

Appendix for LTE BAND 12

Product Name: Smart Phone

Model No: Neo

Appendix A: Average Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	20.42	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	19.57	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	20.50	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	19.70	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	20.40	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	19.51	PASS
Band12	1.4MHz	QPSK	23017	3RB#0	20.43	PASS
Band12	1.4MHz	16QAM	23017	3RB#0	19.34	PASS
Band12	1.4MHz	QPSK	23017	3RB#1	20.49	PASS
Band12	1.4MHz	16QAM	23017	3RB#1	19.37	PASS
Band12	1.4MHz	QPSK	23017	3RB#3	20.49	PASS
Band12	1.4MHz	16QAM	23017	3RB#3	19.34	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	19.41	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	18.50	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	20.59	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	19.72	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	20.67	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	19.87	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	20.59	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	19.69	PASS
Band12	1.4MHz	QPSK	23095	3RB#0	20.64	PASS
Band12	1.4MHz	16QAM	23095	3RB#0	19.51	PASS
Band12	1.4MHz	QPSK	23095	3RB#1	20.62	PASS
Band12	1.4MHz	16QAM	23095	3RB#1	19.52	PASS
Band12	1.4MHz	QPSK	23095	3RB#3	20.59	PASS
Band12	1.4MHz	16QAM	23095	3RB#3	19.56	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	19.53	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	18.62	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	20.43	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	19.58	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	20.46	PASS
Band12	1.4MHz	16QAM	23173	1RB#2	19.64	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	20.38	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	19.56	PASS
Band12	1.4MHz	QPSK	23173	3RB#0	20.44	PASS
Band12	1.4MHz	16QAM	23173	3RB#0	19.37	PASS

Band12	1.4MHz	QPSK	23173	3RB#1	20.47	PASS
Band12	1.4MHz	16QAM	23173	3RB#1	19.37	PASS
Band12	1.4MHz	QPSK	23173	3RB#3	20.46	PASS
Band12	1.4MHz	16QAM	23173	3RB#3	19.33	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	19.42	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	18.37	PASS
Band12	3MHz	QPSK	23025	1RB#0	20.49	PASS
Band12	3MHz	16QAM	23025	1RB#0	19.68	PASS
Band12	3MHz	QPSK	23025	1RB#8	20.49	PASS
Band12	3MHz	16QAM	23025	1RB#8	19.66	PASS
Band12	3MHz	QPSK	23025	1RB#14	20.48	PASS
Band12	3MHz	16QAM	23025	1RB#14	19.66	PASS
Band12	3MHz	QPSK	23025	8RB#0	19.48	PASS
Band12	3MHz	16QAM	23025	8RB#0	18.58	PASS
Band12	3MHz	QPSK	23025	8RB#4	19.48	PASS
Band12	3MHz	16QAM	23025	15RB#0	18.52	PASS
Band12	3MHz	QPSK	23095	1RB#0	20.61	PASS
Band12	3MHz	16QAM	23095	1RB#0	19.85	PASS
Band12	3MHz	QPSK	23095	1RB#8	20.67	PASS
Band12	3MHz	16QAM	23095	1RB#8	19.76	PASS
Band12	3MHz	QPSK	23095	1RB#14	20.62	PASS
Band12	3MHz	16QAM	23095	1RB#14	19.78	PASS
Band12	3MHz	16QAM	23095	8RB#0	18.68	PASS
Band12	3MHz	QPSK	23095	8RB#4	19.59	PASS
Band12	3MHz	16QAM	23095	8RB#4	18.67	PASS
Band12	3MHz	QPSK	23095	8RB#7	19.64	PASS
Band12	3MHz	16QAM	23095	8RB#7	18.71	PASS
Band12	3MHz	QPSK	23095	15RB#0	19.59	PASS
Band12	3MHz	16QAM	23095	15RB#0	18.60	PASS
Band12	3MHz	QPSK	23165	1RB#0	20.64	PASS
Band12	3MHz	16QAM	23165	1RB#0	19.44	PASS
Band12	3MHz	16QAM	23165	1RB#8	19.41	PASS
Band12	3MHz	QPSK	23165	1RB#14	20.50	PASS
Band12	3MHz	16QAM	23165	1RB#14	19.38	PASS
Band12	3MHz	QPSK	23165	8RB#0	19.50	PASS
Band12	3MHz	16QAM	23025	8RB#4	18.57	PASS
Band12	3MHz	QPSK	23025	8RB#7	19.49	PASS
Band12	3MHz	16QAM	23025	8RB#7	18.55	PASS
Band12	3MHz	QPSK	23025	15RB#0	19.44	PASS
Band12	3MHz	QPSK	23095	8RB#0	19.63	PASS
Band12	3MHz	QPSK	23165	1RB#8	20.57	PASS
Band12	3MHz	16QAM	23165	8RB#0	18.59	PASS

Band12	3MHz	QPSK	23165	8RB#4	19.54	PASS
Band12	3MHz	16QAM	23165	8RB#4	18.59	PASS
Band12	3MHz	QPSK	23165	8RB#7	19.49	PASS
Band12	3MHz	16QAM	23165	8RB#7	18.56	PASS
Band12	3MHz	QPSK	23165	15RB#0	19.48	PASS
Band12	3MHz	16QAM	23165	15RB#0	18.44	PASS
Band12	5MHz	QPSK	23035	1RB#0	20.49	PASS
Band12	5MHz	16QAM	23035	1RB#0	19.49	PASS
Band12	5MHz	QPSK	23035	1RB#12	20.66	PASS
Band12	5MHz	16QAM	23035	1RB#12	19.69	PASS
Band12	5MHz	QPSK	23035	1RB#24	20.62	PASS
Band12	5MHz	16QAM	23035	1RB#24	19.63	PASS
Band12	5MHz	QPSK	23035	12RB#0	19.53	PASS
Band12	5MHz	16QAM	23035	12RB#0	18.54	PASS
Band12	5MHz	QPSK	23035	12RB#6	19.55	PASS
Band12	5MHz	16QAM	23035	12RB#6	18.54	PASS
Band12	5MHz	QPSK	23035	12RB#13	19.51	PASS
Band12	5MHz	16QAM	23035	12RB#13	18.55	PASS
Band12	5MHz	QPSK	23035	25RB#0	19.56	PASS
Band12	5MHz	16QAM	23035	25RB#0	18.61	PASS
Band12	5MHz	QPSK	23095	1RB#0	20.58	PASS
Band12	5MHz	16QAM	23095	1RB#0	19.80	PASS
Band12	5MHz	QPSK	23095	1RB#12	20.78	PASS
Band12	5MHz	16QAM	23095	1RB#12	19.96	PASS
Band12	5MHz	QPSK	23095	1RB#24	20.55	PASS
Band12	5MHz	16QAM	23095	1RB#24	19.75	PASS
Band12	5MHz	QPSK	23095	12RB#0	19.65	PASS
Band12	5MHz	16QAM	23095	12RB#0	18.76	PASS
Band12	5MHz	QPSK	23095	12RB#6	19.64	PASS
Band12	5MHz	16QAM	23095	12RB#6	18.74	PASS
Band12	5MHz	QPSK	23095	12RB#13	19.66	PASS
Band12	5MHz	16QAM	23095	12RB#13	18.73	PASS
Band12	5MHz	QPSK	23095	25RB#0	19.70	PASS
Band12	5MHz	16QAM	23095	25RB#0	18.71	PASS
Band12	5MHz	QPSK	23155	1RB#0	20.61	PASS
Band12	5MHz	16QAM	23155	1RB#0	19.60	PASS
Band12	5MHz	QPSK	23155	1RB#12	20.64	PASS
Band12	5MHz	16QAM	23155	1RB#12	19.68	PASS
Band12	5MHz	QPSK	23155	1RB#24	20.52	PASS
Band12	5MHz	16QAM	23155	1RB#24	19.49	PASS
Band12	5MHz	QPSK	23155	12RB#0	19.53	PASS
Band12	5MHz	16QAM	23155	12RB#0	18.66	PASS

