

LTE Band 66

Bandwidth	Modulation	RB size	RB offset	CH131979	CH132322	CH132665	EIRP		
				1710.7MHz	1745MHz	1779.3MHz			
1.4MHz	QPSK	1	0	22.97	22.94	22.95	24.47	24.44	24.45
		1	2	22.97	23.01	23.13	24.47	24.51	24.63
		1	5	22.92	22.96	23.03	24.42	24.46	24.53
		3	0	22.95	23.06	23.08	24.45	24.56	24.58
		3	1	22.90	23.12	23.15	24.40	24.62	24.65
		3	2	22.87	23.02	22.99	24.37	24.52	24.49
		6	0	21.96	22.14	21.96	23.46	23.64	23.46
	16QAM	1	0	21.94	22.19	22.12	23.44	23.69	23.62
		1	2	22.02	22.19	22.19	23.52	23.69	23.69
		1	5	22.03	22.15	22.04	23.53	23.65	23.54
		3	0	22.17	21.96	22.08	23.67	23.46	23.58
		3	1	22.07	21.99	22.05	23.57	23.49	23.55
		3	2	22.01	21.98	22.10	23.51	23.48	23.60
		6	0	21.11	20.74	21.06	22.61	22.24	22.56

Bandwidth	Modulation	RB size	RB offset	CH131987	CH132322	CH132657	EIRP		
				1711.5MHz	1745MHz	1778.5MHz			
3MHz	QPSK	1	0	22.74	22.91	23.13	24.24	24.41	24.63
		1	7	23.16	23.05	23.49	24.66	24.55	24.99
		1	14	23.12	22.99	23.00	24.62	24.49	24.50
		8	0	21.94	22.12	22.06	23.44	23.62	23.56
		8	4	21.94	22.09	22.11	23.44	23.59	23.61
		8	7	22.01	22.06	22.12	23.51	23.56	23.62
		15	0	21.99	22.12	22.05	23.49	23.62	23.55
	16QAM	1	0	22.00	22.33	22.09	23.50	23.83	23.59
		1	7	22.18	22.37	22.54	23.68	23.87	24.04
		1	14	22.00	22.07	22.05	23.50	23.57	23.55
		8	0	21.31	21.20	20.66	22.81	22.70	22.16
		8	4	21.25	21.06	20.71	22.75	22.56	22.21
		8	7	21.30	21.12	20.72	22.80	22.62	22.22
		15	0	21.07	21.15	20.76	22.57	22.65	22.26

Bandwidth	Modulation	RB size	RB offset	CH131997	CH132322	CH132647	EIRP		
				1712.5MHz	1745MHz	1777.5MHz			
5MHz	QPSK	1	0	22.83	22.80	22.86	24.33	24.30	24.36
		1	13	22.87	22.57	22.81	24.37	24.07	24.31
		1	24	22.82	22.60	22.83	24.32	24.10	24.33
		12	0	21.95	22.07	21.95	23.45	23.57	23.45
		12	6	21.99	22.08	22.05	23.49	23.58	23.55
		12	11	21.95	22.14	22.07	23.45	23.64	23.57
		25	0	21.94	22.12	22.00	23.44	23.62	23.50
	16QAM	1	0	21.51	21.73	21.41	23.01	23.23	22.91
		1	13	21.86	21.64	22.07	23.36	23.14	23.57
		1	24	21.35	21.58	21.68	22.85	23.08	23.18
		12	0	20.72	20.83	21.07	22.22	22.33	22.57
		12	6	20.95	20.92	20.98	22.45	22.42	22.48
		12	11	21.01	20.86	20.93	22.51	22.36	22.43
		25	0	20.97	21.18	20.92	22.47	22.68	22.42

Bandwidth	Modulation	RB size	RB offset	CH132022	CH132322	CH132622	EIRP		
				1715MHz	1745MHz	1775MHz			
10MHz	QPSK	1	0	22.84	22.98	22.92	24.34	24.48	24.42
		1	25	23.32	23.02	23.09	24.82	24.52	24.59
		1	49	23.14	23.07	23.00	24.64	24.57	24.50
		25	0	21.98	22.16	22.02	23.48	23.66	23.52
		25	13	22.00	22.17	22.04	23.50	23.67	23.54
		25	25	21.94	22.11	22.03	23.44	23.61	23.53
		50	0	21.96	22.15	21.95	23.46	23.65	23.45
	16QAM	1	0	21.99	21.57	21.61	23.49	23.07	23.11
		1	25	22.16	22.15	22.05	23.66	23.65	23.55
		1	49	21.94	21.64	22.00	23.44	23.14	23.50
		25	0	20.96	21.11	21.05	22.46	22.61	22.55
		25	13	21.01	21.08	21.03	22.51	22.58	22.53
		25	25	20.93	21.05	21.00	22.43	22.55	22.50
		50	0	20.92	21.04	20.96	22.42	22.54	22.46

Bandwidth	Modulation	RB size	RB offset	CH132047	CH132322	CH132597	EIRP		
				1717.5MHz	1745MHz	1772.5MHz			
15MHz	QPSK	1	0	23.21	23.08	22.98	23.21	23.08	22.98
		1	38	23.15	23.03	22.96	23.15	23.03	22.96
		1	74	23.09	22.96	22.85	23.09	22.96	22.85
		36	0	22.00	22.14	21.99	22.00	22.14	21.99
		36	18	21.95	22.14	21.96	21.95	22.14	21.96
		36	39	21.91	22.10	22.05	21.91	22.10	22.05
		75	0	21.97	22.11	21.98	21.97	22.11	21.98
	16QAM	1	0	21.97	21.52	22.71	21.97	21.52	22.71
		1	38	22.62	22.17	22.90	22.62	22.17	22.90
		1	74	21.71	21.58	22.53	21.71	21.58	22.53
		36	0	20.82	21.10	20.80	20.82	21.10	20.80
		36	18	20.93	21.12	20.91	20.93	21.12	20.91
		36	39	20.91	21.13	20.89	20.91	21.13	20.89
		75	0	20.86	21.00	20.90	20.86	21.00	20.90

Bandwidth	Modulation	RB size	RB offset	CH132072	CH132322	CH132572	EIRP		
				1720MHz	1745MHz	1770MHz			
20MHz	QPSK	1	0	22.39	23.15	22.57	23.89	24.65	24.07
		1	50	22.96	23.22	23.05	24.46	24.72	24.55
		1	99	22.45	23.01	22.77	23.95	24.51	24.27
		50	0	22.03	22.15	21.96	23.53	23.65	23.46
		50	25	21.98	22.13	21.98	23.48	23.63	23.48
		50	50	22.01	22.09	21.94	23.51	23.59	23.44
		100	0	22.00	22.16	21.94	23.50	23.66	23.44
	16QAM	1	0	22.16	21.38	21.60	23.66	22.88	23.10
		1	50	22.19	22.55	22.12	23.69	24.05	23.62
		1	99	21.66	21.31	22.04	23.16	22.81	23.54
		50	0	21.07	21.03	20.83	22.57	22.53	22.33
		50	25	21.07	21.21	20.81	22.57	22.71	22.31
		50	50	21.06	21.11	20.75	22.56	22.61	22.25
		100	0	20.91	21.07	20.80	22.41	22.57	22.30

LTE Band 71

Bandwidth	Modulation	RB size	RB offset	CH 133147	CH133297	CH133447	ERP		
				665.5MHz	680.5MHz	695.5MHz			
5MHz	QPSK	1	0	22.76	22.73	22.37	19.71	19.68	19.32
		1	2	22.89	22.83	22.58	19.84	19.78	19.53
		1	5	22.75	22.67	22.46	19.70	19.62	19.41
		3	0	22.03	21.98	21.85	18.98	18.93	18.80
		3	1	22.05	21.98	21.88	19.00	18.93	18.83
		3	2	22.13	21.99	21.88	19.08	18.94	18.83
		6	0	22.02	21.97	21.87	18.97	18.92	18.82
	16QAM	1	0	21.54	21.36	21.45	18.49	18.31	18.40
		1	2	22.06	21.57	22.00	19.01	18.52	18.95
		1	5	21.44	21.05	21.38	18.39	18.00	18.33
		3	0	20.86	20.72	20.61	17.81	17.67	17.56
		3	1	21.11	20.76	20.85	18.06	17.71	17.80
		3	2	21.10	20.72	20.86	18.05	17.67	17.81
		6	0	21.00	21.14	20.76	17.95	18.09	17.71

