

FCC Appendix RF Test Data for LTE Band 25

FCC ID : 2AU4T-TH11

Company : Shanghai TUGE Data Technologies Co., Ltd.

EUT : MobileHub

Model Number : TH11

Report No. : CTA26071403109

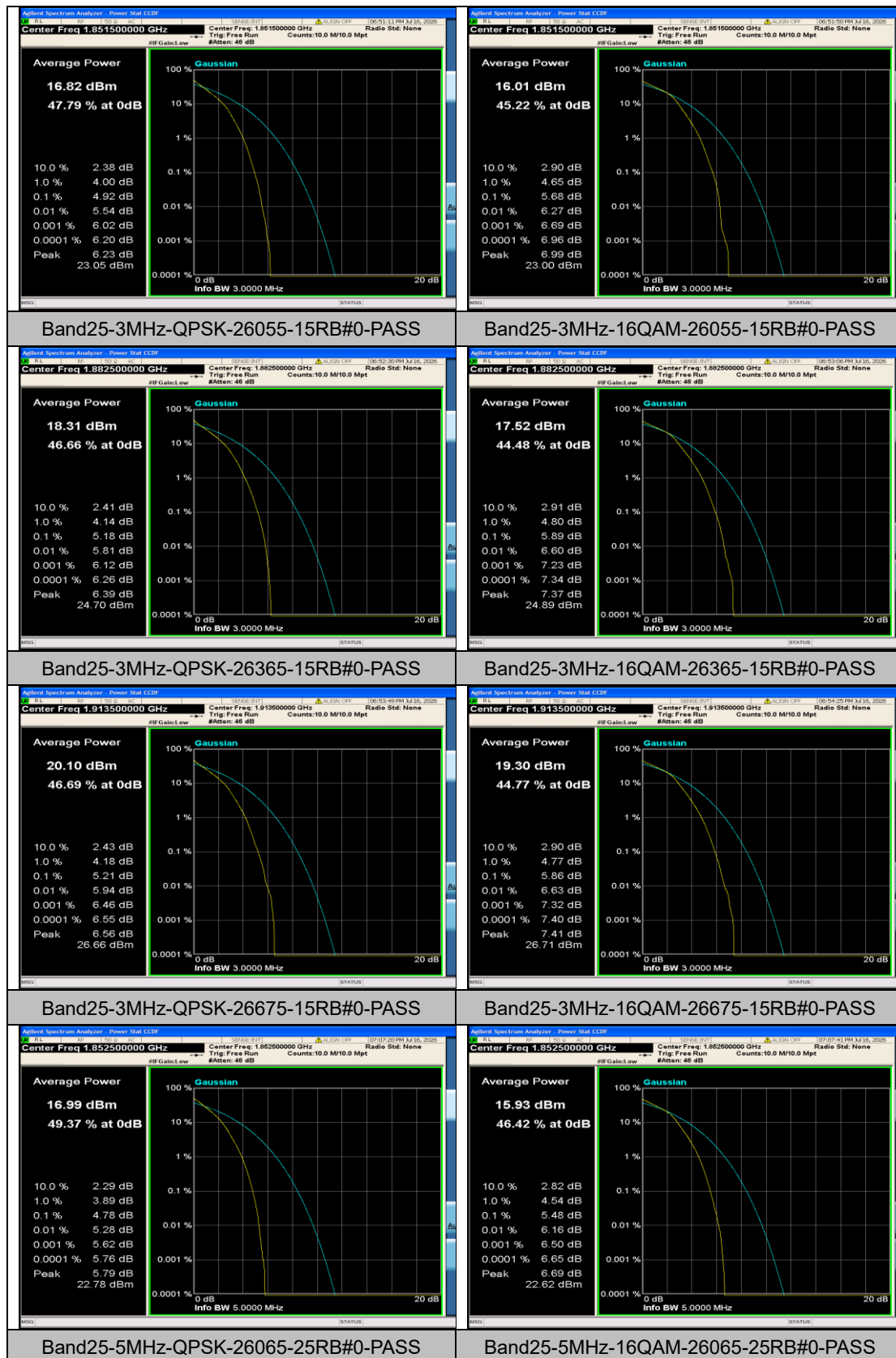
Reviewed By : Eric Wang

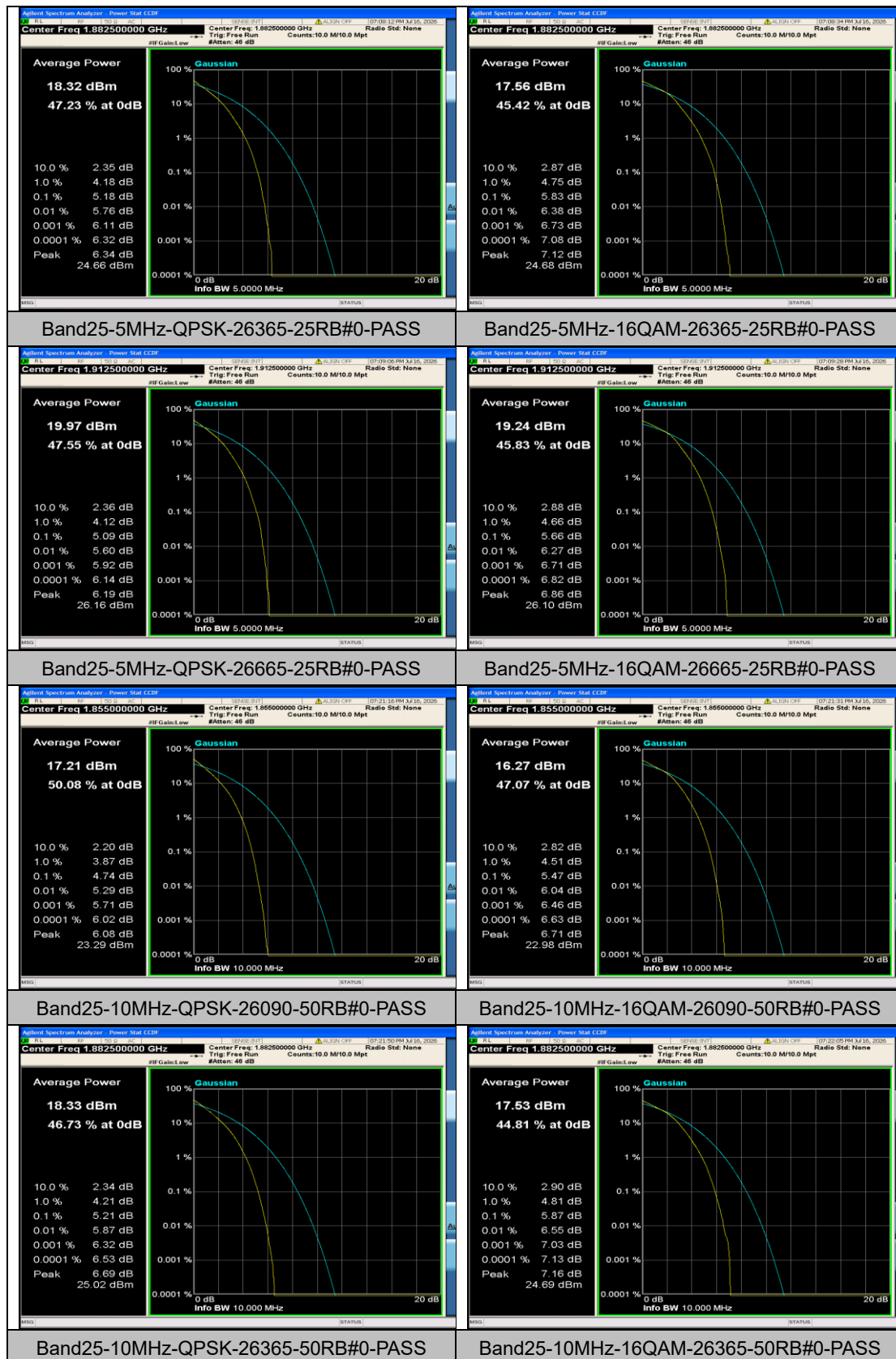
Appendix B: Peak-to-Average Ratio(CCDF)

