

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	23.3	24.7	33	PASS
Band7	5MHz	QPSK	20775	1RB#12	23.15	24.55	33	PASS
Band7	5MHz	QPSK	20775	1RB#24	23.17	24.57	33	PASS
Band7	5MHz	QPSK	20775	25RB#0	22.74	24.14	33	PASS
Band7	5MHz	16QAM	20775	1RB#0	22.58	23.98	33	PASS
Band7	5MHz	16QAM	20775	1RB#12	22.89	24.29	33	PASS
Band7	5MHz	16QAM	20775	1RB#24	22.44	23.84	33	PASS
Band7	5MHz	16QAM	20775	25RB#0	21.76	23.16	33	PASS
Band7	5MHz	QPSK	21100	1RB#0	23.22	24.62	33	PASS
Band7	5MHz	QPSK	21100	1RB#12	23.52	24.92	33	PASS
Band7	5MHz	QPSK	21100	1RB#24	23.31	24.71	33	PASS
Band7	5MHz	QPSK	21100	25RB#0	22.57	23.97	33	PASS
Band7	5MHz	16QAM	21100	1RB#0	22.58	23.98	33	PASS
Band7	5MHz	16QAM	21100	1RB#12	22.51	23.91	33	PASS
Band7	5MHz	16QAM	21100	1RB#24	22.66	24.06	33	PASS
Band7	5MHz	16QAM	21100	25RB#0	21.36	22.76	33	PASS
Band7	5MHz	QPSK	21425	1RB#0	23.42	24.82	33	PASS
Band7	5MHz	QPSK	21425	1RB#12	23.51	24.91	33	PASS
Band7	5MHz	QPSK	21425	1RB#24	23.38	24.78	33	PASS
Band7	5MHz	QPSK	21425	25RB#0	22.62	24.02	33	PASS
Band7	5MHz	16QAM	21425	1RB#0	22.77	24.17	33	PASS
Band7	5MHz	16QAM	21425	1RB#12	22.69	24.09	33	PASS
Band7	5MHz	16QAM	21425	1RB#24	22.4	23.8	33	PASS
Band7	5MHz	16QAM	21425	25RB#0	21.42	22.82	33	PASS
Band7	10MHz	QPSK	20800	1RB#0	23.16	24.56	33	PASS
Band7	10MHz	QPSK	20800	1RB#24	23.27	24.67	33	PASS
Band7	10MHz	QPSK	20800	1RB#49	23.32	24.72	33	PASS
Band7	10MHz	QPSK	20800	50RB#0	22.8	24.2	33	PASS
Band7	10MHz	16QAM	20800	1RB#0	22.85	24.25	33	PASS
Band7	10MHz	16QAM	20800	1RB#24	22.71	24.11	33	PASS
Band7	10MHz	16QAM	20800	1RB#49	22.44	23.84	33	PASS
Band7	10MHz	16QAM	20800	50RB#0	21.82	23.22	33	PASS
Band7	10MHz	QPSK	21100	1RB#0	23.51	24.91	33	PASS
Band7	10MHz	QPSK	21100	1RB#24	23.52	24.92	33	PASS
Band7	10MHz	QPSK	21100	1RB#49	23.11	24.51	33	PASS
Band7	10MHz	QPSK	21100	50RB#0	22.7	24.1	33	PASS
Band7	10MHz	16QAM	21100	1RB#0	22.84	24.24	33	PASS

Band7	10MHz	16QAM	21100	1RB#24	22.94	24.34	33	PASS
Band7	10MHz	16QAM	21100	1RB#49	22.13	23.53	33	PASS
Band7	10MHz	16QAM	21100	50RB#0	21.67	23.07	33	PASS
Band7	10MHz	QPSK	21400	1RB#0	23.77	25.17	33	PASS
Band7	10MHz	QPSK	21400	1RB#24	23.68	25.08	33	PASS
Band7	10MHz	QPSK	21400	1RB#49	23.44	24.84	33	PASS
Band7	10MHz	QPSK	21400	50RB#0	22.76	24.16	33	PASS
Band7	10MHz	16QAM	21400	1RB#0	22.78	24.18	33	PASS
Band7	10MHz	16QAM	21400	1RB#24	22.84	24.24	33	PASS
Band7	10MHz	16QAM	21400	1RB#49	22.66	24.06	33	PASS
Band7	10MHz	16QAM	21400	50RB#0	21.77	23.17	33	PASS
Band7	15MHz	QPSK	20825	1RB#0	23.32	24.72	33	PASS
Band7	15MHz	QPSK	20825	1RB#38	23.43	24.83	33	PASS
Band7	15MHz	QPSK	20825	1RB#74	23.37	24.77	33	PASS
Band7	15MHz	QPSK	20825	75RB#0	22.7	24.1	33	PASS
Band7	15MHz	16QAM	20825	1RB#0	22.68	24.08	33	PASS
Band7	15MHz	16QAM	20825	1RB#38	22.94	24.34	33	PASS
Band7	15MHz	16QAM	20825	1RB#74	22.24	23.64	33	PASS
Band7	15MHz	16QAM	20825	75RB#0	21.42	22.82	33	PASS
Band7	15MHz	QPSK	21100	1RB#0	23.32	24.72	33	PASS
Band7	15MHz	QPSK	21100	1RB#38	23.53	24.93	33	PASS
Band7	15MHz	QPSK	21100	1RB#74	23.11	24.51	33	PASS
Band7	15MHz	QPSK	21100	75RB#0	22.53	23.93	33	PASS
Band7	15MHz	16QAM	21100	1RB#0	22.6	24	33	PASS
Band7	15MHz	16QAM	21100	1RB#38	22.65	24.05	33	PASS
Band7	15MHz	16QAM	21100	1RB#74	22.22	23.62	33	PASS
Band7	15MHz	16QAM	21100	75RB#0	21.45	22.85	33	PASS
Band7	15MHz	QPSK	21375	1RB#0	23.56	24.96	33	PASS
Band7	15MHz	QPSK	21375	1RB#38	23.37	24.77	33	PASS
Band7	15MHz	QPSK	21375	1RB#74	23.27	24.67	33	PASS
Band7	15MHz	QPSK	21375	75RB#0	22.75	24.15	33	PASS
Band7	15MHz	16QAM	21375	1RB#0	22.8	24.2	33	PASS
Band7	15MHz	16QAM	21375	1RB#38	22.8	24.2	33	PASS
Band7	15MHz	16QAM	21375	1RB#74	22.54	23.94	33	PASS
Band7	15MHz	16QAM	21375	75RB#0	21.65	23.05	33	PASS
Band7	20MHz	QPSK	20850	1RB#0	23.17	24.57	33	PASS
Band7	20MHz	QPSK	20850	1RB#49	23.44	24.84	33	PASS
Band7	20MHz	QPSK	20850	1RB#99	23.06	24.46	33	PASS
Band7	20MHz	QPSK	20850	100RB#0	22.61	24.01	33	PASS
Band7	20MHz	16QAM	20850	1RB#0	22.7	24.1	33	PASS
Band7	20MHz	16QAM	20850	1RB#49	22.41	23.81	33	PASS
Band7	20MHz	16QAM	20850	1RB#99	22.47	23.87	33	PASS
Band7	20MHz	16QAM	20850	100RB#0	21.56	22.96	33	PASS
Band7	20MHz	QPSK	21100	1RB#0	23.53	24.93	33	PASS
Band7	20MHz	QPSK	21100	1RB#49	23.52	24.92	33	PASS

