

Appendix-D LTE Band 48

Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	EIRP (dBm)
Band48	5MHz	QPSK	55265	1RB#0	17.13	19.12
Band48	5MHz	QPSK	55265	1RB#12	17.23	19.22
Band48	5MHz	QPSK	55265	1RB#24	17.29	19.28
Band48	5MHz	QPSK	55265	25RB#0	16.08	18.07
Band48	5MHz	16QAM	55265	1RB#0	16.38	18.37
Band48	5MHz	16QAM	55265	1RB#12	16.48	18.47
Band48	5MHz	16QAM	55265	1RB#24	16.55	18.54
Band48	5MHz	16QAM	55265	25RB#0	15.02	17.01
Band48	5MHz	64QAM	55265	1RB#0	15.05	17.04
Band48	5MHz	64QAM	55265	1RB#12	15.14	17.13
Band48	5MHz	64QAM	55265	1RB#24	15.22	17.21
Band48	5MHz	64QAM	55265	25RB#0	13.96	15.95
Band48	5MHz	256QAM	55265	1RB#0	12.15	14.14
Band48	5MHz	256QAM	55265	1RB#12	12.28	14.27
Band48	5MHz	256QAM	55265	1RB#24	12.3	14.29
Band48	5MHz	256QAM	55265	25RB#0	12.26	14.25
Band48	5MHz	QPSK	55990	1RB#0	17.27	19.26
Band48	5MHz	QPSK	55990	1RB#12	17.27	19.26
Band48	5MHz	QPSK	55990	1RB#24	17.25	19.24
Band48	5MHz	QPSK	55990	25RB#0	15.83	17.82
Band48	5MHz	16QAM	55990	1RB#0	16.1	18.09
Band48	5MHz	16QAM	55990	1RB#12	16.14	18.13
Band48	5MHz	16QAM	55990	1RB#24	16.07	18.06
Band48	5MHz	16QAM	55990	25RB#0	14.83	16.82
Band48	5MHz	64QAM	55990	1RB#0	14.75	16.74
Band48	5MHz	64QAM	55990	1RB#12	14.78	16.77
Band48	5MHz	64QAM	55990	1RB#24	14.73	16.72
Band48	5MHz	64QAM	55990	25RB#0	13.8	15.79
Band48	5MHz	256QAM	55990	1RB#0	11.91	13.9
Band48	5MHz	256QAM	55990	1RB#12	11.86	13.85
Band48	5MHz	256QAM	55990	1RB#24	11.84	13.83
Band48	5MHz	256QAM	55990	25RB#0	11.9	13.89
Band48	5MHz	QPSK	56715	1RB#0	17.81	19.8
Band48	5MHz	QPSK	56715	1RB#12	17.82	19.81
Band48	5MHz	QPSK	56715	1RB#24	17.77	19.76
Band48	5MHz	QPSK	56715	25RB#0	16.81	18.8

Band48	5MHz	16QAM	56715	1RB#0	16.97	18.96
Band48	5MHz	16QAM	56715	1RB#12	17.04	19.03
Band48	5MHz	16QAM	56715	1RB#24	17.05	19.04
Band48	5MHz	16QAM	56715	25RB#0	15.84	17.83
Band48	5MHz	64QAM	56715	1RB#0	15.72	17.71
Band48	5MHz	64QAM	56715	1RB#12	15.79	17.78
Band48	5MHz	64QAM	56715	1RB#24	15.75	17.74
Band48	5MHz	64QAM	56715	25RB#0	14.8	16.79
Band48	5MHz	256QAM	56715	1RB#0	12.51	14.5
Band48	5MHz	256QAM	56715	1RB#12	12.79	14.78
Band48	5MHz	256QAM	56715	1RB#24	12.82	14.81
Band48	5MHz	256QAM	56715	25RB#0	12.88	14.87
Band48	10MHz	QPSK	55290	1RB#0	17.13	19.12
Band48	10MHz	QPSK	55290	1RB#24	17.33	19.32
Band48	10MHz	QPSK	55290	1RB#49	17.35	19.34
Band48	10MHz	QPSK	55290	50RB#0	15.95	17.94
Band48	10MHz	16QAM	55290	1RB#0	16.37	18.36
Band48	10MHz	16QAM	55290	1RB#24	16.66	18.65
Band48	10MHz	16QAM	55290	1RB#49	16.65	18.64
Band48	10MHz	16QAM	55290	50RB#0	15.13	17.12
Band48	10MHz	64QAM	55290	1RB#0	15.01	17
Band48	10MHz	64QAM	55290	1RB#24	15.02	17.01
Band48	10MHz	64QAM	55290	1RB#49	14.92	16.91
Band48	10MHz	64QAM	55290	50RB#0	13.94	15.93
Band48	10MHz	256QAM	55290	1RB#0	12.13	14.12
Band48	10MHz	256QAM	55290	1RB#24	12.32	14.31
Band48	10MHz	256QAM	55290	1RB#49	12.36	14.35
Band48	10MHz	256QAM	55290	50RB#0	12.35	14.34
Band48	10MHz	QPSK	55990	1RB#0	17.17	19.16
Band48	10MHz	QPSK	55990	1RB#24	17.24	19.23
Band48	10MHz	QPSK	55990	1RB#49	17.23	19.22
Band48	10MHz	QPSK	55990	50RB#0	15.85	17.84
Band48	10MHz	16QAM	55990	1RB#0	16.02	18.01
Band48	10MHz	16QAM	55990	1RB#24	16.12	18.11
Band48	10MHz	16QAM	55990	1RB#49	16.09	18.08
Band48	10MHz	16QAM	55990	50RB#0	14.87	16.86
Band48	10MHz	64QAM	55990	1RB#0	14.74	16.73
Band48	10MHz	64QAM	55990	1RB#24	14.8	16.79
Band48	10MHz	64QAM	55990	1RB#49	14.76	16.75
Band48	10MHz	64QAM	55990	50RB#0	13.77	15.76
Band48	10MHz	256QAM	55990	1RB#0	11.87	13.86
Band48	10MHz	256QAM	55990	1RB#24	11.81	13.8
Band48	10MHz	256QAM	55990	1RB#49	11.83	13.82
Band48	10MHz	256QAM	55990	50RB#0	11.92	13.91

Band48	10MHz	QPSK	56690	1RB#0	17.57	19.56
Band48	10MHz	QPSK	56690	1RB#24	17.84	19.83
Band48	10MHz	QPSK	56690	1RB#49	17.82	19.81
Band48	10MHz	QPSK	56690	50RB#0	16.74	18.73
Band48	10MHz	16QAM	56690	1RB#0	16.82	18.81
Band48	10MHz	16QAM	56690	1RB#24	17.06	19.05
Band48	10MHz	16QAM	56690	1RB#49	17.08	19.07
Band48	10MHz	16QAM	56690	50RB#0	15.81	17.8
Band48	10MHz	64QAM	56690	1RB#0	15.53	17.52
Band48	10MHz	64QAM	56690	1RB#24	15.7	17.69
Band48	10MHz	64QAM	56690	1RB#49	15.75	17.74
Band48	10MHz	64QAM	56690	50RB#0	14.66	16.65
Band48	10MHz	256QAM	56690	1RB#0	12.87	14.86
Band48	10MHz	256QAM	56690	1RB#24	12.79	14.78
Band48	10MHz	256QAM	56690	1RB#49	12.81	14.8
Band48	10MHz	256QAM	56690	50RB#0	12.81	14.8
Band48	15MHz	QPSK	55315	1RB#0	17.42	19.41
Band48	15MHz	QPSK	55315	1RB#38	17.31	19.3
Band48	15MHz	QPSK	55315	1RB#74	17.22	19.21
Band48	15MHz	QPSK	55315	75RB#0	16.34	18.33
Band48	15MHz	16QAM	55315	1RB#0	16.27	18.26
Band48	15MHz	16QAM	55315	1RB#38	16.63	18.62
Band48	15MHz	16QAM	55315	1RB#74	16.47	18.46
Band48	15MHz	16QAM	55315	75RB#0	15.32	17.31
Band48	15MHz	256QAM	55315	1RB#0	12.04	14.03
Band48	15MHz	256QAM	55315	1RB#38	12.31	14.3
Band48	15MHz	256QAM	55315	1RB#74	12.34	14.33
Band48	15MHz	256QAM	55315	75RB#0	12.38	14.37
Band48	15MHz	QPSK	55990	1RB#0	17.27	19.26
Band48	15MHz	QPSK	55990	1RB#38	17.11	19.1
Band48	15MHz	QPSK	55990	1RB#74	17.22	19.21
Band48	15MHz	QPSK	55990	75RB#0	14.2	16.19
Band48	15MHz	16QAM	55990	1RB#0	16.35	18.34
Band48	15MHz	16QAM	55990	1RB#38	16.41	18.4
Band48	15MHz	16QAM	55990	1RB#74	16.38	18.37
Band48	15MHz	16QAM	55990	75RB#0	15.85	17.84
Band48	15MHz	256QAM	55990	1RB#0	11.91	13.9
Band48	15MHz	256QAM	55990	1RB#38	11.83	13.82
Band48	15MHz	256QAM	55990	1RB#74	11.85	13.84
Band48	15MHz	256QAM	55990	75RB#0	11.88	13.87
Band48	15MHz	QPSK	56665	1RB#0	17.32	19.31
Band48	15MHz	QPSK	56665	1RB#38	17.15	19.14
Band48	15MHz	QPSK	56665	1RB#74	17.23	19.22
Band48	15MHz	QPSK	56665	75RB#0	14.82	16.81

Band48	15MHz	16QAM	56665	1RB#0	16.67	18.66
Band48	15MHz	16QAM	56665	1RB#38	16.72	18.71
Band48	15MHz	16QAM	56665	1RB#74	16.67	18.66
Band48	15MHz	16QAM	56665	75RB#0	13.7	15.69
Band48	15MHz	256QAM	56665	1RB#0	12.46	14.45
Band48	15MHz	256QAM	56665	1RB#38	12.69	14.68
Band48	15MHz	256QAM	56665	1RB#74	12.77	14.76
Band48	15MHz	256QAM	56665	75RB#0	12.71	14.7
Band48	20MHz	QPSK	55340	1RB#0	17.26	19.25
Band48	20MHz	QPSK	55340	1RB#49	17.33	19.32
Band48	20MHz	QPSK	55340	1RB#99	17.28	19.27
Band48	20MHz	QPSK	55340	100RB#0	16.01	18
Band48	20MHz	16QAM	55340	1RB#0	16.5	18.49
Band48	20MHz	16QAM	55340	1RB#49	16.46	18.45
Band48	20MHz	16QAM	55340	1RB#99	16.36	18.35
Band48	20MHz	16QAM	55340	100RB#0	14.98	16.97
Band48	20MHz	64QAM	55340	1RB#0	14.87	16.86
Band48	20MHz	64QAM	55340	1RB#49	14.84	16.83
Band48	20MHz	64QAM	55340	1RB#99	14.83	16.82
Band48	20MHz	64QAM	55340	100RB#0	13.85	15.84
Band48	20MHz	256QAM	55340	1RB#0	12.07	14.06
Band48	20MHz	256QAM	55340	1RB#49	12.37	14.36
Band48	20MHz	256QAM	55340	1RB#99	12.05	14.04
Band48	20MHz	256QAM	55340	100RB#0	12.13	14.12
Band48	20MHz	QPSK	55990	1RB#0	17.11	19.1
Band48	20MHz	QPSK	55990	1RB#49	17.23	19.22
Band48	20MHz	QPSK	55990	1RB#99	17.16	19.15
Band48	20MHz	QPSK	55990	100RB#0	16.12	18.11
Band48	20MHz	16QAM	55990	1RB#0	16.21	18.2
Band48	20MHz	16QAM	55990	1RB#49	16.66	18.65
Band48	20MHz	16QAM	55990	1RB#99	16.26	18.25
Band48	20MHz	16QAM	55990	100RB#0	15.01	17
Band48	20MHz	64QAM	55990	1RB#0	14.91	16.9
Band48	20MHz	64QAM	55990	1RB#49	14.81	16.8
Band48	20MHz	64QAM	55990	1RB#99	14.94	16.93
Band48	20MHz	64QAM	55990	100RB#0	13.91	15.9
Band48	20MHz	256QAM	55990	1RB#0	11.94	13.93
Band48	20MHz	256QAM	55990	1RB#49	11.81	13.8
Band48	20MHz	256QAM	55990	1RB#99	11.78	13.77
Band48	20MHz	256QAM	55990	100RB#0	11.86	13.85
Band48	20MHz	QPSK	56640	1RB#0	17.65	19.64
Band48	20MHz	QPSK	56640	1RB#49	17.73	19.72
Band48	20MHz	QPSK	56640	1RB#99	17.68	19.67
Band48	20MHz	QPSK	56640	100RB#0	16.81	18.8

