

FCC Appendix RF Test Data for LTE Band 12

FCC ID : 2BVLN-QS

Company : Wuhan Qinggou Intelligent Technology Co., Ltd.

EUT : Qingo AI Vending

Model Number : QS-779CREW(G)-US

Report No. : CTA26030400804

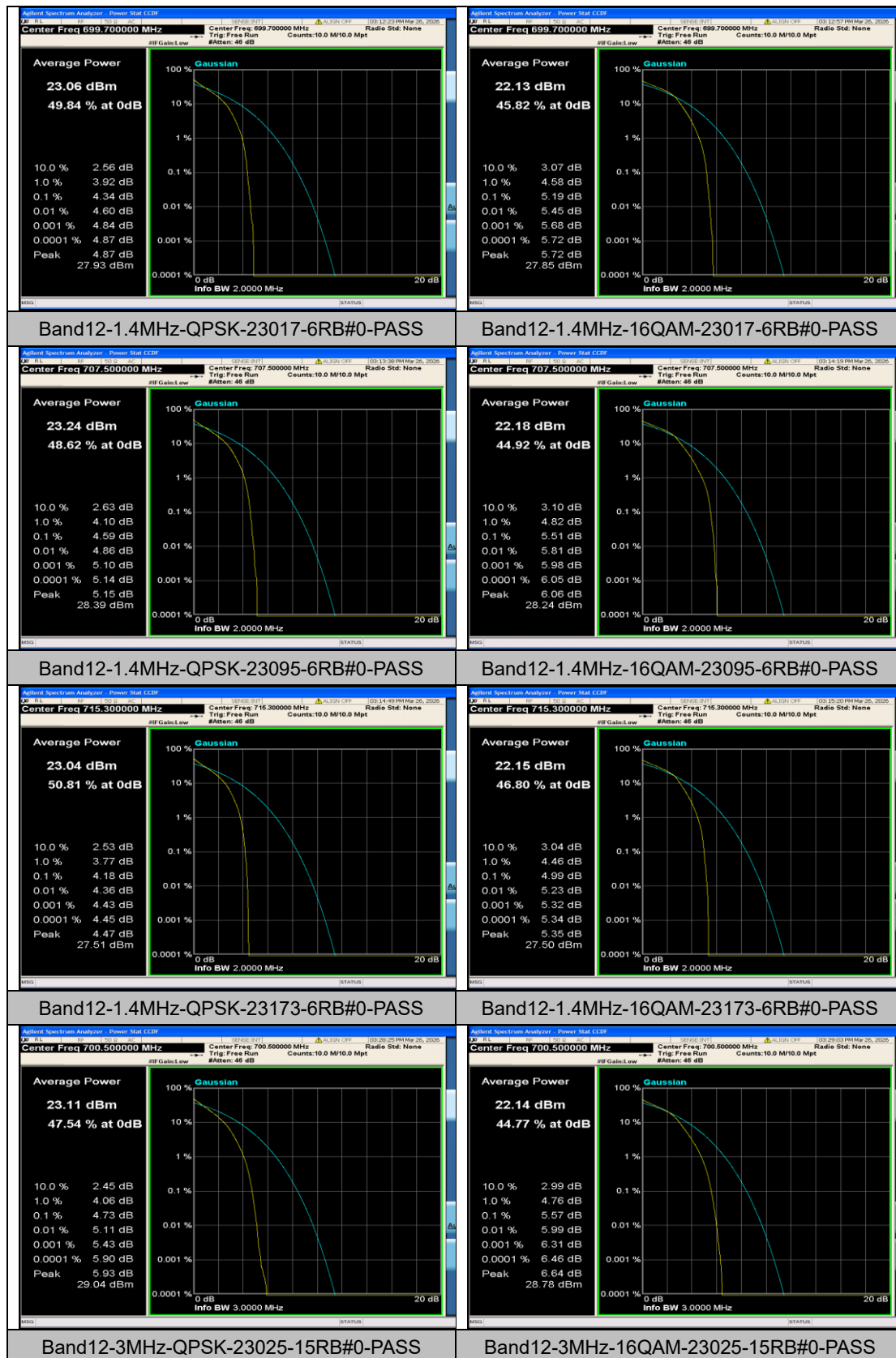
Reviewed By : Eric Wang

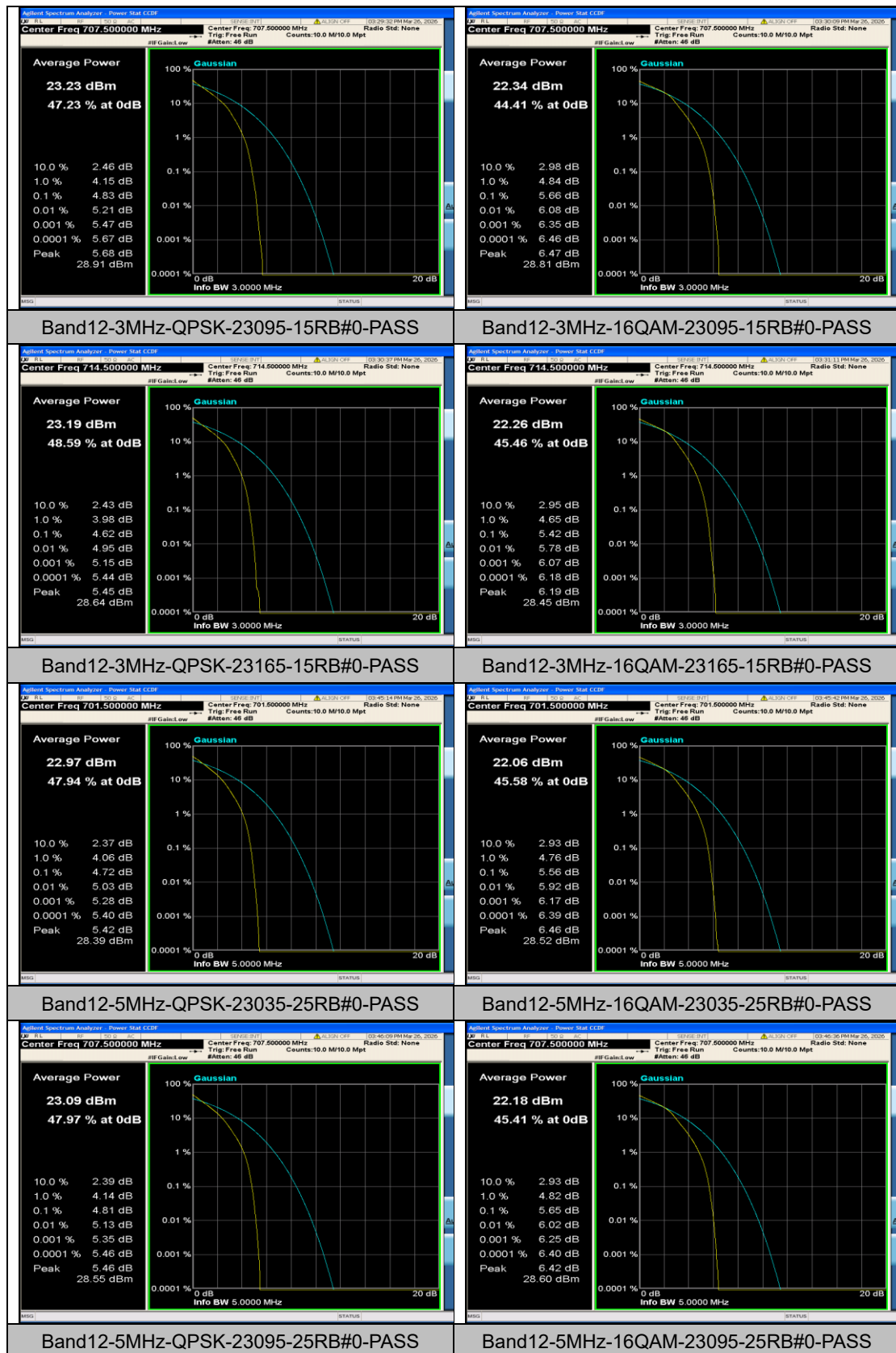
Appendix B: Peak-to-Average Ratio(CCDF)

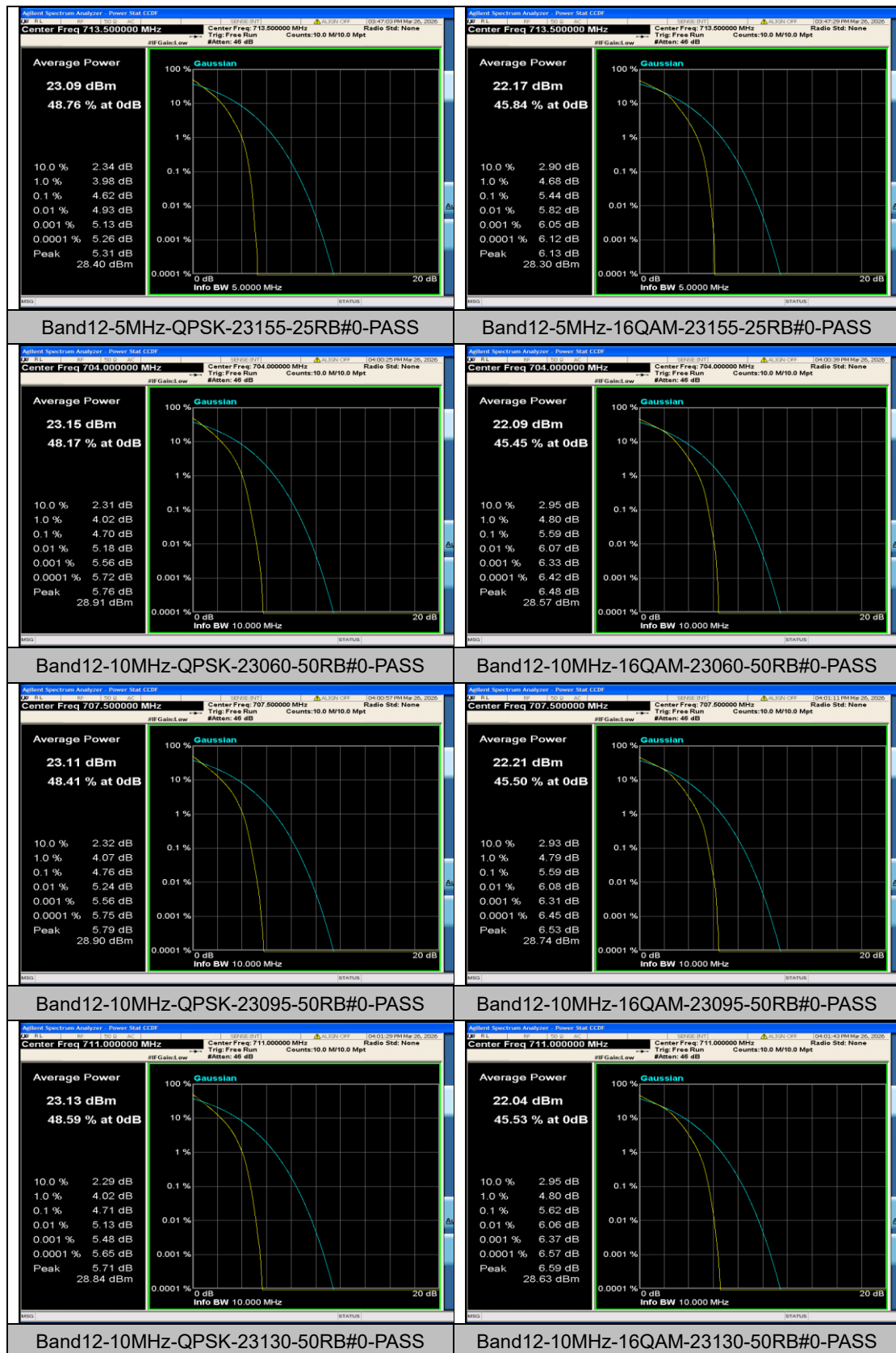
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	4.34	13	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	5.19	13	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	4.59	13	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	5.51	13	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	4.18	13	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	4.99	13	PASS
Band12	3MHz	QPSK	23025	15RB#0	4.73	13	PASS
Band12	3MHz	16QAM	23025	15RB#0	5.57	13	PASS
Band12	3MHz	QPSK	23095	15RB#0	4.83	13	PASS
Band12	3MHz	16QAM	23095	15RB#0	5.66	13	PASS
Band12	3MHz	QPSK	23165	15RB#0	4.62	13	PASS
Band12	3MHz	16QAM	23165	15RB#0	5.42	13	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.72	13	PASS
Band12	5MHz	16QAM	23035	25RB#0	5.56	13	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.81	13	PASS
Band12	5MHz	16QAM	23095	25RB#0	5.65	13	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.62	13	PASS
Band12	5MHz	16QAM	23155	25RB#0	5.44	13	PASS
Band12	10MHz	QPSK	23060	50RB#0	4.70	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	5.59	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	4.76	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	5.59	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	4.71	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	5.62	13	PASS

