

FCC LTE Band Test Data

FCC ID : 2BMCH-CS89

Company: : Alited Global Trading Co., Limited

EUT : Sound Box

Model Number : CS89

Reviewed By : Eric Wang

Appendix A: Conducted Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band41	5MHz	QPSK	39675	1RB#0	23.80	PASS
Band41	5MHz	QPSK	39675	1RB#12	23.72	PASS
Band41	5MHz	QPSK	39675	1RB#24	23.62	PASS
Band41	5MHz	QPSK	39675	12RB#0	22.61	PASS
Band41	5MHz	QPSK	39675	12RB#6	22.63	PASS
Band41	5MHz	QPSK	39675	12RB#13	22.57	PASS
Band41	5MHz	QPSK	39675	25RB#0	22.58	PASS
Band41	5MHz	QPSK	40620	1RB#0	24.09	PASS
Band41	5MHz	QPSK	40620	1RB#12	24.11	PASS
Band41	5MHz	QPSK	40620	1RB#24	24.05	PASS
Band41	5MHz	QPSK	40620	12RB#0	23.01	PASS
Band41	5MHz	QPSK	40620	12RB#6	23.08	PASS
Band41	5MHz	QPSK	40620	12RB#13	23.00	PASS
Band41	5MHz	QPSK	40620	25RB#0	23.04	PASS
Band41	5MHz	QPSK	41565	1RB#0	23.73	PASS
Band41	5MHz	QPSK	41565	1RB#12	23.51	PASS
Band41	5MHz	QPSK	41565	1RB#24	23.50	PASS
Band41	5MHz	QPSK	41565	12RB#0	22.25	PASS
Band41	5MHz	QPSK	41565	12RB#6	22.32	PASS
Band41	5MHz	QPSK	41565	12RB#13	22.23	PASS
Band41	5MHz	QPSK	41565	25RB#0	22.28	PASS
Band41	5MHz	16QAM	39675	1RB#0	23.12	PASS
Band41	5MHz	16QAM	39675	1RB#12	23.17	PASS
Band41	5MHz	16QAM	39675	1RB#24	23.12	PASS
Band41	5MHz	16QAM	39675	12RB#0	21.34	PASS
Band41	5MHz	16QAM	39675	12RB#6	21.36	PASS
Band41	5MHz	16QAM	39675	12RB#13	21.30	PASS
Band41	5MHz	16QAM	39675	25RB#0	21.30	PASS
Band41	5MHz	16QAM	40620	1RB#0	23.49	PASS
Band41	5MHz	16QAM	40620	1RB#12	23.51	PASS
Band41	5MHz	16QAM	40620	1RB#24	23.41	PASS
Band41	5MHz	16QAM	40620	12RB#0	22.07	PASS
Band41	5MHz	16QAM	40620	12RB#6	22.04	PASS
Band41	5MHz	16QAM	40620	12RB#13	21.98	PASS
Band41	5MHz	16QAM	40620	25RB#0	22.02	PASS
Band41	5MHz	16QAM	41565	1RB#0	22.66	PASS

Band41	5MHz	16QAM	41565	1RB#12	22.44	PASS
Band41	5MHz	16QAM	41565	1RB#24	22.43	PASS
Band41	5MHz	16QAM	41565	12RB#0	21.47	PASS
Band41	5MHz	16QAM	41565	12RB#6	21.45	PASS
Band41	5MHz	16QAM	41565	12RB#13	21.40	PASS
Band41	5MHz	16QAM	41565	25RB#0	21.35	PASS
Band41	10MHz	QPSK	39700	1RB#0	23.31	PASS
Band41	10MHz	QPSK	39700	1RB#24	23.39	PASS
Band41	10MHz	QPSK	39700	1RB#49	23.32	PASS
Band41	10MHz	QPSK	39700	25RB#0	22.37	PASS
Band41	10MHz	QPSK	39700	25RB#12	22.39	PASS
Band41	10MHz	QPSK	39700	25RB#25	22.38	PASS
Band41	10MHz	QPSK	39700	50RB#0	22.37	PASS
Band41	10MHz	QPSK	40620	1RB#0	24.07	PASS
Band41	10MHz	QPSK	40620	1RB#24	24.14	PASS
Band41	10MHz	QPSK	40620	1RB#49	24.03	PASS
Band41	10MHz	QPSK	40620	25RB#0	22.99	PASS
Band41	10MHz	QPSK	40620	25RB#12	23.01	PASS
Band41	10MHz	QPSK	40620	25RB#25	23.05	PASS
Band41	10MHz	QPSK	40620	50RB#0	23.07	PASS
Band41	10MHz	QPSK	41540	1RB#0	23.97	PASS
Band41	10MHz	QPSK	41540	1RB#24	23.75	PASS
Band41	10MHz	QPSK	41540	1RB#49	23.63	PASS
Band41	10MHz	QPSK	41540	25RB#0	22.32	PASS
Band41	10MHz	QPSK	41540	25RB#12	22.33	PASS
Band41	10MHz	QPSK	41540	25RB#25	22.19	PASS
Band41	10MHz	QPSK	41540	50RB#0	22.35	PASS
Band41	10MHz	16QAM	39700	1RB#0	22.62	PASS
Band41	10MHz	16QAM	39700	1RB#24	22.76	PASS
Band41	10MHz	16QAM	39700	1RB#49	22.69	PASS
Band41	10MHz	16QAM	39700	25RB#0	21.08	PASS
Band41	10MHz	16QAM	39700	25RB#12	21.09	PASS
Band41	10MHz	16QAM	39700	25RB#25	21.18	PASS
Band41	10MHz	16QAM	40620	1RB#0	23.32	PASS
Band41	10MHz	16QAM	40620	1RB#24	23.42	PASS
Band41	10MHz	16QAM	40620	1RB#49	23.33	PASS
Band41	10MHz	16QAM	40620	25RB#0	22.08	PASS
Band41	10MHz	16QAM	40620	25RB#12	22.09	PASS
Band41	10MHz	16QAM	40620	25RB#25	22.13	PASS
Band41	10MHz	16QAM	41540	1RB#0	22.55	PASS
Band41	10MHz	16QAM	41540	1RB#24	22.15	PASS
Band41	10MHz	16QAM	41540	1RB#49	22.14	PASS
Band41	10MHz	16QAM	41540	25RB#0	21.41	PASS

