

Appendix for LTE Band 38

Product Name: TITAN 5400

Model No: G5G-X62O

Appendix A: Average Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	20.58	PASS
Band38	5MHz	QPSK	37775	1RB#12	20.62	PASS
Band38	5MHz	QPSK	37775	1RB#24	20.56	PASS
Band38	5MHz	QPSK	37775	12RB#0	19.64	PASS
Band38	5MHz	QPSK	37775	12RB#6	19.66	PASS
Band38	5MHz	QPSK	37775	12RB#13	19.60	PASS
Band38	5MHz	QPSK	37775	25RB#0	19.63	PASS
Band38	5MHz	16QAM	37775	1RB#0	19.47	PASS
Band38	5MHz	16QAM	37775	1RB#12	19.61	PASS
Band38	5MHz	16QAM	37775	1RB#24	19.43	PASS
Band38	5MHz	16QAM	37775	12RB#0	19.72	PASS
Band38	5MHz	16QAM	37775	12RB#6	19.61	PASS
Band38	5MHz	16QAM	37775	12RB#13	19.51	PASS
Band38	5MHz	16QAM	37775	25RB#0	19.61	PASS
Band38	5MHz	QPSK	38000	1RB#0	20.08	PASS
Band38	5MHz	QPSK	38000	1RB#12	20.27	PASS
Band38	5MHz	QPSK	38000	1RB#24	20.23	PASS
Band38	5MHz	QPSK	38000	12RB#0	19.25	PASS
Band38	5MHz	QPSK	38000	12RB#6	19.33	PASS
Band38	5MHz	QPSK	38000	12RB#13	19.26	PASS
Band38	5MHz	QPSK	38000	25RB#0	19.30	PASS
Band38	5MHz	16QAM	38000	1RB#0	19.17	PASS
Band38	5MHz	16QAM	38000	1RB#12	19.35	PASS
Band38	5MHz	16QAM	38000	1RB#24	19.03	PASS
Band38	5MHz	16QAM	38000	12RB#0	19.18	PASS
Band38	5MHz	16QAM	38000	12RB#6	19.28	PASS
Band38	5MHz	16QAM	38000	12RB#13	19.35	PASS
Band38	5MHz	16QAM	38000	25RB#0	19.30	PASS
Band38	5MHz	QPSK	38225	1RB#0	20.65	PASS
Band38	5MHz	QPSK	38225	1RB#12	20.80	PASS
Band38	5MHz	QPSK	38225	1RB#24	20.73	PASS
Band38	5MHz	QPSK	38225	12RB#0	19.64	PASS
Band38	5MHz	QPSK	38225	12RB#6	19.72	PASS
Band38	5MHz	QPSK	38225	12RB#13	19.75	PASS
Band38	5MHz	QPSK	38225	25RB#0	19.70	PASS

Band38	5MHz	16QAM	38225	1RB#0	19.60	PASS
Band38	5MHz	16QAM	38225	1RB#12	19.79	PASS
Band38	5MHz	16QAM	38225	1RB#24	19.73	PASS
Band38	5MHz	16QAM	38225	12RB#0	19.61	PASS
Band38	5MHz	16QAM	38225	12RB#6	19.67	PASS
Band38	5MHz	16QAM	38225	12RB#13	19.79	PASS
Band38	5MHz	16QAM	38225	25RB#0	19.67	PASS
Band38	10MHz	QPSK	37800	1RB#0	20.55	PASS
Band38	10MHz	QPSK	37800	1RB#24	20.49	PASS
Band38	10MHz	QPSK	37800	1RB#49	20.37	PASS
Band38	10MHz	QPSK	37800	25RB#0	19.54	PASS
Band38	10MHz	QPSK	37800	25RB#12	19.58	PASS
Band38	10MHz	QPSK	37800	25RB#25	19.42	PASS
Band38	10MHz	QPSK	37800	50RB#0	19.54	PASS
Band38	10MHz	16QAM	37800	1RB#0	19.43	PASS
Band38	10MHz	16QAM	37800	1RB#24	19.36	PASS
Band38	10MHz	16QAM	37800	1RB#49	19.27	PASS
Band38	10MHz	16QAM	37800	25RB#0	19.50	PASS
Band38	10MHz	16QAM	37800	25RB#12	19.55	PASS
Band38	10MHz	16QAM	37800	25RB#25	19.44	PASS
Band38	10MHz	16QAM	37800	50RB#0	19.51	PASS
Band38	10MHz	QPSK	38000	1RB#0	20.07	PASS
Band38	10MHz	QPSK	38000	1RB#24	20.22	PASS
Band38	10MHz	QPSK	38000	1RB#49	20.23	PASS
Band38	10MHz	QPSK	38000	25RB#0	19.18	PASS
Band38	10MHz	QPSK	38000	25RB#12	19.16	PASS
Band38	10MHz	QPSK	38000	25RB#25	19.22	PASS
Band38	10MHz	QPSK	38000	50RB#0	19.23	PASS
Band38	10MHz	16QAM	38000	1RB#0	19.15	PASS
Band38	10MHz	16QAM	38000	1RB#24	19.01	PASS
Band38	10MHz	16QAM	38000	1RB#49	19.21	PASS
Band38	10MHz	16QAM	38000	25RB#0	19.16	PASS
Band38	10MHz	16QAM	38000	25RB#12	19.16	PASS
Band38	10MHz	16QAM	38000	25RB#25	19.22	PASS
Band38	10MHz	16QAM	38000	50RB#0	19.23	PASS
Band38	10MHz	QPSK	38200	1RB#0	20.59	PASS
Band38	10MHz	QPSK	38200	1RB#24	20.67	PASS
Band38	10MHz	QPSK	38200	1RB#49	20.69	PASS
Band38	10MHz	QPSK	38200	25RB#0	19.55	PASS
Band38	10MHz	QPSK	38200	25RB#12	19.57	PASS
Band38	10MHz	QPSK	38200	25RB#25	19.67	PASS
Band38	10MHz	QPSK	38200	50RB#0	19.58	PASS

Band38	10MHz	16QAM	38200	1RB#0	19.62	PASS
Band38	10MHz	16QAM	38200	1RB#24	19.91	PASS
Band38	10MHz	16QAM	38200	1RB#49	19.78	PASS
Band38	10MHz	16QAM	38200	25RB#0	19.61	PASS
Band38	10MHz	16QAM	38200	25RB#12	19.57	PASS
Band38	10MHz	16QAM	38200	25RB#25	19.66	PASS
Band38	10MHz	16QAM	38200	50RB#0	19.57	PASS
Band38	15MHz	QPSK	37825	1RB#0	20.33	PASS
Band38	15MHz	QPSK	37825	1RB#38	20.22	PASS
Band38	15MHz	QPSK	37825	1RB#74	20.05	PASS
Band38	15MHz	QPSK	37825	38RB#0	19.41	PASS
Band38	15MHz	QPSK	37825	38RB#18	19.40	PASS
Band38	15MHz	QPSK	37825	38RB#37	19.43	PASS
Band38	15MHz	QPSK	37825	75RB#0	19.41	PASS
Band38	15MHz	16QAM	37825	1RB#0	19.45	PASS
Band38	15MHz	16QAM	37825	1RB#38	19.31	PASS
Band38	15MHz	16QAM	37825	1RB#74	19.09	PASS
Band38	15MHz	16QAM	37825	38RB#0	19.41	PASS
Band38	15MHz	16QAM	37825	38RB#18	19.41	PASS
Band38	15MHz	16QAM	37825	38RB#37	19.42	PASS
Band38	15MHz	16QAM	37825	75RB#0	18.44	PASS
Band38	15MHz	QPSK	38000	1RB#0	20.05	PASS
Band38	15MHz	QPSK	38000	1RB#38	19.99	PASS
Band38	15MHz	QPSK	38000	1RB#74	20.08	PASS
Band38	15MHz	QPSK	38000	38RB#0	19.15	PASS
Band38	15MHz	QPSK	38000	38RB#18	19.13	PASS
Band38	15MHz	QPSK	38000	38RB#37	19.14	PASS
Band38	15MHz	QPSK	38000	75RB#0	19.10	PASS
Band38	15MHz	16QAM	38000	1RB#0	19.13	PASS
Band38	15MHz	16QAM	38000	1RB#38	19.16	PASS
Band38	15MHz	16QAM	38000	1RB#74	19.20	PASS
Band38	15MHz	16QAM	38000	38RB#0	19.18	PASS
Band38	15MHz	16QAM	38000	38RB#18	19.17	PASS
Band38	15MHz	16QAM	38000	38RB#37	19.16	PASS
Band38	15MHz	16QAM	38000	75RB#0	18.08	PASS
Band38	15MHz	QPSK	38175	1RB#0	20.23	PASS
Band38	15MHz	QPSK	38175	1RB#38	20.37	PASS
Band38	15MHz	QPSK	38175	1RB#74	20.46	PASS
Band38	15MHz	QPSK	38175	38RB#0	19.43	PASS
Band38	15MHz	QPSK	38175	38RB#18	19.44	PASS
Band38	15MHz	QPSK	38175	38RB#37	19.41	PASS
Band38	15MHz	QPSK	38175	75RB#0	19.42	PASS

