

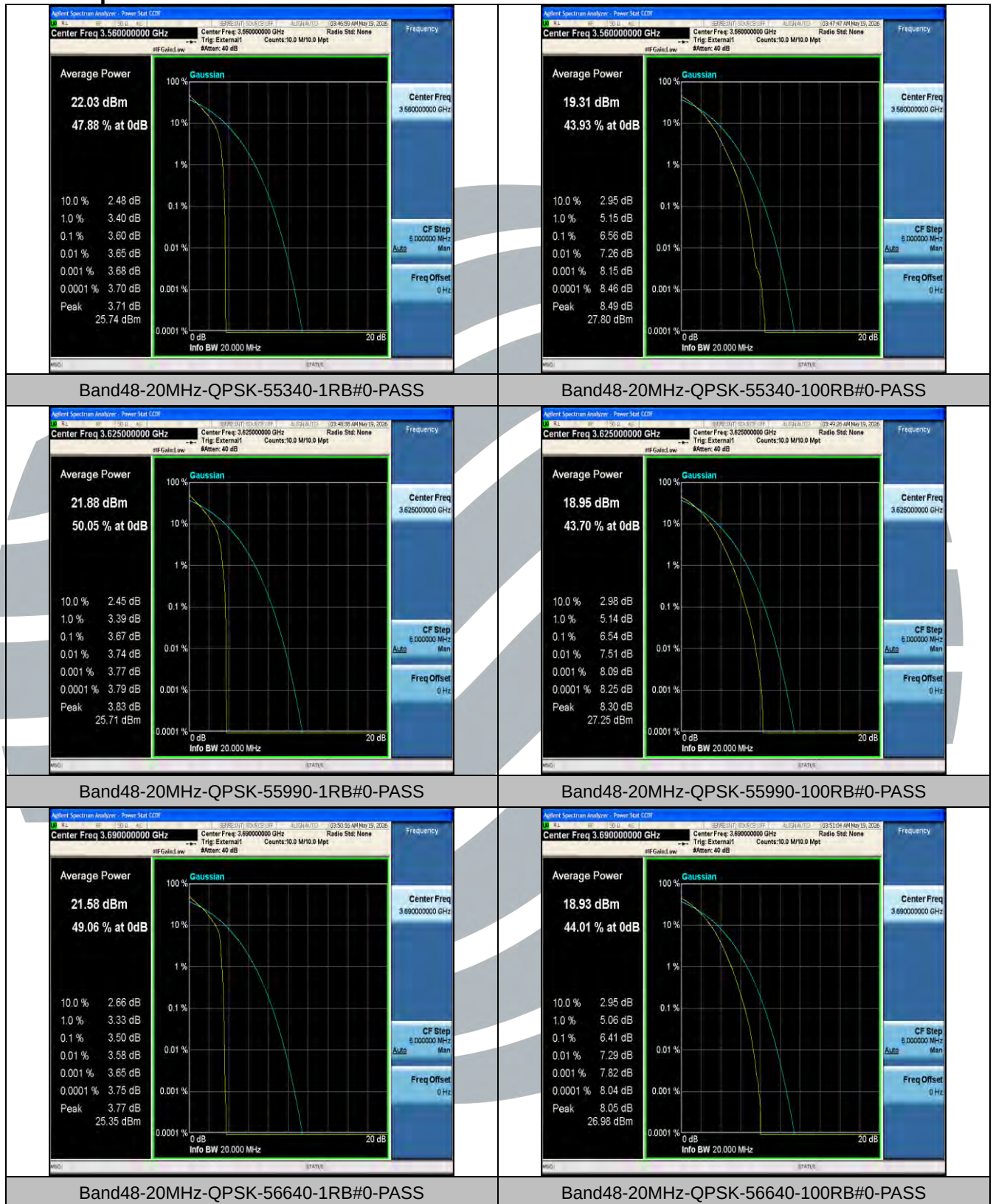
APPENDIX A LTE BAND 48 RF TEST DATA

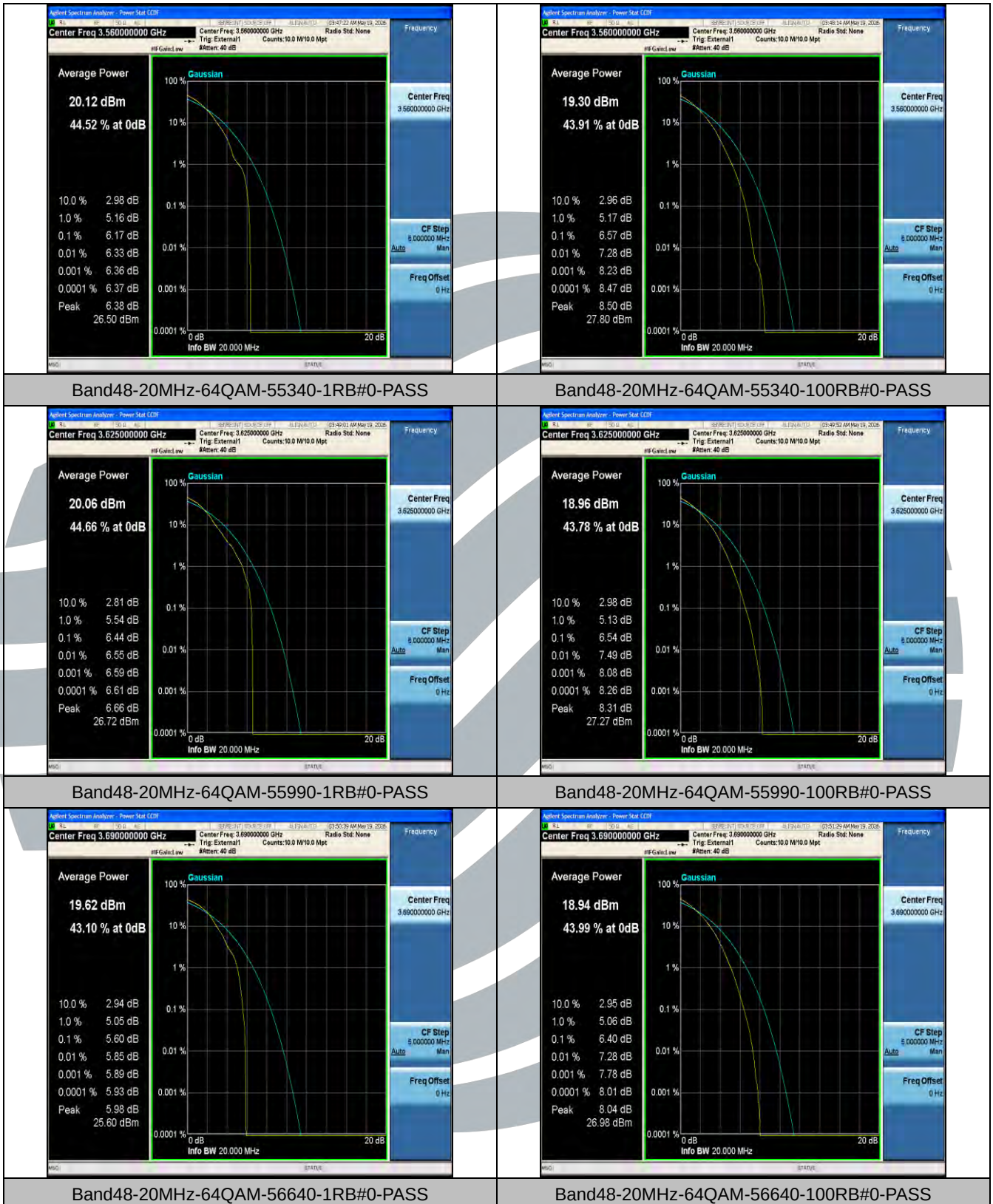
A.1 PEAK-TO-AVERAGE RATIO(CCDF)

