

FCC LTE Band Test Data

FCC ID : 2BDCL-M616A

Company: : Signalinks Communication Technology Co.,Ltd

EUT : 4G LTE Mobile Wifi

Model Number : M616A

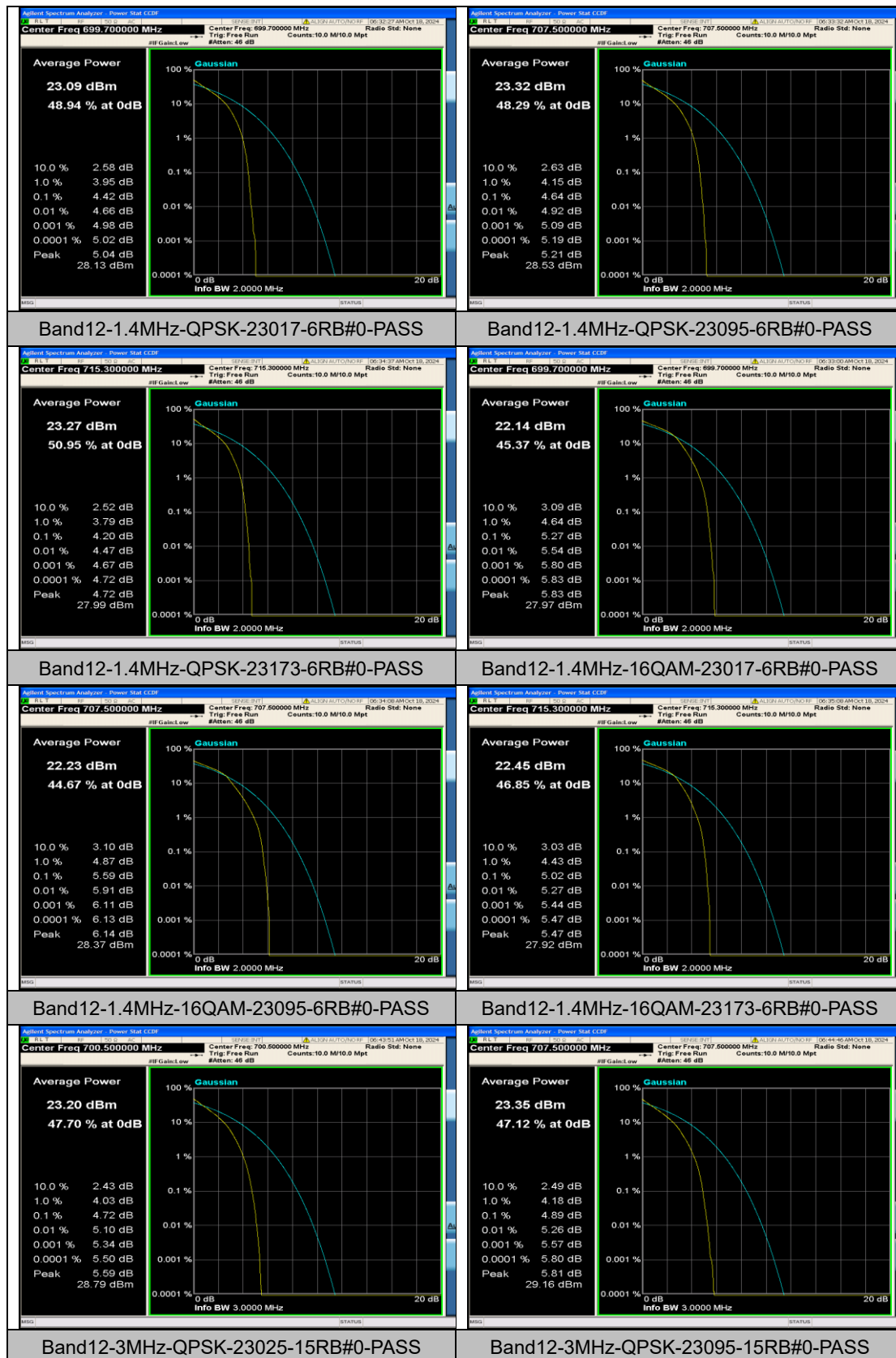
Reviewed By : Eric Wang

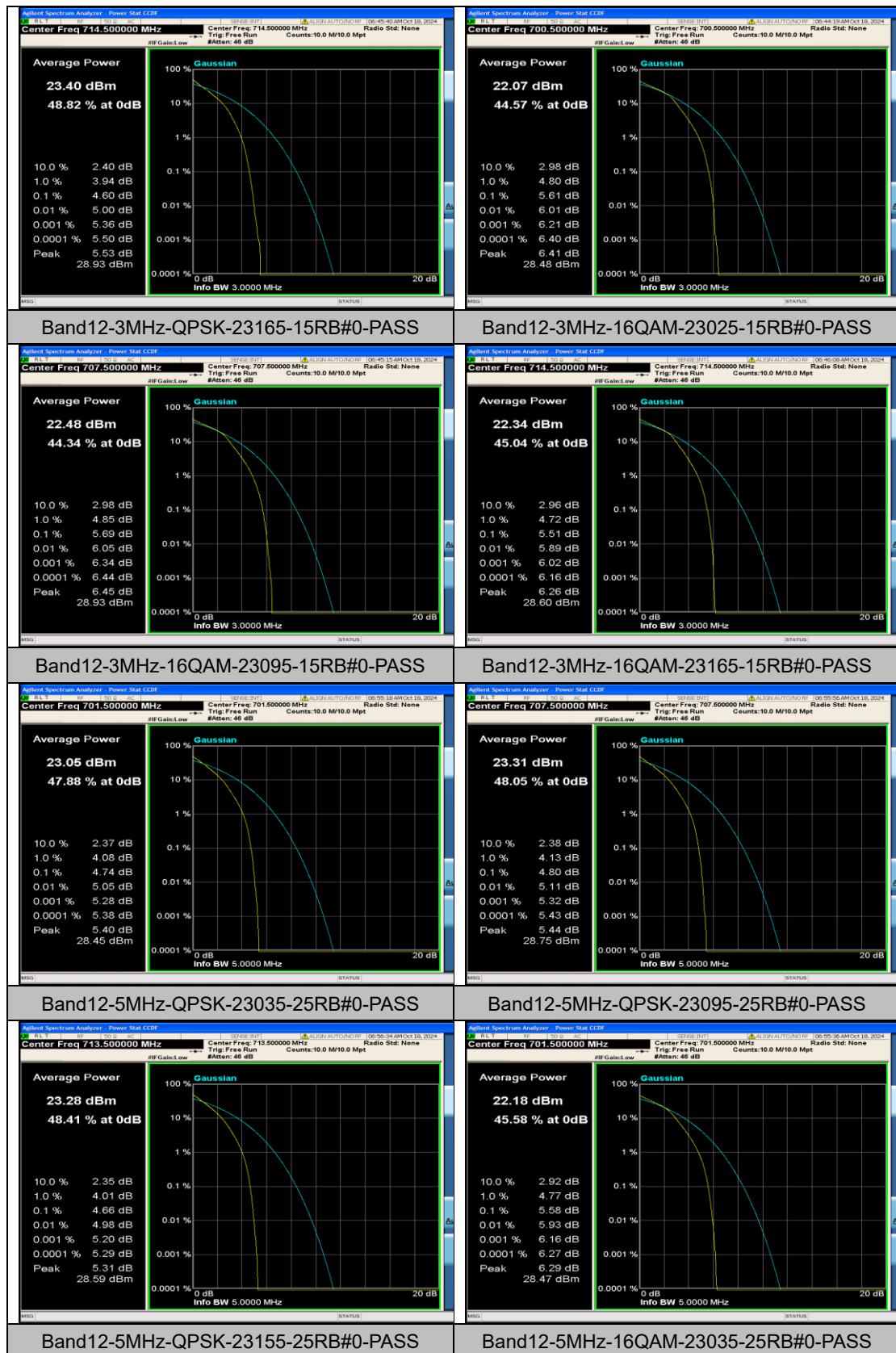
Appendix B: Peak-to-Average Ratio(CCDF)

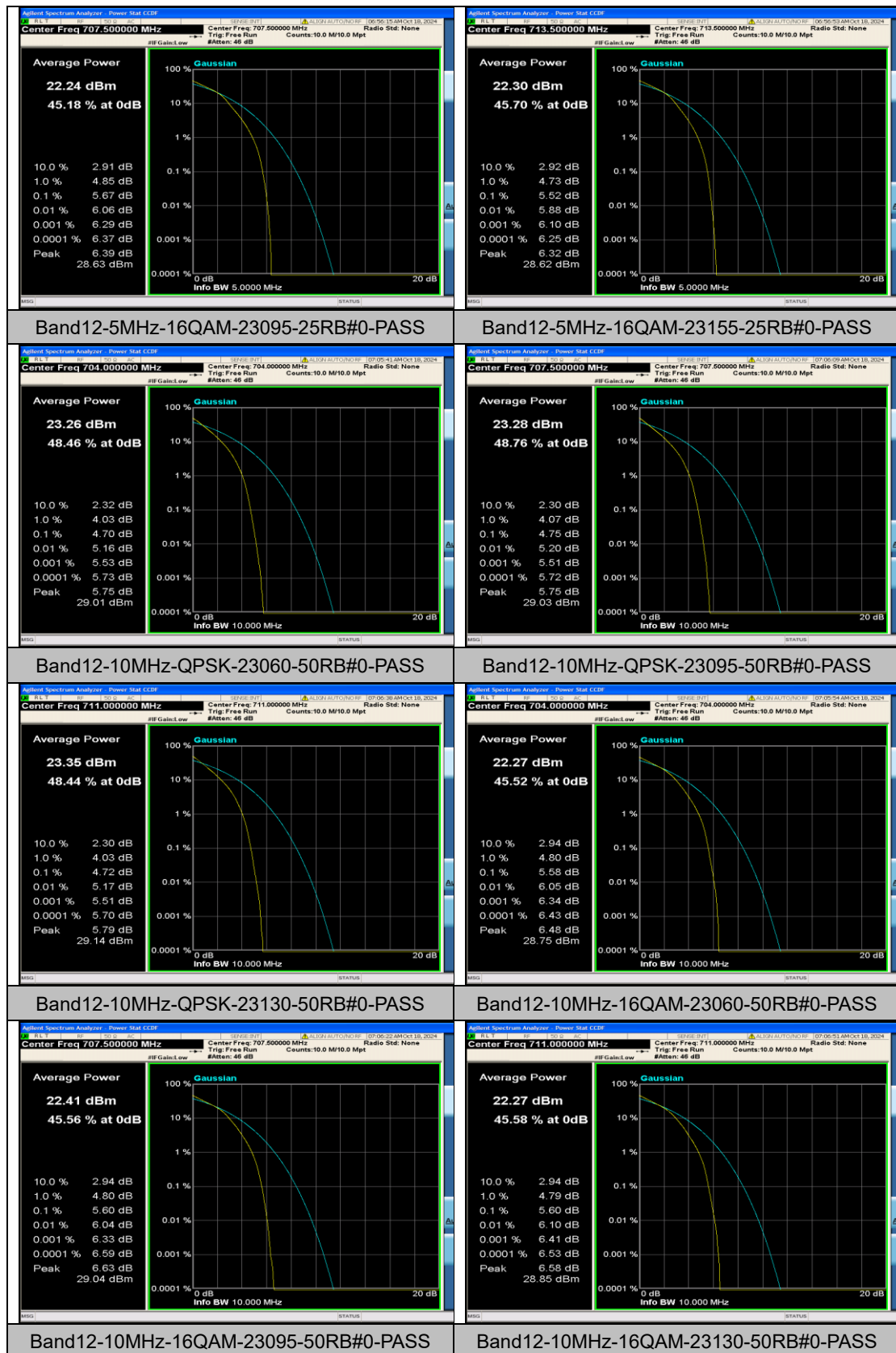
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	4.42	13	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	4.64	13	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	4.20	13	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	5.27	13	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	5.59	13	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	5.02	13	PASS
Band12	3MHz	QPSK	23025	15RB#0	4.72	13	PASS
Band12	3MHz	QPSK	23095	15RB#0	4.89	13	PASS
Band12	3MHz	QPSK	23165	15RB#0	4.60	13	PASS
Band12	3MHz	16QAM	23025	15RB#0	5.61	13	PASS
Band12	3MHz	16QAM	23095	15RB#0	5.69	13	PASS
Band12	3MHz	16QAM	23165	15RB#0	5.51	13	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.74	13	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.80	13	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.66	13	PASS
Band12	5MHz	16QAM	23035	25RB#0	5.58	13	PASS
Band12	5MHz	16QAM	23095	25RB#0	5.67	13	PASS
Band12	5MHz	16QAM	23155	25RB#0	5.52	13	PASS
Band12	10MHz	QPSK	23060	50RB#0	4.70	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	4.75	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	4.72	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	5.58	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	5.60	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	5.60	13	PASS

