

Appendix-A LTE Cat M1 Band 85

Effective (Isotropic) Radiated Power Output Data for M1

Test Result

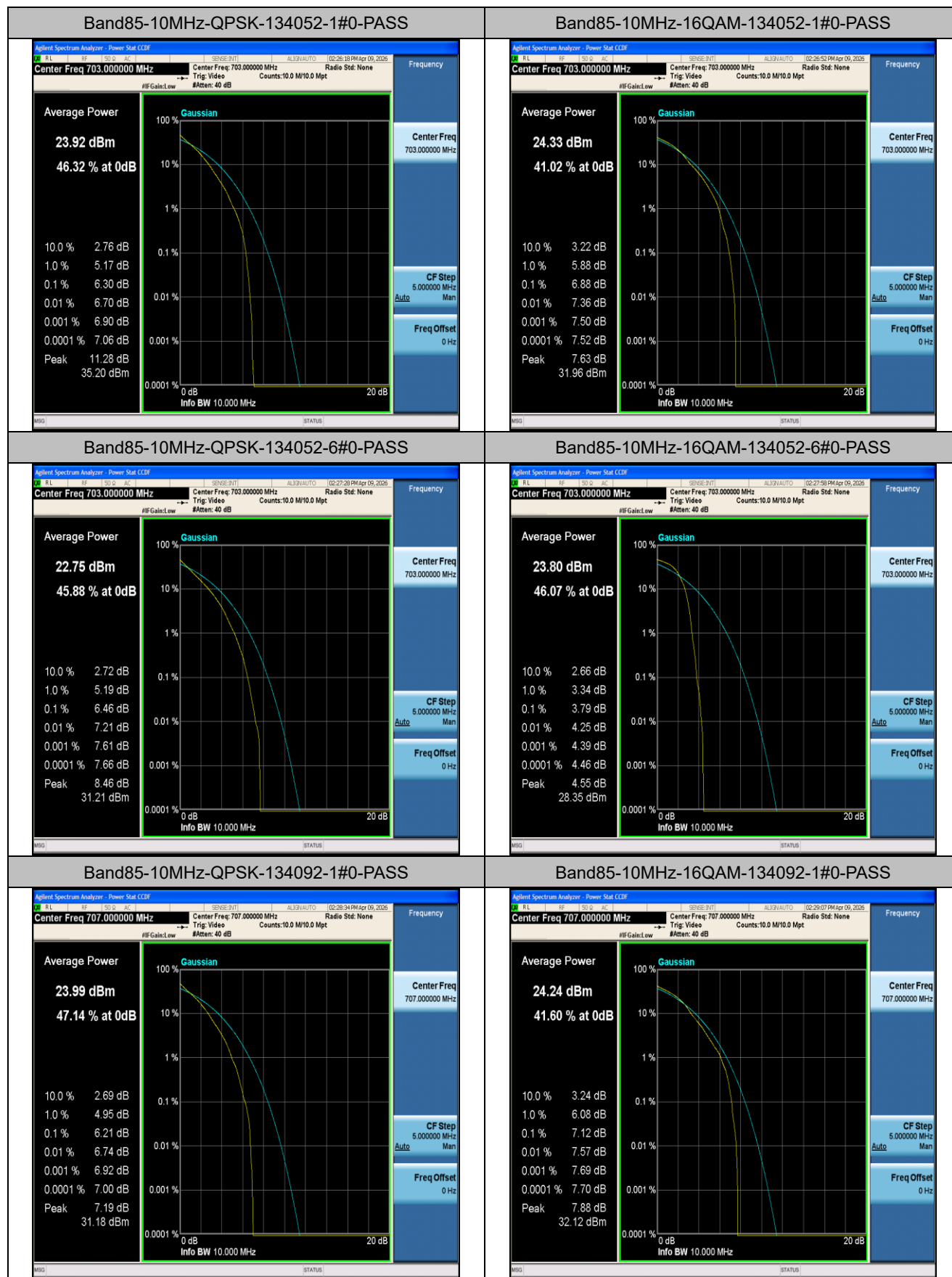
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Power (dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band85	5MHz	QPSK	134027	1	0	Low	23.58	27.83	34.77	PASS
Band85	5MHz	16QAM	134027	1	0	Low	24.06	28.31	34.77	PASS
Band85	5MHz	QPSK	134027	1	5	Low	23.77	28.02	34.77	PASS
Band85	5MHz	16QAM	134027	1	5	Low	24.19	28.44	34.77	PASS
Band85	5MHz	QPSK	134027	6	0	Low	22.45	26.7	34.77	PASS
Band85	5MHz	16QAM	134027	6	0	Low	23.59	27.84	34.77	PASS
Band85	5MHz	QPSK	134092	1	0	Low	23.73	27.98	34.77	PASS
Band85	5MHz	16QAM	134092	1	0	Low	23.99	28.24	34.77	PASS
Band85	5MHz	QPSK	134092	1	5	Low	23.86	28.11	34.77	PASS
Band85	5MHz	16QAM	134092	1	5	Low	24.01	28.26	34.77	PASS
Band85	5MHz	QPSK	134092	6	0	Low	22.5	26.75	34.77	PASS
Band85	5MHz	16QAM	134092	6	0	Low	23.62	27.87	34.77	PASS
Band85	5MHz	QPSK	134157	1	0	High	23.85	28.1	34.77	PASS
Band85	5MHz	16QAM	134157	1	0	High	24.08	28.33	34.77	PASS
Band85	5MHz	QPSK	134157	1	5	High	23.87	28.12	34.77	PASS
Band85	5MHz	16QAM	134157	1	5	High	24.29	28.54	34.77	PASS
Band85	5MHz	QPSK	134157	6	0	High	22.62	26.87	34.77	PASS
Band85	5MHz	16QAM	134157	6	0	High	23.76	28.01	34.77	PASS
Band85	10MHz	QPSK	134052	1	0	Low	23.66	27.91	34.77	PASS
Band85	10MHz	16QAM	134052	1	0	Low	23.85	28.1	34.77	PASS
Band85	10MHz	QPSK	134052	1	5	Low	23.76	28.01	34.77	PASS
Band85	10MHz	16QAM	134052	1	5	Low	24.17	28.42	34.77	PASS
Band85	10MHz	QPSK	134052	6	0	Low	22.46	26.71	34.77	PASS
Band85	10MHz	16QAM	134052	6	0	Low	23.58	27.83	34.77	PASS
Band85	10MHz	QPSK	134092	1	0	Low	23.68	27.93	34.77	PASS
Band85	10MHz	16QAM	134092	1	0	Low	24.07	28.32	34.77	PASS
Band85	10MHz	QPSK	134092	1	5	Low	23.83	28.08	34.77	PASS
Band85	10MHz	16QAM	134092	1	5	Low	24.03	28.28	34.77	PASS
Band85	10MHz	QPSK	134092	6	0	Low	22.51	26.76	34.77	PASS
Band85	10MHz	16QAM	134092	6	0	Low	23.54	27.79	34.77	PASS
Band85	10MHz	QPSK	134132	1	0	High	23.89	28.14	34.77	PASS
Band85	10MHz	16QAM	134132	1	0	High	24.09	28.34	34.77	PASS
Band85	10MHz	QPSK	134132	1	5	High	23.91	28.16	34.77	PASS
Band85	10MHz	16QAM	134132	1	5	High	24.25	28.5	34.77	PASS
Band85	10MHz	QPSK	134132	6	0	High	22.65	26.9	34.77	PASS
Band85	10MHz	16QAM	134132	6	0	High	23.78	28.03	34.77	PASS

