

Appendix-A LTE Cat M1 Band 85

Effective (Isotropic) Radiated Power Output Data for M1

Test Result

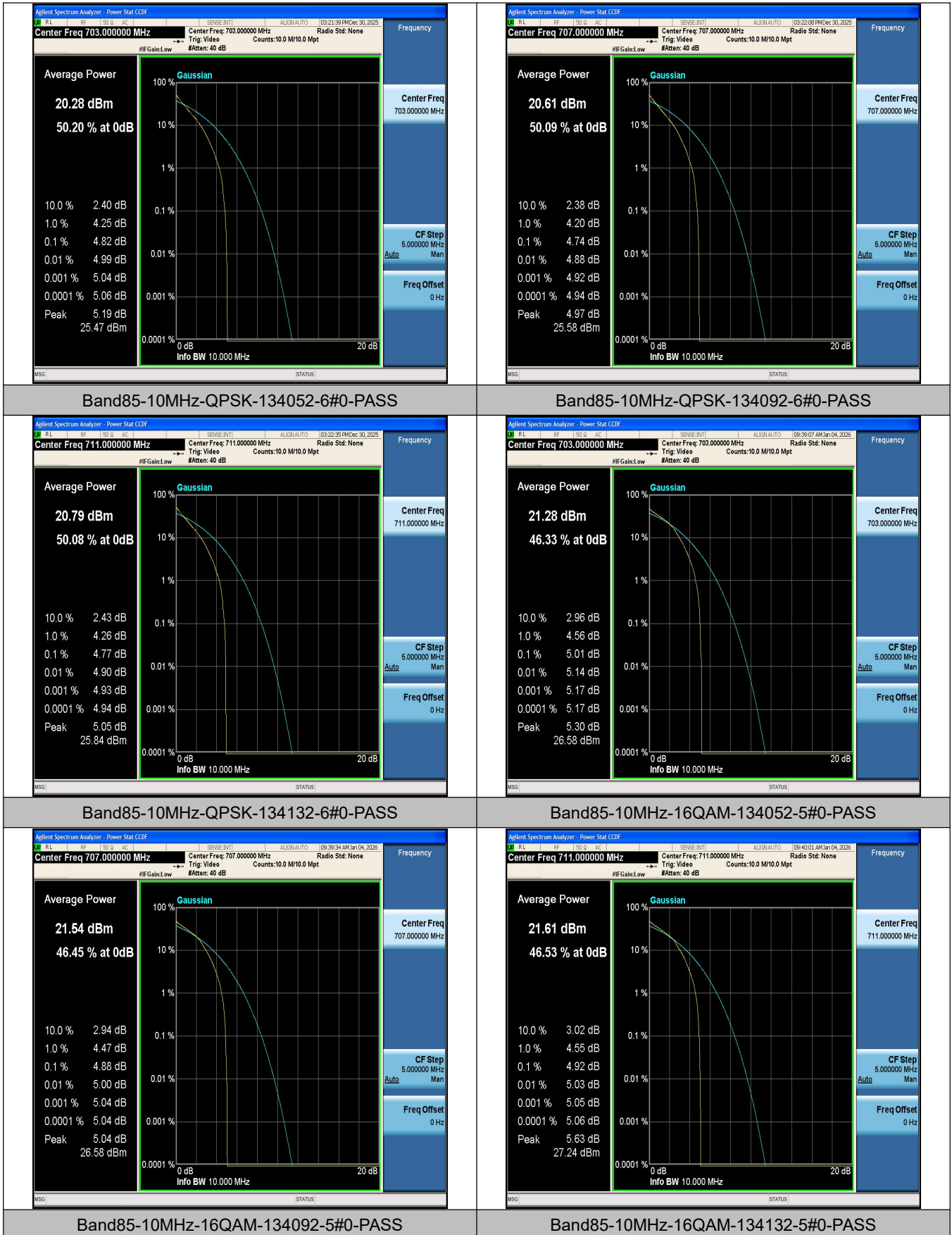
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Power (dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band85	5MHz	QPSK	134027	1	0	Low	20.99	22.79	34.77	PASS
Band85	5MHz	QPSK	134027	1	5	Low	20.83	22.63	34.77	PASS
Band85	5MHz	QPSK	134027	6	0	Low	19.96	21.76	34.77	PASS
Band85	5MHz	QPSK	134092	1	0	Low	21.1	22.9	34.77	PASS
Band85	5MHz	QPSK	134092	1	5	Low	20.91	22.71	34.77	PASS
Band85	5MHz	QPSK	134092	6	0	Low	20.04	21.84	34.77	PASS
Band85	5MHz	QPSK	134157	1	0	High	21.32	23.12	34.77	PASS
Band85	5MHz	QPSK	134157	1	5	High	21.17	22.97	34.77	PASS
Band85	5MHz	QPSK	134157	6	0	High	20.3	22.1	34.77	PASS
Band85	10MHz	QPSK	134052	1	0	Low	21	22.8	34.77	PASS
Band85	10MHz	QPSK	134052	1	5	Low	20.84	22.64	34.77	PASS
Band85	10MHz	QPSK	134052	6	0	Low	19.92	21.72	34.77	PASS
Band85	10MHz	QPSK	134092	1	0	Low	21.12	22.92	34.77	PASS
Band85	10MHz	QPSK	134092	1	5	Low	20.88	22.68	34.77	PASS
Band85	10MHz	QPSK	134092	6	0	Low	20.01	21.81	34.77	PASS
Band85	10MHz	QPSK	134132	1	0	High	21.29	23.09	34.77	PASS
Band85	10MHz	QPSK	134132	1	5	High	21.05	22.85	34.77	PASS
Band85	10MHz	QPSK	134132	6	0	High	20.06	21.86	34.77	PASS
Band85	5MHz	16QAM	134027	1	0	Low	20.87	22.67	34.77	PASS
Band85	5MHz	16QAM	134027	1	5	Low	20.71	22.51	34.77	PASS
Band85	5MHz	16QAM	134027	5	0	Low	19.73	21.53	34.77	PASS
Band85	5MHz	16QAM	134092	1	0	Low	21.03	22.83	34.77	PASS
Band85	5MHz	16QAM	134092	1	5	Low	20.92	22.72	34.77	PASS
Band85	5MHz	16QAM	134092	5	0	Low	19.79	21.59	34.77	PASS
Band85	5MHz	16QAM	134157	1	0	High	21.32	23.12	34.77	PASS
Band85	5MHz	16QAM	134157	1	5	High	21.07	22.87	34.77	PASS
Band85	5MHz	16QAM	134157	5	0	High	20.19	21.99	34.77	PASS
Band85	10MHz	16QAM	134052	1	0	Low	20.8	22.6	34.77	PASS
Band85	10MHz	16QAM	134052	1	5	Low	20.62	22.42	34.77	PASS
Band85	10MHz	16QAM	134052	5	0	Low	20.8	22.6	34.77	PASS
Band85	10MHz	16QAM	134092	1	0	Low	21	22.8	34.77	PASS
Band85	10MHz	16QAM	134092	1	5	Low	20.47	22.27	34.77	PASS
Band85	10MHz	16QAM	134092	5	0	Low	20.82	22.62	34.77	PASS
Band85	10MHz	16QAM	134132	1	0	High	21.31	23.11	34.77	PASS
Band85	10MHz	16QAM	134132	1	5	High	21.08	22.88	34.77	PASS
Band85	10MHz	16QAM	134132	5	0	High	21.27	23.07	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	6	0	Low	4.82	<=13	PASS
Band85	10MHz	QPSK	134092	6	0	Low	4.74	<=13	PASS
Band85	10MHz	QPSK	134132	6	0	High	4.77	<=13	PASS
Band85	10MHz	16QAM	134052	5	0	Low	5.01	<=13	PASS
Band85	10MHz	16QAM	134092	5	0	Low	4.88	<=13	PASS
Band85	10MHz	16QAM	134132	5	0	High	4.92	<=13	PASS