Test Graphs





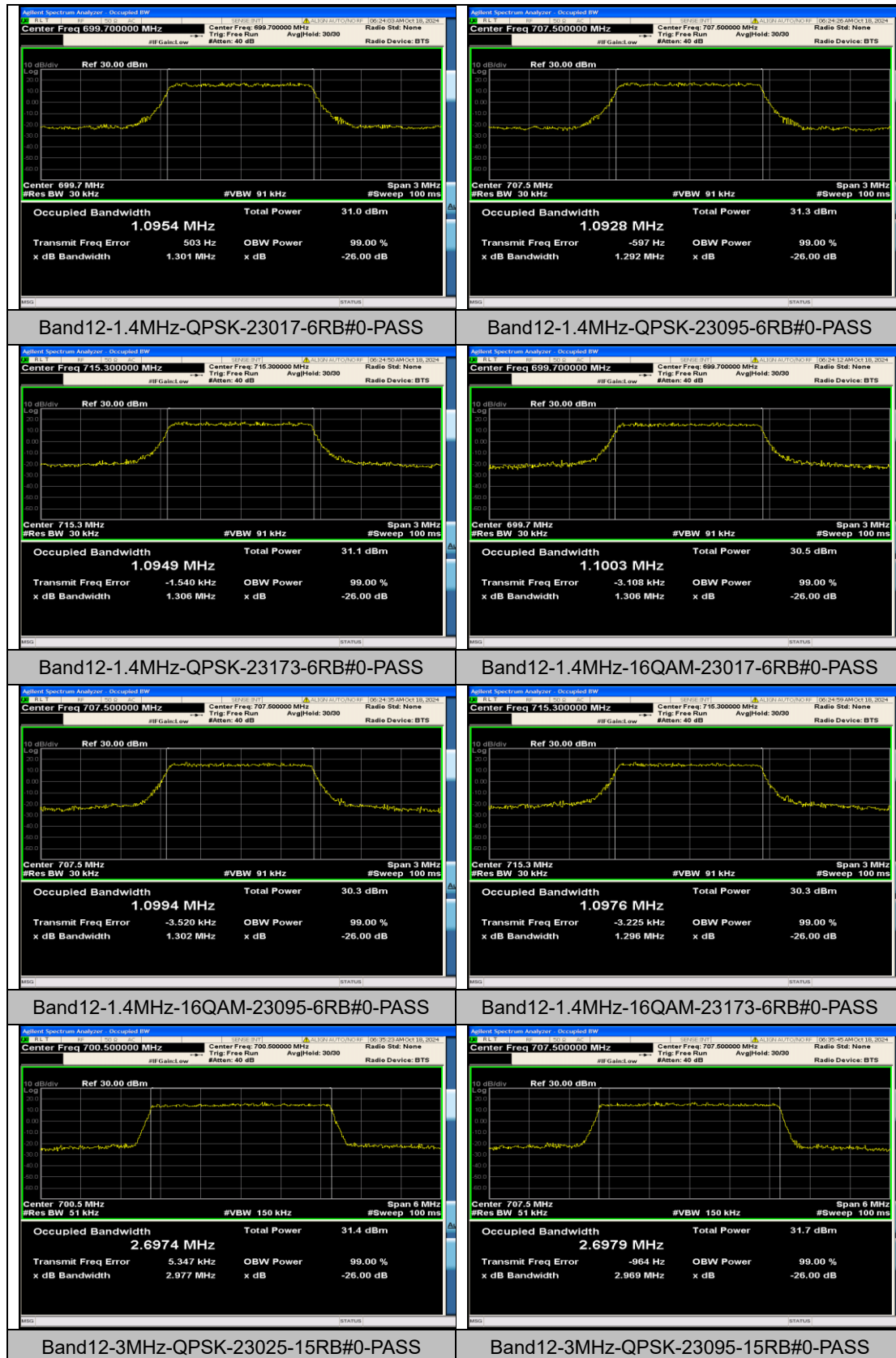


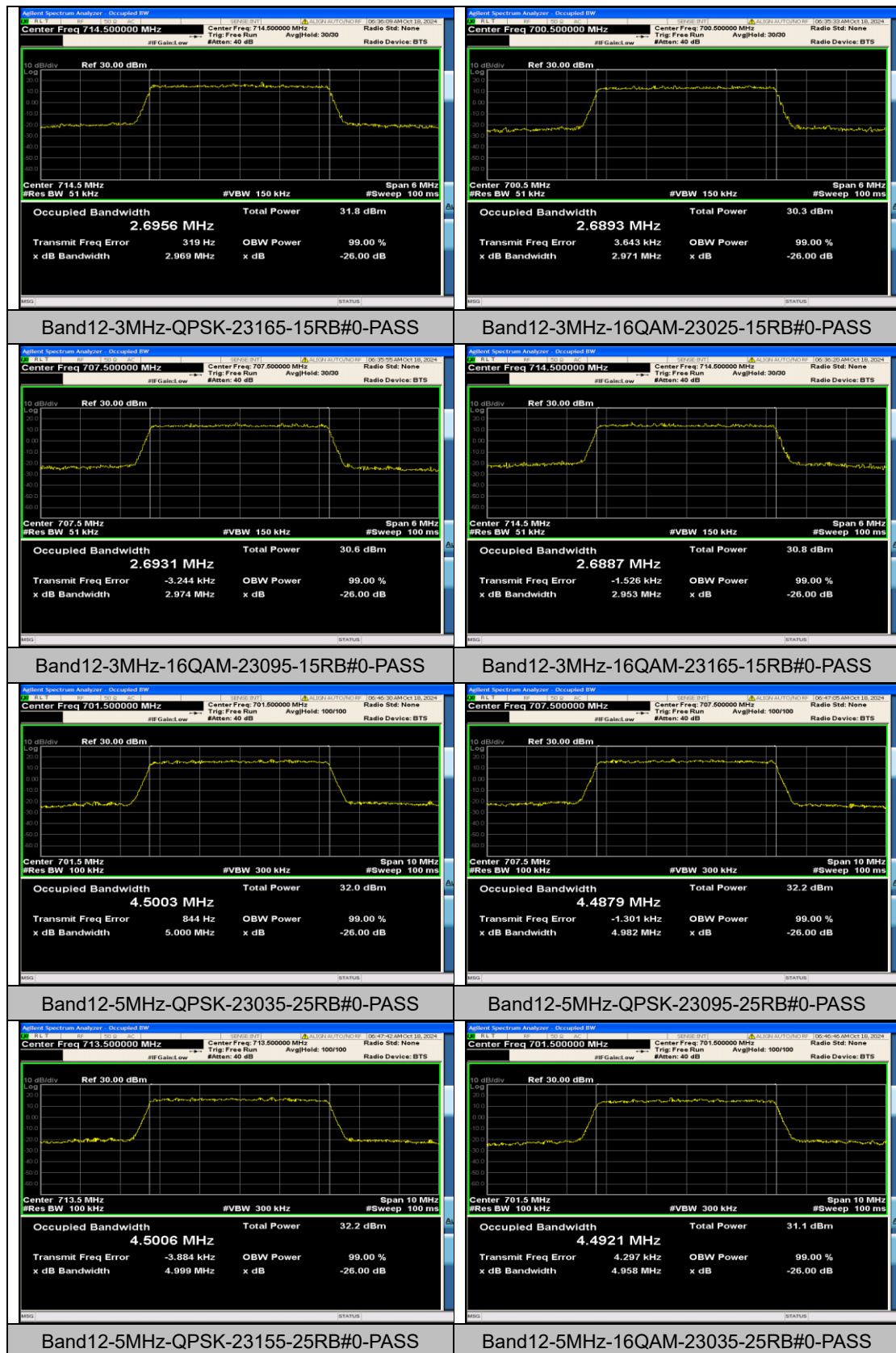
Appendix C: 26dB Bandwidth and Occupied Bandwidth

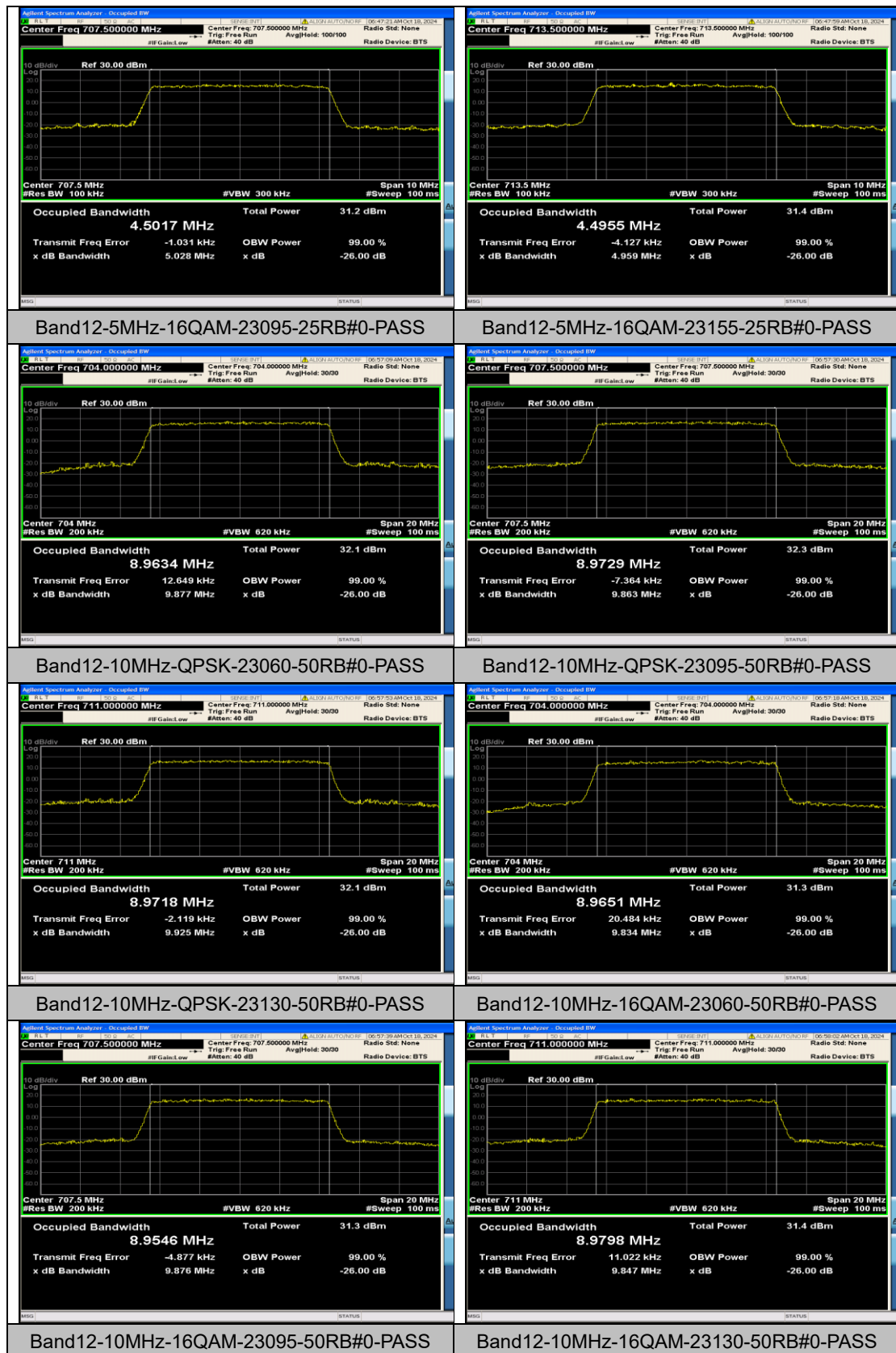
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	1.0954	1.301	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.0928	1.292	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.0949	1.306	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.1003	1.306	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.0994	1.302	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.0976	1.296	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.6974	2.977	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.6979	2.969	PASS
Band12	3MHz	QPSK	23165	15RB#0	2.6956	2.969	PASS
Band12	3MHz	16QAM	23025	15RB#0	2.6893	2.971	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.6931	2.974	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.6887	2.953	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.5003	5.000	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.4879	4.982	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.5006	4.999	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.4921	4.958	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.5017	5.028	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.4955	4.959	PASS
Band12	10MHz	QPSK	23060	50RB#0	8.9634	9.877	PASS
Band12	10MHz	QPSK	23095	50RB#0	8.9729	9.863	PASS
Band12	10MHz	QPSK	23130	50RB#0	8.9718	9.925	PASS
Band12	10MHz	16QAM	23060	50RB#0	8.9651	9.834	PASS
Band12	10MHz	16QAM	23095	50RB#0	8.9546	9.876	PASS
Band12	10MHz	16QAM	23130	50RB#0	8.9798	9.847	PASS

