

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	23.52	24.92	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#12	24.22	25.62	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#24	23.60	25.00	33.00	PASS
Band7	5MHz	QPSK	20775	25RB#0	22.87	24.27	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#0	22.68	24.08	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#12	22.64	24.04	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#24	22.59	23.99	33.00	PASS
Band7	5MHz	16QAM	20775	25RB#0	21.56	22.96	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#0	24.06	25.46	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#12	24.40	25.8	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#24	23.76	25.16	33.00	PASS
Band7	5MHz	QPSK	21100	25RB#0	23.10	24.50	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#0	23.39	24.79	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#12	23.71	25.11	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#24	22.68	24.08	33.00	PASS
Band7	5MHz	16QAM	21100	25RB#0	22.01	23.41	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#0	24.03	25.43	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#12	24.35	25.75	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#24	23.91	25.31	33.00	PASS
Band7	5MHz	QPSK	21425	25RB#0	23.01	24.41	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#0	23.17	24.57	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#12	23.33	24.73	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#24	23.00	24.4	33.00	PASS
Band7	5MHz	16QAM	21425	25RB#0	21.93	23.33	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#0	23.78	25.18	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#24	23.81	25.21	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#49	23.71	25.11	33.00	PASS
Band7	10MHz	QPSK	20800	50RB#0	22.83	24.23	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#0	22.70	24.1	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#24	22.60	24.00	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#49	22.66	24.06	33.00	PASS
Band7	10MHz	16QAM	20800	50RB#0	21.68	23.08	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#0	24.04	25.44	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#24	24.31	25.71	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#49	23.84	25.24	33.00	PASS
Band7	10MHz	QPSK	21100	50RB#0	23.07	24.47	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#0	23.22	24.62	33.00	PASS

Band7	10MHz	16QAM	21100	1RB#24	23.59	24.99	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#49	23.01	24.41	33.00	PASS
Band7	10MHz	16QAM	21100	50RB#0	21.96	23.36	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#0	23.87	25.27	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#24	23.87	25.27	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#49	23.91	25.31	33.00	PASS
Band7	10MHz	QPSK	21400	50RB#0	22.88	24.28	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#0	22.61	24.01	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#24	22.71	24.11	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#49	23.04	24.44	33.00	PASS
Band7	10MHz	16QAM	21400	50RB#0	21.74	23.14	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#0	23.68	25.08	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#38	23.56	24.96	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#74	23.53	24.93	33.00	PASS
Band7	15MHz	QPSK	20825	75RB#0	22.63	24.03	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#0	22.84	24.24	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#38	22.89	24.29	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#74	22.51	23.91	33.00	PASS
Band7	15MHz	16QAM	20825	75RB#0	21.48	22.88	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#0	23.74	25.14	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#38	24.22	25.62	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#74	23.57	24.97	33.00	PASS
Band7	15MHz	QPSK	21100	75RB#0	22.83	24.23	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#0	22.64	24.04	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#38	22.83	24.23	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#74	22.43	23.83	33.00	PASS
Band7	15MHz	16QAM	21100	75RB#0	21.77	23.17	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#0	23.68	25.08	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#38	23.91	25.31	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#74	23.77	25.17	33.00	PASS
Band7	15MHz	QPSK	21375	75RB#0	22.77	24.17	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#0	22.69	24.09	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#38	22.43	23.83	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#74	22.61	24.01	33.00	PASS
Band7	15MHz	16QAM	21375	75RB#0	21.72	23.12	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#0	23.61	25.01	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#49	23.64	25.04	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#99	23.38	24.78	33.00	PASS
Band7	20MHz	QPSK	20850	100RB#0	22.65	24.05	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#0	22.36	23.76	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#49	22.48	23.88	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#99	22.33	23.73	33.00	PASS
Band7	20MHz	16QAM	20850	100RB#0	21.47	22.87	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#0	23.56	24.96	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#49	24.18	25.58	33.00	PASS

