

Appendix for LTE Band 7

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
Band7	5MHz	QPSK	20775	1RB#0	20.63	PASS
Band7	5MHz	QPSK	20775	1RB#12	20.74	PASS
Band7	5MHz	QPSK	20775	1RB#24	20.71	PASS
Band7	5MHz	QPSK	20775	12RB#0	19.59	PASS
Band7	5MHz	QPSK	20775	12RB#6	19.65	PASS
Band7	5MHz	QPSK	20775	12RB#13	19.71	PASS
Band7	5MHz	QPSK	20775	25RB#0	19.71	PASS
Band7	5MHz	16QAM	20775	1RB#0	19.71	PASS
Band7	5MHz	16QAM	20775	1RB#12	19.61	PASS
Band7	5MHz	16QAM	20775	1RB#24	19.63	PASS
Band7	5MHz	16QAM	20775	12RB#0	19.61	PASS
Band7	5MHz	16QAM	20775	12RB#6	19.58	PASS
Band7	5MHz	16QAM	20775	12RB#13	19.64	PASS
Band7	5MHz	16QAM	20775	25RB#0	19.70	PASS
Band7	5MHz	QPSK	21100	1RB#0	21.00	PASS
Band7	5MHz	QPSK	21100	1RB#12	21.10	PASS
Band7	5MHz	QPSK	21100	1RB#24	21.04	PASS
Band7	5MHz	QPSK	21100	12RB#0	20.01	PASS
Band7	5MHz	QPSK	21100	12RB#6	20.03	PASS
Band7	5MHz	QPSK	21100	12RB#13	20.07	PASS
Band7	5MHz	QPSK	21100	25RB#0	20.06	PASS
Band7	5MHz	16QAM	21100	1RB#0	20.06	PASS
Band7	5MHz	16QAM	21100	1RB#12	20.25	PASS
Band7	5MHz	16QAM	21100	1RB#24	20.07	PASS
Band7	5MHz	16QAM	21100	12RB#0	19.00	PASS
Band7	5MHz	16QAM	21100	12RB#6	19.99	PASS
Band7	5MHz	16QAM	21100	12RB#13	19.05	PASS
Band7	5MHz	16QAM	21100	25RB#0	19.04	PASS
Band7	5MHz	QPSK	21425	1RB#0	21.12	PASS
Band7	5MHz	QPSK	21425	1RB#12	21.11	PASS
Band7	5MHz	QPSK	21425	1RB#24	21.02	PASS
Band7	5MHz	QPSK	21425	12RB#0	20.12	PASS
Band7	5MHz	QPSK	21425	12RB#6	20.13	PASS
Band7	5MHz	QPSK	21425	12RB#13	20.10	PASS
Band7	5MHz	QPSK	21425	25RB#0	20.09	PASS

Band7	5MHz	16QAM	21425	1RB#0	20.14	PASS
Band7	5MHz	16QAM	21425	1RB#12	20.10	PASS
Band7	5MHz	16QAM	21425	1RB#24	20.02	PASS
Band7	5MHz	16QAM	21425	12RB#0	19.16	PASS
Band7	5MHz	16QAM	21425	12RB#6	19.17	PASS
Band7	5MHz	16QAM	21425	12RB#13	19.20	PASS
Band7	5MHz	16QAM	21425	25RB#0	19.14	PASS
Band7	10MHz	QPSK	20800	1RB#0	20.69	PASS
Band7	10MHz	QPSK	20800	1RB#24	20.75	PASS
Band7	10MHz	QPSK	20800	1RB#49	20.78	PASS
Band7	10MHz	QPSK	20800	25RB#0	19.80	PASS
Band7	10MHz	QPSK	20800	25RB#12	19.80	PASS
Band7	10MHz	QPSK	20800	25RB#25	19.80	PASS
Band7	10MHz	QPSK	20800	50RB#0	19.82	PASS
Band7	10MHz	16QAM	20800	1RB#0	19.74	PASS
Band7	10MHz	16QAM	20800	1RB#24	19.69	PASS
Band7	10MHz	16QAM	20800	1RB#49	19.68	PASS
Band7	10MHz	16QAM	20800	25RB#0	18.82	PASS
Band7	10MHz	16QAM	20800	25RB#12	18.81	PASS
Band7	10MHz	16QAM	20800	25RB#25	18.80	PASS
Band7	10MHz	16QAM	20800	50RB#0	18.82	PASS
Band7	10MHz	QPSK	21100	1RB#0	21.03	PASS
Band7	10MHz	QPSK	21100	1RB#24	21.22	PASS
Band7	10MHz	QPSK	21100	1RB#49	21.16	PASS
Band7	10MHz	QPSK	21100	25RB#0	20.13	PASS
Band7	10MHz	QPSK	21100	25RB#12	20.11	PASS
Band7	10MHz	QPSK	21100	25RB#25	20.18	PASS
Band7	10MHz	QPSK	21100	50RB#0	20.16	PASS
Band7	10MHz	16QAM	21100	1RB#0	19.93	PASS
Band7	10MHz	16QAM	21100	1RB#24	20.23	PASS
Band7	10MHz	16QAM	21100	1RB#49	20.09	PASS
Band7	10MHz	16QAM	21100	25RB#0	19.05	PASS
Band7	10MHz	16QAM	21100	25RB#12	19.10	PASS
Band7	10MHz	16QAM	21100	25RB#25	19.18	PASS
Band7	10MHz	16QAM	21100	50RB#0	19.13	PASS
Band7	10MHz	QPSK	21400	1RB#0	21.22	PASS
Band7	10MHz	QPSK	21400	1RB#24	21.27	PASS
Band7	10MHz	QPSK	21400	1RB#49	21.13	PASS
Band7	10MHz	QPSK	21400	25RB#0	20.29	PASS
Band7	10MHz	QPSK	21400	25RB#12	20.26	PASS
Band7	10MHz	QPSK	21400	25RB#25	20.14	PASS
Band7	10MHz	QPSK	21400	50RB#0	20.24	PASS

Band7	10MHz	16QAM	21400	1RB#0	20.21	PASS
Band7	10MHz	16QAM	21400	1RB#24	20.17	PASS
Band7	10MHz	16QAM	21400	1RB#49	19.98	PASS
Band7	10MHz	16QAM	21400	25RB#0	19.26	PASS
Band7	10MHz	16QAM	21400	25RB#12	19.27	PASS
Band7	10MHz	16QAM	21400	25RB#25	19.23	PASS
Band7	10MHz	16QAM	21400	50RB#0	19.24	PASS
Band7	15MHz	QPSK	20825	1RB#0	20.57	PASS
Band7	15MHz	QPSK	20825	1RB#38	20.56	PASS
Band7	15MHz	QPSK	20825	1RB#74	20.57	PASS
Band7	15MHz	QPSK	20825	38RB#0	19.76	PASS
Band7	15MHz	QPSK	20825	38RB#18	19.73	PASS
Band7	15MHz	QPSK	20825	38RB#37	19.73	PASS
Band7	15MHz	QPSK	20825	75RB#0	19.72	PASS
Band7	15MHz	16QAM	20825	1RB#0	19.53	PASS
Band7	15MHz	16QAM	20825	1RB#38	19.62	PASS
Band7	15MHz	16QAM	20825	1RB#74	19.57	PASS
Band7	15MHz	16QAM	20825	38RB#0	19.72	PASS
Band7	15MHz	16QAM	20825	38RB#18	19.70	PASS
Band7	15MHz	16QAM	20825	38RB#37	19.75	PASS
Band7	15MHz	16QAM	20825	75RB#0	19.74	PASS
Band7	15MHz	QPSK	21100	1RB#0	20.90	PASS
Band7	15MHz	QPSK	21100	1RB#38	20.99	PASS
Band7	15MHz	QPSK	21100	1RB#74	20.95	PASS
Band7	15MHz	QPSK	21100	38RB#0	19.99	PASS
Band7	15MHz	QPSK	21100	38RB#18	20.02	PASS
Band7	15MHz	QPSK	21100	38RB#37	19.98	PASS
Band7	15MHz	QPSK	21100	75RB#0	20.04	PASS
Band7	15MHz	16QAM	21100	1RB#0	19.78	PASS
Band7	15MHz	16QAM	21100	1RB#38	20.01	PASS
Band7	15MHz	16QAM	21100	1RB#74	19.97	PASS
Band7	15MHz	16QAM	21100	38RB#0	20.03	PASS
Band7	15MHz	16QAM	21100	38RB#18	20.04	PASS
Band7	15MHz	16QAM	21100	38RB#37	20.02	PASS
Band7	15MHz	16QAM	21100	75RB#0	19.03	PASS
Band7	15MHz	QPSK	21375	1RB#0	21.04	PASS
Band7	15MHz	QPSK	21375	1RB#38	21.03	PASS
Band7	15MHz	QPSK	21375	1RB#74	20.90	PASS
Band7	15MHz	QPSK	21375	38RB#0	20.13	PASS
Band7	15MHz	QPSK	21375	38RB#18	20.13	PASS
Band7	15MHz	QPSK	21375	38RB#37	20.12	PASS
Band7	15MHz	QPSK	21375	75RB#0	20.13	PASS