Band12	5MHz	QPSK	23155	12RB#6	19.57	PASS
Band12	5MHz	16QAM	23155	12RB#6	18.62	PASS
Band12	5MHz	QPSK	23155	12RB#13	19.55	PASS
Band12	5MHz	16QAM	23155	12RB#13	18.61	PASS
Band12	5MHz	QPSK	23155	25RB#0	19.57	PASS
Band12	5MHz	16QAM	23155	25RB#0	18.67	PASS
Band12	10MHz	QPSK	23060	1RB#0	20.49	PASS
Band12	10MHz	16QAM	23060	1RB#0	19.62	PASS
Band12	10MHz	QPSK	23060	1RB#24	20.69	PASS
Band12	10MHz	16QAM	23060	1RB#24	19.88	PASS
Band12	10MHz	QPSK	23060	1RB#49	20.66	PASS
Band12	10MHz	16QAM	23060	1RB#49	19.81	PASS
Band12	10MHz	QPSK	23060	25RB#0	19.67	PASS
Band12	10MHz	16QAM	23060	25RB#0	18.73	PASS
Band12	10MHz	QPSK	23060	25RB#12	19.70	PASS
Band12	10MHz	16QAM	23060	25RB#12	18.72	PASS
Band12	10MHz	QPSK	23060	25RB#25	19.69	PASS
Band12	10MHz	16QAM	23060	25RB#25	18.73	PASS
Band12	10MHz	QPSK	23060	50RB#0	19.63	PASS
Band12	10MHz	16QAM	23060	50RB#0	18.70	PASS
Band12	10MHz	QPSK	23095	1RB#0	20.54	PASS
Band12	10MHz	16QAM	23095	1RB#0	19.74	PASS
Band12	10MHz	QPSK	23095	1RB#24	20.81	PASS
Band12	10MHz	16QAM	23095	1RB#24	20.02	PASS
Band12	10MHz	QPSK	23095	1RB#49	20.58	PASS
Band12	10MHz	16QAM	23095	1RB#49	19.76	PASS
Band12	10MHz	QPSK	23095	25RB#0	19.68	PASS
Band12	10MHz	16QAM	23095	25RB#0	18.78	PASS
Band12	10MHz	QPSK	23095	25RB#12	19.65	PASS
Band12	10MHz	16QAM	23095	25RB#12	18.74	PASS
Band12	10MHz	QPSK	23095	25RB#25	19.66	PASS
Band12	10MHz	16QAM	23095	25RB#25	18.78	PASS
Band12	10MHz	QPSK	23095	50RB#0	19.67	PASS
Band12	10MHz	16QAM	23095	50RB#0	18.75	PASS
Band12	10MHz	QPSK	23130	1RB#0	20.70	PASS
Band12	10MHz	16QAM	23130	1RB#0	19.58	PASS
Band12	10MHz	QPSK	23130	1RB#24	20.73	PASS
Band12	10MHz	16QAM	23130	1RB#24	19.61	PASS
Band12	10MHz	QPSK	23130	1RB#49	20.47	PASS
Band12	10MHz	16QAM	23130	1RB#49	19.44	PASS
Band12	10MHz	QPSK	23130	25RB#0	19.67	PASS
Band12	10MHz	16QAM	23130	25RB#0	18.74	PASS

Band12	10MHz	QPSK	23130	25RB#12	19.69	PASS
Band12	10MHz	16QAM	23130	25RB#12	18.80	PASS
Band12	10MHz	QPSK	23130	25RB#25	19.62	PASS
Band12	10MHz	16QAM	23130	25RB#25	18.72	PASS
Band12	10MHz	QPSK	23130	50RB#0	19.65	PASS
Band12	10MHz	16QAM	23130	50RB#0	18.68	PASS

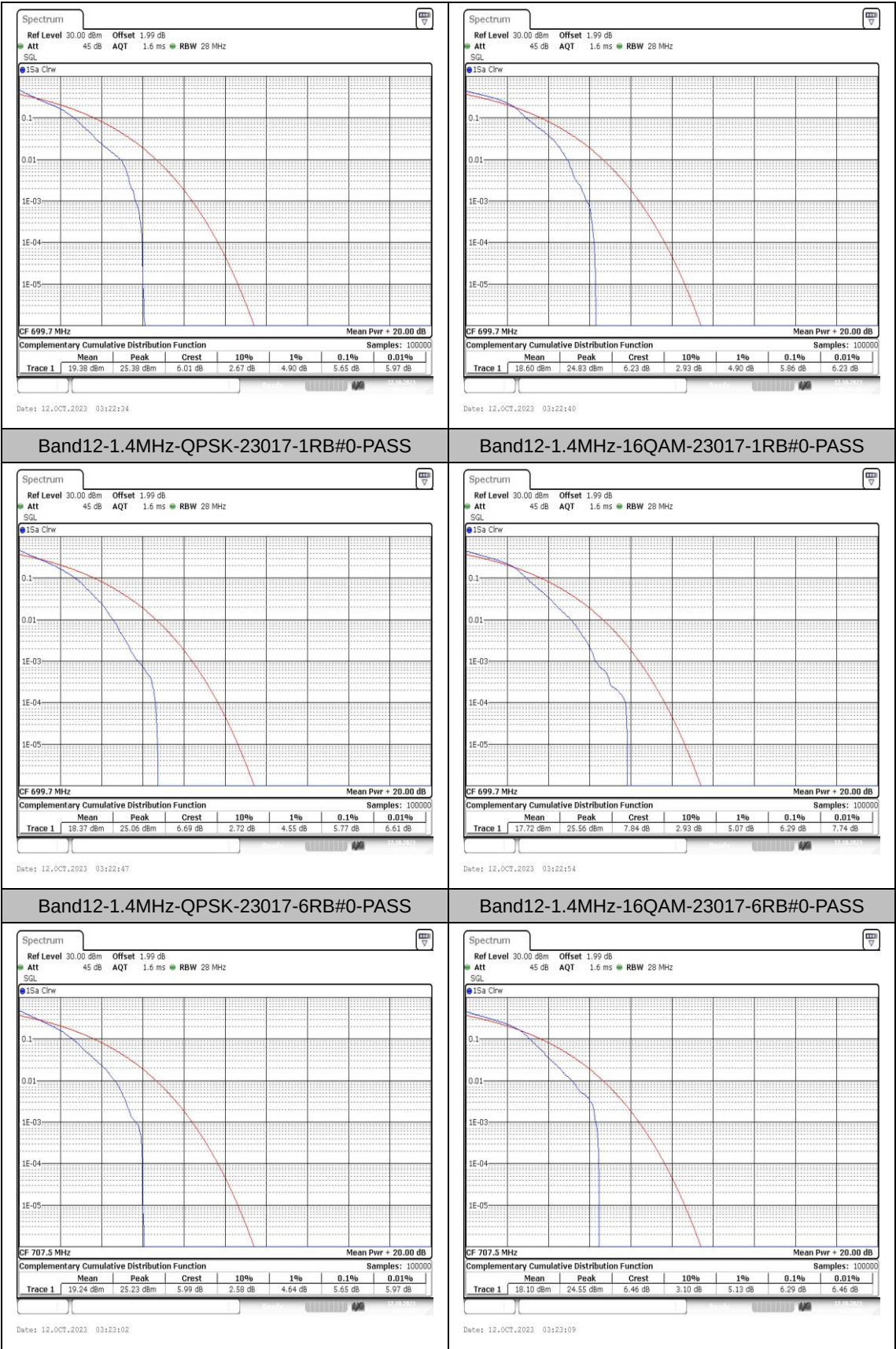
Appendix B: Peak-to-Average Ratio(CCDF)