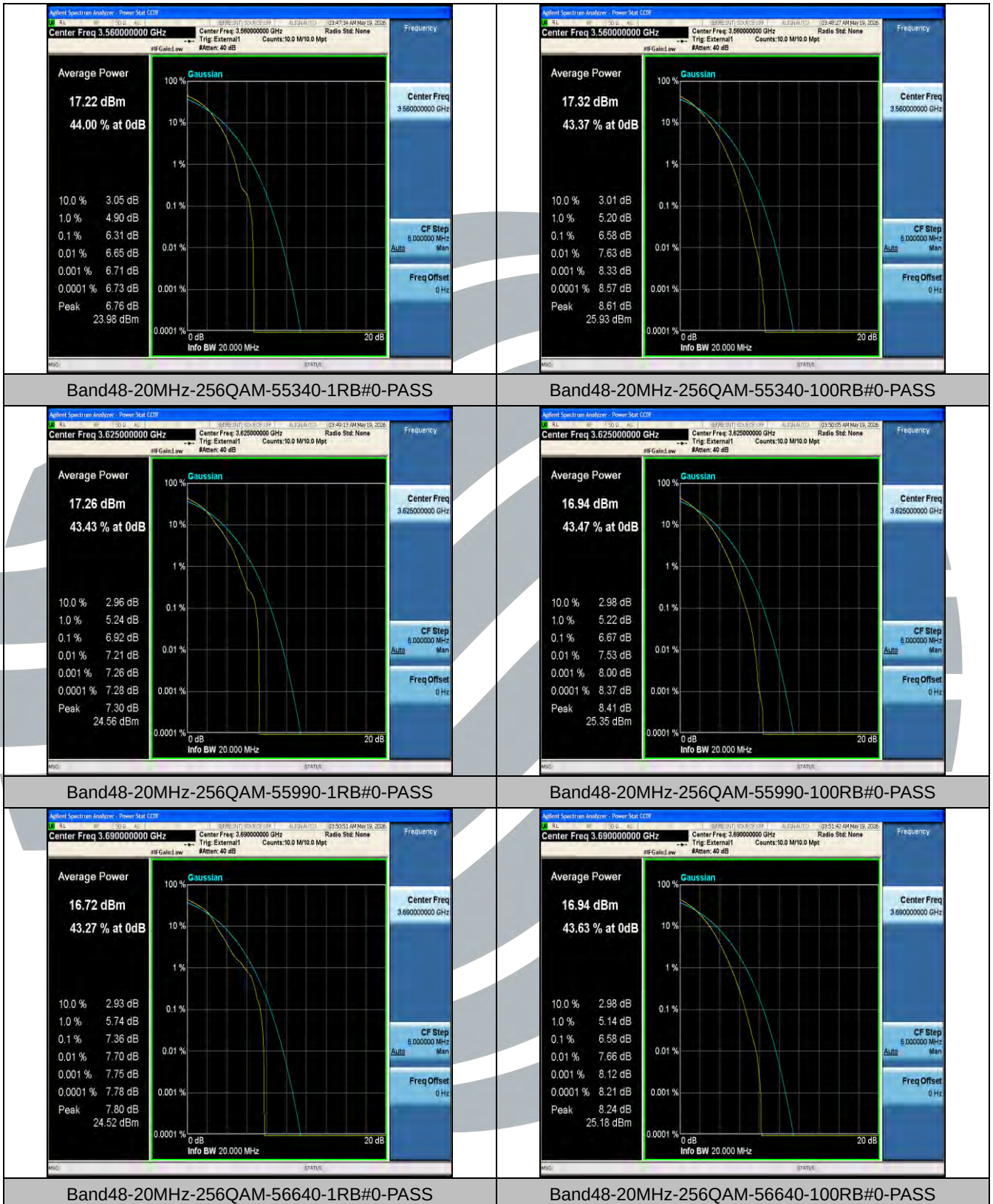
Test Result

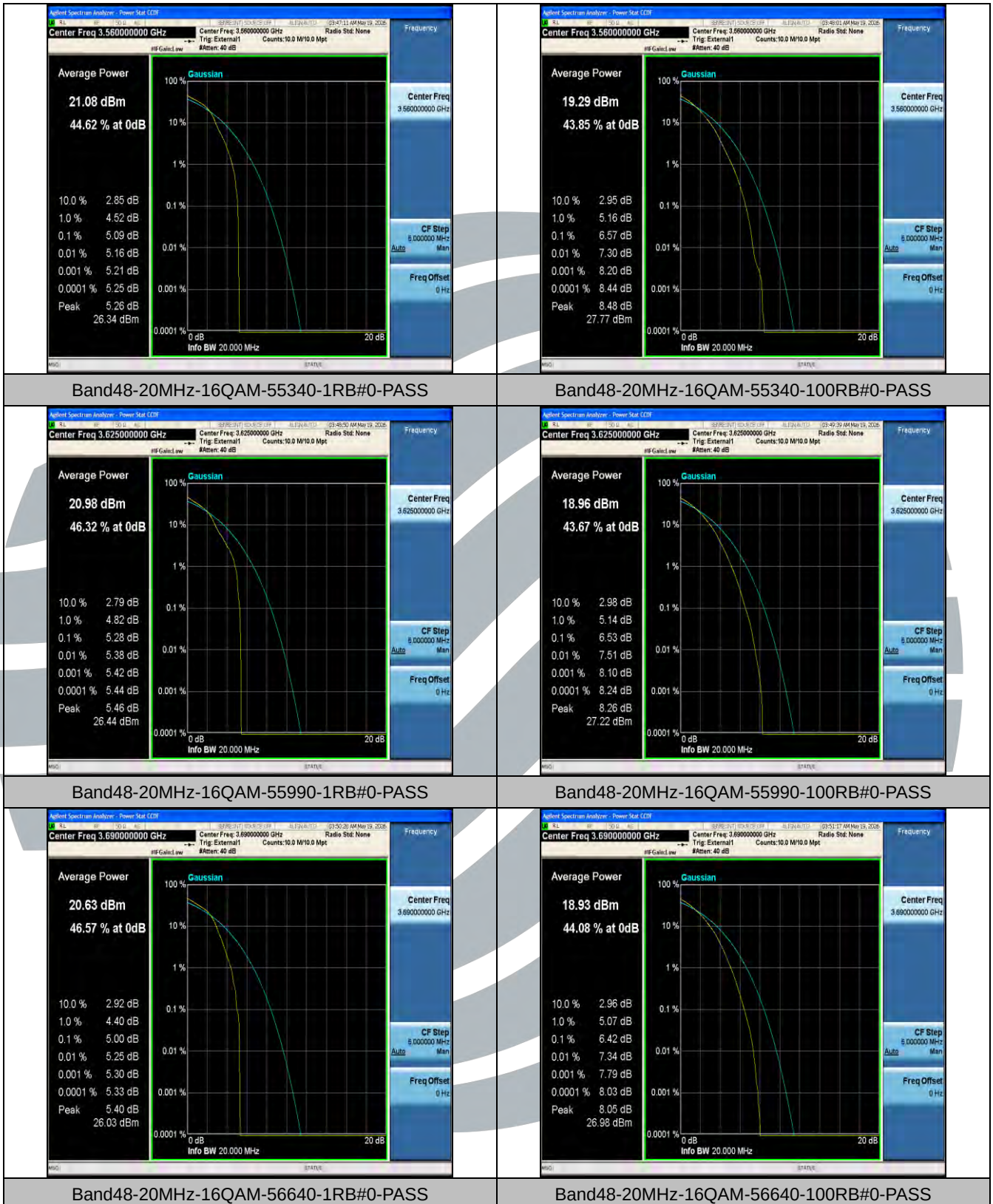
Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band48	20MHz	QPSK	55340	1RB#0	3.60	13	PASS
Band48	20MHz	QPSK	55340	100RB#0	6.56	13	PASS
Band48	20MHz	QPSK	55990	1RB#0	3.67	13	PASS
Band48	20MHz	QPSK	55990	100RB#0	6.54	13	PASS
Band48	20MHz	QPSK	56640	1RB#0	3.50	13	PASS
Band48	20MHz	QPSK	56640	100RB#0	6.41	13	PASS
Band48	20MHz	64QAM	55340	1RB#0	6.17	13	PASS
Band48	20MHz	64QAM	55340	100RB#0	6.57	13	PASS
Band48	20MHz	64QAM	55990	1RB#0	6.44	13	PASS
Band48	20MHz	64QAM	55990	100RB#0	6.54	13	PASS
Band48	20MHz	64QAM	56640	1RB#0	5.60	13	PASS
Band48	20MHz	64QAM	56640	100RB#0	6.40	13	PASS
Band48	20MHz	256QAM	55340	1RB#0	6.31	13	PASS
Band48	20MHz	256QAM	55340	100RB#0	6.58	13	PASS
Band48	20MHz	256QAM	55990	1RB#0	6.92	13	PASS
Band48	20MHz	256QAM	55990	100RB#0	6.67	13	PASS
Band48	20MHz	256QAM	56640	1RB#0	7.36	13	PASS
Band48	20MHz	256QAM	56640	100RB#0	6.58	13	PASS
Band48	20MHz	16QAM	55340	1RB#0	5.09	13	PASS
Band48	20MHz	16QAM	55340	100RB#0	6.57	13	PASS
Band48	20MHz	16QAM	55990	1RB#0	5.28	13	PASS
Band48	20MHz	16QAM	55990	100RB#0	6.53	13	PASS
Band48	20MHz	16QAM	56640	1RB#0	5.00	13	PASS
Band48	20MHz	16QAM	56640	100RB#0	6.42	13	PASS

