

FCC Appendix RF Test Data for LTE Band 4

FCC ID : 2BYEV-HELIXX

Company : SHENZHEN DANFOO TECHNOLOGY CO.,LTD.

EUT : Smart Bee Box

Model Number : HELIX X

Report No. : CTA26071300503

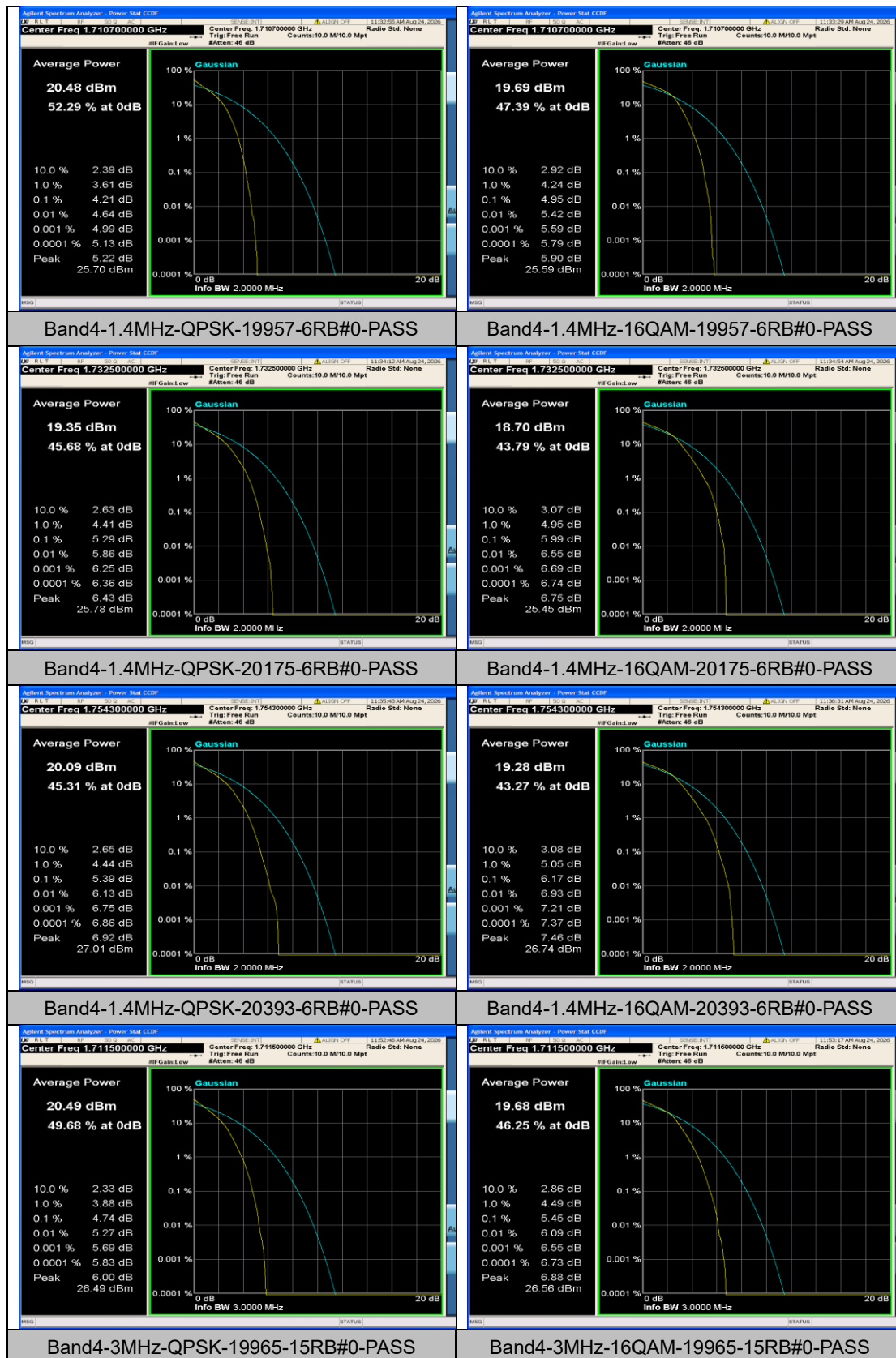
Reviewed By : Eric Wang

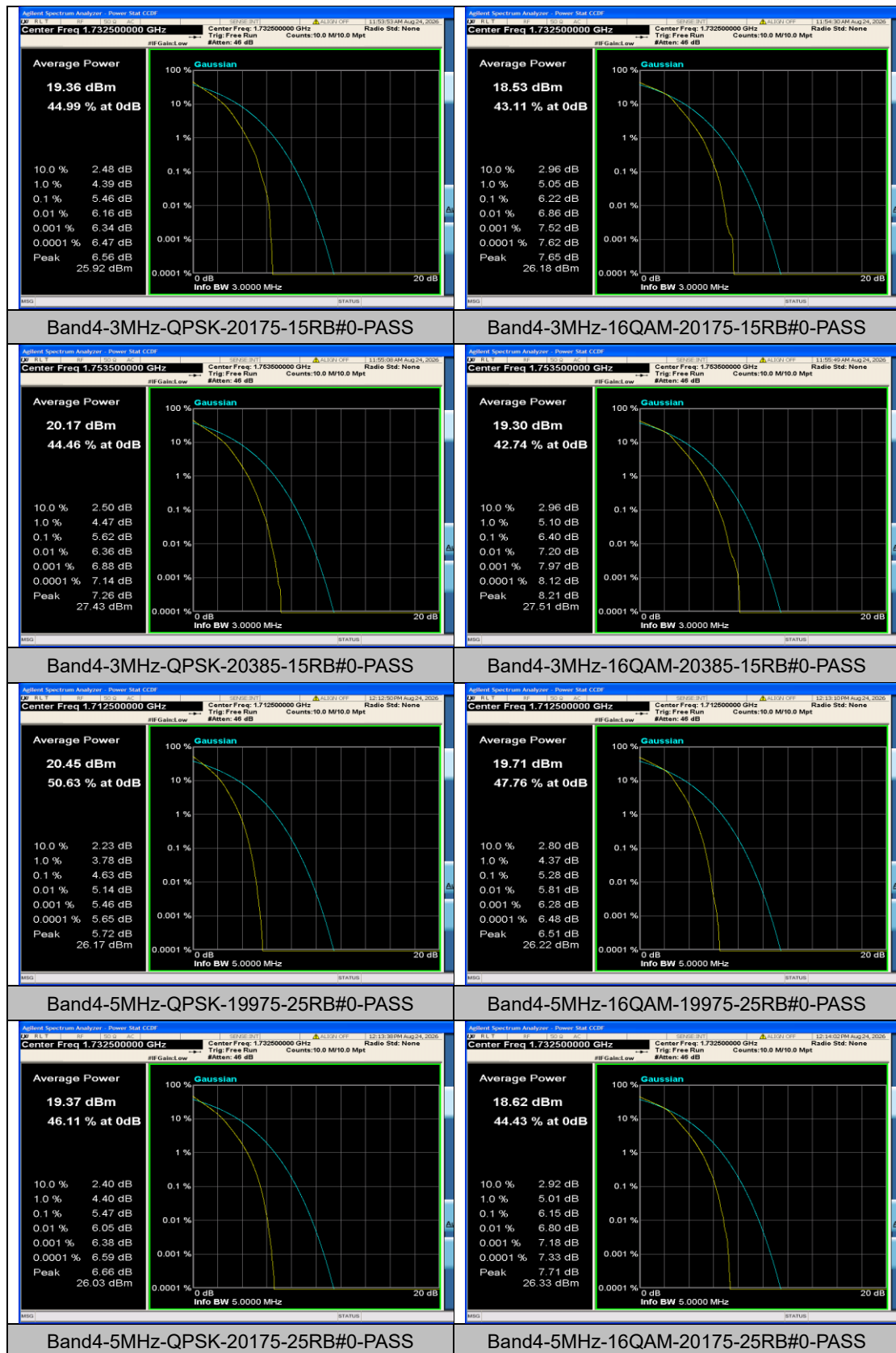
Appendix B: Peak-to-Average Ratio(CCDF)