Test Graphs





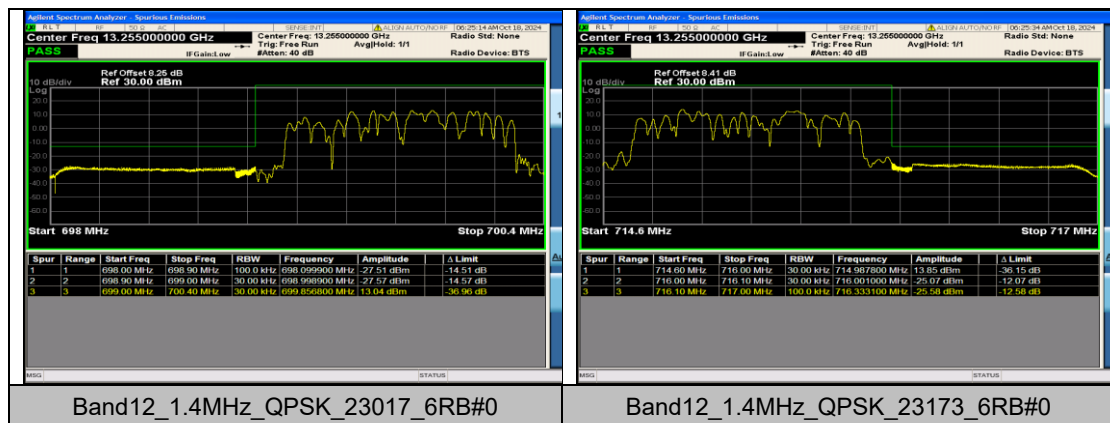


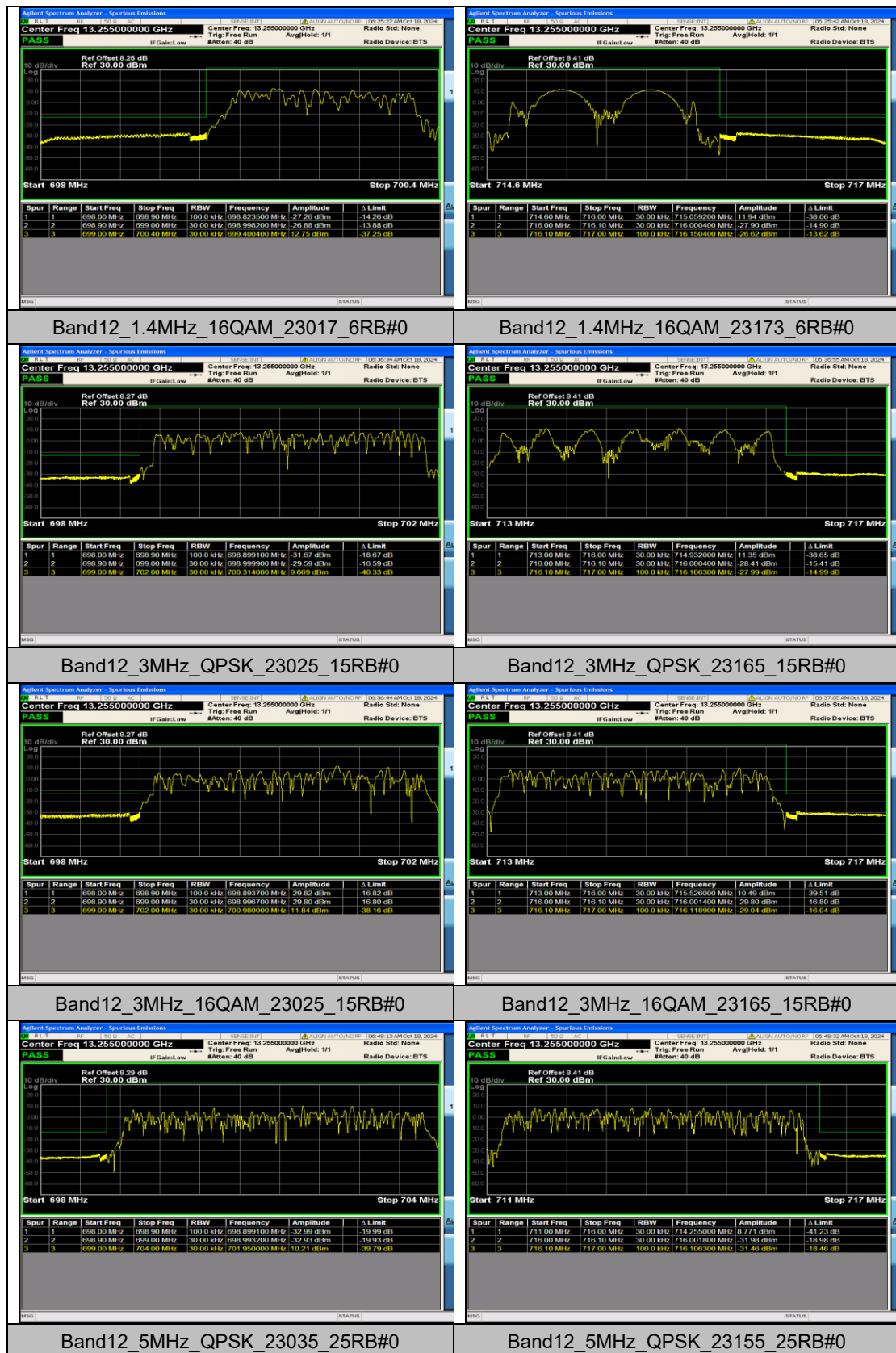
Appendix D: Band Edge

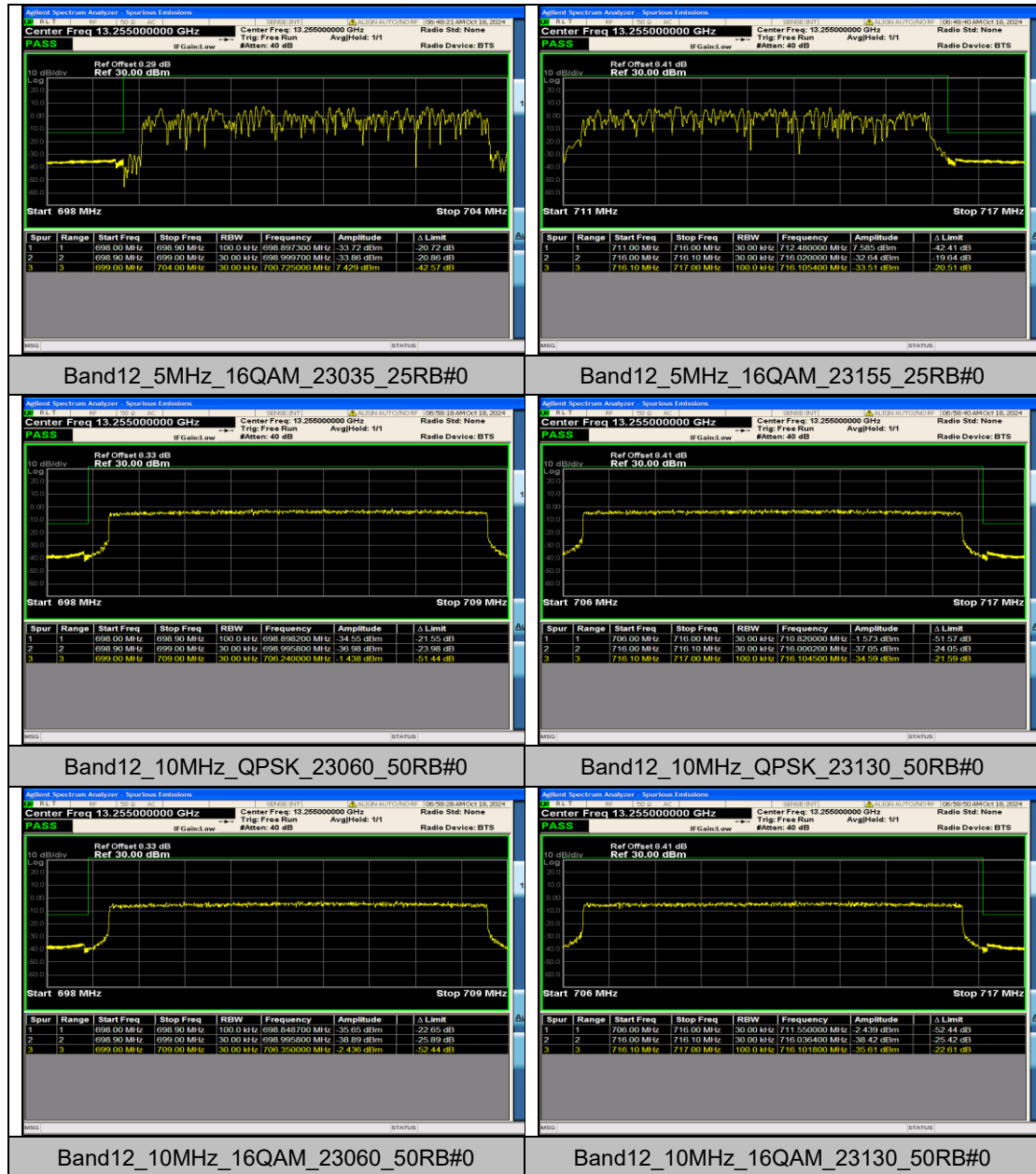
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	-27.51	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	-25.07	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	-26.88	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	-26.62	PASS
Band12	3MHz	QPSK	23025	15RB#0	-29.59	PASS
Band12	3MHz	QPSK	23165	15RB#0	-27.99	PASS
Band12	3MHz	16QAM	23025	15RB#0	-29.80	PASS
Band12	3MHz	16QAM	23165	15RB#0	-29.04	PASS
Band12	5MHz	QPSK	23035	25RB#0	-32.93	PASS
Band12	5MHz	QPSK	23155	25RB#0	-31.46	PASS
Band12	5MHz	16QAM	23035	25RB#0	-33.72	PASS
Band12	5MHz	16QAM	23155	25RB#0	-32.64	PASS
Band12	10MHz	QPSK	23060	50RB#0	-34.55	PASS
Band12	10MHz	QPSK	23130	50RB#0	-34.59	PASS
Band12	10MHz	16QAM	23060	50RB#0	-35.65	PASS
Band12	10MHz	16QAM	23130	50RB#0	-35.61	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	-49.60	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	0.15~30	-52.91	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	30~1000	-51.31	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	1000~3000	-46.53	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	3000~10000	-43.32	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	0.009~0.15	-47.69	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	0.15~30	-52.46	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	30~1000	-51.35	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1000~3000	-45.84	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	3000~10000	-43.01	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	0.009~0.15	-46.89	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	0.15~30	-52.89	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	30~1000	-50.82	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1000~3000	-45.01	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	3000~10000	-43.45	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	0.009~0.15	-44.86	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	0.15~30	-52.95	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	30~1000	-51.96	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1000~3000	-45.89	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	3000~10000	-43.58	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	0.009~0.15	-46.13	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	0.15~30	-53.71	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	30~1000	-52.98	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1000~3000	-46.70	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	3000~10000	-43.41	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	0.009~0.15	-48.05	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	0.15~30	-54.08	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	30~1000	-51.55	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1000~3000	-46.45	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	3000~10000	-43.74	PASS
Band12	3MHz	QPSK	23025	15RB#0	0.009~0.15	-48.78	PASS
Band12	3MHz	QPSK	23025	15RB#0	0.15~30	-54.26	PASS
Band12	3MHz	QPSK	23025	15RB#0	30~1000	-51.36	PASS
Band12	3MHz	QPSK	23025	15RB#0	1000~3000	-46.49	PASS
Band12	3MHz	QPSK	23025	15RB#0	3000~10000	-43.12	PASS
Band12	3MHz	QPSK	23095	15RB#0	0.009~0.15	-48.72	PASS

