

FCC Appendix RF Test Data for LTE Band 4

FCC ID : 2BWWK-F63

Company : ShenZhen ArBolo Technology Co., Ltd.

EUT : GPS Tracker

Model Number : F63

Report No. : CTA26061700802

Reviewed By : Eric Wang

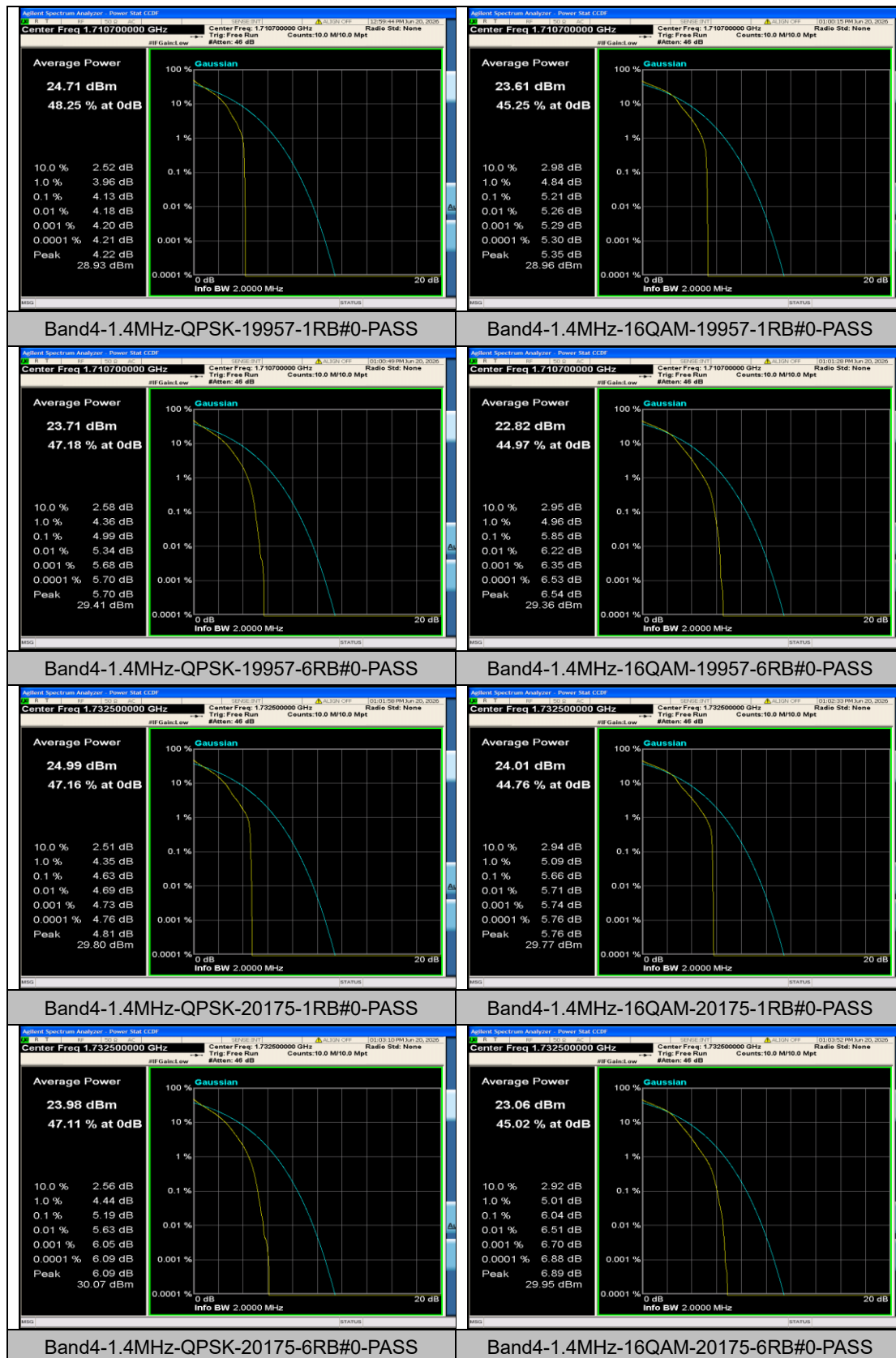
Appendix B: Peak-to-Average Ratio(CCDF)

