

Appendix-A LTE Cat M1 Band 13

Effective (Isotropic) Radiated Power Output Data for M1

Test Result

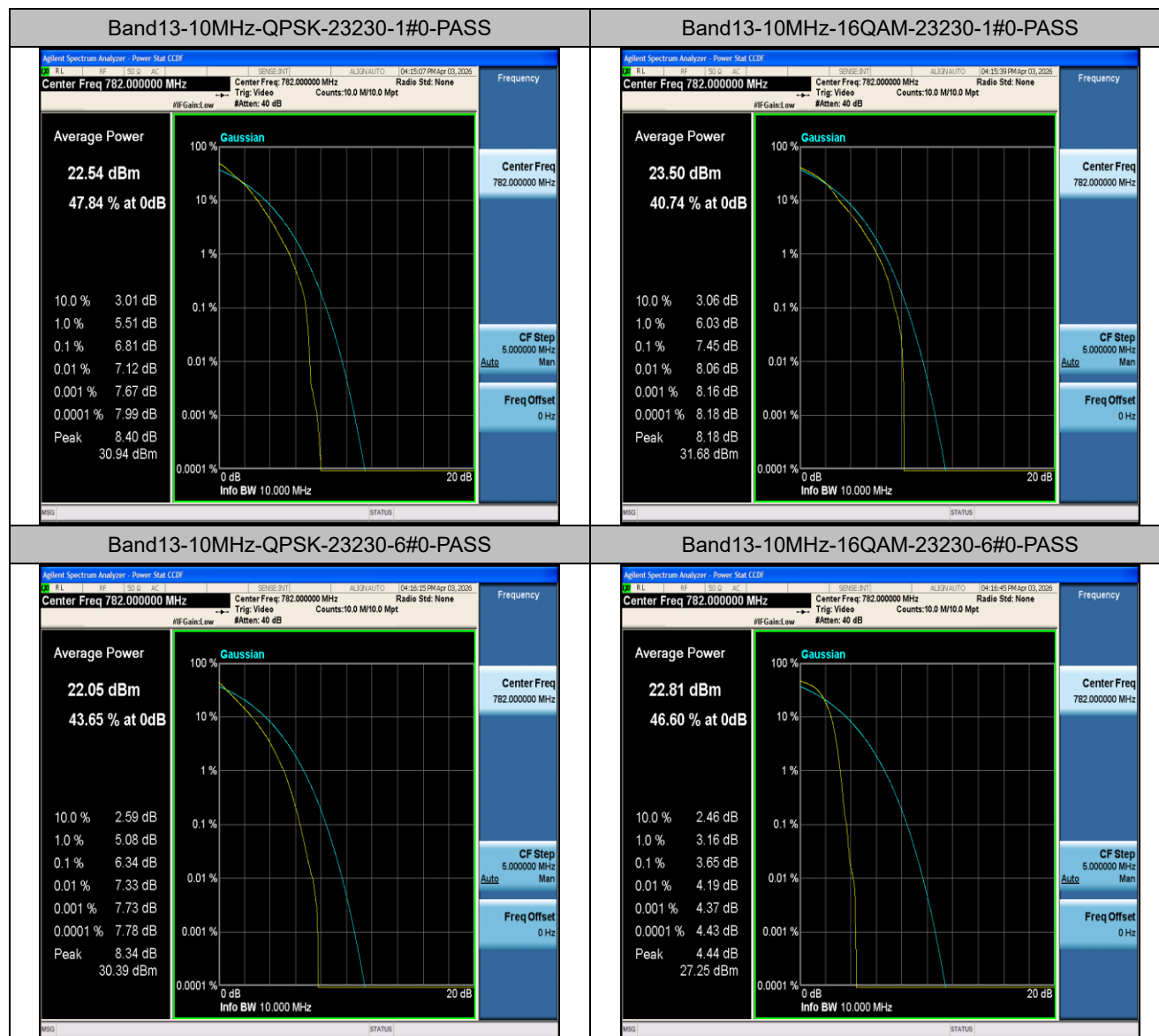
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Power (dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band13	5MHz	QPSK	23205	1	0	Low	23	26.96	44.77	PASS
Band13	5MHz	16QAM	23205	1	0	Low	23.35	27.31	44.77	PASS
Band13	5MHz	QPSK	23205	1	5	Low	22.99	26.95	44.77	PASS
Band13	5MHz	16QAM	23205	1	5	Low	23.21	27.17	44.77	PASS
Band13	5MHz	QPSK	23205	6	0	Low	21.82	25.78	44.77	PASS
Band13	5MHz	16QAM	23205	6	0	Low	22.74	26.7	44.77	PASS
Band13	5MHz	QPSK	23230	1	0	Low	22.91	26.87	44.77	PASS
Band13	5MHz	16QAM	23230	1	0	Low	23.3	27.26	44.77	PASS
Band13	5MHz	QPSK	23230	1	5	Low	22.88	26.84	44.77	PASS
Band13	5MHz	16QAM	23230	1	5	Low	23.22	27.18	44.77	PASS
Band13	5MHz	QPSK	23230	6	0	Low	21.67	25.63	44.77	PASS
Band13	5MHz	16QAM	23230	6	0	Low	22.67	26.63	44.77	PASS