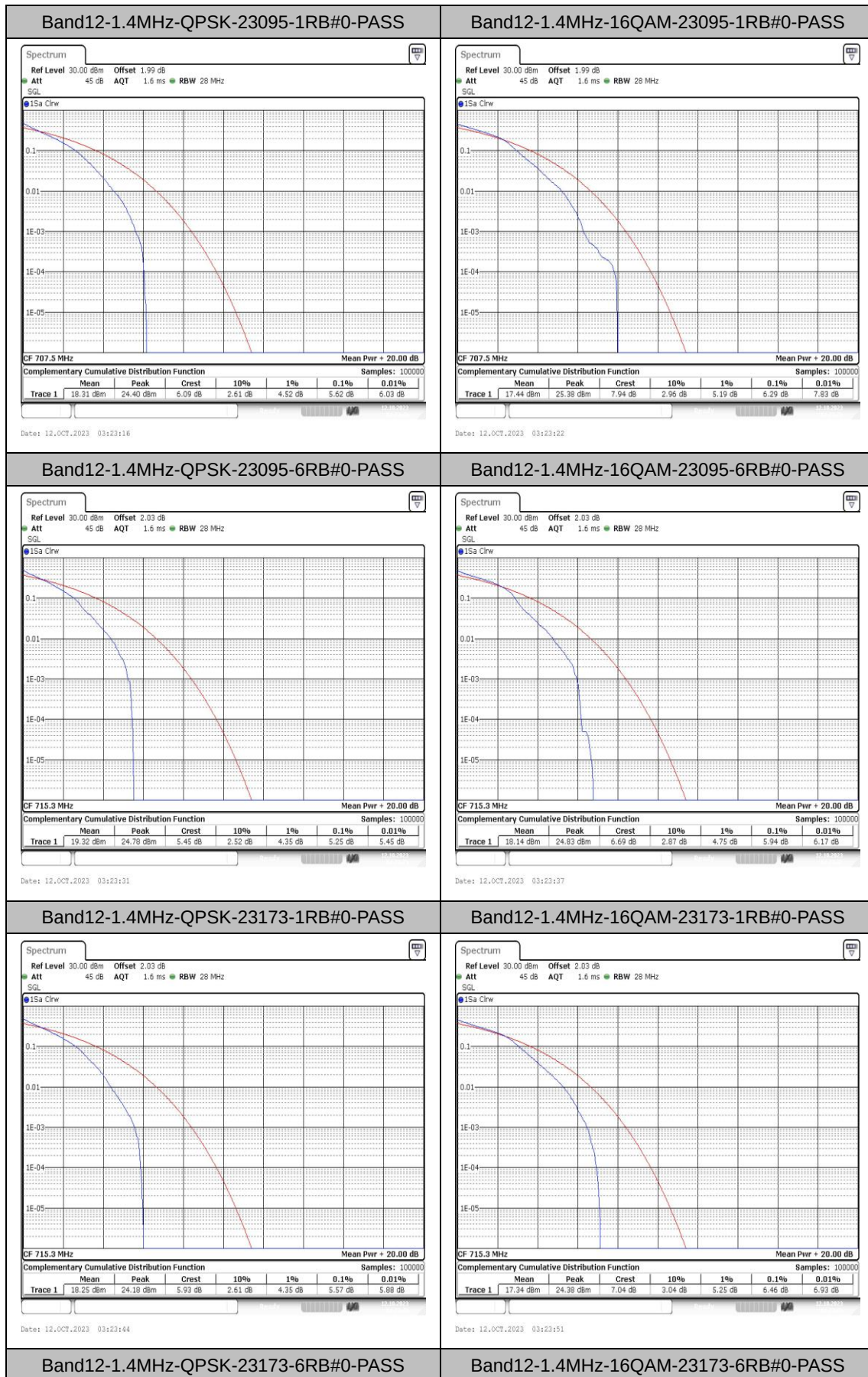
Test Result

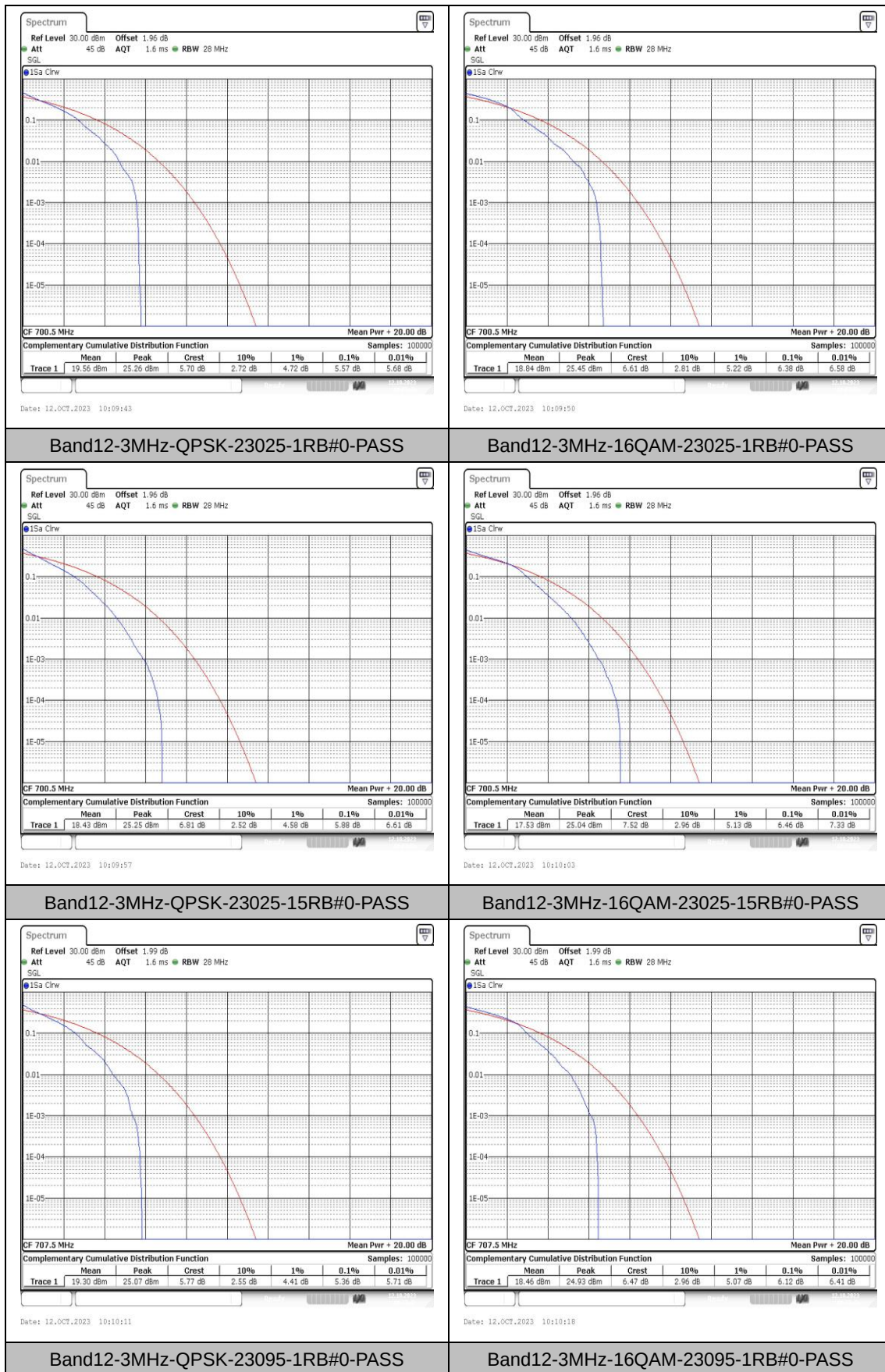
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	5.65	13	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	5.86	13	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	5.77	13	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	6.29	13	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	5.65	13	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	6.29	13	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	5.62	13	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	6.29	13	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	5.25	13	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	5.94	13	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	5.57	13	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	6.46	13	PASS
Band12	3MHz	QPSK	23025	1RB#0	5.57	13	PASS
Band12	3MHz	16QAM	23025	1RB#0	6.38	13	PASS
Band12	3MHz	QPSK	23025	15RB#0	5.88	13	PASS
Band12	3MHz	16QAM	23025	15RB#0	6.46	13	PASS
Band12	3MHz	QPSK	23095	1RB#0	5.36	13	PASS
Band12	3MHz	16QAM	23095	1RB#0	6.12	13	PASS
Band12	3MHz	QPSK	23095	15RB#0	5.65	13	PASS
Band12	3MHz	16QAM	23095	15RB#0	6.67	13	PASS
Band12	3MHz	QPSK	23165	1RB#0	4.99	13	PASS
Band12	3MHz	16QAM	23165	1RB#0	5.83	13	PASS
Band12	3MHz	QPSK	23165	15RB#0	5.59	13	PASS
Band12	3MHz	16QAM	23165	15RB#0	6.20	13	PASS
Band12	5MHz	QPSK	23035	1RB#0	6.29	13	PASS
Band12	5MHz	16QAM	23035	1RB#0	6.12	13	PASS
Band12	5MHz	QPSK	23035	25RB#0	5.74	13	PASS
Band12	5MHz	16QAM	23035	25RB#0	6.43	13	PASS
Band12	5MHz	QPSK	23095	1RB#0	5.80	13	PASS
Band12	5MHz	16QAM	23095	1RB#0	5.88	13	PASS
Band12	5MHz	QPSK	23095	25RB#0	5.94	13	PASS
Band12	5MHz	16QAM	23095	25RB#0	6.61	13	PASS
Band12	5MHz	QPSK	23155	1RB#0	5.13	13	PASS
Band12	5MHz	16QAM	23155	1RB#0	6.00	13	PASS
Band12	5MHz	QPSK	23155	25RB#0	5.71	13	PASS
Band12	5MHz	16QAM	23155	25RB#0	6.46	13	PASS

