

Appendix-A LTE Cat M1 Band 13

Effective (Isotropic) Radiated Power Output Data for M1

Test Result

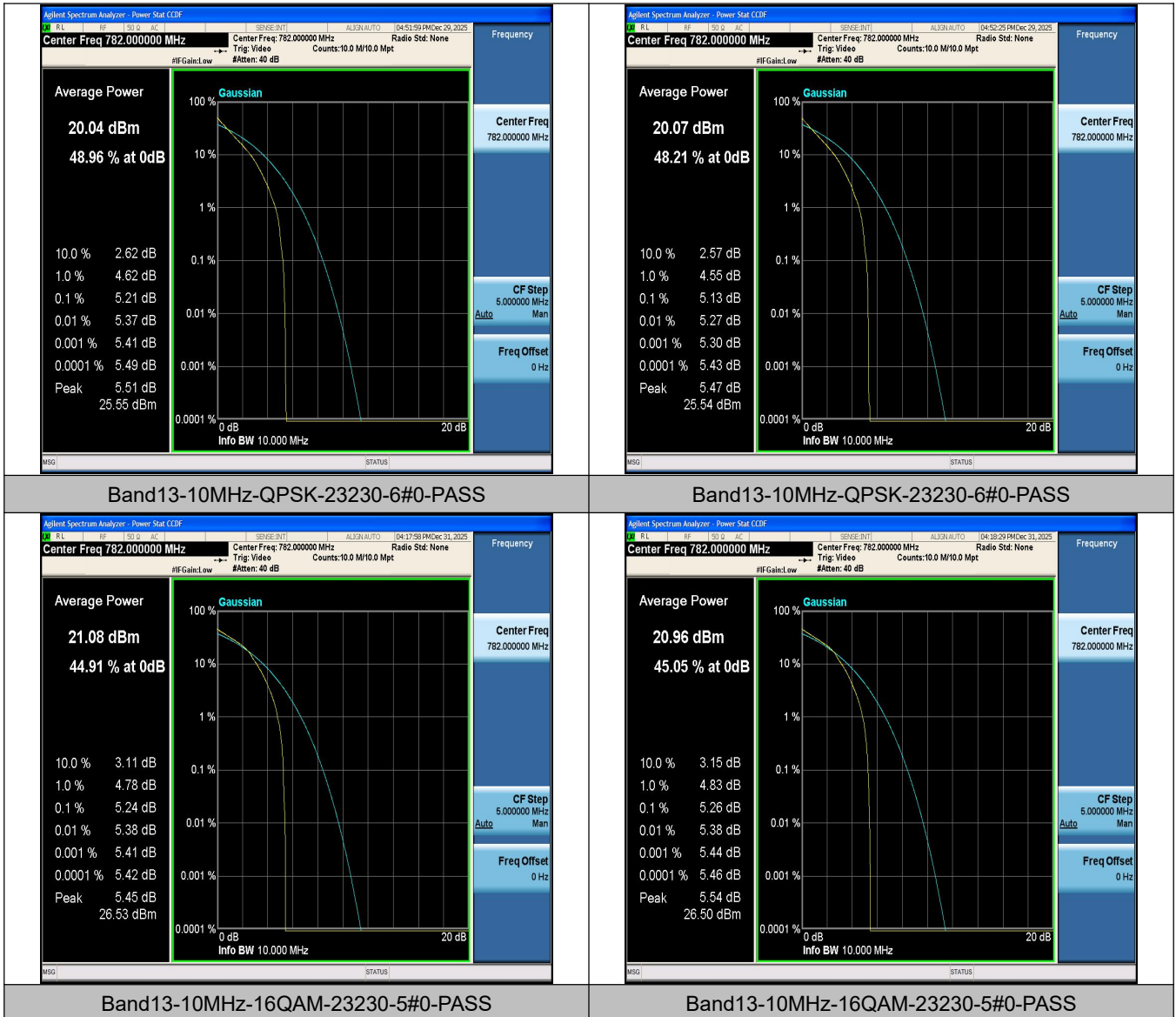
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Power (dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band13	5MHz	QPSK	23205	1	0	Low	20.58	22.88	44.77	PASS
Band13	5MHz	QPSK	23205	1	5	Low	20.46	22.76	44.77	PASS
Band13	5MHz	QPSK	23205	6	0	Low	19.52	21.82	44.77	PASS
Band13	5MHz	QPSK	23230	1	0	Low	20.74	23.04	44.77	PASS
Band13	5MHz	QPSK	23230	1	5	Low	20.44	22.74	44.77	PASS
Band13	5MHz	QPSK	23230	6	0	Low	19.64	21.94	44.77	PASS
Band13	5MHz	QPSK	23255	1	0	High	20.77	23.07	44.77	PASS
Band13	5MHz	QPSK	23255	1	5	High	20.49	22.79	44.77	PASS
Band13	5MHz	QPSK	23255	6	0	High	19.7	22	44.77	PASS
Band13	10MHz	QPSK	23230	1	0	Low	20.77	23.07	44.77	PASS
