

FCC Appendix RF Test Data for LTE Band 5

FCC ID : 2AU4T-TH11

Company : Shanghai TUGE Data Technologies Co., Ltd.

EUT : MobileHub

Model Number : TH11

Report No. : CTA26071403104

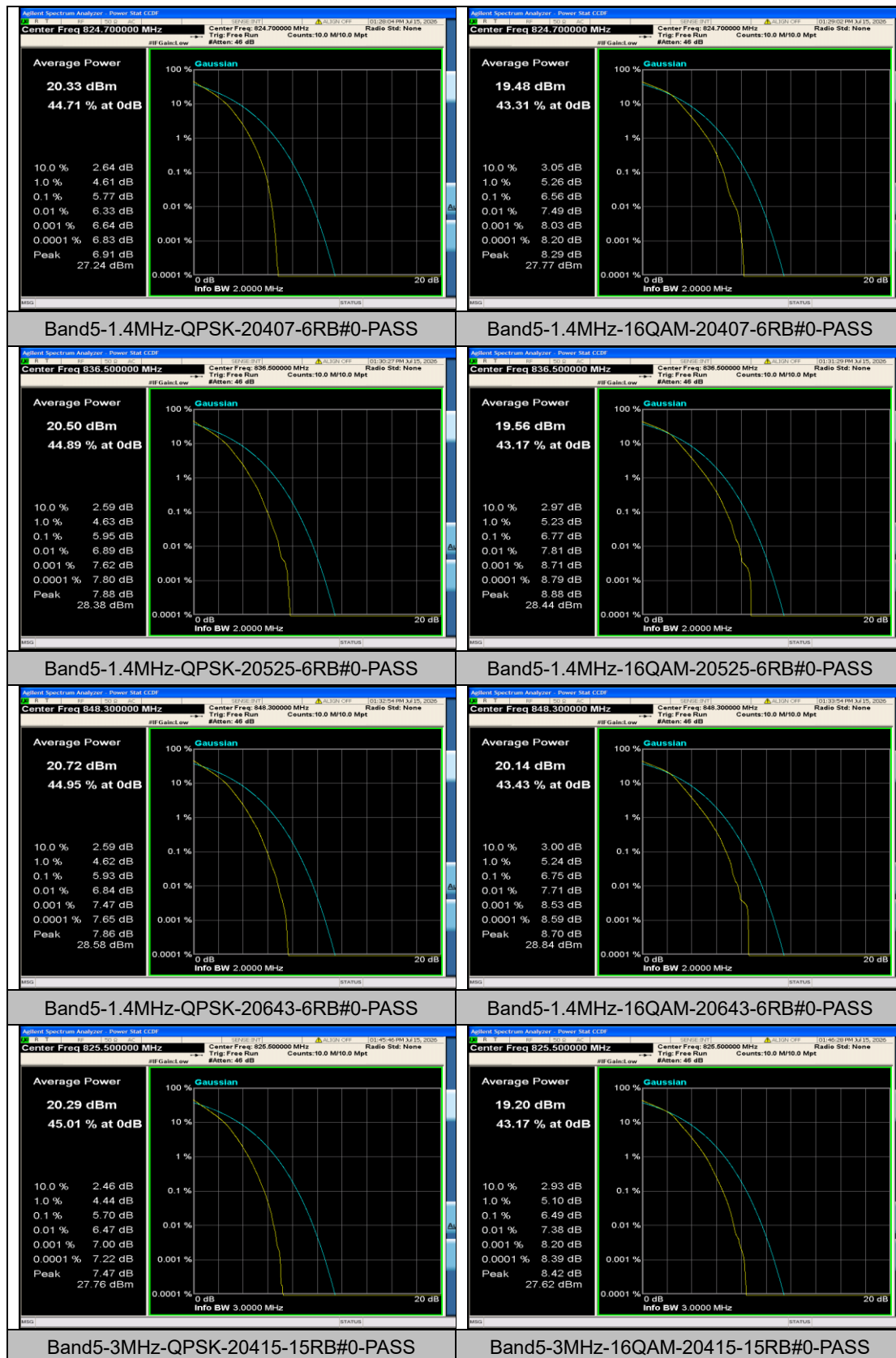
Reviewed By : Eric Wang

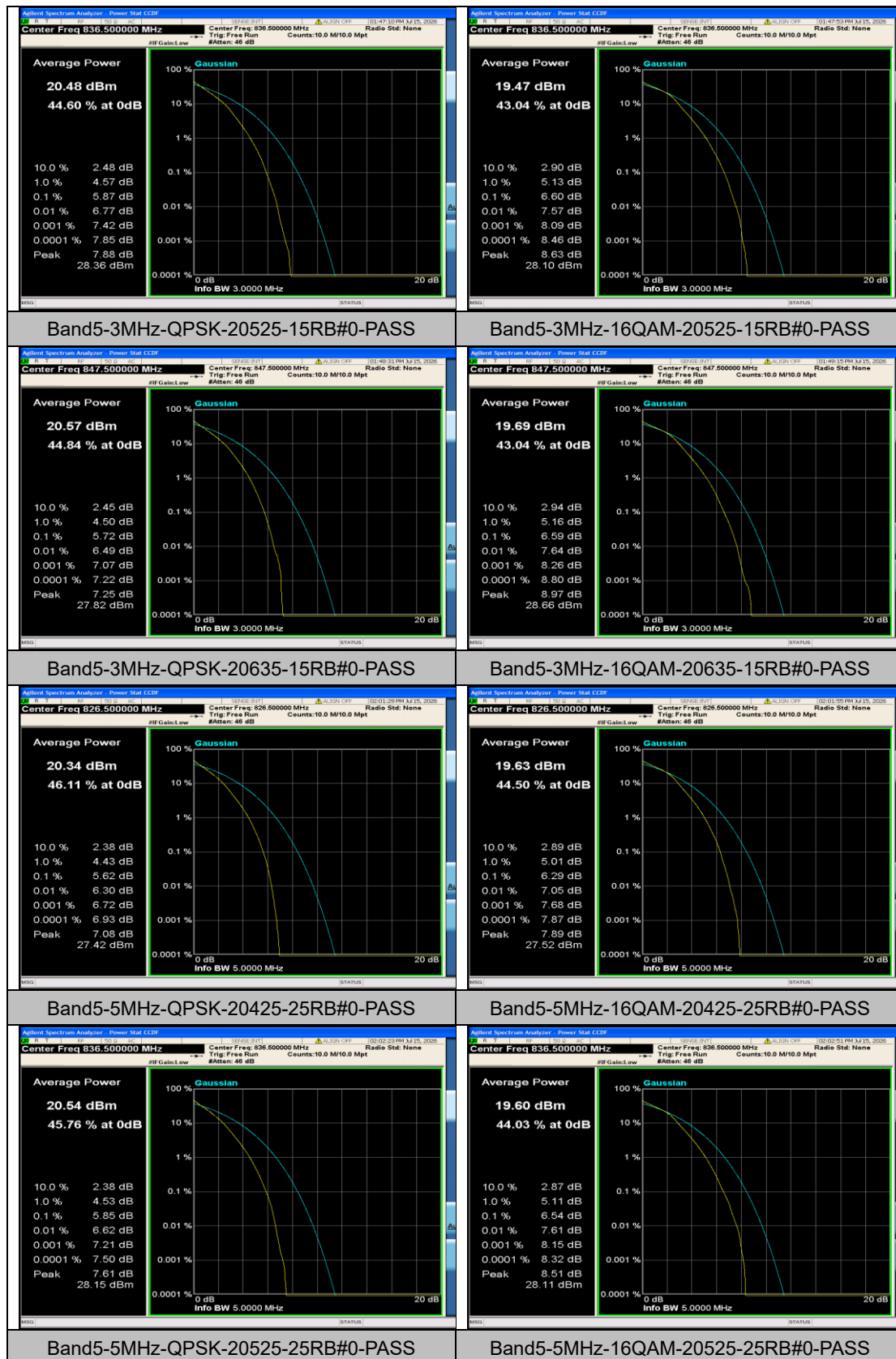
Appendix B: Peak-to-Average Ratio(CCDF)

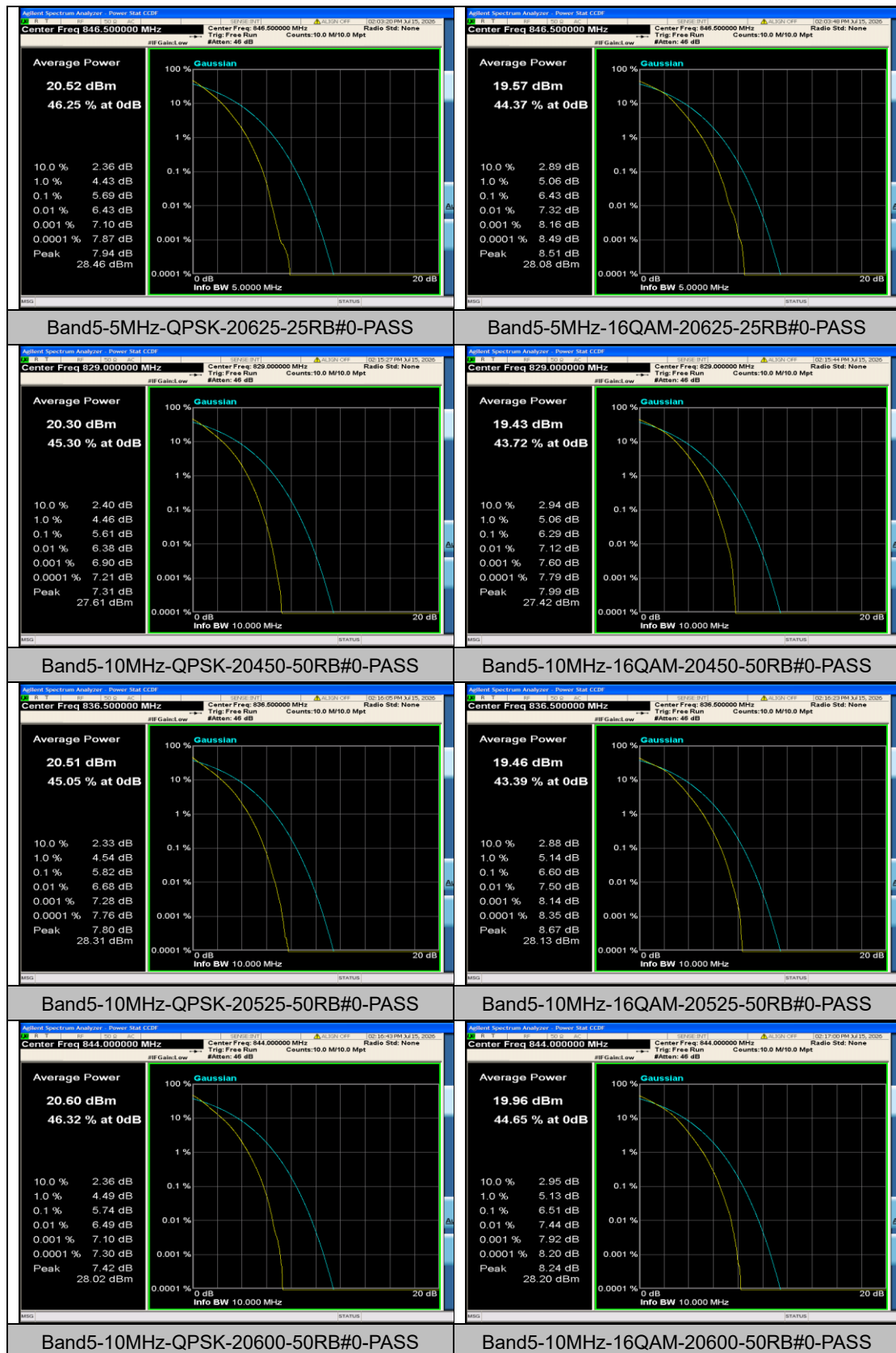
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	5.77	13	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	6.56	13	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	5.95	13	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	6.77	13	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	5.93	13	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	6.75	13	PASS
Band5	3MHz	QPSK	20415	15RB#0	5.70	13	PASS
Band5	3MHz	16QAM	20415	15RB#0	6.49	13	PASS
Band5	3MHz	QPSK	20525	15RB#0	5.87	13	PASS
Band5	3MHz	16QAM	20525	15RB#0	6.60	13	PASS
Band5	3MHz	QPSK	20635	15RB#0	5.72	13	PASS
Band5	3MHz	16QAM	20635	15RB#0	6.59	13	PASS
Band5	5MHz	QPSK	20425	25RB#0	5.62	13	PASS
Band5	5MHz	16QAM	20425	25RB#0	6.29	13	PASS
Band5	5MHz	QPSK	20525	25RB#0	5.85	13	PASS
Band5	5MHz	16QAM	20525	25RB#0	6.54	13	PASS
Band5	5MHz	QPSK	20625	25RB#0	5.69	13	PASS
Band5	5MHz	16QAM	20625	25RB#0	6.43	13	PASS
Band5	10MHz	QPSK	20450	50RB#0	5.61	13	PASS
Band5	10MHz	16QAM	20450	50RB#0	6.29	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	5.82	13	PASS
Band5	10MHz	16QAM	20525	50RB#0	6.60	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	5.74	13	PASS
Band5	10MHz	16QAM	20600	50RB#0	6.51	13	PASS