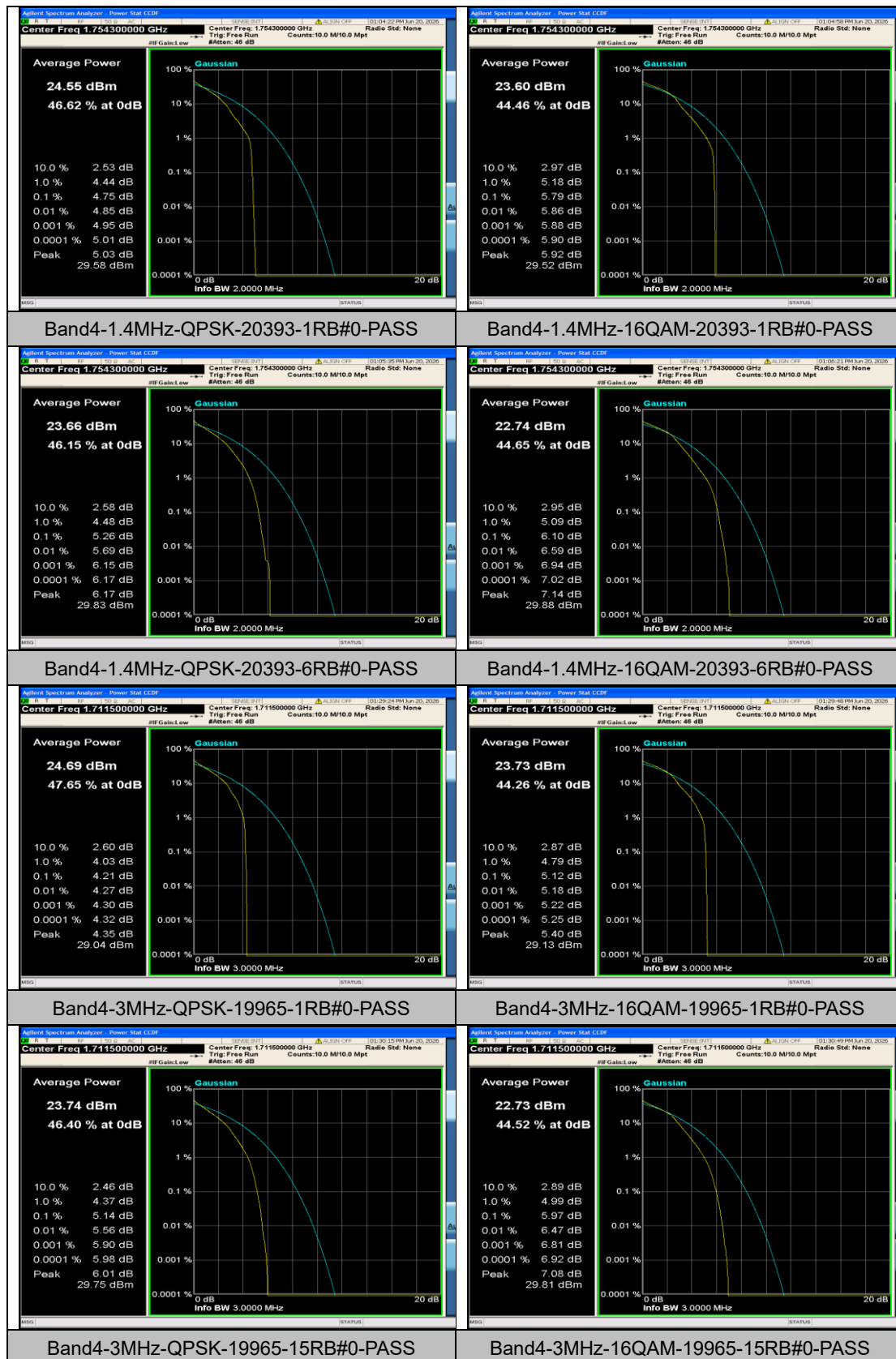
Test Result

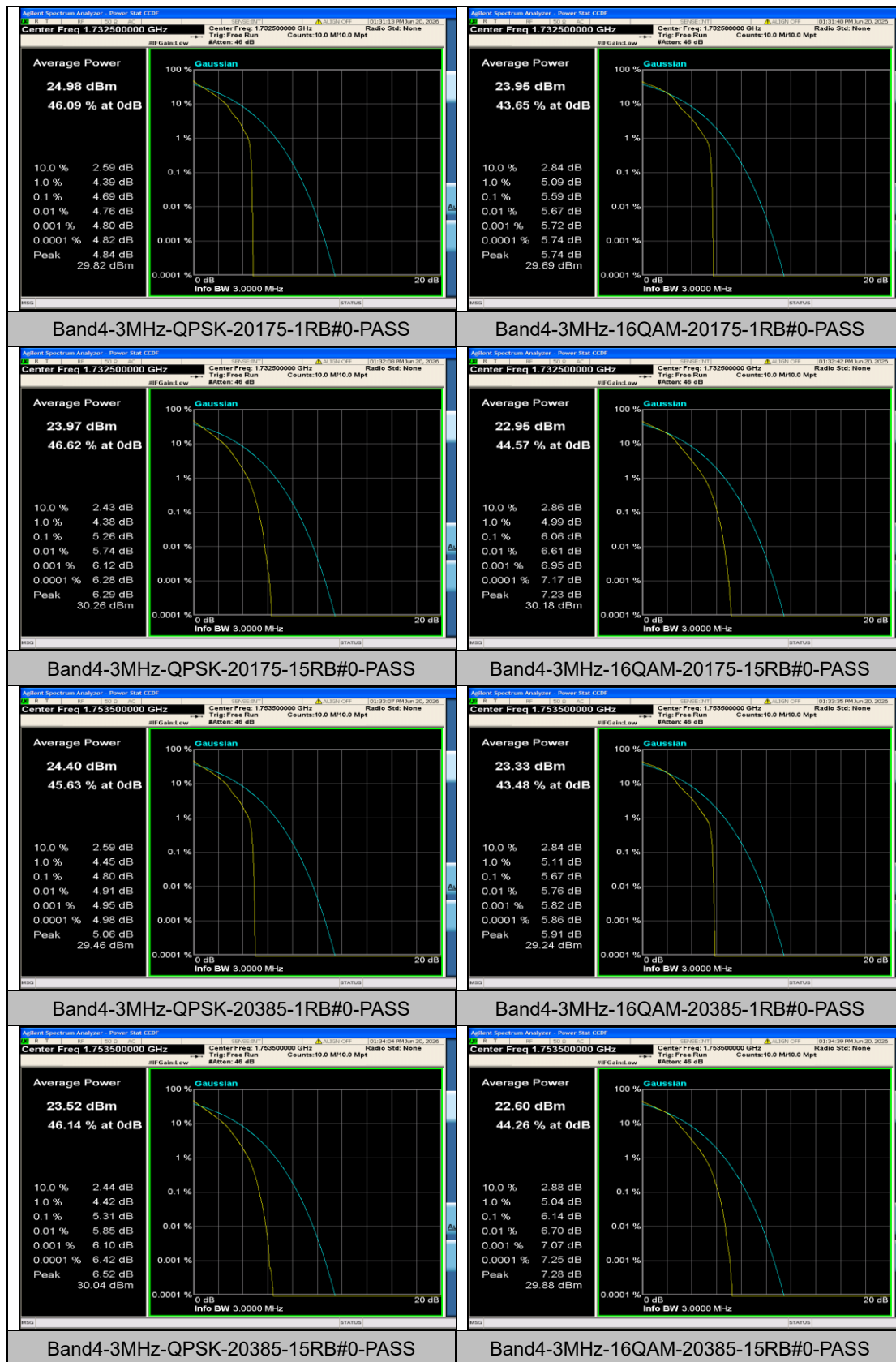
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band4	1.4MHz	QPSK	19957	1RB#0	4.13	13	PASS
Band4	1.4MHz	16QAM	19957	1RB#0	5.21	13	PASS
Band4	1.4MHz	QPSK	19957	6RB#0	4.99	13	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	5.85	13	PASS
Band4	1.4MHz	QPSK	20175	1RB#0	4.63	13	PASS
Band4	1.4MHz	16QAM	20175	1RB#0	5.66	13	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	5.19	13	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	6.04	13	PASS
Band4	1.4MHz	QPSK	20393	1RB#0	4.75	13	PASS
Band4	1.4MHz	16QAM	20393	1RB#0	5.79	13	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	5.26	13	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	6.10	13	PASS
Band4	3MHz	QPSK	19965	1RB#0	4.21	13	PASS
Band4	3MHz	16QAM	19965	1RB#0	5.12	13	PASS
Band4	3MHz	QPSK	19965	15RB#0	5.14	13	PASS
Band4	3MHz	16QAM	19965	15RB#0	5.97	13	PASS
Band4	3MHz	QPSK	20175	1RB#0	4.69	13	PASS
Band4	3MHz	16QAM	20175	1RB#0	5.59	13	PASS
Band4	3MHz	QPSK	20175	15RB#0	5.26	13	PASS
Band4	3MHz	16QAM	20175	15RB#0	6.06	13	PASS
Band4	3MHz	QPSK	20385	1RB#0	4.80	13	PASS
Band4	3MHz	16QAM	20385	1RB#0	5.67	13	PASS
Band4	3MHz	QPSK	20385	15RB#0	5.31	13	PASS
Band4	3MHz	16QAM	20385	15RB#0	6.14	13	PASS
Band4	5MHz	QPSK	19975	1RB#0	4.17	13	PASS
Band4	5MHz	16QAM	19975	1RB#0	5.05	13	PASS
Band4	5MHz	QPSK	19975	25RB#0	5.18	13	PASS
Band4	5MHz	16QAM	19975	25RB#0	5.93	13	PASS
Band4	5MHz	QPSK	20175	1RB#0	4.64	13	PASS
Band4	5MHz	16QAM	20175	1RB#0	5.53	13	PASS
Band4	5MHz	QPSK	20175	25RB#0	5.21	13	PASS
Band4	5MHz	16QAM	20175	25RB#0	6.00	13	PASS
Band4	5MHz	QPSK	20375	1RB#0	4.64	13	PASS
Band4	5MHz	16QAM	20375	1RB#0	5.57	13	PASS
Band4	5MHz	QPSK	20375	25RB#0	5.31	13	PASS
Band4	5MHz	16QAM	20375	25RB#0	6.08	13	PASS

