

FCC LTE Band Test Data

FCC ID : 2BNAP-Y68

Company: : Shenzhen Hemi Intelligent Technology Co., Ltd

EUT : QR PAYMENT DEVICE

Model Number : Y68

Reviewed By : Eric Wang

Appendix A: Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	22.76	PASS
Band7	5MHz	QPSK	20775	1RB#12	21.69	PASS
Band7	5MHz	QPSK	20775	1RB#24	20.74	PASS
Band7	5MHz	QPSK	20775	12RB#0	21.09	PASS
Band7	5MHz	QPSK	20775	12RB#6	21.09	PASS
Band7	5MHz	QPSK	20775	12RB#13	20.20	PASS
Band7	5MHz	QPSK	20775	25RB#0	20.63	PASS
Band7	5MHz	QPSK	21100	1RB#0	23.00	PASS
Band7	5MHz	QPSK	21100	1RB#12	22.84	PASS
Band7	5MHz	QPSK	21100	1RB#24	22.31	PASS
Band7	5MHz	QPSK	21100	12RB#0	21.72	PASS
Band7	5MHz	QPSK	21100	12RB#6	21.72	PASS
Band7	5MHz	QPSK	21100	12RB#13	21.55	PASS
Band7	5MHz	QPSK	21100	25RB#0	21.67	PASS
Band7	5MHz	QPSK	21425	1RB#0	23.13	PASS
Band7	5MHz	QPSK	21425	1RB#12	23.03	PASS
Band7	5MHz	QPSK	21425	1RB#24	22.21	PASS
Band7	5MHz	QPSK	21425	12RB#0	22.08	PASS
Band7	5MHz	QPSK	21425	12RB#6	22.09	PASS
Band7	5MHz	QPSK	21425	12RB#13	21.82	PASS
Band7	5MHz	QPSK	21425	25RB#0	21.95	PASS
Band7	5MHz	16QAM	20775	1RB#0	21.66	PASS
Band7	5MHz	16QAM	20775	1RB#12	20.86	PASS
Band7	5MHz	16QAM	20775	1RB#24	19.90	PASS
Band7	5MHz	16QAM	20775	12RB#0	20.18	PASS
Band7	5MHz	16QAM	20775	12RB#6	20.17	PASS
Band7	5MHz	16QAM	20775	12RB#13	19.39	PASS
Band7	5MHz	16QAM	20775	25RB#0	19.66	PASS
Band7	5MHz	16QAM	21100	1RB#0	21.71	PASS
Band7	5MHz	16QAM	21100	1RB#12	21.77	PASS
Band7	5MHz	16QAM	21100	1RB#24	21.30	PASS
Band7	5MHz	16QAM	21100	12RB#0	20.69	PASS
Band7	5MHz	16QAM	21100	12RB#6	20.69	PASS
Band7	5MHz	16QAM	21100	12RB#13	20.61	PASS
Band7	5MHz	16QAM	21100	25RB#0	20.69	PASS
Band7	5MHz	16QAM	21425	1RB#0	21.98	PASS

Band7	5MHz	16QAM	21425	1RB#12	22.09	PASS
Band7	5MHz	16QAM	21425	1RB#24	21.43	PASS
Band7	5MHz	16QAM	21425	12RB#0	20.87	PASS
Band7	5MHz	16QAM	21425	12RB#6	20.87	PASS
Band7	5MHz	16QAM	21425	12RB#13	21.04	PASS
Band7	5MHz	16QAM	21425	25RB#0	21.02	PASS
Band7	10MHz	QPSK	20800	1RB#0	22.55	PASS
Band7	10MHz	QPSK	20800	1RB#24	20.49	PASS
Band7	10MHz	QPSK	20800	1RB#49	19.73	PASS
Band7	10MHz	QPSK	20800	25RB#0	20.36	PASS
Band7	10MHz	QPSK	20800	25RB#12	20.38	PASS
Band7	10MHz	QPSK	20800	25RB#25	18.86	PASS
Band7	10MHz	QPSK	20800	50RB#0	19.86	PASS
Band7	10MHz	QPSK	21100	1RB#0	23.01	PASS
Band7	10MHz	QPSK	21100	1RB#24	22.73	PASS
Band7	10MHz	QPSK	21100	1RB#49	21.41	PASS
Band7	10MHz	QPSK	21100	25RB#0	21.68	PASS
Band7	10MHz	QPSK	21100	25RB#12	21.68	PASS
Band7	10MHz	QPSK	21100	25RB#25	21.13	PASS
Band7	10MHz	QPSK	21100	50RB#0	21.64	PASS
Band7	10MHz	QPSK	21400	1RB#0	20.84	PASS
Band7	10MHz	QPSK	21400	1RB#24	23.16	PASS
Band7	10MHz	QPSK	21400	1RB#49	22.09	PASS
Band7	10MHz	QPSK	21400	25RB#0	20.55	PASS
Band7	10MHz	QPSK	21400	25RB#12	20.46	PASS
Band7	10MHz	QPSK	21400	25RB#25	21.89	PASS
Band7	10MHz	QPSK	21400	50RB#0	21.44	PASS
Band7	10MHz	16QAM	20800	1RB#0	21.40	PASS
Band7	10MHz	16QAM	20800	1RB#24	19.53	PASS
Band7	10MHz	16QAM	20800	1RB#49	18.76	PASS
Band7	10MHz	16QAM	20800	25RB#0	19.36	PASS
Band7	10MHz	16QAM	20800	25RB#12	19.37	PASS
Band7	10MHz	16QAM	20800	25RB#25	17.91	PASS
Band7	10MHz	16QAM	21100	1RB#0	21.51	PASS
Band7	10MHz	16QAM	21100	1RB#24	21.56	PASS
Band7	10MHz	16QAM	21100	1RB#49	20.23	PASS
Band7	10MHz	16QAM	21100	25RB#0	20.59	PASS
Band7	10MHz	16QAM	21100	25RB#12	20.59	PASS
Band7	10MHz	16QAM	21100	25RB#25	20.27	PASS
Band7	10MHz	16QAM	21400	1RB#0	19.79	PASS
Band7	10MHz	16QAM	21400	1RB#24	21.72	PASS
Band7	10MHz	16QAM	21400	1RB#49	21.54	PASS
Band7	10MHz	16QAM	21400	25RB#0	19.25	PASS

