

FCC Appendix RF Test Data for LTE Band 7

FCC ID : 2AU4T-TH11

Company : Shanghai TUGE Data Technologies Co., Ltd.

EUT : MobileHub

Model Number : TH11

Report No. : CTA26071403105

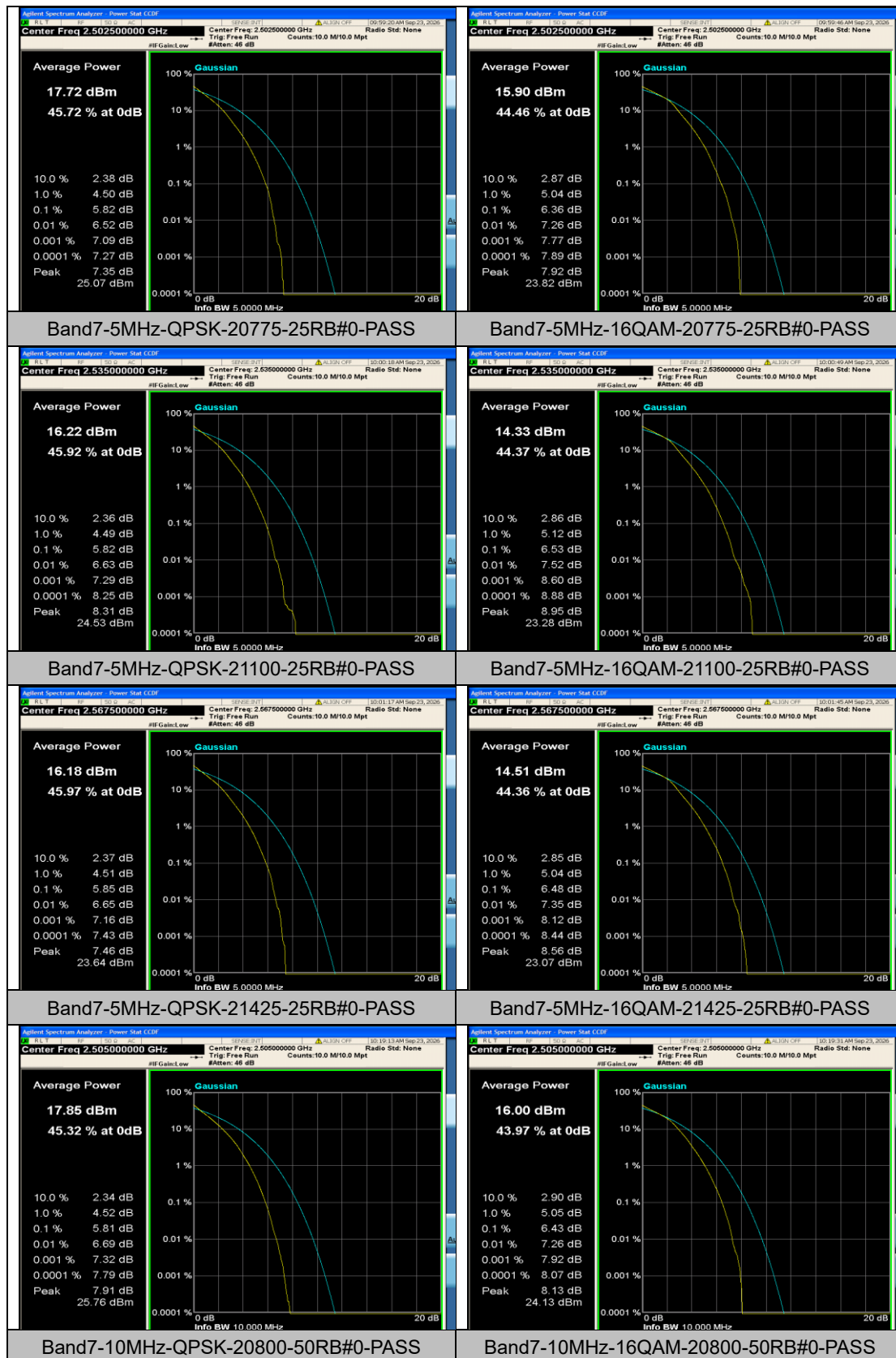
Reviewed By : Eric Wang

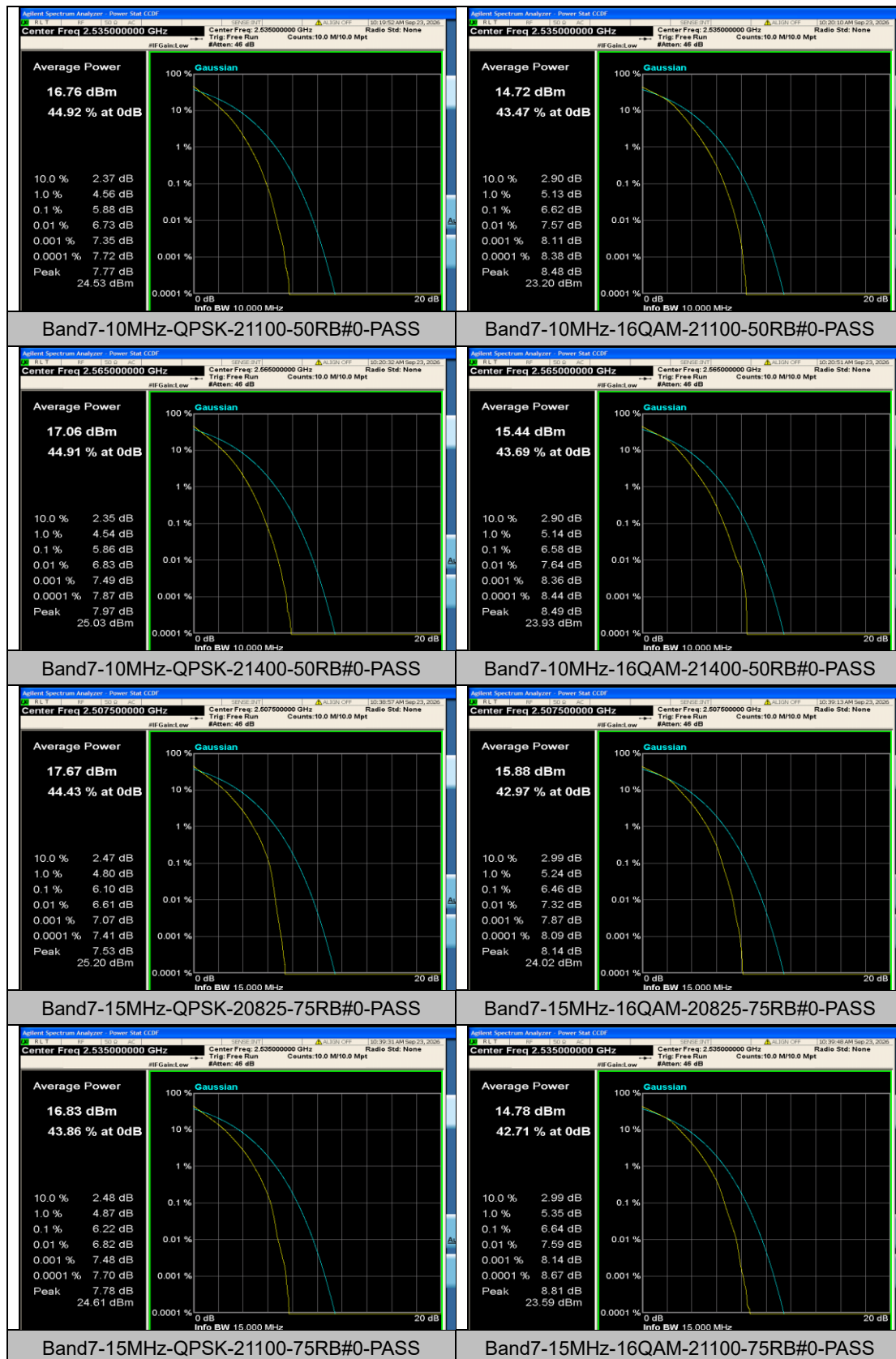
Appendix B: Peak-to-Average Ratio(CCDF)