Band13	5MHz	QPSK	23255	1	0	High	22.6	26.56	44.77	PASS
Band13	5MHz	16QAM	23255	1	0	High	22.95	26.91	44.77	PASS
Band13	5MHz	QPSK	23255	1	5	High	22.6	26.56	44.77	PASS
Band13	5MHz	16QAM	23255	1	5	High	23.01	26.97	44.77	PASS
Band13	5MHz	QPSK	23255	6	0	High	21.41	25.37	44.77	PASS
Band13	5MHz	16QAM	23255	6	0	High	22.54	26.5	44.77	PASS
Band13	10MHz	QPSK	23230	1	0	Low	22.87	26.83	44.77	PASS
Band13	10MHz	16QAM	23230	1	0	Low	23.11	27.07	44.77	PASS
Band13	10MHz	QPSK	23230	1	5	Low	22.8	26.76	44.77	PASS
Band13	10MHz	16QAM	23230	1	5	Low	23.18	27.14	44.77	PASS
Band13	10MHz	QPSK	23230	6	0	Low	21.64	25.6	44.77	PASS
Band13	10MHz	16QAM	23230	6	0	Low	22.48	26.44	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	1	0	Low	6.81	<=13	PASS
Band13	10MHz	16QAM	23230	1	0	Low	7.45	<=13	PASS
Band13	10MHz	QPSK	23230	6	0	Low	6.34	<=13	PASS
Band13	10MHz	16QAM	23230	6	0	Low	3.65	<=13	PASS