Band7	10MHz	16QAM	21400	25RB#12	19.25	PASS
Band7	10MHz	16QAM	21400	25RB#25	20.82	PASS
Band7	15MHz	QPSK	20825	1RB#0	22.45	PASS
Band7	15MHz	QPSK	20825	1RB#38	20.05	PASS
Band7	15MHz	QPSK	20825	1RB#74	20.07	PASS
Band7	15MHz	QPSK	20825	38RB#0	19.08	PASS
Band7	15MHz	QPSK	20825	38RB#18	19.08	PASS
Band7	15MHz	QPSK	20825	38RB#37	19.06	PASS
Band7	15MHz	QPSK	20825	75RB#0	18.81	PASS
Band7	15MHz	QPSK	21100	1RB#0	22.59	PASS
Band7	15MHz	QPSK	21100	1RB#38	22.73	PASS
Band7	15MHz	QPSK	21100	1RB#74	20.79	PASS
Band7	15MHz	QPSK	21100	38RB#0	21.40	PASS
Band7	15MHz	QPSK	21100	38RB#18	21.39	PASS
Band7	15MHz	QPSK	21100	38RB#37	21.39	PASS
Band7	15MHz	QPSK	21100	75RB#0	21.59	PASS
Band7	15MHz	QPSK	21375	1RB#0	19.38	PASS
Band7	15MHz	QPSK	21375	1RB#38	21.93	PASS
Band7	15MHz	QPSK	21375	1RB#74	22.38	PASS
Band7	15MHz	QPSK	21375	38RB#0	20.83	PASS
Band7	15MHz	QPSK	21375	38RB#18	20.81	PASS
Band7	15MHz	QPSK	21375	38RB#37	20.80	PASS
Band7	15MHz	QPSK	21375	75RB#0	20.95	PASS
Band7	15MHz	16QAM	20825	1RB#0	21.42	PASS
Band7	15MHz	16QAM	20825	1RB#38	19.12	PASS
Band7	15MHz	16QAM	20825	1RB#74	19.04	PASS
Band7	15MHz	16QAM	20825	38RB#0	19.08	PASS
Band7	15MHz	16QAM	20825	38RB#18	19.07	PASS
Band7	15MHz	16QAM	20825	38RB#37	19.06	PASS
Band7	15MHz	16QAM	21100	1RB#0	21.47	PASS
Band7	15MHz	16QAM	21100	1RB#38	21.98	PASS
Band7	15MHz	16QAM	21100	1RB#74	20.18	PASS
Band7	15MHz	16QAM	21100	38RB#0	21.39	PASS
Band7	15MHz	16QAM	21100	38RB#18	21.39	PASS
Band7	15MHz	16QAM	21100	38RB#37	21.40	PASS
Band7	15MHz	16QAM	21375	1RB#0	18.32	PASS
Band7	15MHz	16QAM	21375	1RB#38	20.60	PASS
Band7	15MHz	16QAM	21375	1RB#74	21.53	PASS
Band7	15MHz	16QAM	21375	38RB#0	20.81	PASS
Band7	15MHz	16QAM	21375	38RB#18	20.80	PASS
Band7	15MHz	16QAM	21375	38RB#37	20.79	PASS
Band7	20MHz	QPSK	20850	1RB#0	22.48	PASS
Band7	20MHz	QPSK	20850	1RB#49	20.08	PASS

Band7	20MHz	QPSK	20850	1RB#99	21.03	PASS
Band7	20MHz	QPSK	20850	50RB#0	19.57	PASS
Band7	20MHz	QPSK	20850	50RB#25	19.49	PASS
Band7	20MHz	QPSK	20850	50RB#50	19.15	PASS
Band7	20MHz	QPSK	20850	100RB#0	19.13	PASS
Band7	20MHz	QPSK	21100	1RB#0	22.12	PASS
Band7	20MHz	QPSK	21100	1RB#49	22.77	PASS
Band7	20MHz	QPSK	21100	1RB#99	20.30	PASS
Band7	20MHz	QPSK	21100	50RB#0	21.72	PASS
Band7	20MHz	QPSK	21100	50RB#25	21.69	PASS
Band7	20MHz	QPSK	21100	50RB#50	20.45	PASS
Band7	20MHz	QPSK	21100	100RB#0	21.16	PASS
Band7	20MHz	QPSK	21350	1RB#0	19.17	PASS
Band7	20MHz	QPSK	21350	1RB#49	20.96	PASS
Band7	20MHz	QPSK	21350	1RB#99	22.64	PASS
Band7	20MHz	QPSK	21350	50RB#0	18.71	PASS
Band7	20MHz	QPSK	21350	50RB#25	18.49	PASS
Band7	20MHz	QPSK	21350	50RB#50	21.36	PASS
Band7	20MHz	QPSK	21350	100RB#0	20.24	PASS
Band7	20MHz	16QAM	20850	1RB#0	21.24	PASS
Band7	20MHz	16QAM	20850	1RB#49	19.05	PASS
Band7	20MHz	16QAM	20850	1RB#99	19.63	PASS
Band7	20MHz	16QAM	21100	1RB#0	20.67	PASS
Band7	20MHz	16QAM	21100	1RB#49	21.71	PASS
Band7	20MHz	16QAM	21100	1RB#99	19.27	PASS
Band7	20MHz	16QAM	21350	1RB#0	18.02	PASS
Band7	20MHz	16QAM	21350	1RB#49	19.64	PASS
Band7	20MHz	16QAM	21350	1RB#99	21.79	PASS

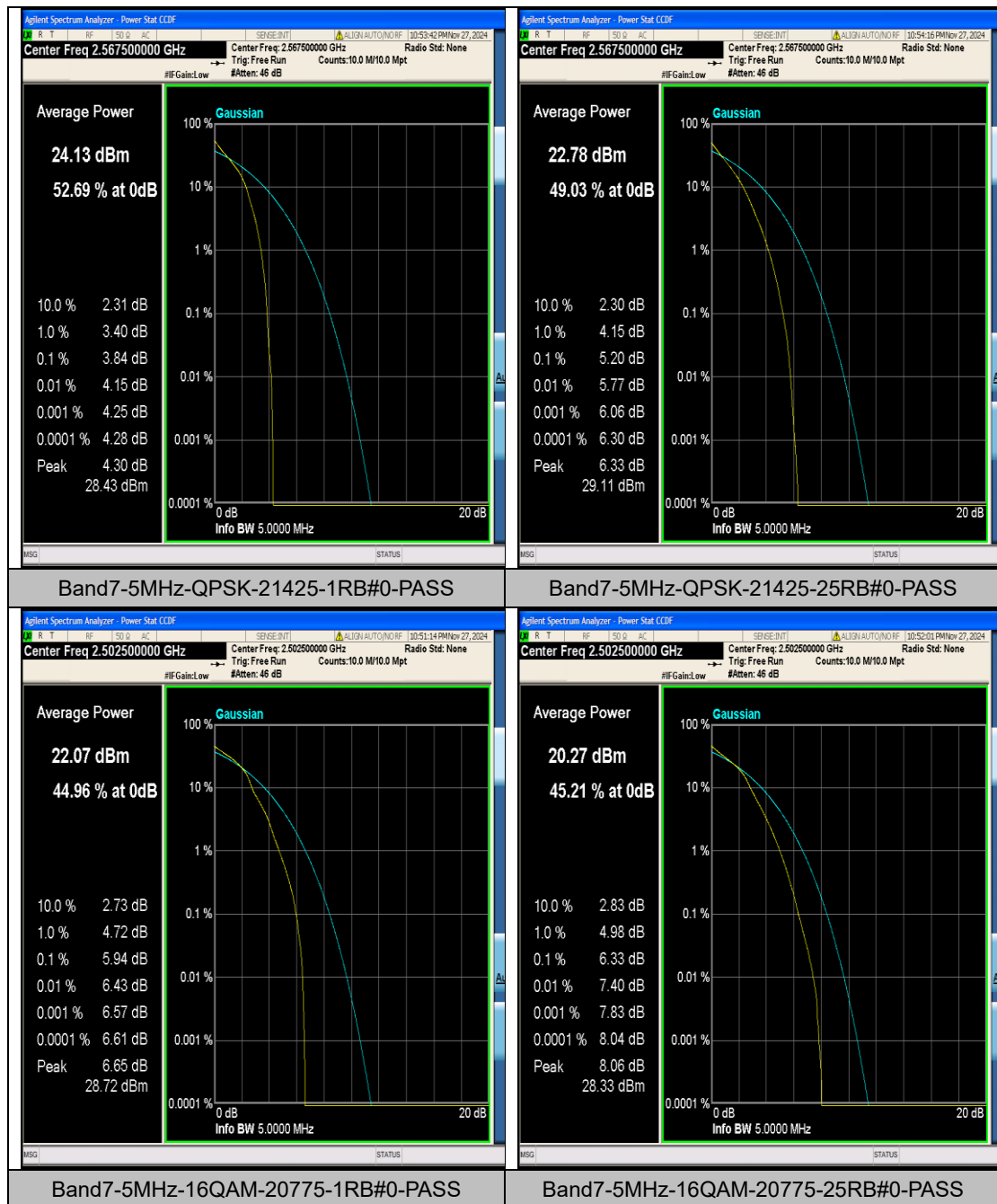
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

