

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	23.19	20.34	44.77	PASS
Band13	5MHz	QPSK	23205	1RB#12	23.06	20.21	44.77	PASS
Band13	5MHz	QPSK	23205	1RB#24	23.02	20.17	44.77	PASS
Band13	5MHz	QPSK	23205	25RB#0	22.15	19.3	44.77	PASS
Band13	5MHz	QPSK	23230	1RB#0	22.3	19.45	44.77	PASS
Band13	5MHz	QPSK	23230	1RB#12	22.5	19.65	44.77	PASS
Band13	5MHz	QPSK	23230	1RB#24	22.31	19.46	44.77	PASS
Band13	5MHz	QPSK	23230	25RB#0	21.13	18.28	44.77	PASS
Band13	5MHz	QPSK	23255	1RB#0	21.39	18.54	44.77	PASS
Band13	5MHz	QPSK	23255	1RB#12	21.54	18.69	44.77	PASS
Band13	5MHz	QPSK	23255	1RB#24	21.43	18.58	44.77	PASS
Band13	5MHz	QPSK	23255	25RB#0	20.09	17.24	44.77	PASS
Band13	5MHz	16QAM	23205	1RB#0	23.06	20.21	44.77	PASS
Band13	5MHz	16QAM	23205	1RB#12	23.06	20.21	44.77	PASS
Band13	5MHz	16QAM	23205	1RB#24	23.05	20.2	44.77	PASS
Band13	5MHz	16QAM	23205	25RB#0	22.19	19.34	44.77	PASS
Band13	5MHz	16QAM	23230	1RB#0	22.43	19.58	44.77	PASS
Band13	5MHz	16QAM	23230	1RB#12	22.41	19.56	44.77	PASS
Band13	5MHz	16QAM	23230	1RB#24	22.3	19.45	44.77	PASS
Band13	5MHz	16QAM	23230	25RB#0	21.17	18.32	44.77	PASS
Band13	5MHz	16QAM	23255	1RB#0	21.24	18.39	44.77	PASS
Band13	5MHz	16QAM	23255	1RB#12	21.36	18.51	44.77	PASS
Band13	5MHz	16QAM	23255	1RB#24	21.25	18.4	44.77	PASS
