

Appendix for LTE BAND 71

Product Name: Smart Phone

Model No: X68

Appendix A: Average Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band71	5MHz	QPSK	133147	1RB#0	23.76	PASS
Band71	5MHz	16QAM	133147	1RB#0	22.69	PASS
Band71	5MHz	QPSK	133147	1RB#12	23.90	PASS
Band71	5MHz	16QAM	133147	1RB#12	22.84	PASS
Band71	5MHz	QPSK	133147	1RB#24	23.87	PASS
Band71	5MHz	16QAM	133147	1RB#24	22.77	PASS
Band71	5MHz	QPSK	133147	12RB#0	22.61	PASS
Band71	5MHz	16QAM	133147	12RB#0	21.56	PASS
Band71	5MHz	QPSK	133147	12RB#6	22.60	PASS
Band71	5MHz	16QAM	133147	12RB#6	21.57	PASS
Band71	5MHz	QPSK	133147	12RB#13	22.86	PASS
Band71	5MHz	16QAM	133147	12RB#13	21.84	PASS
Band71	5MHz	QPSK	133147	25RB#0	22.84	PASS
Band71	5MHz	16QAM	133147	25RB#0	21.81	PASS
Band71	5MHz	QPSK	133297	1RB#0	23.83	PASS
Band71	5MHz	16QAM	133297	1RB#0	22.75	PASS
Band71	5MHz	QPSK	133297	1RB#12	23.83	PASS
Band71	5MHz	16QAM	133297	1RB#12	22.90	PASS
Band71	5MHz	QPSK	133297	1RB#24	23.77	PASS
Band71	5MHz	16QAM	133297	1RB#24	22.76	PASS
Band71	5MHz	QPSK	133297	12RB#0	22.83	PASS
Band71	5MHz	16QAM	133297	12RB#0	21.78	PASS
Band71	5MHz	QPSK	133297	12RB#6	22.79	PASS
Band71	5MHz	16QAM	133297	12RB#6	21.77	PASS
Band71	5MHz	QPSK	133297	12RB#13	22.71	PASS
Band71	5MHz	16QAM	133297	12RB#13	21.70	PASS
Band71	5MHz	QPSK	133297	25RB#0	22.73	PASS
Band71	5MHz	16QAM	133297	25RB#0	21.74	PASS
Band71	5MHz	QPSK	133447	1RB#0	23.82	PASS
Band71	5MHz	16QAM	133447	1RB#0	22.58	PASS
Band71	5MHz	QPSK	133447	1RB#12	23.96	PASS
Band71	5MHz	16QAM	133447	1RB#12	22.84	PASS
Band71	5MHz	QPSK	133447	1RB#24	23.93	PASS
Band71	5MHz	16QAM	133447	1RB#24	22.79	PASS
Band71	5MHz	QPSK	133447	12RB#0	22.78	PASS
Band71	5MHz	16QAM	133447	12RB#0	21.84	PASS

Band71	5MHz	QPSK	133447	12RB#6	22.85	PASS
Band71	5MHz	16QAM	133447	12RB#6	21.81	PASS
Band71	5MHz	QPSK	133447	12RB#13	22.80	PASS
Band71	5MHz	16QAM	133447	12RB#13	21.77	PASS
Band71	5MHz	QPSK	133447	25RB#0	22.81	PASS
Band71	5MHz	16QAM	133447	25RB#0	21.85	PASS
Band71	10MHz	QPSK	133172	1RB#0	23.82	PASS
Band71	10MHz	16QAM	133172	1RB#0	22.58	PASS
Band71	10MHz	QPSK	133172	1RB#24	24.01	PASS
Band71	10MHz	16QAM	133172	1RB#24	22.78	PASS
Band71	10MHz	QPSK	133172	1RB#49	23.87	PASS
Band71	10MHz	16QAM	133172	1RB#49	22.63	PASS
Band71	10MHz	QPSK	133172	25RB#0	22.63	PASS
Band71	10MHz	16QAM	133172	25RB#0	21.59	PASS
Band71	10MHz	QPSK	133172	25RB#12	22.58	PASS
Band71	10MHz	16QAM	133172	25RB#12	21.56	PASS
Band71	10MHz	QPSK	133172	25RB#25	22.88	PASS
Band71	10MHz	16QAM	133172	25RB#25	21.88	PASS
Band71	10MHz	QPSK	133172	50RB#0	22.70	PASS
Band71	10MHz	16QAM	133172	50RB#0	21.74	PASS
Band71	10MHz	QPSK	133297	1RB#0	23.85	PASS
Band71	10MHz	16QAM	133297	1RB#0	22.77	PASS
Band71	10MHz	QPSK	133297	1RB#24	23.79	PASS
Band71	10MHz	16QAM	133297	1RB#24	22.83	PASS
Band71	10MHz	QPSK	133297	1RB#49	23.77	PASS
Band71	10MHz	16QAM	133297	1RB#49	22.76	PASS
Band71	10MHz	QPSK	133297	25RB#0	22.83	PASS
Band71	10MHz	16QAM	133297	25RB#0	21.75	PASS
Band71	10MHz	QPSK	133297	25RB#12	22.83	PASS
Band71	10MHz	16QAM	133297	25RB#12	21.73	PASS
Band71	10MHz	QPSK	133297	25RB#25	22.64	PASS
Band71	10MHz	16QAM	133297	25RB#25	21.62	PASS
Band71	10MHz	QPSK	133297	50RB#0	22.74	PASS
Band71	10MHz	16QAM	133297	50RB#0	21.69	PASS
Band71	10MHz	QPSK	133422	1RB#0	23.78	PASS
Band71	10MHz	16QAM	133422	1RB#0	22.56	PASS
Band71	10MHz	QPSK	133422	1RB#24	23.96	PASS
Band71	10MHz	16QAM	133422	1RB#24	22.66	PASS
Band71	10MHz	QPSK	133422	1RB#49	23.99	PASS
Band71	10MHz	16QAM	133422	1RB#49	22.79	PASS
Band71	10MHz	QPSK	133422	25RB#0	22.60	PASS
Band71	10MHz	16QAM	133422	25RB#0	21.61	PASS