Test Graphs

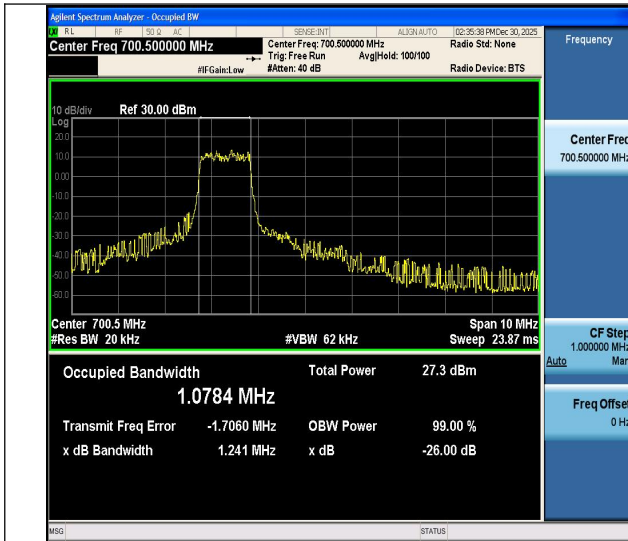


26dB Bandwidth and Occupied Bandwidth for M1

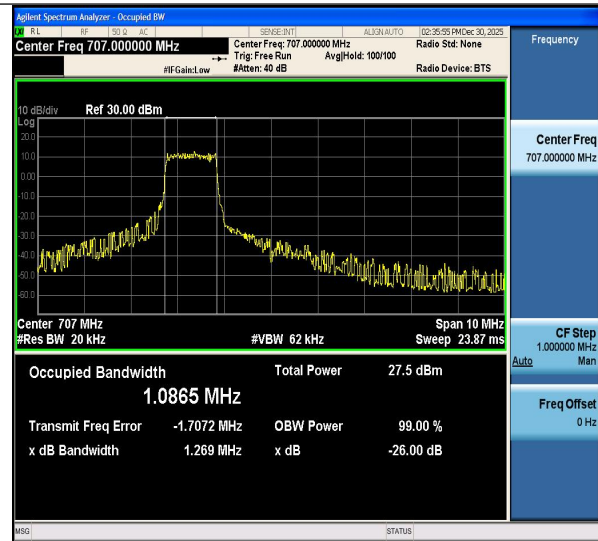
Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band85	5MHz	QPSK	134027	6	0	Low	1.0784	1.241	PASS
Band85	5MHz	QPSK	134092	6	0	Low	1.0865	1.269	PASS
Band85	5MHz	QPSK	134157	6	0	High	1.0878	1.253	PASS
Band85	10MHz	QPSK	134052	6	0	Low	1.0895	1.281	PASS
Band85	10MHz	QPSK	134092	6	0	Low	1.0918	1.240	PASS
Band85	10MHz	QPSK	134132	6	0	High	1.0965	1.289	PASS
Band85	5MHz	16QAM	134027	5	0	Low	0.91775	1.100	PASS
Band85	5MHz	16QAM	134092	5	0	Low	0.92293	1.092	PASS
Band85	5MHz	16QAM	134157	5	0	High	0.91960	1.110	PASS
Band85	10MHz	16QAM	134052	5	0	Low	0.92123	1.110	PASS
Band85	10MHz	16QAM	134092	5	0	Low	0.92500	1.135	PASS
Band85	10MHz	16QAM	134132	5	0	High	0.91564	1.098	PASS