Test Graphs





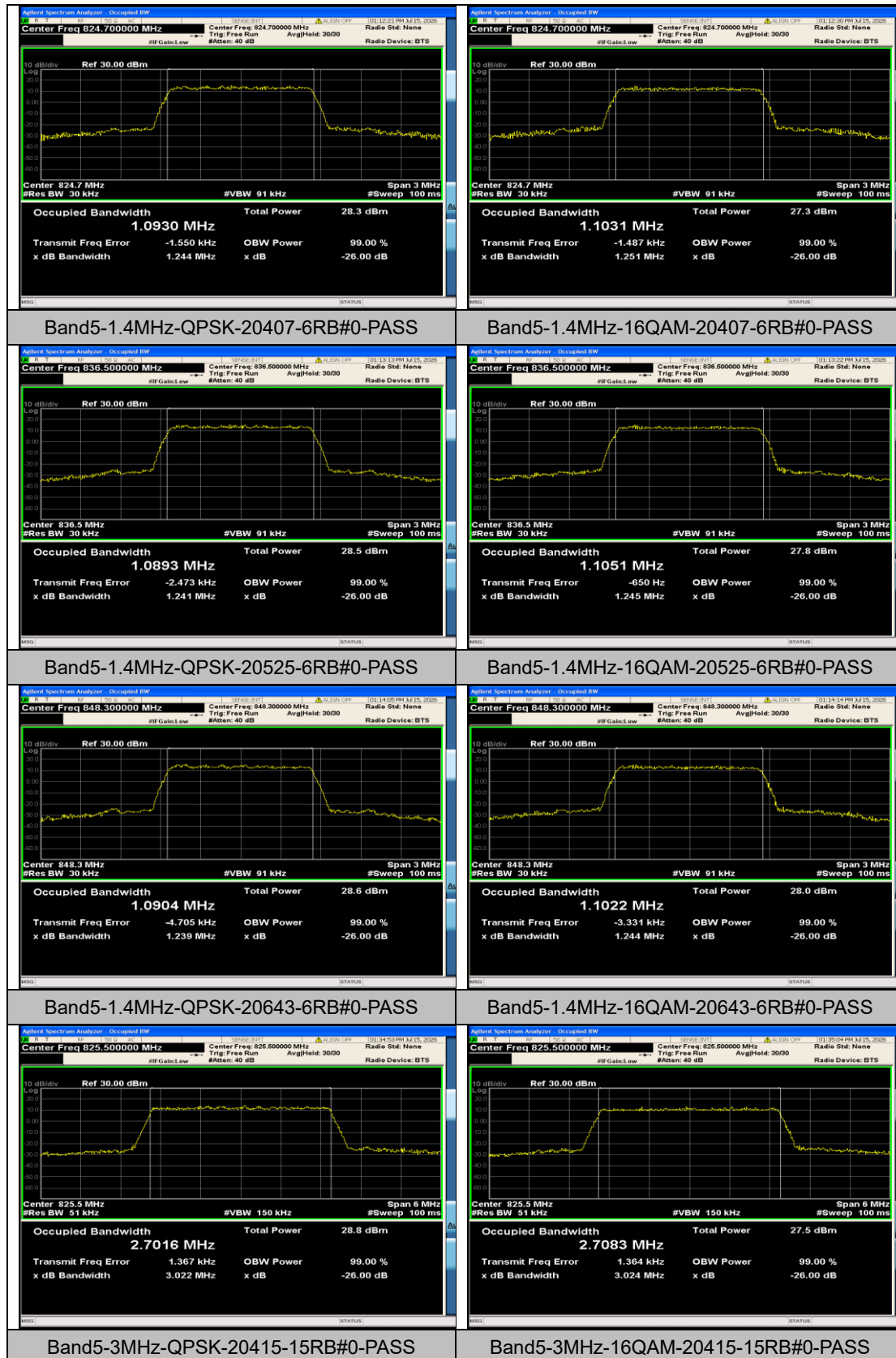


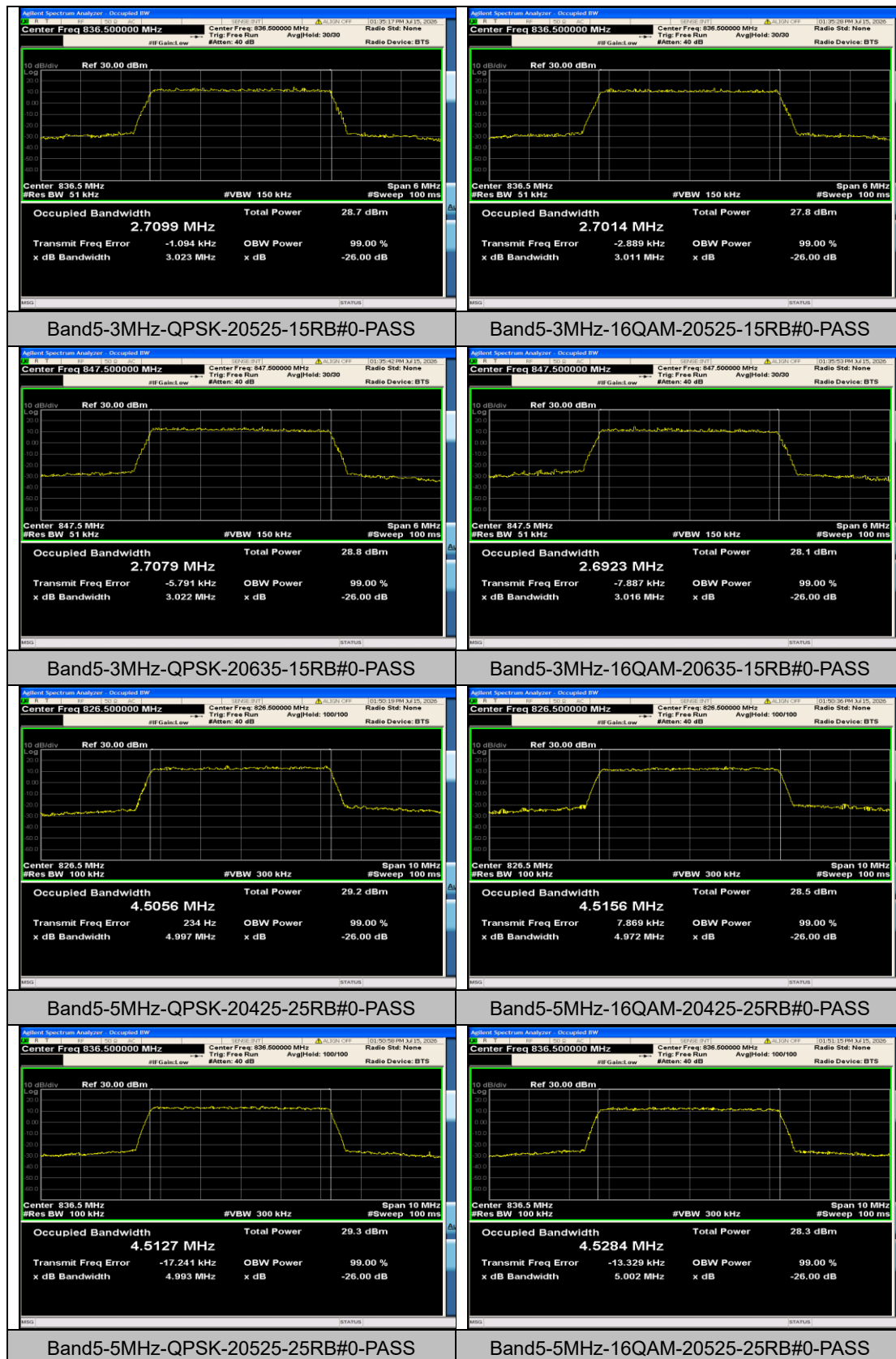
Appendix C: 26dB Bandwidth and Occupied Bandwidth