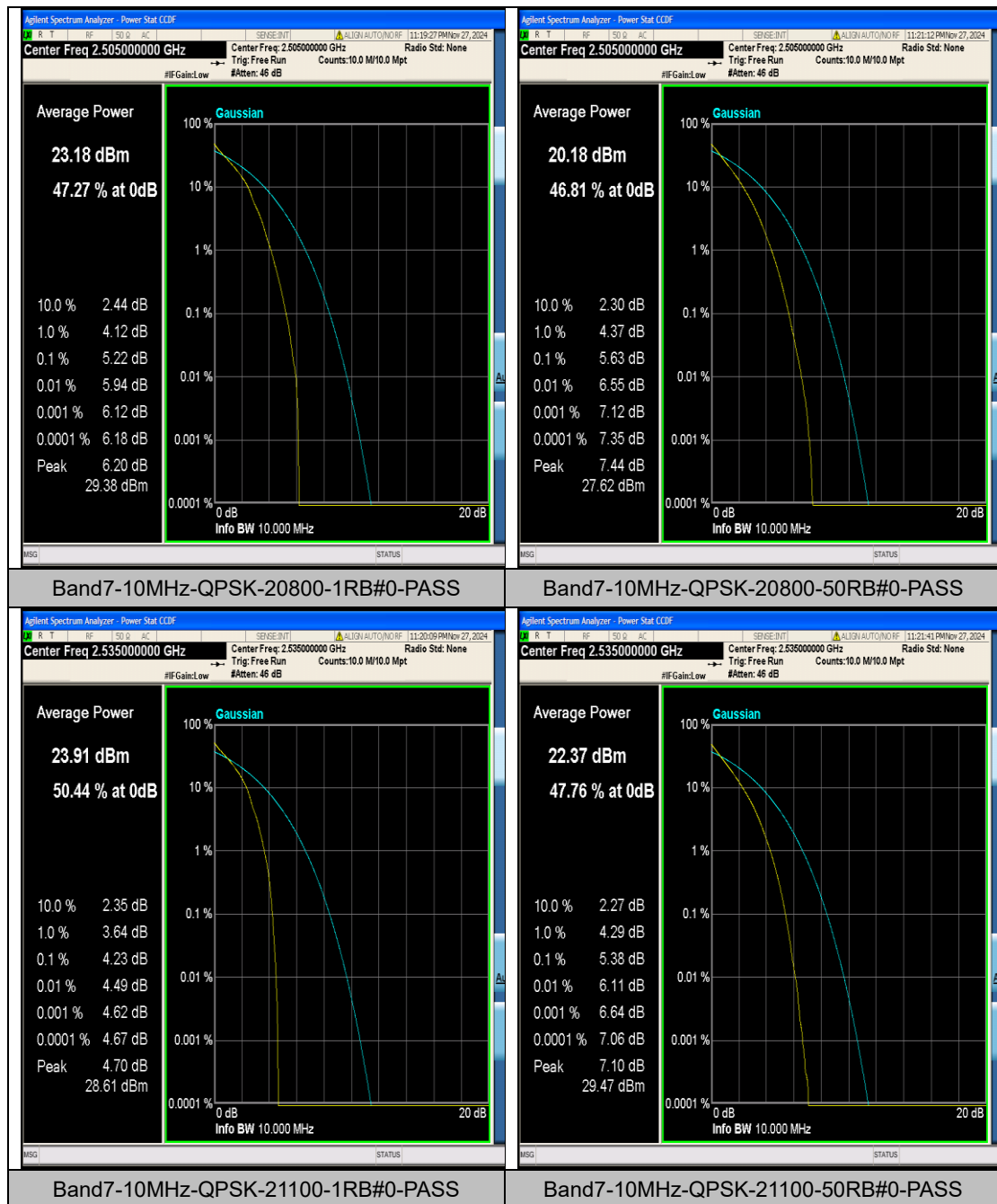
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	5.30	13	PASS
Band7	5MHz	QPSK	20775	25RB#0	5.65	13	PASS
Band7	5MHz	QPSK	21100	1RB#0	4.56	13	PASS
Band7	5MHz	QPSK	21100	25RB#0	5.55	13	PASS
Band7	5MHz	QPSK	21425	1RB#0	3.84	13	PASS
Band7	5MHz	QPSK	21425	25RB#0	5.20	13	PASS
Band7	5MHz	16QAM	20775	1RB#0	5.94	13	PASS
Band7	5MHz	16QAM	20775	25RB#0	6.33	13	PASS
Band7	5MHz	16QAM	21100	1RB#0	5.27	13	PASS
Band7	5MHz	16QAM	21100	25RB#0	6.21	13	PASS
Band7	5MHz	16QAM	21425	1RB#0	4.43	13	PASS
Band7	5MHz	16QAM	21425	25RB#0	5.78	13	PASS
Band7	10MHz	QPSK	20800	1RB#0	5.22	13	PASS
Band7	10MHz	QPSK	20800	50RB#0	5.63	13	PASS
Band7	10MHz	QPSK	21100	1RB#0	4.23	13	PASS
Band7	10MHz	QPSK	21100	50RB#0	5.38	13	PASS
Band7	10MHz	QPSK	21400	1RB#0	4.60	13	PASS
Band7	10MHz	QPSK	21400	50RB#0	5.01	13	PASS
Band7	10MHz	16QAM	20800	1RB#0	6.13	13	PASS
Band7	10MHz	16QAM	21100	1RB#0	5.24	13	PASS
Band7	10MHz	16QAM	21400	1RB#0	5.72	13	PASS
Band7	15MHz	QPSK	20825	1RB#0	5.17	13	PASS
Band7	15MHz	QPSK	20825	75RB#0	5.99	13	PASS
Band7	15MHz	QPSK	21100	1RB#0	4.40	13	PASS
Band7	15MHz	QPSK	21100	75RB#0	5.68	13	PASS
Band7	15MHz	QPSK	21375	1RB#0	5.11	13	PASS
Band7	15MHz	QPSK	21375	75RB#0	5.54	13	PASS
Band7	15MHz	16QAM	20825	1RB#0	6.38	13	PASS
Band7	15MHz	16QAM	21100	1RB#0	5.48	13	PASS
Band7	15MHz	16QAM	21375	1RB#0	6.34	13	PASS
Band7	20MHz	QPSK	20850	1RB#0	5.20	13	PASS
Band7	20MHz	QPSK	20850	100RB#0	5.67	13	PASS
Band7	20MHz	QPSK	21100	1RB#0	4.60	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	5.29	13	PASS
Band7	20MHz	QPSK	21350	1RB#0	5.20	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	5.53	13	PASS