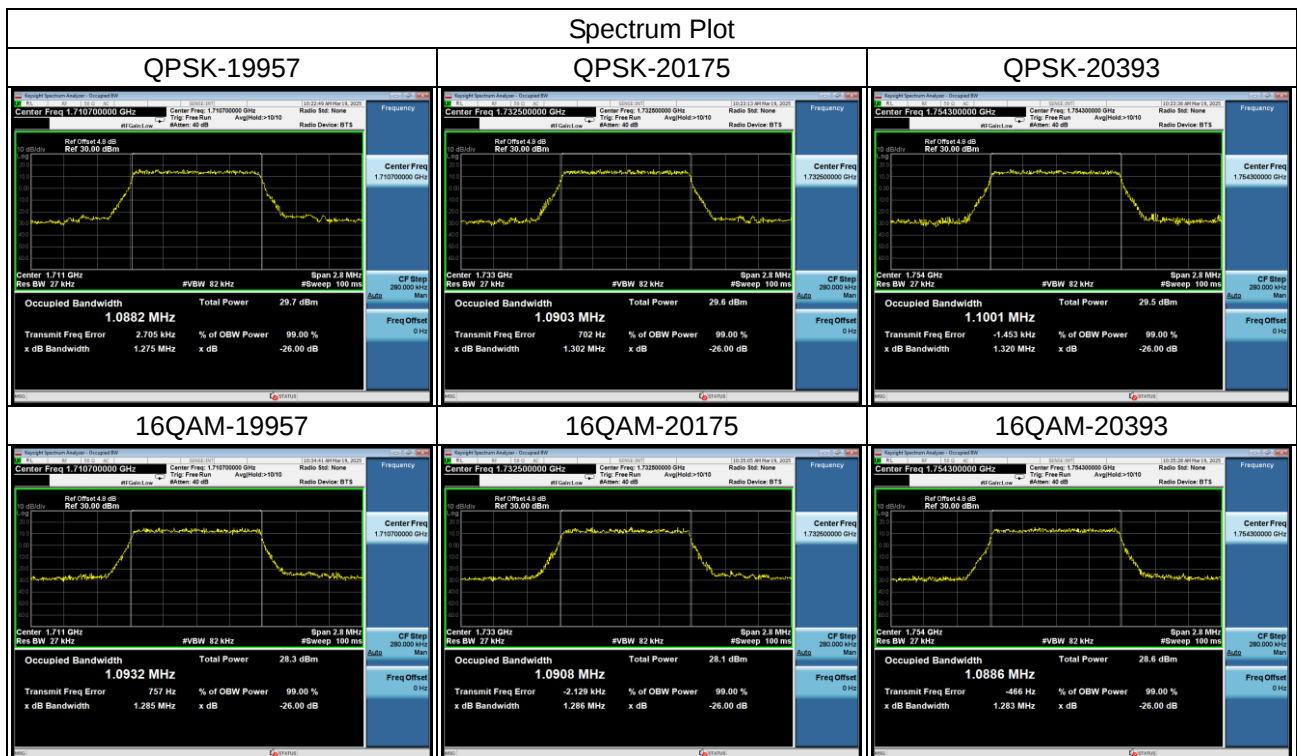
Bandwidth	Modulation	RB size	RB offset	CH 133172	CH133297	CH133422	ERP		
				668MHz	680.5MHz	693MHz			
10MHz	QPSK	1	0	23.04	22.82	22.84	19.99	19.77	19.79
		1	7	23.32	22.90	23.14	20.27	19.85	20.09
		1	14	23.21	22.72	22.88	20.16	19.67	19.83
		8	0	22.05	22.12	21.93	19.00	19.07	18.88
		8	4	22.05	22.01	21.96	19.00	18.96	18.91
		8	7	22.10	21.98	21.85	19.05	18.93	18.80
		15	0	21.96	21.99	21.95	18.91	18.94	18.90
	16QAM	1	0	22.22	21.94	22.12	19.17	18.89	19.07
		1	7	22.38	22.14	22.00	19.33	19.09	18.95
		1	14	22.21	21.94	21.45	19.16	18.89	18.40
		8	0	21.02	20.96	21.04	17.97	17.91	17.99
		8	4	21.15	20.92	20.98	18.10	17.87	17.93
		8	7	21.11	21.07	20.94	18.06	18.02	17.89
		15	0	20.94	20.99	20.89	17.89	17.94	17.84

Bandwidth	Modulation	RB size	RB offset	CH 133197	CH133297	CH133397	ERP		
				670.5MHz	680.5MHz	690.5MHz			
15MHz	QPSK	1	0	22.95	22.94	22.86	19.90	19.89	19.81
		1	13	23.61	22.86	22.92	20.56	19.81	19.87
		1	24	23.20	22.82	22.81	20.15	19.77	19.76
		12	0	22.04	22.09	21.88	18.99	19.04	18.83
		12	6	22.08	22.04	22.04	19.03	18.99	18.99
		12	11	22.06	21.96	21.90	19.01	18.91	18.85
		25	0	22.02	22.03	21.92	18.97	18.98	18.87
	16QAM	1	0	22.01	21.77	22.59	18.96	18.72	19.54
		1	13	22.23	22.02	22.85	19.18	18.97	19.80
		1	24	22.21	21.36	22.51	19.16	18.31	19.46
		12	0	20.90	21.05	20.84	17.85	18.00	17.79
		12	6	21.01	21.03	20.90	17.96	17.98	17.85
		12	11	20.96	20.97	20.67	17.91	17.92	17.62
		25	0	20.81	20.90	20.78	17.76	17.85	17.73

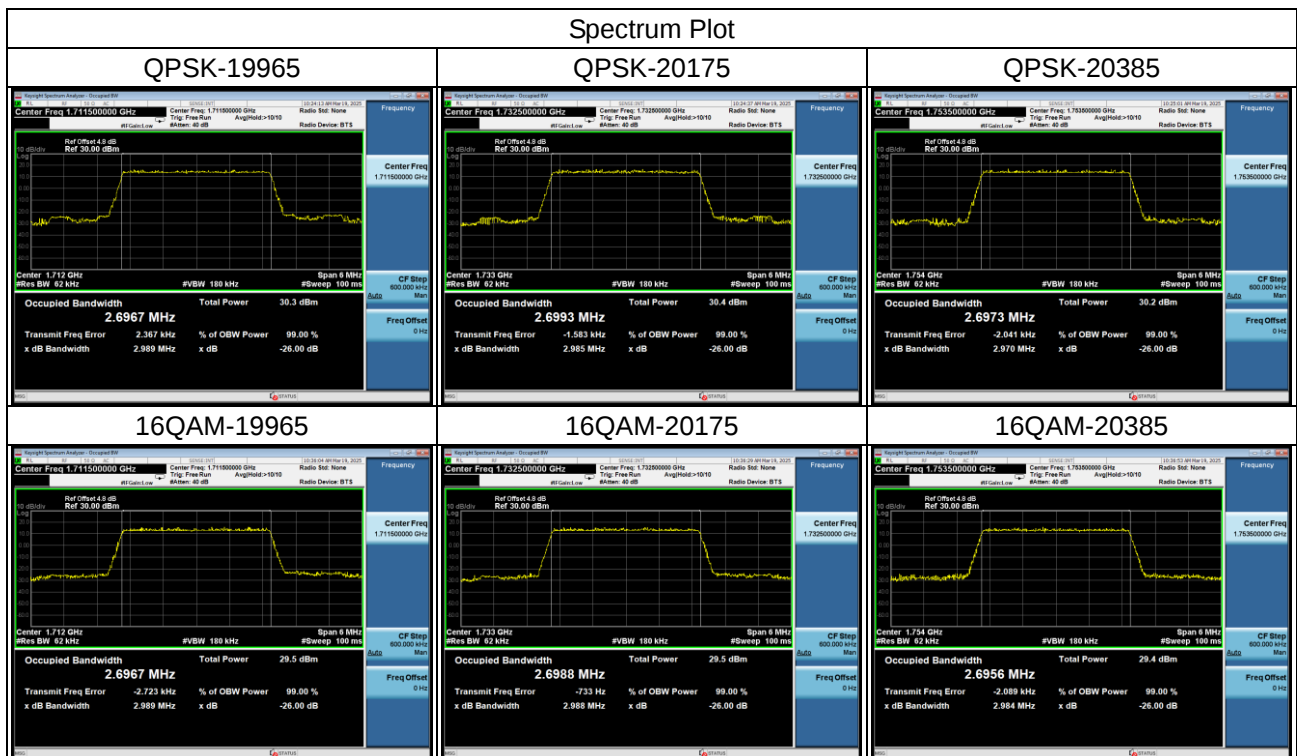
Bandwidth	Modulation	RB size	RB offset	CH 133222	CH133322	CH133372	ERP		
				673MHz	683MHz	688MHz			
20MHz	QPSK	1	0	22.62	22.89	22.45	19.57	19.84	19.40
		1	25	23.01	23.33	23.01	19.96	20.28	19.96
		1	49	22.58	22.88	22.41	19.53	19.83	19.36
		25	0	22.05	22.00	21.90	19.00	18.95	18.85
		25	13	22.06	22.01	21.94	19.01	18.96	18.89
		25	25	22.06	21.89	21.93	19.01	18.84	18.88
		50	0	21.97	21.95	21.93	18.92	18.90	18.88
	16QAM	1	0	21.93	21.62	21.41	18.88	18.57	18.36
		1	25	22.42	21.87	21.79	19.37	18.82	18.74
		1	49	21.45	21.01	21.34	18.40	17.96	18.29
		25	0	21.07	20.90	20.76	18.02	17.85	17.71
		25	13	21.18	20.98	20.70	18.13	17.93	17.65
		25	25	20.96	20.90	20.79	17.91	17.85	17.74
		50	0	21.00	20.74	20.81	17.95	17.69	17.76