Peak-to-Average Ratio(CCDF) for M1

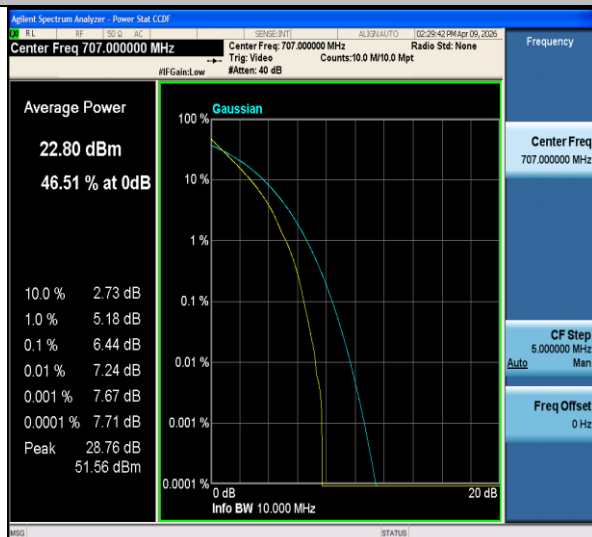
Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result(dB)	Limit(dB)	Verdict
Band85	10MHz	QPSK	134052	1	0	Low	6.30	<=13	PASS
Band85	10MHz	16QAM	134052	1	0	Low	6.88	<=13	PASS
Band85	10MHz	QPSK	134052	6	0	Low	6.46	<=13	PASS
Band85	10MHz	16QAM	134052	6	0	Low	3.79	<=13	PASS
Band85	10MHz	QPSK	134092	1	0	Low	6.21	<=13	PASS
Band85	10MHz	16QAM	134092	1	0	Low	7.12	<=13	PASS
Band85	10MHz	QPSK	134092	6	0	Low	6.44	<=13	PASS
Band85	10MHz	16QAM	134092	6	0	Low	3.73	<=13	PASS
Band85	10MHz	QPSK	134132	1	0	High	6.23	<=13	PASS
Band85	10MHz	16QAM	134132	1	0	High	6.71	<=13	PASS
Band85	10MHz	QPSK	134132	6	0	High	6.41	<=13	PASS
Band85	10MHz	16QAM	134132	6	0	High	3.72	<=13	PASS