Band41	10MHz	16QAM	41540	25RB#12	21.41	PASS
Band41	10MHz	16QAM	41540	25RB#25	21.27	PASS
Band41	15MHz	QPSK	39725	1RB#0	23.59	PASS
Band41	15MHz	QPSK	39725	1RB#38	23.69	PASS
Band41	15MHz	QPSK	39725	1RB#74	23.67	PASS
Band41	15MHz	QPSK	39725	38RB#0	22.62	PASS
Band41	15MHz	QPSK	39725	38RB#18	22.62	PASS
Band41	15MHz	QPSK	39725	38RB#37	22.62	PASS
Band41	15MHz	QPSK	39725	75RB#0	22.63	PASS
Band41	15MHz	QPSK	40620	1RB#0	24.38	PASS
Band41	15MHz	QPSK	40620	1RB#38	24.39	PASS
Band41	15MHz	QPSK	40620	1RB#74	24.30	PASS
Band41	15MHz	QPSK	40620	38RB#0	23.32	PASS
Band41	15MHz	QPSK	40620	38RB#18	23.31	PASS
Band41	15MHz	QPSK	40620	38RB#37	23.31	PASS
Band41	15MHz	QPSK	40620	75RB#0	23.33	PASS
Band41	15MHz	QPSK	41515	1RB#0	24.47	PASS
Band41	15MHz	QPSK	41515	1RB#38	24.15	PASS
Band41	15MHz	QPSK	41515	1RB#74	23.86	PASS
Band41	15MHz	QPSK	41515	38RB#0	22.61	PASS
Band41	15MHz	QPSK	41515	38RB#18	22.60	PASS
Band41	15MHz	QPSK	41515	38RB#37	22.58	PASS
Band41	15MHz	QPSK	41515	75RB#0	22.67	PASS
Band41	15MHz	16QAM	39725	1RB#0	22.98	PASS
Band41	15MHz	16QAM	39725	1RB#38	22.99	PASS
Band41	15MHz	16QAM	39725	1RB#74	22.94	PASS
Band41	15MHz	16QAM	39725	38RB#0	22.62	PASS
Band41	15MHz	16QAM	39725	38RB#18	22.62	PASS
Band41	15MHz	16QAM	39725	38RB#37	22.62	PASS
Band41	15MHz	16QAM	40620	1RB#0	23.66	PASS
Band41	15MHz	16QAM	40620	1RB#38	23.68	PASS
Band41	15MHz	16QAM	40620	1RB#74	23.58	PASS
Band41	15MHz	16QAM	40620	38RB#0	23.32	PASS
Band41	15MHz	16QAM	40620	38RB#18	23.31	PASS
Band41	15MHz	16QAM	40620	38RB#37	23.30	PASS
Band41	15MHz	16QAM	41515	1RB#0	22.99	PASS
Band41	15MHz	16QAM	41515	1RB#38	22.61	PASS
Band41	15MHz	16QAM	41515	1RB#74	22.41	PASS
Band41	15MHz	16QAM	41515	38RB#0	22.60	PASS
Band41	15MHz	16QAM	41515	38RB#18	22.59	PASS
Band41	15MHz	16QAM	41515	38RB#37	22.67	PASS
Band41	20MHz	QPSK	39750	1RB#0	23.45	PASS
Band41	20MHz	QPSK	39750	1RB#49	23.67	PASS

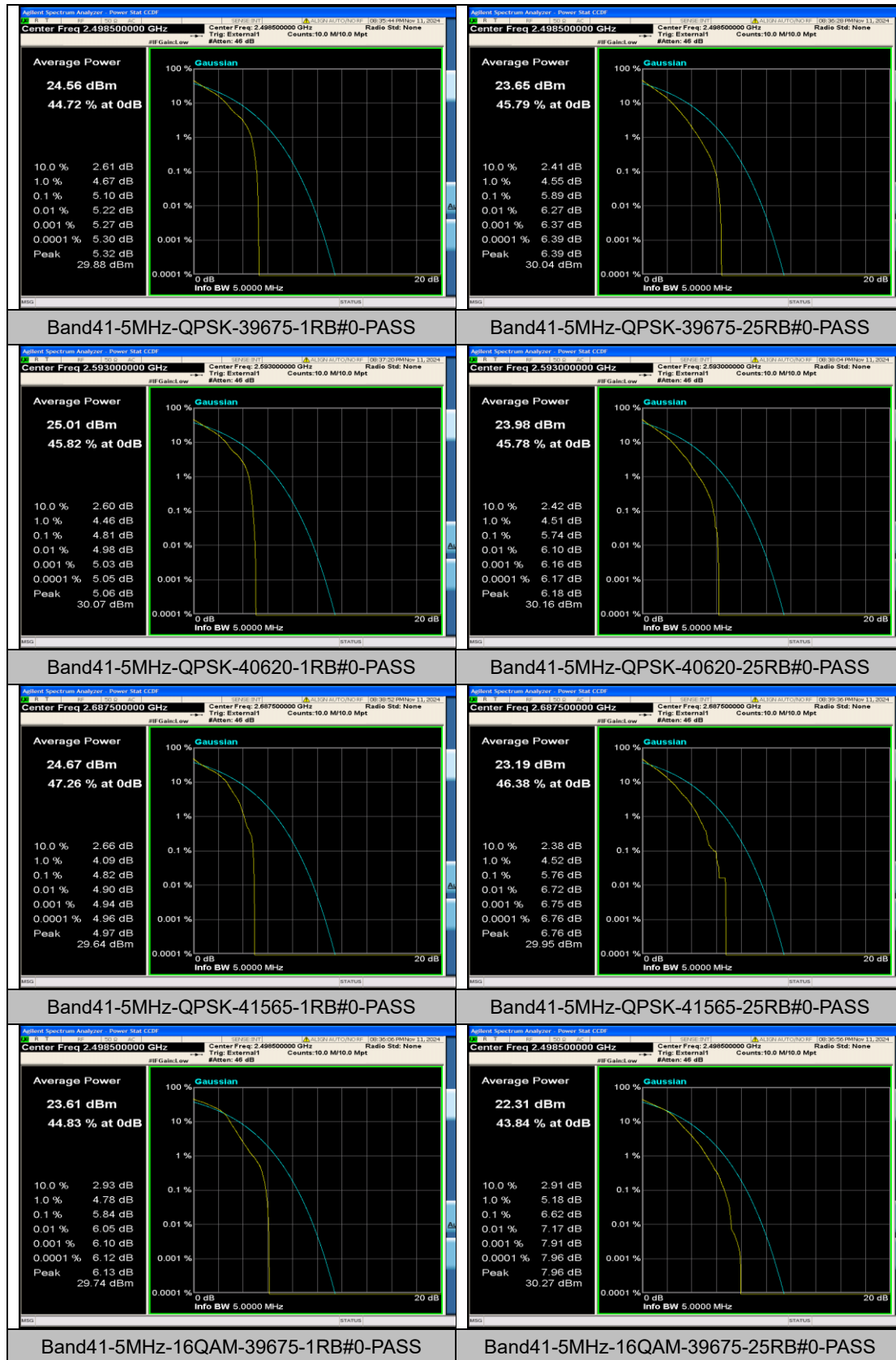
Band41	20MHz	QPSK	39750	1RB#99	23.55	PASS
Band41	20MHz	QPSK	39750	50RB#0	22.64	PASS
Band41	20MHz	QPSK	39750	50RB#25	22.63	PASS
Band41	20MHz	QPSK	39750	50RB#50	22.66	PASS
Band41	20MHz	QPSK	39750	100RB#0	22.60	PASS
Band41	20MHz	QPSK	40620	1RB#0	24.19	PASS
Band41	20MHz	QPSK	40620	1RB#49	24.40	PASS
Band41	20MHz	QPSK	40620	1RB#99	24.18	PASS
Band41	20MHz	QPSK	40620	50RB#0	23.31	PASS
Band41	20MHz	QPSK	40620	50RB#25	23.27	PASS
Band41	20MHz	QPSK	40620	50RB#50	23.22	PASS
Band41	20MHz	QPSK	40620	100RB#0	23.27	PASS
Band41	20MHz	QPSK	41490	1RB#0	24.27	PASS
Band41	20MHz	QPSK	41490	1RB#49	24.08	PASS
Band41	20MHz	QPSK	41490	1RB#99	23.65	PASS
Band41	20MHz	QPSK	41490	50RB#0	22.92	PASS
Band41	20MHz	QPSK	41490	50RB#25	22.86	PASS
Band41	20MHz	QPSK	41490	50RB#50	22.53	PASS
Band41	20MHz	QPSK	41490	100RB#0	22.77	PASS
Band41	20MHz	16QAM	39750	1RB#0	22.60	PASS
Band41	20MHz	16QAM	39750	1RB#49	22.85	PASS
Band41	20MHz	16QAM	39750	1RB#99	22.63	PASS
Band41	20MHz	16QAM	40620	1RB#0	23.28	PASS
Band41	20MHz	16QAM	40620	1RB#49	23.52	PASS
Band41	20MHz	16QAM	40620	1RB#99	23.29	PASS
Band41	20MHz	16QAM	41490	1RB#0	22.65	PASS
Band41	20MHz	16QAM	41490	1RB#49	22.48	PASS
Band41	20MHz	16QAM	41490	1RB#99	22.03	PASS

