

Appendix-A LTE Band 7

Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	23.97	25.37	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#12	23.68	25.08	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#24	23.63	25.03	33.00	PASS
Band7	5MHz	QPSK	20775	25RB#0	22.83	24.23	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#0	22.69	24.09	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#12	22.81	24.21	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#24	22.75	24.15	33.00	PASS
Band7	5MHz	16QAM	20775	25RB#0	22.05	23.45	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#0	23.52	24.92	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#12	23.55	24.95	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#24	23.46	24.86	33.00	PASS
Band7	5MHz	QPSK	21100	25RB#0	22.64	24.04	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#0	22.84	24.24	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#12	22.28	23.68	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#24	22.33	23.73	33.00	PASS
Band7	5MHz	16QAM	21100	25RB#0	21.48	22.88	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#0	23.16	24.56	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#12	23.61	25.01	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#24	23.46	24.86	33.00	PASS
Band7	5MHz	QPSK	21425	25RB#0	22.55	23.95	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#0	22.17	23.57	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#12	22.4	23.8	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#24	22.29	23.69	33.00	PASS
Band7	5MHz	16QAM	21425	25RB#0	21.46	22.86	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#0	23.81	25.21	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#24	24.01	25.41	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#49	23.63	25.03	33.00	PASS
Band7	10MHz	QPSK	20800	50RB#0	22.86	24.26	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#0	22.38	23.78	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#24	22.76	24.16	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#49	22.58	23.98	33.00	PASS
Band7	10MHz	16QAM	20800	50RB#0	21.94	23.34	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#0	23.71	25.11	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#24	23.93	25.33	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#49	23.55	24.95	33.00	PASS
Band7	10MHz	QPSK	21100	50RB#0	22.74	24.14	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#0	22.7	24.1	33.00	PASS

Band7	10MHz	16QAM	21100	1RB#24	22.65	24.05	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#49	22.56	23.96	33.00	PASS
Band7	10MHz	16QAM	21100	50RB#0	21.71	23.11	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#0	23.58	24.98	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#24	23.84	25.24	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#49	23.59	24.99	33.00	PASS
Band7	10MHz	QPSK	21400	50RB#0	22.63	24.03	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#0	22.6	24	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#24	23.06	24.46	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#49	22.16	23.56	33.00	PASS
Band7	10MHz	16QAM	21400	50RB#0	21.63	23.03	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#0	23.6	25	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#38	23.75	25.15	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#74	23.4	24.8	33.00	PASS
Band7	15MHz	QPSK	20825	75RB#0	22.78	24.18	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#0	22.58	23.98	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#38	22.45	23.85	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#74	22.61	24.01	33.00	PASS
Band7	15MHz	16QAM	20825	75RB#0	21.82	23.22	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#0	23.58	24.98	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#38	23.81	25.21	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#74	23.45	24.85	33.00	PASS
Band7	15MHz	QPSK	21100	75RB#0	22.69	24.09	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#0	22.57	23.97	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#38	22.35	23.75	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#74	22.35	23.75	33.00	PASS
Band7	15MHz	16QAM	21100	75RB#0	21.66	23.06	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#0	23.68	25.08	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#38	23.75	25.15	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#74	23.74	25.14	33.00	PASS
Band7	15MHz	QPSK	21375	75RB#0	22.58	23.98	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#0	23.04	24.44	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#38	23.1	24.5	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#74	22.57	23.97	33.00	PASS
Band7	15MHz	16QAM	21375	75RB#0	21.59	22.99	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#0	23.47	24.87	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#49	23.85	25.25	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#99	23.75	25.15	33.00	PASS
Band7	20MHz	QPSK	20850	100RB#0	22.8	24.2	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#0	22.4	23.8	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#49	23.29	24.69	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#99	23.23	24.63	33.00	PASS
Band7	20MHz	16QAM	20850	100RB#0	21.68	23.08	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#0	23.63	25.03	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#49	23.92	25.32	33.00	PASS

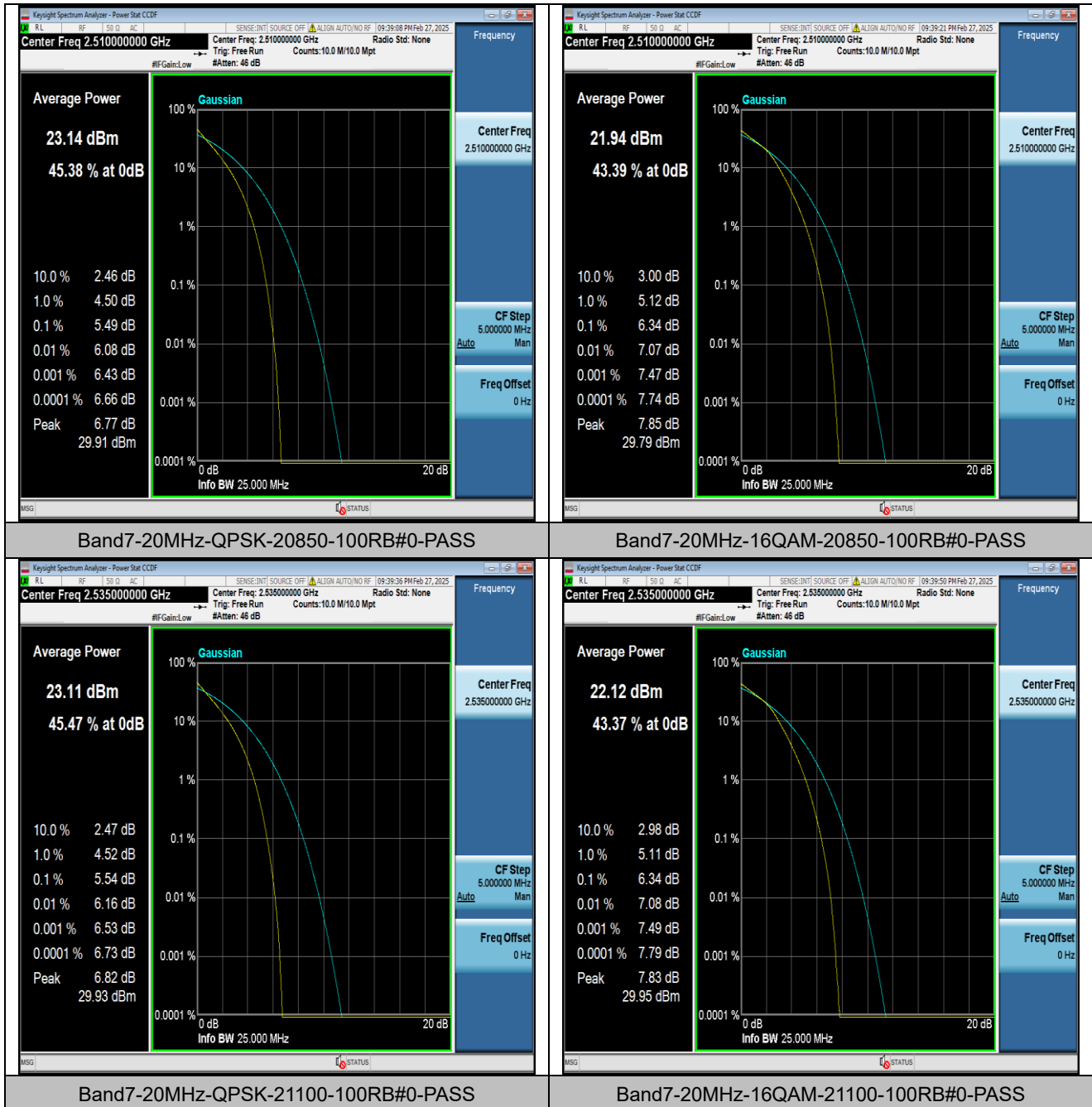
Band7	20MHz	QPSK	21100	1RB#99	23.55	24.95	33.00	PASS
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Band7	20MHz	16QAM	21100	1RB#0	22.43	23.83	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#49	22.97	24.37	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#99	22.23	23.63	33.00	PASS
Band7	20MHz	16QAM	21100	100RB#0	21.73	23.13	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#0	23.79	25.19	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#49	23.77	25.17	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#99	23.38	24.78	33.00	PASS
Band7	20MHz	QPSK	21350	100RB#0	22.69	24.09	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#0	22.72	24.12	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#49	23.19	24.59	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#99	22.43	23.83	33.00	PASS
Band7	20MHz	16QAM	21350	100RB#0	21.71	23.11	33.00	PASS

