

Test Data for E-UTRA Band 41

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: Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	EIRP(dBm)	Verdict
Band41	5MHz	QPSK	39675	1RB#0	19.26	19.55	PASS
Band41	5MHz	16QAM	39675	1RB#0	19.42	19.71	PASS
Band41	5MHz	QPSK	39675	1RB#12	19.27	19.56	PASS
Band41	5MHz	16QAM	39675	1RB#12	19.38	19.67	PASS
Band41	5MHz	QPSK	39675	1RB#24	19.43	19.72	PASS
Band41	5MHz	16QAM	39675	1RB#24	19.43	19.72	PASS
Band41	5MHz	QPSK	39675	12RB#0	18.86	19.15	PASS
Band41	5MHz	16QAM	39675	12RB#0	17.87	18.16	PASS
Band41	5MHz	QPSK	39675	12RB#6	18.85	19.14	PASS
Band41	5MHz	16QAM	39675	12RB#6	17.85	18.14	PASS
Band41	5MHz	QPSK	39675	12RB#13	18.89	19.18	PASS
Band41	5MHz	16QAM	39675	12RB#13	17.88	18.17	PASS
Band41	5MHz	QPSK	39675	25RB#0	18.85	19.14	PASS
Band41	5MHz	16QAM	39675	25RB#0	17.87	18.16	PASS
Band41	5MHz	QPSK	40620	1RB#0	17.65	17.94	PASS
Band41	5MHz	16QAM	40620	1RB#0	17.32	17.61	PASS
Band41	5MHz	QPSK	40620	1RB#12	17.63	17.92	PASS
Band41	5MHz	16QAM	40620	1RB#12	17.21	17.50	PASS
Band41	5MHz	QPSK	40620	1RB#24	17.66	17.95	PASS
Band41	5MHz	16QAM	40620	1RB#24	17.52	17.81	PASS
Band41	5MHz	QPSK	40620	12RB#0	17.24	17.53	PASS
Band41	5MHz	16QAM	40620	12RB#0	16.29	16.58	PASS
Band41	5MHz	QPSK	40620	12RB#6	17.23	17.52	PASS
Band41	5MHz	16QAM	40620	12RB#6	16.30	16.59	PASS
Band41	5MHz	QPSK	40620	12RB#13	17.18	17.47	PASS
Band41	5MHz	16QAM	40620	12RB#13	16.38	16.67	PASS
Band41	5MHz	QPSK	40620	25RB#0	17.18	17.47	PASS
Band41	5MHz	16QAM	40620	25RB#0	16.20	16.49	PASS
Band41	5MHz	QPSK	41565	1RB#0	18.94	19.23	PASS
Band41	5MHz	16QAM	41565	1RB#0	19.44	19.73	PASS
Band41	5MHz	QPSK	41565	1RB#12	18.83	19.12	PASS
Band41	5MHz	16QAM	41565	1RB#12	19.47	19.76	PASS
Band41	5MHz	QPSK	41565	1RB#24	18.77	19.06	PASS
Band41	5MHz	16QAM	41565	1RB#24	19.23	19.52	PASS
Band41	5MHz	QPSK	41565	12RB#0	18.48	18.77	PASS
Band41	5MHz	16QAM	41565	12RB#0	17.46	17.75	PASS

Band41	5MHz	QPSK	41565	12RB#6	18.33	18.62	PASS
Band41	5MHz	16QAM	41565	12RB#6	17.45	17.74	PASS
Band41	5MHz	QPSK	41565	12RB#13	18.21	18.50	PASS
Band41	5MHz	16QAM	41565	12RB#13	17.30	17.59	PASS
Band41	5MHz	QPSK	41565	25RB#0	18.39	18.68	PASS
Band41	5MHz	16QAM	41565	25RB#0	17.56	17.85	PASS
Band41	10MHz	QPSK	39700	1RB#0	19.16	19.45	PASS
Band41	10MHz	16QAM	39700	1RB#0	18.74	19.03	PASS
Band41	10MHz	QPSK	39700	1RB#24	19.30	19.59	PASS
Band41	10MHz	16QAM	39700	1RB#24	18.84	19.13	PASS
Band41	10MHz	QPSK	39700	1RB#49	19.26	19.55	PASS
Band41	10MHz	16QAM	39700	1RB#49	18.69	18.98	PASS
Band41	10MHz	QPSK	39700	25RB#0	18.79	19.08	PASS
Band41	10MHz	16QAM	39700	25RB#0	17.90	18.19	PASS
Band41	10MHz	QPSK	39700	25RB#12	18.80	19.09	PASS
Band41	10MHz	16QAM	39700	25RB#12	17.90	18.19	PASS
Band41	10MHz	QPSK	39700	25RB#25	18.81	19.10	PASS
Band41	10MHz	16QAM	39700	25RB#25	17.90	18.19	PASS
Band41	10MHz	QPSK	39700	50RB#0	18.81	19.10	PASS
Band41	10MHz	16QAM	39700	50RB#0	17.90	18.19	PASS
Band41	10MHz	QPSK	40620	1RB#0	17.64	17.93	PASS
Band41	10MHz	16QAM	40620	1RB#0	17.20	17.49	PASS
Band41	10MHz	QPSK	40620	1RB#24	17.66	17.95	PASS
Band41	10MHz	16QAM	40620	1RB#24	17.50	17.79	PASS
Band41	10MHz	QPSK	40620	1RB#49	17.57	17.86	PASS
Band41	10MHz	16QAM	40620	1RB#49	17.16	17.45	PASS
Band41	10MHz	QPSK	40620	25RB#0	17.14	17.43	PASS
Band41	10MHz	16QAM	40620	25RB#0	16.40	16.69	PASS
Band41	10MHz	QPSK	40620	25RB#12	17.15	17.44	PASS
Band41	10MHz	16QAM	40620	25RB#12	16.40	16.69	PASS
Band41	10MHz	QPSK	40620	25RB#25	17.31	17.60	PASS
Band41	10MHz	16QAM	40620	25RB#25	16.39	16.68	PASS
Band41	10MHz	QPSK	40620	50RB#0	17.23	17.52	PASS
Band41	10MHz	16QAM	40620	50RB#0	16.34	16.63	PASS
Band41	10MHz	QPSK	41540	1RB#0	19.15	19.44	PASS
Band41	10MHz	16QAM	41540	1RB#0	18.81	19.10	PASS
Band41	10MHz	QPSK	41540	1RB#24	18.92	19.21	PASS
Band41	10MHz	16QAM	41540	1RB#24	18.47	18.76	PASS
Band41	10MHz	QPSK	41540	1RB#49	18.62	18.91	PASS
Band41	10MHz	16QAM	41540	1RB#49	18.25	18.54	PASS
Band41	10MHz	QPSK	41540	25RB#0	18.62	18.91	PASS
Band41	10MHz	16QAM	41540	25RB#0	17.75	18.04	PASS
Band41	10MHz	QPSK	41540	25RB#12	18.62	18.91	PASS

