

Appendix for LTE BAND 12

Product Name: 4G GPS device

Model No: FA96S

Appendix A: Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	23.08	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	23.17	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	23.08	PASS
Band12	1.4MHz	QPSK	23017	3RB#0	23.10	PASS
Band12	1.4MHz	QPSK	23017	3RB#1	23.11	PASS
Band12	1.4MHz	QPSK	23017	3RB#3	23.08	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	22.18	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	22.10	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	22.22	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	22.04	PASS
Band12	1.4MHz	16QAM	23017	3RB#0	22.01	PASS
Band12	1.4MHz	16QAM	23017	3RB#1	22.11	PASS
Band12	1.4MHz	16QAM	23017	3RB#3	21.95	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	21.18	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	23.19	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	23.29	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	23.16	PASS
Band12	1.4MHz	QPSK	23095	3RB#0	23.22	PASS
Band12	1.4MHz	QPSK	23095	3RB#1	23.16	PASS
Band12	1.4MHz	QPSK	23095	3RB#3	23.14	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	22.26	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	22.18	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	22.28	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	22.13	PASS
Band12	1.4MHz	16QAM	23095	3RB#0	22.06	PASS
Band12	1.4MHz	16QAM	23095	3RB#1	22.16	PASS
Band12	1.4MHz	16QAM	23095	3RB#3	22.02	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	21.23	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	23.18	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	23.18	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	23.14	PASS
Band12	1.4MHz	QPSK	23173	3RB#0	23.22	PASS
Band12	1.4MHz	QPSK	23173	3RB#1	23.12	PASS
Band12	1.4MHz	QPSK	23173	3RB#3	23.18	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	22.17	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	22.05	PASS

Band12	1.4MHz	16QAM	23173	1RB#2	22.34	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	22.09	PASS
Band12	1.4MHz	16QAM	23173	3RB#0	22.01	PASS
Band12	1.4MHz	16QAM	23173	3RB#1	22.08	PASS
Band12	1.4MHz	16QAM	23173	3RB#3	22.07	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	21.01	PASS
Band12	3MHz	QPSK	23025	1RB#0	23.13	PASS
Band12	3MHz	QPSK	23025	1RB#8	23.13	PASS
Band12	3MHz	QPSK	23025	1RB#14	23.22	PASS
Band12	3MHz	QPSK	23025	8RB#0	22.17	PASS
Band12	3MHz	QPSK	23025	8RB#4	22.16	PASS
Band12	3MHz	QPSK	23025	8RB#7	22.21	PASS
Band12	3MHz	QPSK	23025	15RB#0	22.17	PASS
Band12	3MHz	16QAM	23025	1RB#0	22.15	PASS
Band12	3MHz	16QAM	23025	1RB#8	22.13	PASS
Band12	3MHz	16QAM	23025	1RB#14	22.21	PASS
Band12	3MHz	16QAM	23025	8RB#0	21.21	PASS
Band12	3MHz	16QAM	23025	8RB#4	21.19	PASS
Band12	3MHz	16QAM	23025	8RB#7	21.21	PASS
Band12	3MHz	16QAM	23025	15RB#0	21.22	PASS
Band12	3MHz	QPSK	23095	1RB#0	23.28	PASS
Band12	3MHz	QPSK	23095	1RB#8	23.17	PASS
Band12	3MHz	QPSK	23095	1RB#14	23.25	PASS
Band12	3MHz	QPSK	23095	8RB#0	22.28	PASS
Band12	3MHz	QPSK	23095	8RB#4	22.22	PASS
Band12	3MHz	QPSK	23095	8RB#7	22.23	PASS
Band12	3MHz	QPSK	23095	15RB#0	22.25	PASS
Band12	3MHz	16QAM	23095	1RB#0	22.31	PASS
Band12	3MHz	16QAM	23095	1RB#8	22.20	PASS
Band12	3MHz	16QAM	23095	1RB#14	22.23	PASS
Band12	3MHz	16QAM	23095	8RB#0	21.31	PASS
Band12	3MHz	16QAM	23095	8RB#4	21.26	PASS
Band12	3MHz	16QAM	23095	8RB#7	21.24	PASS
Band12	3MHz	16QAM	23095	15RB#0	21.22	PASS
Band12	3MHz	QPSK	23165	1RB#0	23.18	PASS
Band12	3MHz	QPSK	23165	1RB#8	23.08	PASS
Band12	3MHz	QPSK	23165	1RB#14	23.10	PASS
Band12	3MHz	QPSK	23165	8RB#0	22.19	PASS
Band12	3MHz	QPSK	23165	8RB#4	22.17	PASS
Band12	3MHz	QPSK	23165	8RB#7	22.13	PASS
Band12	3MHz	QPSK	23165	15RB#0	22.17	PASS
Band12	3MHz	16QAM	23165	1RB#0	22.11	PASS

Band12	3MHz	16QAM	23165	1RB#8	22.29	PASS
Band12	3MHz	16QAM	23165	1RB#14	22.02	PASS
Band12	3MHz	16QAM	23165	8RB#0	21.17	PASS
Band12	3MHz	16QAM	23165	8RB#4	21.09	PASS
Band12	3MHz	16QAM	23165	8RB#7	21.17	PASS
Band12	3MHz	16QAM	23165	15RB#0	21.08	PASS
Band12	5MHz	QPSK	23035	1RB#0	23.34	PASS
Band12	5MHz	QPSK	23035	1RB#12	23.25	PASS
Band12	5MHz	QPSK	23035	1RB#24	23.44	PASS
Band12	5MHz	QPSK	23035	12RB#0	22.22	PASS
Band12	5MHz	QPSK	23035	12RB#6	22.23	PASS
Band12	5MHz	QPSK	23035	12RB#13	22.25	PASS
Band12	5MHz	QPSK	23035	25RB#0	22.28	PASS
Band12	5MHz	16QAM	23035	1RB#0	22.21	PASS
Band12	5MHz	16QAM	23035	1RB#12	22.22	PASS
Band12	5MHz	16QAM	23035	1RB#24	22.29	PASS
Band12	5MHz	16QAM	23035	12RB#0	21.23	PASS
Band12	5MHz	16QAM	23035	12RB#6	21.24	PASS
Band12	5MHz	16QAM	23035	12RB#13	21.25	PASS
Band12	5MHz	16QAM	23035	25RB#0	21.27	PASS
Band12	5MHz	QPSK	23095	1RB#0	23.42	PASS
Band12	5MHz	QPSK	23095	1RB#12	23.27	PASS
Band12	5MHz	QPSK	23095	1RB#24	23.41	PASS
Band12	5MHz	QPSK	23095	12RB#0	22.31	PASS
Band12	5MHz	QPSK	23095	12RB#6	22.27	PASS
Band12	5MHz	QPSK	23095	12RB#13	22.25	PASS
Band12	5MHz	QPSK	23095	25RB#0	22.28	PASS
Band12	5MHz	16QAM	23095	1RB#0	22.29	PASS
Band12	5MHz	16QAM	23095	1RB#12	22.22	PASS
Band12	5MHz	16QAM	23095	1RB#24	22.28	PASS
Band12	5MHz	16QAM	23095	12RB#0	21.30	PASS
Band12	5MHz	16QAM	23095	12RB#6	21.30	PASS
Band12	5MHz	16QAM	23095	12RB#13	21.25	PASS
Band12	5MHz	16QAM	23095	25RB#0	21.29	PASS
Band12	5MHz	QPSK	23155	1RB#0	23.34	PASS
Band12	5MHz	QPSK	23155	1RB#12	23.27	PASS
Band12	5MHz	QPSK	23155	1RB#24	23.28	PASS
Band12	5MHz	QPSK	23155	12RB#0	22.26	PASS
Band12	5MHz	QPSK	23155	12RB#6	22.24	PASS
Band12	5MHz	QPSK	23155	12RB#13	22.23	PASS
Band12	5MHz	QPSK	23155	25RB#0	22.29	PASS
Band12	5MHz	16QAM	23155	1RB#0	22.31	PASS