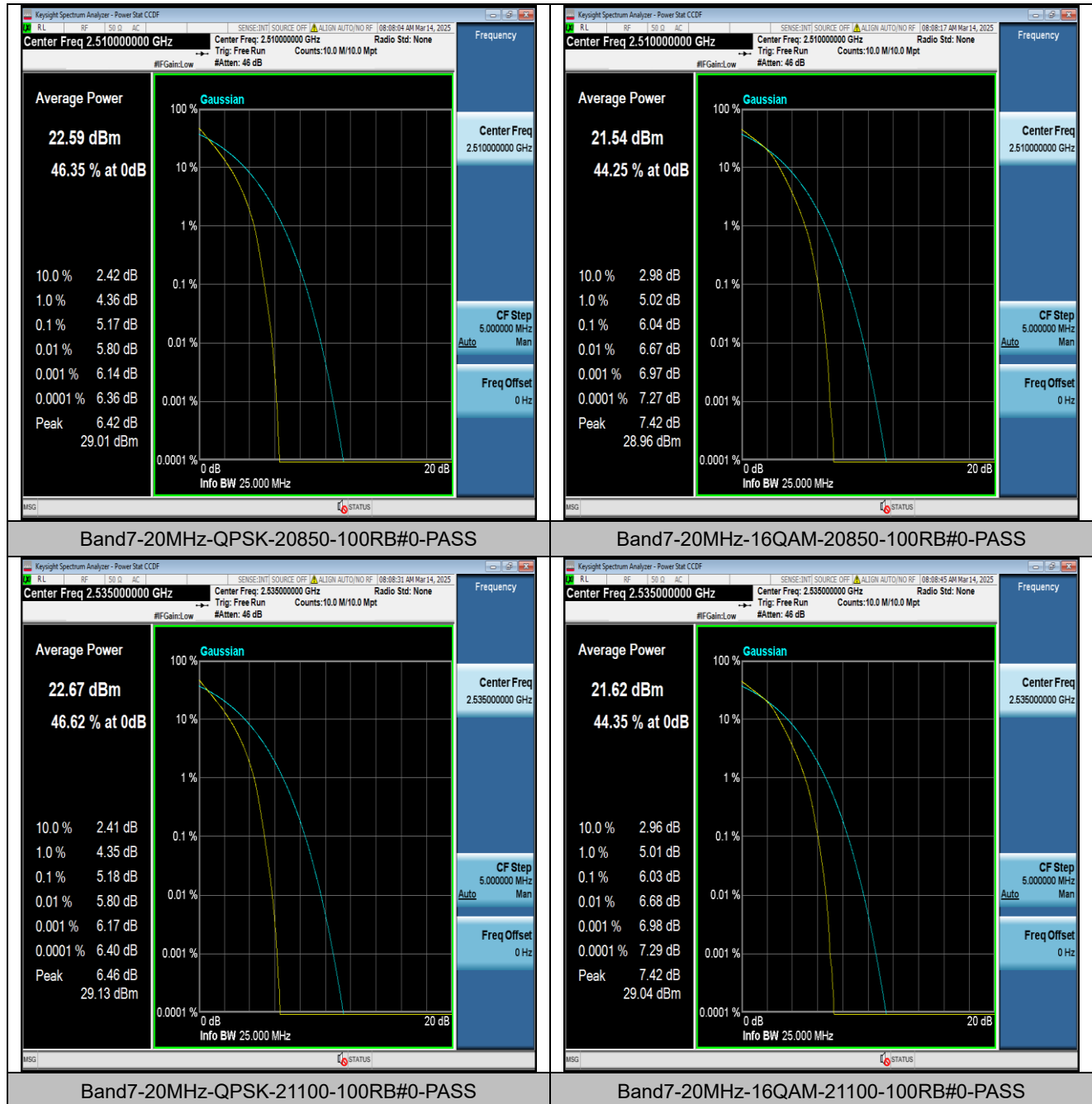
Band7	20MHz	QPSK	21100	1RB#99	23.16	24.56	33	PASS
Band7	20MHz	QPSK	21100	100RB#0	22.58	23.98	33	PASS
Band7	20MHz	16QAM	21100	1RB#0	22.55	23.95	33	PASS
Band7	20MHz	16QAM	21100	1RB#49	22.71	24.11	33	PASS
Band7	20MHz	16QAM	21100	1RB#99	22.5	23.9	33	PASS
Band7	20MHz	16QAM	21100	100RB#0	21.39	22.79	33	PASS
Band7	20MHz	QPSK	21350	1RB#0	23.38	24.78	33	PASS
Band7	20MHz	QPSK	21350	1RB#49	23.23	24.63	33	PASS
Band7	20MHz	QPSK	21350	1RB#99	23.11	24.51	33	PASS
Band7	20MHz	QPSK	21350	100RB#0	22.7	24.1	33	PASS
Band7	20MHz	16QAM	21350	1RB#0	22.63	24.03	33	PASS
Band7	20MHz	16QAM	21350	1RB#49	22.61	24.01	33	PASS
Band7	20MHz	16QAM	21350	1RB#99	22.26	23.66	33	PASS
Band7	20MHz	16QAM	21350	100RB#0	21.62	23.02	33	PASS

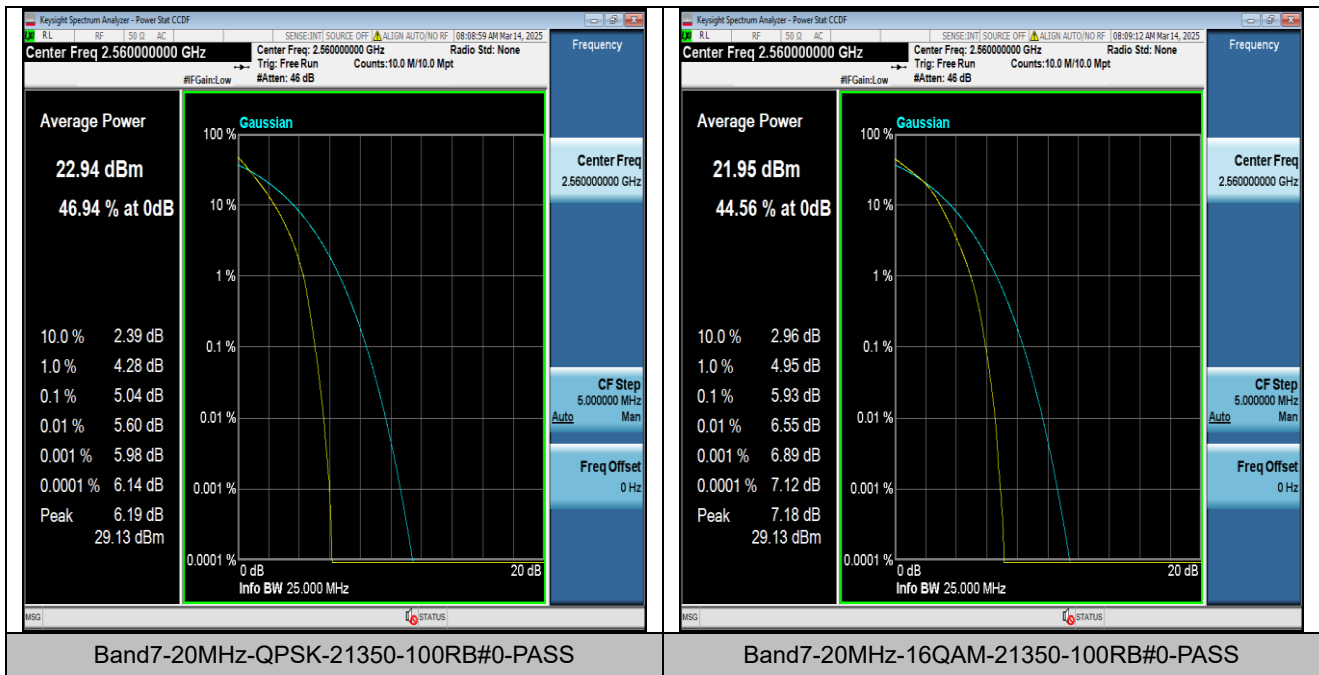
Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	5.17	13	PASS
Band7	20MHz	16QAM	20850	100RB#0	6.04	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	5.18	13	PASS
Band7	20MHz	16QAM	21100	100RB#0	6.03	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	5.04	13	PASS
Band7	20MHz	16QAM	21350	100RB#0	5.93	13	PASS