Band41	10MHz	16QAM	41540	25RB#12	17.75	18.04	PASS
Band41	10MHz	QPSK	41540	25RB#25	18.37	18.66	PASS
Band41	10MHz	16QAM	41540	25RB#25	17.41	17.70	PASS
Band41	10MHz	QPSK	41540	50RB#0	18.35	18.64	PASS
Band41	10MHz	16QAM	41540	50RB#0	17.56	17.85	PASS
Band41	15MHz	QPSK	39725	1RB#0	19.14	19.43	PASS
Band41	15MHz	16QAM	39725	1RB#0	18.90	19.19	PASS
Band41	15MHz	QPSK	39725	1RB#38	19.19	19.48	PASS
Band41	15MHz	16QAM	39725	1RB#38	18.74	19.03	PASS
Band41	15MHz	QPSK	39725	1RB#74	19.09	19.38	PASS
Band41	15MHz	16QAM	39725	1RB#74	18.77	19.06	PASS
Band41	15MHz	QPSK	39725	38RB#0	18.81	19.10	PASS
Band41	15MHz	16QAM	39725	38RB#0	18.81	19.10	PASS
Band41	15MHz	QPSK	39725	38RB#18	18.81	19.10	PASS
Band41	15MHz	16QAM	39725	38RB#18	18.80	19.09	PASS
Band41	15MHz	QPSK	39725	38RB#37	18.81	19.10	PASS
Band41	15MHz	16QAM	39725	38RB#37	18.80	19.09	PASS
Band41	15MHz	QPSK	39725	75RB#0	18.80	19.09	PASS
Band41	15MHz	16QAM	39725	75RB#0	17.91	18.20	PASS
Band41	15MHz	QPSK	40620	1RB#0	17.80	18.09	PASS
Band41	15MHz	16QAM	40620	1RB#0	17.33	17.62	PASS
Band41	15MHz	QPSK	40620	1RB#38	17.72	18.01	PASS
Band41	15MHz	16QAM	40620	1RB#38	17.08	17.37	PASS
Band41	15MHz	QPSK	40620	1RB#74	17.75	18.04	PASS
Band41	15MHz	16QAM	40620	1RB#74	17.25	17.54	PASS
Band41	15MHz	QPSK	40620	38RB#0	17.18	17.47	PASS
Band41	15MHz	16QAM	40620	38RB#0	17.18	17.47	PASS
Band41	15MHz	QPSK	40620	38RB#18	17.18	17.47	PASS
Band41	15MHz	16QAM	40620	38RB#18	17.18	17.47	PASS
Band41	15MHz	QPSK	40620	38RB#37	17.19	17.48	PASS
Band41	15MHz	16QAM	40620	38RB#37	17.19	17.48	PASS
Band41	15MHz	QPSK	40620	75RB#0	17.19	17.48	PASS
Band41	15MHz	16QAM	40620	75RB#0	16.31	16.60	PASS
Band41	15MHz	QPSK	41515	1RB#0	19.33	19.62	PASS
Band41	15MHz	16QAM	41515	1RB#0	19.06	19.35	PASS
Band41	15MHz	QPSK	41515	1RB#38	19.13	19.42	PASS
Band41	15MHz	16QAM	41515	1RB#38	18.66	18.95	PASS
Band41	15MHz	QPSK	41515	1RB#74	18.63	18.92	PASS
Band41	15MHz	16QAM	41515	1RB#74	18.23	18.52	PASS
Band41	15MHz	QPSK	41515	38RB#0	18.54	18.83	PASS
Band41	15MHz	16QAM	41515	38RB#0	18.53	18.82	PASS
Band41	15MHz	QPSK	41515	38RB#18	18.54	18.83	PASS
Band41	15MHz	16QAM	41515	38RB#18	18.53	18.82	PASS

Band41	15MHz	QPSK	41515	38RB#37	18.53	18.82	PASS
Band41	15MHz	16QAM	41515	38RB#37	18.52	18.81	PASS
Band41	15MHz	QPSK	41515	75RB#0	18.52	18.81	PASS
Band41	15MHz	16QAM	41515	75RB#0	17.75	18.04	PASS
Band41	20MHz	QPSK	39750	1RB#0	19.28	19.57	PASS
Band41	20MHz	16QAM	39750	1RB#0	19.55	19.84	PASS
Band41	20MHz	QPSK	39750	1RB#49	19.15	19.44	PASS
Band41	20MHz	16QAM	39750	1RB#49	19.42	19.71	PASS
Band41	20MHz	QPSK	39750	1RB#99	19.19	19.48	PASS
Band41	20MHz	16QAM	39750	1RB#99	19.38	19.67	PASS
Band41	20MHz	QPSK	39750	50RB#0	18.88	19.17	PASS
Band41	20MHz	16QAM	39750	50RB#0	18.11	18.40	PASS
Band41	20MHz	QPSK	39750	50RB#25	18.88	19.17	PASS
Band41	20MHz	16QAM	39750	50RB#25	18.11	18.40	PASS
Band41	20MHz	QPSK	39750	50RB#50	18.75	19.04	PASS
Band41	20MHz	16QAM	39750	50RB#50	18.03	18.32	PASS
Band41	20MHz	QPSK	39750	100RB#0	18.85	19.14	PASS
Band41	20MHz	16QAM	39750	100RB#0	17.89	18.18	PASS
Band41	20MHz	QPSK	40620	1RB#0	18.17	18.46	PASS
Band41	20MHz	16QAM	40620	1RB#0	18.21	18.50	PASS
Band41	20MHz	QPSK	40620	1RB#49	17.97	18.26	PASS
Band41	20MHz	16QAM	40620	1RB#49	17.88	18.17	PASS
Band41	20MHz	QPSK	40620	1RB#99	18.05	18.34	PASS
Band41	20MHz	16QAM	40620	1RB#99	18.11	18.40	PASS
Band41	20MHz	QPSK	40620	50RB#0	17.29	17.58	PASS
Band41	20MHz	16QAM	40620	50RB#0	16.43	16.72	PASS
Band41	20MHz	QPSK	40620	50RB#25	17.31	17.60	PASS
Band41	20MHz	16QAM	40620	50RB#25	16.44	16.73	PASS
Band41	20MHz	QPSK	40620	50RB#50	17.41	17.70	PASS
Band41	20MHz	16QAM	40620	50RB#50	16.44	16.73	PASS
Band41	20MHz	QPSK	40620	100RB#0	17.35	17.64	PASS
Band41	20MHz	16QAM	40620	100RB#0	16.44	16.73	PASS
Band41	20MHz	QPSK	41490	1RB#0	19.43	19.72	PASS
Band41	20MHz	16QAM	41490	1RB#0	19.71	20.00	PASS
Band41	20MHz	QPSK	41490	1RB#49	19.20	19.49	PASS
Band41	20MHz	16QAM	41490	1RB#49	19.54	19.83	PASS
Band41	20MHz	QPSK	41490	1RB#99	18.79	19.08	PASS
Band41	20MHz	16QAM	41490	1RB#99	18.94	19.23	PASS
Band41	20MHz	QPSK	41490	50RB#0	19.11	19.40	PASS
Band41	20MHz	16QAM	41490	50RB#0	18.20	18.49	PASS
Band41	20MHz	QPSK	41490	50RB#25	18.98	19.27	PASS
Band41	20MHz	16QAM	41490	50RB#25	18.20	18.49	PASS
Band41	20MHz	QPSK	41490	50RB#50	18.53	18.82	PASS

Band41	20MHz	16QAM	41490	50RB#50	17.84	18.13	PASS
Band41	20MHz	QPSK	41490	100RB#0	18.78	19.07	PASS
Band41	20MHz	16QAM	41490	100RB#0	17.99	18.28	PASS

