

Test Data for E-UTRA Band 40_1

EUT: <u>Bus Validator</u> Test Model: <u>E60</u>
Ambient Condition: <u>25</u> °C, <u>45</u> %RH, <u>101.325</u> kPa
Test Engineer: <u>Jack Zhou</u>

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Appendix A: Maximum Power Spectral Density Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	EIRP(dBm)	Verdict
40(2305-2315)	5MHz	QPSK	38725	1RB#0	19.91	20.56	PASS
40(2305-2315)	5MHz	16QAM	38725	1RB#0	19.48	20.13	PASS
40(2305-2315)	5MHz	QPSK	38725	1RB#24	20.49	21.14	PASS
40(2305-2315)	5MHz	16QAM	38725	1RB#24	19.43	20.08	PASS
40(2305-2315)	5MHz	QPSK	38725	1RB#49	20.43	21.08	PASS
40(2305-2315)	5MHz	16QAM	38725	1RB#49	19.35	20.00	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	18.10	18.75	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	17.43	18.08	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#12	18.07	18.72	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#12	17.88	18.53	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#25	18.28	18.93	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#25	17.57	18.22	PASS
40(2305-2315)	5MHz	QPSK	38725	50RB#0	18.64	19.29	PASS
40(2305-2315)	5MHz	16QAM	38725	50RB#0	18.82	19.47	PASS
40(2305-2315)	5MHz	QPSK	38750	1RB#0	19.79	20.44	PASS
40(2305-2315)	5MHz	16QAM	38750	1RB#0	19.17	19.82	PASS
40(2305-2315)	5MHz	QPSK	38750	1RB#24	20.26	20.91	PASS
40(2305-2315)	5MHz	16QAM	38750	1RB#24	19.86	20.51	PASS
40(2305-2315)	5MHz	QPSK	38750	1RB#49	20.30	20.95	PASS

2315)							
40(2305-2315)	5MHz	16QAM	38750	1RB#49	19.42	20.07	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	17.94	18.59	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	17.56	18.21	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#12	18.45	19.10	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#12	17.59	18.24	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#25	18.15	18.80	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#25	17.67	18.32	PASS
40(2305-2315)	5MHz	QPSK	38750	50RB#0	18.83	19.48	PASS
40(2305-2315)	5MHz	16QAM	38750	50RB#0	18.27	18.92	PASS
40(2305-2315)	5MHz	QPSK	38775	1RB#0	20.42	21.07	PASS
40(2305-2315)	5MHz	16QAM	38775	1RB#0	19.59	20.24	PASS
40(2305-2315)	5MHz	QPSK	38775	1RB#24	19.80	20.45	PASS
40(2305-2315)	5MHz	16QAM	38775	1RB#24	19.59	20.24	PASS
40(2305-2315)	5MHz	QPSK	38775	1RB#49	20.31	20.96	PASS
40(2305-2315)	5MHz	16QAM	38775	1RB#49	19.11	19.76	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	18.03	18.68	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	18.08	18.73	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#12	18.10	18.75	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#12	18.63	19.28	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#25	17.87	18.52	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#25	17.90	18.55	PASS

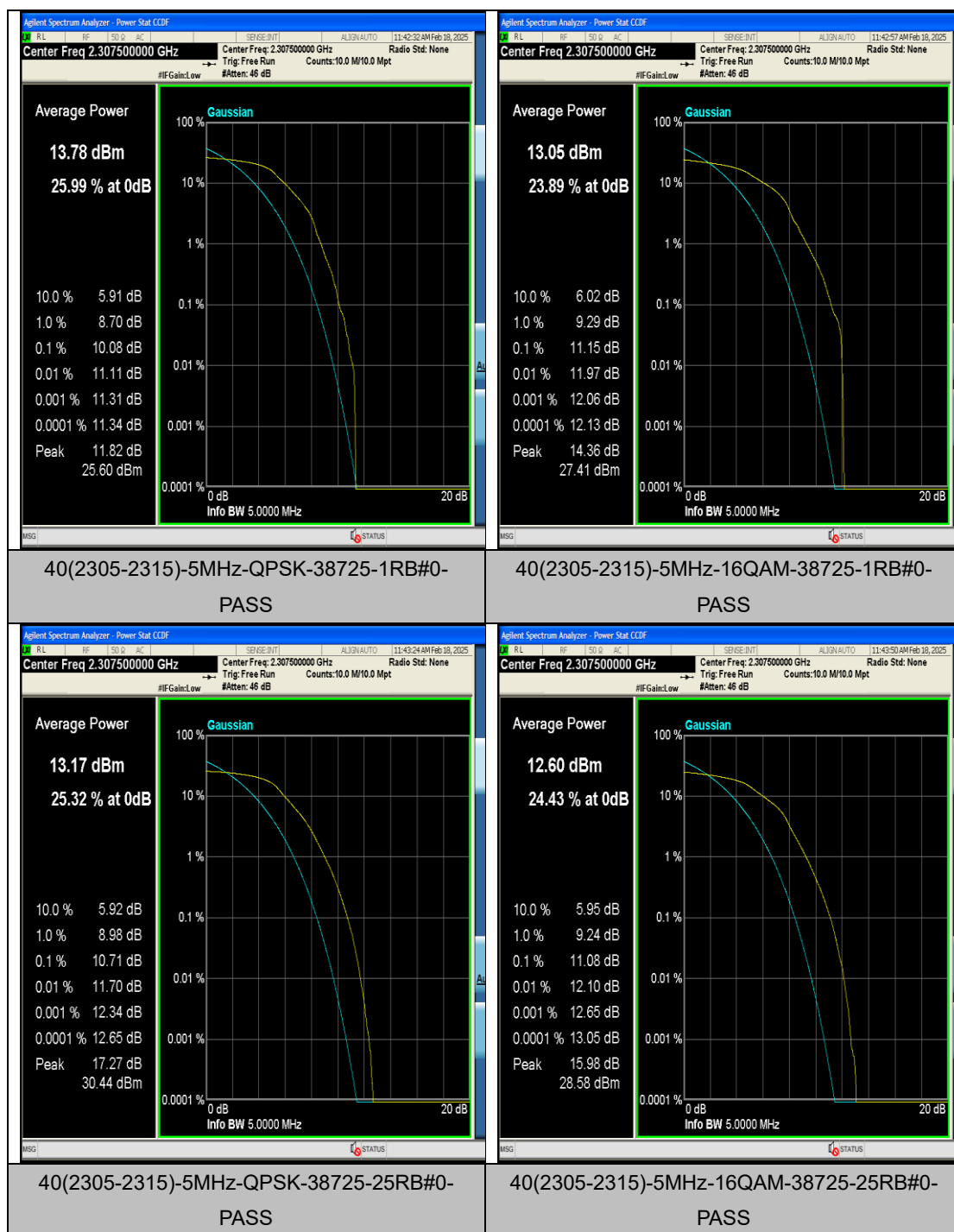
40(2305-2315)	5MHz	QPSK	38775	50RB#0	18.53	19.18	PASS
40(2305-2315)	5MHz	16QAM	38775	50RB#0	18.67	19.32	PASS
40(2305-2315)	10MHz	QPSK	38750	1RB#0	20.34	20.99	PASS
40(2305-2315)	10MHz	16QAM	38750	1RB#0	19.58	20.23	PASS
40(2305-2315)	10MHz	QPSK	38750	1RB#24	20.07	20.72	PASS
40(2305-2315)	10MHz	16QAM	38750	1RB#24	19.91	20.56	PASS
40(2305-2315)	10MHz	QPSK	38750	1RB#49	20.10	20.75	PASS
40(2305-2315)	10MHz	16QAM	38750	1RB#49	19.77	20.42	PASS
40(2305-2315)	10MHz	QPSK	38750	25RB#0	18.22	18.87	PASS
40(2305-2315)	10MHz	16QAM	38750	25RB#0	18.23	18.88	PASS
40(2305-2315)	10MHz	QPSK	38750	25RB#12	18.13	18.78	PASS
40(2305-2315)	10MHz	16QAM	38750	25RB#12	17.36	18.01	PASS
40(2305-2315)	10MHz	QPSK	38750	25RB#25	18.46	19.11	PASS
40(2305-2315)	10MHz	16QAM	38750	25RB#25	17.40	18.05	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	15.76	16.41	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	15.71	16.36	PASS

