

Full & Default Power Mode Main PA

GSM900 Art 0 TX Channel Frequency (MHz)	Burst Average Power (dBm)			Time-up Limit (dBm)	Frame Average Power (dBm)			Time-up Limit (dBm)
	128	189	251		128	189	251	
824.2	836.4	848.8		824.2	836.4	848.8		
CSM 1 Tx slot	32.81	32.85	32.77	34.00	23.81	23.85	23.77	25.00
GPRS-1 Tx slots	37.68	32.76	32.73	34.00	23.68	23.76	23.73	25.00
GPRS-2 Tx slots	29.59	29.61	29.57	31.00	23.59	23.61	23.57	25.00
GPRS-3 Tx slots	27.81	27.86	27.87	29.20	23.35	23.40	23.31	24.94
GPRS-4 Tx slots	26.06	26.17	26.14	28.00	23.06	23.17	23.14	25.00
EDGE-1 Tx slot	23.89	23.93	23.79	27.00	16.89	16.93	16.79	18.00
EDGE-2 Tx slots	23.31	23.40	23.31	24.00	17.31	17.40	17.31	18.00
EDGE-3 Tx slots	21.42	21.53	21.47	22.20	17.16	17.27	17.21	17.94
EDGE-4 Tx slots	19.81	19.85	19.79	21.00	16.81	16.85	16.79	18.00

Band TX Channel Frequency (MHz)	WCDMA V.AN.0			Time-up Limit (dBm)	
	4132	4182	4233		
824.2	836.4	848.8			
3GPP Rel 99	AMR 12.2ktps	24.53	24.60	24.49	25.00
3GPP Rel 99	RMTC 12.2ktps	24.62	24.64	24.60	25.00
3GPP Rel 6	HSDPA Subtest-1	23.64	23.67	23.63	24.00
3GPP Rel 6	HSDPA Subtest-2	23.80	23.68	23.56	24.00
3GPP Rel 6	HSDPA Subtest-3	23.06	23.10	23.09	23.50
3GPP Rel 6	HSDPA Subtest-4	23.10	23.20	23.07	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.67	23.62	23.58	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.66	23.61	23.58	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	23.10	23.10	23.11	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	23.17	23.19	23.05	23.50
3GPP Rel 6	HSPA Subtest-1	23.59	23.59	23.55	24.00
3GPP Rel 6	HSPA Subtest-2	21.58	21.64	21.63	22.00
3GPP Rel 6	HSPA Subtest-3	22.88	22.62	22.81	23.00
3GPP Rel 6	HSPA Subtest-4	21.64	21.60	21.66	22.00
3GPP Rel 6	HSPA Subtest-5	23.60	23.63	23.54	24.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	21.06	21.12	21.05	21.50

GSM850 Ant 1	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	TX Channel	199	199		291	199	199	
Frequency (MHz)	524.2	530.4	536.6	524.2	530.4	536.6	542.8	
GSM-1 Tx slot	33.01	33.00	32.96	34.50	24.01	24.00	23.96	
GPRS-1 Tx slot	32.86	32.92	32.87	34.50	23.86	23.92	23.87	
GPRS-2 Tx slots	29.91	29.87	29.83	31.50	23.81	23.87	23.83	
GPRS-3 Tx slots	27.83	27.91	27.80	29.70	23.57	23.65	23.54	
GPRS-4 Tx slots	28.53	28.70	28.62	28.50	23.53	23.70	23.62	
EDGE-1 Tx slot	26.04	26.13	26.01	27.50	17.04	17.13	17.01	
EDGE-2 Tx slots	23.45	23.65	23.49	24.50	17.45	17.65	17.49	
EDGE-3 Tx slots	21.59	21.68	21.62	22.70	17.33	17.42	17.36	
EDGE-4 Tx slots	20.04	20.11	19.93	21.50	17.04	17.11	16.93	

Band	WCDMA V. Ant.1			Tune-up Limit (dBm)
	TX Channel	4132	4182	
Rx Channel	4357	4407	4458	
Frequency (MHz)	533.4	539.4	545.5	
3GPP Rel 99 RMC 12.2Kbps	23.89	24.00	23.99	25.00
3GPP Rel 99 RMC 12.2Kbps	23.99	24.05	24.01	25.00
3GPP Rel 6 HSDPA Subtest-1	23.05	23.04	23.01	24.00
3GPP Rel 6 HSDPA Subtest-2	22.96	23.01	23.01	24.00
3GPP Rel 6 HSDPA Subtest-3	22.43	22.55	22.52	23.50
3GPP Rel 6 HSDPA Subtest-4	22.49	22.59	22.52	23.50
3GPP Rel 6 DCHSDPA Subtest-1	22.93	23.05	23.05	24.00
3GPP Rel 6 DCHSDPA Subtest-2	23.05	22.99	23.01	24.00
3GPP Rel 6 DCHSDPA Subtest-3	22.48	22.54	22.55	23.50
3GPP Rel 6 DCHSDPA Subtest-4	22.47	22.60	22.54	23.50
3GPP Rel 6 HSUPA Subtest-1	23.03	23.07	22.97	24.00
3GPP Rel 6 HSUPA Subtest-2	20.94	21.05	21.02	22.00
3GPP Rel 6 HSUPA Subtest-3	21.94	21.99	21.97	23.00
3GPP Rel 6 HSUPA Subtest-4	20.95	21.02	21.04	22.00
3GPP Rel 6 HSUPA Subtest-5	23.03	23.09	23.08	24.00
3GPP Rel 7 HSPA+ (eHSPA) Subtest-1	20.48	20.51	20.45	21.50



Appendix E

GSM1900 Ant 2	Burst Average Power (dbm)			Tune-up Limit (dbm)	Frame Average Power (dbm)			Tune-up Limit (dbm)	
	TX Channel	512	661		810	512	661		810
	Frequency (MHz)	1850.2	1850		1850.8	1850.2	1850		1850.8
GSM-1 Tx slot	29.97	30.10	29.99	31.50	20.97	21.10	20.99	22.50	
GPRS-1 Tx slot	29.98	30.07	30.03	31.50	20.98	21.07	21.03	22.50	
GPRS-2 Tx slots	26.77	26.91	26.84	28.50	20.77	20.91	20.84	22.50	
GPRS-3 Tx slots	24.83	24.93	24.90	26.70	20.57	20.67	20.64	22.44	
GPRS-4 Tx slots	23.53	23.65	23.58	25.50	20.53	20.65	20.56	22.50	
EDGE-1 Tx slot	25.42	25.54	25.40	27.00	16.42	16.54	16.40	18.00	
EDGE-2 Tx slots	22.99	22.78	22.72	24.00	16.99	16.78	16.72	18.00	
EDGE-3 Tx slots	20.87	20.90	20.86	22.20	16.61	16.64	16.60	17.94	
EDGE-4 Tx slots	20.00	20.07	19.96	21.00	17.00	17.07	16.96	18.00	

Band	WCDMA M Ant 2			Tune-up Limit (dbm)	
	TX Channel	1312	1413		1513
	Rx Channel	1537	1638		1738
Frequency (MHz)	1742.4	1742.0	1742.6		
3GPP Rel 99	AMR 12.2Kbps	23.00	23.09	23.50	24.50
3GPP Rel 99	RMTC 12.2Kbps	23.03	23.13	23.04	24.50
3GPP Rel 6	HSDPA Subtest-1	21.99	22.10	22.08	23.50
3GPP Rel 6	HSDPA Subtest-2	22.03	22.13	22.10	23.50
3GPP Rel 6	HSDPA Subtest-3	21.53	21.69	21.49	23.00
3GPP Rel 6	HSDPA Subtest-4	21.56	21.61	21.48	23.00
3GPP Rel 8	DCHSDPA Subtest-1	21.98	22.18	22.00	23.50
3GPP Rel 8	DCHSDPA Subtest-2	22.06	22.11	22.09	23.50
3GPP Rel 8	DCHSDPA Subtest-3	21.50	21.60	21.48	23.00
3GPP Rel 8	DCHSDPA Subtest-4	21.58	21.68	21.50	23.00
3GPP Rel 6	HSUPA Subtest-1	22.02	22.07	21.99	23.50
3GPP Rel 6	HSUPA Subtest-2	20.03	20.17	20.07	21.50
3GPP Rel 6	HSUPA Subtest-3	21.06	21.13	21.09	22.50
3GPP Rel 6	HSUPA Subtest-4	20.04	20.18	20.08	21.50
3GPP Rel 6	HSUPA Subtest-5	22.06	22.10	22.03	23.50
3GPP Rel 7	HSPA+ (E-UTRA) Subtest-1	18.54	18.60	18.58	21.00

Band		WCDMA II Aht 3			Tune-up Limit (dBm)	WCDMA IV Aht 3			Tune-up Limit (dBm)
Tx Channel	Rx Channel	8692	8900	8938		1512	1412	1518	
Frequency (MHz)		1852.4	1880	1907.6	1712.4	1732.6	1752.6		
3GPP Rel 99	AMR 12.2Kbps	24.34	24.41	24.37	25.00	23.94	24.00	23.92	25.00
3GPP Rel 99	AMR 12.2Kbps	24.44	24.54	24.50	25.00	23.98	24.03	23.96	25.00
3GPP Rel 6	HSDPA Subtest-1	23.44	23.52	23.49	24.00	22.94	23.06	22.90	24.00
3GPP Rel 6	HSDPA Subtest-2	23.43	23.55	23.51	24.00	23.00	22.97	23.00	24.00
3GPP Rel 6	HSDPA Subtest-3	22.89	22.99	22.97	23.50	22.52	22.58	22.50	23.50
3GPP Rel 6	HSDPA Subtest-4	22.95	23.03	22.98	23.50	22.47	22.55	22.48	23.50
3GPP Rel 6	DC-HSDPA Subtest-1	23.48	23.57	23.50	24.00	23.00	23.04	23.02	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.46	23.57	23.51	24.00	22.94	23.08	22.91	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.93	23.06	23.04	23.50	22.50	22.56	22.48	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.93	22.99	22.98	23.50	22.48	22.53	22.48	23.50
3GPP Rel 6	HSPA Subtest-1	23.49	23.59	23.45	24.00	22.93	23.00	22.99	24.00
3GPP Rel 6	HSPA Subtest-2	21.47	21.53	21.48	22.00	20.99	20.99	20.93	22.00
3GPP Rel 6	HSPA Subtest-3	22.43	22.59	22.55	23.00	22.02	22.01	21.92	23.00
3GPP Rel 6	HSPA Subtest-4	21.49	21.58	21.48	22.00	20.98	20.98	20.93	22.00
3GPP Rel 6	HSPA Subtest-5	23.44	23.51	23.47	24.00	22.97	23.09	22.96	24.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	20.91	20.99	20.97	21.50	20.48	20.57	20.42	21.50

GSM1900 Ant 5	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
TX Channel	1509.2	1690	1909.8	31.00	21.00	21.05	20.96	22.00
Frequency (MHz)	30.00	30.05	29.96	31.00	20.94	21.00	20.90	22.00
GPRS 1 Tx slot	29.94	30.00	29.90	31.00	20.94	21.00	20.90	22.00
GPRS 2 Tx slots	28.85	28.90	28.86	28.00	20.85	20.90	20.86	22.00
GPRS 3 Tx slots	24.87	24.94	24.88	28.20	20.81	20.88	20.82	21.94
GPRS 4 Tx slots	23.60	23.65	23.61	25.00	20.60	20.65	20.61	22.00
EDGE 1 Tx slot	25.46	25.48	25.40	27.00	16.46	16.48	16.40	18.00
EDGE 2 Tx slots	22.35	22.68	22.59	24.00	16.55	16.66	16.59	18.00
EDGE 3 Tx slots	21.08	21.10	20.98	22.20	16.82	16.84	16.72	17.94
EDGE 4 Tx slots	20.45	20.54	20.40	21.00	17.45	17.54	17.40	18.00

Band	WCDMA II Ant 5			Tune-up Limit (dBm)	WCDMA II Ant 5			Tune-up Limit (dBm)
	9262	9400	9538		1312	1413	1513	
TX Channel	9662	9800	9938	1537	1638	1738		
Rx Channel	18224	18500	19076	17424	17426	17626		
Frequency (MHz)	24.00	24.07	24.11	25.00	23.11	23.28	23.29	
3GPP Rel 99 RMC 12.2Kbps	24.10	24.18	24.15	25.00	23.23	23.31	23.28	
3GPP Rel 6 HSDPA Subtest-1	23.09	23.17	23.10	24.00	22.24	22.26	22.30	
3GPP Rel 6 HSDPA Subtest-2	23.13	23.19	23.15	24.00	22.21	22.27	22.25	
3GPP Rel 6 HSDPA Subtest-3	22.60	22.70	22.64	23.50	21.77	21.79	21.73	
3GPP Rel 6 HSDPA Subtest-4	22.57	22.69	22.60	23.50	21.78	21.87	21.77	
3GPP Rel 6 DCHSDPA Subtest-1	23.12	23.19	23.10	24.00	22.19	22.26	22.22	
3GPP Rel 6 DCHSDPA Subtest-2	23.13	23.22	23.14	24.00	22.23	22.33	22.24	
3GPP Rel 6 DCHSDPA Subtest-3	22.58	22.62	22.61	23.50	21.73	21.82	21.74	
3GPP Rel 6 DCHSDPA Subtest-4	22.61	22.63	22.61	23.50	21.72	21.77	21.75	
3GPP Rel 6 HSUPA Subtest-1	23.12	23.15	23.11	24.00	22.18	22.35	22.24	
3GPP Rel 6 HSUPA Subtest-2	21.07	21.15	21.16	22.00	20.19	20.31	20.33	
3GPP Rel 6 HSUPA Subtest-3	22.14	22.16	22.10	23.00	21.28	21.34	21.23	
3GPP Rel 6 HSUPA Subtest-4	21.15	21.19	21.11	22.00	20.17	20.28	20.28	
3GPP Rel 6 HSUPA Subtest-5	23.13	23.20	23.15	24.00	22.23	22.28	22.28	
3GPP Rel 7 HSPA+ (TDDM) Subtest-1	20.57	20.72	20.66	21.50	18.70	18.82	18.77	

Band 5 Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 2656	Power Middle Ch. / Freq. 2656	Power High Ch. / Freq. 2656	Tune-up limit (dBm)	MPR (dB)	
Channel				829	836.5	844			
Frequency (MHz)									
10	QPSK	1	0	25.31	25.35	25.32			
10	QPSK	1	25	25.29	25.33	25.19	25.7	0	
10	QPSK	1	49	25.21	25.27	25.23			
10	QPSK	25	0	24.28	24.41	24.38			
10	QPSK	25	12	24.28	24.38	24.16	24.7	1	
10	QPSK	25	25	24.19	24.27	24.22			
10	QPSK	50	0	24.30	24.35	24.25			
10	16QAM	1	0	24.28	24.31	24.26			
10	16QAM	1	25	24.28	24.34	24.16	24.7	1	
10	16QAM	1	49	24.11	24.22	24.17			
10	16QAM	25	0	23.24	23.43	23.41			
10	16QAM	25	12	23.23	23.41	23.21			
10	16QAM	25	25	23.15	23.22	23.18	23.7	2	
10	16QAM	50	0	23.35	23.36	23.25			
10	64QAM	1	0	23.34	23.25	23.28			
10	64QAM	1	25	23.28	23.39	23.19	23.7	2	
10	64QAM	1	49	23.16	23.22	23.18			
10	64QAM	25	0	22.24	22.42	22.33			
10	64QAM	25	12	22.28	22.33	22.10			
10	64QAM	25	25	22.28	22.34	22.24	22.7	3	
10	64QAM	50	0	22.33	22.30	22.30			
10	256QAM	1	0	20.26	20.41	20.38			
10	256QAM	1	25	20.23	20.41	20.21	20.7	5	
10	256QAM	1	49	20.15	20.30	20.23			
10	256QAM	25	0	20.32	20.40	20.28			
10	256QAM	25	12	20.32	20.31	20.21	20.7	5	
10	256QAM	25	25	20.29	20.31	20.13			
10	256QAM	50	0	20.08	20.18	20.20			
Channel				26425	26525	26525	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				836.5	836.5	846.5			
5	QPSK	1	0	25.22	25.28	25.24			
5	QPSK	1	12	25.27	25.18	25.13	25.7	0	
5	QPSK	1	24	25.15	25.18	25.18			
5	QPSK	12	0	24.20	24.34	24.25			
5	QPSK	12	7	24.21	24.28	24.05	24.7	1	
5	QPSK	12	13	24.10	24.16	24.13			
5	QPSK	25	0	24.22	24.23	24.21			
5	16QAM	1	0	23.18	23.24	23.15			
5	16QAM	1	12	24.21	24.27	24.08	24.7	1	
5	16QAM	1	24	24.03	24.13	24.15			
5	16QAM	12	0	23.15	23.34	23.31			
5	16QAM	12	7	23.18	23.32	23.19	23.7	2	
5	16QAM	12	13	23.08	23.24	23.16			
5	16QAM	25	0	23.21	23.24	23.20			
5	64QAM	1	0	23.21	23.20	23.17			
5	64QAM	1	12	23.17	23.29	23.06	23.7	2	
5	64QAM	1	24	23.04	23.19	23.07			
5	64QAM	12	0	22.16	22.30	22.29			
5	64QAM	12	7	22.22	22.31	21.97	22.7	3	
5	64QAM	12	13	22.13	22.10	22.18			
5	64QAM	25	0	22.26	22.25	22.24			
5	256QAM	1	0	20.16	20.31	20.25			
5	256QAM	1	12	20.21	20.29	20.08	20.7	5	
5	256QAM	1	24	20.17	20.21	20.16			
5	256QAM	12	0	20.21	20.33	20.14			
5	256QAM	12	7	20.09	20.26	20.08	20.7	5	
5	256QAM	12	13	20.25	20.24	20.08			
5	256QAM	25	0	20.05	20.11	20.07			
Channel				26515	26525	26525	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				856.5	856.5	862.5			
3	QPSK	1	0	25.20	25.26	25.23			
3	QPSK	1	8	25.20	25.25	25.08	25.7	0	
3	QPSK	1	14	25.08	25.16	25.13			
3	QPSK	8	0	24.18	24.31	24.31			
3	QPSK	8	4	24.25	24.31	24.07	24.7	1	
3	QPSK	8	7	24.10	24.25	24.18			
3	QPSK	15	0	24.22	24.25	24.14			
3	16QAM	1	0	24.26	24.18	24.20			
3	16QAM	1	8	24.19	24.32	24.12	24.7	1	
3	16QAM	1	14	24.01	24.11	24.09			
3	16QAM	8	0	23.20	23.31	23.34			
3	16QAM	8	4	23.18	23.21	23.07			
3	16QAM	8	7	23.09	23.12	23.11	23.7	2	
3	16QAM	15	0	23.32	23.29	23.20			
3	64QAM	1	0	23.31	23.23	23.19			
3	64QAM	1	8	23.19	23.26	23.14	23.7	2	
3	64QAM	1	14	23.17	23.19	23.14			
3	64QAM	8	0	22.16	22.28	22.21			
3	64QAM	8	4	22.16	22.20	22.00	22.7	3	
3	64QAM	8	7	22.08	22.17	22.13			
3	64QAM	15	0	22.25	22.32	22.26			
3	256QAM	1	0	20.26	20.37	20.24			
3	256QAM	1	8	20.17	20.31	20.14	20.7	5	
3	256QAM	1	14	20.13	20.23	20.09			
3	256QAM	8	0	20.18	20.36	20.21			
3	256QAM	8	4	20.16	20.17	20.12	20.7	5	
3	256QAM	8	7	20.16	20.18	20.03			
3	256QAM	15	0	20.04	20.10	20.08			
Channel				26507	26525	26543	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				824.7	836.5	848.3			
1.4	QPSK	1	0	25.19	25.30	25.29			
1.4	QPSK	1	3	25.24	25.21	25.17	25.7	0	
1.4	QPSK	1	5	25.10	25.25	25.17			
1.4	QPSK	3	0	25.16	25.20	25.24			
1.4	QPSK	3	3	25.02	25.16	25.12	24.7	1	
1.4	QPSK	6	0	24.28	24.27	24.21	24.7	1	
1.4	16QAM	1	0	24.21	24.28	24.16			
1.4	16QAM	1	3	24.16	24.24	24.14	24.7	1	
1.4	16QAM	1	14	24.05	24.15	24.14			
1.4	16QAM	3	0	24.22	24.14	24.13			
1.4	16QAM	3	1	24.07	24.19	24.06			
1.4	16QAM	3	3	24.08	24.15	23.95			
1.4	16QAM	6	0	23.23	23.26	23.20	23.7	2	
1.4	64QAM	1	0	23.22	23.13	23.22			
1.4	64QAM	1	3	23.20	23.26	23.16			
1.4	64QAM	1	5	23.12	23.20	23.08	23.7	2	
1.4	64QAM	3	0	23.19	23.22	23.06			
1.4	64QAM	3	1	23.16	23.02	23.12			
1.4	64QAM	3	3	23.08	23.13	23.10	22.7	3	
1.4	256QAM	1	0	20.13	20.28	20.32			
1.4	256QAM	1	3	20.15	20.31	20.13	20.7	5	
1.4	256QAM	1	5	20.13	20.19	20.16			
1.4	256QAM	3	0	20.20	20.28	20.16			
1.4	256QAM	3	1	20.08	20.28	20.17			
1.4	256QAM	3	3	20.24	20.23	20.04			
1.4	256QAM	6	0	19.97	20.16	20.09	20.7	5	

Band 26 Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 26765	Power Middle Ch. / Freq. 26865	Power High Ch. / Freq. 26965	Tune-up limit (dBm)	MPR (dB)	
Channel				26765	26865	26965			
Frequency (MHz)				821.5	831.5	841.5			
15	QPSK	1	0	25.33	25.36	25.35			
15	QPSK	1	37	25.23	25.30	25.17	25.7	0	
15	QPSK	1	74	25.17	25.25	25.26			
15	QPSK	36	0	24.26	24.42	24.39			
15	QPSK	36	20	24.26	24.35	24.11	24.7	1	
15	QPSK	36	39	24.15	24.26	24.19			
15	QPSK	75	0	24.32	24.37	24.29			
15	16QAM	1	0	24.26	24.31	24.23			
15	16QAM	1	37	24.29	24.27	24.17	24.7	1	
15	16QAM	1	74	24.05	24.15	24.12			
15	16QAM	36	0	23.22	23.45	23.38			
15	16QAM	36	20	23.23	23.44	23.23			
15	16QAM	36	39	23.10	23.16	23.14	23.7	2	
15	16QAM	75	0	23.38	23.34	23.22			
15	64QAM	1	0	23.36	23.21	23.20			
15	64QAM	1	37	23.18	23.34	23.11	23.7	2	
15	64QAM	1	74	23.16	23.17	23.21			
15	64QAM	36	0	22.28	22.34	22.28			
15	64QAM	36	20	22.23	22.26	22.03	22.7	3	
15	64QAM	36	39	22.19	22.20	22.12			
15	64QAM	75	0	22.37	22.41	22.30			
15	256QAM	1	0	20.23	20.45	20.42			
15	256QAM	1	37	20.21	20.43	20.22	20.7	5	
15	256QAM	1	74	20.07	20.32	20.16			
15	256QAM	36	0	20.27	20.42	20.25			
15	256QAM	36	20	20.22	20.30	20.19	20.7	5	
15	256QAM	36	39	20.29	20.28	20.08			
15	256QAM	75	0	20.07	20.17	20.22			
Channel				26740	26865	26990	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				819	831.5	844			
10	QPSK	1	0	25.28	25.26	25.30			
10	QPSK	1	25	25.15	25.28	25.06	25.7	0	
10	QPSK	1	49	25.16	25.17	25.17			
10	QPSK	25	0	24.21	24.36	24.38			
10	QPSK	25	12						

Band 5 Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 26950	Power Middle Ch. / Freq. 26925	Power High Ch. / Freq. 26900	Tune-up limit (dBm)	MPR (dB)	
Channel				829	836.5	844			
Frequency (MHz)									
10	QPSK	1	0	24.61	24.63	24.59			
10	QPSK	1	25	24.53	24.58	24.52	25.7	0	
10	QPSK	1	49	24.61	24.56	24.56			
10	QPSK	25	0	23.58	23.60	23.48			
10	QPSK	25	12	23.55	23.60	23.48	24.7	1	
10	QPSK	25	25	23.55	23.62	23.61			
10	QPSK	50	0	23.59	23.65	23.63			
10	16QAM	1	0	23.58	23.61	23.61	24.7	1	
10	16QAM	1	25	23.40	23.49	23.45			
10	16QAM	1	49	23.45	23.53	23.56			
10	16QAM	25	0	22.56	22.71	22.60			
10	16QAM	25	12	22.58	22.56	22.51	23.7	2	
10	16QAM	25	25	22.52	22.58	22.62			
10	16QAM	50	0	22.55	22.70	22.59			
10	64QAM	1	0	22.56	22.63	22.65	23.7	2	
10	64QAM	1	25	22.42	22.48	22.47			
10	64QAM	1	49	22.43	22.57	22.57			
10	64QAM	25	0	21.62	21.72	21.65			
10	64QAM	25	12	21.60	21.62	21.50	22.7	3	
10	64QAM	25	25	21.57	21.57	21.62			
10	64QAM	50	0	21.55	21.61	21.59			
10	256QAM	1	0	19.56	19.70	19.67	20.7	5	
10	256QAM	1	25	19.50	19.60	19.50			
10	256QAM	1	49	19.55	19.62	19.66			
10	256QAM	25	0	19.61	19.59	19.66			
10	256QAM	25	12	19.62	19.62	19.62	20.7	5	
10	256QAM	25	25	19.51	19.46	19.41			
10	256QAM	50	0	19.48	19.57	19.51			
Channel				26425	26925	26925	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				836.5	836.5	846.5			
5	QPSK	1	0	24.54	24.52	24.50			
5	QPSK	1	12	24.46	24.46	24.44	25.7	0	
5	QPSK	1	24	24.54	24.45	24.45			
5	QPSK	12	0	23.51	23.62	23.54			
5	QPSK	12	7	23.48	23.47	23.39	24.7	1	
5	QPSK	12	13	23.47	23.51	23.54			
5	QPSK	25	0	23.47	23.53	23.52			
5	16QAM	1	0	23.47	23.48	23.55	24.7	1	
5	16QAM	1	12	23.42	23.41	23.32			
5	16QAM	1	24	23.38	23.41	23.47			
5	16QAM	12	0	22.52	22.63	22.57			
5	16QAM	12	7	22.46	22.43	22.48	23.7	2	
5	16QAM	12	13	22.43	22.46	22.58			
5	16QAM	25	0	22.41	22.68	22.45			
5	64QAM	1	0	22.46	22.50	22.60	23.7	2	
5	64QAM	1	12	22.35	22.43	22.35			
5	64QAM	1	24	22.38	22.44	22.46			
5	64QAM	12	0	21.51	21.66	21.62			
5	64QAM	12	7	21.56	21.58	21.44	22.7	3	
5	64QAM	12	13	21.52	21.45	21.59			
5	64QAM	25	0	21.44	21.55	21.54			
5	256QAM	1	0	19.51	19.67	19.57	20.7	5	
5	256QAM	1	12	19.40	19.49	19.39			
5	256QAM	1	24	19.47	19.50	19.60			
5	256QAM	12	0	19.58	19.55	19.61			
5	256QAM	12	7	19.54	19.56	19.49	20.7	5	
5	256QAM	12	13	19.38	19.41	19.35			
5	256QAM	25	0	19.36	19.53	19.46			
Channel				26475	26925	26925	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				836.5	836.5	846.5			
3	QPSK	1	0	24.50	24.50	24.54			
3	QPSK	1	8	24.43	24.45	24.50	25.7	0	
3	QPSK	1	14	24.55	24.45	24.50			
3	QPSK	8	0	23.47	23.56	23.55			
3	QPSK	8	4	23.48	23.47	23.34	24.7	1	
3	QPSK	8	7	23.53	23.46	23.56			
3	QPSK	15	0	23.50	23.53	23.54			
3	16QAM	1	0	23.47	23.50	23.50	24.7	1	
3	16QAM	1	8	23.35	23.43	23.36			
3	16QAM	1	14	23.40	23.40	23.51			
3	16QAM	8	0	22.46	22.65	22.48			
3	16QAM	8	4	22.50	22.58	22.40	23.7	2	
3	16QAM	8	7	22.43	22.53	22.58			
3	16QAM	15	0	22.42	22.66	22.54			
3	64QAM	1	0	22.52	22.49	22.61			
3	64QAM	1	8	22.29	22.36	22.42	23.7	2	
3	64QAM	1	14	22.36	22.44	22.47			
3	64QAM	8	0	21.54	21.68	21.63			
3	64QAM	8	4	21.53	21.53	21.47	22.7	3	
3	64QAM	8	7	21.47	21.50	21.55			
3	64QAM	15	0	21.42	21.58	21.47			
3	256QAM	1	0	19.46	19.64	19.57	20.7	5	
3	256QAM	1	8	19.46	19.53	19.46			
3	256QAM	1	14	19.52	19.57	19.60			
3	256QAM	8	0	19.53	19.48	19.58			
3	256QAM	8	4	19.50	19.57	19.56	20.7	5	
3	256QAM	8	7	19.48	19.39	19.30			
3	256QAM	15	0	19.40	19.57	19.47			
Channel				26497	26925	26943	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				824.7	836.5	848.3			
1.4	QPSK	1	0	24.51	24.54	24.46			
1.4	QPSK	1	3	24.51	24.50	24.44	25.7	0	
1.4	QPSK	1	5	24.51	24.45	24.51			
1.4	QPSK	3	0	24.38	24.46	24.40			
1.4	QPSK	3	1	24.38	24.47	24.33	24.7	1	
1.4	QPSK	3	3	24.46	24.38	24.41			
1.4	QPSK	6	0	23.55	23.56	23.50	24.7	1	
1.4	16QAM	1	0	23.52	23.50	23.58			
1.4	16QAM	1	3	23.34	23.43	23.43			
1.4	16QAM	1	14	23.32	23.46	23.47	24.7	1	
1.4	16QAM	3	0	23.45	23.48	23.42			
1.4	16QAM	3	1	23.47	23.42	23.53			
1.4	16QAM	3	3	23.27	23.37	23.33			
1.4	16QAM	6	0	22.47	22.59	22.45	23.7	2	
1.4	64QAM	1	0	22.51	22.60	22.62			
1.4	64QAM	1	3	22.31	22.41	22.39	24.7	3	
1.4	64QAM	1	5	22.33	22.54	22.44			
1.4	64QAM	3	0	22.36	22.56	22.31	23.7	2	
1.4	64QAM	3	1	22.37	22.51	22.55			
1.4	64QAM	3	3	22.25	22.37	22.34			
1.4	256QAM	1	0	19.53	19.66	19.57	22.7	3	
1.4	256QAM	1	3	19.36	19.46	19.40			
1.4	256QAM	1	5	19.51	19.48	19.54			
1.4	256QAM	3	0	19.48	19.56	19.63	20.7	5	
1.4	256QAM	3	1	19.52	19.49	19.53			
1.4	256QAM	3	3	19.40	19.43	19.33			
1.4	256QAM	6	0	19.35	19.44	19.39	20.7	5	

Band 26 Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 26765	Power Middle Ch. / Freq. 26865	Power High Ch. / Freq. 26965	Tune-up limit (dBm)	MPR (dB)	
Channel				821.5	831.5	841.5			
Frequency (MHz)									
15	QPSK	1	0	24.57	24.58	24.51			
15	QPSK	1	37	24.50	24.54	24.46	25.7	0	
15	QPSK	1	74	24.55	24.50	24.49			
15	QPSK	36	0	23.53	23.59	23.63			
15	QPSK	36	20	23.55	23.61	23.38	24.7	1	
15	QPSK	36	39	23.51	23.55	23.59			
15	QPSK	75	0	23.55	23.60	23.54			
15	16QAM	1	0	23.51	23.60	23.55	24.7	1	
15	16QAM	1	37	23.37	23.46	23.40			
15	16QAM	1	74	23.35	23.53	23.53			
15	16QAM	36	0	22.48	22.69	22.60			
15	16QAM	36	20	22.54	22.53	22.50	23.7	2	
15	16QAM	36	39	22.47	22.50	22.55			
15	16QAM	75	0	22.54	22.60	22.56			
15	64QAM	1	0	22.49	22.57	22.56	23.7	2	
15	64QAM	1	37	22.41	22.38	22.42			
15	64QAM	1	74	22.43	22.52	22.57			
15	64QAM	36	0	21.60	21.64	21.60			
15	64QAM	36	20	21.55	21.55	21.47	22.7	3	
15	64QAM	36	39	21.51	21.47	21.57			
15	64QAM	75	0	21.52	21.58	21.50			
15	256QAM	1	0	19.56	19.61	19.60	20.7	5	
15	256QAM	1	37	19.50	19.53	19.44			
15	256QAM	1	74	19.54	19.56	19.61			
15	256QAM	36	0	19.53	19.56	19.64			
15	256QAM	36	20	19.61	19.50	19.55	20.7	5	
15	256QAM	36	39	19.40	19.44	19.30			
15	256QAM	75	0	19.45	19.47	19.48			
Channel				26740	26865	26960	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				819	831.5	844			
10	QPSK	1	0	24.48	24.52	24.43			
10	QPSK	1	25	24.43	24.49	24.35	25.7	0	
10	QPSK	1	49	24.52	24.40	24.48			
10	QPSK	25	0	23.50					



Band 2 Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch./F.Freq.	Power Hch./F.Freq.	Power Lch./F.Freq.	Turn-up (dB)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	23.22	23.24	23.13			
20	QPSK	1	6	23.17	23.19	23.08			
20	QPSK	50	0	23.23	23.30	23.11			
20	QPSK	50	6	23.22	23.25	23.10			
20	QPSK	50	12	22.18	22.24	22.04			
20	QPSK	100	0	22.21	22.29	22.17			
20	QPSK	100	6	22.27	22.33	22.12			
20	HQAM	1	49	22.24	22.24	22.09			
20	HQAM	1	59	22.23	22.23	22.11			
20	HQAM	50	0	22.24	22.24	22.09			
20	HQAM	50	24	21.19	21.25	21.05			
20	HQAM	50	50	21.19	21.24	21.03			
20	HQAM	100	0	21.21	21.24	21.02			
20	HQAM	100	6	21.23	21.27	21.07			
20	HQAM	1	49	21.13	21.29	21.08			
20	HQAM	1	59	21.23	21.28	21.05			
20	HQAM	50	0	20.26	20.33	20.13			
20	HQAM	50	24	20.14	20.19	20.01			
20	HQAM	50	50	20.19	20.18	20.00			
20	HQAM	100	0	20.25	20.34	20.19			
20	HQAM	100	6	20.24	20.25	20.07			
20	HQAM	1	49	18.20	18.29	18.07			
20	HQAM	1	59	18.22	18.24	18.03			
20	HQAM	50	0	18.24	18.25	18.06			
20	HQAM	50	24	18.20	18.24	18.03			
20	HQAM	50	50	18.20	18.22	18.00			
20	HQAM	100	0	18.22	18.23	18.01			
20	HQAM	100	6	18.23	18.24	18.02			
Channel									
Frequency (MHz)									
16	QPSK	1	0	18.07	18.00	18.03			
16	QPSK	1	6	23.20	23.22	23.11			
16	QPSK	1	12	23.19	23.21	23.06			
16	QPSK	50	0	22.21	22.21	22.05			
16	QPSK	50	6	22.27	22.27	22.02			
16	QPSK	50	12	22.23	22.26	22.06			
16	QPSK	100	0	22.18	22.21	22.09			
16	QPSK	100	6	22.25	22.21	22.09			
16	HQAM	1	37	22.18	22.27	22.06			
16	HQAM	1	47	22.25	22.21	22.09			
16	HQAM	50	0	21.15	21.21	21.08			
16	HQAM	50	24	21.19	21.27	21.01			
16	HQAM	50	50	21.19	21.17	21.01			
16	HQAM	100	0	20.21	20.13	20.01			
16	HQAM	100	6	20.17	20.30	20.07			
16	HQAM	1	37	18.13	18.22	18.05			
16	HQAM	1	47	18.17	18.20	18.13			
16	HQAM	50	0	18.20	18.20	18.04			
16	HQAM	50	24	18.20	18.20	18.04			
16	HQAM	50	50	18.04	18.23	18.01			
16	HQAM	100	0	18.18	18.20	18.01			
Channel									
Frequency (MHz)									
10	QPSK	1	0	18.02	18.00	18.03			
10	QPSK	1	6	23.20	23.14	23.11			
10	QPSK	1	12	23.17	23.16	23.05			
10	QPSK	50	0	22.21	22.21	22.03			
10	QPSK	50	6	22.27	22.21	22.03			
10	QPSK	50	12	22.23	22.25	22.08			
10	QPSK	100	0	22.24	22.25	22.08			
10	QPSK	100	6	22.27	22.21	22.03			
10	HQAM	1	25	22.21	22.21	22.03			
10	HQAM	1	35	22.27	22.21	22.03			
10	HQAM	50	0	21.24	21.20	21.09			
10	HQAM	50	12	21.11	21.17	21.05			
10	HQAM	50	24	21.10	21.17	21.05			
10	HQAM	50	50	21.19	21.27	21.04			
10	HQAM	100	0	21.20	21.20	21.04			
10	HQAM	100	6	21.21	21.30	21.11			
10	HQAM	25	0	20.25	20.31	20.07			
10	HQAM	25	6	20.20	20.30	20.02			
10	HQAM	50	0	20.16	20.26	20.15			
10	HQAM	50	18	18.13	18.26	18.07			
10	HQAM	50	36	18.11	18.20	18.10			
10	HQAM	100	0	18.17	18.16	18.03			
10	HQAM	100	6	18.27	18.27	18.05			
10	HQAM	25	12	18.27	18.18	18.00			
10	HQAM	25	18	18.00	18.28	18.08			
10	HQAM	50	0	18.20	18.19	18.00			
Channel									
Frequency (MHz)									
5	QPSK	1	0	18.02	18.00	18.03			
5	QPSK	1	6	23.12	23.16	23.08			
5	QPSK	1	12	23.12	23.16	23.08			
5	QPSK	1	18	23.19	23.16	23.04			
5	QPSK	50	0	22.21	22.21	22.03			
5	QPSK	50	6	22.27	22.21	22.03			
5	QPSK	50	12	22.23	22.25	22.08			
5	QPSK	100	0	22.24	22.25	22.08			
5	QPSK	100	6	22.27	22.21	22.03			
5	HQAM	1	25	22.21	22.21	22.03			
5	HQAM	1	35	22.27	22.21	22.03			
5	HQAM	50	0	21.17	21.14	21.04			
5	HQAM	50	12	21.12	21.17	21.06			
5	HQAM	50	24	21.19	21.27	21.04			
5	HQAM	50	36	21.18	21.35	21.22			
5	HQAM	100	0	20.25	20.30	20.04			
5	HQAM	100	6	20.20	20.11	20.00			
5	HQAM	100	12	20.13	20.20	20.10			
5	HQAM	100	18	20.11	20.30	20.19			
5	HQAM	25	12	18.13	18.21	18.06			
5	HQAM	25	18	18.21	18.26	18.07			
5	HQAM	50	0	18.22	18.18	18.04			
5	HQAM	50	18	18.20	18.20	18.00			
5	HQAM	50	36	18.00	18.22	18.08			
5	HQAM	100	0	18.20	18.19	18.00			
Channel									
Frequency (MHz)									
3	QPSK	1	0	18.02	18.00	18.03			
3	QPSK	1	6	23.12	23.18	23.10			
3	QPSK	1	12	23.12	23.18	23.08			
3	QPSK	1	18	23.19	23.16	23.06			
3	QPSK	50	0	22.21	22.21	22.03			
3	QPSK	50	6	22.27	22.21	22.03			
3	QPSK	50	12	22.23	22.25	22.08			
3	QPSK	100	0	22.24	22.25	22.08			
3	QPSK	100	6	22.27	22.21	22.03			
3	HQAM	1	25	22.21	22.21	22.03			
3	HQAM	1	35	22.27	22.21	22.03			
3	HQAM	50	0	21.19	21.22	21.06			
3	HQAM	50	12	21.12	21.17	21.04			
3	HQAM	50	24	21.19	21.27	21.04			
3	HQAM	50	36	21.18	21.35	21.22			
3	HQAM	100	0	20.25	20.30	20.04			
3	HQAM	100	6	20.20	20.11	20.00			
3	HQAM	100	12	20.13	20.20	20.10			
3	HQAM	100	18	20.11	20.30	20.19			
3	HQAM	25	12	18.13	18.21	18.06			
3	HQAM	25	18	18.21	18.26	18.07			
3	HQAM	50	0	18.22	18.18	18.04			
3	HQAM	50	18	18.20	18.20	18.00			
3	HQAM	50	36	18.00	18.22	18.08			
3	HQAM	100	0	18.20	18.19	18.00			
Channel									
Frequency (MHz)									
1.4	QPSK	1	0	23.22	23.14	23.15			
1.4	QPSK	1	3	23.07	23.14	23.01			
1.4	QPSK	1	6	23.14	23.11	23.15			
1.4	QPSK	1	9	23.17	23.08	23.10			
1.4	QPSK	3	0	23.09	23.08	23.09			
1.4	QPSK	3	3	22.29	22.29	22.19			
1.4	QPSK	3	6	22.30	22.16	22.04			
1.4	HQAM	1	9	22.24	22.23	22.09			
1.4	HQAM	1	12	22.23	22.26	22.06			
1.4	HQAM	3	0	22.18	22.18	22.02			
1.4	HQAM	3	3	22.24	22.18	22.02			
1.4	HQAM	3	6	22.20	22.10	22.04			
1.4	HQAM	3							



Band 2 Ant 3										
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch./F.Freq.	Power Hch./F.Freq.	Power Lch./F.Freq.	Turn-up (dB)	MFR (dB)		
Channel										
20	QPSK	1	0	24.17	24.22	24.15			25.5	0
20	QPSK	1	66	24.17	24.16	24.06				
20	QPSK	50	0	23.17	23.26	23.17			24.5	1
20	QPSK	50	66	23.18	23.22	23.10				
20	QPSK	50	132	23.18	23.19	23.04				
20	QPSK	100	0	22.18	22.33	22.11			24.5	1
20	QPSK	100	66	22.19	22.21	22.16				
20	16QAM	1	0	22.18	22.18	22.15			24.5	1
20	16QAM	1	66	22.18	22.12	22.01				
20	16QAM	50	0	22.18	22.18	22.12			23.5	2
20	16QAM	50	66	22.18	22.10	21.99				
20	16QAM	100	0	22.18	22.29	22.10			23.5	2
20	16QAM	100	66	22.18	22.26	22.18				
20	64QAM	1	0	22.17	22.19	22.20			23.5	2
20	64QAM	1	66	22.17	22.19	22.16				
20	64QAM	50	0	21.17	21.29	21.16			22.5	3
20	64QAM	50	66	21.17	21.27	21.08				
20	64QAM	100	0	21.18	21.23	21.09			20.5	5
20	64QAM	100	66	21.18	21.23	21.09				
20	256QAM	1	0	19.21	19.28	19.27			20.5	5
20	256QAM	1	66	19.20	19.21	19.08				
20	256QAM	1	132	19.20	19.21	19.08				
20	256QAM	50	0	19.24	19.13	19.05			20.5	5
20	256QAM	50	66	19.24	19.13	19.05				
20	256QAM	50	132	19.24	19.19	19.20			20.5	5
20	256QAM	50	198	19.24	19.12	19.17				
20	256QAM	100	0	19.26	19.20	19.06			20.5	5
20	256QAM	100	66	19.26	19.20	19.06				
Channel										
15	QPSK	1	0	18.73	18.80	18.75			20.5	5
15	QPSK	1	66	18.73	18.80	18.75				
15	QPSK	1	132	18.73	18.80	18.75				
15	QPSK	50	0	24.14	24.12	24.21			25.5	0
15	QPSK	50	66	24.14	24.12	24.03				
15	QPSK	50	132	24.14	24.12	24.03				
15	QPSK	36	0	23.04	23.21	23.07			24.5	1
15	QPSK	36	66	23.04	23.17	23.03				
15	QPSK	36	132	23.04	23.17	23.03				
15	QPSK	36	36	22.05	23.13	22.99			24.5	1
15	QPSK	36	72	22.05	23.15	23.08				
15	QPSK	36	108	22.05	23.15	23.08				
15	16QAM	1	0	22.08	23.11	23.08			24.5	1
15	16QAM	1	66	22.08	23.11	23.08				
15	16QAM	1	132	22.08	23.11	23.08				
15	16QAM	36	0	22.07	22.22	22.15			23.5	2
15	16QAM	36	66	22.07	22.22	22.15				
15	16QAM	36	108	22.07	22.22	22.15				
15	16QAM	36	20	22.00	22.11	22.00			23.5	2
15	16QAM	36	40	22.00	22.11	22.00				
15	16QAM	36	60	22.00	22.11	22.00				
15	16QAM	36	80	22.00	22.11	22.00				
15	16QAM	36	100	22.00	22.11	22.00				
15	16QAM	36	120	22.00	22.11	22.00				
15	16QAM	36	140	22.00	22.11	22.00				
15	16QAM	36	160	22.00	22.11	22.00				
15	16QAM	36	180	22.00	22.11	22.00				
15	16QAM	36	200	22.00	22.11	22.00				
15	16QAM	36	220	22.00	22.11	22.00				
15	16QAM	36	240	22.00	22.11	22.00				
15	16QAM	36	260	22.00	22.11	22.00				
15	16QAM	36	280	22.00	22.11	22.00				
15	16QAM	36	300	22.00	22.11	22.00				
15	16QAM	36	320	22.00	22.11	22.00				
15	16QAM	36	340	22.00	22.11	22.00				
15	16QAM	36	360	22.00	22.11	22.00				
15	16QAM	36	380	22.00	22.11	22.00				
15	16QAM	36	400	22.00	22.11	22.00				
15	16QAM	36	420	22.00	22.11	22.00				
15	16QAM	36	440	22.00	22.11	22.00				
15	16QAM	36	460	22.00	22.11	22.00				
15	16QAM	36	480	22.00	22.11	22.00				
15	16QAM	36	500	22.00	22.11	22.00				
15	16QAM	36	520	22.00	22.11	22.00				
15	16QAM	36	540	22.00	22.11	22.00				
15	16QAM	36	560	22.00	22.11	22.00				
15	16QAM	36	580	22.00	22.11	22.00				
15	16QAM	36	600	22.00	22.11	22.00				
15	16QAM	36	620	22.00	22.11	22.00				
15	16QAM	36	640	22.00	22.11	22.00				
15	16QAM	36	660	22.00	22.11	22.00				
15	16QAM	36	680	22.00	22.11	22.00				
15	16QAM	36	700	22.00	22.11	22.00				
15	16QAM	36	720	22.00	22.11	22.00				
15	16QAM	36	740	22.00	22.11	22.00				
15	16QAM	36	760	22.00	22.11	22.00				
15	16QAM	36	780	22.00	22.11	22.00				
15	16QAM	36	800	22.00	22.11	22.00				
15	16QAM	36	820	22.00	22.11	22.00				
15	16QAM	36	840	22.00	22.11	22.00				
15	16QAM	36	860	22.00	22.11	22.00				
15	16QAM	36	880	22.00	22.11	22.00				
15	16QAM	36	900	22.00	22.11	22.00				
15	16QAM	36	920	22.00	22.11	22.00				
15	16QAM	36	940	22.00	22.11	22.00				
15	16QAM	36	960	22.00	22.11	22.00				
15	16QAM	36	980	22.00	22.11	22.00				
15	16QAM	36	1000	22.00	22.11	22.00				
15	16QAM	36	1020	22.00	22.11	22.00				
15	16QAM	36	1040	22.00	22.11	22.00				
15	16QAM	36	1060	22.00	22.11	22.00				
15	16QAM	36	1080	22.00	22.11	22.00				
15	16QAM	36	1100	22.00	22.11	22.00				
15	16QAM	36	1120	22.00	22.11	22.00				
15	16QAM	36	1140	22.00	22.11	22.00				
15	16QAM	36	1160	22.00	22.11	22.00				
15	16QAM	36	1180	22.00	22.11	22.00				
15	16QAM	36	1200	22.00	22.11	22.00				
15	16QAM	36	1220	22.00	22.11	22.00				
15	16QAM	36	1240	22.00	22.11	22.00				
15	16QAM	36	1260	22.00	22.11	22.00				
15	16QAM	36	1280	22.00	22.11	22.00				
15	16QAM	36	1300	22.00	22.11	22.00				
15	16QAM	36	1320	22.00	22.11	22.00				
15	16QAM	36	1340	22.00	22.11	22.00				
15	16QAM	36	1360	22.00	22.11	22.00				
15	16QAM	36	1380	22.00	22.11	22.00				
15	16QAM	36	1400	22.00	22.11	22.00				
15	16QAM	36	1420	22.00	22.11	22.00				
15	16QAM	36	1440	22.00	22.11	22.00				
15	16QAM	36	1460	22.00	22.11	22.00				
15	16QAM	36	1480	22.00	22.11	22.00				
15	16QAM	36	1500	22.00	22.11	22.00				
15	16QAM	36	1520	22.00	22.11	22.00				
15	16QAM	36	1540	22.00	22.11	22.00				
15	16QAM	36	1560	22.00	22.11	22.00				
15	16QAM	36	1580	22.00	22.11	22.00				
15	16QAM	36	1600	22.00	22.11	22.00				



Band 4 Ant 5										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power High Ch./Freq.	Turn-up Init. (dBm)	MPE (dB)	MPE (dB)	
Channel										
Frequency (MHz)										
20	QPSK	1	0	24.32	24.43	24.38		25.7	0	
20	QPSK	1	49	24.24	24.38	24.30				
20	QPSK	1	99	24.24	24.38	24.30				
20	QPSK	50	0	23.32	23.41	23.33				
20	QPSK	50	24	23.29	23.39	23.34		24.7	1	
20	QPSK	50	50	23.24	23.38	23.30				
20	QPSK	100	0	23.30	23.39	23.40				
20	HQAM	1	0	23.28	23.38	23.33		24.7	1	
20	HQAM	1	49	23.20	23.44	23.32				
20	HQAM	1	99	23.18	23.33	23.34				
20	HQAM	50	0	22.29	22.38	22.37		23.7	2	
20	HQAM	50	24	22.29	22.34	22.30				
20	HQAM	50	50	22.24	22.38	22.30				
20	HQAM	100	0	22.24	22.43	22.44				
20	HQAM	1	49	22.23	22.40	22.36		23.7	2	
20	HQAM	1	99	22.24	22.37	22.35				
20	HQAM	50	0	21.20	21.41	21.32				
20	HQAM	50	24	21.20	21.37	21.37		22.7	3	
20	HQAM	50	50	21.25	21.42	21.34				
20	HQAM	100	0	21.25	21.38	21.40				
20	256QAM	1	0	19.27	19.36	19.32		20.7	5	
20	256QAM	1	49	19.31	19.37	19.35				
20	256QAM	1	99	19.22	19.36	19.37				
20	256QAM	50	0	19.25	19.42	19.34				
20	256QAM	50	24	19.39	19.39	19.40		20.7	5	
20	256QAM	50	50	19.25	19.41	19.31				
20	256QAM	100	0	19.21	19.36	19.32				
Channel										
Frequency (MHz)										
16	QPSK	1	0	24.26	24.40	24.31		25.7	0	
16	QPSK	1	49	24.24	24.36	24.31				
16	QPSK	1	99	24.21	24.34	24.29				
16	QPSK	50	0	23.22	23.31	23.28				
16	QPSK	50	24	23.20	23.26	23.26		24.7	1	
16	QPSK	50	50	23.10	23.29	23.21				
16	HQAM	1	0	23.26	23.31	23.28				
16	HQAM	1	49	23.22	23.32	23.28		24.7	1	
16	HQAM	1	99	23.16	23.35	23.19				
16	HQAM	50	0	22.23	22.27	22.21		23.7	2	
16	HQAM	50	24	22.20	22.30	22.20				
16	HQAM	50	50	22.25	22.27	22.28				
16	HQAM	100	0	22.28	22.33	22.41		23.7	2	
16	HQAM	1	49	22.29	22.37	22.35				
16	HQAM	1	99	22.19	22.26	22.19				
16	HQAM	50	0	21.17	21.35	21.28				
16	HQAM	50	24	21.18	21.30	21.23		22.7	3	
16	HQAM	50	50	21.22	21.33	21.25				
16	HQAM	100	0	21.12	21.31	21.43				
16	256QAM	1	0	19.24	19.32	19.27		20.7	5	
16	256QAM	1	49	19.16	19.33	19.34				
16	256QAM	1	99	19.10	19.31	19.28				
16	256QAM	50	0	19.20	19.30	19.33		20.7	5	
16	256QAM	50	24	19.13	19.31	19.23				
16	256QAM	50	50	19.13	19.32	19.27				
Channel										
Frequency (MHz)										
10	QPSK	1	0	24.24	24.37	24.30		25.7	0	
10	QPSK	1	25	24.14	24.27	24.29				
10	QPSK	1	49	24.16	24.35	24.19				
10	QPSK	25	0	23.25	23.36	23.30				
10	QPSK	25	12	23.25	23.36	23.32		24.7	1	
10	QPSK	25	25	23.16	23.24	23.31				
10	HQAM	1	0	23.28	23.36	23.31				
10	HQAM	1	25	23.19	23.31	23.19		24.7	1	
10	HQAM	1	49	23.24	23.34	23.30				
10	HQAM	25	0	22.24	22.27	22.28		23.7	2	
10	HQAM	25	12	22.16	22.23	22.19				
10	HQAM	25	25	22.21	22.28	22.23				
10	HQAM	50	0	22.23	22.37	22.31				
10	HQAM	50	12	22.29	22.29	22.33		23.7	2	
10	HQAM	50	25	22.12	22.31	22.23				
10	HQAM	100	0	22.19	22.24	22.23				
10	HQAM	25	0	21.25	21.29	21.28		22.7	3	
10	HQAM	25	12	21.24	21.40	21.23				
10	HQAM	50	0	21.13	21.35	21.37				
10	HQAM	50	12	19.24	19.34	19.34		20.7	5	
10	256QAM	1	0	19.22	19.32	19.22				
10	256QAM	1	49	19.10	19.29	19.31				
10	256QAM	1	99	19.10	19.30	19.28		20.7	5	
10	256QAM	50	0	19.13	19.32	19.31				
Channel										
Frequency (MHz)										
5	QPSK	1	0	24.15	24.37	24.25		25.7	0	
5	QPSK	1	12	24.18	24.36	24.21				
5	QPSK	1	24	24.19	24.24	24.18				
5	QPSK	12	0	23.19	23.29	23.22				
5	QPSK	12	7	23.20	23.31	23.23		24.7	1	
5	QPSK	12	13	23.14	23.31	23.30				
5	HQAM	1	0	23.15	23.19	23.18				
5	HQAM	1	12	23.25	23.41	23.19		24.7	1	
5	HQAM	1	24	23.15	23.19	23.19				
5	HQAM	12	0	22.20	22.26	22.32		23.7	2	
5	HQAM	12	7	22.18	22.31	22.20				
5	HQAM	12	13	22.31	22.26	22.30				
5	HQAM	25	0	22.19	22.36	22.31				
5	HQAM	25	12	22.21	22.35	22.41		23.7	2	
5	HQAM	25	24	22.23	22.36	22.32				
5	HQAM	50	0	21.22	22.33	22.17				
5	HQAM	50	12	21.19	21.39	21.30		22.7	3	
5	HQAM	50	24	21.23	21.26	21.23				
5	HQAM	100	0	21.13	21.32	21.23				
5	HQAM	25	0	21.17	21.36	21.32				
5	256QAM	1	0	19.21	19.29	19.29		20.7	5	
5	256QAM	1	12	19.18	19.33	19.32				
5	256QAM	1	24	19.15	19.32	19.28				
5	256QAM	12	0	19.10	19.34	19.29		20.7	5	
5	256QAM	12	7	19.20	19.30	19.27				
5	256QAM	12	13	19.16	19.37	19.31				
5	256QAM	25	0	19.15	19.35	19.11				
Channel										
Frequency (MHz)										
14	QPSK	1	0	24.25	24.41	24.35		25.7	0	
14	QPSK	1	3	24.22	24.27	24.28				
14	QPSK	1	6	24.22	24.33	24.24				
14	QPSK	1	9	24.14	24.29	24.23		25.7	0	
14	QPSK	3	0	23.24	23.33	23.28				
14	QPSK	3	4	23.24	23.33	23.28		24.7	1	
14	QPSK	3	7	23.14	23.28	23.22				
14	HQAM	1	0	23.25	23.33	23.24				
14	HQAM	1	3	23.34	23.31	23.35		24.7	1	
14	HQAM	1	6	23.19	23.33	23.24				
14	HQAM	3	0	23.14	23.23	23.11				
14	HQAM	3	4	22.23	22.28	22.30		23.7	2	
14	HQAM	3	7	22.20	22.25	22.28				
14	HQAM	16	0	22.18	22.36	22.24				
14	HQAM	16	4	22.21	22.39	22.32		23.7	2	
14	HQAM	16	8	22.30	22.36	22.32				
14	HQAM	3	0	22.21	22.30	22.25				
14	HQAM	3	4	21.27	21.31	21.21		22.7	3	
14	HQAM	3	7	21.17	21.38	21.23				
14	HQAM	16	0	21.12	21.34	21.42				
14	256QAM	1	0	19.27	19.36	19.18		20.7	5	
14	256QAM	1	4	19.17	19.33	19.32				
14	256QAM	1	8	19.15	19.35	19.25				
14	256QAM	3	0	19.20	19.31					

Band 38 Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power High Ch. / Freq.	Power Middle Ch. / Freq.	Power Low Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	24.18	24.20	24.16	25.5	0		
20	QPSK	1	49	24.11	24.15	24.09				
20	QPSK	1	99	24.07	24.13	24.08				
20	QPSK	50	0	23.13	23.21	23.19				
20	QPSK	50	24	23.10	23.09	23.06	24.5	1		
20	QPSK	50	50	23.01	23.13	23.13				
20	QPSK	100	0	23.17	23.18	23.18				
20	16QAM	1	0	23.17	23.16	23.13	24.5	1		
20	16QAM	1	49	23.10	23.16	23.08				
20	16QAM	1	99	23.11	23.11	23.03				
20	16QAM	50	0	22.15	22.17	22.23				
20	16QAM	50	24	22.05	22.13	22.03	23.5	2		
20	16QAM	50	50	22.00	22.12	22.10				
20	16QAM	100	0	22.16	22.19	22.18				
20	64QAM	1	0	22.17	22.14	22.15				
20	64QAM	1	49	22.07	22.16	22.12	23.5	2		
20	64QAM	1	99	22.05	22.09	21.99				
20	64QAM	50	0	21.11	21.22	21.23				
20	64QAM	50	24	21.12	21.14	21.05	22.5	3		
20	64QAM	50	50	21.03	21.14	21.14				
20	64QAM	100	0	21.18	21.16	21.22				
20	256QAM	1	0	19.12	19.23	19.20				
20	256QAM	1	49	19.10	19.06	19.10	20.5	5		
20	256QAM	1	99	19.03	19.10	19.17				
20	256QAM	50	0	19.22	19.22	19.14				
20	256QAM	50	24	19.14	19.14	19.13	20.5	5		
20	256QAM	50	50	19.15	19.10	19.07				
20	256QAM	100	0	19.05	19.10	19.05				
Channel				37825	38000	38175				
Frequency (MHz)				25775	25925	26125				
15	QPSK	1	0	24.07	24.11	24.05	25.5	0		
15	QPSK	1	37	24.08	24.08	23.96				
15	QPSK	1	74	23.94	24.01	24.05				
15	QPSK	36	0	23.01	23.13	23.10	24.5	1		
15	QPSK	36	20	23.03	22.97	23.03				
15	QPSK	36	39	22.94	23.10	23.10				
15	QPSK	75	0	23.07	23.07	23.13	24.5	1		
15	16QAM	1	0	23.14	23.08	23.09				
15	16QAM	1	37	23.07	23.13	23.00	24.5	1		
15	16QAM	1	74	22.99	23.01	22.95				
15	16QAM	36	0	22.06	22.06	22.17				
15	16QAM	36	20	21.99	22.01	21.97	23.5	2		
15	16QAM	36	39	21.89	21.99	22.03				
15	16QAM	75	0	22.12	22.15	22.14				
15	16QAM	1	0	22.12	22.02	22.07	23.5	2		
15	64QAM	1	37	21.96	22.12	22.00				
15	64QAM	1	74	21.90	22.01	21.96	22.5	3		
15	64QAM	36	0	20.98	21.18	21.21				
15	64QAM	36	20	21.04	21.05	20.91	22.5	3		
15	64QAM	36	39	20.93	21.03	21.05				
15	64QAM	75	0	21.10	21.04	21.14				
15	256QAM	1	0	19.06	19.06	19.14	20.5	5		
15	256QAM	1	37	19.02	19.02	19.03				
15	256QAM	1	74	18.92	18.96	19.09				
15	256QAM	36	0	19.15	19.11	19.01				
15	256QAM	36	20	19.05	19.02	19.04	20.5	5		
15	256QAM	36	39	19.01	19.00	19.05				
15	256QAM	75	0	18.98	19.01	18.98				
Channel				37800	38000	38200				
Frequency (MHz)				25750	25950	26150				
10	QPSK	1	0	24.15	24.18	24.06	25.5	0		
10	QPSK	1	25	24.02	24.02	23.99				
10	QPSK	1	49	23.99	24.04	23.97				
10	QPSK	25	0	23.10	23.07	23.05				
10	QPSK	25	12	23.07	23.00	22.94	24.5	1		
10	QPSK	25	25	22.88	23.07	23.01				
10	QPSK	50	0	23.03	23.13	23.07				
10	16QAM	1	0	23.10	23.08	23.00	24.5	1		
10	16QAM	1	25	22.97	23.07	23.02				
10	16QAM	1	49	22.97	23.08	22.98				
10	16QAM	25	0	22.03	22.05	22.13				
10	16QAM	25	12	21.97	22.00	21.95	23.5	2		
10	16QAM	25	25	21.87	22.06	21.99				
10	16QAM	50	0	22.11	22.07	22.06				
10	64QAM	1	0	22.12	22.05	22.03	23.5	2		
10	64QAM	1	25	22.01	22.04	21.98				
10	64QAM	1	49	22.02	22.07	21.93				
10	64QAM	25	0	21.08	21.15	21.10				
10	64QAM	25	12	21.08	21.10	20.91	22.5	3		
10	64QAM	25	25	20.92	21.12	21.05				
10	64QAM	50	0	21.05	21.03	21.12				
10	256QAM	1	0	19.08	19.12	19.10	20.5	5		
10	256QAM	1	25	19.00	19.04	19.05				
10	256QAM	1	49	18.93	18.98	19.09				
10	256QAM	25	0	19.15	19.20	19.05				
10	256QAM	25	12	19.02	19.10	19.07	20.5	5		
10	256QAM	25	25	18.10	18.98	18.96				
10	256QAM	50	0	18.93	18.98	18.94				
Channel				37775	38000	38225				
Frequency (MHz)				25725	25950	26175				
5	QPSK	1	0	24.09	24.18	24.13	25.5	0		
5	QPSK	1	12	23.99	24.09	23.98				
5	QPSK	1	24	23.97	24.08	23.94				
5	QPSK	12	0	23.04	23.12	23.05	24.5	1		
5	QPSK	12	7	22.97	22.98	22.94				
5	QPSK	12	13	22.90	23.04	23.01				
5	QPSK	25	0	23.07	23.16	23.10	24.5	1		
5	16QAM	1	0	23.04	23.08	23.03				
5	16QAM	1	12	22.99	23.03	23.00	24.5	1		
5	16QAM	1	24	22.99	23.06	23.00				
5	16QAM	12	0	22.07	22.05	22.17				
5	16QAM	12	7	21.96	22.05	21.99	23.5	2		
5	16QAM	12	13	21.97	22.09	21.97				
5	16QAM	25	0	22.09	22.07	22.05				
5	64QAM	1	0	22.05	22.12	22.06				
5	64QAM	1	12	21.98	22.04	21.99	23.5	2		
5	64QAM	1	24	22.00	22.01	21.87				
5	64QAM	12	0	21.04	21.08	21.20				
5	64QAM	12	7	21.02	21.00	20.97	22.5	3		
5	64QAM	12	13	20.94	21.01	21.04				
5	64QAM	25	0	21.06	21.03	21.15				
5	256QAM	1	0	19.04	19.13	19.15	20.5	5		
5	256QAM	1	12	19.00	19.03	19.06				
5	256QAM	1	24	19.01	18.97	19.13				
5	256QAM	12	0	19.18	19.18	19.12				
5	256QAM	12	7	19.06	19.03	19.00	20.5	5		
5	256QAM	12	13	19.08	19.07	19.00				
5	256QAM	25	0	18.98	19.08	18.97				

Band 41 Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power High Ch. / Freq.	Power Middle Ch. / Freq.	Power Low Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	24.11	24.14	24.15	25.5	0		
20	QPSK	1	49	24.02	24.08	24.12				
20	QPSK	1	99	23.99	24.01	24.08				
20	QPSK	50	0	23.16	23.16	23.17				
20	QPSK	50	24	22.97	23.07	23.13	24.5	1		
20	QPSK	50	50	22.96	23.02	23.09				
20	QPSK	100	0	23.14	23.10	23.13				
20	16QAM	1	0	23.13	23.14	23.12	24.5	1		
20	16QAM	1	49							



Band 38 Ant 3										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	25.45	25.50	25.43	25.7	0		
20	QPSK	1	49	25.33	25.48	25.39	25.7	0		
20	QPSK	1	99	25.40	25.45	25.33	25.7	0		
20	QPSK	50	0	24.41	24.53	24.46	24.7	1		
20	QPSK	50	24	24.29	24.53	24.45	24.7	1		
20	QPSK	50	50	24.35	24.50	24.38	24.7	1		
20	QPSK	100	0	24.49	24.47	24.38	24.7	1		
20	16QAM	1	0	24.46	24.45	24.43	24.7	1		
20	16QAM	1	49	24.29	24.43	24.34	24.7	1		
20	16QAM	1	99	24.35	24.49	24.33	24.7	1		
20	16QAM	50	0	23.42	23.38	23.50	23.7	2		
20	16QAM	50	24	23.28	23.53	23.48	23.7	2		
20	16QAM	50	50	23.34	23.53	23.43	23.7	2		
20	16QAM	100	0	23.48	23.53	23.38	23.7	2		
20	64QAM	1	0	23.41	23.41	23.45	23.7	2		
20	64QAM	1	49	23.23	23.49	23.30	23.7	2		
20	64QAM	1	99	23.36	23.44	23.30	23.7	2		
20	64QAM	50	0	22.43	22.59	22.48	22.7	3		
20	64QAM	50	24	22.34	22.51	22.46	22.7	3		
20	64QAM	50	50	22.37	22.35	22.33	22.7	3		
20	64QAM	100	0	22.48	22.52	22.42	22.7	3		
20	256QAM	1	0	20.44	20.47	20.43	20.7	5		
20	256QAM	1	49	20.31	20.57	20.41	20.7	5		
20	256QAM	1	99	20.40	20.52	20.33	20.7	5		
20	256QAM	50	0	20.32	20.30	20.37	20.7	5		
20	256QAM	50	24	20.43	20.46	20.46	20.7	5		
20	256QAM	50	50	20.30	20.44	20.29	20.7	5		
20	256QAM	100	0	20.30	20.53	20.35	20.7	5		
Channel				37825	38000	38175				
Frequency (MHz)				25775	25950	26125				
15	QPSK	1	0	25.41	25.39	25.33	25.7	0		
15	QPSK	1	37	25.28	25.38	25.26	25.7	0		
15	QPSK	1	74	25.30	25.38	25.31	25.7	0		
15	QPSK	36	0	24.27	24.47	24.37	24.7	1		
15	QPSK	36	20	24.18	24.51	24.35	24.7	1		
15	QPSK	36	39	24.31	24.45	24.35	24.7	1		
15	QPSK	75	0	24.36	24.37	24.32	24.7	1		
15	16QAM	1	0	24.41	24.36	24.32	24.7	1		
15	16QAM	1	37	24.26	24.40	24.21	24.7	1		
15	16QAM	1	74	24.30	24.44	24.22	24.7	1		
15	16QAM	36	0	23.34	23.45	23.37	23.7	2		
15	16QAM	36	20	23.16	23.39	23.38	23.7	2		
15	16QAM	36	39	23.30	23.50	23.35	23.7	2		
15	16QAM	75	0	23.43	23.44	23.33	23.7	2		
15	16QAM	1	0	23.37	23.28	23.46	23.7	2		
15	16QAM	1	37	23.18	23.44	23.19	23.7	2		
15	16QAM	1	74	23.33	23.33	23.26	23.7	2		
15	16QAM	36	0	22.36	22.51	22.45	22.7	3		
15	16QAM	36	20	22.30	22.40	22.44	22.7	3		
15	16QAM	36	39	22.31	22.45	22.20	22.7	3		
15	16QAM	75	0	22.37	22.48	22.36	22.7	3		
15	256QAM	1	0	20.32	20.37	20.38	20.7	5		
15	256QAM	1	37	20.22	20.49	20.31	20.7	5		
15	256QAM	1	74	20.35	20.45	20.24	20.7	5		
15	256QAM	36	0	20.49	20.45	20.27	20.7	5		
15	256QAM	36	20	20.34	20.37	20.42	20.7	5		
15	256QAM	36	39	20.21	20.37	20.20	20.7	5		
15	256QAM	75	0	20.18	20.48	20.26	20.7	5		
Channel				37800	38000	38200				
Frequency (MHz)				25750	25950	26150				
10	QPSK	1	0	25.41	25.44	25.33	25.7	0		
10	QPSK	1	25	25.24	25.37	25.35	25.7	0		
10	QPSK	1	49	25.33	25.39	25.22	25.7	0		
10	QPSK	25	0	24.34	24.47	24.43	24.7	1		
10	QPSK	25	12	24.17	24.39	24.38	24.7	1		
10	QPSK	25	25	24.28	24.42	24.26	24.7	1		
10	QPSK	50	0	24.36	24.43	24.29	24.7	1		
10	16QAM	1	0	24.37	24.33	24.41	24.7	1		
10	16QAM	1	25	24.20	24.39	24.22	24.7	1		
10	16QAM	1	49	24.27	24.37	24.26	24.7	1		
10	16QAM	25	0	23.28	23.50	23.38	23.7	2		
10	16QAM	25	12	23.19	23.51	23.40	23.7	2		
10	16QAM	25	25	23.28	23.49	23.40	23.7	2		
10	16QAM	50	0	23.37	23.44	23.35	23.7	2		
10	16QAM	1	0	23.27	23.37	23.37	23.7	2		
10	64QAM	1	25	23.14	23.40	23.26	23.7	2		
10	64QAM	1	49	23.28	23.42	23.19	23.7	2		
10	64QAM	25	0	22.37	22.54	22.37	22.7	3		
10	64QAM	25	12	22.31	22.48	22.40	22.7	3		
10	64QAM	25	25	22.27	22.41	22.26	22.7	3		
10	64QAM	50	0	22.38	22.41	22.35	22.7	3		
10	256QAM	1	0	20.32	20.36	20.35	20.7	5		
10	256QAM	1	25	20.28	20.53	20.34	20.7	5		
10	256QAM	1	49	20.37	20.48	20.24	20.7	5		
10	256QAM	25	0	20.49	20.37	20.33	20.7	5		
10	256QAM	25	12	20.39	20.38	20.38	20.7	5		
10	256QAM	25	25	20.20	20.41	20.17	20.7	5		
10	256QAM	50	0	20.20	20.51	20.21	20.7	5		
Channel				37775	38000	38225				
Frequency (MHz)				22725	22950	23175				
5	QPSK	1	0	25.34	25.39	25.40	25.7	0		
5	QPSK	1	12	25.28	25.41	25.34	25.7	0		
5	QPSK	1	24	25.30	25.40	25.26	25.7	0		
5	QPSK	12	0	24.38	24.42	24.37	24.7	1		
5	QPSK	12	7	24.27	24.47	24.34	24.7	1		
5	QPSK	12	13	24.28	24.42	24.30	24.7	1		
5	QPSK	25	0	24.43	24.41	24.24	24.7	1		
5	16QAM	1	0	24.41	24.43	24.35	24.7	1		
5	16QAM	1	12	24.16	24.38	24.21	24.7	1		
5	16QAM	1	24	24.25	24.40	24.27	24.7	1		
5	16QAM	12	0	23.31	23.52	23.40	23.7	2		
5	16QAM	12	7	23.17	23.44	23.36	23.7	2		
5	16QAM	12	13	23.31	23.46	23.41	23.7	2		
5	16QAM	25	0	23.46	23.50	23.36	23.7	2		
5	64QAM	1	0	23.29	23.33	23.36	23.7	2		
5	64QAM	1	12	23.14	23.39	23.26	23.7	2		
5	64QAM	1	24	23.31	23.33	23.22	23.7	2		
5	64QAM	12	0	22.32	22.46	22.43	22.7	3		
5	64QAM	12	7	22.30	22.48	22.43	22.7	3		
5	64QAM	12	13	22.31	22.41	22.30	22.7	3		
5	64QAM	25	0	22.42	22.39	22.35	22.7	3		
5	256QAM	1	0	20.35	20.38	20.30	20.7	5		
5	256QAM	1	12	20.24	20.51	20.29	20.7	5		
5	256QAM	1	24	20.29	20.48	20.28	20.7	5		
5	256QAM	12	0	20.48	20.38	20.29	20.7	5		
5	256QAM	12	7	20.31	20.42	20.40	20.7	5		
5	256QAM	12	13	20.23	20.36	20.15	20.7	5		
5	256QAM	25	0	20.22	20.42	20.24	20.7	5		

Band 41 Ant 3										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	25.36	25.29	25.48	25.25	25.31	25.7	0
20	QPSK	1	49	25.22	25.16	25.39	25.43	25.23	25.7	0
20										



Band 38 Ant 4										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	23.09	23.15	23.13	24.5	0		
20	QPSK	1	49	23.00	23.10	23.09				
20	QPSK	1	99	22.97	23.09	23.04				
20	QPSK	50	0	22.08	22.21	22.10				
20	QPSK	50	24	22.03	22.08	22.15				
20	QPSK	50	50	21.99	22.03	22.10	23.5	1		
20	QPSK	100	0	22.10	22.14	22.13				
20	16QAM	1	0	22.07	22.14	22.15				
20	16QAM	1	49	22.06	22.16	22.06				
20	16QAM	1	99	21.98	22.11	22.02				
20	16QAM	50	0	21.07	21.17	21.08				
20	16QAM	50	24	20.97	21.02	21.17				
20	16QAM	50	50	20.99	21.01	21.04				
20	16QAM	100	0	21.12	21.19	21.11				
20	64QAM	1	0	21.08	21.16	21.10				
20	64QAM	1	49	21.07	21.22	21.07				
20	64QAM	1	99	20.94	21.06	21.00				
20	64QAM	50	0	20.09	20.26	20.07				
20	64QAM	50	24	20.95	20.11	20.15				
20	64QAM	50	50	19.99	19.98	20.11	21.5	3		
20	64QAM	100	0	20.10	20.10	20.19				
20	256QAM	1	0	18.10	18.25	18.13				
20	256QAM	1	49	17.98	18.06	18.14				
20	256QAM	1	99	17.97	18.05	18.13				
20	256QAM	50	0	18.14	18.17	18.14				
20	256QAM	50	24	18.07	18.11	18.17				
20	256QAM	50	50	18.00	18.12	18.01				
20	256QAM	100	0	18.02	18.09	17.96				
Channel				37825	38000	38175				
Frequency (MHz)				25775	2595	2612.5				
15	QPSK	1	0	23.02	23.05	23.10	24.5	0		
15	QPSK	1	37	22.89	23.07	22.99				
15	QPSK	1	74	22.86	22.96	22.99				
15	QPSK	36	0	22.05	22.13	22.03				
15	QPSK	36	20	22.01	21.94	22.10				
15	QPSK	36	39	21.91	21.98	21.97	23.5	1		
15	QPSK	75	0	22.08	22.08	22.05				
15	16QAM	1	0	21.99	22.01	22.11				
15	16QAM	1	37	21.96	22.13	22.03				
15	16QAM	1	74	21.96	22.06	21.94				
15	16QAM	36	0	20.95	21.13	21.03				
15	16QAM	36	20	20.90	20.98	21.03				
15	16QAM	36	39	20.87	20.94	20.91	22.5	2		
15	16QAM	75	0	20.99	21.14	20.99				
15	64QAM	1	0	21.01	21.04	20.99				
15	64QAM	1	37	21.01	21.10	21.03				
15	64QAM	1	74	20.93	21.01	20.98				
15	64QAM	36	0	19.99	20.17	19.95				
15	64QAM	36	20	19.97	20.09	20.09				
15	64QAM	36	39	19.89	19.85	20.01	21.5	3		
15	64QAM	75	0	20.00	19.96	20.06				
15	256QAM	1	0	18.01	18.05	18.01				
15	256QAM	1	37	17.93	18.04	18.06				
15	256QAM	1	74	17.83	17.92	18.01				
15	256QAM	36	0	18.06	18.13	18.01				
15	256QAM	36	20	18.03	18.01	18.11				
15	256QAM	36	39	17.86	18.07	17.98				
15	256QAM	75	0	17.99	18.06	17.92				
Channel				37800	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	22.98	23.12	23.11	24.5	0		
10	QPSK	1	25	22.89	23.03	22.98				
10	QPSK	1	49	22.89	23.00	22.94				
10	QPSK	25	0	22.06	22.14	22.04				
10	QPSK	25	12	21.93	22.02	22.08				
10	QPSK	25	25	21.89	21.98	22.01				
10	QPSK	50	0	22.03	22.11	22.10				
10	16QAM	1	0	21.94	22.09	22.10				
10	16QAM	1	25	21.99	22.11	22.02				
10	16QAM	1	49	21.92	22.05	21.85				
10	16QAM	25	0	21.05	21.03	20.98				
10	16QAM	25	12	20.87	20.96	21.07				
10	16QAM	25	25	20.93	20.96	20.92				
10	16QAM	50	0	21.08	21.08	21.07				
10	64QAM	1	0	21.04	21.03	21.03				
10	64QAM	1	25	21.04	21.09	20.94				
10	64QAM	1	49	20.86	20.98	20.91				
10	64QAM	25	0	20.06	20.18	19.94				
10	64QAM	25	12	19.99	20.04	20.07				
10	64QAM	25	25	19.97	19.96	20.03				
10	64QAM	50	0	20.06	20.06	20.15	21.5	3		
10	256QAM	1	0	17.97	18.12	18.07				
10	256QAM	1	25	17.93	18.03	18.01				
10	256QAM	1	49	17.90	17.91	18.10				
10	256QAM	25	0	18.11	18.12	18.10				
10	256QAM	25	12	18.02	18.07	18.09				
10	256QAM	25	25	17.87	18.05	17.92				
10	256QAM	50	0	17.93	18.02	17.92				
Channel				37775	38000	38225				
Frequency (MHz)				25725	2595	2617.5				
5	QPSK	1	0	22.99	23.08	23.06	24.5	0		
5	QPSK	1	12	22.90	22.98	22.96				
5	QPSK	1	24	22.85	22.97	23.02				
5	QPSK	12	0	22.07	22.08	22.06				
5	QPSK	12	7	21.94	21.98	22.04				
5	QPSK	12	13	21.89	21.97	22.00				
5	QPSK	25	0	22.04	22.01	22.02				
5	16QAM	1	0	21.99	22.02	22.08				
5	16QAM	1	12	21.97	22.11	22.04				
5	16QAM	1	24	21.95	22.00	21.91				
5	16QAM	12	0	21.01	21.15	21.03				
5	16QAM	12	7	20.86	20.95	21.10				
5	16QAM	12	13	20.92	20.93	20.94				
5	16QAM	25	0	21.04	21.07	21.07				
5	64QAM	1	0	20.99	21.10	21.00				
5	64QAM	1	12	21.00	21.11	20.95				
5	64QAM	1	24	20.82	20.99	20.91				
5	64QAM	12	0	20.03	20.16	19.96				
5	64QAM	12	7	19.92	19.99	20.11				
5	64QAM	12	13	19.87	19.92	20.04				
5	64QAM	25	0	20.01	20.06	20.08				
5	256QAM	1	0	18.05	18.19	18.05				
5	256QAM	1	12	17.88	17.94	18.04				
5	256QAM	1	24	17.95	17.94	18.03				
5	256QAM	12	0	18.08	18.12	18.10				
5	256QAM	12	7	17.95	18.01	18.13				
5	256QAM	12	13	17.88	17.99	17.89				
5	256QAM	25	0	17.91	18.01	17.83				

Band 41 Ant 4										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	23.05	22.97	23.11	24.5	0		
20	QPSK	1	49	22.98	22.87	23.06				
20	QPSK	1	99	22.98	22.94	23.03				
20	QPSK	50	0	22.10	21.92	22.15				
20	QPSK	50	24	22.04	21.83	22.11				
20	QPSK	50	50	21.98	21.89	22.05				
20	QPSK	100	0	22.10	22.00	22.12				
20	16QAM	1	0	22.08	21.91	22.09				
20	16QAM	1	49	22.00	21.90	22.06				
20	16QAM	1	99	21.99	21.96	22.05				
20	16QAM	50	0	21.14	20.95					



Band 38 Ant 5										
BW (MHz)	Modulation	RB Size	RB Offset	Power High Ch. / Freq.	Power Middle Ch. / Freq.	Power Low Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	24.21	24.24	24.19	25.5	0		
20	QPSK	1	49	24.18	24.20	24.14				
20	QPSK	1	99	24.10	24.17	24.09				
20	QPSK	50	0	23.20	23.28	23.14				
20	QPSK	50	24	23.16	23.22	23.17	24.5	1		
20	QPSK	50	50	23.07	23.12	23.10				
20	QPSK	100	0	23.16	23.27	23.15				
20	16QAM	1	0	23.16	23.24	23.18	24.5	1		
20	16QAM	1	49	23.19	23.17	23.09				
20	16QAM	1	99	23.09	23.20	23.12				
20	16QAM	50	0	22.23	22.25	22.12				
20	16QAM	50	24	22.13	22.17	22.13	23.5	2		
20	16QAM	50	50	22.02	22.16	22.09				
20	16QAM	100	0	22.20	22.26	22.18				
20	64QAM	1	0	22.16	22.29	22.23				
20	64QAM	1	49	22.16	22.14	22.03	23.5	2		
20	64QAM	1	99	22.10	22.26	22.16				
20	64QAM	50	0	21.14	21.30	21.19				
20	64QAM	50	24	21.14	21.18	21.18	22.5	3		
20	64QAM	50	50	21.11	21.17	21.05				
20	64QAM	100	0	21.19	21.32	21.16				
20	256QAM	1	0	19.22	19.26	19.13				
20	256QAM	1	49	19.19	19.27	19.20	20.5	5		
20	256QAM	1	99	19.07	19.17	19.10				
20	256QAM	50	0	19.15	19.28	19.16				
20	256QAM	50	24	19.20	19.18	19.14	20.5	5		
20	256QAM	50	50	19.15	19.16	19.11				
20	256QAM	100	0	19.11	19.25	19.09				
Channel				37825	38000	38175				
Frequency (MHz)				25775	25925	26125				
15	QPSK	1	0	24.19	24.13	24.13	25.5	0		
15	QPSK	1	37	24.15	24.10	24.11				
15	QPSK	1	74	23.98	24.11	24.01				
15	QPSK	36	0	23.08	23.17	23.05				
15	QPSK	36	20	23.09	23.13	23.04	24.5	1		
15	QPSK	36	39	23.03	23.09	23.09				
15	QPSK	75	0	23.03	23.17	23.11				
15	16QAM	1	0	23.13	23.14	23.16				
15	16QAM	1	37	23.06	23.08	23.01	24.5	1		
15	16QAM	1	74	23.05	23.14	22.99				
15	16QAM	36	0	22.11	22.19	22.03				
15	16QAM	36	20	22.03	22.14	22.04	23.5	2		
15	16QAM	36	39	21.90	22.07	22.05				
15	16QAM	75	0	22.16	22.15	22.09				
15	64QAM	1	0	22.09	22.26	22.11				
15	64QAM	1	37	22.06	22.10	21.96	23.5	2		
15	64QAM	1	74	22.06	22.12	22.12				
15	64QAM	36	0	21.08	21.25	21.14				
15	64QAM	36	20	21.00	21.11	21.05	22.5	3		
15	64QAM	36	39	21.02	21.09	20.93				
15	64QAM	75	0	21.15	21.24	21.14				
15	256QAM	1	0	19.19	19.14	19.07	20.5	5		
15	256QAM	1	37	19.08	19.20	19.10				
15	256QAM	1	74	19.04	19.14	18.99				
15	256QAM	36	0	19.03	19.19	19.07				
15	256QAM	36	20	19.09	19.15	19.06	20.5	5		
15	256QAM	36	39	19.12	19.10	19.02				
15	256QAM	75	0	19.03	19.21	19.00				
Channel				37800	38000	38200				
Frequency (MHz)				25750	25950	26150				
10	QPSK	1	0	24.14	24.13	24.12	25.5	0		
10	QPSK	1	25	24.07	24.11	24.10				
10	QPSK	1	49	24.00	24.12	24.01				
10	QPSK	25	0	23.11	23.17	23.02				
10	QPSK	25	12	23.13	23.10	23.04	24.5	1		
10	QPSK	25	25	22.94	23.04	23.03				
10	QPSK	50	0	23.12	23.13	23.02				
10	16QAM	1	0	23.04	23.20	23.10	24.5	1		
10	16QAM	1	25	23.06	23.11	23.00				
10	16QAM	1	49	23.00	23.10	22.98				
10	16QAM	25	0	22.14	22.13	22.05				
10	16QAM	25	12	22.07	22.11	22.07	23.5	2		
10	16QAM	25	25	21.93	22.13	22.05				
10	16QAM	50	0	22.17	22.17	22.11				
10	64QAM	1	0	22.10	22.24	22.12	23.5	2		
10	64QAM	1	25	22.09	22.00	21.96				
10	64QAM	1	49	22.04	22.19	22.10				
10	64QAM	25	0	21.10	21.18	21.06	22.5	3		
10	64QAM	25	12	21.04	21.10	21.10				
10	64QAM	25	25	21.02	21.14	21.00				
10	64QAM	50	0	21.15	21.22	21.04				
10	256QAM	1	0	19.13	19.18	19.00	20.5	5		
10	256QAM	1	25	19.12	19.19	19.13				
10	256QAM	1	49	18.99	19.15	18.97				
10	256QAM	25	0	19.05	19.26	19.07				
10	256QAM	25	12	19.11	19.05	19.11	20.5	5		
10	256QAM	25	25	19.13	19.14	19.05				
10	256QAM	50	0	18.99	19.21	19.03				
Channel				37775	38000	38225				
Frequency (MHz)				25725	25950	26175				
5	QPSK	1	0	24.07	24.20	24.06	25.5	0		
5	QPSK	1	12	24.09	24.11	24.01				
5	QPSK	1	24	23.97	24.13	23.99				
5	QPSK	12	0	23.07	23.16	23.07				
5	QPSK	12	7	23.12	23.09	23.12	24.5	1		
5	QPSK	12	13	22.94	23.00	22.99				
5	QPSK	25	0	23.12	23.24	23.02				
5	16QAM	1	0	23.14	23.21	23.05	24.5	1		
5	16QAM	1	12	23.11	23.09	23.03				
5	16QAM	1	24	23.00	23.13	23.04				
5	16QAM	12	0	22.11	22.22	22.06				
5	16QAM	12	7	22.06	22.05	22.11	23.5	2		
5	16QAM	12	13	21.93	22.09	21.96				
5	16QAM	25	0	22.11	22.15	22.15				
5	64QAM	1	0	22.12	22.24	22.19				
5	64QAM	1	12	22.13	22.04	21.94	23.5	2		
5	64QAM	1	24	21.97	22.19	22.12				
5	64QAM	12	0	21.11	21.27	21.14				
5	64QAM	12	7	21.11	21.09	21.12	22.5	3		
5	64QAM	12	13	21.03	21.15	21.02				
5	64QAM	25	0	21.10	21.23	21.07				
5	256QAM	1	0	19.08	19.15	19.10	20.5	5		
5	256QAM	1	12	19.14	19.24	19.16				
5	256QAM	1	24	18.98	19.14	19.04				
5	256QAM	12	0	19.04	19.24	19.08				
5	256QAM	12	7	19.16	19.08	19.01	20.5	5		
5	256QAM	12	13	19.11	19.11	19.02				
5	256QAM	25	0	18.99	19.18	18.98				

Band 41 Ant 5										
BW (MHz)	Modulation	RB Size	RB Offset	Power High Ch. / Freq.	Power Middle Ch. / Freq.	Power Low Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	24.13	24.18	24.19	24.00	24.05		
20	QPSK	1	49	24.06	24.11	24.17	23.92	24.01	25.5	0
20	QPSK	1	99	24.02	24.09	24.16	23.91	23.93		
20	QPSK	50	0	23.14	23.19	23.21	23.02	23.05		
20	QPSK	50	24	23.03	23.09	23.20	22.97	22.98	24.5	1
20										



Band 42 Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				42190	42590	42990			
Frequency (MHz)				3460	3500	3540			
20	QPSK	1	0	21.43	21.52	21.46	23	0	
20	QPSK	1	49	21.36	21.48	21.37			
20	QPSK	1	99	21.31	21.47	21.41			
20	QPSK	50	0	20.47	20.54	20.40			
20	QPSK	50	24	20.35	20.48	20.39			
20	QPSK	50	50	20.27	20.52	20.35			
20	QPSK	100	0	20.45	20.53	20.40			
20	16QAM	1	0	20.48	20.47	20.49			
20	16QAM	1	49	20.36	20.56	20.34			
20	16QAM	1	99	20.33	20.52	20.43			
20	16QAM	50	0	19.47	19.58	19.43			
20	16QAM	50	24	19.30	19.52	19.43			
20	16QAM	50	50	19.33	19.55	19.40			
20	16QAM	100	0	19.47	19.52	19.36			
20	64QAM	1	0	19.54	19.47	19.46			
20	64QAM	1	49	19.40	19.58	19.37			
20	64QAM	1	99	19.31	19.47	19.37			
20	64QAM	50	0	18.53	18.59	18.43			
20	64QAM	50	24	18.31	18.46	18.45			
20	64QAM	50	50	18.29	18.45	18.30			
20	64QAM	100	0	18.49	18.53	18.41			
20	256QAM	1	0	16.48	16.57	16.41			
20	256QAM	1	49	16.38	16.50	16.39			
20	256QAM	1	99	16.21	16.50	16.34			
20	256QAM	50	0	16.47	16.53	16.46			
20	256QAM	50	24	16.47	16.49	16.44			
20	256QAM	50	50	16.32	16.56	16.30			
20	256QAM	100	0	16.27	16.55	16.38			
Channel				42165	42590	43015			
Frequency (MHz)				3422.5	3525	3527.5			
15	QPSK	1	0	21.36	21.49	21.36	23	0	
15	QPSK	1	37	21.31	21.37	21.32			
15	QPSK	1	74	21.17	21.45	21.37			
15	QPSK	36	0	20.42	20.47	20.29			
15	QPSK	36	20	20.32	20.34	20.34			
15	QPSK	36	39	20.15	20.48	20.25			
15	QPSK	75	0	20.39	20.40	20.35			
15	16QAM	1	0	20.42	20.39	20.41			
15	16QAM	1	37	20.25	20.41	20.30			
15	16QAM	1	74	20.22	20.40	20.35			
15	16QAM	36	0	19.36	19.45	19.33			
15	16QAM	36	20	19.24	19.49	19.34			
15	16QAM	36	39	19.28	19.42	19.36			
15	16QAM	75	0	19.44	19.44	19.23			
15	64QAM	1	0	19.42	19.39	19.39			
15	64QAM	1	37	19.28	19.51	19.33			
15	64QAM	1	74	19.21	19.39	19.30			
15	64QAM	36	0	18.49	18.48	18.36			
15	64QAM	36	20	18.27	18.41	18.42			
15	64QAM	36	39	18.26	18.38	18.18			
15	64QAM	75	0	18.37	18.40	18.38			
15	256QAM	1	0	16.37	16.54	16.30			
15	256QAM	1	37	16.25	16.41	16.35			
15	256QAM	1	74	16.09	16.40	16.21			
15	256QAM	36	0	16.43	16.48	16.43			
15	256QAM	36	20	16.37	16.43	16.37			
15	256QAM	36	39	16.19	16.44	16.17			
15	256QAM	75	0	16.17	16.48	16.28			
Channel				42140	42590	43040			
Frequency (MHz)				3455	3500	3545			
10	QPSK	1	0	21.40	21.49	21.42	23	0	
10	QPSK	1	25	21.27	21.38	21.28			
10	QPSK	1	49	21.25	21.38	21.30			
10	QPSK	25	0	20.34	20.50	20.29			
10	QPSK	25	12	20.31	20.38	20.26			
10	QPSK	25	25	20.22	20.40	20.23			
10	QPSK	50	0	20.36	20.46	20.38			
10	16QAM	1	0	20.34	20.34	20.37			
10	16QAM	1	25	20.30	20.41	20.24			
10	16QAM	1	49	20.20	20.39	20.37			
10	16QAM	25	0	19.38	19.45	19.32			
10	16QAM	25	12	19.25	19.43	19.39			
10	16QAM	25	25	19.21	19.45	19.35			
10	16QAM	50	0	19.38	19.48	19.34			
10	64QAM	1	0	19.51	19.35	19.37			
10	64QAM	1	25	19.37	19.51	19.30			
10	64QAM	1	49	19.18	19.44	19.28			
10	64QAM	25	0	18.49	18.45	18.35			
10	64QAM	25	12	18.25	18.32	18.33			
10	64QAM	25	25	18.19	18.40	18.24			
10	64QAM	50	0	18.36	18.48	18.27			
10	256QAM	1	0	16.39	16.50	16.29			
10	256QAM	1	25	16.31	16.44	16.35			
10	256QAM	1	49	16.11	16.41	16.29			
10	256QAM	25	0	16.36	16.50	16.43			
10	256QAM	25	12	16.41	16.40	16.38			
10	256QAM	25	25	16.27	16.45	16.24			
10	256QAM	50	0	16.21	16.43	16.32			
Channel				42115	42590	43065			
Frequency (MHz)				3422.5	3500	3547.5			
5	QPSK	1	0	21.38	21.46	21.42	23	0	
5	QPSK	1	12	21.31	21.40	21.35			
5	QPSK	1	24	21.20	21.40	21.38			
5	QPSK	12	0	20.37	20.48	20.26			
5	QPSK	12	7	20.24	20.45	20.27			
5	QPSK	12	13	20.16	20.49	20.29			
5	QPSK	25	0	20.39	20.42	20.28			
5	16QAM	1	0	20.41	20.42	20.43			
5	16QAM	1	12	20.23	20.41	20.26			
5	16QAM	1	24	20.21	20.45	20.35			
5	16QAM	12	0	19.40	19.51	19.37			
5	16QAM	12	7	19.26	19.41	19.34			
5	16QAM	12	13	19.28	19.50	19.29			
5	16QAM	25	0	19.39	19.45	19.30			
5	64QAM	1	0	19.47	19.42	19.41			
5	64QAM	1	12	19.36	19.49	19.35			
5	64QAM	1	24	19.17	19.40	19.36			
5	64QAM	12	0	18.48	18.47	18.40			
5	64QAM	12	7	18.24	18.33	18.38			
5	64QAM	12	13	18.18	18.40	18.28			
5	64QAM	25	0	18.36	18.40	18.37			
5	256QAM	1	0	16.38	16.50	16.29			
5	256QAM	1	12	16.30	16.47	16.35			
5	256QAM	1	24	16.15	16.37	16.22			
5	256QAM	12	0	16.40	16.44	16.32			
5	256QAM	12	7	16.43	16.47	16.38			
5	256QAM	12	13	16.20	16.54	16.27			
5	256QAM	25	0	16.18	16.48	16.25			

Band 48 Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				55340	55830	56150			
Frequency (MHz)				3560	3569	3641			
20	QPSK	1	0	20.62	20.71	20.67	22	0	
20	QPSK	1	49	20.58	20.88	20.64			
20	QPSK	1	99	20.50	20.85	20.57			
20	QPSK	50	0	19.58	19.72	19.71			
20	QPSK	50	24	19.56	19.68	19.60			
20	QPSK	50	50	19.55	19.60	19.62			
20	QPSK	100	0	19.65	19.70	19.73			
20	16QAM	1	0	19.65	19.66	19.63			
20	16QAM	1	49	19.58	19.65	19.61			
20	16QAM	1	99	19.47	19.68	19.57			
20	16QAM	50	0	18.63	18.68	18.73			
20	16QAM	50	24	18.52	18.72	18.66			
20	16QAM	50	50	18.58	18.55	18.64			
20	16QAM	100	0	18.59	18.69	18.72			
20	64QAM	1	0	18.58	18.63	18.58			
20	64QAM	1	49	18.55	18.62	18.57	</		



Band 42 Ant 6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				42190	42590	42990			
Frequency (MHz)				3460	3500	3540			
20	QPSK	1	0	25.07	25.13	25.09	26	0	
20	QPSK	1	49	24.95	25.10	25.05			
20	QPSK	1	99	24.98	25.08	24.95			
20	QPSK	50	0	24.03	24.18	24.08			
20	QPSK	50	24	23.96	24.09	24.03	25	1	
20	QPSK	50	50	23.92	24.04	23.99			
20	QPSK	100	0	24.04	24.13	24.14			
20	16QAM	1	0	24.11	24.11	24.07			
20	16QAM	1	49	23.89	23.99	23.96	25	1	
20	16QAM	1	99	24.01	24.09	23.94			
20	16QAM	50	0	23.08	23.19	23.04			
20	16QAM	50	24	22.96	23.10	23.00	24	2	
20	16QAM	50	50	22.98	23.05	23.03			
20	16QAM	100	0	23.03	23.17	23.18			
20	64QAM	1	0	23.12	23.10	23.07			
20	64QAM	1	49	22.88	23.11	23.08	24	2	
20	64QAM	1	99	23.02	23.10	22.97			
20	64QAM	50	0	22.04	22.19	22.06			
20	64QAM	50	24	21.99	22.05	22.00	23	3	
20	64QAM	50	50	21.97	22.08	21.98			
20	64QAM	100	0	22.02	22.07	22.20			
20	256QAM	1	0	19.97	20.12	20.13			
20	256QAM	1	49	19.97	20.07	20.02	21	5	
20	256QAM	1	99	19.93	19.99	19.99			
20	256QAM	50	0	20.09	20.08	20.19			
20	256QAM	50	24	20.09	20.08	20.07	21	5	
20	256QAM	50	50	19.88	20.04	20.07			
20	256QAM	100	0	19.96	20.08	19.96			
Channel				42165	42590	43015	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3472.5	3525	3577.5			
15	QPSK	1	0	24.95	25.01	25.06	26	0	
15	QPSK	1	37	24.82	25.00	24.98			
15	QPSK	1	74	24.84	24.98	24.83			
15	QPSK	36	0	24.00	24.10	24.02			
15	QPSK	36	20	23.86	24.01	23.88	25	1	
15	QPSK	36	39	23.82	23.90	23.86			
15	QPSK	75	0	23.96	24.09	24.03			
15	16QAM	1	0	24.06	24.08	24.00			
15	16QAM	1	37	23.80	24.00	23.94	25	1	
15	16QAM	1	74	23.95	24.03	23.90			
15	16QAM	36	0	23.00	23.12	22.96			
15	16QAM	36	20	22.90	23.02	22.96	24	2	
15	16QAM	36	39	22.93	22.98	22.92			
15	16QAM	75	0	22.94	23.14	23.05			
15	64QAM	1	0	23.01	23.01	22.94			
15	64QAM	1	37	22.83	23.01	23.03	24	2	
15	64QAM	1	74	22.88	23.01	22.91			
15	64QAM	36	0	21.98	22.14	22.02			
15	64QAM	36	20	21.90	21.94	21.91	23	3	
15	64QAM	36	39	21.88	21.96	21.92			
15	64QAM	75	0	21.94	21.95	22.13			
15	256QAM	1	0	19.85	20.01	20.01			
15	256QAM	1	37	19.95	19.95	19.93	21	5	
15	256QAM	1	74	19.88	19.92	19.91			
15	256QAM	36	0	20.07	20.05	20.17			
15	256QAM	36	20	19.98	19.98	19.96	21	5	
15	256QAM	36	39	19.79	19.99	19.98			
15	256QAM	75	0	19.88	19.95	19.91			
Channel				42140	42590	43040	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3455	3500	3545			
10	QPSK	1	0	25.02	25.08	25.02	26	0	
10	QPSK	1	25	24.83	25.07	25.00			
10	QPSK	1	49	24.89	25.06	24.91			
10	QPSK	25	0	23.90	24.04	23.99			
10	QPSK	25	12	23.90	24.06	23.94	25	1	
10	QPSK	25	25	23.80	23.98	23.96			
10	QPSK	50	0	23.97	24.08	24.09			
10	16QAM	1	0	24.07	24.05	24.00			
10	16QAM	1	25	23.83	23.99	23.99	25	1	
10	16QAM	1	49	23.90	24.01	23.91			
10	16QAM	25	0	22.96	23.06	22.98			
10	16QAM	25	12	22.88	23.07	22.93	24	2	
10	16QAM	25	25	22.90	22.94	22.99			
10	16QAM	50	0	22.99	23.12	23.08			
10	64QAM	1	0	23.01	23.00	22.97			
10	64QAM	1	25	22.81	23.02	22.99	24	2	
10	64QAM	1	49	22.90	22.98	22.91			
10	64QAM	25	0	21.91	22.17	21.98			
10	64QAM	25	12	21.88	21.93	21.95	23	3	
10	64QAM	25	25	21.85	22.00	21.90			
10	64QAM	50	0	21.94	22.05	22.10			
10	256QAM	1	0	19.88	20.07	20.00			
10	256QAM	1	25	19.85	20.02	19.89	21	5	
10	256QAM	1	49	19.86	19.92	19.88			
10	256QAM	25	0	19.96	20.00	20.16			
10	256QAM	25	12	20.06	19.98	19.96	21	5	
10	256QAM	25	25	19.77	19.96	19.97			
10	256QAM	50	0	19.90	20.02	19.83			
Channel				42115	42590	43065	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3422.5	3500	3577.5			
5	QPSK	1	0	24.99	24.99	25.03	26	0	
5	QPSK	1	12	24.84	25.02	24.95			
5	QPSK	1	24	24.85	24.96	24.90			
5	QPSK	12	0	23.93	24.08	23.94			
5	QPSK	12	7	23.92	23.98	23.94	25	1	
5	QPSK	12	13	23.88	23.93	23.88			
5	QPSK	25	0	23.96	24.10	24.03			
5	16QAM	1	0	23.99	24.02	24.03			
5	16QAM	1	12	23.77	24.03	23.96	25	1	
5	16QAM	1	24	23.95	24.05	23.81			
5	16QAM	12	0	23.01	23.09	22.93			
5	16QAM	12	7	22.86	23.01	22.97	24	2	
5	16QAM	12	13	22.96	22.99	22.90			
5	16QAM	25	0	22.94	23.05	23.14			
5	64QAM	1	0	23.09	23.04	23.05			
5	64QAM	1	12	22.83	23.08	23.04	24	2	
5	64QAM	1	24	22.92	22.97	22.83			
5	64QAM	12	0	21.96	22.10	22.01			
5	64QAM	12	7	21.90	22.02	21.90	23	3	
5	64QAM	12	13	21.87	22.04	21.90			
5	64QAM	25	0	21.95	22.03	22.07			
5	256QAM	1	0	19.93	20.05	20.05			
5	256QAM	1	12	19.88	20.03	19.95	21	5	
5	256QAM	1	24	19.79	19.97	19.90			
5	256QAM	12	0	20.05	20.04	20.14			
5	256QAM	12	7	20.00	19.98	19.94			
5	256QAM	12	13	19.75	19.98	20.03	21	5	
5	256QAM	25	0	19.91	20.04	19.90			

Band 48 Ant 6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	23.95	24.07	24.01	24.00	25	0
20	QPSK	1	49	23.90	24.04	23.93	23.87		
20	QPSK	1	99	23.86	24.00	23.90	23.87		
20	QPSK	50	0	22.95	23.07	22.97	23.06		
20	QPSK	50	24	22.96	23.05	22.93	22.88	24	1
20	QPSK	50	50	22.81	23.03	22.96	22.96		
20	QPSK	100	0	22.94	23.03	23.04	22.96		
20	16QAM	1	0	22.90	23.02	23.05	22.99		
20	16QAM	1	49	22.89	23.01	22.99	22.90	24	1
20	16QAM	1	99	22.88	23.02	22.89	22.92		
20	16QAM	50	0	21.94	22.05	21.96	22.10		
20	16QAM	50	24	22.00	22.07	21.96	21.90	23	2
20	16QAM	50	50	21.76	22.05				



Band 42 Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				42190	42590	42990			
Frequency (MHz)				3460	3500	3540			
20	QPSK	1	0	24.04	24.10	24.08	25.5	0	
20	QPSK	1	49	23.91	24.05	24.03			
20	QPSK	1	99	24.00	24.03	24.06			
20	QPSK	50	0	23.04	23.15	23.11			
20	QPSK	50	24	22.86	23.10	22.98	24.5	1	
20	QPSK	50	50	23.03	23.02	23.07			
20	QPSK	100	0	23.10	23.10	23.10			
20	16QAM	1	0	23.03	23.08	23.10			
20	16QAM	1	49	22.92	23.06	22.99			
20	16QAM	1	99	23.00	22.99	23.10	24.5	1	
20	16QAM	50	0	22.03	22.17	22.15			
20	16QAM	50	24	21.83	22.10	22.03	23.5	2	
20	16QAM	50	50	21.98	22.04	22.01			
20	16QAM	100	0	22.06	22.07	22.07			
20	64QAM	1	0	22.04	22.07	22.09			
20	64QAM	1	49	21.98	22.10	22.04	23.5	2	
20	64QAM	1	99	22.00	21.98	22.06			
20	64QAM	50	0	21.01	21.20	21.11			
20	64QAM	50	24	20.89	21.15	20.96	22.5	3	
20	64QAM	50	50	21.02	21.02	21.02			
20	64QAM	100	0	21.15	21.13	21.05			
20	256QAM	1	0	19.06	19.18	19.10			
20	256QAM	1	49	18.84	19.10	18.99	20.5	5	
20	256QAM	1	99	18.98	19.05	19.06			
20	256QAM	50	0	18.09	18.10	18.15			
20	256QAM	50	24	18.97	18.14	18.09	20.5	5	
20	256QAM	50	50	18.88	18.10	18.02			
20	256QAM	100	0	19.01	19.02	19.14			
Channel				42165	42590	43015	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3473.5	3525	3577.5			
15	QPSK	1	0	24.00	23.98	23.99	25.5	0	
15	QPSK	1	37	23.77	23.92	23.93			
15	QPSK	1	74	23.93	23.99	24.00			
15	QPSK	36	0	23.02	23.06	23.00	24.5	1	
15	QPSK	36	20	22.74	23.04	22.93			
15	QPSK	36	39	22.92	23.24	23.02			
15	QPSK	75	0	23.03	23.05	23.07			
15	16QAM	1	0	22.96	22.95	23.06			
15	16QAM	1	37	22.81	22.96	22.95	24.5	1	
15	16QAM	1	74	22.87	22.90	23.02			
15	16QAM	36	0	21.96	22.05	22.06			
15	16QAM	36	20	21.70	22.02	21.96	23.5	2	
15	16QAM	36	39	21.95	21.95	21.99			
15	16QAM	75	0	22.00	22.00	21.96			
15	64QAM	1	0	21.97	22.02	21.98			
15	64QAM	1	37	21.90	21.97	22.00	23.5	2	
15	64QAM	1	74	21.87	21.85	22.01			
15	64QAM	36	0	20.88	21.15	21.04			
15	64QAM	36	20	20.85	21.06	20.87	22.5	3	
15	64QAM	36	39	20.95	20.92	20.91			
15	64QAM	75	0	21.08	21.04	21.01			
15	256QAM	1	0	18.01	18.12	18.99			
15	256QAM	1	37	18.72	18.01	18.92	20.5	5	
15	256QAM	1	74	18.95	18.94	18.96			
15	256QAM	36	0	18.95	19.05	19.11			
15	256QAM	36	20	18.95	19.00	19.00	20.5	5	
15	256QAM	36	39	18.84	18.02	18.97			
15	256QAM	75	0	18.93	18.97	19.05			
Channel				42140	42590	43040	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3455	3500	3545			
10	QPSK	1	0	23.96	23.98	24.02	25.5	0	
10	QPSK	1	25	23.83	24.01	23.98			
10	QPSK	1	49	23.87	23.98	23.94			
10	QPSK	25	0	23.00	23.08	22.98	24.5	1	
10	QPSK	25	12	22.82	22.97	22.94			
10	QPSK	25	25	22.92	22.99	22.98			
10	QPSK	50	0	23.06	23.03	23.07			
10	16QAM	1	0	22.94	23.04	23.04	24.5	1	
10	16QAM	1	25	22.83	23.03	22.92			
10	16QAM	1	49	22.87	22.96	22.98			
10	16QAM	25	0	21.99	22.12	22.10	23.5	2	
10	16QAM	25	12	21.78	22.02	21.93			
10	16QAM	25	25	21.88	21.98	21.90			
10	16QAM	50	0	22.00	21.93	21.94			
10	64QAM	1	0	21.94	21.99	22.01	23.5	2	
10	64QAM	1	25	21.87	21.98	21.91			
10	64QAM	1	49	21.88	21.84	21.98			
10	64QAM	25	0	20.93	21.06	20.98	22.5	3	
10	64QAM	25	12	20.83	21.03	20.89			
10	64QAM	25	25	20.99	20.96	20.94			
10	64QAM	50	0	21.13	21.03	20.97			
10	256QAM	1	0	19.01	19.05	19.01	20.5	5	
10	256QAM	1	25	18.72	18.98	18.93			
10	256QAM	1	49	18.94	19.00	18.99			
10	256QAM	25	0	18.95	19.05	19.12			
10	256QAM	25	12	18.96	19.00	18.97	20.5	5	
10	256QAM	25	25	18.84	18.99	18.94			
10	256QAM	50	0	18.97	19.00	19.11			
Channel				42115	42590	43065	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3472.5	3500	3547.5			
5	QPSK	1	0	24.01	24.04	23.97	25.5	0	
5	QPSK	1	12	23.88	23.97	23.91			
5	QPSK	1	24	23.94	23.95	24.02			
5	QPSK	12	0	22.95	23.02	22.98	24.5	1	
5	QPSK	12	7	22.84	22.98	22.84			
5	QPSK	12	13	22.91	22.98	22.93			
5	QPSK	25	0	23.00	23.03	23.03			
5	16QAM	1	0	22.98	22.97	22.98	24.5	1	
5	16QAM	1	12	22.85	22.95	22.89			
5	16QAM	1	24	22.90	22.91	23.03			
5	16QAM	12	0	22.00	22.09	22.08	23.5	2	
5	16QAM	12	7	21.75	22.07	21.94			
5	16QAM	12	13	21.87	22.01	21.95			
5	16QAM	25	0	21.93	21.95	21.96			
5	64QAM	1	0	21.91	21.95	22.06			
5	64QAM	1	12	21.89	22.08	21.91	23.5	2	
5	64QAM	1	24	21.93	21.91	21.96			
5	64QAM	12	0	20.91	21.14	21.02			
5	64QAM	12	7	20.81	21.12	20.86	22.5	3	
5	64QAM	12	13	20.98	20.93	20.94			
5	64QAM	25	0	21.07	21.00	21.00			
5	256QAM	1	0	19.04	19.09	18.99	20.5	5	
5	256QAM	1	12	18.79	18.99	18.87			
5	256QAM	1	24	18.87	18.92	18.93			
5	256QAM	12	0	19.03	19.06	19.13			
5	256QAM	12	7	18.89	19.02	19.04	20.5	5	
5	256QAM	12	13	18.86	19.05	18.99			
5	256QAM	25	0	18.92	18.95	19.08			

Band 48 Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				55340	55830	56150			
Frequency (MHz)				3560	3569	3641			
20	QPSK	1	0	23.32	23.40	23.35	25	0	
20	QPSK	1	49	23.28	23.36	23.30			
20	QPSK	1	99	23.30	23.35	23.30			
20	QPSK	50	0	22.25	22.43	22.38			
20	QPSK	50	24	22.31	22.38	22.32	24	1	
20	QPSK	50	50	22.30	22.39	22.25			
20	QPSK	100	0	22.38	22.37	22.33			
20	16QAM	1	0	22.29	22.36	22.32			
20	16QAM	1	49	22.31	22.31	22.34	24	1	
20	16QAM	1	99	22.27	22.33	22.32			
20	16QAM	50	0	21.21	21.41	21.37			
20	16QAM	50	24	21.34	21.41	21.28	23	2	
20	16QAM	50	50	21.31	21.38	21.24			

Band 42 Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power Mid Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				42190	42590	42990			
Frequency (MHz)				3460	3500	3540			
20	QPSK	1	0	23.52	23.55	23.48	25	0	
20	QPSK	1	49	23.48	23.51	23.42			
20	QPSK	1	99	23.39	23.48	23.40			
20	QPSK	50	0	22.50	22.50	22.44	24	1	
20	QPSK	50	24	22.44	22.50	22.39			
20	QPSK	50	50	22.34	22.47	22.41			
20	QPSK	100	0	22.50	22.57	22.50			
20	16QAM	1	0	22.53	22.55	22.54	24	1	
20	16QAM	1	49	22.54	22.54	22.39			
20	16QAM	1	99	22.39	22.48	22.35			
20	16QAM	50	0	21.45	21.58	21.47	23	2	
20	16QAM	50	24	21.44	21.54	21.44			
20	16QAM	50	50	21.28	21.44	21.36			
20	16QAM	100	0	21.49	21.58	21.45			
20	64QAM	1	0	21.56	21.50	21.49	23	2	
20	64QAM	1	49	21.55	21.57	21.45			
20	64QAM	1	99	21.39	21.48	21.39			
20	64QAM	50	0	20.47	20.60	20.50	22	3	
20	64QAM	50	24	20.46	20.50	20.39			
20	64QAM	50	50	20.39	20.39	20.38			
20	64QAM	100	0	20.50	20.58	20.54			
20	256QAM	1	0	18.44	18.55	18.44	20	5	
20	256QAM	1	49	18.44	18.52	18.35			
20	256QAM	1	99	18.39	18.49	18.47			
20	256QAM	50	0	18.55	18.54	18.51			
20	256QAM	50	24	18.48	18.50	18.49	20	5	
20	256QAM	50	50	18.51	18.48	18.34			
20	256QAM	100	0	18.37	18.50	18.34			
Channel				42165	42590	43015			
Frequency (MHz)				3472.5	3500	3527.5			
15	QPSK	1	0	23.47	23.46	23.45	25	0	
15	QPSK	1	37	23.35	23.46	23.32			
15	QPSK	1	74	23.30	23.35	23.34			
15	QPSK	36	0	22.48	22.50	22.34	24	1	
15	QPSK	36	20	22.36	22.47	22.27			
15	QPSK	36	39	22.23	22.43	22.38			
15	QPSK	75	0	22.41	22.51	22.41			
15	16QAM	1	0	22.42	22.50	22.45	24	1	
15	16QAM	1	37	22.42	22.48	22.29			
15	16QAM	1	74	22.25	22.37	22.26			
15	16QAM	36	0	21.40	21.49	21.41	23	2	
15	16QAM	36	20	21.38	21.41	21.31			
15	16QAM	36	39	21.18	21.32	21.32			
15	16QAM	75	0	21.37	21.46	21.33			
15	64QAM	1	0	21.43	21.46	21.46	23	2	
15	64QAM	1	37	21.53	21.52	21.42			
15	64QAM	1	74	21.28	21.39	21.24			
15	64QAM	36	0	20.35	20.54	20.42	22	3	
15	64QAM	36	20	20.39	20.42	20.37			
15	64QAM	36	39	20.34	20.34	20.33			
15	64QAM	75	0	20.40	20.56	20.48			
15	256QAM	1	0	18.32	18.49	18.41	20	5	
15	256QAM	1	37	18.39	18.42	18.30			
15	256QAM	1	74	18.36	18.37	18.40			
15	256QAM	36	0	18.46	18.49	18.41	20	5	
15	256QAM	36	20	18.41	18.43	18.37			
15	256QAM	36	39	18.37	18.45	18.30			
15	256QAM	75	0	18.33	18.39	18.23			
Channel				42140	42590	43040			
Frequency (MHz)				3455	3500	3545			
10	QPSK	1	0	23.39	23.45	23.42	25	0	
10	QPSK	1	25	23.44	23.38	23.38			
10	QPSK	1	49	23.33	23.40	23.30			
10	QPSK	25	0	22.41	22.52	22.33	24	1	
10	QPSK	25	12	22.39	22.46	22.30			
10	QPSK	25	25	22.28	22.35	22.30			
10	QPSK	50	0	22.37	22.48	22.43			
10	16QAM	1	0	22.48	22.46	22.50	24	1	
10	16QAM	1	25	22.44	22.50	22.35			
10	16QAM	1	49	22.31	22.38	22.21			
10	16QAM	25	0	21.42	21.54	21.43	23	2	
10	16QAM	25	12	21.42	21.47	21.38			
10	16QAM	25	25	21.26	21.32	21.29			
10	16QAM	50	0	21.46	21.49	21.32			
10	64QAM	1	0	21.47	21.48	21.37	23	2	
10	64QAM	1	25	21.46	21.50	21.33			
10	64QAM	1	49	21.30	21.40	21.27			
10	64QAM	25	0	20.33	20.46	20.36	22	3	
10	64QAM	25	12	20.42	20.46	20.33			
10	64QAM	25	25	20.26	20.32	20.35			
10	64QAM	50	0	20.39	20.48	20.46			
10	256QAM	1	0	18.41	18.41	18.32	20	5	
10	256QAM	1	25	18.41	18.40	18.24			
10	256QAM	1	49	18.34	18.45	18.33			
10	256QAM	25	0	18.42	18.47	18.42			
10	256QAM	25	12	18.41	18.45	18.47	20	5	
10	256QAM	25	25	18.45	18.35	18.28			
10	256QAM	50	0	18.31	18.37	18.23			
Channel				42115	42590	43065			
Frequency (MHz)				3422.5	3500	3577.5			
5	QPSK	1	0	23.42	23.53	23.35	25	0	
5	QPSK	1	12	23.36	23.48	23.39			
5	QPSK	1	24	23.27	23.34	23.32			
5	QPSK	12	0	22.44	22.49	22.38	24	1	
5	QPSK	12	7	22.33	22.37	22.27			
5	QPSK	12	13	22.30	22.43	22.38			
5	QPSK	25	0	22.48	22.54	22.37			
5	16QAM	1	0	22.50	22.49	22.50	24	1	
5	16QAM	1	12	22.49	22.40	22.28			
5	16QAM	1	24	22.31	22.43	22.32			
5	16QAM	12	0	21.39	21.49	21.43	23	2	
5	16QAM	12	7	21.41	21.44	21.40			
5	16QAM	12	13	21.19	21.35	21.25			
5	16QAM	25	0	21.40	21.55	21.35	22	2	
5	64QAM	1	0	21.52	21.52	21.37			
5	64QAM	1	12	21.42	21.50	21.42	23	2	
5	64QAM	1	24	21.26	21.44	21.34			
5	64QAM	12	0	20.45	20.50	20.37	22	2	
5	64QAM	12	7	20.36	20.43	20.27			
5	64QAM	12	13	20.31	20.38	20.30	22	3	
5	64QAM	25	0	20.42	20.56	20.47			
5	256QAM	1	0	18.38	18.52	18.30	20	5	
5	256QAM	1	12	18.30	18.46	18.24			
5	256QAM	1	24	18.32	18.43	18.39			
5	256QAM	12	0	18.50	18.42	18.38			
5	256QAM	12	7	18.44	18.37	18.43	20	5	
5	256QAM	12	13	18.41	18.35	18.32			
5	256QAM	25	0	18.24	18.40	18.30			

Band 48 Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power Mid Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				55340	55830	56150			
Frequency (MHz)				3560	3609	3641			
20	QPSK	1	0	22.49	22.65	22.55	24	0	
20	QPSK	1	49	22.41	22.59	22.44			
20	QPSK	1	99	22.44	22.38	22.51			
20	QPSK	50	0	21.46	21.70	21.54	23	1	
20	QPSK	50	24	21.36	21.57	21.49			
20	QPSK	50	50	21.40	21.55	21.48			
20	QPSK	100	0	21.47	21.66	21.61			
20	16QAM	1	0	21.47	21.52	21.50	23	1	
20	16QAM	1	49	21.39	21.54	21.49			
20	16QAM	1	99	21.44	21.61	21.56			
20	16QAM	50	0	20.44	20.74	20.52	22	2	
20	16QAM	50	24	20.36	20.62	20.44			
20	16QAM	50	50	20.43	20.39	20.53			
20	16QAM	100	0	20.51	20.71	20.62			

Reduced Power Mode for DSI1_Main PA

GSM900 Art 0 DSI1	Burst Average Power (dBm)			Turnup Limit (dBm)	Frame Average Power (dBm)			Turnup Limit (dBm)
	128	199	251		128	199	251	
TX Channel	824.2	836.4	848.6	34.00	23.81	23.85	23.77	25.00
Frequency (MHz)	824.2	836.4	848.6	34.00	23.81	23.85	23.77	25.00
ISM 1 Tx slots	32.81	32.85	32.77	34.00	23.81	23.85	23.77	25.00
GPRS 1 Tx slots	32.68	32.76	32.73	34.00	23.68	23.76	23.73	25.00
GPRS 2 Tx slots	29.59	29.61	29.57	31.00	23.59	23.61	23.57	25.00
GPRS 3 Tx slots	27.61	27.66	27.57	29.20	23.35	23.40	23.31	24.94
GPRS 4 Tx slots	26.08	26.17	26.14	28.00	23.08	23.17	23.14	25.00
EDGE 1 Tx slots	23.89	23.93	23.79	27.00	18.89	18.93	18.79	18.00
EDGE 2 Tx slots	23.31	23.40	23.31	24.00	17.31	17.40	17.31	18.00
EDGE 3 Tx slots	21.42	21.53	21.47	22.20	17.16	17.27	17.21	17.84
EDGE 4 Tx slots	18.81	18.85	18.79	21.00	16.81	16.85	16.79	18.00

Band	WCDMA V. Art 0 DSI1			Turnup Limit (dBm)	
	4132	4182	4233		
TX Channel	4357	4407	4458	25.00	
Rx Channel	826.4	838.4	848.6	25.00	
Frequency (MHz)	826.4	838.4	848.6	25.00	
3GPP Rel 99	AMR 12.2kbps	24.53	24.60	24.49	25.00
3GPP Rel 99	RM12 12.2kbps	24.62	24.64	24.60	25.00
3GPP Rel 6	HSDPA Subtest-1	23.64	23.67	23.63	24.00
3GPP Rel 6	HSDPA Subtest-2	23.60	23.68	23.58	24.00
3GPP Rel 6	HSDPA Subtest-3	23.06	23.10	23.09	23.50
3GPP Rel 6	HSDPA Subtest-4	23.10	23.20	23.07	23.50
3GPP Rel 6	DCHSDPA Subtest-1	23.67	23.62	23.58	24.00
3GPP Rel 6	DCHSDPA Subtest-2	23.66	23.61	23.58	24.00
3GPP Rel 6	DCHSDPA Subtest-3	23.10	23.10	23.11	23.50
3GPP Rel 6	DCHSDPA Subtest-4	23.17	23.19	23.05	23.50
3GPP Rel 6	HSPA Subtest-1	23.59	23.59	23.55	24.00
3GPP Rel 6	HSPA Subtest-2	21.58	21.64	21.63	22.00
3GPP Rel 6	HSPA Subtest-3	22.88	22.82	22.81	23.00
3GPP Rel 6	HSPA Subtest-4	21.64	21.60	21.66	22.00
3GPP Rel 6	HSPA Subtest-5	23.60	23.63	23.54	24.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	21.06	21.12	21.05	21.50

GSM850 Ant 1 DS11	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	190	199	201		190	199	201	
TX Channel	190	199	201	30.00	19.53	19.54	19.47	21.00
Frequency (MHz)	534.2	538.4	541.6					
GSM-1 Tx slot	28.53	28.54	28.47	30.00	19.53	19.54	19.47	21.00
GPRS-1 Tx slot	28.38	28.38	28.36	30.00	19.38	19.38	19.36	21.00
GPRS-2 Tx slots	25.36	25.39	25.27	27.00	18.36	18.39	18.27	21.00
GPRS-3 Tx slots	23.28	23.42	23.29	25.20	19.02	19.16	19.03	20.94
GPRS-4 Tx slots	22.04	22.16	22.08	24.00	19.04	19.16	19.08	21.00
EDGE-1 Tx slot	26.04	26.13	26.01	27.50	17.04	17.13	17.01	18.50
EDGE-2 Tx slots	23.45	23.65	23.49	24.50	17.45	17.65	17.49	18.50
EDGE-3 Tx slots	21.59	21.68	21.62	22.70	17.33	17.42	17.38	18.44
EDGE-4 Tx slots	20.04	20.11	19.93	21.50	17.04	17.11	16.93	18.50

Band	WCDMA V. Ant 1 DS11			Tune-up Limit (dBm)
	4132	4182	4233	
TX Channel	4357	4407	4458	
Rx Channel	4357	4407	4458	
Frequency (MHz)	534.4	538.4	543.6	
3GPP Rel 99 RMC 12.2kops	19.42	18.44	18.50	19.50
3GPP Rel 99 RMC 12.2kops	18.47	18.50	18.51	19.50
3GPP Rel 6 HSDPA Subtest-1	17.54	17.54	17.47	18.50
3GPP Rel 6 HSDPA Subtest-2	17.44	17.46	17.55	18.50
3GPP Rel 6 HSDPA Subtest-3	16.97	17.08	17.05	18.00
3GPP Rel 6 HSDPA Subtest-4	16.98	17.13	16.97	18.00
3GPP Rel 6 DCHSDPA Subtest-1	17.39	17.60	17.55	18.50
3GPP Rel 6 DCHSDPA Subtest-2	17.50	17.48	17.48	18.50
3GPP Rel 6 DCHSDPA Subtest-3	16.87	17.00	17.01	18.00
3GPP Rel 6 DCHSDPA Subtest-4	16.96	17.16	16.99	18.00
3GPP Rel 6 HSUPA Subtest-1	17.56	17.61	17.47	18.50
3GPP Rel 6 HSUPA Subtest-2	16.38	15.56	15.46	16.50
3GPP Rel 6 HSUPA Subtest-3	16.44	16.46	16.52	17.50
3GPP Rel 6 HSUPA Subtest-4	15.42	15.46	15.52	16.50
3GPP Rel 6 HSUPA Subtest-5	17.51	17.62	17.53	18.50
3GPP Rel 7 HSPA+ (E-UTRA) Subtest-1	14.94	15.00	14.94	16.00

GSM1900 Ant.2 DSH1	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	TX Channel	812	861		910	812	861	
Frequency (MHz)	1850.2	1860	1869.8		1850.2	1860	1869.8	
GSM-1 Tx slot	27.97	28.07	28.02	29.50	18.97	19.07	19.02	20.50
GPRS-1 Tx slot	27.84	28.11	27.99	29.50	18.84	19.11	18.99	20.50
GPRS-2 Tx slots	24.74	24.96	24.86	26.50	16.74	16.96	16.86	20.50
GPRS-3 Tx slots	22.87	22.92	22.95	24.70	16.61	16.66	16.69	20.44
GPRS-4 Tx slots	21.57	21.64	21.51	23.50	16.57	16.64	16.51	20.50
EDGE-1 Tx slot	25.42	25.54	25.40	27.00	16.42	16.54	16.40	18.00
EDGE-2 Tx slots	22.69	22.78	22.72	24.00	16.69	16.78	16.72	18.00
EDGE-3 Tx slots	20.87	20.90	20.86	22.20	16.61	16.64	16.60	17.94
EDGE-4 Tx slots	20.00	20.07	19.96	21.00	17.00	17.07	16.96	18.00

Band	WCDMA IV Ant.2 DSH1			Tune-up Limit (dBm)	
	TX Channel	1312	1413		1513
Rx Channel	1537	1638	1738		
Frequency (MHz)	1712.4	1722.6	1722.6		
3GPP Rel 99	AMR 12.2kops	16.54	16.56	16.45	18.00
3GPP Rel 99	RMC 12.2kops	16.54	16.67	16.56	18.00
3GPP Rel 6	HSDPA Subtest-1	15.51	15.61	15.53	17.00
3GPP Rel 6	HSDPA Subtest-2	15.47	15.62	15.55	17.00
3GPP Rel 6	HSDPA Subtest-3	15.07	15.23	14.97	16.50
3GPP Rel 6	HSDPA Subtest-4	15.03	15.17	14.99	16.50
3GPP Rel 8	DCHSDPA Subtest-1	15.50	15.64	15.50	17.00
3GPP Rel 8	DCHSDPA Subtest-2	15.56	15.58	15.55	17.00
3GPP Rel 8	DCHSDPA Subtest-3	15.01	15.07	14.98	16.50
3GPP Rel 8	DCHSDPA Subtest-4	15.02	15.19	14.97	16.50
3GPP Rel 6	HSUPA Subtest-1	15.56	15.58	15.53	17.00
3GPP Rel 6	HSUPA Subtest-2	13.57	13.69	13.51	15.00
3GPP Rel 6	HSUPA Subtest-3	14.52	14.65	14.55	16.00
3GPP Rel 6	HSUPA Subtest-4	13.59	13.71	13.57	15.00
3GPP Rel 6	HSUPA Subtest-5	15.56	15.55	15.54	17.00
3GPP Rel 7	HSPA+ (LTCAM) Subtest-1	13.04	13.18	13.06	14.50

Band	WCDMA II Ant 3 DSI1			Tune-up Limit (dBm)	WCDMA IV Ant 3 DSI1			Tune-up Limit (dBm)
	TX Channel	9662	9660		9658	1912	1413	
	Rx Channel	9662	9660	9658	1912	1413	1913	
	Frequency (MHz)	1852.4	1880	1907.6	1712.4	1732.6	1752.6	
3GPP Rel 99	AMR 12.2Kbps	16.33	16.44	16.37	17.00	16.97	16.94	16.89
3GPP Rel 99	AMR 12.2Kbps	16.48	16.52	16.46	17.00	16.96	17.08	16.99
3GPP Rel 6	HSDPA Subtest-1	15.40	15.56	15.45	16.00	15.90	16.04	15.86
3GPP Rel 6	HSDPA Subtest-2	15.41	15.49	15.49	16.00	16.00	16.01	16.04
3GPP Rel 6	HSDPA Subtest-3	14.91	14.99	15.01	15.50	15.57	15.60	15.51
3GPP Rel 6	HSDPA Subtest-4	14.93	14.99	15.01	15.50	15.44	15.55	15.43
3GPP Rel 8	DC-HSDPA Subtest-1	15.45	15.51	15.48	16.00	15.99	16.06	15.97
3GPP Rel 8	DC-HSDPA Subtest-2	15.48	15.54	15.53	16.00	15.90	16.05	15.94
3GPP Rel 8	DC-HSDPA Subtest-3	14.87	15.14	15.10	15.50	15.54	15.61	15.47
3GPP Rel 8	DC-HSDPA Subtest-4	14.91	15.05	14.99	15.50	15.49	15.58	15.51
3GPP Rel 6	HSPA Subtest-1	15.53	15.61	15.48	16.00	15.88	15.95	15.96
3GPP Rel 6	HSPA Subtest-2	13.43	13.50	13.51	14.00	13.88	13.97	13.98
3GPP Rel 6	HSPA Subtest-3	14.47	14.64	14.50	15.00	14.97	15.00	14.86
3GPP Rel 6	HSPA Subtest-4	13.51	13.55	13.48	14.00	14.01	14.00	13.92
3GPP Rel 6	HSPA Subtest-5	15.45	15.48	15.49	16.00	16.01	16.11	15.93
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	12.88	12.99	13.00	13.50	13.50	13.58	13.45



Appendix E

	Burst Average Power (dbm)			Tune-up Limit (dbm)	Frame-Average Power (dbm)			Tune-up Limit (dbm)
	512	661	810		512	661	810	
TX Channel	1550.2	1850	1939.8	21.00	1550.2	1850	1939.8	22.00
Frequency (MHz)	30.00	30.05	29.98	31.00	21.00	21.05	20.96	22.00
GSM-1 Tx slot	29.94	30.00	29.90	31.00	20.94	21.00	20.90	22.00
GPRS-2 Tx slots	20.85	20.90	20.88	20.00	20.85	20.90	20.86	22.00
GPRS-3 Tx slots	24.87	24.94	24.88	26.20	20.81	20.88	20.82	21.94
GPRS-4 Tx slots	23.60	23.65	23.61	25.00	20.80	20.85	20.81	22.00
EDGE-1 Tx slot	25.46	25.48	25.40	27.00	16.46	16.48	16.40	18.00
EDGE-2 Tx slots	22.55	22.66	22.59	24.00	16.55	16.66	16.59	18.00
EDGE-3 Tx slots	21.08	21.10	20.98	22.20	16.82	16.84	16.72	17.94
EDGE-4 Tx slots	20.45	20.54	20.40	21.00	17.45	17.54	17.40	18.00

Band	WCDMA II Art 6 DS1			Tune-up Limit (dbm)	WCDMA II Art 5 DS1			Tune-up Limit (dbm)
	9662	9400	9538		1312	1413	1513	
TX Channel	9662	9600	9938	1772.4	1723.2	1727.6	1727.6	
Rx Channel	9662	9600	9938	1772.4	1723.2	1727.6	1727.6	
Frequency (MHz)	1322.4	1300	1307.6	25.00	23.11	23.28	23.28	
3GPP Rel 99	AMR 12.2kops	24.00	24.07	24.11	25.00	23.11	23.28	
3GPP Rel 99	RMC 12.2kops	24.10	24.16	24.15	25.00	23.23	23.31	
3GPP Rel 6	HSDPA Subtest-1	23.09	23.17	23.10	24.00	22.24	22.26	
3GPP Rel 6	HSDPA Subtest-2	23.13	23.16	23.15	24.00	22.21	22.27	
3GPP Rel 6	HSDPA Subtest-3	22.60	22.70	22.64	23.50	21.77	21.70	
3GPP Rel 6	HSDPA Subtest-4	22.57	22.69	22.60	23.50	21.78	21.87	
3GPP Rel 8	DCHSDPA Subtest-1	23.12	23.19	23.10	24.00	22.19	22.26	
3GPP Rel 8	DCHSDPA Subtest-2	23.13	23.22	23.14	24.00	22.23	22.33	
3GPP Rel 8	DCHSDPA Subtest-3	22.58	22.62	22.61	23.50	21.73	21.82	
3GPP Rel 8	DCHSDPA Subtest-4	22.61	22.63	22.61	23.50	21.72	21.77	
3GPP Rel 6	HSUPA Subtest-1	23.12	23.15	23.11	24.00	22.18	22.35	
3GPP Rel 6	HSUPA Subtest-2	21.07	21.15	21.16	22.00	20.19	20.31	
3GPP Rel 6	HSUPA Subtest-3	22.14	22.16	22.10	23.00	21.28	21.34	
3GPP Rel 6	HSUPA Subtest-4	21.15	21.19	21.11	22.00	20.17	20.29	
3GPP Rel 6	HSUPA Subtest-5	23.13	23.20	23.15	24.00	22.23	22.28	
3GPP Rel 7	HSPA+ (E-UMTS) Subtest-1	20.57	20.72	20.66	21.00	19.76	19.85	

Band 5 Ant 0 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 2650	Power Middle Ch. / Freq. 2656	Power High Ch. / Freq. 2662	Tune-up limit (dBm)	MPR (dB)	
Channel				829	836.5	844			
Frequency (MHz)				25.31	25.35	25.32			
10	QPSK	1	0	25.31	25.35	25.32			
10	QPSK	1	25	25.29	25.33	25.19	25.7	0	
10	QPSK	1	49	25.21	25.27	25.23			
10	QPSK	25	0	24.28	24.41	24.38			
10	QPSK	25	12	24.28	24.38	24.16	24.7	1	
10	QPSK	25	25	24.19	24.27	24.22			
10	QPSK	50	0	24.30	24.35	24.27			
10	16QAM	1	0	24.28	24.31	24.26			
10	16QAM	1	25	24.28	24.34	24.16	24.7	1	
10	16QAM	1	49	24.11	24.22	24.17			
10	16QAM	25	0	23.24	23.43	23.41			
10	16QAM	25	12	23.23	23.41	23.21			
10	16QAM	25	25	23.15	23.22	23.18	23.7	2	
10	16QAM	50	0	23.35	23.36	23.25			
10	64QAM	1	0	23.34	23.25	23.28			
10	64QAM	1	25	23.28	23.39	23.19	23.7	2	
10	64QAM	1	49	23.16	23.22	23.18			
10	64QAM	25	0	22.24	22.42	22.33			
10	64QAM	25	12	22.28	22.33	22.10			
10	64QAM	25	25	22.28	22.34	22.24	22.7	3	
10	64QAM	50	0	22.33	22.30	22.30			
10	256QAM	1	0	20.26	20.41	20.38			
10	256QAM	1	25	20.23	20.41	20.21	20.7	5	
10	256QAM	1	49	20.15	20.30	20.23			
10	256QAM	25	0	20.32	20.40	20.28			
10	256QAM	25	12	20.32	20.39	20.21			
10	256QAM	25	25	20.29	20.31	20.13	20.7	5	
10	256QAM	50	0	20.08	20.18	20.20			
Channel				20425	20525	20625			
Frequency (MHz)				836.5	836.5	846.5			
5	QPSK	1	0	25.22	25.28	25.24			
5	QPSK	1	12	25.27	25.18	25.13	25.7	0	
5	QPSK	1	24	25.15	25.18	25.18			
5	QPSK	12	0	24.20	24.34	24.25			
5	QPSK	12	7	24.21	24.28	24.05	24.7	1	
5	QPSK	12	13	24.10	24.16	24.13			
5	QPSK	25	0	24.22	24.23	24.21			
5	16QAM	1	0	23.18	23.24	23.15			
5	16QAM	1	12	24.21	24.27	24.08	24.7	1	
5	16QAM	1	24	24.03	24.13	24.15			
5	16QAM	12	0	23.15	23.34	23.31			
5	16QAM	12	7	23.18	23.32	23.19	23.7	2	
5	16QAM	12	13	23.08	23.24	23.16			
5	16QAM	25	0	23.21	23.24	23.20			
5	64QAM	1	0	23.21	23.20	23.17			
5	64QAM	1	12	23.17	23.29	23.06	23.7	2	
5	64QAM	1	24	23.04	23.19	23.07			
5	64QAM	12	0	22.16	22.30	22.29			
5	64QAM	12	7	22.22	22.31	21.97	22.7	3	
5	64QAM	12	13	22.13	22.10	22.18			
5	64QAM	25	0	22.26	22.25	22.24			
5	256QAM	1	0	20.16	20.31	20.25			
5	256QAM	1	12	20.21	20.29	20.08	20.7	5	
5	256QAM	1	24	20.17	20.21	20.16			
5	256QAM	12	0	20.21	20.33	20.14			
5	256QAM	12	7	20.09	20.26	20.08	20.7	5	
5	256QAM	12	13	20.25	20.24	20.08			
5	256QAM	25	0	20.05	20.11	20.07			
Channel				20415	20525	20625			
Frequency (MHz)				836.5	836.5	842.5			
3	QPSK	1	0	25.20	25.26	25.23			
3	QPSK	1	8	25.20	25.25	25.08	25.7	0	
3	QPSK	1	14	25.08	25.16	25.13			
3	QPSK	8	0	24.18	24.31	24.31			
3	QPSK	8	4	24.25	24.31	24.07	24.7	1	
3	QPSK	8	7	24.10	24.25	24.18			
3	QPSK	15	0	24.22	24.25	24.14			
3	16QAM	1	0	24.26	24.18	24.20			
3	16QAM	1	8	24.19	24.32	24.12	24.7	1	
3	16QAM	1	14	24.01	24.11	24.09			
3	16QAM	8	0	23.20	23.31	23.34			
3	16QAM	8	4	23.18	23.21	23.07			
3	16QAM	8	7	23.09	23.12	23.11	23.7	2	
3	16QAM	15	0	23.32	23.29	23.20			
3	64QAM	1	0	23.31	23.23	23.19			
3	64QAM	1	8	23.19	23.26	23.14	23.7	2	
3	64QAM	1	14	23.17	23.19	23.14			
3	64QAM	8	0	22.16	22.28	22.21			
3	64QAM	8	4	22.16	22.20	22.00	22.7	3	
3	64QAM	8	7	22.08	22.17	22.13			
3	64QAM	15	0	22.25	22.32	22.26			
3	256QAM	1	0	20.20	20.37	20.24			
3	256QAM	1	8	20.17	20.31	20.14	20.7	5	
3	256QAM	1	14	20.13	20.23	20.09			
3	256QAM	8	0	20.18	20.36	20.21			
3	256QAM	8	4	20.16	20.17	20.12	20.7	5	
3	256QAM	8	7	20.16	20.18	20.03			
3	256QAM	15	0	20.04	20.10	20.08			
Channel				20407	20525	20643			
Frequency (MHz)				824.7	836.5	848.3			
1.4	QPSK	1	0	25.19	25.30	25.29			
1.4	QPSK	1	3	25.24	25.21	25.17	25.7	0	
1.4	QPSK	1	5	25.10	25.25	25.17			
1.4	QPSK	3	0	25.16	25.20	25.24			
1.4	QPSK	3	3	25.02	25.16	25.12	24.7	1	
1.4	QPSK	6	0	24.28	24.27	24.21	24.7	1	
1.4	16QAM	1	0	24.21	24.28	24.16			
1.4	16QAM	1	3	24.16	24.24	24.14	24.7	1	
1.4	16QAM	1	14	24.05	24.15	24.14			
1.4	16QAM	3	0	24.22	24.14	24.13			
1.4	16QAM	3	1	24.07	24.19	24.06			
1.4	16QAM	3	3	24.08	24.15	23.95	23.7	2	
1.4	16QAM	6	0	23.23	23.26	23.20	23.7	2	
1.4	64QAM	1	0	23.22	23.13	23.22			
1.4	64QAM	1	3	23.20	23.26	23.16			
1.4	64QAM	1	5	23.12	23.20	23.08	23.7	2	
1.4	64QAM	3	0	23.19	23.22	23.06			
1.4	64QAM	3	1	23.16	23.02	23.12			
1.4	64QAM	3	3	23.08	23.13	23.10	22.7	3	
1.4	256QAM	1	0	20.13	20.28	20.32			
1.4	256QAM	1	3	20.15	20.31	20.13	20.7	5	
1.4	256QAM	1	5	20.13	20.19	20.16			
1.4	256QAM	3	0	20.20	20.28	20.16			
1.4	256QAM	3	1	20.08	20.28	20.17			
1.4	256QAM	3	3	20.24	20.23	20.04	20.7	5	
1.4	256QAM	6	0	19.97	20.16	20.09	20.7	5	

Band 26 Ant 0 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 26706	Power Middle Ch. / Freq. 26665	Power High Ch. / Freq. 26665	Tune-up limit (dBm)	MPR (dB)	
Channel				821.5	831.5	841.5			
Frequency (MHz)				25.33	25.36	25.35			
15	QPSK	1	0	25.33	25.36	25.35			
15	QPSK	1	37	25.23	25.30	25.17	25.7	0	
15	QPSK	1	74	25.17	25.25	25.26			
15	QPSK	36	0	24.26	24.42	24.39			
15	QPSK	36	20	24.26	24.35	24.11	24.7	1	
15	QPSK	36	36	24.15	24.26	24.19			
15	QPSK	75	0	24.32	24.37	24.29			
15	16QAM	1	0	24.26	24.31	24.23			
15	16QAM	1	37	24.29	24.27	24.17	24.7	1	
15	16QAM	1	74	24.05	24.15	24.12			
15	16QAM	36	0	23.22	23.45	23.38			
15	16QAM	36	20	23.23	23.44	23.23	23.7	2	
15	16QAM	36	36	23.10	23.16	23.14			
15	16QAM	75	0	23.38	23.34	23.22			
15	64QAM	1	0	23.36	23.21	23.20			

Band 5 Ant 1 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				2626	2626	2626			
Frequency (MHz)				829	836.5	844			
10	QPSK	1	0	19.17	19.18	19.14			
10	QPSK	1	25	19.00	19.07	18.96	20.2	0	
10	QPSK	1	49	19.17	19.03	19.00			
10	QPSK	25	0	19.12	19.10	19.16			
10	QPSK	25	12	19.96	19.03	18.90	20.2	0	
10	QPSK	25	25	19.14	19.03	18.94			
10	QPSK	50	0	19.16	19.09	19.10			
10	16QAM	1	0	18.82	19.00	18.94			
10	16QAM	1	25	19.09	19.01	18.93	20.2	0	
10	16QAM	1	49	19.07	19.17	19.07			
10	16QAM	25	0	18.94	19.05	18.91			
10	16QAM	25	12	19.08	18.93	18.90	20.2	0	
10	16QAM	25	25	19.11	18.99	19.15			
10	16QAM	50	0	18.95	18.99	18.89			
10	64QAM	1	0	19.15	19.04	19.06			
10	64QAM	1	25	19.16	19.08	19.00	20.2	0	
10	64QAM	1	49	18.90	18.93	18.88			
10	64QAM	25	0	19.14	19.16	19.03			
10	64QAM	25	12	18.90	19.02	18.89	20.2	0	
10	64QAM	25	25	18.97	18.98	18.98			
10	64QAM	50	0	19.13	19.08	19.06			
10	256QAM	1	0	19.16	19.07	19.08			
10	256QAM	1	25	18.97	19.08	18.94	20.2	0	
10	256QAM	1	49	19.11	19.00	18.98			
10	256QAM	25	0	19.12	19.04	19.06			
10	256QAM	25	12	19.94	19.01	18.91	20.2	0	
10	256QAM	25	25	19.15	18.99	18.87			
10	256QAM	50	0	19.08	19.07	19.04			
Channel				26426	26525	26525			
Frequency (MHz)				826.5	836.5	846.5			
5	QPSK	1	0	19.04	19.08	19.10			
5	QPSK	1	12	18.98	18.94	18.93	20.2	0	
5	QPSK	1	24	19.04	19.00	18.87			
5	QPSK	12	0	19.05	18.96	19.12			
5	QPSK	12	7	18.88	18.95	18.80	20.2	0	
5	QPSK	12	13	19.03	18.99	18.84			
5	QPSK	25	0	19.04	19.00	19.05			
5	16QAM	1	0	18.79	18.94	18.99			
5	16QAM	1	12	19.01	18.89	18.90	20.2	0	
5	16QAM	1	24	18.97	19.13	18.99			
5	16QAM	12	0	18.89	18.98	18.82			
5	16QAM	12	7	18.99	18.83	18.84	20.2	0	
5	16QAM	12	13	18.99	18.94	18.11			
5	16QAM	25	0	18.80	18.85	18.82			
5	64QAM	1	0	19.07	18.89	18.82			
5	64QAM	1	12	19.11	18.95	18.97	20.2	0	
5	64QAM	1	24	18.77	18.82	18.85			
5	64QAM	12	0	19.06	19.05	18.89			
5	64QAM	12	7	18.83	19.01	18.80	20.2	0	
5	64QAM	12	13	19.06	18.85	18.92			
5	64QAM	25	0	18.99	19.02	19.00			
5	256QAM	1	0	19.12	18.98	19.01			
5	256QAM	1	12	18.93	19.01	18.82	20.2	0	
5	256QAM	1	24	19.07	18.96	18.94			
5	256QAM	12	0	19.09	18.93	18.92			
5	256QAM	12	7	18.85	18.97	18.74	20.2	0	
5	256QAM	12	13	19.13	18.93	18.84			
5	256QAM	25	0	19.00	18.99	19.00			
Channel				26740	26865	26990			
Frequency (MHz)				819	831.5	844			
10	QPSK	1	0	19.10	19.11	19.00			
10	QPSK	1	25	18.93	18.93	18.77	20.2	0	
10	QPSK	1	49	19.03	18.87	18.86			
10	QPSK	25	0	18.89	18.90	19.00			
10	QPSK	25	12	18.75	18.90	18.91	20.2	0	
10	QPSK	25	25	18.95	18.81	18.85			
10	QPSK	50	0	19.00	18.90	18.96			
10	16QAM	1	0	18.75	18.91	18.94			
10	16QAM	1	25	18.91	18.87	18.76	20.2	0	
10	16QAM	1	49	18.94	19.02	18.94			
10	16QAM	25	0	18.78	18.90	18.87			
10	16QAM	25	12	18.96	18.84	18.85	20.2	0	
10	16QAM	25	25	18.94	18.84	18.84			
10	16QAM	50	0	18.73	18.74	18.84			
10	64QAM	1	0	18.88	18.72	18.63			
10	64QAM	1	25	19.01	18.89	18.84	20.2	0	
10	64QAM	1	49	18.73	18.79	18.76			
10	64QAM	25	0	18.94	19.07	18.82			
10	64QAM	25	12	18.82	18.78	18.77	20.2	0	
10	64QAM	25	25	18.97	18.87	18.74			
10	64QAM	50	0	18.99	18.93	18.92			
10	256QAM	1	0	19.00	19.00	18.91			
10	256QAM	1	25	18.87	19.01	18.76	20.2	0	
10	256QAM	1	49	18.99	18.99	18.89			
10	256QAM	25	0	18.95	18.90	18.98			
10	256QAM	25	12	18.74	18.90	18.70	20.2	0	
10	256QAM	25	25	18.95	18.88	18.77			
10	256QAM	50	0	18.96	18.99	18.86			
Channel				26715	26855	27015			
Frequency (MHz)				816.5	831.5	846.5			
5	QPSK	1	0	19.13	19.12	19.03			
5	QPSK	1	12	18.74	18.91	18.79	20.2	0	
5	QPSK	1	24	19.06	18.88	18.83			
5	QPSK	12	0	18.96	18.93	19.06			
5	QPSK	12	7	18.79	18.98	18.74	20.2	0	
5	QPSK	12	13	18.97	18.94	18.84			
5	QPSK	25	0	19.04	18.85	19.02			
5	16QAM	1	0	18.76	18.84	18.74			
5	16QAM	1	12	18.98	18.83	18.85	20.2	0	
5	16QAM	1	24	18.89	19.03	18.91			
5	16QAM	12	0	18.80	18.90	18.92			
5	16QAM	12	7	18.92	18.78	18.90	20.2	0	
5	16QAM	12	13	18.89	18.83	19.05			
5	16QAM	25	0	18.78	18.83	18.83			
5	64QAM	1	0	18.90	18.81	18.86			
5	64QAM	1	12	18.99	18.85	18.85	20.2	0	
5	64QAM	1	24	18.75	18.91	18.89			
5	64QAM	12	0	18.96	19.10	18.88			
5	64QAM	12	7	18.78	18.90	18.75	20.2	0	
5	64QAM	12	13	19.03	18.89	18.73			
5	64QAM	25	0	18.95	18.89	18.95			
5	256QAM	1	0	18.96	18.90	18.97			
5	256QAM	1	12	18.92	18.96	18.81	20.2	0	
5	256QAM	1	24	18.89	18.93	18.82			
5	256QAM	12	0	18.93	18.86	18.94			
5	256QAM	12	7	18.82	18.93	18.71	20.2	0	
5	256QAM	12	13	18.97	18.87	18.71			
5	256QAM	25	0	18.94	18.97	18.90			
Channel				26702	26885	27025			
Frequency (MHz)				815.5	831.5	847.5			
3	QPSK	1	0	19.10	19.11	18.99			
3	QPSK	1	8	18.84	18.99	18.82	20.2	0	
3	QPSK	1	14	19.00	18.79	18.90			
3	QPSK	8	0	18.91	18.85	19.04			
3	QPSK	8	4	18.87	18.92	18.81	20.2	0	
3	QPSK	8	7	18.98	18.98	18.88			
3	QPSK	15	0	19.04	18.95	19.04			
3	16QAM	1	0	18.86	18.90	18.92			
3	16QAM	1	8	19.01	18.96	18.82	20.2	0	
3	16QAM	1	14	18.97	19.08	18.94			
3	16QAM	8	0	18.85	19.00	18.86			
3	16QAM	8	4	18.92	18.91	18.82	20.2	0	
3	16QAM	8	7	19.08	18.88	19.03			
3	16QAM	15	0	18.78	18.96	18.84			
3	64QAM	1	0	19.08	18.84	18.73			
3	64QAM	1	8	19.11	18.98	18.93	20.2	0	</



Band 2 Ant 2 DS1I									
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch./F.Freq.	Power Ch./F.Freq.	Power Ch./F.Freq.	Turn-up (dB)	MPR (dB)	MPE (dB)
Channel									
Frequency (MHz)									
20	QPSK	1	0	15.43	15.53	15.56	17	0	0
20	QPSK	1	99	15.37	15.46	15.28			
20	QPSK	50	0	15.30	15.43	15.29			
20	QPSK	50	24	15.33	15.33	15.24			
20	QPSK	50	50	15.38	15.41	15.07			
20	QPSK	100	0	15.35	15.44	15.29			
20	QPSK	100	0	15.35	15.40	15.29			
20	HQAM	1	49	15.29	15.27	15.17	17	0	0
20	HQAM	1	99	15.36	15.29	15.17			
20	HQAM	50	0	15.30	15.28	15.09			
20	HQAM	50	24	15.21	15.31	15.15			
20	HQAM	50	50	15.21	15.36	15.37			
20	HQAM	100	0	15.28	15.30	15.35			
20	HQAM	100	0	15.38	15.40	15.35			
20	HQAM	1	49	15.30	15.24	15.35	17	0	0
20	HQAM	1	99	15.30	15.24	15.35			
20	HQAM	50	0	15.34	15.32	15.24			
20	HQAM	50	24	15.20	15.18	15.09			
20	HQAM	50	50	15.30	15.28	15.09			
20	HQAM	100	0	15.30	15.34	15.31			
20	HQAM	100	0	15.38	15.40	15.35			
20	HQAM	1	49	15.29	15.25	15.17	17	0	0
20	HQAM	1	99	15.36	15.29	15.15			
20	HQAM	50	0	15.30	15.28	15.09			
20	HQAM	50	24	15.24	15.18	15.15			
20	HQAM	50	50	15.21	15.36	15.23			
20	HQAM	100	0	15.30	15.32	15.23			
20	HQAM	100	0	15.38	15.40	15.35			
Channel									
Frequency (MHz)									
16	QPSK	1	0	18.07	18.00	18.03	17	0	0
16	QPSK	1	99	18.04	18.04	18.04			
16	QPSK	1	99	18.04	18.04	18.04			
16	QPSK	36	0	18.04	18.03	18.05			
16	QPSK	36	36	18.00	18.03	18.05			
16	QPSK	75	0	18.00	18.00	18.00			
16	QPSK	75	0	18.00	18.00	18.00			
16	HQAM	1	37	18.18	18.15	18.12	17	0	0
16	HQAM	1	74	18.00	18.00	18.00			
16	HQAM	36	0	18.08	18.06	18.03			
16	HQAM	36	20	18.13	18.21	18.04			
16	HQAM	36	20	18.00	18.00	18.00			
16	HQAM	75	0	18.03	18.03	18.11			
16	HQAM	1	0	18.24	18.33	18.28	17	0	0
16	HQAM	1	37	18.00	18.00	18.00			
16	HQAM	36	0	18.08	18.06	18.03			
16	HQAM	36	20	18.13	18.21	18.04			
16	HQAM	75	0	18.03	18.03	18.11			
16	HQAM	1	0	18.24	18.33	18.28	17	0	0
16	HQAM	1	37	18.00	18.00	18.00			
16	HQAM	36	0	18.08	18.06	18.03			
16	HQAM	36	20	18.13	18.21	18.04			
16	HQAM	75	0	18.03	18.03	18.11			
16	HQAM	1	0	18.24	18.33	18.28	17	0	0
16	HQAM	1	37	18.00	18.00	18.00			
16	HQAM	36	0	18.08	18.06	18.03			
16	HQAM	36	20	18.13	18.21	18.04			
16	HQAM	75	0	18.03	18.03	18.11			
16	HQAM	1	0	18.24	18.33	18.28	17	0	0
16	HQAM	1	37	18.00	18.00	18.00			
16	HQAM	36	0	18.08	18.06	18.03			
16	HQAM	36	20	18.13	18.21	18.04			
16	HQAM	75	0	18.03	18.03	18.11			
16	HQAM	1	0	18.24	18.33	18.28	17	0	0
16	HQAM	1	37	18.00	18.00	18.00			
16	HQAM	36	0	18.08	18.06	18.03			
16	HQAM	36	20	18.13	18.21	18.04			
16	HQAM	75	0	18.03	18.03	18.11			
16	HQAM	1	0	18.24	18.33	18.28	17	0	0
16	HQAM	1	37	18.00	18.00	18.00			
16	HQAM	36	0	18.08	18.06	18.03			
16	HQAM	36	20	18.13	18.21	18.04			
16	HQAM	75	0	18.03	18.03	18.11			
16	HQAM	1	0	18.24	18.33	18.28	17	0	0
16	HQAM	1	37	18.00	18.00	18.00			
16	HQAM	36	0	18.08	18.06	18.03			
16	HQAM	36	20	18.13	18.21	18.04			
16	HQAM	75	0	18.03	18.03	18.11			
16	HQAM	1	0	18.24	18.33	18.28	17	0	0
16	HQAM	1	37	18.00	18.00	18.00			
16	HQAM	36	0	18.08	18.06	18.03			
16	HQAM	36	20	18.13	18.21	18.04			
16	HQAM	75	0	18.03	18.03	18.11			
16	HQAM	1	0	18.24	18.33	18.28	17	0	0
16	HQAM	1	37	18.00	18.00	18.00			
16	HQAM	36	0	18.08	18.06	18.03			
16	HQAM	36	20	18.13	18.21	18.04			
16	HQAM	75	0	18.03	18.03	18.11			
16	HQAM	1	0	18.24	18.33	18.28	17	0	0
16	HQAM	1	37	18.00	18.00	18.00			
16	HQAM	36	0	18.08	18.06	18.03			
16	HQAM	36	20	18.13	18.21	18.04			
16	HQAM	75	0	18.03	18.03	18.11			
16	HQAM	1	0	18.24	18.33	18.28	17	0	0
16	HQAM	1	37	18.00	18.00	18.00			
16	HQAM	36	0	18.08	18.06	18.03			
16	HQAM	36	20	18.13	18.21	18.04			
16	HQAM	75	0	18.03	18.03	18.11			
16	HQAM	1	0	18.24	18.33	18.28	17	0	0
16	HQAM	1	37	18.00	18.00	18.00			
16	HQAM	36	0	18.08	18.06	18.03			
16	HQAM	36	20	18.13	18.21	18.04			
16	HQAM	75	0	18.03	18.03	18.11			
16	HQAM	1	0	18.24	18.33	18.28	17	0	0
16	HQAM	1	37	18.00	18.00	18.00			
16	HQAM	36	0	18.08	18.06	18.03			
16	HQAM	36	20	18.13	18.21	18.04			
16	HQAM	75	0	18.03	18.03	18.11			
16	HQAM	1	0	18.24	18.33	18.28	17	0	0
16	HQAM	1	37	18.00	18.00	18.00			
16	HQAM	36	0	18.08	18.06	18.03			
16	HQAM	36	20	18.13	18.21	18.04			
16	HQAM	75	0	18.03	18.03	18.11			
16	HQAM	1	0	18.24	18.33	18.28	17	0	0
16	HQAM	1	37	18.00	18.00	18.00			
16	HQAM	36	0	18.08	18.06	18.03			
16	HQAM	36	20	18.13	18.21	18.04			
16	HQAM	75	0	18.03	18.03	18.11			
16	HQAM	1	0	18.24	18.33	18.28	17	0	0
16	HQAM	1	37	18.00	18.00	18.00			
16	HQAM	36	0	18.08	18.06	18.03			
16	HQAM	36	20	18.13	18.21	18.04			
16	HQAM	75	0	18.03	18.03	18.11			
16	HQAM	1	0	18.24	18.33	18.28	17	0	0
16	HQAM	1	37	18.00	18.00	18.00			
16	HQAM	36	0	18.08	18.06	18.03			
16	HQAM	36	20	18.13	18.21	18.04			
16	HQAM	75	0	18.03	18.03	18.11			
16	HQAM	1	0	18.24	18.33	18.28	17	0	0
16	HQAM	1	37	18.00	18.00	18.00			
16	HQAM	36	0	18.08	18.06	18.03			
16	HQAM	36	20	18.13	18.21	18.04			
16	HQAM	75	0	18.03	18.03	18.11			
16	HQAM	1	0	18.24	18.33	18.28	17	0	0
16	HQAM	1	37	18.00	18.00	18.00			
16	HQAM	36	0	18.08	18.06	18.03			
16	HQAM	36	20	18.13	18.21	18.04			
16	HQAM	75	0	18.03	18.03	18.11			
16	HQAM	1	0	18.24	18.33	18.28	17	0	0
16	HQAM	1							



Band 2 Ant 3 DS11										
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch./Freq.	Power Ch./Freq.	Power Ch./Freq.	Turn-up (dB)	MPE (dB)		
Channel										
Frequency (MHz)	1860	1860	1860	1860	1860	1860				
20	QPSK	1	0	16.48	16.73	16.84			18	0
20	QPSK	1	99	16.58	16.71	16.82			18	0
20	QPSK	50	0	16.58	16.69	16.78			18	0
20	QPSK	50	99	16.58	16.69	16.78			18	0
20	QPSK	100	0	16.65	16.87	16.81			18	0
20	QPSK	100	99	16.65	16.81	16.82			18	0
20	16QAM	1	49	16.45	16.82	16.57			18	0
20	16QAM	1	99	16.48	16.87	16.41			18	0
20	16QAM	50	0	16.58	16.85	16.50			18	0
20	16QAM	50	24	16.45	16.83	16.45			18	0
20	16QAM	50	50	16.39	16.87	16.30			18	0
20	16QAM	50	99	16.58	16.85	16.49			18	0
20	64QAM	1	0	16.58	16.80	16.54			18	0
20	64QAM	1	49	16.49	16.83	16.53			18	0
20	64QAM	1	99	16.58	16.85	16.48			18	0
20	64QAM	50	0	16.52	16.87	16.49			18	0
20	64QAM	50	24	16.47	16.83	16.41			18	0
20	64QAM	50	50	16.53	16.83	16.47			18	0
20	256QAM	1	0	16.49	16.82	16.57			18	0
20	256QAM	1	49	16.45	16.82	16.48			18	0
20	256QAM	1	99	16.49	16.85	16.54			18	0
20	256QAM	50	24	16.37	16.80	16.45			18	0
20	256QAM	50	50	16.41	16.89	16.28			18	0
20	256QAM	100	0	16.47	16.87	16.48			18	0
Channel										
Frequency (MHz)	1867.5	1860	1860.5	1860.5	1860.5	1860.5				
15	QPSK	1	0	16.80	16.80	16.38			18	0
15	QPSK	1	99	16.80	16.80	16.38			18	0
15	QPSK	74	0	16.49	16.80	16.49			18	0
15	QPSK	36	0	16.49	16.80	16.49			18	0
15	QPSK	36	99	16.49	16.80	16.49			18	0
15	QPSK	36	36	16.45	16.82	16.25			18	0
15	16QAM	1	49	16.32	16.86	16.48			18	0
15	16QAM	1	99	16.36	16.83	16.48			18	0
15	16QAM	36	0	16.45	16.89	16.40			18	0
15	16QAM	36	99	16.45	16.89	16.40			18	0
15	16QAM	36	36	16.41	16.89	16.40			18	0
15	64QAM	1	0	16.44	16.89	16.51			18	0
15	64QAM	1	49	16.44	16.89	16.51			18	0
15	64QAM	1	99	16.44	16.89	16.51			18	0
15	64QAM	36	0	16.42	16.89	16.42			18	0
15	64QAM	36	99	16.42	16.89	16.42			18	0
15	256QAM	1	0	16.37	16.80	16.54			18	0
15	256QAM	1	49	16.41	16.89	16.48			18	0
15	256QAM	1	99	16.40	16.89	16.46			18	0
15	256QAM	36	24	16.33	16.80	16.37			18	0
15	256QAM	36	36	16.35	16.85	16.19			18	0
15	256QAM	100	0	16.47	16.87	16.48			18	0
Channel										
Frequency (MHz)	1869.5	1860	1860.5	1860.5	1860.5	1860.5				
5	QPSK	1	0	16.54	16.81	16.81			18	0
5	QPSK	1	25	16.57	16.81	16.82			18	0
5	QPSK	1	49	16.56	16.82	16.38			18	0
5	QPSK	1	99	16.56	16.82	16.38			18	0
5	QPSK	25	0	16.38	16.89	16.44			18	0
5	QPSK	25	25	16.43	16.82	16.28			18	0
5	16QAM	1	49	16.34	16.86	16.48			18	0
5	16QAM	1	99	16.34	16.86	16.48			18	0
5	16QAM	25	0	16.43	16.83	16.48			18	0
5	16QAM	25	25	16.38	16.80	16.42			18	0
5	16QAM	50	0	16.53	16.80	16.44			18	0
5	64QAM	1	0	16.54	16.82	16.45			18	0
5	64QAM	1	49	16.49	16.86	16.37			18	0
5	64QAM	1	99	16.44	16.83	16.37			18	0
5	64QAM	25	0	16.28	16.85	16.31			18	0
5	64QAM	25	25	16.54	16.84	16.40			18	0
5	256QAM	1	0	16.42	16.86	16.44			18	0
5	256QAM	1	49	16.44	16.89	16.48			18	0
5	256QAM	1	99	16.42	16.89	16.44			18	0
5	256QAM	25	12	16.27	16.84	16.34			18	0
5	256QAM	25	25	16.31	16.84	16.34			18	0
5	256QAM	25	50	16.35	16.83	16.24			18	0
Channel										
Frequency (MHz)	1869.5	1860	1860.5	1860.5	1860.5	1860.5				
5	QPSK	1	0	16.54	16.81	16.81			18	0
5	QPSK	1	12	16.44	16.85	16.20			18	0
5	QPSK	1	24	16.42	16.80	16.39			18	0
5	QPSK	1	48	16.48	16.86	16.48			18	0
5	QPSK	12	0	16.45	16.83	16.23			18	0
5	QPSK	12	13	16.36	16.87	16.30			18	0
5	16QAM	1	0	16.42	16.83	16.45			18	0
5	16QAM	1	12	16.31	16.86	16.31			18	0
5	16QAM	1	24	16.33	16.80	16.18			18	0
5	16QAM	12	0	16.27	16.84	16.28			18	0
5	16QAM	12	13	16.37	16.87	16.26			18	0
5	16QAM	25	0	16.33	16.83	16.18			18	0
5	16QAM	25	13	16.29	16.83	16.20			18	0
5	16QAM	25	25	16.30	16.84	16.25			18	0
5	64QAM	1	0	16.54	16.85	16.35			18	0
5	64QAM	1	24	16.38	16.89	16.28			18	0
5	64QAM	12	0	16.46	16.87	16.23			18	0
5	64QAM	12	13	16.28	16.83	16.18			18	0
5	64QAM	25	0	16.44	16.81	16.27			18	0
5	256QAM	1	0	16.37	16.84	16.40			18	0
5	256QAM	1	12	16.31	16.88	16.41			18	0
5	256QAM	1	24	16.45	16.38	16.37			18	0
5	256QAM	12	0	16.38	16.88	16.30			18	0
5	256QAM	12	13	16.32	16.36	16.40			18	0
5	256QAM	12	25	16.28	16.36	16.30			18	0
5	256QAM	25	0	16.51	16.89	16.33			18	0
Channel										
Frequency (MHz)	1869.5	1860	1860.5	1860.5	1860.5	1860.5				
3	QPSK	1	0	16.54	16.81	16.81			18	0
3	QPSK	1	8	16.54	16.84	16.41			18	0
3	QPSK	1	14	16.49	16.82	16.51			18	0
3	QPSK	1	20	16.52	16.83	16.49			18	0
3	QPSK	8	4	16.41	16.84	16.39			18	0
3	QPSK	8	7	16.38	16.86	16.27			18	0
3	QPSK	15	0	16.51	16.82	16.52			18	0
3	16QAM	1	0	16.57	16.83	16.46			18	0
3	16QAM	1	8	16.32	16.83	16.48			18	0
3	16QAM	1	14	16.32	16.87	16.41			18	0
3	16QAM	1	20	16.44	16.82	16.43			18	0
3	16QAM	8	0	16.49	16.89	16.44			18	0
3	16QAM	8	7	16.36	16.45	16.24			18	0
3	64QAM	1	0	16.50	16.83	16.33			18	0
3	64QAM	1	8	16.36	16.85	16.34			18	0
3	64QAM	1	14	16.44	16.83	16.36			18	0
3	64QAM	1	20	16.52	16.84	16.28			18	0
3	256QAM	1	0	16.44	16.83	16.36			18	0
3	256QAM	1	8	16.32	16.84	16.41			18	0
3	256QAM	1	14	16.42	16.84	16.37			18	0
3	256QAM	1	20	16.42	16.83	16.48			18	0
3	256QAM	8	4	16.29	16.87	16.34			18	0
3	256QAM	8	7	16.33	16.88	16.30			18	0
3	256QAM	8	15	16.51	16.48	16.45			18	0
Channel										
Frequency (MHz)	1869.5	1860	1860.5	1860.5	1860.5	1860.5				
1.4	QPSK	1	0	16.59	16.89	16.50			18	0
1.4	QPSK	1	3	16.53	16.80	16.55			18	0
1.4	QPSK	1	6	16.50	16.81	16.47			18	0
1.4	QPSK	3	0	16.41	16.83	16.45			18	0
1.4	QPSK	3	6	16.37	16.87	16.31			18	0
1.4	16QAM	1	0	16.58	16.89	16.45			18	0
1.4	16QAM	1	3	16.33	16.87	16.35			18	0
1.4	16QAM	3	0	16.45	16.85	16.37			18	0
1.4	16QAM	3	6	16.38	16.88	16.27			18	0
1.4	16QAM	6	0	16.49	16.82	16.40			18	0
1.4	16QAM	6	3	16.39	16.87	16.49			18	0
1.4	64QAM	1	0	16.48	16.89	16.41			18	0
1.4	64QAM	1	3	16.48	16.83	16.36			18	0
1.4	64QAM	1	6	16.32	16.84	16.28			18	0
1.4	64QAM	3	0	16.52	16.83	16.40			18	0
1.4	64QAM	3	6	16.32	16.81	16.34			18	0
1.4	256QAM	1	0	16.37						



Band 4 Ant 5 DSI1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power High Ch./Freq.	Turn-up Init. (dBm)	MPE (dB)	MPE (dB)	
Channel										
Frequency (MHz)										
20	QPSK	1	0	24.32	24.43	24.38		25.7	0	
20	QPSK	1	49	24.24	24.38	24.30				
20	QPSK	1	99	24.24	24.38	24.30				
20	QPSK	50	0	23.32	23.41	23.33		24.7	1	
20	QPSK	50	24	23.28	23.39	23.33				
20	QPSK	50	50	23.24	23.38	23.30				
20	QPSK	100	0	23.30	23.39	23.40		24.7	1	
20	HQAM	1	0	23.30	23.38	23.38				
20	HQAM	1	49	23.30	23.44	23.32		24.7	1	
20	HQAM	1	99	23.18	23.33	23.34				
20	HQAM	50	0	22.28	22.38	22.37		23.7	2	
20	HQAM	50	24	22.29	22.34	22.30				
20	HQAM	50	50	22.24	22.36	22.30				
20	HQAM	100	0	22.24	22.40	22.30		23.7	2	
20	HQAM	1	0	22.41	22.43	22.44				
20	HQAM	1	49	22.33	22.40	22.36		23.7	2	
20	HQAM	1	99	22.37	22.37	22.37				
20	HQAM	50	0	21.30	21.41	21.32		22.7	3	
20	HQAM	50	24	21.30	21.37	21.37				
20	HQAM	50	50	21.25	21.42	21.34				
20	HQAM	100	0	21.25	21.38	21.40		20.7	5	
20	HQAM	1	0	19.31	19.37	19.35				
20	HQAM	1	49	19.31	19.37	19.37		20.7	5	
20	HQAM	1	99	19.22	19.36	19.37				
20	HQAM	50	0	19.22	19.37	19.35		20.7	5	
20	HQAM	50	24	19.39	19.39	19.40				
20	HQAM	50	50	19.25	19.41	19.31				
20	HQAM	100	0	19.25	19.36	19.35		20.7	5	
Channel										
Frequency (MHz)										
15	QPSK	1	0	24.26	24.40	24.31		25.7	0	
15	QPSK	1	49	24.24	24.36	24.31				
15	QPSK	1	99	24.21	24.34	24.29				
15	QPSK	50	0	23.22	23.31	23.28		24.7	1	
15	QPSK	50	24	23.20	23.26	23.26				
15	QPSK	50	50	23.10	23.29	23.21				
15	QPSK	100	0	23.26	23.31	23.28		24.7	1	
15	HQAM	1	0	23.32	23.32	23.32				
15	HQAM	1	37	23.16	23.35	23.19		24.7	1	
15	HQAM	1	74	23.16	23.31	23.28				
15	HQAM	50	0	22.33	22.27	22.31		23.7	2	
15	HQAM	50	20	22.20	22.30	22.20				
15	HQAM	50	49	22.27	22.27	22.29				
15	HQAM	75	0	22.29	22.27	22.28		23.7	2	
15	HQAM	1	0	22.28	22.33	22.41				
15	HQAM	1	37	22.20	22.37	22.29		23.7	2	
15	HQAM	1	74	22.19	22.26	22.19				
15	HQAM	36	0	21.17	21.35	21.20		22.7	3	
15	HQAM	36	0	21.22	21.33	21.23				
15	HQAM	36	39	21.22	21.33	21.25				
15	HQAM	75	0	21.12	21.31	21.43		20.7	5	
15	HQAM	1	0	19.24	19.34	19.32				
15	HQAM	1	37	19.16	19.33	19.34		20.7	5	
15	HQAM	1	74	19.16	19.33	19.34				
15	HQAM	36	0	19.32	19.30	19.30		20.7	5	
15	HQAM	36	39	19.32	19.30	19.33				
15	HQAM	75	0	19.13	19.31	19.23		20.7	5	
15	HQAM	75	0	19.13	19.32	19.27				
Channel										
Frequency (MHz)										
10	QPSK	1	0	24.24	24.37	24.30		25.7	0	
10	QPSK	1	25	24.14	24.27	24.29				
10	QPSK	1	49	24.16	24.35	24.19				
10	QPSK	25	0	23.20	23.29	23.24		24.7	1	
10	QPSK	25	12	23.25	23.36	23.29				
10	QPSK	25	25	23.15	23.24	23.21				
10	HQAM	1	0	23.28	23.36	23.31		24.7	1	
10	HQAM	1	25	23.19	23.31	23.19				
10	HQAM	1	49	23.20	23.28	23.28				
10	HQAM	25	0	22.24	22.27	22.28		23.7	2	
10	HQAM	25	12	22.16	22.23	22.19				
10	HQAM	25	25	22.21	22.28	22.23				
10	HQAM	50	0	22.23	22.37	22.31		23.7	2	
10	HQAM	1	0	22.25	22.27	22.28				
10	HQAM	1	25	22.19	22.26	22.19				
10	HQAM	12	0	21.13	21.40	21.23		22.7	3	
10	HQAM	12	0	21.13	21.35	21.27				
10	HQAM	12	39	21.12	21.33	21.25				
10	HQAM	25	0	21.12	21.31	21.43		20.7	5	
10	HQAM	1	0	19.24	19.34	19.32				
10	HQAM	1	37	19.16	19.33	19.34		20.7	5	
10	HQAM	1	74	19.16	19.33	19.34				
10	HQAM	36	0	19.32	19.30	19.30		20.7	5	
10	HQAM	36	39	19.32	19.30	19.33				
10	HQAM	75	0	19.13	19.31	19.23		20.7	5	
10	HQAM	75	0	19.13	19.32	19.27				
Channel										
Frequency (MHz)										
5	QPSK	1	0	24.24	24.37	24.30		25.7	0	
5	QPSK	1	12	24.14	24.27	24.29				
5	QPSK	1	24	24.19	24.24	24.18				
5	QPSK	12	0	23.19	23.29	23.24		24.7	1	
5	QPSK	12	7	23.20	23.31	23.23				
5	QPSK	12	13	23.14	23.31	23.30				
5	HQAM	1	0	23.28	23.36	23.31		24.7	1	
5	HQAM	1	12	23.25	23.41	23.19				
5	HQAM	1	24	23.15	23.19	23.18				
5	HQAM	12	0	22.30	22.34	22.32		23.7	2	
5	HQAM	12	7	22.15	22.31	22.20				
5	HQAM	12	13	22.31	22.26	22.30				
5	HQAM	25	0	22.19	22.36	22.27		23.7	2	
5	HQAM	1	0	22.21	22.35	22.41				
5	HQAM	1	12	22.22	22.36	22.31				
5	HQAM	1	24	22.12	22.33	22.17		22.7	3	
5	HQAM	12	0	21.19	21.39	21.26				
5	HQAM	12	7	21.23	21.26	21.23				
5	HQAM	12	13	21.13	21.32	21.23		20.7	5	
5	HQAM	25	0	21.17	21.36	21.32				
5	HQAM	1	0	19.21	19.29	19.29		20.7	5	
5	HQAM	1	12	19.18	19.33	19.32				
5	HQAM	1	24	19.15	19.32	19.28				
5	HQAM	12	0	19.19	19.34	19.29		20.7	5	
5	HQAM	12	7	19.20	19.30	19.27				
5	HQAM	12	13	19.15	19.31	19.24		20.7	5	
5	HQAM	25	0	19.15	19.35	19.11				
Channel										
Frequency (MHz)										
3	QPSK	1	0	24.15	24.37	24.23		25.7	0	
3	QPSK	1	8	24.21	24.32	24.28				
3	QPSK	1	14	24.18	24.35	24.26				
3	QPSK	8	0	23.20	23.39	23.32		24.7	1	
3	QPSK	8	4	23.24	23.33	23.28				
3	QPSK	8	7	23.14	23.28	23.22				
3	HQAM	1	0	23.25	23.33	23.34		24.7	1	
3	HQAM	1	8	23.19	23.33	23.24				
3	HQAM	1	14	23.14	23.23	23.11				
3	HQAM	8	0	22.24	22.33	22.30		23.7	2	
3	HQAM	8	4	22.23	22.28	22.17				
3	HQAM	8	7	22.20	22.25	22.28				
3	HQAM	16	0	22.18	22.36	22.24		23.7	2	
3	HQAM	1	0	22.21	22.39	22.32				
3	HQAM	1	8	22.30	22.36	22.32				
3	HQAM	1	14	22.21	22.30	22.25		22.7	3	
3	HQAM	8	0	21.27	21.31	21.24				
3	HQAM	8	4	21.18	21.30	21.30				

Band 38 Ant 2 DSI1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Mid Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	16.23	16.25	16.11	17.5	0		
20	QPSK	1	49	16.14	16.10	16.13				
20	QPSK	1	99	16.05	16.08	16.06	17.5	0		
20	QPSK	50	0	16.17	16.22	16.06				
20	QPSK	50	24	16.10	16.03	16.08	17.5	0		
20	QPSK	50	50	15.94	16.05	16.01				
20	QPSK	100	0	16.14	16.16	16.03	17.5	0		
20	16QAM	1	0	16.13	16.15	16.01				
20	16QAM	1	49	16.11	16.00	16.11	17.5	0		
20	16QAM	1	99	15.93	15.95	15.93				
20	16QAM	50	0	16.12	16.15	15.99	17.5	0		
20	16QAM	50	24	16.03	16.00	15.99				
20	16QAM	50	50	15.82	15.96	15.94	17.5	0		
20	16QAM	100	0	16.04	16.13	15.92				
20	64QAM	1	0	16.20	16.11	16.01	17.5	0		
20	64QAM	1	49	16.12	15.98	16.00				
20	64QAM	1	99	15.97	16.04	15.97	17.5	0		
20	64QAM	50	0	16.14	16.09	15.98				
20	64QAM	50	24	16.01	15.98	15.96	17.5	0		
20	64QAM	50	50	15.89	15.93	15.96				
20	64QAM	100	0	16.01	16.04	15.89	17.5	0		
20	256QAM	1	0	16.17	16.13	16.04				
20	256QAM	1	49	16.04	16.03	16.00	17.5	0		
20	256QAM	1	99	16.03	15.99	15.94				
20	256QAM	50	0	16.08	16.17	15.94	17.5	0		
20	256QAM	50	24	15.96	15.89	16.01				
20	256QAM	50	50	15.89	16.02	15.90	17.5	0		
20	256QAM	100	0	16.06	16.11	15.96				
Channel				37825	38000	38175				
Frequency (MHz)				25775	2595	2612.5				
15	QPSK	1	0	16.14	16.22	16.08	17.5	0		
15	QPSK	1	37	16.02	16.03	16.04				
15	QPSK	1	74	15.92	15.97	16.03	17.5	0		
15	QPSK	36	0	16.09	16.15	16.04				
15	QPSK	36	20	15.98	15.96	16.01	17.5	0		
15	QPSK	36	39	15.84	15.96	15.95				
15	QPSK	75	0	16.01	16.07	15.85	17.5	0		
15	16QAM	1	0	16.06	16.10	15.98				
15	16QAM	1	37	16.01	15.90	15.97	17.5	0		
15	16QAM	1	74	15.88	15.89	15.81				
15	16QAM	36	0	16.05	16.05	15.88	17.5	0		
15	16QAM	36	20	15.98	15.97	15.85				
15	16QAM	36	39	15.79	15.90	15.89	17.5	0		
15	16QAM	75	0	15.92	16.08	15.82				
15	64QAM	1	0	16.15	15.98	15.92	17.5	0		
15	64QAM	1	37	16.00	15.87	15.95				
15	64QAM	1	74	15.89	15.92	15.94	17.5	0		
15	64QAM	36	0	16.09	16.07	15.92				
15	64QAM	36	20	15.92	15.94	15.90	17.5	0		
15	64QAM	36	39	15.83	15.88	15.90				
15	64QAM	75	0	15.91	15.92	15.79	17.5	0		
15	256QAM	1	0	16.14	16.09	15.97				
15	256QAM	1	37	15.92	15.92	15.93	17.5	0		
15	256QAM	1	74	16.01	15.93	15.89				
15	256QAM	36	0	16.01	16.14	15.81	17.5	0		
15	256QAM	36	20	15.90	15.84	15.98				
15	256QAM	36	39	15.78	15.99	15.84	17.5	0		
15	256QAM	75	0	15.93	15.99	15.98				
Channel				37800	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	16.09	16.13	16.06	17.5	0		
10	QPSK	1	25	16.05	16.01	16.11				
10	QPSK	1	49	16.00	15.99	16.01	17.5	0		
10	QPSK	25	0	16.05	16.19	15.97				
10	QPSK	25	12	16.04	15.99	15.99	17.5	0		
10	QPSK	25	25	15.85	15.97	15.98				
10	QPSK	50	0	16.03	16.09	15.94	17.5	0		
10	16QAM	1	0	16.11	16.01	15.96				
10	16QAM	1	25	16.03	15.88	16.05	17.5	0		
10	16QAM	1	49	15.91	15.86	15.83				
10	16QAM	25	0	16.07	16.08	15.88	17.5	0		
10	16QAM	25	12	15.95	15.90	15.86				
10	16QAM	25	25	15.79	15.88	15.85	17.5	0		
10	16QAM	50	0	15.92	16.11	15.89				
10	64QAM	1	0	16.06	16.03	15.91	17.5	0		
10	64QAM	1	25	16.00	15.85	15.98				
10	64QAM	1	49	15.89	15.92	15.86	17.5	0		
10	64QAM	25	0	16.02	16.05	15.90				
10	64QAM	25	12	15.90	15.92	15.90	17.5	0		
10	64QAM	25	25	15.81	15.87	15.84				
10	64QAM	50	0	15.88	15.97	15.80	17.5	0		
10	256QAM	1	0	16.10	16.01	15.99				
10	256QAM	1	25	15.98	15.99	15.90	17.5	0		
10	256QAM	1	49	15.94	15.87	15.89				
10	256QAM	25	12	15.90	16.11	15.81	17.5	0		
10	256QAM	25	12	15.90	15.90	15.97				
10	256QAM	25	25	15.77	15.92	15.80	17.5	0		
10	256QAM	50	0	16.00	16.05	15.88				
Channel				37775	38000	38225				
Frequency (MHz)				25725	2595	2617.5				
5	QPSK	1	0	16.09	16.16	16.04	17.5	0		
5	QPSK	1	12	16.01	16.01	16.05				
5	QPSK	1	24	15.93	15.99	15.94	17.5	0		
5	QPSK	12	0	16.14	16.17	15.95				
5	QPSK	12	7	15.96	15.97	15.96	17.5	0		
5	QPSK	12	13	15.82	15.99	15.97				
5	QPSK	25	0	16.10	16.05	15.97	17.5	0		
5	16QAM	1	0	16.04	16.01	15.95				
5	16QAM	1	12	16.06	15.90	16.06	17.5	0		
5	16QAM	1	24	15.90	15.92	15.81				
5	16QAM	12	0	16.07	16.02	15.86	17.5	0		
5	16QAM	12	7	15.99	15.95	15.98				
5	16QAM	12	13	15.78	15.94	15.83	17.5	0		
5	16QAM	25	0	15.93	16.00	15.89				
5	64QAM	1	0	16.15	16.03	15.89	17.5	0		
5	64QAM	1	12	16.08	15.86	15.92				
5	64QAM	1	24	15.85	15.98	15.85	17.5	0		
5	64QAM	12	0	16.00	16.01	15.85				
5	64QAM	12	7	15.98	15.90	15.93	17.5	0		
5	64QAM	12	13	15.86	15.90	15.82				
5	64QAM	25	0	15.95	15.97	15.84	17.5	0		
5	256QAM	1	0	16.04	16.10	16.01				
5	256QAM	1	12	15.96	15.95	15.91	17.5	0		
5	256QAM	1	24	15.99	15.94	15.84				
5	256QAM	12	0	15.99	16.12	15.85	17.5	0		
5	256QAM	12	7	15.87	15.85	15.93				
5	256QAM	12	13	15.86	15.98	15.83	17.5	0		
5	256QAM	25	0	15.95	16.00	15.83				

Band 41 Ant 2 DSI1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Mid Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	16.10	16.15	16.17	17.5	0		
20	QPSK	1	49	16.05	16.10	16.16				
20	QPSK	1	99	15.98	15.95	16.08	17.5	0		
20	QPSK	50	0	16.07	16.06	16.14				
20	QPSK	50	24	16.01	16.02	16.04	17.5	0		
20	QPSK	50	50	15.87	15.87	15.97				
20	QPSK	100	0	16.03	16.07	16.13	17.5	0		
20	16QAM	1	0	16.06	16.11	16.07				
20	16QAM	1	49	15.94	16.01	16.07	17.5	0		
20	16QAM	1	99	15.94	15.90	15.96				
20	16QAM	50	0	15.98	15.99	16.01	17.5	0		
20	16QAM	50	24	15.93	15.88	15.95				
20	16QAM	50	50	15.76	15.79	15.94	17.5	0		
20	16QAM	100	0	15.91	16.04	16.02				
20	64QAM	1	0	16.05	16.04	16.08</				