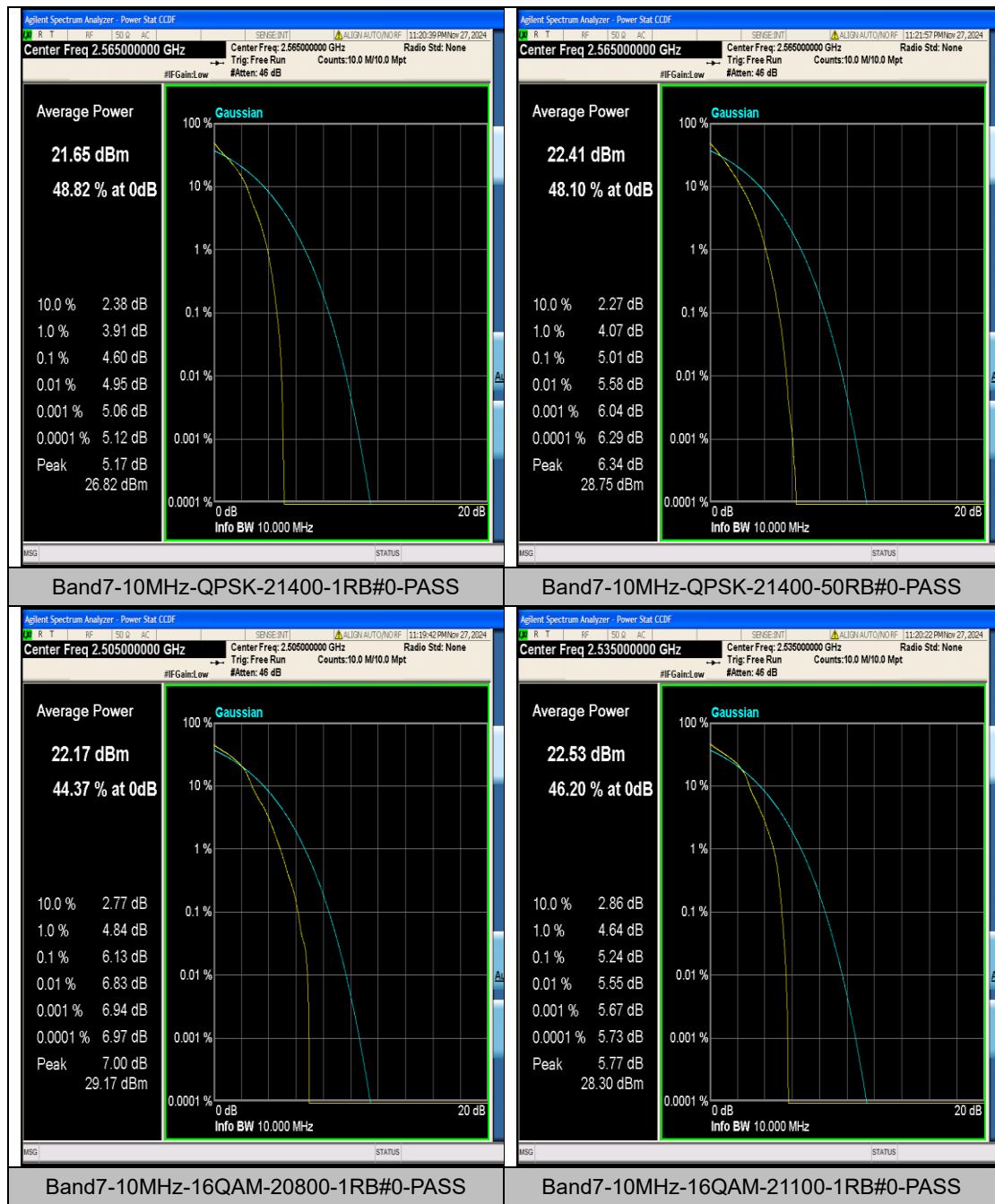
Test Graphs

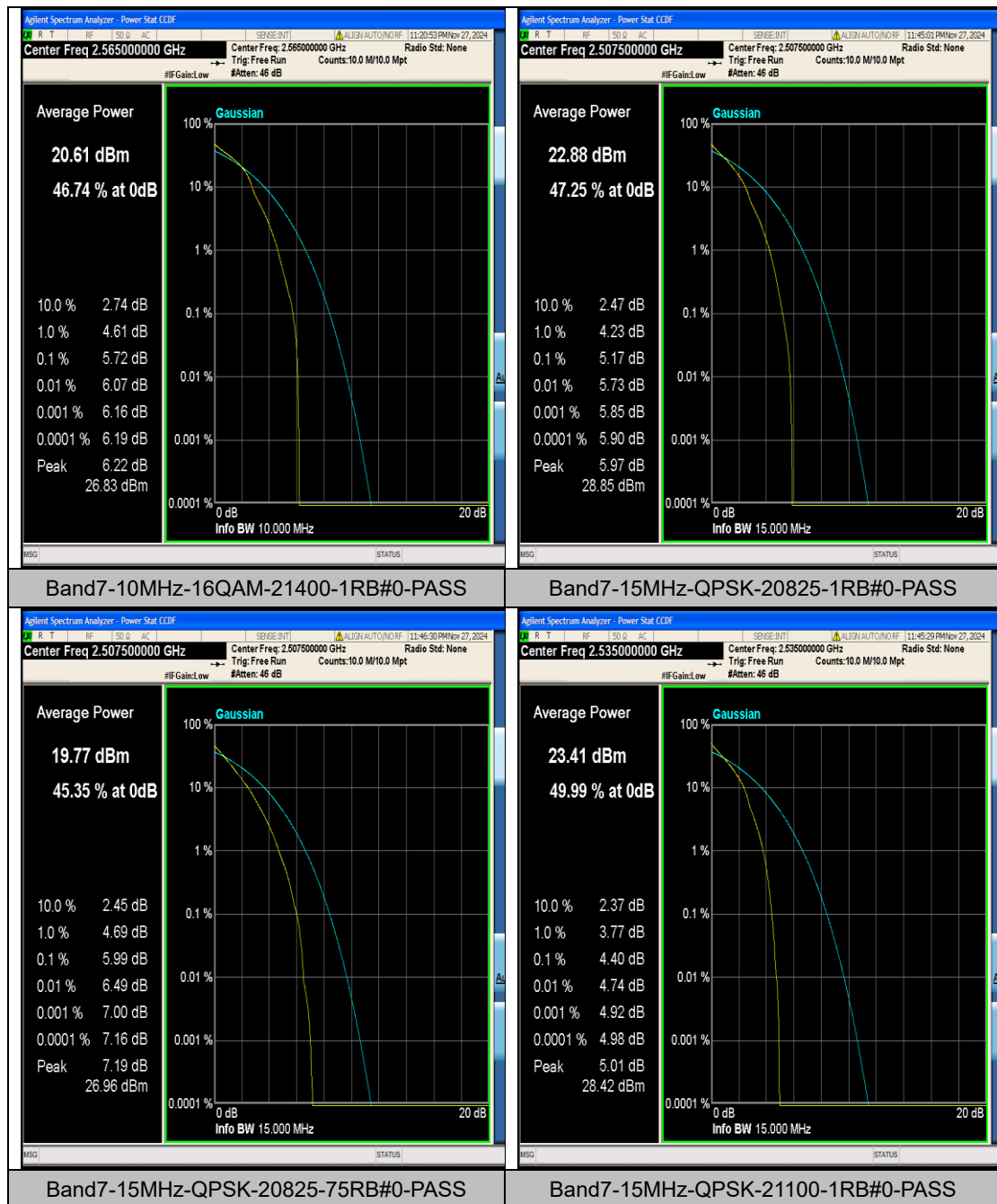