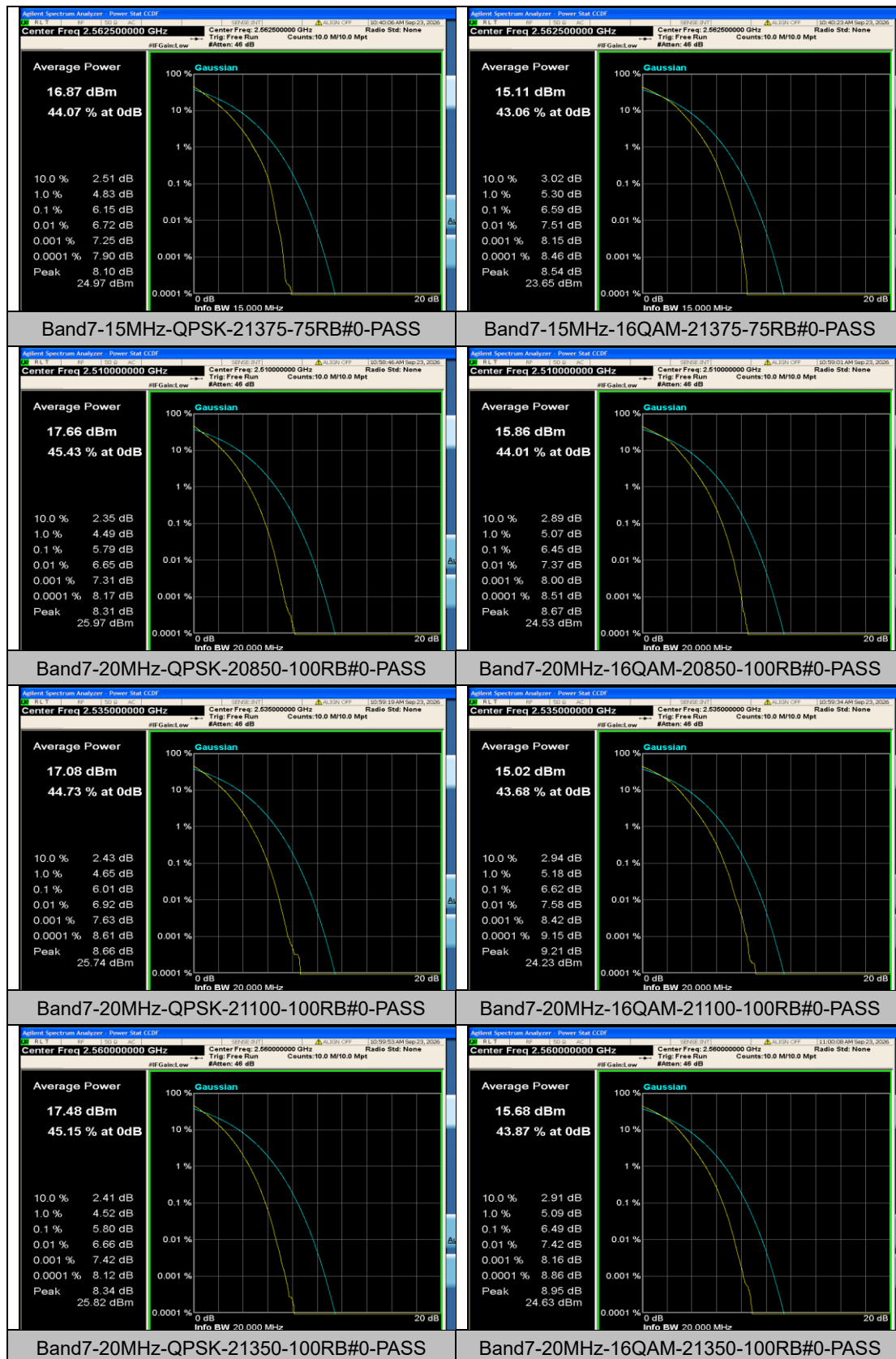
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	5.82	13	PASS
Band7	5MHz	16QAM	20775	25RB#0	6.36	13	PASS
Band7	5MHz	QPSK	21100	25RB#0	5.82	13	PASS
Band7	5MHz	16QAM	21100	25RB#0	6.53	13	PASS
Band7	5MHz	QPSK	21425	25RB#0	5.85	13	PASS
Band7	5MHz	16QAM	21425	25RB#0	6.48	13	PASS
Band7	10MHz	QPSK	20800	50RB#0	5.81	13	PASS
Band7	10MHz	16QAM	20800	50RB#0	6.43	13	PASS
Band7	10MHz	QPSK	21100	50RB#0	5.88	13	PASS
Band7	10MHz	16QAM	21100	50RB#0	6.62	13	PASS
Band7	10MHz	QPSK	21400	50RB#0	5.86	13	PASS
Band7	10MHz	16QAM	21400	50RB#0	6.58	13	PASS
Band7	15MHz	QPSK	20825	75RB#0	6.10	13	PASS
Band7	15MHz	16QAM	20825	75RB#0	6.46	13	PASS
Band7	15MHz	QPSK	21100	75RB#0	6.22	13	PASS
Band7	15MHz	16QAM	21100	75RB#0	6.64	13	PASS
Band7	15MHz	QPSK	21375	75RB#0	6.15	13	PASS
Band7	15MHz	16QAM	21375	75RB#0	6.59	13	PASS
Band7	20MHz	QPSK	20850	100RB#0	5.79	13	PASS
Band7	20MHz	16QAM	20850	100RB#0	6.45	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	6.01	13	PASS
Band7	20MHz	16QAM	21100	100RB#0	6.62	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	5.80	13	PASS
Band7	20MHz	16QAM	21350	100RB#0	6.49	13	PASS