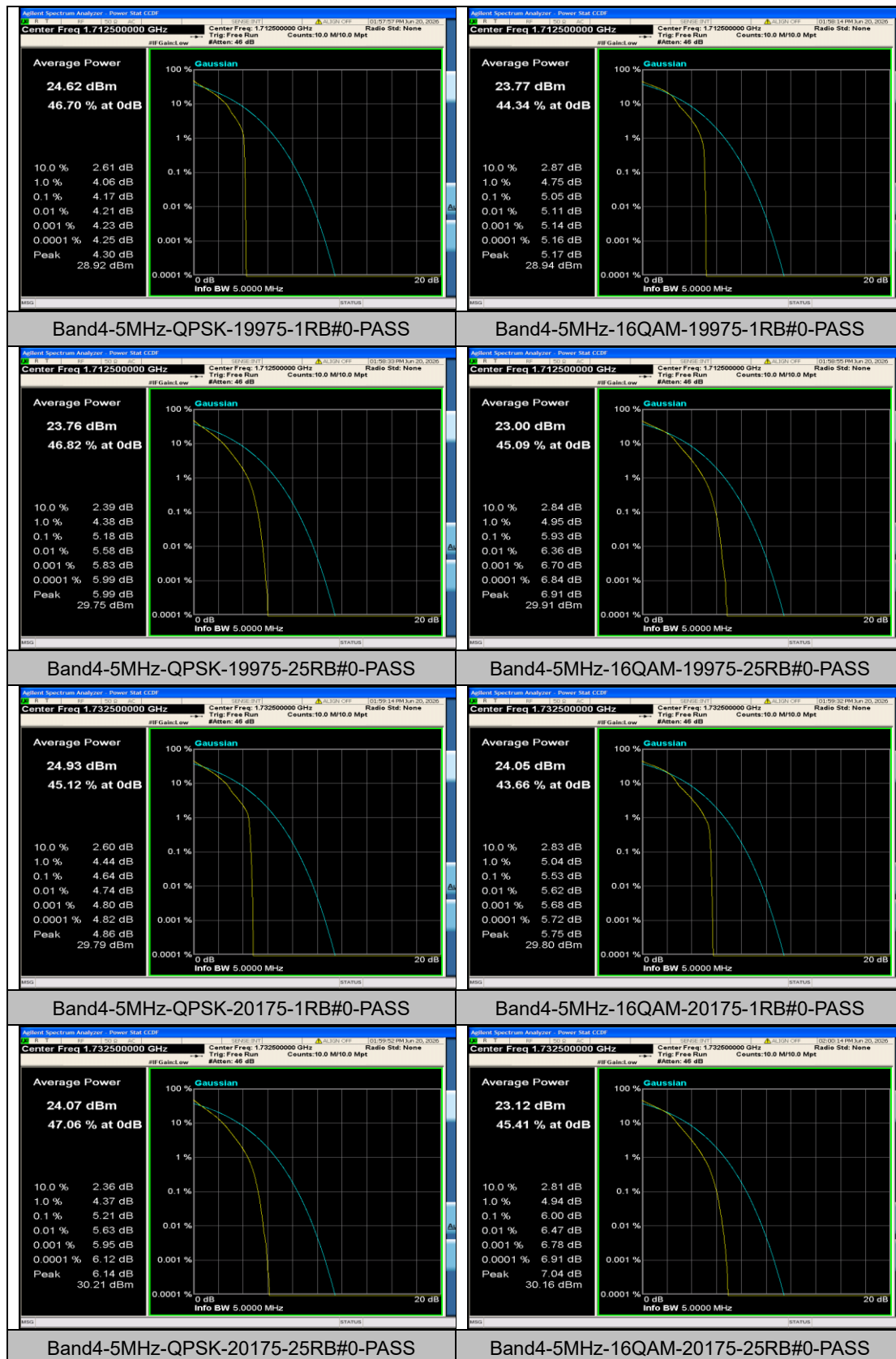
Band4	10MHz	QPSK	20000	1RB#0	4.07	13	PASS
Band4	10MHz	16QAM	20000	1RB#0	4.89	13	PASS
Band4	10MHz	QPSK	20175	1RB#0	4.66	13	PASS
Band4	10MHz	16QAM	20175	1RB#0	5.54	13	PASS
Band4	10MHz	QPSK	20350	1RB#0	4.50	13	PASS
Band4	10MHz	16QAM	20350	1RB#0	5.46	13	PASS
Band4	10MHz	QPSK	20000	50RB#0	5.19	13	PASS
Band4	10MHz	QPSK	20175	50RB#0	5.37	13	PASS
Band4	10MHz	QPSK	20350	50RB#0	5.40	13	PASS
Band4	15MHz	QPSK	20025	1RB#0	3.61	13	PASS
Band4	15MHz	16QAM	20025	1RB#0	4.81	13	PASS
Band4	15MHz	QPSK	20175	1RB#0	3.80	13	PASS
Band4	15MHz	16QAM	20175	1RB#0	4.74	13	PASS
Band4	15MHz	QPSK	20325	1RB#0	5.33	13	PASS
Band4	15MHz	16QAM	20325	1RB#0	6.18	13	PASS
Band4	15MHz	QPSK	20025	75RB#0	5.15	13	PASS
Band4	15MHz	QPSK	20175	75RB#0	6.09	13	PASS
Band4	15MHz	QPSK	20325	75RB#0	6.06	13	PASS
Band4	20MHz	QPSK	20050	1RB#0	3.37	13	PASS
Band4	20MHz	QPSK	20175	1RB#0	4.98	13	PASS
Band4	20MHz	QPSK	20300	1RB#0	5.24	13	PASS
Band4	20MHz	QPSK	20050	100RB#0	4.92	13	PASS
Band4	20MHz	QPSK	20175	100RB#0	9.48	13	PASS
Band4	20MHz	QPSK	20300	100RB#0	5.76	13	PASS