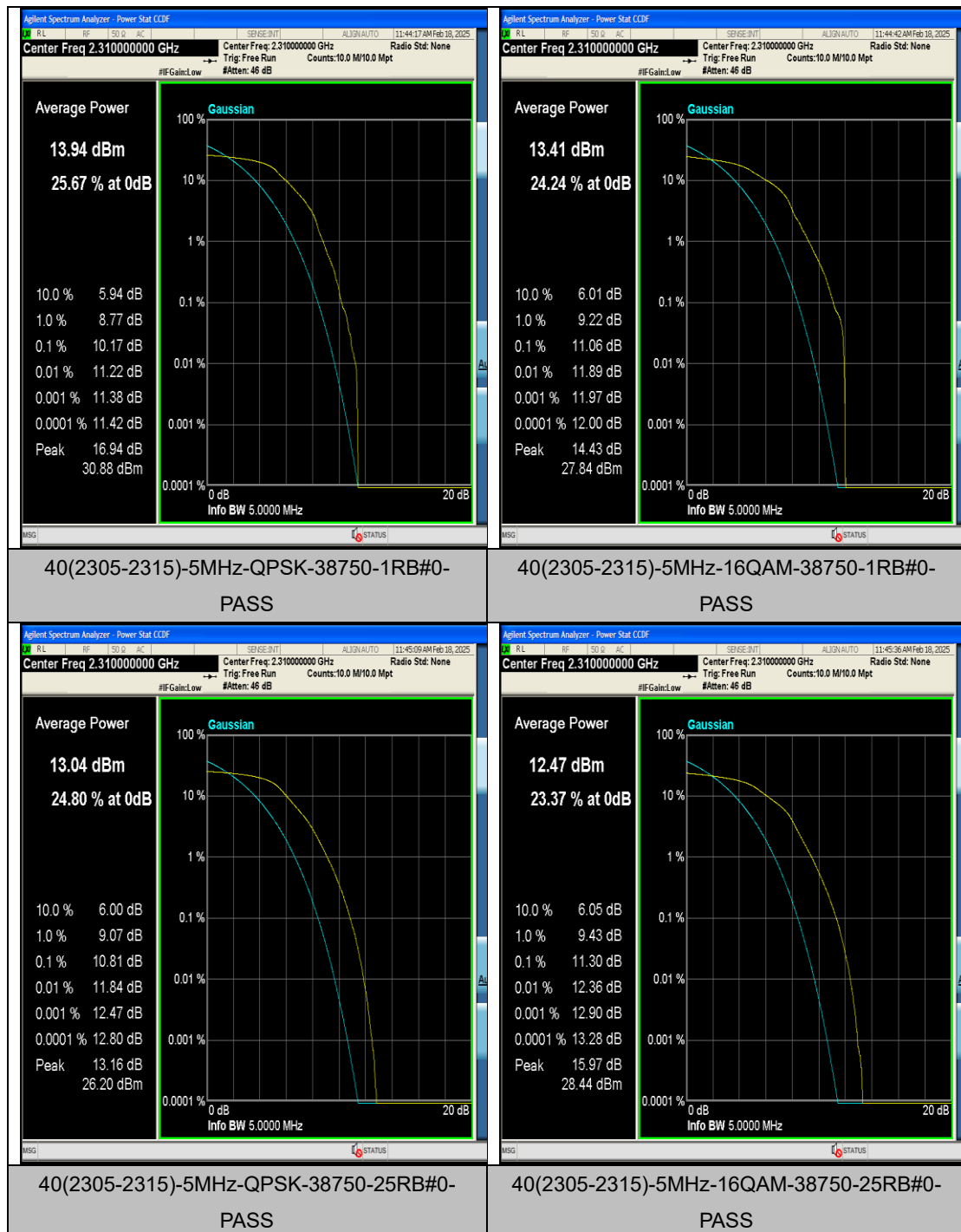
Appendix B: Peak-to-Average Ratio(CCDF)