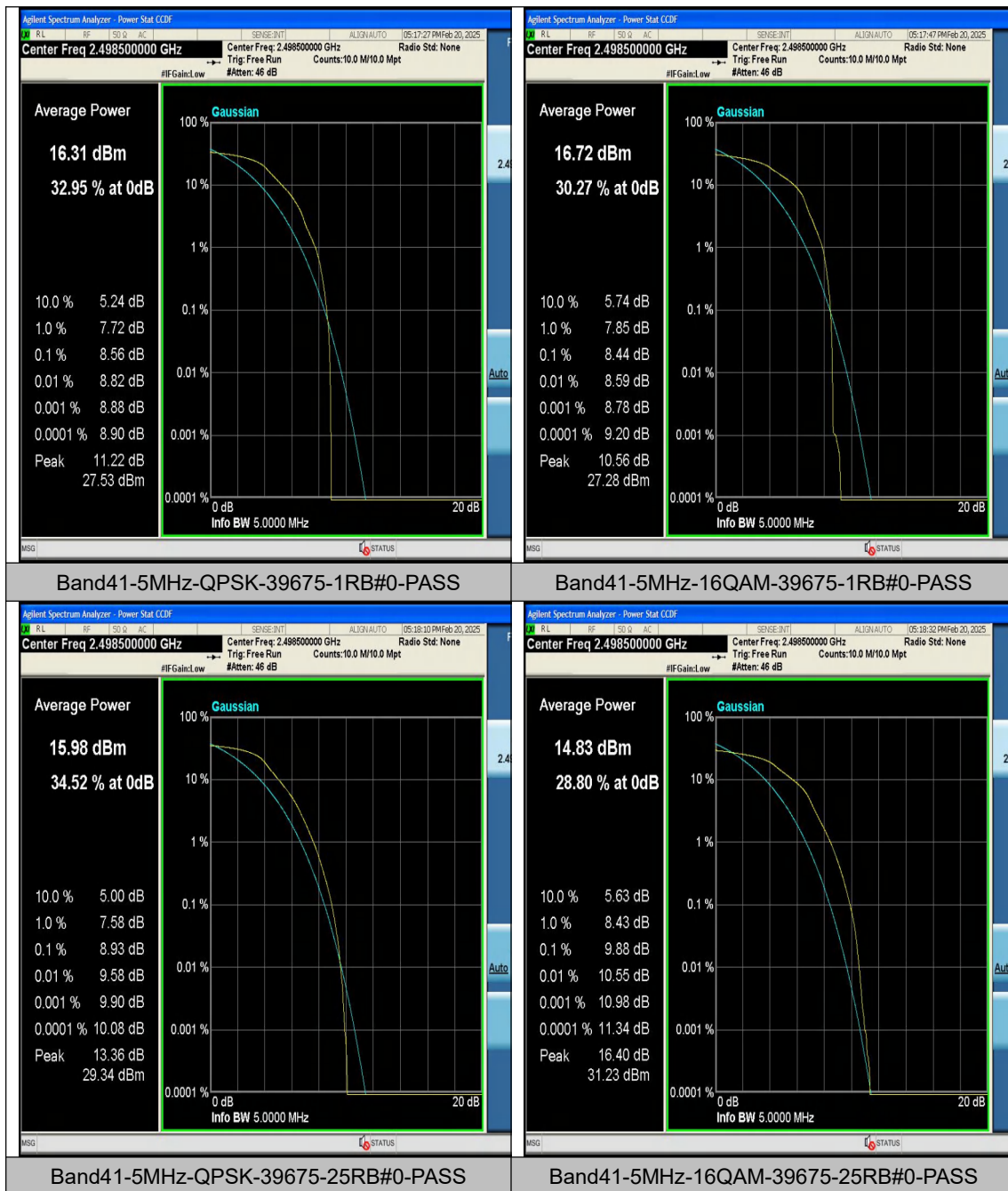
Appendix B: Peak-to-Average Ratio(CCDF)