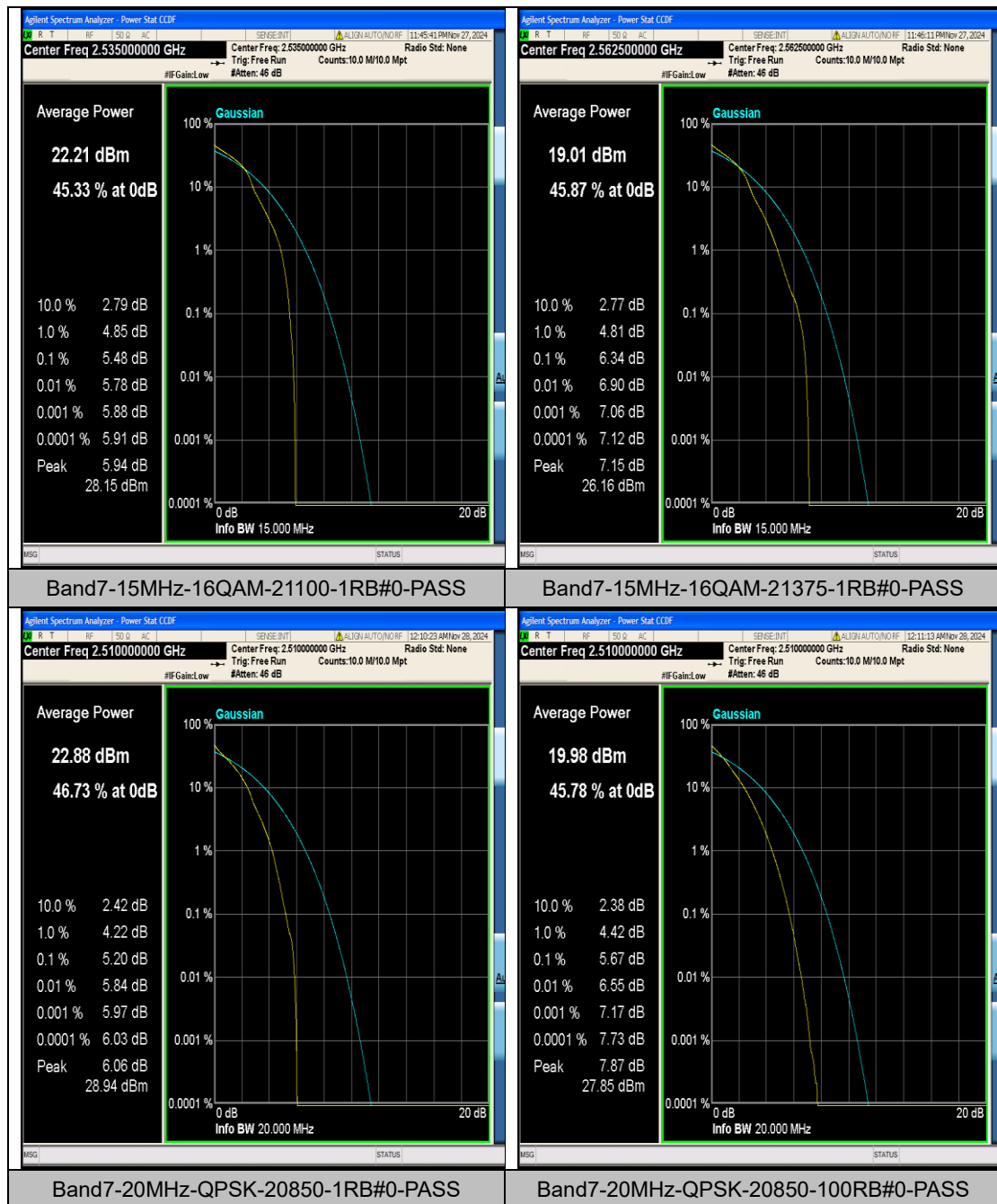












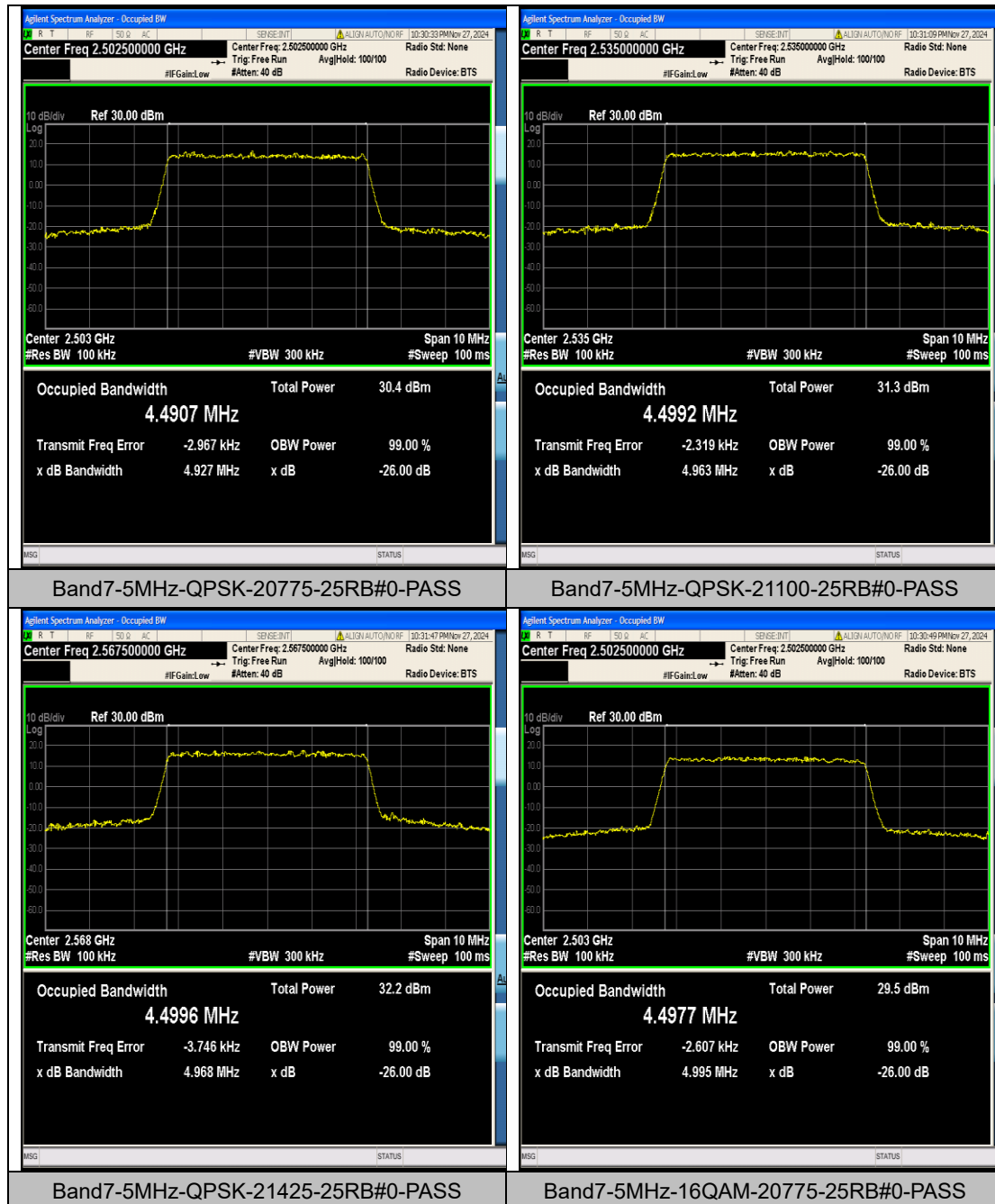