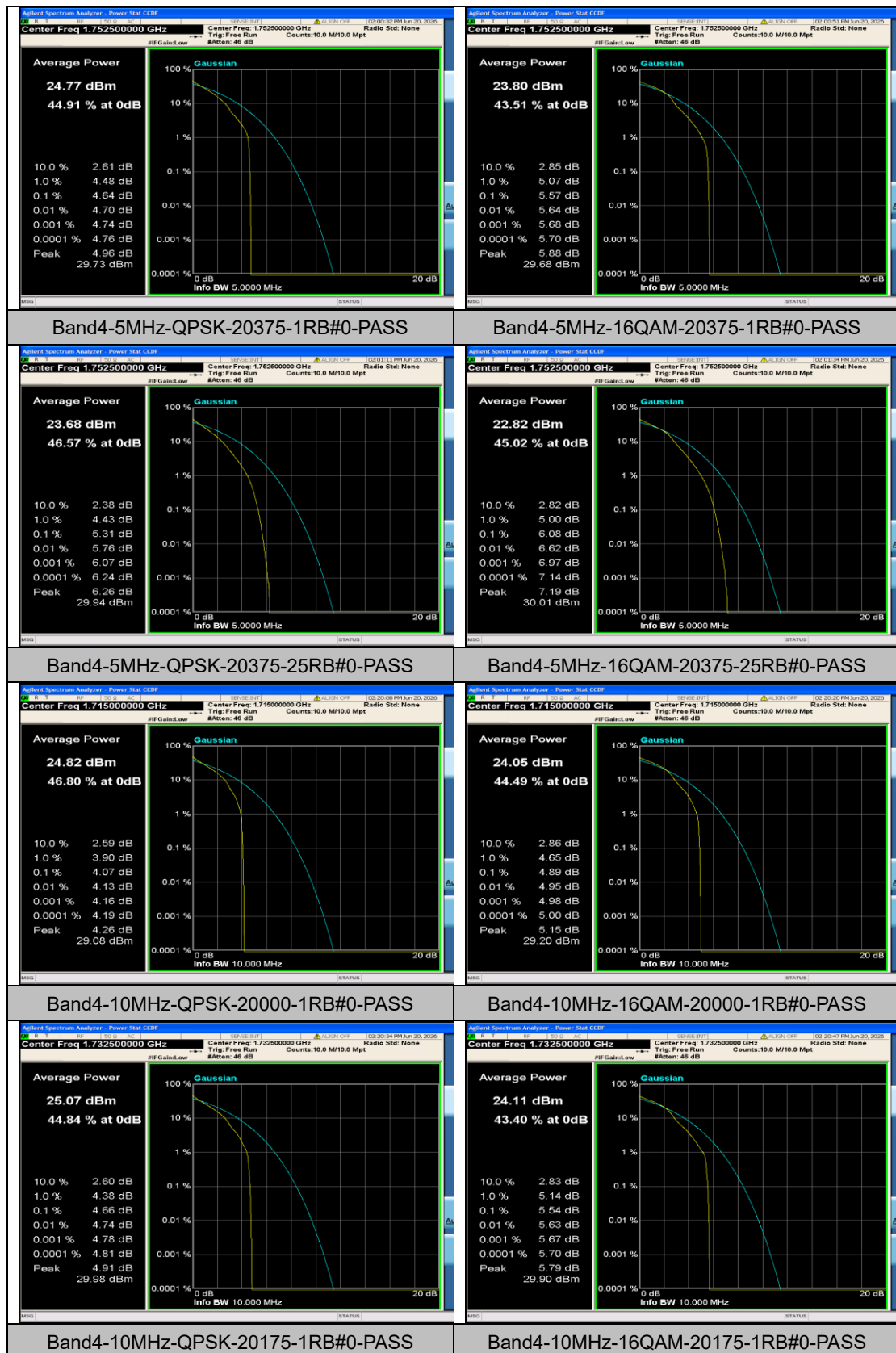
Test Graphs

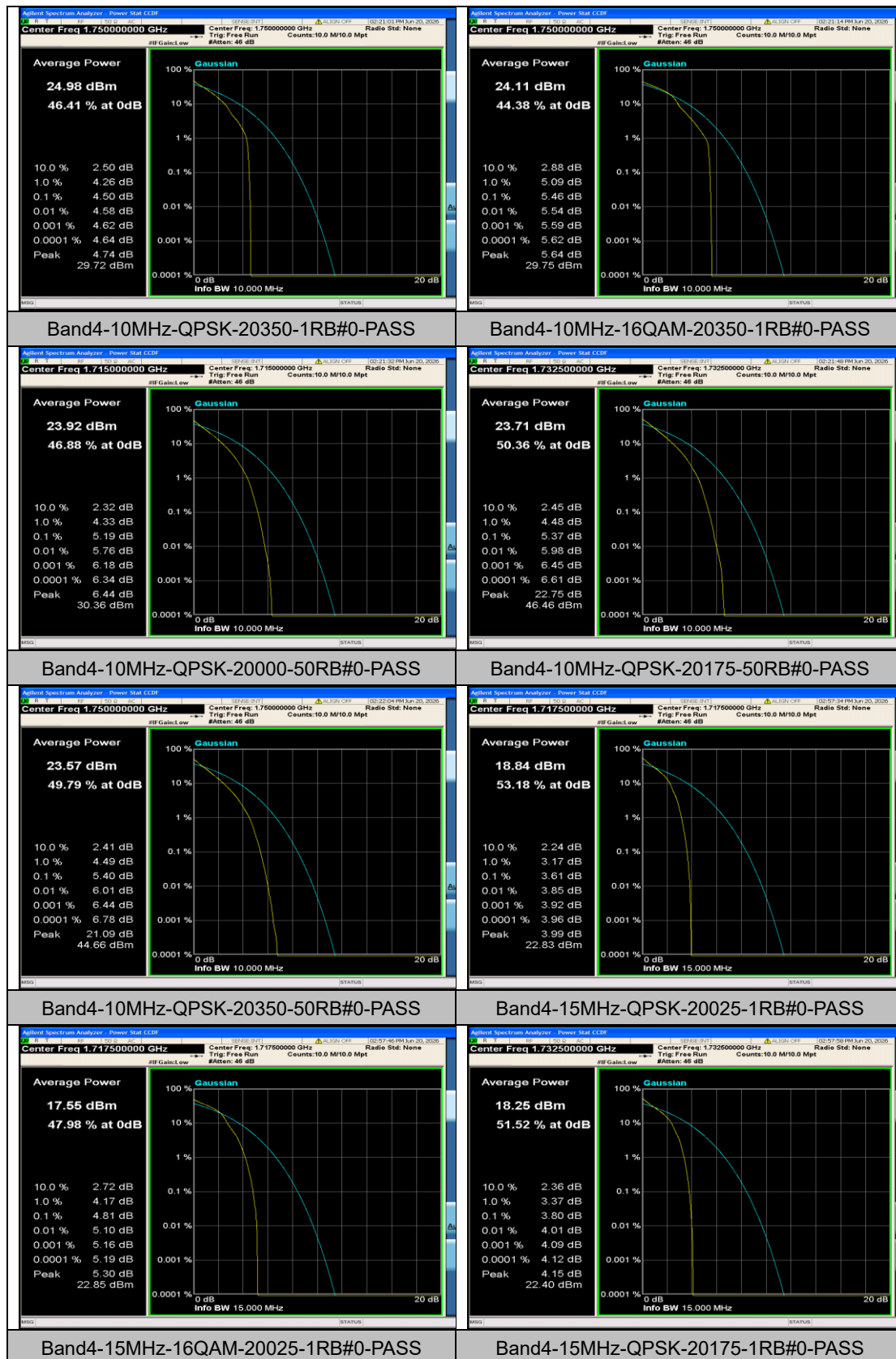


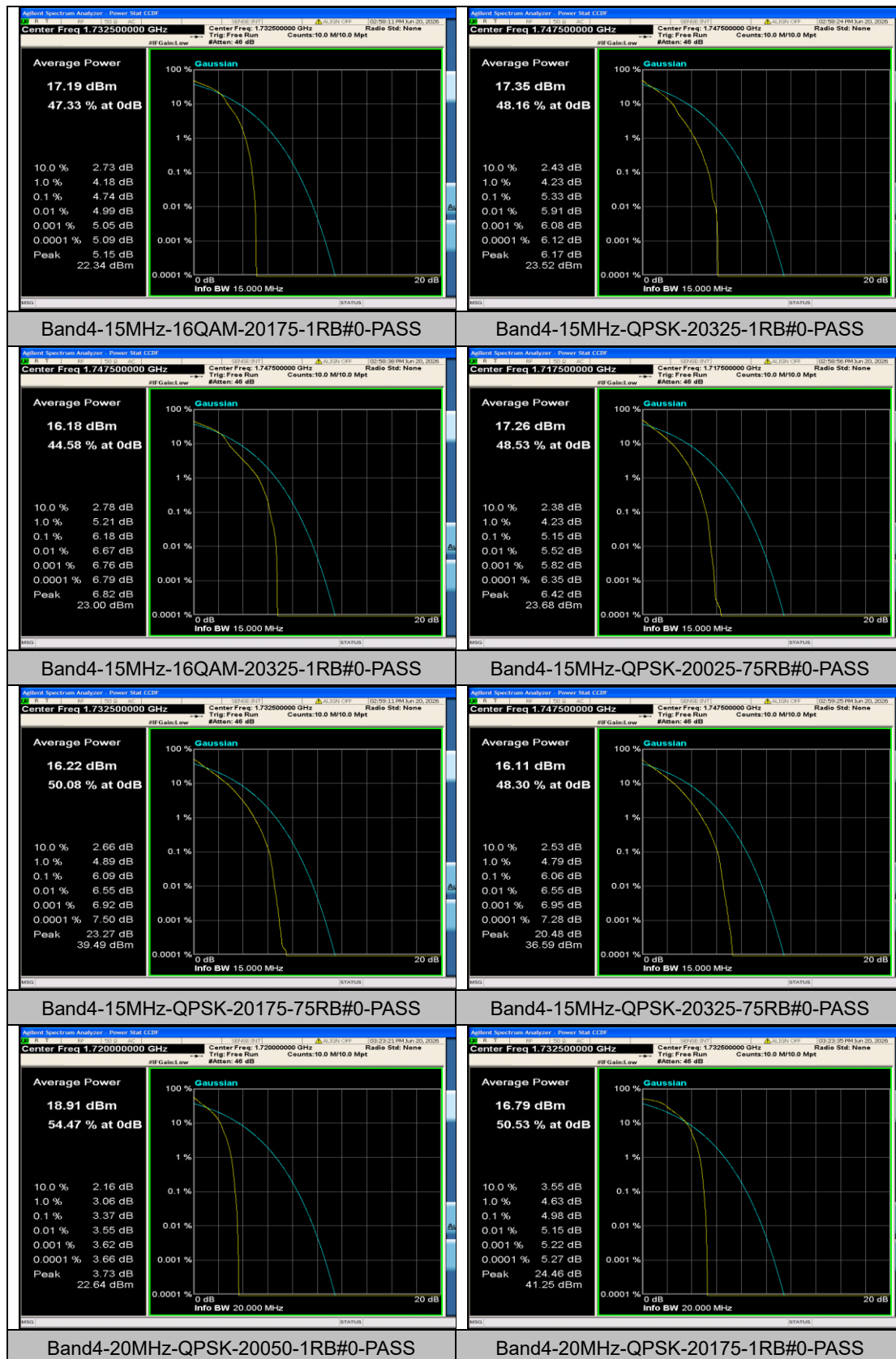


