

5.2.6 LTE Band 13

Conducted Power(dBm)											
Modulation			QPSK			16QAM			64QAM		
Band	Bandwidth (MHz)	RB	23205	23230	23255	23205	23230	23255	23205	23230	23255
			779.5	782	784.5	779.5	782	784.5	779.5	782	784.5
13	5	1@0	24.14	24.22	24.17	23.03	23.20	23.06	22.27	22.32	22.27
		1@12	24.18	24.12	24.16	23.13	23.28	22.99	22.35	22.40	22.19
		1@24	24.17	24.07	24.09	23.16	23.18	23.05	22.21	22.24	22.14
		12@0	23.20	23.25	23.26	22.15	22.34	22.19	21.35	21.56	21.33
		12@7	23.20	23.30	23.33	22.17	22.44	22.29	21.32	21.57	21.46
		12@13	23.20	23.23	23.35	22.18	22.29	22.27	21.29	21.38	21.46
		25@0	23.18	23.43	23.34	22.31	22.40	22.35	21.55	21.49	21.51
Band	Bandwidth (MHz)	RB	--	23230	--	--	23230	--	--	23230	--
			--	782	--	--	782	--	--	782	--
13	10	1@0	--	24.27	--	--	23.69	--	--	22.90	--
		1@25	--	24.22	--	--	23.89	--	--	23.06	--
		1@49	--	24.16	--	--	23.88	--	--	23.04	--
		25@0	--	23.31	--	--	22.46	--	--	21.69	--
		25@12	--	23.32	--	--	22.38	--	--	21.44	--
		25@25	--	23.38	--	--	22.47	--	--	21.61	--
		50@0	--	23.35	--	--	22.43	--	--	21.54	--

5.2.7 LTE Band 17

Conducted Power(dBm)											
Modulation			QPSK			16QAM			64QAM		
Band	Bandwidth (MHz)	RB	23755	23790	23825	23755	23790	23825	23755	23790	23825
			706.5	710	713.5	706.5	710	713.5	706.5	710	713.5
17	5	1@0	24.02	24.19	24.17	23.09	23.09	23.02	22.29	22.17	22.18
		1@12	24.10	24.17	24.08	23.10	23.09	23.03	22.29	22.25	22.19
		1@24	24.20	24.09	24.18	23.14	23.08	22.95	22.35	22.28	22.05
		12@0	23.20	23.26	23.28	22.11	22.30	22.25	21.28	21.38	21.34
		12@7	23.23	23.13	23.28	22.19	22.21	22.17	21.31	21.34	21.28
		12@13	23.28	23.13	23.16	22.21	22.19	22.18	21.37	21.43	21.41
		25@0	23.19	23.19	23.26	22.31	22.21	22.30	21.37	21.37	21.37
Band	Bandwidth (MHz)	RB	23780	23790	23800	23780	23790	23800	23780	23790	23800
			709	710	711	709	710	711	709	710	711
17	10	1@0	24.17	24.32	24.39	23.79	23.32	23.34	22.99	22.43	22.41
		1@25	24.20	24.23	24.32	23.68	23.15	23.31	22.91	22.28	22.53
		1@49	24.25	24.23	24.35	23.76	23.24	23.26	22.89	22.46	22.37
		25@0	23.19	23.45	23.43	22.33	22.26	22.48	21.42	21.46	21.57
		25@12	23.20	23.17	23.26	22.22	22.14	22.33	21.42	21.28	21.48
		25@25	23.27	23.19	23.24	22.27	22.14	22.30	21.41	21.24	21.49
		50@0	23.29	23.28	23.33	22.35	22.32	22.32	21.49	21.38	21.56

5.2.8 LTE Band 25

Conducted Power(dBm)											
Modulation			QPSK			16QAM			64QAM		
Band	Bandwidth (MHz)	RB	26047	26365	266263	26047	26365	266263	26047	26365	266263
			1850.7	1882.5	1914.3	1850.7	1882.5	1914.3	1850.7	1882.5	1914.3
25	1.4	1@0	23.47	23.61	23.64	22.47	22.56	22.60	21.59	21.67	21.85
		1@3	23.44	23.61	23.61	22.46	22.52	22.52	21.54	21.69	21.69
		1@5	23.44	23.67	23.66	22.49	22.45	22.60	21.65	21.64	21.71
		3@0	23.42	23.62	23.50	22.48	22.87	22.44	21.68	21.93	21.64
		3@1	23.68	23.66	23.56	22.50	22.91	22.49	21.58	21.97	21.62
		3@3	23.43	23.56	23.49	22.62	23.02	22.40	21.74	22.19	21.65
		6@0	22.48	22.56	22.61	21.21	21.47	21.70	20.33	20.60	20.92
25	3	1@0	23.26	23.43	23.51	22.74	22.53	22.69	21.85	21.64	21.92
		1@8	23.38	23.46	23.56	22.90	22.52	22.56	21.98	21.68	21.67
		1@14	23.38	23.46	23.51	22.91	22.49	22.58	21.99	21.65	21.64
		8@0	22.60	22.78	22.48	21.65	21.72	21.54	20.78	20.96	20.68
		8@4	22.73	22.48	22.34	21.70	21.48	21.47	20.81	20.70	20.63
		8@7	22.63	22.41	22.30	21.75	21.56	21.42	20.82	20.63	20.63
		15@0	22.72	22.69	22.45	21.65	21.68	21.57	20.79	20.88	20.77
25	5	1@0	23.31	23.48	23.52	22.28	22.49	22.53	21.51	21.64	21.59
		1@12	23.26	23.45	23.57	22.23	22.46	22.43	21.33	21.63	21.54
		1@24	23.36	23.56	23.56	22.31	22.50	22.48	21.52	21.63	21.72
		12@0	22.53	22.53	22.60	21.51	21.55	21.75	20.66	20.78	20.89
		12@7	22.44	22.61	22.48	21.38	21.44	21.70	20.53	20.51	20.82
		12@13	22.42	22.61	22.48	21.48	21.53	21.60	20.57	20.65	20.72
		25@0	22.45	22.53	22.49	21.55	21.71	21.61	20.65	20.80	20.75
25	10	1@0	23.49	23.52	23.47	22.58	23.19	22.69	21.64	22.26	21.94
		1@25	23.55	23.48	23.67	22.55	23.17	22.56	21.66	22.29	21.66
		1@49	23.59	23.60	23.58	22.61	23.26	22.51	21.77	22.40	21.74
		25@0	22.52	22.74	22.59	21.73	21.81	21.74	20.87	21.03	20.81
		25@12	22.48	22.56	22.39	21.73	21.67	21.52	20.93	20.80	20.74
		25@25	22.48	22.65	22.42	21.61	21.58	21.61	20.83	20.79	20.71
		50@0	22.56	22.73	22.49	21.70	21.78	21.68	20.91	20.86	20.81
25	15	1@0	23.29	23.50	23.55	22.82	23.11	22.64	21.98	22.18	21.81
		1@37	23.41	23.48	23.60	22.90	23.23	22.54	22.04	22.44	21.68
		1@74	23.40	23.47	23.58	22.98	23.15	22.49	22.04	22.34	21.69
		36@0	22.59	22.82	22.60	21.60	21.68	21.61	20.70	20.86	20.79
		36@20	22.64	22.69	22.63	21.57	21.64	21.67	20.70	20.82	20.77
		36@39	22.61	22.58	22.57	21.65	21.58	21.65	20.84	20.79	20.77
		75@0	22.66	22.62	22.61	21.58	21.63	21.64	20.82	20.83	20.70
25	20	1@0	23.39	23.57	23.57	23.06	22.54	22.70	22.16	21.62	21.92
		1@49	23.32	23.55	23.66	23.08	22.64	22.68	22.23	21.76	21.73
		1@99	23.42	23.57	23.71	23.05	22.58	22.66	22.22	21.82	21.77
		50@0	22.51	22.54	22.62	21.59	21.59	21.56	20.78	20.80	20.66
		50@24	22.34	22.53	22.54	21.70	21.61	21.64	20.93	20.79	20.70
		50@50	22.41	22.58	22.62	21.61	21.56	21.66	20.81	20.64	20.88
		100@0	22.44	22.58	22.51	21.54	21.42	21.78	20.64	20.58	20.84

5.2.9 LTE Band 26

Conducted Power(dBm)											
Modulation			QPSK			16QAM			64QAM		
Band	Bandwidth (MHz)	RB	26797	26915	27033	26797	26915	27033	26797	26915	27033
26	1.4	1@0	23.75	23.77	23.81	22.80	22.81	22.88	21.96	21.96	22.00
		1@3	23.74	23.74	23.83	22.78	22.75	22.83	21.97	21.81	22.00
		1@5	23.75	23.80	23.90	22.79	22.76	22.83	21.96	22.01	22.03
		3@0	23.74	23.74	23.90	22.79	22.80	22.80	21.92	21.95	21.86
		3@1	23.81	23.84	23.82	22.81	22.83	22.90	21.98	22.03	22.14
		3@3	23.70	23.83	23.84	22.75	22.77	22.87	21.85	21.99	21.93
		6@0	23.74	23.83	23.82	22.72	22.86	22.92	21.96	21.99	22.04
26	3	1@0	23.64	23.78	23.77	22.61	22.68	22.77	21.71	21.85	21.98
		1@8	23.66	23.71	23.67	22.64	22.63	22.82	21.71	21.80	22.02
		1@14	23.57	23.71	23.68	22.64	22.71	22.72	21.82	21.90	21.84
		8@0	23.61	23.62	23.74	22.74	22.66	22.77	21.82	21.86	21.88
		8@4	23.67	23.69	23.71	22.72	22.80	22.74	21.89	22.03	21.91
		8@7	23.62	23.80	23.76	22.66	22.73	22.68	21.75	21.92	21.78
		15@0	23.66	23.79	23.76	22.71	22.71	22.73	21.78	21.93	21.93
26	5	1@0	23.60	23.66	23.68	22.70	22.64	22.73	21.76	21.74	21.92
		1@12	23.63	23.70	23.71	22.66	22.69	22.75	21.84	21.87	21.84
		1@24	23.66	23.65	23.76	22.60	22.66	22.66	21.79	21.84	21.90
		12@0	23.61	23.74	23.75	22.73	22.70	22.66	21.96	21.93	21.77
		12@7	23.58	23.70	23.78	22.67	22.71	22.68	21.84	21.78	21.78
		12@13	23.63	23.73	23.73	22.67	22.70	22.68	21.84	21.77	21.74
		25@0	23.69	23.71	23.67	22.64	22.67	22.74	21.70	21.78	21.86
26	10	1@0	23.53	23.77	23.70	22.74	22.76	22.81	21.81	21.85	22.02
		1@25	23.65	23.70	23.71	22.72	22.71	22.74	21.92	21.79	21.95
		1@49	23.64	23.70	23.70	22.75	22.75	22.78	21.87	21.92	21.96
		25@0	23.71	23.80	23.79	22.76	22.80	22.84	21.85	21.99	22.06
		25@12	23.80	23.77	23.82	22.64	22.75	22.81	21.89	22.00	22.05
		25@25	23.68	23.76	23.80	22.69	22.78	22.69	21.93	21.85	21.90
		50@0	23.75	23.77	23.82	22.73	22.70	22.79	21.78	21.87	22.02
26	15	1@0	23.69	23.67	23.87	22.58	22.67	22.79	21.71	21.83	22.04
		1@37	23.59	23.71	23.82	22.58	22.79	22.87	21.66	21.92	22.02
		1@74	23.73	23.82	23.90	22.66	22.67	22.90	21.90	21.77	22.03
		36@0	23.61	23.67	23.98	22.55	22.66	22.91	21.69	21.79	22.05
		36@20	23.65	23.80	23.82	22.65	22.66	22.96	21.77	21.81	22.20
		36@39	23.62	23.65	23.87	22.72	22.65	22.90	21.87	21.76	22.07
		75@0	23.55	23.74	23.82	22.59	22.67	22.81	21.68	21.74	21.99

5.2.10 LTE Band 26 (Part 90S)

Modulation			QPSK			16QAM			64QAM		
Band	Bandwidth (MHz)	RB	26697	26740	26783	26697	26740	26783	26697	26740	26783
			814.7	819	823.3	814.7	819	823.3	814.7	819	823.3
26	1.4	1@0	23.64	23.49	23.66	22.50	22.49	22.60	21.66	21.71	21.74
		1@3	23.59	23.57	23.53	22.74	22.64	22.60	21.97	21.72	21.82
		1@5	23.49	23.58	23.51	22.47	22.47	22.56	21.70	21.60	21.62
		3@0	23.59	23.57	23.64	22.70	22.45	22.51	21.94	21.67	21.63
		3@1	23.47	23.64	23.54	22.58	22.63	22.62	21.77	21.85	21.73
		3@3	23.74	23.55	23.62	22.57	22.56	22.53	21.73	21.64	21.69
		6@0	23.74	23.47	23.55	22.51	22.57	22.70	21.73	21.65	21.83
26	3	1@0	23.55	23.46	23.59	22.45	22.50	22.60	21.67	21.58	21.70
		1@8	23.56	23.54	23.44	22.52	22.59	22.50	21.65	21.64	21.75
		1@14	23.60	23.56	23.55	22.51	22.52	22.64	21.61	21.69	21.74
		8@0	23.52	23.55	23.63	22.53	22.54	22.59	21.70	21.74	21.82
		8@4	23.54	23.57	23.51	22.62	22.53	22.57	21.84	21.70	21.79
		8@7	23.55	23.57	23.49	22.53	22.52	22.63	21.72	21.77	21.78
		15@0	23.60	23.50	23.50	22.57	22.57	22.63	21.80	21.80	21.76
26	5	1@0	23.53	23.54	23.56	22.51	22.57	22.49	21.59	21.81	21.69
		1@12	23.49	23.61	23.61	22.56	22.60	22.59	21.78	21.78	21.70
		1@24	23.50	23.60	23.59	22.55	22.53	22.49	21.73	21.67	21.59
		12@0	23.60	23.49	23.58	22.50	22.53	22.53	21.74	21.75	21.69
		12@7	23.53	23.52	23.61	22.52	22.52	22.47	21.58	21.77	21.57
		12@13	23.52	23.58	23.56	22.59	22.52	22.56	21.70	21.67	21.77
		25@0	23.51	23.52	23.60	22.52	22.48	22.56	21.63	21.71	21.81
26	10	1@0	--	26740	--	--	26740	--	--	26740	--
		1@25	--	819	--	--	819	--	--	819	--
		1@49	--	23.64	--	--	22.49	--	--	21.72	--
		25@0	--	23.61	--	--	22.61	--	--	21.84	--
		25@12	--	23.47	--	--	22.38	--	--	21.58	--
		25@25	--	22.57	--	--	21.60	--	--	20.75	--
		50@0	--	22.58	--	--	21.65	--	--	20.83	--
26	15	1@0	--	22.59	--	--	21.63	--	--	20.75	--
		1@37	--	22.55	--	--	21.55	--	--	20.73	--
		1@74	--	--	8765	--	--	8765	--	--	8765
		36@0	--	--	821.5	--	--	821.5	--	--	821.5
		36@20	--	--	23.68	--	--	22.95	--	--	22.14
		36@39	--	--	23.78	--	--	23.07	--	--	22.14
		75@0	--	--	23.68	--	--	22.93	--	--	22.12
26	15	1@0	--	--	22.65	--	--	21.56	--	--	20.74
		1@37	--	--	22.61	--	--	21.57	--	--	20.71
		1@74	--	--	22.59	--	--	21.57	--	--	20.75
		36@0	--	--	22.58	--	--	21.58	--	--	20.70
		36@20	--	--	--	--	--	--	--	--	--
		36@39	--	--	--	--	--	--	--	--	--
		75@0	--	--	--	--	--	--	--	--	--