Band12	5MHz	16QAM	23155	1RB#12	22.36	PASS
Band12	5MHz	16QAM	23155	1RB#24	22.29	PASS
Band12	5MHz	16QAM	23155	12RB#0	21.31	PASS
Band12	5MHz	16QAM	23155	12RB#6	21.32	PASS
Band12	5MHz	16QAM	23155	12RB#13	21.29	PASS
Band12	5MHz	16QAM	23155	25RB#0	21.23	PASS
Band12	10MHz	QPSK	23060	1RB#0	23.35	PASS
Band12	10MHz	QPSK	23060	1RB#24	23.28	PASS
Band12	10MHz	QPSK	23060	1RB#49	23.36	PASS
Band12	10MHz	QPSK	23060	25RB#0	22.28	PASS
Band12	10MHz	QPSK	23060	25RB#12	22.27	PASS
Band12	10MHz	QPSK	23060	25RB#25	22.30	PASS
Band12	10MHz	QPSK	23060	50RB#0	22.29	PASS
Band12	10MHz	16QAM	23060	1RB#0	22.29	PASS
Band12	10MHz	16QAM	23060	1RB#24	22.21	PASS
Band12	10MHz	16QAM	23060	1RB#49	22.32	PASS
Band12	10MHz	16QAM	23060	25RB#0	21.24	PASS
Band12	10MHz	16QAM	23060	25RB#12	21.25	PASS
Band12	10MHz	16QAM	23060	25RB#25	21.29	PASS
Band12	10MHz	QPSK	23095	1RB#0	23.36	PASS
Band12	10MHz	QPSK	23095	1RB#24	23.38	PASS
Band12	10MHz	QPSK	23095	1RB#49	23.35	PASS
Band12	10MHz	QPSK	23095	25RB#0	22.31	PASS
Band12	10MHz	QPSK	23095	25RB#12	22.31	PASS
Band12	10MHz	QPSK	23095	25RB#25	22.26	PASS
Band12	10MHz	QPSK	23095	50RB#0	22.28	PASS
Band12	10MHz	16QAM	23095	1RB#0	22.25	PASS
Band12	10MHz	16QAM	23095	1RB#24	22.45	PASS
Band12	10MHz	16QAM	23095	1RB#49	22.20	PASS
Band12	10MHz	16QAM	23095	25RB#0	21.28	PASS
Band12	10MHz	16QAM	23095	25RB#12	21.31	PASS
Band12	10MHz	16QAM	23095	25RB#25	21.29	PASS
Band12	10MHz	QPSK	23130	1RB#0	23.68	PASS
Band12	10MHz	QPSK	23130	1RB#24	23.25	PASS
Band12	10MHz	QPSK	23130	1RB#49	23.25	PASS
Band12	10MHz	QPSK	23130	25RB#0	22.34	PASS
Band12	10MHz	QPSK	23130	25RB#12	22.26	PASS
Band12	10MHz	QPSK	23130	25RB#25	22.24	PASS
Band12	10MHz	QPSK	23130	50RB#0	22.31	PASS
Band12	10MHz	16QAM	23130	1RB#0	22.17	PASS
Band12	10MHz	16QAM	23130	1RB#24	22.22	PASS
Band12	10MHz	16QAM	23130	1RB#49	22.04	PASS

Band12	10MHz	16QAM	23130	25RB#0	21.36	PASS
Band12	10MHz	16QAM	23130	25RB#12	21.24	PASS
Band12	10MHz	16QAM	23130	25RB#25	21.27	PASS

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

Test Result

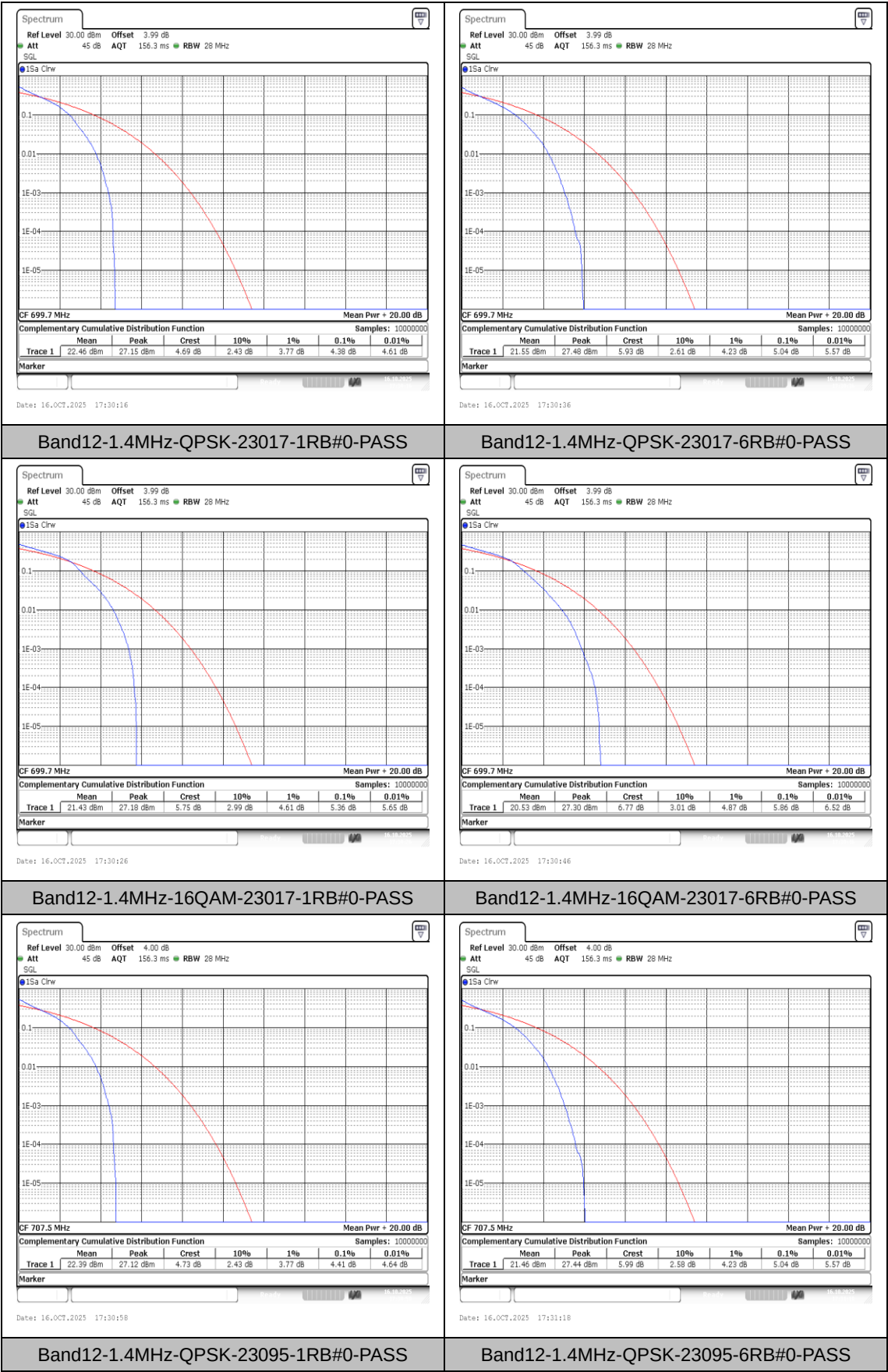
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	4.38	13	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	5.04	13	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	5.36	13	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	5.86	13	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	4.41	13	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	5.04	13	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	5.39	13	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	5.86	13	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	4.32	13	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	4.96	13	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	5.16	13	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	5.83	13	PASS
Band12	3MHz	QPSK	23025	1RB#0	4.32	13	PASS
Band12	3MHz	QPSK	23025	15RB#0	5.19	13	PASS
Band12	3MHz	16QAM	23025	1RB#0	5.28	13	PASS
Band12	3MHz	16QAM	23025	15RB#0	6.00	13	PASS
Band12	3MHz	QPSK	23095	1RB#0	4.41	13	PASS
Band12	3MHz	QPSK	23095	15RB#0	5.10	13	PASS
Band12	3MHz	16QAM	23095	1RB#0	5.30	13	PASS
Band12	3MHz	16QAM	23095	15RB#0	5.94	13	PASS
Band12	3MHz	QPSK	23165	1RB#0	4.55	13	PASS
Band12	3MHz	QPSK	23165	15RB#0	5.16	13	PASS
Band12	3MHz	16QAM	23165	1RB#0	5.39	13	PASS
Band12	3MHz	16QAM	23165	15RB#0	6.00	13	PASS
Band12	5MHz	QPSK	23035	1RB#0	4.35	13	PASS
Band12	5MHz	QPSK	23035	25RB#0	5.25	13	PASS
Band12	5MHz	16QAM	23035	1RB#0	5.10	13	PASS
Band12	5MHz	16QAM	23035	25RB#0	6.00	13	PASS
Band12	5MHz	QPSK	23095	1RB#0	4.55	13	PASS
Band12	5MHz	QPSK	23095	25RB#0	5.10	13	PASS
Band12	5MHz	16QAM	23095	1RB#0	5.28	13	PASS
Band12	5MHz	16QAM	23095	25RB#0	5.88	13	PASS
Band12	5MHz	QPSK	23155	1RB#0	4.61	13	PASS
Band12	5MHz	QPSK	23155	25RB#0	5.22	13	PASS
Band12	5MHz	16QAM	23155	1RB#0	5.39	13	PASS
Band12	5MHz	16QAM	23155	25RB#0	6.00	13	PASS