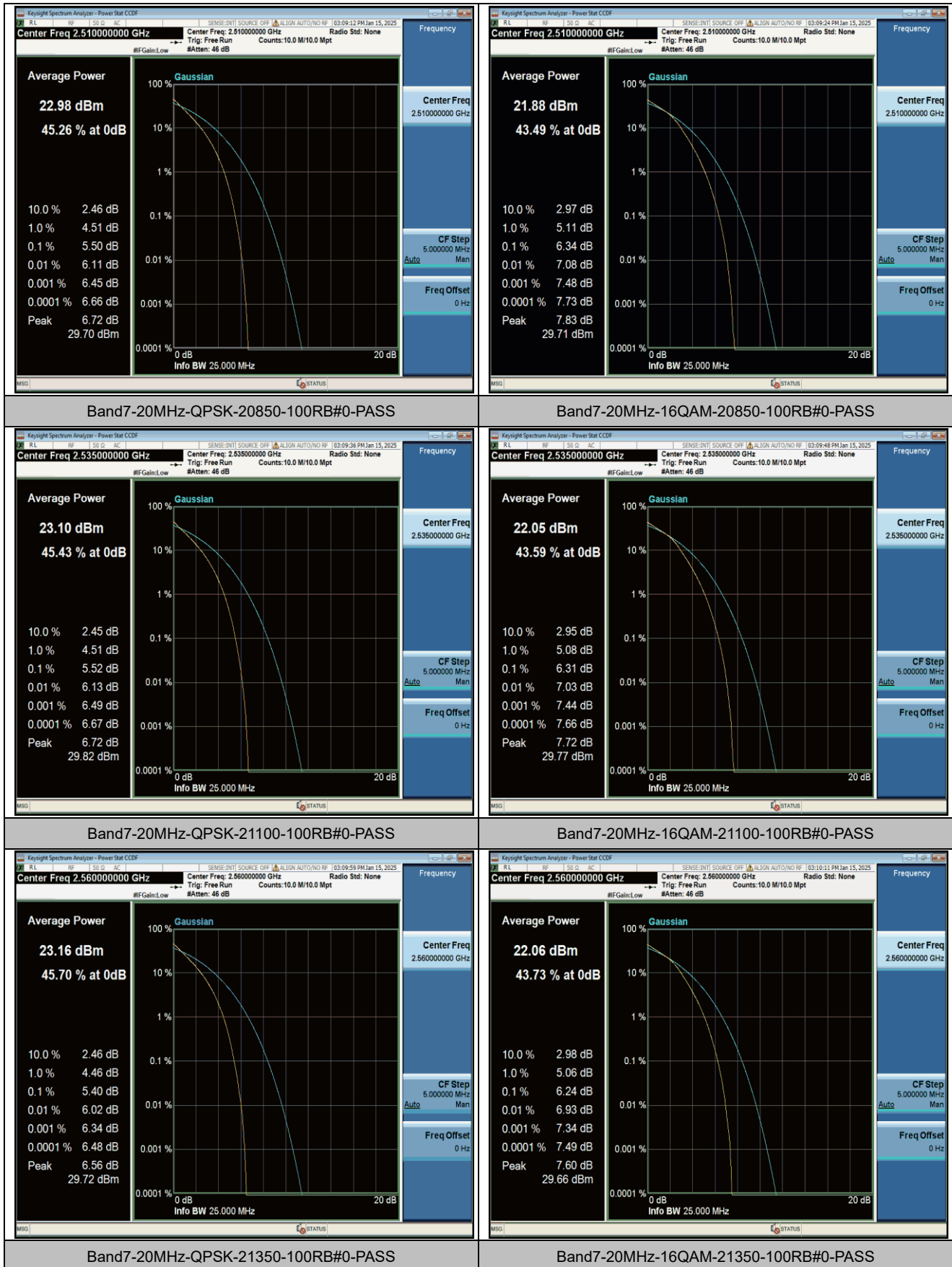
Band7	20MHz	QPSK	21100	1RB#99	23.42	24.82	33.00	PASS
Band7	20MHz	QPSK	21100	100RB#0	22.79	24.19	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#0	22.35	23.75	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#49	23.06	24.46	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#99	22.58	23.98	33.00	PASS
Band7	20MHz	16QAM	21100	100RB#0	21.68	23.08	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#0	23.85	25.25	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#49	23.60	25.00	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#99	23.93	25.33	33.00	PASS
Band7	20MHz	QPSK	21350	100RB#0	22.66	24.06	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#0	22.44	23.84	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#49	22.36	23.76	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#99	22.48	23.88	33.00	PASS
Band7	20MHz	16QAM	21350	100RB#0	21.66	23.06	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	5.50	13	PASS
Band7	20MHz	16QAM	20850	100RB#0	6.34	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	5.52	13	PASS
Band7	20MHz	16QAM	21100	100RB#0	6.31	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	5.40	13	PASS
Band7	20MHz	16QAM	21350	100RB#0	6.24	13	PASS