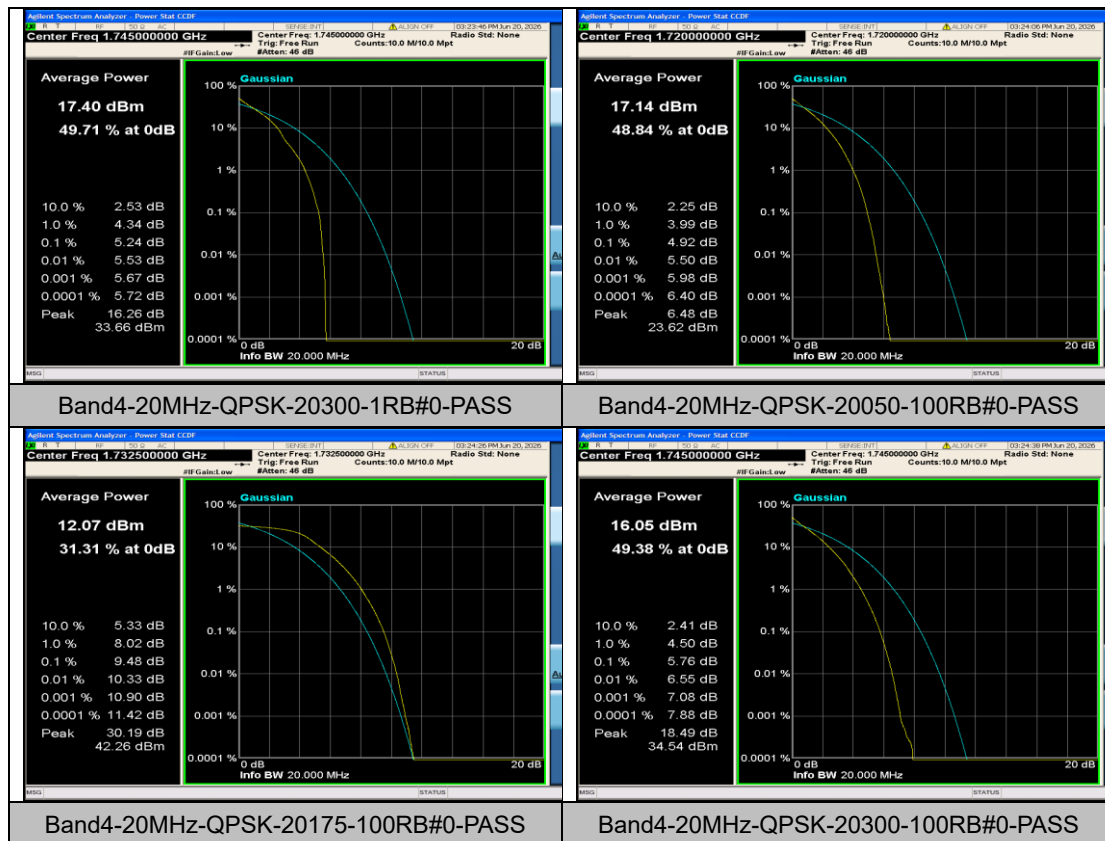












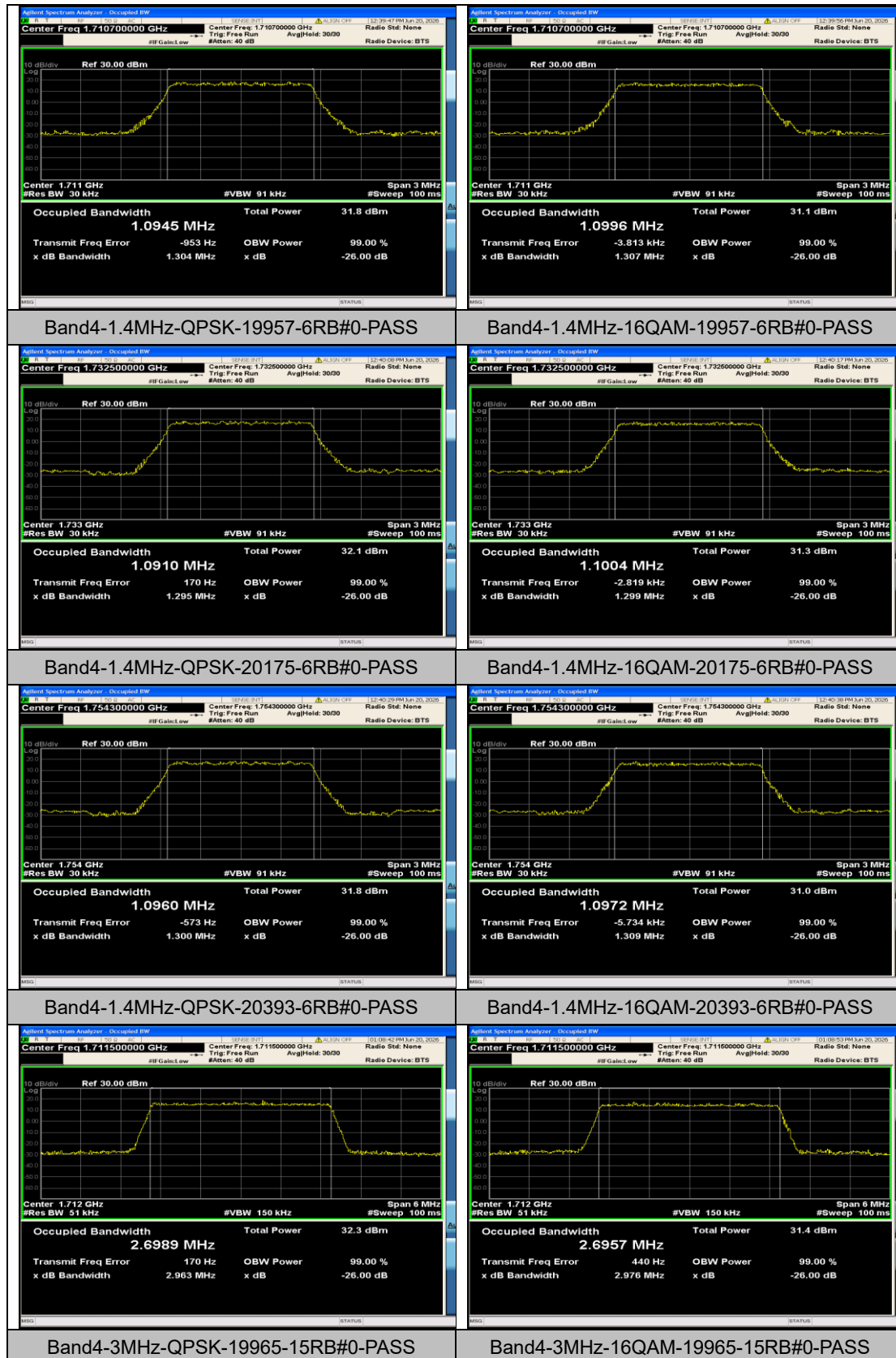
Appendix C: 26dB Bandwidth and Occupied Bandwidth

