

Appendix-A LTE Cat M1 Band 13

Effective (Isotropic) Radiated Power Output Data for M1

Test Result

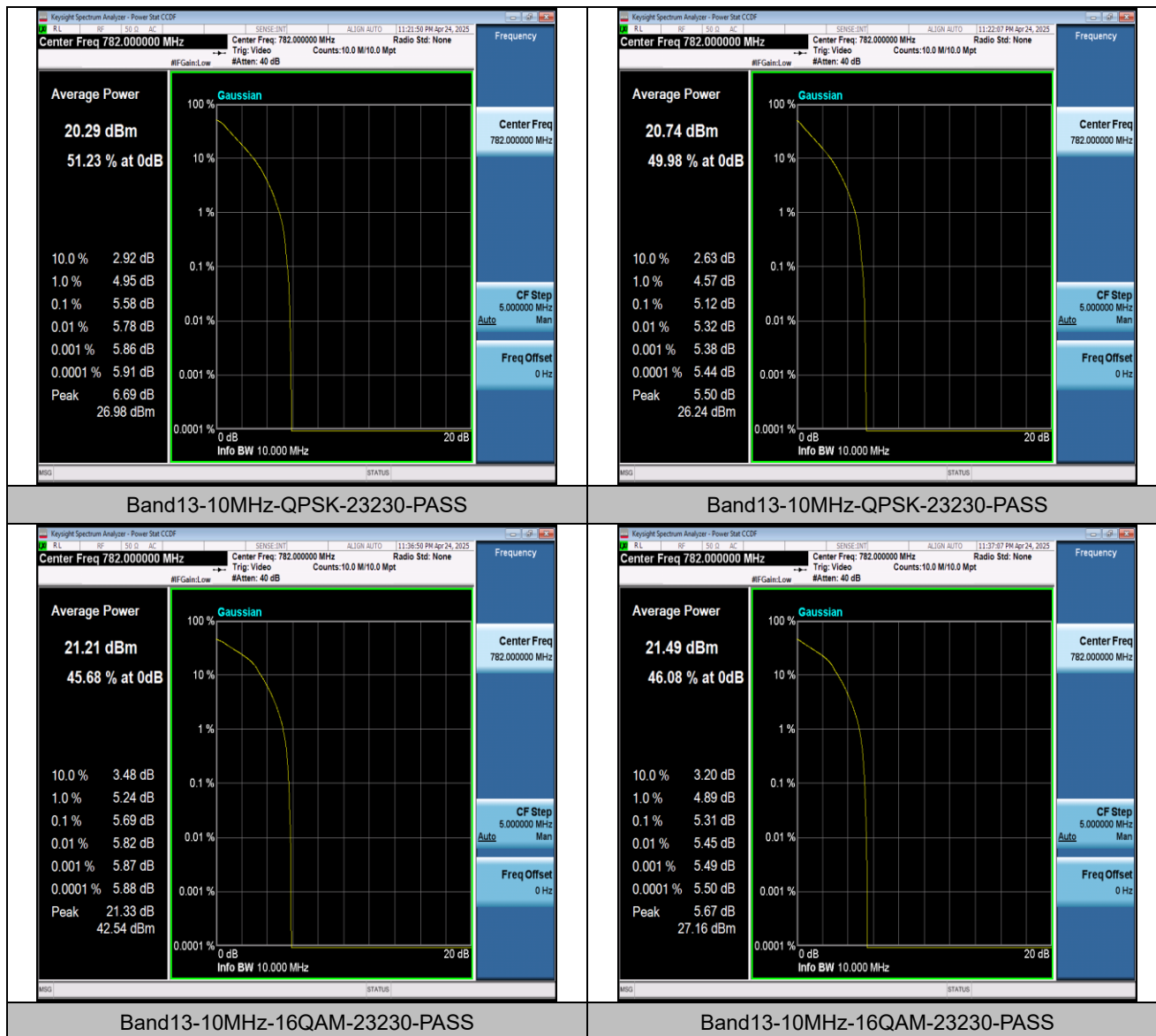
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Power (dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band13	5MHz	QPSK	23205	1	0	Low	20.99	23.29	44.77	PASS
Band13	5MHz	QPSK	23205	1	5	Low	20.58	22.88	44.77	PASS
Band13	5MHz	QPSK	23205	6	0	Low	19.77	22.07	44.77	PASS
Band13	5MHz	QPSK	23230	1	0	Low	20.90	23.2	44.77	PASS
Band13	5MHz	QPSK	23230	1	5	Low	20.50	22.8	44.77	PASS
Band13	5MHz	QPSK	23230	6	0	Low	19.77	22.07	44.77	PASS
Band13	5MHz	QPSK	23255	1	0	High	21.00	23.3	44.77	PASS
Band13	5MHz	QPSK	23255	1	5	High	20.50	22.8	44.77	PASS
Band13	5MHz	QPSK	23255	6	0	High	19.73	22.03	44.77	PASS
Band13	10MHz	QPSK	23230	1	0	Low	20.89	23.19	44.77	PASS
Band13	10MHz	QPSK	23230	1	5	Low	20.62	22.92	44.77	PASS
Band13	10MHz	QPSK	23230	6	0	Low	19.77	22.07	44.77	PASS
