

Appendix-A LTE Cat M1 Band 17

Effective (Isotropic) Radiated Power Output Data for M1

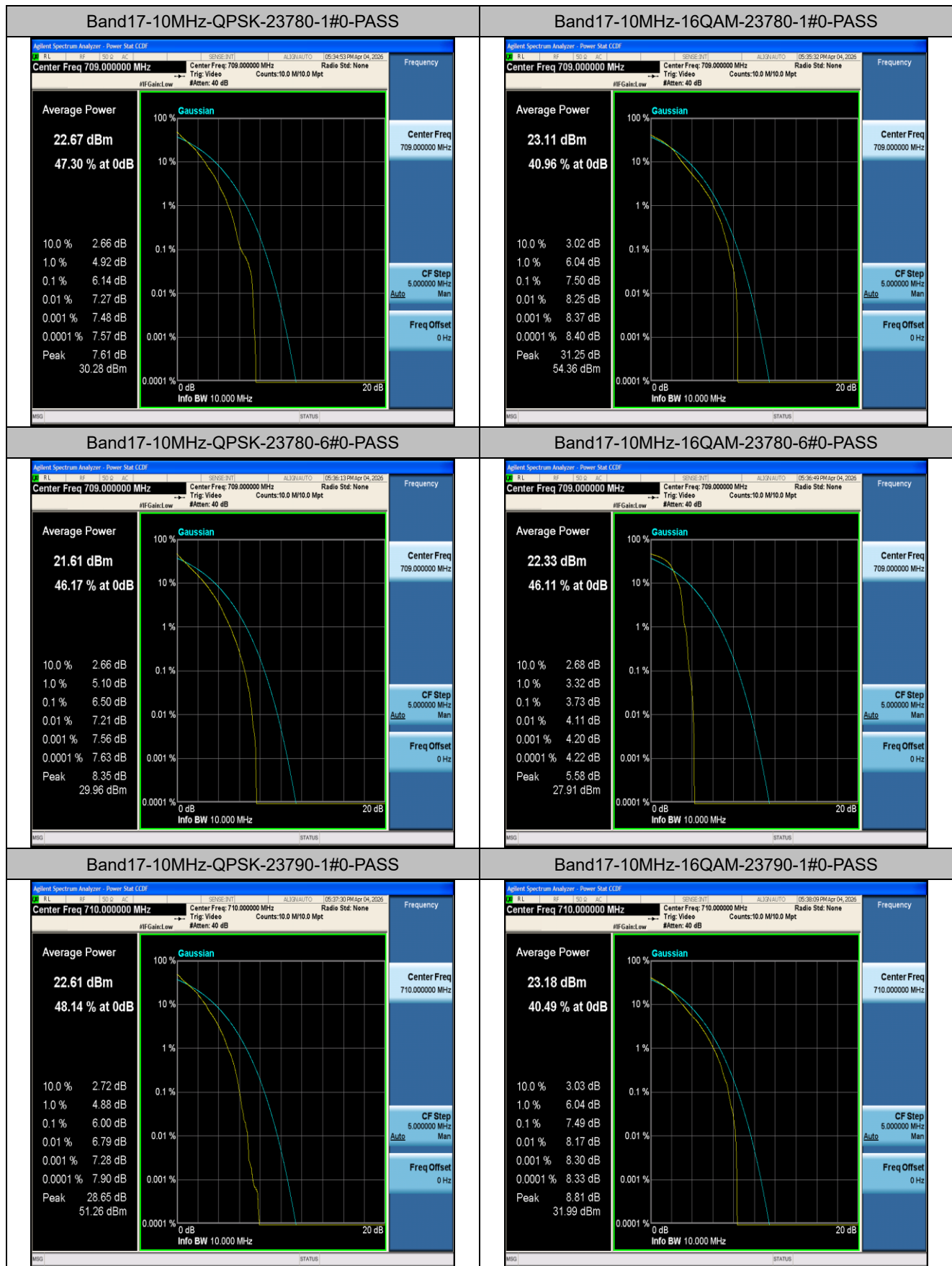
Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Power (dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band17	5MHz	QPSK	23755	1	0	Low	22.14	26.49	34.77	PASS
Band17	5MHz	16QAM	23755	1	0	Low	22.47	26.82	34.77	PASS
Band17	5MHz	QPSK	23755	1	5	Low	22.22	26.57	34.77	PASS
Band17	5MHz	16QAM	23755	1	5	Low	22.41	26.76	34.77	PASS
Band17	5MHz	QPSK	23755	6	0	Low	20.99	25.34	34.77	PASS
Band17	5MHz	16QAM	23755	6	0	Low	21.95	26.3	34.77	PASS
Band17	5MHz	QPSK	23790	1	0	Low	22.06	26.41	34.77	PASS
Band17	5MHz	16QAM	23790	1	0	Low	22.37	26.72	34.77	PASS
Band17	5MHz	QPSK	23790	1	5	Low	22.05	26.4	34.77	PASS
Band17	5MHz	16QAM	23790	1	5	Low	22.34	26.69	34.77	PASS
Band17	5MHz	QPSK	23790	6	0	Low	20.95	25.3	34.77	PASS
Band17	5MHz	16QAM	23790	6	0	Low	21.75	26.1	34.77	PASS
Band17	5MHz	QPSK	23825	1	0	High	22.2	26.55	34.77	PASS
Band17	5MHz	16QAM	23825	1	0	High	22.5	26.85	34.77	PASS
Band17	5MHz	QPSK	23825	1	5	High	22.21	26.56	34.77	PASS
Band17	5MHz	16QAM	23825	1	5	High	22.51	26.86	34.77	PASS
Band17	5MHz	QPSK	23825	6	0	High	21.06	25.41	34.77	PASS
Band17	5MHz	16QAM	23825	6	0	High	22.07	26.42	34.77	PASS
Band17	10MHz	QPSK	23780	1	0	Low	22.13	26.48	34.77	PASS
Band17	10MHz	16QAM	23780	1	0	Low	22.56	26.91	34.77	PASS
Band17	10MHz	QPSK	23780	1	5	Low	22.15	26.5	34.77	PASS
Band17	10MHz	16QAM	23780	1	5	Low	22.54	26.89	34.77	PASS
Band17	10MHz	QPSK	23780	6	0	Low	20.97	25.32	34.77	PASS
Band17	10MHz	16QAM	23780	6	0	Low	21.85	26.2	34.77	PASS
Band17	10MHz	QPSK	23790	1	0	Low	22.13	26.48	34.77	PASS
Band17	10MHz	16QAM	23790	1	0	Low	22.51	26.86	34.77	PASS
Band17	10MHz	QPSK	23790	1	5	Low	22.13	26.48	34.77	PASS
Band17	10MHz	16QAM	23790	1	5	Low	22.42	26.77	34.77	PASS
Band17	10MHz	QPSK	23790	6	0	Low	20.94	25.29	34.77	PASS
Band17	10MHz	16QAM	23790	6	0	Low	21.83	26.18	34.77	PASS
Band17	10MHz	QPSK	23800	1	0	High	22.2	26.55	34.77	PASS
Band17	10MHz	16QAM	23800	1	0	High	22.54	26.89	34.77	PASS
Band17	10MHz	QPSK	23800	1	5	High	22.22	26.57	34.77	PASS
Band17	10MHz	16QAM	23800	1	5	High	22.5	26.85	34.77	PASS
Band17	10MHz	QPSK	23800	6	0	High	21.02	25.37	34.77	PASS
Band17	10MHz	16QAM	23800	6	0	High	22.12	26.47	34.77	PASS

