

Test Data for E-UTRA Band 40_2

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(2350-2360)	5MHz	QPSK	39175	1RB#0	20.76	21.41	PASS
40(2350-2360)	5MHz	16QAM	39175	1RB#0	20.35	21.00	PASS
40(2350-2360)	5MHz	QPSK	39175	1RB#24	21.45	22.10	PASS
40(2350-2360)	5MHz	16QAM	39175	1RB#24	20.61	21.26	PASS
40(2350-2360)	5MHz	QPSK	39175	1RB#49	21.16	21.81	PASS
40(2350-2360)	5MHz	16QAM	39175	1RB#49	20.14	20.79	PASS
40(2350-2360)	5MHz	QPSK	39175	25RB#0	19.80	20.45	PASS
40(2350-2360)	5MHz	16QAM	39175	25RB#0	18.45	19.10	PASS
40(2350-2360)	5MHz	QPSK	39175	25RB#12	18.78	19.43	PASS
40(2350-2360)	5MHz	16QAM	39175	25RB#12	18.67	19.32	PASS
40(2350-2360)	5MHz	QPSK	39175	25RB#25	18.91	19.56	PASS
40(2350-2360)	5MHz	16QAM	39175	25RB#25	18.56	19.21	PASS
40(2350-2360)	5MHz	QPSK	39175	50RB#0	19.35	20.00	PASS
40(2350-2360)	5MHz	16QAM	39175	50RB#0	19.77	20.42	PASS
40(2350-2360)	5MHz	QPSK	39200	1RB#0	21.23	21.88	PASS
40(2350-2360)	5MHz	16QAM	39200	1RB#0	20.73	21.38	PASS
40(2350-2360)	5MHz	QPSK	39200	1RB#24	21.07	21.72	PASS
40(2350-2360)	5MHz	16QAM	39200	1RB#24	21.57	22.22	PASS
40(2350-2360)	5MHz	QPSK	39200	1RB#49	20.74	21.39	PASS

2360)							
40(2350-2360)	5MHz	16QAM	39200	1RB#49	20.81	21.46	PASS
40(2350-2360)	5MHz	QPSK	39200	25RB#0	19.63	20.28	PASS
40(2350-2360)	5MHz	16QAM	39200	25RB#0	18.77	19.42	PASS
40(2350-2360)	5MHz	QPSK	39200	25RB#12	19.43	20.08	PASS
40(2350-2360)	5MHz	16QAM	39200	25RB#12	18.46	19.11	PASS
40(2350-2360)	5MHz	QPSK	39200	25RB#25	20.23	20.88	PASS
40(2350-2360)	5MHz	16QAM	39200	25RB#25	18.59	19.24	PASS
40(2350-2360)	5MHz	QPSK	39200	50RB#0	19.21	19.86	PASS
40(2350-2360)	5MHz	16QAM	39200	50RB#0	19.76	20.41	PASS
40(2350-2360)	5MHz	QPSK	39225	1RB#0	20.60	21.25	PASS
40(2350-2360)	5MHz	16QAM	39225	1RB#0	20.50	21.15	PASS
40(2350-2360)	5MHz	QPSK	39225	1RB#24	21.62	22.27	PASS
40(2350-2360)	5MHz	16QAM	39225	1RB#24	21.51	22.16	PASS
40(2350-2360)	5MHz	QPSK	39225	1RB#49	21.65	22.30	PASS
40(2350-2360)	5MHz	16QAM	39225	1RB#49	21.54	22.19	PASS
40(2350-2360)	5MHz	QPSK	39225	25RB#0	19.48	20.13	PASS
40(2350-2360)	5MHz	16QAM	39225	25RB#0	19.20	19.85	PASS
40(2350-2360)	5MHz	QPSK	39225	25RB#12	19.35	20.00	PASS
40(2350-2360)	5MHz	16QAM	39225	25RB#12	19.00	19.65	PASS
40(2350-2360)	5MHz	QPSK	39225	25RB#25	19.69	20.34	PASS
40(2350-2360)	5MHz	16QAM	39225	25RB#25	19.25	19.90	PASS

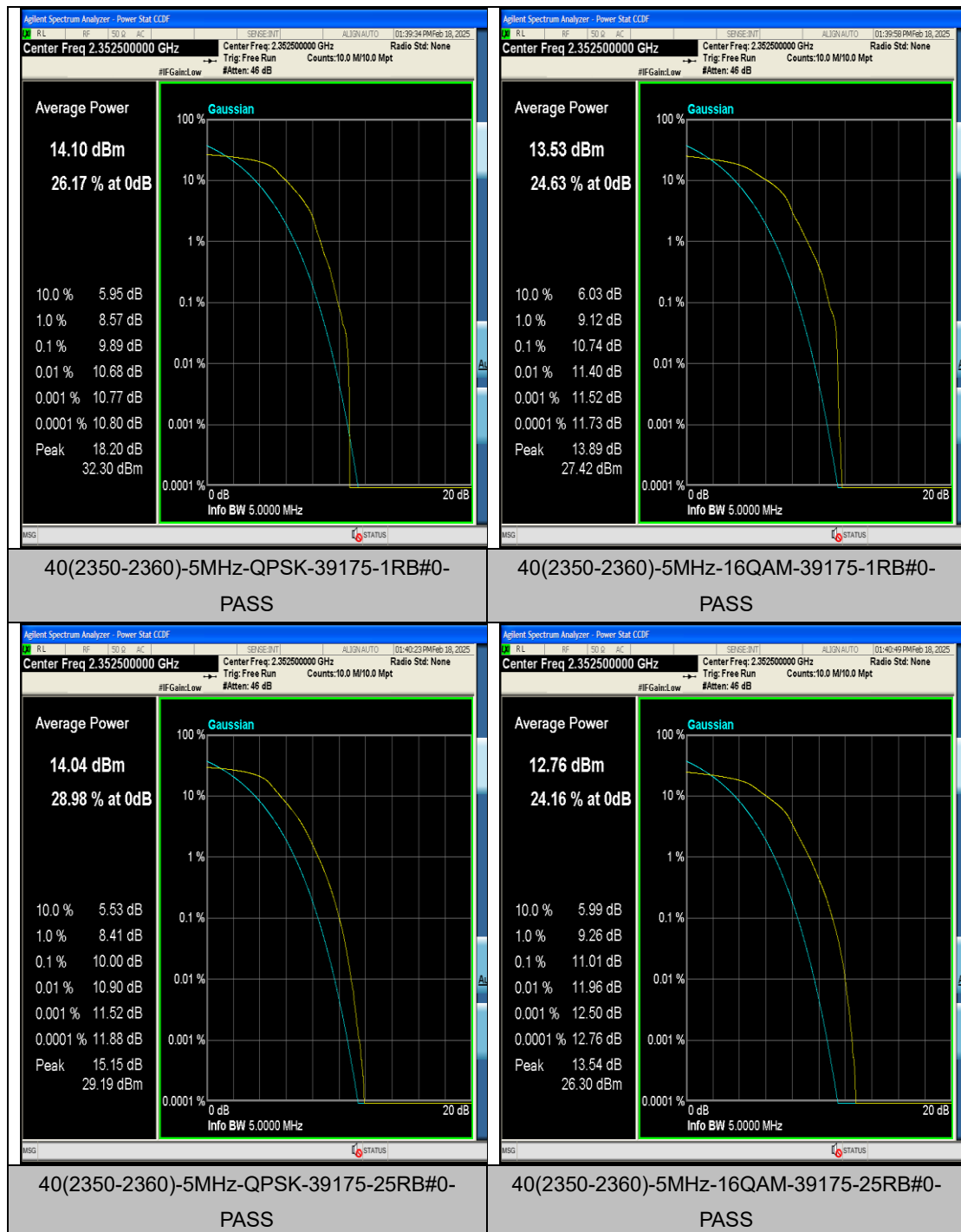
40(2350-2360)	5MHz	QPSK	39225	50RB#0	19.42	20.07	PASS
40(2350-2360)	5MHz	16QAM	39225	50RB#0	20.06	20.71	PASS
40(2350-2360)	10MHz	QPSK	39200	1RB#0	20.13	20.78	PASS
40(2350-2360)	10MHz	16QAM	39200	1RB#0	19.65	20.30	PASS
40(2350-2360)	10MHz	QPSK	39200	1RB#24	20.36	21.01	PASS
40(2350-2360)	10MHz	16QAM	39200	1RB#24	20.11	20.76	PASS
40(2350-2360)	10MHz	QPSK	39200	1RB#49	21.09	21.74	PASS
40(2350-2360)	10MHz	16QAM	39200	1RB#49	21.22	21.87	PASS
40(2350-2360)	10MHz	QPSK	39200	25RB#0	18.08	18.73	PASS
40(2350-2360)	10MHz	16QAM	39200	25RB#0	18.21	18.86	PASS
40(2350-2360)	10MHz	QPSK	39200	25RB#12	18.98	19.63	PASS
40(2350-2360)	10MHz	16QAM	39200	25RB#12	17.55	18.20	PASS
40(2350-2360)	10MHz	QPSK	39200	25RB#25	19.31	19.96	PASS
40(2350-2360)	10MHz	16QAM	39200	25RB#25	18.32	18.97	PASS
40(2350-2360)	10MHz	QPSK	39200	50RB#0	17.21	17.86	PASS
40(2350-2360)	10MHz	16QAM	39200	50RB#0	16.20	16.85	PASS