Band13	5MHz	16QAM	23205	1	0	Low	21.12	23.42	44.77	PASS
Band13	5MHz	16QAM	23205	1	5	Low	20.96	23.26	44.77	PASS
Band13	5MHz	16QAM	23205	5	0	Low	20.04	22.34	44.77	PASS
Band13	5MHz	16QAM	23230	1	0	Low	21.12	23.42	44.77	PASS
Band13	5MHz	16QAM	23230	1	5	Low	20.86	23.16	44.77	PASS
Band13	5MHz	16QAM	23230	5	0	Low	19.98	22.28	44.77	PASS
Band13	5MHz	16QAM	23255	1	0	High	21.31	23.61	44.77	PASS
Band13	5MHz	16QAM	23255	1	5	High	20.89	23.19	44.77	PASS
Band13	5MHz	16QAM	23255	5	0	High	20.03	22.33	44.77	PASS
Band13	10MHz	16QAM	23230	1	0	Low	21.08	23.38	44.77	PASS
Band13	10MHz	16QAM	23230	1	5	Low	20.84	23.14	44.77	PASS
Band13	10MHz	16QAM	23230	5	0	Low	20.98	23.28	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	5.58	<=13	PASS
Band13	10MHz	QPSK	23230	6	0	High	5.12	<=13	PASS
Band13	10MHz	16QAM	23230	5	0	Low	5.69	<=13	PASS
Band13	10MHz	16QAM	23230	5	0	High	5.31	<=13	PASS