Test Graphs





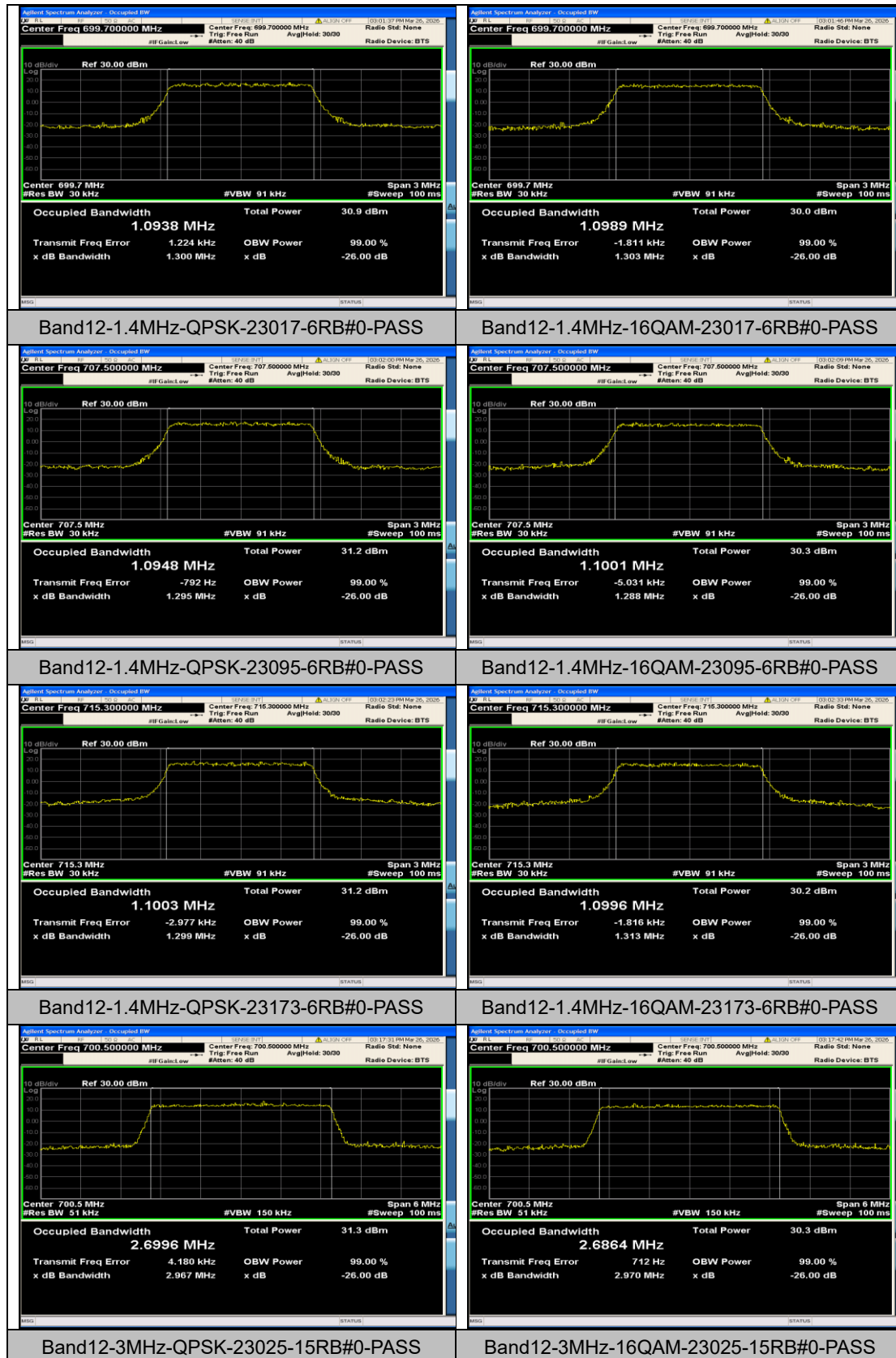


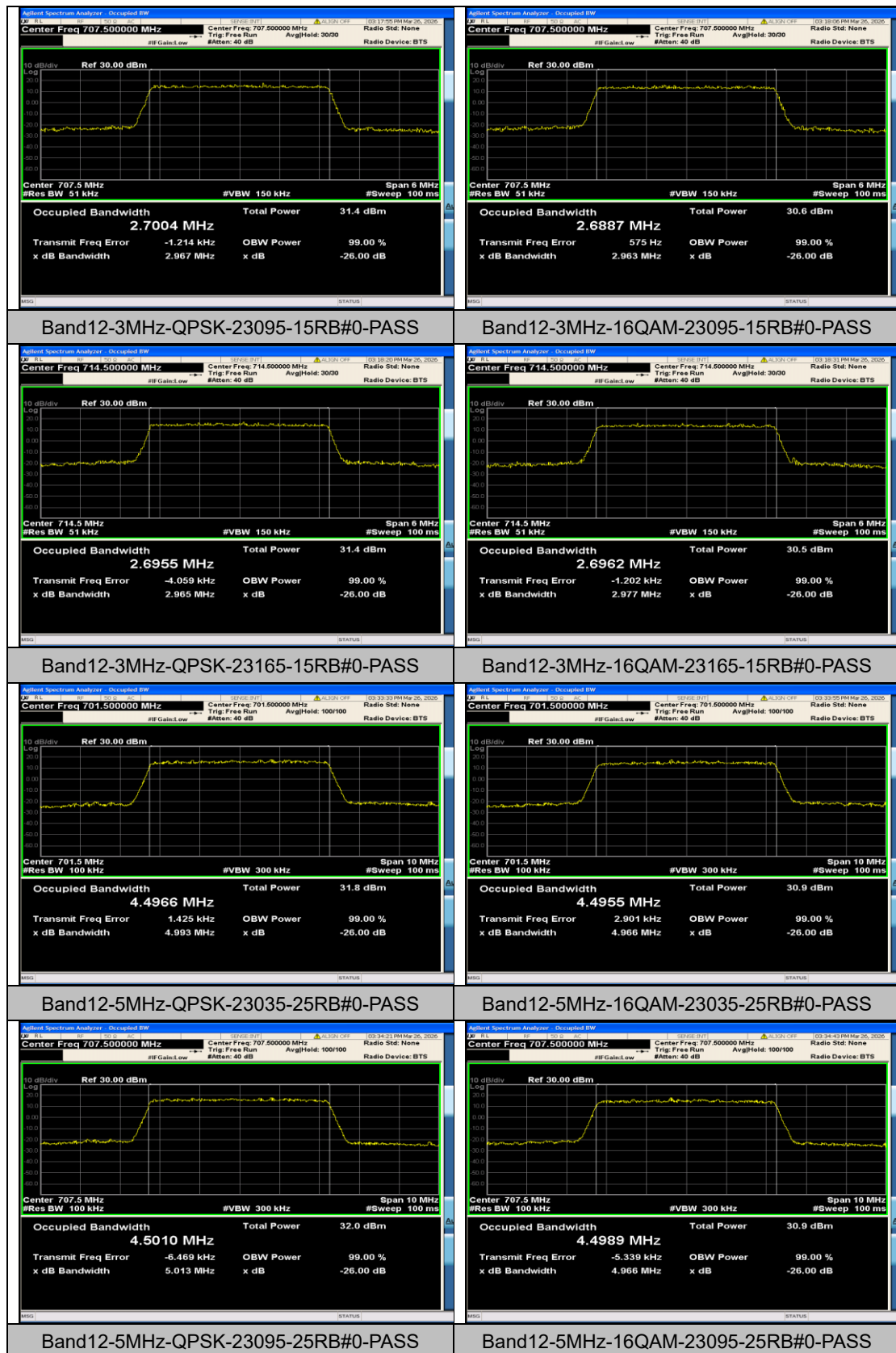
Appendix C: 26dB Bandwidth and Occupied Bandwidth