Band 38 Ant 3 DSI1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	18.45	18.46	18.40				
20	QPSK	1	49	18.34	18.43	18.37	18.7	0		
20	QPSK	1	99	18.39	18.40	18.34				
20	QPSK	50	0	18.32	18.40	18.32				
20	QPSK	50	24	18.21	18.40	18.29	18.7	0		
20	QPSK	50	50	18.35	18.33	18.25				
20	QPSK	100	0	18.33	18.37	18.31				
20	16QAM	1	0	18.37	18.38	18.37				
20	16QAM	1	49	18.31	18.27	18.18	18.7	0		
20	16QAM	1	99	18.38	18.29	18.28				
20	16QAM	50	0	18.25	18.34	18.23				
20	16QAM	50	24	18.08	18.29	18.23	18.7	0		
20	16QAM	50	50	18.27	18.29	18.14				
20	16QAM	100	0	18.26	18.25	18.27				
20	64QAM	1	0	18.32	18.39	18.32				
20	64QAM	1	49	18.27	18.33	18.33	18.7	0		
20	64QAM	1	99	18.36	18.27	18.25				
20	64QAM	50	0	18.27	18.32	18.19				
20	64QAM	50	24	18.11	18.33	18.18	18.7	0		
20	64QAM	50	50	18.27	18.27	18.18				
20	64QAM	100	0	18.29	18.33	18.21				
20	256QAM	1	0	18.39	18.37	18.35				
20	256QAM	1	49	18.26	18.31	18.34	18.7	0		
20	256QAM	1	99	18.33	18.32	18.29				
20	256QAM	50	0	18.21	18.27	18.24				
20	256QAM	50	24	18.15	18.34	18.20	18.7	0		
20	256QAM	50	50	18.24	18.26	18.11				
20	256QAM	100	0	18.24	18.32	18.22				
Channel				37825	38000	38175	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				25775	2595	2612.5				
15	QPSK	1	0	18.32	18.39	18.27	18.7	0		
15	QPSK	1	37	18.28	18.35	18.24				
15	QPSK	1	74	18.38	18.30	18.21				
15	QPSK	36	0	18.25	18.32	18.21				
15	QPSK	36	20	18.07	18.34	18.27	18.7	0		
15	QPSK	36	39	18.21	18.27	18.22				
15	QPSK	75	0	18.22	18.31	18.27				
15	16QAM	1	0	18.34	18.28	18.31				
15	16QAM	1	37	18.20	18.32	18.23	18.7	0		
15	16QAM	1	74	18.31	18.17	18.22				
15	16QAM	36	0	18.19	18.27	18.15				
15	16QAM	36	20	17.94	18.24	18.13	18.7	0		
15	16QAM	36	39	18.25	18.18	18.01				
15	16QAM	75	0	18.22	18.12	18.24				
15	64QAM	1	0	18.24	18.38	18.28				
15	64QAM	1	37	18.25	18.21	18.21	18.7	0		
15	64QAM	1	74	18.30	18.22	18.14				
15	64QAM	36	0	18.23	18.24	18.06				
15	64QAM	36	20	18.03	18.22	18.14	18.7	0		
15	64QAM	36	39	18.19	18.19	18.09				
15	64QAM	75	0	18.25	18.24	18.11				
15	256QAM	1	0	18.32	18.30	18.23				
15	256QAM	1	37	18.28	18.28	18.22	18.7	0		
15	256QAM	1	74	18.30	18.21	18.16				
15	256QAM	36	0	18.10	18.15	18.11				
15	256QAM	36	20	18.07	18.25	18.17	18.7	0		
15	256QAM	36	39	18.18	18.21	18.06				
15	256QAM	75	0	18.15	18.22	18.18				
Channel				37890	38000	38200	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	18.33	18.41	18.28	18.7	0		
10	QPSK	1	25	18.25	18.32	18.28				
10	QPSK	1	49	18.33	18.28	18.27				
10	QPSK	25	0	18.27	18.38	18.21				
10	QPSK	25	12	18.09	18.33	18.25	18.7	0		
10	QPSK	25	25	18.31	18.26	18.19				
10	QPSK	50	0	18.23	18.35	18.24				
10	16QAM	1	0	18.34	18.27	18.24	18.7	0		
10	16QAM	1	25	18.22	18.34	18.31				
10	16QAM	1	49	18.30	18.26	18.22				
10	16QAM	25	0	18.21	18.28	18.09				
10	16QAM	25	12	18.02	18.15	18.10	18.7	0		
10	16QAM	25	25	18.19	18.18	18.05				
10	16QAM	50	0	18.18	18.22	18.19				
10	64QAM	1	0	18.27	18.33	18.18				
10	64QAM	1	25	18.13	18.24	18.22	18.7	0		
10	64QAM	1	49	18.23	18.20	18.18				
10	64QAM	25	0	18.16	18.24	18.06				
10	64QAM	25	12	18.01	18.31	18.15	18.7	0		
10	64QAM	25	25	18.23	18.18	18.13				
10	64QAM	50	0	18.25	18.20	18.12				
10	256QAM	1	0	18.32	18.29	18.23				
10	256QAM	1	25	18.14	18.18	18.26	18.7	0		
10	256QAM	1	49	18.21	18.29	18.17				
10	256QAM	25	0	18.14	18.13	18.21				
10	256QAM	25	12	18.09	18.27	18.10	18.7	0		
10	256QAM	25	25	18.12	18.13	18.06				
10	256QAM	50	0	18.18	18.20	18.16				
Channel				37775	38000	38225	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				25725	2595	2617.5				
5	QPSK	1	0	18.36	18.40	18.28	18.7	0		
5	QPSK	1	12	18.30	18.41	18.29				
5	QPSK	1	24	18.31	18.31	18.29				
5	QPSK	12	0	18.30	18.31	18.28				
5	QPSK	12	7	18.16	18.36	18.20	18.7	0		
5	QPSK	12	13	18.22	18.28	18.14				
5	QPSK	25	0	18.26	18.32	18.19				
5	16QAM	1	0	18.34	18.30	18.31				
5	16QAM	1	12	18.25	18.29	18.24	18.7	0		
5	16QAM	1	24	18.33	18.20	18.15				
5	16QAM	12	0	18.18	18.31	18.16				
5	16QAM	12	7	18.02	18.24	18.19	18.7	0		
5	16QAM	12	13	18.15	18.26	18.11				
5	16QAM	25	0	18.24	18.21	18.15				
5	64QAM	1	0	18.27	18.25	18.20				
5	64QAM	1	12	18.19	18.25	18.27	18.7	0		
5	64QAM	1	24	18.28	18.16	18.13				
5	64QAM	12	0	18.22	18.22	18.10				
5	64QAM	12	7	18.09	18.21	18.08	18.7	0		
5	64QAM	12	13	18.23	18.22	18.06				
5	64QAM	25	0	18.17	18.22	18.15				
5	256QAM	1	0	18.31	18.34	18.30	18.7	0		
5	256QAM	1	12	18.21	18.25	18.27				
5	256QAM	1	24	18.28	18.19	18.21				
5	256QAM	12	0	18.17	18.14	18.12				
5	256QAM	12	7	18.09	18.23	18.06	18.7	0		
5	256QAM	12	13	18.12	18.21	18.04				
5	256QAM	25	0	18.13	18.24	18.10				

Band 41 Ant 3 DSI1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	18.39	18.30	18.50				
20	QPSK	1	49	18.23	18.14	18.42	18.7	0		
20	QPSK	1	99	18.35	18.29	18.38				
20	QPSK	50	0	18.31	18.25	18.45				
20	QPSK	50	24	18.09	18.05	18.39	18.7	0		
20	QPSK	50	50	18.22	18.20	18.24				
20	QPSK	100	0	18.31	18.22	18.43				
20	16QAM	1	0	18.20	18.21	18.40				
20	16QAM	1	49	18.16	18.00	18.32	18.7	0		
20	16QAM	1	99	18.28	18.16	18.33				
20	16QAM	50	0	18.28	18.12	18.34				
20	16QAM	50	24	18.01	18.00	18.28	18.7	0		
20	16QAM	50	50	18.19	18.09	18.14				
20	16QAM	100	0	18.25	18.09	18.38				
20	64QAM	1	0	18.35	18.21	18.41				
20	64QAM	1	49	18.10	18.09	18.37	18.7	0		
20	64QAM	1	99	18.27	18.18	18.29				
20	64QAM	50	0	18.23	18.13	18.35				
20	64QAM	50	24	18.02	17.99	18.33	18.7	0		
20	64QAM	50	50	18.10	18.07	18.22				
20	64QAM	100	0	18.24	18.08	18.35				
20	256QAM	1	0	18.35	18.25	18.38				
20	256QAM	1	49	18.20	18.04	18.37	18.7	0		
20	256QAM	1	99	18.33	18.18	18.34				
20	256QAM	50	0	18.24	18.20	18.40				
20	256QAM	50	24	17.98	17.93	18.35	18.7	0		



Band 38 Ant 4 DSI1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	18.11	18.16	18.13	19.5	0		
20	QPSK	1	49	18.01	18.11	18.04				
20	QPSK	1	99	17.99	18.11	18.03				
20	QPSK	50	0	18.05	18.10	18.02				
20	QPSK	50	24	17.94	18.04	17.91				
20	QPSK	50	50	17.85	18.04	17.91				
20	QPSK	100	0	18.07	18.08	18.05				
20	16QAM	1	0	18.05	18.07	18.03	19.5	0		
20	16QAM	1	49	17.92	18.05	17.96				
20	16QAM	1	99	17.87	18.05	17.92				
20	16QAM	50	0	18.01	18.00	17.92				
20	16QAM	50	24	17.88	17.96	17.82				
20	16QAM	50	50	17.76	17.88	17.78				
20	16QAM	100	0	18.04	17.88	17.96	19.5	0		
20	64QAM	1	0	18.01	18.08	18.01				
20	64QAM	1	49	17.95	18.03	18.01				
20	64QAM	1	99	17.96	18.04	17.93				
20	64QAM	50	0	18.03	18.08	17.91				
20	64QAM	50	24	17.92	17.87	17.88				
20	64QAM	50	50	17.92	18.01	17.85				
20	64QAM	100	0	18.00	17.96	17.93	19.5	0		
20	256QAM	1	0	18.07	18.09	18.06				
20	256QAM	1	49	17.93	18.08	17.92				
20	256QAM	1	99	17.85	18.03	17.89				
20	256QAM	50	0	17.98	18.05	17.91				
20	256QAM	50	24	17.82	17.93	17.87				
20	256QAM	50	50	17.75	17.90	17.87				
20	256QAM	100	0	18.05	18.02	17.93	19.5	0		
Channel				37825	38000	38175				
Frequency (MHz)				25775	25925	26125				
15	QPSK	1	0	17.99	18.11	17.99	19.5	0		
15	QPSK	1	37	17.92	18.08	18.00				
15	QPSK	1	74	17.85	18.05	17.92				
15	QPSK	36	0	17.93	17.96	17.91				
15	QPSK	36	20	17.83	17.85	17.87				
15	QPSK	36	39	17.76	18.00	17.77				
15	QPSK	75	0	18.01	18.02	17.93	19.5	0		
15	16QAM	1	0	18.00	18.03	17.98				
15	16QAM	1	37	17.81	17.92	17.87				
15	16QAM	1	74	17.83	17.82	17.81				
15	16QAM	36	0	17.89	17.88	17.89				
15	16QAM	36	20	17.83	17.87	17.74				
15	16QAM	36	39	17.67	17.88	17.70				
15	16QAM	75	0	17.98	17.86	17.94				
15	64QAM	1	0	17.93	18.02	17.90				
15	64QAM	1	37	17.86	17.82	17.96				
15	64QAM	1	74	17.81	18.01	17.81				
15	64QAM	36	0	17.98	18.00	17.86				
15	64QAM	36	20	17.81	17.91	17.77				
15	64QAM	36	39	17.64	17.90	17.76				
15	64QAM	75	0	17.89	17.90	17.79				
15	256QAM	1	0	17.96	18.03	18.00				
15	256QAM	1	37	17.86	18.02	17.86				
15	256QAM	1	74	17.81	18.00	17.83				
15	256QAM	36	0	17.89	17.91	17.85				
15	256QAM	36	20	17.76	17.84	17.75				
15	256QAM	36	39	17.71	17.82	17.74				
15	256QAM	75	0	17.99	17.91	17.82	19.5	0		
Channel				37800	38000	38200				
Frequency (MHz)				25750	25950	26150				
10	QPSK	1	0	18.09	18.11	18.02	19.5	0		
10	QPSK	1	25	17.92	18.05	17.95				
10	QPSK	1	49	17.94	18.03	17.96				
10	QPSK	25	0	17.97	18.01	17.93				
10	QPSK	25	12	17.85	17.97	17.78				
10	QPSK	25	25	17.71	17.95	17.88				
10	QPSK	50	0	18.04	17.97	17.92				
10	16QAM	1	0	18.00	17.97	17.90	19.5	0		
10	16QAM	1	25	17.83	17.92	17.95				
10	16QAM	1	49	17.83	17.98	17.88				
10	16QAM	25	0	17.95	17.97	17.83				
10	16QAM	25	12	17.76	17.86	17.68				
10	16QAM	25	25	17.72	17.91	17.74				
10	16QAM	50	0	17.91	17.88	17.90				
10	64QAM	1	0	17.88	17.96	17.92				
10	64QAM	1	25	17.93	17.97	17.91				
10	64QAM	1	49	17.84	17.94	17.88				
10	64QAM	25	0	17.89	17.96	17.87				
10	64QAM	25	12	17.83	17.85	17.86				
10	64QAM	25	25	17.83	17.89	17.72				
10	64QAM	50	0	17.86	17.93	17.88				
10	256QAM	1	0	18.04	18.04	17.95				
10	256QAM	1	25	17.80	18.04	17.86				
10	256QAM	1	49	17.81	17.94	17.78				
10	256QAM	25	0	17.92	17.88	17.85				
10	256QAM	25	12	17.69	17.81	17.78				
10	256QAM	25	25	17.72	17.84	17.84				
10	256QAM	50	0	17.92	17.92	17.88	19.5	0		
Channel				37775	38000	38225				
Frequency (MHz)				25725	2595	26175				
5	QPSK	1	0	18.01	18.13	18.02	19.5	0		
5	QPSK	1	12	17.98	18.07	17.95				
5	QPSK	1	24	17.96	17.99	17.91				
5	QPSK	12	0	17.99	18.03	17.97				
5	QPSK	12	7	17.83	17.95	17.85				
5	QPSK	12	13	17.73	17.81	17.87				
5	QPSK	25	0	18.02	18.02	18.01				
5	16QAM	1	0	17.95	18.04	17.95	19.5	0		
5	16QAM	1	12	17.79	17.99	17.96				
5	16QAM	1	24	17.76	17.94	17.85				
5	16QAM	12	0	17.88	17.81	17.90				
5	16QAM	12	7	17.80	17.81	17.71				
5	16QAM	12	13	17.64	17.87	17.73				
5	16QAM	25	0	17.92	17.84	17.89				
5	64QAM	1	0	17.99	18.04	17.90				
5	64QAM	1	12	17.85	18.00	17.90				
5	64QAM	1	24	17.88	17.85	17.85				
5	64QAM	12	0	17.98	18.05	17.89				
5	64QAM	12	7	17.88	17.91	17.81				
5	64QAM	12	13	17.62	17.92	17.81				
5	64QAM	25	0	17.88	17.88	17.81				
5	256QAM	1	0	18.02	18.03	17.96				
5	256QAM	1	12	17.99	18.03	17.79				
5	256QAM	1	24	17.81	17.92	17.78				
5	256QAM	12	0	17.94	17.95	17.86				
5	256QAM	12	7	17.73	17.90	17.80				
5	256QAM	12	13	17.63	17.78	17.78				
5	256QAM	25	0	17.95	17.98	17.88	19.5	0		

Band 41 Ant 4 DSI1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	17.99	17.88	18.14	19.5	0		
20	QPSK	1	49	18.02	17.84	18.05				
20	QPSK	1	99	17.93	17.82	18.07				
20	QPSK	50	0	17.87	17.93	18.09				
20	QPSK	50	24	17.89	17.78	18.03				
20	QPSK	50	50	17.80	17.87	17.97				
20	QPSK	100	0	17.94	17.92	18.06				
20	16QAM	1	0	17.87	17.92	18.05	19.5	0		
20	16QAM	1	49	17.86	17.72	17.95				
20	16QAM	1	99	17.83	17.90	17.94				
20										

Band 38 Ant 5 DSI1										
BW (MHz)	Modulation	RB Size	RB Offset	Power High Ch / Freq	Power Middle Ch / Freq	Power Low Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	24.21	24.24	24.19	25.5	0		
20	QPSK	1	49	24.18	24.20	24.14				
20	QPSK	1	99	24.10	24.17	24.09				
20	QPSK	50	0	23.20	23.28	23.14				
20	QPSK	50	24	23.16	23.22	23.17	24.5	1		
20	QPSK	50	50	23.07	23.12	23.10				
20	QPSK	100	0	23.16	23.27	23.15				
20	16QAM	1	0	23.16	23.24	23.18	24.5	1		
20	16QAM	1	49	23.19	23.17	23.09				
20	16QAM	1	99	23.09	23.20	23.12				
20	16QAM	50	0	22.23	22.25	22.12				
20	16QAM	50	24	22.13	22.17	22.13	23.5	2		
20	16QAM	50	50	22.02	22.16	22.09				
20	16QAM	100	0	22.20	22.26	22.16				
20	64QAM	1	0	22.16	22.29	22.23				
20	64QAM	1	49	22.16	22.14	22.03	23.5	2		
20	64QAM	1	99	22.10	22.26	22.16				
20	64QAM	50	0	21.14	21.30	21.19				
20	64QAM	50	24	21.14	21.18	21.18	22.5	3		
20	64QAM	50	50	21.11	21.17	21.05				
20	64QAM	100	0	21.19	21.32	21.16				
20	256QAM	1	0	19.22	19.26	19.13				
20	256QAM	1	49	19.19	19.27	19.20	20.5	5		
20	256QAM	1	99	19.07	19.17	19.10				
20	256QAM	50	0	19.15	19.28	19.16				
20	256QAM	50	24	19.20	19.18	19.14	20.5	5		
20	256QAM	50	50	19.15	19.16	19.11				
20	256QAM	100	0	19.11	19.25	19.09				
Channel				37825	38000	38175				
Frequency (MHz)				25775	25925	26125				
15	QPSK	1	0	24.19	24.13	24.13	25.5	0		
15	QPSK	1	37	24.15	24.10	24.11				
15	QPSK	1	74	23.98	24.11	24.01				
15	QPSK	36	0	23.08	23.17	23.05				
15	QPSK	36	20	23.09	23.13	23.04	24.5	1		
15	QPSK	36	39	22.93	23.09	22.99				
15	QPSK	75	0	23.03	23.17	23.11				
15	16QAM	1	0	23.13	23.14	23.16				
15	16QAM	1	37	23.06	23.08	23.01	24.5	1		
15	16QAM	1	74	23.05	23.14	22.99				
15	16QAM	36	0	22.11	22.19	22.03				
15	16QAM	36	20	22.03	22.14	22.04	23.5	2		
15	16QAM	36	39	21.90	22.07	22.05				
15	16QAM	75	0	22.16	22.15	22.09				
15	64QAM	1	0	22.09	22.26	22.11				
15	64QAM	1	37	22.06	22.10	21.96	23.5	2		
15	64QAM	1	74	21.97	22.06	22.12				
15	64QAM	36	0	21.08	21.25	21.14				
15	64QAM	36	20	21.00	21.11	21.05	22.5	3		
15	64QAM	36	39	21.02	21.09	20.93				
15	64QAM	75	0	21.15	21.24	21.14				
15	256QAM	1	0	19.19	19.14	19.07	20.5	5		
15	256QAM	1	37	19.08	19.20	19.10				
15	256QAM	1	74	19.04	19.14	18.99				
15	256QAM	36	0	19.03	19.19	19.07				
15	256QAM	36	20	19.09	19.15	19.06	20.5	5		
15	256QAM	36	39	19.12	19.10	19.02				
15	256QAM	75	0	19.03	19.21	19.00				
Channel				37800	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	24.14	24.13	24.12	25.5	0		
10	QPSK	1	25	24.07	24.11	24.10				
10	QPSK	1	49	24.00	24.12	24.01				
10	QPSK	25	0	23.11	23.17	23.02				
10	QPSK	25	12	23.13	23.10	23.04	24.5	1		
10	QPSK	25	25	22.94	23.04	23.03				
10	QPSK	50	0	23.12	23.13	23.02				
10	16QAM	1	0	23.04	23.20	23.10	24.5	1		
10	16QAM	1	25	22.96	23.11	23.00				
10	16QAM	1	49	23.00	23.10	22.98				
10	16QAM	25	0	22.14	22.13	22.05				
10	16QAM	25	12	22.07	22.11	22.07	23.5	2		
10	16QAM	25	25	21.93	22.13	22.05				
10	16QAM	50	0	22.17	22.17	22.11				
10	64QAM	1	0	22.10	22.24	22.12	23.5	2		
10	64QAM	1	25	22.09	22.00	21.96				
10	64QAM	1	49	22.04	22.19	22.10				
10	64QAM	25	0	21.10	21.18	21.06	22.5	3		
10	64QAM	25	12	21.04	21.10	21.10				
10	64QAM	25	25	21.02	21.14	21.00				
10	64QAM	50	0	21.15	21.22	21.04				
10	256QAM	1	0	19.13	19.18	19.00	20.5	5		
10	256QAM	1	25	19.12	19.19	19.13				
10	256QAM	1	49	18.99	19.15	18.97				
10	256QAM	25	0	19.05	19.26	19.07				
10	256QAM	25	12	19.11	19.05	19.11	20.5	5		
10	256QAM	25	25	19.13	19.14	19.05				
10	256QAM	50	0	18.99	19.21	19.03				
Channel				37775	38000	38225				
Frequency (MHz)				25725	2595	2617.5				
5	QPSK	1	0	24.07	24.20	24.06	25.5	0		
5	QPSK	1	12	24.09	24.11	24.01				
5	QPSK	1	24	23.97	24.13	23.99				
5	QPSK	12	0	23.07	23.16	23.07				
5	QPSK	12	7	23.12	23.09	23.12	24.5	1		
5	QPSK	12	13	22.94	23.00	22.99				
5	QPSK	25	0	23.12	23.24	23.02				
5	16QAM	1	0	23.14	23.21	23.05	24.5	1		
5	16QAM	1	12	23.11	23.09	23.03				
5	16QAM	1	24	23.00	23.13	23.04				
5	16QAM	12	0	22.11	22.22	22.06				
5	16QAM	12	7	22.06	22.05	22.11	23.5	2		
5	16QAM	12	13	21.93	22.09	21.96				
5	16QAM	25	0	22.11	22.15	22.15				
5	64QAM	1	0	22.12	22.24	22.19				
5	64QAM	1	12	22.13	22.04	21.94	23.5	2		
5	64QAM	1	24	21.97	22.19	22.12				
5	64QAM	12	0	21.11	21.27	21.14				
5	64QAM	12	7	21.11	21.09	21.12	22.5	3		
5	64QAM	12	13	21.03	21.15	21.02				
5	64QAM	25	0	21.10	21.23	21.07				
5	256QAM	1	0	19.08	19.15	19.10	20.5	5		
5	256QAM	1	12	19.14	19.24	19.16				
5	256QAM	1	24	18.98	19.14	19.04				
5	256QAM	12	0	19.04	19.24	19.08				
5	256QAM	12	7	19.16	19.08	19.01	20.5	5		
5	256QAM	12	13	19.11	19.11	19.02				
5	256QAM	25	0	18.99	19.18	18.98				

Band 41 Ant 5 DSI1										
BW (MHz)	Modulation	RB Size	RB Offset	Power High Ch / Freq	Power Middle Ch / Freq	Power Low Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	24.13	24.18	24.19	25.5	0		
20	QPSK	1	49	24.06	24.11	24.17				
20	QPSK	1	99	24.02	24.09	24.16				
20	QPSK	50	0	23.14	23.19	23.21				
20	QPSK	50	24	23.03	23.09	23.20	24.5	1		
20	QPSK	50	50	22.99	23.11	23.20				</



Band 42 Ant 1 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				42190	42590	42990			
Frequency (MHz)				3460	3500	3540			
20	QPSK	1	0	19.97	20.03	19.99	21.5	0	
20	QPSK	1	49	19.82	20.02	19.92			
20	QPSK	1	99	19.77	19.94	19.86			
20	QPSK	50	0	19.85	20.00	19.86			
20	QPSK	50	24	19.75	19.92	19.87	21.5	0	
20	QPSK	50	50	19.75	19.84	19.75			
20	QPSK	100	0	19.95	19.97	19.86			
20	16QAM	1	0	19.85	19.89	19.85			
20	16QAM	1	49	19.70	19.89	19.87	21.5	0	
20	16QAM	1	99	19.65	19.83	19.80			
20	16QAM	50	0	19.41	19.48	19.51			
20	16QAM	50	24	19.31	19.50	19.41	21	0.5	
20	16QAM	50	50	19.28	19.45	19.41			
20	16QAM	100	0	19.40	19.52	19.31			
20	64QAM	1	0	19.28	19.44	19.33			
20	64QAM	1	49	19.22	19.34	19.23	21	0.5	
20	64QAM	1	99	19.49	19.46	19.36			
20	64QAM	50	0	18.42	18.52	18.45			
20	64QAM	50	24	18.35	18.47	18.48	20	1.5	
20	64QAM	50	50	18.31	18.43	18.39			
20	64QAM	100	0	18.36	18.46	18.38			
20	256QAM	1	0	16.42	16.47	16.46			
20	256QAM	1	49	16.36	16.50	16.45	18	3.5	
20	256QAM	1	99	16.29	16.47	16.38			
20	256QAM	50	0	16.35	16.47	16.39			
20	256QAM	50	24	16.29	16.47	16.39	18	3.5	
20	256QAM	50	50	16.20	16.30	16.27			
20	256QAM	100	0	16.50	16.41	16.34			
Channel				42165	42590	43015	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3427.5	3500	3572.5			
15	QPSK	1	0	19.94	19.99	19.93	21.5	0	
15	QPSK	1	37	19.72	19.99	19.82			
15	QPSK	1	74	19.66	19.84	19.76			
15	QPSK	36	0	19.72	19.92	19.73			
15	QPSK	36	20	19.69	19.79	19.81	21.5	0	
15	QPSK	36	39	19.65	19.70	19.67			
15	QPSK	75	0	19.92	19.87	19.74			
15	16QAM	1	0	19.80	19.80	19.83			
15	16QAM	1	37	19.71	19.83	19.80	21.5	0	
15	16QAM	1	74	19.57	19.73	19.74			
15	16QAM	36	0	19.35	19.42	19.43			
15	16QAM	36	20	19.25	19.40	19.29	21	0.5	
15	16QAM	36	39	19.25	19.35	19.27			
15	16QAM	75	0	19.31	19.44	19.27			
15	64QAM	1	0	19.17	19.41	19.29			
15	64QAM	1	37	19.10	19.30	19.17	21	0.5	
15	64QAM	1	74	19.45	19.35	19.24			
15	64QAM	36	0	18.37	18.41	18.39			
15	64QAM	36	20	18.28	18.42	18.43	20	1.5	
15	64QAM	36	39	18.22	18.30	18.18			
15	64QAM	75	0	18.32	18.35	18.26			
15	256QAM	1	0	16.38	16.41	16.40			
15	256QAM	1	37	16.28	16.40	16.37	18	3.5	
15	256QAM	1	74	16.21	16.34	16.25			
15	256QAM	36	0	16.27	16.35	16.32			
15	256QAM	36	20	16.24	16.34	16.26	18	3.5	
15	256QAM	36	39	16.12	16.21	16.19			
15	256QAM	75	0	16.45	16.39	16.20			
Channel				42140	42590	43040	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3455	3500	3545			
10	QPSK	1	0	19.85	19.94	19.86	21.5	0	
10	QPSK	1	25	19.76	19.99	19.80			
10	QPSK	1	49	19.68	19.85	19.75			
10	QPSK	25	0	19.80	19.89	19.78			
10	QPSK	25	12	19.62	19.81	19.73	21.5	0	
10	QPSK	25	25	19.63	19.72	19.66			
10	QPSK	50	0	19.87	19.85	19.74			
10	16QAM	1	0	19.77	19.77	19.86			
10	16QAM	1	25	19.69	19.86	19.84	21.5	0	
10	16QAM	1	49	19.56	19.77	19.70			
10	16QAM	25	0	19.33	19.38	19.38			
10	16QAM	25	12	19.24	19.46	19.37	21	0.5	
10	16QAM	25	25	19.19	19.38	19.37			
10	16QAM	50	0	19.27	19.47	19.29			
10	64QAM	1	0	19.18	19.38	19.20			
10	64QAM	1	25	19.18	19.22	19.18	21	0.5	
10	64QAM	1	49	19.44	19.42	19.34			
10	64QAM	25	0	18.28	18.44	18.36			
10	64QAM	25	12	18.30	18.34	18.39	20	1.5	
10	64QAM	25	25	18.24	18.31	18.25			
10	64QAM	50	0	18.26	18.41	18.28			
10	256QAM	1	0	16.35	16.34	16.40			
10	256QAM	1	25	16.23	16.41	16.41	18	3.5	
10	256QAM	1	49	16.16	16.40	16.32			
10	256QAM	25	0	16.26	16.43	16.33			
10	256QAM	25	12	16.25	16.43	16.29	18	3.5	
10	256QAM	25	25	16.17	16.25	16.21			
10	256QAM	50	0	16.41	16.32	16.22			
Channel				42115	42590	43065	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3427.5	3500	3572.5			
5	QPSK	1	0	19.84	19.94	19.89	21.5	0	
5	QPSK	1	12	19.73	19.89	19.79			
5	QPSK	1	24	19.70	19.83	19.75			
5	QPSK	12	0	19.80	19.93	19.75			
5	QPSK	12	7	19.69	19.82	19.82	21.5	0	
5	QPSK	12	13	19.71	19.73	19.67			
5	QPSK	25	0	19.90	19.95	19.73			
5	16QAM	1	0	19.76	19.79	19.91			
5	16QAM	1	12	19.68	19.78	19.81	21.5	0	
5	16QAM	1	24	19.54	19.81	19.69			
5	16QAM	12	0	19.30	19.37	19.45			
5	16QAM	12	7	19.26	19.43	19.30	21	0.5	
5	16QAM	12	13	19.24	19.41	19.29			
5	16QAM	25	0	19.27	19.39	19.20			
5	64QAM	1	0	19.21	19.35	19.29			
5	64QAM	1	12	19.14	19.25	19.14	21	0.5	
5	64QAM	1	24	19.43	19.44	19.33			
5	64QAM	12	0	18.37	18.47	18.35			
5	64QAM	12	7	18.30	18.40	18.38	20	1.5	
5	64QAM	12	13	18.24	18.32	18.26			
5	64QAM	25	0	18.23	18.36	18.33			
5	256QAM	1	0	16.30	16.34	16.35			
5	256QAM	1	12	16.31	16.46	16.32	18	3.5	
5	256QAM	1	24	16.16	16.40	16.34			
5	256QAM	12	0	16.23	16.41	16.36			
5	256QAM	12	7	16.25	16.41	16.36	18	3.5	
5	256QAM	12	13	16.15	16.27	16.13			
5	256QAM	25	0	16.42	16.28	16.21			

Band 48 Ant 1 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3569	3641	3690		
20	QPSK	1	0	19.60	19.73	19.65	19.65	21	0
20	QPSK	1	49	19.58	19.64	19.80	19.66		
20	QPSK	1	99	19.55	19.83	19.83	19.54		
20	QPSK	50	0	19.52	19.69	19.53	19.53		
20	QPSK	50	24	19.49	19.53	19.46	19.62	21	0
20	QPSK	50	50	19.46	19.49	19.56	19.45		
20	QPSK	100	0	19.49	19.66	19.56	19.60		
20	16QAM	1	0	19.51	19.60	19.82	19.62		
20	16QAM	1	49	19.52	19.55	19.52	19.61	21	0
20	16QAM	1	99	19.46	19.58	19.56	19.52		
20	16QAM	50	0	18.61	18.69	18.65	18.67		
20	16QAM	50	24	18.63	18.69	18.58	18.61	20	

Band 42 Ant 6 DSI1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				42190	42590	42990				
Frequency (MHz)				3460	3500	3540				
20	QPSK	1	0	15.41	15.65	15.56	16.5	0		
20	QPSK	1	49	15.39	15.47	15.59				
20	QPSK	1	99	15.48	15.48	15.62				
20	QPSK	50	0	15.47	15.51	15.59				
20	QPSK	50	24	15.48	15.48	15.50				
20	QPSK	50	50	15.48	15.55	15.54				
20	QPSK	100	0	15.39	15.45	15.57				
20	16QAM	1	0	15.43	15.52	15.58				
20	16QAM	1	49	15.50	15.52	15.60				
20	16QAM	1	99	15.47	15.52	15.52				
20	16QAM	50	0	15.50	15.52	15.55				
20	16QAM	50	24	15.42	15.50	15.57				
20	16QAM	50	50	15.48	15.47	15.57				
20	16QAM	100	0	15.42	15.48	15.62				
20	64QAM	1	0	15.49	15.56	15.56				
20	64QAM	1	49	15.49	15.51	15.52				
20	64QAM	1	99	15.39	15.45	15.59				
20	64QAM	50	0	15.50	15.50	15.53				
20	64QAM	50	24	15.42	15.48	15.54				
20	64QAM	50	50	15.45	15.49	15.50				
20	64QAM	100	0	15.43	15.46	15.56				
20	256QAM	1	0	15.46	15.52	15.54				
20	256QAM	1	49	15.45	15.55	15.59				
20	256QAM	1	99	15.45	15.55	15.57				
20	256QAM	50	0	15.49	15.56	15.50				
20	256QAM	50	24	15.41	15.53	15.61				
20	256QAM	50	50	15.42	15.48	15.50				
20	256QAM	100	0	15.47	15.55	15.55				
Channel				42165	42590	43015				
Frequency (MHz)				3422.5	3500	3577.5				
15	QPSK	1	0	15.29	15.43	15.47	16.5	0		
15	QPSK	1	37	15.37	15.44	15.50				
15	QPSK	1	74	15.34	15.39	15.45				
15	QPSK	36	0	15.35	15.40	15.42				
15	QPSK	36	20	15.31	15.37	15.49				
15	QPSK	36	39	15.39	15.42	15.49				
15	QPSK	75	0	15.41	15.45	15.49				
15	16QAM	1	0	15.34	15.37	15.48				
15	16QAM	1	37	15.36	15.39	15.41				
15	16QAM	1	74	15.38	15.45	15.41				
15	16QAM	36	0	15.37	15.44	15.40				
15	16QAM	36	20	15.33	15.44	15.49				
15	16QAM	36	39	15.34	15.35	15.47				
15	16QAM	75	0	15.34	15.44	15.48				
15	64QAM	1	0	15.34	15.43	15.45				
15	64QAM	1	37	15.40	15.40	15.44				
15	64QAM	1	74	15.36	15.42	15.48				
15	64QAM	36	0	15.36	15.43	15.48				
15	64QAM	36	20	15.39	15.36	15.48				
15	64QAM	36	39	15.37	15.41	15.47				
15	64QAM	75	0	15.31	15.47	15.48				
15	256QAM	1	0	15.33	15.46	15.51				
15	256QAM	1	37	15.32	15.40	15.49				
15	256QAM	1	74	15.31	15.37	15.50				
15	256QAM	36	0	15.35	15.38	15.42				
15	256QAM	36	20	15.37	15.45	15.43				
15	256QAM	36	39	15.31	15.45	15.43				
15	256QAM	75	0	15.41	15.46	15.47				
Channel				42140	42590	43040				
Frequency (MHz)				3455	3500	3545				
10	QPSK	1	0	15.39	15.41	15.43	16.5	0		
10	QPSK	1	25	15.33	15.38	15.50				
10	QPSK	1	49	15.31	15.43	15.44				
10	QPSK	25	0	15.35	15.39	15.45				
10	QPSK	25	12	15.31	15.36	15.52				
10	QPSK	25	25	15.38	15.40	15.42				
10	QPSK	50	0	15.33	15.41	15.49				
10	16QAM	1	0	15.40	15.38	15.40				
10	16QAM	1	25	15.35	15.36	15.47				
10	16QAM	1	49	15.34	15.42	15.45				
10	16QAM	25	0	15.36	15.38	15.45				
10	16QAM	25	12	15.35	15.46	15.45				
10	16QAM	25	25	15.36	15.47	15.47				
10	16QAM	50	0	15.31	15.40	15.48				
10	64QAM	1	0	15.29	15.36	15.45				
10	64QAM	1	25	15.34	15.42	15.49				
10	64QAM	1	49	15.34	15.38	15.48				
10	64QAM	25	0	15.32	15.46	15.47				
10	64QAM	25	12	15.33	15.45	15.48				
10	64QAM	25	25	15.39	15.42	15.47				
10	64QAM	50	0	15.29	15.43	15.49				
10	256QAM	1	0	15.32	15.40	15.46				
10	256QAM	1	25	15.35	15.38	15.49				
10	256QAM	1	49	15.35	15.39	15.41				
10	256QAM	25	0	15.34	15.36	15.47				
10	256QAM	25	12	15.37	15.43	15.49				
10	256QAM	25	25	15.38	15.43	15.44				
10	256QAM	50	0	15.30	15.43	15.51				
Channel				42115	42590	43065				
Frequency (MHz)				3422.5	3500	3577.5				
5	QPSK	1	0	15.40	15.42	15.40	16.5	0		
5	QPSK	1	12	15.30	15.47	15.49				
5	QPSK	1	24	15.41	15.39	15.46				
5	QPSK	12	0	15.32	15.40	15.41				
5	QPSK	12	7	15.39	15.39	15.44				
5	QPSK	12	13	15.41	15.40	15.45				
5	QPSK	25	0	15.30	15.41	15.41				
5	16QAM	1	0	15.35	15.42	15.50				
5	16QAM	1	12	15.34	15.35	15.48				
5	16QAM	1	24	15.35	15.35	15.51				
5	16QAM	12	0	15.34	15.37	15.51				
5	16QAM	12	7	15.36	15.41	15.41				
5	16QAM	12	13	15.38	15.39	15.47				
5	16QAM	25	0	15.30	15.45	15.41				
5	64QAM	1	0	15.31	15.38	15.48				
5	64QAM	1	12	15.37	15.46	15.51				
5	64QAM	1	24	15.39	15.36	15.47				
5	64QAM	12	0	15.32	15.37	15.44				
5	64QAM	12	7	15.31	15.38	15.42				
5	64QAM	12	13	15.35	15.44	15.51				
5	64QAM	25	0	15.30	15.35	15.40				
5	256QAM	1	0	15.32	15.47	15.41				
5	256QAM	1	12	15.37	15.44	15.49				
5	256QAM	1	24	15.32	15.37	15.45				
5	256QAM	12	0	15.40	15.45	15.46				
5	256QAM	12	7	15.37	15.40	15.49				
5	256QAM	12	13	15.33	15.44	15.45				
5	256QAM	25	0	15.30	15.39	15.44				

Band 48 Ant 6 DSI1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				55340	55830	56150				
Frequency (MHz)				3560	3569	3641				
20	QPSK	1	0	15.91	16.15	16.00	17	0		
20	QPSK	1	49	15.91	16.07	16.03				
20	QPSK	1	99	15.94	16.11	16.02				
20	QPSK	50	0	15.89	16.05	16.05				
20	QPSK	50	24	15.92	16.07	16.06				
20	QPSK	50	50	15.91	16.03	16.05				
20	QPSK	100	0	15.93	16.10	15.98				
20	16QAM	1	0	15.90	16.08	16.00				
20										

Band 42 Ant 7 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				42190	42590	42990			
Frequency (MHz)				3460	3500	3540			
20	QPSK	1	0	17.08	17.21	17.10	18.5	0	
20	QPSK	1	49	16.98	17.11	17.04			
20	QPSK	1	99	17.04	17.07	17.09			
20	QPSK	50	0	17.09	17.06	17.09			
20	QPSK	50	24	17.08	17.15	17.10			
20	QPSK	50	50	17.09	17.07	17.12			
20	QPSK	100	0	17.00	17.13	17.07			
20	16QAM	1	0	17.02	17.09	17.07	18.5	0	
20	16QAM	1	49	17.09	17.14	17.06			
20	16QAM	1	99	16.99	17.14	17.06			
20	16QAM	50	0	17.03	17.12	17.10			
20	16QAM	50	24	17.02	17.11	17.06			
20	16QAM	50	50	17.03	17.13	17.09			
20	16QAM	100	0	17.08	17.11	17.06			
20	64QAM	1	0	17.09	17.08	17.10	18.5	0	
20	64QAM	1	49	17.09	17.10	17.03			
20	64QAM	1	99	17.00	17.08	17.07			
20	64QAM	50	0	17.01	17.15	17.07			
20	64QAM	50	24	17.00	17.10	17.05			
20	64QAM	50	50	17.01	17.07	17.08			
20	64QAM	100	0	17.09	17.05	17.13			
20	256QAM	1	0	17.07	17.14	17.13	18.5	0	
20	256QAM	1	49	17.03	17.13	17.06			
20	256QAM	1	99	17.06	17.08	17.03			
20	256QAM	50	0	17.09	17.13	17.12			
20	256QAM	50	24	17.09	17.16	17.03			
20	256QAM	50	50	17.06	17.10	17.12			
20	256QAM	100	0	17.04	17.11	17.02			
Channel				42165	42590	43015	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3422.5	3500	3577.5			
15	QPSK	1	0	16.94	17.02	16.99	18.5	0	
15	QPSK	1	37	16.96	16.98	17.00			
15	QPSK	1	74	16.92	17.01	17.00			
15	QPSK	36	0	16.99	16.99	17.03			
15	QPSK	36	20	16.99	17.03	17.01			
15	QPSK	36	39	16.93	17.05	16.95			
15	QPSK	75	0	17.00	16.97	17.03	18.5	0	
15	16QAM	1	0	16.88	16.99	16.99			
15	16QAM	1	37	16.94	16.96	17.03			
15	16QAM	1	74	16.97	16.98	16.93			
15	16QAM	36	0	16.99	17.03	16.95			
15	16QAM	36	20	16.95	16.98	16.98			
15	16QAM	36	39	16.98	17.03	16.94			
15	16QAM	75	0	16.89	17.01	16.93			
15	64QAM	1	0	16.96	16.94	17.03	18.5	0	
15	64QAM	1	37	16.96	16.97	16.95			
15	64QAM	1	74	16.90	17.06	17.02			
15	64QAM	36	0	16.90	16.94	17.00			
15	64QAM	36	20	16.98	17.00	16.99			
15	64QAM	36	39	17.00	16.96	16.97			
15	64QAM	75	0	16.91	16.95	16.96			
15	256QAM	1	0	16.92	17.00	16.93	18.5	0	
15	256QAM	1	37	16.92	17.01	16.94			
15	256QAM	1	74	16.99	16.94	16.96			
15	256QAM	36	0	16.98	17.02	16.99			
15	256QAM	36	20	16.91	17.03	17.02			
15	256QAM	36	39	16.88	17.06	16.96			
15	256QAM	75	0	16.91	16.98	16.97			
Channel				42140	42590	43040	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3455	3500	3545			
10	QPSK	1	0	16.97	17.00	16.93	18.5	0	
10	QPSK	1	25	16.95	17.00	16.98			
10	QPSK	1	49	16.92	16.99	17.00			
10	QPSK	25	0	16.99	17.02	16.93			
10	QPSK	25	12	16.97	16.96	17.02			
10	QPSK	25	25	16.91	17.02	16.92			
10	QPSK	50	0	16.89	17.06	16.96			
10	16QAM	1	0	16.95	17.01	16.96	18.5	0	
10	16QAM	1	25	16.98	17.02	16.95			
10	16QAM	1	49	16.90	17.02	17.03			
10	16QAM	25	0	17.00	17.03	17.00			
10	16QAM	25	12	16.97	17.01	17.02			
10	16QAM	25	25	16.99	16.98	16.95			
10	16QAM	50	0	16.88	16.99	16.99			
10	64QAM	1	0	16.99	17.05	16.97	18.5	0	
10	64QAM	1	25	16.95	17.06	16.94			
10	64QAM	1	49	16.95	17.04	16.96			
10	64QAM	25	0	16.95	17.00	17.00			
10	64QAM	25	12	16.90	17.03	16.99			
10	64QAM	25	25	16.95	17.05	16.97			
10	64QAM	50	0	16.89	16.99	16.98			
10	256QAM	1	0	16.96	17.05	17.02	18.5	0	
10	256QAM	1	25	16.92	16.96	17.02			
10	256QAM	1	49	16.89	17.01	16.98			
10	256QAM	25	0	16.99	17.02	17.01			
10	256QAM	25	12	16.93	16.99	16.93			
10	256QAM	25	25	16.98	16.99	16.94			
10	256QAM	50	0	16.88	16.97	17.04			
Channel				42115	42590	43065	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3422.5	3500	3577.5			
5	QPSK	1	0	16.90	16.96	17.03	18.5	0	
5	QPSK	1	12	16.98	16.94	16.93			
5	QPSK	1	24	17.00	17.05	16.93			
5	QPSK	12	0	16.94	17.02	16.94			
5	QPSK	12	7	16.90	17.02	17.03			
5	QPSK	12	13	16.91	17.06	17.01			
5	QPSK	25	0	16.97	17.04	16.95			
5	16QAM	1	0	16.96	16.98	16.94	18.5	0	
5	16QAM	1	12	16.98	16.95	16.98			
5	16QAM	1	24	16.89	17.06	16.93			
5	16QAM	12	0	16.91	17.05	16.99			
5	16QAM	12	7	16.91	16.96	17.01			
5	16QAM	12	13	16.94	16.98	17.00			
5	16QAM	25	0	16.99	16.95	17.00			
5	64QAM	1	0	16.96	16.97	17.01	18.5	0	
5	64QAM	1	12	16.95	17.04	17.01			
5	64QAM	1	24	16.95	16.95	17.00			
5	64QAM	12	0	17.00	17.02	17.03			
5	64QAM	12	7	16.98	17.02	17.00			
5	64QAM	12	13	16.91	17.00	17.00			
5	64QAM	25	0	16.92	17.06	16.97			
5	256QAM	1	0	16.96	17.01	16.92	18.5	0	
5	256QAM	1	12	16.97	16.96	16.98			
5	256QAM	1	24	16.95	17.05	16.97			
5	256QAM	12	0	16.93	16.99	17.03			
5	256QAM	12	7	16.98	16.97	17.00			
5	256QAM	12	13	16.98	16.96	16.95			
5	256QAM	25	0	16.93	16.95	17.04			

Band 48 Ant 7 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3569	3641	3690		
20	QPSK	1	0	18.29	18.49	18.32	18.28		
20	QPSK	1	49	18.31	18.39	18.32	18.31	20	0
20	QPSK	1	99	18.26	18.43	18.31	18.30		
20	QPSK	50	0	18.34	18.37	18.32	18.23		
20	QPSK	50	24	18.35	18.46	18.33	18.32		
20	QPSK	50	50	18.28	18.37	18.31	18.23		
20	QPSK	100	0	18.36	18.45	18.32	18.28		
20	16QAM	1	0	18.37	18.40	18.37	18.27		
20	16QAM	1	49	18.31	18.44	18.36	18.34		
20	16QAM	1	99	18.31	18.45	18.39	18.34		
20	16QAM	50	0	18.34	18.36	18.40	18.30		
20	16QAM	50	24	18.37	18.46	18.33	18.29		
20	16QAM	50	50	18.36	18.40	18.30	18.31		
20									



Band 42 Ant 8 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				42190	42590	42990			
Frequency (MHz)				3460	3500	3540			
20	QPSK	1	0	23.52	23.55	23.48	25	0	
20	QPSK	1	49	23.48	23.51	23.42			
20	QPSK	1	99	23.39	23.48	23.40			
20	QPSK	50	0	22.50	22.50	22.44			
20	QPSK	50	24	22.44	22.50	22.39	24	1	
20	QPSK	50	50	22.34	22.47	22.41			
20	QPSK	100	0	22.50	22.57	22.50			
20	16QAM	1	0	22.53	22.55	22.54			
20	16QAM	1	49	22.54	22.54	22.39	24	1	
20	16QAM	1	99	22.39	22.48	22.35			
20	16QAM	50	0	21.45	21.58	21.47			
20	16QAM	50	24	21.44	21.54	21.44	23	2	
20	16QAM	50	50	21.28	21.44	21.36			
20	16QAM	100	0	21.49	21.58	21.46			
20	64QAM	1	0	21.56	21.50	21.49			
20	64QAM	1	49	21.55	21.57	21.45	23	2	
20	64QAM	1	99	21.39	21.48	21.39			
20	64QAM	50	0	20.47	20.60	20.50			
20	64QAM	50	24	20.46	20.50	20.39	22	3	
20	64QAM	50	50	20.39	20.39	20.38			
20	64QAM	100	0	20.50	20.58	20.54			
20	256QAM	1	0	18.44	18.55	18.44			
20	256QAM	1	49	18.44	18.52	18.35	20	5	
20	256QAM	1	99	18.39	18.49	18.47			
20	256QAM	50	0	18.55	18.54	18.51			
20	256QAM	50	24	18.48	18.50	18.49	20	5	
20	256QAM	50	50	18.51	18.48	18.34			
20	256QAM	100	0	18.37	18.50	18.34			
Channel				42165	42590	43015	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3422.5	3500	3577.5			
15	QPSK	1	0	23.47	23.46	23.45	25	0	
15	QPSK	1	37	23.35	23.46	23.32			
15	QPSK	1	74	23.30	23.35	23.34			
15	QPSK	36	0	22.48	22.50	22.34			
15	QPSK	36	20	22.36	22.47	22.27	24	1	
15	QPSK	36	39	22.23	22.43	22.38			
15	QPSK	75	0	22.41	22.51	22.41			
15	16QAM	1	0	22.42	22.50	22.45			
15	16QAM	1	37	22.42	22.48	22.29	24	1	
15	16QAM	1	74	22.25	22.37	22.26			
15	16QAM	36	0	21.40	21.49	21.41			
15	16QAM	36	20	21.38	21.41	21.31			
15	16QAM	36	39	21.18	21.32	21.32	23	2	
15	16QAM	75	0	21.37	21.48	21.33			
15	64QAM	1	0	21.43	21.46	21.46			
15	64QAM	1	37	21.53	21.52	21.42	23	2	
15	64QAM	1	74	21.28	21.39	21.24			
15	64QAM	36	0	20.35	20.54	20.42			
15	64QAM	36	20	20.39	20.42	20.37	22	3	
15	64QAM	36	39	20.34	20.34	20.33			
15	64QAM	75	0	20.40	20.56	20.48			
15	256QAM	1	0	18.32	18.49	18.41			
15	256QAM	1	37	18.39	18.42	18.30	20	5	
15	256QAM	1	74	18.36	18.37	18.40			
15	256QAM	36	0	18.46	18.49	18.41			
15	256QAM	36	20	18.41	18.43	18.37	20	5	
15	256QAM	36	39	18.37	18.45	18.30			
15	256QAM	75	0	18.33	18.39	18.23			
Channel				42140	42590	43040	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3455	3500	3545			
10	QPSK	1	0	23.39	23.45	23.42	25	0	
10	QPSK	1	25	23.44	23.38	23.38			
10	QPSK	1	49	23.33	23.40	23.30			
10	QPSK	25	0	22.41	22.54	22.33			
10	QPSK	25	12	22.39	22.46	22.30	24	1	
10	QPSK	25	25	22.28	22.35	22.30			
10	QPSK	50	0	22.37	22.48	22.43			
10	16QAM	1	0	22.48	22.46	22.50			
10	16QAM	1	25	22.44	22.50	22.35	24	1	
10	16QAM	1	49	22.31	22.38	22.21			
10	16QAM	25	0	21.42	21.54	21.43			
10	16QAM	25	12	21.42	21.47	21.38	23	2	
10	16QAM	25	25	21.26	21.32	21.29			
10	16QAM	50	0	21.46	21.49	21.32			
10	64QAM	1	0	21.47	21.48	21.37			
10	64QAM	1	25	21.46	21.50	21.33	23	2	
10	64QAM	1	49	21.30	21.40	21.27			
10	64QAM	25	0	20.33	20.48	20.36			
10	64QAM	25	12	20.42	20.46	20.33	22	3	
10	64QAM	25	25	20.26	20.32	20.35			
10	64QAM	50	0	20.39	20.48	20.46			
10	256QAM	1	0	18.41	18.41	18.32			
10	256QAM	1	25	18.41	18.40	18.24	20	5	
10	256QAM	1	49	18.34	18.45	18.33			
10	256QAM	25	0	18.42	18.47	18.42			
10	256QAM	25	12	18.41	18.45	18.47	20	5	
10	256QAM	25	25	18.45	18.35	18.28			
10	256QAM	50	0	18.31	18.37	18.23			
Channel				42115	42590	43065	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3422.5	3500	3577.5			
5	QPSK	1	0	23.42	23.53	23.35	25	0	
5	QPSK	1	12	23.36	23.48	23.39			
5	QPSK	1	24	23.27	23.34	23.32			
5	QPSK	12	0	22.44	22.49	22.38			
5	QPSK	12	7	22.33	22.37	22.27	24	1	
5	QPSK	12	13	22.30	22.43	22.38			
5	QPSK	25	0	22.48	22.54	22.37			
5	16QAM	1	0	22.50	22.49	22.50			
5	16QAM	1	12	22.49	22.40	22.28	24	1	
5	16QAM	1	24	22.31	22.43	22.32			
5	16QAM	12	0	21.39	21.49	21.43			
5	16QAM	12	7	21.41	21.44	21.40			
5	16QAM	12	13	21.19	21.35	21.25	23	2	
5	16QAM	25	0	21.40	21.55	21.35			
5	64QAM	1	0	21.52	21.52	21.37			
5	64QAM	1	12	21.42	21.50	21.42	23	2	
5	64QAM	1	24	21.26	21.44	21.34			
5	64QAM	12	0	20.45	20.50	20.37			
5	64QAM	12	7	20.36	20.43	20.27	22	3	
5	64QAM	12	13	20.31	20.38	20.30			
5	64QAM	25	0	20.42	20.56	20.47			
5	256QAM	1	0	18.38	18.52	18.30			
5	256QAM	1	12	18.30	18.46	18.24	20	5	
5	256QAM	1	24	18.32	18.43	18.39			
5	256QAM	12	0	18.50	18.42	18.38			
5	256QAM	12	7	18.44	18.37	18.43	20	5	
5	256QAM	12	13	18.41	18.35	18.32			
5	256QAM	25	0	18.24	18.40	18.30			

Band 48 Ant 8 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	22.49	22.65	22.55	22.60	24	0
20	QPSK	1	49	22.41	22.59	22.44	22.49		
20	QPSK	1	99	22.44	22.38	22.51	22.47		
20	QPSK	50	0	21.46	21.70	21.54	21.59		
20	QPSK	50	24	21.36	21.57	21.49	21.50	23	1
20	QPSK	50	50	21.40	21.55	21.48	21.48		
20	QPSK	100	0	21.47	21.66	21.61	21.64		
20	16QAM	1	0	21.47	21.52	21.50	21.54		
20	16QAM	1	49	21.39	21.54	21.49	21.47	23	1
20	16QAM	1	99	21.44	21.61	21.56	21.52		
20	16QAM	50	0	20.44	20.74	20.52	20.58		
20	16QAM	50	24	20.36	20.62	20.44	20.46	22	2
20	16QAM	50	50	20.43	20.39				

Reduced Power Mode for DSI3_Main PA

GSM850 Art 0 DSI3 TX Channel	Band Average Power (dbm)			Tune-up Limit (dbm)	Frame Average Power (dbm)			Tune-up Limit (dbm)
	128	193	251		128	193	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slots	32.81	32.85	32.77	34.00	23.81	23.85	23.77	25.00
GPRS 1 Tx slots	30.88	32.76	32.73	34.00	23.68	23.76	23.73	25.00
GPRS 2 Tx slots	29.59	29.61	29.57	31.00	23.59	23.61	23.57	25.00
GPRS 3 Tx slots	27.61	27.66	27.57	29.20	23.35	23.40	23.31	24.94
GPRS 4 Tx slots	26.08	26.17	26.14	28.00	23.08	23.17	23.14	25.00
EDGE 1 Tx slots	25.99	25.93	25.79	27.00	16.99	16.93	16.79	18.00
EDGE 2 Tx slots	23.31	23.40	23.31	24.00	17.31	17.40	17.31	18.00
EDGE 3 Tx slots	21.42	21.53	21.47	22.20	17.16	17.27	17.21	17.94
EDGE 4 Tx slots	19.81	19.85	19.79	21.00	16.81	16.85	16.79	18.00

Band TX Channel	WCDMA V Art 0 DSI3			Tune-up Limit (dbm)	
	4132	4162	4233		
Rx Channel	4357	4407	4458		
Frequency (MHz)	824.4	836.4	848.6		
3GPP Rel 99	AMR 12.2kbps	24.53	24.80	24.49	25.00
3GPP Rel 99	RMIC 12.2kbps	24.82	24.64	24.60	25.00
3GPP Rel 6	HSDPA Subtest-1	23.84	23.67	23.63	24.00
3GPP Rel 6	HSDPA Subtest-2	23.60	23.66	23.56	24.00
3GPP Rel 6	HSDPA Subtest-3	23.06	23.10	23.09	23.50
3GPP Rel 6	HSDPA Subtest-4	23.10	23.20	23.07	23.50
3GPP Rel 6	DC-HSDPA Subtest-1	23.67	23.62	23.59	24.00
3GPP Rel 6	DC-HSDPA Subtest-2	23.66	23.61	23.58	24.00
3GPP Rel 6	DC-HSDPA Subtest-3	23.10	23.10	23.11	23.50
3GPP Rel 6	DC-HSDPA Subtest-4	23.17	23.19	23.05	23.50
3GPP Rel 6	HSUPA Subtest-1	23.59	23.58	23.55	24.00
3GPP Rel 6	HSUPA Subtest-2	21.58	21.64	21.63	22.00
3GPP Rel 6	HSUPA Subtest-3	22.68	22.62	22.61	23.00
3GPP Rel 6	HSUPA Subtest-4	21.64	21.60	21.66	22.00
3GPP Rel 6	HSUPA Subtest-5	23.60	23.63	23.54	24.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	21.06	21.12	21.05	21.50

GSM850 Ant.1 DSIS	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	190	199	201		190	199	201	
TX Channel	524.2	530.4	541.6	34.50	24.01	24.00	23.96	25.50
Frequency (MHz)	33.01	33.00	32.98	34.50	24.01	24.00	23.96	25.50
GSM-1 Tx slot	32.86	32.92	32.87	34.50	23.86	23.92	23.87	25.50
GPRS-2 Tx slots	29.81	29.87	29.83	31.50	23.81	23.87	23.83	25.50
GPRS-3 Tx slots	27.83	27.91	27.80	29.70	23.57	23.65	23.54	25.44
GPRS-4 Tx slots	26.53	26.70	26.62	28.50	23.53	23.70	23.62	25.50
EDGE-1 Tx slot	26.04	26.13	26.01	27.50	17.04	17.13	17.01	18.50
EDGE-2 Tx slots	23.45	23.65	23.49	24.50	17.45	17.65	17.49	18.50
EDGE-3 Tx slots	21.59	21.68	21.62	22.70	17.33	17.42	17.38	18.44
EDGE-4 Tx slots	20.04	20.11	19.93	21.50	17.04	17.11	16.93	18.50

Band	WCDMA V. Ant.1 DSIS			Tune-up Limit (dBm)
	4132	4182	4233	
TX Channel	4357	4407	4458	
Rx Channel	4357	4407	4458	
Frequency (MHz)	533.4	538.4	543.6	
3GPP Rel 99 RMC 12.2Kbps	20.39	20.52	20.51	21.50
3GPP Rel 99 RMC 12.2Kbps	20.47	20.53	20.48	21.50
3GPP Rel 6 HSDPA Subtest-1	19.50	19.57	19.47	20.50
3GPP Rel 6 HSDPA Subtest-2	19.47	19.47	19.50	20.50
3GPP Rel 6 HSDPA Subtest-3	19.94	19.05	19.99	20.00
3GPP Rel 6 HSDPA Subtest-4	19.04	19.03	19.03	20.00
3GPP Rel 8 DCHSDPA Subtest-1	19.45	19.50	19.61	20.50
3GPP Rel 8 DCHSDPA Subtest-2	19.58	19.48	19.53	20.50
3GPP Rel 8 DCHSDPA Subtest-3	19.94	19.02	19.08	20.00
3GPP Rel 8 DCHSDPA Subtest-4	19.02	19.09	19.08	20.00
3GPP Rel 6 HSUPA Subtest-1	19.49	19.62	19.53	20.50
3GPP Rel 6 HSUPA Subtest-2	17.46	17.52	17.50	18.50
3GPP Rel 6 HSUPA Subtest-3	19.40	18.43	18.47	19.50
3GPP Rel 6 HSUPA Subtest-4	17.50	17.52	17.50	18.50
3GPP Rel 6 HSUPA Subtest-5	19.53	19.55	19.52	20.50
3GPP Rel 7 HSPA+ (E-UTRA) Subtest-1	17.53	17.52	16.93	18.00



Appendix E

GSM1900 Ar1.2 DSIS	Burst Average Power (dbm)			Tune-up Limit (dbm)	Frame-Average Power (dbm)			Tune-up Limit (dbm)
	512	661	810		512	661	810	
	1550.2	1850	1950.8		1550.2	1850	1950.8	
TX Channel								
Frequency (MHz)								
GSM-1 Tx slot	29.97	30.10	29.99	31.50	20.97	21.10	20.99	22.50
GPRS-1 Tx slot	29.98	30.07	30.03	31.50	20.98	21.07	21.03	22.50
GPRS-2 Tx slots	26.77	26.91	26.84	28.50	20.77	20.91	20.84	22.50
GPRS-3 Tx slots	24.83	24.93	24.90	26.70	20.57	20.67	20.64	22.44
GPRS-4 Tx slots	23.53	23.65	23.58	25.50	20.53	20.65	20.56	22.50
EDGE-1 Tx slot	25.42	25.54	25.40	27.00	16.42	16.54	16.40	18.00
EDGE-2 Tx slots	22.99	22.78	22.72	24.00	16.99	16.78	16.72	18.00
EDGE-3 Tx slots	20.87	20.90	20.86	22.20	16.61	16.64	16.60	17.94
EDGE-4 Tx slots	20.00	20.07	19.96	21.00	17.00	17.07	16.96	18.00

Band	WCDMA Ar1.2 DSIS			Tune-up Limit (dbm)
	1312	1413	1513	
	1537	1638	1738	
TX Channel				
Rx Channel				
Frequency (MHz)				
3GPP Rel 99	AMR 12.2kops	22.05	22.05	23.50
3GPP Rel 99	RMTC 12.2kops	22.01	22.10	23.50
3GPP Rel 6	HSDPA Subtest-1	21.03	21.10	21.14
3GPP Rel 6	HSDPA Subtest-2	21.00	21.17	21.07
3GPP Rel 6	HSDPA Subtest-3	20.48	20.68	20.49
3GPP Rel 6	HSDPA Subtest-4	20.52	20.60	20.44
3GPP Rel 8	DCHSDPA Subtest-1	20.99	21.20	21.02
3GPP Rel 8	DCHSDPA Subtest-2	21.11	21.12	20.99
3GPP Rel 8	DCHSDPA Subtest-3	20.49	20.61	20.47
3GPP Rel 8	DCHSDPA Subtest-4	20.56	20.64	20.45
3GPP Rel 6	HSUPA Subtest-1	21.06	21.08	20.98
3GPP Rel 6	HSUPA Subtest-2	19.98	19.19	19.05
3GPP Rel 6	HSUPA Subtest-3	20.00	20.16	20.10
3GPP Rel 6	HSUPA Subtest-4	19.08	19.15	19.10
3GPP Rel 6	HSUPA Subtest-5	21.10	21.06	20.97
3GPP Rel 7	HSPA+ (LTCAM) Subtest-1	18.56	18.64	18.62

Band	TX Channel	WCDMA II Art.3 DSSS			Time-up Limit (dBm)	WCDMA IV Art.3 DSSS			Time-up Limit (dBm)
		9652	9600	9538		1512	1413	1313	
		9652	9600	9538		1517	1433	1338	
Frequency (MHz)	1852.4	1880	1907.6	1712.4	1732.6	1752.8			
3GPP Rel 99	AMR 12.2kops	20.89	20.92	20.90	21.50	22.88	23.00	22.97	24.00
3GPP Rel 99	AMR 12.2kops	20.89	21.06	20.97	21.50	22.99	23.01	22.95	24.00
3GPP Rel 6	HSDPA Subtest-1	19.91	20.00	20.04	20.50	21.97	22.07	21.85	23.00
3GPP Rel 6	HSDPA Subtest-2	19.98	20.06	20.04	20.50	21.96	21.96	21.99	23.00
3GPP Rel 6	HSDPA Subtest-3	19.44	19.46	19.52	20.00	21.57	21.53	21.53	22.50
3GPP Rel 6	HSDPA Subtest-4	19.41	19.57	19.42	20.00	21.51	21.51	21.47	22.50
3GPP Rel 6	DC-HSDPA Subtest-1	19.96	20.08	20.04	20.50	21.98	21.99	22.06	23.00
3GPP Rel 6	DC-HSDPA Subtest-2	19.93	20.04	19.98	20.50	21.92	22.11	21.90	23.00
3GPP Rel 6	DC-HSDPA Subtest-3	19.44	19.57	19.48	20.00	21.49	21.52	21.53	22.50
3GPP Rel 6	DC-HSDPA Subtest-4	19.45	19.45	19.50	20.00	21.52	21.59	21.43	22.50
3GPP Rel 6	HSPA Subtest-1	19.94	20.05	19.93	20.50	21.95	22.03	21.95	23.00
3GPP Rel 6	HSPA Subtest-2	18.01	18.06	17.98	18.50	19.97	20.02	19.88	21.00
3GPP Rel 6	HSPA Subtest-3	18.97	18.11	19.00	19.50	21.01	20.96	20.92	22.00
3GPP Rel 6	HSPA Subtest-4	17.98	18.06	17.90	18.50	19.94	19.95	19.94	21.00
3GPP Rel 6	HSPA Subtest-5	19.91	20.04	20.02	20.50	21.96	22.09	21.99	23.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	17.36	17.51	17.43	18.00	19.52	19.62	19.46	20.50



Appendix E

GSM1900 Art 5 DSIS	Burst Average Power (dbm)			Tune-up Limit (dbm)	Frame-Average Power (dbm)			Tune-up Limit (dbm)
	512	661	810		512	661	810	
TX Channel	1532.2	1830	1939.8	22.00	1722.4	1723.2	1723.5	22.00
Frequency (MHz)	1532.2	1830	1939.8	22.00	1722.4	1723.2	1723.5	22.00
GSM-1 Tx slot	30.00	30.05	29.98	31.00	21.00	21.05	20.96	22.00
GPRS-1 Tx slot	29.94	30.00	29.90	31.00	20.94	21.00	20.90	22.00
GPRS-2 Tx slots	26.85	26.90	26.88	28.00	20.85	20.90	20.86	22.00
GPRS-3 Tx slots	24.87	24.94	24.88	26.20	20.81	20.88	20.82	21.94
GPRS-4 Tx slots	23.60	23.65	23.61	25.00	20.80	20.85	20.81	22.00
EDGE-1 Tx slot	25.46	25.48	25.40	27.00	16.46	16.48	16.40	18.00
EDGE-2 Tx slots	22.55	22.66	22.59	24.00	16.55	16.66	16.59	18.00
EDGE-3 Tx slots	21.08	21.10	20.98	22.20	16.82	16.84	16.72	17.94
EDGE-4 Tx slots	20.45	20.54	20.40	21.00	17.45	17.54	17.40	18.00

Band	WCDMA II Art 6 DSIS			Tune-up Limit (dbm)	WCDMA II Art 5 DSIS			Tune-up Limit (dbm)
	9662	9400	9538		1312	1413	1513	
TX Channel	9662	9600	9538	22.00	1722.4	1723.2	1723.5	22.00
Rx Channel	9662	9600	9538	22.00	1722.4	1723.2	1723.5	22.00
Frequency (MHz)	1532.2	1830	1939.8	22.00	1722.4	1723.2	1723.5	22.00
3GPP Rel 99	AMR 12.2kops	20.99	21.09	21.13	22.00	20.90	20.78	20.71
3GPP Rel 99	RMC 12.2kops	21.14	21.15	21.11	22.00	20.78	20.87	20.74
3GPP Rel 6	HSDPA Subtest-1	20.11	20.21	20.08	21.00	19.79	19.82	19.78
3GPP Rel 6	HSDPA Subtest-2	20.13	20.17	20.20	21.00	19.75	19.77	19.74
3GPP Rel 6	HSDPA Subtest-3	19.58	19.66	19.69	20.50	19.29	19.32	19.19
3GPP Rel 6	HSDPA Subtest-4	19.57	19.73	19.65	20.50	19.27	19.33	19.21
3GPP Rel 8	DCHSDPA Subtest-1	20.16	20.22	20.09	21.00	19.65	19.74	19.69
3GPP Rel 8	DCHSDPA Subtest-2	20.15	20.27	20.11	21.00	19.74	19.86	19.86
3GPP Rel 8	DCHSDPA Subtest-3	19.59	19.65	19.62	20.50	19.19	19.32	19.25
3GPP Rel 8	DCHSDPA Subtest-4	19.55	19.64	19.58	20.50	19.27	19.31	19.28
3GPP Rel 8	HSUPA Subtest-1	20.14	20.17	20.12	21.00	19.66	19.81	19.71
3GPP Rel 8	HSUPA Subtest-2	18.07	18.17	18.13	19.00	17.84	17.81	17.84
3GPP Rel 8	HSUPA Subtest-3	19.13	19.20	19.15	20.00	18.83	18.86	18.72
3GPP Rel 8	HSUPA Subtest-4	18.15	18.24	18.05	19.00	17.65	17.83	17.72
3GPP Rel 8	HSUPA Subtest-5	20.15	20.18	20.10	21.00	19.77	19.72	19.82
3GPP Rel 7	HSPA+ (E-UTRA) Subtest-1	17.58	17.67	17.62	18.50	17.21	17.39	17.33

Band 5 Ant 0 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 2650	Power Middle Ch. / Freq. 2655	Power High Ch. / Freq. 2660	Tune-up limit (dBm)	MPR (dB)	
Channel				829	836.5	844			
Frequency (MHz)				24.29	24.51	24.22			
10	QPSK	1	0	24.29	24.51	24.22			
10	QPSK	1	25	24.45	24.43	24.31	24.7	0	
10	QPSK	1	49	24.41	24.44	24.30			
10	QPSK	25	0	24.37	24.42	24.34			
10	QPSK	25	12	24.41	24.43	24.30	24.7	0	
10	QPSK	25	25	24.38	24.34	24.23			
10	QPSK	50	0	24.39	24.39	24.23			
10	16QAM	1	0	24.30	24.40	24.26			
10	16QAM	1	25	24.35	24.43	24.27	24.7	0	
10	16QAM	1	49	24.45	24.47	24.23			
10	16QAM	25	0	23.33	23.51	23.30			
10	16QAM	25	12	23.34	23.40	23.14	23.7	1	
10	16QAM	25	25	23.34	23.52	23.27			
10	16QAM	50	0	23.31	23.56	23.30			
10	64QAM	1	0	23.24	23.41	23.21			
10	64QAM	1	25	23.37	23.48	23.22	23.7	1	
10	64QAM	1	49	23.34	23.50	23.14			
10	64QAM	25	0	22.37	22.44	22.16			
10	64QAM	25	12	22.21	22.38	22.20	22.7	2	
10	64QAM	25	25	22.36	22.15	22.15			
10	64QAM	50	0	22.36	22.54	22.22			
10	256QAM	1	0	20.22	20.42	20.19			
10	256QAM	1	25	20.34	20.53	20.30	20.7	4	
10	256QAM	1	49	20.30	20.43	20.31			
10	256QAM	25	0	20.24	20.42	20.18			
10	256QAM	25	12	20.33	20.42	20.18	20.7	4	
10	256QAM	25	25	20.24	20.39	20.17			
10	256QAM	50	0	20.28	20.49	20.22			
Channel				26425	26525	26525			
Frequency (MHz)				836.5	836.5	846.5			
5	QPSK	1	0	24.25	24.30	24.10			
5	QPSK	1	14	24.28	24.34	24.19	24.7	0	
5	QPSK	1	24	24.39	24.34	24.18			
5	QPSK	12	0	24.20	24.35	24.27			
5	QPSK	12	7	24.38	24.24	24.27	24.7	0	
5	QPSK	12	13	24.22	24.21	24.17			
5	QPSK	25	0	24.25	24.36	24.09			
5	16QAM	1	0	23.18	23.31	23.25			
5	16QAM	1	12	24.29	24.28	24.23	24.7	0	
5	16QAM	1	24	24.44	24.37	24.14			
5	16QAM	12	0	23.18	23.45	23.22			
5	16QAM	12	7	23.25	23.37	23.08	23.7	1	
5	16QAM	12	13	23.18	23.29	23.23			
5	16QAM	25	0	23.23	23.48	23.20			
5	64QAM	1	0	23.21	23.25	23.08			
5	64QAM	1	12	23.27	23.37	23.17	23.7	1	
5	64QAM	1	24	23.28	23.36	23.10			
5	64QAM	12	0	22.24	22.38	22.01			
5	64QAM	12	7	22.35	22.29	22.01	22.7	2	
5	64QAM	12	13	22.16	22.42	22.02			
5	64QAM	25	0	22.34	22.45	22.06			
5	256QAM	1	0	20.08	20.27	20.11			
5	256QAM	1	12	20.30	20.42	20.29	20.7	4	
5	256QAM	1	24	20.28	20.36	20.14			
5	256QAM	12	0	20.11	20.25	20.10			
5	256QAM	12	7	20.26	20.35	20.10	20.7	4	
5	256QAM	12	13	20.17	20.33	20.12			
5	256QAM	25	0	20.22	20.39	20.19			
Channel				26515	26525	26525			
Frequency (MHz)				842.5	842.5	847.5			
3	QPSK	1	0	24.23	24.30	24.20			
3	QPSK	1	8	24.39	24.34	24.19	24.7	0	
3	QPSK	1	14	24.27	24.33	24.21			
3	QPSK	8	0	24.30	24.27	24.21			
3	QPSK	8	4	24.33	24.42	24.13	24.7	0	
3	QPSK	8	7	24.18	24.28	24.13			
3	QPSK	15	0	24.27	24.20	24.06			
3	16QAM	1	0	24.19	24.29	24.24			
3	16QAM	1	8	24.20	24.28	24.09	24.7	0	
3	16QAM	1	14	24.43	24.40	24.07			
3	16QAM	8	0	22.36	22.40	22.13			
3	16QAM	8	4	23.30	23.32	23.07	23.7	1	
3	16QAM	8	7	23.25	23.43	23.15			
3	16QAM	15	0	23.17	23.46	23.15			
3	64QAM	1	0	23.18	23.37	23.17			
3	64QAM	1	8	23.21	23.34	23.13	23.7	1	
3	64QAM	1	14	23.35	23.35	23.10			
3	64QAM	8	0	22.30	22.38	21.97			
3	64QAM	8	4	22.06	22.35	22.08	22.7	2	
3	64QAM	8	7	22.26	22.44	22.11			
3	64QAM	15	0	22.35	22.40	22.08			
3	256QAM	1	0	20.10	20.39	20.08			
3	256QAM	1	8	20.26	20.43	20.13	20.7	4	
3	256QAM	1	14	20.28	20.31	20.25			
3	256QAM	8	0	20.10	20.39	20.07			
3	256QAM	8	4	20.27	20.34	20.16	20.7	4	
3	256QAM	8	7	20.14	20.37	20.14			
3	256QAM	15	0	20.21	20.42	20.13			
Channel				26567	26525	26543			
Frequency (MHz)				824.7	836.5	848.3			
1.4	QPSK	1	0	24.19	24.40	24.13			
1.4	QPSK	1	3	24.37	24.37	24.23	24.7	0	
1.4	QPSK	1	5	24.30	24.37	24.17			
1.4	QPSK	3	0	24.18	24.41	24.21			
1.4	QPSK	3	4	23.29	24.24	24.23	24.7	0.5	
1.4	QPSK	3	3	24.23	24.19	24.19			
1.4	QPSK	6	0	24.37	24.30	24.05	24.7	0	
1.4	16QAM	1	0	24.22	24.23	24.11			
1.4	16QAM	1	3	24.31	24.41	24.17			
1.4	16QAM	1	14	24.33	24.31	24.14	24.7	0	
1.4	16QAM	3	0	23.16	23.47	23.16			
1.4	16QAM	3	1	23.19	23.35	23.05			
1.4	16QAM	3	3	23.28	23.41	23.25			
1.4	16QAM	6	0	23.13	23.42	23.27	23.7	1	
1.4	64QAM	1	0	23.13	23.30	23.07			
1.4	64QAM	1	3	23.25	23.32	23.18			
1.4	64QAM	1	5	23.32	23.38	23.02	23.7	1	
1.4	64QAM	3	0	22.36	22.29	22.14			
1.4	64QAM	3	1	22.14	22.28	22.13			
1.4	64QAM	3	3	22.24	22.54	22.15			
1.4	64QAM	6	0	22.28	22.47	22.19	22.7	2	
1.4	256QAM	1	0	20.21	20.38	20.15			
1.4	256QAM	1	3	20.27	20.45	20.25			
1.4	256QAM	1	5	20.11	20.41	20.16	20.7	4	
1.4	256QAM	3	0	20.07	20.28	20.04			
1.4	256QAM	3	1	20.26	20.40	20.00			
1.4	256QAM	3	3	20.18	20.23	20.08			
1.4	256QAM	6	0	20.24	20.40	20.12	20.7	4	

Band 26 Ant 0 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 26705	Power Middle Ch. / Freq. 26665	Power High Ch. / Freq. 26625	Tune-up limit (dBm)	MPR (dB)	
Channel				821.5	831.5	841.5			
Frequency (MHz)				24.78	24.91	24.89			
15	QPSK	1	0	24.78	24.91	24.89			
15	QPSK	1	37	24.84	24.87	24.67	25.2	0	
15	QPSK	1	74	24.84	24.81	24.74			
15	QPSK	36	0	23.73	23.99	23.93			
15	QPSK	36	20	23.81	23.87	23.68	24.7	0.5	
15	QPSK	36	39	23.66	23.67	23.71			
15	QPSK	75	0	23.80	23.81	23.80			
15	16QAM	1	0	23.83	23.75	23.70			
15	16QAM	1	37	23.81	23.78	23.71	24.7	0.5	
15	16QAM	1	74	23.48	23.76	23.59			
15	16QAM	36	0	22.80	22.95	22.93			
15	16QAM	36	20	22.72	23.01	22.72	23.7	1.5	
15	16QAM	36	39	22.80	22.88	22.70			

Band 5 Ant 1 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				2656	2626	2696			
Frequency (MHz)				829	836.5	844			
10	QPSK	1	0	20.58	20.68	20.83			
10	QPSK	1	25	20.51	20.80	20.53	21.7	0	
10	QPSK	1	49	20.60	20.53	20.54			
10	QPSK	25	0	20.55	20.57	20.57			
10	QPSK	25	12	20.47	20.54	20.50	21.7	0	
10	QPSK	25	25	20.52	20.40	20.52			
10	QPSK	50	0	20.55	20.58	20.57			
10	16QAM	1	0	20.52	20.57	20.54			
10	16QAM	1	25	20.39	20.50	20.48	21.7	0	
10	16QAM	1	49	20.50	20.39	20.51			
10	16QAM	25	0	20.41	20.50	20.46			
10	16QAM	25	12	20.43	20.45	20.41	21.7	0	
10	16QAM	25	25	20.43	20.33	20.45			
10	16QAM	50	0	20.46	20.45	20.52			
10	64QAM	1	0	20.48	20.51	20.52			
10	64QAM	1	25	20.30	20.42	20.46	21.7	0	
10	64QAM	1	49	20.38	20.33	20.47			
10	64QAM	25	0	20.47	20.51	20.54			
10	64QAM	25	12	20.36	20.46	20.45	21.7	0	
10	64QAM	25	25	20.43	20.38	20.48			
10	64QAM	50	0	20.44	20.55	20.47			
10	256QAM	1	0	19.53	19.59	19.62			
10	256QAM	1	25	19.48	19.50	19.46	20.7	1	
10	256QAM	1	49	19.57	19.41	19.50			
10	256QAM	25	0	19.51	19.57	19.60			
10	256QAM	25	12	19.52	19.51	19.50	20.7	1	
10	256QAM	25	25	19.40	19.48	19.51			
10	256QAM	50	0	19.55	19.41	19.52			
Channel				2626	2626	2626			
Frequency (MHz)				836.5	836.5	846.5			
5	QPSK	1	0	20.50	20.56	20.36			
5	QPSK	1	12	20.38	20.47	20.47	21.7	0	
5	QPSK	1	24	20.54	20.39	20.41			
5	QPSK	12	0	20.41	20.53	20.48			
5	QPSK	12	7	20.43	20.51	20.43	21.7	0	
5	QPSK	12	13	20.48	20.31	20.39			
5	QPSK	25	0	20.46	20.51	20.45			
5	16QAM	1	0	20.43	20.38	20.48			
5	16QAM	1	12	20.38	20.47	20.44	21.7	0	
5	16QAM	1	24	20.39	20.30	20.43			
5	16QAM	12	0	20.29	20.37	20.32			
5	16QAM	12	7	20.33	20.38	20.32	21.7	0	
5	16QAM	12	13	20.33	20.26	20.32			
5	16QAM	25	0	20.30	20.41	20.43			
5	64QAM	1	0	20.36	20.49	20.36			
5	64QAM	1	12	20.24	20.29	20.41	21.7	0	
5	64QAM	1	24	20.24	20.27	20.41			
5	64QAM	12	0	20.43	20.48	20.45			
5	64QAM	12	7	19.52	19.57	19.50	21.7	0	
5	64QAM	12	13	20.33	20.27	20.40			
5	64QAM	25	0	20.37	20.43	20.43			
5	256QAM	1	0	19.46	19.56	19.57			
5	256QAM	1	12	19.36	19.37	19.37	20.7	1	
5	256QAM	1	24	19.48	19.36	19.36			
5	256QAM	12	0	19.39	19.44	19.51			
5	256QAM	12	7	19.41	19.53	19.41	20.7	1	
5	256QAM	12	13	19.26	19.45	19.44			
5	256QAM	25	0	19.51	19.29	19.48			
Channel				2676	2626	2626			
Frequency (MHz)				836.5	836.5	846.5			
3	QPSK	1	0	20.52	20.63	20.56			
3	QPSK	1	8	20.45	20.52	20.47	21.7	0	
3	QPSK	1	14	20.55	20.43	20.48			
3	QPSK	8	0	20.47	20.49	20.47			
3	QPSK	8	4	20.39	20.50	20.41	21.7	0	
3	QPSK	8	7	20.44	20.32	20.43			
3	16QAM	1	0	20.43	20.47	20.41			
3	16QAM	1	8	20.32	20.45	20.41	21.7	0	
3	16QAM	1	14	20.45	20.36	20.40			
3	16QAM	8	0	20.35	20.46	20.33			
3	16QAM	8	4	20.31	20.41	20.37	21.7	0	
3	16QAM	8	7	20.35	20.29	20.35			
3	16QAM	15	0	20.33	20.40	20.44			
3	64QAM	1	0	20.41	20.42	20.37			
3	64QAM	1	8	20.17	20.40	20.38	21.7	0	
3	64QAM	1	14	20.42	20.30	20.38			
3	64QAM	8	0	20.37	20.41	20.49			
3	64QAM	8	4	20.22	20.38	20.41	21.7	0	
3	64QAM	8	7	20.36	20.23	20.34			
3	64QAM	15	0	20.33	20.50	20.45			
3	256QAM	1	0	19.45	19.53	19.55			
3	256QAM	1	8	19.37	19.46	19.43	20.7	1	
3	256QAM	1	14	19.44	19.35	19.44			
3	256QAM	8	0	19.37	19.54	19.50			
3	256QAM	8	4	19.49	19.52	19.38	20.7	1	
3	256QAM	8	7	19.37	19.47	19.40			
3	256QAM	15	0	19.44	19.37	19.46			
Channel				2697	2626	2663			
Frequency (MHz)				829.7	836.5	848.3			
1.4	QPSK	1	0	20.57	20.62	20.49			
1.4	QPSK	1	3	20.42	20.51	20.39	21.7	0	
1.4	QPSK	1	5	20.50	20.42	20.48			
1.4	QPSK	3	0	20.52	20.57	20.46			
1.4	QPSK	3	3	20.44	20.41	20.38			
1.4	QPSK	3	3	20.40	20.37	20.41			
1.4	QPSK	6	0	20.49	20.48	20.46	21.7	0	
1.4	16QAM	1	0	20.40	20.47	20.46			
1.4	16QAM	1	3	20.36	20.38	20.37			
1.4	16QAM	1	14	20.42	20.30	20.38	21.7	0	
1.4	16QAM	3	0	20.29	20.38	20.37			
1.4	16QAM	3	1	20.38	20.36	20.28			
1.4	16QAM	3	3	20.32	20.28	20.31			
1.4	16QAM	6	0	20.42	20.43	20.49	21.7	0	
1.4	64QAM	1	0	20.34	20.44	20.36			
1.4	64QAM	1	3	20.23	20.33	20.39			
1.4	64QAM	1	5	20.32	20.27	20.40	21.7	0	
1.4	64QAM	3	0	20.34	20.40	20.51			
1.4	64QAM	3	1	20.28	20.33	20.34			
1.4	64QAM	3	3	20.38	20.32	20.39	21.7	0	
1.4	256QAM	1	0	19.40	19.55	19.56			
1.4	256QAM	1	3	19.35	19.47	19.32			
1.4	256QAM	1	5	19.43	19.30	19.41	20.7	1	
1.4	256QAM	3	0	19.47	19.49	19.55			
1.4	256QAM	3	1	19.36	19.46	19.37			
1.4	256QAM	3	3	19.34	19.42	19.41			
1.4	256QAM	6	0	19.49	19.37	19.43	20.7	1	

Band 26 Ant 1 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				2676	2665	2665			
Frequency (MHz)				821.5	831.5	841.5			
15	QPSK	1	0	21.61	21.83	21.50			
15	QPSK	1	37	21.53	21.56	21.50	22.7	0	
15	QPSK	1	74	21.54	21.54	21.45			
15	QPSK	36	0	21.50	21.58	21.43			
15	QPSK	36	20	21.46	21.47	21.42	22.7	0	
15	QPSK	36	39	21.43	21.43	21.37			
15	QPSK	75	0	21.54	21.55	21.37			
15	16QAM	1	0	21.55	21.51	21.45			
15	16QAM	1	37	21.45	21.52	21.40	22.7	0	
15	16QAM	1	74	21.51	21.45	21.31			
15	16QAM	36	0	21.54	21.56	21.45			
15	16QAM	36	20	21.39	21.45	21.37	22.7	0	
15	16QAM	36	39	21.52	21.52	21.38			
15	16QAM	75	0	21.41	21.45	21.32			
15	64QAM	1	0	21.51	21.50	21.37			
15	64QAM	1	37	21.42	21.46	21.37	22.7		



Band 2 Ant 2 DS13										
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch./F.Freq.	Power Ch./F.Freq.	Power Ch./F.Freq.	Turn-up (dB)	MFR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	21.43	21.47	21.56			23	0
20	QPSK	1	6	21.43	21.47	21.56			23	0
20	QPSK	1	12	21.43	21.47	21.56			23	0
20	QPSK	1	18	21.43	21.47	21.56			23	0
20	QPSK	50	0	21.38	21.45	21.53			23	0
20	QPSK	50	6	21.38	21.45	21.53			23	0
20	QPSK	50	12	21.38	21.45	21.53			23	0
20	QPSK	50	18	21.38	21.45	21.53			23	0
20	QPSK	100	0	21.36	21.43	21.50			23	0
20	QPSK	100	6	21.36	21.43	21.50			23	0
20	QPSK	100	12	21.36	21.43	21.50			23	0
20	QPSK	100	18	21.36	21.43	21.50			23	0
20	QPSK	1	49	21.22	21.27	21.28			23	0
20	QPSK	1	55	21.22	21.27	21.28			23	0
20	QPSK	1	61	21.22	21.27	21.28			23	0
20	QPSK	1	67	21.22	21.27	21.28			23	0
20	QPSK	50	24	21.13	21.22	21.23			23	0
20	QPSK	50	30	21.13	21.22	21.23			23	0
20	QPSK	50	36	21.13	21.22	21.23			23	0
20	QPSK	50	42	21.13	21.22	21.23			23	0
20	QPSK	100	24	21.09	21.21	21.19			23	0
20	QPSK	100	30	21.09	21.21	21.19			23	0
20	QPSK	100	36	21.09	21.21	21.19			23	0
20	QPSK	100	42	21.09	21.21	21.19			23	0
20	QPSK	1	99	21.11	21.31	21.22			23	0
20	QPSK	1	105	21.11	21.31	21.22			23	0
20	QPSK	1	111	21.11	21.31	21.22			23	0
20	QPSK	1	117	21.11	21.31	21.22			23	0
20	QPSK	50	24	20.97	20.98	20.94			22	1
20	QPSK	50	30	20.97	20.98	20.94			22	1
20	QPSK	50	36	20.97	20.98	20.94			22	1
20	QPSK	50	42	20.97	20.98	20.94			22	1
20	QPSK	100	24	20.93	20.94	20.92			22	1
20	QPSK	100	30	20.93	20.94	20.92			22	1
20	QPSK	100	36	20.93	20.94	20.92			22	1
20	QPSK	100	42	20.93	20.94	20.92			22	1
20	QPSK	1	149	18.18	18.40	18.31			20	3
20	QPSK	1	155	18.18	18.40	18.31			20	3
20	QPSK	1	161	18.18	18.40	18.31			20	3
20	QPSK	1	167	18.18	18.40	18.31			20	3
20	QPSK	50	24	18.38	18.42	18.47			20	3
20	QPSK	50	30	18.38	18.42	18.47			20	3
20	QPSK	50	36	18.38	18.42	18.47			20	3
20	QPSK	50	42	18.38	18.42	18.47			20	3
20	QPSK	100	24	18.20	18.32	18.28			20	3
20	QPSK	100	30	18.20	18.32	18.28			20	3
20	QPSK	100	36	18.20	18.32	18.28			20	3
20	QPSK	100	42	18.20	18.32	18.28			20	3
Channel										
Frequency (MHz)										
16	QPSK	1	0	18.07	18.00	18.03			16	0
16	QPSK	1	6	18.07	18.00	18.03			16	0
16	QPSK	1	12	18.07	18.00	18.03			16	0
16	QPSK	1	18	18.07	18.00	18.03			16	0
16	QPSK	36	0	21.26	21.42	21.39			23	0
16	QPSK	36	6	21.26	21.42	21.39			23	0
16	QPSK	36	12	21.26	21.42	21.39			23	0
16	QPSK	36	18	21.26	21.42	21.39			23	0
16	QPSK	75	0	21.30	21.30	21.29			23	0
16	QPSK	75	6	21.30	21.30	21.29			23	0
16	QPSK	75	12	21.30	21.30	21.29			23	0
16	QPSK	75	18	21.30	21.30	21.29			23	0
16	QPSK	1	37	21.14	21.26	21.19			23	0
16	QPSK	1	43	21.14	21.26	21.19			23	0
16	QPSK	1	49	21.14	21.26	21.19			23	0
16	QPSK	1	55	21.14	21.26	21.19			23	0
16	QPSK	36	24	21.09	21.29	21.19			23	0
16	QPSK	36	30	21.09	21.29	21.19			23	0
16	QPSK	36	36	21.09	21.29	21.19			23	0
16	QPSK	36	42	21.09	21.29	21.19			23	0
16	QPSK	75	0	21.30	21.26	21.05			23	0
16	QPSK	75	6	21.30	21.26	21.05			23	0
16	QPSK	75	12	21.30	21.26	21.05			23	0
16	QPSK	75	18	21.30	21.26	21.05			23	0
16	QPSK	1	81	21.20	21.33	21.07			23	0
16	QPSK	1	87	21.20	21.33	21.07			23	0
16	QPSK	1	93	21.20	21.33	21.07			23	0
16	QPSK	1	99	21.20	21.33	21.07			23	0
16	QPSK	36	24	20.98	20.93	20.93			22	1
16	QPSK	36	30	20.98	20.93	20.93			22	1
16	QPSK	36	36	20.98	20.93	20.93			22	1
16	QPSK	36	42	20.98	20.93	20.93			22	1
16	QPSK	75	0	20.92	20.93	20.93			22	1
16	QPSK	75	6	20.92	20.93	20.93			22	1
16	QPSK	75	12	20.92	20.93	20.93			22	1
16	QPSK	75	18	20.92	20.93	20.93			22	1
16	QPSK	1	129	18.18	18.28	18.19			20	3
16	QPSK	1	135	18.18	18.28	18.19			20	3
16	QPSK	1	141	18.18	18.28	18.19			20	3
16	QPSK	1	147	18.18	18.28	18.19			20	3
16	QPSK	36	24	18.20	18.26	18.19			20	3
16	QPSK	36	30	18.20	18.26	18.19			20	3
16	QPSK	36	36	18.20	18.26	18.19			20	3
16	QPSK	36	42	18.20	18.26	18.19			20	3
16	QPSK	75	0	18.22	18.23	18.21			20	3
16	QPSK	75	6	18.22	18.23	18.21			20	3
16	QPSK	75	12	18.22	18.23	18.21			20	3
16	QPSK	75	18	18.22	18.23	18.21			20	3
16	QPSK	1	189	18.00	18.00	18.00			16	0
16	QPSK	1	195	18.00	18.00	18.00			16	0
16	QPSK	1	201	18.00	18.00	18.00			16	0
16	QPSK	1	207	18.00	18.00	18.00			16	0
16	QPSK	36	24	21.26	21.42	21.39			23	0
16	QPSK	36	30	21.26	21.42	21.39			23	0
16	QPSK	36	36	21.26	21.42	21.39			23	0
16	QPSK	36	42	21.26	21.42	21.39			23	0
16	QPSK	75	0	21.30	21.30	21.29			23	0
16	QPSK	75	6	21.30	21.30	21.29			23	0
16	QPSK	75	12	21.30	21.30	21.29			23	0
16	QPSK	75	18	21.30	21.30	21.29			23	0
16	QPSK	1	225	21.14	21.26	21.19			23	0
16	QPSK	1	231	21.14	21.26	21.19			23	0
16	QPSK	1	237	21.14	21.26	21.19			23	0
16	QPSK	1	243	21.14	21.26	21.19			23	0
16	QPSK	36	24	21.09	21.29	21.19			23	0
16	QPSK	36	30	21.09	21.29	21.19			23	0
16	QPSK	36	36	21.09	21.29	21.19			23	0
16	QPSK	36	42	21.09	21.29	21.19			23	0
16	QPSK	75	0	21.30	21.26	21.05			23	0
16	QPSK	75	6	21.30	21.26	21.05			23	0
16	QPSK	75	12	21.30	21.26	21.05			23	0
16	QPSK	75	18	21.30	21.26	21.05			23	0
16	QPSK	1	285	21.20	21.33	21.07			23	0
16	QPSK	1	291	21.20	21.33	21.07			23	0
16	QPSK	1	297	21.20	21.33	21.07			23	

Band 4 Ant 5 DS13										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Mid Ch./Freq.	Power High Ch./Freq.	Turn-up (dB)	MPE (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	21.79	21.97	21.90				
20	QPSK	1	49	21.72	21.80	21.83	23.2	0		
20	QPSK	1	99	21.77	21.84	21.78				
20	QPSK	50	0	21.75	21.83	21.82				
20	QPSK	50	24	21.78	21.78	21.82	23.2	0		
20	QPSK	50	50	21.68	21.70	21.68				
20	QPSK	100	0	21.77	21.81	21.84				
20	QPSK	100	0	21.72	21.89	21.81				
20	HQAM	1	49	21.81	21.81	21.70	23.2	0		
20	HQAM	1	99	21.70	21.76	21.71				
20	HQAM	50	0	21.77	21.81	21.75				
20	HQAM	50	24	21.58	21.75	21.61	23.2	0		
20	HQAM	50	50	21.57	21.59	21.57				
20	HQAM	100	0	21.72	21.83	21.81				
20	HQAM	100	0	21.62	21.81	21.75				
20	HQAM	1	49	21.57	21.75	21.66	23.2	0		
20	HQAM	1	99	21.62	21.67	21.66				
20	HQAM	50	0	21.20	21.49	21.36				
20	HQAM	50	24	21.30	21.28	21.24	22.7	0.5		
20	HQAM	50	50	21.18	21.24	21.17				
20	HQAM	100	0	21.22	21.44	21.31				
20	ZSSBAM	1	0	19.21	19.41	19.27				
20	ZSSBAM	1	49	19.11	19.28	19.18	20.7	2.5		
20	ZSSBAM	1	99	19.18	19.22	19.17				
20	ZSSBAM	50	0	19.25	19.36	19.28				
20	ZSSBAM	50	24	19.20	19.35	19.27	20.7	2.5		
20	ZSSBAM	50	50	19.12	19.30	19.23				
20	ZSSBAM	100	0	19.25	19.25	19.25				
Channel										
Frequency (MHz)										
15	QPSK	1	0	21.67	21.81	21.78				
15	QPSK	1	37	21.66	21.76	21.76	23.2	0		
15	QPSK	1	74	21.72	21.79	21.72				
15	QPSK	36	0	21.67	21.84	21.87				
15	QPSK	36	20	21.60	21.74	21.68	23.2	0		
15	QPSK	36	36	21.57	21.68	21.57				
15	HQAM	75	0	21.60	21.83	21.87				
15	HQAM	75	0	21.59	21.80	21.81	23.2	0		
15	HQAM	1	37	21.49	21.73	21.58				
15	HQAM	1	74	21.62	21.67	21.67	23.2	0		
15	HQAM	36	0	21.67	21.77	21.73				
15	HQAM	36	20	21.50	21.62	21.57	23.2	0		
15	HQAM	36	36	21.52	21.66	21.66				
15	HQAM	75	0	21.67	21.72	21.62				
15	HQAM	75	0	21.60	21.76	21.63	23.2	0		
15	HQAM	1	37	21.52	21.80	21.65				
15	HQAM	1	74	21.57	21.60	21.54	22.7	0.5		
15	HQAM	36	0	21.24	21.43	21.28				
15	HQAM	36	20	21.15	21.35	21.20				
15	HQAM	36	36	21.08	21.12	21.05				
15	HQAM	75	0	21.14	21.31	21.21				
15	ZSSBAM	1	0	19.25	19.26	19.26				
15	ZSSBAM	1	37	19.00	19.26	19.05	20.7	2.5		
15	ZSSBAM	1	74	19.12	19.20	19.08				
15	ZSSBAM	50	0	19.25	19.34	19.26				
15	ZSSBAM	50	24	19.20	19.33	19.24	20.7	2.5		
15	ZSSBAM	50	36	19.06	19.23	19.11				
15	ZSSBAM	75	0	19.25	19.23	19.23				
Channel										
Frequency (MHz)										
10	QPSK	1	0	21.73	21.83	21.79				
10	QPSK	1	25	21.65	21.86	21.71	23.2	0		
10	QPSK	1	49	21.68	21.74	21.70				
10	QPSK	25	0	21.67	21.80	21.83				
10	QPSK	25	12	21.53	21.76	21.63	23.2	0		
10	QPSK	25	25	21.56	21.68	21.62				
10	HQAM	75	0	21.68	21.84	21.73				
10	HQAM	1	25	21.67	21.71	21.67	23.2	0		
10	HQAM	1	49	21.65	21.76	21.70				
10	HQAM	25	0	21.65	21.70	21.65				
10	HQAM	25	12	21.56	21.63	21.48	23.2	0		
10	HQAM	25	24	21.54	21.64	21.54				
10	HQAM	50	0	21.61	21.74	21.70				
10	HQAM	1	0	21.65	21.71	21.67	23.2	0		
10	HQAM	1	25	21.63	21.70	21.63				
10	HQAM	1	49	21.58	21.60	21.48				
10	HQAM	25	0	21.25	21.35	21.31				
10	HQAM	25	12	21.16	21.33	21.20	22.7	0.5		
10	HQAM	25	25	21.08	21.18	20.99				
10	HQAM	50	0	21.11	21.42	21.20				
10	ZSSBAM	1	0	19.17	19.34	19.23				
10	ZSSBAM	1	25	19.01	19.18	19.14	20.7	2.5		
10	ZSSBAM	1	49	19.02	19.08	19.03				
10	ZSSBAM	25	0	19.02	19.30	19.23				
10	ZSSBAM	25	12	19.07	19.32	19.20	20.7	2.5		
10	ZSSBAM	25	25	19.04	19.17	19.08				
10	ZSSBAM	50	0	19.20	19.20	19.20				
Channel										
Frequency (MHz)										
5	QPSK	1	0	19.975	20.175	20.075				
5	QPSK	1	0	17.115	17.215	17.215				
5	QPSK	1	12	21.69	21.83	21.81	23.2	0		
5	QPSK	1	24	21.74	21.75	21.65				
5	QPSK	12	0	21.71	21.80	21.81				
5	QPSK	12	7	21.55	21.74	21.70	23.2	0		
5	QPSK	12	13	21.54	21.67	21.62				
5	HQAM	24	0	21.71	21.86	21.83				
5	HQAM	1	0	21.69	21.85	21.73	23.2	0		
5	HQAM	1	12	21.67	21.72	21.61				
5	HQAM	1	24	21.66	21.66	21.66				
5	HQAM	12	0	21.64	21.79	21.70				
5	HQAM	12	7	21.50	21.63	21.58	23.2	0		
5	HQAM	12	13	21.41	21.48	21.45				
5	HQAM	25	0	21.64	21.75	21.68				
5	HQAM	1	0	21.67	21.74	21.63	23.2	0		
5	HQAM	1	12	21.65	21.64	21.61				
5	HQAM	1	24	21.53	21.65	21.57				
5	HQAM	12	0	21.17	21.37	21.27				
5	HQAM	12	7	21.00	21.15	21.04	22.7	0.5		
5	HQAM	12	13	21.09	21.14	21.04				
5	HQAM	25	0	21.13	21.41	21.24				
5	HQAM	25	0	19.08	19.38	19.24				
5	ZSSBAM	1	12	19.02	19.26	19.05	20.7	2.5		
5	ZSSBAM	1	24	19.06	19.17	19.06				
5	ZSSBAM	12	0	19.02	19.27	19.04				
5	ZSSBAM	12	7	19.13	19.31	19.24	20.7	2.5		
5	ZSSBAM	12	13	19.04	19.23	19.00				
5	ZSSBAM	25	0	19.13	19.15	19.01				
Channel										
Frequency (MHz)										
3	QPSK	1	8	21.68	21.84	21.78	23.2	0		
3	QPSK	1	14	21.64	21.77	21.74				
3	QPSK	8	0	21.71	21.81	21.71				
3	QPSK	8	4	21.54	21.76	21.63	23.2	0		
3	QPSK	8	7	21.56	21.68	21.65				
3	QPSK	16	0	21.71	21.78	21.71				
3	HQAM	1	0	21.66	21.78	21.61	23.2	0		
3	HQAM	1	8	21.50	21.71	21.62				
3	HQAM	1	14	21.56	21.64	21.60				
3	HQAM	8	0	21.68	21.72	21.71	23.2	0		
3	HQAM	8	4	21.36	21.71	21.55				
3	HQAM	8	7	21.46	21.48	21.45				
3	HQAM	16	0	21.66	21.73	21.63				
3	HQAM	1	0	21.60	21.72	21.61	23.2	0		
3	HQAM	1	8	21.49	21.60	21.49				
3	HQAM	1	14	21.57	21.62	21.54				
3	HQAM	8	0	21.27	21.46	21.24				
3	HQAM	8	4	21.03	21.17	21.03	22.7	0.5		
3	HQAM	8	7	21.11	21.21	21.09				
3	HQAM	16	0	21.67	21.76	21.64				
3	ZSSBAM	1	8	19.09	19.27	19.17				
3	ZSSBAM	1	16	19.05	19.15	19.10	20.7	2.5		
3	ZSSBAM	8	0	19.10	19.18	19.10				
3	ZSSBAM	8	0	19.17	19.24	19.24				
3	ZSSBAM	8	4	19.16	19.21	19.23	20.7	2.5		
3	ZSSBAM	8	7	19.09	19.19	19.10				
3	ZSSBAM	16	0	19.23	19.22	19.10				
Channel										
Frequency (MHz)										
14	QPSK	1	0	21.69	21.82	21.82				
14	QPSK	1	3	21.67	21.76	21.74	23.2	0		
14	QPSK	1	6	21.66	21.84	21.81				
14	QPSK	3	0	21.52	21.68	21.60				
14	QPSK	3	3	21.64	21.57	21.51	23.2	0		
14	HQAM	1	0	21.60	21.77	21.76				
14	HQAM	1	3	21.65	21.74	21.63	23.2	0		
14	HQAM	1	6	21.62	21.71	21.68				
14	HQAM	3	0	21.62	21.67	21.62				
14	HQAM	3	3	21.41	21.56	21.53				
14	HQAM	6	0	21.60	21.79	21.62	23.2	0		
14	HQAM	6	3							

Band 38 Ant 2 DSI3										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	19.64	19.74	19.87	21	0		
20	QPSK	1	49	19.65	19.64	19.81				
20	QPSK	1	99	19.54	19.59	19.57				
20	QPSK	50	0	19.57	19.69	19.62				
20	QPSK	50	24	19.58	19.59	19.48	21	0		
20	QPSK	50	50	19.51	19.53	19.45				
20	QPSK	100	0	19.57	19.66	19.59				
20	16QAM	1	0	19.55	19.63	19.58	21	0		
20	16QAM	1	49	19.60	19.55	19.52				
20	16QAM	1	99	19.40	19.53	19.51				
20	16QAM	50	0	19.54	19.62	19.62				
20	16QAM	50	24	19.57	19.56	19.49	21	0		
20	16QAM	50	50	19.49	19.45	19.53				
20	16QAM	100	0	19.53	19.59	19.52				
20	64QAM	1	0	19.46	19.49	19.44				
20	64QAM	1	49	19.49	19.40	19.42	21	0		
20	64QAM	1	99	19.51	19.62	19.56				
20	64QAM	50	0	19.56	19.67	19.57				
20	64QAM	50	24	19.52	19.38	19.39	21	0		
20	64QAM	50	50	19.43	19.47	19.47				
20	64QAM	100	0	19.51	19.57	19.58				
20	256QAM	1	0	19.15	19.30	19.13				
20	256QAM	1	49	19.19	19.12	19.08	20.5	0.5		
20	256QAM	1	99	19.05	19.13	19.06				
20	256QAM	50	0	19.03	19.22	19.12				
20	256QAM	50	24	19.13	19.04	19.03	20.5	0.5		
20	256QAM	50	50	18.95	19.08	18.91				
20	256QAM	100	0	19.12	19.20	19.08				
Channel				37825	38000	38175	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				25775	2595	2612.5				
15	QPSK	1	0	19.52	19.67	19.62	21	0		
15	QPSK	1	37	19.57	19.61	19.59				
15	QPSK	1	74	19.45	19.49	19.52				
15	QPSK	36	0	19.52	19.60	19.59				
15	QPSK	36	20	19.51	19.47	19.37	21	0		
15	QPSK	36	39	19.43	19.40	19.34				
15	QPSK	75	0	19.53	19.55	19.46				
15	16QAM	1	0	19.44	19.50	19.49				
15	16QAM	1	37	19.56	19.42	19.40	21	0		
15	16QAM	1	74	19.28	19.46	19.39				
15	16QAM	36	0	19.45	19.50	19.50				
15	16QAM	36	20	19.45	19.45	19.45	21	0		
15	16QAM	36	39	19.41	19.42	19.44				
15	16QAM	75	0	19.47	19.48	19.55				
15	64QAM	1	0	19.41	19.36	19.31				
15	64QAM	1	37	19.38	19.29	19.35	21	0		
15	64QAM	1	74	19.37	19.60	19.45				
15	64QAM	36	0	19.50	19.63	19.43				
15	64QAM	36	20	19.40	19.53	19.52	21	0		
15	64QAM	36	39	19.38	19.43	19.34				
15	64QAM	75	0	19.48	19.48	19.48				
15	256QAM	1	0	19.08	19.21	19.00				
15	256QAM	1	37	19.09	19.08	19.05	20.5	0.5		
15	256QAM	1	74	18.92	19.03	18.93				
15	256QAM	36	0	19.00	19.10	19.02				
15	256QAM	36	20	19.08	18.97	18.96	20.5	0.5		
15	256QAM	36	39	18.91	18.97	18.84				
15	256QAM	75	0	19.01	19.11	19.04				
Channel				37800	38000	38200	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				25750	2595	2615				
10	QPSK	1	0	19.61	19.61	19.56	21	0		
10	QPSK	1	25	19.58	19.60	19.57				
10	QPSK	1	49	19.40	19.49	19.52				
10	QPSK	25	0	19.53	19.66	19.50				
10	QPSK	25	12	19.45	19.52	19.43	21	0		
10	QPSK	25	25	19.42	19.40	19.41				
10	QPSK	50	0	19.47	19.63	19.46				
10	16QAM	1	0	19.44	19.56	19.49	21	0		
10	16QAM	1	25	19.54	19.53	19.46				
10	16QAM	1	49	19.36	19.46	19.37				
10	16QAM	25	0	19.49	19.53	19.49				
10	16QAM	25	12	19.51	19.50	19.40	21	0		
10	16QAM	25	25	19.46	19.42	19.47				
10	16QAM	50	0	19.48	19.48	19.50				
10	64QAM	1	0	19.34	19.41	19.39	21	0		
10	64QAM	1	25	19.44	19.27	19.30				
10	64QAM	1	49	19.39	19.57	19.51				
10	64QAM	25	0	19.48	19.62	19.54				
10	64QAM	25	12	19.40	19.48	19.50	21	0		
10	64QAM	25	25	19.36	19.35	19.44				
10	64QAM	50	0	19.41	19.49	19.52				
10	256QAM	1	0	19.03	19.20	19.09				
10	256QAM	1	25	19.14	19.07	19.05	20.5	0.5		
10	256QAM	1	49	18.97	19.01	19.03				
10	256QAM	25	0	19.02	19.15	19.08				
10	256QAM	25	12	19.06	19.02	19.00	20.5	0.5		
10	256QAM	25	25	18.82	19.05	18.81				
10	256QAM	50	0	19.03	19.08	19.05				
Channel				37775	38000	38225	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				25725	2595	2617.5				
5	QPSK	1	0	19.50	19.71	19.53	21	0		
5	QPSK	1	12	19.58	19.59	19.52				
5	QPSK	1	24	19.50	19.47	19.47				
5	QPSK	12	0	19.55	19.63	19.51				
5	QPSK	12	7	19.56	19.53	19.42	21	0		
5	QPSK	12	13	19.44	19.47	19.37				
5	QPSK	25	0	19.46	19.54	19.55				
5	16QAM	1	0	19.52	19.50	19.46				
5	16QAM	1	12	19.56	19.44	19.45	21	0		
5	16QAM	1	24	19.35	19.48	19.37				
5	16QAM	12	0	19.42	19.55	19.49				
5	16QAM	12	7	19.53	19.46	19.46	21	0		
5	16QAM	12	13	19.36	19.40	19.47				
5	16QAM	25	0	19.50	19.47	19.51				
5	64QAM	1	0	19.38	19.45	19.35				
5	64QAM	1	12	19.41	19.30	19.36	21	0		
5	64QAM	1	24	19.39	19.49	19.54				
5	64QAM	12	0	19.49	19.58	19.54				
5	64QAM	12	7	19.41	19.45	19.55	21	0		
5	64QAM	12	13	19.40	19.39	19.37				
5	64QAM	25	0	19.45	19.52	19.48				
5	256QAM	1	0	19.11	19.17	19.00				
5	256QAM	1	12	19.11	18.98	18.96	20.5	0.5		
5	256QAM	1	24	18.97	19.03	18.98				
5	256QAM	12	0	18.90	19.08	19.05				
5	256QAM	12	7	19.00	18.95	18.96	20.5	0.5		
5	256QAM	12	13	18.81	19.00	18.89				
5	256QAM	25	0	19.03	19.15	18.99				

Band 41 Ant 2 DSI3										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	19.61	19.63	19.68	21	0		
20	QPSK	1	49	19.53	19.57	19.65				
20	QPSK	1	99	19.51	19.57	19.54				
20	QPSK	50	0	19.55	19.54	19.64				
20	QPSK	50	24	19.41	19.47	19.59	21	0		
20	QPSK	50	50	19.43	19.44	19.51				

Band 38 Ant 3 DSI3										
BW (MHz)	Modulation	RB Size	RB Offset	Power High Ch. / Freq.	Power Middle Ch. / Freq.	Power Low Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	21.91	21.98	21.96	22.2	0		
20	QPSK	1	49	21.79	21.86	21.89				
20	QPSK	1	99	21.92	21.97	21.86	22.2	0		
20	QPSK	50	0	21.83	21.95	21.84				
20	QPSK	50	24	21.77	21.89	21.82	22.2	0		
20	QPSK	50	50	21.89	21.87	21.77				
20	QPSK	100	0	21.84	21.93	21.88	22.2	0		
20	16QAM	1	0	21.79	21.91	21.89				
20	16QAM	1	49	21.72	21.94	21.78	22.2	0		
20	16QAM	1	99	21.83	21.88	21.73				
20	16QAM	50	0	21.89	21.86	21.83	22.2	0		
20	16QAM	50	24	21.66	21.82	21.78				
20	16QAM	50	50	21.83	21.95	21.75	22.2	0		
20	16QAM	100	0	21.74	21.90	21.71				
20	16QAM	1	0	21.71	21.77	21.71	22.2	0		
20	16QAM	1	49	21.86	21.75	21.66				
20	16QAM	1	99	21.82	21.84	21.79	22.2	0		
20	16QAM	50	0	21.85	21.85	21.82				
20	16QAM	50	24	21.76	21.91	21.80	22.2	0		
20	16QAM	50	50	21.81	21.91	21.80				
20	16QAM	100	0	21.80	21.81	21.79	20.7	1.5		
20	256QAM	1	0	20.44	20.46	20.48				
20	256QAM	1	49	20.29	20.46	20.37	20.7	1.5		
20	256QAM	1	99	20.41	20.53	20.32				
20	256QAM	50	0	20.32	20.50	20.31	20.7	1.5		
20	256QAM	50	24	20.33	20.42	20.30				
20	256QAM	50	50	20.44	20.43	20.26	20.7	1.5		
20	256QAM	100	0	20.37	20.41	20.33				
Channel				37825	38000	38175	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				25725	25875	25925				
15	QPSK	1	0	21.84	21.92	21.91	22.2	0		
15	QPSK	1	37	21.70	21.90	21.83				
15	QPSK	1	74	21.78	21.89	21.81	22.2	0		
15	QPSK	36	0	21.72	21.91	21.82				
15	QPSK	36	20	21.70	21.79	21.80	22.2	0		
15	QPSK	36	39	21.80	21.83	21.84				
15	QPSK	75	0	21.70	21.79	21.75	22.2	0		
15	16QAM	1	0	21.76	21.81	21.79				
15	16QAM	1	37	21.60	21.81	21.76	22.2	0		
15	16QAM	1	74	21.70	21.84	21.69				
15	16QAM	36	0	21.76	21.75	21.74	22.2	0		
15	16QAM	36	20	21.55	21.73	21.75				
15	16QAM	36	39	21.73	21.89	21.86	22.2	0		
15	16QAM	75	0	21.68	21.81	21.66				
15	16QAM	1	0	21.60	21.68	21.65	22.2	0		
15	16QAM	1	37	21.75	21.68	21.58				
15	16QAM	1	74	21.77	21.77	21.71	22.2	0		
15	16QAM	36	0	21.75	21.78	21.76				
15	16QAM	36	20	21.66	21.79	21.73	22.2	0		
15	16QAM	36	39	21.70	21.77	21.68				
15	16QAM	75	0	21.69	21.74	21.71	20.7	1.5		
15	256QAM	1	0	20.40	20.33	20.37				
15	256QAM	1	37	20.34	20.28	20.28	20.7	1.5		
15	256QAM	1	74	20.32	20.49	20.24				
15	256QAM	36	0	20.23	20.45	20.25	20.7	1.5		
15	256QAM	36	20	20.20	20.39	20.23				
15	256QAM	36	39	20.35	20.32	20.15	20.7	1.5		
15	256QAM	75	0	20.34	20.37	20.21				
Channel				37920	38050	38220	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	21.86	21.93	21.92	22.2	0		
10	QPSK	1	25	21.74	21.90	21.82				
10	QPSK	1	49	21.98	21.86	21.73	22.2	0		
10	QPSK	25	0	21.81	21.91	21.80				
10	QPSK	25	12	21.72	21.83	21.78	22.2	0		
10	QPSK	25	25	21.78	21.81	21.71				
10	QPSK	50	0	21.74	21.90	21.80	22.2	0		
10	16QAM	1	0	21.74	21.86	21.86				
10	16QAM	1	25	21.60	21.90	21.86	22.2	0		
10	16QAM	1	49	21.73	21.76	21.59				
10	16QAM	25	0	21.81	21.82	21.74	22.2	0		
10	16QAM	25	12	21.55	21.89	21.76				
10	16QAM	25	25	21.74	21.82	21.73	22.2	0		
10	16QAM	50	0	21.69	21.90	21.58				
10	16QAM	1	0	21.68	21.72	21.57	22.2	0		
10	16QAM	1	25	21.73	21.72	21.64				
10	16QAM	1	49	21.79	21.81	21.77	22.2	0		
10	16QAM	25	0	21.78	21.72	21.76				
10	16QAM	25	12	21.69	21.80	21.72	22.2	0		
10	16QAM	25	25	21.71	21.77	21.67				
10	16QAM	50	0	21.76	21.68	21.72	22.2	0		
10	256QAM	1	0	20.38	20.43	20.41				
10	256QAM	1	25	20.23	20.33	20.26	20.7	1.5		
10	256QAM	1	49	20.33	20.40	20.22				
10	256QAM	25	0	20.21	20.47	20.24	20.7	1.5		
10	256QAM	25	12	20.21	20.37	20.22				
10	256QAM	25	25	20.40	20.40	20.19	20.7	1.5		
10	256QAM	50	0	20.25	20.31	20.31				
Channel				37775	38000	38225	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				25725	2595	2617.5				
5	QPSK	1	0	21.83	21.92	21.86	22.2	0		
5	QPSK	1	12	21.69	21.88	21.84				
5	QPSK	1	24	21.89	21.93	21.83	22.2	0		
5	QPSK	12	0	21.79	21.92	21.80				
5	QPSK	12	7	21.71	21.77	21.79	22.2	0		
5	QPSK	12	13	21.78	21.84	21.85				
5	QPSK	25	0	21.76	21.83	21.81	22.2	0		
5	16QAM	1	0	21.71	21.83	21.80				
5	16QAM	1	12	21.60	21.81	21.74	22.2	0		
5	16QAM	1	24	21.80	21.77	21.60				
5	16QAM	12	0	21.86	21.74	21.76	22.2	0		
5	16QAM	12	7	21.54	21.80	21.73				
5	16QAM	12	13	21.71	21.85	21.66	22.2	0		
5	16QAM	25	0	21.60	21.79	21.68				
5	16QAM	1	0	21.68	21.70	21.65	22.2	0		
5	16QAM	1	12	21.81	21.61	21.61				
5	16QAM	1	24	21.80	21.73	21.69	22.2	0		
5	16QAM	12	0	21.79	21.83	21.69				
5	16QAM	12	7	21.64	21.87	21.76	22.2	0		
5	16QAM	12	13	21.71	21.83	21.71				
5	16QAM	25	0	21.67	21.73	21.69	22.2	0		
5	256QAM	1	0	20.41	20.34	20.35				
5	256QAM	1	12	20.16	20.44	20.33	20.7	1.5		
5	256QAM	1	24	20.37	20.42	20.20				
5	256QAM	12	0	20.28	20.45	20.25	20.7	1.5		
5	256QAM	12	7	20.25	20.31	20.18				
5	256QAM	12	13	20.32	20.30	20.15	20.7	1.5		
5	256QAM	25	0	20.29	20.39	20.25				

Band 41 Ant 3 DSI3										
BW (MHz)	Modulation	RB Size	RB Offset	Power High Ch. / Freq.	Power Middle Ch. / Freq.	Power Low Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	21.36	21.30	21.52	21.7	0		
20	QPSK	1	49	21.27	21.12	21.46				
20	QPSK	1	99	21.26	21.29	21.33	21.7	0		
20	QPSK	50	0	21.27	21.17	21.48				
20	QPSK	50	24	21.15	21.04	21.38	21.7	0		
20	QPSK	50	50	21.21	21.18	21.23				
20	QPSK	100	0	21.30	21.24	21.44	21.7	0		
20	16QAM	1	0	21.26	21.17	21.39				
20	16QAM	1	49	21.23	21.08					



Band 38 Ant 4 DS13										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	21.12	21.18	21.10	22.5	0		
20	QPSK	1	49	21.03	21.12	21.14				
20	QPSK	1	99	20.92	21.09	21.08				
20	QPSK	50	0	20.98	21.16	21.01	22.5	0		
20	QPSK	50	24	21.01	21.01	21.06				
20	QPSK	50	50	20.84	21.00	21.01				
20	QPSK	100	0	21.05	21.13	20.99	22.5	0		
20	16QAM	1	0	21.07	21.12	20.97				
20	16QAM	1	49	20.95	21.02	21.07				
20	16QAM	1	99	20.81	21.02	20.94	22.5	0		
20	16QAM	50	0	21.05	21.13	21.08				
20	16QAM	50	24	20.91	20.99	21.08				
20	16QAM	50	50	20.80	21.04	20.96	22.5	0		
20	16QAM	100	0	20.97	21.07	20.98				
20	16QAM	100	0	20.97	20.90	21.00				
20	64QAM	1	0	20.97	20.90	21.00	22.5	0		
20	64QAM	1	49	20.80	20.88	20.98				
20	64QAM	1	99	21.00	21.08	20.87				
20	64QAM	50	0	20.06	20.19	20.12	21.5	1		
20	64QAM	50	24	20.01	20.10	20.18				
20	64QAM	50	50	19.88	20.08	20.12				
20	64QAM	100	0	19.95	20.18	20.07	19.5	3		
20	256QAM	1	0	18.09	18.13	18.16				
20	256QAM	1	49	18.05	18.17	18.09				
20	256QAM	1	99	17.90	18.07	18.11	19.5	3		
20	256QAM	1	49	17.96	18.09	18.06				
20	256QAM	50	24	17.97	18.02	18.05				
20	256QAM	50	50	17.79	17.99	18.05	19.5	3		
20	256QAM	100	0	18.08	18.11	17.99				
Channel				37825	38000	38175				
Frequency (MHz)				25775	25925	26125				
15	QPSK	1	0	21.02	21.12	21.07	22.5	0		
15	QPSK	1	37	20.93	21.08	21.10				
15	QPSK	1	74	20.80	20.97	20.94				
15	QPSK	36	0	20.88	21.10	20.92	22.5	0		
15	QPSK	36	20	20.88	20.92	20.97				
15	QPSK	36	39	20.81	20.91	20.97				
15	QPSK	75	0	20.95	21.07	20.95	22.5	0		
15	16QAM	1	0	21.00	21.00	20.85				
15	16QAM	1	37	20.91	20.91	20.96				
15	16QAM	1	74	20.72	21.00	20.88	22.5	0		
15	16QAM	36	0	21.01	21.03	21.01				
15	16QAM	36	20	20.81	20.94	21.01				
15	16QAM	36	39	20.68	20.95	20.85	22.5	0		
15	16QAM	75	0	20.79	20.93	20.85				
15	16QAM	75	0	20.84	20.83	20.96				
15	16QAM	1	37	20.74	20.85	20.93	22.5	0		
15	16QAM	1	74	20.93	21.03	20.94				
15	16QAM	36	0	19.94	20.10	20.07				
15	16QAM	36	20	19.95	20.00	20.13	21.5	1		
15	16QAM	36	39	19.78	20.04	20.07				
15	16QAM	75	0	19.82	20.10	20.03				
15	256QAM	1	0	17.96	18.08	18.02	19.5	3		
15	256QAM	1	37	17.93	18.07	17.98				
15	256QAM	1	74	17.79	18.03	18.09				
15	256QAM	36	0	17.90	18.11	17.87	19.5	3		
15	256QAM	36	20	17.93	17.92	17.92				
15	256QAM	36	39	17.70	17.85	17.98				
15	256QAM	75	0	18.03	18.04	17.90				
Channel				37800	38000	38200				
Frequency (MHz)				25750	25950	26150				
10	QPSK	1	0	21.02	21.15	20.99	22.5	0		
10	QPSK	1	25	21.01	21.00	21.02				
10	QPSK	1	49	20.96	21.01	20.96				
10	QPSK	25	0	20.91	21.06	20.93	22.5	0		
10	QPSK	25	12	20.97	20.91	20.93				
10	QPSK	25	25	20.76	20.87	20.92				
10	QPSK	50	0	21.00	21.00	20.96	22.5	0		
10	16QAM	1	0	20.98	21.04	20.90				
10	16QAM	1	25	20.92	20.90	20.98				
10	16QAM	1	49	20.69	20.90	20.85	22.5	0		
10	16QAM	25	0	20.98	21.09	21.03				
10	16QAM	25	12	20.88	20.87	21.00				
10	16QAM	25	25	20.76	21.00	20.93	22.5	0		
10	16QAM	50	0	20.83	20.95	20.79				
10	16QAM	50	0	20.94	20.91	20.95				
10	64QAM	1	25	20.74	20.83	20.88	22.5	0		
10	64QAM	1	49	20.91	20.98	20.79				
10	64QAM	25	0	19.92	20.07	20.03				
10	64QAM	25	12	19.96	20.07	20.06	21.5	1		
10	64QAM	25	25	19.76	20.04	20.06				
10	64QAM	50	0	19.82	20.12	19.96				
10	256QAM	1	0	18.03	18.00	18.14	19.5	3		
10	256QAM	1	25	18.00	18.11	18.01				
10	256QAM	1	49	17.79	18.00	18.03				
10	256QAM	25	0	17.93	18.12	17.95	19.5	3		
10	256QAM	25	12	17.91	17.93	17.94				
10	256QAM	25	25	17.77	17.93	17.94				
10	256QAM	50	0	18.02	18.07	17.88				
Channel				37775	38000	38225				
Frequency (MHz)				25725	25950	26175				
5	QPSK	1	0	21.07	21.14	20.99	22.5	0		
5	QPSK	1	12	20.97	21.07	21.01				
5	QPSK	1	24	20.90	21.03	21.02				
5	QPSK	12	0	20.86	21.06	20.94	22.5	0		
5	QPSK	12	7	20.90	20.95	21.01				
5	QPSK	12	13	20.75	20.92	20.94				
5	QPSK	25	0	20.94	21.10	20.95	22.5	0		
5	16QAM	1	0	20.99	20.99	20.84				
5	16QAM	1	12	20.83	20.94	21.00				
5	16QAM	1	24	20.71	20.92	20.89	22.5	0		
5	16QAM	12	0	20.97	21.00	20.95				
5	16QAM	12	7	20.89	20.85	20.98				
5	16QAM	12	13	20.77	21.01	20.86	22.5	0		
5	16QAM	25	0	20.74	20.97	20.83				
5	16QAM	25	0	20.84	20.79	20.87				
5	64QAM	1	12	20.71	20.85	20.87	22.5	0		
5	64QAM	1	24	20.87	20.95	20.83				
5	64QAM	12	0	19.96	20.08	19.99				
5	64QAM	12	7	19.97	20.03	20.06	21.5	1		
5	64QAM	12	13	19.74	19.95	19.98				
5	64QAM	25	0	19.87	20.12	20.03				
5	256QAM	1	0	18.05	18.06	18.04	19.5	3		
5	256QAM	1	12	17.91	18.10	18.04				
5	256QAM	1	24	17.88	17.95	18.06				
5	256QAM	12	0	17.93	18.07	17.95	19.5	3		
5	256QAM	12	7	17.84	17.89	17.98				
5	256QAM	12	13	17.76	17.91	17.97				
5	256QAM	25	0	17.94	18.09	17.89				

Band 41 Ant 4 DS13												
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)				
Channel				39750	40185	40620	41055	41490				
Frequency (MHz)				2506	2549.5	2593	2636.5	2680				
20	QPSK	1	0	21.57	21.49	21.66	21.49	21.42	23	0		
20	QPSK	1	49	21.44	21.38	21.54	21.42	21.44				
20	QPSK	1	99	21.49	21.46	21.55	21.45	21.35				
20	QPSK	50	0	21.49	21.43	21.63	21.42	21.38	23	0		
20	QPSK	50	24	21.37	21.26	21.51	21.40	21.33				
20	QPSK	50	50	21.44	21.43	21.43	21.32	21.32				
20	QPSK	100	0	21.44	21.41	21.61	21.41	21.32	23	0		
20	16QAM	1	0	21.55	21.37	21.39	21.36	21.36				
20	16QAM	1	49	21.39	21.33	21.49	21.39	21.40				
20	16QAM	1	99	21.42	21.39	21.51	21.36	21.29	22.5	0.5		
20	16QAM	50	0	21.09	20.97	21.14	21.03					



Band 38 Ant 5 DSI3										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	22.27	22.28	22.20	23.5	0		
20	QPSK	1	49	22.22	22.19	22.12				
20	QPSK	1	99	22.14	22.22	22.12	23.5	0		
20	QPSK	50	0	22.14	22.26	22.06				
20	QPSK	50	24	22.13	22.10	22.01	23.5	0		
20	QPSK	50	50	22.02	22.16	22.06				
20	QPSK	100	0	22.20	22.24	22.07	23.5	0		
20	16QAM	1	0	22.22	22.20	22.12				
20	16QAM	1	49	22.18	22.23	22.01	23.5	0		
20	16QAM	1	99	22.02	22.12	22.00				
20	16QAM	50	0	22.18	22.19	22.06	23.5	0		
20	16QAM	50	24	22.15	22.08	22.09				
20	16QAM	50	50	22.05	22.09	22.05	23.5	0		
20	16QAM	100	0	22.06	22.14	22.02				
20	64QAM	1	0	22.01	22.08	21.93	23.5	0		
20	64QAM	1	49	21.89	22.03	21.98				
20	64QAM	1	99	22.08	22.12	21.93	23.5	0		
20	64QAM	50	0	21.25	21.31	21.23				
20	64QAM	50	24	21.27	21.14	21.06	22.5	1		
20	64QAM	50	50	21.18	21.25	21.15				
20	64QAM	100	0	21.19	21.20	21.09	20.5	3		
20	256QAM	1	0	19.31	19.33	19.24				
20	256QAM	1	49	19.18	19.20	19.16	20.5	3		
20	256QAM	1	99	19.19	19.26	19.16				
20	256QAM	50	0	19.17	19.20	19.09	20.5	3		
20	256QAM	50	24	19.13	19.10	19.05				
20	256QAM	50	50	19.02	19.15	19.06	20.5	3		
20	256QAM	100	0	19.25	19.21	19.11				
Channel				37825	38000	38175				
Frequency (MHz)				25725	25875	26025				
15	QPSK	1	0	22.14	22.23	22.17	23.5	0		
15	QPSK	1	37	22.11	22.10	22.07				
15	QPSK	1	74	22.02	22.08	22.04	23.5	0		
15	QPSK	36	0	22.02	22.24	21.95				
15	QPSK	36	20	22.10	22.05	21.88	23.5	0		
15	QPSK	36	39	22.13	22.12	21.96				
15	QPSK	75	0	22.15	22.18	21.96	23.5	0		
15	16QAM	1	0	22.15	22.13	22.01				
15	16QAM	1	37	22.08	22.06	21.93	23.5	0		
15	16QAM	1	74	21.97	22.05	21.89				
15	16QAM	36	0	22.05	22.05	22.00	23.5	0		
15	16QAM	36	20	22.12	22.05	21.98				
15	16QAM	36	39	22.01	21.97	22.02	23.5	0		
15	16QAM	75	0	22.03	22.05	21.94				
15	64QAM	1	0	21.90	22.00	21.88	23.5	0		
15	64QAM	1	37	21.78	21.84	21.85				
15	64QAM	1	74	22.00	22.06	21.81	22.5	1		
15	64QAM	36	0	21.20	21.23	21.21				
15	64QAM	36	20	21.14	21.11	20.95	22.5	1		
15	64QAM	36	39	21.05	21.21	21.05				
15	64QAM	75	0	21.13	21.18	21.04	20.5	3		
15	256QAM	1	0	19.19	19.20	19.14				
15	256QAM	1	37	19.15	19.17	19.07	20.5	3		
15	256QAM	1	74	19.05	19.22	19.13				
15	256QAM	36	0	19.04	19.11	19.01	20.5	3		
15	256QAM	36	20	19.03	18.96	18.97				
15	256QAM	36	39	18.93	19.03	18.94	20.5	3		
15	256QAM	75	0	19.20	19.11	19.06				
Channel				37820	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	22.24	22.25	22.14	23.5	0		
10	QPSK	1	25	22.09	22.14	21.99				
10	QPSK	1	49	22.08	22.09	22.02	23.5	0		
10	QPSK	25	0	22.04	22.21	21.95				
10	QPSK	25	12	22.00	21.97	21.89	23.5	0		
10	QPSK	25	25	21.90	22.03	21.94				
10	QPSK	50	0	22.17	22.10	22.04	23.5	0		
10	16QAM	1	0	22.16	22.15	22.08				
10	16QAM	1	25	22.06	22.01	21.86	23.5	0		
10	16QAM	1	49	21.96	22.07	21.92				
10	16QAM	25	0	22.05	22.06	22.04	23.5	0		
10	16QAM	25	12	22.07	22.05	21.88				
10	16QAM	25	25	21.96	21.95	21.86	23.5	0		
10	16QAM	50	0	22.02	22.00	21.92				
10	64QAM	1	0	21.97	22.03	21.82	23.5	0		
10	64QAM	1	25	21.85	21.91	21.91				
10	64QAM	1	49	21.99	22.03	21.80	22.5	1		
10	64QAM	25	0	21.23	21.28	21.20				
10	64QAM	25	12	21.24	21.01	20.95	22.5	1		
10	64QAM	25	25	21.15	21.12	21.02				
10	64QAM	50	0	21.10	21.13	21.04	20.5	3		
10	256QAM	1	0	19.20	19.23	19.21				
10	256QAM	1	25	19.06	19.08	19.02	20.5	3		
10	256QAM	1	49	19.09	19.14	19.12				
10	256QAM	25	0	19.05	19.08	19.02	20.5	3		
10	256QAM	25	12	19.02	19.05	18.95				
10	256QAM	25	25	18.93	19.05	18.98	20.5	3		
10	256QAM	50	0	19.22	19.08	19.03				
Channel				37775	38000	38225				
Frequency (MHz)				25725	2595	2617.5				
5	QPSK	1	0	22.21	22.26	22.11	23.5	0		
5	QPSK	1	12	22.14	22.11	22.05				
5	QPSK	1	24	22.12	22.19	21.99	23.5	0		
5	QPSK	12	0	22.03	22.21	21.98				
5	QPSK	12	7	22.01	22.01	21.90	23.5	0		
5	QPSK	12	13	21.97	22.11	21.83				
5	QPSK	25	0	22.17	22.16	21.94	23.5	0		
5	16QAM	1	0	22.19	22.07	22.07				
5	16QAM	1	12	22.04	22.04	21.88	23.5	0		
5	16QAM	1	24	21.92	22.02	21.93				
5	16QAM	12	0	22.06	22.13	21.99	23.5	0		
5	16QAM	12	7	22.05	22.05	22.05				
5	16QAM	12	13	21.91	22.06	22.02	22.5	1		
5	16QAM	25	0	21.95	22.11	22.00				
5	64QAM	1	0	21.92	22.01	21.88	23.5	0		
5	64QAM	1	12	21.78	21.93	21.93				
5	64QAM	1	24	21.97	22.07	21.80	22.5	1		
5	64QAM	12	0	21.13	21.22	21.17				
5	64QAM	12	7	21.14	21.08	21.03	20.5	3		
5	64QAM	12	13	21.08	21.12	21.04				
5	64QAM	25	0	21.09	21.17	21.06	20.5	3		
5	256QAM	1	0	19.21	19.22	19.20				
5	256QAM	1	12	19.11	19.17	19.04	20.5	3		
5	256QAM	1	24	19.14	19.20	19.11				
5	256QAM	12	0	19.10	19.15	18.95	20.5	3		
5	256QAM	12	7	19.03	19.00	18.98				
5	256QAM	12	13	18.93	19.02	18.94	20.5	3		
5	256QAM	25	0	19.14	19.18	19.08				

Band 41 Ant 5 DSI3										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	22.09	22.22	22.23	23.5	0		
20	QPSK	1	49	22.06	22.10	22.21				
20	QPSK	1	99	21.99	22.07	22.18	23.5	0		
20	QPSK	50	0	22.01	22.14	22.19				
20	QPSK	50	24	22.01	22.01	22.08	23.5	0		
20	QPSK	50	50	21.96	21.97	22.08				
20	QPSK	100	0	21.98	22.19	22.15	23.5	0		
20	16QAM	1	0	22.03	22.18	22.09				
20	16QAM	1	49	21.90	21.96	22.08	23.5	0		
20	16QAM	1	99</							



Band 42 Ant 1 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				42190	42590	42990			
Frequency (MHz)				3460	3500	3540			
20	QPSK	1	0	20.91	21.07	21.02	22.5	0	
20	QPSK	1	49	20.81	21.04	20.81			
20	QPSK	1	99	20.84	20.99	20.89			
20	QPSK	50	0	20.43	20.60	20.49	22	0.5	
20	QPSK	50	24	20.31	20.52	20.31			
20	QPSK	50	50	20.39	20.53	20.37			
20	QPSK	100	0	20.46	20.58	20.48	22	0.5	
20	16QAM	1	0	20.34	20.56	20.32			
20	16QAM	1	49	20.33	20.53	20.44			
20	16QAM	1	99	20.39	20.58	20.57	21	1.5	
20	16QAM	50	0	19.48	19.68	19.48			
20	16QAM	50	24	19.37	19.48	19.31			
20	16QAM	50	50	19.41	19.58	19.36	20	2.5	
20	16QAM	100	0	19.45	19.57	19.43			
20	64QAM	1	0	19.35	19.61	19.33			
20	64QAM	1	49	19.33	19.54	19.42	21	1.5	
20	64QAM	1	99	19.39	19.52	19.59			
20	64QAM	50	0	18.48	18.63	18.54			
20	16QAM	50	24	18.28	18.56	18.32	20	2.5	
20	16QAM	50	50	18.40	18.52	18.41			
20	64QAM	100	0	18.44	18.54	18.52			
20	256QAM	1	0	16.47	16.65	16.50	18	4.5	
20	256QAM	1	49	16.28	16.53	16.26			
20	256QAM	1	99	16.40	16.53	16.38			
20	256QAM	50	0	16.42	16.57	16.42	18	4.5	
20	256QAM	50	24	16.29	16.61	16.28			
20	256QAM	50	50	16.33	16.48	16.42			
20	256QAM	100	0	16.42	16.60	16.59			
Channel				42165	42590	43015	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3472.5	3525	3577.5			
15	QPSK	1	0	20.86	21.02	20.88	22.5	0	
15	QPSK	1	37	20.76	20.91	20.76			
15	QPSK	1	74	20.74	20.92	20.77			
15	QPSK	36	0	20.37	20.48	20.47	22	0.5	
15	QPSK	36	20	20.17	20.40	20.25			
15	QPSK	36	39	20.34	20.48	20.32			
15	QPSK	75	0	20.32	20.53	20.35	15	0.5	
15	16QAM	1	0	20.27	20.51	20.28			
15	16QAM	1	37	20.23	20.42	20.38			
15	16QAM	1	74	20.34	20.54	20.48	21	1.5	
15	16QAM	36	0	19.37	19.58	19.37			
15	16QAM	36	20	19.28	19.38	19.23			
15	16QAM	36	39	19.37	19.45	19.34	20	2	
15	16QAM	75	0	19.41	19.47	19.38			
15	64QAM	1	0	19.27	19.57	19.19			
15	64QAM	1	37	19.22	19.50	19.34	21	1.5	
15	64QAM	1	74	19.36	19.39	19.52			
15	64QAM	36	0	18.41	18.53	18.41			
15	64QAM	36	20	18.15	18.49	18.23	20	2.5	
15	64QAM	36	39	18.28	18.48	18.36			
15	64QAM	75	0	18.40	18.49	18.41			
15	256QAM	1	0	16.34	16.55	16.41	18	4.5	
15	256QAM	1	37	16.17	16.50	16.16			
15	256QAM	1	74	16.26	16.41	16.26			
15	256QAM	36	0	16.32	16.49	16.36	18	4.5	
15	256QAM	36	20	16.22	16.57	16.25			
15	256QAM	36	39	16.20	16.40	16.29			
15	256QAM	75	0	16.39	16.48	16.53			
Channel				42140	42590	43040	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3455	3500	3545			
10	QPSK	1	0	20.86	21.00	20.86	22.5	0	
10	QPSK	1	25	20.71	20.93	20.88			
10	QPSK	1	49	20.71	20.97	20.75			
10	QPSK	25	0	20.34	20.51	20.38	22	0.5	
10	QPSK	25	12	20.19	20.39	20.22			
10	QPSK	25	25	20.36	20.51	20.31			
10	QPSK	50	0	20.34	20.56	20.38	22	0.5	
10	16QAM	1	0	20.30	20.51	20.21			
10	16QAM	1	25	20.30	20.47	20.42			
10	16QAM	1	49	20.36	20.42	20.54	21	1.5	
10	16QAM	25	0	19.42	19.60	19.39			
10	16QAM	25	12	19.24	19.39	19.28			
10	16QAM	25	25	19.37	19.56	19.24	20	2	
10	16QAM	50	0	19.39	19.45	19.36			
10	64QAM	1	0	19.27	19.54	19.30			
10	64QAM	1	25	19.23	19.49	19.30	21	1.5	
10	64QAM	1	49	19.36	19.45	19.49			
10	64QAM	25	0	18.45	18.57	18.44			
10	64QAM	25	12	18.22	18.49	18.24	20	2.5	
10	64QAM	25	25	18.38	18.46	18.37			
10	64QAM	50	0	18.30	18.41	18.50			
10	256QAM	1	0	16.38	16.62	16.38	18	4.5	
10	256QAM	1	25	16.26	16.42	16.20			
10	256QAM	1	49	16.27	16.43	16.33			
10	256QAM	25	0	16.38	16.48	16.40	18	4.5	
10	256QAM	25	12	16.17	16.49	16.19			
10	256QAM	25	25	16.20	16.34	16.35			
10	256QAM	50	0	16.37	16.53	16.47			
Channel				42115	42590	43065	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3422.5	3500	3577.5			
5	QPSK	1	0	20.78	21.01	20.88	22.5	0	
5	QPSK	1	12	20.79	20.97	20.78			
5	QPSK	1	24	20.75	20.97	20.85			
5	QPSK	12	0	20.31	20.57	20.37	22	0.5	
5	QPSK	12	7	20.23	20.49	20.18			
5	QPSK	12	13	20.29	20.44	20.25			
5	QPSK	25	0	20.34	20.47	20.46	22	0.5	
5	16QAM	1	0	20.27	20.46	20.27			
5	16QAM	1	12	20.30	20.51	20.40			
5	16QAM	1	24	20.35	20.52	20.44	21	1.5	
5	16QAM	12	0	19.44	19.60	19.37			
5	16QAM	12	7	19.34	19.43	19.23			
5	16QAM	12	13	19.36	19.53	19.30	20	2	
5	16QAM	25	0	19.31	19.49	19.41			
5	64QAM	1	0	19.30	19.57	19.23			
5	64QAM	1	12	19.25	19.50	19.35	21	1.5	
5	64QAM	1	24	19.31	19.44	19.53			
5	64QAM	12	0	18.39	18.56	18.46			
5	64QAM	12	7	18.19	18.47	18.19	20	2.5	
5	64QAM	12	13	18.30	18.42	18.32			
5	64QAM	25	0	18.38	18.46	18.50			
5	256QAM	1	0	16.44	16.62	16.42	18	4.5	
5	256QAM	1	12	16.26	16.45	16.18			
5	256QAM	1	24	16.32	16.44	16.32			
5	256QAM	12	0	16.30	16.55	16.28	18	4.5	
5	256QAM	12	7	16.26	16.54	16.25			
5	256QAM	12	13	16.24	16.37	16.33			
5	256QAM	25	0	16.33	16.47	16.46			

Band 48 Ant 1 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3569	3641	3690		
20	QPSK	1	0	20.62	20.71	20.67	22	0	
20	QPSK	1	49	20.58	20.88	20.64			
20	QPSK	1	99	20.50	20.85	20.59			
20	QPSK	50	0	19.58	19.72	19.71	21	1	
20	QPSK	50	24	19.56	19.68	19.60			
20	QPSK	50	50	19.55	19.60	19.62			
20	QPSK	100	0	19.65	19.70	19.73	21	1	
20	16QAM	1	0	19.65	19.66	19.63			
20	16QAM	1	49	19.58	19.65	19.61			
20	16QAM	1	99	19.47	19.68	19.57	20	2	
20	16QAM	50	0	18.63	18.68	18.73			
20	16QAM	50	24	18.52	18.72	18.66			
20	16QAM	50	50	18.58	18.55	18.64	20	2	
20	16QAM	100	0	18.59	18.69	18.72			
20	64QAM	1	0	18.59	18.63	18.58			
20	64QAM	1	49	18.55	18.62	18.57	20	2	
20	64QAM	1	99	18.42	18.71	18.55			
20	64QAM	50	0	17.58	17.78	17.67			
20	64QAM	50	24	17.51	17.70	17.83	19	3	
20	64QAM	50	50	17.60	17.60	17.63			
20	64QAM	100	0	17.67	17.71	17.75			
20	256QAM	1	0	15.56	15.75	15.72	17	5	
20	256QAM	1	49	15.53	15.63	15.66			
20	256QAM	1	99	15.59	15.60	15.62			
20	2								



Band 42 Ant 6 DSI3												
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)				
Channel				42190	42590	42990						
Frequency (MHz)				3460	3500	3540						
20	QPSK	1	0	19.63	19.66	19.58	20.5	0				
20	QPSK	1	49	19.43	19.60	19.58						
20	QPSK	1	99	19.49	19.56	19.51						
20	QPSK	50	0	19.60	19.63	19.47						
20	QPSK	50	24	19.36	19.51	19.55						
20	QPSK	50	50	19.37	19.53	19.44						
20	QPSK	100	0	19.60	19.56	19.52						
20	16QAM	1	0	19.51	19.63	19.49						
20	16QAM	1	49	19.31	19.48	19.54						
20	16QAM	1	99	19.40	19.49	19.48						
20	16QAM	50	0	19.48	19.57	19.35	20.5	0				
20	16QAM	50	24	19.27	19.45	19.49						
20	16QAM	50	50	19.31	19.49	19.40						
20	16QAM	100	0	19.53	19.52	19.46						
20	64QAM	1	0	19.51	19.61	19.54						
20	64QAM	1	49	19.33	19.53	19.47						
20	64QAM	1	99	19.46	19.46	19.39						
20	64QAM	50	0	19.52	19.55	19.42						
20	64QAM	50	24	19.29	19.38	19.43						
20	64QAM	50	50	19.25	19.31	19.38						
20	64QAM	100	0	19.47	19.47	19.42	20.5	0				
20	256QAM	1	0	19.57	19.63	19.52						
20	256QAM	1	49	19.37	19.49	19.47						
20	256QAM	1	99	19.37	19.50	19.47						
20	256QAM	50	0	19.55	19.59	19.34						
20	256QAM	50	24	19.30	19.43	19.41						
20	256QAM	50	50	19.26	19.42	19.36						
20	256QAM	100	0	19.46	19.48	19.43						
Channel				42165	42590	43015						
Frequency (MHz)				3472.5	3512	3552.5						
15	QPSK	1	0	19.60	19.61	19.45	20.5	0				
15	QPSK	1	37	19.37	19.49	19.53						
15	QPSK	1	74	19.44	19.43	19.47						
15	QPSK	36	0	19.50	19.60	19.38						
15	QPSK	36	20	19.31	19.43	19.43						
15	QPSK	36	39	19.26	19.45	19.35						
15	QPSK	75	0	19.55	19.51	19.46						
15	16QAM	1	0	19.46	19.52	19.41						
15	16QAM	1	37	19.28	19.45	19.44						
15	16QAM	1	74	19.28	19.46	19.45						
15	16QAM	36	0	19.37	19.50	19.28	20.5	0				
15	16QAM	36	20	19.14	19.39	19.44						
15	16QAM	36	39	19.21	19.39	19.36						
15	16QAM	75	0	19.50	19.46	19.40						
15	64QAM	1	0	19.46	19.58	19.43						
15	64QAM	1	37	19.26	19.43	19.37						
15	64QAM	1	74	19.33	19.33	19.32						
15	64QAM	36	0	19.50	19.48	19.30						
15	64QAM	36	20	19.16	19.26	19.40						
15	64QAM	36	39	19.19	19.37	19.31						
15	256QAM	1	0	19.54	19.35	19.41	20.5	0				
15	256QAM	1	37	19.35	19.46	19.43						
15	256QAM	1	74	19.32	19.46	19.43						
15	256QAM	36	0	19.44	19.49	19.25						
15	256QAM	36	20	19.20	19.40	19.33						
15	256QAM	36	39	19.23	19.37	19.26						
15	256QAM	75	0	19.43	19.34	19.38						
Channel				42140	42590	43040						
Frequency (MHz)				3455	3500	3545						
10	QPSK	1	0	19.54	19.56	19.45			20.5	0		
10	QPSK	1	25	19.38	19.53	19.53						
10	QPSK	1	49	19.42	19.52	19.40						
10	QPSK	25	0	19.51	19.57	19.34						
10	QPSK	25	12	19.27	19.47	19.48						
10	QPSK	25	25	19.32	19.50	19.34						
10	QPSK	50	0	19.53	19.49	19.47						
10	16QAM	1	0	19.43	19.59	19.43						
10	16QAM	1	25	19.20	19.45	19.44						
10	16QAM	1	49	19.27	19.39	19.35						
10	16QAM	25	0	19.39	19.53	19.26	20.5	0				
10	16QAM	25	12	19.23	19.36	19.47						
10	16QAM	25	25	19.20	19.38	19.28						
10	16QAM	50	0	19.43	19.39	19.34						
10	64QAM	1	0	19.38	19.59	19.49						
10	64QAM	1	25	19.26	19.41	19.37						
10	64QAM	1	49	19.36	19.33	19.33						
10	64QAM	25	0	19.41	19.43	19.37						
10	64QAM	25	12	19.26	19.26	19.30						
10	64QAM	25	25	19.19	19.40	19.26						
10	256QAM	1	0	19.40	19.33	19.29	20.5	0				
10	256QAM	1	25	19.33	19.42	19.43						
10	256QAM	1	49	19.25	19.47	19.39						
10	256QAM	25	0	19.42	19.47	19.31						
10	256QAM	25	12	19.19	19.37	19.38						
10	256QAM	25	25	19.20	19.31	19.24						
10	256QAM	50	0	19.42	19.44	19.38						
Channel				42115	42590	43065						
Frequency (MHz)				3472.5	3500	3547.5						
5	QPSK	1	0	19.52	19.62	19.55			20.5	0		
5	QPSK	1	12	19.35	19.53	19.47						
5	QPSK	1	24	19.43	19.48	19.46						
5	QPSK	12	0	19.49	19.54	19.35						
5	QPSK	12	7	19.24	19.46	19.46						
5	QPSK	12	13	19.33	19.46	19.32						
5	QPSK	25	0	19.50	19.50	19.49						
5	16QAM	1	0	19.48	19.60	19.39						
5	16QAM	1	12	19.26	19.44	19.42						
5	16QAM	1	24	19.35	19.44	19.38						
5	16QAM	12	0	19.38	19.43	19.32	20.5	0				
5	16QAM	12	7	19.16	19.33	19.36						
5	16QAM	12	13	19.28	19.40	19.30						
5	16QAM	25	0	19.44	19.45	19.35						
5	64QAM	1	0	19.38	19.56	19.51						
5	64QAM	1	12	19.26	19.42	19.37						
5	64QAM	1	24	19.35	19.40	19.34						
5	64QAM	12	0	19.43	19.43	19.35						
5	64QAM	12	7	19.22	19.27	19.36						
5	64QAM	12	13	19.22	19.37	19.35						
5	256QAM	1	0	19.46	19.59	19.47	20.5	0				
5	256QAM	1	12	19.27	19.37	19.37						
5	256QAM	1	24	19.35	19.47	19.38						
5	256QAM	12	0	19.52	19.53	19.30						
5	256QAM	12	7	19.24	19.40	19.31						
5	256QAM	12	13	19.17	19.36	19.27						
5	256QAM	25	0	19.39	19.36	19.37						

Band 48 Ant 6 DSI3												
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)				
Channel				55340	55830	56150	56640					
Frequency (MHz)				3560	3569	3541	3590					
20	QPSK	1	0	18.48	18.59	18.46	19.5	0				
20	QPSK	1	49	18.40	18.53	18.41						
20	QPSK	1	99	18.40	18.50	18.45						
20	QPSK	50	0	18.34	18.56	18.44						
20	QPSK	50	24	18.30	18.48	18.30						
20	QPSK	50	50	18.34	18.37	18.31						
20	QPSK	100	0	18.34	18.55	18.43						
20	16QAM	1	0	18.38	18.46	18.44						
20	16QAM	1	49	18.36	18.42	18.29						
20	16QAM	1	99	18.37	18.39	18.40						
20	16QAM	50	0	18.36	18.47	18.34	19.5	0				
20	16QAM	50	24	18.34	18.48	18.33						
20	16QAM	50	50	18.29	18.44	18.33						
20	16QAM	100	0	18.27	18.43	18.40						
20	64QAM	1	0	18.23	18.35	18.22						
20	64QAM	1	49	18.21	18.29	18.26						
20	64QAM	1	99	18.24	18.48	18.33						
20	64QAM	50	0	18.37	18.50	18.36						
20	64QAM	50	24	18.27	18.49	18.31						
20	64QAM	50	50	18.27	18.39	18.33						
20	64QAM	100	0	18.25	18.49	18.32	19.5	0				
20	256QAM	1	0	18.40	18.54	18.35						
20	256QAM	1	49	18.28	18.48	18.28						
20	256QAM	1	99	18.29	18.45	18.37						
20	256QAM	50	0	18.27	18.49	18.35						
20	256QAM	50	24	18.20	18.36	18.17						
20	256QAM	50	50	18.23	18.35	18.22						
20	256QAM	100	0	18.25	18.46	18.39						
Channel				55315	55820	56160			56665			
Frequency (MHz)				3572.5	3572	3572			3592.5			
15	QPSK	1	0	19.42	19.54	19.32	19.5	0				
15	QPSK	1	37	18.37	18.44	18.32						
15	QPSK	1	74	18.27	18.40	18.35						
15	QPSK	36	0	18.28	18.43	18.30						
15	QPSK	36	20	18.19	18.35	18.25						
15	QPSK	36	39	18.26	18.29	18.30						
15	QPSK	75	0	18.23	18.52	18.37						
15	16QAM	1	0	18.33	18.44	18.39</						



Band 42 Ant 7 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				42190	42590	42990			
Frequency (MHz)				3460	3500	3540			
20	QPSK	1	0	20.08	20.16	20.13	21.5	0	
20	QPSK	1	49	19.85	20.10	20.07			
20	QPSK	1	99	20.05	20.08	20.08			
20	QPSK	50	0	20.01	20.10	20.04			
20	QPSK	50	24	19.83	19.97	20.02			
20	QPSK	50	50	20.00	20.01	19.95			
20	QPSK	100	0	20.05	20.09	20.07			
20	16QAM	1	0	20.01	20.07	20.06			
20	16QAM	1	49	19.78	20.06	19.94			
20	16QAM	1	99	19.93	19.98	19.98			
20	16QAM	50	0	20.04	20.07	20.04			
20	16QAM	50	24	19.80	20.04	19.98			
20	16QAM	50	50	20.02	19.95	20.06			
20	16QAM	100	0	19.99	19.97	20.01			
20	64QAM	1	0	19.70	19.95	19.88			
20	64QAM	1	49	19.92	19.90	19.82			
20	64QAM	1	99	19.93	19.96	20.03			
20	64QAM	50	0	19.98	20.10	20.04			
20	64QAM	50	24	19.76	20.10	20.01			
20	64QAM	50	50	19.97	19.98	20.03			
20	64QAM	100	0	19.88	20.06	19.92			
20	256QAM	1	0	19.03	19.13	19.15			
20	256QAM	1	49	18.88	19.12	19.11			
20	256QAM	1	99	19.03	19.11	19.03			
20	256QAM	50	0	18.96	19.08	19.01			
20	256QAM	50	24	18.83	18.96	19.06			
20	256QAM	50	50	18.95	18.97	18.94			
20	256QAM	100	0	19.05	19.07	19.06			
Channel				42165	42590	43015			
Frequency (MHz)				3472.5	3525	3577.5			
15	QPSK	1	0	20.03	20.14	20.03	21.5	0	
15	QPSK	1	37	19.76	20.03	19.96			
15	QPSK	1	74	19.97	19.92	20.06			
15	QPSK	36	0	19.93	20.07	19.98			
15	QPSK	36	20	19.79	19.93	19.96			
15	QPSK	36	39	19.88	19.98	19.99			
15	QPSK	75	0	19.99	20.06	20.00			
15	16QAM	1	0	19.95	20.04	20.02			
15	16QAM	1	37	19.74	19.98	19.81			
15	16QAM	1	74	19.88	19.86	19.91			
15	16QAM	36	0	19.91	20.01	20.01			
15	16QAM	36	20	19.74	19.97	19.96			
15	16QAM	36	39	19.97	19.84	19.94			
15	16QAM	75	0	19.83	19.90	19.95			
15	64QAM	1	0	19.60	19.89	19.79			
15	64QAM	1	37	19.84	19.79	19.76			
15	64QAM	1	74	19.82	19.88	19.99			
15	64QAM	36	0	19.95	20.01	19.95			
15	64QAM	36	20	19.67	19.99	19.97			
15	64QAM	36	39	19.90	19.87	19.92			
15	64QAM	75	0	19.79	19.94	19.88			
15	256QAM	1	0	18.94	19.11	19.04			
15	256QAM	1	37	18.76	18.99	19.02			
15	256QAM	1	74	18.97	19.02	19.00			
15	256QAM	36	0	18.86	18.95	18.90			
15	256QAM	36	20	18.74	18.88	18.92			
15	256QAM	36	39	18.92	18.88	18.91			
15	256QAM	75	0	18.92	19.01	19.00			
Channel				42140	42590	43040			
Frequency (MHz)				3455	3500	3545			
10	QPSK	1	0	20.04	20.08	20.00	21.5	0	
10	QPSK	1	25	19.81	20.06	20.05			
10	QPSK	1	49	19.96	20.03	19.99			
10	QPSK	25	0	19.94	19.98	19.97			
10	QPSK	25	12	19.79	19.87	19.89			
10	QPSK	25	25	19.92	19.88	19.83			
10	QPSK	50	0	19.94	20.04	20.00			
10	16QAM	1	0	19.89	20.00	19.95			
10	16QAM	1	25	19.73	19.93	19.91			
10	16QAM	1	49	19.88	19.84	19.89			
10	16QAM	25	0	19.91	19.95	19.99			
10	16QAM	25	12	19.68	19.94	19.89			
10	16QAM	25	25	19.97	19.91	19.99			
10	16QAM	50	0	19.83	19.89	19.92			
10	64QAM	1	0	19.59	19.83	19.83			
10	64QAM	1	25	19.85	19.87	19.73			
10	64QAM	1	49	19.85	19.93	19.90			
10	64QAM	25	0	19.91	20.00	19.95			
10	64QAM	25	12	19.67	20.00	19.89			
10	64QAM	25	25	19.89	19.85	19.92			
10	64QAM	50	0	19.83	20.00	19.85			
10	256QAM	1	0	18.93	19.06	19.08			
10	256QAM	1	25	18.77	19.03	19.00			
10	256QAM	1	49	18.94	19.07	18.90			
10	256QAM	25	0	18.86	19.01	18.96			
10	256QAM	25	12	18.74	18.94	18.99			
10	256QAM	25	25	18.90	18.94	18.91			
10	256QAM	50	0	18.98	19.05	18.96			
Channel				42115	42590	43065			
Frequency (MHz)				3472.5	3500	3527.5			
5	QPSK	1	0	20.03	20.06	20.08	21.5	0	
5	QPSK	1	12	19.76	19.96	20.02			
5	QPSK	1	24	19.97	19.94	19.94			
5	QPSK	12	0	19.87	19.98	19.94			
5	QPSK	12	7	19.70	19.83	19.99			
5	QPSK	12	13	19.92	19.96	19.97			
5	QPSK	25	0	19.97	19.96	19.99			
5	16QAM	1	0	19.93	19.93	20.02			
5	16QAM	1	12	19.72	19.97	19.92			
5	16QAM	1	24	19.90	19.84	19.89			
5	16QAM	12	0	19.91	19.96	19.94			
5	16QAM	12	7	19.69	19.90	19.84			
5	16QAM	12	13	19.91	19.88	19.94			
5	16QAM	25	0	19.77	19.87	19.98			
5	64QAM	1	0	19.56	19.82	19.85			
5	64QAM	1	12	19.86	19.86	19.89			
5	64QAM	1	24	19.90	19.93	19.93			
5	64QAM	12	0	19.93	19.96	19.99			
5	64QAM	12	7	19.62	20.00	19.93			
5	64QAM	12	13	19.87	19.95	20.00			
5	64QAM	25	0	19.85	19.96	19.88			
5	256QAM	1	0	19.00	19.08	19.09			
5	256QAM	1	12	18.84	19.04	19.09			
5	256QAM	1	24	18.99	19.07	18.93			
5	256QAM	12	0	18.83	18.97	18.92			
5	256QAM	12	7	18.75	18.86	19.03			
5	256QAM	12	13	18.89	18.94	18.85			
5	256QAM	25	0	18.95	19.05	18.96			

Band 48 Ant 7 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3569	3641	3690		
20	QPSK	1	0	19.87	19.90	19.83	19.82	21.5	0
20	QPSK	1	49	19.73	19.86	19.84	19.79		
20	QPSK	1	99	19.85	19.81	19.76	19.70		
20	QPSK	50	0	19.83	19.87	19.70	19.68		
20	QPSK	50	24	19.67	19.76	19.73	19.70		
20	QPSK	50	50	19.71	19.78	19.63	19.58		
20	QPSK	100	0	19.83	19.84	19.71	19.73		
20	16QAM	1	0	19.83	19.84	19.74	19.78		
20	16QAM	1	49	19.68	19.74	19.81	19.81		
20	16QAM	1	99	19.80	19.72	19.72	19.65		
20	16QAM	50	0	19.83	19.84	19.80	19.72		
20	16QAM	50	24	19.70	19.81	19.75	19.70		
20	16QAM	50	50	19.80	19.72	19.67	19.62		
20	16QAM	100	0	19.76	19.82	19.67	19.61		
20	64QAM	1	0	19.58					



Band 42 Ant 8 DSI3										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				42190	42590	42990				
Frequency (MHz)				3460	3500	3540				
20	QPSK	1	0	18.52	18.55	18.45				
20	QPSK	1	49	18.47	18.50	18.37	20	0		
20	QPSK	1	99	18.39	18.52	18.36				
20	QPSK	50	0	18.42	18.50	18.36				
20	QPSK	50	24	18.35	18.36	18.28				
20	QPSK	50	50	18.35	18.46	18.23				
20	QPSK	100	0	18.46	18.46	18.31				
20	16QAM	1	0	18.44	18.43	18.35				
20	16QAM	1	49	18.38	18.40	18.28	20	0		
20	16QAM	1	99	18.26	18.39	18.33				
20	16QAM	50	0	18.40	18.44	18.41				
20	16QAM	50	24	18.44	18.41	18.27				
20	16QAM	50	50	18.33	18.45	18.27				
20	16QAM	100	0	18.32	18.44	18.29				
20	64QAM	1	0	18.25	18.29	18.23				
20	64QAM	1	49	18.32	18.35	18.16	20	0		
20	64QAM	1	99	18.35	18.43	18.26				
20	64QAM	50	0	18.47	18.51	18.38				
20	64QAM	50	24	18.44	18.46	18.30				
20	64QAM	50	50	18.34	18.46	18.24	20	0		
20	64QAM	100	0	18.28	18.43	18.32				
20	256QAM	1	0	18.38	18.43	18.36				
20	256QAM	1	49	18.40	18.46	18.29	20	0		
20	256QAM	1	99	18.32	18.45	18.29				
20	256QAM	50	0	18.37	18.41	18.30				
20	256QAM	50	24	18.22	18.27	18.18				
20	256QAM	50	50	18.24	18.32	18.12	20	0		
20	256QAM	100	0	18.34	18.43	18.21				
Channel				42165	42590	43015	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				3422.5	3500	3577.5				
15	QPSK	1	0	18.42	18.46	18.39				
15	QPSK	1	37	18.40	18.46	18.32				
15	QPSK	1	74	18.27	18.46	18.28				
15	QPSK	36	0	18.29	18.44	18.34				
15	QPSK	36	20	18.22	18.27	18.24	20	0		
15	QPSK	36	39	18.31	18.36	18.19				
15	QPSK	75	0	18.40	18.38	18.27				
15	16QAM	1	0	18.40	18.30	18.30				
15	16QAM	1	37	18.25	18.38	18.25	20	0		
15	16QAM	1	74	18.15	18.32	18.19				
15	16QAM	36	0	18.26	18.34	18.33				
15	16QAM	36	20	18.33	18.29	18.18				
15	16QAM	36	39	18.29	18.39	18.13	20	0		
15	16QAM	75	0	18.26	18.38	18.19				
15	64QAM	1	0	18.14	18.22	18.19				
15	64QAM	1	37	18.25	18.26	18.07				
15	64QAM	1	74	18.26	18.34	18.13	20	0		
15	64QAM	36	0	18.39	18.45	18.30				
15	64QAM	36	20	18.32	18.36	18.20	20	0		
15	64QAM	36	39	18.28	18.38	18.18				
15	64QAM	75	0	18.17	18.33	18.25				
15	256QAM	1	0	18.25	18.35	18.26				
15	256QAM	1	37	18.32	18.33	18.21	20	0		
15	256QAM	1	74	18.22	18.37	18.17				
15	256QAM	36	0	18.31	18.29	18.25				
15	256QAM	36	20	18.18	18.21	18.13	20	0		
15	256QAM	36	39	18.18	18.21	18.00				
15	256QAM	75	0	18.21	18.40	18.16				
Channel				42140	42590	43040	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				3455	3500	3545				
10	QPSK	1	0	18.49	18.49	18.36				
10	QPSK	1	25	18.35	18.42	18.25	20	0		
10	QPSK	1	49	18.30	18.41	18.23				
10	QPSK	25	0	18.32	18.47	18.30				
10	QPSK	25	12	18.28	18.30	18.17				
10	QPSK	25	25	18.30	18.32	18.16	20	0		
10	QPSK	50	0	18.37	18.39	18.21				
10	16QAM	1	0	18.36	18.36	18.28				
10	16QAM	1	25	18.26	18.34	18.21	20	0		
10	16QAM	1	49	18.16	18.30	18.25				
10	16QAM	25	0	18.37	18.41	18.32				
10	16QAM	25	12	18.36	18.29	18.21				
10	16QAM	25	25	18.31	18.34	18.16	20	0		
10	16QAM	50	0	18.24	18.34	18.17				
10	64QAM	1	0	18.19	18.45	18.10				
10	64QAM	1	25	18.29	18.29	18.10	20	0		
10	64QAM	1	49	18.22	18.35	18.22				
10	64QAM	25	0	18.41	18.43	18.25				
10	64QAM	25	12	18.30	18.39	18.25	20	0		
10	64QAM	25	25	18.22	18.42	18.17				
10	64QAM	50	0	18.17	18.33	18.28				
10	256QAM	1	0	18.32	18.32	18.34				
10	256QAM	1	25	18.26	18.36	18.21	20	0		
10	256QAM	1	49	18.22	18.42	18.14				
10	256QAM	25	0	18.30	18.39	18.14				
10	256QAM	25	12	18.22	18.42	18.22				
10	256QAM	25	25	18.15	18.25	18.11				
10	256QAM	25	25	18.20	18.18	18.03				
10	256QAM	50	0	18.30	18.39	18.14	20	0		
Channel				42115	42590	43065	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				3422.5	3500	3577.5				
5	QPSK	1	0	18.49	18.46	18.42				
5	QPSK	1	12	18.39	18.46	18.25	20	0		
5	QPSK	1	24	18.31	18.46	18.29				
5	QPSK	12	0	18.30	18.39	18.25				
5	QPSK	12	7	18.29	18.31	18.22	20	0		
5	QPSK	12	13	18.28	18.44	18.10				
5	QPSK	25	0	18.37	18.42	18.18				
5	16QAM	1	0	18.35	18.30	18.25				
5	16QAM	1	12	18.24	18.30	18.24	20	0		
5	16QAM	1	24	18.22	18.36	18.23				
5	16QAM	12	0	18.38	18.40	18.36				
5	16QAM	12	7	18.32	18.28	18.15				
5	16QAM	12	13	18.30	18.35	18.17	20	0		
5	16QAM	25	0	18.18	18.37	18.19				
5	64QAM	1	0	18.14	18.22	18.15				
5	64QAM	1	12	18.29	18.28	18.08	20	0		
5	64QAM	1	24	18.26	18.37	18.23				
5	64QAM	12	0	18.41	18.49	18.36				
5	64QAM	12	7	18.31	18.37	18.24				
5	64QAM	12	13	18.28	18.37	18.21	20	0		
5	64QAM	25	0	18.21	18.33	18.23				
5	256QAM	1	0	18.34	18.34	18.33				
5	256QAM	1	12	18.32	18.34	18.21	20	0		
5	256QAM	1	24	18.25	18.41	18.16				
5	256QAM	12	0	18.33	18.38	18.22				
5	256QAM	12	7	18.15	18.22	18.06	20	0		
5	256QAM	12	13	18.18	18.25	18.03				
5	256QAM	25	0	18.21	18.38	18.15				

Band 48 Ant 8 DSI3										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				55340	55830	56150	56640			
Frequency (MHz)				3560	3569	3641	3690			
20	QPSK	1	0	19.46	19.63	19.51	19.61			
20	QPSK	1	49	19.40	19.62	19.49	19.52	21	0	
20	QPSK	1	99	19.46	19.61	19.52	19.41			
20	QPSK	50	0	19.36	19.59	19.42	19.47			
20	QPSK	50	24	19.31	19.56	19.39	19.48	21	0	

Reduced Power Mode for DSI4_Main PA

GSM850 Art 0 DSI4	Burst Average Power (dbm)			Tune-up Limit (dbm)	Frame Average Power (dbm)			Tune-up Limit (dbm)
	128	189	251		128	189	251	
TX Channel	834.2	836.4	848.6	834.2	836.4	848.6		
Frequency (MHz)	834.2	836.4	848.6	834.2	836.4	848.6		
DSM 1 Tx slots	32.81	32.85	32.77	34.00	23.61	23.55	23.77	
GPRS 1 Tx slots	32.86	32.76	32.73	34.00	23.68	23.76	23.73	
GPRS 2 Tx slots	29.59	29.61	29.57	31.00	23.59	23.61	23.57	
GPRS 3 Tx slots	27.81	27.66	27.57	29.20	23.35	23.40	23.31	
GPRS 4 Tx slots	26.08	26.17	26.14	28.00	23.08	23.17	23.14	
EDGE 1 Tx slots	25.89	25.93	25.79	27.00	16.89	16.93	16.79	
EDGE 2 Tx slots	23.31	23.40	23.31	24.00	17.31	17.40	17.31	
EDGE 3 Tx slots	21.42	21.53	21.47	22.20	17.16	17.27	17.21	
EDGE 4 Tx slots	19.81	19.85	19.79	21.00	16.81	16.85	16.79	

Band	WCDMA V Art 0 DSI4			Tune-up Limit (dbm)
	4192	4182	4293	
TX Channel	4357	4409	4458	
Frequency (MHz)	836.4	836.4	836.6	
3GPP Rel 99 AMR 12.2Kbps	24.53	24.80	24.49	25.00
3GPP Rel 99 RMC 12.2Kbps	24.62	24.64	24.60	25.00
3GPP Rel 6 HSDPA Subtest-1	23.64	23.67	23.63	24.00
3GPP Rel 6 HSDPA Subtest-2	23.60	23.68	23.58	24.00
3GPP Rel 6 HSDPA Subtest-3	23.06	23.10	23.09	23.50
3GPP Rel 6 HSDPA Subtest-4	23.10	23.20	23.07	23.50
3GPP Rel 6 DCHSDPA Subtest-1	23.67	23.62	23.58	24.00
3GPP Rel 6 DCHSDPA Subtest-2	23.66	23.61	23.58	24.00
3GPP Rel 6 DCHSDPA Subtest-3	23.10	23.10	23.11	23.50
3GPP Rel 6 DCHSDPA Subtest-4	23.17	23.18	23.05	23.50
3GPP Rel 6 HSUPA Subtest-1	23.59	23.58	23.55	24.00
3GPP Rel 6 HSUPA Subtest-2	21.58	21.64	21.63	22.00
3GPP Rel 6 HSUPA Subtest-3	22.88	22.82	22.61	23.00
3GPP Rel 6 HSUPA Subtest-4	21.54	21.60	21.66	22.00
3GPP Rel 6 HSUPA Subtest-5	23.60	23.63	23.54	24.00
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	21.06	21.12	21.05	21.50

GSM850 Ant.1 DS44	Burst Average Power (dbm)			Tune-up Limit (dbm)	Frame Average Power (dbm)			Tune-up Limit (dbm)
	190	199	201		190	199	201	
TX Channel	534.2	538.4	541.8	34.50	24.01	24.00	23.96	25.50
Frequency (MHz)	33.01	33.00	32.98	34.50	24.01	24.00	23.96	25.50
GSM-1 Tx slot	32.86	32.92	32.87	34.50	23.86	23.92	23.87	25.50
GPRS-1 Tx slots	29.81	29.87	29.83	31.50	23.81	23.87	23.83	25.50
GPRS-3 Tx slots	27.83	27.91	27.80	29.70	23.57	23.65	23.54	25.44
GPRS-4 Tx slots	26.53	26.70	26.62	28.50	23.53	23.70	23.62	25.50
EDGE-1 Tx slot	26.04	26.13	26.01	27.50	17.04	17.13	17.01	18.50
EDGE-2 Tx slots	23.45	23.65	23.49	24.50	17.45	17.65	17.49	18.50
EDGE-3 Tx slots	21.59	21.68	21.62	22.70	17.33	17.42	17.38	18.44
EDGE-4 Tx slots	20.04	20.11	19.93	21.50	17.04	17.11	16.93	18.50

Band	WCDMA V. Ant.1 DS44			Tune-up Limit (dbm)
	4132	4182	4233	
TX Channel	4357	4407	4458	
Rx Channel	4357	4407	4458	
Frequency (MHz)	533.4	538.4	543.6	
3GPP Rel 99 RMC 12.2Kbps	23.92	24.00	23.98	25.00
3GPP Rel 99 RMC 12.2Kbps	23.99	24.05	24.01	25.00
3GPP Rel 6 HSDPA Subtest-1	23.05	23.04	23.01	24.00
3GPP Rel 6 HSDPA Subtest-2	22.96	23.01	23.01	24.00
3GPP Rel 6 HSDPA Subtest-3	22.43	22.55	22.52	23.50
3GPP Rel 6 HSDPA Subtest-4	22.48	22.59	22.52	23.50
3GPP Rel 6 DCHSDPA Subtest-1	22.93	23.05	23.05	24.00
3GPP Rel 6 DCHSDPA Subtest-2	23.05	22.99	23.01	24.00
3GPP Rel 6 DCHSDPA Subtest-3	22.48	22.54	22.55	23.50
3GPP Rel 6 DCHSDPA Subtest-4	22.47	22.60	22.54	23.50
3GPP Rel 6 HSUPA Subtest-1	23.03	23.07	22.97	24.00
3GPP Rel 6 HSUPA Subtest-2	20.94	21.05	21.02	22.00
3GPP Rel 6 HSUPA Subtest-3	21.94	21.99	21.97	23.00
3GPP Rel 6 HSUPA Subtest-4	20.95	21.02	21.04	22.00
3GPP Rel 6 HSUPA Subtest-5	23.03	23.09	23.06	24.00
3GPP Rel 7 HSPA+ (E-UTRA) Subtest-1	20.48	20.51	20.45	21.50

GSM1900 Art 2 DS4	Burst Average Power (dbm)			Tune-up Limit (dbm)	Frame Average Power (dbm)			Tune-up Limit (dbm)	
	TX Channel	512	661		810	512	661		810
	Frequency (MHz)	1550.2	1550		1550.8	1550.2	1550		1550.8
GSM-1 Tx slot	29.97	30.10	29.99	31.50	20.97	21.10	20.99	22.50	
GPRS-1 Tx slot	29.98	30.07	30.03	31.50	20.98	21.07	21.03	22.50	
GPRS-2 Tx slots	26.77	26.91	26.84	28.50	20.77	20.91	20.84	22.50	
GPRS-3 Tx slots	24.83	24.93	24.90	26.70	20.57	20.67	20.64	22.44	
GPRS-4 Tx slots	23.53	23.65	23.58	25.50	20.53	20.65	20.56	22.50	
EDGE-1 Tx slot	25.42	25.54	25.40	27.00	16.42	16.54	16.40	18.00	
EDGE-2 Tx slots	22.99	22.78	22.72	24.00	16.99	16.78	16.72	18.00	
EDGE-3 Tx slots	20.87	20.90	20.86	22.20	16.61	16.64	16.60	17.94	
EDGE-4 Tx slots	20.00	20.07	19.96	21.00	17.00	17.07	16.96	18.00	

Band	WCDMA Rev 2 DS4			Tune-up Limit (dbm)	
	TX Channel	1312	1413		1513
	Rx Channel	1537	1638		1738
Frequency (MHz)	1742.4	1742.0	1742.6		
3GPP Rel 99	AMR 12.2Kbps	23.00	23.09	23.50	24.50
3GPP Rel 99	RMC 12.2Kbps	23.03	23.13	23.04	24.50
3GPP Rel 6	HSDPA Subtest-1	21.99	22.10	22.08	23.50
3GPP Rel 6	HSDPA Subtest-2	22.03	22.13	22.10	23.50
3GPP Rel 6	HSDPA Subtest-3	21.53	21.69	21.49	23.00
3GPP Rel 6	HSDPA Subtest-4	21.56	21.61	21.48	23.00
3GPP Rel 8	DCHSDPA Subtest-1	21.98	22.18	22.00	23.50
3GPP Rel 8	DCHSDPA Subtest-2	22.06	22.11	22.09	23.50
3GPP Rel 8	DCHSDPA Subtest-3	21.50	21.60	21.48	23.00
3GPP Rel 8	DCHSDPA Subtest-4	21.58	21.68	21.50	23.00
3GPP Rel 6	HSUPA Subtest-1	22.02	22.07	21.99	23.50
3GPP Rel 6	HSUPA Subtest-2	20.03	20.17	20.07	21.50
3GPP Rel 6	HSUPA Subtest-3	21.06	21.13	21.09	22.50
3GPP Rel 6	HSUPA Subtest-4	20.04	20.18	20.08	21.50
3GPP Rel 6	HSUPA Subtest-5	22.06	22.10	22.03	23.50
3GPP Rel 7	HSPA+ (LTCAM) Subtest-1	18.54	18.60	18.58	21.00

Band	WCDMA II Art.3 DSS4	WCDMA II Art.3 DSS4			Time-up Limit (dBm)	WCDMA IV Art.3 DSS4			Time-up Limit (dBm)
		9652	9600	9558		1512	1513	1515	
TX Channel	9652	9600	9558		1512	1513	1515		
Rx Channel	9652	9600	9558		1517	1533	1738		
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.8		
3GPP Rel 99	AMR 12.2Kbps	24.34	24.41	24.37	25.00	23.94	24.00	23.92	25.00
3GPP Rel 99	AMR 12.2Kbps	24.44	24.54	24.50	25.00	23.98	24.03	23.96	25.00
3GPP Rel 6	HSDPA Subtest-1	23.44	23.52	23.49	24.00	22.94	23.06	22.90	24.00
3GPP Rel 6	HSDPA Subtest-2	23.43	23.55	23.51	24.00	23.00	22.97	23.00	24.00
3GPP Rel 6	HSDPA Subtest-3	22.89	22.99	22.97	23.50	22.52	22.58	22.50	23.50
3GPP Rel 6	HSDPA Subtest-4	22.95	23.03	22.98	23.50	22.47	22.55	22.48	23.50
3GPP Rel 6	DC-HSDPA Subtest-1	23.48	23.57	23.50	24.00	23.00	23.04	23.02	24.00
3GPP Rel 6	DC-HSDPA Subtest-2	23.46	23.57	23.51	24.00	22.94	23.06	22.91	24.00
3GPP Rel 6	DC-HSDPA Subtest-3	22.93	23.05	23.04	23.50	22.50	22.56	22.48	23.50
3GPP Rel 6	DC-HSDPA Subtest-4	22.93	22.99	22.98	23.50	22.48	22.53	22.48	23.50
3GPP Rel 6	HSPA Subtest-1	23.49	23.59	23.45	24.00	22.93	23.00	22.99	24.00
3GPP Rel 6	HSPA Subtest-2	21.47	21.53	21.48	22.00	20.99	20.99	20.93	22.00
3GPP Rel 6	HSPA Subtest-3	22.43	22.59	22.55	23.00	22.02	22.01	21.92	23.00
3GPP Rel 6	HSPA Subtest-4	21.49	21.58	21.48	22.00	20.98	20.98	20.93	22.00
3GPP Rel 6	HSPA Subtest-5	23.44	23.51	23.47	24.00	22.97	23.09	22.98	24.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	20.91	20.99	20.97	21.50	20.48	20.57	20.42	21.50



Appendix E

GSM1900 Ant 5 DS4	Burst Average Power (dbm)			Tune-up Limit (dbm)	Frame Average Power (dbm)			Tune-up Limit (dbm)
	512	661	810		512	661	810	
TX Channel	1532.2	1830	1939.8	22.00	1722.4	1723.2	1723.5	22.00
Frequency (MHz)	1532.2	1830	1939.8	22.00	1722.4	1723.2	1723.5	22.00
GSM-1 Tx slot	30.00	30.05	29.98	31.00	21.00	21.05	20.96	22.00
GPRS-1 Tx slot	29.94	30.00	29.90	31.00	20.94	21.00	20.90	22.00
GPRS-2 Tx slots	26.85	26.90	26.86	28.00	20.85	20.90	20.86	22.00
GPRS-3 Tx slots	24.87	24.94	24.88	26.20	20.81	20.88	20.82	21.94
GPRS-4 Tx slots	23.60	23.65	23.61	25.00	20.60	20.65	20.61	22.00
EDGE-1 Tx slot	25.46	25.48	25.40	27.00	16.46	16.48	16.40	18.00
EDGE-2 Tx slots	22.55	22.66	22.59	24.00	16.55	16.66	16.59	18.00
EDGE-3 Tx slots	21.08	21.10	20.98	22.20	16.82	16.84	16.72	17.94
EDGE-4 Tx slots	20.45	20.54	20.40	21.00	17.45	17.54	17.40	18.00

Band	WCDMA II Ant 6 DS4			Tune-up Limit (dbm)	WCDMA II Ant 5 DS4			Tune-up Limit (dbm)
	9262	9400	9538		1312	1413	1513	
TX Channel	9662	9800	9938	22.00	1722.4	1723.2	1723.5	22.00
Rx Channel	9662	9800	9938	22.00	1722.4	1723.2	1723.5	22.00
Frequency (MHz)	1532.2	1830	1939.8	22.00	1722.4	1723.2	1723.5	22.00
3GPP Rel 99	AMR 12.2kops	20.99	21.09	21.13	22.00	20.90	20.78	20.71
3GPP Rel 99	RMC 12.2kops	21.14	21.15	21.11	22.00	20.78	20.87	20.74
3GPP Rel 6	HSDPA Subtest-1	20.11	20.21	20.08	21.00	19.79	19.82	19.78
3GPP Rel 6	HSDPA Subtest-2	20.13	20.17	20.20	21.00	19.75	19.77	19.74
3GPP Rel 6	HSDPA Subtest-3	19.58	19.66	19.69	20.50	19.29	19.32	19.19
3GPP Rel 6	HSDPA Subtest-4	19.57	19.73	19.65	20.50	19.27	19.33	19.21
3GPP Rel 8	DCHSDPA Subtest-1	20.16	20.22	20.09	21.00	19.65	19.74	19.69
3GPP Rel 8	DCHSDPA Subtest-2	20.15	20.27	20.11	21.00	19.74	19.86	19.86
3GPP Rel 8	DCHSDPA Subtest-3	19.59	19.65	19.62	20.50	19.19	19.32	19.25
3GPP Rel 8	DCHSDPA Subtest-4	19.55	19.64	19.58	20.50	19.27	19.31	19.28
3GPP Rel 6	HSUPA Subtest-1	20.14	20.17	20.12	21.00	19.66	19.81	19.71
3GPP Rel 6	HSUPA Subtest-2	18.07	18.17	18.13	19.00	17.84	17.81	17.84
3GPP Rel 6	HSUPA Subtest-3	19.13	19.20	19.15	20.00	18.83	19.86	19.72
3GPP Rel 6	HSUPA Subtest-4	18.15	18.24	18.05	19.00	17.65	17.83	17.72
3GPP Rel 6	HSUPA Subtest-5	20.15	20.18	20.10	21.00	19.77	19.72	19.82
3GPP Rel 7	HSPA+ (LTCAM) Subtest-1	17.58	17.67	17.62	18.50	17.21	17.39	17.33

Band 5 Ant 0 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				2626	2626	2626			
Frequency (MHz)				829	836.5	844			
10	QPSK	1	0	24.29	24.51	24.22			
10	QPSK	1	25	24.45	24.43	24.31	24.7	0	
10	QPSK	1	49	24.41	24.44	24.30			
10	QPSK	25	0	24.37	24.42	24.34			
10	QPSK	25	12	24.41	24.43	24.30	24.7	0	
10	QPSK	25	25	24.38	24.34	24.23			
10	QPSK	50	0	24.39	24.39	24.23			
10	16QAM	1	0	24.30	24.40	24.26			
10	16QAM	1	25	24.36	24.43	24.27	24.7	0	
10	16QAM	1	49	24.45	24.47	24.23			
10	16QAM	25	0	23.33	23.51	23.30			
10	16QAM	25	12	23.34	23.40	23.14	23.7	1	
10	16QAM	25	25	23.34	23.52	23.27			
10	16QAM	50	0	23.31	23.56	23.30			
10	64QAM	1	0	23.24	23.41	23.21			
10	64QAM	1	25	23.37	23.46	23.22	23.7	1	
10	64QAM	1	49	23.34	23.50	23.14			
10	64QAM	25	0	22.37	22.44	22.16			
10	64QAM	25	12	22.21	22.38	22.20			
10	64QAM	25	25	22.36	22.15	22.15	22.7	2	
10	64QAM	50	0	22.36	22.54	22.22			
10	256QAM	1	0	20.22	20.42	20.19			
10	256QAM	1	25	20.34	20.53	20.30	20.7	4	
10	256QAM	1	49	20.30	20.43	20.31			
10	256QAM	25	0	20.24	20.43	20.18			
10	256QAM	25	12	20.37	20.42	20.18	20.7	4	
10	256QAM	25	25	20.24	20.39	20.17			
10	256QAM	50	0	20.28	20.49	20.22			
Channel				2626	2626	2626			
Frequency (MHz)				826.5	836.5	846.5			
5	QPSK	1	0	24.25	24.30	24.10			
5	QPSK	1	14	24.28	24.34	24.19	24.7	0	
5	QPSK	1	24	24.39	24.34	24.18			
5	QPSK	12	0	24.20	24.35	24.27			
5	QPSK	12	7	24.38	24.24	24.27	24.7	0	
5	QPSK	12	13	24.22	24.21	24.17			
5	QPSK	25	0	24.25	24.36	24.09			
5	16QAM	1	0	23.18	23.31	23.25			
5	16QAM	1	12	24.29	24.28	24.23	24.7	0	
5	16QAM	1	24	24.44	24.37	24.14			
5	16QAM	12	0	23.18	23.45	23.22			
5	16QAM	12	7	23.25	23.37	23.08	23.7	1	
5	16QAM	12	13	23.18	23.29	23.23			
5	16QAM	25	0	23.23	23.48	23.20			
5	64QAM	1	0	23.21	23.25	23.08			
5	64QAM	1	12	23.27	23.37	23.17	23.7	1	
5	64QAM	1	24	23.28	23.36	23.10			
5	64QAM	12	0	22.24	22.38	22.01			
5	64QAM	12	7	22.35	22.29	22.01	22.7	2	
5	64QAM	12	13	22.16	22.42	22.02			
5	64QAM	25	0	22.34	22.45	22.06			
5	256QAM	1	0	20.08	20.27	20.11			
5	256QAM	1	12	20.30	20.42	20.29	20.7	4	
5	256QAM	1	24	20.28	20.36	20.14			
5	256QAM	12	0	20.11	20.25	20.10			
5	256QAM	12	7	20.26	20.35	20.10	20.7	4	
5	256QAM	12	13	20.17	20.33	20.12			
5	256QAM	25	0	20.22	20.39	20.19			
Channel				2616	2626	2636			
Frequency (MHz)				821.5	831.5	841.5			
3	QPSK	1	0	24.23	24.30	24.20			
3	QPSK	1	8	24.39	24.34	24.19	24.7	0	
3	QPSK	1	14	24.27	24.33	24.21			
3	QPSK	8	0	24.30	24.27	24.21			
3	QPSK	8	4	24.33	24.42	24.13	24.7	0	
3	QPSK	8	7	24.18	24.26	24.13			
3	QPSK	15	0	24.27	24.20	24.06			
3	16QAM	1	0	24.19	24.29	24.24			
3	16QAM	1	8	24.20	24.28	24.09	24.7	0	
3	16QAM	1	14	24.43	24.40	24.07			
3	16QAM	8	0	22.36	22.40	22.13			
3	16QAM	8	4	23.30	23.32	23.07			
3	16QAM	8	7	23.25	23.43	23.15	23.7	1	
3	16QAM	15	0	23.17	23.46	23.15			
3	64QAM	1	0	23.18	23.37	23.17			
3	64QAM	1	8	23.21	23.34	23.13	23.7	1	
3	64QAM	1	14	23.32	23.35	23.10			
3	64QAM	8	0	22.30	22.38	21.97			
3	64QAM	8	4	22.06	22.35	22.08	22.7	2	
3	64QAM	8	7	22.26	22.44	22.11			
3	64QAM	15	0	22.35	22.40	22.08			
3	256QAM	1	0	20.10	20.39	20.08			
3	256QAM	1	8	20.26	20.43	20.13	20.7	4	
3	256QAM	1	14	20.28	20.31	20.25			
3	256QAM	8	0	20.10	20.39	20.07			
3	256QAM	8	4	20.27	20.34	20.16	20.7	4	
3	256QAM	8	7	20.14	20.37	20.14			
3	256QAM	15	0	20.21	20.42	20.13			
Channel				2607	2626	2643			
Frequency (MHz)				824.7	836.5	848.3			
1.4	QPSK	1	0	24.19	24.40	24.13			
1.4	QPSK	1	3	24.37	24.37	24.23			
1.4	QPSK	1	5	24.30	24.37	24.17	24.7	0	
1.4	QPSK	3	0	24.18	24.41	24.21			
1.4	QPSK	3	3	24.29	24.24	24.23			
1.4	QPSK	3	3	24.23	24.19	24.19	24.7	0.5	
1.4	QPSK	6	0	24.37	24.30	24.05	24.7	0	
1.4	16QAM	1	0	24.22	24.23	24.11			
1.4	16QAM	1	3	24.31	24.41	24.17			
1.4	16QAM	1	14	24.33	24.31	24.14	24.7	0	
1.4	16QAM	3	0	23.16	23.47	23.16			
1.4	16QAM	3	1	23.19	23.35	23.05			
1.4	16QAM	3	3	23.28	23.41	23.25			
1.4	16QAM	6	0	23.13	23.42	23.27	23.7	1	
1.4	64QAM	1	0	23.13	23.30	23.07			
1.4	64QAM	1	3	23.25	23.32	23.18			
1.4	64QAM	1	5	23.32	23.38	23.02	23.7	1	
1.4	64QAM	3	0	22.36	22.29	22.14			
1.4	64QAM	3	1	22.14	22.28	22.13			
1.4	64QAM	3	3	22.24	22.54	22.15			
1.4	64QAM	6	0	22.28	22.47	22.19	22.7	2	
1.4	256QAM	1	0	20.21	20.38	20.15			
1.4	256QAM	1	3	20.27	20.45	20.25			
1.4	256QAM	1	5	20.11	20.41	20.16	20.7	4	
1.4	256QAM	3	0	20.07	20.28	20.04			
1.4	256QAM	3	1	20.26	20.40	20.00			
1.4	256QAM	3	3	20.18	20.23	20.08			
1.4	256QAM	6	0	20.24	20.40	20.12	20.7	4	

Band 26 Ant 0 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				2626	2626	2626			
Frequency (MHz)				821.5	831.5	841.5			
15	QPSK	1	0	24.78	24.91	24.89			
15	QPSK	1	37	24.84	24.87	24.67	25.2	0	
15	QPSK	1	74	24.84	24.81	24.74			
15	QPSK	36	0	23.73	23.99	23.93			
15	QPSK	36	20	23.81	23.87	23.68	24.7	0.5	
15	QPSK	36	39	23.66	23.67	23.71			
15	QPSK	75	0	23.80	23.81	23.80			
15	16QAM	1	0	23.83	23.75	23.70			
15	16QAM	1	37	23.81	23.78	23.71	24.7	0.5	
15	16QAM	1	74	23.48	23.76	23.59			
15	16QAM	36	0	22.80	22.95	22.93			
15	16QAM	36	20	22.72	23.01	22.72	23.7	1.5	
15	16QAM	36	39	22.80	22.88	22.70			
15	16QAM	75	0	22.83	22.92	22.87</			

Band 5 Ant 1 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 2656	Power Middle Ch. / Freq. 2626	Power High Ch. / Freq. 2666	Tune-up limit (dBm)	MPR (dB)	
Channel				829	836.5	844			
Frequency (MHz)									
10	QPSK	1	0	24.61	24.63	24.59			
10	QPSK	1	25	24.53	24.58	24.52	25.7	0	
10	QPSK	1	49	24.61	24.56	24.56			
10	QPSK	25	0	23.58	23.60	23.48			
10	QPSK	25	12	23.55	23.60	23.48	24.7	1	
10	QPSK	25	25	23.55	23.62	23.61			
10	QPSK	50	0	23.59	23.65	23.63			
10	16QAM	1	0	23.58	23.61	23.61	24.7	1	
10	16QAM	1	25	23.40	23.49	23.45			
10	16QAM	1	49	23.45	23.53	23.56			
10	16QAM	25	0	22.56	22.71	22.60			
10	16QAM	25	12	22.58	22.56	22.51	23.7	2	
10	16QAM	25	25	22.52	22.58	22.62			
10	16QAM	50	0	22.55	22.70	22.59			
10	64QAM	1	0	22.56	22.63	22.65	23.7	2	
10	64QAM	1	25	22.42	22.48	22.47			
10	64QAM	1	49	22.43	22.57	22.57			
10	64QAM	25	0	21.62	21.72	21.65			
10	64QAM	25	12	21.60	21.62	21.50	22.7	3	
10	64QAM	25	25	21.57	21.57	21.62			
10	64QAM	50	0	21.55	21.61	21.59			
10	256QAM	1	0	19.56	19.70	19.67	20.7	5	
10	256QAM	1	25	19.50	19.60	19.50			
10	256QAM	1	49	19.55	19.62	19.66			
10	256QAM	25	0	19.61	19.59	19.66			
10	256QAM	25	12	19.62	19.62	19.62	20.7	5	
10	256QAM	25	25	19.51	19.46	19.41			
10	256QAM	50	0	19.48	19.57	19.51			
Channel				2626	2626.5	2626.5	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				836.5	836.5	846.5			
5	QPSK	1	0	24.54	24.52	24.50			
5	QPSK	1	12	24.46	24.46	24.44	25.7	0	
5	QPSK	1	24	24.54	24.45	24.45			
5	QPSK	12	0	23.51	23.62	23.54			
5	QPSK	12	7	23.48	23.47	23.39	24.7	1	
5	QPSK	12	13	23.47	23.51	23.54			
5	QPSK	25	0	23.47	23.53	23.52			
5	16QAM	1	0	23.47	23.48	23.55	24.7	1	
5	16QAM	1	12	23.42	23.41	23.32			
5	16QAM	1	24	23.38	23.41	23.47			
5	16QAM	12	0	22.52	22.63	22.57			
5	16QAM	12	7	22.46	22.43	22.48	23.7	2	
5	16QAM	12	13	22.43	22.46	22.58			
5	16QAM	25	0	22.41	22.88	22.45			
5	64QAM	1	0	22.46	22.50	22.60	23.7	2	
5	64QAM	1	12	22.35	22.43	22.35			
5	64QAM	1	24	22.38	22.44	22.46			
5	64QAM	12	0	21.51	21.66	21.62			
5	64QAM	12	7	21.56	21.58	21.44	22.7	3	
5	64QAM	12	13	21.52	21.45	21.59			
5	64QAM	25	0	21.44	21.55	21.54			
5	256QAM	1	0	19.51	19.67	19.57	20.7	5	
5	256QAM	1	12	19.40	19.49	19.39			
5	256QAM	1	24	19.47	19.50	19.60			
5	256QAM	12	0	19.58	19.55	19.61			
5	256QAM	12	7	19.54	19.58	19.49	20.7	5	
5	256QAM	12	13	19.38	19.41	19.35			
5	256QAM	25	0	19.36	19.33	19.46			
Channel				2616	2626.5	2626.5	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				836.5	836.5	846.5			
3	QPSK	1	0	24.50	24.50	24.54			
3	QPSK	1	8	24.43	24.45	24.50	25.7	0	
3	QPSK	1	14	24.55	24.45	24.50			
3	QPSK	8	0	23.47	23.56	23.55			
3	QPSK	8	4	23.48	23.47	23.34	24.7	1	
3	QPSK	8	7	23.53	23.46	23.56			
3	QPSK	15	0	23.50	23.53	23.54			
3	16QAM	1	0	23.47	23.50	23.50	24.7	1	
3	16QAM	1	8	23.35	23.43	23.36			
3	16QAM	1	14	23.40	23.40	23.51			
3	16QAM	8	0	22.46	22.65	22.48			
3	16QAM	8	4	22.50	22.58	22.40	23.7	2	
3	16QAM	8	7	22.43	22.53	22.58			
3	16QAM	15	0	22.42	22.66	22.54			
3	64QAM	1	0	22.52	22.49	22.61	23.7	2	
3	64QAM	1	8	22.29	22.36	22.42			
3	64QAM	1	14	22.36	22.46	22.47			
3	64QAM	8	0	21.54	21.68	21.63			
3	64QAM	8	4	21.53	21.53	21.47	22.7	3	
3	64QAM	8	7	21.47	21.50	21.55			
3	64QAM	15	0	21.42	21.58	21.47			
3	256QAM	1	0	19.46	19.64	19.57	20.7	5	
3	256QAM	1	8	19.46	19.53	19.46			
3	256QAM	1	14	19.52	19.57	19.60			
3	256QAM	8	0	19.53	19.48	19.58	20.7	5	
3	256QAM	8	4	19.50	19.57	19.56			
3	256QAM	8	7	19.48	19.39	19.30			
3	256QAM	15	0	19.40	19.57	19.47			
Channel				2607	2626.5	2626.5	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				829.7	836.5	848.3			
1.4	QPSK	1	0	24.51	24.54	24.46			
1.4	QPSK	1	3	24.51	24.50	24.44	25.7	0	
1.4	QPSK	1	5	24.51	24.45	24.51			
1.4	QPSK	3	0	24.38	24.46	24.40			
1.4	QPSK	3	1	24.38	24.47	24.33	24.7	1	
1.4	QPSK	3	3	24.46	24.38	24.41			
1.4	QPSK	6	0	23.55	23.56	23.50	24.7	1	
1.4	16QAM	1	0	23.52	23.50	23.58			
1.4	16QAM	1	3	23.34	23.43	23.43			
1.4	16QAM	1	14	23.32	23.46	23.47	24.7	1	
1.4	16QAM	3	0	23.45	23.48	23.42			
1.4	16QAM	3	1	23.47	23.42	23.53			
1.4	16QAM	3	3	23.27	23.37	23.33			
1.4	16QAM	6	0	22.47	22.59	22.45	23.7	2	
1.4	64QAM	1	0	22.51	22.60	22.62			
1.4	64QAM	1	3	22.31	22.41	22.39	24.7	3	
1.4	64QAM	1	5	22.33	22.54	22.44			
1.4	64QAM	3	0	22.36	22.56	22.31	23.7	2	
1.4	64QAM	3	1	22.37	22.51	22.55			
1.4	64QAM	3	3	22.25	22.37	22.34			
1.4	256QAM	1	0	19.53	19.66	19.57	22.7	3	
1.4	256QAM	1	3	19.36	19.46	19.40			
1.4	256QAM	1	5	19.51	19.48	19.54			
1.4	256QAM	3	0	19.48	19.56	19.63	20.7	5	
1.4	256QAM	3	1	19.52	19.49	19.53			
1.4	256QAM	3	3	19.40	19.44	19.33			
1.4	256QAM	6	0	19.35	19.44	19.39	20.7	5	

Band 26 Ant 1 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 2656	Power Middle Ch. / Freq. 2666	Power High Ch. / Freq. 2666	Tune-up limit (dBm)	MPR (dB)	
Channel				821.5	831.5	841.5			
Frequency (MHz)									
15	QPSK	1	0	24.57	24.58	24.51			
15	QPSK	1	37	24.50	24.54	24.46	25.7	0	
15	QPSK	1	74	24.55	24.50	24.49			
15	QPSK	36	0	23.53	23.59	23.63			
15	QPSK	36	20	23.55	23.61	23.38	24.7	1	
15	QPSK	36	39	23.51	23.55	23.59			
15	QPSK	75	0	23.55	23.60	23.54			
15	16QAM	1	0	23.51	23.60	23.55	24.7	1	
15	16QAM	1	37	23.37	23.46	23.40			
15	16QAM	1	74	23.35	23.53	23.53			
15	16QAM	36	0	22.48	22.69	22.60			
15	16QAM	36	20	22.54	22.53	22.50	23.7	2	
15	16QAM	36	39	22.47	22.50	22.55			
15	16QAM	75	0	22.54	22.60	22.56			
15	64QAM	1	0	22.49	22.57	22.56	23.7	2	
15	64QAM	1	37	22.41	22.38	22.42			
15	64QAM	1	74	22.43	22.52	22.57			
15	64QAM	36	0	21.60	21.64	21.60			
15	64QAM	36	20	21.55	21.55	21.47	22.7	3	
15	64QAM	36	39	21.51	21.47	21.57			
15	64QAM	75	0	21.52	21.58	21.50			
15	256QAM	1	0	19.56	19.61	19.60	20.7	5	
15	256QAM	1	37	19.50	19.53	19.44			
15	256QAM	1	74	19.54	19.56	19.61			
15	256QAM	36	0	19.53	19.58	19.64			
15	256QAM	36	20	19.61	19.50	19.55	20.7	5	
15	256QAM	36	39	19.40	19.44	19.30			
15	256QAM	75	0	19.45	19.47	19.48			
Channel				26740	26665	26990	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				819	831.5	844			
10	QPSK	1	0	24.48	24.52	24.43			
10	QPSK	1	25	24.43	24.49	24.35	25.7	0	
10	QPSK	1	49	24.52	24.40	24.48			
10	QPSK	25	0	23.					



