

Appendix F

LTE BAND48

CONDUCTED OUTPUT POWER AND E.I.R.P.

CONDUCTED OUTPUT POWER (dBm)

LTE band 48:

LTE Band 48 (Ant7)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		55340	55990	56640
		Frequency (MHz)		3560	3625	3690
20M	QPSK	1	0	22.58	23.00	22.94
		1	50	22.73	23.06	22.98
		1	99	22.74	23.12	23.03
		50	0	21.76	22.22	22.16
		50	25	21.79	22.24	22.19
		50	50	21.88	22.34	22.21
		100	0	21.81	22.16	22.07
	16QAM	1	0	22.02	22.48	22.32
		1	50	22.02	22.34	22.32
		1	99	22.13	22.59	22.39
		50	0	20.77	21.10	21.07
		50	25	20.85	21.25	21.19
		50	50	20.82	21.14	21.16
		100	0	20.88	21.24	21.10
	64QAM	1	0	20.95	21.30	21.36
		1	50	21.10	21.44	21.40
		1	99	21.09	21.55	21.38
		50	0	19.82	20.16	20.20
		50	25	19.88	20.25	20.17
		50	50	19.85	20.21	20.22
		100	0	19.84	20.19	20.20
	256QAM	1	0	18.01	18.43	18.31
		1	50	18.05	18.47	18.42
		1	99	18.17	18.56	18.36
		50	0	17.83	18.28	18.10
		50	25	17.81	18.25	18.12
		50	50	17.84	18.20	18.29
		100	0	17.76	18.18	18.20

BW	MCS Index	Channel		55315	55990	56665
		Frequency (MHz)		3557.5	3625	3692.5
15M	QPSK	1	0	22.53	22.88	22.90
		1	37	22.71	23.02	22.89
		1	74	22.63	23.04	23.00
		36	0	21.73	22.11	22.03
		36	19	21.66	22.19	22.10
		36	39	21.77	22.19	22.09
		75	0	21.72	22.01	22.05
	16QAM	1	0	21.87	22.34	22.27
		1	37	21.88	22.29	22.28
		1	74	22.06	22.44	22.30
		36	0	20.70	21.06	20.93
		36	19	20.75	21.13	21.10
		36	39	20.70	21.11	21.06
		75	0	20.78	21.15	20.99
	64QAM	1	0	20.92	21.18	21.24
		1	37	21.00	21.38	21.33
		1	74	20.95	21.50	21.37
		36	0	19.71	20.09	20.05
		36	19	19.85	20.22	20.06
		36	39	19.83	20.11	20.11
		75	0	19.70	20.16	20.11
	256QAM	1	0	17.94	18.33	18.23
		1	37	17.95	18.44	18.36
		1	74	18.06	18.43	18.31
		36	0	17.69	18.22	18.02
		36	19	17.73	18.22	17.98
		36	39	17.80	18.18	18.15
		75	0	17.61	18.16	18.07

BW	MCS Index	Channel		55290	55990	56690
		Frequency (MHz)		3555	3625	3695
10M	QPSK	1	0	22.48	22.94	22.83
		1	24	22.59	23.03	22.96
		1	49	22.71	23.01	23.01
		25	0	21.67	22.12	22.15
		25	12	21.64	22.17	22.08
		25	25	21.86	22.20	22.14
		50	0	21.72	22.04	22.01
	16QAM	1	0	21.90	22.47	22.25
		1	24	21.91	22.28	22.23
		1	49	22.07	22.48	22.33
		25	0	20.74	21.02	20.96
		25	12	20.71	21.18	21.05
		25	25	20.80	21.06	21.04
		50	0	20.85	21.11	21.06
	64QAM	1	0	20.87	21.17	21.31
		1	24	21.05	21.30	21.37
		1	49	21.05	21.50	21.31
		25	0	19.75	20.14	20.10
		25	12	19.84	20.16	20.08
		25	25	19.83	20.18	20.11
		50	0	19.79	20.16	20.18
	256QAM	1	0	17.90	18.41	18.28
		1	24	18.02	18.46	18.27
		1	49	18.13	18.49	18.31
		25	0	17.68	18.25	18.04
		25	12	17.73	18.10	17.99
		25	25	17.71	18.05	18.16
		50	0	17.65	18.10	18.16