Band71	10MHz	QPSK	133422	25RB#12	22.63	PASS
Band71	10MHz	16QAM	133422	25RB#12	21.60	PASS
Band71	10MHz	QPSK	133422	25RB#25	22.74	PASS
Band71	10MHz	16QAM	133422	25RB#25	21.75	PASS
Band71	10MHz	QPSK	133422	50RB#0	22.71	PASS
Band71	10MHz	16QAM	133422	50RB#0	21.67	PASS
Band71	15MHz	QPSK	133197	1RB#0	23.53	PASS
Band71	15MHz	16QAM	133197	1RB#0	22.30	PASS
Band71	15MHz	QPSK	133197	1RB#38	23.68	PASS
Band71	15MHz	16QAM	133197	1RB#38	22.38	PASS
Band71	15MHz	QPSK	133197	1RB#74	23.47	PASS
Band71	15MHz	16QAM	133197	1RB#74	22.21	PASS
Band71	15MHz	QPSK	133197	38RB#0	22.33	PASS
Band71	15MHz	16QAM	133197	38RB#0	22.28	PASS
Band71	15MHz	QPSK	133197	38RB#18	22.48	PASS
Band71	15MHz	16QAM	133197	38RB#18	22.42	PASS
Band71	15MHz	QPSK	133197	38RB#37	22.22	PASS
Band71	15MHz	16QAM	133197	38RB#37	22.21	PASS
Band71	15MHz	QPSK	133197	75RB#0	22.77	PASS
Band71	15MHz	16QAM	133197	75RB#0	21.71	PASS
Band71	15MHz	QPSK	133297	1RB#0	23.60	PASS
Band71	15MHz	16QAM	133297	1RB#0	22.53	PASS
Band71	15MHz	QPSK	133297	1RB#38	23.47	PASS
Band71	15MHz	16QAM	133297	1RB#38	22.47	PASS
Band71	15MHz	QPSK	133297	1RB#74	23.41	PASS
Band71	15MHz	16QAM	133297	1RB#74	22.44	PASS
Band71	15MHz	QPSK	133297	38RB#0	22.56	PASS
Band71	15MHz	16QAM	133297	38RB#0	22.52	PASS
Band71	15MHz	QPSK	133297	38RB#18	22.46	PASS
Band71	15MHz	16QAM	133297	38RB#18	22.45	PASS
Band71	15MHz	QPSK	133297	38RB#37	22.43	PASS
Band71	15MHz	16QAM	133297	38RB#37	22.41	PASS
Band71	15MHz	QPSK	133297	75RB#0	22.47	PASS
Band71	15MHz	16QAM	133297	75RB#0	21.41	PASS
Band71	15MHz	QPSK	133397	1RB#0	23.39	PASS
Band71	15MHz	16QAM	133397	1RB#0	22.53	PASS
Band71	15MHz	QPSK	133397	1RB#38	23.42	PASS
Band71	15MHz	16QAM	133397	1RB#38	22.51	PASS
Band71	15MHz	QPSK	133397	1RB#74	23.56	PASS
Band71	15MHz	16QAM	133397	1RB#74	22.70	PASS
Band71	15MHz	QPSK	133397	38RB#0	22.57	PASS
Band71	15MHz	16QAM	133397	38RB#0	22.51	PASS

Band71	15MHz	QPSK	133397	38RB#18	22.50	PASS
Band71	15MHz	16QAM	133397	38RB#18	22.53	PASS
Band71	15MHz	QPSK	133397	38RB#37	22.69	PASS
Band71	15MHz	16QAM	133397	38RB#37	22.68	PASS
Band71	15MHz	QPSK	133397	75RB#0	22.60	PASS
Band71	15MHz	16QAM	133397	75RB#0	21.56	PASS
Band71	20MHz	QPSK	133222	1RB#0	23.38	PASS
Band71	20MHz	16QAM	133222	1RB#0	22.21	PASS
Band71	20MHz	QPSK	133222	1RB#49	24.04	PASS
Band71	20MHz	16QAM	133222	1RB#49	22.60	PASS
Band71	20MHz	QPSK	133222	1RB#99	23.35	PASS
Band71	20MHz	16QAM	133222	1RB#99	22.13	PASS
Band71	20MHz	QPSK	133222	50RB#0	22.60	PASS
Band71	20MHz	16QAM	133222	50RB#0	21.63	PASS
Band71	20MHz	QPSK	133222	50RB#25	22.61	PASS
Band71	20MHz	16QAM	133222	50RB#25	21.63	PASS
Band71	20MHz	QPSK	133222	50RB#50	22.60	PASS
Band71	20MHz	16QAM	133222	50RB#50	21.64	PASS
Band71	20MHz	QPSK	133222	100RB#0	22.56	PASS
Band71	20MHz	16QAM	133222	100RB#0	21.58	PASS
Band71	20MHz	QPSK	133322	1RB#0	23.52	PASS
Band71	20MHz	16QAM	133322	1RB#0	22.34	PASS
Band71	20MHz	QPSK	133322	1RB#49	23.68	PASS
Band71	20MHz	16QAM	133322	1RB#49	22.60	PASS
Band71	20MHz	QPSK	133322	1RB#99	23.45	PASS
Band71	20MHz	16QAM	133322	1RB#99	22.22	PASS
Band71	20MHz	QPSK	133322	50RB#0	22.57	PASS
Band71	20MHz	16QAM	133322	50RB#0	21.50	PASS
Band71	20MHz	QPSK	133322	50RB#25	22.56	PASS
Band71	20MHz	16QAM	133322	50RB#25	21.52	PASS
Band71	20MHz	QPSK	133322	50RB#50	22.58	PASS
Band71	20MHz	16QAM	133322	50RB#50	21.55	PASS
Band71	20MHz	QPSK	133322	100RB#0	22.66	PASS
Band71	20MHz	16QAM	133322	100RB#0	21.60	PASS
Band71	20MHz	QPSK	133372	1RB#0	23.42	PASS
Band71	20MHz	16QAM	133372	1RB#0	22.41	PASS
Band71	20MHz	QPSK	133372	1RB#49	23.60	PASS
Band71	20MHz	16QAM	133372	1RB#49	22.74	PASS
Band71	20MHz	QPSK	133372	1RB#99	23.50	PASS
Band71	20MHz	16QAM	133372	1RB#99	22.58	PASS
Band71	20MHz	QPSK	133372	50RB#0	22.86	PASS
Band71	20MHz	16QAM	133372	50RB#0	21.87	PASS