Test Graphs





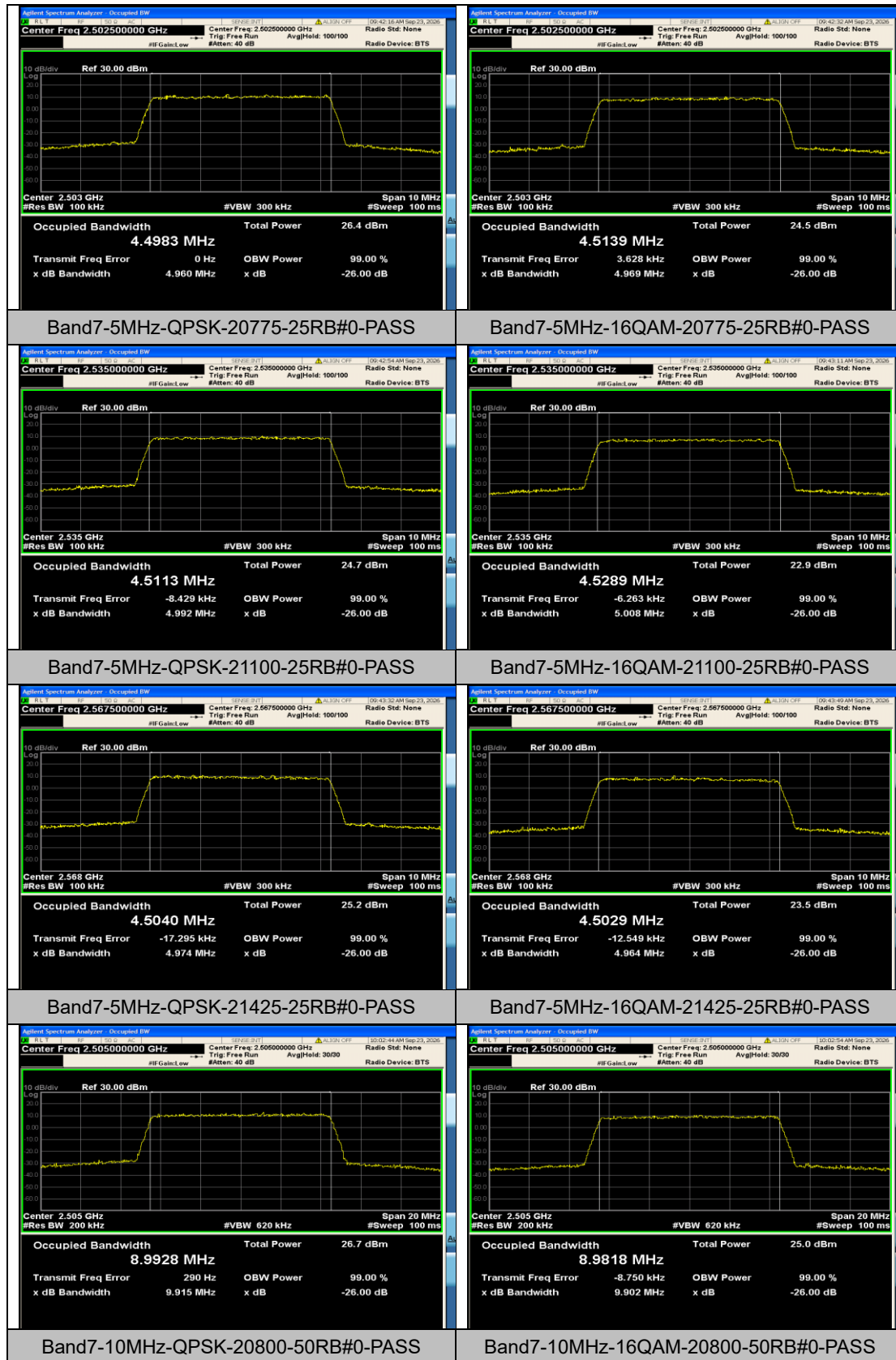


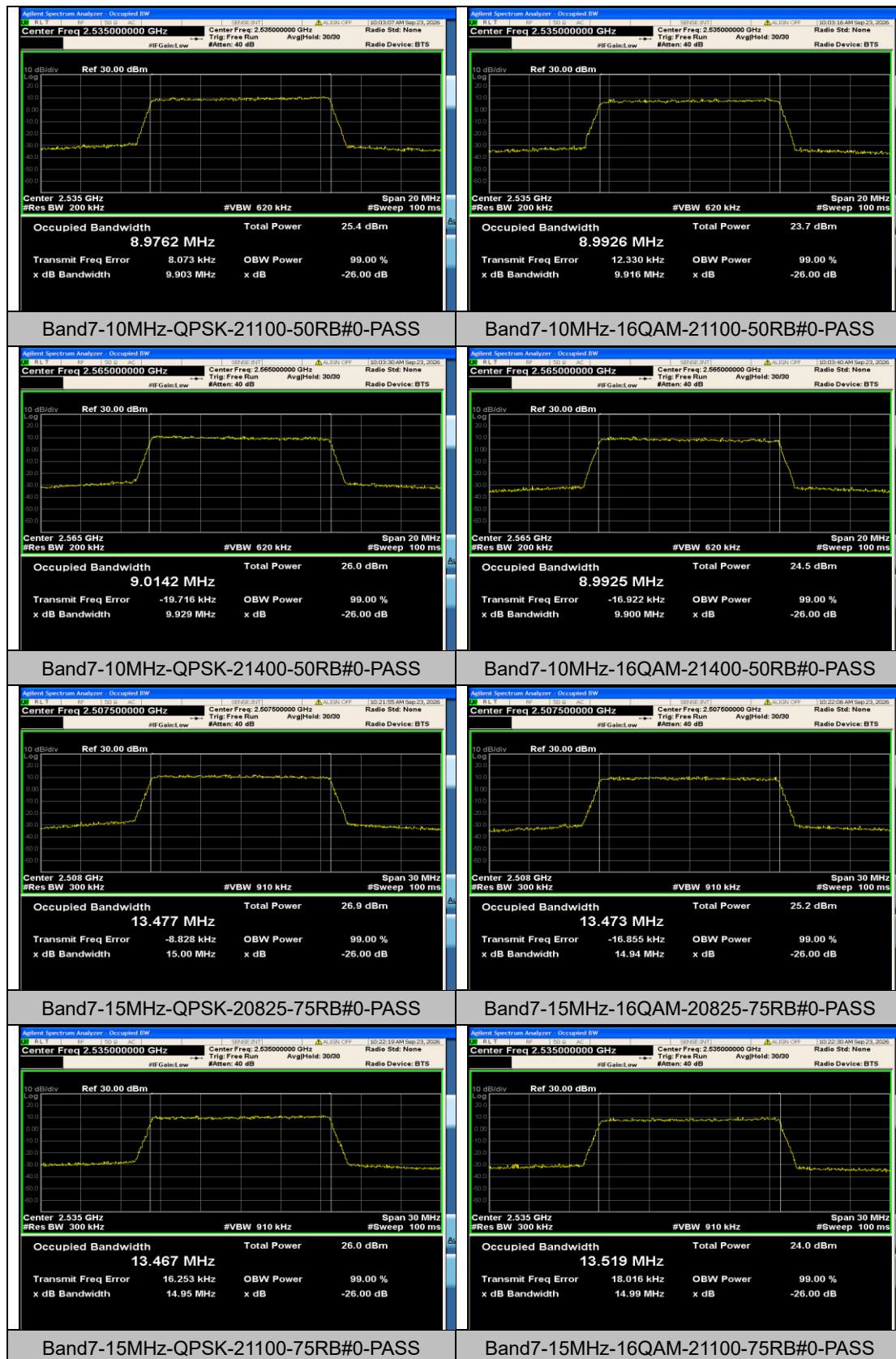
Appendix C: 26dB Bandwidth and Occupied Bandwidth

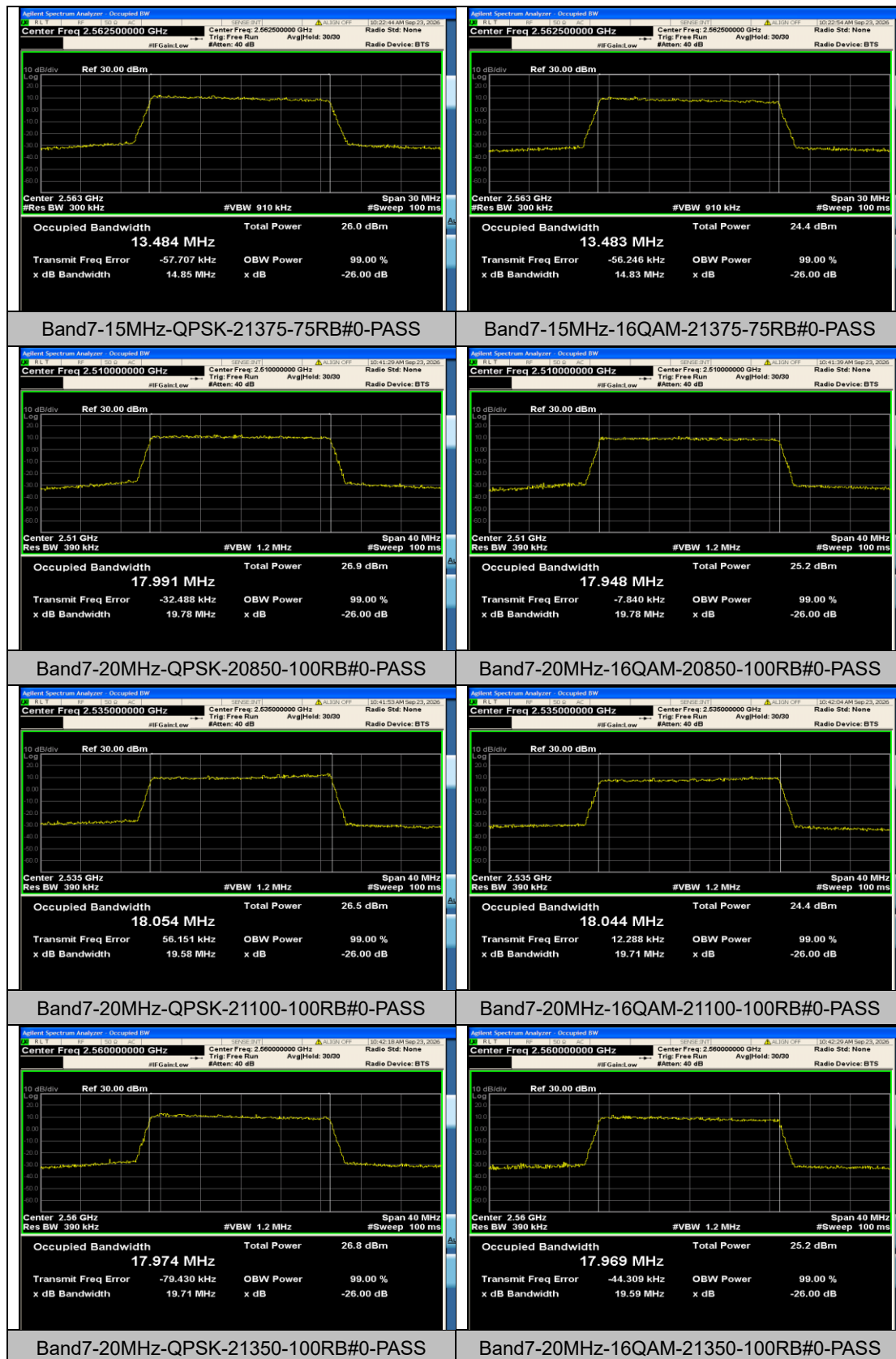
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.4983	4.960	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.5139	4.969	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.5113	4.992	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.5289	5.008	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.5040	4.974	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.5029	4.964	PASS
Band7	10MHz	QPSK	20800	50RB#0	8.9928	9.915	PASS
Band7	10MHz	16QAM	20800	50RB#0	8.9818	9.902	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.9762	9.903	PASS
Band7	10MHz	16QAM	21100	50RB#0	8.9926	9.916	PASS
Band7	10MHz	QPSK	21400	50RB#0	9.0142	9.929	PASS
Band7	10MHz	16QAM	21400	50RB#0	8.9925	9.900	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.477	15.00	PASS
Band7	15MHz	16QAM	20825	75RB#0	13.473	14.94	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.467	14.95	PASS
Band7	15MHz	16QAM	21100	75RB#0	13.519	14.99	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.484	14.85	PASS
Band7	15MHz	16QAM	21375	75RB#0	13.483	14.83	PASS
Band7	20MHz	QPSK	20850	100RB#0	17.991	19.78	PASS
Band7	20MHz	16QAM	20850	100RB#0	17.948	19.78	PASS
Band7	20MHz	QPSK	21100	100RB#0	18.054	19.58	PASS
Band7	20MHz	16QAM	21100	100RB#0	18.044	19.71	PASS
Band7	20MHz	QPSK	21350	100RB#0	17.974	19.71	PASS
Band7	20MHz	16QAM	21350	100RB#0	17.969	19.59	PASS