BW	MCS Index	Channel		55265	55990	56715
		Frequency (MHz)		3552.5	3625	3697.5
5M	QPSK	1	0	22.56	22.88	22.80
		1	12	22.71	22.97	22.86
		1	24	22.66	23.00	23.01
		12	0	21.73	22.10	22.09
		12	6	21.65	22.12	22.04
		12	13	21.76	22.28	22.15
		25	0	21.78	22.06	22.03
	16QAM	1	0	22.00	22.33	22.26
		1	12	21.89	22.19	22.29
		1	24	22.06	22.51	22.33
		12	0	20.73	21.08	20.97
		12	6	20.80	21.13	21.07
		12	13	20.81	21.02	21.04
		25	0	20.82	21.17	20.99
	64QAM	1	0	20.89	21.20	21.26
		1	12	20.98	21.29	21.27
		1	24	20.95	21.45	21.35
		12	0	19.77	20.15	20.10
		12	6	19.82	20.13	20.03
		12	13	19.73	20.14	20.14
		25	0	19.83	20.08	20.13
	256QAM	1	0	17.97	18.37	18.17
		1	12	17.98	18.32	18.36
		1	24	18.13	18.52	18.21
		12	0	17.69	18.25	18.03
		12	6	17.68	18.19	17.97
		12	13	17.72	18.19	18.15
		25	0	17.73	18.10	18.17

EIRP

LTE Band 48

LTE B48 5M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10Mhz)
55265	3552.5	22.71	-1	21.71	148.25	23
55990	3625	23	-1	22	158.49	23
56715	3697.5	23.01	-1	22.01	158.85	23

LTE B48 5M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10Mhz)
55265	3552.5	22.06	-1	21.06	127.64	23
55990	3625	22.51	-1	21.51	141.58	23
56715	3697.5	22.33	-1	21.33	135.83	23

LTE B48 5M 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10Mhz)
55265	3552.5	20.98	-1	19.98	99.54	23
55990	3625	21.45	-1	20.45	110.92	23
56715	3697.5	21.35	-1	20.35	108.39	23

LTE B48 5M 256QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10Mhz)
55265	3552.5	18.13	-1	17.13	51.64	23
55990	3625	18.52	-1	17.52	56.49	23
56715	3697.5	18.36	-1	17.36	54.45	23

LTE B48 10M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10Mhz)
55290	3555	22.71	-1	21.71	148.25	23
55990	3625	23.03	-1	22.03	159.59	23
56690	3695	23.01	-1	22.01	158.85	23

LTE B48 10M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10Mhz)
55290	3555	22.07	-1	21.07	127.94	23
55990	3625	22.48	-1	21.48	140.6	23
56690	3695	22.33	-1	21.33	135.83	23

LTE B48 10M 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10Mhz)
55290	3555	21.05	-1	20.05	101.16	23
55990	3625	21.5	-1	20.5	112.2	23
56690	3695	21.37	-1	20.37	108.89	23

LTE B48 10M 256QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10Mhz)
55290	3555	18.13	-1	17.13	51.64	23
55990	3625	18.49	-1	17.49	56.1	23
56690	3695	18.31	-1	17.31	53.83	23

LTE B48 15M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10Mhz)
55315	3557.5	22.71	-1	21.71	148.25	23
55990	3625	23.04	-1	22.04	159.96	23
56665	3692.5	23	-1	22	158.49	23

LTE B48 15M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10Mhz)
55315	3557.5	22.06	-1	21.06	127.64	23
55990	3625	22.44	-1	21.44	139.32	23
56665	3692.5	22.3	-1	21.3	134.9	23

LTE B48 15M 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10Mhz)
55315	3557.5	21	-1	20	100	23
55990	3625	21.5	-1	20.5	112.2	23
56665	3692.5	21.37	-1	20.37	108.89	23

LTE B48 15M 256QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10Mhz)
55315	3557.5	18.06	-1	17.06	50.82	23
55990	3625	18.44	-1	17.44	55.46	23
56665	3692.5	18.36	-1	17.36	54.45	23