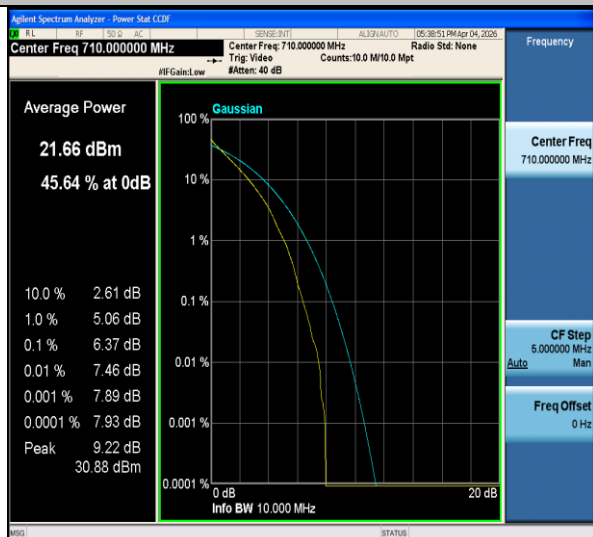
Peak-to-Average Ratio(CCDF) for M1**Test Result**

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result(dB)	Limit(dB)	Verdict
Band17	10MHz	QPSK	23780	1	0	Low	6.14	<=13	PASS
Band17	10MHz	16QAM	23780	1	0	Low	7.50	<=13	PASS
Band17	10MHz	QPSK	23780	6	0	Low	6.50	<=13	PASS
Band17	10MHz	16QAM	23780	6	0	Low	3.73	<=13	PASS
Band17	10MHz	QPSK	23790	1	0	Low	6.00	<=13	PASS
Band17	10MHz	16QAM	23790	1	0	Low	7.49	<=13	PASS
Band17	10MHz	QPSK	23790	6	0	Low	6.37	<=13	PASS
Band17	10MHz	16QAM	23790	6	0	Low	3.65	<=13	PASS
Band17	10MHz	QPSK	23800	1	0	High	5.73	<=13	PASS
Band17	10MHz	16QAM	23800	1	0	High	7.38	<=13	PASS
Band17	10MHz	QPSK	23800	6	0	High	6.56	<=13	PASS
Band17	10MHz	16QAM	23800	6	0	High	3.63	<=13	PASS