Test Graphs





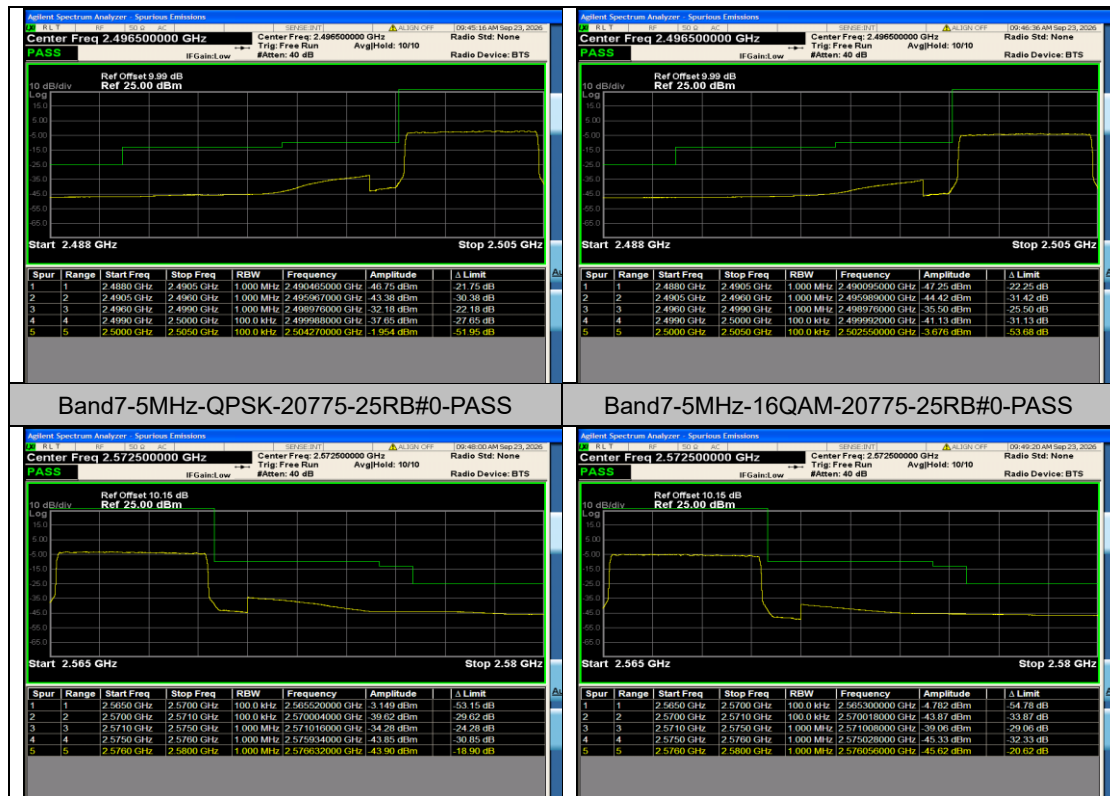


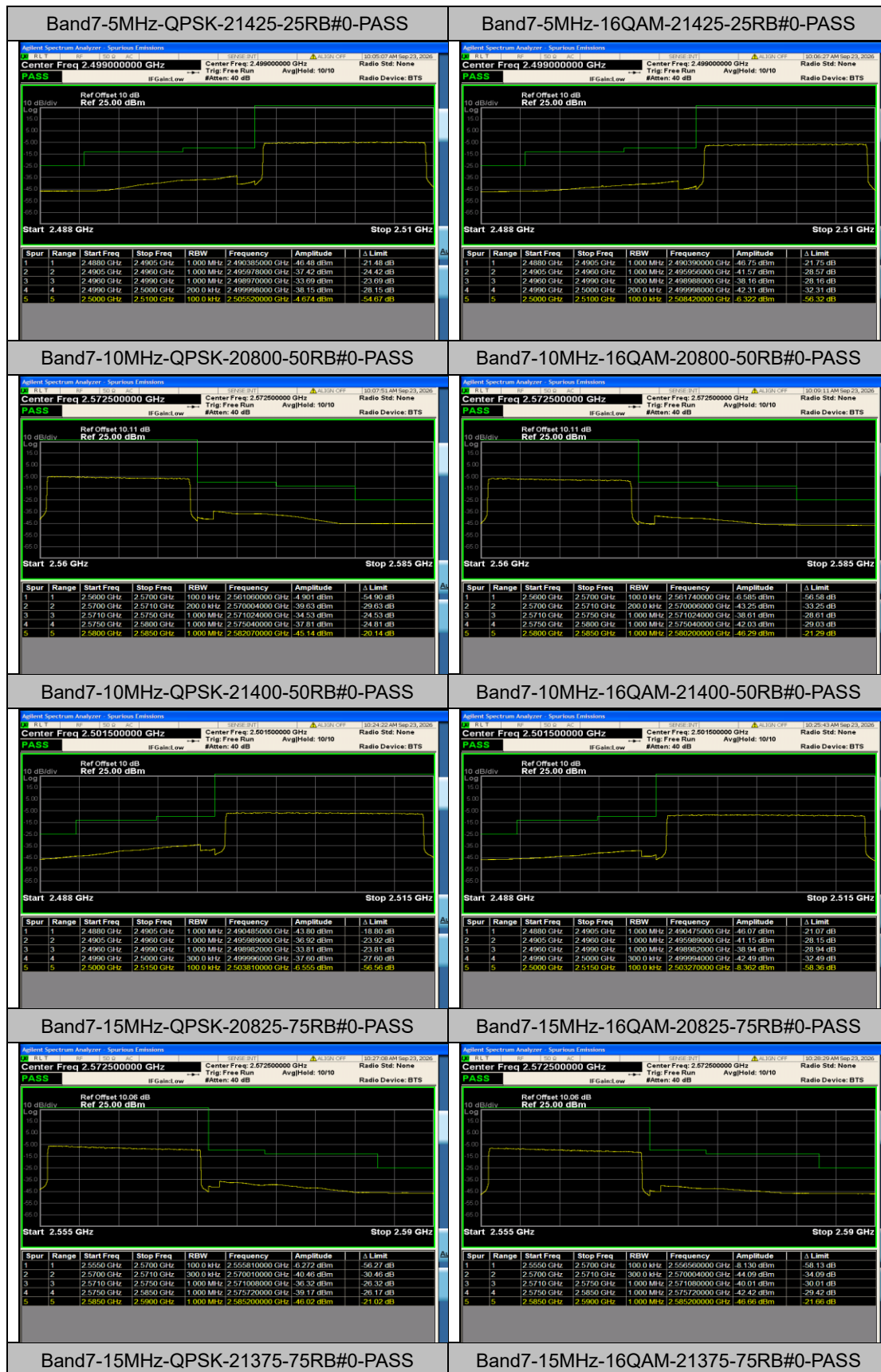
Appendix D: Band Edge

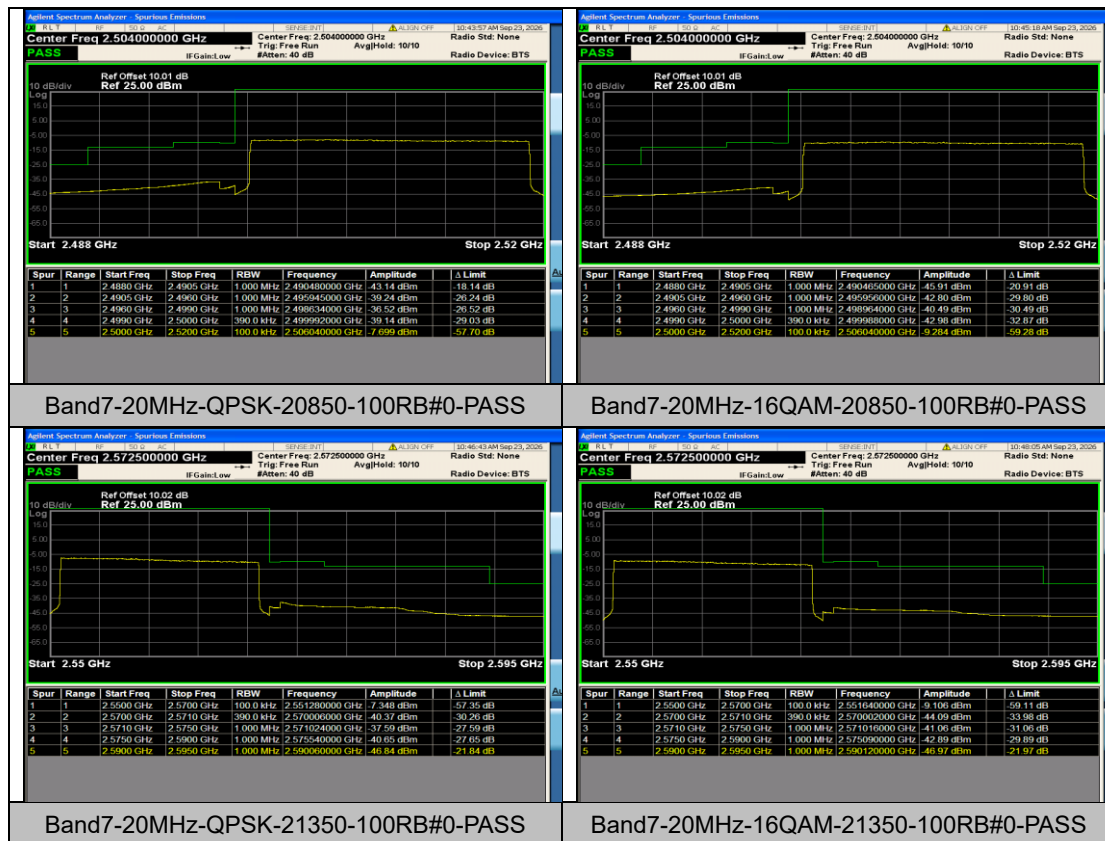
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	-46.75	PASS
Band7	5MHz	16QAM	20775	25RB#0	-47.25	PASS
Band7	5MHz	QPSK	21425	25RB#0	-43.90	PASS
Band7	5MHz	16QAM	21425	25RB#0	-45.62	PASS
Band7	10MHz	QPSK	20800	50RB#0	-46.48	PASS
Band7	10MHz	16QAM	20800	50RB#0	-46.75	PASS
Band7	10MHz	QPSK	21400	50RB#0	-45.14	PASS
Band7	10MHz	16QAM	21400	50RB#0	-46.29	PASS
Band7	15MHz	QPSK	20825	75RB#0	-43.80	PASS
Band7	15MHz	16QAM	20825	75RB#0	-46.07	PASS
Band7	15MHz	QPSK	21375	75RB#0	-46.02	PASS
Band7	15MHz	16QAM	21375	75RB#0	-46.66	PASS
Band7	20MHz	QPSK	20850	100RB#0	-43.14	PASS
Band7	20MHz	16QAM	20850	100RB#0	-45.91	PASS
Band7	20MHz	QPSK	21350	100RB#0	-46.84	PASS
Band7	20MHz	16QAM	21350	100RB#0	-46.97	PASS

