



<FR1 n48_Ant 0_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				638000	641666	645332	22.0
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	20.92	21.14	21.09	
40	PI/2 BPSK	1	53	20.58	20.90	20.79	22.0
40	PI/2 BPSK	1	104	20.60	20.88	20.83	
40	PI/2 BPSK	50	0	20.66	20.92	20.84	
40	PI/2 BPSK	50	28	20.78	21.04	20.92	22.0
40	PI/2 BPSK	50	56	20.70	20.96	20.87	22.0
40	PI/2 BPSK	100	0	20.65	20.92	20.81	
40	QPSK	1	1	20.57	20.88	20.73	
40	QPSK	1	53	20.62	20.92	20.80	22.0
40	QPSK	1	104	20.63	20.87	20.80	
40	QPSK	50	0	20.62	20.92	20.84	
40	QPSK	50	28	20.57	20.87	20.78	22.0
40	QPSK	50	56	20.62	20.93	20.78	22.0
40	QPSK	100	0	20.67	20.92	20.79	
40	16QAM	1	1	20.55	20.83	20.72	
40	64QAM	1	1	20.09	20.31	20.18	21.5
40	256QAM	1	1	18.04	18.34	18.24	19.5
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	20.85	21.12	21.05	22.0
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	20.91	21.07	21.07	22.0
Channel				637168	641666	646166	Tune-up limit (dBm)
Frequency (MHz)				3557.52	3624.99	3692.49	
15	PI/2 BPSK	1	1	20.92	21.13	20.99	22.0
Channel				637000	641666	646332	Tune-up limit (dBm)
Frequency (MHz)				3555	3624.99	3694.98	
10	PI/2 BPSK	1	1	20.92	21.09	21.00	22.0



<FR1 n48_Ant 2_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				638000	641666	645332	22.0
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	20.89	20.95	20.92	
40	PI/2 BPSK	1	53	20.75	20.83	20.72	22.0
40	PI/2 BPSK	1	104	20.73	20.82	20.79	
40	PI/2 BPSK	50	0	20.72	20.87	20.74	
40	PI/2 BPSK	50	28	20.85	20.92	20.84	22.0
40	PI/2 BPSK	50	56	20.75	20.88	20.85	22.0
40	PI/2 BPSK	100	0	20.82	20.89	20.84	
40	QPSK	1	1	20.68	20.79	20.74	
40	QPSK	1	53	20.72	20.81	20.71	22.0
40	QPSK	1	104	20.69	20.83	20.79	
40	QPSK	50	0	20.78	20.91	20.82	
40	QPSK	50	28	20.76	20.84	20.74	22.0
40	QPSK	50	56	20.72	20.84	20.79	22.0
40	QPSK	100	0	20.72	20.86	20.75	
40	16QAM	1	1	20.56	20.70	20.65	
40	64QAM	1	1	20.16	20.26	20.22	21.5
40	256QAM	1	1	18.15	18.24	18.21	19.5
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	20.85	20.91	20.88	22.0
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	20.83	20.93	20.83	22.0
Channel				637168	641666	646166	Tune-up limit (dBm)
Frequency (MHz)				3557.52	3624.99	3692.49	
15	PI/2 BPSK	1	1	20.89	20.85	20.88	22.0
Channel				637000	641666	646332	Tune-up limit (dBm)
Frequency (MHz)				3555	3624.99	3694.98	
10	PI/2 BPSK	1	1	20.87	20.90	20.90	22.0



<FR1 n48_Ant 0_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				638000	641666	645332	12.5
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	11.37	11.58	11.53	
40	PI/2 BPSK	1	53	11.25	11.50	11.43	12.5
40	PI/2 BPSK	1	104	11.34	11.44	11.44	
40	PI/2 BPSK	50	0	11.20	11.49	11.39	
40	PI/2 BPSK	50	28	11.33	11.49	11.43	12.5
40	PI/2 BPSK	50	56	11.26	11.46	11.47	12.5
40	PI/2 BPSK	100	0	11.29	11.46	11.48	
40	QPSK	1	1	11.29	11.53	11.46	
40	QPSK	1	53	11.28	11.42	11.38	12.5
40	QPSK	1	104	11.20	11.48	11.41	
40	QPSK	50	0	11.24	11.40	11.45	
40	QPSK	50	28	11.26	11.51	11.39	12.5
40	QPSK	50	56	11.27	11.43	11.42	12.5
40	QPSK	100	0	11.20	11.49	11.41	
40	16QAM	1	1	11.30	11.43	11.44	
40	64QAM	1	1	11.26	11.49	11.47	12.5
40	256QAM	1	1	11.21	11.44	11.40	12.5
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	11.32	11.57	11.44	12.5
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	11.36	11.51	11.48	12.5
Channel				637168	641666	646166	Tune-up limit (dBm)
Frequency (MHz)				3557.52	3624.99	3692.49	
15	PI/2 BPSK	1	1	11.33	11.52	11.47	12.5
Channel				637000	641666	646332	Tune-up limit (dBm)
Frequency (MHz)				3555	3624.99	3694.98	
10	PI/2 BPSK	1	1	11.36	11.49	11.46	12.5

<FR1 n48_Ant 2_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				638000	641666	645332	14.5
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	14.11	14.22	14.09	
40	PI/2 BPSK	1	53	13.82	14.01	13.91	14.5
40	PI/2 BPSK	1	104	13.93	14.12	13.91	
40	PI/2 BPSK	50	0	13.91	14.01	13.94	
40	PI/2 BPSK	50	28	13.93	14.13	13.90	14.5
40	PI/2 BPSK	50	56	13.87	14.02	13.91	14.5
40	PI/2 BPSK	100	0	13.89	14.06	13.90	
40	QPSK	1	1	13.87	14.06	13.95	
40	QPSK	1	53	13.91	13.97	13.77	14.5
40	QPSK	1	104	13.90	14.11	13.93	
40	QPSK	50	0	13.85	14.12	13.87	
40	QPSK	50	28	14.03	14.14	13.94	14.5
40	QPSK	50	56	13.97	14.05	13.87	14.5
40	QPSK	100	0	13.84	13.99	13.74	
40	16QAM	1	1	14.02	14.11	13.98	
40	64QAM	1	1	13.83	14.00	13.85	14.5
40	256QAM	1	1	14.08	14.20	13.96	14.5
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	14.02	14.12	14.03	14.5
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	14.08	14.12	14.00	14.5
Channel				637168	641666	646166	Tune-up limit (dBm)
Frequency (MHz)				3557.52	3624.99	3692.49	
15	PI/2 BPSK	1	1	14.02	14.20	14.02	14.5
Channel				637000	641666	646332	Tune-up limit (dBm)
Frequency (MHz)				3555	3624.99	3694.98	
10	PI/2 BPSK	1	1	14.10	14.13	14.07	14.5



<FR1 n77_Ant 0_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	24.0
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	23.17	23.19	23.14	
100	PI/2 BPSK	1	137	22.94	23.01	22.92	23.5
100	PI/2 BPSK	1	271	23.05	23.11	22.99	
100	PI/2 BPSK	135	0	22.59	22.71	22.63	
100	PI/2 BPSK	135	69	22.88	23.00	22.91	23.5
100	PI/2 BPSK	135	138	22.75	22.78	22.73	
100	PI/2 BPSK	270	0	22.61	22.73	22.64	
100	QPSK	1	1	23.10	23.18	23.12	24.0
100	QPSK	1	137	22.94	23.04	22.90	
100	QPSK	1	271	23.09	23.17	23.07	
100	QPSK	135	0	22.13	22.25	22.17	23.0
100	QPSK	135	69	22.91	22.97	22.91	24.0
100	QPSK	135	138	22.22	22.25	22.19	23.0
100	QPSK	270	0	22.22	22.27	22.16	
100	16QAM	1	1	22.15	22.27	22.21	
100	64QAM	1	1	20.71	20.75	20.62	21.5
100	256QAM	1	1	18.63	18.70	18.58	19.5
Channel				649668	656000	662332	24.0
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	23.15	23.11	23.08	
Channel				649334	656000	662666	24.0
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	23.12	23.10	23.08	
Channel				649000	656000	663000	24.0
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	23.15	23.11	23.07	
Channel				648668	656000	663332	24.0
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	23.16	23.16	23.04	
Channel				648334	656000	663666	24.0
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	23.09	23.16	23.13	
Channel				648000	656000	664000	24.0
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	23.12	23.16	23.13	
Channel				647668	656000	664332	24.0
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	23.07	23.11	23.08	
Channel				647500	656000	664500	24.0
Frequency (MHz)				3712.5	3840.00	3967.50	
25	PI/2 BPSK	1	1	23.13	23.17	23.04	
Channel				647334	656000	664666	24.0
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	23.17	23.16	23.09	
Channel				647168	656000	664832	24.0
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	23.08	23.18	23.13	
Channel				647000	656000	665000	24.0
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	23.17	23.12	23.05	



<FR1 n77_Ant 2_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	24.0
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	23.06	23.14	23.03	
100	PI/2 BPSK	1	137	22.88	22.96	22.76	23.5
100	PI/2 BPSK	1	271	22.96	23.00	22.84	
100	PI/2 BPSK	135	0	22.59	22.64	22.49	
100	PI/2 BPSK	135	69	22.90	22.92	22.83	24.0
100	PI/2 BPSK	135	138	22.63	22.65	22.52	
100	PI/2 BPSK	270	0	22.55	22.55	22.44	
100	QPSK	1	1	23.02	23.05	22.92	23.0
100	QPSK	1	137	22.80	22.81	22.76	
100	QPSK	1	271	23.01	22.99	22.97	
100	QPSK	135	0	22.08	22.12	21.98	24.0
100	QPSK	135	69	22.76	22.84	22.69	
100	QPSK	135	138	22.11	22.13	22.02	
100	QPSK	270	0	22.05	22.03	21.95	23.0
100	16QAM	1	1	22.07	22.05	21.97	
100	64QAM	1	1	20.57	20.58	20.46	
100	256QAM	1	1	18.60	18.65	18.47	19.5
Channel				649668	656000	662332	24.0
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	22.98	23.09	22.99	
Channel				649334	656000	662666	24.0
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	23.04	23.09	22.98	
Channel				649000	656000	663000	24.0
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	22.96	23.12	22.94	
Channel				648668	656000	663332	24.0
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	22.98	23.04	23.02	
Channel				648334	656000	663666	24.0
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	23.02	22.97	22.94	
Channel				648000	656000	664000	24.0
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	23.01	22.98	22.99	
Channel				647668	656000	664332	24.0
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	23.01	23.03	22.97	
Channel				647500	656000	664500	24.0
Frequency (MHz)				3712.5	3840.00	3967.50	
25	PI/2 BPSK	1	1	22.99	22.99	22.98	
Channel				647334	656000	664666	24.0
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	23.01	23.01	22.93	
Channel				647168	656000	664832	24.0
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	23.02	23.05	22.98	
Channel				647000	656000	665000	24.0
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	22.98	23.04	22.99	



<FR1 n77_Ant 0_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	12.0
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	11.75	11.79	11.65	
100	PI/2 BPSK	1	137	11.59	11.65	11.53	12.0
100	PI/2 BPSK	1	271	11.61	11.68	11.53	
100	PI/2 BPSK	135	0	11.66	11.65	11.55	
100	PI/2 BPSK	135	69	11.67	11.77	11.52	12.0
100	PI/2 BPSK	135	138	11.62	11.74	11.58	12.0
100	PI/2 BPSK	270	0	11.60	11.61	11.51	
100	QPSK	1	1	11.70	11.71	11.62	
100	QPSK	1	137	11.65	11.60	11.52	12.0
100	QPSK	1	271	11.60	11.62	11.56	
100	QPSK	135	0	11.60	11.69	11.59	
100	QPSK	135	69	11.69	11.70	11.55	12.0
100	QPSK	135	138	11.67	11.67	11.57	12.0
100	QPSK	270	0	11.69	11.65	11.50	
100	16QAM	1	1	11.68	11.69	11.56	
100	64QAM	1	1	11.67	11.66	11.54	12.0
100	256QAM	1	1	11.66	11.61	11.52	12.0
Channel				649668	656000	662332	12.0
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	11.68	11.74	11.58	
Channel				649334	656000	662666	12.0
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	11.71	11.77	11.61	
Channel				649000	656000	663000	12.0
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	11.68	11.71	11.63	
Channel				648668	656000	663332	12.0
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	11.72	11.70	11.55	
Channel				648334	656000	663666	12.0
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	11.66	11.71	11.57	
Channel				648000	656000	664000	12.0
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	11.66	11.73	11.61	
Channel				647668	656000	664332	12.0
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	11.72	11.70	11.59	
Channel				647500	656000	664500	12.0
Frequency (MHz)				3712.5	3840.00	3967.50	
25	PI/2 BPSK	1	1	11.65	11.68	11.57	
Channel				647334	656000	664666	12.0
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	11.73	11.69	11.61	
Channel				647168	656000	664832	12.0
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	11.67	11.72	11.62	
Channel				647000	656000	665000	12.0
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	11.67	11.74	11.63	



<FR1 n77_Ant 2_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	13.0
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	12.44	12.52	12.43	
100	PI/2 BPSK	1	137	12.26	12.37	12.27	13.0
100	PI/2 BPSK	1	271	12.33	12.49	12.39	
100	PI/2 BPSK	135	0	12.30	12.44	12.28	
100	PI/2 BPSK	135	69	12.36	12.46	12.40	13.0
100	PI/2 BPSK	135	138	12.35	12.37	12.28	
100	PI/2 BPSK	270	0	12.30	12.38	12.27	
100	QPSK	1	1	12.39	12.46	12.39	13.0
100	QPSK	1	137	12.28	12.38	12.28	
100	QPSK	1	271	12.36	12.49	12.35	
100	QPSK	135	0	12.29	12.44	12.34	13.0
100	QPSK	135	69	12.32	12.47	12.42	
100	QPSK	135	138	12.25	12.43	12.34	
100	QPSK	270	0	12.31	12.41	12.16	13.0
100	16QAM	1	1	12.34	12.52	12.42	
100	64QAM	1	1	12.28	12.47	12.23	
100	256QAM	1	1	12.44	12.48	12.38	13.0
Channel				649668	656000	662332	13.0
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	12.37	12.50	12.40	
Channel				649334	656000	662666	13.0
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	12.41	12.51	12.43	
Channel				649000	656000	663000	13.0
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	12.37	12.48	12.35	
Channel				648668	656000	663332	13.0
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	12.40	12.46	12.40	
Channel				648334	656000	663666	13.0
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	12.37	12.47	12.40	
Channel				648000	656000	664000	13.0
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	12.42	12.48	12.33	
Channel				647668	656000	664332	13.0
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	12.39	12.51	12.36	
Channel				647500	656000	664500	13.0
Frequency (MHz)				3712.5	3840.00	3967.50	
25	PI/2 BPSK	1	1	12.43	12.47	12.38	
Channel				647334	656000	664666	13.0
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	12.44	12.43	12.36	
Channel				647168	656000	664832	13.0
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	12.39	12.42	12.41	
Channel				647000	656000	665000	13.0
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	12.35	12.47	12.37	