Test Graphs







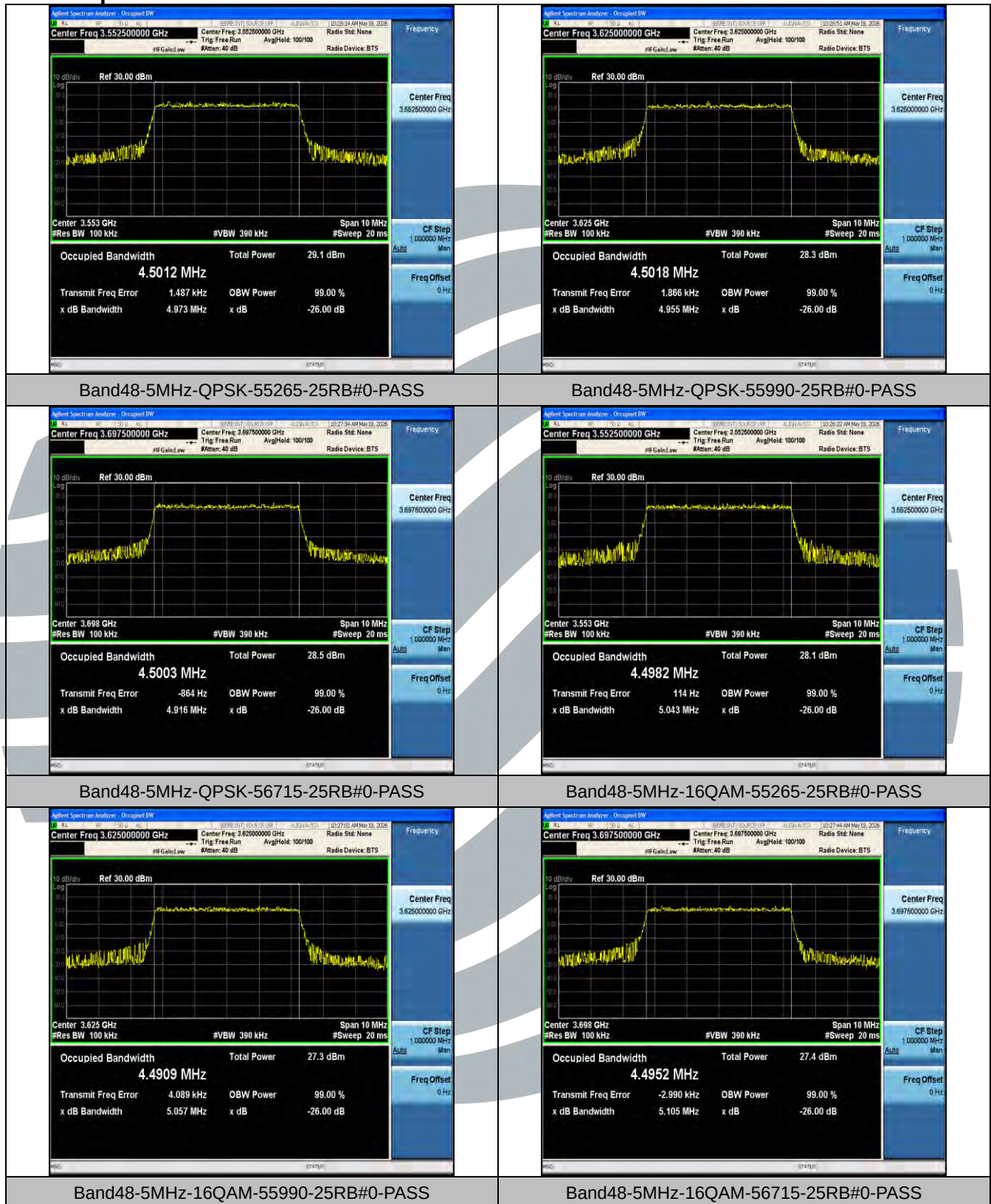


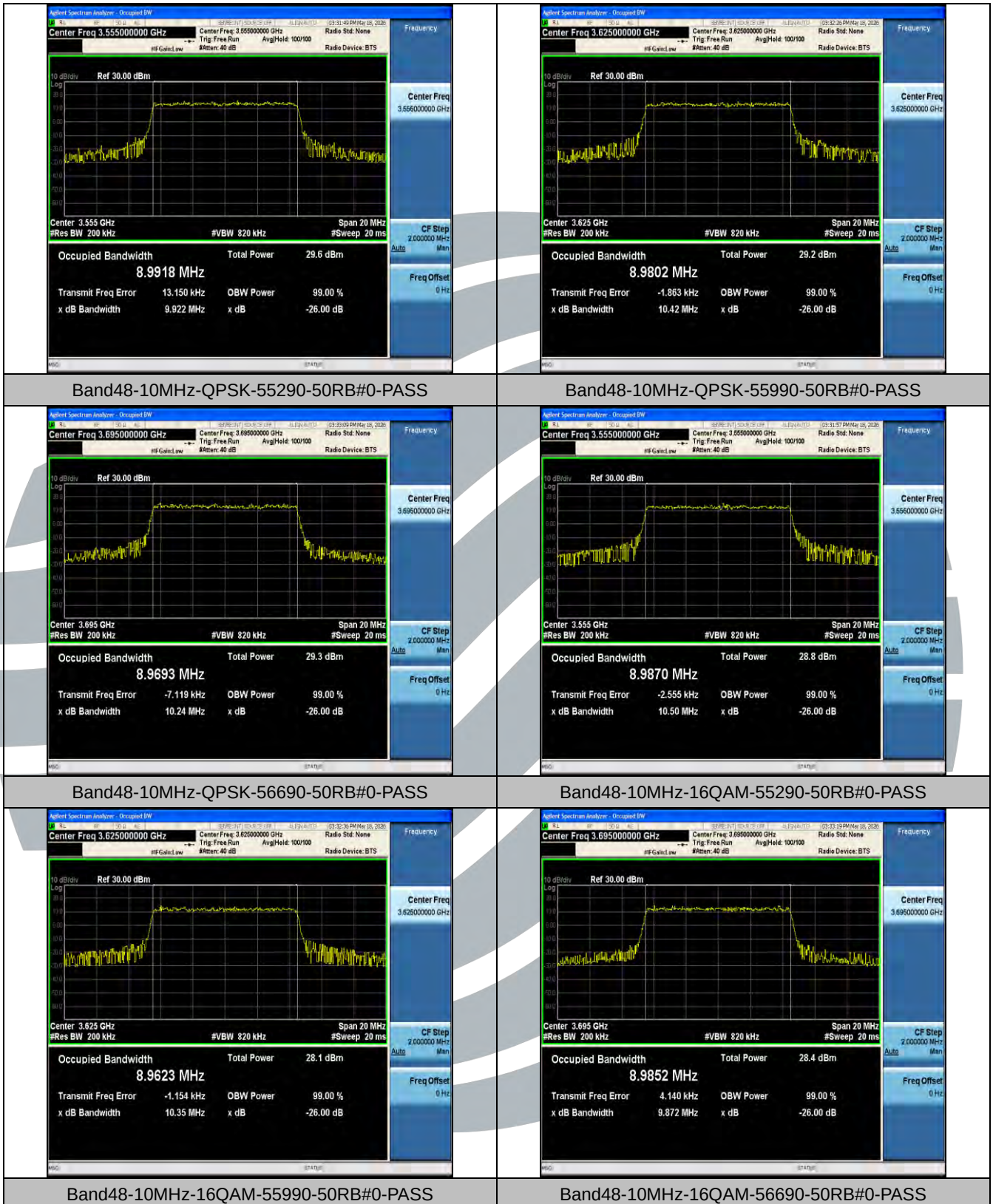
A.2 26DB BANDWIDTH AND OCCUPIED BANDWIDTH

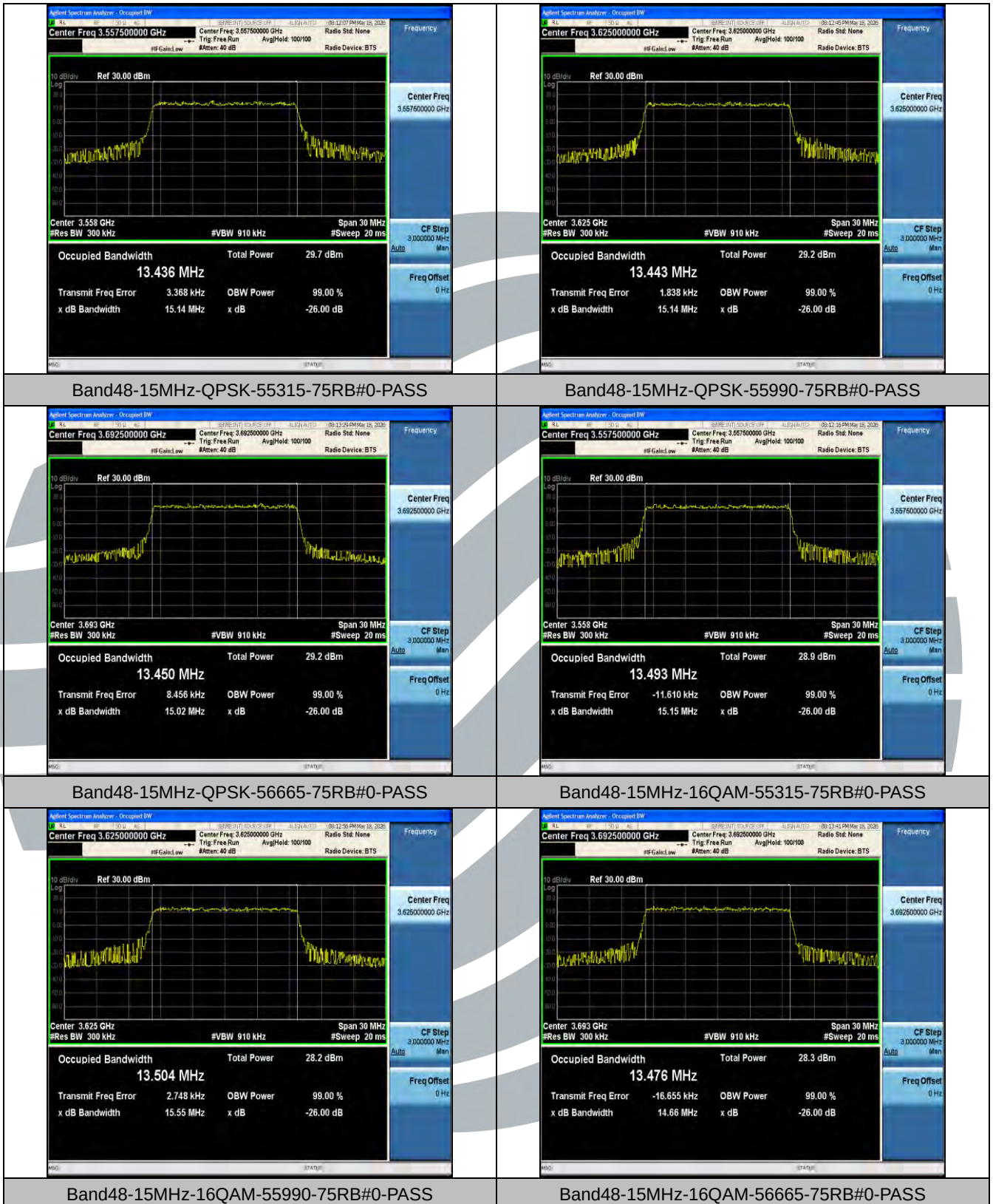
Test Result

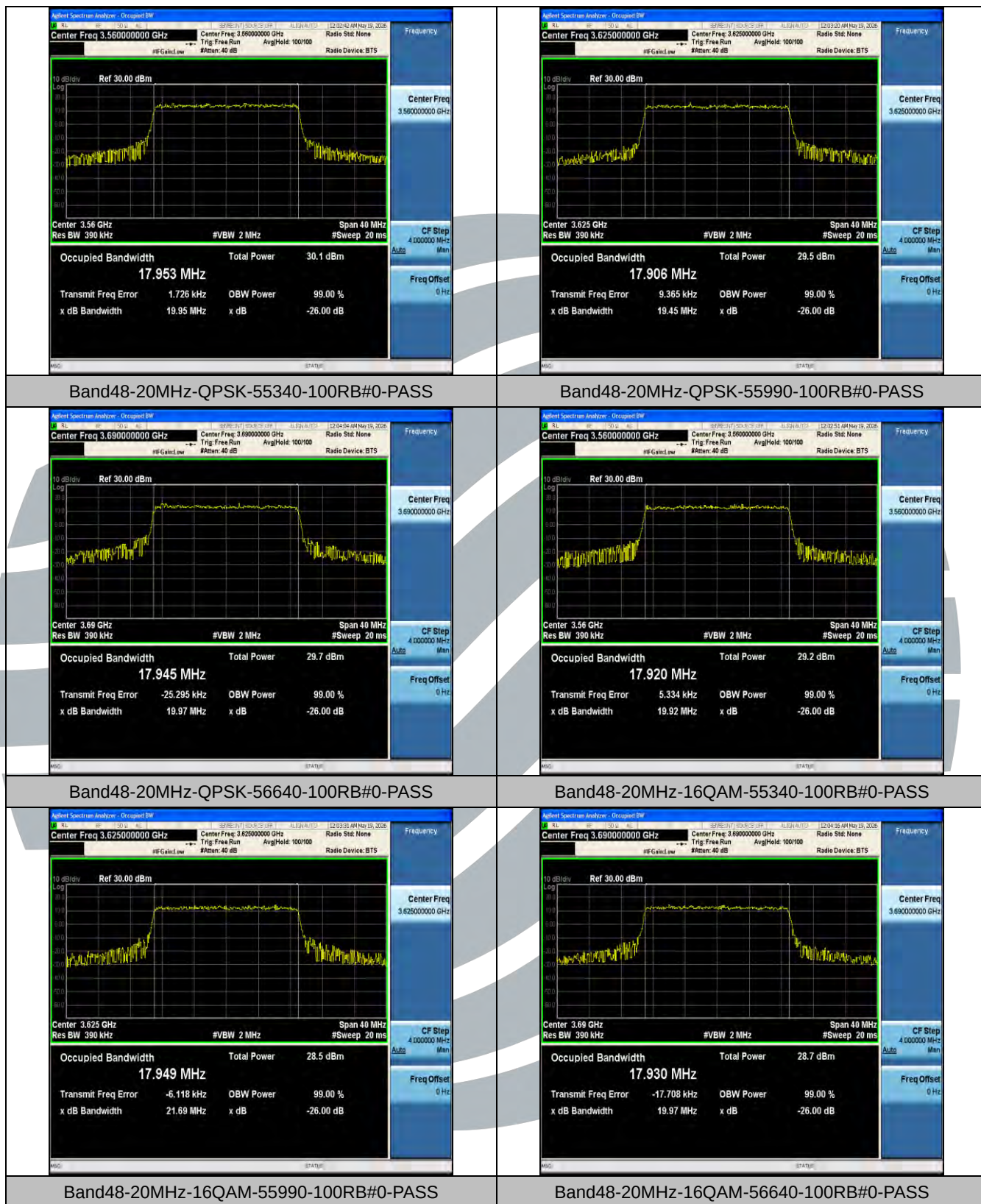
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band48	5MHz	QPSK	55265	25RB#0	4.5012	4.973	PASS
Band48	5MHz	QPSK	55990	25RB#0	4.5018	4.955	PASS
Band48	5MHz	QPSK	56715	25RB#0	4.5003	4.916	PASS
Band48	5MHz	16QAM	55265	25RB#0	4.4982	5.043	PASS
Band48	5MHz	16QAM	55990	25RB#0	4.4909	5.057	PASS
Band48	5MHz	16QAM	56715	25RB#0	4.4952	5.105	PASS
Band48	10MHz	QPSK	55290	50RB#0	8.9918	9.922	PASS
Band48	10MHz	QPSK	55990	50RB#0	8.9802	10.42	PASS
Band48	10MHz	QPSK	56690	50RB#0	8.9693	10.24	PASS