Band71	20MHz	QPSK	133372	50RB#25	22.88	PASS
Band71	20MHz	16QAM	133372	50RB#25	21.85	PASS
Band71	20MHz	QPSK	133372	50RB#50	22.73	PASS
Band71	20MHz	16QAM	133372	50RB#50	21.72	PASS
Band71	20MHz	QPSK	133372	100RB#0	22.74	PASS
Band71	20MHz	16QAM	133372	100RB#0	21.69	PASS

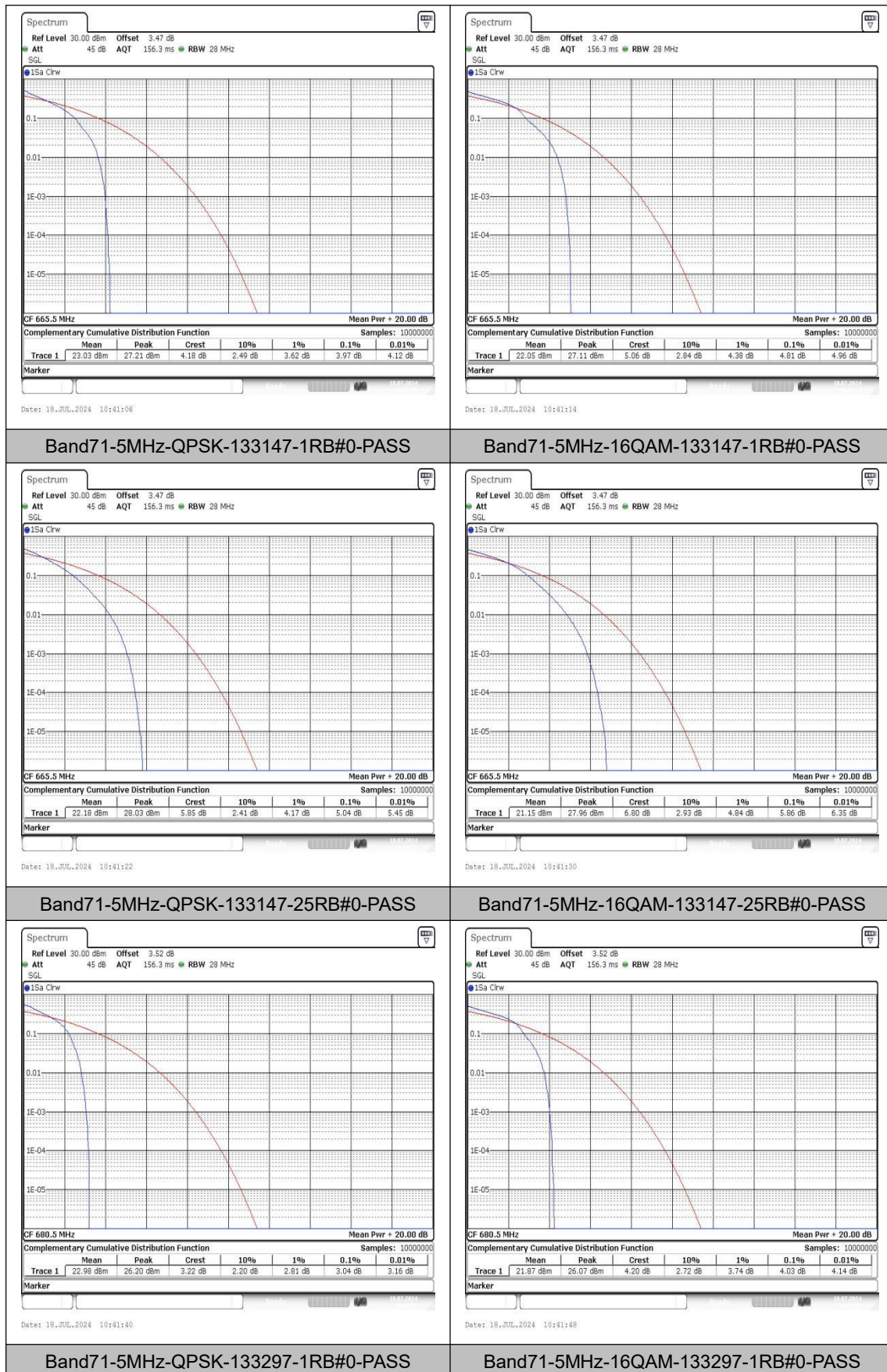
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band71	5MHz	QPSK	133147	1RB#0	3.97	13	PASS
Band71	5MHz	16QAM	133147	1RB#0	4.81	13	PASS
Band71	5MHz	QPSK	133147	25RB#0	5.04	13	PASS
Band71	5MHz	16QAM	133147	25RB#0	5.86	13	PASS
Band71	5MHz	QPSK	133297	1RB#0	3.04	13	PASS
Band71	5MHz	16QAM	133297	1RB#0	4.03	13	PASS
Band71	5MHz	QPSK	133297	25RB#0	4.70	13	PASS
Band71	5MHz	16QAM	133297	25RB#0	5.54	13	PASS
Band71	5MHz	QPSK	133447	1RB#0	3.48	13	PASS
Band71	5MHz	16QAM	133447	1RB#0	4.29	13	PASS
Band71	5MHz	QPSK	133447	25RB#0	4.67	13	PASS
Band71	5MHz	16QAM	133447	25RB#0	5.51	13	PASS
Band71	10MHz	QPSK	133172	1RB#0	3.83	13	PASS
Band71	10MHz	16QAM	133172	1RB#0	4.72	13	PASS
Band71	10MHz	QPSK	133172	50RB#0	5.19	13	PASS
Band71	10MHz	16QAM	133172	50RB#0	6.03	13	PASS
Band71	10MHz	QPSK	133297	1RB#0	2.84	13	PASS
Band71	10MHz	16QAM	133297	1RB#0	3.88	13	PASS
Band71	10MHz	QPSK	133297	50RB#0	4.72	13	PASS
Band71	10MHz	16QAM	133297	50RB#0	5.62	13	PASS
Band71	10MHz	QPSK	133422	1RB#0	4.20	13	PASS
Band71	10MHz	16QAM	133422	1RB#0	5.13	13	PASS
Band71	10MHz	QPSK	133422	50RB#0	4.78	13	PASS
Band71	10MHz	16QAM	133422	50RB#0	5.62	13	PASS
Band71	15MHz	QPSK	133197	1RB#0	3.83	13	PASS
Band71	15MHz	16QAM	133197	1RB#0	4.75	13	PASS
Band71	15MHz	QPSK	133197	75RB#0	5.07	13	PASS
Band71	15MHz	16QAM	133197	75RB#0	5.88	13	PASS
Band71	15MHz	QPSK	133297	1RB#0	3.30	13	PASS
Band71	15MHz	16QAM	133297	1RB#0	4.35	13	PASS
Band71	15MHz	QPSK	133297	75RB#0	4.96	13	PASS
Band71	15MHz	16QAM	133297	75RB#0	5.65	13	PASS
Band71	15MHz	QPSK	133397	1RB#0	4.96	13	PASS
Band71	15MHz	16QAM	133397	1RB#0	6.09	13	PASS
Band71	15MHz	QPSK	133397	75RB#0	5.28	13	PASS
Band71	15MHz	16QAM	133397	75RB#0	5.94	13	PASS
Band71	20MHz	QPSK	133222	1RB#0	3.88	13	PASS

