

FCC Appendix RF Test Data for-LTE Band 38

Company: : Shenzhen Qianxun Yunchuang Technology Co., Ltd.

EUT : GPS TRACKER

Model Number : Q8

FCC ID : 2BRNM-Q8

Report No. : CTA25073100102

Reviewed By : Eric Wang

Appendix A: Conducted Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	23.27	PASS
Band38	5MHz	QPSK	37775	1RB#12	23.28	PASS
Band38	5MHz	QPSK	37775	1RB#24	23.16	PASS
Band38	5MHz	QPSK	37775	12RB#0	22.32	PASS
Band38	5MHz	QPSK	37775	12RB#6	22.33	PASS
Band38	5MHz	QPSK	37775	12RB#13	22.24	PASS
Band38	5MHz	QPSK	37775	25RB#0	22.29	PASS
Band38	5MHz	QPSK	38000	1RB#0	22.99	PASS
Band38	5MHz	QPSK	38000	1RB#12	23.06	PASS
Band38	5MHz	QPSK	38000	1RB#24	23.14	PASS
Band38	5MHz	QPSK	38000	12RB#0	22.32	PASS
Band38	5MHz	QPSK	38000	12RB#6	22.32	PASS
Band38	5MHz	QPSK	38000	12RB#13	22.29	PASS
Band38	5MHz	QPSK	38000	25RB#0	22.31	PASS
Band38	5MHz	QPSK	38225	1RB#0	23.47	PASS
Band38	5MHz	QPSK	38225	1RB#12	23.49	PASS
Band38	5MHz	QPSK	38225	1RB#24	23.43	PASS
Band38	5MHz	QPSK	38225	12RB#0	22.47	PASS
Band38	5MHz	QPSK	38225	12RB#6	22.48	PASS
Band38	5MHz	QPSK	38225	12RB#13	22.47	PASS
Band38	5MHz	QPSK	38225	25RB#0	22.44	PASS
Band38	5MHz	16QAM	37775	1RB#0	22.30	PASS
Band38	5MHz	16QAM	37775	1RB#12	22.68	PASS
Band38	5MHz	16QAM	37775	1RB#24	22.61	PASS
Band38	5MHz	16QAM	37775	12RB#0	21.30	PASS
Band38	5MHz	16QAM	37775	12RB#6	21.30	PASS
Band38	5MHz	16QAM	37775	12RB#13	21.15	PASS
Band38	5MHz	16QAM	37775	25RB#0	21.39	PASS
Band38	5MHz	16QAM	38000	1RB#0	22.67	PASS
Band38	5MHz	16QAM	38000	1RB#12	22.61	PASS
Band38	5MHz	16QAM	38000	1RB#24	22.63	PASS
Band38	5MHz	16QAM	38000	12RB#0	21.35	PASS
Band38	5MHz	16QAM	38000	12RB#6	21.35	PASS
Band38	5MHz	16QAM	38000	12RB#13	21.29	PASS
Band38	5MHz	16QAM	38000	25RB#0	21.53	PASS
Band38	5MHz	16QAM	38225	1RB#0	22.89	PASS

Band38	5MHz	16QAM	38225	1RB#12	22.87	PASS
Band38	5MHz	16QAM	38225	1RB#24	22.71	PASS
Band38	5MHz	16QAM	38225	12RB#0	21.46	PASS
Band38	5MHz	16QAM	38225	12RB#6	21.46	PASS
Band38	5MHz	16QAM	38225	12RB#13	21.47	PASS
Band38	5MHz	16QAM	38225	25RB#0	21.39	PASS
Band38	10MHz	QPSK	37800	1RB#0	23.38	PASS
Band38	10MHz	QPSK	37800	1RB#24	23.44	PASS
Band38	10MHz	QPSK	37800	1RB#49	23.34	PASS
Band38	10MHz	QPSK	37800	25RB#0	22.48	PASS
Band38	10MHz	QPSK	37800	25RB#12	22.49	PASS
Band38	10MHz	QPSK	37800	25RB#25	22.44	PASS
Band38	10MHz	QPSK	37800	50RB#0	22.50	PASS
Band38	10MHz	QPSK	38000	1RB#0	23.40	PASS
Band38	10MHz	QPSK	38000	1RB#24	23.32	PASS
Band38	10MHz	QPSK	38000	1RB#49	23.28	PASS
Band38	10MHz	QPSK	38000	25RB#0	22.49	PASS
Band38	10MHz	QPSK	38000	25RB#12	22.50	PASS
Band38	10MHz	QPSK	38000	25RB#25	22.50	PASS
Band38	10MHz	QPSK	38000	50RB#0	22.45	PASS
Band38	10MHz	QPSK	38200	1RB#0	23.48	PASS
Band38	10MHz	QPSK	38200	1RB#24	23.45	PASS
Band38	10MHz	QPSK	38200	1RB#49	23.47	PASS
Band38	10MHz	QPSK	38200	25RB#0	22.57	PASS
Band38	10MHz	QPSK	38200	25RB#12	22.57	PASS
Band38	10MHz	QPSK	38200	25RB#25	22.63	PASS
Band38	10MHz	QPSK	38200	50RB#0	22.54	PASS
Band38	10MHz	16QAM	37800	1RB#0	22.84	PASS
Band38	10MHz	16QAM	37800	1RB#24	22.96	PASS
Band38	10MHz	16QAM	37800	1RB#49	22.15	PASS
Band38	10MHz	16QAM	37800	25RB#0	21.49	PASS
Band38	10MHz	16QAM	37800	25RB#12	21.49	PASS
Band38	10MHz	16QAM	37800	25RB#25	21.45	PASS
Band38	10MHz	16QAM	38000	1RB#0	22.49	PASS
Band38	10MHz	16QAM	38000	1RB#24	22.44	PASS
Band38	10MHz	16QAM	38000	1RB#49	22.58	PASS
Band38	10MHz	16QAM	38000	25RB#0	21.40	PASS
Band38	10MHz	16QAM	38000	25RB#12	21.40	PASS
Band38	10MHz	16QAM	38000	25RB#25	21.44	PASS
Band38	10MHz	16QAM	38200	1RB#0	22.76	PASS
Band38	10MHz	16QAM	38200	1RB#24	22.69	PASS
Band38	10MHz	16QAM	38200	1RB#49	22.54	PASS
Band38	10MHz	16QAM	38200	25RB#0	21.59	PASS