Band38	15MHz	16QAM	38175	1RB#0	19.28	PASS
Band38	15MHz	16QAM	38175	1RB#38	19.39	PASS
Band38	15MHz	16QAM	38175	1RB#74	19.55	PASS
Band38	15MHz	16QAM	38175	38RB#0	19.37	PASS
Band38	15MHz	16QAM	38175	38RB#18	19.43	PASS
Band38	15MHz	16QAM	38175	38RB#37	19.44	PASS
Band38	15MHz	16QAM	38175	75RB#0	18.37	PASS
Band38	20MHz	QPSK	37850	1RB#0	20.38	PASS
Band38	20MHz	QPSK	37850	1RB#49	20.23	PASS
Band38	20MHz	QPSK	37850	1RB#99	20.03	PASS
Band38	20MHz	QPSK	37850	50RB#0	19.36	PASS
Band38	20MHz	QPSK	37850	50RB#25	19.34	PASS
Band38	20MHz	QPSK	37850	50RB#50	19.22	PASS
Band38	20MHz	QPSK	37850	100RB#0	19.36	PASS
Band38	20MHz	16QAM	37850	1RB#0	19.43	PASS
Band38	20MHz	16QAM	37850	1RB#49	19.16	PASS
Band38	20MHz	16QAM	37850	1RB#99	19.93	PASS
Band38	20MHz	16QAM	37850	50RB#0	19.33	PASS
Band38	20MHz	16QAM	37850	50RB#25	19.37	PASS
Band38	20MHz	16QAM	37850	50RB#50	19.24	PASS
Band38	20MHz	16QAM	37850	100RB#0	19.35	PASS
Band38	20MHz	QPSK	38000	1RB#0	20.04	PASS
Band38	20MHz	QPSK	38000	1RB#49	19.97	PASS
Band38	20MHz	QPSK	38000	1RB#99	20.14	PASS
Band38	20MHz	QPSK	38000	50RB#0	19.11	PASS
Band38	20MHz	QPSK	38000	50RB#25	19.07	PASS
Band38	20MHz	QPSK	38000	50RB#50	19.17	PASS
Band38	20MHz	QPSK	38000	100RB#0	19.11	PASS
Band38	20MHz	16QAM	38000	1RB#0	19.99	PASS
Band38	20MHz	16QAM	38000	1RB#49	19.86	PASS
Band38	20MHz	16QAM	38000	1RB#99	19.11	PASS
Band38	20MHz	16QAM	38000	50RB#0	19.08	PASS
Band38	20MHz	16QAM	38000	50RB#25	19.09	PASS
Band38	20MHz	16QAM	38000	50RB#50	19.20	PASS
Band38	20MHz	16QAM	38000	100RB#0	19.13	PASS
Band38	20MHz	QPSK	38150	1RB#0	20.23	PASS
Band38	20MHz	QPSK	38150	1RB#49	20.30	PASS
Band38	20MHz	QPSK	38150	1RB#99	20.46	PASS
Band38	20MHz	QPSK	38150	50RB#0	19.39	PASS
Band38	20MHz	QPSK	38150	50RB#25	19.34	PASS
Band38	20MHz	QPSK	38150	50RB#50	19.45	PASS
Band38	20MHz	QPSK	38150	100RB#0	19.43	PASS

Band38	20MHz	16QAM	38150	1RB#0	19.11	PASS
Band38	20MHz	16QAM	38150	1RB#49	19.19	PASS
Band38	20MHz	16QAM	38150	1RB#99	19.33	PASS
Band38	20MHz	16QAM	38150	50RB#0	19.33	PASS
Band38	20MHz	16QAM	38150	50RB#25	19.31	PASS
Band38	20MHz	16QAM	38150	50RB#50	19.52	PASS
Band38	20MHz	16QAM	38150	100RB#0	19.44	PASS

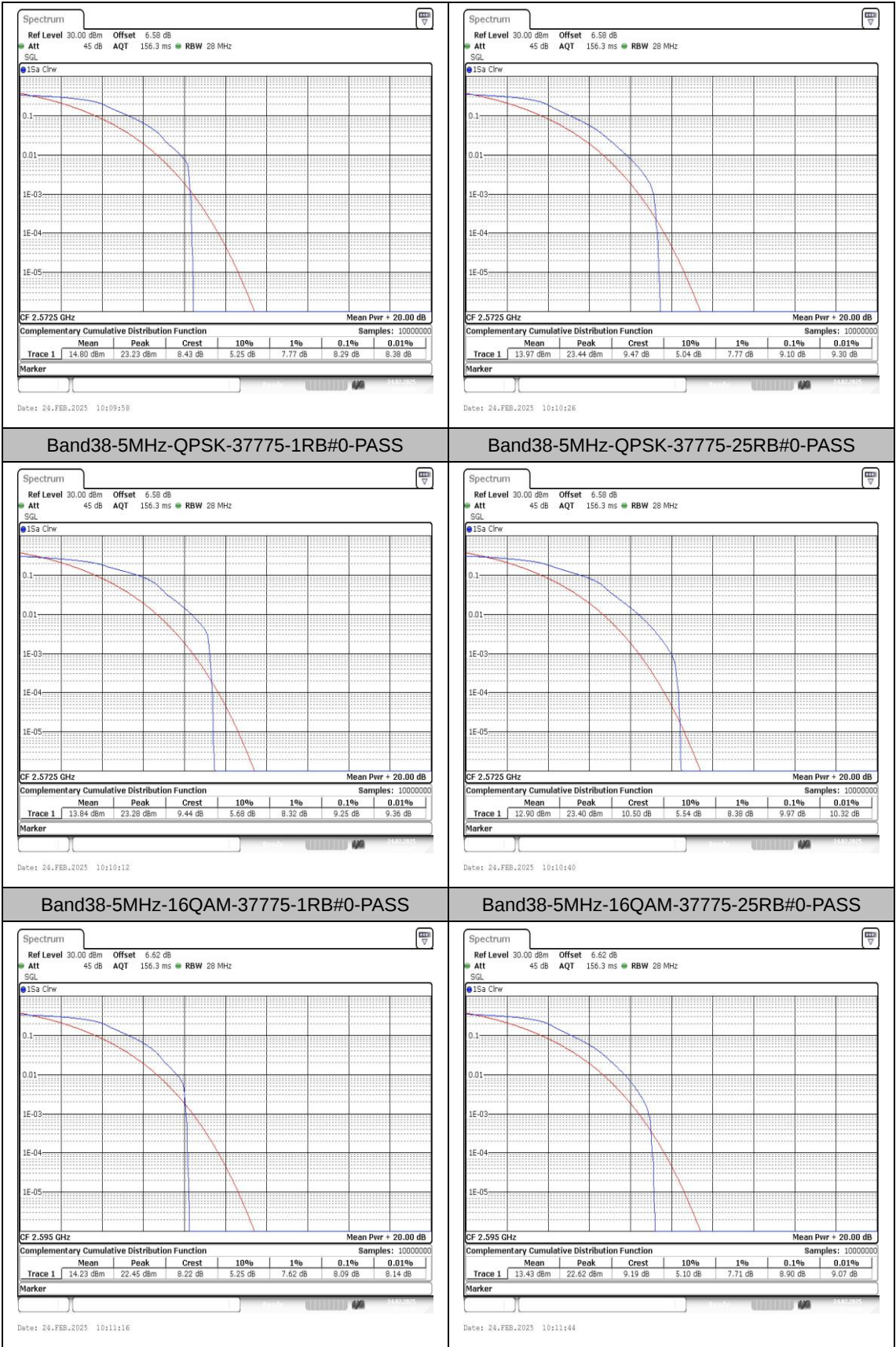
Appendix B: Peak-to-Average Ratio(CCDF)

