

Appendix-D 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	23.62	23.41	34.77	PASS
Band13	5MHz	QPSK	23205	1RB#12	23.65	23.44	34.77	PASS
Band13	5MHz	QPSK	23205	1RB#24	23.71	23.5	34.77	PASS
Band13	5MHz	QPSK	23205	25RB#0	22.45	22.24	34.77	PASS
Band13	5MHz	16QAM	23205	1RB#0	22.8	22.59	34.77	PASS
Band13	5MHz	16QAM	23205	1RB#12	22.55	22.34	34.77	PASS
Band13	5MHz	16QAM	23205	1RB#24	22.84	22.63	34.77	PASS
Band13	5MHz	16QAM	23205	25RB#0	21.51	21.3	34.77	PASS
Band13	5MHz	64QAM	23205	1RB#0	21.56	21.35	34.77	PASS
Band13	5MHz	64QAM	23205	1RB#12	21.54	21.33	34.77	PASS
Band13	5MHz	64QAM	23205	1RB#24	21.67	21.46	34.77	PASS
Band13	5MHz	64QAM	23205	25RB#0	20.44	20.23	34.77	PASS
Band13	5MHz	256QAM	23205	1RB#0	18.74	18.53	34.77	PASS
Band13	5MHz	256QAM	23205	1RB#12	18.53	18.32	34.77	PASS
Band13	5MHz	256QAM	23205	1RB#24	18.75	18.54	34.77	PASS
Band13	5MHz	256QAM	23205	25RB#0	18.67	18.46	34.77	PASS
Band13	5MHz	QPSK	23230	1RB#0	23.68	23.47	34.77	PASS
Band13	5MHz	QPSK	23230	1RB#12	23.66	23.45	34.77	PASS
Band13	5MHz	QPSK	23230	1RB#24	23.62	23.41	34.77	PASS
Band13	5MHz	QPSK	23230	25RB#0	22.59	22.38	34.77	PASS
Band13	5MHz	16QAM	23230	1RB#0	22.6	22.39	34.77	PASS
Band13	5MHz	16QAM	23230	1RB#12	22.87	22.66	34.77	PASS
Band13	5MHz	16QAM	23230	1RB#24	22.85	22.64	34.77	PASS
Band13	5MHz	16QAM	23230	25RB#0	21.62	21.41	34.77	PASS
Band13	5MHz	64QAM	23230	1RB#0	21.51	21.3	34.77	PASS
Band13	5MHz	64QAM	23230	1RB#12	21.63	21.42	34.77	PASS
Band13	5MHz	64QAM	23230	1RB#24	21.64	21.43	34.77	PASS