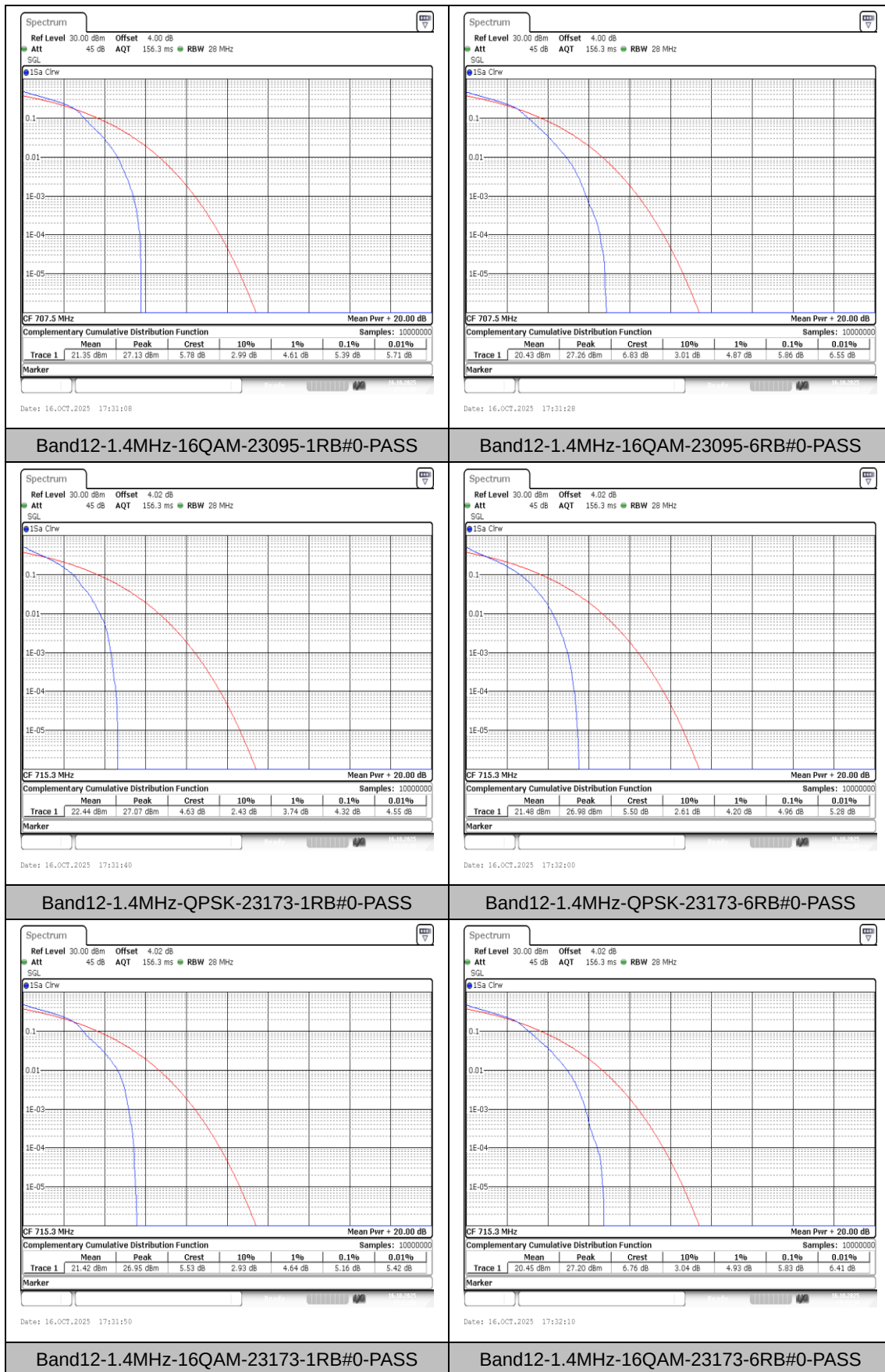
Waltek Testing Group (Shenzhen) Co., Ltd.