Band38	10MHz	16QAM	38200	25RB#12	21.58	PASS
Band38	10MHz	16QAM	38200	25RB#25	21.57	PASS
Band38	15MHz	QPSK	37825	1RB#0	23.49	PASS
Band38	15MHz	QPSK	37825	1RB#38	23.38	PASS
Band38	15MHz	QPSK	37825	1RB#74	23.56	PASS
Band38	15MHz	QPSK	37825	38RB#0	22.46	PASS
Band38	15MHz	QPSK	37825	38RB#18	22.45	PASS
Band38	15MHz	QPSK	37825	38RB#37	22.52	PASS
Band38	15MHz	QPSK	37825	75RB#0	22.52	PASS
Band38	15MHz	QPSK	38000	1RB#0	23.52	PASS
Band38	15MHz	QPSK	38000	1RB#38	23.44	PASS
Band38	15MHz	QPSK	38000	1RB#74	23.36	PASS
Band38	15MHz	QPSK	38000	38RB#0	22.60	PASS
Band38	15MHz	QPSK	38000	38RB#18	22.60	PASS
Band38	15MHz	QPSK	38000	38RB#37	22.59	PASS
Band38	15MHz	QPSK	38000	75RB#0	22.52	PASS
Band38	15MHz	QPSK	38175	1RB#0	23.60	PASS
Band38	15MHz	QPSK	38175	1RB#38	23.52	PASS
Band38	15MHz	QPSK	38175	1RB#74	23.56	PASS
Band38	15MHz	QPSK	38175	38RB#0	22.59	PASS
Band38	15MHz	QPSK	38175	38RB#18	22.59	PASS
Band38	15MHz	QPSK	38175	38RB#37	22.59	PASS
Band38	15MHz	QPSK	38175	75RB#0	22.64	PASS
Band38	15MHz	16QAM	37825	1RB#0	22.50	PASS
Band38	15MHz	16QAM	37825	1RB#38	22.40	PASS
Band38	15MHz	16QAM	37825	1RB#74	22.57	PASS
Band38	15MHz	16QAM	37825	38RB#0	22.45	PASS
Band38	15MHz	16QAM	37825	38RB#18	22.52	PASS
Band38	15MHz	16QAM	37825	38RB#37	22.51	PASS
Band38	15MHz	16QAM	38000	1RB#0	22.61	PASS
Band38	15MHz	16QAM	38000	1RB#38	22.48	PASS
Band38	15MHz	16QAM	38000	1RB#74	22.69	PASS
Band38	15MHz	16QAM	38000	38RB#0	22.60	PASS
Band38	15MHz	16QAM	38000	38RB#18	22.59	PASS
Band38	15MHz	16QAM	38000	38RB#37	22.59	PASS
Band38	15MHz	16QAM	38175	1RB#0	22.67	PASS
Band38	15MHz	16QAM	38175	1RB#38	22.57	PASS
Band38	15MHz	16QAM	38175	1RB#74	22.80	PASS
Band38	15MHz	16QAM	38175	38RB#0	22.59	PASS
Band38	15MHz	16QAM	38175	38RB#18	22.59	PASS
Band38	15MHz	16QAM	38175	38RB#37	22.58	PASS
Band38	20MHz	QPSK	37850	1RB#0	23.37	PASS
Band38	20MHz	QPSK	37850	1RB#49	23.40	PASS

Band38	20MHz	QPSK	37850	1RB#99	23.26	PASS
Band38	20MHz	QPSK	37850	50RB#0	22.45	PASS
Band38	20MHz	QPSK	37850	50RB#25	22.45	PASS
Band38	20MHz	QPSK	37850	50RB#50	22.44	PASS
Band38	20MHz	QPSK	37850	100RB#0	22.45	PASS
Band38	20MHz	QPSK	38000	1RB#0	23.45	PASS
Band38	20MHz	QPSK	38000	1RB#49	23.66	PASS
Band38	20MHz	QPSK	38000	1RB#99	23.44	PASS
Band38	20MHz	QPSK	38000	50RB#0	22.60	PASS
Band38	20MHz	QPSK	38000	50RB#25	22.61	PASS
Band38	20MHz	QPSK	38000	50RB#50	22.57	PASS
Band38	20MHz	QPSK	38000	100RB#0	22.61	PASS
Band38	20MHz	QPSK	38150	1RB#0	23.56	PASS
Band38	20MHz	QPSK	38150	1RB#49	23.84	PASS
Band38	20MHz	QPSK	38150	1RB#99	23.53	PASS
Band38	20MHz	QPSK	38150	50RB#0	22.72	PASS
Band38	20MHz	QPSK	38150	50RB#25	22.67	PASS
Band38	20MHz	QPSK	38150	50RB#50	22.75	PASS
Band38	20MHz	QPSK	38150	100RB#0	22.74	PASS
Band38	20MHz	16QAM	37850	1RB#0	23.01	PASS
Band38	20MHz	16QAM	37850	1RB#49	23.26	PASS
Band38	20MHz	16QAM	37850	1RB#99	23.00	PASS
Band38	20MHz	16QAM	38000	1RB#0	23.15	PASS
Band38	20MHz	16QAM	38000	1RB#49	23.11	PASS
Band38	20MHz	16QAM	38000	1RB#99	23.06	PASS
Band38	20MHz	16QAM	38150	1RB#0	23.16	PASS
Band38	20MHz	16QAM	38150	1RB#49	23.32	PASS
Band38	20MHz	16QAM	38150	1RB#99	23.28	PASS