Band 2 Ant 2 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch./F.Freq.	Power Hch./F.Freq.	Power Lch./F.Freq.	Turn-up (min)	MFR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	23.22	23.24	23.13			
20	QPSK	1	6	23.17	23.19	23.08			
20	QPSK	50	0	23.23	23.30	23.11			
20	QPSK	50	6	23.25	23.32	23.13			
20	QPSK	50	12	23.18	23.24	23.04			
20	QPSK	100	0	23.21	23.29	23.17			
20	QPSK	100	6	23.27	23.33	23.18			
20	HQAM	1	49	22.24	22.24	22.09	24	1	
20	HQAM	1	59	22.23	22.23	22.11			
20	HQAM	50	0	22.24	22.24	22.11			
20	HQAM	50	24	21.19	21.25	21.05			
20	HQAM	50	50	21.19	21.24	21.03			
20	HQAM	100	0	21.21	21.24	21.02			
20	HQAM	100	6	21.23	21.27	21.07			
20	HQAM	1	49	21.13	21.29	21.08			
20	HQAM	1	59	21.20	21.28	21.05			
20	HQAM	50	0	20.26	20.33	20.13			
20	HQAM	50	24	20.14	20.19	20.01			
20	HQAM	50	50	20.15	20.18	20.00			
20	HQAM	100	0	20.15	20.34	20.19			
20	HQAM	100	6	20.16	20.23	20.14			
20	HQAM	1	49	18.20	18.29	18.07			
20	HQAM	1	59	18.22	18.24	18.03			
20	HQAM	50	0	18.24	18.26	18.06			
20	HQAM	50	24	18.20	18.24	18.03			
20	HQAM	50	50	18.09	18.25	18.09			
20	HQAM	100	0	18.27	18.29	18.08			
Channel									
Frequency (MHz)									
16	QPSK	1	0	18.07	18.00	18.13			
16	QPSK	1	6	23.20	23.22	23.11			
16	QPSK	1	12	23.17	23.17	23.06			
16	QPSK	1	18	23.19	23.11	23.00			
16	QPSK	36	0	22.21	22.21	22.10			
16	QPSK	36	6	22.27	22.27	22.16			
16	QPSK	36	12	22.13	22.20	22.06			
16	QPSK	72	0	22.16	22.11	22.00			
16	QPSK	72	6	22.22	22.21	22.10			
16	HQAM	1	37	22.18	22.27	22.06			
16	HQAM	1	47	22.16	22.25	22.04			
16	HQAM	36	0	21.15	21.21	21.08			
16	HQAM	36	20	21.19	21.27	21.01			
16	HQAM	36	36	21.19	21.28	21.02			
16	HQAM	72	0	21.18	21.28	21.03			
16	HQAM	1	0	21.21	21.26	21.08			
16	HQAM	1	10	21.23	21.28	21.09			
16	HQAM	1	20	21.19	21.25	21.04			
16	HQAM	36	0	20.18	20.31	20.14			
16	HQAM	36	20	20.19	20.30	20.03			
16	HQAM	36	36	20.21	20.13	20.01			
16	HQAM	72	0	20.17	20.30	20.06			
16	HQAM	72	6	20.18	20.26	20.07			
16	HQAM	72	12	18.13	18.22	18.05			
16	HQAM	1	37	18.17	18.20	18.13			
16	HQAM	1	47	18.17	18.20	18.13			
16	HQAM	36	0	18.20	18.20	18.04			
16	HQAM	36	20	18.20	18.20	18.04			
16	HQAM	36	36	18.04	18.23	18.01			
16	HQAM	72	0	18.13	18.20	18.03			
Channel									
Frequency (MHz)									
10	QPSK	1	0	18.00	18.00	18.00			
10	QPSK	1	6	23.20	23.14	23.11			
10	QPSK	1	12	23.17	23.14	23.11			
10	QPSK	1	18	23.19	23.16	23.06			
10	QPSK	36	0	22.21	22.21	22.10			
10	QPSK	36	6	22.27	22.27	22.16			
10	QPSK	36	12	22.13	22.20	22.06			
10	HQAM	1	0	22.24	22.25	22.08			
10	HQAM	1	25	22.17	22.21	22.03			
10	HQAM	1	49	22.16	22.25	22.04			
10	HQAM	36	0	21.24	21.20	21.03			
10	HQAM	36	12	21.11	21.17	21.05			
10	HQAM	36	24	21.10	21.17	21.02			
10	HQAM	72	0	21.19	21.27	21.04			
10	HQAM	1	0	21.20	21.20	21.04			
10	HQAM	1	10	21.21	21.30	21.11			
10	HQAM	25	0	20.25	20.31	20.07			
10	HQAM	25	12	20.20	20.20	20.02			
10	HQAM	25	24	20.16	20.26	20.15			
10	HQAM	72	0	18.11	18.20	18.10			
10	HQAM	72	6	18.17	18.16	18.03			
10	HQAM	72	12	18.13	18.20	18.07			
10	HQAM	25	0	18.27	18.18	18.00			
10	HQAM	25	12	18.27	18.18	18.00			
10	HQAM	25	24	18.00	18.28	18.08			
10	HQAM	72	0	18.00	18.19	18.00			
Channel									
Frequency (MHz)									
5	QPSK	1	0	18.00	18.00	18.00			
5	QPSK	1	6	23.12	23.16	23.08			
5	QPSK	1	12	23.12	23.16	23.08			
5	QPSK	1	18	23.19	23.16	23.06			
5	QPSK	36	0	22.21	22.21	22.10			
5	QPSK	36	6	22.27	22.26	22.09			
5	QPSK	36	12	22.13	22.20	22.06			
5	HQAM	1	0	22.20	22.19	22.03			
5	HQAM	1	12	22.13	22.17	22.00			
5	HQAM	1	24	21.17	21.19	21.06			
5	HQAM	1	36	21.16	21.27	21.04			
5	HQAM	1	48	21.19	21.27	21.04			
5	HQAM	36	0	20.25	20.28	20.04			
5	HQAM	36	12	20.20	20.11	20.00			
5	HQAM	36	24	20.16	20.20	20.00			
5	HQAM	72	0	18.11	18.20	18.10			
5	HQAM	72	6	18.17	18.16	18.03			
5	HQAM	72	12	18.13	18.20	18.07			
5	HQAM	25	0	18.27	18.18	18.00			
5	HQAM	25	12	18.27	18.18	18.00			
5	HQAM	25	24	18.00	18.28	18.08			
5	HQAM	72	0	18.00	18.19	18.00			
Channel									
Frequency (MHz)									
3	QPSK	1	0	18.00	18.00	18.00			
3	QPSK	1	6	23.12	23.16	23.08			
3	QPSK	1	12	23.12	23.16	23.08			
3	QPSK	1	18	23.19	23.16	23.06			
3	QPSK	36	0	22.21	22.21	22.10			
3	QPSK	36	6	22.27	22.26	22.09			
3	QPSK	36	12	22.13	22.20	22.06			
3	HQAM	1	0	22.20	22.19	22.03			
3	HQAM	1	12	22.13	22.17	22.00			
3	HQAM	1	24	21.17	21.19	21.06			
3	HQAM	1	36	21.16	21.27	21.04			
3	HQAM	1	48	21.19	21.27	21.04			
3	HQAM	36	0	20.25	20.28	20.04			
3	HQAM	36	12	20.20	20.11	20.00			
3	HQAM	36	24	20.16	20.20	20.00			
3	HQAM	72	0	18.11	18.20	18.10			
3	HQAM	72	6	18.17	18.16	18.03			
3	HQAM	72	12	18.13	18.20	18.07			
3	HQAM	25	0	18.27	18.18	18.00			
3	HQAM	25	12	18.27	18.18	18.00			
3	HQAM	25	24	18.00	18.28	18.08			
3	HQAM	72	0	18.00	18.19	18.00			
Channel									
Frequency (MHz)									
1.4	QPSK	1	0	18.00	18.00	18.00			
1.4	QPSK	1	6	23.22	23.14	23.15			
1.4	QPSK	1	12	23.17	23.14	23.11			
1.4	QPSK	1	18	23.19	23.16	23.06			
1.4	QPSK	36	0	22.21	22.21	22.10			
1.4	QPSK	36	6	22.27	22.27	22.16			
1.4	QPSK	36	12	22.13	22.20	22.06			
1.4	HQAM	1	0	22.20	22.21	22.03			
1.4	HQAM	1	12	22.13	22.17	22.00			
1.4	HQAM	1	24	21.17	21.19	21.06			
1.4	HQAM	1	36	21.16					



Band 2 Ant 3 DS14										
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch./F.Freq.	Power Hg./Ch.F.Freq.	Power Lg./Ch.F.Freq.	Turn-up (dB)	MFR (dB)		
20	QPSK	1	0	24.17	24.22	24.15			25.5	0
20	QPSK	1	66	24.07	24.16	24.06				
20	QPSK	50	0	23.17	23.26	23.17			24.5	1
20	QPSK	50	66	23.08	23.12	23.03				
20	QPSK	50	132	23.08	23.19	23.04				
20	QPSK	100	0	22.18	22.33	22.11			24.5	1
20	QPSK	100	66	22.11	22.18	22.06				
20	16QAM	1	49	22.18	22.18	22.15			24.5	1
20	16QAM	1	99	22.08	22.12	22.01				
20	16QAM	50	24	22.10	22.18	22.12			23.5	2
20	16QAM	50	74	22.08	22.10	22.06				
20	16QAM	100	0	22.08	22.10	22.06				
20	16QAM	100	66	22.18	22.26	22.18			23.5	2
20	16QAM	100	132	22.11	22.10	22.07				
20	16QAM	50	0	21.17	21.29	21.16			22.5	3
20	16QAM	50	24	21.02	21.07	21.06				
20	16QAM	50	74	21.08	21.09	21.03				
20	16QAM	100	0	21.18	21.23	21.09				
20	25QAM	1	69	19.27	19.28	19.27			20.5	5
20	25QAM	1	119	19.28	19.21	19.05				
20	25QAM	50	24	19.28	19.21	19.05				
20	25QAM	50	74	19.11	19.19	19.20			20.5	5
20	25QAM	50	119	19.08	19.12	19.17				
20	25QAM	100	0	19.08	19.08	19.06				
20	25QAM	100	66	19.08	19.08	19.06				
20	25QAM	100	132	19.08	19.08	19.06				
15	QPSK	1	0	24.14	24.12	24.21			25.5	0
15	QPSK	1	74	24.04	24.06	24.03				
15	QPSK	36	0	23.04	23.21	23.07			24.5	1
15	QPSK	36	36	22.98	23.17	22.93				
15	QPSK	36	72	22.95	23.13	22.99				
15	16QAM	1	37	22.09	22.15	22.08			24.5	1
15	16QAM	1	74	22.02	22.08	22.09				
15	16QAM	36	0	22.07	22.22	22.15			23.5	2
15	16QAM	36	36	22.00	22.11	22.00				
15	16QAM	36	72	22.02	22.07	22.05				
15	16QAM	75	0	22.10	22.24	21.97			23.5	2
15	16QAM	75	36	22.10	22.14	22.08				
15	16QAM	75	72	22.02	22.15	22.04				
15	16QAM	36	0	21.08	21.21	21.05			22.5	3
15	16QAM	36	36	21.08	21.23	21.06				
15	16QAM	36	72	21.05	21.17	21.03				
15	16QAM	75	0	21.04	21.15	21.02				
15	25QAM	1	37	19.28	19.30	19.20			20.5	5
15	25QAM	1	74	19.28	19.28	19.23				
15	25QAM	36	0	19.24	19.27	19.12			20.5	5
15	25QAM	36	36	19.24	19.29	19.25				
15	25QAM	75	0	19.28	19.28	19.25				
15	25QAM	75	36	19.28	19.28	19.25				
15	25QAM	75	72	19.28	19.28	19.25				
10	QPSK	1	0	24.07	24.07	24.07			25.5	0
10	QPSK	1	25	24.02	24.01	24.01				
10	QPSK	1	49	23.95	24.14	23.99			24.5	1
10	QPSK	25	0	23.95	24.05	23.95				
10	QPSK	25	12	23.98	24.08	23.94			24.5	1
10	QPSK	25	25	23.88	24.06	24.03				
10	QPSK	25	37	23.91	24.05	23.99				
10	16QAM	1	0	24.04	24.06	24.04			24.5	1
10	16QAM	1	25	23.98	24.00	24.01				
10	16QAM	1	49	23.91	24.01	23.91			24.5	1
10	16QAM	25	0	23.90	23.98	23.91				
10	16QAM	25	12	23.90	23.91	23.87			23.5	2
10	16QAM	25	25	23.90	23.92	23.85				
10	16QAM	25	37	23.98	23.98	23.95				
10	16QAM	50	0	23.98	23.98	23.95				
10	16QAM	50	12	23.98	23.98	23.94			23.5	2
10	16QAM	50	25	23.97	23.98	23.94				
10	16QAM	50	37	23.98	23.97	23.97				
10	16QAM	25	0	23.92	24.05	23.94			24.5	1
10	16QAM	25	12	23.91	23.98	23.95				
10	16QAM	25	25	23.91	23.92	23.87			23.5	2
10	16QAM	25	37	23.98	23.98	23.95				
10	16QAM	50	0	23.92	23.98	23.94			23.5	2
10	16QAM	50	12	23.92	23.94	23.92				
10	16QAM	50	25	23.92	23.94	23.92				
10	16QAM	50	37	23.98	23.97	23.97				
10	16QAM	25	0	23.83	24.05	23.99			24.5	1
10	16QAM	25	12	23.81	23.98	23.95				
10	16QAM	25	25	23.81	23.92	23.87			23.5	2
10	16QAM	25	37	23.98	23.98	23.95				
10	16QAM	50	0	23.88	24.01	23.94			24.5	1
10	16QAM	50	12	23.88	23.94	23.96				
10	16QAM	50	25	23.88	23.94	23.96				
10	16QAM	50	37	23.98	23.97	23.97				
10	16QAM	25	0	23.83	24.01	23.94			24.5	1
10	16QAM	25	12	23.81	23.98	23.95				
10	16QAM	25	25	23.81	23.92	23.87			23.5	2
10	16QAM	25	37	23.98	23.98	23.95				
10	16QAM	50	0	23.88	24.01	23.94			24.5	1
10	16QAM	50	12	23.88	23.94	23.96				
10	16QAM	50	25	23.88	23.94	23.96				
10	16QAM	50	37	23.98	23.97	23.97				
10	25QAM	1	24	19.28	19.28	19.26			20.5	5
10	25QAM	1	49	19.24	19.28	19.26				
10	25QAM	12	0	19.28	19.28	19.26				
10	25QAM	12	12	19.28	19.28	19.26				
10	25QAM	12	25	19.28	19.28	19.26				
10	25QAM	25	0	19.28	19.28	19.26			20.5	5
10	25QAM	25	12	19.28	19.28	19.26				
10	25QAM	25	25	19.28	19.28	19.26				
10	25QAM	50	0	19.28	19.28	19.26				
10	25QAM	50	12	19.28	19.28	19.26				
10	25QAM	50	25	19.28	19.28	19.26				
10	25QAM	50	37	19.28	19.28	19.26				
10	25QAM	100	0	19.28	19.28	19.26				
10	25QAM	100	12	19.28	19.28	19.26				
10	25QAM	100	25	19.28	19.28	19.26				
10	25QAM	100	37	19.28	19.28	19.26				
10	25QAM	100	49	19.28	19.28	19.26				
10	25QAM	100	61	19.28	19.28	19.26				
10	25QAM	100	74	19.28	19.28	19.26				
10	25QAM	100	86	19.28	19.28	19.26				
10	25QAM	100	99	19.28	19.28	19.26				
10	25QAM	100	111	19.28	19.28	19.26				
10	25QAM	100	124	19.28	19.28	19.26				
10	25QAM	100	137	19.28	19.28	19.26				
10	25QAM	100	149	19.28	19.28	19.26				
10	25QAM	100	162	19.28	19.28	19.26				
10	25QAM	100	174	19.28	19.28	19.26				
10	25QAM	100	187	19.28	19.28	19.26				
10	25QAM	100	199	19.28	19.28	19.26				
10	25QAM	100	212	19.28	19.28	19.26				
10	25QAM	100	224	19.28	19.28	19.26				
10	25QAM	100	237	19.28	19.28	19.26				
10	25QAM	100	249	19.28	19.28	19.26				
10	25QAM	100	262	19.28	19.28	19.26				
10	25QAM									

Band 4 Ant 5 DS14										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power High Ch./Freq.	Turn-up (dB)	MPE (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	21.79	21.97	21.90			23.2	0
20	QPSK	1	49	21.77	21.84	21.78				
20	QPSK	50	0	21.75	21.83	21.82				
20	QPSK	50	24	21.78	21.85	21.84				
20	QPSK	50	50	21.86	21.70	21.68			23.2	0
20	QPSK	100	0	21.77	21.81	21.84				
20	HQAM	1	0	21.72	21.89	21.80				
20	HQAM	1	49	21.81	21.81	21.70			23.2	0
20	HQAM	1	99	21.70	21.76	21.71				
20	HQAM	50	0	21.77	21.81	21.75				
20	HQAM	50	24	21.58	21.75	21.61			23.2	0
20	HQAM	50	50	21.59	21.59	21.51				
20	HQAM	100	0	21.72	21.83	21.81				
20	HQAM	100	0	21.62	21.81	21.75				
20	HQAM	1	49	21.52	21.75	21.66			23.2	0
20	HQAM	1	99	21.62	21.67	21.68				
20	HQAM	50	0	21.20	21.49	21.36				
20	HQAM	50	24	21.30	21.28	21.24			22.7	0.5
20	HQAM	50	50	21.18	21.24	21.17				
20	HQAM	100	0	21.22	21.44	21.31				
20	ZSSVM	1	0	19.21	19.41	19.27				
20	ZSSVM	1	49	19.11	19.28	19.18			20.7	2.5
20	ZSSVM	1	99	19.18	19.22	19.17				
20	ZSSVM	50	0	19.25	19.36	19.28				
20	ZSSVM	50	24	19.20	19.35	19.31			20.7	2.5
20	ZSSVM	50	50	19.12	19.30	19.23				
20	ZSSVM	100	0	19.25	19.25	19.25				
Channel										
Frequency (MHz)										
15	QPSK	1	0	21.67	21.81	21.78			23.2	0
15	QPSK	1	37	21.66	21.76	21.76				
15	QPSK	1	74	21.72	21.79	21.82				
15	QPSK	36	0	21.67	21.84	21.87				
15	QPSK	36	20	21.60	21.74	21.81				
15	QPSK	36	36	21.57	21.68	21.57			23.2	0
15	HQAM	1	0	21.60	21.83	21.87				
15	HQAM	1	37	21.69	21.73	21.58			23.2	0
15	HQAM	1	74	21.62	21.80	21.82				
15	HQAM	36	0	21.67	21.77	21.73				
15	HQAM	36	20	21.50	21.62	21.57			23.2	0
15	HQAM	36	36	21.52	21.66	21.66				
15	HQAM	75	0	21.67	21.72	21.82				
15	HQAM	1	0	21.60	21.78	21.83			23.2	0
15	HQAM	1	37	21.62	21.87	21.86				
15	HQAM	1	74	21.57	21.80	21.84				
15	HQAM	36	0	21.24	21.43	21.28				
15	HQAM	36	20	21.15	21.35	21.15			22.7	0.5
15	HQAM	36	36	21.28	21.12	21.05				
15	HQAM	75	0	21.14	21.31	21.21				
15	ZSSVM	1	0	19.05	19.26	19.16				
15	ZSSVM	1	37	19.00	19.26	19.05			20.7	2.5
15	ZSSVM	1	74	19.12	19.20	19.08				
15	ZSSVM	50	0	19.05	19.34	19.25				
15	ZSSVM	50	24	19.07	19.33	19.34			20.7	2.5
15	ZSSVM	50	36	19.06	19.23	19.11				
15	ZSSVM	100	0	19.25	19.23	19.11				
Channel										
Frequency (MHz)										
10	QPSK	1	0	21.73	21.83	21.79			23.2	0
10	QPSK	1	25	21.65	21.86	21.71				
10	QPSK	1	49	21.68	21.74	21.70				
10	QPSK	25	0	21.67	21.80	21.83				
10	QPSK	25	12	21.53	21.76	21.63			23.2	0
10	QPSK	25	25	21.58	21.68	21.62				
10	HQAM	1	0	21.68	21.84	21.73				
10	HQAM	1	25	21.67	21.71	21.67			23.2	0
10	HQAM	1	49	21.65	21.80	21.81				
10	HQAM	25	0	21.65	21.70	21.67				
10	HQAM	25	12	21.56	21.83	21.48			23.2	0
10	HQAM	25	25	21.54	21.64	21.64				
10	HQAM	50	0	21.61	21.74	21.70				
10	HQAM	1	0	21.65	21.71	21.67			23.2	0
10	HQAM	1	25	21.63	21.70	21.83				
10	HQAM	1	49	21.58	21.60	21.48				
10	HQAM	25	0	21.25	21.35	21.31				
10	HQAM	25	12	21.18	21.33	21.29			22.7	0.5
10	HQAM	25	25	21.08	21.18	20.99				
10	HQAM	50	0	21.11	21.42	21.20				
10	ZSSVM	1	0	19.17	19.34	19.23				
10	ZSSVM	1	25	19.01	19.18	19.14			20.7	2.5
10	ZSSVM	1	49	19.02	19.08	19.03				
10	ZSSVM	50	0	19.02	19.30	19.23				
10	ZSSVM	50	12	19.07	19.32	19.28			20.7	2.5
10	ZSSVM	50	25	19.04	19.17	19.05				
10	ZSSVM	100	0	19.20	19.20	19.09				
Channel										
Frequency (MHz)										
5	QPSK	1	0	21.75	21.83	21.81			23.2	0
5	QPSK	1	12	21.69	21.81	21.65				
5	QPSK	1	24	21.74	21.75	21.65				
5	QPSK	12	0	21.71	21.80	21.81				
5	QPSK	12	7	21.55	21.74	21.70			23.2	0
5	QPSK	12	13	21.54	21.87	21.62				
5	HQAM	1	0	21.73	21.86	21.86				
5	HQAM	1	12	21.69	21.85	21.73			23.2	0
5	HQAM	1	24	21.67	21.72	21.61				
5	HQAM	12	0	21.68	21.86	21.86				
5	HQAM	12	7	21.60	21.79	21.70			23.2	0
5	HQAM	12	13	21.41	21.48	21.48				
5	HQAM	25	0	21.64	21.75	21.68				
5	HQAM	1	0	21.67	21.74	21.63			23.2	0
5	HQAM	1	12	21.66	21.86	21.85				
5	HQAM	1	24	21.63	21.80	21.82				
5	HQAM	12	0	21.57	21.74	21.67				
5	HQAM	12	7	21.50	21.80	21.58			23.2	0
5	HQAM	12	13	21.41	21.48	21.48				
5	HQAM	25	0	21.64	21.75	21.68				
5	HQAM	1	0	21.67	21.74	21.63			23.2	0
5	HQAM	1	12	21.66	21.86	21.85				
5	HQAM	1	24	21.63	21.80	21.82				
5	HQAM	12	0	21.57	21.74	21.67				
5	HQAM	12	7	21.50	21.80	21.58			23.2	0
5	HQAM	12	13	21.41	21.48	21.48				
5	HQAM	25	0	21.64	21.75	21.68				
5	ZSSVM	1	0	19.07	19.26	19.05			20.7	2.5
5	ZSSVM	1	12	19.06	19.17	19.06				
5	ZSSVM	1	24	19.02	19.27	19.04				
5	ZSSVM	12	0	19.07	19.33	19.24			20.7	2.5
5	ZSSVM	12	7	19.13	19.31	19.24				
5	ZSSVM	12	13	19.04	19.23	19.04				
5	ZSSVM	25	0	19.13	19.15	19.01				
Channel										
Frequency (MHz)										
3	QPSK	1	0	21.72	21.81	21.82			23.2	0
3	QPSK	1	8	21.68	21.84	21.78				
3	QPSK	1	14	21.64	21.77	21.74				
3	QPSK	8	0	21.71	21.81	21.71				
3	QPSK	8	4	21.54	21.76	21.63			23.2	0
3	QPSK	8	7	21.56	21.68	21.65				
3	HQAM	1	0	21.71	21.78	21.81				
3	HQAM	1	8	21.60	21.71	21.62			23.2	0
3	HQAM	1	14	21.58	21.84	21.69				
3	HQAM	8	0	21.68	21.78	21.72				
3	HQAM	8	4	21.58	21.71	21.55			23.2	0
3	HQAM	8	7	21.46	21.48	21.48				
3	HQAM	16	0	21.66	21.73	21.6				



Band 38 Ant 2 DSI4										
BW (MHz)	Modulation	RB Size	RB Offset	Power High Ch. / Freq.	Power Middle Ch. / Freq.	Power Low Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	24.18	24.20	24.16	25.5	0		
20	QPSK	1	49	24.11	24.15	24.09	25.5	0		
20	QPSK	1	99	24.07	24.13	24.08	25.5	0		
20	QPSK	50	0	23.13	23.21	23.19	24.5	1		
20	QPSK	50	24	23.10	23.09	23.06	24.5	1		
20	QPSK	50	50	23.01	23.13	23.13	24.5	1		
20	QPSK	100	0	23.17	23.18	23.18	24.5	1		
20	16QAM	1	0	23.17	23.16	23.13	24.5	1		
20	16QAM	1	49	23.10	23.16	23.08	24.5	1		
20	16QAM	1	99	23.11	23.11	23.03	24.5	1		
20	16QAM	50	0	22.15	22.17	22.23	23.5	2		
20	16QAM	50	24	22.05	22.13	22.03	23.5	2		
20	16QAM	50	50	22.00	22.12	22.10	23.5	2		
20	16QAM	100	0	22.16	22.19	22.18	23.5	2		
20	64QAM	1	0	22.17	22.14	22.15	23.5	2		
20	64QAM	1	49	22.07	22.16	22.12	23.5	2		
20	64QAM	1	99	22.05	22.09	21.99	23.5	2		
20	64QAM	50	0	21.11	21.22	21.23	22.5	3		
20	64QAM	50	24	21.12	21.14	21.05	22.5	3		
20	64QAM	50	50	21.03	21.14	21.14	22.5	3		
20	64QAM	100	0	21.18	21.16	21.22	22.5	3		
20	256QAM	1	0	19.12	19.23	19.20	20.5	5		
20	256QAM	1	49	19.10	19.06	19.10	20.5	5		
20	256QAM	1	99	19.03	19.10	19.17	20.5	5		
20	256QAM	50	0	19.22	19.22	19.14	20.5	5		
20	256QAM	50	24	19.14	19.14	19.13	20.5	5		
20	256QAM	50	50	19.15	19.10	19.07	20.5	5		
20	256QAM	100	0	19.05	19.10	19.05	20.5	5		
Channel				37825	38000	38175				
Frequency (MHz)				25775	2592	2592				
15	QPSK	1	0	24.07	24.11	24.05	25.5	0		
15	QPSK	1	37	24.08	24.08	23.96	25.5	0		
15	QPSK	1	74	23.94	24.01	24.05	25.5	0		
15	QPSK	36	0	23.01	23.13	23.10	24.5	1		
15	QPSK	36	20	23.03	22.97	23.03	24.5	1		
15	QPSK	36	39	22.94	23.10	23.10	24.5	1		
15	QPSK	75	0	23.07	23.07	23.13	24.5	1		
15	16QAM	1	0	23.14	23.08	23.09	24.5	1		
15	16QAM	1	37	23.07	23.13	23.00	24.5	1		
15	16QAM	1	74	22.99	23.01	22.95	24.5	1		
15	16QAM	36	0	22.06	22.06	22.17	23.5	2		
15	16QAM	36	20	21.99	22.01	21.97	23.5	2		
15	16QAM	36	39	21.89	21.99	22.03	23.5	2		
15	16QAM	75	0	22.12	22.15	22.14	23.5	2		
15	16QAM	1	0	22.12	22.02	22.07	23.5	2		
15	64QAM	1	37	21.96	22.12	22.07	22.5	3		
15	64QAM	1	74	21.90	22.01	21.96	22.5	3		
15	64QAM	36	0	20.98	21.18	21.21	22.5	3		
15	64QAM	36	20	21.04	21.05	20.91	22.5	3		
15	64QAM	36	39	20.93	21.03	21.05	22.5	3		
15	64QAM	75	0	21.10	21.04	21.14	22.5	3		
15	256QAM	1	0	19.06	19.06	19.14	20.5	5		
15	256QAM	1	37	19.02	19.02	19.03	20.5	5		
15	256QAM	1	74	18.92	18.96	19.09	20.5	5		
15	256QAM	36	0	19.15	19.11	19.01	20.5	5		
15	256QAM	36	20	19.05	19.02	19.04	20.5	5		
15	256QAM	36	39	19.01	19.00	19.05	20.5	5		
15	256QAM	75	0	18.98	19.01	18.96	20.5	5		
Channel				37800	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	24.15	24.18	24.06	25.5	0		
10	QPSK	1	25	24.02	24.02	23.99	25.5	0		
10	QPSK	1	49	23.99	23.97	23.92	25.5	0		
10	QPSK	25	0	23.10	23.07	23.05	24.5	1		
10	QPSK	25	12	23.07	23.00	22.94	24.5	1		
10	QPSK	25	25	22.88	23.07	23.01	24.5	1		
10	QPSK	50	0	23.03	23.13	23.07	24.5	1		
10	16QAM	1	0	23.10	23.08	23.00	24.5	1		
10	16QAM	1	25	22.97	23.07	23.02	24.5	1		
10	16QAM	1	49	22.97	23.08	22.98	24.5	1		
10	16QAM	25	0	22.03	22.05	22.13	23.5	2		
10	16QAM	25	12	21.97	22.00	21.95	23.5	2		
10	16QAM	25	25	21.87	22.06	21.99	23.5	2		
10	16QAM	50	0	22.11	22.07	22.06	23.5	2		
10	64QAM	1	0	22.12	22.05	22.03	23.5	2		
10	64QAM	1	25	22.01	22.04	21.98	23.5	2		
10	64QAM	1	49	22.02	22.07	21.93	23.5	2		
10	64QAM	25	0	21.08	21.15	21.10	22.5	3		
10	64QAM	25	12	21.06	21.10	20.91	22.5	3		
10	64QAM	25	25	20.92	21.12	21.05	22.5	3		
10	64QAM	50	0	21.05	21.03	21.05	22.5	3		
10	256QAM	1	0	19.06	19.12	19.10	20.5	5		
10	256QAM	1	25	19.00	19.04	19.05	20.5	5		
10	256QAM	1	49	18.93	18.98	19.09	20.5	5		
10	256QAM	25	0	19.15	19.20	19.05	20.5	5		
10	256QAM	25	12	19.02	19.10	19.07	20.5	5		
10	256QAM	25	25	18.10	18.98	18.96	20.5	5		
10	256QAM	50	0	18.93	18.98	18.94	20.5	5		
Channel				37775	38000	38225				
Frequency (MHz)				25725	2595	2617.5				
5	QPSK	1	0	24.09	24.18	24.13	25.5	0		
5	QPSK	1	12	23.99	24.09	23.98	25.5	0		
5	QPSK	1	24	23.97	24.08	23.94	25.5	0		
5	QPSK	12	0	23.04	23.12	23.05	24.5	1		
5	QPSK	12	7	22.97	22.98	22.94	24.5	1		
5	QPSK	12	13	22.90	23.04	23.01	24.5	1		
5	QPSK	25	0	23.07	23.16	23.10	24.5	1		
5	16QAM	1	0	23.04	23.08	23.03	24.5	1		
5	16QAM	1	12	22.99	23.03	23.00	24.5	1		
5	16QAM	1	24	22.99	23.06	23.00	24.5	1		
5	16QAM	12	0	22.07	22.05	22.17	23.5	2		
5	16QAM	12	7	21.96	22.05	21.99	23.5	2		
5	16QAM	12	13	21.97	22.09	21.97	23.5	2		
5	16QAM	25	0	22.09	22.07	22.05	23.5	2		
5	64QAM	1	0	22.05	22.12	22.06	23.5	2		
5	64QAM	1	12	21.98	22.04	21.99	23.5	2		
5	64QAM	1	24	22.00	22.01	21.87	23.5	2		
5	64QAM	12	0	21.04	21.08	21.20	22.5	3		
5	64QAM	12	7	21.02	21.00	20.97	22.5	3		
5	64QAM	12	13	20.94	21.01	21.04	22.5	3		
5	64QAM	25	0	21.06	21.03	21.15	22.5	3		
5	256QAM	1	0	19.04	19.13	19.15	20.5	5		
5	256QAM	1	12	19.00	19.03	19.06	20.5	5		
5	256QAM	1	24	19.01	18.97	19.13	20.5	5		
5	256QAM	12	0	19.18	19.18	19.12	20.5	5		
5	256QAM	12	7	19.06	19.03	19.00	20.5	5		
5	256QAM	12	13	19.08	19.07	19.00	20.5	5		
5	256QAM	25	0	18.98	19.08	18.97	20.5	5		

Band 41 Ant 2 DSI4										
BW (MHz)	Modulation	RB Size	RB Offset	Power High Ch. / Freq.	Power Middle Ch. / Freq.	Power Low Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	24.11	24.14	24.15	25.5	0		
20	QPSK	1	49	24.02	24.08	24.12	25.5	0		
20	QPSK	1	99	23.99	24.01					



Band 38 Ant 3 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				37850	38000	38150			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	0	25.45	25.50	25.43	25.7	0	
20	QPSK	1	49	25.33	25.48	25.39			
20	QPSK	1	99	25.40	25.45	25.33			
20	QPSK	50	0	24.41	24.53	24.46			
20	QPSK	50	24	24.29	24.53	24.45	24.7	1	
20	QPSK	50	50	24.35	24.50	24.38			
20	QPSK	100	0	24.49	24.47	24.38			
20	16QAM	1	0	24.46	24.45	24.43	24.7	1	
20	16QAM	1	49	24.29	24.43	24.34			
20	16QAM	1	99	24.35	24.49	24.33			
20	16QAM	50	0	23.42	23.38	23.50			
20	16QAM	50	24	23.28	23.53	23.48	23.7	2	
20	16QAM	50	50	23.34	23.53	23.43			
20	16QAM	100	0	23.48	23.53	23.38			
20	64QAM	1	0	23.41	23.41	23.45			
20	64QAM	1	49	23.23	23.49	23.30	23.7	2	
20	64QAM	1	99	23.36	23.44	23.30			
20	64QAM	50	0	22.43	22.59	22.48			
20	64QAM	50	24	22.34	22.51	22.46	22.7	3	
20	64QAM	50	50	22.37	22.35	22.33			
20	64QAM	100	0	22.48	22.52	22.42			
20	256QAM	1	0	20.44	20.47	20.43			
20	256QAM	1	49	20.31	20.57	20.41	20.7	5	
20	256QAM	1	99	20.40	20.52	20.33			
20	256QAM	50	0	20.32	20.30	20.37			
20	256QAM	50	24	20.43	20.46	20.46	20.7	5	
20	256QAM	50	50	20.30	20.44	20.29			
20	256QAM	100	0	20.30	20.53	20.35			
Channel				37825	38000	38175			
Frequency (MHz)				25775	25950	26125			
15	QPSK	1	0	25.41	25.39	25.33	25.7	0	
15	QPSK	1	37	25.28	25.38	25.26			
15	QPSK	1	74	25.30	25.38	25.31			
15	QPSK	36	0	24.27	24.47	24.37	24.7	1	
15	QPSK	36	20	24.18	24.51	24.35			
15	QPSK	36	39	24.31	24.45	24.35			
15	QPSK	75	0	24.36	24.37	24.32			
15	16QAM	1	0	24.41	24.36	24.32	24.7	1	
15	16QAM	1	37	24.26	24.40	24.21			
15	16QAM	1	74	24.30	24.44	24.22			
15	16QAM	36	0	23.34	23.45	23.37	23.7	2	
15	16QAM	36	20	23.16	23.39	23.38			
15	16QAM	36	39	23.30	23.50	23.35			
15	16QAM	75	0	23.43	23.44	23.33			
15	64QAM	1	0	23.37	23.28	23.46	23.7	2	
15	64QAM	1	37	23.18	23.44	23.19			
15	64QAM	1	74	23.33	23.33	23.26			
15	64QAM	36	0	22.36	22.51	22.45	22.7	3	
15	64QAM	36	20	22.30	22.40	22.44			
15	64QAM	36	39	22.31	22.45	22.20			
15	64QAM	75	0	22.37	22.48	22.36			
15	256QAM	1	0	20.32	20.37	20.38	20.7	5	
15	256QAM	1	37	20.22	20.49	20.31			
15	256QAM	1	74	20.35	20.45	20.24			
15	256QAM	36	0	20.49	20.45	20.27			
15	256QAM	36	20	20.34	20.37	20.42	20.7	5	
15	256QAM	36	39	20.21	20.37	20.20			
15	256QAM	75	0	20.18	20.48	20.26			
Channel				37800	38000	38200			
Frequency (MHz)				25750	25950	26150			
10	QPSK	1	0	25.41	25.44	25.33	25.7	0	
10	QPSK	1	25	25.24	25.37	25.35			
10	QPSK	1	49	25.33	25.33	25.22			
10	QPSK	25	0	24.34	24.47	24.43	24.7	1	
10	QPSK	25	12	24.17	24.39	24.38			
10	QPSK	25	25	24.28	24.42	24.26			
10	QPSK	50	0	24.36	24.43	24.29			
10	16QAM	1	0	24.37	24.33	24.41	24.7	1	
10	16QAM	1	25	24.20	24.39	24.22			
10	16QAM	1	49	24.27	24.37	24.26			
10	16QAM	25	0	23.28	23.50	23.38	23.7	2	
10	16QAM	25	12	23.19	23.51	23.40			
10	16QAM	25	25	23.28	23.49	23.40			
10	16QAM	50	0	23.37	23.44	23.35			
10	64QAM	1	0	23.27	23.37	23.37	23.7	2	
10	64QAM	1	25	23.14	23.40	23.26			
10	64QAM	1	49	23.28	23.42	23.19			
10	64QAM	25	0	22.37	22.54	22.37	22.7	3	
10	64QAM	25	12	22.31	22.48	22.40			
10	64QAM	25	25	22.37	22.61	22.26			
10	64QAM	50	0	22.38	22.41	22.35			
10	256QAM	1	0	20.32	20.36	20.35	20.7	5	
10	256QAM	1	25	20.28	20.53	20.34			
10	256QAM	1	49	20.37	20.48	20.24			
10	256QAM	25	0	20.49	20.37	20.33			
10	256QAM	25	12	20.39	20.38	20.38	20.7	5	
10	256QAM	25	25	20.20	20.41	20.17			
10	256QAM	50	0	20.20	20.51	20.21			
Channel				37775	38000	38225			
Frequency (MHz)				22225	22500	22775			
5	QPSK	1	0	25.34	25.39	25.40	25.7	0	
5	QPSK	1	12	25.28	25.41	25.34			
5	QPSK	1	24	25.30	25.40	25.26			
5	QPSK	12	0	24.38	24.42	24.37	24.7	1	
5	QPSK	12	7	24.27	24.47	24.34			
5	QPSK	12	13	24.28	24.42	24.30			
5	QPSK	25	0	24.43	24.41	24.24	24.7	1	
5	16QAM	1	0	24.41	24.43	24.35			
5	16QAM	1	12	24.16	24.38	24.21			
5	16QAM	1	24	24.25	24.40	24.27			
5	16QAM	12	0	23.31	23.52	23.40	23.7	2	
5	16QAM	12	7	23.17	23.44	23.36			
5	16QAM	12	13	23.31	23.46	23.41			
5	16QAM	25	0	23.46	23.50	23.36			
5	64QAM	1	0	23.29	23.33	23.36	23.7	2	
5	64QAM	1	12	23.14	23.39	23.26			
5	64QAM	1	24	23.31	23.33	23.22			
5	64QAM	12	0	22.32	22.46	22.43	22.7	3	
5	64QAM	12	7	22.30	22.48	22.43			
5	64QAM	12	13	22.31	22.41	22.30			
5	64QAM	25	0	22.42	22.39	22.35			
5	256QAM	1	0	20.35	20.38	20.30	20.7	5	
5	256QAM	1	12	20.24	20.51	20.29			
5	256QAM	1	24	20.29	20.48	20.28			
5	256QAM	12	0	20.48	20.38	20.29			
5	256QAM	12	7	20.31	20.42	20.40	20.7	5	
5	256QAM	12	13	20.23	20.36	20.15			
5	256QAM	25	0	20.22	20.42	20.24			

Band 41 Ant 3 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Power High Middle Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	25.36	25.29	25.43	25.25	25.31	25.7
20	QPSK	1	49	25.22	25.16	25.39	25.43	25.23	
20	QPSK	1	99	25.31	25.26	25.38	25.18	25.21	
20	QPSK	50	0	24.39	24.31	24.51	24.25	24.34	
20	QPSK	50	24	24.18	24.17	24.47	24.29	24.15	24.7
20	QPSK	50	50	24.30	24.27	24.40	24.14	24.26	
20	QPSK	100	0	24.30	24.24	24.48	24.21	24.34	
20	16QAM	1	0	24.35	24.24	24.47	24.29	24.31	24.7
20	16QAM	1	49	24.23	24.18	24.47	24.17	24.18	
20	16QAM	1	99	24.33	24.23	24.40	24.18	24.28	
20	16QAM	50	0	23.39	23.26	23.46	23.29	23.28	
20	16QAM	50	24						



Band 38 Ant 4 DSI4										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	23.09	23.15	23.13	24.5	0		
20	QPSK	1	49	23.00	23.10	23.09				
20	QPSK	1	99	22.97	23.09	23.04				
20	QPSK	50	0	22.08	22.21	22.10				
20	QPSK	50	24	22.03	22.08	22.15				
20	QPSK	50	50	21.99	22.03	22.10	23.5	1		
20	QPSK	100	0	22.10	22.14	22.13				
20	16QAM	1	0	22.07	22.14	22.15				
20	16QAM	1	49	22.06	22.16	22.06	23.5	1		
20	16QAM	1	99	21.98	22.11	22.02				
20	16QAM	50	0	21.07	21.17	21.08				
20	16QAM	50	24	20.97	21.02	21.17				
20	16QAM	50	50	20.99	21.01	21.04				
20	16QAM	100	0	21.12	21.19	21.11				
20	64QAM	1	0	21.08	21.16	21.10				
20	64QAM	1	49	21.07	21.22	21.07	22.5	2		
20	64QAM	1	99	20.84	21.06	21.00				
20	64QAM	50	0	20.09	20.26	20.07				
20	64QAM	50	24	20.04	20.11	20.15				
20	64QAM	50	50	19.99	19.98	20.11	21.5	3		
20	64QAM	100	0	20.10	20.10	20.19				
20	256QAM	1	0	18.10	18.25	18.13				
20	256QAM	1	49	17.98	18.06	18.14	19.5	5		
20	256QAM	1	99	17.97	18.05	18.13				
20	256QAM	50	0	18.14	18.17	18.14				
20	256QAM	50	24	18.07	18.11	18.17				
20	256QAM	50	50	18.00	18.12	18.01	19.5	5		
20	256QAM	100	0	18.02	18.09	17.96				
Channel				37825	38000	38175				
Frequency (MHz)				25775	2592	25125				
15	QPSK	1	0	23.02	23.05	23.10	24.5	0		
15	QPSK	1	37	22.89	23.07	22.99				
15	QPSK	1	74	22.86	22.96	22.99				
15	QPSK	36	0	22.05	22.13	22.03				
15	QPSK	36	20	22.01	21.94	22.10	23.5	1		
15	QPSK	36	39	21.91	21.98	21.97				
15	QPSK	75	0	22.08	22.08	22.05				
15	16QAM	1	0	21.99	22.01	22.11				
15	16QAM	1	37	21.96	22.13	22.03	23.5	1		
15	16QAM	1	74	21.96	22.06	21.94				
15	16QAM	36	0	20.95	21.13	21.03				
15	16QAM	36	20	20.90	20.98	21.03				
15	16QAM	36	39	20.87	20.94	20.91	22.5	2		
15	16QAM	75	0	20.99	21.14	20.99				
15	16QAM	1	0	21.01	21.04	20.99				
15	16QAM	1	37	21.01	21.10	21.03	22.5	2		
15	16QAM	1	74	20.93	21.01	20.98				
15	16QAM	36	0	19.99	20.17	19.95				
15	16QAM	36	20	19.97	20.09	20.09	21.5	3		
15	16QAM	36	39	19.89	19.85	20.01				
15	16QAM	75	0	20.00	19.96	20.06				
15	256QAM	1	0	18.01	18.05	18.01				
15	256QAM	1	37	17.93	18.04	18.06	19.5	5		
15	256QAM	1	74	17.83	17.92	18.01				
15	256QAM	36	0	18.06	18.13	18.01				
15	256QAM	36	20	18.03	18.01	18.11	19.5	5		
15	256QAM	36	39	17.86	18.07	17.98				
15	256QAM	75	0	17.99	18.06	17.92				
Channel				37800	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	22.98	23.12	23.11	24.5	0		
10	QPSK	1	25	22.89	23.03	22.98				
10	QPSK	1	49	22.89	23.00	22.94				
10	QPSK	25	0	22.06	22.14	22.04				
10	QPSK	25	12	21.93	22.02	22.08				
10	QPSK	25	25	21.89	21.98	22.01	23.5	1		
10	QPSK	50	0	22.03	22.11	22.10				
10	16QAM	1	0	21.94	22.09	22.10	23.5	1		
10	16QAM	1	25	21.99	22.11	22.02				
10	16QAM	1	49	21.92	22.05	21.85				
10	16QAM	25	0	21.05	21.03	20.98				
10	16QAM	25	12	20.87	20.96	21.07				
10	16QAM	25	25	20.93	20.96	20.92	22.5	2		
10	16QAM	50	0	21.08	21.06	21.07				
10	16QAM	1	0	21.04	21.03	21.03				
10	64QAM	1	25	21.04	21.09	20.94	22.5	2		
10	64QAM	1	49	20.86	20.98	20.91				
10	64QAM	25	0	20.06	20.18	19.94				
10	64QAM	25	12	19.99	20.04	20.07				
10	64QAM	25	25	19.97	19.96	20.03	21.5	3		
10	64QAM	50	0	20.06	20.06	20.15				
10	256QAM	1	0	17.97	18.12	18.07				
10	256QAM	1	25	17.93	18.03	18.01	19.5	5		
10	256QAM	1	49	17.90	17.91	18.10				
10	256QAM	25	0	18.11	18.12	18.10				
10	256QAM	25	12	18.02	18.07	18.09				
10	256QAM	25	25	17.87	18.05	17.92	19.5	5		
10	256QAM	50	0	17.93	18.02	17.92				
Channel				37775	38000	38225				
Frequency (MHz)				25725	2595	2617.5				
5	QPSK	1	0	22.99	23.08	23.06	24.5	0		
5	QPSK	1	12	22.90	22.98	22.96				
5	QPSK	1	24	22.85	22.97	23.02				
5	QPSK	12	0	22.07	22.08	22.06				
5	QPSK	12	7	21.94	21.98	22.04	23.5	1		
5	QPSK	12	13	21.89	21.97	22.00				
5	QPSK	25	0	22.04	22.01	22.02				
5	16QAM	1	0	21.99	22.02	22.08				
5	16QAM	1	12	21.97	22.11	22.04	23.5	1		
5	16QAM	1	24	21.95	22.00	21.91				
5	16QAM	12	0	21.01	21.15	21.03				
5	16QAM	12	7	20.86	20.85	21.10	22.5	2		
5	16QAM	12	13	20.92	20.93	20.94				
5	16QAM	25	0	21.04	21.07	21.07				
5	64QAM	1	0	20.99	21.10	21.00				
5	64QAM	1	12	21.00	21.11	20.95	22.5	2		
5	64QAM	1	24	20.82	20.99	20.91				
5	64QAM	12	0	20.03	20.16	19.96				
5	64QAM	12	7	19.92	19.99	20.11	21.5	3		
5	64QAM	12	13	19.87	19.92	20.04				
5	64QAM	25	0	20.01	20.06	20.08				
5	256QAM	1	0	18.05	18.19	18.05				
5	256QAM	1	12	17.88	17.94	18.04	19.5	5		
5	256QAM	1	24	17.95	17.94	18.03				
5	256QAM	12	0	18.08	18.12	18.10				
5	256QAM	12	7	17.95	18.01	18.13	19.5	5		
5	256QAM	12	13	17.88	17.99	17.89				
5	256QAM	25	0	17.91	18.01	17.83				

Band 41 Ant 4 DSI4										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	23.05	22.97	23.11	24.5	0		
20	QPSK	1	49	22.98	22.87	23.06				
20	QPSK	1	99	22.98	22.94	23.03				
20	QPSK	50	0	22.10	21.92	22.15				
20	QPSK	50	24	22.04	21.83	22.11				
20	QPSK	50	50	21.98	21.89	22.05	23.5	1		
20	QPSK	100	0	22.10	22.00	22.12				
20	16QAM	1	0	22.08	21.91	22.09				
20	16QAM	1	49	22.00	21.90	22.06	23.5			



Band 38 Ant 5 DSI4										
BW (MHz)	Modulation	RB Size	RB Offset	Power High Ch. / Freq.	Power Middle Ch. / Freq.	Power Low Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	22.27	22.28	22.20	23.5	0		
20	QPSK	1	49	22.22	22.19	22.12				
20	QPSK	1	99	22.14	22.32	22.12	23.5	0		
20	QPSK	50	0	22.14	22.26	22.06				
20	QPSK	50	24	22.13	22.10	22.01	23.5	0		
20	QPSK	50	50	22.02	22.16	22.06				
20	QPSK	100	0	22.20	22.24	22.07	23.5	0		
20	16QAM	1	0	22.22	22.20	22.12				
20	16QAM	1	49	22.18	22.33	22.01	23.5	0		
20	16QAM	1	99	22.02	22.12	22.00				
20	16QAM	50	0	22.18	22.19	22.06	23.5	0		
20	16QAM	50	24	22.15	22.08	22.09				
20	16QAM	50	50	22.05	22.09	22.05	23.5	0		
20	16QAM	100	0	22.06	22.14	22.02				
20	64QAM	1	0	22.01	22.08	21.93	23.5	0		
20	64QAM	1	49	21.89	22.03	21.98				
20	64QAM	1	99	22.08	22.12	21.83	23.5	0		
20	64QAM	50	0	21.25	21.31	21.23				
20	64QAM	50	24	21.27	21.14	21.06	22.5	1		
20	64QAM	50	50	21.18	21.25	21.15				
20	64QAM	100	0	21.19	21.20	21.09	20.5	3		
20	256QAM	1	0	19.31	19.33	19.24				
20	256QAM	1	49	19.18	19.20	19.16	20.5	3		
20	256QAM	1	99	19.19	19.26	19.16				
20	256QAM	50	0	19.17	19.20	19.09	20.5	3		
20	256QAM	50	24	19.13	19.10	19.05				
20	256QAM	50	50	19.02	19.15	19.06	20.5	3		
20	256QAM	100	0	19.25	19.21	19.11				
Channel				37825	38000	38175				
Frequency (MHz)				25775	25925	26125				
15	QPSK	1	0	22.14	22.23	22.17	23.5	0		
15	QPSK	1	37	22.11	22.10	22.07				
15	QPSK	1	74	22.02	22.08	22.04	23.5	0		
15	QPSK	36	0	22.02	22.24	21.95				
15	QPSK	36	20	22.10	22.05	21.88	23.5	0		
15	QPSK	36	39	21.93	22.12	21.96				
15	QPSK	75	0	22.15	22.18	21.96	23.5	0		
15	16QAM	1	0	22.15	22.13	22.01				
15	16QAM	1	37	22.08	22.06	21.93	23.5	0		
15	16QAM	1	74	21.97	22.05	21.89				
15	16QAM	36	0	22.05	22.05	22.00	23.5	0		
15	16QAM	36	20	22.12	22.05	21.99				
15	16QAM	36	39	22.01	21.97	22.02	23.5	0		
15	16QAM	75	0	22.03	22.05	21.94				
15	64QAM	1	0	21.90	22.00	21.88	23.5	0		
15	64QAM	1	37	21.78	21.84	21.85				
15	64QAM	1	74	22.00	22.06	21.81	22.5	1		
15	64QAM	36	0	21.20	21.23	21.21				
15	64QAM	36	20	21.14	21.11	20.95	22.5	1		
15	64QAM	36	39	21.05	21.21	21.05				
15	64QAM	75	0	21.13	21.18	21.04	20.5	3		
15	256QAM	1	0	19.19	19.20	19.14				
15	256QAM	1	37	19.15	19.17	19.07	20.5	3		
15	256QAM	1	74	19.05	19.22	19.13				
15	256QAM	36	0	19.04	19.11	19.01	20.5	3		
15	256QAM	36	20	19.03	18.96	18.97				
15	256QAM	36	39	18.93	19.03	18.94	20.5	3		
15	256QAM	75	0	19.20	19.11	19.06				
Channel				37820	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	22.24	22.25	22.14	23.5	0		
10	QPSK	1	25	22.09	22.14	21.99				
10	QPSK	1	49	22.08	22.09	22.02	23.5	0		
10	QPSK	25	0	22.04	22.21	21.95				
10	QPSK	25	12	22.00	21.97	21.89	23.5	0		
10	QPSK	25	25	21.90	22.03	21.94				
10	QPSK	50	0	22.17	22.10	22.04	23.5	0		
10	16QAM	1	0	22.16	22.15	22.08				
10	16QAM	1	25	22.06	22.01	21.86	23.5	0		
10	16QAM	1	49	21.96	22.07	21.92				
10	16QAM	25	0	22.05	22.06	22.04	23.5	0		
10	16QAM	25	12	22.07	22.05	21.88				
10	16QAM	25	25	21.96	21.95	21.86	23.5	0		
10	16QAM	50	0	22.02	22.00	21.92				
10	64QAM	1	0	21.97	22.03	21.82	23.5	0		
10	64QAM	1	25	21.85	21.91	21.91				
10	64QAM	1	49	21.99	22.03	21.80	22.5	1		
10	64QAM	25	0	21.23	21.28	21.20				
10	64QAM	25	12	21.24	21.01	20.95	22.5	1		
10	64QAM	25	25	21.15	21.12	21.02				
10	64QAM	50	0	21.10	21.13	21.04	20.5	3		
10	256QAM	1	0	19.20	19.23	19.21				
10	256QAM	1	25	19.06	19.08	19.02	20.5	3		
10	256QAM	1	49	19.09	19.14	19.12				
10	256QAM	25	0	19.05	19.08	19.02	20.5	3		
10	256QAM	25	12	19.02	19.05	18.95				
10	256QAM	25	25	18.93	19.05	18.98	20.5	3		
10	256QAM	50	0	19.22	19.08	19.03				
Channel				37775	38000	38225				
Frequency (MHz)				25725	2595	26175				
5	QPSK	1	0	22.21	22.26	22.11	23.5	0		
5	QPSK	1	12	22.14	22.11	22.05				
5	QPSK	1	24	22.12	22.19	21.99	23.5	0		
5	QPSK	12	0	22.03	22.21	21.98				
5	QPSK	12	7	22.01	22.01	21.90	23.5	0		
5	QPSK	12	13	21.97	22.11	21.83				
5	QPSK	25	0	22.17	22.16	21.94	23.5	0		
5	16QAM	1	0	22.19	22.07	22.07				
5	16QAM	1	12	22.04	22.04	21.88	23.5	0		
5	16QAM	1	24	21.92	22.02	21.93				
5	16QAM	12	0	22.06	22.13	21.99	23.5	0		
5	16QAM	12	7	22.05	22.05	22.05				
5	16QAM	12	13	21.91	22.06	22.02	22.5	1		
5	16QAM	25	0	21.95	22.11	22.00				
5	64QAM	1	0	21.92	22.01	21.88	23.5	0		
5	64QAM	1	12	21.78	21.93	21.93				
5	64QAM	1	24	21.97	22.07	21.80	22.5	1		
5	64QAM	12	0	21.13	21.22	21.17				
5	64QAM	12	7	21.14	21.08	21.03	20.5	3		
5	64QAM	12	13	21.08	21.12	21.04				
5	64QAM	25	0	21.09	21.17	21.06	20.5	3		
5	256QAM	1	0	19.21	19.22	19.20				
5	256QAM	1	12	19.11	19.17	19.04	20.5	3		
5	256QAM	1	24	19.14	19.20	19.11				
5	256QAM	12	0	19.10	19.15	18.95	20.5	3		
5	256QAM	12	7	19.03	19.00	18.98				
5	256QAM	12	13	18.93	19.02	18.94	20.5	3		
5	256QAM	25	0	19.14	19.18	19.08				

Band 41 Ant 5 DSI4										
BW (MHz)	Modulation	RB Size	RB Offset	Power High Ch. / Freq.	Power Middle Ch. / Freq.	Power Low Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	22.09	22.22	22.23	23.5	0		
20	QPSK	1	49	22.06	22.10	22.21				
20	QPSK	1	99	21.99	22.07	22.18	23.5	0		
20	QPSK	50	0	22.01	22.14	22.19				
20	QPSK	50	24	22.01	22.01	22.08	23.5	0		
20	QPSK	50	50	21.96	21.97	22.08				
20	QPSK	100	0	21.98	22.19	22.15	23.5	0		
20	16QAM	1	0	22.03	22.18	22.09				
20	16QAM	1	49	22.03	22.02	22.11	23.5	0		
20	16QAM	1	99	21.90	21.96	22.08				
20	16QAM	50	0	22.05	22.15	22.13	23.5	0		
20	16QAM	50	24	21.95	22.00	22.13				
20	16QAM	50	50	21.88	22.01	22.14	23.5	0		
20	16QAM	100	0	21.93	22.06	22.07				
20	64QAM	1	0	21.90	21.96	22.01	23.5</			



Band 42 Ant 1 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				42190	42590	42990			
Frequency (MHz)				3460	3500	3540			
20	QPSK	1	0	21.43	21.52	21.46	23	0	
20	QPSK	1	49	21.36	21.48	21.37			
20	QPSK	1	99	21.31	21.47	21.41			
20	QPSK	50	0	20.47	20.54	20.40			
20	QPSK	50	24	20.35	20.48	20.39			
20	QPSK	50	50	20.27	20.52	20.35			
20	QPSK	100	0	20.45	20.53	20.40			
20	16QAM	1	0	20.48	20.47	20.49			
20	16QAM	1	49	20.36	20.56	20.34			
20	16QAM	1	99	20.33	20.52	20.43			
20	16QAM	50	0	19.47	19.58	19.43			
20	16QAM	50	24	19.30	19.52	19.43			
20	16QAM	50	50	19.33	19.55	19.40			
20	16QAM	100	0	19.47	19.52	19.36			
20	64QAM	1	0	19.54	19.47	19.46			
20	64QAM	1	49	19.40	19.58	19.37			
20	64QAM	1	99	19.31	19.47	19.37			
20	64QAM	50	0	18.53	18.59	18.43			
20	64QAM	50	24	18.31	18.46	18.45			
20	64QAM	50	50	18.29	18.49	18.30			
20	64QAM	100	0	18.49	18.53	18.41			
20	256QAM	1	0	16.48	16.57	16.41			
20	256QAM	1	49	16.38	16.50	16.39			
20	256QAM	1	99	16.21	16.50	16.34			
20	256QAM	50	0	16.47	16.53	16.46			
20	256QAM	50	24	16.47	16.49	16.44			
20	256QAM	50	50	16.32	16.56	16.30			
20	256QAM	100	0	16.27	16.55	16.38			
Channel				42165	42590	43015			
Frequency (MHz)				3422.5	3525	3527.5			
15	QPSK	1	0	21.36	21.45	21.36	23	0	
15	QPSK	1	37	21.31	21.37	21.32			
15	QPSK	1	74	21.17	21.45	21.37			
15	QPSK	36	0	20.42	20.47	20.29			
15	QPSK	36	20	20.32	20.34	20.34			
15	QPSK	36	39	20.15	20.48	20.25			
15	QPSK	75	0	20.39	20.40	20.35			
15	16QAM	1	0	20.42	20.39	20.41			
15	16QAM	1	37	20.25	20.41	20.30			
15	16QAM	1	74	20.22	20.40	20.35			
15	16QAM	36	0	19.36	19.45	19.33			
15	16QAM	36	20	19.24	19.49	19.34			
15	16QAM	36	39	19.28	19.42	19.36			
15	16QAM	75	0	19.44	19.44	19.23			
15	64QAM	1	0	19.42	19.39	19.39			
15	64QAM	1	37	19.28	19.51	19.33			
15	64QAM	1	74	19.21	19.39	19.30			
15	64QAM	36	0	18.49	18.48	18.36			
15	64QAM	36	20	18.27	18.41	18.42			
15	64QAM	36	39	18.26	18.38	18.18			
15	64QAM	75	0	18.37	18.40	18.38			
15	256QAM	1	0	16.37	16.54	16.30			
15	256QAM	1	37	16.25	16.41	16.35			
15	256QAM	1	74	16.09	16.40	16.21			
15	256QAM	36	0	16.43	16.48	16.43			
15	256QAM	36	20	16.37	16.43	16.37			
15	256QAM	36	39	16.19	16.44	16.17			
15	256QAM	75	0	16.17	16.48	16.28			
Channel				42140	42590	43040			
Frequency (MHz)				3455	3500	3545			
10	QPSK	1	0	21.40	21.49	21.42	23	0	
10	QPSK	1	25	21.27	21.38	21.28			
10	QPSK	1	49	21.25	21.38	21.30			
10	QPSK	25	0	20.34	20.50	20.29			
10	QPSK	25	12	20.31	20.38	20.26			
10	QPSK	25	25	20.22	20.40	20.23			
10	QPSK	50	0	20.36	20.46	20.38			
10	16QAM	1	0	20.34	20.34	20.37			
10	16QAM	1	25	20.30	20.41	20.24			
10	16QAM	1	49	20.20	20.39	20.37			
10	16QAM	25	0	19.38	19.45	19.32			
10	16QAM	25	12	19.25	19.43	19.39			
10	16QAM	25	25	19.21	19.45	19.35			
10	16QAM	50	0	19.38	19.48	19.34			
10	64QAM	1	0	19.51	19.35	19.37			
10	64QAM	1	25	19.37	19.51	19.30			
10	64QAM	1	49	19.18	19.44	19.28			
10	64QAM	25	0	18.49	18.45	18.35			
10	64QAM	25	12	18.25	18.32	18.33			
10	64QAM	25	25	18.19	18.40	18.24			
10	64QAM	50	0	18.36	18.48	18.27			
10	256QAM	1	0	16.39	16.50	16.29			
10	256QAM	1	25	16.31	16.44	16.35			
10	256QAM	1	49	16.11	16.41	16.29			
10	256QAM	25	0	16.36	16.50	16.43			
10	256QAM	25	12	16.41	16.40	16.38			
10	256QAM	25	25	16.27	16.45	16.24			
10	256QAM	50	0	16.21	16.43	16.32			
Channel				42115	42590	43065			
Frequency (MHz)				3422.5	3500	3577.5			
5	QPSK	1	0	21.38	21.45	21.42	23	0	
5	QPSK	1	12	21.31	21.40	21.35			
5	QPSK	1	24	21.20	21.40	21.38			
5	QPSK	12	0	20.37	20.48	20.26			
5	QPSK	12	7	20.24	20.45	20.27			
5	QPSK	12	13	20.16	20.49	20.29			
5	QPSK	25	0	20.39	20.42	20.28			
5	16QAM	1	0	20.41	20.42	20.43			
5	16QAM	1	12	20.23	20.41	20.26			
5	16QAM	1	24	20.21	20.45	20.35			
5	16QAM	12	0	19.40	19.51	19.37			
5	16QAM	12	7	19.26	19.41	19.34			
5	16QAM	12	13	19.28	19.50	19.29			
5	16QAM	25	0	19.39	19.45	19.30			
5	64QAM	1	0	19.47	19.42	19.41			
5	64QAM	1	12	19.36	19.49	19.35			
5	64QAM	1	24	19.17	19.40	19.36			
5	64QAM	12	0	18.48	18.47	18.40			
5	64QAM	12	7	18.24	18.33	18.38			
5	64QAM	12	13	18.18	18.40	18.28			
5	64QAM	25	0	18.36	18.40	18.37			
5	256QAM	1	0	16.38	16.50	16.29			
5	256QAM	1	12	16.30	16.47	16.35			
5	256QAM	1	24	16.15	16.37	16.22			
5	256QAM	12	0	16.40	16.44	16.32			
5	256QAM	12	7	16.43	16.47	16.38			
5	256QAM	12	13	16.20	16.54	16.27			
5	256QAM	25	0	16.18	16.48	16.25			

Band 48 Ant 1 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				55340	55830	56150			
Frequency (MHz)				3560	3569	3641			
20	QPSK	1	0	20.62	20.71	20.67	22	0	
20	QPSK	1	49	20.58	20.88	20.64			
20	QPSK	1	99	20.50	20.85	20.57			
20	QPSK	50	0	19.58	19.72	19.71			
20	QPSK	50	24	19.56	19.68	19.60			
20	QPSK	50	50	19.55	19.60	19.62			
20	QPSK	100	0	19.65	19.70	19.73			
20	16QAM	1	0	19.65	19.66	19.63			
20	16QAM	1	49	19.58	19.65	19.61			
20	16QAM	1	99	19.47	19.68	19.57			
20	16QAM	50	0	18.63	18.68	18.73			
20	16QAM	50	24	18.52	18.72	18.66			
20	16QAM	50	50	18.58	18.55	18.64			
20	16QAM	100	0	18.59	18.69	18.72			
20	64QAM	1	0	18.58	18.63	18.58			
20	64QAM	1	49	18.55	18.62	18.5			

Band 42 Ant 6 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				42190	42590	42990			
Frequency (MHz)				3460	3500	3540			
20	QPSK	1	0	25.07	25.13	25.09	26	0	
20	QPSK	1	49	24.95	25.10	25.05			
20	QPSK	1	99	24.98	25.08	24.95			
20	QPSK	50	0	24.03	24.18	24.08			
20	QPSK	50	24	23.96	24.09	24.03	25	1	
20	QPSK	50	50	23.92	24.04	23.99			
20	QPSK	100	0	24.04	24.13	24.14			
20	16QAM	1	0	24.11	24.11	24.07			
20	16QAM	1	49	23.89	23.99	23.96	25	1	
20	16QAM	1	99	24.01	24.09	23.94			
20	16QAM	50	0	23.08	23.19	23.04			
20	16QAM	50	24	22.96	23.10	23.00	24	2	
20	16QAM	50	50	22.98	23.05	23.03			
20	16QAM	100	0	23.03	23.17	23.18			
20	64QAM	1	0	23.12	23.10	23.07			
20	64QAM	1	49	22.88	23.11	23.08	24	2	
20	64QAM	1	99	23.02	23.10	22.97			
20	64QAM	50	0	22.04	22.19	22.06			
20	64QAM	50	24	21.99	22.05	22.00	23	3	
20	64QAM	50	50	21.97	22.08	21.98			
20	64QAM	100	0	22.02	22.07	22.20			
20	256QAM	1	0	19.97	20.12	20.13			
20	256QAM	1	49	19.97	20.07	20.02	21	5	
20	256QAM	1	99	19.93	19.99	19.99			
20	256QAM	50	0	20.09	20.08	20.19			
20	256QAM	50	24	20.09	20.08	20.07	21	5	
20	256QAM	50	50	19.88	20.04	20.07			
20	256QAM	100	0	19.96	20.08	19.96			
Channel				42165	42590	43015	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3472.5	3500	3527.5			
15	QPSK	1	0	24.95	25.01	25.06	26	0	
15	QPSK	1	37	24.82	25.00	24.98			
15	QPSK	1	74	24.84	24.98	24.83			
15	QPSK	36	0	24.00	24.10	24.02			
15	QPSK	36	20	23.86	24.01	23.88	25	1	
15	QPSK	36	39	23.82	23.90	23.86			
15	QPSK	75	0	23.96	24.09	24.03			
15	16QAM	1	0	24.06	24.08	24.00			
15	16QAM	1	37	23.80	24.00	23.94	25	1	
15	16QAM	1	74	23.95	24.03	23.90			
15	16QAM	36	0	23.00	23.12	22.96			
15	16QAM	36	20	22.90	23.02	22.96	24	2	
15	16QAM	36	39	22.93	22.98	22.92			
15	16QAM	75	0	22.94	23.14	23.05			
15	64QAM	1	0	23.01	23.01	22.94			
15	64QAM	1	37	22.83	23.01	23.03	24	2	
15	64QAM	1	74	22.88	23.01	22.91			
15	64QAM	36	0	21.98	22.14	22.02			
15	64QAM	36	20	21.90	21.94	21.91	23	3	
15	64QAM	36	39	21.88	21.96	21.82			
15	64QAM	75	0	21.94	21.95	22.13			
15	256QAM	1	0	19.85	20.01	20.01	21	5	
15	256QAM	1	37	19.95	19.95	19.93			
15	256QAM	1	74	19.88	19.92	19.91			
15	256QAM	36	0	20.07	20.05	20.17			
15	256QAM	36	20	19.98	19.98	19.96	21	5	
15	256QAM	36	39	19.79	19.99	19.98			
15	256QAM	75	0	19.88	19.95	19.91			
Channel				42140	42590	43040	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3455	3500	3545			
10	QPSK	1	0	25.02	25.08	25.02	26	0	
10	QPSK	1	25	24.83	25.07	25.00			
10	QPSK	1	49	24.89	25.06	24.91			
10	QPSK	25	0	23.90	24.04	23.99	25	1	
10	QPSK	25	12	23.90	24.06	23.94			
10	QPSK	25	25	23.80	23.98	23.96			
10	QPSK	50	0	23.97	24.08	24.09			
10	16QAM	1	0	24.07	24.05	24.00	25	1	
10	16QAM	1	25	23.83	23.99	23.99			
10	16QAM	1	49	23.90	24.01	23.91			
10	16QAM	25	0	22.96	23.06	22.98	24	2	
10	16QAM	25	12	22.88	23.07	22.83			
10	16QAM	25	25	22.90	22.94	22.99			
10	16QAM	50	0	22.99	23.12	23.08			
10	64QAM	1	0	23.01	23.00	22.97	24	2	
10	64QAM	1	25	22.81	23.02	22.99			
10	64QAM	1	49	22.90	22.98	22.91			
10	64QAM	25	0	21.91	22.17	21.98			
10	64QAM	25	12	21.88	21.93	21.95	23	3	
10	64QAM	25	25	21.85	22.00	21.90			
10	64QAM	50	0	21.94	22.05	22.10			
10	256QAM	1	0	19.88	20.07	20.00	21	5	
10	256QAM	1	25	19.85	20.02	19.89			
10	256QAM	1	49	19.86	19.92	19.88			
10	256QAM	25	0	19.96	20.00	20.16			
10	256QAM	25	12	20.06	19.98	19.96	21	5	
10	256QAM	25	25	19.77	19.96	19.97			
10	256QAM	50	0	19.90	20.02	19.83			
Channel				42115	42590	43065	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3422.5	3500	3577.5			
5	QPSK	1	0	24.98	24.99	25.03	26	0	
5	QPSK	1	12	24.84	25.02	24.95			
5	QPSK	1	24	24.85	24.96	24.90			
5	QPSK	12	0	23.93	24.08	23.94			
5	QPSK	12	7	23.92	23.98	23.94	25	1	
5	QPSK	12	13	23.88	23.93	23.88			
5	QPSK	25	0	23.96	24.10	24.03			
5	16QAM	1	0	23.99	24.02	24.03			
5	16QAM	1	12	23.77	24.03	23.96	25	1	
5	16QAM	1	24	23.95	24.05	23.81			
5	16QAM	12	0	23.01	23.09	22.93			
5	16QAM	12	7	22.86	23.01	22.97	24	2	
5	16QAM	12	13	22.96	22.99	22.80			
5	16QAM	25	0	22.94	23.05	23.14			
5	64QAM	1	0	23.09	23.04	23.05			
5	64QAM	1	12	22.83	23.08	23.04	24	2	
5	64QAM	1	24	22.92	22.97	22.83			
5	64QAM	12	0	21.96	22.10	22.01			
5	64QAM	12	7	21.90	22.02	21.90	23	3	
5	64QAM	12	13	21.87	22.04	21.90			
5	64QAM	25	0	21.95	22.03	22.07			
5	256QAM	1	0	19.93	20.05	20.05	21	5	
5	256QAM	1	12	19.88	20.03	19.95			
5	256QAM	1	24	19.79	19.97	19.90			
5	256QAM	12	0	20.05	20.04	20.14			
5	256QAM	12	7	20.00	19.98	19.94	21	5	
5	256QAM	12	13	19.75	19.98	20.03			
5	256QAM	25	0	19.91	20.04	19.90			

Band 48 Ant 6 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				55340	55830	56150	56640		
Frequency (MHz)				3560	3609	3641	3690		
20	QPSK	1	0	23.95	24.07	24.01	24.00	25	0
20	QPSK	1	49	23.90	24.04	23.93	23.87		
20	QPSK	1	99	23.86	24.00	23.90	23.87		
20	QPSK	50	0	22.95	23.07	22.97	23.06		
20	QPSK	50	24	22.96	23.05	22.93	22.88	24	1
20	QPSK	50	50	22.81	23.03	22.96	22.96		
20	QPSK	100	0	22.94	23.03	23.04	22.96		
20	16QAM	1	0	22.90	23.02	23.05	22.99		
20	16QAM	1	49	22.89	23.01	22.99	22.90	24	1
20	16QAM	1	99	22.88	23.02	22.89	22.92		
20	16QAM	50	0	21.94	22.05	21.96	22.10		
20	16QAM	50	24	22.00	22.07	21.96	21.90	23	2
20	16QAM	50	50	21.76					



Band 42 Ant 7 DS14										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				42190	42590	42990				
Frequency (MHz)				3460	3500	3540				
20	QPSK	1	0	24.04	24.10	24.08	25.5	0		
20	QPSK	1	49	23.91	24.05	24.03				
20	QPSK	1	99	24.00	24.03	24.06				
20	QPSK	50	0	23.04	23.15	23.11				
20	QPSK	50	24	22.86	23.10	22.98	24.5	1		
20	QPSK	50	50	23.03	23.02	23.07				
20	QPSK	100	0	23.10	23.10	23.10				
20	16QAM	1	0	23.03	23.08	23.10				
20	16QAM	1	49	22.92	23.06	22.99				
20	16QAM	1	99	23.00	22.99	23.10	24.5	1		
20	16QAM	50	0	22.03	22.17	22.15				
20	16QAM	50	24	21.83	22.10	22.03	23.5	2		
20	16QAM	50	50	21.98	22.04	22.01				
20	16QAM	100	0	22.06	22.07	22.07				
20	64QAM	1	0	22.04	22.07	22.09				
20	64QAM	1	49	21.98	22.10	22.04	23.5	2		
20	64QAM	1	99	22.00	21.98	22.06				
20	64QAM	50	0	21.01	21.20	21.11				
20	64QAM	50	24	20.89	21.15	20.96	22.5	3		
20	64QAM	50	50	21.02	21.02	21.02				
20	64QAM	100	0	21.15	21.13	21.05				
20	256QAM	1	0	19.06	19.18	19.10	20.5	5		
20	256QAM	1	49	18.84	19.10	18.99				
20	256QAM	1	99	18.98	19.05	19.06				
20	256QAM	50	0	19.09	19.10	19.15				
20	256QAM	50	24	18.97	19.14	19.09	20.5	5		
20	256QAM	50	50	18.88	19.10	19.02				
20	256QAM	100	0	19.01	19.02	19.14				
Channel				42165	42590	43015	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				3473.5	3523.5	3573.5				
15	QPSK	1	0	24.00	23.98	23.99	25.5	0		
15	QPSK	1	37	23.77	23.92	23.93				
15	QPSK	1	74	23.93	23.99	24.00				
15	QPSK	36	0	23.02	23.06	23.00	24.5	1		
15	QPSK	36	20	22.74	23.04	22.93				
15	QPSK	36	39	22.92	23.04	23.02				
15	QPSK	75	0	23.03	23.05	23.07				
15	16QAM	1	0	22.96	22.95	23.06				
15	16QAM	1	37	22.81	22.96	22.95	24.5	1		
15	16QAM	1	74	22.87	22.90	23.02				
15	16QAM	36	0	21.96	22.05	22.06				
15	16QAM	36	20	21.70	22.02	21.96	23.5	2		
15	16QAM	36	39	21.95	21.95	21.99				
15	16QAM	75	0	22.00	22.00	21.96				
15	64QAM	1	0	21.97	22.02	21.98				
15	64QAM	1	37	21.90	21.97	22.00	23.5	2		
15	64QAM	1	74	21.87	21.85	22.01				
15	64QAM	36	0	20.88	21.15	21.04				
15	64QAM	36	20	20.85	21.06	20.87	22.5	3		
15	64QAM	36	39	20.95	20.92	20.91				
15	64QAM	75	0	21.08	21.04	21.01				
15	256QAM	1	0	18.01	18.12	18.99	20.5	5		
15	256QAM	1	37	18.72	18.01	18.92				
15	256QAM	1	74	18.95	18.94	18.96				
15	256QAM	36	0	18.95	19.05	19.11				
15	256QAM	36	20	18.95	19.00	19.00	20.5	5		
15	256QAM	36	39	18.84	19.02	18.97				
15	256QAM	75	0	18.93	18.97	19.05				
Channel				42140	42590	43040	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				3455	3500	3545				
10	QPSK	1	0	23.96	23.98	24.02	25.5	0		
10	QPSK	1	25	23.83	24.01	23.98				
10	QPSK	1	49	23.87	23.98	23.94				
10	QPSK	25	0	23.00	23.08	22.98				
10	QPSK	25	12	22.82	22.97	22.94	24.5	1		
10	QPSK	25	25	22.92	22.99	22.98				
10	QPSK	50	0	23.06	23.03	23.07				
10	16QAM	1	0	22.94	23.04	23.04	24.5	1		
10	16QAM	1	25	22.83	23.03	22.92				
10	16QAM	1	49	22.87	22.98	22.98				
10	16QAM	25	0	21.99	22.12	22.10	23.5	2		
10	16QAM	25	12	21.78	22.02	21.93				
10	16QAM	25	25	21.88	21.98	21.90				
10	16QAM	50	0	22.00	21.93	21.94				
10	64QAM	1	0	21.94	21.99	22.01	23.5	2		
10	64QAM	1	25	21.87	21.98	21.91				
10	64QAM	1	49	21.88	21.84	21.98				
10	64QAM	25	0	20.93	21.06	20.98	22.5	3		
10	64QAM	25	12	20.83	21.03	20.89				
10	64QAM	25	25	20.99	20.96	20.94				
10	64QAM	50	0	21.13	21.03	20.97				
10	256QAM	1	0	19.01	19.05	19.01	20.5	5		
10	256QAM	1	25	18.72	18.98	18.93				
10	256QAM	1	49	18.94	19.00	18.99				
10	256QAM	25	0	18.95	19.05	19.12				
10	256QAM	25	12	18.96	19.00	18.97	20.5	5		
10	256QAM	25	25	18.84	18.99	18.94				
10	256QAM	50	0	18.97	19.00	19.11				
Channel				42115	42590	43065	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				3422.5	3500	3577.5				
5	QPSK	1	0	24.01	24.04	23.97	25.5	0		
5	QPSK	1	12	23.88	23.97	23.91				
5	QPSK	1	24	23.94	23.95	24.02				
5	QPSK	12	0	22.95	23.02	22.98				
5	QPSK	12	7	22.84	22.98	22.84	24.5	1		
5	QPSK	12	13	22.91	22.98	22.93				
5	QPSK	25	0	23.00	23.03	23.03				
5	16QAM	1	0	22.98	22.97	22.98	24.5	1		
5	16QAM	1	12	22.85	22.95	22.89				
5	16QAM	1	24	22.90	22.91	23.03				
5	16QAM	12	0	22.00	22.09	22.08				
5	16QAM	12	7	21.75	22.07	21.94	23.5	2		
5	16QAM	12	13	21.87	22.01	21.95				
5	16QAM	25	0	21.93	21.95	21.96				
5	64QAM	1	0	21.91	21.95	22.06				
5	64QAM	1	12	21.89	22.08	21.91	23.5	2		
5	64QAM	1	24	21.93	21.91	21.96				
5	64QAM	12	0	20.91	21.14	21.02				
5	64QAM	12	7	20.81	21.12	20.86	22.5	3		
5	64QAM	12	13	20.98	20.93	20.94				
5	64QAM	25	0	21.07	21.00	21.00				
5	256QAM	1	0	19.04	19.09	18.99	20.5	5		
5	256QAM	1	12	18.79	18.99	18.87				
5	256QAM	1	24	18.87	18.92	18.93				
5	256QAM	12	0	19.03	19.06	19.13				
5	256QAM	12	7	18.89	19.02	19.04	20.5	5		
5	256QAM	12	13	18.86	19.05	18.99				
5	256QAM	25	0	18.92	18.95	19.08				

Band 48 Ant 7 DS14										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				55340	55830	56150	56640			
Frequency (MHz)				3560	3569	3641	3690			
20	QPSK	1	0	23.32	23.40	23.35	23.5	0		
20	QPSK	1	49	23.28	23.36	23.30				
20	QPSK	1	99	23.30	23.35	23.30				
20	QPSK	50	0	22.25	22.43	22.38				
20	QPSK	50	24	22.31	22.38	22.32	24	1		
20	QPSK	50	50	22.30						



Band 42 Ant 8 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				42190	42590	42990			
Frequency (MHz)				3460	3500	3540			
20	QPSK	1	0	22.54	22.56	22.45			
20	QPSK	1	49	22.46	22.49	22.40	24	0	
20	QPSK	1	99	22.33	22.40	22.45			
20	QPSK	50	0	22.44	22.53	22.32			
20	QPSK	50	24	22.34	22.40	22.28			
20	QPSK	50	50	22.29	22.36	22.36	24	0	
20	QPSK	100	0	22.46	22.50	22.36			
20	16QAM	1	0	22.48	22.46	22.38			
20	16QAM	1	49	22.33	22.36	22.27	24	0	
20	16QAM	1	99	22.26	22.45	22.37			
20	16QAM	50	0	21.56	21.60	21.50			
20	16QAM	50	24	21.43	21.50	21.34	23	1	
20	16QAM	50	50	21.37	21.53	21.40			
20	16QAM	100	0	21.43	21.40	21.37			
20	64QAM	1	0	21.29	21.44	21.23			
20	64QAM	1	49	21.29	21.32	21.40	23	1	
20	64QAM	1	99	21.52	21.46	21.31			
20	64QAM	50	0	20.56	20.58	20.51			
20	64QAM	50	24	20.44	20.49	20.34	22	2	
20	64QAM	50	50	20.30	20.48	20.48			
20	64QAM	100	0	20.48	20.57	20.31			
20	256QAM	1	0	18.51	18.56	18.44			
20	256QAM	1	49	18.41	18.45	18.41	20	4	
20	256QAM	1	99	18.38	18.52	18.50			
20	256QAM	50	0	18.39	18.56	18.34			
20	256QAM	50	24	18.30	18.41	18.25	20	4	
20	256QAM	50	50	18.33	18.42	18.35			
20	256QAM	100	0	18.45	18.55	18.37			
Channel				42165	42590	43015	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3423.5	3500	3577.5			
15	QPSK	1	0	22.45	22.51	22.35			
15	QPSK	1	37	22.35	22.45	22.27	24	0	
15	QPSK	1	74	22.31	22.41	22.39			
15	QPSK	36	0	22.31	22.44	22.27			
15	QPSK	36	20	22.30	22.27	22.16	24	0	
15	QPSK	36	39	22.26	22.26	22.33			
15	QPSK	75	0	22.41	22.41	22.31			
15	16QAM	1	0	22.44	22.33	22.27			
15	16QAM	1	37	22.26	22.34	22.20	24	0	
15	16QAM	1	74	22.20	22.35	22.34			
15	16QAM	36	0	21.52	21.47	21.46			
15	16QAM	36	20	21.33	21.47	21.23	23	1	
15	16QAM	36	39	21.24	21.50	21.37			
15	16QAM	75	0	21.36	21.43	21.33			
15	64QAM	1	0	21.20	21.32	21.14			
15	64QAM	1	37	21.23	21.27	21.36	23	1	
15	64QAM	1	74	21.38	21.38	21.18			
15	64QAM	36	0	20.49	20.48	20.47			
15	64QAM	36	20	20.35	20.37	20.21	22	2	
15	64QAM	36	39	20.16	20.40	20.40			
15	64QAM	75	0	20.43	20.44	20.25			
15	256QAM	1	0	18.41	18.45	18.31			
15	256QAM	1	37	18.27	18.32	18.33	20	4	
15	256QAM	1	74	18.27	18.39	18.42			
15	256QAM	36	0	18.27	18.47	18.30			
15	256QAM	36	20	18.17	18.32	18.13	20	4	
15	256QAM	36	39	18.27	18.31	18.30			
15	256QAM	75	0	18.35	18.42	18.29			
Channel				42140	42590	43040	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3455	3500	3545			
10	QPSK	1	0	22.40	22.49	22.32			
10	QPSK	1	25	22.43	22.38	22.26	24	0	
10	QPSK	1	49	22.27	22.44	22.31			
10	QPSK	25	0	22.36	22.45	22.20			
10	QPSK	25	12	22.25	22.28	22.15	24	0	
10	QPSK	25	25	22.18	22.25	22.26			
10	QPSK	50	0	22.32	22.44	22.30			
10	16QAM	1	0	22.43	22.37	22.28			
10	16QAM	1	25	22.29	22.34	22.19	24	0	
10	16QAM	1	49	22.16	22.38	22.32			
10	16QAM	25	0	21.44	21.58	21.44			
10	16QAM	25	12	21.38	21.44	21.30	23	1	
10	16QAM	25	25	21.35	21.42	21.37			
10	16QAM	50	0	21.38	21.40	21.24			
10	64QAM	1	0	21.25	21.40	21.15	23	1	
10	64QAM	1	25	21.16	21.24	21.28			
10	64QAM	1	49	21.40	21.43	21.24			
10	64QAM	25	0	20.53	20.51	20.41			
10	64QAM	25	12	20.40	20.42	20.25	22	2	
10	64QAM	25	25	20.28	20.42	20.38			
10	64QAM	50	0	20.42	20.53	20.21			
10	256QAM	1	0	18.48	18.49	18.31			
10	256QAM	1	25	18.31	18.37	18.29	20	4	
10	256QAM	1	49	18.24	18.46	18.41			
10	256QAM	25	0	18.32	18.44	18.29			
10	256QAM	25	12	18.22	18.30	18.17	20	4	
10	256QAM	25	25	18.22	18.31	18.26			
10	256QAM	50	0	18.38	18.52	18.27			
Channel				42115	42590	43065	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3423.5	3500	3577.5			
5	QPSK	1	0	22.52	22.44	22.37			
5	QPSK	1	12	22.43	22.37	22.28	24	0	
5	QPSK	1	24	22.27	22.44	22.32			
5	QPSK	12	0	22.42	22.50	22.20			
5	QPSK	12	7	22.26	22.28	22.24	24	0	
5	QPSK	12	13	22.23	22.30	22.33			
5	QPSK	25	0	22.41	22.37	22.26			
5	16QAM	1	0	22.42	22.40	22.30			
5	16QAM	1	12	22.20	22.38	22.15	24	0	
5	16QAM	1	24	22.20	22.33	22.32			
5	16QAM	12	0	21.49	21.56	21.42			
5	16QAM	12	7	21.31	21.36	21.25	23	1	
5	16QAM	12	13	21.27	21.41	21.38			
5	16QAM	25	0	21.35	21.47	21.28			
5	64QAM	1	0	21.16	21.37	21.15			
5	64QAM	1	12	21.18	21.19	21.35	23	1	
5	64QAM	1	24	21.45	21.44	21.25			
5	64QAM	12	0	20.47	20.54	20.47			
5	64QAM	12	7	20.36	20.46	20.30	22	2	
5	64QAM	12	13	20.21	20.34	20.44			
5	64QAM	25	0	20.45	20.44	20.26			
5	256QAM	1	0	18.49	18.52	18.36			
5	256QAM	1	12	18.35	18.32	18.32	20	4	
5	256QAM	1	24	18.34	18.42	18.43			
5	256QAM	12	0	18.25	18.48	18.31			
5	256QAM	12	7	18.18	18.39	18.14	20	4	
5	256QAM	12	13	18.30	18.35	18.33			
5	256QAM	25	0	18.34	18.49	18.35			

Band 48 Ant 8 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				55340	55830	56150			
Frequency (MHz)				3560	3569	3641			
20	QPSK	1	0	21.50	21.63	21.51			
20	QPSK	1	49	21.47	21.57	21.46	23	0	
20	QPSK	1	99	21.46	21.37	21.57			
20	QPSK	50	0	21.42	21.61	21.39			
20	QPSK	50	24	21.39	21.54	21.39	23	0	
20	QPSK	50	50	21.36	21.44	21.43			
20	QPSK	100	0	21.47	21.56	21.37			
20	16QAM	1	0	21.36	21.37	21.40			
20	16QAM	1	49	21.40	21.54	21.42	23	0	
20	16QAM	1	99	21.34	21.52	21.47			
20	16QAM	50	0	20.51	20.59	20.57			
20	16QAM	50	24	20.43	20.54	20.49	22	1	
20	16QAM	50	50	20.51	20.53	20.60			
20	16QAM	100	0	20.45					



Reduced Power Mode for DSI6_Main PA

GSM850 Art 0 DSR	Burst Average Power (dBm)			Turn-up Limit (dBm)	Frame-Average Power (dBm)			Turn-up Limit (dBm)
	128	189	251		128	189	251	
TX Channel	834.2	836.4	848.6	834.2	836.4	848.6		
Frequency (MHz)	834.2	836.4	848.6	834.2	836.4	848.6		
DSM 1 Tx slots	32.81	32.85	32.77	34.00	23.81	23.85	23.77	
GPRS 1 Tx slots	32.86	32.76	32.73	34.00	23.68	23.76	23.73	
GPRS 2 Tx slots	29.59	29.61	29.57	31.00	23.59	23.61	23.57	
GPRS 3 Tx slots	27.81	27.66	27.57	29.20	23.35	23.40	23.31	
GPRS 4 Tx slots	26.08	26.17	26.14	28.00	23.08	23.17	23.14	
EDGE 1 Tx slots	25.89	25.93	25.79	27.00	16.89	16.93	16.79	
EDGE 2 Tx slots	23.31	23.40	23.31	24.00	17.31	17.40	17.31	
EDGE 3 Tx slots	21.42	21.53	21.47	22.20	17.16	17.27	17.21	
EDGE 4 Tx slots	19.81	19.85	19.79	21.00	16.81	16.85	16.79	

Band	WCDMA V Art 0 DSR			Turn-up Limit (dBm)
	4192	4182	4293	
TX Channel	4357	4409	4458	
Frequency (MHz)	836.4	836.4	836.6	
3GPP Rel 99 AMR 12.2Kbps	24.53	24.80	24.49	25.00
3GPP Rel 99 RMC 12.2Kbps	24.62	24.64	24.60	25.00
3GPP Rel 6 HSDPA Subtest-1	23.64	23.67	23.63	24.00
3GPP Rel 6 HSDDPA Subtest-2	23.60	23.68	23.58	24.00
3GPP Rel 6 HSDPA Subtest-3	23.06	23.10	23.09	23.50
3GPP Rel 6 HSDPA Subtest-4	23.10	23.20	23.07	23.50
3GPP Rel 6 DCHSDPA Subtest-1	23.67	23.62	23.58	24.00
3GPP Rel 6 DCHSDPA Subtest-2	23.66	23.61	23.58	24.00
3GPP Rel 6 DCHSDPA Subtest-3	23.10	23.10	23.11	23.50
3GPP Rel 6 DCHSDPA Subtest-4	23.17	23.18	23.05	23.50
3GPP Rel 6 HSUPA Subtest-1	23.59	23.58	23.55	24.00
3GPP Rel 6 HSUPA Subtest-2	21.58	21.64	21.63	22.00
3GPP Rel 6 HSUPA Subtest-3	22.88	22.82	22.61	23.00
3GPP Rel 6 HSUPA Subtest-4	21.54	21.60	21.66	22.00
3GPP Rel 6 HSUPA Subtest-5	23.60	23.63	23.54	24.00
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	21.06	21.12	21.05	21.50



Appendix E

GSM850 Ant.1 DS8B	Burst Average Power (dbm)			Tune-up Limit (dbm)	Frame Average Power (dbm)			Tune-up Limit (dbm)	
	Tx Channel	198	199		201	198	199		201
	Frequency (MHz)	534.2	535.4		541.6	524.2	535.4		541.6
GSM-1 Tx slot	28.53	28.54	28.47	30.00	19.53	19.54	19.47	21.00	
GPRS-1 Tx slot	28.38	28.38	28.36	30.00	19.38	19.38	19.36	21.00	
GPRS-2 Tx slots	25.36	25.39	25.27	27.00	16.36	16.39	16.27	21.00	
GPRS-3 Tx slots	23.28	23.42	23.29	25.20	19.02	19.16	19.03	20.94	
GPRS-4 Tx slots	22.04	22.16	22.08	24.00	19.04	19.16	19.08	21.00	
EDGE-1 Tx slot	26.04	26.13	26.01	27.50	17.04	17.13	17.01	18.50	
EDGE-2 Tx slots	23.45	23.65	23.49	24.50	17.45	17.65	17.49	18.50	
EDGE-3 Tx slots	21.59	21.68	21.62	22.70	17.33	17.42	17.38	18.44	
EDGE-4 Tx slots	20.04	20.11	19.93	21.50	17.04	17.11	16.93	18.50	

Band	WCDMA V. Ant.1 DS8B			Tune-up Limit (dbm)	
	Tx Channel	4132	4182		4233
	Rx Channel	4357	4407		4458
Frequency (MHz)	533.4	538.4	543.5		
3GPP Rel 99	AMR 12.2kops	19.42	18.44	19.50	
3GPP Rel 99	RMTC 12.2kops	18.47	18.50	19.50	
3GPP Rel 6	HSDPA Subtest-1	17.54	17.54	17.47	
3GPP Rel 6	HSDPA Subtest-2	17.44	17.46	17.55	
3GPP Rel 6	HSDPA Subtest-3	16.97	17.08	17.05	
3GPP Rel 6	HSDPA Subtest-4	16.98	17.13	16.97	
3GPP Rel 8	DCHSDPA Subtest-1	17.39	17.60	17.55	
3GPP Rel 8	DCHSDPA Subtest-2	17.50	17.48	17.48	
3GPP Rel 8	DCHSDPA Subtest-3	16.87	17.00	17.01	
3GPP Rel 8	DCHSDPA Subtest-4	16.96	17.16	16.99	
3GPP Rel 6	HSUPA Subtest-1	17.56	17.61	17.47	
3GPP Rel 6	HSUPA Subtest-2	16.38	15.56	15.46	
3GPP Rel 6	HSUPA Subtest-3	16.44	16.46	16.52	
3GPP Rel 6	HSUPA Subtest-4	15.42	15.46	15.52	
3GPP Rel 6	HSUPA Subtest-5	17.51	17.62	17.53	
3GPP Rel 7	HSPA+ (E-UMTS) Subtest-1	14.94	15.02	14.94	



Appendix E

GSM1900 Art 2 DS#	Burst Average Power (dbm)			Tune-up Limit (dbm)	Frame Average Power (dbm)			Tune-up Limit (dbm)
	512	661	810		512	661	810	
TX Channel	512	661	810	1900.2	1900.2	1900.2	1900.8	
Frequency (MHz)	1900.2	1900.2	1900.8					
GSM-1 Tx slot	27.97	28.07	28.02	29.50	18.97	19.07	19.02	20.50
GPRS-1 Tx slot	27.94	28.11	27.99	29.50	18.94	19.11	18.99	20.50
GPRS-2 Tx slots	24.74	24.96	24.86	26.50	18.74	18.96	18.86	20.50
GPRS-3 Tx slots	22.87	22.92	22.95	24.70	18.61	18.66	18.69	20.44
GPRS-4 Tx slots	21.57	21.64	21.51	23.50	18.57	18.64	18.51	20.50
EDGE-1 Tx slot	25.42	25.54	25.40	27.00	16.42	16.54	16.40	18.00
EDGE-2 Tx slots	22.99	22.78	22.72	24.00	16.69	16.76	16.72	18.00
EDGE-3 Tx slots	20.87	20.90	20.86	22.20	16.61	16.64	16.60	17.94
EDGE-4 Tx slots	20.00	20.07	19.96	21.00	17.00	17.07	16.96	18.00

Band	WCDMA Rev. Art 2 DS#			Tune-up Limit (dbm)
	1312	1413	1513	
TX Channel	1312	1413	1513	
Rx Channel	1537	1638	1738	
Frequency (MHz)	1742.4	1742.6	1752.6	
3GPP Rel 99 RMC 12.2Kbps	19.54	16.56	16.43	18.00
3GPP Rel 99 RMC 12.2Kbps	16.54	16.67	16.50	18.00
3GPP Rel 6 HSDPA Subtest-1	15.51	15.61	15.53	17.00
3GPP Rel 6 HSDPA Subtest-2	15.47	15.62	15.55	17.00
3GPP Rel 6 HSDPA Subtest-3	15.07	15.23	14.97	16.50
3GPP Rel 6 HSDPA Subtest-4	15.03	15.17	14.99	16.50
3GPP Rel 8 DCHSDPA Subtest-1	15.50	15.64	15.50	17.00
3GPP Rel 8 DCHSDPA Subtest-2	15.56	15.56	15.55	17.00
3GPP Rel 8 DCHSDPA Subtest-3	15.01	15.07	14.98	16.50
3GPP Rel 8 DCHSDPA Subtest-4	15.02	15.19	14.97	16.50
3GPP Rel 6 HSUPA Subtest-1	15.56	15.56	15.53	17.00
3GPP Rel 6 HSUPA Subtest-2	13.57	13.69	13.51	15.00
3GPP Rel 6 HSUPA Subtest-3	14.52	14.65	14.55	16.00
3GPP Rel 6 HSUPA Subtest-4	13.59	13.71	13.57	15.00
3GPP Rel 6 HSUPA Subtest-5	15.56	15.55	15.54	17.00
3GPP Rel 7 HSPA+ (E-UMTS) Subtest-1	13.04	13.16	13.06	14.50

Band	TX Channel	WCDMA II Art.3 DSS			Time-up Limit (dBm)	WCDMA IV Art.3 DSS			Time-up Limit (dBm)
		9652	9800	9858		1312	1313	1313	
		9652	9900	9938		1537	1538	1738	
Frequency (MHz)	1852.4	1880	1907.6	1712.4	1732.6	1752.8			
3GPP Rel 99	AMR 12.2Kbps	16.33	16.44	16.37	17.00	16.97	16.94	16.89	18.00
3GPP Rel 99	AMR 12.2Kbps	16.48	16.53	16.48	17.00	16.96	17.06	16.99	18.00
3GPP Rel 6	HSDPA Subtest-1	15.40	15.56	15.45	16.00	15.90	16.04	15.86	17.00
3GPP Rel 6	HSDPA Subtest-2	15.41	15.49	15.49	16.00	16.00	16.01	16.04	17.00
3GPP Rel 6	HSDPA Subtest-3	14.91	14.99	15.01	15.50	15.57	15.60	15.51	16.50
3GPP Rel 6	HSDPA Subtest-4	14.93	14.99	15.01	15.50	15.44	15.55	15.43	16.50
3GPP Rel 6	DC-HSDPA Subtest-1	15.45	15.51	15.48	16.00	15.99	16.06	15.97	17.00
3GPP Rel 6	DC-HSDPA Subtest-2	15.48	15.54	15.53	16.00	15.90	16.05	15.94	17.00
3GPP Rel 6	DC-HSDPA Subtest-3	14.87	15.14	15.10	15.50	15.54	15.61	15.47	16.50
3GPP Rel 6	DC-HSDPA Subtest-4	14.91	15.05	14.90	15.50	15.49	15.58	15.51	16.50
3GPP Rel 6	HSPA Subtest-1	15.53	15.61	15.48	16.00	15.88	15.95	15.96	17.00
3GPP Rel 6	HSPA Subtest-2	13.43	13.50	13.51	14.00	13.98	13.97	13.98	15.00
3GPP Rel 6	HSPA Subtest-3	14.47	14.64	14.50	15.00	14.97	15.00	14.86	16.00
3GPP Rel 6	HSPA Subtest-4	13.51	13.55	13.49	14.00	14.01	14.00	13.92	15.00
3GPP Rel 6	HSPA Subtest-5	15.45	15.48	15.49	16.00	16.01	16.11	15.93	17.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	12.88	12.99	13.00	13.50	13.50	13.58	13.45	14.50



Appendix E

GSM1900 Art 5 DS8	Burst Average Power (dbm)			Tune-up Limit (dbm)	Frame Average Power (dbm)			Tune-up Limit (dbm)
	512	661	810		512	661	810	
TX Channel	512	661	810	21.00	21.00	21.00	21.00	21.00
Frequency (MHz)	1850.2	1850	1850.8	1850.2	1850	1850.8	1850.2	1850.8
GSM-1 Tx slot	30.00	30.05	29.98	31.00	21.00	21.05	20.96	22.00
GPRS-1 Tx slot	29.94	30.00	29.90	31.00	20.94	21.00	20.90	22.00
GPRS-2 Tx slots	20.85	20.90	20.88	20.00	20.85	20.90	20.86	22.00
GPRS-3 Tx slots	24.87	24.94	24.88	26.20	20.81	20.88	20.82	21.94
GPRS-4 Tx slots	23.60	23.65	23.61	25.00	20.80	20.85	20.81	22.00
EDGE-1 Tx slot	25.46	25.48	25.40	27.00	16.46	16.48	16.40	18.00
EDGE-2 Tx slots	22.55	22.66	22.59	24.00	16.55	16.66	16.59	18.00
EDGE-3 Tx slots	21.08	21.10	20.98	22.20	16.82	16.84	16.72	17.94
EDGE-4 Tx slots	20.45	20.54	20.40	21.00	17.45	17.54	17.40	18.00

Band	WCDMA II Art 6 DS8			Tune-up Limit (dbm)	WCDMA II Art 5 DS8			Tune-up Limit (dbm)	
	9262	9400	9538		1312	1413	1513		
TX Channel	9262	9400	9538	21.00	21.00	21.00	21.00	21.00	
Rx Channel	9662	9800	9938	1724	1724	1724	1724	1724	
Frequency (MHz)	1522.4	1530	1537.6	1724	1724	1724	1724	1724	
3GPP Rel 99	AMR 12.2kops	20.48	20.56	20.53	21.50	20.60	20.78	20.71	22.00
3GPP Rel 99	RMC 12.2kops	20.60	20.71	20.61	21.50	20.78	20.87	20.74	22.00
3GPP Rel 6	HSDPA Subtest-1	19.55	19.72	19.62	20.50	19.79	19.82	19.78	21.00
3GPP Rel 6	HSDPA Subtest-2	19.57	19.72	19.66	20.50	19.75	19.77	19.74	21.00
3GPP Rel 6	HSDPA Subtest-3	19.06	19.26	19.19	20.00	19.26	19.32	19.18	20.50
3GPP Rel 6	HSDPA Subtest-4	19.04	19.21	19.05	20.00	19.27	19.33	19.21	20.50
3GPP Rel 8	DCHSDPA Subtest-1	19.65	19.73	19.62	20.50	19.65	19.74	19.69	21.00
3GPP Rel 8	DCHSDPA Subtest-2	19.61	19.75	19.69	20.50	19.74	19.86	19.86	21.00
3GPP Rel 8	DCHSDPA Subtest-3	19.04	19.07	19.06	20.00	19.19	19.32	19.25	20.50
3GPP Rel 8	DCHSDPA Subtest-4	19.14	19.16	19.11	20.00	19.27	19.31	19.28	20.50
3GPP Rel 6	HSUPA Subtest-1	19.56	19.61	19.56	20.50	19.66	19.81	19.71	21.00
3GPP Rel 6	HSUPA Subtest-2	17.60	17.66	17.72	18.50	17.84	17.81	17.84	19.00
3GPP Rel 6	HSUPA Subtest-3	19.69	19.61	19.64	19.50	19.83	19.86	19.72	20.00
3GPP Rel 6	HSUPA Subtest-4	17.65	17.72	17.59	18.50	17.65	17.83	17.72	19.00
3GPP Rel 6	HSUPA Subtest-5	19.64	19.75	19.64	20.50	19.77	19.72	19.82	21.00
3GPP Rel 7	HSPA+ (E-UTRA) Subtest-1	17.63	17.18	17.10	18.00	17.21	17.39	17.33	18.50

Band 5 Ant 0 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 26265	Power Middle Ch. / Freq. 26266	Power High Ch. / Freq. 26267	Tune-up limit (dBm)	MPR (dB)	
Channel				829	836.5	844			
Frequency (MHz)									
10	QPSK	1	0	24.29	24.51	24.22			
10	QPSK	1	25	24.45	24.43	24.31	24.7	0	
10	QPSK	1	49	24.41	24.44	24.30			
10	QPSK	25	0	24.37	24.42	24.34			
10	QPSK	25	12	24.41	24.43	24.30	24.7	0	
10	QPSK	25	25	24.38	24.34	24.23			
10	QPSK	50	0	24.39	24.39	24.23			
10	16QAM	1	0	24.30	24.40	24.26			
10	16QAM	1	25	24.35	24.43	24.27	24.7	0	
10	16QAM	1	49	24.45	24.47	24.23			
10	16QAM	25	0	23.33	23.51	23.30			
10	16QAM	25	12	23.34	23.40	23.14	23.7	1	
10	16QAM	25	25	23.34	23.52	23.27			
10	16QAM	50	0	23.31	23.56	23.30			
10	64QAM	1	0	23.24	23.41	23.21			
10	64QAM	1	25	23.37	23.48	23.22	23.7	1	
10	64QAM	1	49	23.34	23.50	23.14			
10	64QAM	25	0	22.37	22.44	22.16			
10	64QAM	25	12	22.21	22.38	22.20			
10	64QAM	25	25	22.36	22.15	22.15	22.7	2	
10	64QAM	50	0	22.36	22.54	22.22			
10	256QAM	1	0	20.22	20.42	20.19			
10	256QAM	1	25	20.34	20.53	20.30	20.7	4	
10	256QAM	1	49	20.30	20.43	20.31			
10	256QAM	25	0	20.24	20.43	20.18			
10	256QAM	25	12	20.37	20.42	20.18	20.7	4	
10	256QAM	25	25	20.24	20.39	20.17			
10	256QAM	50	0	20.28	20.49	20.22			
Channel				26425	26525	26525			
Frequency (MHz)									
5	QPSK	1	0	24.25	24.30	24.10			
5	QPSK	1	14	24.28	24.34	24.19	24.7	0	
5	QPSK	1	24	24.39	24.34	24.18			
5	QPSK	12	0	24.20	24.35	24.27			
5	QPSK	12	7	24.38	24.24	24.27	24.7	0	
5	QPSK	12	13	24.22	24.21	24.17			
5	QPSK	25	0	24.25	24.36	24.09			
5	16QAM	1	0	23.18	23.31	23.25			
5	16QAM	1	12	24.29	24.28	24.23	24.7	0	
5	16QAM	1	24	24.44	24.37	24.14			
5	16QAM	12	0	23.18	23.45	23.22			
5	16QAM	12	7	23.25	23.37	23.08	23.7	1	
5	16QAM	12	13	23.18	23.29	23.23			
5	16QAM	25	0	23.23	23.48	23.20			
5	64QAM	1	0	23.21	23.25	23.08			
5	64QAM	1	12	23.27	23.37	23.17	23.7	1	
5	64QAM	1	24	23.28	23.36	23.10			
5	64QAM	12	0	22.24	22.38	22.01			
5	64QAM	12	7	22.35	22.29	22.01	22.7	2	
5	64QAM	12	13	22.16	22.42	22.02			
5	64QAM	25	0	22.34	22.45	22.06			
5	256QAM	1	0	20.08	20.27	20.11			
5	256QAM	1	12	20.30	20.42	20.29	20.7	4	
5	256QAM	1	24	20.28	20.36	20.14			
5	256QAM	12	0	20.11	20.25	20.10			
5	256QAM	12	7	20.26	20.35	20.10	20.7	4	
5	256QAM	12	13	20.17	20.33	20.12			
5	256QAM	25	0	20.22	20.39	20.19			
Channel				26745	26855	26905			
Frequency (MHz)									
10	QPSK	1	0	24.46	24.76	24.83			
10	QPSK	1	25	24.54	24.73	24.63	25.2	0	
10	QPSK	1	49	24.60	24.66	24.83			
10	QPSK	25	0	23.71	23.86	23.75			
10	QPSK	25	12	23.75	23.72	23.49	24.7	0.5	
10	QPSK	25	25	23.62	23.50	23.69			
10	QPSK	50	0	23.70	23.69	23.70			
10	16QAM	1	0	23.70	23.84	23.69			
10	16QAM	1	25	23.72	23.71	23.55	24.7	0.5	
10	16QAM	1	49	23.33	23.67	23.57			
10	16QAM	25	0	22.65	22.85	22.79			
10	16QAM	25	12	22.54	22.85	22.59	23.7	1.5	
10	16QAM	25	25	22.50	22.57	22.61			
10	16QAM	50	0	22.70	22.87	22.59			
10	64QAM	1	0	22.63	22.63	22.60			
10	64QAM	1	25	22.71	22.65	22.45	23.7	1.5	
10	64QAM	1	49	22.51	22.52	22.71			
10	64QAM	25	0	21.75	21.76	21.66			
10	64QAM	25	12	21.80	21.78	21.66	22.7	2.5	
10	64QAM	25	25	21.69	21.58	21.74			
10	64QAM	50	0	21.78	21.74	21.75			
10	256QAM	1	0	19.72	19.72	19.92			
10	256QAM	1	25	19.65	19.90	19.59	20.7	4.5	
10	256QAM	1	49	19.61	19.77	19.86			
10	256QAM	25	0	19.69	19.88	19.78			
10	256QAM	25	12	19.70	19.78	19.69	20.7	4.5	
10	256QAM	25	25	19.60	19.68	19.43			
10	256QAM	50	0	19.48	19.45	19.61			
Channel				26715	26855	26765			
Frequency (MHz)									
5	QPSK	1	0	24.73	24.84	24.74			
5	QPSK	1	12	24.46	24.85	24.53	25.2	0	
5	QPSK	1	24	24.46	24.63	24.59			
5	QPSK	12	0	23.57	23.89	23.80			
5	QPSK	12	7	23.70	23.75	23.61	24.7	0.5	
5	QPSK	12	13	23.50	23.56	23.42			
5	QPSK	25	0	23.69	23.70	23.76			
5	16QAM	1	0	23.73	23.61	23.56			
5	16QAM	1	12	23.65	23.60	23.68	24.7	0.5	
5	16QAM	1	24	23.40	23.63	23.49			
5	16QAM	12	0	22.77	22.87	22.86			
5	16QAM	12	7	22.80	22.72	22.58	23.7	1.5	
5	16QAM	12	13	22.51	22.50	22.53			
5	16QAM	25	0	22.77	22.76	22.65			
5	64QAM	1	0	22.65	22.56	22.64			
5	64QAM	1	12	22.65	22.71	22.44	23.7	1.5	
5	64QAM	1	24	22.58	22.61	22.71			
5	64QAM	12	0	21.80	21.72	21.78			
5	64QAM	12	7	21.59	21.64	21.37	22.7	2.5	
5	64QAM	12	13	21.61	21.60	21.74			
5	64QAM	25	0	21.80	21.77	21.69			
5	256QAM	1	0	19.61	19.77	19.86			
5	256QAM	1	12	19.60	19.86	19.52	20.7	4.5	
5	256QAM	1	24	19.54	19.75	19.52			
5	256QAM	12	0	19.76	19.74	19.64			
5	256QAM	12	7	19.69	19.86	19.59	20.7	4.5	
5	256QAM	12	13	19.66	19.65	19.41			
5	256QAM	25	0	19.49	19.45	19.61			
Channel				26705	26855	27025			
Frequency (MHz)									
3	QPSK	1	0	24.72	24.75	24.79			
3	QPSK	1	8	24.47	24.76	24.51	25.2	0	
3	QPSK	1	14	24.61	24.75	24.59			
3	QPSK	8	0	23.67	23.93	23.62			
3	QPSK	8	4	23.29	24.24	24.23	24.7	0.5	
3	QPSK	8	7	23.48	23.55	23.65			
3	QPSK	15	0	23.77	23.78	23.75			
3	16QAM	1	0	23.72	23.67	23.64			
3	16QAM	1	8	23.66	23.61	23.54	24.7	0.5	
3	16QAM	1	14	23.58	23.59	23.46			
3	16QAM	8	0	22.61	22.88	22.74			
3	16QAM	8	4	22.65	22.92	22.60	23.7	1.5	
3	16QAM	8	7	22.45	22.58	22.67			
3	16QAM	15	0	22.74	22.73	22.53			
3	64QAM	1	0	22.72	22.56	22.72			
3	64QAM	1	8	22.66	22.82	22.57	23.7	1.5	
3	64QAM	1	14	22.53	22.57	22.61			
3	64QAM	8	0	21.75	21.82	21.72			

Band 5 Ant 1 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 2650	Power Middle Ch. / Freq. 2655	Power High Ch. / Freq. 2660	Tune-up limit (dBm)	MPR (dB)	
Channel				829	836.5	844			
10	QPSK	1	0	19.17	19.18	19.14			
10	QPSK	1	25	19.00	19.07	18.96	20.2	0	
10	QPSK	1	49	19.17	19.03	19.00			
10	QPSK	25	0	19.12	19.10	19.16			
10	QPSK	25	12	19.96	19.03	18.90	20.2	0	
10	QPSK	25	25	19.14	19.03	18.94			
10	QPSK	50	0	19.16	19.09	19.10			
10	16QAM	1	0	18.82	19.00	18.94	20.2	0	
10	16QAM	1	25	19.09	19.01	18.93			
10	16QAM	1	49	19.07	19.17	19.07			
10	16QAM	25	0	18.94	19.05	18.91			
10	16QAM	25	12	19.08	18.93	18.90	20.2	0	
10	16QAM	25	25	19.11	18.99	19.15			
10	16QAM	50	0	18.95	18.99	18.89			
10	64QAM	1	0	19.15	19.04	19.06	20.2	0	
10	64QAM	1	25	19.16	19.08	19.00			
10	64QAM	1	49	18.90	18.93	18.88			
10	64QAM	25	0	19.14	19.16	19.03			
10	64QAM	25	12	18.90	19.02	18.89	20.2	0	
10	64QAM	25	25	18.97	18.98	18.98			
10	64QAM	50	0	19.13	19.08	19.06			
10	256QAM	1	0	19.16	19.07	19.08	20.2	0	
10	256QAM	1	25	18.97	19.08	18.94			
10	256QAM	1	49	19.11	19.00	18.98			
10	256QAM	25	0	19.12	19.04	19.06	20.2	0	
10	256QAM	25	12	19.94	19.01	18.91			
10	256QAM	25	25	19.15	18.99	18.87			
10	256QAM	50	0	19.08	19.07	19.04			
Channel				26425	26525	26525	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				836.5	836.5	846.5			
5	QPSK	1	0	19.04	19.08	19.10			
5	QPSK	1	12	18.98	18.94	18.93	20.2	0	
5	QPSK	1	24	19.04	19.00	18.87			
5	QPSK	12	0	19.05	18.96	19.12			
5	QPSK	12	7	18.88	18.95	18.80	20.2	0	
5	QPSK	12	13	19.03	18.99	18.84			
5	QPSK	25	0	19.04	19.00	19.05			
5	16QAM	1	0	18.79	18.94	18.99	20.2	0	
5	16QAM	1	12	19.01	18.89	18.90			
5	16QAM	1	24	18.97	19.13	18.99			
5	16QAM	12	0	18.89	18.98	18.82			
5	16QAM	12	7	18.99	18.83	18.84	20.2	0	
5	16QAM	12	13	18.98	18.94	18.11			
5	16QAM	25	0	18.80	18.85	18.82			
5	64QAM	1	0	19.07	18.89	18.82	20.2	0	
5	64QAM	1	12	19.11	18.95	18.97			
5	64QAM	1	24	18.77	18.82	18.85			
5	64QAM	12	0	19.06	19.05	18.89			
5	64QAM	12	7	18.83	19.01	18.80	20.2	0	
5	64QAM	12	13	19.06	18.85	18.92			
5	64QAM	25	0	18.99	19.02	19.00			
5	256QAM	1	0	19.12	18.98	19.01	20.2	0	
5	256QAM	1	12	18.93	19.01	18.82			
5	256QAM	1	24	19.07	18.96	18.94			
5	256QAM	12	0	19.09	18.93	18.92			
5	256QAM	12	7	18.85	18.97	18.74	20.2	0	
5	256QAM	12	13	19.13	18.93	18.84			
5	256QAM	25	0	19.00	18.99	19.00			
Channel				26476	26565	26565	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				846.5	831.5	844			
10	QPSK	1	0	19.04	19.08	19.10			
10	QPSK	1	25	18.97	18.93	18.77	20.2	0	
10	QPSK	1	49	19.03	18.87	18.86			
10	QPSK	25	0	18.89	18.90	19.00			
10	QPSK	25	12	18.75	18.90	18.91	20.2	0	
10	QPSK	25	25	18.95	18.81	18.85			
10	QPSK	50	0	19.00	19.00	18.99			
10	16QAM	1	0	18.75	18.91	18.94	20.2	0	
10	16QAM	1	25	18.91	18.87	18.76			
10	16QAM	1	49	18.94	19.02	18.94			
10	16QAM	25	0	18.78	18.90	18.87			
10	16QAM	25	12	18.96	18.84	18.85	20.2	0	
10	16QAM	25	25	18.94	18.84	18.84			
10	16QAM	50	0	18.73	18.74	18.84			
10	64QAM	1	0	18.88	18.72	18.63	20.2	0	
10	64QAM	1	25	19.01	18.89	18.84			
10	64QAM	1	49	18.73	18.79	18.76			
10	64QAM	25	0	18.94	19.07	18.82			
10	64QAM	25	12	18.82	18.78	18.77	20.2	0	
10	64QAM	25	25	18.97	18.87	18.74			
10	64QAM	50	0	18.99	18.93	18.92			
10	256QAM	1	0	19.00	19.00	19.01	20.2	0	
10	256QAM	1	25	18.87	19.01	18.76			
10	256QAM	1	49	18.95	18.99	18.89			
10	256QAM	25	0	18.95	18.90	18.98			
10	256QAM	25	12	18.74	18.90	18.70	20.2	0	
10	256QAM	25	25	18.95	18.88	18.77			
10	256QAM	50	0	18.96	18.99	18.86			
Channel				26715	26805	27015	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				846.5	831.5	844			
5	QPSK	1	0	19.13	19.12	19.03			
5	QPSK	1	12	18.74	18.91	18.79	20.2	0	
5	QPSK	1	24	19.06	18.88	18.83			
5	QPSK	12	0	18.96	18.93	19.06			
5	QPSK	12	7	18.79	18.98	18.74	20.2	0	
5	QPSK	12	13	18.97	18.94	18.84			
5	QPSK	25	0	19.04	18.85	19.02			
5	16QAM	1	0	18.76	18.84	18.74	20.2	0	
5	16QAM	1	12	18.98	18.83	18.85			
5	16QAM	1	24	18.89	19.03	18.91			
5	16QAM	12	0	18.80	18.86	18.92			
5	16QAM	12	7	18.92	18.78	18.99	20.2	0	
5	16QAM	12	13	18.89	18.83	19.05			
5	16QAM	25	0	18.78	18.83	18.63			
5	64QAM	1	0	18.90	18.81	18.66	20.2	0	
5	64QAM	1	12	18.99	18.85	18.85			
5	64QAM	1	24	18.75	18.91	18.89			
5	64QAM	12	0	18.96	19.10	18.88			
5	64QAM	12	7	18.78	18.90	18.75	20.2	0	
5	64QAM	12	13	19.03	18.89	18.73			
5	64QAM	25	0	18.95	18.89	18.95			
5	256QAM	1	0	18.96	18.90	18.97	20.2	0	
5	256QAM	1	12	18.92	18.96	18.91			
5	256QAM	1	24	18.89	18.93	18.82			
5	256QAM	12	0	18.93	18.86	18.94			
5	256QAM	12	7	18.82	18.93	18.71	20.2	0	
5	256QAM	12	13	18.97	18.87	18.71			
5	256QAM	25	0	18.94	18.97	18.90			
Channel				26765	26855	27025	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				846.5	831.5	847.5			
3	QPSK	1	0	19.10	19.11	18.99			
3	QPSK	1	8	18.84	18.99	18.82	20.2	0	
3	QPSK	1	14	19.00	18.79	18.90			
3	QPSK	8	0	18.91	18.85	19.04			
3	QPSK	8	4	18.87	18.92	18.81	20.2	0	
3	QPSK	8	7	18.98	18.98	18.98			
3	QPSK	15	0	19.04	18.95	19.04			
3	16QAM	1	0	18.86	18.90	18.92	20.2	0	
3	16QAM	1	8	19.01	18.96	18.82			
3	16QAM	1	14	18.97	19.08	18.94			
3	16QAM	8	0	18.85	18.90	18.86			
3	16QAM	8	4	18.87	18.91	18.82	20.2	0	
3	16QAM	8	7	19.08	18.88	19.03			
3	16QAM	15	0	18.78	18.96	18.84			
3	64QAM	1	0	19.08	18.84	18.73	20.2	0	
3	64QAM	1	8	19.11	18.98	18.93			
3	64QAM	1	14	18.95	18.96	18.94			
3	64QAM	8	0	19.00	19.11	18.90			
3	64QAM	8	4	18.76	18.99	18.79	20.2	0	
3	64QAM	8	7	19.07	18.91	18.89			
3	64QAM	15	0	19.07	18.99	18.99			
3	256QAM	1	0	19.06	19.05	19.04	20.2	0	
3	256QAM	1	8	18.95	19.00	18.95			
3	256QAM	1	14	19.03	18.92	18.88			
3	256QAM	8	0	19.07	19.01	18.99			
3	256QAM	8	4	18.90	18.88	18.73	20.2	0	
3	256QAM	8	7	19.05	18.96	18.81			
3	256QAM	15	0	18.99	18.90	18.98			
Channel				26807	26925	26943	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				824.7	836.5	848.3			
14	QPSK	1	0	19.07	19.08	19.08			
14	QPSK	1	3	18.91	19.02	18.94	20.2	0	
14	QPSK	1	5	19.04	18.96	18.96			
14	QPSK	3	0	19.05	19.01	19.10			
14	QPSK	3	3	19.07	18.92	18.85	20.2	0	
14	QPSK	3	3	19.08	18.92	18.88			



Band 2 Ant 2 DS16										
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch./F.Freq.	Power Ch./F.Freq.	Power Ch./F.Freq.	Turn-up (dB)	MPR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	15.43	15.53	15.56			17	0
20	QPSK	1	0	15.43	15.53	15.56				
20	QPSK	1	99	15.37	15.46	15.52				
20	QPSK	50	0	15.30	15.43	15.50				
20	QPSK	50	24	15.33	15.43	15.50				
20	QPSK	50	50	15.38	15.41	15.67			17	0
20	QPSK	100	0	15.35	15.44	15.50				
20	QPSK	100	0	15.35	15.44	15.50				
20	HQAM	1	49	15.29	15.27	15.17			17	0
20	HQAM	1	99	15.36	15.29	15.17				
20	HQAM	50	0	15.32	15.28	15.29				
20	HQAM	50	24	15.21	15.31	15.18			17	0
20	HQAM	50	50	15.21	15.36	15.37				
20	HQAM	100	0	15.33	15.28	15.30				
20	HQAM	100	0	15.38	15.40	15.35				
20	HQAM	1	49	15.30	15.24	15.35			17	0
20	HQAM	1	99	15.30	15.24	15.35				
20	HQAM	50	0	15.34	15.32	15.24				
20	HQAM	50	24	15.20	15.18	15.09			17	0
20	HQAM	50	50	15.32	15.28	15.29				
20	HQAM	100	0	15.30	15.34	15.30				
20	HQAM	100	0	15.38	15.40	15.35				
20	HQAM	1	49	15.23	15.35	15.17			17	0
20	HQAM	1	99	15.36	15.29	15.18				
20	HQAM	50	0	15.32	15.28	15.29				
20	HQAM	50	24	15.24	15.18	15.15			17	0
20	HQAM	50	50	15.21	15.36	15.23				
20	HQAM	100	0	15.33	15.28	15.29				
20	HQAM	100	0	15.38	15.40	15.35				
Channel										
Frequency (MHz)										
16	QPSK	1	0	18.07	18.00	18.03				
16	QPSK	1	0	18.07	18.00	18.03				
16	QPSK	1	99	18.27	18.39	18.34			17	0
16	QPSK	1	99	18.27	18.39	18.34				
16	QPSK	1	74	18.20	18.36	18.24				
16	QPSK	36	0	18.34	18.33	18.20				
16	QPSK	36	0	18.34	18.33	18.20				
16	QPSK	36	36	18.20	18.33	18.25			17	0
16	QPSK	75	0	18.26	18.40	18.28				
16	QPSK	75	0	18.26	18.38	18.28				
16	HQAM	1	37	18.18	18.15	18.12			17	0
16	HQAM	1	74	18.20	18.26	18.21				
16	HQAM	36	0	18.38	18.26	18.23				
16	HQAM	36	20	18.13	18.21	18.04			17	0
16	HQAM	36	20	18.13	18.21	18.04				
16	HQAM	75	0	18.33	18.23	18.11				
16	HQAM	1	0	18.24	18.33	18.28			17	0
16	HQAM	1	99	18.20	18.26	18.21				
16	HQAM	36	0	18.38	18.26	18.23				
16	HQAM	36	20	18.13	18.21	18.04			17	0
16	HQAM	75	0	18.33	18.23	18.11				
16	HQAM	1	0	18.24	18.33	18.28			17	0
16	HQAM	1	99	18.20	18.26	18.21				
16	HQAM	36	0	18.38	18.26	18.23				
16	HQAM	36	20	18.13	18.21	18.04			17	0
16	HQAM	75	0	18.33	18.23	18.11				
16	HQAM	1	0	18.24	18.33	18.28			17	0
16	HQAM	1	99	18.20	18.26	18.21				
16	HQAM	36	0	18.38	18.26	18.23				
16	HQAM	36	20	18.13	18.21	18.04			17	0
16	HQAM	75	0	18.33	18.23	18.11				
16	HQAM	1	0	18.24	18.33	18.28			17	0
16	HQAM	1	99	18.20	18.26	18.21				
16	HQAM	36	0	18.38	18.26	18.23				
16	HQAM	36	20	18.13	18.21	18.04			17	0
16	HQAM	75	0	18.33	18.23	18.11				
16	HQAM	1	0	18.24	18.33	18.28			17	0
16	HQAM	1	99	18.20	18.26	18.21				
16	HQAM	36	0	18.38	18.26	18.23				
16	HQAM	36	20	18.13	18.21	18.04			17	0
16	HQAM	75	0	18.33	18.23	18.11				
16	HQAM	1	0	18.24	18.33	18.28			17	0
16	HQAM	1	99	18.20	18.26	18.21				
16	HQAM	36	0	18.38	18.26	18.23				
16	HQAM	36	20	18.13	18.21	18.04			17	0
16	HQAM	75	0	18.33	18.23	18.11				
16	HQAM	1	0	18.24	18.33	18.28			17	0
16	HQAM	1	99	18.20	18.26	18.21				
16	HQAM	36	0	18.38	18.26	18.23				
16	HQAM	36	20	18.13	18.21	18.04			17	0
16	HQAM	75	0	18.33	18.23	18.11				
16	HQAM	1	0	18.24	18.33	18.28			17	0
16	HQAM	1	99	18.20	18.26	18.21				
16	HQAM	36	0	18.38	18.26	18.23				
16	HQAM	36	20	18.13	18.21	18.04			17	0
16	HQAM	75	0	18.33	18.23	18.11				
16	HQAM	1	0	18.24	18.33	18.28			17	0
16	HQAM	1	99	18.20	18.26	18.21				
16	HQAM	36	0	18.38	18.26	18.23				
16	HQAM	36	20	18.13	18.21	18.04			17	0
16	HQAM	75	0	18.33	18.23	18.11				
16	HQAM	1	0	18.24	18.33	18.28			17	0
16	HQAM	1	99	18.20	18.26	18.21				
16	HQAM	36	0	18.38	18.26	18.23				
16	HQAM	36	20	18.13	18.21	18.04			17	0
16	HQAM	75	0	18.33	18.23	18.11				
16	HQAM	1	0	18.24	18.33	18.28			17	0
16	HQAM	1	99	18.20	18.26	18.21				
16	HQAM	36	0	18.38	18.26	18.23				
16	HQAM	36	20	18.13	18.21	18.04			17	0
16	HQAM	75	0	18.33	18.23	18.11				
16	HQAM	1	0	18.24	18.33	18.28			17	0
16	HQAM	1	99	18.20	18.26	18.21				
16	HQAM	36	0	18.38	18.26	18.23				
16	HQAM	36	20	18.13	18.21	18.04			17	0
16	HQAM	75	0	18.33	18.23	18.11				
16	HQAM	1	0	18.24	18.33	18.28			17	0
16	HQAM	1	99	18.20	18.26	18.21				
16	HQAM	36	0	18.38	18.26	18.23				
16	HQAM	36	20	18.13	18.21	18.04			17	0
16	HQAM	75	0	18.33	18.23	18.11				
16	HQAM	1	0	18.24	18.33	18.28			17	0
16	HQAM	1	99	18.20	18.26	18.21				
16	HQAM	36	0	18.38	18.26	18.23				
16	HQAM	36	20	18.13	18.21	18.04			17	0
16	HQAM	75	0	18.33	18.23	18.11				
16	HQAM	1	0	18.24	18.33	18.28			17	0
16	HQAM	1	99	18.20	18.26	18.21				
16	HQAM	36	0	18.38	18.26	18.23				
16	HQAM	36	20	18.13	18.21	18.04			17	0
16	HQAM	75	0	18.33	18.23	18.11				
16	HQAM	1	0	18.24	18.33	18.28			17	0
16	HQAM	1	99	18.20	18.26	18.21				
16	HQAM	36	0	18.38	18.26	18.23				
16	HQAM	36	20	18.13	18.21	18.04			17	0
16	HQAM	75	0	18.33	18.23	18.11				
16	HQAM	1	0	18.24	18.33	18.28			17	0
16	HQAM	1	99	18.20	18.26	18.21				
16	HQAM	36	0	18.38	18.26	18.23				
16	HQAM	36	20	18.13	18.21	18.04			17	0
16	HQAM									



Band 2 Ant 3 DS16										
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch./Freq.	Power High Ch./Freq.	Power Low Ch./Freq.	Turn-up time (min)	MFR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	16.48	16.73	16.84	18	0		
20	QPSK	1	99	16.58	16.71	16.82				
20	QPSK	50	0	16.58	16.69	16.78				
20	QPSK	50	99	16.58	16.69	16.78				
20	QPSK	100	0	16.65	16.87	16.81				
20	QPSK	100	99	16.65	16.81	16.82				
20	16QAM	1	49	16.45	16.52	16.57	18	0		
20	16QAM	1	99	16.48	16.57	16.61				
20	16QAM	50	0	16.58	16.65	16.70				
20	16QAM	50	24	16.45	16.53	16.45	18	0		
20	16QAM	50	50	16.39	16.57	16.30				
20	16QAM	50	99	16.58	16.65	16.49				
20	64QAM	1	0	16.58	16.60	16.54				
20	64QAM	1	49	16.49	16.63	16.53	18	0		
20	64QAM	1	99	16.58	16.64	16.48				
20	64QAM	50	0	16.52	16.57	16.49				
20	64QAM	50	24	16.47	16.63	16.41	18	0		
20	64QAM	50	50	16.53	16.53	16.47				
20	64QAM	50	99	16.48	16.62	16.49				
20	256QAM	1	0	16.45	16.52	16.57				
20	256QAM	1	49	16.47	16.67	16.48	18	0		
20	256QAM	1	99	16.49	16.55	16.54				
20	256QAM	50	0	16.37	16.60	16.45				
20	256QAM	50	24	16.41	16.59	16.28	18	0		
20	256QAM	50	50	16.47	16.57	16.28				
20	256QAM	50	99	16.47	16.57	16.28				
Channel										
Frequency (MHz)										
15	QPSK	1	0	16.80	16.80	16.38	18	0		
15	QPSK	1	99	16.87	16.87	16.38				
15	QPSK	74	0	16.49	16.40	16.49				
15	QPSK	74	99	16.52	16.40	16.40				
15	QPSK	36	0	16.45	16.42	16.25				
15	QPSK	36	99	16.45	16.42	16.25				
15	QPSK	75	0	16.52	16.56	16.48	18	0		
15	QPSK	75	99	16.40	16.56	16.48				
15	16QAM	1	37	16.38	16.53	16.48	18	0		
15	16QAM	1	74	16.37	16.51	16.48				
15	16QAM	36	0	16.45	16.59	16.40				
15	16QAM	36	99	16.45	16.59	16.40				
15	16QAM	75	0	16.52	16.51	16.47	18	0		
15	16QAM	75	99	16.44	16.49	16.51				
15	64QAM	1	0	16.44	16.53	16.44	18	0		
15	64QAM	1	49	16.42	16.53	16.44				
15	64QAM	36	0	16.48	16.43	16.44				
15	64QAM	36	99	16.38	16.43	16.33	18	0		
15	64QAM	75	0	16.50	16.49	16.40				
15	64QAM	75	99	16.40	16.49	16.40				
15	256QAM	1	0	16.37	16.50	16.54				
15	256QAM	1	49	16.37	16.50	16.54	18	0		
15	256QAM	1	99	16.40	16.49	16.47				
15	256QAM	50	0	16.40	16.45	16.46				
15	256QAM	50	24	16.33	16.40	16.37	18	0		
15	256QAM	50	50	16.35	16.45	16.19				
15	256QAM	50	99	16.47	16.52	16.45				
Channel										
Frequency (MHz)										
10	QPSK	1	0	16.60	16.60	16.10	18	0		
10	QPSK	1	25	16.57	16.61	16.62				
10	QPSK	1	49	16.56	16.62	16.38				
10	QPSK	1	74	16.47	16.61	16.47				
10	QPSK	25	0	16.38	16.59	16.44				
10	QPSK	25	25	16.43	16.62	16.28	18	0		
10	QPSK	25	50	16.40	16.55	16.56				
10	QPSK	25	75	16.54	16.51	16.47				
10	16QAM	1	25	16.34	16.56	16.44	18	0		
10	16QAM	1	49	16.34	16.56	16.44				
10	16QAM	25	0	16.43	16.53	16.48				
10	16QAM	25	25	16.38	16.60	16.42	18	0		
10	16QAM	25	50	16.35	16.50	16.33				
10	16QAM	25	75	16.53	16.40	16.37				
10	64QAM	1	0	16.54	16.52	16.45	18	0		
10	64QAM	1	49	16.49	16.58	16.37				
10	64QAM	25	0	16.28	16.45	16.31				
10	64QAM	25	25	16.28	16.45	16.31	18	0		
10	64QAM	50	0	16.54	16.44	16.40				
10	64QAM	50	24	16.38	16.52	16.24	18	0		
10	64QAM	50	50	16.40	16.42	16.24				
10	64QAM	50	75	16.52	16.42	16.25				
10	256QAM	1	0	16.27	16.41	16.31	18	0		
10	256QAM	1	49	16.27	16.42	16.35				
10	256QAM	1	99	16.30	16.30	16.44				
10	256QAM	50	0	16.29	16.42	16.35				
10	256QAM	50	24	16.27	16.54	16.34	18	0		
10	256QAM	50	50	16.29	16.37	16.32				
10	256QAM	50	75	16.51	16.48	16.48				
Channel										
Frequency (MHz)										
5	QPSK	1	0	16.54	16.54	16.14	18	0		
5	QPSK	1	12	16.47	16.57	16.61				
5	QPSK	1	24	16.54	16.65	16.40				
5	QPSK	1	36	16.47	16.65	16.48				
5	QPSK	12	0	16.48	16.57	16.44				
5	QPSK	12	13	16.45	16.35	16.43	18	0		
5	QPSK	12	25	16.54	16.53	16.43				
5	QPSK	12	37	16.47	16.57	16.45				
5	QPSK	12	49	16.38	16.42	16.49	18	0		
5	QPSK	12	61	16.53	16.48	16.37				
5	16QAM	1	0	16.52	16.50	16.39	18	0		
5	16QAM	1	12	16.40	16.59	16.50				
5	16QAM	1	24	16.38	16.57	16.48				
5	16QAM	1	36	16.51	16.61	16.46				
5	16QAM	12	0	16.37	16.47	16.32	18	0		
5	16QAM	12	13	16.36	16.47	16.38				
5	16QAM	12	25	16.43	16.60	16.39				
5	16QAM	12	37	16.37	16.47	16.32	18	0		
5	16QAM	12	49	16.48	16.53	16.45				
5	64QAM	1	0	16.48	16.54	16.48	18	0		
5	64QAM	1	12	16.44	16.63	16.44				
5	64QAM	1	24	16.50	16.54	16.39				
5	64QAM	12	0	16.41	16.47	16.45	18	0		
5	64QAM	12	13	16.34	16.57	16.30				
5	64QAM	12	25	16.38	16.52	16.29				
5	64QAM	12	37	16.54	16.41	16.40				
5	64QAM	12	49	16.48	16.51	16.48				
5	256QAM	1	0	16.34	16.54	16.42	18	0		
5	256QAM	1	12	16.34	16.54	16.42				
5	256QAM	1	24	16.39	16.52	16.39				
5	256QAM	12	0	16.39	16.52	16.39	18	0		
5	256QAM	12	13	16.39	16.52	16.39				
5	256QAM	12	25	16.51	16.49	16.43				
Channel										
Frequency (MHz)										
3	QPSK	1	0	16.59	16.59	16.50	18	0		
3	QPSK	1	8	16.54	16.64	16.41				
3	QPSK	1	14	16.49	16.62	16.52				
3	QPSK	1	20	16.52	16.63	16.49				
3	QPSK	8	0	16.41	16.54	16.39	18	0		
3	QPSK	8	7	16.38	16.56	16.27				
3	QPSK	8	15	16.51	16.62	16.52				
3	16QAM	1	0	16.57	16.53	16.46	18	0		
3	16QAM	1	8	16.32	16.53	16.48				
3	16QAM	1	16	16.43	16.67	16.47				
3	16QAM	1	24	16.47	16.56	16.42				
3	16QAM	8</								

Band 4 Ant 5 DS16										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Mid Ch./Freq.	Power High Ch./Freq.	Turn-up (dB)	MPE (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	21.79	21.97	21.90			23.2	0
20	QPSK	1	49	21.72	21.80	21.83				
20	QPSK	1	99	21.77	21.84	21.78				
20	QPSK	50	0	21.75	21.83	21.82				
20	QPSK	50	24	21.78	21.86	21.85				
20	QPSK	50	50	21.86	21.70	21.68			23.2	0
20	QPSK	100	0	21.77	21.81	21.84				
20	QPSK	100	0	21.72	21.89	21.81				
20	HQAM	1	49	21.81	21.81	21.70			23.2	0
20	HQAM	1	99	21.70	21.76	21.71				
20	HQAM	50	0	21.77	21.81	21.75				
20	HQAM	50	24	21.58	21.75	21.61			23.2	0
20	HQAM	50	50	21.59	21.59	21.51				
20	HQAM	100	0	21.72	21.83	21.81				
20	HQAM	100	0	21.62	21.81	21.75				
20	HQAM	1	49	21.52	21.75	21.86			23.2	0
20	HQAM	1	99	21.62	21.67	21.68				
20	HQAM	50	0	21.20	21.49	21.56				
20	HQAM	50	24	21.30	21.28	21.24			22.7	0.5
20	HQAM	50	50	21.18	21.24	21.17				
20	HQAM	100	0	21.22	21.44	21.31				
20	ZSSVM	1	0	19.21	19.41	19.27				
20	ZSSVM	1	49	19.11	19.28	19.18			20.7	2.5
20	ZSSVM	1	99	19.18	19.22	19.17				
20	ZSSVM	50	0	19.25	19.36	19.28				
20	ZSSVM	50	24	19.20	19.35	19.31			20.7	2.5
20	ZSSVM	50	50	19.12	19.30	19.23				
20	ZSSVM	100	0	19.25	19.25	19.25				
Channel										
Frequency (MHz)										
15	QPSK	1	0	21.67	21.81	21.78			23.2	0
15	QPSK	1	49	21.66	21.76	21.76				
15	QPSK	1	99	21.72	21.79	21.74				
15	QPSK	50	0	21.67	21.84	21.87			23.2	0
15	QPSK	50	24	21.60	21.74	21.68				
15	QPSK	50	50	21.57	21.68	21.57			23.2	0
15	HQAM	1	49	21.60	21.83	21.87				
15	HQAM	1	99	21.69	21.80	21.81			23.2	0
15	HQAM	50	0	21.47	21.77	21.73				
15	HQAM	50	24	21.50	21.62	21.57			23.2	0
15	HQAM	50	50	21.62	21.67	21.66				
15	HQAM	100	0	21.67	21.72	21.62				
15	HQAM	100	0	21.60	21.76	21.63			23.2	0
15	HQAM	1	49	21.62	21.87	21.86				
15	HQAM	1	99	21.57	21.80	21.54				
15	HQAM	50	0	21.24	21.43	21.29			22.7	0.5
15	HQAM	50	24	21.15	21.26	21.15				
15	HQAM	50	50	21.08	21.12	21.05				
15	HQAM	100	0	21.14	21.31	21.21				
15	ZSSVM	1	0	19.05	19.26	19.16				
15	ZSSVM	1	49	19.00	19.26	19.05			20.7	2.5
15	ZSSVM	1	99	19.12	19.20	19.08				
15	ZSSVM	50	0	19.05	19.34	19.25				
15	ZSSVM	50	24	19.07	19.33	19.34			20.7	2.5
15	ZSSVM	50	50	19.06	19.23	19.11				
15	ZSSVM	100	0	19.05	19.23	19.11				
Channel										
Frequency (MHz)										
10	QPSK	1	0	21.73	21.83	21.79			23.2	0
10	QPSK	1	25	21.65	21.86	21.71				
10	QPSK	1	49	21.68	21.74	21.70				
10	QPSK	25	0	21.63	21.80	21.83			23.2	0
10	QPSK	25	12	21.53	21.76	21.63				
10	QPSK	25	25	21.56	21.68	21.62			23.2	0
10	HQAM	1	49	21.68	21.84	21.73				
10	HQAM	1	99	21.57	21.71	21.67			23.2	0
10	HQAM	25	0	21.65	21.70	21.65				
10	HQAM	25	12	21.56	21.63	21.48			23.2	0
10	HQAM	50	0	21.54	21.64	21.54				
10	HQAM	50	0	21.51	21.74	21.70				
10	HQAM	100	0	21.55	21.71	21.67			23.2	0
10	HQAM	100	0	21.50	21.70	21.63				
10	HQAM	1	49	21.58	21.60	21.48				
10	HQAM	25	0	21.25	21.35	21.31			22.7	0.5
10	HQAM	25	12	21.16	21.36	21.32				
10	HQAM	50	0	21.11	21.42	21.20				
10	ZSSVM	1	0	19.17	19.34	19.23				
10	ZSSVM	1	25	19.01	19.18	19.14			20.7	2.5
10	ZSSVM	1	49	19.02	19.08	19.03				
10	ZSSVM	50	0	19.02	19.30	19.23				
10	ZSSVM	50	12	19.07	19.32	19.28			20.7	2.5
10	ZSSVM	50	25	19.04	19.17	19.05				
10	ZSSVM	100	0	19.02	19.20	19.09				
Channel										
Frequency (MHz)										
5	QPSK	1	0	21.75	21.83	21.79			23.2	0
5	QPSK	1	12	21.69	21.81	21.65				
5	QPSK	1	24	21.74	21.75	21.65				
5	QPSK	12	0	21.71	21.89	21.81			23.2	0
5	QPSK	12	7	21.55	21.74	21.70				
5	QPSK	12	13	21.54	21.87	21.62			23.2	0
5	HQAM	1	49	21.67	21.86	21.85				
5	HQAM	1	99	21.60	21.85	21.73			23.2	0
5	HQAM	12	0	21.67	21.72	21.61				
5	HQAM	12	7	21.66	21.66	21.58			23.2	0
5	HQAM	12	0	21.64	21.76	21.68				
5	HQAM	12	7	21.50	21.48	21.58			23.2	0
5	HQAM	25	0	21.64	21.75	21.68				
5	HQAM	25	0	21.67	21.74	21.63			23.2	0
5	HQAM	50	0	21.62	21.66	21.61				
5	HQAM	50	0	21.64	21.78	21.72				
5	HQAM	12	7	21.50	21.48	21.45			23.2	0
5	HQAM	12	0	21.67	21.74	21.63				
5	HQAM	12	7	21.60	21.65	21.57			23.2	0
5	HQAM	24	0	21.53	21.69	21.57				
5	HQAM	24	0	21.57	21.37	21.27			22.7	0.5
5	HQAM	25	0	21.60	21.15	21.15				
5	HQAM	25	13	21.09	21.14	21.04				
5	HQAM	25	0	21.13	21.41	21.24			23.2	0
5	ZSSVM	1	0	19.08	19.38	19.24				
5	ZSSVM	1	12	19.02	19.26	19.05			20.7	2.5
5	ZSSVM	1	24	19.06	19.17	19.06				
5	ZSSVM	12	0	19.02	19.27	19.04				
5	ZSSVM	12	7	19.13	19.31	19.24			20.7	2.5
5	ZSSVM	12	13	19.04	19.23	19.04				
5	ZSSVM	25	0	19.13	19.15	19.01				
Channel										
Frequency (MHz)										
3	QPSK	1	8	21.68	21.84	21.78			23.2	0
3	QPSK	1	14	21.64	21.77	21.74				
3	QPSK	8	0	21.71	21.81	21.71				
3	QPSK	8	4	21.54	21.76	21.63			23.2	0
3	QPSK	8	7	21.56	21.68	21.56				
3	HQAM	1	8	21.71	21.78	21.71				
3	HQAM	1	8	21.60	21.71	21.62			23.2	0
3	HQAM	8	0	21.58	21.64	21.60				
3	HQAM	8	4	21.58	21.71	21.55			23.2	0
3	HQAM	8	7	21.46	21.48	21.45				
3	HQAM	16	0	21.66	21.73	21.63				
3	HQAM	16	0	21.60	21.72	21.61			23.2	0
3	HQAM	8	0	21.49	21.60	21.49				
3	HQAM	8	0	21.57	21.62	21.54				
3	HQAM	8	0	21.27	21.46	21.24			22.7	0.5
3	HQAM	8	0	21.03	21.17	21.03				
3	HQAM	8	7	21.11	21.21	21.09				

Band 38 Ant 2 DS16										
BW (MHz)	Modulation	RB Size	RB Offset	Power High Ch. / Freq.	Power Mid Ch. / Freq.	Power Low Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	16.23	16.25	16.11	17.5	0		
20	QPSK	1	49	16.14	16.10	16.13				
20	QPSK	1	99	16.05	16.08	16.06	17.5	0		
20	QPSK	50	0	16.17	16.22	16.06				
20	QPSK	50	24	16.10	16.03	16.08	17.5	0		
20	QPSK	50	50	15.94	16.05	16.01				
20	QPSK	100	0	16.14	16.16	16.03	17.5	0		
20	16QAM	1	0	16.13	16.15	16.01				
20	16QAM	1	49	16.11	16.00	16.11	17.5	0		
20	16QAM	1	99	15.93	15.95	15.93				
20	16QAM	50	0	16.12	16.15	15.99	17.5	0		
20	16QAM	50	24	16.03	16.00	15.99				
20	16QAM	50	50	15.82	15.96	15.94	17.5	0		
20	16QAM	100	0	16.04	16.13	15.92				
20	64QAM	1	0	16.20	16.11	16.01	17.5	0		
20	64QAM	1	49	16.12	15.98	16.00				
20	64QAM	1	99	15.97	16.04	15.97	17.5	0		
20	64QAM	50	0	16.14	16.09	15.98				
20	64QAM	50	24	16.01	15.96	15.96	17.5	0		
20	64QAM	50	50	15.89	15.93	15.96				
20	64QAM	100	0	16.01	16.04	15.89	17.5	0		
20	256QAM	1	0	16.17	16.13	16.04				
20	256QAM	1	49	16.04	16.03	16.00	17.5	0		
20	256QAM	1	99	16.03	15.99	15.94				
20	256QAM	50	0	16.08	16.17	15.94	17.5	0		
20	256QAM	50	24	15.96	15.89	16.01				
20	256QAM	50	50	15.89	16.02	15.90	17.5	0		
20	256QAM	100	0	16.06	16.11	15.96				
Channel				37825	38000	38175				
Frequency (MHz)				25775	2595	2612.5				
15	QPSK	1	0	16.14	16.22	16.08	17.5	0		
15	QPSK	1	37	16.02	16.03	16.04				
15	QPSK	1	74	15.92	15.97	16.03	17.5	0		
15	QPSK	36	0	16.09	16.15	16.04				
15	QPSK	36	20	15.98	15.96	16.01	17.5	0		
15	QPSK	36	39	15.84	15.96	15.95				
15	QPSK	75	0	16.01	16.07	15.85	17.5	0		
15	16QAM	1	0	16.06	16.10	15.98				
15	16QAM	1	37	16.01	15.90	15.97	17.5	0		
15	16QAM	1	74	15.88	15.89	15.81				
15	16QAM	36	0	16.05	16.05	15.88	17.5	0		
15	16QAM	36	20	15.98	15.97	15.85				
15	16QAM	36	39	15.79	15.90	15.89	17.5	0		
15	16QAM	75	0	15.92	16.08	15.82				
15	64QAM	1	0	16.15	15.98	15.92	17.5	0		
15	64QAM	1	37	16.00	15.87	15.95				
15	64QAM	1	74	15.89	15.92	15.94	17.5	0		
15	64QAM	36	0	16.09	16.07	15.92				
15	64QAM	36	20	15.92	15.94	15.90	17.5	0		
15	64QAM	36	39	15.83	15.88	15.90				
15	64QAM	75	0	15.91	15.92	15.79	17.5	0		
15	256QAM	1	0	16.14	16.09	15.97				
15	256QAM	1	37	15.92	15.92	15.93	17.5	0		
15	256QAM	1	74	16.01	15.93	15.89				
15	256QAM	36	0	16.01	16.14	15.81	17.5	0		
15	256QAM	36	20	15.90	15.84	15.98				
15	256QAM	36	39	15.78	15.99	15.84	17.5	0		
15	256QAM	75	0	15.93	15.99	15.98				
Channel				37800	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	16.09	16.13	16.06	17.5	0		
10	QPSK	1	25	16.05	16.01	16.11				
10	QPSK	1	49	16.00	15.99	16.01	17.5	0		
10	QPSK	25	0	16.05	16.19	15.97				
10	QPSK	25	12	16.04	15.99	15.99	17.5	0		
10	QPSK	25	25	15.85	15.97	15.98				
10	QPSK	50	0	16.03	16.09	15.94	17.5	0		
10	16QAM	1	0	16.11	16.01	15.96				
10	16QAM	1	25	16.03	15.88	16.05	17.5	0		
10	16QAM	1	49	15.91	15.86	15.83				
10	16QAM	25	0	16.07	16.08	15.88	17.5	0		
10	16QAM	25	12	15.95	15.90	15.86				
10	16QAM	25	25	15.79	15.88	15.85	17.5	0		
10	16QAM	50	0	15.92	16.11	15.89				
10	64QAM	1	0	16.06	16.03	15.91	17.5	0		
10	64QAM	1	25	16.00	15.85	15.98				
10	64QAM	1	49	15.89	15.92	15.86	17.5	0		
10	64QAM	25	0	16.02	16.05	15.90				
10	64QAM	25	12	15.90	15.92	15.90	17.5	0		
10	64QAM	25	25	15.81	15.87	15.84				
10	64QAM	50	0	15.88	15.97	15.80	17.5	0		
10	256QAM	1	0	16.10	16.01	15.99				
10	256QAM	1	25	15.98	15.99	15.90	17.5	0		
10	256QAM	1	49	15.94	15.87	15.89				
10	256QAM	25	0	16.02	16.11	15.81	17.5	0		
10	256QAM	25	12	15.90	15.90	15.97				
10	256QAM	25	25	15.77	15.92	15.80	17.5	0		
10	256QAM	50	0	16.00	16.05	15.88				
Channel				37775	38000	38225				
Frequency (MHz)				25725	2595	2617.5				
5	QPSK	1	0	16.09	16.16	16.04	17.5	0		
5	QPSK	1	12	16.01	16.01	16.05				
5	QPSK	1	24	15.93	15.99	15.94	17.5	0		
5	QPSK	12	0	16.14	16.17	15.95				
5	QPSK	12	7	15.96	15.97	15.96	17.5	0		
5	QPSK	12	13	15.82	15.99	15.97				
5	QPSK	25	0	16.10	16.05	15.97	17.5	0		
5	16QAM	1	0	16.04	16.01	15.95				
5	16QAM	1	12	16.06	15.90	16.06	17.5	0		
5	16QAM	1	24	15.90	15.92	15.81				
5	16QAM	12	0	16.07	16.02	15.86	17.5	0		
5	16QAM	12	7	15.99	15.95	15.98				
5	16QAM	12	13	15.78	15.94	15.83	17.5	0		
5	16QAM	25	0	15.93	16.00	15.89				
5	64QAM	1	0	16.15	16.03	15.89	17.5	0		
5	64QAM	1	12	16.08	15.86	15.92				
5	64QAM	1	24	15.85	15.98	15.85	17.5	0		
5	64QAM	12	0	16.00	16.01	15.85				
5	64QAM	12	7	15.98	15.90	15.93	17.5	0		
5	64QAM	12	13	15.86	15.90	15.82				
5	64QAM	25	0	15.95	15.97	15.84	17.5	0		
5	256QAM	1	0	16.04	16.10	16.01				
5	256QAM	1	12	15.96	15.95	15.91	17.5	0		
5	256QAM	1	24	15.99	15.94	15.84				
5	256QAM	12	0	15.99	16.12	15.85	17.5	0		
5	256QAM	12	7	15.87	15.85	15.93				
5	256QAM	12	13	15.86	15.98	15.83	17.5	0		
5	256QAM	25	0	15.95	16.00	15.83				

Band 41 Ant 2 DS16										
BW (MHz)	Modulation	RB Size	RB Offset	Power High Ch. / Freq.	Power Mid Ch. / Freq.	Power Low Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	16.10	16.15	16.17	17.5	0		
20	QPSK	1	49	16.05	16.10	16.16				
20	QPSK	1	99	15.98	15.95	16.08	17.5	0		
20	QPSK	50	0	16.07	16.06	16.14				
20	QPSK	50	24	16.01	16.02	16.04	17.5	0		
20	QPSK	50	50	15.87	15.87	15.97				
20	QPSK	100	0	16.03	16.07	16.13	17.5	0		
20	16QAM	1	0	16.06	16.11	16.07				
20	16QAM	1	49	15.94	16.01	16.07	17.5	0		



Band 38 Ant 3 DS16										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	18.45	18.46	18.40	18.7	0		
20	QPSK	1	49	18.34	18.43	18.37				
20	QPSK	1	99	18.39	18.40	18.34				
20	QPSK	50	0	18.32	18.40	18.32				
20	QPSK	50	24	18.21	18.40	18.29	18.7	0		
20	QPSK	50	50	18.35	18.33	18.25				
20	QPSK	100	0	18.33	18.37	18.31				
20	16QAM	1	0	18.37	18.38	18.37	18.7	0		
20	16QAM	1	49	18.31	18.27	18.29				
20	16QAM	1	99	18.38	18.29	18.28				
20	16QAM	50	0	18.25	18.34	18.23				
20	16QAM	50	24	18.08	18.29	18.23	18.7	0		
20	16QAM	50	50	18.27	18.29	18.14				
20	16QAM	100	0	18.26	18.25	18.27				
20	64QAM	1	0	18.32	18.39	18.32				
20	64QAM	1	49	18.27	18.33	18.33	18.7	0		
20	64QAM	1	99	18.36	18.27	18.25				
20	64QAM	50	0	18.27	18.32	18.19				
20	64QAM	50	24	18.11	18.33	18.18	18.7	0		
20	64QAM	50	50	18.27	18.27	18.18				
20	64QAM	100	0	18.29	18.33	18.21				
20	256QAM	1	0	18.39	18.37	18.35				
20	256QAM	1	49	18.26	18.31	18.34	18.7	0		
20	256QAM	1	99	18.33	18.32	18.29				
20	256QAM	50	0	18.21	18.27	18.24				
20	256QAM	50	24	18.15	18.34	18.20	18.7	0		
20	256QAM	50	50	18.24	18.26	18.11				
20	256QAM	100	0	18.24	18.32	18.22				
Channel				37825	38000	38175				
Frequency (MHz)				25775	2595	2612.5				
15	QPSK	1	0	18.32	18.39	18.27	18.7	0		
15	QPSK	1	37	18.28	18.35	18.24				
15	QPSK	1	74	18.38	18.30	18.21				
15	QPSK	36	0	18.25	18.32	18.21				
15	QPSK	36	20	18.07	18.34	18.27	18.7	0		
15	QPSK	36	39	18.21	18.27	18.22				
15	QPSK	75	0	18.22	18.31	18.27				
15	16QAM	1	0	18.34	18.28	18.31				
15	16QAM	1	37	18.20	18.32	18.23	18.7	0		
15	16QAM	1	74	18.31	18.17	18.22				
15	16QAM	36	0	18.19	18.27	18.15				
15	16QAM	36	20	17.94	18.24	18.13	18.7	0		
15	16QAM	36	39	18.25	18.18	18.01				
15	16QAM	75	0	18.22	18.12	18.24				
15	64QAM	1	0	18.24	18.38	18.28				
15	64QAM	1	37	18.25	18.26	18.21	18.7	0		
15	64QAM	1	74	18.30	18.22	18.14				
15	64QAM	36	0	18.23	18.24	18.06				
15	64QAM	36	20	18.03	18.22	18.14	18.7	0		
15	64QAM	36	39	18.19	18.19	18.09				
15	64QAM	75	0	18.25	18.24	18.11				
15	256QAM	1	0	18.32	18.30	18.23				
15	256QAM	1	37	18.28	18.28	18.22	18.7	0		
15	256QAM	1	74	18.30	18.21	18.16				
15	256QAM	36	0	18.10	18.15	18.11				
15	256QAM	36	20	18.07	18.25	18.17	18.7	0		
15	256QAM	36	39	18.18	18.21	18.06				
15	256QAM	75	0	18.15	18.22	18.18				
Channel				37890	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	18.33	18.41	18.28	18.7	0		
10	QPSK	1	25	18.25	18.32	18.28				
10	QPSK	1	49	18.33	18.28	18.27				
10	QPSK	25	0	18.27	18.38	18.21				
10	QPSK	25	12	18.09	18.33	18.25	18.7	0		
10	QPSK	25	25	18.31	18.26	18.19				
10	QPSK	50	0	18.32	18.35	18.24				
10	16QAM	1	0	18.34	18.27	18.24	18.7	0		
10	16QAM	1	25	18.22	18.34	18.31				
10	16QAM	1	49	18.30	18.26	18.22				
10	16QAM	25	0	18.21	18.28	18.09				
10	16QAM	25	12	18.02	18.15	18.10	18.7	0		
10	16QAM	25	25	18.19	18.18	18.05				
10	16QAM	50	0	18.18	18.22	18.19				
10	64QAM	1	0	18.27	18.33	18.18	18.7	0		
10	64QAM	1	25	18.13	18.24	18.22				
10	64QAM	1	49	18.23	18.20	18.18				
10	64QAM	25	0	18.16	18.24	18.06				
10	64QAM	25	12	18.01	18.31	18.15	18.7	0		
10	64QAM	25	25	18.23	18.18	18.13				
10	64QAM	50	0	18.25	18.20	18.12				
10	256QAM	1	0	18.32	18.29	18.23				
10	256QAM	1	25	18.14	18.18	18.26	18.7	0		
10	256QAM	1	49	18.21	18.29	18.17				
10	256QAM	25	0	18.14	18.13	18.21				
10	256QAM	25	12	18.09	18.27	18.10	18.7	0		
10	256QAM	25	25	18.12	18.13	18.06				
10	256QAM	50	0	18.18	18.20	18.16				
Channel				37775	38000	38225				
Frequency (MHz)				25725	2595	2617.5				
5	QPSK	1	0	18.36	18.40	18.28	18.7	0		
5	QPSK	1	12	18.30	18.41	18.29				
5	QPSK	1	24	18.31	18.31	18.29				
5	QPSK	12	0	18.30	18.31	18.28				
5	QPSK	12	7	18.16	18.36	18.20	18.7	0		
5	QPSK	12	13	18.22	18.28	18.14				
5	QPSK	25	0	18.26	18.32	18.19				
5	16QAM	1	0	18.34	18.30	18.31				
5	16QAM	1	12	18.25	18.29	18.24	18.7	0		
5	16QAM	1	24	18.33	18.20	18.15				
5	16QAM	12	0	18.18	18.31	18.16				
5	16QAM	12	7	18.02	18.24	18.19	18.7	0		
5	16QAM	12	13	18.15	18.26	18.11				
5	16QAM	25	0	18.24	18.21	18.15				
5	64QAM	1	0	18.27	18.25	18.20				
5	64QAM	1	12	18.19	18.25	18.27	18.7	0		
5	64QAM	1	24	18.28	18.16	18.13				
5	64QAM	12	0	18.22	18.22	18.10				
5	64QAM	12	7	18.09	18.21	18.08	18.7	0		
5	64QAM	12	13	18.23	18.22	18.06				
5	64QAM	25	0	18.17	18.22	18.15				
5	256QAM	1	0	18.31	18.34	18.30	18.7	0		
5	256QAM	1	12	18.21	18.25	18.27				
5	256QAM	1	24	18.28	18.19	18.21				
5	256QAM	12	0	18.17	18.14	18.12				
5	256QAM	12	7	18.09	18.23	18.06	18.7	0		
5	256QAM	12	13	18.12	18.21	18.04				
5	256QAM	25	0	18.13	18.24	18.10				

Band 41 Ant 3 DS16										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	18.39	18.30	18.50	18.7	0		
20	QPSK	1	49	18.23	18.14	18.42				
20	QPSK	1	99	18.35	18.24	18.38				
20	QPSK	50	0	18.31	18.25	18.45				
20	QPSK	50	24	18.09	18.05	18.39	18.7	0		
20	QPSK	50	50	18.22	18.20	18.24				
20	QPSK	100	0	18.31	18.22	18.43				
20	16QAM	1	0	18.20	18.21	18.40	18.7	0		
20	16QAM	1	49	18.16	18.00	18.32</				



Band 38 Ant 4 DS16												
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)				
Channel				37850	38000	38150						
Frequency (MHz)				2580	2595	2610						
20	QPSK	1	0	18.11	18.16	18.13	19.5	0				
20	QPSK	1	49	18.01	18.11	18.04						
20	QPSK	1	99	17.99	18.11	18.03						
20	QPSK	50	0	18.05	18.10	18.02	19.5	0				
20	QPSK	50	24	17.94	18.04	17.91						
20	QPSK	50	50	17.85	18.04	17.91						
20	QPSK	100	0	18.07	18.08	18.05	19.5	0				
20	16QAM	1	0	18.05	18.07	18.03						
20	16QAM	1	49	17.92	18.05	17.96						
20	16QAM	1	99	17.87	18.05	17.92	19.5	0				
20	16QAM	50	0	18.01	18.00	17.92						
20	16QAM	50	24	17.88	17.96	17.82						
20	16QAM	50	50	17.76	17.88	17.78	19.5	0				
20	16QAM	100	0	18.04	17.88	17.96						
20	16QAM	1	0	18.01	18.08	18.01						
20	64QAM	1	0	18.01	18.08	18.01	19.5	0				
20	64QAM	1	49	17.95	18.03	18.01						
20	64QAM	1	99	17.96	18.04	17.93						
20	64QAM	50	0	18.03	18.08	17.91	19.5	0				
20	64QAM	50	24	17.92	17.87	17.86						
20	64QAM	50	50	17.92	18.01	17.85						
20	64QAM	100	0	18.00	17.96	17.93	19.5	0				
20	256QAM	1	0	18.07	18.09	18.06						
20	256QAM	1	49	17.93	18.08	17.92						
20	256QAM	1	99	17.85	18.03	17.89	19.5	0				
20	256QAM	50	0	17.98	18.05	17.91						
20	256QAM	50	24	17.82	17.93	17.87						
20	256QAM	50	50	17.75	17.90	17.87	19.5	0				
20	256QAM	100	0	18.05	18.02	17.93						
Channel				37825	38000	38175			Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				25775	2592	2612.5						
15	QPSK	1	0	17.99	18.11	17.99	19.5	0				
15	QPSK	1	37	17.92	18.08	18.00						
15	QPSK	1	74	17.85	18.05	17.92						
15	QPSK	36	0	17.93	17.96	17.91	19.5	0				
15	QPSK	36	20	17.83	17.85	17.87						
15	QPSK	36	39	17.76	18.00	17.77						
15	QPSK	75	0	18.01	18.02	17.93	19.5	0				
15	16QAM	1	0	18.00	18.03	17.98						
15	16QAM	1	37	17.81	17.92	17.87						
15	16QAM	1	74	17.83	17.82	17.81	19.5	0				
15	16QAM	36	0	17.89	17.88	17.89						
15	16QAM	36	20	17.83	17.87	17.74						
15	16QAM	36	39	17.67	17.88	17.70	19.5	0				
15	16QAM	75	0	17.98	17.86	17.94						
15	16QAM	1	0	17.93	18.02	17.90						
15	16QAM	1	37	17.86	17.82	17.96	19.5	0				
15	16QAM	1	74	17.81	18.01	17.81						
15	16QAM	36	0	17.98	18.00	17.86						
15	16QAM	36	20	17.81	17.91	17.77	19.5	0				
15	16QAM	36	39	17.64	17.90	17.76						
15	16QAM	75	0	17.89	17.90	17.79						
15	256QAM	1	0	17.96	18.03	18.00	19.5	0				
15	256QAM	1	37	17.86	18.02	17.86						
15	256QAM	1	74	17.81	18.00	17.83						
15	256QAM	36	0	17.89	17.91	17.85	19.5	0				
15	256QAM	36	20	17.76	17.84	17.75						
15	256QAM	36	39	17.71	17.82	17.74						
15	256QAM	75	0	17.99	17.91	17.82	19.5	0				
Channel				37800	38000	38200			Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				2575	2595	2615						
10	QPSK	1	0	18.09	18.11	18.02	19.5	0				
10	QPSK	1	25	17.92	18.05	17.95						
10	QPSK	1	49	17.94	18.03	17.96						
10	QPSK	25	0	17.97	18.01	17.93	19.5	0				
10	QPSK	25	12	17.85	17.97	17.78						
10	QPSK	25	25	17.71	17.95	17.88						
10	QPSK	50	0	18.04	17.97	17.92	19.5	0				
10	16QAM	1	0	18.00	17.97	17.90						
10	16QAM	1	25	17.83	17.92	17.95						
10	16QAM	1	49	17.83	17.98	17.88	19.5	0				
10	16QAM	25	0	17.95	17.97	17.83						
10	16QAM	25	12	17.76	17.86	17.68						
10	16QAM	25	25	17.72	17.91	17.74	19.5	0				
10	16QAM	50	0	17.91	17.88	17.90						
10	16QAM	1	0	17.88	17.96	17.92						
10	64QAM	1	25	17.93	17.97	17.91	19.5	0				
10	64QAM	1	49	17.84	17.94	17.88						
10	64QAM	25	0	17.89	17.96	17.87						
10	64QAM	25	12	17.83	17.85	17.86	19.5	0				
10	64QAM	25	25	17.83	17.89	17.72						
10	64QAM	50	0	17.86	17.93	17.88						
10	256QAM	1	0	18.04	18.04	17.95	19.5	0				
10	256QAM	1	25	17.80	18.04	17.86						
10	256QAM	1	49	17.81	17.94	17.78						
10	256QAM	25	0	17.92	17.88	17.85	19.5	0				
10	256QAM	25	12	17.69	17.81	17.78						
10	256QAM	25	25	17.72	17.84	17.84						
10	256QAM	50	0	17.92	17.92	17.88	19.5	0				
Channel				37775	38000	38225			Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				25725	2595	2617.5						
5	QPSK	1	0	18.01	18.13	18.02	19.5	0				
5	QPSK	1	12	17.98	18.07	17.95						
5	QPSK	1	24	17.96	17.99	17.91						
5	QPSK	12	0	17.99	18.03	17.97	19.5	0				
5	QPSK	12	7	17.83	17.95	17.85						
5	QPSK	12	13	17.73	17.81	17.87						
5	QPSK	25	0	18.02	18.02	18.01	19.5	0				
5	16QAM	1	0	17.95	18.04	17.95						
5	16QAM	1	12	17.79	17.99	17.96						
5	16QAM	1	24	17.76	17.94	17.85	19.5	0				
5	16QAM	12	0	17.88	17.81	17.90						
5	16QAM	12	7	17.80	17.81	17.71						
5	16QAM	12	13	17.64	17.87	17.73	19.5	0				
5	16QAM	25	0	17.92	17.84	17.89						
5	64QAM	1	0	17.99	18.04	17.90						
5	64QAM	1	12	17.85	18.00	17.90	19.5	0				
5	64QAM	1	24	17.88	17.85	17.85						
5	64QAM	12	0	17.98	18.05	17.89						
5	64QAM	12	7	17.88	17.91	17.81	19.5	0				
5	64QAM	12	13	17.62	17.92	17.81						
5	64QAM	25	0	17.88	17.88	17.81						
5	256QAM	1	0	18.02	18.03	17.96	19.5	0				
5	256QAM	1	12	17.99	18.03	17.79						
5	256QAM	1	24	17.81	17.92	17.78						
5	256QAM	12	0	17.94	17.95	17.86	19.5	0				
5	256QAM	12	7	17.73	17.90	17.80						
5	256QAM	12	13	17.63	17.78	17.78						
5	256QAM	25	0	17.95	17.98	17.88	19.5	0				