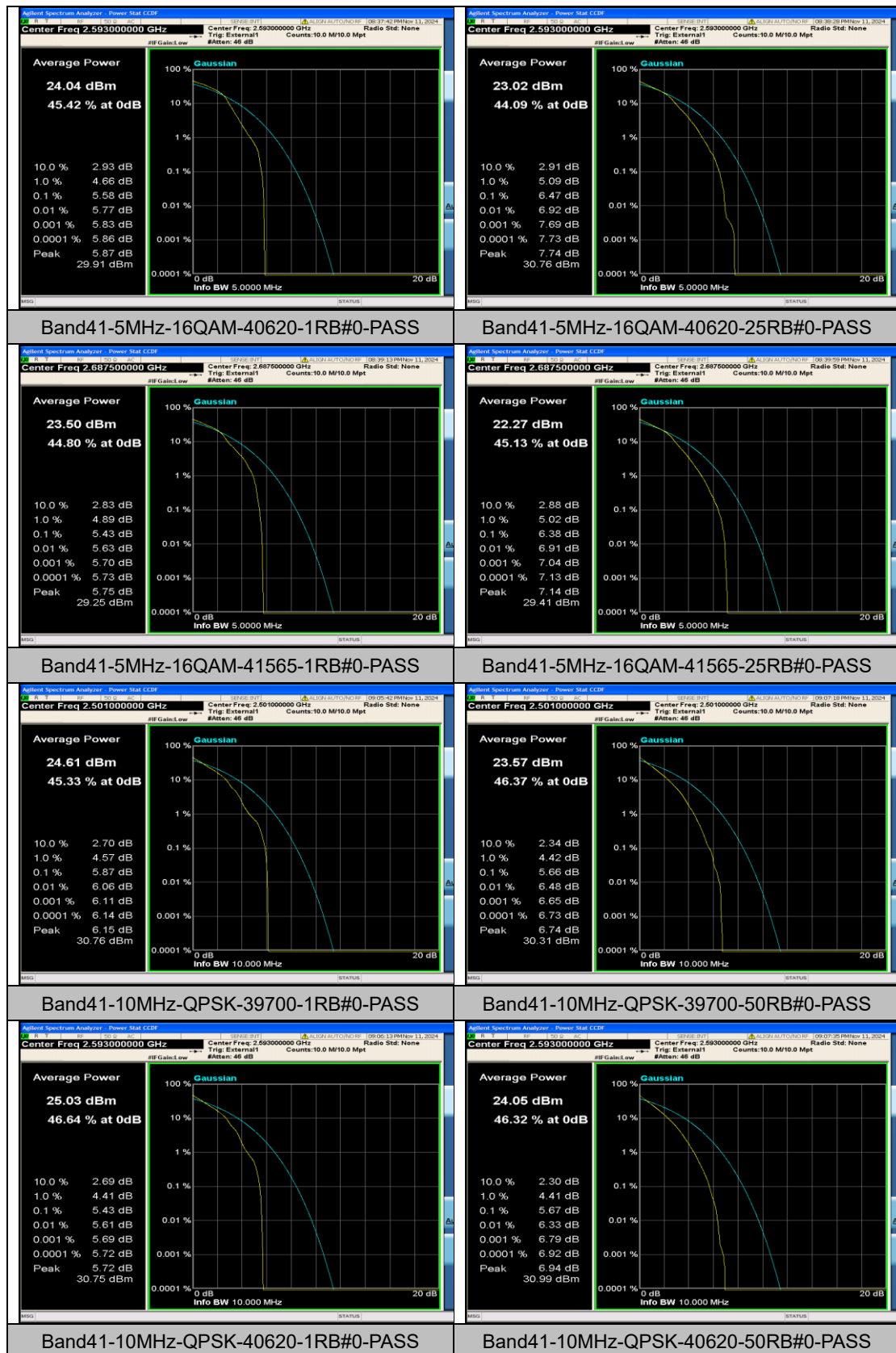
Appendix B: Peak-to-Average Ratio(CCDF)