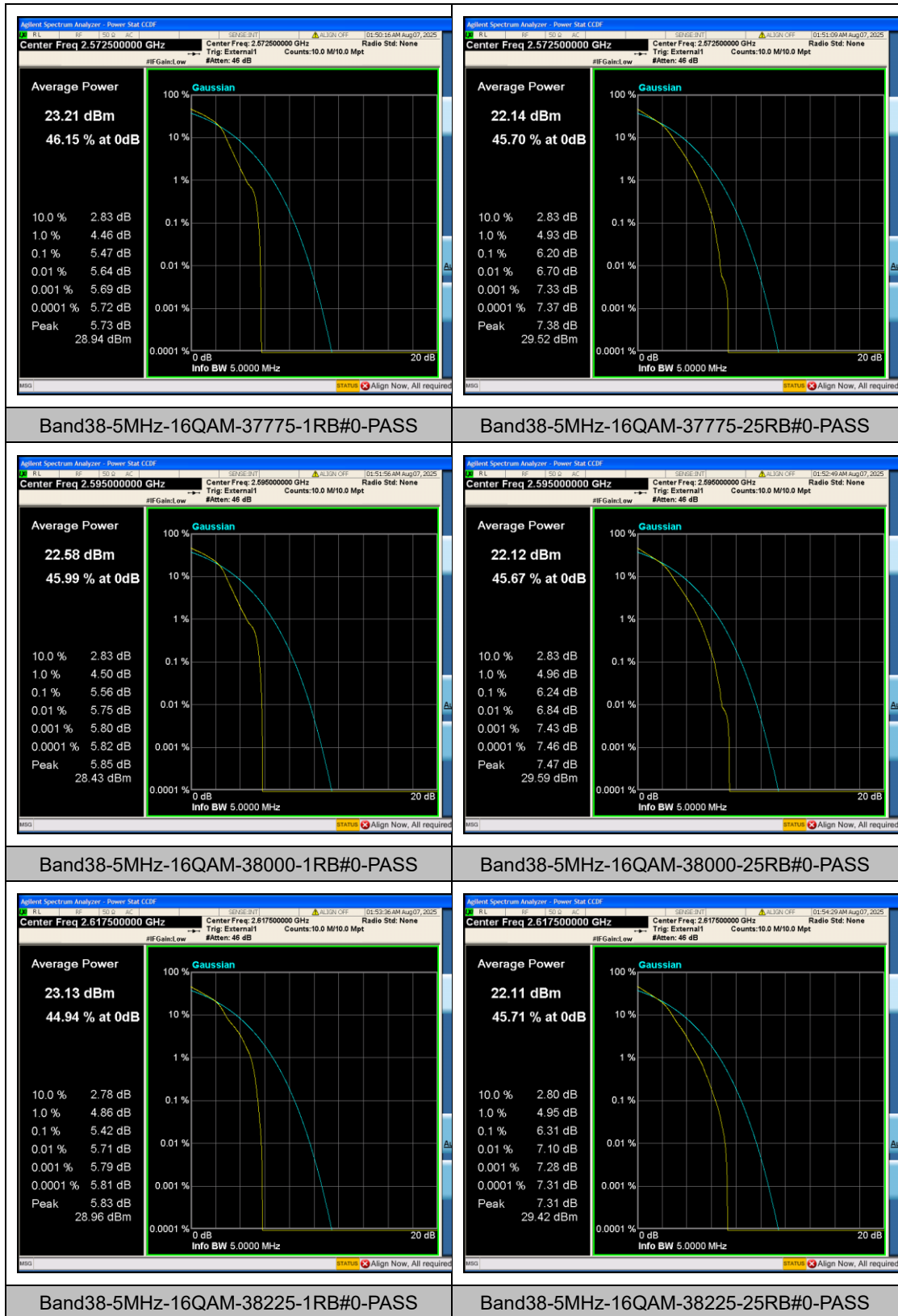
Appendix B: Peak-to-Average Ratio(CCDF)