LTE B48 20M QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10Mhz)
55340	3560	22.74	-1	21.74	149.28	23
55990	3625	23.12	-1	22.12	162.93	23
56640	3690	23.03	-1	22.03	159.59	23

LTE B48 20M 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10Mhz)
55340	3560	22.13	-1	21.13	129.72	23
55990	3625	22.59	-1	21.59	144.21	23
56640	3690	22.39	-1	21.39	137.72	23

LTE B48 20M 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10Mhz)
55340	3560	21.1	-1	20.1	102.33	23
55990	3625	21.55	-1	20.55	113.5	23
56640	3690	21.4	-1	20.4	109.65	23

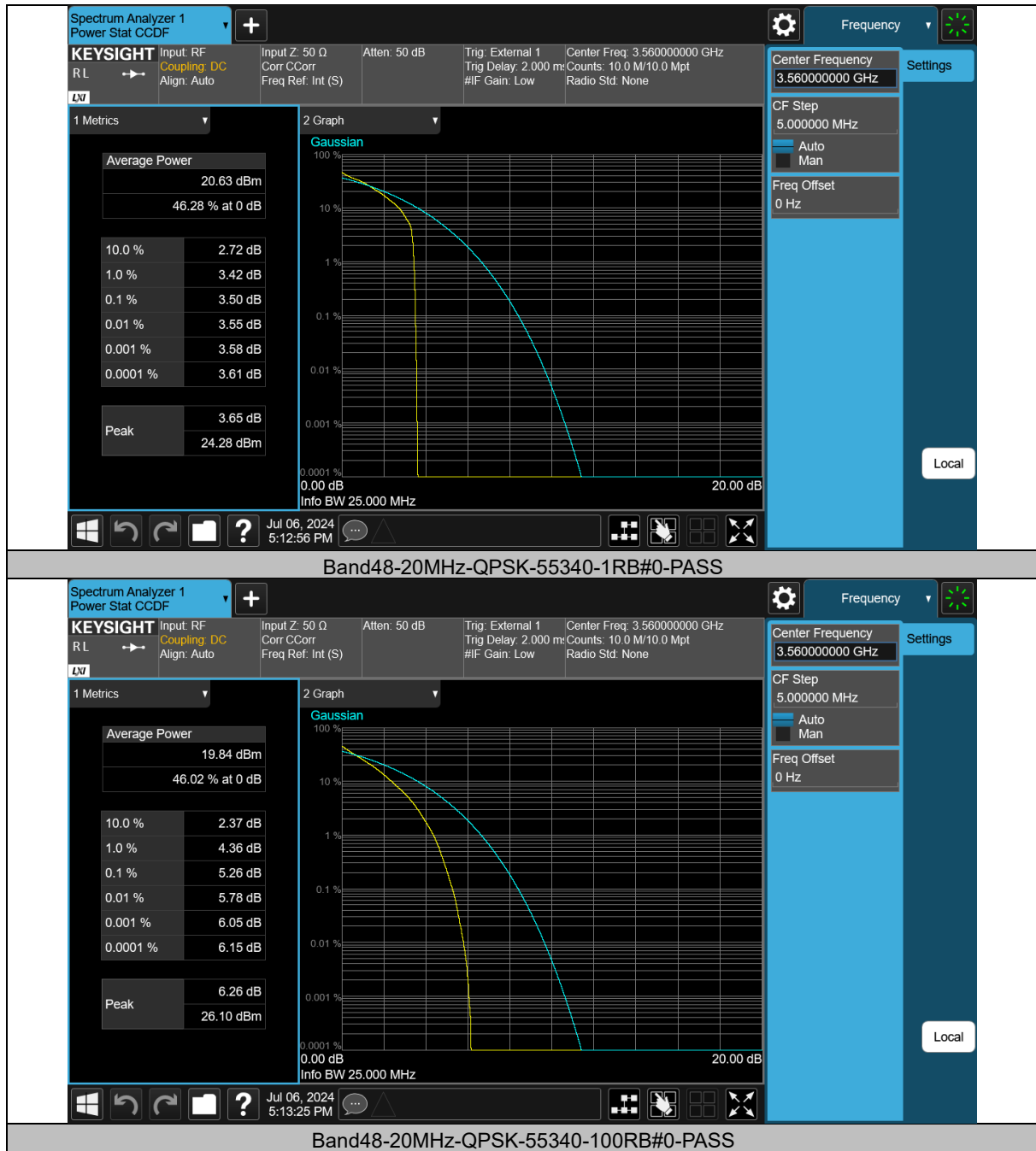
LTE B48 20M 256QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP (mW)	Limit (dBm/10Mhz)
55340	3560	18.17	-1	17.17	52.12	23
55990	3625	18.56	-1	17.56	57.02	23
56640	3690	18.42	-1	17.42	55.21	23