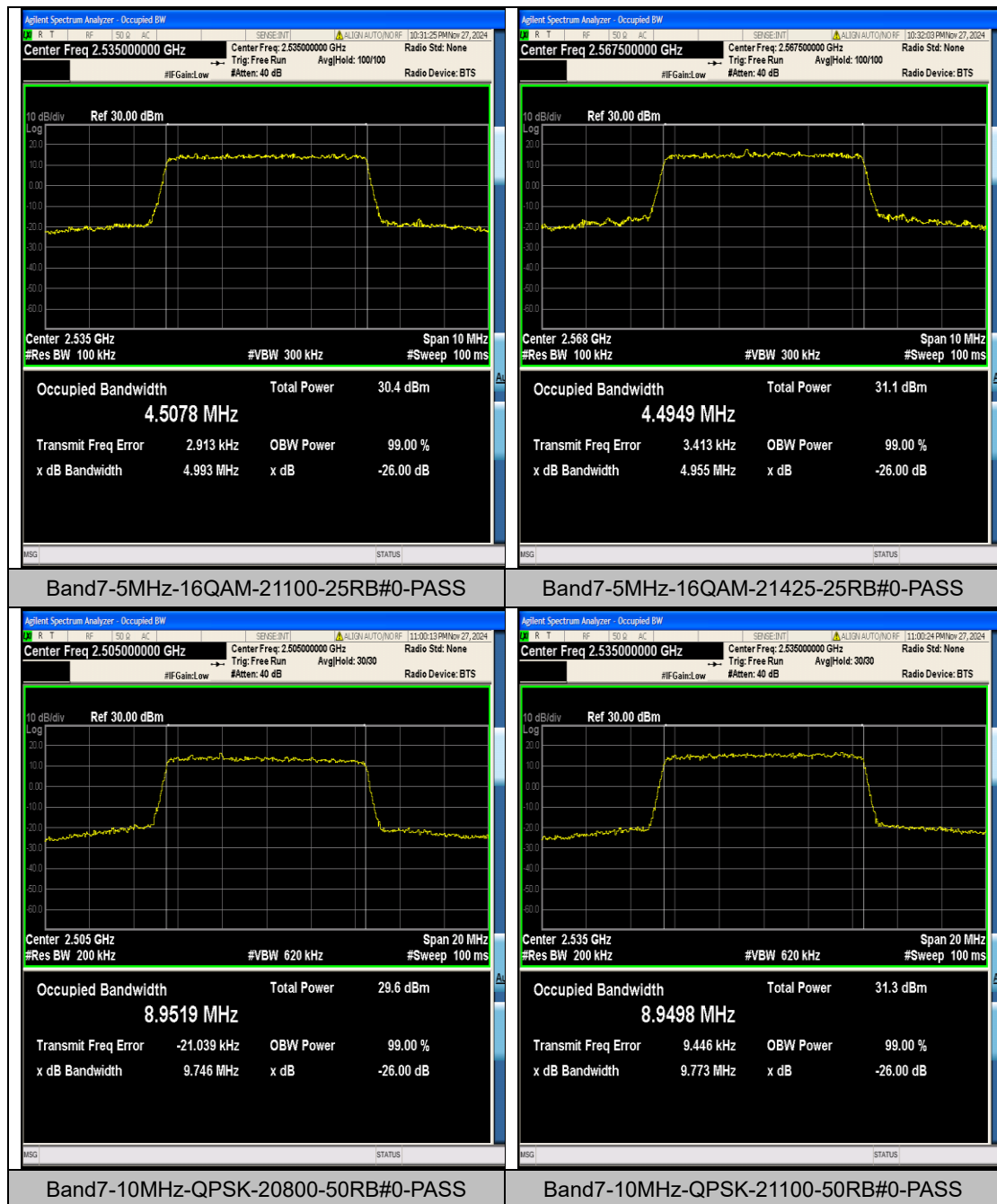
Appendix C: 26dB Bandwidth and Occupied Bandwidth