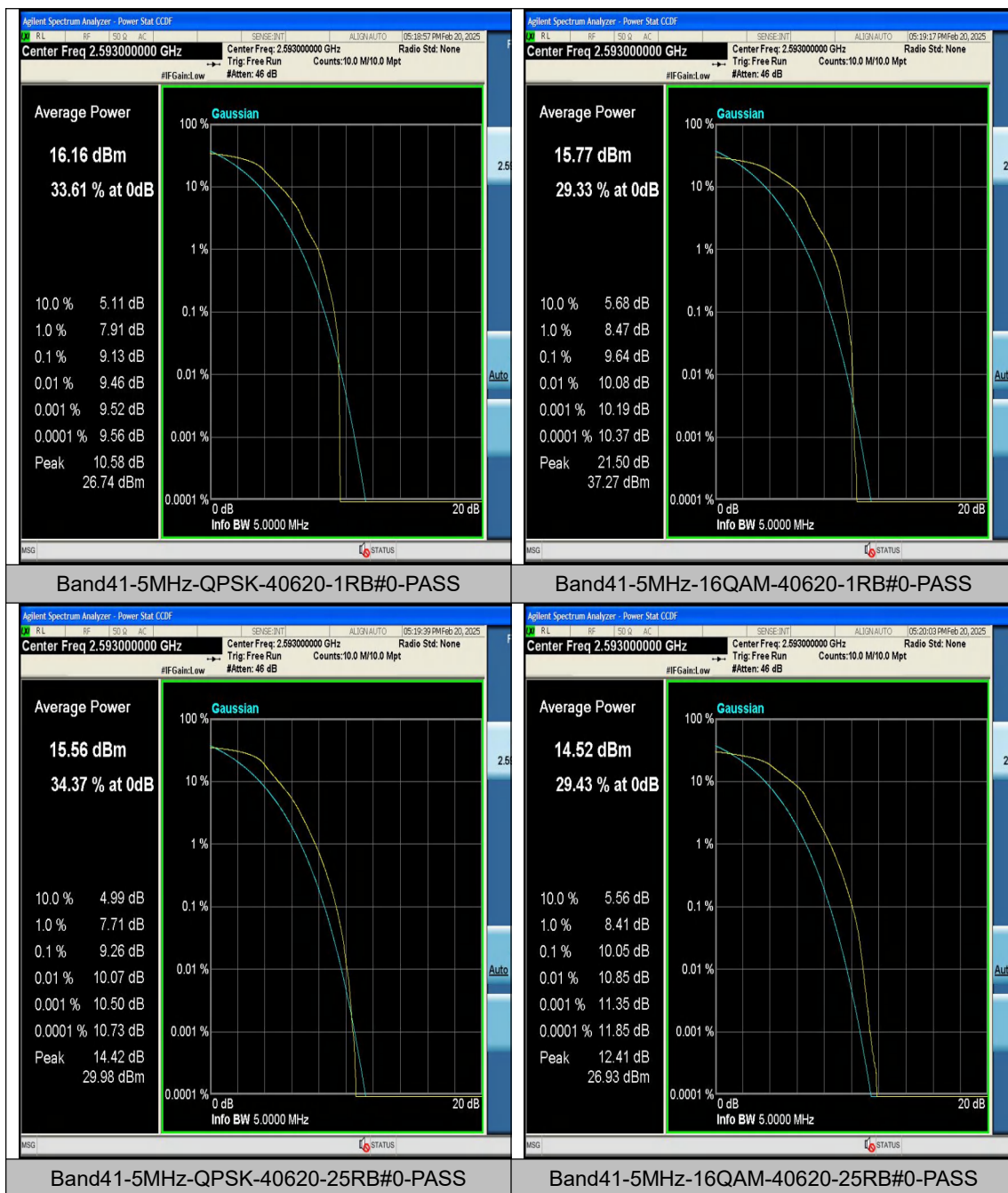
Test Result

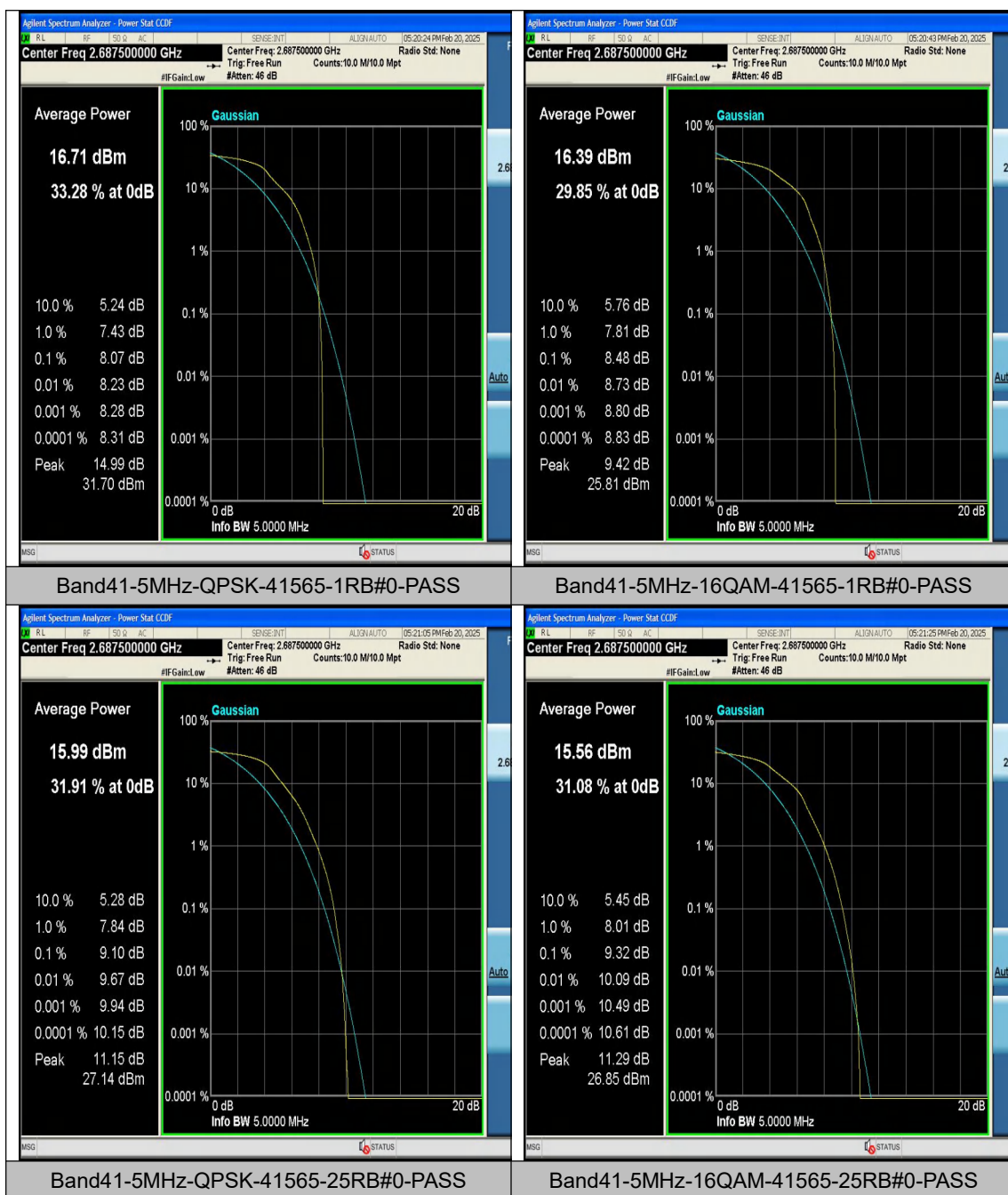
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band41	5MHz	QPSK	39675	1RB#0	8.56	13	PASS
Band41	5MHz	16QAM	39675	1RB#0	8.44	13	PASS
Band41	5MHz	QPSK	39675	25RB#0	8.93	13	PASS
Band41	5MHz	16QAM	39675	25RB#0	9.88	13	PASS
Band41	5MHz	QPSK	40620	1RB#0	9.13	13	PASS
Band41	5MHz	16QAM	40620	1RB#0	9.64	13	PASS
Band41	5MHz	QPSK	40620	25RB#0	9.26	13	PASS
Band41	5MHz	16QAM	40620	25RB#0	10.05	13	PASS
Band41	5MHz	QPSK	41565	1RB#0	8.07	13	PASS
Band41	5MHz	16QAM	41565	1RB#0	8.48	13	PASS
Band41	5MHz	QPSK	41565	25RB#0	9.10	13	PASS
Band41	5MHz	16QAM	41565	25RB#0	9.32	13	PASS
Band41	10MHz	QPSK	39700	1RB#0	8.40	13	PASS
Band41	10MHz	16QAM	39700	1RB#0	9.32	13	PASS
Band41	10MHz	QPSK	39700	50RB#0	8.91	13	PASS
Band41	10MHz	16QAM	39700	50RB#0	9.74	13	PASS
Band41	10MHz	QPSK	40620	1RB#0	8.95	13	PASS
Band41	10MHz	16QAM	40620	1RB#0	9.78	13	PASS
Band41	10MHz	QPSK	40620	50RB#0	9.10	13	PASS
Band41	10MHz	16QAM	40620	50RB#0	10.00	13	PASS
Band41	10MHz	QPSK	41540	1RB#0	8.18	13	PASS
Band41	10MHz	16QAM	41540	1RB#0	8.47	13	PASS
Band41	10MHz	QPSK	41540	50RB#0	8.86	13	PASS
Band41	10MHz	16QAM	41540	50RB#0	9.68	13	PASS
Band41	15MHz	QPSK	39725	1RB#0	9.26	13	PASS
Band41	15MHz	16QAM	39725	1RB#0	9.06	13	PASS
Band41	15MHz	QPSK	39725	75RB#0	9.17	13	PASS
Band41	15MHz	16QAM	39725	75RB#0	9.80	13	PASS
Band41	15MHz	QPSK	40620	1RB#0	8.93	13	PASS
Band41	15MHz	16QAM	40620	1RB#0	9.94	13	PASS
Band41	15MHz	QPSK	40620	75RB#0	9.13	13	PASS
Band41	15MHz	16QAM	40620	75RB#0	9.81	13	PASS
Band41	15MHz	QPSK	41515	1RB#0	7.97	13	PASS
Band41	15MHz	16QAM	41515	1RB#0	9.02	13	PASS
Band41	15MHz	QPSK	41515	75RB#0	8.93	13	PASS
Band41	15MHz	16QAM	41515	75RB#0	9.55	13	PASS