5.2.11 LTE Band 30

Conducted Power(dBm)											
Modulation			QPSK			16QAM			64QAM		
Band	Bandwidth (MHz)	RB	27685	27710	27735	27685	27710	27735	27685	27710	27735
			2307.5	2310	2312.5	2307.5	2310	2312.5	2307.5	2310	2312.5
30	5	1@0	23.15	23.22	23.30	22.27	22.34	22.15	21.34	21.51	21.37
		1@12	23.30	23.26	23.23	22.26	22.26	22.22	21.40	21.44	21.28
		1@24	23.30	23.26	23.28	22.21	22.29	22.17	21.29	21.52	21.39
		12@0	22.30	22.25	22.46	21.20	21.45	21.30	20.33	20.66	20.52
		12@7	22.41	22.28	22.44	21.22	21.41	21.30	20.37	20.49	20.48
		12@13	22.39	22.29	22.45	21.38	21.38	21.33	20.47	20.44	20.43
		25@0	22.43	22.40	22.44	21.41	21.40	21.44	20.60	20.63	20.54
Band	Bandwidth (MHz)	RB	--	27710	--	--	27710	--	--	27710	--
			--	2310	--	--	2310	--	--	2310	--
30	10	1@0	--	23.43	--	--	22.50	--	--	21.74	--
		1@25	--	23.53	--	--	22.51	--	--	21.59	--
		1@49	--	23.50	--	--	22.45	--	--	21.58	--
		25@0	--	22.29	--	--	21.43	--	--	20.63	--
		25@12	--	22.35	--	--	21.52	--	--	20.62	--
		25@25	--	22.38	--	--	21.43	--	--	20.62	--
		50@0	--	22.38	--	--	21.39	--	--	20.56	--

5.2.12 LTE Band 41

Conducted Power(dBm)											
Modulation			QPSK			16QAM			64QAM		
Band	Bandwidth (MHz)	RB	39675	40620	41565	39675	40620	41565	39675	40620	41565
			2498.5	2593	2687.5	2498.5	2593	2687.5	2498.5	2593	2687.5
41	5	1@0	25.09	25.18	25.08	24.07	23.75	24.24	23.20	22.96	23.41
		1@12	25.13	25.20	25.04	24.21	23.76	24.23	23.39	22.95	23.44
		1@24	25.22	25.29	25.04	24.12	23.80	24.25	23.18	22.98	23.46
		12@0	24.25	24.25	24.14	23.12	23.22	23.19	22.34	22.39	22.32
		12@7	24.34	24.25	24.13	23.21	23.22	23.24	22.37	22.35	22.40
		12@13	24.24	24.26	24.13	23.22	23.31	23.17	22.43	22.44	22.33
		25@0	24.31	24.24	24.17	23.22	23.38	23.18	22.43	22.52	22.37
Band	Bandwidth (MHz)	RB	39700	40620	41540	39700	40620	41540	39700	40620	41540
			2501	2593	2685	2501	2593	2685	2501	2593	2685
41	10	1@0	25.15	25.18	24.98	24.29	23.75	23.98	23.53	22.91	23.08
		1@25	25.27	25.18	25.06	24.30	23.70	23.94	23.40	22.76	23.04
		1@49	25.20	25.17	24.96	24.38	23.69	24.03	23.45	22.76	23.15
		25@0	24.35	24.28	24.18	23.45	23.38	23.13	22.68	22.55	22.37
		25@12	24.24	24.27	24.11	23.22	23.27	23.22	22.41	22.52	22.28
		25@25	24.24	24.27	24.11	23.29	23.36	23.13	22.52	22.51	22.26
		50@0	24.26	24.25	24.22	23.26	23.23	23.18	22.43	22.37	22.34
Band	Bandwidth (MHz)	RB	39725	40620	41515	39725	40620	41515	39725	40620	41515
			2503.5	2593	2682.5	2503.5	2593	2682.5	2503.5	2593	2682.5
41	15	1@0	25.04	25.38	25.00	23.83	24.16	24.22	23.08	23.38	23.42
		1@37	25.18	25.27	24.99	23.96	24.06	24.24	23.07	23.11	23.38
		1@74	25.19	25.37	24.99	23.87	24.14	24.21	23.12	23.36	23.27
		36@0	24.31	24.32	24.29	23.25	23.20	23.26	22.31	22.35	22.48
		36@20	24.30	24.29	24.23	23.25	23.27	23.21	22.41	22.33	22.28
		36@39	24.33	24.29	24.21	23.28	23.23	23.15	22.36	22.37	22.30
		75@0	24.34	24.32	24.29	23.32	23.22	23.15	22.47	22.28	22.31
Band	Bandwidth (MHz)	RB	39750	40620	41490	39750	40620	41490	39750	40620	41490
			2506	2593	2680	2506	2593	2680	2506	2593	2680
41	20	1@0	25.22	25.51	25.23	23.87	24.18	24.19	23.01	23.35	23.42
		1@49	25.20	25.36	25.17	23.98	24.12	24.19	23.19	23.23	23.39
		1@99	25.22	25.36	25.29	23.97	24.13	24.32	23.11	23.38	23.43
		50@0	24.34	24.41	24.17	23.43	23.36	23.24	22.62	22.56	22.44
		50@24	24.38	24.30	24.21	23.43	23.44	23.26	22.55	22.65	22.50
		50@50	24.35	24.29	24.21	23.26	23.37	23.20	22.51	22.62	22.30
		100@0	24.27	24.32	24.22	23.27	23.29	23.13	22.41	22.38	22.21

5.2.13 LTE Band 66

Conducted Power(dBm)											
Modulation			QPSK			16QAM			64QAM		
Band	Bandwidth (MHz)	RB	131979	132322	132665	131979	132322	132665	131979	132322	132665
66	1.4	1@0	23.46	23.46	23.47	23.04	22.46	22.59	22.20	21.66	21.84
		1@3	23.38	23.47	23.39	22.93	22.57	22.42	22.13	21.68	21.61
		1@5	23.35	23.52	23.50	22.88	22.54	22.43	22.03	21.79	21.63
		3@0	22.59	22.61	22.61	21.54	21.64	21.50	20.61	20.88	20.59
		3@1	22.69	22.64	22.53	21.63	21.66	21.41	20.72	20.86	20.50
		3@3	22.68	22.75	22.47	21.67	21.61	21.36	20.75	20.76	20.56
		6@0	22.63	22.62	22.52	21.64	21.65	21.55	20.80	20.81	20.72
66	3	1@0	23.66	23.60	23.51	22.77	23.24	22.53	22.00	22.33	21.75
		1@8	23.67	23.60	23.54	22.75	23.23	22.60	21.97	22.31	21.77
		1@14	23.66	23.52	23.67	22.74	23.24	22.51	21.96	22.36	21.69
		8@0	22.59	22.58	22.55	21.61	21.87	21.48	20.74	20.97	20.55
		8@4	22.54	22.55	22.56	21.66	21.79	21.50	20.88	20.87	20.56
		8@7	22.55	22.63	22.53	21.57	21.84	21.54	20.73	21.06	20.79
		15@0	22.68	22.68	22.55	21.79	21.74	21.42	20.86	20.89	20.54
66	5	1@0	23.48	23.44	23.40	22.40	22.56	22.45	21.63	21.68	21.65
		1@12	23.41	23.48	23.46	22.36	22.54	22.38	21.58	21.68	21.50
		1@24	23.54	23.50	23.37	22.33	22.49	22.41	21.39	21.64	21.48
		12@0	22.57	22.61	22.43	21.60	21.55	21.55	20.74	20.71	20.75
		12@7	22.73	22.71	22.50	21.67	21.62	21.49	20.82	20.77	20.65
		12@13	22.72	22.67	22.46	21.56	21.56	21.58	20.72	20.67	20.65
		25@0	22.62	22.64	22.48	21.69	21.66	21.54	20.75	20.76	20.66
66	10	1@0	23.65	23.48	23.55	22.63	23.19	22.53	21.79	22.38	21.61
		1@25	23.59	23.51	23.48	22.69	23.17	22.43	21.80	22.35	21.63
		1@49	23.65	23.56	23.50	22.74	23.25	22.49	21.86	22.45	21.64
		25@0	22.59	22.56	22.60	21.74	21.69	21.61	20.80	20.83	20.78
		25@12	22.58	22.67	22.50	21.75	21.77	21.52	20.84	20.90	20.65
		25@25	22.67	22.64	22.41	21.74	21.79	21.47	20.94	20.97	20.68
		50@0	22.65	22.72	22.46	21.67	21.79	21.58	20.85	20.99	20.71
66	15	1@0	23.45	23.45	23.48	23.00	23.29	22.54	22.19	22.46	21.62
		1@37	23.47	23.50	23.57	23.00	23.15	22.42	22.18	22.39	21.48
		1@74	23.50	23.49	23.42	23.05	23.14	22.51	22.13	22.25	21.74
		36@0	22.59	22.62	22.57	21.47	21.67	21.58	20.53	20.85	20.78
		36@20	22.66	22.68	22.68	21.62	21.70	21.63	20.67	20.78	20.71
		36@39	22.61	22.70	22.61	21.58	21.70	21.49	20.67	20.76	20.65
		75@0	22.65	22.75	22.55	21.68	21.58	21.65	20.78	20.77	20.81
66	20	1@0	23.57	23.73	23.58	22.61	22.59	22.42	21.84	21.81	21.66
		1@49	23.64	23.60	23.59	22.75	22.60	22.52	21.90	21.67	21.71
		1@99	23.58	23.63	23.55	22.67	22.56	22.53	21.84	21.80	21.76
		50@0	23.70	23.80	23.57	22.90	23.04	22.37	22.11	22.15	21.59
		50@24	23.81	23.70	23.53	22.72	23.05	22.43	21.84	22.26	21.67
		50@50	23.76	23.66	23.52	22.68	22.91	22.38	21.77	22.01	21.46
		100@0	22.55	22.70	22.61	21.38	21.75	21.57	20.62	20.96	20.67

5.2.14 LTE Band 71

Conducted Power(dBm)											
Modulation			QPSK			16QAM			64QAM		
Band	Bandwidth (MHz)	RB	133147	133297	133447	133147	133297	133447	133147	133297	133447
			665.5	680.5	695.5	665.5	680.5	695.5	665.5	680.5	695.5
71	5	1@0	24.25	24.16	24.22	22.97	23.18	23.07	22.09	22.31	22.15
		1@12	24.23	24.20	24.24	23.14	23.21	23.19	22.37	22.45	22.43
		1@24	24.21	24.11	24.22	23.10	23.18	23.12	22.34	22.25	22.18
		12@0	23.08	23.29	23.34	21.98	22.37	22.15	21.07	21.58	21.36
		12@7	23.32	23.28	23.36	22.28	22.40	22.25	21.47	21.61	21.31
		12@13	23.41	23.29	23.51	22.34	22.41	22.33	21.54	21.57	21.56
		25@0	23.21	23.36	23.46	22.39	22.29	22.49	21.64	21.48	21.65
Band	Bandwidth (MHz)	RB	133172	133297	133422	133172	133297	133422	133172	133297	133422
			668	680.5	693	668	680.5	693	668	680.5	693
71	10	1@0	24.19	24.31	24.15	23.16	23.21	23.66	22.22	22.39	22.89
		1@25	24.19	24.39	24.27	23.25	23.33	23.75	22.35	22.53	22.84
		1@49	24.10	24.43	24.34	23.34	23.36	23.76	22.40	22.49	22.88
		25@0	23.21	23.22	23.19	22.14	22.25	22.27	21.36	21.31	21.34
		25@12	23.43	23.27	23.33	22.44	22.20	22.24	21.64	21.30	21.44
		25@25	23.42	23.27	23.33	22.44	22.19	22.28	21.54	21.34	21.35
		50@0	23.30	23.21	23.21	22.36	22.32	22.28	21.46	21.52	21.50
Band	Bandwidth (MHz)	RB	133197	133297	133397	133197	133297	133397	133197	133297	133397
			670.5	680.5	690.5	670.5	680.5	690.5	670.5	680.5	690.5
71	15	1@0	24.23	24.26	24.17	23.74	23.16	23.55	22.88	22.24	22.73
		1@37	24.14	24.36	24.30	23.94	23.33	23.79	23.04	22.57	22.87
		1@74	24.22	24.35	24.30	23.80	23.26	23.79	23.00	22.48	22.99
		36@0	23.21	23.34	23.43	22.19	22.34	22.32	21.35	21.51	21.54
		36@20	23.41	23.44	23.45	22.30	22.34	22.36	21.53	21.47	21.53
		36@39	23.32	23.36	23.46	22.24	22.44	22.37	21.30	21.58	21.47
		75@0	23.34	23.43	23.48	22.33	22.39	22.38	21.52	21.49	21.43
Band	Bandwidth (MHz)	RB	133222	133322	133372	133222	133322	133372	133222	133322	133372
			673	683	688	673	683	688	673	683	688
71	20	1@0	24.24	24.32	24.37	23.72	23.28	23.36	22.89	22.39	22.46
		1@49	24.15	24.28	24.55	23.81	23.36	23.51	22.92	22.54	22.59
		1@99	24.25	24.32	24.53	23.87	23.30	23.51	22.94	22.45	22.72
		50@0	23.07	23.28	23.59	22.13	22.24	22.62	21.28	21.34	21.76
		50@24	23.34	23.37	23.37	22.34	22.35	22.52	21.48	21.41	21.61
		50@50	23.27	23.45	23.36	22.29	22.44	22.55	21.50	21.68	21.77
		100@0	23.14	23.31	23.49	22.28	22.35	22.51	21.46	21.48	21.68

5.3 ERP OR EIRP

Test Requirement: FCC 47 CFR Part 2.1046(a)
LTE Band 2 & LTE Band 25: FCC 47 CFR Part 24.232(c)
LTE Band 4 & LTE Band 66: FCC 47 CFR Part 27.50(d)(4)
LTE Band 5 & LTE Band 26: FCC 47 CFR Part 22.913(a)
LTE Band 7 & Band 41: FCC 47 CFR Part 27.50(h)(2)
LTE Band 12 & Band 17 & Band 71: FCC 47 CFR Part 27.50(c)(10)
LTE Band 13: FCC 47 CFR Part 27.50(b)(10)
LTE Band 26: FCC 47 CFR Part 90.635
LTE Band 30: FCC 47 CFR Part 27.50(a)(3)

Test Method: KDB 971168 D01v03r01 Section 5.6 & ANSI C63.26-2015

Limit:

FCC 47 CFR Part 22.913(a):

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

FCC 47 CFR Part 24.232(c):

Mobile and portable stations are limited to 2 watts EIRP.

FCC 47 CFR Part 27.50(a)(3): For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth. For mobile and portable stations using time division duplexing (TDD) technology, the duty cycle must not exceed 38 percent in the 2305-2315 MHz and 2350-2360 MHz bands. Mobile and portable stations using FDD technology are restricted to transmitting in the 2305-2315 MHz band. Power averaging shall not include intervals in which the transmitter is off.

FCC 47 CFR Part 27.50(d)(4):

Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

FCC 47 CFR Part 27.50(c)(10):

Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

FCC 47 CFR Part 27.50(h)(2):

Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

FCC 47 CFR Part 27.50(b)(10):

Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP.

FCC 47 CFR Part 90.635:

(a) The effective radiated power and antenna height for base stations may not exceed 1 kilowatt (30 dBw) and 304 m. (1,000 ft.) above average terrain (AAT), respectively, or the equivalent thereof as determined from the Table. These are maximum values, and applicants will be required to justify power levels and antenna heights requested.

(b) The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw).

Table—Equivalent Power and Antenna Heights for Base Stations in the 851–869 MHz and 935–940 MHz Bands Which Have a Requirement for a 32 km (20 mi) Service Area Radius

Antenna height (ATT) meters (feet)	Effective radiated power (watts) ^{1 2 4}
Above 1,372 (4,500)	65
Above 1,220 (4,000) to 1,372 (4,500)	70

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Above 1,067 (3,500) to 1,220 (4,000)	75
Above 915 (3,000) to 1,067 (3,500)	100
Above 763 (2,500) to 915 (3,000)	140
Above 610 (2,000) to 763 (2,500)	200
Above 458 (1,500) to 610 (2,000)	350
Above 305 (1,000) to 458 (1,500)	600
Up to 305 (1,000)	³ 1,000

1. Power is given in terms of effective radiated power (ERP).
2. Applicants in the Los Angeles, CA, area who demonstrate a need to serve both the downtown and fringe areas will be permitted to utilize an ERP of 1 kw at the following mountaintop sites: Santiago Park, Sierra Peak, Mount Lukens, and Mount Wilson.
3. Stations with antennas below 305 m (1,000 ft) (AAT) will be restricted to a maximum power of 1 kw (ERP).
4. Licensees in San Diego, CA, will be permitted to utilize an ERP of 500 watts at the following mountaintop sites: Palomar, Otay, Woodson and Miguel.

Test Procedure:

According to KDB 412172 D01 Power Approach,

- $ERP \text{ or } EIRP = P_T + G_T - L_C$
- $ERP = EIRP - 2.15$

where

- P_T = transmitter output power, expressed in dBW, dBm, or PSD;
- G_T = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);
- L_C = **signal attenuation in the connecting cable between the transmitter and antenna, in dB.**

Test Setup: Refer to section 4.2.1 for details.