<FR1 n77_HPUE_Ant 0_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	26.15	26.16	26.12	
100	PI/2 BPSK	1	137	25.91	26.00	25.94	27.0
100	PI/2 BPSK	1	271	26.06	26.09	25.97	
100	PI/2 BPSK	135	0	25.41	25.46	25.35	
100	PI/2 BPSK	135	69	25.90	25.97	25.91	27.0
100	PI/2 BPSK	135	138	25.49	25.51	25.46	26.5
100	PI/2 BPSK	270	0	25.39	25.49	25.39	
100	QPSK	1	1	26.08	26.10	26.03	
100	QPSK	1	137	25.94	25.97	25.86	27.0
100	QPSK	1	271	26.00	26.10	25.99	
100	QPSK	135	0	24.91	24.96	24.86	
100	QPSK	135	69	25.89	25.90	25.83	27.0
100	QPSK	135	138	24.89	24.98	24.88	26.0
100	QPSK	270	0	24.92	24.97	24.90	
100	16QAM	1	1	24.92	25.00	24.94	
100	64QAM	1	1	23.46	23.50	23.44	24.5
100	256QAM	1	1	21.41	21.45	21.33	22.5
Channel				649668	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	26.12	26.08	26.10	
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	26.15	26.15	26.10	
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	26.14	26.06	26.07	
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	26.15	26.07	26.02	
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	26.05	26.12	26.11	
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	26.11	26.07	26.07	
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	26.05	26.13	26.06	
Channel				647500	656000	664500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3840.00	3967.50	
25	PI/2 BPSK	1	1	26.13	26.13	26.03	
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	26.15	26.07	26.07	
Channel				647168	656000	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	26.07	26.14	26.07	
Channel				647000	656000	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	26.14	26.08	26.03	



<FR1 n77_HPUE_Ant 2_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	27.0
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	26.04	26.07	26.04	
100	PI/2 BPSK	1	137	25.79	25.82	25.88	26.5
100	PI/2 BPSK	1	271	25.78	25.90	25.77	
100	PI/2 BPSK	135	0	25.36	25.39	25.37	
100	PI/2 BPSK	135	69	25.85	25.87	25.86	27.0
100	PI/2 BPSK	135	138	25.32	25.40	25.37	
100	PI/2 BPSK	270	0	25.30	25.36	25.28	
100	QPSK	1	1	25.85	25.94	25.86	26.0
100	QPSK	1	137	25.78	25.85	25.79	
100	QPSK	1	271	25.87	25.82	25.80	
100	QPSK	135	0	24.77	24.87	24.76	27.0
100	QPSK	135	69	25.80	25.77	25.71	
100	QPSK	135	138	24.84	24.82	24.84	
100	QPSK	270	0	24.85	24.85	24.89	26.0
100	16QAM	1	1	24.75	24.84	24.76	
100	64QAM	1	1	23.39	23.43	23.39	
100	256QAM	1	1	21.29	21.31	21.29	22.5
Channel				649668	656000	662332	27.0
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	25.99	25.95	25.96	
Channel				649334	656000	662666	27.0
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	26.04	25.96	26.02	
Channel				649000	656000	663000	27.0
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	25.97	26.03	26.01	
Channel				648668	656000	663332	27.0
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	26.03	26.03	26.00	
Channel				648334	656000	663666	27.0
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	26.06	26.01	25.94	
Channel				648000	656000	664000	27.0
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	26.02	26.04	25.96	
Channel				647668	656000	664332	27.0
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	26.01	26.00	26.01	
Channel				647500	656000	664500	27.0
Frequency (MHz)				3712.5	3840.00	3967.50	
25	PI/2 BPSK	1	1	26.04	25.95	25.96	
Channel				647334	656000	664666	27.0
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	26.04	25.99	25.95	
Channel				647168	656000	664832	27.0
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	26.05	25.96	26.01	
Channel				647000	656000	665000	27.0
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	25.98	25.96	25.98	



<FR1 n77_HPUE_Ant 0_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	15.0
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	14.69	14.74	14.57	
100	PI/2 BPSK	1	137	14.58	14.60	14.49	15.0
100	PI/2 BPSK	1	271	14.52	14.66	14.52	
100	PI/2 BPSK	135	0	14.53	14.62	14.43	
100	PI/2 BPSK	135	69	14.57	14.68	14.48	15.0
100	PI/2 BPSK	135	138	14.53	14.65	14.39	15.0
100	PI/2 BPSK	270	0	14.50	14.68	14.46	
100	QPSK	1	1	14.52	14.69	14.51	
100	QPSK	1	137	14.57	14.67	14.41	15.0
100	QPSK	1	271	14.55	14.65	14.40	
100	QPSK	135	0	14.55	14.63	14.44	
100	QPSK	135	69	14.55	14.65	14.46	15.0
100	QPSK	135	138	14.55	14.59	14.54	15.0
100	QPSK	270	0	14.49	14.61	14.40	
100	16QAM	1	1	14.54	14.68	14.48	
100	64QAM	1	1	14.50	14.63	14.40	15.0
100	256QAM	1	1	14.54	14.63	14.47	15.0
Channel				649668	656000	662332	15.0
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	14.65	14.71	14.48	
Channel				649334	656000	662666	15.0
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	14.59	14.66	14.56	
Channel				649000	656000	663000	15.0
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	14.58	14.66	14.56	
Channel				648668	656000	663332	15.0
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	14.68	14.67	14.53	
Channel				648334	656000	663666	15.0
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	14.66	14.64	14.54	
Channel				648000	656000	664000	15.0
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	14.67	14.64	14.46	
Channel				647668	656000	664332	15.0
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	14.59	14.67	14.54	
Channel				647500	656000	664500	15.0
Frequency (MHz)				3712.5	3840.00	3967.50	
25	PI/2 BPSK	1	1	14.58	14.72	14.55	
Channel				647334	656000	664666	15.0
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	14.63	14.70	14.50	
Channel				647168	656000	664832	15.0
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	14.62	14.65	14.50	
Channel				647000	656000	665000	15.0
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	14.62	14.69	14.54	



<FR1 n77_HPUE_Ant 2_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	16.0
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	15.36	15.49	15.42	
100	PI/2 BPSK	1	137	15.20	15.28	15.17	16.0
100	PI/2 BPSK	1	271	15.31	15.48	15.26	
100	PI/2 BPSK	135	0	15.25	15.41	15.28	
100	PI/2 BPSK	135	69	15.32	15.42	15.30	16.0
100	PI/2 BPSK	135	138	15.17	15.35	15.16	16.0
100	PI/2 BPSK	270	0	15.16	15.33	15.12	
100	QPSK	1	1	15.33	15.39	15.21	
100	QPSK	1	137	15.19	15.34	15.20	16.0
100	QPSK	1	271	15.32	15.48	15.27	
100	QPSK	135	0	15.28	15.43	15.26	
100	QPSK	135	69	15.33	15.42	15.32	16.0
100	QPSK	135	138	15.18	15.38	15.27	16.0
100	QPSK	270	0	15.24	15.36	15.24	
100	16QAM	1	1	15.36	15.48	15.32	
100	64QAM	1	1	15.28	15.43	15.30	16.0
100	256QAM	1	1	15.31	15.47	15.38	16.0
Channel				649668	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	15.26	15.40	15.33	16.0
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	15.31	15.43	15.36	16.0
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	15.26	15.43	15.42	16.0
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	15.28	15.43	15.34	16.0
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	15.35	15.44	15.41	16.0
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	15.28	15.49	15.36	16.0
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	15.32	15.39	15.38	16.0
Channel				647500	656000	664500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3840.00	3967.50	
25	PI/2 BPSK	1	1	15.33	15.49	15.40	16.0
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	15.28	15.40	15.38	16.0
Channel				647168	656000	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3840	3972.48	
15	PI/2 BPSK	1	1	15.27	15.49	15.34	16.0
Channel				647000	656000	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3840	3975	
10	PI/2 BPSK	1	1	15.35	15.45	15.38	16.0



<FR1 n77_Ant 0_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		23.32		24.0
100	PI/2 BPSK	1	137		23.07		
100	PI/2 BPSK	1	271		23.20		
100	PI/2 BPSK	135	0		22.85		23.5
100	PI/2 BPSK	135	69		23.09		24.0
100	PI/2 BPSK	135	138		22.77		23.5
100	PI/2 BPSK	270	0		22.83		
100	QPSK	1	1		23.27		24.0
100	QPSK	1	137		23.08		
100	QPSK	1	271		23.24		
100	QPSK	135	0		22.27		23.0
100	QPSK	135	69		23.05		24.0
100	QPSK	135	138		22.28		23.0
100	QPSK	270	0		22.32		
100	16QAM	1	1		22.38		23.0
100	64QAM	1	1		20.86		21.5
100	256QAM	1	1		18.86		19.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	23.22	23.30	23.20	24.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	23.27	23.22	23.21	24.0
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	23.21	23.26	23.19	24.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	23.22	23.26	23.12	24.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	23.30	23.29	23.15	24.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	23.22	23.30	23.17	24.0
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	23.24	23.29	23.17	24.0
Channel				630834	633332	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3499.98	3537.48	
25	PI/2 BPSK	1	1	23.23	23.31	23.19	24.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	23.21	23.31	23.20	24.0
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	23.29	23.29	23.15	24.0
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	23.22	23.29	23.12	24.0



<FR1 n77_Ant 2_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		24.0
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		23.58		
100	PI/2 BPSK	1	137		23.38		23.5
100	PI/2 BPSK	1	271		23.48		
100	PI/2 BPSK	135	0		23.03		
100	PI/2 BPSK	135	69		23.38		24.0
100	PI/2 BPSK	135	138		23.07		
100	PI/2 BPSK	270	0		23.04		
100	QPSK	1	1		23.49		24.0
100	QPSK	1	137		23.25		
100	QPSK	1	271		23.49		
100	QPSK	135	0		22.53		23.0
100	QPSK	135	69		23.23		24.0
100	QPSK	135	138		22.58		23.0
100	QPSK	270	0		22.57		
100	16QAM	1	1		22.58		
100	64QAM	1	1		21.00		21.5
100	256QAM	1	1		19.04		19.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	23.52	23.57	23.46	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	23.49	23.56	23.45	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	23.52	23.52	23.51	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	23.51	23.53	23.47	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	23.54	23.50	23.46	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	23.44	23.52	23.43	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	23.49	23.54	23.48	
Channel				630834	633332	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3499.98	3537.48	
25	PI/2 BPSK	1	1	23.47	23.54	23.52	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	23.50	23.57	23.45	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	23.45	23.52	23.43	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	23.45	23.56	23.47	



<FR1 n77_Ant 0_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		12.0
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		11.62		
100	PI/2 BPSK	1	137		11.51		12.0
100	PI/2 BPSK	1	271		11.43		
100	PI/2 BPSK	135	0		11.53		
100	PI/2 BPSK	135	69		11.57		12.0
100	PI/2 BPSK	135	138		11.41		12.0
100	PI/2 BPSK	270	0		11.41		
100	QPSK	1	1		11.61		
100	QPSK	1	137		11.44		12.0
100	QPSK	1	271		11.55		
100	QPSK	135	0		11.52		
100	QPSK	135	69		11.54		12.0
100	QPSK	135	138		11.51		12.0
100	QPSK	270	0		11.39		
100	16QAM	1	1		11.48		
100	64QAM	1	1		11.45		12.0
100	256QAM	1	1		11.49		12.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	11.52	11.51	11.52	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	11.54	11.59	11.57	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	11.51	11.55	11.59	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	11.55	11.54	11.51	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	11.53	11.55	11.51	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	11.54	11.52	11.53	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	11.59	11.55	11.57	
Channel				630834	633332	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3499.98	3537.48	
25	PI/2 BPSK	1	1	11.56	11.59	11.58	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	11.53	11.54	11.55	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	11.53	11.59	11.56	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	11.53	11.60	11.58	



<FR1 n77_Ant 2_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		13.0
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		12.75		
100	PI/2 BPSK	1	137		12.61		13.0
100	PI/2 BPSK	1	271		12.67		
100	PI/2 BPSK	135	0		12.58		
100	PI/2 BPSK	135	69		12.72		13.0
100	PI/2 BPSK	135	138		12.64		13.0
100	PI/2 BPSK	270	0		12.62		
100	QPSK	1	1		12.67		
100	QPSK	1	137		12.63		13.0
100	QPSK	1	271		12.67		
100	QPSK	135	0		12.71		
100	QPSK	135	69		12.62		13.0
100	QPSK	135	138		12.73		13.0
100	QPSK	270	0		12.69		
100	16QAM	1	1		12.75		
100	64QAM	1	1		12.73		13.0
100	256QAM	1	1		12.71		13.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	12.59	12.74	12.49	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	12.52	12.71	12.57	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	12.55	12.67	12.51	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	12.57	12.73	12.55	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	12.52	12.70	12.51	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	12.60	12.71	12.52	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	12.54	12.72	12.48	
Channel				630834	633332	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3499.98	3537.48	
25	PI/2 BPSK	1	1	12.55	12.72	12.47	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	12.52	12.69	12.56	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	12.52	12.74	12.54	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	12.57	12.67	12.48	



<FR1 n77_HPUE_Ant 0_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		26.31		27.0
100	PI/2 BPSK	1	137		26.16		
100	PI/2 BPSK	1	271		26.17		
100	PI/2 BPSK	135	0		25.65		26.5
100	PI/2 BPSK	135	69		26.06		27.0
100	PI/2 BPSK	135	138		25.67		26.5
100	PI/2 BPSK	270	0		25.61		
100	QPSK	1	1		26.23		27.0
100	QPSK	1	137		26.00		
100	QPSK	1	271		26.20		
100	QPSK	135	0		25.14		26.0
100	QPSK	135	69		26.00		27.0
100	QPSK	135	138		25.05		26.0
100	QPSK	270	0		25.12		
100	16QAM	1	1		25.14		26.0
100	64QAM	1	1		23.63		24.5
100	256QAM	1	1		21.73		22.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	26.15	26.23	26.09	27.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	26.12	26.25	26.11	27.0
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	26.19	26.16	26.09	27.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	26.19	26.20	26.17	27.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	26.09	26.19	26.12	27.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	26.13	26.24	26.18	27.0
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	26.19	26.24	26.10	27.0
Channel				630834	633332	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3499.98	3537.48	
25	PI/2 BPSK	1	1	26.19	26.17	26.10	27.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	26.11	26.17	26.17	27.0
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	26.14	26.25	26.15	27.0
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	26.17	26.17	26.13	27.0



<FR1 n77_HPUE_Ant 2_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		27.0
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		26.61		
100	PI/2 BPSK	1	137		26.39		26.5
100	PI/2 BPSK	1	271		26.34		
100	PI/2 BPSK	135	0		25.88		
100	PI/2 BPSK	135	69		26.42		26.5
100	PI/2 BPSK	135	138		25.90		
100	PI/2 BPSK	270	0		25.90		
100	QPSK	1	1		26.44		27.0
100	QPSK	1	137		26.32		
100	QPSK	1	271		26.39		
100	QPSK	135	0		25.42		26.0
100	QPSK	135	69		26.35		
100	QPSK	135	138		25.41		
100	QPSK	270	0		25.40		24.5
100	16QAM	1	1		25.35		
100	64QAM	1	1		23.98		
100	256QAM	1	1		21.85		22.5
Channel				633000	633332	633666	27.0
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	26.59	26.48	26.51	
Channel				632668	633332	634000	27.0
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	26.56	26.47	26.41	
Channel				632334	633332	634332	27.0
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	26.60	26.53	26.45	
Channel				632000	633332	634666	27.0
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	26.53	26.54	26.43	
Channel				631668	633332	635000	27.0
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	26.53	26.47	26.48	
Channel				631334	633332	635332	27.0
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	26.60	26.57	26.49	
Channel				631000	633332	635666	27.0
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	26.59	26.57	26.50	
Channel				630834	633332	635832	27.0
Frequency (MHz)				3462.51	3499.98	3537.48	
25	PI/2 BPSK	1	1	26.59	26.52	26.51	
Channel				630668	633332	636000	27.0
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	26.52	26.48	26.43	
Channel				630500	633332	636166	27.0
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	26.59	26.55	26.47	
Channel				630334	633332	636332	27.0
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	26.57	26.54	26.42	