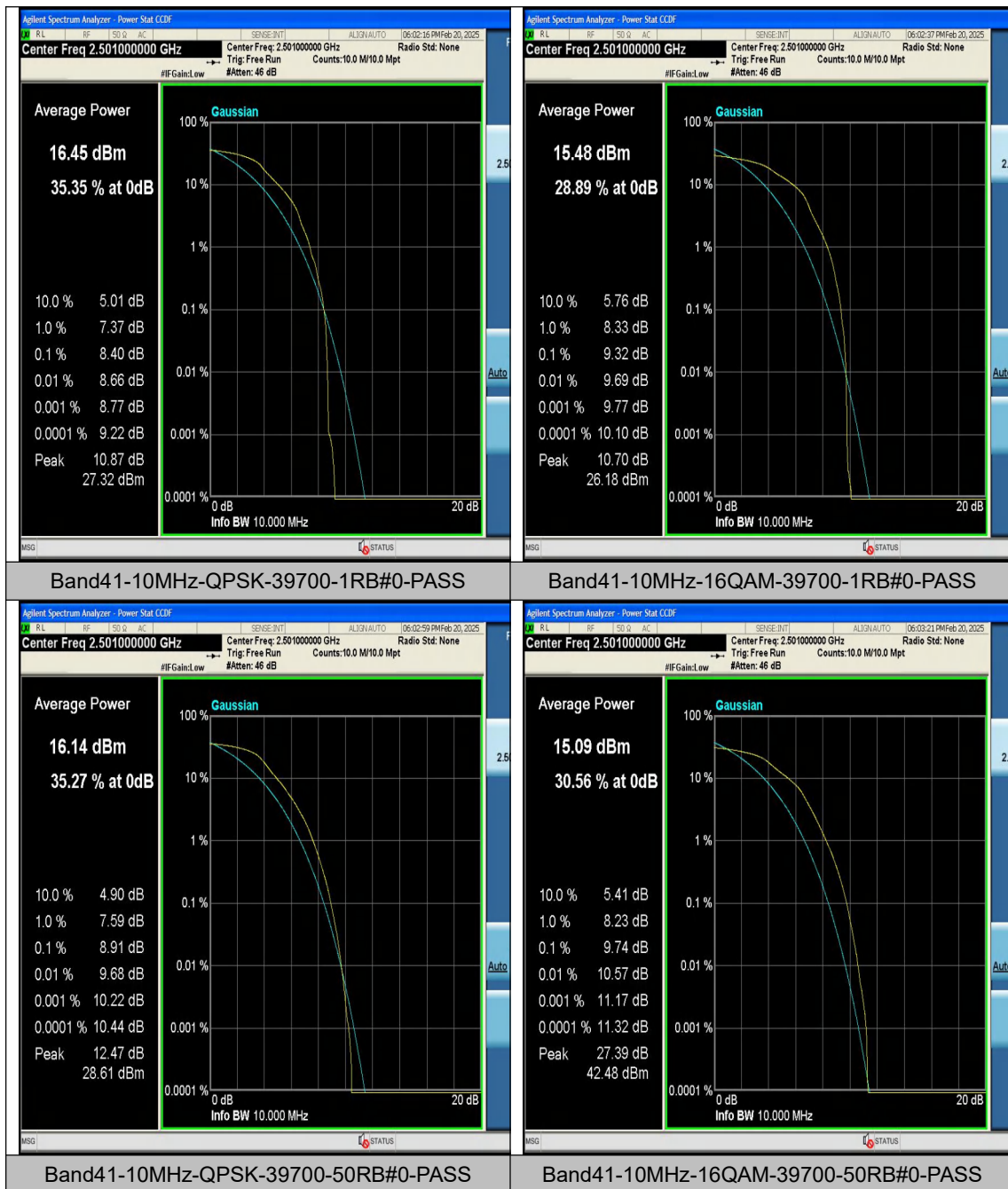
Band41	20MHz	QPSK	39750	1RB#0	7.81	13	PASS
Band41	20MHz	16QAM	39750	1RB#0	8.07	13	PASS
Band41	20MHz	QPSK	39750	100RB#0	8.53	13	PASS
Band41	20MHz	16QAM	39750	100RB#0	9.67	13	PASS
Band41	20MHz	QPSK	40620	1RB#0	8.41	13	PASS
Band41	20MHz	16QAM	40620	1RB#0	9.32	13	PASS
Band41	20MHz	QPSK	40620	100RB#0	9.46	13	PASS
Band41	20MHz	16QAM	40620	100RB#0	10.26	13	PASS
Band41	20MHz	QPSK	41490	1RB#0	7.69	13	PASS
Band41	20MHz	16QAM	41490	1RB#0	7.59	13	PASS
Band41	20MHz	QPSK	41490	100RB#0	8.20	13	PASS
Band41	20MHz	16QAM	41490	100RB#0	9.23	13	PASS