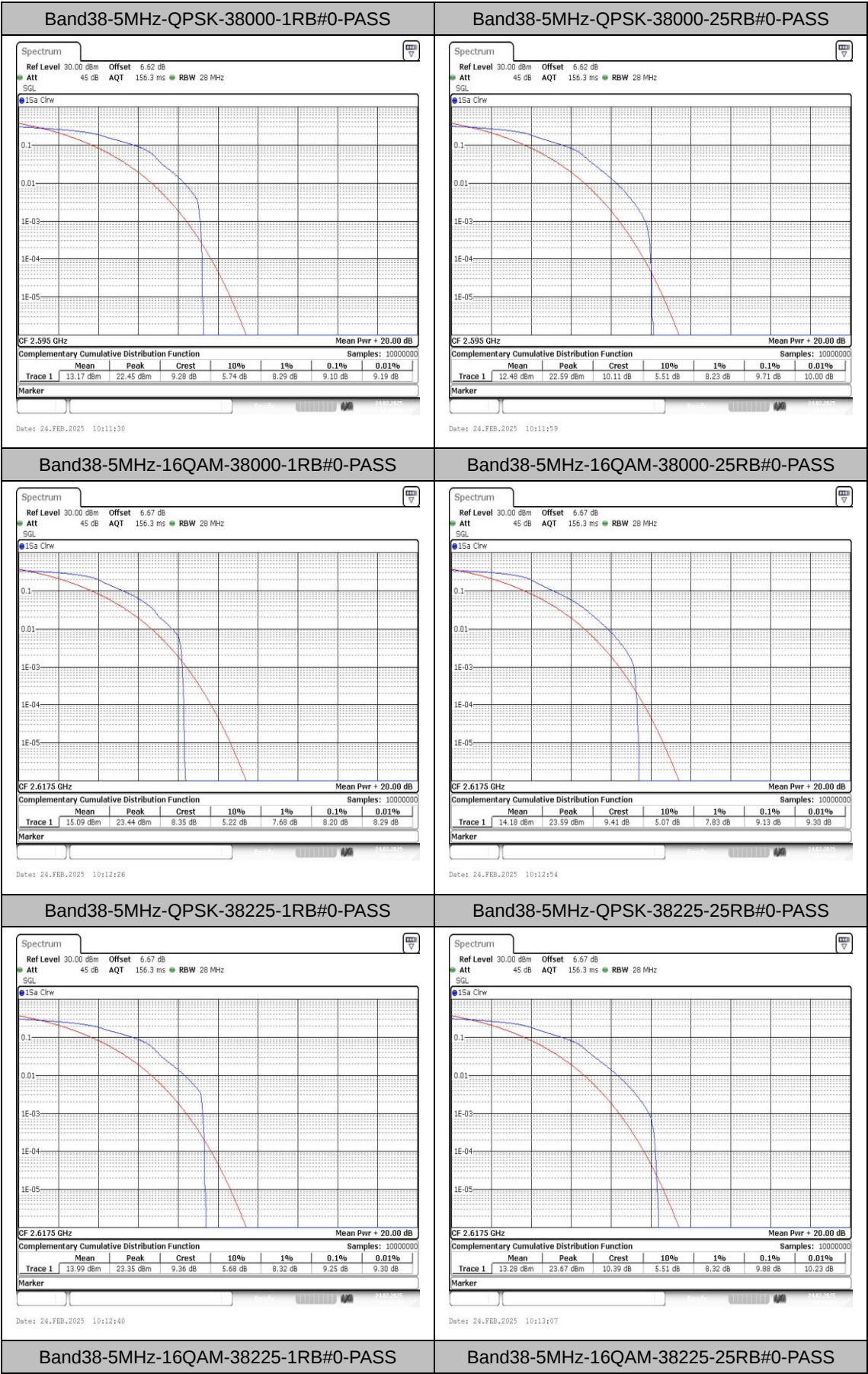
Test Result

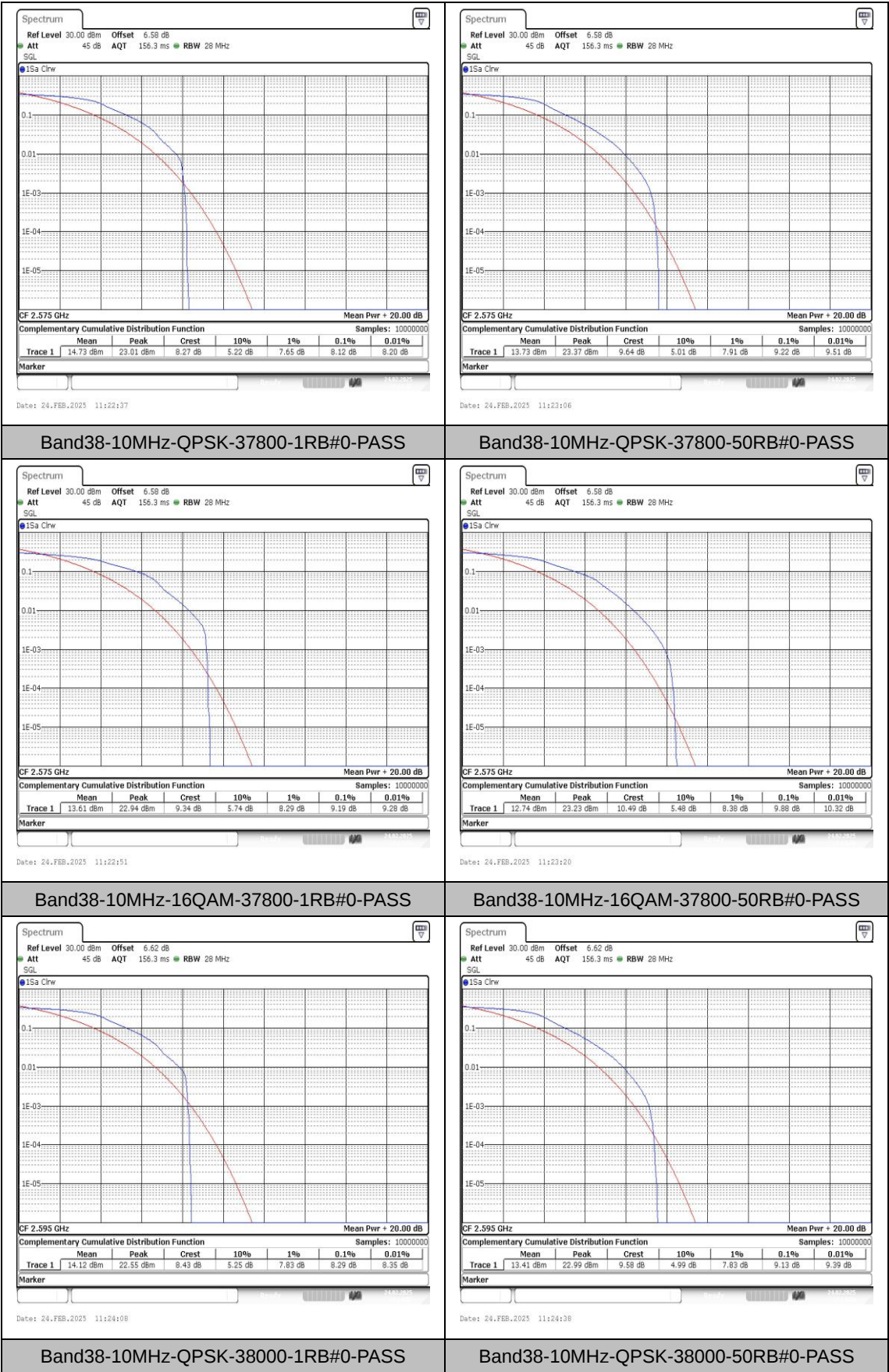
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	8.29	13	PASS
Band38	5MHz	QPSK	37775	25RB#0	9.10	13	PASS
Band38	5MHz	16QAM	37775	1RB#0	9.25	13	PASS
Band38	5MHz	16QAM	37775	25RB#0	9.97	13	PASS
Band38	5MHz	QPSK	38000	1RB#0	8.09	13	PASS
Band38	5MHz	QPSK	38000	25RB#0	8.90	13	PASS
Band38	5MHz	16QAM	38000	1RB#0	9.10	13	PASS
Band38	5MHz	16QAM	38000	25RB#0	9.71	13	PASS
Band38	5MHz	QPSK	38225	1RB#0	8.20	13	PASS
Band38	5MHz	QPSK	38225	25RB#0	9.13	13	PASS
Band38	5MHz	16QAM	38225	1RB#0	9.25	13	PASS
Band38	5MHz	16QAM	38225	25RB#0	9.88	13	PASS
Band38	10MHz	QPSK	37800	1RB#0	8.12	13	PASS
Band38	10MHz	QPSK	37800	50RB#0	9.22	13	PASS
Band38	10MHz	16QAM	37800	1RB#0	9.19	13	PASS
Band38	10MHz	16QAM	37800	50RB#0	9.88	13	PASS
Band38	10MHz	QPSK	38000	1RB#0	8.29	13	PASS
Band38	10MHz	QPSK	38000	50RB#0	9.13	13	PASS
Band38	10MHz	16QAM	38000	1RB#0	9.25	13	PASS
Band38	10MHz	16QAM	38000	50RB#0	9.86	13	PASS
Band38	10MHz	QPSK	38200	1RB#0	8.29	13	PASS
Band38	10MHz	QPSK	38200	50RB#0	9.04	13	PASS
Band38	10MHz	16QAM	38200	1RB#0	9.22	13	PASS
Band38	10MHz	16QAM	38200	50RB#0	9.91	13	PASS
Band38	15MHz	QPSK	37825	1RB#0	8.35	13	PASS
Band38	15MHz	QPSK	37825	75RB#0	9.36	13	PASS
Band38	15MHz	16QAM	37825	1RB#0	9.33	13	PASS
Band38	15MHz	16QAM	37825	75RB#0	10.00	13	PASS
Band38	15MHz	QPSK	38000	1RB#0	8.41	13	PASS
Band38	15MHz	QPSK	38000	75RB#0	9.30	13	PASS
Band38	15MHz	16QAM	38000	1RB#0	9.16	13	PASS
Band38	15MHz	16QAM	38000	75RB#0	10.03	13	PASS
Band38	15MHz	QPSK	38175	1RB#0	8.20	13	PASS
Band38	15MHz	QPSK	38175	75RB#0	9.25	13	PASS
Band38	15MHz	16QAM	38175	1RB#0	9.28	13	PASS