<FR1 n77_HPUE_Ant 0_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		15.0
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		14.63		
100	PI/2 BPSK	1	137		14.38		15.0
100	PI/2 BPSK	1	271		14.41		
100	PI/2 BPSK	135	0		14.41		
100	PI/2 BPSK	135	69		14.59		15.0
100	PI/2 BPSK	135	138		14.41		15.0
100	PI/2 BPSK	270	0		14.36		
100	QPSK	1	1		14.49		
100	QPSK	1	137		14.34		15.0
100	QPSK	1	271		14.32		
100	QPSK	135	0		14.36		
100	QPSK	135	69		14.38		15.0
100	QPSK	135	138		14.52		15.0
100	QPSK	270	0		14.32		
100	16QAM	1	1		14.42		
100	64QAM	1	1		14.34		15.0
100	256QAM	1	1		14.46		15.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	14.52	14.57	14.54	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	14.51	14.53	14.53	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	14.57	14.55	14.50	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	14.53	14.48	14.55	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	14.56	14.48	14.52	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	14.52	14.55	14.54	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	14.50	14.50	14.49	
Channel				630834	633332	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3499.98	3537.48	
25	PI/2 BPSK	1	1	14.50	14.56	14.50	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	14.58	14.57	14.58	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	14.55	14.51	14.52	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	14.54	14.48	14.55	



<FR1 n77_HPUE_Ant 2_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		16.0
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		15.63		
100	PI/2 BPSK	1	137		15.42		16.0
100	PI/2 BPSK	1	271		15.62		
100	PI/2 BPSK	135	0		15.51		
100	PI/2 BPSK	135	69		15.57		16.0
100	PI/2 BPSK	135	138		15.52		16.0
100	PI/2 BPSK	270	0		15.55		
100	QPSK	1	1		15.49		
100	QPSK	1	137		15.44		16.0
100	QPSK	1	271		15.56		
100	QPSK	135	0		15.56		
100	QPSK	135	69		15.55		16.0
100	QPSK	135	138		15.49		16.0
100	QPSK	270	0		15.43		
100	16QAM	1	1		15.55		
100	64QAM	1	1		15.57		16.0
100	256QAM	1	1		15.60		16.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	15.54	15.54	15.39	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	15.57	15.62	15.46	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	15.59	15.57	15.43	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	15.57	15.58	15.46	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	15.54	15.59	15.40	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	15.58	15.54	15.42	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	15.55	15.60	15.45	
Channel				630834	633332	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3499.98	3537.48	
25	PI/2 BPSK	1	1	15.49	15.55	15.40	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	15.56	15.58	15.45	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	15.56	15.53	15.43	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	15.49	15.53	15.41	



<FR1 n78_Ant 0_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		23.16		24.0
100	PI/2 BPSK	1	137		23.09		
100	PI/2 BPSK	1	271		23.03		
100	PI/2 BPSK	135	0		22.95		23.5
100	PI/2 BPSK	135	69		23.12		24.0
100	PI/2 BPSK	135	138		22.93		23.5
100	PI/2 BPSK	270	0		22.93		
100	QPSK	1	1		23.13		24.0
100	QPSK	1	137		23.10		
100	QPSK	1	271		23.01		
100	QPSK	135	0		22.41		23.0
100	QPSK	135	69		23.12		24.0
100	QPSK	135	138		22.41		23.0
100	QPSK	270	0		22.42		
100	16QAM	1	1		22.45		23.0
100	64QAM	1	1		20.93		21.5
100	256QAM	1	1		18.89		19.5
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	23.12	23.12	23.13	24.0
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	23.11	23.13	23.10	24.0
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	23.09	23.10	23.06	24.0
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	23.06	23.12	23.03	24.0
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	23.04	23.06	23.09	24.0
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	23.05	23.13	23.07	24.0
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	23.05	23.13	23.07	24.0
Channel				647500	650000	652500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3750.00	3787.50	
25	PI/2 BPSK	1	1	23.12	23.12	23.09	24.0
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	23.09	23.12	23.09	24.0
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	23.11	23.09	23.10	24.0
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	23.08	23.03	23.04	24.0



<FR1 n78_Ant 2_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		23.00		
100	PI/2 BPSK	1	137		22.85		24.0
100	PI/2 BPSK	1	271		22.86		
100	PI/2 BPSK	135	0		22.57		23.5
100	PI/2 BPSK	135	69		22.81		24.0
100	PI/2 BPSK	135	138		22.51		23.5
100	PI/2 BPSK	270	0		22.43		
100	QPSK	1	1		22.99		
100	QPSK	1	137		22.78		24.0
100	QPSK	1	271		22.82		
100	QPSK	135	0		22.04		23.0
100	QPSK	135	69		22.67		24.0
100	QPSK	135	138		22.02		23.0
100	QPSK	270	0		21.95		
100	16QAM	1	1		22.13		23.0
100	64QAM	1	1		20.65		21.5
100	256QAM	1	1		18.62		19.5
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	22.96	22.94	22.90	
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	22.87	22.93	22.85	
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	22.86	22.92	22.88	
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	22.93	22.88	22.83	
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	22.87	22.87	22.84	
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	22.91	22.93	22.87	
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	22.87	22.92	22.87	
Channel				647500	650000	652500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3750.00	3787.50	
25	PI/2 BPSK	1	1	22.93	22.94	22.88	
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	22.92	22.89	22.89	
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	22.96	22.85	22.84	
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	22.92	22.90	22.81	



<FR1 n78_Ant 0_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		12.0
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		11.71		
100	PI/2 BPSK	1	137		11.56		12.0
100	PI/2 BPSK	1	271		11.62		
100	PI/2 BPSK	135	0		11.63		
100	PI/2 BPSK	135	69		11.65		12.0
100	PI/2 BPSK	135	138		11.56		12.0
100	PI/2 BPSK	270	0		11.61		
100	QPSK	1	1		11.64		
100	QPSK	1	137		11.57		12.0
100	QPSK	1	271		11.61		
100	QPSK	135	0		11.60		
100	QPSK	135	69		11.63		12.0
100	QPSK	135	138		11.61		12.0
100	QPSK	270	0		11.56		
100	16QAM	1	1		11.57		
100	64QAM	1	1		11.61		12.0
100	256QAM	1	1		11.62		12.0
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	11.69	11.63	11.68	
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	11.62	11.68	11.68	
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	11.63	11.68	11.67	
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	11.56	11.59	11.58	
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	11.61	11.62	11.66	
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	11.62	11.69	11.66	
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	11.65	11.64	11.58	
Channel				647500	650000	652500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3750.00	3787.50	
25	PI/2 BPSK	1	1	11.58	11.66	11.63	
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	11.59	11.64	11.63	
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	11.63	11.64	11.61	
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	11.67	11.61	11.64	



<FR1 n78_Ant 2_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		12.51		
100	PI/2 BPSK	1	137		12.35		13.0
100	PI/2 BPSK	1	271		12.42		
100	PI/2 BPSK	135	0		12.36		
100	PI/2 BPSK	135	69		12.49		13.0
100	PI/2 BPSK	135	138		12.41		13.0
100	PI/2 BPSK	270	0		12.40		
100	QPSK	1	1		12.44		
100	QPSK	1	137		12.40		13.0
100	QPSK	1	271		12.47		
100	QPSK	135	0		12.43		
100	QPSK	135	69		12.47		13.0
100	QPSK	135	138		12.37		13.0
100	QPSK	270	0		12.32		
100	16QAM	1	1		12.43		
100	64QAM	1	1		12.46		13.0
100	256QAM	1	1		12.49		13.0
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	12.45	12.39	12.35	
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	12.48	12.45	12.35	
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	12.45	12.39	12.37	
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	12.50	12.45	12.35	
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	12.50	12.36	12.40	
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	12.45	12.43	12.33	
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	12.50	12.45	12.33	
Channel				647500	650000	652500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3750.00	3787.50	
25	PI/2 BPSK	1	1	12.43	12.40	12.36	
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	12.44	12.42	12.32	
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	12.43	12.37	12.38	
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	12.45	12.37	12.31	



<FR1 n78_HPUE_Ant 0_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		26.12		27.0
100	PI/2 BPSK	1	137		26.06		
100	PI/2 BPSK	1	271		26.06		
100	PI/2 BPSK	135	0		25.76		26.5
100	PI/2 BPSK	135	69		26.11		27.0
100	PI/2 BPSK	135	138		25.72		26.5
100	PI/2 BPSK	270	0		25.75		
100	QPSK	1	1		26.10		27.0
100	QPSK	1	137		26.10		
100	QPSK	1	271		26.06		
100	QPSK	135	0		25.18		26.0
100	QPSK	135	69		26.01		27.0
100	QPSK	135	138		25.16		26.0
100	QPSK	270	0		25.17		
100	16QAM	1	1		25.21		26.0
100	64QAM	1	1		23.81		24.5
100	256QAM	1	1		21.65		22.5
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	26.08	26.03	26.02	27.0
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	26.03	26.02	26.03	27.0
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	26.02	26.10	26.03	27.0
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	26.08	26.03	26.04	27.0
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	26.09	26.10	26.11	27.0
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	26.05	26.11	26.10	27.0
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	26.06	26.06	26.07	27.0
Channel				647500	650000	652500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3750.00	3787.50	
25	PI/2 BPSK	1	1	26.08	26.09	26.07	27.0
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	26.07	26.08	26.02	27.0
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	26.05	26.10	26.10	27.0
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	26.08	26.03	26.10	27.0



<FR1 n78_HPUE_Ant 2_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		27.0
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		26.03		
100	PI/2 BPSK	1	137		25.78		26.5
100	PI/2 BPSK	1	271		25.75		
100	PI/2 BPSK	135	0		25.12		
100	PI/2 BPSK	135	69		25.66		26.5
100	PI/2 BPSK	135	138		25.14		
100	PI/2 BPSK	270	0		25.15		
100	QPSK	1	1		25.81		27.0
100	QPSK	1	137		25.60		
100	QPSK	1	271		25.70		
100	QPSK	135	0		24.63		26.0
100	QPSK	135	69		25.59		27.0
100	QPSK	135	138		24.52		26.0
100	QPSK	270	0		24.61		
100	16QAM	1	1		24.77		
100	64QAM	1	1		23.26		24.5
100	256QAM	1	1		21.15		22.5
Channel				649668	650000	650332	27.0
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	25.95	25.91	25.87	
Channel				649334	650000	650666	27.0
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	25.91	25.93	25.89	
Channel				649000	650000	651000	27.0
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	25.94	25.86	25.85	
Channel				648668	650000	651332	27.0
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	25.89	25.91	25.85	
Channel				648334	650000	651666	27.0
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	25.88	25.94	25.83	
Channel				648000	650000	652000	27.0
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	25.92	25.87	25.90	
Channel				647668	650000	652332	27.0
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	25.94	25.85	25.90	
Channel				647500	650000	652500	27.0
Frequency (MHz)				3712.5	3750.00	3787.50	
25	PI/2 BPSK	1	1	25.89	25.93	25.85	
Channel				647334	650000	652666	27.0
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	25.96	25.84	25.80	
Channel				647168	650000	652832	27.0
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	25.94	25.89	25.80	
Channel				647000	650000	653000	27.0
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	25.87	25.86	25.85	



<FR1 n78_HPUE_Ant 0_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		15.0
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		14.73		
100	PI/2 BPSK	1	137		14.62		15.0
100	PI/2 BPSK	1	271		14.66		
100	PI/2 BPSK	135	0		14.61		
100	PI/2 BPSK	135	69		14.68		15.0
100	PI/2 BPSK	135	138		14.62		15.0
100	PI/2 BPSK	270	0		14.61		
100	QPSK	1	1		14.57		
100	QPSK	1	137		14.58		15.0
100	QPSK	1	271		14.61		
100	QPSK	135	0		14.59		
100	QPSK	135	69		14.64		15.0
100	QPSK	135	138		14.59		15.0
100	QPSK	270	0		14.59		
100	16QAM	1	1		14.51		
100	64QAM	1	1		14.58		15.0
100	256QAM	1	1		14.60		15.0
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	14.63	14.65	14.68	
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	14.66	14.65	14.62	
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	14.62	14.69	14.62	
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	14.68	14.67	14.62	
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	14.62	14.70	14.64	
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	14.67	14.68	14.65	
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	14.59	14.64	14.67	
Channel				647500	650000	652500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3750.00	3787.50	
25	PI/2 BPSK	1	1	14.63	14.64	14.62	
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	14.66	14.63	14.65	
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	14.64	14.63	14.66	
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	14.64	14.63	14.62	

**<FR1 n78_HPUE_Ant 2_Sensor ON>**

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		15.54		
100	PI/2 BPSK	1	137		15.33		16.0
100	PI/2 BPSK	1	271		15.48		
100	PI/2 BPSK	135	0		15.39		
100	PI/2 BPSK	135	69		15.49		16.0
100	PI/2 BPSK	135	138		15.40		16.0
100	PI/2 BPSK	270	0		15.45		
100	QPSK	1	1		15.42		
100	QPSK	1	137		15.37		16.0
100	QPSK	1	271		15.52		
100	QPSK	135	0		15.42		
100	QPSK	135	69		15.45		16.0
100	QPSK	135	138		15.43		16.0
100	QPSK	270	0		15.44		
100	16QAM	1	1		15.46		
100	64QAM	1	1		15.53		16.0
100	256QAM	1	1		15.47		16.0
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	15.37	15.42	15.50	
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	15.42	15.46	15.45	
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	15.33	15.40	15.53	
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	15.40	15.47	15.52	
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	15.38	15.43	15.44	
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	15.40	15.43	15.52	
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	15.35	15.44	15.45	
Channel				647500	650000	652500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3750.00	3787.50	
25	PI/2 BPSK	1	1	15.42	15.49	15.53	
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	15.43	15.40	15.51	
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	15.33	15.48	15.53	
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	15.36	15.42	15.50	



<FR1 n78_Ant 0_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		23.28		24.0
100	PI/2 BPSK	1	137		23.17		
100	PI/2 BPSK	1	271		23.16		
100	PI/2 BPSK	135	0		22.84		23.5
100	PI/2 BPSK	135	69		23.07		24.0
100	PI/2 BPSK	135	138		22.87		23.5
100	PI/2 BPSK	270	0		22.78		
100	QPSK	1	1		23.23		24.0
100	QPSK	1	137		23.03		
100	QPSK	1	271		23.19		
100	QPSK	135	0		22.31		23.0
100	QPSK	135	69		22.98		24.0
100	QPSK	135	138		22.31		23.0
100	QPSK	270	0		22.28		
100	16QAM	1	1		22.39		23.0
100	64QAM	1	1		20.89		21.5
100	256QAM	1	1		18.88		19.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	23.14	23.14	23.16	24.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	23.13	23.14	23.18	24.0
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	23.18	23.16	23.26	24.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	23.14	23.23	23.20	24.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	23.11	23.22	23.23	24.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	23.10	23.18	23.24	24.0
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	23.16	23.24	23.20	24.0
Channel				630834	633332	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3499.98	3537.48	
25	PI/2 BPSK	1	1	23.18	23.16	23.19	24.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	23.16	23.15	23.22	24.0
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	23.16	23.15	23.23	24.0
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	23.12	23.15	23.18	24.0



<FR1 n78_Ant 2_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		24.0
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		23.42		
100	PI/2 BPSK	1	137		23.29		23.5
100	PI/2 BPSK	1	271		23.28		
100	PI/2 BPSK	135	0		22.91		
100	PI/2 BPSK	135	69		23.20		23.5
100	PI/2 BPSK	135	138		22.79		
100	PI/2 BPSK	270	0		22.89		
100	QPSK	1	1		23.27		24.0
100	QPSK	1	137		23.14		
100	QPSK	1	271		23.14		
100	QPSK	135	0		22.38		23.0
100	QPSK	135	69		23.12		24.0
100	QPSK	135	138		22.33		23.0
100	QPSK	270	0		22.42		
100	16QAM	1	1		22.43		
100	64QAM	1	1		20.90		21.5
100	256QAM	1	1		18.81		19.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	23.33	23.38	23.25	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	23.33	23.33	23.19	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	23.28	23.38	23.24	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	23.23	23.34	23.23	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	23.27	23.37	23.21	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	23.25	23.30	23.19	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	23.25	23.30	23.20	
Channel				630834	633332	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3499.98	3537.48	
25	PI/2 BPSK	1	1	23.33	23.28	23.20	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	23.31	23.29	23.19	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	23.26	23.30	23.25	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	23.27	23.38	23.16	