Band48	10MHz	16QAM	55290	50RB#0	8.9870	10.50	PASS
Band48	10MHz	16QAM	55990	50RB#0	8.9623	10.35	PASS
Band48	10MHz	16QAM	56690	50RB#0	8.9852	9.872	PASS
Band48	15MHz	QPSK	55315	75RB#0	13.436	15.14	PASS
Band48	15MHz	QPSK	55990	75RB#0	13.443	15.14	PASS
Band48	15MHz	QPSK	56665	75RB#0	13.450	15.02	PASS
Band48	15MHz	16QAM	55315	75RB#0	13.493	15.15	PASS
Band48	15MHz	16QAM	55990	75RB#0	13.504	15.55	PASS
Band48	15MHz	16QAM	56665	75RB#0	13.476	14.66	PASS
Band48	20MHz	QPSK	55340	100RB#0	17.953	19.95	PASS
Band48	20MHz	QPSK	55990	100RB#0	17.906	19.45	PASS
Band48	20MHz	QPSK	56640	100RB#0	17.945	19.97	PASS
Band48	20MHz	16QAM	55340	100RB#0	17.920	19.92	PASS
Band48	20MHz	16QAM	55990	100RB#0	17.949	21.69	PASS
Band48	20MHz	16QAM	56640	100RB#0	17.930	19.97	PASS