Test Graphs

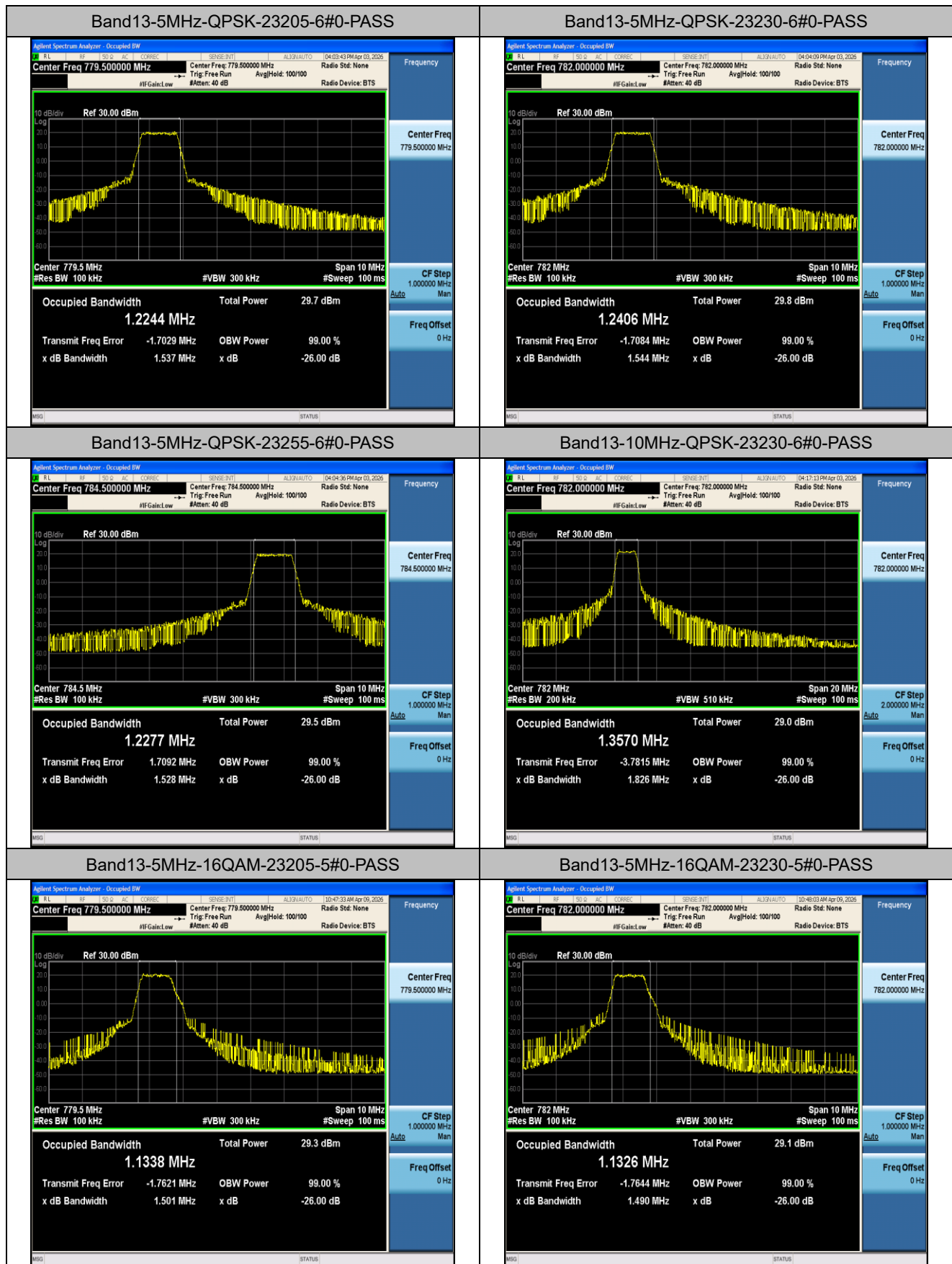


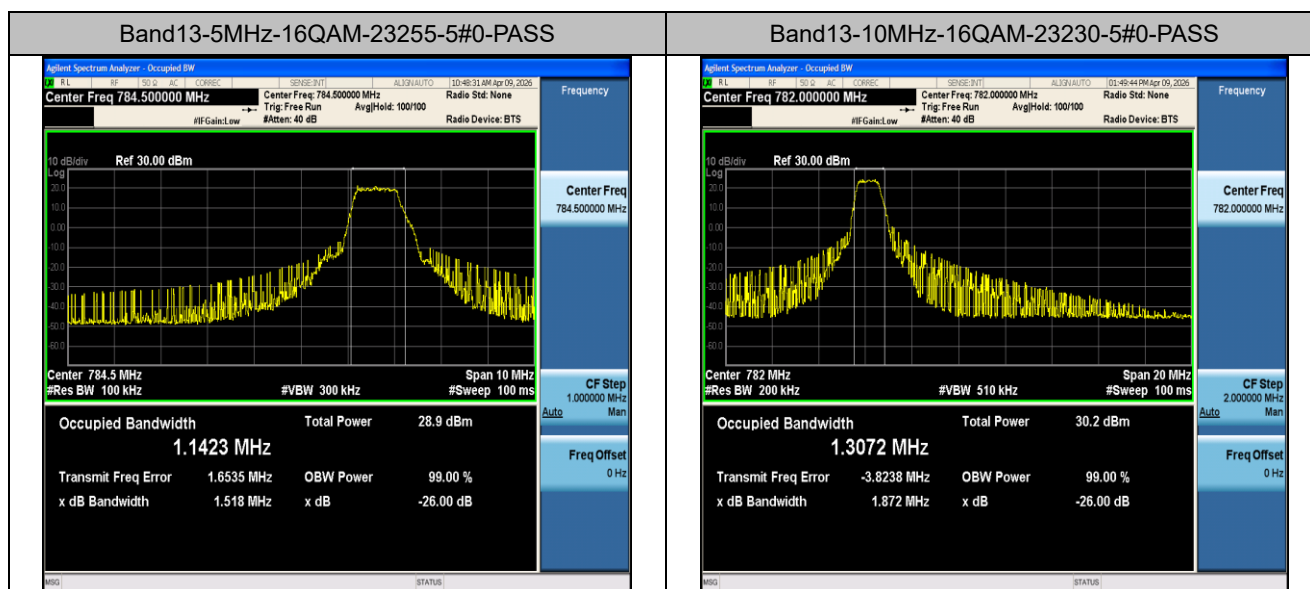
26dB Bandwidth and Occupied Bandwidth for M1