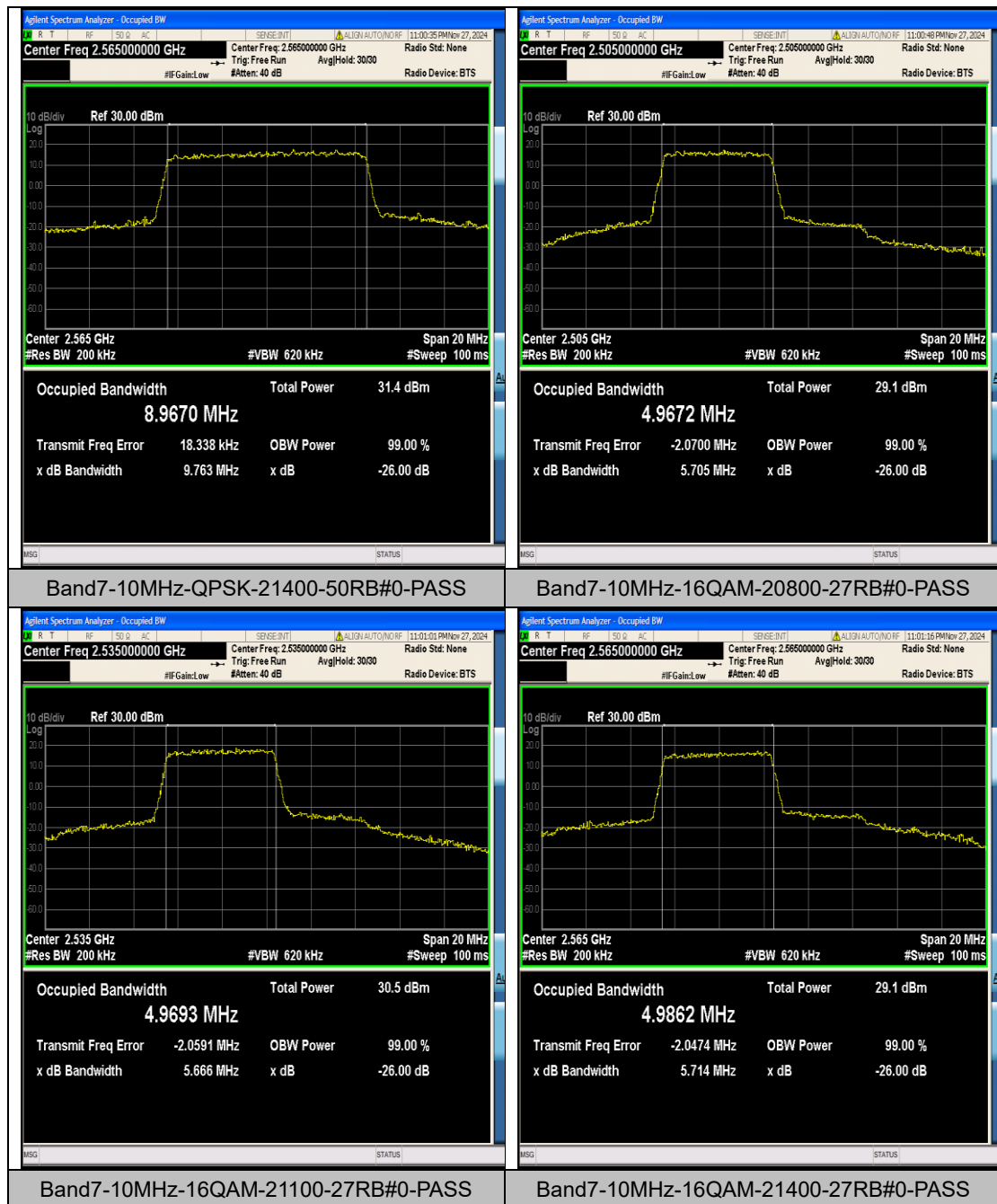
Test Result

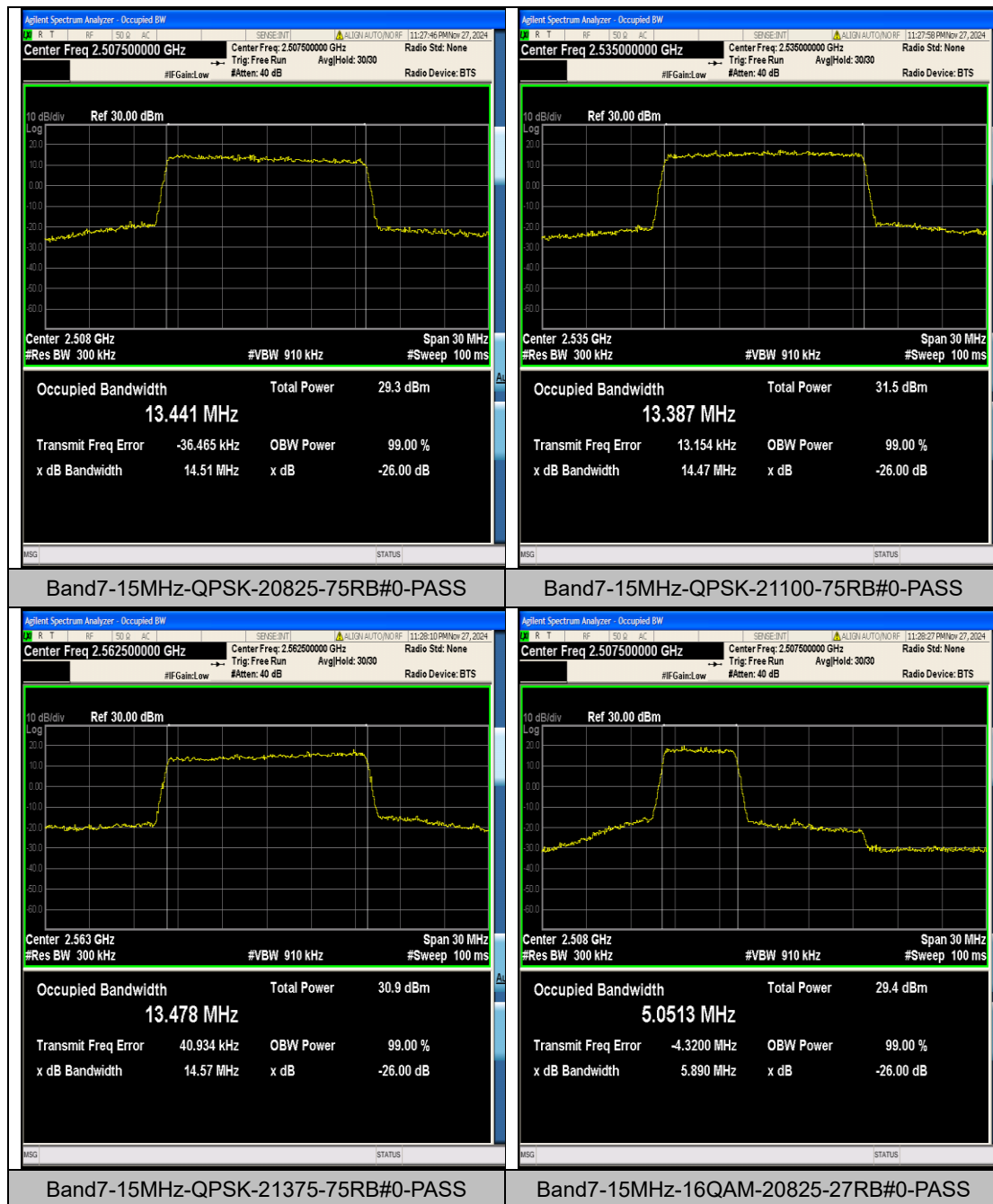
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.4907	4.927	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.4992	4.963	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.4996	4.968	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.4977	4.995	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.5078	4.993	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.4949	4.955	PASS
Band7	10MHz	QPSK	20800	50RB#0	8.9519	9.746	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.9498	9.773	PASS
Band7	10MHz	QPSK	21400	50RB#0	8.9670	9.763	PASS
Band7	10MHz	16QAM	20800	27RB#0	4.9672	5.705	PASS
Band7	10MHz	16QAM	21100	27RB#0	4.9693	5.666	PASS
Band7	10MHz	16QAM	21400	27RB#0	4.9862	5.714	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.441	14.51	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.387	14.47	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.478	14.57	PASS
Band7	15MHz	16QAM	20825	27RB#0	5.0513	5.890	PASS
Band7	15MHz	16QAM	21100	27RB#0	5.0843	5.991	PASS
Band7	15MHz	16QAM	21375	27RB#0	5.0979	5.923	PASS
Band7	20MHz	QPSK	20850	100RB#0	17.934	19.15	PASS
Band7	20MHz	QPSK	21100	100RB#0	17.852	19.20	PASS
Band7	20MHz	QPSK	21350	100RB#0	17.975	19.13	PASS
Band7	20MHz	16QAM	20850	27RB#0	5.1707	6.102	PASS
Band7	20MHz	16QAM	21100	27RB#0	5.1589	6.089	PASS
Band7	20MHz	16QAM	21350	27RB#0	5.1933	6.185	PASS