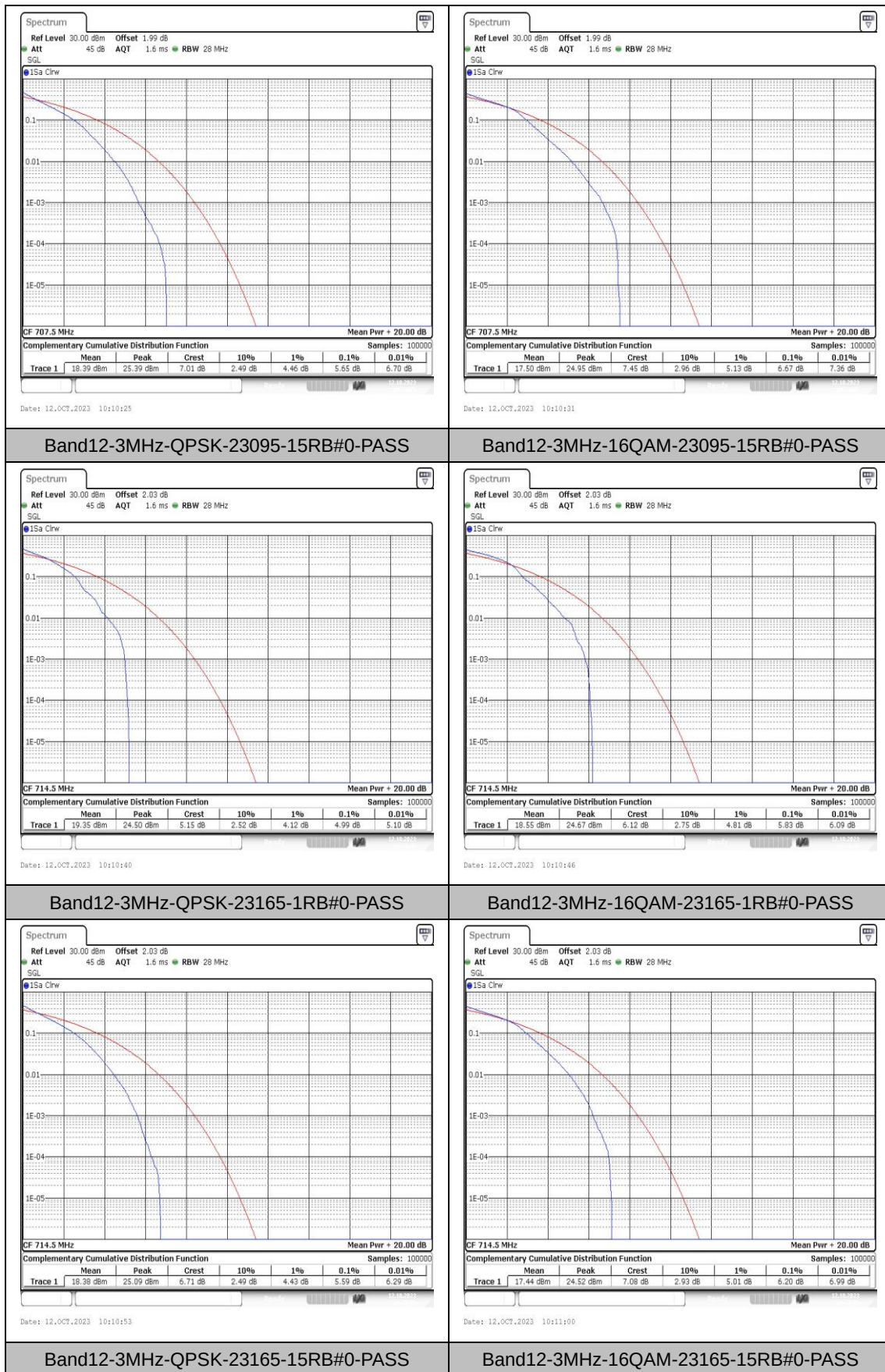
Band12	10MHz	QPSK	23060	1RB#0	5.57	13	PASS
Band12	10MHz	16QAM	23060	1RB#0	5.94	13	PASS
Band12	10MHz	QPSK	23060	50RB#0	5.57	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	6.55	13	PASS
Band12	10MHz	QPSK	23095	1RB#0	5.48	13	PASS
Band12	10MHz	16QAM	23095	1RB#0	5.97	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	5.74	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	6.43	13	PASS
Band12	10MHz	QPSK	23130	1RB#0	5.77	13	PASS
Band12	10MHz	16QAM	23130	1RB#0	6.90	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	5.68	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	6.35	13	PASS

