

Appendix-A LTE Band 5

Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	23.11	21.26	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	23.15	21.3	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	23.07	21.22	38.45	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	22.02	20.17	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	22.45	20.6	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#2	22.57	20.72	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	22.41	20.56	38.45	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	21.3	19.45	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	22.97	21.12	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	23.01	21.16	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	22.97	21.12	38.45	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	22.03	20.18	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	22.32	20.47	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#2	22.44	20.59	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	22.51	20.66	38.45	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	21.1	19.25	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	23.11	21.26	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	23.09	21.24	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	22.97	21.12	38.45	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	22.05	20.2	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	22.34	20.49	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#2	22.42	20.57	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#5	22.36	20.51	38.45	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	21.21	19.36	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#0	23.19	21.34	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#8	23.09	21.24	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#14	22.98	21.13	38.45	PASS
Band5	3MHz	QPSK	20415	15RB#0	22.11	20.26	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#0	22.32	20.47	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#8	22.6	20.75	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#14	22.22	20.37	38.45	PASS
Band5	3MHz	16QAM	20415	15RB#0	21.23	19.38	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#0	23.03	21.18	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#8	22.96	21.11	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#14	23	21.15	38.45	PASS
Band5	3MHz	QPSK	20525	15RB#0	21.97	20.12	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#0	22.5	20.65	38.45	PASS

Band5	3MHz	16QAM	20525	1RB#8	22.35	20.5	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#14	22.27	20.42	38.45	PASS
Band5	3MHz	16QAM	20525	15RB#0	21.17	19.32	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#0	23.11	21.26	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#8	23.01	21.16	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#14	22.98	21.13	38.45	PASS
Band5	3MHz	QPSK	20635	15RB#0	22.01	20.16	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#0	22.41	20.56	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#8	22.39	20.54	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#14	22.56	20.71	38.45	PASS
Band5	3MHz	16QAM	20635	15RB#0	21.1	19.25	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#0	23.23	21.38	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#12	23.17	21.32	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#24	23	21.15	38.45	PASS
Band5	5MHz	QPSK	20425	25RB#0	22.18	20.33	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#0	22.53	20.68	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#12	22.32	20.47	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#24	22.62	20.77	38.45	PASS
Band5	5MHz	16QAM	20425	25RB#0	21.26	19.41	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#0	23.08	21.23	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#12	23.09	21.24	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#24	23	21.15	38.45	PASS
Band5	5MHz	QPSK	20525	25RB#0	22.1	20.25	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#0	22.25	20.4	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#12	22.46	20.61	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#24	22.5	20.65	38.45	PASS
Band5	5MHz	16QAM	20525	25RB#0	21.12	19.27	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#0	22.91	21.06	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#12	22.98	21.13	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#24	22.86	21.01	38.45	PASS
Band5	5MHz	QPSK	20625	25RB#0	22.15	20.3	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#0	22.27	20.42	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#12	22.35	20.5	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#24	22.42	20.57	38.45	PASS
Band5	5MHz	16QAM	20625	25RB#0	20.94	19.09	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#0	23.25	21.4	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#24	23.16	21.31	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#49	23.15	21.3	38.45	PASS
Band5	10MHz	QPSK	20450	50RB#0	22.27	20.42	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#0	22.67	20.82	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#24	22.47	20.62	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#49	22.26	20.41	38.45	PASS
Band5	10MHz	16QAM	20450	50RB#0	21.35	19.5	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#0	23.07	21.22	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#24	23.05	21.2	38.45	PASS

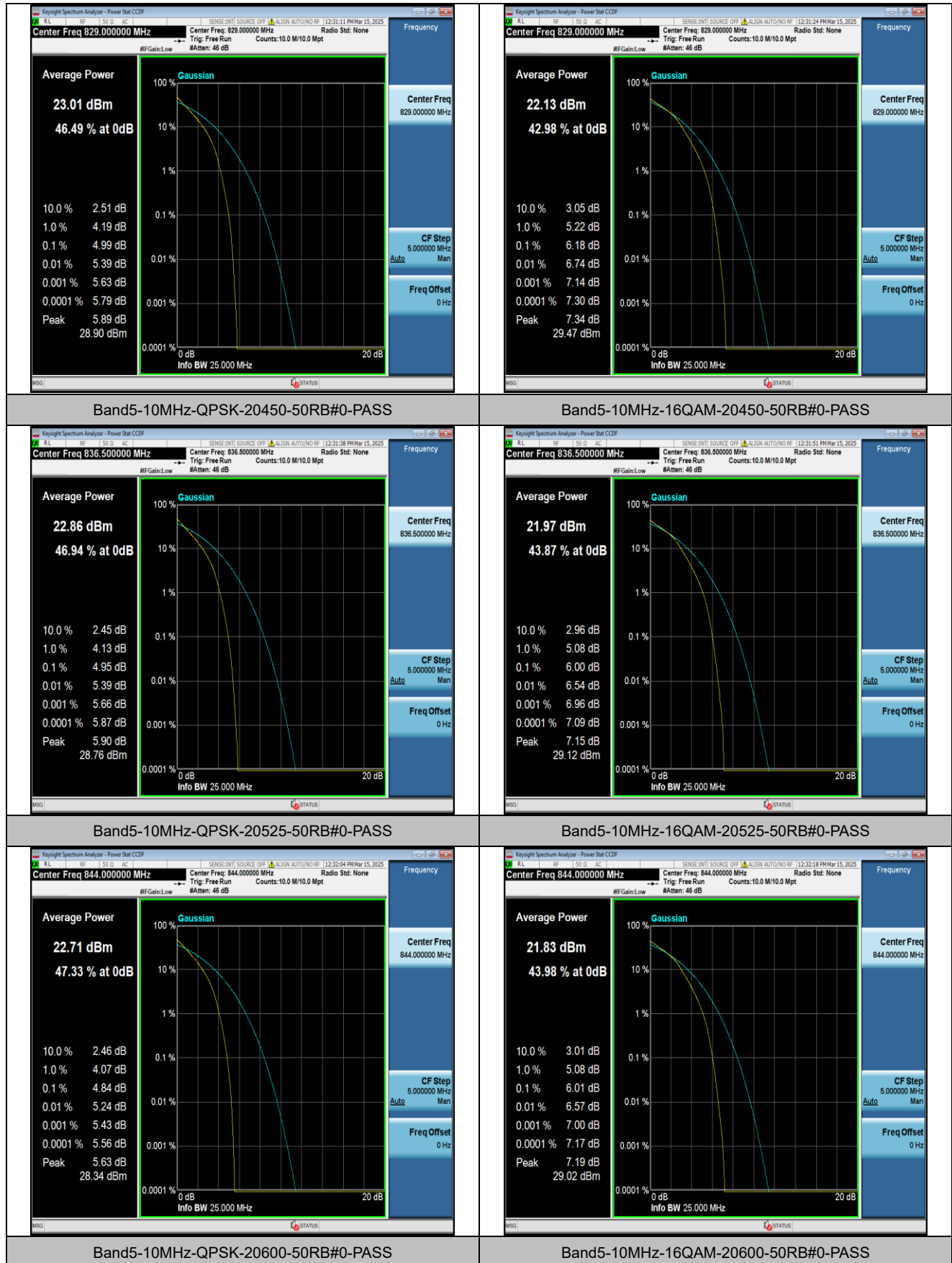
Band5	10MHz	QPSK	20525	1RB#49	22.87	21.02	38.45	PASS
Band5	10MHz	QPSK	20525	50RB#0	22.09	20.24	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#0	22.54	20.69	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#24	22.55	20.7	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#49	22.35	20.5	38.45	PASS
Band5	10MHz	16QAM	20525	50RB#0	21.15	19.3	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#0	22.88	21.03	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#24	22.8	20.95	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#49	22.81	20.96	38.45	PASS
Band5	10MHz	QPSK	20600	50RB#0	21.98	20.13	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#0	22.43	20.58	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#24	22.43	20.58	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#49	22.39	20.54	38.45	PASS
Band5	10MHz	16QAM	20600	50RB#0	20.92	19.07	38.45	PASS

Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	4.99	13	PASS
Band5	10MHz	16QAM	20450	50RB#0	6.18	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	4.95	13	PASS
Band5	10MHz	16QAM	20525	50RB#0	6.00	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	4.84	13	PASS
Band5	10MHz	16QAM	20600	50RB#0	6.01	13	PASS

Test Graphs

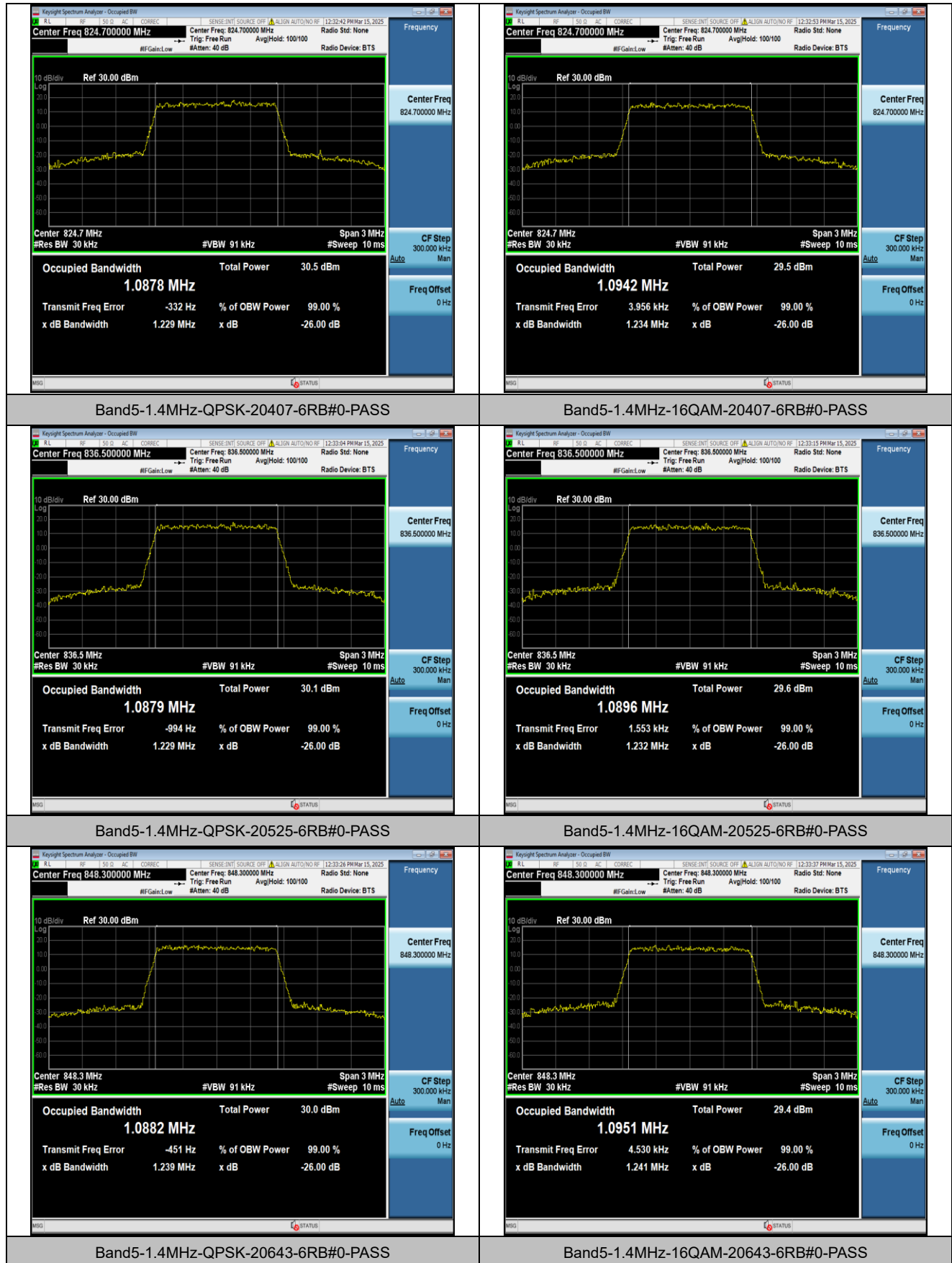


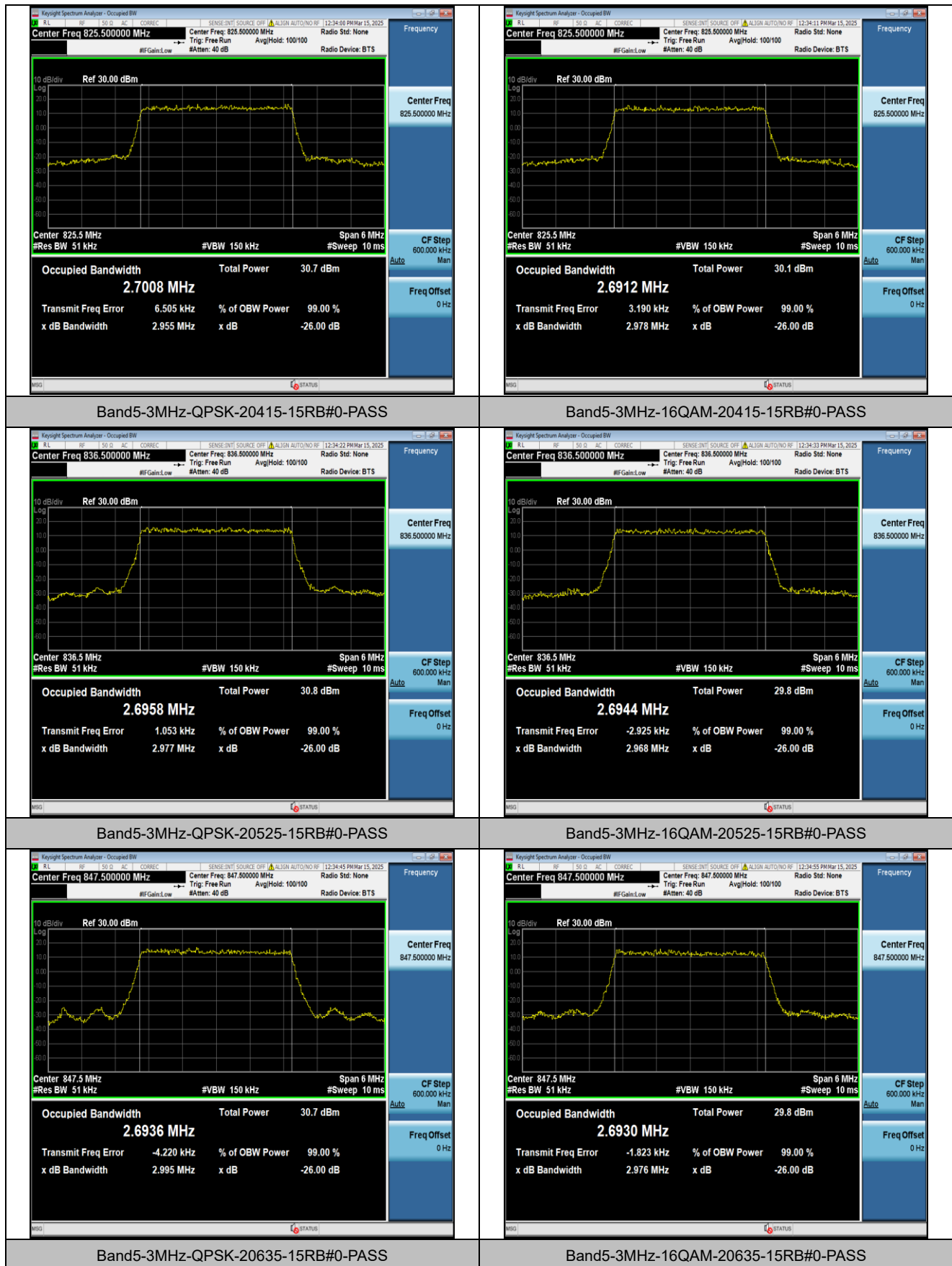
26dB Bandwidth and Occupied Bandwidth

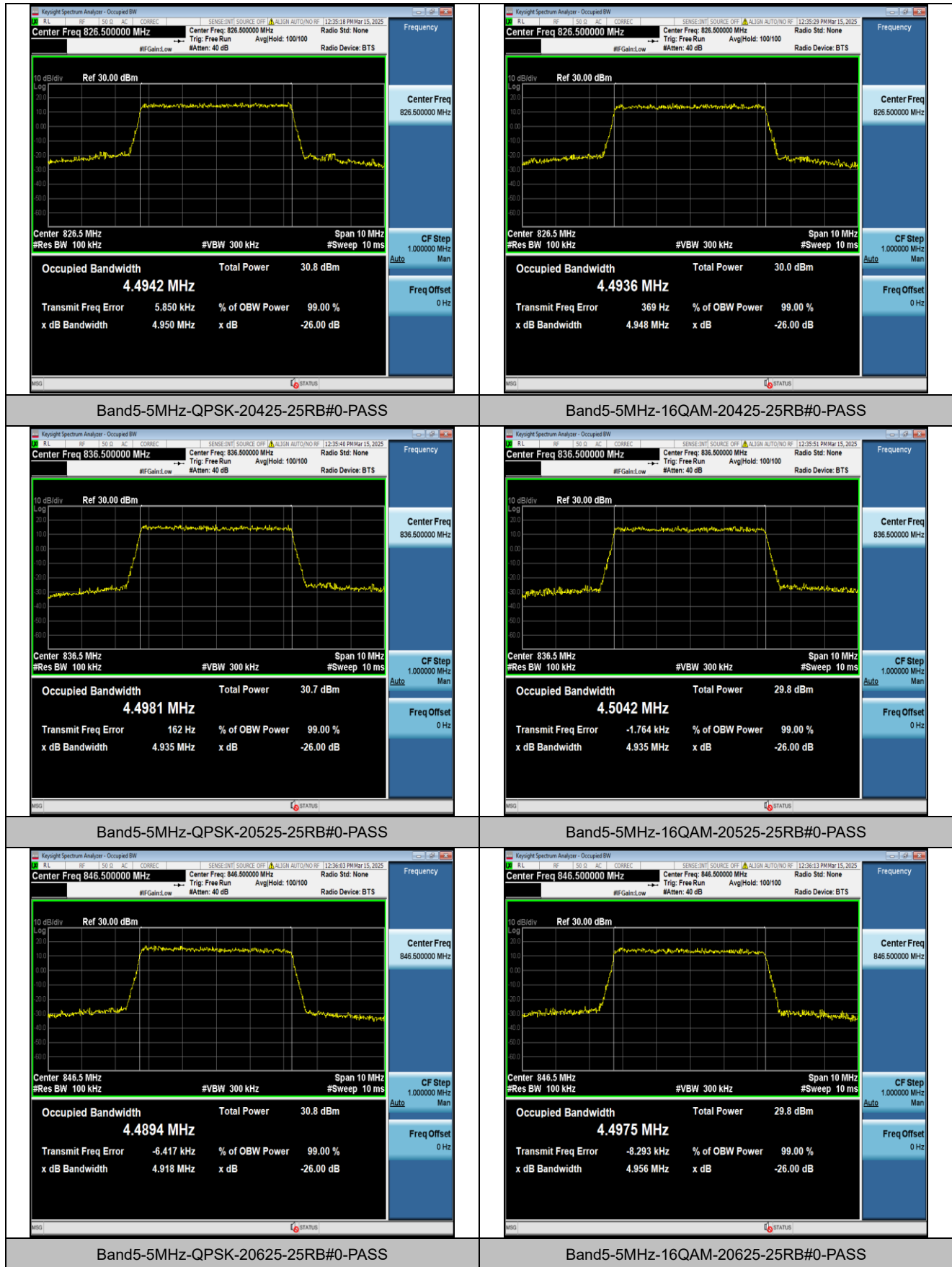
Test Result

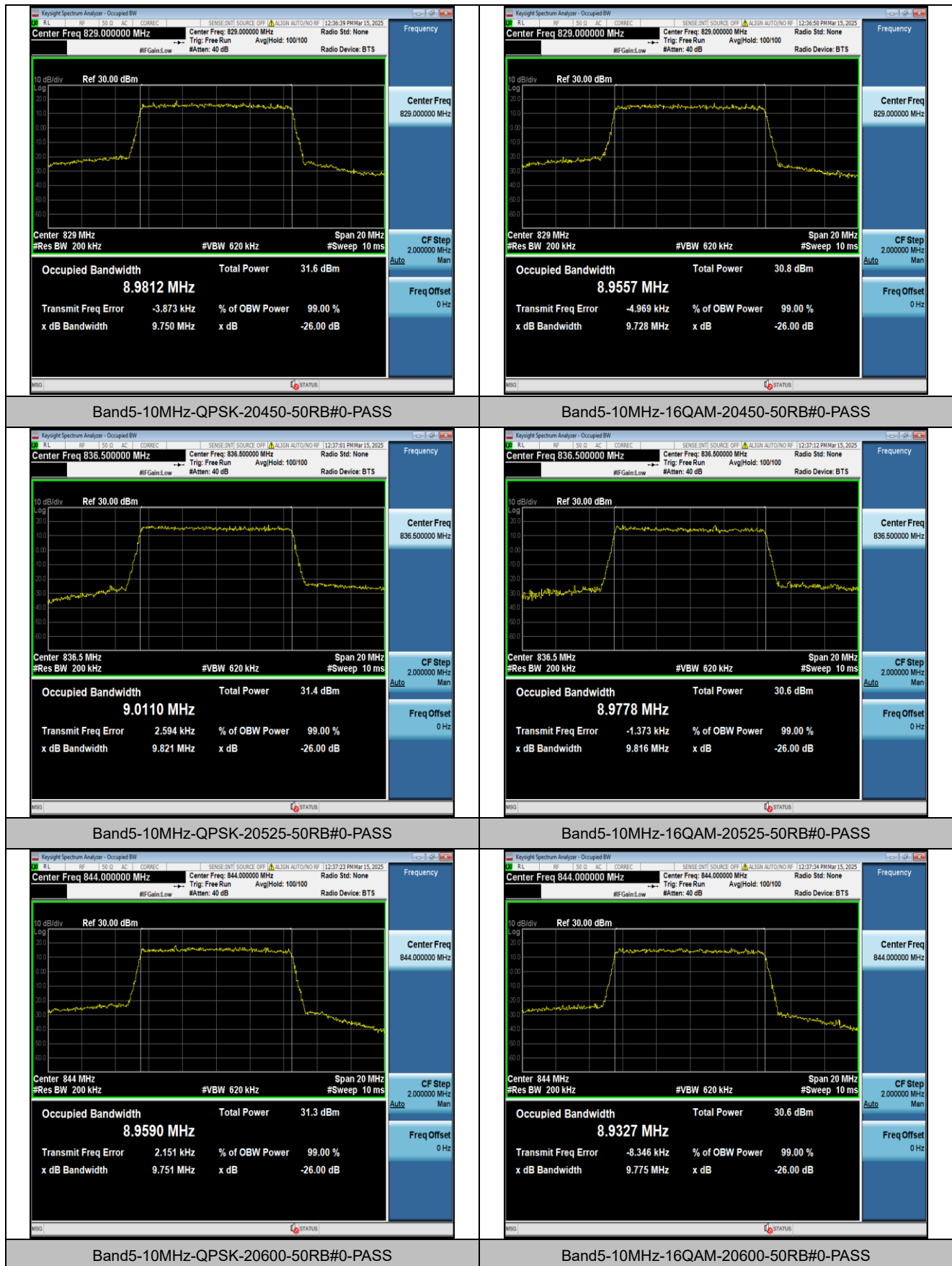
Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	1.0878	1.229	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	1.0942	1.234	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.0879	1.229	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1.0896	1.232	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1.0882	1.239	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	1.0951	1.241	PASS
Band5	3MHz	QPSK	20415	15RB#0	2.7008	2.955	PASS
Band5	3MHz	16QAM	20415	15RB#0	2.6912	2.978	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.6958	2.977	PASS
Band5	3MHz	16QAM	20525	15RB#0	2.6944	2.968	PASS
Band5	3MHz	QPSK	20635	15RB#0	2.6936	2.995	PASS
Band5	3MHz	16QAM	20635	15RB#0	2.6930	2.976	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.4942	4.950	PASS
Band5	5MHz	16QAM	20425	25RB#0	4.4936	4.948	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.4981	4.935	PASS
Band5	5MHz	16QAM	20525	25RB#0	4.5042	4.935	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.4894	4.918	PASS
Band5	5MHz	16QAM	20625	25RB#0	4.4975	4.956	PASS
Band5	10MHz	QPSK	20450	50RB#0	8.9812	9.750	PASS
Band5	10MHz	16QAM	20450	50RB#0	8.9557	9.728	PASS
Band5	10MHz	QPSK	20525	50RB#0	9.0110	9.821	PASS
Band5	10MHz	16QAM	20525	50RB#0	8.9778	9.816	PASS
Band5	10MHz	QPSK	20600	50RB#0	8.9590	9.751	PASS
Band5	10MHz	16QAM	20600	50RB#0	8.9327	9.775	PASS