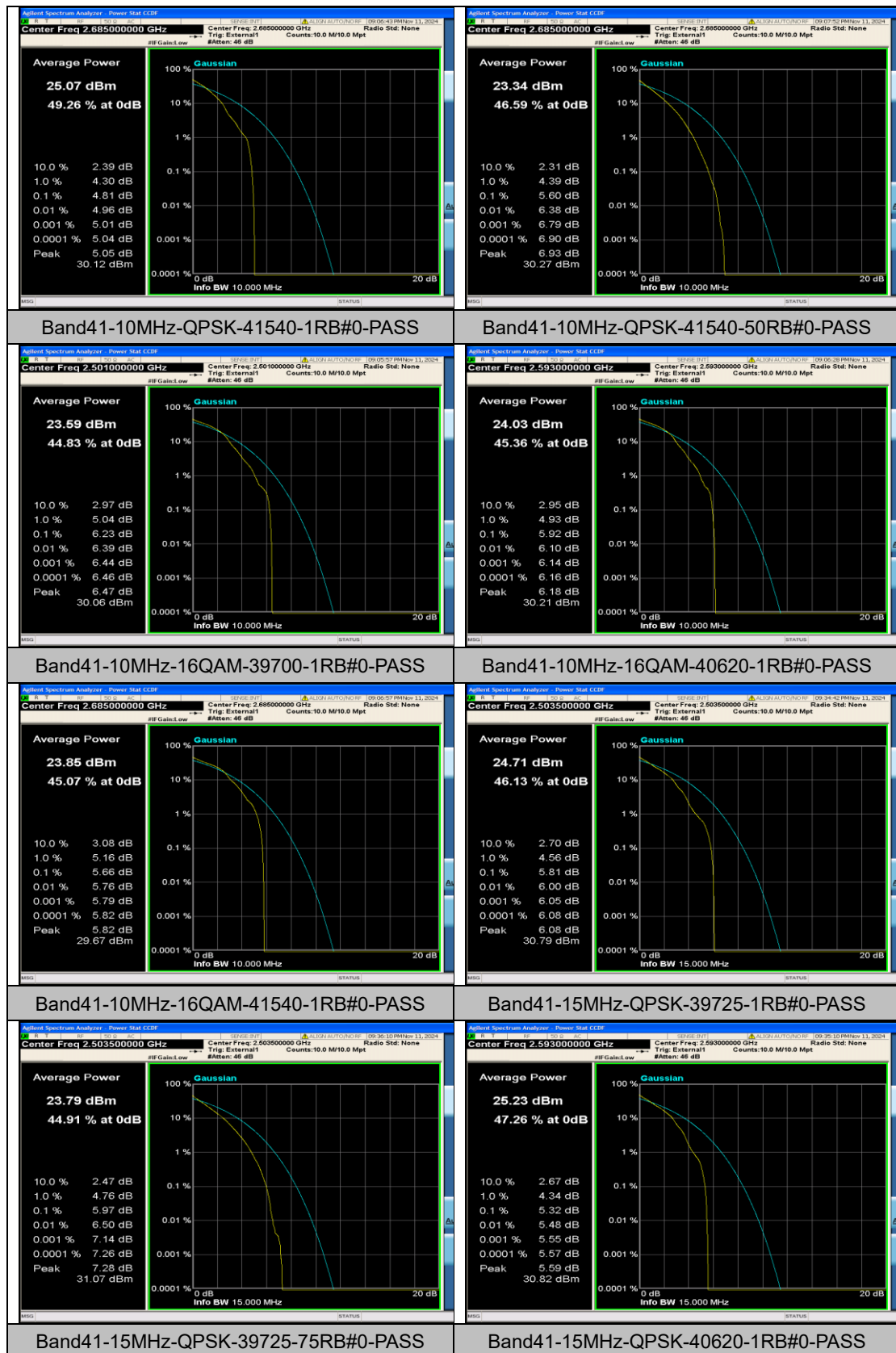
Test Result

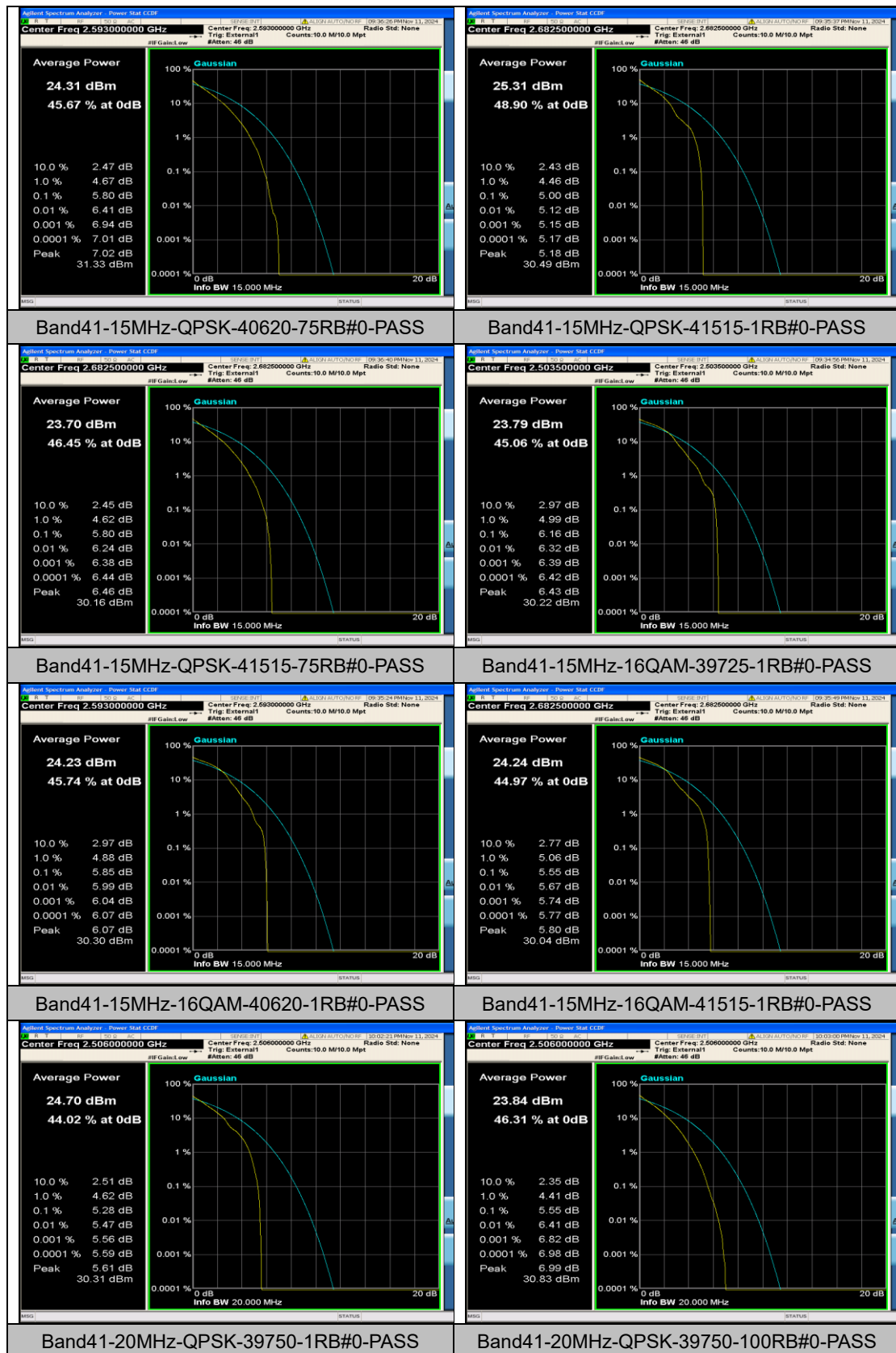
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band41	5MHz	QPSK	39675	1RB#0	5.10	13	PASS
Band41	5MHz	QPSK	39675	25RB#0	5.89	13	PASS
Band41	5MHz	QPSK	40620	1RB#0	4.81	13	PASS
Band41	5MHz	QPSK	40620	25RB#0	5.74	13	PASS
Band41	5MHz	QPSK	41565	1RB#0	4.82	13	PASS
Band41	5MHz	QPSK	41565	25RB#0	5.76	13	PASS
Band41	5MHz	16QAM	39675	1RB#0	5.84	13	PASS
Band41	5MHz	16QAM	39675	25RB#0	6.62	13	PASS
Band41	5MHz	16QAM	40620	1RB#0	5.58	13	PASS
Band41	5MHz	16QAM	40620	25RB#0	6.47	13	PASS
Band41	5MHz	16QAM	41565	1RB#0	5.43	13	PASS
Band41	5MHz	16QAM	41565	25RB#0	6.38	13	PASS
Band41	10MHz	QPSK	39700	1RB#0	5.87	13	PASS
Band41	10MHz	QPSK	39700	50RB#0	5.66	13	PASS
Band41	10MHz	QPSK	40620	1RB#0	5.43	13	PASS
Band41	10MHz	QPSK	40620	50RB#0	5.67	13	PASS