Band 41 Ant 4 DS16												
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)				
Channel				39750	40185	40620	41055	41490				
Frequency (MHz)				2506	2549.5	2593	2636.5	2680				
20	QPSK	1	0	17.99	17.88	18.14	18.05	17.99	19.5	0		
20	QPSK	1	49	18.02	17.84	18.06	18.00	17.89				
20	QPSK	1	99	17.93	17.92	18.07	17.88	17.86				
20	QPSK	50	0	17.87	17.93	18.09	17.95	17.85	19.5	0		
20	QPSK	50	24	17.89	17.78	18.03	17.97	17.77				
20	QPSK	50	50	17.80	17.87	17.97	17.72	17.78				
20	QPSK	100	0	17.94	17.92	18.06	18.00	17.94	19.5	0		
20	16QAM	1	0	17.87	17.92	18.05	17.89	17.97				
20	16QAM	1	49	17.86	17.72	17.95	17.94	17.79				
20	16QAM	1	99	17.83	17.90	17.94	17.77	17.73	19.5	0		



Band 38 Ant 5 DS16										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	22.27	22.28	22.20	23.5	0		
20	QPSK	1	49	22.22	22.19	22.12				
20	QPSK	1	99	22.14	22.32	22.12	23.5	0		
20	QPSK	50	0	22.14	22.26	22.06				
20	QPSK	50	24	22.13	22.10	22.01	23.5	0		
20	QPSK	50	50	22.02	22.16	22.06				
20	QPSK	100	0	22.20	22.24	22.07	23.5	0		
20	16QAM	1	0	22.22	22.20	22.12				
20	16QAM	1	49	22.16	22.33	22.01	23.5	0		
20	16QAM	1	99	22.02	22.12	22.00				
20	16QAM	50	0	22.18	22.19	22.06	23.5	0		
20	16QAM	50	24	22.15	22.08	22.09				
20	16QAM	50	50	22.05	22.09	22.05	23.5	0		
20	16QAM	100	0	22.06	22.14	22.02				
20	64QAM	1	0	22.01	22.08	21.93	23.5	0		
20	64QAM	1	49	21.89	22.03	21.98				
20	64QAM	1	99	22.08	22.12	21.83	23.5	0		
20	64QAM	50	0	21.25	21.31	21.23				
20	64QAM	50	24	21.27	21.14	21.06	22.5	1		
20	64QAM	50	50	21.18	21.25	21.15				
20	64QAM	100	0	21.19	21.20	21.09	20.5	3		
20	256QAM	1	0	19.31	19.33	19.24				
20	256QAM	1	49	19.18	19.20	19.16	20.5	3		
20	256QAM	1	99	19.19	19.26	19.16				
20	256QAM	50	0	19.17	19.20	19.09	20.5	3		
20	256QAM	50	24	19.13	19.10	19.05				
20	256QAM	50	50	19.02	19.15	19.06	20.5	3		
20	256QAM	100	0	19.25	19.21	19.11				
Channel				37825	38000	38175				
Frequency (MHz)				25725	25825	25925				
15	QPSK	1	0	22.14	22.23	22.17	23.5	0		
15	QPSK	1	37	22.11	22.10	22.07				
15	QPSK	1	74	22.02	22.08	22.04	23.5	0		
15	QPSK	36	0	22.02	22.24	21.95				
15	QPSK	36	20	22.10	22.05	21.88	23.5	0		
15	QPSK	36	39	22.13	22.12	21.96				
15	QPSK	75	0	22.15	22.18	21.96	23.5	0		
15	16QAM	1	0	22.15	22.13	22.01				
15	16QAM	1	37	22.08	22.06	21.93	23.5	0		
15	16QAM	1	74	21.97	22.05	21.89				
15	16QAM	36	0	22.05	22.05	22.00	23.5	0		
15	16QAM	36	20	22.12	22.05	21.99				
15	16QAM	36	39	22.01	21.97	22.02	23.5	0		
15	16QAM	75	0	22.03	22.05	21.94				
15	64QAM	1	0	21.90	22.00	21.88	23.5	0		
15	64QAM	1	37	21.78	21.84	21.85				
15	64QAM	1	74	22.00	22.06	21.81	23.5	0		
15	64QAM	36	0	21.20	21.23	21.21				
15	64QAM	36	20	21.14	21.11	20.95	22.5	1		
15	64QAM	36	39	21.05	21.21	21.05				
15	64QAM	75	0	21.13	21.18	21.04	20.5	3		
15	256QAM	1	0	19.19	19.20	19.14				
15	256QAM	1	37	19.15	19.11	19.07	20.5	3		
15	256QAM	1	74	19.05	19.22	19.13				
15	256QAM	36	0	19.04	19.11	19.01	20.5	3		
15	256QAM	36	20	19.03	18.96	18.97				
15	256QAM	36	39	18.93	19.03	18.94	20.5	3		
15	256QAM	75	0	19.20	19.11	19.06				
Channel				37820	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	22.24	22.25	22.14	23.5	0		
10	QPSK	1	25	22.09	22.14	21.99				
10	QPSK	1	49	22.08	22.09	22.02	23.5	0		
10	QPSK	25	0	22.04	22.21	21.95				
10	QPSK	25	12	22.00	21.97	21.89	23.5	0		
10	QPSK	25	25	21.90	22.03	21.94				
10	QPSK	50	0	22.17	22.10	22.04	23.5	0		
10	16QAM	1	0	22.16	22.15	22.08				
10	16QAM	1	25	22.06	22.01	21.86	23.5	0		
10	16QAM	1	49	21.96	22.07	21.92				
10	16QAM	25	0	22.05	22.06	22.04	23.5	0		
10	16QAM	25	12	22.07	22.05	21.88				
10	16QAM	25	25	21.96	21.95	21.86	23.5	0		
10	16QAM	50	0	22.02	22.00	21.92				
10	64QAM	1	0	21.97	22.03	21.82	23.5	0		
10	64QAM	1	25	21.85	21.91	21.91				
10	64QAM	1	49	21.99	22.03	21.80	23.5	0		
10	64QAM	25	0	21.23	21.28	21.20				
10	64QAM	25	12	21.24	21.01	20.95	22.5	1		
10	64QAM	25	25	21.15	21.12	21.02				
10	64QAM	50	0	21.10	21.13	21.04	20.5	3		
10	256QAM	1	0	19.20	19.23	19.21				
10	256QAM	1	25	19.06	19.08	19.02	20.5	3		
10	256QAM	1	49	19.09	19.14	19.12				
10	256QAM	25	0	19.05	19.08	19.02	20.5	3		
10	256QAM	25	12	19.02	19.05	18.95				
10	256QAM	25	25	18.93	19.05	18.98	20.5	3		
10	256QAM	50	0	19.22	19.08	19.03				
Channel				37775	38000	38225				
Frequency (MHz)				25725	2595	2617.5				
5	QPSK	1	0	22.21	22.26	22.11	23.5	0		
5	QPSK	1	12	22.14	22.11	22.05				
5	QPSK	1	24	22.12	22.19	21.99	23.5	0		
5	QPSK	12	0	22.03	22.21	21.98				
5	QPSK	12	7	22.01	22.01	21.80	23.5	0		
5	QPSK	12	13	21.97	22.11	21.83				
5	QPSK	25	0	22.17	22.16	21.94	23.5	0		
5	16QAM	1	0	22.19	22.07	22.07				
5	16QAM	1	12	22.04	22.04	21.88	23.5	0		
5	16QAM	1	24	21.92	22.02	21.93				
5	16QAM	12	0	22.06	22.13	21.99	23.5	0		
5	16QAM	12	7	22.05	22.05	22.05				
5	16QAM	12	13	21.91	22.06	22.02	23.5	0		
5	16QAM	25	0	21.95	22.11	22.00				
5	64QAM	1	0	21.92	22.01	21.88	23.5	0		
5	64QAM	1	12	21.78	21.93	21.93				
5	64QAM	1	24	21.97	22.07	21.80	23.5	0		
5	64QAM	12	0	21.13	21.22	21.17				
5	64QAM	12	7	21.14	21.08	21.03	22.5	1		
5	64QAM	12	13	21.08	21.12	21.04				
5	64QAM	25	0	21.09	21.17	21.06	20.5	3		
5	256QAM	1	0	19.21	19.22	19.20				
5	256QAM	1	12	19.11	19.17	19.04	20.5	3		
5	256QAM	1	24	19.14	19.20	19.11				
5	256QAM	12	0	19.10	19.15	18.95	20.5	3		
5	256QAM	12	7	19.03	19.00	18.98				
5	256QAM	12	13	18.93	19.02	18.94	20.5	3		
5	256QAM	25	0	19.14	19.18	19.08				

Band 41 Ant 5 DS16										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	22.09	22.22	22.23	23.5	0		
20	QPSK	1	49	22.06	22.10	22.21				
20	QPSK	1	99	21.99	22.07	22.18	23.5	0		
20	QPSK	50	0	22.01	22.14	22.19				
20	QPSK	50	24	22.01	22.01	22.08	23.5	0		
20	QPSK	50	50	21.96	21.97	22.08				
20	QPSK	100	0	21.98	22.19	22.15	23.5	0		
20	16QAM	1	0	22.03	22.18	22.09				
20	16QAM	1	49	22.03	22.02	22.11	23.5	0		
20	16QAM	1	99</							



Band 42 Ant 1 DSI6										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				42190	42590	42990				
Frequency (MHz)				3460	3500	3540				
20	QPSK	1	0	19.97	20.03	19.99	21.5	0		
20	QPSK	1	49	19.82	20.02	19.92				
20	QPSK	1	99	19.77	19.94	19.86				
20	QPSK	50	0	19.85	20.00	19.86				
20	QPSK	50	24	19.75	19.92	19.87	21.5	0		
20	QPSK	50	50	19.75	19.84	19.75				
20	QPSK	100	0	19.95	19.97	19.86				
20	16QAM	1	0	19.85	19.89	19.85				
20	16QAM	1	49	19.70	19.89	19.87	21.5	0		
20	16QAM	1	99	19.65	19.83	19.80				
20	16QAM	50	0	19.41	19.48	19.51				
20	16QAM	50	24	19.31	19.50	19.41	21	0.5		
20	16QAM	50	50	19.28	19.45	19.41				
20	16QAM	100	0	19.40	19.52	19.31				
20	64QAM	1	0	19.28	19.44	19.33				
20	64QAM	1	49	19.22	19.34	19.23	21	0.5		
20	64QAM	1	99	19.49	19.46	19.36				
20	64QAM	50	0	18.42	18.52	18.45				
20	64QAM	50	24	18.35	18.47	18.48	20	1.5		
20	64QAM	50	50	18.31	18.43	18.39				
20	64QAM	100	0	18.36	18.46	18.38				
20	256QAM	1	0	16.42	16.47	16.46				
20	256QAM	1	49	16.36	16.50	16.45	18	3.5		
20	256QAM	1	99	16.29	16.47	16.38				
20	256QAM	50	0	16.35	16.47	16.39				
20	256QAM	50	24	16.29	16.47	16.39	18	3.5		
20	256QAM	50	50	16.20	16.30	16.27				
20	256QAM	100	0	16.50	16.41	16.34				
Channel				42165	42590	43015	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				3422.5	3500	3577.5				
15	QPSK	1	0	19.94	19.99	19.93	21.5	0		
15	QPSK	1	37	19.72	19.99	19.82				
15	QPSK	1	74	19.66	19.84	19.76				
15	QPSK	36	0	19.72	19.92	19.73				
15	QPSK	36	20	19.69	19.79	19.81	21.5	0		
15	QPSK	36	39	19.65	19.70	19.67				
15	QPSK	75	0	19.92	19.87	19.74				
15	16QAM	1	0	19.80	19.80	19.83				
15	16QAM	1	37	19.71	19.83	19.80	21.5	0		
15	16QAM	1	74	19.57	19.73	19.74				
15	16QAM	36	0	19.35	19.42	19.43				
15	16QAM	36	20	19.25	19.40	19.29	21	0.5		
15	16QAM	36	39	19.25	19.35	19.27				
15	16QAM	75	0	19.31	19.44	19.27				
15	64QAM	1	0	19.17	19.41	19.29				
15	64QAM	1	37	19.10	19.30	19.17	21	0.5		
15	64QAM	1	74	19.45	19.35	19.24				
15	64QAM	36	0	18.37	18.41	18.39				
15	64QAM	36	20	18.28	18.42	18.43	20	1.5		
15	64QAM	36	39	18.22	18.30	18.18				
15	64QAM	75	0	18.32	18.35	18.26				
15	256QAM	1	0	16.38	16.41	16.40				
15	256QAM	1	37	16.28	16.40	16.37	18	3.5		
15	256QAM	1	74	16.21	16.34	16.25				
15	256QAM	36	0	16.27	16.35	16.32				
15	256QAM	36	20	16.24	16.34	16.26	18	3.5		
15	256QAM	36	39	16.12	16.21	16.19				
15	256QAM	75	0	16.45	16.39	16.20				
Channel				42140	42590	43040	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				3455	3500	3545				
10	QPSK	1	0	19.85	19.94	19.86	21.5	0		
10	QPSK	1	25	19.76	19.99	19.80				
10	QPSK	1	49	19.68	19.95	19.75				
10	QPSK	25	0	19.80	19.89	19.78				
10	QPSK	25	12	19.62	19.81	19.73	21.5	0		
10	QPSK	25	25	19.63	19.72	19.66				
10	QPSK	50	0	19.87	19.85	19.74				
10	16QAM	1	0	19.77	19.77	19.86	21.5	0		
10	16QAM	1	25	19.69	19.86	19.84				
10	16QAM	1	49	19.56	19.77	19.70				
10	16QAM	25	0	19.33	19.38	19.38				
10	16QAM	25	12	19.24	19.46	19.37	21	0.5		
10	16QAM	25	25	19.19	19.38	19.37				
10	16QAM	50	0	19.27	19.47	19.26				
10	64QAM	1	0	19.18	19.38	19.20	21	0.5		
10	64QAM	1	25	19.18	19.22	19.18				
10	64QAM	1	49	19.44	19.42	19.34				
10	64QAM	25	0	18.28	18.44	18.36				
10	64QAM	25	12	18.30	18.34	18.39	20	1.5		
10	64QAM	25	25	18.24	18.31	18.25				
10	64QAM	50	0	18.26	18.41	18.28				
10	256QAM	1	0	16.35	16.34	16.40				
10	256QAM	1	25	16.23	16.41	16.41	18	3.5		
10	256QAM	1	49	16.16	16.40	16.32				
10	256QAM	25	0	16.26	16.43	16.33				
10	256QAM	25	12	16.25	16.43	16.29	18	3.5		
10	256QAM	25	25	16.17	16.25	16.21				
10	256QAM	50	0	16.41	16.32	16.22				
Channel				42115	42590	43065	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				3222.5	3500	3577.5				
5	QPSK	1	0	19.84	19.94	19.89	21.5	0		
5	QPSK	1	12	19.73	19.89	19.79				
5	QPSK	1	24	19.70	19.83	19.75				
5	QPSK	12	0	19.80	19.93	19.75				
5	QPSK	12	7	19.69	19.82	19.82	21.5	0		
5	QPSK	12	13	19.71	19.73	19.67				
5	QPSK	25	0	19.90	19.95	19.73				
5	16QAM	1	0	19.76	19.79	19.91	21.5	0		
5	16QAM	1	12	19.68	19.78	19.81				
5	16QAM	1	24	19.54	19.81	19.69				
5	16QAM	12	0	19.30	19.37	19.45				
5	16QAM	12	7	19.26	19.43	19.30	21	0.5		
5	16QAM	12	13	19.24	19.41	19.29				
5	16QAM	25	0	19.27	19.39	19.20				
5	64QAM	1	0	19.21	19.35	19.29				
5	64QAM	1	12	19.14	19.25	19.14	21	0.5		
5	64QAM	1	24	19.43	19.44	19.33				
5	64QAM	12	0	18.37	18.47	18.35				
5	64QAM	12	7	18.30	18.40	18.38	20	1.5		
5	64QAM	12	13	18.24	18.32	18.26				
5	64QAM	25	0	18.23	18.36	18.33				
5	256QAM	1	0	16.30	16.34	16.35				
5	256QAM	1	12	16.31	16.46	16.32	18	3.5		
5	256QAM	1	24	16.16	16.40	16.34				
5	256QAM	12	0	16.23	16.41	16.36				
5	256QAM	12	7	16.25	16.41	16.36	18	3.5		
5	256QAM	12	13	16.15	16.27	16.13				
5	256QAM	25	0	16.42	16.28	16.21				

Band 48 Ant 1 DSI6										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				55340	55830	56150	56640			
Frequency (MHz)				3560	3569	3641	3690			
20	QPSK	1	0	19.60	19.73	19.65	19.65	21	0	
20	QPSK	1	49	19.58	19.64	19.60	19.66			
20	QPSK	1	99	19.55	19.63	19.53	19.54			
20	QPSK	50	0	19.52	19.69	19.53	19.53			
20	QPSK	50	24	19.49	19.53	19.46	19.62	21	0	
20	Q									

Band 42 Ant 6 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				42190	42590	42990			
Frequency (MHz)				3460	3500	3540			
20	QPSK	1	0	15.41	15.65	15.56	16.5	0	
20	QPSK	1	49	15.39	15.47	15.59			
20	QPSK	1	99	15.48	15.48	15.62			
20	QPSK	50	0	15.47	15.51	15.59			
20	QPSK	50	24	15.48	15.46	15.50			
20	QPSK	50	50	15.48	15.55	15.54			
20	QPSK	100	0	15.39	15.45	15.57			
20	16QAM	1	0	15.43	15.52	15.58			
20	16QAM	1	49	15.50	15.52	15.60			
20	16QAM	1	99	15.47	15.52	15.52			
20	16QAM	50	0	15.50	15.52	15.55			
20	16QAM	50	24	15.42	15.50	15.57			
20	16QAM	50	50	15.48	15.47	15.57			
20	16QAM	100	0	15.42	15.48	15.62			
20	64QAM	1	0	15.49	15.56	15.56			
20	64QAM	1	49	15.49	15.51	15.52			
20	64QAM	1	99	15.39	15.45	15.59			
20	64QAM	50	0	15.50	15.50	15.53			
20	64QAM	50	24	15.42	15.48	15.54			
20	64QAM	50	50	15.45	15.45	15.50			
20	64QAM	100	0	15.43	15.46	15.56			
20	256QAM	1	0	15.46	15.52	15.54			
20	256QAM	1	49	15.45	15.55	15.59			
20	256QAM	1	99	15.45	15.55	15.57			
20	256QAM	50	0	15.49	15.56	15.50			
20	256QAM	50	24	15.41	15.53	15.61			
20	256QAM	50	50	15.42	15.48	15.50			
20	256QAM	100	0	15.47	15.55	15.55			
Channel				42165	42590	43015			
Frequency (MHz)				3422.5	3500	3577.5			
15	QPSK	1	0	15.29	15.43	15.47	16.5	0	
15	QPSK	1	37	15.37	15.44	15.50			
15	QPSK	1	74	15.34	15.39	15.45			
15	QPSK	36	0	15.35	15.40	15.42			
15	QPSK	36	20	15.31	15.37	15.49			
15	QPSK	36	39	15.39	15.42	15.49			
15	QPSK	75	0	15.41	15.45	15.49			
15	16QAM	1	0	15.34	15.37	15.48			
15	16QAM	1	37	15.36	15.39	15.41			
15	16QAM	1	74	15.38	15.45	15.41			
15	16QAM	36	0	15.37	15.44	15.40			
15	16QAM	36	20	15.33	15.44	15.49			
15	16QAM	36	39	15.34	15.35	15.47			
15	16QAM	75	0	15.34	15.44	15.48			
15	64QAM	1	0	15.34	15.43	15.45			
15	64QAM	1	37	15.40	15.40	15.44			
15	64QAM	1	74	15.36	15.42	15.48			
15	64QAM	36	0	15.36	15.43	15.48			
15	64QAM	36	20	15.39	15.36	15.48			
15	64QAM	36	39	15.37	15.41	15.47			
15	64QAM	75	0	15.31	15.47	15.48			
15	256QAM	1	0	15.33	15.46	15.51			
15	256QAM	1	37	15.32	15.40	15.49			
15	256QAM	1	74	15.31	15.37	15.50			
15	256QAM	36	0	15.35	15.38	15.42			
15	256QAM	36	20	15.37	15.45	15.43			
15	256QAM	36	39	15.31	15.45	15.43			
15	256QAM	75	0	15.41	15.46	15.47			
Channel				42140	42590	43040			
Frequency (MHz)				3455	3500	3545			
10	QPSK	1	0	15.39	15.41	15.43	16.5	0	
10	QPSK	1	25	15.33	15.38	15.50			
10	QPSK	1	49	15.31	15.43	15.44			
10	QPSK	25	0	15.35	15.39	15.45			
10	QPSK	25	12	15.31	15.36	15.52			
10	QPSK	25	25	15.38	15.40	15.42			
10	QPSK	50	0	15.33	15.41	15.49			
10	16QAM	1	0	15.40	15.38	15.40			
10	16QAM	1	25	15.35	15.36	15.47			
10	16QAM	1	49	15.34	15.42	15.45			
10	16QAM	25	0	15.36	15.38	15.45			
10	16QAM	25	12	15.35	15.46	15.45			
10	16QAM	25	25	15.36	15.47	15.47			
10	16QAM	50	0	15.31	15.40	15.48			
10	64QAM	1	0	15.29	15.36	15.45			
10	64QAM	1	25	15.34	15.42	15.49			
10	64QAM	1	49	15.34	15.38	15.48			
10	64QAM	25	0	15.32	15.46	15.47			
10	64QAM	25	12	15.33	15.45	15.48			
10	64QAM	25	25	15.39	15.42	15.47			
10	64QAM	50	0	15.29	15.43	15.48			
10	256QAM	1	0	15.32	15.40	15.46			
10	256QAM	1	25	15.35	15.38	15.49			
10	256QAM	1	49	15.35	15.39	15.41			
10	256QAM	25	0	15.34	15.36	15.47			
10	256QAM	25	12	15.37	15.43	15.49			
10	256QAM	25	25	15.38	15.43	15.44			
10	256QAM	50	0	15.30	15.43	15.51			
Channel				42115	42590	43065			
Frequency (MHz)				3422.5	3500	3577.5			
5	QPSK	1	0	15.40	15.42	15.40	16.5	0	
5	QPSK	1	12	15.30	15.47	15.49			
5	QPSK	1	24	15.41	15.39	15.46			
5	QPSK	12	0	15.32	15.40	15.41			
5	QPSK	12	7	15.39	15.39	15.44			
5	QPSK	12	13	15.41	15.40	15.45			
5	QPSK	25	0	15.30	15.41	15.41			
5	16QAM	1	0	15.35	15.42	15.50			
5	16QAM	1	12	15.34	15.35	15.48			
5	16QAM	1	24	15.35	15.35	15.51			
5	16QAM	12	0	15.34	15.37	15.51			
5	16QAM	12	7	15.36	15.41	15.41			
5	16QAM	12	13	15.38	15.39	15.47			
5	16QAM	25	0	15.30	15.45	15.41			
5	64QAM	1	0	15.31	15.38	15.48			
5	64QAM	1	12	15.37	15.46	15.51			
5	64QAM	1	24	15.39	15.36	15.47			
5	64QAM	12	0	15.32	15.37	15.44			
5	64QAM	12	7	15.31	15.38	15.42			
5	64QAM	12	13	15.35	15.44	15.51			
5	64QAM	25	0	15.30	15.35	15.40			
5	256QAM	1	0	15.32	15.47	15.41			
5	256QAM	1	12	15.37	15.44	15.49			
5	256QAM	1	24	15.32	15.37	15.45			
5	256QAM	12	0	15.40	15.45	15.46			
5	256QAM	12	7	15.37	15.40	15.49			
5	256QAM	12	13	15.33	15.44	15.45			
5	256QAM	25	0	15.30	15.39	15.44			

Band 48 Ant 6 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				55340	55530	56150			
Frequency (MHz)				3560	3569	3641			
20	QPSK	1	0	15.91	16.15	16.00	17	0	
20	QPSK	1	49	15.91	16.07	16.03			
20	QPSK	1	99	15.94	16.11	16.02			
20	QPSK	50	0	15.89	16.05	16.05			
20	QPSK	50	24	15.92	16.07	16.06			
20	QPSK	50	50	15.91	16.03	16.05			
20	QPSK	100	0	15.93	16.10	15.98			
20	16QAM	1	0	15.90	16.08	16.00			
20	16QAM	1	49	15.97	16.13	15.99			
20	16QAM	1	99	15.91	16.12	16.03			
20	16QAM	50	0	15.90	16.09	15.95			
20	16QAM	50	24	15.95	16.05	15.95			
20	16QAM	50	50	15.91	16.07	16.00			
20	16QAM	100	0	15.91	16.03	16.05			
20	64QAM	1	0	15.88	16.12	15.96			
20	64QAM	1	49	16.00					



Band 42 Ant 7 DSI6										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				42190	42590	42990				
Frequency (MHz)				3460	3500	3540				
20	QPSK	1	0	17.08	17.21	17.10	18.5	0		
20	QPSK	1	49	16.98	17.11	17.04				
20	QPSK	1	99	17.04	17.07	17.09				
20	QPSK	50	0	17.09	17.06	17.09				
20	QPSK	50	24	17.08	17.15	17.10				
20	QPSK	50	50	17.09	17.07	17.12				
20	QPSK	100	0	17.00	17.13	17.07				
20	16QAM	1	0	17.02	17.09	17.07	18.5	0		
20	16QAM	1	49	17.09	17.14	17.06				
20	16QAM	1	99	16.99	17.14	17.06				
20	16QAM	50	0	17.03	17.12	17.10				
20	16QAM	50	24	17.02	17.11	17.06				
20	16QAM	50	50	17.03	17.13	17.09				
20	16QAM	100	0	17.06	17.11	17.06				
20	64QAM	1	0	17.09	17.08	17.10	18.5	0		
20	64QAM	1	49	17.09	17.10	17.03				
20	64QAM	1	99	17.00	17.08	17.07				
20	64QAM	50	0	17.01	17.15	17.07				
20	64QAM	50	24	17.00	17.10	17.05				
20	64QAM	50	50	17.01	17.07	17.09				
20	64QAM	100	0	17.09	17.05	17.13				
20	256QAM	1	0	17.07	17.14	17.13	18.5	0		
20	256QAM	1	49	17.03	17.13	17.06				
20	256QAM	1	99	17.06	17.08	17.03				
20	256QAM	50	0	17.09	17.13	17.12				
20	256QAM	50	24	17.09	17.16	17.03				
20	256QAM	50	50	17.06	17.10	17.12				
20	256QAM	100	0	17.04	17.11	17.02				
Channel				42165	42590	43015	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				3422.5	3500	3577.5				
15	QPSK	1	0	16.94	17.02	16.99	18.5	0		
15	QPSK	1	37	16.96	16.98	17.00				
15	QPSK	1	74	16.92	17.01	17.00				
15	QPSK	36	0	16.99	16.99	17.03				
15	QPSK	36	20	16.99	17.03	17.01				
15	QPSK	36	39	16.93	17.05	16.95				
15	QPSK	75	0	17.00	16.97	17.03	18.5	0		
15	16QAM	1	0	16.88	16.99	16.99				
15	16QAM	1	37	16.94	16.96	17.03				
15	16QAM	1	74	16.97	16.98	16.93				
15	16QAM	36	0	16.99	17.03	16.95				
15	16QAM	36	20	16.95	16.98	16.98				
15	16QAM	36	39	16.98	17.03	16.94				
15	16QAM	75	0	16.89	17.01	16.93				
15	64QAM	1	0	16.96	16.94	17.03	18.5	0		
15	64QAM	1	37	16.96	16.97	16.95				
15	64QAM	1	74	16.90	17.06	17.02				
15	64QAM	36	0	16.90	16.94	17.00				
15	64QAM	36	20	16.98	17.00	16.99				
15	64QAM	36	39	17.00	16.96	16.97				
15	64QAM	75	0	16.91	16.95	16.96				
15	256QAM	1	0	16.92	17.00	16.93	18.5	0		
15	256QAM	1	37	16.92	17.01	16.94				
15	256QAM	1	74	16.99	16.94	16.96				
15	256QAM	36	0	16.98	17.02	16.99				
15	256QAM	36	20	16.91	17.03	17.02				
15	256QAM	36	39	16.88	17.06	16.96				
15	256QAM	75	0	16.91	16.98	16.97				
Channel				42140	42590	43040	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				3455	3500	3545				
10	QPSK	1	0	16.97	17.00	16.93	18.5	0		
10	QPSK	1	25	16.95	17.00	16.98				
10	QPSK	1	49	16.92	16.96	17.00				
10	QPSK	25	0	16.99	17.02	16.93				
10	QPSK	25	12	16.97	16.96	17.02				
10	QPSK	25	25	16.91	17.02	16.92				
10	QPSK	50	0	16.89	17.06	16.96				
10	16QAM	1	0	16.95	17.01	16.96	18.5	0		
10	16QAM	1	25	16.98	17.02	16.95				
10	16QAM	1	49	16.90	17.02	17.03				
10	16QAM	25	0	17.00	17.03	17.00				
10	16QAM	25	12	16.97	17.01	17.02				
10	16QAM	25	25	16.99	16.98	16.95				
10	16QAM	50	0	16.88	16.99	16.99				
10	64QAM	1	0	16.99	17.05	16.97	18.5	0		
10	64QAM	1	25	16.95	17.06	16.94				
10	64QAM	1	49	16.95	17.04	16.96				
10	64QAM	25	0	16.95	17.00	17.00				
10	64QAM	25	12	16.90	17.03	16.99				
10	64QAM	25	25	16.95	17.05	16.97				
10	64QAM	50	0	16.89	16.99	16.98				
10	256QAM	1	0	16.96	17.05	17.02	18.5	0		
10	256QAM	1	25	16.92	16.96	17.02				
10	256QAM	1	49	16.89	17.01	16.98				
10	256QAM	25	0	16.99	17.02	17.01				
10	256QAM	25	12	16.93	16.99	16.93				
10	256QAM	25	25	16.98	16.99	16.94				
10	256QAM	50	0	16.88	16.97	17.04				
Channel				42115	42590	43065	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				3422.5	3500	3577.5				
5	QPSK	1	0	16.90	16.96	17.03	18.5	0		
5	QPSK	1	12	16.98	16.94	16.93				
5	QPSK	1	24	17.00	17.05	16.93				
5	QPSK	12	0	16.94	17.02	16.94				
5	QPSK	12	7	16.90	17.02	17.03				
5	QPSK	12	13	16.91	17.06	17.01				
5	QPSK	25	0	16.97	17.04	16.95				
5	16QAM	1	0	16.96	16.98	16.94	18.5	0		
5	16QAM	1	12	16.98	16.95	16.98				
5	16QAM	1	24	16.89	17.06	16.93				
5	16QAM	12	0	16.91	17.05	16.99				
5	16QAM	12	7	16.91	16.96	17.01				
5	16QAM	12	13	16.94	16.98	17.00				
5	16QAM	25	0	16.99	17.05	17.00				
5	64QAM	1	0	16.96	16.97	17.01	18.5	0		
5	64QAM	1	12	16.95	17.04	17.01				
5	64QAM	1	24	16.95	16.95	17.00				
5	64QAM	12	0	17.00	17.02	17.03				
5	64QAM	12	7	16.98	17.02	17.00				
5	64QAM	12	13	16.91	17.00	17.00				
5	64QAM	25	0	16.92	17.06	16.97				
5	256QAM	1	0	16.96	17.01	16.92	18.5	0		
5	256QAM	1	12	16.97	16.96	16.98				
5	256QAM	1	24	16.95	17.05	16.97				
5	256QAM	12	0	16.93	16.99	17.03				
5	256QAM	12	7	16.98	16.97	17.00				
5	256QAM	12	13	16.98	16.96	16.95				
5	256QAM	25	0	16.93	16.95	17.04				

Band 48 Ant 7 DSI6										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				55340	55830	56150	56640			
Frequency (MHz)				3560	3569	3641	3690			
20	QPSK	1	0	18.29	18.49	18.32	18.28			
20	QPSK	1	49	18.31	18.39	18.32	18.31	20	0	
20	QPSK	1	99	18.26	18.43	18.31	18.30			
20	QPSK	50	0	18.34	18.37	18.32	18.23			
20	QPSK	50	24	18.35	18.46	18.33	18.32			
20	QPSK	50	50	18.28	18.37	18.31	18.23			
20	QPSK	100	0							



Band 42 Ant 8 DS16										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				42190	42590	42990				
Frequency (MHz)				3460	3500	3540				
20	QPSK	1	0	18.05	18.10	17.96	19.5	0		
20	QPSK	1	49	17.98	17.95	17.94				
20	QPSK	1	99	17.87	18.01	17.88				
20	QPSK	50	0	17.92	18.08	17.88				
20	QPSK	50	24	17.93	17.89	17.83	19.5	0		
20	QPSK	50	50	17.83	17.97	17.79				
20	QPSK	100	0	18.02	18.03	17.87				
20	16QAM	1	0	17.95	18.02	17.84				
20	16QAM	1	49	17.90	17.95	17.84	19.5	0		
20	16QAM	1	99	17.81	17.87	17.73				
20	16QAM	50	0	17.78	18.01	17.74				
20	16QAM	50	24	17.87	17.81	17.72	19.5	0		
20	16QAM	50	50	17.73	17.91	17.76				
20	16QAM	100	0	17.98	17.89	17.76				
20	64QAM	1	0	18.01	18.02	17.85				
20	64QAM	1	49	17.93	17.85	17.85	19.5	0		
20	64QAM	1	99	17.85	17.93	17.78				
20	64QAM	50	0	17.85	18.04	17.83				
20	64QAM	50	24	17.89	17.83	17.76	19.5	0		
20	64QAM	50	50	17.72	17.83	17.74				
20	64QAM	100	0	17.93	17.97	17.74				
20	256QAM	1	0	17.94	18.03	17.93				
20	256QAM	1	49	17.86	17.92	17.85	19.5	0		
20	256QAM	1	99	17.79	17.90	17.78				
20	256QAM	50	0	17.81	17.97	17.86				
20	256QAM	50	24	17.89	17.79	17.73	19.5	0		
20	256QAM	50	50	17.73	17.94	17.67				
20	256QAM	100	0	17.96	17.92	17.76				
Channel				42165	42590	43015	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				3423.5	3500	3576.5				
15	QPSK	1	0	18.03	17.98	17.84	19.5	0		
15	QPSK	1	37	17.93	17.89	17.83				
15	QPSK	1	74	17.85	17.94	17.76				
15	QPSK	36	0	17.88	17.95	17.79				
15	QPSK	36	20	17.80	17.85	17.70	19.5	0		
15	QPSK	36	39	17.75	17.92	17.73				
15	QPSK	75	0	17.91	18.01	17.81				
15	16QAM	1	0	17.81	17.99	17.81				
15	16QAM	1	37	17.81	17.77	17.75	19.5	0		
15	16QAM	1	74	17.72	17.82	17.68				
15	16QAM	36	0	17.70	17.88	17.68				
15	16QAM	36	20	17.84	17.74	17.63	19.5	0		
15	16QAM	36	39	17.60	17.83	17.66				
15	16QAM	75	0	17.85	17.78	17.65				
15	64QAM	1	0	17.93	17.95	17.79				
15	64QAM	1	37	17.86	17.74	17.77	19.5	0		
15	64QAM	1	74	17.82	17.80	17.64				
15	64QAM	36	0	17.78	18.01	17.70				
15	64QAM	36	20	17.86	17.72	17.66	19.5	0		
15	64QAM	36	39	17.62	17.88	17.69				
15	64QAM	75	0	17.87	17.85	17.64				
15	256QAM	1	0	17.87	17.92	17.86				
15	256QAM	1	37	17.76	17.87	17.71	19.5	0		
15	256QAM	1	74	17.70	17.77	17.70				
15	256QAM	36	0	17.70	17.87	17.74				
15	256QAM	36	20	17.79	17.76	17.64	19.5	0		
15	256QAM	36	39	17.62	17.82	17.59				
15	256QAM	75	0	17.84	17.82	17.63				
Channel				42140	42590	43040	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				3455	3500	3545				
10	QPSK	1	0	17.98	18.02	17.92	19.5	0		
10	QPSK	1	25	17.89	17.85	17.81				
10	QPSK	1	49	17.81	17.92	17.74				
10	QPSK	25	0	17.90	18.05	17.80				
10	QPSK	25	12	17.86	17.84	17.75	19.5	0		
10	QPSK	25	25	17.80	17.88	17.67				
10	QPSK	50	0	17.92	17.99	17.85				
10	16QAM	1	0	17.91	17.98	17.75				
10	16QAM	1	25	17.81	17.77	17.76	19.5	0		
10	16QAM	1	49	17.71	17.85	17.65				
10	16QAM	25	0	17.71	17.93	17.61				
10	16QAM	25	12	17.80	17.75	17.70	19.5	0		
10	16QAM	25	25	17.68	17.88	17.68				
10	16QAM	50	0	17.94	17.77	17.69				
10	64QAM	1	0	17.93	17.89	17.77				
10	64QAM	1	25	17.88	17.72	17.73	19.5	0		
10	64QAM	1	49	17.75	17.84	17.71				
10	64QAM	25	0	17.83	17.99	17.70				
10	64QAM	25	12	17.80	17.73	17.71	19.5	0		
10	64QAM	25	25	17.59	17.83	17.70				
10	64QAM	50	0	17.83	17.93	17.61				
10	256QAM	1	0	17.86	17.92	17.83				
10	256QAM	1	25	17.82	17.78	17.77	19.5	0		
10	256QAM	1	49	17.75	17.88	17.68				
10	256QAM	25	0	17.67	17.84	17.74				
10	256QAM	25	12	17.76	17.93	17.71	19.5	0		
10	256QAM	25	25	17.63	17.81	17.53				
10	256QAM	50	0	17.82	17.84	17.64				
Channel				42115	42590	43065	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				3423.5	3500	3576.5				
5	QPSK	1	0	17.97	18.06	17.90	19.5	0		
5	QPSK	1	12	17.94	17.93	17.87				
5	QPSK	1	24	17.74	17.93	17.76				
5	QPSK	12	0	17.88	17.95	17.79				
5	QPSK	12	7	17.83	17.77	17.78	19.5	0		
5	QPSK	12	13	17.72	17.93	17.69				
5	QPSK	25	0	17.96	17.92	17.76				
5	16QAM	1	0	17.84	17.92	17.73				
5	16QAM	1	12	17.81	17.77	17.79	19.5	0		
5	16QAM	1	24	17.76	17.85	17.67				
5	16QAM	12	0	17.70	17.94	17.65				
5	16QAM	12	7	17.85	17.75	17.68	19.5	0		
5	16QAM	12	13	17.62	17.83	17.64				
5	16QAM	25	0	17.85	17.81	17.64				
5	64QAM	1	0	17.87	17.93	17.83				
5	64QAM	1	12	17.79	17.83	17.82	19.5	0		
5	64QAM	1	24	17.71	17.90	17.66				
5	64QAM	12	0	17.79	18.01	17.74				
5	64QAM	12	7	17.62	17.80	17.65	19.5	0		
5	64QAM	12	13	17.69	17.81	17.65				
5	64QAM	25	0	17.84	17.85	17.61				
5	256QAM	1	0	17.82	17.94	17.86				
5	256QAM	1	12	17.83	17.82	17.72	19.5	0		
5	256QAM	1	24	17.69	17.81	17.72				
5	256QAM	12	0	17.67	17.84	17.82				
5	256QAM	12	7	17.83	17.73	17.63	19.5	0		
5	256QAM	12	13	17.66	17.89	17.61				
5	256QAM	25	0	17.93	17.90	17.67				

Band 48 Ant 8 DS16										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				55340	55830	56150				
Frequency (MHz)				3560	3609	3641				
20	QPSK	1	0	17.45	17.66	17.52	19	0		
20	QPSK	1	49	17.45	17.57	17.38				
20	QPSK	1	99	17.47	17.89	17.48				
20	QPSK	50	0	17.32	17.58	17.41				
20	QPSK	50	24	17.41	17.45	17.32	19	0		
20	QPSK	50	50	17.35	17.56</					



Full & Default Power Mode_Other PA

Band 2 other PA Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq.	Power Middle Ch / Freq.	Power High Ch / Freq.	Turn-up time (min)	MPR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	24.42	24.25	24.12				
20	QPSK	1	49	24.42	24.21	24.12	25.5	0		
20	QPSK	1	99	24.11	24.19	24.18				
20	QPSK	1	49	23.21	23.29	23.28				
20	QPSK	50	24	23.11	23.18	23.15	24.5	1		
20	QPSK	50	50	23.16	23.21	23.15				
20	QPSK	100	0	23.18	23.28	23.19				
20	HQAM	1	0	23.22	23.27	23.13				
20	HQAM	1	49	23.09	23.17	23.11	24.5	1		
20	HQAM	50	0	22.22	22.28	22.24				
20	HQAM	50	24	22.05	22.16	22.10	23.5	2		
20	HQAM	50	50	22.25	22.31	22.21				
20	HQAM	100	0	22.23	22.28	22.24				
20	HQAM	1	0	22.27	22.32	22.10				
20	HQAM	1	49	22.21	22.16	22.14	23.5	2		
20	HQAM	1	99	22.05	22.15	22.17				
20	HQAM	50	0	21.21	21.25	21.25				
20	HQAM	50	24	21.11	21.23	21.12	22.5	3		
20	HQAM	50	50	21.18	21.23	21.12				
20	HQAM	100	0	21.19	21.25	21.23				
20	ZSSVM	1	0	19.23	19.26	19.21				
20	ZSSVM	1	49	19.15	19.20	19.11	20.5	5		
20	ZSSVM	1	99	19.18	19.18	19.20				
20	ZSSVM	50	0	19.18	19.23	19.24				
20	ZSSVM	50	24	19.20	19.30	19.18	20.5	5		
20	ZSSVM	50	50	19.11	19.11	19.15				
20	ZSSVM	100	0	19.02	19.13	19.14				
Channel										
Frequency (MHz)										
16	QPSK	1	0	24.07	24.15	24.08				
15	QPSK	1	37	24.01	24.16	24.08	25.5	0		
15	QPSK	1	74	24.04	24.08	24.04				
15	QPSK	36	0	23.17	23.17	23.08				
15	QPSK	36	20	23.05	23.13	23.11	24.5	1		
15	QPSK	36	39	23.09	23.09	23.08				
15	QPSK	75	0	23.14	23.20	23.03				
15	HQAM	1	0	23.11	23.23	23.03				
15	HQAM	1	37	23.01	23.08	23.09	24.5	1		
15	HQAM	1	74	23.01	23.04	23.15				
15	HQAM	36	0	22.09	22.17	22.19				
15	HQAM	36	20	21.96	22.07	21.95	23.5	2		
15	HQAM	36	39	22.12	22.15	22.02				
15	HQAM	75	0	22.15	22.14	22.12				
15	HQAM	1	0	22.21	22.23	22.07				
15	HQAM	1	37	22.01	22.12	22.03	23.5	2		
15	HQAM	1	74	21.92	22.11	22.13				
15	HQAM	36	0	21.13	21.31	21.17				
15	HQAM	36	20	21.04	21.05	21.01	22.5	3		
15	HQAM	36	39	21.09	21.17	21.05				
15	HQAM	75	0	21.13	21.14	21.14				
15	ZSSVM	1	0	19.20	19.12	19.15				
15	ZSSVM	1	37	19.07	19.13	19.09	20.5	5		
15	ZSSVM	1	74	19.07	19.07	19.06				
15	ZSSVM	36	0	19.09	19.15	19.10				
15	ZSSVM	36	20	19.07	19.17	19.09	20.5	5		
15	ZSSVM	75	0	18.99	19.00	19.01				
15	ZSSVM	75	0	18.99	19.07	19.01				
Channel										
Frequency (MHz)										
10	QPSK	1	0	24.03	24.16	24.03				
10	QPSK	1	25	24.02	24.17	24.04	25.5	0		
10	QPSK	1	49	24.00	24.14	24.13				
10	QPSK	25	0	23.17	23.18	23.08				
10	QPSK	25	12	23.03	23.10	23.08	24.5	1		
10	QPSK	25	26	23.09	23.17	23.10				
10	QPSK	50	0	23.11	23.14	23.14				
10	HQAM	1	0	23.09	23.18	23.04				
10	HQAM	1	25	22.05	22.11	22.00	24.5	1		
10	HQAM	1	49	23.04	23.10	23.12				
10	HQAM	25	0	22.18	22.14	22.19				
10	HQAM	25	12	21.96	22.04	22.05	23.5	2		
10	HQAM	25	25	22.10	22.14	22.01				
10	HQAM	50	0	22.14	22.22	22.16				
10	HQAM	1	0	22.02	22.24	21.96				
10	HQAM	1	25	22.09	22.09	22.07	23.5	2		
10	HQAM	1	49	21.92	22.11	22.04				
10	HQAM	25	0	21.10	21.32	21.22				
10	HQAM	25	12	21.09	21.04	21.05	22.5	3		
10	HQAM	25	25	21.06	21.12	21.04				
10	HQAM	50	0	21.14	21.22	21.15				
10	ZSSVM	1	0	19.23	19.16	19.15				
10	ZSSVM	1	25	19.05	19.06	19.08	20.5	5		
10	ZSSVM	1	49	19.07	19.15	19.11				
10	ZSSVM	25	0	19.13	19.18	19.08	20.5	5		
10	ZSSVM	25	12	19.13	19.18	19.08				
10	ZSSVM	25	25	19.02	19.05	19.01				
10	ZSSVM	50	0	19.02	19.03	19.03				
Channel										
Frequency (MHz)										
5	QPSK	1	0	24.10	24.13	24.12				
5	QPSK	1	12	23.99	24.12	24.10	25.5	0		
5	QPSK	1	24	24.03	24.16	24.03				
5	QPSK	12	0	23.23	23.15	23.13				
5	QPSK	12	7	23.02	23.04	23.03	24.5	1		
5	QPSK	12	13	23.04	23.18	23.11				
5	QPSK	25	0	23.06	23.17	23.10				
5	HQAM	1	0	23.18	23.23	23.06				
5	HQAM	1	12	22.07	22.11	22.05	24.5	1		
5	HQAM	1	24	23.02	23.07	23.12				
5	HQAM	12	0	22.15	22.22	22.19				
5	HQAM	12	7	21.92	22.08	21.97	23.5	2		
5	HQAM	12	13	22.02	22.14	22.06				
5	HQAM	25	0	22.11	22.21	22.21				
5	HQAM	25	0	22.18	22.27	21.98				
5	HQAM	1	12	21.98	22.14	22.05	23.5	2		
5	HQAM	1	24	22.02	22.06	22.14				
5	HQAM	12	0	21.09	21.12	21.09	22.5	3		
5	HQAM	12	13	21.05	21.12	21.09				
5	ZSSVM	1	0	19.10	19.20	19.15				
5	ZSSVM	1	12	19.04	19.08	19.01	20.5	5		
5	ZSSVM	1	24	19.13	19.12	19.13				
5	ZSSVM	12	0	19.05	19.21	19.13				
5	ZSSVM	12	7	19.07	19.22	19.05	20.5	5		
5	ZSSVM	12	13	19.05	19.05	19.05				
5	ZSSVM	25	0	19.03	19.03	19.00				
Channel										
Frequency (MHz)										
3	QPSK	1	0	24.15	24.15	24.08				
3	QPSK	1	8	24.02	24.10	24.08	25.5	0		
3	QPSK	1	14	24.03	24.12	24.08				
3	QPSK	8	0	23.23	23.15	23.15				
3	QPSK	8	4	23.04	23.04	23.05	24.5	1		
3	QPSK	8	7	23.07	23.13	23.12				
3	QPSK	15	0	23.04	23.21	23.13				
3	HQAM	1	0	23.18	23.14	23.07				
3	HQAM	1	14	22.08	23.04	23.13	24.5	1		
3	HQAM	8	0	22.10	22.24	22.14				
3	HQAM	8	4	21.96	22.03	22.01	23.5	2		
3	HQAM	8	7	22.07	22.06	22.04				
3	HQAM	15	0	22.15	22.22	22.14				
3	HQAM	1	0	22.18	22.27	22.07				
3	HQAM	1	8	22.07	22.07	22.08	23.5	2		
3	HQAM	1	14	21.96	22.04	22.03				
3	HQAM	8	0	21.18	21.26	21.23				
3	HQAM	8	4	21.03	21.10	20.99	22.5	3		
3	HQAM									



Band 7 other PA Ant 3									
Channel	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				20650	21100	21550			
Frequency (MHz)				2010	2055	2100			
20	QPSK	1	0	22.31	22.36	22.28			23
20	QPSK	1	49	22.18	22.33	22.21			
20	QPSK	1	99	22.25	22.31	22.19			
20	QPSK	50	0	21.32	21.41	21.22			22
20	QPSK	50	24	21.21	21.29	21.24			
20	QPSK	50	50	21.26	21.27	21.15			
20	QPSK	100	0	21.27	21.36	21.30			
20	16QAM	1	0	21.29	21.34	21.27			22
20	16QAM	1	49	21.19	21.28	21.18			
20	16QAM	1	99	21.26	21.32	21.23			
20	16QAM	50	0	20.30	20.37	20.16			21
20	16QAM	50	24	20.15	20.31	20.22			
20	16QAM	50	50	20.29	20.21	20.21			
20	16QAM	100	0	20.31	20.32	20.34			
20	64QAM	1	0	20.32	20.39	20.30			21
20	64QAM	1	49	20.21	20.33	20.16			
20	64QAM	1	99	20.32	20.32	20.22			
20	64QAM	50	0	19.34	19.44	19.24			20
20	64QAM	50	24	19.22	19.29	19.25			
20	64QAM	50	50	19.31	19.21	19.09			
20	64QAM	100	0	19.31	19.42	19.30			
20	256QAM	1	0	17.29	17.36	17.21			18
20	256QAM	1	49	17.27	17.31	17.22			
20	256QAM	1	99	17.29	17.25	17.16			
20	256QAM	50	0	17.26	17.33	17.31			18
20	256QAM	50	24	17.32	17.32	17.23			
20	256QAM	50	50	17.23	17.28	17.22			
20	256QAM	100	0	17.24	17.30	17.20			
Channel				20625	21100	21375			
Frequency (MHz)				2007.5	2055	2092.5			
15	QPSK	1	0	22.20	22.28	22.15			23
15	QPSK	1	37	22.10	22.26	22.19			
15	QPSK	1	74	22.14	22.27	22.12			
15	QPSK	36	0	21.19	21.28	21.18			22
15	QPSK	36	20	21.14	21.17	21.15			
15	QPSK	36	39	21.16	21.17	21.08			
15	QPSK	75	0	21.16	21.30	21.16			22
15	16QAM	1	0	21.25	21.23	21.07			
15	16QAM	1	37	21.15	21.23	21.07			
15	16QAM	1	74	21.16	21.20	21.15			21
15	16QAM	36	0	20.24	20.24	20.13			
15	16QAM	36	20	20.02	20.21	20.09			
15	16QAM	36	39	20.24	20.17	20.16			
15	16QAM	75	0	20.21	20.28	20.29			21
15	64QAM	1	0	20.20	20.36	20.26			
15	64QAM	1	37	20.10	20.29	20.06			
15	64QAM	1	74	20.30	20.24	20.19			20
15	64QAM	36	0	19.28	19.31	19.18			
15	64QAM	36	20	19.10	19.21	19.21			
15	64QAM	36	39	19.21	19.10	19.02			
15	64QAM	75	0	19.23	19.31	19.18			18
15	256QAM	1	0	17.17	17.33	17.09			
15	256QAM	1	37	17.16	17.26	17.13			
15	256QAM	1	74	17.17	17.14	17.10			18
15	256QAM	36	0	17.23	17.27	17.27			
15	256QAM	36	20	17.25	17.18	17.19			
15	256QAM	36	39	17.15	17.23	17.09			
15	256QAM	75	0	17.15	17.25	17.14			
Channel				20800	21100	21400			
Frequency (MHz)				2055	2055	2055			
10	QPSK	1	0	22.19	22.32	22.18			23
10	QPSK	1	25	22.11	22.21	22.09			
10	QPSK	1	49	22.16	22.27	22.17			22
10	QPSK	25	0	21.20	21.32	21.19			
10	QPSK	25	12	21.14	21.24	21.14			
10	QPSK	25	25	21.19	21.17	21.04			
10	QPSK	50	0	21.17	21.29	21.24			22
10	16QAM	1	0	21.16	21.29	21.24			
10	16QAM	1	25	21.12	21.19	21.09			
10	16QAM	1	49	21.23	21.29	21.12			21
10	16QAM	25	0	20.25	20.27	20.06			
10	16QAM	25	12	20.10	20.22	20.09			
10	16QAM	25	25	20.26	20.14	20.09			
10	16QAM	50	0	20.23	20.19	20.28			21
10	64QAM	1	0	20.21	20.35	20.21			
10	64QAM	1	25	20.13	20.25	20.02			
10	64QAM	1	49	20.19	20.19	20.15			20
10	64QAM	25	0	19.32	19.32	19.12			
10	64QAM	25	12	19.10	19.19	19.19			
10	64QAM	25	25	19.21	19.16	19.05			
10	64QAM	50	0	19.19	19.39	19.17			18
10	256QAM	1	0	17.26	17.34	17.19			
10	256QAM	1	25	17.18	17.19	17.15			
10	256QAM	1	49	17.17	17.21	17.02			18
10	256QAM	25	0	17.16	17.25	17.24			
10	256QAM	25	12	17.19	17.20	17.13			
10	256QAM	25	25	17.16	17.18	17.13			
10	256QAM	50	0	17.20	17.19	17.15			
Channel				20775	21100	21425			
Frequency (MHz)				2002.5	2035	2067.5			
5	QPSK	1	0	22.20	22.30	22.19			23
5	QPSK	1	12	22.13	22.29	22.16			
5	QPSK	1	24	22.12	22.22	22.17			
5	QPSK	12	0	21.20	21.32	21.11			22
5	QPSK	12	7	21.09	21.16	21.13			
5	QPSK	12	13	21.13	21.23	21.12			
5	QPSK	25	0	21.21	21.24	21.18			22
5	16QAM	1	0	21.24	21.28	21.22			
5	16QAM	1	12	21.10	21.18	21.10			
5	16QAM	1	24	21.14	21.25	21.21			21
5	16QAM	12	0	20.19	20.34	20.06			
5	16QAM	12	7	20.07	20.22	20.13			
5	16QAM	12	13	20.20	20.14	20.16			
5	16QAM	25	0	20.24	20.21	20.29			21
5	64QAM	1	0	20.27	20.35	20.19			
5	64QAM	1	12	20.12	20.28	20.03			
5	64QAM	1	24	20.19	20.29	20.10			
5	64QAM	12	0	19.31	19.30	19.13			20
5	64QAM	12	7	19.19	19.19	19.18			
5	64QAM	12	13	19.20	19.13	19.04			
5	64QAM	25	0	19.18	19.35	19.24			18
5	256QAM	1	0	17.23	17.23	17.16			
5	256QAM	1	12	17.23	17.29	17.12			
5	256QAM	1	24	17.24	17.13	17.12			
5	256QAM	12	0	17.18	17.27	17.24			18
5	256QAM	12	7	17.22	17.26	17.11			
5	256QAM	12	13	17.13	17.23	17.11			
5	256QAM	25	0	17.15	17.26	17.12			



Band 2 other PA Ant 5										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPE (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	24.13	24.17	24.10			25	0
20	QPSK	1	49	24.09	24.11	23.98				
20	QPSK	50	0	23.99	23.99	23.13			24	1
20	QPSK	50	24	23.97	23.18	23.02				
20	QPSK	50	50	23.07	23.12	22.98				
20	QPSK	100	0	23.07	23.18	23.13				
20	HQAM	1	0	23.13	23.12	23.11			24	1
20	HQAM	1	49	23.08	23.18	23.08				
20	HQAM	1	99	23.04	23.10	22.99				
20	HQAM	50	0	22.95	23.15	22.94				
20	HQAM	50	24	21.98	22.18	22.02			23	2
20	HQAM	50	50	22.00	22.17	21.96				
20	HQAM	100	0	22.02	22.02	22.02				
20	HQAM	1	0	22.10	22.07	22.06				
20	HQAM	1	49	22.00	22.20	22.00			23	2
20	HQAM	1	99	22.01	22.15	21.98				
20	HQAM	50	0	21.94	21.20	21.08				
20	HQAM	50	24	21.03	21.22	21.04			22	3
20	HQAM	50	50	22.07	21.07	20.90				
20	ZSSBAM	100	0	19.07	19.16	19.04				
20	ZSSBAM	1	49	18.99	19.20	19.03			20	5
20	ZSSBAM	1	99	18.93	19.16	18.91				
20	ZSSBAM	50	0	19.11	19.12	19.02				
20	ZSSBAM	50	24	19.10	19.08	19.09			20	5
20	ZSSBAM	50	50	19.07	19.23	19.11				
20	ZSSBAM	100	0	19.20	19.07	19.21				
Channel										
Frequency (MHz)										
15	QPSK	1	0	24.03	24.07	24.01			25	0
15	QPSK	1	37	23.92	24.03	24.01				
15	QPSK	1	74	23.97	24.04	23.85				
15	QPSK	36	0	23.92	23.16	23.04			24	1
15	QPSK	36	20	22.92	23.05	22.89				
15	QPSK	36	36	22.99	23.08	22.83				
15	HQAM	1	0	23.10	23.02	23.00				
15	HQAM	1	37	22.99	23.14	22.98			24	1
15	HQAM	1	74	22.97	23.07	22.94				
15	HQAM	36	0	21.99	22.02	22.03				
15	HQAM	36	20	21.85	22.12	21.91			23	2
15	HQAM	36	36	22.02	22.13	21.92				
15	HQAM	75	0	21.99	22.17	22.11				
15	HQAM	1	0	22.04	21.97	21.93			23	2
15	HQAM	1	37	21.03	21.14	21.04				
15	HQAM	1	74	21.05	21.12	21.03				
15	HQAM	36	0	20.96	21.10	20.96				
15	HQAM	36	20	20.98	21.13	20.93			22	3
15	HQAM	36	36	20.95	21.06	20.95				
15	HQAM	75	0	21.00	21.14	20.97				
15	ZSSBAM	1	37	18.94	19.07	18.92				
15	ZSSBAM	1	74	18.90	19.08	18.90			20	5
15	ZSSBAM	1	74	18.97	19.07	18.94				
15	ZSSBAM	36	0	18.98	19.02	18.95				
15	ZSSBAM	36	20	19.00	18.92	18.98			20	5
15	ZSSBAM	36	36	18.99	19.17	18.97				
15	ZSSBAM	75	0	18.95	18.93	18.93				
Channel										
Frequency (MHz)										
10	QPSK	1	0	24.00	24.03	24.00			25	0
10	QPSK	1	25	23.98	24.08	24.00				
10	QPSK	1	49	23.95	24.00	23.88				
10	QPSK	25	0	23.90	23.17	23.04			24	1
10	QPSK	25	12	22.93	23.06	22.85				
10	QPSK	25	25	22.95	23.00	22.91				
10	HQAM	1	0	23.08	23.12	23.07				
10	HQAM	1	25	23.01	23.05	23.01			24	1
10	HQAM	1	49	22.98	23.00	22.96				
10	HQAM	25	0	22.00	22.11	22.01				
10	HQAM	25	12	21.86	22.10	21.89			23	2
10	HQAM	25	25	22.03	22.12	21.92				
10	HQAM	50	0	22.04	22.08	22.04				
10	HQAM	1	0	22.08	21.97	21.94			23	2
10	HQAM	1	25	21.02	21.18	21.04				
10	HQAM	1	49	21.00	22.04	21.87				
10	HQAM	25	0	20.91	21.07	20.94			22	3
10	HQAM	25	12	20.92	21.10	20.85				
10	HQAM	25	25	20.91	21.11	20.91				
10	HQAM	50	0	20.97	21.16	20.95				
10	ZSSBAM	1	0	18.98	19.08	19.04				
10	ZSSBAM	1	25	18.92	19.16	18.95			20	5
10	ZSSBAM	1	49	18.98	19.11	18.75				
10	ZSSBAM	25	0	19.02	19.05	18.97				
10	ZSSBAM	25	12	18.96	19.01	19.05			20	5
10	ZSSBAM	25	25	19.05	19.14	19.03				
10	ZSSBAM	50	0	18.93	19.01	18.92				
Channel										
Frequency (MHz)										
5	QPSK	1	0	24.01	24.05	24.01			25	0
5	QPSK	1	12	23.92	24.05	23.95				
5	QPSK	1	24	24.04	24.06	23.94				
5	QPSK	12	0	23.00	23.11	23.03				
5	QPSK	12	7	22.96	23.08	22.89			24	1
5	QPSK	12	13	23.01	23.01	22.85				
5	QPSK	25	0	22.98	23.14	23.02				
5	HQAM	1	0	23.01	23.08	23.03			24	1
5	HQAM	1	12	23.04	23.05	23.01				
5	HQAM	1	24	22.02	23.03	22.92				
5	HQAM	12	0	21.84	22.06	22.08				
5	HQAM	12	7	21.85	22.09	21.95			23	2
5	HQAM	12	13	22.02	22.14	21.90				
5	HQAM	25	0	22.10	22.16	22.03				
5	HQAM	1	0	22.06	21.98	22.01			23	2
5	HQAM	1	12	21.04	22.06	21.88				
5	HQAM	1	24	21.98	22.12	21.80				
5	HQAM	12	0	20.97	21.15	21.01			22	3
5	HQAM	12	7	20.92	21.17	20.99				
5	HQAM	12	13	20.99	21.06	20.90				
5	ZSSBAM	1	0	21.02	21.20	21.03				
5	ZSSBAM	1	0	19.05	19.09	19.05				
5	ZSSBAM	1	12	18.92	19.13	18.90			20	5
5	ZSSBAM	1	24	18.96	19.09	18.85				
5	ZSSBAM	12	0	19.08	19.09	18.97				
5	ZSSBAM	12	7	19.03	19.01	19.02			20	5
5	ZSSBAM	12	13	19.04	19.13	19.00				
5	ZSSBAM	25	0	18.97	19.02	18.98				
Channel										
Frequency (MHz)										
3	QPSK	1	0	24.07	24.11	24.01			25	0
3	QPSK	1	6	23.99	24.05	23.98				
3	QPSK	1	14	24.06	24.03	23.89				
3	QPSK	6	0	23.02	23.09	23.00				
3	QPSK	6	4	22.96	23.12	22.84			24	1
3	QPSK	6	7	22.97	23.09	22.94				
3	QPSK	15	0	23.02	23.12	23.00				
3	HQAM	1	0	23.11	23.06	23.08			24	1
3	HQAM	1	6	22.94	23.05	22.92				
3	HQAM	1	14	22.90	22.95	22.86				
3	HQAM	6	0	22.00	22.02	22.03				
3	HQAM	6	4	21.83	22.04	21.89			23	2
3	HQAM	6	7	21.97	22.04	21.84				
3	HQAM	15	0	22.02	22.14	22.08				
3	HQAM	1	0	21.86	21.94	21.96			23	2
3	HQAM	1	6	21.89	22.18	21.88				
3	HQAM	1	14	21.95	22.10	21.83				
3	HQAM	6	0	20.91	21.19	20.96			22	3
3	HQAM	6	4	20.96	21.12	20.86				
3	HQAM	6	7	21.00	21.13	20.92				
3	HQAM	15	0							



Band 38 other PA Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	23.82	23.86	23.78				
20	QPSK	1	49	23.74	23.80	23.87	25	0		
20	QPSK	1	99	23.75	23.79	23.89				
20	QPSK	50	0	22.82	22.92	22.78				
20	QPSK	50	24	22.73	22.86	22.68				
20	QPSK	50	50	22.69	22.80	22.65	24	1		
20	QPSK	100	0	22.84	22.88	22.77				
20	16QAM	1	0	22.86	22.78	22.82				
20	16QAM	1	49	22.76	22.85	22.65	24	1		
20	16QAM	1	99	22.80	22.78	22.70				
20	16QAM	50	0	21.85	21.94	21.75				
20	16QAM	50	24	21.73	21.85	21.73				
20	16QAM	50	50	21.71	21.74	21.70				
20	16QAM	100	0	21.88	21.83	21.81				
20	64QAM	1	0	21.88	21.79	21.80				
20	64QAM	1	49	21.80	21.90	21.70	23	2		
20	64QAM	1	99	21.79	21.73	21.88				
20	64QAM	50	0	20.81	20.97	20.78				
20	64QAM	50	24	20.75	20.91	20.83				
20	64QAM	50	50	20.74	20.83	20.70	22	3		
20	64QAM	100	0	20.84	20.82	20.83				
20	256QAM	1	0	18.79	18.95	18.74				
20	256QAM	1	49	18.76	18.82	18.86	20	5		
20	256QAM	1	99	18.71	18.83	18.88				
20	256QAM	50	0	18.86	18.90	18.80				
20	256QAM	50	24	18.91	18.87	18.84	20	5		
20	256QAM	50	50	18.78	18.81	18.60				
20	256QAM	100	0	18.75	18.80	18.72				
Channel				37825	38000	38175				
Frequency (MHz)				25775	25925	26125				
15	QPSK	1	0	23.76	23.75	23.70				
15	QPSK	1	37	23.61	23.72	23.61	25	0		
15	QPSK	1	74	23.72	23.68	23.61				
15	QPSK	36	0	22.72	22.82	22.86				
15	QPSK	36	20	22.61	22.79	22.56	24	1		
15	QPSK	36	39	22.58	22.78	22.81				
15	QPSK	75	0	22.73	22.78	22.65				
15	16QAM	1	0	22.83	22.76	22.73				
15	16QAM	1	37	22.65	22.79	22.55	24	1		
15	16QAM	1	74	22.69	22.75	22.56				
15	16QAM	36	0	21.81	21.80	21.84				
15	16QAM	36	20	21.59	21.82	21.59				
15	16QAM	36	39	21.68	21.66	21.64	23	2		
15	16QAM	75	0	21.79	21.78	21.67				
15	64QAM	1	0	21.81	21.68	21.76				
15	64QAM	1	37	21.68	21.76	21.58	23	2		
15	64QAM	1	74	21.76	21.61	21.85				
15	64QAM	36	0	20.76	20.86	20.88				
15	64QAM	36	20	20.72	20.81	20.49	22	3		
15	64QAM	36	39	20.67	20.75	20.87				
15	64QAM	75	0	20.78	20.70	20.75				
15	256QAM	1	0	18.70	18.89	18.83				
15	256QAM	1	37	18.73	18.79	18.58	20	5		
15	256QAM	1	74	18.67	18.69	18.63				
15	256QAM	36	0	18.72	18.79	18.72				
15	256QAM	36	20	18.80	18.78	18.75	20	5		
15	256QAM	36	39	18.84	18.72	18.52				
15	256QAM	75	0	18.73	18.72	18.52				
Channel				37900	38000	38200				
Frequency (MHz)				25750	25950	26150				
10	QPSK	1	0	23.77	23.78	23.69				
10	QPSK	1	25	23.68	23.66	23.53	25	0		
10	QPSK	1	49	23.69	23.75	23.57				
10	QPSK	25	0	22.78	22.80	22.72				
10	QPSK	25	12	22.63	22.76	22.55				
10	QPSK	25	25	22.65	22.77	22.60	24	1		
10	QPSK	50	0	22.74	22.78	22.65				
10	16QAM	1	0	22.80	22.73	22.88				
10	16QAM	1	49	22.66	22.78	22.55	24	1		
10	16QAM	1	99	22.76	22.72	22.65				
10	16QAM	25	0	21.75	21.89	21.67				
10	16QAM	25	12	21.67	21.71	21.82				
10	16QAM	25	25	21.65	21.64	21.66	23	2		
10	16QAM	50	0	21.77	21.79	21.75				
10	64QAM	1	0	21.77	21.72	21.76				
10	64QAM	1	25	21.70	21.87	21.64	23	2		
10	64QAM	1	49	21.73	21.63	21.59				
10	64QAM	25	0	20.73	20.93	20.74				
10	64QAM	25	12	20.69	20.89	20.55	22	3		
10	64QAM	25	25	20.62	20.74	20.83				
10	64QAM	50	0	20.75	20.70	20.72				
10	256QAM	1	0	18.69	18.81	18.68				
10	256QAM	1	25	18.68	18.74	18.55	20	5		
10	256QAM	1	49	18.59	18.80	18.55				
10	256QAM	25	0	18.84	18.77	18.74				
10	256QAM	25	12	18.83	18.81	18.81				
10	256QAM	25	25	18.70	18.71	18.53	20	5		
10	256QAM	50	0	18.71	18.77	18.63				
Channel				37775	38000	38225				
Frequency (MHz)				25725	25925	26125				
5	QPSK	1	0	23.76	23.81	23.64				
5	QPSK	1	12	23.66	23.77	23.58	25	0		
5	QPSK	1	24	23.62	23.66	23.61				
5	QPSK	12	0	22.73	22.87	22.75				
5	QPSK	12	7	22.69	22.81	22.55	24	1		
5	QPSK	12	13	22.57	22.82	22.52				
5	QPSK	25	0	22.76	22.79	22.66				
5	16QAM	1	0	22.75	22.78	22.78				
5	16QAM	1	12	22.71	22.80	22.60	24	1		
5	16QAM	1	24	22.77	22.76	22.65				
5	16QAM	12	0	21.82	21.84	21.85				
5	16QAM	12	7	21.67	21.80	21.67				
5	16QAM	12	13	21.68	21.64	21.60	23	2		
5	16QAM	25	0	21.86	21.71	21.77				
5	64QAM	1	0	21.85	21.76	21.89				
5	64QAM	1	12	21.67	21.78	21.67	23	2		
5	64QAM	1	24	21.86	21.59	21.84				
5	64QAM	12	0	20.70	20.95	20.73				
5	64QAM	12	7	20.72	20.84	20.52	22	3		
5	64QAM	12	13	20.71	20.75	20.63				
5	64QAM	25	0	20.73	20.68	20.74				
5	256QAM	1	0	18.75	18.83	18.60				
5	256QAM	1	12	18.67	18.69	18.58	20	5		
5	256QAM	1	24	18.61	18.76	18.60				
5	256QAM	12	0	18.74	18.78	18.74				
5	256QAM	12	7	18.79	18.84	18.78	20	5		
5	256QAM	12	13	18.69	18.68	18.58				
5	256QAM	25	0	18.66	18.74	18.58				

Band 41 other PA Ant 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch. / Freq	Power Low Middle Ch. / Freq	Power Middle Ch. / Freq	Power High Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2560	2569.5	2593	2636.5	2680		
20	QPSK	1	0	23.65	23.70	23.74	23.64	23.61		
20	QPSK	1	49	23.57	23.65	23.70	23.52	23.49	25	0
20	QPSK	1	99	23.51	23.62	23.68	23.58	23.57		
20	QPSK	50	0	22.60	22.72	22.80	22.61	22.67		
20	QPSK	50	24	22.62	22.63	22.65	22.47	22.51	24	1
20	QPSK	50	50	22.52	22.64	22.73	22.60	22.57		
20	QPSK	100	0	22.66	22.75	22.78	22.70	22.56		
20	16QAM	1	0	22.67	22.71					



Band 38 other PA Ant 3										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	21.75	21.81	21.73	22.5	0		
20	QPSK	1	49	21.71	21.77	21.81				
20	QPSK	1	99	21.61	21.74	21.83				
20	QPSK	50	0	20.71	20.87	20.71				
20	QPSK	50	24	20.76	20.83	20.67	21.5	1		
20	QPSK	50	50	20.57	20.79	20.58				
20	16QAM	100	0	20.71	20.84	20.72				
20	16QAM	1	49	20.66	20.72	20.56	21.5	1		
20	16QAM	1	99	20.60	20.75	20.64				
20	16QAM	50	0	19.71	19.84	19.69				
20	16QAM	50	24	19.80	19.87	19.65	20.5	2		
20	16QAM	50	50	19.60	19.77	19.56				
20	16QAM	100	0	19.72	19.88	19.57				
20	64QAM	1	0	19.68	19.86	19.74				
20	64QAM	1	49	19.65	19.70	19.51	20.5	2		
20	64QAM	1	99	19.54	19.75	19.58				
20	64QAM	50	0	18.71	18.81	18.72				
20	64QAM	50	24	18.80	18.77	18.70	19.5	3		
20	64QAM	50	50	18.57	18.83	18.58				
20	64QAM	100	0	18.75	18.88	18.67				
20	256QAM	1	0	16.66	16.89	16.73				
20	256QAM	1	49	16.78	16.77	16.68	17.5	5		
20	256QAM	1	99	16.54	16.82	16.83				
20	256QAM	50	0	16.76	16.81	16.88				
20	256QAM	50	24	16.77	16.86	16.82	17.5	5		
20	256QAM	50	50	16.71	16.71	16.62				
20	256QAM	100	0	16.57	16.77	16.61				
Channel				37825	38000	38175	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				25725	2595	25925				
15	QPSK	1	0	21.64	21.70	21.60	22.5	0		
15	QPSK	1	37	21.58	21.73	21.48				
15	QPSK	1	74	21.47	21.60	21.59				
15	QPSK	36	0	20.64	20.77	20.59	21.5	1		
15	QPSK	36	20	20.71	20.76	20.59				
15	QPSK	36	39	20.48	20.75	20.50				
15	QPSK	75	0	20.67	20.77	20.86				
15	16QAM	1	0	20.67	20.76	20.67	21.5	1		
15	16QAM	1	37	20.56	20.60	20.50				
15	16QAM	1	74	20.55	20.69	20.58				
15	16QAM	36	0	19.60	19.77	19.59	20.5	2		
15	16QAM	36	20	19.68	19.81	19.58				
15	16QAM	36	39	19.53	19.73	19.45				
15	16QAM	75	0	19.59	19.79	19.64				
15	64QAM	1	0	19.65	19.75	19.69	20.5	2		
15	64QAM	1	37	19.56	19.56	19.43				
15	64QAM	1	74	19.51	19.69	19.45				
15	64QAM	36	0	18.69	18.76	18.63	19.5	3		
15	64QAM	36	20	18.73	18.70	18.60				
15	64QAM	36	39	18.52	18.77	18.47				
15	64QAM	75	0	18.71	18.80	18.54				
15	256QAM	1	0	16.53	16.76	16.70	17.5	5		
15	256QAM	1	37	16.69	16.64	16.56				
15	256QAM	1	74	16.43	16.72	16.52				
15	256QAM	36	0	16.73	16.70	16.58	17.5	5		
15	256QAM	36	20	16.64	16.79	16.72				
15	256QAM	36	39	16.61	16.64	16.53				
15	256QAM	75	0	16.49	16.67	16.49				
Channel				37920	38000	38200	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	21.70	21.89	21.87	22.5	0		
10	QPSK	1	25	21.58	21.63	21.55				
10	QPSK	1	49	21.57	21.71	21.58				
10	QPSK	25	0	20.65	20.76	20.66	21.5	1		
10	QPSK	25	12	20.73	20.74	20.65				
10	QPSK	25	25	20.48	20.74	20.50				
10	QPSK	50	0	20.63	20.74	20.63	21.5	1		
10	16QAM	100	0	20.56	20.66	20.45				
10	16QAM	1	49	20.50	20.71	20.51	21.5	1		
10	16QAM	25	0	19.58	19.74	19.66	20.5	2		
10	16QAM	25	12	19.70	19.82	19.61				
10	16QAM	25	25	19.47	19.71	19.53				
10	16QAM	50	0	19.67	19.83	19.66				
10	64QAM	1	0	19.55	19.83	19.68	20.5	2		
10	64QAM	1	25	19.57	19.61	19.43				
10	64QAM	1	49	19.49	19.71	19.48				
10	64QAM	25	0	18.85	18.76	18.67	19.5	3		
10	64QAM	25	12	18.88	18.67	18.65				
10	64QAM	25	25	18.45	18.81	18.46				
10	64QAM	50	0	18.66	18.82	18.61				
10	256QAM	1	0	16.60	16.83	16.66	17.5	5		
10	256QAM	1	25	16.71	16.64	16.56				
10	256QAM	1	49	16.48	16.78	16.59				
10	256QAM	25	0	16.64	16.72	16.61				
10	256QAM	25	12	16.63	16.81	16.69	17.5	5		
10	256QAM	25	25	16.59	16.59	16.49				
10	256QAM	50	0	16.51	16.64	16.56				
Channel				37775	38000	38225	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				23225	2325	23125				
5	QPSK	1	0	21.68	21.74	21.62	22.5	0		
5	QPSK	1	12	21.65	21.68	21.51				
5	QPSK	1	24	21.51	21.67	21.52				
5	QPSK	12	0	20.60	20.77	20.58	21.5	1		
5	QPSK	12	7	20.67	20.80	20.54				
5	QPSK	12	13	20.47	20.71	20.50				
5	QPSK	25	0	20.65	20.78	20.65	21.5	1		
5	16QAM	1	0	20.70	20.68	20.66				
5	16QAM	1	12	20.63	20.68	20.50	21.5	1		
5	16QAM	1	24	20.57	20.70	20.60				
5	16QAM	12	0	19.63	19.72	19.63	20.5	2		
5	16QAM	12	7	19.68	19.80	19.53				
5	16QAM	12	13	19.56	19.71	19.54				
5	16QAM	25	0	19.63	19.76	19.55				
5	64QAM	1	0	19.56	19.73	19.62	20.5	2		
5	64QAM	1	12	19.63	19.60	19.39				
5	64QAM	1	24	19.49	19.68	19.54				
5	64QAM	12	0	18.63	18.78	18.69	19.5	3		
5	64QAM	12	7	18.78	18.64	18.67				
5	64QAM	12	13	18.45	18.76	18.50				
5	64QAM	25	0	18.83	18.77	18.62				
5	256QAM	1	0	16.58	16.86	16.70	17.5	5		
5	256QAM	1	12	16.66	16.66	16.60				
5	256QAM	1	24	16.49	16.72	16.57				
5	256QAM	12	0	16.69	16.75	16.60				
5	256QAM	12	7	16.68	16.83	16.77	17.5	5		
5	256QAM	12	13	16.62	16.62	16.57				
5	256QAM	25	0	16.45	16.68	16.55				

Band 41 other PA Ant 3											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620	41055	41490			
Frequency (MHz)				2506	2549.5	2593	2636.5	2680			
20	QPSK	1	0	21.62	21.70	21.76	21.66	21.63	22.5	0	
20	QPSK	1	49	21.58	21.65	21.71	21.55	21.53			
20	QPSK	1	99	21.50	21.63	21.68	21.60	21.58			
20	QPSK	50	0	20.65	20.69	20.80	20.83	20.57	21.5	1	
20	QPSK	50	24	20.61	20.69	20.74	20.60	20.56			
20	QPSK	50	50	20.52	20.68	20.70	20.65	20.56			
20	16QAM	100									



Band 38 other PA Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				37850	38000	38150			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	0	22.73	22.78	22.70			
20	QPSK	1	49	22.69	22.73	22.56	24	0	
20	QPSK	1	99	22.60	22.71	22.62			
20	QPSK	50	0	21.73	21.82	21.71			
20	QPSK	50	24	21.74	21.73	21.51			
20	QPSK	50	50	21.57	21.65	21.67	23	1	
20	QPSK	100	0	21.71	21.77	21.72			
20	16QAM	1	0	21.79	21.73	21.70			
20	16QAM	1	49	21.64	21.69	21.59	23	1	
20	16QAM	1	99	21.65	21.72	21.67			
20	16QAM	50	0	20.75	20.77	20.74			
20	16QAM	50	24	20.69	20.75	20.53	22	2	
20	16QAM	50	50	20.52	20.71	20.70			
20	16QAM	100	0	20.68	20.81	20.76			
20	64QAM	1	0	20.79	20.73	20.68			
20	64QAM	1	49	20.69	20.72	20.59	22	2	
20	64QAM	1	99	20.65	20.69	20.73			
20	64QAM	50	0	19.67	19.80	19.72			
20	64QAM	50	24	19.79	19.71	19.52	21	3	
20	64QAM	50	50	19.54	19.66	19.70			
20	64QAM	100	0	19.69	19.81	19.67			
20	256QAM	1	0	17.72	17.83	17.69			
20	256QAM	1	49	17.72	17.77	17.53	19	5	
20	256QAM	1	99	17.52	17.70	17.70			
20	256QAM	50	0	17.65	17.76	17.66			
20	256QAM	50	24	17.75	17.69	17.66	19	5	
20	256QAM	50	50	17.63	17.65	17.60			
20	256QAM	100	0	17.70	17.74	17.63			
Channel				37825	38000	38175			
Frequency (MHz)				25775	2592	2592			
15	QPSK	1	0	22.70	22.64	22.58	24	0	
15	QPSK	1	37	22.57	22.63	22.48			
15	QPSK	1	74	22.56	22.62	22.49			
15	QPSK	36	0	21.67	21.73	21.62			
15	QPSK	36	20	21.71	21.68	21.48	23	1	
15	QPSK	36	39	21.46	21.61	21.55			
15	QPSK	75	0	21.61	21.67	21.56			
15	16QAM	1	0	21.76	21.63	21.56			
15	16QAM	1	37	21.50	21.59	21.56	23	1	
15	16QAM	1	74	21.58	21.62	21.61			
15	16QAM	36	0	20.64	20.73	20.69			
15	16QAM	36	20	20.59	20.72	20.39	22	2	
15	16QAM	36	39	20.39	20.60	20.60			
15	16QAM	75	0	20.65	20.70	20.66			
15	64QAM	1	0	20.67	20.62	20.58			
15	64QAM	1	37	20.59	20.65	20.47	22	2	
15	64QAM	1	74	20.59	20.65	20.60			
15	64QAM	36	0	19.63	19.76	19.62			
15	64QAM	36	20	19.72	19.64	19.47	21	3	
15	64QAM	36	39	19.48	19.56	19.59			
15	64QAM	75	0	19.66	19.71	19.59			
15	256QAM	1	0	17.63	17.75	17.59			
15	256QAM	1	30	17.63	17.67	17.41	19	5	
15	256QAM	1	74	17.38	17.61	17.63			
15	256QAM	36	0	17.52	17.73	17.52			
15	256QAM	36	20	17.64	17.60	17.55	19	5	
15	256QAM	36	39	17.60	17.53	17.46			
15	256QAM	75	0	17.60	17.69	17.55			
Channel				37900	38000	38200			
Frequency (MHz)				2575	2595	2615			
10	QPSK	1	0	22.70	22.75	22.63	24	0	
10	QPSK	1	25	22.60	22.63	22.43			
10	QPSK	1	49	22.49	22.65	22.49			
10	QPSK	25	0	21.71	21.79	21.63			
10	QPSK	25	12	21.64	21.65	21.47	23	1	
10	QPSK	25	25	21.47	21.57	21.58			
10	QPSK	50	0	21.69	21.75	21.66			
10	16QAM	1	0	21.75	21.61	21.59	23	1	
10	16QAM	1	25	21.57	21.67	21.45			
10	16QAM	1	49	21.57	21.68	21.63			
10	16QAM	25	0	20.70	20.67	20.68			
10	16QAM	25	12	20.59	20.69	20.50	22	2	
10	16QAM	25	25	20.48	20.58	20.57			
10	16QAM	50	0	20.63	20.76	20.64			
10	64QAM	1	0	20.74	20.60	20.64			
10	64QAM	1	25	20.63	20.69	20.47	22	2	
10	64QAM	1	49	20.58	20.66	20.61			
10	64QAM	25	0	19.56	19.68	19.70			
10	64QAM	25	12	19.71	19.66	19.43	21	3	
10	64QAM	25	25	19.52	19.55	19.57			
10	64QAM	50	0	19.62	19.73	19.64			
10	256QAM	1	0	17.67	17.73	17.65			
10	256QAM	1	25	17.66	17.70	17.45	19	5	
10	256QAM	1	49	17.47	17.68	17.60			
10	256QAM	25	0	17.59	17.66	17.59			
10	256QAM	25	12	17.66	17.63	17.61	19	5	
10	256QAM	25	25	17.55	17.62	17.57			
10	256QAM	50	0	17.66	17.67	17.56			
Channel				37775	38000	38225			
Frequency (MHz)				25725	25925	26125			
5	QPSK	1	0	22.63	22.67	22.65	24	0	
5	QPSK	1	12	22.61	22.56	22.44			
5	QPSK	1	24	22.53	22.67	22.49			
5	QPSK	12	0	21.61	21.70	21.63			
5	QPSK	12	7	21.68	21.63	21.40	23	1	
5	QPSK	12	13	21.53	21.57	21.56			
5	QPSK	25	0	21.64	21.64	21.62			
5	16QAM	1	0	21.71	21.66	21.63			
5	16QAM	1	12	21.53	21.64	21.50	23	1	
5	16QAM	1	24	21.60	21.70	21.54			
5	16QAM	12	0	20.67	20.73	20.67			
5	16QAM	12	7	20.59	20.73	20.49	22	2	
5	16QAM	12	13	20.40	20.63	20.59			
5	16QAM	25	0	20.55	20.68	20.71			
5	64QAM	1	0	20.70	20.64	20.58			
5	64QAM	1	12	20.62	20.70	20.56	22	2	
5	64QAM	1	24	20.63	20.64	20.70			
5	64QAM	12	0	19.64	19.76	19.63			
5	64QAM	12	7	19.70	19.63	19.42	21	3	
5	64QAM	12	13	19.40	19.54	19.59			
5	64QAM	25	0	19.65	19.69	19.59			
5	256QAM	1	0	17.63	17.76	17.61			
5	256QAM	1	12	17.62	17.64	17.40	19	5	
5	256QAM	1	24	17.41	17.63	17.66			
5	256QAM	12	0	17.61	17.73	17.58			
5	256QAM	12	7	17.64	17.64	17.55	19	5	
5	256QAM	12	13	17.51	17.62	17.51			
5	256QAM	25	0	17.60	17.62	17.54			

Band 41 other PA Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				39750	40165	40620			
Frequency (MHz)				2506	2549.5	2593			
20	QPSK	1	0	22.65	22.62	22.61			
20	QPSK	1	49	22.55	22.60	22.61	24	0	
20	QPSK	1	99	22.59	22.56	22.56			
20	QPSK	50	0	21.62	21.59	21.73			
20	QPSK	50	24	21.54	21.57	21.48	23	1	
20	QPSK	50	50	21.62	21.50	21.58			
20	QPSK	100	0	21.65	21.58	21.69	21.58	21.55	
20	16QAM	1	0	21.63	21.58	21.68	21.57	21.56	
20	16QAM	1	49	21.55	21.63	21.63	21.43	21.52	23
20	16QAM	1	99	21.63	21.57	21.57	21.54	21.47	
20	16QAM	50	0	20.62	20.56	20.70	20.56	20.49	
20	16QAM	50	24	20.48	20.61	20.57	20.42	20.54	22
20	16QAM	50	50	20.60	20.56	20.60	20.		



Band 38 other PA Ant 5										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	23.66	23.72	23.81	24.5	0		
20	QPSK	1	49	23.56	23.70	23.50				
20	QPSK	1	99	23.83	23.48	23.48				
20	QPSK	50	0	22.72	22.78	22.59				
20	QPSK	50	24	22.60	22.73	22.48				
20	QPSK	50	50	22.66	22.72	22.47				
20	16QAM	1	0	22.63	22.75	22.61	23.5	1		
20	16QAM	1	49	22.62	22.72	22.54				
20	16QAM	1	99	22.61	22.65	22.50				
20	16QAM	1	99	22.65	22.71	22.54				
20	16QAM	50	0	21.77	21.72	21.57				
20	16QAM	50	24	21.59	21.75	21.50				
20	16QAM	50	50	21.88	21.86	21.44				
20	16QAM	100	0	21.67	21.80	21.57				
20	64QAM	1	0	21.61	21.73	21.62				
20	64QAM	1	49	21.59	21.69	21.51				
20	64QAM	1	99	21.61	21.76	21.56				
20	64QAM	50	0	20.69	20.83	20.64				
20	64QAM	50	24	20.57	20.72	20.30				
20	64QAM	50	50	20.70	20.69	20.43				
20	64QAM	100	0	20.69	20.73	20.59				
20	256QAM	1	0	18.68	18.81	18.58				
20	256QAM	1	49	18.80	18.69	18.43				
20	256QAM	1	99	18.71	18.71	18.51				
20	256QAM	50	0	18.87	18.79	18.55				
20	256QAM	50	24	18.64	18.69	18.61				
20	256QAM	50	50	18.57	18.70	18.47				
20	256QAM	100	0	18.61	18.67	18.56				
Channel				37825	38000	38175				
Frequency (MHz)				25775	2595	2612.5				
15	QPSK	1	0	23.55	23.66	23.47	24.5	0		
15	QPSK	1	37	23.47	23.63	23.46				
15	QPSK	1	74	23.59	23.64	23.37				
15	QPSK	36	0	22.61	22.68	22.53				
15	QPSK	36	20	22.55	22.65	22.43				
15	QPSK	36	39	22.56	22.60	22.33				
15	QPSK	75	0	22.61	22.65	22.49				
15	16QAM	1	0	22.54	22.69	22.56				
15	16QAM	1	37	22.55	22.57	22.42				
15	16QAM	1	74	22.61	22.67	22.52				
15	16QAM	36	0	21.85	21.68	21.46				
15	16QAM	36	20	21.54	21.86	21.40				
15	16QAM	36	39	21.58	21.56	21.38				
15	16QAM	75	0	21.58	21.75	21.52				
15	64QAM	1	0	21.54	21.81	21.51				
15	64QAM	1	37	21.54	21.64	21.46				
15	64QAM	1	74	21.51	21.65	21.49				
15	64QAM	36	0	20.55	20.78	20.58				
15	64QAM	36	20	20.52	20.67	20.45				
15	64QAM	36	39	20.65	20.85	20.29				
15	64QAM	75	0	20.64	20.66	20.48				
15	256QAM	1	0	18.57	18.79	18.52				
15	256QAM	1	37	18.55	18.63	18.40				
15	256QAM	1	74	18.64	18.60	18.37				
15	256QAM	36	0	18.58	18.69	18.56				
15	256QAM	36	20	18.51	18.67	18.54				
15	256QAM	36	39	18.55	18.58	18.35				
15	256QAM	75	0	18.51	18.58	18.48				
Channel				37900	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	23.55	23.64	23.47	24.5	0		
10	QPSK	1	25	23.50	23.68	23.38				
10	QPSK	1	49	23.59	23.64	23.42				
10	QPSK	25	0	22.65	22.72	22.50				
10	QPSK	25	12	22.53	22.69	22.39				
10	QPSK	25	25	22.59	22.65	22.41				
10	QPSK	50	0	22.59	22.67	22.56				
10	16QAM	1	0	22.51	22.61	22.55				
10	16QAM	1	25	22.58	22.57	22.39				
10	16QAM	1	49	22.61	22.67	22.45				
10	16QAM	25	0	21.88	21.69	21.44				
10	16QAM	25	12	21.47	21.62	21.38				
10	16QAM	25	25	21.60	21.54	21.38				
10	16QAM	50	0	21.84	21.87	21.49				
10	64QAM	1	0	21.49	21.69	21.51				
10	64QAM	1	25	21.54	21.66	21.37				
10	64QAM	1	49	21.51	21.67	21.51				
10	64QAM	25	0	20.58	20.74	20.61				
10	64QAM	25	12	20.50	20.58	20.46				
10	64QAM	25	25	20.59	20.66	20.31				
10	64QAM	50	0	20.64	20.69	20.54				
10	256QAM	1	0	18.58	18.79	18.55				
10	256QAM	1	25	18.55	18.60	18.38				
10	256QAM	1	49	18.66	18.68	18.45				
10	256QAM	25	0	18.64	18.72	18.52				
10	256QAM	25	12	18.52	18.66	18.57				
10	256QAM	25	25	18.55	18.65	18.36				
10	256QAM	50	0	18.49	18.57	18.52				
Channel				37775	38000	38225				
Frequency (MHz)				23225	2325	2317.5				
5	QPSK	1	0	23.55	23.61	23.52	24.5	0		
5	QPSK	1	12	23.51	23.58	23.37				
5	QPSK	1	24	23.59	23.53	23.35				
5	QPSK	12	0	22.62	22.70	22.48				
5	QPSK	12	7	22.58	22.67	22.36				
5	QPSK	12	13	22.59	22.60	22.41				
5	QPSK	25	0	22.52	22.64	22.53				
5	16QAM	1	0	22.58	22.61	22.52				
5	16QAM	1	12	22.48	22.60	22.44				
5	16QAM	1	24	22.56	22.64	22.41				
5	16QAM	12	0	21.84	21.88	21.43				
5	16QAM	12	7	21.50	21.68	21.42				
5	16QAM	12	13	21.56	21.53	21.35				
5	16QAM	25	0	21.64	21.67	21.54				
5	64QAM	1	0	21.55	21.65	21.55				
5	64QAM	1	12	21.49	21.56	21.39				
5	64QAM	1	24	21.53	21.71	21.53				
5	64QAM	12	0	20.56	20.72	20.54				
5	64QAM	12	7	20.54	20.62	20.46				
5	64QAM	12	13	20.67	20.59	20.35				
5	64QAM	25	0	20.60	20.59	20.51				
5	256QAM	1	0	18.65	18.70	18.51				
5	256QAM	1	12	18.53	18.61	18.35				
5	256QAM	1	24	18.57	18.61	18.41				
5	256QAM	12	0	18.57	18.71	18.54				
5	256QAM	12	7	18.58	18.59	18.53				
5	256QAM	12	13	18.55	18.63	18.34				
5	256QAM	25	0	18.57	18.65	18.51				

Band 41 other PA Ant 5										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	23.56	23.52	23.60	24.5	0		
20	QPSK	1	49	23.50	23.46	23.55				
20	QPSK	1	99	23.83	23.47	23.51				
20	QPSK	50	0	22.58	22.58	22.64				
20	QPSK	50	24	22.44	22.48	22.54				
20	QPSK	50	50	22.52	22.53	22.51				
20	QPSK	100	0	22.57	22.50	22.63				
20	16QAM	1	0	22.52	22.53	22.60				
20										



Reduced Power Mode for DSI1

Band 2 other PA Ant 2 DSI1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. (MHz)	Power Middle Ch. Freq. (MHz)	Power High Ch. Freq. (MHz)	Turn-up time (min)	MPR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	18.17	18.37	18.53	17.5	0		
20	QPSK	1	49	18.21	18.24	18.28				
20	QPSK	1	99	18.27	18.28	18.18				
20	QPSK	50	0	18.02	18.28	18.28				
20	QPSK	50	24	18.18	18.11	18.18	17.5	0		
20	QPSK	100	0	18.08	18.14	18.14				
20	QPSK	100	0	18.08	18.02	18.09				
20	HQAM	1	49	18.08	18.08	18.08	17.5	0		
20	HQAM	1	99	18.18	18.18	18.20				
20	HQAM	50	0	18.07	18.18	18.04				
20	HQAM	50	24	18.09	18.05	18.06	17.5	0		
20	HQAM	100	0	18.00	18.01	18.00				
20	HQAM	100	0	18.00	18.18	18.09	17.5	0		
20	HQAM	1	49	18.05	18.04	18.00				
20	HQAM	1	99	18.06	18.09	18.06				
20	HQAM	50	24	18.09	18.01	18.01	17.5	0		
20	HQAM	50	50	18.06	18.01	18.00				
20	HQAM	100	0	18.05	18.12	18.08				
20	256QAM	1	0	18.01	18.01	18.00				
20	256QAM	1	49	18.01	18.08	18.00	17.5	0		
20	256QAM	1	99	18.02	18.14	18.00				
20	256QAM	50	0	18.08	18.02	18.00				
20	256QAM	50	24	18.05	18.04	18.08	17.5	0		
20	256QAM	100	0	18.00	18.18	18.00				
20	256QAM	100	0	18.04	18.01	18.00				
Channel										
Frequency (MHz)										
15	QPSK	1	0	18.01	18.27	18.21	17.5	0		
15	QPSK	1	37	18.13	18.18	18.17				
15	QPSK	1	74	18.14	18.28	18.21				
15	QPSK	36	0	18.03	18.18	18.20				
15	QPSK	36	20	18.07	18.02	18.03	17.5	0		
15	QPSK	36	39	18.03	18.04	18.01				
15	QPSK	75	0	18.03	18.08	18.19				
15	HQAM	1	0	18.09	18.09	18.05	17.5	0		
15	HQAM	1	37	18.09	18.00	18.04				
15	HQAM	1	74	18.03	18.03	18.02				
15	HQAM	36	0	18.01	18.03	18.00	17.5	0		
15	HQAM	36	39	18.02	18.04	18.04				
15	HQAM	75	0	18.18	18.04	18.14				
15	HQAM	75	0	18.02	18.08	18.24	17.5	0		
15	HQAM	1	37	18.07	18.18	18.00				
15	HQAM	1	74	18.09	18.18	18.05				
15	HQAM	36	0	18.05	18.12	18.21	17.5	0		
15	HQAM	36	20	18.09	18.18	18.00				
15	HQAM	75	0	18.11	18.03	18.18				
15	256QAM	1	0	18.12	18.04	18.04				
15	256QAM	1	37	18.00	18.08	18.07	17.5	0		
15	256QAM	1	74	18.01	18.07	18.00				
15	256QAM	36	0	18.13	18.18	18.14	17.5	0		
15	256QAM	36	20	18.03	18.12	18.14				
15	256QAM	75	0	18.08	18.04	18.00				
15	256QAM	75	0	18.08	18.04	18.00				
Channel										
Frequency (MHz)										
10	QPSK	1	0	18.03	18.22	18.22	17.5	0		
10	QPSK	1	25	18.06	18.08	18.16				
10	QPSK	1	49	18.13	18.16	18.20				
10	QPSK	25	0	18.09	18.14	18.21				
10	QPSK	25	12	18.02	18.03	18.06	17.5	0		
10	QPSK	25	39	18.03	18.08	18.04				
10	QPSK	50	0	18.03	18.09	18.01				
10	HQAM	1	0	18.08	18.03	18.01	17.5	0		
10	HQAM	1	25	18.02	18.08	18.06				
10	HQAM	1	49	18.01	18.03	18.08				
10	HQAM	25	0	18.07	18.03	18.19	17.5	0		
10	HQAM	25	12	18.04	18.01	18.14				
10	HQAM	25	25	18.05	18.18	18.08				
10	HQAM	50	0	18.08	18.11	18.01	17.5	0		
10	HQAM	1	25	18.00	18.09	18.06				
10	HQAM	1	49	18.04	18.18	18.05				
10	HQAM	25	0	18.12	18.12	18.19	17.5	0		
10	HQAM	25	12	18.09	18.00	18.02				
10	HQAM	25	25	18.11	18.07	18.05				
10	HQAM	50	0	18.18	18.04	18.05	17.5	0		
10	256QAM	1	0	18.13	18.05	18.04				
10	256QAM	1	25	18.01	18.08	18.00	17.5	0		
10	256QAM	1	49	18.06	18.02	18.06				
10	256QAM	25	0	18.09	18.18	18.00				
10	256QAM	25	12	18.11	18.10	18.19	17.5	0		
10	256QAM	50	0	18.02	18.07	18.18				
Channel										
Frequency (MHz)										
5	QPSK	1	0	18.11	18.21	18.24	17.5	0		
5	QPSK	1	12	18.16	18.11	18.23				
5	QPSK	1	24	18.12	18.13	18.12				
5	QPSK	12	0	18.07	18.12	18.23				
5	QPSK	12	7	18.07	18.05	18.08	17.5	0		
5	QPSK	12	13	18.12	18.05	18.01				
5	QPSK	25	0	18.03	18.03	18.18				
5	HQAM	1	0	18.03	18.03	18.01	17.5	0		
5	HQAM	1	12	18.08	18.08	18.05				
5	HQAM	1	24	18.03	18.08	18.06				
5	HQAM	12	0	18.07	18.13	18.09	17.5	0		
5	HQAM	12	7	18.11	18.13	18.18				
5	HQAM	12	13	18.08	18.02	18.05				
5	HQAM	25	0	18.08	18.04	18.19	17.5	0		
5	HQAM	1	0	18.09	18.08	18.07				
5	HQAM	1	12	18.04	18.11	18.07	17.5	0		
5	HQAM	12	24	18.04	18.18	18.07				
5	HQAM	12	0	18.09	18.18	18.09	17.5	0		
5	HQAM	12	7	18.05	18.07	18.06				
5	HQAM	12	13	18.11	18.02	18.17				
5	256QAM	1	0	18.08	18.06	18.03	17.5	0		
5	256QAM	1	12	18.02	18.07	18.01				
5	256QAM	1	24	18.05	18.07	18.03				
5	256QAM	12	0	18.04	18.09	18.03	17.5	0		
5	256QAM	12	13	18.02	18.02	18.00				
5	256QAM	25	0	18.00	18.07	18.03				
Channel										
Frequency (MHz)										
3	QPSK	1	0	18.13	18.24	18.29	17.5	0		
3	QPSK	1	8	18.14	18.13	18.16				
3	QPSK	1	14	18.17	18.11	18.06				
3	QPSK	8	0	18.03	18.19	18.24				
3	QPSK	8	4	18.01	18.06	18.01	17.5	0		
3	QPSK	8	7	18.13	18.07	18.13				
3	QPSK	16	0	18.02	18.01	18.05				
3	HQAM	1	0	18.05	18.04	18.06	17.5	0		
3	HQAM	1	8	18.07	18.09	18.04				
3	HQAM	1	14	18.11	18.06	18.01				
3	HQAM	8	0	18.01	18.01	18.01	17.5	0		
3	HQAM	8	4	18.05	18.09	18.19				
3	HQAM	8	7	18.04	18.01	18.08				
3	HQAM	16	0	18.08	18.09	18.01	17.5	0		
3	HQAM	1	8	18.07	18.19	18.09				
3	HQAM	1	14	18.00	18.14	18.09				
3	HQAM	8	0	18.12	18.18	18.07	17.5	0		
3	HQAM	8	4	18.04	18.05	18.02				
3	HQAM	16	0	18.10	18.17	18.06				
3	256QAM	1	0	18.11	18.00	18.06	17.5	0		
3	256QAM	1	14	18.08	18.01	18.05				
3	256QAM	8	0	18.09	18.13	18.18				
3	256QAM	8	4	18.18	18.02	18.02	17.5	0		
3										

Band 38 other PA Ant 2 DS11										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	15.78	15.88	15.93	17	0		
20	QPSK	1	49	15.82	15.83	15.91				
20	QPSK	1	99	15.89	15.92	15.94				
20	QPSK	50	0	15.68	15.83	15.81				
20	QPSK	50	24	15.83	15.70	15.75				
20	QPSK	50	50	15.80	15.73	15.79				
20	16QAM	1	0	15.61	15.38	15.66				
20	16QAM	1	49	15.75	15.69	15.68				
20	16QAM	1	99	15.47	15.40	15.45				
20	16QAM	50	0	15.61	15.43	15.56				
20	16QAM	50	24	15.47	15.42	15.40				
20	16QAM	50	50	15.62	15.58	15.62				
20	16QAM	100	0	15.45	15.46	15.52				
20	64QAM	1	0	15.60	15.54	15.40				
20	64QAM	1	49	15.56	15.41	15.64				
20	64QAM	1	99	15.60	15.44	15.58				
20	64QAM	50	0	15.42	15.49	15.52				
20	64QAM	50	24	15.68	15.34	15.44				
20	64QAM	50	50	15.61	15.41	15.58				
20	64QAM	100	0	15.48	15.39	15.56				
20	256QAM	1	0	15.46	15.49	15.48				
20	256QAM	1	49	15.59	15.57	15.54				
20	256QAM	1	99	15.60	15.37	15.59				
20	256QAM	50	0	15.61	15.44	15.51				
20	256QAM	50	24	15.53	15.38	15.51				
20	256QAM	50	50	15.48	15.33	15.46				
20	256QAM	100	0	15.49	15.54	15.49				
Channel				37825	38000	38175				
Frequency (MHz)				25775	2595	2612.5				
15	QPSK	1	0	15.67	15.85	15.79	17	0		
15	QPSK	1	37	15.74	15.77	15.86				
15	QPSK	1	74	15.78	15.80	15.79				
15	QPSK	36	0	15.62	15.68	15.68				
15	QPSK	36	20	15.77	15.61	15.65				
15	QPSK	36	39	15.76	15.67	15.71				
15	QPSK	75	0	15.47	15.63	15.45				
15	16QAM	1	0	15.55	15.63	15.53				
15	16QAM	1	37	15.66	15.65	15.58				
15	16QAM	1	74	15.34	15.32	15.34				
15	16QAM	36	0	15.49	15.36	15.44				
15	16QAM	36	20	15.32	15.33	15.33				
15	16QAM	36	39	15.46	15.46	15.56				
15	16QAM	75	0	15.38	15.35	15.42				
15	64QAM	1	0	15.53	15.41	15.30				
15	64QAM	1	37	15.47	15.33	15.59				
15	64QAM	1	74	15.47	15.36	15.51				
15	64QAM	36	0	15.29	15.42	15.43				
15	64QAM	36	20	15.61	15.47	15.28				
15	64QAM	36	39	15.41	15.35	15.50				
15	64QAM	75	0	15.33	15.32	15.42				
15	256QAM	1	0	15.42	15.40	15.40				
15	256QAM	1	37	15.47	15.39	15.39				
15	256QAM	1	74	15.51	15.29	15.48				
15	256QAM	36	0	15.49	15.35	15.37				
15	256QAM	36	20	15.41	15.23	15.38				
15	256QAM	36	39	15.33	15.27	15.41				
15	256QAM	75	0	15.39	15.44	15.33				
Channel				37900	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	15.73	15.93	15.86	17	0		
10	QPSK	1	25	15.73	15.67	15.76				
10	QPSK	1	49	15.76	15.78	15.73				
10	QPSK	25	0	15.55	15.75	15.74				
10	QPSK	25	12	15.72	15.64	15.66				
10	QPSK	25	25	15.68	15.60	15.64				
10	QPSK	50	0	15.48	15.59	15.38				
10	16QAM	1	0	15.53	15.43	15.29				
10	16QAM	1	25	15.64	15.60	15.56				
10	16QAM	1	49	15.34	15.32	15.37				
10	16QAM	25	0	15.49	15.35	15.43				
10	16QAM	25	12	15.37	15.33	15.29				
10	16QAM	25	25	15.56	15.44	15.51				
10	16QAM	50	0	15.29	15.39	15.39				
10	64QAM	1	0	15.54	15.43	15.35				
10	64QAM	1	25	15.51	15.34	15.48				
10	64QAM	1	49	15.53	15.33	15.53				
10	64QAM	25	0	15.27	15.40	15.37				
10	64QAM	25	12	15.63	15.46	15.29				
10	64QAM	25	25	15.41	15.28	15.52				
10	64QAM	50	0	15.34	15.27	15.42				
10	256QAM	1	0	15.39	15.36	15.34				
10	256QAM	1	25	15.54	15.47	15.44				
10	256QAM	1	49	15.55	15.25	15.48				
10	256QAM	25	0	15.49	15.31	15.37				
10	256QAM	25	12	15.47	15.27	15.43				
10	256QAM	25	25	15.43	15.28	15.39				
10	256QAM	50	0	15.43	15.41	15.34				
Channel				37775	38000	38225				
Frequency (MHz)				25925	2595	2617.5				
5	QPSK	1	0	15.66	15.85	15.78	17	0		
5	QPSK	1	12	15.78	15.69	15.85				
5	QPSK	1	24	15.80	15.78	15.79				
5	QPSK	12	0	15.67	15.75	15.74				
5	QPSK	12	7	15.75	15.55	15.70				
5	QPSK	12	13	15.75	15.64	15.72				
5	QPSK	25	0	15.51	15.53	15.26				
5	16QAM	1	0	15.46	15.44	15.59				
5	16QAM	1	12	15.59	15.56	15.53				
5	16QAM	1	24	15.37	15.28	15.37				
5	16QAM	12	0	15.49	15.37	15.50				
5	16QAM	12	7	15.33	15.34	15.30				
5	16QAM	12	13	15.52	15.46	15.57				
5	16QAM	25	0	15.35	15.38	15.42				
5	64QAM	1	0	15.49	15.40	15.33				
5	64QAM	1	12	15.43	15.27	15.56				
5	64QAM	1	24	15.53	15.36	15.46				
5	64QAM	12	0	15.34	15.33	15.48				
5	64QAM	12	7	15.58	15.44	15.40				
5	64QAM	12	13	15.33	15.28	15.45				
5	64QAM	25	0	15.39	15.32	15.46				
5	256QAM	1	0	15.32	15.35	15.43				
5	256QAM	1	12	15.46	15.47	15.40				
5	256QAM	1	24	15.44	15.30	15.48				
5	256QAM	12	0	15.56	15.32	15.35				
5	256QAM	12	7	15.46	15.31	15.38				
5	256QAM	12	13	15.44	15.23	15.41				
5	256QAM	25	0	15.33	15.41	15.37				

Band 41 other PA Ant 2 DS11										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2595	2593	2636.5				
20	QPSK	1	0	15.77	15.74	15.93	17	0		
20	QPSK	1	49	15.78	15.76	15.82				
20	QPSK	1	99	15.86	15.74	15.90				
20	QPSK	50	0	15.74	15.76	15.85				
20	QPSK	50	24	15.83	15.69	15.83				
20	QPSK	50	50	15.79	15.68	15.89				
20	QPSK	100	0	15.84	15.75	15.84				
20	16QAM	1	0	15.75	15.72	15.82				
20	16QAM	1	49	15.85	15.75	15.90				
20	16QAM	1	99	15.78	15.75	15.90				
20	16QAM	50	0	15.79	15.77	15.81				
20	16QAM	50	24	15.79	15.67	15.81				

Band 7 other PA Ant 3 DS11									
Channel	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				20650	21100	21550			
Frequency (MHz)				2010	2055	2090			
20	QPSK	1	0	13.84	13.97	13.92			
20	QPSK	1	49	13.85	13.91	13.89	14.5	0	
20	QPSK	1	99	13.85	13.92	13.79			
20	QPSK	50	0	13.88	13.88	13.89			
20	QPSK	50	24	13.86	13.77	13.90	14.5	0	
20	QPSK	50	50	13.74	13.72	13.79			
20	QPSK	100	0	13.50	13.68	13.52			
20	16QAM	1	0	13.82	13.57	13.65			
20	16QAM	1	49	13.80	13.65	13.61	14.5	0	
20	16QAM	1	99	13.46	13.32	13.51			
20	16QAM	50	0	13.55	13.41	13.59			
20	16QAM	50	24	13.45	13.41	13.41	14.5	0	
20	16QAM	50	50	13.57	13.58	13.52			
20	16QAM	100	0	13.44	13.44	13.48			
20	64QAM	1	0	13.64	13.59	13.34			
20	64QAM	1	49	13.61	13.47	13.56	14.5	0	
20	64QAM	1	99	13.63	13.45	13.51			
20	64QAM	50	0	13.38	13.43	13.45			
20	64QAM	50	24	13.58	13.54	13.48	14.5	0	
20	64QAM	50	50	13.47	13.49	13.52			
20	64QAM	100	0	13.48	13.36	13.52			
20	256QAM	1	0	13.41	13.49	13.53			
20	256QAM	1	49	13.56	13.55	13.54	14.5	0	
20	256QAM	1	99	13.53	13.38	13.52			
20	256QAM	50	0	13.67	13.39	13.55			
20	256QAM	50	24	13.55	13.47	13.58	14.5	0	
20	256QAM	50	50	13.48	13.31	13.47			
20	256QAM	100	0	13.49	13.47	13.50			
Channel				20625	21100	21375			
Frequency (MHz)				20075	20550	20925			
15	QPSK	1	0	13.73	13.84	13.84			
15	QPSK	1	37	13.72	13.76	13.80	14.5	0	
15	QPSK	1	74	13.70	13.80	13.73			
15	QPSK	36	0	13.55	13.82	13.80			
15	QPSK	36	20	13.78	13.64	13.66	14.5	0	
15	QPSK	36	39	13.82	13.66	13.70			
15	QPSK	75	0	13.37	13.62	13.47			
15	16QAM	1	0	13.52	13.45	13.58			
15	16QAM	1	37	13.70	13.54	13.51	14.5	0	
15	16QAM	1	74	13.40	13.27	13.37			
15	16QAM	36	0	13.40	13.33	13.48			
15	16QAM	36	20	13.39	13.27	13.26	14.5	0	
15	16QAM	36	39	13.53	13.51	13.41			
15	16QAM	75	0	13.29	13.30	13.34			
15	64QAM	1	0	13.50	13.43	13.30			
15	64QAM	1	37	13.57	13.41	13.43	14.5	0	
15	64QAM	1	74	13.52	13.33	13.37			
15	64QAM	36	0	13.24	13.33	13.30			
15	64QAM	36	20	13.51	13.46	13.41	14.5	0	
15	64QAM	36	39	13.51	13.42	13.47			
15	64QAM	75	0	13.34	13.31	13.42			
15	256QAM	1	0	13.33	13.37	13.43			
15	256QAM	1	37	13.43	13.49	13.49	14.5	0	
15	256QAM	1	74	13.48	13.32	13.38			
15	256QAM	36	0	13.62	13.24	13.40			
15	256QAM	36	20	13.41	13.31	13.46	14.5	0	
15	256QAM	36	39	13.36	13.24	13.31			
15	256QAM	75	0	13.35	13.38	13.36			
Channel				20800	21100	21400			
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	0	13.79	13.83	13.80			
10	QPSK	1	25	13.79	13.76	13.78	14.5	0	
10	QPSK	1	49	13.77	13.87	13.87			
10	QPSK	25	0	13.64	13.74	13.77			
10	QPSK	25	12	13.74	13.65	13.66	14.5	0	
10	QPSK	25	25	13.89	13.82	13.88			
10	QPSK	50	0	13.41	13.56	13.37			
10	16QAM	1	0	13.57	13.41	13.53			
10	16QAM	1	25	13.71	13.49	13.54	14.5	0	
10	16QAM	1	49	13.35	13.23	13.35			
10	16QAM	25	0	13.48	13.27	13.51			
10	16QAM	25	12	13.36	13.32	13.33	14.5	0	
10	16QAM	25	25	13.52	13.44	13.44			
10	16QAM	50	0	13.32	13.36	13.41			
10	64QAM	1	0	13.58	13.51	13.28			
10	64QAM	1	25	13.46	13.32	13.43	14.5	0	
10	64QAM	1	49	13.50	13.37	13.41			
10	64QAM	25	0	13.27	13.32	13.36			
10	64QAM	25	12	13.50	13.46	13.39	14.5	0	
10	64QAM	25	25	13.34	13.42	13.44			
10	64QAM	50	0	13.40	13.22	13.46			
10	256QAM	1	0	13.51	13.45	13.38			
10	256QAM	1	25	13.44	13.39	13.47	14.5	0	
10	256QAM	1	49	13.40	13.27	13.44			
10	256QAM	25	0	13.57	13.28	13.42			
10	256QAM	25	12	13.45	13.42	13.43	14.5	0	
10	256QAM	25	25	13.36	13.24	13.33			
10	256QAM	50	0	13.38	13.32	13.46			
Channel				20775	21100	21425			
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	0	13.79	13.81	13.81			
5	QPSK	1	12	13.81	13.81	13.82	14.5	0	
5	QPSK	1	24	13.80	13.82	13.71			
5	QPSK	12	0	13.58	13.83	13.83			
5	QPSK	12	7	13.77	13.67	13.68	14.5	0	
5	QPSK	12	13	13.67	13.63	13.63			
5	QPSK	25	0	13.38	13.54	13.42			
5	16QAM	1	0	13.47	13.46	13.59			
5	16QAM	1	12	13.71	13.56	13.52	14.5	0	
5	16QAM	1	24	13.40	13.28	13.41			
5	16QAM	12	0	13.45	13.29	13.47			
5	16QAM	12	7	13.32	13.24	13.26	14.5	0	
5	16QAM	12	13	13.45	13.53	13.42			
5	16QAM	25	0	13.35	13.34	13.32			
5	64QAM	1	0	13.58	13.46	13.19			
5	64QAM	1	12	13.54	13.41	13.49	14.5	0	
5	64QAM	1	24	13.55	13.32	13.46			
5	64QAM	12	0	13.21	13.38	13.38			
5	64QAM	12	7	13.49	13.41	13.40	14.5	0	
5	64QAM	12	13	13.33	13.44	13.36			
5	64QAM	25	0	13.40	13.30	13.41			
5	256QAM	1	0	13.35	13.42	13.45			
5	256QAM	1	12	13.49	13.40	13.50	14.5	0	
5	256QAM	1	24	13.45	13.30	13.48			
5	256QAM	12	0	13.62	13.27	13.42			
5	256QAM	12	7	13.47	13.34	13.52	14.5	0	
5	256QAM	12	13	13.38	13.24	13.42			
5	256QAM	25	0	13.43	13.43	13.36			



Band 38 other PA Ant 3 DS11										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	14.73	14.95	14.85	15.5	0		
20	QPSK	1	49	14.88	14.79	14.94				
20	QPSK	1	99	14.84	14.76	14.78				
20	QPSK	50	0	14.64	14.83	14.83				
20	QPSK	50	24	14.82	14.70	14.78				
20	QPSK	50	50	14.72	14.75	14.88				
20	16QAM	100	0	14.58	14.32	14.53				
20	16QAM	1	49	14.75	14.59	14.62	15.5	0		
20	16QAM	1	99	14.34	14.35	14.44				
20	16QAM	50	0	14.53	14.33	14.51				
20	16QAM	50	24	14.36	14.34	14.41	15.5	0		
20	16QAM	50	50	14.54	14.59	14.49				
20	16QAM	100	0	14.41	14.37	14.52				
20	64QAM	1	0	14.59	14.52	14.38				
20	64QAM	1	49	14.60	14.36	14.55	15.5	0		
20	64QAM	1	99	14.66	14.36	14.44				
20	64QAM	50	0	14.33	14.37	14.44				
20	64QAM	50	24	14.55	14.34	14.46	15.5	0		
20	64QAM	50	50	14.41	14.37	14.52				
20	64QAM	100	0	14.42	14.29	14.53				
20	256QAM	1	0	14.42	14.40	14.49				
20	256QAM	1	49	14.53	14.50	14.44	15.5	0		
20	256QAM	1	99	14.56	14.33	14.56				
20	256QAM	50	0	14.59	14.36	14.47				
20	256QAM	50	24	14.44	14.32	14.49	15.5	0		
20	256QAM	50	50	14.44	14.34	14.43				
20	256QAM	100	0	14.44	14.51	14.47				
Channel				37825	38000	38175	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				25725	2595	2612.5				
15	QPSK	1	0	14.69	14.96	14.71	15.5	0		
15	QPSK	1	37	14.83	14.70	14.82				
15	QPSK	1	74	14.78	14.83	14.64				
15	QPSK	36	0	14.51	14.76	14.70				
15	QPSK	36	20	14.72	14.55	14.84	15.5	0		
15	QPSK	36	39	14.57	14.38	14.56				
15	QPSK	75	0	14.40	14.59	14.42				
15	16QAM	1	0	14.52	14.41	14.50				
15	16QAM	1	37	14.65	14.54	14.57	15.5	0		
15	16QAM	1	74	14.21	14.22	14.30				
15	16QAM	36	0	14.45	14.35	14.35				
15	16QAM	36	20	14.22	14.28	14.26	15.5	0		
15	16QAM	36	39	14.39	14.48	14.34				
15	16QAM	75	0	14.24	14.27	14.48				
15	64QAM	1	0	14.48	14.47	14.26				
15	64QAM	1	37	14.45	14.29	14.41	15.5	0		
15	64QAM	1	74	14.51	14.23	14.37				
15	64QAM	36	0	14.27	14.21	14.37				
15	64QAM	36	20	14.42	14.38	14.31	15.5	0		
15	64QAM	36	39	14.34	14.21	14.46				
15	64QAM	75	0	14.27	14.21	14.48				
15	256QAM	1	0	14.38	14.35	14.37				
15	256QAM	1	37	14.39	14.34	14.33	15.5	0		
15	256QAM	1	74	14.48	14.28	14.46				
15	256QAM	36	0	14.51	14.22	14.41				
15	256QAM	36	20	14.37	14.27	14.39	15.5	0		
15	256QAM	36	39	14.30	14.23	14.28				
15	256QAM	75	0	14.37	14.38	14.40				
Channel				37890	38000	38200	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	14.65	14.88	14.70	15.5	0		
10	QPSK	1	25	14.74	14.75	14.81				
10	QPSK	1	49	14.73	14.58	14.58				
10	QPSK	25	0	14.52	14.70	14.74				
10	QPSK	25	12	14.70	14.62	14.63	15.5	0		
10	QPSK	25	25	14.67	14.63	14.54				
10	QPSK	50	0	14.38	14.59	14.38				
10	16QAM	1	0	14.54	14.41	14.48				
10	16QAM	1	25	14.58	14.59	14.52	15.5	0		
10	16QAM	1	49	14.24	14.23	14.31				
10	16QAM	25	0	14.40	14.18	14.39				
10	16QAM	25	12	14.21	14.28	14.36	15.5	0		
10	16QAM	25	25	14.45	14.52	14.35				
10	16QAM	50	0	14.24	14.28	14.44				
10	64QAM	1	0	14.51	14.41	14.28				
10	64QAM	1	25	14.48	14.22	14.39	15.5	0		
10	64QAM	1	49	14.53	14.23	14.39				
10	64QAM	25	0	14.17	14.24	14.31				
10	64QAM	25	12	14.46	14.38	14.35	15.5	0		
10	64QAM	25	25	14.34	14.23	14.46				
10	64QAM	50	0	14.36	14.18	14.39				
10	256QAM	1	0	14.34	14.28	14.43				
10	256QAM	1	25	14.47	14.43	14.29	15.5	0		
10	256QAM	1	49	14.48	14.27	14.48				
10	256QAM	25	0	14.48	14.28	14.41				
10	256QAM	25	12	14.29	14.22	14.44	15.5	0		
10	256QAM	25	25	14.38	14.29	14.36				
10	256QAM	50	0	14.34	14.36	14.34				
Channel				37775	38000	38225	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				25925	2595	2617.5				
5	QPSK	1	0	14.62	14.81	14.76	15.5	0		
5	QPSK	1	12	14.82	14.74	14.81				
5	QPSK	1	24	14.70	14.72	14.72				
5	QPSK	12	0	14.53	14.71	14.77				
5	QPSK	12	7	14.69	14.61	14.66	15.5	0		
5	QPSK	12	13	14.66	14.60	14.56				
5	QPSK	25	0	14.48	14.59	14.45				
5	16QAM	1	0	14.49	14.40	14.51				
5	16QAM	1	12	14.68	14.48	14.56	15.5	0		
5	16QAM	1	24	14.29	14.30	14.29				
5	16QAM	12	0	14.49	14.21	14.36				
5	16QAM	12	7	14.27	14.30	14.29	15.5	0		
5	16QAM	12	13	14.48	14.46	14.36				
5	16QAM	25	0	14.29	14.23	14.47				
5	64QAM	1	0	14.47	14.39	14.27				
5	64QAM	1	12	14.44	14.22	14.49	15.5	0		
5	64QAM	1	24	14.58	14.30	14.36				
5	64QAM	12	0	14.19	14.28	14.32				
5	64QAM	12	7	14.40	14.37	14.37	15.5	0		
5	64QAM	12	13	14.28	14.23	14.45				
5	64QAM	25	0	14.31	14.16	14.41				
5	256QAM	1	0	14.33	14.27	14.44				
5	256QAM	1	12	14.47	14.39	14.34	15.5	0		
5	256QAM	1	24	14.49	14.28	14.51				
5	256QAM	12	0	14.53	14.21	14.43				
5	256QAM	12	7	14.33	14.19	14.38	15.5	0		
5	256QAM	12	13	14.32	14.23	14.28				
5	256QAM	25	0	14.30	14.44	14.43				

Band 41 other PA Ant 3 DS11											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620	41055	41490			
Frequency (MHz)				2506	2549.5	2593	2636.5	2680			
20	QPSK	1	0	14.73	14.72	14.89	14.74	14.81	15.5	0	
20	QPSK	1	49	14.69	14.76	14.84	14.83	14.82			
20	QPSK	1	99	14.74	14.76	14.81	14.72	14.78			
20	QPSK	50	0	14.61	14.61	14.77	14.69	14.72			
20	QPSK	50	24	14.59	14.66	14.63	14.65	14.66	15.5	0	
20	QPSK										



Band 38 other PA Ant 4 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				37850	38000	38150			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	0	17.79	17.90	17.82	19	0	
20	QPSK	1	49	17.73	17.79	17.81			
20	QPSK	1	99	17.76	17.78	17.81			
20	QPSK	50	0	17.55	17.82	17.80			
20	QPSK	50	24	17.73	17.65	17.70			
20	QPSK	50	50	17.71	17.70	17.88	19	0	
20	QPSK	100	0	17.42	17.67	17.48			
20	16QAM	1	0	17.58	17.48	17.56			
20	16QAM	1	49	17.62	17.58	17.61			
20	16QAM	1	99	17.35	17.22	17.47			
20	16QAM	50	0	17.52	17.29	17.47			
20	16QAM	50	24	17.35	17.35	17.44	19	0	
20	16QAM	50	50	17.48	17.48	17.46			
20	16QAM	100	0	17.36	17.34	17.41			
20	64QAM	1	0	17.54	17.54	17.37			
20	64QAM	1	49	17.48	17.34	17.58	19	0	
20	64QAM	1	99	17.52	17.36	17.45			
20	64QAM	50	0	17.29	17.40	17.46			
20	64QAM	50	24	17.53	17.31	17.41	19	0	
20	64QAM	50	50	17.40	17.42	17.41			
20	64QAM	100	0	17.59	17.35	17.39			
20	64QAM	100	0	17.43	17.32	17.43			
20	256QAM	1	0	17.34	17.42	17.49			
20	256QAM	1	49	17.45	17.45	17.45	19	0	
20	256QAM	1	99	17.55	17.30	17.51			
20	256QAM	50	0	17.59	17.35	17.39			
20	256QAM	50	24	17.44	17.31	17.49	19	0	
20	256QAM	50	50	17.40	17.32	17.45			
20	256QAM	100	0	17.52	17.44	17.49			
Channel				37825	38000	38175	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				25775	2595	2612.5			
15	QPSK	1	0	17.69	17.78	17.69	19	0	
15	QPSK	1	37	17.62	17.63	17.76			
15	QPSK	1	74	17.64	17.64	17.70			
15	QPSK	36	0	17.50	17.75	17.75			
15	QPSK	36	20	17.68	17.53	17.56	19	0	
15	QPSK	36	39	17.59	17.62	17.53			
15	QPSK	75	0	17.33	17.54	17.37			
15	16QAM	1	0	17.42	17.40	17.52			
15	16QAM	1	37	17.56	17.43	17.55	19	0	
15	16QAM	1	74	17.22	17.15	17.40			
15	16QAM	36	0	17.42	17.19	17.37			
15	16QAM	36	20	17.25	17.31	17.35	19	0	
15	16QAM	36	39	17.33	17.38	17.40			
15	16QAM	75	0	17.23	17.26	17.32			
15	64QAM	1	0	17.46	17.48	17.29			
15	64QAM	1	37	17.33	17.22	17.52	19	0	
15	64QAM	1	74	17.48	17.27	17.34			
15	64QAM	36	0	17.14	17.27	17.35			
15	64QAM	36	20	17.44	17.45	17.27	19	0	
15	64QAM	36	39	17.32	17.38	17.40			
15	64QAM	75	0	17.37	17.26	17.29			
15	256QAM	1	0	17.28	17.29	17.38			
15	256QAM	1	37	17.33	17.35	17.36	19	0	
15	256QAM	1	74	17.48	17.23	17.39			
15	256QAM	36	0	17.49	17.30	17.25			
15	256QAM	36	20	17.36	17.19	17.44	19	0	
15	256QAM	36	39	17.35	17.22	17.37			
15	256QAM	75	0	17.31	17.39	17.37			
Channel				37800	38000	38200	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2575	2595	2615			
10	QPSK	1	0	17.66	17.78	17.76	19	0	
10	QPSK	1	25	17.68	17.67	17.72			
10	QPSK	1	49	17.62	17.69	17.69			
10	QPSK	25	0	17.48	17.78	17.68			
10	QPSK	25	12	17.61	17.56	17.65	19	0	
10	QPSK	25	25	17.65	17.63	17.61			
10	QPSK	50	0	17.31	17.60	17.37			
10	16QAM	1	0	17.46	17.43	17.41			
10	16QAM	1	49	17.48	17.45	17.49	19	0	
10	16QAM	1	99	17.21	17.12	17.34			
10	16QAM	25	0	17.44	17.13	17.36			
10	16QAM	25	12	17.31	17.24	17.30	19	0	
10	16QAM	25	25	17.41	17.36	17.36			
10	16QAM	50	0	17.21	17.30	17.32			
10	64QAM	1	0	17.44	17.44	17.27			
10	64QAM	1	25	17.44	17.27	17.49	19	0	
10	64QAM	1	49	17.39	17.30	17.31			
10	64QAM	25	0	17.25	17.27	17.40			
10	64QAM	25	12	17.41	17.45	17.36	19	0	
10	64QAM	25	25	17.27	17.35	17.37			
10	64QAM	50	0	17.37	17.25	17.31			
10	256QAM	1	0	17.25	17.34	17.40			
10	256QAM	1	25	17.31	17.41	17.31	19	0	
10	256QAM	1	49	17.47	17.19	17.36			
10	256QAM	25	0	17.45	17.28	17.33			
10	256QAM	25	12	17.29	17.19	17.33	19	0	
10	256QAM	25	25	17.34	17.18	17.37			
10	256QAM	50	0	17.42	17.30	17.39			
Channel				37775	38000	38225	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				25725	2595	2617.5			
5	QPSK	1	0	17.74	17.62	17.70	19	0	
5	QPSK	1	12	17.60	17.69	17.66			
5	QPSK	1	24	17.70	17.66	17.68			
5	QPSK	12	0	17.48	17.71	17.74			
5	QPSK	12	7	17.64	17.56	17.62	19	0	
5	QPSK	12	13	17.60	17.61	17.52			
5	QPSK	25	0	17.35	17.57	17.40			
5	16QAM	1	0	17.43	17.33	17.48			
5	16QAM	1	12	17.47	17.55	17.54	19	0	
5	16QAM	1	24	17.21	17.06	17.32			
5	16QAM	12	0	17.38	17.21	17.34			
5	16QAM	12	7	17.21	17.25	17.40	19	0	
5	16QAM	12	13	17.38	17.34	17.33			
5	16QAM	25	0	17.26	17.20	17.30			
5	64QAM	1	0	17.42	17.48	17.25			
5	64QAM	1	12	17.42	17.24	17.53	19	0	
5	64QAM	1	24	17.41	17.30	17.26			
5	64QAM	12	0	17.25	17.32	17.41			
5	64QAM	12	7	17.46	17.40	17.31	19	0	
5	64QAM	12	13	17.35	17.37	17.40			
5	64QAM	25	0	17.28	17.19	17.31			
5	256QAM	1	0	17.25	17.35	17.44			
5	256QAM	1	12	17.31	17.30	17.29	19	0	
5	256QAM	1	24	17.48	17.20	17.35			
5	256QAM	12	0	17.53	17.25	17.31			
5	256QAM	12	7	17.30	17.21	17.36	19	0	
5	256QAM	12	13	17.31	17.27	17.37			
5	256QAM	25	0	17.47	17.29	17.33			

Band 41 other PA Ant 4 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				39750	40185	40620			
Frequency (MHz)				2506	2549.5	2593			
20	QPSK	1	0	17.66	17.63	17.74	17.65	17.67	
20	QPSK	1	49	17.65	17.68	17.72	17.69	17.67	19
20	QPSK	1	99	17.72	17.66	17.66	17.68	17.68	
20	QPSK	50	0	17.51	17.45	17.71	17.61	17.62	
20	QPSK	50	24	17.60	17.65	17.58	17.61	17.55	
20	QPSK	50	50	17.53	17.56	17.56	17.60	17.65	19
20	QPSK	100	0	17.31	17.33	17.57	17.31	17.28	
20	16QAM	1	0	17.45	17.52	17.35	17.43	17.45	
20	16QAM	1	49	17.65	17.51	17.50	17.42	17.45	19
20	16QAM	1	99	17.25	17.21	17.19	17.32	17.31	
20	16QAM	50	0	17.37	17.41	17.27	17.41	17.43	
20	16QAM</								



Band 2 other PA Ant 5 DSI1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MFR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	24.13	24.17	24.10			25	0
20	QPSK	1	49	24.13	24.13	24.03				
20	QPSK	1	99	24.09	24.11	23.98				
20	QPSK	50	0	23.99	23.99	23.13			24	1
20	QPSK	50	24	23.97	23.18	23.02				
20	QPSK	50	50	23.07	23.12	22.98				
20	QPSK	100	0	23.07	23.18	23.13				
20	HQAM	1	0	23.13	23.12	23.11			24	1
20	HQAM	1	49	23.08	23.18	23.08				
20	HQAM	1	99	23.04	23.10	22.99				
20	HQAM	50	0	22.95	23.15	22.94				
20	HQAM	50	24	21.98	22.18	22.02			23	2
20	HQAM	50	50	22.09	22.17	21.96				
20	HQAM	100	0	22.07	22.07	22.05				
20	HQAM	1	0	22.10	22.07	22.06				
20	HQAM	1	49	22.03	22.20	22.06			23	2
20	HQAM	1	99	22.01	22.15	21.98				
20	HQAM	50	0	21.94	21.20	21.08				
20	HQAM	50	24	21.03	21.22	21.04				
20	HQAM	50	50	21.03	21.17	20.98			22	3
20	ZSSVM	100	0	19.07	19.16	19.07				
20	ZSSVM	1	49	18.99	19.20	19.03			20	5
20	ZSSVM	1	99	18.93	19.18	18.91				
20	ZSSVM	50	0	19.02	19.12	19.02				
20	ZSSVM	50	24	19.10	19.08	19.09			20	5
20	ZSSVM	50	50	19.07	19.23	19.11				
20	ZSSVM	100	0	19.20	19.07	19.21				
Channel										
Frequency (MHz)										
16	QPSK	1	0	24.03	24.07	24.01			25	0
16	QPSK	1	37	23.92	24.03	24.01				
16	QPSK	1	74	23.97	24.04	23.85				
16	QPSK	36	0	23.92	23.16	23.04			24	1
16	QPSK	36	20	22.92	23.05	22.89				
16	QPSK	36	36	22.99	23.08	22.83				
16	HQAM	1	0	23.10	23.02	23.00				
16	HQAM	1	37	22.99	23.14	22.98			24	1
16	HQAM	1	74	22.97	23.07	22.97				
16	HQAM	36	0	21.99	22.02	22.03				
16	HQAM	36	20	21.85	22.12	21.91			23	2
16	HQAM	36	36	21.85	22.12	21.96				
16	HQAM	75	0	21.99	22.17	22.11				
16	HQAM	1	0	22.04	21.97	21.93			23	2
16	HQAM	1	37	21.03	21.14	21.04				
16	HQAM	1	74	21.05	21.12	21.03				
16	HQAM	36	0	20.96	21.10	20.96				
16	HQAM	36	20	20.98	21.13	20.93			22	3
16	HQAM	36	36	20.95	21.08	20.95				
16	HQAM	75	0	21.00	21.14	20.97				
16	ZSSVM	1	37	18.94	19.07	18.93			20	5
16	ZSSVM	1	74	18.97	19.07	18.94				
16	ZSSVM	36	0	18.98	19.02	18.95				
16	ZSSVM	36	20	19.00	18.92	18.98			20	5
16	ZSSVM	36	36	18.99	18.17	18.97				
16	ZSSVM	75	0	18.95	18.93	18.93				
Channel										
Frequency (MHz)										
10	QPSK	1	0	24.00	24.03	24.00			25	0
10	QPSK	1	25	23.98	24.08	24.00				
10	QPSK	1	49	23.95	24.00	23.88				
10	QPSK	26	0	23.90	23.17	23.04			24	1
10	QPSK	26	12	22.93	23.06	22.85				
10	QPSK	26	25	22.95	23.00	22.91				
10	HQAM	1	0	23.08	23.12	23.07				
10	HQAM	1	25	23.01	23.05	23.01			24	1
10	HQAM	1	49	22.98	23.05	22.97				
10	HQAM	26	0	22.00	22.11	22.01				
10	HQAM	26	12	21.86	22.10	21.89			23	2
10	HQAM	26	25	22.03	22.12	21.99				
10	HQAM	50	0	22.04	22.08	22.04				
10	HQAM	1	0	22.08	21.97	21.94			23	2
10	HQAM	1	25	21.02	21.18	21.04				
10	HQAM	1	49	21.00	22.04	21.87				
10	HQAM	26	0	20.91	21.07	20.94			22	3
10	HQAM	26	12	20.98	21.10	20.95				
10	HQAM	26	25	20.91	21.11	20.91				
10	HQAM	50	0	20.97	21.16	20.95				
10	ZSSVM	1	49	18.98	19.08	18.94			20	5
10	ZSSVM	1	25	18.92	19.16	18.95				
10	ZSSVM	1	49	18.98	19.11	18.75				
10	ZSSVM	26	0	19.02	19.05	18.97				
10	ZSSVM	26	12	18.96	19.01	19.05			20	5
10	ZSSVM	26	25	19.05	18.14	19.03				
10	ZSSVM	50	0	18.93	19.01	18.93				
Channel										
Frequency (MHz)										
5	QPSK	1	0	24.01	24.05	24.01			25	0
5	QPSK	1	12	23.92	24.05	23.95				
5	QPSK	1	24	24.04	24.06	23.94				
5	QPSK	12	0	23.00	23.11	23.03			24	1
5	QPSK	12	7	22.96	23.09	22.89				
5	QPSK	12	13	23.01	23.01	22.85				
5	QPSK	25	0	22.98	23.14	23.02				
5	HQAM	1	0	23.01	23.08	23.03			24	1
5	HQAM	1	12	23.04	23.05	23.01				
5	HQAM	1	24	22.02	23.03	22.97				
5	HQAM	12	0	21.84	22.06	22.08				
5	HQAM	12	7	21.85	22.09	21.95			23	2
5	HQAM	12	13	22.02	22.14	21.90				
5	HQAM	25	0	22.10	22.16	22.03				
5	HQAM	1	0	22.06	21.98	22.01			23	2
5	HQAM	1	12	21.04	22.06	21.88				
5	HQAM	1	24	21.98	22.12	21.80				
5	HQAM	12	0	20.97	21.15	21.01			22	3
5	HQAM	12	7	20.92	21.17	20.99				
5	HQAM	12	13	20.99	21.05	20.90				
5	ZSSVM	1	0	21.02	21.20	21.03				
5	ZSSVM	1	12	19.05	19.09	19.05			20	5
5	ZSSVM	1	12	19.02	19.13	18.90				
5	ZSSVM	1	24	19.06	19.09	18.95				
5	ZSSVM	12	0	19.08	19.09	18.97				
5	ZSSVM	12	7	19.03	19.01	19.02			20	5
5	ZSSVM	12	13	19.04	19.13	19.00				
5	ZSSVM	25	0	18.97	19.02	18.95				
Channel										
Frequency (MHz)										
3	QPSK	1	0	24.07	24.11	24.01			25	0
3	QPSK	1	6	23.99	24.05	23.98				
3	QPSK	1	14	24.06	24.03	23.89				
3	QPSK	8	0	23.02	23.09	23.00			24	1
3	QPSK	8	4	22.99	23.12	22.84				
3	QPSK	8	7	22.97	23.09	22.84				
3	QPSK	15	0	23.02	23.12	23.00				
3	HQAM	1	0	23.11	23.06	23.08			24	1
3	HQAM	1	6	22.94	23.05	22.92				
3	HQAM	1	14	22.90	22.95	22.86				
3	HQAM	8	0	22.00	22.02	22.03				
3	HQAM	8	4	21.83	22.04	21.89			23	2
3	HQAM	8	7	21.97	22.04	21.84				
3	HQAM	15	0	22.02	22.14	22.08				
3	HQAM	1	0	21.86	21.94	21.96			23	2
3	HQAM	1	6	21.89	22.16	21.88				
3	HQAM	1	14	21.95	22.10	21.83				
3	HQAM	8	0	20.91	21.16	20.96			22	3
3	HQAM	8	4	20.96	21.12	20.86				
3	HQAM	8	7	21.00	21.13	20.92				
3	ZSSVM	15	0	19.05	19.14</					

Band 38 other PA Ant 5 DS11										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	23.66	23.72	23.81	24.5	0		
20	QPSK	1	49	23.56	23.70	23.50				
20	QPSK	1	99	23.83	23.68	23.48				
20	QPSK	50	0	22.72	22.78	22.59				
20	QPSK	50	24	22.60	22.73	22.48				
20	QPSK	50	50	22.66	22.72	22.47	23.5	1		
20	16QAM	1	0	22.63	22.75	22.61				
20	16QAM	1	49	22.62	22.72	22.54				
20	16QAM	1	99	22.61	22.65	22.50	23.5	1		
20	16QAM	1	99	22.65	22.71	22.54				
20	16QAM	50	0	21.77	21.72	21.57				
20	16QAM	50	24	21.59	21.75	21.50	22.5	2		
20	16QAM	50	50	21.88	21.86	21.44				
20	16QAM	100	0	21.67	21.80	21.57				
20	64QAM	1	0	21.61	21.73	21.62				
20	64QAM	1	49	21.59	21.69	21.51	22.5	2		
20	64QAM	1	99	21.61	21.76	21.56				
20	64QAM	50	0	20.69	20.83	20.64				
20	64QAM	50	24	20.57	20.72	20.30	21.5	3		
20	64QAM	50	50	20.70	20.69	20.43				
20	64QAM	100	0	20.69	20.73	20.59				
20	256QAM	1	0	18.68	18.81	18.58				
20	256QAM	1	49	18.80	18.69	18.43	19.5	5		
20	256QAM	1	99	18.71	18.71	18.51				
20	256QAM	50	0	18.67	18.79	18.55				
20	256QAM	50	24	18.64	18.69	18.61	19.5	5		
20	256QAM	50	50	18.57	18.70	18.47				
20	256QAM	100	0	18.61	18.67	18.56				
Channel				37825	38000	38175				
Frequency (MHz)				25775	2595	2612.5				
15	QPSK	1	0	23.55	23.66	23.47	24.5	0		
15	QPSK	1	37	23.47	23.63	23.46				
15	QPSK	1	74	23.59	23.64	23.37				
15	QPSK	36	0	22.61	22.68	22.53				
15	QPSK	36	20	22.55	22.65	22.43	23.5	1		
15	QPSK	36	39	22.56	22.60	22.33				
15	QPSK	75	0	22.61	22.65	22.49				
15	16QAM	1	0	22.54	22.69	22.56				
15	16QAM	1	37	22.55	22.57	22.42	23.5	1		
15	16QAM	1	74	22.61	22.67	22.52				
15	16QAM	36	0	21.55	21.68	21.46				
15	16QAM	36	20	21.54	21.56	21.40	22.5	2		
15	16QAM	36	39	21.58	21.56	21.38				
15	16QAM	75	0	21.58	21.75	21.52				
15	64QAM	1	0	21.54	21.61	21.51				
15	64QAM	1	37	21.54	21.64	21.46	22.5	2		
15	64QAM	1	74	21.51	21.65	21.49				
15	64QAM	36	0	20.55	20.78	20.58				
15	64QAM	36	20	20.52	20.67	20.45	21.5	3		
15	64QAM	36	39	20.65	20.65	20.29				
15	64QAM	75	0	20.64	20.66	20.48				
15	256QAM	1	0	18.57	18.79	18.52				
15	256QAM	1	37	18.55	18.63	18.40	19.5	5		
15	256QAM	1	74	18.64	18.60	18.37				
15	256QAM	36	0	18.58	18.69	18.56				
15	256QAM	36	20	18.51	18.67	18.54	19.5	5		
15	256QAM	36	39	18.55	18.58	18.35				
15	256QAM	75	0	18.51	18.58	18.48				
Channel				37900	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	23.55	23.64	23.47	24.5	0		
10	QPSK	1	25	23.50	23.68	23.38				
10	QPSK	1	49	23.59	23.64	23.42				
10	QPSK	25	0	22.65	22.72	22.50				
10	QPSK	25	12	22.53	22.69	22.39	23.5	1		
10	QPSK	25	25	22.59	22.65	22.41				
10	QPSK	50	0	22.59	22.67	22.56				
10	16QAM	1	0	22.51	22.61	22.55	23.5	1		
10	16QAM	1	25	22.58	22.57	22.39				
10	16QAM	1	49	22.61	22.57	22.45				
10	16QAM	25	0	21.88	21.69	21.44				
10	16QAM	25	12	21.47	21.62	21.38	22.5	2		
10	16QAM	25	25	21.60	21.54	21.38				
10	16QAM	50	0	21.84	21.87	21.49				
10	64QAM	1	0	21.49	21.69	21.51				
10	64QAM	1	25	21.54	21.66	21.37	22.5	2		
10	64QAM	1	49	21.51	21.67	21.51				
10	64QAM	25	0	20.58	20.74	20.61				
10	64QAM	25	12	20.50	20.58	20.46	21.5	3		
10	64QAM	25	25	20.59	20.66	20.31				
10	64QAM	50	0	20.64	20.69	20.54				
10	256QAM	1	0	18.58	18.79	18.55				
10	256QAM	1	25	18.55	18.60	18.38	19.5	5		
10	256QAM	1	49	18.66	18.68	18.45				
10	256QAM	25	0	18.64	18.72	18.52				
10	256QAM	25	12	18.52	18.66	18.57				
10	256QAM	25	25	18.55	18.65	18.36	19.5	5		
10	256QAM	50	0	18.49	18.57	18.52				
Channel				37775	38000	38225				
Frequency (MHz)				23225	2325	2317.5				
5	QPSK	1	0	23.55	23.61	23.52	24.5	0		
5	QPSK	1	12	23.51	23.58	23.37				
5	QPSK	1	24	23.59	23.53	23.35				
5	QPSK	12	0	22.62	22.70	22.48				
5	QPSK	12	7	22.58	22.67	22.36	23.5	1		
5	QPSK	12	13	22.59	22.60	22.41				
5	QPSK	25	0	22.52	22.64	22.53				
5	16QAM	1	0	22.58	22.61	22.52				
5	16QAM	1	12	22.48	22.60	22.44	23.5	1		
5	16QAM	1	24	22.56	22.64	22.41				
5	16QAM	12	0	21.84	21.88	21.43				
5	16QAM	12	7	21.50	21.68	21.42	22.5	2		
5	16QAM	12	13	21.56	21.53	21.35				
5	16QAM	25	0	21.64	21.67	21.54				
5	64QAM	1	0	21.55	21.65	21.55				
5	64QAM	1	12	21.49	21.56	21.39	22.5	2		
5	64QAM	1	24	21.53	21.71	21.53				
5	64QAM	12	0	20.56	20.72	20.54				
5	64QAM	12	7	20.54	20.62	20.46	21.5	3		
5	64QAM	12	13	20.67	20.59	20.35				
5	64QAM	25	0	20.60	20.59	20.51				
5	256QAM	1	0	18.65	18.70	18.51				
5	256QAM	1	12	18.53	18.61	18.35	19.5	5		
5	256QAM	1	24	18.57	18.61	18.41				
5	256QAM	12	0	18.57	18.71	18.54				
5	256QAM	12	7	18.58	18.59	18.53	19.5	5		
5	256QAM	12	13	18.55	18.63	18.34				
5	256QAM	25	0	18.57	18.65	18.51				

Band 41 other PA Ant 5 DS11										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	23.56	23.52	23.60	24.5	0		
20	QPSK	1	49	23.50	23.46	23.55				
20	QPSK	1	99	23.83	23.47	23.51				
20	QPSK	50	0	22.58	22.58	22.64				
20	QPSK	50	24	22.44	22.48	22.54				
20	QPSK	50	50	22.52	22.53	22.51	23.5	1		
20	16QAM	1	0	22.52	22.50	22.63				
20	16QAM	1	49	22.52	22.45	22.50				
20	16QAM	1	99	22.54	22.42					



Reduced Power Mode for DS13_Other PA

Band 2 other PA Ant 2 DS13									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Ch./Freq.	Power High Ch./Freq.	Turn-up (dB)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	22.16	22.25	22.21	23.5	0	
20	QPSK	1	49	22.21	22.30	22.23			
20	QPSK	1	99	22.26	22.21	22.23			
20	QPSK	50	0	22.25	22.20	22.19			
20	QPSK	50	24	22.23	22.30	22.12			
20	QPSK	50	50	22.23	22.20	22.18			
20	QPSK	100	0	22.21	22.24	22.21			
20	HQAM	1	0	22.21	22.28	22.21			
20	HQAM	1	49	22.24	22.29	22.18			
20	HQAM	1	99	22.14	22.23	22.17			
20	HQAM	50	0	22.26	22.30	22.22			
20	HQAM	50	24	22.15	22.24	22.18			
20	HQAM	50	50	22.20	22.29	22.17			
20	HQAM	100	0	22.19	22.23	22.22			
20	HQAM	1	0	22.18	22.29	22.19			
20	HQAM	1	99	22.15	22.20	22.21			
20	HQAM	50	0	21.20	21.19	21.22			
20	HQAM	50	24	21.18	21.23	21.15			
20	HQAM	50	50	21.11	21.29	21.23			
20	HQAM	100	0	21.12	21.27	21.18			
20	ZSSVM	1	0	19.18	19.29	19.23			
20	ZSSVM	1	49	19.17	19.27	19.17			
20	ZSSVM	1	99	19.19	19.24	19.25			
20	ZSSVM	50	0	19.15	19.24	19.18			
20	ZSSVM	50	24	19.13	19.26	19.18			
20	ZSSVM	50	50	19.14	19.19	19.16			
20	ZSSVM	100	0	19.15	19.25	19.21			
Channel									
Frequency (MHz)									
15	QPSK	1	0	22.11	22.19	22.13	23.5	0	
15	QPSK	1	37	22.07	22.15	21.98			
15	QPSK	1	74	22.13	22.06	22.18			
15	QPSK	36	0	22.18	22.11	22.11			
15	QPSK	36	20	22.17	22.18	22.05			
15	QPSK	36	39	22.16	22.09	22.12			
15	QPSK	75	0	22.07	22.09	22.05			
15	HQAM	1	0	22.06	22.16	22.12			
15	HQAM	1	37	22.09	22.18	22.12			
15	HQAM	1	74	22.09	22.09	22.05			
15	HQAM	36	0	22.15	22.22	22.07			
15	HQAM	36	20	22.04	22.14	22.10			
15	HQAM	36	39	22.08	22.35	22.07			
15	HQAM	75	0	22.09	22.18	22.07			
15	HQAM	1	0	22.02	22.12	21.97			
15	HQAM	1	37	22.08	22.09	22.05			
15	HQAM	1	74	22.09	22.15	22.14			
15	HQAM	36	0	21.14	21.10	21.13			
15	HQAM	36	20	21.13	21.10	21.04			
15	HQAM	36	39	21.00	21.23	21.08			
15	HQAM	75	0	20.99	21.12	21.08			
15	ZSSVM	1	0	19.05	19.20	19.15			
15	ZSSVM	1	37	19.08	19.23	19.07			
15	ZSSVM	1	74	19.05	19.15	19.21			
15	ZSSVM	36	0	19.05	19.14	19.08			
15	ZSSVM	36	20	19.07	19.20	19.08			
15	ZSSVM	36	39	19.04	19.15	19.05			
15	ZSSVM	75	0	19.02	19.19	19.12			
Channel									
Frequency (MHz)									
10	QPSK	1	0	22.11	22.19	22.13	23.5	0	
10	QPSK	1	25	22.11	22.21	21.99			
10	QPSK	1	49	22.06	22.16	22.10			
10	QPSK	12	0	22.14	22.14	22.06			
10	QPSK	12	12	22.07	22.18	22.03			
10	QPSK	25	0	22.16	22.15	22.11			
10	QPSK	25	1	22.08	22.12	22.06			
10	HQAM	1	0	22.12	22.17	22.09			
10	HQAM	1	25	22.09	22.25	22.13			
10	HQAM	1	49	22.03	22.08	22.02			
10	HQAM	25	0	22.20	22.21	22.07			
10	HQAM	25	12	22.06	22.14	22.03			
10	HQAM	25	25	22.09	22.18	22.14			
10	HQAM	1	0	22.04	22.08	21.99			
10	HQAM	25	0	22.07	22.11	22.05			
10	HQAM	1	49	22.02	22.05	22.12			
10	HQAM	25	0	21.15	21.99	21.18			
10	HQAM	25	12	21.07	21.10	21.05			
10	HQAM	25	25	20.96	21.20	21.18			
10	HQAM	50	0	21.01	21.23	21.03			
10	ZSSVM	1	0	19.03	19.21	19.11			
10	ZSSVM	1	25	19.05	19.11	19.12			
10	ZSSVM	1	49	19.06	19.13	19.14			
10	ZSSVM	25	0	19.03	19.16	19.09			
10	ZSSVM	25	12	19.07	19.12	19.03			
10	ZSSVM	25	25	19.05	19.07	19.06			
10	ZSSVM	50	0	19.07	19.16	19.12			
Channel									
Frequency (MHz)									
5	QPSK	1	0	22.05	22.10	22.12	23.5	0	
5	QPSK	1	12	22.11	22.14	22.05			
5	QPSK	1	24	22.08	22.08	22.11			
5	QPSK	12	0	22.18	22.12	22.10			
5	QPSK	12	7	22.09	22.24	21.97			
5	QPSK	12	13	22.11	22.10	22.05			
5	QPSK	25	0	22.08	22.12	22.07			
5	HQAM	1	0	22.06	22.21	22.07			
5	HQAM	1	12	22.10	22.19	22.07			
5	HQAM	1	24	22.09	22.08	22.04			
5	HQAM	12	0	22.14	22.20	22.10			
5	HQAM	12	7	22.08	22.13	22.05			
5	HQAM	25	0	22.04	22.17	22.07			
5	HQAM	1	0	22.11	22.16	22.03			
5	HQAM	1	12	22.10	22.11	22.09			
5	HQAM	1	24	22.06	22.07	22.12			
5	HQAM	12	0	21.06	21.10	21.17			
5	HQAM	12	7	21.14	21.11	21.20			
5	HQAM	12	13	21.03	21.23	21.14			
5	HQAM	25	0	21.03	21.17	21.04			
5	ZSSVM	1	0	19.09	19.25	19.08			
5	ZSSVM	1	12	19.07	19.17	19.10			
5	ZSSVM	1	24	19.08	19.12	19.05			
5	ZSSVM	12	0	19.07	19.12	19.02			
5	ZSSVM	12	7	19.09	19.22	19.07			
5	ZSSVM	12	13	19.05	19.05	19.05			
5	ZSSVM	25	0	19.02	19.09	19.21			
Channel									
Frequency (MHz)									
3	QPSK	1	0	22.04	22.11	22.05	23.5	0	
3	QPSK	1	8	22.11	22.16	22.06			
3	QPSK	1	14	22.15	22.16	22.08			
3	QPSK	8	0	22.09	22.13	22.04			
3	QPSK	8	4	22.17	22.19	22.09			
3	QPSK	8	7	22.17	22.13	22.12			
3	QPSK	8	0	22.12	22.15	22.09			
3	HQAM	1	0	22.18	22.12	22.13			
3	HQAM	1	8	22.08	22.22	22.04			
3	HQAM	1	14	22.09	22.11	22.04			
3	HQAM	8	0	22.17	22.16	22.09			
3	HQAM	8	4	22.05	22.09	22.02			
3	HQAM	8	7	22.16	22.18	22.06			
3	HQAM	15	0	22.15	22.18	22.12			
3	HQAM	1	0	22.07	22.10	22.09			
3	HQAM	1	14	22.09	22.13	22.15			
3	HQAM	8	4	21.10	21.15	21.03			
3	HQAM	8	7	20.99	21.21	21.15			
3	HQAM	15	0	20.98	21.14	21.10			
3	ZSSVM	1	0	19.08	19.15	19.08			
3	ZSSVM	1	8	19.10	19.15	19.11			
3	ZSSVM	1	14	19.03	19.08	19.10			
3	ZSSVM	8	0	19.09	19.17	19.08			
3	ZSSVM	8	4	19.07	19.16	19.05			
3	ZSSVM	8	7	19.03	19.05	19.02			
3	ZSSVM	15	0	19.04	19.08	19.22			
Channel									
Frequency (MHz)									
1.4	QPSK	1	0	21.91	21.91	22.00	23.5	0	
1.4	QPSK	1	3	22.00	22.05	21.95			
1.4	QPSK								

Band 38 other PA Ant 2 DSIS										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low High Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	19.30	19.45	19.23	20.5	0		
20	QPSK	1	49	19.36	19.36	19.30				
20	QPSK	1	99	19.36	19.40	19.25	20.5	0		
20	QPSK	50	0	19.28	19.36	19.32				
20	QPSK	50	24	19.27	19.30	19.25	20.5	0		
20	QPSK	50	50	19.36	19.35	19.25				
20	QPSK	100	0	19.26	19.33	19.23	20.5	0		
20	16QAM	1	0	19.29	19.30	19.33				
20	16QAM	1	49	19.33	19.35	19.29	20.5	0		
20	16QAM	1	99	19.35	19.37	19.31				
20	16QAM	50	0	19.32	19.31	19.27	20.5	0		
20	16QAM	50	24	19.27	19.33	19.25				
20	16QAM	50	50	19.34	19.33	19.31	20.5	0		
20	16QAM	100	0	19.30	19.30	19.24				
20	64QAM	1	0	19.29	19.42	19.33	20.5	0		
20	64QAM	1	49	19.30	19.38	19.33				
20	64QAM	1	99	19.34	19.33	19.28	20.5	0		
20	64QAM	50	0	19.31	19.34	19.34				
20	64QAM	50	24	19.35	19.39	19.28	20.5	0		
20	64QAM	50	50	19.30	19.41	19.24				
20	64QAM	100	0	19.35	19.32	19.33	20	0.5		
20	256QAM	1	0	18.77	18.97	18.69				
20	256QAM	1	49	18.86	18.91	18.71	20	0.5		
20	256QAM	1	99	18.75	18.95	18.73				
20	256QAM	50	0	18.80	18.85	18.72	20	0.5		
20	256QAM	50	24	18.83	18.91	18.70				
20	256QAM	50	50	18.83	18.88	18.75	20	0.5		
20	256QAM	100	0	18.78	18.92	18.77				
Channel				37825	38000	38175				
Frequency (MHz)				25725	25925	26125				
15	QPSK	1	0	19.25	19.31	19.14	20.5	0		
15	QPSK	1	37	19.32	19.21	19.17				
15	QPSK	1	74	19.22	19.28	19.16	20.5	0		
15	QPSK	36	0	19.20	19.26	19.24				
15	QPSK	36	20	19.14	19.15	19.16	20.5	0		
15	QPSK	36	39	19.25	19.29	19.18				
15	QPSK	75	0	19.16	19.20	19.08	20.5	0		
15	16QAM	1	0	19.20	19.30	19.23				
15	16QAM	1	37	19.23	19.20	19.15	20.5	0		
15	16QAM	1	74	19.20	19.31	19.19				
15	16QAM	36	0	19.28	19.20	19.15	20.5	0		
15	16QAM	36	20	19.21	19.25	19.18				
15	16QAM	36	39	19.28	19.22	19.26	20.5	0		
15	16QAM	75	0	19.31	19.21	19.15				
15	64QAM	1	0	19.24	19.36	19.20	20.5	0		
15	64QAM	1	37	19.16	19.33	19.20				
15	64QAM	1	74	19.25	19.29	19.12	20.5	0		
15	64QAM	36	0	19.23	19.20	19.21				
15	64QAM	36	20	19.21	19.27	19.22	20.5	0		
15	64QAM	36	39	19.18	19.28	19.15				
15	64QAM	75	0	19.25	19.25	19.19	20	0.5		
15	256QAM	1	0	18.62	18.84	18.56				
15	256QAM	1	37	18.70	18.79	18.66	20	0.5		
15	256QAM	1	74	18.62	18.80	18.64				
15	256QAM	36	0	18.68	18.70	18.65	20	0.5		
15	256QAM	36	20	18.69	18.80	18.59				
15	256QAM	36	39	18.68	18.84	18.64	20	0.5		
15	256QAM	75	0	18.70	18.89	18.68				
Channel				37800	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	19.21	19.31	19.08	20.5	0		
10	QPSK	1	25	19.27	19.28	19.19				
10	QPSK	1	49	19.30	19.19	19.19	20.5	0		
10	QPSK	25	0	19.24	19.22	19.24				
10	QPSK	25	12	19.14	19.24	19.18	20.5	0		
10	QPSK	25	25	19.24	19.21	19.16				
10	QPSK	50	0	19.20	19.29	19.09	20.5	0		
10	16QAM	1	0	19.27	19.29	19.18				
10	16QAM	1	49	19.26	19.24	19.15	20.5	0		
10	16QAM	1	99	19.30	19.33	19.22				
10	16QAM	25	0	19.16	19.18	19.17	20.5	0		
10	16QAM	25	12	19.21	19.22	19.19				
10	16QAM	25	25	19.21	19.20	19.18	20.5	0		
10	16QAM	50	0	19.30	19.32	19.15				
10	64QAM	1	0	19.20	19.27	19.26	20.5	0		
10	64QAM	1	25	19.24	19.24	19.20				
10	64QAM	1	49	19.20	19.18	19.17	20.5	0		
10	64QAM	25	0	19.18	19.24	19.27				
10	64QAM	25	12	19.26	19.27	19.18	20.5	0		
10	64QAM	25	25	19.21	19.33	19.19				
10	64QAM	50	0	19.19	19.26	19.27	20	0.5		
10	256QAM	1	0	18.65	18.92	18.56				
10	256QAM	1	25	18.76	18.79	18.65	20	0.5		
10	256QAM	1	49	18.66	18.91	18.64				
10	256QAM	25	0	18.65	18.71	18.60	20	0.5		
10	256QAM	25	12	18.72	18.61	18.59				
10	256QAM	25	25	18.76	18.62	18.61	20	0.5		
10	256QAM	50	0	18.72	18.79	18.65				
Channel				37775	38000	38225				
Frequency (MHz)				25725	2595	26175				
5	QPSK	1	0	19.19	19.34	19.08	20.5	0		
5	QPSK	1	12	19.22	19.22	19.16				
5	QPSK	1	24	19.27	19.30	19.17	20.5	0		
5	QPSK	12	0	19.21	19.31	19.21				
5	QPSK	12	7	19.11	19.16	19.19	20.5	0		
5	QPSK	12	13	19.25	19.29	19.10				
5	QPSK	25	0	19.19	19.19	19.09	20.5	0		
5	16QAM	1	0	19.18	19.21	19.27				
5	16QAM	1	12	19.24	19.22	19.15	20.5	0		
5	16QAM	1	24	19.26	19.32	19.15				
5	16QAM	12	0	19.27	19.22	19.17	20.5	0		
5	16QAM	12	7	19.20	19.25	19.12				
5	16QAM	12	13	19.26	19.29	19.24	20.5	0		
5	16QAM	25	0	19.31	19.23	19.15				
5	64QAM	1	0	19.23	19.36	19.27	20.5	0		
5	64QAM	1	12	19.22	19.23	19.27				
5	64QAM	1	24	19.27	19.24	19.15	20.5	0		
5	64QAM	12	0	19.20	19.18	19.23				
5	64QAM	12	7	19.25	19.24	19.22	20.5	0		
5	64QAM	12	13	19.20	19.34	19.11				
5	64QAM	25	0	19.19	19.22	19.22	20	0.5		
5	256QAM	1	0	18.68	18.84	18.60				
5	256QAM	1	12	18.78	18.83	18.56	20	0.5		
5	256QAM	1	24	18.66	18.81	18.61				
5	256QAM	12	0	18.66	18.75	18.58	20	0.5		
5	256QAM	12	7	18.72	18.79	18.57				
5	256QAM	12	13	18.79	18.63	18.68	20	0.5		
5	256QAM	25	0	18.69	18.83	18.71				

Band 41 other PA Ant 2 DSIS										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low High Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	19.10	19.18	19.32	20.5	0		
20	QPSK	1	49	19.19	19.16	19.16				
20	QPSK	1	99	19.12	19.25	19.19	20.5	0		
20	QPSK	50	0	19.15	19.15	19.22				
20	QPSK	50	24	19.16	19.22	19.29	20.5	0		
20	QPSK	50	50	19.13	19.18	19.27				
20	QPSK	100	0	19.19	19.22	19.26	20.5	0		
20	16QAM	1	0	19.17	19.16	19.23				
20	16QAM	1	49	19.14	19.18	19.23	20.5	0		
20	16QAM	1	99	19.10	19.19	19.20				
20	16QAM	50	0	19.14	19.22	19.27	20.5	0		
20	16QAM	50	24	19.15	19.16	19.20				
20	16QAM	50	50	19.09	19.22	19.24	20.5	0		
20	16QAM	100	0	19.10	19.16	19.26				
20	64QAM	1	0	19.17	19.23	19.2				

Band 7 other PA Ant 3 DSI3									
Channel	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				20650	21100	21550			
Frequency (MHz)				2910	2935	2960			
20	QPSK	1	0	16.75	16.95	16.84	17.5	0	
20	QPSK	1	49	16.85	16.89	16.75			
20	QPSK	1	99	16.78	16.91	16.80			
20	QPSK	50	0	16.80	16.85	16.74	17.5	0	
20	QPSK	50	24	16.79	16.83	16.80			
20	QPSK	50	50	16.78	16.82	16.79			
20	QPSK	100	0	16.84	16.84	16.80	17.5	0	
20	16QAM	1	0	16.75	16.90	16.83			
20	16QAM	1	49	16.84	16.81	16.79			
20	16QAM	1	99	16.82	16.88	16.78	17.5	0	
20	16QAM	50	0	16.85	16.89	16.74			
20	16QAM	50	24	16.75	16.85	16.77			
20	16QAM	50	50	16.85	16.88	16.82	17.5	0	
20	16QAM	100	0	16.81	16.82	16.80			
20	64QAM	1	0	16.82	16.82	16.73			
20	64QAM	1	49	16.80	16.91	16.74	17.5	0	
20	64QAM	1	99	16.82	16.87	16.76			
20	64QAM	50	0	16.78	16.91	16.78			
20	64QAM	50	24	16.81	16.83	16.77	17.5	0	
20	64QAM	50	50	16.82	16.89	16.74			
20	64QAM	100	0	16.87	16.80	16.81			
20	256QAM	1	0	16.82	16.83	16.83	17.5	0	
20	256QAM	1	49	16.87	16.85	16.81			
20	256QAM	1	99	16.80	16.86	16.83			
20	256QAM	50	0	16.87	16.90	16.84	17.5	0	
20	256QAM	50	24	16.77	16.82	16.75			
20	256QAM	50	50	16.77	16.87	16.76			
20	256QAM	100	0	16.81	16.88	16.80			
Channel				20825	21100	21375			
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	0	16.84	16.88	16.78	17.5	0	
15	QPSK	1	37	16.66	16.78	16.77			
15	QPSK	1	74	16.66	16.69	16.69			
15	QPSK	36	0	16.66	16.73	16.77	17.5	0	
15	QPSK	36	20	16.83	16.70	16.70			
15	QPSK	36	39	16.66	16.69	16.73			
15	QPSK	75	0	16.66	16.71	16.70	17.5	0	
15	16QAM	1	0	16.83	16.70	16.70			
15	16QAM	1	37	16.70	16.71	16.76			
15	16QAM	1	74	16.88	16.75	16.75	17.5	0	
15	16QAM	36	0	16.82	16.76	16.69			
15	16QAM	36	20	16.65	16.71	16.77			
15	16QAM	36	39	16.67	16.78	16.71	17.5	0	
15	16QAM	75	0	16.68	16.78	16.73			
15	64QAM	1	0	16.68	16.77	16.69			
15	64QAM	1	37	16.70	16.75	16.78	17.5	0	
15	64QAM	1	74	16.69	16.68	16.73			
15	64QAM	36	0	16.68	16.73	16.75			
15	64QAM	36	20	16.61	16.79	16.69	17.5	0	
15	64QAM	36	39	16.64	16.77	16.79			
15	64QAM	75	0	16.67	16.77	16.79			
15	256QAM	1	0	16.60	16.74	16.68	17.5	0	
15	256QAM	1	37	16.68	16.76	16.72			
15	256QAM	1	74	16.65	16.78	16.77			
15	256QAM	36	0	16.70	16.71	16.73	17.5	0	
15	256QAM	36	20	16.64	16.75	16.75			
15	256QAM	36	39	16.83	16.75	16.78			
15	256QAM	75	0	16.70	16.73	16.73			
Channel				20800	21100	21400			
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	0	16.70	16.77	16.68	17.5	0	
10	QPSK	1	25	16.71	16.76	16.72			
10	QPSK	1	49	16.63	16.75	16.75			
10	QPSK	25	0	16.71	16.74	16.69	17.5	0	
10	QPSK	25	12	16.63	16.69	16.75			
10	QPSK	25	25	16.59	16.74	16.72			
10	QPSK	50	0	16.64	16.79	16.73	17.5	0	
10	16QAM	1	0	16.68	16.77	16.72			
10	16QAM	1	25	16.67	16.72	16.69			
10	16QAM	1	49	16.66	16.78	16.77	17.5	0	
10	16QAM	25	0	16.68	16.76	16.78			
10	16QAM	25	12	16.64	16.76	16.71			
10	16QAM	25	25	16.60	16.70	16.80	17.5	0	
10	16QAM	50	0	16.61	16.72	16.76			
10	64QAM	1	0	16.59	16.78	16.68			
10	64QAM	1	25	16.66	16.74	16.70	17.5	0	
10	64QAM	1	49	16.61	16.72	16.71			
10	64QAM	25	0	16.82	16.70	16.76			
10	64QAM	25	12	16.66	16.79	16.72	17.5	0	
10	64QAM	25	25	16.62	16.68	16.77			
10	64QAM	50	0	16.65	16.71	16.79			
10	256QAM	1	0	16.59	16.75	16.72	17.5	0	
10	256QAM	1	25	16.70	16.71	16.77			
10	256QAM	1	49	16.63	16.77	16.72			
10	256QAM	25	0	16.64	16.78	16.71	17.5	0	
10	256QAM	25	12	16.63	16.69	16.78			
10	256QAM	25	25	16.71	16.75	16.75			
10	256QAM	50	0	16.66	16.70	16.79			
Channel				20775	21100	21425			
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	0	16.59	16.78	16.77	17.5	0	
5	QPSK	1	12	16.69	16.74	16.77			
5	QPSK	1	24	16.69	16.71	16.73			
5	QPSK	12	0	16.69	16.71	16.75	17.5	0	
5	QPSK	12	7	16.70	16.76	16.79			
5	QPSK	12	13	16.66	16.70	16.80			
5	QPSK	25	0	16.67	16.74	16.76	17.5	0	
5	16QAM	1	0	16.67	16.75	16.79			
5	16QAM	1	12	16.66	16.70	16.71			
5	16QAM	1	24	16.62	16.76	16.69	17.5	0	
5	16QAM	12	0	16.69	16.69	16.72			
5	16QAM	12	7	16.70	16.78	16.69			
5	16QAM	12	13	16.61	16.71	16.69	17.5	0	
5	16QAM	25	0	16.82	16.73	16.74			
5	64QAM	1	0	16.63	16.75	16.79			
5	64QAM	1	12	16.67	16.70	16.69	17.5	0	
5	64QAM	1	24	16.70	16.74	16.69			
5	64QAM	12	0	16.66	16.70	16.72			
5	64QAM	12	7	16.66	16.69	16.75	17.5	0	
5	64QAM	12	13	16.65	16.74	16.70			
5	64QAM	25	0	16.64	16.71	16.75			
5	256QAM	1	0	16.67	16.78	16.74	17.5	0	
5	256QAM	1	12	16.61	16.75	16.75			
5	256QAM	1	24	16.67	16.75	16.77			
5	256QAM	12	0	16.64	16.68	16.71	17.5	0	
5	256QAM	12	7	16.68	16.70	16.77			
5	256QAM	12	13	16.69	16.79	16.73			
5	256QAM	25	0	16.67	16.76	16.79			



Band 38 other PA Ant 3 DSIS										
BW (MHz)	Modulation	RB Size	RB Offset	Power High Ch. / Freq.	Power Middle Ch. / Freq.	Power Low Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	18.31	18.38	18.26	19	0		
20	QPSK	1	49	18.20	18.26	18.24				
20	QPSK	1	99	18.22	18.24	18.24				
20	QPSK	50	0	18.22	18.26	18.26				
20	QPSK	50	24	18.30	18.31	18.18				
20	QPSK	50	50	18.26	18.33	18.25	19	0		
20	16QAM	1	0	18.27	18.27	18.23				
20	16QAM	1	49	18.27	18.26	18.24	19	0		
20	16QAM	1	99	18.28	18.34	18.24				
20	16QAM	50	0	18.29	18.36	18.21				
20	16QAM	50	24	18.26	18.30	18.24	19	0		
20	16QAM	50	50	18.21	18.25	18.18				
20	16QAM	100	0	18.24	18.25	18.19				
20	64QAM	1	0	18.31	18.36	18.26				
20	64QAM	1	49	18.23	18.31	18.23	19	0		
20	64QAM	1	99	18.22	18.30	18.20				
20	64QAM	50	0	18.23	18.29	18.25				
20	64QAM	50	24	18.24	18.26	18.26	19	0		
20	64QAM	50	50	18.21	18.35	18.24				
20	64QAM	100	0	18.31	18.26	18.17				
20	256QAM	1	0	16.80	16.80	16.72				
20	256QAM	1	49	16.79	16.81	16.74	17.5	1.5		
20	256QAM	1	99	16.81	16.77	16.79				
20	256QAM	50	0	16.73	16.86	16.89				
20	256QAM	50	24	16.80	16.78	16.70	17.5	1.5		
20	256QAM	50	50	16.70	16.77	16.74				
20	256QAM	100	0	16.73	16.82	16.78				
Channel				37875	38000	38175				
Frequency (MHz)				2577.5	2592.5	2612.5				
15	QPSK	1	0	18.23	18.13	18.14	19	0		
15	QPSK	1	37	18.13	18.14	18.16				
15	QPSK	1	74	18.10	18.21	18.11				
15	QPSK	36	0	18.09	18.10	18.14				
15	QPSK	36	20	18.22	18.22	18.14	19	0		
15	QPSK	36	39	18.19	18.20	18.20				
15	QPSK	75	0	18.21	18.13	18.12				
15	16QAM	1	0	18.14	18.18	18.18				
15	16QAM	1	37	18.23	18.20	18.19	19	0		
15	16QAM	1	74	18.15	18.29	18.08				
15	16QAM	36	0	18.16	18.22	18.08				
15	16QAM	36	20	18.13	18.25	18.18	19	0		
15	16QAM	36	39	18.09	18.20	18.05				
15	16QAM	75	0	18.16	18.21	18.12				
15	64QAM	1	0	18.22	18.25	18.16				
15	64QAM	1	37	18.14	18.16	18.10	19	0		
15	64QAM	1	74	18.06	18.24	18.09				
15	64QAM	36	0	18.07	18.16	18.19				
15	64QAM	36	20	18.18	18.16	18.14	19	0		
15	64QAM	36	39	18.15	18.27	18.12				
15	64QAM	75	0	18.25	18.11	18.12				
15	256QAM	1	0	16.69	16.64	16.66				
15	256QAM	1	37	16.69	16.66	16.68	17.5	1.5		
15	256QAM	1	74	16.71	16.71	16.65				
15	256QAM	36	0	16.64	16.73	16.63				
15	256QAM	36	20	16.72	16.70	16.59	17.5	1.5		
15	256QAM	36	39	16.61	16.70	16.63				
15	256QAM	75	0	16.67	16.68	16.71				
Channel				37900	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	18.27	18.14	18.18	19	0		
10	QPSK	1	25	18.10	18.11	18.09				
10	QPSK	1	49	18.12	18.24	18.17				
10	QPSK	25	0	18.17	18.21	18.12				
10	QPSK	25	12	18.16	18.20	18.10	19	0		
10	QPSK	25	25	18.21	18.18	18.16				
10	QPSK	50	0	18.18	18.11	18.17				
10	16QAM	1	0	18.17	18.12	18.08				
10	16QAM	1	49	18.14	18.20	18.18	19	0		
10	16QAM	1	99	18.19	18.24	18.20				
10	16QAM	25	0	18.20	18.21	18.07				
10	16QAM	25	12	18.19	18.25	18.13	19	0		
10	16QAM	25	25	18.10	18.14	18.02				
10	16QAM	50	0	18.13	18.31	18.11				
10	64QAM	1	0	18.23	18.20	18.23				
10	64QAM	1	25	18.09	18.20	18.19	19	0		
10	64QAM	1	49	18.09	18.24	18.09				
10	64QAM	25	0	18.13	18.21	18.20				
10	64QAM	25	12	18.19	18.19	18.15	19	0		
10	64QAM	25	25	18.13	18.24	18.09				
10	64QAM	50	0	18.25	18.10	18.04				
10	256QAM	1	0	16.70	16.71	16.67				
10	256QAM	1	25	16.65	16.71	16.69	17.5	1.5		
10	256QAM	1	49	16.78	16.68	16.63				
10	256QAM	25	0	16.68	16.81	16.65				
10	256QAM	25	12	16.64	16.65	16.57	17.5	1.5		
10	256QAM	25	25	16.65	16.64	16.64				
10	256QAM	50	0	16.63	16.69	16.69				
Channel				37775	38000	38225				
Frequency (MHz)				2572.5	2595	2617.5				
5	QPSK	1	0	18.16	18.14	18.19	19	0		
5	QPSK	1	12	18.08	18.14	18.15				
5	QPSK	1	24	18.16	18.18	18.18				
5	QPSK	12	0	18.16	18.17	18.22				
5	QPSK	12	7	18.19	18.24	18.08	19	0		
5	QPSK	12	13	18.11	18.28	18.09				
5	QPSK	25	0	18.15	18.19	18.15				
5	16QAM	1	0	18.22	18.22	18.14				
5	16QAM	1	12	18.12	18.21	18.17	19	0		
5	16QAM	1	24	18.23	18.22	18.18				
5	16QAM	12	0	18.19	18.21	18.06				
5	16QAM	12	7	18.16	18.23	18.14	19	0		
5	16QAM	12	13	18.14	18.21	18.12				
5	16QAM	25	0	18.16	18.30	18.11				
5	64QAM	1	0	18.18	18.23	18.15				
5	64QAM	1	12	18.15	18.17	18.08	19	0		
5	64QAM	1	24	18.10	18.17	18.11				
5	64QAM	12	0	18.15	18.23	18.19				
5	64QAM	12	7	18.18	18.21	18.14	19	0		
5	64QAM	12	13	18.06	18.31	18.15				
5	64QAM	25	0	18.16	18.10	18.04				
5	256QAM	1	0	16.70	16.73	16.62				
5	256QAM	1	12	16.63	16.66	16.65	17.5	1.5		
5	256QAM	1	24	16.69	16.65	16.73				
5	256QAM	12	0	16.66	16.74	16.61				
5	256QAM	12	7	16.73	16.67	16.56	17.5	1.5		
5	256QAM	12	13	16.56	16.70	16.61				
5	256QAM	25	0	16.63	16.71	16.63				

Band 41 other PA Ant 3 DSIS										
BW (MHz)	Modulation	RB Size	RB Offset	Power High Ch. / Freq.	Power Middle Ch. / Freq.	Power Low Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2606.5				
20	QPSK	1	0	17.68	17.75	17.85	18.5	0		
20	QPSK	1	49	17.60	17.68	17.80				
20	QPSK	1	99	17.59	17.74	17.72				
20	QPSK	50	0	17.60	17.70	17.74				
20	QPSK	50	24	17.60	17.66	17.74	18.5	0		
20	QPSK	50	50	17.66	17.74	17.81				
20	QPSK	100	0	17.63	17.74	17.73				
20	16QAM	1	0	17.66	17.73	17.70				
20	16QAM	1	49	17.62	17.61	17.74	18.5	0		
20	16QAM	1	99	17.58	17.67	17.78				



Band 38 other PA Ant 4 DSIS										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	20.70	20.85	20.72				
20	QPSK	1	49	20.69	20.75	20.89	22	0		
20	QPSK	1	99	20.76	20.72	20.72				
20	QPSK	50	0	20.72	20.82	20.88				
20	QPSK	50	24	20.73	20.78	20.65				
20	QPSK	50	50	20.73	20.75	20.84	22	0		
20	16QAM	100	0	20.71	20.82	20.73				
20	16QAM	100	0	20.71	20.74	20.69				
20	16QAM	1	49	20.70	20.82	20.65	22	0		
20	16QAM	1	99	20.68	20.83	20.74				
20	16QAM	50	0	20.70	20.80	20.73				
20	16QAM	50	24	20.67	20.82	20.72	22	0		
20	16QAM	50	50	20.68	20.80	20.70				
20	16QAM	100	0	20.68	20.78	20.76				
20	64QAM	1	0	20.68	20.78	20.70				
20	64QAM	1	49	20.72	20.75	20.71	22	0		
20	64QAM	1	99	20.77	20.82	20.71				
20	64QAM	50	0	19.68	19.76	19.72				
20	64QAM	50	24	19.78	18.83	19.74	21	1		
20	64QAM	50	50	19.79	19.81	19.66				
20	64QAM	100	0	19.78	19.73	19.74				
20	256QAM	1	0	17.68	17.74	17.66				
20	256QAM	1	49	17.70	17.73	17.74	19	3		
20	256QAM	1	99	17.79	17.82	17.74				
20	256QAM	50	0	17.68	17.82	17.68				
20	256QAM	50	24	17.74	17.77	17.70	19	3		
20	256QAM	50	50	17.73	17.78	17.68				
20	256QAM	100	0	17.68	17.83	17.75				
Channel				37825	38000	38175				
Frequency (MHz)				25775	25925	26125				
15	QPSK	1	0	20.64	20.65	20.68				
15	QPSK	1	37	20.58	20.67	20.60	22	0		
15	QPSK	1	74	20.66	20.70	20.57				
15	QPSK	36	0	20.57	20.75	20.80				
15	QPSK	36	20	20.61	20.64	20.59	22	0		
15	QPSK	36	39	20.60	20.71	20.57				
15	QPSK	75	0	20.66	20.70	20.59				
15	16QAM	1	0	20.58	20.61	20.60				
15	16QAM	1	37	20.59	20.68	20.57	22	0		
15	16QAM	1	74	20.62	20.78	20.61				
15	16QAM	36	0	20.59	20.64	20.62				
15	16QAM	36	20	20.53	20.69	20.57	22	0		
15	16QAM	36	39	20.55	20.66	20.62				
15	16QAM	75	0	20.65	20.63	20.62				
15	64QAM	1	0	20.58	20.68	20.60				
15	64QAM	1	37	20.60	20.64	20.64	22	0		
15	64QAM	1	74	20.64	20.69	20.63				
15	64QAM	36	0	19.54	19.63	19.68				
15	64QAM	36	20	19.66	19.72	19.62	21	1		
15	64QAM	36	39	19.64	19.66	19.57				
15	64QAM	75	0	19.65	19.66	19.62				
15	256QAM	1	0	17.60	17.69	17.51				
15	256QAM	1	37	17.58	17.64	17.69	19	3		
15	256QAM	1	74	17.65	17.71	17.60				
15	256QAM	36	0	17.55	17.76	17.54				
15	256QAM	36	20	17.59	17.72	17.54	19	3		
15	256QAM	36	39	17.67	17.65	17.55				
15	256QAM	75	0	17.55	17.72	17.62				
Channel				37900	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	20.66	20.59	20.65				
10	QPSK	1	25	20.63	20.66	20.59	22	0		
10	QPSK	1	49	20.61	20.62	20.60				
10	QPSK	25	0	20.57	20.72	20.62				
10	QPSK	25	12	20.63	20.70	20.51	22	0		
10	QPSK	25	25	20.58	20.64	20.46				
10	QPSK	50	0	20.66	20.74	20.67				
10	16QAM	1	0	20.57	20.61	20.58	22	0		
10	16QAM	1	25	20.63	20.76	20.57				
10	16QAM	1	49	20.55	20.71	20.61				
10	16QAM	25	0	20.55	20.76	20.59				
10	16QAM	25	12	20.57	20.72	20.62	22	0		
10	16QAM	25	25	20.61	20.75	20.59				
10	16QAM	50	0	20.59	20.62	20.66				
10	64QAM	1	0	20.63	20.71	20.55				
10	64QAM	1	25	20.59	20.69	20.61	22	0		
10	64QAM	1	49	20.71	20.74	20.62				
10	64QAM	25	0	19.53	19.70	19.60				
10	64QAM	25	12	19.69	19.70	19.60	21	1		
10	64QAM	25	25	19.64	19.71	19.57				
10	64QAM	50	0	19.65	19.59	19.62				
10	256QAM	1	0	17.58	17.65	17.60				
10	256QAM	1	25	17.63	17.60	17.62	19	3		
10	256QAM	1	49	17.65	17.67	17.65				
10	256QAM	25	0	17.59	17.77	17.57				
10	256QAM	25	12	17.60	17.65	17.59	19	3		
10	256QAM	25	25	17.63	17.67	17.62				
10	256QAM	50	0	17.53	17.68	17.65				
Channel				37775	38000	38225				
Frequency (MHz)				25725	25925	26175				
5	QPSK	1	0	20.60	20.62	20.57				
5	QPSK	1	12	20.62	20.64	20.59	22	0		
5	QPSK	1	24	20.63	20.71	20.57				
5	QPSK	12	0	20.64	20.69	20.59				
5	QPSK	12	7	20.57	20.71	20.52	22	0		
5	QPSK	12	13	20.61	20.68	20.51				
5	QPSK	25	0	20.63	20.75	20.62				
5	16QAM	1	0	20.58	20.68	20.56				
5	16QAM	1	12	20.65	20.72	20.58	22	0		
5	16QAM	1	24	20.56	20.78	20.62				
5	16QAM	12	0	20.57	20.64	20.60				
5	16QAM	12	7	20.54	20.69	20.58	22	0		
5	16QAM	12	13	20.60	20.66	20.63				
5	16QAM	25	0	20.68	20.68	20.64				
5	64QAM	1	0	20.60	20.66	20.60				
5	64QAM	1	12	20.65	20.67	20.64	22	0		
5	64QAM	1	24	20.64	20.76	20.56				
5	64QAM	12	0	19.58	19.72	19.58				
5	64QAM	12	7	19.66	19.71	19.68	21	1		
5	64QAM	12	13	19.70	19.69	19.54				
5	64QAM	25	0	19.62	19.57	19.59				
5	256QAM	1	0	17.56	17.64	17.59				
5	256QAM	1	12	17.62	17.69	17.61	19	3		
5	256QAM	1	24	17.65	17.78	17.59				
5	256QAM	12	0	17.54	17.69	17.59				
5	256QAM	12	7	17.58	17.70	17.62	19	3		
5	256QAM	12	13	17.62	17.67	17.52				
5	256QAM	25	0	17.52	17.78	17.68				

Band 41 other PA Ant 4 DSIS										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	21.20	21.16	21.25				
20	QPSK	1	49	21.20	21.12	21.22	22.5	0		
20	QPSK	1	99	21.13	21.17	21.14				
20	QPSK	50	0	21.15	21.14	21.19				
20	QPSK	50	24	21.15	21.11	21.13	22.5	0		
20	QPSK	50	50	21.13	21.10	21.23				
20	QPSK	100	0	21.09	21.13	21.21				
20	16QAM	1	0	21.20	21.17	21.20				
20	16QAM	1	49	21.15	21.17	21.22	22.5	0		
20	16QAM	1	99	21						