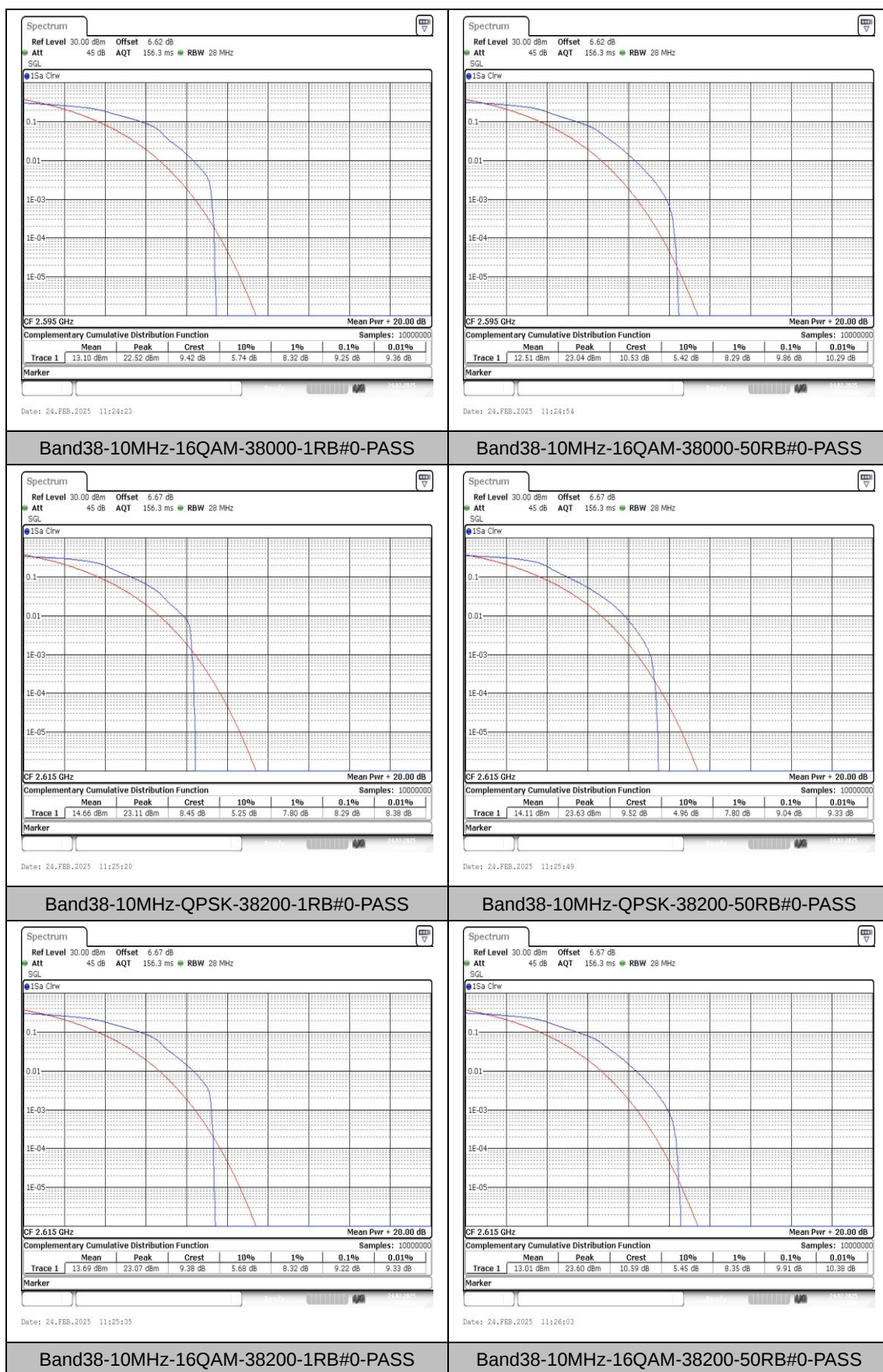
Band38	15MHz	16QAM	38175	75RB#0	10.03	13	PASS
Band38	20MHz	QPSK	37850	1RB#0	8.38	13	PASS
Band38	20MHz	QPSK	37850	100RB#0	9.04	13	PASS
Band38	20MHz	16QAM	37850	1RB#0	9.36	13	PASS
Band38	20MHz	16QAM	37850	100RB#0	9.94	13	PASS
Band38	20MHz	QPSK	38000	1RB#0	8.46	13	PASS
Band38	20MHz	QPSK	38000	100RB#0	8.46	13	PASS
Band38	20MHz	16QAM	38000	1RB#0	8.46	13	PASS
Band38	20MHz	16QAM	38000	100RB#0	9.86	13	PASS
Band38	20MHz	QPSK	38150	1RB#0	8.03	13	PASS
Band38	20MHz	QPSK	38150	100RB#0	8.90	13	PASS
Band38	20MHz	16QAM	38150	1RB#0	9.01	13	PASS
Band38	20MHz	16QAM	38150	100RB#0	9.65	13	PASS