Band41	10MHz	QPSK	41540	1RB#0	4.81	13	PASS
Band41	10MHz	QPSK	41540	50RB#0	5.60	13	PASS
Band41	10MHz	16QAM	39700	1RB#0	6.23	13	PASS
Band41	10MHz	16QAM	40620	1RB#0	5.92	13	PASS
Band41	10MHz	16QAM	41540	1RB#0	5.66	13	PASS
Band41	15MHz	QPSK	39725	1RB#0	5.81	13	PASS
Band41	15MHz	QPSK	39725	75RB#0	5.97	13	PASS
Band41	15MHz	QPSK	40620	1RB#0	5.32	13	PASS
Band41	15MHz	QPSK	40620	75RB#0	5.80	13	PASS
Band41	15MHz	QPSK	41515	1RB#0	5.00	13	PASS
Band41	15MHz	QPSK	41515	75RB#0	5.80	13	PASS
Band41	15MHz	16QAM	39725	1RB#0	6.16	13	PASS
Band41	15MHz	16QAM	40620	1RB#0	5.85	13	PASS
Band41	15MHz	16QAM	41515	1RB#0	5.55	13	PASS
Band41	20MHz	QPSK	39750	1RB#0	5.28	13	PASS
Band41	20MHz	QPSK	39750	100RB#0	5.55	13	PASS
Band41	20MHz	QPSK	40620	1RB#0	4.96	13	PASS
Band41	20MHz	QPSK	40620	100RB#0	5.46	13	PASS
Band41	20MHz	QPSK	41490	1RB#0	4.84	13	PASS
Band41	20MHz	QPSK	41490	100RB#0	5.48	13	PASS