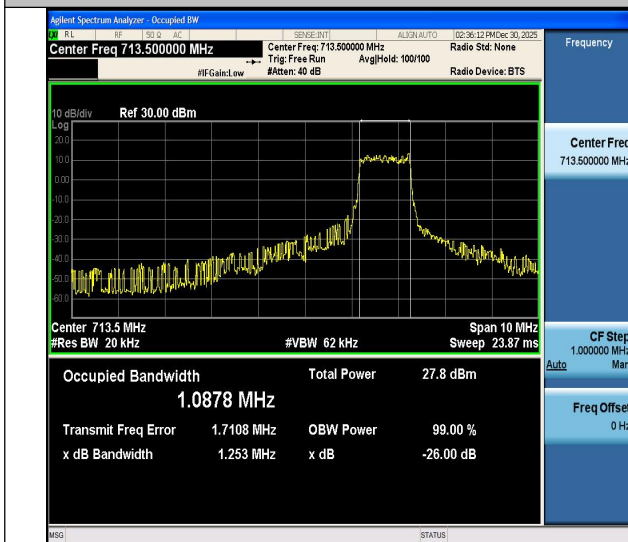
Test Graphs



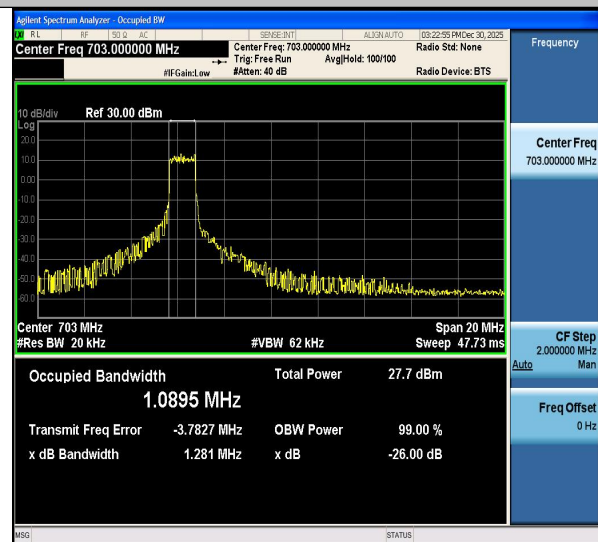
Band85-5MHz-QPSK-134027-6#0-PASS



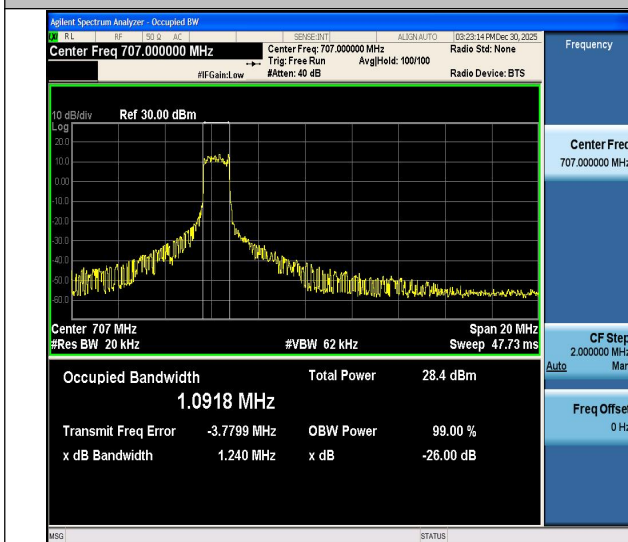
Band85-5MHz-QPSK-134092-6#0-PASS



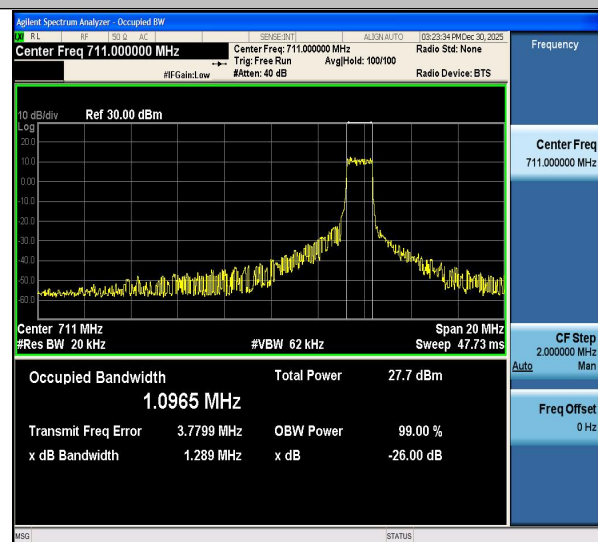
Band85-5MHz-QPSK-134157-6#0-PASS



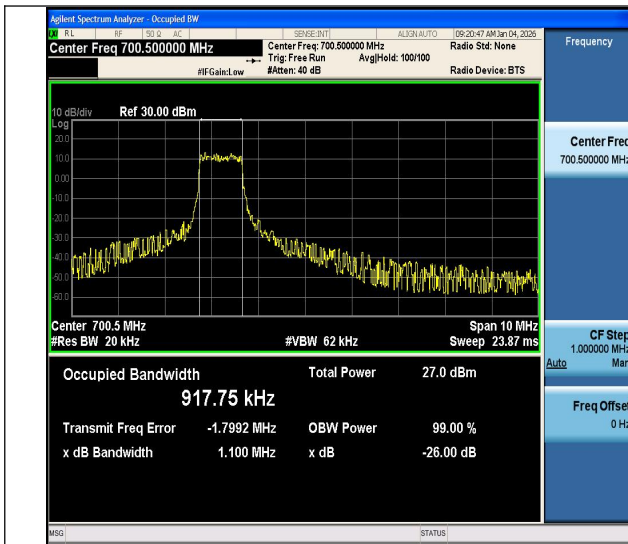
Band85-10MHz-QPSK-134052-6#0-PASS