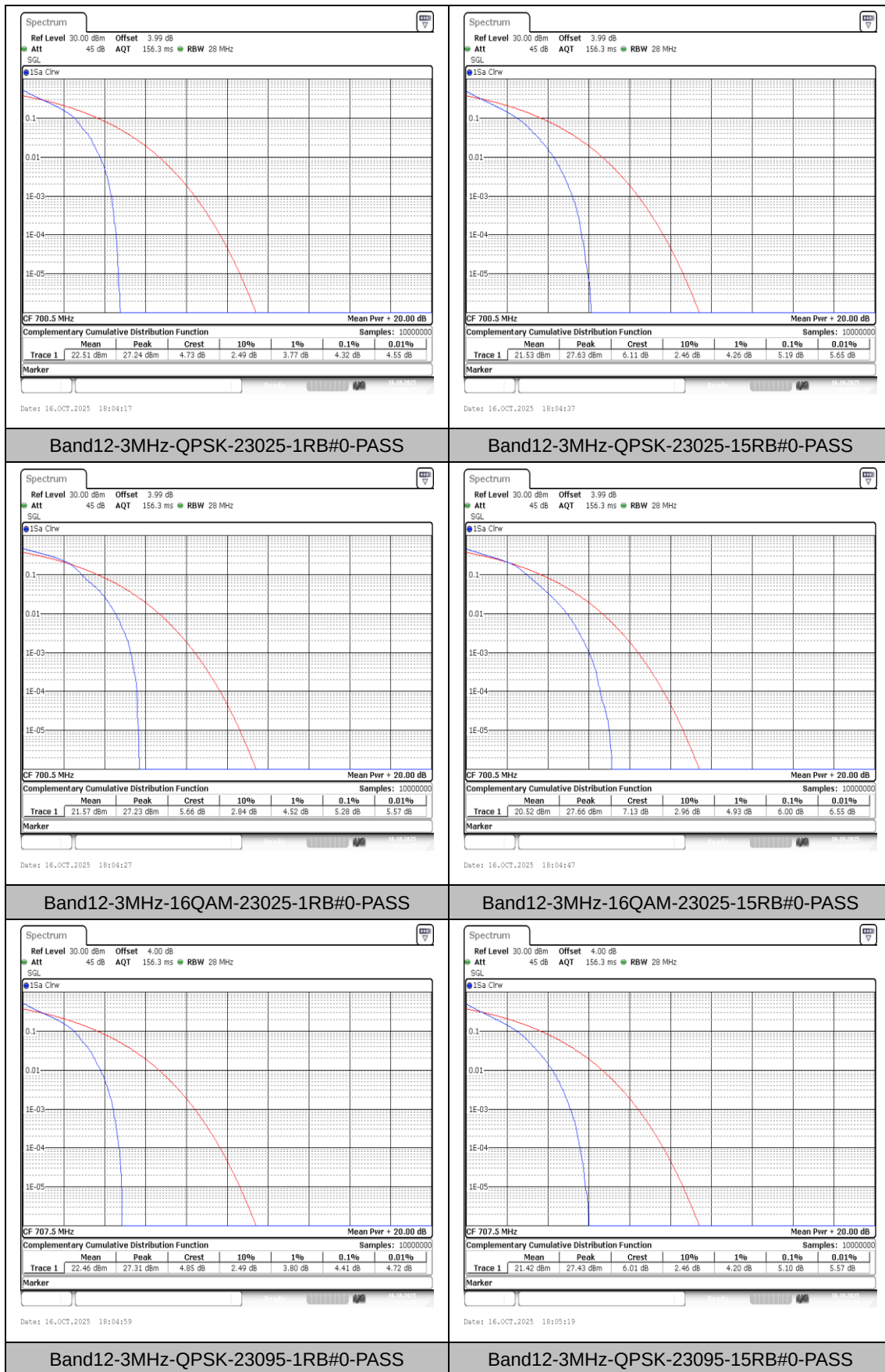
[Http://www.waltek.com.cn](http://www.waltek.com.cn)

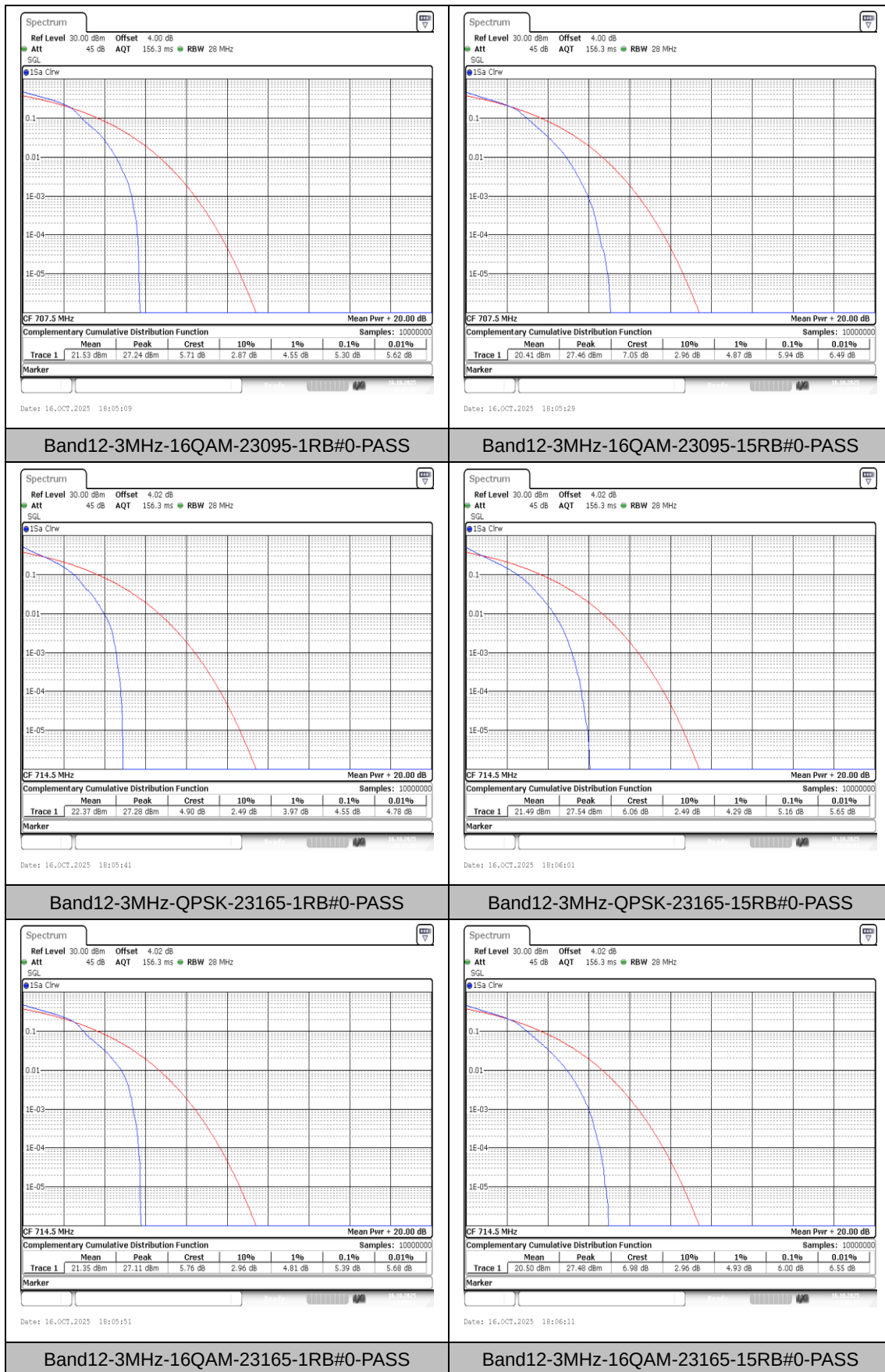
Band12	10MHz	QPSK	23060	1RB#0	4.26	13	PASS
Band12	10MHz	QPSK	23060	50RB#0	5.22	13	PASS
Band12	10MHz	16QAM	23060	1RB#0	5.19	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	6.03	13	PASS
Band12	10MHz	QPSK	23095	1RB#0	4.49	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	5.16	13	PASS
Band12	10MHz	16QAM	23095	1RB#0	5.36	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	6.03	13	PASS
Band12	10MHz	QPSK	23130	1RB#0	4.32	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	5.22	13	PASS
Band12	10MHz	16QAM	23130	1RB#0	5.42	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	6.06	13	PASS