Test Graphs







Appendix E: Conducted Spurious Emission

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	0.009~0.15	-70.25	PASS
Band7	5MHz	QPSK	20775	25RB#0	0.15~30	-60.22	PASS
Band7	5MHz	QPSK	20775	25RB#0	30~1000	-58.05	PASS
Band7	5MHz	QPSK	20775	25RB#0	1000~3000	-47.37	PASS
Band7	5MHz	QPSK	20775	25RB#0	3000~18000	-38.98	PASS
Band7	5MHz	QPSK	20775	25RB#0	18000~26000	-32.21	PASS
Band7	5MHz	16QAM	20775	25RB#0	0.009~0.15	-68.46	PASS
Band7	5MHz	16QAM	20775	25RB#0	0.15~30	-60.97	PASS
Band7	5MHz	16QAM	20775	25RB#0	30~1000	-57.93	PASS
Band7	5MHz	16QAM	20775	25RB#0	1000~3000	-47.88	PASS
Band7	5MHz	16QAM	20775	25RB#0	3000~18000	-38.90	PASS
Band7	5MHz	16QAM	20775	25RB#0	18000~26000	-32.19	PASS
Band7	5MHz	QPSK	21100	25RB#0	0.009~0.15	-69.80	PASS
Band7	5MHz	QPSK	21100	25RB#0	0.15~30	-61.25	PASS
Band7	5MHz	QPSK	21100	25RB#0	30~1000	-58.11	PASS
Band7	5MHz	QPSK	21100	25RB#0	1000~3000	-48.20	PASS
Band7	5MHz	QPSK	21100	25RB#0	3000~18000	-38.73	PASS
Band7	5MHz	QPSK	21100	25RB#0	18000~26000	-32.69	PASS
Band7	5MHz	16QAM	21100	25RB#0	0.009~0.15	-68.61	PASS
Band7	5MHz	16QAM	21100	25RB#0	0.15~30	-62.61	PASS
Band7	5MHz	16QAM	21100	25RB#0	30~1000	-57.38	PASS
Band7	5MHz	16QAM	21100	25RB#0	1000~3000	-45.37	PASS
Band7	5MHz	16QAM	21100	25RB#0	3000~18000	-39.03	PASS
Band7	5MHz	16QAM	21100	25RB#0	18000~26000	-32.61	PASS
Band7	5MHz	QPSK	21425	25RB#0	0.009~0.15	-69.29	PASS
Band7	5MHz	QPSK	21425	25RB#0	0.15~30	-60.59	PASS
Band7	5MHz	QPSK	21425	25RB#0	30~1000	-57.62	PASS
Band7	5MHz	QPSK	21425	25RB#0	1000~3000	-42.41	PASS
Band7	5MHz	QPSK	21425	25RB#0	3000~18000	-38.75	PASS
Band7	5MHz	QPSK	21425	25RB#0	18000~26000	-32.47	PASS
Band7	5MHz	16QAM	21425	25RB#0	0.009~0.15	-69.36	PASS
Band7	5MHz	16QAM	21425	25RB#0	0.15~30	-61.38	PASS
Band7	5MHz	16QAM	21425	25RB#0	30~1000	-58.33	PASS
Band7	5MHz	16QAM	21425	25RB#0	1000~3000	-43.91	PASS
Band7	5MHz	16QAM	21425	25RB#0	3000~18000	-38.75	PASS
Band7	5MHz	16QAM	21425	25RB#0	18000~26000	-32.35	PASS

Band7	10MHz	QPSK	20800	50RB#0	0.009~0.15	-67.45	PASS
Band7	10MHz	QPSK	20800	50RB#0	0.15~30	-62.00	PASS
Band7	10MHz	QPSK	20800	50RB#0	30~1000	-57.68	PASS
Band7	10MHz	QPSK	20800	50RB#0	1000~3000	-47.70	PASS
Band7	10MHz	QPSK	20800	50RB#0	3000~18000	-38.46	PASS
Band7	10MHz	QPSK	20800	50RB#0	18000~26000	-32.38	PASS
Band7	10MHz	16QAM	20800	50RB#0	0.009~0.15	-68.80	PASS
Band7	10MHz	16QAM	20800	50RB#0	0.15~30	-61.89	PASS
Band7	10MHz	16QAM	20800	50RB#0	30~1000	-57.85	PASS
Band7	10MHz	16QAM	20800	50RB#0	1000~3000	-48.37	PASS
Band7	10MHz	16QAM	20800	50RB#0	3000~18000	-38.66	PASS
Band7	10MHz	16QAM	20800	50RB#0	18000~26000	-32.36	PASS
Band7	10MHz	QPSK	21100	50RB#0	0.009~0.15	-69.70	PASS
Band7	10MHz	QPSK	21100	50RB#0	0.15~30	-62.98	PASS
Band7	10MHz	QPSK	21100	50RB#0	30~1000	-58.33	PASS
Band7	10MHz	QPSK	21100	50RB#0	1000~3000	-48.22	PASS
Band7	10MHz	QPSK	21100	50RB#0	3000~18000	-38.81	PASS
Band7	10MHz	QPSK	21100	50RB#0	18000~26000	-32.31	PASS
Band7	10MHz	16QAM	21100	50RB#0	0.009~0.15	-69.60	PASS
Band7	10MHz	16QAM	21100	50RB#0	0.15~30	-61.92	PASS
Band7	10MHz	16QAM	21100	50RB#0	30~1000	-57.83	PASS
Band7	10MHz	16QAM	21100	50RB#0	1000~3000	-42.39	PASS
Band7	10MHz	16QAM	21100	50RB#0	3000~18000	-38.74	PASS
Band7	10MHz	16QAM	21100	50RB#0	18000~26000	-32.47	PASS
Band7	10MHz	QPSK	21400	50RB#0	0.009~0.15	-67.99	PASS
Band7	10MHz	QPSK	21400	50RB#0	0.15~30	-61.71	PASS
Band7	10MHz	QPSK	21400	50RB#0	30~1000	-57.56	PASS
Band7	10MHz	QPSK	21400	50RB#0	1000~3000	-42.83	PASS
Band7	10MHz	QPSK	21400	50RB#0	3000~18000	-38.91	PASS
Band7	10MHz	QPSK	21400	50RB#0	18000~26000	-32.67	PASS
Band7	10MHz	16QAM	21400	50RB#0	0.009~0.15	-67.37	PASS
Band7	10MHz	16QAM	21400	50RB#0	0.15~30	-60.75	PASS
Band7	10MHz	16QAM	21400	50RB#0	30~1000	-57.88	PASS
Band7	10MHz	16QAM	21400	50RB#0	1000~3000	-45.19	PASS
Band7	10MHz	16QAM	21400	50RB#0	3000~18000	-39.05	PASS
Band7	10MHz	16QAM	21400	50RB#0	18000~26000	-32.42	PASS
Band7	15MHz	QPSK	20825	75RB#0	0.009~0.15	-69.75	PASS
Band7	15MHz	QPSK	20825	75RB#0	0.15~30	-58.33	PASS
Band7	15MHz	QPSK	20825	75RB#0	30~1000	-57.85	PASS
Band7	15MHz	QPSK	20825	75RB#0	1000~3000	-47.16	PASS
Band7	15MHz	QPSK	20825	75RB#0	3000~18000	-38.17	PASS
Band7	15MHz	QPSK	20825	75RB#0	18000~26000	-32.06	PASS
Band7	15MHz	16QAM	20825	75RB#0	0.009~0.15	-70.08	PASS