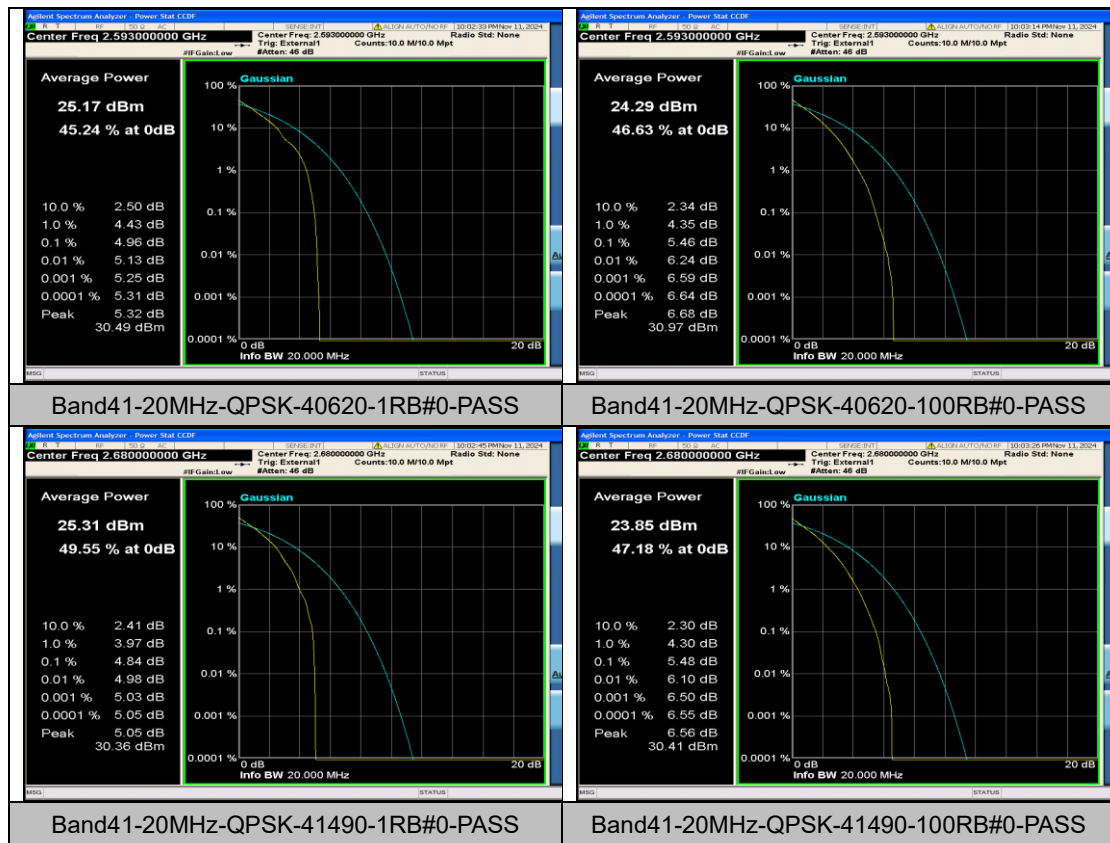
Test Graphs









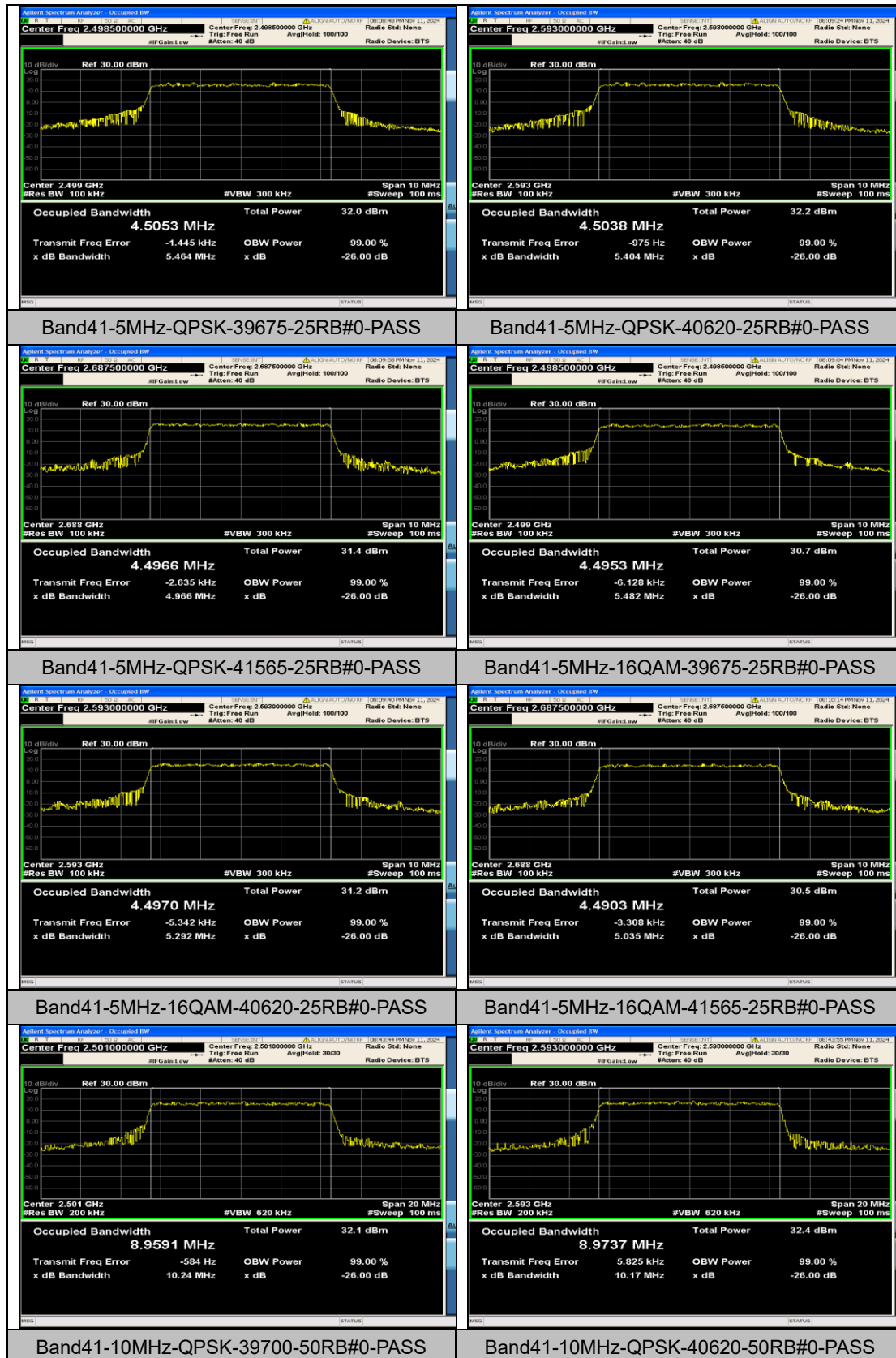


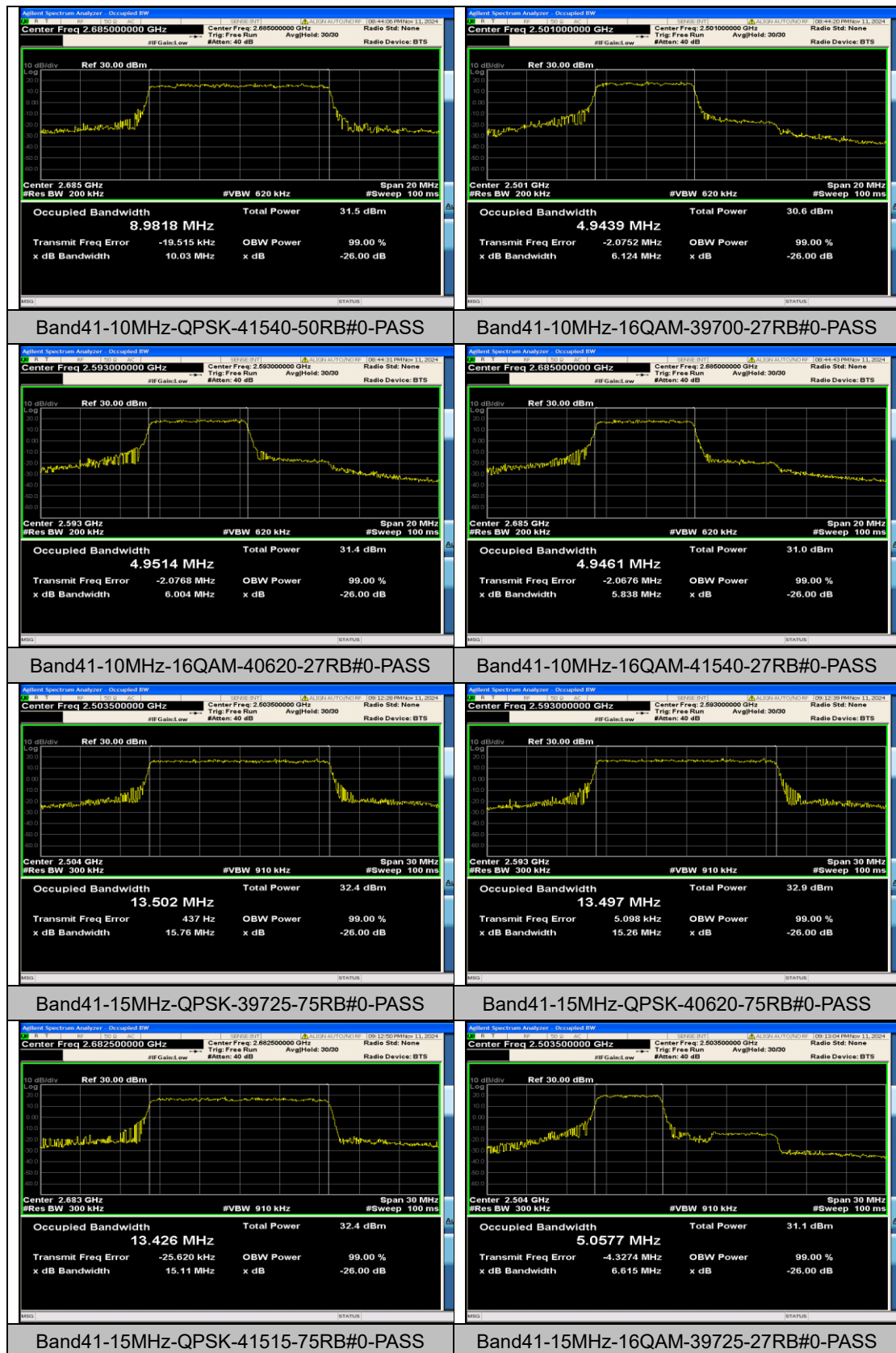
Appendix C: 26dB Bandwidth and Occupied Bandwidth

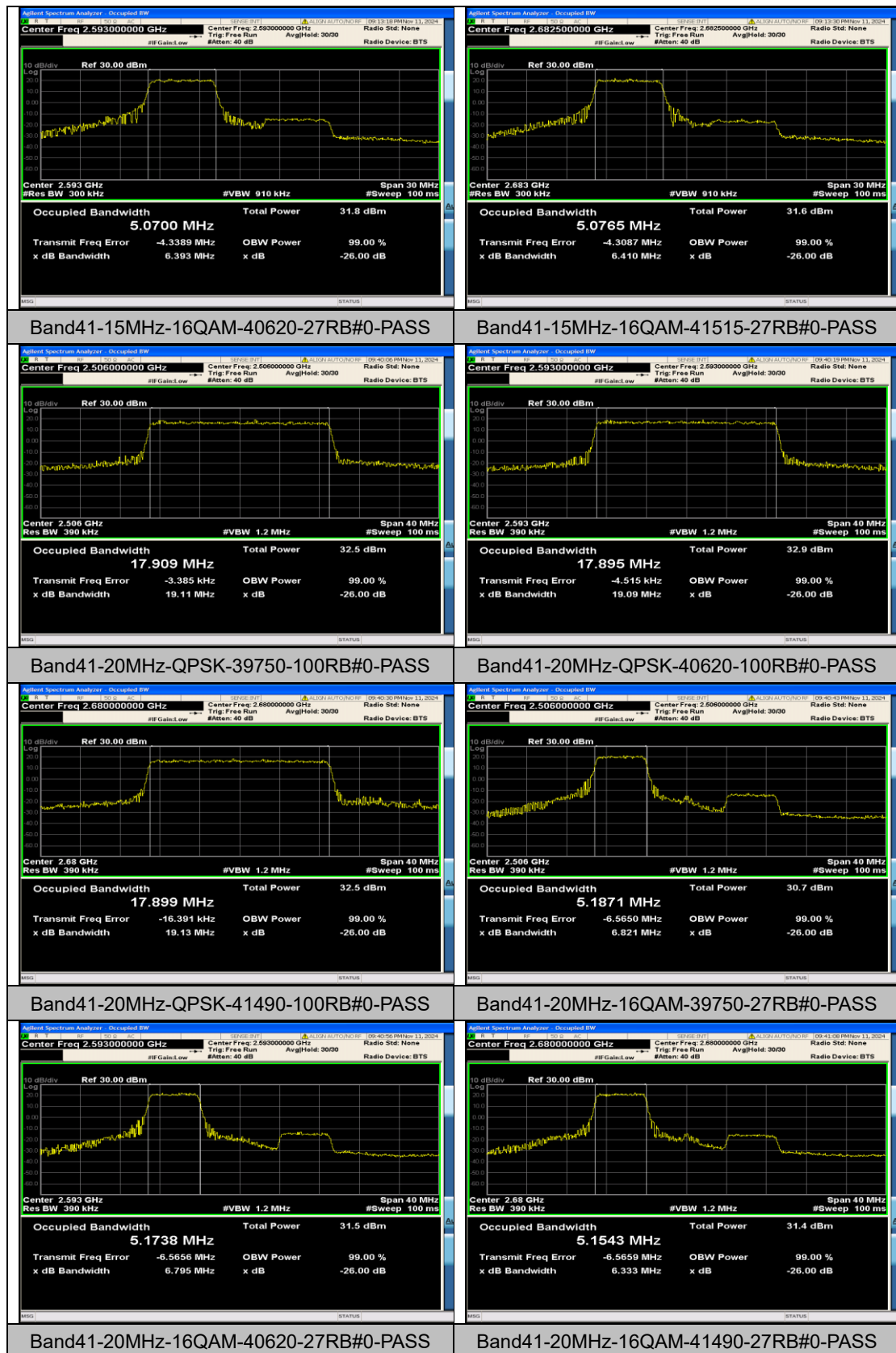
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band41	5MHz	QPSK	39675	25RB#0	4.5053	5.464	PASS
Band41	5MHz	QPSK	40620	25RB#0	4.5038	5.404	PASS
Band41	5MHz	QPSK	41565	25RB#0	4.4966	4.966	PASS
Band41	5MHz	16QAM	39675	25RB#0	4.4953	5.482	PASS
Band41	5MHz	16QAM	40620	25RB#0	4.4970	5.292	PASS
Band41	5MHz	16QAM	41565	25RB#0	4.4903	5.035	PASS
Band41	10MHz	QPSK	39700	50RB#0	8.9591	10.24	PASS
Band41	10MHz	QPSK	40620	50RB#0	8.9737	10.17	PASS
Band41	10MHz	QPSK	41540	50RB#0	8.9818	10.03	PASS