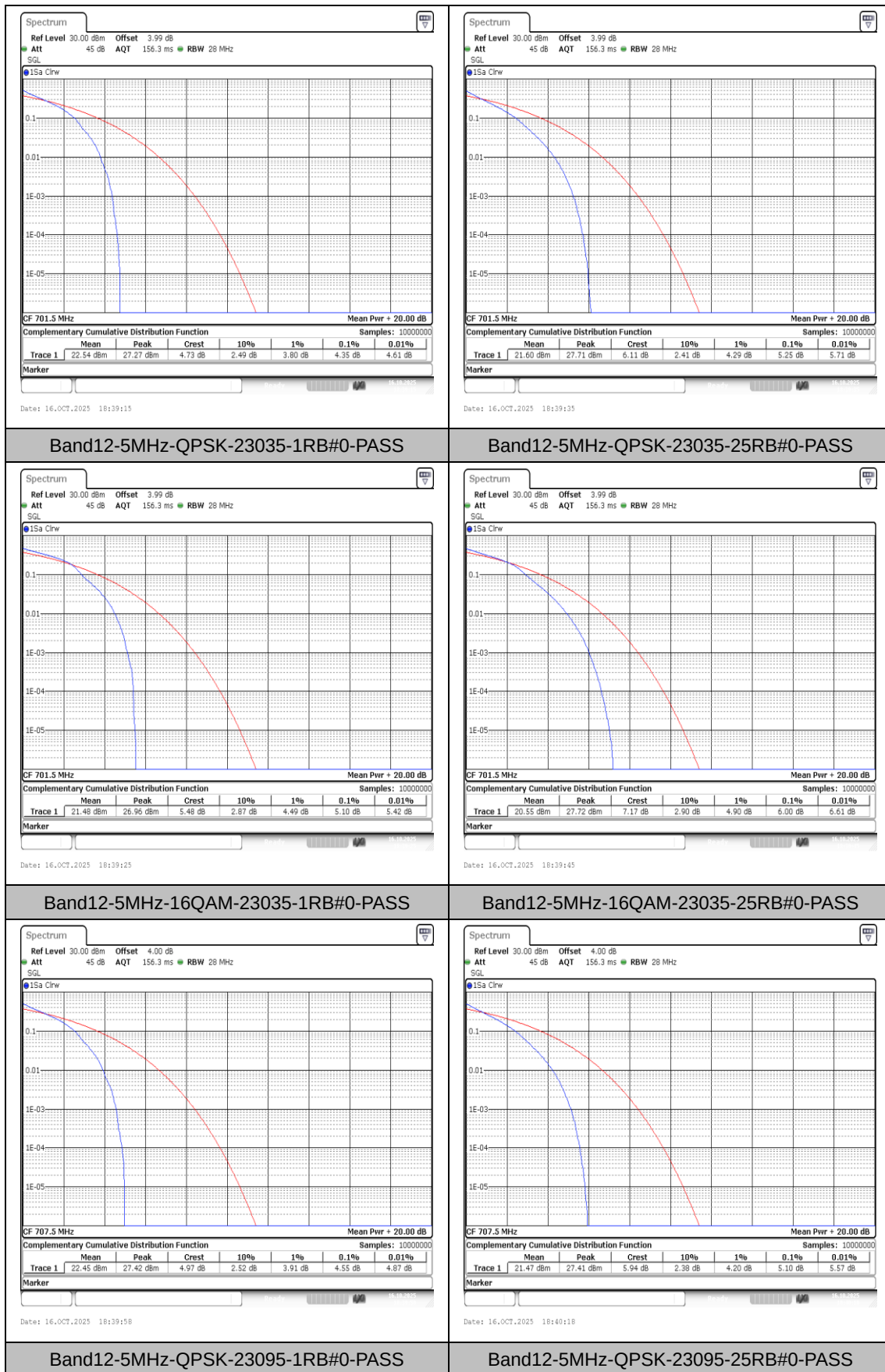
Test Graphs

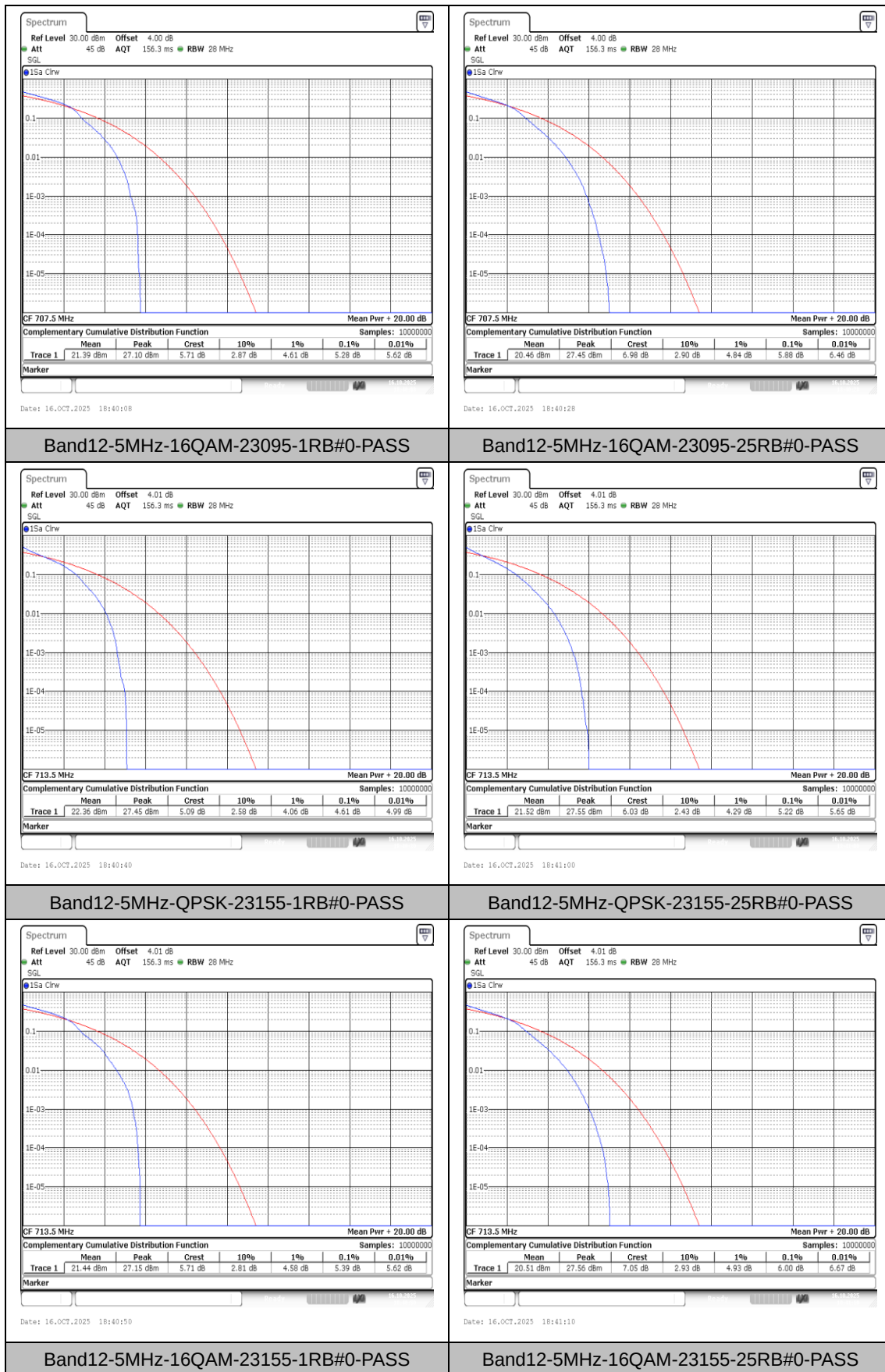