<FR1 n78_Ant 0_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		12.0
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		11.59		
100	PI/2 BPSK	1	137		11.54		12.0
100	PI/2 BPSK	1	271		11.52		
100	PI/2 BPSK	135	0		11.52		
100	PI/2 BPSK	135	69		11.55		12.0
100	PI/2 BPSK	135	138		11.45		12.0
100	PI/2 BPSK	270	0		11.47		
100	QPSK	1	1		11.54		
100	QPSK	1	137		11.48		12.0
100	QPSK	1	271		11.48		
100	QPSK	135	0		11.49		
100	QPSK	135	69		11.50		12.0
100	QPSK	135	138		11.54		12.0
100	QPSK	270	0		11.49		
100	16QAM	1	1		11.49		
100	64QAM	1	1		11.47		12.0
100	256QAM	1	1		11.48		12.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	11.58	11.55	11.56	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	11.53	11.53	11.52	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	11.58	11.51	11.56	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	11.49	11.57	11.58	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	11.45	11.52	11.52	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	11.57	11.55	11.52	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	11.56	11.57	11.54	
Channel				630834	633332	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3499.98	3537.48	
25	PI/2 BPSK	1	1	11.48	11.52	11.58	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	11.52	11.53	11.55	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	11.56	11.58	11.57	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	11.42	11.59	11.51	



<FR1 n78_Ant 2_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		13.0
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		12.82		
100	PI/2 BPSK	1	137		12.63		13.0
100	PI/2 BPSK	1	271		12.77		
100	PI/2 BPSK	135	0		12.73		
100	PI/2 BPSK	135	69		12.76		13.0
100	PI/2 BPSK	135	138		12.69		
100	PI/2 BPSK	270	0		12.60		
100	QPSK	1	1		12.71		13.0
100	QPSK	1	137		12.62		
100	QPSK	1	271		12.76		
100	QPSK	135	0		12.77		13.0
100	QPSK	135	69		12.75		
100	QPSK	135	138		12.70		
100	QPSK	270	0		12.69		13.0
100	16QAM	1	1		12.74		
100	64QAM	1	1		12.73		
100	256QAM	1	1		12.73		13.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	12.74	12.78	12.71	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	12.68	12.77	12.68	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	12.67	12.76	12.65	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	12.77	12.79	12.65	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	12.76	12.78	12.72	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	12.67	12.79	12.71	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	12.68	12.81	12.63	
Channel				630834	633332	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3499.98	3537.48	
25	PI/2 BPSK	1	1	12.73	12.74	12.66	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	12.77	12.75	12.69	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	12.70	12.76	12.68	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	12.70	12.81	12.63	



<FR1 n78_HPUE_Ant 0_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		26.30		27.0
100	PI/2 BPSK	1	137		26.12		
100	PI/2 BPSK	1	271		26.23		
100	PI/2 BPSK	135	0		25.69		26.5
100	PI/2 BPSK	135	69		26.09		27.0
100	PI/2 BPSK	135	138		25.57		26.5
100	PI/2 BPSK	270	0		25.62		
100	QPSK	1	1		26.25		27.0
100	QPSK	1	137		26.06		
100	QPSK	1	271		26.23		
100	QPSK	135	0		25.04		26.0
100	QPSK	135	69		26.03		27.0
100	QPSK	135	138		25.06		26.0
100	QPSK	270	0		25.13		
100	16QAM	1	1		25.14		26.0
100	64QAM	1	1		23.65		24.5
100	256QAM	1	1		21.62		22.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	26.19	26.24	26.26	27.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	26.24	26.25	26.22	27.0
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	26.19	26.23	26.21	27.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	26.27	26.28	26.28	27.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	26.24	26.28	26.29	27.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	26.28	26.29	26.29	27.0
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	26.19	26.25	26.23	27.0
Channel				630834	633332	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3499.98	3537.48	
25	PI/2 BPSK	1	1	26.27	26.26	26.27	27.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	26.20	26.22	26.23	27.0
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	26.24	26.27	26.22	27.0
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	26.27	26.26	26.22	27.0



<FR1 n78_HPUE_Ant 2_Sensor OFF>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		27.0
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		26.40		
100	PI/2 BPSK	1	137		26.17		26.5
100	PI/2 BPSK	1	271		26.19		
100	PI/2 BPSK	135	0		25.49		
100	PI/2 BPSK	135	69		26.08		26.5
100	PI/2 BPSK	135	138		25.52		
100	PI/2 BPSK	270	0		25.47		
100	QPSK	1	1		26.18		27.0
100	QPSK	1	137		25.91		
100	QPSK	1	271		25.98		
100	QPSK	135	0		25.06		26.0
100	QPSK	135	69		26.00		27.0
100	QPSK	135	138		24.89		26.0
100	QPSK	270	0		25.00		
100	16QAM	1	1		25.08		
100	64QAM	1	1		23.62		24.5
100	256QAM	1	1		21.48		22.5
Channel				633000	633332	633666	27.0
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	26.32	26.32	26.18	
Channel				632668	633332	634000	27.0
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	26.25	26.38	26.23	
Channel				632334	633332	634332	27.0
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	26.29	26.33	26.25	
Channel				632000	633332	634666	27.0
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	26.33	26.29	26.24	
Channel				631668	633332	635000	27.0
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	26.31	26.33	26.23	
Channel				631334	633332	635332	27.0
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	26.25	26.35	26.17	
Channel				631000	633332	635666	27.0
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	26.31	26.37	26.18	
Channel				630834	633332	635832	27.0
Frequency (MHz)				3462.51	3499.98	3537.48	
25	PI/2 BPSK	1	1	26.27	26.34	26.16	
Channel				630668	633332	636000	27.0
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	26.31	26.32	26.23	
Channel				630500	633332	636166	27.0
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	26.29	26.34	26.16	
Channel				630334	633332	636332	27.0
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	26.33	26.31	26.21	



<FR1 n78_HPUE_Ant 0_Sensor ON>

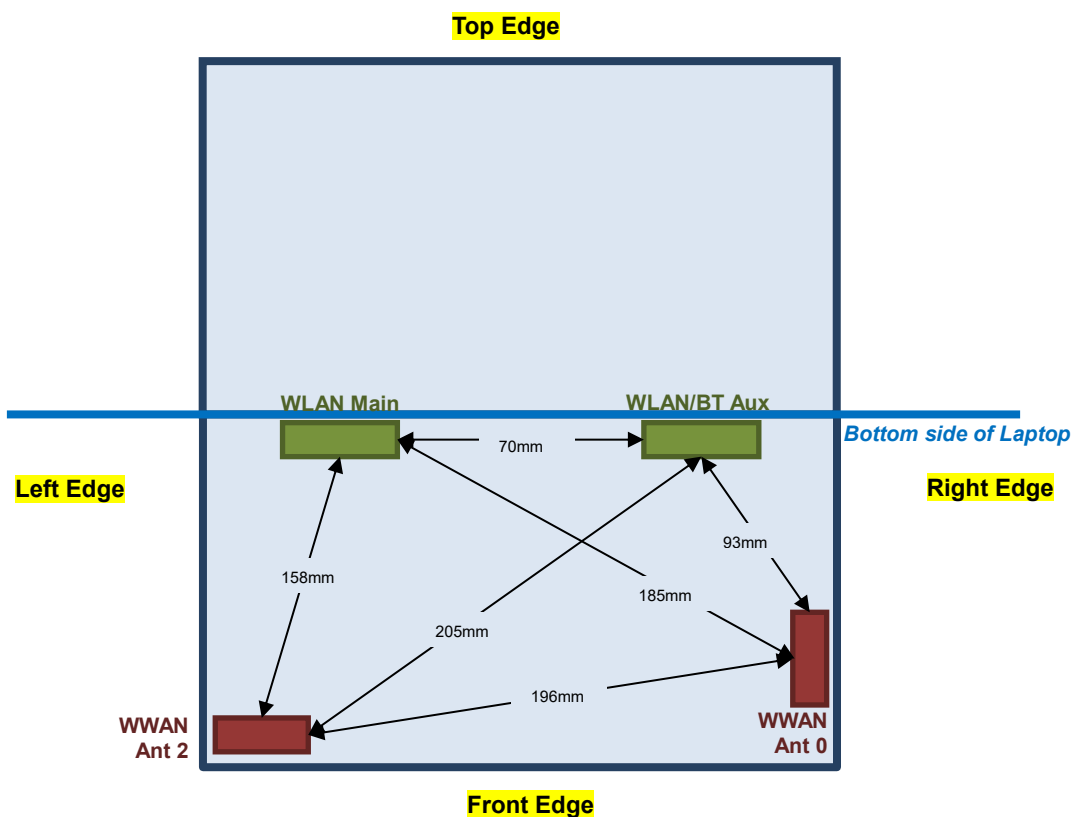
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		15.0
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		14.60		
100	PI/2 BPSK	1	137		14.50		15.0
100	PI/2 BPSK	1	271		14.44		
100	PI/2 BPSK	135	0		14.50		
100	PI/2 BPSK	135	69		14.56		15.0
100	PI/2 BPSK	135	138		14.48		15.0
100	PI/2 BPSK	270	0		14.44		
100	QPSK	1	1		14.49		
100	QPSK	1	137		14.53		15.0
100	QPSK	1	271		14.46		
100	QPSK	135	0		14.53		
100	QPSK	135	69		14.50		15.0
100	QPSK	135	138		14.51		15.0
100	QPSK	270	0		14.47		
100	16QAM	1	1		14.47		
100	64QAM	1	1		14.47		15.0
100	256QAM	1	1		14.53		15.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	14.57	14.51	14.51	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	14.49	14.58	14.57	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	14.50	14.53	14.52	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	14.59	14.53	14.57	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	14.59	14.57	14.50	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	14.57	14.51	14.58	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	14.54	14.51	14.58	
Channel				630834	633332	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3499.98	3537.48	
25	PI/2 BPSK	1	1	14.53	14.50	14.55	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	14.50	14.58	14.51	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	14.56	14.57	14.49	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	14.55	14.54	14.54	



<FR1 n78_HPUE_Ant 2_Sensor ON>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		16.0
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		15.79		
100	PI/2 BPSK	1	137		15.68		16.0
100	PI/2 BPSK	1	271		15.77		
100	PI/2 BPSK	135	0		15.74		
100	PI/2 BPSK	135	69		15.75		16.0
100	PI/2 BPSK	135	138		15.70		16.0
100	PI/2 BPSK	270	0		15.64		
100	QPSK	1	1		15.60		
100	QPSK	1	137		15.67		16.0
100	QPSK	1	271		15.79		
100	QPSK	135	0		15.77		
100	QPSK	135	69		15.76		16.0
100	QPSK	135	138		15.67		16.0
100	QPSK	270	0		15.65		
100	16QAM	1	1		15.75		
100	64QAM	1	1		15.66		16.0
100	256QAM	1	1		15.78		16.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	15.70	15.65	15.62	
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	15.75	15.72	15.65	
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	15.77	15.66	15.69	
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	15.69	15.66	15.66	
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	15.71	15.66	15.61	
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	15.69	15.72	15.62	
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	15.76	15.72	15.68	
Channel				630834	633332	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3499.98	3537.48	
25	PI/2 BPSK	1	1	15.76	15.73	15.64	
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	15.70	15.71	15.69	
Channel				630500	633332	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3499.98	3542.49	
15	PI/2 BPSK	1	1	15.70	15.67	15.66	
Channel				630334	633332	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3499.98	3544.98	
10	PI/2 BPSK	1	1	15.72	15.72	15.59	

14. Antenna Location



The separation distance for antenna to edge :

Antenna	To Bottom Side (mm)
WWAN Antenna 0	5
WWAN Antenna 2	5



<SAR test exclusion table>

General Note:

1. The below table, when the distance is < 50 mm exclusion threshold is "Ratio", when the distance is > 50 mm exclusion threshold is "mW"
2. Maximum power is the source-based time-average power and represents the maximum RF output power among production units
3. Per KDB 447498 D01v06, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
4. Per KDB 447498 D01v06, standalone SAR test exclusion threshold is applied; If the test separation distance is < 5mm, 5mm is used to determine SAR exclusion threshold.
5. Per KDB 447498 D01v06, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances* ≤ 50 mm are determined by:
$$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR}$$
 - f(GHz) is the RF channel transmit frequency in GHz
 - Power and distance are rounded to the nearest mW and mm before calculation
 - The result is rounded to one decimal place for comparison
6. Per KDB 447498 D01v06, at 100 MHz to 6 GHz and for *test separation distances* > 50 mm, the SAR test exclusion threshold is determined according to the following
 - a) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · (f(MHz)/150)] mW, at 100 MHz to 1500 MHz
 - b) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · 10] mW at > 1500 MHz and ≤ 6 GHz

<Antenna 0>

		Antenna 5																																						
Exposure Position	Wireless Interface	WCDMA Band V	WCDMA Band IV	WCDMA Band II	LTE Band 71	LTE Band 12	LTE Band 13	LTE Band 14	LTE Band 17	LTE Band 5	LTE Band 26	LTE Band 4	LTE Band 66	LTE Band 70	LTE Band 2	LTE Band 25	LTE Band 30	LTE Band 7	LTE Band 38	LTE Band 41 HPUE	LTE Band 42	LTE Band 43	LTE Band 46	LTE Band n71	LTE Band n12	LTE Band n13	LTE Band n14	LTE Band n5	LTE Band n26	LTE Band n66	LTE Band n70	LTE Band n2	LTE Band n25	LTE Band n30	LTE Band n7	LTE Band n38	LTE Band n41 HPUE	LTE Band n46	LTE Band n77 HPUE	LTE Band n78 HPUE
	Calculated Frequency (MHz)	846	1750	1907	695	715	784	795	713	848	848	1754	1779	1707.5	1909	1914	2312	2567	2617	2687	3597	3797	3697	695	715	784	795	848	848	1779	1707	1909	1914	2312	2567	2617	2687	3697	3650	3650
	Maximum power (dBm)	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.0	24.0	24.0	24.0	24.0	23.0	24.0	24.0	27.0	24.0	24.0	22.0	24.5	24.5	24.5	24.5	24.5	24.5	24.0	24.0	24.0	24.0	24.0	24.0	27.0	22.0	27.0	27.0	
	Maximum rated power(mW)	281.84	281.84	281.84	281.84	281.84	281.84	281.84	281.84	281.84	281.84	251.19	251.19	251.19	251.19	251.19	199.53	251.19	251.19	501.19	251.19	251.19	158.49	281.84	281.84	281.84	281.84	281.84	251.19	251.19	251.19	251.19	251.19	251.19	251.19	501.19	158.49	501.19	501.19	
	Separation distance(mm)	5.0																																						
Bottom Side	exclusion threshold	51.9	74.6	77.8	47.0	47.7	49.9	50.3	47.6	51.9	51.9	66.5	67.0	65.7	69.4	69.5	60.7	80.5	81.3	164.3	95.3	97.9	61.0	47.0	47.7	49.9	50.3	51.9	51.9	67.0	65.6	69.4	69.5	60.7	80.5	81.3	164.3	61.0	191.5	191.5
	Testing required?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

<Antenna 2>

Exposure Position	Wireless Interface	LTE Band 4	LTE Band 66	LTE Band 70	LTE Band 2	LTE Band 25	LTE Band 30	LTE Band 7	LTE Band 38	LTE Band 41 HPUE	LTE Band 42	LTE Band 43	LTE Band 48	LTE Band n66	LTE Band n70	LTE Band n2	LTE Band n25	LTE Band n30	LTE Band n7	LTE Band n38	LTE Band n41 HPUE	LTE Band n48	LTE Band n77 HPUE	LTE Band n78 HPUE
	Calculated Frequency (MHz)	1754	1779	1707.5	1909	1914	2312	2567	2617	2687	3597	3797	3697	1779	1707	1909	1914	2312	2567	2617	2687	3697	3650	3650
	Maximum power (dBm)	24.0	24.0	24.0	24.0	24.0	23.0	24.0	24.0	27.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	23.0	24.0	24.0	27.0	24.0	27.0	27.0
	Maximum rated power(mW)	251.19	251.19	251.19	251.19	251.19	199.53	251.19	251.19	501.19	251.19	251.19	251.19	251.19	251.19	251.19	251.19	199.53	251.19	251.19	501.19	251.19	501.19	501.19
	Separation distance(mm)	5.0																						
Bottom Side	exclusion threshold	66.5	67.0	65.7	69.4	69.5	60.7	80.5	81.3	164.3	95.3	97.9	96.6	67.0	65.6	69.4	69.5	60.7	80.5	81.3	164.3	96.6	191.5	191.5
	Testing required?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

15. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - b. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
 - c. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix $63.3\%/62.9\% = 1.006$ is applied to scale-up the measured SAR result. The Reported TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
 - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
 - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/kg.
4. For the exposure positions that proximity sensor power reduction is applied for SAR compliance, additional SAR testing with EUT transmitting full power in sensor trigger distance was performed according to section 4. The test results just verification the sensor trigger distance to meet KDB 616217 requirement, when in normal usage will not operate at trigger distance, therefore, these results were not using performed Sim-Tx analysis.