Band7	15MHz	16QAM	20825	75RB#0	0.15~30	-60.39	PASS
Band7	15MHz	16QAM	20825	75RB#0	30~1000	-58.05	PASS
Band7	15MHz	16QAM	20825	75RB#0	1000~3000	-48.54	PASS
Band7	15MHz	16QAM	20825	75RB#0	3000~18000	-39.02	PASS
Band7	15MHz	16QAM	20825	75RB#0	18000~26000	-32.15	PASS
Band7	15MHz	QPSK	21100	75RB#0	0.009~0.15	-69.95	PASS
Band7	15MHz	QPSK	21100	75RB#0	0.15~30	-61.41	PASS
Band7	15MHz	QPSK	21100	75RB#0	30~1000	-57.79	PASS
Band7	15MHz	QPSK	21100	75RB#0	1000~3000	-44.95	PASS
Band7	15MHz	QPSK	21100	75RB#0	3000~18000	-38.91	PASS
Band7	15MHz	QPSK	21100	75RB#0	18000~26000	-32.45	PASS
Band7	15MHz	16QAM	21100	75RB#0	0.009~0.15	-69.76	PASS
Band7	15MHz	16QAM	21100	75RB#0	0.15~30	-61.59	PASS
Band7	15MHz	16QAM	21100	75RB#0	30~1000	-58.03	PASS
Band7	15MHz	16QAM	21100	75RB#0	1000~3000	-48.36	PASS
Band7	15MHz	16QAM	21100	75RB#0	3000~18000	-38.75	PASS
Band7	15MHz	16QAM	21100	75RB#0	18000~26000	-32.52	PASS
Band7	15MHz	QPSK	21375	75RB#0	0.009~0.15	-67.19	PASS
Band7	15MHz	QPSK	21375	75RB#0	0.15~30	-62.94	PASS
Band7	15MHz	QPSK	21375	75RB#0	1000~3000	-46.64	PASS
Band7	15MHz	QPSK	21375	75RB#0	3000~18000	-38.96	PASS
Band7	15MHz	QPSK	21375	75RB#0	18000~26000	-32.25	PASS
Band7	15MHz	16QAM	21375	75RB#0	0.009~0.15	-67.51	PASS
Band7	15MHz	16QAM	21375	75RB#0	0.15~30	-61.02	PASS
Band7	15MHz	16QAM	21375	75RB#0	30~1000	-57.96	PASS
Band7	15MHz	16QAM	21375	75RB#0	1000~3000	-47.86	PASS
Band7	15MHz	16QAM	21375	75RB#0	3000~18000	-38.65	PASS
Band7	15MHz	16QAM	21375	75RB#0	18000~26000	-32.61	PASS
Band7	20MHz	QPSK	20850	100RB#0	0.009~0.15	-68.59	PASS
Band7	20MHz	QPSK	20850	100RB#0	0.15~30	-60.88	PASS
Band7	20MHz	QPSK	20850	100RB#0	30~1000	-58.07	PASS
Band7	20MHz	QPSK	20850	100RB#0	1000~3000	-48.05	PASS
Band7	20MHz	QPSK	20850	100RB#0	3000~18000	-38.71	PASS
Band7	20MHz	QPSK	20850	100RB#0	18000~26000	-32.54	PASS
Band7	20MHz	16QAM	20850	100RB#0	0.009~0.15	-68.16	PASS
Band7	20MHz	16QAM	20850	100RB#0	0.15~30	-61.73	PASS
Band7	20MHz	16QAM	20850	100RB#0	30~1000	-57.90	PASS
Band7	20MHz	16QAM	20850	100RB#0	1000~3000	-48.17	PASS
Band7	20MHz	16QAM	20850	100RB#0	3000~18000	-39.00	PASS
Band7	20MHz	16QAM	20850	100RB#0	18000~26000	-32.22	PASS
Band7	20MHz	QPSK	21100	100RB#0	0.009~0.15	-70.13	PASS
Band7	20MHz	QPSK	21100	100RB#0	0.15~30	-61.20	PASS
Band7	20MHz	QPSK	21100	100RB#0	30~1000	-57.93	PASS

Band7	20MHz	QPSK	21100	100RB#0	1000~3000	-48.27	PASS
Band7	20MHz	QPSK	21100	100RB#0	3000~18000	-38.86	PASS
Band7	20MHz	QPSK	21100	100RB#0	18000~26000	-32.30	PASS
Band7	20MHz	16QAM	21100	100RB#0	0.009~0.15	-70.19	PASS
Band7	20MHz	16QAM	21100	100RB#0	0.15~30	-61.08	PASS
Band7	20MHz	16QAM	21100	100RB#0	30~1000	-58.18	PASS
Band7	20MHz	16QAM	21100	100RB#0	1000~3000	-48.20	PASS
Band7	20MHz	16QAM	21100	100RB#0	3000~18000	-38.69	PASS
Band7	20MHz	16QAM	21100	100RB#0	18000~26000	-32.54	PASS
Band7	20MHz	QPSK	21350	100RB#0	0.009~0.15	-69.06	PASS
Band7	20MHz	QPSK	21350	100RB#0	0.15~30	-63.41	PASS
Band7	20MHz	QPSK	21350	100RB#0	30~1000	-57.87	PASS
Band7	20MHz	QPSK	21350	100RB#0	1000~3000	-48.24	PASS
Band7	20MHz	QPSK	21350	100RB#0	3000~18000	-38.50	PASS
Band7	20MHz	QPSK	21350	100RB#0	18000~26000	-32.33	PASS
Band7	20MHz	16QAM	21350	100RB#0	0.009~0.15	-69.24	PASS
Band7	20MHz	16QAM	21350	100RB#0	0.15~30	-61.42	PASS
Band7	20MHz	16QAM	21350	100RB#0	30~1000	-58.21	PASS
Band7	15MHz	QPSK	21375	75RB#0	30~1000	-57.98	PASS
Band7	20MHz	16QAM	21350	100RB#0	1000~3000	-47.96	PASS
Band7	20MHz	16QAM	21350	100RB#0	3000~18000	-38.92	PASS
Band7	20MHz	16QAM	21350	100RB#0	18000~26000	-32.34	PASS

Test Graphs