APPENDIX B - OCCUPIED BANDWIDTH

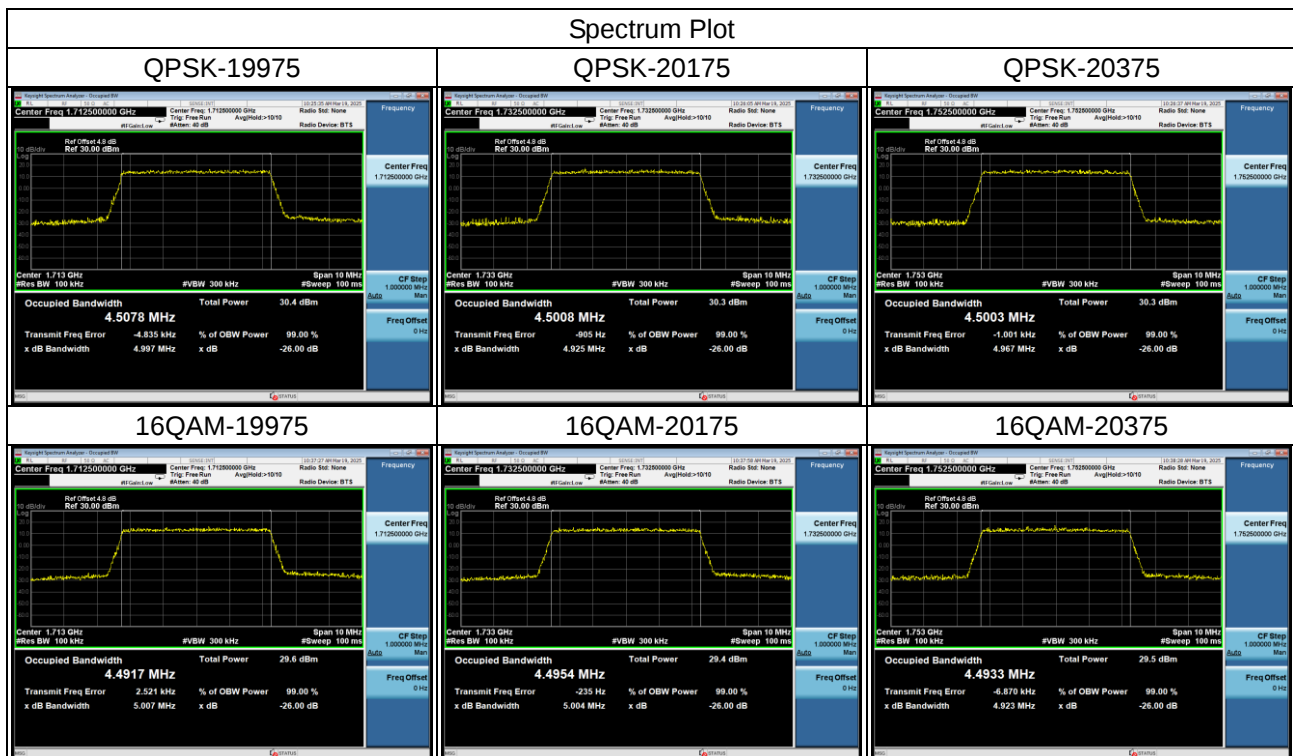
LTE Band 4_1.4MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)		26dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
19957	1710.7	1.0882	1.0932	1.275	1.285
20175	1732.5	1.0903	1.0908	1.302	1.286
20393	1754.3	1.1001	1.0886	1.320	1.283



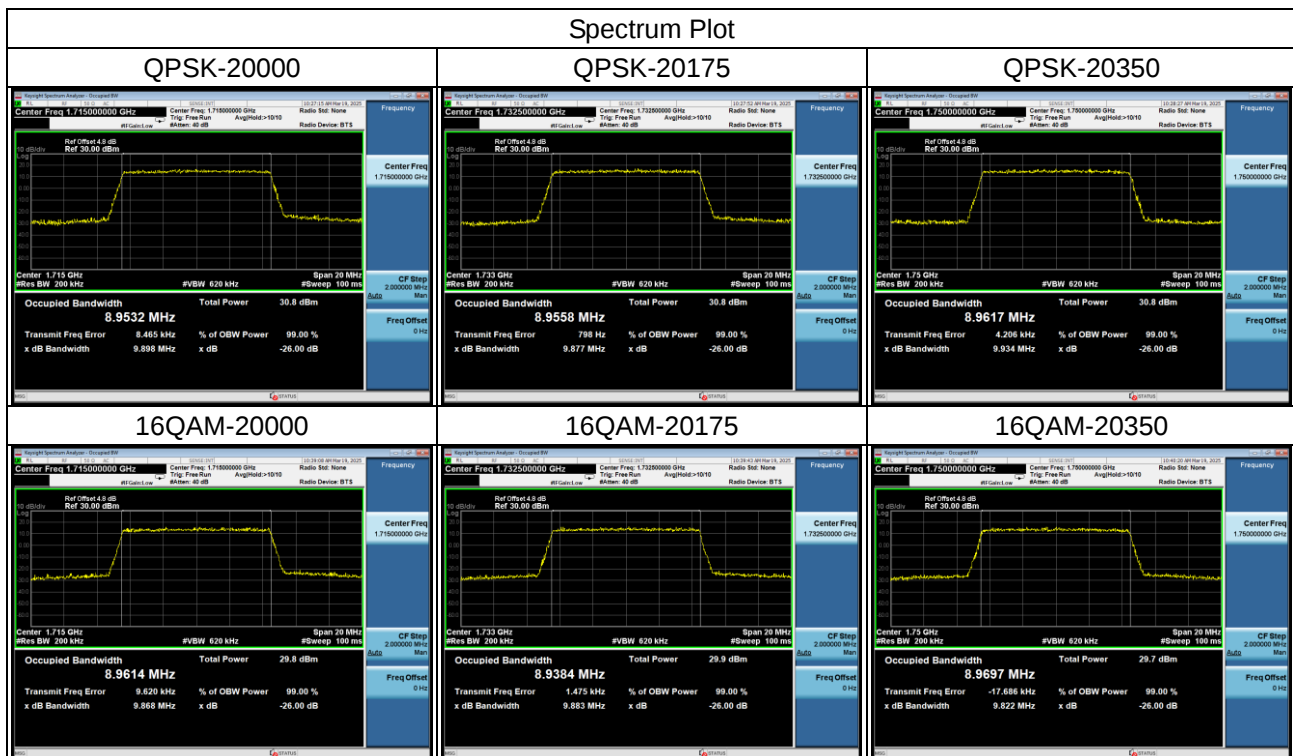
LTE Band 4_3MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)		26dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
19965	1711.5	2.6967	2.6967	2.989	2.989
20175	1732.5	2.6993	2.6988	2.985	2.988
20385	1753.5	2.6973	2.6956	2.970	2.984