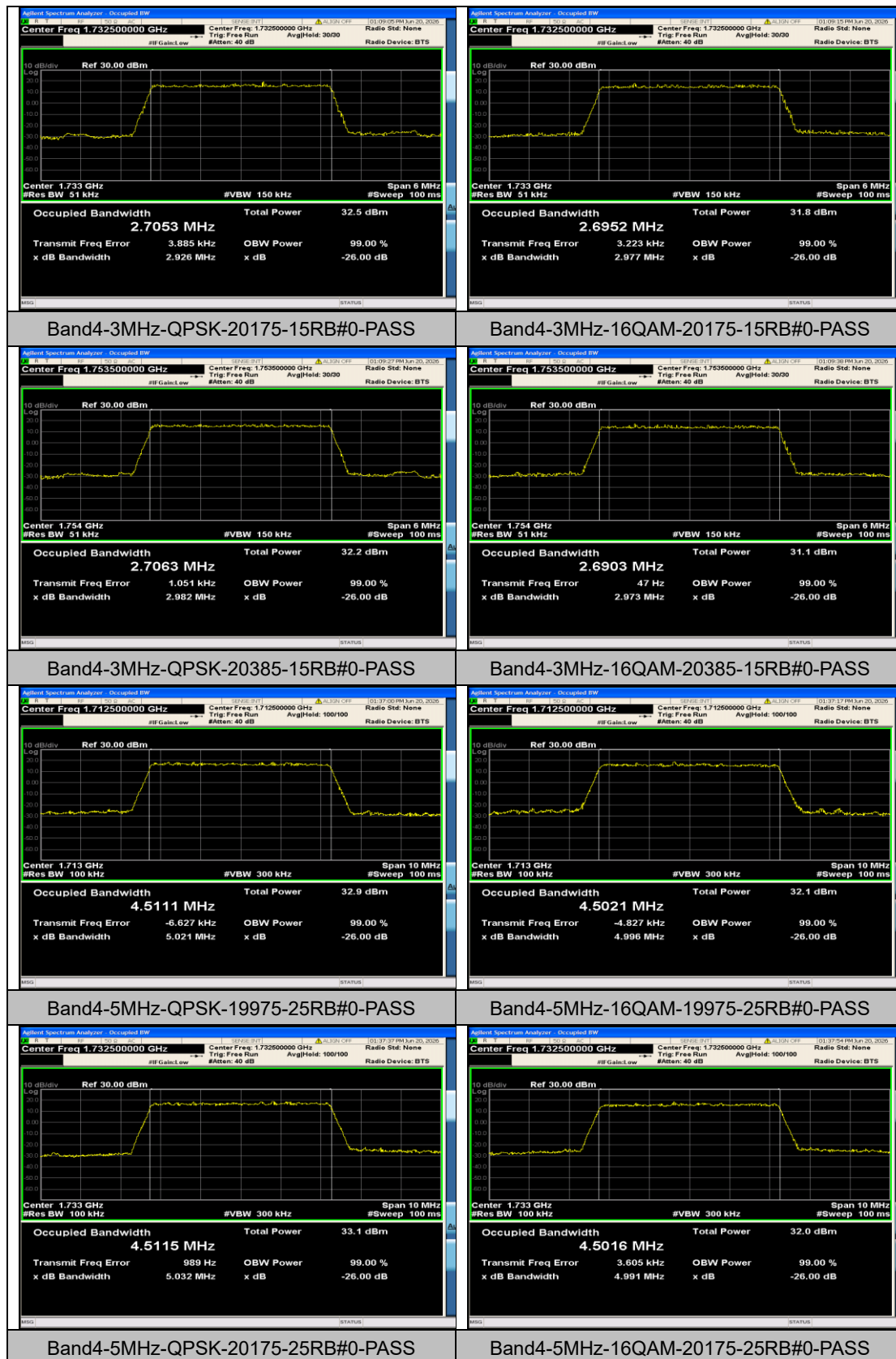
Test Result

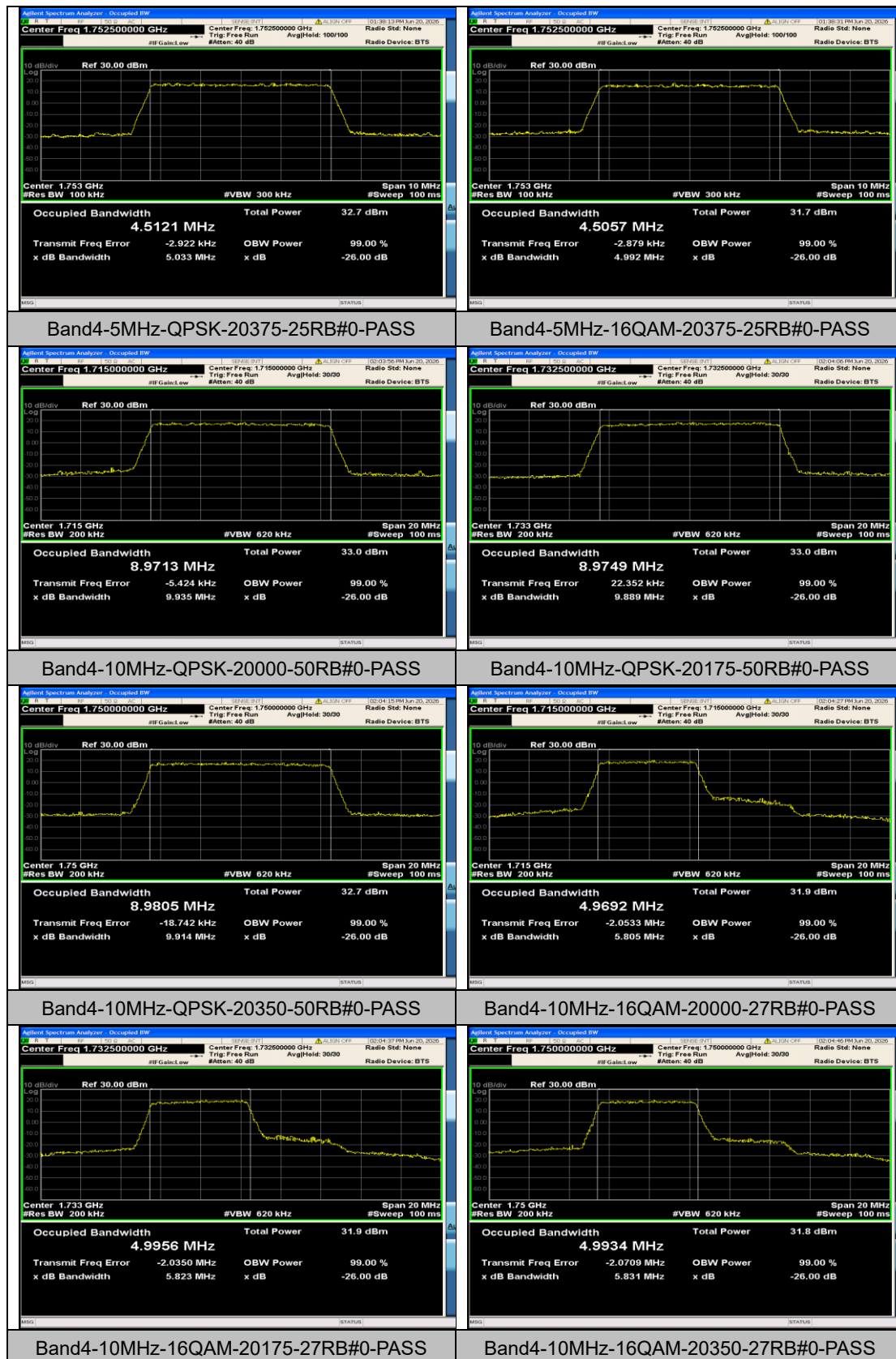
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band4	1.4MHz	QPSK	19957	6RB#0	1.0945	1.304	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	1.0996	1.307	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	1.0910	1.295	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	1.1004	1.299	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	1.0960	1.300	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	1.0972	1.309	PASS
Band4	3MHz	QPSK	19965	15RB#0	2.6989	2.963	PASS
Band4	3MHz	16QAM	19965	15RB#0	2.6957	2.976	PASS
Band4	3MHz	QPSK	20175	15RB#0	2.7053	2.926	PASS
Band4	3MHz	16QAM	20175	15RB#0	2.6952	2.977	PASS
Band4	3MHz	QPSK	20385	15RB#0	2.7063	2.982	PASS
Band4	3MHz	16QAM	20385	15RB#0	2.6903	2.973	PASS
Band4	5MHz	QPSK	19975	25RB#0	4.5111	5.021	PASS
Band4	5MHz	16QAM	19975	25RB#0	4.5021	4.996	PASS
Band4	5MHz	QPSK	20175	25RB#0	4.5115	5.032	PASS
Band4	5MHz	16QAM	20175	25RB#0	4.5016	4.991	PASS
Band4	5MHz	QPSK	20375	25RB#0	4.5121	5.033	PASS
Band4	5MHz	16QAM	20375	25RB#0	4.5057	4.992	PASS
Band4	10MHz	QPSK	20000	50RB#0	8.9713	9.935	PASS
Band4	10MHz	QPSK	20175	50RB#0	8.9749	9.889	PASS
Band4	10MHz	QPSK	20350	50RB#0	8.9805	9.914	PASS
Band4	10MHz	16QAM	20000	27RB#0	4.9692	5.805	PASS
Band4	10MHz	16QAM	20175	27RB#0	4.9956	5.823	PASS
Band4	10MHz	16QAM	20350	27RB#0	4.9934	5.831	PASS
Band4	15MHz	QPSK	20025	75RB#0	13.456	14.53	PASS
Band4	15MHz	QPSK	20175	75RB#0	13.452	14.60	PASS
Band4	15MHz	QPSK	20325	75RB#0	13.466	14.64	PASS
Band4	15MHz	16QAM	20025	27RB#0	5.0517	5.875	PASS
Band4	15MHz	16QAM	20175	27RB#0	5.0807	5.978	PASS
Band4	15MHz	16QAM	20325	27RB#0	5.0585	5.927	PASS
Band4	20MHz	QPSK	20050	100RB#0	17.912	19.12	PASS
Band4	20MHz	QPSK	20175	100RB#0	17.942	19.11	PASS
Band4	20MHz	QPSK	20300	100RB#0	17.947	19.27	PASS
Band4	20MHz	16QAM	20050	27RB#0	5.1870	6.103	PASS