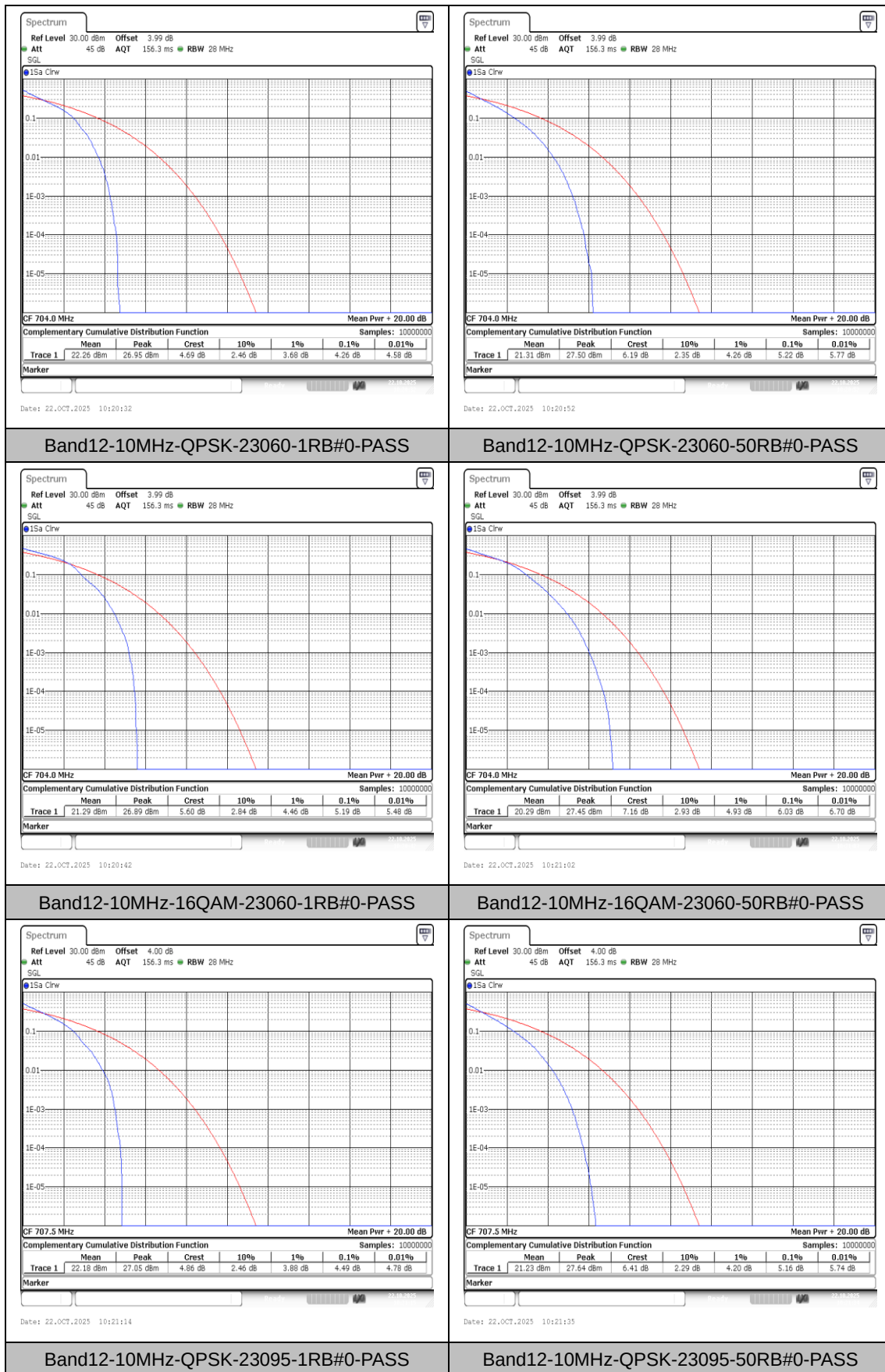


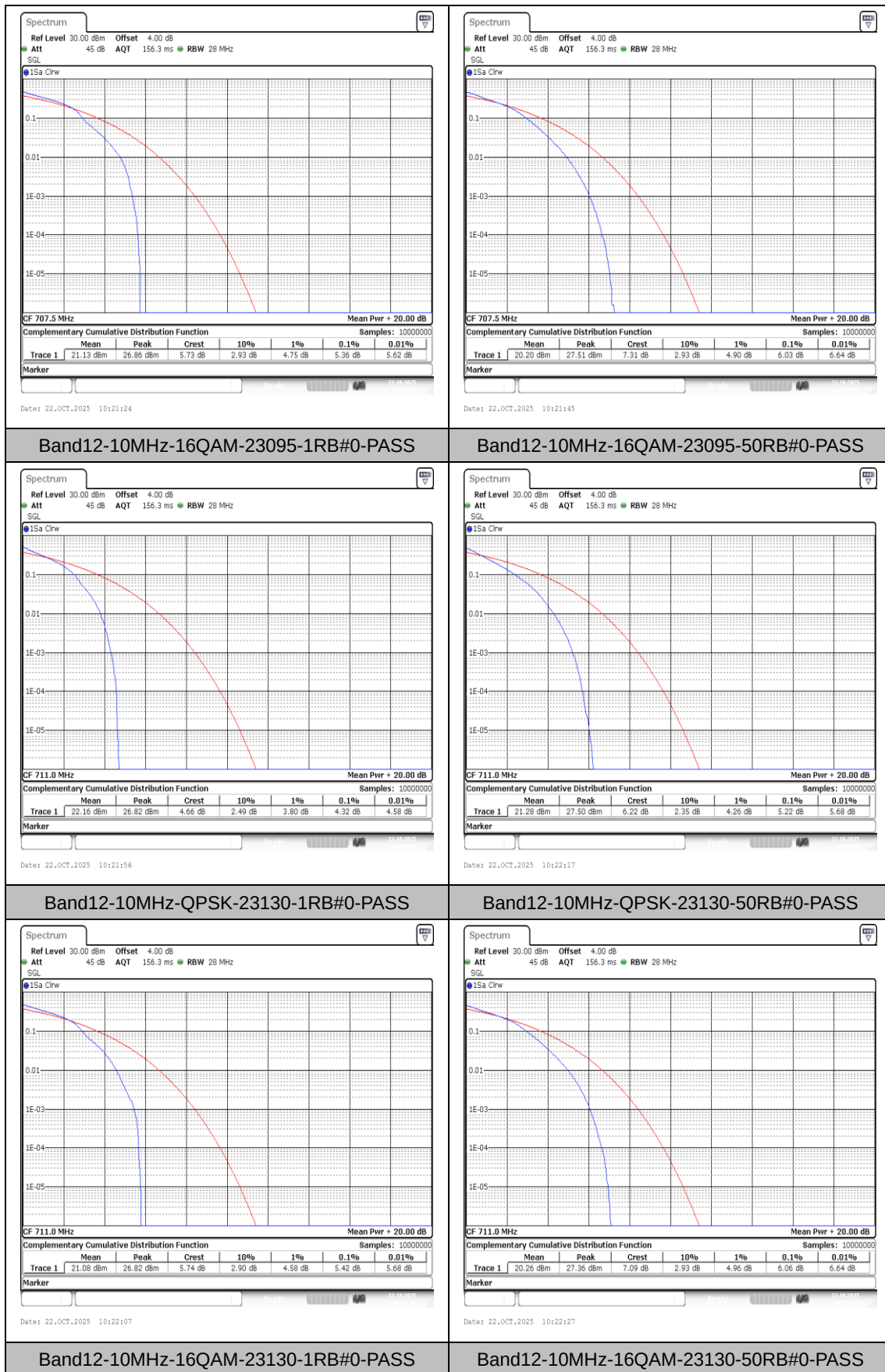










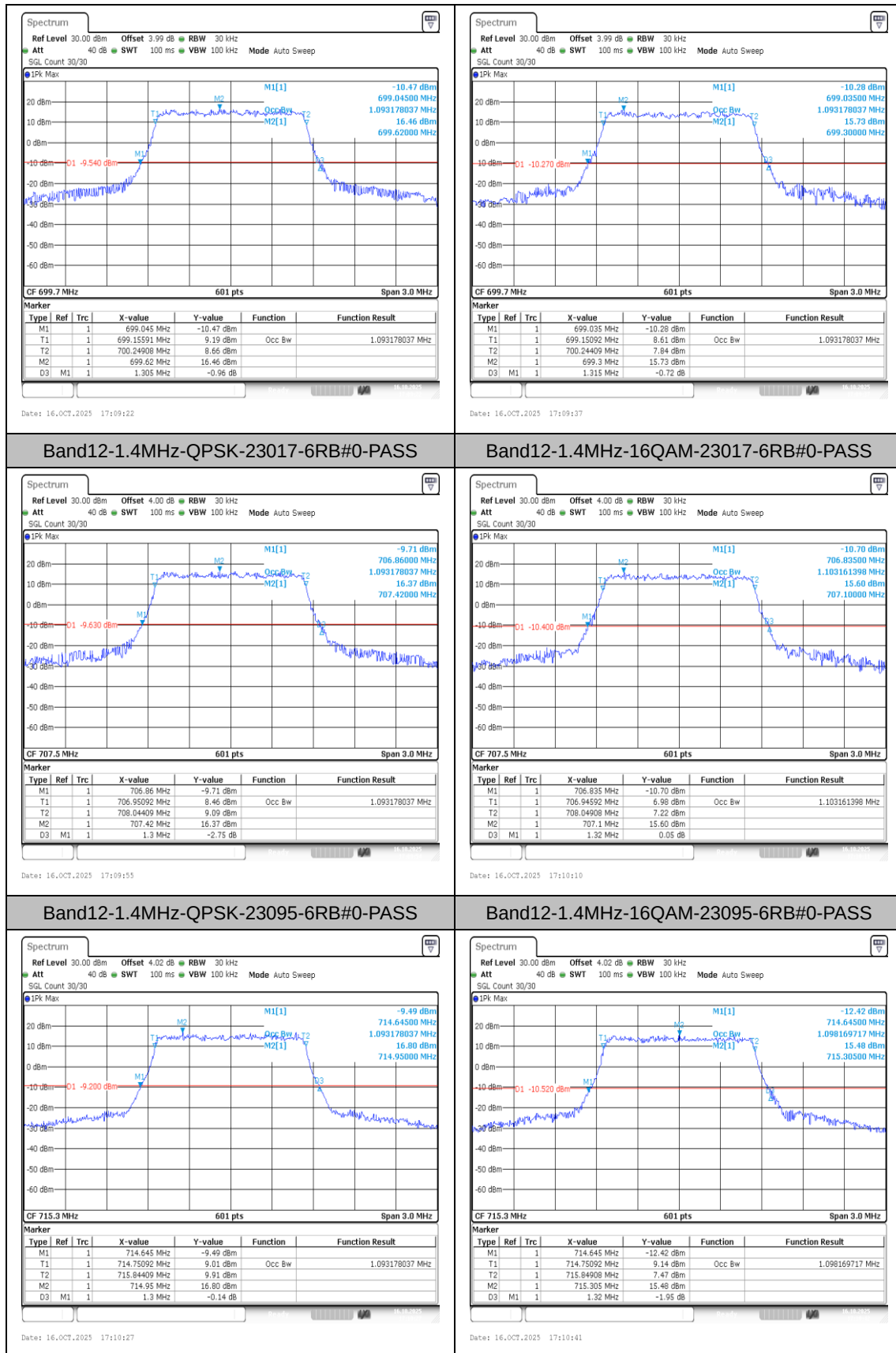