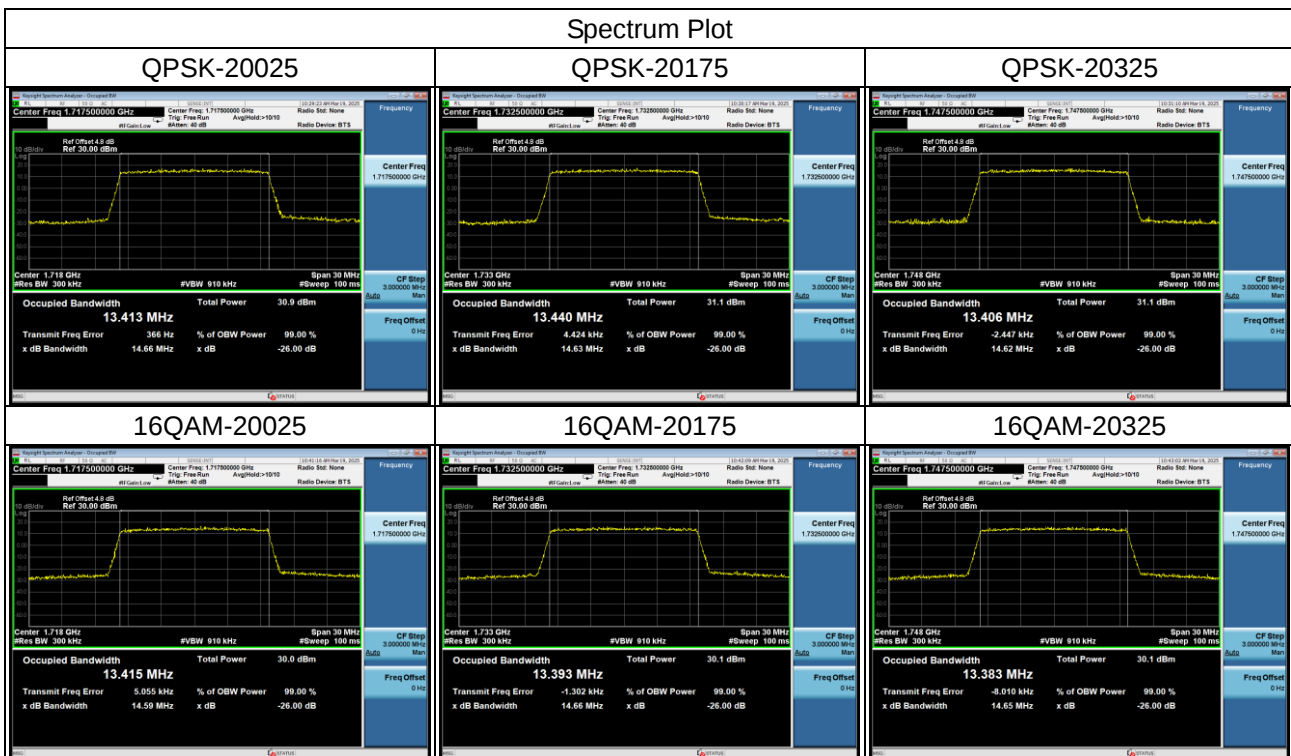
LTE Band 4_5MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)		26dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
19975	1712.5	4.5078	4.4917	4.997	5.007
20175	1732.5	4.5008	4.4954	4.925	5.004
20375	1752.5	4.5003	4.4933	4.967	4.923



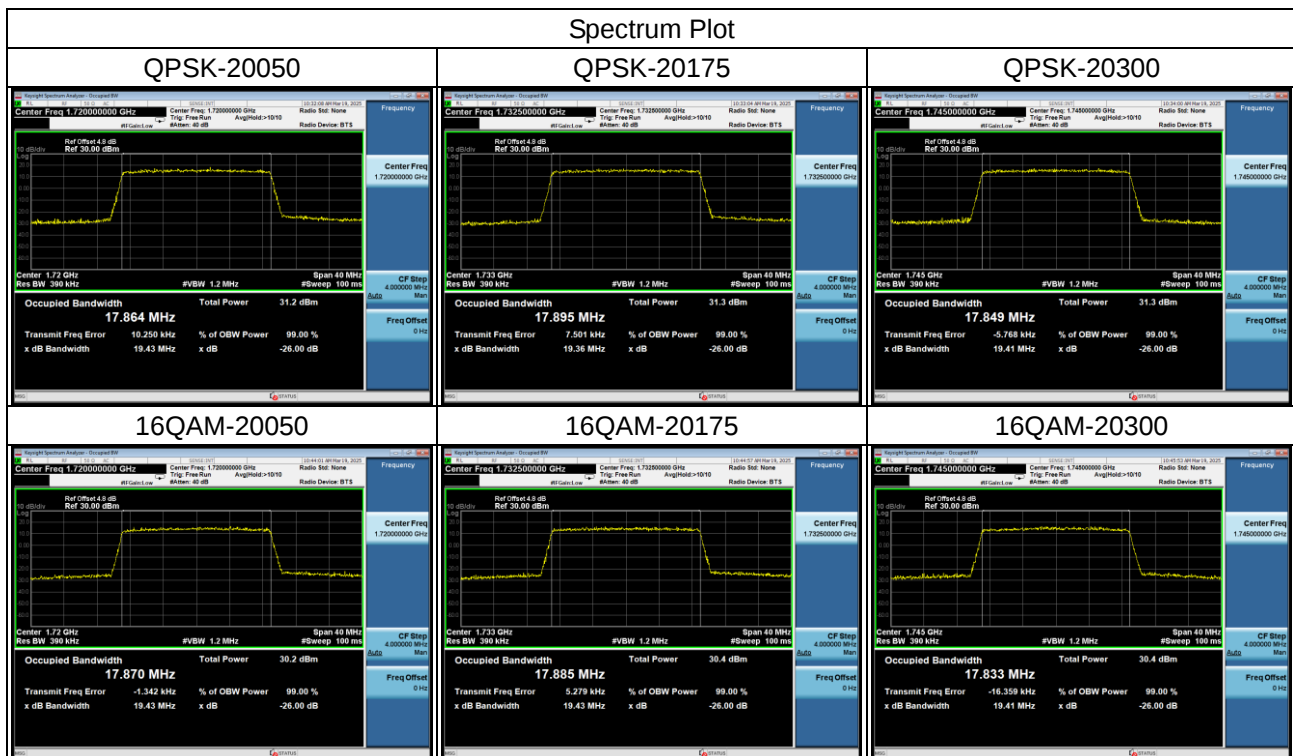
LTE Band 4_10MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)		26dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
20000	1715	8.9532	8.9614	9.898	9.868
20175	1732.5	8.9558	8.9384	9.877	9.883
20350	1715	8.9617	8.9697	9.934	9.822



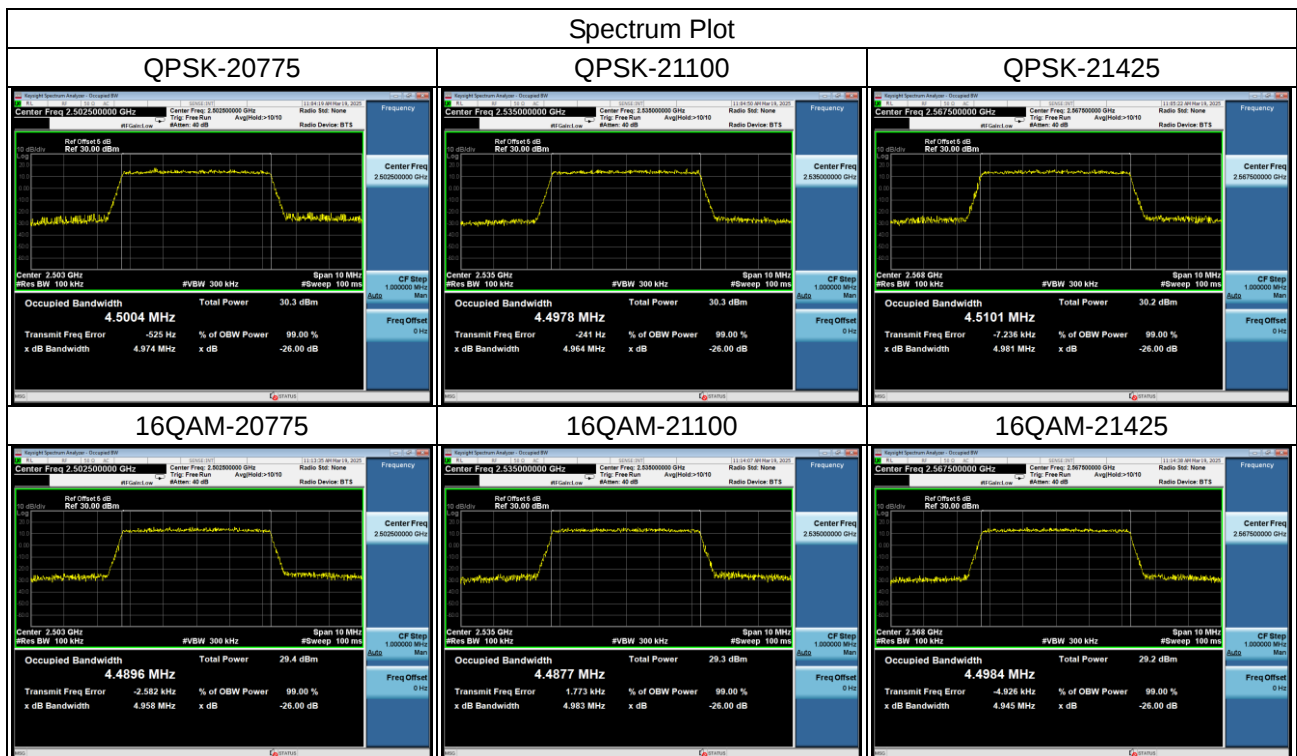
LTE Band 4_15MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)		26dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
20025	1717.5	13.413	13.415	14.66	14.59
20175	1732.5	13.440	13.393	14.63	14.66
20325	1747.5	13.406	13.383	14.62	14.65