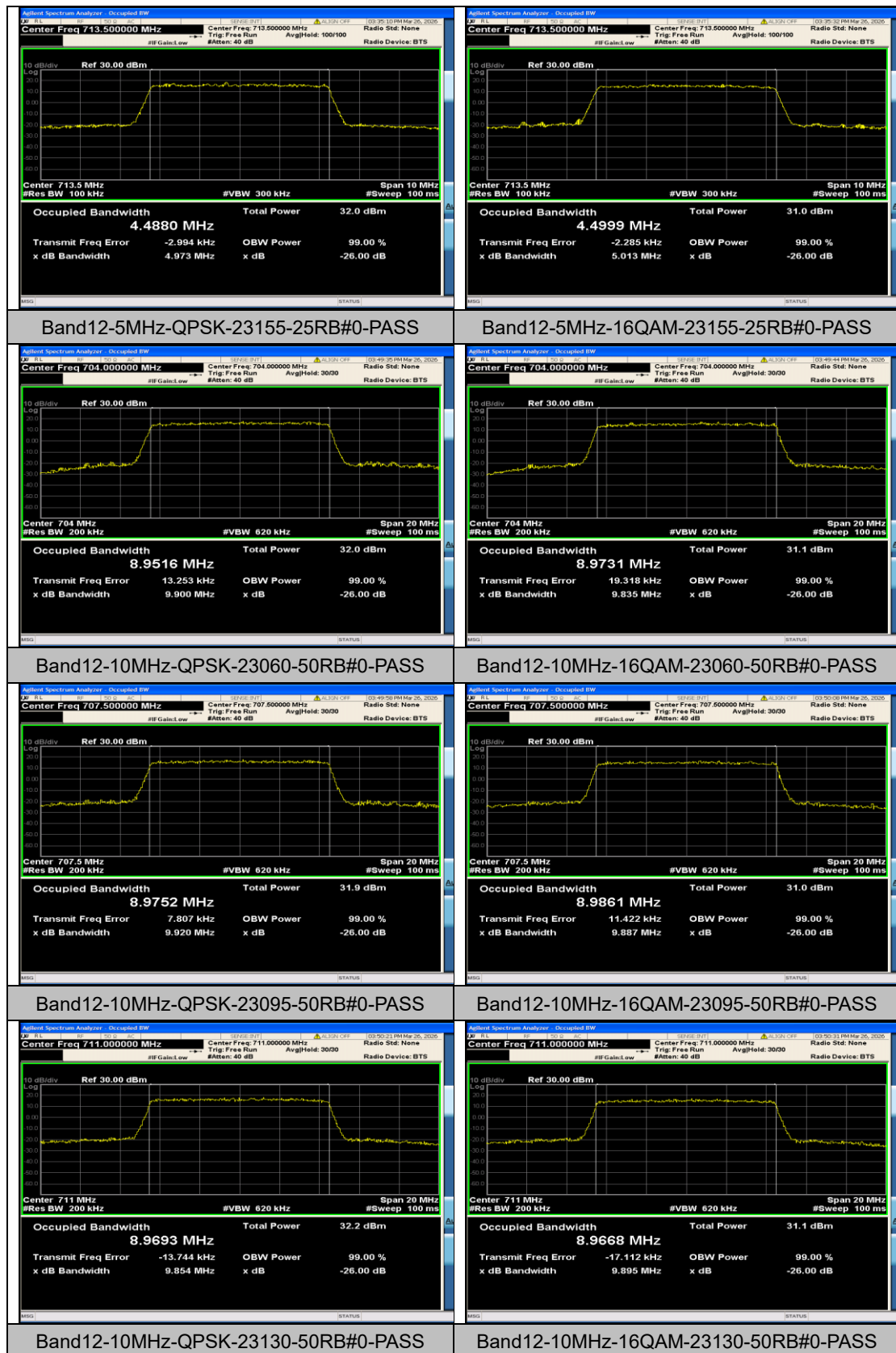
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	1.0938	1.300	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.0989	1.303	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.0948	1.295	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.1001	1.288	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.1003	1.299	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.0996	1.313	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.6996	2.967	PASS
Band12	3MHz	16QAM	23025	15RB#0	2.6864	2.970	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.7004	2.967	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.6887	2.963	PASS
Band12	3MHz	QPSK	23165	15RB#0	2.6955	2.965	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.6962	2.977	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.4966	4.993	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.4955	4.966	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.5010	5.013	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.4989	4.966	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.4880	4.973	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.4999	5.013	PASS
Band12	10MHz	QPSK	23060	50RB#0	8.9516	9.900	PASS
Band12	10MHz	16QAM	23060	50RB#0	8.9731	9.835	PASS
Band12	10MHz	QPSK	23095	50RB#0	8.9752	9.920	PASS
Band12	10MHz	16QAM	23095	50RB#0	8.9861	9.887	PASS
Band12	10MHz	QPSK	23130	50RB#0	8.9693	9.854	PASS
Band12	10MHz	16QAM	23130	50RB#0	8.9668	9.895	PASS