Band7	15MHz	16QAM	21375	1RB#0	20.04	PASS
Band7	15MHz	16QAM	21375	1RB#38	20.19	PASS
Band7	15MHz	16QAM	21375	1RB#74	19.85	PASS
Band7	15MHz	16QAM	21375	38RB#0	20.13	PASS
Band7	15MHz	16QAM	21375	38RB#18	20.13	PASS
Band7	15MHz	16QAM	21375	38RB#37	20.13	PASS
Band7	15MHz	16QAM	21375	75RB#0	19.15	PASS
Band7	20MHz	QPSK	20850	1RB#0	20.61	PASS
Band7	20MHz	QPSK	20850	1RB#49	20.64	PASS
Band7	20MHz	QPSK	20850	1RB#99	20.64	PASS
Band7	20MHz	QPSK	20850	50RB#0	19.67	PASS
Band7	20MHz	QPSK	20850	50RB#25	19.66	PASS
Band7	20MHz	QPSK	20850	50RB#50	19.74	PASS
Band7	20MHz	QPSK	20850	100RB#0	19.75	PASS
Band7	20MHz	16QAM	20850	1RB#0	19.62	PASS
Band7	20MHz	16QAM	20850	1RB#49	19.78	PASS
Band7	20MHz	16QAM	20850	1RB#99	19.76	PASS
Band7	20MHz	16QAM	20850	50RB#0	18.66	PASS
Band7	20MHz	16QAM	20850	50RB#25	18.57	PASS
Band7	20MHz	16QAM	20850	50RB#50	18.75	PASS
Band7	20MHz	16QAM	20850	100RB#0	18.77	PASS
Band7	20MHz	QPSK	21100	1RB#0	20.91	PASS
Band7	20MHz	QPSK	21100	1RB#49	21.01	PASS
Band7	20MHz	QPSK	21100	1RB#99	20.99	PASS
Band7	20MHz	QPSK	21100	50RB#0	19.99	PASS
Band7	20MHz	QPSK	21100	50RB#25	19.96	PASS
Band7	20MHz	QPSK	21100	50RB#50	20.04	PASS
Band7	20MHz	QPSK	21100	100RB#0	19.98	PASS
Band7	20MHz	16QAM	21100	1RB#0	19.74	PASS
Band7	20MHz	16QAM	21100	1RB#49	19.87	PASS
Band7	20MHz	16QAM	21100	1RB#99	19.88	PASS
Band7	20MHz	16QAM	21100	50RB#0	18.95	PASS
Band7	20MHz	16QAM	21100	50RB#25	18.96	PASS
Band7	20MHz	16QAM	21100	50RB#50	19.05	PASS
Band7	20MHz	16QAM	21100	100RB#0	19.99	PASS
Band7	20MHz	QPSK	21350	1RB#0	21.17	PASS
Band7	20MHz	QPSK	21350	1RB#49	21.02	PASS
Band7	20MHz	QPSK	21350	1RB#99	20.96	PASS
Band7	20MHz	QPSK	21350	50RB#0	20.11	PASS
Band7	20MHz	QPSK	21350	50RB#25	20.14	PASS
Band7	20MHz	QPSK	21350	50RB#50	20.03	PASS
Band7	20MHz	QPSK	21350	100RB#0	20.14	PASS

Band7	20MHz	16QAM	21350	1RB#0	20.00	PASS
Band7	20MHz	16QAM	21350	1RB#49	20.02	PASS
Band7	20MHz	16QAM	21350	1RB#99	19.96	PASS
Band7	20MHz	16QAM	21350	50RB#0	19.16	PASS
Band7	20MHz	16QAM	21350	50RB#25	19.15	PASS
Band7	20MHz	16QAM	21350	50RB#50	19.04	PASS
Band7	20MHz	16QAM	21350	100RB#0	19.13	PASS

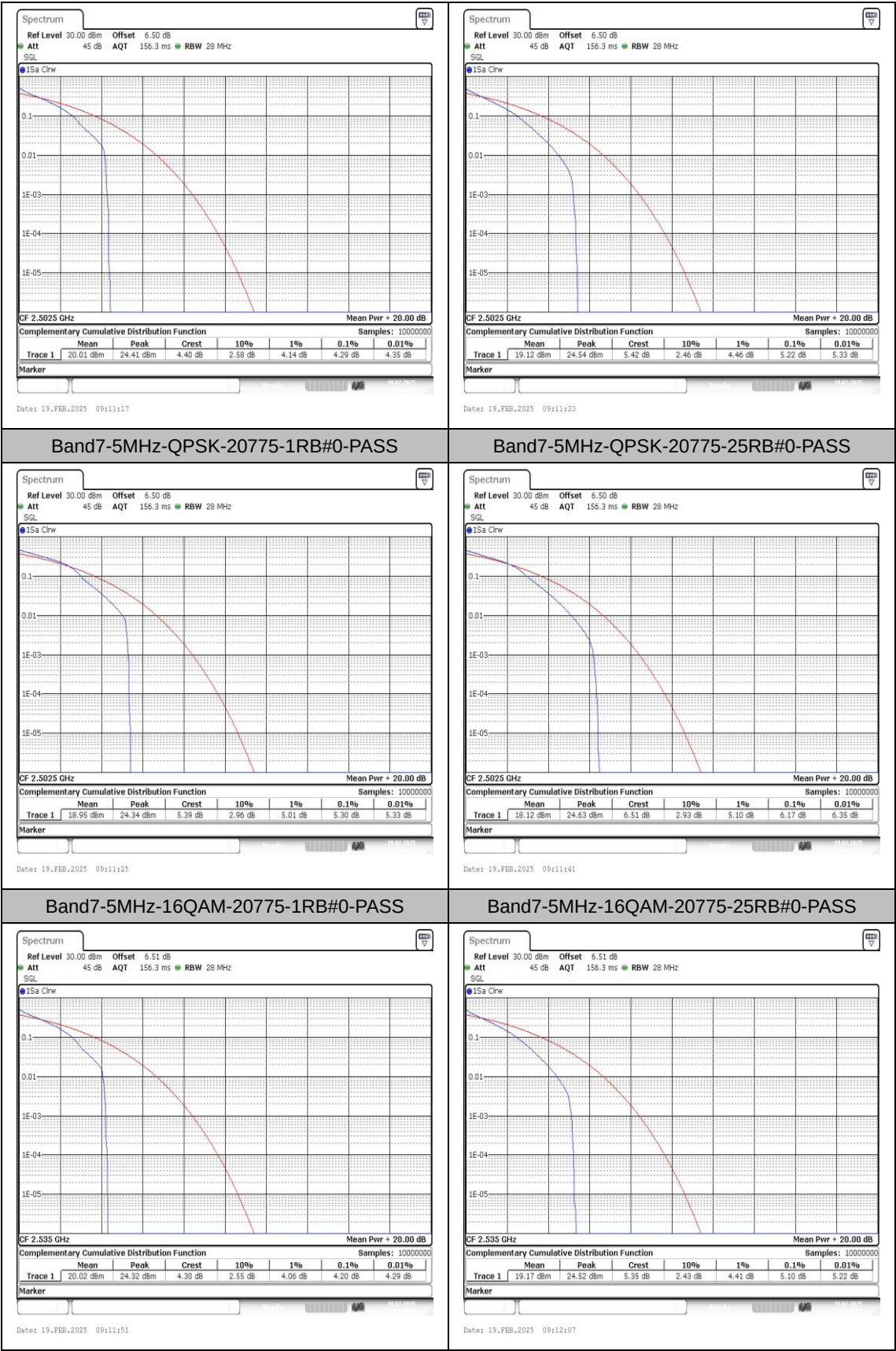
Appendix B: Peak-to-Average Ratio(CCDF)