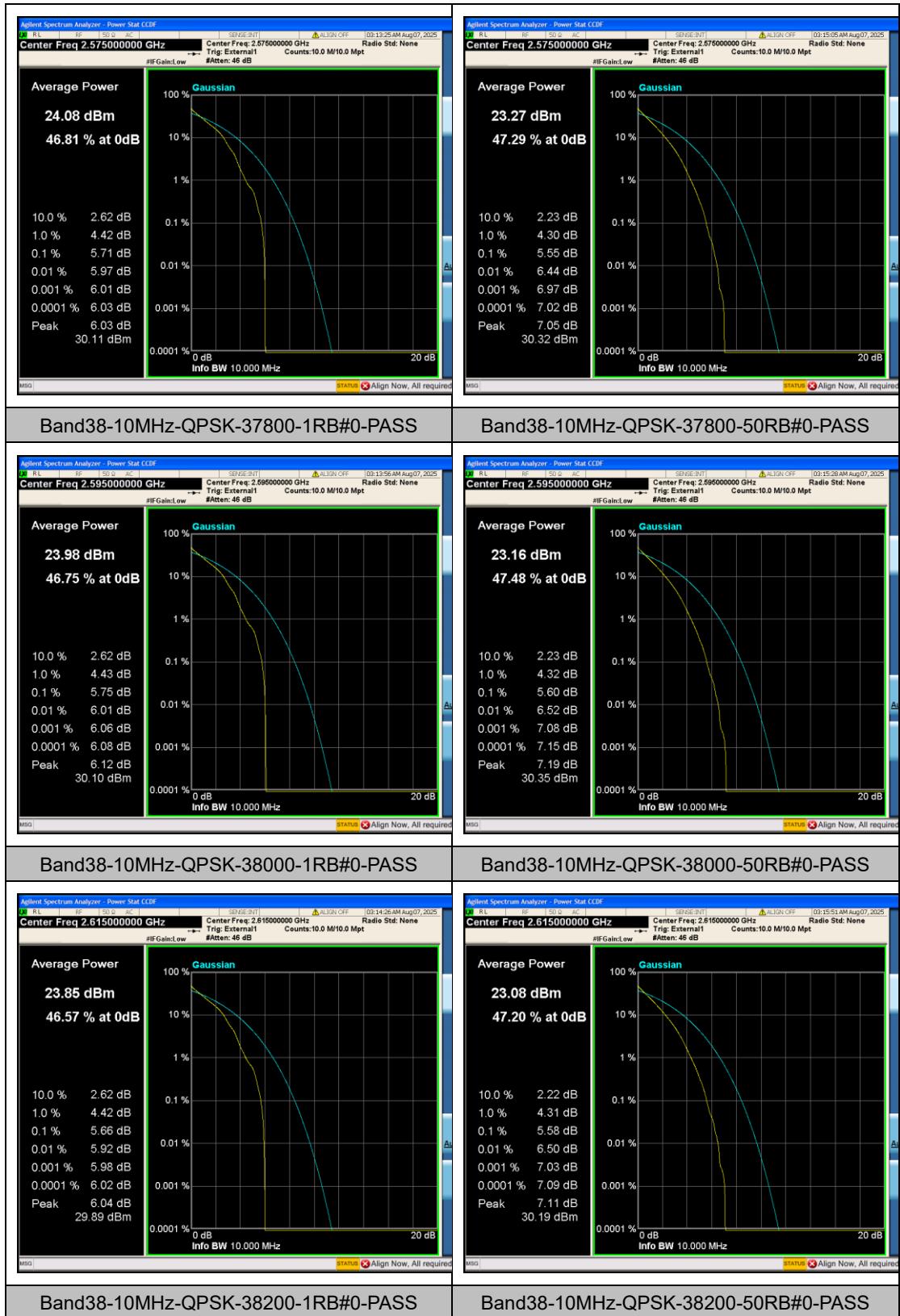
Test Result

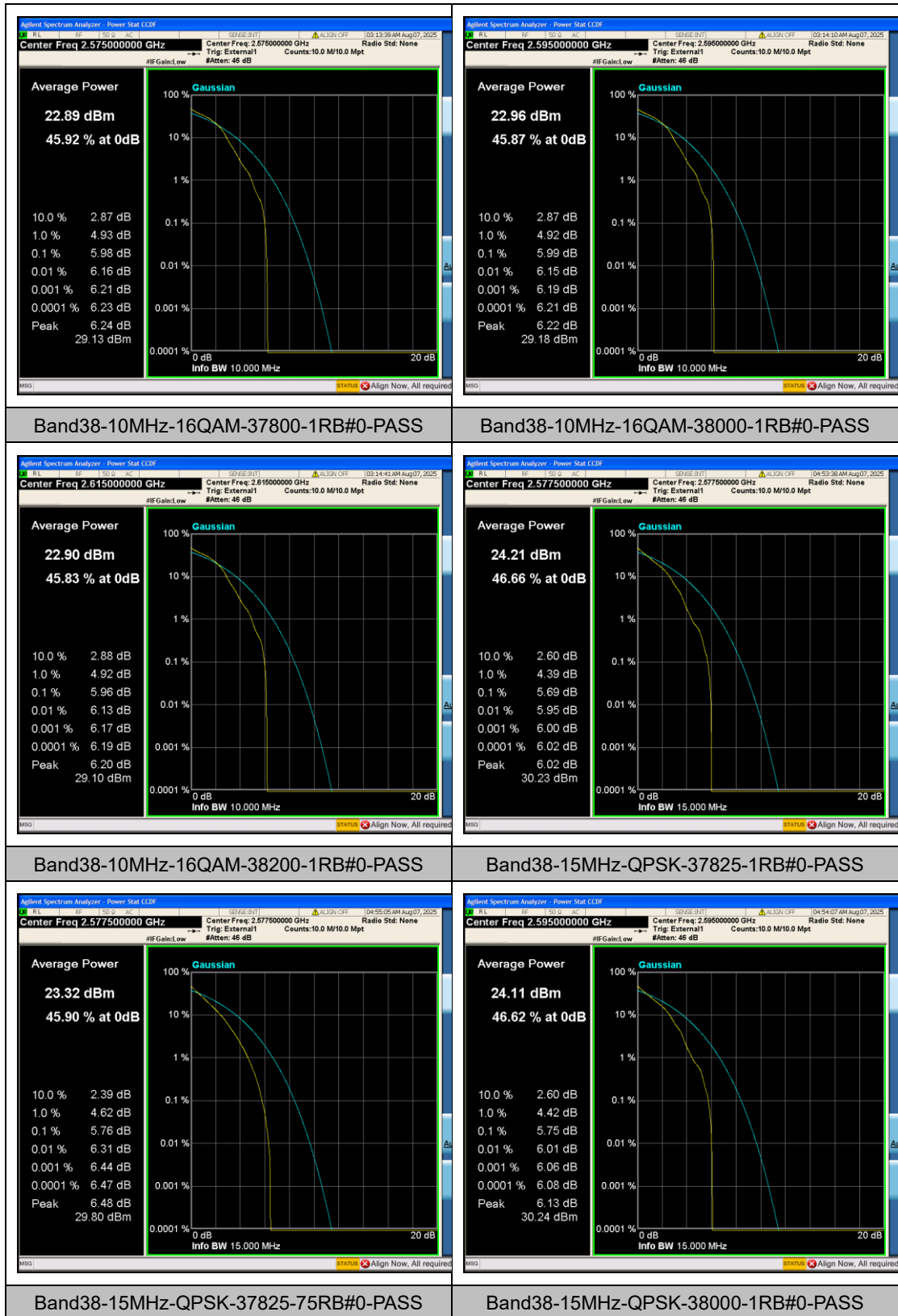
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	4.89	13	PASS
Band38	5MHz	QPSK	37775	25RB#0	5.66	13	PASS
Band38	5MHz	QPSK	38000	1RB#0	4.90	13	PASS
Band38	5MHz	QPSK	38000	25RB#0	5.72	13	PASS
Band38	5MHz	QPSK	38225	1RB#0	5.02	13	PASS
Band38	5MHz	QPSK	38225	25RB#0	5.63	13	PASS
Band38	5MHz	16QAM	37775	1RB#0	5.47	13	PASS
Band38	5MHz	16QAM	37775	25RB#0	6.20	13	PASS
Band38	5MHz	16QAM	38000	1RB#0	5.56	13	PASS
Band38	5MHz	16QAM	38000	25RB#0	6.24	13	PASS
Band38	5MHz	16QAM	38225	1RB#0	5.42	13	PASS
Band38	5MHz	16QAM	38225	25RB#0	6.31	13	PASS
Band38	10MHz	QPSK	37800	1RB#0	5.71	13	PASS
Band38	10MHz	QPSK	37800	50RB#0	5.55	13	PASS
Band38	10MHz	QPSK	38000	1RB#0	5.75	13	PASS
Band38	10MHz	QPSK	38000	50RB#0	5.60	13	PASS
Band38	10MHz	QPSK	38200	1RB#0	5.66	13	PASS
Band38	10MHz	QPSK	38200	50RB#0	5.58	13	PASS
Band38	10MHz	16QAM	37800	1RB#0	5.98	13	PASS
Band38	10MHz	16QAM	38000	1RB#0	5.99	13	PASS
Band38	10MHz	16QAM	38200	1RB#0	5.96	13	PASS
Band38	15MHz	QPSK	37825	1RB#0	5.69	13	PASS
Band38	15MHz	QPSK	37825	75RB#0	5.76	13	PASS
Band38	15MHz	QPSK	38000	1RB#0	5.75	13	PASS
Band38	15MHz	QPSK	38000	75RB#0	5.78	13	PASS
Band38	15MHz	QPSK	38175	1RB#0	5.67	13	PASS
Band38	15MHz	QPSK	38175	75RB#0	5.79	13	PASS
Band38	15MHz	16QAM	37825	1RB#0	5.96	13	PASS
Band38	15MHz	16QAM	38000	1RB#0	5.96	13	PASS
Band38	15MHz	16QAM	38175	1RB#0	6.04	13	PASS
Band38	20MHz	QPSK	37850	1RB#0	4.90	13	PASS
Band38	20MHz	QPSK	37850	100RB#0	5.32	13	PASS
Band38	20MHz	QPSK	38000	1RB#0	4.91	13	PASS
Band38	20MHz	QPSK	38000	100RB#0	5.37	13	PASS
Band38	20MHz	QPSK	38150	1RB#0	4.92	13	PASS
Band38	20MHz	QPSK	38150	100RB#0	5.35	13	PASS