Test Graphs







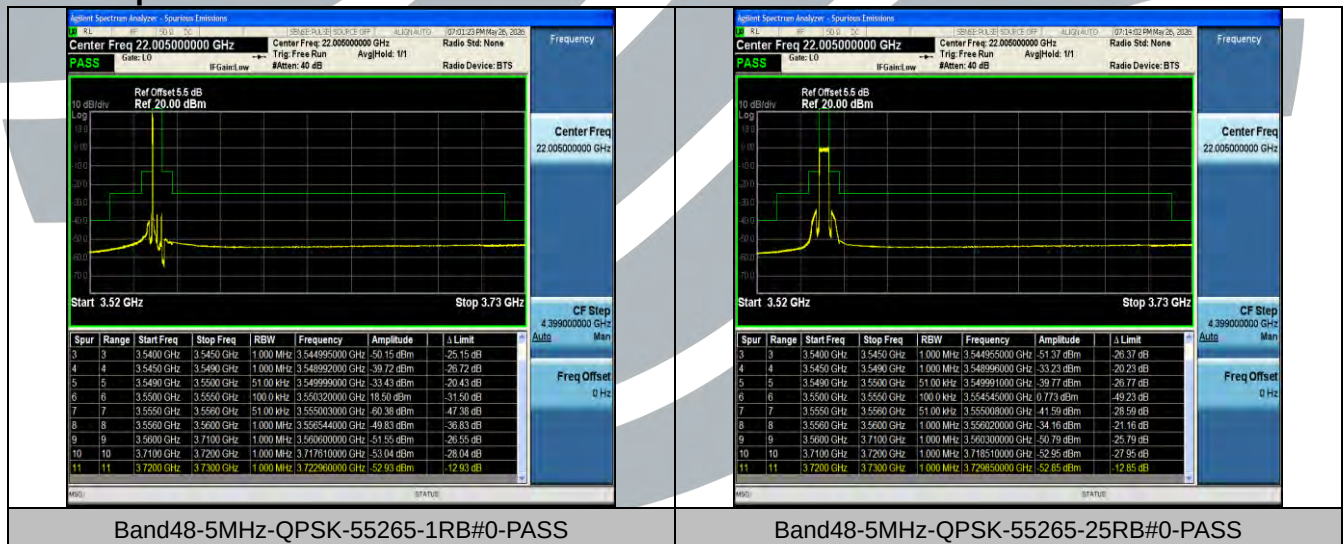


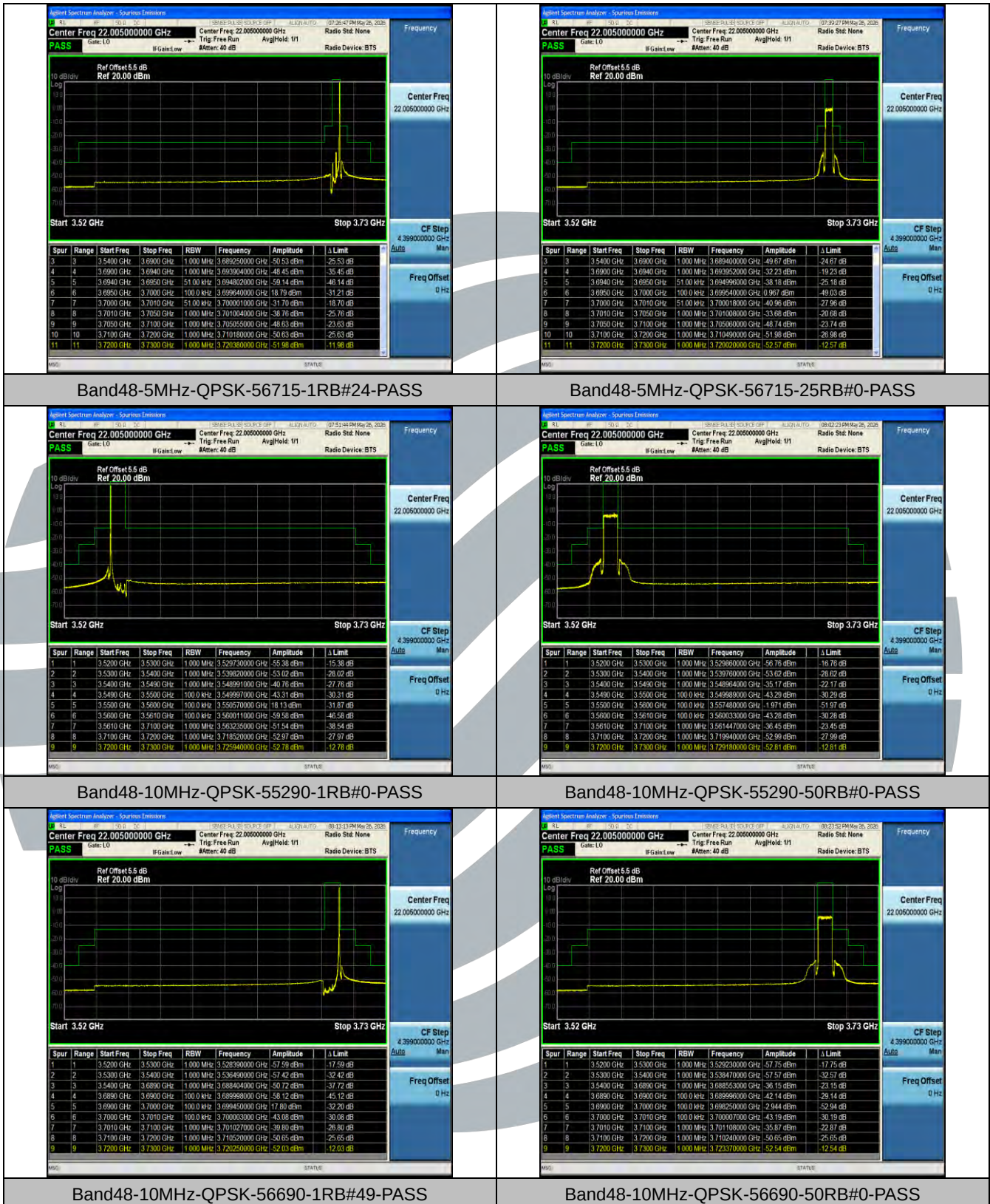
A.3 BAND EDGE

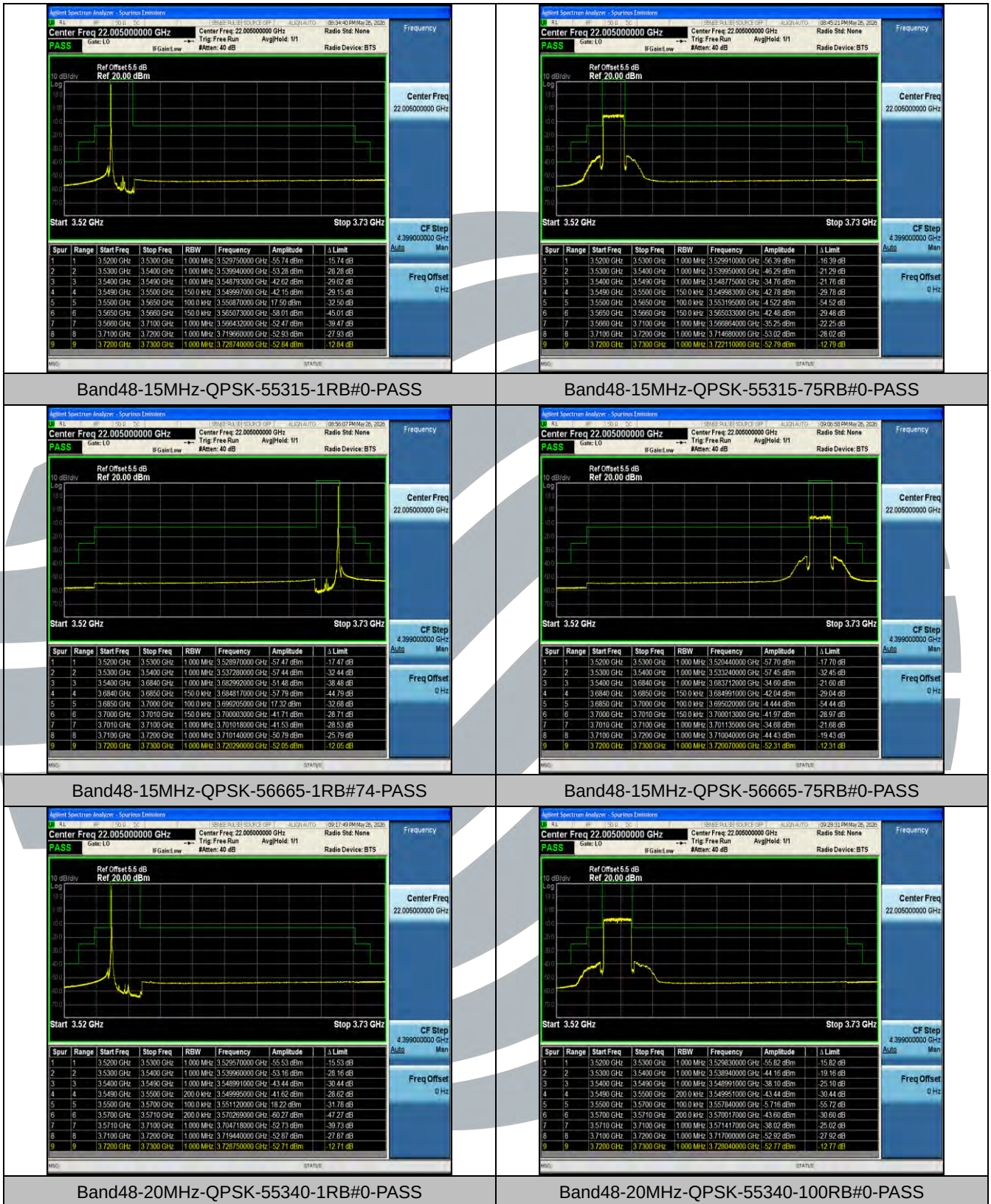
Test Result

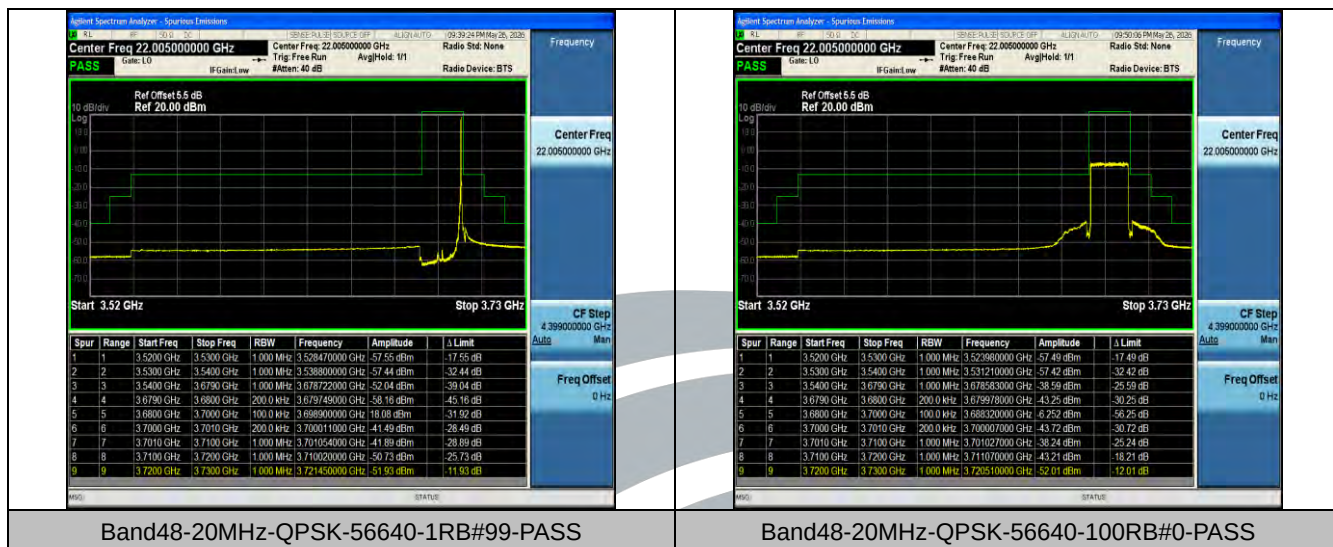
Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	Verdict
Band48	5MHz	QPSK	55265	1RB#0	-52.93	PASS
Band48	5MHz	QPSK	55265	25RB#0	-52.85	PASS
Band48	5MHz	QPSK	56715	1RB#24	-51.98	PASS
Band48	5MHz	QPSK	56715	25RB#0	-52.57	PASS
Band48	10MHz	QPSK	55290	1RB#0	-52.78	PASS
Band48	10MHz	QPSK	55290	50RB#0	-52.81	PASS
Band48	10MHz	QPSK	56690	1RB#49	-52.03	PASS
Band48	10MHz	QPSK	56690	50RB#0	-52.54	PASS
Band48	15MHz	QPSK	55315	1RB#0	-52.84	PASS
Band48	15MHz	QPSK	55315	75RB#0	-52.79	PASS
Band48	15MHz	QPSK	56665	1RB#74	-52.05	PASS
Band48	15MHz	QPSK	56665	75RB#0	-52.31	PASS
Band48	20MHz	QPSK	55340	1RB#0	-52.71	PASS
Band48	20MHz	QPSK	55340	100RB#0	-52.77	PASS
Band48	20MHz	QPSK	56640	1RB#99	-51.93	PASS
Band48	20MHz	QPSK	56640	100RB#0	-52.01	PASS

