

Appendix-C LTE Band 38

Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	23.96	21.68	33	PASS
Band38	5MHz	QPSK	37775	1RB#12	23.91	21.63	33	PASS
Band38	5MHz	QPSK	37775	1RB#24	23.77	21.49	33	PASS
Band38	5MHz	QPSK	37775	25RB#0	22.72	20.44	33	PASS
Band38	5MHz	16QAM	37775	1RB#0	22.39	20.11	33	PASS
Band38	5MHz	16QAM	37775	1RB#12	22.41	20.13	33	PASS
Band38	5MHz	16QAM	37775	1RB#24	22.33	20.05	33	PASS
Band38	5MHz	16QAM	37775	25RB#0	21.89	19.61	33	PASS
Band38	5MHz	QPSK	38000	1RB#0	23.79	21.51	33	PASS
Band38	5MHz	QPSK	38000	1RB#12	23.8	21.52	33	PASS
Band38	5MHz	QPSK	38000	1RB#24	23.74	21.46	33	PASS
Band38	5MHz	QPSK	38000	25RB#0	22.69	20.41	33	PASS
Band38	5MHz	16QAM	38000	1RB#0	22.39	20.11	33	PASS
Band38	5MHz	16QAM	38000	1RB#12	22.49	20.21	33	PASS
Band38	5MHz	16QAM	38000	1RB#24	22.48	20.2	33	PASS
Band38	5MHz	16QAM	38000	25RB#0	21.86	19.58	33	PASS
Band38	5MHz	QPSK	38225	1RB#0	23.67	21.39	33	PASS
Band38	5MHz	QPSK	38225	1RB#12	23.64	21.36	33	PASS
Band38	5MHz	QPSK	38225	1RB#24	23.71	21.43	33	PASS
Band38	5MHz	QPSK	38225	25RB#0	22.57	20.29	33	PASS
Band38	5MHz	16QAM	38225	1RB#0	22.41	20.13	33	PASS
Band38	5MHz	16QAM	38225	1RB#12	22.24	19.96	33	PASS
Band38	5MHz	16QAM	38225	1RB#24	22.27	19.99	33	PASS
Band38	5MHz	16QAM	38225	25RB#0	21.81	19.53	33	PASS
Band38	10MHz	QPSK	37800	1RB#0	23.88	21.6	33	PASS
Band38	10MHz	QPSK	37800	1RB#24	23.87	21.59	33	PASS
Band38	10MHz	QPSK	37800	1RB#49	23.86	21.58	33	PASS
Band38	10MHz	QPSK	37800	50RB#0	22.75	20.47	33	PASS
Band38	10MHz	16QAM	37800	1RB#0	22.55	20.27	33	PASS
Band38	10MHz	16QAM	37800	1RB#24	22.4	20.12	33	PASS
Band38	10MHz	16QAM	37800	1RB#49	22.46	20.18	33	PASS
Band38	10MHz	16QAM	37800	50RB#0	21.95	19.67	33	PASS
Band38	10MHz	QPSK	38000	1RB#0	23.78	21.5	33	PASS
Band38	10MHz	QPSK	38000	1RB#24	23.81	21.53	33	PASS
Band38	10MHz	QPSK	38000	1RB#49	23.76	21.48	33	PASS
Band38	10MHz	QPSK	38000	50RB#0	22.69	20.41	33	PASS

Band38	10MHz	16QAM	38000	1RB#0	22.45	20.17	33	PASS
Band38	10MHz	16QAM	38000	1RB#24	22.32	20.04	33	PASS
Band38	10MHz	16QAM	38000	1RB#49	22.36	20.08	33	PASS
Band38	10MHz	16QAM	38000	50RB#0	21.88	19.6	33	PASS
Band38	10MHz	QPSK	38200	1RB#0	23.8	21.52	33	PASS
Band38	10MHz	QPSK	38200	1RB#24	23.71	21.43	33	PASS
Band38	10MHz	QPSK	38200	1RB#49	23.66	21.38	33	PASS
Band38	10MHz	QPSK	38200	50RB#0	22.73	20.45	33	PASS
Band38	10MHz	16QAM	38200	1RB#0	22.02	19.74	33	PASS
Band38	10MHz	16QAM	38200	1RB#24	21.86	19.58	33	PASS
Band38	10MHz	16QAM	38200	1RB#49	21.84	19.56	33	PASS
Band38	10MHz	16QAM	38200	50RB#0	21.82	19.54	33	PASS
Band38	15MHz	QPSK	37825	1RB#0	24.09	21.81	33	PASS
Band38	15MHz	QPSK	37825	1RB#38	23.9	21.62	33	PASS
Band38	15MHz	QPSK	37825	1RB#74	24.03	21.75	33	PASS
Band38	15MHz	QPSK	37825	75RB#0	22.81	20.53	33	PASS
Band38	15MHz	16QAM	37825	1RB#0	22.46	20.18	33	PASS
Band38	15MHz	16QAM	37825	1RB#38	22.56	20.28	33	PASS
Band38	15MHz	16QAM	37825	1RB#74	22.58	20.3	33	PASS
Band38	15MHz	16QAM	37825	75RB#0	22	19.72	33	PASS
Band38	15MHz	QPSK	38000	1RB#0	23.87	21.59	33	PASS
Band38	15MHz	QPSK	38000	1RB#38	23.77	21.49	33	PASS
Band38	15MHz	QPSK	38000	1RB#74	23.76	21.48	33	PASS
Band38	15MHz	QPSK	38000	75RB#0	22.75	20.47	33	PASS
Band38	15MHz	16QAM	38000	1RB#0	22.46	20.18	33	PASS
Band38	15MHz	16QAM	38000	1RB#38	22.32	20.04	33	PASS
Band38	15MHz	16QAM	38000	1RB#74	22.42	20.14	33	PASS
Band38	15MHz	16QAM	38000	75RB#0	21.93	19.65	33	PASS
Band38	15MHz	QPSK	38175	1RB#0	23.86	21.58	33	PASS
Band38	15MHz	QPSK	38175	1RB#38	23.73	21.45	33	PASS
Band38	15MHz	QPSK	38175	1RB#74	23.66	21.38	33	PASS
Band38	15MHz	QPSK	38175	75RB#0	22.68	20.4	33	PASS
Band38	15MHz	16QAM	38175	1RB#0	22.47	20.19	33	PASS
Band38	15MHz	16QAM	38175	1RB#38	22.38	20.1	33	PASS
Band38	15MHz	16QAM	38175	1RB#74	22.22	19.94	33	PASS
Band38	15MHz	16QAM	38175	75RB#0	21.99	19.71	33	PASS
Band38	20MHz	QPSK	37850	1RB#0	23.75	21.47	33	PASS
Band38	20MHz	QPSK	37850	1RB#49	23.81	21.53	33	PASS
Band38	20MHz	QPSK	37850	1RB#99	23.85	21.57	33	PASS
Band38	20MHz	QPSK	37850	100RB#0	22.69	20.41	33	PASS
Band38	20MHz	16QAM	37850	1RB#0	22.45	20.17	33	PASS
Band38	20MHz	16QAM	37850	1RB#49	22.5	20.22	33	PASS
Band38	20MHz	16QAM	37850	1RB#99	22.41	20.13	33	PASS
Band38	20MHz	16QAM	37850	100RB#0	21.87	19.59	33	PASS