Instruments Used: Refer to section 3 for details

Test Mode: Link mode

Test Results: Pass

Test Data: See table below

Note: The maximum ERP/EIRP is calculated from max output power and antenna gain, the antenna gain provided by the customer, and the customer takes all the responsibilities for the accuracy of antenna gain.

5.3.1 LTE Band 2

Channel	Maximum EIRP (dBm)				Maximum EIRP (W)				Result
	QPSK	16QAM	64QAM	Limit (dBm)	QPSK	16QAM	64QAM	Limit (W)	
Channel Bandwidth: 1.4MHz									
Lowest	24.33	23.51	22.70	33.01	0.2710	0.2244	0.1862	2	Pass
Middle	24.36	23.81	22.95	33.01	0.2729	0.2404	0.1972	2	Pass
Highest	24.44	23.40	22.47	33.01	0.2780	0.2188	0.1766	2	Pass
Channel Bandwidth: 3MHz									
Lowest	24.43	23.48	22.65	33.01	0.2773	0.2228	0.1841	2	Pass
Middle	24.46	24.00	23.17	33.01	0.2793	0.2512	0.2075	2	Pass
Highest	24.52	23.58	22.75	33.01	0.2831	0.2280	0.1884	2	Pass
Channel Bandwidth: 5MHz									
Lowest	24.16	23.26	22.40	33.01	0.2606	0.2118	0.1738	2	Pass
Middle	24.35	23.44	22.60	33.01	0.2723	0.2208	0.1820	2	Pass
Highest	24.35	23.26	22.44	33.01	0.2723	0.2118	0.1754	2	Pass
Channel Bandwidth: 10MHz									
Lowest	24.24	23.97	23.17	33.01	0.2655	0.2495	0.2075	2	Pass
Middle	24.48	23.49	22.73	33.01	0.2805	0.2234	0.1875	2	Pass
Highest	24.57	23.55	22.76	33.01	0.2864	0.2265	0.1888	2	Pass
Channel Bandwidth: 15MHz									
Lowest	24.24	23.96	23.21	33.01	0.2655	0.2489	0.2094	2	Pass
Middle	24.46	23.44	22.61	33.01	0.2793	0.2208	0.1824	2	Pass
Highest	24.39	23.86	23.01	33.01	0.2748	0.2432	0.2000	2	Pass
Channel Bandwidth: 20MHz									
Lowest	24.50	23.74	22.88	33.01	0.2818	0.2366	0.1941	2	Pass
Middle	24.53	23.48	22.72	33.01	0.2838	0.2228	0.1871	2	Pass
Highest	24.59	23.40	22.62	33.01	0.2877	0.2188	0.1828	2	Pass

5.3.2 LTE Band 4

Channel	Maximum EIRP (dBm)				Maximum EIRP (W)				Result
	QPSK	16QAM	64QAM	Limit (dBm)	QPSK	16QAM	64QAM	Limit (W)	
Channel Bandwidth: 1.4MHz									
Lowest	23.87	23.01	22.14	30.00	0.2438	0.2000	0.1637	1	Pass
Middle	23.73	23.35	22.51	30.00	0.2360	0.2163	0.1782	1	Pass
Highest	23.77	22.87	22.05	30.00	0.2382	0.1936	0.1603	1	Pass
Channel Bandwidth: 3MHz									
Lowest	23.80	23.59	22.81	30.00	0.2399	0.2286	0.1910	1	Pass
Middle	23.97	23.00	22.24	30.00	0.2495	0.1995	0.1675	1	Pass
Highest	24.11	23.03	22.18	30.00	0.2576	0.2009	0.1652	1	Pass
Channel Bandwidth: 5MHz									
Lowest	23.82	22.70	21.92	30.00	0.2410	0.1862	0.1556	1	Pass
Middle	23.81	22.91	22.07	30.00	0.2404	0.1954	0.1611	1	Pass
Highest	23.84	22.90	22.15	30.00	0.2421	0.1950	0.1641	1	Pass
Channel Bandwidth: 10MHz									
Lowest	24.05	23.06	22.28	30.00	0.2541	0.2023	0.1690	1	Pass
Middle	23.93	23.61	22.78	30.00	0.2472	0.2296	0.1897	1	Pass
Highest	23.96	23.00	22.15	30.00	0.2489	0.1995	0.1641	1	Pass
Channel Bandwidth: 15MHz									
Lowest	23.84	23.37	22.45	30.00	0.2421	0.2173	0.1758	1	Pass
Middle	23.83	23.56	22.67	30.00	0.2415	0.2270	0.1849	1	Pass
Highest	23.88	22.88	22.11	30.00	0.2443	0.1941	0.1626	1	Pass
Channel Bandwidth: 20MHz									
Lowest	24.13	23.51	22.60	30.00	0.2588	0.2244	0.1820	1	Pass
Middle	24.18	22.98	22.21	30.00	0.2618	0.1986	0.1663	1	Pass
Highest	24.02	23.10	22.34	30.00	0.2523	0.2042	0.1714	1	Pass

5.3.3 LTE Band 5

Channel	Maximum ERP (dBm)				Maximum ERP (W)				Result
	QPSK	16QAM	64QAM	Limit (dBm)	QPSK	16QAM	64QAM	Limit (W)	
Channel Bandwidth: 1.4MHz									
Lowest	21.79	20.83	19.99	38.45	0.1510	0.1211	0.0998	7	Pass
Middle	21.69	21.25	20.50	38.45	0.1476	0.1334	0.1122	7	Pass
Highest	21.79	20.74	19.82	38.45	0.1510	0.1186	0.0959	7	Pass
Channel Bandwidth: 3MHz									
Lowest	21.70	21.33	20.58	38.45	0.1479	0.1358	0.1143	7	Pass
Middle	21.78	20.77	19.86	38.45	0.1507	0.1194	0.0968	7	Pass
Highest	21.76	20.75	19.89	38.45	0.1500	0.1189	0.0975	7	Pass
Channel Bandwidth: 5MHz									
Lowest	21.64	20.61	19.82	38.45	0.1459	0.1151	0.0959	7	Pass
Middle	21.63	20.70	19.81	38.45	0.1455	0.1175	0.0957	7	Pass
Highest	21.54	20.46	19.68	38.45	0.1426	0.1112	0.0929	7	Pass
Channel Bandwidth: 10MHz									
Lowest	21.95	21.04	20.27	38.45	0.1567	0.1271	0.1064	7	Pass
Middle	21.79	20.72	19.93	38.45	0.1510	0.1180	0.0984	7	Pass
Highest	21.91	20.72	19.96	38.45	0.1552	0.1180	0.0991	7	Pass

5.3.4 LTE Band 7

Channel	Maximum EIRP (dBm)				Maximum EIRP (W)				Result
	QPSK	16QAM	64QAM	Limit (dBm)	QPSK	16QAM	64QAM	Limit (W)	
Channel Bandwidth: 5MHz									
Lowest	25.91	24.80	23.92	33.01	0.3899	0.3020	0.2466	2	Pass
Middle	25.97	24.89	24.03	33.01	0.3954	0.3083	0.2529	2	Pass
Highest	26.05	24.96	24.09	33.01	0.4027	0.3133	0.2564	2	Pass
Channel Bandwidth: 10MHz									
Lowest	25.86	24.85	24.03	33.01	0.3855	0.3055	0.2529	2	Pass
Middle	26.03	25.03	24.18	33.01	0.4009	0.3184	0.2618	2	Pass
Highest	25.96	25.35	24.47	33.01	0.3945	0.3428	0.2799	2	Pass
Channel Bandwidth: 15MHz									
Lowest	25.83	25.35	24.50	33.01	0.3828	0.3428	0.2818	2	Pass
Middle	26.00	25.52	24.68	33.01	0.3981	0.3565	0.2938	2	Pass
Highest	26.08	25.06	24.13	33.01	0.4055	0.3206	0.2588	2	Pass
Channel Bandwidth: 20MHz									
Lowest	26.04	25.06	24.26	33.01	0.4018	0.3206	0.2667	2	Pass
Middle	26.15	25.13	24.29	33.01	0.4121	0.3258	0.2685	2	Pass
Highest	26.07	25.50	24.68	33.01	0.4046	0.3548	0.2938	2	Pass

5.3.5 LTE Band 12

Channel	Maximum ERP (dBm)				Maximum ERP (W)				Result
	QPSK	16QAM	64QAM	Limit (dBm)	QPSK	16QAM	64QAM	Limit (W)	
Channel Bandwidth: 1.4MHz									
Lowest	20.93	20.47	19.65	34.77	0.1239	0.1114	0.0923	3	Pass
Middle	20.97	19.93	19.11	34.77	0.1250	0.0984	0.0815	3	Pass
Highest	21.03	20.00	19.21	34.77	0.1268	0.1000	0.0834	3	Pass
Channel Bandwidth: 3MHz									
Lowest	20.99	20.46	19.65	34.77	0.1256	0.1112	0.0923	3	Pass
Middle	20.98	19.93	19.07	34.77	0.1253	0.0984	0.0807	3	Pass
Highest	21.05	19.98	19.13	34.77	0.1274	0.0995	0.0818	3	Pass
Channel Bandwidth: 5MHz									
Lowest	20.87	19.74	18.86	34.77	0.1222	0.0942	0.0769	3	Pass
Middle	20.89	19.80	18.99	34.77	0.1227	0.0955	0.0793	3	Pass
Highest	20.84	19.72	18.94	34.77	0.1213	0.0938	0.0783	3	Pass
Channel Bandwidth: 10MHz									
Lowest	21.04	20.22	19.38	34.77	0.1271	0.1052	0.0867	3	Pass
Middle	20.99	19.88	19.01	34.77	0.1256	0.0973	0.0796	3	Pass
Highest	21.11	19.93	19.16	34.77	0.1291	0.0984	0.0824	3	Pass

5.3.6 LTE Band 13

Channel	Maximum ERP (dBm)				Maximum ERP (W)				Result
	QPSK	16QAM	64QAM	Limit (dBm)	QPSK	16QAM	64QAM	Limit (W)	
Channel Bandwidth: 5MHz									
Lowest	21.26	20.24	19.43	34.77	0.1337	0.1057	0.0877	3	Pass
Middle	21.30	20.36	19.48	34.77	0.1349	0.1086	0.0887	3	Pass
Highest	21.25	20.14	19.35	34.77	0.1334	0.1033	0.0861	3	Pass
Channel Bandwidth: 10MHz									
Middle	21.35	20.97	20.14	34.77	0.1365	0.1250	0.1033	3	Pass

5.3.7 LTE Band 17

Channel	Maximum ERP (dBm)				Maximum ERP (W)				Result
	QPSK	16QAM	64QAM	Limit (dBm)	QPSK	16QAM	64QAM	Limit (W)	
Channel Bandwidth: 5MHz									
Lowest	20.74	19.68	18.89	34.77	0.1186	0.0929	0.0774	3	Pass
Middle	20.73	19.63	18.82	34.77	0.1183	0.0918	0.0762	3	Pass
Highest	20.72	19.57	18.73	34.77	0.1180	0.0906	0.0746	3	Pass
Channel Bandwidth: 10MHz									
Lowest	20.79	20.33	19.53	34.77	0.1199	0.1079	0.0897	3	Pass
Middle	20.86	19.86	19.00	34.77	0.1219	0.0968	0.0794	3	Pass
Highest	20.93	19.88	19.07	34.77	0.1239	0.0973	0.0807	3	Pass

5.3.8 LTE Band 25

Channel	Maximum EIRP (dBm)				Maximum EIRP (W)				Result
	QPSK	16QAM	64QAM	Limit (dBm)	QPSK	16QAM	64QAM	Limit (W)	
Channel Bandwidth: 1.4MHz									
Lowest	24.11	23.05	22.17	33.01	0.2576	0.2018	0.1648	2	Pass
Middle	24.10	23.45	22.62	33.01	0.2570	0.2213	0.1828	2	Pass
Highest	24.09	23.03	22.28	33.01	0.2564	0.2009	0.1690	2	Pass
Channel Bandwidth: 3MHz									
Lowest	23.81	23.34	22.42	33.01	0.2404	0.2158	0.1746	2	Pass
Middle	23.89	22.96	22.11	33.01	0.2449	0.1977	0.1626	2	Pass
Highest	23.99	23.12	22.35	33.01	0.2506	0.2051	0.1718	2	Pass
Channel Bandwidth: 5MHz									
Lowest	23.79	22.74	21.95	33.01	0.2393	0.1879	0.1567	2	Pass
Middle	23.99	22.93	22.07	33.01	0.2506	0.1963	0.1611	2	Pass
Highest	24.00	22.96	22.15	33.01	0.2512	0.1977	0.1641	2	Pass
Channel Bandwidth: 10MHz									
Lowest	24.02	23.04	22.20	33.01	0.2523	0.2014	0.1660	2	Pass
Middle	24.03	23.69	22.83	33.01	0.2529	0.2339	0.1919	2	Pass
Highest	24.10	23.12	22.37	33.01	0.2570	0.2051	0.1726	2	Pass
Channel Bandwidth: 15MHz									
Lowest	23.84	23.41	22.47	33.01	0.2421	0.2193	0.1766	2	Pass
Middle	23.93	23.66	22.87	33.01	0.2472	0.2323	0.1936	2	Pass
Highest	24.03	23.07	22.24	33.01	0.2529	0.2028	0.1675	2	Pass
Channel Bandwidth: 20MHz									
Lowest	23.85	23.51	22.66	33.01	0.2427	0.2244	0.1845	2	Pass
Middle	24.00	23.07	22.25	33.01	0.2512	0.2028	0.1679	2	Pass
Highest	24.14	23.13	22.35	33.01	0.2594	0.2056	0.1718	2	Pass

5.3.9 LTE Band 26

Channel	Maximum ERP (dBm)				Maximum ERP (W)				Result
	QPSK	16QAM	64QAM	Limit (dBm)	QPSK	16QAM	64QAM	Limit (W)	
Channel Bandwidth: 1.4MHz									
Lowest	21.04	20.04	19.21	38.45	0.1271	0.1009	0.0834	7	Pass
Middle	21.07	20.09	19.26	38.45	0.1279	0.1021	0.0843	7	Pass
Highest	21.13	20.15	19.37	38.45	0.1297	0.1035	0.0865	7	Pass
Channel Bandwidth: 3MHz									
Lowest	20.90	19.97	19.12	38.45	0.1230	0.0993	0.0817	7	Pass
Middle	21.03	20.03	19.26	38.45	0.1268	0.1007	0.0843	7	Pass
Highest	21.00	20.05	19.25	38.45	0.1259	0.1012	0.0841	7	Pass
Channel Bandwidth: 5MHz									
Lowest	20.92	19.96	19.19	38.45	0.1236	0.0991	0.0830	7	Pass
Middle	20.97	19.94	19.16	38.45	0.1250	0.0986	0.0824	7	Pass
Highest	21.01	19.98	19.15	38.45	0.1262	0.0995	0.0822	7	Pass
Channel Bandwidth: 10MHz									
Lowest	21.03	19.99	19.16	38.45	0.1268	0.0998	0.0824	7	Pass
Middle	21.03	20.03	19.23	38.45	0.1268	0.1007	0.0838	7	Pass
Highest	21.05	20.07	19.29	38.45	0.1274	0.1016	0.0849	7	Pass
Channel Bandwidth: 15MHz									
Lowest	20.96	19.95	19.13	38.45	0.1247	0.0989	0.0818	7	Pass
Middle	21.05	20.02	19.15	38.45	0.1274	0.1005	0.0822	7	Pass
Highest	21.21	20.19	19.43	38.45	0.1321	0.1045	0.0877	7	Pass