Band 2 other PA Ant 5 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPE (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	21.11	21.27	21.22			
20	QPSK	1	49	21.12	21.15	21.12	22	0	
20	QPSK	1	99	21.12	21.26	21.12			
20	QPSK	50	0	21.05	21.17	21.11			
20	QPSK	24	0	21.18	21.00	21.00			
20	QPSK	50	50	21.11	21.01	21.11	22	0	
20	QPSK	100	0	20.86	21.04	20.85			
20	HQAM	1	0	21.01	20.95	20.96			
20	HQAM	1	49	21.04	20.93	21.00	22	0	
20	HQAM	1	99	20.71	20.87	20.87			
20	HQAM	50	0	20.98	20.77	20.86			
20	HQAM	50	24	20.79	20.85	20.73	22	0	
20	HQAM	50	50	20.80	20.84	20.86			
20	HQAM	100	0	20.78	20.72	20.75			
20	HQAM	1	0	20.88	20.94	20.73			
20	HQAM	1	49	20.60	20.73	20.91	22	0	
20	HQAM	1	99	21.00	20.79	20.80			
20	HQAM	50	24	20.90	20.81	20.77	22	0	
20	HQAM	50	50	20.75	20.75	20.91			
20	HQAM	100	0	20.80	20.87	20.91			
20	ZSSBAM	1	49	18.99	19.20	19.03	20	2	
20	ZSSBAM	1	99	18.93	19.16	18.91			
20	ZSSBAM	50	24	19.10	19.08	19.09	20	2	
20	ZSSBAM	50	50	19.07	19.23	19.11			
20	ZSSBAM	100	0	19.20	19.07	19.03			
Channel									
Frequency (MHz)									
16	QPSK	1	0	20.88	21.18	21.15			
16	QPSK	1	37	21.07	21.08	21.20	22	0	
16	QPSK	1	74	21.02	21.19	20.97			
16	QPSK	36	0	20.96	21.03	21.03			
16	QPSK	20	0	21.06	20.88	20.93	22	0	
16	QPSK	36	36	21.02	20.91	21.01			
16	HQAM	1	0	20.90	20.87	20.72			
16	HQAM	1	74	20.87	20.52	20.82	22	0	
16	HQAM	36	0	20.80	20.69	20.75			
16	HQAM	36	20	20.69	20.62	20.61	22	0	
16	HQAM	75	0	20.82	20.67	20.74			
16	HQAM	1	0	20.73	20.78	20.64	22	0	
16	HQAM	1	37	20.90	20.69	20.66			
16	HQAM	1	74	20.58	20.95	20.71			
16	HQAM	36	0	20.65	20.71	20.72	22	0	
16	HQAM	36	20	20.63	20.68	20.63			
16	HQAM	36	36	20.52	20.95	20.25			
16	HQAM	75	0	20.72	20.68	20.81			
16	ZSSBAM	1	37	18.90	19.07	18.93	20	2	
16	ZSSBAM	1	74	18.97	18.97	18.84			
16	ZSSBAM	36	0	18.98	18.93	18.95			
16	ZSSBAM	36	20	19.00	18.92	18.98	20	2	
16	ZSSBAM	36	36	19.02	18.17	18.97			
16	ZSSBAM	75	0	18.95	18.93	18.93			
Channel									
Frequency (MHz)									
10	QPSK	1	0	21.08	21.21	21.00			
10	QPSK	1	25	21.13	21.07	21.20	22	0	
10	QPSK	1	49	21.04	21.13	20.97			
10	QPSK	25	0	20.98	20.94	20.97			
10	QPSK	25	12	21.06	20.96	21.00	22	0	
10	QPSK	25	25	21.06	20.88	21.01			
10	QPSK	50	0	20.90	20.87	20.82			
10	HQAM	1	0	20.95	20.88	20.89			
10	HQAM	1	25	20.87	20.79	20.85	22	0	
10	HQAM	1	49	20.68	20.63	20.66			
10	HQAM	25	0	20.90	20.82	20.75			
10	HQAM	25	12	20.72	20.60	20.57	22	0	
10	HQAM	25	25	20.78	20.78	20.75			
10	HQAM	50	0	20.63	20.57	20.79			
10	HQAM	1	0	20.81	20.85	20.66	22	0	
10	HQAM	1	25	20.78	20.62	20.63			
10	HQAM	1	49	20.61	20.66	20.74			
10	HQAM	25	0	20.61	20.63	20.72	22	0	
10	HQAM	25	12	20.70	20.70	20.70			
10	HQAM	25	25	20.61	20.61	20.79			
10	HQAM	50	0	20.67	20.67	20.63			
10	ZSSBAM	1	0	18.98	19.08	19.04	20	2	
10	ZSSBAM	1	25	18.92	19.16	18.95			
10	ZSSBAM	1	49	18.98	18.11	18.78			
10	ZSSBAM	25	0	19.02	19.05	18.97	20	2	
10	ZSSBAM	25	12	18.96	19.01	19.05			
10	ZSSBAM	25	25	19.05	18.14	19.03	20	2	
10	ZSSBAM	50	0	18.99	19.01	18.98			
Channel									
Frequency (MHz)									
5	QPSK	1	0	21.05	21.18	21.00			
5	QPSK	1	12	21.10	21.05	21.19	22	0	
5	QPSK	1	24	20.99	21.13	21.04			
5	QPSK	12	0	20.94	21.07	20.96			
5	QPSK	12	7	21.08	20.96	20.98	22	0	
5	QPSK	12	13	20.96	20.92	20.99			
5	QPSK	25	0	20.81	20.86	20.73			
5	HQAM	1	0	20.88	20.84	20.85			
5	HQAM	1	12	20.95	20.80	20.85	22	0	
5	HQAM	1	24	20.58	20.52	20.54			
5	HQAM	12	0	20.86	20.70	20.81			
5	HQAM	12	7	20.67	20.56	20.60	22	0	
5	HQAM	12	13	20.78	20.69	20.75			
5	HQAM	25	0	20.68	20.58	20.78			
5	HQAM	1	0	20.72	20.84	20.61	22	0	
5	HQAM	1	12	20.78	20.67	20.63			
5	HQAM	1	24	20.93	20.68	20.73			
5	HQAM	12	0	20.60	20.72	20.73	22	0	
5	HQAM	12	7	20.63	20.71	20.62			
5	HQAM	12	13	20.81	20.69	20.78			
5	HQAM	25	0	20.73	20.53	20.84			
5	ZSSBAM	1	0	18.95	19.09	18.95	20	2	
5	ZSSBAM	1	12	18.92	19.13	18.90			
5	ZSSBAM	1	24	18.96	18.99	18.85			
5	ZSSBAM	12	0	18.98	18.99	18.97	20	2	
5	ZSSBAM	12	7	18.93	18.91	19.02			
5	ZSSBAM	12	13	18.94	18.13	18.90	20	2	
5	ZSSBAM	25	0	18.97	19.02	18.88			
Channel									
Frequency (MHz)									
3	QPSK	1	0	21.02	21.18	21.15			
3	QPSK	1	6	21.14	21.01	21.18	22	0	
3	QPSK	1	14	21.07	21.12	21.05			
3	QPSK	8	0	20.97	21.08	20.99			
3	QPSK	8	4	21.06	20.90	20.90	22	0	
3	QPSK	8	7	20.99	20.95	20.96			
3	QPSK	15	0	20.71	20.97	20.78			
3	HQAM	1	0	20.92	20.90	20.91			
3	HQAM	1	8	20.82	20.77	20.85	22	0	
3	HQAM	1	14	20.66	20.62	20.71			
3	HQAM	8	0	20.67	20.66	20.77			
3	HQAM	8	4	20.72	20.52	20.69	22	0	
3	HQAM	8	7	20.77	20.76	20.81			
3	HQAM	15	0	20.65	20.59	20.70			
3	HQAM	1	0	20.77	20.67	20.63	22	0	
3	HQAM	1	8	20.84	20.88	20.77			
3	HQAM	1	14	20.94	20.84	20.76			
3	HQAM	8	0	20.58	20.67	20.61			
3	HQAM	8	4	20.81	20.76	20.70	22	0	
3	HQAM	8	7	20.67	20.61	20.85			
3	ZSSBAM	1	8	18.90	19.07	18.91	20	2	
3	ZSSBAM	1	14	19.00	19.07	18.91			
3	ZSSBAM	8	0	19.02	19.05	18.97			
3	ZSSBAM	8	4	19.03	18.88	19.04	20	2	
3	ZSSBAM	8	7	19.00	19.13	19.00			
3	ZSSBAM	15	0	18.95	18.97	18.93			
Channel									
Frequency (MHz)									
1.4	QPSK	1	0	20.99	21.14	21.06			
1.4	QPSK	1	3	21.03	21.02	21.10	22	0	
1.4	QPSK	1	6	21.01	21.18	20.97			
1.4	QPSK	3	0	20.98	21.01	20.98			
1.4									



Band 38 other PA Ant 5 DS13										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	21.71	21.86	21.73	22.5	0		
20	QPSK	1	49	21.70	21.79	21.84				
20	QPSK	1	99	21.76	21.74	21.74				
20	QPSK	50	0	21.56	21.73	21.65				
20	QPSK	50	24	21.62	21.64	21.63				
20	QPSK	50	50	21.70	21.62	21.57				
20	QPSK	100	0	21.44	21.51	21.34				
20	16QAM	1	0	21.53	21.45	21.47				
20	16QAM	1	49	21.65	21.52	21.46				
20	16QAM	1	99	21.24	21.17	21.38				
20	16QAM	50	0	21.51	21.33	21.47				
20	16QAM	50	24	21.33	21.26	21.36				
20	16QAM	50	50	21.45	21.39	21.47				
20	16QAM	100	0	21.28	21.24	21.36				
20	64QAM	1	0	21.43	21.46	21.29				
20	64QAM	1	49	21.47	21.34	21.43				
20	64QAM	1	99	21.56	21.37	21.38				
20	64QAM	50	0	20.69	20.83	20.64				
20	64QAM	50	24	20.57	20.72	20.50				
20	64QAM	50	50	20.70	20.69	20.43				
20	64QAM	100	0	20.69	20.73	20.59				
20	256QAM	1	0	18.68	18.81	18.58				
20	256QAM	1	49	18.80	18.69	18.43				
20	256QAM	1	99	18.71	18.71	18.51				
20	256QAM	50	0	18.87	18.79	18.85				
20	256QAM	50	24	18.64	18.69	18.61				
20	256QAM	50	50	18.57	18.70	18.47				
20	256QAM	100	0	18.61	18.67	18.56				
Channel				37825	38000	38175				
Frequency (MHz)				25775	25925	26125				
15	QPSK	1	0	21.65	21.60	21.69	22.5	0		
15	QPSK	1	37	21.61	21.65	21.70				
15	QPSK	1	74	21.64	21.73	21.60				
15	QPSK	36	0	21.49	21.64	21.51				
15	QPSK	36	20	21.57	21.57	21.52				
15	QPSK	36	39	21.61	21.65	21.51				
15	QPSK	75	0	21.29	21.41	21.25				
15	16QAM	1	0	21.43	21.41	21.40				
15	16QAM	1	37	21.57	21.48	21.36				
15	16QAM	1	74	21.19	21.09	21.28				
15	16QAM	36	0	21.43	21.24	21.35				
15	16QAM	36	20	21.28	21.17	21.31				
15	16QAM	36	39	21.30	21.33	21.35				
15	16QAM	75	0	21.15	21.16	21.24				
15	64QAM	1	0	21.27	21.40	21.13				
15	64QAM	1	37	21.42	21.28	21.33				
15	64QAM	1	74	21.44	21.22	21.26				
15	64QAM	36	0	20.55	20.78	20.58				
15	64QAM	36	20	20.52	20.67	20.45				
15	64QAM	36	39	20.65	20.85	20.29				
15	64QAM	75	0	20.64	20.66	20.48				
15	256QAM	1	0	18.57	18.79	18.52				
15	256QAM	1	37	18.55	18.63	18.40				
15	256QAM	1	74	18.64	18.60	18.37				
15	256QAM	36	0	18.58	18.69	18.56				
15	256QAM	36	20	18.51	18.67	18.54				
15	256QAM	36	39	18.55	18.58	18.35				
15	256QAM	75	0	18.51	18.58	18.48				
Channel				37900	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	21.65	21.61	21.64	22.5	0		
10	QPSK	1	25	21.57	21.63	21.78				
10	QPSK	1	49	21.71	21.68	21.60				
10	QPSK	25	0	21.50	21.83	21.60				
10	QPSK	25	12	21.53	21.50	21.59				
10	QPSK	25	25	21.63	21.50	21.42				
10	QPSK	50	0	21.31	21.39	21.28				
10	16QAM	1	0	21.39	21.40	21.43				
10	16QAM	1	25	21.58	21.38	21.38				
10	16QAM	1	49	21.16	21.09	21.31				
10	16QAM	25	0	21.36	21.22	21.37				
10	16QAM	25	12	21.26	21.15	21.30				
10	16QAM	25	25	21.31	21.32	21.35				
10	16QAM	50	0	21.22	21.13	21.27				
10	64QAM	1	0	21.29	21.32	21.21				
10	64QAM	1	25	21.34	21.23	21.38				
10	64QAM	1	49	21.41	21.22	21.33				
10	64QAM	25	0	20.58	20.74	20.61				
10	64QAM	25	12	20.50	20.58	20.46				
10	64QAM	25	25	20.59	20.66	20.31				
10	64QAM	50	0	20.64	20.69	20.54				
10	256QAM	1	0	18.58	18.79	18.55				
10	256QAM	1	25	18.55	18.60	18.38				
10	256QAM	1	49	18.66	18.68	18.45				
10	256QAM	25	0	18.64	18.72	18.52				
10	256QAM	25	12	18.52	18.66	18.57				
10	256QAM	25	25	18.55	18.65	18.36				
10	256QAM	50	0	18.49	18.57	18.52				
Channel				37775	38000	38225				
Frequency (MHz)				25725	25925	26175				
5	QPSK	1	0	21.65	21.67	21.58	22.5	0		
5	QPSK	1	12	21.62	21.72	21.71				
5	QPSK	1	24	21.68	21.68	21.64				
5	QPSK	12	0	21.50	21.60	21.51				
5	QPSK	12	7	21.53	21.52	21.52				
5	QPSK	12	13	21.65	21.47	21.50				
5	QPSK	25	0	21.39	21.36	21.28				
5	16QAM	1	0	21.45	21.30	21.42				
5	16QAM	1	12	21.60	21.47	21.40				
5	16QAM	1	24	21.17	21.13	21.31				
5	16QAM	12	0	21.40	21.20	21.33				
5	16QAM	12	7	21.21	21.20	21.27				
5	16QAM	12	13	21.39	21.24	21.31				
5	16QAM	25	0	21.22	21.14	21.20				
5	64QAM	1	0	21.30	21.35	21.23				
5	64QAM	1	12	21.43	21.27	21.36				
5	64QAM	1	24	21.48	21.21	21.22				
5	64QAM	12	0	20.56	20.72	20.54				
5	64QAM	12	7	20.54	20.62	20.46				
5	64QAM	12	13	20.67	20.59	20.35				
5	64QAM	25	0	20.60	20.59	20.51				
5	256QAM	1	0	18.65	18.70	18.51				
5	256QAM	1	12	18.53	18.61	18.35				
5	256QAM	1	24	18.57	18.61	18.41				
5	256QAM	12	0	18.57	18.71	18.54				
5	256QAM	12	7	18.58	18.58	18.53				
5	256QAM	12	13	18.55	18.63	18.34				
5	256QAM	25	0	18.57	18.65	18.51				

Band 41 other PA Ant 5 DS13										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	21.55	21.59	21.71	22.5	0		
20	QPSK	1	49	21.59	21.61	21.69				
20	QPSK	1	99	21.54	21.63	21.63				
20	QPSK	50	0	21.44	21.47	21.58				
20	QPSK	50	24	21.49	21.50	21.59				
20	QPSK	50	50	21.47	21.48	21.43				
20	QPSK	100	0	21.30	21.24	21.49				
20	16QAM	1	0	21.45	21.45	21.35				
20	16QAM	1	49	21.56	21.48	21.37				
20	16QAM	1	99	21.12	21.10	21.22				
20	16QAM	50	0	21.31	21.33	21.13				



Reduced Power Mode for DS14_Other PA

Band 2 other PA Ant 2 DS14										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. (MHz)	Power High Ch. Freq. (MHz)	Power High Ch. Freq. (MHz)	Time-up limit (min)	MFR (dB)		
Channel										
20	QPSK	1	0	24.20	24.25	24.18				
20	QPSK	1	49	24.13	24.21	24.05	25.5	0		
20	QPSK	1	99	24.11	24.16	24.16				
20	QPSK	50	0	23.26	23.29	23.21				
20	QPSK	50	24	23.11	23.16	23.16	24.5	1		
20	QPSK	50	50	23.16	23.21	23.15				
20	QPSK	100	0	23.18	23.28	23.19				
20	QPSK	100	0	23.02	23.07	23.03				
20	HQAM	1	49	23.09	23.17	23.11	24.5	1		
20	HQAM	1	99	23.07	23.15	23.19				
20	HQAM	50	0	22.92	22.98	22.94				
20	HQAM	50	24	22.05	22.16	22.10	23.5	2		
20	HQAM	50	50	22.15	22.21	22.11				
20	HQAM	1	5	22.07	22.02	22.10				
20	HQAM	1	49	22.11	22.16	22.14	23.5	2		
20	HQAM	1	99	22.05	22.10	22.07				
20	HQAM	50	0	21.21	21.35	21.25				
20	HQAM	50	24	21.11	21.17	21.13	22.5	3		
20	HQAM	50	50	21.18	21.23	21.20				
20	ZSSBAM	1	0	19.29	19.26	19.21				
20	ZSSBAM	1	49	19.15	19.20	19.17	20.5	5		
20	ZSSBAM	1	99	19.18	19.18	19.20				
20	ZSSBAM	50	0	19.16	19.23	19.24				
20	ZSSBAM	50	24	19.20	19.30	19.14	20.5	5		
20	ZSSBAM	50	50	19.11	19.11	19.15				
20	ZSSBAM	100	0	19.02	19.13	19.14				
Channel										
Frequency (MHz)										
15	QPSK	1	0	24.07	24.15	24.09				
15	QPSK	1	37	24.01	24.16	24.04	25.5	0		
15	QPSK	1	74	24.04	24.08	24.04				
15	QPSK	36	0	23.17	23.17	23.09				
15	QPSK	36	20	23.05	23.13	23.11	24.5	1		
15	QPSK	36	36	23.09	23.09	23.08				
15	QPSK	75	0	23.14	23.20	23.07				
15	HQAM	1	0	23.11	23.23	23.03				
15	HQAM	1	37	23.01	23.08	22.99	24.5	1		
15	HQAM	1	74	23.01	23.04	23.10				
15	HQAM	36	0	22.09	22.17	22.19				
15	HQAM	36	20	21.98	22.07	21.98	23.5	2		
15	HQAM	36	39	22.12	22.15	22.01				
15	HQAM	36	0	22.15	22.14	22.12				
15	HQAM	1	0	22.21	22.23	22.07	23.5	2		
15	HQAM	1	37	22.01	22.12	22.02				
15	HQAM	1	74	21.92	22.11	22.13				
15	HQAM	36	0	21.93	21.91	21.97				
15	HQAM	36	20	21.64	21.88	21.81	22.5	3		
15	HQAM	36	39	21.69	21.97	21.95				
15	HQAM	75	0	21.93	21.94	21.94				
15	ZSSBAM	1	0	19.00	19.12	19.16				
15	ZSSBAM	1	37	19.07	19.13	19.05	20.5	5		
15	ZSSBAM	1	74	19.07	19.07	19.09				
15	ZSSBAM	36	0	19.07	19.17	19.09	20.5	5		
15	ZSSBAM	36	20	19.09	19.09	19.07				
15	ZSSBAM	75	0	19.00	19.07	19.03				
Channel										
Frequency (MHz)										
10	QPSK	1	0	24.08	24.16	24.06				
10	QPSK	1	37	24.02	24.17	24.04	25.5	0		
10	QPSK	1	49	24.00	24.14	24.13				
10	QPSK	25	0	23.17	23.18	23.16				
10	QPSK	25	12	23.03	23.10	23.09	24.5	1		
10	QPSK	25	25	23.09	23.17	23.10				
10	QPSK	50	0	23.11	23.14	23.14				
10	HQAM	1	25	22.95	23.11	23.00	24.5	1		
10	HQAM	1	49	22.04	22.10	22.12				
10	HQAM	25	0	22.15	22.14	22.10				
10	HQAM	25	12	21.98	22.04	22.05	23.5	2		
10	HQAM	25	25	22.10	22.15	22.09				
10	HQAM	50	0	22.14	22.22	22.19				
10	HQAM	50	0	22.14	22.22	22.19				
10	HQAM	1	25	22.00	22.09	22.00	23.5	2		
10	HQAM	1	49	21.92	22.11	22.04				
10	HQAM	25	0	21.99	22.32	21.92				
10	HQAM	25	12	21.98	22.04	21.98	22.5	3		
10	HQAM	25	25	21.96	21.92	21.94				
10	HQAM	50	0	21.94	21.92	21.95				
10	HQAM	50	0	19.23	19.16	19.15				
10	ZSSBAM	1	25	19.05	19.08	19.05	20.5	5		
10	ZSSBAM	1	49	19.09	19.15	19.13				
10	ZSSBAM	25	0	19.07	19.13	19.11				
10	ZSSBAM	25	12	19.13	19.18	19.08	20.5	5		
10	ZSSBAM	25	25	19.09	19.09	19.04				
10	ZSSBAM	50	0	19.03	19.03	19.03				
Channel										
Frequency (MHz)										
5	QPSK	1	0	24.10	24.13	24.10				
5	QPSK	1	12	24.00	24.12	24.10	25.5	0		
5	QPSK	1	24	24.03	24.15	24.03				
5	QPSK	12	0	23.03	23.10	23.13				
5	QPSK	12	7	23.02	23.04	23.03	24.5	1		
5	QPSK	12	13	23.04	23.16	23.11				
5	QPSK	25	0	23.08	23.17	23.17				
5	HQAM	1	0	23.18	23.23	23.08				
5	HQAM	1	12	22.07	23.11	23.05	24.5	1		
5	HQAM	1	24	23.02	23.07	23.04				
5	HQAM	12	0	22.15	22.22	22.19				
5	HQAM	12	7	21.90	22.08	21.97	23.5	2		
5	HQAM	12	13	22.02	22.14	22.06				
5	HQAM	25	0	22.11	22.21	22.21				
5	HQAM	1	0	22.16	22.27	21.96	23.5	2		
5	HQAM	1	12	21.98	22.14	22.05				
5	HQAM	1	24	22.02	22.06	22.14				
5	HQAM	12	0	21.99	21.92	21.96	22.5	3		
5	HQAM	12	7	21.05	21.09	21.06				
5	HQAM	12	13	21.05	21.12	21.08				
5	HQAM	25	0	21.14	21.13	21.14				
5	ZSSBAM	1	0	19.18	19.20	19.15				
5	ZSSBAM	1	12	19.04	19.08	19.01	20.5	5		
5	ZSSBAM	1	24	19.13	19.12	19.17				
5	ZSSBAM	12	0	19.05	19.21	19.11				
5	ZSSBAM	12	7	19.07	19.22	19.05	20.5	5		
5	ZSSBAM	12	13	19.05	19.09	19.05				
5	ZSSBAM	25	0	19.03	19.09	19.03				
Channel										
Frequency (MHz)										
1.4	QPSK	1	0	24.13	24.16	24.03				
1.4	QPSK	1	5	23.99	24.12	24.07	25.5	0		
1.4	QPSK	1	5	24.03	24.16	24.07				
1.4	QPSK	0	24.03	24.02	24.01					
1.4	QPSK	3	1	23.95	24.05	23.94				
1.4	QPSK	3	1	23.95	24.03	24.03	24.5	1		
1.4	QPSK	0	24.06	24.01	24.11					
1.4	HQAM	1	0	23.13	23.15	23.05				
1.4	HQAM	1	3	23.05	23.14	23.04	24.5	1		
1.4	HQAM	1	5	23.03	23.07	23.07				
1.4	HQAM	3	0	22.96	23.16	23.06				
1.4	HQAM	3	1	23.07	23.09	22.95				
1.4	HQAM	3	3	22.04	23.09	22.99	23.5	2		
1.4	HQAM	6	0	22.13	22.22	22.13				
1.4	HQAM	1	0	22.23	22.26	21.96				
1.4	HQAM	1	3	22.04	22.06	22.03				
1.4	HQAM	1	5	22.01	22.13	22.13	23.5	2		
1.4	HQAM	3	0	22.10	22.19	22.07				
1.4	HQAM	3	1	22.17	22.19	21.92	</			



Band 38 other PA Ant 2 DS14										
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	23.82	23.86	23.78				
20	QPSK	1	49	23.74	23.80	23.87	25	0		
20	QPSK	1	99	23.75	23.79	23.69				
20	QPSK	50	0	22.82	22.92	22.78				
20	QPSK	50	24	22.73	22.86	22.68				
20	QPSK	50	50	22.69	22.80	22.65	24	1		
20	QPSK	100	0	22.84	22.88	22.77				
20	16QAM	1	0	22.86	22.84	22.82				
20	16QAM	1	49	22.76	22.85	22.65	24	1		
20	16QAM	1	99	22.80	22.78	22.70				
20	16QAM	50	0	21.85	21.94	21.75				
20	16QAM	50	24	21.73	21.85	21.73				
20	16QAM	50	50	21.71	21.74	21.70				
20	16QAM	100	0	21.88	21.83	21.81				
20	64QAM	1	0	21.88	21.79	21.80				
20	64QAM	1	49	21.80	21.90	21.70	23	2		
20	64QAM	1	99	21.79	21.73	21.88				
20	64QAM	50	0	20.81	20.97	20.78				
20	64QAM	50	24	20.75	20.91	20.83				
20	64QAM	50	50	20.74	20.83	20.70	22	3		
20	64QAM	100	0	20.84	20.82	20.83				
20	256QAM	1	0	18.79	18.95	18.74				
20	256QAM	1	49	18.76	18.82	18.66	20	5		
20	256QAM	1	99	18.71	18.83	18.68				
20	256QAM	50	0	18.86	18.90	18.80				
20	256QAM	50	24	18.91	18.87	18.84				
20	256QAM	50	50	18.78	18.81	18.60	20	5		
20	256QAM	100	0	18.75	18.80	18.72				
Channel				37825	38000	38175				
Frequency (MHz)				25775	25925	26125				
15	QPSK	1	0	23.76	23.75	23.70	25	0		
15	QPSK	1	37	23.61	23.72	23.61				
15	QPSK	1	74	23.72	23.68	23.61				
15	QPSK	36	0	22.72	22.82	22.66				
15	QPSK	36	20	22.61	22.79	22.56	24	1		
15	QPSK	36	39	22.58	22.78	22.61				
15	QPSK	75	0	22.73	22.78	22.65				
15	16QAM	1	0	22.83	22.76	22.73				
15	16QAM	1	37	22.65	22.79	22.55	24	1		
15	16QAM	1	74	22.69	22.75	22.56				
15	16QAM	36	0	21.81	21.80	21.64				
15	16QAM	36	20	21.59	21.82	21.59				
15	16QAM	36	39	21.68	21.66	21.64	23	2		
15	16QAM	75	0	21.79	21.78	21.67				
15	64QAM	1	0	21.81	21.68	21.76				
15	64QAM	1	37	21.68	21.76	21.58	23	2		
15	64QAM	1	74	21.76	21.61	21.85				
15	64QAM	36	0	20.76	20.86	20.68				
15	64QAM	36	20	20.72	20.81	20.49	22	3		
15	64QAM	36	39	20.67	20.75	20.67				
15	64QAM	75	0	20.78	20.70	20.75				
15	256QAM	1	0	18.70	18.89	18.63				
15	256QAM	1	37	18.73	18.79	18.58	20	5		
15	256QAM	1	74	18.67	18.69	18.63				
15	256QAM	36	0	18.72	18.79	18.72				
15	256QAM	36	20	18.80	18.78	18.75	20	5		
15	256QAM	36	39	18.84	18.72	18.52				
15	256QAM	75	0	18.73	18.72	18.52				
Channel				37900	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	23.77	23.78	23.69	25	0		
10	QPSK	1	25	23.68	23.66	23.53				
10	QPSK	1	49	23.69	23.75	23.57				
10	QPSK	25	0	22.78	22.80	22.72				
10	QPSK	25	12	22.63	22.76	22.55				
10	QPSK	25	25	22.65	22.77	22.60	24	1		
10	QPSK	50	0	22.74	22.78	22.65				
10	16QAM	1	0	22.80	22.73	22.68				
10	16QAM	1	49	22.66	22.78	22.55	24	1		
10	16QAM	1	99	22.76	22.72	22.65				
10	16QAM	25	0	21.75	21.89	21.67				
10	16QAM	25	12	21.67	21.71	21.62				
10	16QAM	25	25	21.65	21.64	21.66	23	2		
10	16QAM	50	0	21.77	21.79	21.75				
10	64QAM	1	0	21.77	21.72	21.76				
10	64QAM	1	25	21.70	21.87	21.64	23	2		
10	64QAM	1	49	21.73	21.63	21.59				
10	64QAM	25	0	20.73	20.93	20.74				
10	64QAM	25	12	20.69	20.89	20.55	22	3		
10	64QAM	25	25	20.62	20.74	20.63				
10	64QAM	50	0	20.75	20.70	20.72				
10	256QAM	1	0	18.69	18.81	18.68				
10	256QAM	1	25	18.68	18.74	18.55	20	5		
10	256QAM	1	49	18.59	18.80	18.55				
10	256QAM	25	0	18.84	18.77	18.74				
10	256QAM	25	12	18.83	18.81	18.81				
10	256QAM	25	25	18.70	18.71	18.53	20	5		
10	256QAM	50	0	18.71	18.77	18.63				
Channel				37775	38000	38225				
Frequency (MHz)				25725	25925	26125				
5	QPSK	1	0	23.76	23.81	23.64	25	0		
5	QPSK	1	12	23.66	23.77	23.58				
5	QPSK	1	24	23.62	23.66	23.61				
5	QPSK	12	0	22.73	22.87	22.75				
5	QPSK	12	7	22.69	22.81	22.55	24	1		
5	QPSK	12	13	22.57	22.67	22.52				
5	QPSK	25	0	22.76	22.79	22.66				
5	16QAM	1	0	22.75	22.78	22.78				
5	16QAM	1	12	22.71	22.80	22.60	24	1		
5	16QAM	1	24	22.77	22.76	22.65				
5	16QAM	12	0	21.82	21.84	21.85				
5	16QAM	12	7	21.67	21.80	21.67	23	2		
5	16QAM	12	13	21.68	21.64	21.60				
5	16QAM	25	0	21.86	21.71	21.77				
5	64QAM	1	0	21.85	21.76	21.89				
5	64QAM	1	12	21.67	21.78	21.67	23	2		
5	64QAM	1	24	21.86	21.59	21.84				
5	64QAM	12	0	20.70	20.95	20.73				
5	64QAM	12	7	20.72	20.84	20.52	22	3		
5	64QAM	12	13	20.71	20.75	20.63				
5	64QAM	25	0	20.73	20.68	20.74				
5	256QAM	1	0	18.75	18.83	18.60				
5	256QAM	1	12	18.67	18.69	18.58	20	5		
5	256QAM	1	24	18.61	18.76	18.60				
5	256QAM	12	0	18.74	18.78	18.74				
5	256QAM	12	7	18.79	18.84	18.78	20	5		
5	256QAM	12	13	18.69	18.68	18.58				
5	256QAM	25	0	18.66	18.74	18.58				

Band 41 other PA Ant 2 DS14										
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch. / Freq	Power Low Middle Ch. / Freq	Power Middle Ch. / Freq	Power High Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				39750	40165	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	23.65	23.70	23.74	23.64	23.61		
20	QPSK	1	49	23.57	23.65	23.70	23.52	23.49	25	0
20	QPSK	1	99	23.51	23.62	23.68	23.58	23.57		
20	QPSK	50	0	22.60	22.72	22.80	22.61	22.67		
20	QPSK	50	24	22.62	22.63	22.65	22.47	22.51		
20	QPSK	50	50	22.52	22.64	22.73	22.60	22.57	24	1
20	QPSK	100	0	22.66	22.75	22.78	22.70	22.56		
20	16QAM	1	0	22.67	22.71	22.75	22.62	22.64		
20	16QAM	1	49	22.60	22.69	22.65	22.46	22.44	24	1
20	16QAM	1	99	22.56	22.64	22.68	22.60	22.56		
20	16QAM	50	0	21.58	21.75	21.74	21.57	21.71		
20	16QAM	50	24	21.59	21.65	21.64	21.47	21.49		
20	16QAM	50	50	21.55	21.63	21.76	21.65	21.54	23	2
20	16QAM	100	0	21.66	21.61	21.74	21.74	21.56		
20	64QAM	1	0	21.62	21.69	21.80	21.58	21.64		
20	64QAM	1	49	21.61	21.74	21.63	21.47	21.48	23	2
20	64QAM	1	99	21.59	21.63	21.63	21.61	21.51		
20	64QAM	50	0	20.66	20.78	20.86	20.66	20.65		
20	64QAM	50	24	20.67	20.61	20.68	20.50	20.55	22	3
20	64QAM	50	50	20.57	20.67	20.79	20.65	20.60		
20	64QAM	100	0	20.63	20.79	20.72	20.74	20.57		
20	256QAM	1	0	18.64	18.71	18.80				

Band 7 other PA Ant 3 DS14									
Channel	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				20650	21100	21550			
Frequency (MHz)				2010	2055	2100			
20	QPSK	1	0	22.31	22.36	22.28			23
20	QPSK	1	49	22.18	22.33	22.21			
20	QPSK	1	99	22.25	22.31	22.19			
20	QPSK	50	0	21.32	21.41	21.22			22
20	QPSK	50	24	21.21	21.29	21.24			
20	QPSK	50	50	21.26	21.27	21.15			
20	QPSK	100	0	21.27	21.36	21.30			
20	16QAM	1	0	21.29	21.34	21.27			22
20	16QAM	1	49	21.19	21.28	21.18			
20	16QAM	1	99	21.26	21.32	21.23			
20	16QAM	50	0	20.30	20.37	20.16			21
20	16QAM	50	24	20.15	20.31	20.22			
20	16QAM	50	50	20.29	20.21	20.21			
20	16QAM	100	0	20.31	20.32	20.34			
20	64QAM	1	0	20.32	20.39	20.30			21
20	64QAM	1	49	20.21	20.33	20.16			
20	64QAM	1	99	20.32	20.32	20.22			
20	64QAM	50	0	19.34	19.44	19.24			20
20	64QAM	50	24	19.22	19.29	19.25			
20	64QAM	50	50	19.31	19.21	19.09			
20	64QAM	100	0	19.31	19.42	19.30			
20	256QAM	1	0	17.29	17.36	17.21			18
20	256QAM	1	49	17.27	17.31	17.22			
20	256QAM	1	99	17.29	17.25	17.16			
20	256QAM	50	0	17.26	17.33	17.31			18
20	256QAM	50	24	17.32	17.32	17.23			
20	256QAM	50	50	17.23	17.28	17.22			
20	256QAM	100	0	17.24	17.30	17.20			
Channel				20625	21100	21375			
Frequency (MHz)				2007.5	2055	2092.5			
15	QPSK	1	0	22.20	22.28	22.15			23
15	QPSK	1	37	22.10	22.26	22.19			
15	QPSK	1	74	22.14	22.27	22.12			
15	QPSK	36	0	21.19	21.28	21.18			22
15	QPSK	36	20	21.14	21.17	21.15			
15	QPSK	36	39	21.16	21.17	21.08			
15	QPSK	75	0	21.16	21.30	21.16			22
15	16QAM	1	0	21.25	21.23	21.22			
15	16QAM	1	37	21.15	21.23	21.07			
15	16QAM	1	74	21.16	21.20	21.15			21
15	16QAM	36	0	20.24	20.24	20.13			
15	16QAM	36	20	20.02	20.21	20.09			
15	16QAM	36	39	20.24	20.17	20.16			
15	16QAM	75	0	20.21	20.28	20.29			21
15	64QAM	1	0	20.20	20.36	20.26			
15	64QAM	1	37	20.10	20.29	20.06			
15	64QAM	1	74	20.30	20.24	20.19			20
15	64QAM	36	0	19.28	19.31	19.18			
15	64QAM	36	20	19.10	19.21	19.21			
15	64QAM	36	39	19.21	19.10	19.02			
15	64QAM	75	0	19.23	19.31	19.18			18
15	256QAM	1	0	17.17	17.33	17.09			
15	256QAM	1	37	17.16	17.26	17.13			
15	256QAM	1	74	17.17	17.14	17.10			18
15	256QAM	36	0	17.23	17.27	17.27			
15	256QAM	36	20	17.25	17.18	17.19			
15	256QAM	36	39	17.15	17.23	17.09			
15	256QAM	75	0	17.15	17.25	17.14			
Channel				20800	21100	21400			
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	0	22.19	22.32	22.18			23
10	QPSK	1	25	22.11	22.21	22.09			
10	QPSK	1	49	22.16	22.27	22.17			22
10	QPSK	25	0	21.20	21.32	21.19			
10	QPSK	25	12	21.14	21.24	21.14			
10	QPSK	25	25	21.19	21.17	21.04			
10	QPSK	50	0	21.17	21.29	21.24			22
10	16QAM	1	0	21.16	21.29	21.24			
10	16QAM	1	25	21.12	21.19	21.09			
10	16QAM	1	49	21.23	21.29	21.12			21
10	16QAM	25	0	20.25	20.27	20.06			
10	16QAM	25	12	20.10	20.22	20.09			
10	16QAM	25	25	20.26	20.14	20.09			
10	16QAM	50	0	20.23	20.19	20.28			21
10	64QAM	1	0	20.21	20.35	20.21			
10	64QAM	1	25	20.13	20.25	20.02			
10	64QAM	1	49	20.19	20.19	20.15			20
10	64QAM	25	0	19.32	19.32	19.12			
10	64QAM	25	12	19.10	19.19	19.19			
10	64QAM	25	25	19.21	19.16	19.05			
10	64QAM	50	0	19.19	19.39	19.17			18
10	256QAM	1	0	17.26	17.34	17.19			
10	256QAM	1	25	17.18	17.19	17.15			
10	256QAM	1	49	17.17	17.21	17.02			18
10	256QAM	25	0	17.16	17.25	17.24			
10	256QAM	25	12	17.19	17.20	17.13			
10	256QAM	25	25	17.16	17.18	17.13			
10	256QAM	50	0	17.20	17.19	17.15			
Channel				20775	21100	21425			
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	0	22.20	22.30	22.19			23
5	QPSK	1	12	22.13	22.29	22.16			
5	QPSK	1	24	22.12	22.22	22.17			
5	QPSK	12	0	21.20	21.32	21.11			22
5	QPSK	12	7	21.09	21.16	21.13			
5	QPSK	12	13	21.13	21.23	21.12			
5	QPSK	25	0	21.21	21.24	21.18			22
5	16QAM	1	0	21.24	21.28	21.22			
5	16QAM	1	12	21.10	21.18	21.10			
5	16QAM	1	24	21.14	21.25	21.21			21
5	16QAM	12	0	20.19	20.34	20.06			
5	16QAM	12	7	20.07	20.22	20.13			
5	16QAM	12	13	20.20	20.14	20.16			
5	16QAM	25	0	20.24	20.21	20.29			21
5	64QAM	1	0	20.27	20.35	20.19			
5	64QAM	1	12	20.12	20.28	20.03			
5	64QAM	1	24	20.19	20.29	20.10			
5	64QAM	12	0	19.31	19.30	19.13			20
5	64QAM	12	7	19.19	19.19	19.18			
5	64QAM	12	13	19.20	19.13	19.04			
5	64QAM	25	0	19.18	19.35	19.24			18
5	256QAM	1	0	17.23	17.23	17.16			
5	256QAM	1	12	17.23	17.29	17.12			
5	256QAM	1	24	17.24	17.13	17.12			
5	256QAM	12	0	17.18	17.27	17.24			18
5	256QAM	12	7	17.22	17.26	17.11			
5	256QAM	12	13	17.13	17.23	17.11			
5	256QAM	25	0	17.15	17.26	17.12			



Band 38 other PA Ant 3 DS14										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	21.75	21.81	21.73	22.5	0		
20	QPSK	1	49	21.71	21.77	21.81				
20	QPSK	1	99	21.61	21.74	21.83				
20	QPSK	50	0	20.71	20.87	20.71				
20	QPSK	50	24	20.76	20.83	20.67	21.5	1		
20	QPSK	50	50	20.57	20.79	20.58				
20	16QAM	100	0	20.73	20.81	20.78				
20	16QAM	1	49	20.66	20.72	20.56	21.5	1		
20	16QAM	1	99	20.60	20.75	20.64				
20	16QAM	50	0	19.71	19.84	19.69				
20	16QAM	50	24	19.80	19.87	19.65	20.5	2		
20	16QAM	50	50	19.60	19.77	19.56				
20	16QAM	100	0	19.72	19.88	19.57				
20	64QAM	1	0	19.68	19.86	19.74				
20	64QAM	1	49	19.65	19.70	19.51	20.5	2		
20	64QAM	1	99	19.54	19.75	19.58				
20	64QAM	50	0	18.71	18.81	18.72				
20	64QAM	50	24	18.80	18.77	18.70	19.5	3		
20	64QAM	50	50	18.57	18.83	18.58				
20	64QAM	100	0	18.75	18.88	18.67				
20	256QAM	1	0	16.66	16.89	16.73				
20	256QAM	1	49	16.78	16.77	16.68	17.5	5		
20	256QAM	1	99	16.54	16.82	16.83				
20	256QAM	50	0	16.76	16.81	16.88				
20	256QAM	50	24	16.77	16.86	16.82	17.5	5		
20	256QAM	50	50	16.71	16.71	16.62				
20	256QAM	100	0	16.57	16.77	16.61				
Channel				37825	38000	38175	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				25725	2595	25925				
15	QPSK	1	0	21.64	21.70	21.60	22.5	0		
15	QPSK	1	37	21.58	21.73	21.48				
15	QPSK	1	74	21.47	21.60	21.59				
15	QPSK	36	0	20.64	20.77	20.59				
15	QPSK	36	20	20.71	20.76	20.59	21.5	1		
15	QPSK	36	39	20.48	20.75	20.50				
15	QPSK	75	0	20.67	20.77	20.86				
15	16QAM	1	0	20.67	20.76	20.67				
15	16QAM	1	37	20.56	20.60	20.50	21.5	1		
15	16QAM	1	74	20.55	20.69	20.58				
15	16QAM	36	0	19.60	19.77	19.59				
15	16QAM	36	20	19.68	19.81	19.58	20.5	2		
15	16QAM	36	39	19.53	19.73	19.45				
15	16QAM	75	0	19.59	19.79	19.64				
15	64QAM	1	0	19.65	19.75	19.69				
15	64QAM	1	37	19.56	19.56	19.43	20.5	2		
15	64QAM	1	74	19.51	19.69	19.45				
15	64QAM	36	0	18.69	18.76	18.63				
15	64QAM	36	20	18.73	18.70	18.60	19.5	3		
15	64QAM	36	39	18.52	18.77	18.47				
15	64QAM	75	0	18.71	18.80	18.54				
15	256QAM	1	0	16.53	16.76	16.70				
15	256QAM	1	37	16.68	16.64	16.56	17.5	5		
15	256QAM	1	74	16.43	16.72	16.52				
15	256QAM	36	0	16.73	16.70	16.58				
15	256QAM	36	20	16.84	16.79	16.72	17.5	5		
15	256QAM	36	39	16.61	16.64	16.53				
15	256QAM	75	0	16.49	16.67	16.49				
Channel				37920	38000	38200	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	21.70	21.89	21.87	22.5	0		
10	QPSK	1	25	21.58	21.83	21.55				
10	QPSK	1	49	21.57	21.71	21.58				
10	QPSK	25	0	20.65	20.76	20.66				
10	QPSK	25	12	20.73	20.74	20.65	21.5	1		
10	QPSK	25	25	20.48	20.74	20.50				
10	QPSK	50	0	20.63	20.74	20.63				
10	16QAM	100	0	20.63	20.69	20.67	21.5	1		
10	16QAM	1	0	20.56	20.66	20.45				
10	16QAM	1	49	20.50	20.71	20.51				
10	16QAM	25	0	19.58	19.74	19.66				
10	16QAM	25	12	19.70	19.82	19.61	20.5	2		
10	16QAM	25	25	19.47	19.71	19.53				
10	16QAM	50	0	19.67	19.83	19.66				
10	64QAM	1	0	19.55	19.83	19.68				
10	64QAM	1	25	19.57	19.81	19.43	20.5	2		
10	64QAM	1	49	19.49	19.71	19.48				
10	64QAM	25	0	18.85	18.76	18.67				
10	64QAM	25	12	18.88	18.67	18.65	19.5	3		
10	64QAM	25	25	18.45	18.81	18.46				
10	64QAM	50	0	18.66	18.82	18.61				
10	256QAM	1	0	16.60	16.83	16.66				
10	256QAM	1	25	16.71	16.64	16.56	17.5	5		
10	256QAM	1	49	16.48	16.78	16.59				
10	256QAM	25	0	16.64	16.72	16.61				
10	256QAM	25	12	16.63	16.81	16.69	17.5	5		
10	256QAM	25	25	16.59	16.59	16.49				
10	256QAM	50	0	16.51	16.64	16.56				
Channel				37775	38000	38225	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				23225	2325	23125				
5	QPSK	1	0	21.68	21.74	21.62	22.5	0		
5	QPSK	1	12	21.65	21.68	21.51				
5	QPSK	1	24	21.51	21.67	21.52				
5	QPSK	12	0	20.60	20.77	20.58				
5	QPSK	12	7	20.67	20.80	20.54	21.5	1		
5	QPSK	12	13	20.47	20.71	20.50				
5	QPSK	25	0	20.65	20.78	20.65				
5	16QAM	1	0	20.70	20.68	20.66				
5	16QAM	1	12	20.63	20.68	20.50	21.5	1		
5	16QAM	1	24	20.57	20.70	20.60				
5	16QAM	12	0	19.63	19.72	19.63				
5	16QAM	12	7	19.68	19.80	19.53	20.5	2		
5	16QAM	12	13	19.56	19.71	19.54				
5	16QAM	25	0	19.63	19.76	19.55				
5	64QAM	1	0	19.56	19.73	19.62				
5	64QAM	1	12	19.63	19.60	19.39	20.5	2		
5	64QAM	1	24	19.49	19.68	19.54				
5	64QAM	12	0	18.63	18.78	18.69				
5	64QAM	12	7	18.78	18.64	18.67	19.5	3		
5	64QAM	12	13	18.45	18.76	18.50				
5	64QAM	25	0	18.83	18.77	18.62				
5	256QAM	1	0	16.58	16.86	16.70				
5	256QAM	1	12	16.66	16.66	16.60	17.5	5		
5	256QAM	1	24	16.49	16.72	16.57				
5	256QAM	12	0	16.69	16.75	16.60				
5	256QAM	12	7	16.68	16.83	16.77	17.5	5		
5	256QAM	12	13	16.62	16.62	16.57				
5	256QAM	25	0	16.45	16.68	16.55				

Band 41 other PA Ant 3 DS14										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power Middle Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	21.62	21.70	21.76	21.66	21.63	22.5	0
20	QPSK	1	49	21.58	21.65	21.71	21.55	21.53		
20	QPSK	1	99	21.50	21.63	21.68	21.60	21.58		
20	QPSK	50	0	20.65	20.69	20.80	20.83	20.57		
20	QPSK	50	24	20.61	20.69	20.74	20.60	20.56	21.5	1
20	QPSK	50	50	20.52	20.68	20.70	20.65	20.56		
20	16QAM	100	0	20.64	20.66	20.73	20.70	20.62		
20	16QAM	1	49	20.54	20.65	20.70	20.56	20.47		



Band 38 other PA Ant 4 DS14										
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	22.73	22.78	22.70				
20	QPSK	1	49	22.69	22.73	22.56	24	0		
20	QPSK	1	99	22.60	22.71	22.62				
20	QPSK	50	0	21.73	21.82	21.71				
20	QPSK	50	24	21.74	21.73	21.51				
20	QPSK	50	50	21.57	21.65	21.67	23	1		
20	QPSK	100	0	21.71	21.77	21.72				
20	16QAM	1	0	21.79	21.73	21.70				
20	16QAM	1	49	21.64	21.69	21.59	23	1		
20	16QAM	1	99	21.65	21.72	21.67				
20	16QAM	50	0	20.75	20.77	20.74				
20	16QAM	50	24	20.69	20.75	20.53	22	2		
20	16QAM	50	50	20.52	20.71	20.70				
20	16QAM	100	0	20.68	20.81	20.76				
20	64QAM	1	0	20.79	20.73	20.68				
20	64QAM	1	49	20.69	20.72	20.59	22	2		
20	64QAM	1	99	20.65	20.69	20.73				
20	64QAM	50	0	19.67	19.80	19.72				
20	64QAM	50	24	19.79	19.71	19.52	21	3		
20	64QAM	50	50	19.54	19.66	19.70				
20	64QAM	100	0	19.69	19.81	19.67				
20	256QAM	1	0	17.72	17.83	17.69				
20	256QAM	1	49	17.72	17.77	17.53	19	5		
20	256QAM	1	99	17.52	17.70	17.70				
20	256QAM	50	0	17.65	17.76	17.66				
20	256QAM	50	24	17.75	17.69	17.66	19	5		
20	256QAM	50	50	17.63	17.65	17.60				
20	256QAM	100	0	17.70	17.74	17.63				
Channel				37825	38000	38175				
Frequency (MHz)				25775	2592	2592				
15	QPSK	1	0	22.70	22.64	22.58	24	0		
15	QPSK	1	37	22.57	22.63	22.48				
15	QPSK	1	74	22.56	22.62	22.49				
15	QPSK	36	0	21.67	21.73	21.62				
15	QPSK	36	20	21.71	21.68	21.48	23	1		
15	QPSK	36	39	21.46	21.61	21.55				
15	QPSK	75	0	21.61	21.67	21.59				
15	16QAM	1	0	21.76	21.63	21.56				
15	16QAM	1	37	21.50	21.59	21.56	23	1		
15	16QAM	1	74	21.58	21.62	21.61				
15	16QAM	36	0	20.64	20.73	20.69				
15	16QAM	36	20	20.59	20.72	20.39	22	2		
15	16QAM	36	39	20.39	20.60	20.60				
15	16QAM	75	0	20.65	20.70	20.66				
15	64QAM	1	0	20.67	20.62	20.58				
15	64QAM	1	37	20.59	20.65	20.47	22	2		
15	64QAM	1	74	20.59	20.65	20.60				
15	64QAM	36	0	19.63	19.76	19.62				
15	64QAM	36	20	19.72	19.64	19.47	21	3		
15	64QAM	36	39	19.48	19.56	19.59				
15	64QAM	75	0	19.66	19.71	19.59				
15	256QAM	1	0	17.63	17.75	17.59				
15	256QAM	1	37	17.63	17.67	17.41	19	5		
15	256QAM	1	74	17.38	17.61	17.63				
15	256QAM	36	0	17.52	17.73	17.52				
15	256QAM	36	20	17.64	17.60	17.55	19	5		
15	256QAM	36	39	17.60	17.53	17.46				
15	256QAM	75	0	17.60	17.69	17.55				
Channel				37900	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	22.70	22.75	22.63	24	0		
10	QPSK	1	25	22.60	22.63	22.43				
10	QPSK	1	49	22.49	22.65	22.49				
10	QPSK	25	0	21.71	21.79	21.63				
10	QPSK	25	12	21.64	21.65	21.47	23	1		
10	QPSK	25	25	21.47	21.57	21.58				
10	QPSK	50	0	21.69	21.75	21.66				
10	16QAM	1	0	21.75	21.61	21.59	23	1		
10	16QAM	1	25	21.57	21.67	21.45				
10	16QAM	1	49	21.57	21.68	21.63				
10	16QAM	25	0	20.70	20.67	20.68				
10	16QAM	25	12	20.59	20.69	20.50	22	2		
10	16QAM	25	25	20.48	20.58	20.57				
10	16QAM	50	0	20.63	20.76	20.64				
10	64QAM	1	0	20.74	20.60	20.64				
10	64QAM	1	25	20.63	20.69	20.47	22	2		
10	64QAM	1	49	20.58	20.66	20.61				
10	64QAM	25	0	19.56	19.68	19.70				
10	64QAM	25	12	19.71	19.66	19.43	21	3		
10	64QAM	25	25	19.52	19.55	19.57				
10	64QAM	50	0	19.62	19.73	19.64				
10	256QAM	1	0	17.67	17.73	17.65				
10	256QAM	1	25	17.66	17.70	17.45	19	5		
10	256QAM	1	49	17.47	17.68	17.60				
10	256QAM	25	0	17.59	17.66	17.59				
10	256QAM	25	12	17.66	17.63	17.61				
10	256QAM	25	25	17.55	17.62	17.57	19	5		
10	256QAM	50	0	17.66	17.67	17.56				
Channel				37775	38000	38225				
Frequency (MHz)				25725	25925	26125				
5	QPSK	1	0	22.63	22.67	22.65	24	0		
5	QPSK	1	12	22.61	22.66	22.44				
5	QPSK	1	24	22.53	22.67	22.49				
5	QPSK	12	0	21.61	21.70	21.63				
5	QPSK	12	7	21.68	21.63	21.40	23	1		
5	QPSK	12	13	21.53	21.67	21.56				
5	QPSK	25	0	21.64	21.64	21.62				
5	16QAM	1	0	21.71	21.66	21.63				
5	16QAM	1	12	21.53	21.64	21.50	23	1		
5	16QAM	1	24	21.60	21.70	21.54				
5	16QAM	12	0	20.67	20.73	20.67				
5	16QAM	12	7	20.59	20.73	20.49	22	2		
5	16QAM	12	13	20.40	20.63	20.59				
5	16QAM	25	0	20.55	20.68	20.71				
5	64QAM	1	0	20.70	20.64	20.58				
5	64QAM	1	12	20.62	20.70	20.56	22	2		
5	64QAM	1	24	20.63	20.64	20.70				
5	64QAM	12	0	19.64	19.76	19.63				
5	64QAM	12	7	19.70	19.63	19.42	21	3		
5	64QAM	12	13	19.40	19.54	19.59				
5	64QAM	25	0	19.65	19.69	19.59				
5	256QAM	1	0	17.63	17.76	17.61				
5	256QAM	1	12	17.62	17.64	17.40	19	5		
5	256QAM	1	24	17.41	17.63	17.66				
5	256QAM	12	0	17.61	17.73	17.58				
5	256QAM	12	7	17.64	17.64	17.55	19	5		
5	256QAM	12	13	17.51	17.62	17.51				
5	256QAM	25	0	17.60	17.62	17.54				

Band 41 other PA Ant 4 DS14										
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch. / Freq	Power Low Middle Ch. / Freq	Power High Middle Ch. / Freq	Power High Middle Ch. / Freq	Power High Middle Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				39750	40165	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	22.65	22.62	22.68	22.61	22.58	24	0
20	QPSK	1	49	22.55	22.60	22.61	22.48	22.48		
20	QPSK	1	99	22.59	22.56	22.60	22.55	22.46		
20	QPSK	50	0	21.62	21.59	21.73	21.60	21.54		
20	QPSK	50	24	21.54	21.57	21.59	21.48	21.49	23	1
20	QPSK	50	50	21.62	21.50	21.58	21.57	21.49		
20	QPSK	100	0	21.65	21.58	21.69	21.58	21.55		
20	16QAM	1	0	21.63						



Band 2 other PA Ant 5 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPE (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	21.11	21.27	21.22			
20	QPSK	1	49	21.12	21.15	21.12	22	0	
20	QPSK	1	99	21.12	21.26	21.12			
20	QPSK	50	0	21.05	21.17	21.11			
20	QPSK	24	0	21.18	21.00	21.00			
20	QPSK	50	50	21.11	21.01	21.11	22	0	
20	QPSK	100	0	20.86	20.84	20.85			
20	HQAM	1	0	21.01	20.95	20.96			
20	HQAM	1	49	21.04	20.93	21.00	22	0	
20	HQAM	1	99	20.71	20.87	20.87			
20	HQAM	50	0	20.98	20.77	20.86			
20	HQAM	50	24	20.79	20.85	20.73	22	0	
20	HQAM	50	50	20.80	20.84	20.86			
20	HQAM	100	0	20.78	20.72	20.82			
20	HQAM	1	0	20.88	20.84	20.73			
20	HQAM	1	49	20.60	20.73	20.81	22	0	
20	HQAM	1	99	21.00	20.79	20.80			
20	HQAM	50	24	20.90	20.81	20.77	22	0	
20	HQAM	50	50	20.75	20.75	20.91			
20	HQAM	100	0	20.80	20.67	20.91			
20	ZSSBAM	1	0	19.07	19.16	19.14			
20	ZSSBAM	1	49	18.99	19.20	19.03	20	2	
20	ZSSBAM	1	99	18.93	19.16	18.91			
20	ZSSBAM	50	24	19.10	19.08	19.09	20	2	
20	ZSSBAM	50	50	19.07	19.23	19.11			
20	ZSSBAM	100	0	19.20	19.07	19.03			
Channel									
Frequency (MHz)									
16	QPSK	1	0	20.88	21.18	21.15			
15	QPSK	1	37	21.07	21.08	21.20	22	0	
15	QPSK	1	74	21.02	21.19	20.97			
15	QPSK	36	0	20.86	21.03	21.03			
15	QPSK	20	0	21.06	20.88	20.93	22	0	
15	QPSK	36	36	21.02	20.91	21.01			
15	HQAM	1	0	20.80	20.87	20.72			
15	HQAM	1	74	20.87	20.52	20.82	22	0	
15	HQAM	36	0	20.80	20.89	20.75			
15	HQAM	36	20	20.69	20.62	20.61	22	0	
15	HQAM	75	0	20.82	20.67	20.74			
15	HQAM	1	0	20.73	20.78	20.64	22	0	
15	HQAM	1	37	20.80	20.69	20.66			
15	HQAM	1	74	20.58	20.95	20.71			
15	HQAM	36	0	20.65	20.71	20.72	22	0	
15	HQAM	36	20	20.63	20.68	20.63			
15	HQAM	36	36	20.52	20.95	20.35			
15	HQAM	75	0	20.72	20.68	20.81			
15	ZSSBAM	1	0	18.84	18.87	18.83			
15	ZSSBAM	1	37	18.90	18.98	18.89	20	2	
15	ZSSBAM	1	74	18.87	18.87	18.84			
15	ZSSBAM	36	0	18.88	18.93	18.93			
15	ZSSBAM	36	20	19.00	18.92	18.98	20	2	
15	ZSSBAM	36	36	19.02	18.17	18.87			
15	ZSSBAM	75	0	18.95	18.93	18.93			
Channel									
Frequency (MHz)									
10	QPSK	1	0	21.68	21.21	21.60			
10	QPSK	1	25	21.13	21.07	21.20	22	0	
10	QPSK	1	49	21.04	21.13	20.97			
10	QPSK	25	0	20.98	20.84	20.90			
10	QPSK	25	12	21.06	20.96	21.00	22	0	
10	QPSK	25	25	21.06	20.88	21.01			
10	QPSK	80	0	20.80	20.87	20.86			
10	HQAM	1	0	20.95	20.88	20.89			
10	HQAM	1	25	20.67	20.79	20.85	22	0	
10	HQAM	1	49	20.68	20.63	20.63			
10	HQAM	25	0	20.90	20.82	20.75			
10	HQAM	25	12	20.72	20.80	20.87	22	0	
10	HQAM	25	25	20.78	20.78	20.78			
10	HQAM	50	0	20.63	20.57	20.79			
10	HQAM	1	0	20.81	20.85	20.86			
10	HQAM	1	25	20.78	20.82	20.83	22	0	
10	HQAM	1	49	20.61	20.66	20.74			
10	HQAM	25	0	20.61	20.63	20.72			
10	HQAM	25	12	20.70	20.70	20.70	22	0	
10	HQAM	25	25	20.61	20.61	20.79			
10	HQAM	50	0	20.67	20.67	20.63			
10	ZSSBAM	1	0	18.88	18.88	18.84			
10	ZSSBAM	1	25	18.82	18.16	18.86	20	2	
10	ZSSBAM	1	49	18.88	18.11	18.78			
10	ZSSBAM	25	0	19.02	19.02	18.87			
10	ZSSBAM	25	12	18.96	18.91	18.95	20	2	
10	ZSSBAM	25	25	19.05	18.14	19.03			
10	ZSSBAM	50	0	18.89	18.91	18.88			
Channel									
Frequency (MHz)									
5	QPSK	1	0	21.65	21.18	21.60			
5	QPSK	1	12	21.10	21.05	21.19	22	0	
5	QPSK	1	24	20.99	21.13	21.04			
5	QPSK	12	0	20.84	21.07	20.86			
5	QPSK	12	7	21.08	20.98	20.98	22	0	
5	QPSK	12	13	20.86	20.92	20.99			
5	QPSK	25	0	20.81	20.86	20.73			
5	HQAM	1	0	20.88	20.84	20.85			
5	HQAM	1	12	20.65	20.80	20.85	22	0	
5	HQAM	1	24	20.58	20.52	20.54			
5	HQAM	12	0	20.86	20.70	20.81			
5	HQAM	12	7	20.67	20.56	20.60	22	0	
5	HQAM	12	13	20.78	20.69	20.78			
5	HQAM	25	0	20.68	20.58	20.78			
5	HQAM	1	0	20.72	20.84	20.61	22	0	
5	HQAM	1	12	20.78	20.67	20.63			
5	HQAM	1	24	20.93	20.68	20.73			
5	HQAM	12	0	20.60	20.72	20.73	22	0	
5	HQAM	12	7	20.63	20.71	20.62			
5	HQAM	12	13	20.81	20.69	20.78			
5	HQAM	25	0	20.73	20.53	20.84			
5	ZSSBAM	1	0	18.85	18.89	18.85			
5	ZSSBAM	1	12	18.92	18.13	18.90	20	2	
5	ZSSBAM	1	24	18.96	18.09	18.86			
5	ZSSBAM	12	0	18.88	18.99	18.87			
5	ZSSBAM	12	7	18.93	18.91	19.02	20	2	
5	ZSSBAM	12	13	18.94	18.13	19.00			
5	ZSSBAM	25	0	18.87	18.92	18.88			
Channel									
Frequency (MHz)									
3	QPSK	1	0	21.02	21.18	21.14			
3	QPSK	1	6	21.14	21.01	21.18	22	0	
3	QPSK	1	14	21.07	21.12	21.05			
3	QPSK	6	0	20.87	21.08	20.89			
3	QPSK	6	4	21.06	20.90	20.90	22	0	
3	QPSK	6	7	20.99	20.95	20.96			
3	QPSK	15	0	20.71	20.97	20.78			
3	HQAM	1	0	20.92	20.90	20.91			
3	HQAM	1	6	20.82	20.77	20.86	22	0	
3	HQAM	1	14	20.66	20.82	20.77			
3	HQAM	6	0	20.67	20.66	20.77			
3	HQAM	6	4	20.72	20.52	20.69	22	0	
3	HQAM	6	7	20.77	20.76	20.81			
3	HQAM	15	0	20.65	20.59	20.70			
3	HQAM	1	0	20.77	20.67	20.63	22	0	
3	HQAM	1	6	20.84	20.88	20.77			
3	HQAM	1	14	20.94	20.84	20.76			
3	HQAM	6	0	20.58	20.67	20.61	22	0	
3	HQAM	6	4	20.81	20.76	20.70			
3	HQAM	6	7	20.67	20.61	20.86			
3	ZSSBAM	1	0	18.90	18.97	18.84			
3	ZSSBAM	1	6	18.96	18.16	18.94	20	2	
3	ZSSBAM	1	14	19.00	18.97	18.90			
3	ZSSBAM	6	0	19.02	18.95	18.97			
3	ZSSBAM	6	4	19.03	18.88	19.04	20	2	
3	ZSSBAM	6	7	19.00	18.73	19.00			
3	ZSSBAM	15	0	18.96	18.97	18.93			
Channel									
Frequency (MHz)									
1.4	QPSK	1	0	20.99	21.14	21.06			
1.4	QPSK	1	3	21.03					



Band 38 other PA Ant 5 DS14										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	21.71	21.86	21.73	22.5	0		
20	QPSK	1	49	21.70	21.79	21.84				
20	QPSK	1	99	21.76	21.74	21.74				
20	QPSK	50	0	21.56	21.73	21.65				
20	QPSK	50	24	21.62	21.64	21.63				
20	QPSK	50	50	21.70	21.62	21.57				
20	QPSK	100	0	21.44	21.51	21.34				
20	16QAM	1	0	21.53	21.45	21.47				
20	16QAM	1	49	21.65	21.52	21.46				
20	16QAM	1	99	21.24	21.17	21.38				
20	16QAM	50	0	21.51	21.33	21.47				
20	16QAM	50	24	21.33	21.26	21.36				
20	16QAM	50	50	21.45	21.39	21.47				
20	16QAM	100	0	21.28	21.24	21.36				
20	64QAM	1	0	21.43	21.46	21.29				
20	64QAM	1	49	21.47	21.34	21.43				
20	64QAM	1	99	21.56	21.37	21.38				
20	64QAM	50	0	20.69	20.83	20.64				
20	64QAM	50	24	20.57	20.72	20.50				
20	64QAM	50	50	20.70	20.69	20.43				
20	64QAM	100	0	20.69	20.73	20.59				
20	256QAM	1	0	18.68	18.81	18.58				
20	256QAM	1	49	18.80	18.69	18.43				
20	256QAM	1	99	18.71	18.71	18.51				
20	256QAM	50	0	18.87	18.79	18.85				
20	256QAM	50	24	18.64	18.69	18.61				
20	256QAM	50	50	18.57	18.70	18.47				
20	256QAM	100	0	18.61	18.67	18.56				
Channel				37825	38000	38175				
Frequency (MHz)				25775	25925	26125				
15	QPSK	1	0	21.65	21.60	21.69	22.5	0		
15	QPSK	1	37	21.61	21.65	21.70				
15	QPSK	1	74	21.64	21.73	21.60				
15	QPSK	36	0	21.49	21.64	21.51				
15	QPSK	36	20	21.57	21.57	21.52				
15	QPSK	36	39	21.61	21.65	21.51				
15	QPSK	75	0	21.29	21.41	21.25				
15	16QAM	1	0	21.43	21.41	21.40				
15	16QAM	1	37	21.57	21.48	21.36				
15	16QAM	1	74	21.19	21.09	21.28				
15	16QAM	36	0	21.43	21.24	21.35				
15	16QAM	36	20	21.28	21.17	21.31				
15	16QAM	36	39	21.30	21.33	21.35				
15	16QAM	75	0	21.15	21.16	21.24				
15	64QAM	1	0	21.27	21.40	21.13				
15	64QAM	1	37	21.42	21.28	21.33				
15	64QAM	1	74	21.44	21.22	21.26				
15	64QAM	36	0	20.55	20.78	20.58				
15	64QAM	36	20	20.52	20.67	20.45				
15	64QAM	36	39	20.65	20.85	20.29				
15	64QAM	75	0	20.64	20.66	20.48				
15	256QAM	1	0	18.57	18.79	18.52				
15	256QAM	1	37	18.55	18.63	18.40				
15	256QAM	1	74	18.64	18.60	18.37				
15	256QAM	36	0	18.58	18.69	18.56				
15	256QAM	36	20	18.51	18.67	18.54				
15	256QAM	36	39	18.55	18.58	18.35				
15	256QAM	75	0	18.51	18.58	18.48				
Channel				37900	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	21.65	21.61	21.64	22.5	0		
10	QPSK	1	25	21.57	21.63	21.78				
10	QPSK	1	49	21.71	21.68	21.60				
10	QPSK	25	0	21.50	21.83	21.60				
10	QPSK	25	12	21.53	21.50	21.59				
10	QPSK	25	25	21.63	21.50	21.42				
10	QPSK	50	0	21.31	21.39	21.28				
10	16QAM	1	0	21.39	21.40	21.43				
10	16QAM	1	25	21.58	21.38	21.38				
10	16QAM	1	49	21.16	21.09	21.31				
10	16QAM	25	0	21.36	21.22	21.37				
10	16QAM	25	12	21.26	21.15	21.30				
10	16QAM	25	25	21.31	21.32	21.35				
10	16QAM	50	0	21.22	21.13	21.27				
10	64QAM	1	0	21.29	21.32	21.21				
10	64QAM	1	25	21.34	21.23	21.38				
10	64QAM	1	49	21.41	21.22	21.33				
10	64QAM	25	0	20.58	20.74	20.61				
10	64QAM	25	12	20.50	20.58	20.46				
10	64QAM	25	25	20.59	20.66	20.31				
10	64QAM	50	0	20.64	20.69	20.54				
10	256QAM	1	0	18.58	18.79	18.55				
10	256QAM	1	25	18.55	18.60	18.38				
10	256QAM	1	49	18.66	18.68	18.45				
10	256QAM	25	0	18.64	18.72	18.52				
10	256QAM	25	12	18.52	18.66	18.57				
10	256QAM	25	25	18.55	18.65	18.36				
10	256QAM	50	0	18.49	18.57	18.52				
Channel				37775	38000	38225				
Frequency (MHz)				25725	25925	26175				
5	QPSK	1	0	21.65	21.67	21.58	22.5	0		
5	QPSK	1	12	21.62	21.72	21.71				
5	QPSK	1	24	21.68	21.68	21.64				
5	QPSK	12	0	21.50	21.60	21.51				
5	QPSK	12	7	21.53	21.52	21.52				
5	QPSK	12	13	21.65	21.47	21.50				
5	QPSK	25	0	21.39	21.36	21.28				
5	16QAM	1	0	21.45	21.30	21.42				
5	16QAM	1	12	21.60	21.47	21.40				
5	16QAM	1	24	21.17	21.13	21.31				
5	16QAM	12	0	21.40	21.20	21.33				
5	16QAM	12	7	21.21	21.20	21.27				
5	16QAM	12	13	21.39	21.24	21.31				
5	16QAM	25	0	21.22	21.14	21.20				
5	64QAM	1	0	21.30	21.35	21.23				
5	64QAM	1	12	21.43	21.27	21.36				
5	64QAM	1	24	21.48	21.21	21.22				
5	64QAM	12	0	20.56	20.72	20.54				
5	64QAM	12	7	20.54	20.62	20.46				
5	64QAM	12	13	20.67	20.59	20.35				
5	64QAM	25	0	20.60	20.59	20.51				
5	256QAM	1	0	18.65	18.70	18.51				
5	256QAM	1	12	18.53	18.61	18.35				
5	256QAM	1	24	18.57	18.61	18.41				
5	256QAM	12	0	18.57	18.71	18.54				
5	256QAM	12	7	18.58	18.58	18.53				
5	256QAM	12	13	18.55	18.63	18.34				
5	256QAM	25	0	18.57	18.65	18.51				

Band 41 other PA Ant 5 DS14										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	21.55	21.59	21.71	22.5	0		
20	QPSK	1	49	21.59	21.61	21.69				
20	QPSK	1	99	21.54	21.53	21.63				
20	QPSK	50	0	21.44	21.47	21.58				
20	QPSK	50	24	21.49	21.50	21.59				
20	QPSK	50	50	21.47	21.48	21.43				
20	QPSK	100	0	21.30	21.24	21.49				
20	16QAM	1	0	21.45	21.45	21.35				
20	16QAM	1	49	21.56	21.48	21.37				
20	16QAM	1	99	21.12	21.10	21.22				
20	16QAM	50	0	21.31	21.33	21.13				



Band 38 other PA Ant 2 DSI6										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	15.78	15.88	15.93	17	0		
20	QPSK	1	49	15.82	15.83	15.91				
20	QPSK	1	99	15.89	15.92	15.94				
20	QPSK	50	0	15.68	15.83	15.81				
20	QPSK	50	24	15.83	15.70	15.75				
20	QPSK	50	50	15.80	15.73	15.79				
20	16QAM	1	0	15.61	15.38	15.66				
20	16QAM	1	49	15.75	15.69	15.68				
20	16QAM	1	99	15.47	15.40	15.45				
20	16QAM	50	0	15.61	15.43	15.56				
20	16QAM	50	24	15.47	15.42	15.40				
20	16QAM	50	50	15.62	15.58	15.62				
20	16QAM	100	0	15.45	15.46	15.52				
20	64QAM	1	0	15.60	15.54	15.40				
20	64QAM	1	49	15.56	15.41	15.64				
20	64QAM	1	99	15.60	15.44	15.58				
20	64QAM	50	0	15.42	15.49	15.52				
20	64QAM	50	24	15.68	15.54	15.44				
20	64QAM	50	50	15.61	15.41	15.58				
20	64QAM	100	0	15.48	15.39	15.56				
20	256QAM	1	0	15.46	15.49	15.48				
20	256QAM	1	49	15.59	15.57	15.54				
20	256QAM	1	99	15.60	15.37	15.59				
20	256QAM	50	0	15.61	15.44	15.51				
20	256QAM	50	24	15.53	15.38	15.51				
20	256QAM	50	50	15.48	15.33	15.46				
20	256QAM	100	0	15.49	15.54	15.49				
Channel				37825	38000	38175				
Frequency (MHz)				25775	2595	2612.5				
15	QPSK	1	0	15.67	15.85	15.79	17	0		
15	QPSK	1	37	15.74	15.77	15.86				
15	QPSK	1	74	15.78	15.80	15.79				
15	QPSK	36	0	15.62	15.68	15.68				
15	QPSK	36	20	15.77	15.61	15.65				
15	QPSK	36	39	15.76	15.67	15.71				
15	QPSK	75	0	15.47	15.63	15.45				
15	16QAM	1	0	15.55	15.63	15.53				
15	16QAM	1	37	15.66	15.65	15.58				
15	16QAM	1	74	15.34	15.32	15.34				
15	16QAM	36	0	15.49	15.36	15.44				
15	16QAM	36	20	15.32	15.33	15.33				
15	16QAM	36	39	15.46	15.46	15.56				
15	16QAM	75	0	15.38	15.35	15.42				
15	64QAM	1	0	15.53	15.41	15.30				
15	64QAM	1	37	15.47	15.33	15.59				
15	64QAM	1	74	15.47	15.36	15.51				
15	64QAM	36	0	15.29	15.42	15.43				
15	64QAM	36	20	15.61	15.47	15.28				
15	64QAM	36	39	15.41	15.35	15.50				
15	64QAM	75	0	15.33	15.32	15.42				
15	256QAM	1	0	15.42	15.40	15.40				
15	256QAM	1	37	15.47	15.47	15.39				
15	256QAM	1	74	15.51	15.29	15.48				
15	256QAM	36	0	15.49	15.35	15.37				
15	256QAM	36	20	15.41	15.23	15.38				
15	256QAM	36	39	15.33	15.27	15.41				
15	256QAM	75	0	15.39	15.44	15.33				
Channel				37900	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	15.73	15.93	15.86	17	0		
10	QPSK	1	25	15.73	15.67	15.76				
10	QPSK	1	49	15.76	15.78	15.73				
10	QPSK	25	0	15.55	15.75	15.74				
10	QPSK	25	12	15.72	15.64	15.66				
10	QPSK	25	25	15.68	15.60	15.64				
10	QPSK	50	0	15.48	15.59	15.38				
10	16QAM	1	0	15.53	15.43	15.29				
10	16QAM	1	25	15.64	15.60	15.56				
10	16QAM	1	49	15.34	15.32	15.37				
10	16QAM	25	0	15.49	15.35	15.43				
10	16QAM	25	12	15.37	15.33	15.29				
10	16QAM	25	25	15.56	15.44	15.51				
10	16QAM	50	0	15.29	15.39	15.39				
10	64QAM	1	0	15.54	15.43	15.35				
10	64QAM	1	25	15.51	15.34	15.48				
10	64QAM	1	49	15.53	15.33	15.53				
10	64QAM	25	0	15.27	15.40	15.37				
10	64QAM	25	12	15.63	15.46	15.29				
10	64QAM	25	25	15.41	15.28	15.52				
10	64QAM	50	0	15.34	15.27	15.42				
10	256QAM	1	0	15.39	15.36	15.34				
10	256QAM	1	25	15.54	15.47	15.44				
10	256QAM	1	49	15.55	15.25	15.48				
10	256QAM	25	0	15.49	15.31	15.37				
10	256QAM	25	12	15.47	15.27	15.43				
10	256QAM	25	25	15.43	15.28	15.39				
10	256QAM	50	0	15.43	15.41	15.34				
Channel				37775	38000	38225				
Frequency (MHz)				25925	2595	2617.5				
5	QPSK	1	0	15.66	15.85	15.78	17	0		
5	QPSK	1	12	15.78	15.69	15.85				
5	QPSK	1	24	15.80	15.78	15.79				
5	QPSK	12	0	15.67	15.75	15.74				
5	QPSK	12	7	15.75	15.55	15.70				
5	QPSK	12	13	15.75	15.64	15.72				
5	QPSK	25	0	15.51	15.53	15.26				
5	16QAM	1	0	15.46	15.44	15.59				
5	16QAM	1	12	15.59	15.56	15.53				
5	16QAM	1	24	15.37	15.28	15.37				
5	16QAM	12	0	15.49	15.37	15.50				
5	16QAM	12	7	15.33	15.34	15.30				
5	16QAM	12	13	15.52	15.46	15.57				
5	16QAM	25	0	15.35	15.38	15.42				
5	64QAM	1	0	15.49	15.40	15.33				
5	64QAM	1	12	15.43	15.27	15.56				
5	64QAM	1	24	15.53	15.36	15.46				
5	64QAM	12	0	15.34	15.33	15.48				
5	64QAM	12	7	15.58	15.44	15.40				
5	64QAM	12	13	15.33	15.28	15.45				
5	64QAM	25	0	15.39	15.32	15.46				
5	256QAM	1	0	15.32	15.35	15.43				
5	256QAM	1	12	15.46	15.47	15.40				
5	256QAM	1	24	15.44	15.30	15.48				
5	256QAM	12	0	15.56	15.32	15.35				
5	256QAM	12	7	15.46	15.31	15.38				
5	256QAM	12	13	15.44	15.23	15.41				
5	256QAM	25	0	15.33	15.41	15.37				

Band 41 other PA Ant 2 DSI6										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2506	2549.5	2593				
20	QPSK	1	0	15.77	15.74	15.93	17	0		
20	QPSK	1	49	15.78	15.76	15.82				
20	QPSK	1	99	15.86	15.74	15.90				
20	QPSK	50	0	15.74	15.76	15.85				
20	QPSK	50	24	15.83	15.69	15.83				
20	QPSK	50	50	15.79	15.68	15.89				
20	QPSK	100	0	15.84	15.75	15.84				
20	16QAM	1	0	15.75	15.72	15.82				
20	16QAM	1	49	15.85	15.75	15.90				
20	16QAM	1	99	15.78	15.75	15.90				
20	16QAM	50	0	15.79	15.77	15.81				
20	16QAM	50	24	15.79	15.67	15.81				
20</										



Band 7 other PA Ant 3 DS16								
Channel	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				20650	21100	21550		
Frequency (MHz)				2010	2055	2090		
20	QPSK	1	0	13.84	13.97	13.92		
20	QPSK	1	49	13.85	13.91	13.89	14.5	0
20	QPSK	1	99	13.85	13.92	13.79		
20	QPSK	50	0	13.88	13.88	13.89		
20	QPSK	50	24	13.86	13.77	13.90	14.5	0
20	QPSK	50	50	13.74	13.72	13.79		
20	QPSK	100	0	13.50	13.68	13.52		
20	16QAM	1	0	13.82	13.57	13.65		
20	16QAM	1	49	13.80	13.65	13.61	14.5	0
20	16QAM	1	99	13.46	13.32	13.51		
20	16QAM	50	0	13.55	13.41	13.59		
20	16QAM	50	24	13.45	13.41	13.41	14.5	0
20	16QAM	50	50	13.57	13.58	13.52		
20	16QAM	100	0	13.44	13.44	13.48		
20	64QAM	1	0	13.64	13.59	13.34		
20	64QAM	1	49	13.61	13.47	13.56	14.5	0
20	64QAM	1	99	13.63	13.45	13.51		
20	64QAM	50	0	13.38	13.43	13.45		
20	64QAM	50	24	13.58	13.54	13.48	14.5	0
20	64QAM	50	50	13.47	13.49	13.52		
20	64QAM	100	0	13.48	13.36	13.52		
20	256QAM	1	0	13.41	13.49	13.53		
20	256QAM	1	49	13.56	13.55	13.54	14.5	0
20	256QAM	1	99	13.53	13.38	13.52		
20	256QAM	50	0	13.67	13.39	13.55		
20	256QAM	50	24	13.55	13.47	13.58	14.5	0
20	256QAM	50	50	13.48	13.31	13.47		
20	256QAM	100	0	13.49	13.47	13.50		
Channel				20625	21100	21375		
Frequency (MHz)				20075	20550	20925		
15	QPSK	1	0	13.73	13.84	13.84		
15	QPSK	1	37	13.72	13.76	13.80	14.5	0
15	QPSK	1	74	13.70	13.80	13.73		
15	QPSK	36	0	13.55	13.82	13.80		
15	QPSK	36	20	13.78	13.64	13.66	14.5	0
15	QPSK	36	39	13.82	13.66	13.70		
15	QPSK	75	0	13.37	13.62	13.47		
15	16QAM	1	0	13.52	13.45	13.58		
15	16QAM	1	37	13.70	13.54	13.51	14.5	0
15	16QAM	1	74	13.40	13.27	13.37		
15	16QAM	36	0	13.40	13.33	13.48		
15	16QAM	36	20	13.39	13.27	13.26	14.5	0
15	16QAM	36	39	13.53	13.51	13.41		
15	16QAM	75	0	13.29	13.30	13.34		
15	64QAM	1	0	13.50	13.43	13.30		
15	64QAM	1	37	13.57	13.41	13.43	14.5	0
15	64QAM	1	74	13.52	13.33	13.37		
15	64QAM	36	0	13.24	13.33	13.30		
15	64QAM	36	20	13.51	13.46	13.41	14.5	0
15	64QAM	36	39	13.51	13.42	13.47		
15	64QAM	75	0	13.34	13.31	13.42		
15	256QAM	1	0	13.33	13.37	13.43		
15	256QAM	1	37	13.43	13.49	13.49	14.5	0
15	256QAM	1	74	13.48	13.32	13.38		
15	256QAM	36	0	13.62	13.24	13.40		
15	256QAM	36	20	13.41	13.31	13.46	14.5	0
15	256QAM	36	39	13.36	13.24	13.31		
15	256QAM	75	0	13.35	13.38	13.36		
Channel				20800	21100	21400		
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	0	13.79	13.83	13.80		
10	QPSK	1	25	13.79	13.76	13.78	14.5	0
10	QPSK	1	49	13.77	13.87	13.87		
10	QPSK	25	0	13.64	13.74	13.77		
10	QPSK	25	12	13.74	13.65	13.66	14.5	0
10	QPSK	25	25	13.89	13.82	13.88		
10	QPSK	50	0	13.41	13.56	13.37		
10	16QAM	1	0	13.57	13.41	13.53		
10	16QAM	1	25	13.71	13.49	13.54	14.5	0
10	16QAM	1	49	13.35	13.23	13.35		
10	16QAM	25	0	13.48	13.27	13.51		
10	16QAM	25	12	13.36	13.32	13.33	14.5	0
10	16QAM	25	25	13.52	13.44	13.44		
10	16QAM	50	0	13.32	13.36	13.41		
10	64QAM	1	0	13.58	13.51	13.28		
10	64QAM	1	25	13.46	13.32	13.43	14.5	0
10	64QAM	1	49	13.50	13.37	13.41		
10	64QAM	25	0	13.27	13.32	13.36		
10	64QAM	25	12	13.50	13.46	13.39	14.5	0
10	64QAM	25	25	13.34	13.42	13.44		
10	64QAM	50	0	13.40	13.22	13.46		
10	256QAM	1	0	13.51	13.45	13.38		
10	256QAM	1	25	13.44	13.39	13.47	14.5	0
10	256QAM	1	49	13.40	13.27	13.44		
10	256QAM	25	0	13.57	13.28	13.42		
10	256QAM	25	12	13.45	13.42	13.43	14.5	0
10	256QAM	25	25	13.36	13.24	13.33		
10	256QAM	50	0	13.38	13.32	13.46		
Channel				20775	21100	21425		
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	0	13.79	13.81	13.81		
5	QPSK	1	12	13.81	13.81	13.82	14.5	0
5	QPSK	1	24	13.80	13.82	13.71		
5	QPSK	12	0	13.58	13.83	13.83		
5	QPSK	12	7	13.77	13.67	13.68	14.5	0
5	QPSK	12	13	13.67	13.63	13.63		
5	QPSK	25	0	13.38	13.54	13.42		
5	16QAM	1	0	13.47	13.46	13.59		
5	16QAM	1	12	13.71	13.56	13.52	14.5	0
5	16QAM	1	24	13.40	13.28	13.41		
5	16QAM	12	0	13.45	13.29	13.47		
5	16QAM	12	7	13.32	13.24	13.26	14.5	0
5	16QAM	12	13	13.45	13.33	13.42		
5	16QAM	25	0	13.35	13.34	13.32		
5	64QAM	1	0	13.58	13.46	13.19		
5	64QAM	1	12	13.54	13.41	13.49	14.5	0
5	64QAM	1	24	13.55	13.32	13.46		
5	64QAM	12	0	13.21	13.38	13.38		
5	64QAM	12	7	13.49	13.41	13.40	14.5	0
5	64QAM	12	13	13.33	13.44	13.36		
5	64QAM	25	0	13.40	13.30	13.41		
5	256QAM	1	0	13.35	13.42	13.45		
5	256QAM	1	12	13.49	13.40	13.50	14.5	0
5	256QAM	1	24	13.45	13.30	13.48		
5	256QAM	12	0	13.62	13.27	13.42		
5	256QAM	12	7	13.47	13.34	13.52	14.5	0
5	256QAM	12	13	13.38	13.24	13.42		
5	256QAM	25	0	13.43	13.43	13.36		



Band 38 other PA Ant 3 DS16										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	14.73	14.95	14.85	15.5	0		
20	QPSK	1	49	14.88	14.79	14.94				
20	QPSK	1	99	14.84	14.76	14.78				
20	QPSK	50	0	14.64	14.83	14.83				
20	QPSK	50	24	14.82	14.70	14.78				
20	QPSK	50	50	14.72	14.75	14.88				
20	16QAM	100	0	14.53	14.67	14.50				
20	16QAM	100	49	14.58	14.58	14.62				
20	16QAM	100	99	14.75	14.59	14.62				
20	16QAM	1	99	14.34	14.35	14.44				
20	16QAM	50	0	14.53	14.33	14.51				
20	16QAM	50	24	14.36	14.34	14.41				
20	16QAM	50	50	14.54	14.59	14.49				
20	16QAM	100	0	14.41	14.37	14.52				
20	64QAM	1	0	14.59	14.52	14.38				
20	64QAM	1	49	14.60	14.36	14.55				
20	64QAM	1	99	14.66	14.36	14.44				
20	64QAM	50	0	14.33	14.37	14.44				
20	64QAM	50	24	14.55	14.34	14.46				
20	64QAM	50	50	14.41	14.37	14.52				
20	64QAM	100	0	14.42	14.29	14.53				
20	256QAM	1	0	14.42	14.40	14.49				
20	256QAM	1	49	14.53	14.50	14.44				
20	256QAM	1	99	14.56	14.33	14.56				
20	256QAM	50	0	14.59	14.36	14.47				
20	256QAM	50	24	14.44	14.32	14.49				
20	256QAM	50	50	14.44	14.34	14.43				
20	256QAM	100	0	14.44	14.51	14.47				
Channel				37825	38000	38175				
Frequency (MHz)				25725	2595	2612.5				
15	QPSK	1	0	14.69	14.96	14.71	15.5	0		
15	QPSK	1	37	14.83	14.70	14.82				
15	QPSK	1	74	14.78	14.83	14.64				
15	QPSK	36	0	14.51	14.76	14.70				
15	QPSK	36	20	14.72	14.55	14.84				
15	QPSK	36	39	14.57	14.38	14.56				
15	QPSK	75	0	14.40	14.59	14.42				
15	16QAM	1	0	14.52	14.41	14.50				
15	16QAM	1	37	14.65	14.54	14.57				
15	16QAM	1	74	14.21	14.22	14.30				
15	16QAM	36	0	14.45	14.35	14.35				
15	16QAM	36	20	14.22	14.28	14.26				
15	16QAM	36	39	14.39	14.48	14.34				
15	16QAM	75	0	14.24	14.27	14.48				
15	64QAM	1	0	14.48	14.47	14.26				
15	64QAM	1	37	14.45	14.29	14.41				
15	64QAM	1	74	14.51	14.23	14.37				
15	64QAM	36	0	14.27	14.21	14.37				
15	64QAM	36	20	14.42	14.38	14.31				
15	64QAM	36	39	14.34	14.21	14.46				
15	64QAM	75	0	14.27	14.21	14.48				
15	256QAM	1	0	14.38	14.35	14.37				
15	256QAM	1	37	14.39	14.34	14.33				
15	256QAM	1	74	14.48	14.28	14.46				
15	256QAM	36	0	14.51	14.22	14.41				
15	256QAM	36	20	14.37	14.27	14.39				
15	256QAM	36	39	14.30	14.23	14.28				
15	256QAM	75	0	14.37	14.38	14.40				
Channel				37890	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	14.65	14.88	14.70	15.5	0		
10	QPSK	1	25	14.74	14.75	14.81				
10	QPSK	1	49	14.73	14.58	14.58				
10	QPSK	25	0	14.52	14.70	14.74				
10	QPSK	25	12	14.70	14.62	14.63				
10	QPSK	25	25	14.67	14.63	14.54				
10	QPSK	50	0	14.38	14.59	14.38				
10	16QAM	1	0	14.54	14.41	14.48				
10	16QAM	1	25	14.58	14.59	14.52				
10	16QAM	1	49	14.24	14.23	14.31				
10	16QAM	25	0	14.40	14.18	14.39				
10	16QAM	25	12	14.21	14.28	14.36				
10	16QAM	25	25	14.45	14.52	14.35				
10	16QAM	50	0	14.24	14.28	14.44				
10	64QAM	1	0	14.51	14.41	14.28				
10	64QAM	1	25	14.48	14.22	14.39				
10	64QAM	1	49	14.53	14.23	14.39				
10	64QAM	25	0	14.17	14.24	14.31				
10	64QAM	25	12	14.46	14.38	14.35				
10	64QAM	25	25	14.34	14.23	14.46				
10	64QAM	50	0	14.36	14.18	14.39				
10	256QAM	1	0	14.34	14.28	14.43				
10	256QAM	1	25	14.47	14.43	14.29				
10	256QAM	1	49	14.48	14.27	14.48				
10	256QAM	25	0	14.48	14.28	14.41				
10	256QAM	25	12	14.29	14.22	14.44				
10	256QAM	25	25	14.38	14.29	14.36				
10	256QAM	50	0	14.34	14.36	14.34				
Channel				37775	38000	38225				
Frequency (MHz)				25925	2595	2617.5				
5	QPSK	1	0	14.62	14.81	14.76	15.5	0		
5	QPSK	1	12	14.82	14.74	14.81				
5	QPSK	1	24	14.70	14.72	14.72				
5	QPSK	12	0	14.53	14.71	14.77				
5	QPSK	12	7	14.69	14.61	14.66				
5	QPSK	12	13	14.66	14.60	14.56				
5	QPSK	25	0	14.48	14.59	14.45				
5	16QAM	1	0	14.49	14.40	14.51				
5	16QAM	1	12	14.68	14.48	14.56				
5	16QAM	1	24	14.29	14.30	14.29				
5	16QAM	12	0	14.49	14.21	14.36				
5	16QAM	12	7	14.27	14.30	14.29				
5	16QAM	12	13	14.48	14.46	14.36				
5	16QAM	25	0	14.29	14.23	14.47				
5	64QAM	1	0	14.47	14.39	14.27				
5	64QAM	1	12	14.44	14.22	14.49				
5	64QAM	1	24	14.58	14.30	14.36				
5	64QAM	12	0	14.19	14.28	14.32				
5	64QAM	12	7	14.40	14.37	14.37				
5	64QAM	12	13	14.28	14.23	14.45				
5	64QAM	25	0	14.31	14.16	14.41				
5	256QAM	1	0	14.33	14.27	14.44				
5	256QAM	1	12	14.47	14.39	14.34				
5	256QAM	1	24	14.49	14.28	14.51				
5	256QAM	12	0	14.53	14.21	14.43				
5	256QAM	12	7	14.33	14.19	14.38				
5	256QAM	12	13	14.32	14.23	14.28				
5	256QAM	25	0	14.30	14.44	14.43				

Band 41 other PA Ant 3 DS16										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2590	2593	2636.5	2680			
20	QPSK	1	0	14.73	14.72	14.89	14.74	14.81	15.5	0
20	QPSK	1	49	14.69	14.76	14.84	14.83	14.82		
20	QPSK	1	99	14.74	14.76	14.81	14.72	14.78		
20	QPSK	50	0	14.61	14.61	14.77	14.69	14.72		
20	QPSK	50	24	14.59	14.66	14.63	14.65	14.66		
20	QPSK	50	50	14.58	14.72	14.64	14.61	14.68		
20	QPSK	100	0	14.40	14.48	14.54	14.40	14.38</		



Band 38 other PA Ant 4 DS16									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				37850	38000	38150			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	0	17.79	17.90	17.82	19	0	
20	QPSK	1	49	17.73	17.79	17.81			
20	QPSK	1	99	17.76	17.78	17.81			
20	QPSK	50	0	17.55	17.82	17.80			
20	QPSK	50	24	17.73	17.65	17.70			
20	QPSK	50	50	17.71	17.70	17.88	19	0	
20	QPSK	100	0	17.42	17.67	17.48			
20	16QAM	1	0	17.58	17.48	17.56			
20	16QAM	1	49	17.62	17.58	17.61			
20	16QAM	1	99	17.35	17.22	17.47			
20	16QAM	50	0	17.52	17.29	17.47			
20	16QAM	50	24	17.35	17.35	17.44	19	0	
20	16QAM	50	50	17.48	17.48	17.46			
20	16QAM	100	0	17.36	17.34	17.41			
20	64QAM	1	0	17.54	17.54	17.37			
20	64QAM	1	49	17.48	17.34	17.58	19	0	
20	64QAM	1	99	17.52	17.36	17.45			
20	64QAM	50	0	17.29	17.40	17.46			
20	64QAM	50	24	17.53	17.31	17.41	19	0	
20	64QAM	50	50	17.40	17.42	17.41			
20	64QAM	100	0	17.29	17.24	17.48			
20	64QAM	100	0	17.43	17.32	17.43			
20	256QAM	1	0	17.34	17.42	17.49			
20	256QAM	1	49	17.45	17.45	17.45	19	0	
20	256QAM	1	99	17.55	17.30	17.51			
20	256QAM	50	0	17.59	17.35	17.39			
20	256QAM	50	24	17.44	17.31	17.49	19	0	
20	256QAM	50	50	17.40	17.32	17.45			
20	256QAM	100	0	17.52	17.44	17.49			
Channel				37825	38000	38175	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				25775	2595	2612.5			
15	QPSK	1	0	17.69	17.78	17.69	19	0	
15	QPSK	1	37	17.62	17.63	17.76			
15	QPSK	1	74	17.64	17.64	17.70			
15	QPSK	36	0	17.50	17.75	17.75			
15	QPSK	36	20	17.68	17.53	17.56	19	0	
15	QPSK	36	39	17.59	17.62	17.53			
15	QPSK	75	0	17.33	17.54	17.37			
15	16QAM	1	0	17.42	17.40	17.52			
15	16QAM	1	37	17.56	17.43	17.55	19	0	
15	16QAM	1	74	17.22	17.15	17.40			
15	16QAM	36	0	17.42	17.19	17.37			
15	16QAM	36	20	17.25	17.31	17.35	19	0	
15	16QAM	36	39	17.33	17.38	17.40			
15	16QAM	75	0	17.23	17.26	17.32			
15	64QAM	1	0	17.46	17.48	17.29			
15	64QAM	1	37	17.33	17.22	17.52	19	0	
15	64QAM	1	74	17.48	17.27	17.34			
15	64QAM	36	0	17.14	17.27	17.35			
15	64QAM	36	20	17.44	17.45	17.27	19	0	
15	64QAM	36	39	17.32	17.38	17.40			
15	64QAM	75	0	17.37	17.36	17.40			
15	64QAM	75	0	17.37	17.28	17.29			
15	256QAM	1	0	17.28	17.29	17.38			
15	256QAM	1	30	17.33	17.35	17.35	19	0	
15	256QAM	1	74	17.48	17.23	17.39			
15	256QAM	36	0	17.49	17.30	17.25			
15	256QAM	36	20	17.36	17.19	17.44	19	0	
15	256QAM	36	39	17.35	17.22	17.37			
15	256QAM	75	0	17.31	17.39	17.37			
Channel				37800	38000	38200	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2575	2595	2615			
10	QPSK	1	0	17.66	17.78	17.76	19	0	
10	QPSK	1	25	17.68	17.67	17.72			
10	QPSK	1	49	17.62	17.69	17.69			
10	QPSK	25	0	17.48	17.78	17.68			
10	QPSK	25	12	17.61	17.56	17.65	19	0	
10	QPSK	25	25	17.65	17.63	17.61			
10	QPSK	50	0	17.31	17.60	17.37			
10	16QAM	1	0	17.46	17.43	17.41			
10	16QAM	1	49	17.48	17.45	17.49	19	0	
10	16QAM	1	99	17.21	17.12	17.34			
10	16QAM	25	0	17.44	17.13	17.36			
10	16QAM	25	12	17.31	17.24	17.30	19	0	
10	16QAM	25	25	17.41	17.36	17.36			
10	16QAM	50	0	17.21	17.30	17.32			
10	64QAM	1	0	17.44	17.41	17.27			
10	64QAM	1	25	17.44	17.27	17.49	19	0	
10	64QAM	1	49	17.39	17.30	17.31			
10	64QAM	25	0	17.25	17.27	17.40			
10	64QAM	25	12	17.41	17.45	17.36	19	0	
10	64QAM	25	25	17.27	17.35	17.37			
10	64QAM	50	0	17.37	17.25	17.31			
10	256QAM	1	0	17.25	17.34	17.40			
10	256QAM	1	25	17.31	17.41	17.31	19	0	
10	256QAM	1	49	17.47	17.19	17.36			
10	256QAM	25	0	17.45	17.28	17.33			
10	256QAM	25	12	17.29	17.19	17.33	19	0	
10	256QAM	25	25	17.34	17.18	17.37			
10	256QAM	50	0	17.42	17.30	17.39			
Channel				37775	38000	38225	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				25725	2595	2617.5			
5	QPSK	1	0	17.74	17.62	17.70	19	0	
5	QPSK	1	12	17.60	17.69	17.66			
5	QPSK	1	24	17.70	17.66	17.68			
5	QPSK	12	0	17.48	17.71	17.74			
5	QPSK	12	7	17.64	17.56	17.62	19	0	
5	QPSK	12	13	17.60	17.61	17.52			
5	QPSK	25	0	17.35	17.57	17.40			
5	16QAM	1	0	17.43	17.33	17.48			
5	16QAM	1	12	17.47	17.55	17.54	19	0	
5	16QAM	1	24	17.21	17.06	17.32			
5	16QAM	12	0	17.38	17.21	17.34			
5	16QAM	12	7	17.21	17.25	17.40	19	0	
5	16QAM	12	13	17.38	17.34	17.33			
5	16QAM	25	0	17.28	17.20	17.30			
5	64QAM	1	0	17.42	17.48	17.25			
5	64QAM	1	12	17.42	17.24	17.53	19	0	
5	64QAM	1	24	17.41	17.30	17.26			
5	64QAM	12	0	17.25	17.32	17.41			
5	64QAM	12	7	17.46	17.40	17.31	19	0	
5	64QAM	12	13	17.35	17.37	17.40			
5	64QAM	25	0	17.28	17.19	17.31			
5	256QAM	1	0	17.25	17.35	17.44			
5	256QAM	1	12	17.31	17.30	17.29	19	0	
5	256QAM	1	24	17.48	17.20	17.35			
5	256QAM	12	0	17.53	17.25	17.31			
5	256QAM	12	7	17.30	17.21	17.36	19	0	
5	256QAM	12	13	17.31	17.27	17.37			
5	256QAM	25	0	17.47	17.29	17.33			

Band 41 other PA Ant 4 DS16									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				39750	40185	40620			
Frequency (MHz)				2506	2549.5	2593			
20	QPSK	1	0	17.66	17.63	17.74	17.65	17.67	
20	QPSK	1	49	17.65	17.68	17.74	17.79	17.77	19
20	QPSK	1	99	17.72	17.66	17.66	17.68	17.68	
20	QPSK	50	0	17.51	17.45	17.71	17.61	17.62	
20	QPSK	50	24	17.60	17.65	17.58	17.61	17.55	
20	QPSK	50	50	17.53	17.56	17.56	17.60	17.65	19
20	QPSK	100	0	17.31	17.33	17.57	17.31	17.28	
20	16QAM	1	0	17.45	17.52	17.35	17.43	17.45	
20	16QAM	1	49	17.65	17.51	17.50	17.42	17.45	19
20	16QAM	1	99	17.25	17.21	17.19	17.32	17.31	
20	16QAM	50							



Band 2 other PA Ant 5 DSI6										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MFR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	20.66	20.66	20.73			21.5	0
20	QPSK	1	49	20.73	20.71	20.71				
20	QPSK	1	99	20.72	20.77	20.70				
20	QPSK	50	0	20.54	20.76	20.61			21.5	0
20	QPSK	24	0	20.67	20.56	20.58				
20	QPSK	50	50	20.68	20.56	20.67				
20	QPSK	100	0	20.36	20.53	20.42				
20	HQAM	1	0	20.69	20.44	20.50			21.5	0
20	HQAM	1	49	20.57	20.49	20.50				
20	HQAM	1	99	20.51	20.24	20.43				
20	HQAM	50	0	20.58	20.26	20.45			21.5	0
20	HQAM	50	24	20.39	20.21	20.27				
20	HQAM	50	50	20.44	20.39	20.43				
20	HQAM	100	0	20.29	20.31	20.24			21.5	0
20	HQAM	1	0	20.47	20.44	20.24				
20	HQAM	1	49	20.41	20.29	20.41			21.5	0
20	HQAM	1	99	20.52	20.32	20.43				
20	HQAM	50	24	20.50	20.26	20.26			21.5	0
20	HQAM	50	50	20.39	20.26	20.46				
20	ZSSBAM	1	0	19.07	18.16	18.16			20	1.5
20	ZSSBAM	1	49	18.99	18.20	18.20				
20	ZSSBAM	1	99	18.93	18.16	18.21			20	1.5
20	ZSSBAM	50	24	19.10	18.08	18.09				
20	ZSSBAM	50	50	18.97	18.23	18.11			20	1.5
20	ZSSBAM	100	0	19.20	18.07	18.07				
Channel										
Frequency (MHz)										
16	QPSK	1	0	20.60	20.76	20.67			21.5	0
16	QPSK	1	37	20.66	20.59	20.66				
16	QPSK	1	74	20.62	20.61	20.64				
16	QPSK	36	0	20.43	20.62	20.53			21.5	0
16	QPSK	20	0	20.14	20.49	20.51				
16	QPSK	36	36	20.51	20.51	20.57				
16	HQAM	1	0	20.47	20.37	20.43			21.5	0
16	HQAM	1	74	20.47	20.36	20.43				
16	HQAM	1	37	20.52	20.39	20.39			21.5	0
16	HQAM	1	74	20.47	20.14	20.14				
16	HQAM	36	0	20.43	20.21	20.32			21.5	0
16	HQAM	36	20	20.22	20.15	20.17				
16	HQAM	36	36	20.25	20.25	20.25				
16	HQAM	75	0	20.25	20.25	20.25			21.5	0
16	HQAM	1	0	20.40	20.32	20.13				
16	HQAM	1	37	20.31	20.32	20.43			21.5	0
16	HQAM	1	74	20.37	20.16	20.32				
16	HQAM	36	0	20.18	20.30	20.27			21.5	0
16	HQAM	36	20	20.28	20.23	20.26				
16	HQAM	36	36	20.22	20.17	20.20			21.5	0
16	HQAM	75	0	20.31	20.12	20.37				
16	ZSSBAM	1	0	18.94	18.07	18.07			20	1.5
16	ZSSBAM	1	37	18.90	18.08	18.09				
16	ZSSBAM	1	74	18.97	18.07	18.04			20	1.5
16	ZSSBAM	36	0	18.98	18.02	18.05				
16	ZSSBAM	36	20	19.00	18.02	18.06			20	1.5
16	ZSSBAM	36	36	19.02	18.17	18.07				
16	ZSSBAM	75	0	19.06	18.93	18.93			20	1.5
Channel										
Frequency (MHz)										
10	QPSK	1	0	20.58	20.73	20.64			21.5	0
10	QPSK	1	25	20.61	20.65	20.67				
10	QPSK	1	49	20.66	20.63	20.64				
10	QPSK	26	0	20.46	20.65	20.57			21.5	0
10	QPSK	25	12	20.61	20.48	20.43				
10	QPSK	25	25	20.59	20.40	20.61				
10	QPSK	50	0	20.24	20.45	20.45			21.5	0
10	HQAM	1	0	20.46	20.34	20.49				
10	HQAM	1	25	20.43	20.40	20.36			21.5	0
10	HQAM	1	49	20.47	20.15	20.33				
10	HQAM	25	0	20.41	20.21	20.29			21.5	0
10	HQAM	25	12	20.16	20.14	20.23				
10	HQAM	25	25	20.14	20.34	20.23				
10	HQAM	50	0	20.19	20.25	20.22			21.5	0
10	HQAM	1	0	20.34	20.35	20.16				
10	HQAM	1	25	20.33	20.13	20.25			21.5	0
10	HQAM	1	49	20.37	20.27	20.28				
10	HQAM	25	0	20.14	20.32	20.23			21.5	0
10	HQAM	25	12	20.27	20.27	20.26				
10	HQAM	25	25	20.25	20.23	20.40			21.5	0
10	HQAM	50	0	20.35	20.12	20.26				
10	ZSSBAM	1	0	18.98	18.08	18.04			20	1.5
10	ZSSBAM	1	25	18.92	18.16	18.06				
10	ZSSBAM	1	49	18.98	18.11	18.76			20	1.5
10	ZSSBAM	25	0	19.02	18.06	18.07				
10	ZSSBAM	25	12	18.96	18.01	18.06			20	1.5
10	ZSSBAM	25	25	19.05	18.14	18.03				
10	ZSSBAM	50	0	18.99	18.01	18.06			20	1.5
Channel										
Frequency (MHz)										
5	QPSK	1	0	20.51	20.71	20.61			21.5	0
5	QPSK	1	12	20.57	20.58	20.73				
5	QPSK	1	24	20.64	20.67	20.64				
5	QPSK	12	0	20.44	20.66	20.63			21.5	0
5	QPSK	12	12	20.59	20.45	20.48				
5	QPSK	12	13	20.61	20.42	20.52				
5	QPSK	25	0	20.26	20.41	20.34			21.5	0
5	HQAM	1	0	20.46	20.34	20.44				
5	HQAM	1	12	20.43	20.45	20.39			21.5	0
5	HQAM	1	24	20.21	20.10	20.24				
5	HQAM	12	0	20.62	20.15	20.40			21.5	0
5	HQAM	12	7	20.23	20.06	20.14				
5	HQAM	12	13	20.32	20.23	20.31			21.5	0
5	HQAM	25	0	20.19	20.18	20.27				
5	HQAM	1	0	20.38	20.32	20.11			21.5	0
5	HQAM	1	12	20.38	20.24	20.29				
5	HQAM	1	24	20.64	20.18	20.27			21.5	0
5	HQAM	12	0	20.21	20.11	20.26				
5	HQAM	12	7	20.39	20.20	20.26			21.5	0
5	HQAM	12	13	20.21	20.18	20.41				
5	HQAM	25	0	20.26	20.16	20.26			21.5	0
5	ZSSBAM	1	0	18.95	18.09	18.05			20	1.5
5	ZSSBAM	1	12	18.92	18.13	18.06				
5	ZSSBAM	1	24	18.96	18.09	18.06			20	1.5
5	ZSSBAM	12	0	18.98	18.99	18.97				
5	ZSSBAM	12	7	19.03	18.01	19.02			20	1.5
5	ZSSBAM	12	13	18.94	18.13	18.02				
5	ZSSBAM	25	0	18.97	18.02	18.06			20	1.5
Channel										
Frequency (MHz)										
3	QPSK	1	0	20.51	20.71	20.54			21.5	0
3	QPSK	1	6	20.67	20.62	20.66				
3	QPSK	1	14	20.63	20.72	20.61				
3	QPSK	6	0	20.43	20.66	20.63			21.5	0
3	QPSK	6	4	20.64	20.52	20.49				
3	QPSK	6	7	20.54	20.50	20.58				
3	QPSK	15	0	20.52	20.44	20.50			21.5	0
3	HQAM	1	0	20.46	20.40	20.43				
3	HQAM	1	6	20.44	20.39	20.29			21.5	0
3	HQAM	1	14	20.24	20.06	20.37				
3	HQAM	6	0	20.51	20.11	20.20			21.5	0
3	HQAM	6	4	20.18	20.16	20.13				
3	HQAM	6	7	20.34	20.26	20.26			21.5	0
3	HQAM	15	0	20.19	20.25	20.19				
3	HQAM	1	0	20.34	20.38	20.11			21.5	0
3	HQAM	1	6	20.29	20.17	20.26				
3	HQAM	1	14	20.38	20.23	20.26			21.5	0
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Band 38 other PA Ant 5 DS16										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	21.71	21.86	21.73	22.5	0		
20	QPSK	1	49	21.70	21.79	21.84				
20	QPSK	1	99	21.76	21.74	21.74				
20	QPSK	50	0	21.56	21.73	21.65				
20	QPSK	50	24	21.62	21.64	21.63				
20	QPSK	50	50	21.70	21.62	21.57				
20	QPSK	100	0	21.44	21.51	21.34				
20	16QAM	1	0	21.53	21.45	21.47				
20	16QAM	1	49	21.65	21.52	21.46				
20	16QAM	1	99	21.24	21.17	21.38				
20	16QAM	50	0	21.51	21.33	21.47				
20	16QAM	50	24	21.33	21.26	21.36				
20	16QAM	50	50	21.45	21.39	21.47				
20	16QAM	100	0	21.28	21.24	21.36				
20	64QAM	1	0	21.43	21.46	21.29				
20	64QAM	1	49	21.47	21.34	21.43				
20	64QAM	1	99	21.56	21.37	21.38				
20	64QAM	50	0	20.69	20.83	20.64				
20	64QAM	50	24	20.57	20.72	20.50				
20	64QAM	50	50	20.70	20.69	20.43				
20	64QAM	100	0	20.69	20.73	20.59				
20	256QAM	1	0	18.68	18.81	18.58				
20	256QAM	1	49	18.80	18.69	18.43				
20	256QAM	1	99	18.71	18.71	18.51				
20	256QAM	50	0	18.87	18.79	18.85				
20	256QAM	50	24	18.64	18.69	18.61				
20	256QAM	50	50	18.57	18.70	18.47				
20	256QAM	100	0	18.61	18.67	18.56				
Channel				37825	38000	38175				
Frequency (MHz)				25775	25925	26125				
15	QPSK	1	0	21.65	21.60	21.69	22.5	0		
15	QPSK	1	37	21.61	21.65	21.70				
15	QPSK	1	74	21.64	21.73	21.60				
15	QPSK	36	0	21.49	21.64	21.51				
15	QPSK	36	20	21.57	21.57	21.52				
15	QPSK	36	39	21.61	21.55	21.51				
15	QPSK	75	0	21.29	21.41	21.25				
15	16QAM	1	0	21.43	21.41	21.40				
15	16QAM	1	37	21.57	21.48	21.36				
15	16QAM	1	74	21.19	21.09	21.28				
15	16QAM	36	0	21.43	21.24	21.35				
15	16QAM	36	20	21.28	21.17	21.31				
15	16QAM	36	39	21.30	21.33	21.35				
15	16QAM	75	0	21.15	21.16	21.24				
15	64QAM	1	0	21.27	21.40	21.13				
15	64QAM	1	37	21.42	21.28	21.33				
15	64QAM	1	74	21.44	21.22	21.26				
15	64QAM	36	0	20.55	20.78	20.58				
15	64QAM	36	20	20.52	20.67	20.45				
15	64QAM	36	39	20.65	20.85	20.29				
15	64QAM	75	0	20.64	20.66	20.48				
15	256QAM	1	0	18.57	18.79	18.52				
15	256QAM	1	37	18.55	18.63	18.40				
15	256QAM	1	74	18.64	18.60	18.37				
15	256QAM	36	0	18.58	18.69	18.56				
15	256QAM	36	20	18.51	18.67	18.54				
15	256QAM	36	39	18.55	18.58	18.35				
15	256QAM	75	0	18.51	18.58	18.48				
Channel				37900	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	21.65	21.61	21.64	22.5	0		
10	QPSK	1	25	21.57	21.63	21.78				
10	QPSK	1	49	21.71	21.68	21.60				
10	QPSK	25	0	21.50	21.63	21.60				
10	QPSK	25	12	21.53	21.50	21.59				
10	QPSK	25	25	21.63	21.50	21.42				
10	QPSK	50	0	21.31	21.39	21.28				
10	16QAM	1	0	21.39	21.40	21.43				
10	16QAM	1	25	21.58	21.38	21.38				
10	16QAM	1	49	21.16	21.09	21.31				
10	16QAM	25	0	21.38	21.22	21.37				
10	16QAM	25	12	21.26	21.15	21.30				
10	16QAM	25	25	21.31	21.32	21.35				
10	16QAM	50	0	21.22	21.13	21.27				
10	64QAM	1	0	21.29	21.32	21.21				
10	64QAM	1	25	21.34	21.23	21.38				
10	64QAM	1	49	21.41	21.22	21.33				
10	64QAM	25	0	20.58	20.74	20.61				
10	64QAM	25	12	20.50	20.58	20.46				
10	64QAM	25	25	20.59	20.66	20.31				
10	64QAM	50	0	20.64	20.69	20.54				
10	256QAM	1	0	18.58	18.79	18.55				
10	256QAM	1	25	18.55	18.60	18.38				
10	256QAM	1	49	18.66	18.68	18.45				
10	256QAM	25	0	18.64	18.72	18.52				
10	256QAM	25	12	18.52	18.66	18.57				
10	256QAM	25	25	18.55	18.65	18.36				
10	256QAM	50	0	18.49	18.57	18.52				
Channel				37775	38000	38225				
Frequency (MHz)				25725	25925	26175				
5	QPSK	1	0	21.65	21.67	21.58	22.5	0		
5	QPSK	1	12	21.62	21.72	21.71				
5	QPSK	1	24	21.68	21.68	21.64				
5	QPSK	12	0	21.50	21.60	21.51				
5	QPSK	12	7	21.53	21.52	21.52				
5	QPSK	12	13	21.65	21.47	21.50				
5	QPSK	25	0	21.39	21.36	21.28				
5	16QAM	1	0	21.45	21.30	21.42				
5	16QAM	1	12	21.60	21.47	21.40				
5	16QAM	1	24	21.17	21.13	21.31				
5	16QAM	12	0	21.40	21.20	21.33				
5	16QAM	12	7	21.21	21.20	21.27				
5	16QAM	12	13	21.39	21.24	21.31				
5	16QAM	25	0	21.22	21.14	21.20				
5	64QAM	1	0	21.30	21.35	21.23				
5	64QAM	1	12	21.43	21.27	21.36				
5	64QAM	1	24	21.48	21.21	21.22				
5	64QAM	12	0	20.56	20.72	20.54				
5	64QAM	12	7	20.54	20.62	20.46				
5	64QAM	12	13	20.67	20.59	20.35				
5	64QAM	25	0	20.60	20.59	20.51				
5	256QAM	1	0	18.65	18.70	18.51				
5	256QAM	1	12	18.53	18.61	18.35				
5	256QAM	1	24	18.57	18.61	18.41				
5	256QAM	12	0	18.57	18.71	18.54				
5	256QAM	12	7	18.58	18.58	18.53				
5	256QAM	12	13	18.55	18.63	18.34				
5	256QAM	25	0	18.57	18.65	18.51				

Band 41 other PA Ant 5 DS16										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				39750	40185	40620				
Frequency (MHz)				2566	2594.5	2636.5				
20	QPSK	1	0	21.55	21.59	21.71	22.5	0		
20	QPSK	1	49	21.59	21.61	21.69				
20	QPSK	1	99	21.54	21.63	21.63				
20	QPSK	50	0	21.44	21.47	21.58				
20	QPSK	50	24	21.49	21.50	21.59				
20	QPSK	50	50	21.47	21.48	21.43				
20	QPSK	100	0	21.30	21.24	21.49				
20	16QAM	1	0	21.45	21.45	21.35				
20	16QAM	1	49	21.56	21.48	21.37				
20	16QAM	1	99	21.12	21.10	21.22				
20	16QAM	50	0	21.31	21.33	21.13				



Full & Default Power Mode

n5 Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				166800	167300	167800			
Frequency (MHz)				834	836.5	839			
20	PI/2 BPSK	1	1	24.91	25.11	25.05			
20	PI/2 BPSK	1	53	24.99	25.16	25.11	25.7	0.0	
20	PI/2 BPSK	1	104	25.04	25.12	25.12			
20	PI/2 BPSK	50	0	24.61	24.77	24.66	25.2	0.5	
20	PI/2 BPSK	50	28	24.99	25.04	25.01	25.7	0.0	
20	PI/2 BPSK	50	56	24.61	24.69	24.68			
20	PI/2 BPSK	100	0	24.58	24.71	24.63	25.2	0.5	
20	QPSK	1	1	25.13	25.21	25.17			
20	QPSK	1	53	24.95	25.01	24.97	25.7	0.0	
20	QPSK	1	104	24.97	25.13	25.11			
20	QPSK	50	0	24.16	24.15	24.16	24.7	1.0	
20	QPSK	50	28	25.01	25.04	24.99	25.7	0.0	
20	QPSK	50	56	24.13	24.18	24.12			
20	QPSK	100	0	24.16	24.25	24.21	24.7	1.0	
20	16QAM	1	1	24.17	24.20	24.19	24.7	1.0	
20	64QAM	1	1	22.60	22.73	22.61	23.2	2.5	
20	256QAM	1	1	20.58	20.71	20.68	21.2	4.5	
Channel				166300	167300	168300			
Frequency (MHz)				831.5	836.5	841.5			
15	QPSK	1	1	24.99	25.12	25.10	25.7	0.0	
Channel				163500	167300	168300			
Frequency (MHz)				829	836.5	844			
10	QPSK	1	1	25.10	25.07	25.07	25.7	0.0	
Channel				165300	167300	169300			
Frequency (MHz)				826.5	836.5	846.5			
5	QPSK	1	1	25.01	25.15	25.04	25.7	0.0	

n26 Ant 0									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				164800	166300	167800			
Frequency (MHz)				824	831.5	839			
20	PI/2 BPSK	1	1	24.97	25.15	25.04			
20	PI/2 BPSK	1	53	24.98	25.16	25.16	25.7	0.0	
20	PI/2 BPSK	1	104	25.12	25.13	25.11			
20	PI/2 BPSK	50	0	24.46	24.55	24.42	25.2	0.5	
20	PI/2 BPSK	50	28	24.93	24.99	24.94	25.7	0.0	
20	PI/2 BPSK	50	56	24.41	24.52	24.42			
20	PI/2 BPSK	100	0	24.57	24.57	24.49	25.2	0.5	
20	QPSK	1	1	25.15	25.19	25.14			
20	QPSK	1	53	25.02	25.05	25.04	25.7	0.0	
20	QPSK	1	104	25.01	25.08	25.09			
20	QPSK	50	0	23.90	24.07	23.90	24.7	1.0	
20	QPSK	50	28	25.00	25.07	24.90	25.7	0.0	
20	QPSK	50	56	23.85	24.03	23.86			
20	QPSK	100	0	23.99	24.03	23.90	24.7	1.0	
20	16QAM	1	1	23.92	23.95	23.92	24.7	1.0	
20	64QAM	1	1	22.63	22.73	22.65	23.2	2.5	
20	256QAM	1	1	20.64	20.66	20.60	21.2	4.5	
Channel				164300	166300	168300			
Frequency (MHz)				821.5	831.5	841.5			
15	QPSK	1	1	25.06	25.07	25.02	25.7	0.0	
Channel				163500	165300	168300			
Frequency (MHz)				819	831.5	844			
10	QPSK	1	1	25.06	25.17	25.03	25.7	0.0	
Channel				163300	166300	169300			
Frequency (MHz)				816.5	831.5	846.5			
5	QPSK	1	1	25.02	25.12	25.03	25.7	0.0	

n5 Ant 1									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				166800	167300	167800			
Frequency (MHz)				834	836.5	839			
20	Pi/2 BPSK	1	1	24.63	24.53	24.51			
20	Pi/2 BPSK	1	53	24.61	24.55	24.53	25.7	0.0	
20	Pi/2 BPSK	1	104	24.53	24.54	24.55			
20	Pi/2 BPSK	50	0	24.15	24.15	24.23	25.2	0.5	
20	Pi/2 BPSK	50	25	24.53	24.49	24.50	25.7	0.0	
20	Pi/2 BPSK	50	56	24.17	24.25	24.19	25.2	0.5	
20	Pi/2 BPSK	100	0	24.12	24.10	24.13			
20	QPSK	1	1	24.64	24.71	24.64			
20	QPSK	1	53	24.63	24.59	24.56	25.7	0.0	
20	QPSK	1	104	24.54	24.59	24.52			
20	QPSK	50	0	23.73	23.77	23.61	24.7	1.0	
20	QPSK	50	25	24.52	24.50	24.51	25.7	0.0	
20	QPSK	50	56	23.80	23.77	23.74	24.7	1.0	
20	QPSK	100	0	23.80	23.91	23.70			
20	16QAM	1	1	23.55	23.62	23.51	24.7	1.0	
20	64QAM	1	1	21.97	22.09	22.03	23.2	2.5	
20	256QAM	1	1	20.05	20.17	20.17	21.2	4.5	
Channel				163300	167300	168300	Tune-up limit	MPR	
Frequency (MHz)				831.5	836.5	841.5	(dBm)	(dB)	
15	QPSK	1	1	24.61	24.65	24.53	25.7	0.0	
Channel				165800	167300	168800	Tune-up limit	MPR	
Frequency (MHz)				829	836.5	844	(dBm)	(dB)	
10	QPSK	1	1	24.58	24.55	24.52	25.7	0.0	
Channel				163300	167300	168300	Tune-up limit	MPR	
Frequency (MHz)				826.5	836.5	846.5	(dBm)	(dB)	
5	QPSK	1	1	24.55	24.58	24.53	25.7	0.0	

n26 Ant 1									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				164600	166300	167800			
Frequency (MHz)				824	831.5	839			
20	Pi/2 BPSK	1	1	24.58	24.54	24.54			
20	Pi/2 BPSK	1	53	24.61	24.53	24.50	25.7	0.0	
20	Pi/2 BPSK	1	104	24.52	24.51	24.53			
20	Pi/2 BPSK	50	0	24.08	24.11	24.16	25.2	0.5	
20	Pi/2 BPSK	50	25	24.50	24.53	24.54	25.7	0.0	
20	Pi/2 BPSK	50	56	24.11	24.17	24.15	25.2	0.5	
20	Pi/2 BPSK	100	0	24.13	24.12	24.07			
20	QPSK	1	1	24.63	24.64	24.62			
20	QPSK	1	53	24.60	24.61	24.58	25.7	0.0	
20	QPSK	1	104	24.57	24.60	24.51			
20	QPSK	50	0	23.71	23.78	23.64	24.7	1.0	
20	QPSK	50	25	24.51	24.61	24.52	25.7	0.0	
20	QPSK	50	56	23.73	23.80	23.69	24.7	1.0	
20	QPSK	100	0	23.76	23.85	23.72			
20	16QAM	1	1	23.55	23.58	23.51	24.7	1.0	
20	64QAM	1	1	22.01	22.05	21.98	23.2	2.5	
20	256QAM	1	1	20.08	20.14	20.10	21.2	4.5	
Channel				164300	166300	168300	Tune-up limit	MPR	
Frequency (MHz)				821.5	831.5	841.5	(dBm)	(dB)	
15	QPSK	1	1	24.56	24.57	24.52	25.7	0.0	
Channel				163900	166300	168800	Tune-up limit	MPR	
Frequency (MHz)				819	831.5	844	(dBm)	(dB)	
10	QPSK	1	1	24.54	24.52	24.57	25.7	0.0	
Channel				163300	166300	169300	Tune-up limit	MPR	
Frequency (MHz)				816.5	831.5	846.5	(dBm)	(dB)	
5	QPSK	1	1	24.59	24.60	24.58	25.7	0.0	



n2 Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)	
				Low Ch. Freq.	Middle Ch. Freq.	High Ch. Freq.			
Channel				374000	376000	378000			
Frequency (MHz)				1870	1890	1910			
40	PI2 BPSK	1	1	23.55	23.65	23.62			
40	PI2 BPSK	1	108	23.59	23.62	23.65	25.0	0.0	
40	PI2 BPSK	1	214	23.58	23.69	23.55			
40	PI2 BPSK	108	0	23.12	23.29	23.19	24.5	0.5	
40	PI2 BPSK	108	54	23.52	23.68	23.69	25.0	0.0	
40	PI2 BPSK	108	108	23.15	23.23	23.19	24.5	0.5	
40	PI2 BPSK	216	0	23.14	23.30	23.20			
40	QPSK	1	1	23.65	23.74	23.68			
40	QPSK	1	108	23.66	23.65	23.66	25.0	0.0	
40	QPSK	1	214	23.53	23.65	23.55			
40	QPSK	108	0	22.63	22.80	22.65	24.0	1.0	
40	QPSK	108	54	23.58	23.61	23.55	25.0	0.0	
40	QPSK	108	108	22.67	22.65	22.66	24.0	1.0	
40	QPSK	216	0	22.70	22.71	22.65			
40	16QAM	1	1	22.48	22.53	22.50	24.0	1.0	
40	16QAM	1	1	20.95	20.97	20.91	22.5	2.5	
40	256QAM	1	1	18.92	18.97	18.95	20.5	4.5	
Channel				375500	376500	376500			
Frequency (MHz)				1867.5	1880	1892.5	(dBm)		
35	QPSK	1	1	23.56	23.60	23.54	25.0	0.0	
Channel				377000	378000	379000			
Frequency (MHz)				1885	1895	1895	(dBm)		
30	QPSK	1	1	23.53	23.71	23.62	25.0	0.0	
Channel				372500	376000	379500			
Frequency (MHz)				1902.5	1890	1897.5	(dBm)		
25	QPSK	1	1	23.53	23.71	23.62	25.0	0.0	
Channel				372000	376000	380000			
Frequency (MHz)				1880	1880	1900	(dBm)		
20	QPSK	1	1	23.51	23.70	23.63	25.0	0.0	
Channel				371500	376000	380500			
Frequency (MHz)				1867.5	1880	1902.5	(dBm)		
15	QPSK	1	1	23.53	23.67	23.65	25.0	0.0	
Channel				371000	378000	381000			
Frequency (MHz)				1865	1865	1895	(dBm)		
10	QPSK	1	1	23.56	23.67	23.62	25.0	0.0	
Channel				370500	376000	381500			
Frequency (MHz)				1892.5	1880	1897.5	(dBm)		
5	QPSK	1	1	23.61	23.60	23.57	25.0	0.0	

n7 Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)	
				Low Ch. Freq.	Middle Ch. Freq.	High Ch. Freq.			
Channel				504000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	PI2 BPSK	1	1	24.26	24.31	24.26			
40	PI2 BPSK	1	108	24.17	24.22	24.26	25.5	0.0	
40	PI2 BPSK	1	214	24.24	24.23	24.21			
40	PI2 BPSK	108	0	23.81	23.83	23.77	25.0	0.5	
40	PI2 BPSK	108	54	24.21	24.29	24.19	25.0	0.0	
40	PI2 BPSK	108	108	23.77	23.81	23.82	25.0	0.5	
40	PI2 BPSK	216	0	23.80	23.80	23.84			
40	QPSK	1	1	24.30	24.36	24.32			
40	QPSK	1	108	24.34	24.25	24.20	25.5	0.0	
40	QPSK	1	214	24.21	24.25	24.25			
40	QPSK	108	0	23.16	23.18	23.22	24.5	1.0	
40	QPSK	108	54	24.21	24.27	24.22	25.5	0.0	
40	QPSK	108	108	23.16	23.17	23.13	24.5	1.0	
40	QPSK	216	0	23.26	23.30	23.24			
40	16QAM	1	1	23.00	23.08	23.02	24.5	1.0	
40	16QAM	1	1	21.42	21.55	21.48	23.0	2.5	
40	256QAM	1	1	19.42	19.43	19.40	21.0	4.5	
Channel				505500	507000	510500			
Frequency (MHz)				2517.5	2535	2552.5	(dBm)		
35	QPSK	1	1	24.16	24.29	24.23	25.5	0.0	
Channel				503000	507000	511000			
Frequency (MHz)				2518	2534	2549	(dBm)		
30	QPSK	1	1	24.18	24.34	24.19	25.5	0.0	
Channel				502500	507000	511500			
Frequency (MHz)				2512	2535	2537.5	(dBm)		
25	QPSK	1	1	24.24	24.29	24.23	25.5	0.0	
Channel				502000	507000	512000			
Frequency (MHz)				2510	2535	2550	(dBm)		
20	PI2 BPSK	1	1	24.17	24.25	24.22	25.5	0.0	
Channel				501500	507000	512500			
Frequency (MHz)				2507.5	2535	2562.5	(dBm)		
15	QPSK	1	1	24.26	24.24	24.26	25.5	0.0	
Channel				501000	507000	513000			
Frequency (MHz)				2499	2535	2565	(dBm)		
10	QPSK	1	1	24.21	24.33	24.27	25.5	0.0	
Channel				500500	507000	513500			
Frequency (MHz)				2492.5	2535	2567.5	(dBm)		
5	QPSK	1	1	24.29	24.29	24.21	25.5	0.0	

n66 Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)	
				Low Ch. Freq.	Middle Ch. Freq.	High Ch. Freq.			
Channel				346000	348000	350000			
Frequency (MHz)				1720	1745	1760			
40	PI2 BPSK	1	1	24.26	24.30	24.29			
40	PI2 BPSK	1	108	24.28	24.42	24.29	25.5	0.0	
40	PI2 BPSK	1	214	24.28	24.41	24.32			
40	PI2 BPSK	108	0	23.86	23.93	23.90	25.0	0.5	
40	PI2 BPSK	108	54	24.30	24.36	24.32	25.0	0.0	
40	PI2 BPSK	108	108	23.84	23.84	23.90	25.0	0.5	
40	PI2 BPSK	216	0	23.82	23.96	23.93			
40	QPSK	1	1	24.37	24.48	24.41			
40	QPSK	1	108	24.35	24.40	24.29	25.5	0.0	
40	QPSK	1	214	24.27	24.40	24.31			
40	QPSK	108	0	23.30	23.31	23.36	24.5	1.0	
40	QPSK	108	54	24.35	24.41	24.31	25.5	0.0	
40	QPSK	108	108	23.30	23.32	23.25	24.5	1.0	
40	QPSK	216	0	23.40	23.45	23.38			
40	16QAM	1	1	23.11	23.17	23.12	24.5	1.0	
40	16QAM	1	1	21.58	21.65	21.61	23.0	2.5	
40	256QAM	1	1	19.52	19.53	19.50	21.0	4.5	
Channel				345500	348000	352000			
Frequency (MHz)				1727.5	1745	1762.5	(dBm)		
35	QPSK	1	1	24.27	24.34	24.35	25.5	0.0	
Channel				345000	348000	353000			
Frequency (MHz)				1725	1745	1765	(dBm)		
30	QPSK	1	1	24.31	24.43	24.38	25.5	0.0	
Channel				344500	348000	353500			
Frequency (MHz)				1722.5	1745	1767.5	(dBm)		
25	QPSK	1	1	24.23	24.40	24.23	25.5	0.0	
Channel				344000	348000	354000			
Frequency (MHz)				1720	1745	1770	(dBm)		
20	QPSK	1	1	24.42	24.41	24.41	25.5	0.0	
Channel				343500	348000	354500			
Frequency (MHz)				1717.5	1745	1772.5	(dBm)		
15	QPSK	1	1	24.31	24.42	24.30	25.5	0.0	
Channel				343000	348000	355000			
Frequency (MHz)				1715	1745	1775	(dBm)		
10	QPSK	1	1	24.26	24.42	24.33	25.5	0.0	
Channel				342500	348000	355500			
Frequency (MHz)				1712.5	1745	1777.5	(dBm)		
5	QPSK	1	1	24.29	24.35	24.33	25.5	0.0	



n2 Ant 3									
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)	
				Low Ch. Freq.	Middle Ch. Freq.	High Ch. Freq.			
Channel				376000	376000	376000			
Frequency (MHz)				1870	1880	1890			
40	PI2 BPSK	1	1	24.60	24.62	24.68			
40	PI2 BPSK	1	108	24.60	24.59	24.55	25.5	0.0	
40	PI2 BPSK	1	214	24.63	24.58	24.58			
40	PI2 BPSK	108	0	24.19	24.15	24.20	25.0	0.5	
40	PI2 BPSK	108	54	24.61	24.60	24.62	25.5	0.0	
40	PI2 BPSK	108	108	24.21	24.15	24.18	25.0	0.5	
40	PI2 BPSK	216	0	24.20	24.13	24.16			
40	QPSK	1	1	24.66	24.69	24.65			
40	QPSK	1	108	24.56	24.64	24.57	25.5	0.0	
40	QPSK	1	214	24.60	24.67	24.62			
40	QPSK	108	0	23.55	23.62	23.54	24.5	1.0	
40	QPSK	108	54	24.48	24.51	24.45	25.5	0.0	
40	QPSK	108	108	23.47	23.50	23.48	24.5	1.0	
40	QPSK	216	0	23.60	23.64	23.58			
40	16QAM	1	1	23.42	23.46	23.40	24.5	1.0	
40	16QAM	1	1	21.88	21.95	21.91	23.0	2.5	
40	256QAM	1	1	19.78	19.82	19.80	21.0	4.5	
Channel				379500	379500	379500			
Frequency (MHz)				1867.5	1880	1892.5			
35	QPSK	1	1	24.62	24.62	24.54	25.5	0.0	
Channel				379000	379000	379000			
Frequency (MHz)				1868	1868	1868			
30	QPSK	1	1	24.63	24.59	24.57	25.5	0.0	
Channel				372500	376000	379500			
Frequency (MHz)				1862.5	1868	1873.5			
25	QPSK	1	1	24.57	24.59	24.57	25.5	0.0	
Channel				370000	376000	380000			
Frequency (MHz)				1860	1880	1900			
20	QPSK	1	1	24.62	24.62	24.52	25.5	0.0	
Channel				370500	376000	380500			
Frequency (MHz)				1867.5	1880	1902.5			
15	QPSK	1	1	24.52	24.63	24.61	25.5	0.0	
Channel				371000	376000	381000			
Frequency (MHz)				1865	1880	1895			
10	QPSK	1	1	24.60	24.62	24.58	25.5	0.0	
Channel				370500	376000	381500			
Frequency (MHz)				1862.5	1880	1897.5			
5	QPSK	1	1	24.63	24.60	24.62	25.5	0.0	

n7 Ant 3									
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)	
				Low Ch. Freq.	Middle Ch. Freq.	High Ch. Freq.			
Channel				504000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	PI2 BPSK	1	1	25.13	25.20	25.07			
40	PI2 BPSK	1	108	25.15	25.13	25.22	25.7	0.0	
40	PI2 BPSK	1	214	25.14	25.20	25.17			
40	PI2 BPSK	108	0	24.77	24.71	24.73	25.2	0.5	
40	PI2 BPSK	108	54	25.27	25.28	25.16	25.7	0.0	
40	PI2 BPSK	108	108	24.69	24.77	24.81	25.2	0.5	
40	PI2 BPSK	216	0	24.77	24.83	24.73			
40	QPSK	1	1	25.23	25.34	25.26			
40	QPSK	1	108	25.10	25.20	25.19	25.7	0.0	
40	QPSK	1	214	25.19	25.15	25.20			
40	QPSK	108	0	24.18	24.21	24.06	24.7	1.0	
40	QPSK	108	54	25.22	25.23	25.20	25.7	0.0	
40	QPSK	108	108	24.08	24.31	24.20	24.7	1.0	
40	QPSK	216	0	24.16	24.20	24.18			
40	16QAM	1	1	24.03	24.05	24.07	24.7	1.0	
40	16QAM	1	1	22.44	22.55	22.50	23.2	2.5	
40	256QAM	1	1	20.40	20.35	20.30	21.2	4.5	
Channel				509500	507000	510500			
Frequency (MHz)				2517.5	2535	2552.5			
35	QPSK	1	1	25.13	25.22	25.15	25.7	0.0	
Channel				509000	507000	511000			
Frequency (MHz)				2518	2535	2555			
30	QPSK	1	1	25.18	25.24	25.22	25.7	0.0	
Channel				502500	507000	511500			
Frequency (MHz)				2512.5	2535	2557.5			
25	QPSK	1	1	25.17	25.29	25.19	25.7	0.0	
Channel				500000	507000	512000			
Frequency (MHz)				2510	2535	2550			
20	PI2 BPSK	1	1	25.17	25.31	25.20	25.7	0.0	
Channel				501500	507000	512500			
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	1	25.14	25.25	25.20	25.7	0.0	
Channel				501000	507000	513000			
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	1	25.21	25.22	25.18	25.7	0.0	
Channel				500500	507000	513500			
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	1	25.11	25.32	25.10	25.7	0.0	

n66 Ant 3									
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)	
				Low Ch. Freq.	Middle Ch. Freq.	High Ch. Freq.			
Channel				346000	348000	350000			
Frequency (MHz)				1720	1745	1760			
40	PI2 BPSK	1	1	25.16	25.23	25.24			
40	PI2 BPSK	1	108	25.12	25.19	25.20	25.7	0.0	
40	PI2 BPSK	1	214	25.09	25.27	25.20			
40	PI2 BPSK	108	0	24.68	24.76	24.70	25.2	0.5	
40	PI2 BPSK	108	54	25.18	25.27	25.14	25.7	0.0	
40	PI2 BPSK	108	108	24.72	24.84	24.75	25.2	0.5	
40	PI2 BPSK	216	0	24.72	24.81	24.72			
40	QPSK	1	1	25.21	25.31	25.26			
40	QPSK	1	108	25.14	25.18	25.15	25.7	0.0	
40	QPSK	1	214	25.07	25.23	25.21			
40	QPSK	108	0	24.12	24.18	24.10	24.7	1.0	
40	QPSK	108	54	25.12	25.18	25.15	25.7	0.0	
40	QPSK	108	108	24.08	24.20	24.11	24.7	1.0	
40	QPSK	216	0	24.18	24.25	24.21			
40	16QAM	1	1	23.88	23.94	23.84	24.7	1.0	
40	16QAM	1	1	22.45	22.52	22.48	23.2	2.5	
40	256QAM	1	1	20.42	20.47	20.40	21.2	4.5	
Channel				345500	348000	350500			
Frequency (MHz)				1727.5	1745	1762.5			
35	QPSK	1	1	25.10	25.22	25.21	25.7	0.0	
Channel				345000	348000	353000			
Frequency (MHz)				1725	1745	1765			
30	QPSK	1	1	25.13	25.17	25.16	25.7	0.0	
Channel				344500	348000	353500			
Frequency (MHz)				1722.5	1745	1767.5			
25	QPSK	1	1	25.07	25.20	25.18	25.7	0.0	
Channel				344000	348000	354000			
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	25.13	25.27	25.22	25.7	0.0	
Channel				343500	348000	354500			
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	25.14	25.19	25.16	25.7	0.0	
Channel				343000	348000	355000			
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	1	25.11	25.25	25.21	25.7	0.0	
Channel				342500	348000	355500			
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	25.15	25.22	25.23	25.7	0.0	

n7 Ant 5									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				504000	507000	510000			
Frequency (MHz)				250	250	250			
40	PI/2 BPSK	1	1	24.13	24.19	24.16			
40	PI/2 BPSK	1	108	24.07	24.20	24.21	25.5	0.0	
40	PI/2 BPSK	1	214	24.15	24.23	24.15			
40	PI/2 BPSK	108	0	23.63	23.74	23.88	25.0	0.5	
40	PI/2 BPSK	108	54	24.09	24.26	24.19	25.5	0.0	
40	PI/2 BPSK	108	108	23.72	23.74	23.78	25.0	0.5	
40	PI/2 BPSK	216	0	23.70	23.80	23.79			
40	QPSK	1	1	24.18	24.28	24.24			
40	QPSK	1	108	24.06	24.21	24.17	25.5	0.0	
40	QPSK	1	214	24.13	24.15	24.21			
40	QPSK	108	0	23.09	23.14	23.01	24.5	1.0	
40	QPSK	108	54	24.10	24.15	24.08	25.5	0.0	
40	QPSK	108	108	23.09	23.12	23.09	24.5	1.0	
40	QPSK	216	0	23.13	23.18	23.15			
40	16QAM	1	1	22.88	22.93	22.85	24.5	1.0	
40	64QAM	1	1	21.50	21.54	21.49	23.0	2.5	
40	256QAM	1	1	19.38	19.44	19.42	21.0	4.5	
Channel				503500	507000	510500	Tune-up limit	MPR	
Frequency (MHz)				2517.5	2538	2552.5	(dBm)	(dB)	
35	QPSK	1	1	24.12	24.23	24.13	25.5	0.0	
Channel				503000	507000	511000	Tune-up limit	MPR	
Frequency (MHz)				2515	2535	2555	(dBm)	(dB)	
30	QPSK	1	1	24.10	24.20	24.10	25.5	0.0	
Channel				502500	507000	511500	Tune-up limit	MPR	
Frequency (MHz)				2512.5	2535	2557.5	(dBm)	(dB)	
25	QPSK	1	1	24.09	24.19	24.20	25.5	0.0	
Channel				502000	507000	512000	Tune-up limit	MPR	
Frequency (MHz)				2210	2535	2550	(dBm)	(dB)	
20	PI/2 BPSK	1	1	24.05	24.17	24.19	25.5	0.0	
Channel				501500	507000	512500	Tune-up limit	MPR	
Frequency (MHz)				2507.5	2535	2562.5	(dBm)	(dB)	
15	QPSK	1	1	24.15	24.25	24.20	25.5	0.0	
Channel				501000	507000	513000	Tune-up limit	MPR	
Frequency (MHz)				2505	2535	2565	(dBm)	(dB)	
10	QPSK	1	1	24.05	24.24	24.18	25.5	0.0	
Channel				500500	507000	513500	Tune-up limit	MPR	
Frequency (MHz)				2502.5	2535	2567.5	(dBm)	(dB)	
5	QPSK	1	1	24.10	24.17	24.12	25.5	0.0	

n66 Ant 5									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				346000	349000	352000			
Frequency (MHz)				1730	1745	1750			
40	PI/2 BPSK	1	1	24.31	24.27	24.26			
40	PI/2 BPSK	1	108	24.26	24.34	24.21	25.5	0.0	
40	PI/2 BPSK	1	214	24.26	24.25	24.20			
40	PI/2 BPSK	108	0	23.83	23.93	23.80	25.0	0.5	
40	PI/2 BPSK	108	54	24.34	24.34	24.26	25.5	0.0	
40	PI/2 BPSK	108	108	23.88	23.93	23.84	25.0	0.5	
40	PI/2 BPSK	216	0	23.84	23.88	23.79			
40	QPSK	1	1	24.37	24.39	24.33			
40	QPSK	1	108	24.30	24.29	24.30	25.5	0.0	
40	QPSK	1	214	24.25	24.35	24.30			
40	QPSK	108	0	23.11	23.28	23.25	24.5	1.0	
40	QPSK	108	54	24.25	24.31	24.25	25.5	0.0	
40	QPSK	108	108	23.19	23.25	23.24	24.5	1.0	
40	QPSK	216	0	23.25	23.36	23.31			
40	16QAM	1	1	23.11	23.18	23.13	24.5	1.0	
40	64QAM	1	1	21.57	21.65	21.61	23.0	2.5	
40	256QAM	1	1	19.40	19.56	19.45	21.0	4.5	
Channel				345500	349000	352500	Tune-up limit	MPR	
Frequency (MHz)				1727.5	1745	1762.5	(dBm)	(dB)	
35	QPSK	1	1	24.25	24.33	24.30	25.5	0.0	
Channel				345000	349000	353000	Tune-up limit	MPR	
Frequency (MHz)				1725	1745	1765	(dBm)	(dB)	
30	QPSK	1	1	24.33	24.34	24.21	25.5	0.0	
Channel				344500	349000	353500	Tune-up limit	MPR	
Frequency (MHz)				1722.5	1745	1767.5	(dBm)	(dB)	
25	QPSK	1	1	24.35	24.27	24.23	25.5	0.0	
Channel				344000	349000	354000	Tune-up limit	MPR	
Frequency (MHz)				1720	1745	1770	(dBm)	(dB)	
20	QPSK	1	1	24.31	24.31	24.23	25.5	0.0	
Channel				343500	349000	354500	Tune-up limit	MPR	
Frequency (MHz)				1717.5	1745	1772.5	(dBm)	(dB)	
15	QPSK	1	1	24.28	24.28	24.20	25.5	0.0	
Channel				343000	349000	355000	Tune-up limit	MPR	
Frequency (MHz)				1715	1745	1775	(dBm)	(dB)	
10	QPSK	1	1	24.34	24.32	24.25	25.5	0.0	
Channel				342500	349000	355500	Tune-up limit	MPR	
Frequency (MHz)				1712.5	1745	1777.5	(dBm)	(dB)	
5	QPSK	1	1	24.27	24.35	24.22	25.5	0.0	



n38 Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2590.02	2595	2599.98			
40	PI2 BPSK	1	1	24.15	24.12	24.16			
40	PI2 BPSK	1	53	24.15	24.09	24.15		0.0	
40	PI2 BPSK	1	164	24.20	24.15	24.13			
40	PI2 BPSK	50	0	23.65	23.76	23.82	25.0	0.5	
40	PI2 BPSK	50	28	24.19	24.06	24.15	25.5	0.0	
40	PI2 BPSK	50	58	23.76	23.77	23.72	25.0	0.5	
40	PI2 BPSK	100	0	23.76	23.76	23.76			
40	QPSK	1	1	24.21	24.28	24.27			
40	QPSK	1	53	24.21	24.25	24.19	25.5	0.0	
40	QPSK	1	104	24.22	24.18	24.06			
40	QPSK	50	0	22.91	22.98	22.89	24.5	1.0	
40	QPSK	50	28	23.96	24.02	23.99	25.5	0.0	
40	QPSK	50	58	22.83	22.97	22.88	24.5	1.0	
40	QPSK	100	0	22.95	23.05	23.00			
40	16QAM	1	1	22.86	22.87	22.81	24.5	1.0	
40	16QAM	1	1	21.34	21.53	21.37	23.0	2.5	
40	256QAM	1	1	19.37	19.44	19.39	21.0	4.5	
Channel									
Frequency (MHz)				5170.02	5180.00	5200.98			
Channel				2595.01	2595	2604.99			
30	QPSK	1	1	24.10	24.16	24.17	25.5	0.0	
Channel									
Frequency (MHz)				5165.04	5190.00	5214.98			
Channel				2592.52	2595	2607.48			
25	QPSK	1	1	24.16	24.20	24.19	25.5	0.0	
Channel									
Frequency (MHz)				5160.00	5190.00	5220.00			
Channel				2580	2595	2610			
20	QPSK	1	1	24.17	24.18	24.22	25.5	0.0	
Channel									
Frequency (MHz)				5155.02	5190.00	5224.98			
Channel				2577.51	2595	2612.49			
15	QPSK	1	1	24.10	24.25	24.19	25.5	0.0	
Channel									
Frequency (MHz)				5160.04	5190.00	5229.98			
Channel				2575.02	2595	2614.98			
10	QPSK	1	1	24.12	24.23	24.19	25.5	0.0	

n41 Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	23.78	23.88	23.81			
100	PI2 BPSK	1	137	23.77	23.91	23.80	25.5	0.0	
100	PI2 BPSK	1	271	23.82	23.87	23.85			
100	PI2 BPSK	135	0	23.41	23.49	23.38	25.0	0.5	
100	PI2 BPSK	135	69	23.83	23.96	23.86	25.5	0.0	
100	PI2 BPSK	135	138	23.33	23.45	23.37	25.0	0.5	
100	PI2 BPSK	270	0	23.32	23.44	23.40			
100	QPSK	1	1	23.87	23.98	23.92			
100	QPSK	1	137	23.79	23.87	23.81	25.5	0.0	
100	QPSK	1	271	23.82	23.86	23.87			
100	QPSK	135	0	23.66	23.82	23.66	24.5	1.0	
100	QPSK	135	69	23.88	23.90	23.81	25.5	0.0	
100	QPSK	135	138	23.67	23.81	23.75	24.5	1.0	
100	QPSK	270	0	23.76	23.84	23.78			
100	16QAM	1	1	23.70	23.79	23.72	24.5	1.0	
100	16QAM	1	1	22.69	22.76	22.74	23.0	2.5	
100	256QAM	1	1	20.85	20.91	20.88	21.0	4.5	
Channel									
Frequency (MHz)				5032.00	5185.98	5339.98			
Channel				2541	2592.99	2644.98			
90	QPSK	1	1	23.84	23.86	23.85	25.5	0.0	
Channel									
Frequency (MHz)				5072.04	5185.98	5299.98			
Channel				2532.02	2592.99	2649.99			
80	QPSK	1	1	23.77	23.92	23.82	25.5	0.0	
Channel									
Frequency (MHz)				5052.02	5185.98	5310.00			
Channel				2531.01	2592.99	2655			
70	QPSK	1	1	23.85	23.89	23.89	25.5	0.0	
Channel									
Frequency (MHz)				5052.00	5185.98	5319.98			
Channel				2530	2592.99	2659.99			
60	QPSK	1	1	23.74	23.94	23.87	25.5	0.0	
Channel									
Frequency (MHz)				5042.04	5185.98	5329.98			
Channel				2521.02	2592.99	2664.99			
50	QPSK	1	1	23.76	23.89	23.81	25.5	0.0	
Channel									
Frequency (MHz)				5032.02	5185.98	5340.00			
Channel				2516.01	2592.99	2670			
40	QPSK	1	1	23.83	23.90	23.88	25.5	0.0	
Channel									
Frequency (MHz)				5022.00	5185.98	5349.98			
Channel				2511	2592.99	2674.98			
30	QPSK	1	1	23.89	23.93	23.83	25.5	0.0	
Channel									
Frequency (MHz)				5017.02	5185.98	5350.00			
Channel				2508.51	2592.99	2677.5			
25	QPSK	1	1	23.75	23.91	23.87	25.5	0.0	
Channel									
Frequency (MHz)				5012.04	5185.98	5359.98			
Channel				2506.02	2592.99	2679.99			
20	QPSK	1	1	23.74	23.89	23.82	25.5	0.0	
Channel									
Frequency (MHz)				5007.00	5185.98	5369.98			
Channel				2503.5	2592.99	2682.48			
15	QPSK	1	1	23.77	23.88	23.84	25.5	0.0	
Channel									
Frequency (MHz)				5002.02	5185.98	5370.00			
Channel				2501.01	2592.99	2685			
10	QPSK	1	1	23.79	23.85	23.84	25.5	0.0	

n41 HPUE Ant 2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	24.81	24.94	24.88			
100	PI2 BPSK	1	137	24.75	25.01	24.83	26.5	0.0	
100	PI2 BPSK	1	271	24.78	24.93	24.91			
100	PI2 BPSK	135	0	24.39	24.50	24.39	26.0	0.5	
100	PI2 BPSK	135	69	24.77	24.92	24.82	26.5	0.0	
100	PI2 BPSK	135	138	24.33	24.52	24.38	26.0	0.5	
100	PI2 BPSK	270	0	24.36	24.48	24.42			
100	QPSK	1	1	24.85	25.03	24.93			
100	QPSK	1	137	24.74	24.90	24.80	26.5	0.0	
100	QPSK	1	271	24.75	24.95	24.86			
100	QPSK	135	0	24.32	24.29	24.26	25.5	1.0	
100	QPSK	135	69	24.78	24.82	24.76	26.5	0.0	
100	QPSK	135	138	24.32	24.31	24.32	25.5	1.0	
100	QPSK	270	0	24.38	24.41	24.35			
100	16QAM	1	1	24.32	24.33	24.28	25.5	1.0	
100	16QAM	1	1	22.76	22.83	22.79	24.0	2.5	
100	256QAM	1	1	20.38	20.43	20.35	22.0	4.5	
Channel									
Frequency (MHz)				5032.00	5185.98	5339.98			
Channel				2541	2592.99	2644.98			
90	QPSK	1	1	24.82	24.95	24.90	26.5	0.0	
Channel									
Frequency (MHz)				5072.04	5185.98	5299.98			
Channel				2532.02	2592.99	2649.99			
80	QPSK	1	1	24.71	24.99	24.91	26.5	0.0	
Channel									
Frequency (MHz)				5052.02	5185.98	5310.00			
Channel				2531.01	2592.99	2655			
70	QPSK	1	1	24.72	25.00	24.82	26.5	0.0	
Channel									
Frequency (MHz)				5052.00	5185.98	5319.98			
Channel				2530	2592.99	2659.99			
60	QPSK	1	1	24.71	24.90	24.89	26.5	0.0	
Channel									
Frequency (MHz)				5042.04	5185.98	5329.98			
Channel				2521.02	2592.99	2664.99			
50	QPSK	1	1	24.78	24.94	24.90	26.5	0.0	
Channel									
Frequency (MHz)				5032.02	5185.98	5340.00			
Channel				2516.01	2592.99	2670			
40	QPSK	1	1	24.77	25.00	24.79	26.5	0.0	
Channel									
Frequency (MHz)				5022.00	5185.98	5349.98			
Channel				2511	2592.99	2674.98			
30	QPSK	1	1	24.79	24.90	24.82	26.5	0.0	
Channel									
Frequency (MHz)				5017.02	5185.98	5350.00			
Channel				2508.51	2592.99	2677.5			
25	QPSK	1	1	24.82	24.95	24.89	26.5	0.0	
Channel									
Frequency (MHz)				5012.04	5185.98	5359.98			
Channel				2506.02	2592.99	2679.99			
20	QPSK	1	1	24.75	25.01	24.82	26.5	0.0	
Channel									
Frequency (MHz)				5007.00	5185.98	5369.98			
Channel				2503.5	2592.99	2682.48			
15	QPSK	1	1	24.78	24.91	24.81	26.5	0.0	



n38 Ant 3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				51904	51900	51998			
40	PI2 BPSK	1	1	25.26	25.30	25.19			
40	PI2 BPSK	1	53	25.18	25.26	25.17			0.0
40	PI2 BPSK	1	164	25.30	25.29	25.22			
40	PI2 BPSK	50	0	24.85	24.88	24.88	25.7	0.5	
40	PI2 BPSK	50	28	25.28	25.29	25.15	25.7	0.0	
40	PI2 BPSK	50	58	24.91	24.84	24.87	25.2	0.5	
40	PI2 BPSK	100	0	24.86	24.91	24.83			
40	QPSK	1	1	25.35	25.37	25.30			
40	QPSK	1	53	25.21	25.25	25.21	25.7	0.0	
40	QPSK	1	104	25.27	25.35	25.24			
40	QPSK	50	0	24.00	24.17	24.09	24.7	1.0	
40	QPSK	50	28	25.17	25.23	25.20	25.7	0.0	
40	QPSK	50	58	24.20	24.13	24.18	24.7	1.0	
40	QPSK	100	0	24.13	24.24	24.18			
40	16QAM	1	1	24.04	24.05	24.01	24.7	1.0	
40	16QAM	1	1	22.63	22.71	22.58	23.2	2.5	
40	256QAM	1	1	20.63	20.62	20.51	21.2	4.5	
Channel									
Frequency (MHz)				51702	51900	52098	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	25.24	25.30	25.25	25.7	0.0	
Channel									
Frequency (MHz)				516504	519000	521496	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	25.25	25.34	25.24	25.7	0.0	
Channel									
Frequency (MHz)				516500	519000	522000	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	25.21	25.32	25.28	25.7	0.0	
Channel									
Frequency (MHz)				515502	519000	522498	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	25.32	25.29	25.27	25.7	0.0	
Channel									
Frequency (MHz)				516004	519000	522998	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	25.28	25.28	25.28	25.7	0.0	

n41 Ant 3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	25.22	25.29	25.19			
100	PI2 BPSK	1	137	25.27	25.24	25.29	25.7	0.0	
100	PI2 BPSK	1	271	25.16	25.20	25.28			
100	PI2 BPSK	135	0	25.22	25.23	25.18	25.7	0.0	
100	PI2 BPSK	135	69	25.16	25.28	25.30	25.7	0.0	
100	PI2 BPSK	135	138	25.22	25.22	25.24	25.7	0.0	
100	PI2 BPSK	270	0	25.21	25.20	25.30			
100	QPSK	1	1	25.29	25.33	25.22			
100	QPSK	1	137	25.19	25.20	25.20	25.7	0.0	
100	QPSK	1	271	25.20	25.28	25.19			
100	QPSK	135	0	25.19	25.20	25.21	25.7	0.0	
100	QPSK	135	69	25.22	25.30	25.27	25.7	0.0	
100	QPSK	135	138	25.21	25.29	25.27	25.7	0.0	
100	QPSK	270	0	25.16	25.23	25.21			
100	16QAM	1	1	25.19	25.18	25.31	25.7	0.0	
100	16QAM	1	1	23.68	23.76	23.81	24.2	1.5	
100	256QAM	1	1	21.68	21.72	21.72	22.2	3.5	
Channel									
Frequency (MHz)				508200	518598	528996	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	25.19	25.21	25.29	25.7	0.0	
Channel									
Frequency (MHz)				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	25.24	25.24	25.23	25.7	0.0	
Channel									
Frequency (MHz)				505202	518598	531000	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	25.22	25.29	25.28	25.7	0.0	
Channel									
Frequency (MHz)				505200	518598	531998	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	25.18	25.31	25.29	25.7	0.0	
Channel									
Frequency (MHz)				504204	518598	532998	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	25.19	25.25	25.30	25.7	0.0	
Channel									
Frequency (MHz)				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	25.25	25.22	25.18	25.7	0.0	
Channel									
Frequency (MHz)				502200	518598	534998	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	25.22	25.20	25.20	25.7	0.0	
Channel									
Frequency (MHz)				501702	518598	535500	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	25.16	25.24	25.23	25.7	0.0	
Channel									
Frequency (MHz)				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	25.28	25.20	25.20	25.7	0.0	
Channel									
Frequency (MHz)				500700	518598	536498	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	25.24	25.29	25.20	25.7	0.0	
Channel									
Frequency (MHz)				500202	518598	537000	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	25.20	25.24	25.27	25.7	0.0	

n41 HPUE Ant 3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	26.21	26.22	26.29			
100	PI2 BPSK	1	137	26.20	26.24	26.22	27.0	0.0	
100	PI2 BPSK	1	271	26.18	26.29	26.19			
100	PI2 BPSK	135	0	25.76	25.90	25.82	26.5	0.5	
100	PI2 BPSK	135	69	26.15	26.24	26.22	27.0	0.0	
100	PI2 BPSK	135	138	25.74	25.84	25.81	26.5	0.5	
100	PI2 BPSK	270	0	25.75	25.89	25.85			
100	QPSK	1	1	26.27	26.35	26.33			
100	QPSK	1	137	26.22	26.23	26.20	27.0	0.0	
100	QPSK	1	271	26.18	26.24	26.21			
100	QPSK	135	0	25.21	25.31	25.29	26.0	1.0	
100	QPSK	135	69	26.22	26.32	26.29	27.0	0.0	
100	QPSK	135	138	25.21	25.33	25.34	26.0	1.0	
100	QPSK	270	0	25.30	25.38	25.29			
100	16QAM	1	1	25.22	25.30	25.38	26.0	1.0	
100	16QAM	1	1	23.81	23.87	23.84	24.5	2.5	
100	256QAM	1	1	21.78	21.85	21.81	22.5	4.5	
Channel									
Frequency (MHz)				503200	518598	528996	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	26.23	26.24	26.24	27.0	0.0	
Channel									
Frequency (MHz)				502204	518598	529998	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	26.14	26.22	26.29	27.0	0.0	
Channel									
Frequency (MHz)				500202	518598	531000	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	26.13	26.21	26.29	27.0	0.0	
Channel									
Frequency (MHz)				500200	518598	531998	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	26.25	26.22	26.23	27.0	0.0	
Channel									
Frequency (MHz)				504204	518598	532998	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	26.17	26.31	26.23	27.0	0.0	
Channel									
Frequency (MHz)				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	26.15	26.21	26.24	27.0	0.0	
Channel									
Frequency (MHz)				502200	518598	534998	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	26.19	26.29	26.21	27.0	0.0	
Channel									
Frequency (MHz)				501702	518598	535500	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	26.19	26.27	26.24	27.0	0.0	
Channel									
Frequency (MHz)				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	26.22	26.29	26.31	27.0	0.0	
Channel									
Frequency (MHz)				500700	518598	536498	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	26.15	26.27	26.28	27.0	0.0	
Channel									
Frequency (MHz)				500202	518598	537000	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	26.25	26.32	26.30	27.0	0.0	



n38 Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				518004	518000	518998			
Frequency (MHz)				2500.02	2595	2599.98			
40	PI2 BPSK	1	1	23.24	23.41	23.40			
40	PI2 BPSK	1	53	23.25	23.36	23.33		0.0	
40	PI2 BPSK	1	164	23.30	23.43	23.31			
40	PI2 BPSK	50	0	22.87	23.02	22.91	24.0	0.5	
40	PI2 BPSK	50	28	23.28	23.43	23.40	24.5	0.0	
40	PI2 BPSK	50	58	22.83	22.91	22.93	24.0	0.5	
40	PI2 BPSK	100	0	22.82	22.91	22.89			
40	QPSK	1	1	23.36	23.46	23.44			
40	QPSK	1	53	23.28	23.35	23.38	24.5	0.0	
40	QPSK	1	104	23.33	23.39	23.35			
40	QPSK	50	0	22.25	22.29	22.13	23.5	1.0	
40	QPSK	50	28	23.20	23.24	23.18	24.5	0.0	
40	QPSK	50	58	22.16	22.23	22.19	23.5	1.0	
40	QPSK	100	0	22.28	22.32	22.25			
40	16QAM	1	1	22.11	22.16	22.10	23.5	1.0	
40	16QAM	1	1	20.65	20.72	20.68	22.0	2.5	
40	256QAM	1	1	18.68	18.89	18.62	20.0	4.5	
Channel				518005	518000	520998			
Frequency (MHz)				2585.01	2595	2604.99			
30	QPSK	1	1	23.28	23.41	23.39	24.5	0.0	
Channel				516504	518000	521498			
Frequency (MHz)				2582.42	2595	2607.48			
25	QPSK	1	1	23.24	23.37	23.30	24.5	0.0	
Channel				516500	518000	522000			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	1	23.32	23.35	23.41	24.5	0.0	
Channel				516502	518000	522498			
Frequency (MHz)				2577.51	2595	2612.49			
15	QPSK	1	1	23.29	23.36	23.41	24.5	0.0	
Channel				516004	518000	522998			
Frequency (MHz)				2575.02	2595	2614.98			
10	QPSK	1	1	23.28	23.44	23.39	24.5	0.0	

n41 Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				509204	518598	520200			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	22.84	23.09	22.98			
100	PI2 BPSK	1	137	22.91	23.09	22.88			
100	PI2 BPSK	1	271	22.92	23.00	22.89	24.0	0.0	
100	PI2 BPSK	135	0	22.51	22.56	22.58	23.5	0.5	
100	PI2 BPSK	135	69	22.89	23.12	23.02	24.0	0.0	
100	PI2 BPSK	135	138	22.45	22.61	22.52	23.5	0.5	
100	PI2 BPSK	270	0	22.58	22.58	22.58			
100	QPSK	1	1	23.05	23.14	23.06			
100	QPSK	1	137	22.92	23.03	22.96	24.0	0.0	
100	QPSK	1	271	22.88	23.11	23.06			
100	QPSK	135	0	22.02	22.07	22.00	23.0	1.0	
100	QPSK	135	69	22.98	23.08	23.05	24.0	0.0	
100	QPSK	135	138	22.02	22.08	21.98	23.0	1.0	
100	QPSK	270	0	21.90	22.12	21.98			
100	16QAM	1	1	22.08	22.07	21.98	23.0	1.0	
100	16QAM	1	1	20.44	20.59	20.52	21.5	2.5	
100	256QAM	1	1	18.48	18.65	18.55	19.5	4.5	
Channel				508200	518598	520598			
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	22.94	23.06	23.00	24.0	0.0	
Channel				507204	518598	520998			
Frequency (MHz)				2538.02	2592.99	2649.99			
80	QPSK	1	1	22.99	23.08	22.92	24.0	0.0	
Channel				506202	518598	531000			
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	22.97	23.11	22.92	24.0	0.0	
Channel				505200	518598	531998			
Frequency (MHz)				2526	2592.99	2659.99			
60	QPSK	1	1	22.94	23.04	22.94	24.0	0.0	
Channel				504204	518598	532998			
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	22.98	23.02	22.93	24.0	0.0	
Channel				503202	518598	534000			
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	22.93	23.09	23.03	24.0	0.0	
Channel				502200	518598	534998			
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	22.91	23.06	23.01	24.0	0.0	
Channel				501702	518598	535500			
Frequency (MHz)				2508.51	2592.99	2677.5			
25	QPSK	1	1	22.99	23.11	22.99	24.0	0.0	
Channel				501204	518598	535998			
Frequency (MHz)				2506.02	2592.99	2679.99			
20	QPSK	1	1	23.00	23.00	22.93	24.0	0.0	
Channel				500700	518598	536498			
Frequency (MHz)				2503.5	2592.99	2682.48			
15	QPSK	1	1	23.01	23.12	22.95	24.0	0.0	
Channel				500202	518598	537000			
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	22.91	23.07	23.03	24.0	0.0	

n41 HPUE Ant 4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				509202	518598	520200			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	23.88	24.06	23.95			
100	PI2 BPSK	1	137	23.93	24.05	23.93			
100	PI2 BPSK	1	271	23.93	23.97	23.91	25.0	0.0	
100	PI2 BPSK	135	0	23.49	23.58	23.53	24.5	0.5	
100	PI2 BPSK	135	69	23.90	24.08	24.01	25.0	0.0	
100	PI2 BPSK	135	138	23.47	23.62	23.52	24.5	0.5	
100	PI2 BPSK	270	0	23.55	23.55	23.59			
100	QPSK	1	1	24.00	24.10	24.04			
100	QPSK	1	137	23.89	24.01	23.91	25.0	0.0	
100	QPSK	1	271	23.92	24.06	24.02			
100	QPSK	135	0	23.02	23.08	23.04	24.0	1.0	
100	QPSK	135	69	23.98	24.07	24.01	25.0	0.0	
100	QPSK	135	138	23.03	23.04	22.98	24.0	1.0	
100	QPSK	270	0	22.95	23.14	23.01			
100	16QAM	1	1	23.02	23.08	22.99	24.0	1.0	
100	16QAM	1	1	21.46	21.84	21.54	22.5	2.5	
100	256QAM	1	1	19.49	19.64	19.58	20.5	4.5	
Channel				508200	518598	530998			
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	23.97	23.97	23.92	25.0	0.0	
Channel				507204	518598	529998			
Frequency (MHz)				2538.02	2592.99	2649.99			
80	QPSK	1	1	23.95	24.06	23.98	25.0	0.0	
Channel				506202	518598	531000			
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	23.87	24.04	23.96	25.0	0.0	
Channel				505200	518598	531998			
Frequency (MHz)				2526	2592.99	2659.99			
60	QPSK	1	1	23.95	24.02	24.00	25.0	0.0	
Channel				504204	518598	532998			
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	23.92	23.97	23.91	25.0	0.0	
Channel				503202	518598	534000			
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	23.87	24.01	23.93	25.0	0.0	
Channel				502200	518598	534998			
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	23.90	24.05	23.92	25.0	0.0	
Channel				501702	518598	535500			
Frequency (MHz)				2508.51	2592.99	2677.5			
25	QPSK	1	1	23.97	24.06	23.98	25.0	0.0	
Channel				501204	518598	535998			
Frequency (MHz)				2506.02	2592.99	2679.99			
20	QPSK	1	1	23.95	24.01	23.99	25.0	0.0	
Channel				500700	518598	536498			
Frequency (MHz)				2503.5	2592.99	2682.48			
15	QPSK	1	1	23.93	23.97	24.00	25.0	0.0	
Channel				500202	518598	537000			
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	23.89	23.96	23.97	25.0	0.0	



n38 Ant 5									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				518004	518000	518998			
Frequency (MHz)				2500.02	2595	2599.98			
40	PI2 BPSK	1	1	24.28	24.29	24.34			
40	PI2 BPSK	1	53	24.35	24.30	24.28		0.0	
40	PI2 BPSK	1	104	24.32	24.28	24.32			
40	PI2 BPSK	50	0	23.88	23.89	23.87	25.0	0.5	
40	PI2 BPSK	50	28	24.33	24.36	24.31	25.0	0.0	
40	PI2 BPSK	50	58	23.89	23.96	23.93	25.5	0.5	
40	PI2 BPSK	100	0	23.85	23.97	23.93			
40	QPSK	1	1	24.40	24.42	24.38			
40	QPSK	1	53	24.36	24.25	24.25	25.5	0.0	
40	QPSK	1	104	24.32	24.30	24.29			
40	QPSK	50	0	23.15	23.22	23.13	24.5	1.0	
40	QPSK	50	28	24.25	24.28	24.21	25.5	0.0	
40	QPSK	50	58	23.13	23.19	23.17	24.5	1.0	
40	QPSK	100	0	23.25	23.27	23.21			
40	16QAM	1	1	23.15	23.18	23.13	24.5	1.0	
40	16QAM	1	1	21.89	21.72	21.66	23.0	2.5	
40	256QAM	1	1	19.80	19.84	19.58	21.0	4.5	
Channel				517002	518000	520998			
Frequency (MHz)				2555.01	2595	2604.99			
30	QPSK	1	1	24.32	24.38	24.28	25.5	0.0	
Channel				516504	519000	521498			
Frequency (MHz)				2562.42	2595	2607.48			
25	QPSK	1	1	24.38	24.33	24.33	25.5	0.0	
Channel				516000	519000	522000			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	1	24.36	24.37	24.24	25.5	0.0	
Channel				515502	519000	522498			
Frequency (MHz)				2572.5	2595	2612.49			
15	QPSK	1	1	24.38	24.38	24.25	25.5	0.0	
Channel				515004	519000	522998			
Frequency (MHz)				2575.02	2595	2614.98			
10	QPSK	1	1	24.38	24.30	24.28	25.5	0.0	

n41 Ant 5									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				509202	518598	520900			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	24.31	24.44	24.37			
100	PI2 BPSK	1	137	24.33	24.43	24.37			
100	PI2 BPSK	1	271	24.27	24.41	24.35	25.5	0.0	
100	PI2 BPSK	135	0	23.88	24.03	23.88	25.0	0.5	
100	PI2 BPSK	135	69	24.28	24.37	24.37	25.5	0.0	
100	PI2 BPSK	135	138	23.84	23.94	23.88	25.0	0.5	
100	PI2 BPSK	270	0	23.91	23.95	23.98			
100	QPSK	1	1	24.38	24.48	24.42			
100	QPSK	1	137	24.30	24.35	24.40	25.5	0.0	
100	QPSK	1	271	24.27	24.37	24.38			
100	QPSK	135	0	23.89	23.93	23.83	24.5	1.0	
100	QPSK	135	69	24.30	24.35	24.28	25.5	0.0	
100	QPSK	135	138	23.96	23.98	23.86	24.5	1.0	
100	QPSK	270	0	23.98	24.00	23.95			
100	16QAM	1	1	24.01	24.08	23.98	24.5	1.0	
100	64QAM	1	1	22.65	22.66	22.61	23.0	2.5	
100	256QAM	1	1	20.82	20.88	20.78	21.0	4.5	
Channel				508200	518598	520598			
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	24.36	24.41	24.34	25.5	0.0	
Channel				507204	518598	520998			
Frequency (MHz)				2536.02	2592.99	2649.99			
80	QPSK	1	1	24.33	24.41	24.29	25.5	0.0	
Channel				506202	518598	521000			
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	24.25	24.43	24.38	25.5	0.0	
Channel				505200	518598	521998			
Frequency (MHz)				2526	2592.99	2659.99			
60	QPSK	1	1	24.34	24.43	24.30	25.5	0.0	
Channel				504204	518598	522998			
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	24.27	24.39	24.30	25.5	0.0	
Channel				503202	518598	524000			
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	24.30	24.38	24.32	25.5	0.0	
Channel				502200	518598	524998			
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	24.34	24.35	24.30	25.5	0.0	
Channel				501702	518598	525500			
Frequency (MHz)				2508.51	2592.99	2677.5			
25	QPSK	1	1	24.35	24.46	24.33	25.5	0.0	
Channel				501204	518598	525998			
Frequency (MHz)				2503.02	2592.99	2679.99			
20	QPSK	1	1	24.35	24.34	24.38	25.5	0.0	
Channel				500700	518598	526498			
Frequency (MHz)				2503.5	2592.99	2682.48			
15	QPSK	1	1	24.31	24.45	24.35	25.5	0.0	
Channel				500202	518598	527000			
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	24.34	24.40	24.29	25.5	0.0	

n41 HPUE Ant 5									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				509202	518598	520900			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	25.30	25.31	25.29			
100	PI2 BPSK	1	137	25.24	25.37	25.29			
100	PI2 BPSK	1	271	25.23	25.36	25.34	26.5	0.0	
100	PI2 BPSK	135	0	24.79	24.98	24.87	26.0	0.5	
100	PI2 BPSK	135	69	25.29	25.39	25.29	26.5	0.0	
100	PI2 BPSK	135	138	24.80	24.86	24.93	26.0	0.5	
100	PI2 BPSK	270	0	24.87	24.92	24.87			
100	QPSK	1	1	25.35	25.42	25.38			
100	QPSK	1	137	25.28	25.31	25.25	26.5	0.0	
100	QPSK	1	271	25.29	25.35	25.33			
100	QPSK	135	0	24.25	24.29	24.30	25.5	1.0	
100	QPSK	135	69	25.29	25.33	25.30	26.5	0.0	
100	QPSK	135	138	24.24	24.31	24.29	25.5	1.0	
100	QPSK	270	0	24.35	24.38	24.33			
100	16QAM	1	1	24.28	24.33	24.25	25.5	1.0	
100	64QAM	1	1	22.58	22.67	22.61	24.0	2.5	
100	256QAM	1	1	20.59	20.67	20.63	22.0	4.5	
Channel				508200	518598	520598			
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	25.29	25.32	25.26	26.5	0.0	
Channel				507204	518598	520998			
Frequency (MHz)				2536.02	2592.99	2649.99			
80	QPSK	1	1	25.32	25.39	25.31	26.5	0.0	
Channel				506202	518598	521000			
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	25.27	25.38	25.25	26.5	0.0	
Channel				505200	518598	521998			
Frequency (MHz)				2526	2592.99	2659.99			
60	QPSK	1	1	25.21	25.36	25.31	26.5	0.0	
Channel				504204	518598	522998			
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	25.24	25.31	25.26	26.5	0.0	
Channel				503202	518598	524000			
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	25.23	25.28	25.32	26.5	0.0	
Channel				502200	518598	524998			
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	25.24	25.30	25.37	26.5	0.0	
Channel				501702	518598	525500			
Frequency (MHz)				2508.51	2592.99	2677.5			
25	QPSK	1	1	25.24	25.31	25.28	26.5	0.0	
Channel				501204	518598	525998			
Frequency (MHz)				2503.02	2592.99	2679.99			
20	QPSK	1	1	25.25	25.38	25.30	26.5	0.0	
Channel				500700	518598	526498			
Frequency (MHz)				2503.5	2592.99	2682.48			
15	QPSK	1	1	25.32	25.34	25.33	26.5	0.0	
Channel				500202	518598	527000			
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	25.30	25.33	25.33	26.5	0.0	



n48 Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. / 65000	Power Middle Ch. / Freq. / 641666	Power High Ch. / Freq. / 667988	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	20.49	20.55	20.57			
40	PI2 BPSK	1	53	20.43	20.52	20.50	22.0	0.0	
40	PI2 BPSK	1	104	20.53	20.56	20.57			
40	PI2 BPSK	50	0	20.13	20.06	20.09	21.5	0.5	
40	PI2 BPSK	50	28	20.44	20.49	20.52	22.0	0.0	
40	PI2 BPSK	50	56	20.11	20.19	20.02	21.5	0.5	
40	PI2 BPSK	100	0	20.05	20.20	20.08			
40	QPSK	1	1	20.54	20.67	20.57			
40	QPSK	1	53	20.48	20.57	20.50	22.0	0.0	
40	QPSK	1	104	20.46	20.56	20.54			
40	QPSK	50	0	19.45	19.50	19.44	21.0	1.0	
40	QPSK	50	28	20.57	20.58	20.47	22.0	0.0	
40	QPSK	50	56	19.37	19.54	19.44	21.0	1.0	
40	QPSK	100	0	19.47	19.57	19.55			
40	16QAM	1	1	19.45	19.48	19.38	21.0	1.0	
40	64QAM	1	1	18.18	18.25	18.22	19.5	2.5	
40	256QAM	1	1	18.22	18.26	18.15	17.5	4.5	
Channel									
Frequency (MHz)									
30	QPSK	1	1	20.49	20.61	20.45	22.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	20.41	20.55	20.51	22.0	0.0	
Channel									
Frequency (MHz)									
19	QPSK	1	1	20.49	20.59	20.51	22.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	20.42	20.56	20.49	22.0	0.0	

Part270 n77 Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. / 65000	Power Middle Ch. / Freq. / 66000	Power High Ch. / Freq. / 66500	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	21.82	22.02	21.97			
100	PI2 BPSK	1	137	21.78	22.03	21.84	23.5	0.0	
100	PI2 BPSK	1	271	21.74	21.98	21.97			
100	PI2 BPSK	135	0	21.71	21.84	21.88	23.5	0.0	
100	PI2 BPSK	135	69	21.80	21.96	21.93	23.5	0.0	
100	PI2 BPSK	135	138	21.80	21.99	21.97	23.5	0.0	
100	PI2 BPSK	270	0	21.72	21.91	21.96			
100	QPSK	1	1	21.91	22.12	22.08			
100	QPSK	1	137	21.85	21.96	21.90	23.5	0.0	
100	QPSK	1	271	21.74	21.98	21.98			
100	QPSK	135	0	21.81	22.02	21.93	23.5	0.0	
100	QPSK	135	69	21.87	22.08	21.98	23.5	0.0	
100	QPSK	135	138	21.81	21.93	21.88	23.5	0.0	
100	QPSK	270	0	21.88	22.05	22.04			
100	16QAM	1	1	21.80	21.84	21.87	23.5	0.0	
100	64QAM	1	1	21.35	21.39	21.33	23.0	0.5	
100	256QAM	1	1	19.26	19.35	19.32	21.0	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	21.86	22.05	21.98	23.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	21.85	22.07	22.02	23.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.83	22.01	22.01	23.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	21.88	22.05	21.95	23.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	21.83	22.08	22.02	23.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	21.84	22.05	22.01	23.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	21.85	22.02	22.01	23.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	21.88	22.10	22.05	23.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	21.77	22.02	22.04	23.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	21.88	22.01	22.03	23.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	21.84	21.99	21.96	23.5	0.0	

Part270 n77 HPUE Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. / 65000	Power Middle Ch. / Freq. / 66000	Power High Ch. / Freq. / 66500	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	23.98	24.07	23.98			
100	PI2 BPSK	1	137	23.96	24.02	23.99	25.5	0.0	
100	PI2 BPSK	1	271	23.93	24.00	24.00			
100	PI2 BPSK	135	0	23.92	23.98	23.93	25.0	0.5	
100	PI2 BPSK	135	69	23.98	24.00	24.03	25.5	0.0	
100	PI2 BPSK	135	138	23.91	23.90	23.91	25.0	0.5	
100	PI2 BPSK	270	0	23.47	23.63	23.58			
100	QPSK	1	1	23.98	24.13	24.05			
100	QPSK	1	137	23.92	24.08	24.01	25.5	0.0	
100	QPSK	1	271	23.84	24.10	24.05			
100	QPSK	135	0	22.87	22.89	22.86	24.5	1.0	
100	QPSK	135	69	23.85	23.87	23.82	25.5	0.0	
100	QPSK	135	138	22.87	22.93	22.85	24.5	1.0	
100	QPSK	270	0	23.00	23.02	22.95			
100	16QAM	1	1	22.72	22.77	22.75	24.5	1.0	
100	64QAM	1	1	21.39	21.44	21.41	23.0	2.5	
100	256QAM	1	1	19.32	19.32	19.32	21.0	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	23.90	24.05	24.02	25.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	23.93	24.07	24.00	25.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	23.93	24.04	24.00	25.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	23.92	24.05	24.01	25.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	23.95	24.00	23.95	25.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	23.96	24.11	23.92	25.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.97	24.03	23.98	25.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	23.94	24.09	23.94	25.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.90	24.08	23.95	25.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.98	24.00	24.02	25.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.93	24.11	23.98	25.5	0.0	



Part27Q n77 Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	21.92	3500.01				
100	PI2 BPSK	1	137	21.95			23.5	0.0	
100	PI2 BPSK	1	271	21.95					
100	PI2 BPSK	135	0	21.89			23.5	0.0	
100	PI2 BPSK	135	69	21.82			23.5	0.0	
100	PI2 BPSK	135	138	21.85			23.5	0.0	
100	PI2 BPSK	270	0	21.83					
100	QPSK	1	1	21.90					
100	QPSK	1	137	21.84			23.5	0.0	
100	QPSK	1	271	21.84					
100	QPSK	135	0	21.85			23.5	0.0	
100	QPSK	135	69	21.69			23.5	0.0	
100	QPSK	135	138	21.58			23.5	0.0	
100	QPSK	270	0	21.65					
100	16QAM	1	1	21.64			23.5	0.0	
100	16QAM	1	1	21.28			23.0	0.5	
100	256QAM	1	1	19.27			21.0	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	63300	63334	63368	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	21.68	21.95	21.88	23.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	21.70	21.91	21.89	23.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.77	21.89	21.82	23.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	21.70	21.94	21.87	23.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	21.73	21.90	21.82	23.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	21.77	21.90	21.79	23.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	21.71	21.86	21.80	23.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	21.78	21.91	21.83	23.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	21.77	21.94	21.86	23.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	21.75	21.90	21.82	23.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	21.68	21.82	21.90	23.5	0.0	

Part27Q n77 HPUE Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	23.90	3500.01				
100	PI2 BPSK	1	137	23.94			25.5	0.0	
100	PI2 BPSK	1	271	23.82					
100	PI2 BPSK	135	0	23.46			25.0	0.5	
100	PI2 BPSK	135	69	23.89			25.5	0.0	
100	PI2 BPSK	135	138	23.43			25.0	0.5	
100	PI2 BPSK	270	0	23.51					
100	QPSK	1	1	23.94			25.5	0.0	
100	QPSK	1	137	23.95					
100	QPSK	1	271	23.85					
100	QPSK	135	0	22.70			24.5	1.0	
100	QPSK	135	69	23.74			25.5	0.0	
100	QPSK	135	138	22.79			24.5	1.0	
100	QPSK	270	0	22.84					
100	16QAM	1	1	22.70			24.5	1.0	
100	16QAM	1	1	21.32			23.0	2.5	
100	256QAM	1	1	19.13			21.0	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	63300	63334	63368	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	23.78	23.91	23.85	25.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	23.80	23.88	23.83	25.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	23.71	23.95	23.84	25.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	23.72	23.96	23.86	25.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	23.81	23.88	23.90	25.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	23.82	23.89	23.93	25.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.79	23.91	23.85	25.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	23.74	23.97	23.87	25.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.82	23.94	23.90	25.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.75	23.91	23.89	25.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.73	23.91	23.92	25.5	0.0	

Part27O n78 Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	21.83	3750	3750			
100	PI2 BPSK	1	137	21.91			23.0	0.0	
100	PI2 BPSK	1	271	21.99					
100	PI2 BPSK	135	0	21.89			23.0	0.0	
100	PI2 BPSK	135	69	21.84			23.0	0.0	
100	PI2 BPSK	135	138	21.90			23.0	0.0	
100	PI2 BPSK	270	0	21.88					
100	QPSK	1	1	22.01					
100	QPSK	1	137	21.95			23.0	0.0	
100	QPSK	1	271	21.90					
100	QPSK	135	0	21.80			23.0	0.0	
100	QPSK	135	69	21.97			23.0	0.0	
100	QPSK	135	138	21.83			23.0	0.0	
100	QPSK	270	0	21.85					
100	16QAM	1	1	21.88			23.0	0.0	
100	16QAM	1	1	21.33			20.5	2.5	
100	256QAM	1	1	19.32			20.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	64900	65000	65000	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	21.86	21.96	21.93	23.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	21.88	21.95	21.92	23.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.87	21.85	21.81	23.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	21.86	21.86	21.83	23.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	21.88	21.87	21.84	23.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	21.84	21.96	21.93	23.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	21.88	21.87	21.83	23.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	21.87	21.94	21.90	23.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	21.84	21.92	21.91	23.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	21.81	21.85	21.82	23.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	21.86	21.92	21.90	23.0	0.0	



Part270 n78 HPUE Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	23.91	23.90	23.90			
100	PI2 BPSK	1	137	23.90	23.90	23.90	25.0	0.0	
100	PI2 BPSK	1	271	23.89	23.89	23.89			
100	PI2 BPSK	135	0	23.48	23.48	23.48	24.5	0.5	
100	PI2 BPSK	135	69	23.90	23.90	23.90	25.0	0.0	
100	PI2 BPSK	135	138	23.44	23.44	23.44	24.5	0.5	
100	PI2 BPSK	270	0	23.40	23.40	23.40			
100	QPSK	1	1	23.93	23.93	23.93			
100	QPSK	1	137	23.87	23.87	23.87	25.0	0.0	
100	QPSK	1	271	23.86	23.86	23.86			
100	QPSK	135	0	22.85	22.85	22.85	24.0	1.0	
100	QPSK	135	69	23.81	23.81	23.81	25.0	0.0	
100	QPSK	135	138	22.85	22.85	22.85	24.0	1.0	
100	QPSK	270	0	22.85	22.85	22.85			
100	16QAM	1	1	22.85	22.85	22.85	24.0	1.0	
100	16QAM	1	1	21.28	21.28	21.28	22.5	2.5	
100	256QAM	1	1	19.32	19.32	19.32	20.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	23.50	23.50	23.50	25.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	23.85	23.87	23.79	25.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	23.83	23.83	23.77	25.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	23.78	23.78	23.77	25.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	23.84	23.82	23.78	25.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	23.83	23.81	23.82	25.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.85	23.79	23.81	25.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	23.85	23.79	23.81	25.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.77	23.81	23.85	25.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.83	23.86	23.82	25.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.81	23.78	23.83	25.0	0.0	