Band48	20MHz	16QAM	56640	1RB#0	16.89	18.88
Band48	20MHz	16QAM	56640	1RB#49	17.09	19.08
Band48	20MHz	16QAM	56640	1RB#99	16.94	18.93
Band48	20MHz	16QAM	56640	100RB#0	15.73	17.72
Band48	20MHz	64QAM	56640	1RB#0	15.32	17.31
Band48	20MHz	64QAM	56640	1RB#49	15.28	17.27
Band48	20MHz	64QAM	56640	1RB#99	15.36	17.35
Band48	20MHz	64QAM	56640	100RB#0	14.74	16.73
Band48	20MHz	256QAM	56640	1RB#0	12.86	14.85
Band48	20MHz	256QAM	56640	1RB#49	12.61	14.6
Band48	20MHz	256QAM	56640	1RB#99	12.76	14.75
Band48	20MHz	256QAM	56640	100RB#0	12.55	14.54

Maximum_power_spectral_density

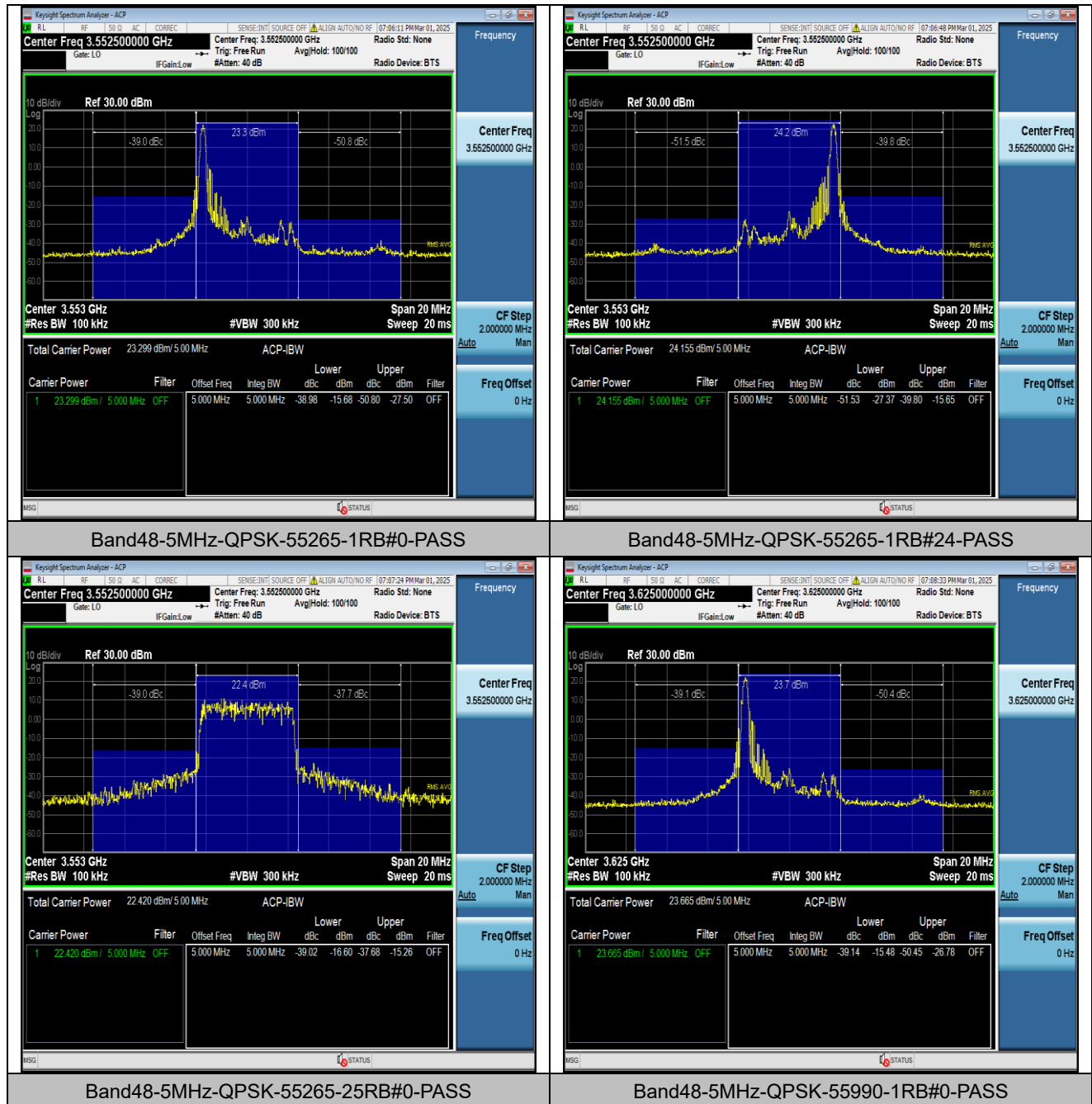
Test Result

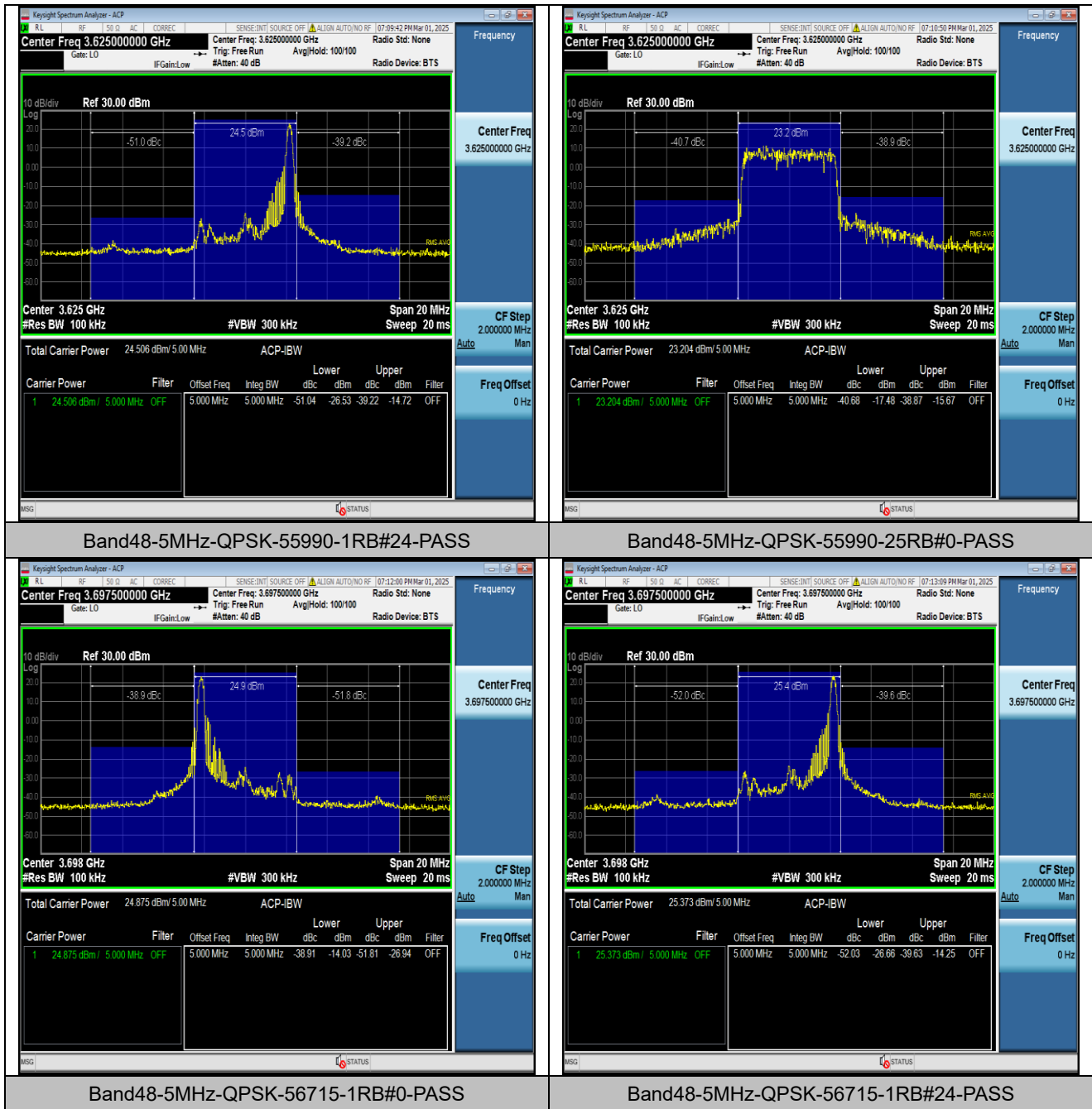
Band	Bandwidth	Modulation	Channel	RB Configuration	Result (10MHz/dBm)	EIRP (10MHz/dBm)	Limit (10MHz/dBm)	Verdict
Band48	5MHz	QPSK	55265	1RB#0	18.5	20.49	23	PASS
Band48	5MHz	QPSK	55265	1RB#12	18.68	20.67	23	PASS
Band48	5MHz	QPSK	55265	1RB#24	18.71	20.7	23	PASS
Band48	5MHz	QPSK	55265	25RB#0	17.27	19.26	23	PASS
Band48	5MHz	QPSK	55990	1RB#0	18.77	20.76	23	PASS
Band48	5MHz	QPSK	55990	1RB#12	18.84	20.83	23	PASS
Band48	5MHz	QPSK	55990	1RB#24	18.88	20.87	23	PASS
Band48	5MHz	QPSK	55990	25RB#0	17.46	19.45	23	PASS
Band48	5MHz	QPSK	56715	1RB#0	19.52	21.51	23	PASS
Band48	5MHz	QPSK	56715	1RB#12	19.67	21.66	23	PASS
Band48	5MHz	QPSK	56715	1RB#24	19.67	21.66	23	PASS
Band48	5MHz	QPSK	56715	25RB#0	18.35	20.34	23	PASS
Band48	10MHz	QPSK	55290	1RB#0	18.51	20.5	23	PASS
Band48	10MHz	QPSK	55290	1RB#24	18.8	20.79	23	PASS
Band48	10MHz	QPSK	55290	1RB#49	18.82	20.81	23	PASS
Band48	10MHz	QPSK	55290	50RB#0	16.47	18.46	23	PASS
Band48	10MHz	QPSK	55990	1RB#0	18.78	20.77	23	PASS
Band48	10MHz	QPSK	55990	1RB#24	18.92	20.91	23	PASS
Band48	10MHz	QPSK	55990	1RB#49	19.09	21.08	23	PASS
Band48	10MHz	QPSK	55990	50RB#0	16.69	18.68	23	PASS
Band48	10MHz	QPSK	56690	1RB#0	19.48	21.47	23	PASS
Band48	10MHz	QPSK	56690	1RB#24	19.66	21.65	23	PASS
Band48	10MHz	QPSK	56690	1RB#49	19.72	21.71	23	PASS
Band48	10MHz	QPSK	56690	50RB#0	17.46	19.45	23	PASS
Band48	15MHz	QPSK	55315	1RB#0	18.51	20.5	23	PASS
Band48	15MHz	QPSK	55315	1RB#38	18.83	20.82	23	PASS
Band48	15MHz	QPSK	55315	1RB#74	18.8	20.79	23	PASS
Band48	15MHz	QPSK	55315	75RB#0	14.93	16.92	23	PASS
Band48	15MHz	QPSK	55990	1RB#0	18.79	20.78	23	PASS
Band48	15MHz	QPSK	55990	1RB#38	18.85	20.84	23	PASS
Band48	15MHz	QPSK	55990	1RB#74	19.13	21.12	23	PASS
Band48	15MHz	QPSK	55990	75RB#0	15.1	17.09	23	PASS
Band48	15MHz	QPSK	56665	1RB#0	19.2	21.19	23	PASS
Band48	15MHz	QPSK	56665	1RB#38	19.55	21.54	23	PASS
Band48	15MHz	QPSK	56665	1RB#74	19.67	21.66	23	PASS
Band48	15MHz	QPSK	56665	75RB#0	15.75	17.74	23	PASS
Band48	20MHz	QPSK	55340	1RB#0	18.42	20.41	23	PASS