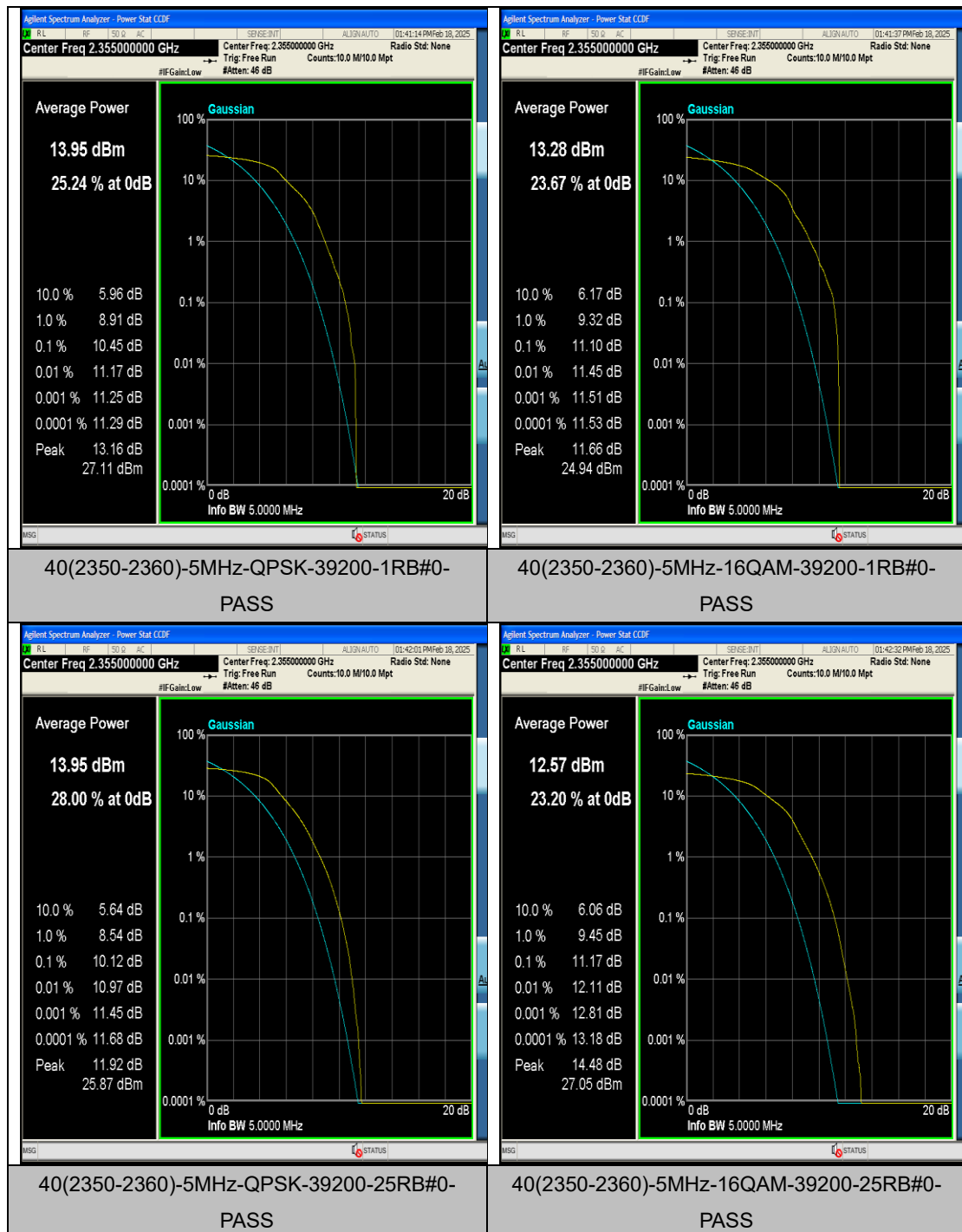
Appendix B: Peak-to-Average Ratio(CCDF)