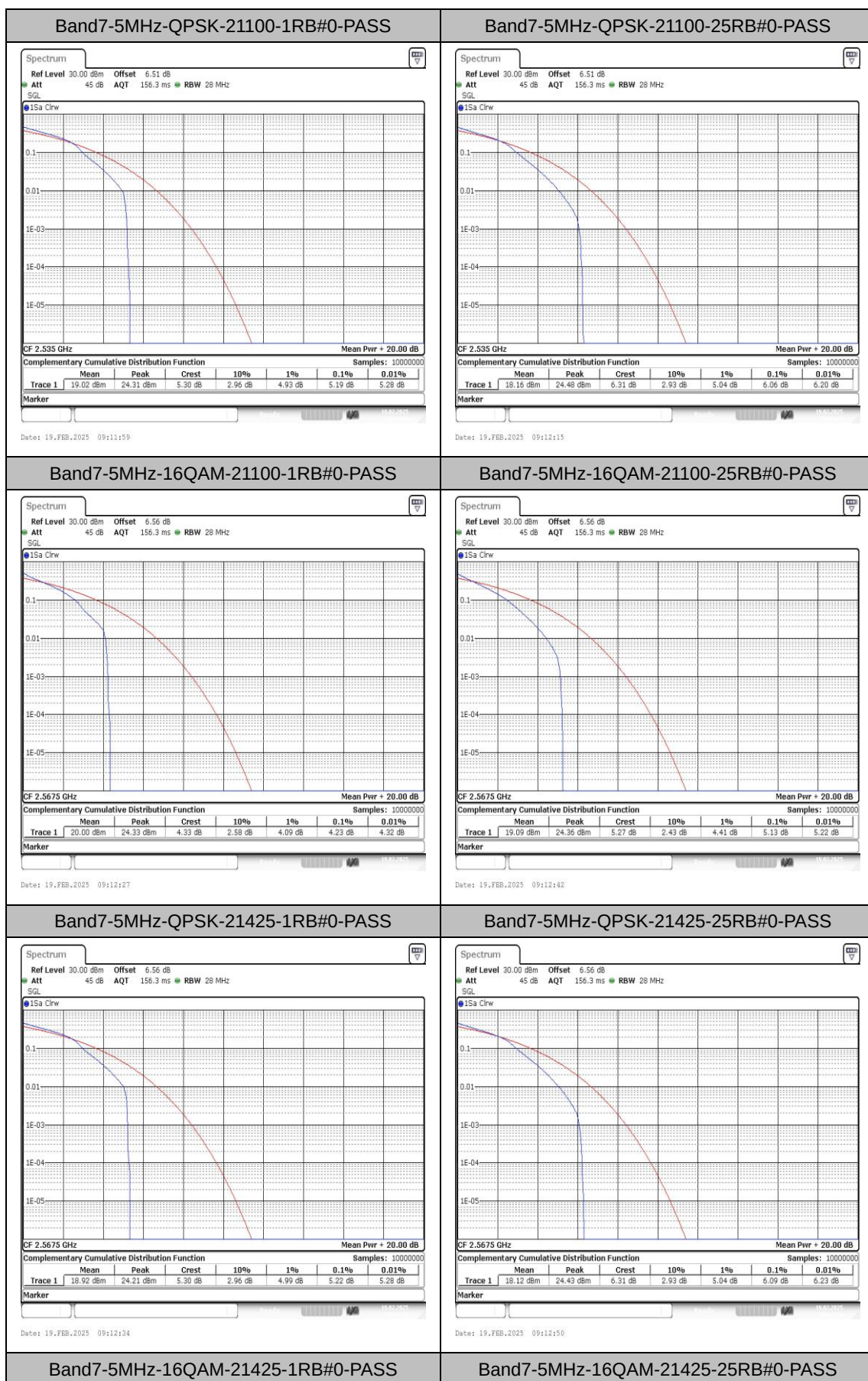
Test Result

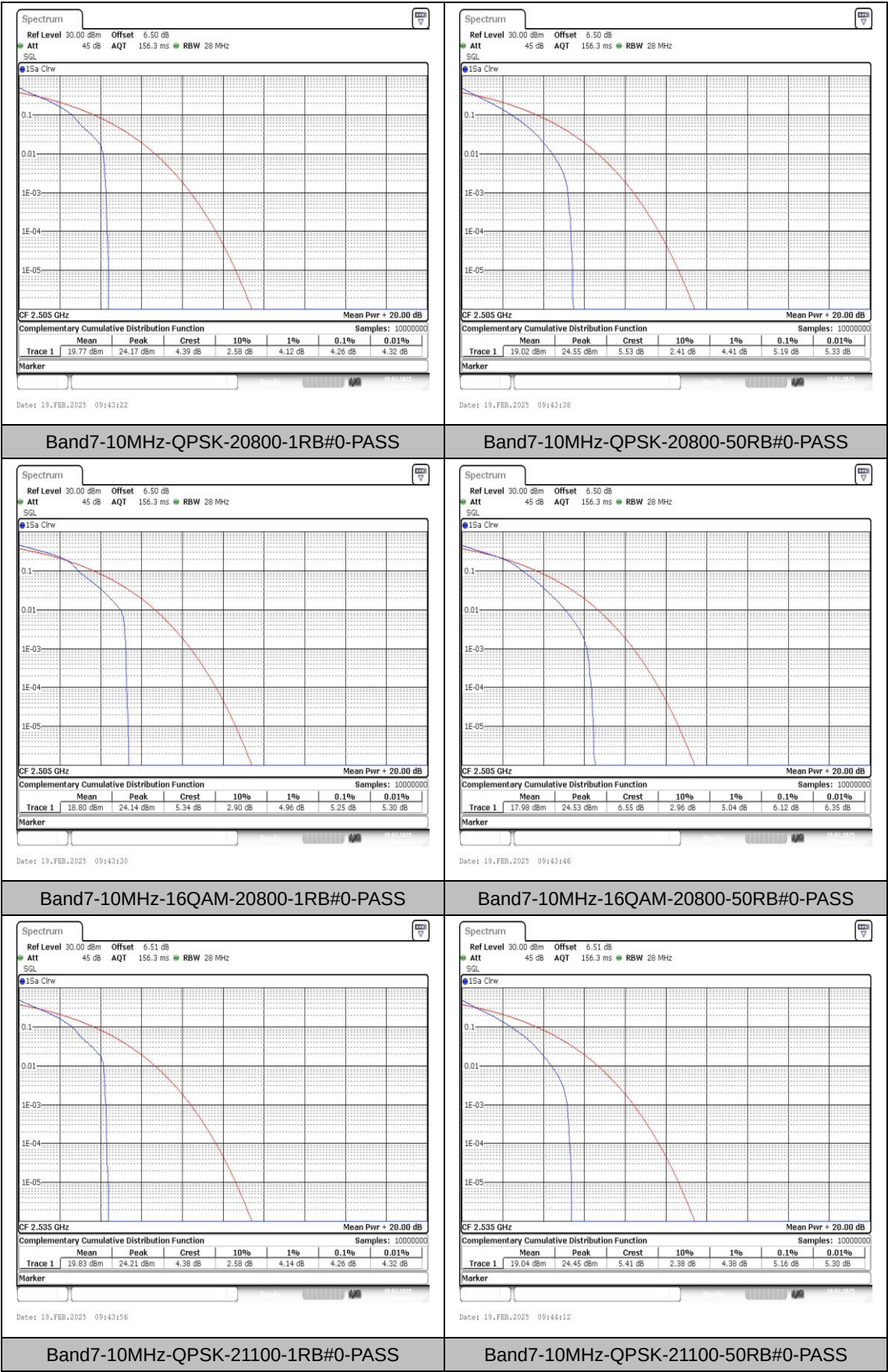
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	4.29	13	PASS
Band7	5MHz	QPSK	20775	25RB#0	5.22	13	PASS
Band7	5MHz	16QAM	20775	1RB#0	5.30	13	PASS
Band7	5MHz	16QAM	20775	25RB#0	6.17	13	PASS
Band7	5MHz	QPSK	21100	1RB#0	4.20	13	PASS
Band7	5MHz	QPSK	21100	25RB#0	5.10	13	PASS
Band7	5MHz	16QAM	21100	1RB#0	5.19	13	PASS
Band7	5MHz	16QAM	21100	25RB#0	6.06	13	PASS
Band7	5MHz	QPSK	21425	1RB#0	4.23	13	PASS
Band7	5MHz	QPSK	21425	25RB#0	5.13	13	PASS
Band7	5MHz	16QAM	21425	1RB#0	5.22	13	PASS
Band7	5MHz	16QAM	21425	25RB#0	6.09	13	PASS
Band7	10MHz	QPSK	20800	1RB#0	4.26	13	PASS
Band7	10MHz	QPSK	20800	50RB#0	5.19	13	PASS
Band7	10MHz	16QAM	20800	1RB#0	5.25	13	PASS
Band7	10MHz	16QAM	20800	50RB#0	6.12	13	PASS
Band7	10MHz	QPSK	21100	1RB#0	4.26	13	PASS
Band7	10MHz	QPSK	21100	50RB#0	5.16	13	PASS
Band7	10MHz	16QAM	21100	1RB#0	5.25	13	PASS
Band7	10MHz	16QAM	21100	50RB#0	6.09	13	PASS
Band7	10MHz	QPSK	21400	1RB#0	4.20	13	PASS
Band7	10MHz	QPSK	21400	50RB#0	5.19	13	PASS
Band7	10MHz	16QAM	21400	1RB#0	5.19	13	PASS
Band7	10MHz	16QAM	21400	50RB#0	6.12	13	PASS
Band7	15MHz	QPSK	20825	1RB#0	4.29	13	PASS
Band7	15MHz	QPSK	20825	75RB#0	5.33	13	PASS
Band7	15MHz	16QAM	20825	1RB#0	5.30	13	PASS
Band7	15MHz	16QAM	20825	75RB#0	6.23	13	PASS
Band7	15MHz	QPSK	21100	1RB#0	4.32	13	PASS
Band7	15MHz	QPSK	21100	75RB#0	5.36	13	PASS
Band7	15MHz	16QAM	21100	1RB#0	5.28	13	PASS
Band7	15MHz	16QAM	21100	75RB#0	6.23	13	PASS
Band7	15MHz	QPSK	21375	1RB#0	4.23	13	PASS
Band7	15MHz	QPSK	21375	75RB#0	5.30	13	PASS
Band7	15MHz	16QAM	21375	1RB#0	5.22	13	PASS