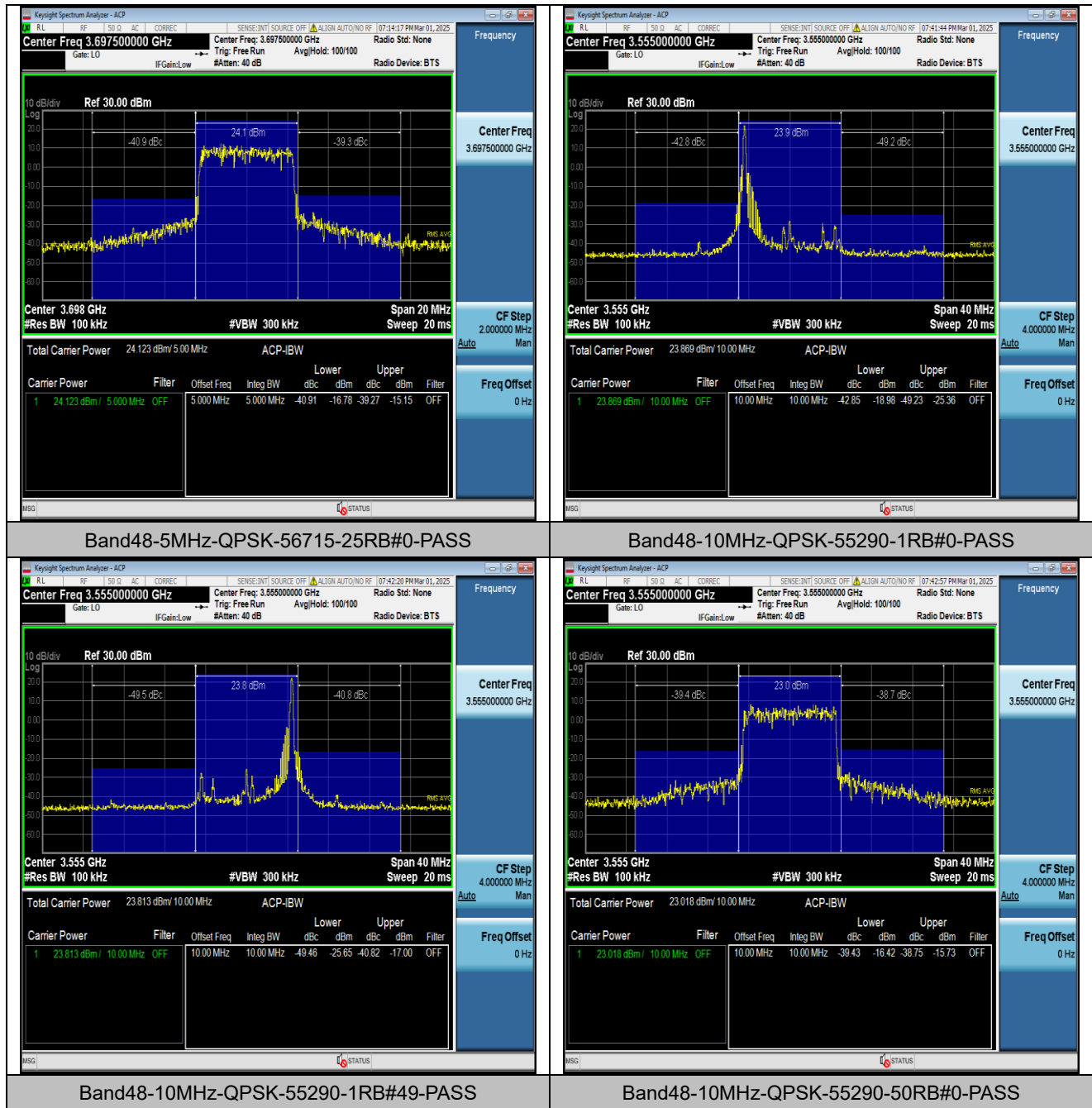
Band48	20MHz	QPSK	55340	1RB#49	18.83	20.82	23	PASS
Band48	20MHz	QPSK	55340	1RB#99	18.81	20.8	23	PASS
Band48	20MHz	QPSK	55340	100RB#0	13.7	15.69	23	PASS
Band48	20MHz	QPSK	55990	1RB#0	18.69	20.68	23	PASS
Band48	20MHz	QPSK	55990	1RB#49	18.85	20.84	23	PASS
Band48	20MHz	QPSK	55990	1RB#99	19.05	21.04	23	PASS
Band48	20MHz	QPSK	55990	100RB#0	13.86	15.85	23	PASS
Band48	20MHz	QPSK	56640	1RB#0	19.01	21	23	PASS
Band48	20MHz	QPSK	56640	1RB#49	19.46	21.45	23	PASS
Band48	20MHz	QPSK	56640	1RB#99	19.6	21.59	23	PASS
Band48	20MHz	QPSK	56640	100RB#0	14.43	16.42	23	PASS