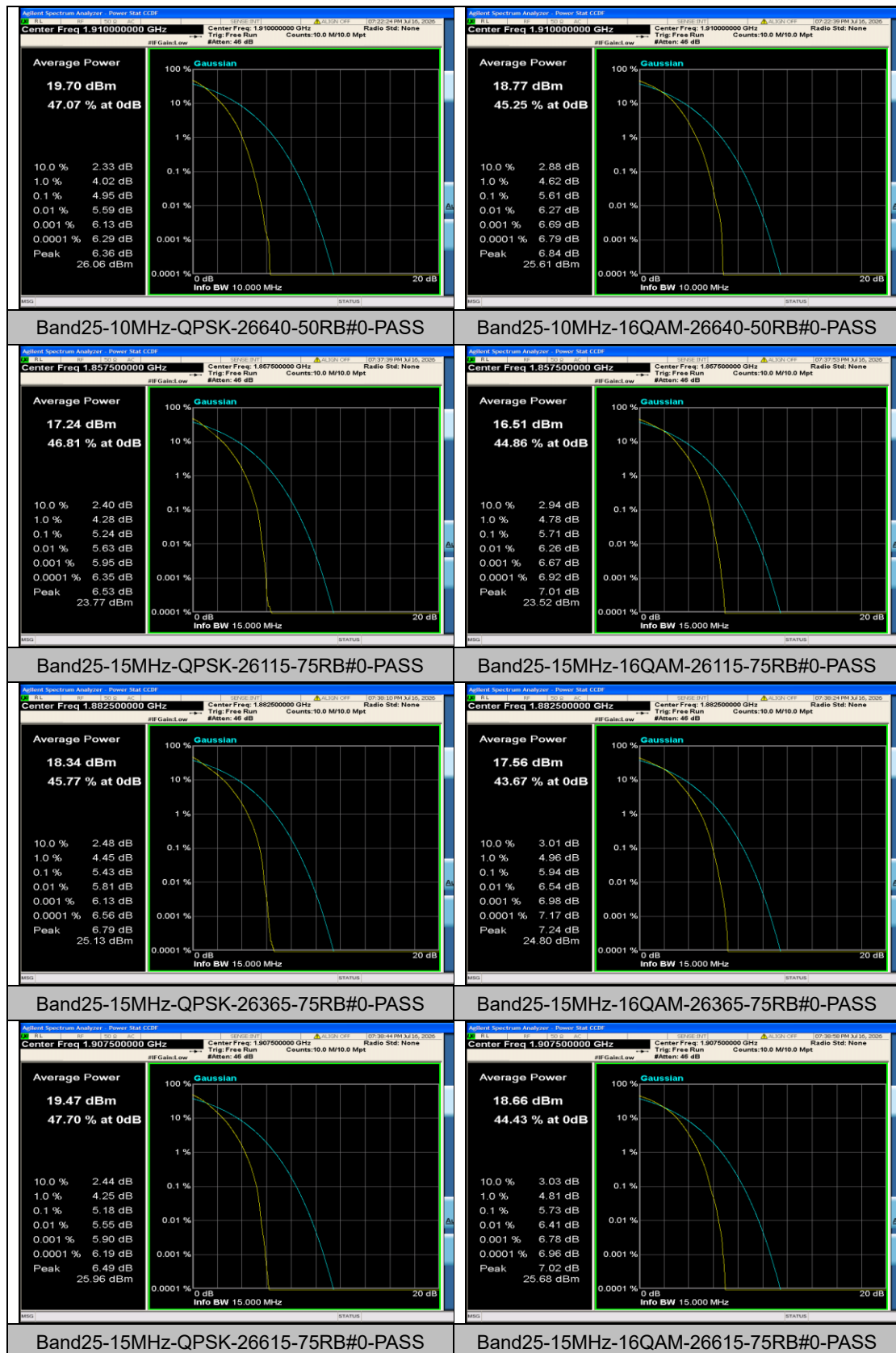
Test Result

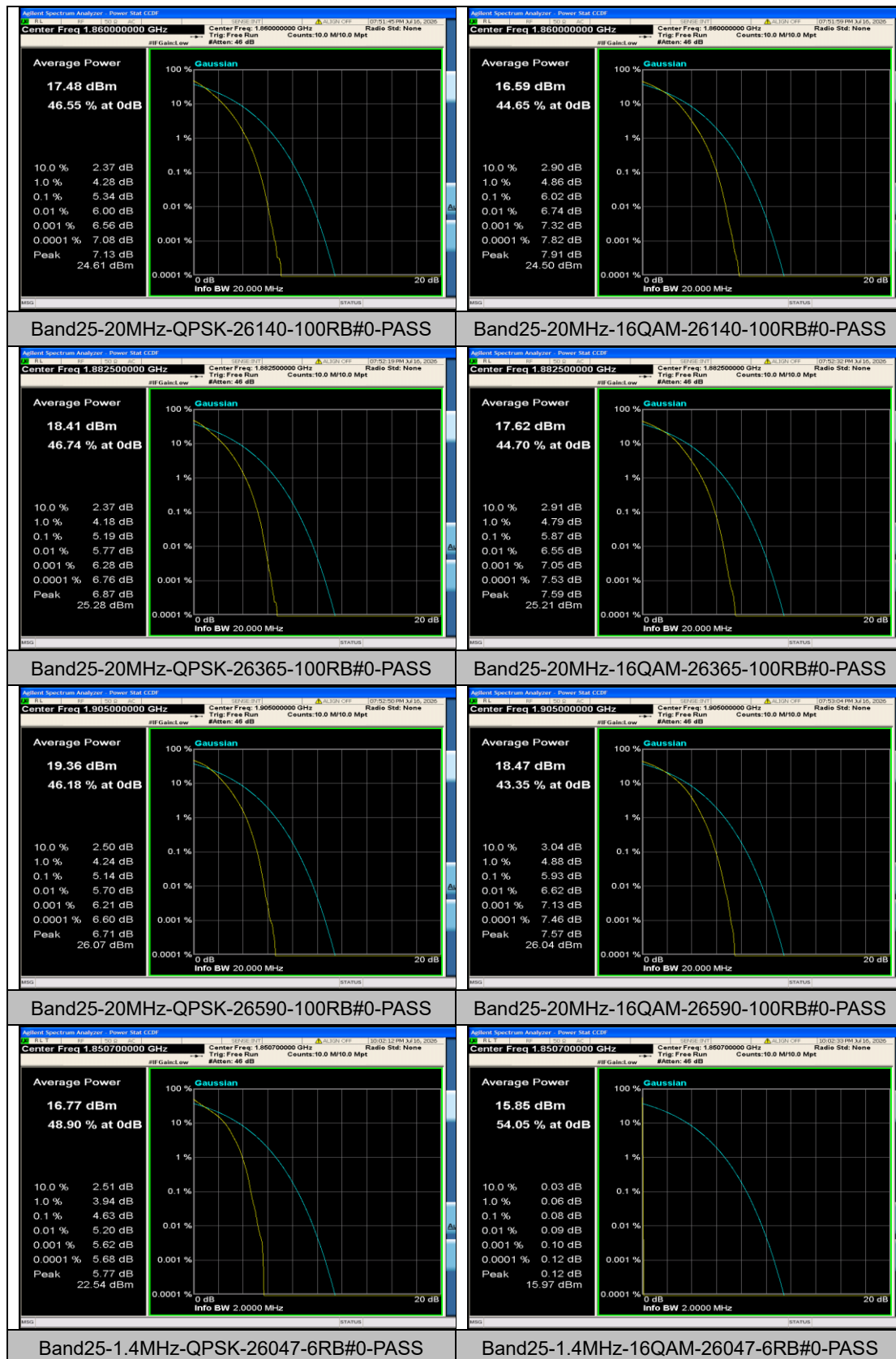
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band25	3MHz	QPSK	26055	15RB#0	4.92	13	PASS
Band25	3MHz	16QAM	26055	15RB#0	5.68	13	PASS
Band25	3MHz	QPSK	26365	15RB#0	5.18	13	PASS
Band25	3MHz	16QAM	26365	15RB#0	5.89	13	PASS
Band25	3MHz	QPSK	26675	15RB#0	5.21	13	PASS
Band25	3MHz	16QAM	26675	15RB#0	5.86	13	PASS
Band25	5MHz	QPSK	26065	25RB#0	4.78	13	PASS
Band25	5MHz	16QAM	26065	25RB#0	5.48	13	PASS
Band25	5MHz	QPSK	26365	25RB#0	5.18	13	PASS
Band25	5MHz	16QAM	26365	25RB#0	5.83	13	PASS
Band25	5MHz	QPSK	26665	25RB#0	5.09	13	PASS
Band25	5MHz	16QAM	26665	25RB#0	5.66	13	PASS
Band25	10MHz	QPSK	26090	50RB#0	4.74	13	PASS
Band25	10MHz	16QAM	26090	50RB#0	5.47	13	PASS
Band25	10MHz	QPSK	26365	50RB#0	5.21	13	PASS
Band25	10MHz	16QAM	26365	50RB#0	5.87	13	PASS
Band25	10MHz	QPSK	26640	50RB#0	4.95	13	PASS
Band25	10MHz	16QAM	26640	50RB#0	5.61	13	PASS
Band25	15MHz	QPSK	26115	75RB#0	5.24	13	PASS
Band25	15MHz	16QAM	26115	75RB#0	5.71	13	PASS
Band25	15MHz	QPSK	26365	75RB#0	5.43	13	PASS
Band25	15MHz	16QAM	26365	75RB#0	5.94	13	PASS
Band25	15MHz	QPSK	26615	75RB#0	5.18	13	PASS
Band25	15MHz	16QAM	26615	75RB#0	5.73	13	PASS
Band25	20MHz	QPSK	26140	100RB#0	5.34	13	PASS
Band25	20MHz	16QAM	26140	100RB#0	6.02	13	PASS
Band25	20MHz	QPSK	26365	100RB#0	5.19	13	PASS
Band25	20MHz	16QAM	26365	100RB#0	5.87	13	PASS
Band25	20MHz	QPSK	26590	100RB#0	5.14	13	PASS
Band25	20MHz	16QAM	26590	100RB#0	5.93	13	PASS
Band25	1.4MHz	QPSK	26047	6RB#0	4.63	13	PASS
Band25	1.4MHz	16QAM	26047	6RB#0	0.08	13	PASS
Band25	1.4MHz	QPSK	26365	6RB#0	8.41	13	PASS
Band25	1.4MHz	16QAM	26365	6RB#0	5.60	13	PASS
Band25	1.4MHz	QPSK	26683	6RB#0	5.12	13	PASS
Band25	1.4MHz	16QAM	26683	6RB#0	0.07	13	PASS