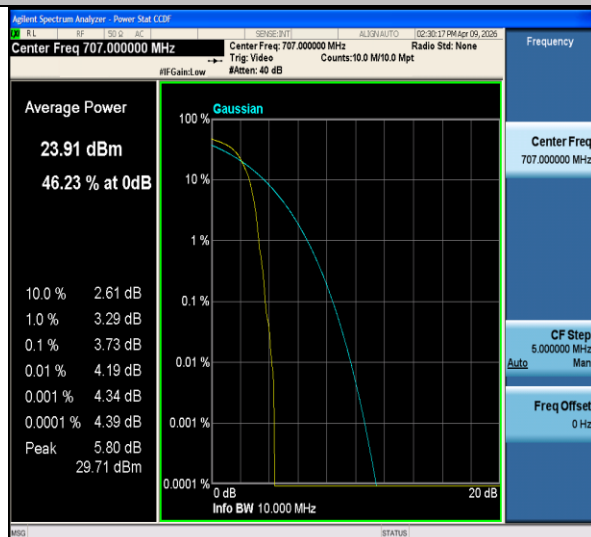
Test Graphs



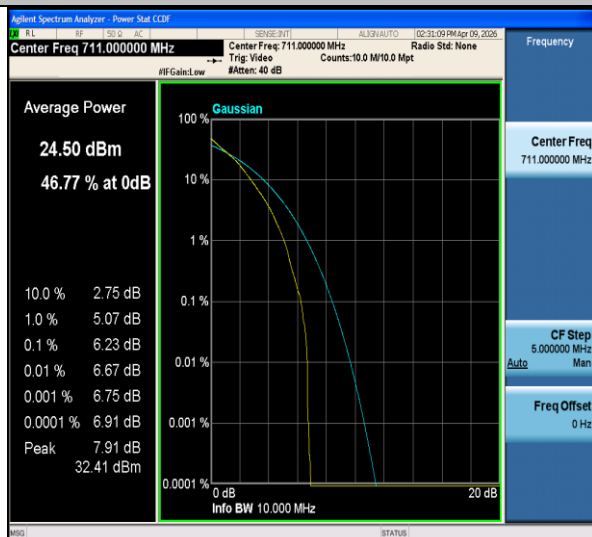
Band85-10MHz-QPSK-134092-6#0-PASS



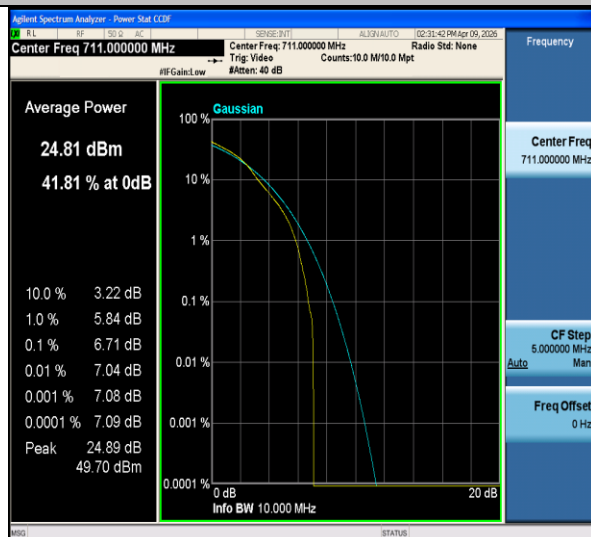
Band85-10MHz-16QAM-134092-6#0-PASS



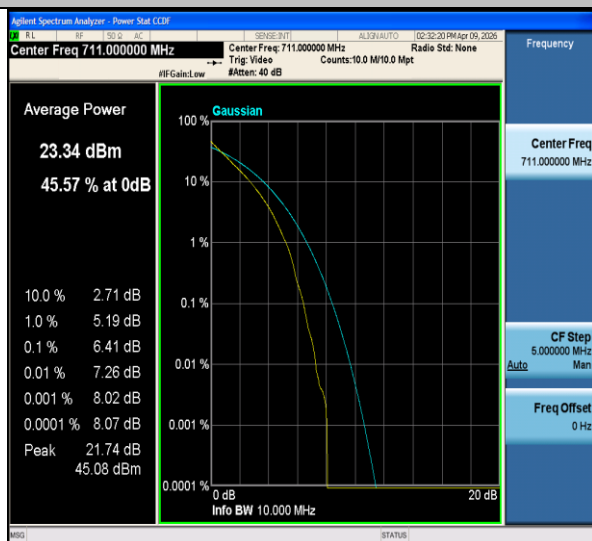
Band85-10MHz-QPSK-134132-1#0-PASS



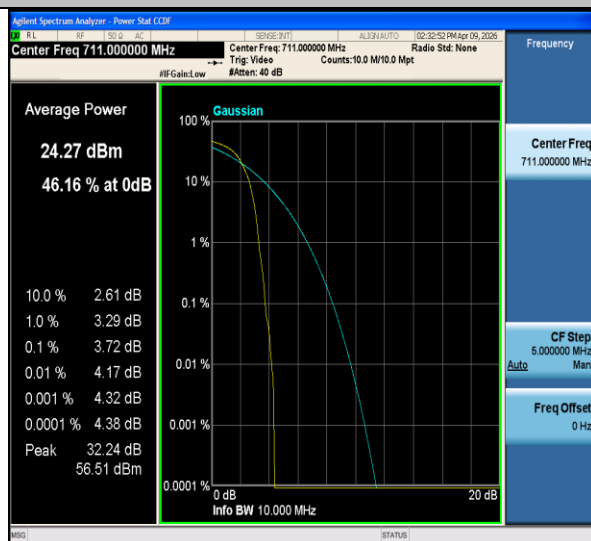
Band85-10MHz-16QAM-134132-1#0-PASS



Band85-10MHz-QPSK-134132-6#0-PASS



Band85-10MHz-16QAM-134132-6#0-PASS

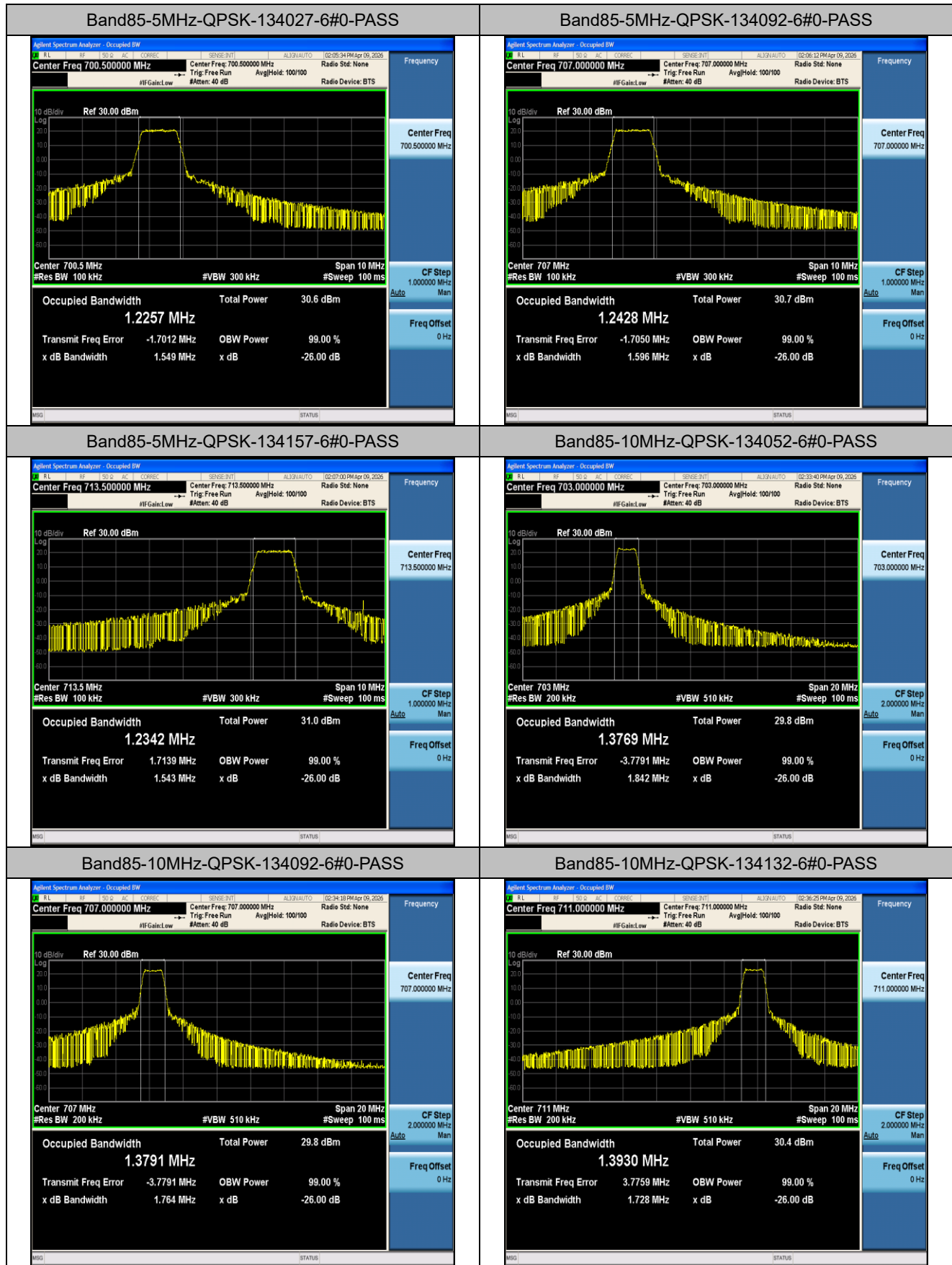


26dB Bandwidth and Occupied Bandwidth for M1

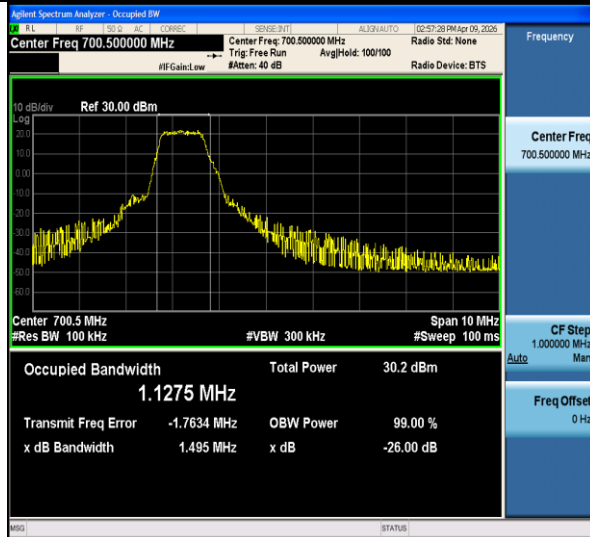
Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band85	5MHz	QPSK	134027	6	0	Low	1.2257	1.549	PASS
Band85	5MHz	QPSK	134092	6	0	Low	1.2428	1.596	PASS
Band85	5MHz	QPSK	134157	6	0	High	1.2342	1.543	PASS
Band85	10MHz	QPSK	134052	6	0	Low	1.3769	1.842	PASS
Band85	10MHz	QPSK	134092	6	0	Low	1.3791	1.764	PASS
Band85	10MHz	QPSK	134132	6	0	High	1.3930	1.728	PASS
Band85	5MHz	16QAM	134027	5	0	Low	1.1275	1.495	PASS
Band85	5MHz	16QAM	134092	5	0	Low	1.1333	1.488	PASS
Band85	5MHz	16QAM	134157	5	0	High	1.1432	1.520	PASS
Band85	10MHz	16QAM	134092	5	0	Low	1.2916	1.682	PASS
Band85	10MHz	16QAM	134052	5	0	Low	1.2925	1.669	PASS
Band85	10MHz	16QAM	134132	5	0	High	1.3079	2.018	PASS