Band13	5MHz	16QAM	23255	25RB#0	20.15	17.3	44.77	PASS
Band13	5MHz	64QAM	23205	1RB#0	23.25	20.4	44.77	PASS
Band13	5MHz	64QAM	23205	1RB#12	22.99	20.14	44.77	PASS
Band13	5MHz	64QAM	23205	1RB#24	23.1	20.25	44.77	PASS
Band13	5MHz	64QAM	23205	25RB#0	22.11	19.26	44.77	PASS
Band13	5MHz	64QAM	23230	1RB#0	22.41	19.56	44.77	PASS
Band13	5MHz	64QAM	23230	1RB#12	22.06	19.21	44.77	PASS
Band13	5MHz	64QAM	23230	1RB#24	22.57	19.72	44.77	PASS
Band13	5MHz	64QAM	23230	25RB#0	21.13	18.28	44.77	PASS
Band13	5MHz	64QAM	23255	1RB#0	21.47	18.62	44.77	PASS
Band13	5MHz	64QAM	23255	1RB#12	21.01	18.16	44.77	PASS
Band13	5MHz	64QAM	23255	1RB#24	21.34	18.49	44.77	PASS
Band13	5MHz	64QAM	23255	25RB#0	20.16	17.31	44.77	PASS

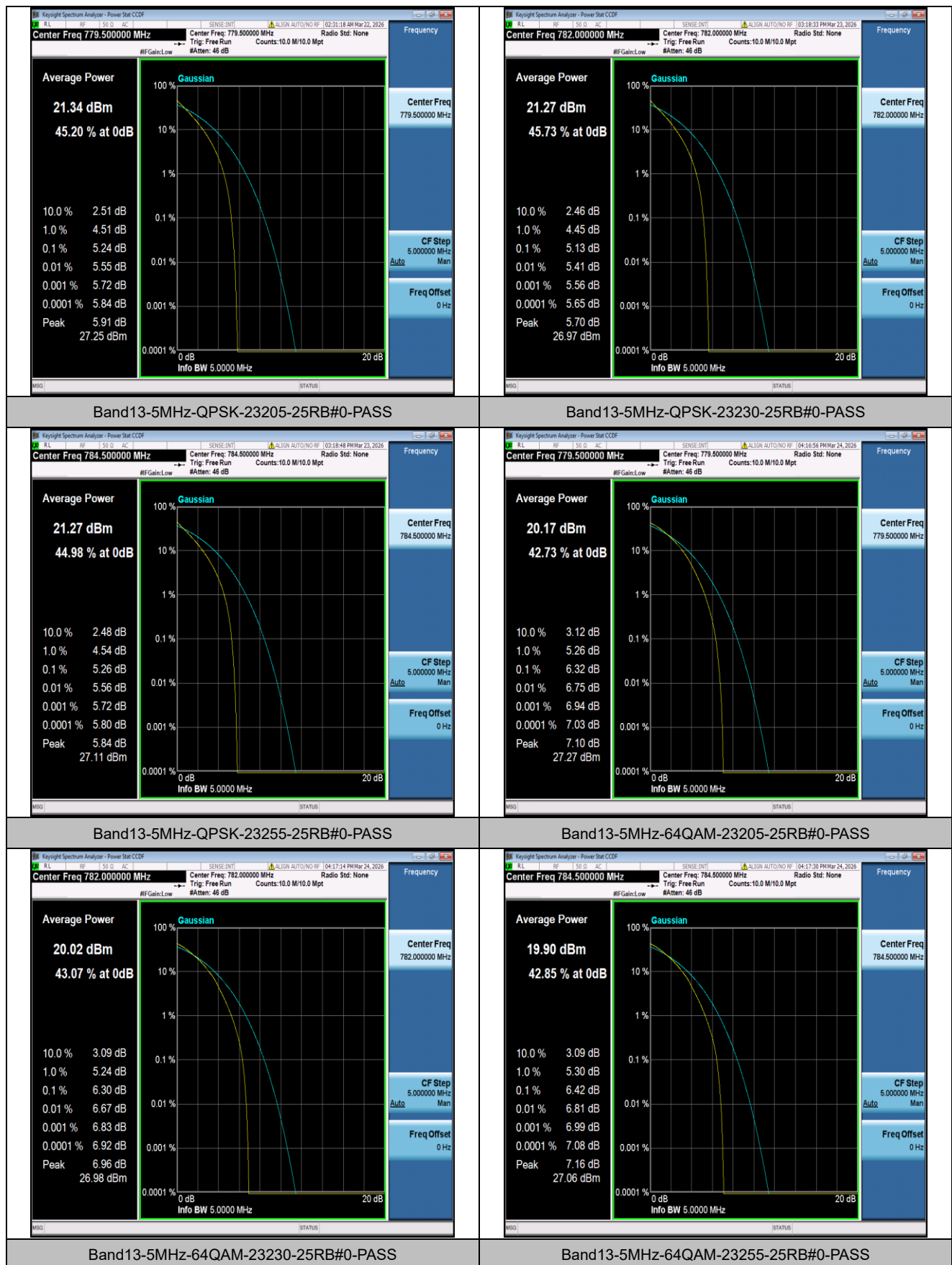
Band13	10MHz	QPSK	23230	1RB#0	23.25	20.4	44.77	PASS
Band13	10MHz	QPSK	23230	1RB#24	23.14	20.29	44.77	PASS
Band13	10MHz	QPSK	23230	1RB#49	23.03	20.18	44.77	PASS
Band13	10MHz	QPSK	23230	50RB#0	22.12	19.27	44.77	PASS
Band13	10MHz	16QAM	23230	1RB#0	22.62	19.77	44.77	PASS
Band13	10MHz	16QAM	23230	1RB#24	22.29	19.44	44.77	PASS
Band13	10MHz	16QAM	23230	1RB#49	22.54	19.69	44.77	PASS
Band13	10MHz	16QAM	23230	50RB#0	21.15	18.3	44.77	PASS
Band13	10MHz	64QAM	23230	1RB#0	21.42	18.57	44.77	PASS
Band13	10MHz	64QAM	23230	1RB#24	21.4	18.55	44.77	PASS