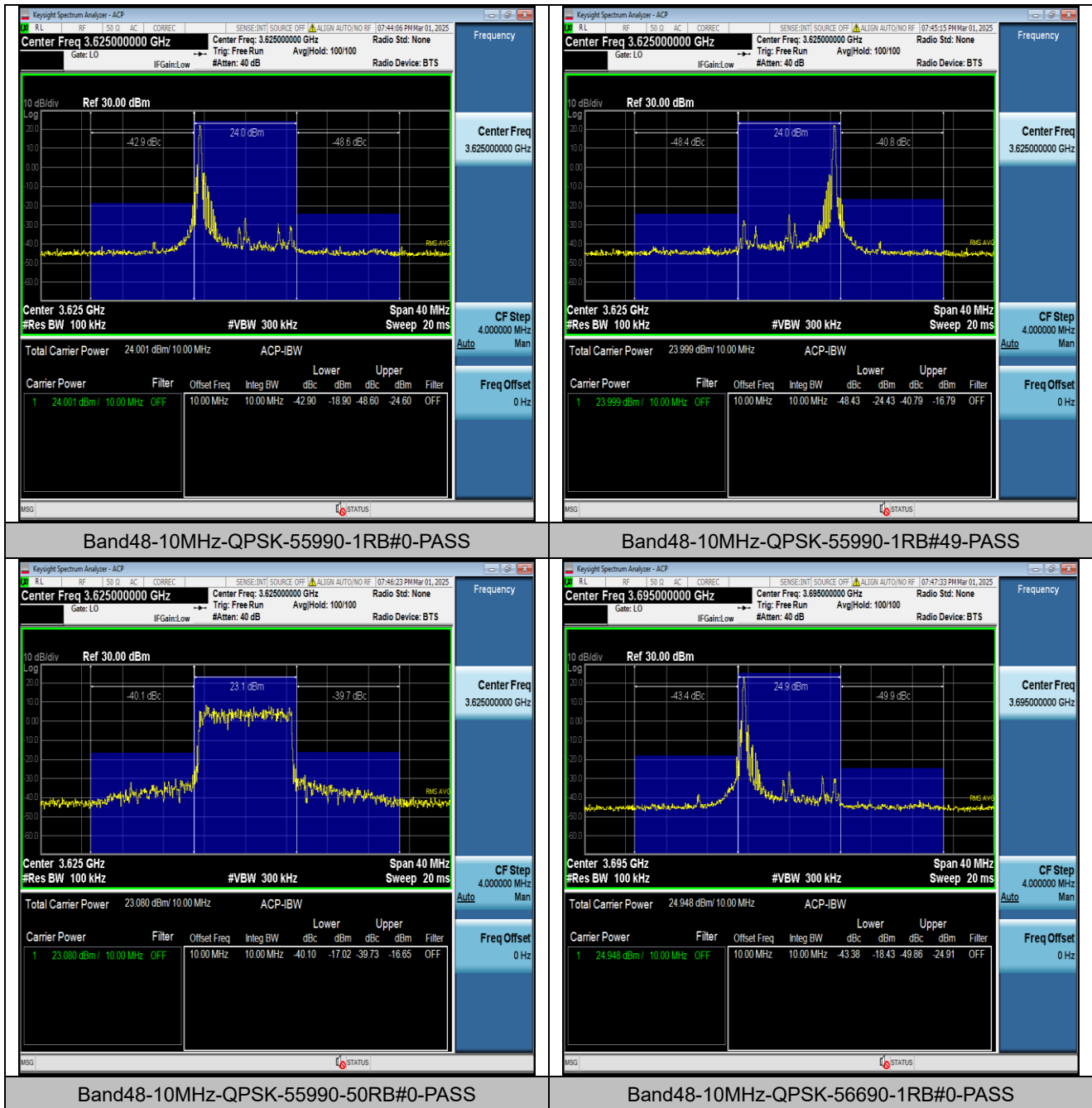
Adjacent Channel Leakage Ratio

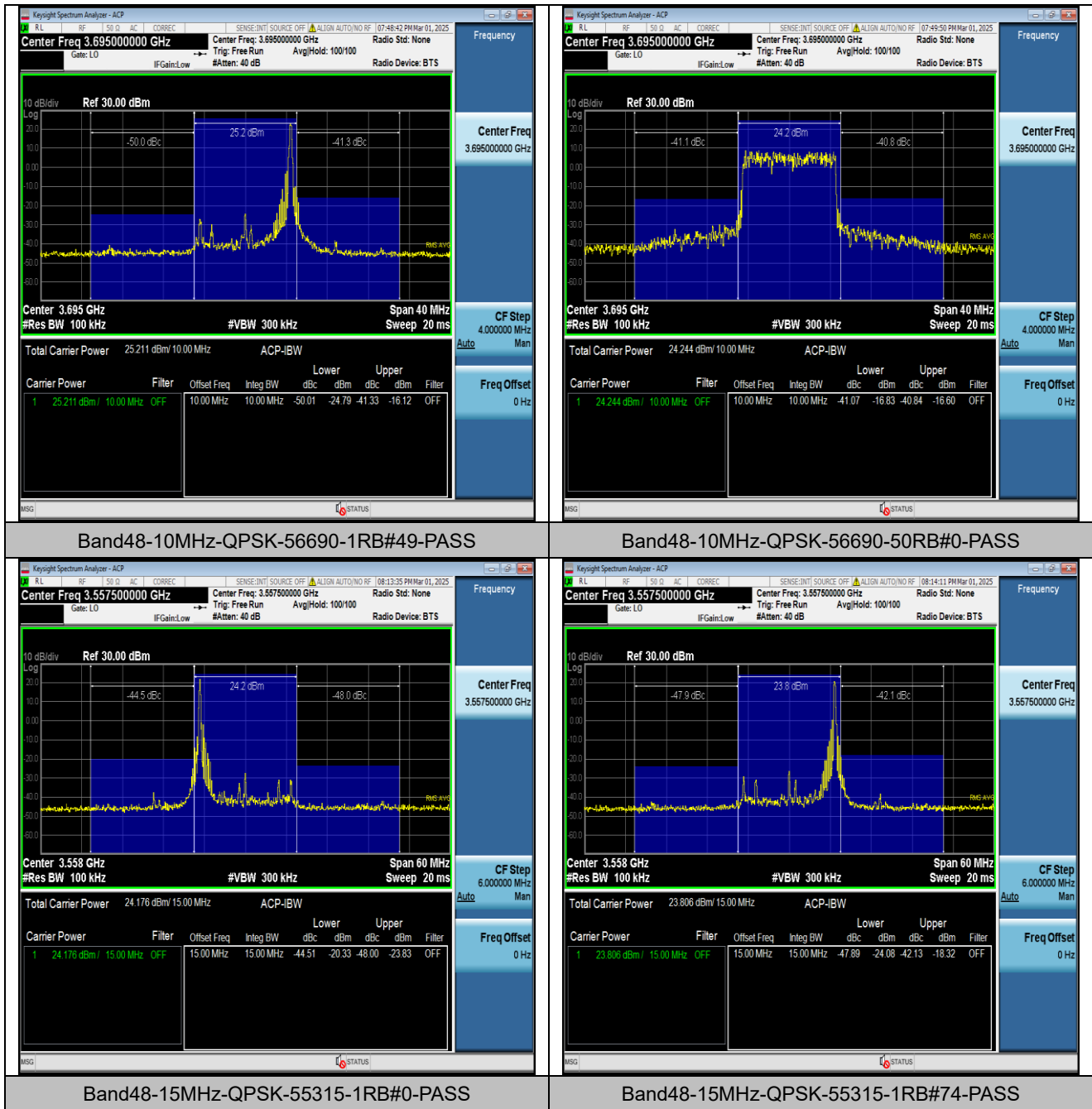
Test Graphs

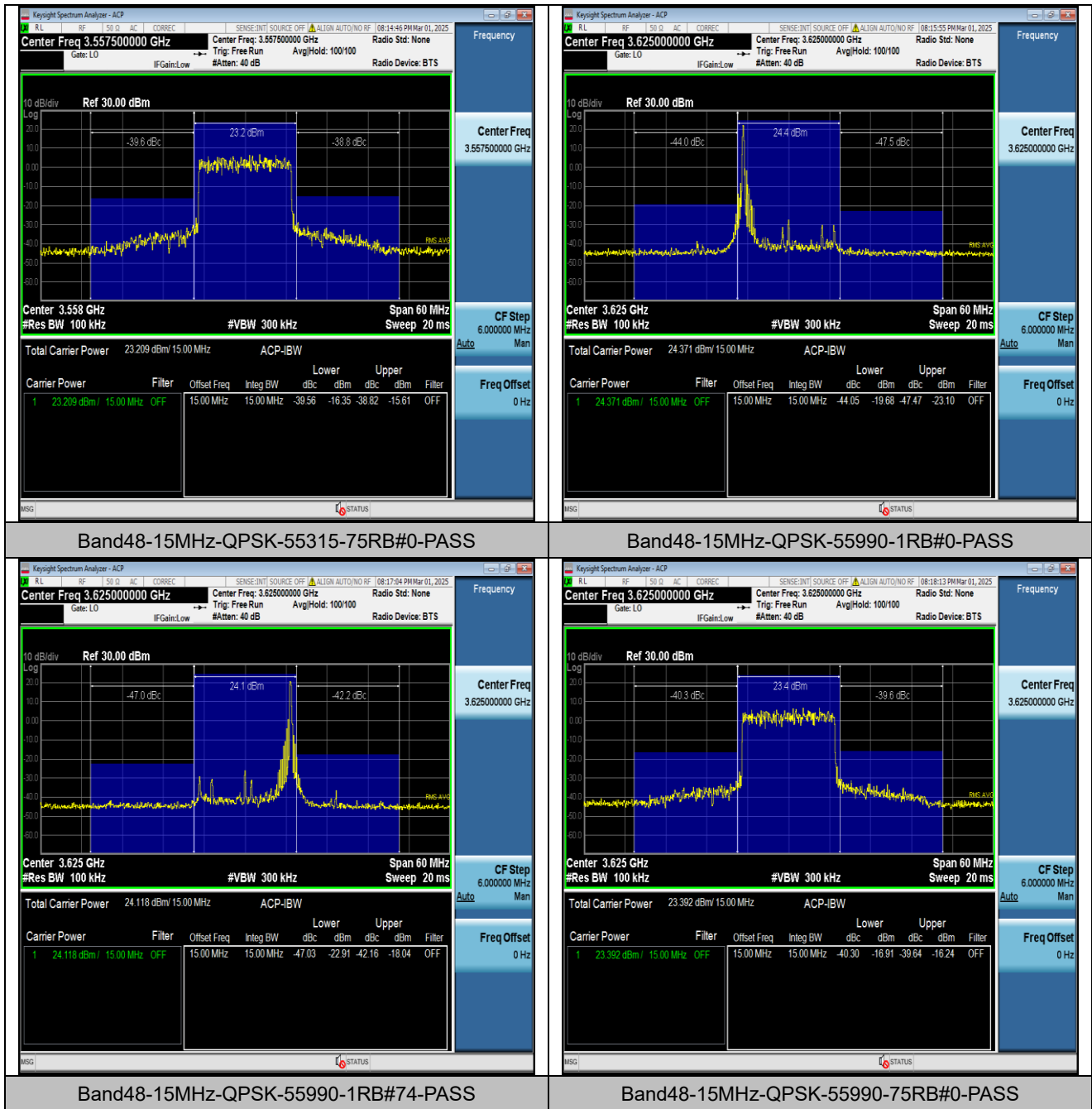


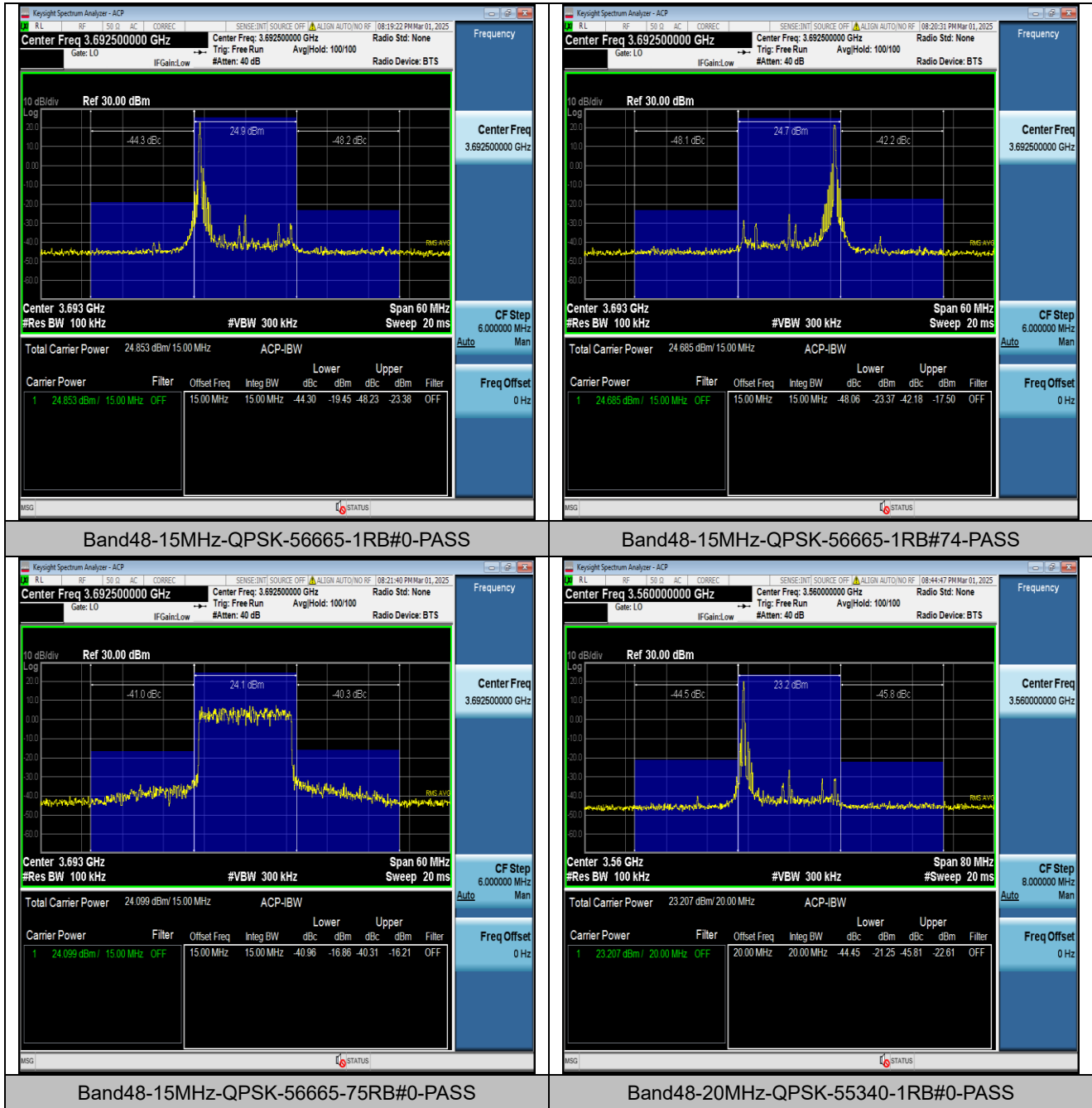


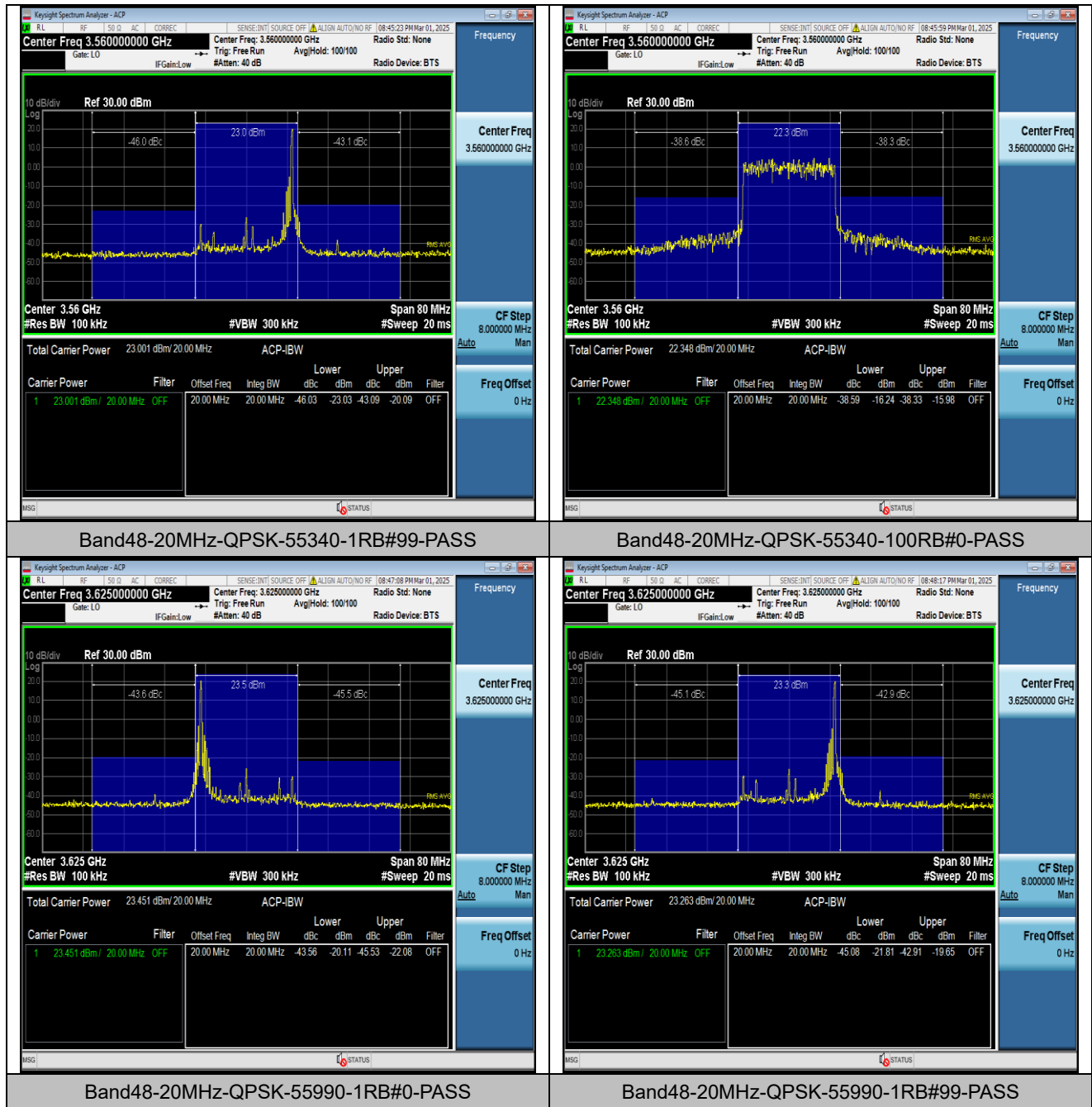


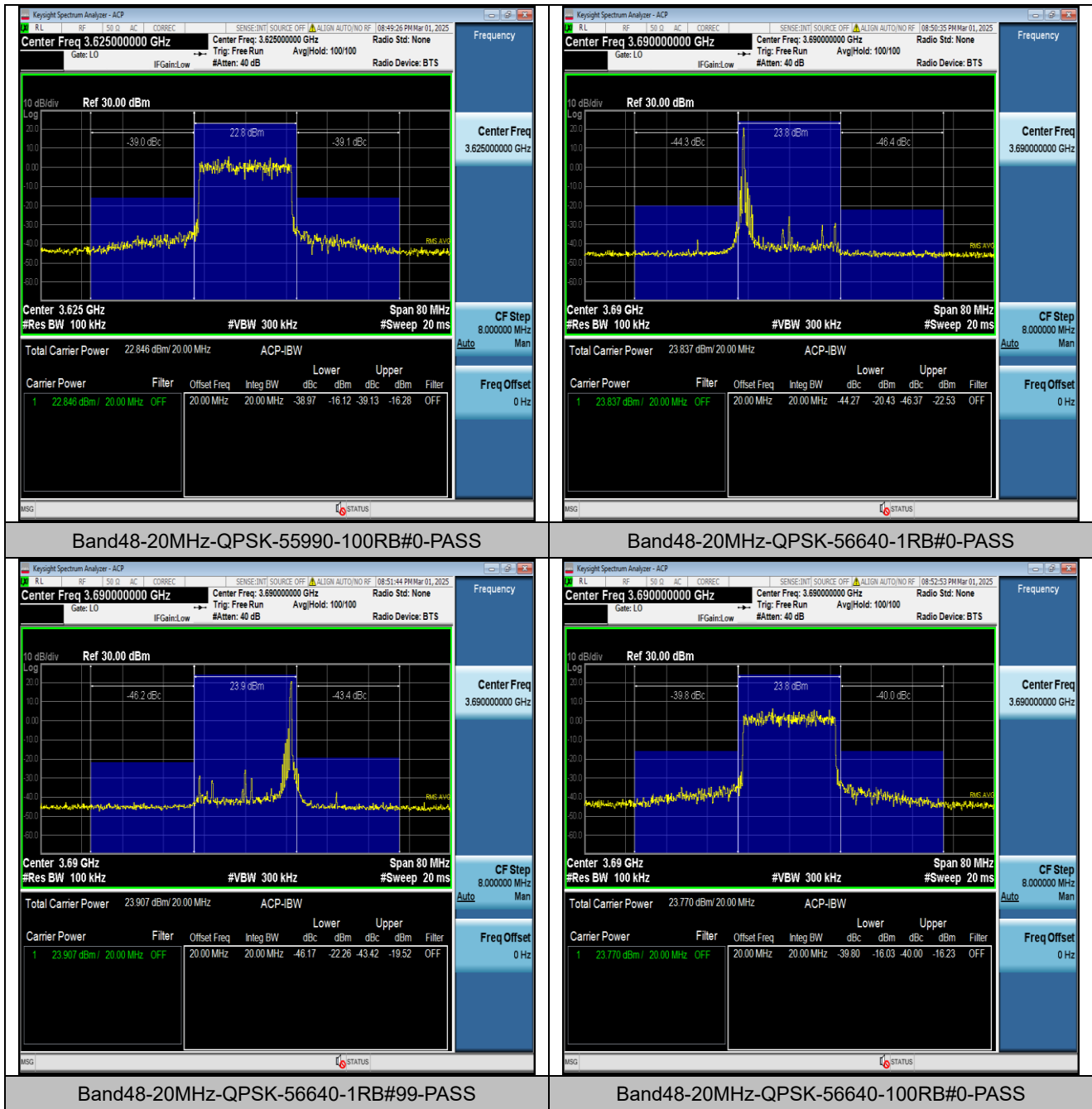










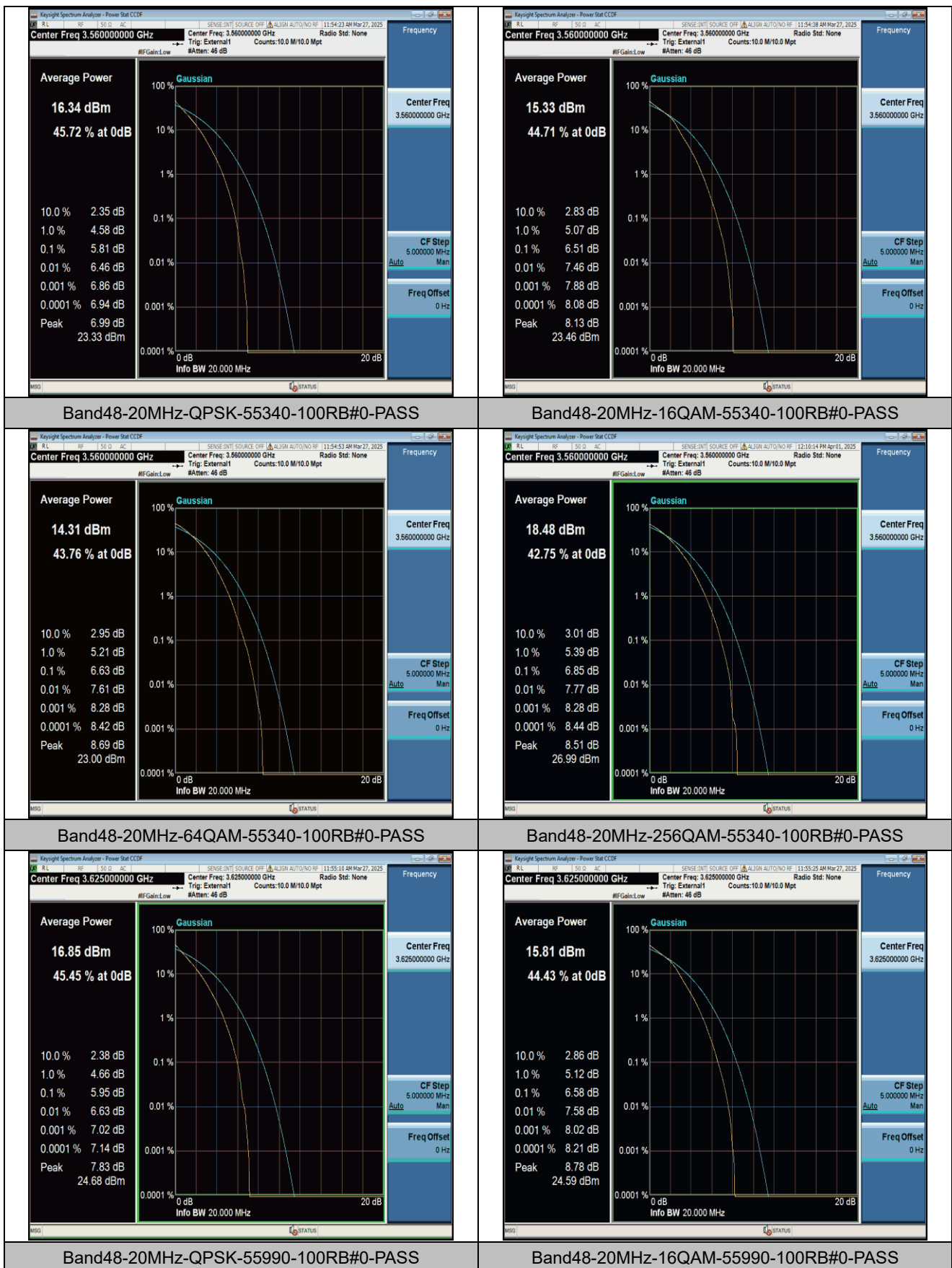