Test Graphs

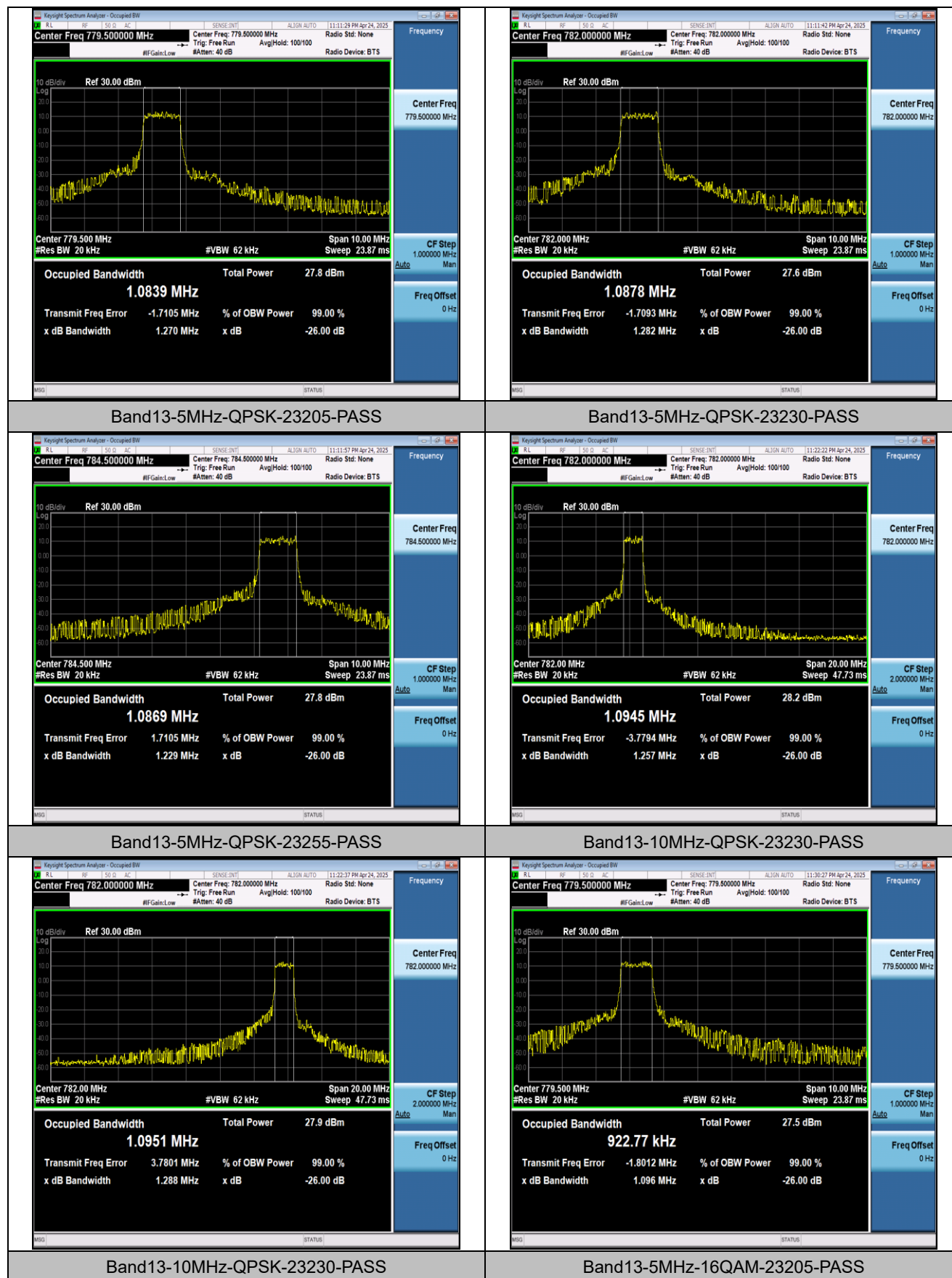


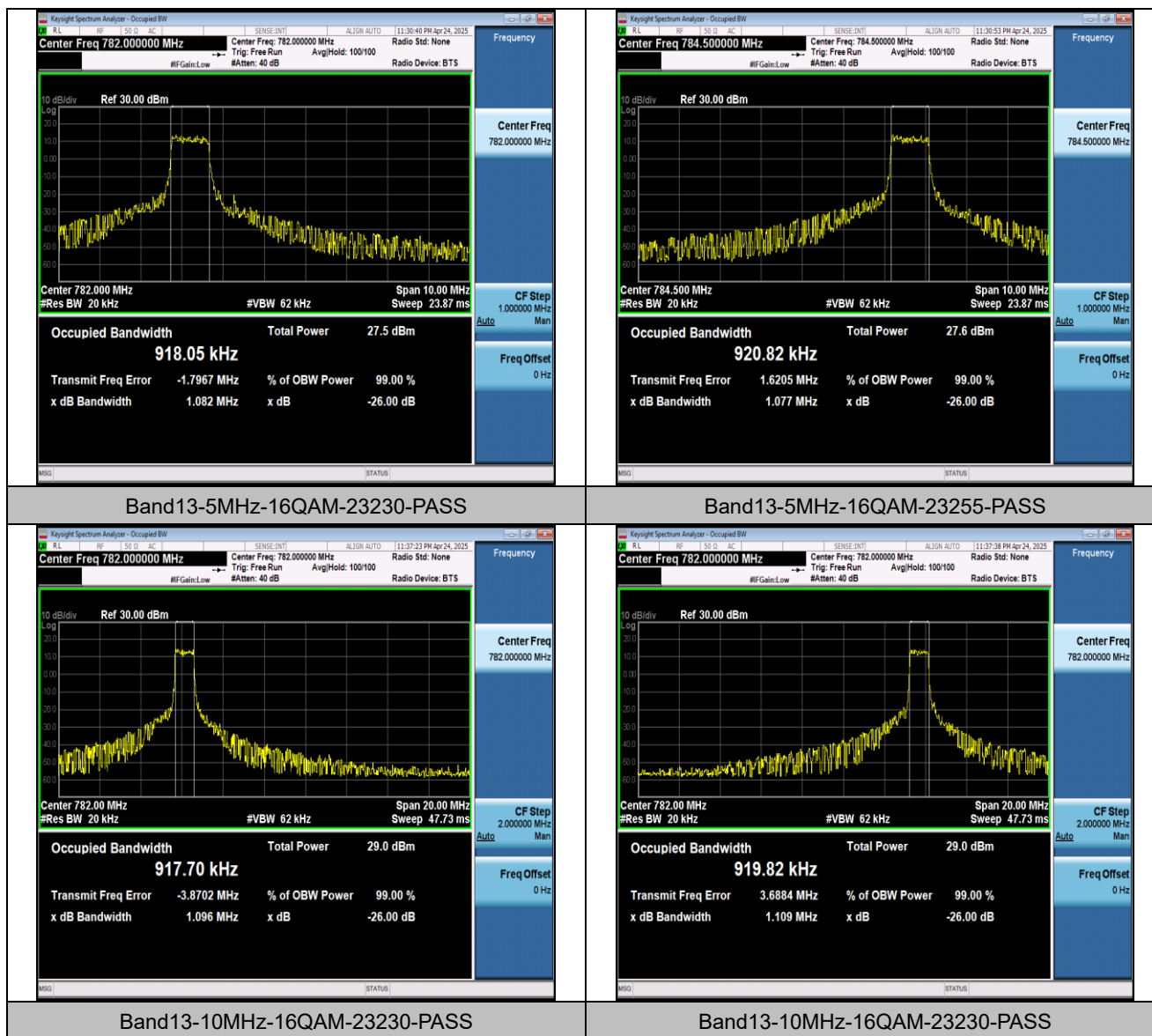
26dB Bandwidth and Occupied Bandwidth for M1

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	1.0839	1.270	PASS
Band13	5MHz	QPSK	23230	6	0	Low	1.0878	1.282	PASS
Band13	5MHz	QPSK	23255	6	0	High	1.0869	1.229	PASS
Band13	10MHz	QPSK	23230	6	0	Low	1.0945	1.257	PASS
Band13	10MHz	QPSK	23230	6	0	High	1.0951	1.288	PASS
Band13	5MHz	16QAM	23205	5	0	Low	0.92277	1.096	PASS
Band13	5MHz	16QAM	23230	5	0	Low	0.91805	1.082	PASS
Band13	5MHz	16QAM	23255	5	0	High	0.92082	1.077	PASS
Band13	10MHz	16QAM	23230	5	0	Low	0.91770	1.096	PASS
Band13	10MHz	16QAM	23230	5	0	High	0.91982	1.109	PASS