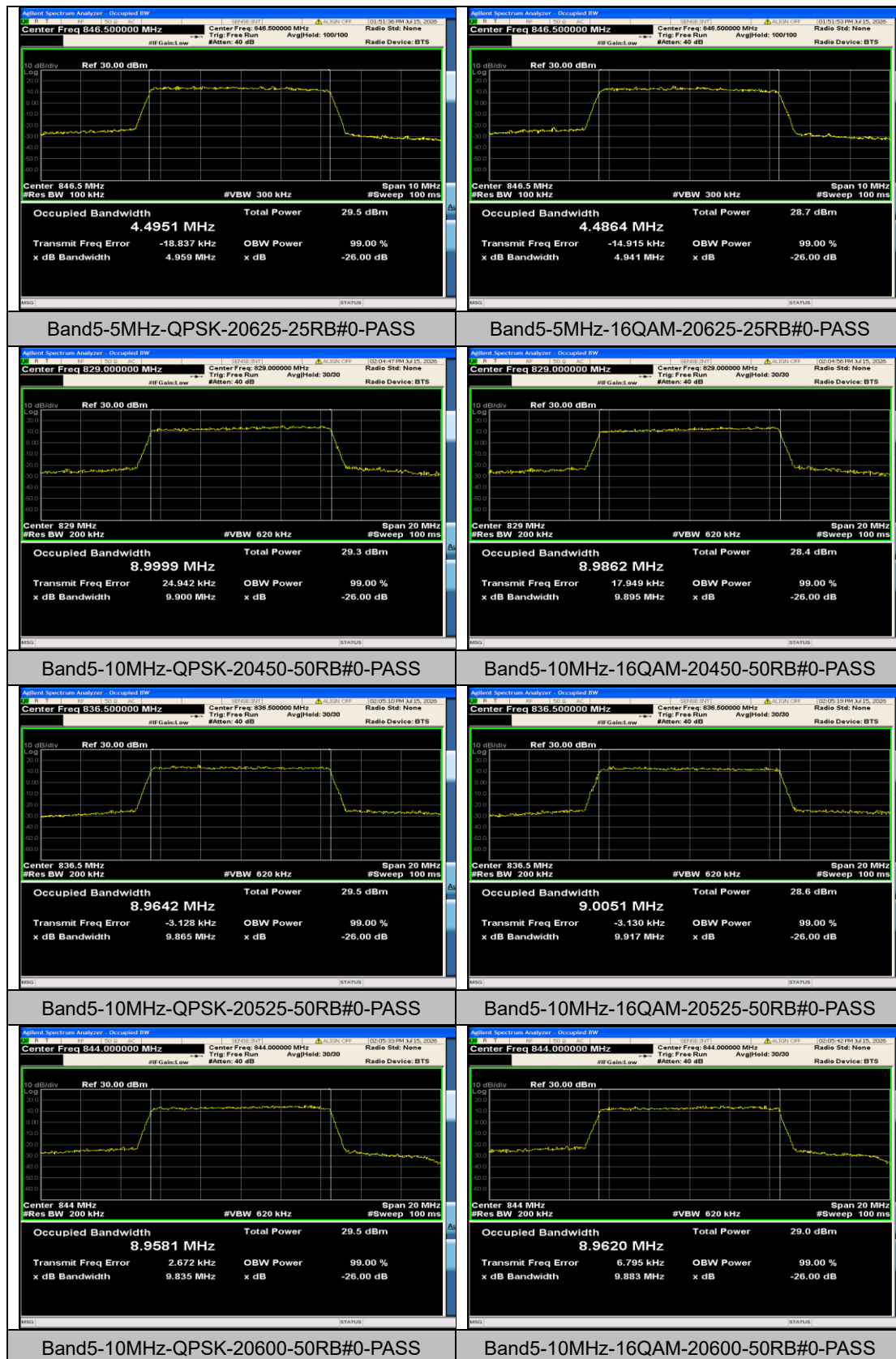
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	1.0930	1.244	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	1.1031	1.251	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.0893	1.241	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1.1051	1.245	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1.0904	1.239	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	1.1022	1.244	PASS
Band5	3MHz	QPSK	20415	15RB#0	2.7016	3.022	PASS
Band5	3MHz	16QAM	20415	15RB#0	2.7083	3.024	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.7099	3.023	PASS
Band5	3MHz	16QAM	20525	15RB#0	2.7014	3.011	PASS
Band5	3MHz	QPSK	20635	15RB#0	2.7079	3.022	PASS
Band5	3MHz	16QAM	20635	15RB#0	2.6923	3.016	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.5056	4.997	PASS
Band5	5MHz	16QAM	20425	25RB#0	4.5156	4.972	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.5127	4.993	PASS
Band5	5MHz	16QAM	20525	25RB#0	4.5284	5.002	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.4951	4.959	PASS
Band5	5MHz	16QAM	20625	25RB#0	4.4864	4.941	PASS
Band5	10MHz	QPSK	20450	50RB#0	8.9999	9.900	PASS
Band5	10MHz	16QAM	20450	50RB#0	8.9862	9.895	PASS
Band5	10MHz	QPSK	20525	50RB#0	8.9642	9.865	PASS
Band5	10MHz	16QAM	20525	50RB#0	9.0051	9.917	PASS
Band5	10MHz	QPSK	20600	50RB#0	8.9581	9.835	PASS
Band5	10MHz	16QAM	20600	50RB#0	8.9620	9.883	PASS