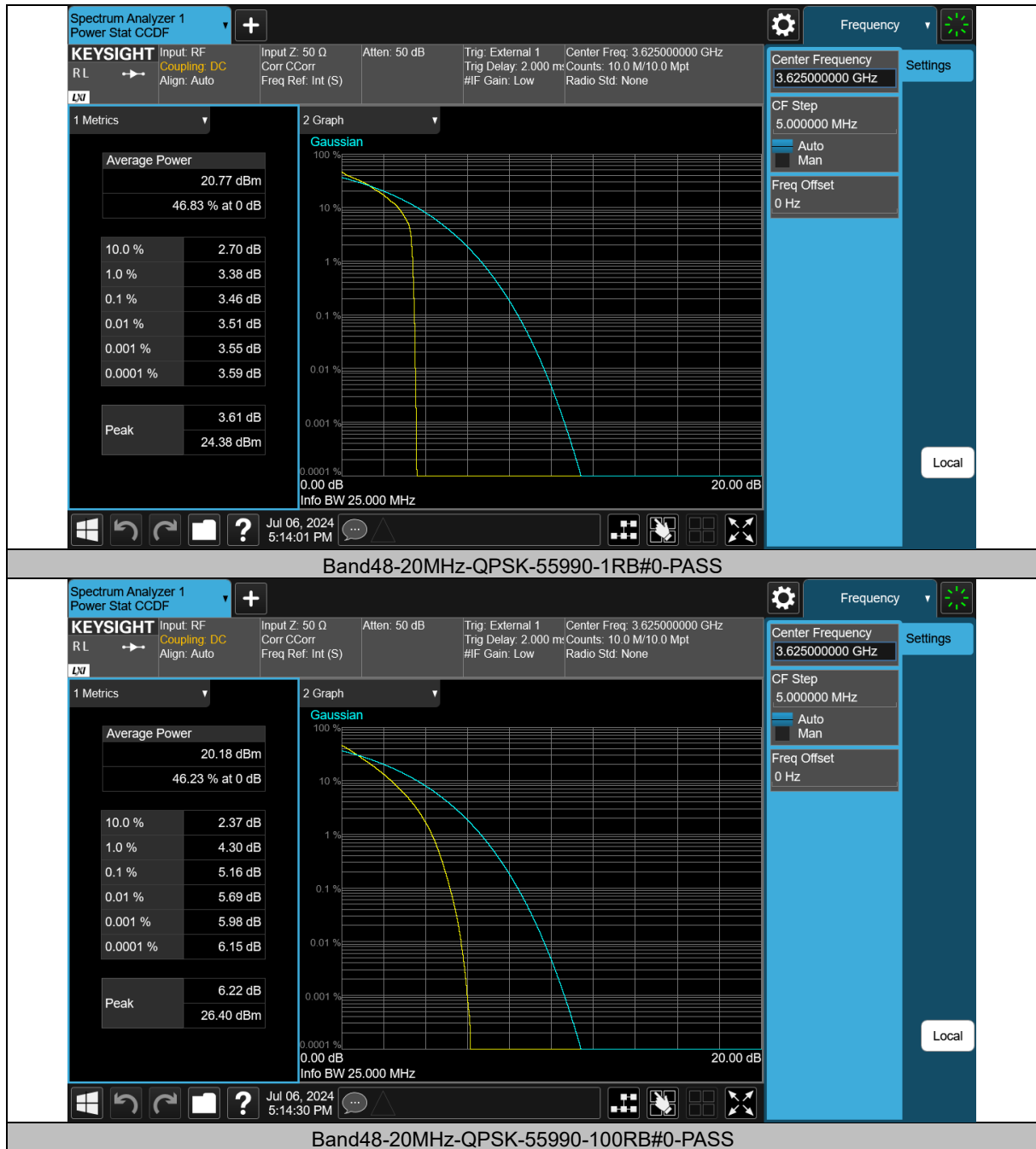
REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).