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	1.2244	1.537	PASS
Band13	5MHz	QPSK	23230	6	0	Low	1.2406	1.544	PASS
Band13	5MHz	QPSK	23255	6	0	High	1.2277	1.528	PASS
Band13	10MHz	QPSK	23230	6	0	Low	1.3570	1.826	PASS
Band13	5MHz	16QAM	23205	5	0	Low	1.1338	1.501	PASS
Band13	5MHz	16QAM	23230	5	0	Low	1.1326	1.490	PASS
Band13	5MHz	16QAM	23255	5	0	High	1.1423	1.518	PASS
Band13	10MHz	16QAM	23230	5	0	Low	1.3072	1.872	PASS

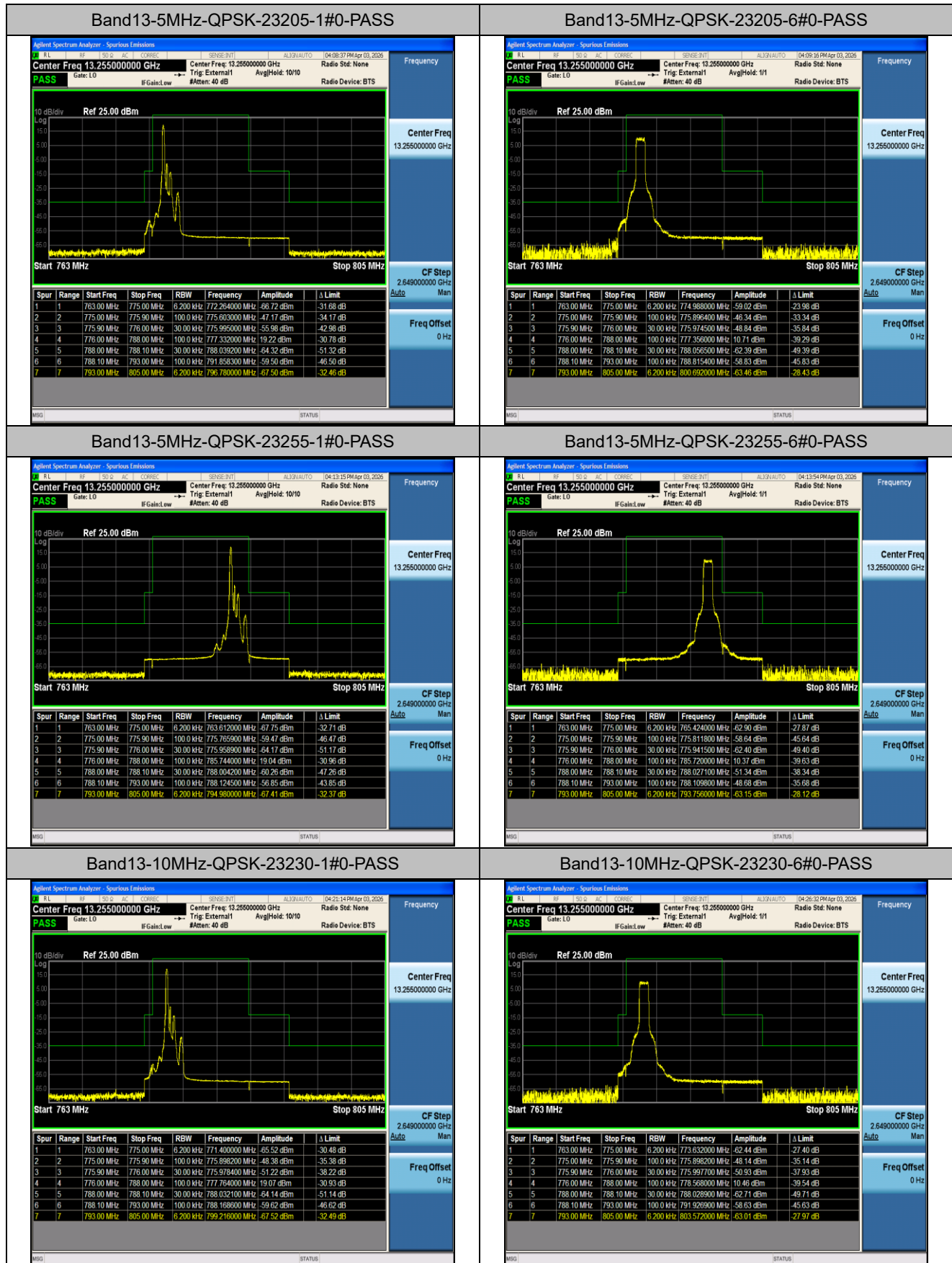
Test Graphs

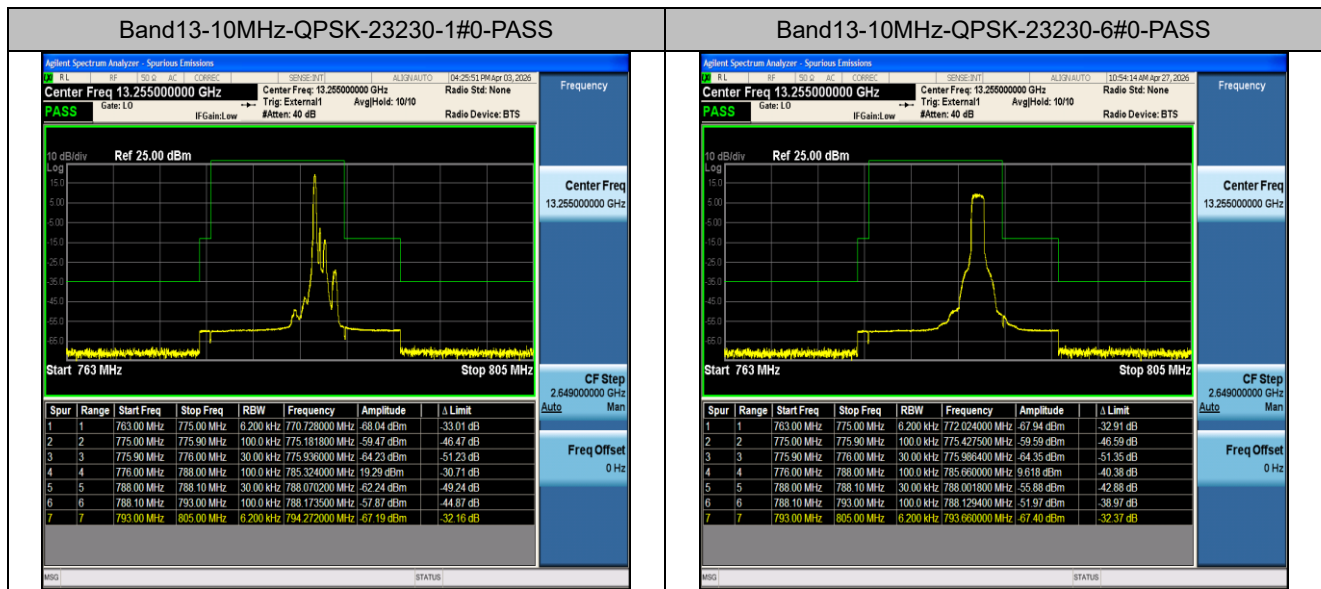