Band13	5MHz	64QAM	23230	25RB#0	20.58	20.37	34.77	PASS
Band13	5MHz	256QAM	23230	1RB#0	18.47	18.26	34.77	PASS
Band13	5MHz	256QAM	23230	1RB#12	18.77	18.56	34.77	PASS
Band13	5MHz	256QAM	23230	1RB#24	18.81	18.6	34.77	PASS
Band13	5MHz	256QAM	23230	25RB#0	18.76	18.55	34.77	PASS
Band13	5MHz	QPSK	23255	1RB#0	23.68	23.47	34.77	PASS
Band13	5MHz	QPSK	23255	1RB#12	23.65	23.44	34.77	PASS
Band13	5MHz	QPSK	23255	1RB#24	23.69	23.48	34.77	PASS
Band13	5MHz	QPSK	23255	25RB#0	22.61	22.4	34.77	PASS

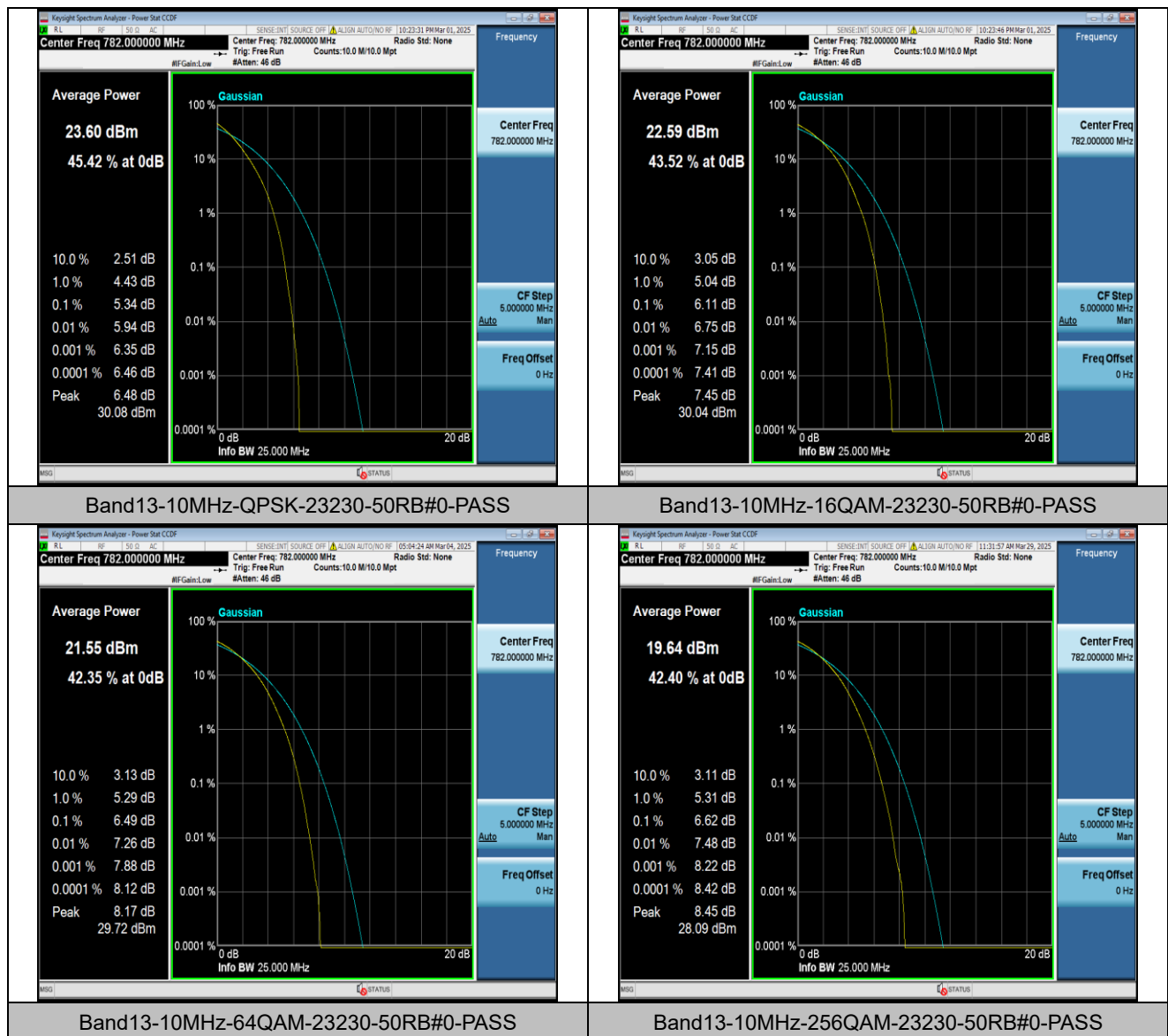
Band13	5MHz	16QAM	23255	1RB#0	23.06	22.85	34.77	PASS
Band13	5MHz	16QAM	23255	1RB#12	22.58	22.37	34.77	PASS
Band13	5MHz	16QAM	23255	1RB#24	22.97	22.76	34.77	PASS
Band13	5MHz	16QAM	23255	25RB#0	21.59	21.38	34.77	PASS