5.3.10 LTE Band 26 (Part 90S)

Channel	Maximum ERP (dBm)				Maximum ERP (W)				Result
	QPSK	16QAM	64QAM	Limit (dBm)	QPSK	16QAM	64QAM	Limit (W)	
Channel Bandwidth: 1.4MHz									
Lowest	20.97	19.97	19.20	50.00	0.1250	0.0993	0.0832	100	Pass
Middle	20.87	19.87	19.08	50.00	0.1222	0.0971	0.0809	100	Pass
Highest	20.89	19.93	19.06	50.00	0.1227	0.0984	0.0805	100	Pass
Channel Bandwidth: 3MHz									
Lowest	20.83	19.85	19.07	50.00	0.1211	0.0966	0.0807	100	Pass
Middle	20.80	19.82	19.03	50.00	0.1202	0.0959	0.0800	100	Pass
Highest	20.86	19.87	19.05	50.00	0.1219	0.0971	0.0804	100	Pass
Channel Bandwidth: 5MHz									
Lowest	20.83	19.82	19.01	50.00	0.1211	0.0959	0.0796	100	Pass
Middle	20.84	19.83	19.04	50.00	0.1213	0.0962	0.0802	100	Pass
Highest	20.84	19.82	19.04	50.00	0.1213	0.0959	0.0802	100	Pass
Channel Bandwidth: 10MHz									
Middle	20.87	19.84	19.07	50.00	0.1222	0.0964	0.0807	100	Pass
Channel Bandwidth: 15MHz									
Lowest	21.01	20.30	19.37	50.00	0.1262	0.1072	0.0865	100	Pass

5.3.11 LTE Band 30

Channel	Maximum EIRP (dBm)				Maximum EIRP (W)				Result
	QPSK	16QAM	64QAM	Limit (dBm)	QPSK	16QAM	64QAM	Limit (W)	
Channel Bandwidth: 5MHz									
Lowest	25.28	24.25	23.38	23.98	0.3373	0.2661	0.2178	0.25	Pass
Middle	25.24	24.32	23.50	23.98	0.3342	0.2704	0.2239	0.25	Pass
Highest	25.28	24.20	23.37	23.98	0.3373	0.2630	0.2173	0.25	Pass
Channel Bandwidth: 10MHz									
Middle	25.51	24.49	23.72	23.98	0.3556	0.2812	0.2355	0.25	Pass

5.3.12 LTE Band 41

Channel	Maximum EIRP (dBm)				Maximum EIRP (W)				Result
	QPSK	16QAM	64QAM	Limit (dBm)	QPSK	16QAM	64QAM	Limit (W)	
Channel Bandwidth: 5MHz									
Lowest	27.30	26.29	25.47	33.01	0.5370	0.4256	0.3524	2	Pass
Middle	27.37	25.88	25.06	33.01	0.5458	0.3873	0.3206	2	Pass
Highest	27.16	26.33	25.54	33.01	0.5200	0.4295	0.3581	2	Pass
Channel Bandwidth: 10MHz									
Lowest	27.35	26.46	25.61	33.01	0.5433	0.4426	0.3639	2	Pass
Middle	27.26	25.83	24.99	33.01	0.5321	0.3828	0.3155	2	Pass
Highest	27.14	26.11	25.23	33.01	0.5176	0.4083	0.3334	2	Pass
Channel Bandwidth: 15MHz									
Lowest	27.27	26.04	25.20	33.01	0.5333	0.4018	0.3311	2	Pass
Middle	27.46	26.24	25.46	33.01	0.5572	0.4207	0.3516	2	Pass
Highest	27.08	26.32	25.50	33.01	0.5105	0.4285	0.3548	2	Pass
Channel Bandwidth: 20MHz									
Lowest	27.30	26.06	25.27	33.01	0.5370	0.4036	0.3365	2	Pass
Middle	27.59	26.26	25.46	33.01	0.5741	0.4227	0.3516	2	Pass
Highest	27.37	26.40	25.51	33.01	0.5458	0.4365	0.3556	2	Pass

5.3.13 LTE Band 66

Channel	Maximum EIRP (dBm)				Maximum EIRP (W)				Result
	QPSK	16QAM	64QAM	Limit (dBm)	QPSK	16QAM	64QAM	Limit (W)	
Channel Bandwidth: 1.4MHz									
Lowest	23.81	23.39	22.55	30.00	0.2404	0.2183	0.1799	1	Pass
Middle	23.87	22.92	22.14	30.00	0.2438	0.1959	0.1637	1	Pass
Highest	23.85	22.94	22.19	30.00	0.2427	0.1968	0.1656	1	Pass
Channel Bandwidth: 3MHz									
Lowest	24.02	23.12	22.35	30.00	0.2523	0.2051	0.1718	1	Pass
Middle	23.95	23.59	22.71	30.00	0.2483	0.2286	0.1866	1	Pass
Highest	24.02	22.95	22.12	30.00	0.2523	0.1972	0.1629	1	Pass
Channel Bandwidth: 5MHz									
Lowest	23.89	22.75	21.98	30.00	0.2449	0.1884	0.1578	1	Pass
Middle	23.85	22.91	22.03	30.00	0.2427	0.1954	0.1596	1	Pass
Highest	23.81	22.80	22.00	30.00	0.2404	0.1905	0.1585	1	Pass
Channel Bandwidth: 10MHz									
Lowest	24.00	23.09	22.21	30.00	0.2512	0.2037	0.1663	1	Pass
Middle	23.91	23.60	22.80	30.00	0.2460	0.2291	0.1905	1	Pass
Highest	23.90	22.88	21.99	30.00	0.2455	0.1941	0.1581	1	Pass
Channel Bandwidth: 15MHz									
Lowest	23.85	23.40	22.54	30.00	0.2427	0.2188	0.1795	1	Pass
Middle	23.85	23.64	22.81	30.00	0.2427	0.2312	0.1910	1	Pass
Highest	23.92	22.89	22.09	30.00	0.2466	0.1945	0.1618	1	Pass
Channel Bandwidth: 20MHz									
Lowest	24.16	23.25	22.46	30.00	0.2606	0.2113	0.1762	1	Pass
Middle	24.15	23.40	22.61	30.00	0.2600	0.2188	0.1824	1	Pass
Highest	23.94	22.88	22.11	30.00	0.2477	0.1941	0.1626	1	Pass

5.3.14 LTE Band 71

Channel	Maximum ERP (dBm)				Maximum ERP (W)				Result
	QPSK	16QAM	64QAM	Limit (dBm)	QPSK	16QAM	64QAM	Limit (W)	
Channel Bandwidth: 5MHz									
Lowest	19.21	18.10	17.33	34.77	0.0834	0.0646	0.0541	3	Pass
Middle	19.16	18.17	17.41	34.77	0.0824	0.0656	0.0551	3	Pass
Highest	19.20	18.15	17.39	34.77	0.0832	0.0653	0.0548	3	Pass
Channel Bandwidth: 10MHz									
Lowest	19.15	18.30	17.36	34.77	0.0822	0.0676	0.0545	3	Pass
Middle	19.39	18.32	17.49	34.77	0.0869	0.0679	0.0561	3	Pass
Highest	19.30	18.72	17.85	34.77	0.0851	0.0745	0.0610	3	Pass
Channel Bandwidth: 15MHz									
Lowest	19.19	18.90	18.00	34.77	0.0830	0.0776	0.0631	3	Pass
Middle	19.32	18.29	17.53	34.77	0.0855	0.0675	0.0566	3	Pass
Highest	19.26	18.75	17.95	34.77	0.0843	0.0750	0.0624	3	Pass
Channel Bandwidth: 20MHz									
Lowest	19.21	18.83	17.90	34.77	0.0834	0.0764	0.0617	3	Pass
Middle	19.28	18.32	17.50	34.77	0.0847	0.0679	0.0562	3	Pass
Highest	19.51	18.47	17.68	34.77	0.0893	0.0703	0.0586	3	Pass

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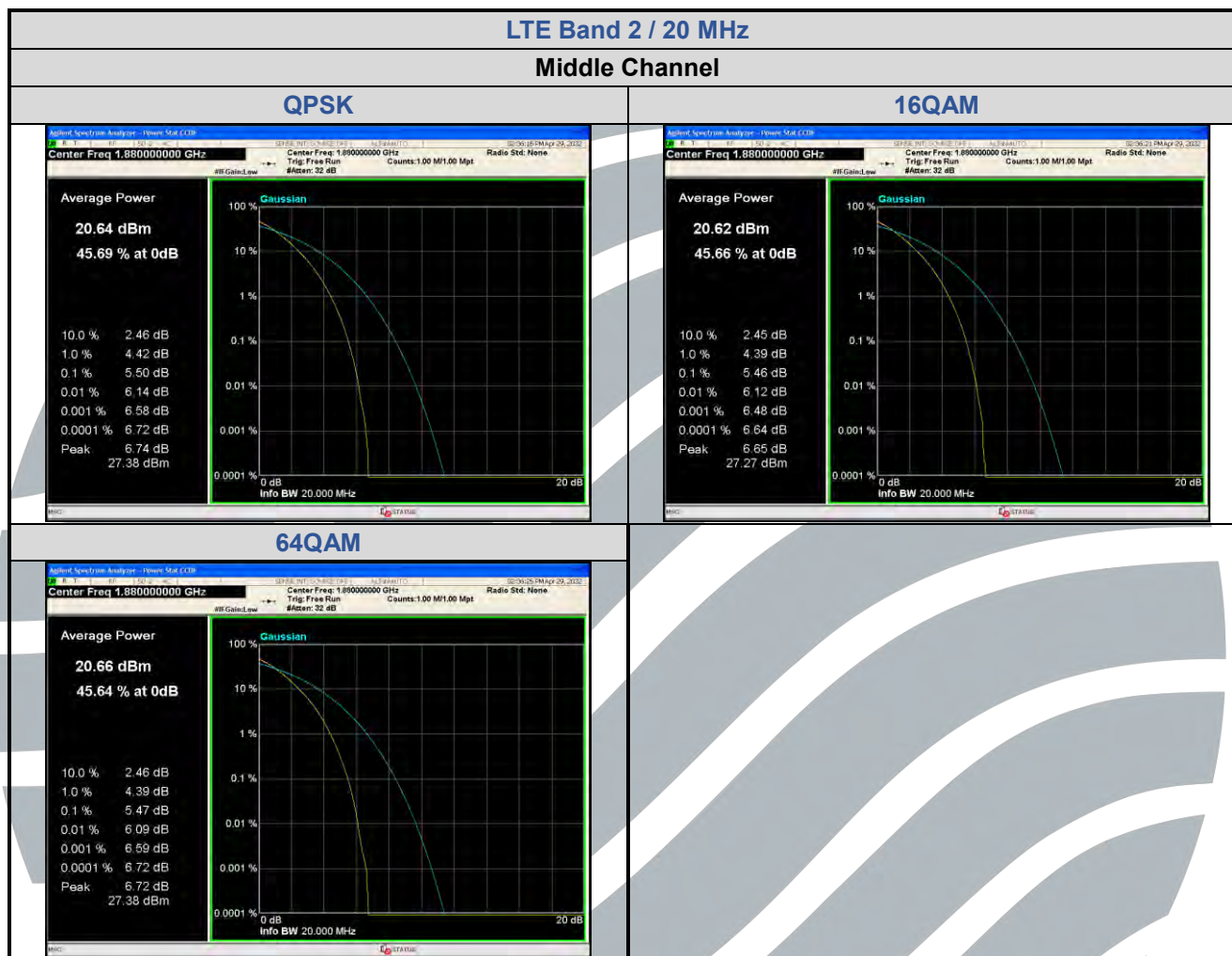
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5.4 PEAK-TO-AVERAGE RATIO

Test Requirement:	LTE Band 2 & LTE Band 25: FCC 47 CFR Part 24.232(d)
	LTE Band 4 & LTE Band 66: FCC 47 CFR Part 27.50(d)(5)
	LTE Band 5 & LTE Band 26: FCC 47 CFR Part 22.913(a)
	LTE Band 7 & Band 41: FCC 47 CFR Part 27.50(d)(5)
	LTE Band 12 & Band 17 & Band 71: FCC 47 CFR Part 27.50(d)(5)
	LTE Band 13: FCC 47 CFR Part 27.50(d)(5)
Test Method:	LTE Band 30: FCC 47 CFR Part 27.50(a)(1)(i)(B)
	KDB 971168 D01v03r01 Section 5.7
Limit:	In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB
Test Procedure:	
The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer.	
a) Set resolution/measurement bandwidth $\geq$ signal's occupied bandwidth	
b) Set the number of counts to a value that stabilizes the measured CCDF curve	
c) Record the maximum PAPR level associated with a probability of 0.1 %	
Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.	
Test Setup:	Refer to section 4.2.2 for details.
Instruments Used:	Refer to section 3 for details
Test Mode:	Link mode
Test Results:	Pass
Test Data:	See table below

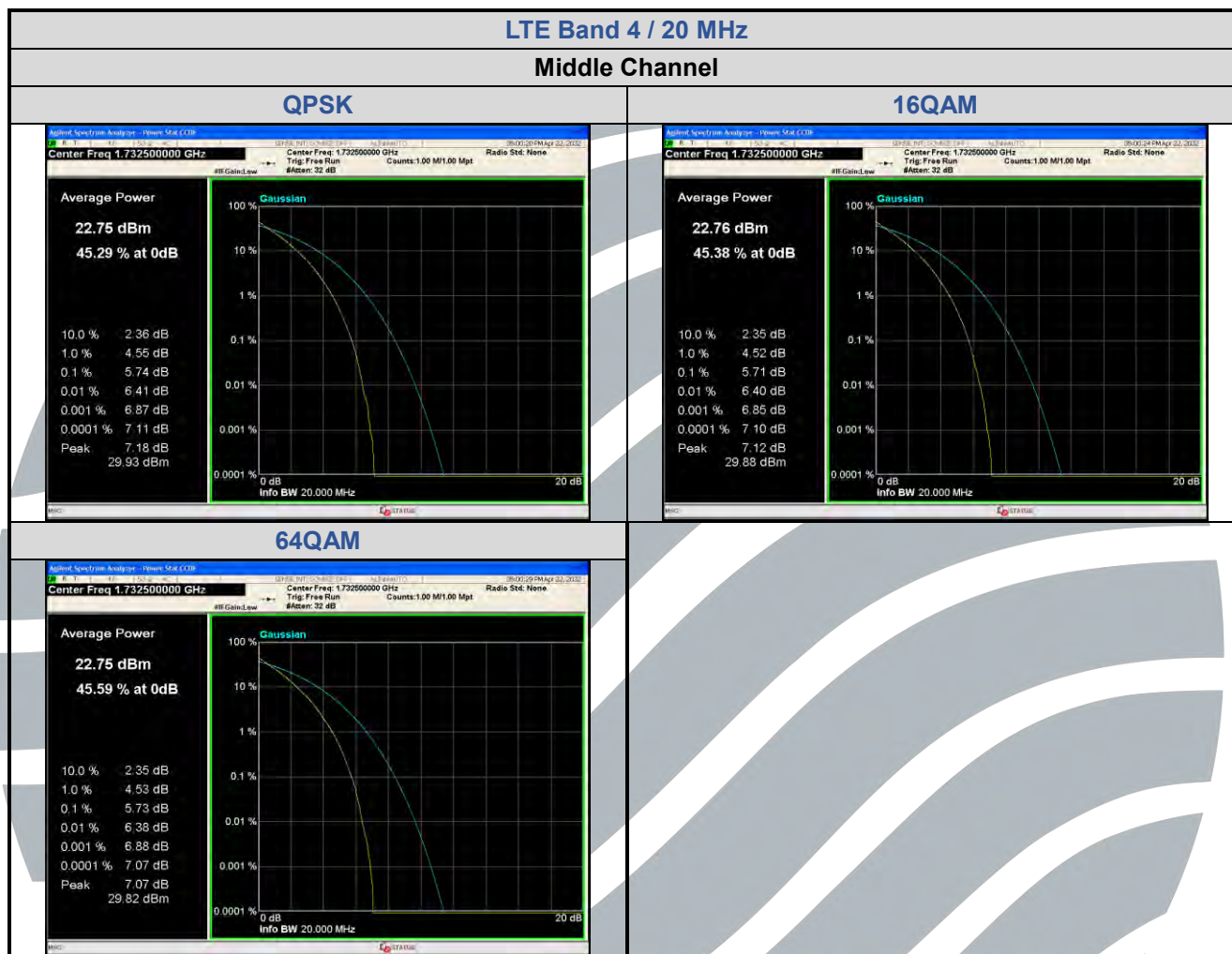
5.4.1 LTE Band 2

Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 20 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Middle	Full RB	5.50	5.46	5.47	13	Pass



