

Appendix-A LTE Band 13

Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	23.31	22.44	44.77	PASS
Band13	5MHz	QPSK	23205	1RB#12	23.23	22.36	44.77	PASS
Band13	5MHz	QPSK	23205	1RB#24	23.13	22.26	44.77	PASS
Band13	5MHz	QPSK	23205	25RB#0	22.37	21.5	44.77	PASS
Band13	5MHz	16QAM	23205	1RB#0	22.31	21.44	44.77	PASS
Band13	5MHz	16QAM	23205	1RB#12	22.36	21.49	44.77	PASS
Band13	5MHz	16QAM	23205	1RB#24	22.34	21.47	44.77	PASS
Band13	5MHz	16QAM	23205	25RB#0	21.31	20.44	44.77	PASS
Band13	5MHz	64QAM	23205	1RB#0	21.26	20.39	44.77	PASS
Band13	5MHz	64QAM	23205	1RB#12	21.53	20.66	44.77	PASS
Band13	5MHz	64QAM	23205	1RB#24	21.34	20.47	44.77	PASS
Band13	5MHz	64QAM	23205	25RB#0	20.35	19.48	44.77	PASS
Band13	5MHz	QPSK	23230	1RB#0	23.28	22.41	44.77	PASS
Band13	5MHz	QPSK	23230	1RB#12	23.21	22.34	44.77	PASS
Band13	5MHz	QPSK	23230	1RB#24	23.23	22.36	44.77	PASS
Band13	5MHz	QPSK	23230	25RB#0	22.26	21.39	44.77	PASS
Band13	5MHz	16QAM	23230	1RB#0	22.3	21.43	44.77	PASS
Band13	5MHz	16QAM	23230	1RB#12	22.34	21.47	44.77	PASS
Band13	5MHz	16QAM	23230	1RB#24	22.09	21.22	44.77	PASS
Band13	5MHz	16QAM	23230	25RB#0	21.23	20.36	44.77	PASS
Band13	5MHz	64QAM	23230	1RB#0	21.5	20.63	44.77	PASS
Band13	5MHz	64QAM	23230	1RB#12	21.57	20.7	44.77	PASS
Band13	5MHz	64QAM	23230	1RB#24	21.56	20.69	44.77	PASS
Band13	5MHz	64QAM	23230	25RB#0	20.16	19.29	44.77	PASS
Band13	5MHz	QPSK	23255	1RB#0	23.23	22.36	44.77	PASS
Band13	5MHz	QPSK	23255	1RB#12	23.17	22.3	44.77	PASS
Band13	5MHz	QPSK	23255	1RB#24	23.07	22.2	44.77	PASS
Band13	5MHz	QPSK	23255	25RB#0	22.22	21.35	44.77	PASS
Band13	5MHz	16QAM	23255	1RB#0	22.22	21.35	44.77	PASS
Band13	5MHz	16QAM	23255	1RB#12	22.36	21.49	44.77	PASS
Band13	5MHz	16QAM	23255	1RB#24	21.96	21.09	44.77	PASS
Band13	5MHz	16QAM	23255	25RB#0	21.23	20.36	44.77	PASS
Band13	5MHz	64QAM	23255	1RB#0	21.44	20.57	44.77	PASS
Band13	5MHz	64QAM	23255	1RB#12	21.21	20.34	44.77	PASS
Band13	5MHz	64QAM	23255	1RB#24	21.26	20.39	44.77	PASS
Band13	5MHz	64QAM	23255	25RB#0	20.22	19.35	44.77	PASS
Band13	10MHz	QPSK	23230	1RB#0	23.41	22.54	44.77	PASS