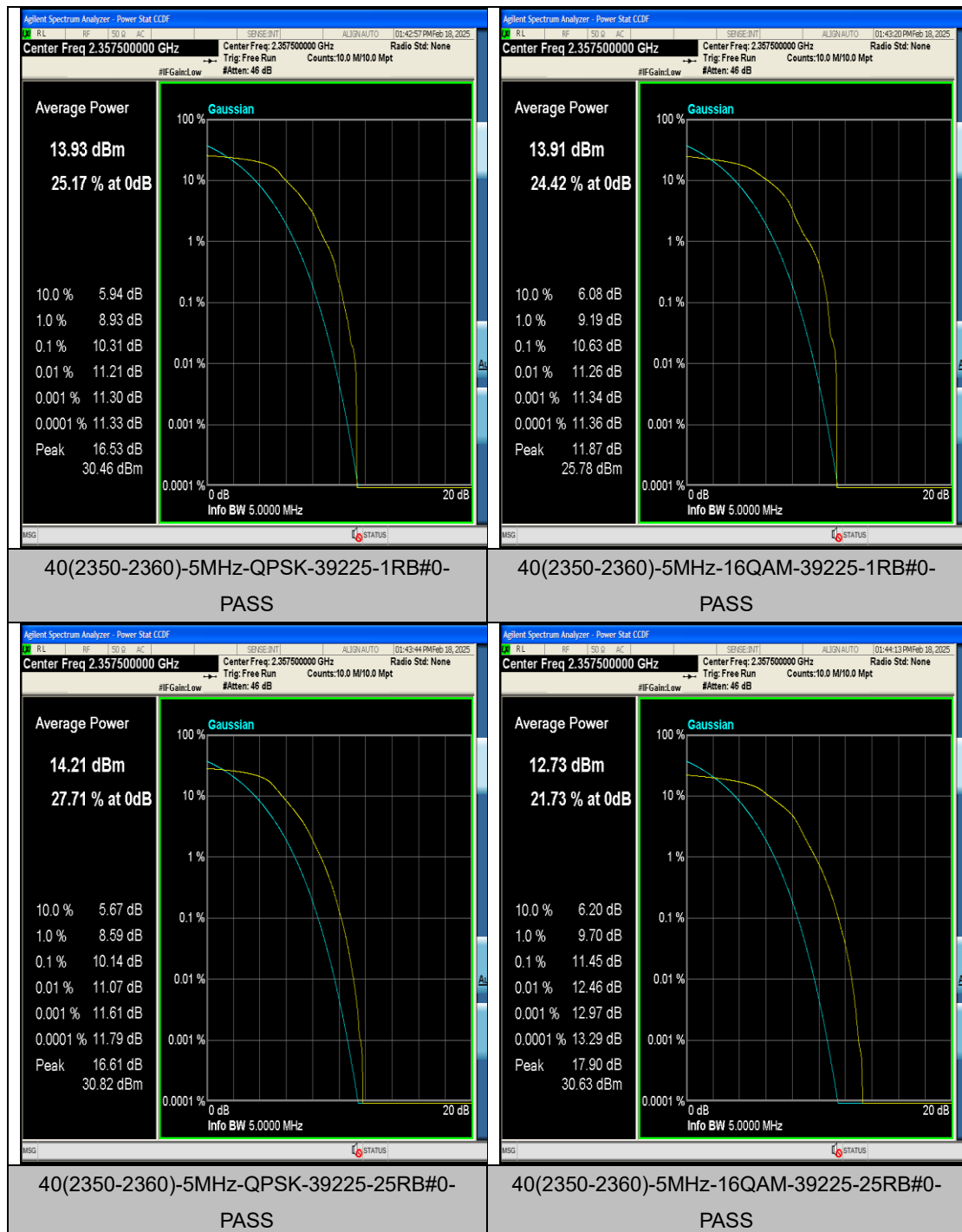
Test Result

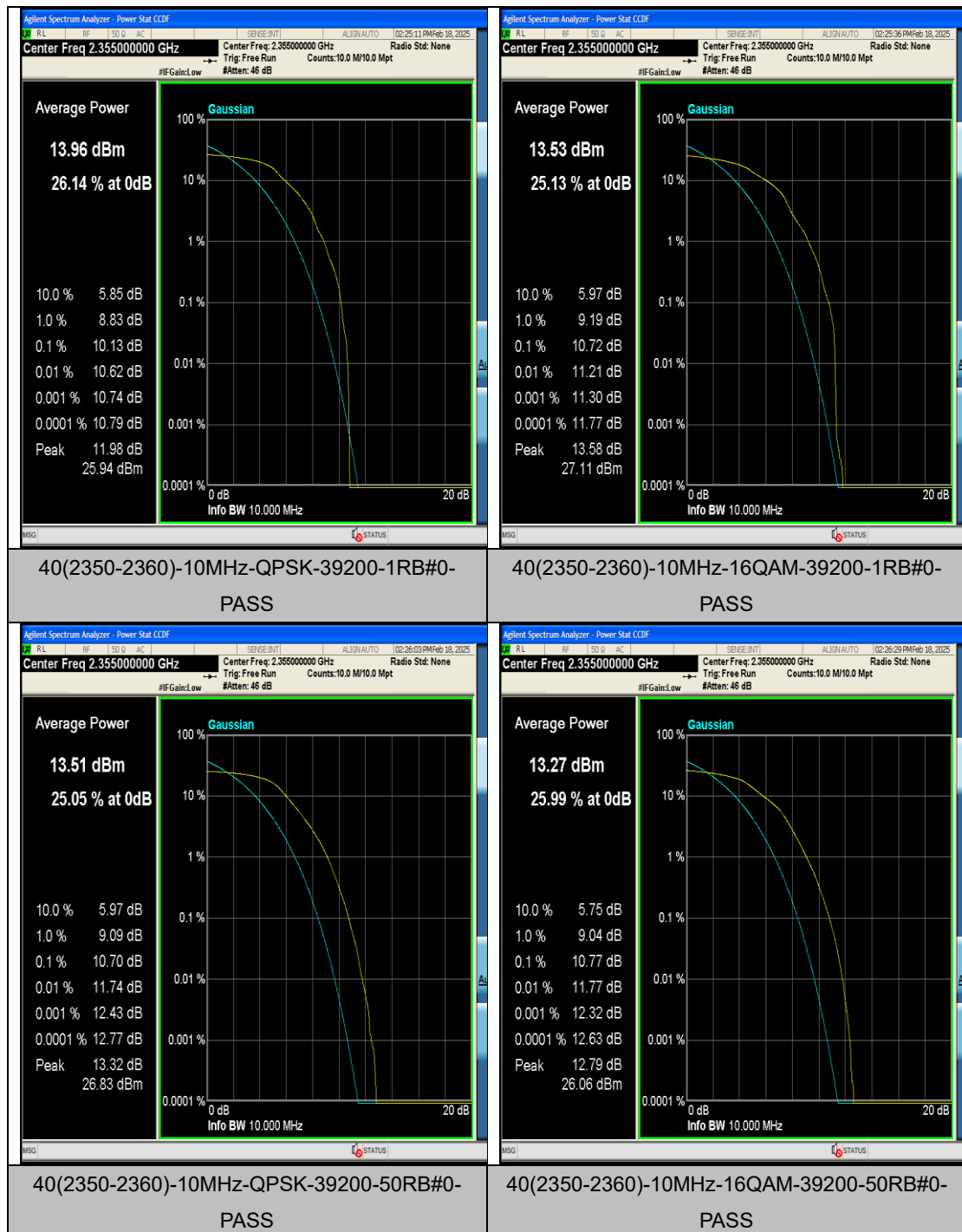
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
40(2350-2360)	5MHz	QPSK	39175	1RB#0	9.89	13	PASS
40(2350-2360)	5MHz	16QAM	39175	1RB#0	10.74	13	PASS
40(2350-2360)	5MHz	QPSK	39175	25RB#0	10.00	13	PASS
40(2350-2360)	5MHz	16QAM	39175	25RB#0	11.01	13	PASS
40(2350-2360)	5MHz	QPSK	39200	1RB#0	10.45	13	PASS
40(2350-2360)	5MHz	16QAM	39200	1RB#0	11.10	13	PASS
40(2350-2360)	5MHz	QPSK	39200	25RB#0	10.12	13	PASS
40(2350-2360)	5MHz	16QAM	39200	25RB#0	11.17	13	PASS
40(2350-2360)	5MHz	QPSK	39225	1RB#0	10.31	13	PASS
40(2350-2360)	5MHz	16QAM	39225	1RB#0	10.63	13	PASS
40(2350-2360)	5MHz	QPSK	39225	25RB#0	10.14	13	PASS
40(2350-2360)	5MHz	16QAM	39225	25RB#0	11.45	13	PASS
40(2350-2360)	10MHz	QPSK	39200	1RB#0	10.13	13	PASS
40(2350-2360)	10MHz	16QAM	39200	1RB#0	10.72	13	PASS
40(2350-2360)	10MHz	QPSK	39200	50RB#0	10.70	13	PASS
40(2350-2360)	10MHz	16QAM	39200	50RB#0	10.77	13	PASS