Test Graphs





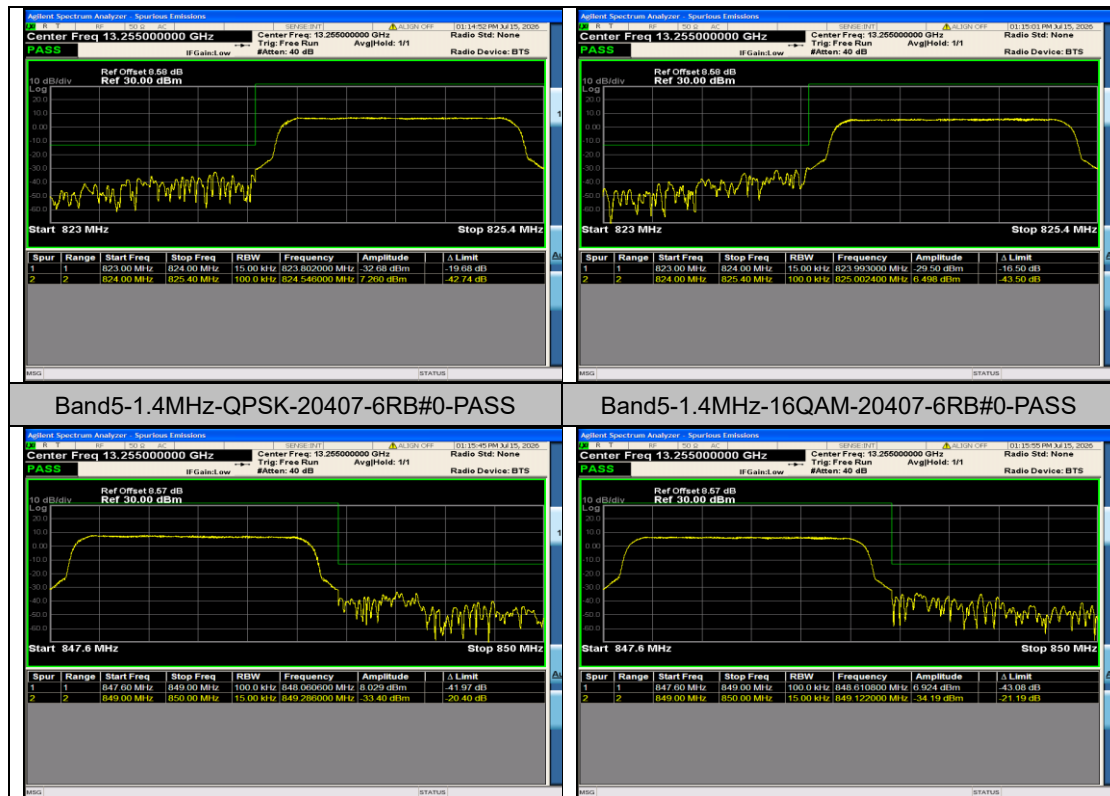


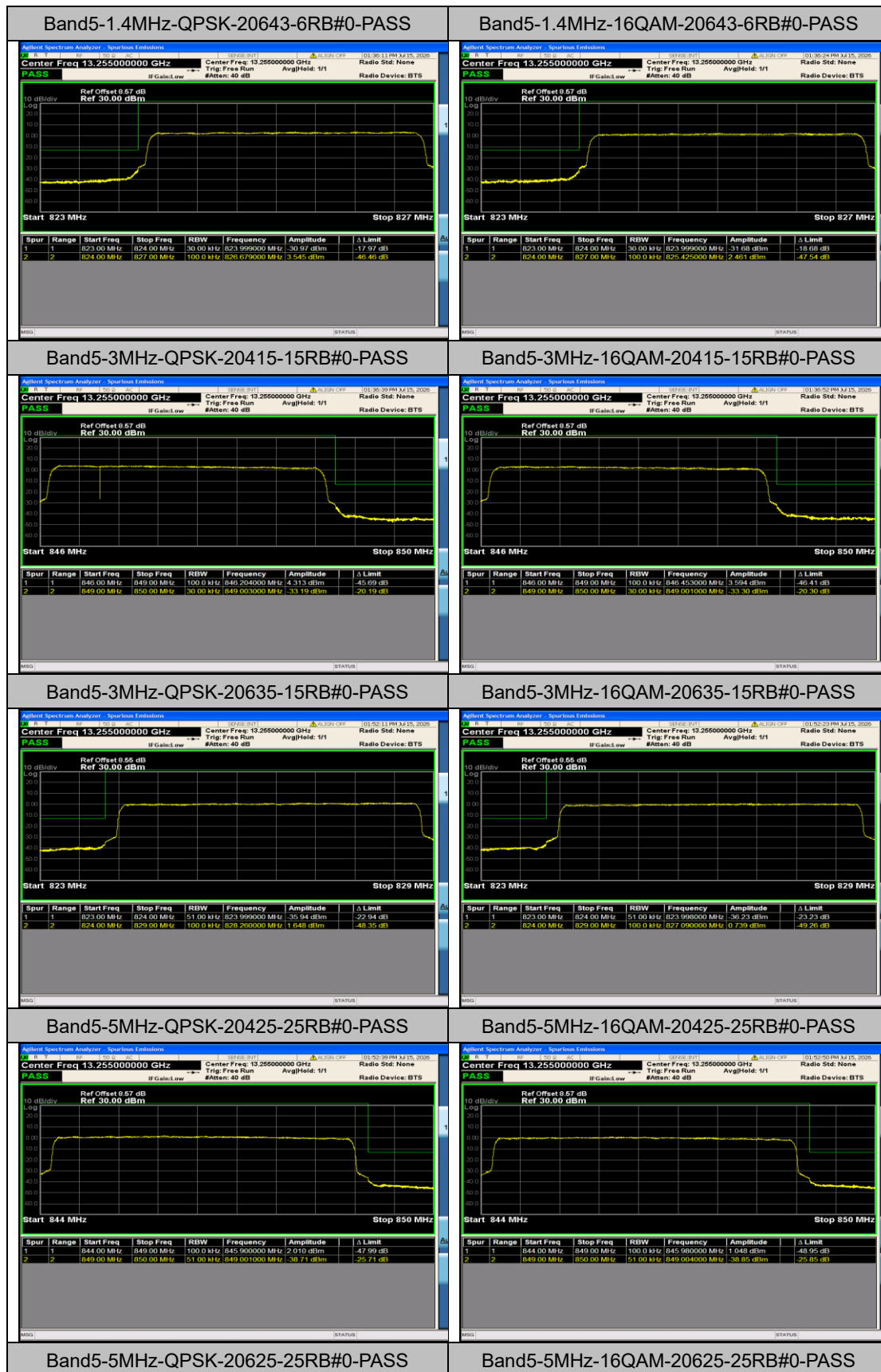
Appendix D: Band Edge

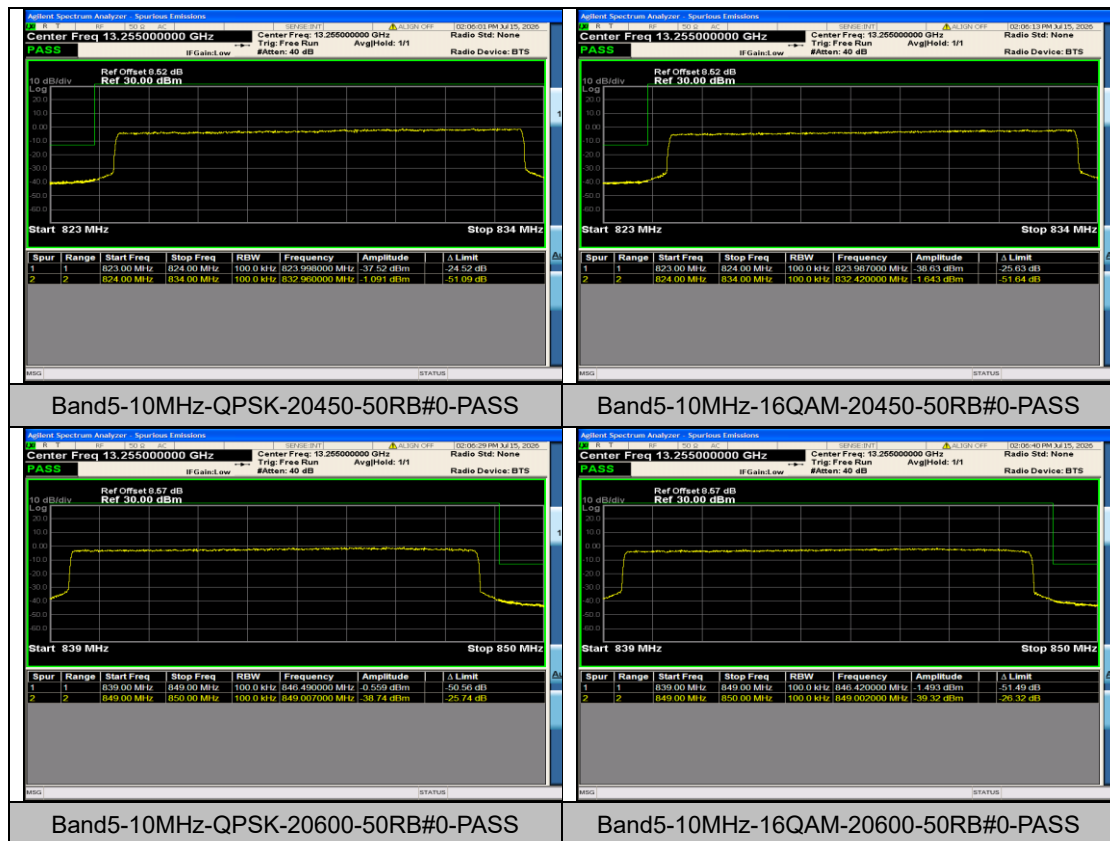
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	-32.68	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	-29.50	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	-33.40	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	-34.19	PASS
Band5	3MHz	QPSK	20415	15RB#0	-30.97	PASS
Band5	3MHz	16QAM	20415	15RB#0	-31.68	PASS
Band5	3MHz	QPSK	20635	15RB#0	-33.19	PASS
Band5	3MHz	16QAM	20635	15RB#0	-33.30	PASS
Band5	5MHz	QPSK	20425	25RB#0	-35.94	PASS
Band5	5MHz	16QAM	20425	25RB#0	-36.23	PASS
Band5	5MHz	QPSK	20625	25RB#0	-38.71	PASS
Band5	5MHz	16QAM	20625	25RB#0	-38.85	PASS
Band5	10MHz	QPSK	20450	50RB#0	-37.52	PASS
Band5	10MHz	16QAM	20450	50RB#0	-38.63	PASS
Band5	10MHz	QPSK	20600	50RB#0	-38.74	PASS
Band5	10MHz	16QAM	20600	50RB#0	-39.32	PASS

Test Graphs







Appendix E: Conducted Spurious Emission

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	0.009~0.15	-60.12	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	0.15~30	-52.02	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	30~1000	-36.65	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	1000~3000	-48.07	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	3000~10000	-44.31	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	0.009~0.15	-56.55	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	0.15~30	-53.82	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	30~1000	-39.06	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	1000~3000	-48.22	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	3000~10000	-43.47	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	0.009~0.15	-60.71	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	0.15~30	-51.81	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	