Band13	10MHz	QPSK	23230	1	5	Low	20.45	22.75	44.77	PASS
Band13	10MHz	QPSK	23230	6	0	Low	19.63	21.93	44.77	PASS
Band13	5MHz	16QAM	23205	1	0	Low	21.07	23.37	44.77	PASS
Band13	5MHz	16QAM	23205	1	5	Low	20.76	23.06	44.77	PASS
Band13	5MHz	16QAM	23205	5	0	Low	19.76	22.06	44.77	PASS
Band13	5MHz	16QAM	23230	1	0	Low	20.99	23.29	44.77	PASS
Band13	5MHz	16QAM	23230	1	5	Low	20.86	23.16	44.77	PASS
Band13	5MHz	16QAM	23230	5	0	Low	19.75	22.05	44.77	PASS
Band13	5MHz	16QAM	23255	1	0	High	21	23.3	44.77	PASS
Band13	5MHz	16QAM	23255	1	5	High	20.89	23.19	44.77	PASS
Band13	5MHz	16QAM	23255	5	0	High	19.82	22.12	44.77	PASS
Band13	10MHz	16QAM	23230	1	0	Low	21.01	23.31	44.77	PASS
Band13	10MHz	16QAM	23230	1	5	Low	20.87	23.17	44.77	PASS
Band13	10MHz	16QAM	23230	5	0	Low	20.68	22.98	44.77	PASS