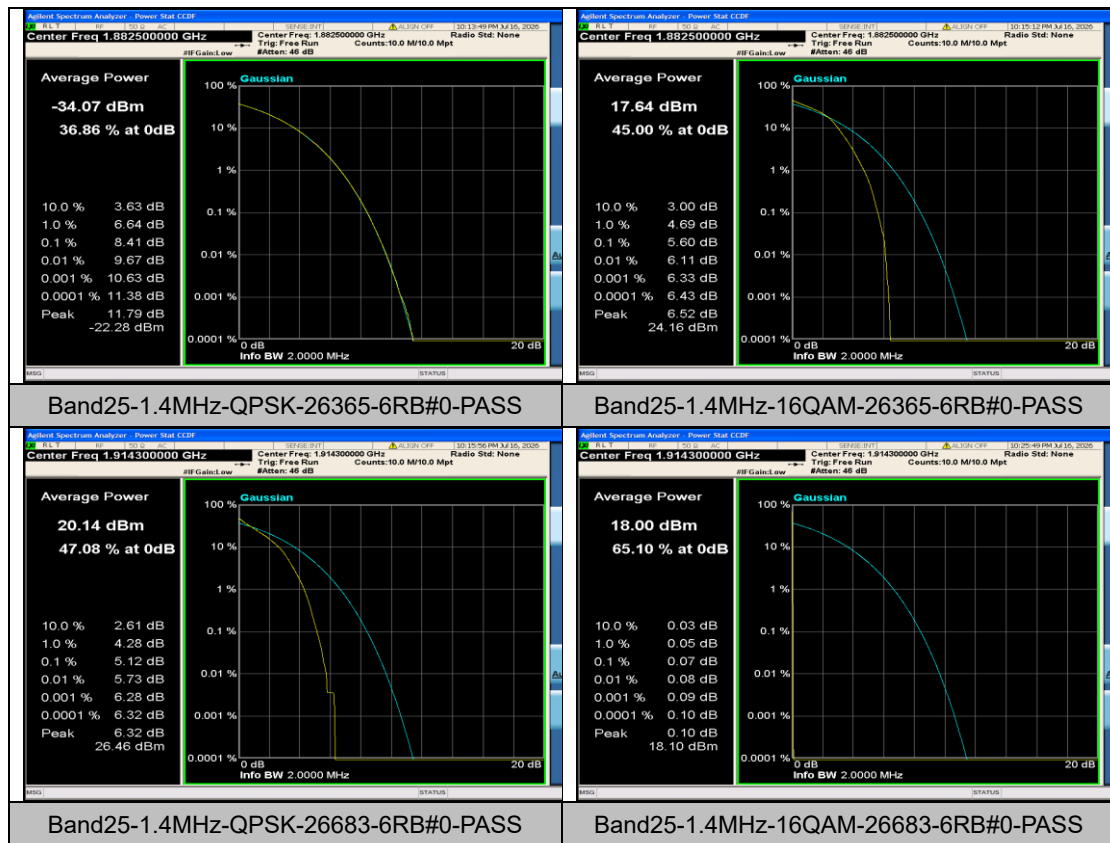
Test Graphs









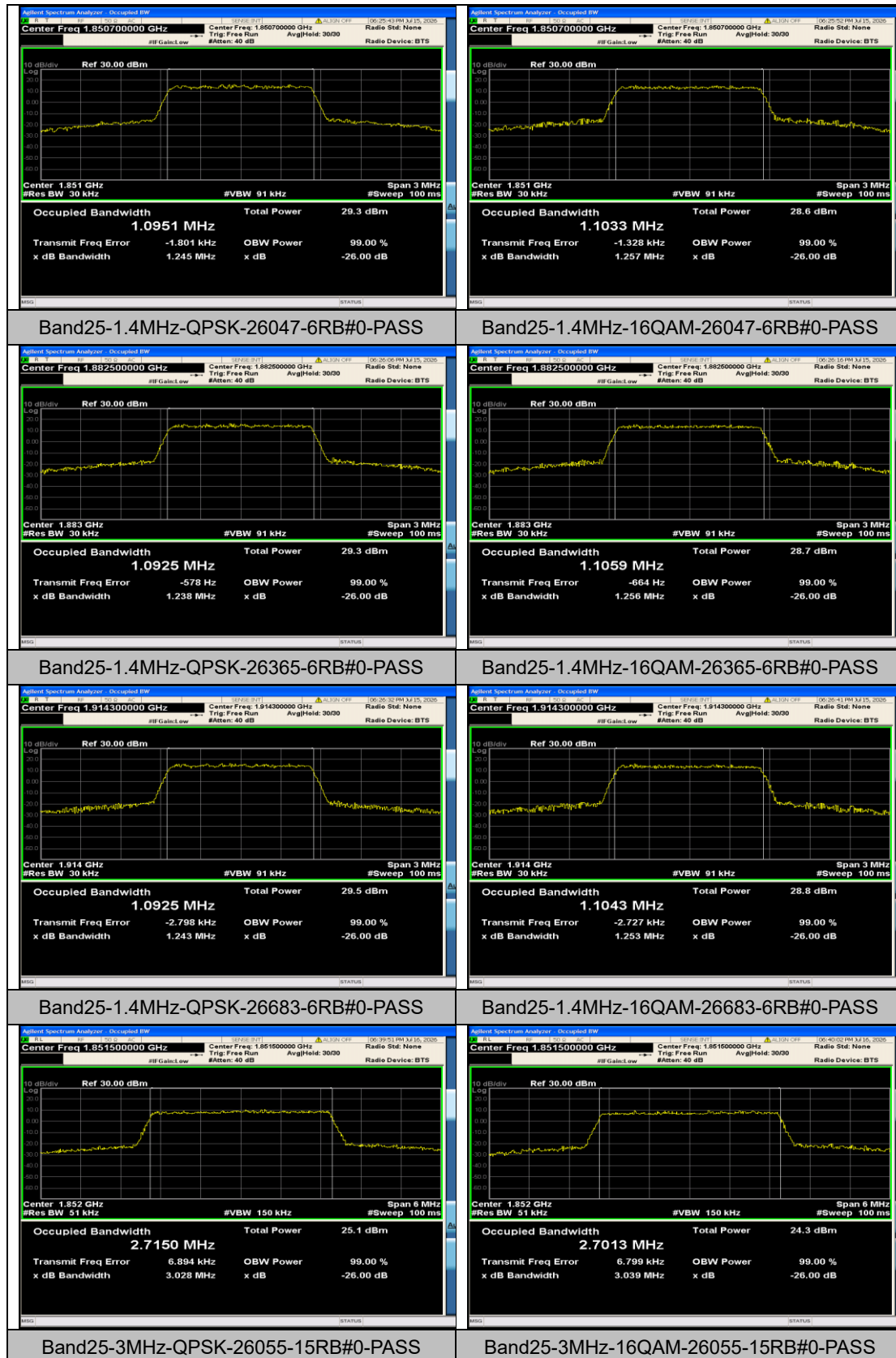


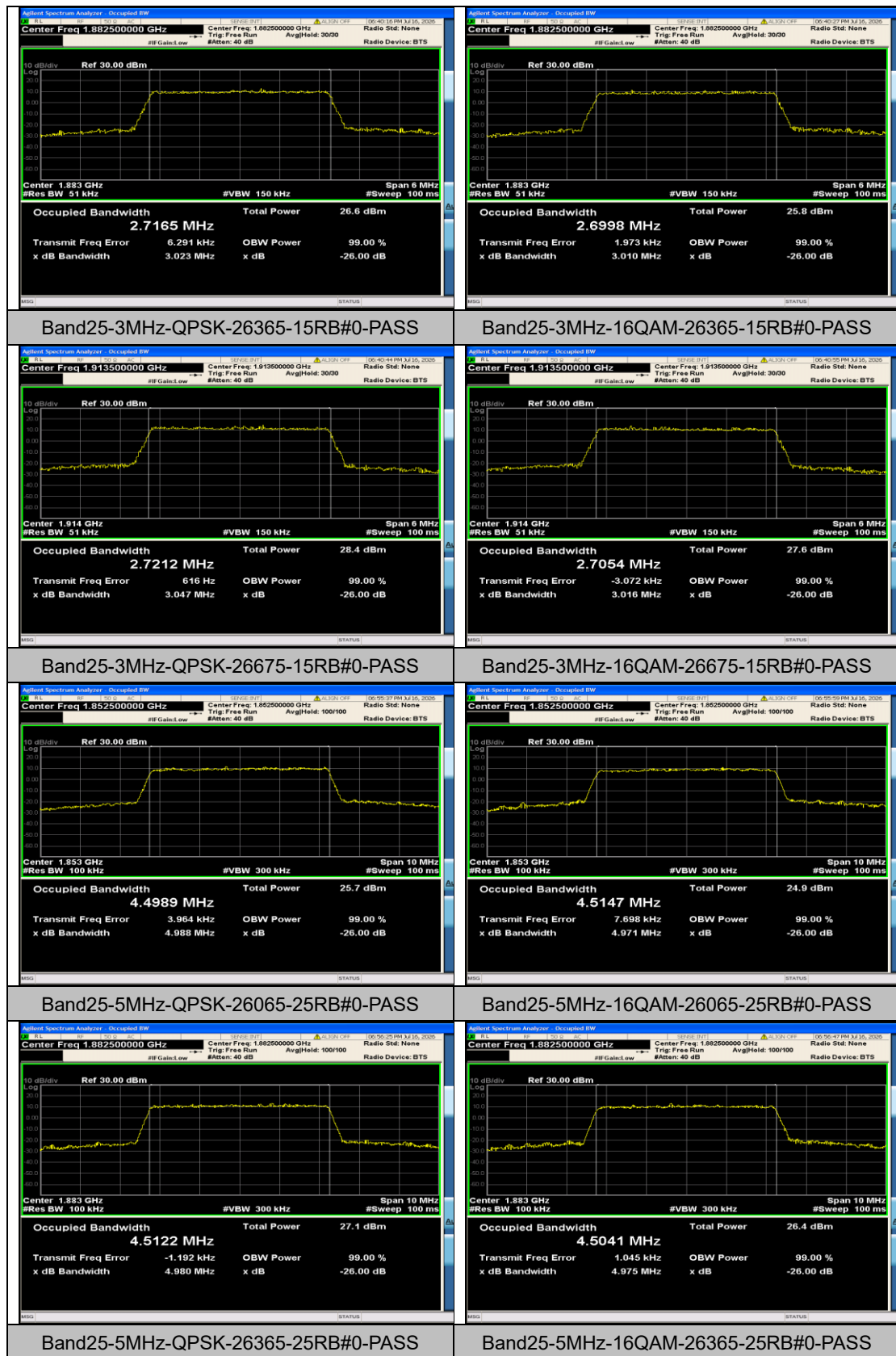
Appendix C: 26dB Bandwidth and Occupied Bandwidth