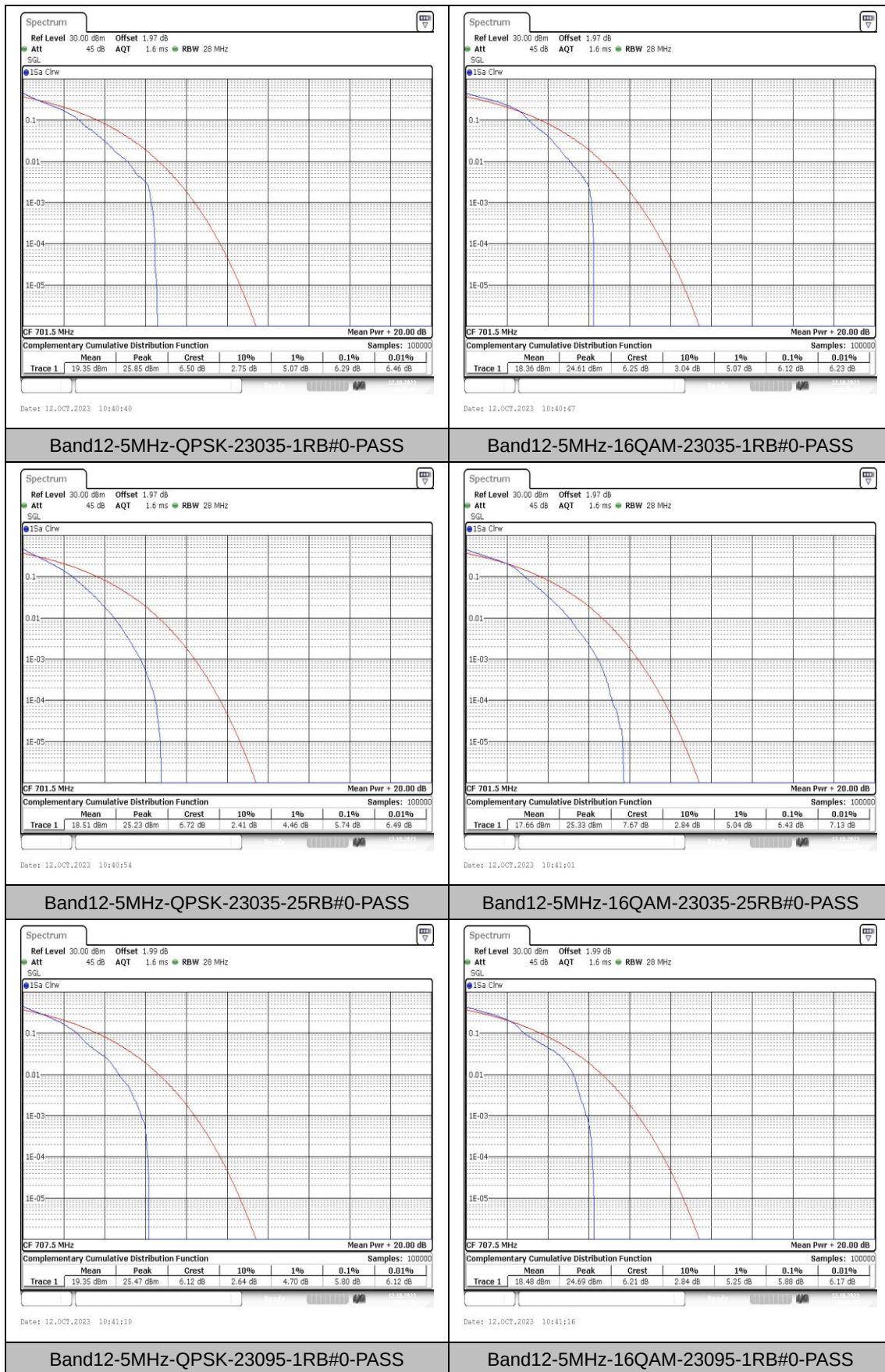
Test Graphs

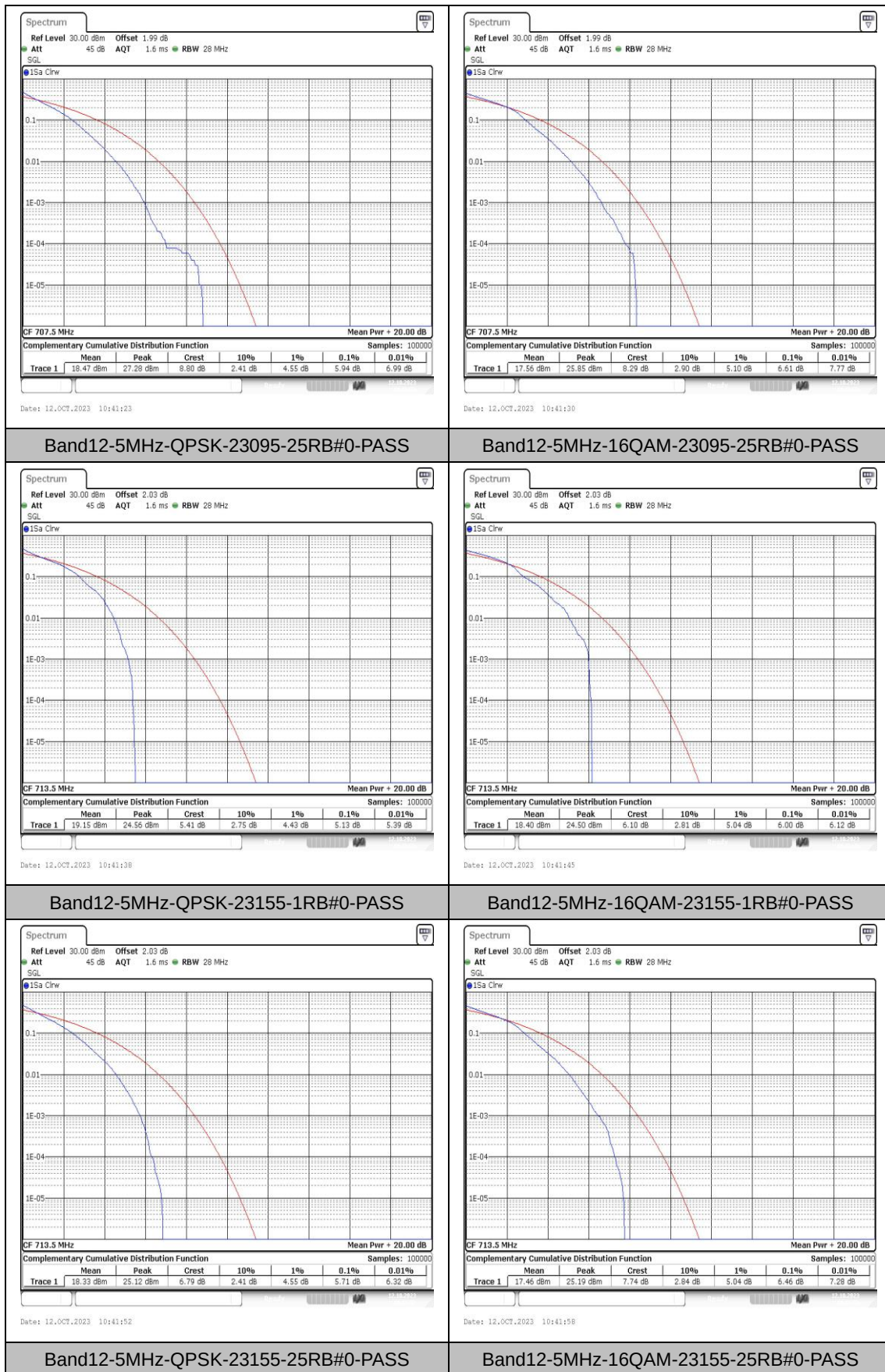