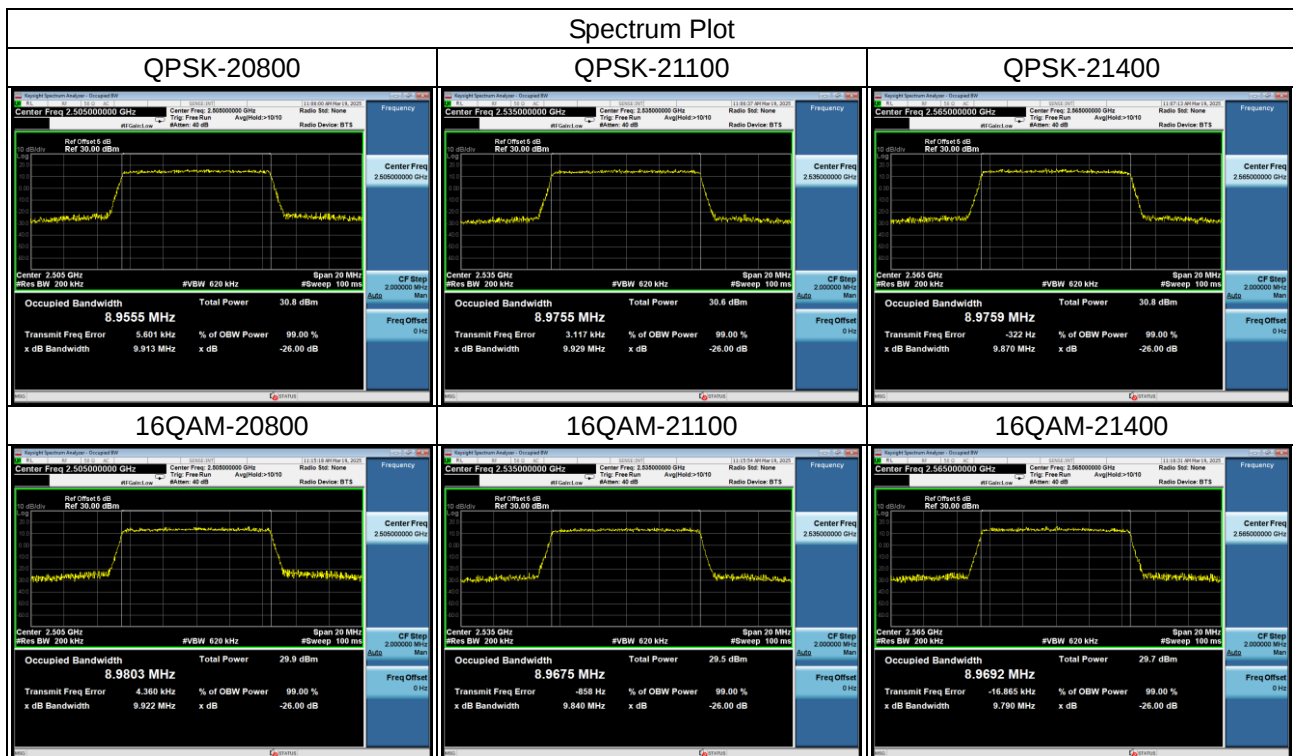
LTE Band 4_20MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)		26dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
20050	1720	17.864	17.870	19.43	19.43
20175	1732.5	17.895	17.885	19.36	19.43
20300	1740	17.849	17.833	19.41	19.41



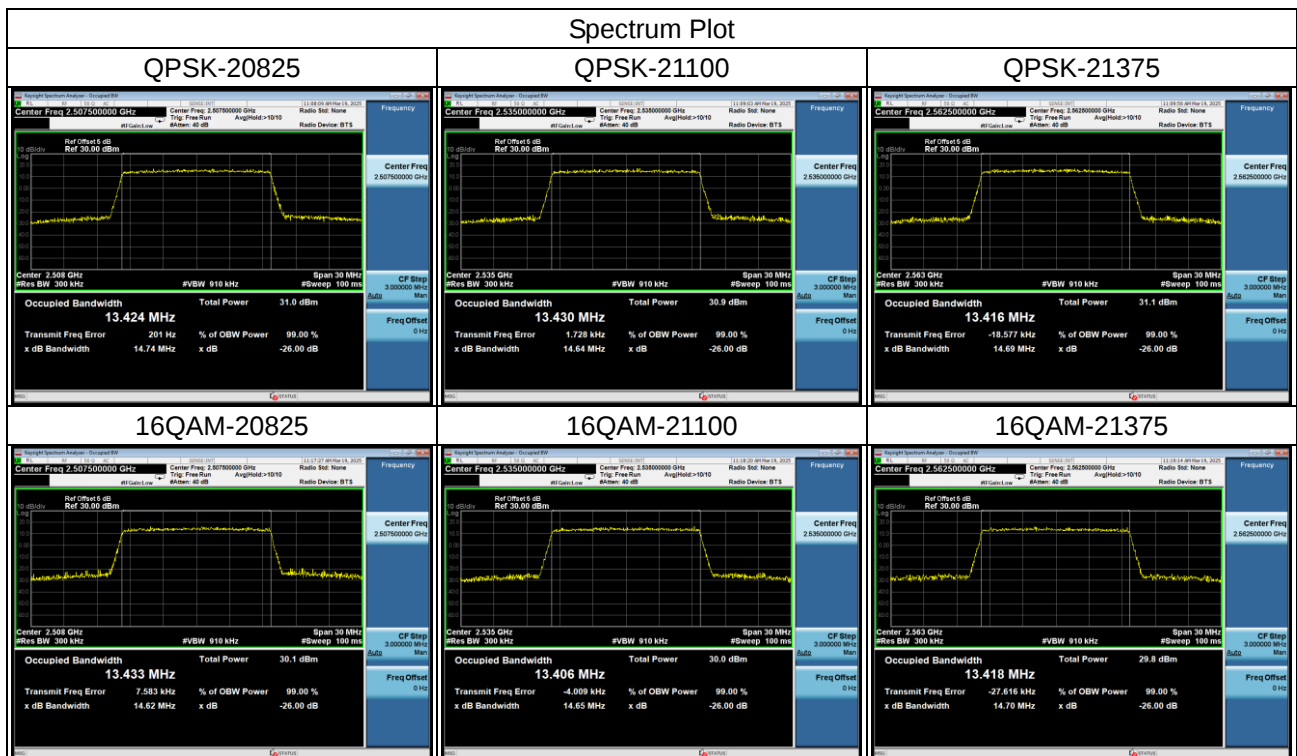
LTE Band 7_5MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)		26dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
20775	2502.5	4.5004	4.4896	4.974	4.958
21100	2535	4.4978	4.4877	4.964	4.983
21425	2567.5	4.5101	4.4984	4.981	4.945



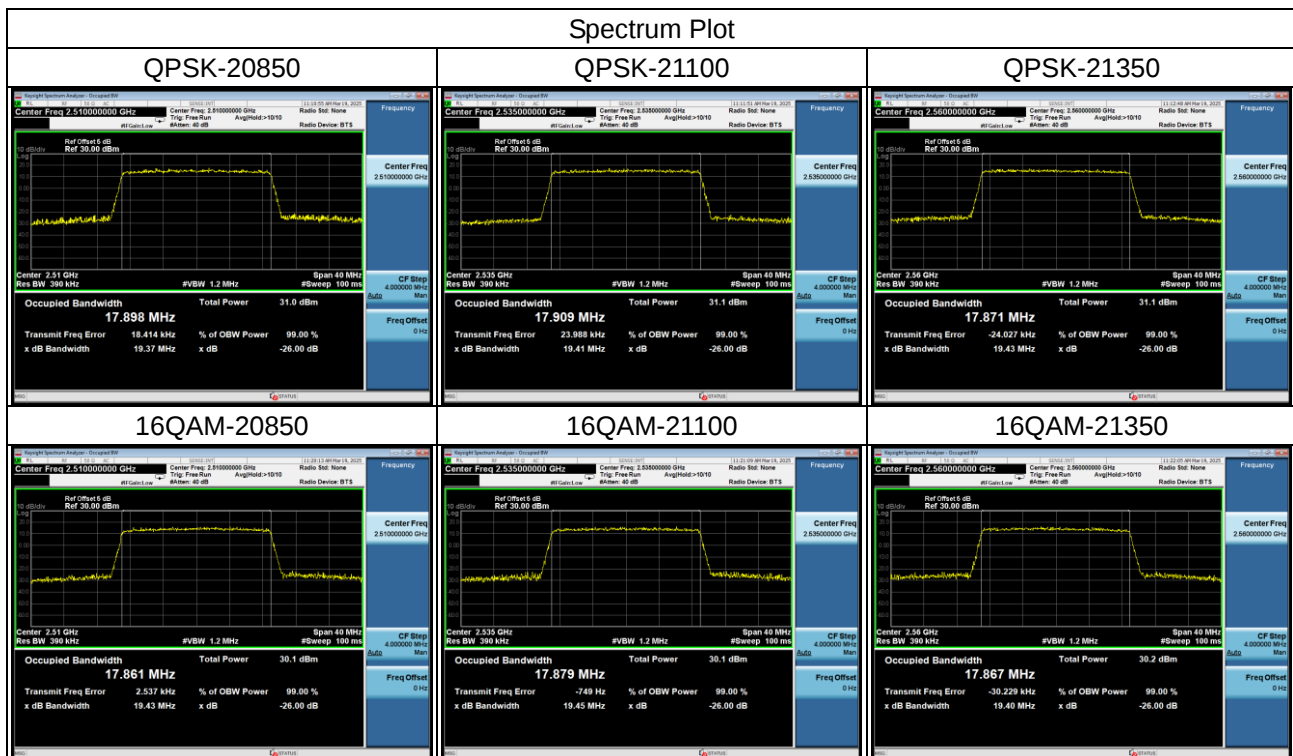
LTE Band 7_10MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)		26dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
20800	2505	8.9555	8.9803	9.913	9.922
21100	2535	8.9755	8.9675	9.929	9.840
21400	2565	8.9759	8.9692	9.870	9.790