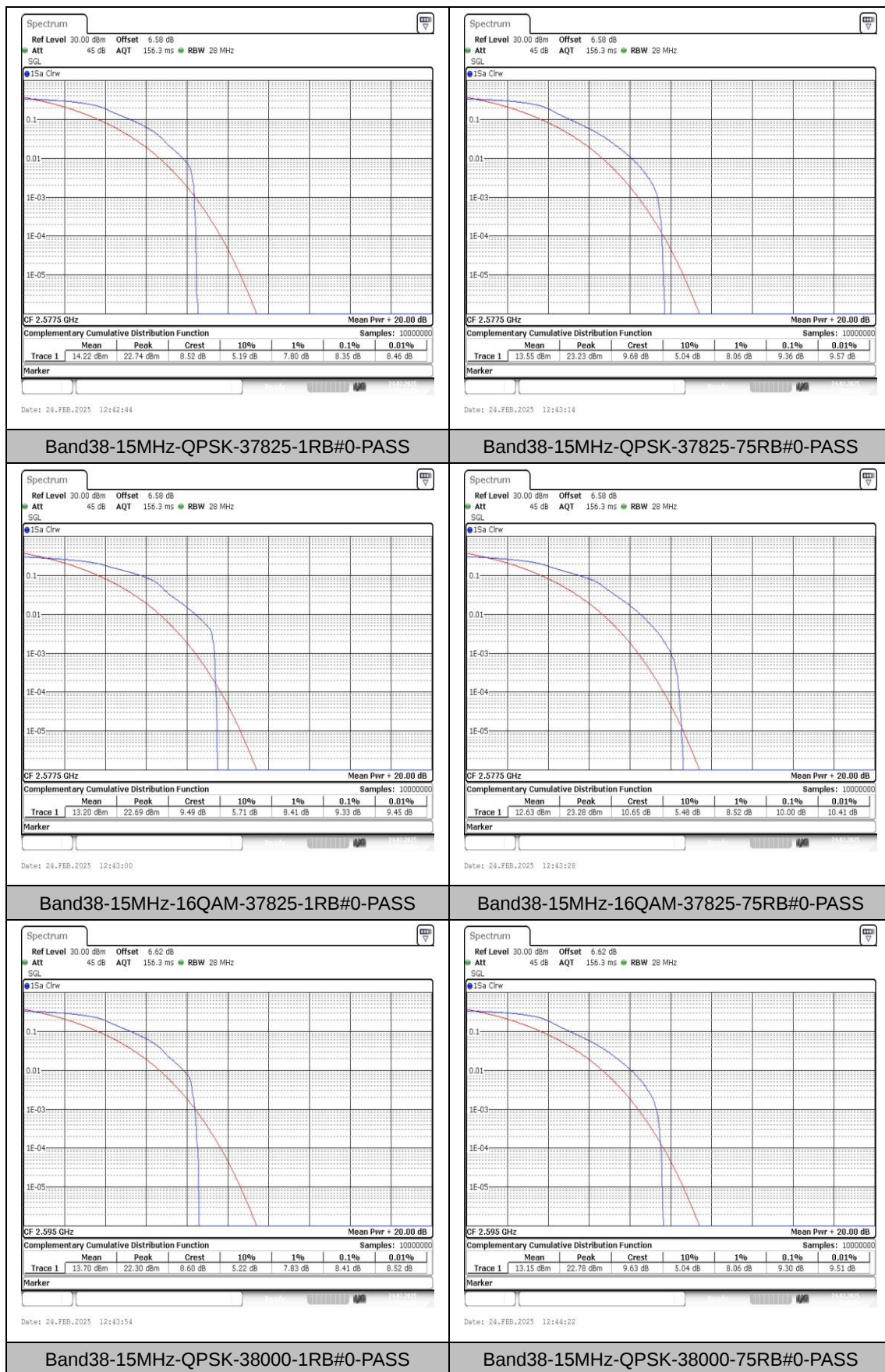
Test Graphs

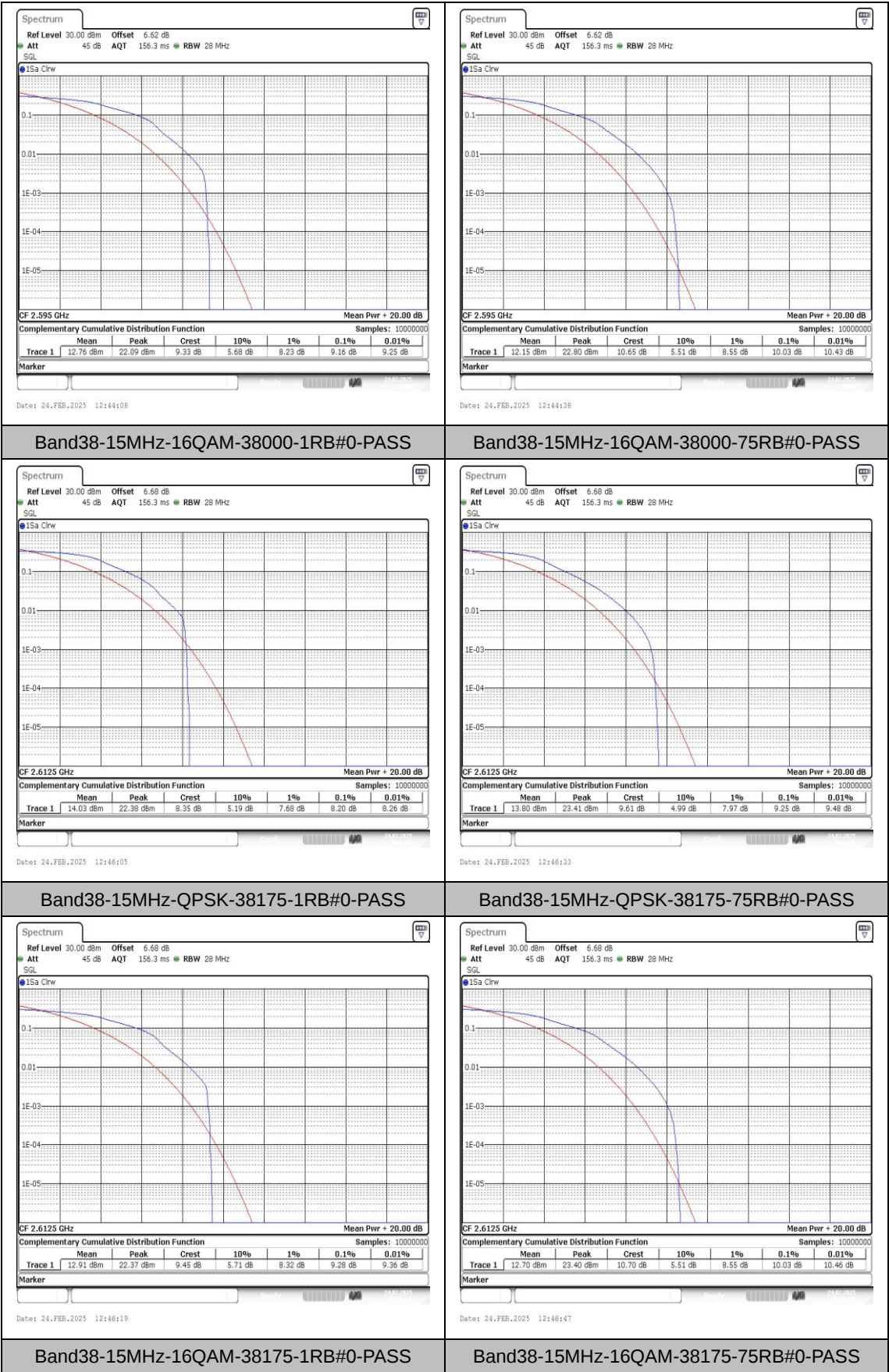


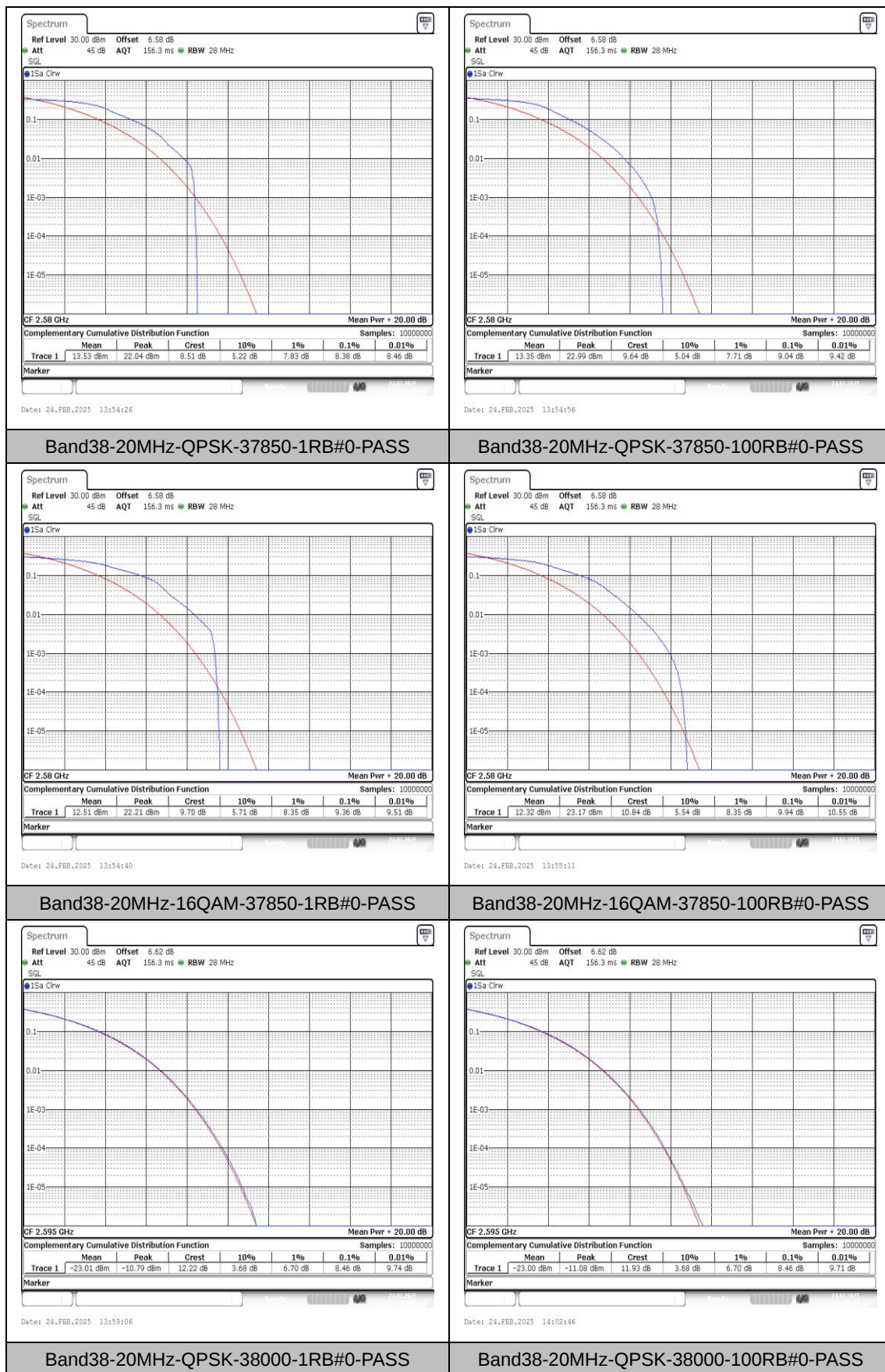