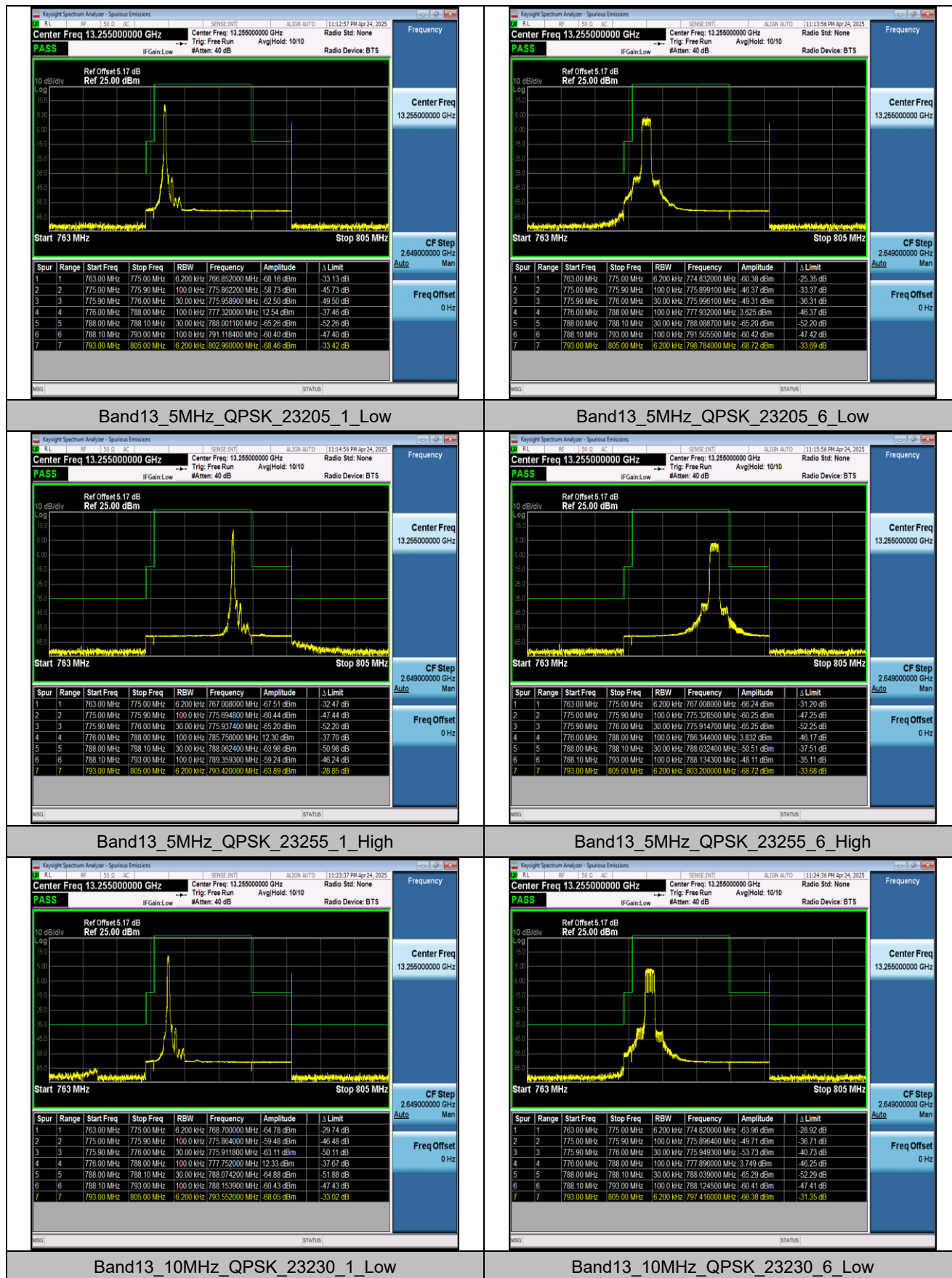
Test Graphs

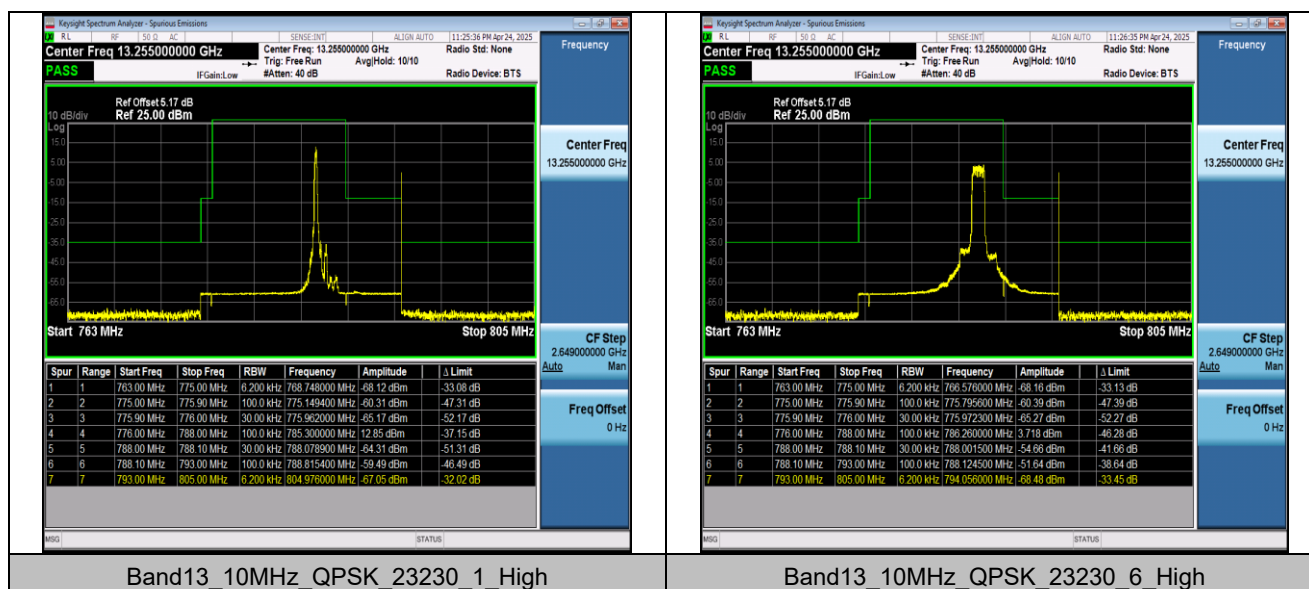




Band Edge for M1

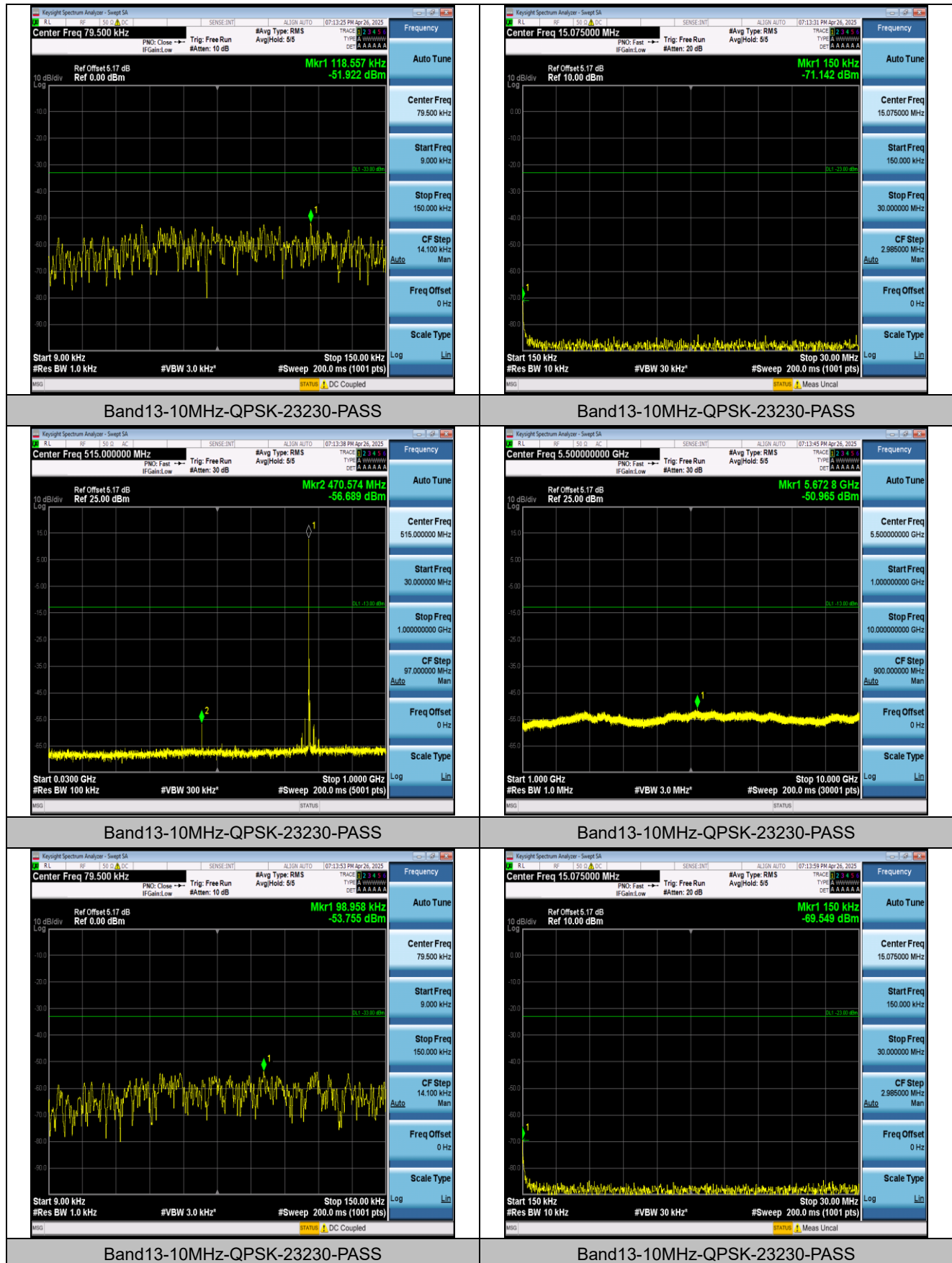
Test Graphs

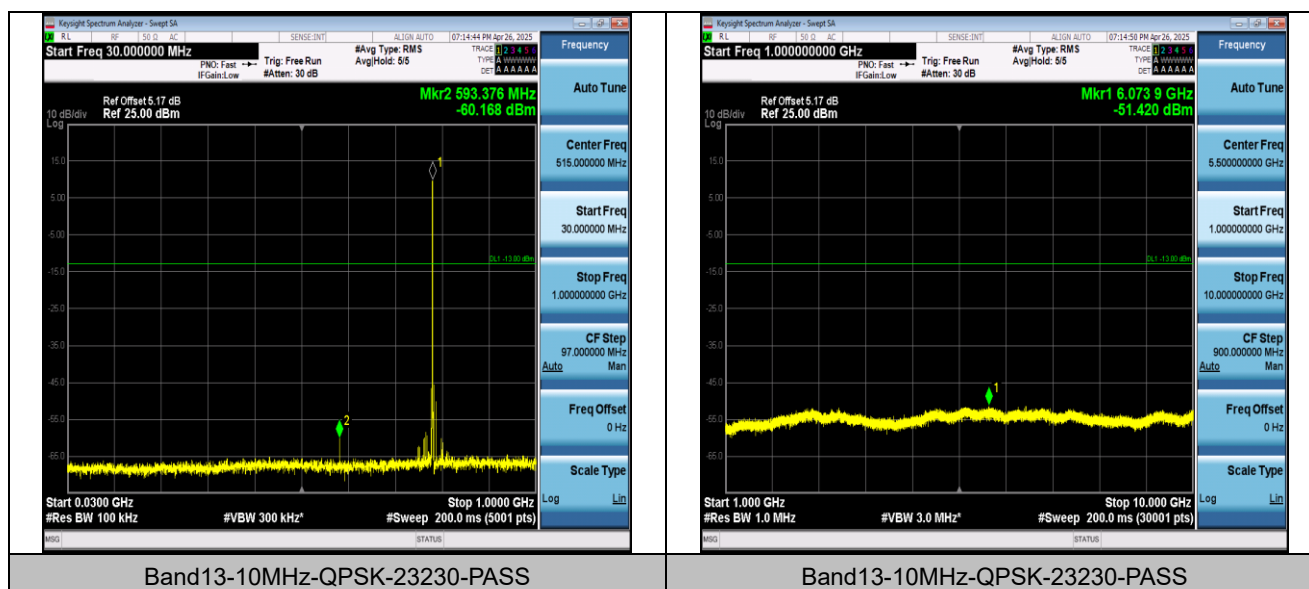




Conducted Spurious Emission for M1

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	-4.70	-0.006010	PASS
Band13	10MHz	QPSK	23230	6	0	Low	VL	NT	-4.70	-0.006010	PASS
Band13	10MHz	QPSK	23230	6	0	Low	VH	NT	-5.20	-0.006650	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	-5.70	-0.007289	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	-20	-5.20	-0.006650	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	-10	-4.80	-0.006138	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	0	-5.80	-0.007417	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	10	-4.60	-0.005882	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	20	-4.50	-0.005754	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	30	-4.90	-0.006266	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	40	-4.30	-0.005499	PASS
Band13	10MHz	QPSK	23230	6	0	Low	NV	50	-4.80	-0.006138	PASS

~The End~