Peak-to-Average Ratio(CCDF) for M1

Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result(dB)	Limit(dB)	Verdict
Band13	10MHz	QPSK	23230	6	0	Low	5.21	<=13	PASS
Band13	10MHz	QPSK	23230	6	0	High	5.13	<=13	PASS
Band13	10MHz	16QAM	23230	5	0	Low	5.24	<=13	PASS
Band13	10MHz	16QAM	23230	5	0	High	5.26	<=13	PASS

Test Graphs

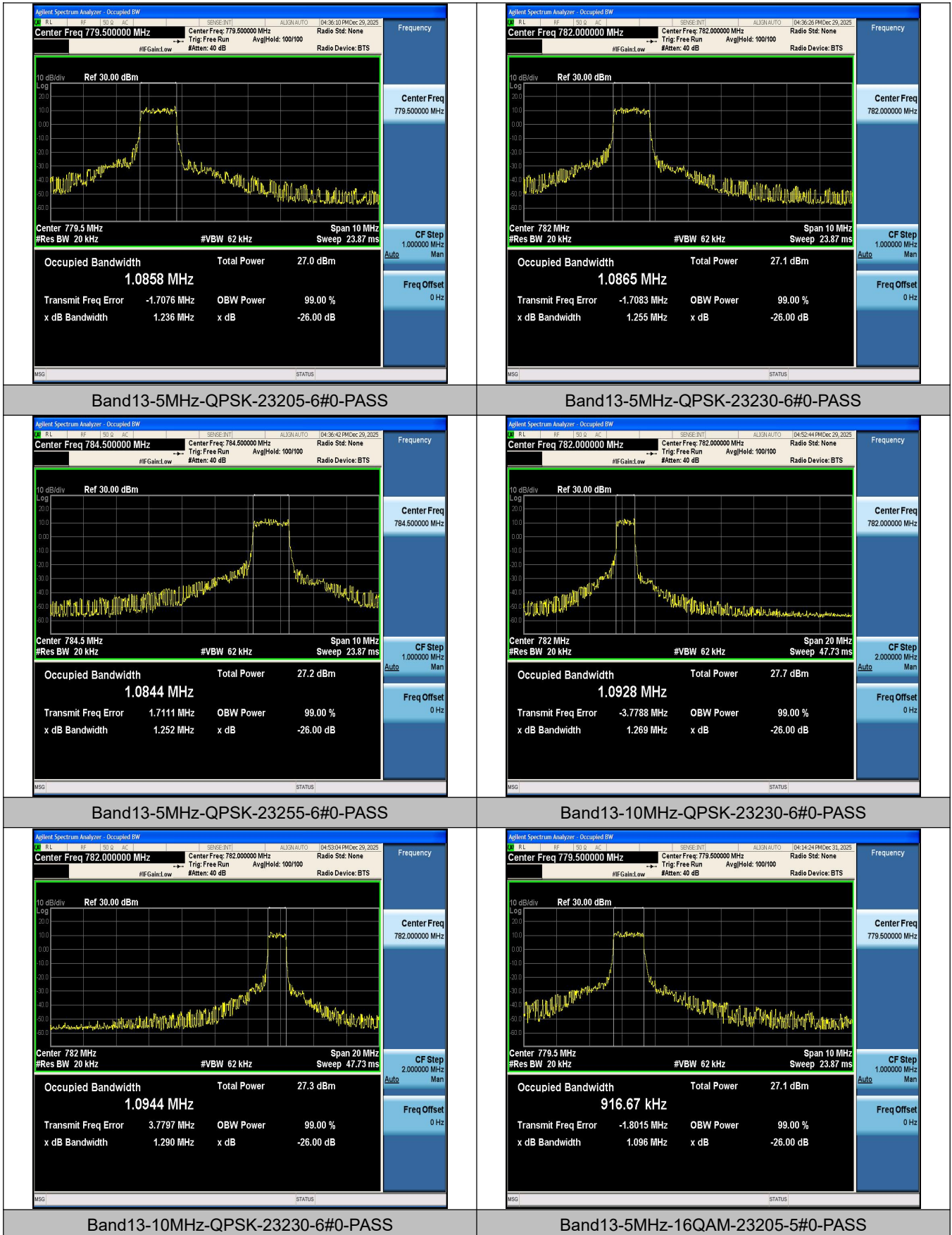


26dB Bandwidth and Occupied Bandwidth for M1

Test Result

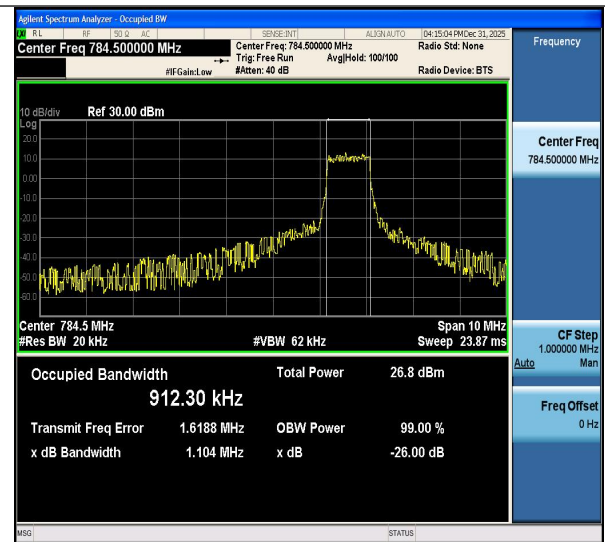
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band13	5MHz	QPSK	23205	6	0	Low	1.0858	1.236	PASS
Band13	5MHz	QPSK	23230	6	0	Low	1.0865	1.255	PASS
Band13	5MHz	QPSK	23255	6	0	High	1.0844	1.252	PASS
Band13	10MHz	QPSK	23230	6	0	Low	1.0928	1.269	PASS
Band13	10MHz	QPSK	23230	6	0	High	1.0944	1.290	PASS
Band13	5MHz	16QAM	23205	5	0	Low	0.91667	1.096	PASS
Band13	5MHz	16QAM	23230	5	0	Low	0.91821	1.100	PASS
Band13	5MHz	16QAM	23255	5	0	High	0.91230	1.104	PASS
Band13	10MHz	16QAM	23230	5	0	Low	0.92546	1.092	PASS
Band13	10MHz	16QAM	23230	5	0	High	0.92194	1.089	PASS