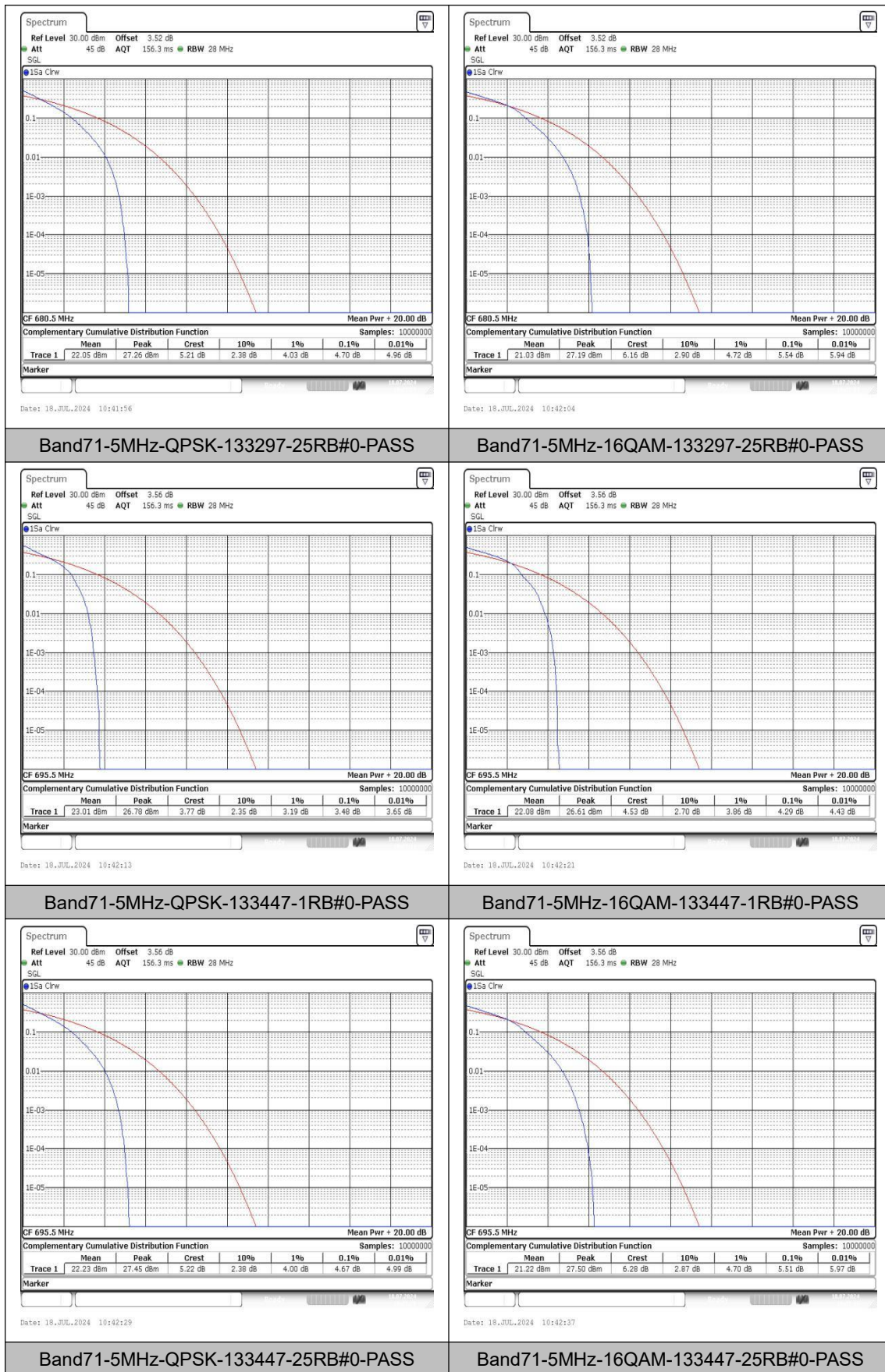
Band71	20MHz	16QAM	133222	1RB#0	4.72	13	PASS
Band71	20MHz	QPSK	133222	100RB#0	5.10	13	PASS
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Band71	20MHz	QPSK	133322	1RB#0	3.39	13	PASS
Band71	20MHz	16QAM	133322	1RB#0	4.49	13	PASS
Band71	20MHz	QPSK	133322	100RB#0	4.70	13	PASS
Band71	20MHz	16QAM	133322	100RB#0	5.62	13	PASS
Band71	20MHz	QPSK	133372	1RB#0	3.33	13	PASS
Band71	20MHz	16QAM	133372	1RB#0	4.46	13	PASS
Band71	20MHz	QPSK	133372	100RB#0	5.07	13	PASS
Band71	20MHz	16QAM	133372	100RB#0	5.88	13	PASS