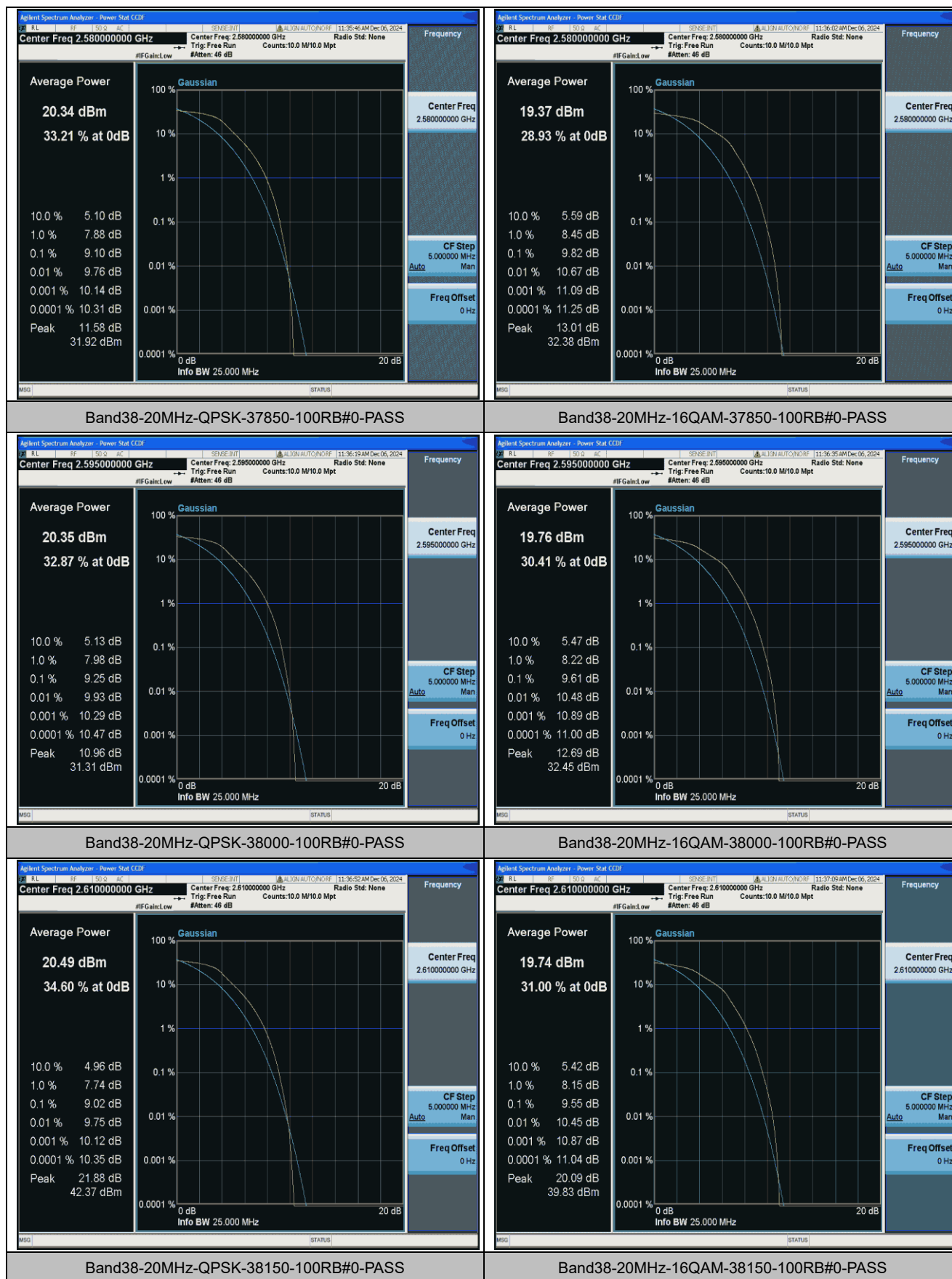
Band38	20MHz	QPSK	38000	1RB#0	23.93	21.65	33	PASS
Band38	20MHz	QPSK	38000	1RB#49	23.83	21.55	33	PASS
Band38	20MHz	QPSK	38000	1RB#99	23.73	21.45	33	PASS
Band38	20MHz	QPSK	38000	100RB#0	22.64	20.36	33	PASS
Band38	20MHz	16QAM	38000	1RB#0	22.44	20.16	33	PASS
Band38	20MHz	16QAM	38000	1RB#49	22.45	20.17	33	PASS
Band38	20MHz	16QAM	38000	1RB#99	22.44	20.16	33	PASS
Band38	20MHz	16QAM	38000	100RB#0	21.82	19.54	33	PASS
Band38	20MHz	QPSK	38150	1RB#0	23.94	21.66	33	PASS
Band38	20MHz	QPSK	38150	1RB#49	23.77	21.49	33	PASS
Band38	20MHz	QPSK	38150	1RB#99	23.62	21.34	33	PASS
Band38	20MHz	QPSK	38150	100RB#0	22.67	20.39	33	PASS
Band38	20MHz	16QAM	38150	1RB#0	22.45	20.17	33	PASS
Band38	20MHz	16QAM	38150	1RB#49	22.44	20.16	33	PASS
Band38	20MHz	16QAM	38150	1RB#99	22.32	20.04	33	PASS
Band38	20MHz	16QAM	38150	100RB#0	21.85	19.57	33	PASS

Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band38	20MHz	QPSK	37850	100RB#0	9.10	13	PASS
Band38	20MHz	16QAM	37850	100RB#0	9.82	13	PASS
Band38	20MHz	QPSK	38000	100RB#0	9.25	13	PASS
Band38	20MHz	16QAM	38000	100RB#0	9.61	13	PASS
Band38	20MHz	QPSK	38150	100RB#0	9.02	13	PASS
Band38	20MHz	16QAM	38150	100RB#0	9.55	13	PASS