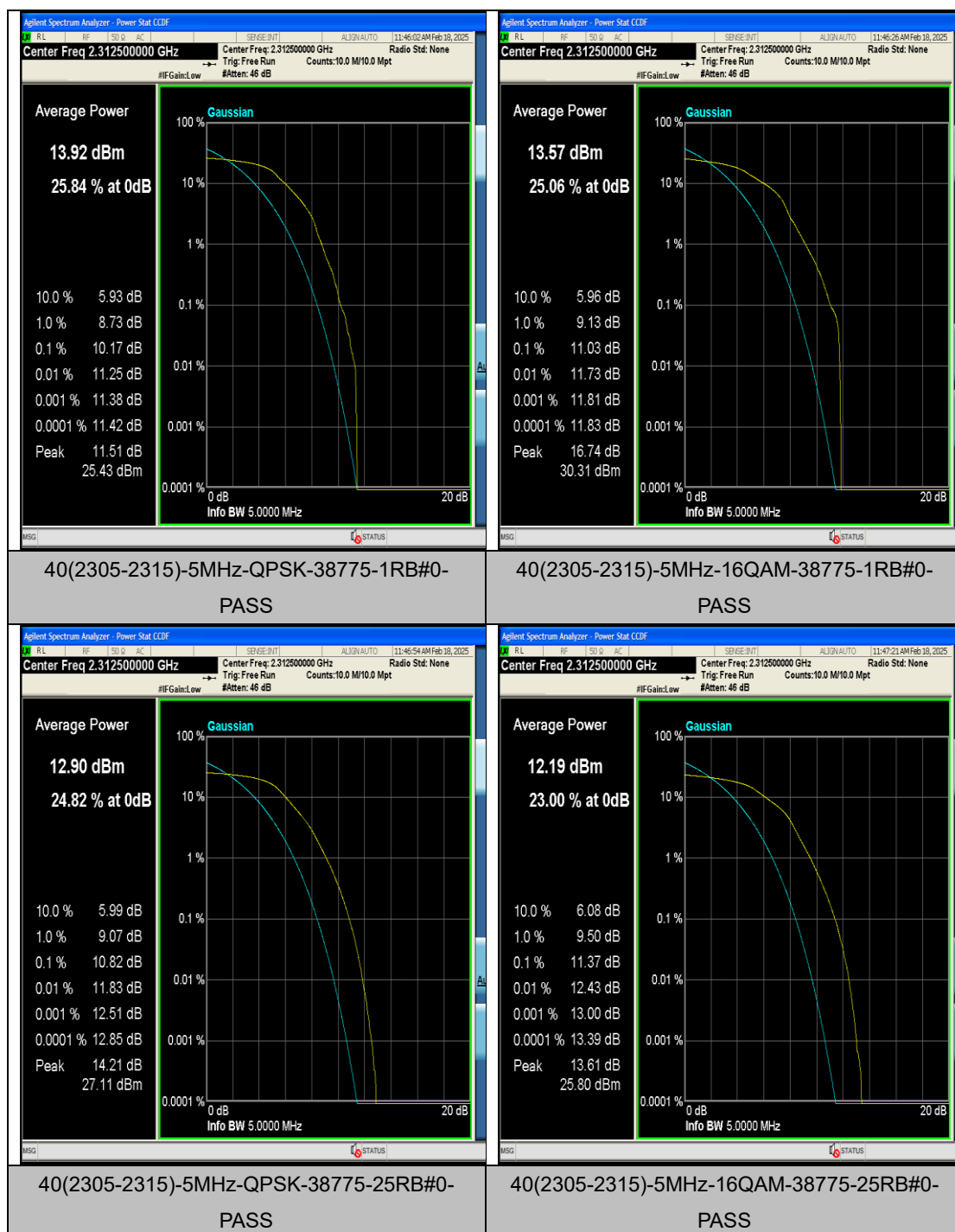
Test Result

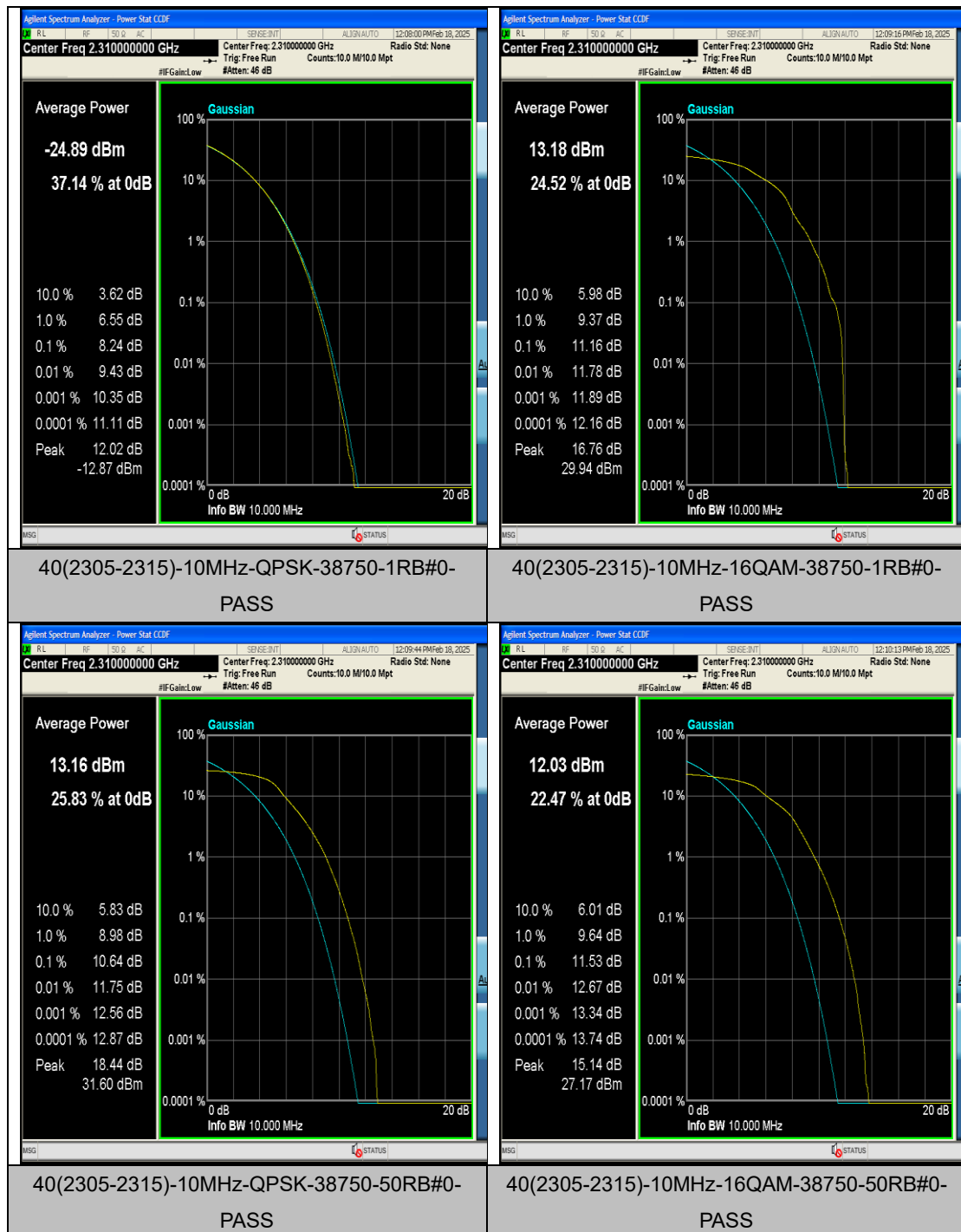
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
40(2305-2315)	5MHz	QPSK	38725	1RB#0	10.08	13	PASS
40(2305-2315)	5MHz	16QAM	38725	1RB#0	11.15	13	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	10.71	13	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	11.08	13	PASS
40(2305-2315)	5MHz	QPSK	38750	1RB#0	10.17	13	PASS
40(2305-2315)	5MHz	16QAM	38750	1RB#0	11.06	13	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	10.81	13	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	11.30	13	PASS
40(2305-2315)	5MHz	QPSK	38775	1RB#0	10.17	13	PASS
40(2305-2315)	5MHz	16QAM	38775	1RB#0	11.03	13	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	10.82	13	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	11.37	13	PASS
40(2305-2315)	10MHz	QPSK	38750	1RB#0	8.24	13	PASS
40(2305-2315)	10MHz	16QAM	38750	1RB#0	11.16	13	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	10.64	13	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	11.53	13	PASS