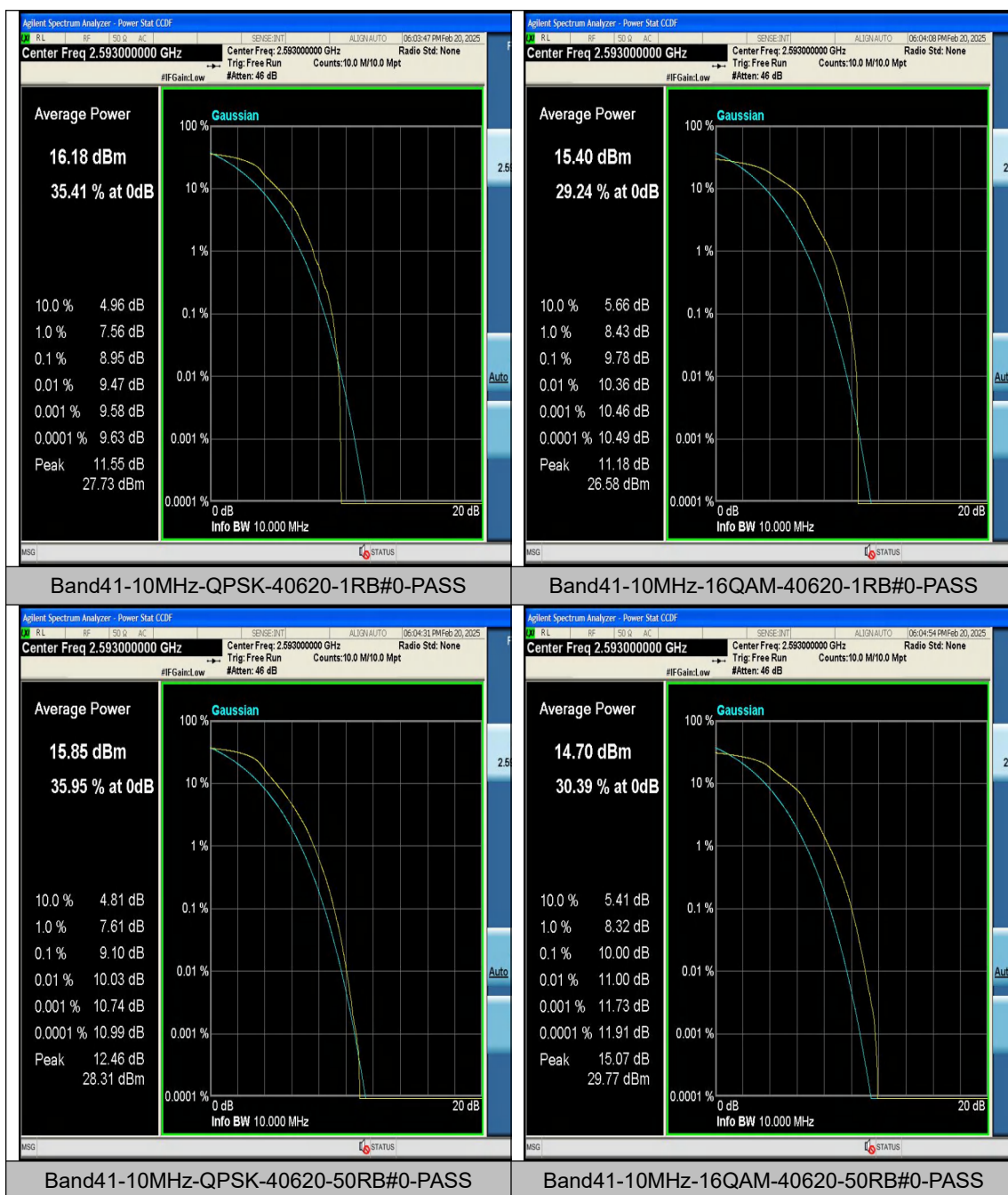
Test Graphs

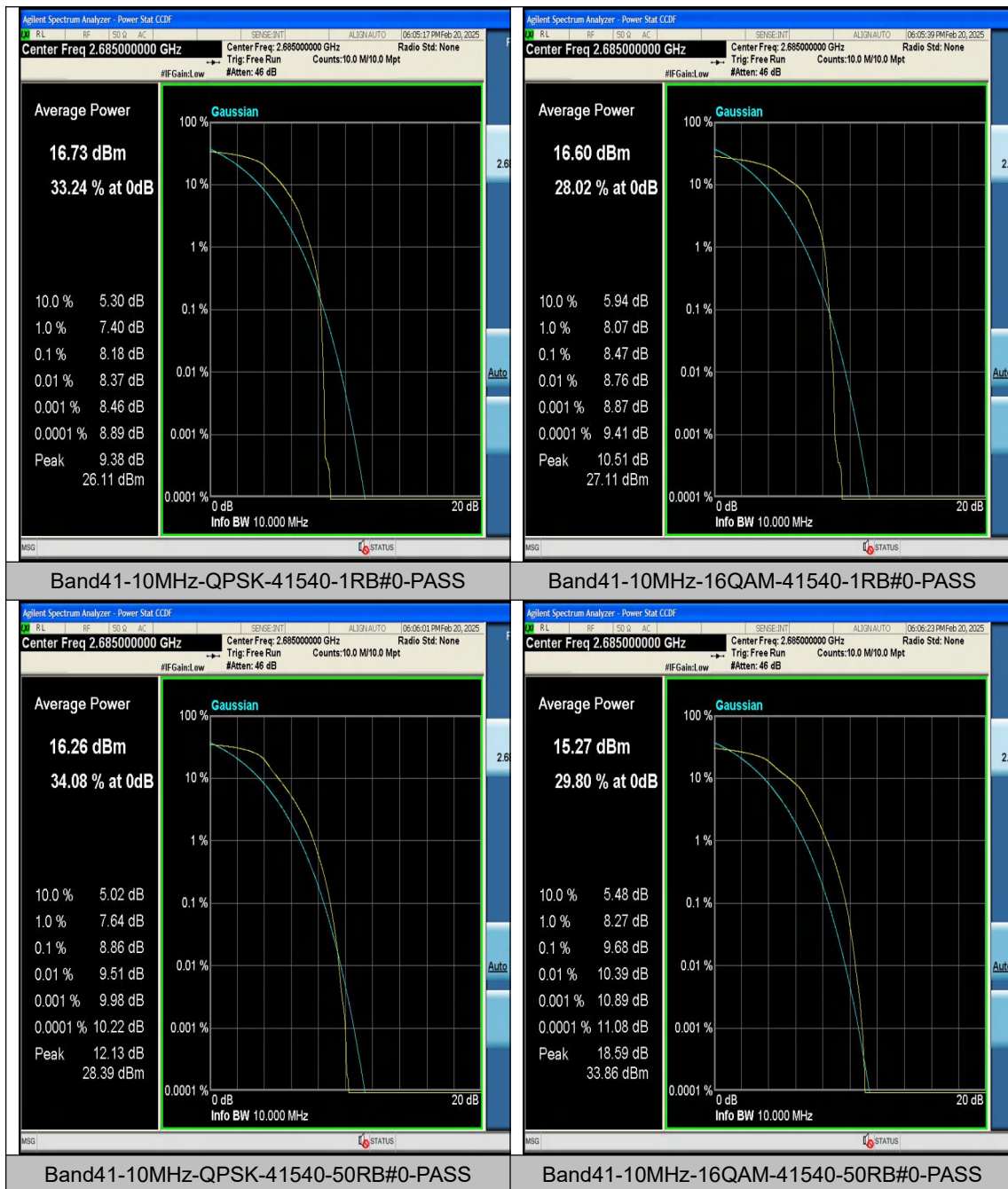


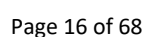


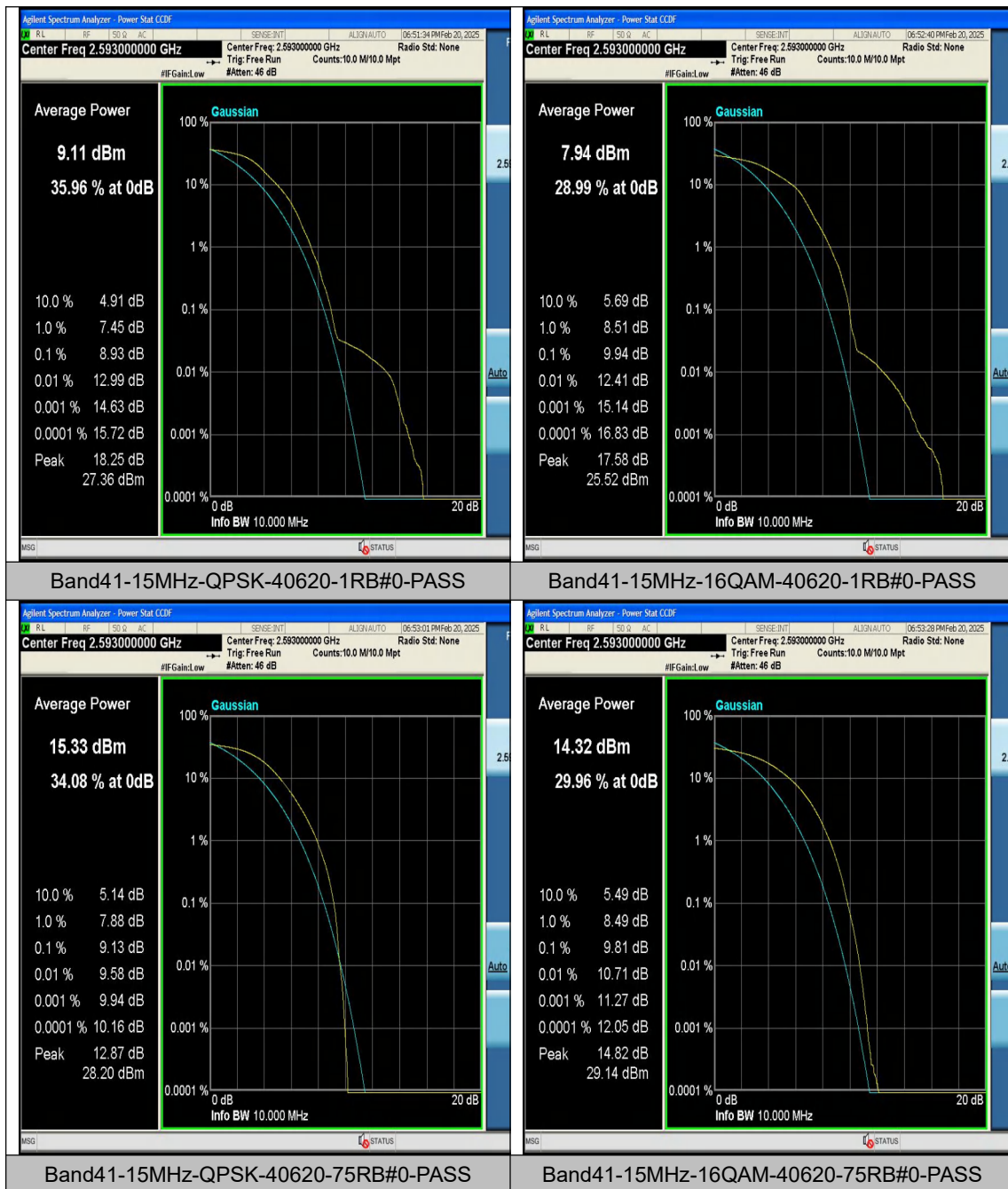


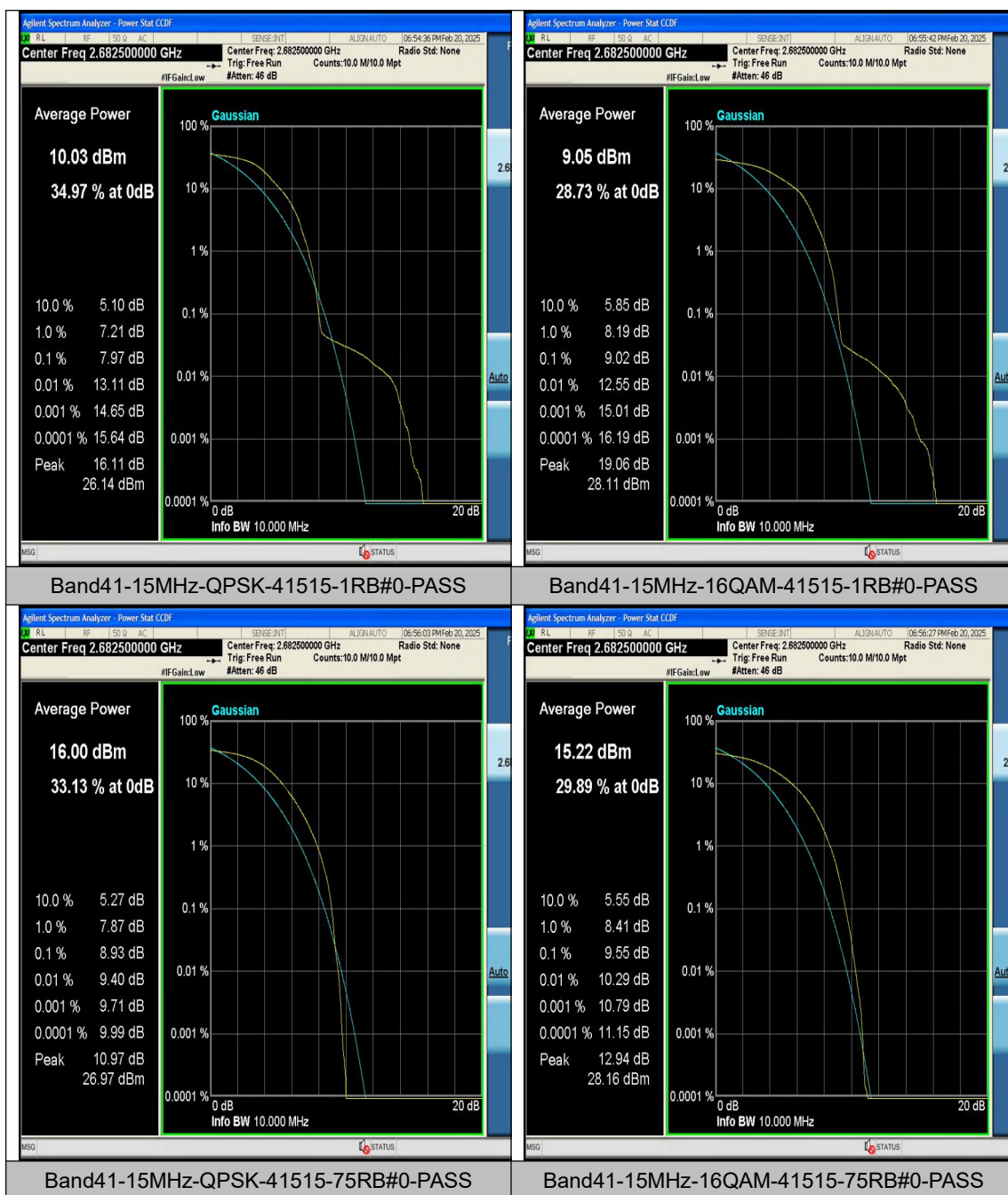


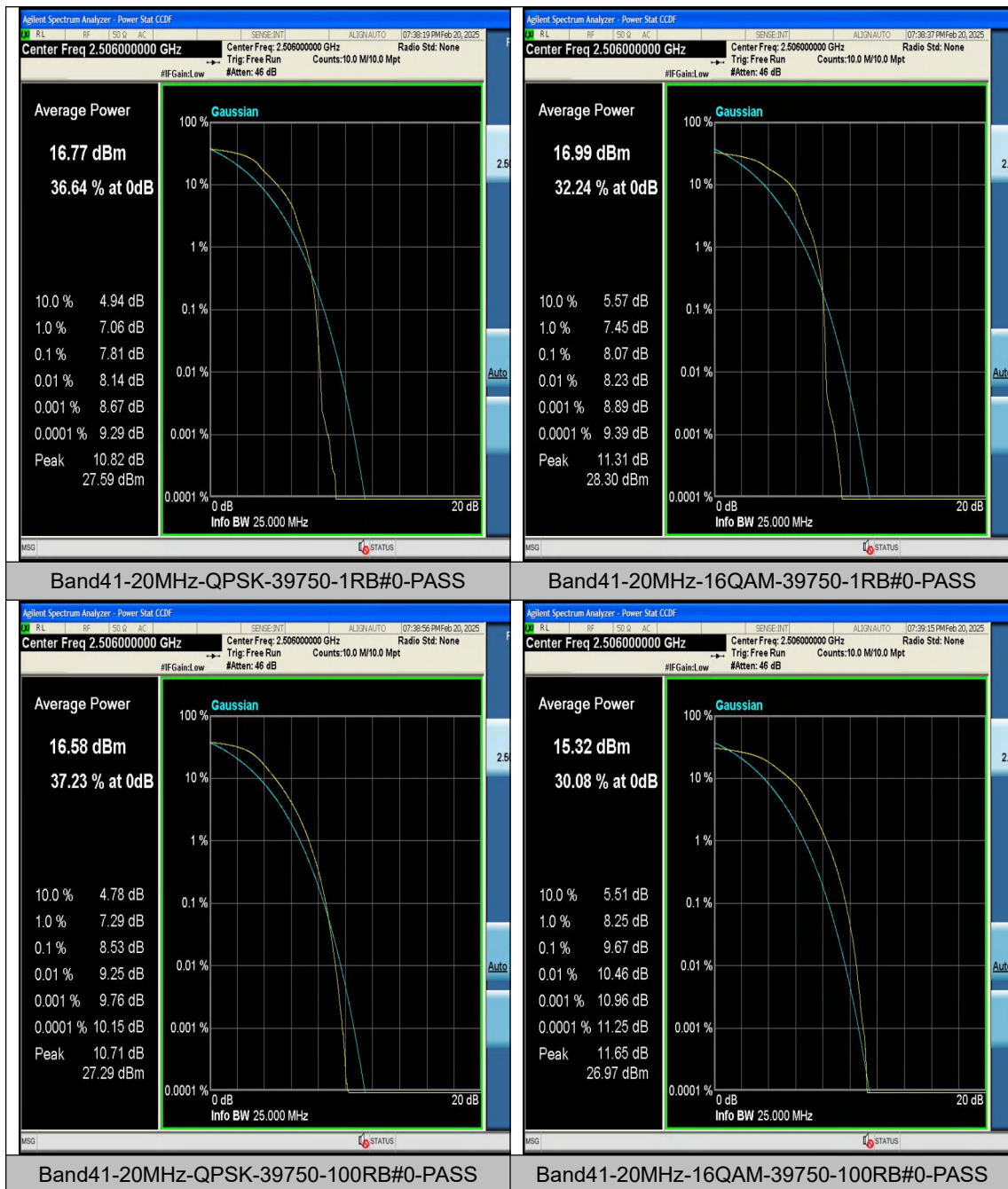


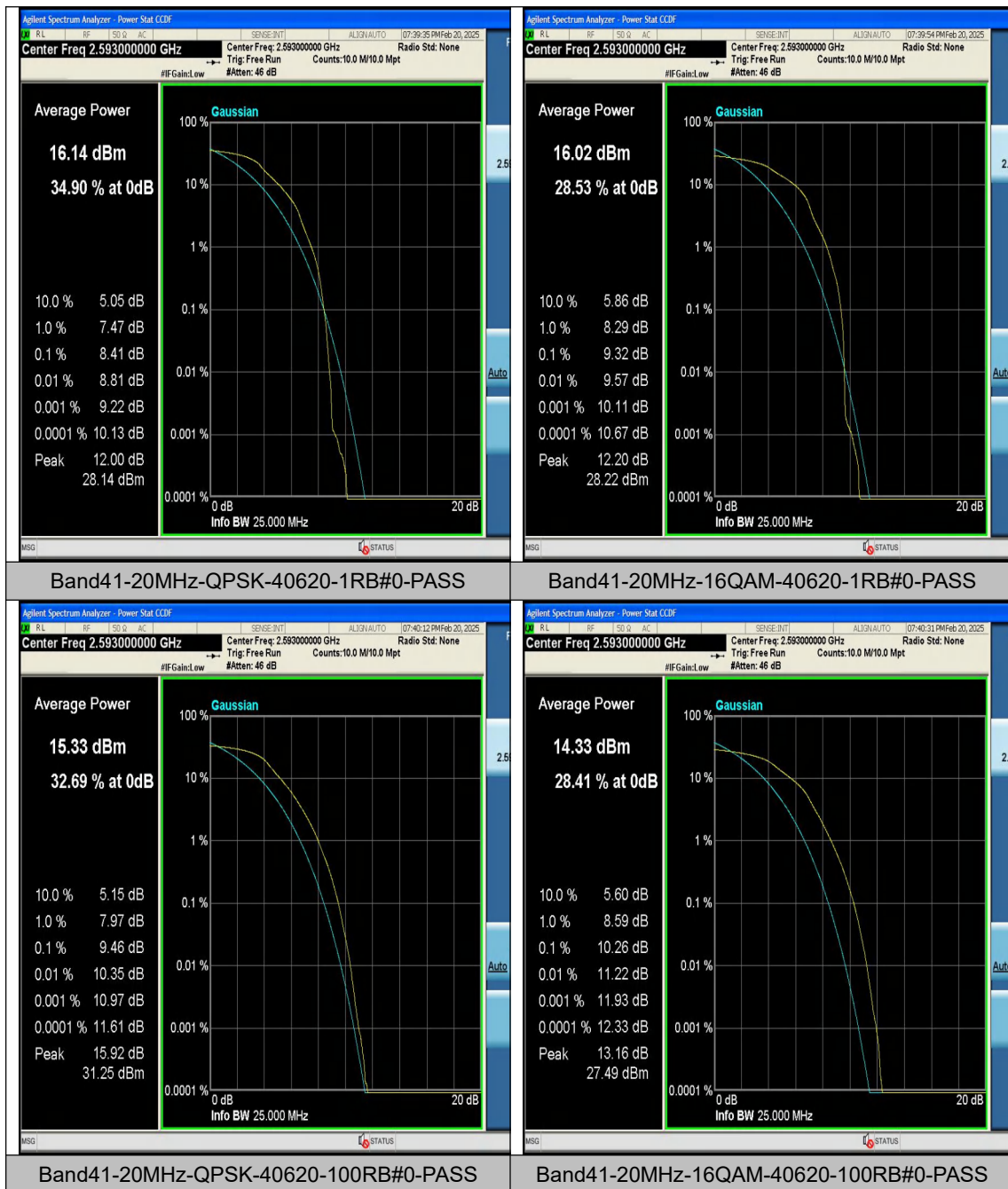


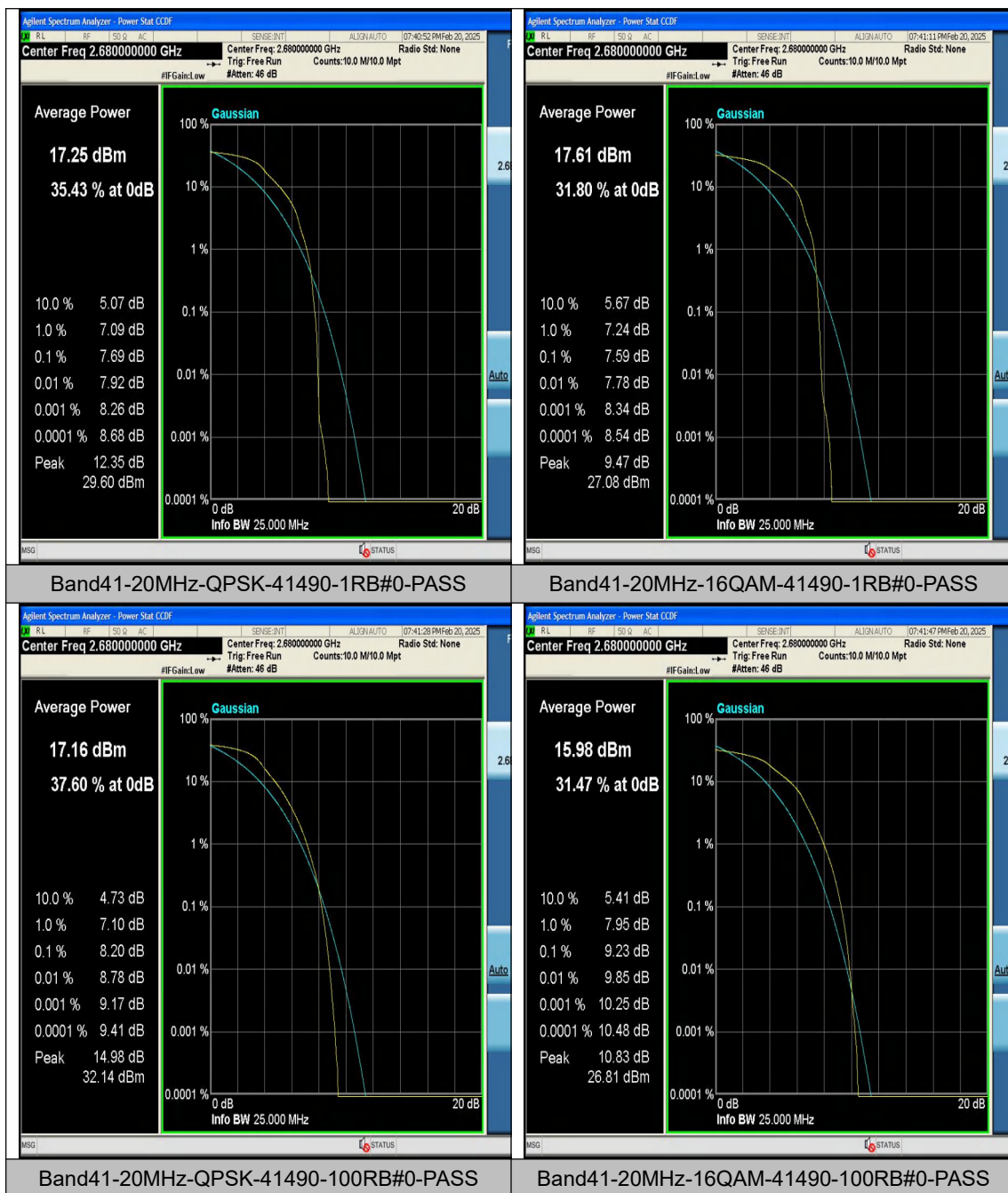












Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band41	5MHz	QPSK	39675	25RB#0	4.5273	5.571	PASS
Band41	5MHz	16QAM	39675	25RB#0	4.5195	5.304	PASS
Band41	5MHz	QPSK	40620	25RB#0	4.5280	5.590	PASS