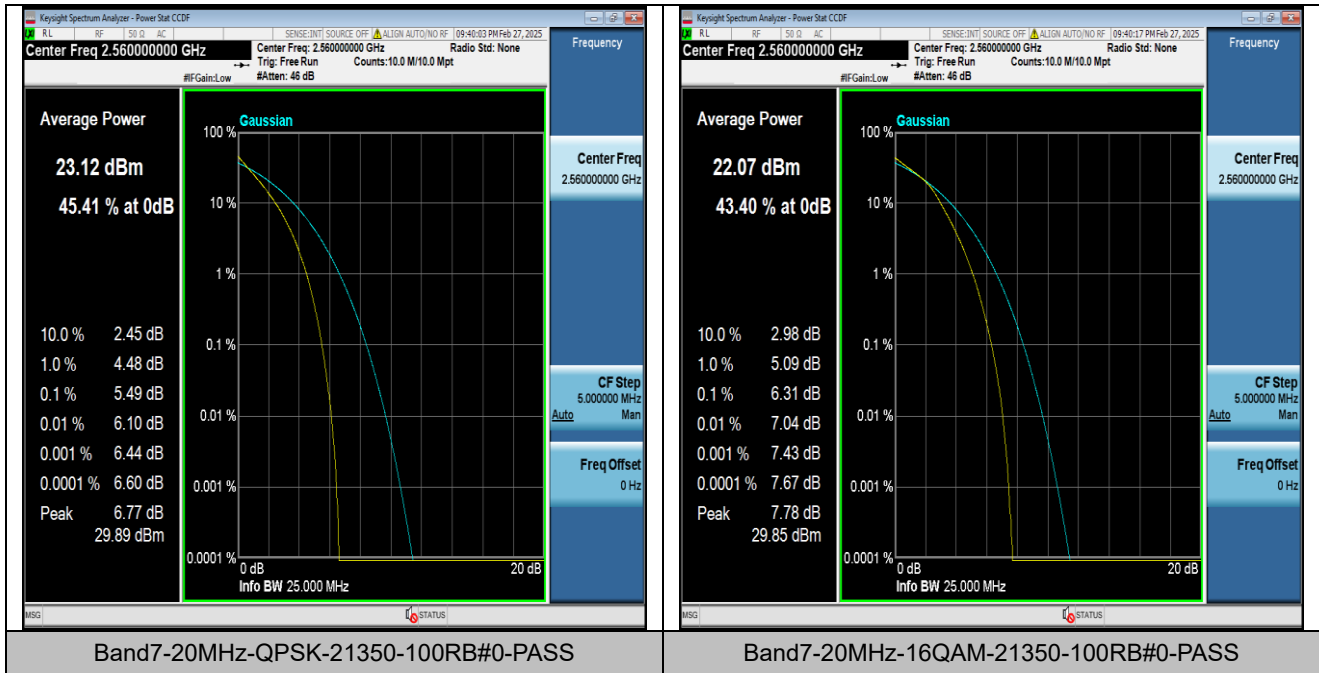
Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	5.49	13	PASS
Band7	20MHz	16QAM	20850	100RB#0	6.34	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	5.54	13	PASS
Band7	20MHz	16QAM	21100	100RB#0	6.34	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	5.49	13	PASS
Band7	20MHz	16QAM	21350	100RB#0	6.31	13	PASS