Test Graphs







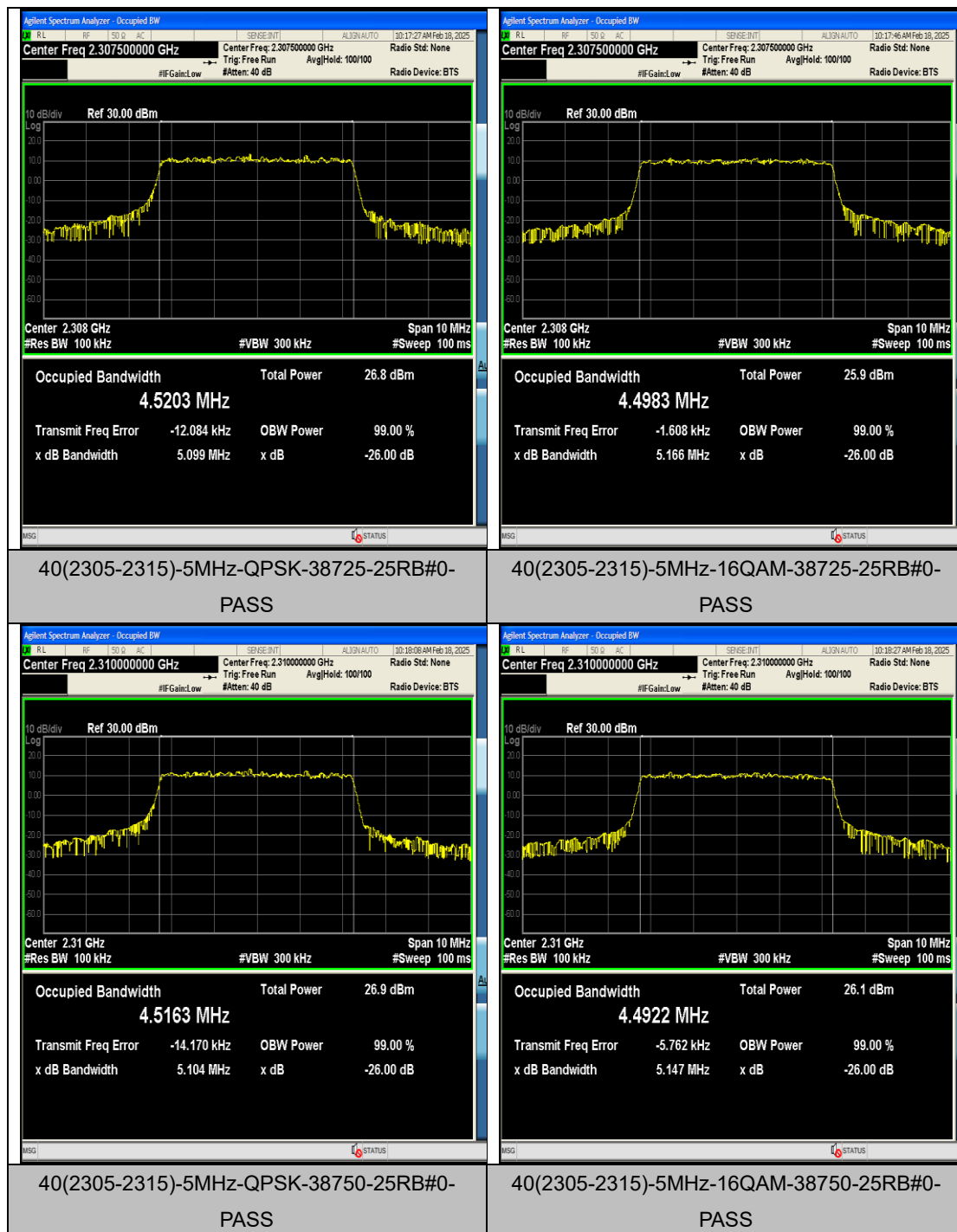


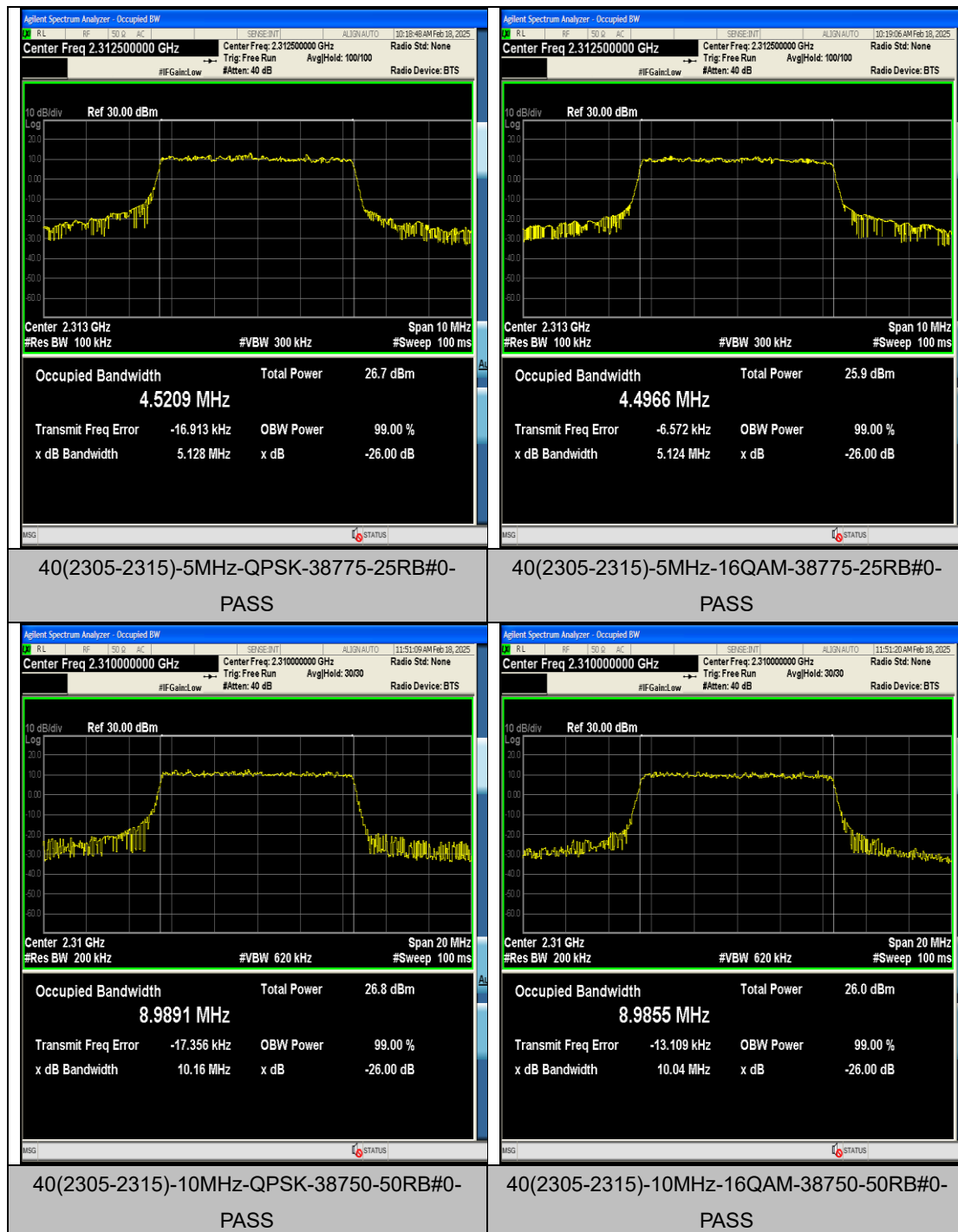
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
40(2305-2315)	5MHz	QPSK	38725	25RB#0	4.5203	5.099	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	4.4983	5.166	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	4.5163	5.104	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	4.4922	5.147	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	4.5209	5.128	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	4.4966	5.124	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	8.9891	10.16	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	8.9855	10.04	PASS