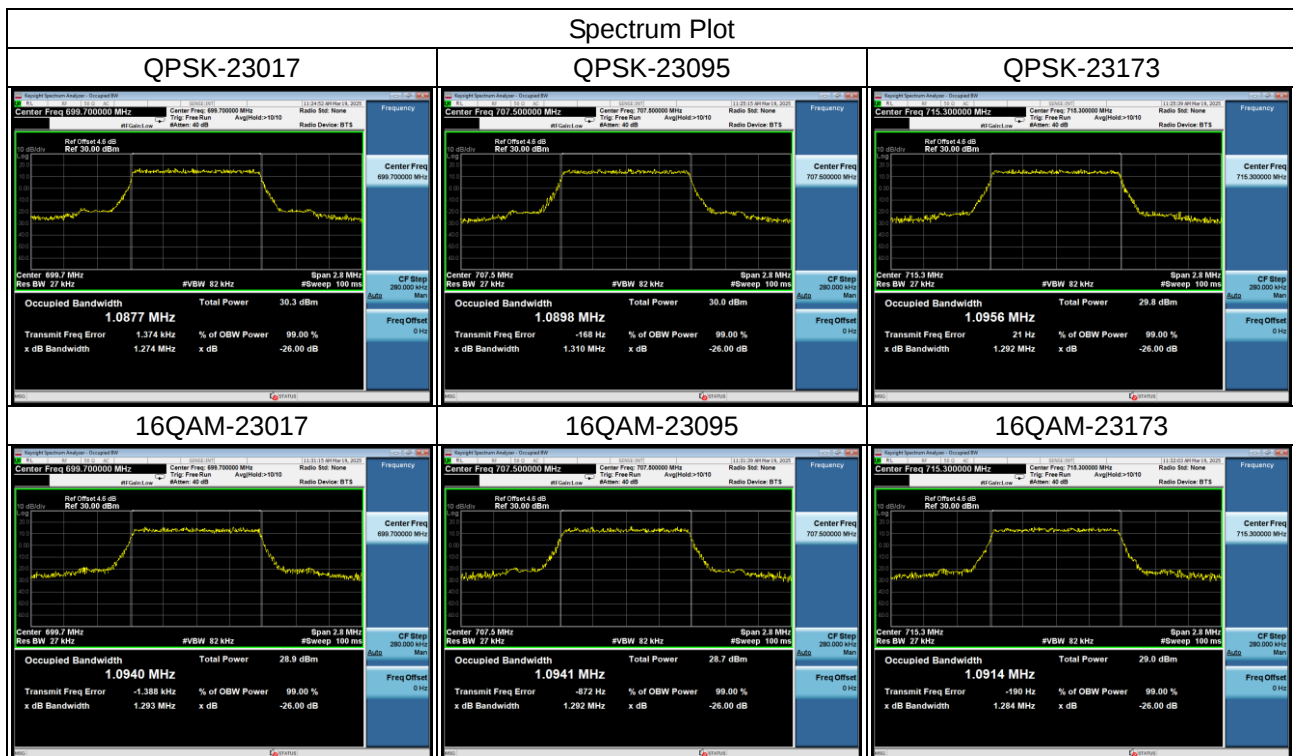
LTE Band 7_15MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)		26dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
20825	2507.5	13.424	13.433	14.74	14.62
21100	2535	13.430	13.406	14.64	14.65
21375	2562.5	13.416	13.418	14.69	14.70



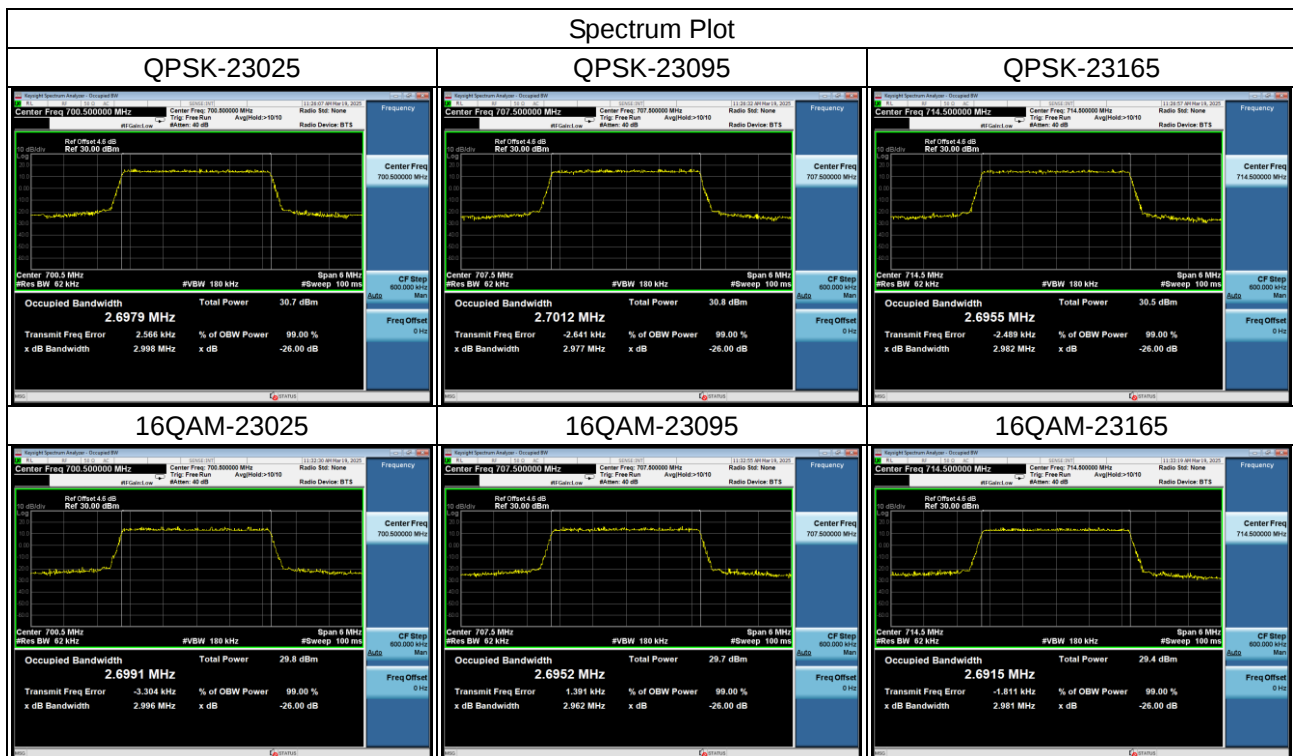
LTE Band 7_20MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)		26dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
20850	2510	17.898	17.861	19.37	19.43
21100	2535	17.909	17.879	19.41	19.45
21350	2560	17.871	17.867	19.43	19.40