30~1000	-58.23	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1000~3000	-47.95	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	3000~10000	-43.93	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	0.009~0.15	-60.09	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	0.15~30	-51.97	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	30~1000	-57.85	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1000~3000	-48.10	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	3000~10000	-43.20	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	0.009~0.15	-59.04	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	0.15~30	-51.33	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	30~1000	-38.42	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1000~3000	-48.12	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	3000~10000	-42.71	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	0.009~0.15	-59.50	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	0.15~30	-53.43	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	30~1000	-39.10	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	1000~3000	-41.49	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	3000~10000	-44.12	PASS
Band5	3MHz	QPSK	20415	15RB#0	0.009~0.15	-60.05	PASS
Band5	3MHz	QPSK	20415	15RB#0	0.15~30	-55.02	PASS
Band5	3MHz	QPSK	20415	15RB#0	30~1000	-34.00	PASS
Band5	3MHz	QPSK	20415	15RB#0	1000~3000	-47.88	PASS
Band5	3MHz	QPSK	20415	15RB#0	3000~10000	-43.84	PASS
Band5	3MHz	16QAM	20415	15RB#0	0.009~0.15	-58.40	PASS

Band5	3MHz	16QAM	20415	15RB#0	0.15~30	-51.25	PASS
Band5	3MHz	16QAM	20415	15RB#0	30~1000	-33.23	PASS
Band5	3MHz	16QAM	20415	15RB#0	1000~3000	-47.87	PASS
Band5	3MHz	16QAM	20415	15RB#0	3000~10000	-44.13	PASS
Band5	3MHz	QPSK	20525	15RB#0	0.009~0.15	-60.30	PASS
Band5	3MHz	QPSK	20525	15RB#0	0.15~30	-51.61	PASS