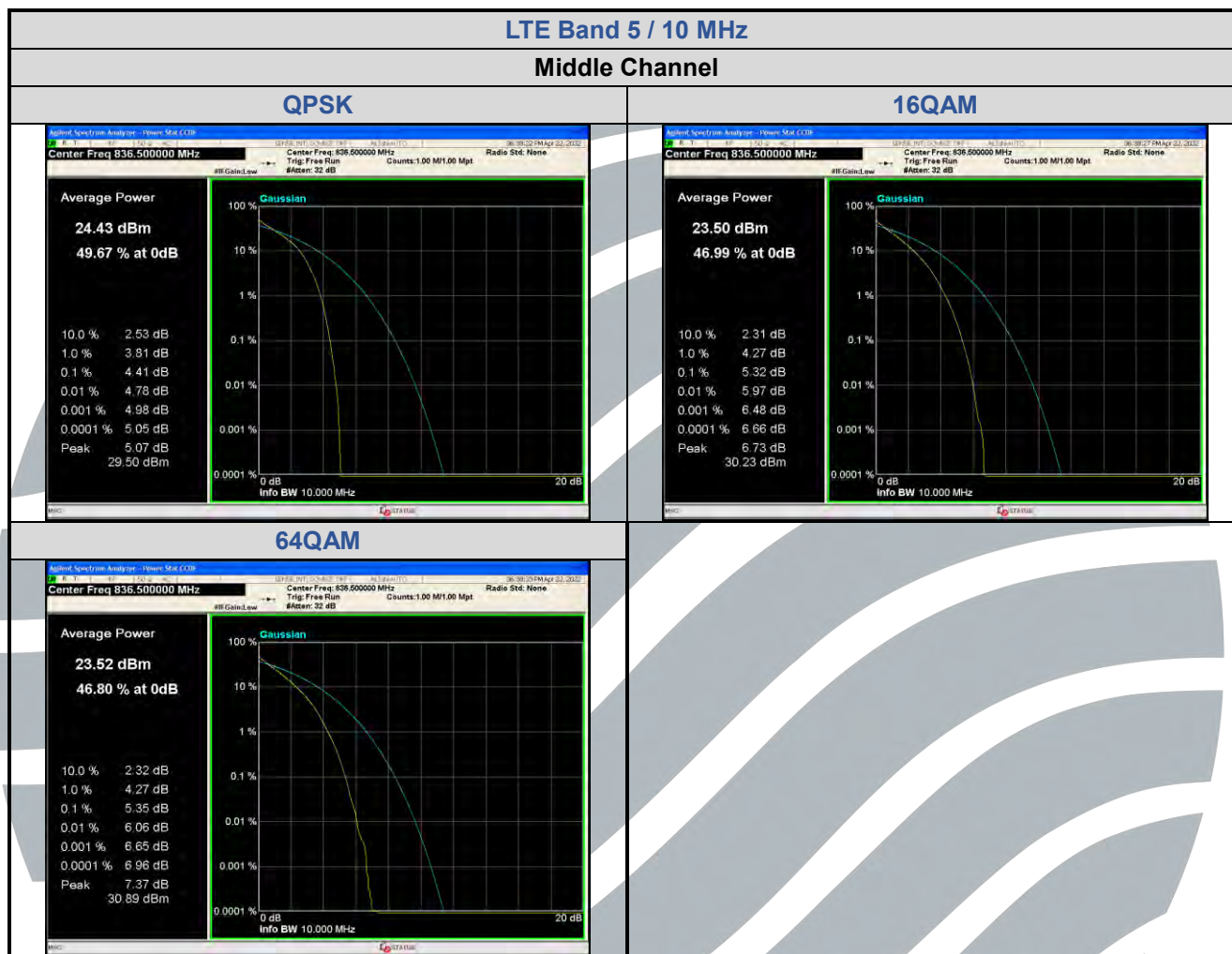
5.4.2 LTE Band 4

Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 20 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Middle	Full RB	5.74	5.71	5.73	13	Pass



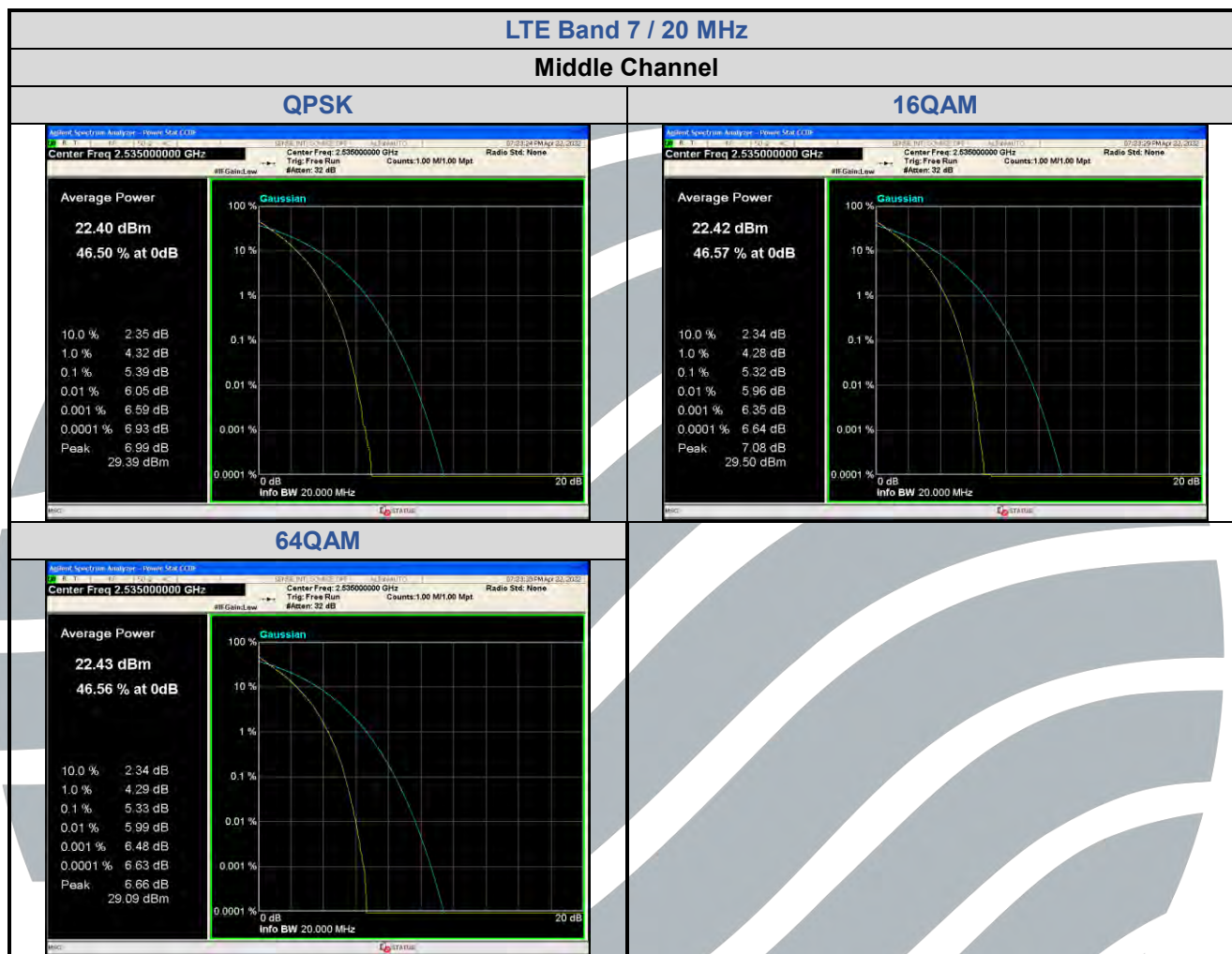
5.4.3 LTE Band 5

Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 10 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Middle	Full RB	4.41	5.32	5.35	13	Pass



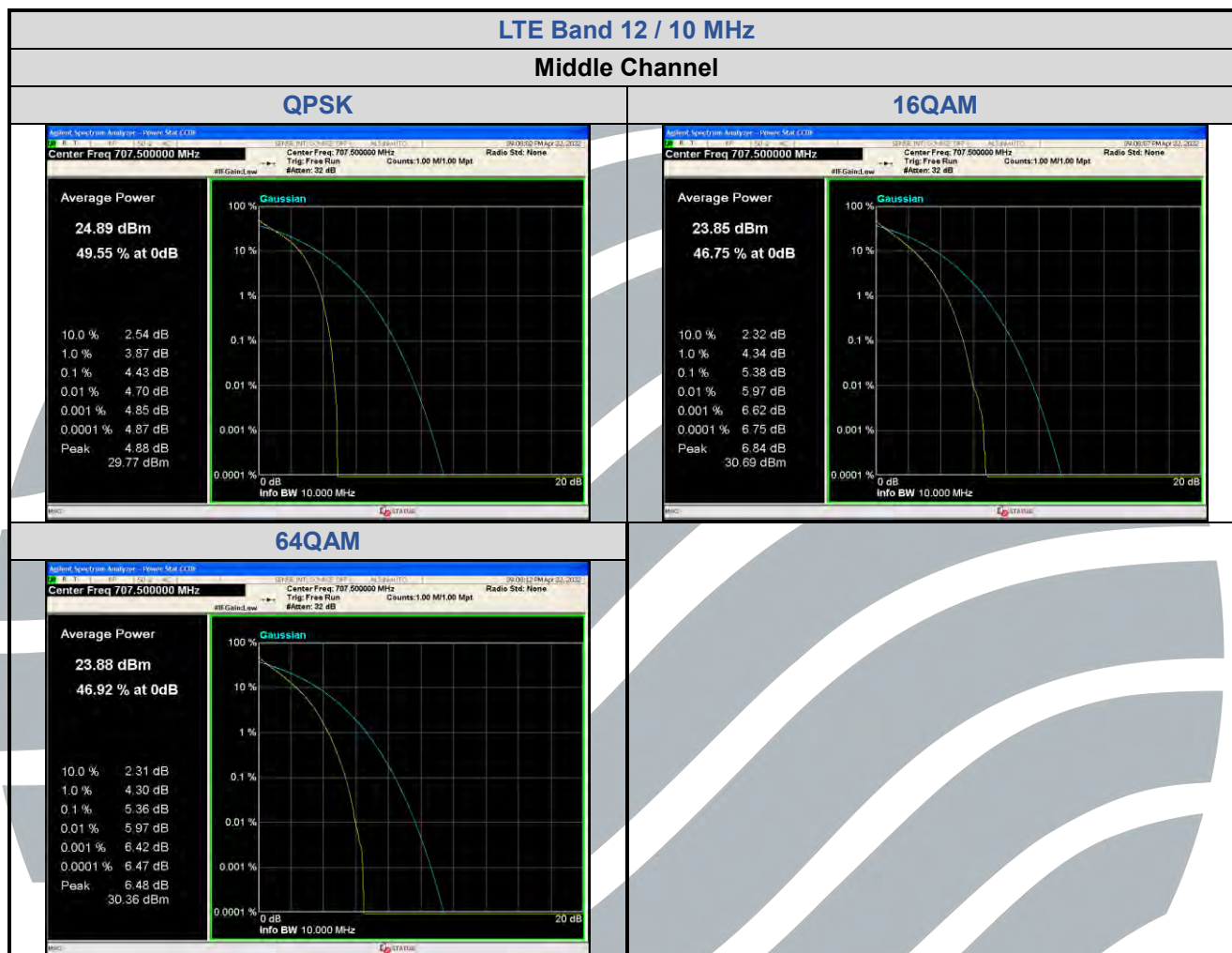
5.4.4 LTE Band 7

Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 20 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Middle	Full RB	5.39	5.32	5.33	13	Pass



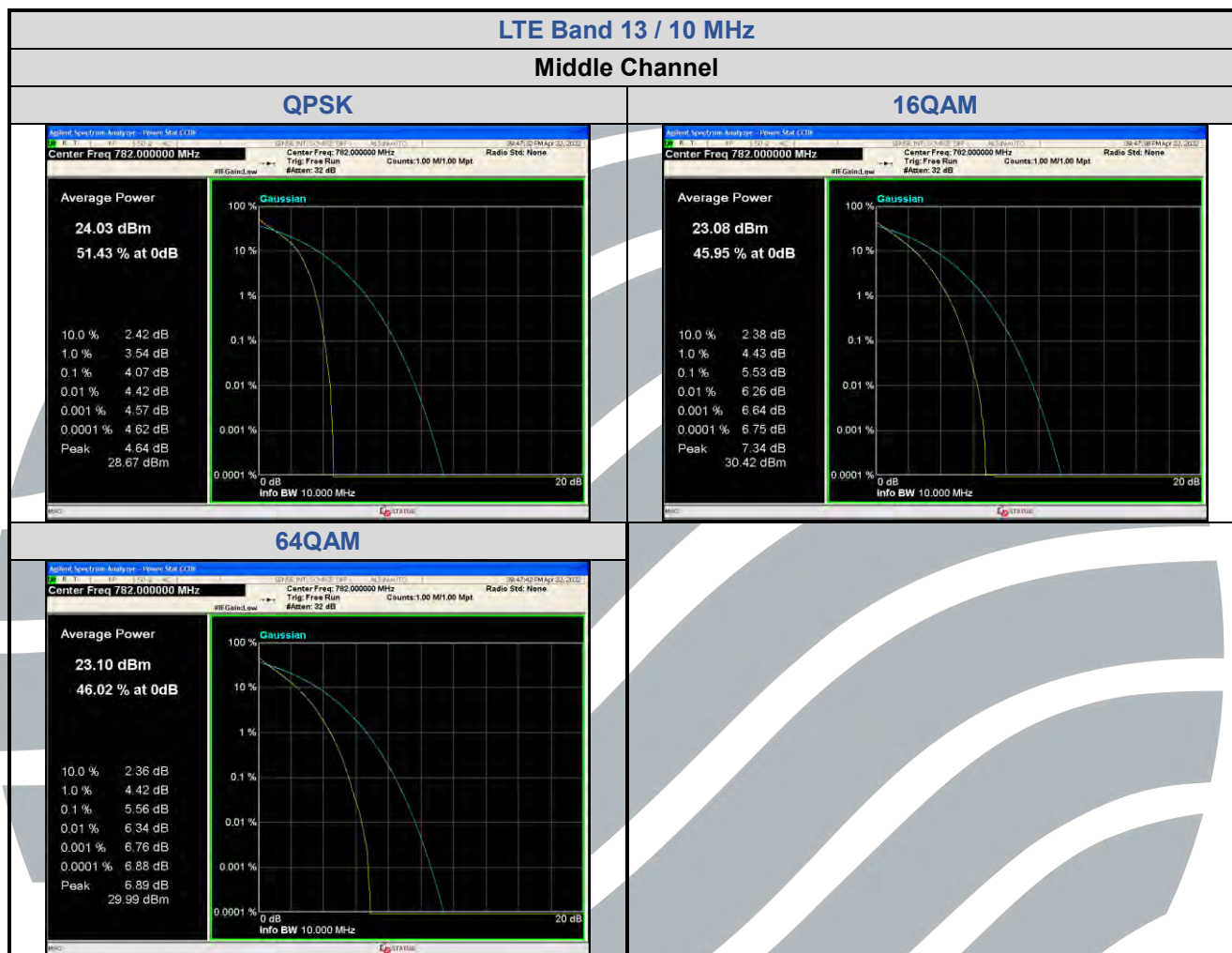
5.4.5 LTE Band 12

Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 10 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Middle	Full RB	4.43	5.38	5.36	13	Pass



