

Appendix-A LTE Band 41

Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band41	5MHz	QPSK	39675	1RB#0	23.57	24.97	33.00	PASS
Band41	5MHz	QPSK	39675	1RB#12	23.69	25.09	33.00	PASS
Band41	5MHz	QPSK	39675	1RB#24	23.64	25.04	33.00	PASS
Band41	5MHz	QPSK	39675	25RB#0	22.81	24.21	33.00	PASS
Band41	5MHz	16QAM	39675	1RB#0	21.88	23.28	33.00	PASS
Band41	5MHz	16QAM	39675	1RB#12	22.05	23.45	33.00	PASS
Band41	5MHz	16QAM	39675	1RB#24	21.77	23.17	33.00	PASS
Band41	5MHz	16QAM	39675	25RB#0	21.53	22.93	33.00	PASS
Band41	5MHz	QPSK	40620	1RB#0	23.60	25	33.00	PASS
Band41	5MHz	QPSK	40620	1RB#12	23.79	25.19	33.00	PASS
Band41	5MHz	QPSK	40620	1RB#24	23.68	25.08	33.00	PASS
Band41	5MHz	QPSK	40620	25RB#0	22.92	24.32	33.00	PASS
Band41	5MHz	16QAM	40620	1RB#0	22.04	23.44	33.00	PASS
Band41	5MHz	16QAM	40620	1RB#12	22.18	23.58	33.00	PASS
Band41	5MHz	16QAM	40620	1RB#24	21.90	23.3	33.00	PASS
Band41	5MHz	16QAM	40620	25RB#0	22.02	23.42	33.00	PASS
Band41	5MHz	QPSK	41565	1RB#0	23.70	25.1	33.00	PASS
Band41	5MHz	QPSK	41565	1RB#12	23.81	25.21	33.00	PASS
Band41	5MHz	QPSK	41565	1RB#24	23.87	25.27	33.00	PASS
Band41	5MHz	QPSK	41565	25RB#0	23.00	24.4	33.00	PASS
Band41	5MHz	16QAM	41565	1RB#0	22.13	23.53	33.00	PASS
Band41	5MHz	16QAM	41565	1RB#12	22.13	23.53	33.00	PASS
Band41	5MHz	16QAM	41565	1RB#24	22.04	23.44	33.00	PASS
Band41	5MHz	16QAM	41565	25RB#0	21.80	23.2	33.00	PASS
Band41	10MHz	QPSK	39700	1RB#0	23.59	24.99	33.00	PASS
Band41	10MHz	QPSK	39700	1RB#24	23.65	25.05	33.00	PASS
Band41	10MHz	QPSK	39700	1RB#49	23.59	24.99	33.00	PASS
Band41	10MHz	QPSK	39700	50RB#0	22.83	24.23	33.00	PASS
Band41	10MHz	16QAM	39700	1RB#0	21.88	23.28	33.00	PASS
Band41	10MHz	16QAM	39700	1RB#24	21.85	23.25	33.00	PASS
Band41	10MHz	16QAM	39700	1RB#49	21.85	23.25	33.00	PASS
Band41	10MHz	16QAM	39700	50RB#0	21.68	23.08	33.00	PASS
Band41	10MHz	QPSK	40620	1RB#0	23.80	25.2	33.00	PASS
Band41	10MHz	QPSK	40620	1RB#24	23.89	25.29	33.00	PASS
Band41	10MHz	QPSK	40620	1RB#49	23.64	25.04	33.00	PASS
Band41	10MHz	QPSK	40620	50RB#0	22.90	24.3	33.00	PASS
Band41	10MHz	16QAM	40620	1RB#0	22.02	23.42	33.00	PASS

Band41	10MHz	16QAM	40620	1RB#24	21.97	23.37	33.00	PASS
Band41	10MHz	16QAM	40620	1RB#49	22.07	23.47	33.00	PASS
Band41	10MHz	16QAM	40620	50RB#0	21.80	23.2	33.00	PASS
Band41	10MHz	QPSK	41540	1RB#0	23.91	25.31	33.00	PASS
Band41	10MHz	QPSK	41540	1RB#24	23.91	25.31	33.00	PASS
Band41	10MHz	QPSK	41540	1RB#49	23.91	25.31	33.00	PASS
Band41	10MHz	QPSK	41540	50RB#0	23.06	24.46	33.00	PASS
Band41	10MHz	16QAM	41540	1RB#0	22.17	23.57	33.00	PASS
Band41	10MHz	16QAM	41540	1RB#24	22.06	23.46	33.00	PASS
Band41	10MHz	16QAM	41540	1RB#49	22.15	23.55	33.00	PASS
Band41	10MHz	16QAM	41540	50RB#0	21.78	23.18	33.00	PASS
Band41	15MHz	QPSK	39725	1RB#0	23.43	24.83	33.00	PASS
Band41	15MHz	QPSK	39725	1RB#38	23.46	24.86	33.00	PASS
Band41	15MHz	QPSK	39725	1RB#74	23.58	24.98	33.00	PASS
Band41	15MHz	QPSK	39725	75RB#0	22.64	24.04	33.00	PASS
Band41	15MHz	16QAM	39725	1RB#0	21.75	23.15	33.00	PASS
Band41	15MHz	16QAM	39725	1RB#38	21.68	23.08	33.00	PASS
Band41	15MHz	16QAM	39725	1RB#74	21.83	23.23	33.00	PASS
Band41	15MHz	16QAM	39725	75RB#0	21.52	22.92	33.00	PASS
Band41	15MHz	QPSK	40620	1RB#0	23.68	25.08	33.00	PASS
Band41	15MHz	QPSK	40620	1RB#38	23.73	25.13	33.00	PASS
Band41	15MHz	QPSK	40620	1RB#74	23.69	25.09	33.00	PASS
Band41	15MHz	QPSK	40620	75RB#0	22.90	24.3	33.00	PASS
Band41	15MHz	16QAM	40620	1RB#0	22.03	23.43	33.00	PASS
Band41	15MHz	16QAM	40620	1RB#38	22.00	23.4	33.00	PASS
Band41	15MHz	16QAM	40620	1RB#74	21.93	23.33	33.00	PASS
Band41	15MHz	16QAM	40620	75RB#0	21.73	23.13	33.00	PASS
Band41	15MHz	QPSK	41515	1RB#0	23.80	25.2	33.00	PASS
Band41	15MHz	QPSK	41515	1RB#38	23.65	25.05	33.00	PASS
Band41	15MHz	QPSK	41515	1RB#74	23.77	25.17	33.00	PASS
Band41	15MHz	QPSK	41515	75RB#0	22.92	24.32	33.00	PASS
Band41	15MHz	16QAM	41515	1RB#0	22.14	23.54	33.00	PASS
Band41	15MHz	16QAM	41515	1RB#38	21.97	23.37	33.00	PASS
Band41	15MHz	16QAM	41515	1RB#74	22.00	23.4	33.00	PASS
Band41	15MHz	16QAM	41515	75RB#0	21.80	23.2	33.00	PASS
Band41	20MHz	QPSK	39750	1RB#0	23.35	24.75	33.00	PASS
Band41	20MHz	QPSK	39750	1RB#49	23.63	25.03	33.00	PASS
Band41	20MHz	QPSK	39750	1RB#99	23.45	24.85	33.00	PASS
Band41	20MHz	QPSK	39750	100RB#0	22.68	24.08	33.00	PASS
Band41	20MHz	16QAM	39750	1RB#0	21.61	23.01	33.00	PASS
Band41	20MHz	16QAM	39750	1RB#49	21.74	23.14	33.00	PASS
Band41	20MHz	16QAM	39750	1RB#99	21.72	23.12	33.00	PASS
Band41	20MHz	16QAM	39750	100RB#0	21.52	22.92	33.00	PASS
Band41	20MHz	QPSK	40620	1RB#0	23.64	25.04	33.00	PASS
Band41	20MHz	QPSK	40620	1RB#49	23.94	25.34	33.00	PASS