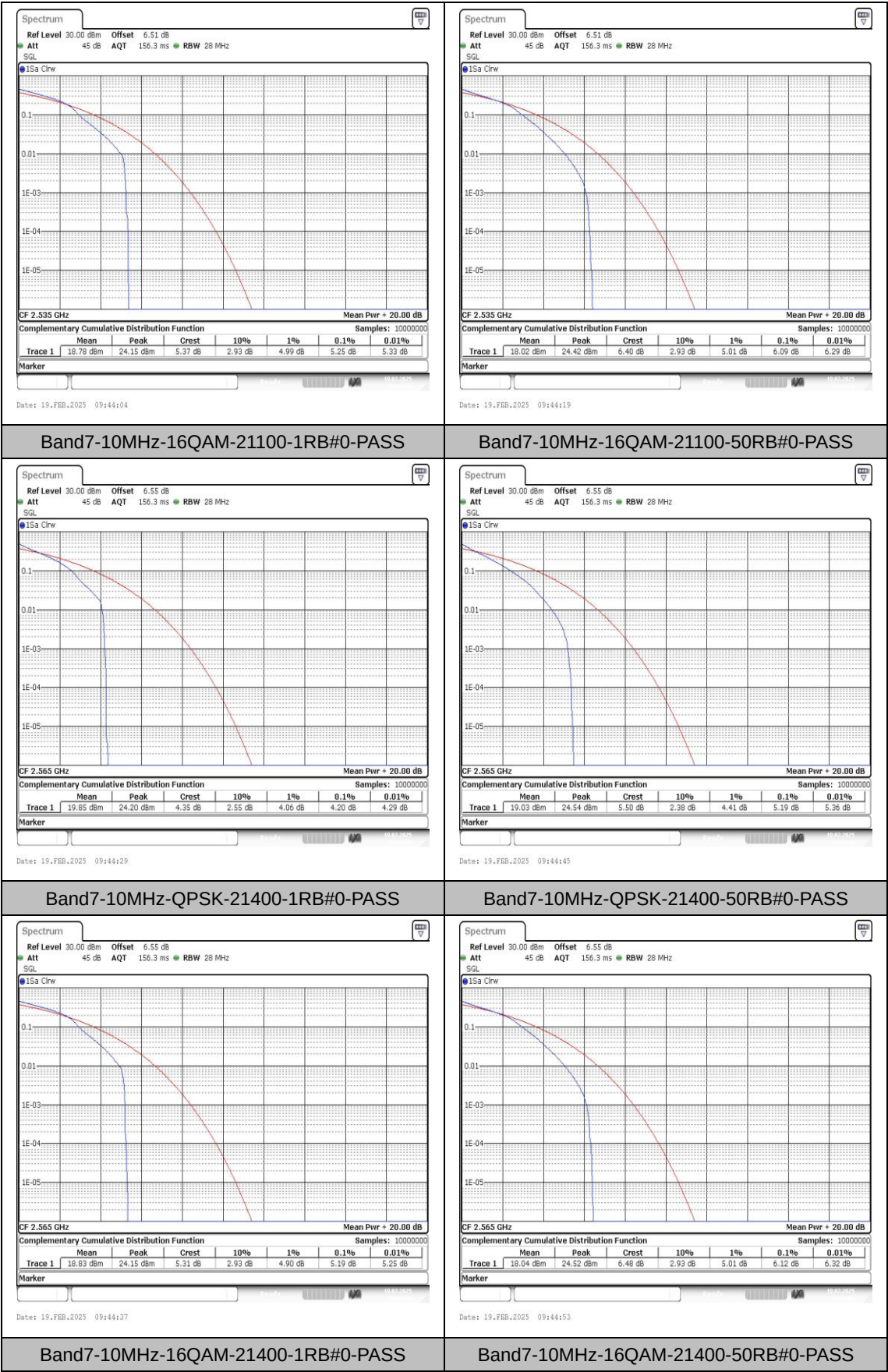
Band7	15MHz	16QAM	21375	75RB#0	6.17	13	PASS
Band7	20MHz	QPSK	20850	1RB#0	4.26	13	PASS
Band7	20MHz	QPSK	20850	100RB#0	5.22	13	PASS
Band7	20MHz	16QAM	20850	1RB#0	5.33	13	PASS
Band7	20MHz	16QAM	20850	100RB#0	6.17	13	PASS
Band7	20MHz	QPSK	21100	1RB#0	4.26	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	5.25	13	PASS
Band7	20MHz	16QAM	21100	1RB#0	5.22	13	PASS
Band7	20MHz	16QAM	21100	100RB#0	6.20	13	PASS
Band7	20MHz	QPSK	21350	1RB#0	4.23	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	5.16	13	PASS
Band7	20MHz	16QAM	21350	1RB#0	5.07	13	PASS
Band7	20MHz	16QAM	21350	100RB#0	6.12	13	PASS