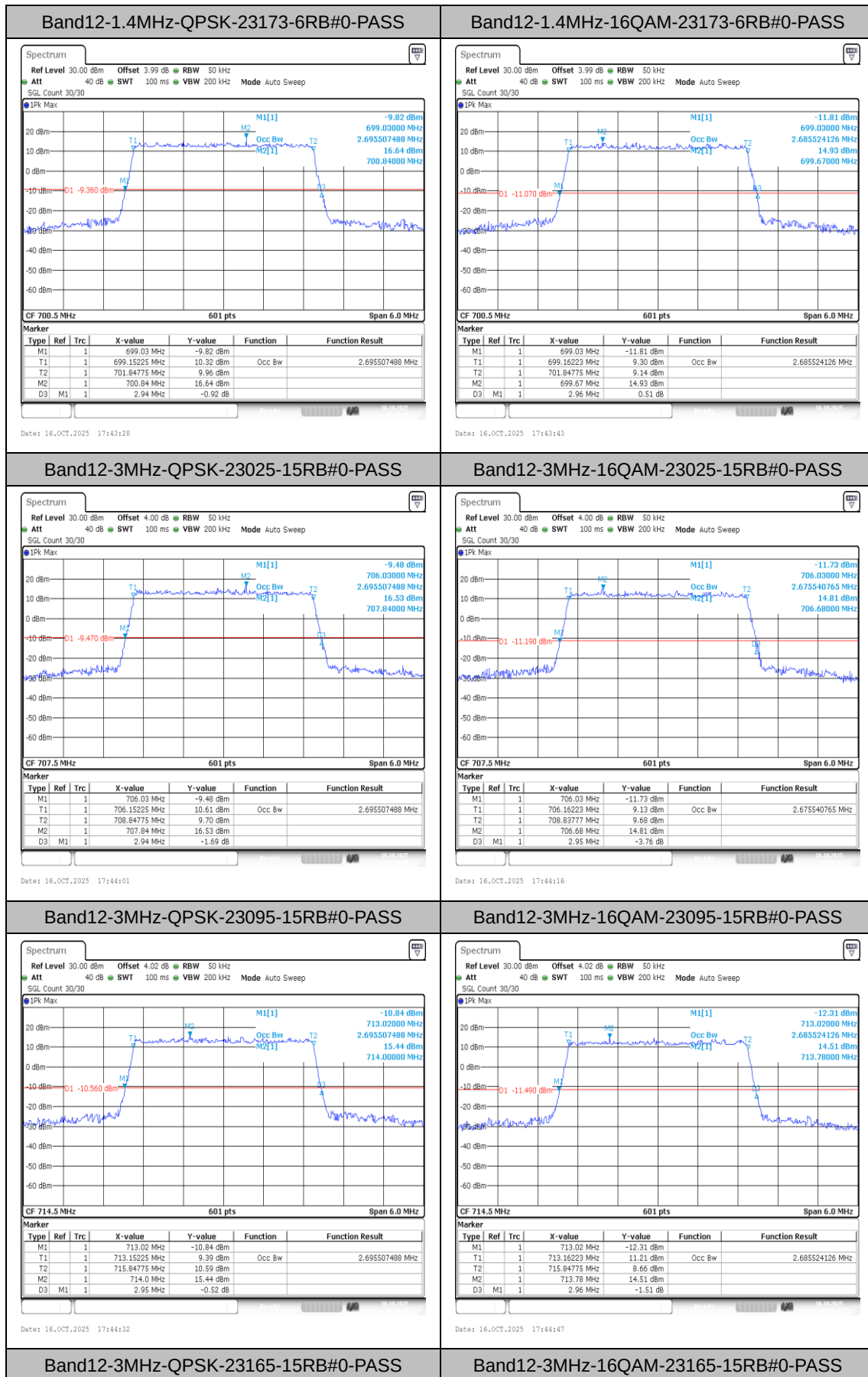
Appendix C: 26dB Bandwidth and Occupied Bandwidth