Band12	3MHz	QPSK	23095	15RB#0	0.15~30	-53.33	PASS
Band12	3MHz	QPSK	23095	15RB#0	30~1000	-50.84	PASS
Band12	3MHz	QPSK	23095	15RB#0	1000~3000	-46.61	PASS
Band12	3MHz	QPSK	23095	15RB#0	3000~10000	-43.34	PASS
Band12	3MHz	QPSK	23165	15RB#0	0.009~0.15	-47.98	PASS
Band12	3MHz	QPSK	23165	15RB#0	0.15~30	-54.21	PASS
Band12	3MHz	QPSK	23165	15RB#0	30~1000	-49.65	PASS
Band12	3MHz	QPSK	23165	15RB#0	1000~3000	-46.66	PASS
Band12	3MHz	QPSK	23165	15RB#0	3000~10000	-43.22	PASS
Band12	3MHz	16QAM	23025	15RB#0	0.009~0.15	-47.53	PASS
Band12	3MHz	16QAM	23025	15RB#0	0.15~30	-53.69	PASS
Band12	3MHz	16QAM	23025	15RB#0	30~1000	-51.65	PASS
Band12	3MHz	16QAM	23025	15RB#0	1000~3000	-46.25	PASS
Band12	3MHz	16QAM	23025	15RB#0	3000~10000	-43.59	PASS
Band12	3MHz	16QAM	23095	15RB#0	0.009~0.15	-49.19	PASS
Band12	3MHz	16QAM	23095	15RB#0	0.15~30	-54.44	PASS
Band12	3MHz	16QAM	23095	15RB#0	30~1000	-53.06	PASS
Band12	3MHz	16QAM	23095	15RB#0	1000~3000	-46.85	PASS
Band12	3MHz	16QAM	23095	15RB#0	3000~10000	-43.56	PASS
Band12	3MHz	16QAM	23165	15RB#0	0.009~0.15	-50.92	PASS
Band12	3MHz	16QAM	23165	15RB#0	0.15~30	-53.05	PASS
Band12	3MHz	16QAM	23165	15RB#0	30~1000	-51.76	PASS
Band12	3MHz	16QAM	23165	15RB#0	1000~3000	-46.82	PASS
Band12	3MHz	16QAM	23165	15RB#0	3000~10000	-43.90	PASS
Band12	5MHz	QPSK	23035	25RB#0	0.009~0.15	-46.16	PASS
Band12	5MHz	QPSK	23035	25RB#0	0.15~30	-55.19	PASS
Band12	5MHz	QPSK	23035	25RB#0	30~1000	-52.41	PASS
Band12	5MHz	QPSK	23035	25RB#0	1000~3000	-46.55	PASS
Band12	5MHz	QPSK	23035	25RB#0	3000~10000	-43.50	PASS
Band12	5MHz	QPSK	23095	25RB#0	0.009~0.15	-46.38	PASS
Band12	5MHz	QPSK	23095	25RB#0	0.15~30	-55.23	PASS
Band12	5MHz	QPSK	23095	25RB#0	30~1000	-54.64	PASS
Band12	5MHz	QPSK	23095	25RB#0	1000~3000	-46.64	PASS
Band12	5MHz	QPSK	23095	25RB#0	3000~10000	-43.35	PASS
Band12	5MHz	QPSK	23155	25RB#0	0.009~0.15	-47.58	PASS
Band12	5MHz	QPSK	23155	25RB#0	0.15~30	-52.71	PASS
Band12	5MHz	QPSK	23155	25RB#0	30~1000	-52.38	PASS
Band12	5MHz	QPSK	23155	25RB#0	1000~3000	-46.55	PASS
Band12	5MHz	QPSK	23155	25RB#0	3000~10000	-43.57	PASS
Band12	5MHz	16QAM	23035	25RB#0	0.009~0.15	-44.71	PASS
Band12	5MHz	16QAM	23035	25RB#0	0.15~30	-53.62	PASS
Band12	5MHz	16QAM	23035	25RB#0	30~1000	-54.70	PASS
Band12	5MHz	16QAM	23035	25RB#0	1000~3000	-46.63	PASS