Test Graphs



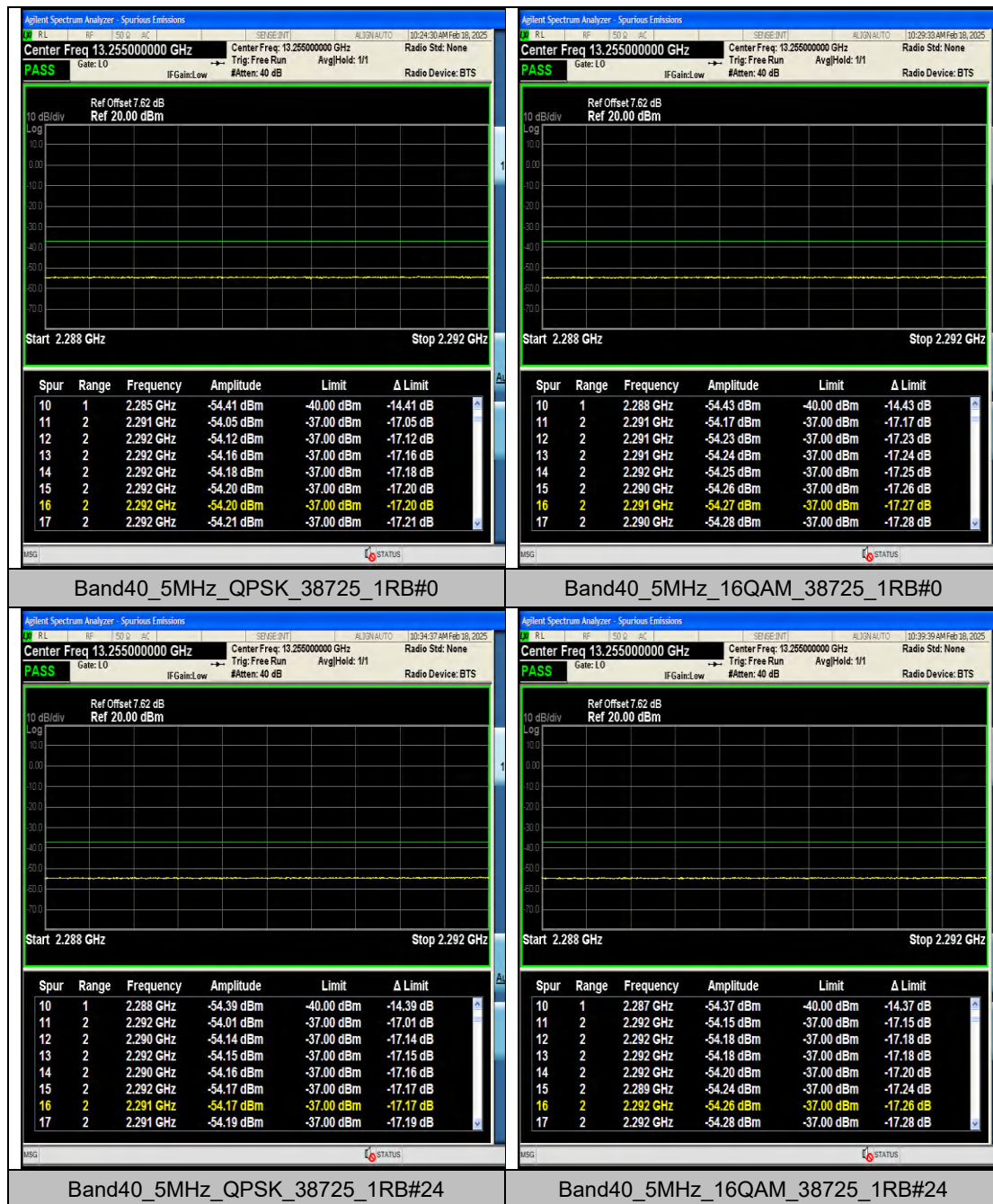


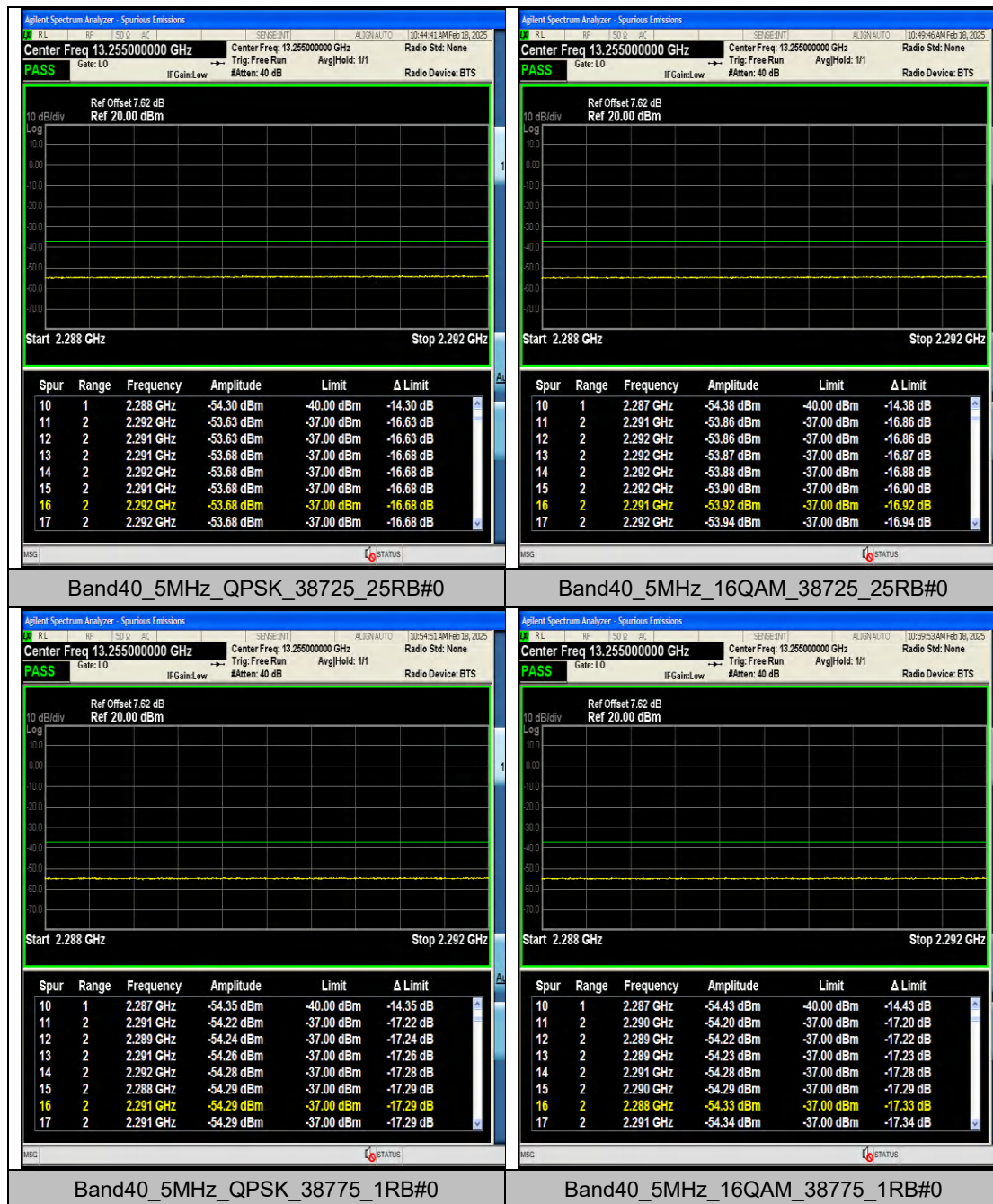
Appendix D: Band Edge

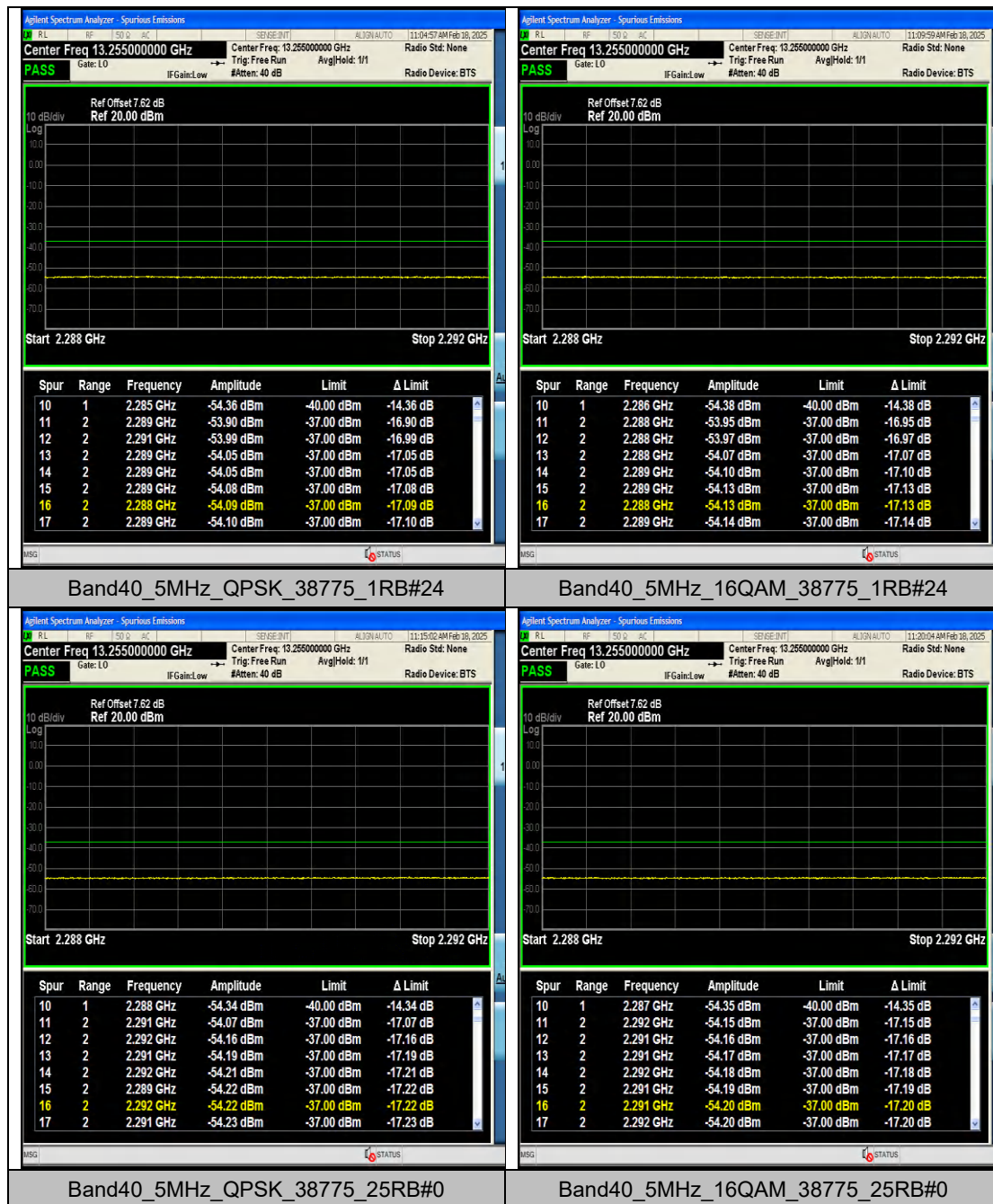
Test Result

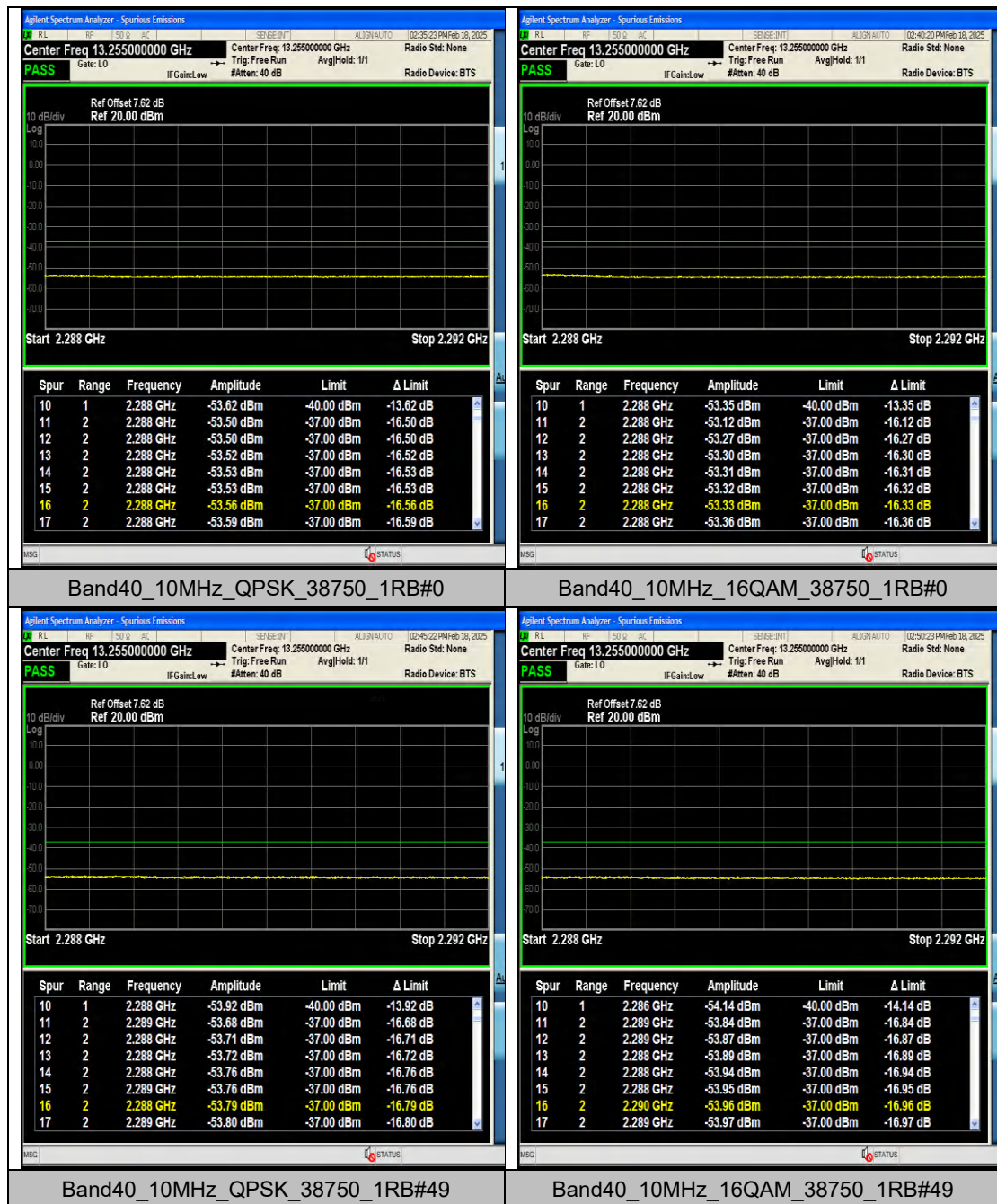
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
40(2305-2315)	5MHz	QPSK	38725	1RB#0	-54.29	PASS
40(2305-2315)	5MHz	16QAM	38725	1RB#0	-54.30	PASS
40(2305-2315)	5MHz	QPSK	38725	1RB#24	-54.28	PASS
40(2305-2315)	5MHz	16QAM	38725	1RB#24	-54.33	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	-54.17	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	-54.25	PASS
40(2305-2315)	5MHz	QPSK	38775	1RB#0	-54.23	PASS
40(2305-2315)	5MHz	16QAM	38775	1RB#0	-54.23	PASS
40(2305-2315)	5MHz	QPSK	38775	1RB#24	-54.31	PASS
40(2305-2315)	5MHz	16QAM	38775	1RB#24	-54.28	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	-54.25	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	-54.24	PASS
40(2305-2315)	10MHz	QPSK	38750	1RB#0	-53.50	PASS
40(2305-2315)	10MHz	16QAM	38750	1RB#0	-53.24	PASS
40(2305-2315)	10MHz	QPSK	38750	1RB#49	-53.69	PASS
40(2305-2315)	10MHz	16QAM	38750	1RB#49	-54.01	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	-48.57	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	-49.63	PASS