Test Graphs



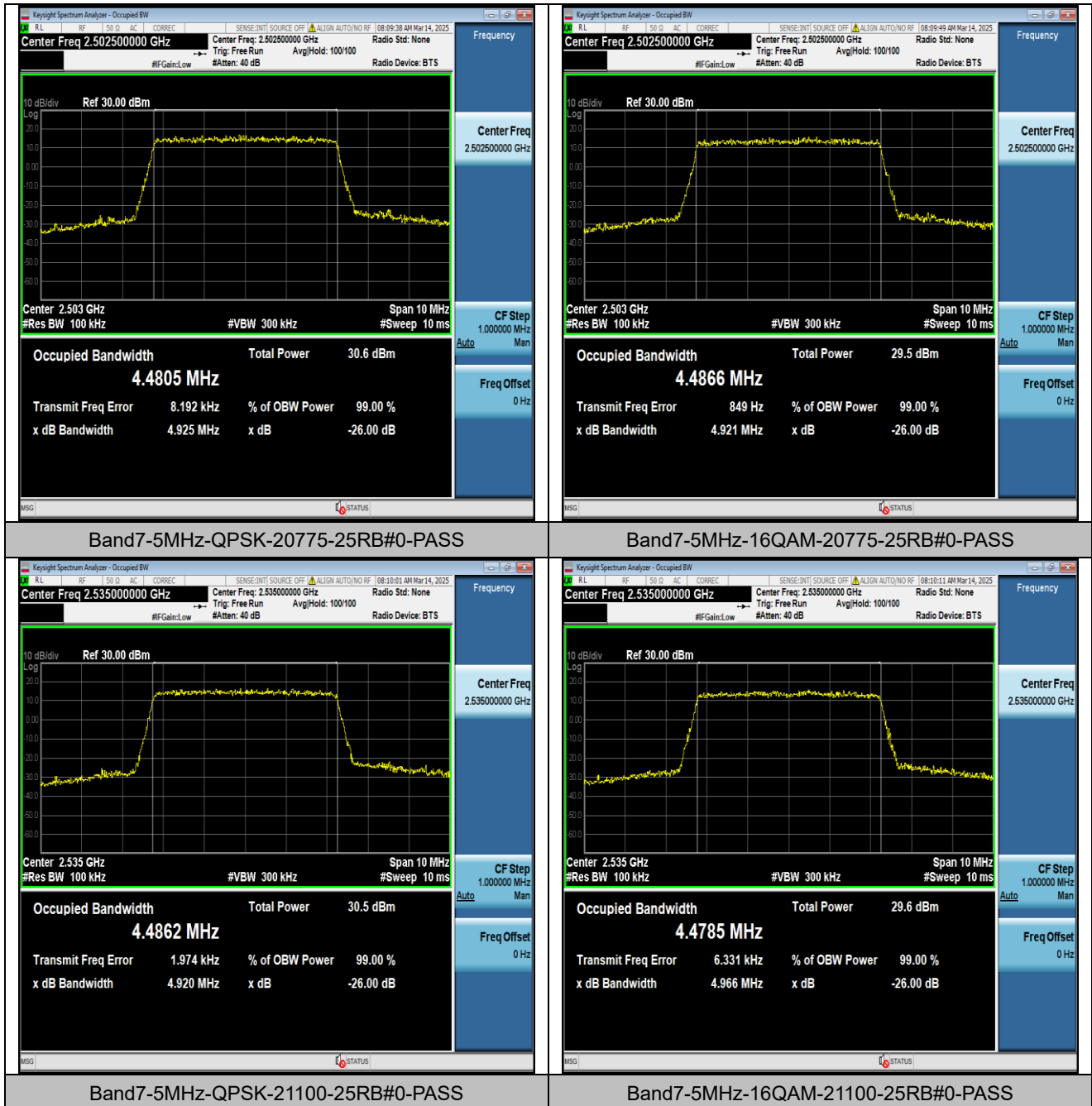


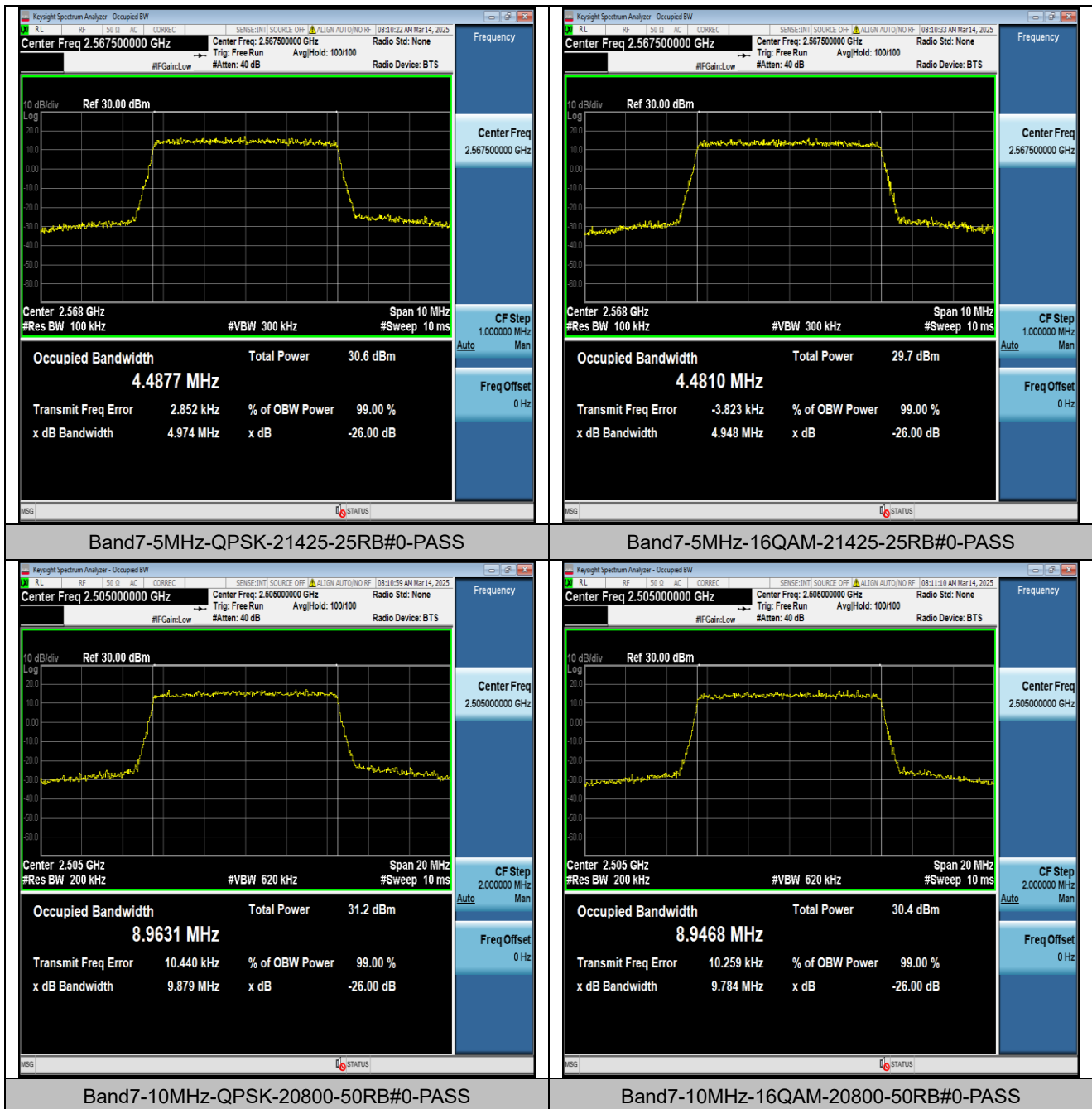
26dB Bandwidth and Occupied Bandwidth

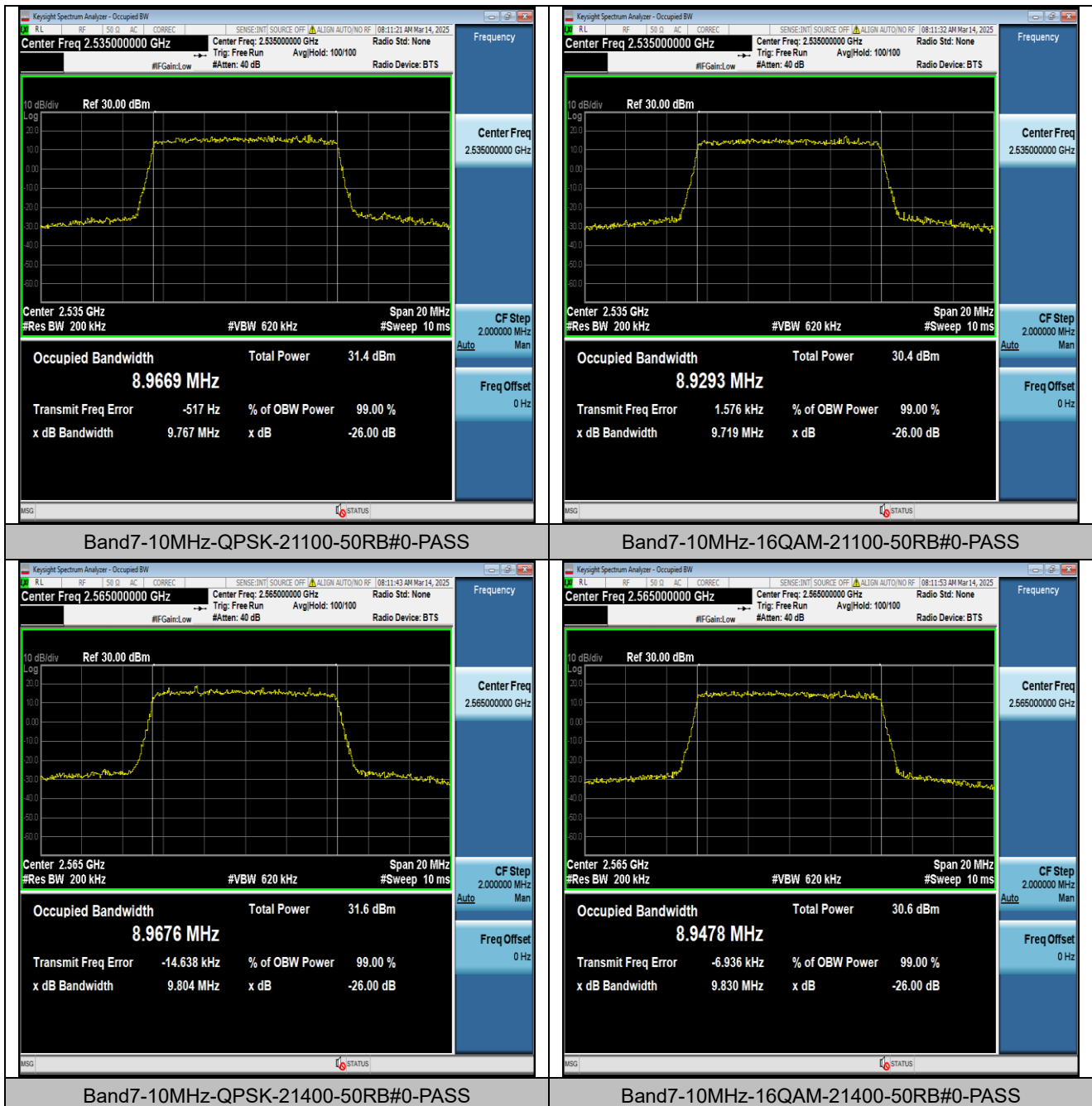
Test Result

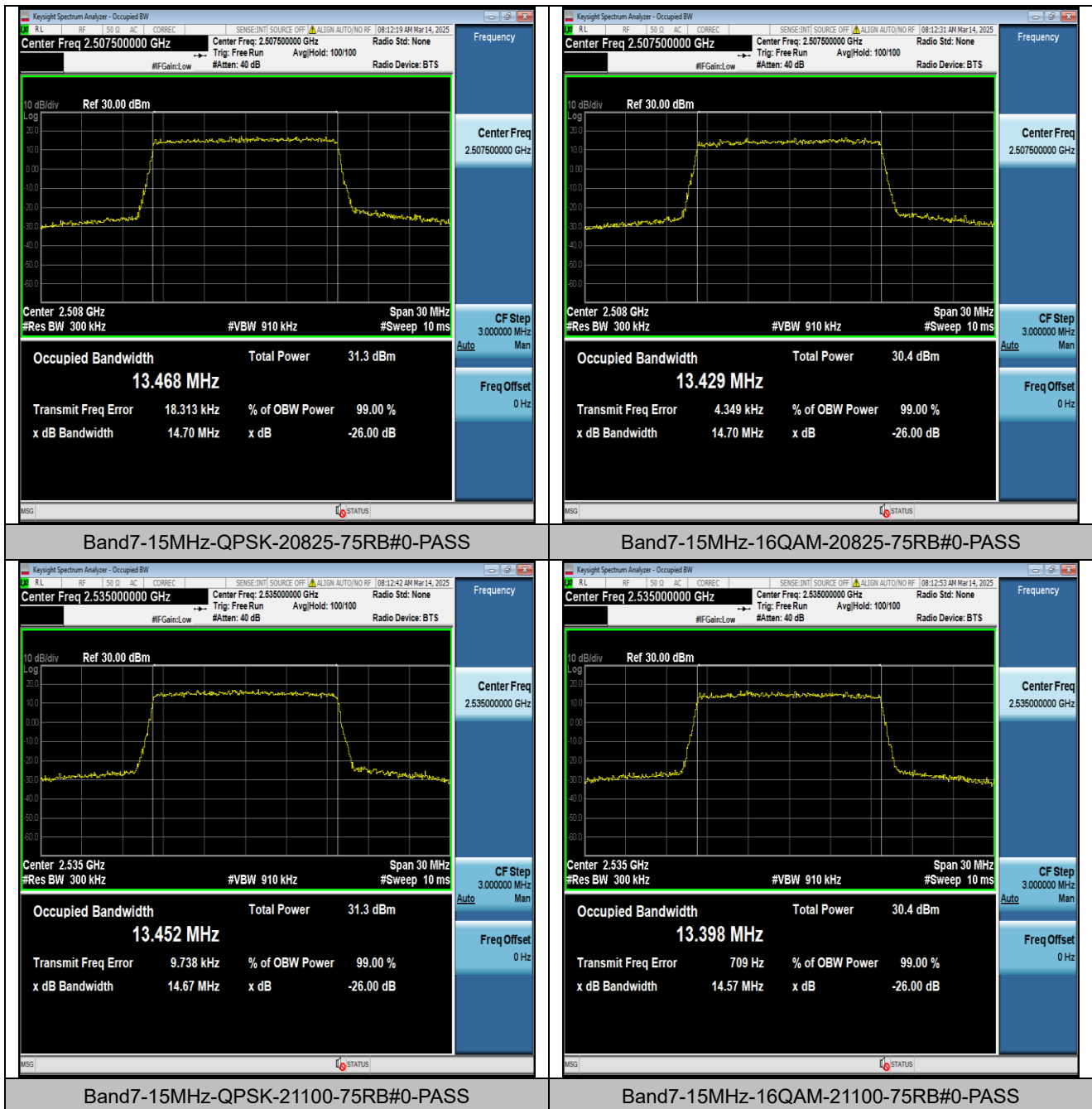
Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.4805	4.925	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.4866	4.921	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.4862	4.920	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.4785	4.966	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.4877	4.974	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.4810	4.948	PASS
Band7	10MHz	QPSK	20800	50RB#0	8.9631	9.879	PASS
Band7	10MHz	16QAM	20800	50RB#0	8.9468	9.784	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.9669	9.767	PASS
Band7	10MHz	16QAM	21100	50RB#0	8.9293	9.719	PASS
Band7	10MHz	QPSK	21400	50RB#0	8.9676	9.804	PASS
Band7	10MHz	16QAM	21400	50RB#0	8.9478	9.830	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.468	14.70	PASS
Band7	15MHz	16QAM	20825	75RB#0	13.429	14.70	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.452	14.67	PASS
Band7	15MHz	16QAM	21100	75RB#0	13.398	14.57	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.419	14.70	PASS
Band7	15MHz	16QAM	21375	75RB#0	13.399	14.58	PASS
Band7	20MHz	QPSK	20850	100RB#0	17.930	19.54	PASS
Band7	20MHz	16QAM	20850	100RB#0	17.874	19.28	PASS
Band7	20MHz	QPSK	21100	100RB#0	17.984	19.45	PASS
Band7	20MHz	16QAM	21100	100RB#0	17.893	19.32	PASS
Band7	20MHz	QPSK	21350	100RB#0	17.891	19.30	PASS
Band7	20MHz	16QAM	21350	100RB#0	17.826	19.41	PASS