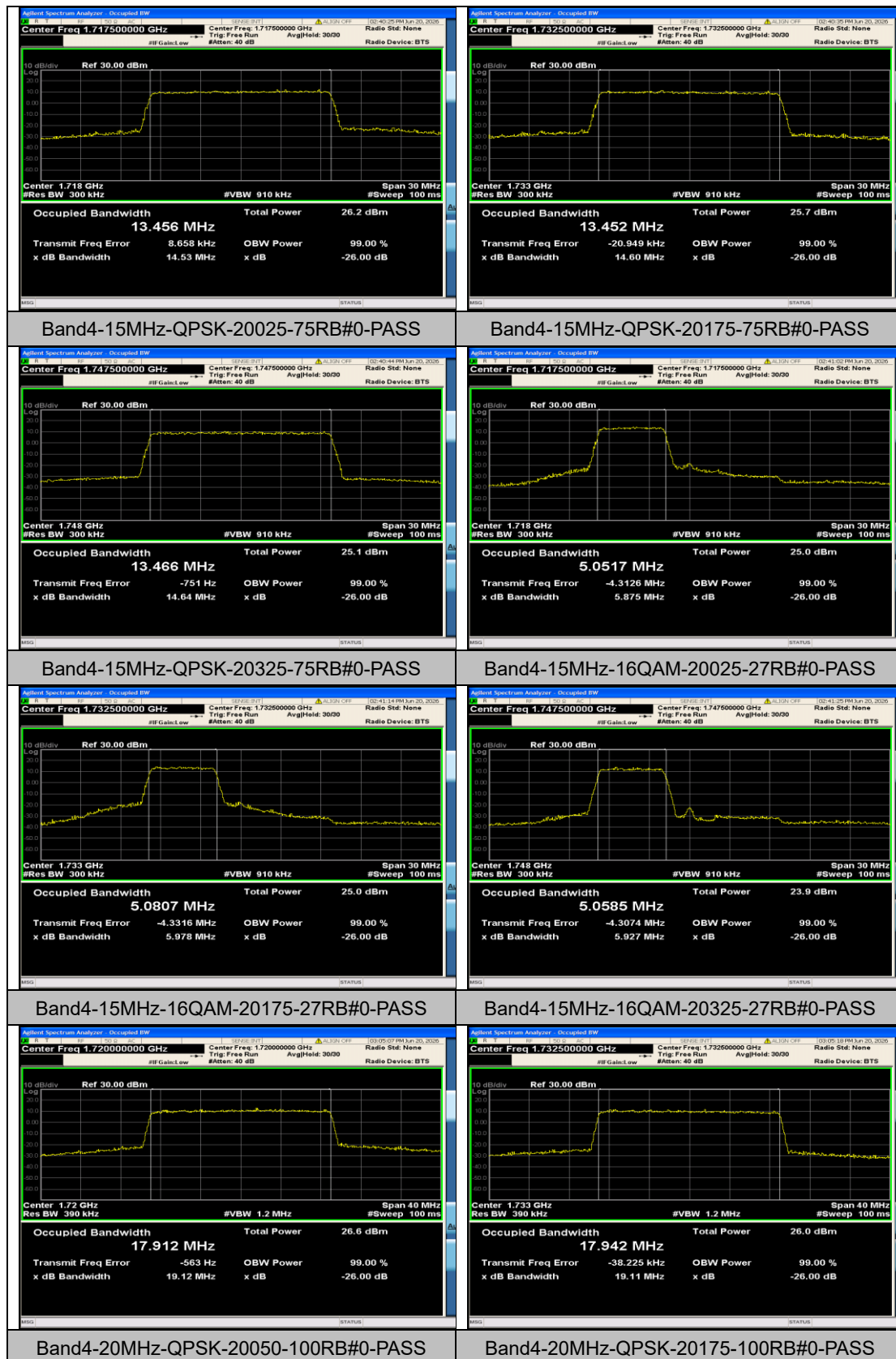
Band4	20MHz	16QAM	20175	27RB#0	5.1754	6.096	PASS
Band4	20MHz	16QAM	20300	27RB#0	5.1637	6.078	PASS