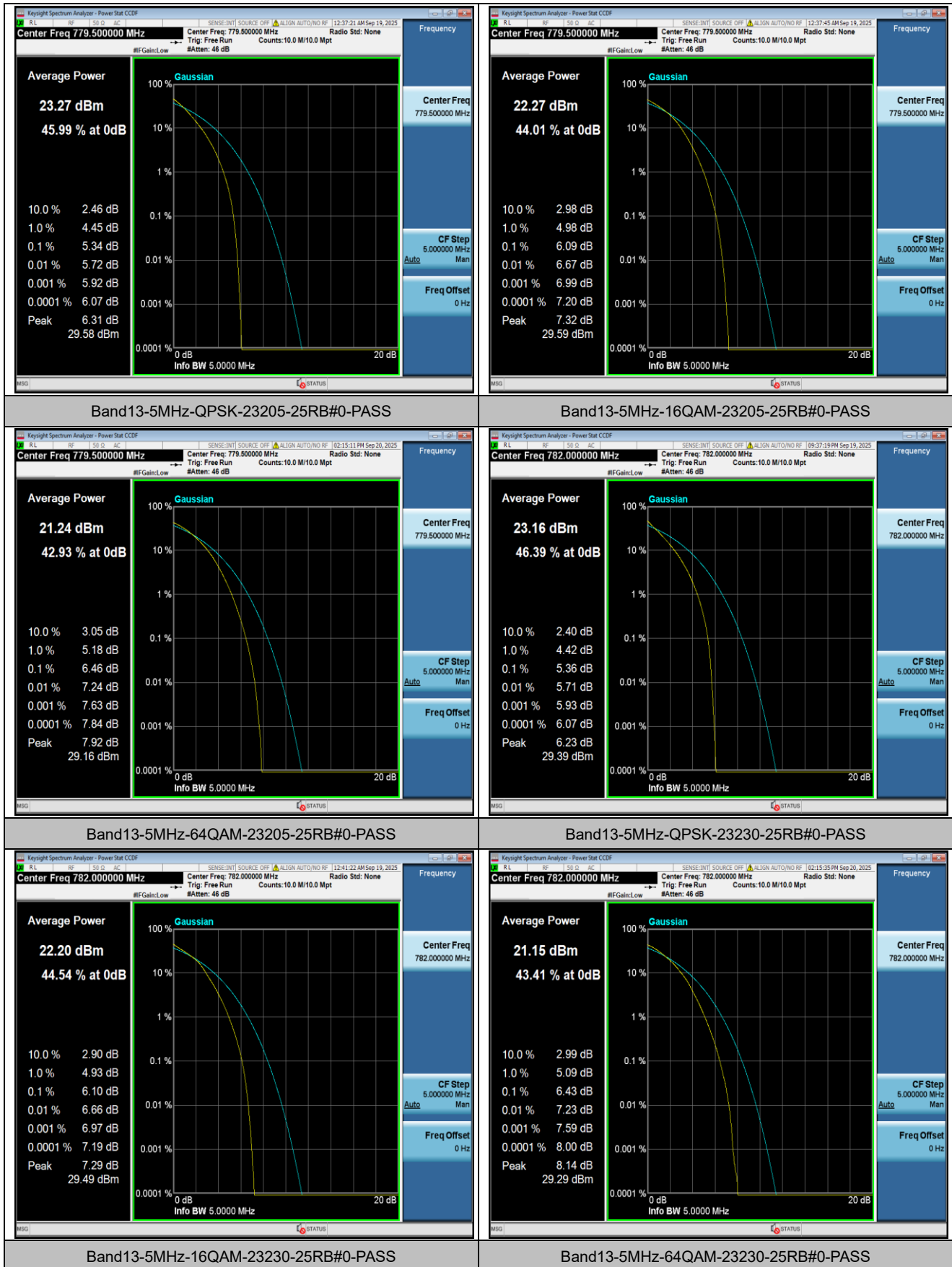
Band13	10MHz	QPSK	23230	1RB#24	23.21	22.34	44.77	PASS
Band13	10MHz	QPSK	23230	1RB#49	23.11	22.24	44.77	PASS
Band13	10MHz	QPSK	23230	50RB#0	22.39	21.52	44.77	PASS
Band13	10MHz	16QAM	23230	1RB#0	22.19	21.32	44.77	PASS
Band13	10MHz	16QAM	23230	1RB#24	22.23	21.36	44.77	PASS
Band13	10MHz	16QAM	23230	1RB#49	22.27	21.4	44.77	PASS
Band13	10MHz	16QAM	23230	50RB#0	21.3	20.43	44.77	PASS
Band13	10MHz	64QAM	23230	1RB#0	21.44	20.57	44.77	PASS
Band13	10MHz	64QAM	23230	1RB#24	21.52	20.65	44.77	PASS
Band13	10MHz	64QAM	23230	1RB#49	21.26	20.39	44.77	PASS
Band13	10MHz	64QAM	23230	50RB#0	20.26	19.39	44.77	PASS