Test Graphs





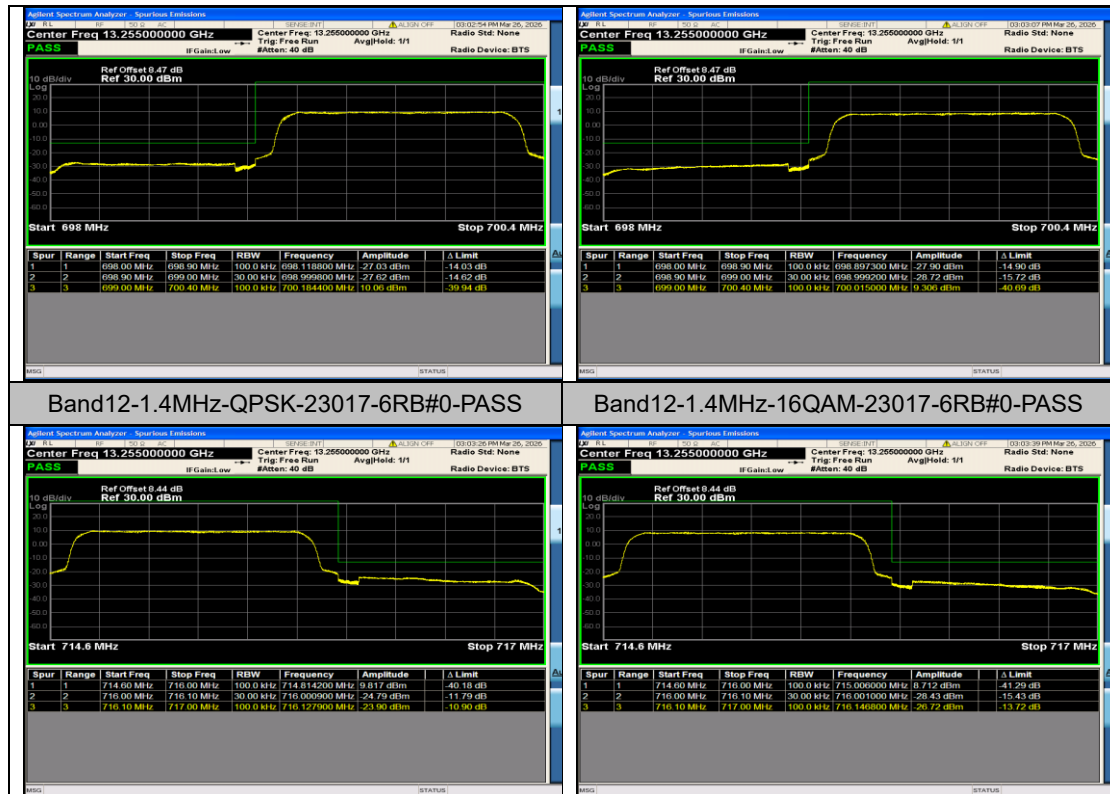


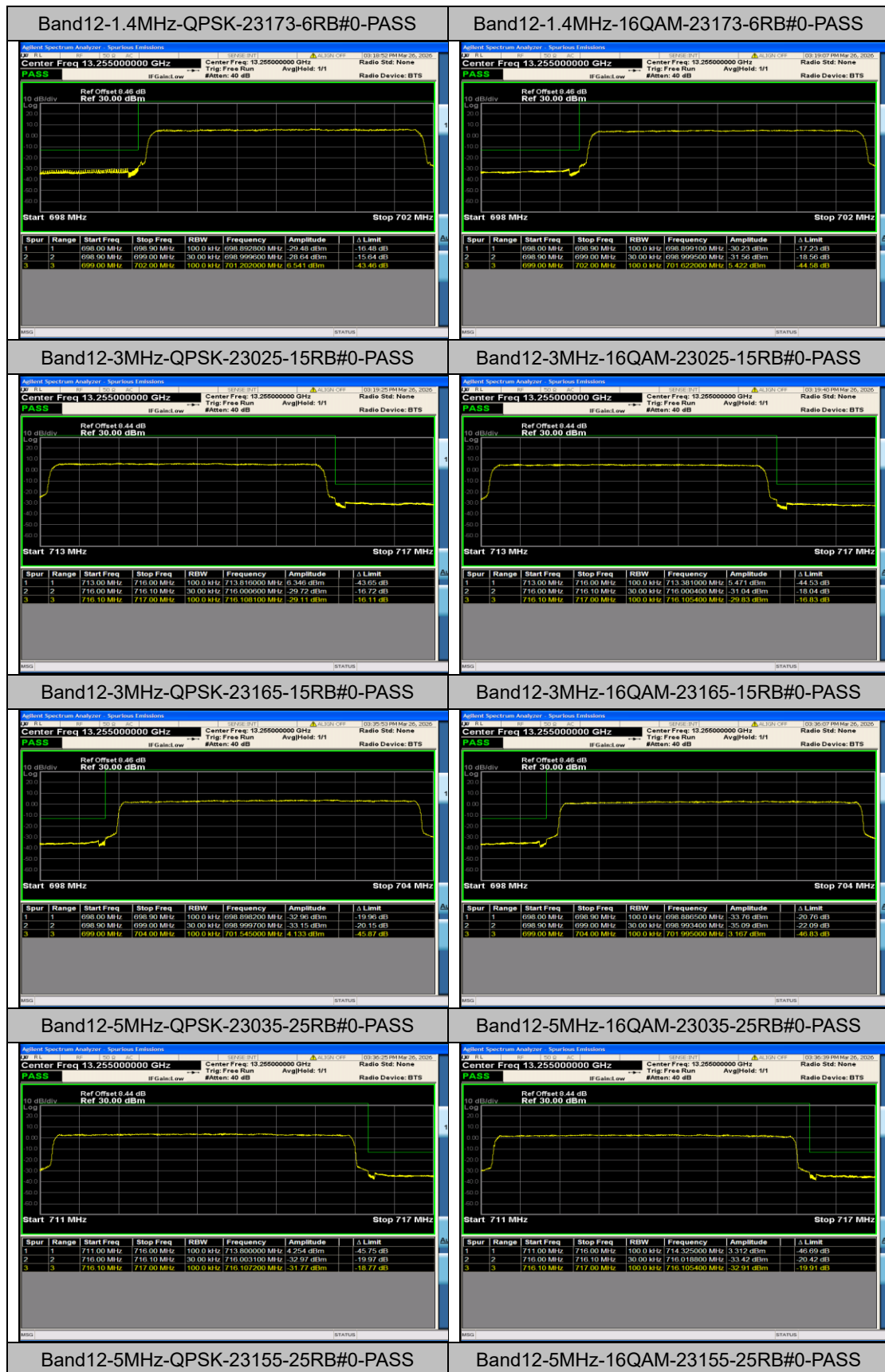
Appendix D: Band Edge

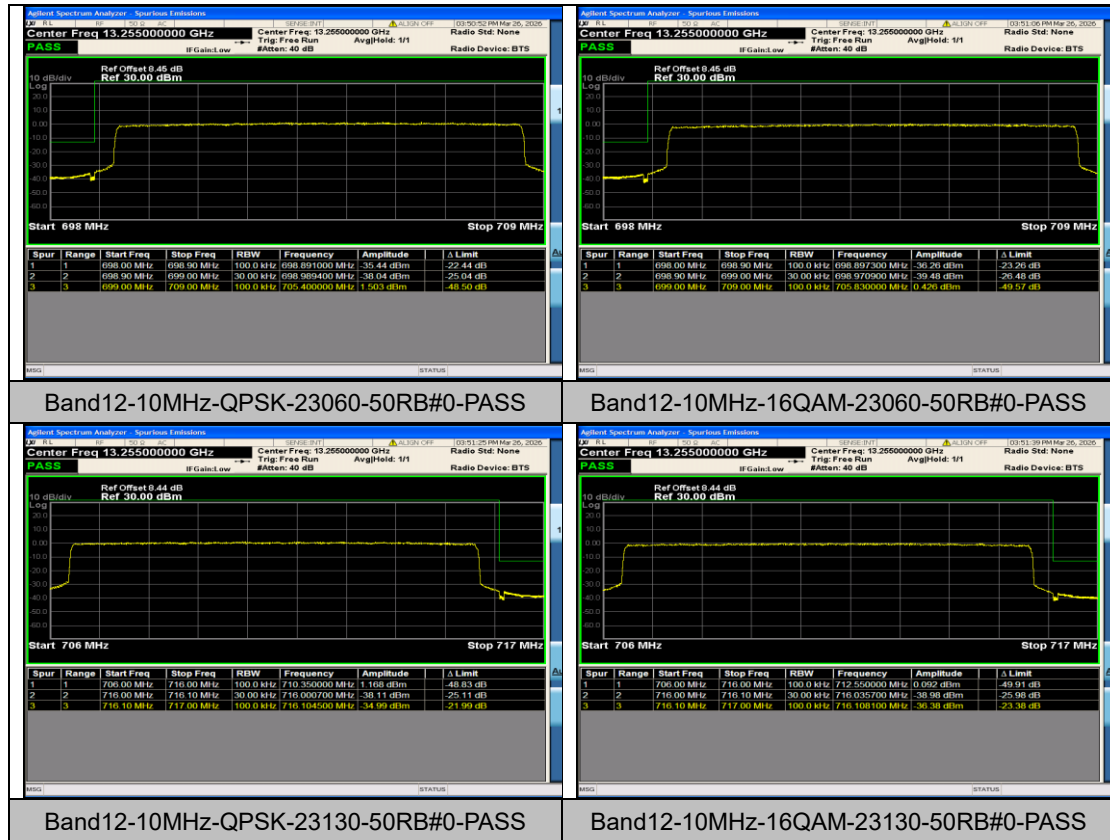
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	-27.03	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	-27.90	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	-23.90	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	-26.72	PASS
Band12	3MHz	QPSK	23025	15RB#0	-28.64	PASS
Band12	3MHz	16QAM	23025	15RB#0	-30.23	PASS
Band12	3MHz	QPSK	23165	15RB#0	-29.11	PASS
Band12	3MHz	16QAM	23165	15RB#0	-29.83	PASS
Band12	5MHz	QPSK	23035	25RB#0	-32.96	PASS
Band12	5MHz	16QAM	23035	25RB#0	-33.76	PASS
Band12	5MHz	QPSK	23155	25RB#0	-31.77	PASS
Band12	5MHz	16QAM	23155	25RB#0	-32.91	PASS
Band12	10MHz	QPSK	23060	50RB#0	-35.44	PASS
Band12	10MHz	16QAM	23060	50RB#0	-36.26	PASS
Band12	10MHz	QPSK	23130	50RB#0	-34.99	PASS
Band12	10MHz	16QAM	23130	50RB#0	-36.38	PASS

Test Graphs







Appendix E: Conducted Spurious Emission

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	0.009~0.15	-60.66	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	0.15~30	-53.31	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	30~1000	-32.35	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	1000~3000	-47.67	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	3000~10000	-44.33	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	0.009~0.15	-59.98	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	0.15~30	-51.19	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	30~1000	-28.86	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1000~3000	-48.04	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	3000~10000	-44.34	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	0.009~0.15	-60.82	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	0.15~30	-52.34	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	