Test Graphs







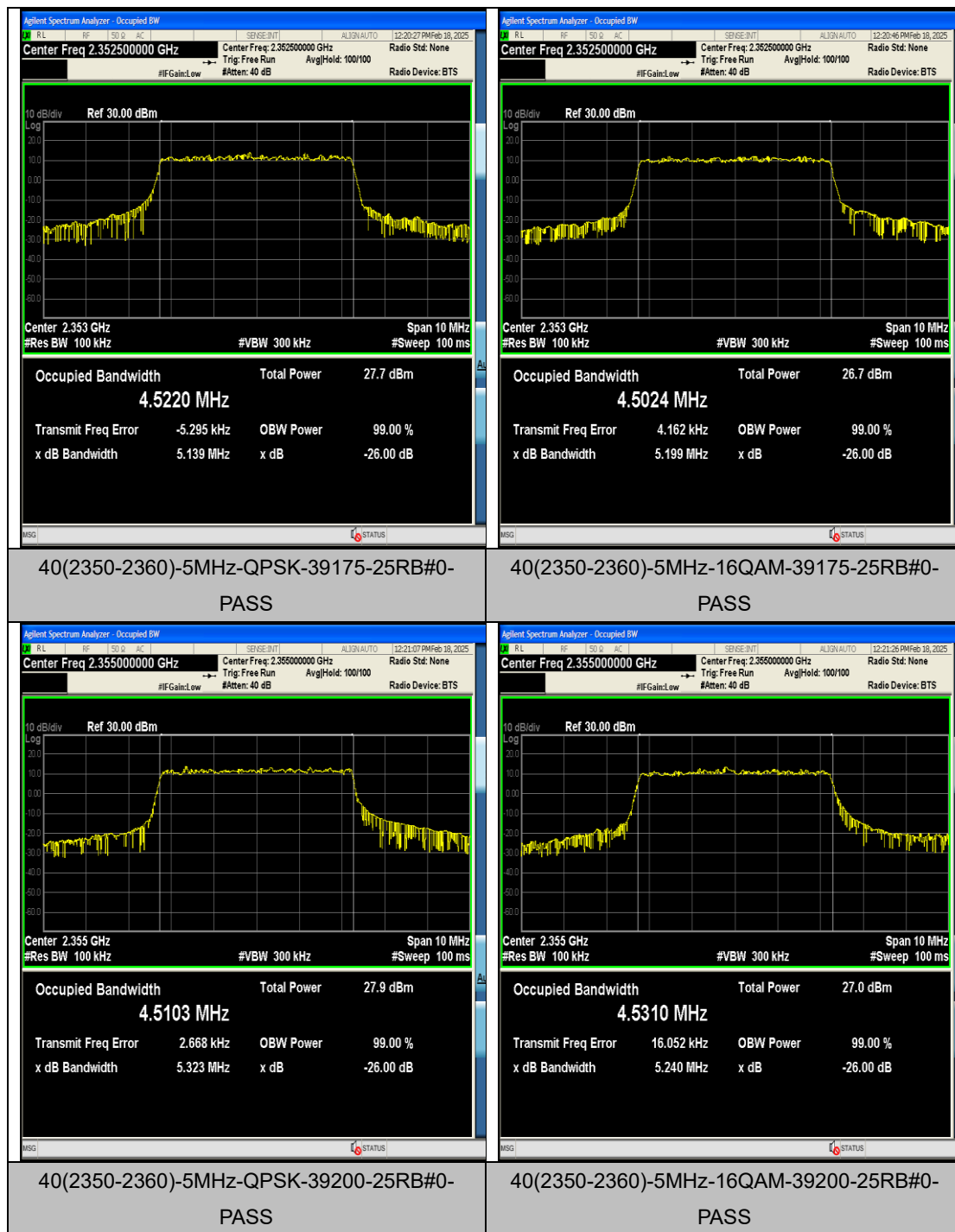


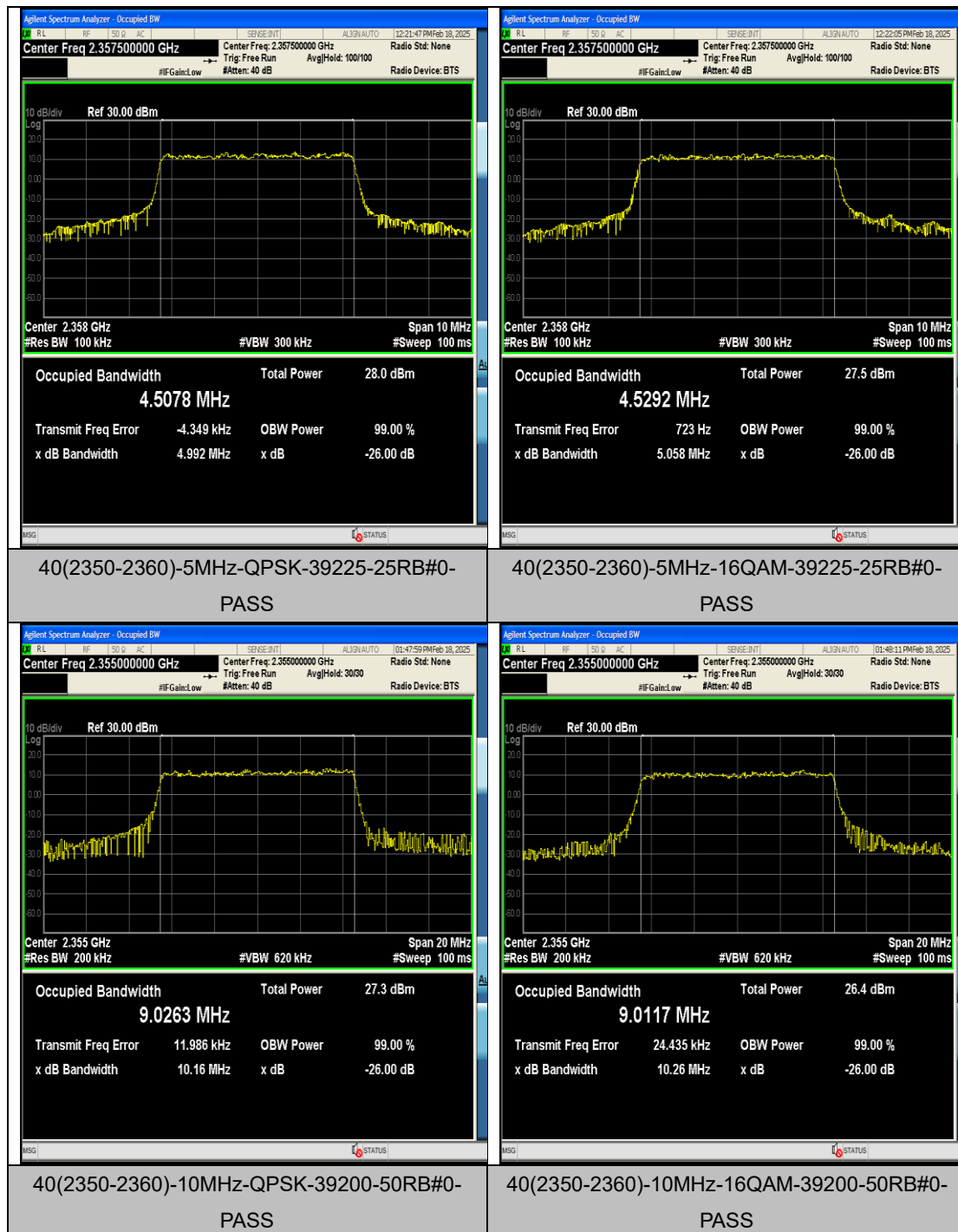
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
40(2350-2360)	5MHz	QPSK	39175	25RB#0	4.5220	5.139	PASS
40(2350-2360)	5MHz	16QAM	39175	25RB#0	4.5024	5.199	PASS
40(2350-2360)	5MHz	QPSK	39200	25RB#0	4.5103	5.323	PASS
40(2350-2360)	5MHz	16QAM	39200	25RB#0	4.5310	5.240	PASS
40(2350-2360)	5MHz	QPSK	39225	25RB#0	4.5078	4.992	PASS
40(2350-2360)	5MHz	16QAM	39225	25RB#0	4.5292	5.058	PASS
40(2350-2360)	10MHz	QPSK	39200	50RB#0	9.0263	10.16	PASS
40(2350-2360)	10MHz	16QAM	39200	50RB#0	9.0117	10.26	PASS