Test Graphs



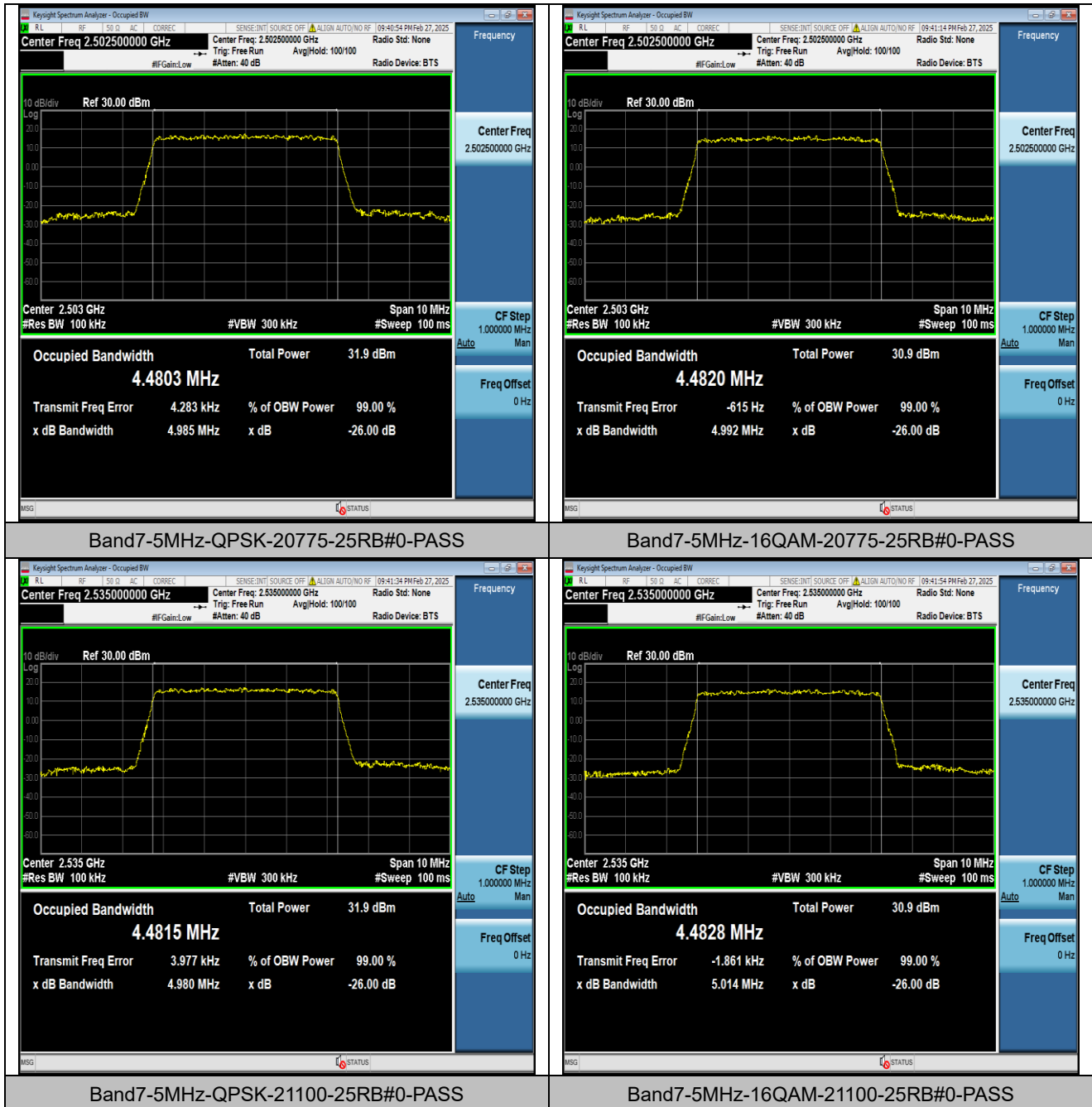


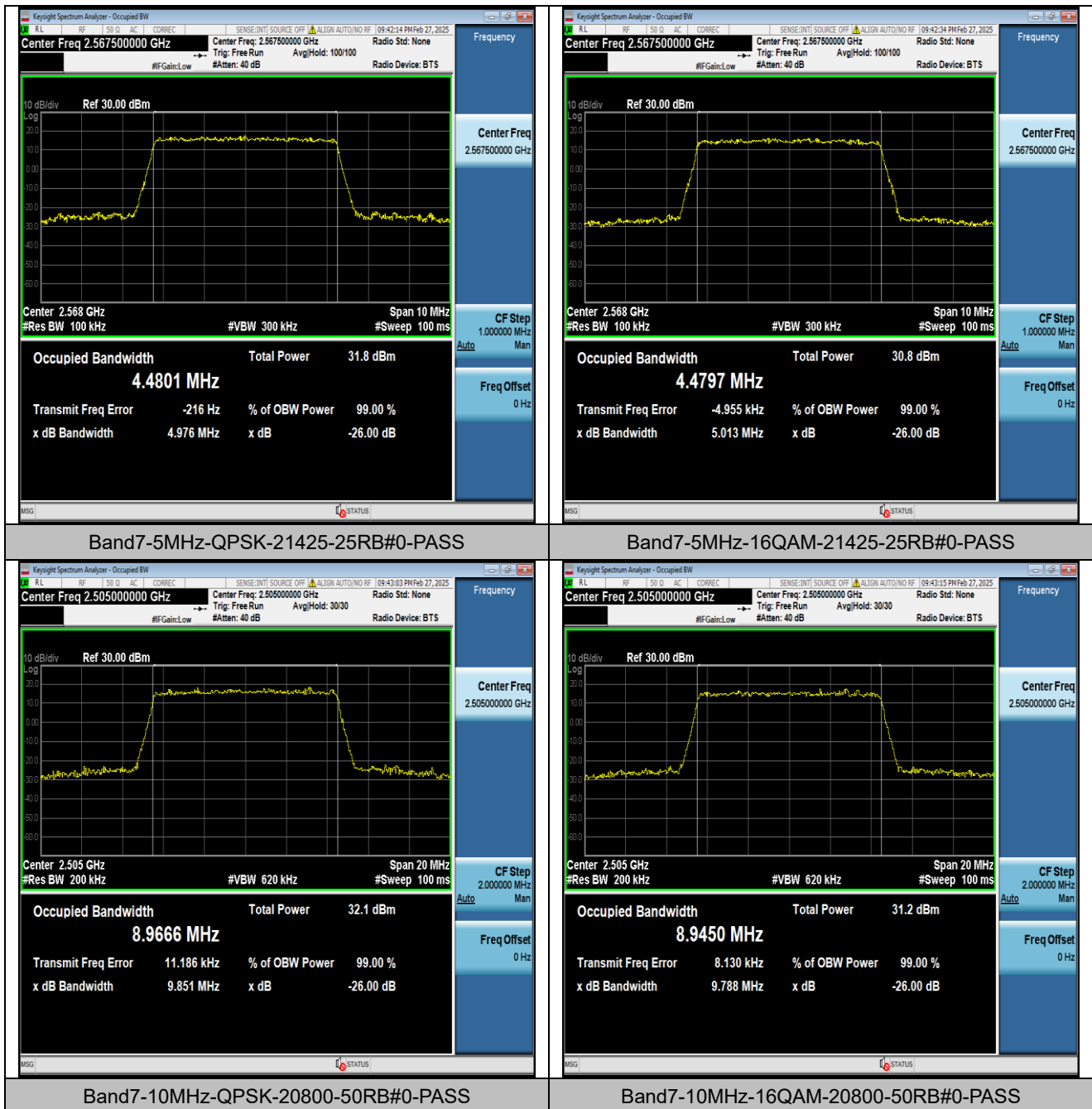
26dB Bandwidth and Occupied Bandwidth

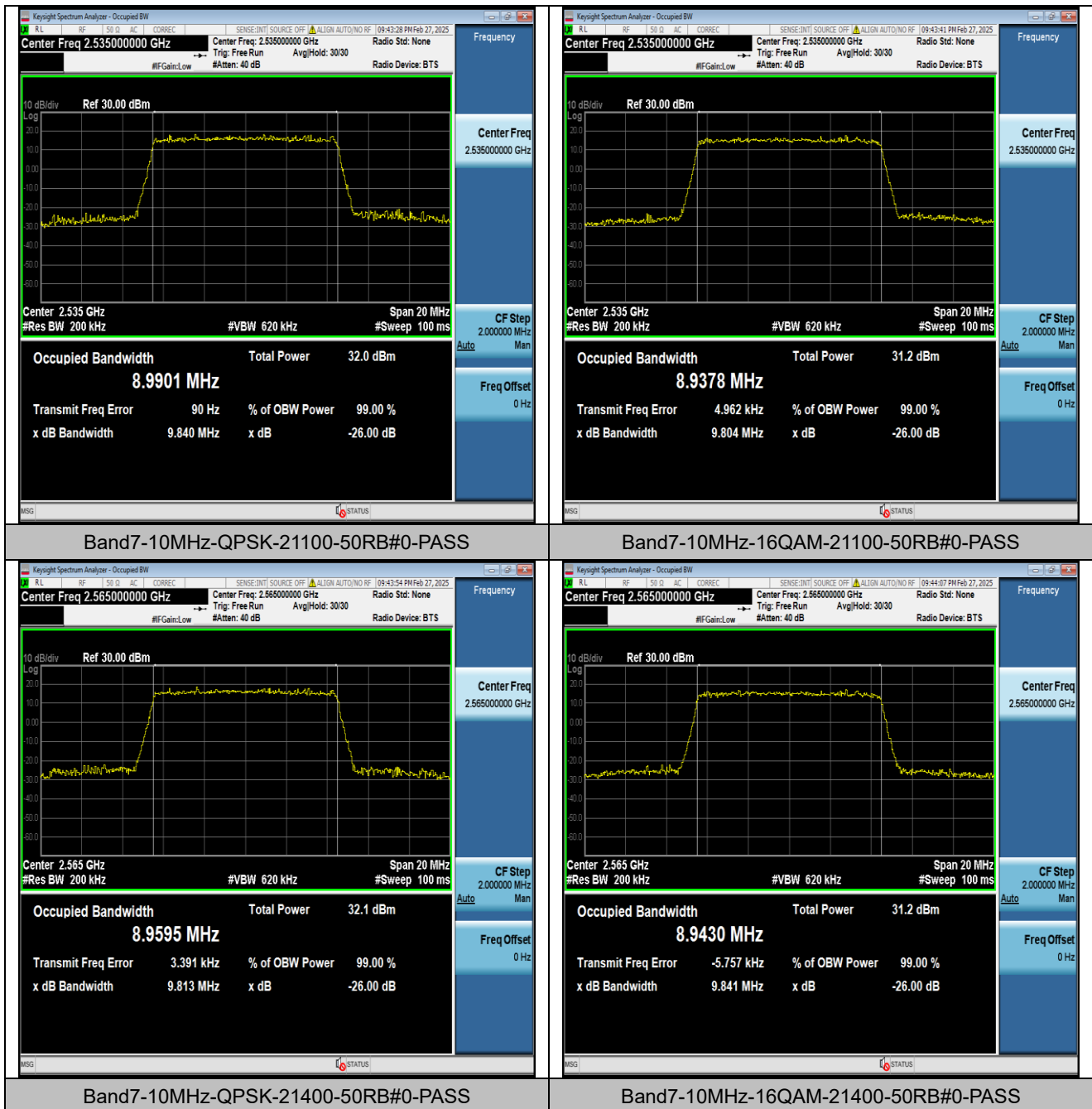
Test Result

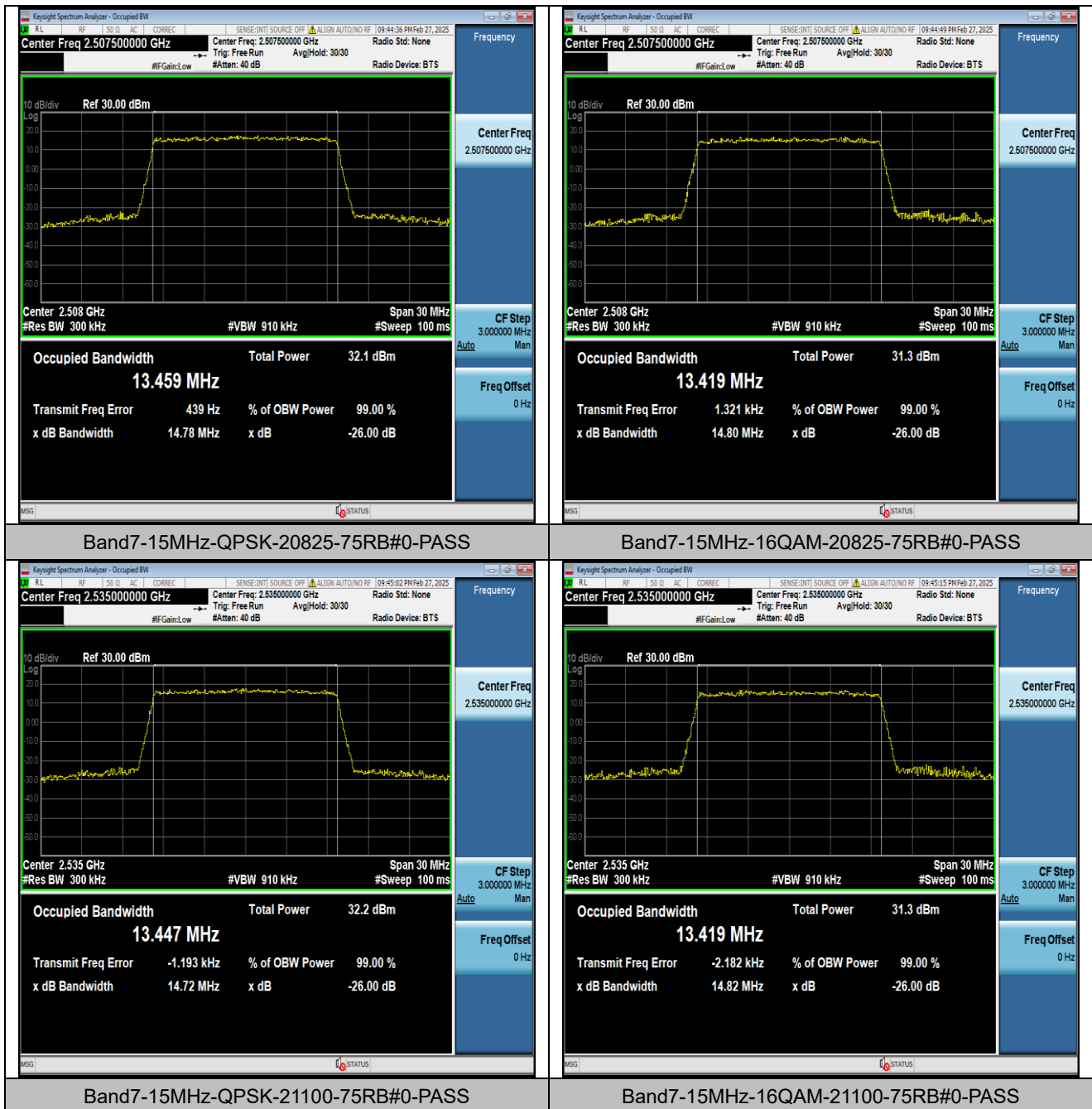
Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.4803	4.985	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.4820	4.992	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.4815	4.980	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.4828	5.014	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.4801	4.976	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.4797	5.013	PASS
Band7	10MHz	QPSK	20800	50RB#0	8.9666	9.851	PASS
Band7	10MHz	16QAM	20800	50RB#0	8.9450	9.788	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.9901	9.840	PASS
Band7	10MHz	16QAM	21100	50RB#0	8.9378	9.804	PASS
Band7	10MHz	QPSK	21400	50RB#0	8.9595	9.813	PASS
Band7	10MHz	16QAM	21400	50RB#0	8.9430	9.841	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.459	14.78	PASS
Band7	15MHz	16QAM	20825	75RB#0	13.419	14.80	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.447	14.72	PASS
Band7	15MHz	16QAM	21100	75RB#0	13.419	14.82	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.425	14.71	PASS
Band7	15MHz	16QAM	21375	75RB#0	13.414	14.66	PASS
Band7	20MHz	QPSK	20850	100RB#0	17.959	19.56	PASS
Band7	20MHz	16QAM	20850	100RB#0	17.888	19.42	PASS
Band7	20MHz	QPSK	21100	100RB#0	17.949	19.54	PASS
Band7	20MHz	16QAM	21100	100RB#0	17.915	19.44	PASS
Band7	20MHz	QPSK	21350	100RB#0	17.932	19.41	PASS
Band7	20MHz	16QAM	21350	100RB#0	17.918	19.47	PASS