UMTS Note:

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA is $\leq 1/4$ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA, and according to the following RF output power, the output power results of the secondary modes (HSUPA, HSDPA) are less than $1/4$ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA.

LTE Note:

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4/B5/B12/B17/B26/B38/B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
7. LTE band 2/4/5/17/38 SAR test was covered by Band 25/66/26/12/41; according to TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. The maximum output power, including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion.
 - b. The channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.

5G NR Note:

1. Referencing the procedure in KDB 941225, the test procedures are outlined as below:
 - a. To start SAR test for the largest channel bandwidth for PI/2 BPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel. Also do SAR test for 50% RB allocation for PI/2 BPSK SAR testing using 1RB PI/2 BPSK allocation procedure
 - b. For PI/2 BPSK with 100% RB allocation, SAR test is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
 - c. For higher modulation QPSK/16QAM/64QAM/256QAM, according to tune-up document the power level is not $\frac{1}{2}$ dB higher than the same configuration in PI/2 BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK/16QAM/64QAM/256QAM SAR testing are not required.
 - d. Smaller bandwidth output power for each RB allocation configuration for this device is not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
 - e. For 5G FR1 n5/n12/n41/n71/n77, the maximum channel bandwidth does not support three non-overlapping channels in the frequency band, the middle channel of the group of overlapping channels were selected for testing.
 - f. Due to test setup limitations, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission. And only for TDD power class2 was performed using Factory Test Mode software to establish the connection and perform SAR with 50% transmission.
 - g. 5G FR1 n2/5/38/78 SAR test was covered by 5G FR1 n25/26/41/77; due to the maximum output power, including tolerance, for the smaller band is $\leq$ the larger band, and the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band

**15.1 Body SAR****<WCDMA SAR>**

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
01	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	28mm	Sensor OFF	9400	1880	WNC	24.21	24.50	1.069	0.17	0.260	0.278
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	0mm	Sensor ON	9400	1880	WNC	11.87	12.50	1.156	-0.02	0.394	0.456
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	0mm	Sensor ON	9400	1880	Speed	11.87	12.50	1.156	0.07	0.378	0.437
02	WCDMA IV_Ant 0	RMC 12.2Kbps	Bottom Side	28mm	Sensor OFF	1312	1712.4	WNC	23.22	24.50	1.343	-0.09	0.256	0.344
	WCDMA IV_Ant 0	RMC 12.2Kbps	Bottom Side	0mm	Sensor ON	1312	1712.4	WNC	12.90	13.50	1.148	-0.01	0.392	0.450
	WCDMA IV_Ant 0	RMC 12.2Kbps	Bottom Side	0mm	Sensor ON	1312	1712.4	Speed	12.90	13.50	1.148	0.01	0.374	0.429
03	WCDMA V_Ant 0	RMC 12.2Kbps	Bottom Side	28mm	Sensor OFF	4233	846.6	WNC	23.18	24.50	1.355	0.06	0.148	0.201
	WCDMA V_Ant 0	RMC 12.2Kbps	Bottom Side	0mm	Sensor ON	4233	846.6	WNC	16.91	17.50	1.146	0.01	0.393	0.450
	WCDMA V_Ant 0	RMC 12.2Kbps	Bottom Side	0mm	Sensor ON	4233	846.6	Speed	16.91	17.50	1.146	0.05	0.374	0.428

<LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 7_Ant 0	20M	QPSK	1	0	Bottom Side	28mm	Sensor OFF	20850	2510	WNC	23.35	24.00	1.161			-0.13	0.189	0.220
	LTE Band 7_Ant 0	20M	QPSK	50	0	Bottom Side	28mm	Sensor OFF	20850	2510	WNC	22.36	23.00	1.159			0.12	0.142	0.165
	LTE Band 7_Ant 0	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	20850	2510	WNC	13.72	14.00	1.067			0.08	0.534	0.570
	LTE Band 7_Ant 0	20M	QPSK	50	0	Bottom Side	0mm	Sensor ON	20850	2510	WNC	13.68	14.00	1.076			-0.06	0.476	0.512
	LTE Band 7C_Ant 0	20M+20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	20850+21048	2510+2529.8	WNC	13.72	14.00	1.067			0.05	0.517	0.551
	LTE Band 7_Ant 0	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	20850	2510	Speed	13.72	14.00	1.067			-0.17	0.442	0.471
	LTE Band 7_Ant 2	20M	QPSK	1	0	Bottom Side	16mm	Sensor OFF	20850	2510	WNC	23.31	24.00	1.172			-0.04	0.462	0.542
	LTE Band 7_Ant 2	20M	QPSK	50	0	Bottom Side	16mm	Sensor OFF	20850	2510	WNC	22.30	23.00	1.175			-0.01	0.388	0.456
	LTE Band 7_Ant 2	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	20850	2510	WNC	16.63	17.00	1.089			0.02	0.591	0.644
	LTE Band 7_Ant 2	20M	QPSK	50	0	Bottom Side	0mm	Sensor ON	20850	2510	WNC	16.41	17.00	1.146			0.07	0.556	0.637
	LTE Band 7_Ant 2	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	20850	2510	Speed	16.63	17.00	1.089			-0.17	0.580	0.632
	LTE Band 12_Ant 0	10M	QPSK	1	0	Bottom Side	28mm	Sensor OFF	23095	707.5	WNC	23.57	24.50	1.239			-0.07	0.168	0.208
	LTE Band 12_Ant 0	10M	QPSK	25	0	Bottom Side	28mm	Sensor OFF	23095	707.5	WNC	22.63	23.50	1.222			-0.1	0.123	0.150
	LTE Band 12_Ant 0	10M	QPSK	1	0	Bottom Side	0mm	Sensor ON	23095	707.5	WNC	18.25	18.50	1.059			0.01	0.616	0.653
	LTE Band 12_Ant 0	10M	QPSK	25	0	Bottom Side	0mm	Sensor ON	23095	707.5	WNC	18.22	18.50	1.067			-0.08	0.575	0.613
	LTE Band 12_Ant 0	10M	QPSK	1	0	Bottom Side	0mm	Sensor ON	23095	707.5	Speed	18.25	18.50	1.059			-0.07	0.402	0.426
	LTE Band 13_Ant 0	10M	QPSK	1	0	Bottom Side	28mm	Sensor OFF	23230	782	WNC	23.42	24.50	1.282			-0.01	0.147	0.189
	LTE Band 13_Ant 0	10M	QPSK	25	0	Bottom Side	28mm	Sensor OFF	23230	782	WNC	22.46	23.50	1.271			0.01	0.105	0.133
	LTE Band 13_Ant 0	10M	QPSK	1	0	Bottom Side	0mm	Sensor ON	23230	782	WNC	17.08	18.00	1.236			-0.02	0.485	0.599
	LTE Band 13_Ant 0	10M	QPSK	25	0	Bottom Side	0mm	Sensor ON	23230	782	WNC	17.03	18.00	1.250			0.13	0.446	0.558
	LTE Band 13_Ant 0	10M	QPSK	1	0	Bottom Side	0mm	Sensor ON	23230	782	Speed	17.08	18.00	1.236			0.18	0.363	0.449
	LTE Band 14_Ant 0	10M	QPSK	1	0	Bottom Side	28mm	Sensor OFF	23330	793	WNC	23.53	24.50	1.250			-0.18	0.134	0.168
	LTE Band 14_Ant 0	10M	QPSK	25	0	Bottom Side	28mm	Sensor OFF	23330	793	WNC	22.55	23.50	1.245			0.07	0.106	0.132
	LTE Band 14_Ant 0	10M	QPSK	1	0	Bottom Side	0mm	Sensor ON	23330	793	WNC	17.19	18.00	1.205			0.02	0.463	0.558
	LTE Band 14_Ant 0	10M	QPSK	25	0	Bottom Side	0mm	Sensor ON	23330	793	WNC	17.15	18.00	1.216			-0.16	0.438	0.533
	LTE Band 14_Ant 0	10M	QPSK	1	0	Bottom Side	0mm	Sensor ON	23330	793	Speed	17.19	18.00	1.205			0.09	0.342	0.412
	LTE Band 25_Ant 0	20M	QPSK	1	0	Bottom Side	28mm	Sensor OFF	26340	1880	WNC	23.58	24.00	1.102			0.05	0.251	0.276
	LTE Band 25_Ant 0	20M	QPSK	50	0	Bottom Side	28mm	Sensor OFF	26340	1880	WNC	22.66	23.00	1.081			-0.01	0.216	0.234
08	LTE Band 25_Ant 0	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	26340	1880	WNC	12.54	13.00	1.112			0.01	0.450	0.500
	LTE Band 25_Ant 0	20M	QPSK	50	0	Bottom Side	0mm	Sensor ON	26340	1880	WNC	12.50	13.00	1.122			-0.07	0.423	0.475
	LTE Band 2C_Ant 0	20M+20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	18900+18702	1880+1860.2	WNC	12.49	13.00	1.125			0.04	0.437	0.491
	LTE Band 25_Ant 0	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	26340	1880	Speed	12.54	13.00	1.112			-0.18	0.399	0.444
	LTE Band 25_Ant 2	20M	QPSK	1	0	Bottom Side	16mm	Sensor OFF	26340	1880	WNC	23.73	24.00	1.064			0.01	0.278	0.296
	LTE Band 25_Ant 2	20M	QPSK	50	0	Bottom Side	16mm	Sensor OFF	26340	1880	WNC	22.94	23.00	1.014			0.19	0.212	0.215
	LTE Band 25_Ant 2	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	26340	1880	WNC	15.95	16.50	1.135			-0.04	0.434	0.493
	LTE Band 25_Ant 2	20M	QPSK	50	0	Bottom Side	0mm	Sensor ON	26340	1880	WNC	15.51	16.50	1.256			0.11	0.388	0.487
	LTE Band 25_Ant 2	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	26340	1880	Speed	15.95	16.50	1.135			0.1	0.412	0.468