Band5	3MHz	QPSK	20525	15RB#0	30~1000	-58.01	PASS
Band5	3MHz	QPSK	20525	15RB#0	1000~3000	-45.79	PASS
Band5	3MHz	QPSK	20525	15RB#0	3000~10000	-44.28	PASS
Band5	3MHz	16QAM	20525	15RB#0	0.009~0.15	-59.47	PASS
Band5	3MHz	16QAM	20525	15RB#0	0.15~30	-52.60	PASS
Band5	3MHz	16QAM	20525	15RB#0	30~1000	-58.23	PASS
Band5	3MHz	16QAM	20525	15RB#0	1000~3000	-47.68	PASS
Band5	3MHz	16QAM	20525	15RB#0	3000~10000	-43.94	PASS
Band5	3MHz	QPSK	20635	15RB#0	0.009~0.15	-59.12	PASS
Band5	3MHz	QPSK	20635	15RB#0	0.15~30	-52.35	PASS
Band5	3MHz	QPSK	20635	15RB#0	30~1000	-33.76	PASS
Band5	3MHz	QPSK	20635	15RB#0	1000~3000	-48.18	PASS
Band5	3MHz	QPSK	20635	15RB#0	3000~10000	-43.90	PASS
Band5	3MHz	16QAM	20635	15RB#0	0.009~0.15	-59.45	PASS
Band5	3MHz	16QAM	20635	15RB#0	0.15~30	-53.40	PASS
Band5	3MHz	16QAM	20635	15RB#0	30~1000	-36.28	PASS
Band5	3MHz	16QAM	20635	15RB#0	1000~3000	-47.96	PASS
Band5	3MHz	16QAM	20635	15RB#0	3000~10000	-43.48	PASS
Band5	5MHz	QPSK	20425	25RB#0	0.009~0.15	-59.75	PASS
Band5	5MHz	QPSK	20425	25RB#0	0.15~30	-52.17	PASS
Band5	5MHz	QPSK	20425	25RB#0	30~1000	-33.01	PASS
Band5	5MHz	QPSK	20425	25RB#0	1000~3000	-45.60	PASS
Band5	5MHz	QPSK	20425	25RB#0	3000~10000	-44.08	PASS
Band5	5MHz	16QAM	20425	25RB#0	0.009~0.15	-59.81	PASS
Band5	5MHz	16QAM	20425	25RB#0	0.15~30	-51.86	PASS
Band5	5MHz	16QAM	20425	25RB#0	30~1000	-31.59	PASS
Band5	5MHz	16QAM	20425	25RB#0	1000~3000	-47.70	PASS
Band5	5MHz	16QAM	20425	25RB#0	3000~10000	-44.13	PASS
Band5	5MHz	QPSK	20525	25RB#0	0.009~0.15	-60.28	PASS
Band5	5MHz	QPSK	20525	25RB#0	0.15~30	-51.51	PASS
Band5	5MHz	QPSK	20525	25RB#0	30~1000	-52.40	PASS
Band5	5MHz	QPSK	20525	25RB#0	1000~3000	-47.23	PASS
Band5	5MHz	QPSK	20525	25RB#0	3000~10000	-43.73	PASS
Band5	5MHz	16QAM	20525	25RB#0	0.009~0.15	-59.98	PASS
Band5	5MHz	16QAM	20525	25RB#0	0.15~30	-49.66	PASS
Band5	5MHz	16QAM	20525	25RB#0	30~1000	-54.43	PASS
Band5	5MHz	16QAM	20525	25RB#0	1000~3000	-47.92	PASS