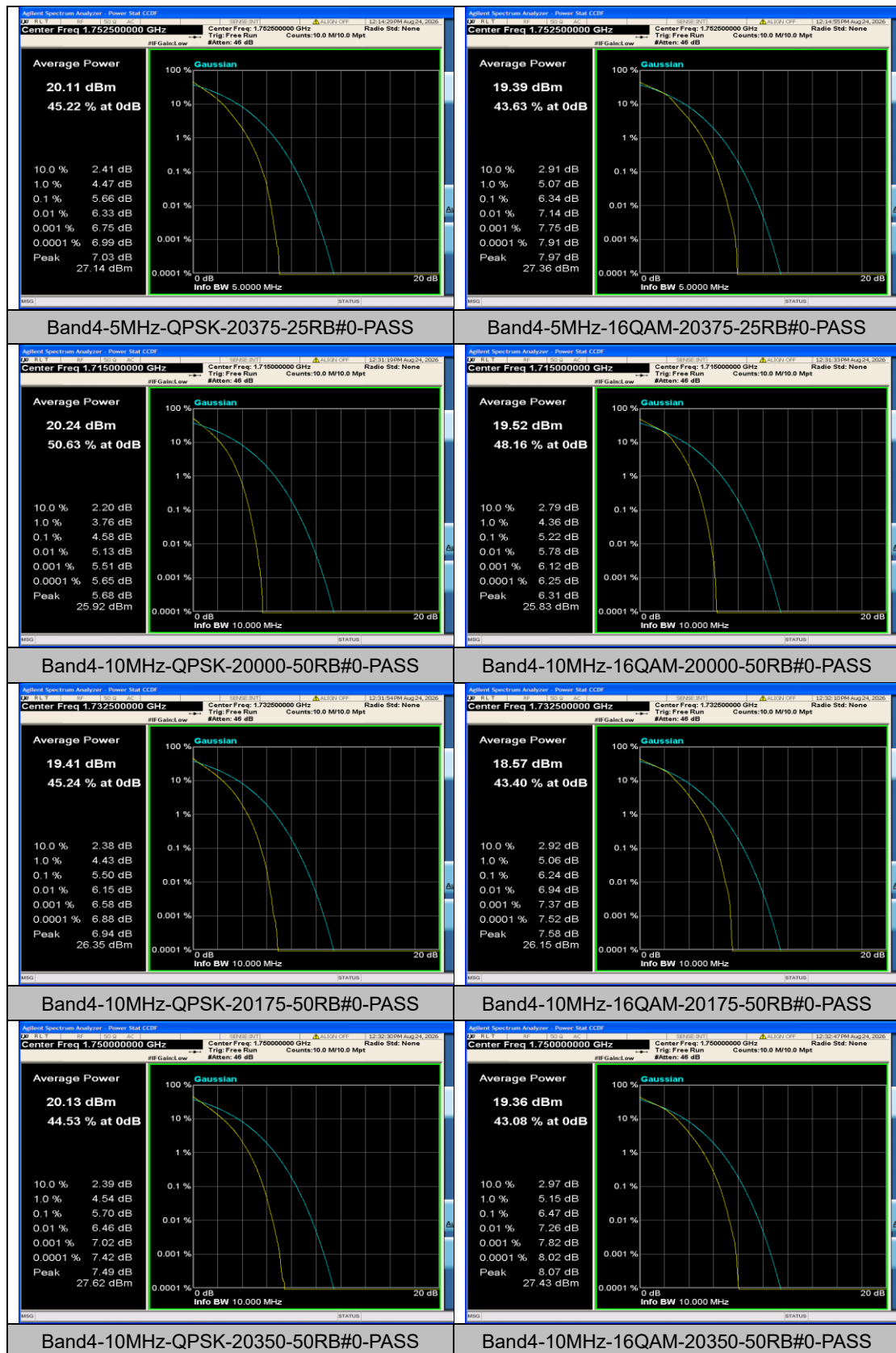
Test Result

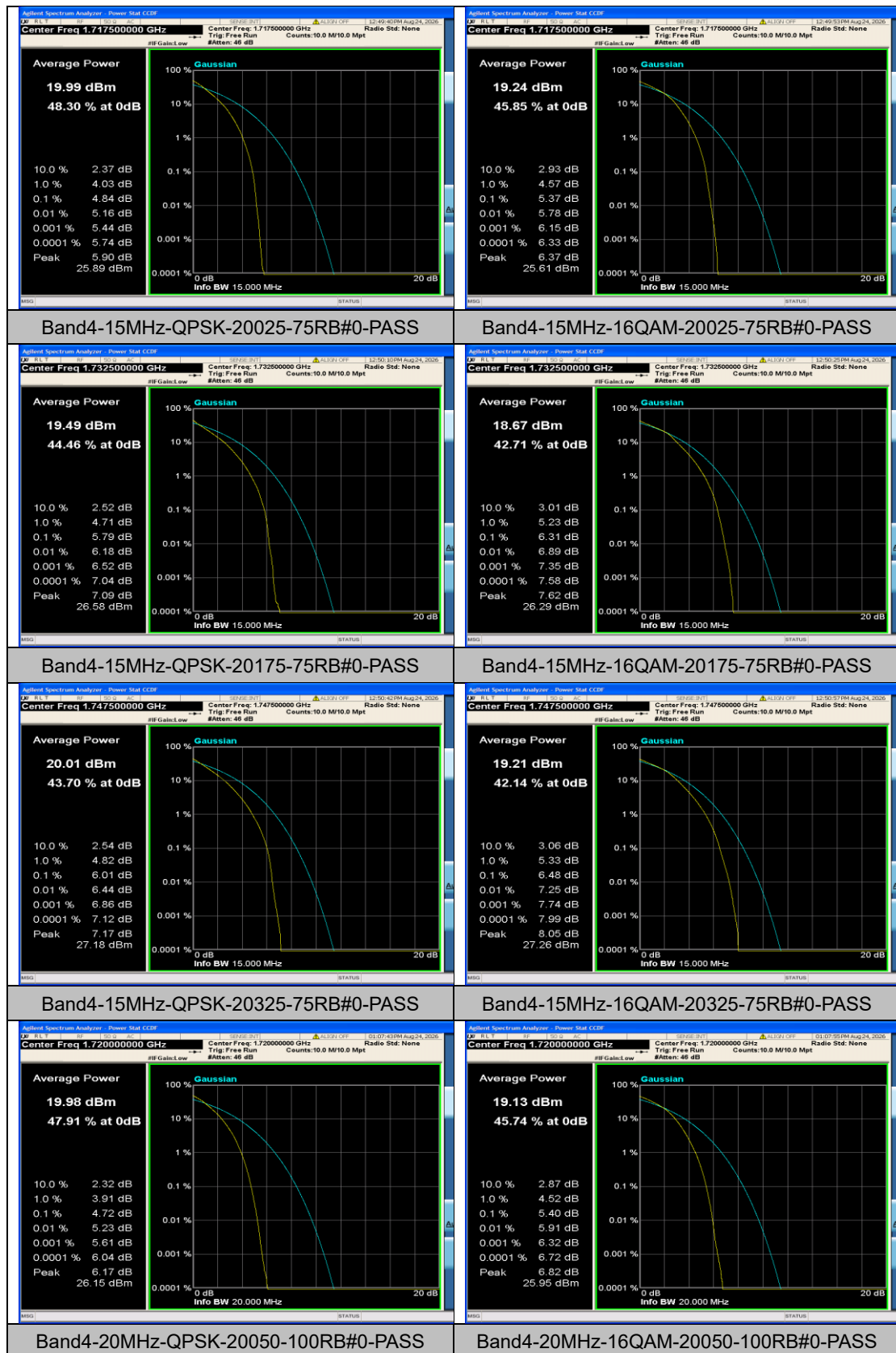
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band4	1.4MHz	QPSK	19957	6RB#0	4.21	13	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	4.95	13	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	5.29	13	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	5.99	13	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	5.39	13	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	6.17	13	PASS
Band4	3MHz	QPSK	19965	15RB#0	4.74	13	PASS
Band4	3MHz	16QAM	19965	15RB#0	5.45	13	PASS
Band4	3MHz	QPSK	20175	15RB#0	5.46	13	PASS
Band4	3MHz	16QAM	20175	15RB#0	6.22	13	PASS
Band4	3MHz	QPSK	20385	15RB#0	5.62	13	PASS
Band4	3MHz	16QAM	20385	15RB#0	6.40	13	PASS
Band4	5MHz	QPSK	19975	25RB#0	4.63	13	PASS
Band4	5MHz	16QAM	19975	25RB#0	5.28	13	PASS
Band4	5MHz	QPSK	20175	25RB#0	5.47	13	PASS