FCC SAR TEST REPORT

Report No. : FA480204-02

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 26_Ant 0	15M	QPSK	1	0	Bottom Side	28mm	Sensor OFF	26865	831.5	WNC	23.55	24.50	1.245			-0.16	0.123	0.153
	LTE Band 26_Ant 0	15M	QPSK	36	0	Bottom Side	28mm	Sensor OFF	26865	831.5	WNC	22.59	23.50	1.233			0.15	0.097	0.120
09	LTE Band 26_Ant 0	15M	QPSK	1	0	Bottom Side	0mm	Sensor ON	26865	831.5	WNC	16.03	17.00	1.250			-0.07	0.409	0.511
	LTE Band 26_Ant 0	15M	QPSK	36	0	Bottom Side	0mm	Sensor ON	26865	831.5	WNC	16.00	17.00	1.259			-0.09	0.372	0.468
	LTE Band 5B_Ant 0	10M+10M	QPSK	1	0	Bottom Side	0mm	Sensor ON	20600+20501	844+834.1	WNC	16.01	17.00	1.256			0.01	0.396	0.497
	LTE Band 26_Ant 0	15M	QPSK	1	0	Bottom Side	0mm	Sensor ON	26865	831.5	Speed	16.03	17.00	1.250			-0.08	0.328	0.410
	LTE Band 30_Ant 0	10M	QPSK	1	0	Bottom Side	28mm	Sensor OFF	27710	2310	WNC	22.08	23.00	1.236			-0.09	0.170	0.210
	LTE Band 30_Ant 0	10M	QPSK	25	0	Bottom Side	28mm	Sensor OFF	27710	2310	WNC	21.18	22.00	1.208			-0.13	0.135	0.163
10	LTE Band 30_Ant 0	10M	QPSK	1	0	Bottom Side	0mm	Sensor ON	27710	2310	WNC	12.95	13.50	1.135			0.05	0.532	0.604
	LTE Band 30_Ant 0	10M	QPSK	25	0	Bottom Side	0mm	Sensor ON	27710	2310	WNC	12.90	13.50	1.148			-0.17	0.496	0.569
	LTE Band 30_Ant 0	10M	QPSK	1	0	Bottom Side	0mm	Sensor ON	27710	2310	Speed	12.95	13.50	1.135			0.11	0.412	0.468
	LTE Band 30_Ant 2	10M	QPSK	1	0	Bottom Side	16mm	Sensor OFF	27710	2310	WNC	22.39	23.00	1.151			0.19	0.466	0.536
	LTE Band 30_Ant 2	10M	QPSK	25	0	Bottom Side	16mm	Sensor OFF	27710	2310	WNC	21.40	22.00	1.148			0.05	0.405	0.465
	LTE Band 30_Ant 2	10M	QPSK	1	0	Bottom Side	0mm	Sensor ON	27710	2310	WNC	16.30	16.50	1.047			0	0.573	0.600
	LTE Band 30_Ant 2	10M	QPSK	25	0	Bottom Side	0mm	Sensor ON	27710	2310	WNC	16.23	16.50	1.064			-0.1	0.545	0.580
	LTE Band 30_Ant 2	10M	QPSK	1	0	Bottom Side	0mm	Sensor ON	27710	2310	Speed	16.30	16.50	1.047			-0.03	0.480	0.503
	LTE Band 41_Ant 0	20M	QPSK	1	0	Bottom Side	28mm	Sensor OFF	40185	2549.5	WNC	23.49	24.00	1.125	62.9	1.006	0.07	0.173	0.196
	LTE Band 41_Ant 0	20M	QPSK	50	0	Bottom Side	28mm	Sensor OFF	40185	2549.5	WNC	22.56	23.00	1.107	62.9	1.006	-0.11	0.136	0.151
11	LTE Band 41_Ant 0	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	40185	2549.5	WNC	15.90	16.50	1.148	62.9	1.006	0.01	0.516	0.596
	LTE Band 41_Ant 0	20M	QPSK	50	0	Bottom Side	0mm	Sensor ON	40185	2549.5	WNC	15.85	16.50	1.161	62.9	1.006	0.06	0.478	0.559
	LTE Band 41C_Ant 0	20M+20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	40185+39987	2549.5+2529.7	WNC	15.84	16.50	1.164	62.9	1.006	0.01	0.491	0.575
	LTE Band 41_HPUE_Ant 0	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	40185	2549.5	WNC	15.90	16.50	1.148	42.9	1.009	0.1	0.385	0.446
	LTE Band 41_Ant 0	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	40185	2549.5	Speed	15.90	16.50	1.148	62.9	1.006	0.12	0.423	0.489
	LTE Band 41_Ant 2	20M	QPSK	1	0	Bottom Side	16mm	Sensor OFF	40185	2549.5	WNC	23.60	24.00	1.096	62.9	1.006	0	0.293	0.323
	LTE Band 41_Ant 2	20M	QPSK	50	0	Bottom Side	16mm	Sensor OFF	40185	2549.5	WNC	22.64	23.00	1.086	62.9	1.006	0.19	0.226	0.247
	LTE Band 41_Ant 2	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	40185	2549.5	WNC	16.05	16.50	1.109	62.9	1.006	0.04	0.268	0.299
	LTE Band 41_Ant 2	20M	QPSK	50	0	Bottom Side	0mm	Sensor ON	40185	2549.5	WNC	15.96	16.50	1.132	62.9	1.006	-0.02	0.242	0.276
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Bottom Side	16mm	Sensor OFF	40185	2549.5	WNC	25.63	27.00	1.371	42.9	1.009	-0.09	0.288	0.398
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Bottom Side	16mm	Sensor OFF	40185	2549.5	Speed	25.63	27.00	1.371	62.9	1.006	-0.04	0.230	0.317
	LTE Band 42_Ant 0	20M	QPSK	1	0	Bottom Side	28mm	Sensor OFF	42590	3500	WNC	23.00	24.00	1.259	62.9	1.006	-0.13	0.195	0.247
	LTE Band 42_Ant 0	20M	QPSK	50	0	Bottom Side	28mm	Sensor OFF	42590	3500	WNC	22.05	23.00	1.245	62.9	1.006	0.12	0.162	0.203
12	LTE Band 42_Ant 0	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	42590	3500	WNC	13.94	14.50	1.138	62.9	1.006	-0.03	0.519	0.594
	LTE Band 42_Ant 0	20M	QPSK	50	0	Bottom Side	0mm	Sensor ON	42590	3500	WNC	13.91	14.50	1.146	62.9	1.006	0.06	0.504	0.581
	LTE Band 42C_Ant 0	20M+20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	43490+43292	3590+3570.2	WNC	14.01	14.50	1.119	62.9	1.006	0.06	0.491	0.553
	LTE Band 42_Ant 0	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	42590	3500	Speed	13.94	14.50	1.138	62.9	1.006	0.06	0.340	0.389
	LTE Band 42_Ant 2	20M	QPSK	1	0	Bottom Side	16mm	Sensor OFF	42590	3500	WNC	23.30	24.00	1.175	62.9	1.006	-0.02	0.138	0.163
	LTE Band 42_Ant 2	20M	QPSK	50	0	Bottom Side	16mm	Sensor OFF	42590	3500	WNC	22.78	23.00	1.052	62.9	1.006	0.05	0.093	0.098
	LTE Band 42_Ant 2	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	42590	3500	WNC	16.06	16.50	1.107	62.9	1.006	-0.06	0.207	0.230
	LTE Band 42_Ant 2	20M	QPSK	50	0	Bottom Side	0mm	Sensor ON	42590	3500	WNC	15.97	16.50	1.130	62.9	1.006	0.11	0.186	0.211
	LTE Band 42_Ant 2	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	42590	3500	Speed	16.06	16.50	1.107	62.9	1.006	0.16	0.204	0.227
	LTE Band 43_Ant 0	20M	QPSK	1	0	Bottom Side	28mm	Sensor OFF	45490	3790	WNC	22.82	24.00	1.312	62.9	1.006	-0.09	0.243	0.321
	LTE Band 43_Ant 0	20M	QPSK	50	0	Bottom Side	28mm	Sensor OFF	45490	3790	WNC	21.86	23.00	1.300	62.9	1.006	0.11	0.186	0.243
13	LTE Band 43_Ant 0	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	45490	3790	WNC	13.66	14.00	1.081	62.9	1.006	0.03	0.616	0.670
	LTE Band 43_Ant 0	20M	QPSK	50	0	Bottom Side	0mm	Sensor ON	45490	3790	WNC	13.64	14.00	1.086	62.9	1.006	0	0.607	0.663
	LTE Band 43C_Ant 0	20M+20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	44491+44689	3690.1+3709.9	WNC	13.66	14.00	1.081	62.9	1.006	0.09	0.599	0.652
	LTE Band 43_Ant 0	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	45490	3790	Speed	13.66	14.00	1.081	62.9	1.006	0.1	0.507	0.552
	LTE Band 43_Ant 2	20M	QPSK	1	0	Bottom Side	16mm	Sensor OFF	45490	3790	WNC	23.16	24.00	1.213	62.9	1.006	-0.08	0.150	0.183
	LTE Band 43_Ant 2	20M	QPSK	50	0	Bottom Side	16mm	Sensor OFF	45490	3790	WNC	22.68	23.00	1.076	62.9	1.006	-0.1	0.115	0.125
	LTE Band 43_Ant 2	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	45490	3790	WNC	14.65	15.00	1.084	62.9	1.006	-0.02	0.171	0.186
	LTE Band 43_Ant 2	20M	QPSK	50	0	Bottom Side	0mm	Sensor ON	45490	3790	WNC	14.59	15.00	1.099	62.9	1.006	-0.1	0.150	0.166
	LTE Band 43_Ant 2	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	45490	3790	Speed	14.65	15.00	1.084	62.9	1.006	0.19	0.134	0.146



FCC SAR TEST REPORT

Report No. : FA480204-02

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 48_Ant 0	20M	QPSK	1	0	Bottom Side	28mm	Sensor OFF	56640	3690	WNC	20.80	22.00	1.318	62.9	1.006	0.11	0.245	0.325
	LTE Band 48_Ant 0	20M	QPSK	50	0	Bottom Side	28mm	Sensor OFF	56640	3690	WNC	19.88	21.00	1.294	62.9	1.006	0.03	0.198	0.258
14	LTE Band 48_Ant 0	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	56640	3690	WNC	13.67	14.50	1.211	62.9	1.006	0.11	0.641	0.781
	LTE Band 48_Ant 0	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	55340	3560	WNC	13.50	14.50	1.259	62.9	1.006	0.01	0.602	0.762
	LTE Band 48_Ant 0	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	55830	3609	WNC	13.60	14.50	1.230	62.9	1.006	-0.06	0.623	0.771
	LTE Band 48_Ant 0	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	56150	3641	WNC	13.61	14.50	1.227	62.9	1.006	0.05	0.622	0.768
	LTE Band 48_Ant 0	20M	QPSK	50	0	Bottom Side	0mm	Sensor ON	56640	3690	WNC	13.65	14.50	1.216	62.9	1.006	0.16	0.619	0.757
	LTE Band 48_Ant 0	20M	QPSK	50	0	Bottom Side	0mm	Sensor ON	55340	3560	WNC	13.44	14.50	1.276	62.9	1.006	0.04	0.591	0.759
	LTE Band 48_Ant 0	20M	QPSK	50	0	Bottom Side	0mm	Sensor ON	55830	3609	WNC	13.53	14.50	1.250	62.9	1.006	0.05	0.598	0.752
	LTE Band 48_Ant 0	20M	QPSK	50	0	Bottom Side	0mm	Sensor ON	56150	3641	WNC	13.52	14.50	1.253	62.9	1.006	0.17	0.600	0.756
	LTE Band 48C_Ant 0	20M+20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	56150+55952	3641+3621.2	WNC	13.67	14.50	1.211	62.9	1.006	-0.12	0.611	0.744
	LTE Band 48C_Ant 0	20M+20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	55340+55538	3560+3579.8	WNC	13.52	14.50	1.253	62.9	1.006	-0.1	0.587	0.740
	LTE Band 48C_Ant 0	20M+20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	55830+55632	3609+3589.2	WNC	13.60	14.50	1.230	62.9	1.006	0.17	0.594	0.735
	LTE Band 48C_Ant 0	20M+20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	56640+56442	3690+3670.2	WNC	13.50	14.50	1.259	62.9	1.006	-0.17	0.582	0.737
	LTE Band 48_Ant 0	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	56640	3690	Speed	13.67	14.50	1.211	62.9	1.006	0.1	0.484	0.589
	LTE Band 48_Ant 2	20M	QPSK	1	0	Bottom Side	16mm	Sensor OFF	56640	3690	WNC	21.94	22.00	1.014	62.9	1.006	-0.04	0.153	0.156
	LTE Band 48_Ant 2	20M	QPSK	50	0	Bottom Side	16mm	Sensor OFF	56640	3690	WNC	20.47	21.00	1.130	62.9	1.006	-0.13	0.111	0.126
	LTE Band 48_Ant 2	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	56640	3690	WNC	15.96	16.50	1.132	62.9	1.006	-0.16	0.095	0.108
	LTE Band 48_Ant 2	20M	QPSK	50	0	Bottom Side	0mm	Sensor ON	56640	3690	WNC	15.89	16.50	1.151	62.9	1.006	0.1	0.089	0.103
	LTE Band 48_Ant 2	20M	QPSK	1	0	Bottom Side	16mm	Sensor OFF	56640	3690	Speed	21.94	22.00	1.014	62.9	1.006	0.1	0.127	0.130
	LTE Band 66_Ant 0	20M	QPSK	1	0	Bottom Side	28mm	Sensor OFF	132322	1745	WNC	23.48	24.00	1.127			-0.15	0.256	0.289
	LTE Band 66_Ant 0	20M	QPSK	50	0	Bottom Side	28mm	Sensor OFF	132322	1745	WNC	22.53	23.00	1.114			0.16	0.201	0.224
	LTE Band 66_Ant 0	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	132322	1745	WNC	13.49	14.00	1.125			0	0.486	0.547
	LTE Band 66_Ant 0	20M	QPSK	50	0	Bottom Side	0mm	Sensor ON	132322	1745	WNC	13.46	14.00	1.132			-0.01	0.477	0.540
	LTE Band 66B_Ant 0	15M+5M	QPSK	1	0	Bottom Side	0mm	Sensor ON	132322+132229	1745+1735.7	WNC	13.35	14.00	1.161			0.06	0.427	0.496
	LTE Band 66C_Ant 0	20M+20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	132322+132124	1745+1725.2	WNC	13.40	14.00	1.148			0.01	0.450	0.517
	LTE Band 66_Ant 0	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	132322	1745	Speed	13.49	14.00	1.125			0.09	0.395	0.444
	LTE Band 66_Ant 2	20M	QPSK	1	0	Bottom Side	16mm	Sensor OFF	132322	1745	WNC	23.92	24.00	1.019			-0.1	0.452	0.460
	LTE Band 66_Ant 2	20M	QPSK	50	0	Bottom Side	16mm	Sensor OFF	132322	1745	WNC	22.84	23.00	1.038			0.1	0.374	0.388
15	LTE Band 66_Ant 2	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	132322	1745	WNC	14.86	15.50	1.159			0.05	0.534	0.619
	LTE Band 66_Ant 2	20M	QPSK	50	0	Bottom Side	0mm	Sensor ON	132322	1745	WNC	14.85	15.50	1.161			0.08	0.522	0.606
	LTE Band 66_Ant 2	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	132322	1745	Speed	14.86	15.50	1.159			0.12	0.518	0.600
	LTE Band 70_Ant 0	15M	QPSK	1	0	Bottom Side	28mm	Sensor OFF	133047	1702.5	WNC	23.44	24.00	1.138			0.17	0.329	0.374
	LTE Band 70_Ant 0	15M	QPSK	36	0	Bottom Side	28mm	Sensor OFF	133047	1702.5	WNC	22.48	23.00	1.127			0.12	0.254	0.286
16	LTE Band 70_Ant 0	15M	QPSK	1	0	Bottom Side	0mm	Sensor ON	133047	1702.5	WNC	14.46	14.50	1.009			-0.03	0.620	0.626
	LTE Band 70_Ant 0	15M	QPSK	36	0	Bottom Side	0mm	Sensor ON	133047	1702.5	WNC	14.32	14.50	1.042			0.08	0.593	0.618
	LTE Band 70_Ant 0	15M	QPSK	1	0	Bottom Side	0mm	Sensor ON	133047	1702.5	Speed	14.46	14.50	1.009			0.05	0.604	0.610
	LTE Band 70_Ant 2	15M	QPSK	1	0	Bottom Side	16mm	Sensor OFF	133047	1702.5	WNC	23.51	24.00	1.119			0	0.411	0.460
	LTE Band 70_Ant 2	15M	QPSK	36	0	Bottom Side	16mm	Sensor OFF	133047	1702.5	WNC	22.39	23.00	1.151			-0.02	0.353	0.406
	LTE Band 70_Ant 2	15M	QPSK	1	0	Bottom Side	0mm	Sensor ON	133047	1702.5	WNC	16.51	17.00	1.119			-0.01	0.558	0.625
	LTE Band 70_Ant 2	15M	QPSK	36	0	Bottom Side	0mm	Sensor ON	133047	1702.5	WNC	16.36	17.00	1.159			-0.14	0.519	0.601
	LTE Band 70_Ant 2	15M	QPSK	1	0	Bottom Side	0mm	Sensor ON	133047	1702.5	Speed	16.51	17.00	1.119			-0.09	0.533	0.597
	LTE Band 71_Ant 0	20M	QPSK	1	0	Bottom Side	28mm	Sensor OFF	133297	680.5	WNC	23.42	24.50	1.282			0.14	0.152	0.195
	LTE Band 71_Ant 0	20M	QPSK	50	0	Bottom Side	28mm	Sensor OFF	133297	680.5	WNC	23.39	23.50	1.026			0.18	0.143	0.147
17	LTE Band 71_Ant 0	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	133297	680.5	WNC	18.67	19.50	1.211			0.05	0.555	0.672
	LTE Band 71_Ant 0	20M	QPSK	50	0	Bottom Side	0mm	Sensor ON	133297	680.5	WNC	18.66	19.50	1.213			-0.15	0.529	0.642
	LTE Band 71_Ant 0	20M	QPSK	1	0	Bottom Side	0mm	Sensor ON	133297	680.5	Speed	18.67	19.50	1.211			0.19	0.303	0.367