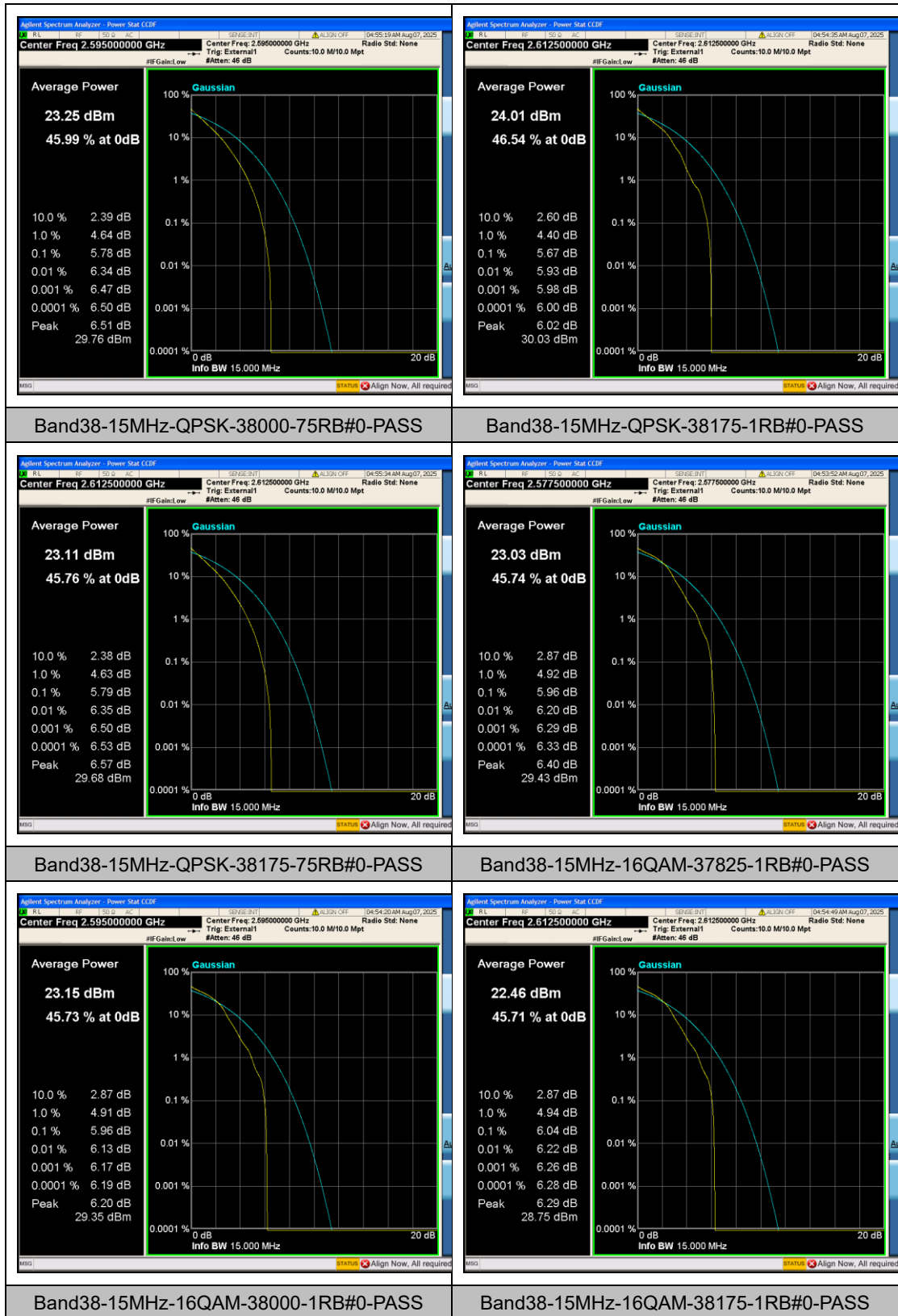
Test Graphs

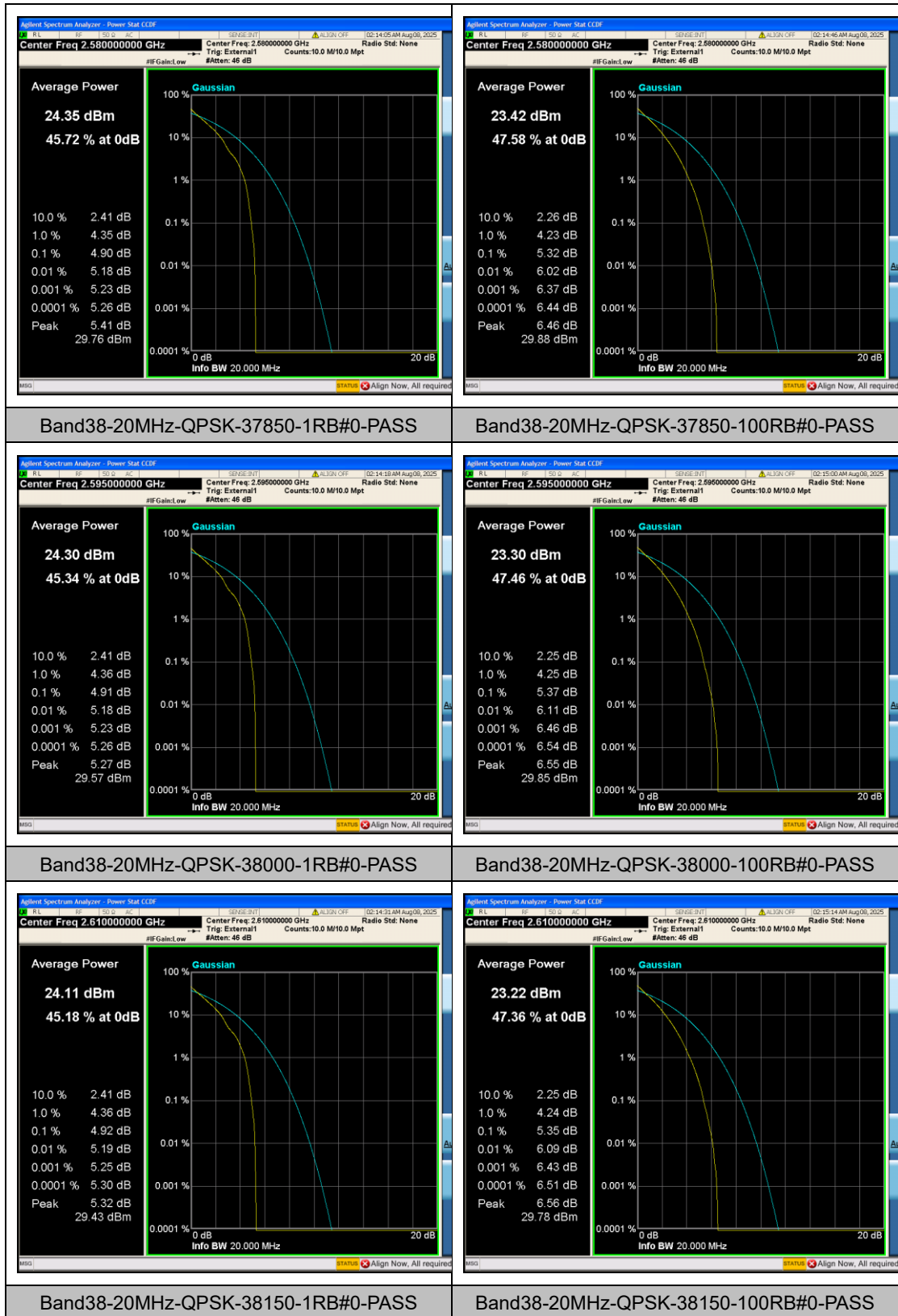