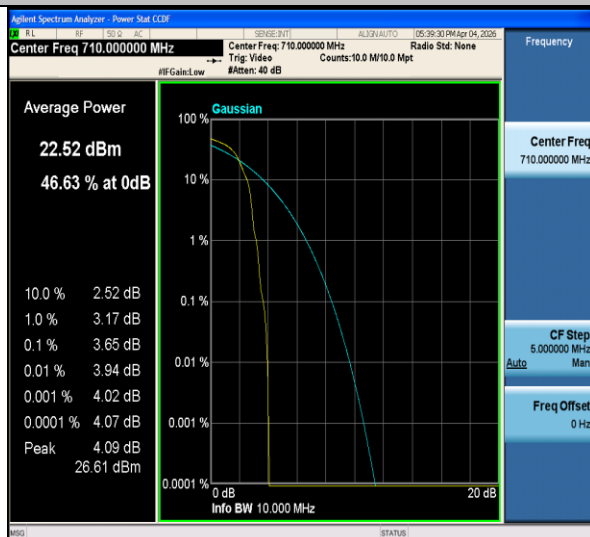
Test Graphs



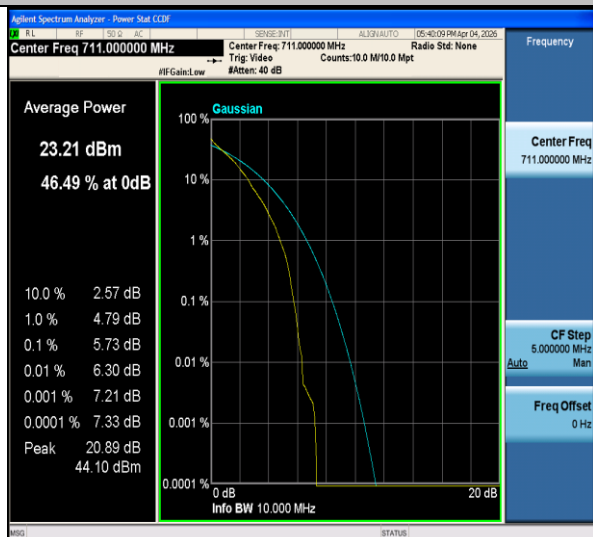
Band17-10MHz-QPSK-23790-6#0-PASS



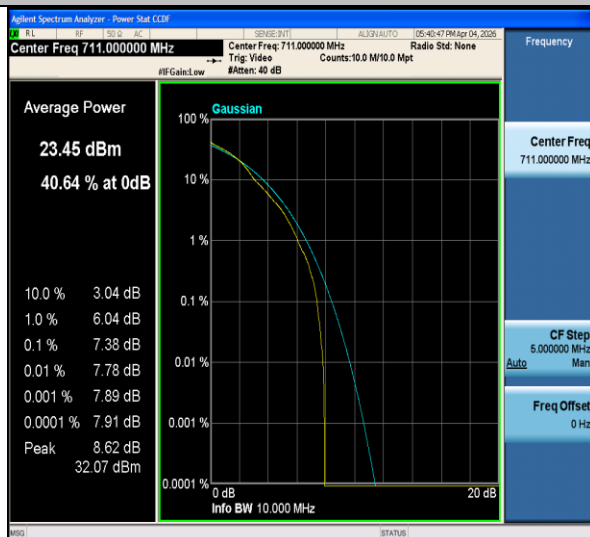
Band17-10MHz-16QAM-23790-6#0-PASS



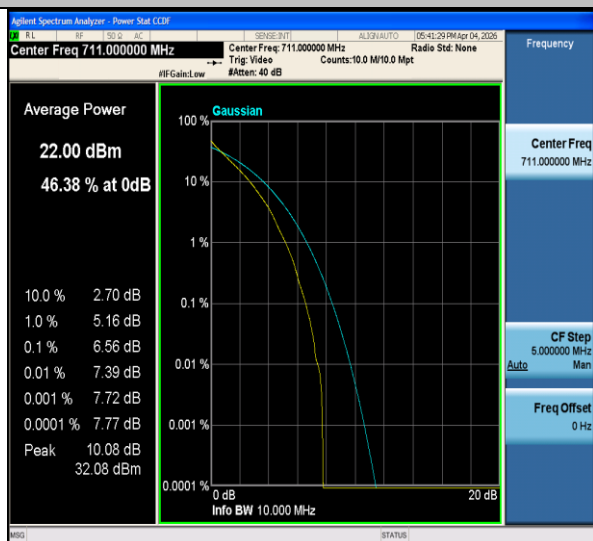
Band17-10MHz-QPSK-23800-1#0-PASS



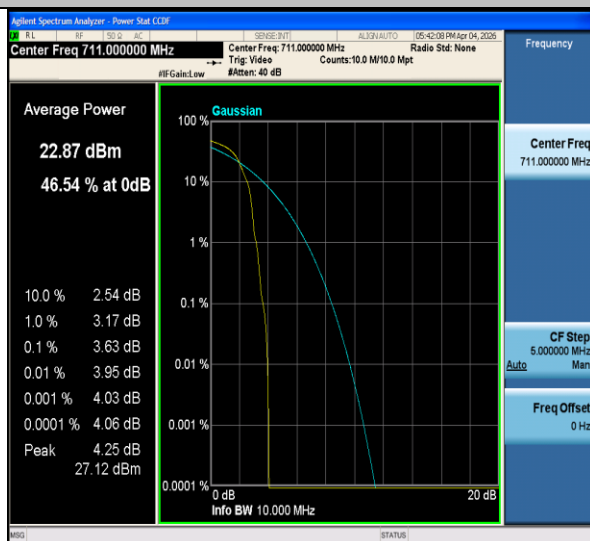
Band17-10MHz-16QAM-23800-1#0-PASS



Band17-10MHz-QPSK-23800-6#0-PASS



Band17-10MHz-16QAM-23800-6#0-PASS

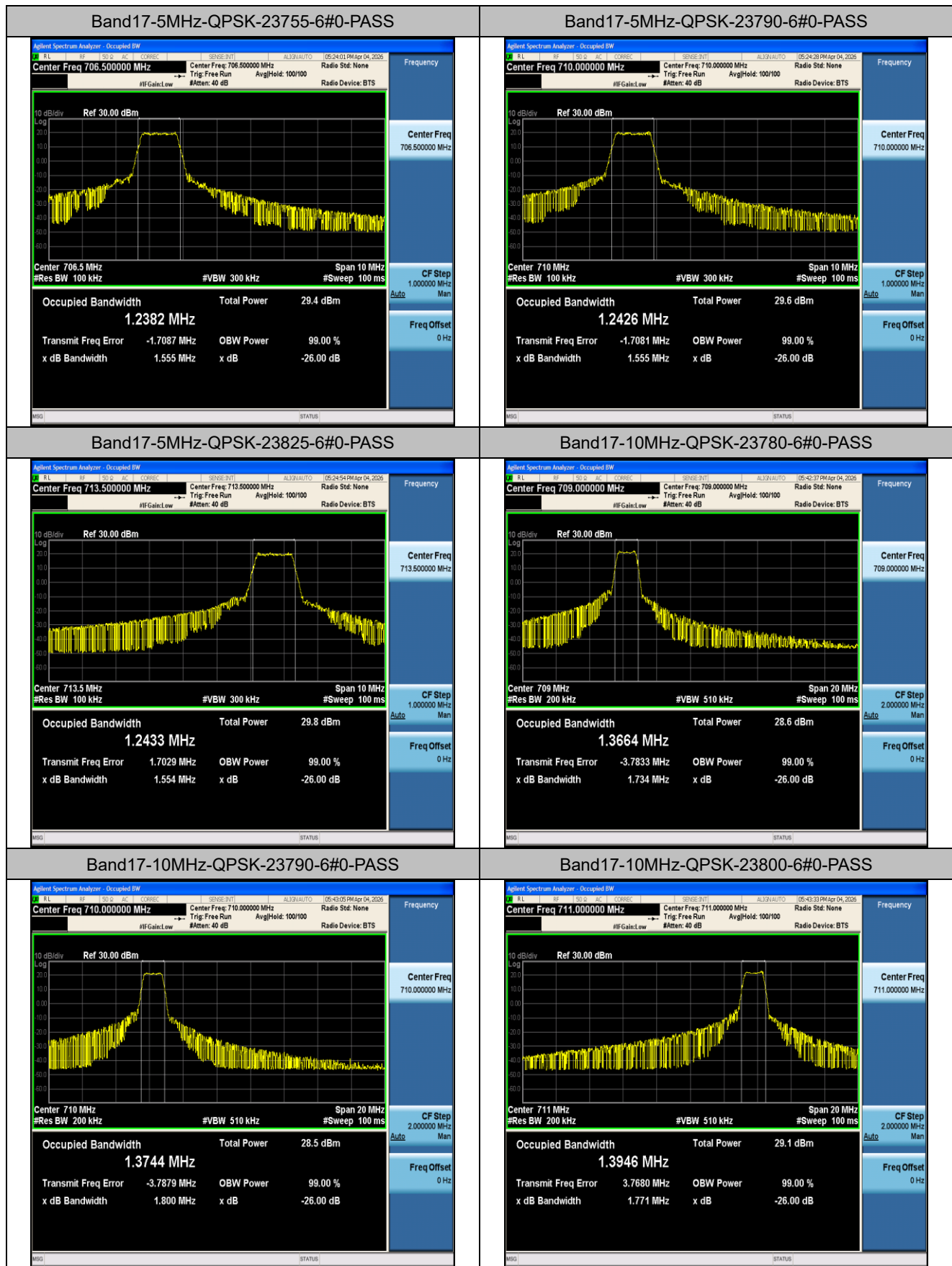


26dB Bandwidth and Occupied Bandwidth for M1

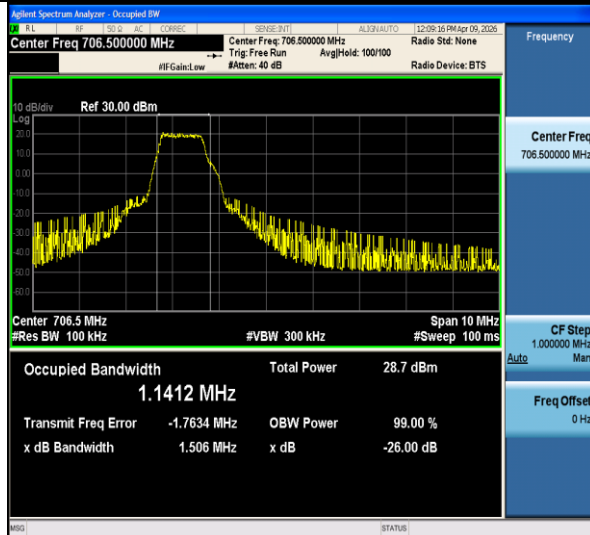
Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band17	5MHz	QPSK	23755	6	0	Low	1.2382	1.555	PASS
Band17	5MHz	QPSK	23790	6	0	Low	1.2426	1.555	PASS
Band17	5MHz	QPSK	23825	6	0	High	1.2433	1.554	PASS
Band17	10MHz	QPSK	23780	6	0	Low	1.3664	1.734	PASS
Band17	10MHz	QPSK	23790	6	0	Low	1.3744	1.800	PASS
Band17	10MHz	QPSK	23800	6	0	High	1.3946	1.771	PASS
Band17	5MHz	16QAM	23755	5	0	Low	1.1412	1.506	PASS
Band17	5MHz	16QAM	23790	5	0	Low	1.1368	1.498	PASS
Band17	5MHz	16QAM	23825	5	0	High	1.1320	1.481	PASS
Band17	10MHz	16QAM	23780	5	0	Low	1.2918	2.040	PASS
Band17	10MHz	16QAM	23790	5	0	Low	1.3047	1.919	PASS
Band17	10MHz	16QAM	23800	5	0	High	1.2871	1.841	PASS