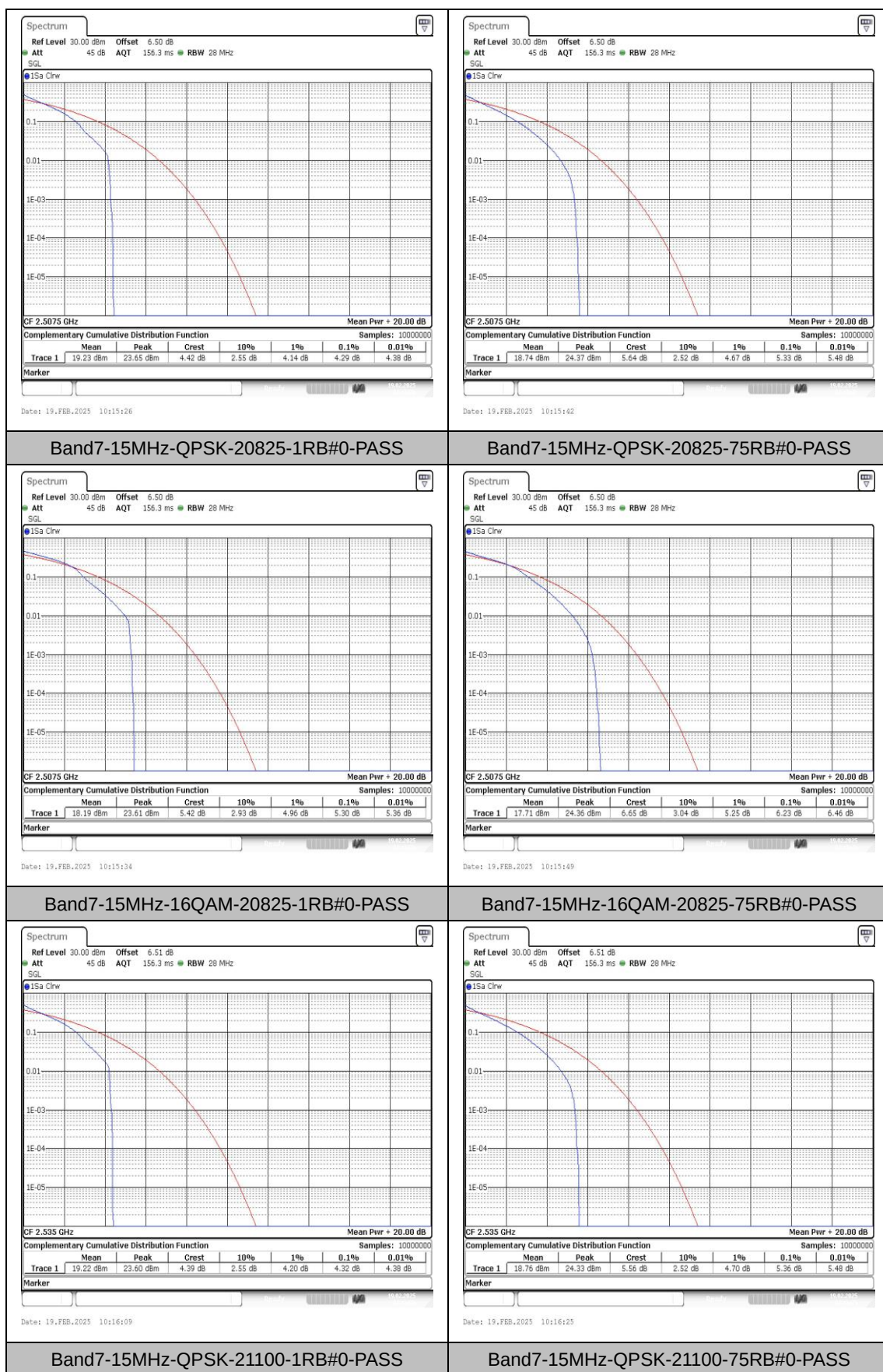
Test Graphs

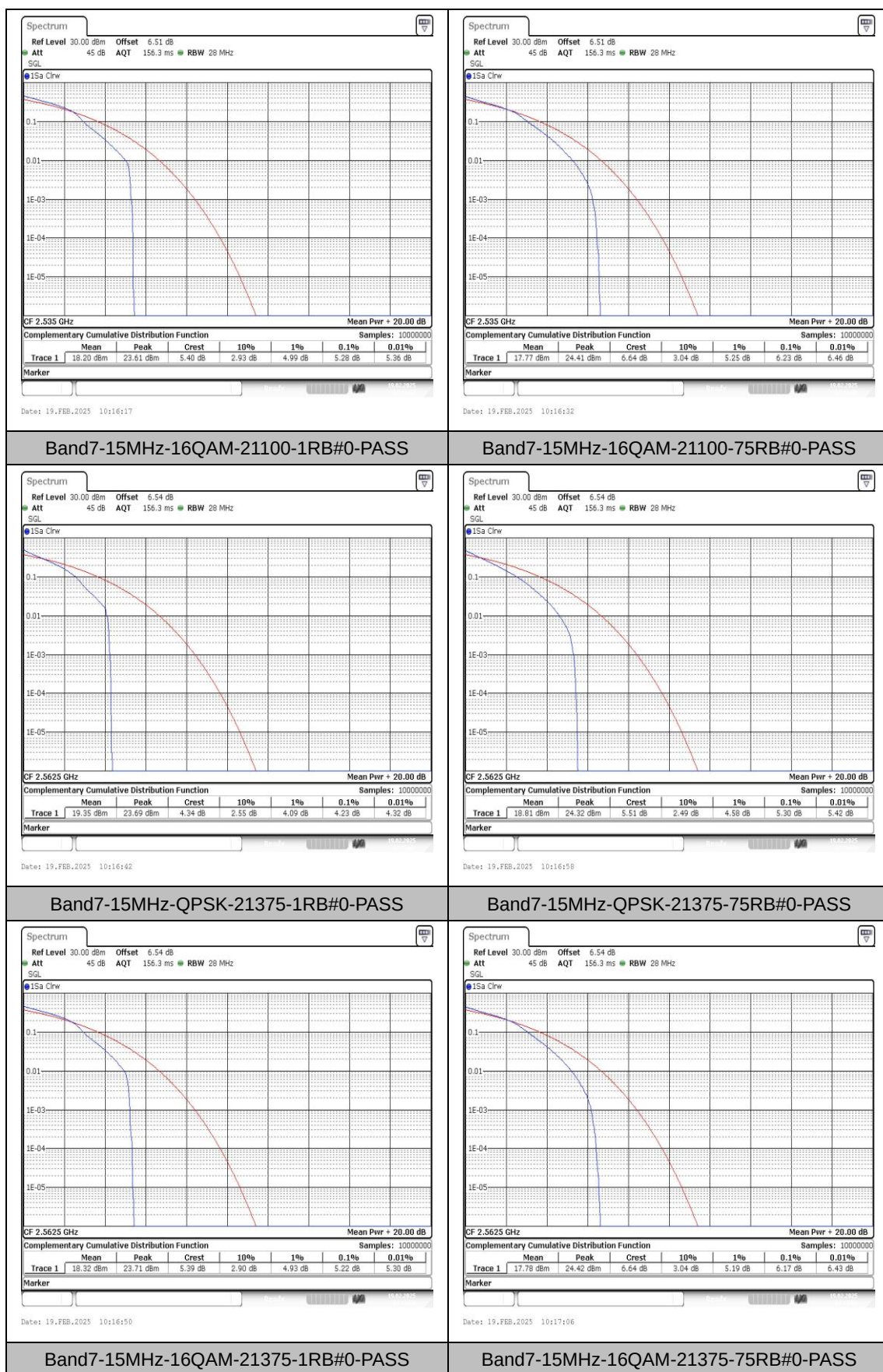


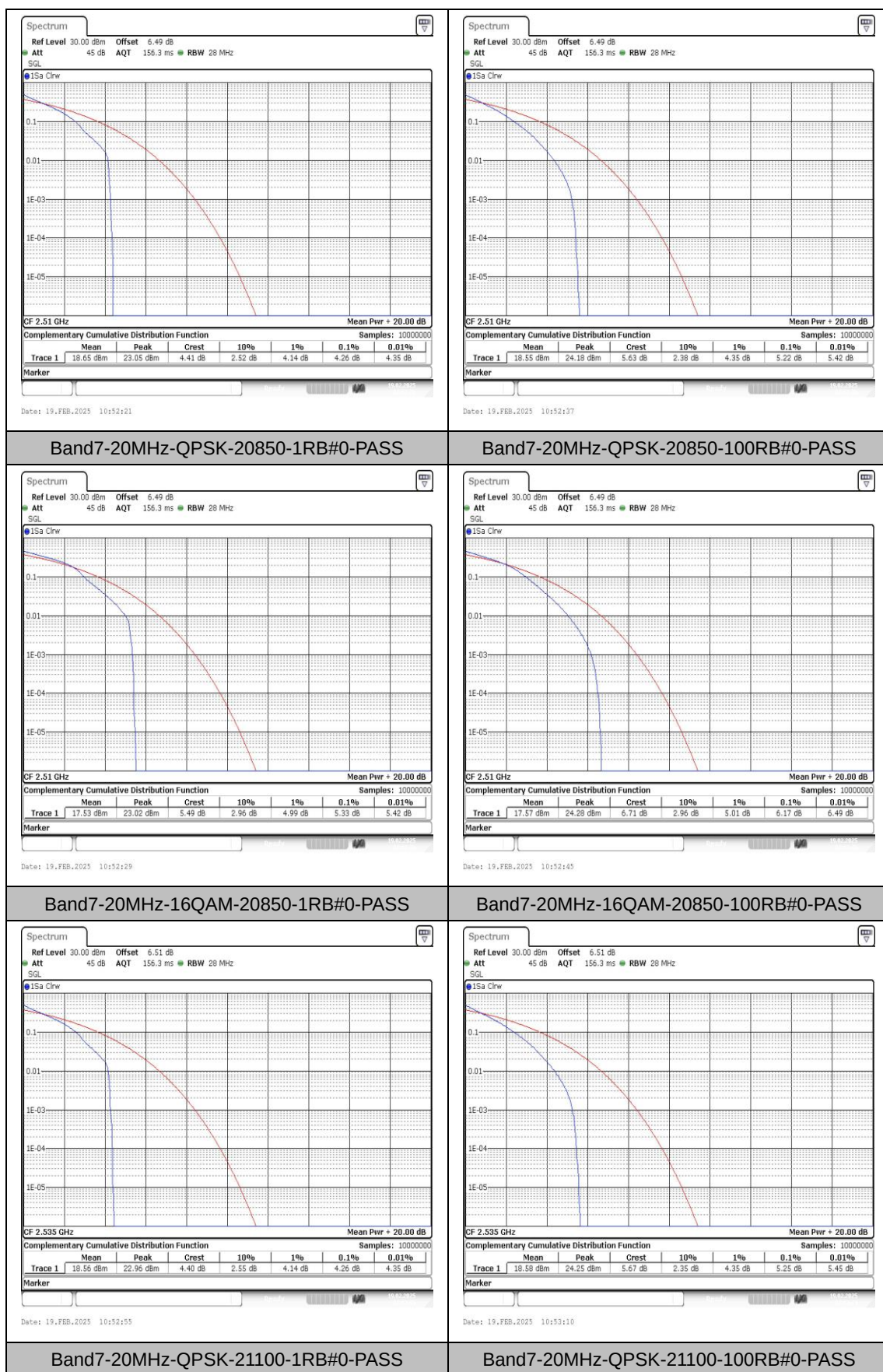