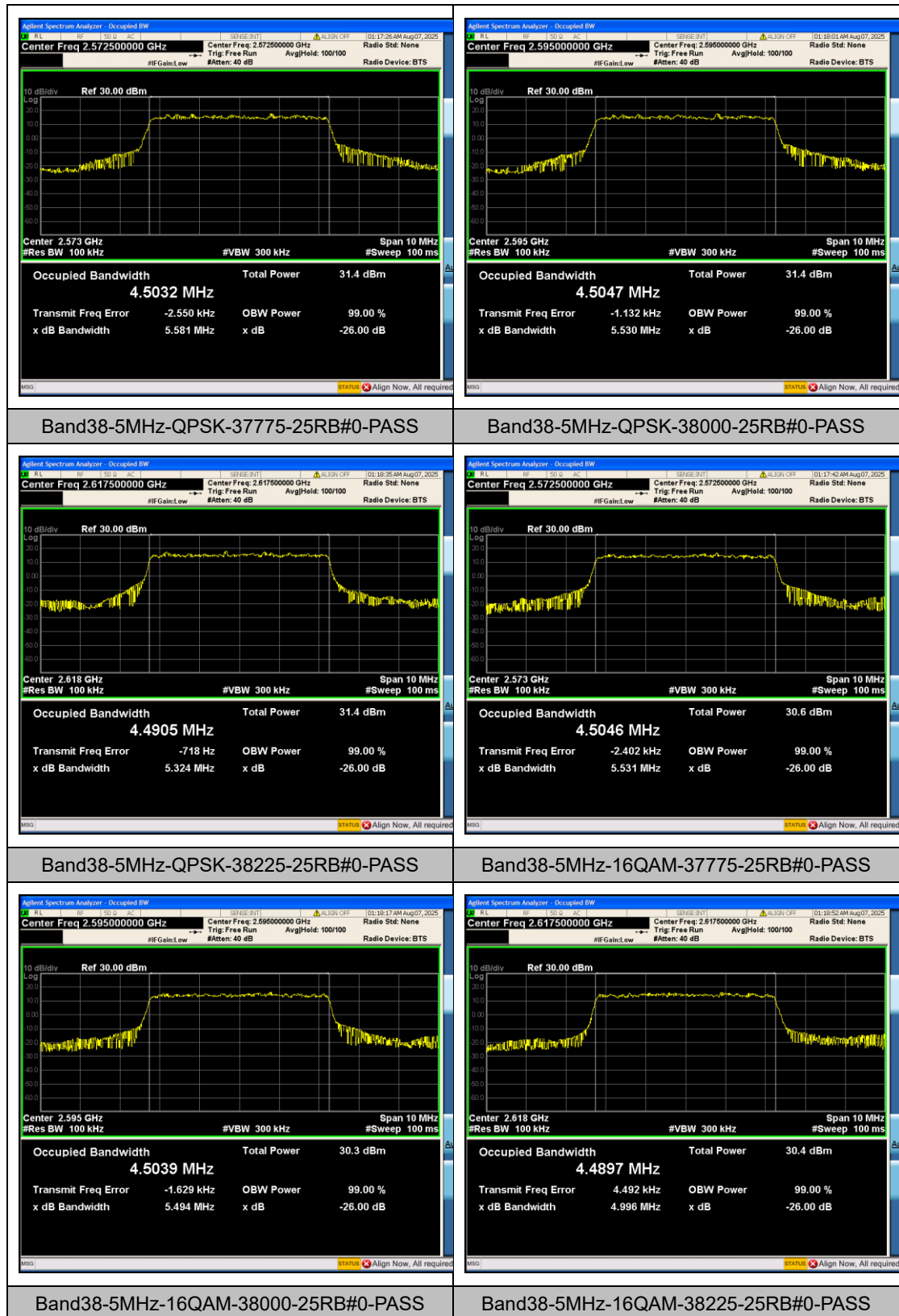


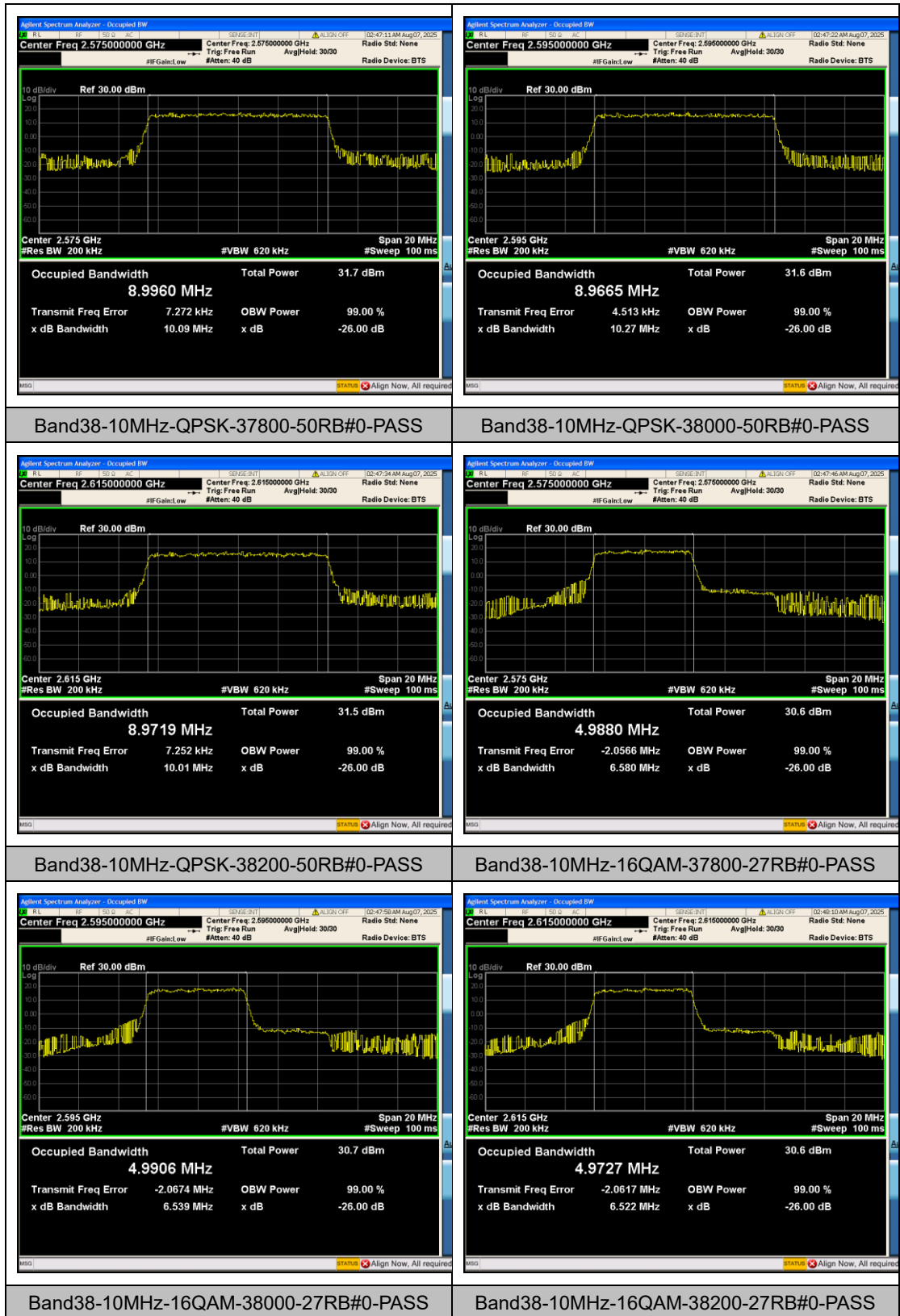
Appendix C: 26dB Bandwidth and Occupied Bandwidth