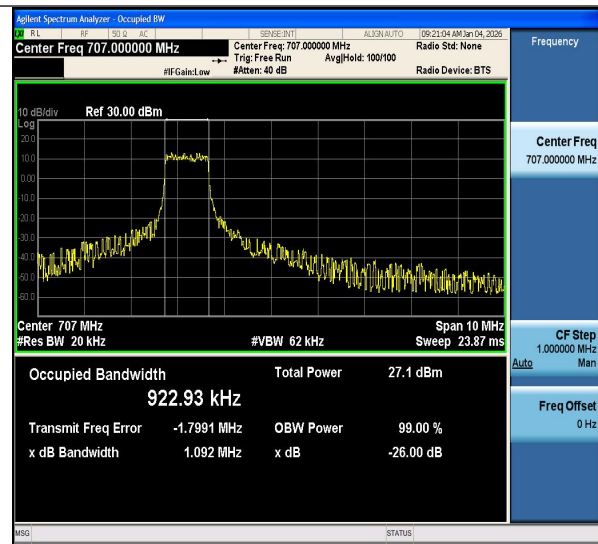
Band85-10MHz-QPSK-134092-6#0-PASS



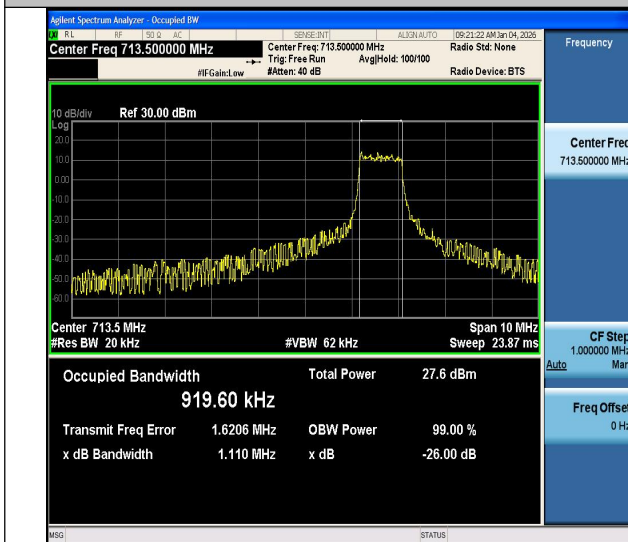
Band85-10MHz-QPSK-134132-6#0-PASS



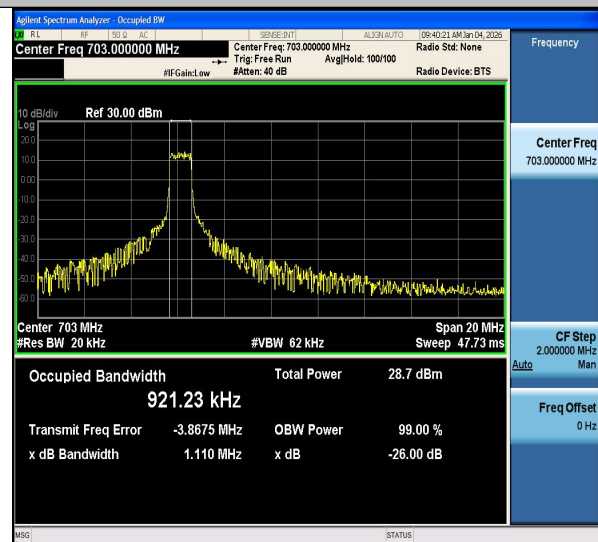
Band85-5MHz-16QAM-134027-5#0-PASS



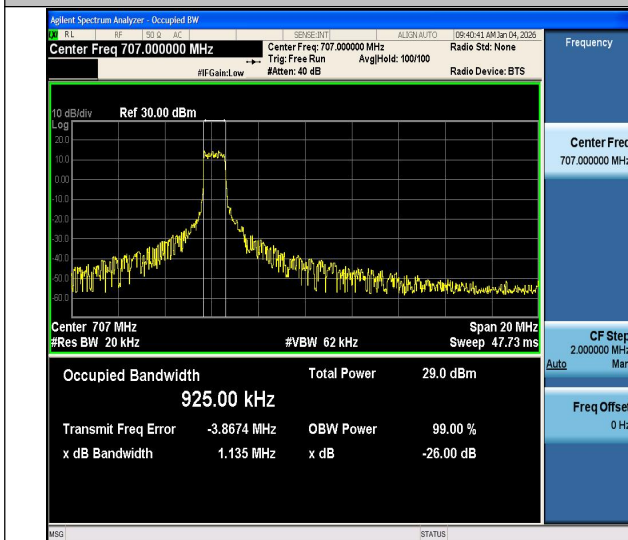
Band85-5MHz-16QAM-134092-5#0-PASS



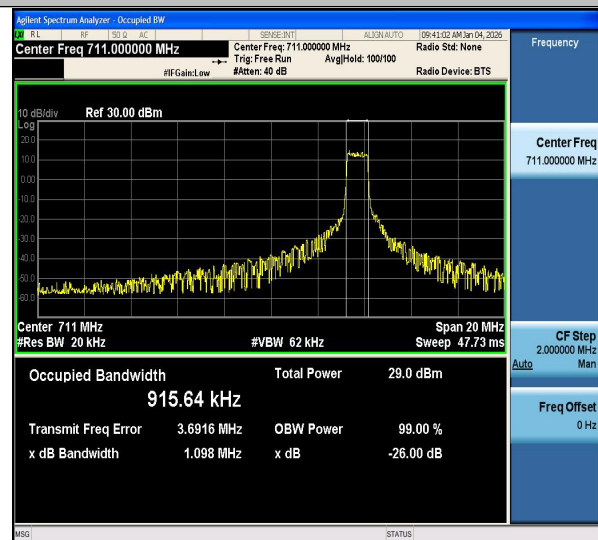
Band85-5MHz-16QAM-134157-5#0-PASS