Test Graphs



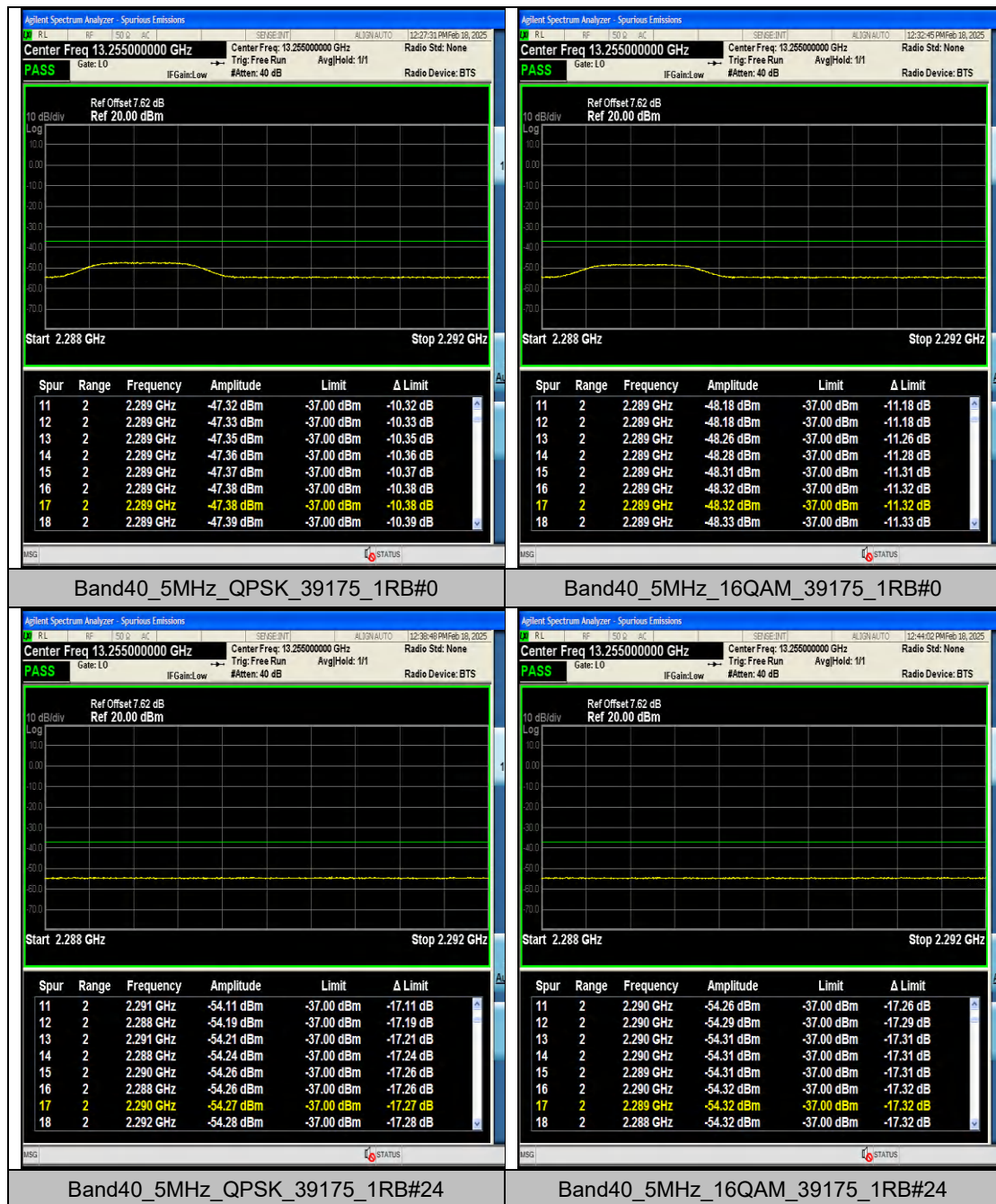


Appendix D: Band Edge

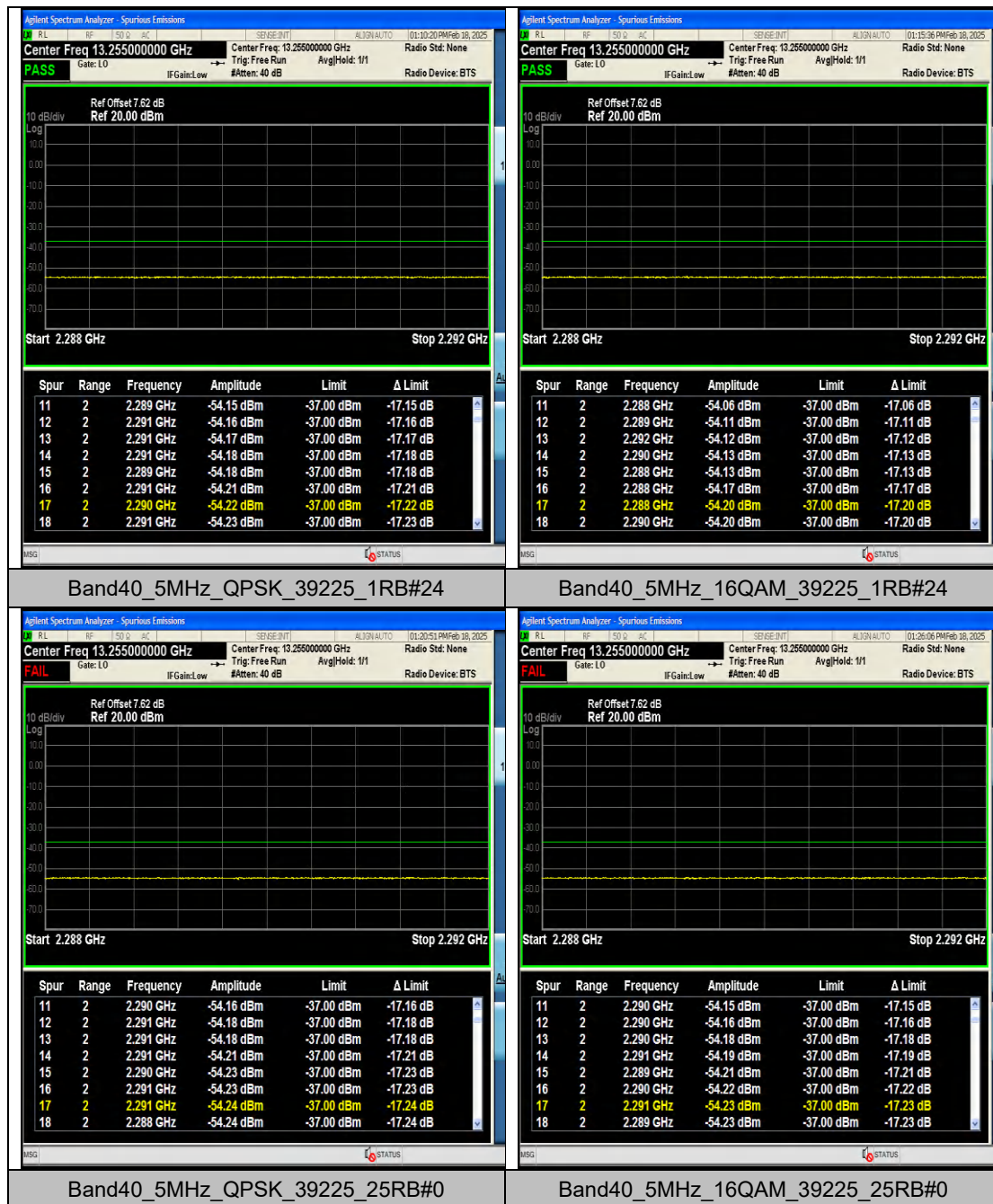
Test Result

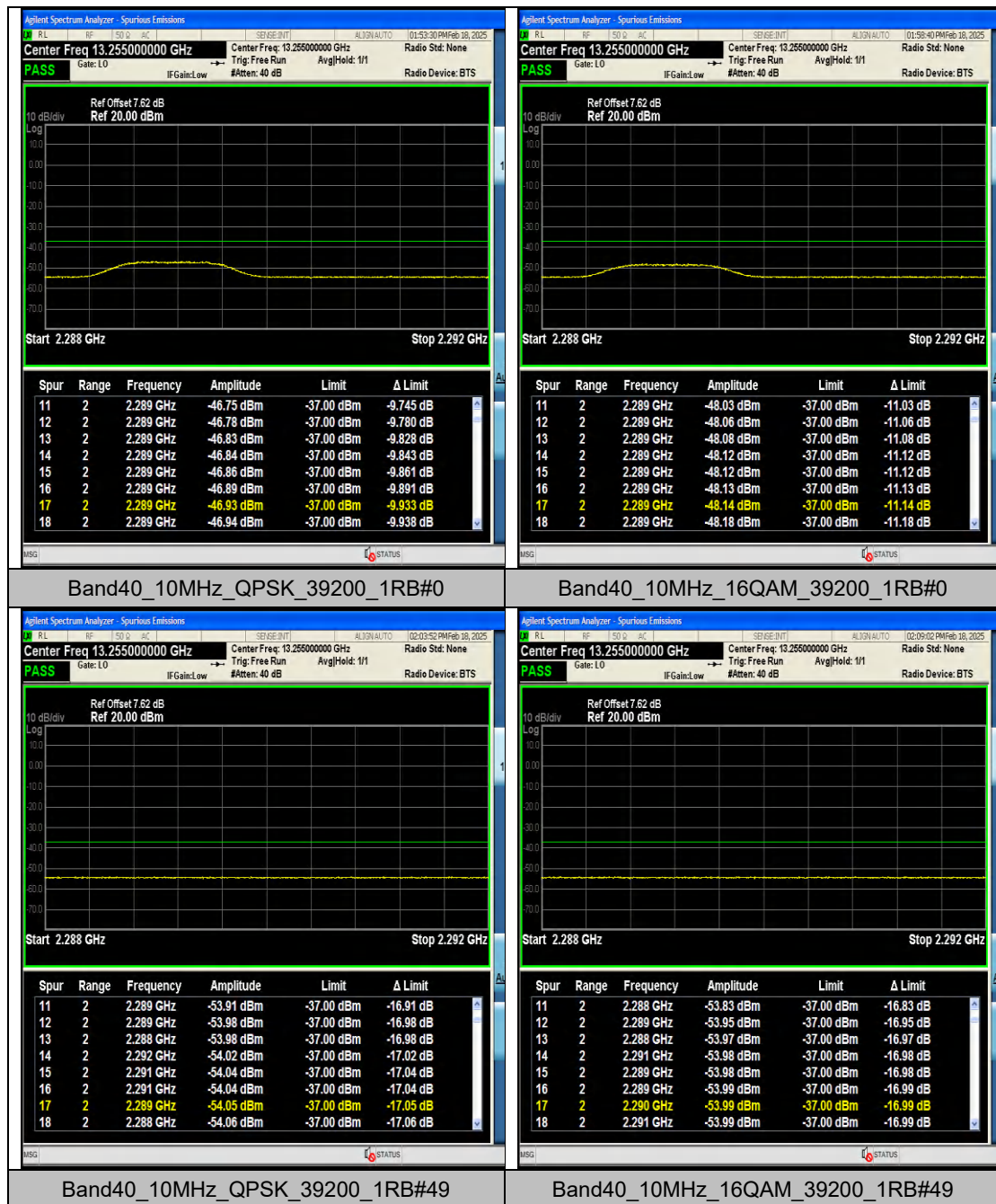
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
40(2350-2360)	5MHz	QPSK	39175	1RB#0	-47.32	PASS
40(2350-2360)	5MHz	16QAM	39175	1RB#0	-48.18	PASS
40(2350-2360)	5MHz	QPSK	39175	1RB#24	-54.19	PASS
40(2350-2360)	5MHz	16QAM	39175	1RB#24	-54.15	PASS
40(2350-2360)	5MHz	QPSK	39175	25RB#0	-54.19	PASS
40(2350-2360)	5MHz	16QAM	39175	25RB#0	-54.16	PASS
40(2350-2360)	5MHz	QPSK	39225	1RB#0	-54.11	PASS
40(2350-2360)	5MHz	16QAM	39225	1RB#0	-54.10	PASS
40(2350-2360)	5MHz	QPSK	39225	1RB#24	-54.14	PASS
40(2350-2360)	5MHz	16QAM	39225	1RB#24	-54.10	PASS
40(2350-2360)	5MHz	QPSK	39225	25RB#0	-54.07	PASS
40(2350-2360)	5MHz	16QAM	39225	25RB#0	-54.14	PASS
40(2350-2360)	10MHz	QPSK	39200	1RB#0	-46.75	PASS
40(2350-2360)	10MHz	16QAM	39200	1RB#0	-48.03	PASS
40(2350-2360)	10MHz	QPSK	39200	1RB#49	-53.99	PASS
40(2350-2360)	10MHz	16QAM	39200	1RB#49	-53.90	PASS
40(2350-2360)	10MHz	QPSK	39200	50RB#0	-53.85	PASS
40(2350-2360)	10MHz	16QAM	39200	50RB#0	-53.94	PASS