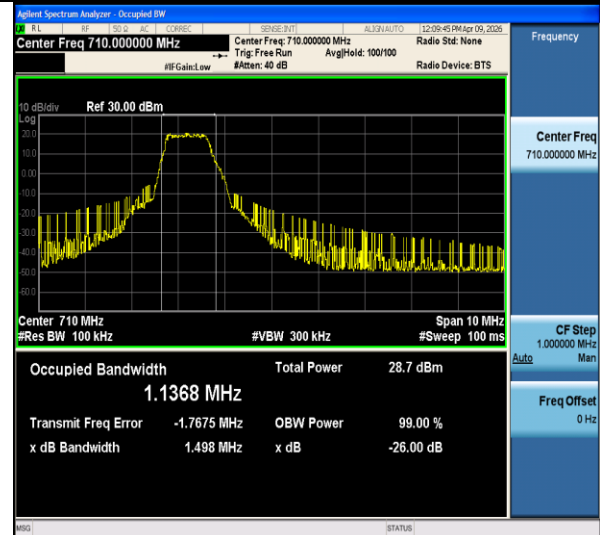
Test Graphs



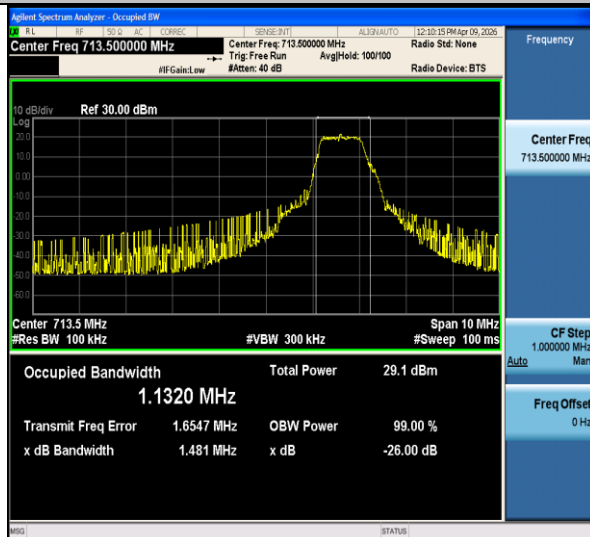
Band17-5MHz-16QAM-23755-5#0-PASS



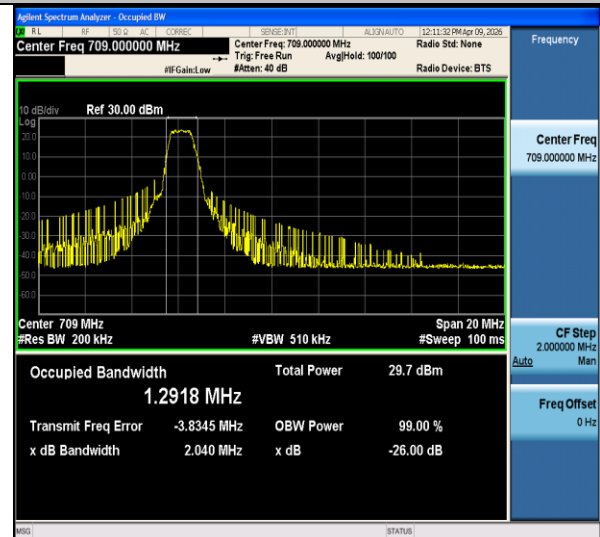
Band17-5MHz-16QAM-23790-5#0-PASS



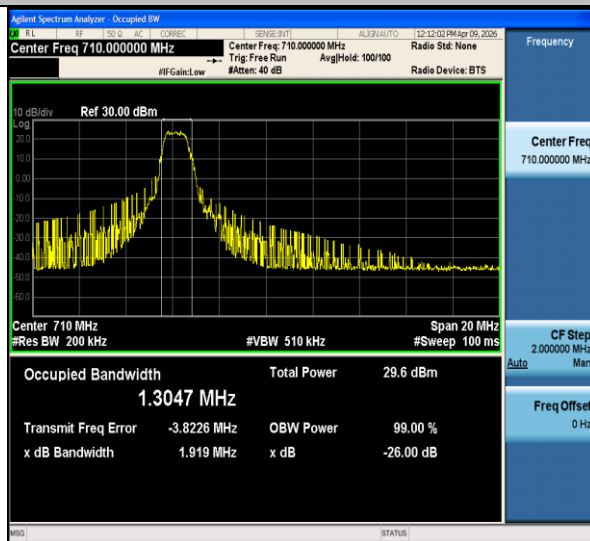
Band17-5MHz-16QAM-23825-5#0-PASS



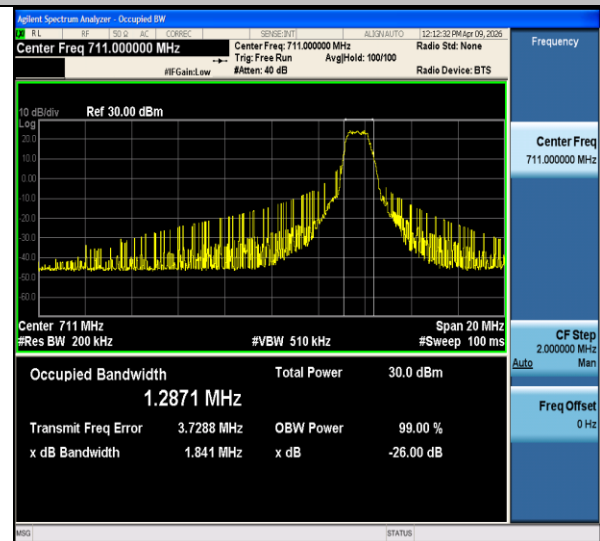
Band17-10MHz-16QAM-23780-5#0-PASS



Band17-10MHz-16QAM-23790-5#0-PASS

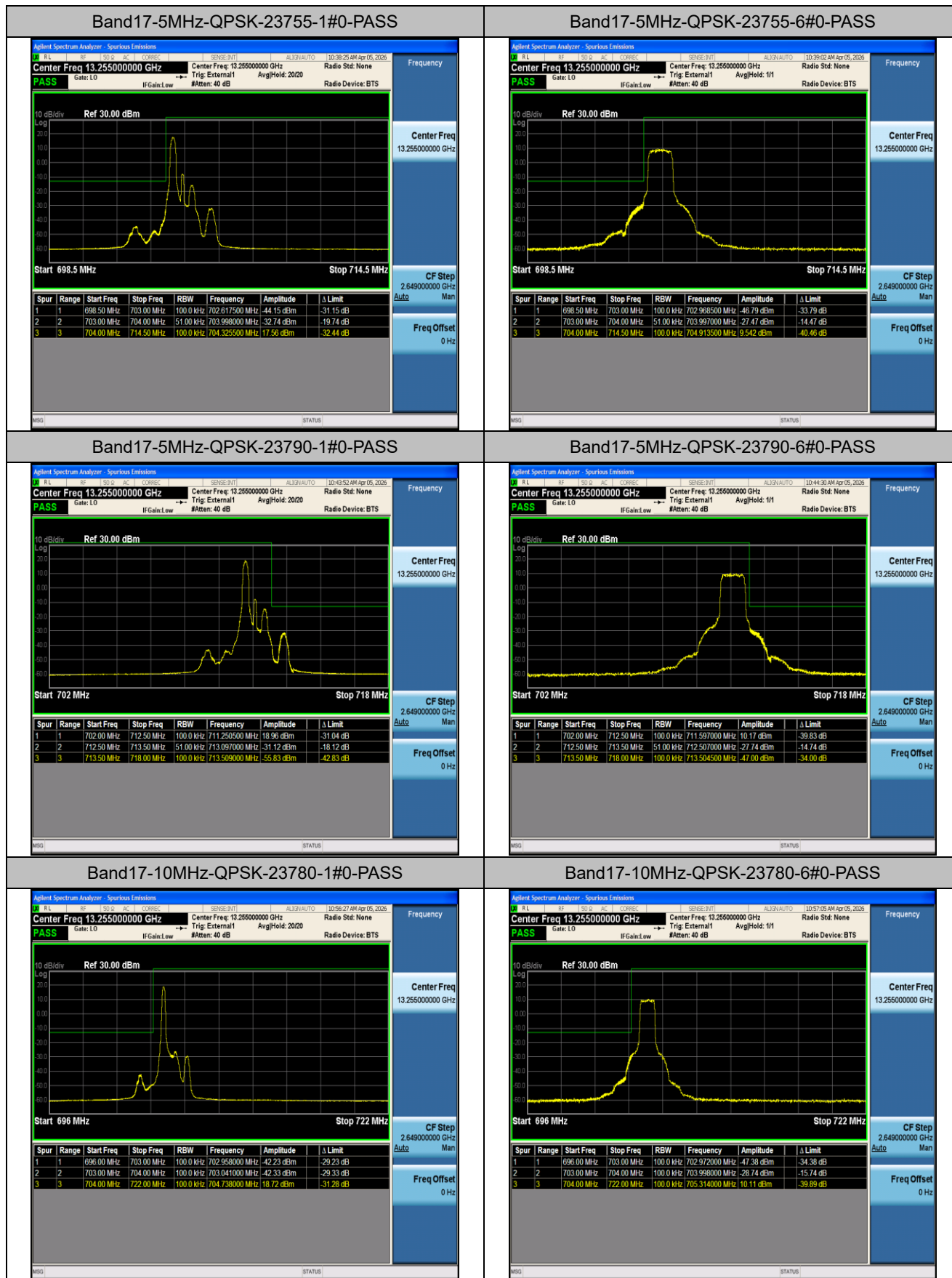


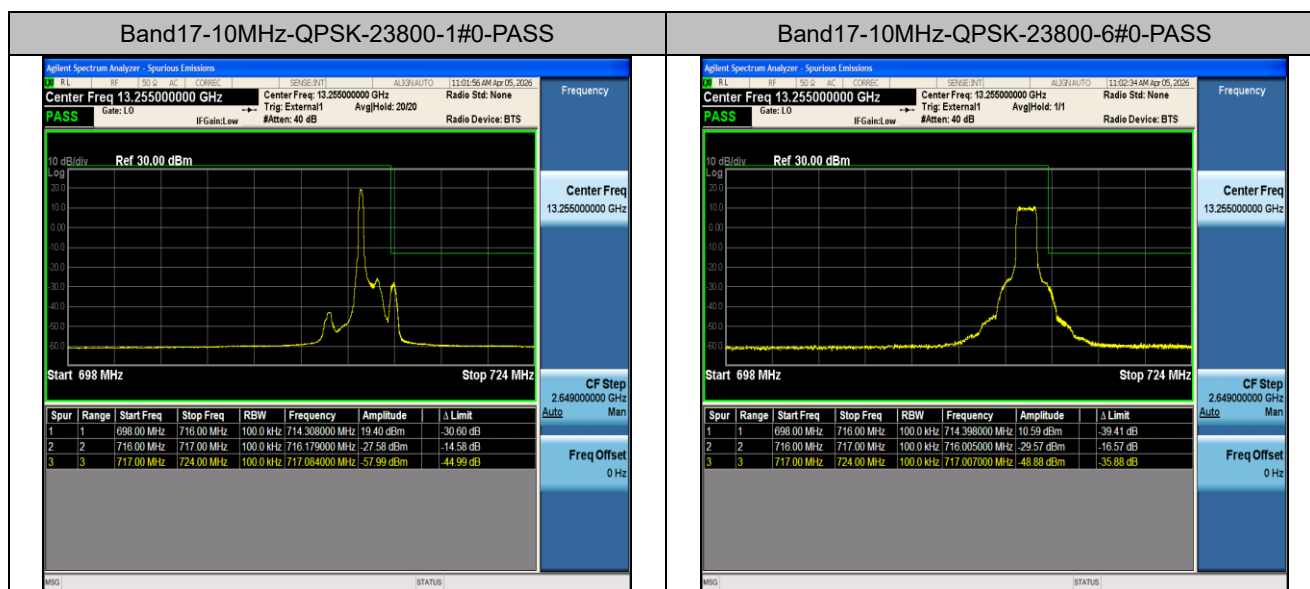
Band17-10MHz-16QAM-23800-5#0-PASS