Test Graphs



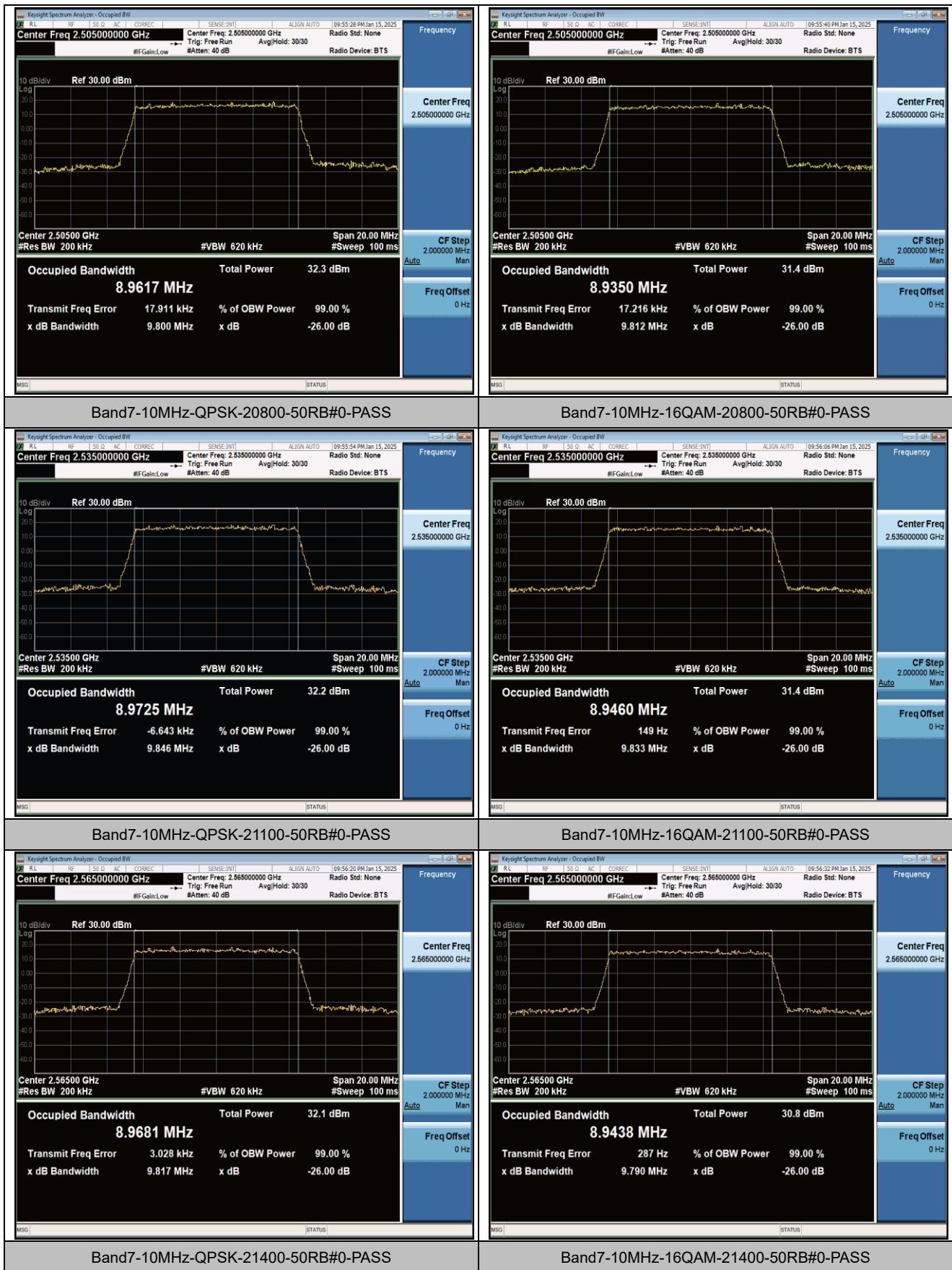
26dB Bandwidth and Occupied Bandwidth

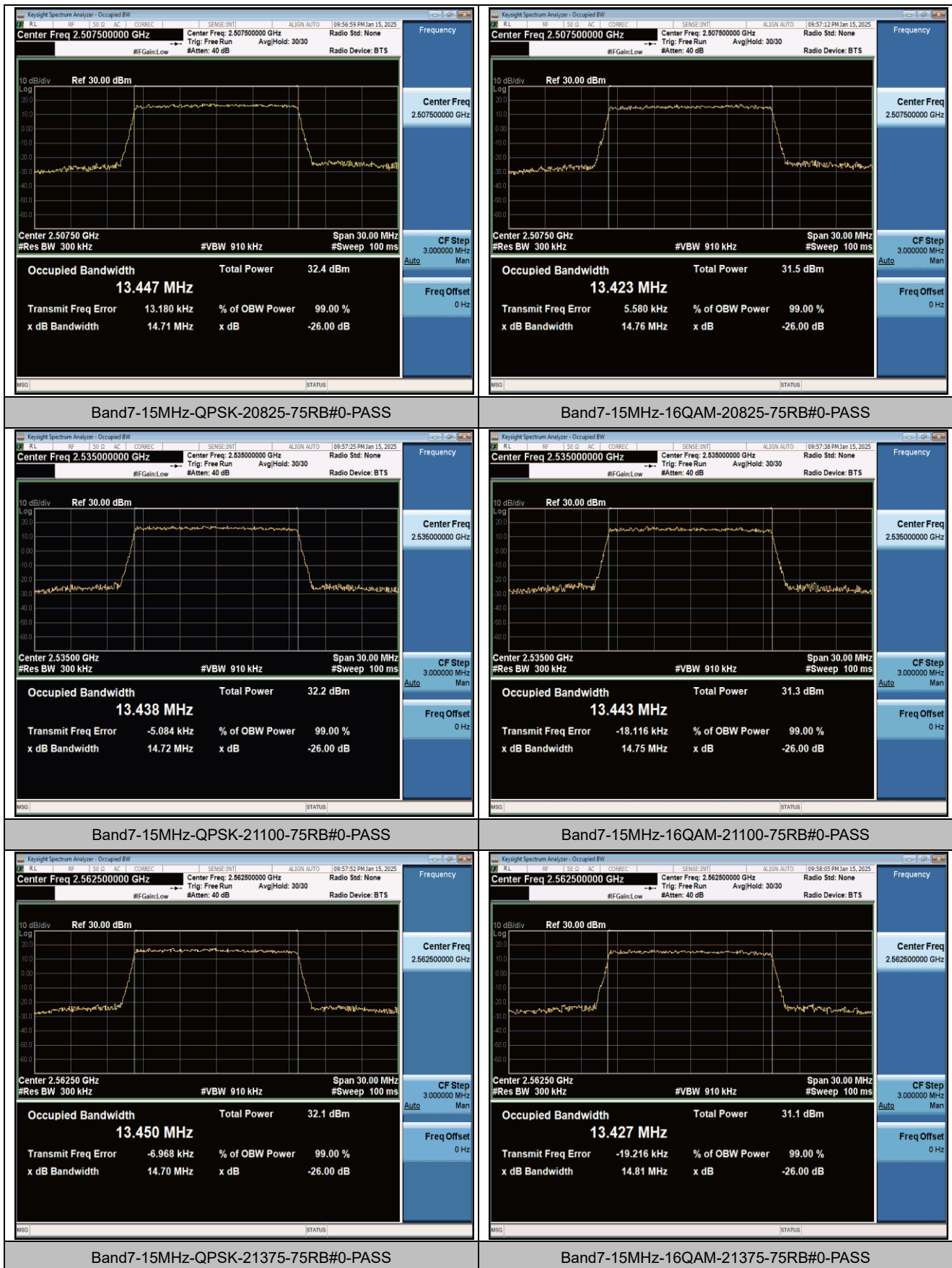
Test Result

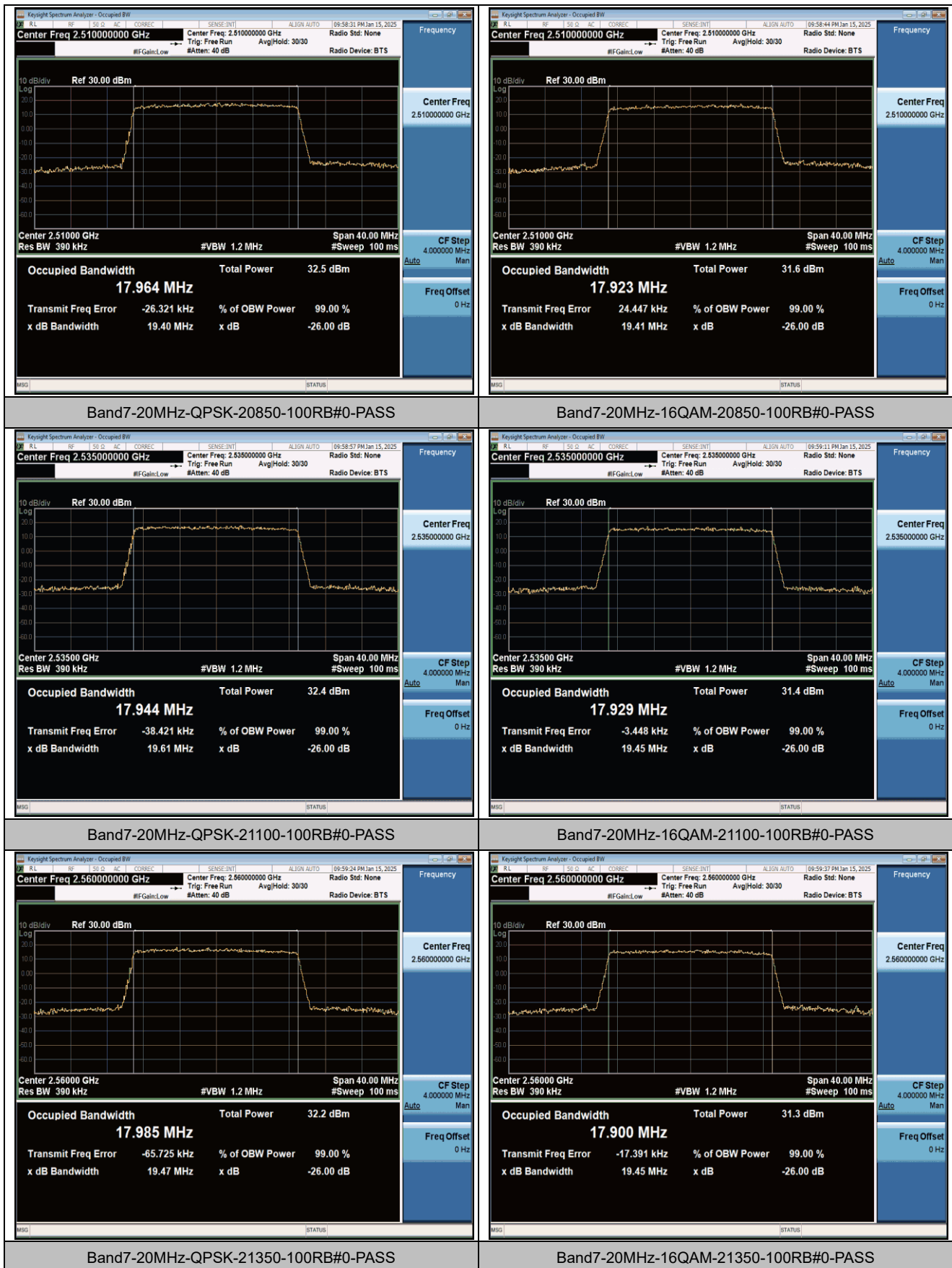
Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.4841	4.951	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.4789	5.008	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.4810	4.981	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.4851	5.018	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.4826	4.979	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.4839	4.985	PASS