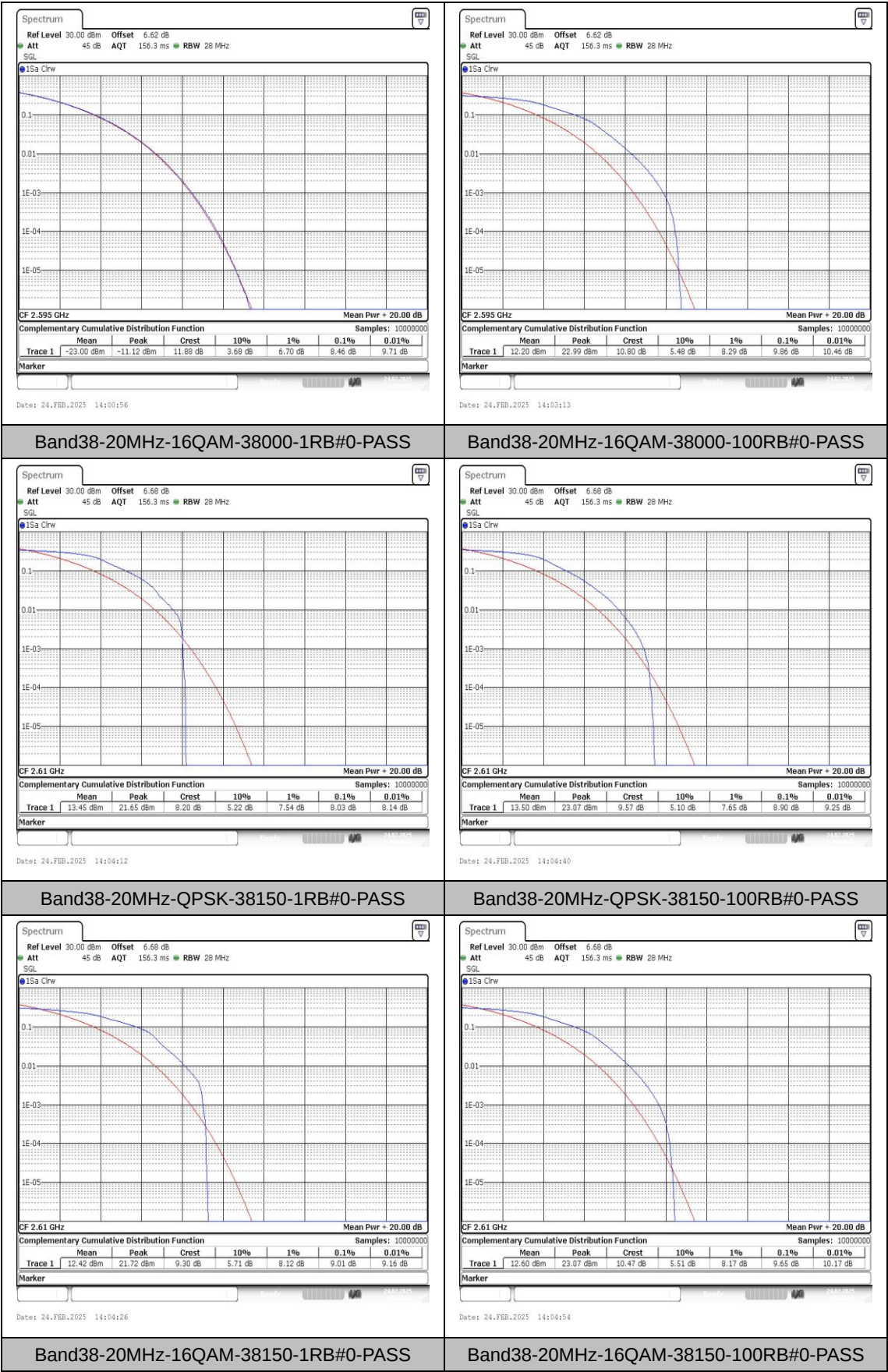










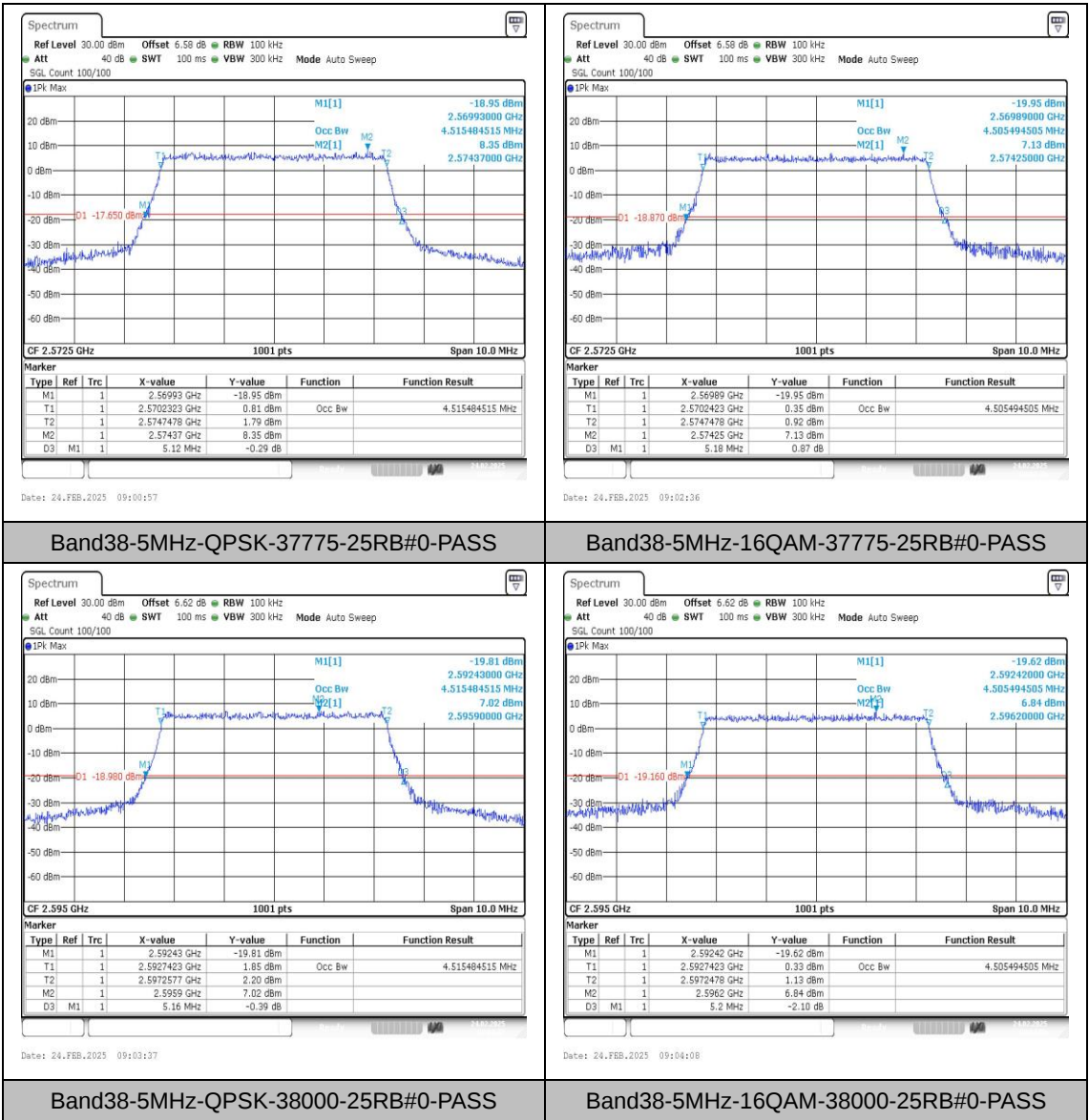


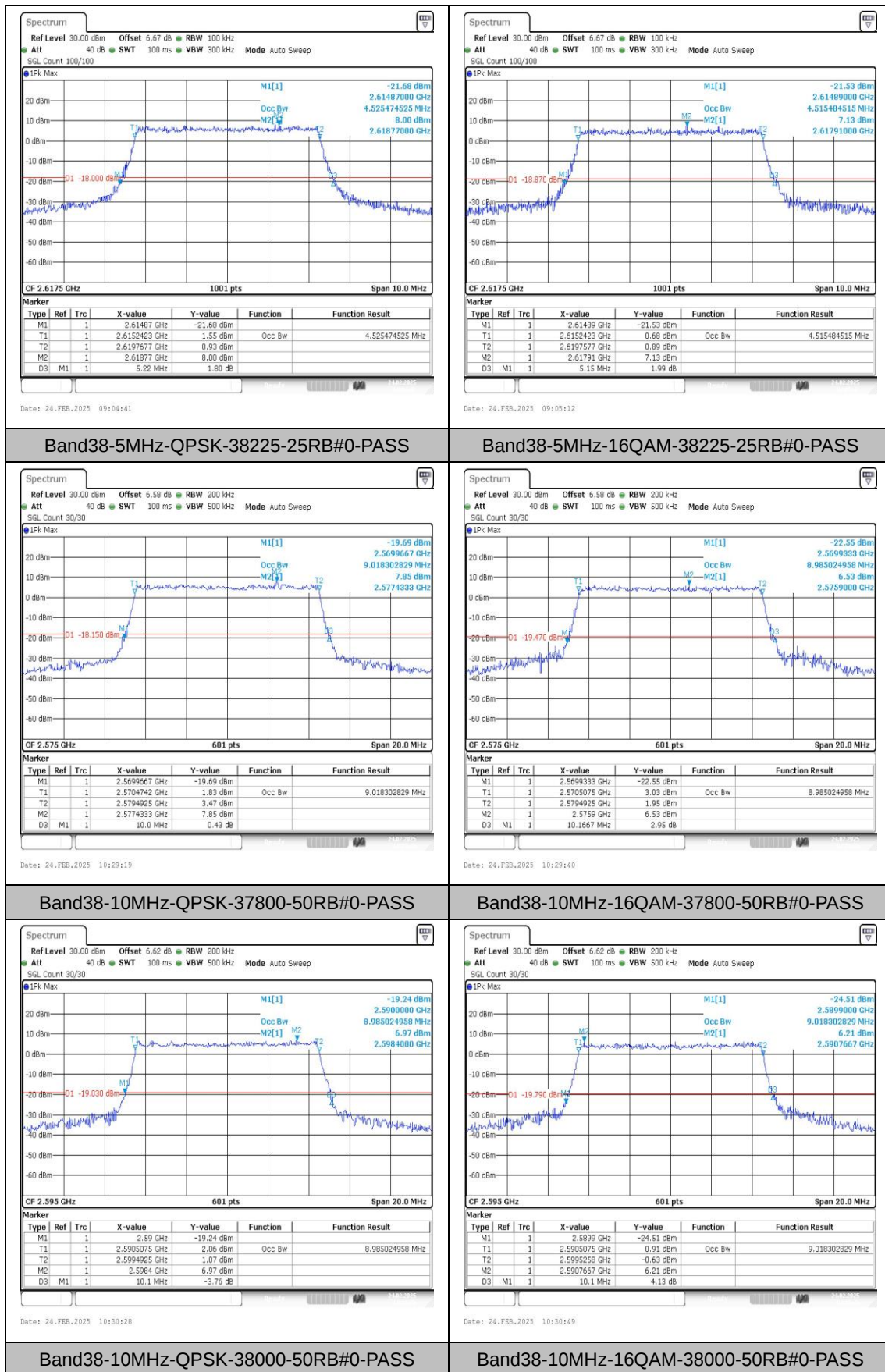
Appendix C: 26dB Bandwidth and Occupied Bandwidth