Band41	10MHz	16QAM	39700	27RB#0	4.9439	6.124	PASS
Band41	10MHz	16QAM	40620	27RB#0	4.9514	6.004	PASS
Band41	10MHz	16QAM	41540	27RB#0	4.9461	5.838	PASS
Band41	15MHz	QPSK	39725	75RB#0	13.502	15.76	PASS
Band41	15MHz	QPSK	40620	75RB#0	13.497	15.26	PASS
Band41	15MHz	QPSK	41515	75RB#0	13.426	15.11	PASS
Band41	15MHz	16QAM	39725	27RB#0	5.0577	6.615	PASS
Band41	15MHz	16QAM	40620	27RB#0	5.0700	6.393	PASS
Band41	15MHz	16QAM	41515	27RB#0	5.0765	6.410	PASS
Band41	20MHz	QPSK	39750	100RB#0	17.909	19.11	PASS
Band41	20MHz	QPSK	40620	100RB#0	17.895	19.09	PASS
Band41	20MHz	QPSK	41490	100RB#0	17.899	19.13	PASS
Band41	20MHz	16QAM	39750	27RB#0	5.1871	6.821	PASS
Band41	20MHz	16QAM	40620	27RB#0	5.1738	6.795	PASS
Band41	20MHz	16QAM	41490	27RB#0	5.1543	6.333	PASS