Band Edge for M1

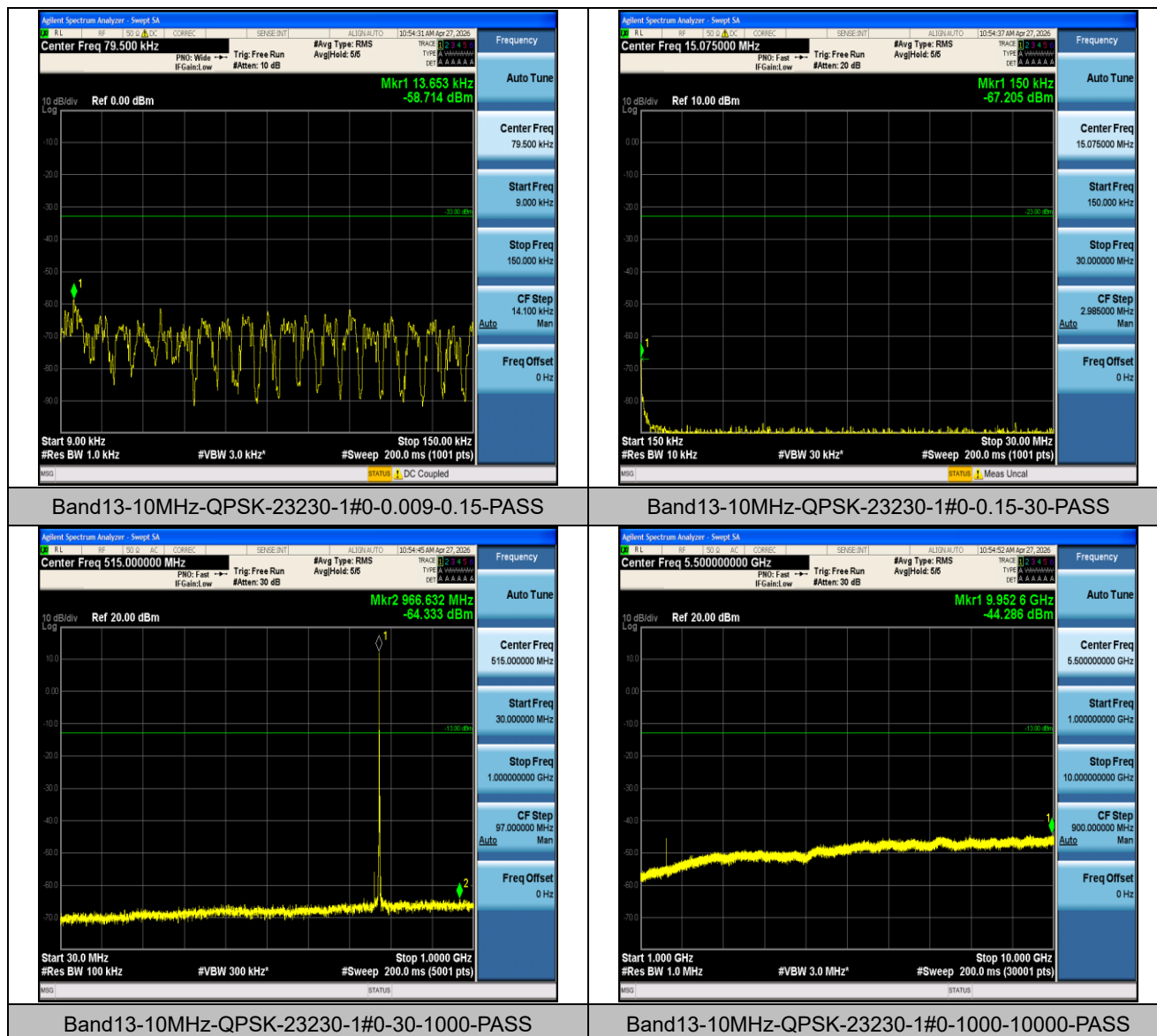
Test Graphs





Conducted Spurious Emission for M1

Test Graphs



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	-5.70	-0.007289	PASS
Band13	10MHz	QPSK	23230	6	0	Low	VL	NT	-6.10	-0.007801	PASS
Band13	10MHz	QPSK	23230	6	0	Low	VH	NT	-4.80	-0.006138	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	-5.90	-0.007545	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	-20	-5.10	-0.006522	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	-10	-4.80	-0.006138	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	0	-5.00	-0.006394	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	10	-4.70	-0.006010	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	20	-5.20	-0.006650	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	30	-4.40	-0.005627	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	40	-4.50	-0.005754	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	50	-5.00	-0.006394	PASS

~The End~