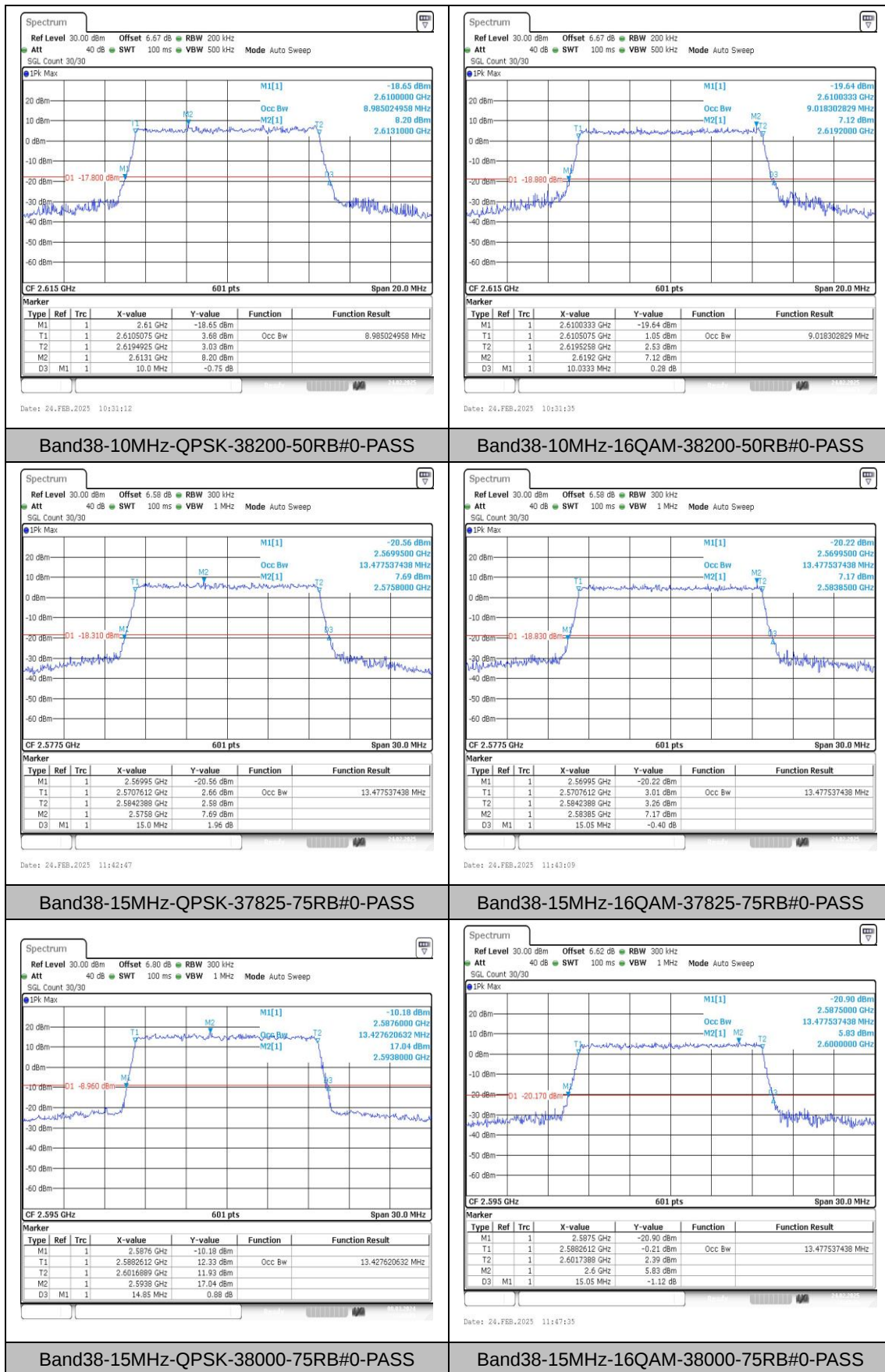
Test Result

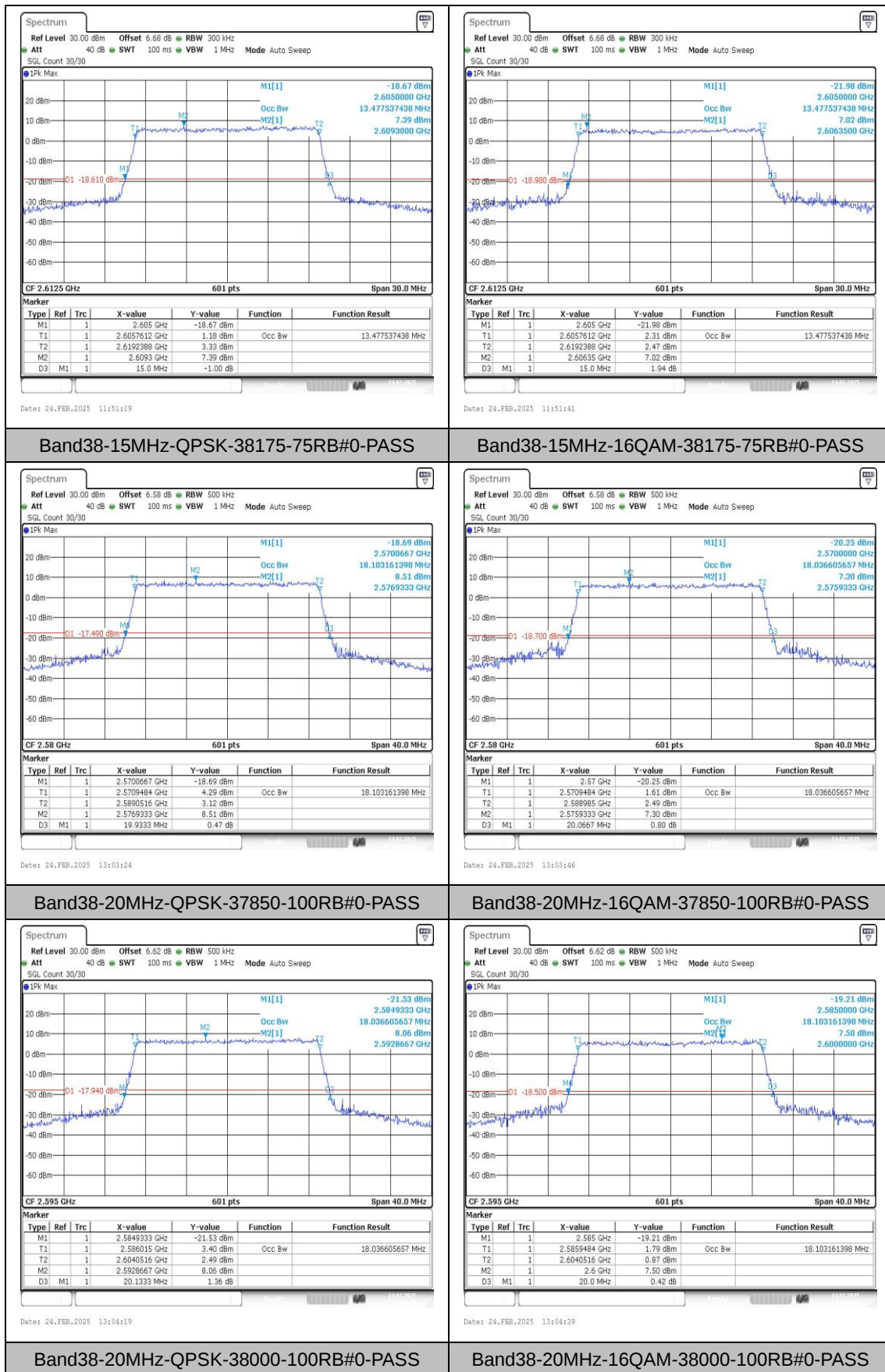
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band38	5MHz	QPSK	37775	25RB#0	4.515	5.12	PASS
Band38	5MHz	16QAM	37775	25RB#0	4.505	5.18	PASS
Band38	5MHz	QPSK	38000	25RB#0	4.515	5.16	PASS
Band38	5MHz	16QAM	38000	25RB#0	4.505	5.20	PASS
Band38	5MHz	QPSK	38225	25RB#0	4.525	5.22	PASS
Band38	5MHz	16QAM	38225	25RB#0	4.515	5.15	PASS
Band38	10MHz	QPSK	37800	50RB#0	9.018	10.00	PASS
Band38	10MHz	16QAM	37800	50RB#0	8.985	10.17	PASS
Band38	10MHz	QPSK	38000	50RB#0	8.985	10.10	PASS
Band38	10MHz	16QAM	38000	50RB#0	9.018	10.10	PASS
Band38	10MHz	QPSK	38200	50RB#0	8.985	10.00	PASS
Band38	10MHz	16QAM	38200	50RB#0	9.018	10.03	PASS
Band38	15MHz	QPSK	37825	75RB#0	13.478	15.00	PASS
Band38	15MHz	16QAM	37825	75RB#0	13.478	15.05	PASS
Band38	15MHz	QPSK	38000	75RB#0	13.428	14.85	PASS
Band38	15MHz	16QAM	38000	75RB#0	13.478	15.05	PASS
Band38	15MHz	QPSK	38175	75RB#0	13.478	15.00	PASS
Band38	15MHz	16QAM	38175	75RB#0	13.478	15.00	PASS
Band38	20MHz	QPSK	37850	100RB#0	18.103	19.93	PASS
Band38	20MHz	16QAM	37850	100RB#0	18.037	20.07	PASS
Band38	20MHz	QPSK	38000	100RB#0	18.037	20.13	PASS
Band38	20MHz	16QAM	38000	100RB#0	18.103	20.00	PASS
Band38	20MHz	QPSK	38150	100RB#0	18.103	20.00	PASS
Band38	20MHz	16QAM	38150	100RB#0	18.037	20.07	PASS

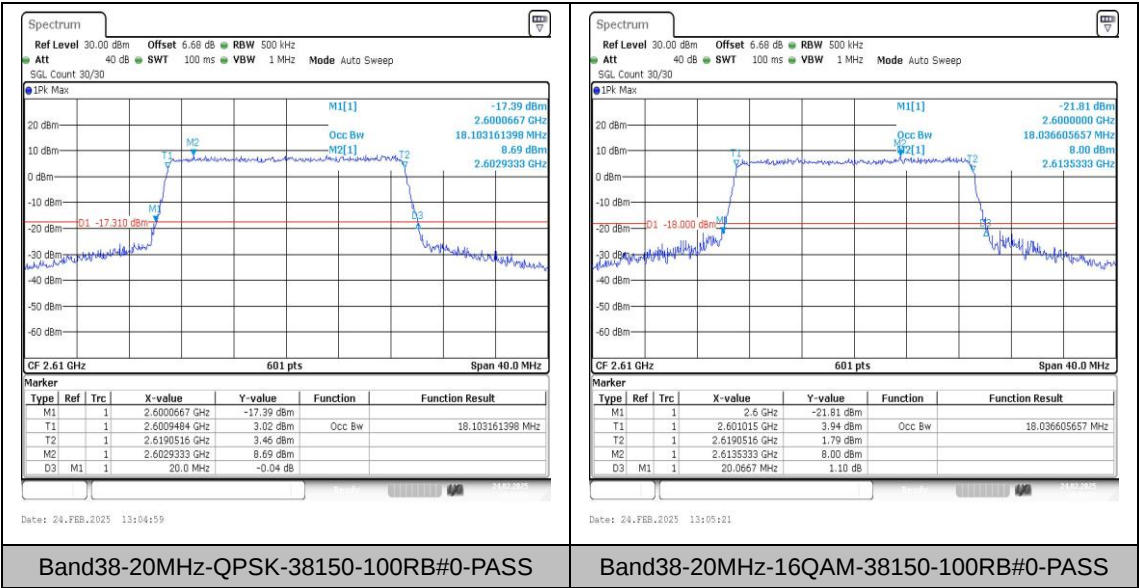
Test Graphs











Appendix D: Band Edge

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	-27.28	PASS
Band38	5MHz	QPSK	37775	1RB#24	-43.13	PASS
Band38	5MHz	QPSK	37775	25RB#0	-39.12	PASS
Band38	5MHz	16QAM	37775	1RB#0	-42.70	PASS
Band38	5MHz	16QAM	37775	1RB#24	-43.21	PASS
Band38	5MHz	16QAM	37775	25RB#0	-39.55	PASS
Band38	5MHz	QPSK	38225	1RB#0	-43.01	PASS
Band38	5MHz	QPSK	38225	1RB#24	-25.78	PASS