Band7	10MHz	QPSK	20800	50RB#0	8.9617	9.800	PASS
Band7	10MHz	16QAM	20800	50RB#0	8.9350	9.812	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.9725	9.846	PASS
Band7	10MHz	16QAM	21100	50RB#0	8.9460	9.833	PASS
Band7	10MHz	QPSK	21400	50RB#0	8.9681	9.817	PASS
Band7	10MHz	16QAM	21400	50RB#0	8.9438	9.790	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.447	14.71	PASS
Band7	15MHz	16QAM	20825	75RB#0	13.423	14.76	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.438	14.72	PASS
Band7	15MHz	16QAM	21100	75RB#0	13.443	14.75	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.450	14.70	PASS
Band7	15MHz	16QAM	21375	75RB#0	13.427	14.81	PASS
Band7	20MHz	QPSK	20850	100RB#0	17.964	19.40	PASS
Band7	20MHz	16QAM	20850	100RB#0	17.923	19.41	PASS
Band7	20MHz	QPSK	21100	100RB#0	17.944	19.61	PASS
Band7	20MHz	16QAM	21100	100RB#0	17.929	19.45	PASS
Band7	20MHz	QPSK	21350	100RB#0	17.985	19.47	PASS
Band7	20MHz	16QAM	21350	100RB#0	17.900	19.45	PASS