Test Graphs

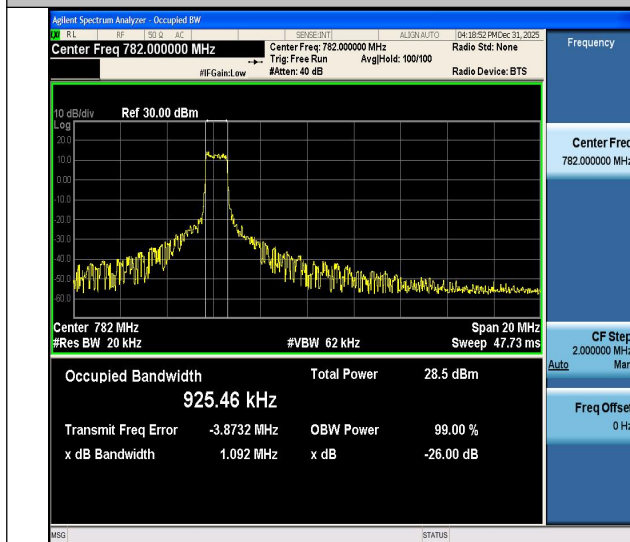




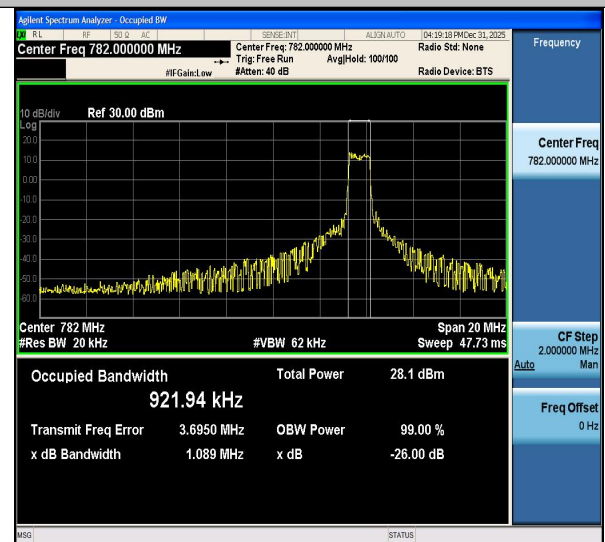
Band13-5MHz-16QAM-23230-5#0-PASS



Band13-5MHz-16QAM-23255-5#0-PASS



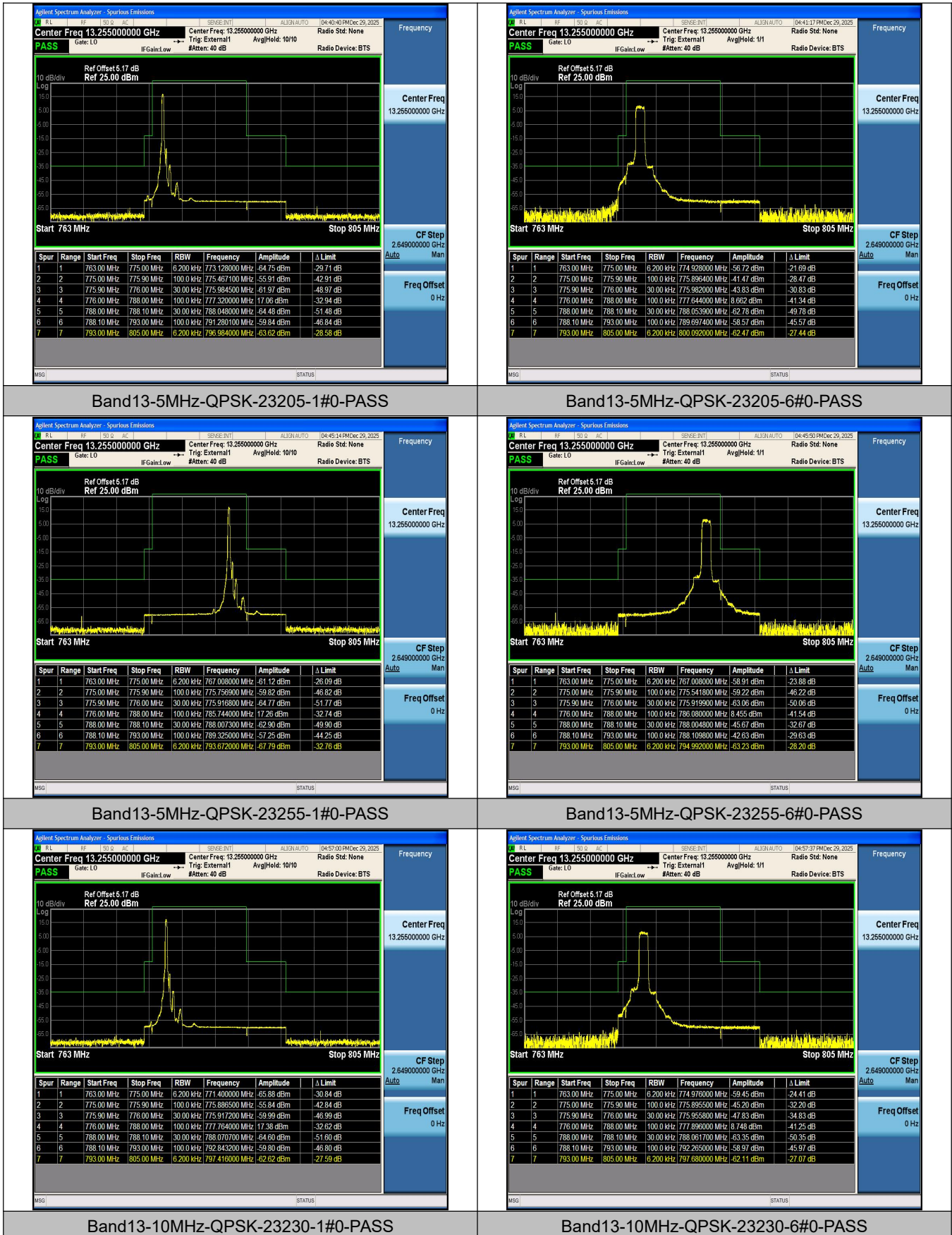
Band13-10MHz-16QAM-23230-5#0-PASS



Band13-10MHz-16QAM-23230-5#0-PASS

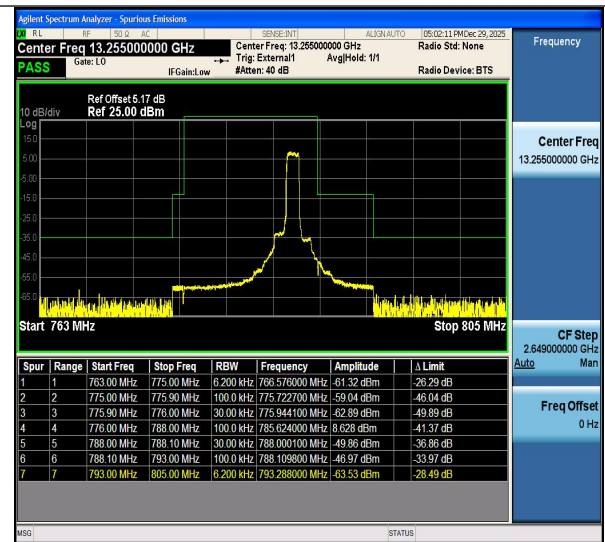
Band Edge for M1

Test Graphs





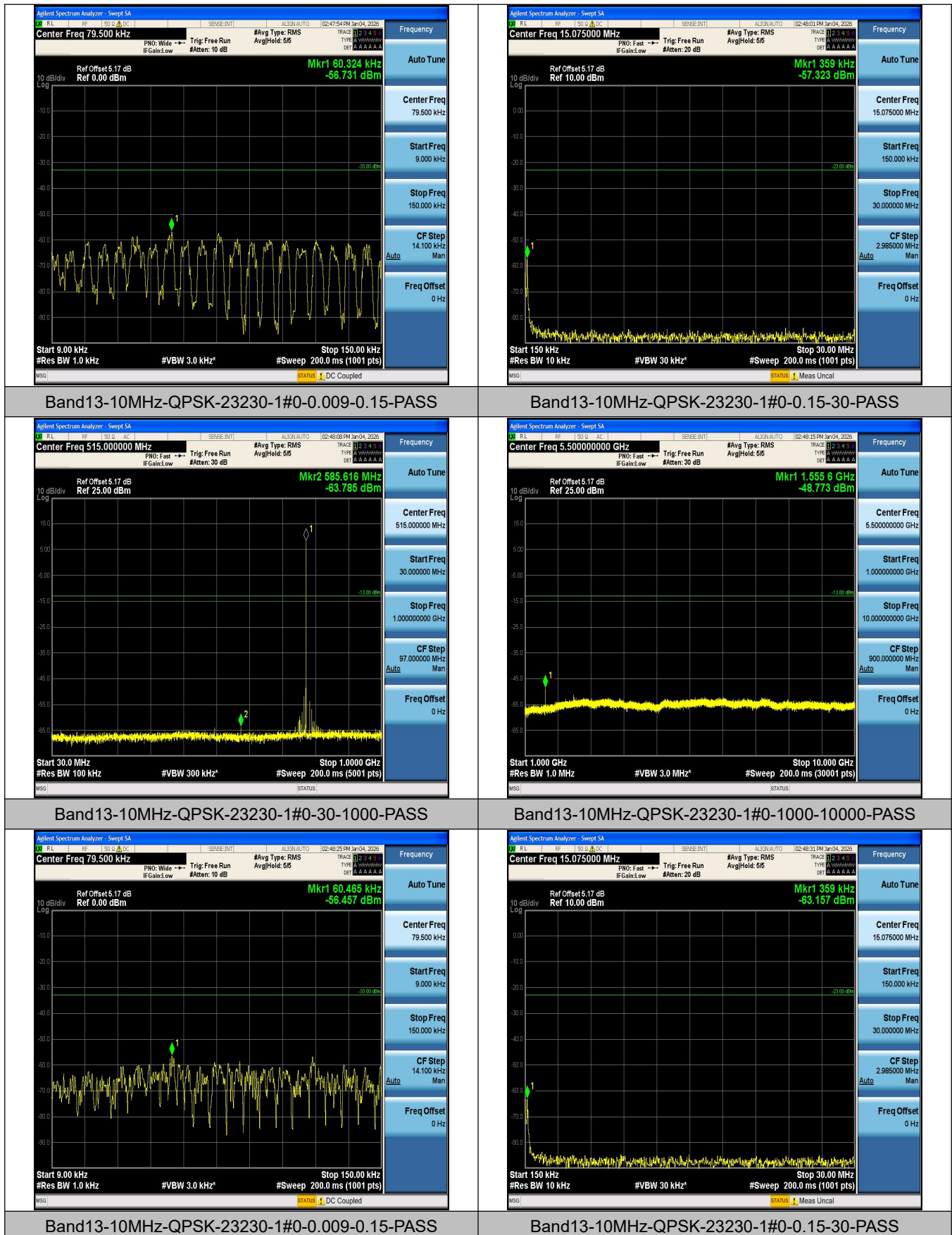