Test Graphs



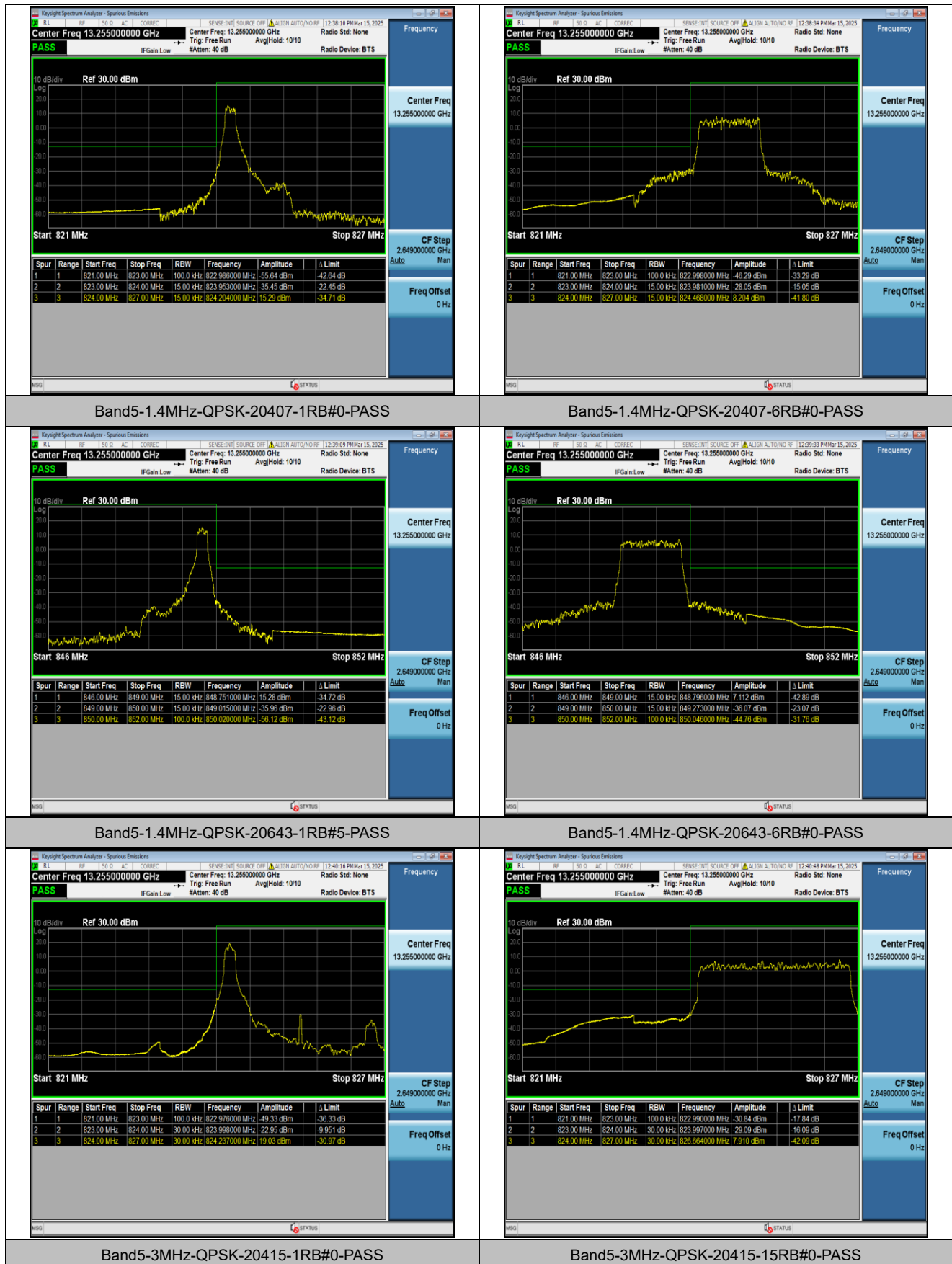






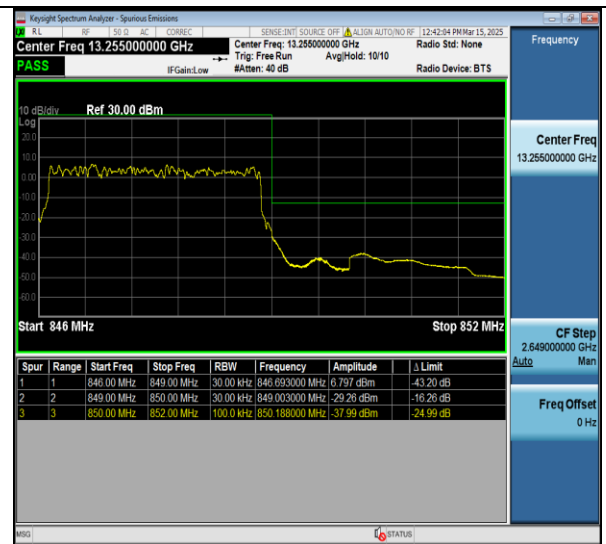
Band Edge

Test Graphs

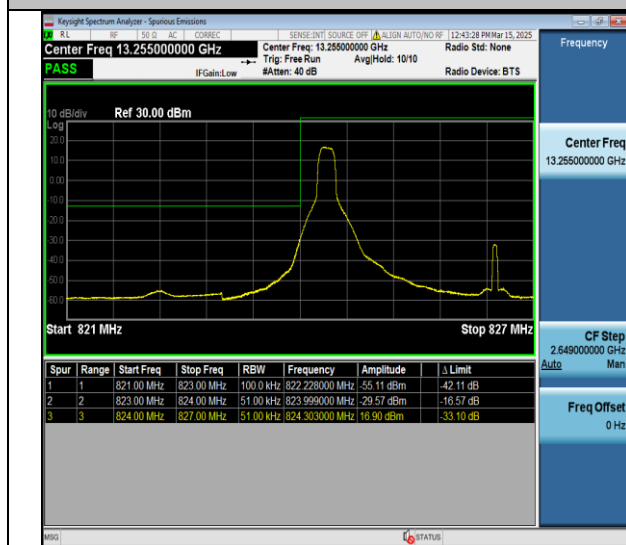




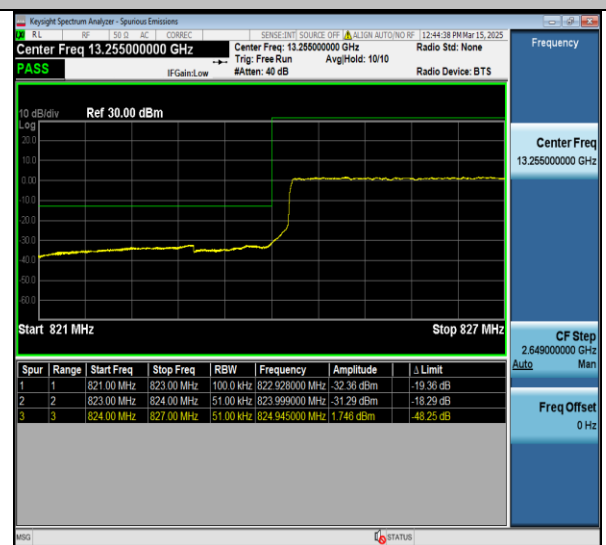
Band5-3MHz-QPSK-20635-1RB#14-PASS



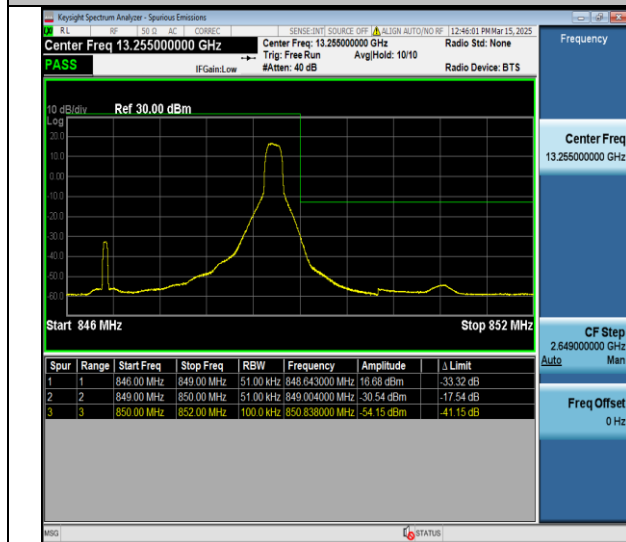
Band5-3MHz-QPSK-20635-15RB#0-PASS



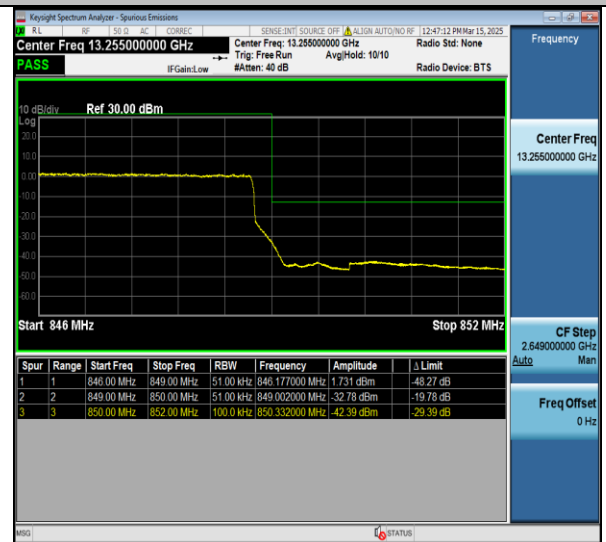
Band5-5MHz-QPSK-20425-1RB#0-PASS



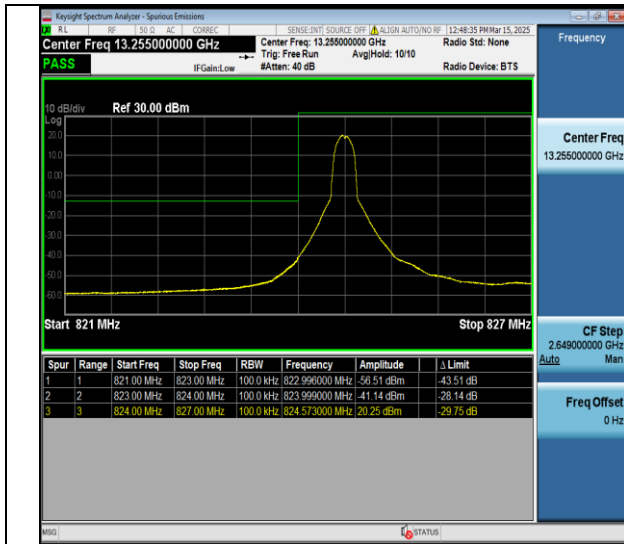
Band5-5MHz-QPSK-20425-25RB#0-PASS



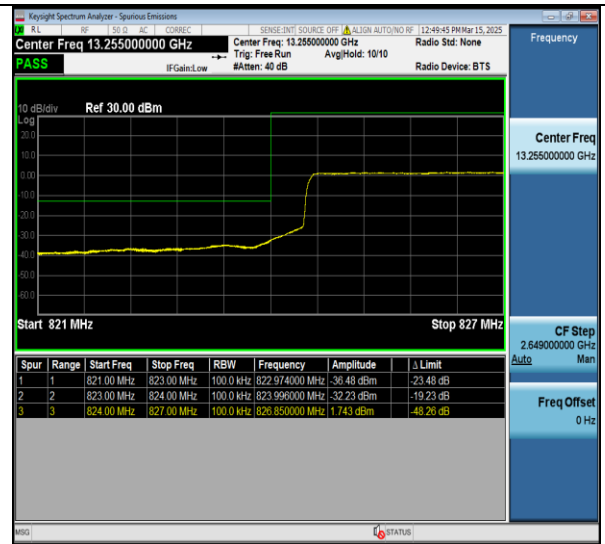