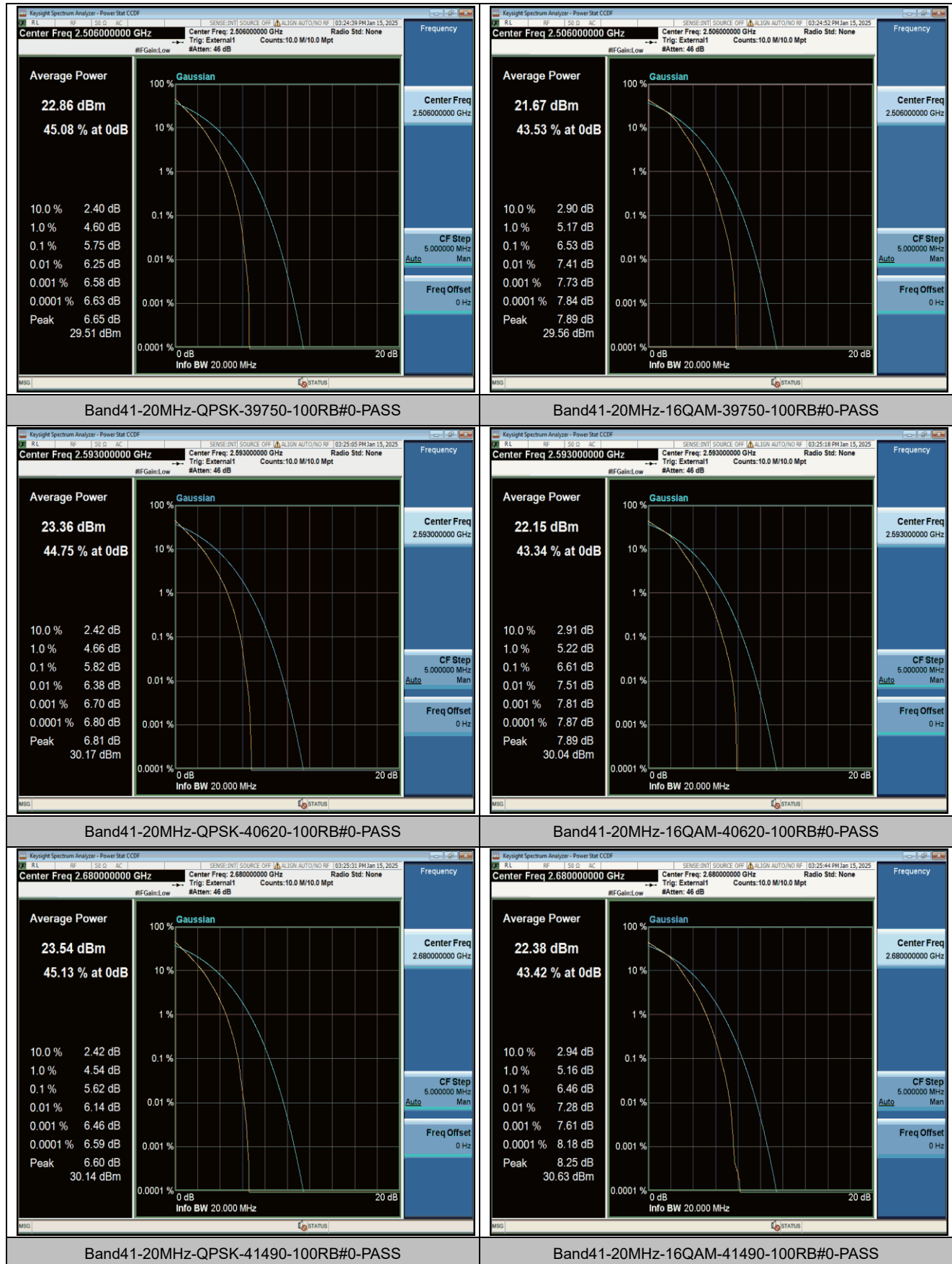
Band41	20MHz	QPSK	40620	1RB#99	23.61	25.01	33.00	PASS
Band41	20MHz	QPSK	40620	100RB#0	22.89	24.29	33.00	PASS
Band41	20MHz	16QAM	40620	1RB#0	21.94	23.34	33.00	PASS
Band41	20MHz	16QAM	40620	1RB#49	21.97	23.37	33.00	PASS
Band41	20MHz	16QAM	40620	1RB#99	21.86	23.26	33.00	PASS
Band41	20MHz	16QAM	40620	100RB#0	21.74	23.14	33.00	PASS
Band41	20MHz	QPSK	41490	1RB#0	23.76	25.16	33.00	PASS
Band41	20MHz	QPSK	41490	1RB#49	23.77	25.17	33.00	PASS
Band41	20MHz	QPSK	41490	1RB#99	23.71	25.11	33.00	PASS
Band41	20MHz	QPSK	41490	100RB#0	22.96	24.36	33.00	PASS
Band41	20MHz	16QAM	41490	1RB#0	22.04	23.44	33.00	PASS
Band41	20MHz	16QAM	41490	1RB#49	22.03	23.43	33.00	PASS
Band41	20MHz	16QAM	41490	1RB#99	21.87	23.27	33.00	PASS
Band41	20MHz	16QAM	41490	100RB#0	21.74	23.14	33.00	PASS

Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band41	20MHz	QPSK	39750	100RB#0	5.75	13	PASS
Band41	20MHz	16QAM	39750	100RB#0	6.53	13	PASS
Band41	20MHz	QPSK	40620	100RB#0	5.82	13	PASS
Band41	20MHz	16QAM	40620	100RB#0	6.61	13	PASS
Band41	20MHz	QPSK	41490	100RB#0	5.62	13	PASS
Band41	20MHz	16QAM	41490	100RB#0	6.46	13	PASS

Test Graphs

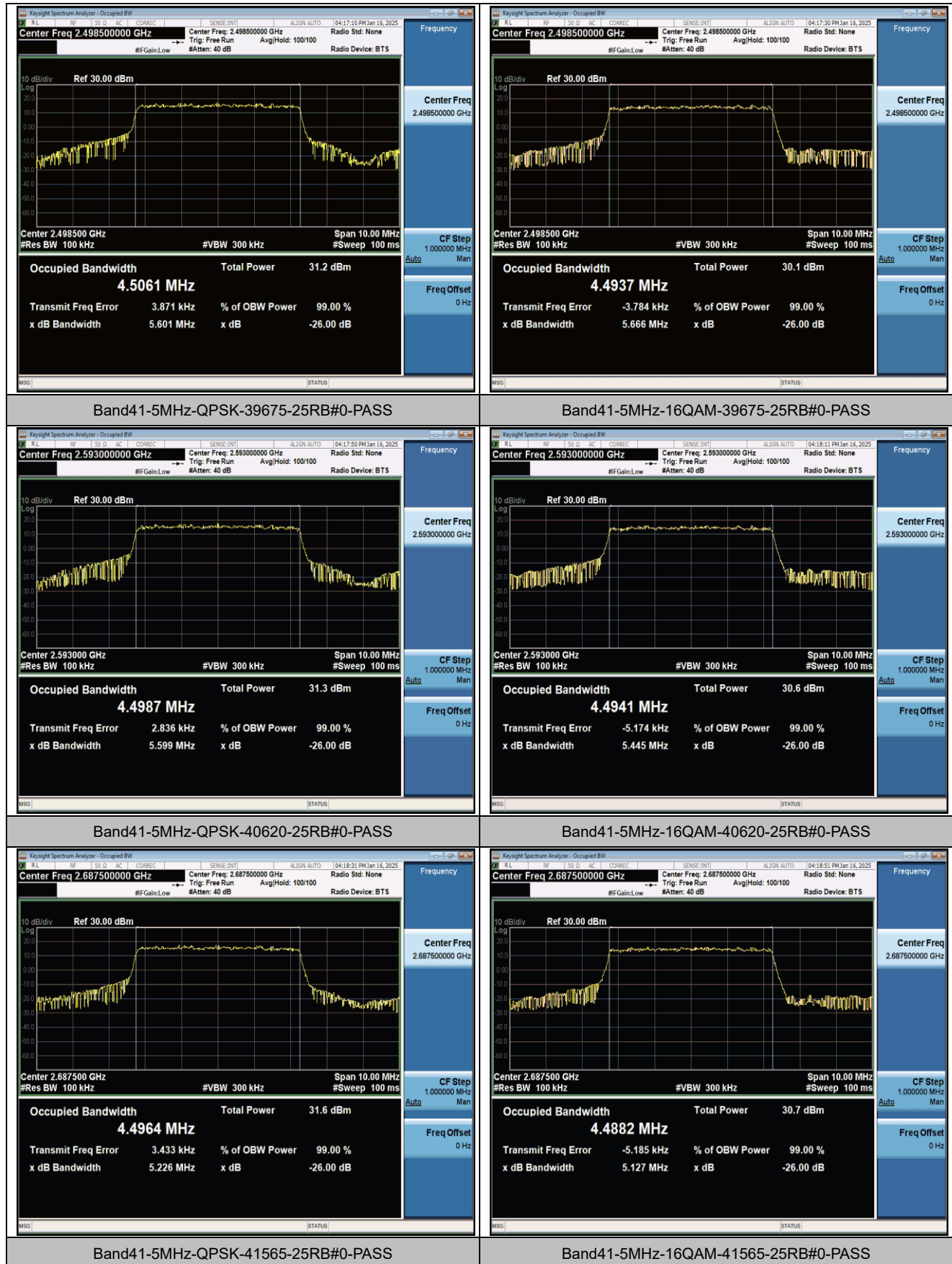


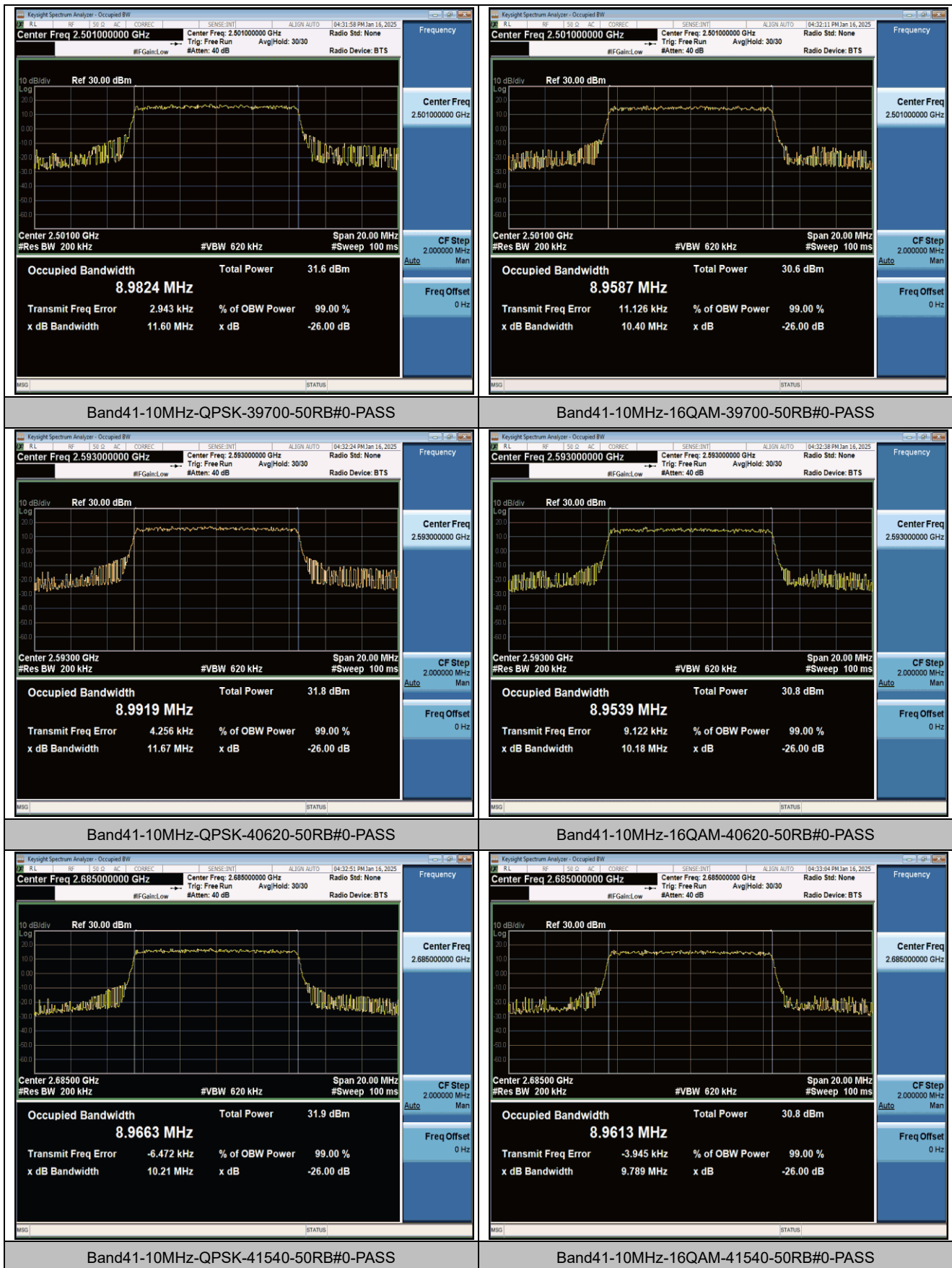
26dB Bandwidth and Occupied Bandwidth

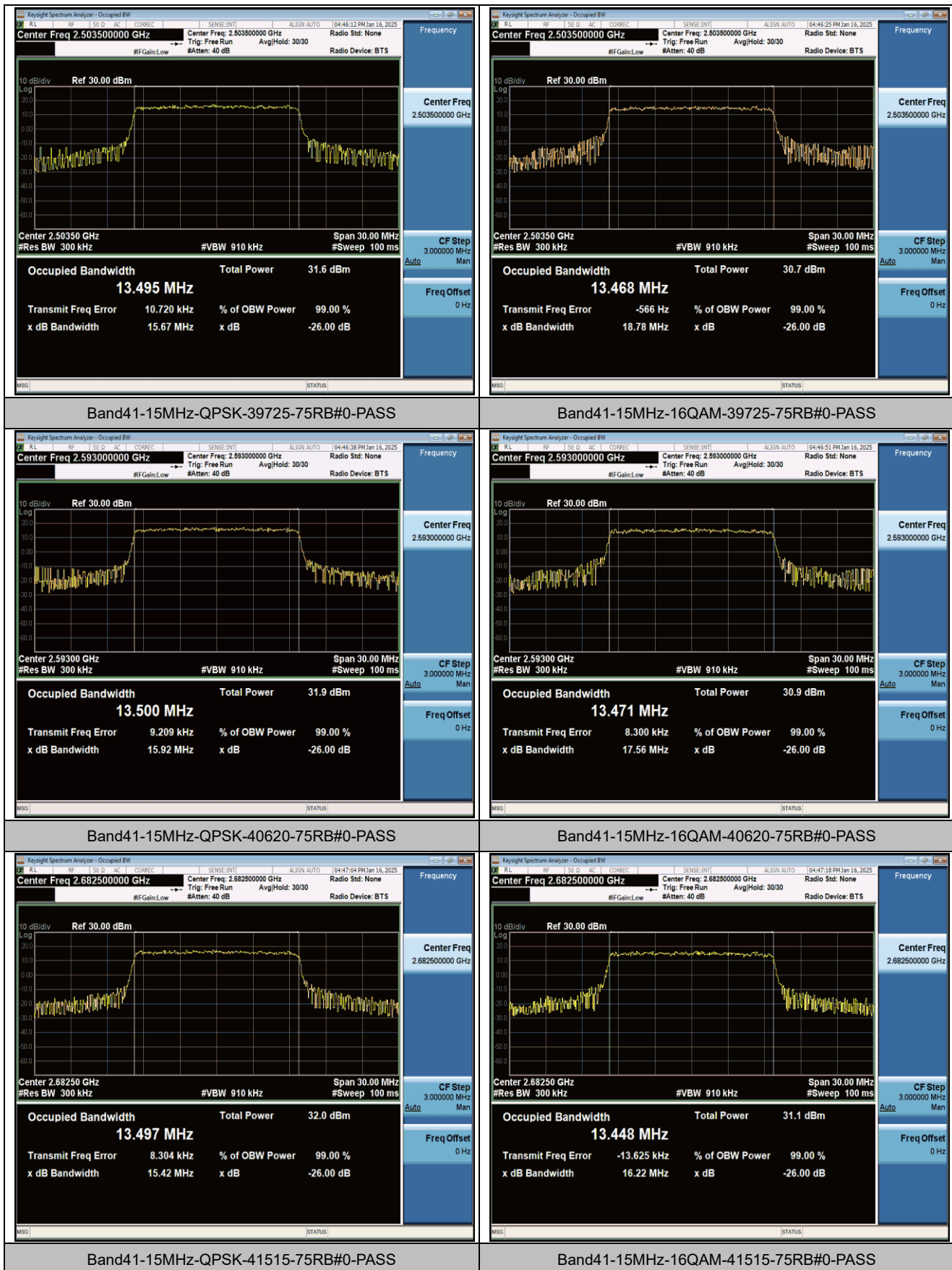
Test Result

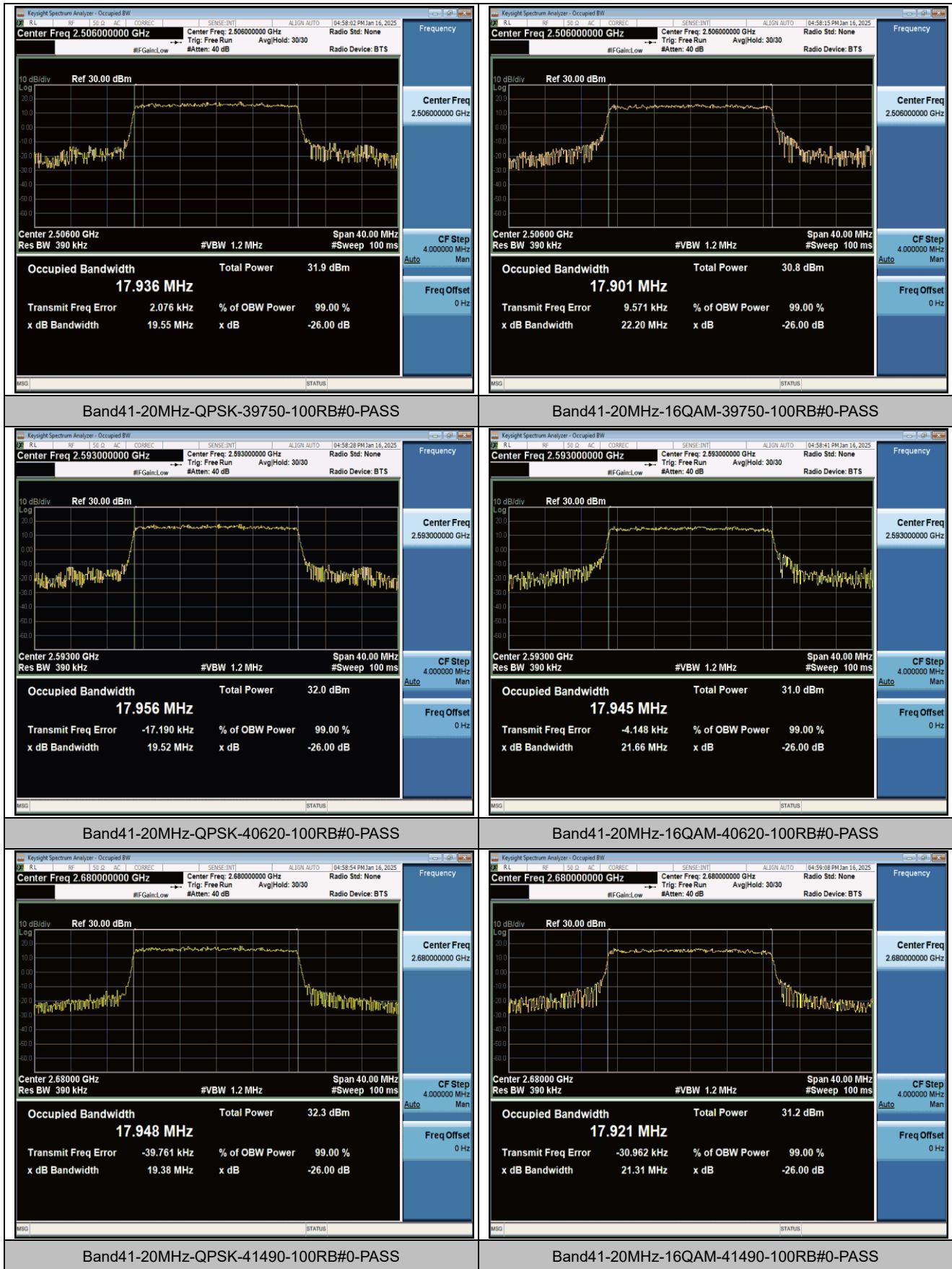
Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band41	5MHz	QPSK	39675	25RB#0	4.5061	5.601	PASS
Band41	5MHz	16QAM	39675	25RB#0	4.4937	5.666	PASS
Band41	5MHz	QPSK	40620	25RB#0	4.4987	5.599	PASS
Band41	5MHz	16QAM	40620	25RB#0	4.4941	5.445	PASS
Band41	5MHz	QPSK	41565	25RB#0	4.4964	5.226	PASS
Band41	5MHz	16QAM	41565	25RB#0	4.4882	5.127	PASS
Band41	10MHz	QPSK	39700	50RB#0	8.9824	11.60	PASS
Band41	10MHz	16QAM	39700	50RB#0	8.9587	10.40	PASS
Band41	10MHz	QPSK	40620	50RB#0	8.9919	11.67	PASS
Band41	10MHz	16QAM	40620	50RB#0	8.9539	10.18	PASS
Band41	10MHz	QPSK	41540	50RB#0	8.9663	10.21	PASS
Band41	10MHz	16QAM	41540	50RB#0	8.9613	9.789	PASS
Band41	15MHz	QPSK	39725	75RB#0	13.495	15.67	PASS
Band41	15MHz	16QAM	39725	75RB#0	13.468	18.78	PASS
Band41	15MHz	QPSK	40620	75RB#0	13.500	15.92	PASS
Band41	15MHz	16QAM	40620	75RB#0	13.471	17.56	PASS
Band41	15MHz	QPSK	41515	75RB#0	13.497	15.42	PASS
Band41	15MHz	16QAM	41515	75RB#0	13.448	16.22	PASS
Band41	20MHz	QPSK	39750	100RB#0	17.936	19.55	PASS
Band41	20MHz	16QAM	39750	100RB#0	17.901	22.20	PASS
Band41	20MHz	QPSK	40620	100RB#0	17.956	19.52	PASS
Band41	20MHz	16QAM	40620	100RB#0	17.945	21.66	PASS
Band41	20MHz	QPSK	41490	100RB#0	17.948	19.38	PASS
Band41	20MHz	16QAM	41490	100RB#0	17.921	21.31	PASS