Band13-10MHz-QPSK-23230-1#0-PASS

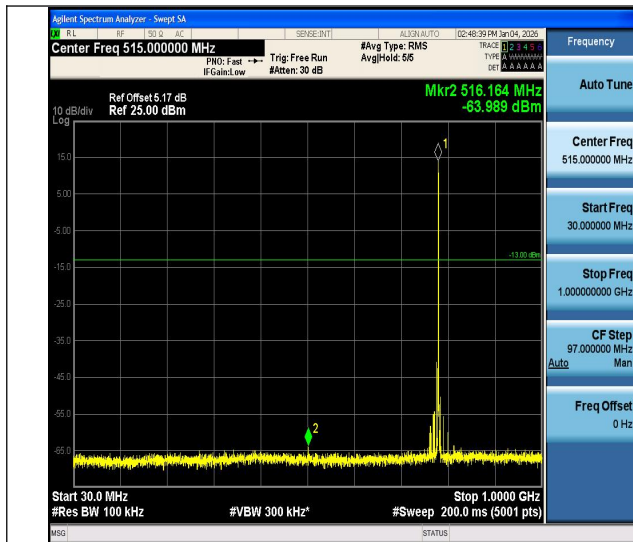


Band13-10MHz-QPSK-23230-6#0-PASS

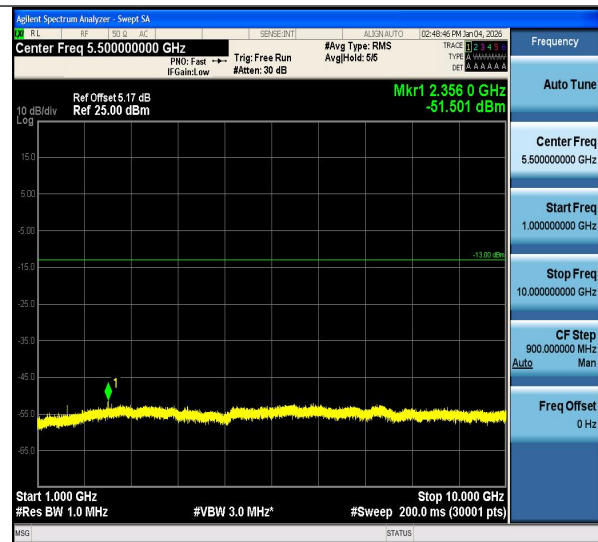
Conducted Spurious Emission for M1

Test Graphs





Band13-10MHz-QPSK-23230-1#0-30-1000-PASS



Band13-10MHz-QPSK-23230-1#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
Band13	10MHz	QPSK	23230	6	0	Low	VN	NT	-5.10	-0.006522	PASS
Band13	10MHz	QPSK	23230	6	0	Low	VL	NT	-4.60	-0.005882	PASS
Band13	10MHz	QPSK	23230	6	0	Low	VH	NT	-6.40	-0.008184	PASS

Temperature											
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band13	10MHz	QPSK	23230	6	0	Low	NV	-30	-5.40	-0.006905	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	-20	-4.70	-0.006010	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	-10	-6.10	-0.007801	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	0	-5.80	-0.007417	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	10	-4.70	-0.006010	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	20	-6.20	-0.007928	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	30	-4.70	-0.006010	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	40	-2.80	-0.003581	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	50	-5.60	-0.007161	PASS

~The End~