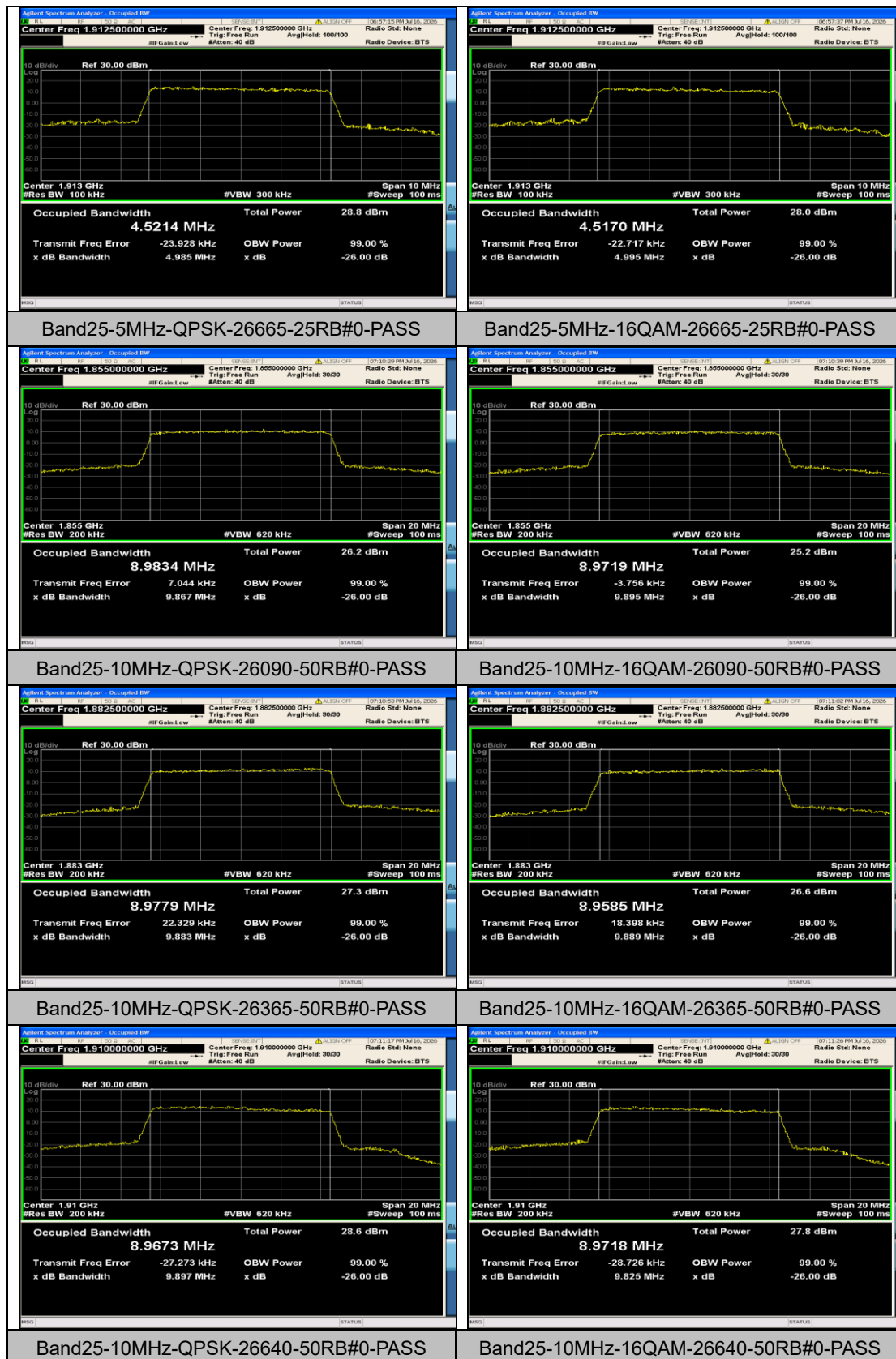
Test Result

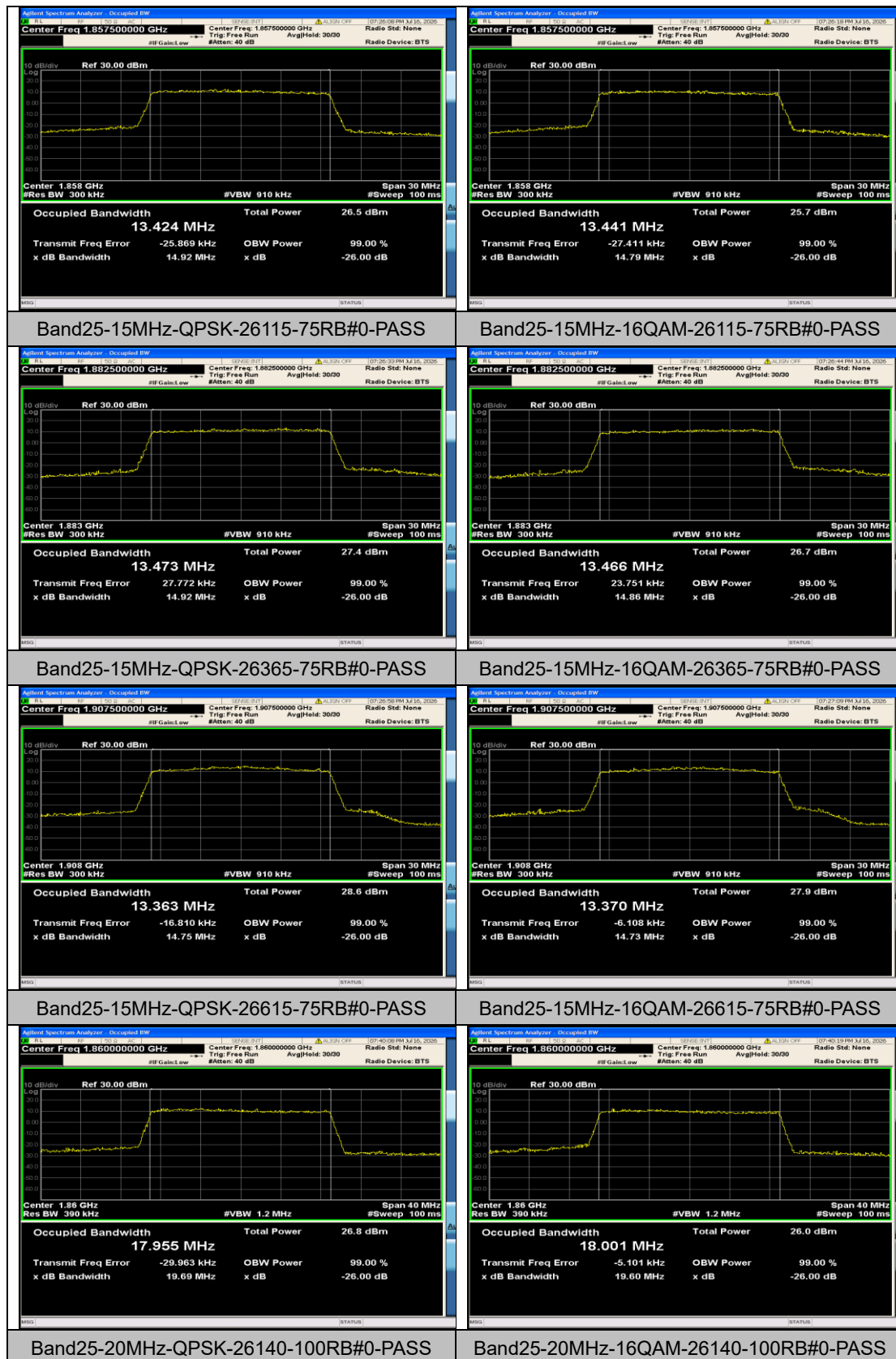
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band25	1.4MHz	QPSK	26047	6RB#0	1.0951	1.245	PASS
Band25	1.4MHz	16QAM	26047	6RB#0	1.1033	1.257	PASS
Band25	1.4MHz	QPSK	26365	6RB#0	1.0925	1.238	PASS
Band25	1.4MHz	16QAM	26365	6RB#0	1.1059	1.256	PASS
Band25	1.4MHz	QPSK	26683	6RB#0	1.0925	1.243	PASS
Band25	1.4MHz	16QAM	26683	6RB#0	1.1043	1.253	PASS
Band25	3MHz	QPSK	26055	15RB#0	2.7150	3.028	PASS
Band25	3MHz	16QAM	26055	15RB#0	2.7013	3.039	PASS
Band25	3MHz	QPSK	26365	15RB#0	2.7165	3.023	PASS
Band25	3MHz	16QAM	26365	15RB#0	2.6998	3.010	PASS
Band25	3MHz	QPSK	26675	15RB#0	2.7212	3.047	PASS
Band25	3MHz	16QAM	26675	15RB#0	2.7054	3.016	PASS
Band25	5MHz	QPSK	26065	25RB#0	4.4989	4.988	PASS
Band25	5MHz	16QAM	26065	25RB#0	4.5147	4.971	PASS
Band25	5MHz	QPSK	26365	25RB#0	4.5122	4.980	PASS
Band25	5MHz	16QAM	26365	25RB#0	4.5041	4.975	PASS
Band25	5MHz	QPSK	26665	25RB#0	4.5214	4.985	PASS
Band25	5MHz	16QAM	26665	25RB#0	4.5170	4.995	PASS
Band25	10MHz	QPSK	26090	50RB#0	8.9834	9.867	PASS
Band25	10MHz	16QAM	26090	50RB#0	8.9719	9.895	PASS
Band25	10MHz	QPSK	26365	50RB#0	8.9779	9.883	PASS
Band25	10MHz	16QAM	26365	50RB#0	8.9585	9.889	PASS
Band25	10MHz	QPSK	26640	50RB#0	8.9673	9.897	PASS
Band25	10MHz	16QAM	26640	50RB#0	8.9718	9.825	PASS
Band25	15MHz	QPSK	26115	75RB#0	13.424	14.92	PASS
Band25	15MHz	16QAM	26115	75RB#0	13.441	14.79	PASS
Band25	15MHz	QPSK	26365	75RB#0	13.473	14.92	PASS
Band25	15MHz	16QAM	26365	75RB#0	13.466	14.86	PASS
Band25	15MHz	QPSK	26615	75RB#0	13.363	14.75	PASS
Band25	15MHz	16QAM	26615	75RB#0	13.370	14.73	PASS
Band25	20MHz	QPSK	26140	100RB#0	17.955	19.69	PASS
Band25	20MHz	16QAM	26140	100RB#0	18.001	19.60	PASS
Band25	20MHz	QPSK	26365	100RB#0	17.913	19.60	PASS
Band25	20MHz	16QAM	26365	100RB#0	17.948	19.55	PASS
Band25	20MHz	QPSK	26590	100RB#0	17.916	19.42	PASS
Band25	20MHz	16QAM	26590	100RB#0	17.906	19.44	PASS