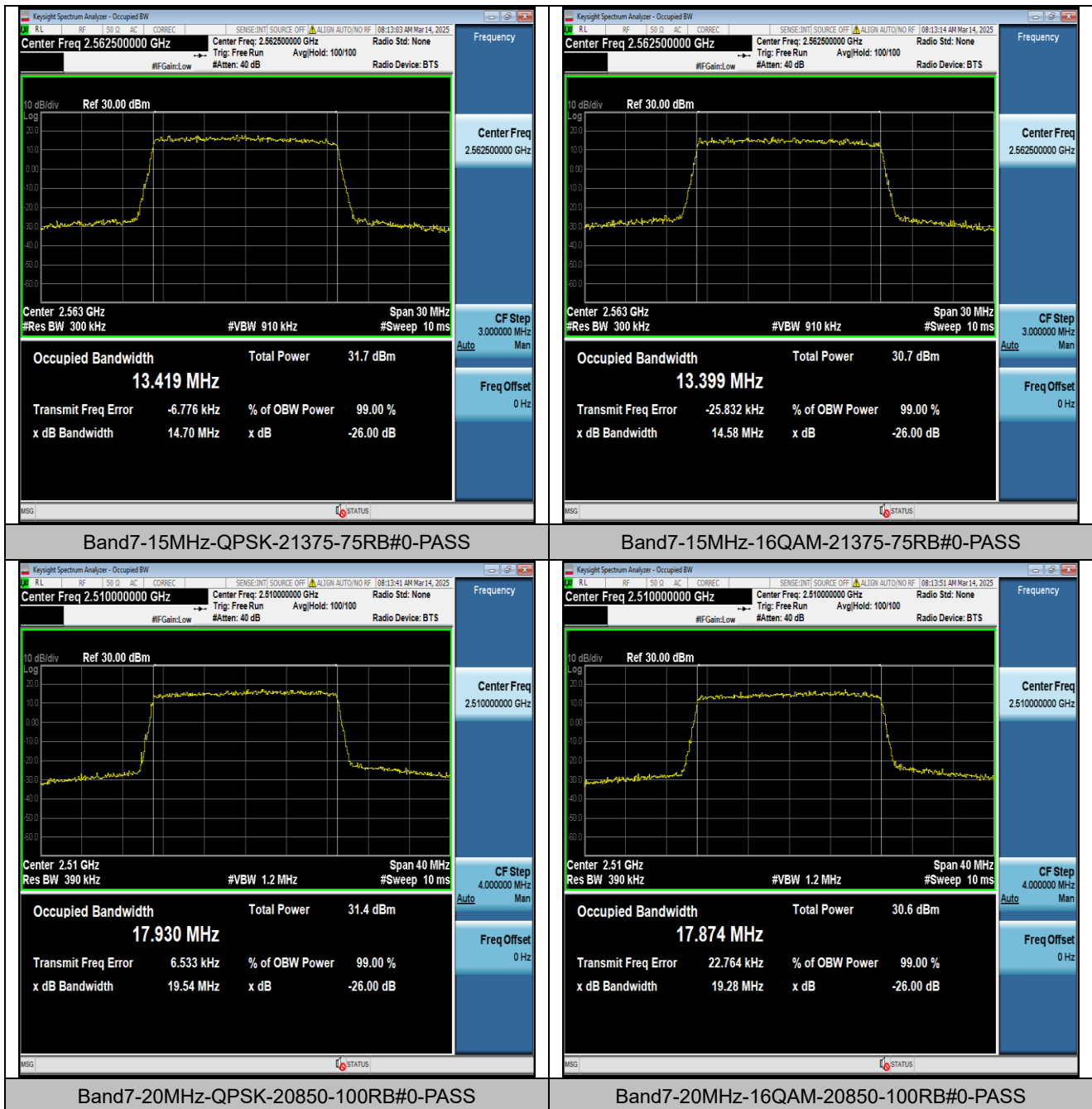
Test Graphs

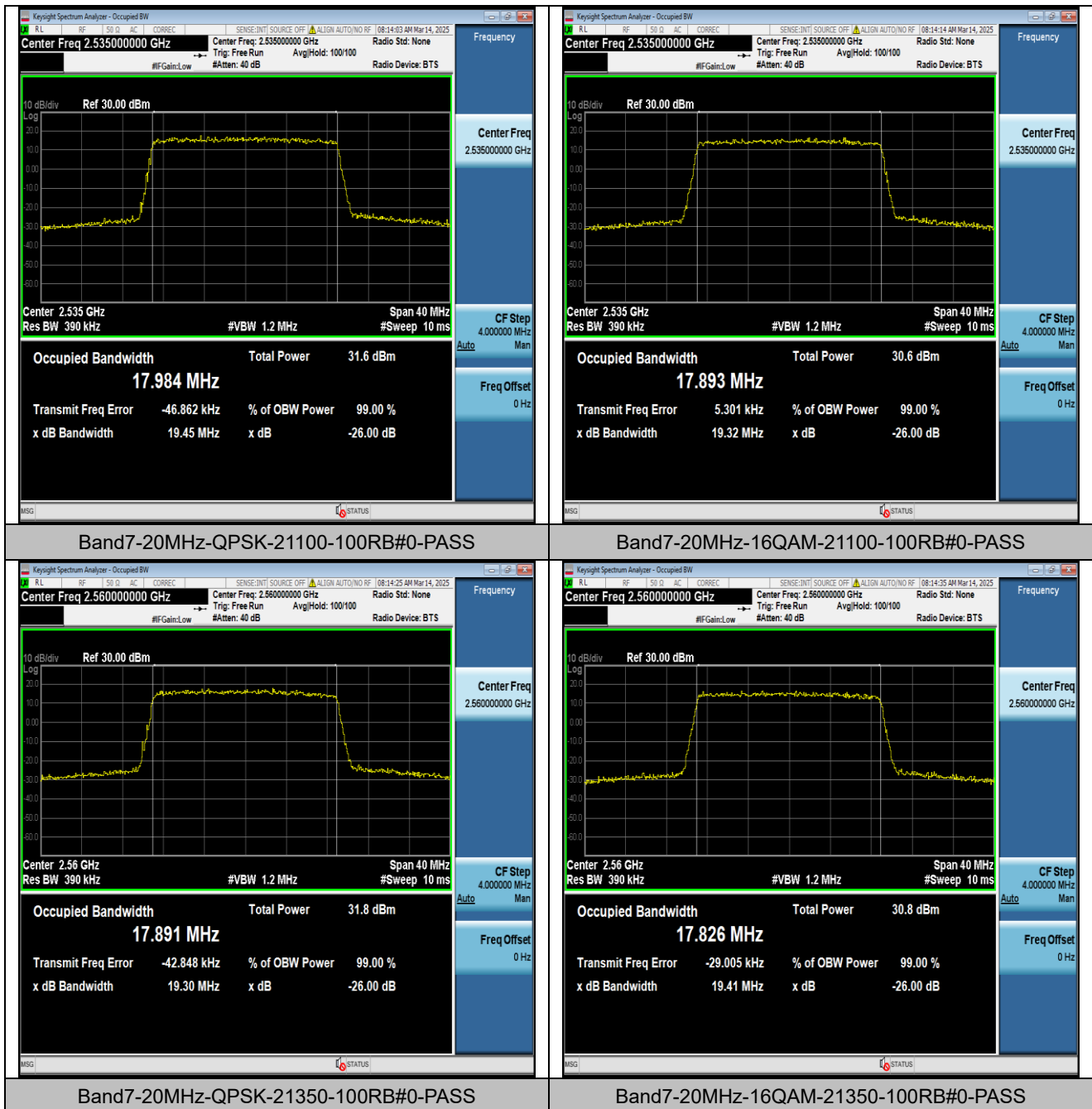






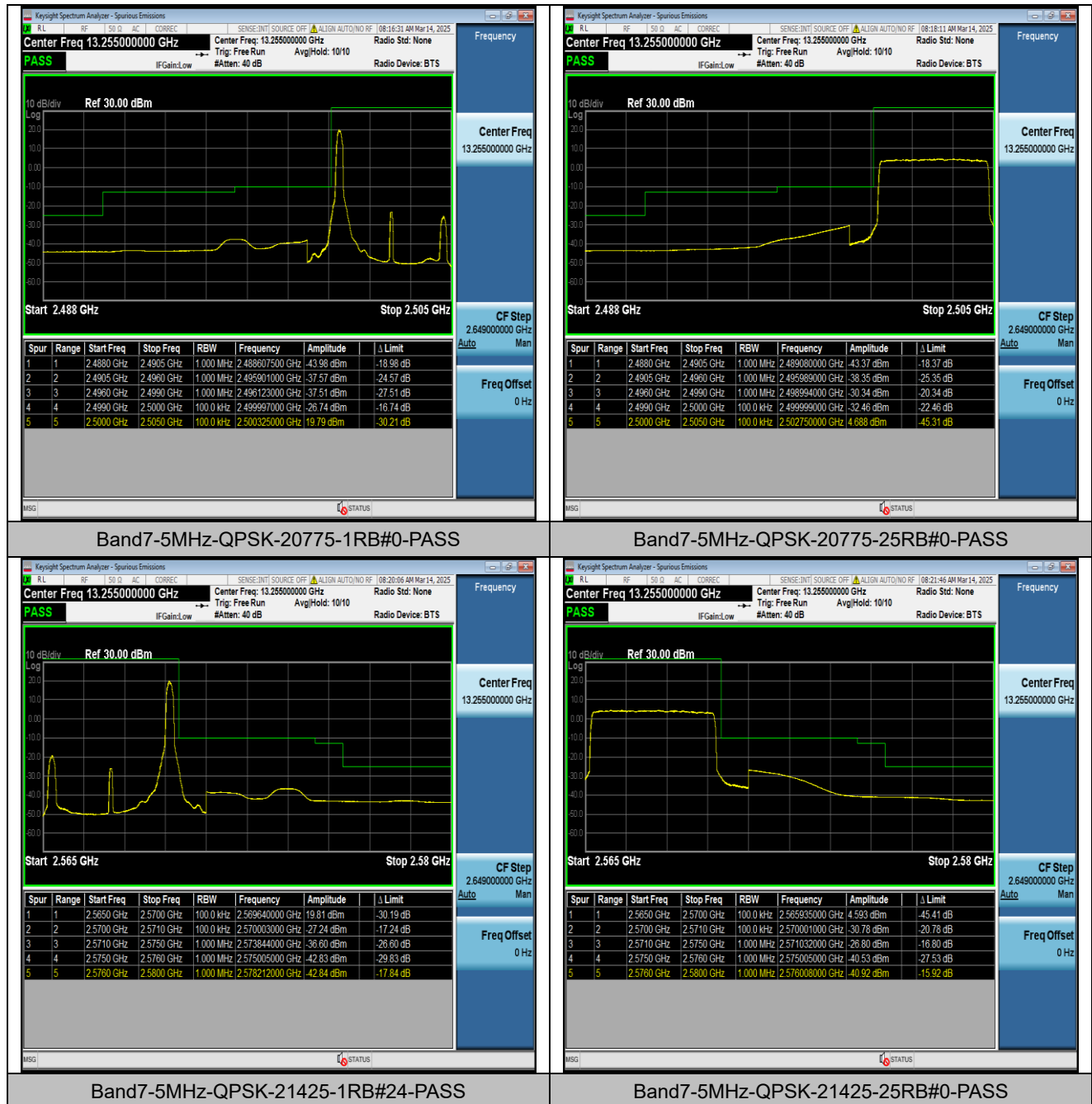


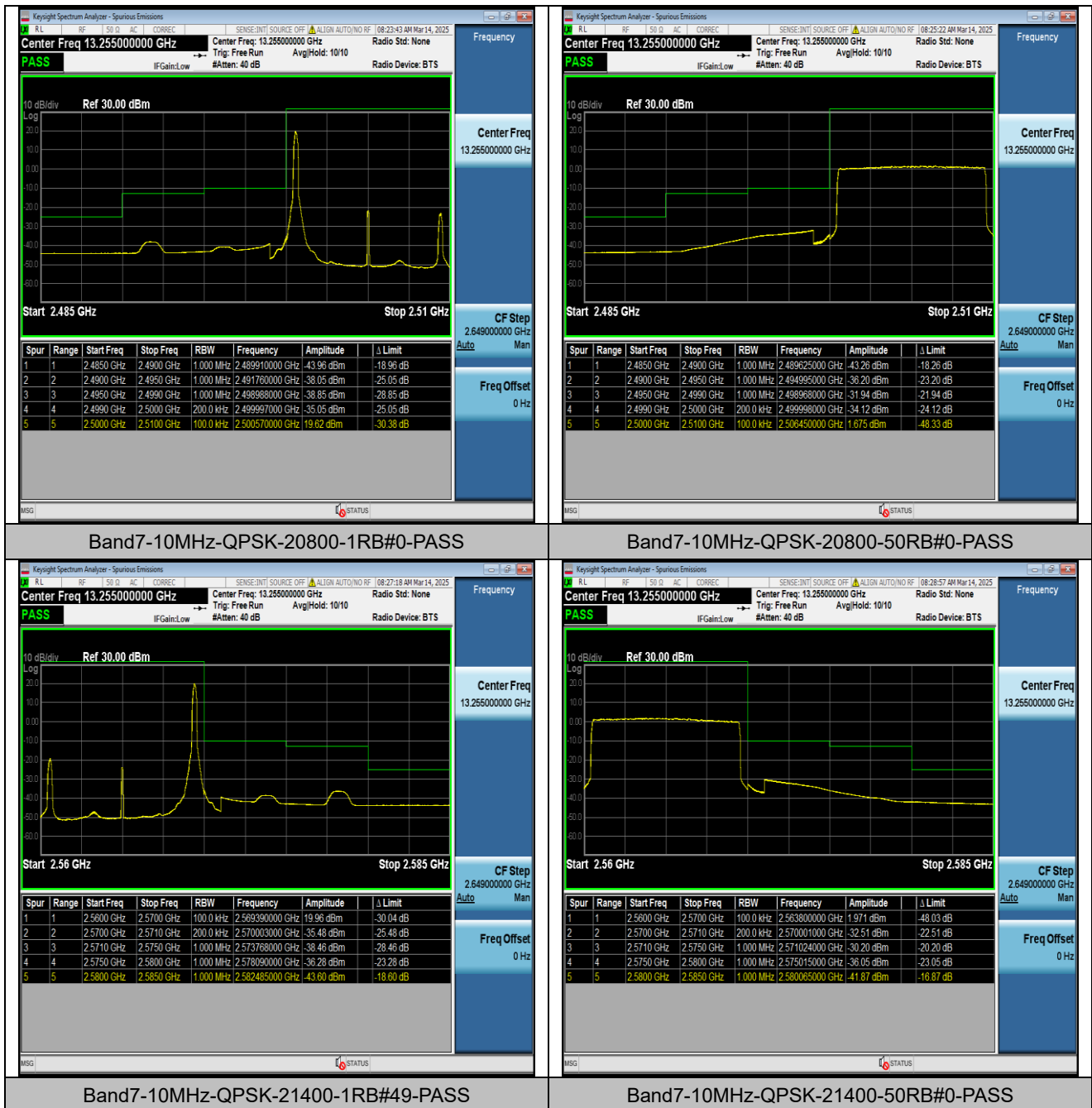


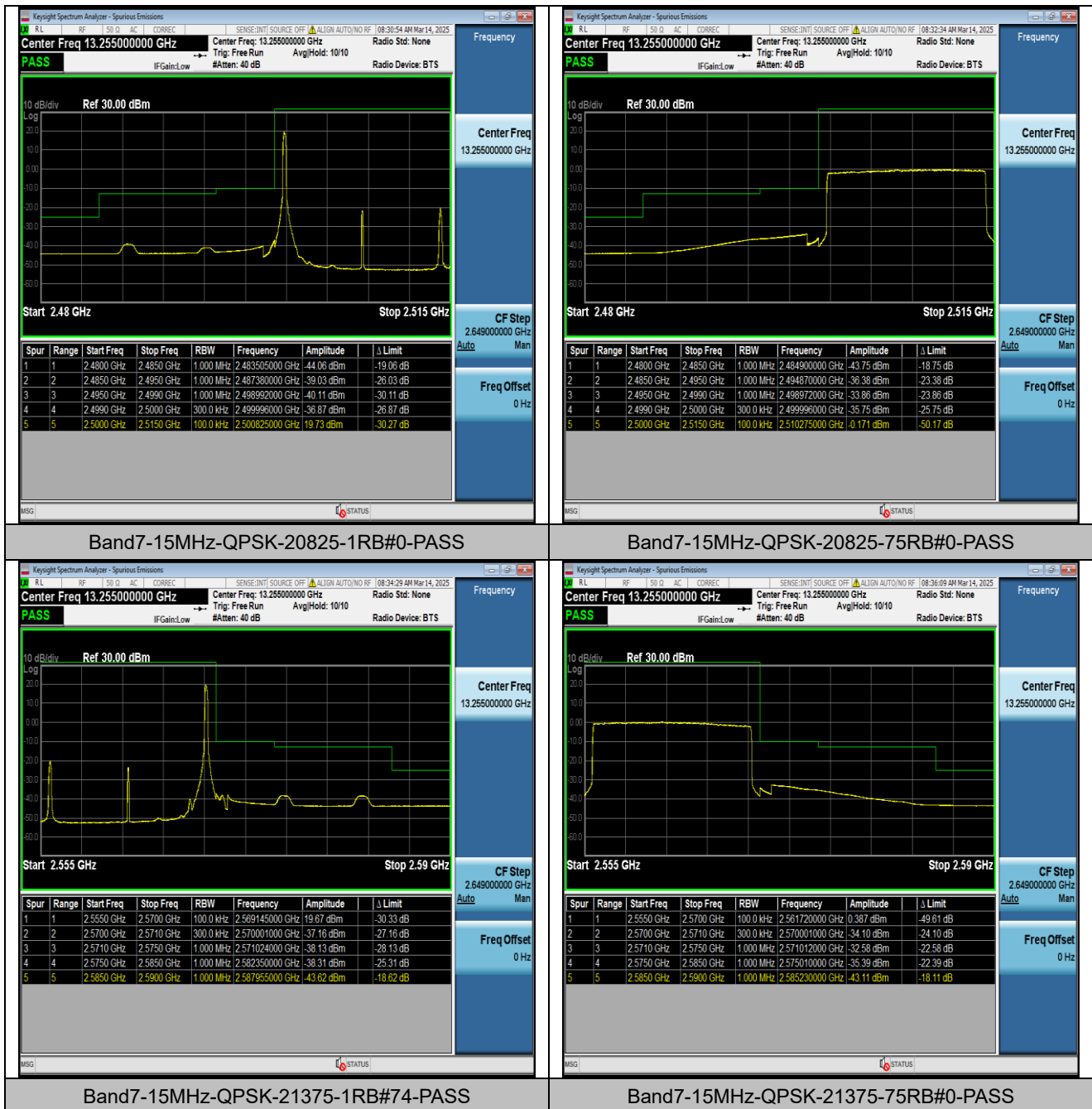


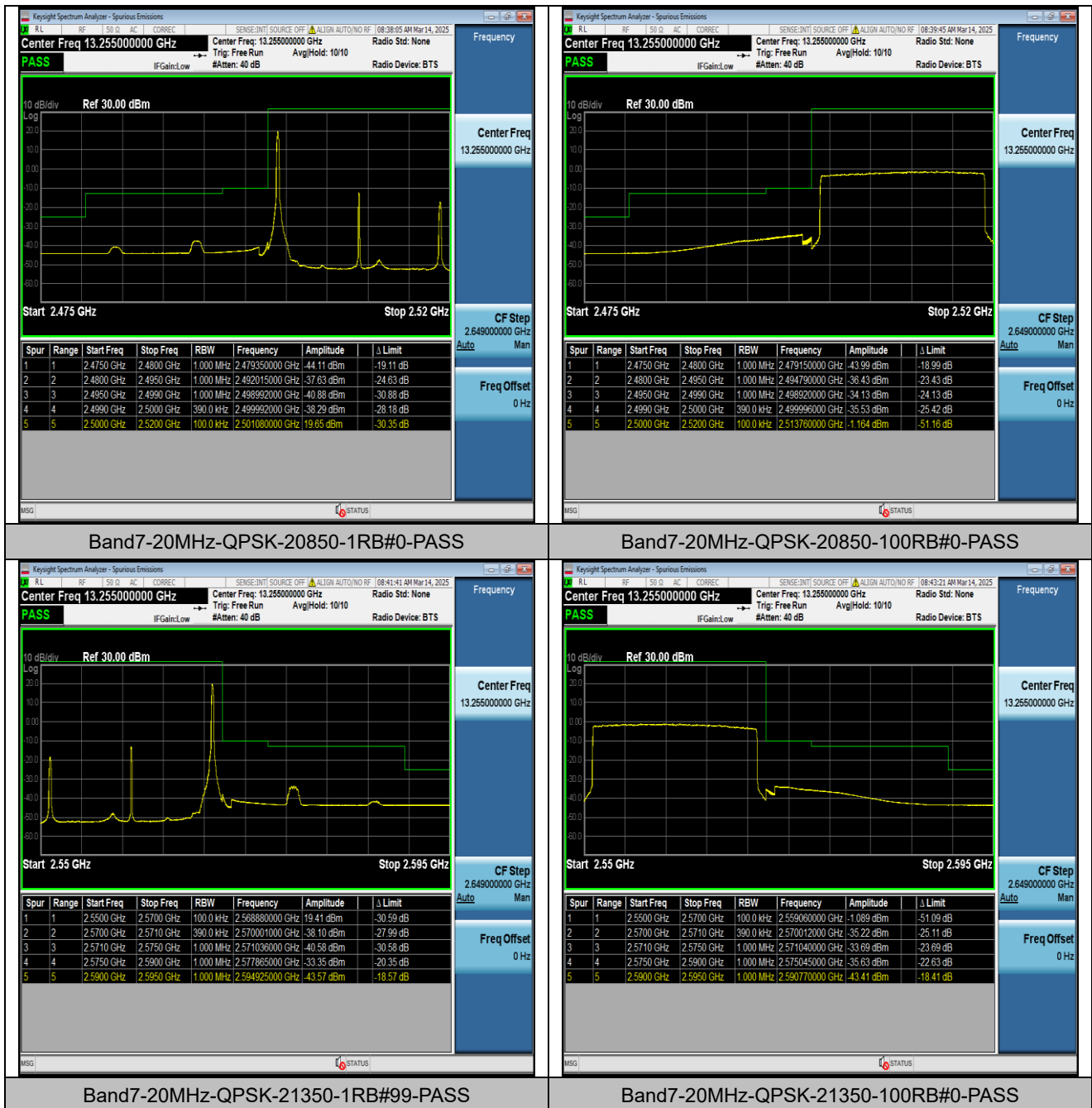
Band Edge

Test Graphs



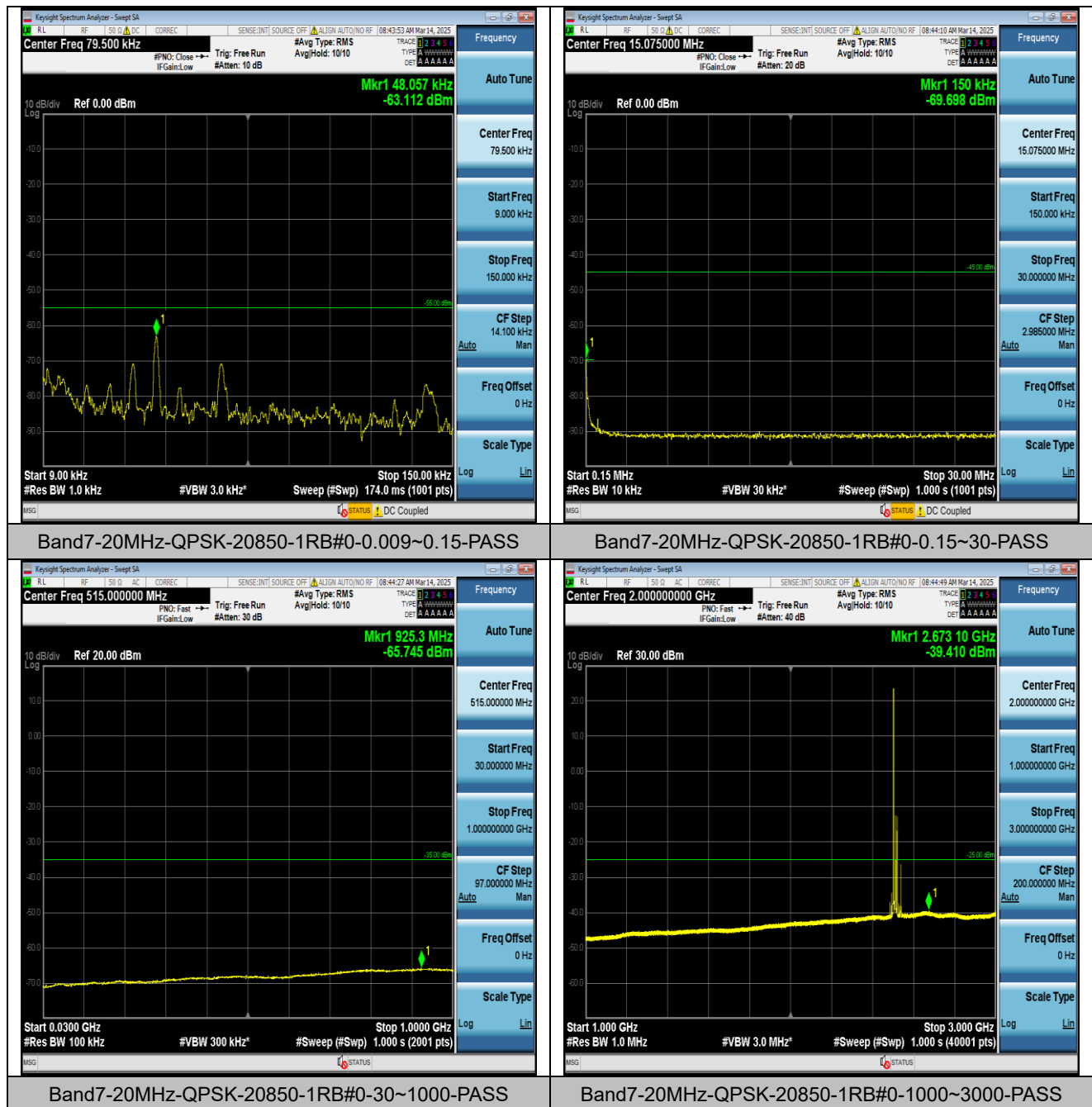