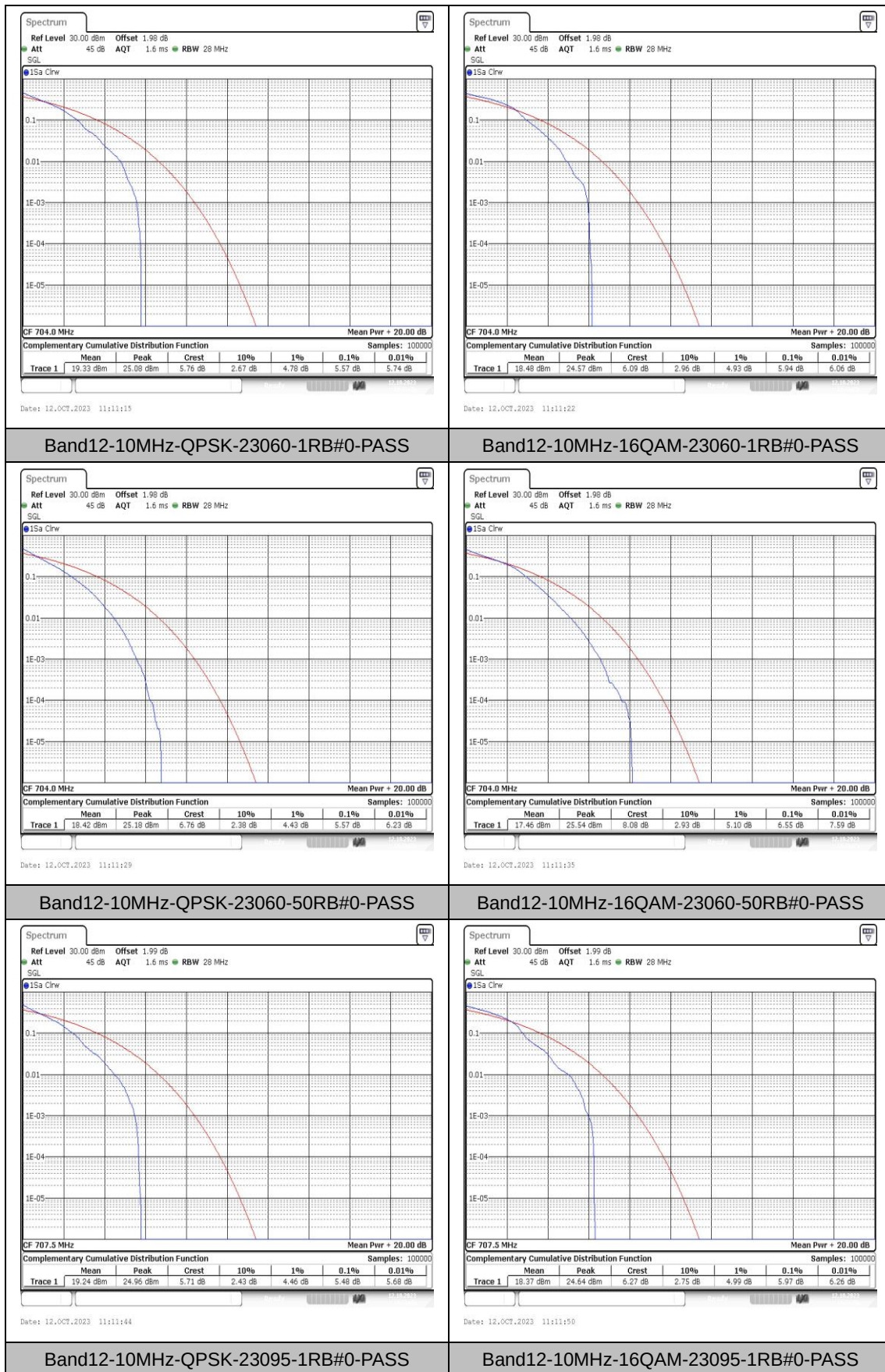


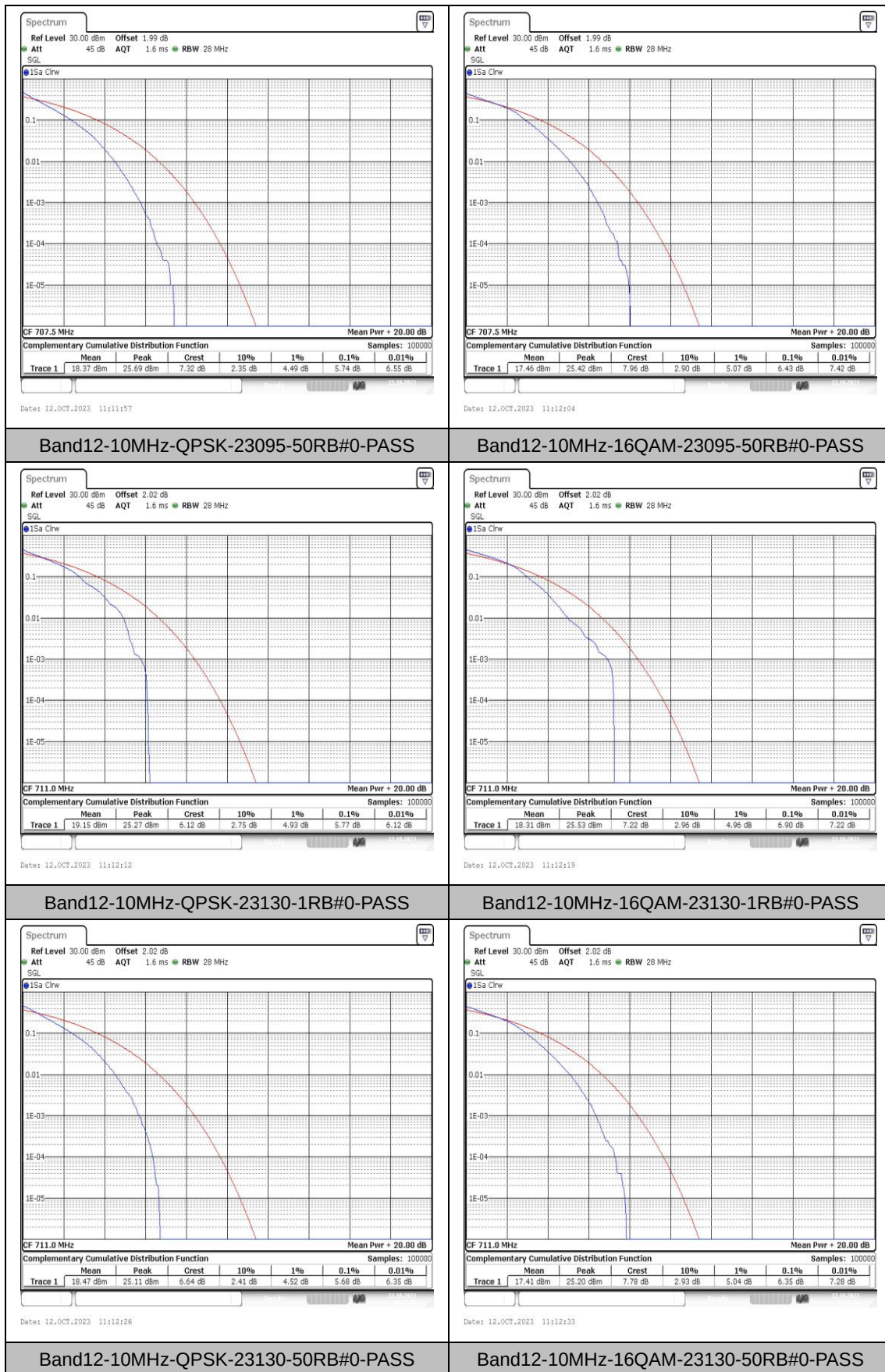










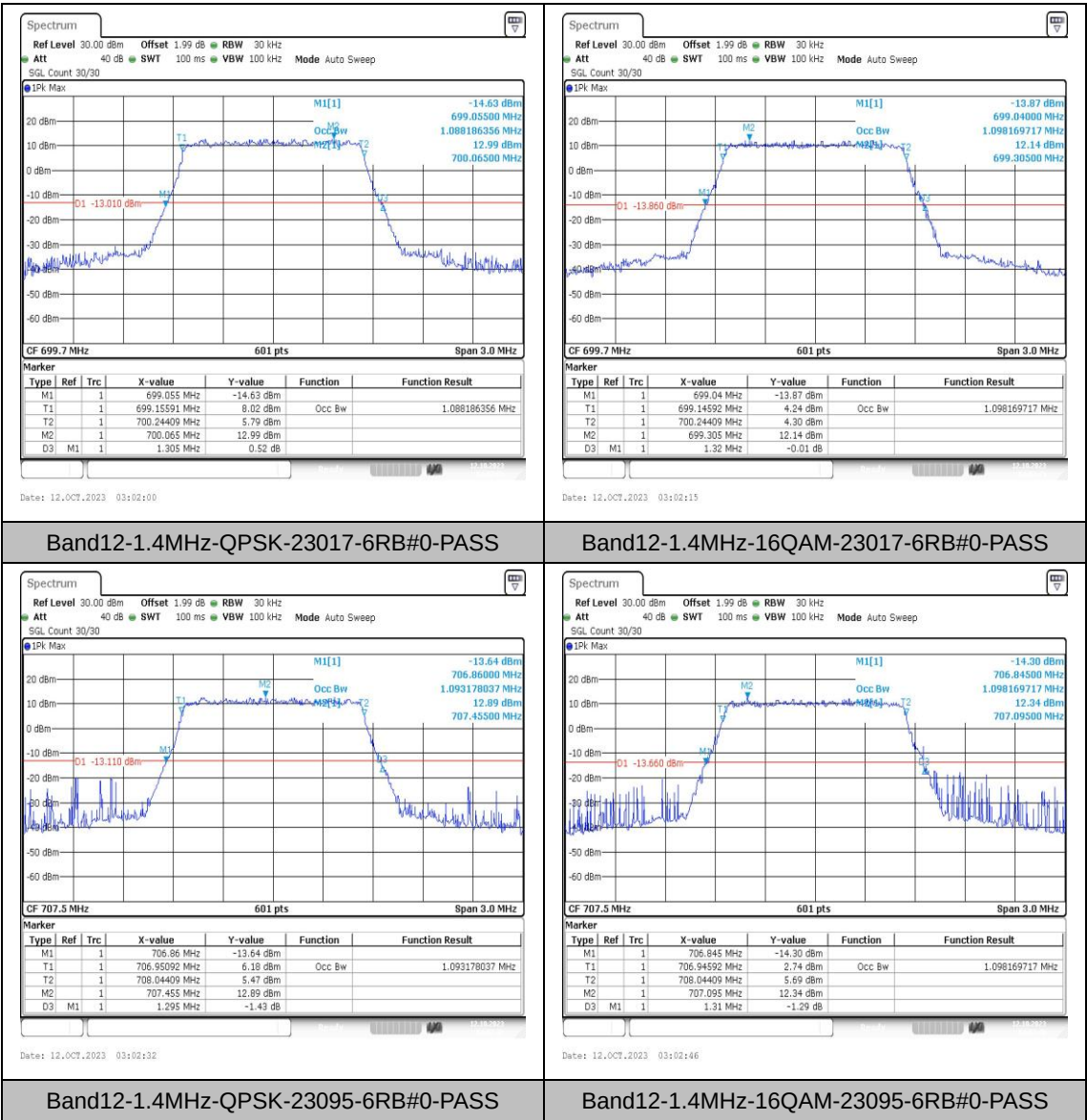