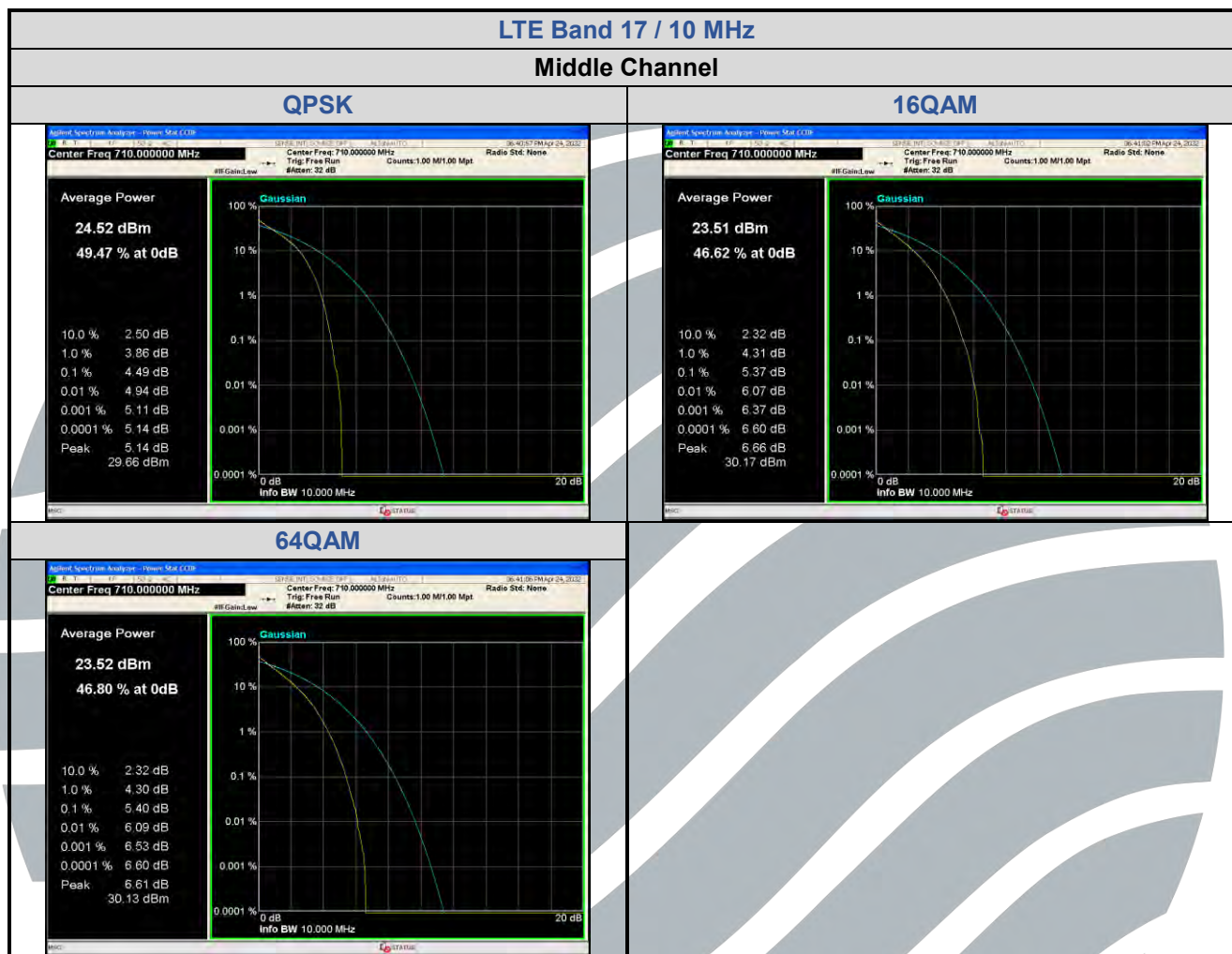
5.4.6 LTE Band 13

Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 10 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Middle	Full RB	4.07	5.53	5.56	13	Pass



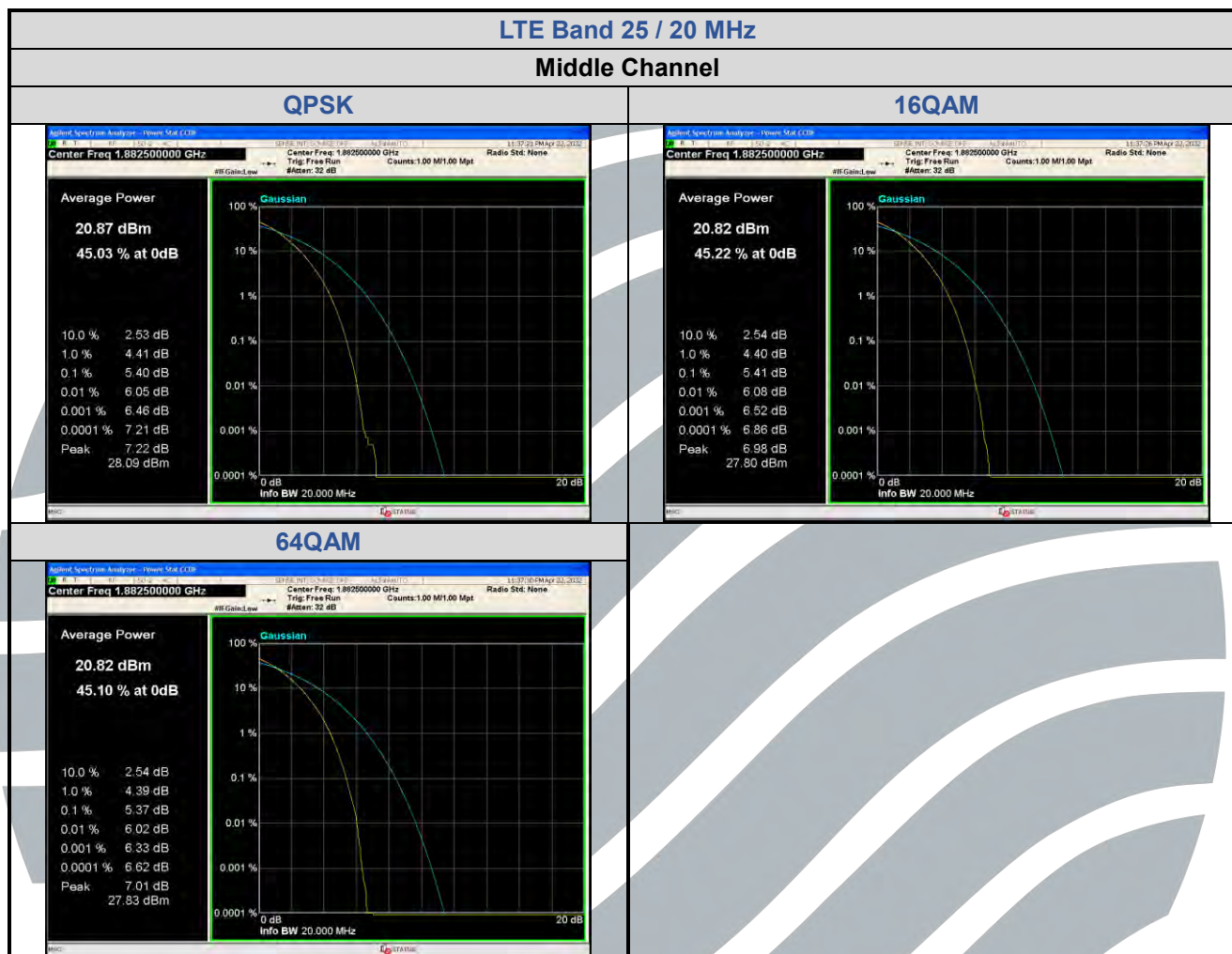
5.4.7 LTE Band 17

Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 10 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Middle	Full RB	4.49	5.37	5.4	13	Pass



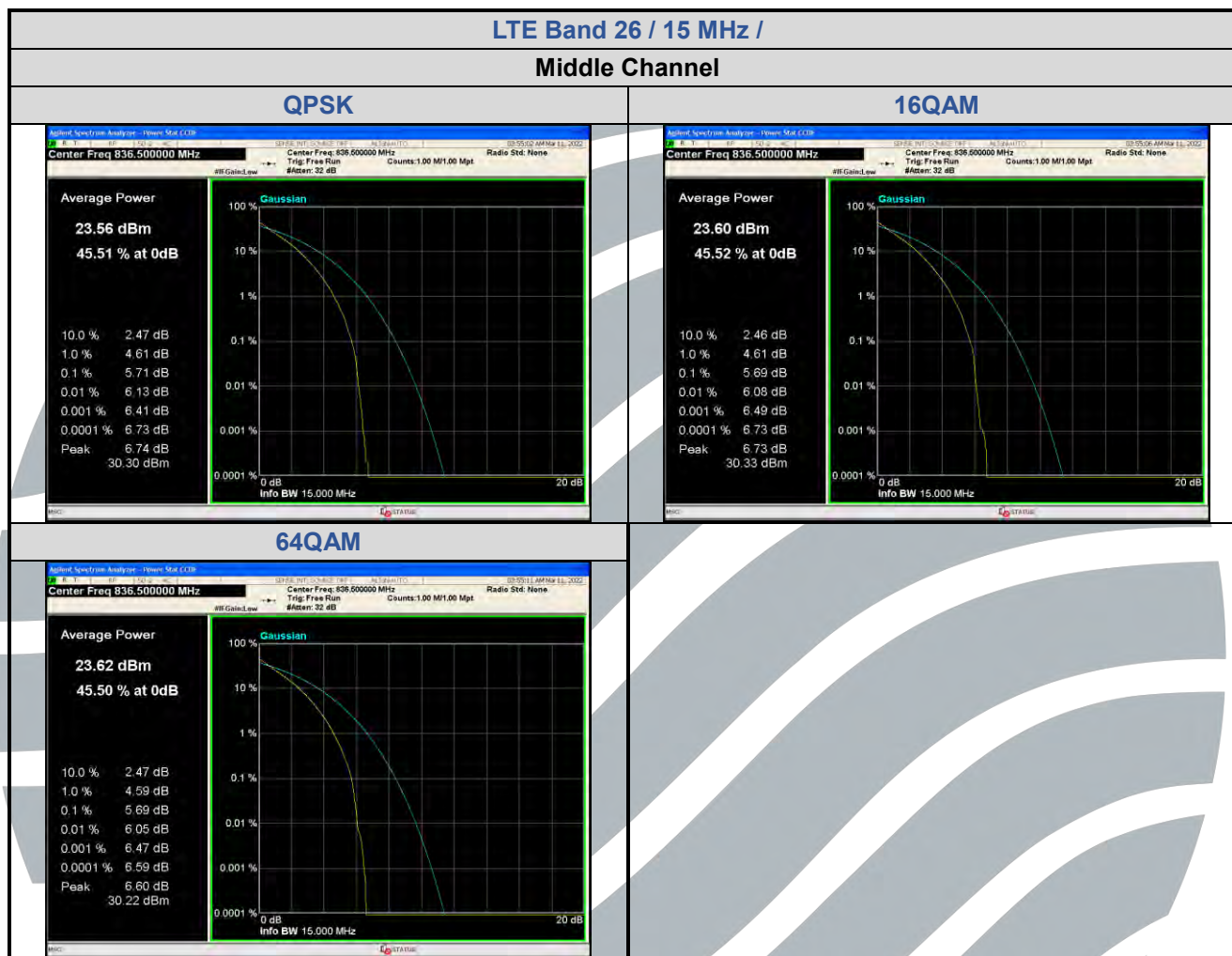
5.4.8 LTE Band 25

Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 20 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Middle	Full RB	5.40	5.41	5.37	13	Pass



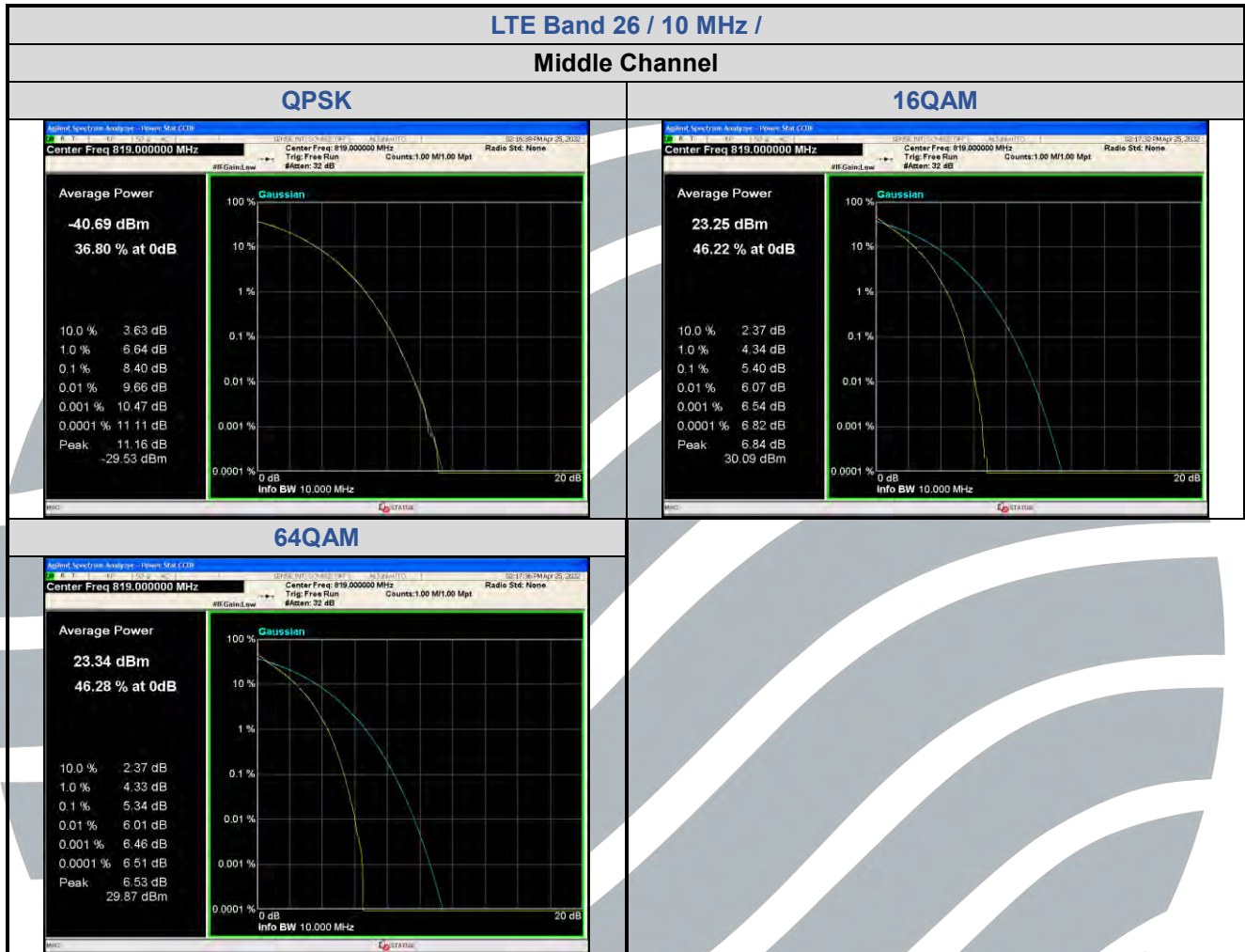
5.4.9 LTE Band 26

Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 15 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Middle	Full RB	5.71	5.69	5.69	13	Pass

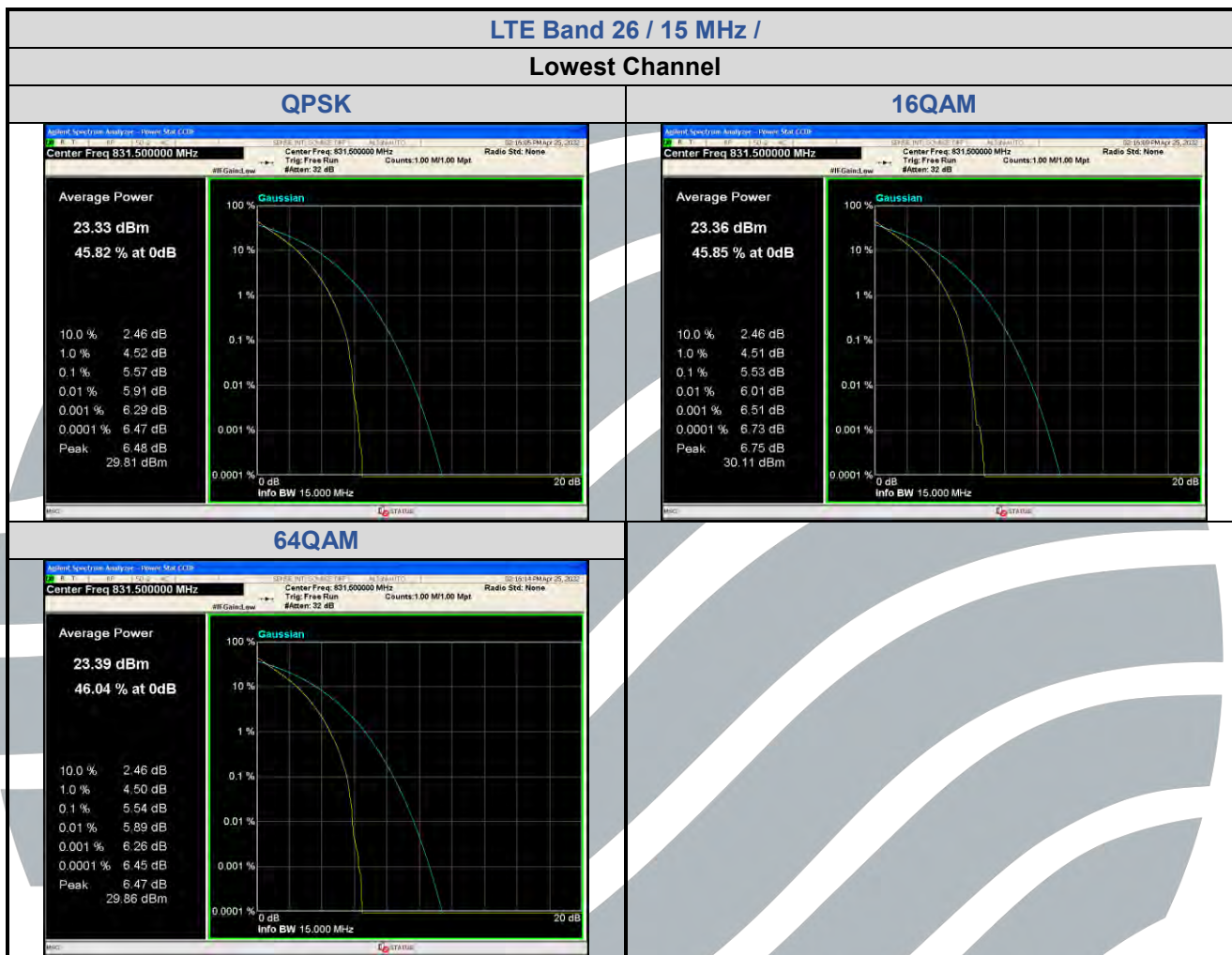


5.4.10 LTE Band 26 (Part 90S)

Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 10 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Middle	Full RB	8.40	5.40	5.34	13	Pass