Test Graphs







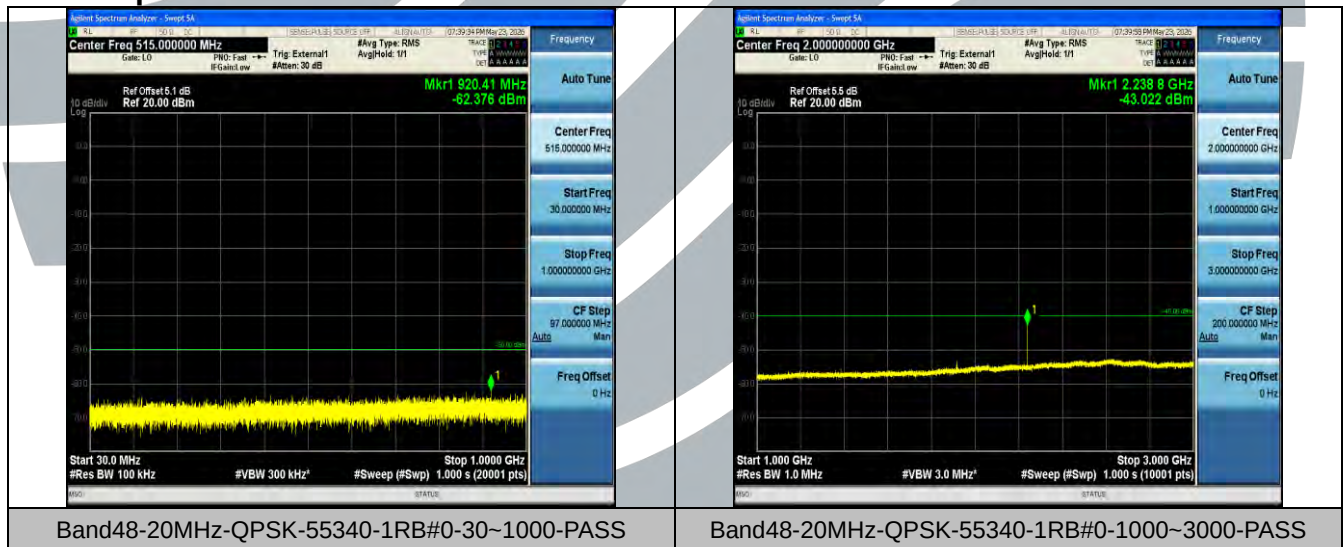


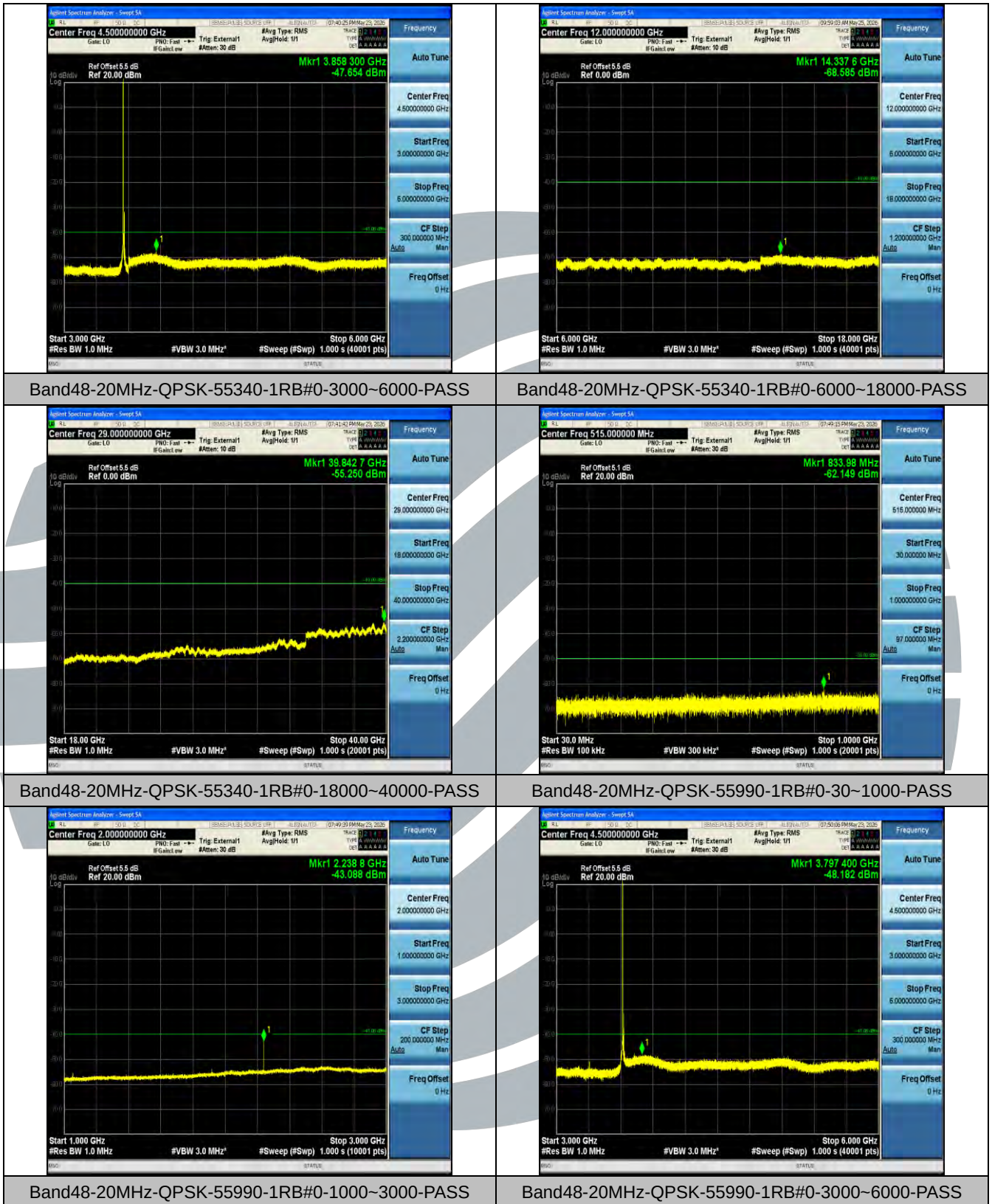
A.4 CONDUCTED SPURIOUS EMISSION

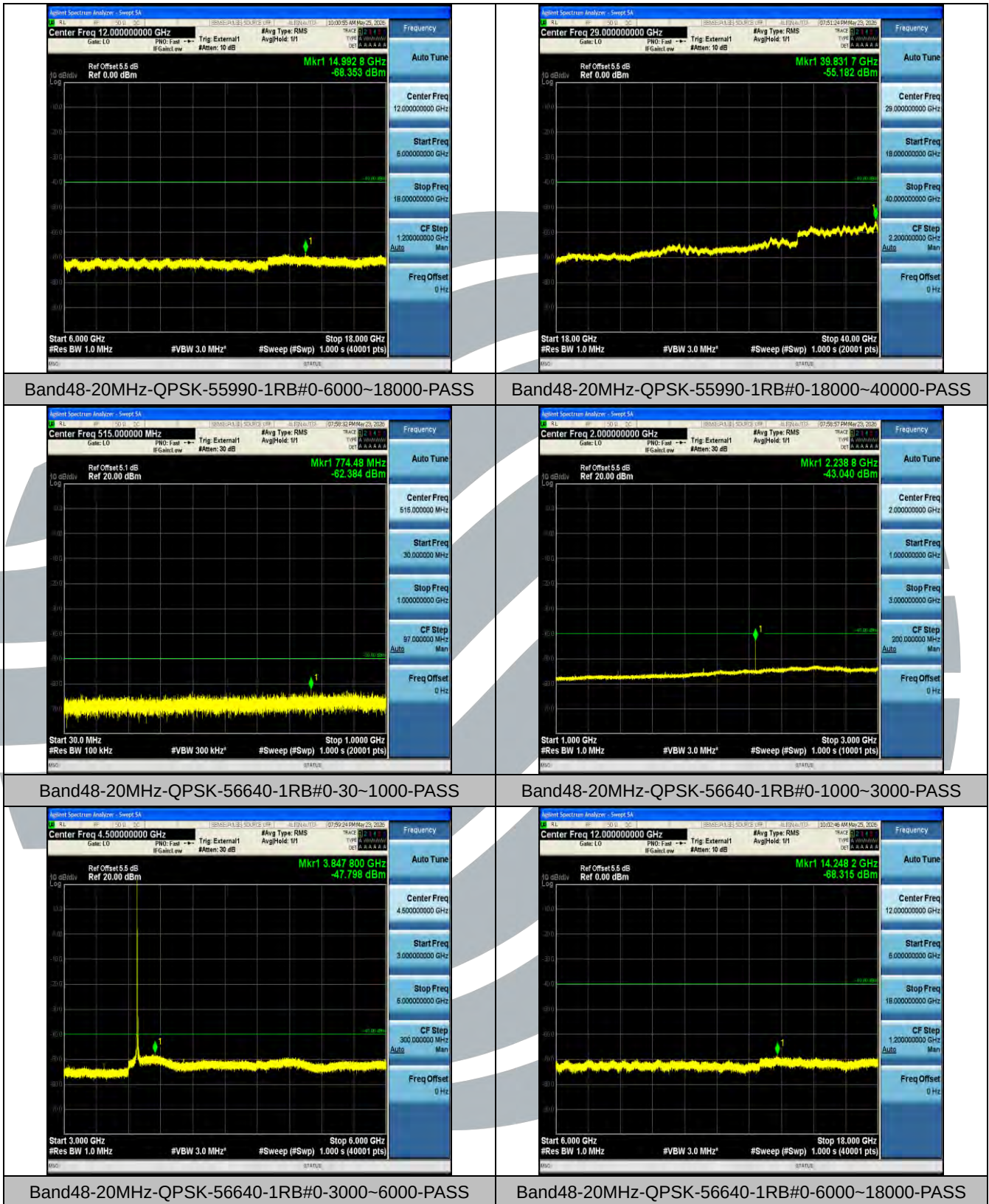
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range (MHz)	Result (dBm)	Verdict
Band48	20MHz	QPSK	55340	1RB#0	30~1000	-62.38	PASS
Band48	20MHz	QPSK	55340	1RB#0	1000~3000	-43.02	PASS
Band48	20MHz	QPSK	55340	1RB#0	3000~6000	-47.65	PASS
Band48	20MHz	QPSK	55340	1RB#0	6000~18000	-68.59	PASS
Band48	20MHz	QPSK	55340	1RB#0	18000~40000	-55.25	PASS
Band48	20MHz	QPSK	55990	1RB#0	30~1000	-62.15	PASS
Band48	20MHz	QPSK	55990	1RB#0	1000~3000	-43.09	PASS
Band48	20MHz	QPSK	55990	1RB#0	3000~6000	-48.18	PASS
Band48	20MHz	QPSK	55990	1RB#0	6000~18000	-68.35	PASS
Band48	20MHz	QPSK	55990	1RB#0	18000~40000	-55.18	PASS
Band48	20MHz	QPSK	56640	1RB#0	30~1000	-62.38	PASS
Band48	20MHz	QPSK	56640	1RB#0	1000~3000	-43.04	PASS
Band48	20MHz	QPSK	56640	1RB#0	3000~6000	-47.80	PASS
Band48	20MHz	QPSK	56640	1RB#0	6000~18000	-68.32	PASS
Band48	20MHz	QPSK	56640	1RB#0	18000~40000	-55.11	PASS

Test Graphs









A.5 FREQUENCY STABILITY