Test Graphs

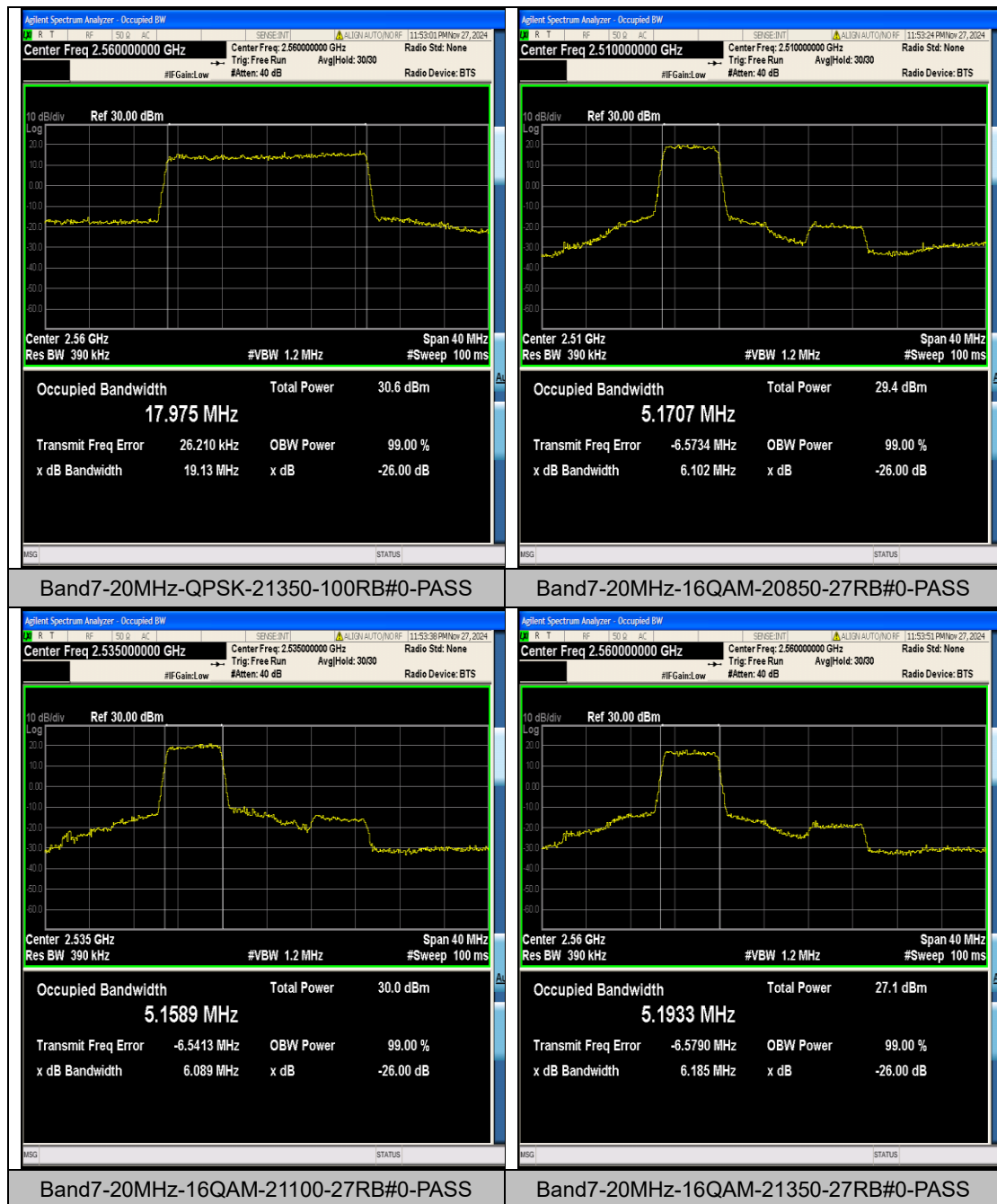












Appendix D: Band Edge

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	-23.06	PASS
Band7	5MHz	QPSK	20775	1RB#24	-29.75	PASS
Band7	5MHz	QPSK	20775	25RB#0	-23.76	PASS
Band7	5MHz	QPSK	21425	1RB#0	-42.18	PASS
Band7	5MHz	QPSK	21425	1RB#24	-22.75	PASS
Band7	5MHz	QPSK	21425	25RB#0	-33.94	PASS
Band7	5MHz	16QAM	20775	1RB#0	-24.16	PASS
Band7	5MHz	16QAM	20775	1RB#24	-30.25	PASS
Band7	5MHz	16QAM	20775	25RB#0	-23.28	PASS
Band7	5MHz	16QAM	21425	1RB#0	-42.14	PASS
Band7	5MHz	16QAM	21425	1RB#24	-38.88	PASS
Band7	5MHz	16QAM	21425	25RB#0	-34.54	PASS
Band7	10MHz	QPSK	20800	1RB#0	-42.62	PASS
Band7	10MHz	QPSK	20800	1RB#49	-43.02	PASS
Band7	10MHz	QPSK	20800	50RB#0	-25.10	PASS
Band7	10MHz	QPSK	21400	1RB#0	-42.69	PASS
Band7	10MHz	QPSK	21400	1RB#49	-42.25	PASS
Band7	10MHz	QPSK	21400	50RB#0	-20.54	PASS
Band7	10MHz	16QAM	20800	1RB#0	-42.67	PASS
Band7	10MHz	16QAM	20800	1RB#49	-43.12	PASS
Band7	10MHz	16QAM	21400	1RB#0	-42.68	PASS
Band7	10MHz	16QAM	21400	1RB#49	-42.35	PASS
Band7	15MHz	QPSK	20825	1RB#0	-43.11	PASS
Band7	15MHz	QPSK	20825	1RB#74	-43.04	PASS
Band7	15MHz	QPSK	20825	75RB#0	-25.53	PASS
Band7	15MHz	QPSK	21375	1RB#0	-42.67	PASS
Band7	15MHz	QPSK	21375	1RB#74	-42.74	PASS
Band7	15MHz	QPSK	21375	75RB#0	-37.16	PASS
Band7	15MHz	16QAM	20825	1RB#0	-42.92	PASS
Band7	15MHz	16QAM	20825	1RB#74	-43.09	PASS
Band7	15MHz	16QAM	21375	1RB#0	-42.56	PASS
Band7	15MHz	16QAM	21375	1RB#74	-42.61	PASS
Band7	20MHz	QPSK	20850	1RB#0	-43.15	PASS
Band7	20MHz	QPSK	20850	1RB#99	-43.08	PASS
Band7	20MHz	QPSK	20850	100RB#0	-26.25	PASS
Band7	20MHz	QPSK	21350	1RB#0	-42.69	PASS
Band7	20MHz	QPSK	21350	1RB#99	-42.72	PASS

Band7	20MHz	QPSK	21350	100RB#0	-24.66	PASS
Band7	20MHz	16QAM	20850	1RB#0	-43.07	PASS
Band7	20MHz	16QAM	20850	1RB#99	-43.14	PASS
Band7	20MHz	16QAM	21350	1RB#0	-42.77	PASS
Band7	20MHz	16QAM	21350	1RB#99	-42.64	PASS

Test Graphs