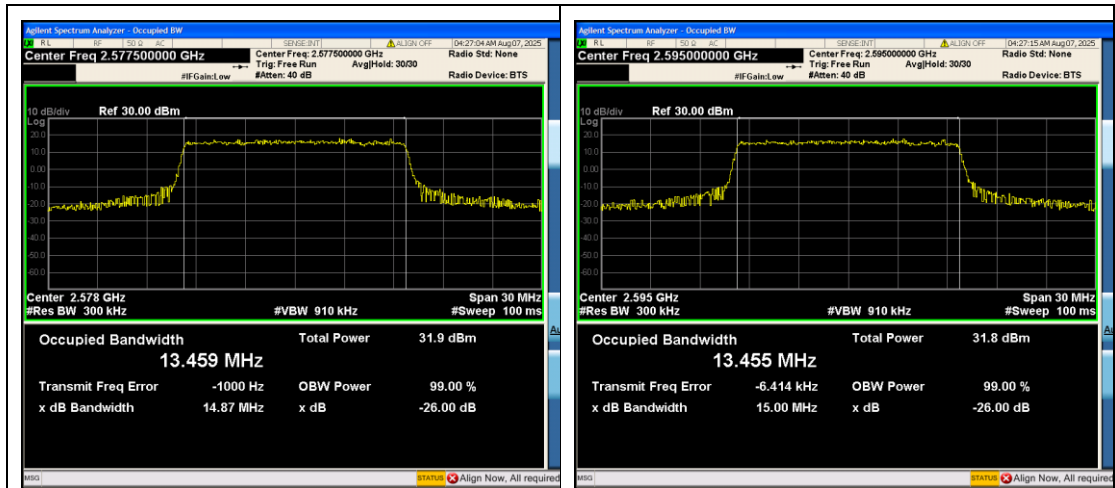
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band38	5MHz	QPSK	37775	25RB#0	4.5032	5.581	PASS
Band38	5MHz	QPSK	38000	25RB#0	4.5047	5.530	PASS
Band38	5MHz	QPSK	38225	25RB#0	4.4905	5.324	PASS
Band38	5MHz	16QAM	37775	25RB#0	4.5046	5.531	PASS
Band38	5MHz	16QAM	38000	25RB#0	4.5039	5.494	PASS
Band38	5MHz	16QAM	38225	25RB#0	4.4897	4.996	PASS
Band38	10MHz	QPSK	37800	50RB#0	8.9960	10.09	PASS
Band38	10MHz	QPSK	38000	50RB#0	8.9665	10.27	PASS
Band38	10MHz	QPSK	38200	50RB#0	8.9719	10.01	PASS
Band38	10MHz	16QAM	37800	27RB#0	4.9880	6.580	PASS
Band38	10MHz	16QAM	38000	27RB#0	4.9906	6.539	PASS
Band38	10MHz	16QAM	38200	27RB#0	4.9727	6.522	PASS
Band38	15MHz	QPSK	37825	75RB#0	13.459	14.87	PASS
Band38	15MHz	QPSK	38000	75RB#0	13.455	15.00	PASS
Band38	15MHz	QPSK	38175	75RB#0	13.469	15.11	PASS
Band38	15MHz	16QAM	37825	27RB#0	5.1211	6.391	PASS
Band38	15MHz	16QAM	38000	27RB#0	5.0914	6.383	PASS
Band38	15MHz	16QAM	38175	27RB#0	5.1225	6.277	PASS
Band38	20MHz	QPSK	37850	100RB#0	17.988	19.40	PASS
Band38	20MHz	QPSK	38000	100RB#0	17.981	20.18	PASS
Band38	20MHz	QPSK	38150	100RB#0	17.922	19.69	PASS
Band38	20MHz	16QAM	37850	27RB#0	5.3107	7.116	PASS
Band38	20MHz	16QAM	38000	27RB#0	5.3138	7.510	PASS
Band38	20MHz	16QAM	38150	27RB#0	5.3355	7.334	PASS