Band Edge for M1

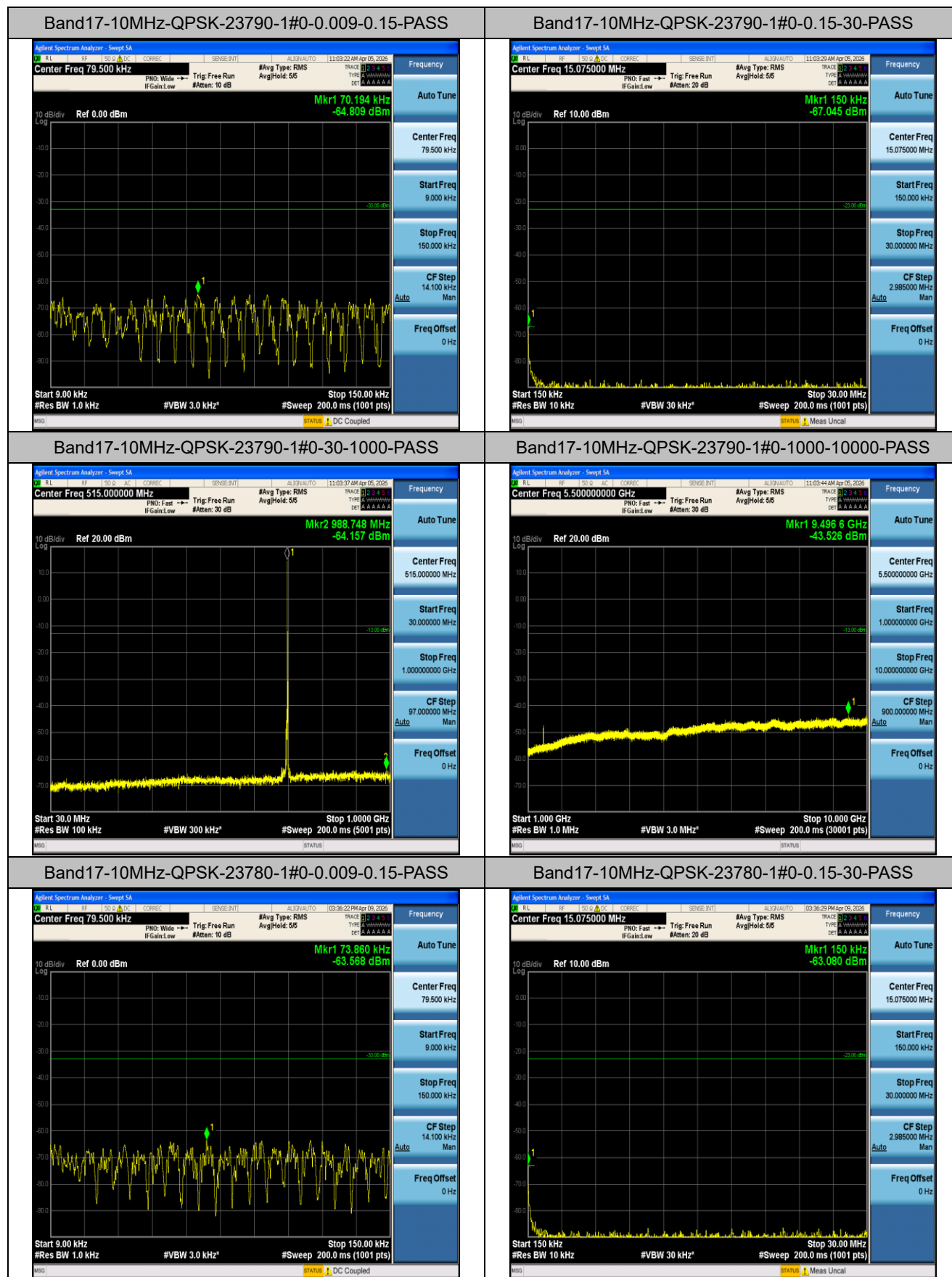
Test Graphs



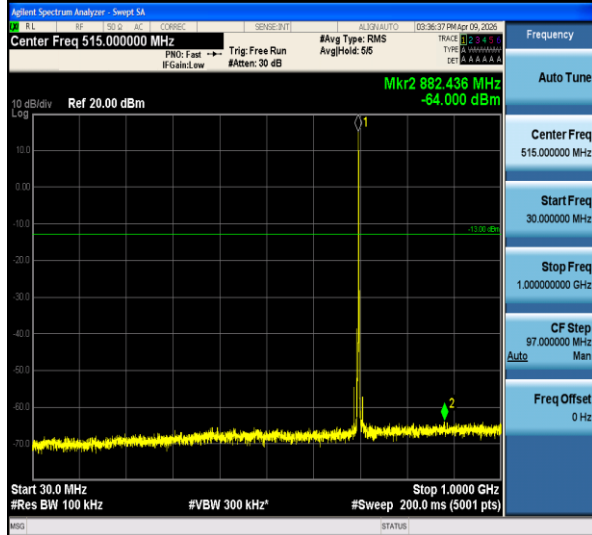


Conducted Spurious Emission for M1

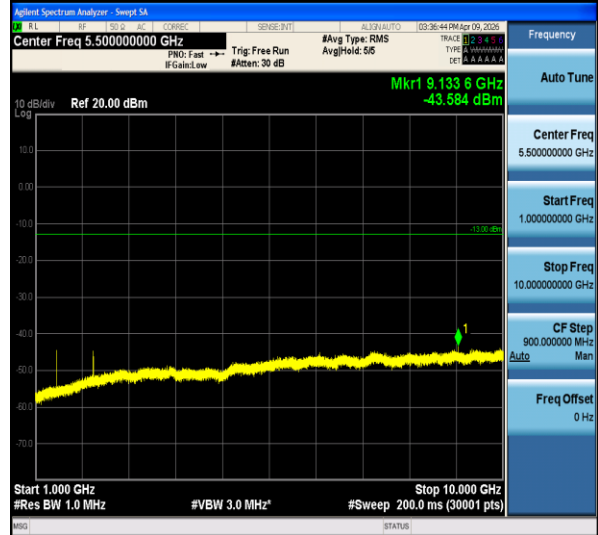
Test Graphs



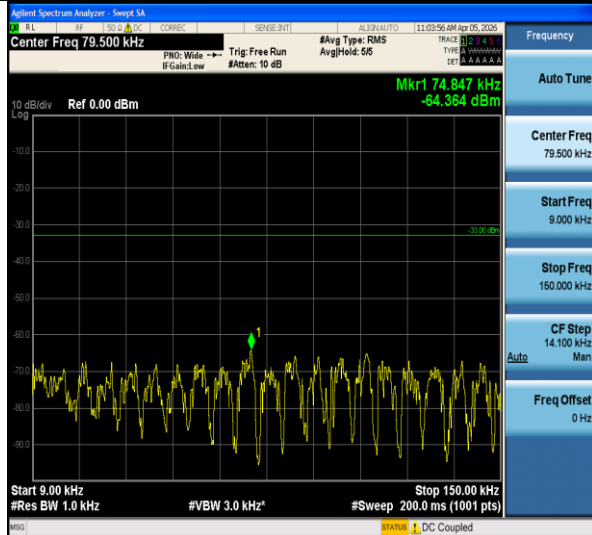
Band17-10MHz-QPSK-23780-1#0-30-1000-PASS



Band17-10MHz-QPSK-23780-1#0-1000-10000-PASS



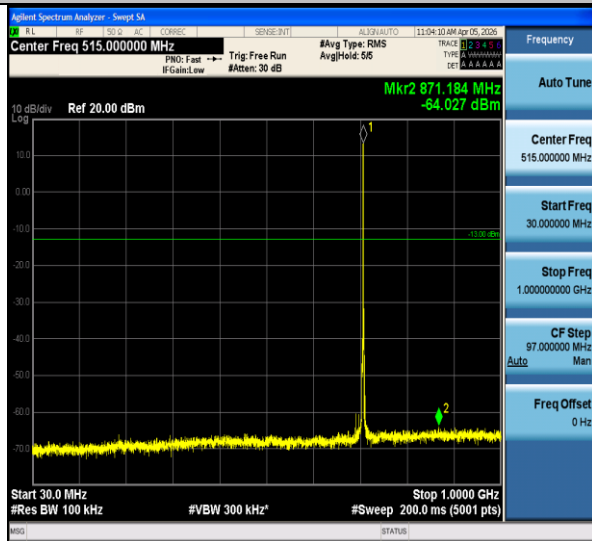
Band17-10MHz-QPSK-23800-1#0-0.009-0.15-PASS



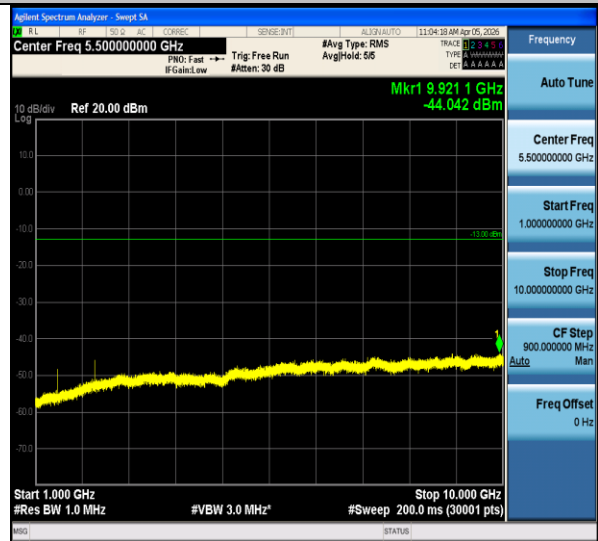
Band17-10MHz-QPSK-23800-1#0-0.15-30-PASS