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



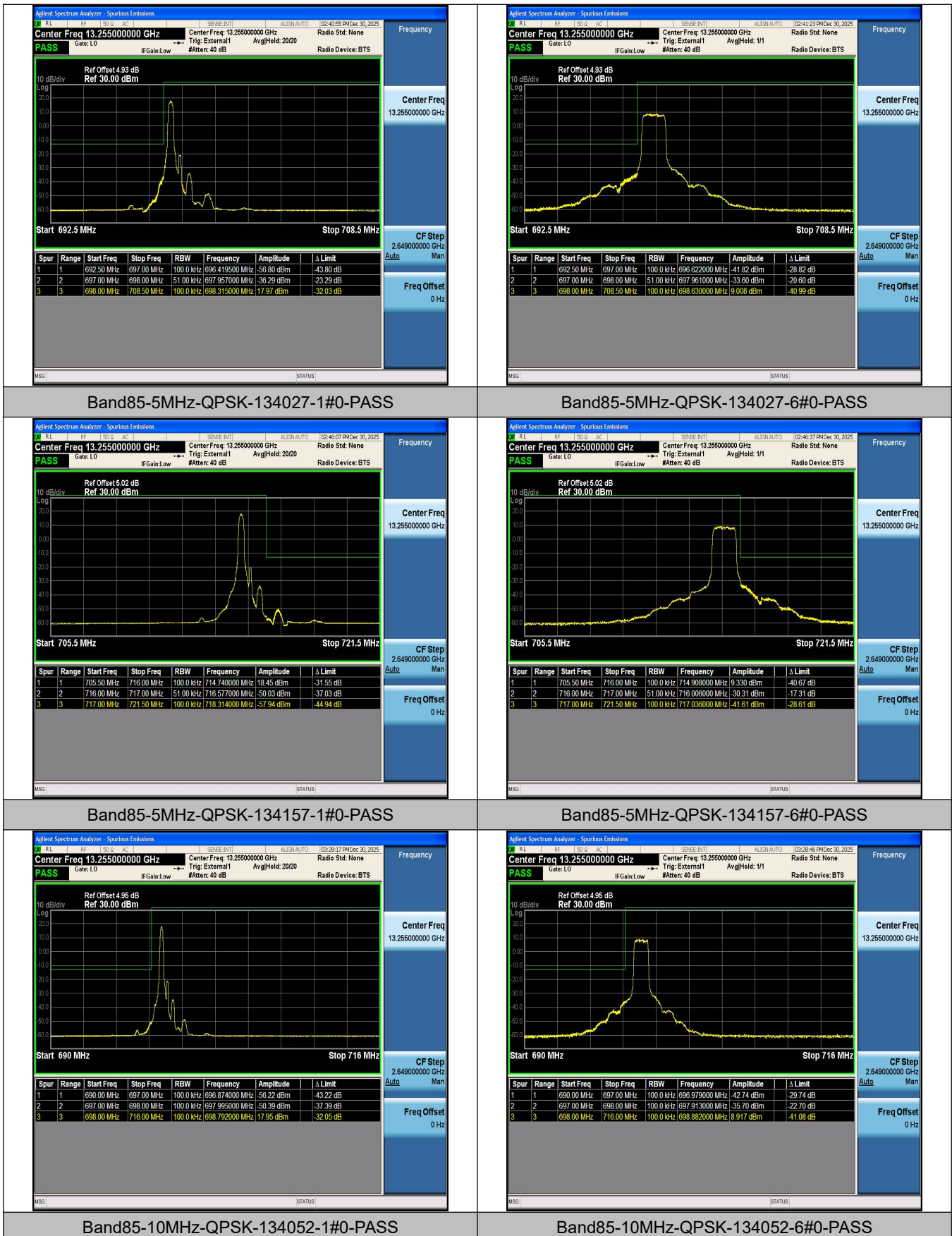
Band85-10MHz-16QAM-134092-5#0-PASS



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

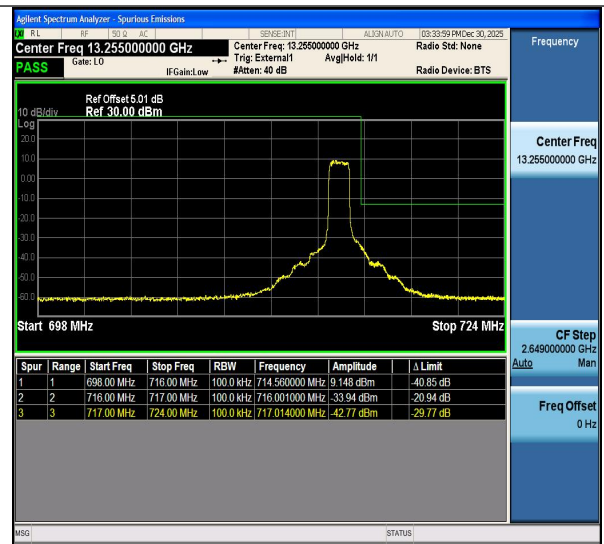
Band Edge for M1

Test Graphs





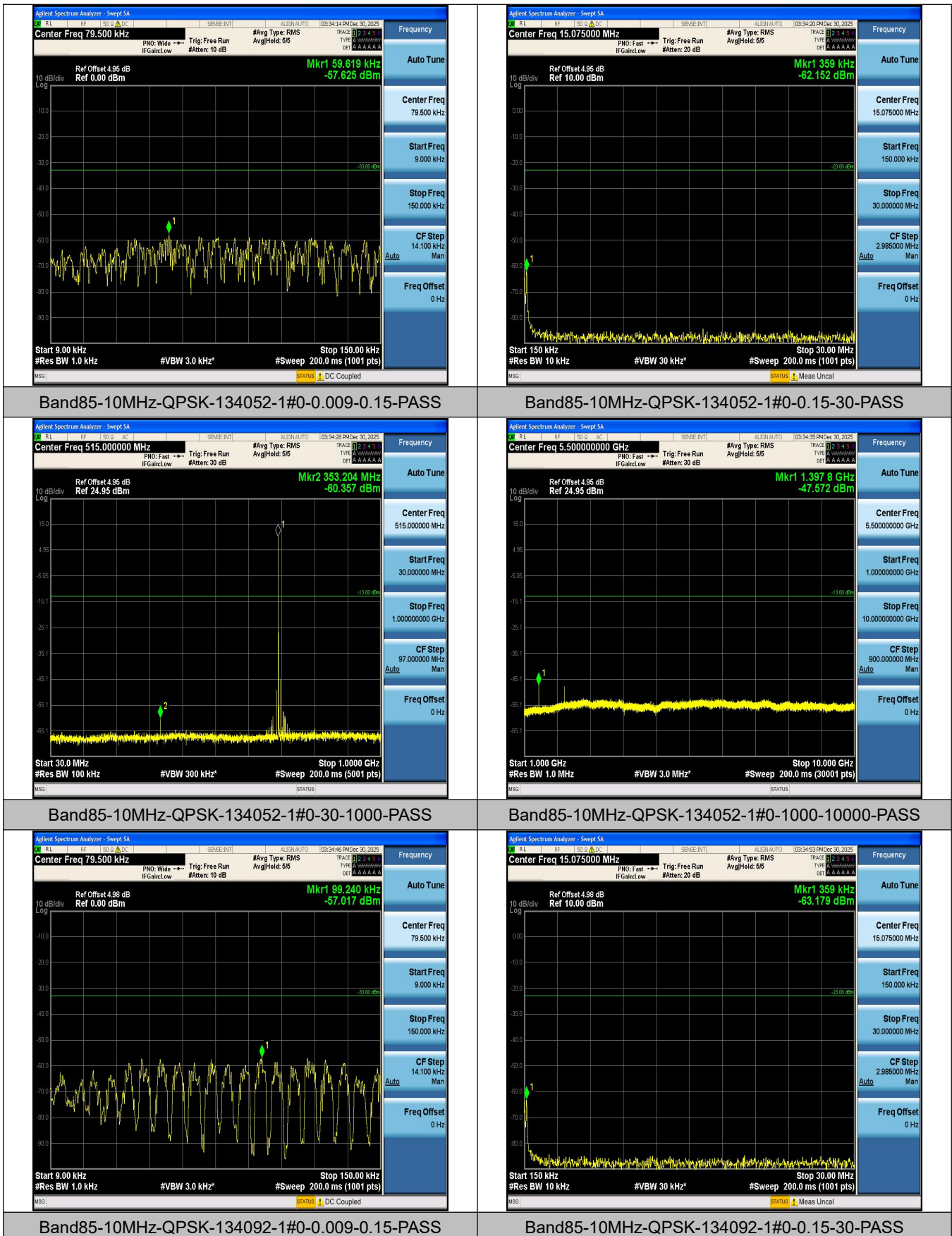
Band85-10MHz-QPSK-134132-1#0-PASS

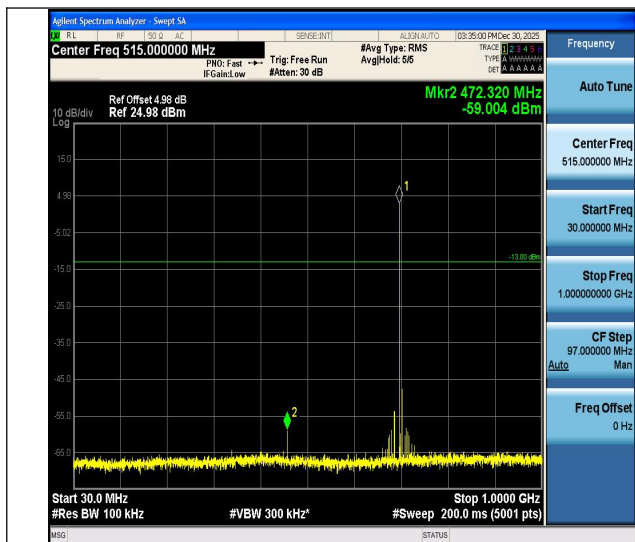