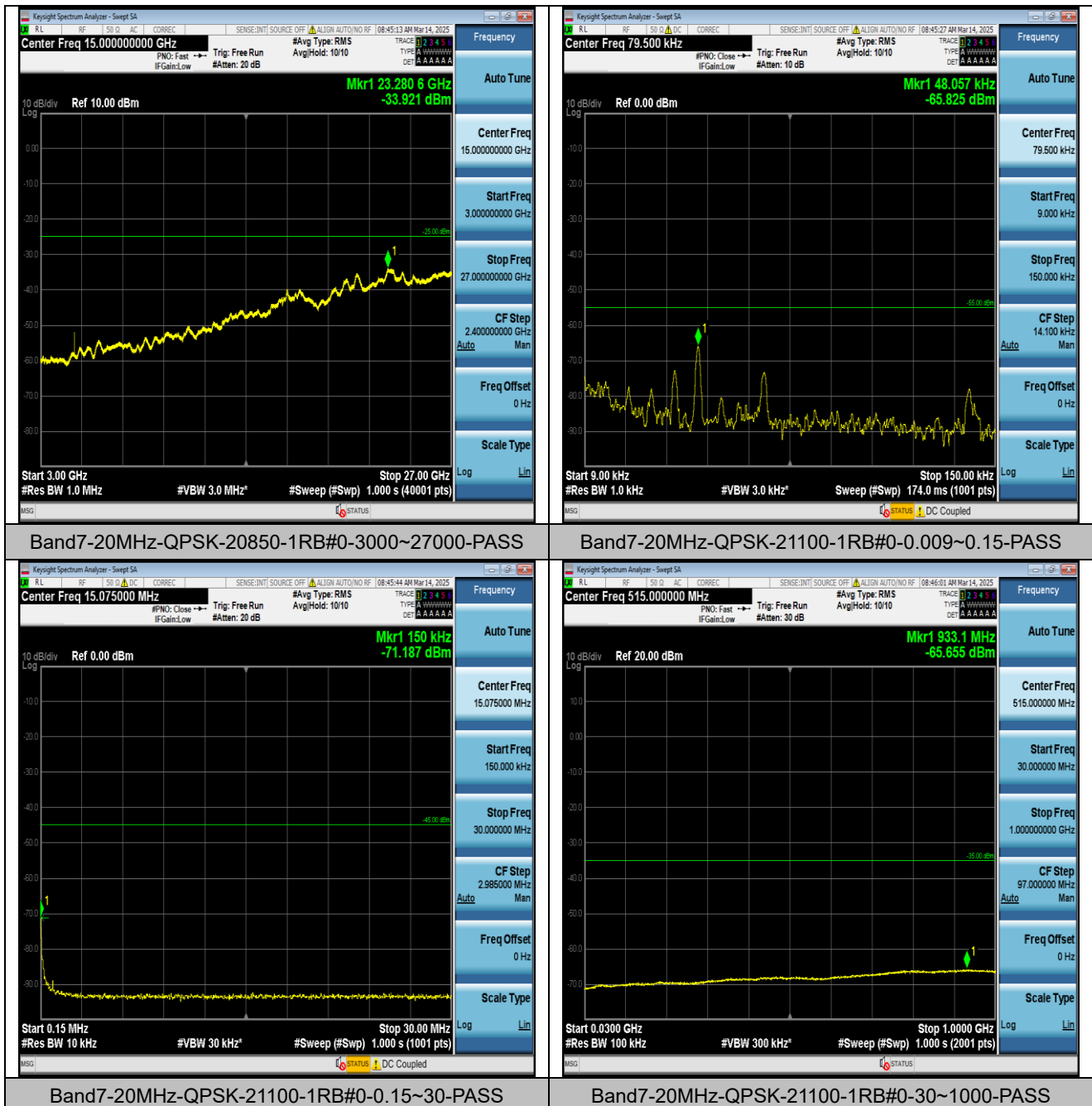


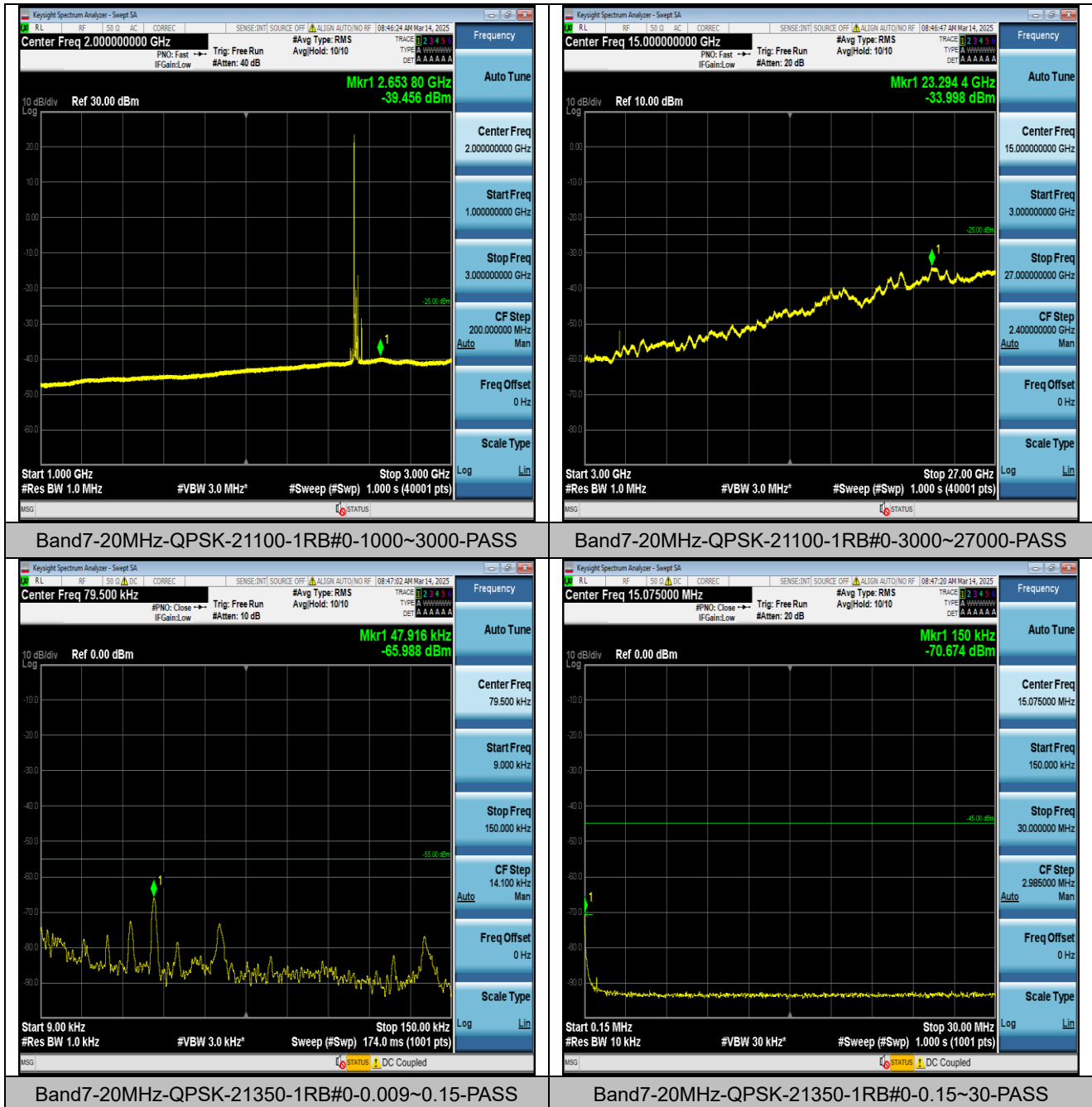


Conducted Spurious Emission

Test Graphs

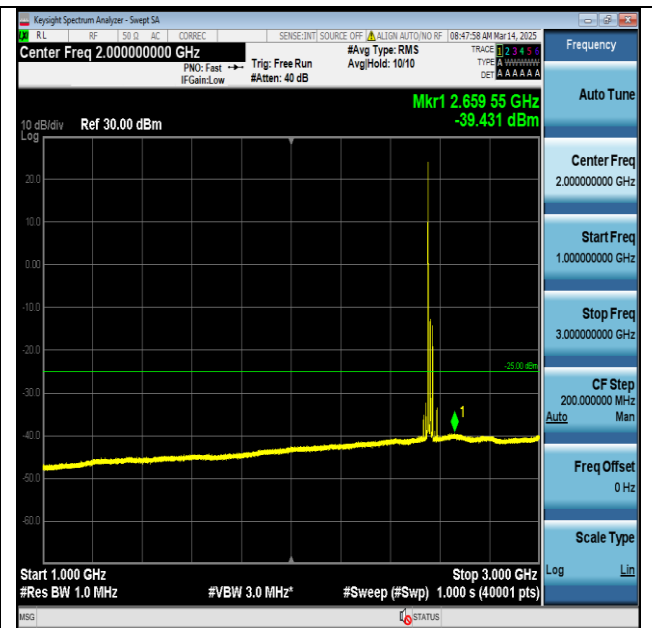








Band7-20MHz-QPSK-21350-1RB#0-30~1000-PASS



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	-0.80	-0.000316	PASS
Band7	20MHz	QPSK	21100	100RB#0	VL	NT	-0.90	-0.000355	PASS
Band7	20MHz	QPSK	21100	100RB#0	VH	NT	-2.60	-0.001026	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	-1.70	-0.000671	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-20	-2.30	-0.000907	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-10	-4.60	-0.001815	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	0	-2.10	-0.000828	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	10	-4.50	-0.001775	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	20	-1.30	-0.000513	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	30	-0.40	-0.000158	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	40	-0.70	-0.000276	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	50	-4.30	-0.001696	PASS

~The End~