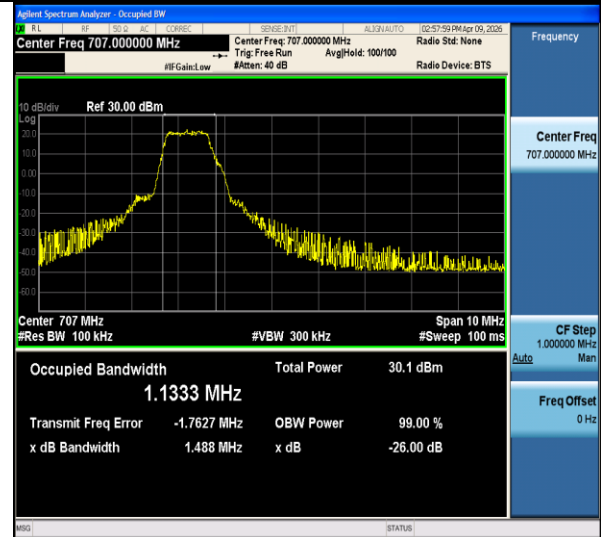
Test Graphs



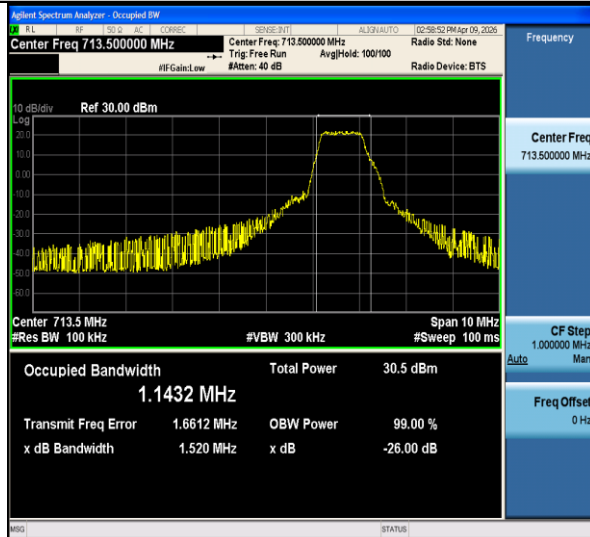
Band85-5MHz-16QAM-134027-5#0-PASS



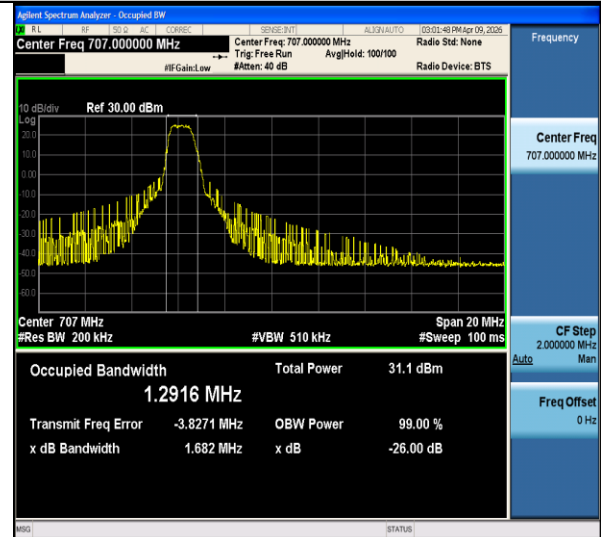
Band85-5MHz-16QAM-134092-5#0-PASS



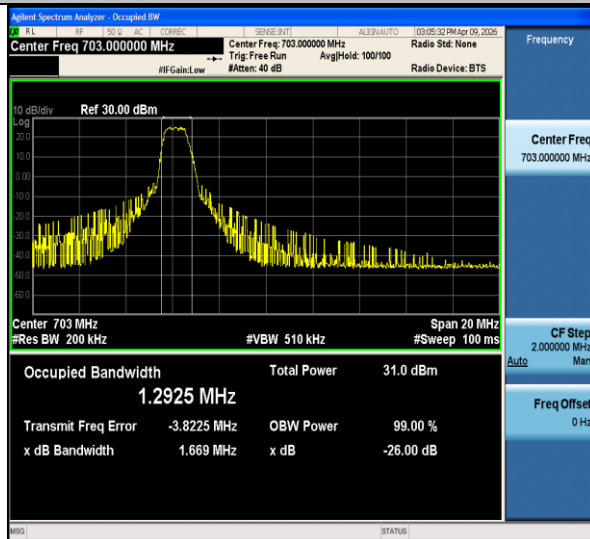
Band85-5MHz-16QAM-134157-5#0-PASS



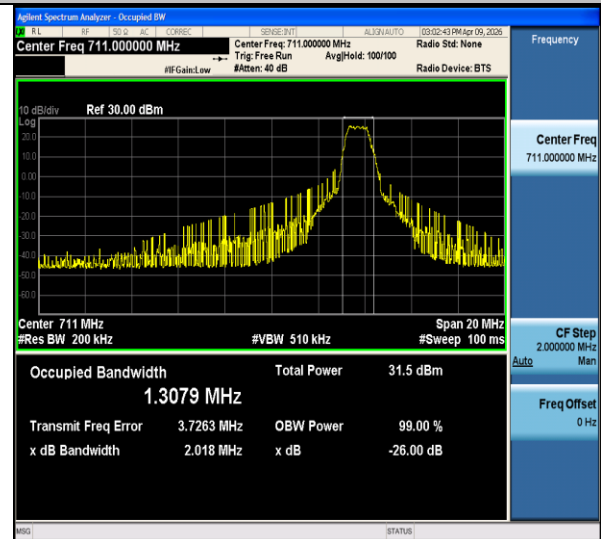
Band85-10MHz-16QAM-134092-5#0-PASS



Band85-10MHz-16QAM-134052-5#0-PASS

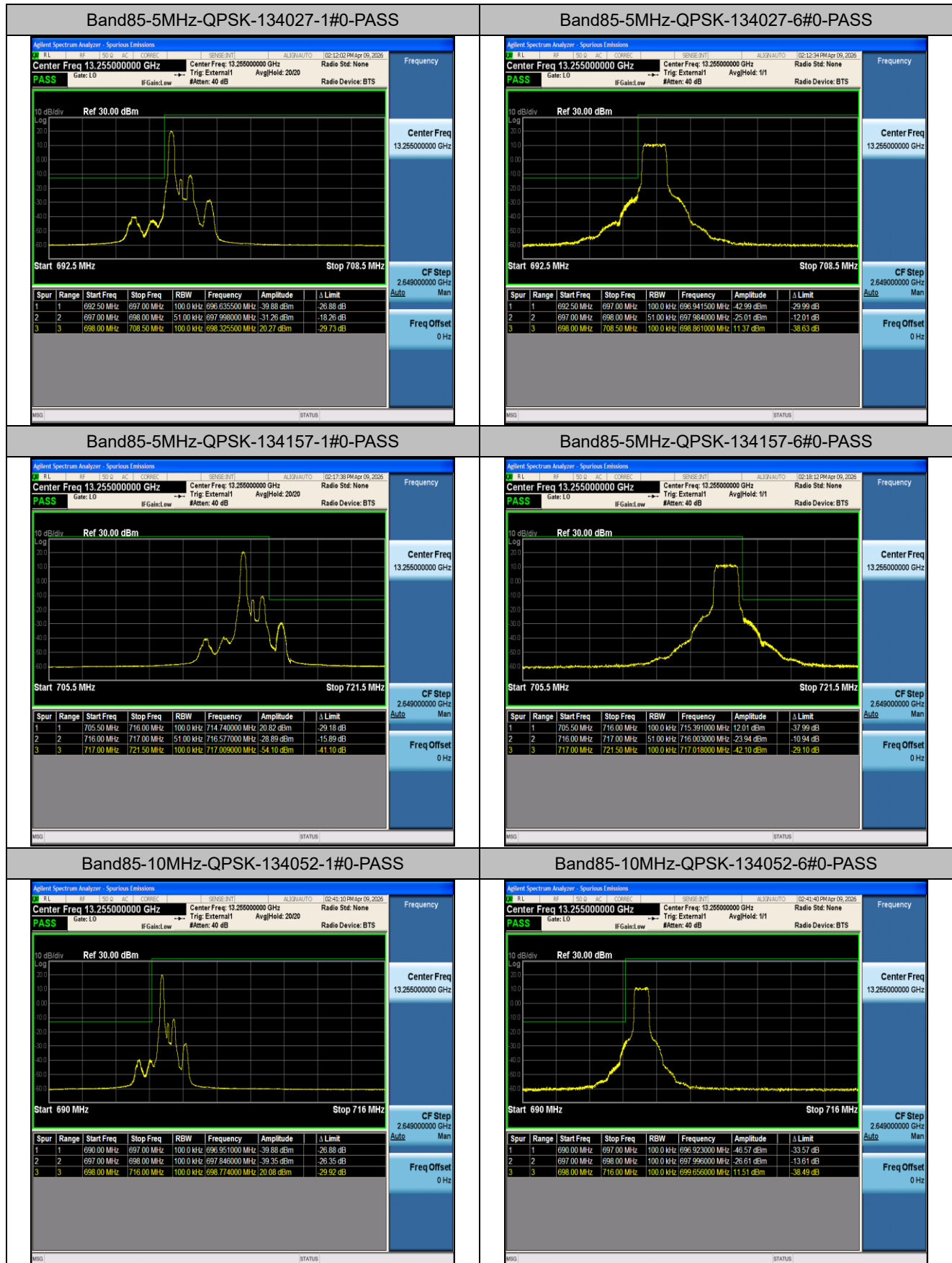


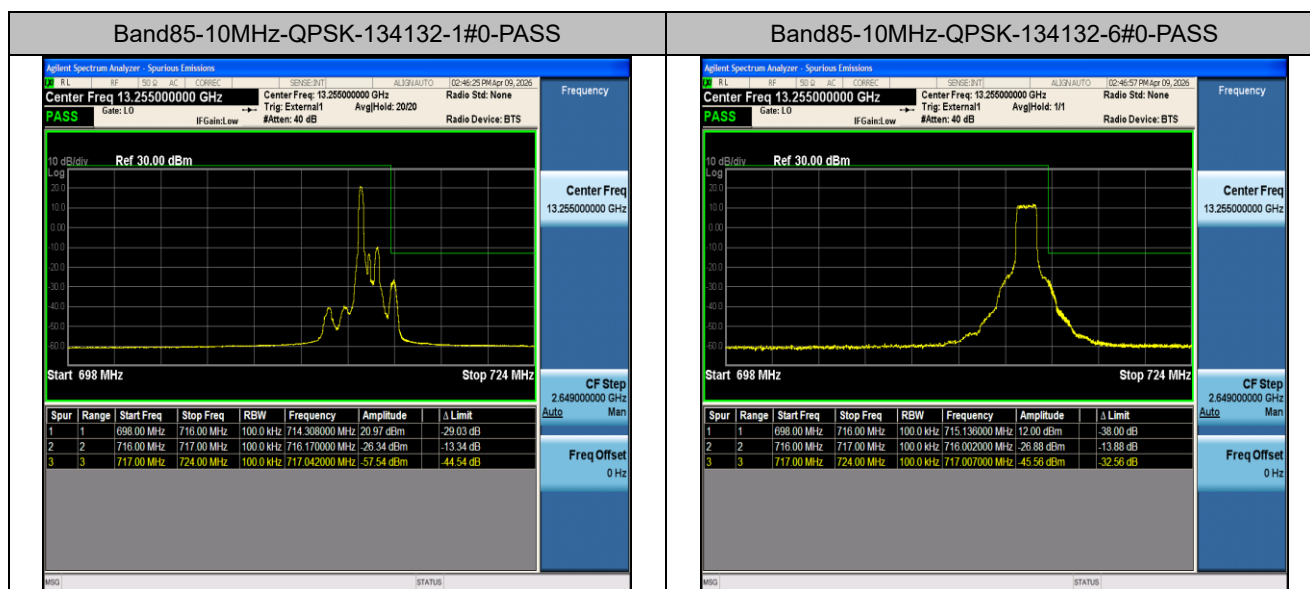