<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n7_Ant 0	40M	BPSK	1	1	Bottom Side	28mm	Sensor OFF	507000	2535	WNC	23.53	24.00	1.114	-0.19	0.197	0.220
	FR1 n7_Ant 0	40M	BPSK	108	54	Bottom Side	28mm	Sensor OFF	507000	2535	WNC	23.50	24.00	1.122	-0.15	0.184	0.206
18	FR1 n7_Ant 0	40M	BPSK	1	1	Bottom Side	0mm	Sensor ON	507000	2535	WNC	13.43	14.00	1.140	0	0.519	0.592
	FR1 n7_Ant 0	40M	BPSK	108	54	Bottom Side	0mm	Sensor ON	507000	2535	WNC	13.37	14.00	1.156	-0.13	0.502	0.580
	FR1 n7_Ant 0	40M	BPSK	1	1	Bottom Side	0mm	Sensor ON	507000	2535	Speed	13.43	14.00	1.140	0.12	0.452	0.515
	FR1 n7_Ant 2	40M	BPSK	1	1	Bottom Side	16mm	Sensor OFF	507000	2535	WNC	23.61	24.00	1.094	-0.01	0.494	0.540
	FR1 n7_Ant 2	40M	BPSK	108	54	Bottom Side	16mm	Sensor OFF	507000	2535	WNC	23.28	24.00	1.180	0.1	0.446	0.526
	FR1 n7_Ant 2	40M	BPSK	1	1	Bottom Side	0mm	Sensor ON	507000	2535	WNC	16.70	17.00	1.072	-0.09	0.541	0.580
	FR1 n7_Ant 2	40M	BPSK	108	54	Bottom Side	0mm	Sensor ON	507000	2535	WNC	16.67	17.00	1.079	-0.07	0.529	0.571
	FR1 n7_Ant 2	40M	BPSK	1	1	Bottom Side	0mm	Sensor ON	507000	2535	Speed	16.70	17.00	1.072	-0.14	0.440	0.471
	FR1 n12_Ant 0	15M	BPSK	1	1	Bottom Side	28mm	Sensor OFF	141500	707.5	WNC	23.69	24.50	1.205	0	0.146	0.176
	FR1 n12_Ant 0	15M	BPSK	36	22	Bottom Side	28mm	Sensor OFF	141500	707.5	WNC	23.56	24.50	1.242	0.03	0.132	0.164
19	FR1 n12_Ant 0	15M	BPSK	1	1	Bottom Side	0mm	Sensor ON	141500	707.5	WNC	18.14	18.50	1.086	0.09	0.552	0.600
	FR1 n12_Ant 0	15M	BPSK	36	22	Bottom Side	0mm	Sensor ON	141500	707.5	WNC	18.11	18.50	1.094	-0.07	0.538	0.589
	FR1 n12_Ant 0	15M	BPSK	1	1	Bottom Side	0mm	Sensor ON	141500	707.5	Speed	18.14	18.50	1.086	0.05	0.546	0.593
	FR1 n13_Ant 0	10M	BPSK	1	1	Bottom Side	28mm	Sensor OFF	156400	782	WNC	23.70	24.50	1.202	-0.05	0.115	0.138
	FR1 n13_Ant 0	10M	BPSK	25	14	Bottom Side	28mm	Sensor OFF	156400	782	WNC	23.66	24.50	1.213	0.16	0.108	0.131
20	FR1 n13_Ant 0	10M	BPSK	1	1	Bottom Side	0mm	Sensor ON	156400	782	WNC	16.70	17.50	1.202	0.07	0.439	0.528
	FR1 n13_Ant 0	10M	BPSK	25	14	Bottom Side	0mm	Sensor ON	156400	782	WNC	16.64	17.50	1.219	-0.15	0.388	0.473
	FR1 n13_Ant 0	10M	BPSK	1	1	Bottom Side	0mm	Sensor ON	156400	782	Speed	16.70	17.50	1.202	-0.19	0.414	0.498
	FR1 n14_Ant 0	10M	BPSK	1	1	Bottom Side	28mm	Sensor OFF	158600	793	WNC	23.74	24.50	1.191	0.13	0.123	0.147
	FR1 n14_Ant 0	10M	BPSK	25	14	Bottom Side	28mm	Sensor OFF	158600	793	WNC	23.70	24.50	1.202	0.02	0.111	0.133
21	FR1 n14_Ant 0	10M	BPSK	1	1	Bottom Side	0mm	Sensor ON	158600	793	WNC	17.35	18.00	1.161	0.03	0.477	0.554
	FR1 n14_Ant 0	10M	BPSK	25	14	Bottom Side	0mm	Sensor ON	158600	793	WNC	17.31	18.00	1.172	-0.06	0.428	0.502
	FR1 n14_Ant 0	10M	BPSK	1	1	Bottom Side	0mm	Sensor ON	158600	793	Speed	17.35	18.00	1.161	0.08	0.456	0.530
	FR1 n25_Ant 0	40M	BPSK	1	1	Bottom Side	28mm	Sensor OFF	376500	1882.5	WNC	23.91	24.00	1.021	-0.15	0.245	0.250
	FR1 n25_Ant 0	40M	BPSK	108	54	Bottom Side	28mm	Sensor OFF	376500	1882.5	WNC	23.85	24.00	1.035	-0.15	0.233	0.241
	FR1 n25_Ant 0	40M	BPSK	1	1	Bottom Side	0mm	Sensor ON	376500	1882.5	WNC	12.86	13.00	1.033	0.02	0.444	0.459
	FR1 n25_Ant 0	40M	BPSK	108	54	Bottom Side	0mm	Sensor ON	376500	1882.5	WNC	12.83	13.00	1.040	0.13	0.392	0.408
	FR1 n25_Ant 0	40M	BPSK	1	1	Bottom Side	0mm	Sensor ON	376500	1882.5	Speed	12.86	13.00	1.033	-0.16	0.407	0.420
	FR1 n25_Ant 2	40M	BPSK	1	1	Bottom Side	16mm	Sensor OFF	376500	1882.5	WNC	24.00	24.00	1.000	-0.17	0.309	0.309
	FR1 n25_Ant 2	40M	BPSK	108	54	Bottom Side	16mm	Sensor OFF	376500	1882.5	WNC	23.91	24.00	1.021	-0.11	0.300	0.306
22	FR1 n25_Ant 2	40M	BPSK	1	1	Bottom Side	0mm	Sensor ON	376500	1882.5	WNC	16.73	17.00	1.064	0.04	0.533	0.567
	FR1 n25_Ant 2	40M	BPSK	108	54	Bottom Side	0mm	Sensor ON	376500	1882.5	WNC	16.72	17.00	1.067	-0.09	0.505	0.539
	FR1 n25_Ant 2	40M	BPSK	1	1	Bottom Side	0mm	Sensor ON	376500	1882.5	Speed	16.73	17.00	1.064	-0.17	0.518	0.551
	FR1 n26_Ant 0	20M	BPSK	1	1	Bottom Side	28mm	Sensor OFF	166300	831.5	WNC	23.72	24.50	1.197	-0.14	0.133	0.159
	FR1 n26_Ant 0	20M	BPSK	50	28	Bottom Side	28mm	Sensor OFF	166300	831.5	WNC	23.67	24.50	1.211	0.07	0.121	0.146
23	FR1 n26_Ant 0	20M	BPSK	1	1	Bottom Side	0mm	Sensor ON	166300	831.5	WNC	16.27	17.00	1.183	-0.03	0.414	0.490
	FR1 n26_Ant 0	20M	BPSK	50	28	Bottom Side	0mm	Sensor ON	166300	831.5	WNC	16.26	17.00	1.186	-0.07	0.405	0.480
	FR1 n26_Ant 0	20M	BPSK	1	1	Bottom Side	0mm	Sensor ON	166300	831.5	Speed	16.27	17.00	1.183	-0.1	0.319	0.377
	FR1 n30_Ant 0	10M	BPSK	1	1	Bottom Side	28mm	Sensor OFF	462000	2310	WNC	22.46	23.00	1.132	0.18	0.201	0.228
	FR1 n30_Ant 0	10M	BPSK	25	14	Bottom Side	28mm	Sensor OFF	462000	2310	WNC	22.41	23.00	1.146	0.02	0.188	0.215
	FR1 n30_Ant 0	10M	BPSK	1	1	Bottom Side	0mm	Sensor ON	462000	2310	WNC	12.78	13.50	1.180	0.05	0.582	0.687
	FR1 n30_Ant 0	10M	BPSK	25	14	Bottom Side	0mm	Sensor ON	462000	2310	WNC	12.75	13.50	1.189	-0.08	0.567	0.674
	FR1 n30_Ant 0	10M	BPSK	1	1	Bottom Side	0mm	Sensor ON	462000	2310	Speed	12.78	13.50	1.180	0.02	0.405	0.478
	FR1 n30_Ant 2	10M	BPSK	1	1	Bottom Side	16mm	Sensor OFF	462000	2310	WNC	22.10	23.00	1.230	-0.08	0.313	0.385
	FR1 n30_Ant 2	10M	BPSK	25	14	Bottom Side	16mm	Sensor OFF	462000	2310	WNC	21.97	23.00	1.268	-0.02	0.284	0.360
24	FR1 n30_Ant 2	10M	BPSK	1	1	Bottom Side	0mm	Sensor ON	462000	2310	WNC	16.77	17.00	1.054	0	0.713	0.752
	FR1 n30_Ant 2	10M	BPSK	25	14	Bottom Side	0mm	Sensor ON	462000	2310	WNC	16.75	17.00	1.059	0.16	0.706	0.748
	FR1 n30_Ant 2	10M	BPSK	1	1	Bottom Side	0mm	Sensor ON	462000	2310	Speed	16.77	17.00	1.054	-0.12	0.566	0.597



FCC SAR TEST REPORT

Report No. : FA480204-02

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n41_Ant 0	100M	BPSK	1	1	Bottom Side	28mm	Sensor OFF	518598	2592.99	WNC	23.39	24.00	1.151	0.11	0.183	0.211
	FR1 n41_Ant 0	100M	BPSK	135	69	Bottom Side	28mm	Sensor OFF	518598	2592.99	WNC	23.10	24.00	1.230	-0.19	0.165	0.203
25	FR1 n41_Ant 0	100M	BPSK	1	1	Bottom Side	0mm	Sensor ON	518598	2592.99	WNC	13.57	14.00	1.104	-0.04	0.554	0.612
	FR1 n41_Ant 0	100M	BPSK	135	69	Bottom Side	0mm	Sensor ON	518598	2592.99	WNC	13.51	14.00	1.119	-0.13	0.539	0.603
	FR1 n41_HPUE_Ant 0	100M	BPSK	1	1	Bottom Side	0mm	Sensor ON	518598	2592.99	WNC	16.69	17.00	1.074	0.14	0.525	0.564
	FR1 n41_Ant 0	100M	BPSK	1	1	Bottom Side	0mm	Sensor ON	518598	2592.99	Speed	13.57	14.00	1.104	-0.18	0.466	0.515
	FR1 n41_Ant 2	100M	BPSK	1	1	Bottom Side	16mm	Sensor OFF	518598	2592.99	WNC	23.16	24.00	1.213	-0.01	0.371	0.450
	FR1 n41_Ant 2	100M	BPSK	135	69	Bottom Side	16mm	Sensor OFF	518598	2592.99	WNC	22.94	24.00	1.276	0.12	0.345	0.440
	FR1 n41_Ant 2	100M	BPSK	1	1	Bottom Side	0mm	Sensor ON	518598	2592.99	WNC	15.20	15.50	1.072	-0.01	0.371	0.398
	FR1 n41_Ant 2	100M	BPSK	135	69	Bottom Side	0mm	Sensor ON	518598	2592.99	WNC	15.13	15.50	1.089	0.17	0.355	0.387
	FR1 n41_HPUE_Ant 2	100M	BPSK	1	1	Bottom Side	16mm	Sensor OFF	518598	2592.99	WNC	26.17	27.00	1.211	-0.11	0.362	0.438
	FR1 n41_Ant 2	100M	BPSK	1	1	Bottom Side	16mm	Sensor OFF	518598	2592.99	Speed	23.16	24.00	1.213	0.03	0.357	0.433
	FR1 n48_Ant 0	40M	BPSK	1	1	Bottom Side	28mm	Sensor OFF	641666	3624.99	WNC	21.14	22.00	1.219	0.08	0.247	0.301
	FR1 n48_Ant 0	40M	BPSK	50	28	Bottom Side	28mm	Sensor OFF	641666	3624.99	WNC	21.04	22.00	1.247	-0.06	0.238	0.297
26	FR1 n48_Ant 0	40M	BPSK	1	1	Bottom Side	0mm	Sensor ON	641666	3624.99	WNC	11.58	12.50	1.236	0.01	0.615	0.760
	FR1 n48_Ant 0	40M	BPSK	1	1	Bottom Side	0mm	Sensor ON	638000	3570	WNC	11.37	12.50	1.297	-0.03	0.564	0.732
	FR1 n48_Ant 0	40M	BPSK	1	1	Bottom Side	0mm	Sensor ON	645332	3679.98	WNC	11.53	12.50	1.250	-0.19	0.602	0.753
	FR1 n48_Ant 0	40M	BPSK	50	28	Bottom Side	0mm	Sensor ON	641666	3624.99	WNC	11.49	12.50	1.262	0.05	0.599	0.756
	FR1 n48_Ant 0	40M	BPSK	50	28	Bottom Side	0mm	Sensor ON	638000	3570	WNC	11.33	12.50	1.309	0.02	0.554	0.725
	FR1 n48_Ant 0	40M	BPSK	50	28	Bottom Side	0mm	Sensor ON	645332	3679.98	WNC	11.43	12.50	1.279	0.06	0.556	0.711
	FR1 n48_Ant 0	40M	BPSK	1	1	Bottom Side	0mm	Sensor ON	641666	3624.99	Speed	11.58	12.50	1.236	0	0.491	0.607
	FR1 n48_Ant 2	40M	BPSK	1	1	Bottom Side	16mm	Sensor OFF	641666	3624.99	WNC	20.95	22.00	1.274	0.04	0.180	0.229
	FR1 n48_Ant 2	40M	BPSK	50	28	Bottom Side	16mm	Sensor OFF	641666	3624.99	WNC	20.92	22.00	1.282	-0.05	0.175	0.224
	FR1 n48_Ant 2	40M	BPSK	1	1	Bottom Side	0mm	Sensor ON	641666	3624.99	WNC	14.22	14.50	1.067	-0.05	0.127	0.135
	FR1 n48_Ant 2	40M	BPSK	50	28	Bottom Side	0mm	Sensor ON	641666	3624.99	WNC	14.13	14.50	1.089	-0.16	0.122	0.133
	FR1 n48_Ant 2	40M	BPSK	1	1	Bottom Side	16mm	Sensor OFF	641666	3624.99	Speed	20.95	22.00	1.274	-0.08	0.170	0.216
	FR1 n66_Ant 0	40M	BPSK	1	1	Bottom Side	28mm	Sensor OFF	349000	1745	WNC	23.86	24.00	1.033	-0.15	0.243	0.251
	FR1 n66_Ant 0	40M	BPSK	108	54	Bottom Side	28mm	Sensor OFF	349000	1745	WNC	23.75	24.00	1.059	-0.08	0.227	0.240
	FR1 n66_Ant 0	40M	BPSK	1	1	Bottom Side	0mm	Sensor ON	349000	1745	WNC	12.64	13.50	1.219	0.01	0.389	0.474
	FR1 n66_Ant 0	40M	BPSK	108	54	Bottom Side	0mm	Sensor ON	349000	1745	WNC	12.61	13.50	1.227	0.1	0.367	0.450
	FR1 n66_Ant 0	40M	BPSK	1	1	Bottom Side	0mm	Sensor ON	349000	1745	Speed	12.64	13.50	1.219	-0.09	0.365	0.445
	FR1 n66_Ant 2	40M	BPSK	1	1	Bottom Side	16mm	Sensor OFF	349000	1745	WNC	23.99	24.00	1.002	-0.19	0.477	0.478
	FR1 n66_Ant 2	40M	BPSK	108	54	Bottom Side	16mm	Sensor OFF	349000	1745	WNC	23.97	24.00	1.007	0.11	0.473	0.476
27	FR1 n66_Ant 2	40M	BPSK	1	1	Bottom Side	0mm	Sensor ON	349000	1745	WNC	15.08	15.50	1.102	-0.09	0.535	0.589
	FR1 n66_Ant 2	40M	BPSK	108	54	Bottom Side	0mm	Sensor ON	349000	1745	WNC	15.07	15.50	1.104	0.12	0.522	0.576
	FR1 n66_Ant 2	40M	BPSK	1	1	Bottom Side	0mm	Sensor ON	349000	1745	Speed	15.08	15.50	1.102	-0.03	0.508	0.560
	FR1 n70_Ant 0	15M	BPSK	1	1	Bottom Side	28mm	Sensor OFF	340500	1702.5	WNC	23.79	24.00	1.050	-0.11	0.216	0.227
	FR1 n70_Ant 0	15M	BPSK	36	22	Bottom Side	28mm	Sensor OFF	340500	1702.5	WNC	23.63	24.00	1.089	-0.18	0.202	0.220
	FR1 n70_Ant 0	15M	BPSK	1	1	Bottom Side	0mm	Sensor ON	340500	1702.5	WNC	14.14	14.50	1.086	0.04	0.503	0.546
	FR1 n70_Ant 0	15M	BPSK	36	22	Bottom Side	0mm	Sensor ON	340500	1702.5	WNC	14.08	14.50	1.102	-0.1	0.482	0.531
	FR1 n70_Ant 0	15M	BPSK	1	1	Bottom Side	0mm	Sensor ON	340500	1702.5	Speed	14.14	14.50	1.086	-0.16	0.484	0.526
	FR1 n70_Ant 2	15M	BPSK	1	1	Bottom Side	16mm	Sensor OFF	340500	1702.5	WNC	23.48	24.00	1.127	0.1	0.313	0.353
	FR1 n70_Ant 2	15M	BPSK	36	22	Bottom Side	16mm	Sensor OFF	340500	1702.5	WNC	23.42	24.00	1.143	-0.15	0.304	0.347
28	FR1 n70_Ant 2	15M	BPSK	1	1	Bottom Side	0mm	Sensor ON	340500	1702.5	WNC	15.50	16.00	1.122	0.01	0.509	0.571
	FR1 n70_Ant 2	15M	BPSK	36	22	Bottom Side	0mm	Sensor ON	340500	1702.5	WNC	15.49	16.00	1.125	0.02	0.487	0.548
	FR1 n70_Ant 2	15M	BPSK	1	1	Bottom Side	0mm	Sensor ON	340500	1702.5	Speed	15.50	16.00	1.122	-0.14	0.496	0.557