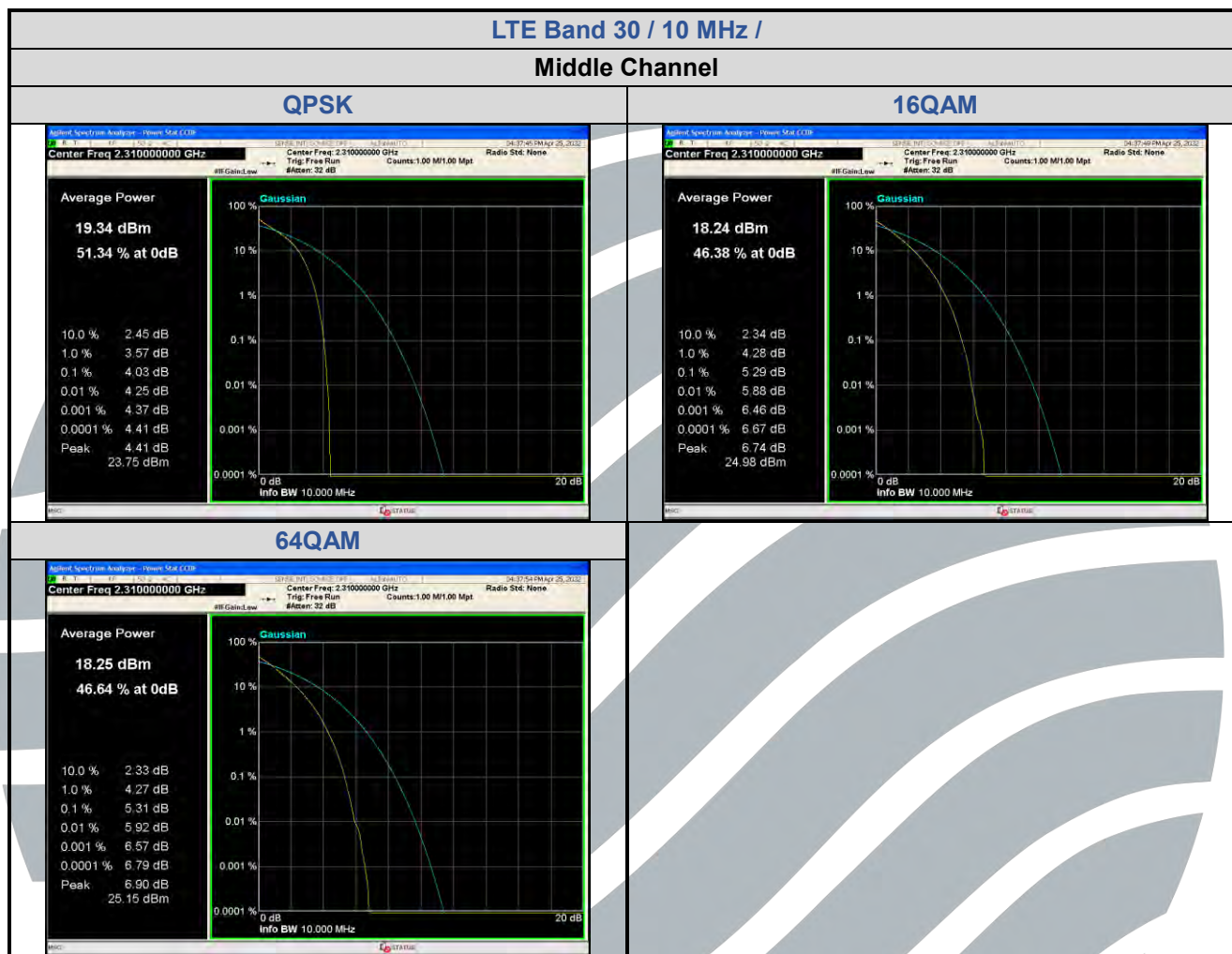


Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 15 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Lowest	Full RB	5.57	5.53	5.54	13	Pass



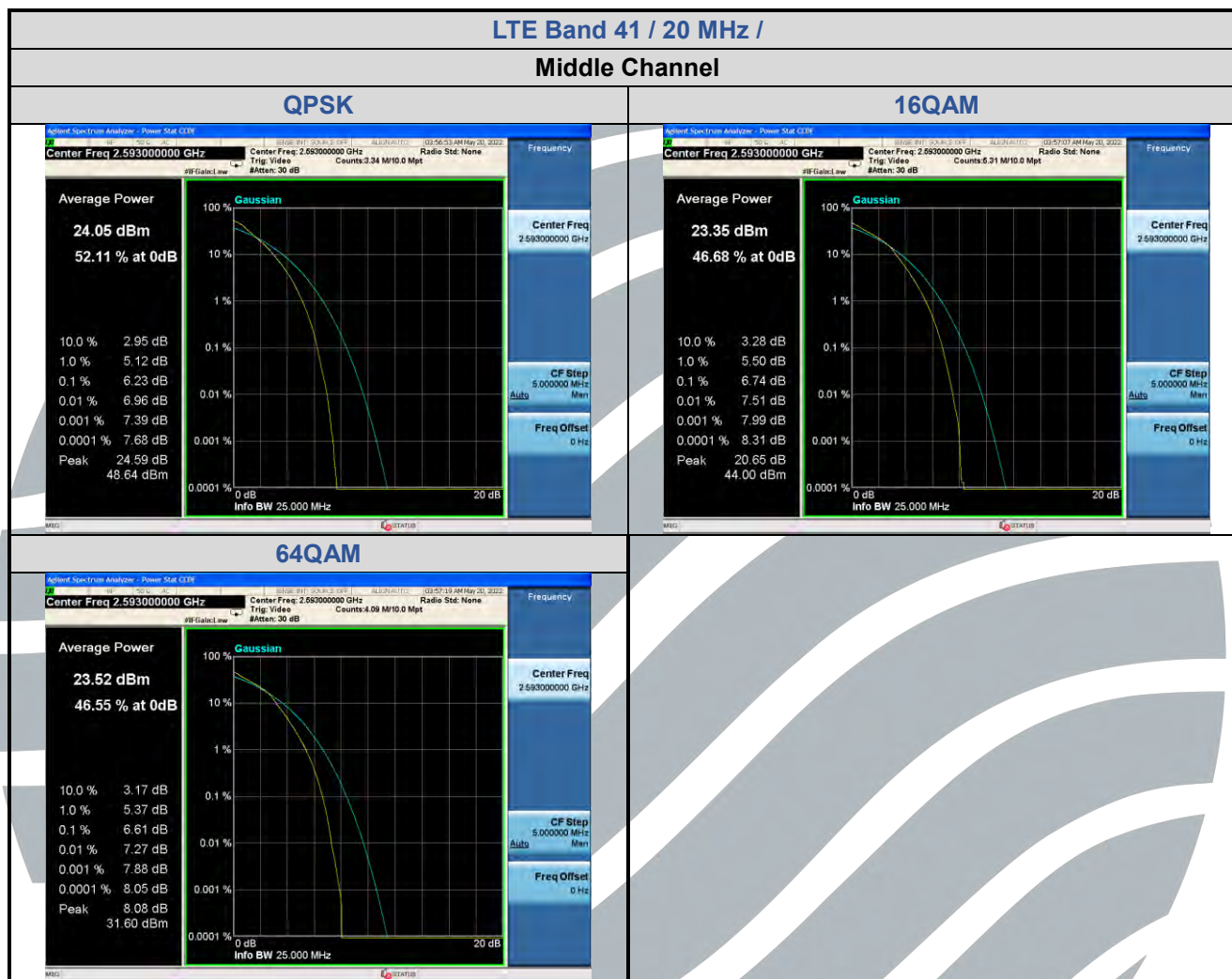
5.4.11 LTE Band 30

Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 10 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Middle	Full RB	4.03	5.29	5.31	13	Pass



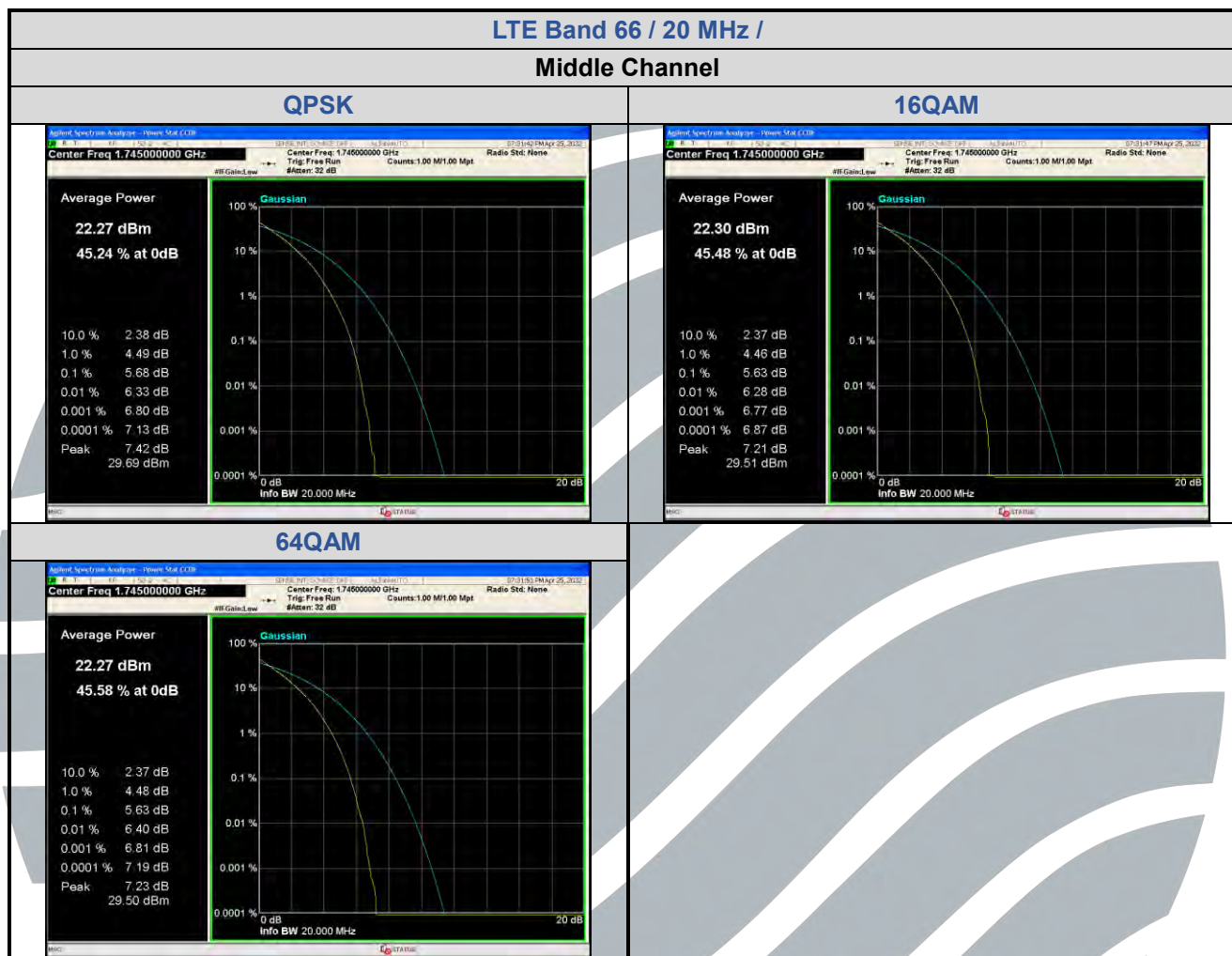
5.4.12 LTE Band 41

Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 20 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Middle	Full RB	6.23	6.74	6.61	13	Pass



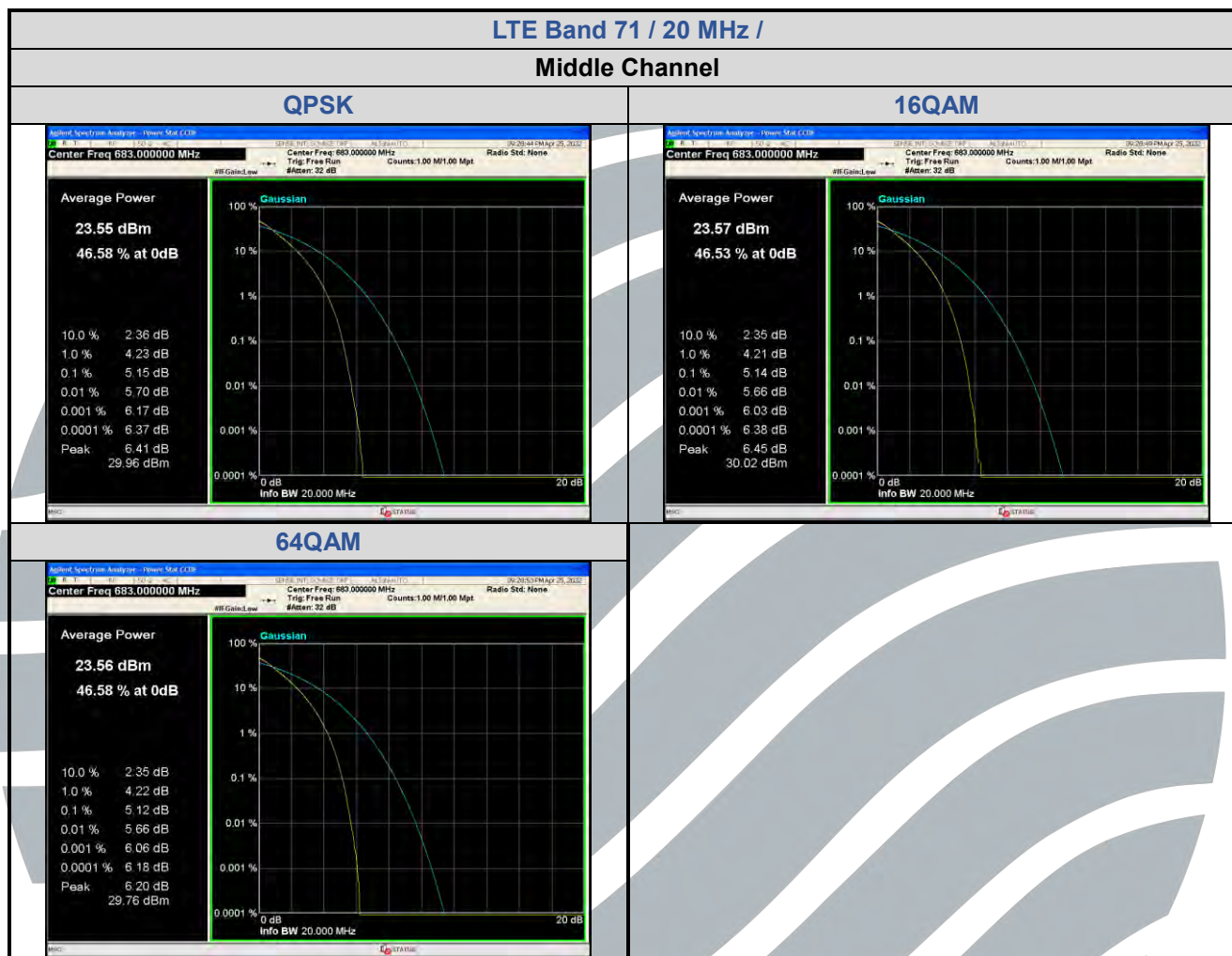
5.4.13 LTE Band 66

Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 20 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Middle	Full RB	5.68	5.63	5.63	13	Pass



5.4.14 LTE Band 71

Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 20 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Middle	Full RB	5.15	5.14	5.12	13	Pass



5.599%&26DB BANDWIDTH

Test Requirement: FCC 47 CFR Part 2.1049(h)

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01 Section 4

Limit: No Limit, for reporting purposes only.