Band4	5MHz	16QAM	20175	25RB#0	6.15	13	PASS
Band4	5MHz	QPSK	20375	25RB#0	5.66	13	PASS
Band4	5MHz	16QAM	20375	25RB#0	6.34	13	PASS
Band4	10MHz	QPSK	20000	50RB#0	4.58	13	PASS
Band4	10MHz	16QAM	20000	50RB#0	5.22	13	PASS
Band4	10MHz	QPSK	20175	50RB#0	5.50	13	PASS
Band4	10MHz	16QAM	20175	50RB#0	6.24	13	PASS
Band4	10MHz	QPSK	20350	50RB#0	5.70	13	PASS
Band4	10MHz	16QAM	20350	50RB#0	6.47	13	PASS
Band4	15MHz	QPSK	20025	75RB#0	4.84	13	PASS
Band4	15MHz	16QAM	20025	75RB#0	5.37	13	PASS
Band4	15MHz	QPSK	20175	75RB#0	5.79	13	PASS
Band4	15MHz	16QAM	20175	75RB#0	6.31	13	PASS
Band4	15MHz	QPSK	20325	75RB#0	6.01	13	PASS
Band4	15MHz	16QAM	20325	75RB#0	6.48	13	PASS
Band4	20MHz	QPSK	20050	100RB#0	4.72	13	PASS
Band4	20MHz	16QAM	20050	100RB#0	5.40	13	PASS
Band4	20MHz	QPSK	20175	100RB#0	5.62	13	PASS
Band4	20MHz	16QAM	20175	100RB#0	6.35	13	PASS
Band4	20MHz	QPSK	20300	100RB#0	5.79	13	PASS
Band4	20MHz	16QAM	20300	100RB#0	6.50	13	PASS