Band38	5MHz	QPSK	38225	25RB#0	-38.25	PASS
Band38	5MHz	16QAM	38225	1RB#0	-43.11	PASS
Band38	5MHz	16QAM	38225	1RB#24	-42.42	PASS
Band38	5MHz	16QAM	38225	25RB#0	-39.10	PASS
Band38	10MHz	QPSK	37800	1RB#0	-43.29	PASS
Band38	10MHz	QPSK	37800	1RB#49	-43.09	PASS
Band38	10MHz	QPSK	37800	50RB#0	-39.95	PASS
Band38	10MHz	16QAM	37800	1RB#0	-43.28	PASS
Band38	10MHz	16QAM	37800	1RB#49	-43.35	PASS
Band38	10MHz	16QAM	37800	50RB#0	-40.19	PASS
Band38	10MHz	QPSK	38200	1RB#0	-43.01	PASS
Band38	10MHz	QPSK	38200	1RB#49	-43.04	PASS
Band38	10MHz	QPSK	38200	50RB#0	-38.69	PASS
Band38	10MHz	16QAM	38200	1RB#0	-43.19	PASS
Band38	10MHz	16QAM	38200	1RB#49	-42.90	PASS
Band38	10MHz	16QAM	38200	50RB#0	-39.80	PASS
Band38	15MHz	QPSK	37825	1RB#0	-26.21	PASS
Band38	15MHz	QPSK	37825	1RB#74	-43.36	PASS
Band38	15MHz	QPSK	37825	75RB#0	-39.51	PASS
Band38	15MHz	16QAM	37825	1RB#0	-27.81	PASS
Band38	15MHz	16QAM	37825	1RB#74	-43.40	PASS
Band38	15MHz	16QAM	37825	75RB#0	-41.31	PASS
Band38	15MHz	QPSK	38175	1RB#0	-43.05	PASS
Band38	15MHz	QPSK	38175	1RB#74	-25.91	PASS
Band38	15MHz	QPSK	38175	75RB#0	-38.77	PASS
Band38	15MHz	16QAM	38175	1RB#0	-43.07	PASS
Band38	15MHz	16QAM	38175	1RB#74	-27.57	PASS
Band38	15MHz	16QAM	38175	75RB#0	-40.91	PASS

Band38	20MHz	QPSK	37850	1RB#0	-24.92	PASS
Band38	20MHz	QPSK	37850	1RB#99	-43.36	PASS
Band38	20MHz	QPSK	37850	100RB#0	-41.53	PASS
Band38	20MHz	16QAM	37850	1RB#0	-25.82	PASS
Band38	20MHz	16QAM	37850	1RB#99	-43.28	PASS
Band38	20MHz	16QAM	37850	100RB#0	-41.90	PASS
Band38	20MHz	QPSK	38150	1RB#0	-43.07	PASS
Band38	20MHz	QPSK	38150	1RB#99	-24.56	PASS
Band38	20MHz	QPSK	38150	100RB#0	-40.96	PASS
Band38	20MHz	16QAM	38150	1RB#0	-43.03	PASS
Band38	20MHz	16QAM	38150	1RB#99	-26.13	PASS
Band38	20MHz	16QAM	38150	100RB#0	-41.18	PASS

Test Graphs