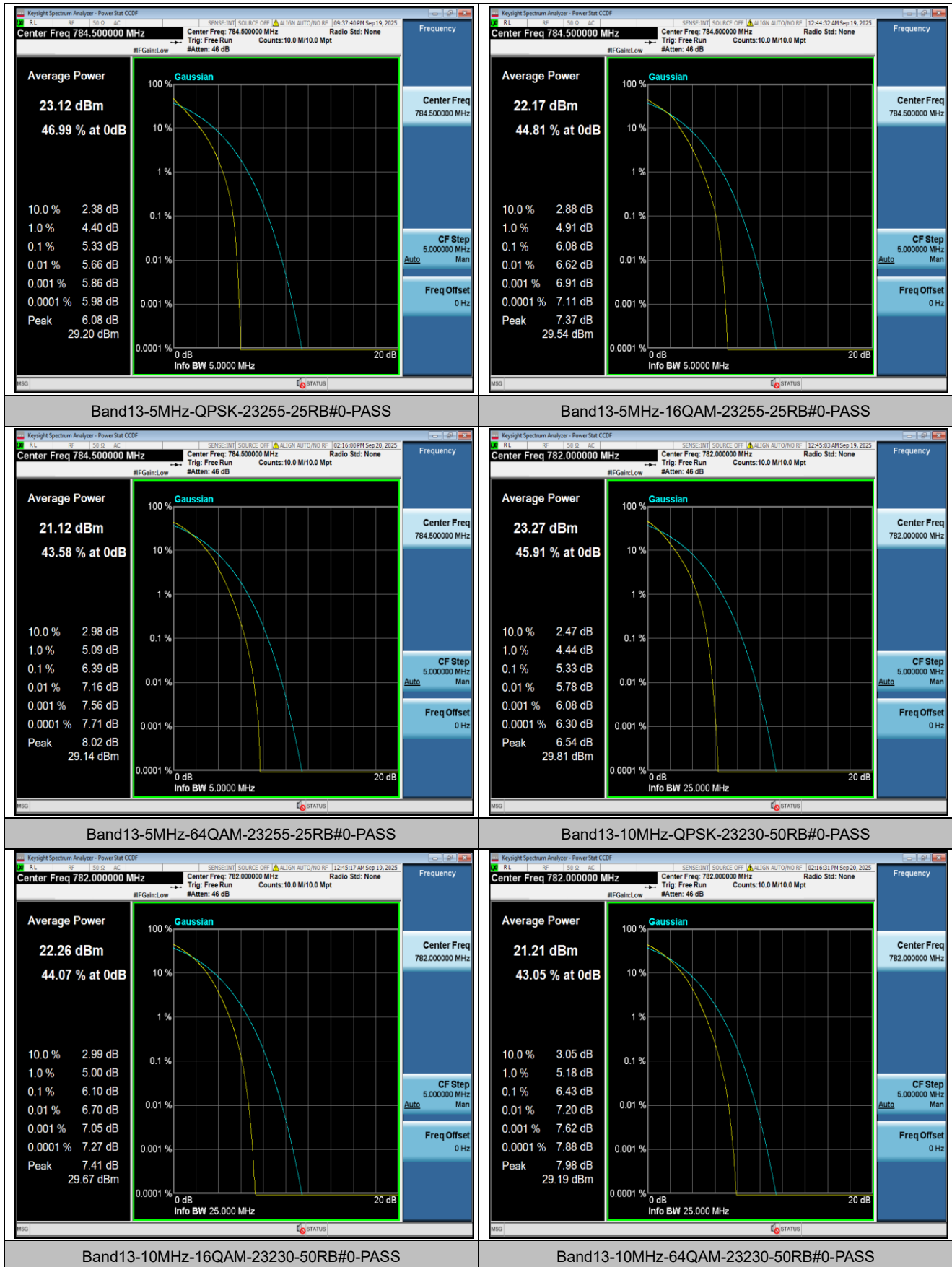
Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	5.34	13	PASS
Band13	5MHz	16QAM	23205	25RB#0	6.09	13	PASS
Band13	5MHz	64QAM	23205	25RB#0	6.46	13	PASS
Band13	5MHz	QPSK	23230	25RB#0	5.36	13	PASS
Band13	5MHz	16QAM	23230	25RB#0	6.10	13	PASS
Band13	5MHz	64QAM	23230	25RB#0	6.43	13	PASS
Band13	5MHz	QPSK	23255	25RB#0	5.33	13	PASS
Band13	5MHz	16QAM	23255	25RB#0	6.08	13	PASS
Band13	5MHz	64QAM	23255	25RB#0	6.39	13	PASS
Band13	10MHz	QPSK	23230	50RB#0	5.33	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	6.10	13	PASS
Band13	10MHz	64QAM	23230	50RB#0	6.43	13	PASS