Band13	10MHz	64QAM	23230	1RB#49	21	18.15	44.77	PASS
Band13	10MHz	64QAM	23230	50RB#0	20.09	17.24	44.77	PASS

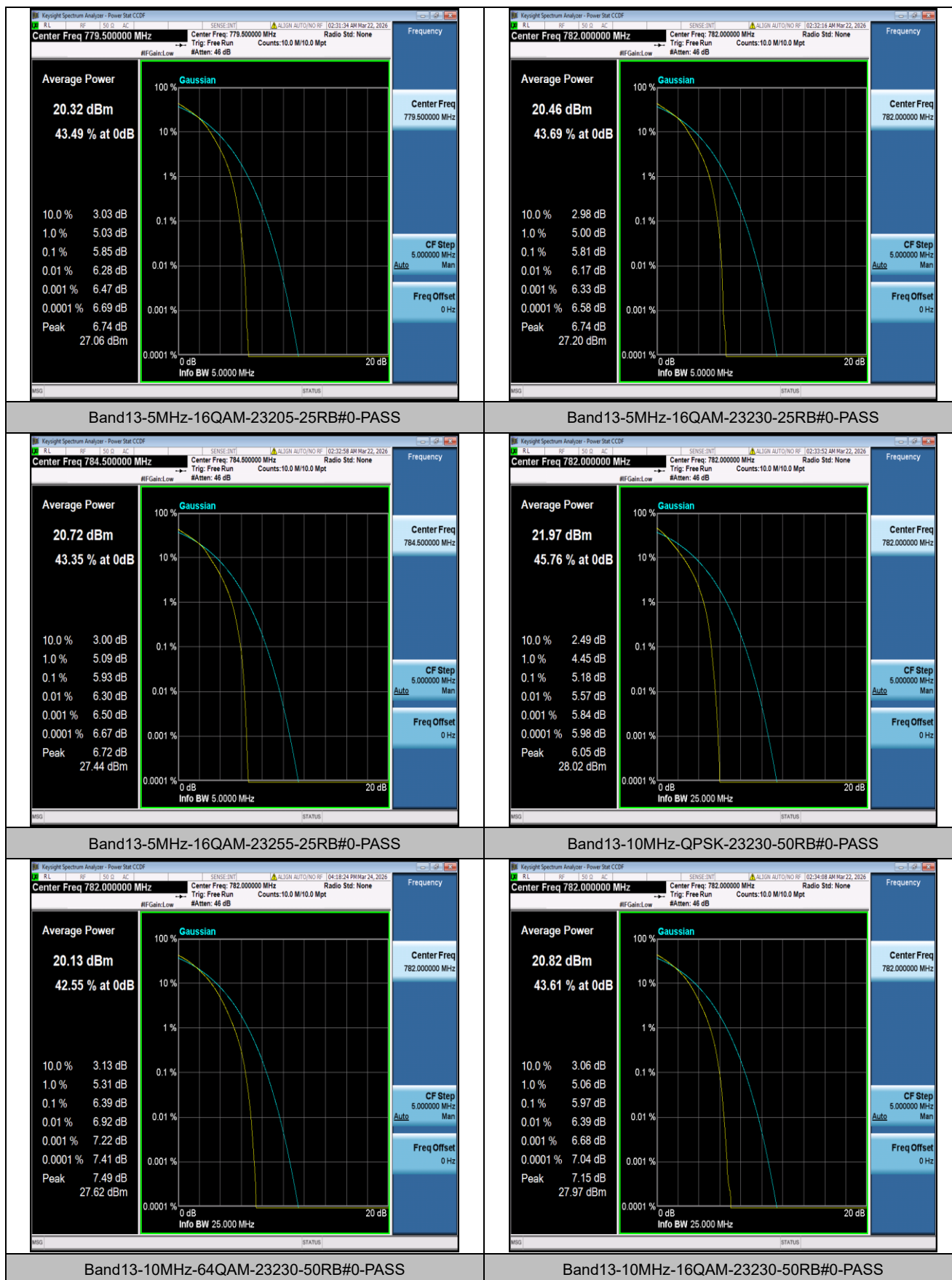
Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	5.24	13	PASS
Band13	5MHz	QPSK	23230	25RB#0	5.13	13	PASS
Band13	5MHz	QPSK	23255	25RB#0	5.26	13	PASS
Band13	5MHz	64QAM	23205	25RB#0	6.32	13	PASS
Band13	5MHz	64QAM	23230	25RB#0	6.30	13	PASS
Band13	5MHz	64QAM	23255	25RB#0	6.42	13	PASS
Band13	5MHz	16QAM	23205	25RB#0	5.85	13	PASS
Band13	5MHz	16QAM	23230	25RB#0	5.81	13	PASS
Band13	5MHz	16QAM	23255	25RB#0	5.93	13	PASS
Band13	10MHz	QPSK	23230	50RB#0	5.18	13	PASS