Test Graphs



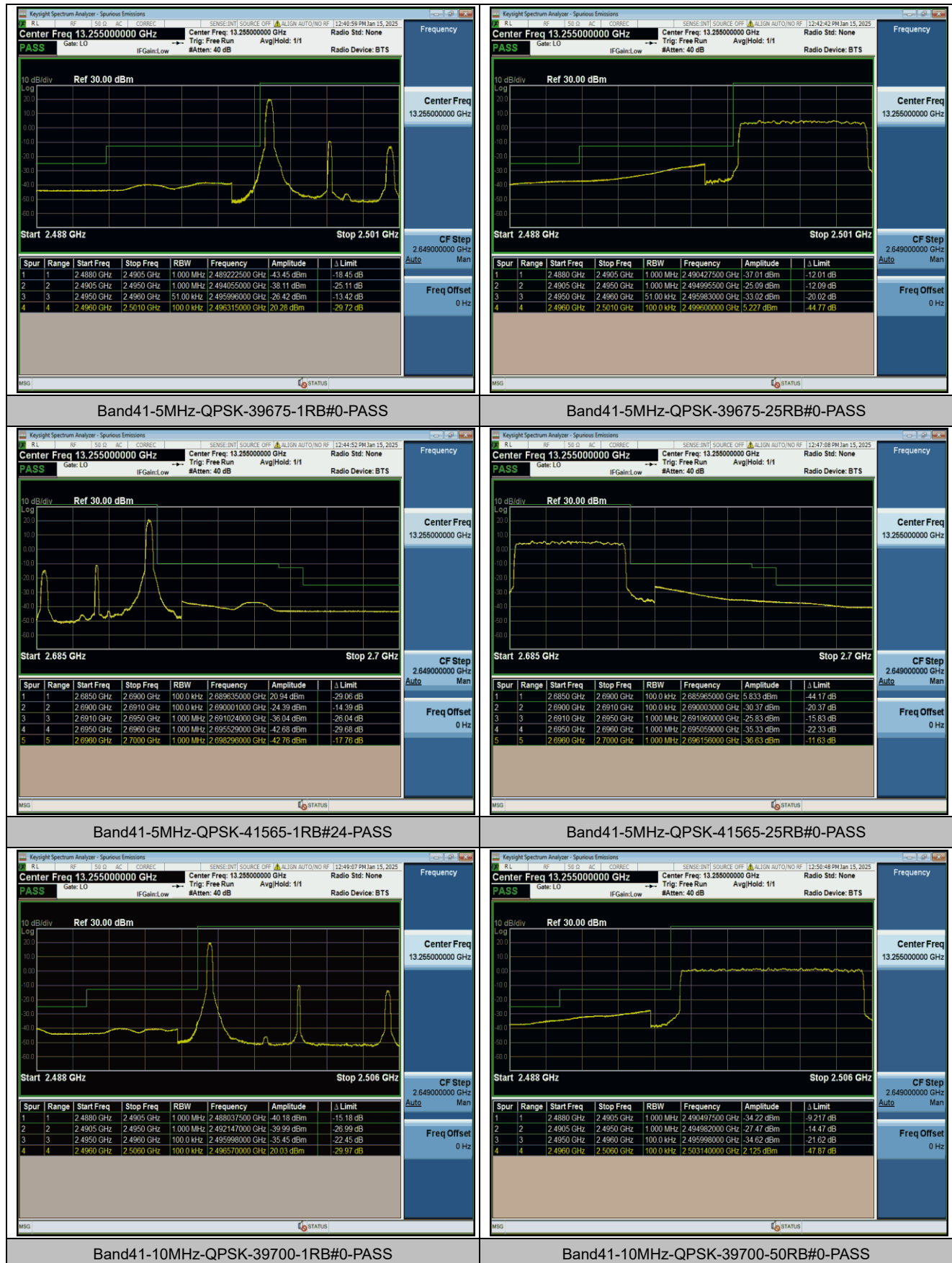


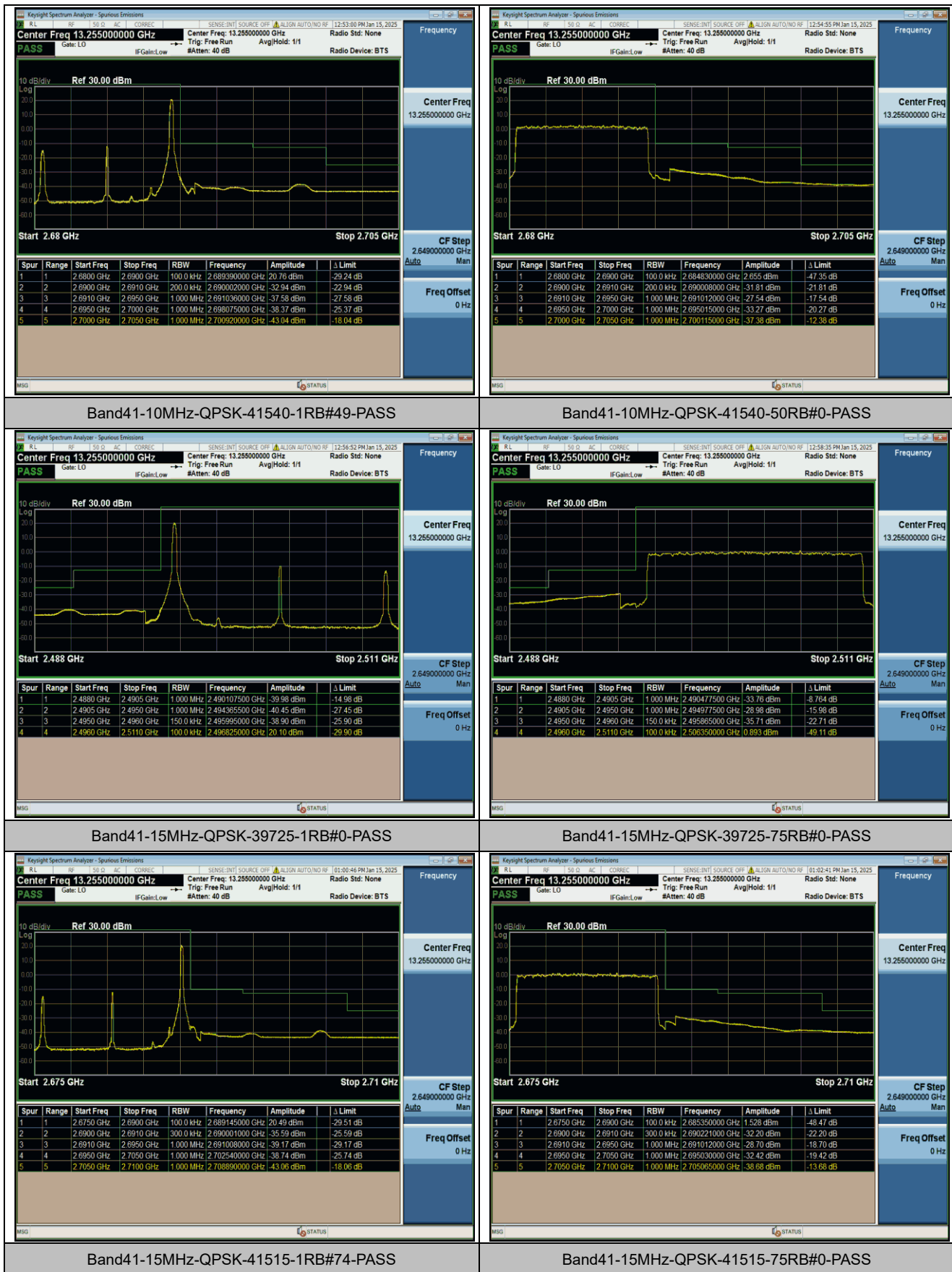


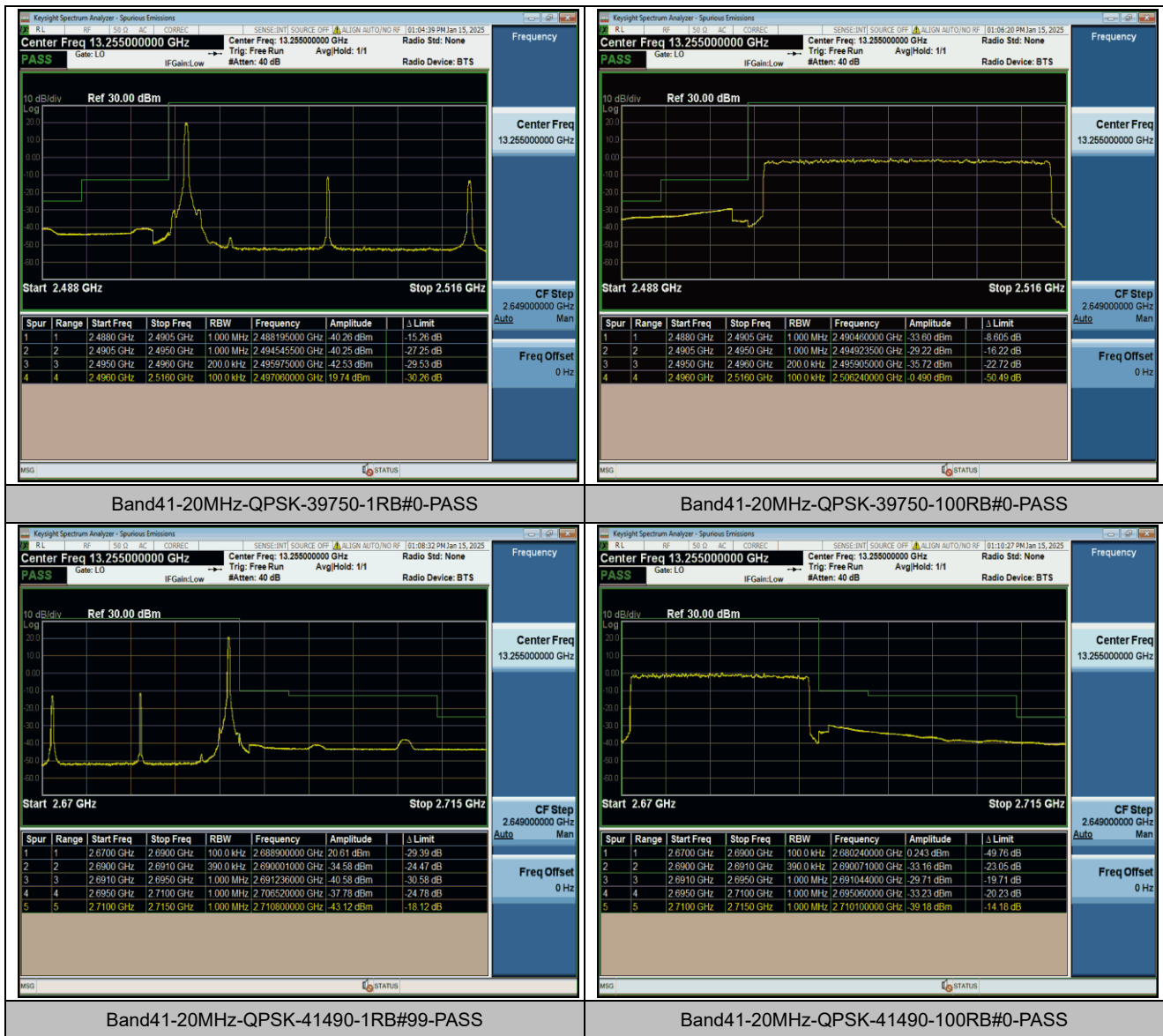


Band Edge

Test Graphs

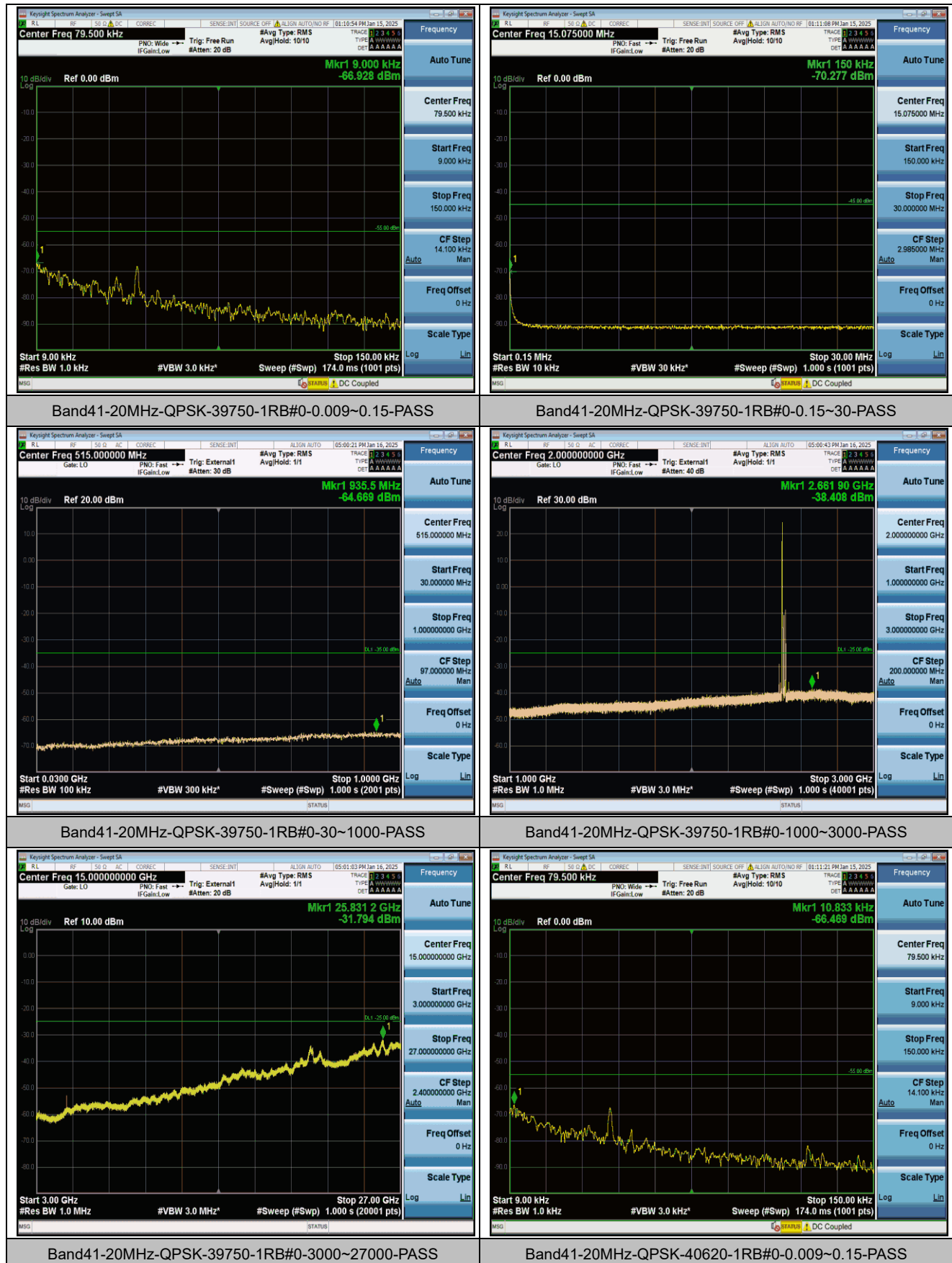


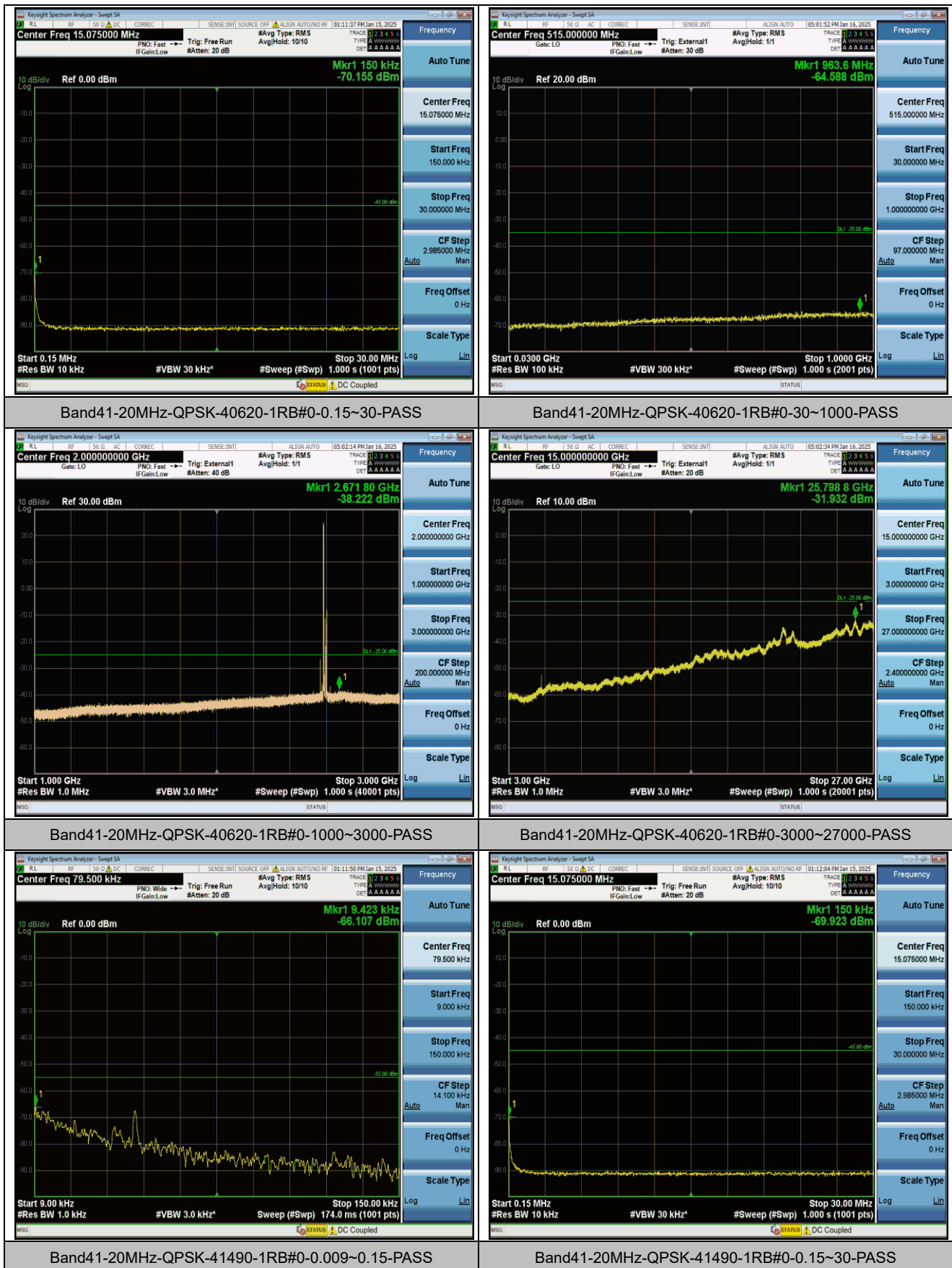




Conducted Spurious Emission

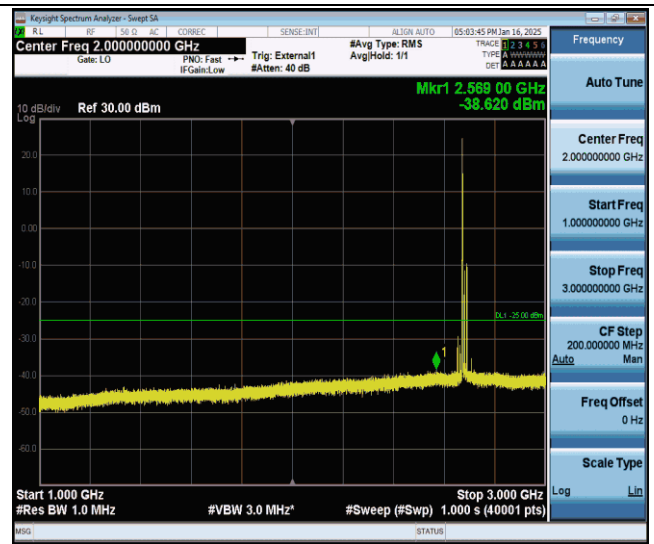
Test Graphs







Band41-20MHz-QPSK-41490-1RB#0-30~1000-PASS



Band41-20MHz-QPSK-41490-1RB#0-1000~3000-PASS



Band41-20MHz-QPSK-41490-1RB#0-3000~27000-PASS

Frequency Stability

Test Result

Voltage									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band41	20MHz	QPSK	40620	100RB#0	VN	NT	0.30	0.000116	PASS
Band41	20MHz	QPSK	40620	100RB#0	VL	NT	3.00	0.001157	PASS
Band41	20MHz	QPSK	40620	100RB#0	VH	NT	2.80	0.001080	PASS

Temperature									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band41	20MHz	QPSK	40620	100RB#0	NV	-30	3.20	0.001234	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	-20	5.00	0.001928	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	-10	2.30	0.000887	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	0	-0.10	-0.000039	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	10	2.80	0.001080	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	20	1.90	0.000733	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	30	4.20	0.001620	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	40	3.10	0.001196	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	50	1.40	0.000540	PASS

~The End~