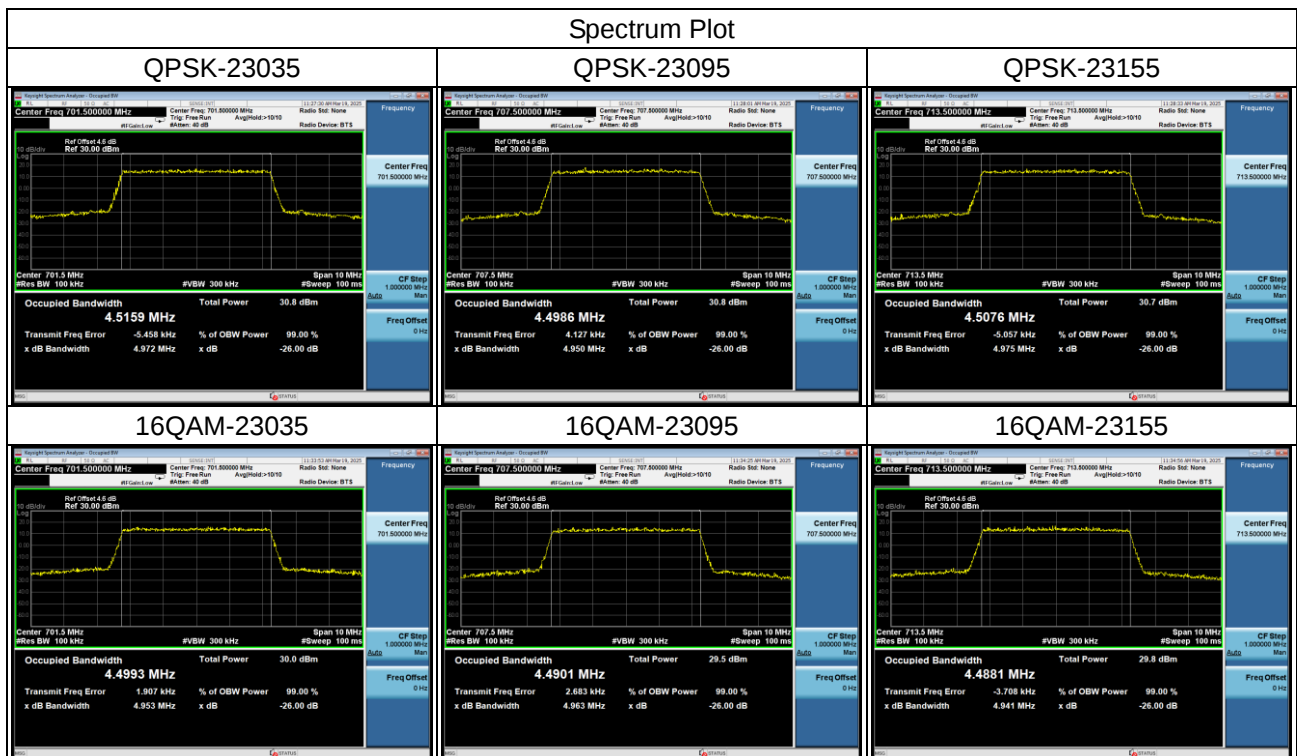
LTE Band 12_1.4MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)		26dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
23017	699.7	1.0877	1.0940	1.274	1.293
23095	707.5	1.0898	1.0941	1.310	1.292
23173	715.3	1.0956	1.0914	1.292	1.284



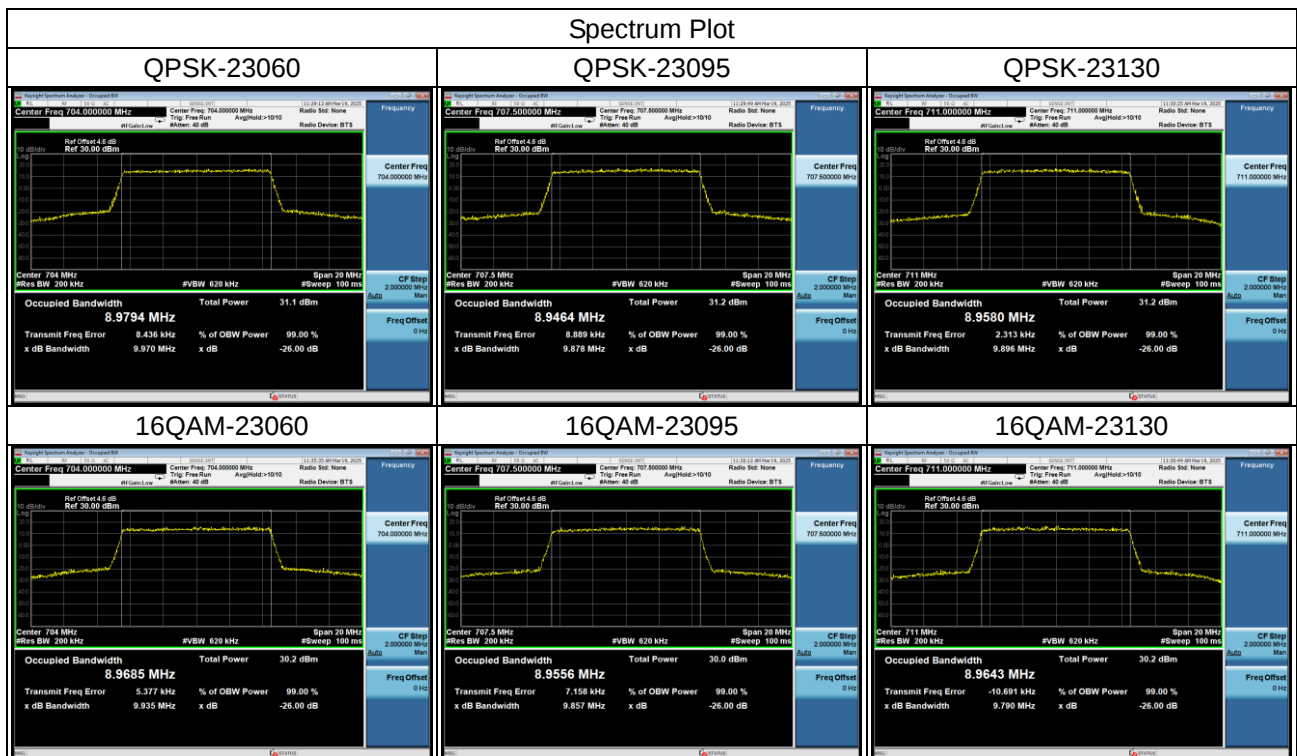
LTE Band 12_3MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)		26dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
23025	700.5	2.6979	2.6991	2.998	2.996
23095	707.5	2.7012	2.6952	2.977	2.962
23165	714.5	2.6955	2.6915	2.982	2.981



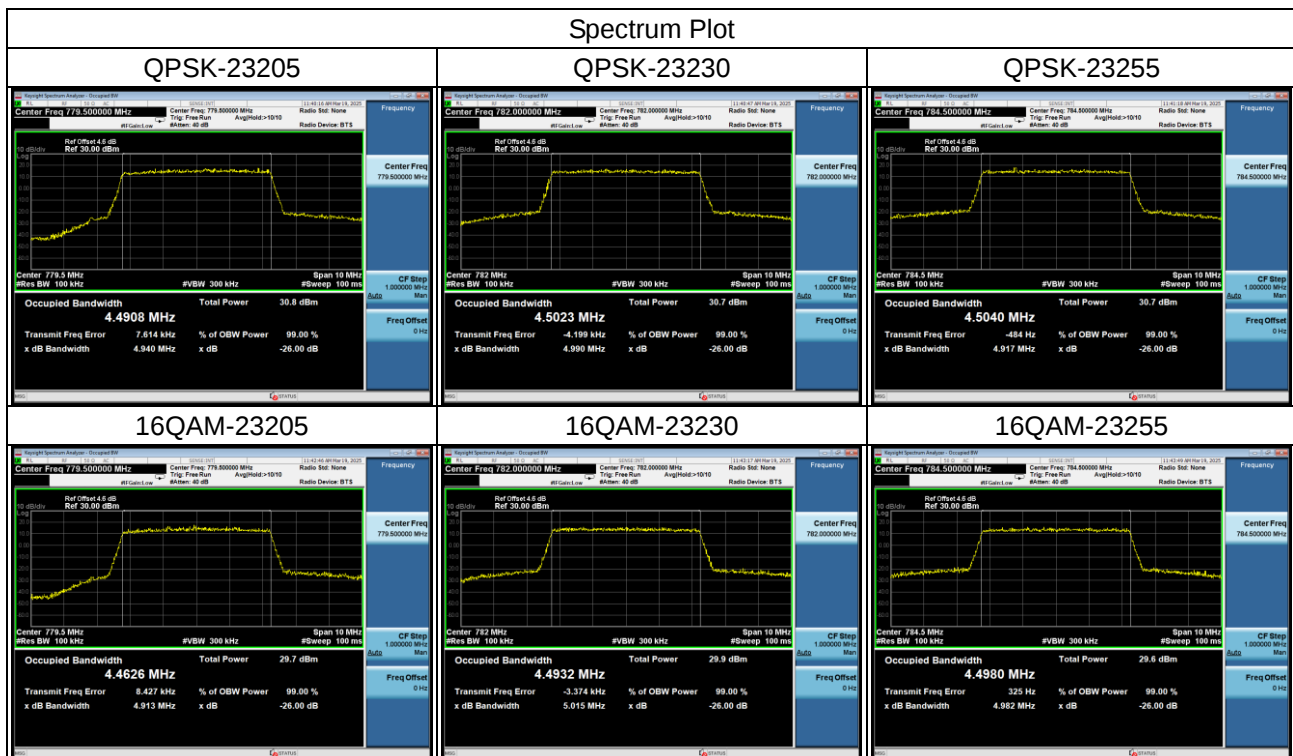
LTE Band 12_5MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)		26dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
23035	701.5	4.5159	4.4993	4.972	4.953
23095	707.5	4.4986	4.4901	4.950	4.963
23155	713.5	4.5076	4.4881	4.975	4.941