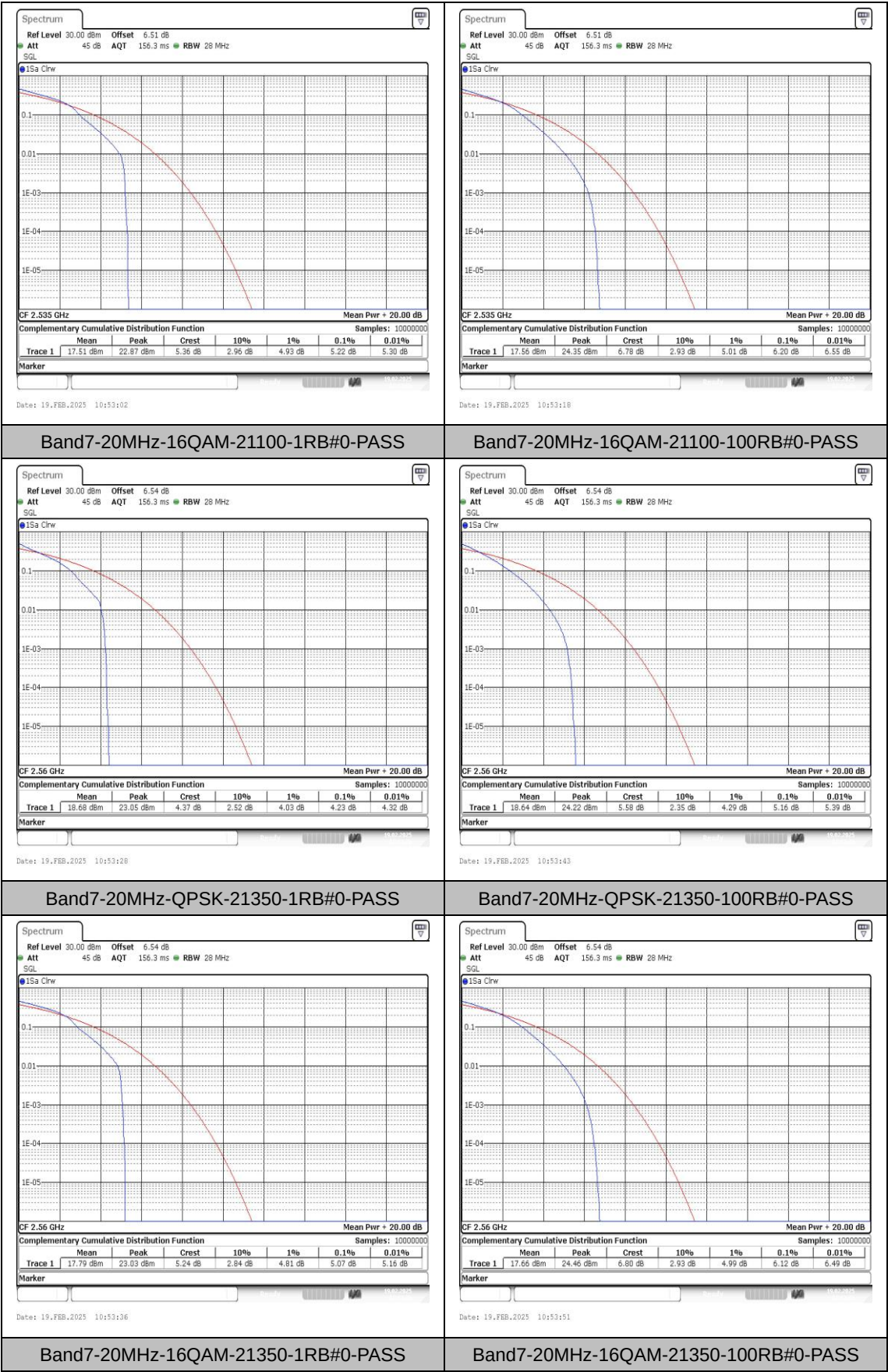










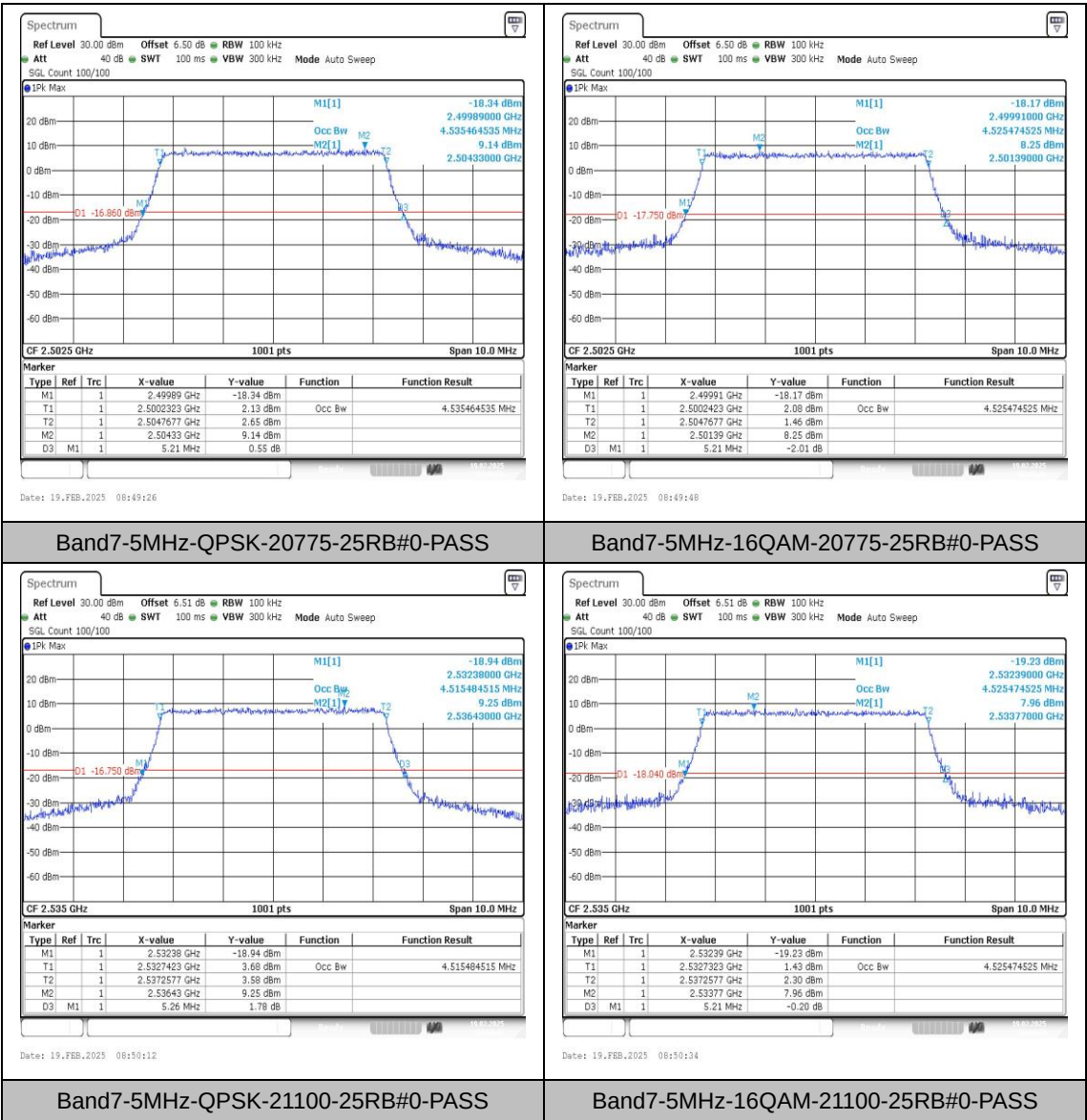


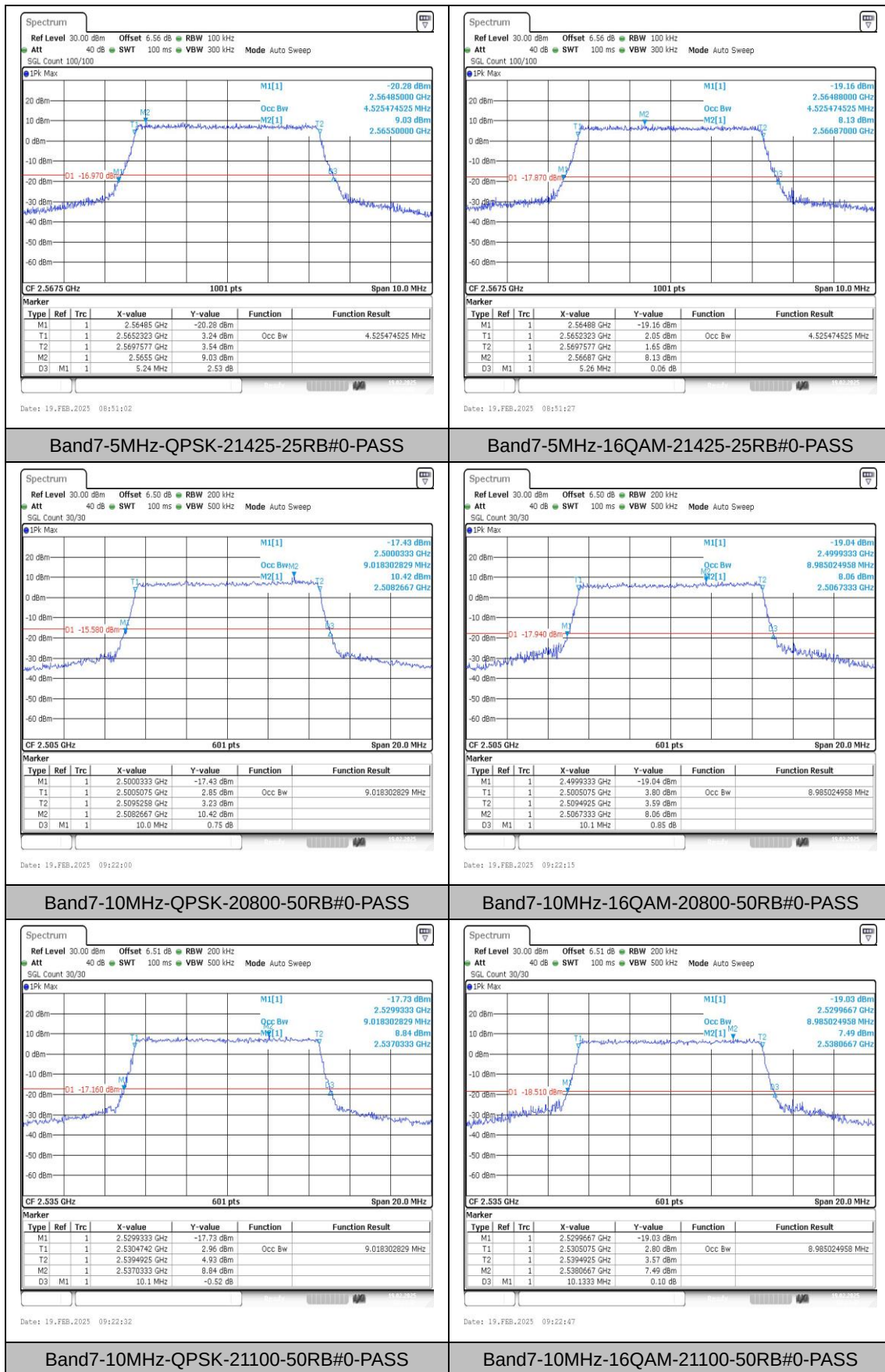
Appendix C: 26dB Bandwidth and Occupied Bandwidth