Test Graphs

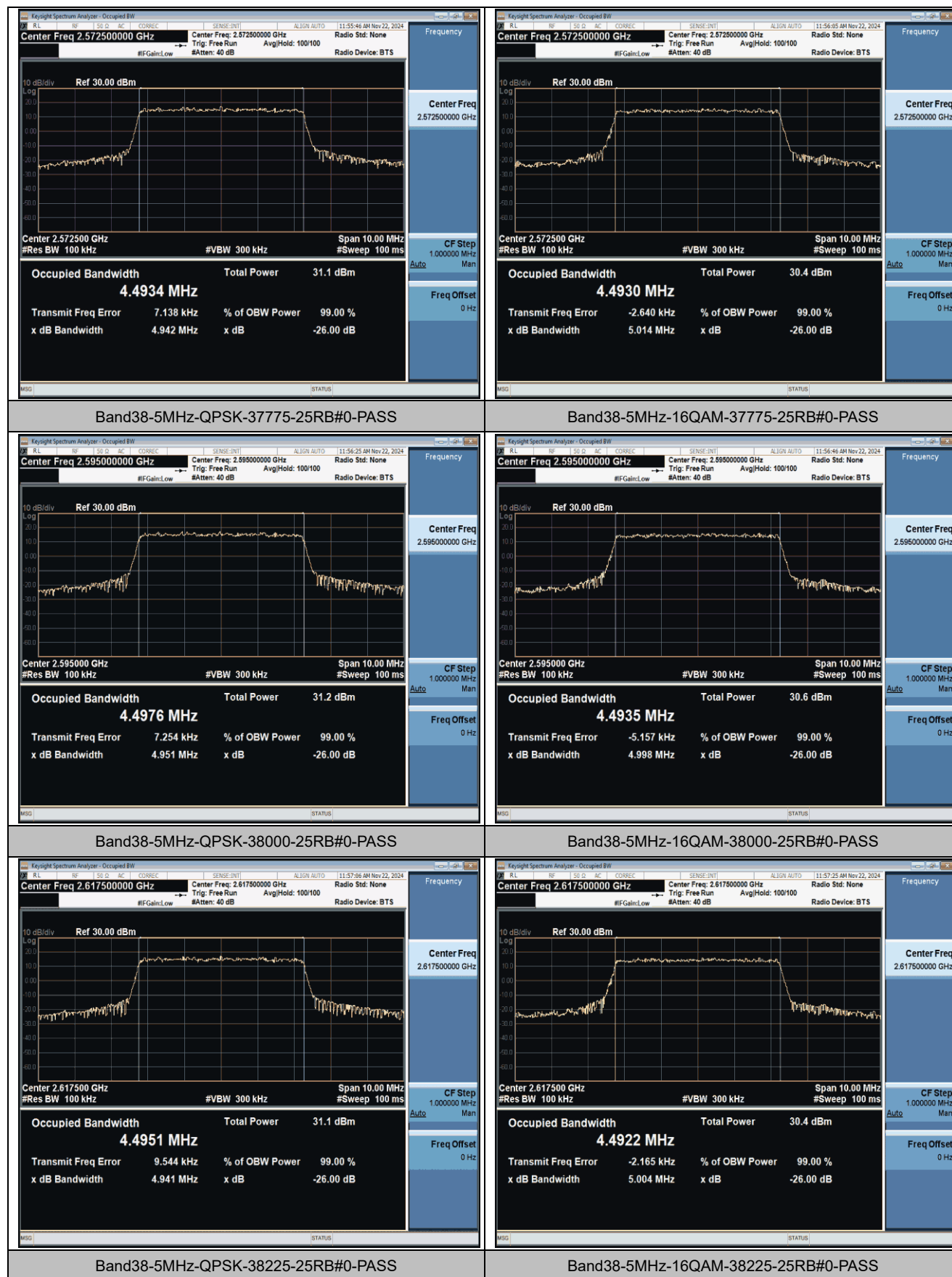


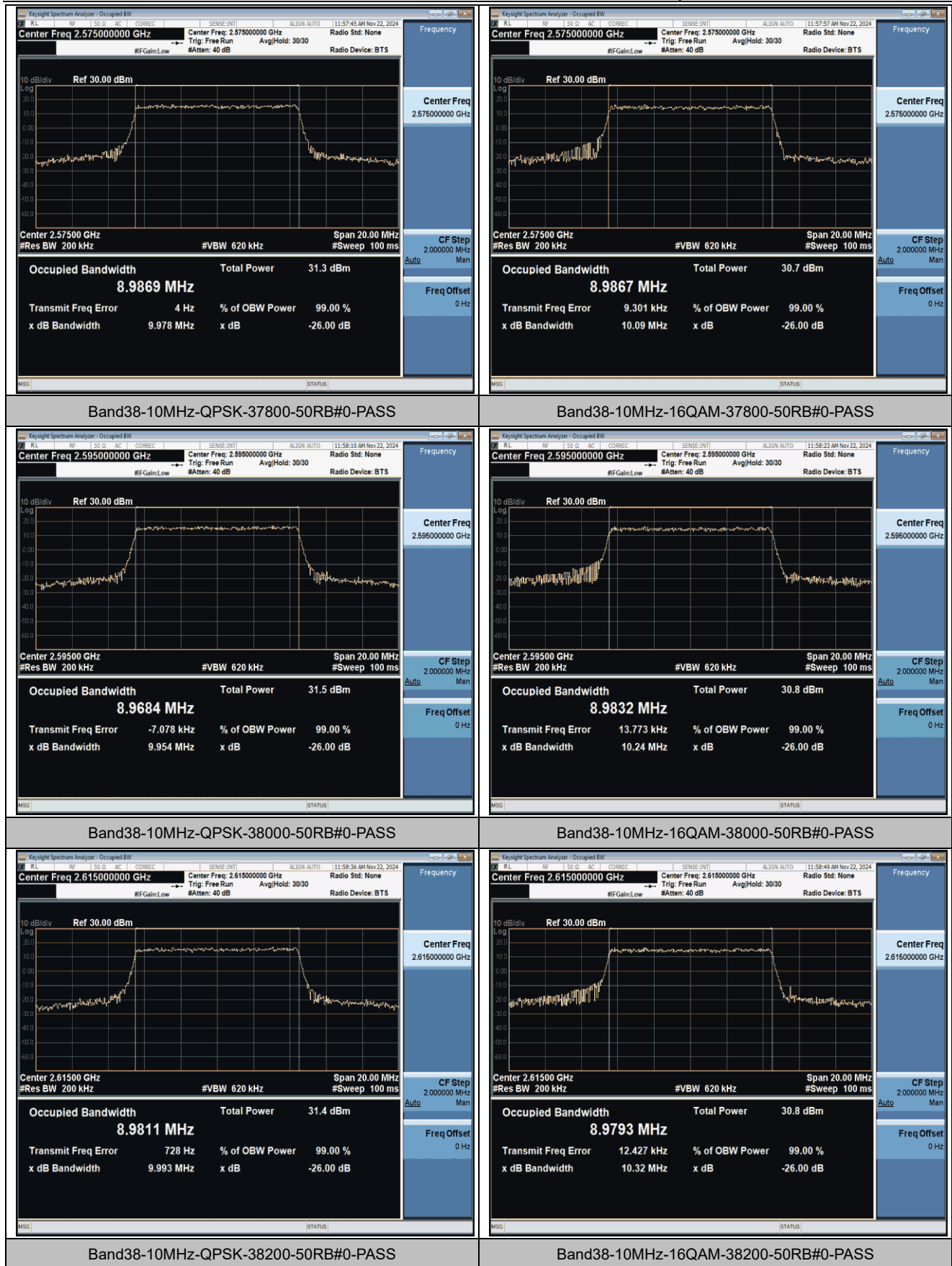
26dB Bandwidth and Occupied Bandwidth

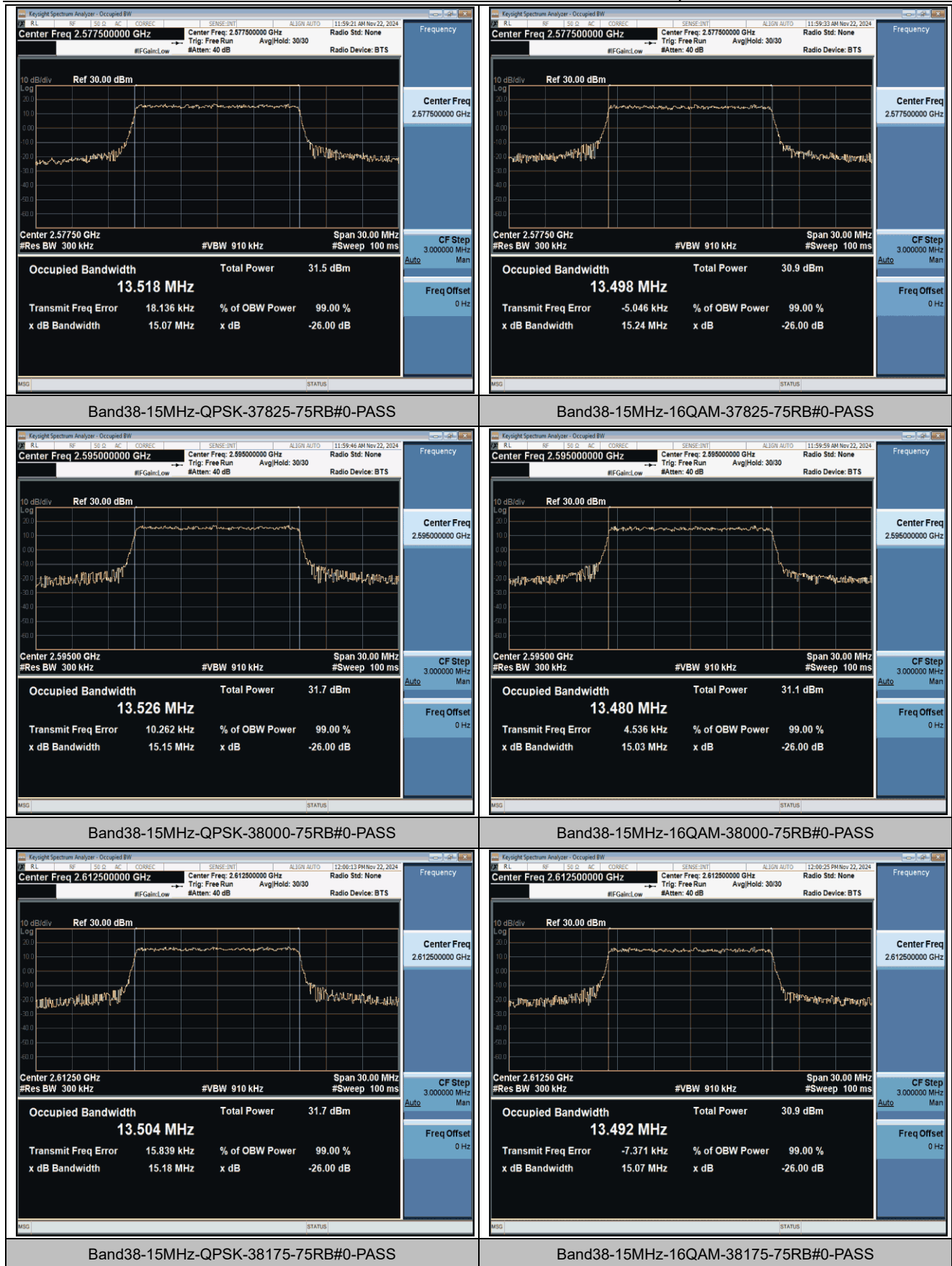
Test Result

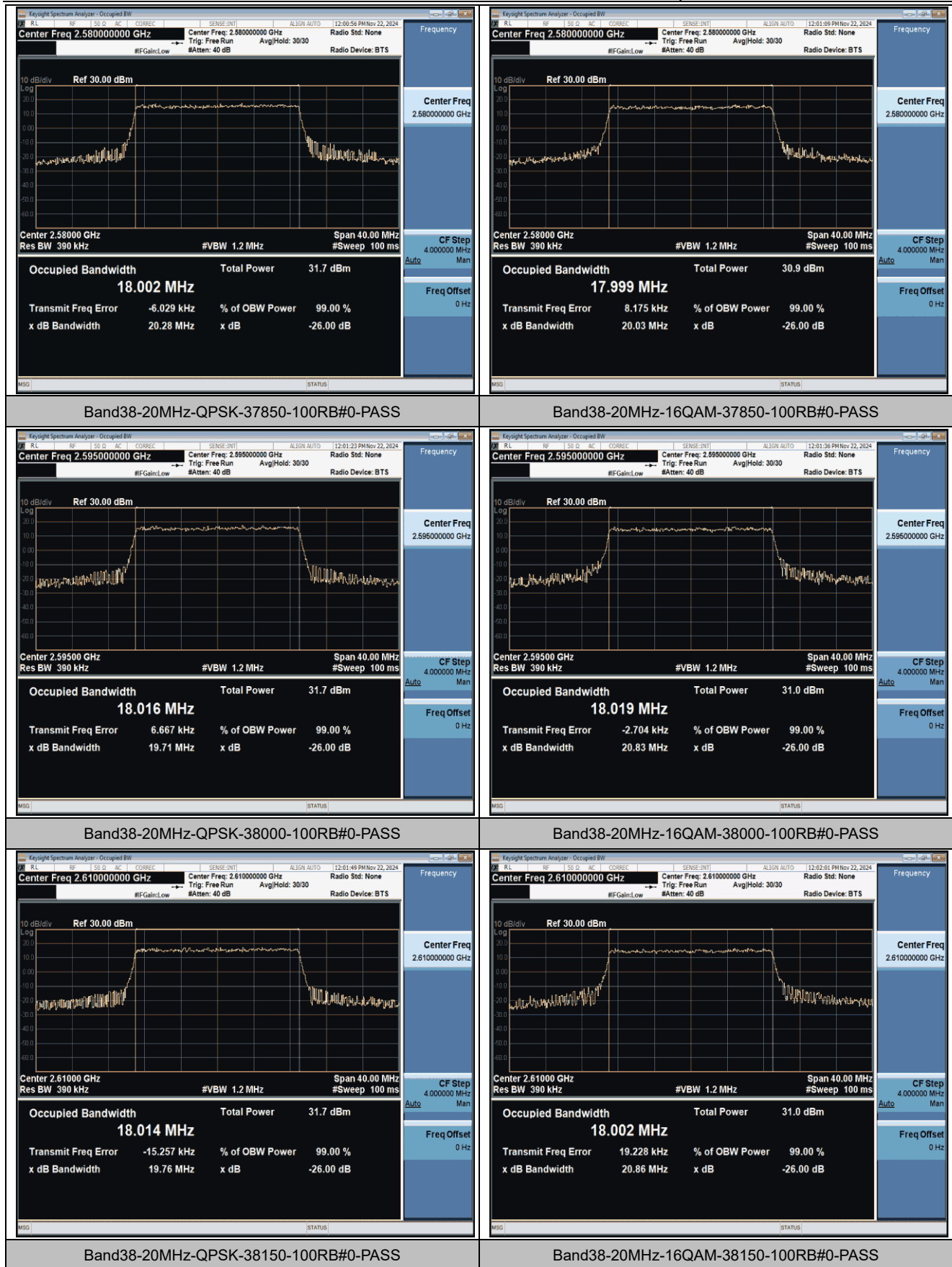
Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band38	5MHz	QPSK	37775	25RB#0	4.4934	4.942	PASS
Band38	5MHz	16QAM	37775	25RB#0	4.4930	5.014	PASS
Band38	5MHz	QPSK	38000	25RB#0	4.4976	4.951	PASS
Band38	5MHz	16QAM	38000	25RB#0	4.4935	4.998	PASS