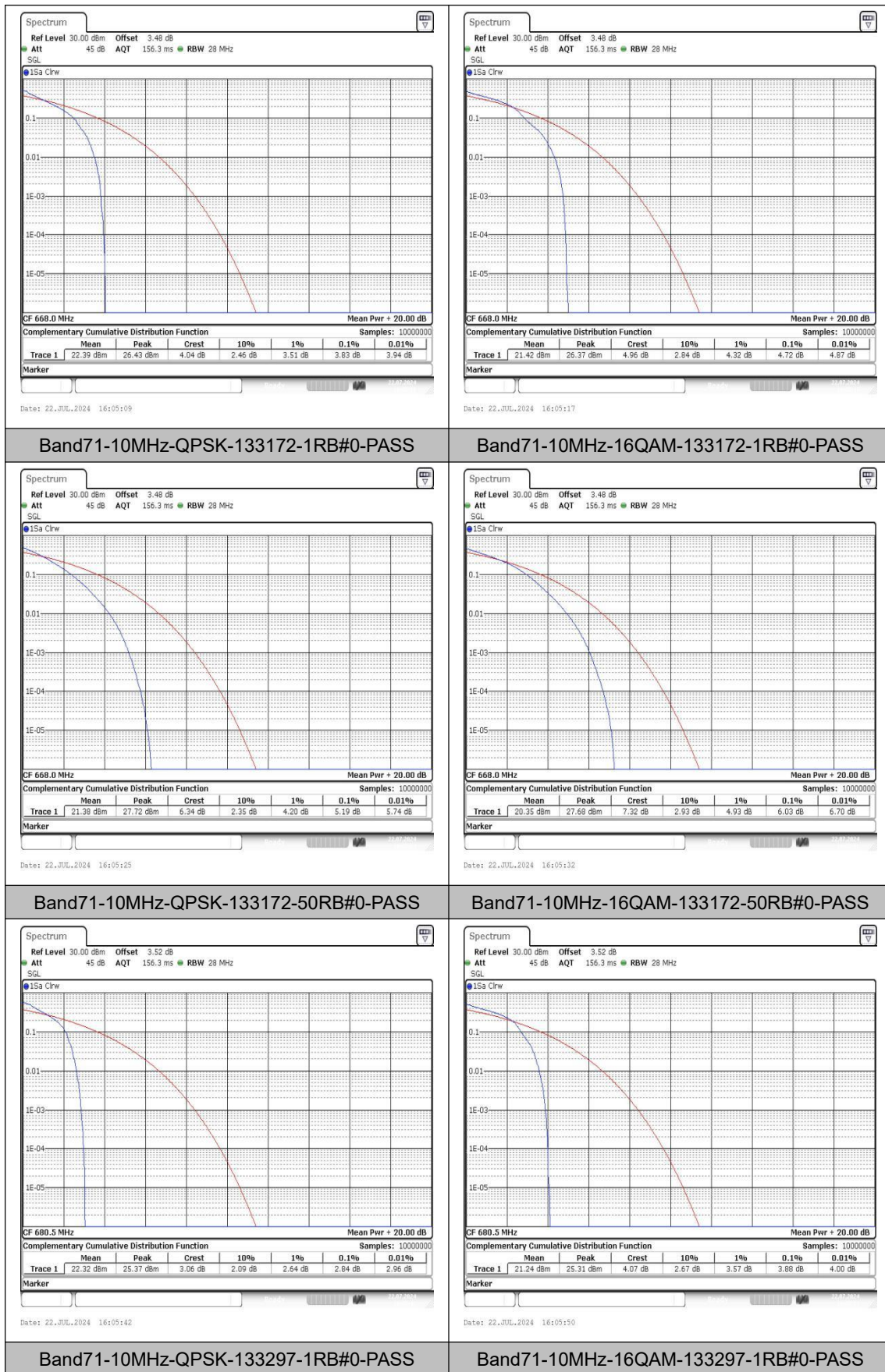
Test Graphs

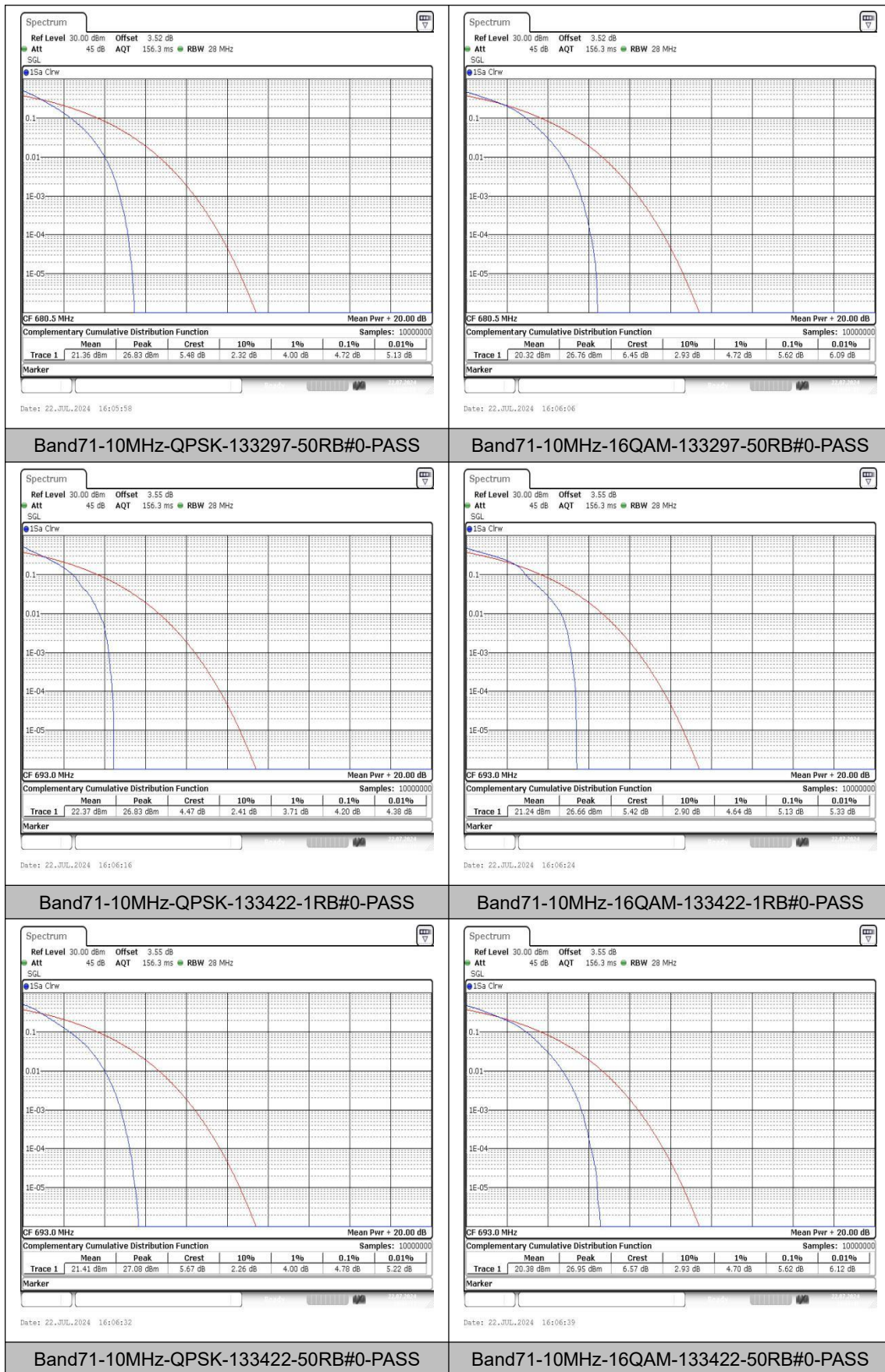