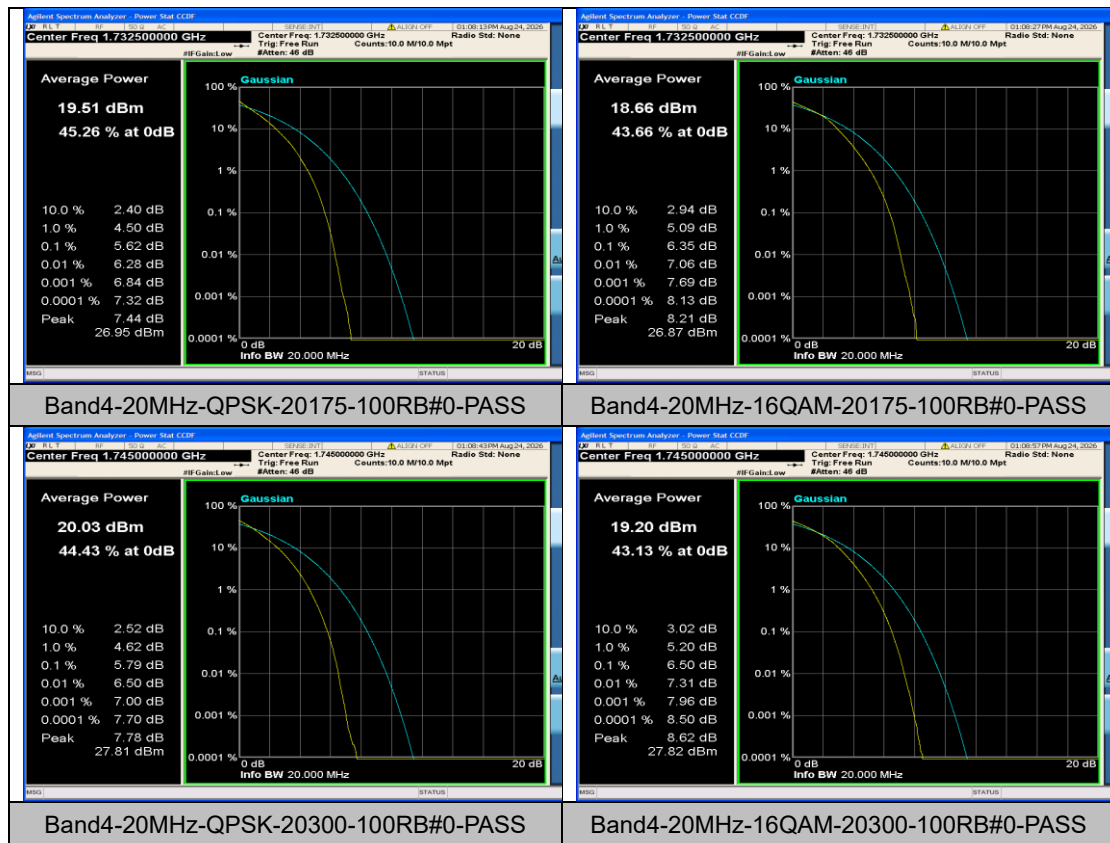
Test Graphs









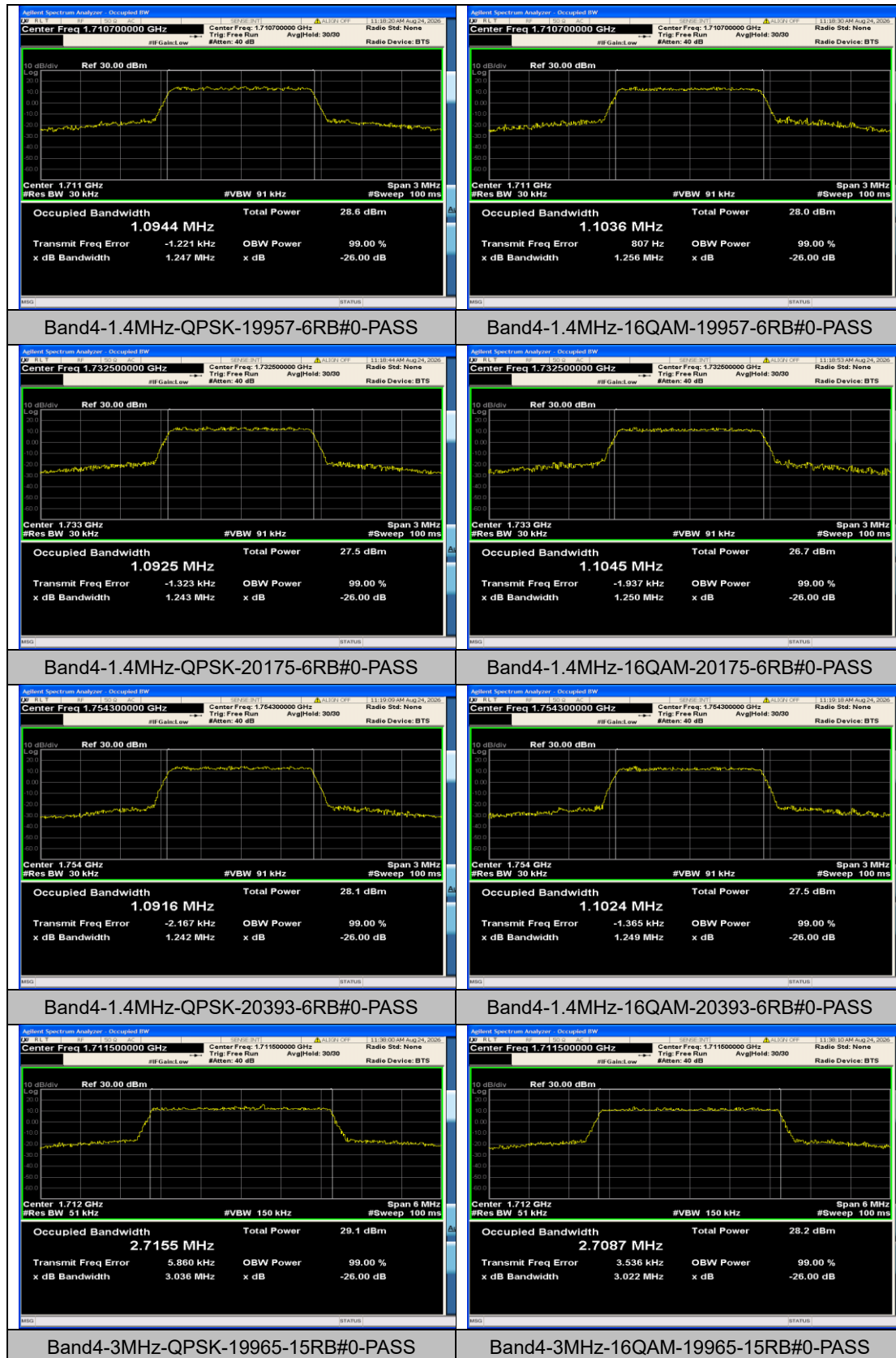