Band38	5MHz	QPSK	38225	25RB#0	4.4951	4.941	PASS
Band38	5MHz	16QAM	38225	25RB#0	4.4922	5.004	PASS
Band38	10MHz	QPSK	37800	50RB#0	8.9869	9.978	PASS
Band38	10MHz	16QAM	37800	50RB#0	8.9867	10.09	PASS
Band38	10MHz	QPSK	38000	50RB#0	8.9684	9.954	PASS
Band38	10MHz	16QAM	38000	50RB#0	8.9832	10.24	PASS
Band38	10MHz	QPSK	38200	50RB#0	8.9811	9.993	PASS
Band38	10MHz	16QAM	38200	50RB#0	8.9793	10.32	PASS
Band38	15MHz	QPSK	37825	75RB#0	13.518	15.07	PASS
Band38	15MHz	16QAM	37825	75RB#0	13.498	15.24	PASS
Band38	15MHz	QPSK	38000	75RB#0	13.526	15.15	PASS
Band38	15MHz	16QAM	38000	75RB#0	13.480	15.03	PASS
Band38	15MHz	QPSK	38175	75RB#0	13.504	15.18	PASS
Band38	15MHz	16QAM	38175	75RB#0	13.492	15.07	PASS
Band38	20MHz	QPSK	37850	100RB#0	18.002	20.28	PASS
Band38	20MHz	16QAM	37850	100RB#0	17.999	20.03	PASS
Band38	20MHz	QPSK	38000	100RB#0	18.016	19.71	PASS
Band38	20MHz	16QAM	38000	100RB#0	18.019	20.83	PASS
Band38	20MHz	QPSK	38150	100RB#0	18.014	19.76	PASS
Band38	20MHz	16QAM	38150	100RB#0	18.002	20.86	PASS