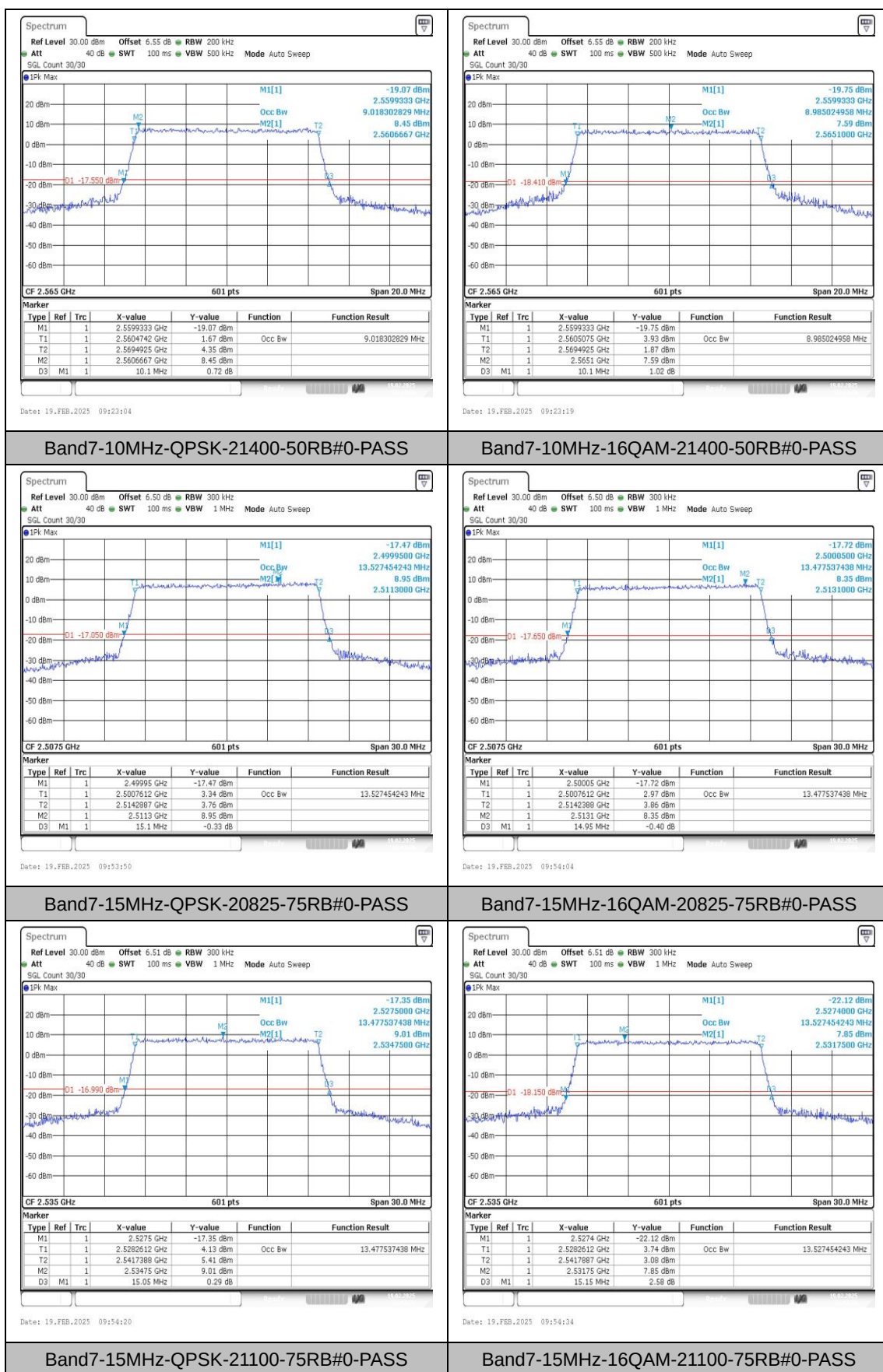
Test Result

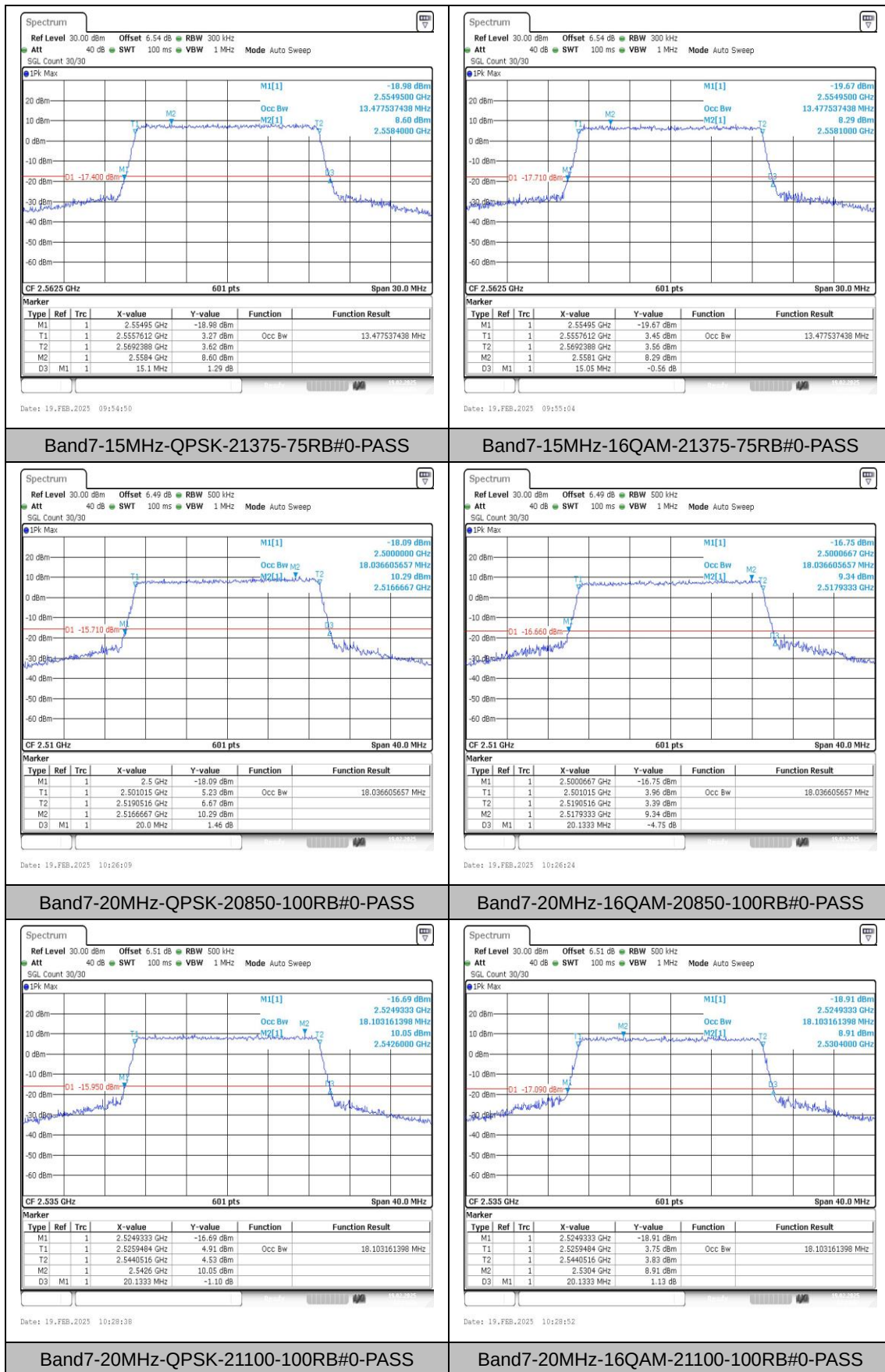
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.535	5.21	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.525	5.21	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.515	5.26	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.525	5.21	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.525	5.24	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.525	5.26	PASS
Band7	10MHz	QPSK	20800	50RB#0	9.018	10.00	PASS
Band7	10MHz	16QAM	20800	50RB#0	8.985	10.10	PASS
Band7	10MHz	QPSK	21100	50RB#0	9.018	10.10	PASS
Band7	10MHz	16QAM	21100	50RB#0	8.985	10.13	PASS
Band7	10MHz	QPSK	21400	50RB#0	9.018	10.10	PASS
Band7	10MHz	16QAM	21400	50RB#0	8.985	10.10	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.527	15.10	PASS
Band7	15MHz	16QAM	20825	75RB#0	13.478	14.95	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.478	15.05	PASS
Band7	15MHz	16QAM	21100	75RB#0	13.527	15.15	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.478	15.10	PASS
Band7	15MHz	16QAM	21375	75RB#0	13.478	15.05	PASS
Band7	20MHz	QPSK	20850	100RB#0	18.037	20.00	PASS
Band7	20MHz	16QAM	20850	100RB#0	18.037	20.13	PASS
Band7	20MHz	QPSK	21100	100RB#0	18.103	20.13	PASS
Band7	20MHz	16QAM	21100	100RB#0	18.103	20.13	PASS
Band7	20MHz	QPSK	21350	100RB#0	18.037	20.20	PASS
Band7	20MHz	16QAM	21350	100RB#0	18.037	20.07	PASS

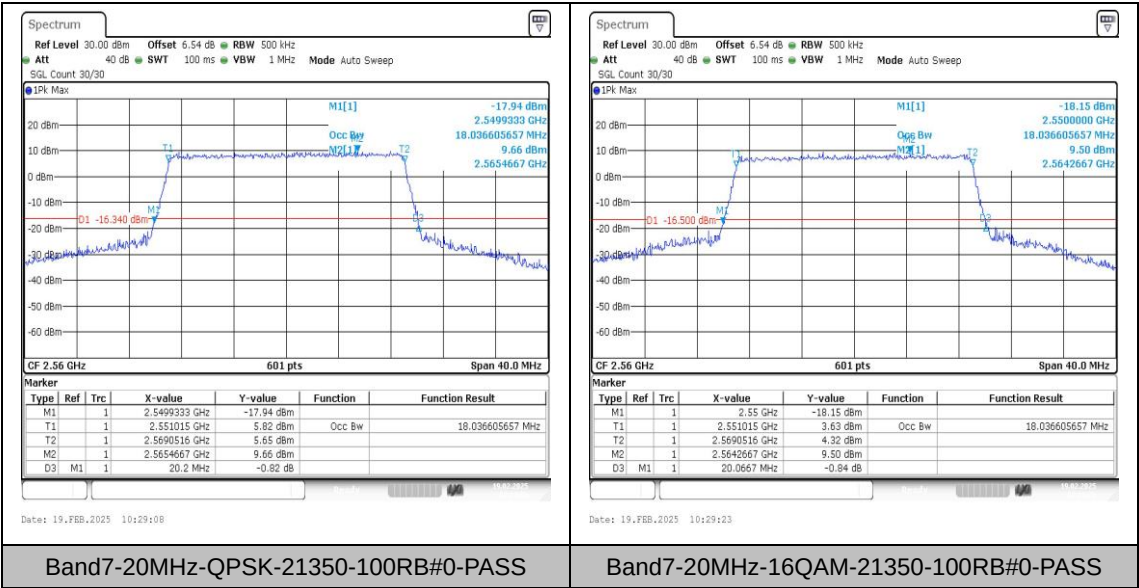
Test Graphs











Appendix D: Band Edge

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	-26.69	PASS
Band7	5MHz	QPSK	20775	1RB#24	-43.47	PASS
Band7	5MHz	QPSK	20775	25RB#0	-42.06	PASS
Band7	5MHz	16QAM	20775	1RB#0	-27.70	PASS
Band7	5MHz	16QAM	20775	1RB#24	-43.55	PASS
Band7	5MHz	16QAM	20775	25RB#0	-42.76	PASS