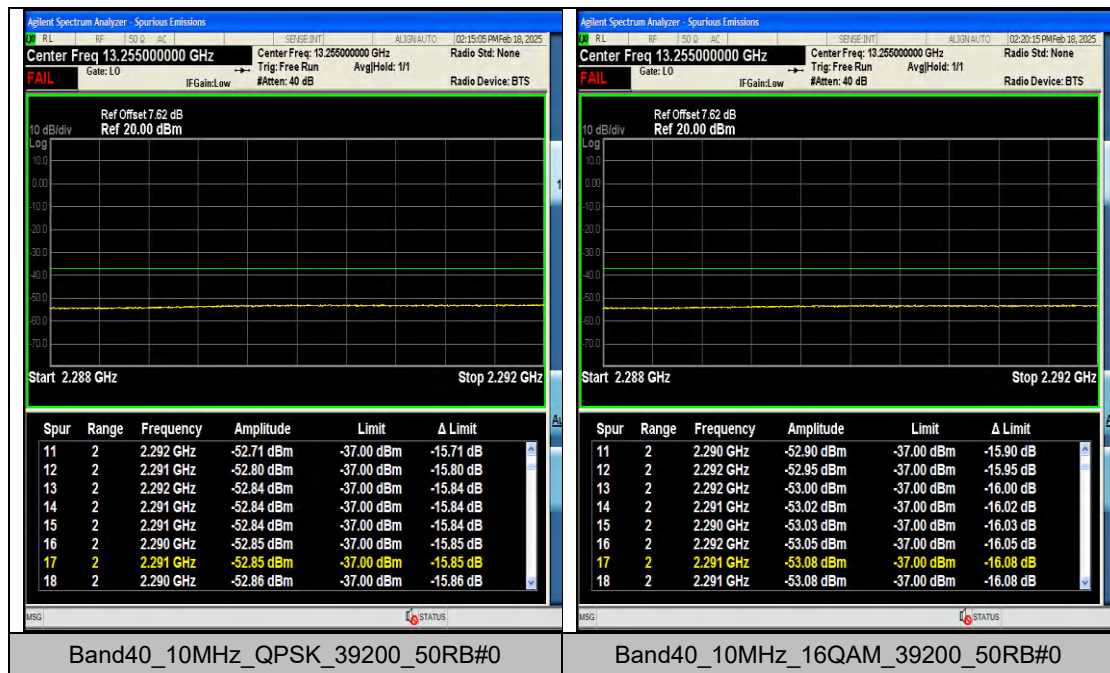
Test Graphs











Appendix E: Conducted Spurious Emission

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band40	5MHz	QPSK	39175	1RB#0	Range1:30~1000MHz	-60.58	PASS
Band40	5MHz	QPSK	39175	1RB#0	Range2:1000~2288MHz	-56.92	PASS
Band40	5MHz	QPSK	39175	1RB#0	Range3:2288~2292MHz	-55.11	PASS
Band40	5MHz	QPSK	39175	1RB#0	Range4:2292~2296MHz	-55.42	PASS
Band40	5MHz	QPSK	39175	1RB#0	Range5:2296~2300MHz	-55.49	PASS
Band40	5MHz	QPSK	39175	1RB#0	Range6:2300~2305MHz	-56.51	PASS
Band40	5MHz	QPSK	39175	1RB#0	Range7:2320~2324MHz	-55.94	PASS
Band40	5MHz	QPSK	39175	1RB#0	Range8:2324~2328MHz	-55.94	PASS
Band40	5MHz	QPSK	39175	1RB#0	Range9:2328~2337MHz	-55.6	PASS
Band40	5MHz	QPSK	39175	1RB#0	Range10:2337~2341MHz	-55.46	PASS
Band40	5MHz	QPSK	39175	1RB#0	Range11:2341~2345MHz	-55.64	PASS
Band40	5MHz	QPSK	39175	1RB#0	Range12:2360~2365MHz	-55.58	PASS
Band40	5MHz	QPSK	39175	1RB#0	Range13:2365~26500	-	PASS

0					MHz	41.2 2	S
Band4 0	5MHz	QPSK	39200	1RB#0	Range1:30~1000MHz	- 59.5 4	PAS S
Band4 0	5MHz	QPSK	39200	1RB#0	Range2:1000~2288M Hz	- 56.2 3	PAS S
Band4 0	5MHz	QPSK	39200	1RB#0	Range3:2288~2292M Hz	- 56.9	PAS S
Band4 0	5MHz	QPSK	39200	1RB#0	Range4:2292~2296M Hz	- 56.2 5	PAS S
Band4 0	5MHz	QPSK	39200	1RB#0	Range5:2296~2300M Hz	- 54.0 5	PAS S
Band4 0	5MHz	QPSK	39200	1RB#0	Range6:2300~2305M Hz	- 56.1 6	PAS S
Band4 0	5MHz	QPSK	39200	1RB#0	Range7:2320~2324M Hz	- 56.7 4	PAS S
Band4 0	5MHz	QPSK	39200	1RB#0	Range8:2324~2328M Hz	- 55.6 4	PAS S
Band4 0	5MHz	QPSK	39200	1RB#0	Range9:2328~2337M Hz	- 55.5 7	PAS S
Band4 0	5MHz	QPSK	39200	1RB#0	Range10:2337~2341M Hz	- 55.4 7	PAS S
Band4 0	5MHz	QPSK	39200	1RB#0	Range11:2341~2345M Hz	- 55.5 5	PAS S
Band4 0	5MHz	QPSK	39200	1RB#0	Range12:2360~2365M Hz	- 55.3 9	PAS S
Band4 0	5MHz	QPSK	39200	1RB#0	Range13:2365~26500 MHz	- 40.1 6	PAS S
Band4 0	5MHz	QPSK	39225	1RB#0	Range1:30~1000MHz	- 60.1 3	PAS S
Band4	5MHz	QPSK	39225	1RB#0	Range2:1000~2288M	-	PAS

0					Hz	56.9 4	S
Band4 0	5MHz	QPSK	39225	1RB#0	Range3:2288~2292M Hz	- 56.2 3	PAS S
Band4 0	5MHz	QPSK	39225	1RB#0	Range4:2292~2296M Hz	- 56.6 9	PAS S
Band4 0	5MHz	QPSK	39225	1RB#0	Range5:2296~2300M Hz	- 55.7 1	PAS S
Band4 0	5MHz	QPSK	39225	1RB#0	Range6:2300~2305M Hz	- 55.2 8	PAS S
Band4 0	5MHz	QPSK	39225	1RB#0	Range7:2320~2324M Hz	- 56.3 7	PAS S
Band4 0	5MHz	QPSK	39225	1RB#0	Range8:2324~2328M Hz	- 57.0 8	PAS S
Band4 0	5MHz	QPSK	39225	1RB#0	Range9:2328~2337M Hz	- 56.2 1	PAS S
Band4 0	5MHz	QPSK	39225	1RB#0	Range10:2337~2341M Hz	- 56.7 5	PAS S
Band4 0	5MHz	QPSK	39225	1RB#0	Range11:2341~2345M Hz	- 55.5 5	PAS S
Band4 0	5MHz	QPSK	39225	1RB#0	Range12:2360~2365M Hz	- 55.4 5	PAS S
Band4 0	5MHz	QPSK	39225	1RB#0	Range13:2365~26500 MHz	- 40.6 3	PAS S
Band4 0	5MHz	16QAM	39175	1RB#0	Range1:30~1000MHz	- 60.9 8	PAS S
Band4 0	5MHz	16QAM	39175	1RB#0	Range2:1000~2288M Hz	- 56.2 6	PAS S
Band4 0	5MHz	16QAM	39175	1RB#0	Range3:2288~2292M Hz	- 54.8 4	PAS S