Band17-10MHz-QPSK-23800-1#0-30-1000-PASS



Band17-10MHz-QPSK-23800-1#0-1000-10000-PASS



Frequency Stability for M1

Test Result

Voltage											
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band17	10MHz	QPSK	23790	6	0	Low	VN	NT	1.40	0.001972	PASS
Band17	10MHz	QPSK	23790	6	0	Low	VL	NT	2.30	0.003239	PASS
Band17	10MHz	QPSK	23790	6	0	Low	VH	NT	4.20	0.005915	PASS

Temperature											
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band17	10MHz	QPSK	23790	6	0	Low	NV	-30	-3.80	-0.005352	PASS
Band17	10MHz	QPSK	23790	6	0	Low	NV	-20	-3.60	-0.005070	PASS
Band17	10MHz	QPSK	23790	6	0	Low	NV	-10	-3.30	-0.004648	PASS
Band17	10MHz	QPSK	23790	6	0	Low	NV	0	-2.90	-0.004085	PASS
Band17	10MHz	QPSK	23790	6	0	Low	NV	10	-3.90	-0.005493	PASS
Band17	10MHz	QPSK	23790	6	0	Low	NV	20	-2.60	-0.003662	PASS
Band17	10MHz	QPSK	23790	6	0	Low	NV	30	-2.40	-0.003380	PASS
Band17	10MHz	QPSK	23790	6	0	Low	NV	40	-2.10	-0.002958	PASS
Band17	10MHz	QPSK	23790	6	0	Low	NV	50	-1.10	-0.001549	PASS

~The End~