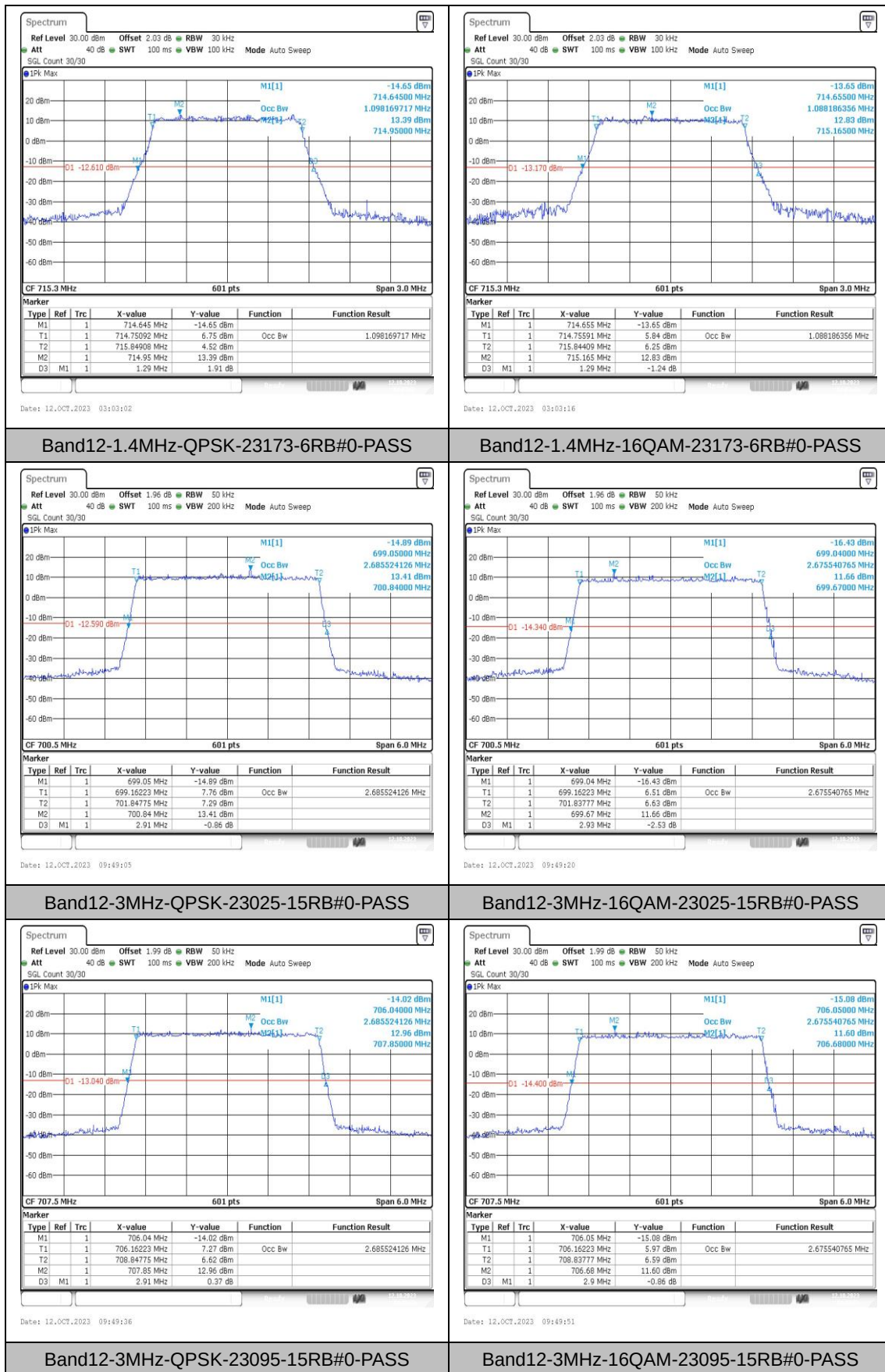
Appendix C: 26dB Bandwidth and Occupied Bandwidth