Test Graphs







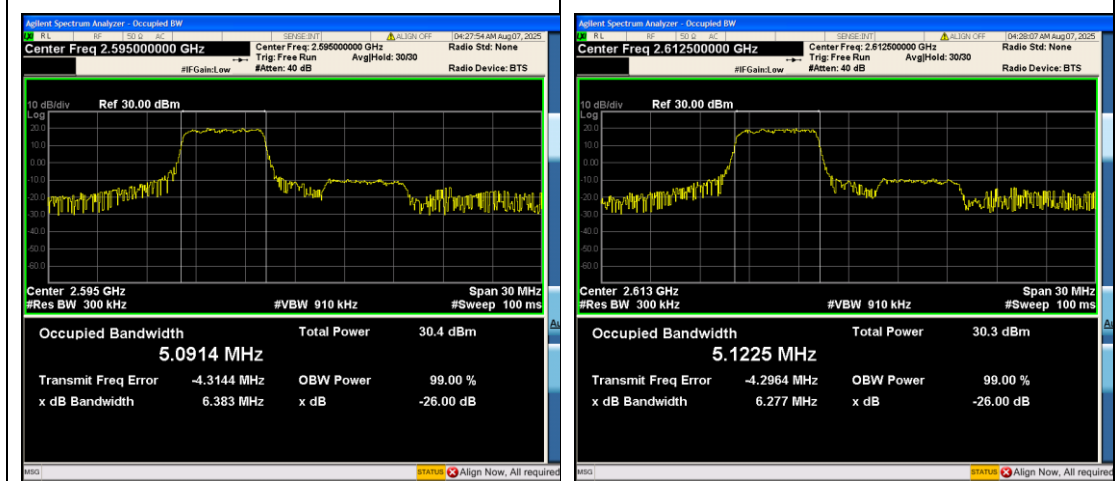
Band38-15MHz-QPSK-37825-75RB#0-PASS

Band38-15MHz-QPSK-38000-75RB#0-PASS



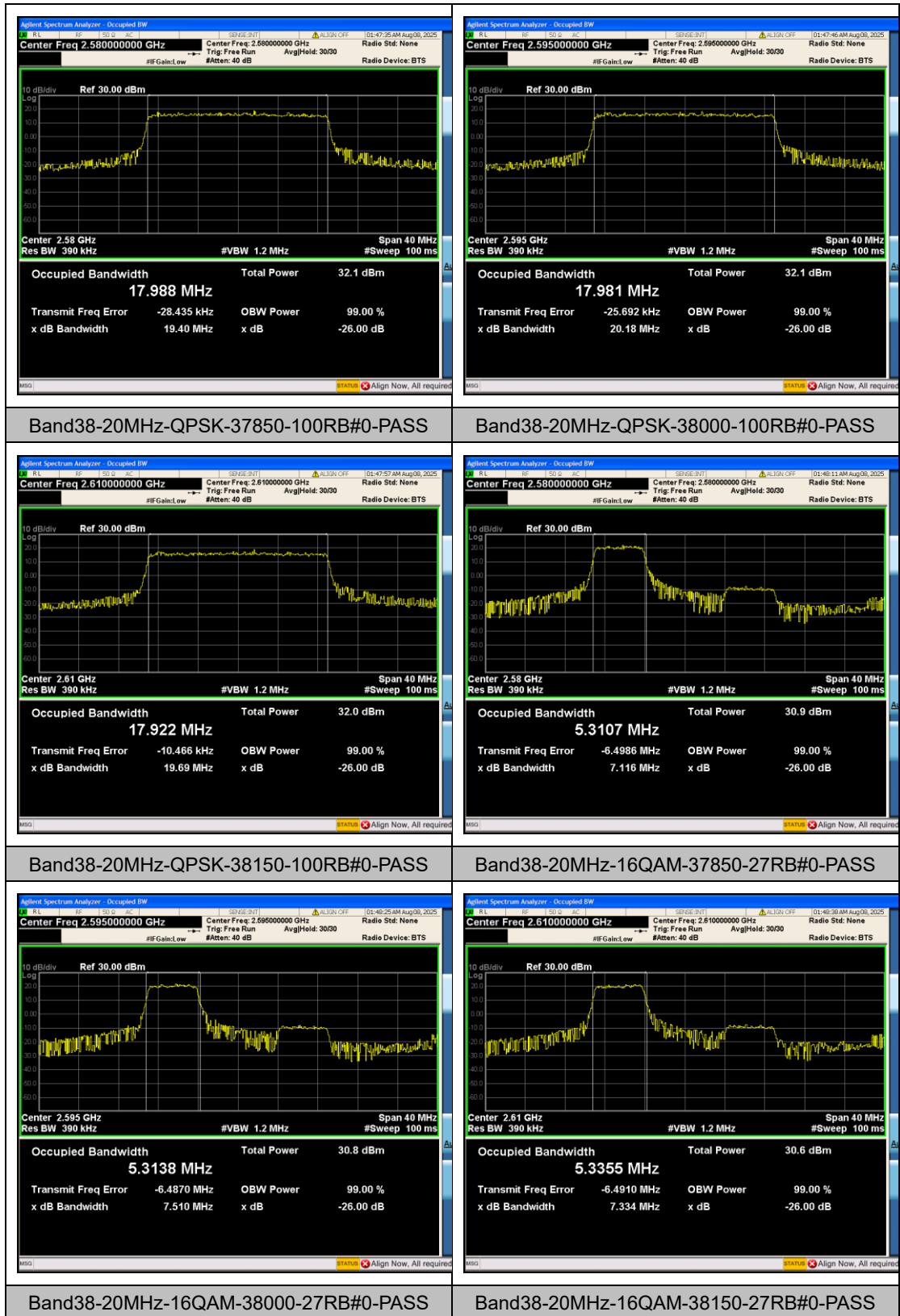
Band38-15MHz-QPSK-38175-75RB#0-PASS

Band38-15MHz-16QAM-37825-27RB#0-PASS



Band38-15MHz-16QAM-38000-27RB#0-PASS

Band38-15MHz-16QAM-38175-27RB#0-PASS



Appendix D: Band Edge

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	-25.88	PASS
Band38	5MHz	QPSK	37775	1RB#24	-42.37	PASS
Band38	5MHz	QPSK	37775	25RB#0	-36.25	PASS
Band38	5MHz	QPSK	38225	1RB#0	-24.88	PASS
Band38	5MHz	QPSK	38225	1RB#24	-25.06	PASS
Band38	5MHz	QPSK	38225	25RB#0	-33.63	PASS
Band38	5MHz	16QAM	37775	1RB#0	-26.46	PASS
Band38	5MHz	16QAM	37775	1RB#24	-42.39	PASS
Band38	5MHz	16QAM	37775	25RB#0	-36.55	PASS
Band38	5MHz	16QAM	38225	1RB#0	-42.01	PASS
Band38	5MHz	16QAM	38225	1RB#24	-26.40	PASS
Band38	5MHz	16QAM	38225	25RB#0	-34.88	PASS
Band38	10MHz	QPSK	37800	1RB#0	-42.38	PASS
Band38	10MHz	QPSK	37800	1RB#49	-27.88	PASS
Band38	10MHz	QPSK	37800	50RB#0	-37.67	PASS
Band38	10MHz	QPSK	38200	1RB#0	-29.00	PASS
Band38	10MHz	QPSK	38200	1RB#49	-41.93	PASS
Band38	10MHz	QPSK	38200	50RB#0	-35.42	PASS
Band38	10MHz	16QAM	37800	1RB#0	-42.43	PASS
Band38	10MHz	16QAM	37800	1RB#49	-42.40	PASS
Band38	10MHz	16QAM	38200	1RB#0	-41.85	PASS
Band38	10MHz	16QAM	38200	1RB#49	-41.87	PASS
Band38	15MHz	QPSK	37825	1RB#0	-42.40	PASS
Band38	15MHz	QPSK	37825	1RB#74	-28.23	PASS
Band38	15MHz	QPSK	37825	75RB#0	-37.57	PASS
Band38	15MHz	QPSK	38175	1RB#0	-28.46	PASS
Band38	15MHz	QPSK	38175	1RB#74	-41.87	PASS
Band38	15MHz	QPSK	38175	75RB#0	-35.36	PASS
Band38	15MHz	16QAM	37825	1RB#0	-42.50	PASS
Band38	15MHz	16QAM	37825	1RB#74	-42.43	PASS
Band38	15MHz	16QAM	38175	1RB#0	-41.85	PASS
Band38	15MHz	16QAM	38175	1RB#74	-41.85	PASS
Band38	20MHz	QPSK	37850	1RB#0	-42.67	PASS
Band38	20MHz	QPSK	37850	1RB#99	-30.42	PASS
Band38	20MHz	QPSK	37850	100RB#0	-39.06	PASS
Band38	20MHz	QPSK	38150	1RB#0	-42.02	PASS
Band38	20MHz	QPSK	38150	1RB#99	-42.00	PASS