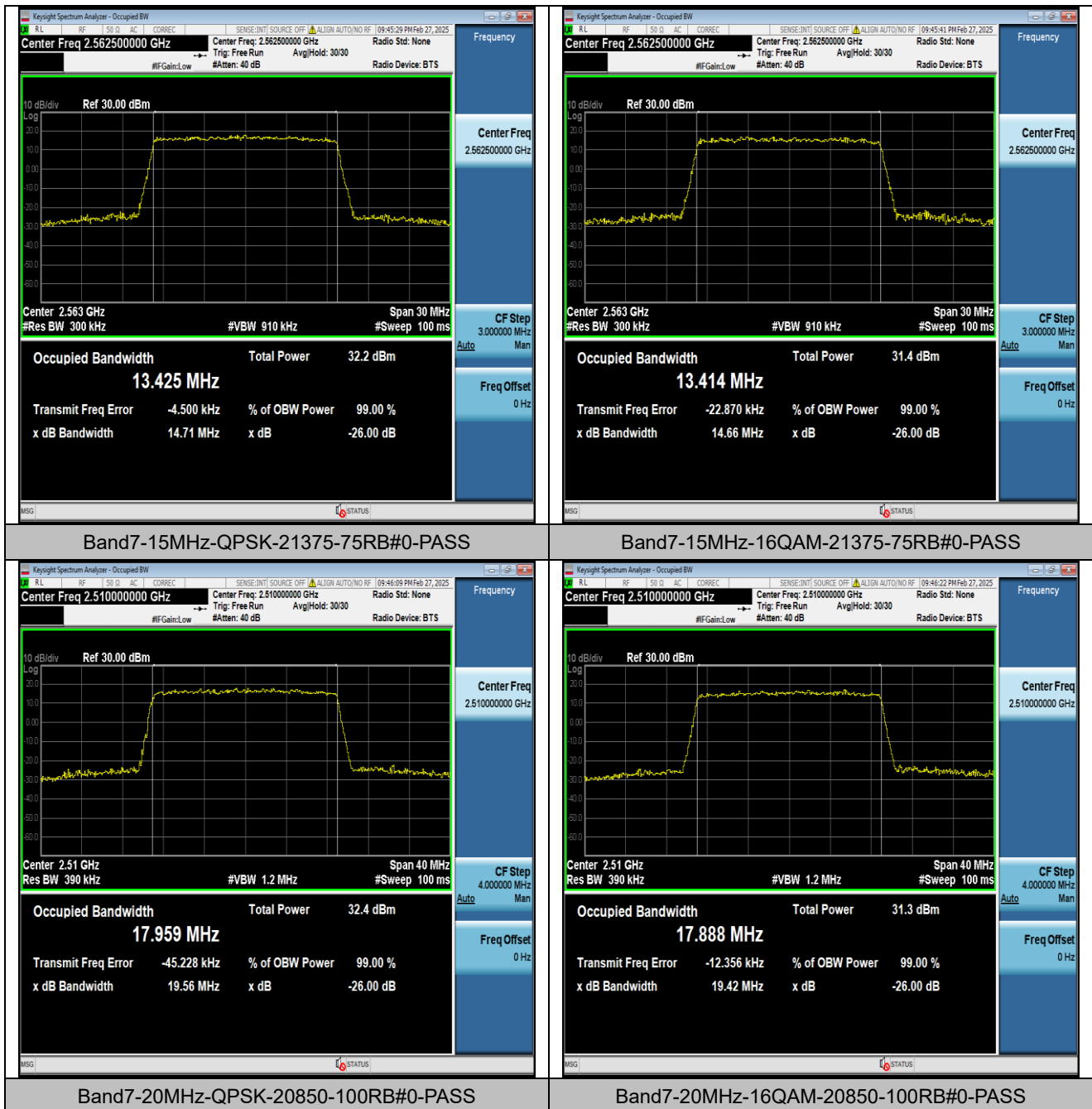
Test Graphs

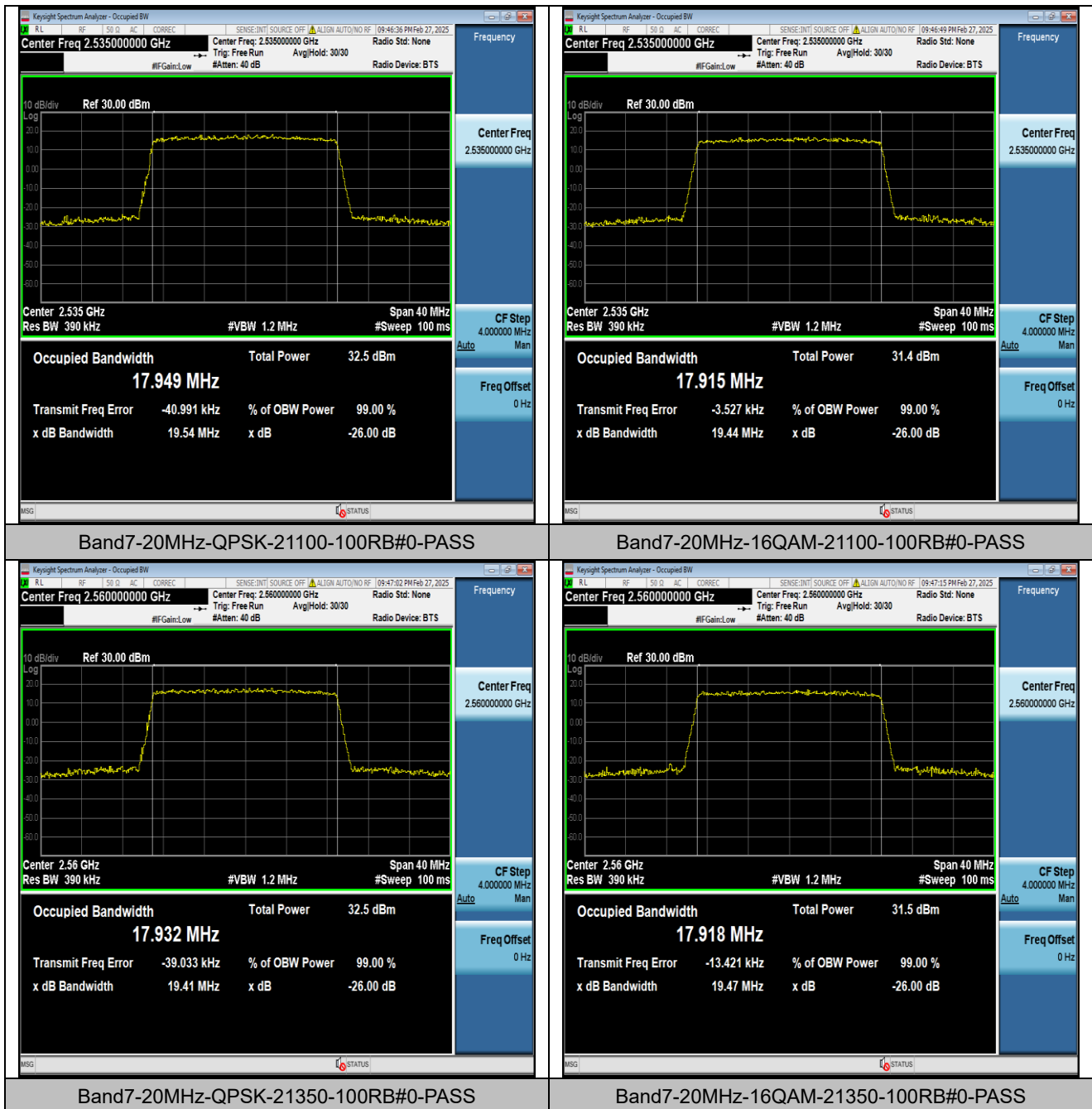






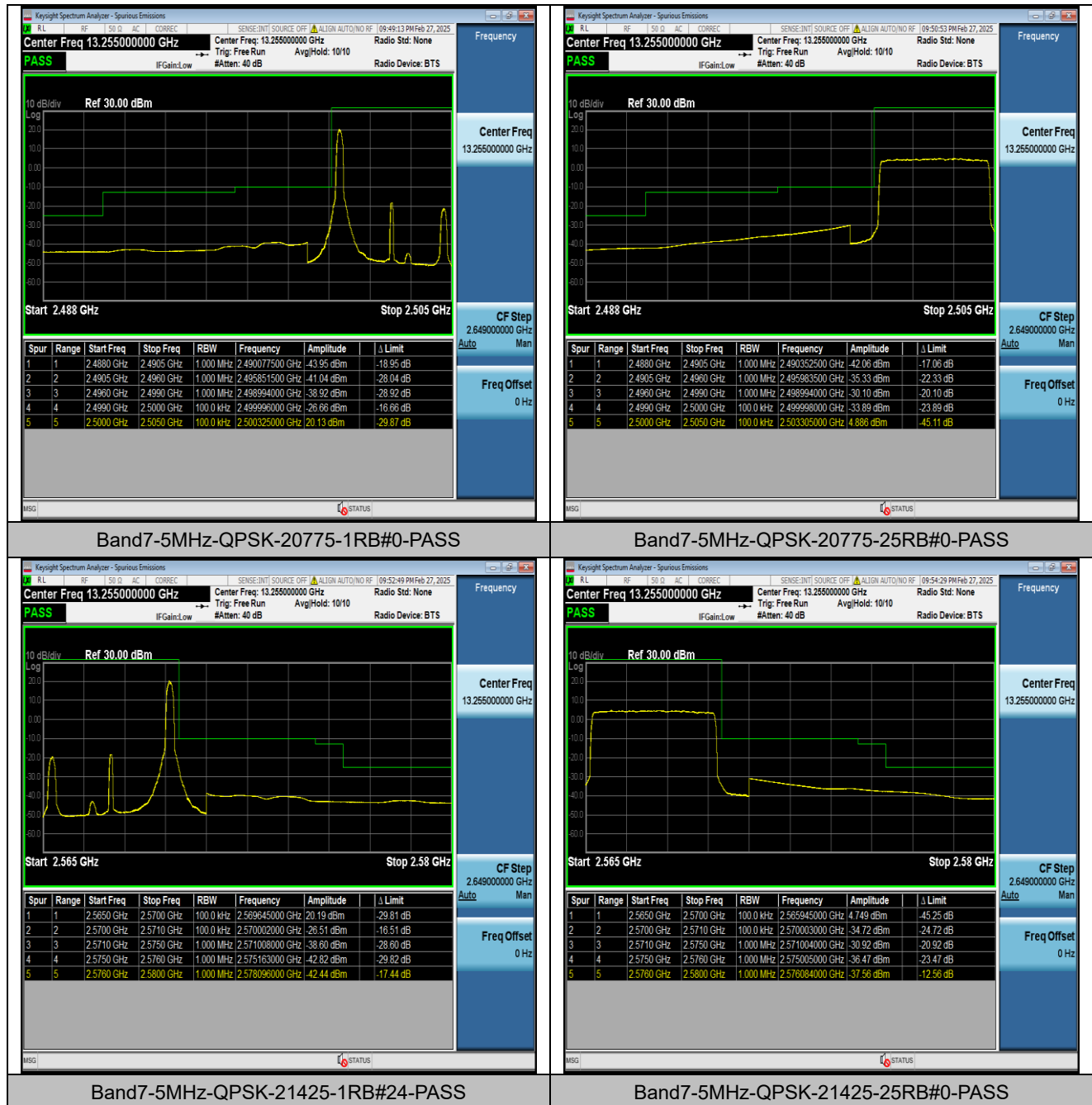


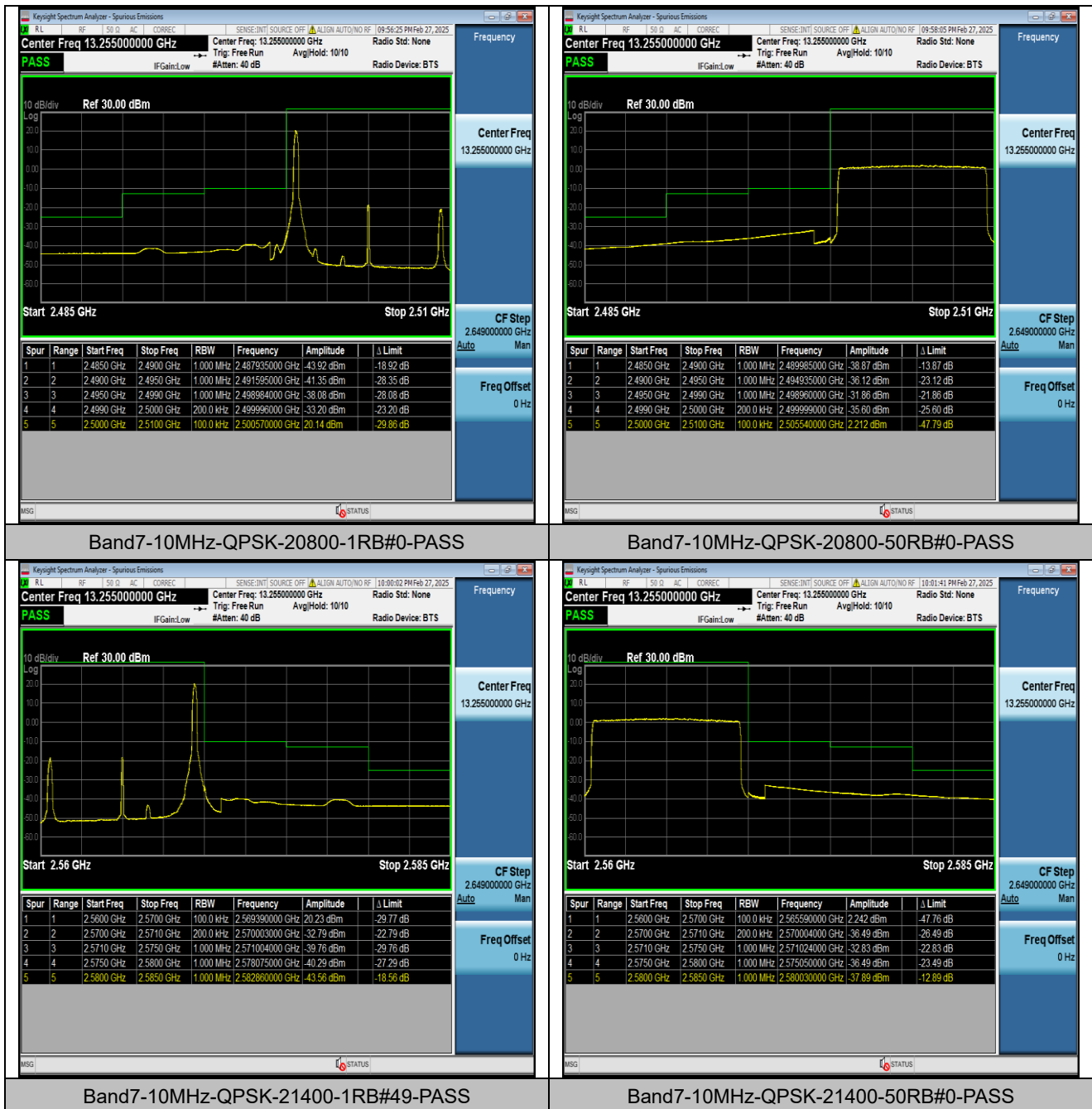


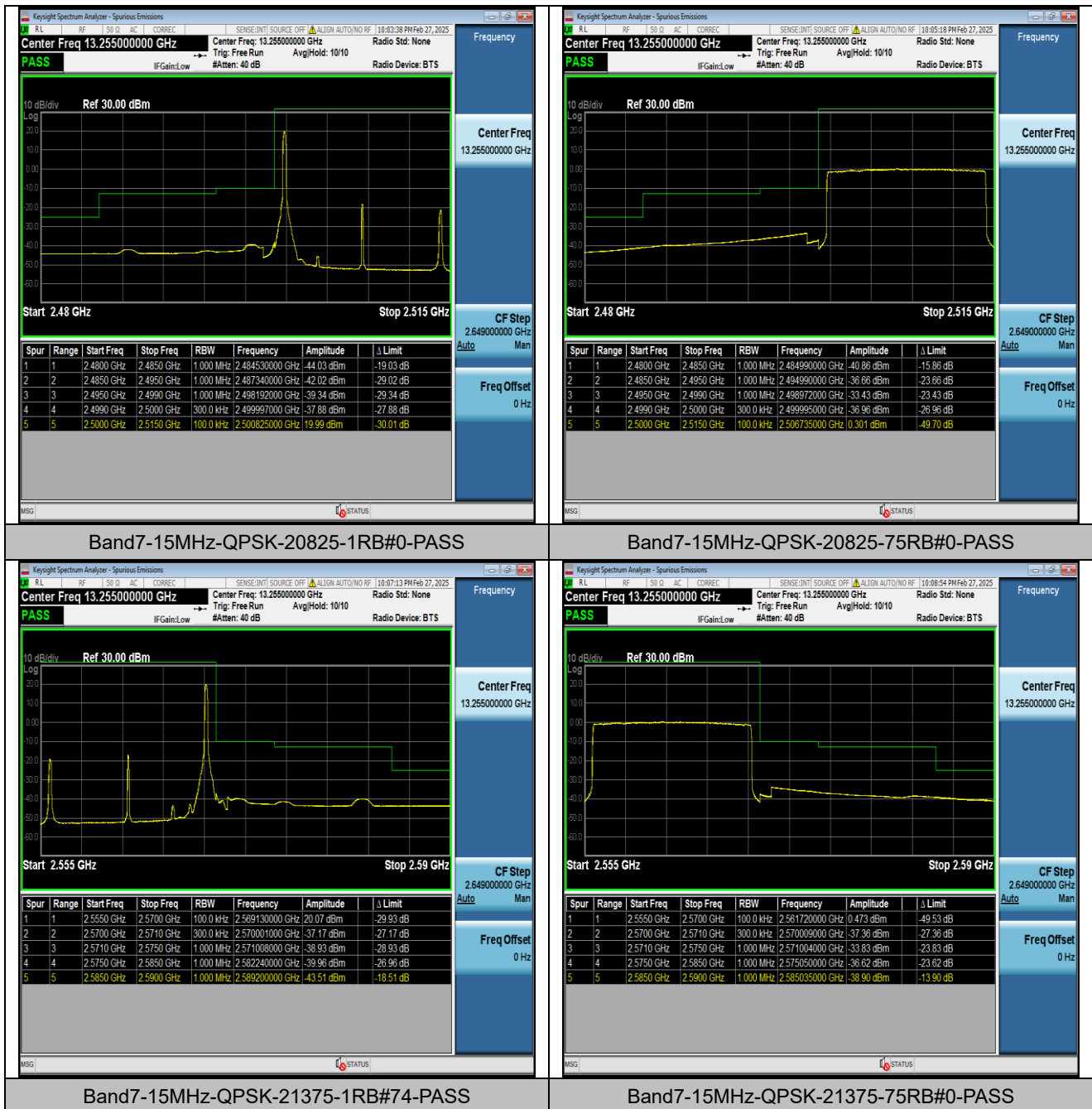


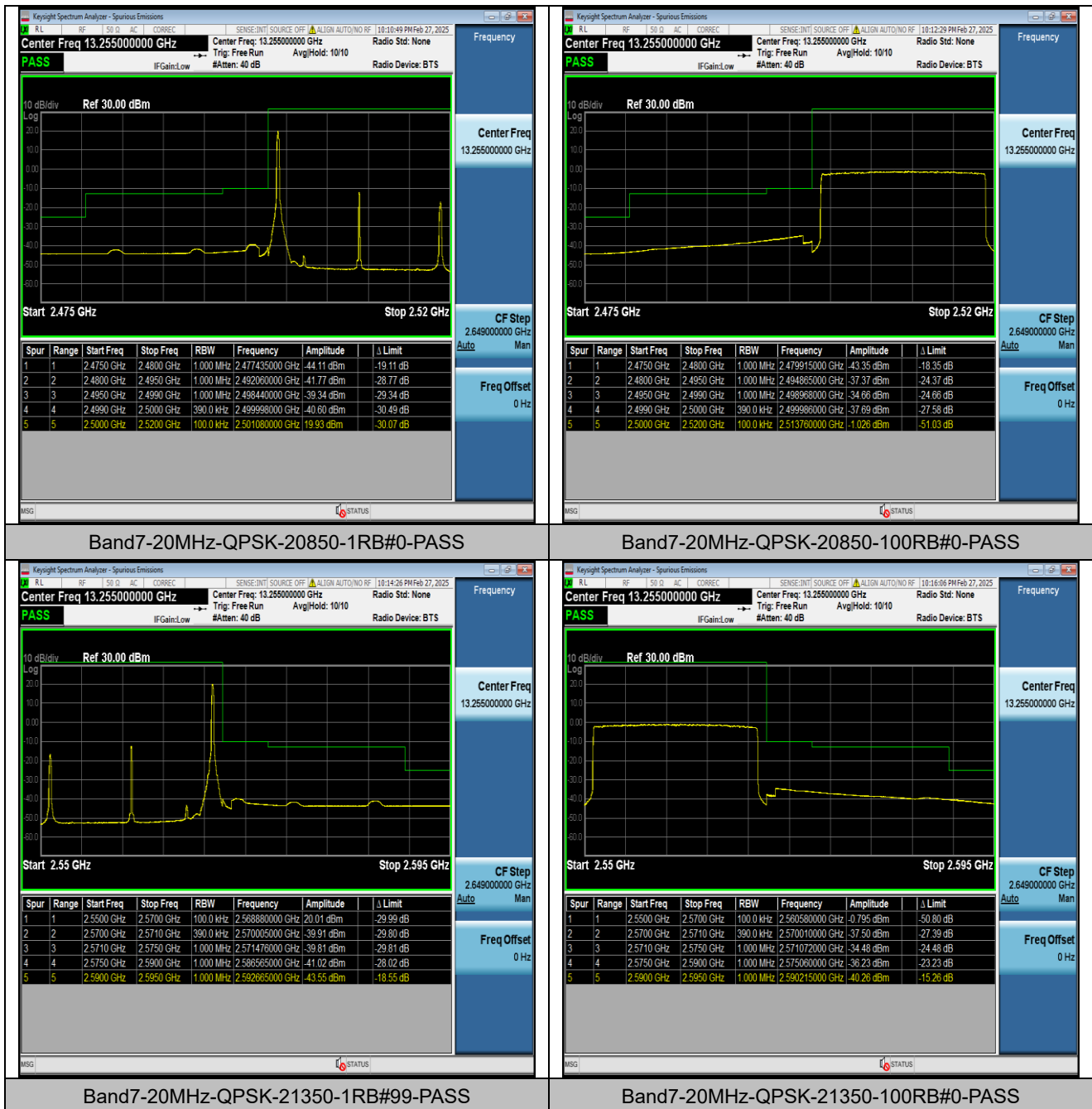
Band Edge

Test Graphs



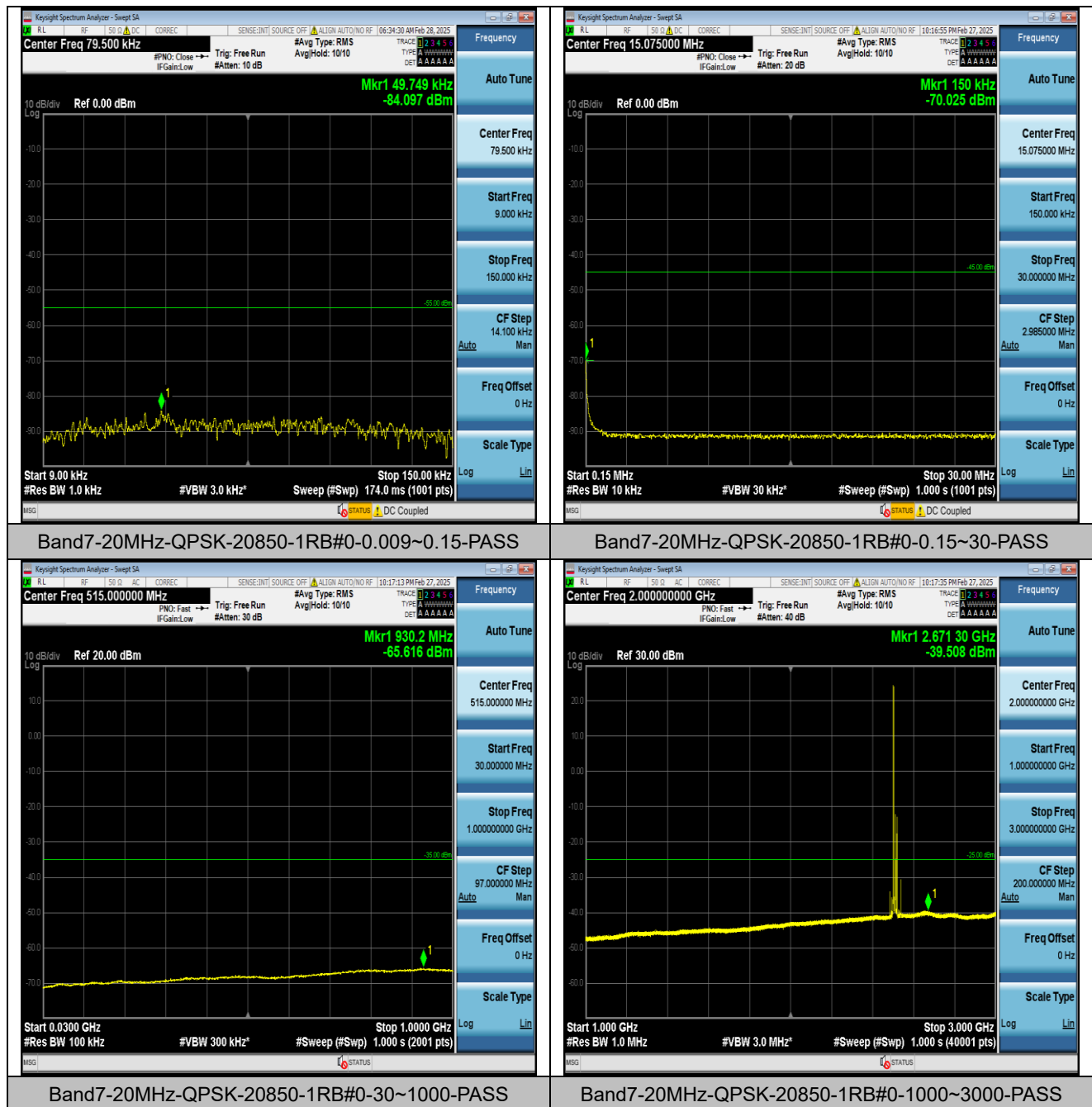


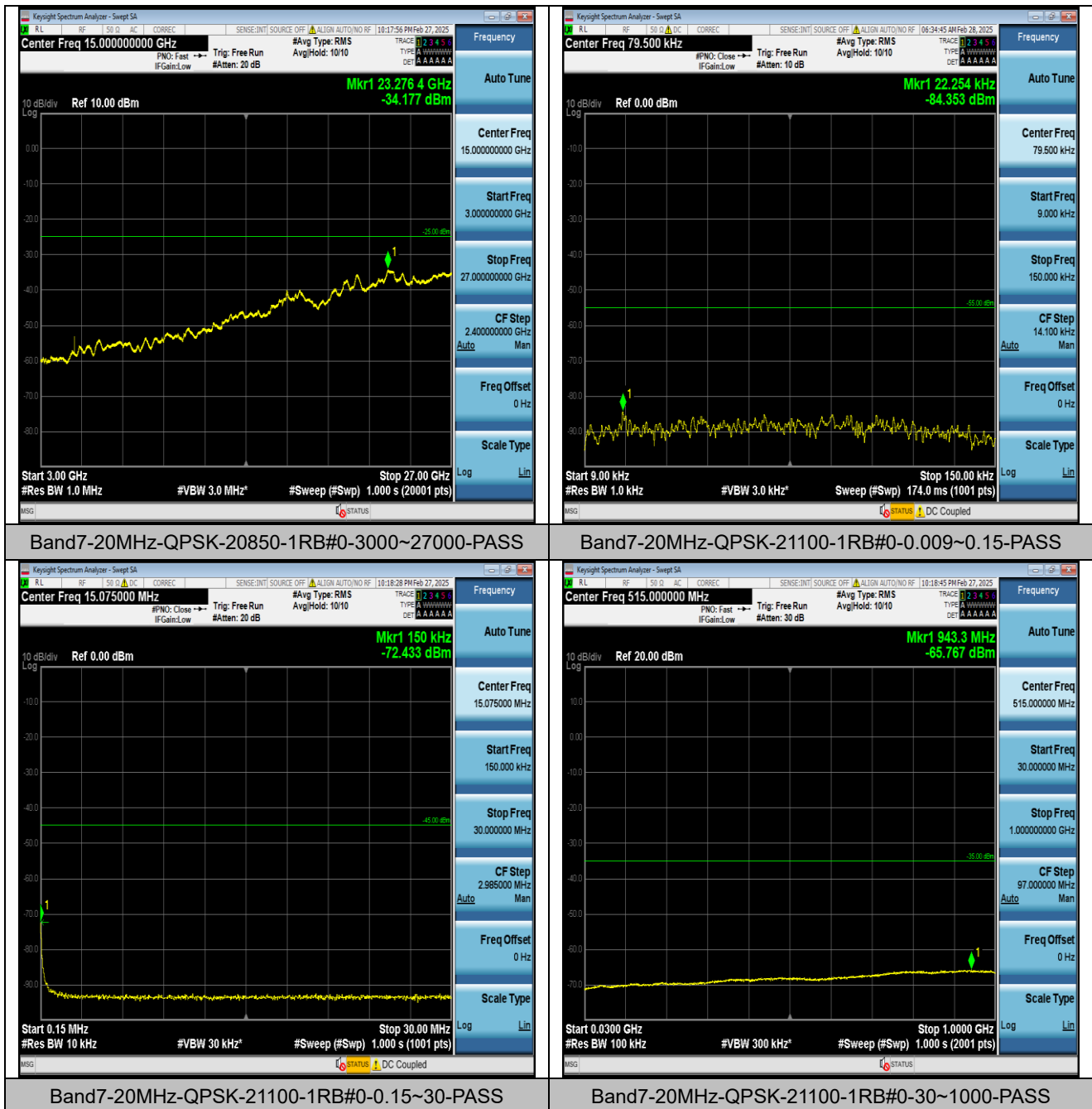




Conducted Spurious Emission

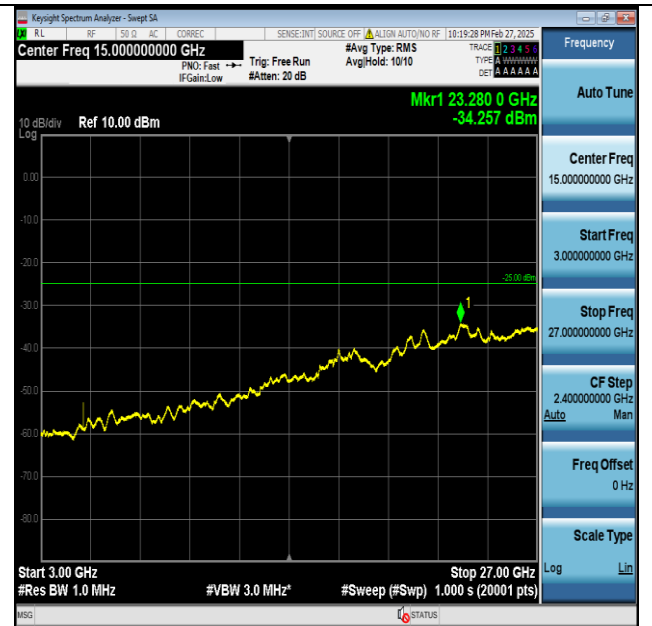
Test Graphs