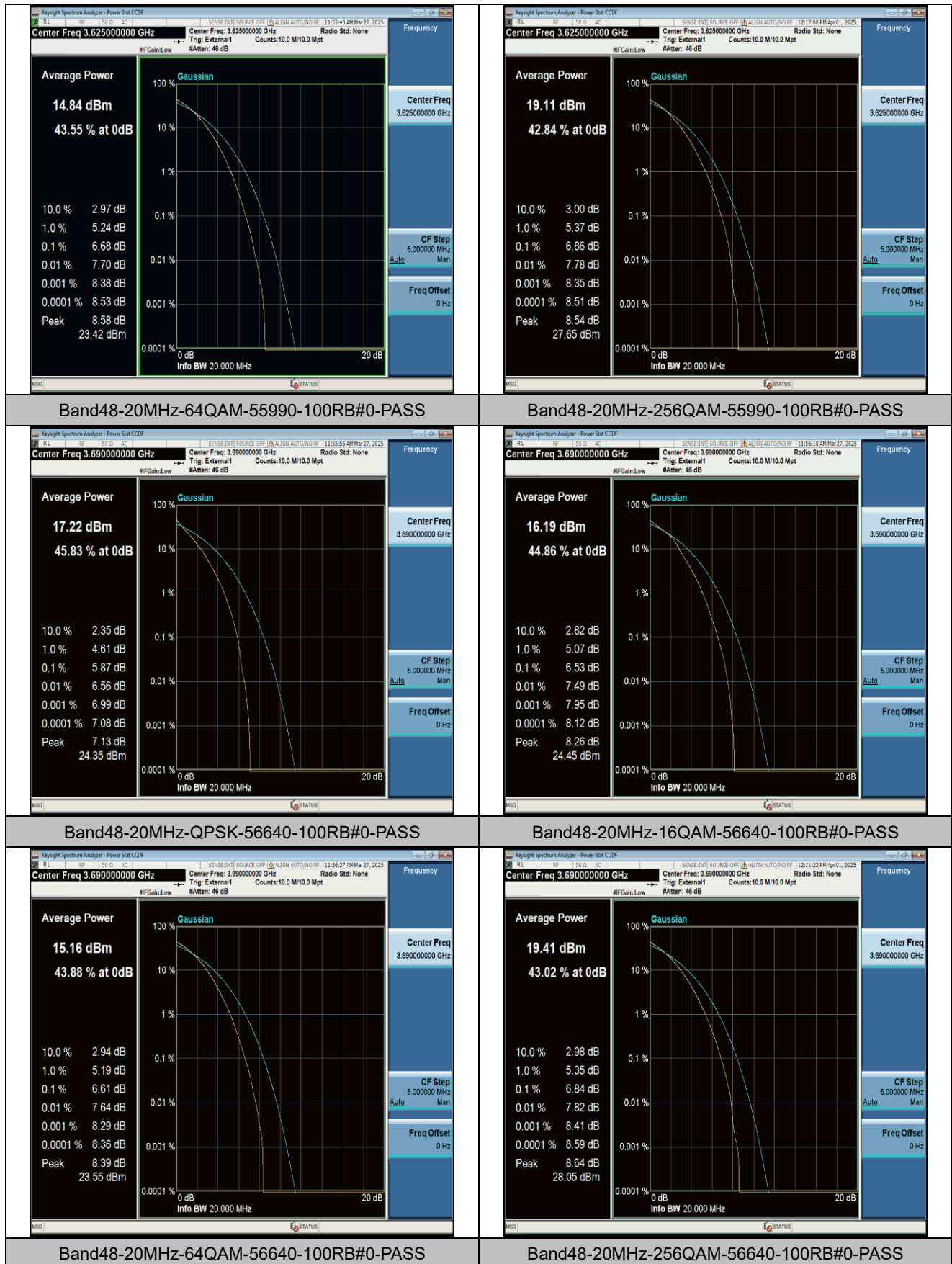
Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band48	20MHz	QPSK	55340	100RB#0	5.81	13	PASS
Band48	20MHz	16QAM	55340	100RB#0	6.51	13	PASS
Band48	20MHz	64QAM	55340	100RB#0	6.63	13	PASS
Band48	20MHz	256QAM	55340	100RB#0	6.85	13	PASS
Band48	20MHz	QPSK	55990	100RB#0	5.95	13	PASS
Band48	20MHz	16QAM	55990	100RB#0	6.58	13	PASS
Band48	20MHz	64QAM	55990	100RB#0	6.68	13	PASS
Band48	20MHz	256QAM	55990	100RB#0	6.86	13	PASS
Band48	20MHz	QPSK	56640	100RB#0	5.87	13	PASS
Band48	20MHz	16QAM	56640	100RB#0	6.53	13	PASS
Band48	20MHz	64QAM	56640	100RB#0	6.61	13	PASS
Band48	20MHz	256QAM	56640	100RB#0	6.84	13	PASS