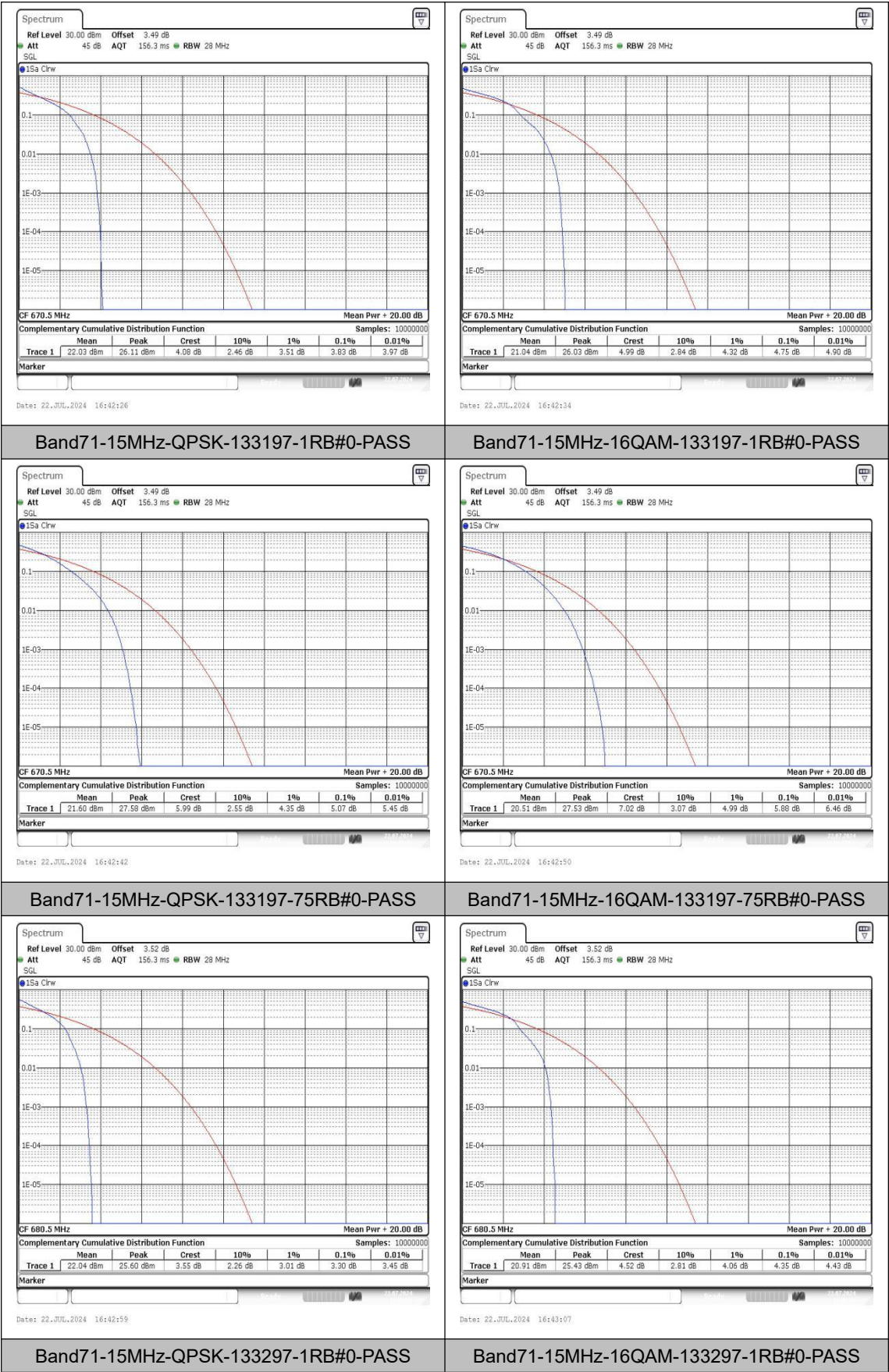
Waltek Testing Group (Shenzhen) Co., Ltd.