30~1000	-57.80	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1000~3000	-48.03	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	3000~10000	-43.73	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	0.009~0.15	-60.05	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	0.15~30	-52.25	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	30~1000	-58.07	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1000~3000	-47.93	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	3000~10000	-44.32	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	0.009~0.15	-60.71	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	0.15~30	-52.09	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	30~1000	-31.22	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1000~3000	-47.04	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	3000~10000	-43.93	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	0.009~0.15	-58.21	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	0.15~30	-52.00	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	30~1000	-31.27	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1000~3000	-47.40	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	3000~10000	-44.04	PASS
Band12	3MHz	QPSK	23025	15RB#0	0.009~0.15	-61.02	PASS
Band12	3MHz	QPSK	23025	15RB#0	0.15~30	-51.29	PASS
Band12	3MHz	QPSK	23025	15RB#0	30~1000	-27.80	PASS
Band12	3MHz	QPSK	23025	15RB#0	1000~3000	-48.00	PASS
Band12	3MHz	QPSK	23025	15RB#0	3000~10000	-44.18	PASS
Band12	3MHz	16QAM	23025	15RB#0	0.009~0.15	-59.30	PASS

Band12	3MHz	16QAM	23025	15RB#0	0.15~30	-51.41	PASS
Band12	3MHz	16QAM	23025	15RB#0	30~1000	-29.44	PASS
Band12	3MHz	16QAM	23025	15RB#0	1000~3000	-48.24	PASS
Band12	3MHz	16QAM	23025	15RB#0	3000~10000	-43.87	PASS
Band12	3MHz	QPSK	23095	15RB#0	0.009~0.15	-59.61	PASS
Band12	3MHz	QPSK	23095	15RB#0	0.15~30	-51.55	PASS
Band12	3MHz	QPSK	23095	15RB#0	30~1000	-53.18	PASS