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Sensor ON/OFF	Ch.	Freq. (MHz)	Antenna Vendor	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n71_Ant 0	20M	BPSK	1	1	Bottom Side	28mm	Sensor OFF	136100	680.5	WNC	23.27	24.50	1.327	-0.17	0.115	0.153
	FR1 n71_Ant 0	20M	BPSK	50	28	Bottom Side	28mm	Sensor OFF	136100	680.5	WNC	23.13	24.50	1.371	-0.15	0.107	0.147
29	FR1 n71_Ant 0	20M	BPSK	1	1	Bottom Side	0mm	Sensor ON	136100	680.5	WNC	18.30	19.00	1.175	-0.01	0.473	0.556
	FR1 n71_Ant 0	20M	BPSK	50	28	Bottom Side	0mm	Sensor ON	136100	680.5	WNC	18.26	19.00	1.186	0.04	0.455	0.540
	FR1 n71_Ant 0	20M	BPSK	1	1	Bottom Side	0mm	Sensor ON	136100	680.5	Speed	18.30	19.00	1.175	-0.04	0.399	0.469
30	FR1 n77_Ant 0	100M	BPSK	1	1	Bottom Side	28mm	Sensor OFF	656000	3840	WNC	23.19	24.00	1.205	-0.05	0.529	0.637
	FR1 n77_Ant 0	100M	BPSK	135	69	Bottom Side	28mm	Sensor OFF	656000	3840	WNC	23.00	24.00	1.259	0.09	0.498	0.627
	FR1 n77_Ant 0	100M	BPSK	1	1	Bottom Side	0mm	Sensor ON	656000	3840	WNC	11.79	12.00	1.050	0	0.580	0.609
	FR1 n77_Ant 0	100M	BPSK	135	69	Bottom Side	0mm	Sensor ON	656000	3840	WNC	11.77	12.00	1.054	-0.15	0.572	0.603
	FR1 n77_HPUE_Ant 0	100M	BPSK	1	1	Bottom Side	28mm	Sensor OFF	656000	3840	WNC	26.16	27.00	1.213	-0.13	0.505	0.613
	FR1 n77_Ant 0	100M	BPSK	1	1	Bottom Side	28mm	Sensor OFF	656000	3840	Speed	23.19	24.00	1.205	-0.03	0.511	0.616
	FR1 n77_Ant 2	100M	BPSK	1	1	Bottom Side	16mm	Sensor OFF	656000	3840	WNC	23.14	24.00	1.219	-0.02	0.253	0.308
	FR1 n77_Ant 2	100M	BPSK	135	69	Bottom Side	16mm	Sensor OFF	656000	3840	WNC	22.92	24.00	1.282	0.05	0.238	0.305
	FR1 n77_Ant 2	100M	BPSK	1	1	Bottom Side	0mm	Sensor ON	656000	3840	WNC	12.52	13.00	1.117	0.04	0.155	0.173
	FR1 n77_Ant 2	100M	BPSK	135	69	Bottom Side	0mm	Sensor ON	656000	3840	WNC	12.46	13.00	1.132	-0.08	0.150	0.170
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	1	Bottom Side	16mm	Sensor OFF	656000	3840	WNC	26.07	27.00	1.239	0.02	0.242	0.300
	FR1 n77_Ant 2	100M	BPSK	1	1	Bottom Side	16mm	Sensor OFF	656000	3840	Speed	23.14	24.00	1.219	0.11	0.239	0.291
	FR1 n77_Ant 0	100M	BPSK	1	1	Bottom Side	28mm	Sensor OFF	633332	3499.98	WNC	23.32	24.00	1.169	-0.02	0.288	0.337
	FR1 n77_Ant 0	100M	BPSK	135	69	Bottom Side	28mm	Sensor OFF	633332	3499.98	WNC	23.09	24.00	1.233	0.13	0.256	0.316
	FR1 n77_Ant 0	100M	BPSK	1	1	Bottom Side	0mm	Sensor ON	633332	3499.98	WNC	11.62	12.00	1.091	-0.03	0.467	0.510
	FR1 n77_Ant 0	100M	BPSK	135	69	Bottom Side	0mm	Sensor ON	633332	3499.98	WNC	11.57	12.00	1.104	0	0.455	0.502
	FR1 n77_HPUE_Ant 0	100M	BPSK	1	1	Bottom Side	0mm	Sensor ON	633332	3499.98	WNC	14.63	15.00	1.089	-0.03	0.449	0.489
	FR1 n77_Ant 0	100M	BPSK	1	1	Bottom Side	0mm	Sensor ON	633332	3499.98	Speed	11.62	12.00	1.091	-0.01	0.459	0.501
	FR1 n77_Ant 2	100M	BPSK	1	1	Bottom Side	16mm	Sensor OFF	633332	3499.98	WNC	23.58	24.00	1.102	0.05	0.236	0.260
	FR1 n77_Ant 2	100M	BPSK	135	69	Bottom Side	16mm	Sensor OFF	633332	3499.98	WNC	23.38	24.00	1.153	0.14	0.218	0.251
	FR1 n77_Ant 2	100M	BPSK	1	1	Bottom Side	0mm	Sensor ON	633332	3499.98	WNC	12.75	13.00	1.059	0.15	0.148	0.157
	FR1 n77_Ant 2	100M	BPSK	135	69	Bottom Side	0mm	Sensor ON	633332	3499.98	WNC	12.72	13.00	1.067	0.07	0.142	0.151
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	1	Bottom Side	16mm	Sensor OFF	633332	3499.98	WNC	26.61	27.00	1.094	-0.1	0.215	0.235
	FR1 n77_Ant 2	100M	BPSK	1	1	Bottom Side	16mm	Sensor OFF	633332	3499.98	Speed	23.58	24.00	1.102	0.15	0.221	0.243

15.2 Power Class 2 and Power Class 3 Linearity

General Note:

This device support Power Class 2 and Power Class 3 operations. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each LTE and FR1 configuration and exposure condition combination, according to the highest time averaged power for Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg, Separate SAR testing for Power Class 2 is not required. Use PC3 power level and SAR to estimated PC2 SAR linearly, and check if the deviation from the measured PC2 SAR is <10%

	LTE Band 41_Ant 0	LTE Band 41_Ant 0
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	16.5	16.5
Reported 1g SAR (W/kg)	0.596	0.446
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	28.28	19.34
Linearity SAR(W/kg)	0.41	
% deviation from expected linearity		9.40%

	LTE Band 41_Ant 2	LTE Band 41_Ant 2
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	24	27
Reported 1g SAR (W/kg)	0.323	0.398
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	159.00	217.01
Linearity SAR(W/kg)	0.44	
% deviation from expected linearity		-9.72%

	FR1 n41_Ant 0	FR1 n41_Ant 0
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	14	17
Reported 1g SAR (W/kg)	0.612	0.564
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	25.12	25.06
Linearity SAR(W/kg)	0.61	
% deviation from expected linearity		-7.62%

	FR1 n41_Ant 2	FR1 n41_Ant 2
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	24	27
Reported 1g SAR (W/kg)	0.45	0.438
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	251.19	250.59
Linearity SAR(W/kg)	0.45	
% deviation from expected linearity		-2.44%



	FR1 n77_Ant 0	FR1 n77_Ant 0
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	24	27
Reported 1g SAR (W/kg)	0.637	0.613
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	251.19	250.59
Linearity SAR(W/kg)	0.64	
% deviation from expected linearity		-3.54%

	FR1 n77_Ant 2	FR1 n77_Ant 2
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	24	27
Reported 1g SAR (W/kg)	0.308	0.3
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	251.19	250.59
Linearity SAR(W/kg)	0.31	
% deviation from expected linearity		-2.37%

16. Simultaneous Transmission Analysis

NO.	Simultaneous Transmission Configurations	Body
1.	WWAN Ant 0 + WWAN Ant 2 + WLAN2.4GHz Main + Bluetooth Aux	Yes
2.	WWAN Ant 0 + WWAN Ant 2 + WLAN2.4GHz Main + WLAN2.4GHz Aux	Yes
3.	WWAN Ant 0 + WWAN Ant 2 + WLAN5/6GHz Main + WLAN5/6GHz Aux + Bluetooth Aux	Yes

General Note:

- The Intel BE201D2W WLAN/BT module is integrated into this host. The maximum WLAN/BT output power and evaluation results are referenced from the Intel test report (Report No.: 240806-04.TR01, FCC ID: PD9BE201D2).
- The worst case WWAN SAR is using for Sim-Tx analysis.
- The Scaled SAR summation is calculated based on the same configuration and test position.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - Scalar SAR summation $< 1.6\text{W/kg}$.
 - $\text{SPLSR} = (\text{SAR}_1 + \text{SAR}_2)^{1.5} / (\text{min. separation distance, mm})$, and the peak separation distance is determined from the square root of $[(x_1-x_2)^2 + (y_1-y_2)^2 + (z_1-z_2)^2]$, where (x_1, y_1, z_1) and (x_2, y_2, z_2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
 - If $\text{SPLSR} \leq 0.04$, simultaneously transmission SAR measurement is not necessary.
 - Simultaneously transmission SAR measurement, and the reported multi-band SAR $< 1.6\text{W/kg}$.
 - The SPLSR calculated results please refer to section 16.2.

16.1 Body Exposure Conditions

Exposure Position	1 WWAN Ant 0 1g SAR (W/kg)	2 WWAN Ant 2 1g SAR (W/kg)	3 WLAN2.4GHz Main 1g SAR (W/kg)	4 WLAN2.4GHz Aux 1g SAR (W/kg)	5 WLAN5/6GHz Main 1g SAR (W/kg)	6 WLAN5/6GHz Aux 1g SAR (W/kg)	7 Bluetooth Aux 1g SAR (W/kg)	1+2+3+7 Summed 1g SAR (W/kg)	1+2+3+4 Summed 1g SAR (W/kg)	1+2+5+6+7 Summed 1g SAR (W/kg)	1+2+3+7 SPLSR	Case No	1+2+3+4 SPLSR	Case No	1+2+5+6+7 SPLSR	Case No
Bottom Side	0.781	0.752	0.470	0.260	0.390	0.450	0.290	2.293	2.263	2.663	0.010	Case 1	0.010	Case 2	0.020	Case 3

16.2 SPLSR Evaluation and Analysis

General Note:

- According to antenna location the minimum distance between each transmit antenna is using for SPLSR analysis
- Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneously transmitting antenna. When the sum of 1-g or 10-g SAR of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the SAR limit, SAR test exclusion applies to that simultaneous transmission configuration. Therefore, the adjacent transmit antennas will be summed first, and then the SPLSR calculation will be evaluated with the farther transmitted antennas.
- $SPLSR = (SAR_1 + SAR_2)^{1.5} / (\text{min. separation distance, mm})$. If $SPLSR \leq 0.04$, simultaneously transmission SAR measurement is not necessary

	Band	Position	SAR (W/kg)	Gap	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				(mm)				
Case 1	WWAN Ant 0	Bottom Side	0.781	0mm	196.0	1.53	0.01	Not required
	WWAN Ant 2		0.752	0mm				
	WWAN Ant 0	Bottom Side	0.781	0mm	185.0	1.25	0.01	Not required
	WLAN2.4GHz Main		0.470	0mm				
	WWAN Ant 0	Bottom Side	0.781	0mm	93.0	1.07	0.01	Not required
	Bluetooth Aux		0.290	0mm				
	WWAN Ant 2	Bottom Side	0.752	0mm	158.0	1.22	0.01	Not required
	WLAN2.4GHz Main		0.470	0mm				
	WWAN Ant 2	Bottom Side	0.752	0mm	205.0	1.04	0.01	Not required
	Bluetooth Aux		0.290	0mm				
	WLAN2.4G Main	Bottom Side	0.470	0mm	70.0	0.76	0.01	Not required
	Bluetooth Aux		0.290	0mm				
Case 2	Band	Position	SAR (W/kg)	Gap (mm)	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WWAN Ant 0	Bottom Side	0.781	0mm	196.0	1.53	0.01	Not required
	WWAN Ant 2		0.752	0mm				
	WWAN Ant 0	Bottom Side	0.781	0mm	185.0	1.25	0.01	Not required
	WLAN2.4GHz Main		0.470	0mm				
	WWAN Ant 0	Bottom Side	0.781	0mm	93.0	1.04	0.01	Not required
	WLAN2.4GHz Aux		0.260	0mm				
	WWAN Ant 2	Bottom Side	0.752	0mm	158.0	1.22	0.01	Not required
	WLAN2.4GHz Main		0.470	0mm				
	WWAN Ant 2	Bottom Side	0.752	0mm	205.0	1.01	0.00	Not required
	WLAN2.4GHz Aux		0.260	0mm				
	WLAN2.4GHz Main	Bottom Side	0.470	0mm	70.0	0.73	0.01	Not required
	WLAN2.4GHz Aux		0.260	0mm				
Case 3	Band	Position	SAR (W/kg)	Gap (mm)	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WWAN Ant 0	Bottom Side	0.781	0mm	196.0	1.53	0.01	Not required
	WWAN Ant 2		0.752	0mm				
	WWAN Ant 0	Bottom Side	0.781	0mm	185.0	1.17	0.01	Not required
	WLAN5/6GHz Main		0.390	0mm				
	WWAN Ant 0	Bottom Side	0.781	0mm	93.0	1.52	0.02	Not required
	WLAN5/6GHz Aux+Bluetooth Aux		0.740	0mm				
	WWAN Ant 2	Bottom Side	0.752	0mm	158.0	1.14	0.01	Not required
	WLAN5/6GHz Main		0.390	0mm				
	WWAN Ant 2	Bottom Side	0.752	0mm	205.0	1.49	0.01	Not required
	WLAN5/6GHz Aux+Bluetooth Aux		0.740	0mm				
	WLAN5/6GHz Main	Bottom Side	0.390	0mm	70.0	1.13	0.02	Not required
	WLAN5/6GHz Aux+Bluetooth Aux		0.740	0mm				

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17. Uncertainty Assessment

Per KDB 865664 D01 SAR measurement 100MHz to 6GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg and the measured 10-g SAR within a frequency band is < 3.75 W/kg. The expanded SAR measurement uncertainty must be $\leq 30\%$, for a confidence interval of $k = 2$. If these conditions are met, extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. For this device, the highest measured 1-g SAR is less 1.5W/kg. Therefore, the measurement uncertainty table is not required in this report.

Declaration of Conformity:

The test results with all measurement uncertainty excluded is presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

18. References

- [1] FCC 47 CFR Part 2 "Frequency Allocations and Radio Treaty Matters; General Rules and Regulations"
- [2] ANSI/IEEE Std. C95.1-1992, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz", September 1992
- [3] IEEE Std. 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", Sep 2013
- [4] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015
- [5] FCC KDB 941225 D01 v03r01, "3G SAR MEAUREMENT PROCEDURES", Oct 2015
- [6] FCC KDB 941225 D05 v02r05, "SAR Evaluation Considerations for LTE Devices", Dec 2015
- [7] FCC KDB 941225 D05A v01r02, "Rel. 10 LTE SAR Test Guidance and KDB Inquiries", Oct 2015
- [8] FCC KDB 616217 D04 v01r02, "SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers", Oct 2015
- [9] SPEAG DASY System Handbook
- [10] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
- [11] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.