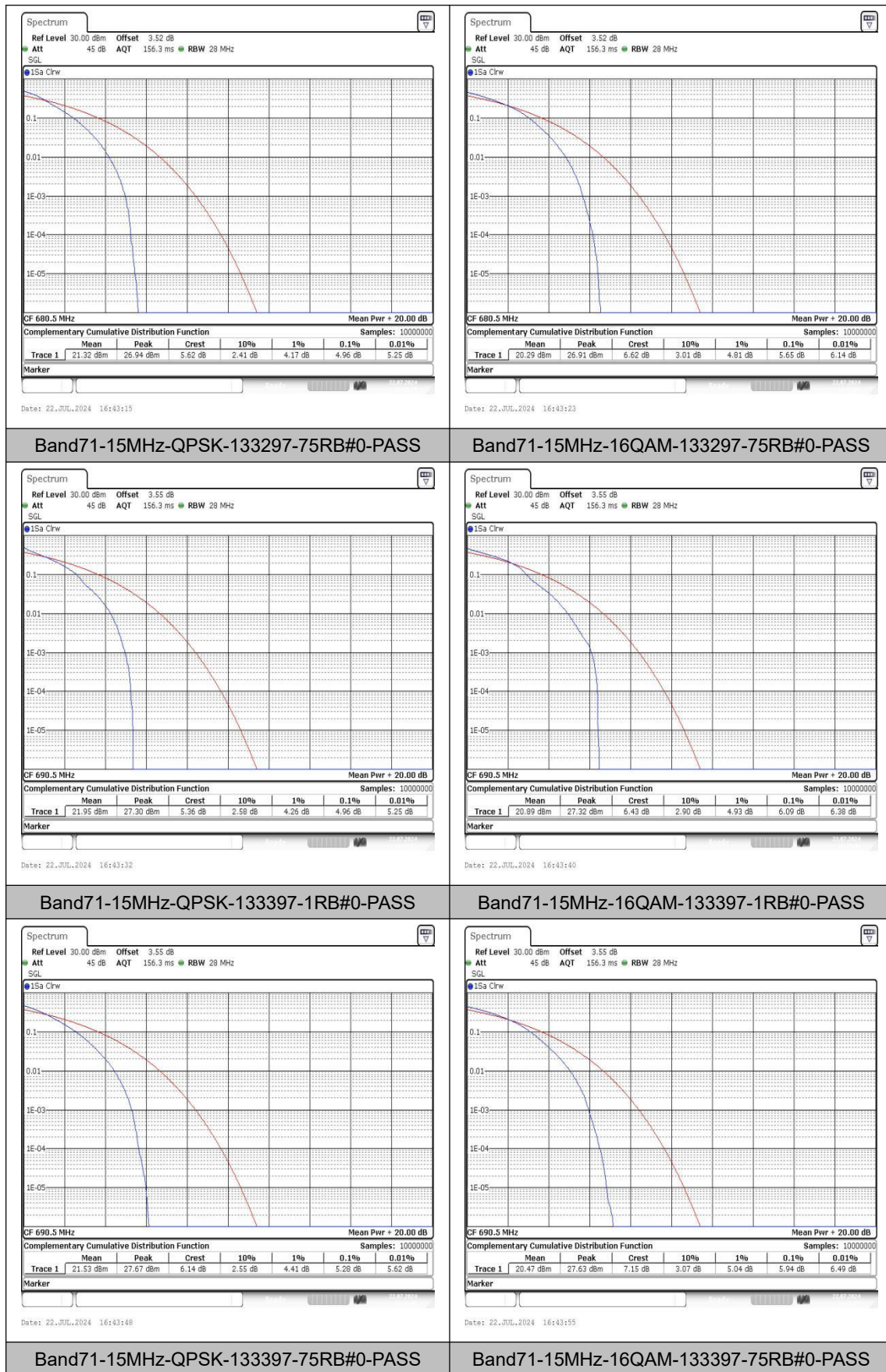
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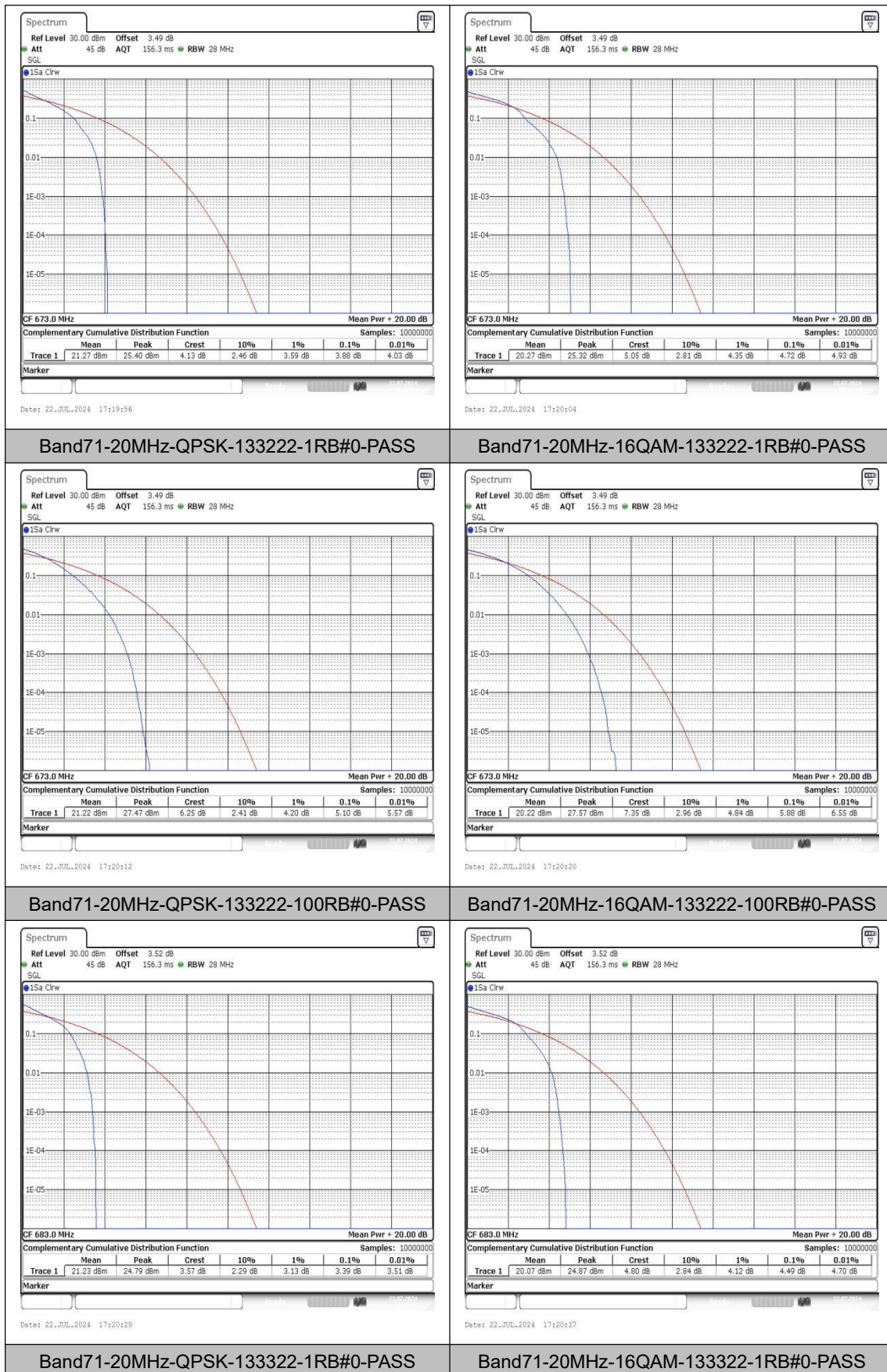