Band13	5MHz	64QAM	23255	1RB#0	21.7	21.49	34.77	PASS
Band13	5MHz	64QAM	23255	1RB#12	21.63	21.42	34.77	PASS
Band13	5MHz	64QAM	23255	1RB#24	21.62	21.41	34.77	PASS
Band13	5MHz	64QAM	23255	25RB#0	20.52	20.31	34.77	PASS
Band13	5MHz	256QAM	23255	1RB#0	18.66	18.45	34.77	PASS
Band13	5MHz	256QAM	23255	1RB#12	18.81	18.6	34.77	PASS
Band13	5MHz	256QAM	23255	1RB#24	18.69	18.48	34.77	PASS
Band13	5MHz	256QAM	23255	25RB#0	18.75	18.54	34.77	PASS
Band13	10MHz	QPSK	23230	1RB#0	23.66	23.45	34.77	PASS
Band13	10MHz	QPSK	23230	1RB#24	23.63	23.42	34.77	PASS
Band13	10MHz	QPSK	23230	1RB#49	23.61	23.4	34.77	PASS
Band13	10MHz	QPSK	23230	50RB#0	22.63	22.42	34.77	PASS
Band13	10MHz	16QAM	23230	1RB#0	22.57	22.36	34.77	PASS
Band13	10MHz	16QAM	23230	1RB#24	23.02	22.81	34.77	PASS
Band13	10MHz	16QAM	23230	1RB#49	22.42	22.21	34.77	PASS
Band13	10MHz	16QAM	23230	50RB#0	21.63	21.42	34.77	PASS
Band13	10MHz	64QAM	23230	1RB#0	21.66	21.45	34.77	PASS
Band13	10MHz	64QAM	23230	1RB#24	21.69	21.48	34.77	PASS
Band13	10MHz	64QAM	23230	1RB#49	21.66	21.45	34.77	PASS
Band13	10MHz	64QAM	23230	50RB#0	20.62	20.41	34.77	PASS
Band13	10MHz	256QAM	23230	1RB#0	18.57	18.36	34.77	PASS
Band13	10MHz	256QAM	23230	1RB#24	18.92	18.71	34.77	PASS
Band13	10MHz	256QAM	23230	1RB#49	18.78	18.57	34.77	PASS
Band13	10MHz	256QAM	23230	50RB#0	18.76	18.55	34.77	PASS

Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band13	10MHz	QPSK	23230	50RB#0	5.34	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	6.11	13	PASS