Band41	5MHz	16QAM	40620	25RB#0	4.5179	5.401	PASS
Band41	5MHz	QPSK	41565	25RB#0	4.4948	4.964	PASS
Band41	5MHz	16QAM	41565	25RB#0	4.4987	5.127	PASS
Band41	10MHz	QPSK	39700	50RB#0	8.9943	10.88	PASS
Band41	10MHz	16QAM	39700	50RB#0	9.0011	10.30	PASS
Band41	10MHz	QPSK	40620	50RB#0	9.0006	10.88	PASS
Band41	10MHz	16QAM	40620	50RB#0	9.0047	10.19	PASS
Band41	10MHz	QPSK	41540	50RB#0	9.0117	10.59	PASS
Band41	10MHz	16QAM	41540	50RB#0	8.9886	10.33	PASS
Band41	15MHz	QPSK	39725	75RB#0	13.530	16.24	PASS
Band41	15MHz	16QAM	39725	75RB#0	13.505	15.57	PASS
Band41	15MHz	QPSK	40620	75RB#0	13.535	16.52	PASS
Band41	15MHz	16QAM	40620	75RB#0	13.502	15.13	PASS
Band41	15MHz	QPSK	41515	75RB#0	13.539	16.37	PASS
Band41	15MHz	16QAM	41515	75RB#0	13.486	15.14	PASS
Band41	20MHz	QPSK	39750	100RB#0	17.960	19.74	PASS
Band41	20MHz	16QAM	39750	100RB#0	17.977	19.65	PASS
Band41	20MHz	QPSK	40620	100RB#0	17.981	19.85	PASS
Band41	20MHz	16QAM	40620	100RB#0	17.942	19.69	PASS
Band41	20MHz	QPSK	41490	100RB#0	18.006	19.93	PASS
Band41	20MHz	16QAM	41490	100RB#0	17.994	19.67	PASS

Test Graphs