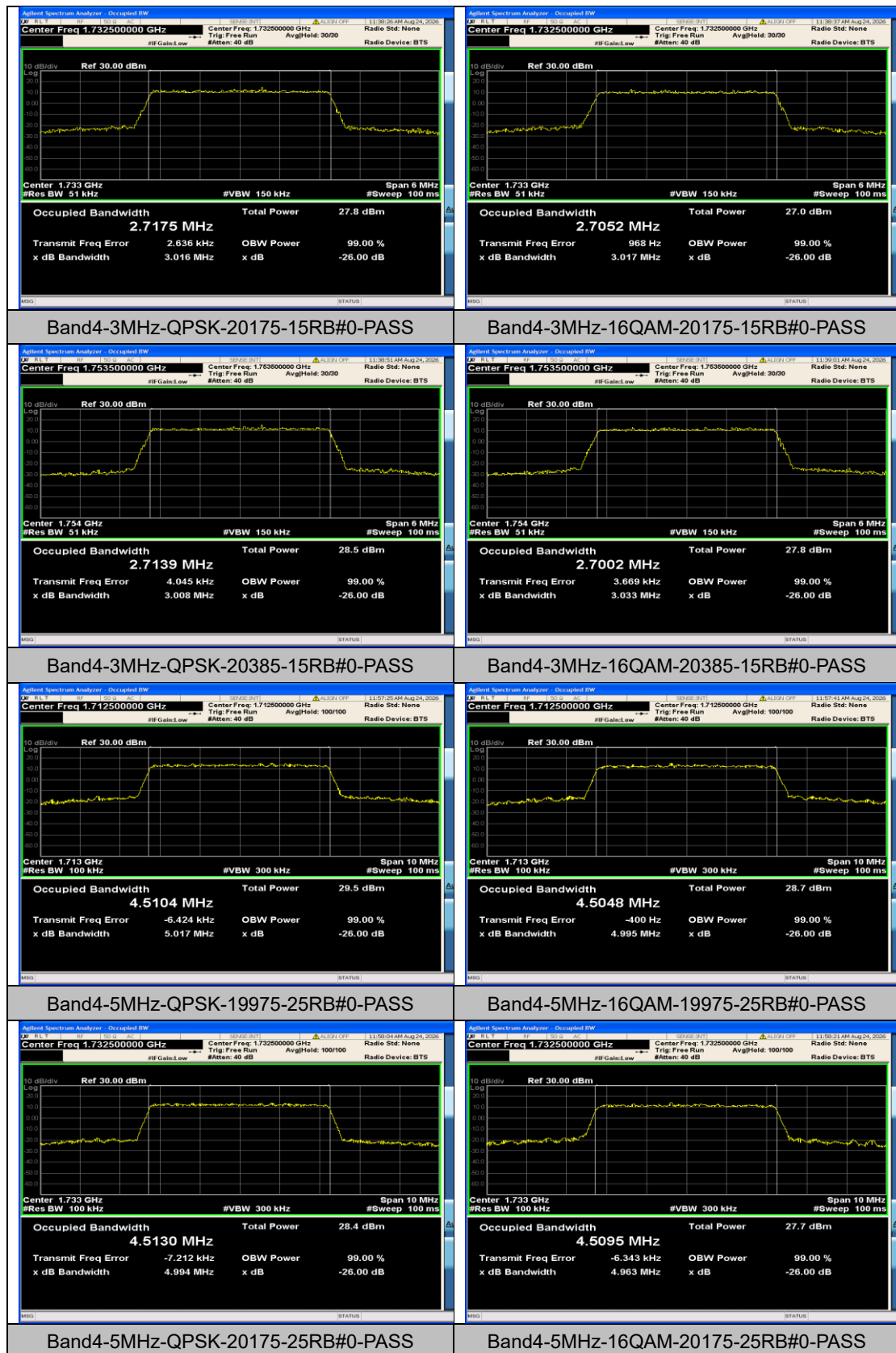
Appendix C: 26dB Bandwidth and Occupied Bandwidth