Band13	10MHz	64QAM	23230	50RB#0	6.49	13	PASS
Band13	10MHz	256QAM	23230	50RB#0	6.62	13	PASS

Test Graphs

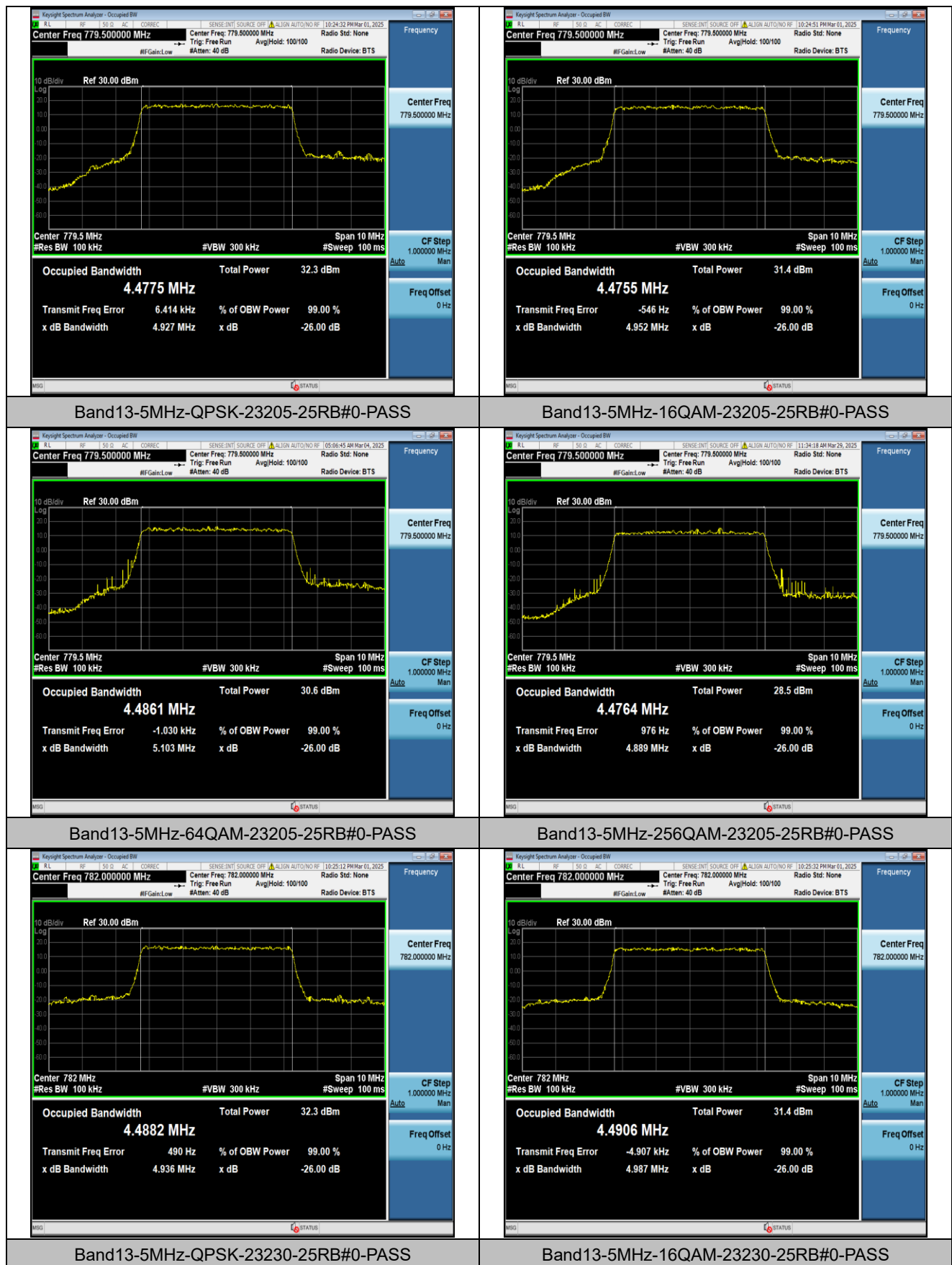


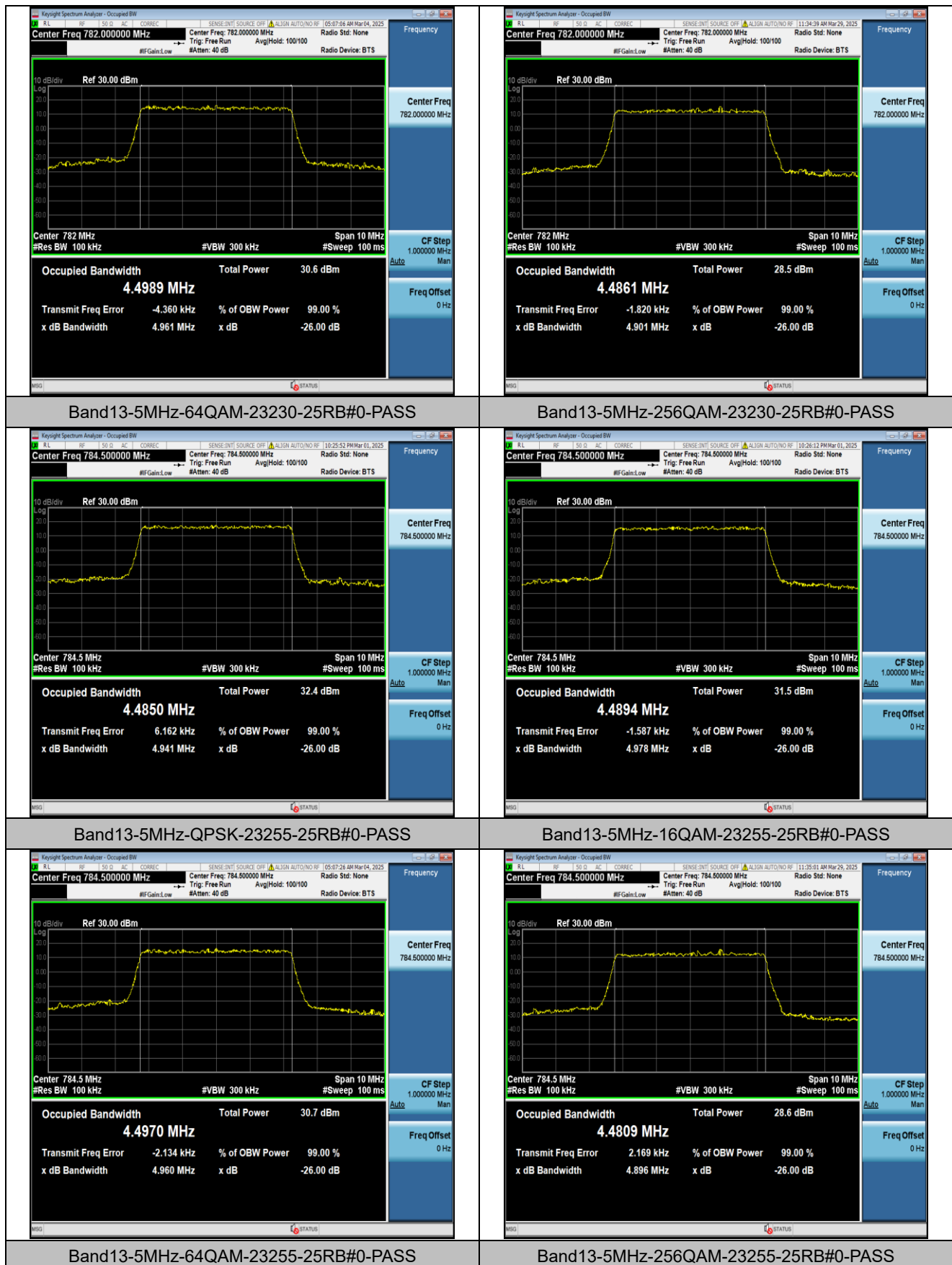
26dB Bandwidth and Occupied Bandwidth

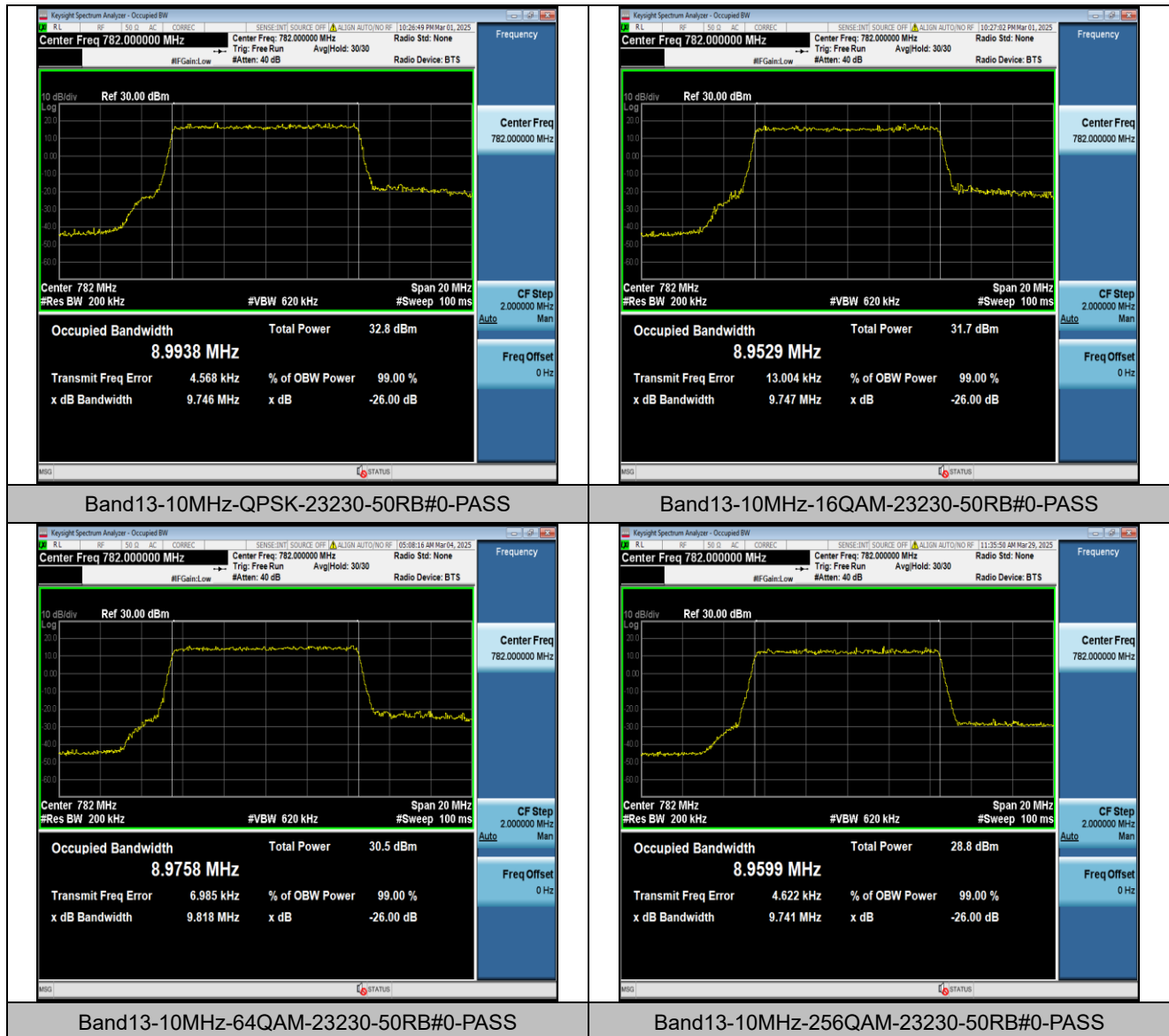
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.4775	4.927	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.4755	4.952	PASS
Band13	5MHz	64QAM	23205	25RB#0	4.4861	5.103	PASS
Band13	5MHz	256QAM	23205	25RB#0	4.4764	4.889	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.4882	4.936	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.4906	4.987	PASS
Band13	5MHz	64QAM	23230	25RB#0	4.4989	4.961	PASS