Band12	3MHz	QPSK	23095	15RB#0	1000~3000	-47.87	PASS
Band12	3MHz	QPSK	23095	15RB#0	3000~10000	-44.52	PASS
Band12	3MHz	16QAM	23095	15RB#0	0.009~0.15	-58.94	PASS
Band12	3MHz	16QAM	23095	15RB#0	0.15~30	-51.13	PASS
Band12	3MHz	16QAM	23095	15RB#0	30~1000	-56.01	PASS
Band12	3MHz	16QAM	23095	15RB#0	1000~3000	-48.06	PASS
Band12	3MHz	16QAM	23095	15RB#0	3000~10000	-44.12	PASS
Band12	3MHz	QPSK	23165	15RB#0	0.009~0.15	-60.42	PASS
Band12	3MHz	QPSK	23165	15RB#0	0.15~30	-51.75	PASS
Band12	3MHz	QPSK	23165	15RB#0	30~1000	-24.57	PASS
Band12	3MHz	QPSK	23165	15RB#0	1000~3000	-48.08	PASS
Band12	3MHz	QPSK	23165	15RB#0	3000~10000	-44.18	PASS
Band12	3MHz	16QAM	23165	15RB#0	0.009~0.15	-59.35	PASS
Band12	3MHz	16QAM	23165	15RB#0	0.15~30	-51.28	PASS
Band12	3MHz	16QAM	23165	15RB#0	30~1000	-27.30	PASS
Band12	3MHz	16QAM	23165	15RB#0	1000~3000	-48.07	PASS
Band12	3MHz	16QAM	23165	15RB#0	3000~10000	-44.41	PASS
Band12	5MHz	QPSK	23035	25RB#0	0.009~0.15	-61.29	PASS
Band12	5MHz	QPSK	23035	25RB#0	0.15~30	-52.65	PASS
Band12	5MHz	QPSK	23035	25RB#0	30~1000	-30.85	PASS
Band12	5MHz	QPSK	23035	25RB#0	1000~3000	-47.85	PASS
Band12	5MHz	QPSK	23035	25RB#0	3000~10000	-44.21	PASS
Band12	5MHz	16QAM	23035	25RB#0	0.009~0.15	-60.19	PASS
Band12	5MHz	16QAM	23035	25RB#0	0.15~30	-52.74	PASS
Band12	5MHz	16QAM	23035	25RB#0	30~1000	-31.57	PASS
Band12	5MHz	16QAM	23035	25RB#0	1000~3000	-48.28	PASS
Band12	5MHz	16QAM	23035	25RB#0	3000~10000	-44.00	PASS
Band12	5MHz	QPSK	23095	25RB#0	0.009~0.15	-61.04	PASS
Band12	5MHz	QPSK	23095	25RB#0	0.15~30	-53.40	PASS
Band12	5MHz	QPSK	23095	25RB#0	30~1000	-42.30	PASS
Band12	5MHz	QPSK	23095	25RB#0	1000~3000	-48.05	PASS
Band12	5MHz	QPSK	23095	25RB#0	3000~10000	-43.92	PASS
Band12	5MHz	16QAM	23095	25RB#0	0.009~0.15	-60.30	PASS
Band12	5MHz	16QAM	23095	25RB#0	0.15~30	-52.21	PASS
Band12	5MHz	16QAM	23095	25RB#0	30~1000	-46.90	PASS
Band12	5MHz	16QAM	23095	25RB#0	1000~3000	-48.03	PASS