Test Graphs





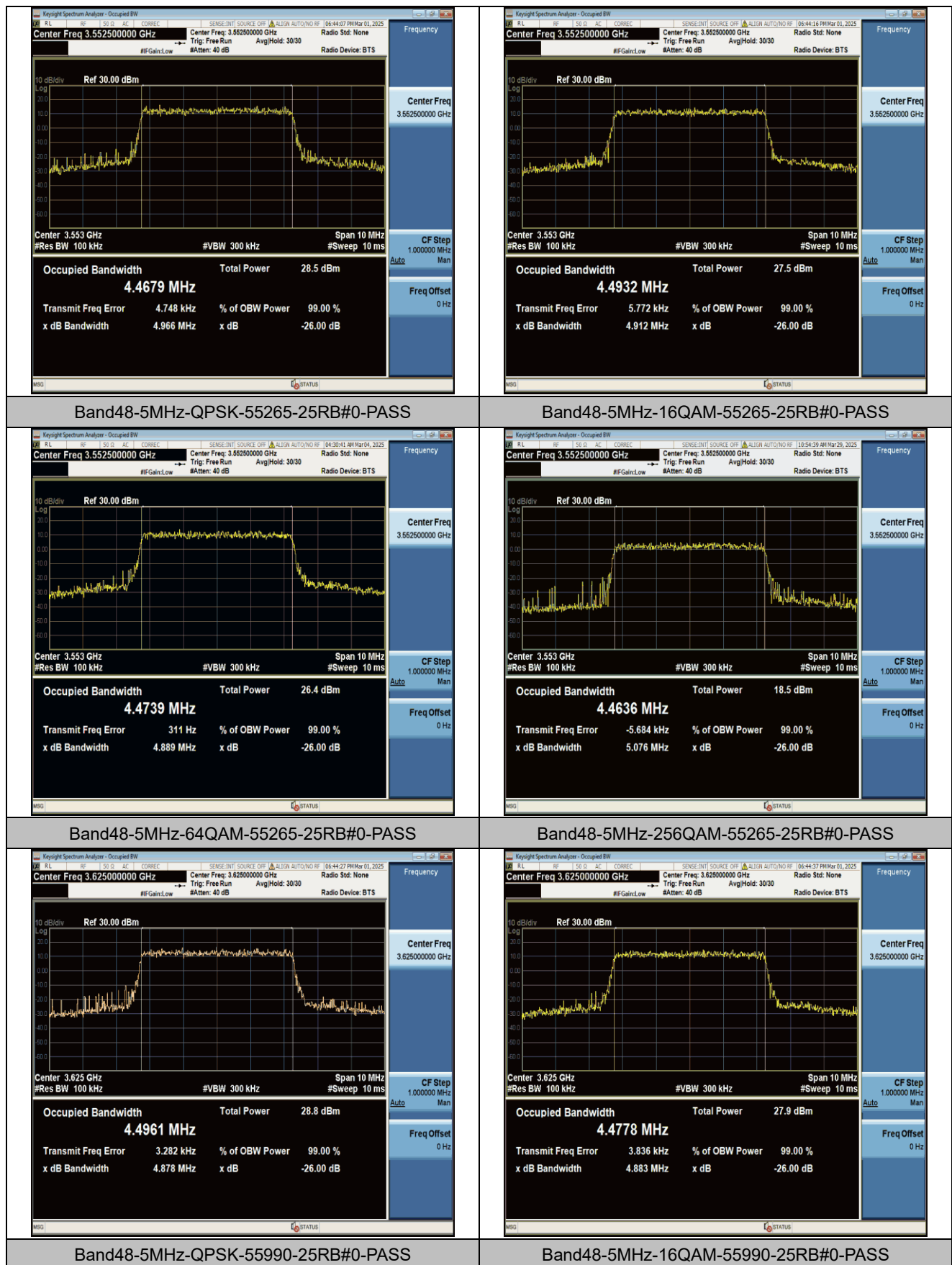
26dB Bandwidth and Occupied Bandwidth

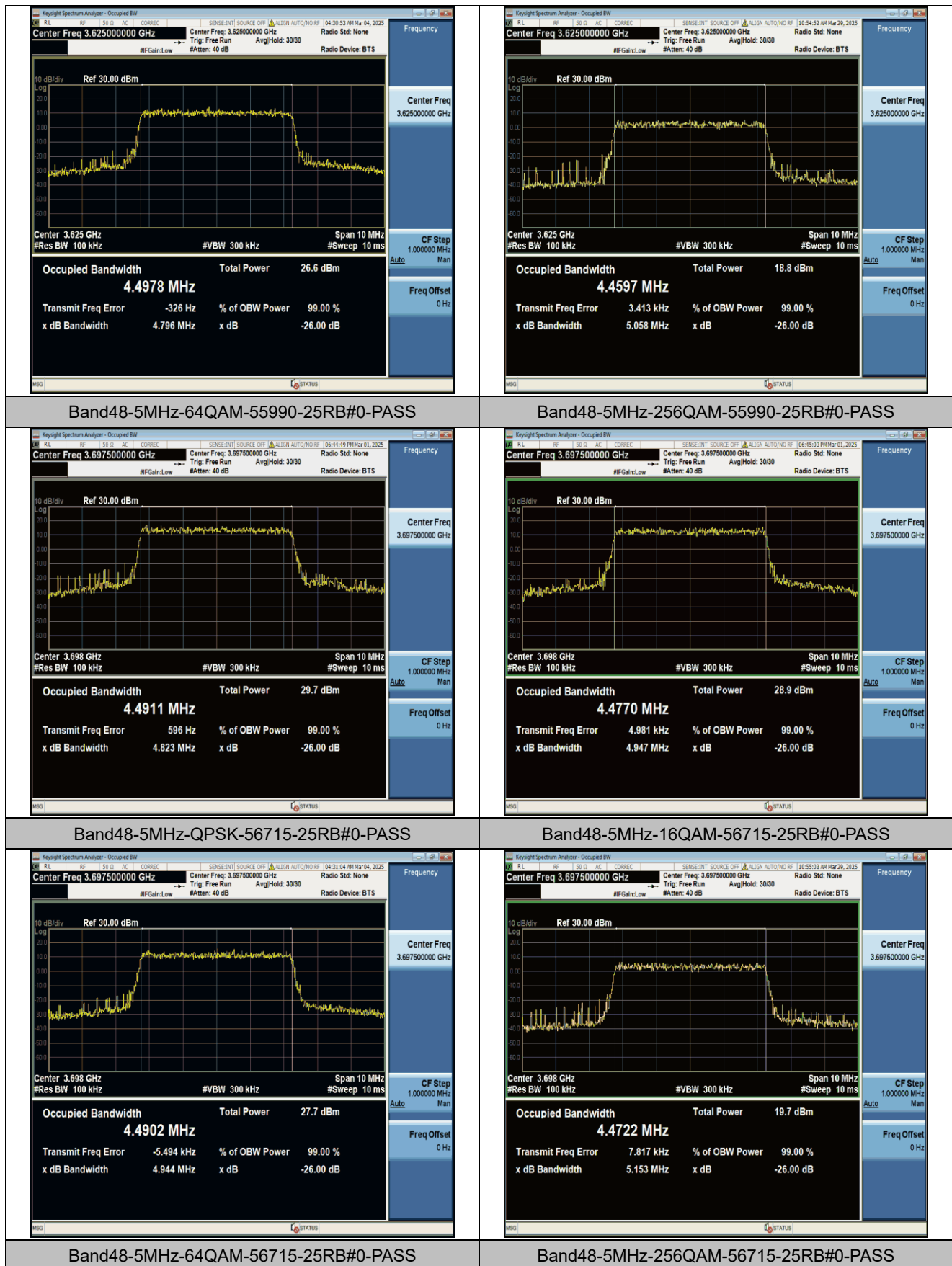
Test Result

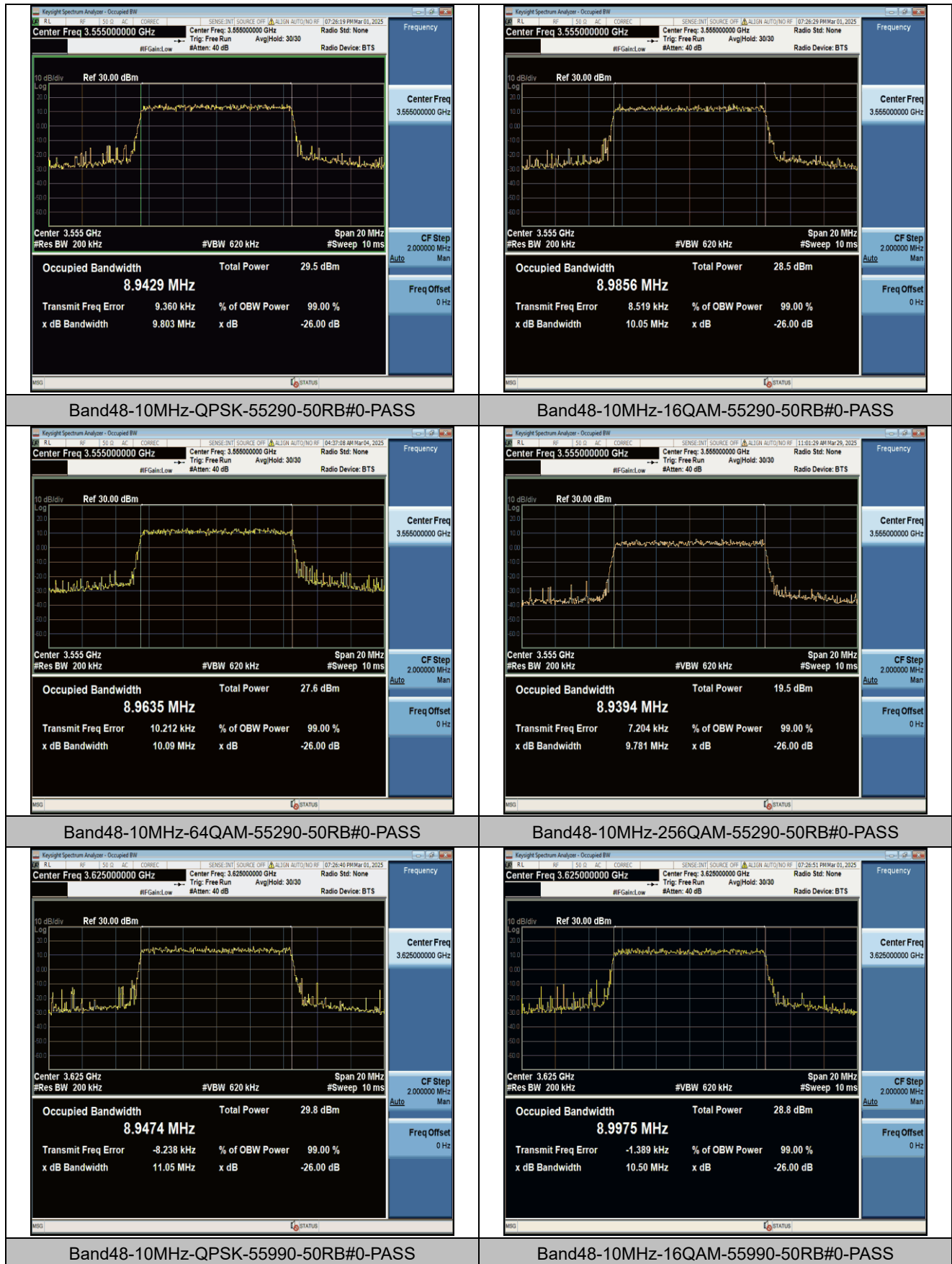
Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band48	5MHz	QPSK	55265	25RB#0	4.4679	4.966	PASS
Band48	5MHz	16QAM	55265	25RB#0	4.4932	4.912	PASS
Band48	5MHz	64QAM	55265	25RB#0	4.4739	4.889	PASS
Band48	5MHz	256QAM	55265	25RB#0	4.4636	5.076	PASS
Band48	5MHz	QPSK	55990	25RB#0	4.4961	4.878	PASS
Band48	5MHz	16QAM	55990	25RB#0	4.4778	4.883	PASS
Band48	5MHz	64QAM	55990	25RB#0	4.4978	4.796	PASS
Band48	5MHz	256QAM	55990	25RB#0	4.4597	5.058	PASS
Band48	5MHz	QPSK	56715	25RB#0	4.4911	4.823	PASS
Band48	5MHz	16QAM	56715	25RB#0	4.4770	4.947	PASS
Band48	5MHz	64QAM	56715	25RB#0	4.4902	4.944	PASS
Band48	5MHz	256QAM	56715	25RB#0	4.4722	5.153	PASS
Band48	10MHz	QPSK	55290	50RB#0	8.9429	9.803	PASS
Band48	10MHz	16QAM	55290	50RB#0	8.9856	10.05	PASS
Band48	10MHz	64QAM	55290	50RB#0	8.9635	10.09	PASS
Band48	10MHz	256QAM	55290	50RB#0	8.9394	9.781	PASS
Band48	10MHz	QPSK	55990	50RB#0	8.9474	11.05	PASS
Band48	10MHz	16QAM	55990	50RB#0	8.9975	10.50	PASS
Band48	10MHz	64QAM	55990	50RB#0	8.9546	11.68	PASS
Band48	10MHz	256QAM	55990	50RB#0	8.9646	10.24	PASS
Band48	10MHz	QPSK	56690	50RB#0	8.9501	10.82	PASS
Band48	10MHz	16QAM	56690	50RB#0	8.9418	11.59	PASS
Band48	10MHz	64QAM	56690	50RB#0	8.9644	11.83	PASS
Band48	10MHz	256QAM	56690	50RB#0	8.9376	9.735	PASS
Band48	15MHz	QPSK	55315	75RB#0	13.444	15.44	PASS
Band48	15MHz	16QAM	55315	75RB#0	13.402	15.80	PASS
Band48	15MHz	64QAM	55315	75RB#0	13.413	15.65	PASS
Band48	15MHz	256QAM	55315	75RB#0	13.426	14.94	PASS
Band48	15MHz	QPSK	55990	75RB#0	13.532	17.60	PASS
Band48	15MHz	16QAM	55990	75RB#0	13.460	20.16	PASS
Band48	15MHz	64QAM	55990	75RB#0	13.449	18.06	PASS
Band48	15MHz	256QAM	55990	75RB#0	13.424	15.76	PASS
Band48	15MHz	QPSK	56665	75RB#0	13.470	14.61	PASS
Band48	15MHz	16QAM	56665	75RB#0	13.466	16.84	PASS
Band48	15MHz	64QAM	56665	75RB#0	13.434	15.77	PASS
Band48	15MHz	256QAM	56665	75RB#0	13.396	14.25	PASS
Band48	20MHz	QPSK	55340	100RB#0	17.918	21.65	PASS
Band48	20MHz	16QAM	55340	100RB#0	17.878	19.82	PASS

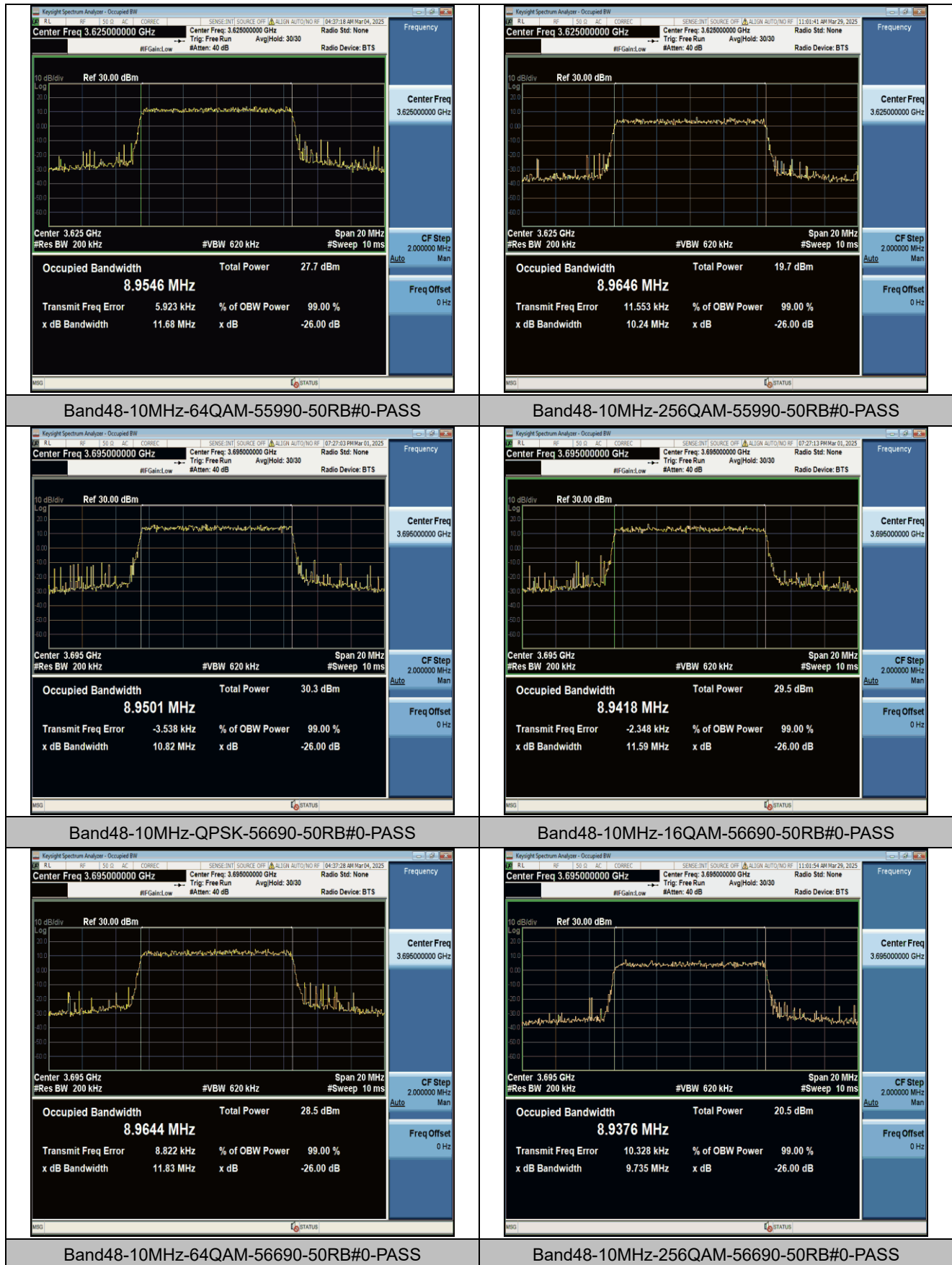
Band48	20MHz	64QAM	55340	100RB#0	17.875	20.26	PASS
Band48	20MHz	256QAM	55340	100RB#0	17.935	21.72	PASS
Band48	20MHz	QPSK	55990	100RB#0	17.934	21.18	PASS
Band48	20MHz	16QAM	55990	100RB#0	17.903	19.20	PASS
Band48	20MHz	64QAM	55990	100RB#0	17.889	20.36	PASS
Band48	20MHz	256QAM	55990	100RB#0	17.894	20.28	PASS
Band48	20MHz	QPSK	56640	100RB#0	17.887	19.76	PASS
Band48	20MHz	16QAM	56640	100RB#0	17.868	20.47	PASS
Band48	20MHz	64QAM	56640	100RB#0	17.871	19.27	PASS
Band48	20MHz	256QAM	56640	100RB#0	17.940	19.02	PASS