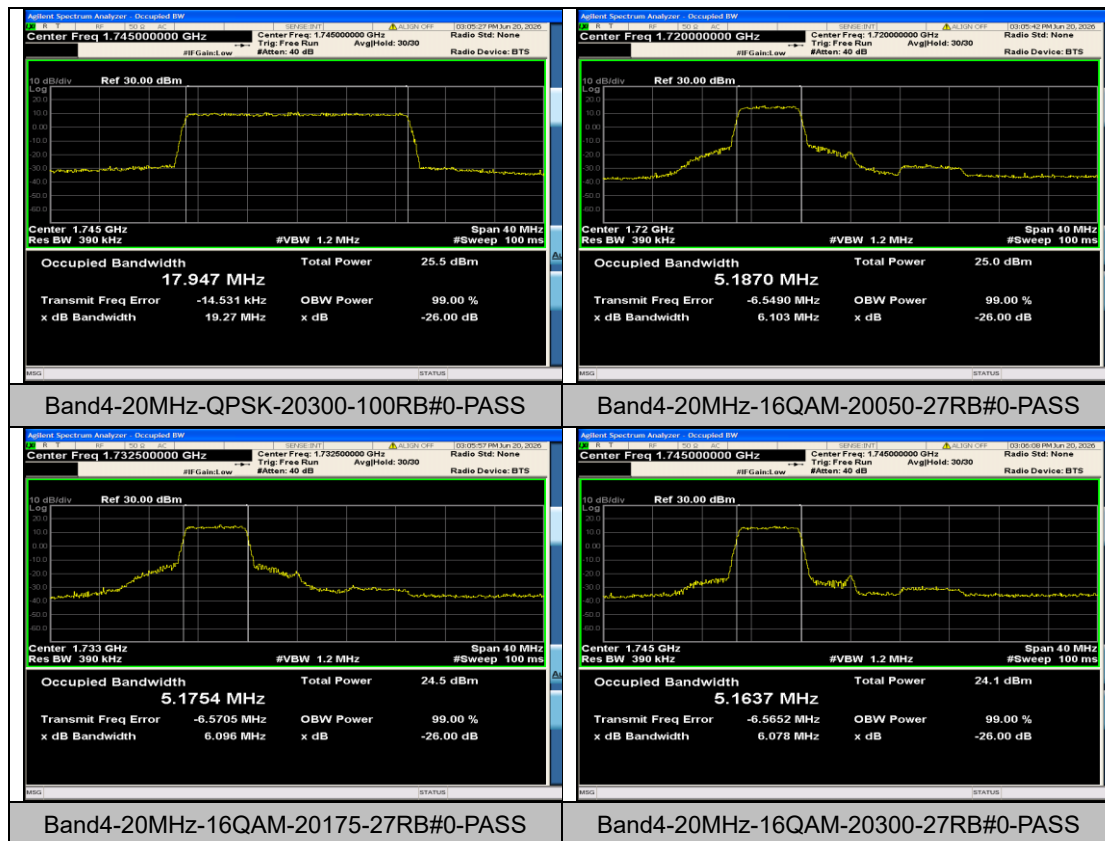
Test Graphs











Appendix D: Band Edge

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band4	1.4MHz	QPSK	19957	1RB#0	-24.91	PASS
Band4	1.4MHz	16QAM	19957	1RB#0	-28.00	PASS
Band4	1.4MHz	QPSK	19957	1RB#5	-41.20	PASS
Band4	1.4MHz	16QAM	19957	1RB#5	-39.38	PASS
Band4	1.4MHz	QPSK	19957	6RB#0	-29.13	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	-31.39	PASS
Band4	1.4MHz	QPSK	20393	1RB#0	-36.51	PASS
Band4	1.4MHz	16QAM	20393	1RB#0	-41.43	PASS
Band4	1.4MHz	QPSK	20393	1RB#5	-30.18	PASS
Band4	1.4MHz	16QAM	20393	1RB#5	-28.24	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	-35.36	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	-28.31	PASS
Band4	3MHz	QPSK	19965	1RB#0	-24.26	PASS
Band4	3MHz	16QAM	19965	1RB#0	-25.02	PASS
Band4	3MHz	QPSK	19965	1RB#14	-45.20	PASS
Band4	3MHz	16QAM	19965	1RB#14	-45.19	PASS
Band4	3MHz	QPSK	19965	15RB#0	-30.36	PASS
Band4	3MHz	16QAM	19965	15RB#0	-32.78	PASS
Band4	3MHz	QPSK	20385	1RB#0	-45.22	PASS
Band4	3MHz	16QAM	20385	1RB#0	-45.91	PASS
Band4	3MHz	QPSK	20385	1RB#14	-24.55	PASS
Band4	3MHz	16QAM	20385	1RB#14	-26.02	PASS
Band4	3MHz	QPSK	20385	15RB#0	-33.31	PASS
Band4	3MHz	16QAM	20385	15RB#0	-33.29	PASS
Band4	5MHz	QPSK	19975	1RB#0	-27.04	PASS
Band4	5MHz	16QAM	19975	1RB#0	-28.37	PASS
Band4	5MHz	QPSK	19975	1RB#24	-54.68	PASS
Band4	5MHz	16QAM	19975	1RB#24	-55.22	PASS
Band4	5MHz	QPSK	19975	25RB#0	-33.33	PASS
Band4	5MHz	16QAM	19975	25RB#0	-35.11	PASS
Band4	5MHz	QPSK	20375	1RB#0	-54.60	PASS
Band4	5MHz	16QAM	20375	1RB#0	-55.13	PASS
Band4	5MHz	QPSK	20375	1RB#24	-26.41	PASS
Band4	5MHz	16QAM	20375	1RB#24	-27.31	PASS
Band4	5MHz	QPSK	20375	25RB#0	-34.53	PASS
Band4	5MHz	16QAM	20375	25RB#0	-35.03	PASS
Band4	10MHz	QPSK	20000	1RB#0	-37.80	PASS

Band4	10MHz	16QAM	20000	1RB#0	-39.42	PASS
Band4	10MHz	QPSK	20000	1RB#49	-52.42	PASS
Band4	10MHz	16QAM	20000	1RB#49	-52.77	PASS
Band4	10MHz	QPSK	20350	1RB#0	-52.74	PASS
Band4	10MHz	16QAM	20350	1RB#0	-53.30	PASS
Band4	10MHz	QPSK	20350	1RB#49	-36.81	PASS
Band4	10MHz	16QAM	20350	1RB#49	-38.17	PASS
Band4	10MHz	QPSK	20000	50RB#0	-36.21	PASS
Band4	10MHz	QPSK	20350	50RB#0	-37.34	PASS
Band4	15MHz	QPSK	20025	1RB#0	-44.05	PASS
Band4	15MHz	16QAM	20025	1RB#0	-45.10	PASS
Band4	15MHz	QPSK	20025	1RB#74	-51.56	PASS
Band4	15MHz	16QAM	20025	1RB#74	-51.78	PASS
Band4	15MHz	QPSK	20325	1RB#0	-51.57	PASS
Band4	15MHz	16QAM	20325	1RB#0	-51.86	PASS
Band4	15MHz	QPSK	20325	1RB#74	-44.13	PASS
Band4	15MHz	16QAM	20325	1RB#74	-44.90	PASS
Band4	15MHz	QPSK	20025	75RB#0	-37.62	PASS
Band4	15MHz	QPSK	20325	75RB#0	-45.53	PASS
Band4	20MHz	QPSK	20050	1RB#0	-46.90	PASS
Band4	20MHz	16QAM	20050	1RB#0	-47.40	PASS
Band4	20MHz	QPSK	20050	1RB#99	-47.36	PASS
Band4	20MHz	16QAM	20050	1RB#99	-48.00	PASS
Band4	20MHz	QPSK	20300	1RB#0	-47.40	PASS
Band4	20MHz	16QAM	20300	1RB#0	-47.53	PASS
Band4	20MHz	QPSK	20300	1RB#99	-46.34	PASS
Band4	20MHz	16QAM	20300	1RB#99	-47.13	PASS
Band4	20MHz	QPSK	20050	100RB#0	-37.43	PASS
Band4	20MHz	QPSK	20300	100RB#0	-43.87	PASS

Test Graphs