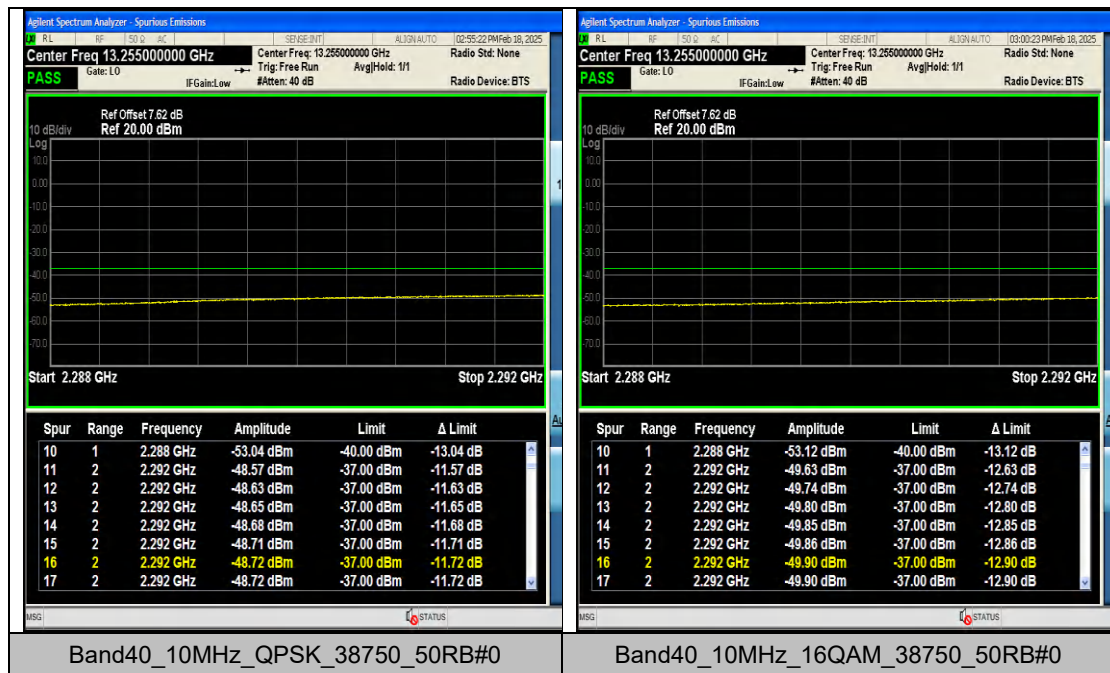
Test Graphs











Appendix E: Conducted Spurious Emission

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band4 0	5MHz	QPSK	38725	1RB#0	Range1:30~1000MHz	-60.75	PASS
Band4 0	5MHz	QPSK	38725	1RB#0	Range2:1000~2288MHz	-56.92	PASS
Band4 0	5MHz	QPSK	38725	1RB#0	Range3:2288~2292MHz	-56.36	PASS
Band4 0	5MHz	QPSK	38725	1RB#0	Range4:2292~2296MHz	-55.42	PASS
Band4 0	5MHz	QPSK	38725	1RB#0	Range5:2296~2300MHz	-55.2	PASS
Band4 0	5MHz	QPSK	38725	1RB#0	Range6:2300~2305MHz	-56.07	PASS
Band4 0	5MHz	QPSK	38725	1RB#0	Range7:2320~2324MHz	-56.78	PASS
Band4 0	5MHz	QPSK	38725	1RB#0	Range8:2324~2328MHz	-56.08	PASS
Band4 0	5MHz	QPSK	38725	1RB#0	Range9:2328~2337MHz	-56.18	PASS
Band4 0	5MHz	QPSK	38725	1RB#0	Range10:2337~2341MHz	-56.26	PASS
Band4 0	5MHz	QPSK	38725	1RB#0	Range11:2341~2345MHz	-54.99	PASS
Band4 0	5MHz	QPSK	38725	1RB#0	Range12:2360~2365MHz	-55.19	PASS

Band4 0	5MHz	QPSK	38725	1RB#0	Range13:2365~26500 MHz	- 45.5 4	PAS S
Band4 0	5MHz	QPSK	38750	1RB#0	Range1:30~1000MHz	- 60.5	PAS S
Band4 0	5MHz	QPSK	38750	1RB#0	Range2:1000~2288M Hz	- 56.9 3	PAS S
Band4 0	5MHz	QPSK	38750	1RB#0	Range3:2288~2292M Hz	- 55.8 1	PAS S
Band4 0	5MHz	QPSK	38750	1RB#0	Range4:2292~2296M Hz	- 56.3 7	PAS S
Band4 0	5MHz	QPSK	38750	1RB#0	Range5:2296~2300M Hz	- 55.2 9	PAS S
Band4 0	5MHz	QPSK	38750	1RB#0	Range6:2300~2305M Hz	- 54.6 2	PAS S
Band4 0	5MHz	QPSK	38750	1RB#0	Range7:2320~2324M Hz	- 56.2 7	PAS S
Band4 0	5MHz	QPSK	38750	1RB#0	Range8:2324~2328M Hz	- 56.2 2	PAS S
Band4 0	5MHz	QPSK	38750	1RB#0	Range9:2328~2337M Hz	- 55.2 4	PAS S
Band4 0	5MHz	QPSK	38750	1RB#0	Range10:2337~2341M Hz	- 55.6 9	PAS S
Band4 0	5MHz	QPSK	38750	1RB#0	Range11:2341~2345M Hz	- 54.9 8	PAS S
Band4 0	5MHz	QPSK	38750	1RB#0	Range12:2360~2365M Hz	- 54.8	PAS S
Band4 0	5MHz	QPSK	38750	1RB#0	Range13:2365~26500 MHz	- 45.2	PAS S
Band4 0	5MHz	QPSK	38775	1RB#0	Range1:30~1000MHz	- 61.1	PAS S
Band4 0	5MHz	QPSK	38775	1RB#0	Range2:1000~2288M Hz	- 56.1 4	PAS S

Band4 0	5MHz	QPSK	38775	1RB#0	Range3:2288~2292M Hz	- 56.6 2	PAS S
Band4 0	5MHz	QPSK	38775	1RB#0	Range4:2292~2296M Hz	- 55.3 8	PAS S
Band4 0	5MHz	QPSK	38775	1RB#0	Range5:2296~2300M Hz	- 56.2 4	PAS S
Band4 0	5MHz	QPSK	38775	1RB#0	Range6:2300~2305M Hz	- 55.2	PAS S
Band4 0	5MHz	QPSK	38775	1RB#0	Range7:2320~2324M Hz	- 56.5 9	PAS S
Band4 0	5MHz	QPSK	38775	1RB#0	Range8:2324~2328M Hz	-56	PAS S
Band4 0	5MHz	QPSK	38775	1RB#0	Range9:2328~2337M Hz	- 55.9 6	PAS S
Band4 0	5MHz	QPSK	38775	1RB#0	Range10:2337~2341M Hz	- 56.1 9	PAS S
Band4 0	5MHz	QPSK	38775	1RB#0	Range11:2341~2345M Hz	- 55.5	PAS S
Band4 0	5MHz	QPSK	38775	1RB#0	Range12:2360~2365M Hz	-56	PAS S
Band4 0	5MHz	QPSK	38775	1RB#0	Range13:2365~26500 MHz	- 45.1 6	PAS S
Band4 0	5MHz	16QAM	38725	1RB#0	Range1:30~1000MHz	- 60.5 2	PAS S
Band4 0	5MHz	16QAM	38725	1RB#0	Range2:1000~2288M Hz	- 56.7 7	PAS S
Band4 0	5MHz	16QAM	38725	1RB#0	Range3:2288~2292M Hz	- 55.1 8	PAS S
Band4 0	5MHz	16QAM	38725	1RB#0	Range4:2292~2296M Hz	- 57.0 7	PAS S
Band4 0	5MHz	16QAM	38725	1RB#0	Range5:2296~2300M Hz	- 55.7 9	PAS S