Band12	5MHz	16QAM	23035	25RB#0	3000~10000	-43.57	PASS
Band12	5MHz	16QAM	23095	25RB#0	0.009~0.15	-48.59	PASS
Band12	5MHz	16QAM	23095	25RB#0	0.15~30	-52.52	PASS
Band12	5MHz	16QAM	23095	25RB#0	30~1000	-56.28	PASS
Band12	5MHz	16QAM	23095	25RB#0	1000~3000	-46.61	PASS
Band12	5MHz	16QAM	23095	25RB#0	3000~10000	-43.13	PASS
Band12	5MHz	16QAM	23155	25RB#0	0.009~0.15	-49.56	PASS
Band12	5MHz	16QAM	23155	25RB#0	0.15~30	-52.04	PASS
Band12	5MHz	16QAM	23155	25RB#0	30~1000	-55.08	PASS
Band12	5MHz	16QAM	23155	25RB#0	1000~3000	-46.56	PASS
Band12	5MHz	16QAM	23155	25RB#0	3000~10000	-43.45	PASS
Band12	10MHz	QPSK	23060	50RB#0	0.009~0.15	-49.41	PASS
Band12	10MHz	QPSK	23060	50RB#0	0.15~30	-51.99	PASS
Band12	10MHz	QPSK	23060	50RB#0	30~1000	-61.58	PASS
Band12	10MHz	QPSK	23060	50RB#0	1000~3000	-46.64	PASS
Band12	10MHz	QPSK	23060	50RB#0	3000~10000	-43.14	PASS
Band12	10MHz	QPSK	23095	50RB#0	0.009~0.15	-47.68	PASS
Band12	10MHz	QPSK	23095	50RB#0	0.15~30	-52.74	PASS
Band12	10MHz	QPSK	23095	50RB#0	30~1000	-61.80	PASS
Band12	10MHz	QPSK	23095	50RB#0	1000~3000	-45.25	PASS
Band12	10MHz	QPSK	23095	50RB#0	3000~10000	-43.53	PASS
Band12	10MHz	QPSK	23130	50RB#0	0.009~0.15	-46.79	PASS
Band12	10MHz	QPSK	23130	50RB#0	0.15~30	-53.10	PASS
Band12	10MHz	QPSK	23130	50RB#0	30~1000	-61.81	PASS
Band12	10MHz	QPSK	23130	50RB#0	1000~3000	-46.98	PASS
Band12	10MHz	QPSK	23130	50RB#0	3000~10000	-43.45	PASS
Band12	10MHz	16QAM	23060	50RB#0	0.009~0.15	-49.57	PASS
Band12	10MHz	16QAM	23060	50RB#0	0.15~30	-52.11	PASS
Band12	10MHz	16QAM	23060	50RB#0	30~1000	-61.65	PASS
Band12	10MHz	16QAM	23060	50RB#0	1000~3000	-46.55	PASS
Band12	10MHz	16QAM	23060	50RB#0	3000~10000	-43.25	PASS
Band12	10MHz	16QAM	23095	50RB#0	0.009~0.15	-48.41	PASS
Band12	10MHz	16QAM	23095	50RB#0	0.15~30	-53.40	PASS
Band12	10MHz	16QAM	23095	50RB#0	30~1000	-61.74	PASS
Band12	10MHz	16QAM	23095	50RB#0	1000~3000	-46.86	PASS
Band12	10MHz	16QAM	23095	50RB#0	3000~10000	-43.72	PASS
Band12	10MHz	16QAM	23130	50RB#0	0.009~0.15	-50.33	PASS
Band12	10MHz	16QAM	23130	50RB#0	0.15~30	-54.14	PASS
Band12	10MHz	16QAM	23130	50RB#0	30~1000	-61.67	PASS
Band12	10MHz	16QAM	23130	50RB#0	1000~3000	-46.57	PASS
Band12	10MHz	16QAM	23130	50RB#0	3000~10000	-43.39	PASS

The figure displays eight Agilent Spectrum Analyzer screenshots arranged in a 4x2 grid. Each screenshot shows a different frequency sweep and signal measurement for the signal Band12_1.4MHz_QPSK_23017_6RB#0. The plots are as follows:

- Top Left:** Center Freq 79.500 kHz, Span 150.0 kHz, Res BW 1.0 kHz. Marker 1 at 10.974 kHz, -49.602 dBm.
- Top Right:** Center Freq 15.075000 MHz, Span 30.0 kHz, Res BW 10 kHz. Marker 1 at 150 kHz, -52.913 dBm.
- Second Row Left:** Center Freq 515.000000 MHz, Span 1.000 s (2001 pts), Res BW 100 kHz. Marker 1 at 703.7 MHz, -51.305 dBm.
- Second Row Right:** Center Freq 2.000000000 GHz, Span 3.000 GHz, Res BW 1.0 MHz. Marker 1 at 2.66945 GHz, -46.526 dBm.
- Third Row Left:** Center Freq 8.500000000 GHz, Span 1.000 s (40001 pts), Res BW 1.0 MHz. Marker 1 at 3.282100 GHz, -43.316 dBm.
- Third Row Right:** Center Freq 79.500 kHz, Span 150.0 kHz, Res BW 1.0 kHz. Marker 1 at 11.820 kHz, -47.687 dBm.
- Bottom Left:** Center Freq 15.075000 MHz, Span 30.0 kHz, Res BW 10 kHz. Marker 1 at 150 kHz, -52.458 dBm.
- Bottom Right:** Center Freq 515.000000 MHz, Span 1.000 s (2001 pts), Res BW 100 kHz. Marker 1 at 703.7 MHz, -51.351 dBm.