Band5	5MHz	16QAM	20525	25RB#0	3000~10000	-43.99	PASS
Band5	5MHz	QPSK	20625	25RB#0	0.009~0.15	-60.06	PASS
Band5	5MHz	QPSK	20625	25RB#0	0.15~30	-53.48	PASS
Band5	5MHz	QPSK	20625	25RB#0	30~1000	-37.93	PASS
Band5	5MHz	QPSK	20625	25RB#0	1000~3000	-46.28	PASS
Band5	5MHz	QPSK	20625	25RB#0	3000~10000	-43.61	PASS
Band5	5MHz	16QAM	20625	25RB#0	0.009~0.15	-59.88	PASS
Band5	5MHz	16QAM	20625	25RB#0	0.15~30	-51.36	PASS
Band5	5MHz	16QAM	20625	25RB#0	30~1000	-37.34	PASS
Band5	5MHz	16QAM	20625	25RB#0	1000~3000	-47.99	PASS
Band5	5MHz	16QAM	20625	25RB#0	3000~10000	-43.52	PASS
Band5	10MHz	QPSK	20450	50RB#0	0.009~0.15	-59.73	PASS
Band5	10MHz	QPSK	20450	50RB#0	0.15~30	-53.72	PASS
Band5	10MHz	QPSK	20450	50RB#0	30~1000	-35.23	PASS
Band5	10MHz	QPSK	20450	50RB#0	1000~3000	-47.86	PASS
Band5	10MHz	QPSK	20450	50RB#0	3000~10000	-44.07	PASS
Band5	10MHz	16QAM	20450	50RB#0	0.009~0.15	-59.15	PASS
Band5	10MHz	16QAM	20450	50RB#0	0.15~30	-53.50	PASS
Band5	10MHz	16QAM	20450	50RB#0	30~1000	-34.55	PASS
Band5	10MHz	16QAM	20450	50RB#0	1000~3000	-48.06	PASS
Band5	10MHz	16QAM	20450	50RB#0	3000~10000	-43.88	PASS
Band5	10MHz	QPSK	20525	50RB#0	0.009~0.15	-60.08	PASS
Band5	10MHz	QPSK	20525	50RB#0	0.15~30	-51.41	PASS
Band5	10MHz	QPSK	20525	50RB#0	30~1000	-47.49	PASS
Band5	10MHz	QPSK	20525	50RB#0	1000~3000	-47.76	PASS
Band5	10MHz	QPSK	20525	50RB#0	3000~10000	-43.92	PASS
Band5	10MHz	16QAM	20525	50RB#0	0.009~0.15	-59.91	PASS
Band5	10MHz	16QAM	20525	50RB#0	0.15~30	-51.65	PASS
Band5	10MHz	16QAM	20525	50RB#0	30~1000	-46.36	PASS
Band5	10MHz	16QAM	20525	50RB#0	1000~3000	-48.27	PASS
Band5	10MHz	16QAM	20525	50RB#0	3000~10000	-43.69	PASS
Band5	10MHz	QPSK	20600	50RB#0	0.009~0.15	-60.04	PASS
Band5	10MHz	QPSK	20600	50RB#0	0.15~30	-52.71	PASS
Band5	10MHz	QPSK	20600	50RB#0	30~1000	-39.34	PASS
Band5	10MHz	QPSK	20600	50RB#0	1000~3000	-48.09	PASS
Band5	10MHz	QPSK	20600	50RB#0	3000~10000	-44.02	PASS
Band5	10MHz	16QAM	20600	50RB#0	0.009~0.15	-59.21	PASS
Band5	10MHz	16QAM	20600	50RB#0	0.15~30	-50.69	PASS
Band5	10MHz	16QAM	20600	50RB#0	30~1000	-37.87	PASS
Band5	10MHz	16QAM	20600	50RB#0	1000~3000	-48.08	PASS
Band5	10MHz	16QAM	20600	50RB#0	3000~10000	-43.77	PASS

Test Graphs