Band85-10MHz-16QAM-134132-5#0-PASS



Band Edge for M1

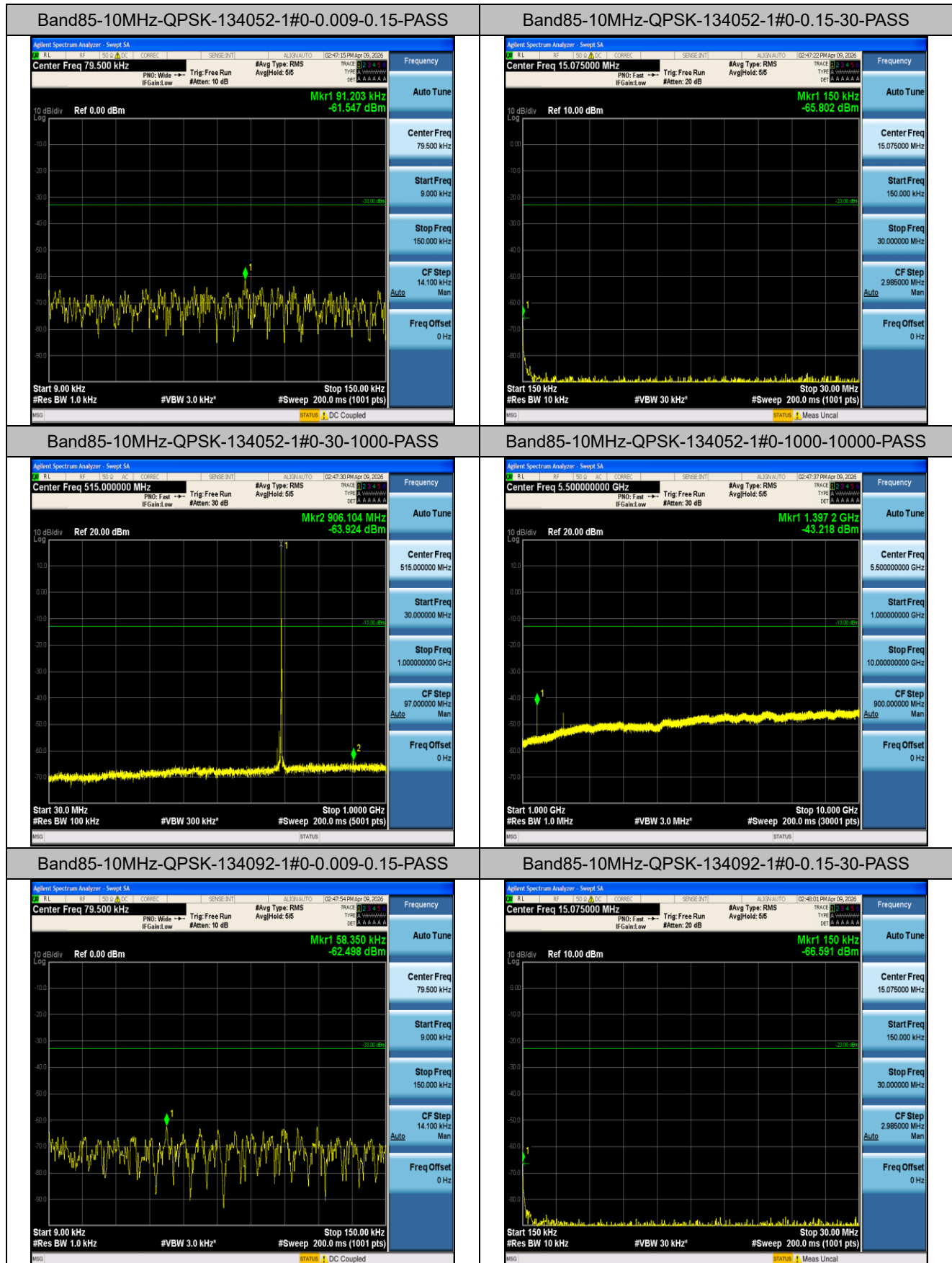
Test Graphs



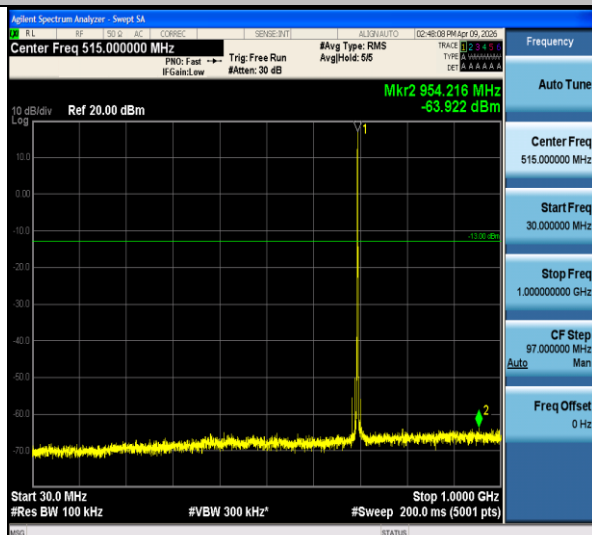


Conducted Spurious Emission for M1

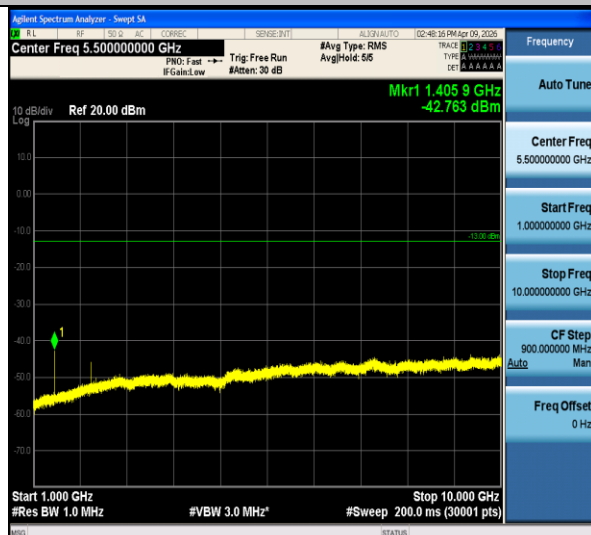
Test Graphs



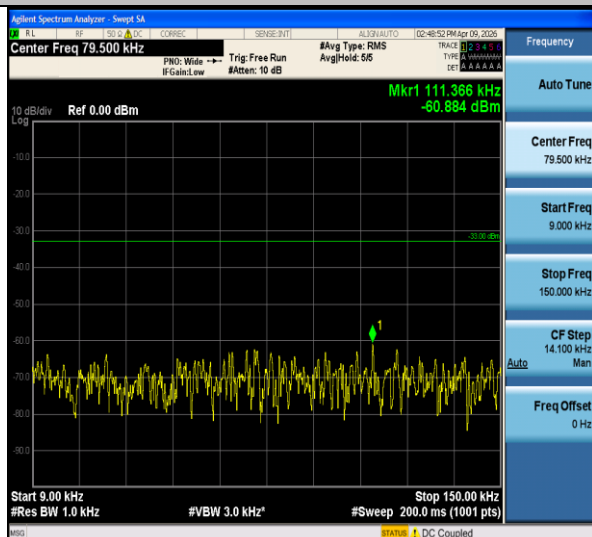
Band85-10MHz-QPSK-134092-1#0-30-1000-PASS



Band85-10MHz-QPSK-134092-1#0-1000-10000-PASS



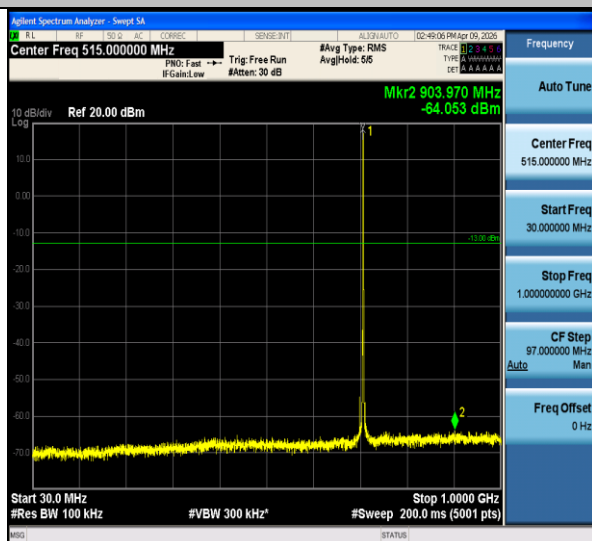
Band85-10MHz-QPSK-134132-1#0-0.009-0.15-PASS



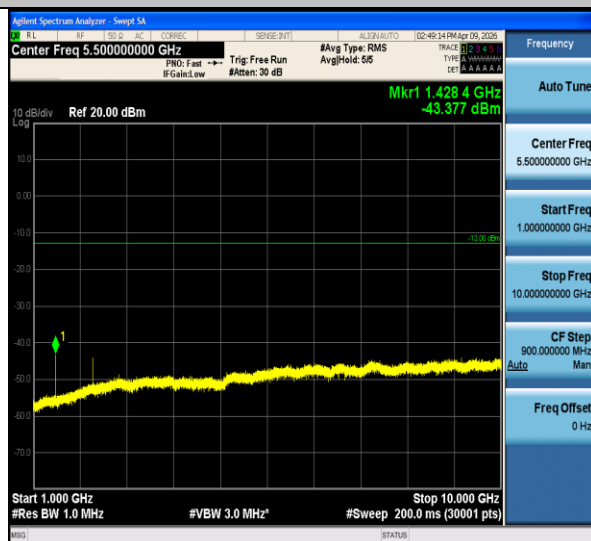