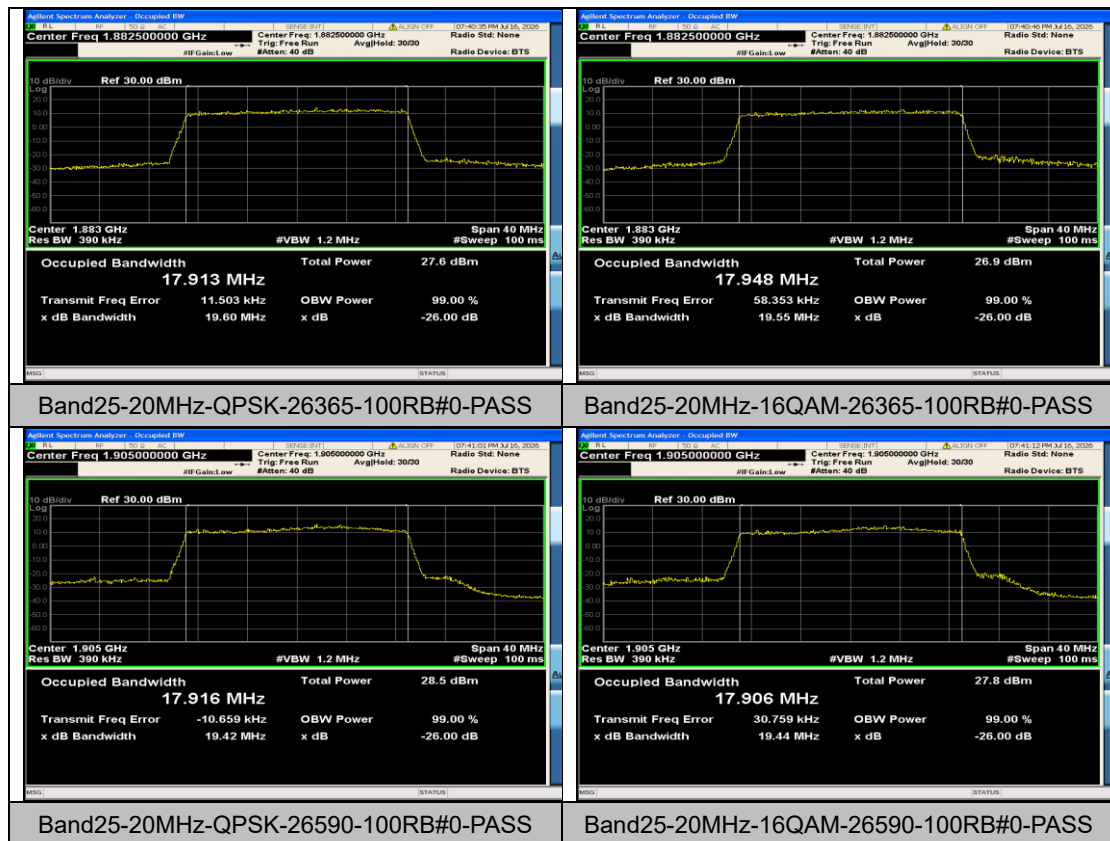
Test Graphs









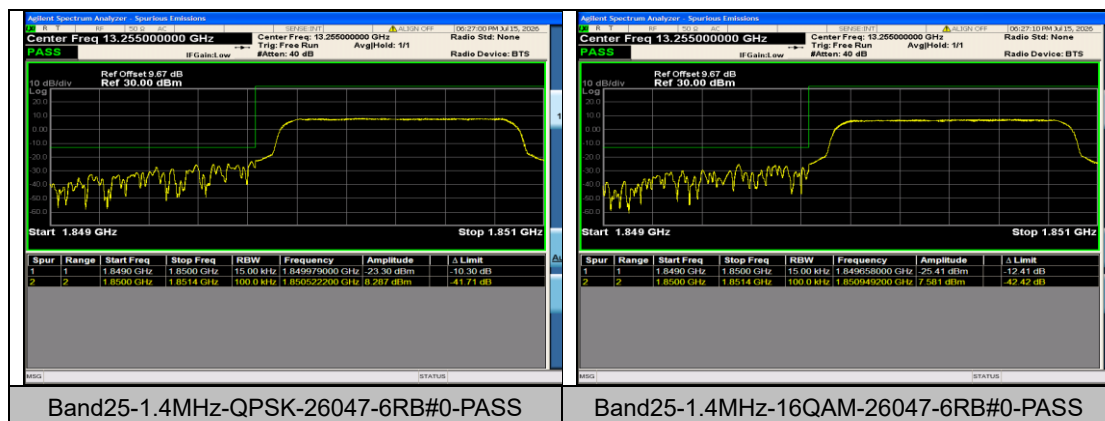


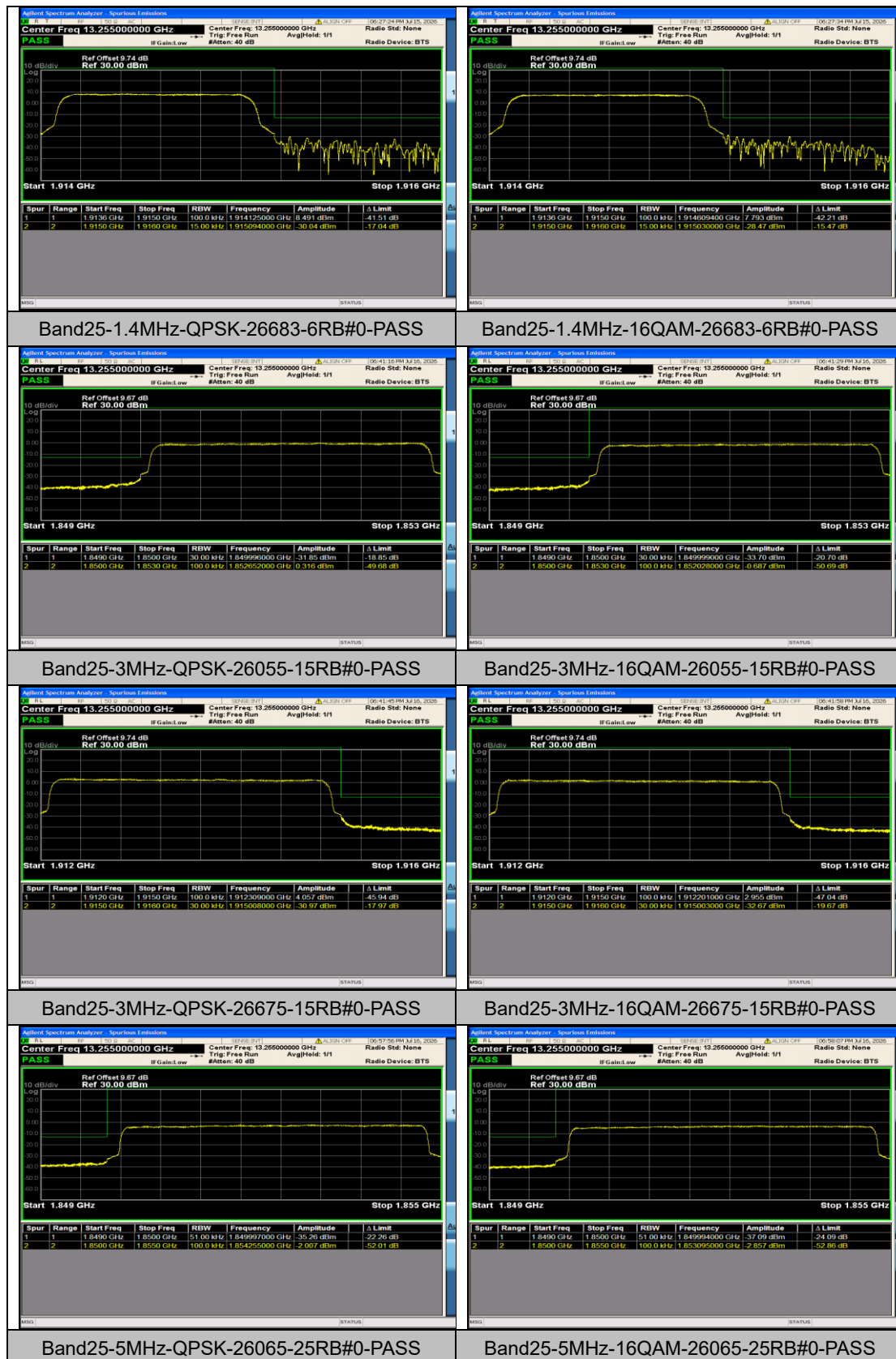
Appendix D: Band Edge

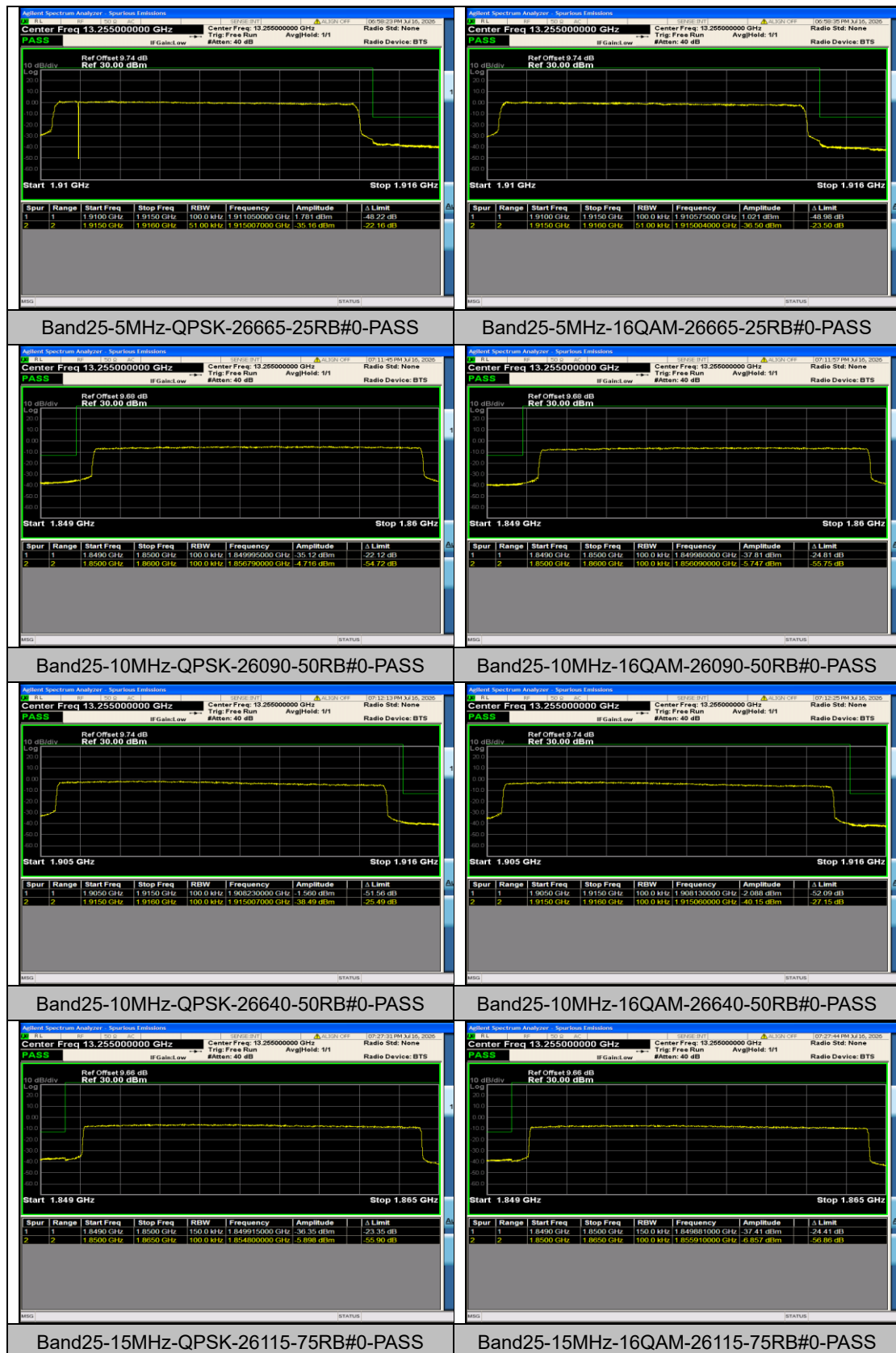
Test Result

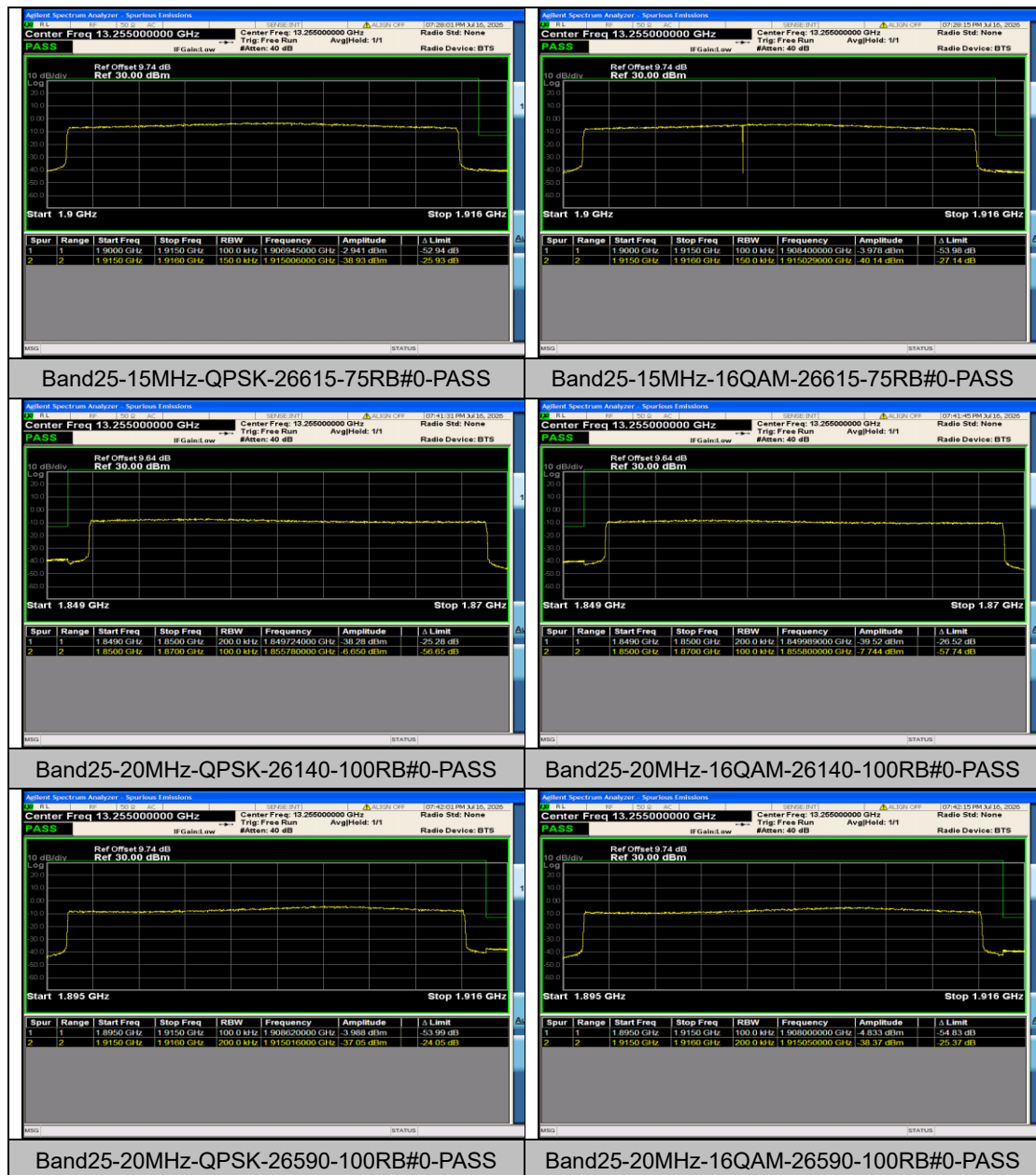
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band25	1.4MHz	QPSK	26047	6RB#0	-23.30	PASS
Band25	1.4MHz	16QAM	26047	6RB#0	-25.41	PASS
Band25	1.4MHz	QPSK	26683	6RB#0	-30.04	PASS
Band25	1.4MHz	16QAM	26683	6RB#0	-28.47	PASS
Band25	3MHz	QPSK	26055	15RB#0	-31.85	PASS
Band25	3MHz	16QAM	26055	15RB#0	-33.70	PASS
Band25	3MHz	QPSK	26675	15RB#0	-30.97	PASS
Band25	3MHz	16QAM	26675	15RB#0	-32.67	PASS
Band25	5MHz	QPSK	26065	25RB#0	-35.26	PASS
Band25	5MHz	16QAM	26065	25RB#0	-37.09	PASS
Band25	5MHz	QPSK	26665	25RB#0	-35.16	PASS
Band25	5MHz	16QAM	26665	25RB#0	-36.50	PASS
Band25	10MHz	QPSK	26090	50RB#0	-35.12	PASS
Band25	10MHz	16QAM	26090	50RB#0	-37.81	PASS
Band25	10MHz	QPSK	26640	50RB#0	-38.49	PASS
Band25	10MHz	16QAM	26640	50RB#0	-40.15	PASS
Band25	15MHz	QPSK	26115	75RB#0	-36.35	PASS
Band25	15MHz	16QAM	26115	75RB#0	-37.41	PASS
Band25	15MHz	QPSK	26615	75RB#0	-38.93	PASS