Test Graphs





26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.5051	5.142	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.5022	5.132	PASS
Band13	5MHz	64QAM	23205	25RB#0	4.5012	5.166	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.5169	5.165	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.5158	5.174	PASS
Band13	5MHz	64QAM	23230	25RB#0	4.5052	5.159	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.5111	5.173	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.5062	5.190	PASS
Band13	5MHz	64QAM	23255	25RB#0	4.5053	5.139	PASS
Band13	10MHz	QPSK	23230	50RB#0	8.9690	10.03	PASS
Band13	10MHz	16QAM	23230	50RB#0	8.9748	9.852	PASS
Band13	10MHz	64QAM	23230	50RB#0	8.9556	9.970	PASS

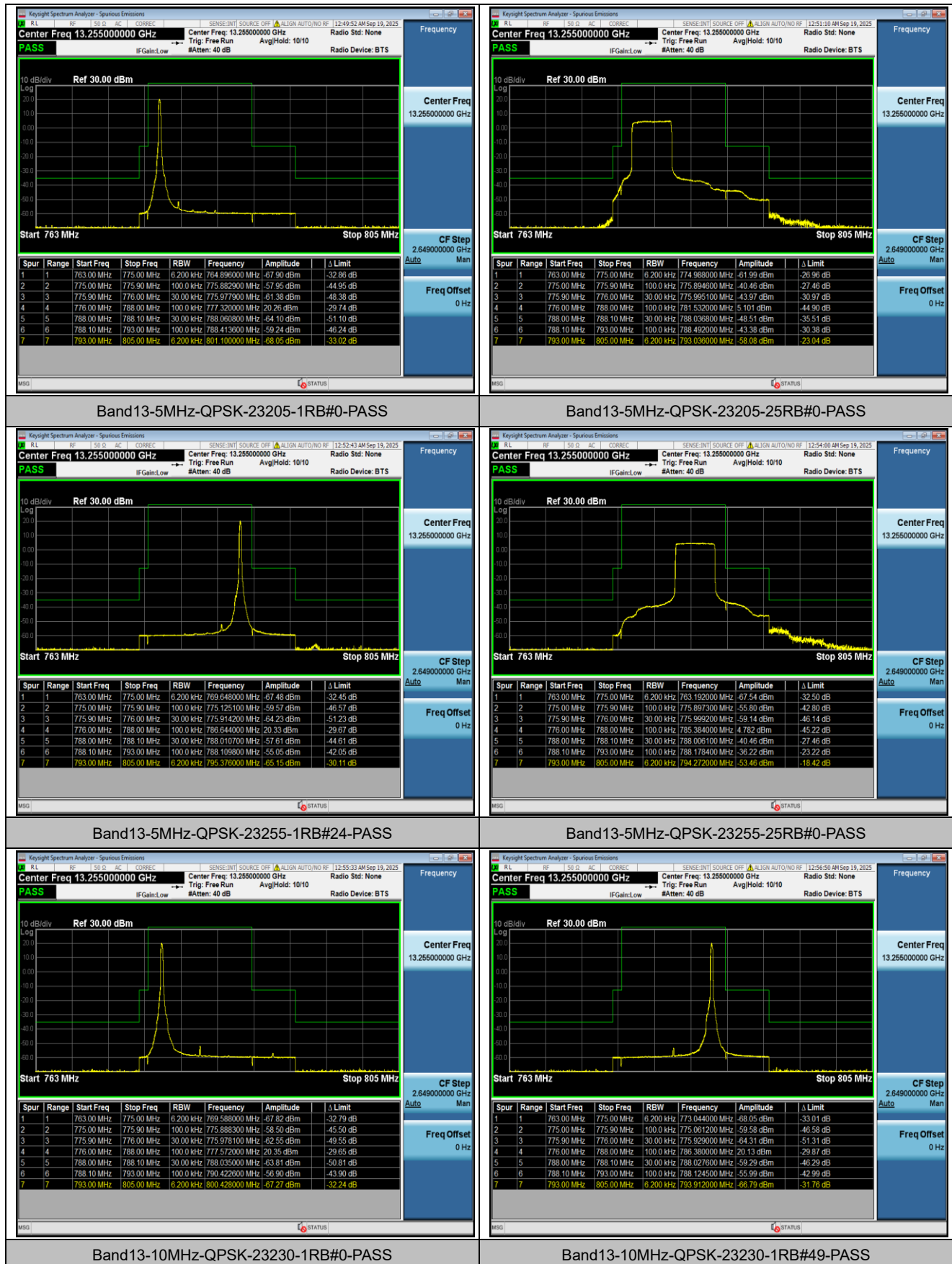
Test Graphs

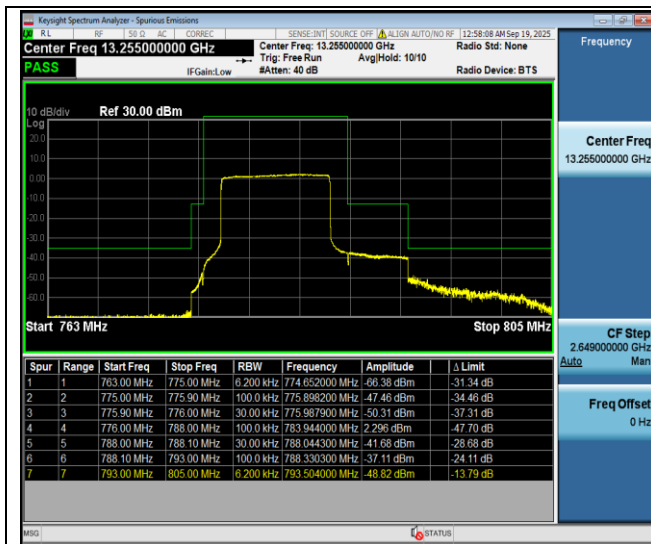




Band Edge

Test Graphs

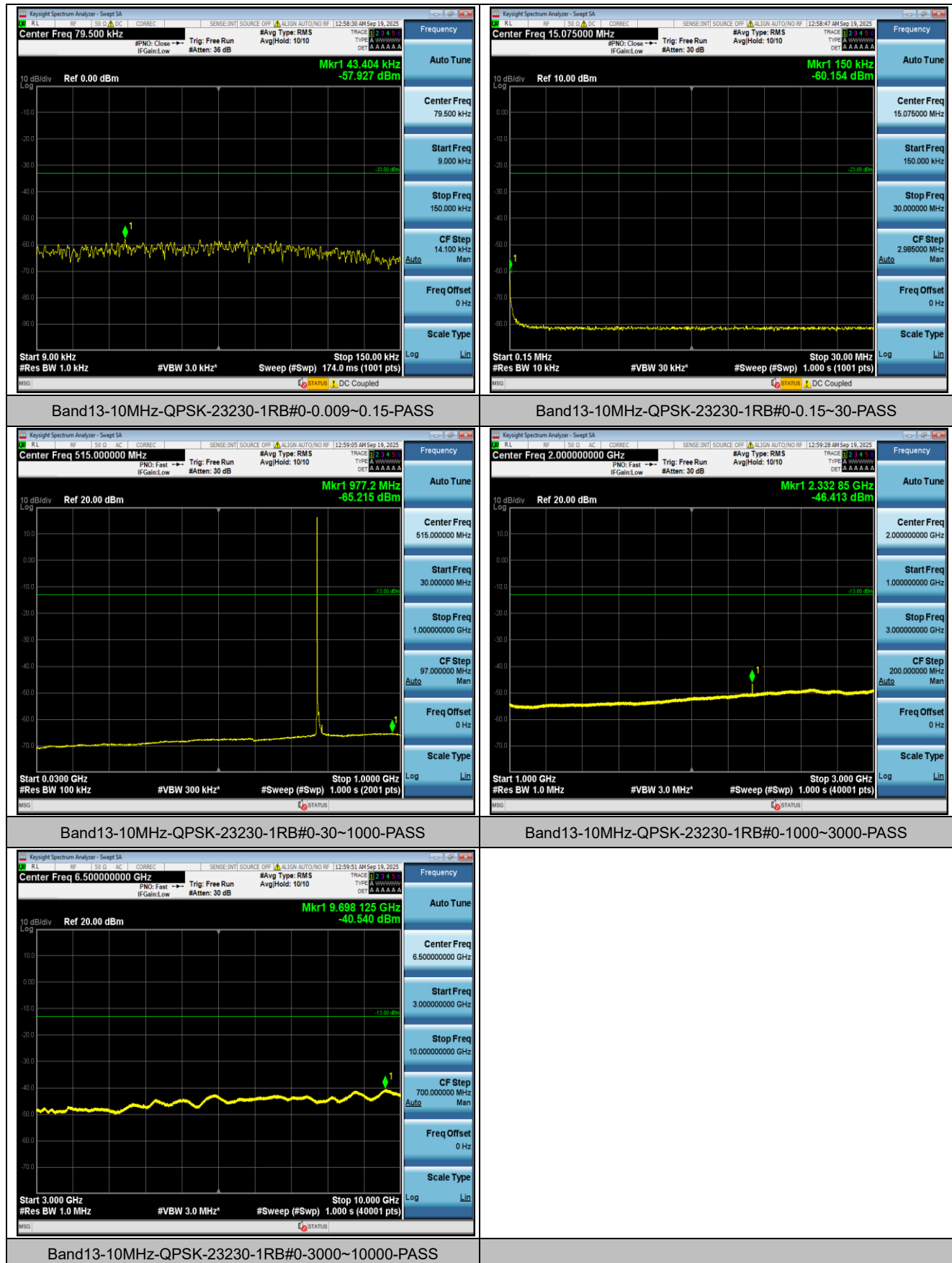




Band13-10MHz-QPSK-23230-50RB#0-PASS

Conducted Spurious Emission

Test Graphs



Frequency Stability

Test Result

Voltage									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band13	10MHz	QPSK	23230	50RB#0	VN	NT	-1.00	-0.001279	PASS
Band13	10MHz	QPSK	23230	50RB#0	VL	NT	-1.60	-0.002046	PASS
Band13	10MHz	QPSK	23230	50RB#0	VH	NT	1.80	0.002302	PASS

Temperature									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band13	10MHz	QPSK	23230	50RB#0	NV	-30	-0.20	-0.000256	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	-20	-0.50	-0.000639	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	-10	0.10	0.000128	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	0	-0.60	-0.000767	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	10	-0.60	-0.000767	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	20	-0.20	-0.000256	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	30	-0.40	-0.000512	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	40	0.20	0.000256	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	50	-1.10	-0.001407	PASS

~The End~