Test Result

Voltage												
Band	BW (MHz)	Modulation	Ch.	RB Configure	Voltage [Vdc]	Temp. (°C)	Result (ppm)	Limit (ppm)	FL (MHz)	FH (MHz)	Limit (MHz)	Verdict
48	20	QPSK	55990	100RB#0	VN	NT	-0.002386	±2.5	---	---	---	PASS
48	20	QPSK	55990	100RB#0	VL	NT	-0.001840	±2.5	---	---	---	PASS
48	20	QPSK	55990	100RB#0	VH	NT	0.002422	±2.5	---	---	---	PASS

Temperature												
Band	BW (MHz)	Modulation	Ch.	RB Configure	Voltage [Vdc]	Temp. (°C)	Result (ppm)	Limit (ppm)	FL (MHz)	FH (MHz)	Limit (MHz)	Verdict
48	20	QPSK	55990	100RB#0	NV	-30	0.002943	±2.5	---	---	---	PASS
48	20	QPSK	55990	100RB#0	NV	-20	-0.001997	±2.5	---	---	---	PASS
48	20	QPSK	55990	100RB#0	NV	-10	-0.001459	±2.5	---	---	---	PASS
48	20	QPSK	55990	100RB#0	NV	0	0.002257	±2.5	---	---	---	PASS
48	20	QPSK	55990	100RB#0	NV	10	-0.001694	±2.5	---	---	---	PASS
48	20	QPSK	55990	100RB#0	NV	20	-0.003109	±2.5	---	---	---	PASS
48	20	QPSK	55990	100RB#0	NV	30	-0.002621	±2.5	---	---	---	PASS
48	20	QPSK	55990	100RB#0	NV	40	0.002019	±2.5	---	---	---	PASS
48	20	QPSK	55990	100RB#0	NV	50	-0.002317	±2.5	---	---	---	PASS