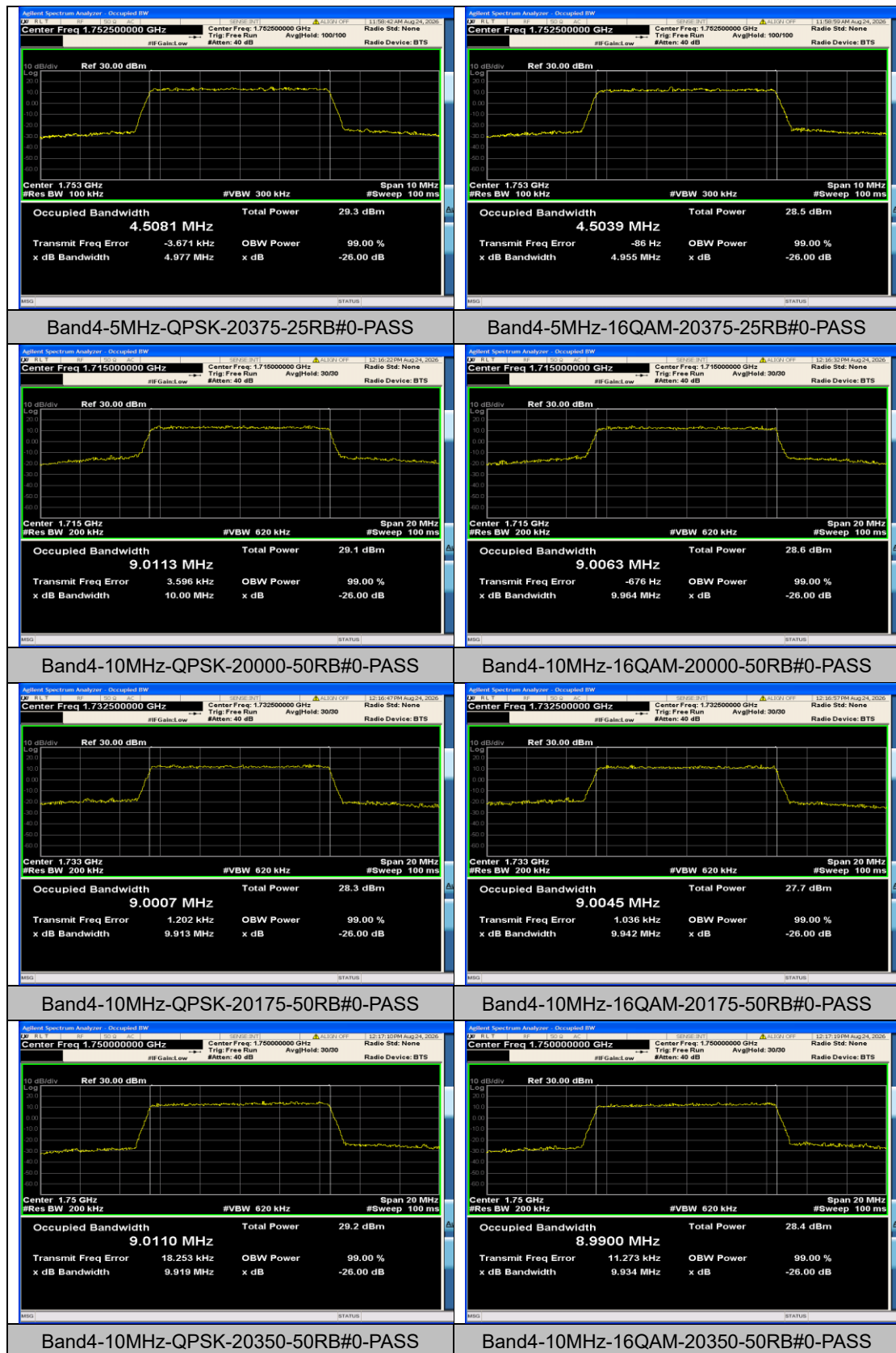
Test Result

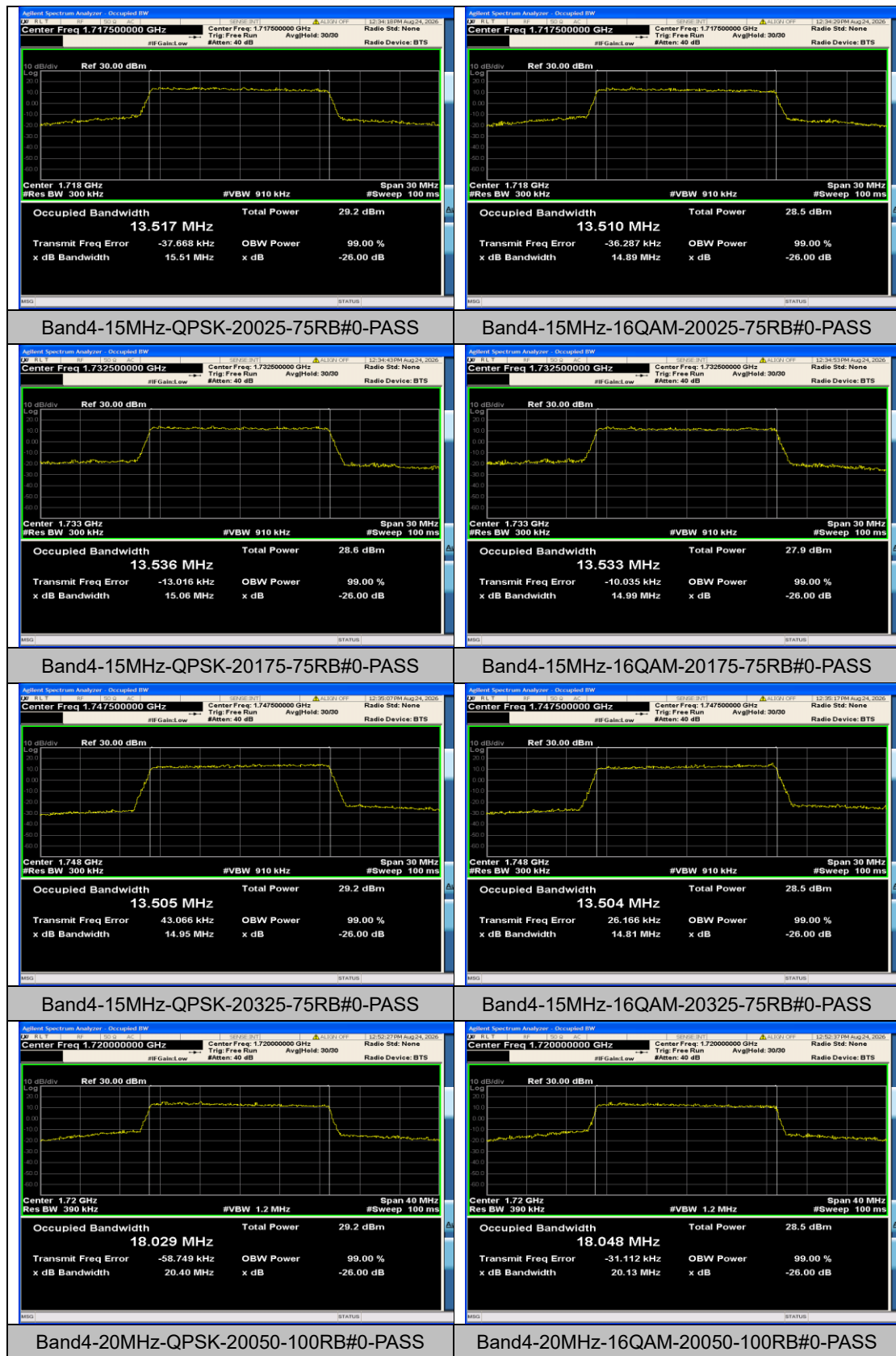
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band4	1.4MHz	QPSK	19957	6RB#0	1.0944	1.247	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	1.1036	1.256	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	1.0925	1.243	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	1.1045	1.250	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	1.0916	1.242	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	1.1024	1.249	PASS
Band4	3MHz	QPSK	19965	15RB#0	2.7155	3.036	PASS
Band4	3MHz	16QAM	19965	15RB#0	2.7087	3.022	PASS
Band4	3MHz	QPSK	20175	15RB#0	2.7175	3.016	PASS
Band4	3MHz	16QAM	20175	15RB#0	2.7052	3.017	PASS
Band4	3MHz	QPSK	20385	15RB#0	2.7139	3.008	PASS
Band4	3MHz	16QAM	20385	15RB#0	2.7002	3.033	PASS
Band4	5MHz	QPSK	19975	25RB#0	4.5104	5.017	PASS
Band4	5MHz	16QAM	19975	25RB#0	4.5048	4.995	PASS
Band4	5MHz	QPSK	20175	25RB#0	4.5130	4.994	PASS
Band4	5MHz	16QAM	20175	25RB#0	4.5095	4.963	PASS