Band12	5MHz	16QAM	23095	25RB#0	3000~10000	-43.89	PASS
Band12	5MHz	QPSK	23155	25RB#0	0.009~0.15	-59.93	PASS
Band12	5MHz	QPSK	23155	25RB#0	0.15~30	-53.93	PASS
Band12	5MHz	QPSK	23155	25RB#0	30~1000	-26.60	PASS
Band12	5MHz	QPSK	23155	25RB#0	1000~3000	-47.99	PASS
Band12	5MHz	QPSK	23155	25RB#0	3000~10000	-44.18	PASS
Band12	5MHz	16QAM	23155	25RB#0	0.009~0.15	-60.01	PASS
Band12	5MHz	16QAM	23155	25RB#0	0.15~30	-51.86	PASS
Band12	5MHz	16QAM	23155	25RB#0	30~1000	-30.18	PASS
Band12	5MHz	16QAM	23155	25RB#0	1000~3000	-48.23	PASS
Band12	5MHz	16QAM	23155	25RB#0	3000~10000	-43.69	PASS
Band12	10MHz	QPSK	23060	50RB#0	0.009~0.15	-59.25	PASS
Band12	10MHz	QPSK	23060	50RB#0	0.15~30	-52.89	PASS
Band12	10MHz	QPSK	23060	50RB#0	30~1000	-32.29	PASS
Band12	10MHz	QPSK	23060	50RB#0	1000~3000	-48.17	PASS
Band12	10MHz	QPSK	23060	50RB#0	3000~10000	-44.39	PASS
Band12	10MHz	16QAM	23060	50RB#0	0.009~0.15	-60.26	PASS
Band12	10MHz	16QAM	23060	50RB#0	0.15~30	-51.99	PASS
Band12	10MHz	16QAM	23060	50RB#0	30~1000	-33.02	PASS
Band12	10MHz	16QAM	23060	50RB#0	1000~3000	-48.05	PASS
Band12	10MHz	16QAM	23060	50RB#0	3000~10000	-43.80	PASS
Band12	10MHz	QPSK	23095	50RB#0	0.009~0.15	-61.15	PASS
Band12	10MHz	QPSK	23095	50RB#0	0.15~30	-52.86	PASS
Band12	10MHz	QPSK	23095	50RB#0	30~1000	-33.86	PASS
Band12	10MHz	QPSK	23095	50RB#0	1000~3000	-48.10	PASS
Band12	10MHz	QPSK	23095	50RB#0	3000~10000	-43.79	PASS
Band12	10MHz	16QAM	23095	50RB#0	0.009~0.15	-60.93	PASS
Band12	10MHz	16QAM	23095	50RB#0	0.15~30	-51.52	PASS
Band12	10MHz	16QAM	23095	50RB#0	30~1000	-34.28	PASS
Band12	10MHz	16QAM	23095	50RB#0	1000~3000	-48.15	PASS
Band12	10MHz	16QAM	23095	50RB#0	3000~10000	-44.13	PASS
Band12	10MHz	QPSK	23130	50RB#0	0.009~0.15	-60.74	PASS
Band12	10MHz	QPSK	23130	50RB#0	0.15~30	-52.24	PASS
Band12	10MHz	QPSK	23130	50RB#0	30~1000	-30.90	PASS
Band12	10MHz	QPSK	23130	50RB#0	1000~3000	-48.08	PASS
Band12	10MHz	QPSK	23130	50RB#0	3000~10000	-44.35	PASS
Band12	10MHz	16QAM	23130	50RB#0	0.009~0.15	-60.72	PASS
Band12	10MHz	16QAM	23130	50RB#0	0.15~30	-52.79	PASS
Band12	10MHz	16QAM	23130	50RB#0	30~1000	-32.57	PASS
Band12	10MHz	16QAM	23130	50RB#0	1000~3000	-48.26	PASS
Band12	10MHz	16QAM	23130	50RB#0	3000~10000	-43.82	PASS

Test Graphs