Test Graphs



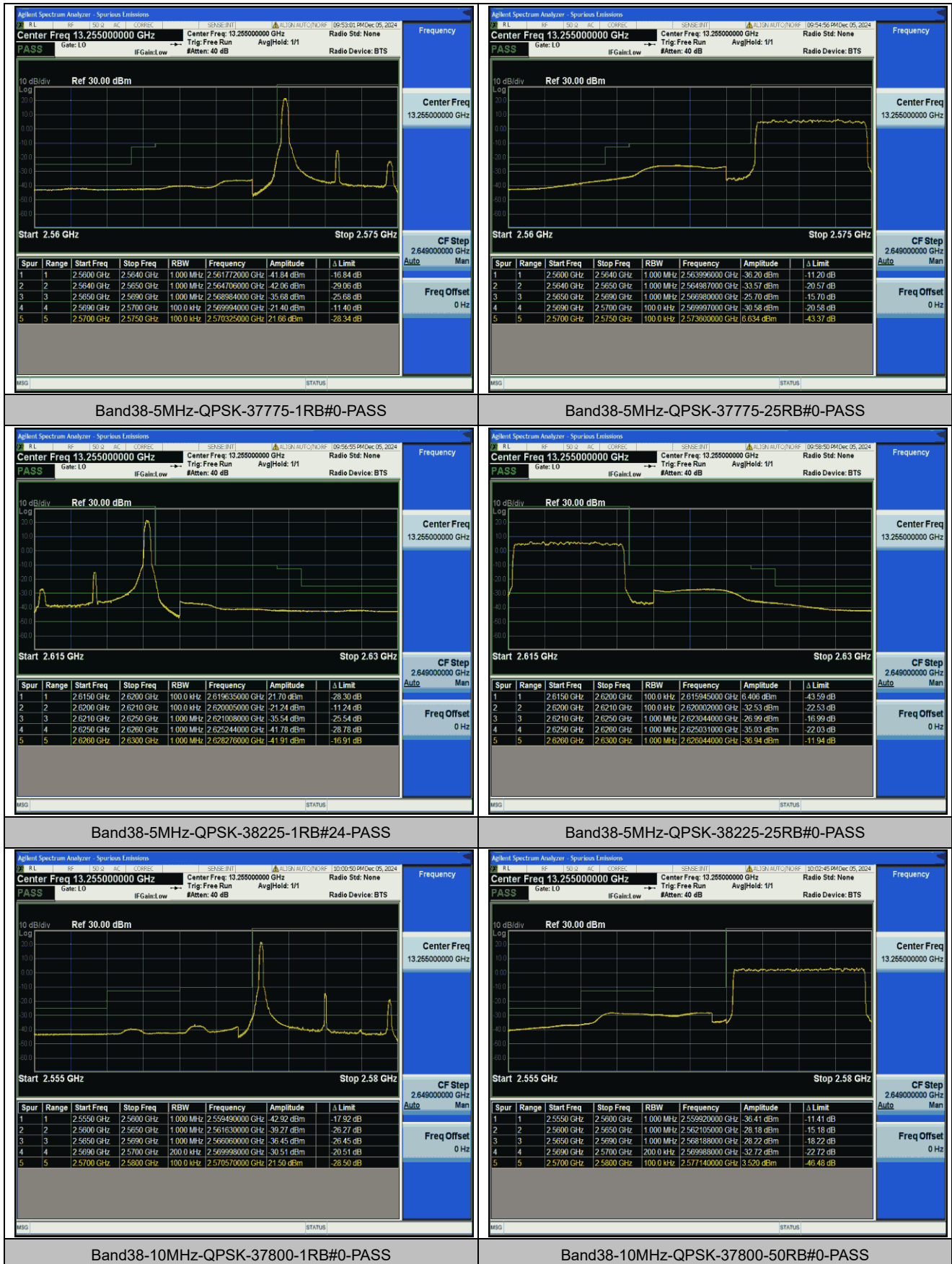


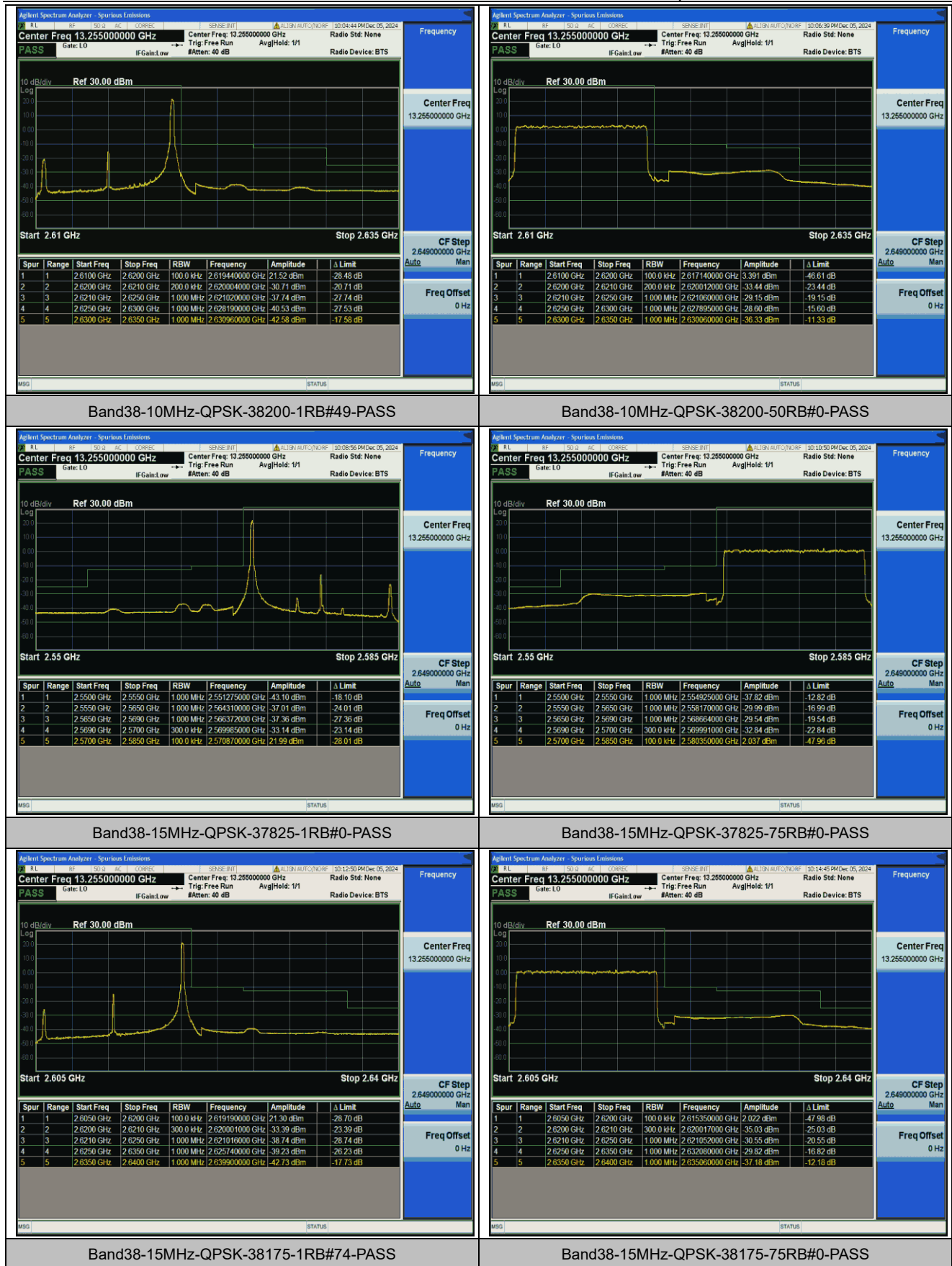


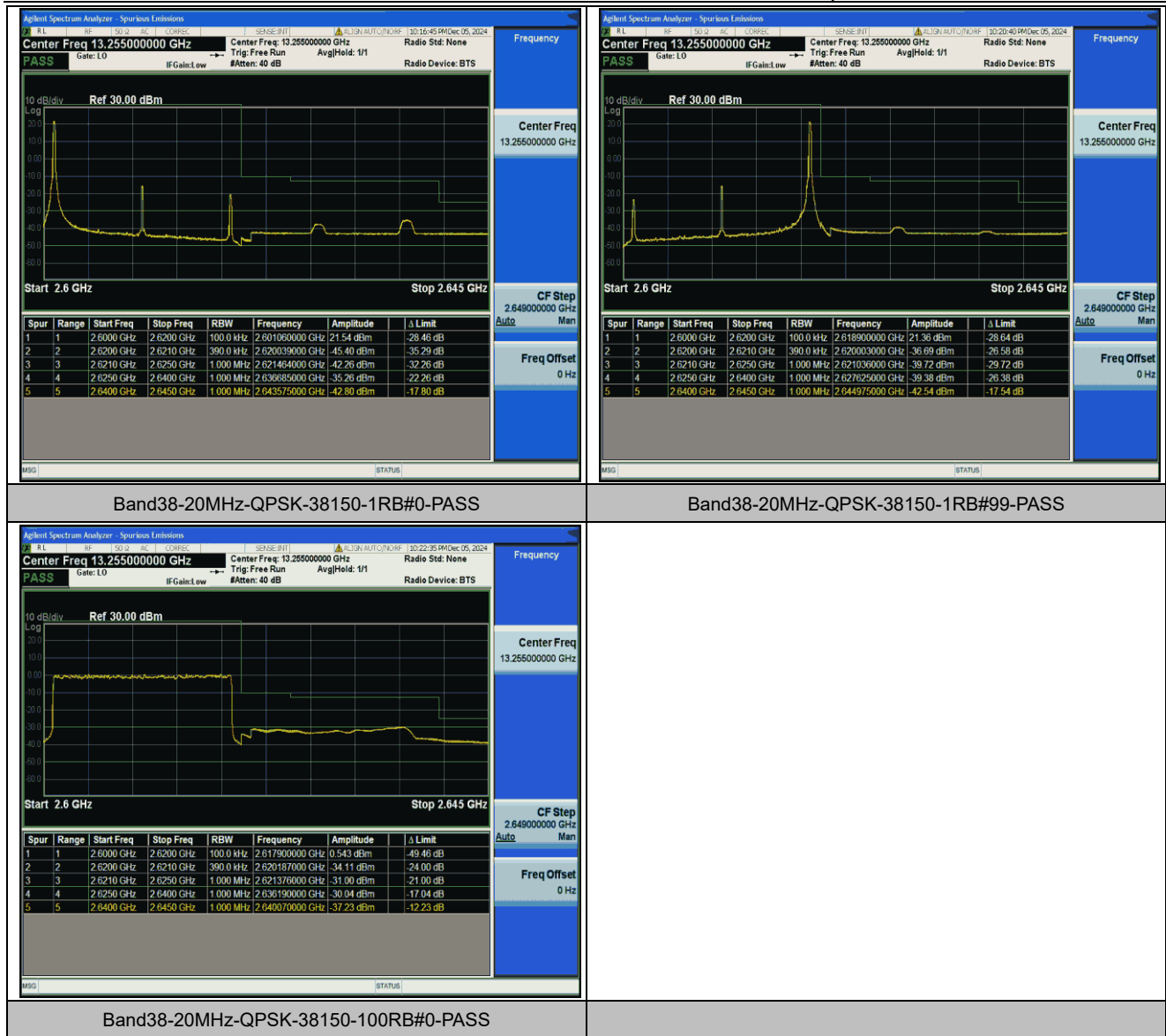


Band Edge

Test Graphs

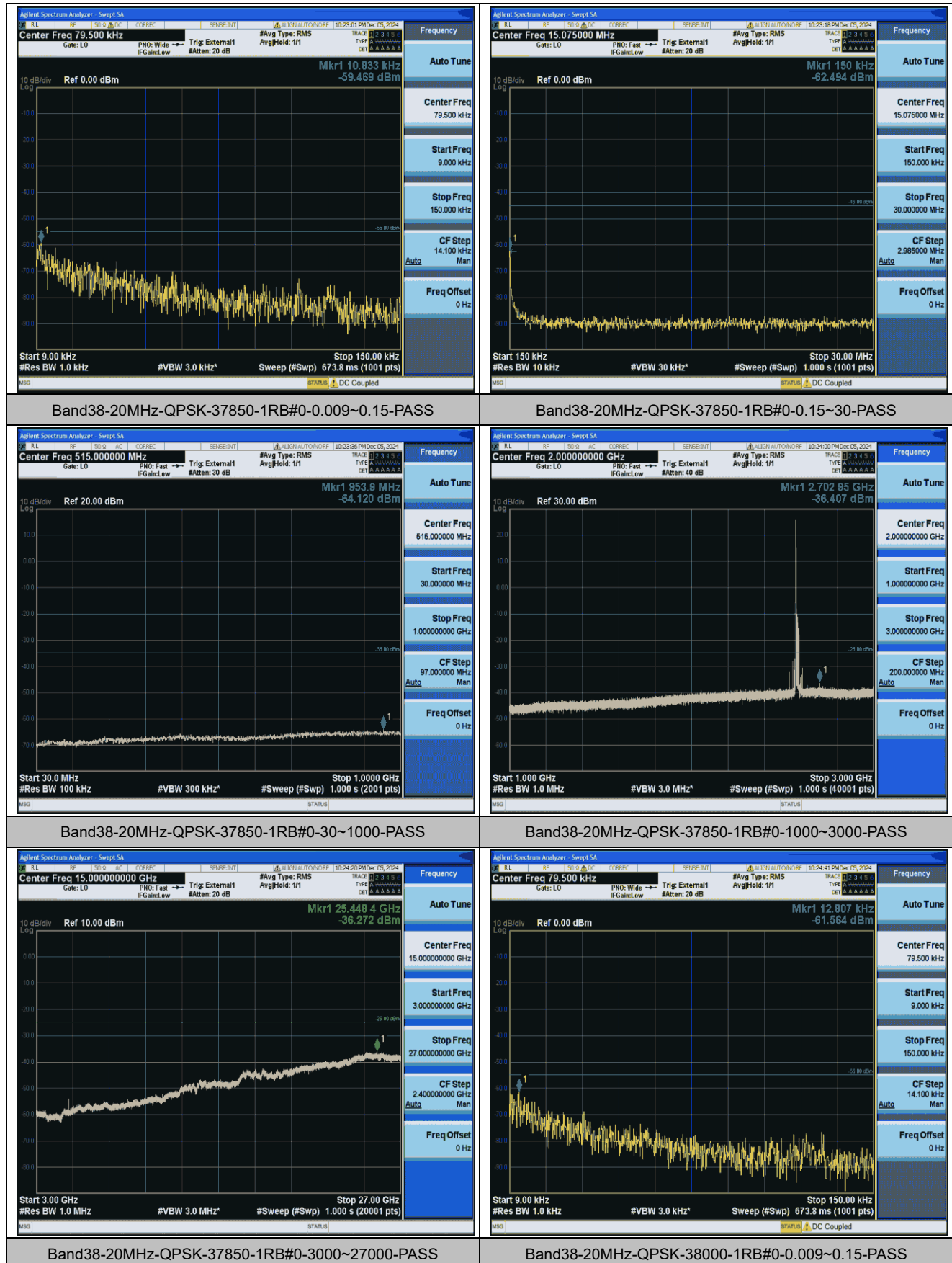


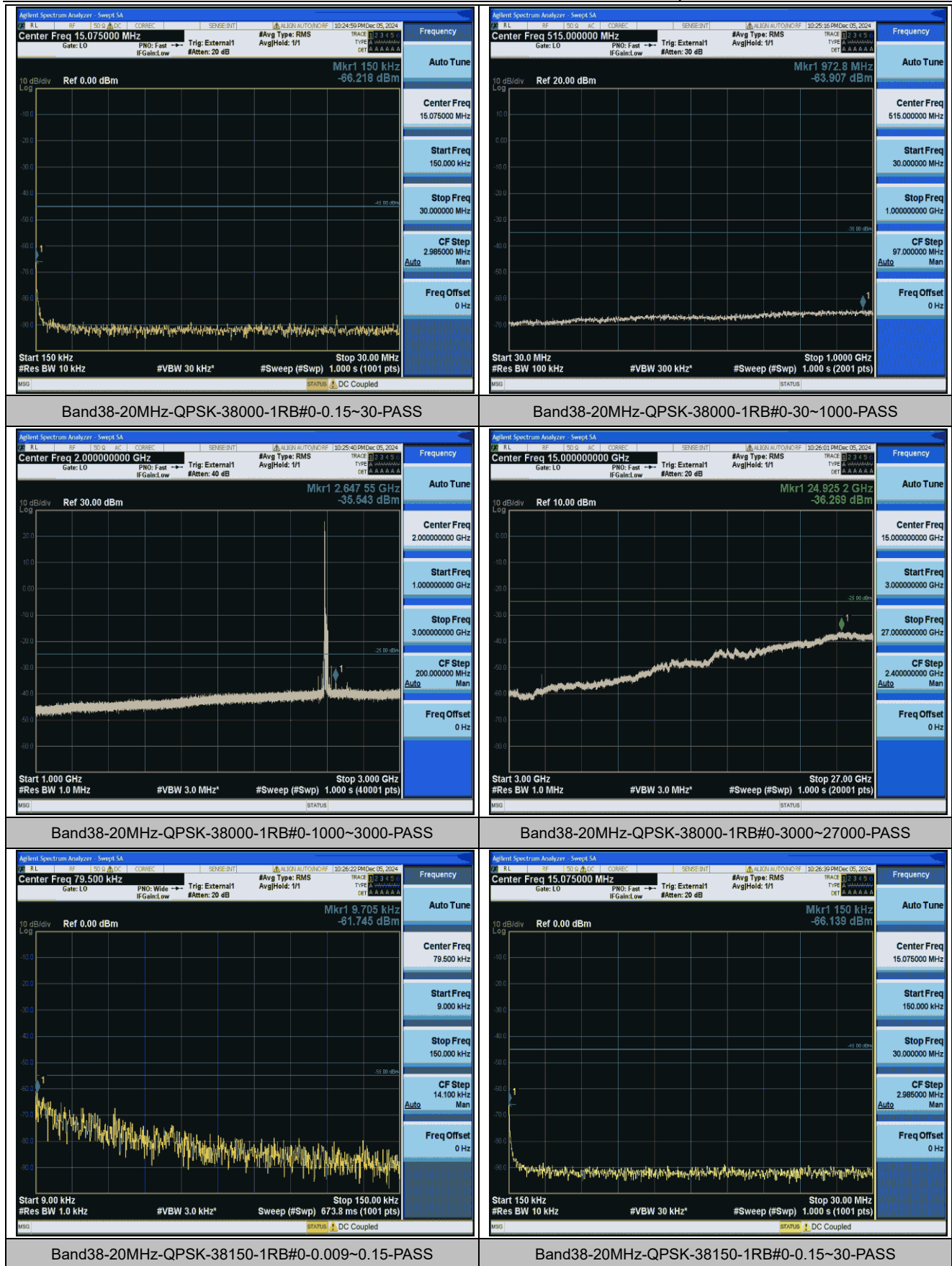


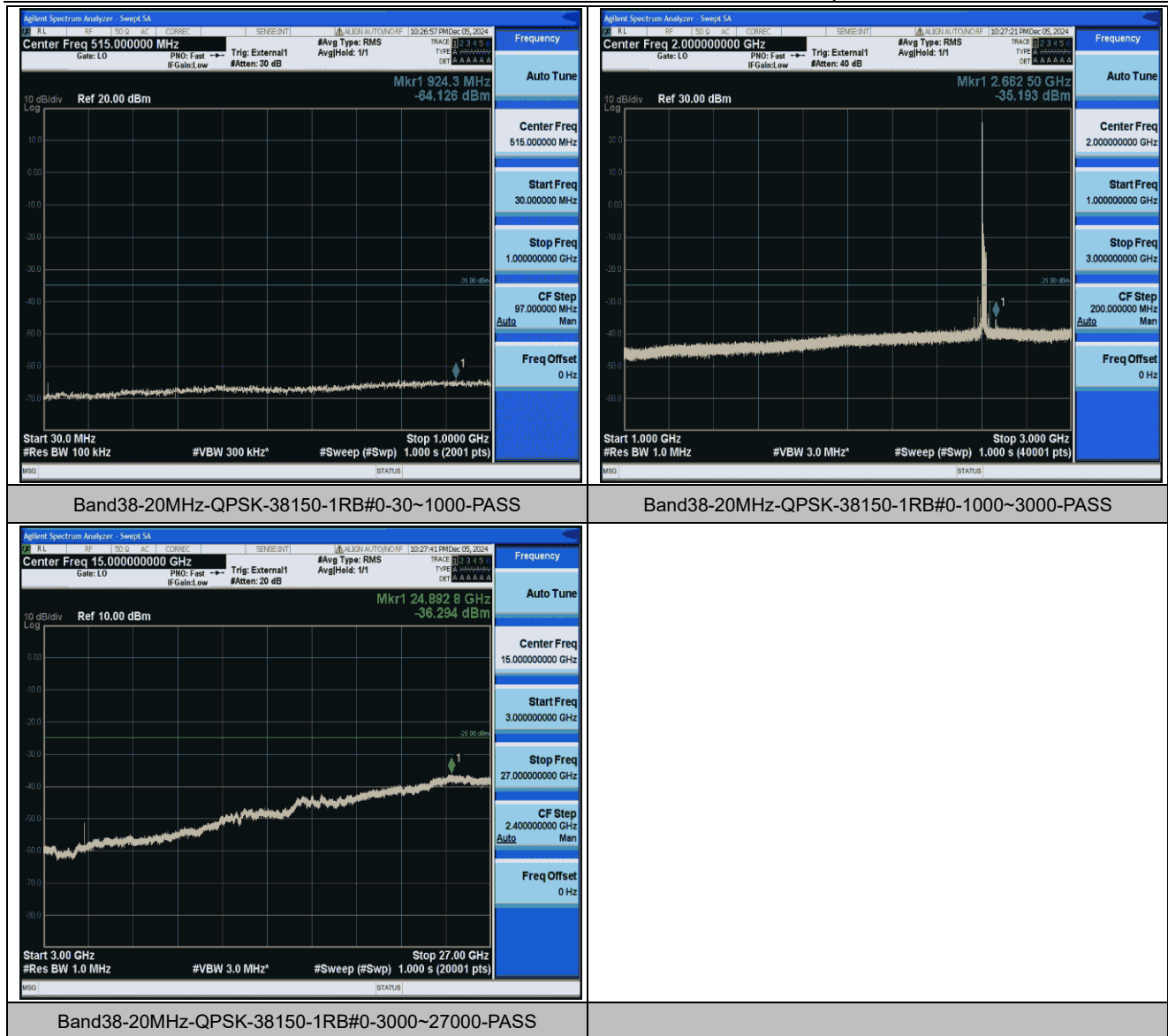


Conducted Spurious Emission

Test Graphs







Frequency Stability

Test Result

Voltage									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band38	20MHz	QPSK	38000	100RB#0	VN	NT	-1.80	-0.000694	PASS
Band38	20MHz	QPSK	38000	100RB#0	VL	NT	-10.50	-0.004046	PASS
Band38	20MHz	QPSK	38000	100RB#0	VH	NT	-5.60	-0.002158	PASS

Temperature									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band38	20MHz	QPSK	38000	100RB#0	NV	-30	-1.30	-0.000501	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-20	12.70	0.004894	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-10	36.70	0.014143	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	0	-1.00	-0.000385	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	10	10.00	0.003854	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	20	30.20	0.011638	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	30	-5.10	-0.001965	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	40	9.90	0.003815	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	50	26.30	0.010135	PASS

~The End~