Band4	5MHz	QPSK	20375	25RB#0	4.5081	4.977	PASS
Band4	5MHz	16QAM	20375	25RB#0	4.5039	4.955	PASS
Band4	10MHz	QPSK	20000	50RB#0	9.0113	10.00	PASS
Band4	10MHz	16QAM	20000	50RB#0	9.0063	9.964	PASS
Band4	10MHz	QPSK	20175	50RB#0	9.0007	9.913	PASS
Band4	10MHz	16QAM	20175	50RB#0	9.0045	9.942	PASS
Band4	10MHz	QPSK	20350	50RB#0	9.0110	9.919	PASS
Band4	10MHz	16QAM	20350	50RB#0	8.9900	9.934	PASS
Band4	15MHz	QPSK	20025	75RB#0	13.517	15.51	PASS
Band4	15MHz	16QAM	20025	75RB#0	13.510	14.89	PASS
Band4	15MHz	QPSK	20175	75RB#0	13.536	15.06	PASS
Band4	15MHz	16QAM	20175	75RB#0	13.533	14.99	PASS
Band4	15MHz	QPSK	20325	75RB#0	13.505	14.95	PASS
Band4	15MHz	16QAM	20325	75RB#0	13.504	14.81	PASS
Band4	20MHz	QPSK	20050	100RB#0	18.029	20.40	PASS
Band4	20MHz	16QAM	20050	100RB#0	18.048	20.13	PASS
Band4	20MHz	QPSK	20175	100RB#0	18.073	19.82	PASS
Band4	20MHz	16QAM	20175	100RB#0	18.142	19.80	PASS
Band4	20MHz	QPSK	20300	100RB#0	18.052	19.83	PASS
Band4	20MHz	16QAM	20300	100RB#0	18.050	19.65	PASS