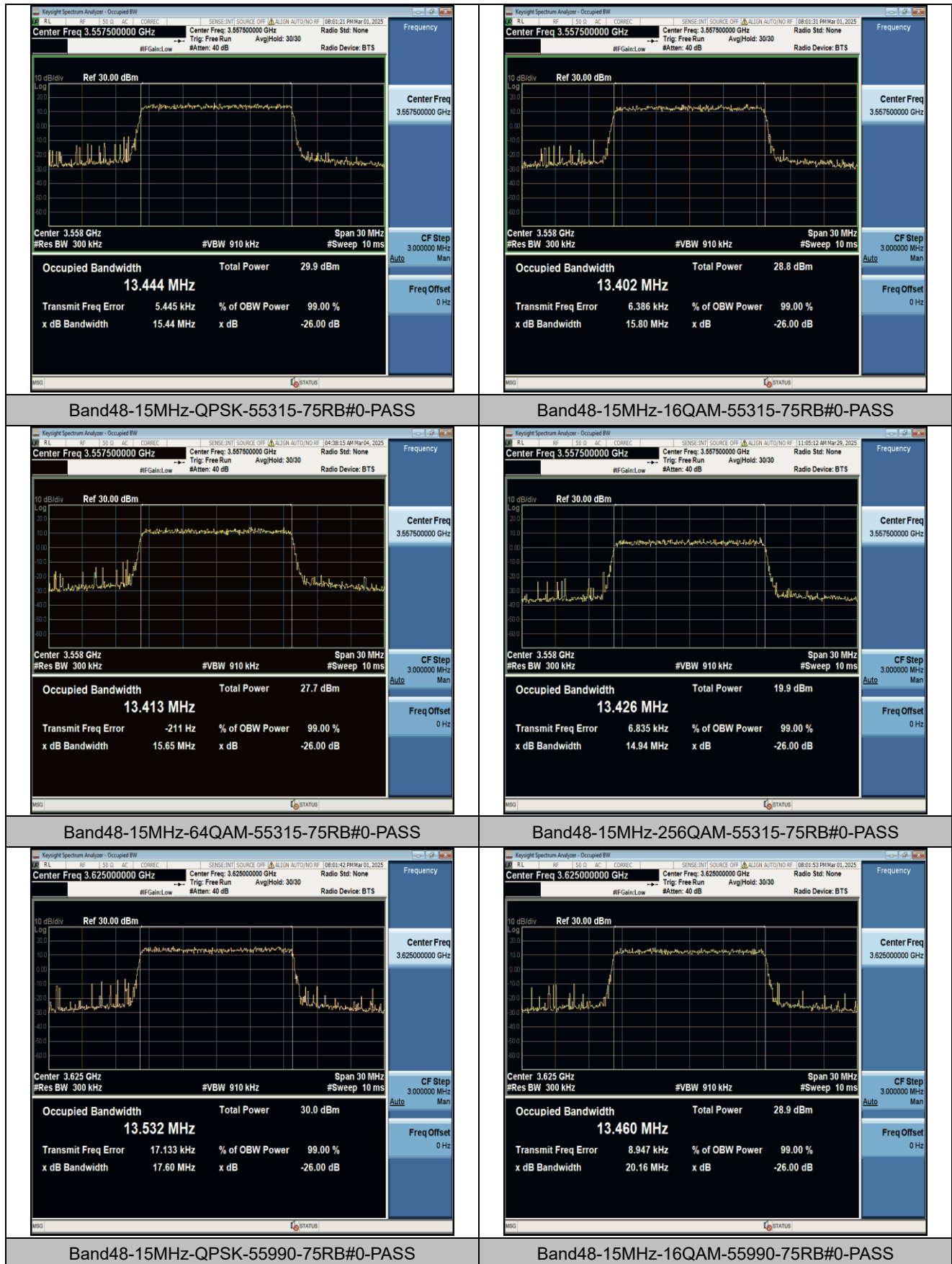
Test Graphs

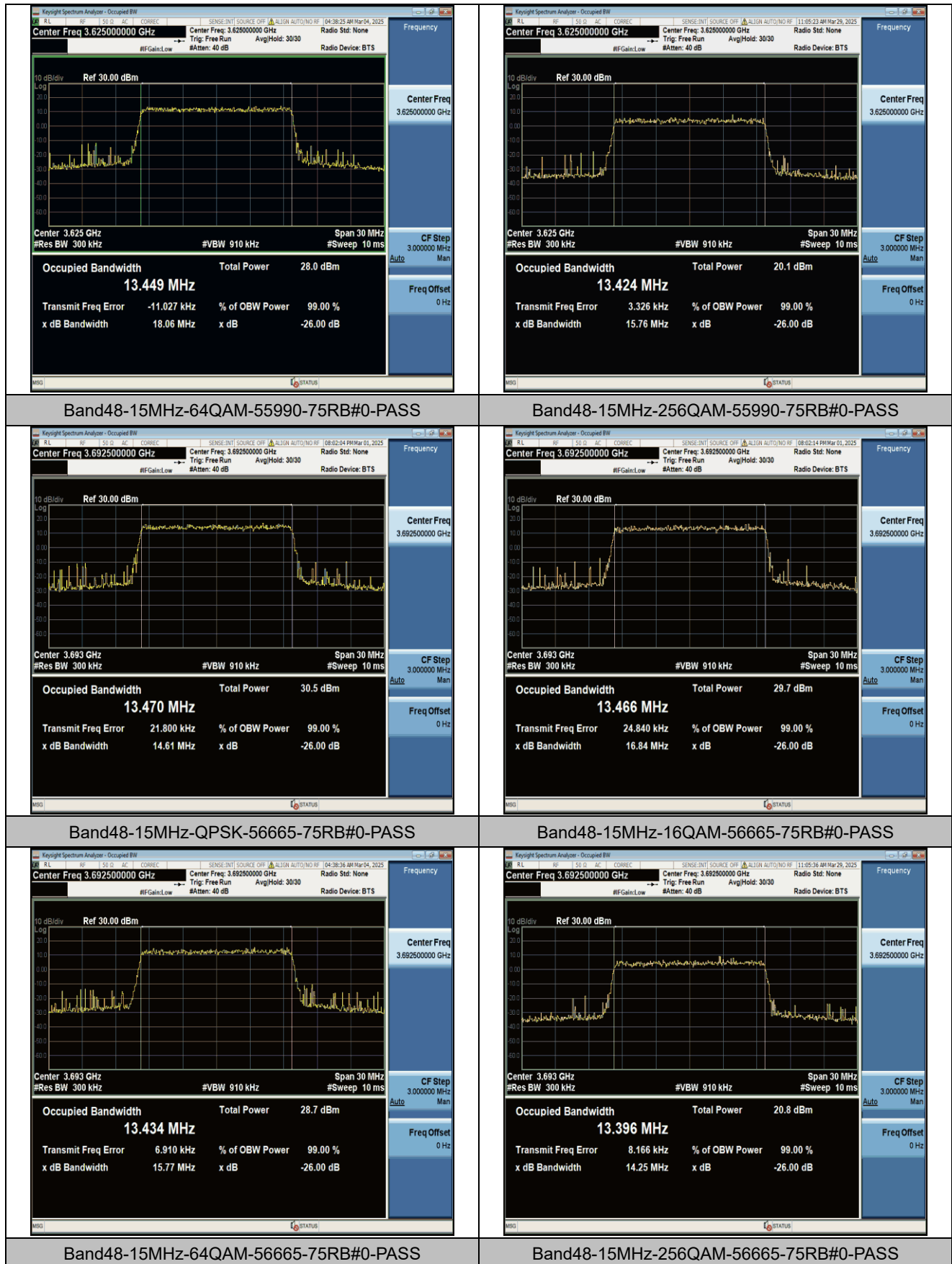


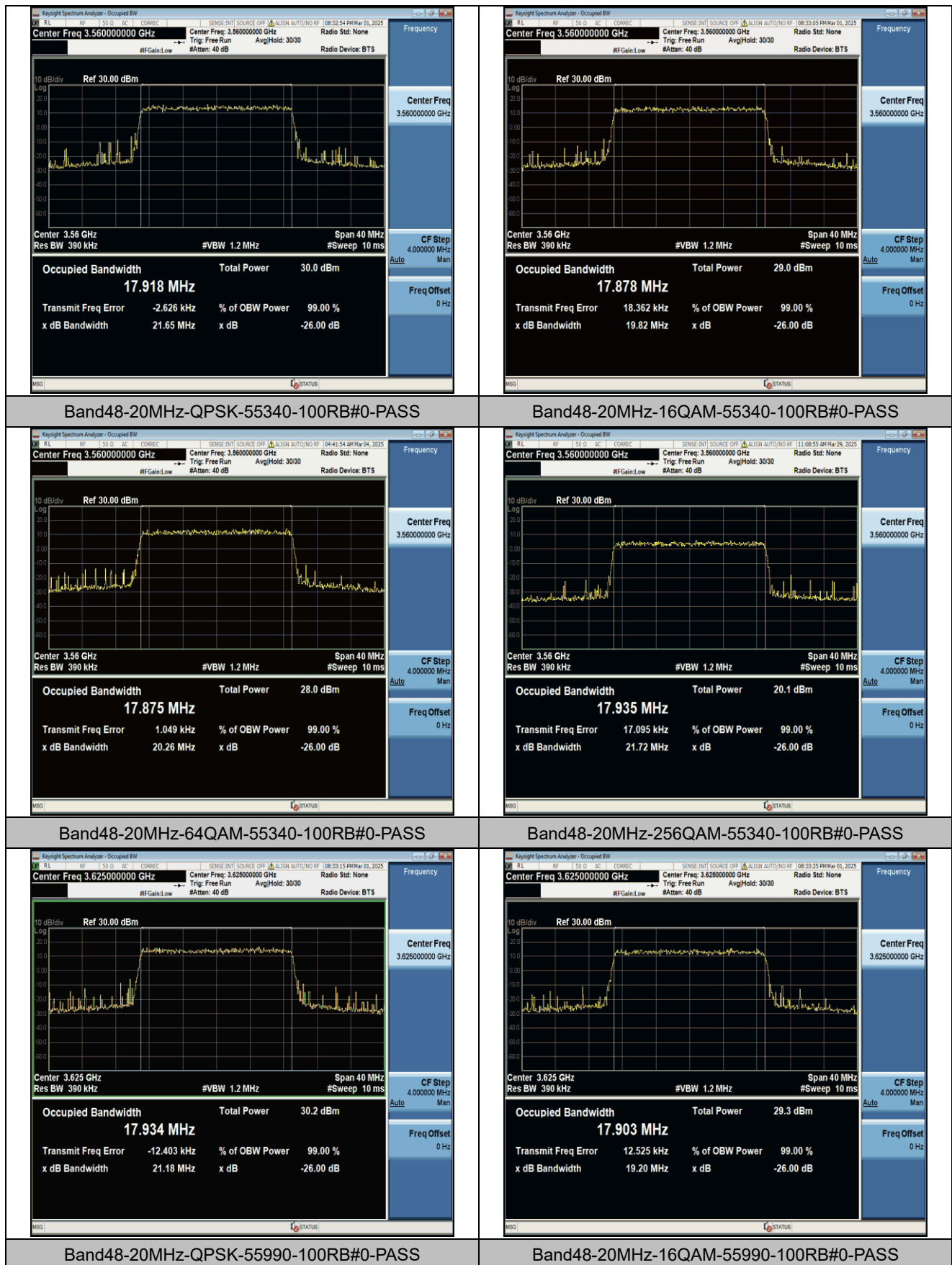


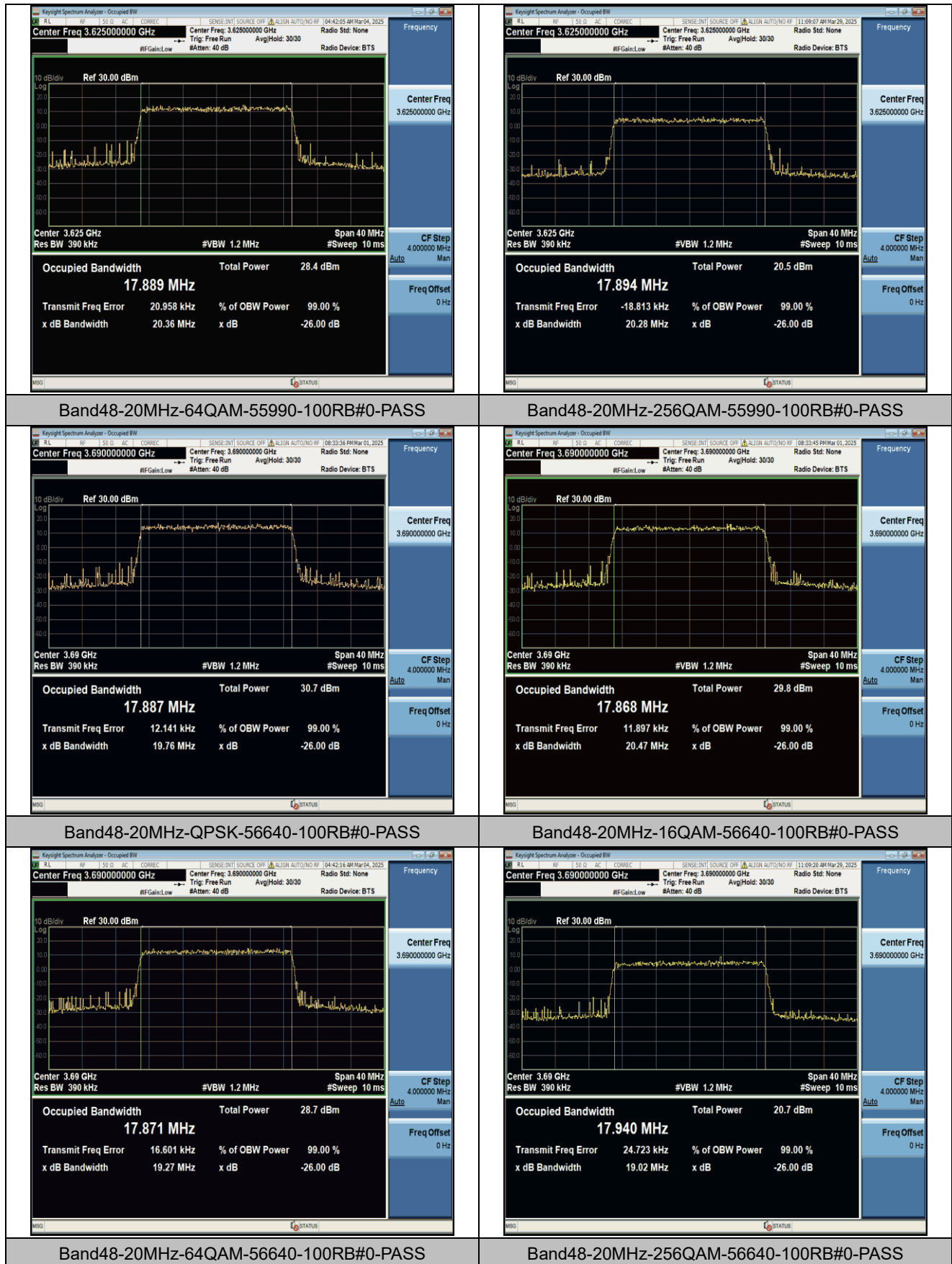












Band Edge

Test Graphs