Part27Q n78 Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	21.67	21.65	21.65			
100	PI2 BPSK	1	137	21.65	21.65	21.65	23.0	0.0	
100	PI2 BPSK	1	271	21.65	21.65	21.65			
100	PI2 BPSK	135	0	21.63	21.63	21.63	23.0	0.0	
100	PI2 BPSK	135	69	21.67	21.67	21.67	23.0	0.0	
100	PI2 BPSK	135	138	21.59	21.59	21.59	23.0	0.0	
100	PI2 BPSK	270	0	21.55	21.55	21.55			
100	QPSK	1	1	21.73	21.73	21.73			
100	QPSK	1	137	21.65	21.65	21.65	23.0	0.0	
100	QPSK	1	271	21.59	21.59	21.59			
100	QPSK	135	0	21.47	21.47	21.47	23.0	0.0	
100	QPSK	135	69	21.67	21.67	21.67	23.0	0.0	
100	QPSK	135	138	21.51	21.51	21.51	23.0	0.0	
100	QPSK	270	0	21.58	21.58	21.58			
100	16QAM	1	1	21.55	21.55	21.55	23.0	0.0	
100	16QAM	1	1	21.04	21.04	21.04	22.5	0.5	
100	256QAM	1	1	19.07	19.07	19.07	20.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	21.60	21.64	21.68	23.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	21.52	21.63	21.59	23.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.61	21.65	21.59	23.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	21.59	21.64	21.67	23.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	21.59	21.62	21.58	23.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	21.51	21.65	21.62	23.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	21.62	21.65	21.68	23.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	21.50	21.61	21.59	23.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	21.61	21.71	21.61	23.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	21.51	21.65	21.63	23.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	21.59	21.60	21.60	23.0	0.0	

Part27Q n78 HPUE Ant 1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	23.65	23.65	23.65			
100	PI2 BPSK	1	137	23.60	23.60	23.60	25.0	0.0	
100	PI2 BPSK	1	271	23.57	23.57	23.57			
100	PI2 BPSK	135	0	23.20	23.20	23.20	24.5	0.5	
100	PI2 BPSK	135	69	23.60	23.60	23.60	25.0	0.0	
100	PI2 BPSK	135	138	23.08	23.08	23.08	24.5	0.5	
100	PI2 BPSK	270	0	23.05	23.05	23.05			
100	QPSK	1	1	23.66	23.66	23.66			
100	QPSK	1	137	23.59	23.59	23.59	25.0	0.0	
100	QPSK	1	271	23.62	23.62	23.62			
100	QPSK	135	0	22.60	22.60	22.60	24.0	1.0	
100	QPSK	135	69	23.48	23.48	23.48	25.0	0.0	
100	QPSK	135	138	22.65	22.65	22.65	24.0	1.0	
100	QPSK	270	0	22.60	22.60	22.60			
100	16QAM	1	1	22.58	22.58	22.58	24.0	1.0	
100	16QAM	1	1	20.98	20.98	20.98	22.5	2.5	
100	256QAM	1	1	19.00	19.00	19.00	20.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	23.58	23.56	23.64	25.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	23.58	23.60	23.55	25.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	23.61	23.63	23.57	25.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	23.56	23.60	23.59	25.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	23.60	23.58	23.54	25.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	23.61	23.59	23.63	25.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.60	23.64	23.61	25.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	23.62	23.59	23.63	25.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.62	23.60	23.63	25.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.54	23.59	23.54	25.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.58	23.65	23.55	25.0	0.0	



n48 Ant 6							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
40	PI/2 BPSK	1	1	24.06	24.16	24.11	0.0
40	PI/2 BPSK	1	53	24.15	24.17	24.16	0.0
40	PI/2 BPSK	1	104	24.06	24.23	24.14	0.0
40	PI/2 BPSK	50	0	23.88	23.76	23.69	0.5
40	PI/2 BPSK	50	28	24.07	24.23	24.14	0.0
40	PI/2 BPSK	50	56	23.87	23.84	23.74	0.5
40	PI/2 BPSK	100	0	23.69	23.79	23.70	0.0
40	QPSK	1	1	24.18	24.29	24.25	0.0
40	QPSK	1	53	24.07	24.18	24.14	0.0
40	QPSK	1	104	24.10	24.20	24.16	0.0
40	QPSK	50	0	23.11	23.03	23.08	1.0
40	QPSK	50	28	24.15	24.17	24.10	0.0
40	QPSK	50	56	23.03	23.06	23.07	1.0
40	QPSK	100	0	23.15	23.17	23.11	0.0
40	16QAM	1	1	23.11	23.12	23.08	1.0
40	16QAM	1	1	21.62	21.68	21.60	2.5
40	256QAM	1	1	19.88	19.87	19.82	4.5
30	QPSK	1	1	24.06	24.24	24.11	0.0
20	QPSK	1	1	24.06	24.25	24.20	0.0
10	QPSK	1	1	24.06	24.22	24.12	0.0

Part270 n77 Ant 6							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
100	PI/2 BPSK	1	1	25.24	25.29	25.24	0.0
100	PI/2 BPSK	1	137	25.22	25.35	25.16	0.0
100	PI/2 BPSK	1	271	25.20	25.29	25.20	0.0
100	PI/2 BPSK	135	0	25.20	25.28	25.16	0.0
100	PI/2 BPSK	135	69	25.28	25.31	25.25	0.0
100	PI/2 BPSK	135	138	25.25	25.33	25.19	0.0
100	PI/2 BPSK	270	0	25.27	25.34	25.20	0.0
100	QPSK	1	1	25.33	25.38	25.30	0.0
100	QPSK	1	137	25.25	25.34	25.17	0.0
100	QPSK	1	271	25.19	25.30	25.20	0.0
100	QPSK	135	0	24.88	24.93	24.80	0.0
100	QPSK	135	69	25.05	25.09	25.01	0.0
100	QPSK	135	138	24.86	24.84	24.80	0.0
100	QPSK	270	0	25.25	25.01	24.98	0.0
100	16QAM	1	1	25.10	25.15	25.08	0.0
100	16QAM	1	1	24.71	24.83	24.77	0.0
100	256QAM	1	1	22.86	22.72	22.60	2.5
90	QPSK	1	1	25.19	25.28	25.22	0.0
80	QPSK	1	1	25.20	25.34	25.16	0.0
70	QPSK	1	1	25.31	25.34	25.17	0.0
60	QPSK	1	1	25.23	25.30	25.26	0.0
50	QPSK	1	1	25.22	25.35	25.26	0.0
40	QPSK	1	1	25.24	25.35	25.25	0.0
30	QPSK	1	1	25.22	25.35	25.26	0.0
25	QPSK	1	1	25.22	25.26	25.22	0.0
20	QPSK	1	1	25.27	25.32	25.17	0.0
15	QPSK	1	1	25.30	25.32	25.20	0.0
10	QPSK	1	1	25.24	25.36	25.23	0.0

Part270 n77 HPUE Ant 6							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
100	PI/2 BPSK	1	1	27.13	27.32	27.17	0.0
100	PI/2 BPSK	1	137	27.16	27.25	27.27	0.0
100	PI/2 BPSK	1	271	27.18	27.24	27.26	0.0
100	PI/2 BPSK	135	0	26.73	26.84	26.75	0.5
100	PI/2 BPSK	135	69	27.20	27.29	27.23	0.0
100	PI/2 BPSK	135	138	26.80	26.81	26.81	0.5
100	PI/2 BPSK	270	0	26.82	26.82	26.78	0.0
100	QPSK	1	1	27.28	27.35	27.30	0.0
100	QPSK	1	137	27.25	27.23	27.27	0.0
100	QPSK	1	271	27.21	27.33	27.24	0.0
100	QPSK	135	0	26.07	26.11	26.01	1.0
100	QPSK	135	69	26.95	27.03	26.99	0.0
100	QPSK	135	138	26.08	26.12	26.01	1.0
100	QPSK	270	0	26.10	26.22	26.15	0.0
100	16QAM	1	1	26.10	26.15	26.08	0.0
100	16QAM	1	1	24.51	24.63	24.58	2.5
100	256QAM	1	1	22.86	22.74	22.70	4.5
90	QPSK	1	1	27.15	27.24	27.28	0.0
80	QPSK	1	1	27.18	27.26	27.20	0.0
70	QPSK	1	1	27.15	27.22	27.17	0.0
60	QPSK	1	1	27.15	27.28	27.21	0.0
50	QPSK	1	1	27.24	27.22	27.20	0.0
40	QPSK	1	1	27.18	27.22	27.24	0.0
30	QPSK	1	1	27.16	27.20	27.22	0.0
25	QPSK	1	1	27.24	27.23	27.24	0.0
20	QPSK	1	1	27.20	27.28	27.25	0.0
15	QPSK	1	1	27.22	27.31	27.23	0.0
10	QPSK	1	1	27.20	27.22	27.17	0.0



Part27Q n77 Ant 6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	25.24	3500.01				
100	PI2 BPSK	1	137	25.25			26.0	0.0	
100	PI2 BPSK	1	271	25.26					
100	PI2 BPSK	135	0	25.34			26.0	0.0	
100	PI2 BPSK	135	69	25.28			26.0	0.0	
100	PI2 BPSK	135	138	25.21			26.0	0.0	
100	PI2 BPSK	270	0	25.15			26.0	0.0	
100	QPSK	1	1	25.38					
100	QPSK	1	137	25.30			28.0	0.0	
100	QPSK	1	271	25.28					
100	QPSK	135	0	25.03			26.0	0.0	
100	QPSK	135	69	25.29			26.0	0.0	
100	QPSK	135	138	24.91			26.0	0.0	
100	QPSK	270	0	25.11			26.0	0.0	
100	16QAM	1	1	25.35			26.0	0.0	
100	16QAM	1	1	24.85			25.5	0.5	
100	256QAM	1	1	24.72			24.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	25.19	63334	63368	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
80	QPSK	1	1	25.17	63268	63400	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
70	QPSK	1	1	25.09	63200	63432	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
60	QPSK	1	1	25.15	63134	63366	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
50	QPSK	1	1	25.15	63068	63300	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
40	QPSK	1	1	25.14	62999	63231	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
30	QPSK	1	1	25.17	62933	63165	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
25	QPSK	1	1	25.18	62867	63100	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
20	QPSK	1	1	25.17	62800	63032	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
15	QPSK	1	1	25.16	62734	62966	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
10	QPSK	1	1	25.12	62668	62900	Tune-up limit (dBm)	MPR	

Part27Q n77 HPUE Ant 6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	27.29	3500.01				
100	PI2 BPSK	1	137	27.30			28.5	0.0	
100	PI2 BPSK	1	271	27.35					
100	PI2 BPSK	135	0	28.85			28.0	0.5	
100	PI2 BPSK	135	69	27.22			28.5	0.0	
100	PI2 BPSK	135	138	28.92			28.0	0.5	
100	PI2 BPSK	270	0	28.84			28.0	0.0	
100	QPSK	1	1	27.41					
100	QPSK	1	137	27.36			28.5	0.0	
100	QPSK	1	271	27.35					
100	QPSK	135	0	28.38			27.5	1.0	
100	QPSK	135	69	27.33			28.5	0.0	
100	QPSK	135	138	28.25			27.5	1.0	
100	QPSK	270	0	28.39			28.0	0.0	
100	16QAM	1	1	28.30			27.5	1.0	
100	16QAM	1	1	24.98			26.0	2.5	
100	256QAM	1	1	24.87			24.0	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	27.29	63334	63368	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
80	QPSK	1	1	27.24	63268	63400	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
70	QPSK	1	1	27.17	63200	63432	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
60	QPSK	1	1	27.24	63134	63366	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
50	QPSK	1	1	27.18	63068	63300	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
40	QPSK	1	1	27.20	62999	63231	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
30	QPSK	1	1	27.16	62933	63165	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
25	QPSK	1	1	27.24	62867	63100	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
20	QPSK	1	1	27.21	62800	63032	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
15	QPSK	1	1	27.24	62734	62966	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
10	QPSK	1	1	27.15	62668	62900	Tune-up limit (dBm)	MPR	

Part27O n78 Ant 6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	24.99	3750	3750			
100	PI2 BPSK	1	137	24.99			26.0	0.0	
100	PI2 BPSK	1	271	25.08					
100	PI2 BPSK	135	0	25.05			26.0	0.0	
100	PI2 BPSK	135	69	25.04			26.0	0.0	
100	PI2 BPSK	135	138	25.10			26.0	0.0	
100	PI2 BPSK	270	0	25.01			26.0	0.0	
100	QPSK	1	1	25.13					
100	QPSK	1	137	25.11			26.0	0.0	
100	QPSK	1	271	25.05					
100	QPSK	135	0	24.95			26.0	0.0	
100	QPSK	135	69	25.12			26.0	0.0	
100	QPSK	135	138	25.08			26.0	0.0	
100	QPSK	270	0	25.01			26.0	0.0	
100	16QAM	1	1	24.97			26.0	0.0	
100	16QAM	1	1	24.62			25.5	0.5	
100	256QAM	1	1	22.52			22.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	24.96	65000	65034	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.93	64934	65068	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.91	64868	65002	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
60	QPSK	1	1	24.94	64800	64934	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.92	64734	64868	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
40	QPSK	1	1	24.88	64668	64802	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
30	QPSK	1	1	24.87	64600	64734	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
25	QPSK	1	1	24.87	64534	64668	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
20	QPSK	1	1	24.88	64468	64602	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.81	64400	64534	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
10	QPSK	1	1	24.89	64334	64468	Tune-up limit (dBm)	MPR	



Part270 n78 HPUE Ant 6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	26.90	27.50	27.50			
100	Pi2 BPSK	1	137	26.98			28.5	0.0	
100	Pi2 BPSK	1	271	27.00					
100	Pi2 BPSK	135	0	26.53			28.0	0.5	
100	Pi2 BPSK	135	69	26.94			28.5	0.0	
100	Pi2 BPSK	135	138	26.81			28.0	0.5	
100	Pi2 BPSK	270	0	26.50					
100	QPSK	1	1	27.38					
100	QPSK	1	137	27.02			28.5	0.0	
100	QPSK	1	271	26.95					
100	QPSK	135	0	25.82			27.5	1.0	
100	QPSK	135	69	27.00			28.5	0.0	
100	QPSK	135	138	25.94			27.5	1.0	
100	QPSK	270	0	26.28					
100	16QAM	1	1	26.05			27.5	1.0	
100	64QAM	1	1	24.51			26.0	2.5	
100	256QAM	1	1	22.54			24.0	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	26.91	27.00	28.96	28.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	26.81	26.88	28.85	28.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	26.77	26.86	28.83	28.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	26.79	26.85	28.84	28.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	26.77	26.86	28.83	28.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	26.87	26.94	28.81	28.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	26.77	26.83	28.82	28.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	26.86	26.94	28.90	28.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	26.85	26.89	28.81	28.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	26.86	26.88	28.84	28.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	26.79	26.84	28.83	28.5	0.0	

Part27Q n78 Ant 6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	25.16					
100	Pi2 BPSK	1	137	25.06			26.0	0.0	
100	Pi2 BPSK	1	271	25.07					
100	Pi2 BPSK	135	0	25.12			26.0	0.0	
100	Pi2 BPSK	135	69	25.00			26.0	0.0	
100	Pi2 BPSK	135	138	25.07			26.0	0.0	
100	Pi2 BPSK	270	0	24.07					
100	QPSK	1	1	25.19					
100	QPSK	1	137	25.06			26.0	0.0	
100	QPSK	1	271	25.10					
100	QPSK	135	0	24.87			26.0	0.0	
100	QPSK	135	69	24.95			26.0	0.0	
100	QPSK	135	138	24.86			26.0	0.0	
100	QPSK	270	0	24.38					
100	16QAM	1	1	25.05			26.0	0.0	
100	64QAM	1	1	24.74			25.5	0.5	
100	256QAM	1	1	22.73			23.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	25.06	25.16	25.10	26.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.97	25.07	25.04	26.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.95	25.05	24.97	26.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	25.03	25.02	25.03	26.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.94	25.07	24.96	26.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	24.97	25.07	24.96	26.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	25.00	25.11	25.03	26.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	24.98	25.12	25.04	26.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	25.04	25.04	25.01	26.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.95	25.11	25.01	26.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	25.04	25.07	25.03	26.0	0.0	

Part27Q n78 HPUE Ant 6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	27.03					
100	Pi2 BPSK	1	137	27.00			28.5	0.0	
100	Pi2 BPSK	1	271	27.13					
100	Pi2 BPSK	135	0	26.66			28.0	0.5	
100	Pi2 BPSK	135	69	27.05			28.5	0.0	
100	Pi2 BPSK	135	138	26.72			28.0	0.5	
100	Pi2 BPSK	270	0	26.73					
100	QPSK	1	1	27.16					
100	QPSK	1	137	27.00			28.5	0.0	
100	QPSK	1	271	27.08					
100	QPSK	135	0	25.96			27.5	1.0	
100	QPSK	135	69	26.98			28.5	0.0	
100	QPSK	135	138	25.99			27.5	1.0	
100	QPSK	270	0	26.05					
100	16QAM	1	1	25.98			27.5	1.0	
100	64QAM	1	1	24.44			26.0	2.5	
100	256QAM	1	1	22.46			24.0	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	27.02	27.10	27.06	28.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	26.89	27.05	26.98	28.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	26.89	27.03	26.99	28.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	26.90	27.00	26.92	28.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	26.96	26.97	26.99	28.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	26.91	27.05	26.96	28.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	26.97	26.97	26.97	28.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	26.92	27.00	27.03	28.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	26.97	26.97	26.98	28.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	26.89	27.04	27.03	28.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	26.91	27.01	26.93	28.5	0.0	



n48 Ant 7								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq. 636000	Power Middle Ch. F.Freq. 3024.99 641666	Power High Ch. F.Freq. 3679.98 646332	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
40	PI/2 BPSK	1	1	23.24	23.39	23.32		
40	PI/2 BPSK	1	53	23.25	23.44	23.30	25.0	0.0
40	PI/2 BPSK	1	104	23.33	23.38	23.29		
40	PI/2 BPSK	50	0	22.90	23.00	22.86	24.5	0.5
40	PI/2 BPSK	50	28	23.26	23.38	23.38	25.0	0.0
40	PI/2 BPSK	50	56	22.87	22.91	22.96		
40	PI/2 BPSK	100	0	22.91	22.98	22.86	24.5	0.5
40	QPSK	1	1	23.38	23.46	23.41		
40	QPSK	1	53	23.33	23.46	23.38	25.0	0.0
40	QPSK	1	104	23.33	23.34	23.36		
40	QPSK	50	0	22.33	22.36	22.25	24.0	1.0
40	QPSK	50	28	22.36	22.39	22.33	25.0	0.0
40	QPSK	50	56	22.33	22.34	22.28	24.0	1.0
40	QPSK	100	0	22.36	22.41	22.35	24.0	1.0
40	16QAM	1	1	22.22	22.30	22.26	24.0	1.0
40	16QAM	1	1	20.74	20.79	20.68	22.5	2.5
40	256QAM	1	1	18.72	18.77	18.65	20.5	4.5
Channel								
Frequency (MHz)								
30	QPSK	1	1	33.63	33.66	33.66	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	1	23.34	23.39	23.38	25.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	23.34	23.39	23.39	25.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	23.28	23.32	23.31	25.0	0.0

Part270 n77 Ant 7								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq. 650000	Power Middle Ch. F.Freq. 3705 3840 3960	Power High Ch. F.Freq. 4080 4200 4320	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI/2 BPSK	1	1	23.97	24.07	23.97		
100	PI/2 BPSK	1	137	23.97	24.01	24.00	25.0	0.0
100	PI/2 BPSK	1	271	24.00	23.98	23.98		
100	PI/2 BPSK	135	0	23.93	23.96	23.95	25.0	0.0
100	PI/2 BPSK	135	69	23.96	23.97	23.98	25.0	0.0
100	PI/2 BPSK	135	138	24.01	23.96	23.94	25.0	0.0
100	PI/2 BPSK	270	0	23.93	24.06	23.94	25.0	0.0
100	QPSK	1	1	24.06	24.09	24.04		
100	QPSK	1	137	23.96	23.97	23.91	25.0	0.0
100	QPSK	1	271	23.96	24.05	24.00		
100	QPSK	135	0	23.70	23.78	23.62	25.0	0.0
100	QPSK	135	69	23.80	23.84	23.78	25.0	0.0
100	QPSK	135	138	23.70	23.76	23.65	25.0	0.0
100	QPSK	270	0	23.68	23.85	23.81	25.0	0.0
100	16QAM	1	1	23.91	23.84	23.88	25.0	0.0
100	16QAM	1	1	23.52	23.56	23.48	24.5	0.5
100	256QAM	1	1	21.48	21.52	21.40	22.5	2.5
Channel								
Frequency (MHz)								
90	QPSK	1	1	24.01	24.06	23.97	25.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	24.02	24.02	24.01	25.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	23.93	24.04	23.93	25.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	23.96	24.06	24.00	25.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	24.00	24.08	23.99	25.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	24.02	24.04	23.98	25.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	33.63	33.66	33.66	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
25	QPSK	1	1	23.93	24.07	23.96	25.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	24.03	24.04	23.91	25.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	24.08	24.02	24.04	25.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	24.03	24.04	23.92	25.0	0.0

Part270 n77 HPUE Ant 7								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq. 650000	Power Middle Ch. F.Freq. 3705 3840 3960	Power High Ch. F.Freq. 4080 4200 4320	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI/2 BPSK	1	1	25.96	25.96	25.87		
100	PI/2 BPSK	1	137	26.00	26.01	25.98	27.5	0.0
100	PI/2 BPSK	1	271	25.94	25.93	25.95		
100	PI/2 BPSK	135	0	25.86	25.87	25.87	27.0	0.5
100	PI/2 BPSK	135	69	26.00	26.01	25.86	27.5	0.0
100	PI/2 BPSK	135	138	25.98	25.92	25.85	27.0	0.5
100	PI/2 BPSK	270	0	25.49	25.56	25.51		
100	QPSK	1	1	26.03	26.06	25.98		
100	QPSK	1	137	25.94	26.01	25.84	27.5	0.0
100	QPSK	1	271	25.96	25.97	25.95		
100	QPSK	135	0	24.83	24.81	24.71	26.5	1.0
100	QPSK	135	69	25.82	25.89	25.86	27.5	0.0
100	QPSK	135	138	24.78	24.87	24.77	26.5	1.0
100	QPSK	270	0	24.88	24.91	24.83	26.5	1.0
100	16QAM	1	1	24.90	24.92	24.84	26.5	1.0
100	16QAM	1	1	23.42	23.51	23.48	25.0	2.5
100	256QAM	1	1	21.40	21.44	21.30	23.0	4.5
Channel								
Frequency (MHz)								
90	QPSK	1	1	25.99	25.92	25.89	27.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	25.92	26.01	25.88	27.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	25.93	26.01	25.89	27.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	25.93	25.96	25.88	27.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	25.96	25.98	25.88	27.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	25.93	26.02	25.92	27.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	33.63	33.66	33.66	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
25	QPSK	1	1	25.89	26.01	25.92	27.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	25.91	25.99	25.84	27.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	25.98	26.03	25.93	27.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	25.95	25.92	25.93	27.5	0.0



Part27Q n77 Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	24.06	3500.01				
100	PI2 BPSK	1	137	24.10			25.0	0.0	
100	PI2 BPSK	1	271	24.06					
100	PI2 BPSK	135	0	24.07			25.0	0.0	
100	PI2 BPSK	135	69	24.10			25.0	0.0	
100	PI2 BPSK	135	138	24.11			25.0	0.0	
100	PI2 BPSK	270	0	24.16			25.0	0.0	
100	QPSK	1	1	24.19					
100	QPSK	1	137	24.12			25.0	0.0	
100	QPSK	1	271	24.12					
100	QPSK	135	0	24.05			25.0	0.0	
100	QPSK	135	69	24.14			25.0	0.0	
100	QPSK	135	138	24.11			25.0	0.0	
100	QPSK	270	0	24.20			25.0	0.0	
100	16QAM	1	1	24.06			25.0	0.0	
100	16QAM	1	1	23.67			24.5	0.5	
100	256QAM	1	1	21.72			22.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	24.08	6333.34	6336.68	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	24.16	3500.01	3505.02	25.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	23.96	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	23.96	3500.01	3510.01	24.02	25.0	0.0
Channel									
Frequency (MHz)									
70	QPSK	1	1	23.94	6333.34	6343.34	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	23.94	3500.01	3515.01	25.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	24.05	6333.34	6346.68	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	24.02	3500.01	3525.02	25.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.04	6333.34	6350.00	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	24.04	3500.01	3535.02	25.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	23.99	6333.34	6353.34	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	23.99	3500.01	3535.02	25.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	24.00	6333.34	6356.68	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	24.00	3500.01	3535.02	25.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	24.00	6333.34	6360.00	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	24.00	3500.01	3537.51	25.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.95	6333.34	6363.34	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	23.95	3500.01	3540.00	23.96	25.0	0.0
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.99	6333.34	6366.68	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	23.99	3500.01	3542.52	25.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.98	6333.34	6370.00	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	23.98	3500.01	3545.01	25.0	0.0	

Part27Q n77 HPUE Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	26.16	3500.01				
100	PI2 BPSK	1	137	26.21			27.5	0.0	
100	PI2 BPSK	1	271	26.19					
100	PI2 BPSK	135	0	26.23			27.0	0.5	
100	PI2 BPSK	135	69	26.26			27.5	0.0	
100	PI2 BPSK	135	138	26.20			27.0	0.5	
100	PI2 BPSK	270	0	26.25			27.0	0.5	
100	QPSK	1	1	26.31					
100	QPSK	1	137	26.15			27.5	0.0	
100	QPSK	1	271	26.18					
100	QPSK	135	0	26.21			26.5	1.0	
100	QPSK	135	69	26.26			27.5	0.0	
100	QPSK	135	138	26.20			26.5	1.0	
100	QPSK	270	0	26.24			26.5	1.0	
100	16QAM	1	1	25.23			26.5	1.0	
100	16QAM	1	1	23.80			25.0	2.5	
100	256QAM	1	1	21.83			23.0	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	26.23	6333.34	6336.68	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	26.23	3500.01	3505.02	26.13	27.5	0.0
Channel									
Frequency (MHz)									
80	QPSK	1	1	26.22	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	26.22	3500.01	3510.01	26.13	27.5	0.0
Channel									
Frequency (MHz)									
70	QPSK	1	1	26.16	6333.34	6343.34	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	26.22	3500.01	3515.01	27.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	26.22	6333.34	6346.68	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	26.22	3500.01	3525.02	27.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	26.17	6333.34	6350.00	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	26.17	3500.01	3535.02	27.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	26.22	6333.34	6353.34	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	26.22	3500.01	3535.02	27.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	26.12	6333.34	6356.68	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	26.12	3500.01	3535.02	27.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	26.12	6333.34	6360.00	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	26.12	3500.01	3537.51	27.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	26.23	6333.34	6363.34	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	26.23	3500.01	3540.00	26.13	27.5	0.0
Channel									
Frequency (MHz)									
15	QPSK	1	1	26.11	6333.34	6366.68	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	26.11	3500.01	3542.52	27.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	26.20	6333.34	6370.00	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	26.20	3500.01	3545.01	27.5	0.0	

Part27O n78 Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	24.48	3750	3750			
100	PI2 BPSK	1	137	24.48			25.5	0.0	
100	PI2 BPSK	1	271	24.46					
100	PI2 BPSK	135	0	24.49			25.5	0.0	
100	PI2 BPSK	135	69	24.47			25.5	0.0	
100	PI2 BPSK	135	138	24.55			25.5	0.0	
100	PI2 BPSK	270	0	24.51			25.0	0.0	
100	QPSK	1	1	24.58					
100	QPSK	1	137	24.54			25.5	0.0	
100	QPSK	1	271	24.48					
100	QPSK	135	0	24.39			25.5	0.0	
100	QPSK	135	69	24.43			25.5	0.0	
100	QPSK	135	138	24.38			25.5	0.0	
100	QPSK	270	0	24.51			25.0	0.0	
100	16QAM	1	1	24.44			25.0	0.5	
100	16QAM	1	1	23.98			25.0	2.5	
100	256QAM	1	1	21.83			23.0	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	24.37	6500.00	6503.34	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	24.37	3750	3750.01	24.42	25.5	0.0
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.44	6500.00	6506.68	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	24.44	3750	3750.02	24.45	25.5	0.0
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.40	6500.00	6510.00	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	24.40	3750	3750.02	24.47	25.5	0.0
Channel									
Frequency (MHz)									
60	QPSK	1	1	24.37	6500.00	6513.34	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	24.37	3750	3750.01	24.42	25.5	0.0
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.38	6500.00	6516.68	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	24.38	3750	3750.02	24.47	25.5	0.0
Channel									
Frequency (MHz)									
40	QPSK	1	1	24.37	6500.00	6520.00	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	24.37	3750	3750.02	24.43	25.5	0.0
Channel									
Frequency (MHz)									
30	QPSK	1	1	24.44	6500.00	6523.34	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	24.44	3750	3750.01	24.43	25.5	0.0
Channel									
Frequency (MHz)									
25	QPSK	1	1	24.44	6500.00	6526.68	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	24.44	3750	3750.02	24.47	25.5	0.0
Channel									
Frequency (MHz)									



Part270 n78 HPUE Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	24.44	24.44	24.44			
100	Pi2 BPSK	1	137	26.46	26.46	26.46	27.5	0.0	
100	Pi2 BPSK	1	271	26.44	26.44	26.44			
100	Pi2 BPSK	135	0	26.48	26.48	26.48	27.0	0.5	
100	Pi2 BPSK	135	69	26.50	26.50	26.50	27.5	0.0	
100	Pi2 BPSK	135	138	26.50	26.50	26.50	27.0	0.5	
100	Pi2 BPSK	270	0	26.43	26.43	26.43			
100	QPSK	1	1	26.53	26.53	26.53			
100	QPSK	1	137	26.48	26.48	26.48	27.5	0.0	
100	QPSK	1	271	26.43	26.43	26.43			
100	QPSK	135	0	26.38	26.38	26.38	26.5	1.0	
100	QPSK	135	69	26.47	26.47	26.47	27.5	0.0	
100	QPSK	135	138	26.43	26.43	26.43	26.5	1.0	
100	QPSK	270	0	26.40	26.40	26.40			
100	16QAM	1	1	25.37	25.37	25.37	26.5	1.0	
100	16QAM	1	137	23.93	23.93	23.93	25.0	2.5	
100	16QAM	1	271	23.87	23.87	23.87	24.0	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	24.30	24.30	24.30	27.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	26.26	26.26	26.26	27.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.26	24.26	24.26	27.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	26.35	26.35	26.35	27.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.26	24.26	24.26	27.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	26.27	26.27	26.27	27.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	26.32	26.32	26.32	27.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	26.26	26.26	26.26	27.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	26.31	26.31	26.31	27.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	26.38	26.38	26.38	27.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	26.29	26.29	26.29	27.5	0.0	

Part27Q n78 Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	24.48	24.48	24.48			
100	Pi2 BPSK	1	137	24.53	24.53	24.53	25.5	0.0	
100	Pi2 BPSK	1	271	24.53	24.53	24.53			
100	Pi2 BPSK	135	0	24.50	24.50	24.50	25.5	0.0	
100	Pi2 BPSK	135	69	24.42	24.42	24.42	25.5	0.0	
100	Pi2 BPSK	135	138	24.48	24.48	24.48	25.5	0.0	
100	Pi2 BPSK	270	0	24.43	24.43	24.43			
100	QPSK	1	1	24.56	24.56	24.56			
100	QPSK	1	137	24.46	24.46	24.46	25.5	0.0	
100	QPSK	1	271	24.49	24.49	24.49			
100	QPSK	135	0	24.31	24.31	24.31	25.5	0.0	
100	QPSK	135	69	24.35	24.35	24.35	25.5	0.0	
100	QPSK	135	138	24.29	24.29	24.29	25.5	0.0	
100	QPSK	270	0	24.47	24.47	24.47			
100	16QAM	1	1	24.51	24.51	24.51	25.0	0.0	
100	16QAM	1	137	23.98	23.98	23.98	25.0	0.5	
100	16QAM	1	271	23.92	23.92	23.92	23.0	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	24.32	24.32	24.32	25.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.41	24.41	24.41	25.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.29	24.29	24.29	25.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	24.29	24.29	24.29	25.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.38	24.38	24.38	25.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	24.30	24.30	24.30	25.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	24.40	24.40	24.40	25.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	24.35	24.35	24.35	25.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	24.31	24.31	24.31	25.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.37	24.37	24.37	25.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	24.37	24.37	24.37	25.5	0.0	

Part27Q n78 HPUE Ant 7									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	26.48	26.48	26.48			
100	Pi2 BPSK	1	137	26.48	26.48	26.48	27.5	0.0	
100	Pi2 BPSK	1	271	26.42	26.42	26.42			
100	Pi2 BPSK	135	0	26.38	26.38	26.38	27.0	0.5	
100	Pi2 BPSK	135	69	26.43	26.43	26.43	27.5	0.0	
100	Pi2 BPSK	135	138	26.48	26.48	26.48	27.0	0.5	
100	Pi2 BPSK	270	0	26.40	26.40	26.40			
100	QPSK	1	1	26.51	26.51	26.51			
100	QPSK	1	137	26.42	26.42	26.42	27.5	0.0	
100	QPSK	1	271	26.46	26.46	26.46			
100	QPSK	135	0	26.29	26.29	26.29	26.5	1.0	
100	QPSK	135	69	26.23	26.23	26.23	27.5	0.0	
100	QPSK	135	138	26.23	26.23	26.23	26.5	1.0	
100	QPSK	270	0	26.35	26.35	26.35			
100	16QAM	1	1	25.22	25.22	25.22	26.5	1.0	
100	16QAM	1	137	23.84	23.84	23.84	25.0	2.5	
100	16QAM	1	271	23.84	23.84	23.84	23.0	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	26.35	26.35	26.35	27.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	26.30	26.30	26.30	27.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	26.24	26.24	26.24	27.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	26.30	26.30	26.30	27.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	26.28	26.28	26.28	27.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	26.25	26.25	26.25	27.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	26.20	26.20	26.20	27.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	26.28	26.28	26.28	27.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	26.24	26.24	26.24	27.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	26.33	26.33	26.33	27.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	26.31	26.31	26.31	27.5	0.0	



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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. / 65000	Power Middle Ch. / Freq. / 641666	Power High Ch. / Freq. / 667988	Tune-up limit (dBm)	MPR (dB)	
40	PI/2 BPSK	1	1	22.53	22.61	22.54			
40	PI/2 BPSK	1	53	22.55	22.52	22.47	24.0	0.0	
40	PI/2 BPSK	1	104	22.58	22.61	22.51			
40	PI/2 BPSK	50	0	22.13	22.10	22.02	23.5	0.5	
40	PI/2 BPSK	50	28	22.54	22.57	22.54	24.0	0.0	
40	PI/2 BPSK	50	56	22.11	22.13	22.09	23.5	0.5	
40	PI/2 BPSK	100	0	22.12	22.18	22.07			
40	QPSK	1	1	22.83	22.85	22.57			
40	QPSK	1	53	22.96	22.98	22.94	24.0	0.0	
40	QPSK	1	104	22.97	22.98	22.90			
40	QPSK	50	0	21.55	21.53	21.45	23.0	1.0	
40	QPSK	50	28	22.55	22.60	22.51	24.0	0.0	
40	QPSK	50	56	21.51	21.61	21.45	23.0	1.0	
40	QPSK	100	0	21.61	21.65	21.58	23.0	1.0	
40	16QAM	1	1	21.80	21.63	21.53	23.0	1.0	
40	16QAM	1	1	19.98	20.05	20.00	21.5	2.5	
40	256QAM	1	1	17.96	18.02	17.94	19.5	4.5	
	Channel			63763	641666	645666	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3965.02	3924.99	3984.99			
30	QPSK	1	1	22.51	22.55	22.45	24.0	0.0	
	Channel			637334	641666	646000	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3962.81	3924.99	3992.49			
20	QPSK	1	1	22.61	22.62	22.45	24.0	0.0	
	Channel			637168	641666	646166	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3957.62	3924.99	3992.49			
15	QPSK	1	1	22.54	22.53	22.49	24.0	0.0	
	Channel			637000	641666	646332	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3955	3924.99	3994.98			
10	QPSK	1	1	22.60	22.62	22.48	24.0	0.0	

Part270 n77 Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. / 65000	Power Middle Ch. / Freq. / 66000	Power High Ch. / Freq. / 66500	Tune-up limit (dBm)	MPR (dB)	
100	PI/2 BPSK	1	1	23.61	23.63	23.57			
100	PI/2 BPSK	1	137	23.60	23.62	23.67	25.0	0.0	
100	PI/2 BPSK	1	271	23.61	23.61	23.68			
100	PI/2 BPSK	135	0	23.28	23.22	23.23	25.0	0.0	
100	PI/2 BPSK	135	69	23.68	23.67	23.65	25.0	0.0	
100	PI/2 BPSK	135	138	23.23	23.29	23.23	25.0	0.0	
100	PI/2 BPSK	270	0	23.22	23.21	23.18			
100	QPSK	1	1	23.73	23.75	23.71			
100	QPSK	1	137	23.66	23.62	23.63	25.0	0.0	
100	QPSK	1	271	23.67	23.70	23.60			
100	QPSK	135	0	23.38	23.45	23.41	25.0	0.0	
100	QPSK	135	69	23.41	23.48	23.46	25.0	0.0	
100	QPSK	135	138	23.39	23.43	23.35	25.0	0.0	
100	QPSK	270	0	23.35	23.60	23.51			
100	16QAM	1	1	23.50	23.58	23.53	25.0	0.0	
100	16QAM	1	1	23.11	23.15	23.09	24.5	0.5	
100	256QAM	1	1	21.06	21.11	21.05	22.5	2.5	
	Channel			64950	65000	65234	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3745.02	3840	3935.01			
90	QPSK	1	1	23.64	23.71	23.60	25.0	0.0	
	Channel			649334	65000	65268	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3742	3840	3945			
80	QPSK	1	1	23.62	23.72	23.60	25.0	0.0	
	Channel			649000	65000	65300	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3740.02	3840	3950.01			
70	QPSK	1	1	23.66	23.66	23.65	25.0	0.0	
	Channel			648334	65000	65300	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3735.01	3840	3955.02			
60	QPSK	1	1	25.55	25.67	25.59	27.0	0.0	
	Channel			648334	65000	65334	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3725.01	3840	3955.02			
50	QPSK	1	1	25.59	25.64	25.61	25.0	0.0	
	Channel			648000	65000	65400	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3724	3840	3960			
40	QPSK	1	1	25.61	25.64	25.68	25.0	0.0	
	Channel			647668	65000	65434	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3715.02	3840	3965.01			
30	QPSK	1	1	23.71	23.84	23.69	25.0	0.0	
	Channel			647500	65000	65500	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3712.5	3840	3967.5			
25	QPSK	1	1	23.65	23.70	23.67	25.0	0.0	
	Channel			647334	65000	65600	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3710.01	3840	3970.02			
20	QPSK	1	1	23.68	23.70	23.65	25.0	0.0	
	Channel			647168	65000	656834	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3707.52	3840	3972.51			
15	QPSK	1	1	23.61	23.62	23.62	25.0	0.0	
	Channel			647000	65000	65600	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3705	3840	3975			
10	QPSK	1	1	23.65	23.64	23.60	25.0	0.0	

Part270 n77 HPUE Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. / 65000	Power Middle Ch. / Freq. / 65000	Power High Ch. / Freq. / 65000	Tune-up limit (dBm)	MPR (dB)	
100	PI/2 BPSK	1	1	25.56	25.64	25.57			
100	PI/2 BPSK	1	137	25.53	25.60	25.64	27.0	0.0	
100	PI/2 BPSK	1	271	25.61	25.61	25.64			
100	PI/2 BPSK	135	0	25.13	25.24	25.26	26.5	0.5	
100	PI/2 BPSK	135	69	25.60	25.63	25.62	27.0	0.0	
100	PI/2 BPSK	135	138	25.17	25.28	25.20	26.5	0.5	
100	PI/2 BPSK	270	0	25.17	25.21	25.17			
100	QPSK	1	1	25.65	25.73	25.71			
100	QPSK	1	137	25.52	25.68	25.68	27.0	0.0	
100	QPSK	1	271	25.52	25.65	25.59			
100	QPSK	135	0	24.68	24.62	24.52	26.0	1.0	
100	QPSK	135	69	25.50	25.55	25.48	27.0	0.0	
100	QPSK	135	138	24.58	24.62	24.55	26.0	1.0	
100	QPSK	270	0	24.61	24.65	24.63			
100	16QAM	1	1	24.48	24.52	24.43	26.0	1.0	
100	16QAM	1	1	23.20	23.25	23.18	24.5	2.5	
100	256QAM	1	1	21.13	21.16	21.11	22.5	4.5	
	Channel			64950	65000	65234	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3745.02	3840	3935.01			
90	QPSK	1	1	25.52	25.67	25.67	27.0	0.0	
	Channel			649334	65000	65268	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3742.01	3840	3940.02			
80	QPSK	1	1	25.53	25.68	25.60	27.0	0.0	
	Channel			649000	65000	65300	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3740.02	3840	3950.01			
70	QPSK	1	1	25.60	25.64	25.59	27.0	0.0	
	Channel			648668	65000	65334	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3735.02	3840	3950.01			
60	QPSK	1	1	25.55	25.67	25.59	27.0	0.0	
	Channel			648334	65000	65368	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3725.01	3840	3955.02			
50	QPSK	1	1	25.57	25.64	25.60	27.0	0.0	
	Channel			648000	65000	65400	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3724	3840	3960			
40	QPSK	1	1	25.57	25.65	25.63	27.0	0.0	
	Channel			647668	65000	65434	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3715.02	3840	3965.01			
30	QPSK	1	1	25.52	25.60	25.63	27.0	0.0	
	Channel			647500	65000	65500	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3712.5	3840	3967.5			
25	QPSK	1	1	25.63	25.63	25.59	27.0	0.0	
	Channel			647334	65000	65600	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3710.01	3840	3970.02			
20	QPSK	1	1	25.54	25.69	25.59	27.0	0.0	
	Channel			647168	65000	656834	Tune-up limit (dBm)	MPR (dB)	
	Frequency (MHz)			3707.52	3840	3972.51			
15	QPSK	1	1	25.52	25.63	25.61	27.0	0.0	
	Channel			647000	65000	65600	Tune-up limit (dBm)	MPR (dB)	



Part27Q n77 Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	23.94	3500.01				
100	PI2 BPSK	1	137	24.06			25.0	0.0	
100	PI2 BPSK	1	271	23.99					
100	PI2 BPSK	135	0	23.85			25.0	0.0	
100	PI2 BPSK	135	69	23.96			25.0	0.0	
100	PI2 BPSK	135	138	23.85			25.0	0.0	
100	PI2 BPSK	270	0	23.85			25.0	0.0	
100	QPSK	1	1	24.09					
100	QPSK	1	137	23.87			25.0	0.0	
100	QPSK	1	271	24.09					
100	QPSK	135	0	23.81			25.0	0.0	
100	QPSK	135	69	23.70			25.0	0.0	
100	QPSK	135	138	23.86			25.0	0.0	
100	QPSK	270	0	23.70			25.0	0.0	
100	16QAM	1	1	23.95			25.0	0.0	
100	64QAM	1	1	23.49			24.5	0.5	
100	256QAM	1	1	21.47			22.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	23.96	6333.34	6336.68	Tune-up limit (dBm)	MPR	
90	QPSK	1	1	23.95	3500.01	3505.02	(dBm)	(dB)	
90	QPSK	1	1	23.96	23.96	23.91	25.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.00	6320.68	6333.34	Tune-up limit (dBm)	MPR	
80	QPSK	1	1	24.00	3500.01	3515.01	(dBm)	(dB)	
80	QPSK	1	1	24.00	23.98	23.93	25.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	23.93	6323.34	6343.34	Tune-up limit (dBm)	MPR	
70	QPSK	1	1	23.93	3500.01	3515.01	(dBm)	(dB)	
70	QPSK	1	1	23.93	23.94	24.00	25.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	24.04	6320.00	6333.34	Tune-up limit (dBm)	MPR	
60	QPSK	1	1	24.04	3500.01	3525.02	(dBm)	(dB)	
60	QPSK	1	1	24.04	23.96	23.96	25.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	23.97	6316.68	6333.34	Tune-up limit (dBm)	MPR	
50	QPSK	1	1	23.97	3500.01	3525.02	(dBm)	(dB)	
50	QPSK	1	1	23.97	23.92	23.98	25.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	24.03	6313.34	6333.34	Tune-up limit (dBm)	MPR	
40	QPSK	1	1	24.03	3500.01	3535.02	(dBm)	(dB)	
40	QPSK	1	1	24.03	24.00	23.98	25.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.96	6310.00	6333.34	Tune-up limit (dBm)	MPR	
30	QPSK	1	1	23.96	3500.01	3535.02	(dBm)	(dB)	
30	QPSK	1	1	23.96	23.94	23.97	25.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	24.02	6306.68	6333.34	Tune-up limit (dBm)	MPR	
25	QPSK	1	1	24.02	3500.01	3537.51	(dBm)	(dB)	
25	QPSK	1	1	24.02	23.94	23.98	25.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	24.04	6303.34	6333.34	Tune-up limit (dBm)	MPR	
20	QPSK	1	1	24.04	3500.01	3540.02	(dBm)	(dB)	
20	QPSK	1	1	24.04	24.00	23.96	25.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.02	6300.00	6333.34	Tune-up limit (dBm)	MPR	
15	QPSK	1	1	24.02	3500.01	3542.52	(dBm)	(dB)	
15	QPSK	1	1	24.02	23.97	23.95	25.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.99	6303.34	6333.34	Tune-up limit (dBm)	MPR	
10	QPSK	1	1	23.99	3500.01	3545.01	(dBm)	(dB)	
10	QPSK	1	1	23.99	24.02	23.93	25.0	0.0	

Part27Q n77 HPUE Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	25.90	3500.01				
100	PI2 BPSK	1	137	25.99			27.0	0.0	
100	PI2 BPSK	1	271	25.98					
100	PI2 BPSK	135	0	25.48			26.5	0.5	
100	PI2 BPSK	135	69	25.91			27.0	0.0	
100	PI2 BPSK	135	138	25.56			26.5	0.5	
100	PI2 BPSK	270	0	25.48			27.0	0.0	
100	QPSK	1	1	26.03					
100	QPSK	1	137	25.88			26.0	1.0	
100	QPSK	1	271	26.04					
100	QPSK	135	0	24.78			26.0	1.0	
100	QPSK	135	69	25.87			26.0	1.0	
100	QPSK	135	138	24.78			26.0	1.0	
100	QPSK	270	0	24.82			26.0	1.0	
100	16QAM	1	1	24.92			24.5	2.5	
100	64QAM	1	1	23.35			22.5	4.5	
100	256QAM	1	1	21.40			22.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	25.90	6333.34	6336.68	Tune-up limit (dBm)	MPR	
90	QPSK	1	1	25.90	3500.01	3505.02	(dBm)	(dB)	
90	QPSK	1	1	25.90	25.80	25.93	27.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	25.84	6320.68	6333.34	Tune-up limit (dBm)	MPR	
80	QPSK	1	1	25.84	3500.01	3515.01	(dBm)	(dB)	
80	QPSK	1	1	25.88	25.85	25.96	27.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	25.84	6323.34	6343.34	Tune-up limit (dBm)	MPR	
70	QPSK	1	1	25.84	3500.01	3515.01	(dBm)	(dB)	
70	QPSK	1	1	25.84	25.80	25.81	27.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	25.89	6320.00	6333.34	Tune-up limit (dBm)	MPR	
60	QPSK	1	1	25.89	3500.01	3525.02	(dBm)	(dB)	
60	QPSK	1	1	25.89	25.80	25.90	27.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	25.93	6316.68	6333.34	Tune-up limit (dBm)	MPR	
50	QPSK	1	1	25.93	3500.01	3525.02	(dBm)	(dB)	
50	QPSK	1	1	25.93	25.78	25.89	27.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	25.88	6313.34	6333.34	Tune-up limit (dBm)	MPR	
40	QPSK	1	1	25.88	3500.01	3535.02	(dBm)	(dB)	
40	QPSK	1	1	25.88	25.75	25.89	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	25.83	6310.00	6333.34	Tune-up limit (dBm)	MPR	
30	QPSK	1	1	25.83	3500.01	3535.02	(dBm)	(dB)	
30	QPSK	1	1	25.83	25.81	25.80	27.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	25.83	6306.68	6333.34	Tune-up limit (dBm)	MPR	
25	QPSK	1	1	25.83	3500.01	3537.51	(dBm)	(dB)	
25	QPSK	1	1	25.83	25.82	25.89	27.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	25.81	6303.34	6333.34	Tune-up limit (dBm)	MPR	
20	QPSK	1	1	25.81	3500.01	3540.02	(dBm)	(dB)	
20	QPSK	1	1	25.81	25.79	25.86	27.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	25.85	6300.00	6333.34	Tune-up limit (dBm)	MPR	
15	QPSK	1	1	25.85	3500.01	3545.01	(dBm)	(dB)	
15	QPSK	1	1	25.85	25.76	25.92	27.0	0.0	

Part27O n78 Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	23.82	3750	3750			
100	PI2 BPSK	1	137	23.79			25.0	0.0	
100	PI2 BPSK	1	271	23.72					
100	PI2 BPSK	135	0	23.34			25.0	0.0	
100	PI2 BPSK	135	69	23.73			25.0	0.0	
100	PI2 BPSK	135	138	23.35			25.0	0.0	
100	PI2 BPSK	270	0	23.35			25.0	0.0	
100	QPSK	1	1	23.86					
100	QPSK	1	137	23.74			25.0	0.0	
100	QPSK	1	271	23.77					
100	QPSK	135	0	23.57			25.0	0.0	
100	QPSK	135	69	23.68			25.0	0.0	
100	QPSK	135	138	23.61			25.0	0.0	
100	QPSK	270	0	23.65			24.5	0.5	
100	64QAM	1	1	23.73			24.5	0.5	
100	256QAM	1	1	21.18			22.5	2.5	
100	256QAM	1	1	21.12			22.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	23.82	6493.34	650000	Tune-up limit (dBm)	MPR	
90	QPSK	1	1	23.82	3745.02	3750	(dBm)	(dB)	
90	QPSK	1	1	23.82	23.82	23.81	25.0	0.0	
Channel									
Frequency (MHz)									



Part270 n78 HPUE Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	23.77	23.77	23.77			
100	Pi2 BPSK	1	137	23.72	23.72	23.72	27.0	0.0	
100	Pi2 BPSK	1	271	23.69	23.69	23.69			
100	Pi2 BPSK	135	0	25.30	25.30	25.30	26.5	0.5	
100	Pi2 BPSK	135	69	25.78	25.78	25.78	27.0	0.0	
100	Pi2 BPSK	135	138	25.29	25.29	25.29	26.5	0.5	
100	Pi2 BPSK	270	0	25.30	25.30	25.30			
100	QPSK	1	1	25.81	25.81	25.81			
100	QPSK	1	137	25.74	25.74	25.74	27.0	0.0	
100	QPSK	1	271	25.74	25.74	25.74			
100	QPSK	135	0	24.56	24.56	24.56	26.0	1.0	
100	QPSK	135	69	25.67	25.67	25.67	27.0	0.0	
100	QPSK	135	138	24.80	24.80	24.80	26.0	1.0	
100	QPSK	270	0	24.80	24.80	24.80			
100	16QAM	1	1	24.64	24.64	24.64	26.0	1.0	
100	16QAM	1	1	23.05	23.05	23.05	24.5	2.5	
100	256QAM	1	1	23.12	23.12	23.12	22.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	25.60	25.60	25.60	27.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	25.69	25.69	25.69	27.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	23.82	23.82	23.82	27.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	25.67	25.67	25.67	27.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	25.82	25.82	25.82	27.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	25.61	25.64	25.59	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	25.85	25.59	25.84	27.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	25.65	25.59	25.64	27.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	25.81	25.59	25.61	27.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	25.63	25.61	25.63	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	25.61	25.63	25.59	27.0	0.0	

Part27Q n78 Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	23.74	23.74	23.74			
100	Pi2 BPSK	1	137	23.72	23.72	23.72	25.0	0.0	
100	Pi2 BPSK	1	271	23.73	23.73	23.73			
100	Pi2 BPSK	135	0	23.28	23.28	23.28	25.0	0.0	
100	Pi2 BPSK	135	69	23.76	23.76	23.76	25.0	0.0	
100	Pi2 BPSK	135	138	23.30	23.30	23.30	25.0	0.0	
100	Pi2 BPSK	270	0	23.38	23.38	23.38			
100	QPSK	1	1	23.84	23.84	23.84			
100	QPSK	1	137	23.77	23.77	23.77	25.0	0.0	
100	QPSK	1	271	23.76	23.76	23.76			
100	QPSK	135	0	23.51	23.51	23.51	25.0	0.0	
100	QPSK	135	69	23.78	23.78	23.78	25.0	0.0	
100	QPSK	135	138	23.54	23.54	23.54	25.0	0.0	
100	QPSK	270	0	23.71	23.71	23.71			
100	16QAM	1	1	23.76	23.76	23.76	24.5	0.0	
100	16QAM	1	1	23.31	23.31	23.31	24.5	0.5	
100	256QAM	1	1	23.25	23.25	23.25	22.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	23.71	23.69	23.63	25.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	23.69	23.63	23.65	25.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	23.69	23.69	23.69	25.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	23.69	23.63	23.64	25.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	23.74	23.69	23.62	25.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	23.89	23.65	23.59	25.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.86	23.67	23.67	25.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	23.86	23.68	23.64	25.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.85	23.70	23.68	25.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.74	23.70	23.60	25.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.67	23.66	23.63	25.0	0.0	

Part27Q n78 HPUE Ant 8									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	25.65	25.65	25.65			
100	Pi2 BPSK	1	137	25.61	25.61	25.61	27.0	0.0	
100	Pi2 BPSK	1	271	25.68	25.68	25.68			
100	Pi2 BPSK	135	0	25.24	25.24	25.24	26.5	0.5	
100	Pi2 BPSK	135	69	25.66	25.66	25.66	27.0	0.0	
100	Pi2 BPSK	135	138	25.17	25.17	25.17	26.5	0.5	
100	Pi2 BPSK	270	0	25.19	25.19	25.19			
100	QPSK	1	1	25.72	25.72	25.72			
100	QPSK	1	137	25.64	25.64	25.64	27.0	0.0	
100	QPSK	1	271	25.68	25.68	25.68			
100	QPSK	135	0	24.58	24.58	24.58	26.0	1.0	
100	QPSK	135	69	25.57	25.57	25.57	27.0	0.0	
100	QPSK	135	138	24.60	24.60	24.60	26.0	1.0	
100	QPSK	270	0	24.62	24.62	24.62			
100	16QAM	1	1	24.67	24.67	24.67	26.0	1.0	
100	16QAM	1	1	23.12	23.12	23.12	24.5	2.5	
100	256QAM	1	1	23.20	23.20	23.20	22.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	25.70	25.59	25.67	27.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	25.64	25.51	25.53	27.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	25.62	25.57	25.53	27.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	25.68	25.46	25.58	27.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	25.59	25.56	25.57	27.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	25.64	25.55	25.64	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	25.59	25.40	25.57	27.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	25.56	25.54	25.59	27.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	25.60	25.49	25.60	27.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	25.65	25.50	25.65	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	25.65	25.46	25.58	27.0	0.0	

Reduced Power Mode for DSI1

n5 Ant 0 DSI1									
BW [MHz]	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit	MPR	
				Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.			
Channel				166800	167300	167800			
Frequency (MHz)				829	836.5	844			
20	PI/2 BPSK	1	1	24.91	25.11	25.05	25.7	0.0	
20	PI/2 BPSK	1	53	24.99	25.16	25.11			
20	PI/2 BPSK	1	104	25.04	25.12	25.12			
20	PI/2 BPSK	50	0	24.61	24.77	24.66	25.2	0.5	
20	PI/2 BPSK	50	28	24.99	25.04	25.01	25.7	0.0	
20	PI/2 BPSK	50	56	24.61	24.69	24.68	25.2	0.5	
20	PI/2 BPSK	100	0	24.56	24.71	24.63			
20	PI/2 BPSK	100	0	24.56	24.71	24.63			
20	QPSK	1	1	25.13	25.21	25.17	25.7	0.0	
20	QPSK	1	53	24.95	25.01	24.97			
20	QPSK	1	104	24.97	25.13	25.11			
20	QPSK	50	0	24.16	24.15	24.16	24.7	1.0	
20	QPSK	50	28	25.01	25.04	24.90	25.7	0.0	
20	QPSK	50	56	24.13	24.16	24.12	24.7	1.0	
20	QPSK	100	0	24.16	24.25	24.21			
20	QPSK	100	0	24.16	24.25	24.21			
20	16QAM	1	1	24.17	24.20	24.19	24.7	1.0	
20	64QAM	1	1	22.60	22.73	22.61	23.2	2.5	
20	256QAM	1	1	20.58	20.71	20.68	21.2	4.5	
Channel				166300	167300	168300	Tune-up limit	MPR	
Frequency (MHz)				831.5	838.5	845.5	(dBm)	(dB)	
15	QPSK	1	1	24.99	25.12	25.10	25.7	0.0	
Channel				165800	167300	168800	Tune-up limit	MPR	
Frequency (MHz)				829	836.5	844	(dBm)	(dB)	
10	QPSK	1	1	25.10	25.07	25.07	25.7	0.0	
Channel				165300	167300	169300	Tune-up limit	MPR	
Frequency (MHz)				826.5	838.5	846.5	(dBm)	(dB)	
5	QPSK	1	1	25.01	25.15	25.04	25.7	0.0	

n26 Ant 0 DSI1									
BW [MHz]	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit	MPR	
				Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.			
Channel				164800	166300	167800			
Frequency (MHz)				824	831.5	839			
20	PI/2 BPSK	1	1	24.97	25.15	25.04	25.7	0.0	
20	PI/2 BPSK	1	53	24.98	25.18	25.18			
20	PI/2 BPSK	1	104	25.12	25.13	25.11			
20	PI/2 BPSK	50	0	24.46	24.55	24.42	25.2	0.5	
20	PI/2 BPSK	50	28	24.93	24.99	24.94	25.7	0.0	
20	PI/2 BPSK	50	56	24.41	24.52	24.42	25.2	0.5	
20	PI/2 BPSK	100	0	24.57	24.57	24.49			
20	PI/2 BPSK	100	0	24.57	24.57	24.49			
20	QPSK	1	1	25.15	25.19	25.14	25.7	0.0	
20	QPSK	1	53	25.02	25.05	25.04			
20	QPSK	1	104	25.01	25.08	25.09			
20	QPSK	50	0	23.90	24.07	23.90	24.7	1.0	
20	QPSK	50	28	25.00	25.07	24.90	25.7	0.0	
20	QPSK	50	56	23.85	24.03	23.86	24.7	1.0	
20	QPSK	100	0	23.99	24.03	23.90			
20	QPSK	100	0	23.99	24.03	23.90			
20	16QAM	1	1	23.92	23.95	23.92	24.7	1.0	
20	64QAM	1	1	22.63	22.73	22.65	23.2	2.5	
20	256QAM	1	1	20.64	20.66	20.60	21.2	4.5	
Channel				164300	166300	168300	Tune-up limit	MPR	
Frequency (MHz)				821.5	831.5	841.5	(dBm)	(dB)	
15	QPSK	1	1	25.08	25.07	25.02	25.7	0.0	
Channel				163800	166300	168800	Tune-up limit	MPR	
Frequency (MHz)				819	831.5	844	(dBm)	(dB)	
10	QPSK	1	1	25.06	25.17	25.03	25.7	0.0	
Channel				163300	166300	169300	Tune-up limit	MPR	
Frequency (MHz)				816.5	831.5	846.5	(dBm)	(dB)	
5	QPSK	1	1	25.02	25.12	25.03	25.7	0.0	

n5 Ant 1 DS11									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				166800	167300	167800			
Frequency (MHz)				834	836.5	839			
20	PI/2 BPSK	1	1	19.11	19.18	19.05			
20	PI/2 BPSK	1	53	19.02	18.99	18.89	20.2	0.0	
20	PI/2 BPSK	1	104	18.91	19.01	18.83			
20	PI/2 BPSK	50	0	19.06	19.18	18.94	20.2	0.0	
20	PI/2 BPSK	50	26	18.88	18.97	18.94	20.2	0.0	
20	PI/2 BPSK	50	56	18.87	19.05	18.95			
20	PI/2 BPSK	100	0	18.91	18.98	18.96	20.2	0.0	
20	QPSK	1	1	19.17	19.22	19.18			
20	QPSK	1	53	18.99	19.11	19.03	20.2	0.0	
20	QPSK	1	104	19.05	19.15	19.01			
20	QPSK	50	0	18.72	18.85	18.87	20.2	0.0	
20	QPSK	50	26	18.99	19.10	18.97	20.2	0.0	
20	QPSK	50	56	18.88	18.95	18.83			
20	QPSK	100	0	18.76	18.88	18.75	20.2	0.0	
20	16QAM	1	1	18.88	18.93	18.82	20.2	0.0	
20	64QAM	1	1	18.90	18.88	18.82	20.2	0.0	
20	256QAM	1	1	18.88	18.95	18.83	20.2	0.0	
Channel				163300	167300	168300	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				831.5	836.5	841.5			
15	QPSK	1	1	19.09	19.10	19.04	20.2	0.0	
Channel				165800	167300	168800	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				829	836.5	844			
10	QPSK	1	1	19.04	19.14	19.10	20.2	0.0	
Channel				163300	167300	168300	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				826.5	836.5	846.5			
5	QPSK	1	1	19.07	19.07	19.04	20.2	0.0	

n26 Ant 1 DS11									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				164500	166300	167800			
Frequency (MHz)				824	831.5	839			
20	PI/2 BPSK	1	1	19.50	19.59	19.38			
20	PI/2 BPSK	1	53	19.42	19.44	19.28	20.7	0.0	
20	PI/2 BPSK	1	104	19.41	19.45	19.31			
20	PI/2 BPSK	50	0	19.51	19.58	19.41	20.7	0.0	
20	PI/2 BPSK	50	26	19.38	19.48	19.34	20.7	0.0	
20	PI/2 BPSK	50	56	19.28	19.48	19.26			
20	PI/2 BPSK	100	0	19.38	19.48	19.36	20.7	0.0	
20	QPSK	1	1	19.55	19.66	19.58			
20	QPSK	1	53	19.40	19.52	19.46	20.7	0.0	
20	QPSK	1	104	19.47	19.56	19.42			
20	QPSK	50	0	19.20	19.32	19.26	20.7	0.0	
20	QPSK	50	26	19.41	19.57	19.45	20.7	0.0	
20	QPSK	50	56	19.27	19.42	19.25			
20	QPSK	100	0	19.26	19.29	19.18	20.7	0.0	
20	16QAM	1	1	19.30	19.45	19.24	20.7	0.0	
20	64QAM	1	1	19.27	19.33	19.17	20.7	0.0	
20	256QAM	1	1	19.25	19.41	19.27	20.7	0.0	
Channel				164300	166300	168300	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				821.5	831.5	841.5			
15	QPSK	1	1	19.43	19.52	19.49	20.7	0.0	
Channel				163800	166300	168800	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				819	831.5	844			
10	QPSK	1	1	19.44	19.52	19.42	20.7	0.0	
Channel				163300	166300	168300	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				816.5	831.5	846.5			
5	QPSK	1	1	19.50	19.54	19.48	20.7	0.0	



n48 Ant 1 DSI1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel							
Frequency (MHz)							
40	PI/2 BPSK	1	1	16.56	16.61	16.42	
40	PI/2 BPSK	1	53	16.40	16.42	16.38	18.0
40	PI/2 BPSK	1	104	16.40	16.44	16.32	
40	PI/2 BPSK	50	0	16.56	16.57	16.39	18.0
40	PI/2 BPSK	50	28	16.34	16.52	16.35	18.0
40	PI/2 BPSK	50	56	16.33	16.42	16.30	
40	PI/2 BPSK	100	0	16.39	16.40	16.37	18.0
40	QPSK	1	1	16.60	16.64	16.61	
40	QPSK	1	53	16.49	16.63	16.51	18.0
40	QPSK	1	104	16.43	16.55	16.54	
40	QPSK	50	0	16.17	16.38	16.32	18.0
40	QPSK	50	28	16.49	16.55	16.50	18.0
40	QPSK	50	56	16.30	16.38	16.25	18.0
40	QPSK	100	0	16.19	16.34	16.15	18.0
40	16QAM	1	1	16.26	16.40	16.26	18.0
40	64QAM	1	1	16.35	16.41	16.22	18.0
40	256QAM	1	1	16.22	16.26	16.13	17.5
Channel							
Frequency (MHz)							
30	QPSK	1	1	16.54	16.58	16.45	18.0
Channel							
Frequency (MHz)							
20	QPSK	1	1	16.54	16.58	16.47	18.0
Channel							
Frequency (MHz)							
10	QPSK	1	1	16.44	16.55	16.53	18.0
Channel							
Frequency (MHz)							
10	QPSK	1	1	16.44	16.60	16.46	18.0

Part270 n77 Ant 1 DSI1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel							
Frequency (MHz)							
100	PI/2 BPSK	1	1	15.84	16.00	15.80	
100	PI/2 BPSK	1	137	15.91	15.95	15.77	17.5
100	PI/2 BPSK	1	271	15.82	15.88	15.71	
100	PI/2 BPSK	135	0	15.97	16.08	15.87	17.5
100	PI/2 BPSK	135	69	15.77	15.84	15.79	17.5
100	PI/2 BPSK	135	138	15.80	15.97	15.82	
100	PI/2 BPSK	270	0	15.87	15.89	15.87	17.5
100	QPSK	1	1	16.05	16.15	16.13	
100	QPSK	1	137	15.96	16.02	16.00	17.5
100	QPSK	1	271	15.94	16.11	15.99	
100	QPSK	135	0	15.88	15.72	15.76	17.5
100	QPSK	135	69	15.96	16.04	15.88	17.5
100	QPSK	135	138	15.88	15.82	15.74	17.5
100	QPSK	270	0	15.85	15.70	15.71	17.5
100	16QAM	1	1	15.74	15.82	15.70	17.5
100	64QAM	1	1	15.80	15.85	15.69	17.5
100	256QAM	1	1	15.80	15.80	15.74	17.5
Channel							
Frequency (MHz)							
90	QPSK	1	1	15.90	15.98	16.02	17.5
Channel							
Frequency (MHz)							
80	QPSK	1	1	15.92	15.95	16.02	17.5
Channel							
Frequency (MHz)							
70	QPSK	1	1	15.92	15.97	16.02	17.5
Channel							
Frequency (MHz)							
60	QPSK	1	1	15.98	16.05	16.00	17.5
Channel							
Frequency (MHz)							
50	QPSK	1	1	15.99	15.95	16.02	17.5
Channel							
Frequency (MHz)							
40	QPSK	1	1	15.97	15.95	16.03	17.5
Channel							
Frequency (MHz)							
30	QPSK	1	1	16.02	16.05	16.02	17.5
Channel							
Frequency (MHz)							
25	QPSK	1	1	15.97	16.04	16.09	17.5
Channel							
Frequency (MHz)							
20	QPSK	1	1	15.98	15.97	16.05	17.5
Channel							
Frequency (MHz)							
15	QPSK	1	1	15.97	16.00	16.00	17.5
Channel							
Frequency (MHz)							
10	QPSK	1	1	15.80	15.97	16.05	17.5

Part270 n77 HPUE Ant 1 DSI1							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	MPR (dB)
Channel							
Frequency (MHz)							
100	PI/2 BPSK	1	1	18.03	18.03	18.85	
100	PI/2 BPSK	1	137	18.92	18.90	18.73	20.5
100	PI/2 BPSK	1	271	18.80	18.89	18.77	
100	PI/2 BPSK	135	0	18.94	19.09	18.85	20.5
100	PI/2 BPSK	135	69	18.82	18.97	18.76	20.5
100	PI/2 BPSK	135	138	18.81	19.00	18.85	
100	PI/2 BPSK	270	0	18.82	18.88	18.83	20.5
100	QPSK	1	1	19.06	19.17	19.10	
100	QPSK	1	137	18.85	18.94	18.82	20.5
100	QPSK	1	271	18.90	18.13	19.03	
100	QPSK	135	0	18.85	18.75	18.81	20.5
100	QPSK	135	69	19.02	19.03	18.91	20.5
100	QPSK	135	138	18.73	18.80	18.72	20.5
100	QPSK	270	0	18.86	18.81	18.72	
100	16QAM	1	1	18.71	18.83	18.75	20.5
100	64QAM	1	1	18.77	18.82	18.71	20.5
100	256QAM	1	1	18.72	18.82	18.72	20.5
Channel							
Frequency (MHz)							
90	QPSK	1	1	18.93	19.06	18.97	20.5
Channel							
Frequency (MHz)							
80	QPSK	1	1	18.96	18.98	19.04	20.5
Channel							
Frequency (MHz)							
70	QPSK	1	1	18.95	19.03	19.08	20.5
Channel							
Frequency (MHz)							
60	QPSK	1	1	18.94	18.98	18.95	20.5
Channel							
Frequency (MHz)							
50	QPSK	1	1	18.97	18.99	18.99	20.5
Channel							
Frequency (MHz)							
40	QPSK	1	1	18.90	18.95	19.04	20.5
Channel							
Frequency (MHz)							
30	QPSK	1	1	19.02	18.95	18.98	20.5
Channel							
Frequency (MHz)							
25	QPSK	1	1	18.95	19.02	18.96	20.5
Channel							
Frequency (MHz)							
20	QPSK	1	1	19.01	19.01	18.94	20.5
Channel							
Frequency (MHz)							
15	QPSK	1	1	19.01	19.04	19.01	20.5
Channel							
Frequency (MHz)							
10	QPSK	1	1	18.92	19.02	18.96	20.5



Part27Q n77 Ant 1 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	15.84	15.84	15.84	17.5	0.0	
100	PI2 BPSK	1	137	15.78	15.78	15.78	17.5	0.0	
100	PI2 BPSK	1	271	15.72	15.72	15.72	17.5	0.0	
100	PI2 BPSK	135	0	15.84	15.84	15.84	17.5	0.0	
100	PI2 BPSK	135	69	15.77	15.77	15.77	17.5	0.0	
100	PI2 BPSK	135	138	15.76	15.76	15.76	17.5	0.0	
100	PI2 BPSK	270	0	15.69	15.69	15.69	17.5	0.0	
100	QPSK	1	1	15.97	15.97	15.97	17.5	0.0	
100	QPSK	1	137	15.86	15.86	15.86	17.5	0.0	
100	QPSK	1	271	15.87	15.87	15.87	17.5	0.0	
100	QPSK	135	0	15.86	15.86	15.86	17.5	0.0	
100	QPSK	135	69	15.82	15.82	15.82	17.5	0.0	
100	QPSK	135	138	15.85	15.85	15.85	17.5	0.0	
100	QPSK	270	0	15.69	15.69	15.69	17.5	0.0	
100	16QAM	1	1	15.73	15.73	15.73	17.5	0.0	
100	16QAM	1	137	15.62	15.62	15.62	17.5	0.0	
100	16QAM	1	271	15.62	15.62	15.62	17.5	0.0	
100	64QAM	1	1	15.62	15.62	15.62	17.5	0.0	
100	256QAM	1	1	15.62	15.62	15.62	17.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	633000	633334	633668	Tune-up limit (dBm)	MPR	
90	QPSK	1	1	3495	3500.01	3505.02	17.5	0.0	
90	QPSK	1	1	15.86	15.83	15.82	17.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	632068	633334	634600	Tune-up limit (dBm)	MPR	
80	QPSK	1	1	3480.02	3500.01	3520	17.5	0.0	
80	QPSK	1	1	15.87	15.84	15.78	17.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	632334	633334	634334	Tune-up limit (dBm)	MPR	
70	QPSK	1	1	3485.01	3500.01	3515.01	17.5	0.0	
70	QPSK	1	1	15.82	15.79	15.73	17.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	632000	633334	634668	Tune-up limit (dBm)	MPR	
60	QPSK	1	1	3480	3500.01	3520.02	17.5	0.0	
60	QPSK	1	1	15.84	15.79	15.73	17.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	631000	633334	635668	Tune-up limit (dBm)	MPR	
50	QPSK	1	1	3475.02	3500.01	3525	17.5	0.0	
50	QPSK	1	1	15.86	15.83	15.78	17.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	631334	633334	635334	Tune-up limit (dBm)	MPR	
40	QPSK	1	1	3480.01	3500.01	3520.01	17.5	0.0	
40	QPSK	1	1	15.81	15.80	15.85	17.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	631000	633334	635668	Tune-up limit (dBm)	MPR	
30	QPSK	1	1	3485	3500.01	3535.02	17.5	0.0	
30	QPSK	1	1	15.81	15.84	15.79	17.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	631000	633334	635668	Tune-up limit (dBm)	MPR	
25	QPSK	1	1	3482.51	3500.01	3537.51	17.5	0.0	
25	QPSK	1	1	15.83	15.84	15.78	17.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	630500	633334	636168	Tune-up limit (dBm)	MPR	
20	QPSK	1	1	3480.02	3500.01	3540	17.5	0.0	
20	QPSK	1	1	15.87	15.86	15.78	17.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	630334	633334	636334	Tune-up limit (dBm)	MPR	
15	QPSK	1	1	3475.02	3500.01	3542.52	17.5	0.0	
15	QPSK	1	1	15.89	15.81	15.75	17.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	630334	633334	636334	Tune-up limit (dBm)	MPR	
10	QPSK	1	1	3495.01	3500.01	3545.01	17.5	0.0	
10	QPSK	1	1	15.82	15.82	15.84	17.5	0.0	

Part27Q n77 HPUE Ant 1 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	18.87	18.87	18.87	20.5	0.0	
100	PI2 BPSK	1	137	18.74	18.74	18.74	20.5	0.0	
100	PI2 BPSK	1	271	18.72	18.72	18.72	20.5	0.0	
100	PI2 BPSK	135	0	18.89	18.89	18.89	20.5	0.0	
100	PI2 BPSK	135	69	18.81	18.81	18.81	20.5	0.0	
100	PI2 BPSK	135	138	18.70	18.70	18.70	20.5	0.0	
100	PI2 BPSK	270	0	18.68	18.68	18.68	20.5	0.0	
100	QPSK	1	1	19.01	19.01	19.01	20.5	0.0	
100	QPSK	1	137	18.94	18.94	18.94	20.5	0.0	
100	QPSK	1	271	18.84	18.84	18.84	20.5	0.0	
100	QPSK	135	0	18.70	18.70	18.70	20.5	0.0	
100	QPSK	135	69	18.79	18.79	18.79	20.5	0.0	
100	QPSK	135	138	18.71	18.71	18.71	20.5	0.0	
100	QPSK	270	0	18.61	18.61	18.61	20.5	0.0	
100	16QAM	1	1	18.77	18.77	18.77	20.5	0.0	
100	16QAM	1	137	18.68	18.68	18.68	20.5	0.0	
100	16QAM	1	271	18.62	18.62	18.62	20.5	0.0	
100	64QAM	1	1	18.62	18.62	18.62	20.5	0.0	
100	256QAM	1	1	18.62	18.62	18.62	20.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	633000	633334	633668	Tune-up limit (dBm)	MPR	
90	QPSK	1	1	3495	3500.01	3505.02	20.5	0.0	
90	QPSK	1	1	18.87	18.83	18.81	20.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	632068	633334	634600	Tune-up limit (dBm)	MPR	
80	QPSK	1	1	3480.02	3500.01	3520	20.5	0.0	
80	QPSK	1	1	18.82	18.81	18.84	20.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	632334	633334	634334	Tune-up limit (dBm)	MPR	
70	QPSK	1	1	3485.01	3500.01	3515.01	20.5	0.0	
70	QPSK	1	1	18.92	18.80	18.85	20.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	632000	633334	634668	Tune-up limit (dBm)	MPR	
60	QPSK	1	1	3480	3500.01	3520.02	20.5	0.0	
60	QPSK	1	1	18.84	18.79	18.78	20.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	631000	633334	635668	Tune-up limit (dBm)	MPR	
50	QPSK	1	1	3475.02	3500.01	3525	20.5	0.0	
50	QPSK	1	1	18.84	18.88	18.88	20.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	631334	633334	635334	Tune-up limit (dBm)	MPR	
40	QPSK	1	1	3480.01	3500.01	3520.01	20.5	0.0	
40	QPSK	1	1	18.85	18.78	18.81	20.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	631000	633334	635668	Tune-up limit (dBm)	MPR	
30	QPSK	1	1	3485	3500.01	3535.02	20.5	0.0	
30	QPSK	1	1	18.81	18.84	18.79	20.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	631000	633334	635668	Tune-up limit (dBm)	MPR	
25	QPSK	1	1	3482.51	3500.01	3537.51	20.5	0.0	
25	QPSK	1	1	18.84	18.86	18.84	20.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	630500	633334	636168	Tune-up limit (dBm)	MPR	
20	QPSK	1	1	3480.02	3500.01	3540	20.5	0.0	
20	QPSK	1	1	18.88	18.80	18.78	20.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	630334	633334	636334	Tune-up limit (dBm)	MPR	
15	QPSK	1	1	3475.02	3500.01	3542.52	20.5	0.0	
15	QPSK	1	1	18.87	18.79	18.80	20.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	630334	633334	636334	Tune-up limit (dBm)	MPR	
10	QPSK	1	1	3495.01	3500.01	3545.01	20.5	0.0	
10	QPSK	1	1	18.83	18.83	18.81	20.5	0.0	

Part270 n78 Ant 1 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	17.86	17.86	17.86	19.0	0.0	
100	PI2 BPSK	1	137	17.80	17.80	17.80	19.0	0.0	
100	PI2 BPSK	1	271	17.82	17.82	17.82	19.0	0.0	
100	PI2 BPSK	135	0	17.85	17.85	17.85	19.0	0.0	
100	PI2 BPSK	135	69	17.84	17.84	17.84	19.0	0.0	
100	PI2 BPSK	135	138	17.					



Part270 n78 HPUE Ant 1 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	3750	3750	3750			
100	PI2 BPSK	1	1	20.94			22.0	0.0	
100	PI2 BPSK	1	137	20.75					
100	PI2 BPSK	1	271	20.84					
100	PI2 BPSK	135	0	20.93			22.0	0.0	
100	PI2 BPSK	135	69	20.81			22.0	0.0	
100	PI2 BPSK	135	138	20.87			22.0	0.0	
100	PI2 BPSK	270	0	20.79					
100	QPSK	1	1	21.04					
100	QPSK	1	137	20.95			22.0	0.0	
100	QPSK	1	271	20.89					
100	QPSK	135	0	20.86			22.0	0.0	
100	QPSK	135	69	20.99			22.0	0.0	
100	QPSK	135	138	20.78			22.0	0.0	
100	QPSK	270	0	20.66					
100	16QAM	1	1	20.79			22.0	0.0	
100	16QAM	1	1	20.86					
100	256QAM	1	1	19.62			21.5	0.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	34863	65000	65034	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
90	QPSK	1	1	20.89	20.89	21.01	22.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	20.85	20.83	20.95	22.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	20.93	20.77	20.93	22.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	20.90	20.85	21.03	22.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	20.95	20.82	20.97	22.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	20.83	20.81	20.95	22.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	20.90	20.81	21.02	22.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	20.95	20.86	21.03	22.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	20.84	20.80	21.03	22.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	20.95	20.87	21.01	22.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	20.84	20.86	21.00	22.0	0.0	

Part27Q n78 Ant 1 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	17.62					
100	PI2 BPSK	1	1	17.49			19.0	0.0	
100	PI2 BPSK	1	137	17.56					
100	PI2 BPSK	1	271	17.50					
100	PI2 BPSK	135	0	17.70			19.0	0.0	
100	PI2 BPSK	135	69	17.65			19.0	0.0	
100	PI2 BPSK	135	138	17.51			19.0	0.0	
100	PI2 BPSK	270	0	17.48					
100	QPSK	1	1	17.76					
100	QPSK	1	137	17.66			19.0	0.0	
100	QPSK	1	271	17.65					
100	QPSK	135	0	17.33			19.0	0.0	
100	QPSK	135	69	17.84			19.0	0.0	
100	QPSK	135	138	17.47			19.0	0.0	
100	QPSK	270	0	17.42					
100	16QAM	1	1	17.47			19.0	0.0	
100	16QAM	1	1	17.44					
100	256QAM	1	1	17.42			19.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	17.61	17.67	17.65	19.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.59	17.68	17.57	19.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	17.57	17.64	17.59	19.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.62	17.74	17.62	19.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	17.65	17.73	17.61	19.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	17.67	17.63	17.63	19.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.67	17.72	17.61	19.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	17.64	17.83	17.60	19.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.67	17.64	17.58	19.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.62	17.70	17.61	19.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.65	17.63	17.59	19.0	0.0	

Part27Q n78 HPUE Ant 1 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	20.65					
100	PI2 BPSK	1	1	20.47			22.0	0.0	
100	PI2 BPSK	1	137	20.48					
100	PI2 BPSK	1	271	20.48					
100	PI2 BPSK	135	0	20.65			22.0	0.0	
100	PI2 BPSK	135	69	20.60			22.0	0.0	
100	PI2 BPSK	135	138	20.56			22.0	0.0	
100	PI2 BPSK	270	0	20.54					
100	QPSK	1	1	20.70					
100	QPSK	1	137	20.67			22.0	0.0	
100	QPSK	1	271	20.65					
100	QPSK	135	0	20.28			22.0	0.0	
100	QPSK	135	69	20.63			22.0	0.0	
100	QPSK	135	138	20.47			22.0	0.0	
100	QPSK	270	0	20.47					
100	16QAM	1	1	20.52			22.0	0.0	
100	16QAM	1	1	20.43					
100	256QAM	1	1	19.60			21.5	0.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	20.61	20.62	20.65	22.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	20.64	20.63	20.60	22.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	20.57	20.65	20.60	22.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	20.60	20.63	20.67	22.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	20.65	20.63	20.62	22.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	20.57	20.64	20.65	22.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	20.60	20.64	20.60	22.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	20.65	20.67	20.65	22.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	20.67	20.62	20.60	22.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	20.61	20.65	20.64	22.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	20.64	20.65	20.60	22.0	0.0	



n2 Ant 2 DS11									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				1870	1880	1890			
40	P1/2 BPSK	1	1	17.12	17.21	17.02			
40	P1/2 BPSK	1	108	17.01	17.07	16.91	18.5	0.0	
40	P1/2 BPSK	1	214	16.93	16.98	16.92			
40	P1/2 BPSK	108	0	17.08	17.18	16.92	18.5	0.0	
40	P1/2 BPSK	108	54	16.93	17.00	16.93	18.5	0.0	
40	P1/2 BPSK	108	108	16.86	17.02	16.98	18.5	0.0	
40	P1/2 BPSK	216	0	16.96	17.02	17.00			
40	QPSK	1	1	17.14	17.28	17.22			
40	QPSK	1	108	16.99	17.21	17.07	18.5	0.0	
40	QPSK	1	214	17.00	17.14	17.02			
40	QPSK	108	0	16.77	16.84	16.81	18.5	0.0	
40	QPSK	108	54	17.10	17.21	16.99	18.5	0.0	
40	QPSK	108	108	16.88	16.93	16.84	18.5	0.0	
40	QPSK	216	0	16.81	16.98	16.74	18.5	0.0	
40	16QAM	1	1	16.89	16.97	16.87	18.5	0.0	
40	64QAM	1	1	16.86	16.94	16.78	18.5	0.0	
40	256QAM	1	1	16.84	16.87	16.83	18.5	0.0	
Channel									
Frequency (MHz)				1867.5	1880	1892.5	(dBm)	(dB)	
35	QPSK	1	1	17.10	17.14	17.08	18.5	0.0	
Channel									
Frequency (MHz)				373000	376000	379000	Tune-up limit (dBm)	MPR	
30	QPSK	1	1	17.00	17.13	17.10	18.5	0.0	
Channel									
Frequency (MHz)				372500	376000	379500	Tune-up limit (dBm)	MPR	
25	QPSK	1	1	17.00	17.14	17.00	18.5	0.0	
Channel									
Frequency (MHz)				372000	376000	380000	Tune-up limit (dBm)	MPR	
20	QPSK	1	1	17.07	17.12	17.14	18.5	0.0	
Channel									
Frequency (MHz)				1867.5	1880	1902.5	Tune-up limit (dBm)	MPR	
15	QPSK	1	1	17.01	17.13	17.12	18.5	0.0	
Channel									
Frequency (MHz)				371000	376000	381000	Tune-up limit (dBm)	MPR	
10	QPSK	1	1	16.99	17.16	17.14	18.5	0.0	
Channel									
Frequency (MHz)				370500	376000	381500	Tune-up limit (dBm)	MPR	
5	QPSK	1	1	17.04	17.20	17.15	18.5	0.0	

n7 Ant 2 DS11									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2320	2335	2350			
40	P1/2 BPSK	1	1	15.76	15.76	15.67			
40	P1/2 BPSK	1	108	15.61	15.70	15.55	17.0	0.0	
40	P1/2 BPSK	1	214	15.55	15.61	15.51			
40	P1/2 BPSK	108	0	15.77	15.83	15.62	17.0	0.0	
40	P1/2 BPSK	108	54	15.53	15.67	15.55	17.0	0.0	
40	P1/2 BPSK	108	108	15.49	15.62	15.59	17.0	0.0	
40	P1/2 BPSK	216	0	15.60	15.65	15.64			
40	QPSK	1	1	15.84	15.87	15.79			
40	QPSK	1	108	15.56	15.81	15.68	17.0	0.0	
40	QPSK	1	214	15.62	15.80	15.74			
40	QPSK	108	0	15.42	15.52	15.44	17.0	0.0	
40	QPSK	108	54	15.70	15.90	15.64	17.0	0.0	
40	QPSK	108	108	15.46	15.63	15.52	17.0	0.0	
40	QPSK	216	0	15.45	15.49	15.46			
40	16QAM	1	1	15.48	15.67	15.53	17.0	0.0	
40	64QAM	1	1	15.54	15.62	15.43	17.0	0.0	
40	256QAM	1	1	15.57	15.65	15.43	17.0	0.0	
Channel									
Frequency (MHz)				2315.0	2335	2355.0	(dBm)	(dB)	
35	QPSK	1	1	15.74	15.70	15.72	17.0	0.0	
Channel									
Frequency (MHz)				503000	507000	511000	Tune-up limit (dBm)	MPR	
30	QPSK	1	1	15.70	15.74	15.71	17.0	0.0	
Channel									
Frequency (MHz)				502500	507000	511500	Tune-up limit (dBm)	MPR	
25	QPSK	1	1	15.73	15.71	15.69	17.0	0.0	
Channel									
Frequency (MHz)				502000	507000	512000	Tune-up limit (dBm)	MPR	
20	P1/2 BPSK	1	1	15.72	15.63	15.65	17.0	0.0	
Channel									
Frequency (MHz)				2307.5	2335	2362.5	(dBm)	(dB)	
15	QPSK	1	1	15.76	15.69	15.66	17.0	0.0	
Channel									
Frequency (MHz)				501000	507000	513000	Tune-up limit (dBm)	MPR	
10	QPSK	1	1	15.68	15.74	15.69	17.0	0.0	
Channel									
Frequency (MHz)				500500	507000	513500	Tune-up limit (dBm)	MPR	
5	QPSK	1	1	15.71	15.66	15.73	17.0	0.0	

n66 Ant 2 DS11									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				1720	1745	1760			
40	P1/2 BPSK	1	1	15.91	15.87	15.80			
40	P1/2 BPSK	1	108	16.74	16.76	16.65	18.0	0.0	
40	P1/2 BPSK	1	214	16.78	16.80	16.57			
40	P1/2 BPSK	108	0	16.84	16.94	16.68	18.0	0.0	
40	P1/2 BPSK	108	54	16.66	16.81	16.72	18.0	0.0	
40	P1/2 BPSK	108	108	16.69	16.80	16.71	18.0	0.0	
40	P1/2 BPSK	216	0	16.73	16.71	16.78			
40	QPSK	1	1	16.92	16.95	16.93			
40	QPSK	1	108	16.76	16.85	16.81	18.0	0.0	
40	QPSK	1	214	16.78	16.87	16.77			
40	QPSK	108	0	16.51	16.58	16.61	18.0	0.0	
40	QPSK	108	54	16.80	16.91	16.78	18.0	0.0	
40	QPSK	108	108	16.55	16.71	16.59	18.0	0.0	
40	QPSK	216	0	16.56	16.62	16.54			
40	16QAM	1	1	16.56	16.74	16.56	18.0	0.0	
40	64QAM	1	1	16.59	16.70	16.57	18.0	0.0	
40	256QAM	1	1	16.64	16.75	16.63	18.0	0.0	
Channel									
Frequency (MHz)				342500	349000	355000	Tune-up limit (dBm)	MPR	
35	QPSK	1	1	16.82	16.80	16.84	18.0	0.0	
Channel									
Frequency (MHz)				344000	349000	353000	Tune-up limit (dBm)	MPR	
30	QPSK	1	1	16.79	16.84	16.81	18.0	0.0	
Channel									
Frequency (MHz)				3422.5	3445	3472.5	(dBm)	(dB)	
25	QPSK	1	1	16.77	16.82	16.83	18.0	0.0	
Channel									
Frequency (MHz)				344000	349000	354000	Tune-up limit (dBm)	MPR	
20	QPSK	1	1	16.73	16.82	16.78	18.0	0.0	
Channel									
Frequency (MHz)				343500	349000	354500	Tune-up limit (dBm)	MPR	
15	QPSK	1	1	16.83	16.80	16.85	18.0	0.0	
Channel									
Frequency (MHz)				343000	349000	355000	Tune-up limit (dBm)	MPR	
10	QPSK	1	1	16.77	16.80	16.79	18.0	0.0	
Channel									
Frequency (MHz)				342500	349000	355500	Tune-up limit (dBm)	MPR	
5	QPSK	1	1	16.85	16.83	16.82	18.0	0.0	



n38 Ant 2 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2590.02	2595	2599.98			
40	PI2 BPSK	1	1	14.03	14.72	14.52			
40	PI2 BPSK	1	53	14.59	14.52	14.47			0.0
40	PI2 BPSK	1	104	14.46	14.60	14.43			16.0
40	PI2 BPSK	50	0	14.66	14.74	14.50			16.0
40	PI2 BPSK	50	28	14.48	14.54	14.55			16.0
40	PI2 BPSK	50	58	14.42	14.62	14.41			16.0
40	PI2 BPSK	100	0	14.53	14.80	14.53			16.0
40	QPSK	1	1	14.77	14.83	14.78			16.0
40	QPSK	1	53	14.81	14.87	14.87			16.0
40	QPSK	1	104	14.61	14.71	14.65			16.0
40	QPSK	50	0	14.30	14.41	14.44			16.0
40	QPSK	50	28	14.59	14.69	14.55			16.0
40	QPSK	50	58	14.42	14.55	14.40			16.0
40	QPSK	100	0	14.37	14.43	14.35			16.0
40	16QAM	1	1	14.46	14.57	14.36			16.0
40	16QAM	1	1	14.46	14.54	14.37			16.0
40	256QAM	1	1	14.40	14.52	14.44			16.0
Channel									
Frequency (MHz)				5170.0	5190.0	5209.98	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	14.70	14.71	14.64	16.0	0.0	
Channel									
Frequency (MHz)				5165.04	5190.00	5214.98	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	14.54	14.72	14.63	16.0	0.0	
Channel									
Frequency (MHz)				5160.00	5190.00	5220.00	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	14.67	14.67	14.72	16.0	0.0	
Channel									
Frequency (MHz)				5155.02	5190.00	5224.98	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	14.69	14.70	14.66	16.0	0.0	
Channel									
Frequency (MHz)				5150.04	5190.00	5229.98	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	14.66	14.79	14.74	16.0	0.0	

n41 Ant 2 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	14.90	14.95	14.80			
100	PI2 BPSK	1	137	14.78	14.76	14.67			16.5
100	PI2 BPSK	1	271	14.71	14.83	14.59			16.5
100	PI2 BPSK	135	0	14.81	14.96	14.75			16.5
100	PI2 BPSK	135	69	14.68	14.76	14.73			16.5
100	PI2 BPSK	135	138	14.64	14.83	14.68			16.5
100	PI2 BPSK	270	0	14.75	14.77	14.67			16.5
100	QPSK	1	1	14.90	15.02	14.96			16.5
100	QPSK	1	137	14.74	14.87	14.86			16.5
100	QPSK	1	271	14.73	14.95	14.78			16.5
100	QPSK	135	0	14.55	14.89	14.60			16.5
100	QPSK	135	69	14.91	14.99	14.89			16.5
100	QPSK	135	138	14.64	14.87	14.57			16.5
100	QPSK	270	0	14.58	14.85	14.57			16.5
100	16QAM	1	1	14.64	14.73	14.64			16.5
100	16QAM	1	1	14.60	14.74	14.57			16.5
100	256QAM	1	1	14.63	14.76	14.56			16.5
Channel									
Frequency (MHz)				5082.00	5185.98	5299.98	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	14.75	14.94	14.82	16.5	0.0	
Channel									
Frequency (MHz)				5072.04	5185.98	5299.98	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	14.81	14.90	14.80	16.5	0.0	
Channel									
Frequency (MHz)				5062.02	5185.98	5310.00	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	14.85	14.94	14.81	16.5	0.0	
Channel									
Frequency (MHz)				5052.00	5185.98	5319.98	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	14.80	14.93	14.87	16.5	0.0	
Channel									
Frequency (MHz)				5042.04	5185.98	5329.98	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	14.81	14.95	14.90	16.5	0.0	
Channel									
Frequency (MHz)				5032.02	5185.98	5340.00	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	14.80	14.86	14.89	16.5	0.0	
Channel									
Frequency (MHz)				5022.00	5185.98	5349.98	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	14.78	14.90	14.87	16.5	0.0	
Channel									
Frequency (MHz)				5012.02	5185.98	5359.98	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	14.75	14.87	14.83	16.5	0.0	
Channel									
Frequency (MHz)				5012.04	5185.98	5359.98	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	14.82	14.92	14.89	16.5	0.0	
Channel									
Frequency (MHz)				5007.00	5185.98	5364.98	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	14.77	14.95	14.87	16.5	0.0	
Channel									
Frequency (MHz)				5002.02	5185.98	5370.00	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	14.83	14.92	14.84	16.5	0.0	

n41 HPUE Ant 2 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	17.90	17.92	17.80			
100	PI2 BPSK	1	137	17.80	17.76	17.71			19.5
100	PI2 BPSK	1	271	17.70	17.83	17.55			19.5
100	PI2 BPSK	135	0	17.76	18.00	17.74			19.5
100	PI2 BPSK	135	69	17.62	17.70	17.79			19.5
100	PI2 BPSK	135	138	17.68	17.82	17.69			19.5
100	PI2 BPSK	270	0	17.70	17.79	17.88			19.5
100	QPSK	1	1	17.80	18.05	17.83			19.5
100	QPSK	1	137	17.78	17.85	17.89			19.5
100	QPSK	1	271	17.75	17.89	17.80			19.5
100	QPSK	135	0	17.58	17.70	17.64			19.5
100	QPSK	135	69	17.78	17.84	17.83			19.5
100	QPSK	135	138	17.67	17.84	17.53			19.5
100	QPSK	270	0	17.62	17.86	17.62			19.5
100	16QAM	1	1	17.69	17.77	17.70			19.5
100	16QAM	1	1	17.62	17.73	17.56			19.5
100	256QAM	1	1	17.59	17.80	17.52			19.5
Channel									
Frequency (MHz)				5082.00	5185.98	5299.98	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	17.85	17.98	17.86	19.5	0.0	
Channel									
Frequency (MHz)				5072.04	5185.98	5299.98	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	17.85	17.90	17.83	19.5	0.0	
Channel									
Frequency (MHz)				5062.02	5185.98	5310.00	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	17.84	17.90	17.87	19.5	0.0	
Channel									
Frequency (MHz)				5052.00	5185.98	5319.98	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	17.85	17.92	17.84	19.5	0.0	
Channel									
Frequency (MHz)				5042.04	5185.98	5329.98	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	17.79	17.92	17.80	19.5	0.0	
Channel									
Frequency (MHz)				5032.02	5185.98	5340.00	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	17.86	17.96	17.88	19.5	0.0	
Channel									
Frequency (MHz)				5022.00	5185.98	5349.98	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	17.85	17.98	17.87	19.5	0.0	
Channel									
Frequency (MHz)				5012.02	5185.98	5359.98	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	17.80	17.96	17.79	19.5	0.0	
Channel									
Frequency (MHz)				5012.04	5185.98	5359.98	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	17.78	17.91	17.81	19.5	0.0	
Channel									
Frequency (MHz)				5007.00	5185.98	5364.98	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	17.75	17.93	17.87	19.5	0.0	
Channel									
Frequency (MHz)				5002.02	5185.98	5370.00	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	17.80	18.01	17.79	19.5	0.0	



n2 Ant 3 DS11								
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)
				Low Ch. Freq.	Upper Ch. Freq.	High Ch. Freq.		
Channel				374000	376000	378000		
Frequency (MHz)				1870	1890	1910		
40	P1/2 BPSK	1	1	17.44	17.60	17.52		
40	P1/2 BPSK	1	108	17.40	17.53	17.35	18.5	0.0
40	P1/2 BPSK	1	214	17.45	17.51	17.38		
40	P1/2 BPSK	108	0	17.57	17.59	17.44	18.5	0.0
40	P1/2 BPSK	108	54	17.38	17.46	17.40	18.5	0.0
40	P1/2 BPSK	108	108	17.34	17.54	17.39		
40	P1/2 BPSK	216	0	17.44	17.49	17.41		
40	QPSK	1	1	17.63	17.74	17.72		
40	QPSK	1	108	17.40	17.46	17.58	18.5	0.0
40	QPSK	1	214	17.51	17.67	17.46		
40	QPSK	108	0	17.30	17.31	17.38	18.5	0.0
40	QPSK	108	54	17.49	17.57	17.48	18.5	0.0
40	QPSK	108	108	17.25	17.35	17.32	18.5	0.0
40	QPSK	216	0	17.29	17.41	17.19		
40	16QAM	1	1	17.30	17.46	17.38	18.5	0.0
40	64QAM	1	1	17.29	17.36	17.30	18.5	0.0
40	256QAM	1	1	17.35	17.45	17.34	18.5	0.0
Channel				379500	379500	379500		
Frequency (MHz)				1897.5	1898	1892.5		
35	QPSK	1	1	17.54	17.63	17.67	18.5	0.0
Channel				373000	376000	379000		
Frequency (MHz)				1865	1898	1898		
30	QPSK	1	1	17.50	17.64	17.68	18.5	0.0
Channel				372500	376000	379500		
Frequency (MHz)				1892.5	1898	1897.5		
25	QPSK	1	1	17.50	17.60	17.62	18.5	0.0
Channel				370000	376000	380000		
Frequency (MHz)				1880	1880	1900		
20	QPSK	1	1	17.47	17.60	17.57	18.5	0.0
Channel				370500	376000	380500		
Frequency (MHz)				1867.5	1880	1902.5		
15	QPSK	1	1	17.54	17.62	17.64	18.5	0.0
Channel				371000	376000	381000		
Frequency (MHz)				1860	1860	1908		
10	QPSK	1	1	17.53	17.63	17.58	18.5	0.0
Channel				370500	376000	381500		
Frequency (MHz)				1892.5	1898	1907.5		
5	QPSK	1	1	17.50	17.60	17.50	18.5	0.0

n7 Ant 3 DS11								
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)
				Low Ch. Freq.	Upper Ch. Freq.	High Ch. Freq.		
Channel				504000	507000	510000		
Frequency (MHz)				2520	2535	2550		
40	P1/2 BPSK	1	1	16.68	16.74	16.69		
40	P1/2 BPSK	1	108	16.60	16.59	16.59	17.2	0.0
40	P1/2 BPSK	1	214	16.61	16.59	16.49		
40	P1/2 BPSK	108	0	16.74	16.80	16.55	17.2	0.0
40	P1/2 BPSK	108	54	16.58	16.68	16.58	17.2	0.0
40	P1/2 BPSK	108	108	16.45	16.63	16.48		
40	P1/2 BPSK	216	0	16.51	16.61	16.63	17.2	0.0
40	QPSK	1	1	16.77	16.85	16.83		
40	QPSK	1	108	16.62	16.75	16.71	17.2	0.0
40	QPSK	1	214	16.67	16.74	16.72		
40	QPSK	108	0	16.37	16.44	16.44	17.2	0.0
40	QPSK	108	54	16.71	16.73	16.63	17.2	0.0
40	QPSK	108	108	16.34	16.38	16.42	17.2	0.0
40	QPSK	216	0	16.44	16.53	16.41		
40	16QAM	1	1	16.44	16.65	16.48	17.2	0.0
40	64QAM	1	1	16.44	16.52	16.40	17.2	0.0
40	256QAM	1	1	16.57	16.64	16.42	17.2	0.0
Channel				505500	507000	510500		
Frequency (MHz)				2517.5	2535	2552.5		
35	QPSK	1	1	16.68	16.73	16.75	17.2	0.0
Channel				503000	507000	511000		
Frequency (MHz)				2515	2535	2555		
30	QPSK	1	1	16.71	16.72	16.75	17.2	0.0
Channel				502500	507000	511500		
Frequency (MHz)				2512.5	2535	2557.5		
25	QPSK	1	1	16.73	16.84	16.69	17.2	0.0
Channel				500000	507000	512000		
Frequency (MHz)				2510	2535	2590		
20	P1/2 BPSK	1	1	16.71	16.71	16.79	17.2	0.0
Channel				501500	507000	512500		
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	1	16.73	16.73	16.69	17.2	0.0
Channel				501000	507000	513000		
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	1	16.70	16.74	16.72	17.2	0.0
Channel				500500	507000	513500		
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	1	16.66	16.64	16.67	17.2	0.0

n66 Ant 3 DS11								
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)
				Low Ch. Freq.	Upper Ch. Freq.	High Ch. Freq.		
Channel				344000	349000	350000		
Frequency (MHz)				1720	1745	1760		
40	P1/2 BPSK	1	1	18.76	18.78	18.63		
40	P1/2 BPSK	1	108	18.55	18.59	18.45	19.2	0.0
40	P1/2 BPSK	1	214	18.58	18.60	18.48		
40	P1/2 BPSK	108	0	18.74	18.79	18.56	19.2	0.0
40	P1/2 BPSK	108	54	18.54	18.66	18.51	19.2	0.0
40	P1/2 BPSK	108	108	18.51	18.63	18.43		
40	P1/2 BPSK	216	0	18.48	18.57	18.54	19.2	0.0
40	QPSK	1	1	18.77	18.83	18.75		
40	QPSK	1	108	18.62	18.70	18.71	19.2	0.0
40	QPSK	1	214	18.66	18.70	18.60		
40	QPSK	108	0	18.34	18.43	18.41	19.2	0.0
40	QPSK	108	54	18.63	18.76	18.56	19.2	0.0
40	QPSK	108	108	18.29	18.31	18.37	19.2	0.0
40	QPSK	216	0	18.38	18.51	18.38		
40	16QAM	1	1	18.48	18.60	18.43	19.2	0.0
40	64QAM	1	1	18.44	18.53	18.40	19.2	0.0
40	256QAM	1	1	18.46	18.55	18.40	19.2	0.0
Channel				345500	349000	352000		
Frequency (MHz)				1727.5	1745	1762.5		
35	QPSK	1	1	18.73	18.69	18.66	19.2	0.0
Channel				344000	349000	353000		
Frequency (MHz)				1725	1745	1765		
30	QPSK	1	1	18.70	18.78	18.66	19.2	0.0
Channel				344500	349000	353500		
Frequency (MHz)				1722.5	1745	1767.5		
25	QPSK	1	1	18.69	18.76	18.62	19.2	0.0
Channel				344000	349000	354000		
Frequency (MHz)				1720	1745	1770		
20	QPSK	1	1	18.72	18.71	18.70	19.2	0.0
Channel				343500	349000	354500		
Frequency (MHz)				1717.5	1745	1772.5		
15	QPSK	1	1	18.63	18.76	18.68	19.2	0.0
Channel				343000	349000	355000		
Frequency (MHz)				1715	1745	1775		
10	QPSK	1	1	18.61	18.74	18.69	19.2	0.0
Channel				342500	349000	355500		
Frequency (MHz)				1712.5	1745	1777.5		
5	QPSK	1	1	18.73	18.76	18.63	19.2	0.0



n38 Ant 3 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	16.27	16.31	16.10			
40	PI2 BPSK	1	53	16.08	16.15	16.11			0.0
40	PI2 BPSK	1	164	16.03	16.10	15.94			
40	PI2 BPSK	50	0	16.29	16.38	16.07	16.7	0.0	
40	PI2 BPSK	50	28	16.05	16.19	16.06	16.7	0.0	
40	PI2 BPSK	50	58	16.00	16.18	16.05	16.7	0.0	
40	PI2 BPSK	100	0	16.11	16.14	16.18			
40	QPSK	1	1	16.30	16.41	16.40			
40	QPSK	1	53	16.15	16.25	16.21	16.7	0.0	
40	QPSK	1	104	16.14	16.32	16.15			
40	QPSK	50	0	15.90	16.02	16.02	16.7	0.0	
40	QPSK	50	28	16.15	16.30	16.21	16.7	0.0	
40	QPSK	50	58	15.81	15.87	15.85	16.7	0.0	
40	QPSK	100	0	15.96	16.02	15.93	16.7	0.0	
40	16QAM	1	1	15.99	16.08	16.07	16.7	0.0	
40	16QAM	1	1	16.02	16.09	15.90	16.7	0.0	
40	256QAM	1	1	16.07	16.15	16.00	16.7	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	16.22	16.33	16.26	16.7	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	16.16	16.20	16.25	16.7	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	16.20	16.25	16.26	16.7	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	16.26	16.25	16.34	16.7	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.16	16.34	16.34	16.7	0.0	

n41 Ant 3 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	15.77	15.77	15.63			
100	PI2 BPSK	1	137	15.64	15.65	15.54			16.2
100	PI2 BPSK	1	271	15.51	15.58	15.46			
100	PI2 BPSK	135	0	15.74	15.72	15.61	16.2	0.0	
100	PI2 BPSK	135	69	15.51	15.65	15.55	16.2	0.0	
100	PI2 BPSK	135	138	15.47	15.64	15.52	16.2	0.0	
100	PI2 BPSK	270	0	15.58	15.60	15.54			
100	QPSK	1	1	15.76	15.88	15.78			
100	QPSK	1	137	15.59	15.79	15.71	16.2	0.0	
100	QPSK	1	271	15.68	15.81	15.69			
100	QPSK	135	0	15.35	15.49	15.39	16.2	0.0	
100	QPSK	135	69	15.65	15.68	15.59	16.2	0.0	
100	QPSK	135	138	15.32	15.33	15.35	16.2	0.0	
100	QPSK	270	0	15.56	15.58	15.46			
100	16QAM	1	1	14.39	15.46	15.39	16.2	0.0	
100	16QAM	1	1	15.51	15.51	15.42	16.2	0.0	
100	256QAM	1	1	15.48	15.53	15.46	16.2	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	15.82	15.74	15.67	16.2	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	15.05	15.74	15.03	16.2	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	15.68	15.73	15.72	16.2	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	15.62	15.82	15.72	16.2	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	15.68	15.78	15.62	16.2	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	15.66	15.76	15.63	16.2	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	15.61	15.70	15.65	16.2	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	15.70	15.80	15.73	16.2	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	15.62	15.74	15.66	16.2	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	15.63	15.84	15.71	16.2	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	15.64	15.78	15.71	16.2	0.0	

n41 HPUE Ant 3 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	18.71	18.81	18.68			
100	PI2 BPSK	1	137	18.60	18.61	18.59			19.5
100	PI2 BPSK	1	271	18.54	18.61	18.51			
100	PI2 BPSK	135	0	18.75	18.72	18.64	19.5	0.0	
100	PI2 BPSK	135	69	18.46	18.63	18.53	19.5	0.0	
100	PI2 BPSK	135	138	18.45	18.58	18.46	19.5	0.0	
100	PI2 BPSK	270	0	18.58	18.57	18.55			
100	QPSK	1	1	18.73	18.89	18.76			
100	QPSK	1	137	18.63	18.75	18.73	19.5	0.0	
100	QPSK	1	271	18.63	18.66	18.64			
100	QPSK	135	0	18.33	18.43	18.36	19.5	0.0	
100	QPSK	135	69	18.59	18.68	18.61	19.5	0.0	
100	QPSK	135	138	18.33	18.29	18.36	19.5	0.0	
100	QPSK	270	0	18.54	18.62	18.49			
100	16QAM	1	1	18.25	18.44	18.35	19.5	0.0	
100	16QAM	1	1	18.56	18.53	18.40	19.5	0.0	
100	256QAM	1	1	18.49	18.55	18.46	19.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	18.82	18.78	18.68	19.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	18.59	18.82	18.69	19.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	18.66	18.80	18.70	19.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	18.63	18.80	18.62	19.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	18.68	18.79	18.62	19.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	18.69	18.81	18.61	19.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	18.59	18.74	18.63	19.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	18.63	18.78	18.67	19.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	18.65	18.79	18.70	19.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	18.65	18.75	18.63	19.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	18.61	18.76	18.69	19.5	0.0	



n38 Ant 4 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	16.90	16.82	16.75			
40	PI2 BPSK	1	53	16.75	16.75	16.69		0.0	
40	PI2 BPSK	1	164	16.73	16.77	16.56			
40	PI2 BPSK	50	0	16.89	16.86	16.68	18.0	0.0	
40	PI2 BPSK	50	28	16.69	16.78	16.67	18.0	0.0	
40	PI2 BPSK	50	56	16.65	16.81	16.60	18.0	0.0	
40	PI2 BPSK	100	0	16.73	16.75	16.74			
40	QPSK	1	1	16.86	17.01	16.89			
40	QPSK	1	53	16.77	16.84	16.85	18.0	0.0	
40	QPSK	1	104	16.70	16.90	16.82			
40	QPSK	50	0	16.51	16.58	16.56	18.0	0.0	
40	QPSK	50	28	16.83	16.92	16.78	18.0	0.0	
40	QPSK	50	56	16.45	16.42	16.55	18.0	0.0	
40	QPSK	100	0	16.69	16.75	16.57			
40	16QAM	1	1	16.24	16.54	16.63	18.0	0.0	
40	16QAM	1	1	16.84	16.67	16.55	18.0	0.0	
40	256QAM	1	1	16.80	16.72	16.57	18.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.00	17.00	16.99			
Channel									
Frequency (MHz)									
25	QPSK	1	1	16.90	16.97	16.79	18.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	16.76	16.93	16.82	18.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	16.76	16.95	16.75	18.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.80	16.88	16.73	18.0	0.0	

n41 Ant 4 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	17.01	17.12	16.90			
100	PI2 BPSK	1	137	16.87	16.93	16.89	18.0	0.0	
100	PI2 BPSK	1	271	16.81	16.97	16.82			
100	PI2 BPSK	135	0	17.01	17.13	16.90	18.0	0.0	
100	PI2 BPSK	135	69	16.80	16.94	16.93	18.0	0.0	
100	PI2 BPSK	135	138	16.80	17.00	16.83	18.0	0.0	
100	PI2 BPSK	270	0	16.83	16.87	16.86			
100	QPSK	1	1	17.07	17.16	17.09			
100	QPSK	1	137	16.98	17.09	16.97	18.0	0.0	
100	QPSK	1	271	16.97	17.07	17.00			
100	QPSK	135	0	16.71	16.75	16.78	18.0	0.0	
100	QPSK	135	69	16.94	17.09	16.91	18.0	0.0	
100	QPSK	135	138	16.56	16.64	16.66	18.0	0.0	
100	QPSK	270	0	16.88	16.85	16.80			
100	16QAM	1	1	16.72	16.77	16.72	18.0	0.0	
100	16QAM	1	1	16.74	16.81	16.76	18.0	0.0	
100	256QAM	1	1	16.81	16.88	16.73	18.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	16.93	17.06	17.01	18.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	16.97	17.05	17.01	18.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	17.02	17.11	17.01	18.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	16.95	17.12	16.95	18.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	16.93	17.12	16.95	18.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	17.02	17.05	16.99	18.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	16.94	17.04	16.90	18.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	16.88	17.07	16.94	18.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.02	17.04	16.97	18.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	16.98	17.06	16.93	18.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.02	17.10	17.02	18.0	0.0	

n41 HPUE Ant 4 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	20.06	20.06	19.94	21.0	0.0	
100	PI2 BPSK	1	137	19.89	19.91	19.83	21.0	0.0	
100	PI2 BPSK	1	271	19.79	20.00	19.77			
100	PI2 BPSK	135	0	20.06	20.18	19.86	21.0	0.0	
100	PI2 BPSK	135	69	19.83	19.97	19.90	21.0	0.0	
100	PI2 BPSK	135	138	19.79	19.95	19.78	21.0	0.0	
100	PI2 BPSK	270	0	19.83	19.91	19.83			
100	QPSK	1	1	20.11	20.21	20.10			
100	QPSK	1	137	20.01	20.04	20.00	21.0	0.0	
100	QPSK	1	271	20.01	20.08	20.01			
100	QPSK	135	0	19.73	19.74	19.73	21.0	0.0	
100	QPSK	135	69	19.92	20.06	19.94	21.0	0.0	
100	QPSK	135	138	19.54	19.63	19.65	21.0	0.0	
100	QPSK	270	0	19.89	19.94	19.77			
100	16QAM	1	1	19.72	19.79	19.71	21.0	0.0	
100	16QAM	1	1	19.74	19.82	19.71	21.0	0.0	
100	256QAM	1	1	19.79	19.87	19.78	21.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	20.02	20.15	19.96	21.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	20.05	20.09	20.00	21.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	19.98	20.14	19.94	21.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	20.02	20.16	20.03	21.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	20.06	20.10	20.04	21.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	20.01	20.06	19.97	21.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	20.00	20.15	19.97	21.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	19.97	20.12	19.97	21.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	19.98	20.16	20.00	21.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	19.99	20.15	19.97	21.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	20.02	20.06	20.05	21.0	0.0	

n7 Ant 5 DS11								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				504000	507000	510000		
Frequency (MHz)				250	2535	2550		
40	PI/2 BPSK	1	1	24.13	24.19	24.16		
40	PI/2 BPSK	1	108	24.07	24.20	24.21	25.5	0.0
40	PI/2 BPSK	1	214	24.15	24.23	24.15		
40	PI/2 BPSK	108	0	23.63	23.74	23.88	25.0	0.5
40	PI/2 BPSK	108	54	24.09	24.26	24.19	25.5	0.0
40	PI/2 BPSK	108	108	23.72	23.74	23.78		
40	PI/2 BPSK	216	0	23.70	23.80	23.79	25.0	0.5
40	QPSK	1	1	24.18	24.28	24.24		
40	QPSK	1	108	24.06	24.21	24.17	25.5	0.0
40	QPSK	1	214	24.13	24.15	24.21		
40	QPSK	108	0	23.09	23.14	23.01	24.5	1.0
40	QPSK	108	54	24.10	24.15	24.08	25.5	0.0
40	QPSK	108	108	23.09	23.12	23.09		
40	QPSK	216	0	23.13	23.18	23.15	24.5	1.0
40	16QAM	1	1	22.88	22.93	22.85	24.5	1.0
40	64QAM	1	1	21.50	21.54	21.49	23.0	2.5
40	256QAM	1	1	19.38	19.44	19.42	21.0	4.5
Channel				503500	507000	510500	Tune-up limit	MPR
Frequency (MHz)				2517.5	2535	2552.5	(dBm)	(dB)
35	QPSK	1	1	24.12	24.23	24.13	25.5	0.0
Channel				503000	507000	511000	Tune-up limit	MPR
Frequency (MHz)				2515	2535	2555	(dBm)	(dB)
30	QPSK	1	1	24.10	24.20	24.10	25.5	0.0
Channel				502500	507000	511500	Tune-up limit	MPR
Frequency (MHz)				2512.5	2535	2557.5	(dBm)	(dB)
25	QPSK	1	1	24.09	24.19	24.20	25.5	0.0
Channel				502000	507000	512000	Tune-up limit	MPR
Frequency (MHz)				2210	2535	2550	(dBm)	(dB)
20	PI/2 BPSK	1	1	24.05	24.17	24.19	25.5	0.0
Channel				501500	507000	512500	Tune-up limit	MPR
Frequency (MHz)				2507.5	2535	2552.5	(dBm)	(dB)
15	QPSK	1	1	24.15	24.25	24.20	25.5	0.0
Channel				501000	507000	513000	Tune-up limit	MPR
Frequency (MHz)				2205	2535	2555	(dBm)	(dB)
10	QPSK	1	1	24.05	24.24	24.18	25.5	0.0
Channel				500500	507000	513500	Tune-up limit	MPR
Frequency (MHz)				2502.5	2535	2557.5	(dBm)	(dB)
5	QPSK	1	1	24.10	24.17	24.12	25.5	0.0

n66 Ant 5 DS11								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				345000	349000	353000		
Frequency (MHz)				1725	1745	1765		
40	PI/2 BPSK	1	1	24.31	24.27	24.26		
40	PI/2 BPSK	1	108	24.26	24.34	24.21	25.5	0.0
40	PI/2 BPSK	1	214	24.26	24.25	24.20		
40	PI/2 BPSK	108	0	23.83	23.93	23.80	25.0	0.5
40	PI/2 BPSK	108	54	24.34	24.34	24.26	25.5	0.0
40	PI/2 BPSK	108	108	23.88	23.93	23.84		
40	PI/2 BPSK	216	0	23.84	23.88	23.79	25.0	0.5
40	QPSK	1	1	24.37	24.39	24.33		
40	QPSK	1	108	24.30	24.29	24.30	25.5	0.0
40	QPSK	1	214	24.25	24.35	24.30		
40	QPSK	108	0	23.11	23.28	23.25	24.5	1.0
40	QPSK	108	54	24.25	24.31	24.25	25.5	0.0
40	QPSK	108	108	23.19	23.25	23.24		
40	QPSK	216	0	23.25	23.36	23.31	24.5	1.0
40	16QAM	1	1	23.11	23.18	23.13	24.5	1.0
40	64QAM	1	1	21.57	21.65	21.61	23.0	2.5
40	256QAM	1	1	19.49	19.56	19.45	21.0	4.5
Channel				344500	349000	353500	Tune-up limit	MPR
Frequency (MHz)				1722.5	1745	1762.5	(dBm)	(dB)
35	QPSK	1	1	24.25	24.33	24.30	25.5	0.0
Channel				344000	349000	353000	Tune-up limit	MPR
Frequency (MHz)				1725	1745	1765	(dBm)	(dB)
30	QPSK	1	1	24.33	24.34	24.21	25.5	0.0
Channel				343500	349000	353500	Tune-up limit	MPR
Frequency (MHz)				1722.5	1745	1767.5	(dBm)	(dB)
25	QPSK	1	1	24.35	24.27	24.23	25.5	0.0
Channel				344000	349000	354000	Tune-up limit	MPR
Frequency (MHz)				1720	1745	1770	(dBm)	(dB)
20	QPSK	1	1	24.31	24.31	24.23	25.5	0.0
Channel				343500	349000	354500	Tune-up limit	MPR
Frequency (MHz)				1717.5	1745	1772.5	(dBm)	(dB)
15	QPSK	1	1	24.28	24.28	24.20	25.5	0.0
Channel				343000	349000	355000	Tune-up limit	MPR
Frequency (MHz)				1715	1745	1775	(dBm)	(dB)
10	QPSK	1	1	24.34	24.32	24.25	25.5	0.0
Channel				342500	349000	355500	Tune-up limit	MPR
Frequency (MHz)				1712.5	1745	1777.5	(dBm)	(dB)
5	QPSK	1	1	24.27	24.35	24.22	25.5	0.0



n38 Ant 5 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2500.02	2595	2599.98			
40	PI2 BPSK	1	1	24.28	24.29	24.34			
40	PI2 BPSK	1	53	24.35	24.30	24.28		0.0	
40	PI2 BPSK	1	104	24.32	24.28	24.32			
40	PI2 BPSK	50	0	23.88	23.89	23.87		25.0	0.5
40	PI2 BPSK	50	28	24.33	24.36	24.31			
40	PI2 BPSK	50	58	23.89	23.96	23.93		25.0	0.5
40	PI2 BPSK	100	0	23.85	23.97	23.93			
40	QPSK	1	1	24.40	24.42	24.38			
40	QPSK	1	53	24.36	24.25	24.25		25.5	0.0
40	QPSK	1	104	24.32	24.30	24.29			
40	QPSK	50	0	23.15	23.22	23.13	24.5	1.0	
40	QPSK	50	28	24.25	24.28	24.21		25.5	0.0
40	QPSK	50	58	23.13	23.19	23.17		24.5	1.0
40	QPSK	100	0	23.25	23.27	23.21			
40	16QAM	1	1	23.15	23.18	23.13	24.5	1.0	
40	16QAM	1	1	21.69	21.72	21.66	23.0	2.5	
40	256QAM	1	1	19.80	19.84	19.58	21.0	4.5	
Channel									
Frequency (MHz)				5170.02	5190.00	5209.98			
Channel				2595.01	2595	2604.99			
30	QPSK	1	1	24.32	24.38	24.28		25.5	0.0
Channel									
Frequency (MHz)				5165.04	5190.00	5214.98			
Channel				2592.42	2595	2607.48			
25	QPSK	1	1	24.39	24.35	24.33		25.5	0.0
Channel									
Frequency (MHz)				5160.00	5190.00	5220.00			
Channel				2580	2595	2610			
20	QPSK	1	1	24.36	24.37	24.24		25.5	0.0
Channel									
Frequency (MHz)				5155.02	5190.00	5224.98			
Channel				2575.02	2595	2614.98			
15	QPSK	1	1	24.38	24.38	24.25		25.5	0.0
Channel									
Frequency (MHz)				5150.04	5190.00	5229.98			
Channel				2575.02	2595	2614.98			
10	QPSK	1	1	24.38	24.30	24.28		25.5	0.0

n41 Ant 5 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	24.31	24.44	24.37			
100	PI2 BPSK	1	137	24.33	24.43	24.37		25.5	0.0
100	PI2 BPSK	1	271	24.27	24.41	24.35			
100	PI2 BPSK	135	0	23.88	24.03	23.88		25.0	0.5
100	PI2 BPSK	135	69	24.28	24.37	24.37		25.5	0.0
100	PI2 BPSK	135	138	23.84	23.94	23.88		25.0	0.5
100	PI2 BPSK	270	0	23.91	23.95	23.98			
100	QPSK	1	1	24.38	24.48	24.42			
100	QPSK	1	137	24.30	24.35	24.40		25.5	0.0
100	QPSK	1	271	24.27	24.37	24.38			
100	QPSK	135	0	23.89	23.93	23.83	24.5	1.0	
100	QPSK	135	69	24.30	24.35	24.28		25.5	0.0
100	QPSK	135	138	23.96	23.98	23.86		24.5	1.0
100	QPSK	270	0	23.98	24.00	23.95			
100	16QAM	1	1	24.01	24.08	23.98	24.5	1.0	
100	64QAM	1	1	22.65	22.66	22.61	23.0	2.5	
100	256QAM	1	1	20.82	20.88	20.78	21.0	4.5	
Channel									
Frequency (MHz)				5032.00	5185.98	5339.98			
Channel				2541	2592.99	2644.98			
90	QPSK	1	1	24.36	24.41	24.34		25.5	0.0
Channel									
Frequency (MHz)				5072.04	5185.98	5299.98			
Channel				2536.02	2592.99	2649.99			
80	QPSK	1	1	24.33	24.41	24.29		25.5	0.0
Channel									
Frequency (MHz)				5052.02	5185.98	5310.00			
Channel				2531.01	2592.99	2655			
70	QPSK	1	1	24.25	24.43	24.38		25.5	0.0
Channel									
Frequency (MHz)				5052.00	5185.98	5319.98			
Channel				2536	2592.99	2659.99			
60	QPSK	1	1	24.34	24.43	24.30		25.5	0.0
Channel									
Frequency (MHz)				5042.04	5185.98	5329.98			
Channel				2521.02	2592.99	2664.99			
50	QPSK	1	1	24.27	24.39	24.30		25.5	0.0
Channel									
Frequency (MHz)				5032.02	5185.98	5340.00			
Channel				2516.01	2592.99	2670			
40	QPSK	1	1	24.30	24.38	24.32		25.5	0.0
Channel									
Frequency (MHz)				5022.00	5185.98	5349.98			
Channel				2511	2592.99	2674.98			
30	QPSK	1	1	24.34	24.35	24.30		25.5	0.0
Channel									
Frequency (MHz)				5017.02	5185.98	5359.00			
Channel				2508.51	2592.99	2677.5			
25	QPSK	1	1	24.35	24.46	24.33		25.5	0.0
Channel									
Frequency (MHz)				5012.04	5185.98	5359.98			
Channel				2508.02	2592.99	2679.99			
20	QPSK	1	1	24.35	24.34	24.38		25.5	0.0
Channel									
Frequency (MHz)				5007.00	5185.98	5364.98			
Channel				2503.5	2592.99	2682.48			
15	QPSK	1	1	24.31	24.45	24.35		25.5	0.0
Channel									
Frequency (MHz)				5002.02	5185.98	5370.00			
Channel				2501.01	2592.99	2685			
10	QPSK	1	1	24.34	24.40	24.29		25.5	0.0

n41 HPUE Ant 5 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	25.30	25.31	25.29			
100	PI2 BPSK	1	137	25.24	25.37	25.29		26.5	0.0
100	PI2 BPSK	1	271	25.23	25.36	25.34			
100	PI2 BPSK	135	0	24.79	24.98	24.87		26.0	0.5
100	PI2 BPSK	135	69	25.29	25.39	25.29		26.5	0.0
100	PI2 BPSK	135	138	24.80	24.86	24.93		26.0	0.5
100	PI2 BPSK	270	0	24.87	24.92	24.87			
100	QPSK	1	1	25.35	25.42	25.38			
100	QPSK	1	137	25.28	25.31	25.25		26.5	0.0
100	QPSK	1	271	25.29	25.35	25.33			
100	QPSK	135	0	24.25	24.29	24.30	25.5	1.0	
100	QPSK	135	69	25.29	25.33	25.30		26.5	0.0
100	QPSK	135	138	24.24	24.31	24.29		26.5	1.0
100	QPSK	270	0	24.35	24.38	24.33			
100	16QAM	1	1	24.28	24.33	24.25	25.5	1.0	
100	64QAM	1	1	22.58	22.67	22.61	24.0	2.5	
100	256QAM	1	1	20.59	20.67	20.63	22.0	4.5	
Channel									
Frequency (MHz)				5032.00	5185.98	5339.98			
Channel				2541	2592.99	2644.98			
90	QPSK	1	1	25.29	25.32	25.26		26.5	0.0
Channel									
Frequency (MHz)				5072.04	5185.98	5299.98			
Channel				2536.02	2592.99	2649.99			
80	QPSK	1	1	25.32	25.39	25.31		26.5	0.0
Channel									
Frequency (MHz)				5052.02	5185.98	5310.00			
Channel				2531.01	2592.99	2655			
70	QPSK	1	1	25.27	25.38	25.25		26.5	0.0
Channel									
Frequency (MHz)				5052.00	5185.98	5319.98			
Channel				2536	2592.99	2659.99			
60	QPSK	1	1	25.21	25.36	25.31		26.5	0.0
Channel									
Frequency (MHz)				5042.04	5185.98	5329.98			
Channel				2521.02	2592.99	2664.99			
50	QPSK	1	1	25.24	25.31	25.26		26.5	0.0
Channel									
Frequency (MHz)				5032.02	5185.98	5340.00			
Channel				2516.01	2592.99	2670			
40	QPSK	1	1	25.23	25.28	25.32		26.5	0.0
Channel									
Frequency (MHz)				5022.00	5185.98	5349.98			
Channel				2511	2592.99	2674.98			
30	QPSK	1	1	25.24	25.30	25.37		26.5	0.0
Channel									
Frequency (MHz)				5017.02	5185.98	5359.00			
Channel				2508.51	2592.99	2677.5			
25	QPSK	1	1	25.24	25.31	25.28		26.5	0.0
Channel									
Frequency (MHz)				5012.04	5185.98	5359.98			
Channel				2508.02	2592.99	2679.99			
20	QPSK	1	1	25.25	25.38	25.30		26.5	0.0
Channel									
Frequency (MHz)				5007.00	5185.98	5364.98			
Channel				2503.5	2592.99	2682.48			
15	QPSK	1	1	25.32	25.34	25.33		26.5	0



n48 Ant 6 DSI1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				636000	641666	646332		
Frequency (MHz)				3370	3624.99	3679.98		
40	PI/2 BPSK	1	1	13.17	13.20	13.06		
40	PI/2 BPSK	1	53	13.06	13.08	13.03	14.0	0.0
40	PI/2 BPSK	1	104	12.97	13.07	12.91		
40	PI/2 BPSK	50	0	13.15	13.18	12.98	14.0	0.0
40	PI/2 BPSK	50	28	12.94	13.11	13.06	14.0	0.0
40	PI/2 BPSK	50	56	12.90	13.15	12.96	14.0	0.0
40	PI/2 BPSK	100	0	12.96	13.08	13.03		
40	QPSK	1	1	13.24	13.27	13.23		
40	QPSK	1	53	13.10	13.21	13.20	14.0	0.0
40	QPSK	1	104	13.12	13.22	13.07		
40	QPSK	50	0	12.82	12.96	12.85	14.0	0.0
40	QPSK	50	28	13.07	13.23	13.12	14.0	0.0
40	QPSK	50	56	12.82	12.80	12.76	14.0	0.0
40	QPSK	100	0	12.97	12.98	12.89		
40	16QAM	1	1	12.84	12.87	12.86	14.0	0.0
40	16QAM	1	1	12.85	13.04	12.82	14.0	0.0
40	256QAM	1	1	13.02	13.07	12.90	14.0	0.0
Channel				639600	641666	645266		
Frequency (MHz)				3965.02	3624.99	3684.99		
30	QPSK	1	1	13.17	13.13	13.16	14.0	0.0
Channel				637334	641666	646000		
Frequency (MHz)				3607.81	3624.99	3692.49		
20	QPSK	1	1	13.14	13.15	13.14	14.0	0.0
Channel				637168	641666	646166		
Frequency (MHz)				3597.52	3624.99	3692.49		
15	QPSK	1	1	13.12	13.12	13.13	14.0	0.0
Channel				637000	641666	646332		
Frequency (MHz)				3585	3624.99	3694.98		
10	QPSK	1	1	13.13	13.16	13.13	14.0	0.0

Part270 n77 Ant 6 DSI1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	660000		
Frequency (MHz)				3750	3840	3930		
100	PI/2 BPSK	1	1	12.82	12.74	12.87		
100	PI/2 BPSK	1	137	12.84	12.82	12.81	13.5	0.0
100	PI/2 BPSK	1	271	12.81	12.72	12.81		
100	PI/2 BPSK	135	0	12.79	12.89	12.80	13.5	0.0
100	PI/2 BPSK	135	69	12.86	12.71	12.85	13.5	0.0
100	PI/2 BPSK	135	138	12.83	12.69	12.57	13.5	0.0
100	PI/2 BPSK	270	0	12.59	12.67	12.59		
100	QPSK	1	1	12.84	12.91	12.83		
100	QPSK	1	137	12.84	12.76	12.79	13.5	0.0
100	QPSK	1	271	12.71	12.86	12.75		
100	QPSK	135	0	12.43	12.57	12.47	13.5	0.0
100	QPSK	135	69	12.75	12.84	12.69	13.5	0.0
100	QPSK	135	138	12.36	12.38	12.25	13.5	0.0
100	QPSK	270	0	12.60	12.62	12.56		
100	16QAM	1	1	12.41	12.53	12.50	13.5	0.0
100	16QAM	1	1	12.50	12.61	12.51	13.5	0.0
100	256QAM	1	1	12.82	12.82	12.81	13.5	0.0
Channel				659500	656000	652334		
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	12.75	12.79	12.78	13.5	0.0
Channel				649334	656000	652668		
Frequency (MHz)				3735	3840	3945		
80	QPSK	1	1	12.70	12.78	12.68	13.5	0.0
Channel				648000	656000	653000		
Frequency (MHz)				3735	3840	3945		
70	QPSK	1	1	12.76	12.81	12.74	13.5	0.0
Channel				648668	656000	653334		
Frequency (MHz)				3730.02	3840	3950.01		
60	QPSK	1	1	12.69	12.73	12.73	13.5	0.0
Channel				648334	656000	653502		
Frequency (MHz)				3725.01	3840	3955.02		
50	QPSK	1	1	12.71	12.83	12.68	13.5	0.0
Channel				648000	656000	654000		
Frequency (MHz)				3725	3840	3960		
40	QPSK	1	1	12.75	12.75	12.76	13.5	0.0
Channel				647668	656000	654334		
Frequency (MHz)				3715.02	3840	3965.01		
30	QPSK	1	1	12.80	12.74	12.70	13.5	0.0
Channel				647500	656000	654500		
Frequency (MHz)				3712.5	3840	3967.5		
25	QPSK	1	1	12.71	12.81	12.70	13.5	0.0
Channel				647334	656000	654668		
Frequency (MHz)				3710.01	3840	3970.02		
20	QPSK	1	1	12.75	12.75	12.74	13.5	0.0
Channel				647168	656000	654834		
Frequency (MHz)				3707.52	3840	3972.51		
15	QPSK	1	1	12.75	12.74	12.73	13.5	0.0
Channel				647000	656000	655000		
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	12.68	12.75	12.75	13.5	0.0

Part270 n77 HPUE Ant 6 DSI1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	660000		
Frequency (MHz)				3750	3840	3930		
100	PI/2 BPSK	1	1	13.71	13.69	13.64		
100	PI/2 BPSK	1	137	13.61	13.59	13.54	17.0	0.0
100	PI/2 BPSK	1	271	13.51	13.63	13.50		
100	PI/2 BPSK	135	0	13.75	13.81	13.59	17.0	0.0
100	PI/2 BPSK	135	69	13.68	13.66	13.67	17.0	0.0
100	PI/2 BPSK	135	138	13.52	13.68	13.53	17.0	0.0
100	PI/2 BPSK	270	0	13.57	13.57	13.47		
100	QPSK	1	1	13.82	13.84	13.74		
100	QPSK	1	137	13.62	13.75	13.72	17.0	0.0
100	QPSK	1	271	13.61	13.63	13.65		
100	QPSK	135	0	13.33	13.56	13.43	17.0	0.0
100	QPSK	135	69	13.65	13.77	13.62	17.0	0.0
100	QPSK	135	138	13.26	13.32	13.24	17.0	0.0
100	QPSK	270	0	13.53	13.59	13.44		
100	16QAM	1	1	13.33	13.45	13.41	17.0	0.0
100	16QAM	1	1	13.48	13.54	13.42	17.0	0.0
100	256QAM	1	1	13.42	13.52	13.40	17.0	0.0
Channel				659500	656000	652334		
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	13.77	13.73	13.67	17.0	0.0
Channel				649334	656000	652668		
Frequency (MHz)				3740.01	3840	3940.02		
80	QPSK	1	1	13.68	13.78	13.64	17.0	0.0
Channel				648000	656000	653000		
Frequency (MHz)				3735	3840	3945		
70	QPSK	1	1	13.60	13.71	13.69	17.0	0.0
Channel				648668	656000	653334		
Frequency (MHz)				3730.02	3840	3950.01		
60	QPSK	1	1	13.71	13.74	13.63	17.0	0.0
Channel				648334	656000	653502		
Frequency (MHz)				3725.01	3840	3955.02		
50	QPSK	1	1	13.68	13.80	13.68	17.0	0.0
Channel				648000	656000	654000		
Frequency (MHz)				3725	3840	3960		
40	QPSK	1	1	13.75	13.71	13.62	17.0	0.0
Channel				647668	656000	654334		
Frequency (MHz)				3715.02	3840	3965.01		
30	QPSK	1	1	13.70	13.71	13.68	17.0	0.0
Channel				647500	656000	654500		
Frequency (MHz)				3712.5	3840	3967.5		
25	QPSK	1	1	13.71	13.74	13.59	17.0	0.0
Channel				647334	656000	654668		
Frequency (MHz)				3710.01	3840	3970.02		
20	QPSK	1	1	13.69	13.75	13.65	17.0	0.0
Channel				647168	656000	654834		
Frequency (MHz)				3707.52	3840	3972.51		
15	QPSK	1	1	13.73	13.69	13.62	17.0	0.0
Channel				647000	656000	655000		
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	13.73	13.71	13.69	17.0	0.0



Part27Q n77 Ant 6 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	12.60	3500.01				
100	PI2 BPSK	1	137	12.49			13.5	0.0	
100	PI2 BPSK	1	271	12.60					
100	PI2 BPSK	135	0	12.75			13.5	0.0	
100	PI2 BPSK	135	69	12.56			13.5	0.0	
100	PI2 BPSK	135	138	12.60			13.5	0.0	
100	PI2 BPSK	270	0	12.62					
100	QPSK	1	1	12.82					
100	QPSK	1	137	12.64			13.5	0.0	
100	QPSK	1	271	12.79					
100	QPSK	135	0	12.48			13.5	0.0	
100	QPSK	135	69	12.75			13.5	0.0	
100	QPSK	135	138	12.26			13.5	0.0	
100	QPSK	270	0	12.80					
100	16QAM	1	1	12.42			13.5	0.0	
100	16QAM	1	1	12.54			13.5	0.0	
100	256QAM	1	1	12.44			13.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	633000	633334	633668	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	3495	3500.01	3505.02	13.5	0.0	
90	QPSK	1	1	12.71	12.66	12.74	13.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	632068	633334	634600	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	3480.69	3500.01	3519.31	13.5	0.0	
80	QPSK	1	1	12.61	12.67	12.71	13.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	632334	633334	634334	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	3485.61	3500.01	3515.61	13.5	0.0	
70	QPSK	1	1	12.61	12.66	12.65	13.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	632000	633334	634668	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	3480	3500.01	3520.02	13.5	0.0	
60	QPSK	1	1	12.63	12.64	12.70	13.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	631000	633334	635000	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	3475.02	3500.01	3525	13.5	0.0	
50	QPSK	1	1	12.67	12.69	12.66	13.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	631134	633334	635334	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	3480.61	3500.01	3520.61	13.5	0.0	
40	QPSK	1	1	12.62	12.63	12.65	13.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	631000	633334	635668	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	3485	3500.01	3535.02	13.5	0.0	
30	QPSK	1	1	12.63	12.66	12.66	13.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	630668	633334	636000	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	3480.62	3500.01	3540	13.5	0.0	
25	QPSK	1	1	12.61	12.71	12.67	13.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	630500	633334	636368	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	3475.02	3500.01	3542.62	13.5	0.0	
20	QPSK	1	1	12.71	12.69	12.68	13.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	630334	633334	636334	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	3475.02	3500.01	3545.01	13.5	0.0	
15	QPSK	1	1	12.67	12.74	12.65	13.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	630334	633334	636334	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	3495.01	3500.01	3545.01	13.5	0.0	
10	QPSK	1	1	12.60	12.68	12.71	13.5	0.0	

Part27Q n77 HPUE Ant 6 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	15.60	3500.01				
100	PI2 BPSK	1	137	15.55			17.0	0.0	
100	PI2 BPSK	1	271	15.63					
100	PI2 BPSK	135	0	15.67			17.0	0.0	
100	PI2 BPSK	135	69	15.53			17.0	0.0	
100	PI2 BPSK	135	138	15.54			17.0	0.0	
100	PI2 BPSK	270	0	15.48					
100	QPSK	1	1	15.73					
100	QPSK	1	137	15.61			17.0	0.0	
100	QPSK	1	271	15.71					
100	QPSK	135	0	15.43			17.0	0.0	
100	QPSK	135	69	15.67			17.0	0.0	
100	QPSK	135	138	15.16			17.0	0.0	
100	QPSK	270	0	15.49					
100	16QAM	1	1	15.29			17.0	0.0	
100	16QAM	1	1	15.44			17.0	0.0	
100	256QAM	1	1	15.42			17.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	633000	633334	633668	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	3495	3500.01	3505.02	17.0	0.0	
90	QPSK	1	1	15.63	15.63	15.54	17.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	632068	633334	634600	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	3480.69	3500.01	3519.31	17.0	0.0	
80	QPSK	1	1	15.67	15.65	15.56	17.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	632334	633334	634334	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	3485.61	3500.01	3515.61	17.0	0.0	
70	QPSK	1	1	15.65	15.60	15.57	17.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	632000	633334	634668	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	3480	3500.01	3520.02	17.0	0.0	
60	QPSK	1	1	15.68	15.67	15.60	17.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	631000	633334	635000	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	3475.02	3500.01	3525	17.0	0.0	
50	QPSK	1	1	15.62	15.60	15.58	17.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	631134	633334	635334	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	3480.61	3500.01	3520.61	17.0	0.0	
40	QPSK	1	1	15.67	15.61	15.51	17.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	631000	633334	635668	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	3485	3500.01	3535.02	17.0	0.0	
30	QPSK	1	1	15.64	15.56	15.60	17.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	630668	633334	636000	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	3480.62	3500.01	3540	17.0	0.0	
25	QPSK	1	1	15.65	15.63	15.54	17.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	630500	633334	636368	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	3475.02	3500.01	3542.62	17.0	0.0	
20	QPSK	1	1	15.63	15.63	15.63	17.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	630334	633334	636334	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	3475.02	3500.01	3545.01	17.0	0.0	
15	QPSK	1	1	15.71	15.59	15.60	17.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	630334	633334	636334	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	3495.01	3500.01	3545.01	17.0	0.0	
10	QPSK	1	1	15.71	15.68	15.53	17.0	0.0	

Part270 n78 Ant 6 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	12.15	3750	3750			
100	PI2 BPSK	1	137	12.04			13.0	0.0	
100	PI2 BPSK	1	271	12.05					
100	PI2 BPSK	135	0	12.16			13.0	0.0	
100	PI2 BPSK	135	69	12.09			13.0	0.0	
100	PI2 BPSK	135	138	12.06			13.0	0.0	
100	PI2 BPSK	270	0	12.00					
100	QPSK	1	1	12.26					
100	QPSK	1	137	12.13			13.0	0.0	
100	QPSK	1	271	12.24					
100	QPSK	135	0	11.85			13.0	0.0	
100	QPSK	135	69	12.15			13.0	0.0	
100	QPSK	135	138	11.78			13.0	0.0	
100	QPSK	270	0	11.89					
100	16QAM	1	1	11.89			13.0	0.0	
100	16QAM	1	1	11.99			13.0	0.0	
100	256QAM	1	1	12.04</					



Part270 n78 HPUE Ant 6 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	15.21	15.21	15.21			
100	PI2 BPSK	1	137	15.08	15.08	15.08	16.5	0.0	
100	PI2 BPSK	1	271	15.01	15.01	15.01			
100	PI2 BPSK	135	0	15.12	15.12	15.12	16.5	0.0	
100	PI2 BPSK	135	69	15.10	15.10	15.10	16.5	0.0	
100	PI2 BPSK	135	138	15.08	15.08	15.08	16.5	0.0	
100	PI2 BPSK	270	0	15.05	15.05	15.05			
100	QPSK	1	1	15.20	15.20	15.20			
100	QPSK	1	137	15.11	15.11	15.11	16.5	0.0	
100	QPSK	1	271	15.22	15.22	15.22			
100	QPSK	135	0	14.91	14.91	14.91	16.5	0.0	
100	QPSK	135	69	15.18	15.18	15.18	16.5	0.0	
100	QPSK	135	138	14.73	14.73	14.73	16.5	0.0	
100	QPSK	270	0	14.87	14.87	14.87			
100	16QAM	1	1	14.82	14.82	14.82	16.5	0.0	
100	64QAM	1	1	14.98	14.98	14.98	16.5	0.0	
100	256QAM	1	1	15.08	15.08	15.08	16.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	15.14	15.14	15.14	16.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	15.16	15.16	15.16	16.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	15.12	15.12	15.09	16.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	15.18	15.15	15.15	16.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	15.11	15.11	15.16	16.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	15.11	15.16	15.10	16.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	15.10	15.10	15.12	16.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	15.15	15.06	15.07	16.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	15.15	15.17	15.07	16.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	15.17	15.09	15.09	16.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	15.16	15.13	15.07	16.5	0.0	

Part270Q n78 Ant 6 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	12.24	12.24	12.24			
100	PI2 BPSK	1	137	12.16	12.16	12.16	13.0	0.0	
100	PI2 BPSK	1	271	12.08	12.08	12.08			
100	PI2 BPSK	135	0	12.30	12.30	12.30	13.0	0.0	
100	PI2 BPSK	135	69	12.14	12.14	12.14	13.0	0.0	
100	PI2 BPSK	135	138	12.18	12.18	12.18	13.0	0.0	
100	PI2 BPSK	270	0	12.12	12.12	12.12			
100	QPSK	1	1	12.33	12.33	12.33			
100	QPSK	1	137	12.21	12.21	12.21	13.0	0.0	
100	QPSK	1	271	12.30	12.30	12.30			
100	QPSK	135	0	11.98	11.98	11.98	13.0	0.0	
100	QPSK	135	69	12.25	12.25	12.25	13.0	0.0	
100	QPSK	135	138	11.78	11.78	11.78	13.0	0.0	
100	QPSK	270	0	11.89	11.89	11.89			
100	16QAM	1	1	11.89	11.89	11.89	13.0	0.0	
100	64QAM	1	1	12.02	12.02	12.02	13.0	0.0	
100	256QAM	1	1	12.07	12.07	12.07	13.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	12.23	12.23	12.15	13.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	12.24	12.18	12.18	13.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	12.22	12.25	12.18	13.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	12.18	12.25	12.13	13.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	12.23	12.20	12.18	13.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	12.23	12.19	12.17	13.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	12.17	12.25	12.20	13.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	12.23	12.21	12.15	13.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	12.14	12.28	12.17	13.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	12.15	12.29	12.14	13.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	12.13	12.20	12.14	13.0	0.0	

Part27Q n78 HPUE Ant 6 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	15.27	15.27	15.27			
100	PI2 BPSK	1	137	15.21	15.21	15.21	16.5	0.0	
100	PI2 BPSK	1	271	15.03	15.03	15.03			
100	PI2 BPSK	135	0	15.24	15.24	15.24	16.5	0.0	
100	PI2 BPSK	135	69	15.11	15.11	15.11	16.5	0.0	
100	PI2 BPSK	135	138	15.14	15.14	15.14	16.5	0.0	
100	PI2 BPSK	270	0	15.16	15.16	15.16			
100	QPSK	1	1	15.37	15.37	15.37			
100	QPSK	1	137	15.26	15.26	15.26	16.5	0.0	
100	QPSK	1	271	15.36	15.36	15.36			
100	QPSK	135	0	14.97	14.97	14.97	16.5	0.0	
100	QPSK	135	69	15.22	15.22	15.22	16.5	0.0	
100	QPSK	135	138	14.85	14.85	14.85	16.5	0.0	
100	QPSK	270	0	14.89	14.89	14.89			
100	16QAM	1	1	14.86	14.86	14.86	16.5	0.0	
100	64QAM	1	1	15.07	15.07	15.07	16.5	0.0	
100	256QAM	1	1	14.82	14.82	14.82	16.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	15.21	15.24	15.14	16.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	15.22	15.21	15.18	16.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	15.10	15.20	15.15	16.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	15.23	15.23	15.20	16.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	15.19	15.25	15.13	16.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	15.19	15.17	15.13	16.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	15.20	15.23	15.17	16.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	15.24	15.23	15.14	16.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	15.21	15.18	15.12	16.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	15.24	15.27	15.20	16.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	15.22	15.23	15.15	16.5	0.0	



n48 Ant 7 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	17.42	17.51	17.38			
40	PI2 BPSK	1	53	17.33	17.59	17.31	19.0	0.0	
40	PI2 BPSK	1	104	17.24	17.32	17.19			
40	PI2 BPSK	50	0	17.41	17.57	17.31	19.0	0.0	
40	PI2 BPSK	50	28	17.25	17.31	17.26	19.0	0.0	
40	PI2 BPSK	50	56	17.26	17.39	17.29	19.0	0.0	
40	PI2 BPSK	100	0	17.26	17.34	17.38			
40	QPSK	1	1	17.56	17.58	17.49			
40	QPSK	1	53	17.48	17.44	17.38	19.0	0.0	
40	QPSK	1	104	17.35	17.55	17.34			
40	QPSK	50	0	17.12	17.16	17.17	19.0	0.0	
40	QPSK	50	28	17.32	17.53	17.36	19.0	0.0	
40	QPSK	50	56	17.02	17.13	17.08	19.0	0.0	
40	QPSK	100	0	17.22	17.25	17.20			
40	16QAM	1	1	17.12	17.17	17.18	19.0	0.0	
40	16QAM	1	1	17.21	17.28	17.09	19.0	0.0	
40	256QAM	1	1	17.18	17.30	17.14	19.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.40	17.42	17.24	19.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.31	17.38	17.33	19.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.22	17.43	17.24	19.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.37	17.32	17.28	19.0	0.0	

Part270 n77 Ant 7 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	14.86	15.00	14.84			
100	PI2 BPSK	1	137	14.82	14.83	14.75	16.0	0.0	
100	PI2 BPSK	1	271	14.79	14.91	14.70			
100	PI2 BPSK	135	0	14.00	14.08	14.85	16.0	0.0	
100	PI2 BPSK	135	69	14.78	14.85	14.82	16.0	0.0	
100	PI2 BPSK	135	138	14.76	14.90	14.75	16.0	0.0	
100	PI2 BPSK	270	0	14.87	14.90	14.81			
100	QPSK	1	1	15.01	15.14	15.13			
100	QPSK	1	137	14.95	15.02	15.01	16.0	0.0	
100	QPSK	1	271	14.90	15.08	14.87			
100	QPSK	135	0	14.62	14.72	14.67	16.0	0.0	
100	QPSK	135	69	14.87	14.97	14.90	16.0	0.0	
100	QPSK	135	138	14.55	14.60	14.66	16.0	0.0	
100	QPSK	270	0	14.79	14.85	14.70			
100	16QAM	1	1	14.61	14.73	14.77	16.0	0.0	
100	16QAM	1	1	14.74	14.85	14.73	16.0	0.0	
100	256QAM	1	1	14.71	14.84	14.72	16.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	14.86	15.07	14.99	16.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	14.93	15.08	15.09	16.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	14.97	15.00	15.07	16.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	14.87	15.05	15.06	16.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	14.95	15.04	14.97	16.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	14.98	15.04	15.00	16.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	14.84	15.05	14.97	16.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	14.90	15.03	15.04	16.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	14.96	15.02	15.02	16.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	14.92	15.00	14.98	16.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	14.84	15.00	14.97	16.0	0.0	

Part270 n77 HPUE Ant 7 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	17.91	17.89	17.89			
100	PI2 BPSK	1	137	17.86	17.89	17.78	19.0	0.0	
100	PI2 BPSK	1	271	17.75	17.85	17.74			
100	PI2 BPSK	135	0	17.97	18.09	17.89	19.0	0.0	
100	PI2 BPSK	135	69	17.80	17.80	17.81	19.0	0.0	
100	PI2 BPSK	135	138	17.80	17.84	17.81	19.0	0.0	
100	PI2 BPSK	270	0	17.85	17.90	17.77			
100	QPSK	1	1	18.00	18.16	18.06			
100	QPSK	1	137	17.92	18.02	17.98	19.0	0.0	
100	QPSK	1	271	17.86	18.04	17.82			
100	QPSK	135	0	17.83	17.86	17.66	19.0	0.0	
100	QPSK	135	69	17.91	17.97	17.90	19.0	0.0	
100	QPSK	135	138	17.85	17.57	17.68	19.0	0.0	
100	QPSK	270	0	17.80	17.81	17.73			
100	16QAM	1	1	17.64	17.70	17.81	19.0	0.0	
100	16QAM	1	1	17.77	17.87	17.75	19.0	0.0	
100	256QAM	1	1	17.65	17.82	17.62	19.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	17.94	18.01	18.02	19.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.88	18.12	17.97	19.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	17.92	18.09	18.03	19.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.89	18.06	17.82	19.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	17.90	18.04	18.00	19.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	17.95	18.03	17.91	19.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.91	18.00	17.87	19.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	17.92	18.08	18.01	19.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.91	18.03	17.95	19.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.85	18.10	17.83	19.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.92	18.11	17.98	19.0	0.0	



Part27Q n77 Ant 7 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	15.06	3500.01				
100	PI2 BPSK	1	137	15.01			16.0	0.0	
100	PI2 BPSK	1	271	14.92					
100	PI2 BPSK	135	0	15.13			16.0	0.0	
100	PI2 BPSK	135	69	15.02			16.0	0.0	
100	PI2 BPSK	135	138	14.94			16.0	0.0	
100	PI2 BPSK	270	0	14.84					
100	QPSK	1	1	15.21					
100	QPSK	1	137	15.11			16.0	0.0	
100	QPSK	1	271	15.16					
100	QPSK	135	0	14.90			16.0	0.0	
100	QPSK	135	69	15.13			16.0	0.0	
100	QPSK	135	138	14.70			16.0	0.0	
100	QPSK	270	0	14.89			16.0	0.0	
100	16QAM	1	1	14.82			16.0	0.0	
100	64QAM	1	1	14.89			16.0	0.0	
100	256QAM	1	1	14.87			16.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	15.11	63334	63368	Tune-up limit (dBm)	MPR	
90	QPSK	1	1	15.14	3495	3500.01	3505.02	16.0	0.0
Channel									
Frequency (MHz)									
80	QPSK	1	1	15.13	63268	63334	63400	Tune-up limit (dBm)	MPR
80	QPSK	1	1	15.13	3480.02	3500.01	3520	16.0	0.0
Channel									
Frequency (MHz)									
70	QPSK	1	1	15.07	63234	63334	63434	Tune-up limit (dBm)	MPR
70	QPSK	1	1	15.07	3485.01	3500.01	3515.01	16.0	0.0
Channel									
Frequency (MHz)									
60	QPSK	1	1	15.07	63200	63334	63468	Tune-up limit (dBm)	MPR
60	QPSK	1	1	15.07	3480	3500.01	3520.02	16.0	0.0
Channel									
Frequency (MHz)									
50	QPSK	1	1	15.02	63168	63334	63500	Tune-up limit (dBm)	MPR
50	QPSK	1	1	15.02	3475.02	3500.01	3525	16.0	0.0
Channel									
Frequency (MHz)									
40	QPSK	1	1	15.08	63100	63334	63568	Tune-up limit (dBm)	MPR
40	QPSK	1	1	15.08	3465	3500.01	3535.02	16.0	0.0
Channel									
Frequency (MHz)									
30	QPSK	1	1	15.09	63068	63334	63600	Tune-up limit (dBm)	MPR
30	QPSK	1	1	15.09	3460.02	3500.01	3540	16.0	0.0
Channel									
Frequency (MHz)									
25	QPSK	1	1	15.06	63034	63334	63634	Tune-up limit (dBm)	MPR
25	QPSK	1	1	15.06	3455.01	3500.01	3545.01	16.0	0.0
Channel									
Frequency (MHz)									
20	QPSK	1	1	15.00	63000	63334	63668	Tune-up limit (dBm)	MPR
20	QPSK	1	1	15.00	3450.01	3500.01	3540	16.0	0.0
Channel									
Frequency (MHz)									
15	QPSK	1	1	15.00	62934	63334	63702	Tune-up limit (dBm)	MPR
15	QPSK	1	1	15.00	3445.01	3500.01	3545.01	16.0	0.0
Channel									
Frequency (MHz)									
10	QPSK	1	1	15.10	62868	63334	63736	Tune-up limit (dBm)	MPR
10	QPSK	1	1	15.10	3440.01	3500.01	3540	16.0	0.0

Part27Q n77 HPUE Ant 7 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	18.14	3500.01				
100	PI2 BPSK	1	137	18.02			19.0	0.0	
100	PI2 BPSK	1	271	17.98					
100	PI2 BPSK	135	0	18.17			19.0	0.0	
100	PI2 BPSK	135	69	18.03			19.0	0.0	
100	PI2 BPSK	135	138	17.99			19.0	0.0	
100	PI2 BPSK	270	0	17.87					
100	QPSK	1	1	18.22					
100	QPSK	1	137	18.16			19.0	0.0	
100	QPSK	1	271	18.15					
100	QPSK	135	0	17.95			19.0	0.0	
100	QPSK	135	69	18.17			19.0	0.0	
100	QPSK	135	138	17.74			19.0	0.0	
100	QPSK	270	0	18.05			19.0	0.0	
100	16QAM	1	1	17.88			19.0	0.0	
100	64QAM	1	1	17.86			19.0	0.0	
100	256QAM	1	1	17.84			19.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	18.14	63334	63368	Tune-up limit (dBm)	MPR	
90	QPSK	1	1	18.14	3495	3500.01	3505.02	19.0	0.0
Channel									
Frequency (MHz)									
80	QPSK	1	1	18.06	63268	63334	63400	Tune-up limit (dBm)	MPR
80	QPSK	1	1	18.15	3480.02	3500.01	3520	19.0	0.0
Channel									
Frequency (MHz)									
70	QPSK	1	1	18.06	63234	63334	63434	Tune-up limit (dBm)	MPR
70	QPSK	1	1	18.06	3485.01	3500.01	3515.01	19.0	0.0
Channel									
Frequency (MHz)									
60	QPSK	1	1	18.09	63200	63334	63468	Tune-up limit (dBm)	MPR
60	QPSK	1	1	18.09	3480	3500.01	3520.02	19.0	0.0
Channel									
Frequency (MHz)									
50	QPSK	1	1	18.14	63168	63334	63500	Tune-up limit (dBm)	MPR
50	QPSK	1	1	18.14	3475.02	3500.01	3525	19.0	0.0
Channel									
Frequency (MHz)									
40	QPSK	1	1	18.09	63100	63334	63568	Tune-up limit (dBm)	MPR
40	QPSK	1	1	18.09	3465	3500.01	3535.02	19.0	0.0
Channel									
Frequency (MHz)									
30	QPSK	1	1	18.12	63068	63334	63600	Tune-up limit (dBm)	MPR
30	QPSK	1	1	18.12	3460.02	3500.01	3540	19.0	0.0
Channel									
Frequency (MHz)									
25	QPSK	1	1	18.15	63034	63334	63634	Tune-up limit (dBm)	MPR
25	QPSK	1	1	18.15	3455.01	3500.01	3545.01	19.0	0.0
Channel									
Frequency (MHz)									
20	QPSK	1	1	18.11	63000	63334	63668	Tune-up limit (dBm)	MPR
20	QPSK	1	1	18.11	3450.01	3500.01	3540	19.0	0.0
Channel									
Frequency (MHz)									
15	QPSK	1	1	18.07	62934	63334	63702	Tune-up limit (dBm)	MPR
15	QPSK	1	1	18.07	3445.01	3500.01	3545.01	19.0	0.0
Channel									
Frequency (MHz)									
10	QPSK	1	1	18.07	62868	63334	63736	Tune-up limit (dBm)	MPR
10	QPSK	1	1	18.07	3440.01	3500.01	3540	19.0	0.0

Part270 n78 Ant 7 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	14.86	3750	3750	3750		
100	PI2 BPSK	1	137	14.88				16.0	0.0
100	PI2 BPSK	1	271	14.81					
100	PI2 BPSK	135	0	15.03			16.0	0.0	
100	PI2 BPSK	135	69	14.82			16.0	0.0	
100	PI2 BPSK	135	138	14.87			16.0	0.0	
100	PI2 BPSK	270	0	14.84					
100	QPSK	1	1	15.13					
100	QPSK	1	137	15.01			16.0	0.0	
100	QPSK	1	271	15.00					
100	QPSK	135	0	14.77			16.0	0.0	
100	QPSK	135	69	15.01			16.0	0.0	
100	QPSK	135	138	14.59			16.0	0.0	
100	QPSK	270	0	14.83			16.0	0.0	
100	16QAM	1	1	14.76			16.0	0.0	
100	64QAM	1	1	14.81			16.0	0.0	
100	256QAM	1	1	14.72			16.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	15.02	64968	65000	65034	Tune-up limit (dBm)	MPR
90	QPSK	1	1	15.02	3745.02	3750	3755.01	16.0	0.0
Channel									
Frequency (MHz)									
80	QPSK	1	1	15.03	64934	65000	65068	Tune-up limit (dBm)	MPR
80	QPSK	1	1	15.03	3740.01	3750	3750.02	16.0	0.0
Channel									
Frequency (MHz)									
70	QPSK	1	1	14.98	64900	65000	65100	Tune-up limit (dBm)	MPR
70	QPSK	1	1	14.98	3735	3750	3765	16.0	0.0
Channel									
Frequency (MHz)									
60	QPSK	1	1	14.99	64868	65000	65134	Tune-up limit (dBm)	MPR
60	QPSK	1	1	14.99	3730.02	3750	3750.01	16.0	0.0
Channel									
Frequency (MHz)									
50	QPSK	1	1	15.07	64800	65000	65200	Tune-up limit (dBm)	MPR
50	QPSK	1	1	15.07	3725.01	3750	3750.02	16.0	0.0
Channel									
Frequency (MHz)									
40	QPSK	1	1	15.03	64768	65000	65234	Tune-up limit (dBm)	MPR
40	QPSK	1	1	15.03	3720.01	3750	3750.02	16.0	0.0
Channel									
Frequency (MHz)									
30	QPSK	1	1	15.00	64734	65000	65300	Tune-up limit (dBm)	MPR
30	QPSK	1	1	15.00	3715.02	3750	3750.01	16.0	0.0
Channel									
Frequency (MHz)									
25	QPSK	1	1	14.97	64700	65000	65368	Tune-up limit (dBm)	MPR
25	QPSK	1	1	14.97	3712				



Part270 n78 HPUE Ant 7 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	3750	3750	3750			
100	PI2 BPSK	1	137	17.81	17.81	17.81	19.0	0.0	
100	PI2 BPSK	1	271	17.78	17.78	17.78			
100	PI2 BPSK	135	0	18.01	18.01	18.01	19.0	0.0	
100	PI2 BPSK	135	69	17.87	17.87	17.87	19.0	0.0	
100	PI2 BPSK	135	138	17.81	17.81	17.81	19.0	0.0	
100	PI2 BPSK	270	0	17.80	17.80	17.80			
100	QPSK	1	1	18.14	18.14	18.14			
100	QPSK	1	137	18.06	18.06	18.06	19.0	0.0	
100	QPSK	1	271	18.00	18.00	18.00			
100	QPSK	135	0	17.70	17.70	17.70	19.0	0.0	
100	QPSK	135	69	17.98	17.98	17.98	19.0	0.0	
100	QPSK	135	138	17.84	17.84	17.84	19.0	0.0	
100	QPSK	270	0	17.75	17.75	17.75			
100	16QAM	1	1	17.82	17.82	17.82	19.0	0.0	
100	64QAM	1	1	17.75	17.75	17.75	19.0	0.0	
100	256QAM	1	1	17.81	17.81	17.81	19.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	548663	650334	650334	Tune-up limit (dBm)	MPR	
90	QPSK	1	1	3745.02	3750	3755.01	19.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	649334	650000	650666	Tune-up limit (dBm)	MPR	
80	QPSK	1	1	18.06	18.02	17.88	19.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	649334	650000	650666	Tune-up limit (dBm)	MPR	
70	QPSK	1	1	17.84	18.00	17.92	19.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	648666	650000	651334	Tune-up limit (dBm)	MPR	
60	QPSK	1	1	17.96	18.04	17.95	19.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	3725.01	3750	3775.02	Tune-up limit (dBm)	MPR	
50	QPSK	1	1	18.09	18.09	17.90	19.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	648000	650000	652000	Tune-up limit (dBm)	MPR	
40	QPSK	1	1	18.02	18.05	17.92	19.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	647668	650000	652334	Tune-up limit (dBm)	MPR	
30	QPSK	1	1	3715.02	3750	3785.01	19.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	647334	650000	650666	Tune-up limit (dBm)	MPR	
25	QPSK	1	1	17.89	17.99	17.87	19.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	647000	650000	650000	Tune-up limit (dBm)	MPR	
20	QPSK	1	1	18.00	18.01	17.87	19.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	647000	650000	650000	Tune-up limit (dBm)	MPR	
15	QPSK	1	1	18.00	18.00	17.95	19.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	647000	650000	650000	Tune-up limit (dBm)	MPR	
10	QPSK	1	1	18.06	18.12	17.90	19.0	0.0	

Part27Q n78 Ant 7 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	3000.01	3000.01	3000.01			
100	PI2 BPSK	1	137	14.83	14.83	14.83	16.0	0.0	
100	PI2 BPSK	1	271	14.84	14.84	14.84			
100	PI2 BPSK	135	0	15.05	15.05	15.05	16.0	0.0	
100	PI2 BPSK	135	69	14.91	14.91	14.91	16.0	0.0	
100	PI2 BPSK	135	138	14.83	14.83	14.83	16.0	0.0	
100	PI2 BPSK	270	0	14.82	14.82	14.82			
100	QPSK	1	1	15.08	15.08	15.08			
100	QPSK	1	137	14.96	14.96	14.96	16.0	0.0	
100	QPSK	1	271	14.99	14.99	14.99			
100	QPSK	135	0	14.67	14.67	14.67	16.0	0.0	
100	QPSK	135	69	15.04	15.04	15.04	16.0	0.0	
100	QPSK	135	138	14.87	14.87	14.87	16.0	0.0	
100	QPSK	270	0	14.85	14.85	14.85			
100	16QAM	1	1	14.72	14.72	14.72	16.0	0.0	
100	64QAM	1	1	14.82	14.82	14.82	16.0	0.0	
100	256QAM	1	1	14.87	14.87	14.87	16.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	633000	633334	633668	Tune-up limit (dBm)	MPR	
90	QPSK	1	1	3486	3600.01	3605.02	16.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	632668	633334	634000	Tune-up limit (dBm)	MPR	
80	QPSK	1	1	14.92	15.03	15.00	16.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	632334	633334	634334	Tune-up limit (dBm)	MPR	
70	QPSK	1	1	14.89	15.02	14.89	16.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	632000	633334	634668	Tune-up limit (dBm)	MPR	
60	QPSK	1	1	14.92	14.92	14.98	16.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	631668	633334	635000	Tune-up limit (dBm)	MPR	
50	QPSK	1	1	14.85	14.95	14.88	16.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	631334	633334	635000	Tune-up limit (dBm)	MPR	
40	QPSK	1	1	3485.01	3600.01	3615.01	16.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	631000	633334	635668	Tune-up limit (dBm)	MPR	
30	QPSK	1	1	3485	3600.01	3635.02	16.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	630668	633334	636000	Tune-up limit (dBm)	MPR	
25	QPSK	1	1	14.88	15.00	15.03	16.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	630334	633334	636334	Tune-up limit (dBm)	MPR	
20	QPSK	1	1	14.84	14.97	14.99	16.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	630000	633334	636668	Tune-up limit (dBm)	MPR	
15	QPSK	1	1	14.89	15.02	14.94	16.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	629668	633334	637000	Tune-up limit (dBm)	MPR	
10	QPSK	1	1	14.88	15.04	15.02	16.0	0.0	

Part27Q n78 HPUE Ant 7 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	3000.01	3000.01	3000.01			
100	PI2 BPSK	1	137	17.86	17.86	17.86	19.0	0.0	
100	PI2 BPSK	1	271	17.88	17.88	17.88			
100	PI2 BPSK	135	0	18.10	18.10	18.10	19.0	0.0	
100	PI2 BPSK	135	69	17.89	17.89	17.89	19.0	0.0	
100	PI2 BPSK	135	138	17.89	17.89	17.89	19.0	0.0	
100	PI2 BPSK	270	0	17.82	17.82	17.82			
100	QPSK	1	1	18.11	18.11	18.11			
100	QPSK	1	137	18.06	18.06	18.06	19.0	0.0	
100	QPSK	1	271	18.01	18.01	18.01			
100	QPSK	135	0	17.65	17.65	17.65	19.0	0.0	
100	QPSK	135	69	18.00	18.00	18.00	19.0	0.0	
100	QPSK	135	138	17.80	17.80	17.80	19.0	0.0	
100	QPSK	270	0	17.83	17.83	17.83			
100	64QAM	1	1	17.69	17.69	17.69	19.0	0.0	
100	64QAM	1	1	17.88	17.88	17.88	19.0	0.0	
100	256QAM	1	1	17.82	17.82	17.82	19.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	633000	633334	633668	Tune-up limit (dBm)	MPR	
90	QPSK	1	1	17.86	17.96	18.09	19.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	632668	633334	634000	Tune-up limit (dBm)	MPR	
80	QPSK	1	1	17.89	17.96	18.06	19.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	632334	633334	634334	Tune-up limit (dBm)	MPR	
70	QPSK	1	1	17.70	17.69	18.05	19.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	632000	633334	634668	Tune-up limit (dBm)	MPR	
60	QPSK	1	1	17.90	18.02	18.02	19.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	631668	633334	635000	Tune-up limit (dBm)	MPR	
50	QPSK	1	1	17.90	17.97	18.06	19.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	631334	633334	635334	Tune-up limit (dBm)	MPR	
40	QPSK	1	1	3485.01	3600.01	3615.01	16.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	631000	633334	635668	Tune-up limit (dBm)	MPR	
30	QPSK	1	1	17.83					



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BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				63000	641666	65532		
Frequency (MHz)				3370	3624.99	3679.88		
40	PI/2 BPSK	1	1	22.53	22.61	22.54	24.0	0.0
40	PI/2 BPSK	1	53	22.55	22.52	22.47		
40	PI/2 BPSK	1	104	22.58	22.61	22.51		
40	PI/2 BPSK	50	0	22.13	22.10	22.02	23.5	0.5
40	PI/2 BPSK	50	28	22.54	22.57	22.54	24.0	0.0
40	PI/2 BPSK	50	56	22.11	22.13	22.09	23.5	0.5
40	PI/2 BPSK	100	0	22.12	22.18	22.07		
40	QPSK	1	1	22.83	22.85	22.57		
40	QPSK	1	53	22.96	22.96	22.94	24.0	0.0
40	QPSK	1	104	22.97	22.98	22.90		
40	QPSK	50	0	21.55	21.53	21.45	23.0	1.0
40	QPSK	50	28	22.55	22.60	22.51	24.0	0.0
40	QPSK	50	56	21.51	21.61	21.45	23.0	1.0
40	QPSK	100	0	21.61	21.65	21.58	23.0	1.0
40	16QAM	1	1	21.80	21.63	21.53	23.0	1.0
40	16QAM	1	1	19.98	20.05	20.00	21.5	2.5
40	256QAM	1	1	17.96	18.02	17.94	19.5	4.5
Channel				63763	641666	645666	Tune-up limit (dBm)	MPR
Frequency (MHz)				3955.02	3924.99	3984.99		
30	QPSK	1	1	22.51	22.55	22.45	24.0	0.0
Channel				637334	641666	646000	Tune-up limit (dBm)	MPR
Frequency (MHz)				3507.42	3624.99	3692.49		
20	QPSK	1	1	22.61	22.62	22.45	24.0	0.0
Channel				637168	641666	646166	Tune-up limit (dBm)	MPR
Frequency (MHz)				3507.42	3624.99	3692.49		
10	QPSK	1	1	22.54	22.51	22.43	24.0	0.0
Channel				637000	641666	646332	Tune-up limit (dBm)	MPR
Frequency (MHz)				3505	3624.99	3694.98		
10	QPSK	1	1	22.60	22.62	22.48	24.0	0.0

Part270 n77 Ant 8 DSI1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				65000	656000	665000		
Frequency (MHz)				3750	3840	3930		
100	PI/2 BPSK	1	1	21.66	21.66	21.50	23.0	0.0
100	PI/2 BPSK	1	137	21.47	21.49	21.41		
100	PI/2 BPSK	1	271	21.40	21.58	21.38		
100	PI/2 BPSK	135	0	21.80	21.64	21.55	23.0	0.0
100	PI/2 BPSK	135	69	21.39	21.54	21.42	23.0	0.0
100	PI/2 BPSK	135	138	21.35	21.54	21.44	23.0	0.0
100	PI/2 BPSK	270	0	21.54	21.56	21.55		
100	QPSK	1	1	21.77	21.81	21.69		
100	QPSK	1	137	21.66	21.66	21.63	23.0	0.0
100	QPSK	1	271	21.51	21.64	21.61		
100	QPSK	135	0	21.30	21.39	21.37	23.0	0.0
100	QPSK	135	69	21.60	21.73	21.49	23.0	0.0
100	QPSK	135	138	21.23	21.20	21.24	23.0	0.0
100	QPSK	270	0	21.46	21.52	21.37		
100	16QAM	1	1	21.35	21.36	21.38	23.0	0.0
100	16QAM	1	1	21.40	21.45	21.28	23.0	0.0
100	256QAM	1	1	21.04	21.11	21.05	22.5	0.5
Channel				64950	656000	662334	Tune-up limit (dBm)	MPR
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	21.65	21.78	21.54	23.0	0.0
Channel				649334	656000	662968	Tune-up limit (dBm)	MPR
Frequency (MHz)				3742.01	3840	3942.02		
80	QPSK	1	1	21.67	21.66	21.64	23.0	0.0
Channel				649000	656000	663000	Tune-up limit (dBm)	MPR
Frequency (MHz)				3735	3840	3945		
70	QPSK	1	1	21.67	21.78	21.59	23.0	0.0
Channel				648968	656000	663334	Tune-up limit (dBm)	MPR
Frequency (MHz)				3730.02	3840	3950.01		
60	QPSK	1	1	21.71	21.68	21.54	23.0	0.0
Channel				648334	656000	663502	Tune-up limit (dBm)	MPR
Frequency (MHz)				3725.01	3840	3955.02		
50	QPSK	1	1	21.65	21.68	21.55	23.0	0.0
Channel				648000	656000	664000	Tune-up limit (dBm)	MPR
Frequency (MHz)				3724	3840	3960		
40	QPSK	1	1	21.63	21.70	21.56	23.0	0.0
Channel				647668	656000	664334	Tune-up limit (dBm)	MPR
Frequency (MHz)				3715.02	3840	3965.01		
30	QPSK	1	1	21.66	21.70	21.64	23.0	0.0
Channel				647500	656000	664500	Tune-up limit (dBm)	MPR
Frequency (MHz)				3712.5	3840	3967.5		
25	QPSK	1	1	21.63	21.71	21.57	23.0	0.0
Channel				647334	656000	664668	Tune-up limit (dBm)	MPR
Frequency (MHz)				3710.01	3840	3970.02		
20	QPSK	1	1	21.71	21.75	21.58	23.0	0.0
Channel				647168	656000	664834	Tune-up limit (dBm)	MPR
Frequency (MHz)				3707.52	3840	3972.51		
15	QPSK	1	1	21.70	21.66	21.61	23.0	0.0
Channel				647000	656000	665000	Tune-up limit (dBm)	MPR
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	21.62	21.73	21.62	23.0	0.0

Part270 n77 HPUE Ant 8 DSI1								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				65000	656000	665000		
Frequency (MHz)				3750	3840	3930		
100	PI/2 BPSK	1	1	24.66	24.67	24.56	26.0	0.0
100	PI/2 BPSK	1	137	24.49	24.60	24.46		
100	PI/2 BPSK	1	271	24.43	24.60	24.43		
100	PI/2 BPSK	135	0	24.59	24.77	24.46	26.0	0.0
100	PI/2 BPSK	135	69	24.51	24.51	24.53	26.0	0.0
100	PI/2 BPSK	135	138	24.45	24.51	24.38	26.0	0.0
100	PI/2 BPSK	270	0	24.49	24.50	24.43		
100	QPSK	1	1	24.72	24.81	24.67		
100	QPSK	1	137	24.55	24.61	24.66	26.0	0.0
100	QPSK	1	271	24.59	24.67	24.63		
100	QPSK	135	0	24.37	24.45	24.30	26.0	0.0
100	QPSK	135	69	24.80	24.69	24.56	26.0	0.0
100	QPSK	135	138	24.23	24.31	24.26	26.0	0.0
100	QPSK	270	0	24.48	24.50	24.31		
100	16QAM	1	1	24.34	24.42	24.42	26.0	0.0
100	16QAM	1	1	23.20	23.25	23.18	24.5	1.5
100	256QAM	1	1	21.13	21.16	21.11	22.5	3.5
Channel				64950	656000	662334	Tune-up limit (dBm)	MPR
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	24.61	24.69	24.63	26.0	0.0
Channel				649334	656000	662968	Tune-up limit (dBm)	MPR
Frequency (MHz)				3742.01	3840	3942.02		
80	QPSK	1	1	24.62	24.69	24.55	26.0	0.0
Channel				649000	656000	663000	Tune-up limit (dBm)	MPR
Frequency (MHz)				3735	3840	3945		
70	QPSK	1	1	24.60	24.69	24.55	26.0	0.0
Channel				648968	656000	663334	Tune-up limit (dBm)	MPR
Frequency (MHz)				3730.02	3840	3950.01		
60	QPSK	1	1	24.64	24.65	24.58	26.0	0.0
Channel				648334	656000	663502	Tune-up limit (dBm)	MPR
Frequency (MHz)				3725.01	3840	3955.02		
50	QPSK	1	1	24.69	24.69	24.55	26.0	0.0
Channel				648000	656000	664000	Tune-up limit (dBm)	MPR
Frequency (MHz)				3724	3840	3960		
40	QPSK	1	1	24.55	24.68	24.57	26.0	0.0
Channel				647668	656000	664334	Tune-up limit (dBm)	MPR
Frequency (MHz)				3715.02	3840	3965.01		
30	QPSK	1	1	24.60	24.64	24.51	26.0	0.0
Channel				647500	656000	664500	Tune-up limit (dBm)	MPR
Frequency (MHz)				3712.5	3840	3967.5		
25	QPSK	1	1	24.65	24.71	24.50	26.0	0.0
Channel				647334	656000	664668	Tune-up limit (dBm)	MPR
Frequency (MHz)				3710.01	3840	3970.02		
20	QPSK	1	1	24.61	24.75	24.56	26.0	0.0
Channel				647168	656000	664834	Tune-up limit (dBm)	MPR
Frequency (MHz)				3707.52	3840	3972.51		
15	QPSK	1	1	24.59	24.77	24.64	26.0	0.0
Channel				647000	656000	665000	Tune-up limit (dBm)	MPR
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	24.62	24.77	24.67	26.0	0.0



Part27Q n77 Ant 8 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	21.88	3500.01				
100	PI2 BPSK	1	137	21.95			23.0	0.0	
100	PI2 BPSK	1	271	21.85					
100	PI2 BPSK	135	0	21.90			23.0	0.0	
100	PI2 BPSK	135	69	21.82			23.0	0.0	
100	PI2 BPSK	135	138	21.78			23.0	0.0	
100	PI2 BPSK	270	0	21.82					
100	QPSK	1	1	22.27					
100	QPSK	1	137	21.87			23.0	0.0	
100	QPSK	1	271	21.92					
100	QPSK	135	0	21.82			23.0	0.0	
100	QPSK	135	69	22.00			23.0	0.0	
100	QPSK	135	138	21.37			23.0	0.0	
100	QPSK	270	0	21.81					
100	16QAM	1	1	21.59			23.0	0.0	
100	16QAM	1	1	21.66			23.0	0.0	
100	256QAM	1	1	21.47			22.5	0.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	21.94	5330.0	63368	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
80	QPSK	1	1	21.91	3495	3500.01	3505.02	23.0	0.0
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.85	3485.01	3500.01	3515.01	23.0	0.0
Channel									
Frequency (MHz)									
60	QPSK	1	1	21.87	3480.02	3500.01	3510.01	23.0	0.0
Channel									
Frequency (MHz)									
50	QPSK	1	1	21.87	3480.02	3500.01	3525.02	23.0	0.0
Channel									
Frequency (MHz)									
40	QPSK	1	1	21.84	3480.02	3500.01	3535.02	23.0	0.0
Channel									
Frequency (MHz)									
30	QPSK	1	1	21.82	3480.02	3500.01	3545.01	23.0	0.0
Channel									
Frequency (MHz)									
25	QPSK	1	1	21.85	3482.01	3500.01	3537.51	23.0	0.0
Channel									
Frequency (MHz)									
20	QPSK	1	1	21.89	3460.02	3500.01	3548.01	23.0	0.0
Channel									
Frequency (MHz)									
15	QPSK	1	1	21.93	3455.01	3500.01	3545.01	23.0	0.0
Channel									
Frequency (MHz)									
10	QPSK	1	1	21.92	3455.01	3500.01	3545.01	23.0	0.0

Part27Q n77 HPUE Ant 8 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	24.84	3500.01				
100	PI2 BPSK	1	137	24.82			26.0	0.0	
100	PI2 BPSK	1	271	24.77					
100	PI2 BPSK	135	0	24.82			26.0	0.0	
100	PI2 BPSK	135	69	24.86			26.0	0.0	
100	PI2 BPSK	135	138	24.70			26.0	0.0	
100	PI2 BPSK	270	0	24.87					
100	QPSK	1	1	24.95					
100	QPSK	1	137	24.86			26.0	0.0	
100	QPSK	1	271	24.85					
100	QPSK	135	0	24.84			26.0	0.0	
100	QPSK	135	69	24.97			26.0	0.0	
100	QPSK	135	138	24.48			26.0	0.0	
100	QPSK	270	0	24.74					
100	16QAM	1	1	24.58			26.0	0.0	
100	16QAM	1	1	24.58			26.0	0.0	
100	64QAM	1	1	23.35			24.5	1.5	
100	256QAM	1	1	23.40			22.5	3.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	24.86	6330.0	63368	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.82	3485.01	3500.01	3505.02	26.0	0.0
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.74	3485.01	3500.01	3515.01	26.0	0.0
Channel									
Frequency (MHz)									
60	QPSK	1	1	24.83	3480.02	3500.01	3520.02	26.0	0.0
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.85	3480.02	3500.01	3535.02	26.0	0.0
Channel									
Frequency (MHz)									
40	QPSK	1	1	24.87	3480.02	3500.01	3545.01	26.0	0.0
Channel									
Frequency (MHz)									
30	QPSK	1	1	24.78	3482.01	3500.01	3537.51	26.0	0.0
Channel									
Frequency (MHz)									
25	QPSK	1	1	24.75	3460.02	3500.01	3535.02	26.0	0.0
Channel									
Frequency (MHz)									
20	QPSK	1	1	24.80	3460.02	3500.01	3548.01	26.0	0.0
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.87	3455.01	3500.01	3545.01	26.0	0.0
Channel									
Frequency (MHz)									
10	QPSK	1	1	24.79	3455.01	3500.01	3545.01	26.0	0.0

Part270 n78 Ant 8 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	21.77	3750	3750			
100	PI2 BPSK	1	137	21.70			23.0	0.0	
100	PI2 BPSK	1	271	21.70					
100	PI2 BPSK	135	0	21.77			23.0	0.0	
100	PI2 BPSK	135	69	21.82			23.0	0.0	
100	PI2 BPSK	135	138	21.62			23.0	0.0	
100	PI2 BPSK	270	0	21.70					
100	QPSK	1	1	21.83					
100	QPSK	1	137	21.80			23.0	0.0	
100	QPSK	1	271	21.76					
100	QPSK	135	0	21.81			23.0	0.0	
100	QPSK	135	69	21.76			23.0	0.0	
100	QPSK	135	138	21.28			23.0	0.0	
100	QPSK	270	0	21.61					
100	16QAM	1	1	21.48			23.0	0.0	
100	16QAM	1	1	21.58			23.0	0.0	
100	256QAM	1	1	21.12			22.5	0.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	21.70	64900	65000	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
80	QPSK	1	1	21.75	3745.02	3750	3755.01	23.0	0.0
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.72	3745.02	3750	3760.02	23.0	0.0
Channel									
Frequency (MHz)									
60	QPSK	1	1	21.81	3745.02	3750	3765.01	23.0	0.0
Channel									
Frequency (MHz)									
50	QPSK	1	1	21.74	3745.02	3750	3775.02	23.0	0.0
Channel									
Frequency (MHz)									
40	QPSK	1	1	21.68	3745.02	3750	3785.01	23.0	0.0
Channel									
Frequency (MHz)									
30	QPSK	1	1	21.77	3745.02	3750	3795.02	23.0	0.0
Channel									
Frequency (MHz)									
25	QPSK	1	1	21.87	3745.02	3750	3797.51	23.0	0.0
Channel									
Frequency (MHz)									
20	QPSK	1	1	21.80	3745.02	3750	3800.02	23.0	0.0
Channel									
Frequency (MHz)									
15	QPSK	1	1	21.77	3745.02	3750	3802.51	23.0	0.0
Channel									
Frequency (MHz)									
10	QPSK	1	1	21.79	3745.02	3750	3802.51	23.0	0.0



Part270 n78 HPUE Ant 8 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	24.81	24.75	24.70			
100	Pi2 BPSK	1	137	24.84			26.0	0.0	
100	Pi2 BPSK	1	271	24.68					
100	Pi2 BPSK	135	0	24.75			26.0	0.0	
100	Pi2 BPSK	135	69	24.68			26.0	0.0	
100	Pi2 BPSK	135	138	24.68			26.0	0.0	
100	Pi2 BPSK	270	0	24.75					
100	QPSK	1	1	24.82					
100	QPSK	1	137	24.75			26.0	0.0	
100	QPSK	1	271	24.69					
100	QPSK	135	0	24.49			26.0	0.0	
100	QPSK	135	69	24.75			26.0	0.0	
100	QPSK	135	138	24.44			26.0	0.0	
100	QPSK	270	0	24.50					
100	16QAM	1	1	24.52			26.0	0.0	
100	16QAM	1	1	23.05			24.5	1.5	
100	256QAM	1	1	23.12			22.5	3.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	24.66	24.75	24.66	26.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.64	24.73	24.67	26.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.60	24.72	24.72	26.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	24.76	24.71	24.72	26.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.75	24.75	24.64	26.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	24.69	24.68	24.70	26.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	24.70	24.70	24.64	26.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	24.75	24.72	24.67	26.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	24.76	24.76	24.70	26.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.73	24.73	24.64	26.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	24.69	24.68	24.64	26.0	0.0	

Part27Q n78 Ant 8 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	21.81	21.75	21.70			
100	Pi2 BPSK	1	137	21.75			23.0	0.0	
100	Pi2 BPSK	1	271	21.73					
100	Pi2 BPSK	135	0	21.78			23.0	0.0	
100	Pi2 BPSK	135	69	21.57			23.0	0.0	
100	Pi2 BPSK	135	138	21.63			23.0	0.0	
100	Pi2 BPSK	270	0	21.68					
100	QPSK	1	1	21.85					
100	QPSK	1	137	21.78			23.0	0.0	
100	QPSK	1	271	21.75					
100	QPSK	135	0	21.52			23.0	0.0	
100	QPSK	135	69	21.73			23.0	0.0	
100	QPSK	135	138	21.35			23.0	0.0	
100	QPSK	270	0	21.58					
100	16QAM	1	1	21.45			23.0	0.0	
100	16QAM	1	1	21.57			23.0	0.0	
100	256QAM	1	1	21.23			22.5	3.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	21.58	21.68	21.68	23.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	21.67	21.70	21.60	23.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.64	21.70	21.67	23.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	21.71	21.66	21.61	23.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	21.58	21.69	21.69	23.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	21.70	21.64	21.60	23.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	21.60	21.72	21.60	23.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	21.66	21.72	21.64	23.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	21.65	21.65	21.59	23.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	21.65	21.61	21.57	23.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	21.61	21.68	21.63	23.0	0.0	