Test Graphs







Appendix D: Band Edge

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band41	5MHz	QPSK	39675	1RB#0	-17.85	PASS
Band41	5MHz	QPSK	39675	1RB#24	-40.78	PASS
Band41	5MHz	QPSK	39675	25RB#0	-22.65	PASS
Band41	5MHz	QPSK	41565	1RB#0	-40.17	PASS
Band41	5MHz	QPSK	41565	1RB#24	-21.56	PASS
Band41	5MHz	QPSK	41565	25RB#0	-37.72	PASS
Band41	5MHz	16QAM	39675	1RB#0	-19.14	PASS
Band41	5MHz	16QAM	39675	1RB#24	-41.20	PASS
Band41	5MHz	16QAM	39675	25RB#0	-23.19	PASS
Band41	5MHz	16QAM	41565	1RB#0	-40.65	PASS
Band41	5MHz	16QAM	41565	1RB#24	-38.47	PASS
Band41	5MHz	16QAM	41565	25RB#0	-37.56	PASS
Band41	10MHz	QPSK	39700	1RB#0	-23.09	PASS
Band41	10MHz	QPSK	39700	1RB#49	-36.05	PASS
Band41	10MHz	QPSK	39700	50RB#0	-31.12	PASS
Band41	10MHz	QPSK	41540	1RB#0	-42.41	PASS
Band41	10MHz	QPSK	41540	1RB#49	-40.41	PASS
Band41	10MHz	QPSK	41540	50RB#0	-39.45	PASS
Band41	10MHz	16QAM	39700	1RB#0	-25.02	PASS
Band41	10MHz	16QAM	39700	1RB#49	-36.22	PASS
Band41	10MHz	16QAM	41540	1RB#0	-42.47	PASS
Band41	10MHz	16QAM	41540	1RB#49	-40.74	PASS
Band41	15MHz	QPSK	39725	1RB#0	-35.33	PASS
Band41	15MHz	QPSK	39725	1RB#74	-37.22	PASS
Band41	15MHz	QPSK	39725	75RB#0	-30.19	PASS
Band41	15MHz	QPSK	41515	1RB#0	-42.52	PASS
Band41	15MHz	QPSK	41515	1RB#74	-42.33	PASS
Band41	15MHz	QPSK	41515	75RB#0	-38.98	PASS
Band41	15MHz	16QAM	39725	1RB#0	-36.20	PASS
Band41	15MHz	16QAM	39725	1RB#74	-38.01	PASS
Band41	15MHz	16QAM	41515	1RB#0	-42.42	PASS
Band41	15MHz	16QAM	41515	1RB#74	-42.35	PASS
Band41	20MHz	QPSK	39750	1RB#0	-36.94	PASS
Band41	20MHz	QPSK	39750	1RB#99	-38.90	PASS
Band41	20MHz	QPSK	39750	100RB#0	-32.26	PASS
Band41	20MHz	QPSK	41490	1RB#0	-42.63	PASS

Band41	20MHz	QPSK	41490	1RB#99	-40.84	PASS
Band41	20MHz	QPSK	41490	100RB#0	-40.59	PASS
Band41	20MHz	16QAM	39750	1RB#0	-37.18	PASS
Band41	20MHz	16QAM	39750	1RB#99	-39.37	PASS
Band41	20MHz	16QAM	41490	1RB#0	-42.58	PASS
Band41	20MHz	16QAM	41490	1RB#99	-41.25	PASS

Test Graphs