Band4 0	5MHz	16QAM	39175	1RB#0	Range4:2292~2296M Hz	- 56.4 4	PAS S
Band4 0	5MHz	16QAM	39175	1RB#0	Range5:2296~2300M Hz	- 56.1 4	PAS S
Band4 0	5MHz	16QAM	39175	1RB#0	Range6:2300~2305M Hz	- 55.8 1	PAS S
Band4 0	5MHz	16QAM	39175	1RB#0	Range7:2320~2324M Hz	- 55.5 9	PAS S
Band4 0	5MHz	16QAM	39175	1RB#0	Range8:2324~2328M Hz	- 55.1 4	PAS S
Band4 0	5MHz	16QAM	39175	1RB#0	Range9:2328~2337M Hz	- 55.5	PAS S
Band4 0	5MHz	16QAM	39175	1RB#0	Range10:2337~2341M Hz	- 55.1 1	PAS S
Band4 0	5MHz	16QAM	39175	1RB#0	Range11:2341~2345M Hz	- 55.1 6	PAS S
Band4 0	5MHz	16QAM	39175	1RB#0	Range12:2360~2365M Hz	- 54.8 7	PAS S
Band4 0	5MHz	16QAM	39175	1RB#0	Range13:2365~26500 MHz	- 40.3 5	PAS S
Band4 0	5MHz	16QAM	39200	1RB#0	Range1:30~1000MHz	- 60.4 1	PAS S
Band4 0	5MHz	16QAM	39200	1RB#0	Range2:1000~2288M Hz	- 55.6 6	PAS S
Band4 0	5MHz	16QAM	39200	1RB#0	Range3:2288~2292M Hz	- 56.7 2	PAS S
Band4 0	5MHz	16QAM	39200	1RB#0	Range4:2292~2296M Hz	- 55.2 6	PAS S
Band4 0	5MHz	16QAM	39200	1RB#0	Range5:2296~2300M Hz	- 55.1 2	PAS S

Band4 0	5MHz	16QAM	39200	1RB#0	Range6:2300~2305M Hz	- 56.1 6	PAS S
Band4 0	5MHz	16QAM	39200	1RB#0	Range7:2320~2324M Hz	- 55.8 3	PAS S
Band4 0	5MHz	16QAM	39200	1RB#0	Range8:2324~2328M Hz	- 56.4 9	PAS S
Band4 0	5MHz	16QAM	39200	1RB#0	Range9:2328~2337M Hz	- 55.6	PAS S
Band4 0	5MHz	16QAM	39200	1RB#0	Range10:2337~2341M Hz	- 56.6 3	PAS S
Band4 0	5MHz	16QAM	39200	1RB#0	Range11:2341~2345M Hz	- 55.0 3	PAS S
Band4 0	5MHz	16QAM	39200	1RB#0	Range12:2360~2365M Hz	- 55.9	PAS S
Band4 0	5MHz	16QAM	39200	1RB#0	Range13:2365~26500 MHz	- 40.9 3	PAS S
Band4 0	5MHz	16QAM	39225	1RB#0	Range1:30~1000MHz	- 59.4 3	PAS S
Band4 0	5MHz	16QAM	39225	1RB#0	Range2:1000~2288M Hz	- 55.9 9	PAS S
Band4 0	5MHz	16QAM	39225	1RB#0	Range3:2288~2292M Hz	- 55.9 5	PAS S
Band4 0	5MHz	16QAM	39225	1RB#0	Range4:2292~2296M Hz	- 56.1 5	PAS S
Band4 0	5MHz	16QAM	39225	1RB#0	Range5:2296~2300M Hz	- 56.2 5	PAS S
Band4 0	5MHz	16QAM	39225	1RB#0	Range6:2300~2305M Hz	- 56.4 7	PAS S
Band4 0	5MHz	16QAM	39225	1RB#0	Range7:2320~2324M Hz	- 55.5 9	PAS S
Band4	5MHz	16QAM	39225	1RB#0	Range8:2324~2328M	-	PAS

0					Hz	56.7 9	S
Band4 0	5MHz	16QAM	39225	1RB#0	Range9:2328~2337M Hz	- 54.8 5	PAS S
Band4 0	5MHz	16QAM	39225	1RB#0	Range10:2337~2341M Hz	- 54.8 7	PAS S
Band4 0	5MHz	16QAM	39225	1RB#0	Range11:2341~2345M Hz	- 56.0 7	PAS S
Band4 0	5MHz	16QAM	39225	1RB#0	Range12:2360~2365M Hz	- 55.7 5	PAS S
Band4 0	5MHz	16QAM	39225	1RB#0	Range13:2365~26500 MHz	- 41.5 9	PAS S
Band4 0	10MHz	QPSK	39200	1RB#0	Range1:30~1000MHz	- 60.7 5	PAS S
Band4 0	10MHz	QPSK	39200	1RB#0	Range2:1000~2288M Hz	- 56.0 9	PAS S
Band4 0	10MHz	QPSK	39200	1RB#0	Range3:2288~2292M Hz	- 55.6 9	PAS S
Band4 0	10MHz	QPSK	39200	1RB#0	Range4:2292~2296M Hz	- 55.4 7	PAS S
Band4 0	10MHz	QPSK	39200	1RB#0	Range5:2296~2300M Hz	- 56.4	PAS S
Band4 0	10MHz	QPSK	39200	1RB#0	Range6:2300~2305M Hz	- 55.6 9	PAS S
Band4 0	10MHz	QPSK	39200	1RB#0	Range7:2320~2324M Hz	-56	PAS S
Band4 0	10MHz	QPSK	39200	1RB#0	Range8:2324~2328M Hz	- 56.5 9	PAS S
Band4 0	10MHz	QPSK	39200	1RB#0	Range9:2328~2337M Hz	- 55.2	PAS S
Band4 0	10MHz	QPSK	39200	1RB#0	Range10:2337~2341M Hz	- 56.1	PAS S
Band4	10MHz	QPSK	39200	1RB#0	Range11:2341~2345M	-	PAS

0					Hz	54.4 3	S
Band4 0	10MHz	QPSK	39200	1RB#0	Range12:2360~2365M Hz	- 55.7 1	PAS S
Band4 0	10MHz	16QAM	39200	1RB#0	Range1:30~1000MHz	- 60.7 9	PAS S
Band4 0	10MHz	16QAM	39200	1RB#0	Range2:1000~2288M Hz	- 56.7 9	PAS S
Band4 0	10MHz	16QAM	39200	1RB#0	Range3:2288~2292M Hz	- 56.4 7	PAS S
Band4 0	10MHz	16QAM	39200	1RB#0	Range4:2292~2296M Hz	- 55.5 4	PAS S
Band4 0	10MHz	16QAM	39200	1RB#0	Range5:2296~2300M Hz	- 56.4 9	PAS S
Band4 0	10MHz	16QAM	39200	1RB#0	Range6:2300~2305M Hz	- 55.6 2	PAS S
Band4 0	10MHz	16QAM	39200	1RB#0	Range7:2320~2324M Hz	- 55.3	PAS S
Band4 0	10MHz	16QAM	39200	1RB#0	Range8:2324~2328M Hz	- 56.7	PAS S
Band4 0	10MHz	16QAM	39200	1RB#0	Range9:2328~2337M Hz	- 56.0 1	PAS S
Band4 0	10MHz	16QAM	39200	1RB#0	Range10:2337~2341M Hz	- 55.7 7	PAS S
Band4 0	10MHz	16QAM	39200	1RB#0	Range11:2341~2345M Hz	- 56.2 1	PAS S
Band4 0	10MHz	16QAM	39200	1RB#0	Range12:2360~2365M Hz	- 55.0 4	PAS S
Band4 0	10MHz	16QAM	39200	1RB#0	Range13:2365~26500 MHz	- 41.0 1	PAS S

Test Graphs