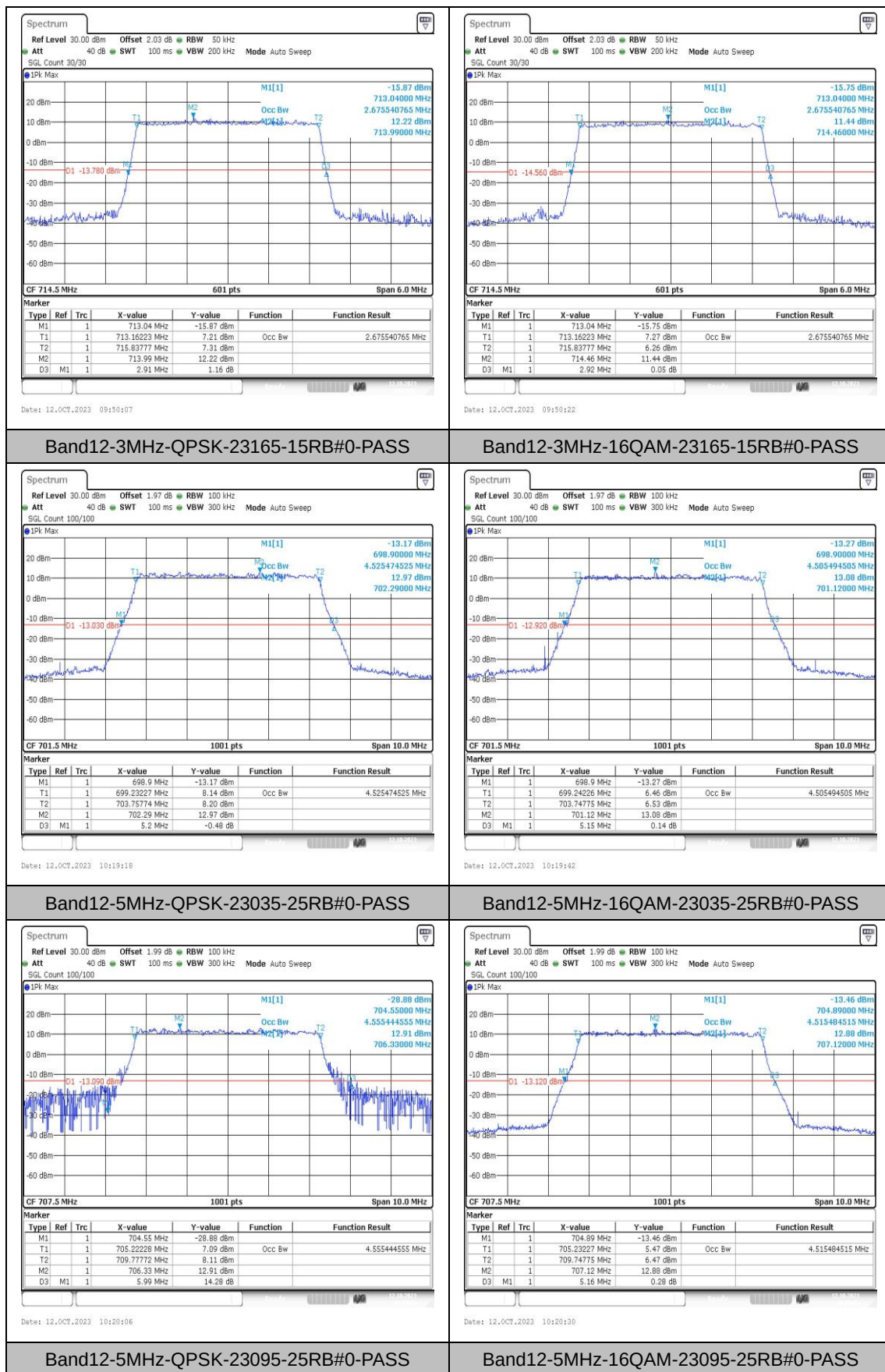
Test Result

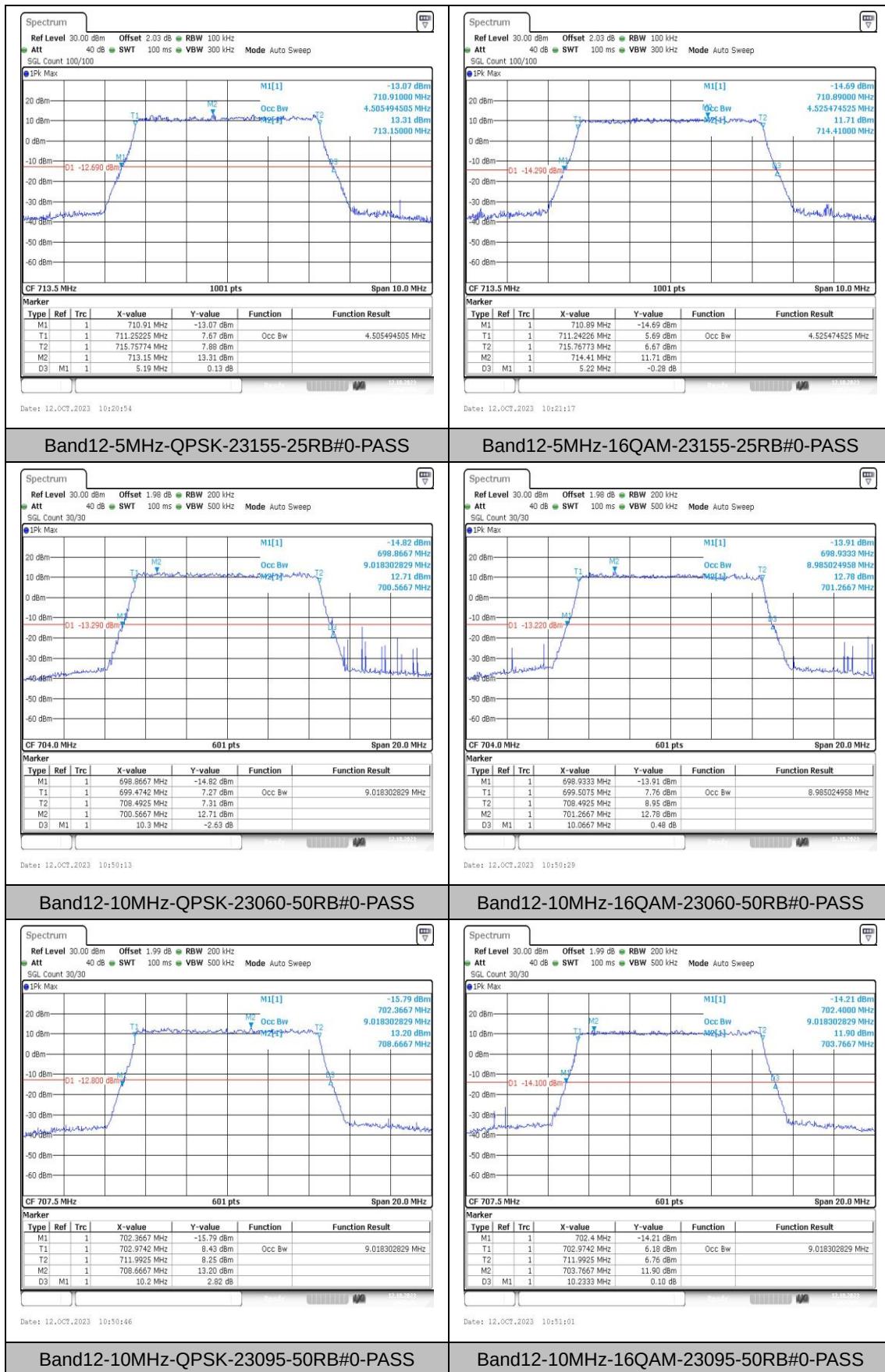
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	1.088	1.30	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.098	1.32	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.093	1.29	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.098	1.31	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.098	1.29	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.088	1.29	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.686	2.91	PASS
Band12	3MHz	16QAM	23025	15RB#0	2.676	2.93	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.686	2.91	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.676	2.90	PASS
Band12	3MHz	QPSK	23165	15RB#0	2.676	2.91	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.676	2.92	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.525	5.20	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.505	5.15	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.555	5.99	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.515	5.16	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.505	5.19	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.525	5.22	PASS
Band12	10MHz	QPSK	23060	50RB#0	9.018	10.30	PASS
Band12	10MHz	16QAM	23060	50RB#0	8.985	10.07	PASS
Band12	10MHz	QPSK	23095	50RB#0	9.018	10.20	PASS
Band12	10MHz	16QAM	23095	50RB#0	9.018	10.23	PASS
Band12	10MHz	QPSK	23130	50RB#0	8.985	10.10	PASS
Band12	10MHz	16QAM	23130	50RB#0	9.018	10.10	PASS

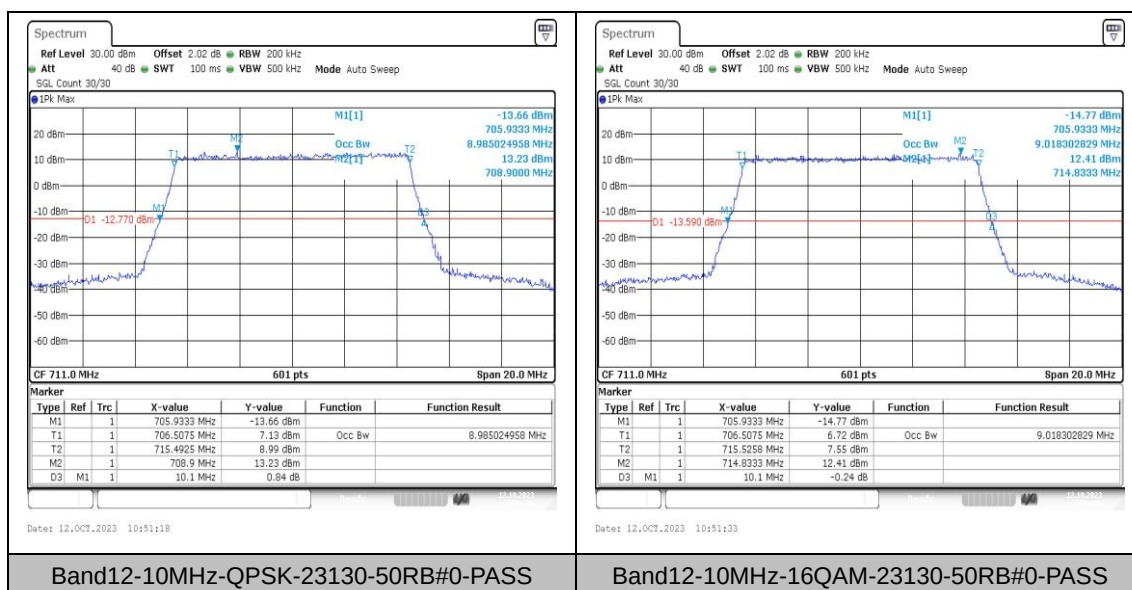
Test Graphs











Appendix D: Band Edge

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	-24.94	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	-25.46	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	-41.72	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	-39.19	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	-33.17	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	-33.62	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	-35.14	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	-33.62	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	-24.73	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	-24.14	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	-33.64	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	-33.62	PASS
Band12	3MHz	QPSK	23025	1RB#0	-26.06	PASS
Band12	3MHz	16QAM	23025	1RB#0	-27.12	PASS
Band12	3MHz	QPSK	23025	1RB#14	-49.70	PASS
Band12	3MHz	16QAM	23025	1RB#14	-49.69	PASS
Band12	3MHz	QPSK	23025	15RB#0	-37.51	PASS
Band12	3MHz	16QAM	23025	15RB#0	-38.65	PASS
Band12	3MHz	QPSK	23165	1RB#0	-49.75	PASS
Band12	3MHz	16QAM	23165	1RB#0	-45.02	PASS

Band12	3MHz	QPSK	23165	1RB#14	-26.11	PASS
Band12	3MHz	16QAM	23165	1RB#14	-26.79	PASS
Band12	3MHz	QPSK	23165	15RB#0	-38.43	PASS
Band12	3MHz	16QAM	23165	15RB#0	-39.15	PASS
Band12	5MHz	QPSK	23035	1RB#0	-18.17	PASS
Band12	5MHz	16QAM	23035	1RB#0	-18.68	PASS
Band12	5MHz	QPSK	23035	1RB#24	-45.05	PASS
Band12	5MHz	16QAM	23035	1RB#24	-49.00	PASS
Band12	5MHz	QPSK	23035	25RB#0	-30.16	PASS
Band12	5MHz	16QAM	23035	25RB#0	-31.49	PASS
Band12	5MHz	QPSK	23155	1RB#0	-48.76	PASS
Band12	5MHz	16QAM	23155	1RB#0	-48.94	PASS
Band12	5MHz	QPSK	23155	1RB#24	-18.42	PASS
Band12	5MHz	16QAM	23155	1RB#24	-19.01	PASS
Band12	5MHz	QPSK	23155	25RB#0	-30.06	PASS
Band12	5MHz	16QAM	23155	25RB#0	-32.30	PASS
Band12	10MHz	QPSK	23060	1RB#0	-22.92	PASS
Band12	10MHz	16QAM	23060	1RB#0	-23.14	PASS
Band12	10MHz	QPSK	23060	1RB#49	-50.34	PASS
Band12	10MHz	16QAM	23060	1RB#49	-50.48	PASS
Band12	10MHz	QPSK	23060	50RB#0	-34.76	PASS
Band12	10MHz	16QAM	23060	50RB#0	-37.51	PASS
Band12	10MHz	QPSK	23130	1RB#0	-50.77	PASS
Band12	10MHz	16QAM	23130	1RB#0	-50.73	PASS
Band12	10MHz	QPSK	23130	1RB#49	-22.07	PASS
Band12	10MHz	16QAM	23130	1RB#49	-22.26	PASS
Band12	10MHz	QPSK	23130	50RB#0	-36.44	PASS
Band12	10MHz	16QAM	23130	50RB#0	-37.41	PASS

Test Graphs