Part27Q n78 HPUE Ant 8 DSI1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	24.75	24.75	24.70			
100	Pi2 BPSK	1	137	24.79			26.0	0.0	
100	Pi2 BPSK	1	271	24.70					
100	Pi2 BPSK	135	0	24.84			26.0	0.0	
100	Pi2 BPSK	135	69	24.63			26.0	0.0	
100	Pi2 BPSK	135	138	24.68			26.0	0.0	
100	Pi2 BPSK	270	0	24.72					
100	QPSK	1	1	24.50					
100	QPSK	1	137	24.80			26.0	0.0	
100	QPSK	1	271	24.78					
100	QPSK	135	0	24.49			26.0	0.0	
100	QPSK	135	69	24.77			26.0	0.0	
100	QPSK	135	138	24.41			26.0	0.0	
100	QPSK	270	0	24.53					
100	16QAM	1	1	24.40			26.0	0.0	
100	16QAM	1	1	23.12			24.5	1.5	
100	256QAM	1	1	21.23			22.5	3.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	24.57	24.67	24.65	26.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.56	24.63	24.61	26.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.52	24.61	24.65	26.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	24.63	24.65	24.68	26.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.61	24.67	24.67	26.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	24.58	24.69	24.72	26.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	24.55	24.61	24.63	26.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	24.59	24.62	24.63	26.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	24.64	24.70	24.64	26.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.57	24.71	24.73	26.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	24.55	24.64	24.74	26.0	0.0	

Reduced Power Mode for DS13

n5 Ant 0 DS13											
BW [MHz]	Modulation	RB Size	RB Offset	Power			Tune-up limit (dBm)	MPR (dB)			
				Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.					
Channel				16800	16700	16700					
Frequency (MHz)				834	836.5	836					
20	PI/2 BPSK	1	1	24.43	24.55	24.58	25.2	0.0			
20	PI/2 BPSK	1	53	24.55	24.63	24.64					
20	PI/2 BPSK	1	104	24.55	24.58	24.60					
20	PI/2 BPSK	50	0	24.61	24.67	24.66	25.2	0.0			
20	PI/2 BPSK	50	26	24.49	24.56	24.54	25.2	0.0			
20	PI/2 BPSK	50	56	24.61	24.61	24.66	25.2	0.0			
20	PI/2 BPSK	100	0	24.58	24.61	24.63					
20	QPSK	1	1	24.60	24.69	24.66	25.2	0.0			
20	QPSK	1	53	24.47	24.49	24.50					
20	QPSK	1	104	24.52	24.62	24.64					
20	QPSK	50	0	24.16	24.15	24.15	24.7	0.5			
20	QPSK	50	26	24.45	24.56	24.36	25.2	0.0			
20	QPSK	50	56	24.13	24.18	24.12	24.7	0.5			
20	QPSK	100	0	24.16	24.25	24.21					
20	16QAM	1	1	24.17	24.20	24.19	24.7	0.6			
20	64QAM	1	1	22.60	22.73	22.61	23.2	2.0			
20	256QAM	1	1	20.58	20.71	20.66	21.2	4.0			
Channel				16800	16700	16800	Tune-up limit	MPR			
Frequency (MHz)				831.5	836.5	841.5	(dBm)	(dB)			
15	QPSK	1	1	24.46	24.52	24.49	25.2	0.0			
Channel				16800	16700	16800	Tune-up limit	MPR			
Frequency (MHz)				829	836.5	844	(dBm)	(dB)			
10	QPSK	1	1	24.46	24.63	24.57	25.2	0.0			
Channel				16800	16700	16800	Tune-up limit	MPR			
Frequency (MHz)				826.5	836.5	846.5	(dBm)	(dB)			
5	QPSK	1	1	24.44	24.57	24.53	25.2	0.0			

n26 Ant 0 DS13											
BW [MHz]	Modulation	RB Size	RB Offset	Power			Tune-up limit (dBm)	MPR (dB)			
				Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.					
Channel				16480	166300	167600					
Frequency (MHz)				824	831.5	836					
20	PI/2 BPSK	1	1	24.97	25.15	25.04	25.7	0.0			
20	PI/2 BPSK	1	53	24.98	25.18	25.18					
20	PI/2 BPSK	1	104	25.12	25.13	25.11					
20	PI/2 BPSK	50	0	24.46	24.55	24.42	25.2	0.5			
20	PI/2 BPSK	50	26	24.93	24.99	24.94	25.7	0.0			
20	PI/2 BPSK	50	56	24.41	24.52	24.42	25.2	0.5			
20	PI/2 BPSK	100	0	24.57	24.57	24.49					
20	QPSK	1	1	25.15	25.19	25.14	25.7	0.0			
20	QPSK	1	53	25.02	25.05	25.04					
20	QPSK	1	104	25.01	25.08	25.09					
20	QPSK	50	0	23.90	24.07	23.90	24.7	1.0			
20	QPSK	50	26	25.00	25.07	24.90	25.7	0.0			
20	QPSK	50	56	23.85	24.03	23.86	24.7	1.0			
20	QPSK	100	0	23.99	24.03	23.90					
20	16QAM	1	1	23.92	23.95	23.92	24.7	1.0			
20	64QAM	1	1	22.63	22.73	22.65	23.2	2.5			
20	256QAM	1	1	20.64	20.66	20.60	21.2	4.5			
Channel				16480	166300	167600	Tune-up limit	MPR			
Frequency (MHz)				821.5	831.5	841.5	(dBm)	(dB)			
15	QPSK	1	1	25.06	25.07	25.02	25.7	0.0			
Channel				163800	166300	168800	Tune-up limit	MPR			
Frequency (MHz)				819	831.5	844	(dBm)	(dB)			
10	QPSK	1	1	25.06	25.17	25.03	25.7	0.0			
Channel				163800	166300	169200	Tune-up limit	MPR			
Frequency (MHz)				816.5	831.5	846.5	(dBm)	(dB)			
5	QPSK	1	1	25.02	25.12	25.03	25.7	0.0			



n5 Ant 1 DS13									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				166800	167300	167800			
Frequency (MHz)				834	836.5	839			
20	Pi/2 BPSK	1	1	20.08	20.26	20.11			
20	Pi/2 BPSK	1	53	20.17	20.20	20.18	21.2	0.0	
20	Pi/2 BPSK	1	104	20.11	20.16	20.15			
20	Pi/2 BPSK	50	0	20.10	20.26	20.11	21.2	0.0	
20	Pi/2 BPSK	50	26	20.15	20.26	20.14	21.2	0.0	
20	Pi/2 BPSK	50	56	20.19	20.25	20.10			
20	Pi/2 BPSK	100	0	20.13	20.21	20.18	21.2	0.0	
20	QPSK	1	1	20.15	20.31	20.15			
20	QPSK	1	53	20.17	20.18	20.09	21.2	0.0	
20	QPSK	1	104	20.19	20.17	20.19			
20	QPSK	50	0	20.10	20.18	20.19	21.2	0.0	
20	QPSK	50	26	20.19	20.21	20.14	21.2	0.0	
20	QPSK	50	56	20.18	20.19	20.17			
20	QPSK	100	0	20.18	20.19	20.11	21.2	0.0	
20	16QAM	1	1	20.19	20.21	20.17	21.2	0.0	
20	64QAM	1	1	20.20	20.26	20.10	21.2	0.0	
20	256QAM	1	1	20.17	20.23	20.12	21.2	0.0	
Channel				168300	167300	168300	Tune-up limit	MPR	
Frequency (MHz)				831.5	836.5	841.5	(dBm)	(dB)	
15	QPSK	1	1	20.04	20.12	20.01	21.2	0.0	
Channel				168800	167300	168800	Tune-up limit	MPR	
Frequency (MHz)				829	836.5	844	(dBm)	(dB)	
10	QPSK	1	1	20.04	20.11	20.05	21.2	0.0	
Channel				169300	167300	169300	Tune-up limit	MPR	
Frequency (MHz)				826.5	836.5	846.5	(dBm)	(dB)	
5	QPSK	1	1	20.07	20.18	20.01	21.2	0.0	

n26 Ant 1 DS13									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				164600	166300	167800			
Frequency (MHz)				824	831.5	839			
20	Pi/2 BPSK	1	1	21.12	21.19	21.06			
20	Pi/2 BPSK	1	53	21.18	21.19	21.11	22.2	0.0	
20	Pi/2 BPSK	1	104	21.12	21.17	21.14			
20	Pi/2 BPSK	50	0	21.09	21.10	21.13	22.2	0.0	
20	Pi/2 BPSK	50	26	21.11	21.17	21.15	22.2	0.0	
20	Pi/2 BPSK	50	56	21.11	21.10	21.17	22.2	0.0	
20	Pi/2 BPSK	100	0	21.07	21.19	21.15			
20	QPSK	1	1	21.07	21.32	21.09			
20	QPSK	1	53	21.14	21.18	21.15	22.2	0.0	
20	QPSK	1	104	21.11	21.19	21.06			
20	QPSK	50	0	21.10	21.15	21.09	22.2	0.0	
20	QPSK	50	26	21.11	21.19	21.15	22.2	0.0	
20	QPSK	50	56	21.08	21.14	21.17			
20	QPSK	100	0	21.08	21.15	21.14	22.2	0.0	
20	16QAM	1	1	21.17	21.12	21.11	22.2	0.0	
20	64QAM	1	1	21.09	21.16	21.08	22.2	0.0	
20	256QAM	1	1	20.09	20.13	20.05	21.2	1.0	
Channel				164300	165300	166300	Tune-up limit	MPR	
Frequency (MHz)				821.5	831.5	841.5	(dBm)	(dB)	
15	QPSK	1	1	20.99	21.11	21.04	22.2	0.0	
Channel				163800	166300	168800	Tune-up limit	MPR	
Frequency (MHz)				819	831.5	844	(dBm)	(dB)	
10	QPSK	1	1	21.00	21.10	20.96	22.2	0.0	
Channel				163300	165300	166300	Tune-up limit	MPR	
Frequency (MHz)				816.5	831.5	846.5	(dBm)	(dB)	
5	QPSK	1	1	21.01	21.05	21.02	22.2	0.0	



n2 Ant 2 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)	
				Low Ch. Freq.	Middle Ch. Freq.	High Ch. Freq.			
Channel				374000	376000	378000			
Frequency (MHz)				1870	1890	1910			
40	P1/2 BPSK	1	1	21.20	21.18	21.23			
40	P1/2 BPSK	1	108	21.16	21.24	21.21	22.5	0.0	
40	P1/2 BPSK	1	214	21.18	21.21	21.15			
40	P1/2 BPSK	108	0	21.11	21.20	21.13	22.5	0.0	
40	P1/2 BPSK	108	54	21.16	21.21	21.18	22.5	0.0	
40	P1/2 BPSK	108	108	21.16	21.22	21.18	22.5	0.0	
40	P1/2 BPSK	216	0	21.19	21.19	21.19			
40	QPSK	1	1	21.20	21.31	21.23			
40	QPSK	1	108	21.10	21.25	21.18	22.5	0.0	
40	QPSK	1	214	21.16	21.28	21.14			
40	QPSK	108	0	21.10	21.23	21.23	22.5	0.0	
40	QPSK	108	54	21.09	21.24	21.21	22.5	0.0	
40	QPSK	108	108	21.16	21.22	21.21	22.5	0.0	
40	QPSK	216	0	21.14	21.28	21.15			
40	16QAM	1	1	21.21	21.20	21.21	22.5	0.0	
40	16QAM	1	1	21.12	21.29	21.22	22.5	0.0	
40	256QAM	1	1	18.12	18.11	18.21	20.0	0.0	
Channel				375500	376500	376500			
Frequency (MHz)				1867.5	1880	1892.5			
35	QPSK	1	1	21.09	21.10	21.12	22.5	0.0	
Channel				377000	378000	379000			
Frequency (MHz)				1882.5	1895	1907.5			
30	QPSK	1	1	21.00	21.11	21.02	22.5	0.0	
Channel				372500	376000	379500			
Frequency (MHz)				1892.5	1895	1897.5			
25	QPSK	1	1	21.10	21.16	21.14	22.5	0.0	
Channel				372000	376000	380000			
Frequency (MHz)				1880	1880	1900			
20	QPSK	1	1	21.01	21.14	21.12	22.5	0.0	
Channel				371500	376500	380500			
Frequency (MHz)				1867.5	1880	1902.5			
15	QPSK	1	1	21.01	21.20	21.04	22.5	0.0	
Channel				371000	376000	381000			
Frequency (MHz)				1865	1885	1895			
10	QPSK	1	1	21.01	21.08	21.02	22.5	0.0	
Channel				370500	376000	381500			
Frequency (MHz)				1862.5	1880	1897.5			
5	QPSK	1	1	21.03	21.09	21.07	22.5	0.0	

n7 Ant 2 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)	
				Low Ch. Freq.	Middle Ch. Freq.	High Ch. Freq.			
Channel				504000	507000	510000			
Frequency (MHz)				2320	2335	2350			
40	P1/2 BPSK	1	1	18.84	18.83	18.84			
40	P1/2 BPSK	1	108	18.84	18.81	18.78	20.0	0.0	
40	P1/2 BPSK	1	214	18.80	18.91	18.83			
40	P1/2 BPSK	108	0	18.80	18.85	18.80	20.0	0.0	
40	P1/2 BPSK	108	54	18.78	18.85	18.87	20.0	0.0	
40	P1/2 BPSK	108	108	18.84	18.82	18.81	20.0	0.0	
40	P1/2 BPSK	216	0	18.81	18.91	18.88			
40	QPSK	1	1	18.77	18.95	18.81			
40	QPSK	1	108	18.76	18.92	18.87	20.0	0.0	
40	QPSK	1	214	18.76	18.81	18.82			
40	QPSK	108	0	18.79	18.89	18.88	20.0	0.0	
40	QPSK	108	54	18.82	18.93	18.86	20.0	0.0	
40	QPSK	108	108	18.80	18.91	18.83	20.0	0.0	
40	QPSK	216	0	18.76	18.95	18.80			
40	16QAM	1	1	18.86	18.90	18.88	20.0	0.0	
40	16QAM	1	1	18.82	18.84	18.80	20.0	0.0	
40	256QAM	1	1	18.82	18.84	18.76	20.0	0.0	
Channel				505500	507000	510500			
Frequency (MHz)				2317.5	2335	2352.5			
35	QPSK	1	1	18.72	18.74	18.68	20.0	0.0	
Channel				503000	507000	511000			
Frequency (MHz)				2312.5	2335	2357.5			
30	QPSK	1	1	18.84	18.75	18.73	20.0	0.0	
Channel				502500	507000	511500			
Frequency (MHz)				2312.5	2335	2357.5			
25	QPSK	1	1	18.72	18.80	18.75	20.0	0.0	
Channel				502000	507000	512000			
Frequency (MHz)				2310	2335	2350			
20	P1/2 BPSK	1	1	18.71	18.72	18.70	20.0	0.0	
Channel				501500	507000	512500			
Frequency (MHz)				2307.5	2335	2362.5			
15	QPSK	1	1	18.76	18.79	18.71	20.0	0.0	
Channel				501000	507000	513000			
Frequency (MHz)				2305	2335	2365			
10	QPSK	1	1	18.84	18.76	18.73	20.0	0.0	
Channel				500500	507000	513500			
Frequency (MHz)				2302.5	2335	2367.5			
5	QPSK	1	1	18.85	18.80	18.71	20.0	0.0	

n66 Ant 2 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)	
				Low Ch. Freq.	Middle Ch. Freq.	High Ch. Freq.			
Channel				346000	348000	350000			
Frequency (MHz)				1724	1745	1760			
40	P1/2 BPSK	1	1	21.38	21.58	21.59			
40	P1/2 BPSK	1	108	21.37	21.45	21.42	22.5	0.0	
40	P1/2 BPSK	1	214	21.35	21.58	21.42			
40	P1/2 BPSK	108	0	21.36	21.55	21.50	22.5	0.0	
40	P1/2 BPSK	108	54	21.28	21.49	21.40	22.5	0.0	
40	P1/2 BPSK	108	108	21.35	21.53	21.35	22.5	0.0	
40	P1/2 BPSK	216	0	21.37	21.53	21.39			
40	QPSK	1	1	21.36	21.63	21.34			
40	QPSK	1	108	21.35	21.50	21.45	22.5	0.0	
40	QPSK	1	214	21.35	21.49	21.38			
40	QPSK	108	0	21.28	21.55	21.30	22.5	0.0	
40	QPSK	108	54	21.28	21.47	21.38	22.5	0.0	
40	QPSK	216	0	21.29	21.55	21.40			
40	16QAM	1	1	21.35	21.42	21.45	22.5	0.0	
40	16QAM	1	1	21.48	21.49	21.39	22.5	0.0	
40	256QAM	1	1	18.82	18.81	18.72	21.0	1.5	
Channel				345500	348000	352000			
Frequency (MHz)				1722.5	1745	1762.5			
35	QPSK	1	1	21.34	21.47	21.26	22.5	0.0	
Channel				345000	348000	353000			
Frequency (MHz)				1722.5	1745	1767.5			
30	QPSK	1	1	21.31	21.48	21.29	22.5	0.0	
Channel				344500	348000	353500			
Frequency (MHz)				1722.5	1745	1767.5			
25	QPSK	1	1	21.32	21.47	21.27	22.5	0.0	
Channel				344000	348000	354000			
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	21.34	21.43	21.34	22.5	0.0	
Channel				343500	348000	354500			
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	21.34	21.43	21.29	22.5	0.0	
Channel				343000	348000	355000			
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	1	21.28	21.48	21.29	22.5	0.0	
Channel				342500	348000	355500			
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	21.29	21.40	21.33	22.5	0.0	



n2 Ant 3 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)	
				Low Ch. Freq.	Middle Ch. Freq.	High Ch. Freq.			
Channel				374000	376000	378000			
Frequency (MHz)				1870	1890	1910			
40	PI2 BPSK	1	1	21.16	21.16	21.14			
40	PI2 BPSK	1	108	21.12	21.24	21.10	22.0	0.0	
40	PI2 BPSK	1	214	21.17	21.17	21.09			
40	PI2 BPSK	108	0	21.21	21.14	21.17	22.0	0.0	
40	PI2 BPSK	108	54	21.12	21.17	21.21	22.0	0.0	
40	PI2 BPSK	108	108	21.18	21.18	21.18	22.0	0.0	
40	PI2 BPSK	216	0	21.12	21.24	21.10			
40	QPSK	1	1	21.18	21.28	21.12			
40	QPSK	1	108	21.12	21.18	21.18	22.0	0.0	
40	QPSK	1	214	21.20	21.18	21.13			
40	QPSK	108	0	21.11	21.14	21.09	22.0	0.0	
40	QPSK	108	54	21.13	21.25	21.14	22.0	0.0	
40	QPSK	108	108	21.21	21.23	21.18	22.0	0.0	
40	QPSK	216	0	21.16	21.28	21.17			
40	16QAM	1	1	21.18	21.20	21.19	22.0	0.0	
40	16QAM	1	1	21.18	21.20	21.18	22.0	0.0	
40	256QAM	1	1	23.17	23.17	23.20	24.0	1.0	
Channel				375500	376500	376500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1867.5	1880	1892.5	(dBm)	(dB)	
35	QPSK	1	1	21.02	21.14	21.00	22.0	0.0	
Channel				377000	378000	379000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1885	1895	1895	(dBm)	(dB)	
30	QPSK	1	1	21.05	21.15	21.08	22.0	0.0	
Channel				372500	376000	379500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1822.5	1860	1877.5	(dBm)	(dB)	
25	QPSK	1	1	21.02	21.12	21.04	22.0	0.0	
Channel				372000	376000	380000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1860	1880	1900	(dBm)	(dB)	
20	QPSK	1	1	21.08	21.12	21.01	22.0	0.0	
Channel				371500	376000	382000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1867.5	1880	1902.5	(dBm)	(dB)	
15	QPSK	1	1	21.00	21.10	21.01	22.0	0.0	
Channel				371000	376000	381000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1865	1880	1895	(dBm)	(dB)	
10	QPSK	1	1	21.02	21.13	21.11	22.0	0.0	
Channel				370500	376000	381500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1822.5	1860	1877.5	(dBm)	(dB)	
5	QPSK	1	1	21.08	21.04	21.05	22.0	0.0	

n7 Ant 3 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)	
				Low Ch. Freq.	Middle Ch. Freq.	High Ch. Freq.			
Channel				504000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	PI2 BPSK	1	1	19.77	19.80	19.71			
40	PI2 BPSK	1	108	19.70	19.79	19.77	20.2	0.0	
40	PI2 BPSK	1	214	19.76	19.89	19.72			
40	PI2 BPSK	108	0	19.75	19.84	19.71	20.2	0.0	
40	PI2 BPSK	108	54	19.78	19.84	19.80	20.2	0.0	
40	PI2 BPSK	108	108	19.73	19.87	19.78	20.2	0.0	
40	PI2 BPSK	216	0	19.69	19.83	19.75			
40	QPSK	1	1	19.77	19.93	19.70			
40	QPSK	1	108	19.76	19.78	19.76	20.2	0.0	
40	QPSK	1	214	19.68	19.79	19.70			
40	QPSK	108	0	19.68	19.82	19.73	20.2	0.0	
40	QPSK	108	54	19.69	19.85	19.72	20.2	0.0	
40	QPSK	108	108	19.68	19.81	19.74	20.2	0.0	
40	QPSK	216	0	19.67	19.83	19.72			
40	16QAM	1	1	19.75	19.89	19.78	20.2	0.0	
40	16QAM	1	1	19.72	19.84	19.72	20.2	0.0	
40	256QAM	1	1	19.68	19.80	19.80	20.2	0.0	
Channel				505500	507000	510500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2517.5	2535	2552.5	(dBm)	(dB)	
35	QPSK	1	1	19.67	19.73	19.69	20.2	0.0	
Channel				503000	507000	511000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2518	2535	2555	(dBm)	(dB)	
30	QPSK	1	1	19.62	19.73	19.65	20.2	0.0	
Channel				502500	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2517.5	2535	2557.5	(dBm)	(dB)	
25	QPSK	1	1	19.61	19.72	19.69	20.2	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2510	2535	2590	(dBm)	(dB)	
20	PI2 BPSK	1	1	19.65	19.71	19.67	20.2	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5	(dBm)	(dB)	
15	QPSK	1	1	19.63	19.69	19.67	20.2	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565	(dBm)	(dB)	
10	QPSK	1	1	19.68	19.68	19.64	20.2	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2577.5	(dBm)	(dB)	
5	QPSK	1	1	19.63	19.60	19.60	20.2	0.0	

n66 Ant 3 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)	
				Low Ch. Freq.	Middle Ch. Freq.	High Ch. Freq.			
Channel				346000	348000	350000			
Frequency (MHz)				1720	1745	1760			
40	PI2 BPSK	1	1	20.70	20.86	20.70			
40	PI2 BPSK	1	108	20.73	20.83	20.79	21.2	0.0	
40	PI2 BPSK	1	214	20.71	20.85	20.79			
40	PI2 BPSK	108	0	20.68	20.83	20.72	21.2	0.0	
40	PI2 BPSK	108	54	20.73	20.80	20.77	21.2	0.0	
40	PI2 BPSK	108	108	20.72	20.79	20.80	21.2	0.0	
40	PI2 BPSK	216	0	20.74	20.87	20.75			
40	QPSK	1	1	20.74	20.89	20.78			
40	QPSK	1	108	20.72	20.84	20.74	21.2	0.0	
40	QPSK	1	214	20.68	20.80	20.72			
40	QPSK	108	0	20.74	20.75	20.75	21.2	0.0	
40	QPSK	108	54	20.74	20.86	20.81	21.2	0.0	
40	QPSK	108	108	20.66	20.78	20.82	21.2	0.0	
40	QPSK	216	0	20.77	20.85	20.81			
40	16QAM	1	1	20.75	20.83	20.77	21.2	0.0	
40	16QAM	1	1	20.71	20.78	20.71	21.2	0.0	
40	256QAM	1	1	20.70	20.79	20.70	21.2	0.0	
Channel				345500	348000	352000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1722.5	1745	1762.5	(dBm)	(dB)	
35	QPSK	1	1	20.62	20.68	20.67	21.2	0.0	
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1725	1745	1765	(dBm)	(dB)	
30	QPSK	1	1	20.58	20.71	20.68	21.2	0.0	
Channel				344500	349000	353500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1722.5	1745	1772.5	(dBm)	(dB)	
25	QPSK	1	1	20.63	20.75	20.62	21.2	0.0	
Channel				344000	349000	354000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1720	1745	1770	(dBm)	(dB)	
20	QPSK	1	1	20.60	20.73	20.69	21.2	0.0	
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5	(dBm)	(dB)	
15	QPSK	1	1	20.84	20.68	20.61	21.2	0.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775	(dBm)	(dB)	
10	QPSK	1	1	20.65	20.75	20.64	21.2	0.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5	(dBm)	(dB)	
5	QPSK	1	1	20.57	20.75	20.63	21.2	0.0	



n7 Ant 5 DS13									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				504000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	PI/2 BPSK	1	1	20.18	20.21	20.05			
40	PI/2 BPSK	1	108	20.05	20.04	19.88	21.5	0.0	
40	PI/2 BPSK	1	214	19.93	20.07	19.83			
40	PI/2 BPSK	108	0	20.13	20.17	20.06	21.5	0.0	
40	PI/2 BPSK	108	54	20.09	20.02	20.07	21.5	0.0	
40	PI/2 BPSK	108	108	19.91	20.14	19.95			
40	PI/2 BPSK	216	0	20.12	19.98	20.00	21.5	0.0	
40	QPSK	1	1	20.31	20.38	20.36			
40	QPSK	1	108	20.11	20.19	20.23	21.5	0.0	
40	QPSK	1	214	20.01	20.33	20.06			
40	QPSK	108	0	19.80	19.92	19.95	21.5	0.0	
40	QPSK	108	54	20.13	20.23	20.19	21.5	0.0	
40	QPSK	108	108	19.76	19.85	19.71	21.5	0.0	
40	QPSK	216	0	19.91	20.02	19.98	21.5	0.0	
40	16QAM	1	1	19.86	19.90	19.89	21.5	0.0	
40	64QAM	1	1	19.98	19.91	19.86	21.5	0.0	
40	256QAM	1	1	19.98	19.44	19.42	21.0	0.5	
Channel				503500	507000	510500	Tune-up limit	MPR	
Frequency (MHz)				2517.5	2535	2552.5	(dBm)	(dB)	
35	QPSK	1	1	20.28	20.27	20.32	21.5	0.0	
Channel				503000	507000	510000	Tune-up limit	MPR	
Frequency (MHz)				2515	2535	2555	(dBm)	(dB)	
30	QPSK	1	1	20.22	20.31	20.24	21.5	0.0	
Channel				502500	507000	511500	Tune-up limit	MPR	
Frequency (MHz)				2512.5	2535	2557.5	(dBm)	(dB)	
25	QPSK	1	1	20.24	20.15	20.25	21.5	0.0	
Channel				502000	507000	512000	Tune-up limit	MPR	
Frequency (MHz)				2510	2535	2550	(dBm)	(dB)	
20	PI/2 BPSK	1	1	20.12	20.21	20.25	21.5	0.0	
Channel				501500	507000	512500	Tune-up limit	MPR	
Frequency (MHz)				2507.5	2535	2552.5	(dBm)	(dB)	
15	QPSK	1	1	20.29	20.23	20.25	21.5	0.0	
Channel				501000	507000	513000	Tune-up limit	MPR	
Frequency (MHz)				2505	2535	2555	(dBm)	(dB)	
10	QPSK	1	1	20.22	20.15	20.19	21.5	0.0	
Channel				500500	507000	513500	Tune-up limit	MPR	
Frequency (MHz)				2502.5	2535	2557.5	(dBm)	(dB)	
5	QPSK	1	1	20.26	20.21	20.28	21.5	0.0	

n66 Ant 5 DS13									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				346000	349000	352000			
Frequency (MHz)				1730	1745	1760			
40	PI/2 BPSK	1	1	22.27	22.34	22.19			
40	PI/2 BPSK	1	108	22.05	22.24	22.01	23.5	0.0	
40	PI/2 BPSK	1	214	22.08	22.20	22.03			
40	PI/2 BPSK	108	0	22.32	22.29	22.21	23.5	0.0	
40	PI/2 BPSK	108	54	22.05	22.13	22.15	23.5	0.0	
40	PI/2 BPSK	108	108	21.97	22.15	22.12			
40	PI/2 BPSK	216	0	22.10	22.13	22.11	23.5	0.0	
40	QPSK	1	1	22.37	22.43	22.37			
40	QPSK	1	108	22.21	22.28	22.29	23.5	0.0	
40	QPSK	1	214	22.14	22.31	22.25			
40	QPSK	108	0	22.01	22.09	21.97	23.5	0.0	
40	QPSK	108	54	22.15	22.26	22.19	23.5	0.0	
40	QPSK	108	108	21.94	21.82	21.98	23.5	0.0	
40	QPSK	216	0	22.01	22.17	22.07	23.5	0.0	
40	16QAM	1	1	22.00	21.97	21.98	23.5	0.0	
40	64QAM	1	1	21.01	21.21	21.12	23.0	0.5	
40	256QAM	1	1	19.05	19.07	19.11	21.0	2.5	
Channel				345500	349000	352500	Tune-up limit	MPR	
Frequency (MHz)				1727.5	1745	1762.5	(dBm)	(dB)	
35	QPSK	1	1	22.26	22.30	22.28	23.5	0.0	
Channel				345000	349000	353000	Tune-up limit	MPR	
Frequency (MHz)				1725	1745	1765	(dBm)	(dB)	
30	QPSK	1	1	22.32	22.30	22.28	23.5	0.0	
Channel				344500	349000	353500	Tune-up limit	MPR	
Frequency (MHz)				1722.5	1745	1767.5	(dBm)	(dB)	
25	QPSK	1	1	22.22	22.29	22.24	23.5	0.0	
Channel				344000	349000	354000	Tune-up limit	MPR	
Frequency (MHz)				1720	1745	1770	(dBm)	(dB)	
20	QPSK	1	1	22.31	22.38	22.21	23.5	0.0	
Channel				343500	349000	354500	Tune-up limit	MPR	
Frequency (MHz)				1717.5	1745	1772.5	(dBm)	(dB)	
15	QPSK	1	1	22.24	22.39	22.22	23.5	0.0	
Channel				343000	349000	355000	Tune-up limit	MPR	
Frequency (MHz)				1715	1745	1775	(dBm)	(dB)	
10	QPSK	1	1	22.31	22.27	22.27	23.5	0.0	
Channel				342500	349000	355500	Tune-up limit	MPR	
Frequency (MHz)				1712.5	1745	1777.5	(dBm)	(dB)	
5	QPSK	1	1	22.22	22.34	22.31	23.5	0.0	



n38 Ant 2 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				519004	519000	519996			
Frequency (MHz)				2590.02	2595	2599.98			
40	PI2 BPSK	1	1	18.22	18.29	18.32			
40	PI2 BPSK	1	53	18.19	18.33	18.24		0.0	
40	PI2 BPSK	1	104	18.20	18.27	18.31			
40	PI2 BPSK	50	0	18.25	18.25	18.32	19.5	0.0	
40	PI2 BPSK	50	28	18.24	18.32	18.24	19.5	0.0	
40	PI2 BPSK	50	58	18.25	18.32	18.26	19.5	0.0	
40	PI2 BPSK	100	0	18.22	18.32	18.30			
40	QPSK	1	1	18.21	18.36	18.28			
40	QPSK	1	53	18.15	18.30	18.30	19.5	0.0	
40	QPSK	1	104	18.16	18.32	18.22			
40	QPSK	50	0	18.20	18.33	18.23	19.5	0.0	
40	QPSK	50	28	18.18	18.34	18.25	19.5	0.0	
40	QPSK	50	58	18.17	18.33	18.23	19.5	0.0	
40	QPSK	100	0	18.20	18.31	18.29			
40	16QAM	1	1	18.25	18.26	18.31	19.5	0.0	
40	16QAM	1	1	18.24	18.29	18.22	19.5	0.0	
40	256QAM	1	1	18.24	18.23	18.31	19.5	0.0	
Channel				517050	519000	520998			
Frequency (MHz)				2595.01	2595	2604.99			
30	QPSK	1	1	18.09	18.17	18.17	19.5	0.0	
Channel				516504	519000	521498			
Frequency (MHz)				2592.52	2595	2607.48			
25	QPSK	1	1	18.08	18.10	18.13	19.5	0.0	
Channel				516000	519000	522000			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	1	18.10	18.24	18.16	19.5	0.0	
Channel				515502	519000	522498			
Frequency (MHz)				2577.51	2595	2612.49			
15	QPSK	1	1	18.08	18.17	18.14	19.5	0.0	
Channel				515004	519000	522998			
Frequency (MHz)				2575.02	2595	2614.98			
10	QPSK	1	1	18.08	18.23	18.15	19.5	0.0	

n41 Ant 2 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				526202	518598	529200			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	18.36	18.52	18.43			
100	PI2 BPSK	1	137	18.37	18.45	18.44			
100	PI2 BPSK	1	271	18.38	18.52	18.40	20.0	0.0	
100	PI2 BPSK	135	0	18.38	18.54	18.40	20.0	0.0	
100	PI2 BPSK	135	69	18.35	18.45	18.46	20.0	0.0	
100	PI2 BPSK	135	138	18.36	18.49	18.39	20.0	0.0	
100	PI2 BPSK	270	0	18.43	18.51	18.37			
100	QPSK	1	1	18.41	18.58	18.37			
100	QPSK	1	137	18.33	18.44	18.48	20.0	0.0	
100	QPSK	1	271	18.34	18.43	18.42			
100	QPSK	135	0	18.34	18.50	18.38	20.0	0.0	
100	QPSK	135	69	18.41	18.53	18.41	20.0	0.0	
100	QPSK	135	138	18.37	18.45	18.45	20.0	0.0	
100	QPSK	270	0	18.33	18.47	18.44			
100	16QAM	1	1	18.34	18.49	18.38	20.0	0.0	
100	16QAM	1	1	18.40	18.46	18.37	20.0	0.0	
100	256QAM	1	1	18.35	18.51	18.44	20.0	0.0	
Channel				526200	518598	529598			
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	18.22	18.43	18.30	20.0	0.0	
Channel				507204	518598	529998			
Frequency (MHz)				2538.02	2592.99	2649.99			
80	QPSK	1	1	18.32	18.33	18.34	20.0	0.0	
Channel				506202	518598	531000			
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	18.25	18.37	18.33	20.0	0.0	
Channel				505200	518598	531998			
Frequency (MHz)				2526	2592.99	2659.99			
60	QPSK	1	1	18.32	18.35	18.29	20.0	0.0	
Channel				504204	518598	532998			
Frequency (MHz)				2521.02	2592.99	2664.98			
50	QPSK	1	1	18.31	18.37	18.37	20.0	0.0	
Channel				503202	518598	533998			
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	18.31	18.41	18.31	20.0	0.0	
Channel				502200	518598	534998			
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	18.21	18.42	18.29	20.0	0.0	
Channel				501702	518598	535500			
Frequency (MHz)				2508.51	2592.99	2677.5			
25	QPSK	1	1	18.21	18.34	18.29	20.0	0.0	
Channel				501204	518598	535998			
Frequency (MHz)				2503.02	2592.99	2679.99			
20	QPSK	1	1	18.28	18.41	18.33	20.0	0.0	
Channel				500700	518598	536498			
Frequency (MHz)				2503.5	2592.99	2682.48			
15	QPSK	1	1	18.32	18.37	18.35	20.0	0.0	
Channel				500202	518598	537000			
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	18.23	18.38	18.37	20.0	0.0	

n41 HPUE Ant 2 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				526202	518598	529200			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	21.58	21.75	21.66			
100	PI2 BPSK	1	137	21.52	21.77	21.65			
100	PI2 BPSK	1	271	21.50	21.70	21.67	23.0	0.0	
100	PI2 BPSK	135	0	21.54	21.75	21.69	23.0	0.0	
100	PI2 BPSK	135	69	21.50	21.71	21.69	23.0	0.0	
100	PI2 BPSK	135	138	21.50	21.88	21.63	23.0	0.0	
100	PI2 BPSK	270	0	21.58	21.71	21.59			
100	QPSK	1	1	21.53	21.83	21.64			
100	QPSK	1	137	21.51	21.75	21.67	23.0	0.0	
100	QPSK	1	271	21.52	21.78	21.67			
100	QPSK	135	0	21.57	21.88	21.59	23.0	0.0	
100	QPSK	135	69	21.50	21.79	21.80	23.0	0.0	
100	QPSK	135	138	21.60	21.78	21.66	23.0	0.0	
100	QPSK	270	0	21.50	21.85	21.57			
100	16QAM	1	1	21.60	21.68	21.68	23.0	0.0	
100	16QAM	1	1	21.54	21.75	21.61	23.0	0.0	
100	256QAM	1	1	20.09	20.15	20.11	21.5	1.5	
Channel				526200	518598	529598			
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	21.48	21.59	21.48	23.0	0.0	
Channel				507204	518598	529998			
Frequency (MHz)				2538.02	2592.99	2649.99			
80	QPSK	1	1	21.47	21.68	21.53	23.0	0.0	
Channel				506202	518598	531000			
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	21.40	21.83	21.56	23.0	0.0	
Channel				505200	518598	531998			
Frequency (MHz)				2526	2592.99	2659.99			
60	QPSK	1	1	21.47	21.83	21.58	23.0	0.0	
Channel				504204	518598	532998			
Frequency (MHz)				2521.02	2592.99	2664.98			
50	QPSK	1	1	21.43	21.87	21.58	23.0	0.0	
Channel				503202	518598	533998			
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	21.42	21.88	21.49	23.0	0.0	
Channel				502200	518598	534998			
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	21.43	21.83	21.52	23.0	0.0	
Channel				501702	518598	535500			
Frequency (MHz)				2508.51	2592.99	2677.5			
25	QPSK	1	1	21.47	21.82	21.48	23.0	0.0	
Channel				501204	518598	535998			
Frequency (MHz)				2503.02	2592.99	2679.99			
20	QPSK	1	1	21.41	21.80	21.52	23.0	0.0	
Channel				500700	518598	536498			
Frequency (MHz)				2503.5	2592.99	2682.48			
15	QPSK	1	1	21.48	21.86	21.50	23.0	0.0	
Channel				500202	518598	537000			
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	21.42	21.84	21.47	23.0	0.0	



n38 Ant 3 DS13									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				519004	519000	519998			
Frequency (MHz)				2590.02	2595	2599.98			
40	PI2 BPSK	1	1	19.80	19.82	19.78			
40	PI2 BPSK	1	53	19.86	19.84	19.80		0.0	
40	PI2 BPSK	1	164	19.89	19.82	19.76			
40	PI2 BPSK	50	0	19.89	19.88	19.81	20.2	0.0	
40	PI2 BPSK	50	28	19.82	19.88	19.75	20.2	0.0	
40	PI2 BPSK	50	58	19.85	19.86	19.76	20.2	0.0	
40	PI2 BPSK	100	0	19.90	19.85	19.76			
40	QPSK	1	1	19.84	19.85	19.81			
40	QPSK	1	53	19.81	19.89	19.84	20.2	0.0	
40	QPSK	1	104	19.86	19.87	19.76			
40	QPSK	50	0	19.85	19.85	19.86	20.2	0.0	
40	QPSK	50	28	19.80	19.93	19.74	20.2	0.0	
40	QPSK	50	58	19.90	19.86	19.75			
40	QPSK	100	0	19.90	19.91	19.75			
40	16QAM	1	1	19.86	19.87	19.74	20.2	0.0	
40	16QAM	1	1	19.86	19.82	19.81	20.2	0.0	
40	256QAM	1	1	19.86	19.83	19.75	20.2	0.0	
Channel				517002	519000	520998			
Frequency (MHz)				2595.01	2595	2604.99			
30	QPSK	1	1	19.74	19.79	19.72	20.2	0.0	
Channel				516504	519000	521498			
Frequency (MHz)				2592.52	2595	2607.48			
25	QPSK	1	1	19.72	19.82	19.70	20.2	0.0	
Channel				516000	519000	522000			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	1	19.80	19.77	19.73	20.2	0.0	
Channel				515502	519000	522498			
Frequency (MHz)				2577.51	2595	2612.49			
15	QPSK	1	1	19.72	19.75	19.70	20.2	0.0	
Channel				515004	519000	522998			
Frequency (MHz)				2575.02	2595	2614.98			
10	QPSK	1	1	19.79	19.74	19.68	20.2	0.0	

n41 Ant 3 DS13									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				526202	518598	529200			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	19.32	19.28	19.29			
100	PI2 BPSK	1	137	19.33	19.30	19.32	19.7	0.0	
100	PI2 BPSK	1	271	19.26	19.28	19.32			
100	PI2 BPSK	135	0	19.28	19.38	19.36	19.7	0.0	
100	PI2 BPSK	135	69	19.28	19.32	19.29	19.7	0.0	
100	PI2 BPSK	135	138	19.25	19.31	19.33	19.7	0.0	
100	PI2 BPSK	270	0	19.34	19.34	19.35			
100	QPSK	1	1	19.30	19.41	19.27			
100	QPSK	1	137	19.33	19.34	19.36	19.7	0.0	
100	QPSK	1	271	19.32	19.32	19.30			
100	QPSK	135	0	19.23	19.31	19.38	19.7	0.0	
100	QPSK	135	69	19.25	19.39	19.27	19.7	0.0	
100	QPSK	135	138	19.35	19.36	19.29	19.7	0.0	
100	QPSK	270	0	19.28	19.37	19.36			
100	16QAM	1	1	19.29	19.27	19.35	19.7	0.0	
100	16QAM	1	1	19.27	19.37	19.34	19.7	0.0	
100	256QAM	1	1	19.32	19.30	19.28	19.7	0.0	
Channel				526200	518598	529198			
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	19.19	19.27	19.20	19.7	0.0	
Channel				507204	518598	529998			
Frequency (MHz)				2536.02	2592.99	2649.99			
80	QPSK	1	1	19.17	19.24	19.20	19.7	0.0	
Channel				506202	518598	531000			
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	19.15	19.18	19.28	19.7	0.0	
Channel				505200	518598	531998			
Frequency (MHz)				2526	2592.99	2659.99			
60	QPSK	1	1	19.23	19.24	19.20	19.7	0.0	
Channel				504204	518598	532998			
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	19.14	19.26	19.20	19.7	0.0	
Channel				503202	518598	534000			
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	19.25	19.21	19.23	19.7	0.0	
Channel				502200	518598	534998			
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	19.22	19.25	19.23	19.7	0.0	
Channel				501702	518598	535500			
Frequency (MHz)				2508.51	2592.99	2677.5			
25	QPSK	1	1	19.22	19.18	19.27	19.7	0.0	
Channel				501204	518598	535998			
Frequency (MHz)				2506.02	2592.99	2679.99			
20	QPSK	1	1	19.14	19.28	19.19	19.7	0.0	
Channel				500700	518598	536498			
Frequency (MHz)				2503.5	2592.99	2682.48			
15	QPSK	1	1	19.21	19.19	19.23	19.7	0.0	
Channel				500202	518598	537000			
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	19.25	19.25	19.19	19.7	0.0	

n41 HPUE Ant 3 DS13									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				529202	518598	532200			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	22.28	22.33	22.23			
100	PI2 BPSK	1	137	22.27	22.35	22.26	23.0	0.0	
100	PI2 BPSK	1	271	22.26	22.23	22.27			
100	PI2 BPSK	135	0	22.32	22.33	22.32	23.0	0.0	
100	PI2 BPSK	135	69	22.29	22.28	22.33	23.0	0.0	
100	PI2 BPSK	135	138	22.20	22.28	22.39	23.0	0.0	
100	PI2 BPSK	270	0	22.37	22.35	22.31			
100	QPSK	1	1	22.35	22.45	22.28			
100	QPSK	1	137	22.35	22.36	22.32	23.0	0.0	
100	QPSK	1	271	22.38	22.34	22.28			
100	QPSK	135	0	22.27	22.25	22.34	23.0	0.0	
100	QPSK	135	69	22.21	22.43	22.22	23.0	0.0	
100	QPSK	135	138	22.37	22.32	22.26	23.0	0.0	
100	QPSK	270	0	22.32	22.41	22.40			
100	16QAM	1	1	22.26	22.22	22.35	23.0	0.0	
100	16QAM	1	1	22.33	22.42	22.31	23.0	0.0	
100	256QAM	1	1	22.29	22.34	22.33	22.8	0.2	
Channel				529200	518598	532198			
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	22.31	22.36	22.11	23.0	0.0	
Channel				507204	518598	529998			
Frequency (MHz)				2536.02	2592.99	2649.99			
80	QPSK	1	1	22.22	22.37	22.12	23.0	0.0	
Channel				506202	518598	531000			
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	22.24	22.26	22.14	23.0	0.0	
Channel				505200	518598	531998			
Frequency (MHz)				2526	2592.99	2659.99			
60	QPSK	1	1	22.29	22.28	22.14	23.0	0.0	
Channel				504204	518598	532998			
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	22.20	22.35	22.16	23.0	0.0	
Channel				503202	518598	534000			
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	22.27	22.27	22.11	23.0	0.0	
Channel				502200	518598	534998			
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	22.23	22.33	22.08	23.0	0.0	
Channel				501702	518598	535500			
Frequency (MHz)				2508.51	2592.99	2677.5			
25	QPSK	1	1	22.25	22.33	22.17	23.0	0.0	
Channel				501204	518598	535998			
Frequency (MHz)				2506.02	2592.99	2679.99			
20	QPSK	1	1	22.27	22.32	22.12	23.0	0.0	
Channel				500700	518598	536498			
Frequency (MHz)				2503.5	2592.99	2682.48			
15	QPSK	1	1	22.25	22.35	22.08	23.0	0.0	
Channel				500202	518598	537000			
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	22.26	22.26	22.12	23.0	0.0	



n38 Ant 4 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				519004	519000	519996			
Frequency (MHz)				2590.02	2595	2599.98			
40	PI2 BPSK	1	1	19.35	19.52	19.47			
40	PI2 BPSK	1	53	19.33	19.40	19.48	20.5	0.0	
40	PI2 BPSK	1	164	19.36	19.43	19.41			
40	PI2 BPSK	50	0	19.32	19.45	19.47	20.5	0.0	
40	PI2 BPSK	50	28	19.38	19.42	19.47	20.5	0.0	
40	PI2 BPSK	50	58	19.42	19.47	19.40	20.5	0.0	
40	PI2 BPSK	100	0	19.34	19.46	19.48			
40	QPSK	1	1	19.42	19.55	19.48			
40	QPSK	1	53	19.44	19.50	19.43	20.5	0.0	
40	QPSK	1	104	19.37	19.48	19.49			
40	QPSK	50	0	19.36	19.52	19.43	20.5	0.0	
40	QPSK	50	28	19.38	19.53	19.42	20.5	0.0	
40	QPSK	50	58	19.41	19.50	19.46	20.5	0.0	
40	QPSK	100	0	19.36	19.45	19.39			
40	16QAM	1	1	19.33	19.51	19.49	20.5	0.0	
40	16QAM	1	1	19.39	19.43	19.48	20.5	0.0	
40	256QAM	1	1	19.01	19.07	19.04	20.0	0.5	
Channel				517000	519000	520998			
Frequency (MHz)				2595.01	2595	2604.99			
30	QPSK	1	1	19.26	19.40	19.29	20.5	0.0	
Channel				516504	519000	521498			
Frequency (MHz)				2592.52	2595	2607.48			
25	QPSK	1	1	19.28	19.40	19.29	20.5	0.0	
Channel				516000	519000	522000			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	1	19.32	19.41	19.34	20.5	0.0	
Channel				515502	519000	522498			
Frequency (MHz)				2577.51	2595	2612.49			
15	QPSK	1	1	19.24	19.39	19.39	20.5	0.0	
Channel				515004	519000	522998			
Frequency (MHz)				2575.02	2595	2614.98			
10	QPSK	1	1	19.33	19.40	19.33	20.5	0.0	

n41 Ant 4 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				520204	518598	520998			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	19.54	19.68	19.56			
100	PI2 BPSK	1	137	19.50	19.68	19.60	20.5	0.0	
100	PI2 BPSK	1	271	19.55	19.67	19.57			
100	PI2 BPSK	135	0	19.54	19.68	19.59	20.5	0.0	
100	PI2 BPSK	135	69	19.51	19.66	19.56	20.5	0.0	
100	PI2 BPSK	135	138	19.50	19.64	19.53	20.5	0.0	
100	PI2 BPSK	270	0	19.55	19.59	19.52			
100	QPSK	1	1	19.55	19.75	19.57			
100	QPSK	1	137	19.55	19.70	19.55	20.5	0.0	
100	QPSK	1	271	19.55	19.63	19.60			
100	QPSK	135	0	19.53	19.60	19.60	20.5	0.0	
100	QPSK	135	69	19.60	19.68	19.61	20.5	0.0	
100	QPSK	135	138	19.51	19.61	19.58	20.5	0.0	
100	QPSK	270	0	19.51	19.67	19.58			
100	16QAM	1	1	19.58	19.64	19.52	20.5	0.0	
100	16QAM	1	1	19.59	19.59	19.59	20.5	0.0	
100	256QAM	1	1	18.53	18.58	18.51	19.5	1.0	
Channel				520200	518598	520998			
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	19.42	19.57	19.46	20.5	0.0	
Channel				507204	518598	520998			
Frequency (MHz)				2536.02	2592.99	2639.99			
80	QPSK	1	1	19.48	19.62	19.43	20.5	0.0	
Channel				506202	518598	521000			
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	19.49	19.51	19.48	20.5	0.0	
Channel				505200	518598	521998			
Frequency (MHz)				2526	2592.99	2659.99			
60	QPSK	1	1	19.48	19.51	19.43	20.5	0.0	
Channel				504204	518598	522998			
Frequency (MHz)				2521.02	2592.99	2664.98			
50	QPSK	1	1	19.41	19.55	19.42	20.5	0.0	
Channel				503202	518598	524000			
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	19.46	19.62	19.47	20.5	0.0	
Channel				502200	518598	524998			
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	19.45	19.58	19.51	20.5	0.0	
Channel				501702	518598	525500			
Frequency (MHz)				2508.51	2592.99	2677.5			
25	QPSK	1	1	19.48	19.63	19.41	20.5	0.0	
Channel				501204	518598	525998			
Frequency (MHz)				2503.02	2592.99	2679.99			
20	QPSK	1	1	19.43	19.60	19.45	20.5	0.0	
Channel				500700	518598	526498			
Frequency (MHz)				2503.5	2592.99	2682.48			
15	QPSK	1	1	19.49	19.55	19.43	20.5	0.0	
Channel				500202	518598	527000			
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	19.44	19.52	19.52	20.5	0.0	

n41 HPUE Ant 4 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				520202	518598	520998			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	22.45	22.53	22.44			
100	PI2 BPSK	1	137	22.39	22.55	22.52	23.5	0.0	
100	PI2 BPSK	1	271	22.43	22.59	22.43			
100	PI2 BPSK	135	0	22.40	22.61	22.46	23.5	0.0	
100	PI2 BPSK	135	69	22.38	22.57	22.42	23.5	0.0	
100	PI2 BPSK	135	138	22.35	22.56	22.46	23.5	0.0	
100	PI2 BPSK	270	0	22.44	22.44	22.47			
100	QPSK	1	1	22.48	22.66	22.46			
100	QPSK	1	137	22.44	22.55	22.48	23.5	0.0	
100	QPSK	1	271	22.47	22.51	22.47			
100	QPSK	135	0	22.48	22.51	22.54	23.5	0.0	
100	QPSK	135	69	22.49	22.61	22.53	23.5	0.0	
100	QPSK	135	138	22.44	22.48	22.44	23.5	0.0	
100	QPSK	270	0	22.45	22.62	22.51			
100	16QAM	1	1	22.45	22.58	22.36	23.5	0.0	
100	16QAM	1	1	21.52	21.51	21.52	22.5	1.0	
100	256QAM	1	1	19.47	19.48	19.38	20.5	3.0	
Channel				520200	518598	520998			
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	22.31	22.47	22.39	23.5	0.0	
Channel				507204	518598	520998			
Frequency (MHz)				2536.02	2592.99	2639.99			
80	QPSK	1	1	22.38	22.49	22.32	23.5	0.0	
Channel				506202	518598	521000			
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	22.39	22.47	22.38	23.5	0.0	
Channel				505200	518598	521998			
Frequency (MHz)				2526	2592.99	2659.99			
60	QPSK	1	1	22.34	22.53	22.31	23.5	0.0	
Channel				504204	518598	522998			
Frequency (MHz)				2521.02	2592.99	2664.98			
50	QPSK	1	1	22.31	22.49	22.38	23.5	0.0	
Channel				503202	518598	524000			
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	22.33	22.51	22.32	23.5	0.0	
Channel				502200	518598	524998			
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	22.33	22.50	22.32	23.5	0.0	
Channel				501702	518598	525500			
Frequency (MHz)				2508.51	2592.99	2677.5			
25	QPSK	1	1	22.34	22.42	22.41	23.5	0.0	
Channel				501204	518598	525998			
Frequency (MHz)				2503.02	2592.99	2679.99			
20	QPSK	1	1	22.38	22.47	22.31	23.5	0.0	
Channel				500700	518598	526498			
Frequency (MHz)				2503.5	2592.99	2682.48			
15	QPSK	1	1	22.39	22.52	22.35	23.5	0.0	
Channel				500202	518598	527000			
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	22.38	22.48	22.37	23.5	0.0	



n38 Ant 5 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	20.26	20.30	20.24			
40	PI2 BPSK	1	53	20.11	20.24	20.14			0.0
40	PI2 BPSK	1	164	20.13	20.15	19.99			
40	PI2 BPSK	50	0	20.34	20.33	20.12	21.0	0.0	
40	PI2 BPSK	50	28	20.18	20.27	20.10	21.0	0.0	
40	PI2 BPSK	50	58	20.06	20.25	20.12	21.0	0.0	
40	PI2 BPSK	100	0	20.20	20.20	20.14			
40	QPSK	1	1	20.37	20.46	20.38			
40	QPSK	1	53	20.23	20.35	20.24	21.0	0.0	
40	QPSK	1	104	20.28	20.36	20.23			
40	QPSK	50	0	19.96	20.06	19.99	21.0	0.0	
40	QPSK	50	28	20.27	20.36	20.26	21.0	0.0	
40	QPSK	50	58	19.99	20.14	20.07	21.0	0.0	
40	QPSK	100	0	19.99	20.05	20.01			
40	16QAM	1	1	20.08	20.13	20.09	21.0	0.0	
40	16QAM	1	1	20.07	20.08	20.00	21.0	0.0	
40	256QAM	1	1	19.10	19.14	19.08	21.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	20.24	20.32	20.32	21.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	20.33	20.39	20.23	21.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	20.24	20.36	20.22	21.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	20.33	20.39	20.30	21.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	19.83	19.89	19.80	21.0	0.0	

n41 Ant 5 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	19.85	19.91	19.76			
100	PI2 BPSK	1	137	19.73	19.83	19.65			
100	PI2 BPSK	1	271	19.88	19.77	19.54	21.0	0.0	
100	PI2 BPSK	135	0	19.88	19.91	19.69	21.0	0.0	
100	PI2 BPSK	135	69	19.65	19.81	19.66	21.0	0.0	
100	PI2 BPSK	135	138	19.70	19.77	19.64	21.0	0.0	
100	PI2 BPSK	270	0	19.74	19.70	19.67			
100	QPSK	1	1	19.86	20.01	19.96			
100	QPSK	1	137	19.79	19.91	19.89	21.0	0.0	
100	QPSK	1	271	19.83	19.96	19.81			
100	QPSK	135	0	19.57	19.61	19.57	21.0	0.0	
100	QPSK	135	69	19.86	19.91	19.78	21.0	0.0	
100	QPSK	135	138	19.63	19.71	19.62	21.0	0.0	
100	QPSK	270	0	19.63	19.72	19.55			
100	16QAM	1	1	19.57	19.71	19.61	21.0	0.0	
100	16QAM	1	1	19.57	19.68	19.56	21.0	0.0	
100	256QAM	1	1	19.82	19.86	19.78	21.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	19.79	19.89	19.85	21.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	19.77	19.88	19.80	21.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	19.77	19.89	19.84	21.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	19.78	19.86	19.88	21.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	19.78	19.85	19.85	21.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	19.78	19.88	19.87	21.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	19.81	19.88	19.85	21.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	19.79	19.86	19.85	21.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	19.78	19.88	19.84	21.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	19.78	19.85	19.85	21.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	19.82	19.87	19.84	21.0	0.0	

n41 HPUE Ant 5 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	22.93	23.10	22.95			
100	PI2 BPSK	1	137	22.84	23.12	22.97			
100	PI2 BPSK	1	271	22.89	23.06	22.99	24.0	0.0	
100	PI2 BPSK	135	0	22.91	23.06	22.98	24.0	0.0	
100	PI2 BPSK	135	69	22.93	23.08	22.98	24.0	0.0	
100	PI2 BPSK	135	138	22.82	23.06	22.99	24.0	0.0	
100	PI2 BPSK	270	0	22.91	23.09	22.94			
100	QPSK	1	1	22.83	23.09	22.97			
100	QPSK	1	137	22.91	23.06	22.97	24.0	0.0	
100	QPSK	1	271	22.94	23.08	22.99			
100	QPSK	135	0	22.95	23.06	23.00	24.0	0.0	
100	QPSK	135	69	22.91	23.09	22.95	24.0	0.0	
100	QPSK	135	138	22.80	23.06	22.94	24.0	0.0	
100	QPSK	270	0	22.89	23.07	23.00			
100	16QAM	1	1	22.89	23.06	22.98	24.0	0.0	
100	16QAM	1	1	22.91	23.11	22.98	24.0	0.0	
100	256QAM	1	1	20.78	20.79	20.81	22.0	2.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	22.83	22.99	22.87	24.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	22.81	23.02	22.89	24.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	22.80	23.00	22.88	24.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	22.88	23.02	22.87	24.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	22.84	22.99	22.87	24.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	22.85	22.97	22.85	24.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	22.84	22.99	22.87	24.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	22.82	23.00	22.84	24.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	22.80	22.97	22.87	24.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	22.84	22.99	22.88	24.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	22.85	22.96	22.85	24.0	0.0	



n48 Ant 1 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI/2 BPSK	1	1	20.09	20.14	20.08			
40	PI/2 BPSK	1	53	20.07	20.17	20.03	21.5	0.0	
40	PI/2 BPSK	1	104	20.03	20.13	20.07			
40	PI/2 BPSK	50	0	20.07	20.17	20.09	21.5	0.0	
40	PI/2 BPSK	50	28	19.98	20.22	20.12	21.5	0.0	
40	PI/2 BPSK	50	56	20.00	20.17	20.07	21.5	0.0	
40	PI/2 BPSK	100	0	20.08	20.13	20.08			
40	QPSK	1	1	20.06	22.25	20.04			
40	QPSK	1	53	20.01	20.21	20.12	21.5	0.0	
40	QPSK	1	104	20.04	20.12	20.08			
40	QPSK	50	0	19.99	19.84	19.82	21.0	0.5	
40	QPSK	50	28	19.98	20.18	20.11	21.5	0.0	
40	QPSK	50	56	19.97	19.84	19.88	21.0	0.5	
40	QPSK	100	0	19.91	19.67	19.65			
40	16QAM	1	1	19.98	19.57	19.50	21.0	0.5	
40	16QAM	1	1	18.98	18.15	17.99	19.5	2.0	
40	256QAM	1	1	18.99	18.16	17.5	17.5	4.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	19.93	20.03	19.90	21.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	19.90	20.07	19.98	21.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	19.97	19.93	19.92	21.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	19.96	20.06	19.93	21.5	0.0	

Part270 n77 Ant 1 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI/2 BPSK	1	1	18.86	19.16	19.04			
100	PI/2 BPSK	1	137	18.84	19.12	19.12	20.5	0.0	
100	PI/2 BPSK	1	271	18.87	19.14	19.08			
100	PI/2 BPSK	135	0	18.82	19.16	19.03	20.5	0.0	
100	PI/2 BPSK	135	69	18.88	19.09	19.11	20.5	0.0	
100	PI/2 BPSK	135	138	18.87	19.10	19.03	20.5	0.0	
100	PI/2 BPSK	270	0	18.86	19.11	19.09			
100	QPSK	1	1	18.86	19.19	19.03			
100	QPSK	1	137	18.91	19.07	19.21	20.5	0.0	
100	QPSK	1	271	18.96	19.11	19.02			
100	QPSK	135	0	18.86	19.12	19.11	20.5	0.0	
100	QPSK	135	69	18.95	19.15	19.12	20.5	0.0	
100	QPSK	135	138	18.91	19.08	19.03	20.5	0.0	
100	QPSK	270	0	18.90	19.13	19.12			
100	16QAM	1	1	18.84	19.15	19.10	20.5	0.0	
100	16QAM	1	1	18.86	19.12	19.14	20.5	0.0	
100	256QAM	1	1	18.91	19.02	19.04	20.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	18.81	18.99	18.96	20.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	18.85	19.01	18.95	20.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	18.86	19.06	18.90	20.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	18.76	18.96	18.96	20.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	18.76	19.04	18.96	20.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	18.86	19.00	18.97	20.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	18.76	19.04	19.02	20.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	18.86	19.05	18.92	20.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	18.75	18.96	18.94	20.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	18.83	19.06	19.01	20.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	18.80	19.05	18.94	20.5	0.0	

Part270 n77 HPUE Ant 1 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI/2 BPSK	1	1	21.88	22.17	22.07			
100	PI/2 BPSK	1	137	21.90	22.12	22.16	23.5	0.0	
100	PI/2 BPSK	1	271	21.85	22.13	22.07			
100	PI/2 BPSK	135	0	21.87	22.14	21.99	23.5	0.0	
100	PI/2 BPSK	135	69	21.94	22.07	22.14	23.5	0.0	
100	PI/2 BPSK	135	138	22.00	22.11	22.05	23.5	0.0	
100	PI/2 BPSK	270	0	21.87	22.08	22.06			
100	QPSK	1	1	21.90	22.24	21.99			
100	QPSK	1	137	21.91	22.10	22.15	23.5	0.0	
100	QPSK	1	271	21.95	22.10	22.08			
100	QPSK	135	0	21.88	22.09	22.06	23.5	0.0	
100	QPSK	135	69	21.93	22.18	22.07	23.5	0.0	
100	QPSK	135	138	21.97	22.09	22.02	23.5	0.0	
100	QPSK	270	0	21.88	22.15	22.14			
100	16QAM	1	1	21.84	22.20	22.11	23.5	0.0	
100	16QAM	1	1	21.99	21.93	21.99	23.0	0.5	
100	256QAM	1	1	19.83	19.82	19.82	21.0	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	21.90	22.12	21.89	23.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	21.80	22.11	21.93	23.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.88	22.07	21.89	23.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	21.88	22.07	21.91	23.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	21.89	22.02	21.91	23.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	21.80	22.06	21.89	23.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	21.88	22.11	21.83	23.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	21.91	22.03	21.88	23.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	21.91	22.09	21.92	23.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	21.85	22.10	21.94	23.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	21.84	22.09	21.99	23.5	0.0	



Part27Q n77 Ant 1 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	18.97	3500.01				
100	PI2 BPSK	1	137	18.97			20.5	0.0	
100	PI2 BPSK	1	271	18.98					
100	PI2 BPSK	135	0	18.93			20.5	0.0	
100	PI2 BPSK	135	69	18.93			20.5	0.0	
100	PI2 BPSK	135	138	19.00			20.5	0.0	
100	PI2 BPSK	270	0	18.99					
100	QPSK	1	1	19.02					
100	QPSK	1	137	18.95			20.5	0.0	
100	QPSK	1	271	18.90					
100	QPSK	135	0	18.88			20.5	0.0	
100	QPSK	135	69	18.99			20.5	0.0	
100	QPSK	135	138	18.86			20.5	0.0	
100	QPSK	270	0	18.91					
100	16QAM	1	1	18.93			20.5	0.0	
100	16QAM	1	137	18.98			20.5	0.0	
100	16QAM	1	271	18.92					
100	16QAM	135	0	18.92			20.5	0.0	
100	16QAM	135	69	18.95			20.5	0.0	
100	16QAM	135	138	18.93			20.5	0.0	
100	16QAM	270	0	18.99					
100	16QAM	270	0	18.92			20.5	0.0	
100	256QAM	1	1	19.02					
Channel									
Frequency (MHz)									
90	QPSK	1	1	18.53	6330.00	6336.68			
Channel									
Frequency (MHz)									
90	QPSK	1	1	18.52	3500.01	3505.02			
Channel									
Frequency (MHz)									
80	QPSK	1	1	18.92	18.86	18.94	20.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	18.97	18.97	18.89	20.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	18.95	18.91	18.87	20.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	18.92	18.92	18.93	20.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	18.88	18.90	18.93	20.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	18.90	18.89	18.82	20.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	18.89	18.90	18.94	20.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	18.98	18.89	18.90	20.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	18.90	18.89	18.90	20.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	18.88	18.91	18.88	20.5	0.0	

Part27Q n77 HPUE Ant 1 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	21.96	3500.01				
100	PI2 BPSK	1	137	21.92			23.5	0.0	
100	PI2 BPSK	1	271	21.99					
100	PI2 BPSK	135	0	21.94			23.5	0.0	
100	PI2 BPSK	135	69	21.94			23.5	0.0	
100	PI2 BPSK	135	138	21.96			23.5	0.0	
100	PI2 BPSK	270	0	21.94					
100	QPSK	1	1	22.00					
100	QPSK	1	137	21.95			23.5	0.0	
100	QPSK	1	271	21.93					
100	QPSK	135	0	21.93			23.5	0.0	
100	QPSK	135	69	21.98			23.5	0.0	
100	QPSK	135	138	21.93			23.5	0.0	
100	QPSK	270	0	21.99					
100	16QAM	1	1	21.87			23.5	0.0	
100	16QAM	1	137	21.11			23.0	0.5	
100	16QAM	1	271	21.92			21.0	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	21.89	6330.00	6336.68			
Channel									
Frequency (MHz)									
80	QPSK	1	1	21.94	3500.01	3505.02			
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.94	21.90	21.80	23.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	21.91	21.86	21.91	23.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	21.89	21.86	21.89	23.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	21.93	21.89	21.95	23.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	21.89	21.89	21.84	23.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	21.94	21.86	21.91	23.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	21.85	21.89	21.94	23.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	21.95	21.85	21.85	23.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	21.91	21.94	21.88	23.5	0.0	

Part270 n78 Ant 1 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	19.47	3750	3750			
100	PI2 BPSK	1	137	19.48			20.5	0.0	
100	PI2 BPSK	1	271	19.54					
100	PI2 BPSK	135	0	19.48			20.5	0.0	
100	PI2 BPSK	135	69	19.48			20.5	0.0	
100	PI2 BPSK	135	138	19.51			20.5	0.0	
100	PI2 BPSK	270	0	19.48					
100	QPSK	1	1	19.59					
100	QPSK	1	137	19.48			20.5	0.0	
100	QPSK	1	271	19.54					
100	QPSK	135	0	19.51			20.5	0.0	
100	QPSK	135	69	19.58			20.5	0.0	
100	QPSK	135	138	19.57			20.5	0.0	
100	QPSK	270	0	19.53					
100	16QAM	1	1	19.47			20.5	0.0	
100	16QAM	1	137	19.58			20.5	0.0	
100	16QAM	1	271	19.45					
100	16QAM	135	0	19.45			20.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	19.39	6490.00	6500.00			
Channel									
Frequency (MHz)									
80	QPSK	1	1	19.40	3750.02	3750.01			
Channel									
Frequency (MHz)									
70	QPSK	1	1	19.38	19.44	19.41	20.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	19.41	19.40	19.38	20.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	19.33	19.36	19.36	20.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	19.40	19.42	19.43	20.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	19.39	19.40	19.32	20.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	19.39	19.40	19.32	20.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	19.38	19.42	19.38	20.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	19.41	19.40	19.44	20.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	19.44	19.36	19.33	20.5	0.0	



Part270 n78 HPUE Ant 1 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	22.41	22.41	22.41			
100	PI2 BPSK	1	137	22.27	22.27	22.27	23.5	0.0	
100	PI2 BPSK	1	271	22.42	22.42	22.42			
100	PI2 BPSK	135	0	22.47	22.47	22.47	23.5	0.0	
100	PI2 BPSK	135	69	22.51	22.51	22.51	23.5	0.0	
100	PI2 BPSK	135	138	22.51	22.51	22.51	23.5	0.0	
100	PI2 BPSK	270	0	22.50	22.50	22.50			
100	QPSK	1	1	22.39	22.39	22.39			
100	QPSK	1	137	22.47	22.47	22.47	23.5	0.0	
100	QPSK	1	271	22.39	22.39	22.39			
100	QPSK	135	0	22.46	22.46	22.46	23.5	0.0	
100	QPSK	135	69	22.53	22.53	22.53	23.5	0.0	
100	QPSK	135	138	22.52	22.52	22.52	23.5	0.0	
100	QPSK	270	0	22.50	22.50	22.50			
100	16QAM	1	1	22.47	22.47	22.47	23.5	0.0	
100	16QAM	1	1	21.51	21.51	21.51	22.5	1.0	
100	256QAM	1	1	19.32	19.32	19.32	20.5	3.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	22.44	22.44	22.44	23.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	22.50	22.41	22.41	23.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	22.42	22.43	22.43	23.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	22.48	22.44	22.44	23.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	22.49	22.39	22.39	23.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	22.49	22.40	22.40	23.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	22.47	22.46	22.46	23.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	22.45	22.42	22.42	23.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	22.49	22.42	22.42	23.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	22.47	22.43	22.43	23.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	22.43	22.42	22.50	23.5	0.0	

Part270Q n78 Ant 1 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	19.21	19.21	19.21			
100	PI2 BPSK	1	137	19.23	19.23	19.23	20.5	0.0	
100	PI2 BPSK	1	271	19.24	19.24	19.24			
100	PI2 BPSK	135	0	19.18	19.18	19.18	20.5	0.0	
100	PI2 BPSK	135	69	19.22	19.22	19.22	20.5	0.0	
100	PI2 BPSK	135	138	19.26	19.26	19.26	20.5	0.0	
100	PI2 BPSK	270	0	19.22	19.22	19.22			
100	QPSK	1	1	19.35	19.35	19.35			
100	QPSK	1	137	19.21	19.21	19.21	20.5	0.0	
100	QPSK	1	271	19.19	19.19	19.19			
100	QPSK	135	0	19.22	19.22	19.22	20.5	0.0	
100	QPSK	135	69	19.29	19.29	19.29	20.5	0.0	
100	QPSK	135	138	19.28	19.28	19.28	20.5	0.0	
100	QPSK	270	0	19.21	19.21	19.21			
100	16QAM	1	1	19.26	19.26	19.26	20.5	0.0	
100	16QAM	1	1	19.26	19.26	19.26	20.5	0.0	
100	256QAM	1	1	19.25	19.25	19.25	20.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	19.08	19.04	19.11	20.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	19.11	19.05	19.12	20.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	19.04	19.12	19.13	20.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	19.04	19.13	19.05	20.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	19.11	19.08	19.08	20.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	19.10	19.13	19.04	20.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	19.12	19.03	19.03	20.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	19.14	19.05	19.13	20.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	19.13	19.07	19.09	20.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	19.09	19.15	19.09	20.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	19.05	19.06	19.05	20.5	0.0	

Part270Q n78 HPUE Ant 1 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	22.18	22.18	22.18			
100	PI2 BPSK	1	137	22.28	22.28	22.28	23.5	0.0	
100	PI2 BPSK	1	271	22.30	22.30	22.30			
100	PI2 BPSK	135	0	22.18	22.18	22.18	23.5	0.0	
100	PI2 BPSK	135	69	22.27	22.27	22.27	23.5	0.0	
100	PI2 BPSK	135	138	22.26	22.26	22.26	23.5	0.0	
100	PI2 BPSK	270	0	22.24	22.24	22.24			
100	QPSK	1	1	22.36	22.36	22.36			
100	QPSK	1	137	22.29	22.29	22.29	23.5	0.0	
100	QPSK	1	271	22.21	22.21	22.21			
100	QPSK	135	0	22.17	22.17	22.17	23.5	0.0	
100	QPSK	135	69	22.30	22.30	22.30	23.5	0.0	
100	QPSK	135	138	22.27	22.27	22.27	23.5	0.0	
100	QPSK	270	0	22.23	22.23	22.23			
100	16QAM	1	1	22.23	22.23	22.23	23.5	0.0	
100	16QAM	1	1	21.31	21.31	21.31	22.5	1.0	
100	256QAM	1	1	19.32	19.32	19.32	20.5	3.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	22.21	22.26	22.32	23.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	22.29	22.28	22.24	23.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	22.22	22.30	22.29	23.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	22.28	22.31	22.28	23.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	22.23	22.28	22.21	23.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	22.22	22.31	22.26	23.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	22.25	22.32	22.23	23.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	22.27	22.21	22.28	23.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	22.23	22.21	22.21	23.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	22.29	22.29	22.27	23.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	22.28	22.26	22.22	23.5	0.0	



n48 Ant 6 DSI3								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
40	PI/2 BPSK	1	1	17.65	17.77	17.79	18.5	0.0
40	PI/2 BPSK	1	53	17.85	17.79	17.80		
40	PI/2 BPSK	1	104	17.66	17.81	17.74		
40	PI/2 BPSK	50	0	17.85	17.83	17.77	18.5	0.0
40	PI/2 BPSK	50	28	17.85	17.84	17.70	18.5	0.0
40	PI/2 BPSK	50	56	17.85	17.82	17.76	18.5	0.0
40	PI/2 BPSK	100	0	17.64	17.75	17.79	18.5	0.0
40	QPSK	1	1	17.68	17.85	17.78		
40	QPSK	1	53	17.72	17.81	17.76		
40	QPSK	1	104	17.64	17.81	17.80	18.5	0.0
40	QPSK	50	0	17.70	17.75	17.73	18.5	0.0
40	QPSK	50	28	17.65	17.84	17.72	18.5	0.0
40	QPSK	50	56	17.62	17.82	17.77	18.5	0.0
40	QPSK	100	0	17.68	17.79	17.76	18.5	0.0
40	16QAM	1	1	17.71	17.79	17.75		
40	16QAM	1	1	17.64	17.79	17.71		
40	256QAM	1	1	17.64	17.77	17.72	18.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	17.62	17.73	17.64	18.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	17.59	17.73	17.65	18.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	17.62	17.69	17.60	18.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	17.54	17.73	17.65	18.5	0.0

Part270 n77 Ant 6 DSI3								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI/2 BPSK	1	1	18.33	18.42	18.35	17.0	0.0
100	PI/2 BPSK	1	137	18.38	18.41	18.33		
100	PI/2 BPSK	1	271	18.38	18.38	18.27		
100	PI/2 BPSK	135	0	18.29	18.42	18.34	17.0	0.0
100	PI/2 BPSK	135	69	18.28	18.33	18.29	17.0	0.0
100	PI/2 BPSK	135	138	18.32	18.39	18.34	17.0	0.0
100	PI/2 BPSK	270	0	18.28	18.37	18.35	17.0	0.0
100	QPSK	1	1	18.39	18.45	18.32		
100	QPSK	1	137	18.35	18.36	18.34		
100	QPSK	1	271	18.31	18.36	18.28	17.0	0.0
100	QPSK	135	0	18.30	18.40	18.32	17.0	0.0
100	QPSK	135	69	18.31	18.44	18.28	17.0	0.0
100	QPSK	135	138	18.30	18.43	18.33	17.0	0.0
100	QPSK	270	0	18.29	18.35	18.34	17.0	0.0
100	16QAM	1	1	18.30	18.40	18.27		
100	16QAM	1	1	18.39	18.37	18.38		
100	256QAM	1	1	18.38	18.42	18.34	17.0	0.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	18.19	18.30	18.26	17.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	18.17	18.22	18.19	17.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	18.18	18.23	18.23	17.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	18.18	18.27	18.18	17.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	18.27	18.32	18.18	17.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	18.28	18.34	18.20	17.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	18.19	18.25	18.23	17.0	0.0
Channel								
Frequency (MHz)								
25	QPSK	1	1	18.22	18.30	18.17	17.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	18.20	18.33	18.17	17.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	18.21	18.29	18.24	17.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	18.26	18.28	18.16	17.0	0.0

Part270 n77 HPUE Ant 6 DSI3								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI/2 BPSK	1	1	19.32	19.40	19.38	20.5	0.0
100	PI/2 BPSK	1	271	19.38	19.40	19.35		
100	PI/2 BPSK	1	271	19.33	19.41	19.24		
100	PI/2 BPSK	135	0	19.24	19.36	19.30	20.5	0.0
100	PI/2 BPSK	135	69	19.23	19.29	19.31	20.5	0.0
100	PI/2 BPSK	135	138	19.37	19.37	19.35	20.5	0.0
100	PI/2 BPSK	270	0	19.23	19.31	19.35	20.5	0.0
100	QPSK	1	1	19.34	19.49	19.35		
100	QPSK	1	137	19.32	19.34	19.35		
100	QPSK	1	271	19.27	19.41	19.23	20.5	0.0
100	QPSK	135	0	19.28	19.37	19.34	20.5	0.0
100	QPSK	135	69	19.36	19.41	19.20	20.5	0.0
100	QPSK	135	138	19.35	19.29	19.32	20.5	0.0
100	QPSK	270	0	19.25	19.42	19.40	20.5	0.0
100	16QAM	1	1	19.24	19.44	19.25		
100	16QAM	1	1	19.37	19.38	19.30		
100	64QAM	1	1	19.32	19.41	19.34	20.5	0.0
Channel								
Frequency (MHz)								
90	QPSK	1	1	19.24	19.31	19.29	20.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	19.24	19.29	19.21	20.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	19.29	19.30	19.24	20.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	19.19	19.34	19.30	20.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	19.25	19.31	19.25	20.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	19.22	19.35	19.20	20.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	19.21	19.27	19.30	20.5	0.0
Channel								
Frequency (MHz)								
25	QPSK	1	1	19.27	19.28	19.21	20.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	19.27	19.28	19.27	20.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	19.27	19.32	19.19	20.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	19.28	19.27	19.30	20.5	0.0



Part27Q n77 Ant 6 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	16.36	3500.01				
100	PI2 BPSK	1	137	16.43			17.0	0.0	
100	PI2 BPSK	1	271	16.39					
100	PI2 BPSK	135	0	16.33			17.0	0.0	
100	PI2 BPSK	135	69	16.40			17.0	0.0	
100	PI2 BPSK	135	138	16.34			17.0	0.0	
100	PI2 BPSK	270	0	16.38					
100	QPSK	1	1	16.51					
100	QPSK	1	137	16.42			17.0	0.0	
100	QPSK	1	271	16.23					
100	QPSK	135	0	16.38			17.0	0.0	
100	QPSK	135	69	16.45			17.0	0.0	
100	QPSK	135	138	16.40			17.0	0.0	
100	QPSK	270	0	16.37					
100	16QAM	1	1	16.43			17.0	0.0	
100	16QAM	1	1	16.41			17.0	0.0	
100	256QAM	1	1	16.32			17.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	16.29	6330.01	6336.68	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
80	QPSK	1	1	16.34	3500.01	3505.02	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
70	QPSK	1	1	16.32	3500.01	3515.01	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
60	QPSK	1	1	16.29	6330.01	6345.01	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
50	QPSK	1	1	16.23	3500.01	3515.01	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
40	QPSK	1	1	16.25	6330.01	6345.01	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
30	QPSK	1	1	16.27	6330.01	6345.01	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
25	QPSK	1	1	16.27	6330.01	6345.01	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
20	QPSK	1	1	16.33	6330.01	6345.01	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
15	QPSK	1	1	16.23	6330.01	6345.01	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.35	6330.01	6345.01	Tune-up limit (dBm)	MPR	

Part27Q n77 HPUE Ant 6 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	19.32	3500.01				
100	PI2 BPSK	1	137	19.46			20.5	0.0	
100	PI2 BPSK	1	271	19.41					
100	PI2 BPSK	135	0	19.28			20.5	0.0	
100	PI2 BPSK	135	69	19.42			20.5	0.0	
100	PI2 BPSK	135	138	19.36			20.5	0.0	
100	PI2 BPSK	270	0	19.39					
100	QPSK	1	1	19.47					
100	QPSK	1	137	19.42			20.5	0.0	
100	QPSK	1	271	19.29					
100	QPSK	135	0	19.42			20.5	0.0	
100	QPSK	135	69	19.44			20.5	0.0	
100	QPSK	135	138	19.36			20.5	0.0	
100	QPSK	270	0	19.38					
100	16QAM	1	1	19.42			20.5	0.0	
100	16QAM	1	1	19.39			20.5	0.0	
100	256QAM	1	1	19.41			20.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	19.43	6330.01	6336.68	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
80	QPSK	1	1	19.43	3500.01	3505.02	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
70	QPSK	1	1	19.33	3500.01	3515.01	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
60	QPSK	1	1	19.36	6330.01	6345.01	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
50	QPSK	1	1	19.32	3500.01	3515.01	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
40	QPSK	1	1	19.39	6330.01	6345.01	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
30	QPSK	1	1	19.31	6330.01	6345.01	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
25	QPSK	1	1	19.31	6330.01	6345.01	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
20	QPSK	1	1	19.36	6330.01	6345.01	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
15	QPSK	1	1	19.26	6330.01	6345.01	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
10	QPSK	1	1	19.36	6330.01	6345.01	Tune-up limit (dBm)	MPR	

Part270 n78 Ant 6 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	17.18	3750	3750			
100	PI2 BPSK	1	137	17.11			18.0	0.0	
100	PI2 BPSK	1	271	17.09					
100	PI2 BPSK	135	0	17.15			18.0	0.0	
100	PI2 BPSK	135	69	17.13			18.0	0.0	
100	PI2 BPSK	135	138	17.13			18.0	0.0	
100	PI2 BPSK	270	0	17.10					
100	QPSK	1	1	17.21					
100	QPSK	1	137	17.16			18.0	0.0	
100	QPSK	1	271	17.08					
100	QPSK	135	0	17.16			18.0	0.0	
100	QPSK	135	69	17.19			18.0	0.0	
100	QPSK	135	138	17.17			18.0	0.0	
100	QPSK	270	0	17.15					
100	16QAM	1	1	17.08			18.0	0.0	
100	16QAM	1	1	17.12			18.0	0.0	
100	64QAM	1	1	17.10			18.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	16.98	6490.01	6500.00	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.06	3750.02	3750.01	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
70	QPSK	1	1	17.05	6490.01	6500.00	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.02	6490.01	6500.00	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
50	QPSK	1	1	16.94	3750.02	3750.01	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
40	QPSK	1	1	16.94	6490.01	6500.00	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
30	QPSK	1	1	16.99	6490.01	6500.00	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
25	QPSK	1	1	17.02	6490.01	6500.00	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.01	6490.01	6500.00	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.03	6490.01	6500.00	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.99	6490.01	6500.00	Tune-up limit (dBm)	MPR	



Part270 n78 HPUE Ant 6 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	3750	3750	3750			
100	Pi2 BPSK	1	137	20.20	20.12		21.5	0.0	
100	Pi2 BPSK	1	271	20.12	20.12				
100	Pi2 BPSK	135	0	20.15	20.15		21.5	0.0	
100	Pi2 BPSK	135	69	20.13	20.13		21.5	0.0	
100	Pi2 BPSK	135	138	20.13	20.13		21.5	0.0	
100	Pi2 BPSK	270	0	20.05	20.05				
100	QPSK	1	1	20.20	20.18		21.5	0.0	
100	QPSK	1	137	20.05	20.05				
100	QPSK	1	271	20.12	20.12				
100	QPSK	135	0	20.12	20.12		21.5	0.0	
100	QPSK	135	69	20.19	20.19		21.5	0.0	
100	QPSK	135	138	20.17	20.17		21.5	0.0	
100	QPSK	270	0	20.21	20.21				
100	16QAM	1	1	20.05	20.05		21.5	0.0	
100	16QAM	1	1	20.16	20.16		21.5	0.0	
100	256QAM	1	1	20.07	20.07		21.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	54863	65000	65034	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
80	QPSK	1	1	20.17	20.13	20.18	21.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	20.21	20.15	20.13	21.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	20.14	20.10	20.19	21.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	20.11	20.20	20.11	21.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	20.19	20.15	20.13	21.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	20.14	20.12	20.14	21.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	20.12	20.21	20.20	21.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	20.15	20.19	20.18	21.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	20.10	20.14	20.20	21.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	20.11	20.21	20.20	21.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	20.11	20.14	20.13	21.5	0.0	

Part27Q n78 Ant 6 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	35000	35000	35000			
100	Pi2 BPSK	1	137	17.15	17.13		18.0	0.0	
100	Pi2 BPSK	1	271	17.20	17.20				
100	Pi2 BPSK	135	0	17.16	17.16		18.0	0.0	
100	Pi2 BPSK	135	69	17.17	17.17		18.0	0.0	
100	Pi2 BPSK	135	138	17.22	17.22		18.0	0.0	
100	Pi2 BPSK	270	0	17.17	17.17				
100	QPSK	1	1	17.20	17.20		18.0	0.0	
100	QPSK	1	137	17.16	17.16				
100	QPSK	1	271	17.14	17.14				
100	QPSK	135	0	17.22	17.22		18.0	0.0	
100	QPSK	135	69	17.25	17.25		18.0	0.0	
100	QPSK	135	138	17.16	17.16		18.0	0.0	
100	QPSK	270	0	17.20	17.20				
100	16QAM	1	1	17.23	17.23		18.0	0.0	
100	16QAM	1	1	17.21	17.21		18.0	0.0	
100	256QAM	1	1	17.10	17.10		18.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	17.14	17.09	17.09	18.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.10	17.07	17.07	18.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	17.26	17.17	17.13	18.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.17	17.06	17.07	18.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	17.11	17.07	17.14	18.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	17.15	17.14	17.08	18.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.69	17.06	17.10	18.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	17.18	17.08	17.09	18.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.13	17.17	17.09	18.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.09	17.14	17.14	18.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.18	17.06	17.13	18.0	0.0	

Part27Q n78 HPUE Ant 6 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	35000	35000	35000			
100	Pi2 BPSK	1	137	20.11	20.13		21.5	0.0	
100	Pi2 BPSK	1	271	20.17	20.17				
100	Pi2 BPSK	135	0	20.20	20.20		21.5	0.0	
100	Pi2 BPSK	135	69	20.20	20.20		21.5	0.0	
100	Pi2 BPSK	135	138	20.17	20.17		21.5	0.0	
100	Pi2 BPSK	270	0	20.14	20.14				
100	QPSK	1	1	20.31	20.31		21.5	0.0	
100	QPSK	1	137	20.16	20.16				
100	QPSK	1	271	20.17	20.17				
100	QPSK	135	0	20.20	20.20		21.5	0.0	
100	QPSK	135	69	20.29	20.29		21.5	0.0	
100	QPSK	135	138	20.18	20.18		21.5	0.0	
100	QPSK	270	0	20.24	20.24				
100	16QAM	1	1	20.21	20.21		21.5	0.0	
100	16QAM	1	1	20.27	20.27		21.5	0.0	
100	256QAM	1	1	20.10	20.10		21.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	63000	63334	63668	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
80	QPSK	1	1	20.21	20.26	20.19	21.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	20.24	20.24	20.25	21.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	20.21	20.21	20.18	21.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	20.22	20.27	20.16	21.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	20.21	20.25	20.21	21.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	20.21	20.25	20.21	21.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	20.15	20.24	20.28	21.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	20.26	20.16	20.18	21.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	20.25	20.25	20.22	21.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	20.20	20.19	20.19	21.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	20.16	20.21	20.20	21.5	0.0	



n48 Ant 7 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq	Power Middle Ch. F.Freq	Power High Ch. F.Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI/2 BPSK	1	1	18.91	18.96	18.93			
40	PI/2 BPSK	1	53	18.83	19.01	18.97	20.5	0.0	
40	PI/2 BPSK	1	104	18.85	18.93	18.94			
40	PI/2 BPSK	50	0	18.85	18.96	18.90	20.5	0.0	
40	PI/2 BPSK	50	28	18.86	18.96	18.89	20.5	0.0	
40	PI/2 BPSK	50	56	18.88	18.92	18.86	20.5	0.0	
40	PI/2 BPSK	100	0	18.89	18.98	18.88			
40	QPSK	1	1	18.85	18.95	18.87			
40	QPSK	1	53	18.89	18.95	18.88	20.5	0.0	
40	QPSK	1	104	18.88	18.94	18.87			
40	QPSK	50	0	18.87	18.92	18.87	20.5	0.0	
40	QPSK	50	28	18.89	18.99	18.97	20.5	0.0	
40	QPSK	50	56	18.91	18.95	18.87	20.5	0.0	
40	QPSK	100	0	18.90	19.00	18.87			
40	16QAM	1	1	18.89	18.95	18.90	20.5	0.0	
40	16QAM	1	1	18.92	18.91	18.88	20.5	0.0	
40	256QAM	1	1	18.92	18.91	18.88	20.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	18.80	18.81	18.78	20.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	18.83	18.83	18.78	20.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	18.78	18.85	18.83	20.5	0.0	

Part270 n77 Ant 7 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq	Power Middle Ch. F.Freq	Power High Ch. F.Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI/2 BPSK	1	1	17.55	17.63	17.54			
100	PI/2 BPSK	1	137	17.52	17.55	17.52	18.5	0.0	
100	PI/2 BPSK	1	271	17.55	17.56	17.58			
100	PI/2 BPSK	135	0	17.57	17.56	17.50	18.5	0.0	
100	PI/2 BPSK	135	69	17.53	17.56	17.54	18.5	0.0	
100	PI/2 BPSK	135	138	17.59	17.62	17.54	18.5	0.0	
100	PI/2 BPSK	270	0	17.57	17.60	17.58			
100	QPSK	1	1	17.52	17.69	17.58			
100	QPSK	1	137	17.56	17.55	17.55	18.5	0.0	
100	QPSK	1	271	17.59	17.55	17.58			
100	QPSK	135	0	17.57	17.55	17.51	18.5	0.0	
100	QPSK	135	69	17.60	17.63	17.59	18.5	0.0	
100	QPSK	135	138	17.62	17.60	17.59	18.5	0.0	
100	QPSK	270	0	17.52	17.57	17.51			
100	16QAM	1	1	17.58	17.63	17.54	18.5	0.0	
100	16QAM	1	1	17.60	17.63	17.58	18.5	0.0	
100	256QAM	1	1	17.62	17.62	17.57	18.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	17.47	17.52	17.46	18.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.46	17.50	17.39	18.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	17.42	17.54	17.44	18.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.47	17.54	17.50	18.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	17.43	17.47	17.50	18.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	17.48	17.47	17.41	18.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.51	17.53	17.48	18.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	17.43	17.50	17.48	18.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.52	17.45	17.45	18.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.50	17.45	17.43	18.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.42	17.54	17.42	18.5	0.0	

Part270 n77 HPUE Ant 7 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq	Power Middle Ch. F.Freq	Power High Ch. F.Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI/2 BPSK	1	1	20.50	20.58	20.57			
100	PI/2 BPSK	1	137	20.52	20.59	20.51	21.5	0.0	
100	PI/2 BPSK	1	271	20.52	20.53	20.63			
100	PI/2 BPSK	135	0	20.54	20.52	20.44	21.5	0.0	
100	PI/2 BPSK	135	69	20.53	20.53	20.60	21.5	0.0	
100	PI/2 BPSK	135	138	20.61	20.58	20.52	21.5	0.0	
100	PI/2 BPSK	270	0	20.53	20.63	20.47			
100	QPSK	1	1	20.55	20.71	20.56			
100	QPSK	1	137	20.44	20.59	20.56	21.5	0.0	
100	QPSK	1	271	20.57	20.52	20.62			
100	QPSK	135	0	20.60	20.60	20.48	21.5	0.0	
100	QPSK	135	69	20.63	20.68	20.60	21.5	0.0	
100	QPSK	135	138	20.67	20.60	20.65	21.5	0.0	
100	QPSK	270	0	20.51	20.62	20.47			
100	16QAM	1	1	20.55	20.62	20.55	21.5	0.0	
100	16QAM	1	1	20.66	20.67	20.61	21.5	0.0	
100	256QAM	1	1	20.66	20.64	20.65	21.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	20.48	20.44	20.40	21.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	20.48	20.42	20.37	21.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	20.43	20.44	20.43	21.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	20.42	20.46	20.43	21.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	20.39	20.44	20.46	21.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	20.38	20.46	20.42	21.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	20.38	20.42	20.38	21.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	20.36	20.42	20.47	21.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	20.39	20.41	20.40	21.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	20.43	20.49	20.47	21.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	20.38	20.41	20.46	21.5	0.0	



Part27Q n77 Ant 7 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq.	Power Middle Ch. F.Freq.	Power High Ch. F.Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	17.71	3500.01				
100	PI2 BPSK	1	137	17.75			18.5	0.0	
100	PI2 BPSK	1	271	17.83					
100	PI2 BPSK	135	0	17.85			18.5	0.0	
100	PI2 BPSK	135	69	17.86			18.5	0.0	
100	PI2 BPSK	135	138	17.88			18.5	0.0	
100	PI2 BPSK	270	0	17.73					
100	QPSK	1	1	17.77					
100	QPSK	1	137	17.73			18.5	0.0	
100	QPSK	1	271	17.85					
100	QPSK	135	0	17.75			18.5	0.0	
100	QPSK	135	69	17.76			18.5	0.0	
100	QPSK	135	138	17.72			18.5	0.0	
100	QPSK	270	0	17.75					
100	16QAM	1	1	17.85			18.5	0.0	
100	16QAM	1	1	17.84			18.5	0.0	
100	256QAM	1	1	17.74			18.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	17.61	633334	633668	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	17.61	3495	3500.01	3505.02	18.5	0.0
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.58	632668	633334	634000	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	17.58	3480.02	3500.01	3520	18.5	0.0
Channel									
Frequency (MHz)									
70	QPSK	1	1	17.51	632334	633334	634334	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	17.51	3485.01	3500.01	3515.01	18.5	0.0
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.50	632000	633334	634668	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	17.50	3480	3500.01	3520.02	18.5	0.0
Channel									
Frequency (MHz)									
50	QPSK	1	1	17.47	631668	633334	635000	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	17.47	3475.02	3500.01	3525	18.5	0.0
Channel									
Frequency (MHz)									
40	QPSK	1	1	17.56	631000	633334	635668	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	17.56	3465.01	3500.01	3535.02	18.5	0.0
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.80	630668	633334	636000	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	17.80	3460.02	3500.01	3540	18.5	0.0
Channel									
Frequency (MHz)									
25	QPSK	1	1	17.83	630334	633334	636334	Tune-up limit (dBm)	MPR (dB)
25	QPSK	1	1	17.83	3455.01	3500.01	3537.51	18.5	0.0
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.82	630000	633334	636668	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	17.82	3450.01	3500.01	3540	18.5	0.0
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.85	629668	633334	637000	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	17.85	3445.01	3500.01	3545.01	18.5	0.0
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.53	630334	633334	636334	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	17.53	3455.01	3500.01	3545.01	18.5	0.0

Part27Q n77 HPUE Ant 7 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq.	Power Middle Ch. F.Freq.	Power High Ch. F.Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	20.67	3500.01				
100	PI2 BPSK	1	137	20.77			21.5	0.0	
100	PI2 BPSK	1	271	20.83					
100	PI2 BPSK	135	0	20.81			21.5	0.0	
100	PI2 BPSK	135	69	20.88			21.5	0.0	
100	PI2 BPSK	135	138	20.88			21.5	0.0	
100	PI2 BPSK	270	0	20.74					
100	QPSK	1	1	20.80					
100	QPSK	1	137	20.86			21.5	0.0	
100	QPSK	1	271	20.80					
100	QPSK	135	0	20.72			21.5	0.0	
100	QPSK	135	69	20.74			21.5	0.0	
100	QPSK	135	138	20.73			21.5	0.0	
100	QPSK	270	0	20.73					
100	16QAM	1	1	20.69			21.5	0.0	
100	16QAM	1	1	20.58			21.5	0.0	
100	256QAM	1	1	20.72			21.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	20.64	633334	633668	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	20.64	3490.01	3505.02	3520	21.5	0.0
Channel									
Frequency (MHz)									
80	QPSK	1	1	20.73	632668	633334	634000	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	20.73	3485.01	3500.01	3515.01	21.5	0.0
Channel									
Frequency (MHz)									
70	QPSK	1	1	20.69	632334	633334	634334	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	20.69	3480.02	3500.01	3510	21.5	0.0
Channel									
Frequency (MHz)									
60	QPSK	1	1	20.67	632000	633334	634668	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	20.67	3480	3500.01	3520.02	21.5	0.0
Channel									
Frequency (MHz)									
50	QPSK	1	1	20.70	631668	633334	635000	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	20.70	3475.02	3500.01	3525	21.5	0.0
Channel									
Frequency (MHz)									
40	QPSK	1	1	20.87	631000	633334	635668	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	20.87	3470.01	3500.01	3535.02	21.5	0.0
Channel									
Frequency (MHz)									
30	QPSK	1	1	20.70	630668	633334	636000	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	20.70	3465.01	3500.01	3530	21.5	0.0
Channel									
Frequency (MHz)									
25	QPSK	1	1	20.69	630334	633334	636334	Tune-up limit (dBm)	MPR (dB)
25	QPSK	1	1	20.69	3460.02	3500.01	3535.01	21.5	0.0
Channel									
Frequency (MHz)									
20	QPSK	1	1	20.65	630000	633334	636668	Tune-up limit (dBm)	MPR (dB)
20	QPSK	1	1	20.65	3455.01	3500.01	3540	21.5	0.0
Channel									
Frequency (MHz)									
15	QPSK	1	1	20.67	629668	633334	637000	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	1	20.67	3450.01	3500.01	3545.01	21.5	0.0
Channel									
Frequency (MHz)									
10	QPSK	1	1	20.74	630334	633334	636334	Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	1	20.74	3455.01	3500.01	3545.01	21.5	0.0

Part270 n78 Ant 7 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq.	Power Middle Ch. F.Freq.	Power High Ch. F.Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	18.10	3750	3750	3750		
100	PI2 BPSK	1	137	18.06				19.0	0.0
100	PI2 BPSK	1	271	18.13					
100	PI2 BPSK	135	0	18.14			19.0	0.0	
100	PI2 BPSK	135	69	18.12			19.0	0.0	
100	PI2 BPSK	135	138	18.06			19.0	0.0	
100	PI2 BPSK	270	0	18.10					
100	QPSK	1	1	18.15					
100	QPSK	1	137	18.08			19.0	0.0	
100	QPSK	1	271	18.03					
100	QPSK	135	0	18.12			19.0	0.0	
100	QPSK	135	69	18.14			19.0	0.0	
100	QPSK	135	138	18.08			19.0	0.0	
100	QPSK	270	0	18.07					
100	16QAM	1	1	18.08			19.0	0.0	
100	16QAM	1	1	18.11			19.0	0.0	
100	64QAM	1	1	18.05			19.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	17.94	649668	650000	650334	Tune-up limit (dBm)	MPR (dB)
90	QPSK	1	1	17.94	3745.02	3750	3755.01	19.0	0.0
Channel									
Frequency (MHz)									
80	QPSK	1	1	18.00	649334	650000	650668	Tune-up limit (dBm)	MPR (dB)
80	QPSK	1	1	18.00	3740.01	3750	3750.02	19.0	0.0
Channel									
Frequency (MHz)									
70	QPSK	1	1	17.94	649000	650000	651000	Tune-up limit (dBm)	MPR (dB)
70	QPSK	1	1	17.94	3735	3750	3765	19.0	0.0
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.98	648668	650000	651334	Tune-up limit (dBm)	MPR (dB)
60	QPSK	1	1	17.98	3730.02	3750	3750.01	19.0	0.0
Channel									
Frequency (MHz)									
50	QPSK	1	1	17.97	648334	650000	651668	Tune-up limit (dBm)	MPR (dB)
50	QPSK	1	1	17.97	3725.01	3750	3755.02	19.0	0.0
Channel									
Frequency (MHz)									
40	QPSK	1	1	17.93	648000	650000	652000	Tune-up limit (dBm)	MPR (dB)
40	QPSK	1	1	17.93	3720.02	3750	3755.01	19.0	0.0
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.92	647668	650000	652334	Tune-up limit (dBm)	MPR (dB)
30	QPSK	1	1	17.92	3715.02	3750	3755.01	19.0	0.0
Channel									
Frequency (MHz)									
25	QPSK	1							



Part270 n78 HPUE Ant 7 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	21.04	21.04	21.04			
100	Pi2 BPSK	1	137	21.03	21.03	21.03	22.0	0.0	
100	Pi2 BPSK	1	271	21.16	21.16	21.16			
100	Pi2 BPSK	135	0	21.15	21.15	21.15	22.0	0.0	
100	Pi2 BPSK	135	69	21.16	21.16	21.16	22.0	0.0	
100	Pi2 BPSK	135	138	21.09	21.09	21.09	22.0	0.0	
100	Pi2 BPSK	270	0	21.14	21.14	21.14			
100	QPSK	1	1	21.19	21.19	21.19			
100	QPSK	1	137	21.18	21.18	21.18	22.0	0.0	
100	QPSK	1	271	21.08	21.08	21.08			
100	QPSK	135	0	21.14	21.14	21.14	22.0	0.0	
100	QPSK	135	69	21.18	21.18	21.18	22.0	0.0	
100	QPSK	135	138	21.12	21.12	21.12	22.0	0.0	
100	QPSK	270	0	21.08	21.08	21.08			
100	16QAM	1	1	21.11	21.11	21.11	22.0	0.0	
100	16QAM	1	1	21.07	21.07	21.07	22.0	0.0	
100	256QAM	1	1	21.02	21.02	21.02	22.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	17.84	17.84	17.84	19.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.88	17.88	17.88	19.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	17.86	17.86	17.86	19.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.88	17.88	17.88	19.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	17.89	17.89	17.89	19.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	17.93	17.93	17.93	19.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.87	17.87	17.87	19.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	17.87	17.87	17.87	19.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.96	17.96	17.96	19.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.97	17.97	17.97	19.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.88	17.88	17.88	19.0	0.0	

Part27Q n78 Ant 7 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	18.00	18.00	18.00			
100	Pi2 BPSK	1	137	18.10	18.10	18.10	19.0	0.0	
100	Pi2 BPSK	1	271	18.11	18.11	18.11			
100	Pi2 BPSK	135	0	18.06	18.06	18.06	19.0	0.0	
100	Pi2 BPSK	135	69	18.05	18.05	18.05	19.0	0.0	
100	Pi2 BPSK	135	138	18.07	18.07	18.07	19.0	0.0	
100	Pi2 BPSK	270	0	18.02	18.02	18.02			
100	QPSK	1	1	18.13	18.13	18.13			
100	QPSK	1	137	18.01	18.01	18.01	19.0	0.0	
100	QPSK	1	271	18.05	18.05	18.05			
100	QPSK	135	0	18.11	18.11	18.11	19.0	0.0	
100	QPSK	135	69	18.12	18.12	18.12	19.0	0.0	
100	QPSK	135	138	18.08	18.08	18.08	19.0	0.0	
100	QPSK	270	0	18.05	18.05	18.05			
100	16QAM	1	1	18.01	18.01	18.01	19.0	0.0	
100	16QAM	1	1	18.03	18.03	18.03	19.0	0.0	
100	256QAM	1	1	18.04	18.04	18.04	19.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	17.94	17.94	17.94	19.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.88	17.88	17.88	19.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	17.86	17.86	17.86	19.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.88	17.88	17.88	19.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	17.89	17.89	17.89	19.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	17.93	17.93	17.93	19.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.87	17.87	17.87	19.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	17.87	17.87	17.87	19.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.96	17.96	17.96	19.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.97	17.97	17.97	19.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.88	17.88	17.88	19.0	0.0	

Part27Q n78 HPUE Ant 7 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	21.08	21.08	21.08			
100	Pi2 BPSK	1	137	21.14	21.14	21.14	22.0	0.0	
100	Pi2 BPSK	1	271	21.08	21.08	21.08			
100	Pi2 BPSK	135	0	21.02	21.02	21.02	22.0	0.0	
100	Pi2 BPSK	135	69	21.06	21.06	21.06	22.0	0.0	
100	Pi2 BPSK	135	138	21.05	21.05	21.05	22.0	0.0	
100	Pi2 BPSK	270	0	21.03	21.03	21.03			
100	QPSK	1	1	21.18	21.18	21.18			
100	QPSK	1	137	21.01	21.01	21.01	22.0	0.0	
100	QPSK	1	271	21.08	21.08	21.08			
100	QPSK	135	0	21.07	21.07	21.07	22.0	0.0	
100	QPSK	135	69	21.11	21.11	21.11	22.0	0.0	
100	QPSK	135	138	21.08	21.08	21.08	22.0	0.0	
100	QPSK	270	0	21.05	21.05	21.05			
100	16QAM	1	1	21.01	21.01	21.01	22.0	0.0	
100	16QAM	1	1	21.08	21.08	21.08	22.0	0.0	
100	256QAM	1	1	21.02	21.02	21.02	22.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	17.94	17.94	17.94	19.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.88	17.88	17.88	19.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	17.86	17.86	17.86	19.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.88	17.88	17.88	19.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	17.89	17.89	17.89	19.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	17.93	17.93	17.93	19.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.87	17.87	17.87	19.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	17.87	17.87	17.87	19.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.96	17.96	17.96	19.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.97	17.97	17.97	19.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.88	17.88	17.88	19.0	0.0	



n48 Ant 8 DSI3						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel						
Frequency (MHz)						
40	PI2 BPSK	1	1	18.09	18.14	18.11
40	PI2 BPSK	1	53	18.17	18.18	18.06
40	PI2 BPSK	1	104	18.11	18.20	18.08
40	PI2 BPSK	50	0	18.16	18.16	18.08
40	PI2 BPSK	50	28	18.12	18.16	18.02
40	PI2 BPSK	50	56	18.18	18.11	18.06
40	PI2 BPSK	100	0	18.08	18.15	18.02
40	QPSK	1	1	18.16	18.23	18.07
40	QPSK	1	53	18.16	18.20	18.11
40	QPSK	1	104	18.10	18.11	18.05
40	QPSK	50	0	18.13	18.19	18.11
40	QPSK	50	28	18.15	18.20	18.07
40	QPSK	50	56	18.09	18.12	18.09
40	QPSK	100	0	18.14	18.15	18.04
40	16QAM	1	1	18.13	18.16	18.05
40	16QAM	1	1	18.09	18.12	18.12
40	256QAM	1	1	18.19	18.10	18.05
Channel						
Frequency (MHz)						
30	QPSK	1	1	18.11	18.16	17.94
Channel						
Frequency (MHz)						
20	QPSK	1	1	18.03	18.14	18.00
Channel						
Frequency (MHz)						
10	QPSK	1	1	18.06	18.14	17.93
Channel						
Frequency (MHz)						
10	QPSK	1	1	18.01	18.13	18.02

Part270 n77 Ant 8 DSI3						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel						
Frequency (MHz)						
100	PI2 BPSK	1	1	18.72	18.70	18.68
100	PI2 BPSK	1	137	18.77	18.83	18.70
100	PI2 BPSK	1	271	18.76	18.85	18.73
100	PI2 BPSK	135	0	18.71	18.83	18.83
100	PI2 BPSK	135	69	18.72	18.70	18.68
100	PI2 BPSK	135	138	18.76	18.79	18.68
100	PI2 BPSK	270	0	18.81	18.77	18.70
100	QPSK	1	1	18.76	18.93	18.68
100	QPSK	1	137	18.81	18.77	18.69
100	QPSK	1	271	18.76	18.76	18.64
100	QPSK	135	0	18.71	18.83	18.73
100	QPSK	135	69	18.75	18.85	18.75
100	QPSK	135	138	18.71	18.82	18.65
100	QPSK	270	0	18.80	18.87	18.75
100	16QAM	1	1	18.80	18.83	18.73
100	16QAM	1	1	18.81	18.78	18.70
100	256QAM	1	1	18.78	18.85	18.63
Channel						
Frequency (MHz)						
90	QPSK	1	1	18.65	18.80	18.62
Channel						
Frequency (MHz)						
80	QPSK	1	1	18.61	18.86	18.62
Channel						
Frequency (MHz)						
70	QPSK	1	1	18.67	18.81	18.54
Channel						
Frequency (MHz)						
60	QPSK	1	1	18.67	18.88	18.55
Channel						
Frequency (MHz)						
50	QPSK	1	1	18.67	18.89	18.57
Channel						
Frequency (MHz)						
40	QPSK	1	1	18.64	18.89	18.53
Channel						
Frequency (MHz)						
30	QPSK	1	1	18.63	18.84	18.50
Channel						
Frequency (MHz)						
25	QPSK	1	1	18.68	18.86	18.55
Channel						
Frequency (MHz)						
20	QPSK	1	1	18.65	18.79	18.50
Channel						
Frequency (MHz)						
15	QPSK	1	1	18.68	18.83	18.52
Channel						
Frequency (MHz)						
10	QPSK	1	1	18.62	18.88	18.57

Part270 n77 HPUE Ant 8 DSI3						
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel						
Frequency (MHz)						
100	PI2 BPSK	1	1	19.75	19.78	19.77
100	PI2 BPSK	1	137	19.70	19.78	19.75
100	PI2 BPSK	1	271	19.72	19.82	19.74
100	PI2 BPSK	135	0	19.75	19.87	19.80
100	PI2 BPSK	135	69	19.73	19.81	19.83
100	PI2 BPSK	135	138	19.73	19.88	19.83
100	PI2 BPSK	270	0	19.73	19.83	19.80
100	QPSK	1	1	19.75	19.93	19.69
100	QPSK	1	137	19.80	19.79	19.86
100	QPSK	1	271	19.70	19.80	19.71
100	QPSK	135	0	19.72	19.86	19.84
100	QPSK	135	69	19.89	19.91	19.88
100	QPSK	135	138	19.80	19.88	19.81
100	QPSK	270	0	19.75	19.78	19.82
100	16QAM	1	1	19.72	19.73	19.65
100	16QAM	1	1	19.88	19.78	19.88
100	256QAM	1	1	19.71	19.82	19.65
Channel						
Frequency (MHz)						
90	QPSK	1	1	19.61	19.73	19.59
Channel						
Frequency (MHz)						
80	QPSK	1	1	19.62	19.75	19.62
Channel						
Frequency (MHz)						
70	QPSK	1	1	19.59	19.83	19.61
Channel						
Frequency (MHz)						
60	QPSK	1	1	19.66	19.78	19.56
Channel						
Frequency (MHz)						
50	QPSK	1	1	19.67	19.75	19.64
Channel						
Frequency (MHz)						
40	QPSK	1	1	19.64	19.71	19.54
Channel						
Frequency (MHz)						
30	QPSK	1	1	19.63	19.81	19.63
Channel						
Frequency (MHz)						
25	QPSK	1	1	19.65	19.74	19.56
Channel						
Frequency (MHz)						
20	QPSK	1	1	19.69	19.78	19.58
Channel						
Frequency (MHz)						
15	QPSK	1	1	19.67	19.78	19.63
Channel						
Frequency (MHz)						
10	QPSK	1	1	19.67	19.74	19.63



Part27Q n77 Ant 8 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	17.07	3500.01				
100	PI2 BPSK	1	137	17.04			18.0	0.0	
100	PI2 BPSK	1	271	17.12					
100	PI2 BPSK	135	0	17.04			18.0	0.0	
100	PI2 BPSK	135	69	17.08			18.0	0.0	
100	PI2 BPSK	135	138	17.07			18.0	0.0	
100	PI2 BPSK	270	0	17.12					
100	QPSK	1	1	17.15					
100	QPSK	1	137	17.12			18.0	0.0	
100	QPSK	1	271	17.10					
100	QPSK	135	0	17.13			18.0	0.0	
100	QPSK	135	69	17.14			18.0	0.0	
100	QPSK	135	138	17.11			18.0	0.0	
100	QPSK	270	0	17.17					
100	16QAM	1	1	17.07			18.0	0.0	
100	16QAM	1	137	17.08			18.0	0.0	
100	16QAM	1	271	17.07			18.0	0.0	
100	256QAM	1	1	17.08			18.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	17.03	6330.00	6336.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.08	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
70	QPSK	1	1	17.07	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.11	6330.01	6336.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
50	QPSK	1	1	17.03	6330.01	6336.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	QPSK	1	1	17.03	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.07	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
25	QPSK	1	1	17.07	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.07	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.03	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.99	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	

Part27Q n77 HPUE Ant 8 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	19.90	3500.01				
100	PI2 BPSK	1	137	19.91			21.0	0.0	
100	PI2 BPSK	1	271	19.92					
100	PI2 BPSK	135	0	19.96			21.0	0.0	
100	PI2 BPSK	135	69	19.90			21.0	0.0	
100	PI2 BPSK	135	138	19.92			21.0	0.0	
100	PI2 BPSK	270	0	19.90					
100	QPSK	1	1	19.95			21.0	0.0	
100	QPSK	1	137	19.95					
100	QPSK	1	271	19.95					
100	QPSK	135	0	19.93			21.0	0.0	
100	QPSK	135	69	19.97			21.0	0.0	
100	QPSK	135	138	19.93			21.0	0.0	
100	QPSK	270	0	19.95					
100	16QAM	1	1	19.91			21.0	0.0	
100	16QAM	1	137	19.89			21.0	0.0	
100	16QAM	1	271	19.93			21.0	0.0	
100	256QAM	1	1	19.93			21.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	19.93	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	19.92	6330.01	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
70	QPSK	1	1	19.90	6330.01	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	19.92	6330.01	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
50	QPSK	1	1	19.89	6330.01	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	QPSK	1	1	19.95	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
30	QPSK	1	1	19.94	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
25	QPSK	1	1	19.95	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	19.91	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
15	QPSK	1	1	19.92	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	19.90	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	

Part270 n78 Ant 8 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	16.84	3750	3750			
100	PI2 BPSK	1	137	16.82			18.0	0.0	
100	PI2 BPSK	1	271	16.82					
100	PI2 BPSK	135	0	16.77			18.0	0.0	
100	PI2 BPSK	135	69	16.79			18.0	0.0	
100	PI2 BPSK	135	138	16.82			18.0	0.0	
100	PI2 BPSK	270	0	16.85					
100	QPSK	1	1	16.88					
100	QPSK	1	137	16.87			18.0	0.0	
100	QPSK	1	271	16.78					
100	QPSK	135	0	16.85			18.0	0.0	
100	QPSK	135	69	16.86			18.0	0.0	
100	QPSK	135	138	16.83			18.0	0.0	
100	QPSK	270	0	16.85					
100	16QAM	1	1	16.85			18.0	0.0	
100	16QAM	1	137	16.80			18.0	0.0	
100	16QAM	1	271	16.82			18.0	0.0	
100	256QAM	1	1	16.82			18.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	16.74	6490.00	6500.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	16.76	6493.34	6500.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
70	QPSK	1	1	16.81	6496.68	6500.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	16.73	6496.68	6500.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
50	QPSK	1	1	16.78	6496.68	6500.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	QPSK	1	1	16.80	6496.68	6500.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
30	QPSK	1	1	16.75	6496.68	6500.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
25	QPSK	1	1	16.82	6496.68	6500.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	16.74	6496.68	6500.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
15	QPSK	1	1	16.83	6496.68	6500.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.77	6496.68	6500.00	Tune-up limit (dBm)	MPR (dB)	



Part270 n78 HPUE Ant 8 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	19.87	19.87	19.87			
100	Pi2 BPSK	1	137	19.88	19.88	19.88			
100	Pi2 BPSK	1	271	19.89	19.89	19.89			
100	Pi2 BPSK	135	0	19.85	19.85	19.85	21.0	0.0	
100	Pi2 BPSK	135	69	19.81	19.81	19.81	21.0	0.0	
100	Pi2 BPSK	135	138	19.86	19.86	19.86	21.0	0.0	
100	Pi2 BPSK	270	0	19.85	19.85	19.85	21.0	0.0	
100	QPSK	1	1	19.91	19.91	19.91			
100	QPSK	1	137	19.86	19.86	19.86	21.0	0.0	
100	QPSK	1	271	19.76	19.76	19.76			
100	QPSK	135	0	19.85	19.85	19.85	21.0	0.0	
100	QPSK	135	69	19.88	19.88	19.88	21.0	0.0	
100	QPSK	135	138	19.87	19.87	19.87	21.0	0.0	
100	QPSK	270	0	19.88	19.88	19.88	21.0	0.0	
100	16QAM	1	1	19.76	19.76	19.76	21.0	0.0	
100	64QAM	1	1	19.81	19.81	19.81	21.0	0.0	
100	256QAM	1	1	19.83	19.83	19.83	21.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	19.81	19.79	19.76	21.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	19.81	19.75	19.83	21.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	19.85	19.84	19.76	21.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	19.80	19.84	19.77	21.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	19.76	19.77	19.77	21.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	19.78	19.87	19.80	21.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	19.82	19.85	19.76	21.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	19.80	19.78	19.77	21.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	19.84	19.81	19.86	21.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	19.83	19.76	19.77	21.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	19.76	19.80	19.76	21.0	0.0	

Part27Q n78 Ant 8 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	18.83	18.83	18.83			
100	Pi2 BPSK	1	137	18.85	18.85	18.85	18.0	0.0	
100	Pi2 BPSK	1	271	18.83	18.83	18.83			
100	Pi2 BPSK	135	0	18.86	18.86	18.86	18.0	0.0	
100	Pi2 BPSK	135	69	18.84	18.84	18.84	18.0	0.0	
100	Pi2 BPSK	135	138	18.81	18.81	18.81	18.0	0.0	
100	Pi2 BPSK	270	0	18.80	18.80	18.80	18.0	0.0	
100	QPSK	1	1	18.95	18.95	18.95			
100	QPSK	1	137	18.80	18.80	18.80	18.0	0.0	
100	QPSK	1	271	18.82	18.82	18.82			
100	QPSK	135	0	18.83	18.83	18.83	18.0	0.0	
100	QPSK	135	69	18.87	18.87	18.87	18.0	0.0	
100	QPSK	135	138	18.86	18.86	18.86	18.0	0.0	
100	QPSK	270	0	18.80	18.80	18.80	18.0	0.0	
100	16QAM	1	1	18.85	18.85	18.85	18.0	0.0	
100	64QAM	1	1	18.89	18.89	18.89	18.0	0.0	
100	256QAM	1	1	18.87	18.87	18.87	18.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	18.87	18.90	18.87	18.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	18.88	18.89	18.90	18.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	18.81	18.80	18.80	18.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	18.83	18.85	18.88	18.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	18.86	18.83	18.88	18.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	18.88	18.79	18.82	18.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	18.80	18.83	18.84	18.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	18.88	18.87	18.86	18.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	18.83	18.89	18.83	18.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	18.85	18.79	18.80	18.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	18.81	18.81	18.85	18.0	0.0	

Part27Q n78 HPUE Ant 8 DSI3									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	19.82	19.82	19.82			
100	Pi2 BPSK	1	137	19.82	19.82	19.82	21.0	0.0	
100	Pi2 BPSK	1	271	19.84	19.84	19.84			
100	Pi2 BPSK	135	0	19.83	19.83	19.83	21.0	0.0	
100	Pi2 BPSK	135	69	19.83	19.83	19.83	21.0	0.0	
100	Pi2 BPSK	135	138	19.85	19.85	19.85	21.0	0.0	
100	Pi2 BPSK	270	0	19.80	19.80	19.80	21.0	0.0	
100	QPSK	1	1	19.86	19.86	19.86			
100	QPSK	1	137	19.86	19.86	19.86	21.0	0.0	
100	QPSK	1	271	19.89	19.89	19.89			
100	QPSK	135	0	19.91	19.91	19.91	21.0	0.0	
100	QPSK	135	69	19.93	19.93	19.93	21.0	0.0	
100	QPSK	135	138	19.91	19.91	19.91	21.0	0.0	
100	QPSK	270	0	19.87	19.87	19.87	21.0	0.0	
100	16QAM	1	1	19.92	19.92	19.92	21.0	0.0	
100	64QAM	1	1	19.91	19.91	19.91	21.0	0.0	
100	256QAM	1	1	19.80	19.80	19.80	21.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	19.84	19.86	19.85	21.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	19.92	19.84	19.85	21.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	19.80	19.81	19.80	21.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	19.80	19.89	19.82	21.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	19.85	19.90	19.85	21.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	19.83	19.86	19.84	21.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	19.83	19.82	19.88	21.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	19.90	19.82	19.86	21.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	19.87	19.89	19.83	21.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	19.85	19.80	19.83	21.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	19.80	19.82	19.86	21.0	0.0	

Reduced Power Mode for DS14

n5 Ant 0 DS14								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				16800	16700	16700		
Frequency (MHz)				834	838.5	836		
20	PI/2 BPSK	1	1	24.43	24.55	24.58		
20	PI/2 BPSK	1	53	24.55	24.63	24.64	25.2	0.0
20	PI/2 BPSK	1	104	24.55	24.58	24.60		
20	PI/2 BPSK	50	0	24.61	24.67	24.66	25.2	0.0
20	PI/2 BPSK	50	28	24.49	24.58	24.54	25.2	0.0
20	PI/2 BPSK	50	56	24.51	24.61	24.66	25.2	0.0
20	PI/2 BPSK	100	0	24.58	24.61	24.63		
20	QPSK	1	1	24.60	24.69	24.66		
20	QPSK	1	53	24.47	24.49	24.50	25.2	0.0
20	QPSK	1	104	24.52	24.62	24.64		
20	QPSK	50	0	24.16	24.15	24.16	24.7	0.5
20	QPSK	50	28	24.45	24.58	24.36	25.2	0.0
20	QPSK	50	56	24.13	24.18	24.12	24.7	0.5
20	QPSK	100	0	24.16	24.25	24.21		
20	16QAM	1	1	24.17	24.20	24.19	24.7	0.5
20	64QAM	1	1	22.60	22.73	22.61	23.2	2.0
20	256QAM	1	1	20.58	20.71	20.68	21.2	4.0
Channel				16800	16700	16800	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				831.5	838.5	841.5		
15	QPSK	1	1	24.46	24.52	24.49	25.2	0.0
Channel				16800	16700	16800	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				829	836.5	844		
10	QPSK	1	1	24.45	24.63	24.57	25.2	0.0
Channel				16800	16700	16800	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				826.5	838.5	846.5		
5	QPSK	1	1	24.44	24.57	24.53	25.2	0.0

n26 Ant 0 DS14								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				16400	16500	16700		
Frequency (MHz)				824	831.5	839		
20	PI/2 BPSK	1	1	24.97	25.15	25.04		
20	PI/2 BPSK	1	53	24.98	25.18	25.18	25.7	0.0
20	PI/2 BPSK	1	104	25.12	25.13	25.11		
20	PI/2 BPSK	50	0	24.46	24.55	24.42	25.2	0.5
20	PI/2 BPSK	50	28	24.93	24.99	24.94	25.7	0.0
20	PI/2 BPSK	50	56	24.41	24.52	24.42	25.2	0.5
20	PI/2 BPSK	100	0	24.57	24.57	24.49		
20	QPSK	1	1	25.15	25.19	25.14		
20	QPSK	1	53	25.02	25.05	25.04	25.7	0.0
20	QPSK	1	104	25.01	25.08	25.09		
20	QPSK	50	0	23.90	24.07	23.90	24.7	1.0
20	QPSK	50	28	25.00	25.07	24.90	25.7	0.0
20	QPSK	50	56	23.85	24.03	23.86	24.7	1.0
20	QPSK	100	0	23.99	24.03	23.90		
20	16QAM	1	1	23.92	23.95	23.92	24.7	1.0
20	64QAM	1	1	22.63	22.73	22.65	23.2	2.5
20	256QAM	1	1	20.64	20.66	20.60	21.2	4.5
Channel				16400	16500	16800	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				821.5	831.5	841.5		
15	QPSK	1	1	25.06	25.07	25.02	25.7	0.0
Channel				16300	16600	16800	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				819	831.5	844		
10	QPSK	1	1	25.03	25.17	25.03	25.7	0.0
Channel				16300	16500	16800	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				816.5	831.5	846.5		
5	QPSK	1	1	25.02	25.12	25.03	25.7	0.0

n5 Ant 1 DS14									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				166800	167300	167800			
Frequency (MHz)				834	836.5	839			
20	PI/2 BPSK	1	1	24.63	24.53	24.51			
20	PI/2 BPSK	1	53	24.61	24.55	24.53	25.7	0.0	
20	PI/2 BPSK	1	104	24.53	24.54	24.55			
20	PI/2 BPSK	50	0	24.15	24.15	24.23	25.2	0.5	
20	PI/2 BPSK	50	25	24.53	24.49	24.50	25.7	0.0	
20	PI/2 BPSK	50	56	24.17	24.25	24.19	25.2	0.5	
20	PI/2 BPSK	100	0	24.12	24.10	24.13			
20	QPSK	1	1	24.64	24.71	24.84			
20	QPSK	1	53	24.63	24.59	24.56	25.7	0.0	
20	QPSK	1	104	24.54	24.59	24.52			
20	QPSK	50	0	23.73	23.77	23.61	24.7	1.0	
20	QPSK	50	25	24.52	24.50	24.51	25.7	0.0	
20	QPSK	50	56	23.80	23.77	23.74	24.7	1.0	
20	QPSK	100	0	23.80	23.91	23.70			
20	16QAM	1	1	23.55	23.62	23.51	24.7	1.0	
20	64QAM	1	1	21.97	22.09	22.03	23.2	2.5	
20	256QAM	1	1	20.05	20.17	20.17	21.2	4.5	
Channel				163300	167300	168300	Tune-up limit	MPR	
Frequency (MHz)				816.5	836.5	841.5	(dBm)	(dB)	
15	QPSK	1	1	24.61	24.65	24.53	25.7	0.0	
Channel				165800	167300	168800	Tune-up limit	MPR	
Frequency (MHz)				829	836.5	844	(dBm)	(dB)	
10	QPSK	1	1	24.58	24.55	24.52	25.7	0.0	
Channel				163300	167300	168300	Tune-up limit	MPR	
Frequency (MHz)				826.5	836.5	846.5	(dBm)	(dB)	
5	QPSK	1	1	24.55	24.58	24.53	25.7	0.0	

n26 Ant 1 DS14									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				164600	166300	167800			
Frequency (MHz)				824	831.5	839			
20	PI/2 BPSK	1	1	24.58	24.54	24.54			
20	PI/2 BPSK	1	53	24.61	24.53	24.50	25.7	0.0	
20	PI/2 BPSK	1	104	24.52	24.51	24.53			
20	PI/2 BPSK	50	0	24.08	24.11	24.16	25.2	0.5	
20	PI/2 BPSK	50	25	24.50	24.53	24.54	25.7	0.0	
20	PI/2 BPSK	50	56	24.11	24.17	24.15	25.2	0.5	
20	PI/2 BPSK	100	0	24.13	24.12	24.07			
20	QPSK	1	1	24.63	24.64	24.62			
20	QPSK	1	53	24.60	24.61	24.58	25.7	0.0	
20	QPSK	1	104	24.57	24.60	24.51			
20	QPSK	50	0	23.71	23.78	23.64	24.7	1.0	
20	QPSK	50	25	24.51	24.61	24.52	25.7	0.0	
20	QPSK	50	56	23.73	23.80	23.69	24.7	1.0	
20	QPSK	100	0	23.76	23.85	23.72			
20	16QAM	1	1	23.55	23.58	23.51	24.7	1.0	
20	64QAM	1	1	22.01	22.05	21.98	23.2	2.5	
20	256QAM	1	1	20.05	20.14	20.10	21.2	4.5	
Channel				164300	165300	166300	Tune-up limit	MPR	
Frequency (MHz)				821.5	831.5	841.5	(dBm)	(dB)	
15	QPSK	1	1	24.56	24.57	24.52	25.7	0.0	
Channel				163900	166300	168800	Tune-up limit	MPR	
Frequency (MHz)				819	831.5	844	(dBm)	(dB)	
10	QPSK	1	1	24.54	24.52	24.57	25.7	0.0	
Channel				163300	165300	166300	Tune-up limit	MPR	
Frequency (MHz)				816.5	831.5	846.5	(dBm)	(dB)	
5	QPSK	1	1	24.59	24.60	24.58	25.7	0.0	



n48 Ant 1 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 636000	Power Middle Ch. / Freq. 3024.99	Power High Ch. / Freq. 3679.88	Tune-up limit (dBm)	MPR (dB)	
40	PI2 BPSK	1	1	20.49	20.55	20.57			
40	PI2 BPSK	1	53	20.43	20.52	20.50	22.0	0.0	
40	PI2 BPSK	1	104	20.53	20.56	20.57			
40	PI2 BPSK	50	0	20.13	20.06	20.09	21.5	0.5	
40	PI2 BPSK	50	28	20.44	20.49	20.52	22.0	0.0	
40	PI2 BPSK	50	56	20.11	20.19	20.02	21.5	0.5	
40	PI2 BPSK	100	0	20.05	20.20	20.08			
40	QPSK	1	1	20.54	20.67	20.57			
40	QPSK	1	53	20.48	20.57	20.59	22.0	0.0	
40	QPSK	1	104	20.46	20.56	20.54			
40	QPSK	50	0	19.45	19.50	19.44	21.0	1.0	
40	QPSK	50	28	20.57	20.58	20.47	22.0	0.0	
40	QPSK	50	56	19.37	19.54	19.44	21.0	1.0	
40	QPSK	100	0	19.47	19.57	19.55			
40	16QAM	1	1	19.45	19.46	19.38	21.0	1.0	
40	16QAM	1	1	18.18	18.25	18.22	19.5	2.5	
40	256QAM	1	1	18.22	18.26	18.15	17.5	4.5	
	Channel			3366.63	6416.66	6455.66	Tune-up limit (dBm)	MPR (dB)	
	Channel			3965.02	3624.99	3684.99	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	20.49	20.61	20.46	22.0	0.0	
	Channel			637.334	6416.66	6460.00	Tune-up limit (dBm)	MPR (dB)	
	Channel			3662.81	3624.99	3692.49	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	20.41	20.55	20.51	22.0	0.0	
	Channel			637.168	6416.66	6461.66	Tune-up limit (dBm)	MPR (dB)	
	Channel			3537.62	3624.99	3692.49	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	20.49	20.59	20.51	22.0	0.0	
	Channel			6370.00	6416.66	6463.32	Tune-up limit (dBm)	MPR (dB)	
	Channel			3555	3624.99	3694.98	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	20.42	20.56	20.49	22.0	0.0	

Part270 n77 Ant 1 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 3750	Power High Ch. / Freq. 3840	Tune-up limit (dBm)	MPR (dB)	
100	PI2 BPSK	1	1	21.82	22.02	21.97			
100	PI2 BPSK	1	137	21.78	22.03	21.94	23.5	0.0	
100	PI2 BPSK	1	271	21.74	21.98	21.97			
100	PI2 BPSK	135	0	21.71	21.94	21.88	23.5	0.0	
100	PI2 BPSK	135	69	21.80	21.96	21.93	23.5	0.0	
100	PI2 BPSK	135	138	21.80	21.99	21.97	23.5	0.0	
100	PI2 BPSK	270	0	21.72	21.91	21.96			
100	QPSK	1	1	21.91	22.12	22.08			
100	QPSK	1	137	21.85	22.06	21.90	23.5	0.0	
100	QPSK	1	271	21.74	21.98	21.98			
100	QPSK	135	0	21.81	22.02	21.93	23.5	0.0	
100	QPSK	135	69	21.87	22.08	21.98	23.5	0.0	
100	QPSK	135	138	21.81	21.93	21.88	23.5	0.0	
100	QPSK	270	0	21.88	22.05	22.04			
100	16QAM	1	1	21.80	21.94	21.87	23.5	0.0	
100	16QAM	1	1	21.35	21.39	21.33	23.0	0.5	
100	256QAM	1	1	19.26	19.36	19.32	21.0	2.5	
	Channel			6555.00	6560.00	6553.34	Tune-up limit (dBm)	MPR (dB)	
	Channel			3745.02	3840	3935.01	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	21.86	22.05	21.98	23.5	0.0	
	Channel			6493.34	6560.00	6526.68	Tune-up limit (dBm)	MPR (dB)	
	Channel			3742.81	3840	3942.02	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	21.85	22.07	22.02	23.5	0.0	
	Channel			6480.00	6560.00	6530.00	Tune-up limit (dBm)	MPR (dB)	
	Channel			3732	3840	3945	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	21.83	22.01	22.01	23.5	0.0	
	Channel			6486.68	6560.00	6533.34	Tune-up limit (dBm)	MPR (dB)	
	Channel			3730.02	3840	3950.01	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	21.88	22.05	21.95	23.5	0.0	
	Channel			6433.34	6560.00	6530.00	Tune-up limit (dBm)	MPR (dB)	
	Channel			3725.01	3840	3955.02	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	21.83	22.08	22.02	23.5	0.0	
	Channel			6480.00	6560.00	6540.00	Tune-up limit (dBm)	MPR (dB)	
	Channel			3742.81	3840	3942.02	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	21.84	22.05	22.01	23.5	0.0	
	Channel			6476.68	6560.00	6543.34	Tune-up limit (dBm)	MPR (dB)	
	Channel			3715.02	3840	3955.01	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	21.85	22.02	22.01	23.5	0.0	
	Channel			6475.00	6560.00	6550.00	Tune-up limit (dBm)	MPR (dB)	
	Channel			3712.5	3840	3967.5	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	21.88	22.10	22.05	23.5	0.0	
	Channel			6473.34	6560.00	6546.68	Tune-up limit (dBm)	MPR (dB)	
	Channel			3710.01	3840	3970.02	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	21.77	22.02	22.04	23.5	0.0	
	Channel			6471.68	6560.00	6548.34	Tune-up limit (dBm)	MPR (dB)	
	Channel			3707.62	3840	3972.51	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	21.88	22.01	22.03	23.5	0.0	
	Channel			6470.00	6560.00	6550.00	Tune-up limit (dBm)	MPR (dB)	
	Channel			3705	3840	3975	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	21.84	21.99	21.96	23.5	0.0	

Part270 n77 HPUE Ant 1 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. 650000	Power Middle Ch. / Freq. 3750	Power High Ch. / Freq. 3840	Tune-up limit (dBm)	MPR (dB)	
100	PI2 BPSK	1	1	23.98	24.07	23.98			
100	PI2 BPSK	1	137	23.96	24.02	23.99	25.5	0.0	
100	PI2 BPSK	1	271	23.93	24.00	24.00			
100	PI2 BPSK	135	0	23.92	23.98	23.93	25.0	0.5	
100	PI2 BPSK	135	69	23.98	24.00	24.03	25.5	0.0	
100	PI2 BPSK	135	138	23.93	23.90	23.91	25.0	0.5	
100	PI2 BPSK	270	0	23.47	23.63	23.58			
100	QPSK	1	1	23.98	24.13	24.05			
100	QPSK	1	137	23.92	24.08	24.01	25.5	0.0	
100	QPSK	1	271	23.84	24.10	24.05			
100	QPSK	135	0	22.87	22.89	22.86	24.5	1.0	
100	QPSK	135	69	23.85	23.87	23.82	25.5	0.0	
100	QPSK	135	138	22.87	22.93	22.85	24.5	1.0	
100	QPSK	270	0	23.00	23.02	22.95			
100	16QAM	1	1	22.72	22.77	22.75	24.5	1.0	
100	16QAM	1	1	21.39	21.44	21.41	23.0	2.5	
100	256QAM	1	1	19.32	19.32	19.32	21.0	4.5	
	Channel			6555.00	6560.00	6553.34	Tune-up limit (dBm)	MPR (dB)	
	Channel			3745.02	3840	3935.01	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	23.90	24.05	24.02	25.5	0.0	
	Channel			6493.34	6560.00	6526.68	Tune-up limit (dBm)	MPR (dB)	
	Channel			3742.81	3840	3942.02	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	23.93	24.07	24.00	25.5	0.0	
	Channel			6480.00	6560.00	6530.00	Tune-up limit (dBm)	MPR (dB)	
	Channel			3732	3840	3945	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	23.93	24.04	24.00	25.5	0.0	
	Channel			6486.68	6560.00	6533.34	Tune-up limit (dBm)	MPR (dB)	
	Channel			3730.02	3840	3950.01	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	23.92	24.05	24.01	25.5	0.0	
	Channel			6433.34	6560.00	6530.00	Tune-up limit (dBm)	MPR (dB)	
	Channel			3725.01	3840	3955.02	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	23.95	24.11	23.92	25.5	0.0	
	Channel			6480.00	6560.00	6540.00	Tune-up limit (dBm)	MPR (dB)	
	Channel			3742.81	3840	3942.02	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	23.90	24.10	23.97	25.5	0.0	
	Channel			6476.68	6560.00	6543.34	Tune-up limit (dBm)	MPR (dB)	
	Channel			3715.02	3840	3955.01	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	23.97	24.03	23.98	25.5	0.0	
	Channel			6475.00	6560.00	6550.00	Tune-up limit (dBm)	MPR (dB)	
	Channel			3712.5	3840	3967.5	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	23.94	24.09	23.94	25.5	0.0	
	Channel			6473.34	6560.00	6546.68	Tune-up limit (dBm)	MPR (dB)	
	Channel			3710.01	3840	3970.02	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	23.90	24.08	23.99	25.5	0.0	
	Channel			6471.68					



Part27Q n77 Ant 1 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq.	Power Middle Ch. F.Freq.	Power High Ch. F.Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	21.92	3500.01				
100	PI2 BPSK	1	137	21.95			23.5	0.0	
100	PI2 BPSK	1	271	21.95					
100	PI2 BPSK	135	0	21.89			23.5	0.0	
100	PI2 BPSK	135	69	21.82			23.5	0.0	
100	PI2 BPSK	135	138	21.85			23.5	0.0	
100	PI2 BPSK	270	0	21.83					
100	QPSK	1	1	21.90					
100	QPSK	1	137	21.84			23.5	0.0	
100	QPSK	1	271	21.84					
100	QPSK	135	0	21.85			23.5	0.0	
100	QPSK	135	69	21.69			23.5	0.0	
100	QPSK	135	138	21.58			23.5	0.0	
100	QPSK	270	0	21.65					
100	16QAM	1	1	21.64			23.5	0.0	
100	16QAM	1	1	21.28			23.0	0.5	
100	256QAM	1	1	19.27			21.0	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	63300	63334	63368	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	21.68	21.95	21.88	23.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	21.70	21.91	21.89	23.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.77	21.89	21.82	23.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	21.70	21.94	21.87	23.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	21.73	21.90	21.82	23.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	21.77	21.90	21.79	23.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	21.71	21.86	21.80	23.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	21.78	21.91	21.83	23.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	21.77	21.94	21.86	23.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	21.75	21.90	21.82	23.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	21.68	21.82	21.90	23.5	0.0	

Part27Q n77 HPUE Ant 1 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq.	Power Middle Ch. F.Freq.	Power High Ch. F.Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	23.30	3500.01				
100	PI2 BPSK	1	137	23.84			25.5	0.0	
100	PI2 BPSK	1	271	23.82					
100	PI2 BPSK	135	0	23.46			25.0	0.5	
100	PI2 BPSK	135	69	23.89			25.5	0.0	
100	PI2 BPSK	135	138	23.43			25.0	0.5	
100	PI2 BPSK	270	0	23.51					
100	QPSK	1	1	23.54					
100	QPSK	1	137	23.95			25.5	0.0	
100	QPSK	1	271	23.85					
100	QPSK	135	0	22.70			24.5	1.0	
100	QPSK	135	69	23.74			25.5	0.0	
100	QPSK	135	138	22.79			24.5	1.0	
100	QPSK	270	0	22.84					
100	16QAM	1	1	22.70			24.5	1.0	
100	16QAM	1	1	21.32			23.0	2.5	
100	256QAM	1	1	19.13			21.0	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	63300	63334	63368	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	23.78	23.91	23.85	25.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	23.80	23.88	23.83	25.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	23.71	23.95	23.84	25.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	23.72	23.96	23.86	25.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	23.81	23.88	23.90	25.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	23.82	23.89	23.93	25.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.79	23.91	23.85	25.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	23.74	23.97	23.87	25.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.82	23.94	23.90	25.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.75	23.91	23.89	25.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.73	23.91	23.92	25.5	0.0	

Part270 n78 Ant 1 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. F.Freq.	Power Middle Ch. F.Freq.	Power High Ch. F.Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	21.83	3750	3750			
100	PI2 BPSK	1	137	21.91			23.0	0.0	
100	PI2 BPSK	1	271	21.99					
100	PI2 BPSK	135	0	21.89			23.0	0.0	
100	PI2 BPSK	135	69	21.84			23.0	0.0	
100	PI2 BPSK	135	138	21.90			23.0	0.0	
100	PI2 BPSK	270	0	21.88					
100	QPSK	1	1	22.01					
100	QPSK	1	137	21.95			23.0	0.0	
100	QPSK	1	271	21.90					
100	QPSK	135	0	21.80			23.0	0.0	
100	QPSK	135	69	21.97			23.0	0.0	
100	QPSK	135	138	21.83			23.0	0.0	
100	QPSK	270	0	21.85					
100	16QAM	1	1	21.88			23.0	0.0	
100	16QAM	1	1	21.33			20.5	0.5	
100	256QAM	1	1	19.32			20.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	64900	65000	65034	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	21.86	21.96	21.93	23.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	21.88	21.95	21.92	23.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.87	21.85	21.81	23.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	21.86	21.86	21.83	23.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	21.88	21.87	21.84	23.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	21.84	21.96	21.83	23.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	21.88	21.87	21.83	23.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	21.87	21.94	21.90	23.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	21.84	21.92	21.91	23.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	21.81	21.85	21.82	23.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	21.86	21.92	21.90	23.0	0.0	



Part270 n78 HPUE Ant 1 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	23.91	23.90	23.90	25.0	0.0	
100	PI2 BPSK	1	137	23.90	23.90	23.90	25.0	0.0	
100	PI2 BPSK	1	271	23.89	23.89	23.89	25.0	0.0	
100	PI2 BPSK	135	0	23.48	23.48	23.48	24.5	0.5	
100	PI2 BPSK	135	69	23.90	23.90	23.90	25.0	0.0	
100	PI2 BPSK	135	138	23.44	23.44	23.44	24.5	0.5	
100	PI2 BPSK	270	0	23.40	23.40	23.40	24.5	0.5	
100	QPSK	1	1	23.93	23.93	23.93	25.0	0.0	
100	QPSK	1	137	23.87	23.87	23.87	25.0	0.0	
100	QPSK	1	271	23.86	23.86	23.86	25.0	0.0	
100	QPSK	135	0	22.85	22.85	22.85	24.0	1.0	
100	QPSK	135	69	23.81	23.81	23.81	25.0	0.0	
100	QPSK	135	138	22.85	22.85	22.85	24.0	1.0	
100	QPSK	270	0	22.83	22.83	22.83	24.0	1.0	
100	16QAM	1	1	22.85	22.85	22.85	24.0	1.0	
100	16QAM	1	1	21.28	21.28	21.28	22.5	2.5	
100	256QAM	1	1	19.32	19.32	19.32	20.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	23.50	23.50	23.50	25.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	23.85	23.87	23.79	25.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	23.83	23.83	23.77	25.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	23.78	23.78	23.77	25.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	23.84	23.82	23.78	25.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	23.83	23.81	23.82	25.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.85	23.79	23.81	25.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	23.85	23.79	23.81	25.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.77	23.81	23.85	25.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.83	23.86	23.82	25.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.81	23.78	23.83	25.0	0.0	

Part27Q n78 Ant 1 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	21.67	21.65	21.65	23.0	0.0	
100	PI2 BPSK	1	137	21.65	21.65	21.65	23.0	0.0	
100	PI2 BPSK	1	271	21.65	21.65	21.65	23.0	0.0	
100	PI2 BPSK	135	0	21.63	21.63	21.63	23.0	0.0	
100	PI2 BPSK	135	69	21.67	21.67	21.67	23.0	0.0	
100	PI2 BPSK	135	138	21.59	21.59	21.59	23.0	0.0	
100	PI2 BPSK	270	0	21.55	21.55	21.55	23.0	0.0	
100	QPSK	1	1	21.73	21.73	21.73	23.0	0.0	
100	QPSK	1	137	21.66	21.66	21.66	23.0	0.0	
100	QPSK	1	271	21.59	21.59	21.59	23.0	0.0	
100	QPSK	135	0	21.47	21.47	21.47	23.0	0.0	
100	QPSK	135	69	21.67	21.67	21.67	23.0	0.0	
100	QPSK	135	138	21.51	21.51	21.51	23.0	0.0	
100	QPSK	270	0	21.58	21.58	21.58	23.0	0.0	
100	16QAM	1	1	21.55	21.55	21.55	23.0	0.0	
100	16QAM	1	1	21.04	21.04	21.04	22.5	0.5	
100	256QAM	1	1	19.07	19.07	19.07	20.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	21.60	21.64	21.68	23.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	21.52	21.63	21.59	23.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	21.61	21.65	21.59	23.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	21.59	21.64	21.67	23.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	21.59	21.62	21.58	23.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	21.51	21.65	21.62	23.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	21.62	21.65	21.68	23.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	21.50	21.61	21.59	23.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	21.61	21.71	21.61	23.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	21.51	21.65	21.63	23.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	21.59	21.60	21.60	23.0	0.0	

Part27Q n78 HPUE Ant 1 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	23.65	23.65	23.65	25.0	0.0	
100	PI2 BPSK	1	137	23.60	23.60	23.60	25.0	0.0	
100	PI2 BPSK	1	271	23.57	23.57	23.57	25.0	0.0	
100	PI2 BPSK	135	0	23.20	23.20	23.20	24.5	0.5	
100	PI2 BPSK	135	69	23.69	23.69	23.69	25.0	0.0	
100	PI2 BPSK	135	138	23.08	23.08	23.08	24.5	0.5	
100	PI2 BPSK	270	0	23.05	23.05	23.05	24.5	0.5	
100	QPSK	1	1	23.66	23.66	23.66	25.0	0.0	
100	QPSK	1	137	23.59	23.59	23.59	25.0	0.0	
100	QPSK	1	271	23.62	23.62	23.62	25.0	0.0	
100	QPSK	135	0	22.60	22.60	22.60	24.0	1.0	
100	QPSK	135	69	23.48	23.48	23.48	25.0	0.0	
100	QPSK	135	138	22.65	22.65	22.65	24.0	1.0	
100	QPSK	270	0	22.60	22.60	22.60	24.0	1.0	
100	16QAM	1	1	22.58	22.58	22.58	24.0	1.0	
100	16QAM	1	1	20.98	20.98	20.98	22.5	2.5	
100	256QAM	1	1	19.00	19.00	19.00	20.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	23.58	23.56	23.64	25.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	23.58	23.60	23.55	25.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	23.61	23.63	23.57	25.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	23.56	23.60	23.59	25.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	23.60	23.58	23.54	25.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	23.61	23.59	23.63	25.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.60	23.64	23.61	25.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	23.62	23.59	23.63	25.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.62	23.60	23.63	25.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.54	23.59	23.54	25.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.58	23.65	23.55	25.0	0.0	



n2 Ant 2 DS14								
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)
				Low Ch. Freq. 374000	Middle Ch. Freq. 376000	High Ch. Freq. 378000		
Channel								
Frequency (MHz)								
40	PI2 BPSK	1	1	23.55	23.65	23.62	25.0	0.0
40	PI2 BPSK	1	108	23.59	23.62	23.65		
40	PI2 BPSK	1	214	23.58	23.69	23.55		
40	PI2 BPSK	108	0	23.12	23.29	23.19	24.5	0.5
40	PI2 BPSK	108	54	23.52	23.68	23.69	25.0	0.0
40	PI2 BPSK	108	108	23.15	23.23	23.19	24.5	0.5
40	PI2 BPSK	216	0	23.14	23.30	23.20	25.0	0.0
40	QPSK	1	1	23.65	23.74	23.68		
40	QPSK	1	108	23.65	23.66	23.66		
40	QPSK	1	214	23.53	23.65	23.55	24.0	1.0
40	QPSK	108	0	22.63	22.80	22.65		
40	QPSK	108	54	23.58	23.61	23.55		
40	QPSK	108	108	22.67	22.65	22.66	24.0	1.0
40	QPSK	216	0	22.70	22.74	22.65	24.0	1.0
40	16QAM	1	1	22.48	22.53	22.50		
40	16QAM	1	1	20.95	20.97	20.91		
40	256QAM	1	1	18.92	18.97	18.85	20.5	4.5
Channel								
Frequency (MHz)								
35	QPSK	1	1	23.56	23.60	23.54	25.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	23.53	23.71	23.62	25.0	0.0
Channel								
Frequency (MHz)								
25	QPSK	1	1	23.53	23.71	23.62	25.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	23.51	23.70	23.63	25.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	23.53	23.67	23.65	25.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	23.56	23.67	23.62	25.0	0.0
Channel								
Frequency (MHz)								
5	QPSK	1	1	23.61	23.60	23.57	25.0	0.0

n7 Ant 2 DS14								
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)
				Low Ch. Freq. 504000	Middle Ch. Freq. 507000	High Ch. Freq. 510000		
Channel								
Frequency (MHz)								
40	PI2 BPSK	1	1	24.26	24.31	24.26	25.5	0.0
40	PI2 BPSK	1	108	24.17	24.22	24.26		
40	PI2 BPSK	1	214	24.24	24.23	24.21		
40	PI2 BPSK	108	0	23.81	23.83	23.77	25.0	0.5
40	PI2 BPSK	108	54	24.21	24.29	24.19	25.0	0.0
40	PI2 BPSK	108	108	23.77	23.81	23.82	25.0	0.5
40	PI2 BPSK	216	0	23.80	23.80	23.84	25.5	0.0
40	QPSK	1	1	24.30	24.36	24.32		
40	QPSK	1	108	24.34	24.25	24.20		
40	QPSK	1	214	24.21	24.25	24.25	24.5	1.0
40	QPSK	108	0	23.16	23.18	23.22		
40	QPSK	108	54	24.21	24.27	24.22		
40	QPSK	108	108	23.16	23.17	23.13	24.5	1.0
40	QPSK	216	0	23.26	23.30	23.24	24.5	1.0
40	16QAM	1	1	23.00	23.08	23.02		
40	16QAM	1	1	21.42	21.55	21.48		
40	256QAM	1	1	19.42	19.43	19.40	21.0	4.5
Channel								
Frequency (MHz)								
35	QPSK	1	1	24.16	24.29	24.23	25.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	24.18	24.34	24.19	25.5	0.0
Channel								
Frequency (MHz)								
25	QPSK	1	1	24.24	24.29	24.23	25.5	0.0
Channel								
Frequency (MHz)								
20	PI2 BPSK	1	1	24.17	24.25	24.22	25.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	24.26	24.24	24.26	25.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	24.21	24.33	24.27	25.5	0.0
Channel								
Frequency (MHz)								
5	QPSK	1	1	24.23	24.25	24.21	25.5	0.0

n66 Ant 2 DS14								
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)
				Low Ch. Freq. 345000	Middle Ch. Freq. 348000	High Ch. Freq. 351000		
Channel								
Frequency (MHz)								
40	PI2 BPSK	1	1	24.25	24.30	24.29	25.5	0.0
40	PI2 BPSK	1	108	24.28	24.42	24.29		
40	PI2 BPSK	1	214	24.28	24.41	24.32		
40	PI2 BPSK	108	0	23.86	23.93	23.90	25.0	0.5
40	PI2 BPSK	108	54	24.30	24.36	24.32	25.5	0.0
40	PI2 BPSK	108	108	23.84	23.84	23.90	25.0	0.5
40	PI2 BPSK	216	0	23.92	23.96	23.93	25.5	0.0
40	QPSK	1	1	24.37	24.48	24.41		
40	QPSK	1	108	24.35	24.40	24.29		
40	QPSK	1	214	24.27	24.40	24.31	24.5	1.0
40	QPSK	108	0	23.30	23.31	23.36		
40	QPSK	108	54	24.35	24.41	24.31		
40	QPSK	108	108	23.30	23.32	23.25	24.5	1.0
40	QPSK	216	0	23.40	23.45	23.38	24.5	1.0
40	16QAM	1	1	23.11	23.17	23.12		
40	16QAM	1	1	21.58	21.65	21.61		
40	256QAM	1	1	19.42	19.43	19.40	21.0	4.5
Channel								
Frequency (MHz)								
35	QPSK	1	1	24.27	24.34	24.35	25.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	24.31	24.43	24.38	25.5	0.0
Channel								
Frequency (MHz)								
25	QPSK	1	1	24.25	24.40	24.23	25.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	24.42	24.41	24.41	25.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	24.31	24.42	24.30	25.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	24.26	24.42	24.33	25.5	0.0
Channel								
Frequency (MHz)								
5	QPSK	1	1	24.25	24.35	24.33	25.5	0.0



n38 Ant 2 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				518004	518000	518998			
Frequency (MHz)				2590.02	2595	2599.98			
40	PI2 BPSK	1	1	24.15	24.12	24.16			
40	PI2 BPSK	1	53	24.15	24.09	24.15		0.0	
40	PI2 BPSK	1	164	24.20	24.15	24.13			
40	PI2 BPSK	50	0	23.65	23.76	23.82	25.0	0.5	
40	PI2 BPSK	50	28	24.19	24.06	24.15	25.5	0.0	
40	PI2 BPSK	50	58	23.76	23.77	23.72	25.0	0.5	
40	PI2 BPSK	100	0	23.76	23.76	23.76			
40	QPSK	1	1	24.21	24.28	24.27			
40	QPSK	1	53	24.21	24.25	24.19	25.5	0.0	
40	QPSK	1	104	24.22	24.18	24.06			
40	QPSK	50	0	22.91	22.98	22.89	24.5	1.0	
40	QPSK	50	28	23.96	24.02	23.99	25.5	0.0	
40	QPSK	50	58	22.83	22.97	22.88	24.5	1.0	
40	QPSK	100	0	22.95	23.05	23.00			
40	16QAM	1	1	22.86	22.87	22.81	24.5	1.0	
40	16QAM	1	1	21.34	21.53	21.37	23.0	2.5	
40	256QAM	1	1	19.37	19.44	19.39	21.0	4.5	
Channel				518026	518000	520098			
Frequency (MHz)				2595.01	2595	2604.99			
30	QPSK	1	1	24.10	24.16	24.17	25.5	0.0	
Channel				516504	519000	521498			
Frequency (MHz)				2592.52	2595	2607.48			
25	QPSK	1	1	24.16	24.20	24.19	25.5	0.0	
Channel				516500	519000	522000			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	1	24.17	24.18	24.22	25.5	0.0	
Channel				516502	519000	522498			
Frequency (MHz)				2577.51	2595	2612.49			
15	QPSK	1	1	24.10	24.25	24.19	25.5	0.0	
Channel				516004	519000	522998			
Frequency (MHz)				2575.02	2595	2614.98			
10	QPSK	1	1	24.12	24.23	24.19	25.5	0.0	

n41 Ant 2 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				526024	518598	528000			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	23.78	23.88	23.81			
100	PI2 BPSK	1	137	23.77	23.91	23.80	25.5	0.0	
100	PI2 BPSK	1	271	23.82	23.87	23.85			
100	PI2 BPSK	135	0	23.41	23.49	23.38	25.0	0.5	
100	PI2 BPSK	135	69	23.83	23.96	23.86	25.5	0.0	
100	PI2 BPSK	135	138	23.33	23.45	23.37	25.0	0.5	
100	PI2 BPSK	270	0	23.32	23.44	23.40			
100	QPSK	1	1	23.87	23.98	23.92			
100	QPSK	1	137	23.79	23.87	23.81	25.5	0.0	
100	QPSK	1	271	23.82	23.86	23.87			
100	QPSK	135	0	23.66	23.82	23.66	24.5	1.0	
100	QPSK	135	69	23.88	23.91	23.91	25.5	0.0	
100	QPSK	135	138	23.67	23.81	23.75	24.5	1.0	
100	QPSK	270	0	23.76	23.84	23.78			
100	16QAM	1	1	23.70	23.79	23.72	24.5	1.0	
100	16QAM	1	1	22.69	22.76	22.74	23.0	2.5	
100	256QAM	1	1	20.85	20.91	20.88	21.0	4.5	
Channel				508200	518598	520598			
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	23.84	23.86	23.85	25.5	0.0	
Channel				507204	518598	520998			
Frequency (MHz)				2536.02	2592.99	2649.99			
80	QPSK	1	1	23.77	23.92	23.82	25.5	0.0	
Channel				506202	518598	531000			
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	23.85	23.89	23.89	25.5	0.0	
Channel				505200	518598	531998			
Frequency (MHz)				2526	2592.99	2659.99			
60	QPSK	1	1	23.74	23.94	23.87	25.5	0.0	
Channel				504204	518598	532998			
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	23.76	23.89	23.81	25.5	0.0	
Channel				503202	518598	533000			
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	23.83	23.90	23.88	25.5	0.0	
Channel				502200	518598	534998			
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	23.89	23.93	23.83	25.5	0.0	
Channel				501702	518598	535500			
Frequency (MHz)				2508.51	2592.99	2677.5			
25	QPSK	1	1	23.75	23.91	23.87	25.5	0.0	
Channel				501204	518598	535998			
Frequency (MHz)				2506.02	2592.99	2679.99			
20	QPSK	1	1	23.74	23.89	23.82	25.5	0.0	
Channel				500700	518598	536498			
Frequency (MHz)				2503.5	2592.99	2682.48			
15	QPSK	1	1	23.77	23.88	23.84	25.5	0.0	
Channel				500202	518598	537000			
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	23.79	23.85	23.84	25.5	0.0	

n41 HPUE Ant 2 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				526022	518598	528000			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	24.81	24.94	24.88			
100	PI2 BPSK	1	137	24.75	25.01	24.83	26.5	0.0	
100	PI2 BPSK	1	271	24.78	24.93	24.91			
100	PI2 BPSK	135	0	24.39	24.50	24.39	26.0	0.5	
100	PI2 BPSK	135	69	24.77	24.92	24.82	26.5	0.0	
100	PI2 BPSK	135	138	24.33	24.52	24.38	26.0	0.5	
100	PI2 BPSK	270	0	24.36	24.48	24.42			
100	QPSK	1	1	24.85	25.03	24.93			
100	QPSK	1	137	24.74	24.90	24.80	26.5	0.0	
100	QPSK	1	271	24.75	24.95	24.86			
100	QPSK	135	0	24.32	24.29	24.26	25.5	1.0	
100	QPSK	135	69	24.78	24.82	24.76	26.5	0.0	
100	QPSK	135	138	24.32	24.31	24.32	25.5	1.0	
100	QPSK	270	0	24.38	24.41	24.35			
100	16QAM	1	1	24.32	24.33	24.28	25.5	1.0	
100	16QAM	1	1	22.76	22.83	22.79	24.0	2.5	
100	256QAM	1	1	20.38	20.43	20.35	22.0	4.5	
Channel				508200	518598	530598			
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	24.82	24.95	24.90	26.5	0.0	
Channel				507204	518598	529998			
Frequency (MHz)				2536.02	2592.99	2649.99			
80	QPSK	1	1	24.71	24.99	24.91	26.5	0.0	
Channel				506202	518598	531000			
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	24.72	25.00	24.82	26.5	0.0	
Channel				505200	518598	531998			
Frequency (MHz)				2526	2592.99	2659.99			
60	QPSK	1	1	24.71	24.90	24.89	26.5	0.0	
Channel				504204	518598	532998			
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	24.78	24.94	24.90	26.5	0.0	
Channel				503202	518598	533000			
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	24.77	25.00	24.79	26.5	0.0	
Channel				502200	518598	534998			
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	24.79	24.90	24.82	26.5	0.0	
Channel				501702	518598	535500			
Frequency (MHz)				2508.51	2592.99	2677.5			
25	QPSK	1	1	24.82	24.95	24.89	26.5	0.0	
Channel				501204	518598	535998			
Frequency (MHz)				2506.02	2592.99	2679.99			
20	QPSK	1	1	24.75	25.01	24.82	26.5	0.0	
Channel				500700	518598	536498			
Frequency (MHz)				2503.5	2592.99	2682.48			
15	QPSK	1	1	24.78	24.91	24.81	26.5	0.0	
Channel				500202	518598	537000			
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	24.74	24.95	24.88	26.5	0.0	



n2 Ant 3 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)	
				Low Ch. Freq.	Middle Ch. Freq.	High Ch. Freq.			
Channel				376000	376000	376000			
Frequency (MHz)				1870	1880	1890			
40	P1/2 BPSK	1	1	24.60	24.62	24.68			
40	P1/2 BPSK	1	108	24.60	24.59	24.55	25.5	0.0	
40	P1/2 BPSK	1	214	24.63	24.58	24.58			
40	P1/2 BPSK	108	0	24.19	24.15	24.20	25.0	0.5	
40	P1/2 BPSK	108	54	24.61	24.60	24.62	25.5	0.0	
40	P1/2 BPSK	108	108	24.21	24.15	24.18	25.0	0.5	
40	P1/2 BPSK	216	0	24.20	24.13	24.16			
40	QPSK	1	1	24.66	24.69	24.65			
40	QPSK	1	108	24.56	24.64	24.57	25.5	0.0	
40	QPSK	1	214	24.60	24.67	24.62			
40	QPSK	108	0	23.55	23.62	23.54	24.5	1.0	
40	QPSK	108	54	24.48	24.51	24.45	25.5	0.0	
40	QPSK	108	108	23.47	23.50	23.48	24.5	1.0	
40	QPSK	216	0	23.60	23.64	23.58			
40	16QAM	1	1	23.42	23.46	23.40	24.5	1.0	
40	16QAM	1	1	21.88	21.95	21.91	23.0	2.5	
40	256QAM	1	1	19.78	19.82	19.80	21.0	4.5	
Channel				379500	379500	379500			
Frequency (MHz)				1867.5	1880	1892.5			
35	QPSK	1	1	24.62	24.62	24.54	25.5	0.0	
Channel				379000	379000	379000			
Frequency (MHz)				1868	1868	1868			
30	QPSK	1	1	24.63	24.63	24.57	25.5	0.0	
Channel				372500	376000	379500			
Frequency (MHz)				1867.5	1880	1897.5			
25	QPSK	1	1	24.57	24.59	24.57	25.5	0.0	
Channel				370000	376000	380000			
Frequency (MHz)				1860	1880	1900			
20	QPSK	1	1	24.62	24.62	24.52	25.5	0.0	
Channel				370500	376000	380500			
Frequency (MHz)				1867.5	1880	1902.5			
15	QPSK	1	1	24.52	24.63	24.61	25.5	0.0	
Channel				371000	376000	381000			
Frequency (MHz)				1868	1880	1898			
10	QPSK	1	1	24.60	24.62	24.58	25.5	0.0	
Channel				370500	376000	381500			
Frequency (MHz)				1867.5	1880	1897.5			
5	QPSK	1	1	24.63	24.60	24.62	25.5	0.0	

n7 Ant 3 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)	
				Low Ch. Freq.	Middle Ch. Freq.	High Ch. Freq.			
Channel				504000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	P1/2 BPSK	1	1	25.13	25.20	25.07			
40	P1/2 BPSK	1	108	25.15	25.13	25.22	25.7	0.0	
40	P1/2 BPSK	1	214	25.14	25.20	25.17			
40	P1/2 BPSK	108	0	24.77	24.71	24.73	25.2	0.5	
40	P1/2 BPSK	108	54	25.27	25.28	25.18	25.7	0.0	
40	P1/2 BPSK	108	108	24.69	24.77	24.81	25.2	0.5	
40	P1/2 BPSK	216	0	24.77	24.83	24.73			
40	QPSK	1	1	25.23	25.34	25.26			
40	QPSK	1	108	25.10	25.20	25.19	25.7	0.0	
40	QPSK	1	214	25.19	25.15	25.20			
40	QPSK	108	0	24.18	24.21	24.06	24.7	1.0	
40	QPSK	108	54	25.22	25.23	25.20	25.7	0.0	
40	QPSK	108	108	24.08	24.31	24.20	24.7	1.0	
40	QPSK	216	0	24.16	24.20	24.18			
40	16QAM	1	1	24.03	24.05	24.07	24.7	1.0	
40	16QAM	1	1	22.44	22.55	22.50	23.2	2.5	
40	256QAM	1	1	20.40	20.35	20.30	21.2	4.5	
Channel				509500	507000	510500			
Frequency (MHz)				2517.5	2535	2552.5			
35	QPSK	1	1	25.13	25.22	25.15	25.7	0.0	
Channel				509000	507000	511000			
Frequency (MHz)				2518	2535	2555			
30	QPSK	1	1	25.18	25.24	25.22	25.7	0.0	
Channel				502500	507000	511500			
Frequency (MHz)				2512.5	2535	2557.5			
25	QPSK	1	1	25.17	25.29	25.19	25.7	0.0	
Channel				500000	507000	512000			
Frequency (MHz)				2510	2535	2550			
20	P1/2 BPSK	1	1	25.17	25.31	25.20	25.7	0.0	
Channel				501500	507000	512500			
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	1	25.14	25.25	25.20	25.7	0.0	
Channel				501000	507000	513000			
Frequency (MHz)				2508	2535	2568			
10	QPSK	1	1	25.21	25.22	25.18	25.7	0.0	
Channel				500500	507000	513500			
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	1	25.11	25.32	25.10	25.7	0.0	

n66 Ant 3 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)	
				Low Ch. Freq.	Middle Ch. Freq.	High Ch. Freq.			
Channel				346000	348000	350000			
Frequency (MHz)				1720	1745	1760			
40	P1/2 BPSK	1	1	25.16	25.23	25.24			
40	P1/2 BPSK	1	108	25.12	25.19	25.20	25.7	0.0	
40	P1/2 BPSK	1	214	25.09	25.27	25.20			
40	P1/2 BPSK	108	0	24.68	24.76	24.70	25.2	0.5	
40	P1/2 BPSK	108	54	25.18	25.27	25.14	25.7	0.0	
40	P1/2 BPSK	108	108	24.72	24.84	24.75	25.2	0.5	
40	P1/2 BPSK	216	0	24.72	24.81	24.72			
40	QPSK	1	1	25.21	25.31	25.26			
40	QPSK	1	108	25.14	25.18	25.15	25.7	0.0	
40	QPSK	1	214	25.07	25.23	25.21			
40	QPSK	108	0	24.12	24.18	24.10	24.7	1.0	
40	QPSK	108	54	25.12	25.18	25.15	25.7	0.0	
40	QPSK	108	108	24.08	24.20	24.11	24.7	1.0	
40	QPSK	216	0	24.18	24.25	24.21			
40	16QAM	1	1	23.88	23.94	23.84	24.7	1.0	
40	16QAM	1	1	22.45	22.52	22.48	23.2	2.5	
40	256QAM	1	1	20.42	20.47	20.40	21.2	4.5	
Channel				345500	349000	352500			
Frequency (MHz)				1727.5	1745	1762.5			
35	QPSK	1	1	25.10	25.22	25.21	25.7	0.0	
Channel				345000	349000	353000			
Frequency (MHz)				1728	1745	1765			
30	QPSK	1	1	25.13	25.17	25.16	25.7	0.0	
Channel				344500	349000	353500			
Frequency (MHz)				1722.5	1745	1767.5			
25	QPSK	1	1	25.07	25.20	25.18	25.7	0.0	
Channel				344000	349000	354000			
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	25.13	25.27	25.22	25.7	0.0	
Channel				343500	349000	354500			
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	25.14	25.19	25.16	25.7	0.0	
Channel				343000	349000	355000			
Frequency (MHz)				1718	1745	1775			
10	QPSK	1	1	25.11	25.25	25.21	25.7	0.0	
Channel				342500	349000	355500			
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	25.15	25.22	25.23	25.7	0.0	



n38 Ant 3 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	24.05	24.67	24.57			
40	PI2 BPSK	1	53	24.63	24.62	24.58		0.0	
40	PI2 BPSK	1	104	24.08	24.05	24.09			
40	PI2 BPSK	50	0	24.85	24.88	24.88	25.2	0.0	
40	PI2 BPSK	50	28	24.73	24.67	24.55	25.2	0.0	
40	PI2 BPSK	50	58	24.91	24.84	24.87	25.2	0.0	
40	PI2 BPSK	100	0	24.86	24.91	24.83			
40	QPSK	1	1	24.86	24.96	24.79			
40	QPSK	1	53	24.71	24.85	24.71	25.2	0.0	
40	QPSK	1	104	24.85	24.85	24.82			
40	QPSK	50	0	24.00	24.17	24.09	24.7	0.5	
40	QPSK	50	28	24.70	24.75	24.74	25.2	0.0	
40	QPSK	50	58	24.20	24.13	24.18	24.7	0.5	
40	QPSK	100	0	24.13	24.24	24.18			
40	16QAM	1	1	24.04	24.05	24.01	24.7	0.5	
40	16QAM	1	1	22.63	22.71	22.58	23.2	2.0	
40	256QAM	1	1	20.63	20.62	20.51	21.2	4.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	24.75	24.86	24.73	25.2	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	24.70	24.82	24.63	25.2	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	24.70	24.90	24.65	25.2	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.71	24.86	24.68	25.2	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	24.71	24.85	24.63	25.2	0.0	

n41 Ant 3 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	24.72	24.77	24.69			
100	PI2 BPSK	1	137	24.74	24.71	24.70	25.2	0.0	
100	PI2 BPSK	1	271	24.57	24.80	24.72			
100	PI2 BPSK	135	0	24.74	24.84	24.63	25.2	0.0	
100	PI2 BPSK	135	69	24.57	24.77	24.77	25.2	0.0	
100	PI2 BPSK	135	138	24.68	24.82	24.62	25.2	0.0	
100	PI2 BPSK	270	0	24.60	24.84	24.79			
100	QPSK	1	1	24.74	24.84	24.77			
100	QPSK	1	137	24.65	24.83	24.77	25.2	0.0	
100	QPSK	1	271	24.65	24.73	24.68			
100	QPSK	135	0	24.67	24.84	24.67	25.2	0.0	
100	QPSK	135	69	24.72	24.80	24.78	25.2	0.0	
100	QPSK	135	138	24.67	24.77	24.77	25.2	0.0	
100	QPSK	270	0	24.66	24.85	24.68			
100	16QAM	1	1	24.64	24.61	24.75	25.2	0.0	
100	16QAM	1	1	23.68	23.76	23.81	24.2	1.0	
100	256QAM	1	1	21.68	21.72	21.72	22.2	3.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	24.59	24.72	24.65	25.2	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.57	24.79	24.62	25.2	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.58	24.71	24.60	25.2	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	24.66	24.72	24.68	25.2	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.70	24.80	24.63	25.2	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	24.60	24.74	24.69	25.2	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	24.63	24.73	24.71	25.2	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	24.66	24.71	24.67	25.2	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	24.68	24.78	24.62	25.2	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.59	24.76	24.73	25.2	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	24.66	24.78	24.71	25.2	0.0	

n41 HPUE Ant 3 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	26.21	26.22	26.22	27.0	0.0	
100	PI2 BPSK	1	137	26.20	26.24	26.22			
100	PI2 BPSK	1	271	26.18	26.29	26.19			
100	PI2 BPSK	135	0	25.76	25.90	25.82	26.5	0.5	
100	PI2 BPSK	135	69	26.15	26.24	26.22	27.0	0.0	
100	PI2 BPSK	135	138	25.74	25.84	25.81	26.5	0.5	
100	PI2 BPSK	270	0	25.75	25.89	25.85			
100	QPSK	1	1	26.27	26.35	26.33			
100	QPSK	1	137	26.22	26.23	26.20	27.0	0.0	
100	QPSK	1	271	26.18	26.24	26.21			
100	QPSK	135	0	25.21	25.31	25.29	26.0	1.0	
100	QPSK	135	69	26.22	26.32	26.28	27.0	0.0	
100	QPSK	135	138	25.21	25.33	25.34	26.0	1.0	
100	QPSK	270	0	25.30	25.38	25.29			
100	16QAM	1	1	25.22	25.30	25.38	26.0	1.0	
100	16QAM	1	1	23.81	23.87	23.84	24.5	2.5	
100	256QAM	1	1	21.78	21.85	21.81	22.5	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	26.23	26.24	26.24	27.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	26.14	26.22	26.23	27.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	26.13	26.21	26.20	27.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	26.25	26.22	26.23	27.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	26.17	26.31	26.23	27.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	26.15	26.21	26.24	27.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	26.19	26.29	26.21	27.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	26.19	26.27	26.24	27.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	26.22	26.29	26.31	27.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	26.15	26.27	26.28	27.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	26.25	26.32	26.30	27.0	0.0	



n38 Ant 4 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				51804	51800	51998			
Frequency (MHz)				2500.02	2595	2599.98			
40	PI2 BPSK	1	1	23.24	23.41	23.40			
40	PI2 BPSK	1	53	23.25	23.36	23.33		0.0	
40	PI2 BPSK	1	164	23.30	23.43	23.31			
40	PI2 BPSK	50	0	22.87	23.02	22.91	24.0	0.5	
40	PI2 BPSK	50	28	23.28	23.43	23.40	24.5	0.0	
40	PI2 BPSK	50	58	22.83	22.91	22.93	24.0	0.5	
40	PI2 BPSK	100	0	22.82	22.91	22.89			
40	QPSK	1	1	23.36	23.46	23.44			
40	QPSK	1	53	23.28	23.35	23.38	24.5	0.0	
40	QPSK	1	104	23.33	23.39	23.35			
40	QPSK	50	0	22.25	22.29	22.13	23.5	1.0	
40	QPSK	50	28	23.20	23.24	23.18	24.5	0.0	
40	QPSK	50	58	22.16	22.23	22.19	23.5	1.0	
40	QPSK	100	0	22.28	22.32	22.25			
40	16QAM	1	1	22.11	22.16	22.10	23.5	1.0	
40	16QAM	1	1	20.65	20.72	20.68	22.0	2.5	
40	256QAM	1	1	18.68	18.89	18.62	20.0	4.5	
Channel				51700	51800	52098			
Frequency (MHz)				2585.01	2595	2604.99			
30	QPSK	1	1	23.28	23.41	23.39	24.5	0.0	
Channel				516504	519000	521498			
Frequency (MHz)				2582.42	2595	2607.48			
25	QPSK	1	1	23.24	23.37	23.30	24.5	0.0	
Channel				516000	519000	522000			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	1	23.32	23.35	23.41	24.5	0.0	
Channel				515502	519000	522498			
Frequency (MHz)				2575.5	2595	2612.49			
15	QPSK	1	1	23.29	23.36	23.41	24.5	0.0	
Channel				515004	519000	522998			
Frequency (MHz)				2575.02	2595	2614.98			
10	QPSK	1	1	23.28	23.44	23.39	24.5	0.0	

n41 Ant 4 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				50920	51858	52900			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	22.84	23.09	22.98			
100	PI2 BPSK	1	137	22.91	23.09	22.88			
100	PI2 BPSK	1	271	22.92	23.00	22.89	24.0	0.0	
100	PI2 BPSK	135	0	22.51	22.56	22.58	23.5	0.5	
100	PI2 BPSK	135	69	22.89	23.12	23.02	24.0	0.0	
100	PI2 BPSK	135	138	22.45	22.61	22.52	23.5	0.5	
100	PI2 BPSK	270	0	22.58	22.58	22.58			
100	QPSK	1	1	23.05	23.14	23.06			
100	QPSK	1	137	22.92	23.03	22.96	24.0	0.0	
100	QPSK	1	271	22.88	23.11	23.06			
100	QPSK	135	0	22.02	22.07	22.00	23.0	1.0	
100	QPSK	135	69	22.98	23.08	23.05	24.0	0.0	
100	QPSK	135	138	22.02	22.08	21.98	23.0	1.0	
100	QPSK	270	0	21.90	22.12	21.98			
100	16QAM	1	1	22.08	22.07	21.98	23.0	1.0	
100	16QAM	1	1	20.44	20.59	20.52	21.5	2.5	
100	256QAM	1	1	18.48	18.65	18.55	19.5	4.5	
Channel				508200	51858	52998			
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	22.94	23.06	23.00	24.0	0.0	
Channel				507204	518598	529998			
Frequency (MHz)				2538.02	2592.99	2640.99			
80	QPSK	1	1	22.59	23.08	22.95	24.0	0.0	
Channel				506202	518598	531000			
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	22.97	23.11	22.92	24.0	0.0	
Channel				505200	518598	531998			
Frequency (MHz)				2526	2592.99	2659.99			
60	QPSK	1	1	22.94	23.04	22.94	24.0	0.0	
Channel				504204	518598	532998			
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	22.98	23.02	22.93	24.0	0.0	
Channel				503202	518598	534000			
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	22.93	23.09	23.03	24.0	0.0	
Channel				502200	518598	534998			
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	22.91	23.06	23.01	24.0	0.0	
Channel				501702	518598	535500			
Frequency (MHz)				2508.51	2592.99	2677.5			
25	QPSK	1	1	22.99	23.11	22.99	24.0	0.0	
Channel				501204	518598	535998			
Frequency (MHz)				2508.02	2592.99	2679.99			
20	QPSK	1	1	23.00	23.00	22.93	24.0	0.0	
Channel				500700	518598	536498			
Frequency (MHz)				2503.5	2592.99	2682.48			
15	QPSK	1	1	23.01	23.12	22.95	24.0	0.0	
Channel				500202	518598	537000			
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	22.91	23.07	23.03	24.0	0.0	

n41 HPUE Ant 4 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				509202	518598	529000			
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	23.88	24.06	23.95			
100	PI2 BPSK	1	137	23.93	24.05	23.93			
100	PI2 BPSK	1	271	23.93	23.97	23.91	25.0	0.0	
100	PI2 BPSK	135	0	23.49	23.58	23.53	24.5	0.5	
100	PI2 BPSK	135	69	23.90	24.08	24.01	25.0	0.0	
100	PI2 BPSK	135	138	23.47	23.62	23.52	24.5	0.5	
100	PI2 BPSK	270	0	23.55	23.55	23.59			
100	QPSK	1	1	24.00	24.10	24.04			
100	QPSK	1	137	23.89	24.01	23.91	25.0	0.0	
100	QPSK	1	271	23.92	24.06	24.02			
100	QPSK	135	0	23.02	23.08	23.04	24.0	1.0	
100	QPSK	135	69	23.98	24.07	24.01	25.0	0.0	
100	QPSK	135	138	23.03	23.04	22.98	24.0	1.0	
100	QPSK	270	0	22.95	23.14	23.01			
100	16QAM	1	1	23.02	23.08	22.99	24.0	1.0	
100	16QAM	1	1	21.46	21.84	21.54	22.5	2.5	
100	256QAM	1	1	19.49	19.64	19.58	20.5	4.5	
Channel				508200	518598	529998			
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	23.97	23.97	23.92	25.0	0.0	
Channel				507204	518598	529998			
Frequency (MHz)				2538.02	2592.99	2640.99			
80	QPSK	1	1	23.95	24.06	23.98	25.0	0.0	
Channel				506202	518598	531000			
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	23.87	24.04	23.96	25.0	0.0	
Channel				505200	518598	531998			
Frequency (MHz)				2526	2592.99	2659.99			
60	QPSK	1	1	23.95	24.02	24.00	25.0	0.0	
Channel				504204	518598	532998			
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	23.92	23.97	23.91	25.0	0.0	
Channel				503202	518598	534000			
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	23.87	24.01	23.93	25.0	0.0	
Channel				502200	518598	534998			
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	23.90	24.05	23.92	25.0	0.0	
Channel				501702	518598	535500			
Frequency (MHz)				2508.51	2592.99	2677.5			
25	QPSK	1	1	23.97	24.06	23.98	25.0	0.0	
Channel				501204	518598	535998			
Frequency (MHz)				2508.02	2592.99	2679.99			
20	QPSK	1	1	23.95	24.01	23.99	25.0	0.0	
Channel				500700	518598	536498			
Frequency (MHz)				2503.5	2592.99	2682.48			
15	QPSK	1	1	23.93	23.97	24.00	25.0	0.0	
Channel				500202	518598	537000			
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	23.89	23.96	23.97	25.0	0.0	



n7 Ant 5 DS14									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				504000	507000	510000			
Frequency (MHz)				2520	2535	2550			
40	PI/2 BPSK	1	1	20.18	20.21	20.05	21.5	0.0	
40	PI/2 BPSK	1	108	20.05	20.04	19.88			
40	PI/2 BPSK	1	214	19.93	20.07	19.83			
40	PI/2 BPSK	108	0	20.13	20.17	20.06	21.5	0.0	
40	PI/2 BPSK	108	54	20.09	20.02	20.07	21.5	0.0	
40	PI/2 BPSK	108	108	19.91	20.14	19.95			
40	PI/2 BPSK	216	0	20.12	19.98	20.00	21.5	0.0	
40	QPSK	1	1	20.31	20.38	20.36			
40	QPSK	1	108	20.11	20.19	20.23	21.5	0.0	
40	QPSK	1	214	20.01	20.33	20.06			
40	QPSK	108	0	19.80	19.92	19.95	21.5	0.0	
40	QPSK	108	54	20.13	20.23	20.19	21.5	0.0	
40	QPSK	108	108	19.76	19.85	19.71	21.5	0.0	
40	QPSK	216	0	19.91	20.02	19.98	21.5	0.0	
40	16QAM	1	1	19.86	19.90	19.89	21.5	0.0	
40	64QAM	1	1	19.98	19.91	19.86	21.5	0.0	
40	256QAM	1	1	19.98	19.44	19.42	21.0	0.5	
Channel				503500	507000	510500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2517.5	2535	2552.5			
35	QPSK	1	1	20.28	20.27	20.32	21.5	0.0	
Channel				503000	507000	510000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2515	2535	2555			
30	QPSK	1	1	20.22	20.31	20.24	21.5	0.0	
Channel				502500	507000	511500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2512.5	2535	2557.5			
25	QPSK	1	1	20.24	20.15	20.25	21.5	0.0	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2510	2535	2550			
20	PI/2 BPSK	1	1	20.12	20.21	20.25	21.5	0.0	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	1	20.29	20.23	20.25	21.5	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	1	20.22	20.15	20.19	21.5	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	1	20.26	20.21	20.28	21.5	0.0	

n66 Ant 5 DS14									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				346000	349000	352000			
Frequency (MHz)				1730	1745	1760			
40	PI/2 BPSK	1	1	22.27	22.34	22.19			
40	PI/2 BPSK	1	108	22.05	22.24	22.01	23.5	0.0	
40	PI/2 BPSK	1	214	22.08	22.20	22.03			
40	PI/2 BPSK	108	0	22.32	22.29	22.21	23.5	0.0	
40	PI/2 BPSK	108	54	22.05	22.13	22.15	23.5	0.0	
40	PI/2 BPSK	108	108	21.97	22.15	22.12			
40	PI/2 BPSK	216	0	22.10	22.13	22.11	23.5	0.0	
40	QPSK	1	1	22.37	22.43	22.37			
40	QPSK	1	108	22.21	22.28	22.29	23.5	0.0	
40	QPSK	1	214	22.14	22.31	22.25			
40	QPSK	108	0	22.01	22.09	21.97	23.5	0.0	
40	QPSK	108	54	22.15	22.26	22.19	23.5	0.0	
40	QPSK	108	108	21.94	21.82	21.98	23.5	0.0	
40	QPSK	216	0	22.01	22.17	22.07	23.5	0.0	
40	16QAM	1	1	22.00	21.97	21.98	23.5	0.0	
40	64QAM	1	1	21.01	21.21	21.12	23.0	0.5	
40	256QAM	1	1	19.05	19.07	19.11	21.0	2.5	
Channel				345500	349000	352500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1727.5	1745	1762.5			
35	QPSK	1	1	22.26	22.30	22.28	23.5	0.0	
Channel				345000	349000	353000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1725	1745	1765			
30	QPSK	1	1	22.32	22.30	22.26	23.5	0.0	
Channel				344500	349000	353500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1722.5	1745	1767.5			
25	QPSK	1	1	22.22	22.29	22.24	23.5	0.0	
Channel				344000	349000	354000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	1	22.31	22.38	22.21	23.5	0.0	
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	1	22.24	22.39	22.22	23.5	0.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	1	22.31	22.27	22.27	23.5	0.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	1	22.22	22.34	22.31	23.5	0.0	



n38 Ant 5 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2590.02	2595	2599.98			
40	PI2 BPSK	1	1	20.26	20.30	20.24			
40	PI2 BPSK	1	53	20.11	20.24	20.14		0.0	
40	PI2 BPSK	1	164	20.13	20.15	19.99			
40	PI2 BPSK	50	0	20.34	20.33	20.12	21.0	0.0	
40	PI2 BPSK	50	28	20.18	20.27	20.10	21.0	0.0	
40	PI2 BPSK	50	58	20.06	20.25	20.12	21.0	0.0	
40	PI2 BPSK	100	0	20.20	20.20	20.14			
40	QPSK	1	1	20.37	20.46	20.38			
40	QPSK	1	53	20.23	20.35	20.24	21.0	0.0	
40	QPSK	1	104	20.28	20.36	20.23			
40	QPSK	50	0	19.96	20.06	19.99	21.0	0.0	
40	QPSK	50	28	20.27	20.36	20.26	21.0	0.0	
40	QPSK	50	58	19.99	20.14	20.07	21.0	0.0	
40	QPSK	100	0	19.99	20.05	20.01			
40	16QAM	1	1	20.08	20.13	20.09	21.0	0.0	
40	16QAM	1	1	20.07	20.08	20.00	21.0	0.0	
40	256QAM	1	1	19.10	19.14	19.08	21.0	0.0	
Channel									
Frequency (MHz)				5170.0	5180.0	5200.0			
Channel				5165.04	5190.00	5214.96	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	20.24	20.32	20.32	21.0	0.0	
Channel									
Frequency (MHz)				5165.04	5190.00	5214.96	Tune-up limit (dBm)	MPR (dB)	
Channel				2572.42	2595	2607.48			
25	QPSK	1	1	20.33	20.39	20.23	21.0	0.0	
Channel									
Frequency (MHz)				5150.00	5190.00	5220.00	Tune-up limit (dBm)	MPR (dB)	
Channel				2580	2595	2610			
20	QPSK	1	1	20.24	20.36	20.22	21.0	0.0	
Channel									
Frequency (MHz)				5150.02	5190.00	5224.98	Tune-up limit (dBm)	MPR (dB)	
Channel				2572.42	2595	2612.49			
15	QPSK	1	1	20.33	20.39	20.30	21.0	0.0	
Channel									
Frequency (MHz)				5150.04	5190.00	5229.96	Tune-up limit (dBm)	MPR (dB)	
Channel				2575.02	2595	2614.98			
10	QPSK	1	1	19.83	19.89	19.80	21.0	0.0	

n41 Ant 5 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	19.85	19.91	19.76			
100	PI2 BPSK	1	137	19.73	19.83	19.65			
100	PI2 BPSK	1	271	19.88	19.77	19.54	21.0	0.0	
100	PI2 BPSK	135	0	19.88	19.91	19.69	21.0	0.0	
100	PI2 BPSK	135	69	19.65	19.81	19.66	21.0	0.0	
100	PI2 BPSK	135	138	19.70	19.77	19.64	21.0	0.0	
100	PI2 BPSK	270	0	19.74	19.70	19.67			
100	QPSK	1	1	19.86	20.01	19.96			
100	QPSK	1	137	19.79	19.91	19.89	21.0	0.0	
100	QPSK	1	271	19.83	19.96	19.81			
100	QPSK	135	0	19.57	19.61	19.57	21.0	0.0	
100	QPSK	135	69	19.86	19.91	19.78	21.0	0.0	
100	QPSK	135	138	19.63	19.71	19.62	21.0	0.0	
100	QPSK	270	0	19.63	19.72	19.55			
100	16QAM	1	1	19.57	19.71	19.61	21.0	0.0	
100	16QAM	1	1	19.57	19.68	19.56	21.0	0.0	
100	256QAM	1	1	19.82	19.86	19.78	21.0	0.0	
Channel									
Frequency (MHz)				5052.00	5185.98	5295.96	Tune-up limit (dBm)	MPR (dB)	
Channel				2541	2592.99	2644.98			
90	QPSK	1	1	19.79	19.89	19.85	21.0	0.0	
Channel									
Frequency (MHz)				5072.04	5185.98	5299.98	Tune-up limit (dBm)	MPR (dB)	
Channel				2532.02	2592.99	2643.99			
80	QPSK	1	1	19.77	19.88	19.80	21.0	0.0	
Channel									
Frequency (MHz)				5052.02	5185.98	5310.00	Tune-up limit (dBm)	MPR (dB)	
Channel				2531.01	2592.99	2655			
70	QPSK	1	1	19.77	19.89	19.84	21.0	0.0	
Channel									
Frequency (MHz)				5052.00	5185.98	5319.98	Tune-up limit (dBm)	MPR (dB)	
Channel				2535	2592.99	2659.99			
60	QPSK	1	1	19.78	19.86	19.88	21.0	0.0	
Channel									
Frequency (MHz)				5042.04	5185.98	5329.98	Tune-up limit (dBm)	MPR (dB)	
Channel				2521.02	2592.99	2654.99			
50	QPSK	1	1	19.78	19.85	19.85	21.0	0.0	
Channel									
Frequency (MHz)				5052.02	5185.98	5340.00	Tune-up limit (dBm)	MPR (dB)	
Channel				2516.01	2592.99	2670			
40	QPSK	1	1	19.78	19.88	19.87	21.0	0.0	
Channel									
Frequency (MHz)				5022.00	5185.98	5349.98	Tune-up limit (dBm)	MPR (dB)	
Channel				2511	2592.99	2674.98			
30	QPSK	1	1	19.81	19.83	19.85	21.0	0.0	
Channel									
Frequency (MHz)				5017.02	5185.98	5355.00	Tune-up limit (dBm)	MPR (dB)	
Channel				2508.51	2592.99	2677.5			
25	QPSK	1	1	19.79	19.86	19.85	21.0	0.0	
Channel									
Frequency (MHz)				5012.04	5185.98	5359.98	Tune-up limit (dBm)	MPR (dB)	
Channel				2509.02	2592.99	2679.99			
20	QPSK	1	1	19.78	19.88	19.84	21.0	0.0	
Channel									
Frequency (MHz)				5007.00	5185.98	5364.98	Tune-up limit (dBm)	MPR (dB)	
Channel				2503.5	2592.99	2682.48			
15	QPSK	1	1	19.78	19.85	19.85	21.0	0.0	
Channel									
Frequency (MHz)				5002.02	5185.98	5370.00	Tune-up limit (dBm)	MPR (dB)	
Channel				2501.01	2592.99	2685			
10	QPSK	1	1	19.82	19.87	19.84	21.0	0.0	

n41 HPUE Ant 5 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	22.93	23.10	22.95			
100	PI2 BPSK	1	137	22.84	23.12	22.97			
100	PI2 BPSK	1	271	22.89	23.06	22.99	24.0	0.0	
100	PI2 BPSK	135	0	22.91	23.06	22.98	24.0	0.0	
100	PI2 BPSK	135	69	22.83	23.08	22.98	24.0	0.0	
100	PI2 BPSK	135	138	22.82	23.08	22.99	24.0	0.0	
100	PI2 BPSK	270	0	22.91	23.09	22.94			
100	QPSK	1	1	22.83	23.09	22.97			
100	QPSK	1	137	22.91	23.06	22.97	24.0	0.0	
100	QPSK	1	271	22.94	23.08	22.99			
100	QPSK	135	0	22.85	23.06	23.00	24.0	0.0	
100	QPSK	135	69	22.91	23.09	22.95	24.0	0.0	
100	QPSK	135	138	22.80	23.06	22.94	24.0	0.0	
100	QPSK	270	0	22.89	23.07	23.00			
100	16QAM	1	1	22.89	23.06	22.98	24.0	0.0	
100	16QAM	1	1	22.91	23.11	22.98	24.0	0.0	
100	256QAM	1	1	20.78	20.79	20.81	22.0	2.0	
Channel									
Frequency (MHz)				5052.00	5185.98	5295.96	Tune-up limit (dBm)	MPR (dB)	
Channel				2541	2592.99	2644.98			
90	QPSK	1	1	22.83	22.99	22.87	24.0	0.0	
Channel									
Frequency (MHz)				5072.04	5185.98	5299.98	Tune-up limit (dBm)	MPR (dB)	
Channel				2532.02	2592.99	2649.99			
80	QPSK	1	1	22.81	23.02	22.89	24.0	0.0	
Channel									
Frequency (MHz)				5052.02	5185.98	5310.00	Tune-up limit (dBm)	MPR (dB)	
Channel				2531.01	2592.99	2655			
70	QPSK	1	1	22.80	23.00	22.88	24.0	0.0	
Channel									
Frequency (MHz)				5052.00	5185.98	5319.98	Tune-up limit (dBm)	MPR (dB)	
Channel				2535	2592.99	2659.99			
60	QPSK	1	1	22.88	23.02	22.87	24.0	0.0	
Channel									
Frequency (MHz)				5042.04	5185.98	5329.98	Tune-up limit (dBm)	MPR (dB)	
Channel				2521.02	2592.99	2654.99			
50	QPSK	1	1	22.84	22.99	22.87	24.0	0.0	
Channel									
Frequency (MHz)				5052.02	5185.98	5340.00	Tune-up limit (dBm)	MPR (dB)	
Channel				2516.01	2592.99	2670			
40	QPSK	1	1	22.85	22.97	22.85	24.0	0.0	
Channel									
Frequency (MHz)				5022.00	5185.98	5349.98	Tune-up limit (dBm)	MPR (dB)	
Channel				2511	2592.99	2674.98			
30	QPSK	1	1	22.84	22.99	22.87	24.0	0.0	
Channel									
Frequency (MHz)				5017.02	5185.98	5355.00	Tune-up limit (dBm)	MPR (dB)	
Channel				2508.51	2592.99	2677.5			
25	QPSK	1	1	22.82	23.00	22.84	24.0	0.0	
Channel									
Frequency (MHz)				5012.04	5185.98	5359.98	Tune-up limit (dBm)	MPR (dB)	
Channel				2509.02	2592.99	2679.99			
20	QPSK	1	1						



n48 Ant 6 DSI4								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
40	PI/2 BPSK	1	1	24.04	24.16	24.11	25.0	0.0
40	PI/2 BPSK	1	53	24.15	24.17	24.16		
40	PI/2 BPSK	1	104	24.06	24.23	24.14	24.5	0.5
40	PI/2 BPSK	50	0	23.88	23.76	23.69		
40	PI/2 BPSK	50	28	24.07	24.23	24.14	25.0	0.0
40	PI/2 BPSK	50	56	23.87	23.84	23.74		
40	PI/2 BPSK	100	0	23.69	23.79	23.70	24.5	0.5
40	QPSK	1	1	24.18	24.29	24.25		
40	QPSK	1	53	24.07	24.18	24.14	25.0	0.0
40	QPSK	1	104	24.10	24.20	24.16		
40	QPSK	50	0	23.11	23.03	23.08	24.0	1.0
40	QPSK	50	28	24.15	24.17	24.10		
40	QPSK	50	56	23.03	23.06	23.07	24.0	1.0
40	QPSK	100	0	23.15	23.17	23.11		
40	16QAM	1	1	23.11	23.12	23.08	24.0	1.0
40	16QAM	1	1	21.62	21.68	21.60		
40	256QAM	1	1	19.88	19.87	19.82	20.5	2.5
Channel								
Frequency (MHz)								
30	QPSK	1	1	24.08	24.24	24.11	25.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	24.06	24.25	24.20	25.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	24.13	24.16	24.17	25.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	24.06	24.22	24.12	25.0	0.0