Band13	5MHz	256QAM	23230	25RB#0	4.4861	4.901	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.4850	4.941	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.4894	4.978	PASS
Band13	5MHz	64QAM	23255	25RB#0	4.4970	4.960	PASS
Band13	5MHz	256QAM	23255	25RB#0	4.4809	4.896	PASS
Band13	10MHz	QPSK	23230	50RB#0	8.9938	9.746	PASS
Band13	10MHz	16QAM	23230	50RB#0	8.9529	9.747	PASS
Band13	10MHz	64QAM	23230	50RB#0	8.9758	9.818	PASS
Band13	10MHz	256QAM	23230	50RB#0	8.9599	9.741	PASS

Test Graphs

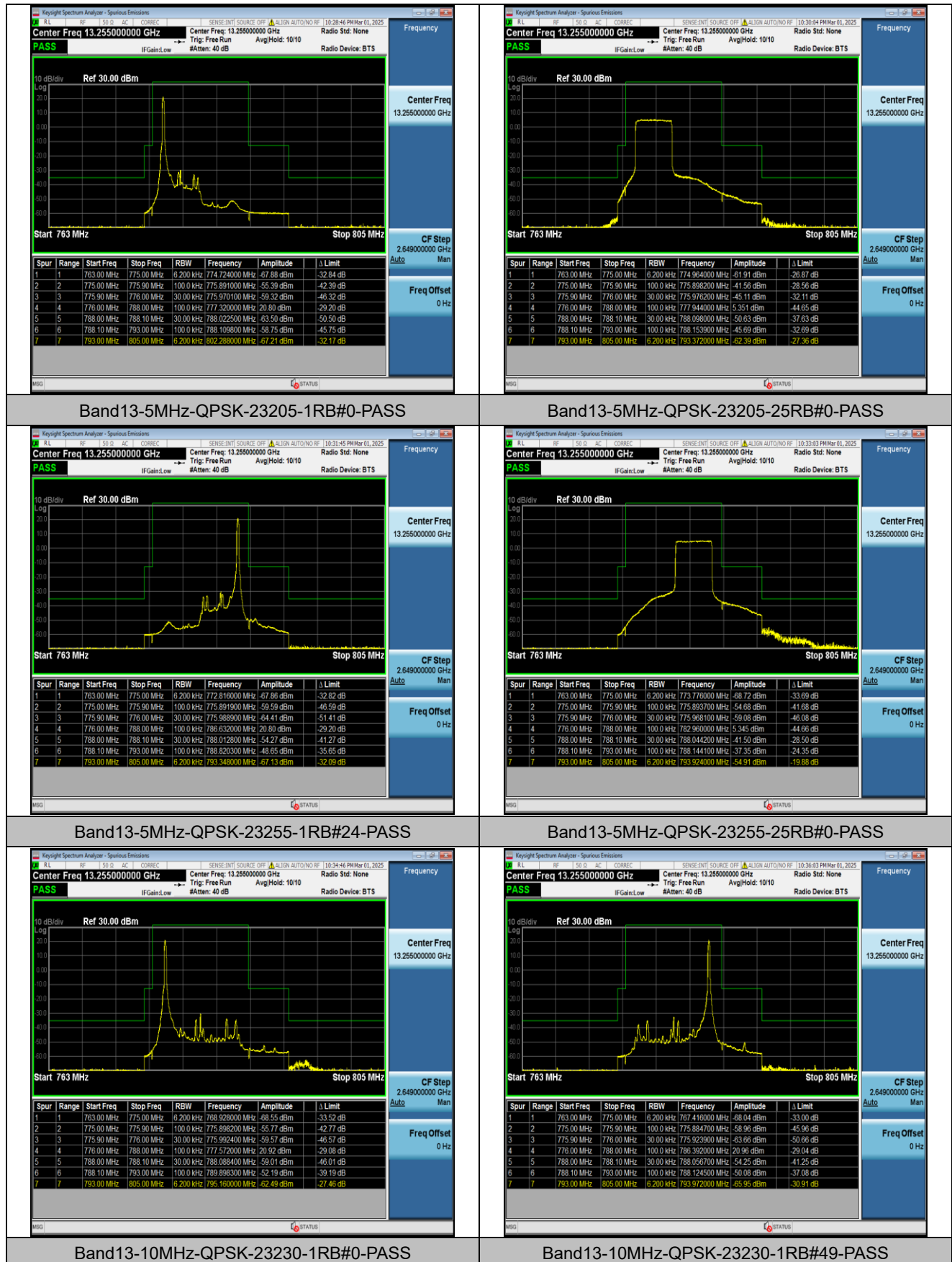


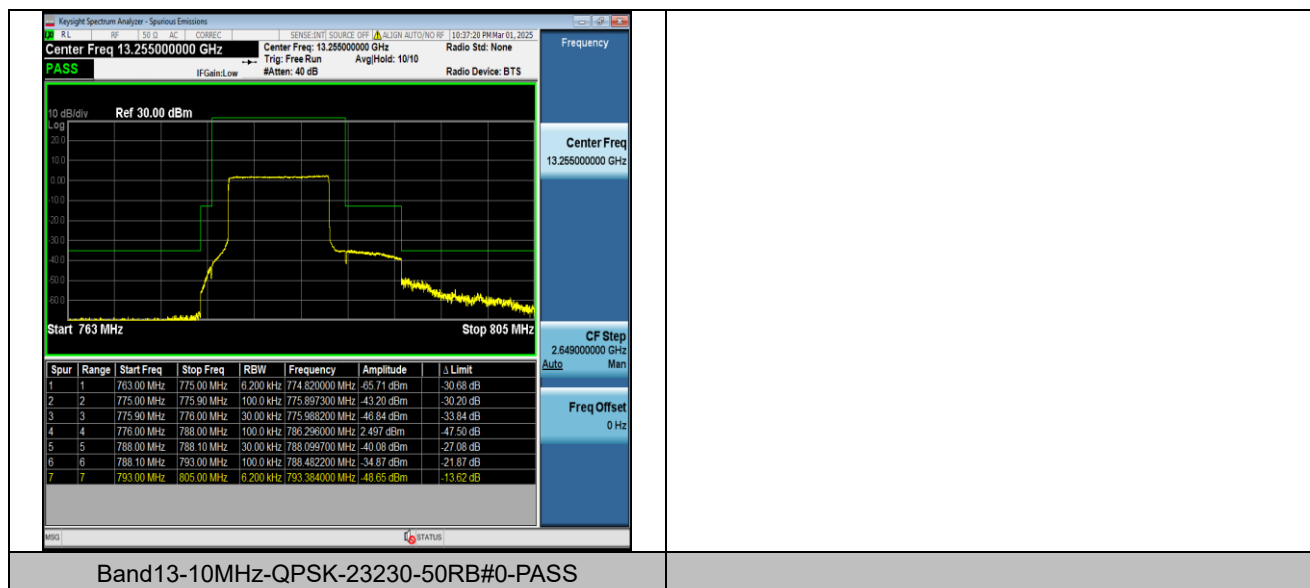




Band Edge

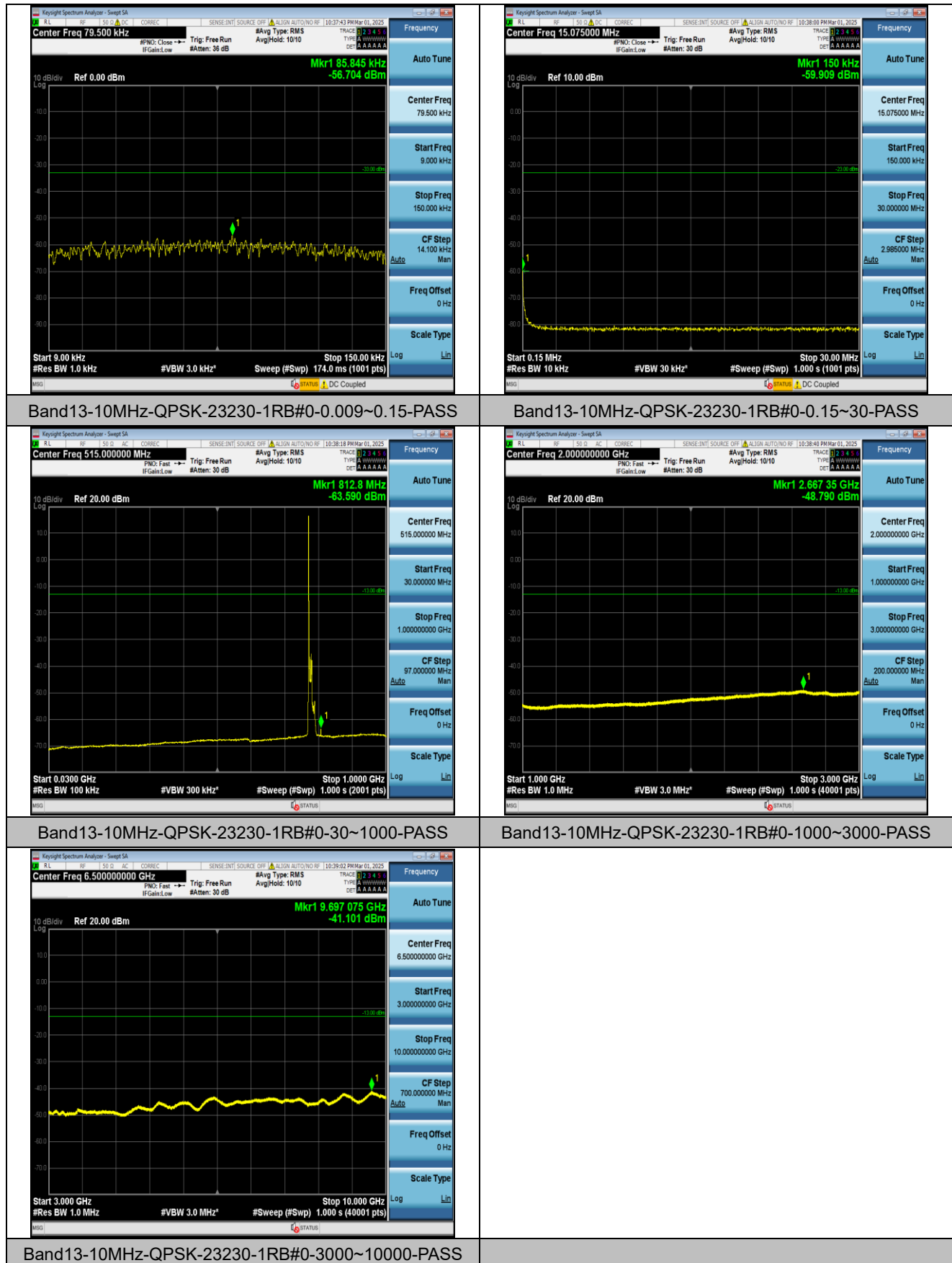
Test Graphs





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	-1.10	-0.001407	PASS
Band13	10MHz	QPSK	23230	50RB#0	VL	NT	-3.30	-0.004220	PASS
Band13	10MHz	QPSK	23230	50RB#0	VH	NT	-0.20	-0.000256	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	-2.70	-0.003453	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	-20	0.50	0.000639	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	-10	-3.20	-0.004092	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	0	-2.30	-0.002941	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	10	-2.60	-0.003325	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	20	-4.10	-0.005243	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	30	-0.30	-0.000384	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	40	1.00	0.001279	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	50	-0.20	-0.000256	PASS

~The End~