Band5-5MHz-QPSK-20625-1RB#24-PASS



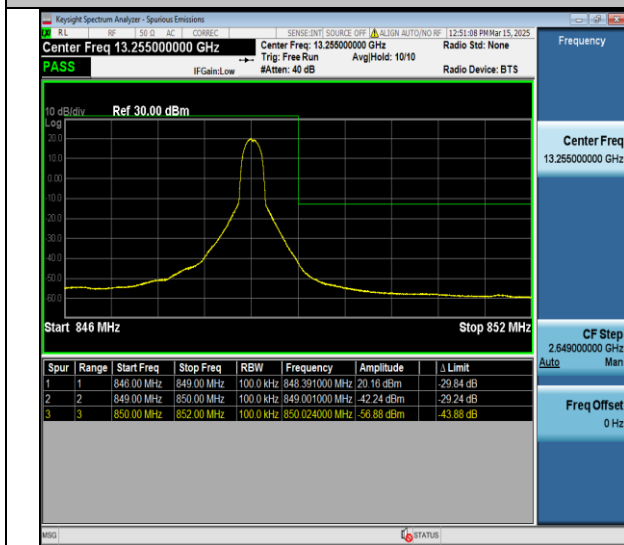
Band5-5MHz-QPSK-20625-25RB#0-PASS



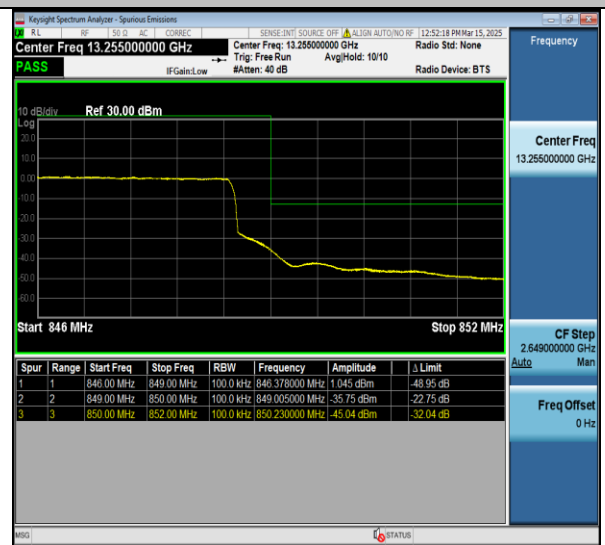
Band5-10MHz-QPSK-20450-1RB#0-PASS



Band5-10MHz-QPSK-20450-50RB#0-PASS



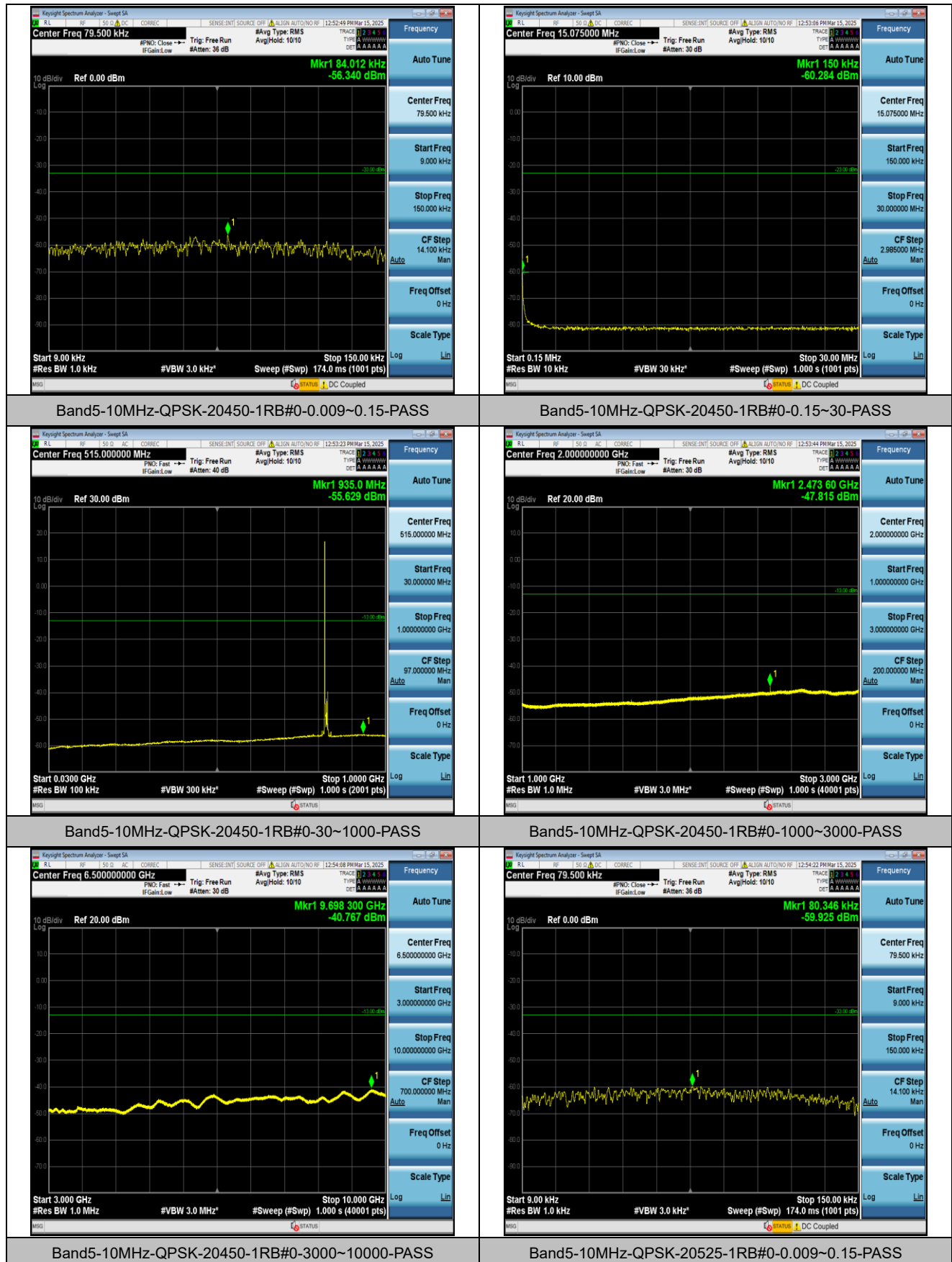
Band5-10MHz-QPSK-20600-1RB#49-PASS

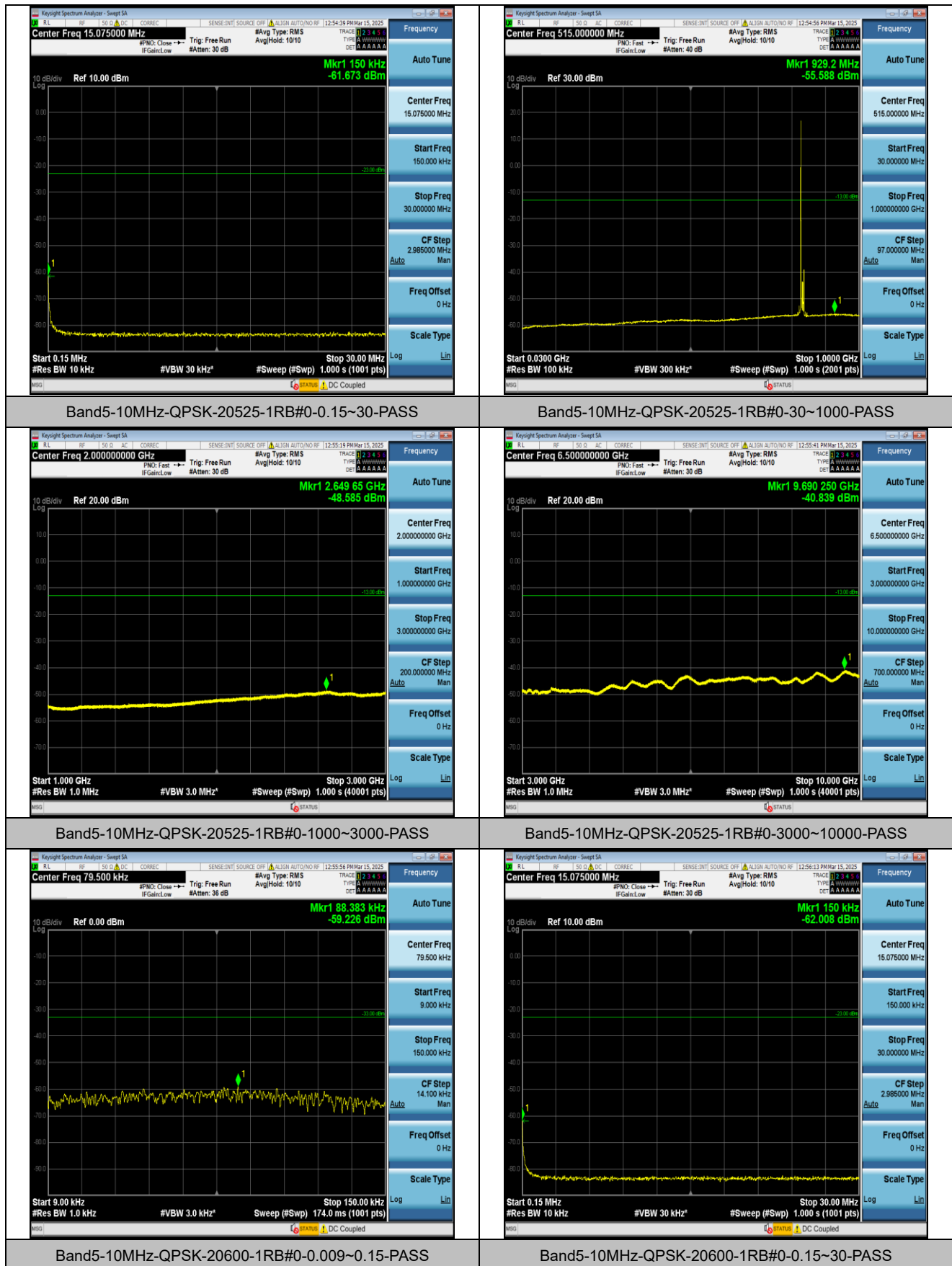


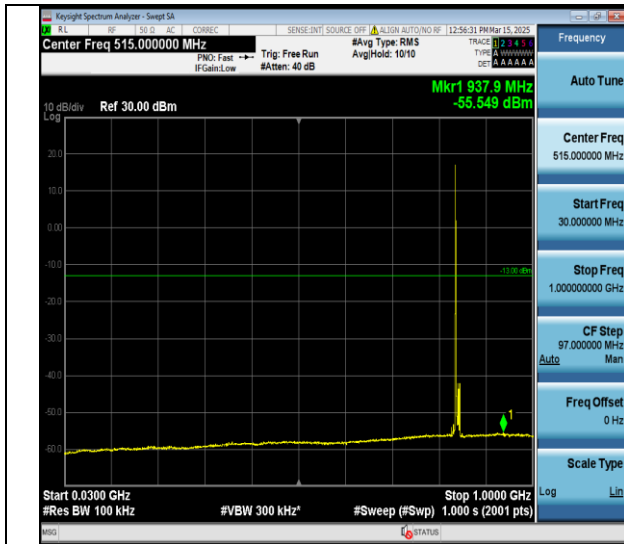
Band5-10MHz-QPSK-20600-50RB#0-PASS

Conducted Spurious Emission

Test Graphs



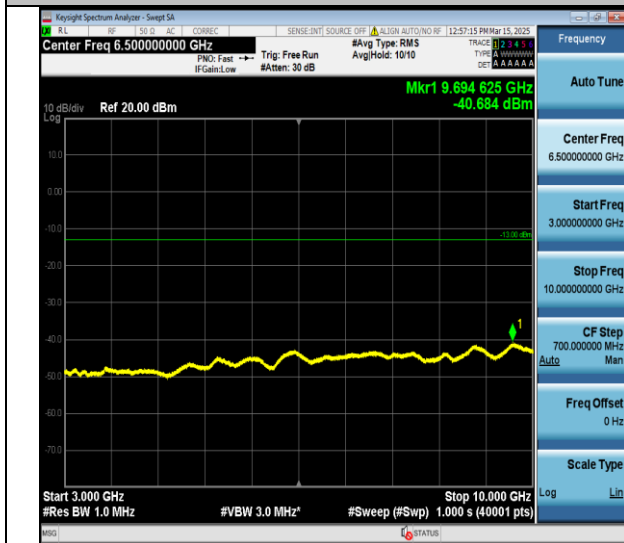