Test Procedure:

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at the low, middle and high channel in each band. The 99% and -26dB bandwidths was also measured and recorded.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

Test Setup: Refer to section 4.2.2 for details.

Instruments Used: Refer to section 3 for details

Test Mode: Link mode

Test Results: Pass

Test Data: See table below

5.5.1 LTE Band 2

Bandwidth (MHz)	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB BW (MHz)
1.4	1880	QPSK	6@0	1.09	1.29
1.4	1880	16QAM	6@0	1.09	1.29
1.4	1880	64QAM	6@0	1.09	1.30
1.4	1909.3	QPSK	6@0	1.09	1.27
1.4	1909.3	16QAM	6@0	1.09	1.27
1.4	1909.3	64QAM	6@0	1.10	1.27
1.4	1850.7	QPSK	6@0	1.09	1.28
1.4	1850.7	16QAM	6@0	1.09	1.26
1.4	1850.7	64QAM	6@0	1.09	1.27
3	1880	QPSK	15@0	2.69	2.91
3	1880	16QAM	15@0	2.69	2.91
3	1880	64QAM	15@0	2.68	2.91
3	1908.5	QPSK	15@0	2.70	2.92
3	1908.5	16QAM	15@0	2.70	2.92
3	1908.5	64QAM	15@0	2.70	2.91
3	1851.5	QPSK	15@0	2.69	2.92
3	1851.5	16QAM	15@0	2.69	2.91
3	1851.5	64QAM	15@0	2.70	2.91
5	1880	QPSK	25@0	4.50	5.11
5	1880	16QAM	25@0	4.53	5.16
5	1880	64QAM	25@0	4.51	5.13
5	1907.5	QPSK	25@0	4.51	5.09
5	1907.5	16QAM	25@0	4.50	5.12
5	1907.5	64QAM	25@0	4.52	5.19
5	1852.5	QPSK	25@0	4.51	5.07
5	1852.5	16QAM	25@0	4.51	5.15
5	1852.5	64QAM	25@0	4.51	5.22
10	1880	QPSK	50@0	8.98	9.98
10	1880	16QAM	50@0	8.99	9.98
10	1880	64QAM	50@0	8.98	10.00
10	1905	QPSK	50@0	8.98	10.02
10	1905	16QAM	50@0	8.98	10.16
10	1905	64QAM	50@0	8.98	9.90
10	1855	QPSK	50@0	8.99	10.00
10	1855	16QAM	50@0	9.02	9.95

Shenzhen UnionTrust Quality and Technology Co., Ltd.

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Tel: +86-755-28230888

Fax: +86-755-28230886

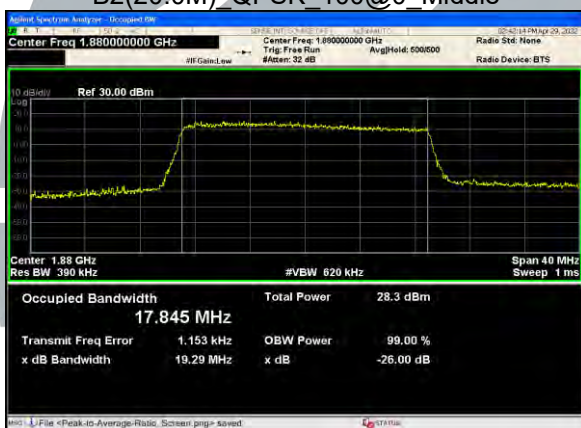
E-mail: info@uttlab.com

<http://www.uttlab.com>

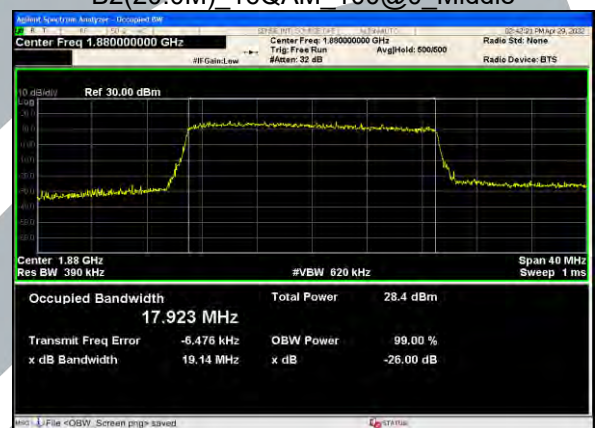
UTTR-RF-FCC4G-V1.1

10	1855	64QAM	50@0	9.01	10.00
15	1880	QPSK	75@0	13.47	14.92
15	1880	16QAM	75@0	13.45	14.75
15	1880	64QAM	75@0	13.43	14.81
15	1902.5	QPSK	75@0	13.43	14.82
15	1902.5	16QAM	75@0	13.44	14.74
15	1902.5	64QAM	75@0	13.43	14.81
15	1857.5	QPSK	75@0	13.53	14.84
15	1857.5	16QAM	75@0	13.51	14.93
15	1857.5	64QAM	75@0	13.55	15.02
20	1880	QPSK	100@0	17.84	19.29
20	1880	16QAM	100@0	17.92	19.14
20	1880	64QAM	100@0	17.90	19.25
20	1900	QPSK	100@0	17.91	19.37
20	1900	16QAM	100@0	17.91	19.34
20	1900	64QAM	100@0	17.93	19.37
20	1860	QPSK	100@0	18.08	20.01
20	1860	16QAM	100@0	18.08	19.67
20	1860	64QAM	100@0	18.09	20.04

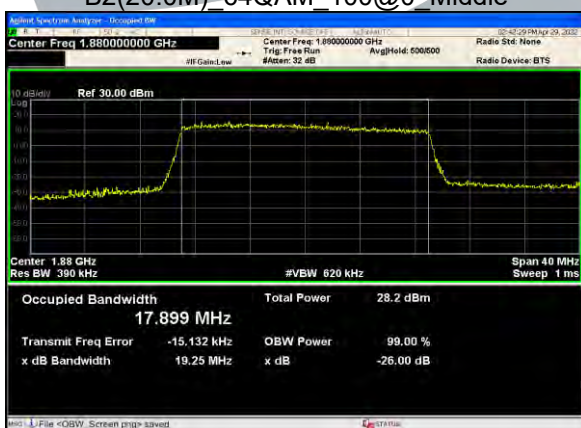
B2(20.0M) QPSK 100@0 Middle



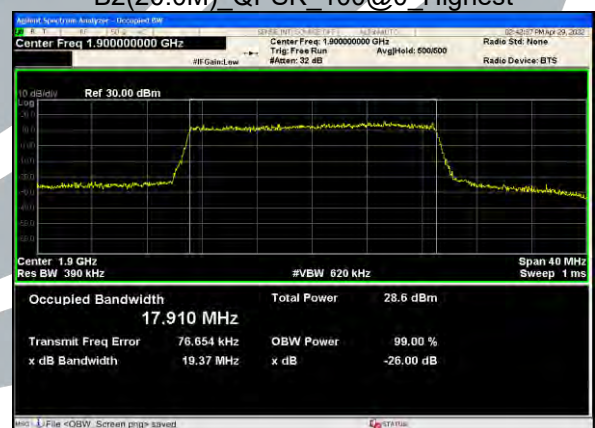
B2(20.0M) 16QAM 100@0 Middle



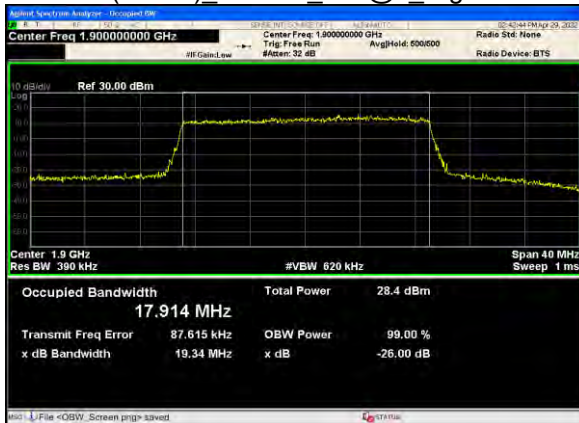
B2(20.0M) 64QAM 100@0 Middle



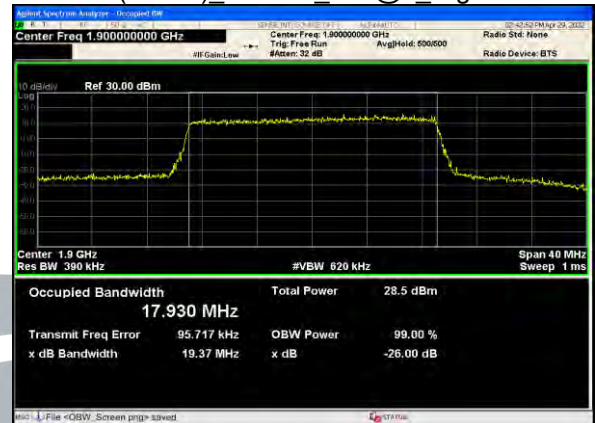
B2(20.0M) QPSK 100@0 Highest



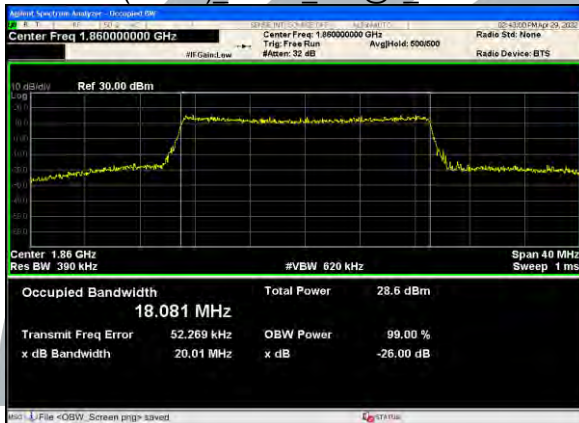
B2(20.0M) 16QAM 100@0 Highest



B2(20.0M) 64QAM 100@0 Highest



B2(20.0M) QPSK 100@0 Lowest



B2(20.0M) 16QAM 100@0 Lowest



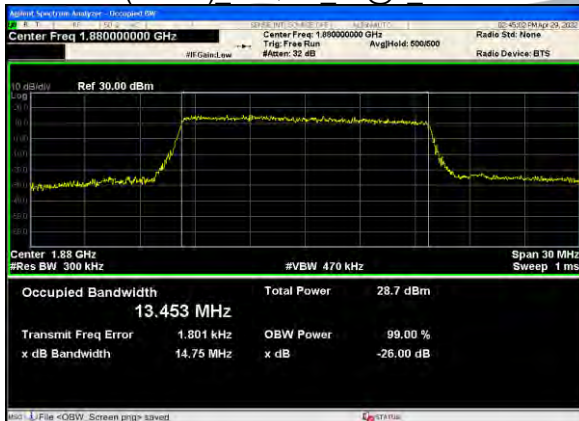
B2(20.0M) 64QAM 100@0 Lowest



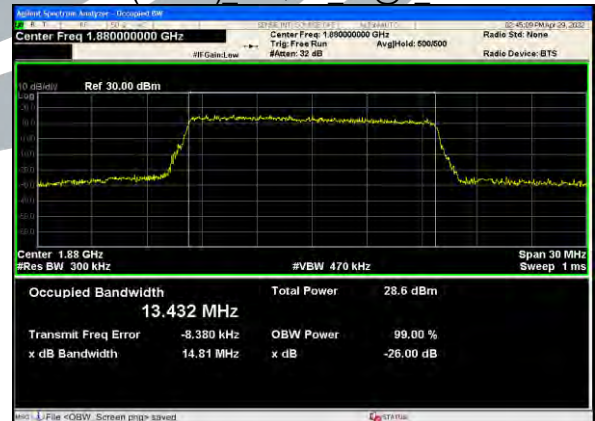
B2(15.0M) QPSK 75@0 Middle



B2(15.0M) 16QAM 75@0 Middle



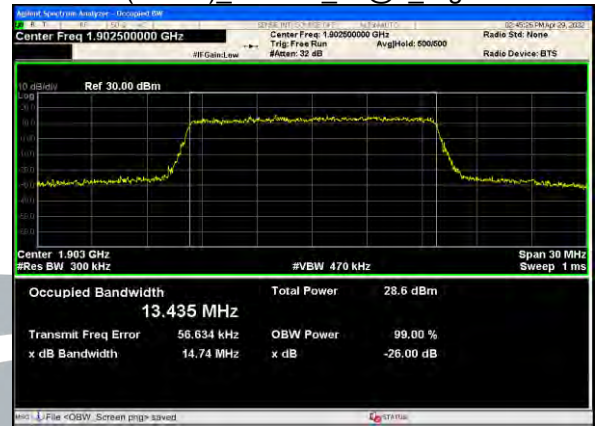
B2(15.0M) 64QAM 75@0 Middle



B2(15.0M) QPSK 75@0 Highest



B2(15.0M) 16QAM 75@0 Highest



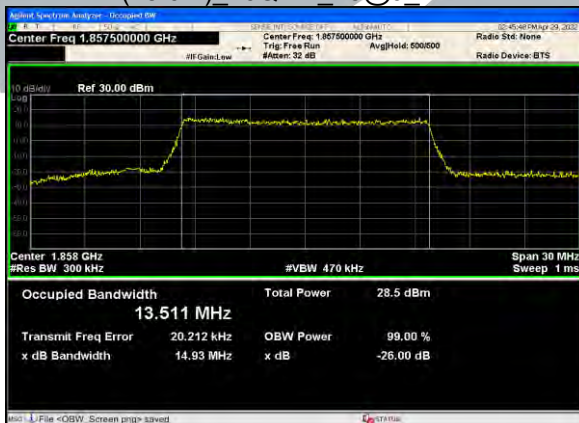
B2(15.0M) 64QAM 75@0 Highest



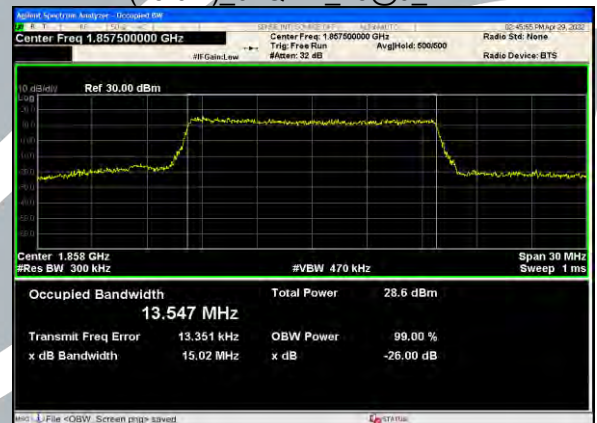
B2(15.0M) QPSK 75@0 Lowest



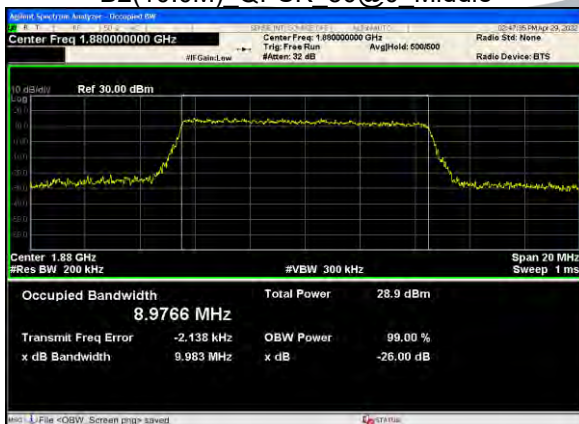
B2(15.0M) 16QAM 75@0 Lowest



B2(15.0M) 64QAM 75@0 Lowest



B2(10.0M) QPSK 50@0 Middle



B2(10.0M) 16QAM 50@0 Middle