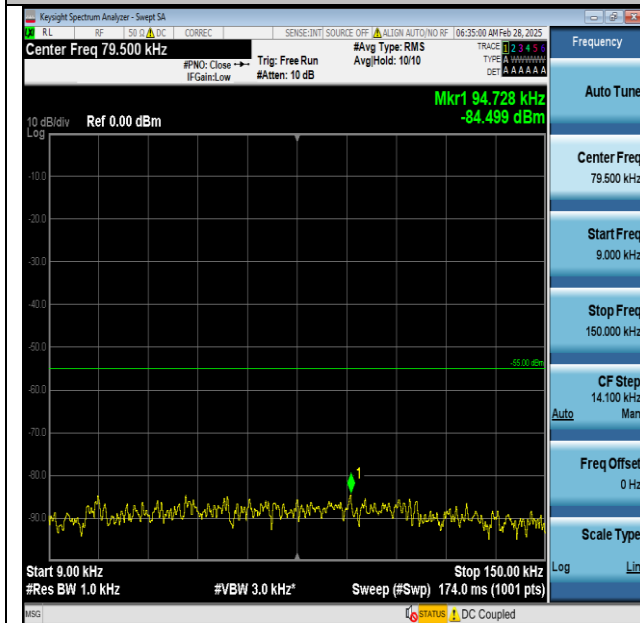




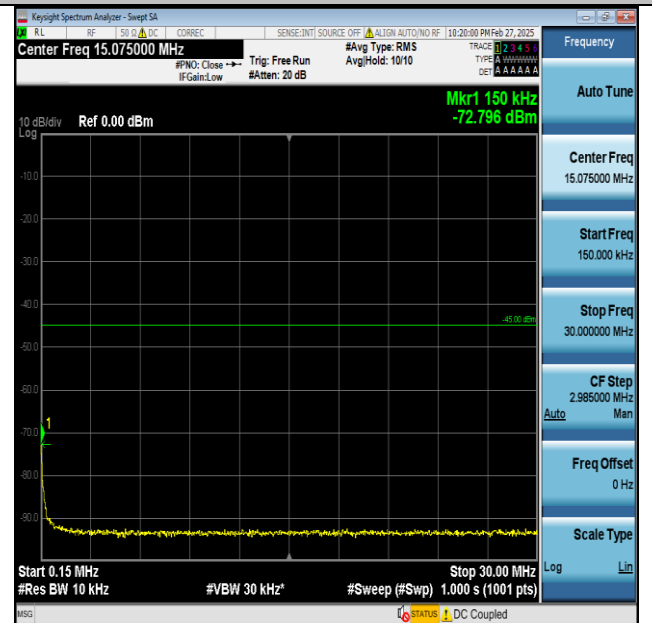
Band7-20MHz-QPSK-21100-1RB#0-1000~3000-PASS



Band7-20MHz-QPSK-21100-1RB#0-3000~27000-PASS



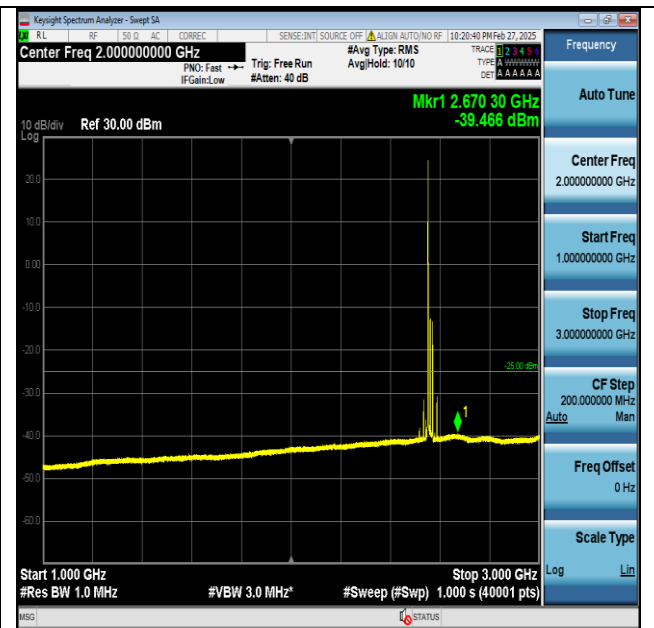
Band7-20MHz-QPSK-21350-1RB#0-0.009~0.15-PASS



Band7-20MHz-QPSK-21350-1RB#0-0.15~30-PASS



Band7-20MHz-QPSK-21350-1RB#0-30~1000-PASS



Band7-20MHz-QPSK-21350-1RB#0-1000~3000-PASS



Band7-20MHz-QPSK-21350-1RB#0-3000~27000-PASS

Frequency Stability

Test Result

Voltage									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band7	20MHz	QPSK	21100	100RB#0	VN	NT	-4.80	-0.001893	PASS
Band7	20MHz	QPSK	21100	100RB#0	VL	NT	-4.80	-0.001893	PASS
Band7	20MHz	QPSK	21100	100RB#0	VH	NT	-7.30	-0.002880	PASS

Temperature									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band7	20MHz	QPSK	21100	100RB#0	NV	-30	-5.00	-0.001972	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-20	-2.30	-0.000907	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-10	-5.70	-0.002249	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	0	-0.90	-0.000355	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	10	-1.80	-0.000710	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	20	0.40	0.000158	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	30	-4.30	-0.001696	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	40	-6.50	-0.002564	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	50	-5.50	-0.002170	PASS

~The End~