Band4 0	5MHz	16QAM	38725	1RB#0	Range6:2300~2305M Hz	- 55.3 6	PAS S
Band4 0	5MHz	16QAM	38725	1RB#0	Range7:2320~2324M Hz	- 56.2 3	PAS S
Band4 0	5MHz	16QAM	38725	1RB#0	Range8:2324~2328M Hz	- 56.6 9	PAS S
Band4 0	5MHz	16QAM	38725	1RB#0	Range9:2328~2337M Hz	- 55.9 9	PAS S
Band4 0	5MHz	16QAM	38725	1RB#0	Range10:2337~2341M Hz	- 56.2 3	PAS S
Band4 0	5MHz	16QAM	38725	1RB#0	Range11:2341~2345M Hz	- 56.0 1	PAS S
Band4 0	5MHz	16QAM	38725	1RB#0	Range12:2360~2365M Hz	- 55.4 8	PAS S
Band4 0	5MHz	16QAM	38725	1RB#0	Range13:2365~26500 MHz	- 44.0 6	PAS S
Band4 0	5MHz	16QAM	38750	1RB#0	Range1:30~1000MHz	- 60.1 4	PAS S
Band4 0	5MHz	16QAM	38750	1RB#0	Range2:1000~2288M Hz	- 56.9 9	PAS S
Band4 0	5MHz	16QAM	38750	1RB#0	Range3:2288~2292M Hz	- 56.1 9	PAS S
Band4 0	5MHz	16QAM	38750	1RB#0	Range4:2292~2296M Hz	- 55.7 7	PAS S
Band4 0	5MHz	16QAM	38750	1RB#0	Range5:2296~2300M Hz	- 55.9 5	PAS S
Band4 0	5MHz	16QAM	38750	1RB#0	Range6:2300~2305M Hz	- 56.3	PAS S
Band4 0	5MHz	16QAM	38750	1RB#0	Range7:2320~2324M Hz	- 56.2	PAS S
Band4	5MHz	16QAM	38750	1RB#0	Range8:2324~2328M	-	PAS

0					Hz	56.2 3	S
Band4 0	5MHz	16QAM	38750	1RB#0	Range9:2328~2337M Hz	- 54.6 1	PAS S
Band4 0	5MHz	16QAM	38750	1RB#0	Range10:2337~2341M Hz	- 55.8 6	PAS S
Band4 0	5MHz	16QAM	38750	1RB#0	Range11:2341~2345M Hz	- 56.3 3	PAS S
Band4 0	5MHz	16QAM	38750	1RB#0	Range12:2360~2365M Hz	- 55.5 1	PAS S
Band4 0	5MHz	16QAM	38750	1RB#0	Range13:2365~26500 MHz	- 44.3	PAS S
Band4 0	5MHz	16QAM	38775	1RB#0	Range1:30~1000MHz	- 60.6 2	PAS S
Band4 0	5MHz	16QAM	38775	1RB#0	Range2:1000~2288M Hz	- 56.7 5	PAS S
Band4 0	5MHz	16QAM	38775	1RB#0	Range3:2288~2292M Hz	- 56.2 7	PAS S
Band4 0	5MHz	16QAM	38775	1RB#0	Range4:2292~2296M Hz	- 55.9 8	PAS S
Band4 0	5MHz	16QAM	38775	1RB#0	Range5:2296~2300M Hz	- 56.3 7	PAS S
Band4 0	5MHz	16QAM	38775	1RB#0	Range6:2300~2305M Hz	- 55.2 6	PAS S
Band4 0	5MHz	16QAM	38775	1RB#0	Range7:2320~2324M Hz	- 55.8 2	PAS S
Band4 0	5MHz	16QAM	38775	1RB#0	Range8:2324~2328M Hz	- 56.6 1	PAS S
Band4 0	5MHz	16QAM	38775	1RB#0	Range9:2328~2337M Hz	- 55.4 7	PAS S
Band4	5MHz	16QAM	38775	1RB#0	Range10:2337~2341M	-	PAS

0					Hz	55.4 2	S
Band4 0	5MHz	16QAM	38775	1RB#0	Range11:2341~2345M Hz	-55	PAS S
Band4 0	5MHz	16QAM	38775	1RB#0	Range12:2360~2365M Hz	- 56.2 2	PAS S
Band4 0	5MHz	16QAM	38775	1RB#0	Range13:2365~26500 MHz	- 44.3 4	PAS S
Band4 0	10MHz	QPSK	38750	1RB#0	Range1:30~1000MHz	- 61.2 2	PAS S
Band4 0	10MHz	QPSK	38750	1RB#0	Range2:1000~2288M Hz	- 56.5 8	PAS S
Band4 0	10MHz	QPSK	38750	1RB#0	Range3:2288~2292M Hz	- 55.7 8	PAS S
Band4 0	10MHz	QPSK	38750	1RB#0	Range4:2292~2296M Hz	- 56.3 5	PAS S
Band4 0	10MHz	QPSK	38750	1RB#0	Range5:2296~2300M Hz	- 56.5	PAS S
Band4 0	10MHz	QPSK	38750	1RB#0	Range6:2300~2305M Hz	- 55.4 2	PAS S
Band4 0	10MHz	QPSK	38750	1RB#0	Range7:2320~2324M Hz	- 56.0 8	PAS S
Band4 0	10MHz	QPSK	38750	1RB#0	Range8:2324~2328M Hz	- 56.8 3	PAS S
Band4 0	10MHz	QPSK	38750	1RB#0	Range9:2328~2337M Hz	- 54.6 3	PAS S
Band4 0	10MHz	QPSK	38750	1RB#0	Range10:2337~2341M Hz	- 55.5 4	PAS S
Band4 0	10MHz	QPSK	38750	1RB#0	Range11:2341~2345M Hz	- 55.2 1	PAS S
Band4 0	10MHz	QPSK	38750	1RB#0	Range12:2360~2365M Hz	- 56.0	PAS S

						3	
Band4 0	10MHz	QPSK	38750	1RB#0	Range13:2365~26500 MHz	- 45.1 3	PAS S
Band4 0	10MHz	16QAM	38750	1RB#0	Range1:30~1000MHz	- 58.6 3	PAS S
Band4 0	10MHz	16QAM	38750	1RB#0	Range2:1000~2288M Hz	- 56.9 6	PAS S
Band4 0	10MHz	16QAM	38750	1RB#0	Range3:2288~2292M Hz	- 55.9 7	PAS S
Band4 0	10MHz	16QAM	38750	1RB#0	Range4:2292~2296M Hz	- 56.2 5	PAS S
Band4 0	10MHz	16QAM	38750	1RB#0	Range5:2296~2300M Hz	- 56.2 5	PAS S
Band4 0	10MHz	16QAM	38750	1RB#0	Range6:2300~2305M Hz	- 55.4 9	PAS S
Band4 0	10MHz	16QAM	38750	1RB#0	Range7:2320~2324M Hz	- 55.9 2	PAS S
Band4 0	10MHz	16QAM	38750	1RB#0	Range8:2324~2328M Hz	- 56.4 3	PAS S
Band4 0	10MHz	16QAM	38750	1RB#0	Range9:2328~2337M Hz	- 55.7 9	PAS S
Band4 0	10MHz	16QAM	38750	1RB#0	Range10:2337~2341M Hz	- 55.1 8	PAS S
Band4 0	10MHz	16QAM	38750	1RB#0	Range11:2341~2345M Hz	- 54.9 3	PAS S
Band4 0	10MHz	16QAM	38750	1RB#0	Range12:2360~2365M Hz	- 55.7 6	PAS S
Band4 0	10MHz	16QAM	38750	1RB#0	Range13:2365~26500 MHz	- 44.1 9	PAS S

Test Graphs