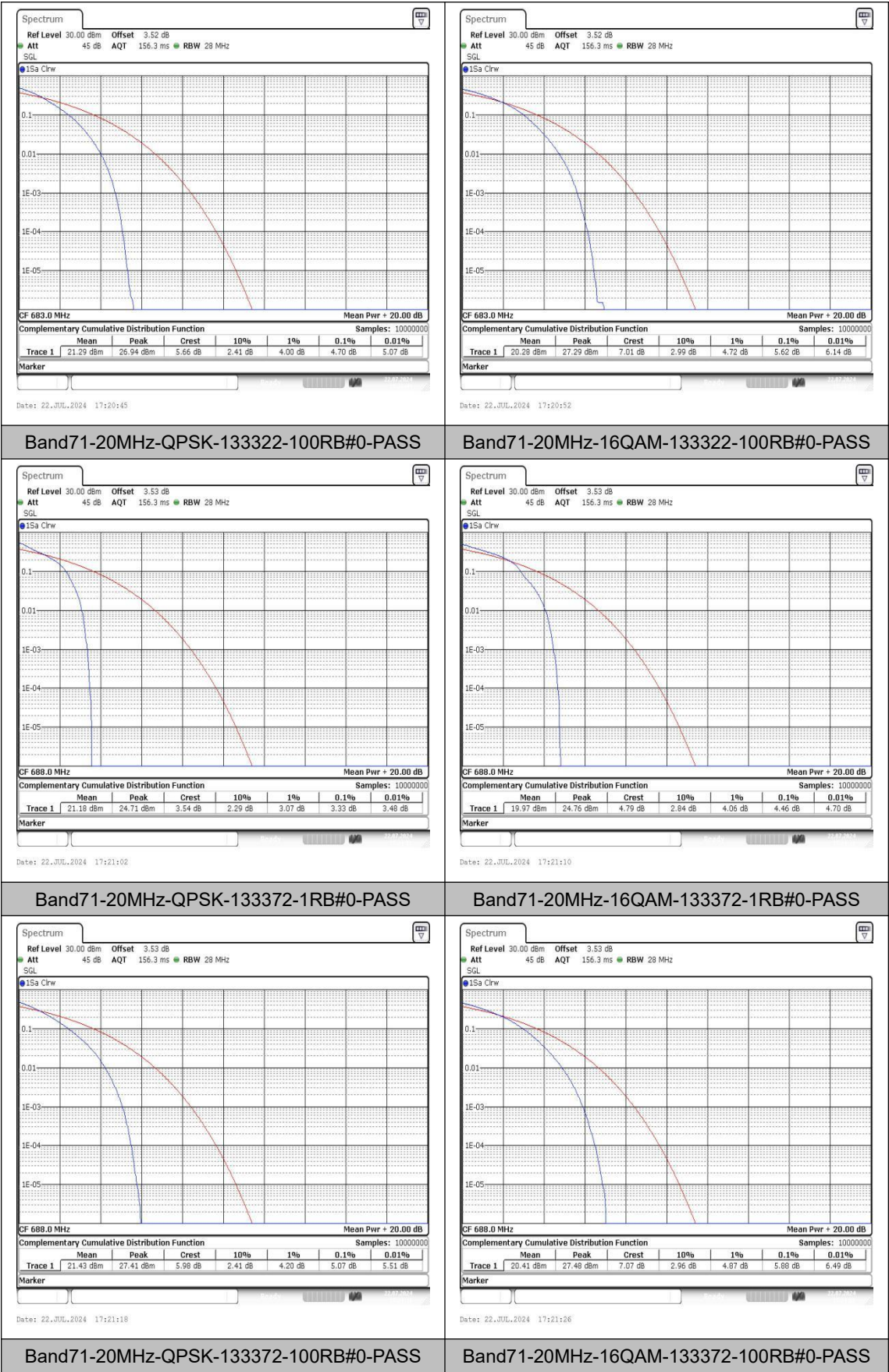












Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band71	5MHz	QPSK	133147	25RB#0	4.515	5.15	PASS
Band71	5MHz	16QAM	133147	25RB#0	4.515	5.14	PASS
Band71	5MHz	QPSK	133297	25RB#0	4.525	5.22	PASS
Band71	5MHz	16QAM	133297	25RB#0	4.515	5.15	PASS
Band71	5MHz	QPSK	133447	25RB#0	4.505	5.17	PASS
Band71	5MHz	16QAM	133447	25RB#0	4.525	5.22	PASS
Band71	10MHz	QPSK	133172	50RB#0	8.952	10.10	PASS
Band71	10MHz	16QAM	133172	50RB#0	8.952	10.17	PASS
Band71	10MHz	QPSK	133297	50RB#0	9.018	10.17	PASS
Band71	10MHz	16QAM	133297	50RB#0	8.985	10.10	PASS
Band71	10MHz	QPSK	133422	50RB#0	8.985	10.10	PASS
Band71	10MHz	16QAM	133422	50RB#0	8.985	10.13	PASS
Band71	15MHz	QPSK	133197	75RB#0	13.527	15.15	PASS
Band71	15MHz	16QAM	133197	75RB#0	13.478	15.05	PASS
Band71	15MHz	QPSK	133297	75RB#0	13.478	15.05	PASS
Band71	15MHz	16QAM	133297	75RB#0	13.428	15.15	PASS
Band71	15MHz	QPSK	133397	75RB#0	13.478	15.10	PASS
Band71	15MHz	16QAM	133397	75RB#0	13.527	15.05	PASS
Band71	20MHz	QPSK	133222	100RB#0	17.903	19.93	PASS
Band71	20MHz	16QAM	133222	100RB#0	17.97	20.00	PASS
Band71	20MHz	QPSK	133322	100RB#0	18.103	20.20	PASS
Band71	20MHz	16QAM	133322	100RB#0	18.103	20.27	PASS
Band71	20MHz	QPSK	133372	100RB#0	18.103	20.20	PASS
Band71	20MHz	16QAM	133372	100RB#0	18.103	20.13	PASS

Test Graphs