Band7	5MHz	QPSK	21425	1RB#0	-43.32	PASS
Band7	5MHz	QPSK	21425	1RB#24	-25.91	PASS
Band7	5MHz	QPSK	21425	25RB#0	-39.93	PASS
Band7	5MHz	16QAM	21425	1RB#0	-43.34	PASS
Band7	5MHz	16QAM	21425	1RB#24	-27.76	PASS
Band7	5MHz	16QAM	21425	25RB#0	-40.32	PASS
Band7	10MHz	QPSK	20800	1RB#0	-27.63	PASS
Band7	10MHz	QPSK	20800	1RB#49	-43.66	PASS
Band7	10MHz	QPSK	20800	50RB#0	-39.02	PASS
Band7	10MHz	16QAM	20800	1RB#0	-43.26	PASS
Band7	10MHz	16QAM	20800	1RB#49	-43.67	PASS
Band7	10MHz	16QAM	20800	50RB#0	-40.70	PASS
Band7	10MHz	QPSK	21400	1RB#0	-43.38	PASS
Band7	10MHz	QPSK	21400	1RB#49	-43.37	PASS
Band7	10MHz	QPSK	21400	50RB#0	-40.59	PASS
Band7	10MHz	16QAM	21400	1RB#0	-43.47	PASS
Band7	10MHz	16QAM	21400	1RB#49	-43.37	PASS
Band7	10MHz	16QAM	21400	50RB#0	-41.78	PASS
Band7	15MHz	QPSK	20825	1RB#0	-25.75	PASS
Band7	15MHz	QPSK	20825	1RB#74	-43.67	PASS
Band7	15MHz	QPSK	20825	75RB#0	-40.58	PASS
Band7	15MHz	16QAM	20825	1RB#0	-26.78	PASS
Band7	15MHz	16QAM	20825	1RB#74	-43.66	PASS
Band7	15MHz	16QAM	20825	75RB#0	-42.20	PASS
Band7	15MHz	QPSK	21375	1RB#0	-43.43	PASS
Band7	15MHz	QPSK	21375	1RB#74	-25.25	PASS
Band7	15MHz	QPSK	21375	75RB#0	-41.41	PASS
Band7	15MHz	16QAM	21375	1RB#0	-43.43	PASS
Band7	15MHz	16QAM	21375	1RB#74	-26.36	PASS
Band7	15MHz	16QAM	21375	75RB#0	-42.60	PASS

Band7	20MHz	QPSK	20850	1RB#0	-24.81	PASS
Band7	20MHz	QPSK	20850	1RB#99	-43.68	PASS
Band7	20MHz	QPSK	20850	100RB#0	-43.16	PASS
Band7	20MHz	16QAM	20850	1RB#0	-25.80	PASS
Band7	20MHz	16QAM	20850	1RB#99	-43.67	PASS
Band7	20MHz	16QAM	20850	100RB#0	-43.23	PASS
Band7	20MHz	QPSK	21350	1RB#0	-43.37	PASS
Band7	20MHz	QPSK	21350	1RB#99	-23.57	PASS
Band7	20MHz	QPSK	21350	100RB#0	-43.12	PASS
Band7	20MHz	16QAM	21350	1RB#0	-43.34	PASS
Band7	20MHz	16QAM	21350	1RB#99	-24.90	PASS
Band7	20MHz	16QAM	21350	100RB#0	-43.18	PASS

Test Graphs