Band25	15MHz	16QAM	26615	75RB#0	-40.14	PASS
Band25	20MHz	QPSK	26140	100RB#0	-38.28	PASS
Band25	20MHz	16QAM	26140	100RB#0	-39.52	PASS
Band25	20MHz	QPSK	26590	100RB#0	-37.05	PASS
Band25	20MHz	16QAM	26590	100RB#0	-38.37	PASS

Test Graphs









Appendix E: Conducted Spurious Emission

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band25	1.4MHz	QPSK	26047	6RB#0	0.009~0.15	-60.28	PASS
Band25	1.4MHz	QPSK	26047	6RB#0	0.15~30	-51.04	PASS
Band25	1.4MHz	QPSK	26047	6RB#0	30~1000	-58.20	PASS
Band25	1.4MHz	QPSK	26047	6RB#0	1000~3000	-26.49	PASS
Band25	1.4MHz	QPSK	26047	6RB#0	3000~20000	-38.13	PASS
Band25	3MHz	QPSK	26055	15RB#0	0.009~0.15	-58.58	PASS
Band25	3MHz	QPSK	26055	15RB#0	0.15~30	-52.90	PASS
Band25	3MHz	QPSK	26055	15RB#0	30~1000	-58.02	PASS
Band25	3MHz	QPSK	26055	15RB#0	1000~3000	-24.31	PASS
Band25	3MHz	QPSK	26055	15RB#0	3000~20000	-38.63	PASS
Band25	3MHz	16QAM	26055	15RB#0	0.009~0.15	-60.26	PASS
Band25	3MHz	16QAM	26055	15RB#0	0.15~30	-50.44	PASS
Band25	3MHz	16QAM	26055	15RB#0	30~1000	-58.14	PASS
Band25	3MHz	16QAM	26055	15RB#0	1000~3000	-26.26	PASS
Band25	3MHz	16QAM	26055	15RB#0	3000~20000	-38.80	PASS