Band85-10MHz-QPSK-134132-1#0-0.15-30-PASS



Band85-10MHz-QPSK-134132-1#0-30-1000-PASS



Band85-10MHz-QPSK-134132-1#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
Band85	10MHz	QPSK	134092	6	0	Low	VN	NT	-7.10	-0.010042	PASS
Band85	10MHz	QPSK	134092	6	0	Low	VL	NT	-6.40	-0.009052	PASS
Band85	10MHz	QPSK	134092	6	0	Low	VH	NT	-7.40	-0.010467	PASS

Temperature											
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band85	10MHz	QPSK	134092	6	0	Low	NV	-30	-7.30	-0.010325	PASS
Band85	10MHz	QPSK	134092	6	0	Low	NV	-20	-7.50	-0.010608	PASS
Band85	10MHz	QPSK	134092	6	0	Low	NV	-10	-7.50	-0.010608	PASS
Band85	10MHz	QPSK	134092	6	0	Low	NV	0	-7.10	-0.010042	PASS
Band85	10MHz	QPSK	134092	6	0	Low	NV	10	-6.70	-0.009477	PASS
Band85	10MHz	QPSK	134092	6	0	Low	NV	20	-7.40	-0.010467	PASS
Band85	10MHz	QPSK	134092	6	0	Low	NV	30	-7.50	-0.010608	PASS
Band85	10MHz	QPSK	134092	6	0	Low	NV	40	-7.20	-0.010184	PASS
Band85	10MHz	QPSK	134092	6	0	Low	NV	50	-7.40	-0.010467	PASS

~The End~