Band13	10MHz	64QAM	23230	50RB#0	6.39	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	5.97	13	PASS

Test Graphs



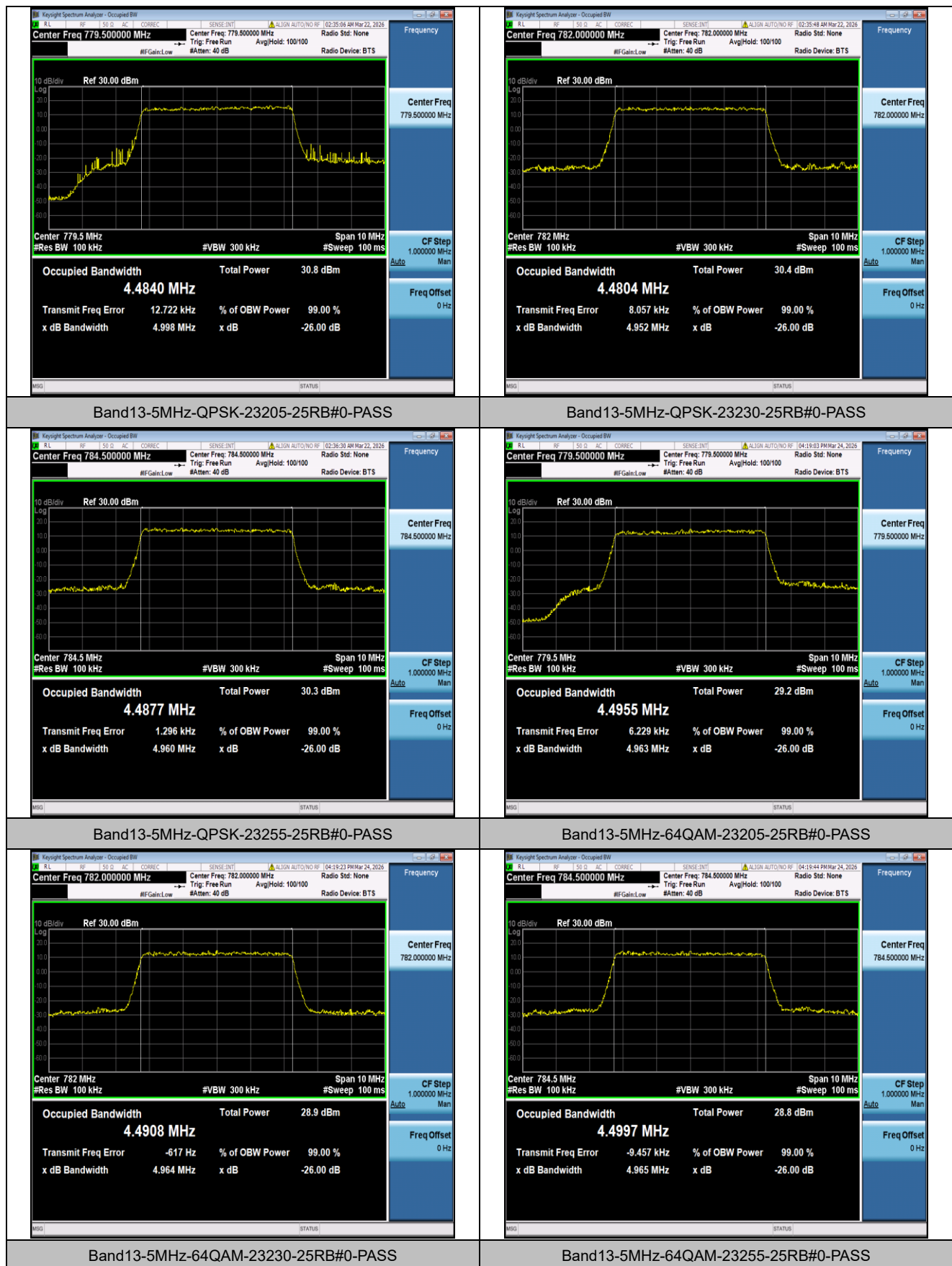


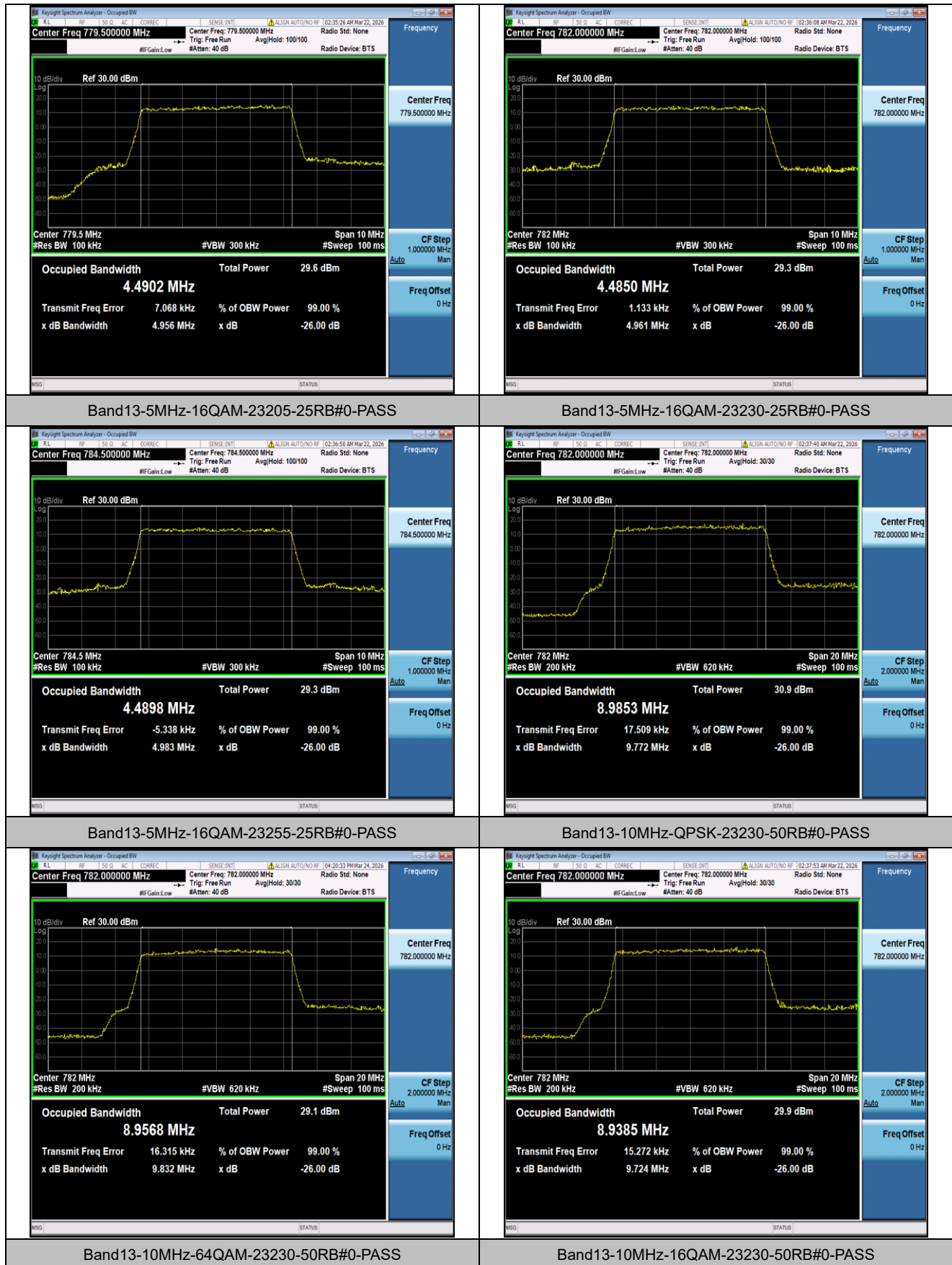
26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.4840	4.998	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.4804	4.952	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.4877	4.960	PASS
Band13	5MHz	64QAM	23205	25RB#0	4.4955	4.963	PASS
Band13	5MHz	64QAM	23230	25RB#0	4.4908	4.964	PASS
Band13	5MHz	64QAM	23255	25RB#0	4.4997	4.965	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.4902	4.956	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.4850	4.961	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.4898	4.983	PASS