Band5-10MHz-QPSK-20600-1RB#0-30~1000-PASS



Band5-10MHz-QPSK-20600-1RB#0-1000~3000-PASS



Band5-10MHz-QPSK-20600-1RB#0-3000~10000-PASS

Frequency Stability

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20525	100RB#0	VN	NT	-4.20	-0.005021	±2.5	PASS
Band5	10MHz	QPSK	20525	100RB#0	VL	NT	-3.20	-0.003825	±2.5	PASS
Band5	10MHz	QPSK	20525	100RB#0	VH	NT	0.30	0.000359	±2.5	PASS

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20525	100RB#0	NV	-30	-1.80	-0.002152	±2.5	PASS
Band5	10MHz	QPSK	20525	100RB#0	NV	-20	-6.70	-0.008010	±2.5	PASS
Band5	10MHz	QPSK	20525	100RB#0	NV	-10	-4.60	-0.005499	±2.5	PASS
Band5	10MHz	QPSK	20525	100RB#0	NV	0	-5.70	-0.006814	±2.5	PASS
Band5	10MHz	QPSK	20525	100RB#0	NV	10	-5.30	-0.006336	±2.5	PASS
Band5	10MHz	QPSK	20525	100RB#0	NV	20	-1.60	-0.001913	±2.5	PASS
Band5	10MHz	QPSK	20525	100RB#0	NV	30	-4.40	-0.005260	±2.5	PASS
Band5	10MHz	QPSK	20525	100RB#0	NV	40	-6.90	-0.008249	±2.5	PASS
Band5	10MHz	QPSK	20525	100RB#0	NV	50	-6.50	-0.007770	±2.5	PASS

~The End~