Band85-10MHz-QPSK-134132-6#0-PASS

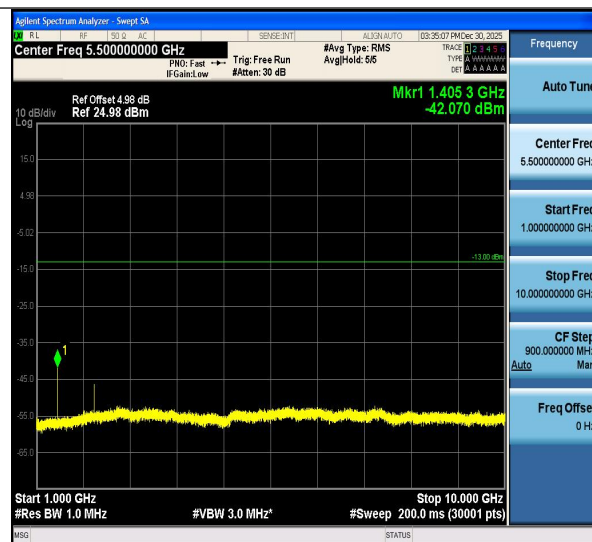
Conducted Spurious Emission for M1

Test Graphs

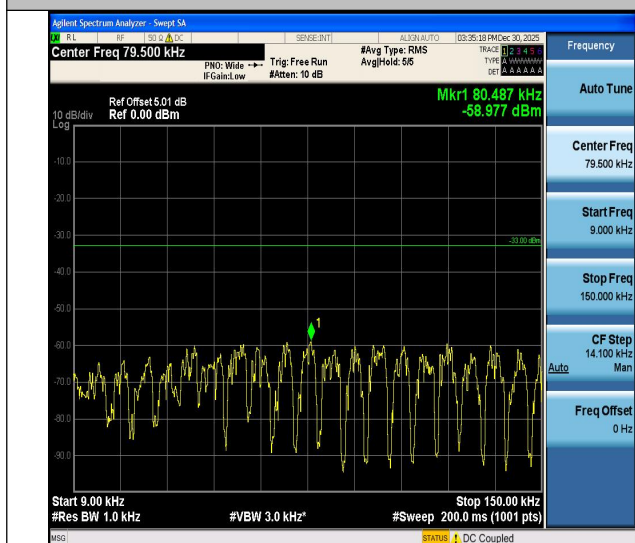




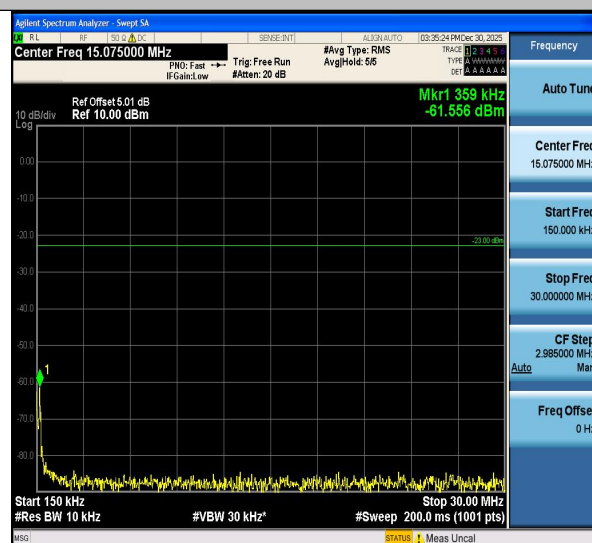
Band85-10MHz-QPSK-134092-1#0-30-1000-PASS



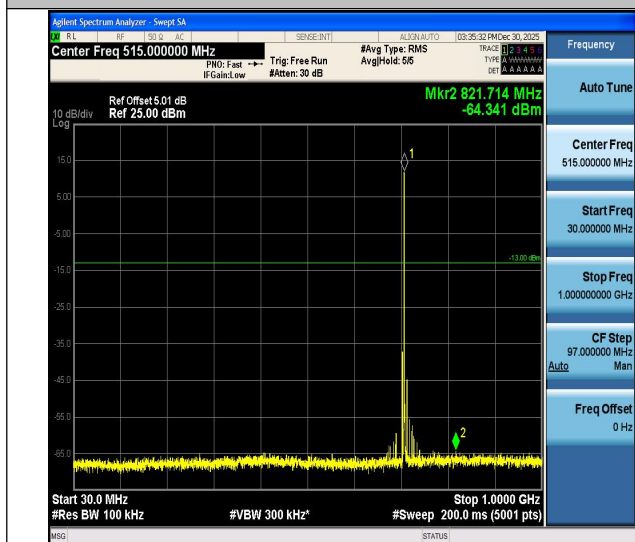
Band85-10MHz-QPSK-134092-1#0-1000-10000-PASS



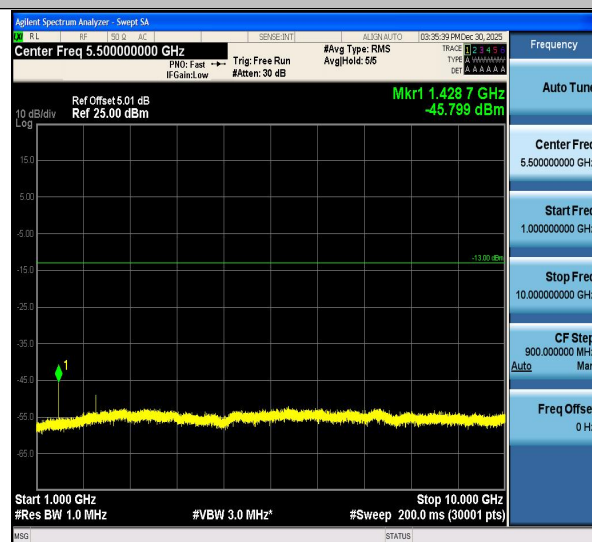
Band85-10MHz-QPSK-134132-1#0-0.009-0.15-PASS



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	1.10	0.001556	PASS
Band85	10MHz	QPSK	134092	6	0	Low	VL	NT	2.30	0.003253	PASS
Band85	10MHz	QPSK	134092	6	0	Low	VH	NT	1.40	0.001980	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	1.00	0.001414	PASS
Band85	10MHz	QPSK	134092	6	0	Low	NV	-20	1.30	0.001839	PASS
Band85	10MHz	QPSK	134092	6	0	Low	NV	-10	0.90	0.001273	PASS
Band85	10MHz	QPSK	134092	6	0	Low	NV	0	0.40	0.000566	PASS
Band85	10MHz	QPSK	134092	6	0	Low	NV	10	2.10	0.002970	PASS
Band85	10MHz	QPSK	134092	6	0	Low	NV	20	1.70	0.002405	PASS
Band85	10MHz	QPSK	134092	6	0	Low	NV	30	1.90	0.002687	PASS
Band85	10MHz	QPSK	134092	6	0	Low	NV	40	1.60	0.002263	PASS
Band85	10MHz	QPSK	134092	6	0	Low	NV	50	1.90	0.002687	PASS

~The End~