Band25	3MHz	QPSK	26365	15RB#0	0.009~0.15	-59.26	PASS
Band25	3MHz	QPSK	26365	15RB#0	0.15~30	-51.10	PASS
Band25	3MHz	QPSK	26365	15RB#0	30~1000	-58.37	PASS
Band25	3MHz	QPSK	26365	15RB#0	1000~3000	-41.13	PASS
Band25	3MHz	QPSK	26365	15RB#0	3000~20000	-38.36	PASS
Band25	3MHz	16QAM	26365	15RB#0	0.009~0.15	-60.16	PASS
Band25	3MHz	16QAM	26365	15RB#0	0.15~30	-50.98	PASS
Band25	3MHz	16QAM	26365	15RB#0	30~1000	-57.95	PASS
Band25	3MHz	16QAM	26365	15RB#0	1000~3000	-40.90	PASS
Band25	3MHz	16QAM	26365	15RB#0	3000~20000	-38.79	PASS
Band25	3MHz	QPSK	26675	15RB#0	0.009~0.15	-59.85	PASS
Band25	3MHz	QPSK	26675	15RB#0	0.15~30	-51.56	PASS
Band25	3MHz	QPSK	26675	15RB#0	30~1000	-57.20	PASS
Band25	3MHz	QPSK	26675	15RB#0	1000~3000	-25.43	PASS
Band25	3MHz	QPSK	26675	15RB#0	3000~20000	-38.68	PASS
Band25	3MHz	16QAM	26675	15RB#0	0.009~0.15	-59.66	PASS
Band25	3MHz	16QAM	26675	15RB#0	0.15~30	-51.99	PASS
Band25	3MHz	16QAM	26675	15RB#0	30~1000	-57.79	PASS
Band25	3MHz	16QAM	26675	15RB#0	1000~3000	-26.56	PASS
Band25	3MHz	16QAM	26675	15RB#0	3000~20000	-38.40	PASS
Band25	5MHz	QPSK	26065	25RB#0	0.009~0.15	-59.85	PASS