Test Graphs



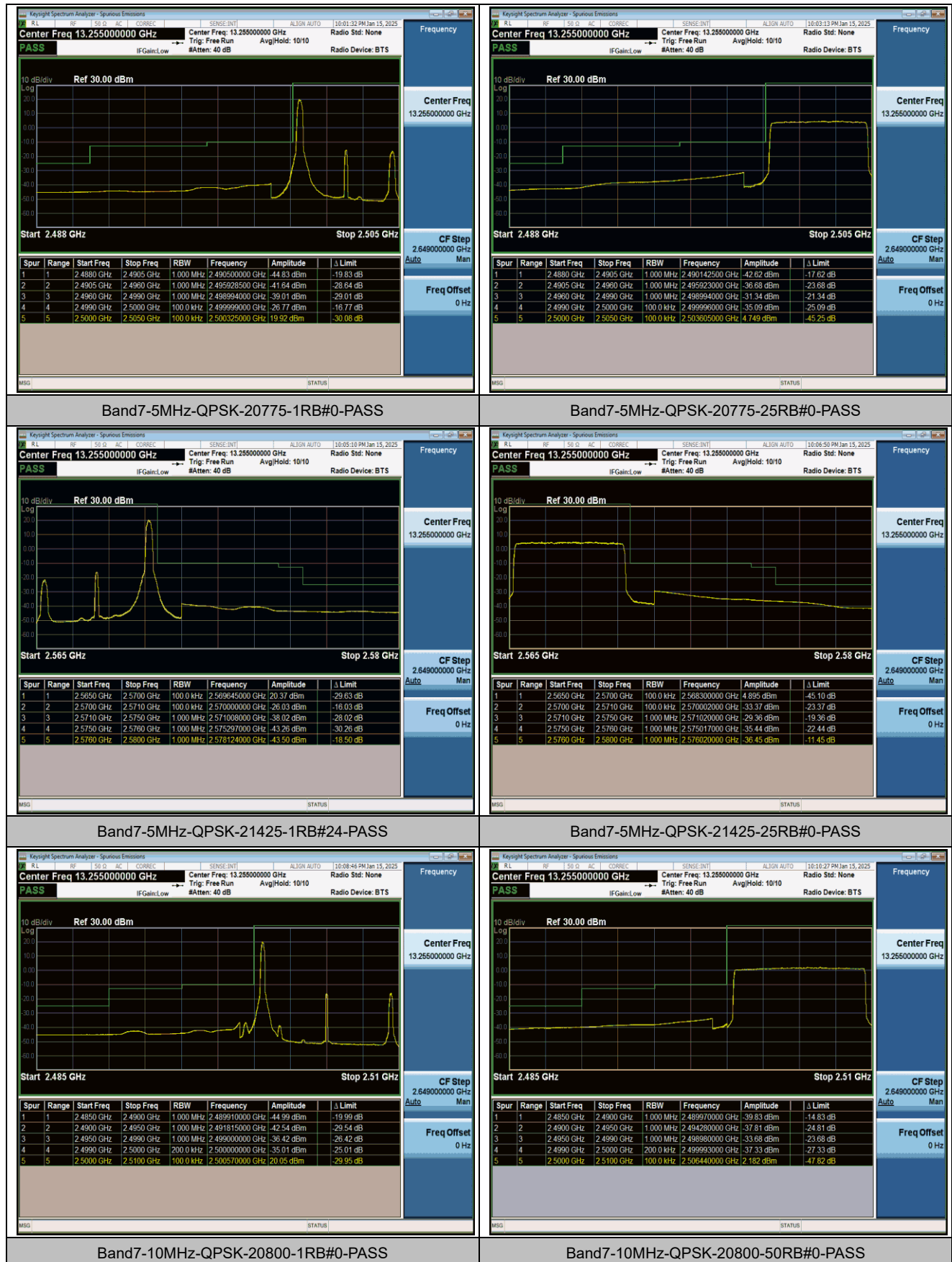


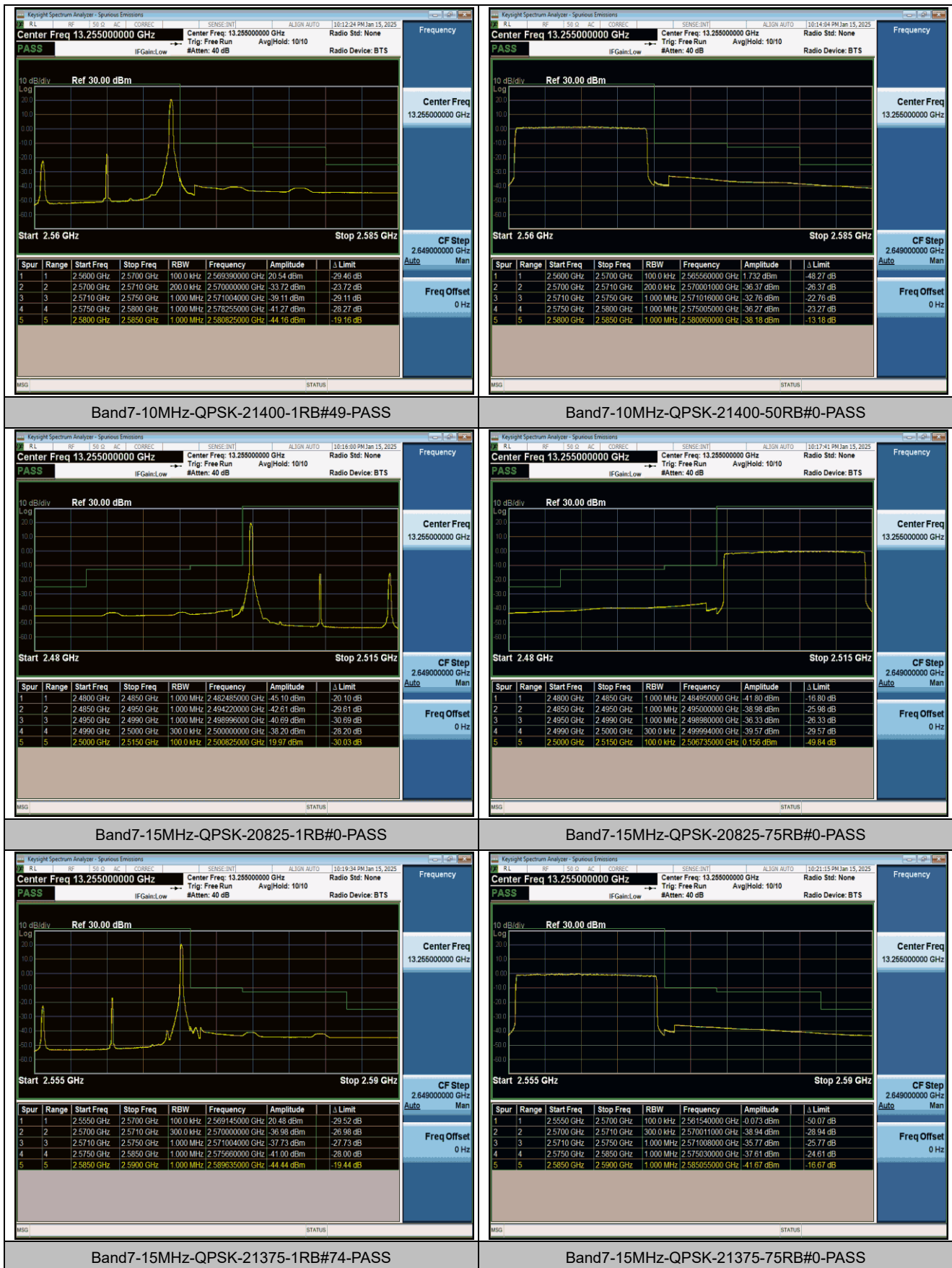


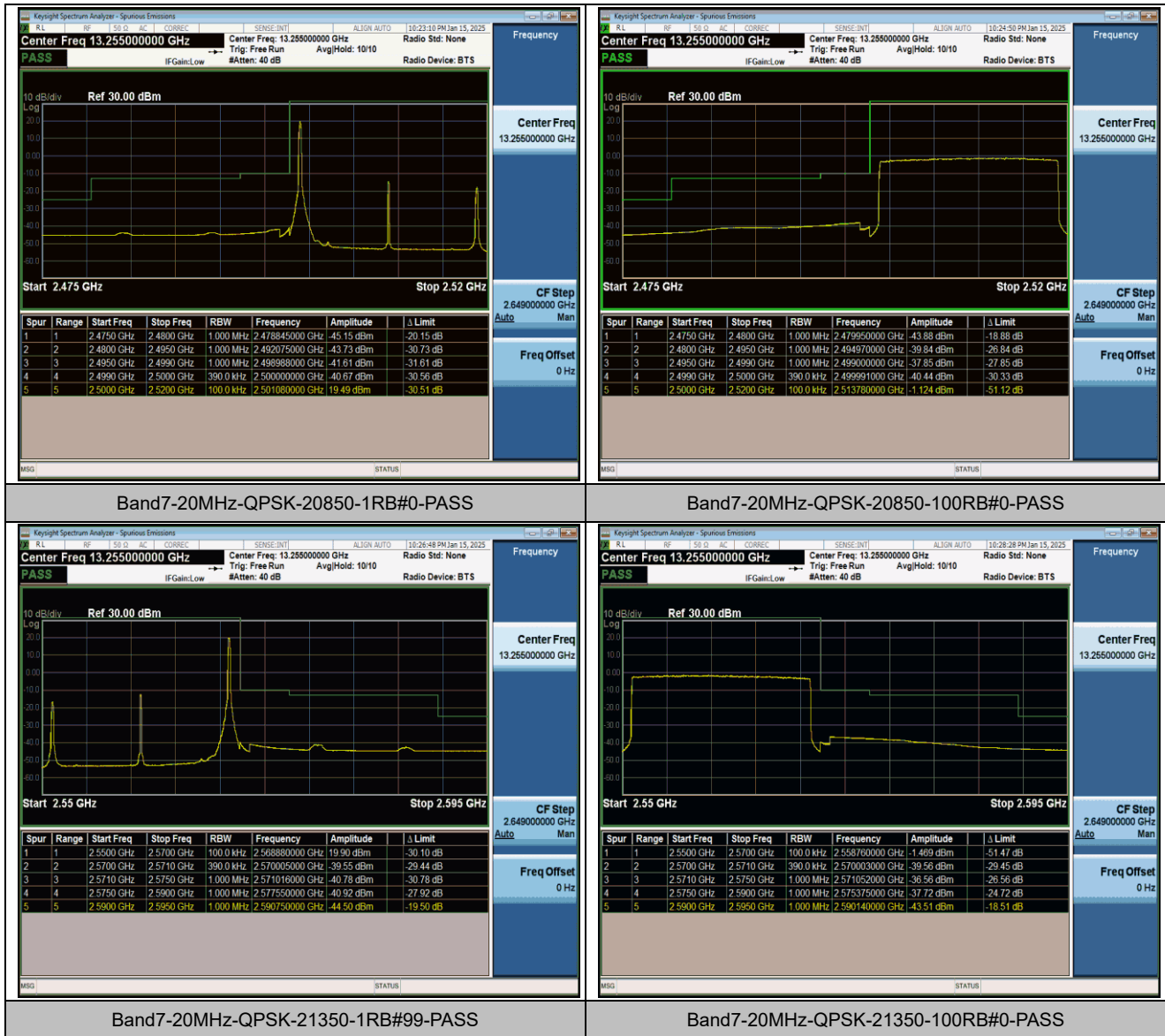


Band Edge

Test Graphs

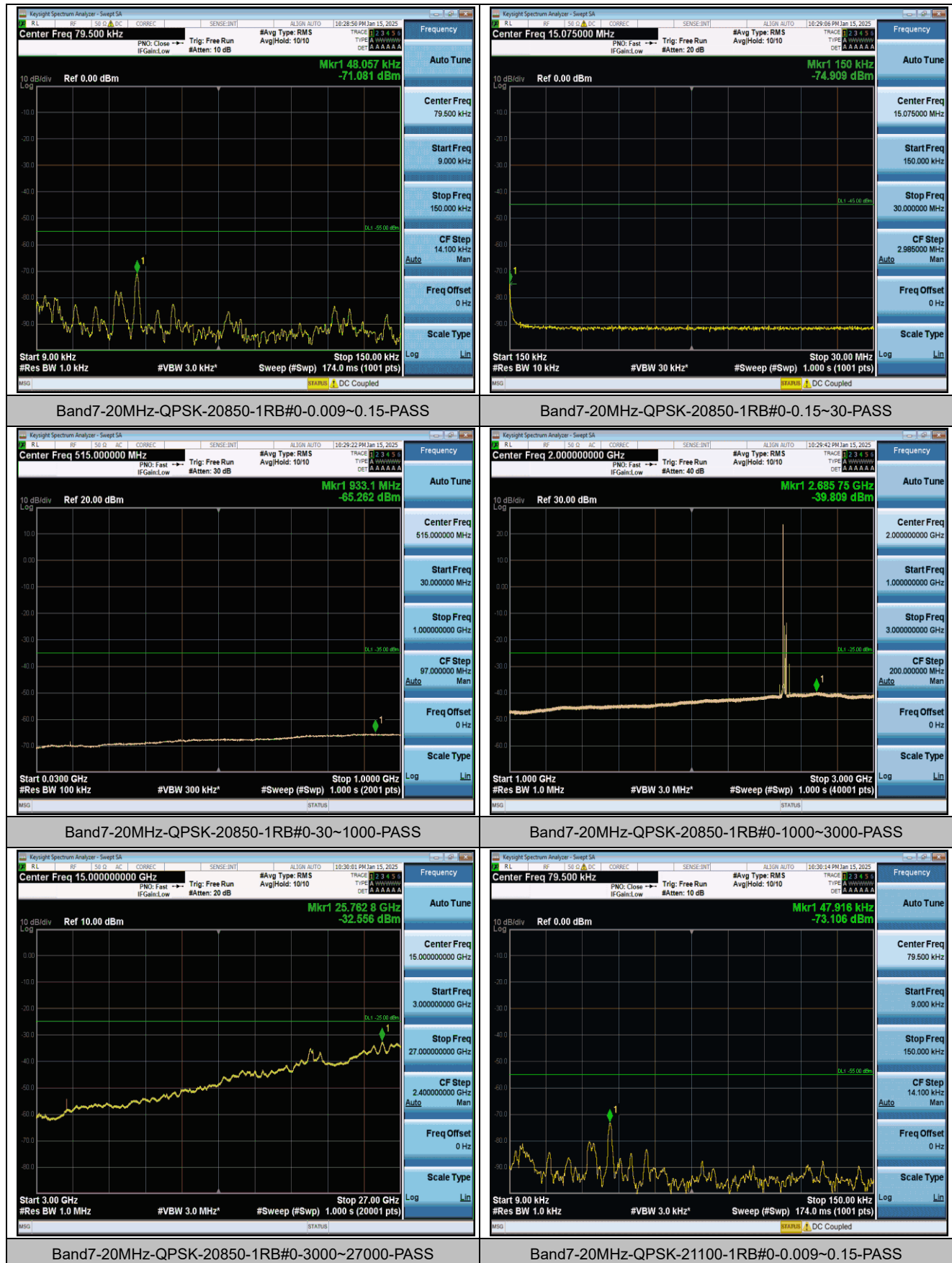






Conducted Spurious Emission

Test Graphs







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	-1.30	-0.000513	PASS
Band7	20MHz	QPSK	21100	100RB#0	VL	NT	0.10	0.000039	PASS
Band7	20MHz	QPSK	21100	100RB#0	VH	NT	-4.20	-0.001657	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	-4.50	-0.001775	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-20	0.00	0.000000	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-10	-4.10	-0.001617	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	0	-3.20	-0.001262	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	10	-1.00	-0.000394	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	20	-4.60	-0.001815	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	30	-4.10	-0.001617	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	40	-1.50	-0.000592	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	50	-0.40	-0.000158	PASS

~The End~