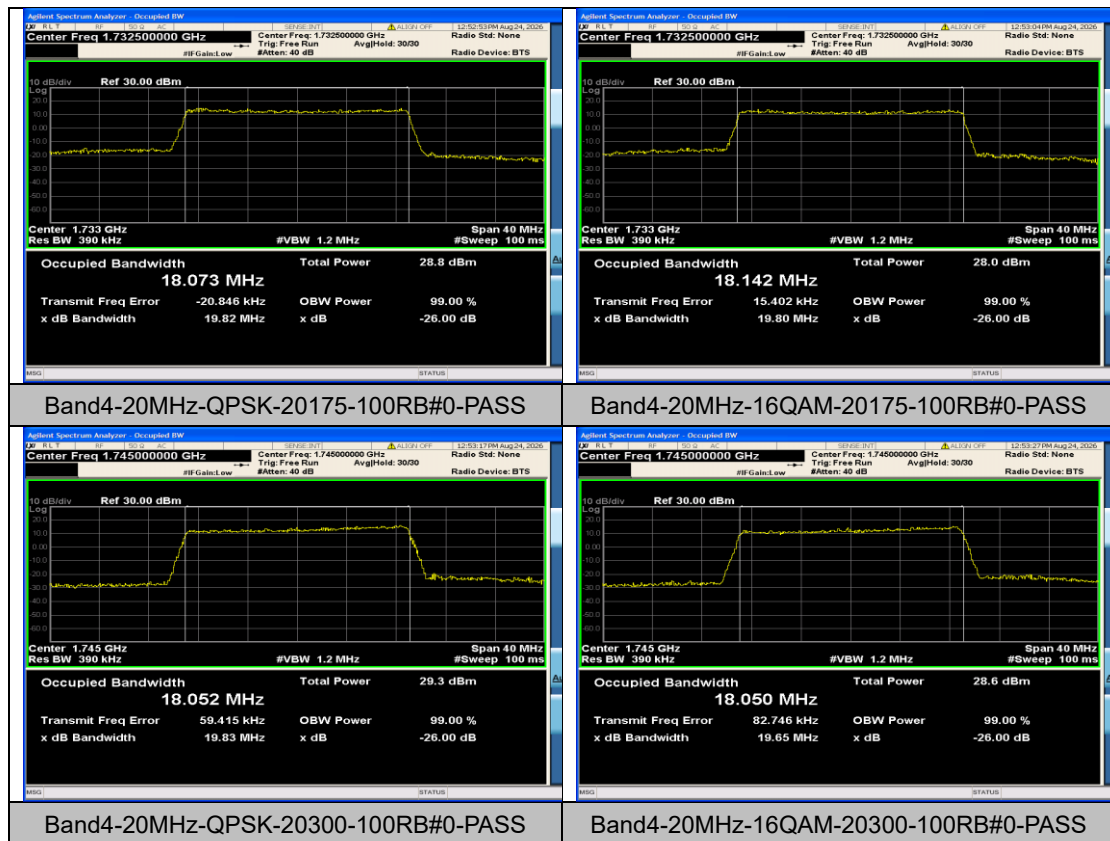
Test Graphs











Appendix D: Band Edge

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band4	1.4MHz	QPSK	19957	6RB#0	-22.95	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	-28.49	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	-32.76	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	-31.85	PASS
Band4	3MHz	QPSK	19965	15RB#0	-26.74	PASS
Band4	3MHz	16QAM	19965	15RB#0	-29.28	PASS
Band4	3MHz	QPSK	20385	15RB#0	-30.80	PASS
Band4	3MHz	16QAM	20385	15RB#0	-31.66	PASS
Band4	5MHz	QPSK	19975	25RB#0	-30.26	PASS
Band4	5MHz	16QAM	19975	25RB#0	-32.40	PASS
Band4	5MHz	QPSK	20375	25RB#0	-35.55	PASS
Band4	5MHz	16QAM	20375	25RB#0	-36.62	PASS
Band4	10MHz	QPSK	20000	50RB#0	-29.62	PASS
Band4	10MHz	16QAM	20000	50RB#0	-32.50	PASS
Band4	10MHz	QPSK	20350	50RB#0	-36.95	PASS
Band4	10MHz	16QAM	20350	50RB#0	-37.45	PASS
Band4	15MHz	QPSK	20025	75RB#0	-27.00	PASS
Band4	15MHz	16QAM	20025	75RB#0	-28.06	PASS
Band4	15MHz	QPSK	20325	75RB#0	-37.04	PASS
Band4	15MHz	16QAM	20325	75RB#0	-37.25	PASS
Band4	20MHz	QPSK	20050	100RB#0	-27.33	PASS
Band4	20MHz	16QAM	20050	100RB#0	-29.30	PASS
Band4	20MHz	QPSK	20300	100RB#0	-37.41	PASS
Band4	20MHz	16QAM	20300	100RB#0	-37.49	PASS

Test Graphs