Band13	10MHz	QPSK	23230	50RB#0	8.9853	9.772	PASS
Band13	10MHz	64QAM	23230	50RB#0	8.9568	9.832	PASS
Band13	10MHz	16QAM	23230	50RB#0	8.9385	9.724	PASS

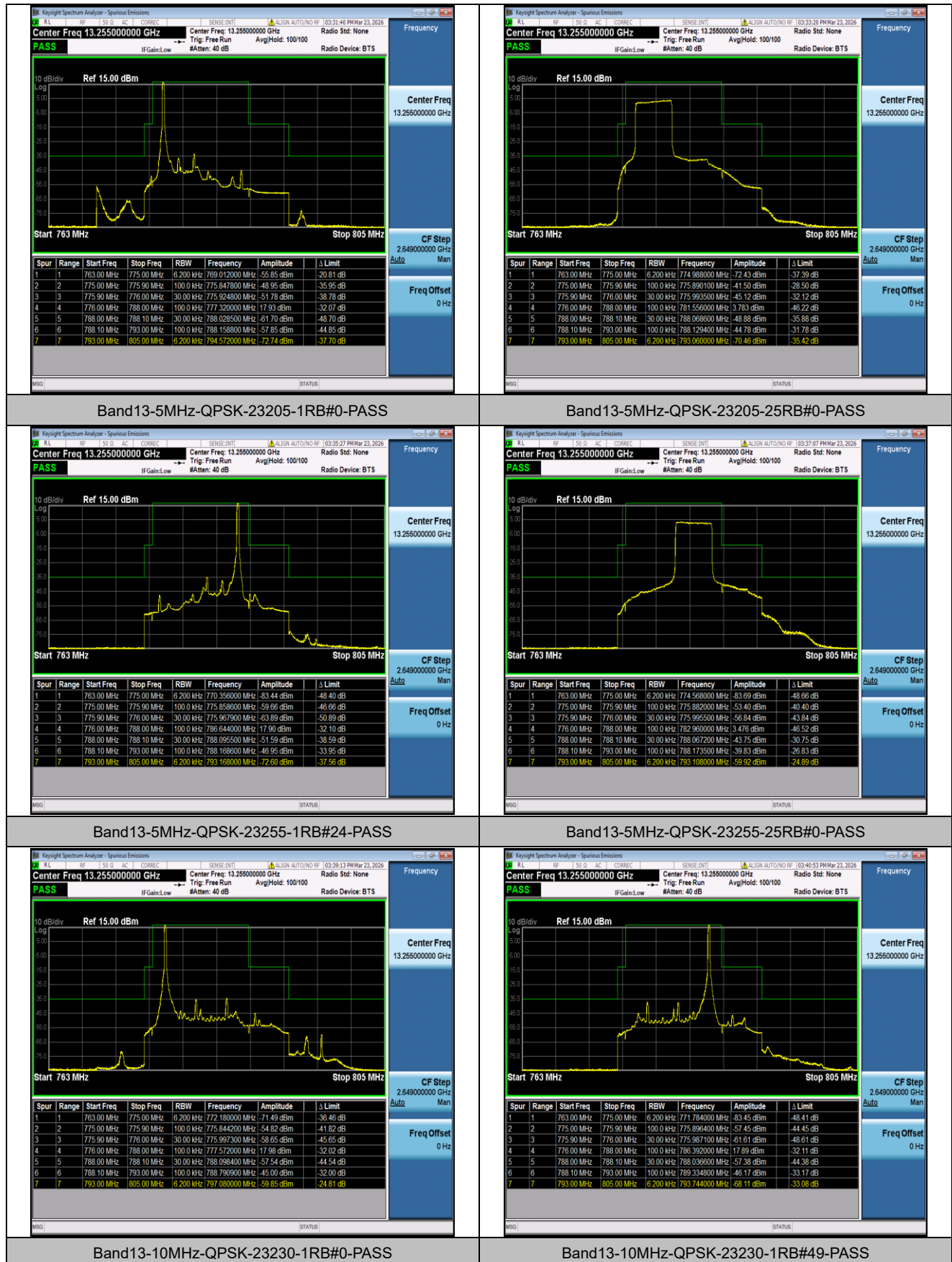
Test Graphs

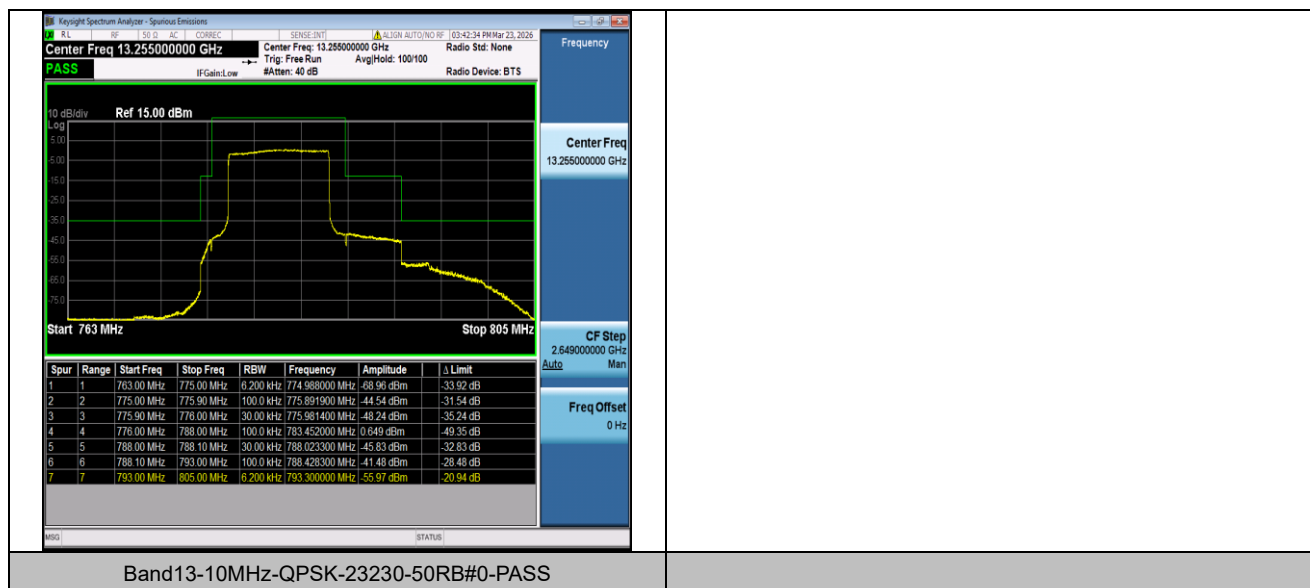




Band Edge

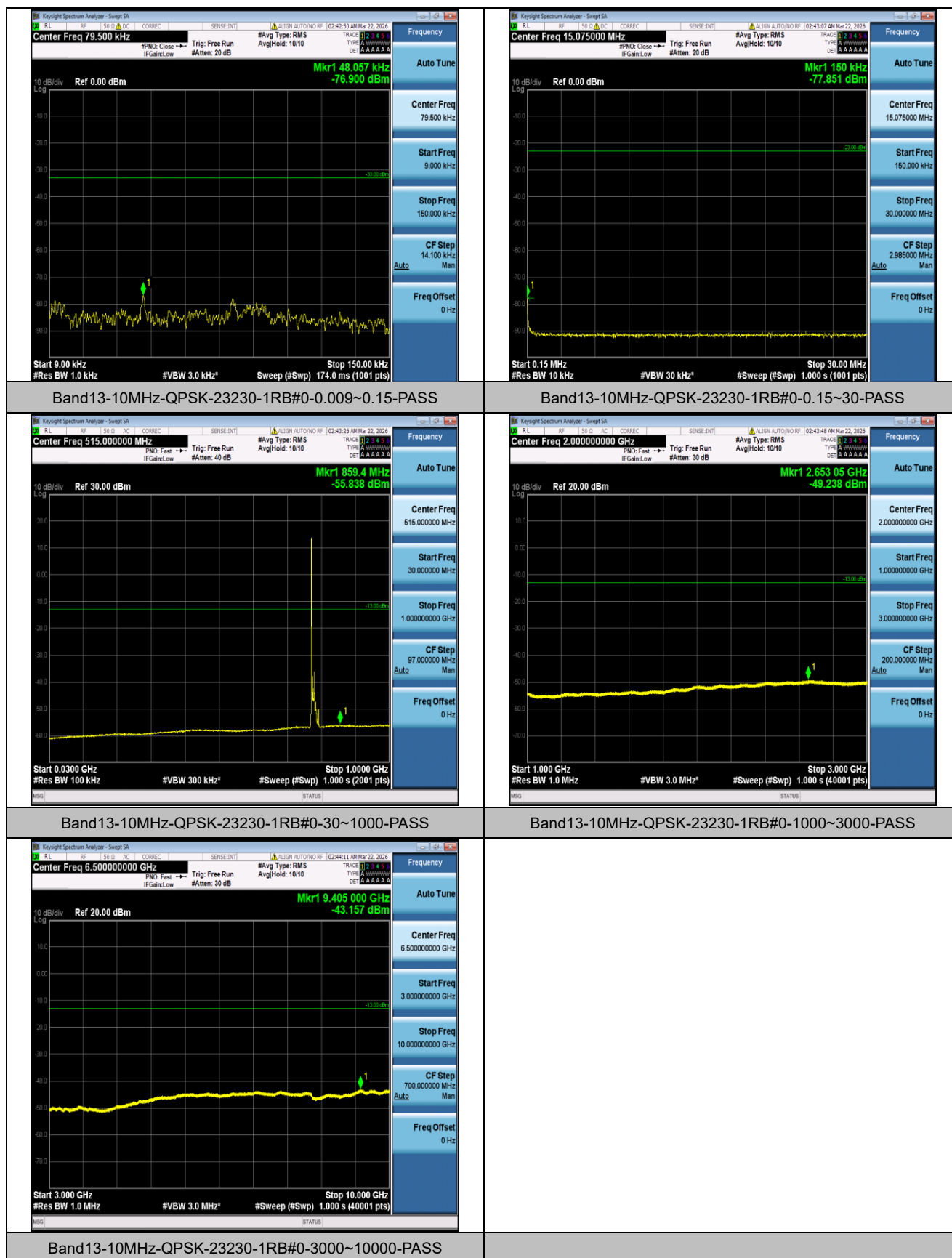
Test Graphs





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	-3.50	-0.004476	PASS
Band13	10MHz	QPSK	23230	50RB#0	VL	NT	-3.00	-0.003836	PASS
Band13	10MHz	QPSK	23230	50RB#0	VH	NT	-2.30	-0.002941	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	1.90	0.002430	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	-20	4.80	0.006138	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	-10	-4.80	-0.006138	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	0	0.10	0.000128	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	10	-10.60	-0.013555	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	20	-4.00	-0.005115	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	30	-11.10	-0.014194	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	40	-4.90	-0.006266	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	50	-4.60	-0.005882	PASS

~The End~