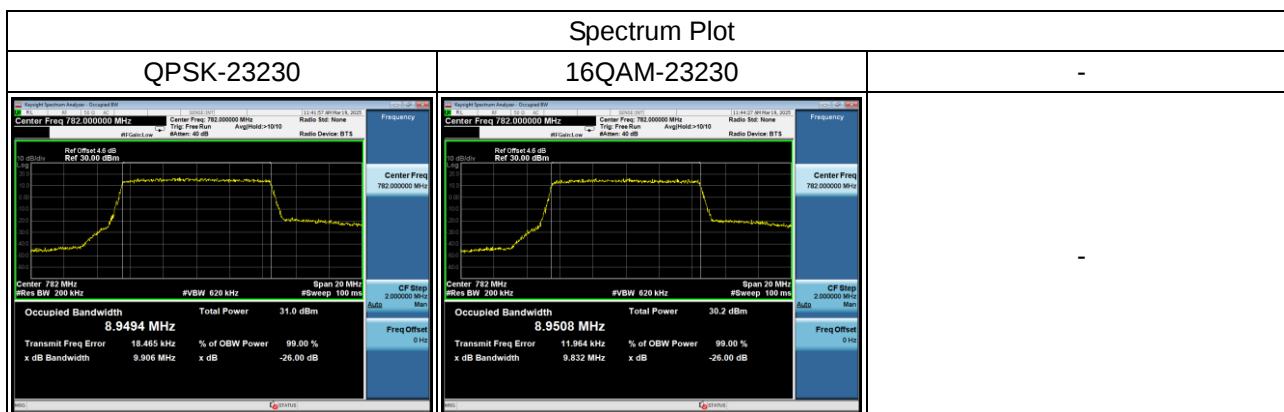
LTE Band 12_10MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)		26dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
23060	704.0	8.9794	8.9685	9.970	9.935
23095	707.5	8.9464	8.9556	9.878	9.857
23130	711.0	8.9580	8.9643	9.896	9.790



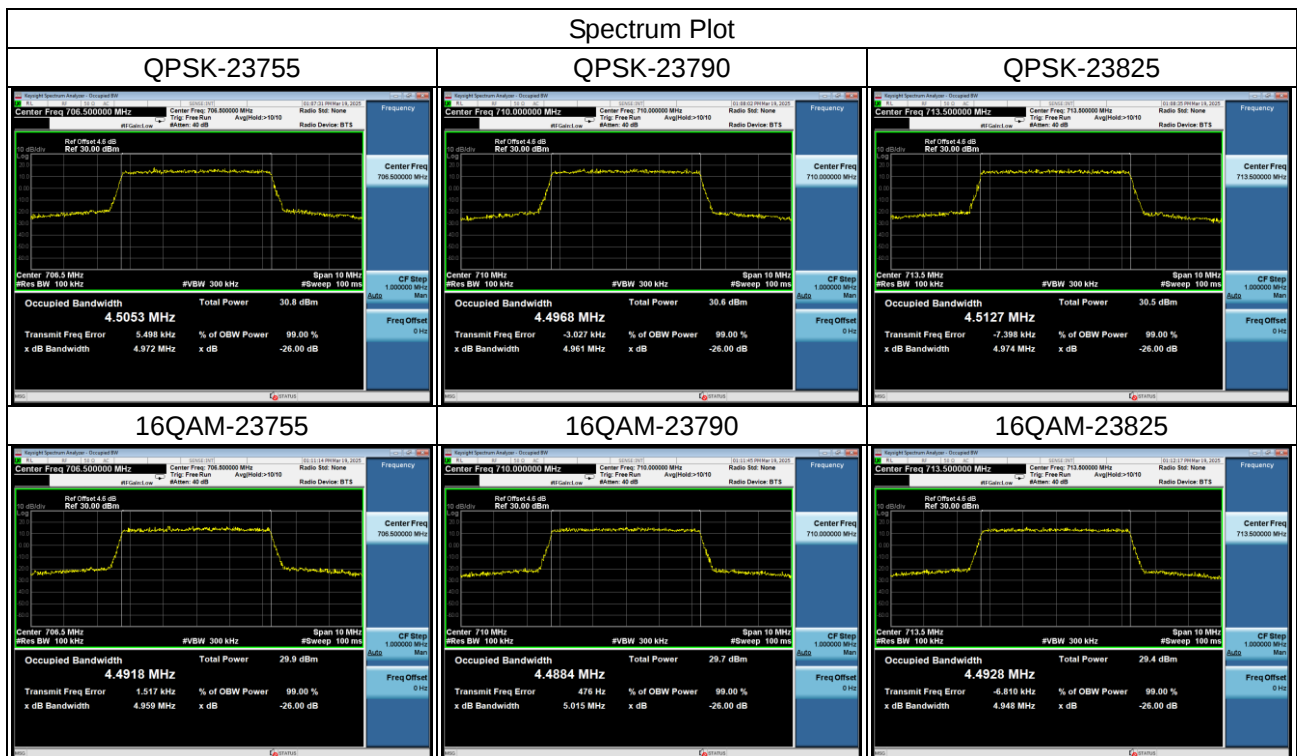
LTE Band 13_5MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)		26dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
23205	779.5	4.4908	4.4626	4.940	4.913
23230	782.0	4.5023	4.4932	4.990	5.015
23255	784.5	4.5040	4.4980	4.917	4.982



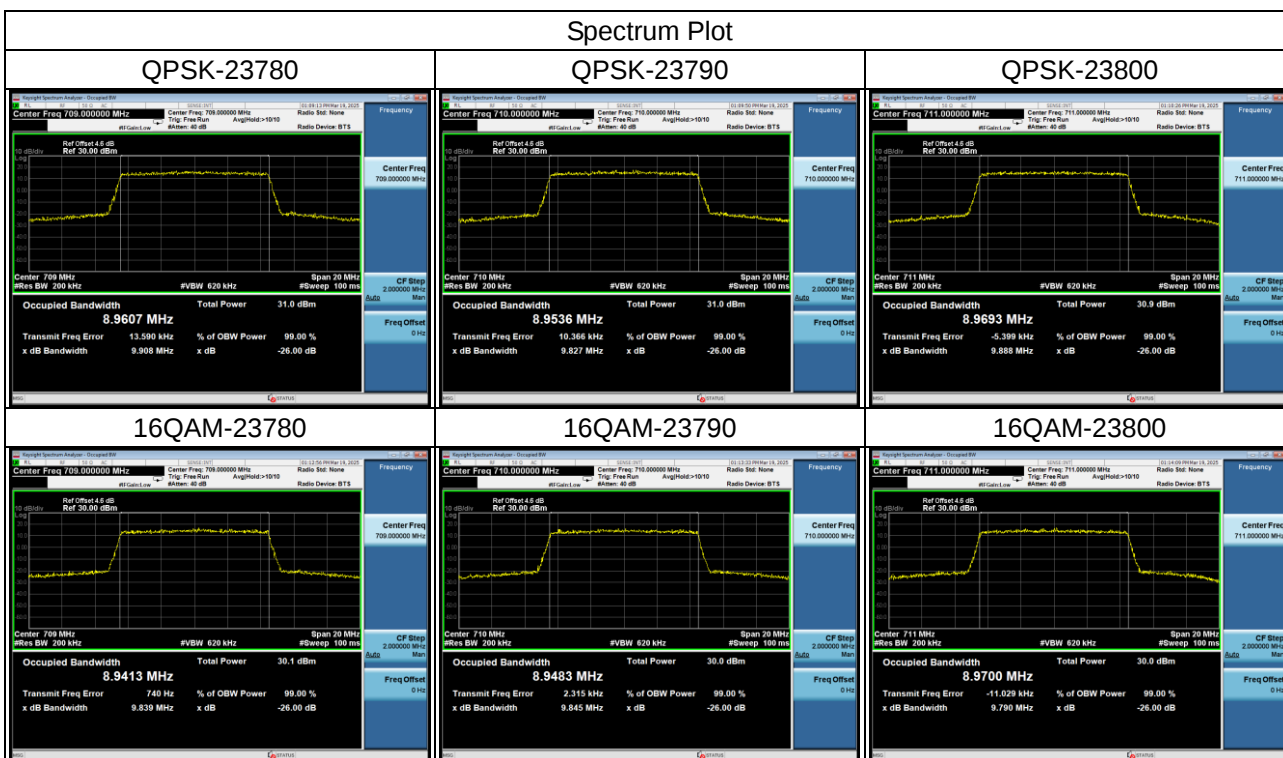
LTE Band 13_10MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)		26dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
23230	782.0	8.9494	8.9508	9.906	9.832



LTE Band 17_5MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)		26dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
23755	706.5	4.5053	4.4918	4.972	4.959
23790	710	4.4968	4.4884	4.961	5.015
23825	713.5	4.5127	4.4928	4.974	4.948



LTE Band 17_10MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)		26dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
23780	709	8.9607	8.9413	9.908	9.839
23790	710	8.9536	8.9483	9.827	9.845
23800	711	8.9693	8.9700	9.888	9.790



LTE Band 41_5MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)		26dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
39675	2498.5	4.5014	4.4891	5.235	5.163
40620	2593	4.5129	4.4856	6.059	4.869
41565	2687.5	4.4885	4.4819	4.943	4.973