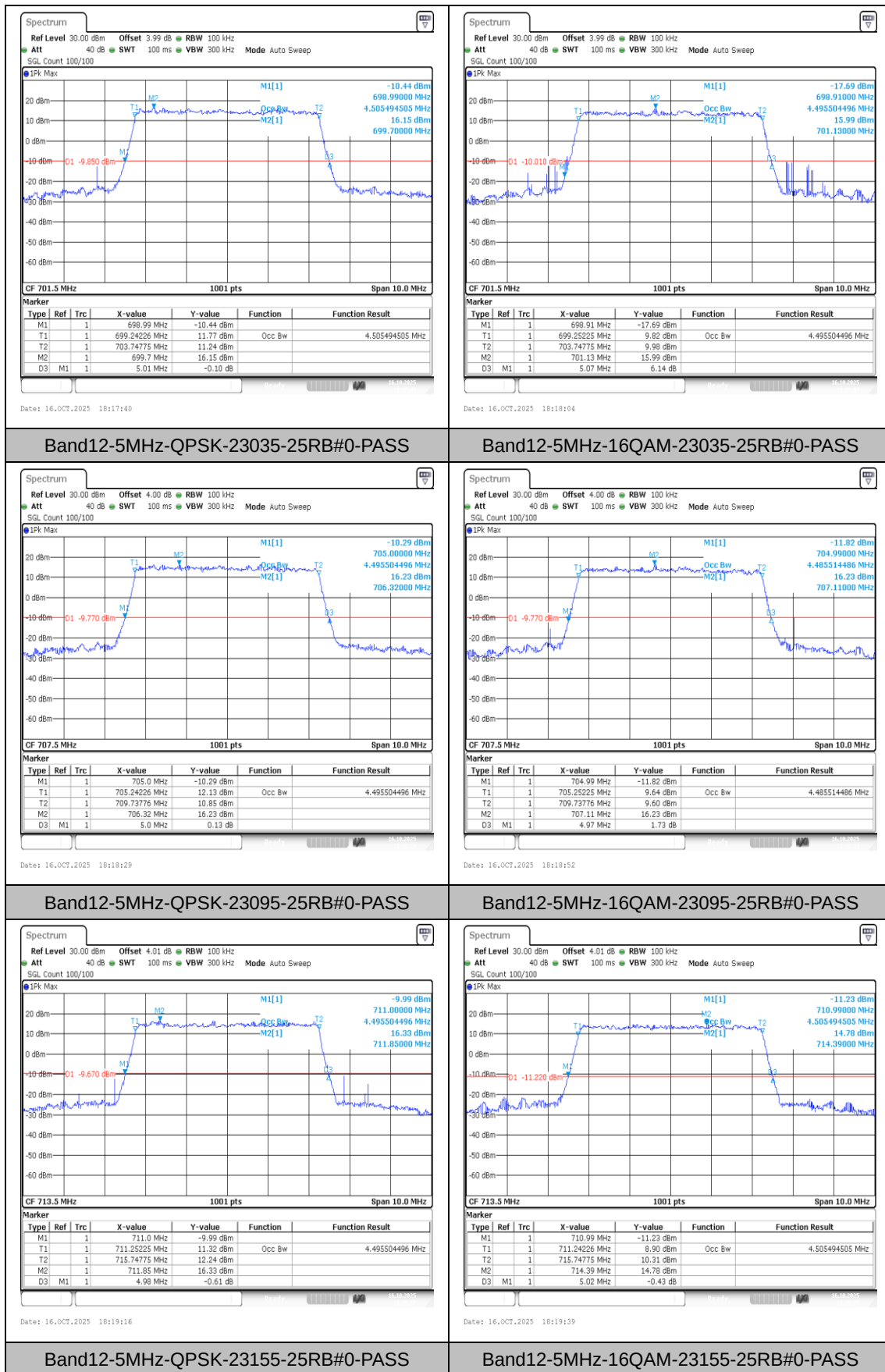
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	1.093	1.30	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.093	1.31	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.093	1.30	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.103	1.32	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.093	1.30	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.098	1.32	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.696	2.94	PASS
Band12	3MHz	16QAM	23025	15RB#0	2.686	2.96	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.696	2.94	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.676	2.95	PASS
Band12	3MHz	QPSK	23165	15RB#0	2.696	2.95	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.686	2.96	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.505	5.01	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.496	5.07	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.496	5.00	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.486	4.97	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.496	4.98	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.505	5.02	PASS
Band12	10MHz	QPSK	23060	50RB#0	8.985	9.87	PASS
Band12	10MHz	QPSK	23095	50RB#0	8.985	9.90	PASS
Band12	10MHz	QPSK	23130	50RB#0	8.985	9.83	PASS

Test Graphs









Band12-10MHz-QPSK-23060-50RB#0-PASS

Band12-10MHz-QPSK-23095-50RB#0-PASS



Band12-10MHz-QPSK-23130-50RB#0-PASS

Appendix D: Band Edge

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	-20.32	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	-41.35	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	-27.87	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	-21.24	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	-42.07	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	-28.20	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	-41.85	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	-20.11	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	-26.78	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	-42.56	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	-20.91	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	-29.42	PASS
Band12	3MHz	QPSK	23025	1RB#0	-19.14	PASS
Band12	3MHz	QPSK	23025	1RB#14	-39.63	PASS
Band12	3MHz	QPSK	23025	15RB#0	-30.43	PASS
Band12	3MHz	16QAM	23025	1RB#0	-19.54	PASS
Band12	3MHz	16QAM	23025	1RB#14	-39.51	PASS
Band12	3MHz	16QAM	23025	15RB#0	-32.83	PASS
Band12	3MHz	QPSK	23165	1RB#0	-40.01	PASS
Band12	3MHz	QPSK	23165	1RB#14	-18.22	PASS
Band12	3MHz	QPSK	23165	15RB#0	-32.02	PASS
Band12	3MHz	16QAM	23165	1RB#0	-40.63	PASS
Band12	3MHz	16QAM	23165	1RB#14	-18.93	PASS
Band12	3MHz	16QAM	23165	15RB#0	-33.04	PASS
Band12	5MHz	QPSK	23035	1RB#0	-21.20	PASS
Band12	5MHz	QPSK	23035	1RB#24	-43.34	PASS
Band12	5MHz	QPSK	23035	25RB#0	-32.04	PASS
Band12	5MHz	16QAM	23035	1RB#0	-21.78	PASS
Band12	5MHz	16QAM	23035	1RB#24	-42.13	PASS
Band12	5MHz	16QAM	23035	25RB#0	-33.61	PASS
Band12	5MHz	QPSK	23155	1RB#0	-38.97	PASS
Band12	5MHz	QPSK	23155	1RB#24	-20.43	PASS
Band12	5MHz	QPSK	23155	25RB#0	-33.66	PASS
Band12	5MHz	16QAM	23155	1RB#0	-46.91	PASS
Band12	5MHz	16QAM	23155	1RB#24	-22.20	PASS
Band12	5MHz	16QAM	23155	25RB#0	-34.54	PASS

Band12	10MHz	QPSK	23060	1RB#0	-26.15	PASS
Band12	10MHz	QPSK	23060	1RB#49	-48.00	PASS
Band12	10MHz	QPSK	23060	50RB#0	-35.75	PASS
Band12	10MHz	16QAM	23060	1RB#0	-26.88	PASS
Band12	10MHz	16QAM	23060	1RB#49	-47.93	PASS
Band12	10MHz	16QAM	23060	50RB#0	-38.08	PASS
Band12	10MHz	QPSK	23130	1RB#0	-48.22	PASS
Band12	10MHz	QPSK	23130	1RB#49	-25.88	PASS
Band12	10MHz	QPSK	23130	50RB#0	-36.11	PASS
Band12	10MHz	16QAM	23130	1RB#0	-48.58	PASS
Band12	10MHz	16QAM	23130	1RB#49	-27.06	PASS
Band12	10MHz	16QAM	23130	50RB#0	-37.87	PASS

Test Graphs