Band25	5MHz	QPSK	26065	25RB#0	0.15~30	-50.80	PASS
Band25	5MHz	QPSK	26065	25RB#0	30~1000	-57.94	PASS
Band25	5MHz	QPSK	26065	25RB#0	1000~3000	-24.58	PASS
Band25	5MHz	QPSK	26065	25RB#0	3000~20000	-38.78	PASS
Band25	5MHz	16QAM	26065	25RB#0	0.009~0.15	-59.52	PASS
Band25	5MHz	16QAM	26065	25RB#0	0.15~30	-51.24	PASS
Band25	5MHz	16QAM	26065	25RB#0	30~1000	-57.48	PASS
Band25	5MHz	16QAM	26065	25RB#0	1000~3000	-24.19	PASS
Band25	5MHz	16QAM	26065	25RB#0	3000~20000	-38.44	PASS
Band25	5MHz	QPSK	26365	25RB#0	0.009~0.15	-59.68	PASS
Band25	5MHz	QPSK	26365	25RB#0	0.15~30	-50.06	PASS
Band25	5MHz	QPSK	26365	25RB#0	30~1000	-59.32	PASS
Band25	5MHz	QPSK	26365	25RB#0	1000~3000	-47.83	PASS
Band25	5MHz	QPSK	26365	25RB#0	3000~20000	-38.29	PASS
Band25	5MHz	16QAM	26365	25RB#0	0.009~0.15	-60.07	PASS
Band25	5MHz	16QAM	26365	25RB#0	0.15~30	-51.88	PASS
Band25	5MHz	16QAM	26365	25RB#0	30~1000	-59.19	PASS
Band25	5MHz	16QAM	26365	25RB#0	1000~3000	-39.81	PASS
Band25	5MHz	16QAM	26365	25RB#0	3000~20000	-38.79	PASS
Band25	5MHz	QPSK	26665	25RB#0	0.009~0.15	-59.20	PASS
Band25	5MHz	QPSK	26665	25RB#0	0.15~30	-50.43	PASS
Band25	5MHz	QPSK	26665	25RB#0	30~1000	-58.48	PASS
Band25	5MHz	QPSK	26665	25RB#0	1000~3000	-25.15	PASS
Band25	5MHz	QPSK	26665	25RB#0	3000~20000	-38.65	PASS
Band25	5MHz	16QAM	26665	25RB#0	0.009~0.15	-57.97	PASS
Band25	5MHz	16QAM	26665	25RB#0	0.15~30	-51.94	PASS
Band25	5MHz	16QAM	26665	25RB#0	30~1000	-58.56	PASS
Band25	5MHz	16QAM	26665	25RB#0	1000~3000	-24.87	PASS
Band25	5MHz	16QAM	26665	25RB#0	3000~20000	-38.70	PASS
Band25	10MHz	QPSK	26090	50RB#0	0.009~0.15	-60.54	PASS
Band25	10MHz	QPSK	26090	50RB#0	0.15~30	-51.58	PASS
Band25	10MHz	QPSK	26090	50RB#0	30~1000	-58.75	PASS
Band25	10MHz	QPSK	26090	50RB#0	1000~3000	-23.34	PASS
Band25	10MHz	QPSK	26090	50RB#0	3000~20000	-38.37	PASS
Band25	10MHz	16QAM	26090	50RB#0	0.009~0.15	-58.63	PASS
Band25	10MHz	16QAM	26090	50RB#0	0.15~30	-51.36	PASS
Band25	10MHz	16QAM	26090	50RB#0	30~1000	-58.13	PASS
Band25	10MHz	16QAM	26090	50RB#0	1000~3000	-25.58	PASS
Band25	10MHz	16QAM	26090	50RB#0	3000~20000	-38.46	PASS
Band25	10MHz	QPSK	26365	50RB#0	0.009~0.15	-59.18	PASS
Band25	10MHz	QPSK	26365	50RB#0	0.15~30	-53.47	PASS
Band25	10MHz	QPSK	26365	50RB#0	30~1000	-59.25	PASS
Band25	10MHz	QPSK	26365	50RB#0	1000~3000	-47.99	PASS

Band25	10MHz	QPSK	26365	50RB#0	3000~20000	-38.25	PASS
Band25	10MHz	16QAM	26365	50RB#0	0.009~0.15	-59.25	PASS
Band25	10MHz	16QAM	26365	50RB#0	0.15~30	-49.50	PASS
Band25	10MHz	16QAM	26365	50RB#0	30~1000	-58.96	PASS
Band25	10MHz	16QAM	26365	50RB#0	1000~3000	-41.56	PASS
Band25	10MHz	16QAM	26365	50RB#0	3000~20000	-38.45	PASS
Band25	10MHz	QPSK	26640	50RB#0	0.009~0.15	-58.64	PASS
Band25	10MHz	QPSK	26640	50RB#0	0.15~30	-51.08	PASS
Band25	10MHz	QPSK	26640	50RB#0	30~1000	-58.94	PASS
Band25	10MHz	QPSK	26640	50RB#0	1000~3000	-27.90	PASS
Band25	10MHz	QPSK	26640	50RB#0	3000~20000	-38.42	PASS
Band25	10MHz	16QAM	26640	50RB#0	0.009~0.15	-60.16	PASS
Band25	10MHz	16QAM	26640	50RB#0	0.15~30	-53.87	PASS
Band25	10MHz	16QAM	26640	50RB#0	30~1000	-58.86	PASS
Band25	10MHz	16QAM	26640	50RB#0	1000~3000	-27.85	PASS
Band25	10MHz	16QAM	26640	50RB#0	3000~20000	-38.53	PASS
Band25	15MHz	QPSK	26115	75RB#0	0.009~0.15	-59.78	PASS
Band25	15MHz	QPSK	26115	75RB#0	0.15~30	-51.23	PASS
Band25	15MHz	QPSK	26115	75RB#0	30~1000	-57.78	PASS
Band25	15MHz	QPSK	26115	75RB#0	1000~3000	-23.69	PASS
Band25	15MHz	QPSK	26115	75RB#0	3000~20000	-38.43	PASS
Band25	15MHz	16QAM	26115	75RB#0	0.009~0.15	-59.96	PASS
Band25	15MHz	16QAM	26115	75RB#0	0.15~30	-53.18	PASS
Band25	15MHz	16QAM	26115	75RB#0	30~1000	-58.42	PASS
Band25	15MHz	16QAM	26115	75RB#0	1000~3000	-27.20	PASS
Band25	15MHz	16QAM	26115	75RB#0	3000~20000	-38.66	PASS
Band25	15MHz	QPSK	26365	75RB#0	0.009~0.15	-58.50	PASS
Band25	15MHz	QPSK	26365	75RB#0	0.15~30	-51.72	PASS
Band25	15MHz	QPSK	26365	75RB#0	30~1000	-58.08	PASS
Band25	15MHz	QPSK	26365	75RB#0	1000~3000	-44.12	PASS
Band25	15MHz	QPSK	26365	75RB#0	3000~20000	-38.48	PASS
Band25	15MHz	16QAM	26365	75RB#0	0.009~0.15	-58.99	PASS
Band25	15MHz	16QAM	26365	75RB#0	0.15~30	-53.15	PASS
Band25	15MHz	16QAM	26365	75RB#0	30~1000	-58.54	PASS
Band25	15MHz	16QAM	26365	75RB#0	1000~3000	-46.03	PASS
Band25	15MHz	16QAM	26365	75RB#0	3000~20000	-38.83	PASS
Band25	15MHz	QPSK	26615	75RB#0	0.009~0.15	-60.35	PASS
Band25	15MHz	QPSK	26615	75RB#0	0.15~30	-52.14	PASS
Band25	15MHz	QPSK	26615	75RB#0	30~1000	-58.40	PASS
Band25	15MHz	QPSK	26615	75RB#0	1000~3000	-30.23	PASS
Band25	15MHz	QPSK	26615	75RB#0	3000~20000	-38.68	PASS
Band25	15MHz	16QAM	26615	75RB#0	0.009~0.15	-59.51	PASS
Band25	15MHz	16QAM	26615	75RB#0	0.15~30	-49.69	PASS

Band25	15MHz	16QAM	26615	75RB#0	30~1000	-58.68	PASS
Band25	15MHz	16QAM	26615	75RB#0	1000~3000	-31.36	PASS
Band25	15MHz	16QAM	26615	75RB#0	3000~20000	-38.84	PASS
Band25	20MHz	QPSK	26140	100RB#0	0.009~0.15	-59.49	PASS
Band25	20MHz	QPSK	26140	100RB#0	0.15~30	-50.38	PASS
Band25	20MHz	QPSK	26140	100RB#0	30~1000	-58.41	PASS
Band25	20MHz	QPSK	26140	100RB#0	1000~3000	-29.76	PASS
Band25	20MHz	QPSK	26140	100RB#0	3000~20000	-38.52	PASS
Band25	20MHz	16QAM	26140	100RB#0	0.009~0.15	-59.81	PASS
Band25	20MHz	16QAM	26140	100RB#0	0.15~30	-52.19	PASS
Band25	20MHz	16QAM	26140	100RB#0	30~1000	-59.38	PASS
Band25	20MHz	16QAM	26140	100RB#0	1000~3000	-30.52	PASS
Band25	20MHz	16QAM	26140	100RB#0	3000~20000	-38.45	PASS
Band25	20MHz	QPSK	26365	100RB#0	0.009~0.15	-59.83	PASS
Band25	20MHz	QPSK	26365	100RB#0	0.15~30	-50.35	PASS
Band25	20MHz	QPSK	26365	100RB#0	30~1000	-58.65	PASS
Band25	20MHz	QPSK	26365	100RB#0	1000~3000	-44.00	PASS
Band25	20MHz	QPSK	26365	100RB#0	3000~20000	-38.65	PASS
Band25	20MHz	16QAM	26365	100RB#0	0.009~0.15	-59.32	PASS
Band25	20MHz	16QAM	26365	100RB#0	0.15~30	-52.65	PASS
Band25	20MHz	16QAM	26365	100RB#0	30~1000	-58.89	PASS
Band25	20MHz	16QAM	26365	100RB#0	1000~3000	-44.36	PASS
Band25	20MHz	16QAM	26365	100RB#0	3000~20000	-38.81	PASS
Band25	20MHz	QPSK	26590	100RB#0	0.009~0.15	-58.82	PASS
Band25	20MHz	QPSK	26590	100RB#0	0.15~30	-52.96	PASS
Band25	20MHz	QPSK	26590	100RB#0	30~1000	-59.19	PASS
Band25	20MHz	QPSK	26590	100RB#0	1000~3000	-28.50	PASS
Band25	20MHz	QPSK	26590	100RB#0	3000~20000	-38.30	PASS
Band25	20MHz	16QAM	26590	100RB#0	0.009~0.15	-59.31	PASS
Band25	20MHz	16QAM	26590	100RB#0	0.15~30	-52.29	PASS
Band25	20MHz	16QAM	26590	100RB#0	30~1000	-58.89	PASS
Band25	20MHz	16QAM	26590	100RB#0	1000~3000	-29.77	PASS
Band25	20MHz	16QAM	26590	100RB#0	3000~20000	-38.52	PASS