Part270 n77 Ant 6 DSI4								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI/2 BPSK	1	1	25.24	25.29	25.24	26.0	0.0
100	PI/2 BPSK	1	137	25.22	25.35	25.16		
100	PI/2 BPSK	1	271	25.20	25.29	25.20	26.0	0.0
100	PI/2 BPSK	135	0	25.20	25.28	25.16		
100	PI/2 BPSK	135	69	25.29	25.31	25.25	26.0	0.0
100	PI/2 BPSK	135	138	25.25	25.33	25.19		
100	PI/2 BPSK	270	0	25.27	25.34	25.20	26.0	0.0
100	QPSK	1	1	25.33	25.38	25.30		
100	QPSK	1	137	25.25	25.34	25.17	26.0	0.0
100	QPSK	1	271	25.19	25.30	25.20		
100	QPSK	135	0	24.88	24.93	24.80	26.0	0.0
100	QPSK	135	69	25.05	25.09	25.01		
100	QPSK	135	138	24.86	24.84	24.80	26.0	0.0
100	QPSK	270	0	24.95	25.01	24.88		
100	16QAM	1	1	25.10	25.15	25.08	26.0	0.0
100	16QAM	1	1	24.71	24.83	24.77		
100	256QAM	1	1	22.86	22.72	22.60	23.5	2.5
Channel								
Frequency (MHz)								
90	QPSK	1	1	25.19	25.28	25.22	26.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	25.20	25.34	25.16	26.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	25.31	25.34	25.17	26.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	25.23	25.30	25.26	26.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	25.22	25.35	25.26	26.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	25.24	25.35	25.25	26.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	25.22	25.29	25.22	26.0	0.0
Channel								
Frequency (MHz)								
25	QPSK	1	1	25.22	25.26	25.22	26.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	25.27	25.32	25.17	26.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	25.30	25.32	25.20	26.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	25.24	25.36	25.23	26.0	0.0

Part270 n77 HPUE Ant 6 DSI4								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI/2 BPSK	1	1	27.13	27.32	27.17	28.5	0.0
100	PI/2 BPSK	1	137	27.16	27.25	27.27		
100	PI/2 BPSK	1	271	27.18	27.24	27.26	28.0	0.5
100	PI/2 BPSK	135	0	26.73	26.84	26.75		
100	PI/2 BPSK	135	69	27.20	27.29	27.23	28.5	0.0
100	PI/2 BPSK	135	138	26.80	26.81	26.81		
100	PI/2 BPSK	270	0	26.82	26.82	26.78	28.0	0.5
100	QPSK	1	1	27.28	27.35	27.30		
100	QPSK	1	137	27.25	27.23	27.27	28.5	0.0
100	QPSK	1	271	27.21	27.33	27.24		
100	QPSK	135	0	26.07	26.11	26.01	27.5	1.0
100	QPSK	135	69	26.95	27.03	26.99		
100	QPSK	135	138	26.09	26.12	26.01	27.5	1.0
100	QPSK	270	0	26.10	26.22	26.15		
100	16QAM	1	1	26.10	26.15	26.08	27.5	1.0
100	16QAM	1	1	24.51	24.63	24.58		
100	256QAM	1	1	22.86	22.74	22.70	24.0	4.5
Channel								
Frequency (MHz)								
90	QPSK	1	1	27.15	27.24	27.28	28.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	27.18	27.26	27.20	28.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	27.15	27.22	27.17	28.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	27.15	27.28	27.21	28.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	27.24	27.22	27.20	28.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	27.18	27.22	27.24	28.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	27.16	27.20	27.22	28.5	0.0
Channel								
Frequency (MHz)								
25	QPSK	1	1	27.24	27.23	27.24	28.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	27.20	27.28	27.25	28.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	27.22	27.31	27.23	28.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	27.20	27.22	27.17	28.5	0.0



Part27Q n77 Ant 6 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	25.24	3500.01				
100	PI2 BPSK	1	137	25.29			26.0	0.0	
100	PI2 BPSK	1	271	25.26					
100	PI2 BPSK	135	0	25.34			26.0	0.0	
100	PI2 BPSK	135	69	25.28			26.0	0.0	
100	PI2 BPSK	135	138	25.21			26.0	0.0	
100	PI2 BPSK	270	0	25.15			26.0	0.0	
100	QPSK	1	1	25.38					
100	QPSK	1	137	25.30			28.0	0.0	
100	QPSK	1	271	25.28					
100	QPSK	135	0	25.03			26.0	0.0	
100	QPSK	135	69	25.29			26.0	0.0	
100	QPSK	135	138	24.91			26.0	0.0	
100	QPSK	270	0	25.11			26.0	0.0	
100	16QAM	1	1	25.35			26.0	0.0	
100	16QAM	1	1	24.85			25.5	0.5	
100	256QAM	1	1	24.72			24.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	25.19	63334	63368	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
80	QPSK	1	1	25.17	63268	63400	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
70	QPSK	1	1	25.09	63000	63334	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
60	QPSK	1	1	25.15	63480	63502	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
50	QPSK	1	1	25.15	63134	63334	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
40	QPSK	1	1	25.14	63000	63334	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
30	QPSK	1	1	25.17	63100	63368	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
25	QPSK	1	1	25.18	63068	63334	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
20	QPSK	1	1	25.17	63000	63334	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
15	QPSK	1	1	25.16	63034	63334	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
10	QPSK	1	1	25.12	63501	63501	Tune-up limit (dBm)	MPR	

Part27Q n77 HPUE Ant 6 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	27.29	3500.01				
100	PI2 BPSK	1	137	27.30			28.5	0.0	
100	PI2 BPSK	1	271	27.35					
100	PI2 BPSK	135	0	28.85			28.0	0.5	
100	PI2 BPSK	135	69	27.22			28.5	0.0	
100	PI2 BPSK	135	138	28.92			28.0	0.5	
100	PI2 BPSK	270	0	28.84			28.0	0.0	
100	QPSK	1	1	27.41					
100	QPSK	1	137	27.40			28.5	0.0	
100	QPSK	1	271	27.35					
100	QPSK	135	0	28.38			27.5	1.0	
100	QPSK	135	69	27.33			28.5	0.0	
100	QPSK	135	138	28.25			27.5	1.0	
100	QPSK	270	0	28.39			26.0	0.0	
100	16QAM	1	1	28.30			27.5	1.0	
100	16QAM	1	1	24.98			26.0	2.5	
100	256QAM	1	1	24.87			24.0	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	27.29	63334	63368	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
80	QPSK	1	1	27.24	63268	63400	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
70	QPSK	1	1	27.17	63000	63334	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
60	QPSK	1	1	27.24	63480	63502	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
50	QPSK	1	1	27.18	63134	63334	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
40	QPSK	1	1	27.20	63000	63334	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
30	QPSK	1	1	27.16	63100	63368	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
25	QPSK	1	1	27.24	63068	63334	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
20	QPSK	1	1	27.21	63000	63334	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
15	QPSK	1	1	27.24	63034	63334	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
10	QPSK	1	1	27.15	63501	63501	Tune-up limit (dBm)	MPR	

Part270 n78 Ant 6 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	24.99	3750	3750			
100	PI2 BPSK	1	137	24.99			26.0	0.0	
100	PI2 BPSK	1	271	25.08					
100	PI2 BPSK	135	0	25.05			26.0	0.0	
100	PI2 BPSK	135	69	25.04			26.0	0.0	
100	PI2 BPSK	135	138	25.10			26.0	0.0	
100	PI2 BPSK	270	0	25.01			26.0	0.0	
100	QPSK	1	1	25.13					
100	QPSK	1	137	25.11			26.0	0.0	
100	QPSK	1	271	25.05					
100	QPSK	135	0	24.95			26.0	0.0	
100	QPSK	135	69	25.12			26.0	0.0	
100	QPSK	135	138	25.08			26.0	0.0	
100	QPSK	270	0	25.01			26.0	0.0	
100	16QAM	1	1	24.97			26.0	0.0	
100	16QAM	1	1	24.62			25.5	0.5	
100	256QAM	1	1	22.52			22.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	24.96	64900	65000	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.93	64834	65000	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.91	64808	65000	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
60	QPSK	1	1	24.94	64950	65000	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.92	64768	65000	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
40	QPSK	1	1	24.88	64800	65000	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
30	QPSK	1	1	24.87	64750	65000	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
25	QPSK	1	1	24.87	64725	65000	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
20	QPSK	1	1	24.88	64734	65000	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.81	64700	65000	Tune-up limit (dBm)	MPR	
Channel									
Frequency (MHz)									
10	QPSK	1	1	24.89	64705	65000	Tune-up limit (dBm)	MPR	



Part270 n78 HPUE Ant 6 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	26.90	27.50	27.50			
100	PI2 BPSK	1	137	26.98	27.50	27.50	28.5	0.0	
100	PI2 BPSK	1	271	27.00	27.50	27.50			
100	PI2 BPSK	135	0	26.53	27.50	27.50	28.0	0.5	
100	PI2 BPSK	135	69	26.94	27.50	27.50	28.5	0.0	
100	PI2 BPSK	135	138	26.81	27.50	27.50	28.0	0.5	
100	PI2 BPSK	270	0	26.50	27.50	27.50			
100	QPSK	1	1	27.38	27.50	27.50			
100	QPSK	1	137	27.02	27.50	27.50	28.5	0.0	
100	QPSK	1	271	26.95	27.50	27.50			
100	QPSK	135	0	25.82	27.50	27.50	27.5	1.0	
100	QPSK	135	69	27.00	27.50	27.50	28.5	0.0	
100	QPSK	135	138	25.94	27.50	27.50	27.5	1.0	
100	QPSK	270	0	26.28	27.50	27.50			
100	16QAM	1	1	26.05	27.50	27.50	27.5	1.0	
100	16QAM	1	1	24.51	27.50	27.50	26.0	2.5	
100	256QAM	1	1	22.54	27.50	27.50	24.0	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	26.91	27.00	26.96	28.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	26.81	26.88	26.85	28.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	26.77	26.86	26.83	28.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	26.79	26.85	26.84	28.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	26.85	26.94	26.91	28.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	26.87	26.94	26.91	28.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	26.77	26.83	26.82	28.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	26.86	26.94	26.90	28.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	26.85	26.88	26.81	28.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	26.82	26.86	26.84	28.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	26.79	26.84	26.83	28.5	0.0	

Part270Q n78 Ant 6 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	25.16	25.00	25.00			
100	PI2 BPSK	1	137	25.06	25.00	25.00	26.0	0.0	
100	PI2 BPSK	1	271	25.07	25.00	25.00			
100	PI2 BPSK	135	0	25.12	25.00	25.00	26.0	0.0	
100	PI2 BPSK	135	69	25.20	25.00	25.00	26.0	0.0	
100	PI2 BPSK	135	138	25.07	25.00	25.00	26.0	0.0	
100	PI2 BPSK	270	0	24.07	25.00	25.00			
100	QPSK	1	1	25.19	25.00	25.00			
100	QPSK	1	137	25.06	25.00	25.00	26.0	0.0	
100	QPSK	1	271	25.10	25.00	25.00			
100	QPSK	135	0	24.87	25.00	25.00	26.0	0.0	
100	QPSK	135	69	24.95	25.00	25.00	26.0	0.0	
100	QPSK	135	138	24.86	25.00	25.00	26.0	0.0	
100	QPSK	270	0	23.84	25.00	25.00			
100	16QAM	1	1	25.05	25.00	25.00	26.0	0.0	
100	16QAM	1	1	24.74	25.00	25.00	25.5	0.5	
100	256QAM	1	1	22.73	25.00	25.00	23.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	25.06	25.16	25.10	26.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.97	25.07	25.04	26.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.95	25.05	24.97	26.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	25.03	25.02	25.03	26.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.94	25.07	24.96	26.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	24.97	25.07	24.96	26.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	25.00	25.11	25.03	26.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	24.98	25.12	25.04	26.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	25.04	25.04	25.01	26.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.95	25.11	25.01	26.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	25.04	25.07	25.03	26.0	0.0	

Part270Q n78 HPUE Ant 6 DS14									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	27.03	27.00	27.00			
100	PI2 BPSK	1	137	27.00	27.00	27.00	28.5	0.0	
100	PI2 BPSK	1	271	27.13	27.00	27.00			
100	PI2 BPSK	135	0	26.66	27.00	27.00	28.0	0.5	
100	PI2 BPSK	135	69	27.05	27.00	27.00	28.5	0.0	
100	PI2 BPSK	135	138	26.72	27.00	27.00	28.0	0.5	
100	PI2 BPSK	270	0	26.73	27.00	27.00			
100	QPSK	1	1	27.16	27.00	27.00			
100	QPSK	1	137	27.06	27.00	27.00	28.5	0.0	
100	QPSK	1	271	27.08	27.00	27.00			
100	QPSK	135	0	25.96	27.00	27.00	27.5	1.0	
100	QPSK	135	69	26.98	27.00	27.00	28.5	0.0	
100	QPSK	135	138	25.99	27.00	27.00	27.5	1.0	
100	QPSK	270	0	26.05	27.00	27.00			
100	16QAM	1	1	25.98	27.00	27.00	27.5	1.0	
100	16QAM	1	1	24.44	27.00	27.00	26.0	2.5	
100	256QAM	1	1	22.46	27.00	27.00	24.0	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	27.02	27.10	27.06	28.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	26.89	27.05	26.98	28.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	26.89	27.00	26.89	28.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	26.90	27.00	26.92	28.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	26.96	26.97	26.99	28.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	26.91	27.05	26.96	28.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	26.87	26.89	26.87	28.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	26.92	27.00	27.03	28.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	26.97	26.97	26.98	28.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	26.89	27.04	27.03	28.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	26.91	27.01	26.93	28.5	0.0	



n48 Ant 7 DSI4								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. / 65000	Power Middle Ch. / Freq. / 64166	Power High Ch. / Freq. / 60798	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
40	PI/2 BPSK	1	1	23.24	23.39	23.32	25.0	0.0
40	PI/2 BPSK	1	53	23.25	23.44	23.30	25.0	0.0
40	PI/2 BPSK	1	104	23.33	23.38	23.29	25.0	0.0
40	PI/2 BPSK	50	0	22.90	23.00	22.86	24.5	0.5
40	PI/2 BPSK	50	28	23.26	23.38	23.38	25.0	0.0
40	PI/2 BPSK	50	56	22.87	22.91	22.96	24.5	0.5
40	PI/2 BPSK	100	0	22.91	22.98	22.86	25.0	0.0
40	QPSK	1	1	23.38	23.46	23.41	25.0	0.0
40	QPSK	1	53	23.33	23.46	23.38	25.0	0.0
40	QPSK	1	104	23.33	23.34	23.38	25.0	0.0
40	QPSK	50	0	22.33	22.36	22.25	24.0	1.0
40	QPSK	50	28	22.35	22.39	22.33	25.0	0.0
40	QPSK	50	56	22.33	22.34	22.28	24.0	1.0
40	16QAM	1	1	22.22	22.30	22.26	24.0	1.0
40	16QAM	1	1	20.74	20.79	20.68	22.5	2.5
40	256QAM	1	1	18.72	18.77	18.65	20.5	4.5
Channel								
Frequency (MHz)								
30	QPSK	1	1	23.33	23.35	23.34	25.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	23.34	23.39	23.38	25.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	23.34	23.39	23.38	25.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	23.28	23.32	23.31	25.0	0.0

Part270 n77 Ant 7 DSI4								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. / 65000	Power Middle Ch. / Freq. / 65000	Power High Ch. / Freq. / 65000	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI/2 BPSK	1	1	23.97	24.07	23.97	25.0	0.0
100	PI/2 BPSK	1	137	23.97	24.01	24.00	25.0	0.0
100	PI/2 BPSK	1	271	24.00	23.98	23.98	25.0	0.0
100	PI/2 BPSK	135	0	23.93	23.96	23.95	25.0	0.0
100	PI/2 BPSK	135	69	23.96	23.97	23.96	25.0	0.0
100	PI/2 BPSK	135	138	24.01	23.96	23.94	25.0	0.0
100	PI/2 BPSK	270	0	23.93	24.06	23.94	25.0	0.0
100	QPSK	1	1	24.06	24.09	24.04	25.0	0.0
100	QPSK	1	137	23.95	23.97	23.91	25.0	0.0
100	QPSK	1	271	23.95	24.05	24.00	25.0	0.0
100	QPSK	135	0	23.70	23.78	23.62	25.0	0.0
100	QPSK	135	69	23.80	23.84	23.78	25.0	0.0
100	QPSK	135	138	23.70	23.76	23.65	25.0	0.0
100	QPSK	270	0	23.96	23.95	23.91	25.0	0.0
100	16QAM	1	1	23.91	23.94	23.88	25.0	0.0
100	16QAM	1	1	23.52	23.56	23.48	24.5	0.5
100	256QAM	1	1	21.48	21.52	21.40	22.5	2.5
Channel								
Frequency (MHz)								
90	QPSK	1	1	24.01	24.06	23.97	25.0	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	24.02	24.02	24.01	25.0	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	23.93	24.04	23.93	25.0	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	23.96	24.06	24.00	25.0	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	24.00	24.08	23.99	25.0	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	24.02	24.04	23.98	25.0	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	23.95	24.07	23.90	25.0	0.0
Channel								
Frequency (MHz)								
25	QPSK	1	1	23.93	24.07	23.96	25.0	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	24.03	24.04	23.91	25.0	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	24.04	24.02	23.93	25.0	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	24.03	24.04	23.92	25.0	0.0

Part270 n77 HPUE Ant 7 DSI4								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. / 65000	Power Middle Ch. / Freq. / 65000	Power High Ch. / Freq. / 65000	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
100	PI/2 BPSK	1	1	25.96	25.96	25.87	27.5	0.0
100	PI/2 BPSK	1	137	26.00	26.01	25.98	27.5	0.0
100	PI/2 BPSK	1	271	25.94	25.93	25.95	27.5	0.0
100	PI/2 BPSK	135	0	25.86	25.87	25.87	27.0	0.5
100	PI/2 BPSK	135	69	26.00	26.01	25.86	27.5	0.0
100	PI/2 BPSK	135	138	25.98	25.92	25.85	27.0	0.5
100	PI/2 BPSK	270	0	25.49	25.56	25.51	27.0	0.5
100	QPSK	1	1	26.03	26.06	25.98	27.5	0.0
100	QPSK	1	137	25.94	26.01	25.94	27.5	0.0
100	QPSK	1	271	25.95	25.97	25.95	27.5	0.0
100	QPSK	135	0	24.83	24.81	24.71	26.5	1.0
100	QPSK	135	69	25.82	25.89	25.86	27.5	0.0
100	QPSK	135	138	24.78	24.87	24.77	26.5	1.0
100	QPSK	270	0	24.88	24.91	24.83	26.5	1.0
100	16QAM	1	1	24.90	24.92	24.84	26.5	1.0
100	16QAM	1	1	23.42	23.51	23.48	25.0	2.5
100	256QAM	1	1	21.40	21.44	21.30	23.0	4.5
Channel								
Frequency (MHz)								
90	QPSK	1	1	25.99	25.92	25.89	27.5	0.0
Channel								
Frequency (MHz)								
80	QPSK	1	1	25.92	26.01	25.88	27.5	0.0
Channel								
Frequency (MHz)								
70	QPSK	1	1	25.93	26.01	25.89	27.5	0.0
Channel								
Frequency (MHz)								
60	QPSK	1	1	25.93	25.96	25.88	27.5	0.0
Channel								
Frequency (MHz)								
50	QPSK	1	1	25.90	25.98	25.88	27.5	0.0
Channel								
Frequency (MHz)								
40	QPSK	1	1	25.93	26.00	25.90	27.5	0.0
Channel								
Frequency (MHz)								
30	QPSK	1	1	25.92	26.00	25.84	27.5	0.0
Channel								
Frequency (MHz)								
25	QPSK	1	1	25.89	26.01	25.92	27.5	0.0
Channel								
Frequency (MHz)								
20	QPSK	1	1	25.91	25.99	25.84	27.5	0.0
Channel								
Frequency (MHz)								
15	QPSK	1	1	25.91	26.03	25.85	27.5	0.0
Channel								
Frequency (MHz)								
10	QPSK	1	1	25.95	25.92	25.93	27.5	0.0



Part27Q n77 Ant 7 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	24.06	3500.01				
100	PI2 BPSK	1	137	24.10			25.0	0.0	
100	PI2 BPSK	1	271	24.06					
100	PI2 BPSK	135	0	24.07			25.0	0.0	
100	PI2 BPSK	135	69	24.10			25.0	0.0	
100	PI2 BPSK	135	138	24.11			25.0	0.0	
100	PI2 BPSK	270	0	24.16			25.0	0.0	
100	QPSK	1	1	24.19					
100	QPSK	1	137	24.12			25.0	0.0	
100	QPSK	1	271	24.12					
100	QPSK	135	0	24.05			25.0	0.0	
100	QPSK	135	69	24.14			25.0	0.0	
100	QPSK	135	138	24.11			25.0	0.0	
100	QPSK	270	0	24.20			25.0	0.0	
100	16QAM	1	1	24.06			25.0	0.0	
100	16QAM	1	1	23.67			24.5	0.5	
100	256QAM	1	1	23.72			22.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	24.08	6333.34	6336.68	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	24.16	3500.01	3505.02	(dBm)	(dB)	
90	QPSK	1	1	24.08	24.16	24.10	25.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	23.98	6320.68	6340.00	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	23.98	3500.01	3515.01	(dBm)	(dB)	
80	QPSK	1	1	23.98	24.07	24.02	25.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	23.94	6323.34	6343.34	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	23.94	3500.01	3515.01	(dBm)	(dB)	
70	QPSK	1	1	23.94	24.07	24.01	25.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	23.90	6320.00	6346.68	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	23.90	3500.01	3520.02	(dBm)	(dB)	
60	QPSK	1	1	23.90	24.02	24.08	25.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.04	6313.34	6333.34	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	24.04	3500.01	3515.01	(dBm)	(dB)	
50	QPSK	1	1	24.04	24.04	24.05	25.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	23.99	6310.00	6336.68	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	23.99	3500.01	3535.02	(dBm)	(dB)	
40	QPSK	1	1	23.99	24.06	24.02	25.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	24.00	6306.68	6330.00	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	24.00	3500.01	3530.01	(dBm)	(dB)	
30	QPSK	1	1	24.00	24.05	24.03	25.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	24.00	6302.01	6337.51	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	24.00	3500.01	3537.51	(dBm)	(dB)	
25	QPSK	1	1	24.00	24.06	24.06	25.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.95	6300.00	6336.68	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	23.95	3500.01	3540.02	(dBm)	(dB)	
20	QPSK	1	1	23.95	24.04	23.98	25.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.96	6303.34	6333.34	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	23.96	3500.01	3545.01	(dBm)	(dB)	
15	QPSK	1	1	23.96	24.05	24.02	25.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.88	6305.01	6330.01	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	23.88	3500.01	3545.01	(dBm)	(dB)	
10	QPSK	1	1	23.88	24.02	24.00	25.0	0.0	

Part27Q n77 HPUE Ant 7 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	26.16	3500.01				
100	PI2 BPSK	1	137	26.21			27.5	0.0	
100	PI2 BPSK	1	271	26.19					
100	PI2 BPSK	135	0	26.23			27.0	0.5	
100	PI2 BPSK	135	69	26.26			27.5	0.0	
100	PI2 BPSK	135	138	26.20			27.0	0.5	
100	PI2 BPSK	270	0	26.25			27.0	0.5	
100	QPSK	1	1	26.31					
100	QPSK	1	137	26.15			27.5	0.0	
100	QPSK	1	271	26.18					
100	QPSK	135	0	26.21			26.5	1.0	
100	QPSK	135	69	26.26			27.5	0.0	
100	QPSK	135	138	26.20			26.5	1.0	
100	QPSK	270	0	26.24			26.5	1.0	
100	16QAM	1	1	26.23			26.5	1.0	
100	16QAM	1	1	23.80			23.0	4.5	
100	256QAM	1	1	23.83			23.0	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	26.23	6333.34	6336.68	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	26.23	3500.01	3505.02	(dBm)	(dB)	
90	QPSK	1	1	26.23	26.24	26.13	27.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	26.22	6320.68	6340.00	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	26.22	3500.01	3515.01	(dBm)	(dB)	
80	QPSK	1	1	26.22	26.22	26.13	27.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	26.16	6323.34	6343.34	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	26.16	3500.01	3515.01	(dBm)	(dB)	
70	QPSK	1	1	26.16	26.22	26.13	27.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	26.22	6320.00	6346.68	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	26.22	3500.01	3520.02	(dBm)	(dB)	
60	QPSK	1	1	26.22	26.16	26.10	27.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	26.17	6313.34	6333.34	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	26.17	3500.01	3515.01	(dBm)	(dB)	
50	QPSK	1	1	26.17	26.28	26.16	27.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	26.22	6310.00	6336.68	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	26.22	3500.01	3535.02	(dBm)	(dB)	
40	QPSK	1	1	26.22	26.15	26.11	27.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	26.12	6306.68	6330.00	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	26.12	3500.01	3530.01	(dBm)	(dB)	
30	QPSK	1	1	26.12	26.15	26.17	27.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	26.12	6302.01	6337.51	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	26.12	3500.01	3537.51	(dBm)	(dB)	
25	QPSK	1	1	26.12	26.24	26.17	27.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	26.23	6300.00	6336.68	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	26.23	3500.01	3540.02	(dBm)	(dB)	
20	QPSK	1	1	26.23	26.25	26.13	27.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	26.11	6303.34	6333.34	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	26.11	3500.01	3545.01	(dBm)	(dB)	
15	QPSK	1	1	26.11	26.21	26.17	27.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	26.20	6305.01	6330.01	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	26.20	3500.01	3545.01	(dBm)	(dB)	
10	QPSK	1	1	26.20	26.24	26.12	27.5	0.0	

Part270 n78 Ant 7 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	24.48	3750	3750			
100	PI2 BPSK	1	137	24.48					
100	PI2 BPSK	1	271	24.46			25.5	0.0	
100	PI2 BPSK	1	271	24.55					
100	PI2 BPSK	135	0	24.49			25.5	0.0	
100	PI2 BPSK	135	69	24.47			25.5	0.0	
100	PI2 BPSK	135	138	24.55			25.5	0.0	
100	PI2 BPSK	270	0	24.51			25.0	0.0	
100	QPSK	1	1	24.58					
100	QPSK	1	137	24.54			25.5	0.0	
100	QPSK	1	271	24.48					
100	QPSK	135	0	24.39			25.5	0.0	
100	QPSK	135	69	24.43			25.5	0.0	
100	QPSK	135	138	24.38			25.5	0.0	
100	QPSK	270	0	24.51			25.0	0.0	
100	16QAM	1	1	24.44			25.0	0.5	
100	16QAM	1	1	23.98			23.0	2.5	</



Part270 n78 HPUE Ant 7 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	24.44	24.44	24.44			
100	Pi2 BPSK	1	137	26.46	26.46	26.46	27.5	0.0	
100	Pi2 BPSK	1	271	26.44	26.44	26.44			
100	Pi2 BPSK	135	0	26.48	26.48	26.48	27.0	0.5	
100	Pi2 BPSK	135	69	26.50	26.50	26.50	27.5	0.0	
100	Pi2 BPSK	135	138	26.50	26.50	26.50	27.0	0.5	
100	Pi2 BPSK	270	0	26.43	26.43	26.43			
100	QPSK	1	1	26.53	26.53	26.53			
100	QPSK	1	137	26.46	26.46	26.46	27.5	0.0	
100	QPSK	1	271	26.43	26.43	26.43			
100	QPSK	135	0	26.38	26.38	26.38	26.5	1.0	
100	QPSK	135	69	26.47	26.47	26.47	27.5	0.0	
100	QPSK	135	138	26.43	26.43	26.43	26.5	1.0	
100	QPSK	270	0	26.46	26.46	26.46			
100	16QAM	1	1	25.37	25.37	25.37	26.5	1.0	
100	16QAM	1	137	23.93	23.93	23.93	25.0	2.5	
100	16QAM	1	271	23.87	23.87	23.87	24.0	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	3486.02	3486.02	3486.02	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	26.30	26.30	26.30	27.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	26.26	26.26	26.26	26.34	26.35	27.5
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.22	24.22	24.22	24.30	27.5	0.0
Channel									
Frequency (MHz)									
60	QPSK	1	1	26.35	26.35	26.35	26.30	27.5	0.0
Channel									
Frequency (MHz)									
50	QPSK	1	1	26.29	26.29	26.29	26.34	27.5	0.0
Channel									
Frequency (MHz)									
40	QPSK	1	1	26.27	26.27	26.27	26.33	27.5	0.0
Channel									
Frequency (MHz)									
30	QPSK	1	1	26.32	26.32	26.32	26.27	27.5	0.0
Channel									
Frequency (MHz)									
25	QPSK	1	1	26.26	26.26	26.26	26.33	27.5	0.0
Channel									
Frequency (MHz)									
20	QPSK	1	1	26.31	26.31	26.31	26.33	27.5	0.0
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.39	24.43	24.37	24.33	27.5	0.0
Channel									
Frequency (MHz)									
10	QPSK	1	1	24.29	24.34	24.34	24.34	27.5	0.0

Part27Q n78 Ant 7 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	24.48	24.48	24.48			
100	Pi2 BPSK	1	137	24.53	24.53	24.53	25.5	0.0	
100	Pi2 BPSK	1	271	24.53	24.53	24.53			
100	Pi2 BPSK	135	0	24.50	24.50	24.50	25.5	0.0	
100	Pi2 BPSK	135	69	24.42	24.42	24.42	25.5	0.0	
100	Pi2 BPSK	135	138	24.48	24.48	24.48	25.5	0.0	
100	Pi2 BPSK	270	0	24.43	24.43	24.43			
100	QPSK	1	1	24.56	24.56	24.56			
100	QPSK	1	137	24.46	24.46	24.46	25.5	0.0	
100	QPSK	1	271	24.49	24.49	24.49			
100	QPSK	135	0	24.31	24.31	24.31	25.5	0.0	
100	QPSK	135	69	24.35	24.35	24.35	25.5	0.0	
100	QPSK	135	138	24.29	24.29	24.29	25.5	0.0	
100	QPSK	270	0	24.47	24.47	24.47			
100	16QAM	1	1	24.51	24.51	24.51	25.0	0.0	
100	16QAM	1	137	23.98	23.98	23.98	25.0	0.5	
100	16QAM	1	271	23.92	23.92	23.92	23.0	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	3486.02	3486.02	3486.02	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	24.32	24.39	24.34	24.34	25.5	0.0
Channel									
Frequency (MHz)									
80	QPSK	1	1	24.41	24.36	24.35	24.35	25.5	0.0
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.23	24.42	24.31	24.31	25.5	0.0
Channel									
Frequency (MHz)									
60	QPSK	1	1	24.29	24.34	24.34	24.34	25.5	0.0
Channel									
Frequency (MHz)									
50	QPSK	1	1	24.38	24.37	24.40	24.40	25.5	0.0
Channel									
Frequency (MHz)									
40	QPSK	1	1	24.30	24.38	24.31	24.31	25.5	0.0
Channel									
Frequency (MHz)									
30	QPSK	1	1	24.40	24.44	24.39	24.39	25.5	0.0
Channel									
Frequency (MHz)									
25	QPSK	1	1	24.35	24.38	24.36	24.36	25.5	0.0
Channel									
Frequency (MHz)									
20	QPSK	1	1	24.31	24.45	24.32	24.32	25.5	0.0
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.27	24.37	24.33	24.33	25.5	0.0
Channel									
Frequency (MHz)									
10	QPSK	1	1	24.37	24.38	24.38	24.38	25.5	0.0

Part27Q n78 HPUE Ant 7 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	26.48	26.48	26.48			
100	Pi2 BPSK	1	137	26.48	26.48	26.48	27.5	0.0	
100	Pi2 BPSK	1	271	26.42	26.42	26.42			
100	Pi2 BPSK	135	0	26.38	26.38	26.38	27.0	0.5	
100	Pi2 BPSK	135	69	26.43	26.43	26.43	27.5	0.0	
100	Pi2 BPSK	135	138	26.48	26.48	26.48	27.0	0.5	
100	Pi2 BPSK	270	0	26.40	26.40	26.40			
100	QPSK	1	1	26.51	26.51	26.51			
100	QPSK	1	137	26.42	26.42	26.42	27.5	0.0	
100	QPSK	1	271	26.46	26.46	26.46			
100	QPSK	135	0	25.29	25.29	25.29	26.5	1.0	
100	QPSK	135	69	26.23	26.23	26.23	27.5	0.0	
100	QPSK	135	138	25.23	25.23	25.23	26.5	1.0	
100	QPSK	270	0	25.35	25.35	25.35			
100	16QAM	1	1	25.22	25.22	25.22	26.5	1.0	
100	16QAM	1	137	23.84	23.84	23.84	25.0	2.5	
100	16QAM	1	271	23.84	23.84	23.84	23.0	4.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	3486.02	3486.02	3486.02	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	26.35	26.30	26.28	27.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	26.30	26.35	26.34	27.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	24.24	24.27	24.30	24.30	27.5	0.0
Channel									
Frequency (MHz)									
60	QPSK	1	1	26.30	26.39	26.33	27.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	26.28	26.38	26.33	27.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	26.25	26.34	26.30	27.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	26.26	26.32	26.30	27.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	26.28	26.32	26.34	27.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	26.24	26.33	26.29	27.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	24.33	24.34	24.35	24.35	27.5	0.0
Channel									
Frequency (MHz)									
10	QPSK	1	1	26.31	26.30	26.34	27.5	0.0	



n48 Ant 8 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	20.10	20.00	19.96			
40	PI2 BPSK	1	53	19.88	19.96	19.88	21.5	0.0	
40	PI2 BPSK	1	104	19.88	19.96	19.82			
40	PI2 BPSK	50	0	19.88	20.16	19.90	21.5	0.0	
40	PI2 BPSK	50	28	19.90	19.93	19.84	21.5	0.0	
40	PI2 BPSK	50	56	19.80	19.99	19.78	21.5	0.0	
40	PI2 BPSK	100	0	19.94	19.93	19.93			
40	QPSK	1	1	20.17	20.19	20.16			
40	QPSK	1	53	20.02	20.01	20.01	21.5	0.0	
40	QPSK	1	104	19.88	20.04	20.03			
40	QPSK	50	0	19.77	19.76	19.81	21.5	0.0	
40	QPSK	50	28	19.95	20.02	19.92	21.5	0.0	
40	QPSK	50	56	19.86	19.67	19.74	21.5	0.0	
40	QPSK	100	0	19.81	19.83	19.83			
40	16QAM	1	1	19.80	19.83	19.83	21.5	0.0	
40	16QAM	1	1	19.82	19.87	19.71	21.5	0.0	
40	256QAM	1	1	17.96	18.02	17.94	19.5	2.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	20.08	19.99	20.11	21.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	20.08	20.03	20.02	21.5	0.0	
Channel									
Frequency (MHz)									
19	QPSK	1	1	20.04	20.00	20.09	21.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	20.02	20.06	20.02	21.5	0.0	

Part270 n77 Ant 8 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	20.68	20.66	20.52			
100	PI2 BPSK	1	137	20.49	20.56	20.49	22.0	0.0	
100	PI2 BPSK	1	271	20.50	20.54	20.43			
100	PI2 BPSK	135	0	20.66	20.64	20.46	22.0	0.0	
100	PI2 BPSK	135	69	20.38	20.50	20.52	22.0	0.0	
100	PI2 BPSK	135	138	20.43	20.60	20.40	22.0	0.0	
100	PI2 BPSK	270	0	20.52	20.56	20.50			
100	QPSK	1	1	20.65	20.79	20.75			
100	QPSK	1	137	20.58	20.64	20.62	22.0	0.0	
100	QPSK	1	271	20.60	20.74	20.54			
100	QPSK	135	0	20.33	20.38	20.30	22.0	0.0	
100	QPSK	135	69	20.63	20.73	20.52	22.0	0.0	
100	QPSK	135	138	20.16	20.21	20.35	22.0	0.0	
100	QPSK	270	0	20.40	20.40	20.35			
100	16QAM	1	1	20.31	20.33	20.34	22.0	0.0	
100	16QAM	1	1	20.38	20.43	20.32	22.0	0.0	
100	256QAM	1	1	20.37	20.53	20.34	22.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	20.58	20.67	20.62	22.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	20.57	20.76	20.62	22.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	20.60	20.72	20.63	22.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	20.65	20.73	20.67	22.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	20.52	20.69	20.66	22.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	20.52	20.64	20.60	22.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	20.56	20.75	20.72	22.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	20.55	20.76	20.72	22.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	20.56	20.73	20.64	22.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	20.45	20.74	20.69	22.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	20.54	20.67	20.61	22.0	0.0	

Part270 n77 HPUE Ant 8 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	23.74	23.62	23.66			
100	PI2 BPSK	1	137	23.51	23.51	23.44	25.0	0.0	
100	PI2 BPSK	1	271	23.48	23.58	23.40			
100	PI2 BPSK	135	0	23.61	23.70	23.45	25.0	0.0	
100	PI2 BPSK	135	69	23.38	23.58	23.53	25.0	0.0	
100	PI2 BPSK	135	138	23.50	23.64	23.38	25.0	0.0	
100	PI2 BPSK	270	0	23.50	23.52	23.53			
100	QPSK	1	1	23.60	23.84	23.81			
100	QPSK	1	137	23.64	23.67	23.67	25.0	0.0	
100	QPSK	1	271	23.68	23.72	23.58			
100	QPSK	135	0	23.29	23.30	23.36	25.0	0.0	
100	QPSK	135	69	23.88	23.78	23.48	25.0	0.0	
100	QPSK	135	138	23.22	23.21	23.36	25.0	0.0	
100	QPSK	270	0	23.47	23.51	23.34			
100	16QAM	1	1	23.31	23.30	23.35	25.0	0.0	
100	16QAM	1	1	23.20	23.25	23.18	24.5	0.5	
100	256QAM	1	1	21.13	21.16	21.11	22.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	23.54	23.75	23.70	25.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	23.49	23.73	23.73	25.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	23.53	23.73	23.84	25.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	23.50	23.77	23.66	25.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	23.49	23.71	23.74	25.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	23.49	23.74	23.66	25.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.51	23.70	23.74	25.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	23.51	23.70	23.73	25.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.53	23.68	23.64	25.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.45	23.66	23.67	25.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.50	23.77	23.72	25.0	0.0	



Part27Q n77 Ant 8 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	20.86	3500.01				
100	PI2 BPSK	1	137	20.81			22.0	0.0	
100	PI2 BPSK	1	271	20.76					
100	PI2 BPSK	135	0	20.91			22.0	0.0	
100	PI2 BPSK	135	69	20.77			22.0	0.0	
100	PI2 BPSK	135	138	20.84			22.0	0.0	
100	PI2 BPSK	270	0	20.77					
100	QPSK	1	1	21.96					
100	QPSK	1	137	20.87			22.0	0.0	
100	QPSK	1	271	20.87					
100	QPSK	135	0	20.59			22.0	0.0	
100	QPSK	135	69	20.92			22.0	0.0	
100	QPSK	135	138	20.45			22.0	0.0	
100	QPSK	270	0	20.72					
100	16QAM	1	1	20.54			22.0	0.0	
100	16QAM	1	1	20.63			22.0	0.0	
100	256QAM	1	1	20.77			22.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	20.50	6333.34	6336.68	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	20.89	3500.01	3505.02	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
70	QPSK	1	1	20.83	3500.01	3515.01	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	20.85	3500.01	3525.02	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
50	QPSK	1	1	20.89	3500.01	3535.02	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	QPSK	1	1	20.82	3500.01	3545.02	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
30	QPSK	1	1	20.87	3500.01	3555.02	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
25	QPSK	1	1	20.80	3500.01	3565.01	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	20.78	3500.01	3575.01	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
15	QPSK	1	1	20.84	3500.01	3585.01	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	20.80	3500.01	3595.01	Tune-up limit (dBm)	MPR (dB)	

Part27Q n77 HPUE Ant 8 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	23.86	3500.01				
100	PI2 BPSK	1	137	23.70			25.0	0.0	
100	PI2 BPSK	1	271	23.77					
100	PI2 BPSK	135	0	23.86			25.0	0.0	
100	PI2 BPSK	135	69	23.79			25.0	0.0	
100	PI2 BPSK	135	138	23.91			25.0	0.0	
100	PI2 BPSK	270	0	23.79					
100	QPSK	1	1	24.14					
100	QPSK	1	137	23.85			25.0	0.0	
100	QPSK	1	271	23.82					
100	QPSK	135	0	23.57			25.0	0.0	
100	QPSK	135	69	23.96			25.0	0.0	
100	QPSK	135	138	23.46			25.0	0.0	
100	QPSK	270	0	23.80					
100	16QAM	1	1	23.57			25.0	0.0	
100	16QAM	1	1	23.35			24.5	0.5	
100	256QAM	1	1	23.40			22.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	23.83	6333.34	6336.68	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	23.76	3500.01	3505.02	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
70	QPSK	1	1	23.85	3500.01	3515.01	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	23.79	3500.01	3525.02	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
50	QPSK	1	1	23.79	3500.01	3535.02	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	QPSK	1	1	23.82	3500.01	3545.02	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.78	3500.01	3555.02	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
25	QPSK	1	1	23.72	3500.01	3565.01	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.73	3500.01	3575.01	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.75	3500.01	3585.01	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.72	3500.01	3595.01	Tune-up limit (dBm)	MPR (dB)	

Part270 n78 Ant 8 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	23.79	3750	3750			
100	PI2 BPSK	1	137	20.80			22.0	0.0	
100	PI2 BPSK	1	271	20.59					
100	PI2 BPSK	135	0	20.84			22.0	0.0	
100	PI2 BPSK	135	69	20.61			22.0	0.0	
100	PI2 BPSK	135	138	20.63			22.0	0.0	
100	PI2 BPSK	270	0	20.62					
100	QPSK	1	1	20.92					
100	QPSK	1	137	20.77			22.0	0.0	
100	QPSK	1	271	20.86					
100	QPSK	135	0	20.54			22.0	0.0	
100	QPSK	135	69	20.82			22.0	0.0	
100	QPSK	135	138	20.32			22.0	0.0	
100	QPSK	270	0	20.64					
100	16QAM	1	1	20.46			22.0	0.0	
100	16QAM	1	1	20.53			22.0	0.0	
100	256QAM	1	1	20.64			22.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	20.78	64900	65000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	20.75	3745.02	3750	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
70	QPSK	1	1	20.74	64933.4	65000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	20.74	3745.02	3750	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
50	QPSK	1	1	20.78	64966.8	65000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	QPSK	1	1	20.78	3745.02	3750	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
30	QPSK	1	1	20.77	64966.8	65000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
25	QPSK	1	1	20.72	3745.02	3750	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	20.79	64966.8	65000	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
15	QPSK	1	1	20.75	3745.02	3750	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	20.76	64966.8	65000	Tune-up limit (dBm)	MPR (dB)	



Part270 n78 HPUE Ant 8 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	3750	3750	3750			
100	Pi2 BPSK	1	137	23.56	23.56	23.56	25.0	0.0	
100	Pi2 BPSK	1	271	23.59	23.59	23.59			
100	Pi2 BPSK	135	0	23.72	23.72	23.72	25.0	0.0	
100	Pi2 BPSK	135	69	23.84	23.84	23.84	25.0	0.0	
100	Pi2 BPSK	135	138	23.82	23.82	23.82	25.0	0.0	
100	Pi2 BPSK	270	0	23.81	23.81	23.81			
100	QPSK	1	1	23.88	23.88	23.88	25.0	0.0	
100	QPSK	1	137	23.89	23.89	23.89			
100	QPSK	1	271	23.77	23.77	23.77			
100	QPSK	135	0	23.46	23.46	23.46	25.0	0.0	
100	QPSK	135	69	23.78	23.78	23.78	25.0	0.0	
100	QPSK	135	138	23.26	23.26	23.26	25.0	0.0	
100	QPSK	270	0	23.85	23.85	23.85			
100	16QAM	1	1	23.43	23.43	23.43	25.0	0.0	
100	16QAM	1	1	23.05	23.05	23.05	24.5	0.5	
100	256QAM	1	1	23.15	23.15	23.15	22.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	3486.02	3486.02	3486.02	25.0	0.0	
90	QPSK	1	1	23.78	23.72	23.76	25.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	23.71	23.62	23.77	25.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	3486.01	3486.01	3486.01	25.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	23.89	23.69	23.74	25.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	23.72	23.64	23.70	25.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	23.74	23.71	23.75	25.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.72	23.60	23.61	25.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	23.76	23.73	23.75	25.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.72	23.69	23.80	25.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.67	23.70	23.75	25.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.75	23.62	23.78	25.0	0.0	

Part270Q n78 Ant 8 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	3000.01	3000.01	3000.01			
100	Pi2 BPSK	1	137	20.72	20.72	20.72	22.0	0.0	
100	Pi2 BPSK	1	271	20.59	20.59	20.59			
100	Pi2 BPSK	1	271	20.53	20.53	20.53			
100	Pi2 BPSK	135	0	20.79	20.79	20.79	22.0	0.0	
100	Pi2 BPSK	135	69	20.84	20.84	20.84	22.0	0.0	
100	Pi2 BPSK	135	138	20.60	20.60	20.60	22.0	0.0	
100	Pi2 BPSK	270	0	20.58	20.58	20.58			
100	QPSK	1	1	20.90	20.90	20.90	22.0	0.0	
100	QPSK	1	137	20.76	20.76	20.76			
100	QPSK	1	271	20.85	20.85	20.85			
100	QPSK	135	0	20.61	20.61	20.61	22.0	0.0	
100	QPSK	135	69	20.76	20.76	20.76	22.0	0.0	
100	QPSK	135	138	20.38	20.38	20.38	22.0	0.0	
100	QPSK	270	0	20.60	20.60	20.60			
100	16QAM	1	1	20.50	20.50	20.50	22.0	0.0	
100	16QAM	1	1	20.48	20.48	20.48	22.0	0.0	
100	256QAM	1	1	20.60	20.60	20.60	22.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	3486.02	3486.02	3486.02	25.0	0.0	
90	QPSK	1	1	20.70	20.69	20.78	22.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	20.71	20.66	20.74	22.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	20.78	20.63	20.77	22.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	20.72	20.66	20.77	22.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	20.73	20.64	20.75	22.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	20.77	20.68	20.74	22.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	20.76	20.64	20.69	22.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	20.70	20.60	20.71	22.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	20.68	20.64	20.74	22.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	20.78	20.60	20.81	22.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	20.68	20.63	20.81	22.0	0.0	

Part270Q n78 HPUE Ant 8 DSI4									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	3000.01	3000.01	3000.01			
100	Pi2 BPSK	1	137	23.70	23.70	23.70	25.0	0.0	
100	Pi2 BPSK	1	271	23.49	23.49	23.49			
100	Pi2 BPSK	1	271	23.58	23.58	23.58			
100	Pi2 BPSK	135	0	23.65	23.65	23.65	25.0	0.0	
100	Pi2 BPSK	135	69	23.66	23.66	23.66	25.0	0.0	
100	Pi2 BPSK	135	138	23.62	23.62	23.62	25.0	0.0	
100	Pi2 BPSK	270	0	23.62	23.62	23.62			
100	QPSK	1	1	23.94	23.94	23.94	25.0	0.0	
100	QPSK	1	137	23.76	23.76	23.76			
100	QPSK	1	271	23.78	23.78	23.78			
100	QPSK	135	0	23.51	23.51	23.51	25.0	0.0	
100	QPSK	135	69	23.80	23.80	23.80	25.0	0.0	
100	QPSK	135	138	23.21	23.21	23.21	25.0	0.0	
100	QPSK	270	0	23.57	23.57	23.57			
100	16QAM	1	1	23.48	23.48	23.48	25.0	0.0	
100	16QAM	1	1	23.12	23.12	23.12	24.5	0.5	
100	256QAM	1	1	23.26	23.26	23.26	22.5	2.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	3486.02	3486.02	3486.02	25.0	0.0	
90	QPSK	1	1	23.80	23.73	23.69	25.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	23.74	23.62	23.77	25.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	23.70	23.65	23.67	25.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	23.68	23.61	23.79	25.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	23.81	23.66	23.72	25.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	23.72	23.75	23.68	25.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	23.76	23.72	23.70	25.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	23.70	23.73	23.67	25.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	23.75	23.67	23.71	25.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	23.78	23.69	23.72	25.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	23.73	23.66	23.67	25.0	0.0	



Reduced Power Mode for DSI6

n5 Ant 0 DSI6									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				167800	167300	167800			
Frequency (MHz)				834	838.5	838			
20	PI/2 BPSK	1	1	24.43	24.55	24.58			
20	PI/2 BPSK	1	53	24.55	24.63	24.64	25.2	0.0	
20	PI/2 BPSK	1	104	24.55	24.58	24.60			
20	PI/2 BPSK	50	0	24.61	24.67	24.68	25.2	0.0	
20	PI/2 BPSK	50	28	24.49	24.58	24.54	25.2	0.0	
20	PI/2 BPSK	50	56	24.61	24.61	24.68	25.2	0.0	
20	PI/2 BPSK	100	0	24.58	24.61	24.63			
20	QPSK	1	1	24.60	24.69	24.66			
20	QPSK	1	53	24.47	24.49	24.50	25.2	0.0	
20	QPSK	1	104	24.52	24.62	24.64			
20	QPSK	50	0	24.16	24.15	24.16	24.7	0.5	
20	QPSK	50	28	24.45	24.58	24.38	25.2	0.0	
20	QPSK	50	56	24.13	24.18	24.12	24.7	0.5	
20	QPSK	100	0	24.16	24.25	24.21			
20	16QAM	1	1	24.17	24.20	24.19	24.7	0.5	
20	64QAM	1	1	22.60	22.73	22.61	23.2	2.0	
20	256QAM	1	1	20.58	20.71	20.68	21.2	4.0	
Channel				168300	167300	168300	Tune-up limit (dBm)	MPR	
Frequency (MHz)				831.5	838.5	841.5			
15	QPSK	1	1	24.46	24.52	24.49	25.2	0.0	
Channel				168800	167300	168800	Tune-up limit (dBm)	MPR	
Frequency (MHz)				829	836.5	844			
10	QPSK	1	1	24.45	24.63	24.57	25.2	0.0	
Channel				169300	167300	169300	Tune-up limit (dBm)	MPR	
Frequency (MHz)				826.5	838.5	846.5			
5	QPSK	1	1	24.44	24.57	24.53	25.2	0.0	

n26 Ant 0 DSI6									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				164800	165300	164800			
Frequency (MHz)				824	831.5	839			
20	PI/2 BPSK	1	1	24.97	25.15	25.04			
20	PI/2 BPSK	1	53	24.98	25.18	25.18	25.7	0.0	
20	PI/2 BPSK	1	104	25.12	25.13	25.11			
20	PI/2 BPSK	50	0	24.46	24.55	24.42	25.2	0.5	
20	PI/2 BPSK	50	28	24.93	24.99	24.94	25.7	0.0	
20	PI/2 BPSK	50	56	24.41	24.52	24.42	25.2	0.5	
20	PI/2 BPSK	100	0	24.57	24.57	24.49			
20	QPSK	1	1	25.15	25.19	25.14			
20	QPSK	1	53	25.02	25.05	25.04	25.7	0.0	
20	QPSK	1	104	25.01	25.08	25.09			
20	QPSK	50	0	23.90	24.07	23.90	24.7	1.0	
20	QPSK	50	28	25.00	25.07	24.90	24.7	0.0	
20	QPSK	50	56	23.85	24.03	23.86	24.7	1.0	
20	QPSK	100	0	23.99	24.03	23.90			
20	16QAM	1	1	23.92	23.95	23.92	24.7	1.0	
20	64QAM	1	1	22.63	22.73	22.65	23.2	2.5	
20	256QAM	1	1	20.64	20.66	20.60	21.2	4.5	
Channel				164300	165300	164300	Tune-up limit (dBm)	MPR	
Frequency (MHz)				821.5	831.5	841.5			
15	QPSK	1	1	25.06	25.07	25.02	25.7	0.0	
Channel				163800	166300	163800	Tune-up limit (dBm)	MPR	
Frequency (MHz)				819	831.5	844			
10	QPSK	1	1	25.00	25.17	25.03	25.7	0.0	
Channel				163300	165300	163300	Tune-up limit (dBm)	MPR	
Frequency (MHz)				816.5	831.5	846.5			
5	QPSK	1	1	25.02	25.12	25.03	25.7	0.0	

n5 Ant 1 DS16									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				166800	167300	167800			
Frequency (MHz)				834	836.5	839			
20	Pi/2 BPSK	1	1	19.11	19.18	19.05			
20	Pi/2 BPSK	1	53	19.02	18.99	18.89	20.2	0.0	
20	Pi/2 BPSK	1	104	18.91	19.01	18.83			
20	Pi/2 BPSK	50	0	19.06	19.18	18.94	20.2	0.0	
20	Pi/2 BPSK	50	26	18.88	18.97	18.94	20.2	0.0	
20	Pi/2 BPSK	50	56	18.87	19.05	18.95			
20	Pi/2 BPSK	100	0	18.91	18.98	18.96	20.2	0.0	
20	QPSK	1	1	19.17	19.22	19.18			
20	QPSK	1	53	18.99	19.11	19.03	20.2	0.0	
20	QPSK	1	104	19.05	19.15	19.01			
20	QPSK	50	0	18.72	18.85	18.87	20.2	0.0	
20	QPSK	50	26	18.99	19.10	18.97	20.2	0.0	
20	QPSK	50	56	18.88	18.95	18.83			
20	QPSK	100	0	18.76	18.88	18.75	20.2	0.0	
20	16QAM	1	1	18.88	18.93	18.82	20.2	0.0	
20	64QAM	1	1	18.90	18.88	18.82	20.2	0.0	
20	256QAM	1	1	18.88	18.95	18.83	20.2	0.0	
Channel				163300	167300	168300	Tune-up limit (dBm)	MPR	
Frequency (MHz)				831.5	836.5	841.5	(dB)	(dB)	
15	QPSK	1	1	19.09	19.10	19.04	20.2	0.0	
Channel				165800	167300	168800	Tune-up limit (dBm)	MPR	
Frequency (MHz)				829	836.5	844	(dB)	(dB)	
10	QPSK	1	1	19.04	19.14	19.10	20.2	0.0	
Channel				163300	167300	168300	Tune-up limit (dBm)	MPR	
Frequency (MHz)				826.5	836.5	846.5	(dB)	(dB)	
5	QPSK	1	1	19.07	19.07	19.04	20.2	0.0	

n26 Ant 1 DS16									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				164500	166300	167800			
Frequency (MHz)				824	831.5	839			
20	Pi/2 BPSK	1	1	19.50	19.59	19.38			
20	Pi/2 BPSK	1	53	19.42	19.44	19.28	20.7	0.0	
20	Pi/2 BPSK	1	104	19.41	19.45	19.31			
20	Pi/2 BPSK	50	0	19.51	19.58	19.41	20.7	0.0	
20	Pi/2 BPSK	50	26	19.38	19.48	19.34	20.7	0.0	
20	Pi/2 BPSK	50	56	19.28	19.48	19.26			
20	Pi/2 BPSK	100	0	19.38	19.48	19.36	20.7	0.0	
20	QPSK	1	1	19.55	19.66	19.58			
20	QPSK	1	53	19.40	19.52	19.46	20.7	0.0	
20	QPSK	1	104	19.47	19.56	19.42			
20	QPSK	50	0	19.20	19.32	19.26	20.7	0.0	
20	QPSK	50	26	19.41	19.57	19.45	20.7	0.0	
20	QPSK	50	56	19.27	19.42	19.25			
20	QPSK	100	0	19.26	19.29	19.18	20.7	0.0	
20	16QAM	1	1	19.30	19.45	19.24	20.7	0.0	
20	64QAM	1	1	19.27	19.33	19.17	20.7	0.0	
20	256QAM	1	1	19.25	19.41	19.27	20.7	0.0	
Channel				164300	166300	168300	Tune-up limit (dBm)	MPR	
Frequency (MHz)				821.5	831.5	841.5	(dB)	(dB)	
15	QPSK	1	1	19.43	19.52	19.49	20.7	0.0	
Channel				163800	166300	168800	Tune-up limit (dBm)	MPR	
Frequency (MHz)				819	831.5	844	(dB)	(dB)	
10	QPSK	1	1	19.44	19.52	19.42	20.7	0.0	
Channel				163300	166300	168300	Tune-up limit (dBm)	MPR	
Frequency (MHz)				816.5	831.5	846.5	(dB)	(dB)	
5	QPSK	1	1	19.50	19.54	19.48	20.7	0.0	



n48 Ant 1 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI/2 BPSK	1	1	16.56	16.61	16.42			
40	PI/2 BPSK	1	53	16.40	16.42	16.36	18.0	0.0	
40	PI/2 BPSK	1	104	16.40	16.44	16.32			
40	PI/2 BPSK	50	0	16.56	16.57	16.39	18.0	0.0	
40	PI/2 BPSK	50	28	16.34	16.52	16.35	18.0	0.0	
40	PI/2 BPSK	50	56	16.33	16.42	16.30			
40	PI/2 BPSK	100	0	16.39	16.40	16.37	18.0	0.0	
40	QPSK	1	1	16.60	16.64	16.61			
40	QPSK	1	53	16.49	16.63	16.51	18.0	0.0	
40	QPSK	1	104	16.43	16.55	16.54			
40	QPSK	50	0	16.17	16.38	16.32	18.0	0.0	
40	QPSK	50	28	16.49	16.55	16.50	18.0	0.0	
40	QPSK	50	56	16.30	16.38	16.25	18.0	0.0	
40	QPSK	100	0	16.19	16.34	16.19	18.0	0.0	
40	16QAM	1	1	16.26	16.40	16.26	18.0	0.0	
40	16QAM	1	1	16.35	16.41	16.22	18.0	0.0	
40	256QAM	1	1	16.22	16.26	16.13	17.5	0.5	
Channel									
Frequency (MHz)									
30	QPSK	1	1	16.54	16.58	16.45	18.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	16.54	16.58	16.47	18.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.44	16.55	16.53	18.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.44	16.60	16.46	18.0	0.0	

Part270 n77 Ant 1 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI/2 BPSK	1	1	16.04	16.00	15.80			
100	PI/2 BPSK	1	137	15.91	15.95	15.77	17.5	0.0	
100	PI/2 BPSK	1	271	15.82	15.86	15.71			
100	PI/2 BPSK	135	0	15.97	16.08	15.87	17.5	0.0	
100	PI/2 BPSK	135	69	15.77	15.84	15.79	17.5	0.0	
100	PI/2 BPSK	135	138	15.80	15.97	15.82			
100	PI/2 BPSK	270	0	15.87	15.89	15.87	17.5	0.0	
100	QPSK	1	1	16.05	16.15	16.13			
100	QPSK	1	137	15.96	16.02	16.00	17.5	0.0	
100	QPSK	1	271	15.94	16.11	15.99			
100	QPSK	135	0	15.88	15.72	15.76	17.5	0.0	
100	QPSK	135	69	15.96	16.04	15.88	17.5	0.0	
100	QPSK	135	138	15.88	15.82	15.74	17.5	0.0	
100	QPSK	270	0	15.85	15.70	15.71	17.5	0.0	
100	16QAM	1	1	15.74	15.82	15.70	17.5	0.0	
100	16QAM	1	1	15.80	15.85	15.69	17.5	0.0	
100	256QAM	1	1	15.80	15.80	15.74	17.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	15.90	15.98	16.02	17.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	15.92	15.95	16.02	17.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	15.92	15.97	16.02	17.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	15.98	16.05	16.00	17.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	15.99	15.95	16.02	17.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	15.97	15.95	16.03	17.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	16.02	16.05	16.08	17.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	15.97	16.04	16.09	17.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	15.98	15.97	16.05	17.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	15.97	16.00	16.03	17.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	15.90	15.97	16.05	17.5	0.0	

Part270 n77 HPUE Ant 1 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI/2 BPSK	1	1	16.03	16.03	16.05			
100	PI/2 BPSK	1	137	15.92	15.97	15.85	20.5	0.0	
100	PI/2 BPSK	1	271	15.80	15.89	15.77			
100	PI/2 BPSK	135	0	15.94	15.99	15.85	20.5	0.0	
100	PI/2 BPSK	135	69	15.82	15.87	15.76	20.5	0.0	
100	PI/2 BPSK	135	138	15.81	15.90	15.85			
100	PI/2 BPSK	270	0	15.82	15.88	15.83	20.5	0.0	
100	QPSK	1	1	16.06	16.17	16.10			
100	QPSK	1	137	15.85	15.94	15.82	20.5	0.0	
100	QPSK	1	271	15.80	15.13	15.03			
100	QPSK	135	0	15.85	15.75	15.81	20.5	0.0	
100	QPSK	135	69	15.92	15.93	15.81	20.5	0.0	
100	QPSK	135	138	15.73	15.80	15.72	20.5	0.0	
100	QPSK	270	0	15.86	15.81	15.72			
100	16QAM	1	1	15.71	15.83	15.75	20.5	0.0	
100	16QAM	1	1	15.77	15.82	15.71	20.5	0.0	
100	256QAM	1	1	15.76	15.85	15.72	20.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	15.93	15.96	15.97	20.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	15.96	15.98	15.94	20.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	15.95	15.93	15.98	20.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	15.94	15.98	15.95	20.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	15.93	15.91	15.95	20.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	15.97	15.95	15.94	20.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	16.02	16.05	16.08	20.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	15.95	15.92	15.96	20.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	15.91	15.91	15.94	20.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	15.91	15.94	15.91	20.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	15.92	15.92	15.96	20.5	0.0	



Part27Q n77 Ant 1 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	15.84	3500.01				
100	PI2 BPSK	1	137	15.78			17.5	0.0	
100	PI2 BPSK	1	271	15.72					
100	PI2 BPSK	135	0	15.84			17.5	0.0	
100	PI2 BPSK	135	69	15.77			17.5	0.0	
100	PI2 BPSK	135	138	15.76			17.5	0.0	
100	PI2 BPSK	270	0	15.69					
100	QPSK	1	1	15.97					
100	QPSK	1	137	15.86			17.5	0.0	
100	QPSK	1	271	15.81					
100	QPSK	135	0	15.86			17.5	0.0	
100	QPSK	135	69	15.82			17.5	0.0	
100	QPSK	135	138	15.85			17.5	0.0	
100	QPSK	270	0	15.85					
100	16QAM	1	1	15.73			17.5	0.0	
100	16QAM	1	137	15.62			17.5	0.0	
100	16QAM	1	271	15.62					
100	16QAM	135	0	15.62			17.5	0.0	
100	16QAM	135	69	15.62			17.5	0.0	
100	16QAM	135	138	15.62			17.5	0.0	
100	16QAM	270	0	15.62					
100	256QAM	1	1	15.62			17.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	15.86	633334	633668	Tune-up limit (dBm)	MPR	
90	QPSK	1	137	15.83	3500.01	3505.02	17.5	0.0	
90	QPSK	1	271	15.81					
Channel									
Frequency (MHz)									
80	QPSK	1	1	15.87	632068	633400	Tune-up limit (dBm)	MPR	
80	QPSK	1	137	15.81	3500.01	3515.01	17.5	0.0	
80	QPSK	1	271	15.87					
Channel									
Frequency (MHz)									
70	QPSK	1	1	15.82	632334	634334	Tune-up limit (dBm)	MPR	
70	QPSK	1	137	15.82	3500.01	3515.01	17.5	0.0	
70	QPSK	1	271	15.87					
Channel									
Frequency (MHz)									
60	QPSK	1	1	15.84	632000	634668	Tune-up limit (dBm)	MPR	
60	QPSK	1	137	15.84	3500.01	3520.02	17.5	0.0	
60	QPSK	1	271	15.87					
Channel									
Frequency (MHz)									
50	QPSK	1	1	15.86	631100	633668	Tune-up limit (dBm)	MPR	
50	QPSK	1	137	15.83	3500.01	3535.02	17.5	0.0	
50	QPSK	1	271	15.81					
Channel									
Frequency (MHz)									
40	QPSK	1	1	15.81	631134	633334	Tune-up limit (dBm)	MPR	
40	QPSK	1	137	15.81	3500.01	3530.01	17.5	0.0	
40	QPSK	1	271	15.81					
Channel									
Frequency (MHz)									
30	QPSK	1	1	15.86	631000	633668	Tune-up limit (dBm)	MPR	
30	QPSK	1	137	15.86	3500.01	3535.02	17.5	0.0	
30	QPSK	1	271	15.87					
Channel									
Frequency (MHz)									
25	QPSK	1	1	15.83	630668	633000	Tune-up limit (dBm)	MPR	
25	QPSK	1	137	15.86	3500.01	3540.02	17.5	0.0	
25	QPSK	1	271	15.87					
Channel									
Frequency (MHz)									
20	QPSK	1	1	15.87	630500	633668	Tune-up limit (dBm)	MPR	
20	QPSK	1	137	15.86	3500.01	3542.02	17.5	0.0	
20	QPSK	1	271	15.89					
Channel									
Frequency (MHz)									
15	QPSK	1	1	15.89	630334	633334	Tune-up limit (dBm)	MPR	
15	QPSK	1	137	15.89	3500.01	3545.01	17.5	0.0	
15	QPSK	1	271	15.82					
Channel									
Frequency (MHz)									
10	QPSK	1	1	15.82	630500	633668	Tune-up limit (dBm)	MPR	
10	QPSK	1	137	15.82	3500.01	3545.01	17.5	0.0	

Part27Q n77 HPUE Ant 1 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	18.87	3500.01				
100	PI2 BPSK	1	137	18.74			20.5	0.0	
100	PI2 BPSK	1	271	18.72					
100	PI2 BPSK	135	0	18.89			20.5	0.0	
100	PI2 BPSK	135	69	18.81			20.5	0.0	
100	PI2 BPSK	135	138	18.70			20.5	0.0	
100	PI2 BPSK	270	0	18.68					
100	QPSK	1	1	19.01					
100	QPSK	1	137	18.94			20.5	0.0	
100	QPSK	1	271	18.84					
100	QPSK	135	0	18.70			20.5	0.0	
100	QPSK	135	69	18.79			20.5	0.0	
100	QPSK	135	138	18.71			20.5	0.0	
100	QPSK	270	0	18.61					
100	16QAM	1	1	18.77			20.5	0.0	
100	16QAM	1	137	18.68			20.5	0.0	
100	16QAM	1	271	18.62					
100	16QAM	135	0	18.62			20.5	0.0	
100	16QAM	135	69	18.62			20.5	0.0	
100	16QAM	135	138	18.62			20.5	0.0	
100	16QAM	270	0	18.62					
100	256QAM	1	1	18.62			20.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	18.87	633334	633668	Tune-up limit (dBm)	MPR	
90	QPSK	1	137	18.83	3500.01	3505.02	20.5	0.0	
90	QPSK	1	271	18.81					
Channel									
Frequency (MHz)									
80	QPSK	1	1	18.82	632068	633400	Tune-up limit (dBm)	MPR	
80	QPSK	1	137	18.81	3500.01	3515.01	20.5	0.0	
80	QPSK	1	271	18.87					
Channel									
Frequency (MHz)									
70	QPSK	1	1	18.82	632334	634334	Tune-up limit (dBm)	MPR	
70	QPSK	1	137	18.82	3500.01	3515.01	20.5	0.0	
70	QPSK	1	271	18.87					
Channel									
Frequency (MHz)									
60	QPSK	1	1	18.84	632000	634668	Tune-up limit (dBm)	MPR	
60	QPSK	1	137	18.79	3500.01	3520.02	20.5	0.0	
60	QPSK	1	271	18.87					
Channel									
Frequency (MHz)									
50	QPSK	1	1	18.84	631100	633668	Tune-up limit (dBm)	MPR	
50	QPSK	1	137	18.88	3500.01	3535.02	20.5	0.0	
50	QPSK	1	271	18.84					
Channel									
Frequency (MHz)									
40	QPSK	1	1	18.85	631134	633334	Tune-up limit (dBm)	MPR	
40	QPSK	1	137	18.85	3500.01	3530.01	20.5	0.0	
40	QPSK	1	271	18.85					
Channel									
Frequency (MHz)									
30	QPSK	1	1	18.81	631000	633668	Tune-up limit (dBm)	MPR	
30	QPSK	1	137	18.84	3500.01	3535.02	20.5	0.0	
30	QPSK	1	271	18.87					
Channel									
Frequency (MHz)									
25	QPSK	1	1	18.84	630668	633000	Tune-up limit (dBm)	MPR	
25	QPSK	1	137	18.86	3500.01	3540.02	20.5	0.0	
25	QPSK	1	271	18.87					
Channel									
Frequency (MHz)									
20	QPSK	1	1	18.88	630500	633668	Tune-up limit (dBm)	MPR	
20	QPSK	1	137	18.86	3500.01	3542.02	20.5	0.0	
20	QPSK	1	271	18.89					
Channel									
Frequency (MHz)									
15	QPSK	1	1	18.87	630334	633334	Tune-up limit (dBm)	MPR	
15	QPSK	1	137	18.79	3500.01	3545.01	20.5	0.0	
15	QPSK	1	271	18.82					
Channel									
Frequency (MHz)									
10	QPSK	1	1	18.83	630500	633668	Tune-up limit (dBm)	MPR	
10	QPSK	1	137	18.83	3500.01	3545.01	20.5	0.0	

Part270 n78 Ant 1 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	17.86	3750	3750			
100	PI2 BPSK	1	137	17.80			19.0	0.0	
100	PI2 BPSK	1	271	17.82					
100	PI2 BPSK	135	0	17.85			19.0	0.0	
100	PI2 BPSK	135	69	17.84			19.0	0.0	
100	PI2 BPSK	135	138	17.81			19.0	0.0	
100	PI2 BPSK	270	0	17.85					
100	QPSK	1	1	18.06					
100	QPSK	1	137	17.98			19.0	0.0	
100	QPSK	1	271	17.84					
100	QPSK	135	0	17.70			19.0	0.0	
100	QPSK	135	69	17.86			19.0	0.0	
100	QPSK	135	138	17.73			19.0	0.0	
100	QPSK	270	0	17.65					



Part270 n78 HPUE Ant 1 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	3750	3750	3750			
100	Pi2 BPSK	1	137	20.94			22.0	0.0	
100	Pi2 BPSK	1	271	20.75					
100	Pi2 BPSK	1	271	20.84					
100	Pi2 BPSK	135	0	20.93			22.0	0.0	
100	Pi2 BPSK	135	69	20.81			22.0	0.0	
100	Pi2 BPSK	135	138	20.87			22.0	0.0	
100	Pi2 BPSK	270	0	20.79					
100	QPSK	1	1	21.04					
100	QPSK	1	137	20.95			22.0	0.0	
100	QPSK	1	271	20.89					
100	QPSK	135	0	20.86			22.0	0.0	
100	QPSK	135	69	20.99			22.0	0.0	
100	QPSK	135	138	20.78			22.0	0.0	
100	QPSK	270	0	20.66					
100	16QAM	1	1	20.79			22.0	0.0	
100	16QAM	1	1	20.86					
100	256QAM	1	1	19.42			21.5	0.5	
Channel									
Frequency (MHz)									
90	QPSK	1	1	54863	65000	65034	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
90	QPSK	1	1	3745.02	3750	3755.01	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
80	QPSK	1	1	20.89	20.89	21.01	22.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	649334	650000	650668	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
80	QPSK	1	1	20.85	20.83	20.95	22.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	646000	650000	651000	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
70	QPSK	1	1	3742.81	3750	3759.02	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
60	QPSK	1	1	20.90	20.85	21.03	22.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	648868	650000	651334	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
60	QPSK	1	1	3750.02	3750	3750.01	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
50	QPSK	1	1	20.95	20.82	20.97	22.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	648000	650000	652000	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
40	QPSK	1	1	3725.01	3750	3775.02	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
40	QPSK	1	1	20.83	20.81	20.95	22.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	647868	650000	652334	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
30	QPSK	1	1	3715.02	3750	3785.01	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
25	QPSK	1	1	20.90	20.81	21.02	22.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	647234	650000	650668	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
20	QPSK	1	1	3712.5	3750	3787.5	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
20	QPSK	1	1	20.84	20.80	21.03	22.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	647168	650000	652834	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
15	QPSK	1	1	3707.52	3750	3792.51	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
10	QPSK	1	1	647000	650000	653000	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
10	QPSK	1	1	3705	3750	3795	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
10	QPSK	1	1	20.84	20.86	21.00	22.0	0.0	

Part27Q n78 Ant 1 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	17.62					
100	Pi2 BPSK	1	137	17.49			19.0	0.0	
100	Pi2 BPSK	1	271	17.50					
100	Pi2 BPSK	1	271	17.50					
100	Pi2 BPSK	135	0	17.70			19.0	0.0	
100	Pi2 BPSK	135	69	17.65			19.0	0.0	
100	Pi2 BPSK	135	138	17.51			19.0	0.0	
100	Pi2 BPSK	270	0	17.48					
100	QPSK	1	1	17.76					
100	QPSK	1	137	17.66			19.0	0.0	
100	QPSK	1	271	17.65					
100	QPSK	135	0	17.33			19.0	0.0	
100	QPSK	135	69	17.84			19.0	0.0	
100	QPSK	135	138	17.47			19.0	0.0	
100	QPSK	270	0	17.42					
100	16QAM	1	1	17.47			19.0	0.0	
100	16QAM	1	1	17.44					
100	256QAM	1	1	17.42			19.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	63300	63334	63368	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
90	QPSK	1	1	3486	3600.01	3605.02	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.61	17.67	17.65	19.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	632068	633334	634000	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.59	17.68	17.57	19.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	632334	633334	634334	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
70	QPSK	1	1	3485.01	3600.01	3615.01	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
70	QPSK	1	1	17.57	17.64	17.59	19.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	632000	633334	634668	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
60	QPSK	1	1	3480	3600.01	3620.02	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.62	17.74	17.62	19.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	631000	633334	635000	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
50	QPSK	1	1	3475.02	3600.01	3625.01	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
50	QPSK	1	1	17.65	17.73	17.61	19.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	631334	633334	635334	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
40	QPSK	1	1	3482.01	3600.01	3628.01	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
40	QPSK	1	1	17.67	17.63	17.63	19.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	631000	633334	635668	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
30	QPSK	1	1	3485	3600.01	3635.02	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.67	17.72	17.61	19.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	630668	633334	636000	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
25	QPSK	1	1	3482.51	3600.01	3637.51	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
25	QPSK	1	1	17.64	17.63	17.60	19.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	630668	633334	636000	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
20	QPSK	1	1	3480.02	3600.01	3640	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.67	17.64	17.58	19.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	630500	633334	636168	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
15	QPSK	1	1	3477.5	3600.01	3642.52	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.62	17.70	17.61	19.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	630334	633334	636334	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
10	QPSK	1	1	3465.01	3600.01	3645.01	Tune-up limit	MPR	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.65	17.63	17.59	19.0	0.0	

Part27Q n78 HPUE Ant 1 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	Pi2 BPSK	1	1	20.65					
100	Pi2 BPSK	1	137	20.47			22.0	0.0	
100	Pi2 BPSK	1	271	20.48					
100	Pi2 BPSK	1	271	20.48					
100	Pi2 BPSK	135	0	20.65			22.0	0.0	
100	Pi2 BPSK	135	69	20.60			22.0	0.0	
100	Pi2 BPSK	135	138	20.56			22.0	0.0	
100	Pi2 BPSK	270	0	20.54					
100	QPSK	1	1	20.70					
100	QPSK	1	137	20.67			22.0	0.0	
100	QPSK	1	271	20.65					
100	QPSK	135	0	20.28			22.0		



n2 Ant 2 DSI6								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				374000	376000	378000		
Frequency (MHz)				1870	1890	1910		
40	PI2 BPSK	1	1	17.12	17.21	17.02		
40	PI2 BPSK	1	108	17.01	17.07	16.91	18.5	0.0
40	PI2 BPSK	1	214	16.93	16.98	16.92		
40	PI2 BPSK	108	0	17.08	17.18	16.92	18.5	0.0
40	PI2 BPSK	108	54	16.93	17.00	16.93	18.5	0.0
40	PI2 BPSK	108	108	16.86	17.02	16.98	18.5	0.0
40	PI2 BPSK	216	0	16.96	17.02	17.00		
40	QPSK	1	1	17.14	17.28	17.22		
40	QPSK	1	108	16.99	17.21	17.07	18.5	0.0
40	QPSK	1	214	17.00	17.14	17.02		
40	QPSK	108	0	16.77	16.84	16.81	18.5	0.0
40	QPSK	108	54	17.10	17.21	16.99	18.5	0.0
40	QPSK	108	108	16.88	16.93	16.84	18.5	0.0
40	QPSK	216	0	16.81	16.98	16.74	18.5	0.0
40	16QAM	1	1	16.89	16.97	16.87	18.5	0.0
40	64QAM	1	1	16.86	16.94	16.78	18.5	0.0
40	256QAM	1	1	16.84	17.02	16.87	18.5	0.0
Channel				375500	376500	376500	Tune-up limit (dBm)	MPR
Frequency (MHz)				1867.5	1880	1892.5	(dB)	
35	QPSK	1	1	17.10	17.14	17.08	18.5	0.0
Channel				373000	376000	379000	Tune-up limit (dBm)	MPR
Frequency (MHz)				1865	1885	1895	(dB)	
30	QPSK	1	1	17.00	17.13	17.10	18.5	0.0
Channel				372500	376000	379500	Tune-up limit (dBm)	MPR
Frequency (MHz)				1862.5	1880	1897.5	(dB)	
25	QPSK	1	1	17.05	17.14	17.05	18.5	0.0
Channel				372000	376000	380000	Tune-up limit (dBm)	MPR
Frequency (MHz)				1860	1880	1900	(dB)	
20	QPSK	1	1	17.07	17.12	17.14	18.5	0.0
Channel				371500	376000	380500	Tune-up limit (dBm)	MPR
Frequency (MHz)				1857.5	1880	1902.5	(dB)	
15	QPSK	1	1	17.01	17.13	17.12	18.5	0.0
Channel				371000	376000	381000	Tune-up limit (dBm)	MPR
Frequency (MHz)				1855	1880	1905	(dB)	
10	QPSK	1	1	16.99	17.16	17.14	18.5	0.0
Channel				370500	376000	381500	Tune-up limit (dBm)	MPR
Frequency (MHz)				1852.5	1880	1907.5	(dB)	
5	QPSK	1	1	17.04	17.20	17.15	18.5	0.0

n7 Ant 2 DSI6								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				504000	507000	510000		
Frequency (MHz)				2520	2535	2550		
40	PI2 BPSK	1	1	15.76	15.76	15.67		
40	PI2 BPSK	1	108	15.61	15.70	15.55	17.0	0.0
40	PI2 BPSK	1	214	15.55	15.61	15.51		
40	PI2 BPSK	108	0	15.77	15.83	15.62	17.0	0.0
40	PI2 BPSK	108	54	15.53	15.67	15.55	17.0	0.0
40	PI2 BPSK	108	108	15.49	15.62	15.59	17.0	0.0
40	PI2 BPSK	216	0	15.60	15.65	15.64		
40	QPSK	1	1	15.84	15.87	15.79		
40	QPSK	1	108	15.56	15.81	15.68	17.0	0.0
40	QPSK	1	214	15.62	15.80	15.74		
40	QPSK	108	0	15.42	15.52	15.44	17.0	0.0
40	QPSK	108	54	15.70	15.90	15.64	17.0	0.0
40	QPSK	108	108	15.46	15.63	15.52	17.0	0.0
40	QPSK	216	0	15.45	15.49	15.46	17.0	0.0
40	16QAM	1	1	15.48	15.67	15.53	17.0	0.0
40	64QAM	1	1	15.54	15.62	15.43	17.0	0.0
40	256QAM	1	1	15.57	15.65	15.43	17.0	0.0
Channel				505500	507000	510500	Tune-up limit (dBm)	MPR
Frequency (MHz)				2517.5	2535	2552.5	(dB)	
35	QPSK	1	1	15.74	15.70	15.72	17.0	0.0
Channel				503000	507000	511000	Tune-up limit (dBm)	MPR
Frequency (MHz)				2515	2535	2555	(dB)	
30	QPSK	1	1	15.70	15.74	15.71	17.0	0.0
Channel				502500	507000	511500	Tune-up limit (dBm)	MPR
Frequency (MHz)				2512.5	2535	2557.5	(dB)	
25	QPSK	1	1	15.73	15.71	15.69	17.0	0.0
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR
Frequency (MHz)				2510	2535	2560	(dB)	
20	PI2 BPSK	1	1	15.72	15.63	15.65	17.0	0.0
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR
Frequency (MHz)				2507.5	2535	2562.5	(dB)	
15	QPSK	1	1	15.76	15.69	15.66	17.0	0.0
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR
Frequency (MHz)				2505	2535	2565	(dB)	
10	QPSK	1	1	15.68	15.74	15.69	17.0	0.0
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR
Frequency (MHz)				2502.5	2535	2567.5	(dB)	
5	QPSK	1	1	15.71	15.66	15.73	17.0	0.0

n66 Ant 2 DSI6								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				344000	348000	352000		
Frequency (MHz)				1720	1745	1760		
40	PI2 BPSK	1	1	15.91	15.87	15.80		
40	PI2 BPSK	1	108	16.74	16.76	16.65	18.0	0.0
40	PI2 BPSK	1	214	16.78	16.80	16.57		
40	PI2 BPSK	108	0	16.84	16.94	16.68	18.0	0.0
40	PI2 BPSK	108	54	16.66	16.81	16.72	18.0	0.0
40	PI2 BPSK	108	108	16.69	16.80	16.71	18.0	0.0
40	PI2 BPSK	216	0	16.73	16.71	16.78		
40	QPSK	1	1	16.92	16.95	16.93		
40	QPSK	1	108	16.76	16.85	16.81	18.0	0.0
40	QPSK	1	214	16.78	16.87	16.77		
40	QPSK	108	0	16.51	16.58	16.61	18.0	0.0
40	QPSK	108	54	16.80	16.91	16.78	18.0	0.0
40	QPSK	108	108	16.55	16.71	16.59	18.0	0.0
40	QPSK	216	0	16.56	16.62	16.54	18.0	0.0
40	16QAM	1	1	16.56	16.74	16.57	18.0	0.0
40	64QAM	1	1	16.59	16.70	16.57	18.0	0.0
40	256QAM	1	1	16.64	16.75	16.63	18.0	0.0
Channel				345500	348000	352500	Tune-up limit (dBm)	MPR
Frequency (MHz)				1727.5	1745	1762.5	(dB)	
35	QPSK	1	1	16.82	16.80	16.84	18.0	0.0
Channel				343000	348000	353000	Tune-up limit (dBm)	MPR
Frequency (MHz)				1725	1745	1765	(dB)	
30	QPSK	1	1	16.79	16.84	16.81	18.0	0.0
Channel				344500	348000	353500	Tune-up limit (dBm)	MPR
Frequency (MHz)				1727.5	1745	1767.5	(dB)	
25	QPSK	1	1	16.77	16.82	16.83	18.0	0.0
Channel				344000	348000	354000	Tune-up limit (dBm)	MPR
Frequency (MHz)				1720	1745	1770	(dB)	
20	QPSK	1	1	16.73	16.82	16.78	18.0	0.0
Channel				343500	348000	354500	Tune-up limit (dBm)	MPR
Frequency (MHz)				1717.5	1745	1772.5	(dB)	
15	QPSK	1	1	16.83	16.80	16.85	18.0	0.0
Channel				343000	348000	355000	Tune-up limit (dBm)	MPR
Frequency (MHz)				1715	1745	1775	(dB)	
10	QPSK	1	1	16.77	16.80	16.79	18.0	0.0
Channel				342500	348000	355500	Tune-up limit (dBm)	MPR
Frequency (MHz)				1712.5	1745	1777.5	(dB)	
5	QPSK	1	1	16.85	16.83	16.82	18.0	0.0



n38 Ant 2 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2500.02	2595	2599.98			
40	PI2 BPSK	1	1	14.03	14.72	14.52			
40	PI2 BPSK	1	53	14.59	14.52	14.47			0.0
40	PI2 BPSK	1	104	14.46	14.60	14.43			16.0
40	PI2 BPSK	50	0	14.66	14.74	14.50			16.0
40	PI2 BPSK	50	28	14.48	14.54	14.55			16.0
40	PI2 BPSK	50	58	14.42	14.62	14.41			16.0
40	PI2 BPSK	100	0	14.53	14.80	14.53			16.0
40	QPSK	1	1	14.77	14.83	14.78			16.0
40	QPSK	1	53	14.81	14.87	14.87			16.0
40	QPSK	1	104	14.61	14.71	14.65			16.0
40	QPSK	50	0	14.30	14.41	14.44			16.0
40	QPSK	50	28	14.59	14.69	14.55			16.0
40	QPSK	50	58	14.42	14.55	14.40			16.0
40	QPSK	100	0	14.37	14.43	14.35			16.0
40	16QAM	1	1	14.46	14.57	14.36			16.0
40	16QAM	1	1	14.46	14.54	14.37			16.0
40	256QAM	1	1	14.40	14.52	14.44			16.0
Channel									
Frequency (MHz)				5170.0	5190.0	5209.98	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	14.70	14.71	14.64	16.0	0.0	
Channel									
Frequency (MHz)				5165.04	5190.00	5214.98	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	14.54	14.72	14.63	16.0	0.0	
Channel									
Frequency (MHz)				5160.00	5190.00	5220.00	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	14.67	14.67	14.72	16.0	0.0	
Channel									
Frequency (MHz)				5155.02	5190.00	5224.98	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	14.69	14.70	14.66	16.0	0.0	
Channel									
Frequency (MHz)				5150.04	5190.00	5229.98	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	14.66	14.79	14.74	16.0	0.0	

n41 Ant 2 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	14.90	14.95	14.80			
100	PI2 BPSK	1	137	14.78	14.76	14.67			16.5
100	PI2 BPSK	1	271	14.71	14.83	14.59			16.5
100	PI2 BPSK	135	0	14.81	14.96	14.75			16.5
100	PI2 BPSK	135	69	14.68	14.76	14.73			16.5
100	PI2 BPSK	135	138	14.64	14.83	14.68			16.5
100	PI2 BPSK	270	0	14.75	14.77	14.67			16.5
100	QPSK	1	1	14.90	15.02	14.96			16.5
100	QPSK	1	137	14.74	14.87	14.86			16.5
100	QPSK	1	271	14.73	14.95	14.76			16.5
100	QPSK	135	0	14.55	14.89	14.60			16.5
100	QPSK	135	69	14.91	14.99	14.89			16.5
100	QPSK	135	138	14.64	14.87	14.57			16.5
100	QPSK	270	0	14.58	14.85	14.57			16.5
100	16QAM	1	1	14.64	14.73	14.64			16.5
100	16QAM	1	1	14.60	14.74	14.57			16.5
100	256QAM	1	1	14.63	14.76	14.56			16.5
Channel									
Frequency (MHz)				5082.00	5185.98	5299.98	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	14.75	14.94	14.82	16.5	0.0	
Channel									
Frequency (MHz)				5072.04	5185.98	5299.98	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	14.81	14.90	14.80	16.5	0.0	
Channel									
Frequency (MHz)				5062.02	5185.98	5310.00	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	14.85	14.94	14.81	16.5	0.0	
Channel									
Frequency (MHz)				5052.00	5185.98	5319.98	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	14.80	14.93	14.87	16.5	0.0	
Channel									
Frequency (MHz)				5042.04	5185.98	5329.98	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	14.81	14.95	14.90	16.5	0.0	
Channel									
Frequency (MHz)				5032.02	5185.98	5340.00	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	14.80	14.86	14.89	16.5	0.0	
Channel									
Frequency (MHz)				5022.00	5185.98	5349.98	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	14.78	14.90	14.87	16.5	0.0	
Channel									
Frequency (MHz)				5012.02	5185.98	5359.98	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	14.75	14.87	14.83	16.5	0.0	
Channel									
Frequency (MHz)				5012.04	5185.98	5359.98	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	14.82	14.92	14.89	16.5	0.0	
Channel									
Frequency (MHz)				5007.00	5185.98	5364.98	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	14.77	14.95	14.87	16.5	0.0	
Channel									
Frequency (MHz)				5002.02	5185.98	5370.00	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	14.83	14.92	14.84	16.5	0.0	

n41 HPUE Ant 2 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	17.90	17.92	17.80			
100	PI2 BPSK	1	137	17.80	17.76	17.71			19.5
100	PI2 BPSK	1	271	17.70	17.83	17.55			19.5
100	PI2 BPSK	135	0	17.76	18.00	17.74			19.5
100	PI2 BPSK	135	69	17.62	17.70	17.79			19.5
100	PI2 BPSK	135	138	17.68	17.82	17.69			19.5
100	PI2 BPSK	270	0	17.70	17.79	17.88			19.5
100	QPSK	1	1	17.80	18.05	17.83			19.5
100	QPSK	1	137	17.78	17.85	17.89			19.5
100	QPSK	1	271	17.75	17.89	17.80			19.5
100	QPSK	135	0	17.58	17.70	17.64			19.5
100	QPSK	135	69	17.78	17.84	17.83			19.5
100	QPSK	135	138	17.67	17.84	17.53			19.5
100	QPSK	270	0	17.62	17.86	17.62			19.5
100	16QAM	1	1	17.69	17.77	17.70			19.5
100	16QAM	1	1	17.62	17.73	17.56			19.5
100	256QAM	1	1	17.59	17.80	17.52			19.5
Channel									
Frequency (MHz)				5082.00	5185.98	5299.98	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	17.85	17.98	17.86	19.5	0.0	
Channel									
Frequency (MHz)				5072.04	5185.98	5299.98	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	17.85	17.90	17.83	19.5	0.0	
Channel									
Frequency (MHz)				5062.02	5185.98	5310.00	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	17.84	17.90	17.87	19.5	0.0	
Channel									
Frequency (MHz)				5052.00	5185.98	5319.98	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	17.85	17.92	17.84	19.5	0.0	
Channel									
Frequency (MHz)				5042.04	5185.98	5329.98	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	17.79	17.92	17.80	19.5	0.0	
Channel									
Frequency (MHz)				5032.02	5185.98	5340.00	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	17.86	17.96	17.88	19.5	0.0	
Channel									
Frequency (MHz)				5022.00	5185.98	5349.98	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	17.85	17.98	17.87	19.5	0.0	
Channel									
Frequency (MHz)				5012.02	5185.98	5359.98	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	17.80	17.96	17.79	19.5	0.0	
Channel									
Frequency (MHz)				5012.04	5185.98	5359.98	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	17.78	17.91	17.81	19.5	0.0	
Channel									
Frequency (MHz)				5007.00	5185.98	5364.98	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	17.75	17.93	17.87	19.5	0.0	
Channel									
Frequency (MHz)				5002.02	5185.98	5370.00	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	17.80	18.01	17.79	19.5	0.0	



n2 Ant 3 DS16								
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)
				Low Ch. Freq.	Upper Ch. Freq.	High Ch. Freq.		
Channel				374000	376000	378000		
Frequency (MHz)				1870	1880	1890		
40	PI2 BPSK	1	1	17.44	17.60	17.52		
40	PI2 BPSK	1	108	17.40	17.53	17.35	18.5	0.0
40	PI2 BPSK	1	214	17.45	17.51	17.38		
40	PI2 BPSK	108	0	17.57	17.59	17.44	18.5	0.0
40	PI2 BPSK	108	54	17.38	17.46	17.40	18.5	0.0
40	PI2 BPSK	108	108	17.34	17.54	17.39		
40	PI2 BPSK	216	0	17.44	17.49	17.41		
40	QPSK	1	1	17.63	17.74	17.72		
40	QPSK	1	108	17.40	17.46	17.58	18.5	0.0
40	QPSK	1	214	17.51	17.67	17.46		
40	QPSK	108	0	17.30	17.31	17.38	18.5	0.0
40	QPSK	108	54	17.49	17.57	17.48	18.5	0.0
40	QPSK	108	108	17.25	17.35	17.32	18.5	0.0
40	QPSK	216	0	17.29	17.41	17.19		
40	16QAM	1	1	17.30	17.46	17.38	18.5	0.0
40	16QAM	1	1	17.29	17.36	17.30	18.5	0.0
40	256QAM	1	1	17.35	17.45	17.34	18.5	0.0
Channel				379500	379500	379500		
Frequency (MHz)				1867.5	1880	1892.5		
35	QPSK	1	1	17.54	17.63	17.67	18.5	0.0
Channel				373000	376000	379000		
Frequency (MHz)				1865	1868	1868		
30	QPSK	1	1	17.50	17.64	17.68	18.5	0.0
Channel				372500	376000	379500		
Frequency (MHz)				1862.5	1869	1874.5		
25	QPSK	1	1	17.50	17.60	17.62	18.5	0.0
Channel				370500	376000	380000		
Frequency (MHz)				1860	1880	1900		
20	QPSK	1	1	17.47	17.60	17.57	18.5	0.0
Channel				370500	376000	380500		
Frequency (MHz)				1867.5	1880	1902.5		
15	QPSK	1	1	17.54	17.62	17.64	18.5	0.0
Channel				371000	376000	381000		
Frequency (MHz)				1865	1869	1868		
10	QPSK	1	1	17.53	17.63	17.58	18.5	0.0
Channel				370500	376000	381500		
Frequency (MHz)				1862.5	1869	1874.5		
5	QPSK	1	1	17.50	17.60	17.59	18.5	0.0

n7 Ant 3 DS16								
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)
				Low Ch. Freq.	Upper Ch. Freq.	High Ch. Freq.		
Channel				504000	507000	510000		
Frequency (MHz)				2520	2535	2550		
40	PI2 BPSK	1	1	16.68	16.74	16.69		
40	PI2 BPSK	1	108	16.60	16.59	16.59	17.2	0.0
40	PI2 BPSK	1	214	16.61	16.59	16.49		
40	PI2 BPSK	108	0	16.74	16.80	16.55	17.2	0.0
40	PI2 BPSK	108	54	16.58	16.68	16.58	17.2	0.0
40	PI2 BPSK	108	108	16.45	16.63	16.48		
40	PI2 BPSK	216	0	16.51	16.61	16.63	17.2	0.0
40	QPSK	1	1	16.77	16.85	16.83		
40	QPSK	1	108	16.62	16.75	16.71	17.2	0.0
40	QPSK	1	214	16.67	16.74	16.72		
40	QPSK	108	0	16.37	16.44	16.44	17.2	0.0
40	QPSK	108	54	16.71	16.73	16.63	17.2	0.0
40	QPSK	108	108	16.34	16.38	16.42	17.2	0.0
40	QPSK	216	0	16.44	16.53	16.41		
40	16QAM	1	1	16.44	16.65	16.48	17.2	0.0
40	16QAM	1	1	16.44	16.52	16.40	17.2	0.0
40	256QAM	1	1	16.57	16.64	16.42	17.2	0.0
Channel				505500	507000	510500		
Frequency (MHz)				2517.5	2535	2552.5		
35	QPSK	1	1	16.68	16.73	16.75	17.2	0.0
Channel				503000	507000	511000		
Frequency (MHz)				2515	2535	2555		
30	QPSK	1	1	16.71	16.72	16.75	17.2	0.0
Channel				502500	507000	511500		
Frequency (MHz)				2512.5	2535	2557.5		
25	QPSK	1	1	16.73	16.84	16.69	17.2	0.0
Channel				500000	507000	512000		
Frequency (MHz)				2510	2535	2550		
20	PI2 BPSK	1	1	16.71	16.71	16.79	17.2	0.0
Channel				501500	507000	512500		
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	1	16.73	16.73	16.69	17.2	0.0
Channel				501000	507000	513000		
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	1	16.70	16.74	16.72	17.2	0.0
Channel				500500	507000	513500		
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	1	16.66	16.64	16.67	17.2	0.0

n66 Ant 3 DS16								
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)
				Low Ch. Freq.	Upper Ch. Freq.	High Ch. Freq.		
Channel				344000	348000	352000		
Frequency (MHz)				1720	1745	1760		
40	PI2 BPSK	1	1	18.76	18.78	18.63		
40	PI2 BPSK	1	108	18.55	18.59	18.45	19.2	0.0
40	PI2 BPSK	1	214	18.58	18.60	18.48		
40	PI2 BPSK	108	0	18.74	18.79	18.56	19.2	0.0
40	PI2 BPSK	108	54	18.54	18.66	18.51	19.2	0.0
40	PI2 BPSK	108	108	18.51	18.63	18.43		
40	PI2 BPSK	216	0	18.48	18.57	18.54	19.2	0.0
40	QPSK	1	1	18.77	18.83	18.75		
40	QPSK	1	108	18.62	18.70	18.71	19.2	0.0
40	QPSK	1	214	18.66	18.70	18.60		
40	QPSK	108	0	18.34	18.43	18.41	19.2	0.0
40	QPSK	108	54	18.63	18.76	18.56	19.2	0.0
40	QPSK	108	108	18.29	18.31	18.37	19.2	0.0
40	QPSK	216	0	18.38	18.51	18.38		
40	16QAM	1	1	18.48	18.60	18.43	19.2	0.0
40	16QAM	1	1	18.44	18.53	18.40	19.2	0.0
40	256QAM	1	1	18.46	18.55	18.40	19.2	0.0
Channel				345500	349000	352500		
Frequency (MHz)				1727.5	1745	1762.5		
35	QPSK	1	1	18.73	18.69	18.66	19.2	0.0
Channel				343000	349000	353000		
Frequency (MHz)				1725	1745	1765		
30	QPSK	1	1	18.70	18.78	18.66	19.2	0.0
Channel				344500	349000	353500		
Frequency (MHz)				1727.5	1745	1767.5		
25	QPSK	1	1	18.69	18.76	18.62	19.2	0.0
Channel				346000	349000	354000		
Frequency (MHz)				1730	1745	1770		
20	QPSK	1	1	18.72	18.71	18.70	19.2	0.0
Channel				342500	349000	354500		
Frequency (MHz)				1717.5	1745	1772.5		
15	QPSK	1	1	18.63	18.76	18.68	19.2	0.0
Channel				343500	349000	355000		
Frequency (MHz)				1719	1745	1773		
10	QPSK	1	1	18.61	18.74	18.69	19.2	0.0
Channel				342500	349000	355500		
Frequency (MHz)				1717.5	1745	1774.5		
5	QPSK	1	1	18.73	18.76	18.63	19.2	0.0



n38 Ant 3 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	16.27	16.31	16.10			
40	PI2 BPSK	1	53	16.08	16.15	16.11			0.0
40	PI2 BPSK	1	164	16.03	16.10	15.94			
40	PI2 BPSK	50	0	16.29	16.38	16.07	16.7	0.0	
40	PI2 BPSK	50	28	16.05	16.19	16.06	16.7	0.0	
40	PI2 BPSK	50	58	16.00	16.18	16.05	16.7	0.0	
40	PI2 BPSK	100	0	16.11	16.14	16.18			
40	QPSK	1	1	16.30	16.41	16.40			
40	QPSK	1	53	16.15	16.23	16.21	16.7	0.0	
40	QPSK	1	104	16.14	16.32	16.15			
40	QPSK	50	0	15.90	16.02	16.02	16.7	0.0	
40	QPSK	50	28	16.15	16.30	16.21	16.7	0.0	
40	QPSK	50	58	15.81	15.87	15.85	16.7	0.0	
40	QPSK	100	0	15.96	16.02	15.93			
40	16QAM	1	1	15.99	16.08	16.07	16.7	0.0	
40	16QAM	1	1	16.02	16.09	15.90	16.7	0.0	
40	256QAM	1	1	16.07	16.15	16.00	16.7	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	16.22	16.33	16.26	16.7	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	16.16	16.20	16.25	16.7	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	16.20	16.25	16.26	16.7	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	16.26	16.25	16.34	16.7	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.16	16.34	16.34	16.7	0.0	

n41 Ant 3 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	15.77	15.77	15.63			
100	PI2 BPSK	1	137	15.64	15.65	15.54			16.2
100	PI2 BPSK	1	271	15.51	15.58	15.46			
100	PI2 BPSK	135	0	15.74	15.72	15.61	16.2	0.0	
100	PI2 BPSK	135	69	15.51	15.65	15.55	16.2	0.0	
100	PI2 BPSK	135	138	15.47	15.64	15.52	16.2	0.0	
100	PI2 BPSK	270	0	15.58	15.60	15.54			
100	QPSK	1	1	15.76	15.88	15.78			
100	QPSK	1	137	15.59	15.79	15.71	16.2	0.0	
100	QPSK	1	271	15.68	15.81	15.69			
100	QPSK	135	0	15.35	15.49	15.39	16.2	0.0	
100	QPSK	135	69	15.65	15.68	15.59	16.2	0.0	
100	QPSK	135	138	15.32	15.33	15.35	16.2	0.0	
100	QPSK	270	0	15.56	15.58	15.46			
100	16QAM	1	1	14.39	15.46	15.39	16.2	0.0	
100	16QAM	1	1	15.51	15.51	15.42	16.2	0.0	
100	256QAM	1	1	15.48	15.53	15.46	16.2	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	15.82	15.74	15.67	16.2	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	15.05	15.74	15.03	16.2	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	15.68	15.73	15.72	16.2	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	15.62	15.82	15.72	16.2	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	15.68	15.78	15.62	16.2	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	15.66	15.76	15.63	16.2	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	15.61	15.70	15.65	16.2	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	15.70	15.80	15.73	16.2	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	15.62	15.74	15.66	16.2	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	15.63	15.84	15.71	16.2	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	15.64	15.78	15.71	16.2	0.0	

n41 HPUE Ant 3 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	18.71	18.81	18.68			
100	PI2 BPSK	1	137	18.60	18.61	18.59			19.5
100	PI2 BPSK	1	271	18.54	18.61	18.51			
100	PI2 BPSK	135	0	18.75	18.72	18.64	19.5	0.0	
100	PI2 BPSK	135	69	18.46	18.63	18.53	19.5	0.0	
100	PI2 BPSK	135	138	18.45	18.58	18.46	19.5	0.0	
100	PI2 BPSK	270	0	18.58	18.57	18.55			
100	QPSK	1	1	18.73	18.89	18.76			
100	QPSK	1	137	18.63	18.75	18.73	19.5	0.0	
100	QPSK	1	271	18.63	18.66	18.64			
100	QPSK	135	0	18.33	18.43	18.36	19.5	0.0	
100	QPSK	135	69	18.59	18.68	18.61	19.5	0.0	
100	QPSK	135	138	18.33	18.29	18.36	19.5	0.0	
100	QPSK	270	0	18.54	18.62	18.49			
100	16QAM	1	1	18.54	18.44	18.35	19.5	0.0	
100	16QAM	1	1	18.56	18.53	18.40	19.5	0.0	
100	256QAM	1	1	18.49	18.55	18.46	19.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	18.82	18.78	18.68	19.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	18.59	18.82	18.69	19.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	18.66	18.80	18.70	19.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	18.63	18.80	18.62	19.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	18.68	18.79	18.62	19.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	18.69	18.81	18.61	19.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	18.59	18.74	18.63	19.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	18.63	18.78	18.67	19.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	18.65	18.79	18.70	19.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	18.65	18.75	18.63	19.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	18.61	18.76	18.69	19.5	0.0	



n38 Ant 4 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2590.02	2595	2599.98			
40	PI2 BPSK	1	1	16.90	16.82	16.75			
40	PI2 BPSK	1	53	16.75	16.75	16.69		0.0	
40	PI2 BPSK	1	164	16.73	16.77	16.56			
40	PI2 BPSK	50	0	16.89	16.86	16.68	18.0	0.0	
40	PI2 BPSK	50	28	16.69	16.78	16.67	18.0	0.0	
40	PI2 BPSK	50	58	16.65	16.81	16.60	18.0	0.0	
40	PI2 BPSK	100	0	16.73	16.75	16.74			
40	QPSK	1	1	16.86	17.01	16.89			
40	QPSK	1	53	16.77	16.84	16.85	18.0	0.0	
40	QPSK	1	104	16.70	16.90	16.82			
40	QPSK	50	0	16.51	16.58	16.56	18.0	0.0	
40	QPSK	50	28	16.83	16.92	16.78	18.0	0.0	
40	QPSK	50	58	16.45	16.42	16.55	18.0	0.0	
40	QPSK	100	0	16.69	16.75	16.57			
40	16QAM	1	1	16.24	16.54	16.63	18.0	0.0	
40	16QAM	1	1	16.84	16.67	16.55	18.0	0.0	
40	256QAM	1	1	16.80	16.72	16.57	18.0	0.0	
Channel				5170.02	5190.00	5209.98			
Frequency (MHz)				2595.01	2595	2604.99			
30	QPSK	1	1	16.74	16.97	16.75	18.0	0.0	
Channel				5165.04	5190.00	5214.96			
Frequency (MHz)				2592.52	2595	2607.48			
25	QPSK	1	1	16.90	16.97	16.79	18.0	0.0	
Channel				5160.00	5190.00	5220.00			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	1	16.76	16.93	16.82	18.0	0.0	
Channel				5155.02	5190.00	5224.98			
Frequency (MHz)				2577.51	2595	2612.49			
15	QPSK	1	1	16.76	16.95	16.75	18.0	0.0	
Channel				5150.04	5190.00	5229.96			
Frequency (MHz)				2575.02	2595	2614.98			
10	QPSK	1	1	16.80	16.88	16.73	18.0	0.0	

n41 Ant 4 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	17.01	17.12	16.90			
100	PI2 BPSK	1	137	16.87	16.93	16.89	18.0	0.0	
100	PI2 BPSK	1	271	16.81	16.97	16.82			
100	PI2 BPSK	135	0	17.01	17.13	16.90	18.0	0.0	
100	PI2 BPSK	135	69	16.80	16.94	16.93	18.0	0.0	
100	PI2 BPSK	135	138	16.80	17.00	16.83	18.0	0.0	
100	PI2 BPSK	270	0	16.83	16.87	16.86			
100	QPSK	1	1	17.07	17.16	17.09			
100	QPSK	1	137	16.98	17.09	16.97	18.0	0.0	
100	QPSK	1	271	16.97	17.07	17.00			
100	QPSK	135	0	16.71	16.75	16.78	18.0	0.0	
100	QPSK	135	69	16.94	17.09	16.91	18.0	0.0	
100	QPSK	135	138	16.96	16.84	16.86	18.0	0.0	
100	QPSK	270	0	16.88	16.85	16.80			
100	16QAM	1	1	16.72	16.77	16.72	18.0	0.0	
100	16QAM	1	1	16.74	16.81	16.75	18.0	0.0	
100	256QAM	1	1	16.81	16.88	16.73	18.0	0.0	
Channel				5082.00	5185.98	5299.96			
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	16.93	17.06	17.01	18.0	0.0	
Channel				5072.04	5185.98	5299.98			
Frequency (MHz)				2538.02	2592.99	2643.99			
80	QPSK	1	1	16.97	17.05	17.01	18.0	0.0	
Channel				5062.02	5185.98	5310.00			
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	17.02	17.11	17.01	18.0	0.0	
Channel				5052.00	5185.98	5319.98			
Frequency (MHz)				2526	2592.99	2659.99			
60	QPSK	1	1	16.95	17.12	16.95	18.0	0.0	
Channel				5042.04	5185.98	5329.98			
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	16.93	17.12	16.95	18.0	0.0	
Channel				5032.02	5185.98	5340.00			
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	17.02	17.05	16.99	18.0	0.0	
Channel				5022.00	5185.98	5349.98			
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	16.94	17.04	16.90	18.0	0.0	
Channel				5012.02	5185.98	5350.00			
Frequency (MHz)				2508.51	2592.99	2677.5			
25	QPSK	1	1	16.98	17.07	16.94	18.0	0.0	
Channel				5012.04	5185.98	5359.98			
Frequency (MHz)				2508.02	2592.99	2679.99			
20	QPSK	1	1	17.02	17.04	16.97	18.0	0.0	
Channel				5007.00	5185.98	5364.98			
Frequency (MHz)				2503.5	2592.99	2682.48			
15	QPSK	1	1	16.98	17.06	16.93	18.0	0.0	
Channel				5002.02	5185.98	5370.00			
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	17.02	17.10	17.02	18.0	0.0	

n41 HPUE Ant 4 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	20.06	20.06	19.94	21.0	0.0	
100	PI2 BPSK	1	137	19.89	19.91	19.83	21.0	0.0	
100	PI2 BPSK	1	271	19.79	20.00	19.77			
100	PI2 BPSK	135	0	20.06	20.18	19.86	21.0	0.0	
100	PI2 BPSK	135	69	19.83	19.97	19.90	21.0	0.0	
100	PI2 BPSK	135	138	19.79	19.95	19.78	21.0	0.0	
100	PI2 BPSK	270	0	19.83	19.91	19.83			
100	QPSK	1	1	20.11	20.21	20.10			
100	QPSK	1	137	20.01	20.04	20.00	21.0	0.0	
100	QPSK	1	271	20.01	20.08	20.01			
100	QPSK	135	0	19.73	19.74	19.73	21.0	0.0	
100	QPSK	135	69	19.92	20.06	19.94	21.0	0.0	
100	QPSK	135	138	19.94	19.93	19.85	21.0	0.0	
100	QPSK	270	0	19.89	19.94	19.77			
100	16QAM	1	1	19.72	19.79	19.71	21.0	0.0	
100	16QAM	1	1	19.74	19.82	19.71	21.0	0.0	
100	256QAM	1	1	19.79	19.87	19.78	21.0	0.0	
Channel				5082.00	5185.98	5299.96			
Frequency (MHz)				2541	2592.99	2644.98			
90	QPSK	1	1	20.02	20.15	19.96	21.0	0.0	
Channel				5072.04	5185.98	5299.98			
Frequency (MHz)				2538.02	2592.99	2643.99			
80	QPSK	1	1	20.05	20.09	20.00	21.0	0.0	
Channel				5062.02	5185.98	5310.00			
Frequency (MHz)				2531.01	2592.99	2655			
70	QPSK	1	1	19.98	20.14	19.94	21.0	0.0	
Channel				5052.00	5185.98	5319.98			
Frequency (MHz)				2526	2592.99	2659.99			
60	QPSK	1	1	20.02	20.16	20.03	21.0	0.0	
Channel				5042.04	5185.98	5329.98			
Frequency (MHz)				2521.02	2592.99	2664.99			
50	QPSK	1	1	20.06	20.10	20.04	21.0	0.0	
Channel				5032.02	5185.98	5340.00			
Frequency (MHz)				2516.01	2592.99	2670			
40	QPSK	1	1	20.01	20.06	19.97	21.0	0.0	
Channel				5022.00	5185.98	5349.98			
Frequency (MHz)				2511	2592.99	2674.98			
30	QPSK	1	1	20.00	20.15	19.97	21.0	0.0	
Channel				5012.02	5185.98	5350.00			
Frequency (MHz)				2508.51	2592.99	2677.5			
25	QPSK	1	1	19.97	20.12	19.97	21.0	0.0	
Channel				5012.04	5185.98	5359.98			
Frequency (MHz)				2508.02	2592.99	2679.99			
20	QPSK	1	1	19.98	20.16	20.00	21.0	0.0	
Channel				5007.00	5185.98	5364.98			
Frequency (MHz)				2503.5	2592.99	2682.48			
15	QPSK	1	1	19.99	20.15	19.97	21.0	0.0	
Channel				5002.02	5185.98	5370.00			
Frequency (MHz)				2501.01	2592.99	2685			
10	QPSK	1	1	20.02	20.06	20.05	21.0	0.0	



n7 Ant 5 DS16								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				504000	507000	510000		
Frequency (MHz)				2520	2535	2550		
40	PI/2 BPSK	1	1	20.18	20.21	20.05	21.5	0.0
40	PI/2 BPSK	1	108	20.05	20.04	19.88		
40	PI/2 BPSK	1	214	19.93	20.07	19.83		
40	PI/2 BPSK	108	0	20.13	20.17	20.06	21.5	0.0
40	PI/2 BPSK	108	54	20.09	20.02	20.07	21.5	0.0
40	PI/2 BPSK	108	108	19.91	20.14	19.95	21.5	0.0
40	PI/2 BPSK	216	0	20.12	19.98	20.00		
40	QPSK	1	1	20.31	20.38	20.36		
40	QPSK	1	108	20.11	20.19	20.23	21.5	0.0
40	QPSK	1	214	20.01	20.33	20.06		
40	QPSK	108	0	19.80	19.92	19.95		
40	QPSK	108	54	20.13	20.23	20.19	21.5	0.0
40	QPSK	108	108	19.76	19.85	19.71	21.5	0.0
40	QPSK	216	0	19.91	20.02	19.98		
40	16QAM	1	1	19.86	19.90	19.89		
40	64QAM	1	1	19.88	19.91	19.86	21.5	0.0
40	256QAM	1	1	19.38	19.44	19.42	21.0	0.5
Channel				503500	507000	510000	Tune-up limit	MPR
Frequency (MHz)				2517.5	2535	2552.5	(dBm)	(dB)
35	QPSK	1	1	20.28	20.27	20.32	21.5	0.0
Channel				503000	507000	510000	Tune-up limit	MPR
Frequency (MHz)				2515	2535	2555	(dBm)	(dB)
30	QPSK	1	1	20.22	20.31	20.24	21.5	0.0
Channel				502500	507000	510000	Tune-up limit	MPR
Frequency (MHz)				2512.5	2535	2557.5	(dBm)	(dB)
25	QPSK	1	1	20.24	20.15	20.25	21.5	0.0
Channel				502000	507000	510000	Tune-up limit	MPR
Frequency (MHz)				2510	2535	2550	(dBm)	(dB)
20	PI/2 BPSK	1	1	20.12	20.21	20.25	21.5	0.0
Channel				501500	507000	512500	Tune-up limit	MPR
Frequency (MHz)				2507.5	2535	2562.5	(dBm)	(dB)
15	QPSK	1	1	20.29	20.23	20.25	21.5	0.0
Channel				501000	507000	513000	Tune-up limit	MPR
Frequency (MHz)				2505	2535	2565	(dBm)	(dB)
10	QPSK	1	1	20.22	20.15	20.19	21.5	0.0
Channel				500500	507000	513500	Tune-up limit	MPR
Frequency (MHz)				2502.5	2535	2567.5	(dBm)	(dB)
5	QPSK	1	1	20.26	20.21	20.28	21.5	0.0

n66 Ant 5 DS16								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				345000	349000	352000		
Frequency (MHz)				1725	1745	1765		
40	PI/2 BPSK	1	1	21.38	21.37	21.25	22.5	0.0
40	PI/2 BPSK	1	108	21.21	21.25	21.19		
40	PI/2 BPSK	1	214	21.21	21.24	21.06		
40	PI/2 BPSK	108	0	21.42	21.45	21.18	22.5	0.0
40	PI/2 BPSK	108	54	21.14	21.27	21.16	22.5	0.0
40	PI/2 BPSK	108	108	21.21	21.28	21.14	22.5	0.0
40	PI/2 BPSK	216	0	21.17	21.24	21.23		
40	QPSK	1	1	21.39	21.55	21.43		
40	QPSK	1	108	21.23	21.39	21.32	22.5	0.0
40	QPSK	1	214	21.25	21.43	21.30		
40	QPSK	108	0	21.07	21.10	21.10		
40	QPSK	108	54	21.28	21.42	21.25	22.5	0.0
40	QPSK	108	108	21.15	21.28	21.10	22.5	0.0
40	QPSK	216	0	21.06	21.15	21.08		
40	16QAM	1	1	21.16	21.31	21.10		
40	64QAM	1	1	21.13	21.19	21.07	22.5	0.0
40	256QAM	1	1	19.40	19.56	19.45	21.0	1.5
Channel				344500	349000	352500	Tune-up limit	MPR
Frequency (MHz)				1722.5	1745	1767.5	(dBm)	(dB)
35	QPSK	1	1	21.28	21.49	21.36	22.5	0.0
Channel				344000	349000	353000	Tune-up limit	MPR
Frequency (MHz)				1720	1745	1765	(dBm)	(dB)
30	QPSK	1	1	21.23	21.39	21.27	22.5	0.0
Channel				343500	349000	353500	Tune-up limit	MPR
Frequency (MHz)				1722.5	1745	1767.5	(dBm)	(dB)
25	QPSK	1	1	21.35	21.40	21.38	22.5	0.0
Channel				344000	349000	354000	Tune-up limit	MPR
Frequency (MHz)				1720	1745	1770	(dBm)	(dB)
20	QPSK	1	1	21.31	21.42	21.31	22.5	0.0
Channel				343500	349000	354500	Tune-up limit	MPR
Frequency (MHz)				1717.5	1745	1772.5	(dBm)	(dB)
15	QPSK	1	1	21.31	21.42	21.28	22.5	0.0
Channel				343000	349000	355000	Tune-up limit	MPR
Frequency (MHz)				1715	1745	1775	(dBm)	(dB)
10	QPSK	1	1	21.32	21.49	21.35	22.5	0.0
Channel				342500	349000	355500	Tune-up limit	MPR
Frequency (MHz)				1712.5	1745	1777.5	(dBm)	(dB)
5	QPSK	1	1	21.24	21.50	21.36	22.5	0.0



n38 Ant 5 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2590.02	2595	2599.98			
40	PI2 BPSK	1	1	20.26	20.30	20.24	21.0	0.0	
40	PI2 BPSK	1	53	20.11	20.24	20.14			
40	PI2 BPSK	1	164	20.13	20.15	19.99			
40	PI2 BPSK	50	0	20.34	20.33	20.12	21.0	0.0	
40	PI2 BPSK	50	28	20.18	20.27	20.10	21.0	0.0	
40	PI2 BPSK	50	58	20.06	20.25	20.12	21.0	0.0	
40	PI2 BPSK	100	0	20.20	20.20	20.14			
40	QPSK	1	1	20.37	20.46	20.38	21.0	0.0	
40	QPSK	1	53	20.23	20.35	20.24			
40	QPSK	1	104	20.28	20.36	20.23			
40	QPSK	50	0	19.96	20.06	19.99	21.0	0.0	
40	QPSK	50	28	20.27	20.36	20.26	21.0	0.0	
40	QPSK	50	58	19.99	20.14	20.07			
40	QPSK	100	0	19.99	20.05	20.01			
40	16QAM	1	1	20.08	20.13	20.09	21.0	0.0	
40	16QAM	1	1	20.07	20.08	20.00	21.0	0.0	
40	256QAM	1	1	19.10	19.14	19.08	21.0	0.0	
Channel									
Frequency (MHz)				5170.0	5180.0	5200.0			
30	QPSK	1	1	20.24	20.32	20.32	21.0	0.0	
Channel									
Frequency (MHz)				5165.04	5190.00	5214.96			
25	QPSK	1	1	20.33	20.39	20.23	21.0	0.0	
Channel									
Frequency (MHz)				5150.00	5190.00	5220.00			
20	QPSK	1	1	20.24	20.36	20.22	21.0	0.0	
Channel									
Frequency (MHz)				5150.02	5190.00	5224.98			
15	QPSK	1	1	20.33	20.39	20.30	21.0	0.0	
Channel									
Frequency (MHz)				5150.04	5190.00	5229.96			
10	QPSK	1	1	19.83	19.89	19.80	21.0	0.0	

n41 Ant 5 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	19.85	19.91	19.76			
100	PI2 BPSK	1	137	19.73	19.83	19.65	21.0	0.0	
100	PI2 BPSK	1	271	19.68	19.77	19.54			
100	PI2 BPSK	135	0	19.88	19.91	19.69	21.0	0.0	
100	PI2 BPSK	135	69	19.65	19.81	19.66	21.0	0.0	
100	PI2 BPSK	135	138	19.70	19.77	19.64	21.0	0.0	
100	PI2 BPSK	270	0	19.74	19.70	19.67			
100	QPSK	1	1	19.86	20.01	19.96			
100	QPSK	1	137	19.79	19.91	19.89	21.0	0.0	
100	QPSK	1	271	19.83	19.96	19.81			
100	QPSK	135	0	19.57	19.61	19.57	21.0	0.0	
100	QPSK	135	69	19.86	19.91	19.78	21.0	0.0	
100	QPSK	135	138	19.63	19.71	19.62	21.0	0.0	
100	QPSK	270	0	19.63	19.72	19.55			
100	16QAM	1	1	19.57	19.71	19.61	21.0	0.0	
100	16QAM	1	1	19.57	19.68	19.56	21.0	0.0	
100	256QAM	1	1	19.82	19.86	19.78	21.0	0.0	
Channel									
Frequency (MHz)				5052.00	5185.98	5299.98			
90	QPSK	1	1	19.79	19.89	19.85	21.0	0.0	
Channel									
Frequency (MHz)				5072.04	5185.98	5299.98			
80	QPSK	1	1	19.77	19.88	19.80	21.0	0.0	
Channel									
Frequency (MHz)				5052.02	5185.98	5310.00			
70	QPSK	1	1	19.77	19.89	19.84	21.0	0.0	
Channel									
Frequency (MHz)				5052.00	5185.98	5319.98			
60	QPSK	1	1	19.78	19.86	19.88	21.0	0.0	
Channel									
Frequency (MHz)				5042.04	5185.98	5329.98			
50	QPSK	1	1	19.78	19.85	19.85	21.0	0.0	
Channel									
Frequency (MHz)				2516.01	2592.99	2684.99			
40	QPSK	1	1	19.78	19.88	19.87	21.0	0.0	
Channel									
Frequency (MHz)				5022.00	5185.98	5349.98			
30	QPSK	1	1	19.81	19.83	19.85	21.0	0.0	
Channel									
Frequency (MHz)				5017.02	5185.98	5355.00			
25	QPSK	1	1	19.79	19.86	19.85	21.0	0.0	
Channel									
Frequency (MHz)				5012.04	5185.98	5359.98			
20	QPSK	1	1	19.78	19.88	19.84	21.0	0.0	
Channel									
Frequency (MHz)				5007.00	5185.98	5364.98			
15	QPSK	1	1	19.78	19.85	19.85	21.0	0.0	
Channel									
Frequency (MHz)				5002.02	5185.98	5370.00			
10	QPSK	1	1	19.82	19.87	19.84	21.0	0.0	

n41 HPUE Ant 5 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	22.93	23.10	22.95	24.0	0.0	
100	PI2 BPSK	1	137	22.84	23.12	22.97			
100	PI2 BPSK	1	271	22.89	23.06	22.99			
100	PI2 BPSK	135	0	22.91	23.08	22.98	24.0	0.0	
100	PI2 BPSK	135	69	22.93	23.08	22.98	24.0	0.0	
100	PI2 BPSK	135	138	22.82	23.08	22.99	24.0	0.0	
100	PI2 BPSK	270	0	22.91	23.09	22.94			
100	QPSK	1	1	22.83	23.09	22.97			
100	QPSK	1	137	22.91	23.06	22.97	24.0	0.0	
100	QPSK	1	271	22.94	23.08	22.99			
100	QPSK	135	0	22.85	23.06	23.00	24.0	0.0	
100	QPSK	135	69	22.91	23.09	22.95	24.0	0.0	
100	QPSK	135	138	22.80	23.06	22.94	24.0	0.0	
100	QPSK	270	0	22.89	23.07	23.00			
100	16QAM	1	1	22.89	23.06	22.98	24.0	0.0	
100	16QAM	1	1	22.91	23.11	22.98	24.0	0.0	
100	256QAM	1	1	20.78	20.79	20.81	22.0	2.0	
Channel									
Frequency (MHz)				5052.00	5185.98	5299.98			
90	QPSK	1	1	22.83	22.99	22.87	24.0	0.0	
Channel									
Frequency (MHz)				5072.04	5185.98	5299.98			
80	QPSK	1	1	22.81	23.02	22.89	24.0	0.0	
Channel									
Frequency (MHz)				5052.02	5185.98	5310.00			
70	QPSK	1	1	22.80	23.00	22.88	24.0	0.0	
Channel									
Frequency (MHz)				5052.00	5185.98	5319.98			
60	QPSK	1	1	22.88	23.02	22.87	24.0	0.0	
Channel									
Frequency (MHz)				5042.04	5185.98	5329.98			
50	QPSK	1	1	22.84	22.99	22.87	24.0	0.0	
Channel									
Frequency (MHz)				2516.01	2592.99	2684.99			
40	QPSK	1	1	22.85	22.97	22.85	24.0	0.0	
Channel									
Frequency (MHz)				5022.00	5185.98	5349.98			
30	QPSK	1	1	22.84	22.99	22.87	24.0	0.0	
Channel									
Frequency (MHz)				5017.02	5185.98	5355.00			
25	QPSK	1	1	22.82	23.00	22.84	24.0	0.0	
Channel									
Frequency (MHz)				5012.04	5185.98	5359.98			
20	QPSK	1	1	22.80	22.97	22.87	24.0	0.0	
Channel									
Frequency (MHz)				5007.00	5185.98	5364.98			
15	QPSK	1	1	22.84	22.99	22.88	24.0	0.0	
Channel									
Frequency (MHz)				5002.02	5185.98	5370.00			
10	QPSK	1	1	22.85	22.96	22.85	24.0	0.0	



n48 Ant 6 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. / Power	Power Middle Ch. / Freq. / Power	Power High Ch. / Freq. / Power	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				3370	3624.99	3679.98			
40	PI/2 BPSK	1	1	13.17	13.20	13.06			
40	PI/2 BPSK	1	53	13.06	13.08	13.03	14.0	0.0	
40	PI/2 BPSK	1	104	12.97	13.07	12.91			
40	PI/2 BPSK	50	0	13.15	13.18	12.98	14.0	0.0	
40	PI/2 BPSK	50	28	12.94	13.11	13.06	14.0	0.0	
40	PI/2 BPSK	50	56	12.90	13.15	12.96	14.0	0.0	
40	PI/2 BPSK	100	0	12.96	13.08	13.03			
40	QPSK	1	1	13.24	13.27	13.23			
40	QPSK	1	53	13.10	13.21	13.20	14.0	0.0	
40	QPSK	1	104	13.12	13.22	13.07			
40	QPSK	50	0	12.82	12.96	12.85	14.0	0.0	
40	QPSK	50	28	13.07	13.23	13.12	14.0	0.0	
40	QPSK	50	56	12.82	12.80	12.76	14.0	0.0	
40	QPSK	100	0	12.97	12.98	12.89			
40	16QAM	1	1	12.84	12.97	12.96	14.0	0.0	
40	16QAM	1	1	12.85	13.04	12.82	14.0	0.0	
40	256QAM	1	1	13.02	13.07	12.90	14.0	0.0	
Channel									
Frequency (MHz)				3365.02	3624.99	3684.99			
30	QPSK	1	1	13.17	13.13	13.16	14.0	0.0	
Channel									
Frequency (MHz)				637.334	641666	646000			
20	QPSK	1	1	13.14	13.15	13.14	14.0	0.0	
Channel									
Frequency (MHz)				637.334	641666	646166			
15	QPSK	1	1	13.12	13.12	13.13	14.0	0.0	
Channel									
Frequency (MHz)				3365	3624.99	3694.98			
10	QPSK	1	1	13.13	13.16	13.13	14.0	0.0	

Part270 n77 Ant 6 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. / Power	Power Middle Ch. / Freq. / Power	Power High Ch. / Freq. / Power	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				3705	3840	3930			
100	PI/2 BPSK	1	1	12.82	12.74	12.87			
100	PI/2 BPSK	1	137	12.84	12.82	12.81	13.5	0.0	
100	PI/2 BPSK	1	271	12.81	12.72	12.81			
100	PI/2 BPSK	135	0	12.79	12.89	12.80	13.5	0.0	
100	PI/2 BPSK	135	69	12.88	12.71	12.85	13.5	0.0	
100	PI/2 BPSK	135	138	12.83	12.69	12.57	13.5	0.0	
100	PI/2 BPSK	270	0	12.50	12.67	12.59			
100	QPSK	1	1	12.84	12.91	12.83			
100	QPSK	1	137	12.84	12.76	12.79	13.5	0.0	
100	QPSK	1	271	12.71	12.86	12.75			
100	QPSK	135	0	12.43	12.57	12.47	13.5	0.0	
100	QPSK	135	69	12.75	12.84	12.69	13.5	0.0	
100	QPSK	135	138	12.36	12.38	12.25	13.5	0.0	
100	QPSK	270	0	12.60	12.62	12.56			
100	16QAM	1	1	12.41	12.53	12.50	13.5	0.0	
100	16QAM	1	1	12.50	12.61	12.51	13.5	0.0	
100	256QAM	1	1	12.82	12.82	12.81	13.5	0.0	
Channel									
Frequency (MHz)				3745.02	3840	3935.01			
90	QPSK	1	1	12.75	12.79	12.78	13.5	0.0	
Channel									
Frequency (MHz)				649334	656000	652068			
80	QPSK	1	1	12.70	12.78	12.68	13.5	0.0	
Channel									
Frequency (MHz)				3705	3840	3945			
70	QPSK	1	1	12.76	12.81	12.74	13.5	0.0	
Channel									
Frequency (MHz)				648668	656000	663334			
60	QPSK	1	1	12.69	12.73	12.73	13.5	0.0	
Channel									
Frequency (MHz)				3725.01	3840	3955.02			
50	QPSK	1	1	12.71	12.83	12.68	13.5	0.0	
Channel									
Frequency (MHz)				649000	656000	664000			
40	QPSK	1	1	12.75	12.75	12.76	13.5	0.0	
Channel									
Frequency (MHz)				647668	656000	664334			
30	QPSK	1	1	12.80	12.74	12.70	13.5	0.0	
Channel									
Frequency (MHz)				3712.5	3840	3967.5			
25	QPSK	1	1	12.71	12.81	12.81	13.5	0.0	
Channel									
Frequency (MHz)				647334	656000	664668			
20	QPSK	1	1	12.75	12.75	12.74	13.5	0.0	
Channel									
Frequency (MHz)				647188	656000	664834			
15	QPSK	1	1	12.75	12.74	12.73	13.5	0.0	
Channel									
Frequency (MHz)				3705	3840	3975			
10	QPSK	1	1	12.68	12.75	12.75	13.5	0.0	

Part270 n77 HPUE Ant 6 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq. / Power	Power Middle Ch. / Freq. / Power	Power High Ch. / Freq. / Power	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				3705	3840	3930			
100	PI/2 BPSK	1	1	15.71	15.69	15.64			
100	PI/2 BPSK	1	137	15.61	15.59	15.54	17.0	0.0	
100	PI/2 BPSK	1	271	15.51	15.63	15.50			
100	PI/2 BPSK	135	0	15.75	15.81	15.59	17.0	0.0	
100	PI/2 BPSK	135	69	15.68	15.66	15.67	17.0	0.0	
100	PI/2 BPSK	135	138	15.52	15.68	15.53	17.0	0.0	
100	PI/2 BPSK	270	0	15.57	15.57	15.47			
100	QPSK	1	1	15.82	15.84	15.74			
100	QPSK	1	137	15.62	15.75	15.72	17.0	0.0	
100	QPSK	1	271	15.61	15.63	15.65			
100	QPSK	135	0	15.33	15.56	15.43	17.0	0.0	
100	QPSK	135	69	15.65	15.77	15.62	17.0	0.0	
100	QPSK	135	138	15.26	15.32	15.24	17.0	0.0	
100	QPSK	270	0	15.53	15.59	15.44			
100	16QAM	1	1	15.33	15.45	15.41	17.0	0.0	
100	16QAM	1	1	15.48	15.54	15.42	17.0	0.0	
100	256QAM	1	1	15.42	15.52	15.40	17.0	0.0	
Channel									
Frequency (MHz)				3745.02	3840	3935.01			
90	QPSK	1	1	15.77	15.73	15.67	17.0	0.0	
Channel									
Frequency (MHz)				649334	656000	652068			
80	QPSK	1	1	15.68	15.78	15.64	17.0	0.0	
Channel									
Frequency (MHz)				3705	3840	3945			
70	QPSK	1	1	15.60	15.71	15.69	17.0	0.0	
Channel									
Frequency (MHz)				648668	656000	663334			
60	QPSK	1	1	15.71	15.74	15.63	17.0	0.0	
Channel									
Frequency (MHz)				3725.01	3840	3955.02			
50	QPSK	1	1	15.68	15.80	15.68	17.0	0.0	
Channel									
Frequency (MHz)				649000	656000	664000			
40	QPSK	1	1	15.75	15.71	15.62	17.0	0.0	
Channel									
Frequency (MHz)				647668	656000	664334			
30	QPSK	1	1	15.70	15.71	15.68	17.0	0.0	
Channel									
Frequency (MHz)				3712.5	3840	3967.5			
25	QPSK	1	1	15.71	15.74	15.59	17.0	0.0	
Channel									
Frequency (MHz)				647334	656000	664668			
20	QPSK	1	1	15.69	15.75	15.65	17.0	0.0	
Channel									
Frequency (MHz)				647188	656000	664834			
15	QPSK	1	1	15.73	15.69	15.62	17.0	0.0	
Channel									
Frequency (MHz)				3705	3840	3975			
10	QPSK	1	1	15.73	15.71	15.69	17.0	0.0	



Part27Q n77 Ant 6 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	12.60	3500.01				
100	PI2 BPSK	1	137	12.49			13.5	0.0	
100	PI2 BPSK	1	271	12.60					
100	PI2 BPSK	135	0	12.75			13.5	0.0	
100	PI2 BPSK	135	69	12.56			13.5	0.0	
100	PI2 BPSK	135	138	12.60			13.5	0.0	
100	PI2 BPSK	270	0	12.62					
100	QPSK	1	1	12.82					
100	QPSK	1	137	12.64			13.5	0.0	
100	QPSK	1	271	12.79					
100	QPSK	135	0	12.48			13.5	0.0	
100	QPSK	135	69	12.75			13.5	0.0	
100	QPSK	135	138	12.26			13.5	0.0	
100	QPSK	270	0	12.60					
100	16QAM	1	1	12.42			13.5	0.0	
100	16QAM	1	1	12.54			13.5	0.0	
100	256QAM	1	1	12.44			13.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	633000	633334	633668	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	3495	3500.01	3505.02	13.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	12.71	12.66	12.74	13.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	12.61	12.67	12.71	13.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	12.81	12.69	12.65	13.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	12.83	12.64	12.70	13.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	12.87	12.69	12.66	13.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	12.82	12.63	12.65	13.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	12.81	12.71	12.67	13.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	12.81	12.71	12.67	13.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	12.71	12.69	12.68	13.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	12.77	12.74	12.65	13.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	12.60	12.68	12.71	13.5	0.0	

Part27Q n77 HPUE Ant 6 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	15.60	3500.01				
100	PI2 BPSK	1	137	15.55			17.0	0.0	
100	PI2 BPSK	1	271	15.63					
100	PI2 BPSK	135	0	15.67			17.0	0.0	
100	PI2 BPSK	135	69	15.53			17.0	0.0	
100	PI2 BPSK	135	138	15.54			17.0	0.0	
100	PI2 BPSK	270	0	15.48					
100	QPSK	1	1	15.73					
100	QPSK	1	137	15.61			17.0	0.0	
100	QPSK	1	271	15.71					
100	QPSK	135	0	15.43			17.0	0.0	
100	QPSK	135	69	15.67			17.0	0.0	
100	QPSK	135	138	15.16			17.0	0.0	
100	QPSK	270	0	15.49					
100	16QAM	1	1	15.29			17.0	0.0	
100	16QAM	1	1	15.44			17.0	0.0	
100	256QAM	1	1	15.42			17.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	633000	633334	633668	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	3495	3500.01	3505.02	17.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	15.67	15.65	15.56	17.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	15.65	15.60	15.57	17.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	15.68	15.67	15.60	17.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	15.62	15.60	15.58	17.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	15.67	15.61	15.51	17.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	15.65	15.63	15.54	17.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	15.65	15.63	15.54	17.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	15.63	15.63	15.63	17.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	15.71	15.59	15.60	17.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	15.71	15.68	15.53	17.0	0.0	

Part270 n78 Ant 6 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	12.15	3750	3750			
100	PI2 BPSK	1	137	12.04			13.0	0.0	
100	PI2 BPSK	1	271	12.05					
100	PI2 BPSK	135	0	12.16			13.0	0.0	
100	PI2 BPSK	135	69	12.09			13.0	0.0	
100	PI2 BPSK	135	138	12.06			13.0	0.0	
100	PI2 BPSK	270	0	12.00					
100	QPSK	1	1	12.26					
100	QPSK	1	137	12.13			13.0	0.0	
100	QPSK	1	271	12.24					
100	QPSK	135	0	11.85			13.0	0.0	
100	QPSK	135	69	12.15			13.0	0.0	
100	QPSK	135	138	11.79			13.0	0.0	
100	QPSK	270	0	11.89					
100	16QAM	1	1	11.89			13.0	0.0	
100	16QAM	1	1	11.99			13.0	0.0	
100	256QAM	1	1	12.04			13.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	649600	650000	650400	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	3745.02	3750	3755.01	13.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	12.10	12.22	12.10	13.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	12.15	12.17	12.13	13.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	12.13	12.22	12.09	13.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	12.17	12.20	12.17	13.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	12.15	12.22	12.12	13.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	12.11	12.12	12.10	13.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	12.17	12.15	12.16	13.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	12.09	12.19	12.11	13.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	12.10	12.20	12.13	13.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	12.12	12.17	12.16	13.0	0.0	



Part270 n78 HPUE Ant 6 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	15.21	15.08	15.08	16.5	0.0	
100	PI2 BPSK	1	137	15.08	15.08	15.08	16.5	0.0	
100	PI2 BPSK	1	271	15.01	15.08	15.08	16.5	0.0	
100	PI2 BPSK	135	0	15.12	15.12	15.12	16.5	0.0	
100	PI2 BPSK	135	69	15.10	15.10	15.10	16.5	0.0	
100	PI2 BPSK	135	138	15.08	15.08	15.08	16.5	0.0	
100	PI2 BPSK	270	0	15.05	15.05	15.05	16.5	0.0	
100	QPSK	1	1	15.20	15.11	15.11	16.5	0.0	
100	QPSK	1	137	15.11	15.11	15.11	16.5	0.0	
100	QPSK	1	271	15.22	15.22	15.22	16.5	0.0	
100	QPSK	135	0	14.91	14.91	14.91	16.5	0.0	
100	QPSK	135	69	15.18	15.18	15.18	16.5	0.0	
100	QPSK	135	138	14.73	14.73	14.73	16.5	0.0	
100	QPSK	270	0	14.87	14.87	14.87	16.5	0.0	
100	16QAM	1	1	14.82	14.82	14.82	16.5	0.0	
100	16QAM	1	1	14.98	14.98	14.98	16.5	0.0	
100	256QAM	1	1	15.08	15.08	15.08	16.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	15.14	15.16	15.17	16.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	15.16	15.15	15.12	16.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	15.12	15.12	15.09	16.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	15.18	15.15	15.15	16.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	15.11	15.11	15.16	16.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	15.11	15.16	15.10	16.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	15.10	15.10	15.12	16.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	15.15	15.06	15.07	16.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	15.15	15.17	15.07	16.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	15.17	15.16	15.09	16.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	15.16	15.13	15.07	16.5	0.0	

Part27Q n78 Ant 6 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	12.24	12.16	12.16	13.0	0.0	
100	PI2 BPSK	1	137	12.16	12.16	12.16	13.0	0.0	
100	PI2 BPSK	1	271	12.08	12.08	12.08	13.0	0.0	
100	PI2 BPSK	135	0	12.30	12.30	12.30	13.0	0.0	
100	PI2 BPSK	135	69	12.14	12.14	12.14	13.0	0.0	
100	PI2 BPSK	135	138	12.18	12.18	12.18	13.0	0.0	
100	PI2 BPSK	270	0	12.12	12.12	12.12	13.0	0.0	
100	QPSK	1	1	12.33	12.23	12.23	13.0	0.0	
100	QPSK	1	137	12.23	12.23	12.23	13.0	0.0	
100	QPSK	1	271	12.30	12.30	12.30	13.0	0.0	
100	QPSK	135	0	11.98	11.98	11.98	13.0	0.0	
100	QPSK	135	69	12.25	12.25	12.25	13.0	0.0	
100	QPSK	135	138	11.78	11.78	11.78	13.0	0.0	
100	QPSK	270	0	11.89	11.89	11.89	13.0	0.0	
100	16QAM	1	1	11.89	11.89	11.89	13.0	0.0	
100	16QAM	1	1	12.02	12.02	12.02	13.0	0.0	
100	256QAM	1	1	12.07	12.07	12.07	13.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	12.23	12.23	12.15	13.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	12.24	12.18	12.18	13.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	12.22	12.25	12.18	13.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	12.18	12.25	12.13	13.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	12.23	12.20	12.18	13.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	12.23	12.19	12.17	13.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	12.17	12.25	12.20	13.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	12.23	12.21	12.15	13.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	12.14	12.28	12.17	13.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	12.15	12.29	12.14	13.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	12.13	12.20	12.14	13.0	0.0	

Part27Q n78 HPUE Ant 6 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	15.27	15.21	15.21	16.5	0.0	
100	PI2 BPSK	1	137	15.21	15.21	15.21	16.5	0.0	
100	PI2 BPSK	1	271	15.03	15.03	15.03	16.5	0.0	
100	PI2 BPSK	135	0	15.24	15.24	15.24	16.5	0.0	
100	PI2 BPSK	135	69	15.11	15.11	15.11	16.5	0.0	
100	PI2 BPSK	135	138	15.14	15.14	15.14	16.5	0.0	
100	PI2 BPSK	270	0	15.18	15.18	15.18	16.5	0.0	
100	QPSK	1	1	15.37	15.27	15.27	16.5	0.0	
100	QPSK	1	137	15.26	15.26	15.26	16.5	0.0	
100	QPSK	1	271	15.36	15.36	15.36	16.5	0.0	
100	QPSK	135	0	14.97	14.97	14.97	16.5	0.0	
100	QPSK	135	69	15.22	15.22	15.22	16.5	0.0	
100	QPSK	135	138	14.85	14.85	14.85	16.5	0.0	
100	QPSK	270	0	14.98	14.98	14.98	16.5	0.0	
100	16QAM	1	1	14.86	14.86	14.86	16.5	0.0	
100	16QAM	1	1	15.07	15.07	15.07	16.5	0.0	
100	256QAM	1	1	14.88	14.88	14.88	16.5	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	15.21	15.24	15.14	16.5	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	15.22	15.21	15.18	16.5	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	15.10	15.20	15.15	16.5	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	15.23	15.23	15.20	16.5	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	15.19	15.26	15.13	16.5	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	15.19	15.17	15.13	16.5	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	15.20	15.23	15.17	16.5	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	15.24	15.23	15.14	16.5	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	15.21	15.18	15.12	16.5	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	15.24	15.27	15.20	16.5	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	15.22	15.23	15.15	16.5	0.0	



n48 Ant 7 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	PI2 BPSK	1	1	17.42	17.51	17.38			
40	PI2 BPSK	1	53	17.33	17.59	17.31	19.0	0.0	
40	PI2 BPSK	1	104	17.24	17.32	17.19			
40	PI2 BPSK	50	0	17.41	17.57	17.31	19.0	0.0	
40	PI2 BPSK	50	28	17.25	17.33	17.26	19.0	0.0	
40	PI2 BPSK	50	56	17.26	17.39	17.29	19.0	0.0	
40	PI2 BPSK	100	0	17.26	17.34	17.38			
40	QPSK	1	1	17.56	17.58	17.49			
40	QPSK	1	53	17.48	17.48	17.38	19.0	0.0	
40	QPSK	1	104	17.39	17.56	17.34			
40	QPSK	50	0	17.12	17.16	17.17	19.0	0.0	
40	QPSK	50	28	17.32	17.53	17.36	19.0	0.0	
40	QPSK	50	56	17.02	17.13	17.08	19.0	0.0	
40	QPSK	100	0	17.22	17.25	17.20			
40	16QAM	1	1	17.12	17.17	17.18	19.0	0.0	
40	16QAM	1	1	17.21	17.28	17.09	19.0	0.0	
40	256QAM	1	1	17.18	17.20	17.14	19.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.40	17.42	17.24	19.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.31	17.38	17.33	19.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.22	17.23	17.24	19.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.37	17.32	17.28	19.0	0.0	

Part270 n77 Ant 7 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	14.86	15.00	14.84			
100	PI2 BPSK	1	137	14.82	14.83	14.75	16.0	0.0	
100	PI2 BPSK	1	271	14.79	14.91	14.70			
100	PI2 BPSK	135	0	14.00	14.08	14.85	16.0	0.0	
100	PI2 BPSK	135	69	14.78	14.86	14.82	16.0	0.0	
100	PI2 BPSK	135	138	14.76	14.90	14.75	16.0	0.0	
100	PI2 BPSK	270	0	14.87	14.90	14.81			
100	QPSK	1	1	15.01	15.14	15.13			
100	QPSK	1	137	14.86	15.02	15.01	16.0	0.0	
100	QPSK	1	271	14.80	15.08	14.87			
100	QPSK	135	0	14.62	14.72	14.67	16.0	0.0	
100	QPSK	135	69	14.87	14.97	14.90	16.0	0.0	
100	QPSK	135	138	14.56	14.66	14.66	16.0	0.0	
100	QPSK	270	0	14.79	14.89	14.70			
100	16QAM	1	1	14.61	14.73	14.77	16.0	0.0	
100	16QAM	1	1	14.74	14.85	14.73	16.0	0.0	
100	256QAM	1	1	14.71	14.84	14.72	16.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	14.86	15.07	14.99	16.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	14.93	15.08	15.09	16.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	14.97	15.00	15.07	16.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	14.87	15.05	15.06	16.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	14.95	15.04	14.97	16.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	14.98	15.04	15.00	16.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	14.84	15.05	14.97	16.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	14.90	15.03	15.04	16.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	14.96	15.02	15.02	16.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	14.92	15.06	14.98	16.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	14.84	15.00	14.97	16.0	0.0	

Part270 n77 HPUE Ant 7 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	17.91	17.89	17.89			
100	PI2 BPSK	1	137	17.86	17.89	17.78	19.0	0.0	
100	PI2 BPSK	1	271	17.78	17.86	17.74			
100	PI2 BPSK	135	0	17.97	18.09	17.89	19.0	0.0	
100	PI2 BPSK	135	69	17.80	17.80	17.81	19.0	0.0	
100	PI2 BPSK	135	138	17.80	17.84	17.81	19.0	0.0	
100	PI2 BPSK	270	0	17.85	17.90	17.77			
100	QPSK	1	1	18.00	18.16	18.06			
100	QPSK	1	137	17.92	18.02	17.88	19.0	0.0	
100	QPSK	1	271	17.86	18.04	17.82			
100	QPSK	135	0	17.83	17.86	17.66	19.0	0.0	
100	QPSK	135	69	17.91	17.97	17.90	19.0	0.0	
100	QPSK	135	138	17.85	17.87	17.68	19.0	0.0	
100	QPSK	270	0	17.80	17.81	17.73			
100	16QAM	1	1	17.64	17.70	17.81	19.0	0.0	
100	16QAM	1	1	17.77	17.87	17.75	19.0	0.0	
100	256QAM	1	1	17.82	17.82	17.62	19.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	17.94	18.01	18.02	19.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.88	18.12	17.97	19.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	17.92	18.09	18.03	19.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.89	18.06	17.82	19.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	17.90	18.04	18.00	19.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	17.95	18.03	17.91	19.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.91	18.00	17.87	19.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	17.92	18.08	18.01	19.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.91	18.03	17.95	19.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.85	18.10	17.83	19.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.92	18.11	17.88	19.0	0.0	



Part27Q n77 Ant 7 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	15.06	3500.01				
100	PI2 BPSK	1	137	15.01			16.0	0.0	
100	PI2 BPSK	1	271	14.92					
100	PI2 BPSK	135	0	15.13			16.0	0.0	
100	PI2 BPSK	135	69	15.02			16.0	0.0	
100	PI2 BPSK	135	138	14.94			16.0	0.0	
100	PI2 BPSK	270	0	14.84					
100	QPSK	1	1	15.21					
100	QPSK	1	137	15.11			16.0	0.0	
100	QPSK	1	271	15.16					
100	QPSK	135	0	14.90			16.0	0.0	
100	QPSK	135	69	15.13			16.0	0.0	
100	QPSK	135	138	14.70			16.0	0.0	
100	QPSK	270	0	14.89			16.0	0.0	
100	16QAM	1	1	14.82			16.0	0.0	
100	64QAM	1	1	14.89			16.0	0.0	
100	256QAM	1	1	14.87			16.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	63300	633334	633668	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	3495	3500.01	3505.02	16.0	0.0	
90	QPSK	1	1	15.11	15.14	14.99	16.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	632668	633334	634000	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	3485.01	3500.01	3515.01	16.0	0.0	
80	QPSK	1	1	15.13	15.13	15.08	16.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	632334	633334	634334	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	3485.01	3500.01	3515.01	16.0	0.0	
70	QPSK	1	1	15.07	15.16	15.03	16.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	632000	633334	634668	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	3480	3500.01	3520.02	16.0	0.0	
60	QPSK	1	1	15.07	15.16	15.06	16.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	631668	633334	635000	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	3475.02	3500.01	3525	16.0	0.0	
50	QPSK	1	1	15.02	15.12	15.04	16.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	631334	633334	635334	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	3470.01	3500.01	3530.01	16.0	0.0	
40	QPSK	1	1	15.08	15.08	15.04	16.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	631000	633334	635668	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	3465	3500.01	3535.02	16.0	0.0	
30	QPSK	1	1	15.09	15.14	15.04	16.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	630668	633334	636000	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	3460.02	3500.01	3540	16.0	0.0	
25	QPSK	1	1	15.06	15.13	15.03	16.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	630334	633334	636334	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	3455.01	3500.01	3545.01	16.0	0.0	
20	QPSK	1	1	15.00	15.10	14.98	16.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	630000	633334	636668	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	3450.01	3500.01	3540.01	16.0	0.0	
15	QPSK	1	1	15.00	15.10	15.00	16.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	630000	633334	636668	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	1	3455.01	3500.01	3545.01	16.0	0.0	
10	QPSK	1	1	15.10	15.11	15.06	16.0	0.0	

Part27Q n77 HPUE Ant 7 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	18.14	3500.01				
100	PI2 BPSK	1	137	18.02			19.0	0.0	
100	PI2 BPSK	1	271	17.98					
100	PI2 BPSK	135	0	18.17			19.0	0.0	
100	PI2 BPSK	135	69	18.03			19.0	0.0	
100	PI2 BPSK	135	138	17.99			19.0	0.0	
100	PI2 BPSK	270	0	17.87					
100	QPSK	1	1	18.22					
100	QPSK	1	137	18.16			19.0	0.0	
100	QPSK	1	271	18.15					
100	QPSK	135	0	17.95			19.0	0.0	
100	QPSK	135	69	18.17			19.0	0.0	
100	QPSK	135	138	17.74			19.0	0.0	
100	QPSK	270	0	18.05			19.0	0.0	
100	16QAM	1	1	17.88			19.0	0.0	
100	64QAM	1	1	17.86			19.0	0.0	
100	256QAM	1	1	17.84			19.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	63300	633334	633668	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	3495	3500.01	3505.02	16.0	0.0	
90	QPSK	1	1	18.14	18.17	18.04	19.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	632668	633334	634000	Tune-up limit (dBm)	MPR (dB)	
80	QPSK	1	1	3485.01	3500.01	3515.01	16.0	0.0	
80	QPSK	1	1	18.15	18.18	17.93	19.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	632334	633334	634334	Tune-up limit (dBm)	MPR (dB)	
70	QPSK	1	1	3480.02	3500.01	3510	19.0	0.0	
70	QPSK	1	1	18.06	18.09	18.01	19.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	632000	633334	634668	Tune-up limit (dBm)	MPR (dB)	
60	QPSK	1	1	3480	3500.01	3520.02	16.0	0.0	
60	QPSK	1	1	18.09	18.13	17.87	19.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	631668	633334	635000	Tune-up limit (dBm)	MPR (dB)	
50	QPSK	1	1	3475.02	3500.01	3525	16.0	0.0	
50	QPSK	1	1	18.14	18.15	17.94	19.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	631334	633334	635334	Tune-up limit (dBm)	MPR (dB)	
40	QPSK	1	1	3470.01	3500.01	3530.01	16.0	0.0	
40	QPSK	1	1	18.09	18.12	17.96	19.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	631000	633334	635668	Tune-up limit (dBm)	MPR (dB)	
30	QPSK	1	1	3465	3500.01	3535.02	16.0	0.0	
30	QPSK	1	1	18.12	18.19	18.06	19.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	630668	633334	636000	Tune-up limit (dBm)	MPR (dB)	
25	QPSK	1	1	3462.51	3500.01	3537.51	16.0	0.0	
25	QPSK	1	1	18.15	18.14	18.06	19.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	630334	633334	636334	Tune-up limit (dBm)	MPR (dB)	
20	QPSK	1	1	3457.5	3500.01	3542.52	16.0	0.0	
20	QPSK	1	1	18.07	18.15	17.93	19.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	630000	633334	636668	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	1	3455.01	3500.01	3545.01	16.0	0.0	
15	QPSK	1	1	18.07	18.08	18.03	19.0	0.0	

Part270 n78 Ant 7 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	14.86	3750	3750			
100	PI2 BPSK	1	137	14.88			16.0	0.0	
100	PI2 BPSK	1	271	14.81					
100	PI2 BPSK	135	0	15.03			16.0	0.0	
100	PI2 BPSK	135	69	14.82			16.0	0.0	
100	PI2 BPSK	135	138	14.87			16.0	0.0	
100	PI2 BPSK	270	0	14.84					
100	QPSK	1	1	15.13					
100	QPSK	1	137	15.01			16.0	0.0	
100	QPSK	1	271	15.00					
100	QPSK	135	0	14.77			16.0	0.0	
100	QPSK	135	69	15.01			16.0	0.0	
100	QPSK	135	138	14.59			16.0	0.0	
100	QPSK	270	0	14.81			16.0	0.0	
100	16QAM	1	1	14.76			16.0	0.0	
100	64QAM	1	1	14.81			16.0	0.0	
100	256QAM	1	1	14.72			16.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	64960	65000	65040	Tune-up limit (dBm)	MPR (dB)	
90	QPSK	1	1	3745.02	3750	3755.01	16.0	0.0	
90	QPSK	1	1						



Part270 n78 HPUE Ant 7 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	17.90	17.90	17.90			
100	PI2 BPSK	1	137	17.87	17.87	17.87	19.0	0.0	
100	PI2 BPSK	1	271	17.78	17.78	17.78			
100	PI2 BPSK	135	0	18.01	18.01	18.01	19.0	0.0	
100	PI2 BPSK	135	69	17.87	17.87	17.87	19.0	0.0	
100	PI2 BPSK	135	138	17.81	17.81	17.81	19.0	0.0	
100	PI2 BPSK	270	0	17.80	17.80	17.80			
100	QPSK	1	1	18.14	18.14	18.14			
100	QPSK	1	137	18.06	18.06	18.06	19.0	0.0	
100	QPSK	1	271	18.00	18.00	18.00			
100	QPSK	135	0	17.70	17.70	17.70	19.0	0.0	
100	QPSK	135	69	17.98	17.98	17.98	19.0	0.0	
100	QPSK	135	138	17.84	17.84	17.84	19.0	0.0	
100	QPSK	270	0	17.75	17.75	17.75			
100	16QAM	1	1	17.82	17.82	17.82	19.0	0.0	
100	64QAM	1	1	17.75	17.75	17.75	19.0	0.0	
100	256QAM	1	1	17.81	17.81	17.81	19.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	18.00	18.00	18.00	19.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	18.08	18.02	17.88	19.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	17.84	18.00	17.92	19.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.98	18.04	17.95	19.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	17.88	18.00	17.92	19.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	18.02	18.05	17.92	19.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	18.40	18.05	17.84	19.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	17.99	17.99	17.87	19.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	18.00	18.01	17.87	19.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	18.00	18.00	17.95	19.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	18.06	18.12	17.90	19.0	0.0	

Part270Q n78 Ant 7 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	14.83	14.83	14.83			
100	PI2 BPSK	1	137	14.85	14.85	14.85	16.0	0.0	
100	PI2 BPSK	1	271	14.84	14.84	14.84			
100	PI2 BPSK	135	0	15.05	15.05	15.05	16.0	0.0	
100	PI2 BPSK	135	69	14.91	14.91	14.91	16.0	0.0	
100	PI2 BPSK	135	138	14.83	14.83	14.83	16.0	0.0	
100	PI2 BPSK	270	0	14.82	14.82	14.82			
100	QPSK	1	1	15.08	15.08	15.08			
100	QPSK	1	137	14.96	14.96	14.96	16.0	0.0	
100	QPSK	1	271	14.99	14.99	14.99			
100	QPSK	135	0	14.67	14.67	14.67	16.0	0.0	
100	QPSK	135	69	15.04	15.04	15.04	16.0	0.0	
100	QPSK	135	138	14.87	14.87	14.87	16.0	0.0	
100	QPSK	270	0	14.85	14.85	14.85			
100	16QAM	1	1	14.72	14.72	14.72	16.0	0.0	
100	64QAM	1	1	14.82	14.82	14.82	16.0	0.0	
100	256QAM	1	1	14.87	14.87	14.87	16.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	14.85	14.96	15.05	16.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	14.92	15.03	15.00	16.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	14.89	15.02	14.89	16.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	14.92	14.92	14.98	16.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	14.85	14.85	14.88	16.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	14.98	14.91	15.03	16.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	14.80	14.89	14.81	16.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	14.88	15.00	15.03	16.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	14.84	14.97	14.99	16.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	14.89	15.02	14.94	16.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	14.88	15.04	15.02	16.0	0.0	

Part270Q n78 HPUE Ant 7 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	17.86	17.86	17.86			
100	PI2 BPSK	1	137	17.88	17.88	17.88	19.0	0.0	
100	PI2 BPSK	1	271	17.84	17.84	17.84			
100	PI2 BPSK	135	0	18.10	18.10	18.10	19.0	0.0	
100	PI2 BPSK	135	69	17.89	17.89	17.89	19.0	0.0	
100	PI2 BPSK	135	138	17.89	17.89	17.89	19.0	0.0	
100	PI2 BPSK	270	0	17.82	17.82	17.82			
100	QPSK	1	1	18.11	18.11	18.11			
100	QPSK	1	137	18.03	18.03	18.03	19.0	0.0	
100	QPSK	1	271	18.01	18.01	18.01			
100	QPSK	135	0	17.65	17.65	17.65	19.0	0.0	
100	QPSK	135	69	18.00	18.00	18.00	19.0	0.0	
100	QPSK	135	138	17.80	17.80	17.80	19.0	0.0	
100	QPSK	270	0	17.83	17.83	17.83			
100	16QAM	1	1	17.69	17.69	17.69	19.0	0.0	
100	64QAM	1	1	17.88	17.88	17.88	19.0	0.0	
100	256QAM	1	1	17.82	17.82	17.82	19.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	17.86	17.86	18.09	19.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.89	17.86	18.06	19.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	17.70	17.69	18.05	19.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.90	18.02	18.02	19.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	17.90	17.97	18.06	19.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	17.85	17.85	18.07	19.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.83	17.83	18.09	19.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	17.92	18.00	18.06	19.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.85	17.83	18.02	19.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.82	17.82	18.04	19.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	17.88	17.91	18.03	19.0	0.0	



n48 Ant 8 DSI6								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				636000	641666	645332		
Frequency (MHz)				3370	3824.99	3973.98		
40	PI2 BPSK	1	1	16.09	16.14	16.11		
40	PI2 BPSK	1	53	16.17	16.18	16.06	17.5	0.0
40	PI2 BPSK	1	104	16.11	16.20	16.08		
40	PI2 BPSK	50	0	16.16	16.16	16.08	17.5	0.0
40	PI2 BPSK	50	28	16.12	16.16	16.02	17.5	0.0
40	PI2 BPSK	50	56	16.18	16.11	16.06	17.5	0.0
40	PI2 BPSK	100	0	16.08	16.15	16.02		
40	QPSK	1	1	16.16	16.23	16.07		
40	QPSK	1	53	16.16	16.26	16.11	17.5	0.0
40	QPSK	1	104	16.10	16.11	16.05		
40	QPSK	50	0	16.13	16.19	16.11	17.5	0.0
40	QPSK	50	28	16.15	16.20	16.07	17.5	0.0
40	QPSK	50	56	16.09	16.12	16.09	17.5	0.0
40	QPSK	100	0	16.14	16.15	16.04		
40	16QAM	1	1	16.13	16.16	16.05	17.5	0.0
40	64QAM	1	1	16.09	16.12	16.12	17.5	0.0
40	256QAM	1	1	16.19	16.16	16.05	17.5	0.0
Channel				637600	641666	645332		
Frequency (MHz)				3955.02	3924.99	3984.99		
30	QPSK	1	1	16.11	16.16	15.94	17.5	0.0
Channel				637334	641666	645000		
Frequency (MHz)				3962.81	3924.99	3992.49		
20	QPSK	1	1	16.03	16.14	16.00	17.5	0.0
Channel				637168	641666	646166		
Frequency (MHz)				3957.82	3924.99	3992.49		
10	QPSK	1	1	16.06	16.14	15.93	17.5	0.0
Channel				637000	641666	646332		
Frequency (MHz)				3955	3924.99	3994.98		
10	QPSK	1	1	16.01	16.13	16.02	17.5	0.0

Part270 n77 Ant 8 DSI6								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	PI2 BPSK	1	1	16.72	16.70	16.66		
100	PI2 BPSK	1	137	16.77	16.83	16.70	18.0	0.0
100	PI2 BPSK	1	271	16.76	16.85	16.73		
100	PI2 BPSK	135	0	16.71	16.83	16.63	18.0	0.0
100	PI2 BPSK	135	69	16.72	16.79	16.68	18.0	0.0
100	PI2 BPSK	135	138	16.76	16.79	16.66	18.0	0.0
100	PI2 BPSK	270	0	16.81	16.77	16.70		
100	QPSK	1	1	16.76	16.93	16.68		
100	QPSK	1	137	16.81	16.77	16.69	18.0	0.0
100	QPSK	1	271	16.76	16.76	16.64		
100	QPSK	135	0	16.71	16.83	16.73	18.0	0.0
100	QPSK	135	69	16.75	16.85	16.75	18.0	0.0
100	QPSK	135	138	16.71	16.82	16.65	18.0	0.0
100	QPSK	270	0	16.80	16.87	16.75		
100	16QAM	1	1	16.80	16.83	16.73	18.0	0.0
100	64QAM	1	1	16.81	16.76	16.70	18.0	0.0
100	256QAM	1	1	16.78	16.85	16.63	18.0	0.0
Channel				650500	656000	662000		
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	16.65	16.80	16.62	18.0	0.0
Channel				649334	656000	662000		
Frequency (MHz)				3742	3840	3945		
80	QPSK	1	1	16.61	16.86	16.62	18.0	0.0
Channel				648000	656000	663000		
Frequency (MHz)				3735	3840	3945		
70	QPSK	1	1	16.67	16.81	16.54	18.0	0.0
Channel				648668	656000	663334		
Frequency (MHz)				3730.02	3840	3950.01		
60	QPSK	1	1	16.67	16.88	16.55	18.0	0.0
Channel				648334	656000	663000		
Frequency (MHz)				3725.01	3840	3955.02		
50	QPSK	1	1	16.67	16.89	16.57	18.0	0.0
Channel				648000	656000	664000		
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	16.64	16.89	16.53	18.0	0.0
Channel				647668	656000	664334		
Frequency (MHz)				3715.02	3840	3965.01		
30	QPSK	1	1	16.63	16.83	16.58	18.0	0.0
Channel				647500	656000	664500		
Frequency (MHz)				3712.5	3840	3967.5		
25	QPSK	1	1	16.68	16.86	16.55	18.0	0.0
Channel				647334	656000	664668		
Frequency (MHz)				3710.01	3840	3970.02		
20	QPSK	1	1	16.65	16.79	16.50	18.0	0.0
Channel				647168	656000	664834		
Frequency (MHz)				3707.52	3840	3972.51		
15	QPSK	1	1	16.68	16.86	16.62	18.0	0.0
Channel				647000	656000	665000		
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	16.62	16.88	16.57	18.0	0.0

Part270 n77 HPUE Ant 8 DSI6								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				650000	656000	662000		
Frequency (MHz)				3750	3840	3930		
100	PI2 BPSK	1	1	19.75	19.78	19.77		
100	PI2 BPSK	1	137	19.70	19.78	19.75	21.0	0.0
100	PI2 BPSK	1	271	19.72	19.82	19.74		
100	PI2 BPSK	135	0	19.75	19.87	19.60	21.0	0.0
100	PI2 BPSK	135	69	19.73	19.81	19.63	21.0	0.0
100	PI2 BPSK	135	138	19.73	19.88	19.63	21.0	0.0
100	PI2 BPSK	270	0	19.73	19.83	19.60		
100	QPSK	1	1	19.75	19.93	19.69		
100	QPSK	1	137	19.86	19.79	19.66	21.0	0.0
100	QPSK	1	271	19.70	19.80	19.71		
100	QPSK	135	0	19.72	19.86	19.64	21.0	0.0
100	QPSK	135	69	19.69	19.91	19.68	21.0	0.0
100	QPSK	135	138	19.80	19.88	19.61	21.0	0.0
100	QPSK	270	0	19.75	19.78	19.62		
100	16QAM	1	1	19.72	19.73	19.65	21.0	0.0
100	64QAM	1	1	19.68	19.78	19.68	21.0	0.0
100	256QAM	1	1	19.71	19.82	19.62	21.0	0.0
Channel				650500	656000	662000		
Frequency (MHz)				3745.02	3840	3935.01		
90	QPSK	1	1	19.61	19.73	19.59	21.0	0.0
Channel				649334	656000	662000		
Frequency (MHz)				3742	3840	3945		
80	QPSK	1	1	19.62	19.75	19.62	21.0	0.0
Channel				648000	656000	663000		
Frequency (MHz)				3735	3840	3945		
70	QPSK	1	1	19.59	19.83	19.61	21.0	0.0
Channel				648668	656000	663334		
Frequency (MHz)				3730.02	3840	3950.01		
60	QPSK	1	1	19.66	19.78	19.56	21.0	0.0
Channel				648334	656000	663000		
Frequency (MHz)				3725.01	3840	3955.02		
50	QPSK	1	1	19.67	19.75	19.64	21.0	0.0
Channel				648000	656000	664000		
Frequency (MHz)				3720	3840	3960		
40	QPSK	1	1	19.64	19.71	19.54	21.0	0.0
Channel				647668	656000	664334		
Frequency (MHz)				3715.02	3840	3965.01		
30	QPSK	1	1	19.64	19.81	19.63	21.0	0.0
Channel				647500	656000	664500		
Frequency (MHz)				3712.5	3840	3967.5		
25	QPSK	1	1	19.65	19.74	19.56	21.0	0.0
Channel				647334	656000	664668		
Frequency (MHz)				3710.01	3840	3970.02		
20	QPSK	1	1	19.69	19.78	19.58	21.0	0.0
Channel				647168	656000	664834		
Frequency (MHz)				3707.52	3840	3972.51		
15	QPSK	1	1	19.67	19.78	19.63	21.0	0.0
Channel				647000	656000	665000		
Frequency (MHz)				3705	3840	3975		
10	QPSK	1	1	19.67	19.74	19.63	21.0	0.0



Part27Q n77 Ant 8 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	17.07	3500.01				
100	PI2 BPSK	1	137	17.04			18.0	0.0	
100	PI2 BPSK	1	271	17.12					
100	PI2 BPSK	135	0	17.04			18.0	0.0	
100	PI2 BPSK	135	69	17.08			18.0	0.0	
100	PI2 BPSK	135	138	17.07			18.0	0.0	
100	PI2 BPSK	270	0	17.12					
100	QPSK	1	1	17.15					
100	QPSK	1	137	17.12			18.0	0.0	
100	QPSK	1	271	17.10					
100	QPSK	135	0	17.13			18.0	0.0	
100	QPSK	135	69	17.14			18.0	0.0	
100	QPSK	135	138	17.11			18.0	0.0	
100	QPSK	270	0	17.17					
100	16QAM	1	1	17.07			18.0	0.0	
100	16QAM	1	137	17.08			18.0	0.0	
100	16QAM	1	271	17.07			18.0	0.0	
100	256QAM	1	1	17.08			18.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	17.03	6330.00	6336.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	17.08	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
70	QPSK	1	1	17.07	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	17.11	6330.01	6336.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
50	QPSK	1	1	17.05	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	QPSK	1	1	17.03	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
30	QPSK	1	1	17.07	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
25	QPSK	1	1	17.07	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	17.07	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
15	QPSK	1	1	17.03	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.99	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	

Part27Q n77 HPUE Ant 8 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	19.90	3500.01				
100	PI2 BPSK	1	137	19.91			21.0	0.0	
100	PI2 BPSK	1	271	19.92					
100	PI2 BPSK	135	0	19.96			21.0	0.0	
100	PI2 BPSK	135	69	19.93			21.0	0.0	
100	PI2 BPSK	135	138	19.92			21.0	0.0	
100	PI2 BPSK	270	0	19.90					
100	QPSK	1	1	19.95			21.0	0.0	
100	QPSK	1	137	19.96					
100	QPSK	1	271	19.95					
100	QPSK	135	0	19.93			21.0	0.0	
100	QPSK	135	69	19.97			21.0	0.0	
100	QPSK	135	138	19.93			21.0	0.0	
100	QPSK	270	0	19.95					
100	16QAM	1	1	19.91			21.0	0.0	
100	16QAM	1	137	19.99			21.0	0.0	
100	16QAM	1	271	19.98			21.0	0.0	
100	256QAM	1	1	19.93			21.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	19.93	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	19.92	6330.01	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
70	QPSK	1	1	19.90	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	19.92	6330.01	6336.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
50	QPSK	1	1	19.89	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	QPSK	1	1	19.95	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
30	QPSK	1	1	19.94	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
25	QPSK	1	1	19.95	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	19.91	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
15	QPSK	1	1	19.92	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	19.90	6333.34	6340.00	Tune-up limit (dBm)	MPR (dB)	

Part270 n78 Ant 8 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	16.84	3750	3750			
100	PI2 BPSK	1	137	16.82			18.0	0.0	
100	PI2 BPSK	1	271	16.82					
100	PI2 BPSK	135	0	16.77			18.0	0.0	
100	PI2 BPSK	135	69	16.79			18.0	0.0	
100	PI2 BPSK	135	138	16.82			18.0	0.0	
100	PI2 BPSK	270	0	16.85					
100	QPSK	1	1	16.88					
100	QPSK	1	137	16.87			18.0	0.0	
100	QPSK	1	271	16.78					
100	QPSK	135	0	16.85			18.0	0.0	
100	QPSK	135	69	16.86			18.0	0.0	
100	QPSK	135	138	16.83			18.0	0.0	
100	QPSK	270	0	16.86					
100	16QAM	1	1	16.85			18.0	0.0	
100	16QAM	1	137	16.80			18.0	0.0	
100	16QAM	1	271	16.82			18.0	0.0	
100	256QAM	1	1	16.82			18.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	16.74	6490.00	6500.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
80	QPSK	1	1	16.76	6493.34	6500.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
70	QPSK	1	1	16.81	6496.68	6500.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
60	QPSK	1	1	16.73	6490.00	6500.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
50	QPSK	1	1	16.78	6493.34	6500.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
40	QPSK	1	1	16.80	6496.68	6500.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
30	QPSK	1	1	16.75	6490.00	6500.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
25	QPSK	1	1	16.82	6493.34	6500.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	1	16.74	6496.68	6500.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
15	QPSK	1	1	16.83	6490.00	6500.00	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	1	16.77	6493.34	6500.00	Tune-up limit (dBm)	MPR (dB)	



Part270 n78 HPUE Ant 8 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	19.87	19.87	19.87			
100	PI2 BPSK	1	137	19.88	19.88	19.88			
100	PI2 BPSK	1	271	19.80	19.80	19.80			
100	PI2 BPSK	135	0	19.85	19.85	19.85	21.0	0.0	
100	PI2 BPSK	135	69	19.81	19.81	19.81	21.0	0.0	
100	PI2 BPSK	135	138	19.86	19.86	19.86	21.0	0.0	
100	PI2 BPSK	270	0	19.85	19.85	19.85	21.0	0.0	
100	QPSK	1	1	19.91	19.91	19.91			
100	QPSK	1	137	19.86	19.86	19.86	21.0	0.0	
100	QPSK	1	271	19.76	19.76	19.76			
100	QPSK	135	0	19.85	19.85	19.85	21.0	0.0	
100	QPSK	135	69	19.88	19.88	19.88	21.0	0.0	
100	QPSK	135	138	19.87	19.87	19.87	21.0	0.0	
100	QPSK	270	0	19.88	19.88	19.88	21.0	0.0	
100	16QAM	1	1	19.76	19.76	19.76	21.0	0.0	
100	64QAM	1	1	19.81	19.81	19.81	21.0	0.0	
100	256QAM	1	1	19.83	19.83	19.83	21.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	19.81	19.79	19.76	21.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	19.81	19.75	19.83	21.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	19.85	19.84	19.76	21.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	19.80	19.84	19.77	21.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	19.76	19.77	19.77	21.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	19.78	19.87	19.80	21.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	19.82	19.85	19.76	21.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	19.80	19.78	19.77	21.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	19.84	19.81	19.86	21.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	19.83	19.76	19.77	21.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	19.76	19.80	19.76	21.0	0.0	

Part27Q n78 Ant 8 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	18.83	18.83	18.83			
100	PI2 BPSK	1	137	18.85	18.85	18.85	18.0	0.0	
100	PI2 BPSK	1	271	18.83	18.83	18.83			
100	PI2 BPSK	135	0	18.86	18.86	18.86	18.0	0.0	
100	PI2 BPSK	135	69	18.84	18.84	18.84	18.0	0.0	
100	PI2 BPSK	135	138	18.91	18.91	18.91	18.0	0.0	
100	PI2 BPSK	270	0	18.80	18.80	18.80	18.0	0.0	
100	QPSK	1	1	18.95	18.95	18.95			
100	QPSK	1	137	18.80	18.80	18.80	18.0	0.0	
100	QPSK	1	271	18.82	18.82	18.82			
100	QPSK	135	0	18.83	18.83	18.83	18.0	0.0	
100	QPSK	135	69	18.87	18.87	18.87	18.0	0.0	
100	QPSK	135	138	18.86	18.86	18.86	18.0	0.0	
100	QPSK	270	0	18.80	18.80	18.80	18.0	0.0	
100	16QAM	1	1	18.85	18.85	18.85	18.0	0.0	
100	64QAM	1	1	18.89	18.89	18.89	18.0	0.0	
100	256QAM	1	1	18.87	18.87	18.87	18.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	18.87	18.90	18.87	18.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	18.88	18.89	18.90	18.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	18.81	18.80	18.80	18.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	18.83	18.85	18.88	18.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	18.86	18.83	18.88	18.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	18.88	18.79	18.82	18.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	18.80	18.83	18.84	18.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	18.88	18.87	18.86	18.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	18.83	18.89	18.83	18.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	18.85	18.79	18.80	18.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	18.81	18.81	18.85	18.0	0.0	

Part27Q n78 HPUE Ant 8 DSI6									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
100	PI2 BPSK	1	1	19.82	19.82	19.82			
100	PI2 BPSK	1	137	19.82	19.82	19.82	21.0	0.0	
100	PI2 BPSK	1	271	19.84	19.84	19.84			
100	PI2 BPSK	135	0	19.83	19.83	19.83	21.0	0.0	
100	PI2 BPSK	135	69	19.83	19.83	19.83	21.0	0.0	
100	PI2 BPSK	135	138	19.85	19.85	19.85	21.0	0.0	
100	PI2 BPSK	270	0	19.80	19.80	19.80	21.0	0.0	
100	QPSK	1	1	19.86	19.86	19.86			
100	QPSK	1	137	19.86	19.86	19.86	21.0	0.0	
100	QPSK	1	271	19.88	19.88	19.88			
100	QPSK	135	0	19.91	19.91	19.91	21.0	0.0	
100	QPSK	135	69	19.93	19.93	19.93	21.0	0.0	
100	QPSK	135	138	19.91	19.91	19.91	21.0	0.0	
100	QPSK	270	0	19.87	19.87	19.87	21.0	0.0	
100	16QAM	1	1	19.92	19.92	19.92	21.0	0.0	
100	64QAM	1	1	19.91	19.91	19.91	21.0	0.0	
100	256QAM	1	1	19.83	19.83	19.83	21.0	0.0	
Channel									
Frequency (MHz)									
90	QPSK	1	1	19.84	19.86	19.85	21.0	0.0	
Channel									
Frequency (MHz)									
80	QPSK	1	1	19.92	19.84	19.85	21.0	0.0	
Channel									
Frequency (MHz)									
70	QPSK	1	1	19.80	19.84	19.82	21.0	0.0	
Channel									
Frequency (MHz)									
60	QPSK	1	1	19.80	19.89	19.82	21.0	0.0	
Channel									
Frequency (MHz)									
50	QPSK	1	1	19.85	19.90	19.85	21.0	0.0	
Channel									
Frequency (MHz)									
40	QPSK	1	1	19.83	19.86	19.84	21.0	0.0	
Channel									
Frequency (MHz)									
30	QPSK	1	1	19.83	19.82	19.82	21.0	0.0	
Channel									
Frequency (MHz)									
25	QPSK	1	1	19.90	19.82	19.86	21.0	0.0	
Channel									
Frequency (MHz)									
20	QPSK	1	1	19.87	19.89	19.83	21.0	0.0	
Channel									
Frequency (MHz)									
15	QPSK	1	1	19.85	19.80	19.83	21.0	0.0	
Channel									
Frequency (MHz)									
10	QPSK	1	1	19.80	19.82	19.86	21.0	0.0	

Bluetooth BR/EDR ANT16

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	15.21	11.98	12.30
	CH 39	2441	15.54	12.55	12.28
	CH 78	2480	15.29	12.36	12.33
Tune-up Limit			17.00	14.00	14.00

Bluetooth BR/EDR ANT7

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	15.45	12.41	12.28
	CH 39	2441	15.24	11.96	11.96
	CH 78	2480	14.89	11.67	11.72
Tune-up Limit			16.50	13.00	13.00

BLE_1M ANT16

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
LE	CH 00	2402	14.98		
	CH 19	2440	15.27		
	CH 39	2480	15.10		
Tune-up Limit			16.00		

BLE_1M ANT7

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
LE	CH 00	2402	14.97		
	CH 19	2440	14.90		
	CH 39	2480	14.23		
Tune-up Limit			16.00		

BLE_2M ANT16

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
LE	CH 00	2402	14.99		
	CH 19	2440	15.30		
	CH 39	2480	15.40		
Tune-up Limit			16.00		

BLE_2M ANT7

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
LE	CH 00	2402	14.55		
	CH 19	2440	14.72		
	CH 39	2480	14.63		
Tune-up Limit			16.00		

Bluetooth Beamforming

Bluetooth		ANT16		Average power (dBm)		
Mode	Channel	Frequency (MHz)	1Mbps	2Mbps	3Mbps	
BR / EDR	CH 00	2402	12.50	7.72	7.60	
	CH 39	2441	12.44	7.41	7.33	
	CH 78	2480	12.57	7.90	7.90	
Tune-up Limit			13.00	8.50	8.50	

Bluetooth		ANT7		Average power (dBm)		
Mode	Channel	Frequency (MHz)	1Mbps	2Mbps	3Mbps	
BR / EDR	CH 00	2402	12.22	6.59	6.60	
	CH 39	2441	12.06	7.05	7.12	
	CH 78	2480	12.16	7.60	7.16	
Tune-up Limit			13.00	8.00	8.00	

Bluetooth		ANT16+7		Average power (dBm)		
Mode	Channel	Frequency (MHz)	1Mbps	2Mbps	3Mbps	
BR / EDR	CH 00	2402	15.43	10.39	9.57	
	CH 39	2441	15.27	10.24	10.24	
	CH 78	2480	15.38	10.76	10.56	
Tune-up Limit			16.50	11.50	11.50	