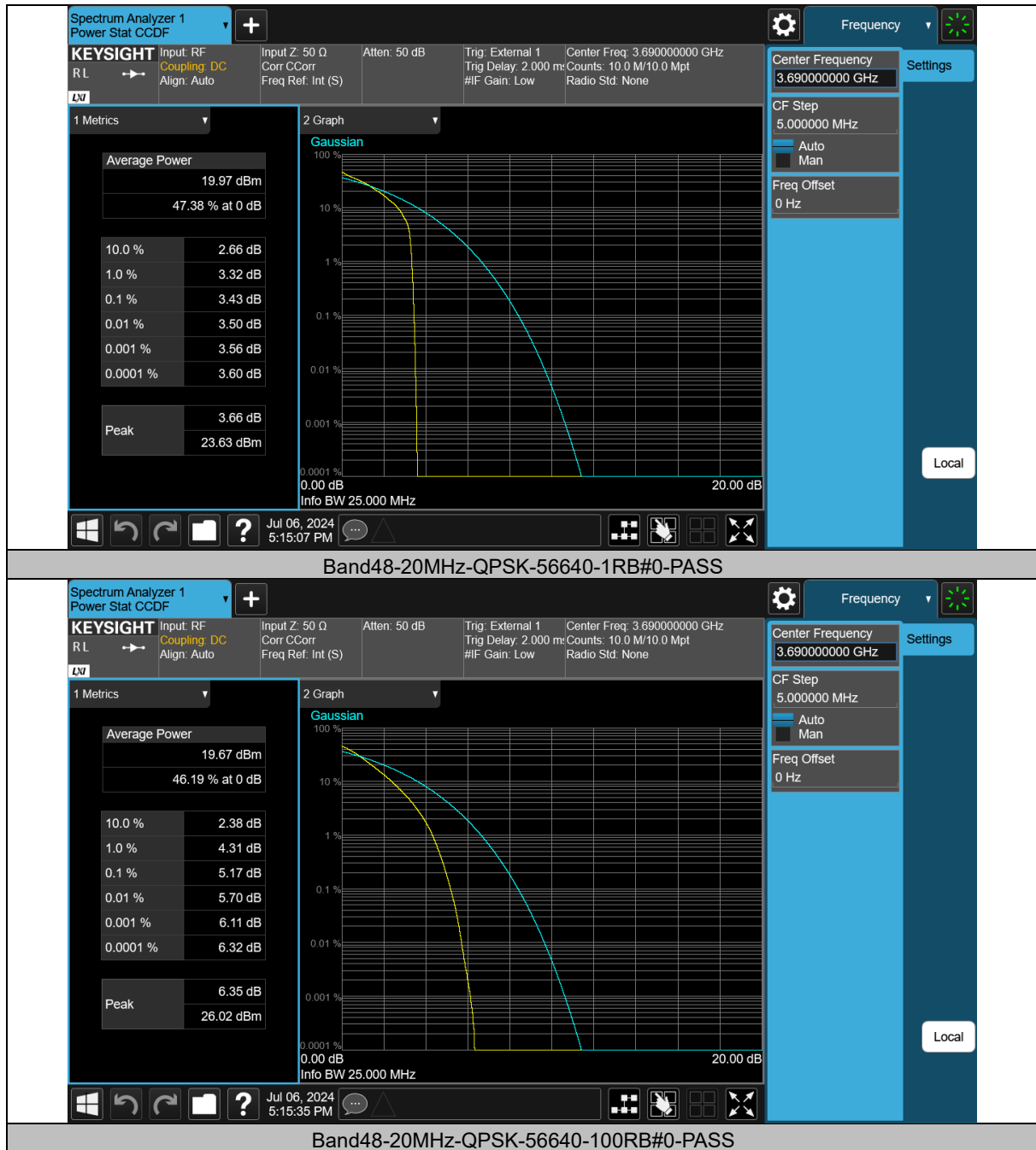
PEAK-TO-AVERAGE RATIO(CCDF) TEST RESULT

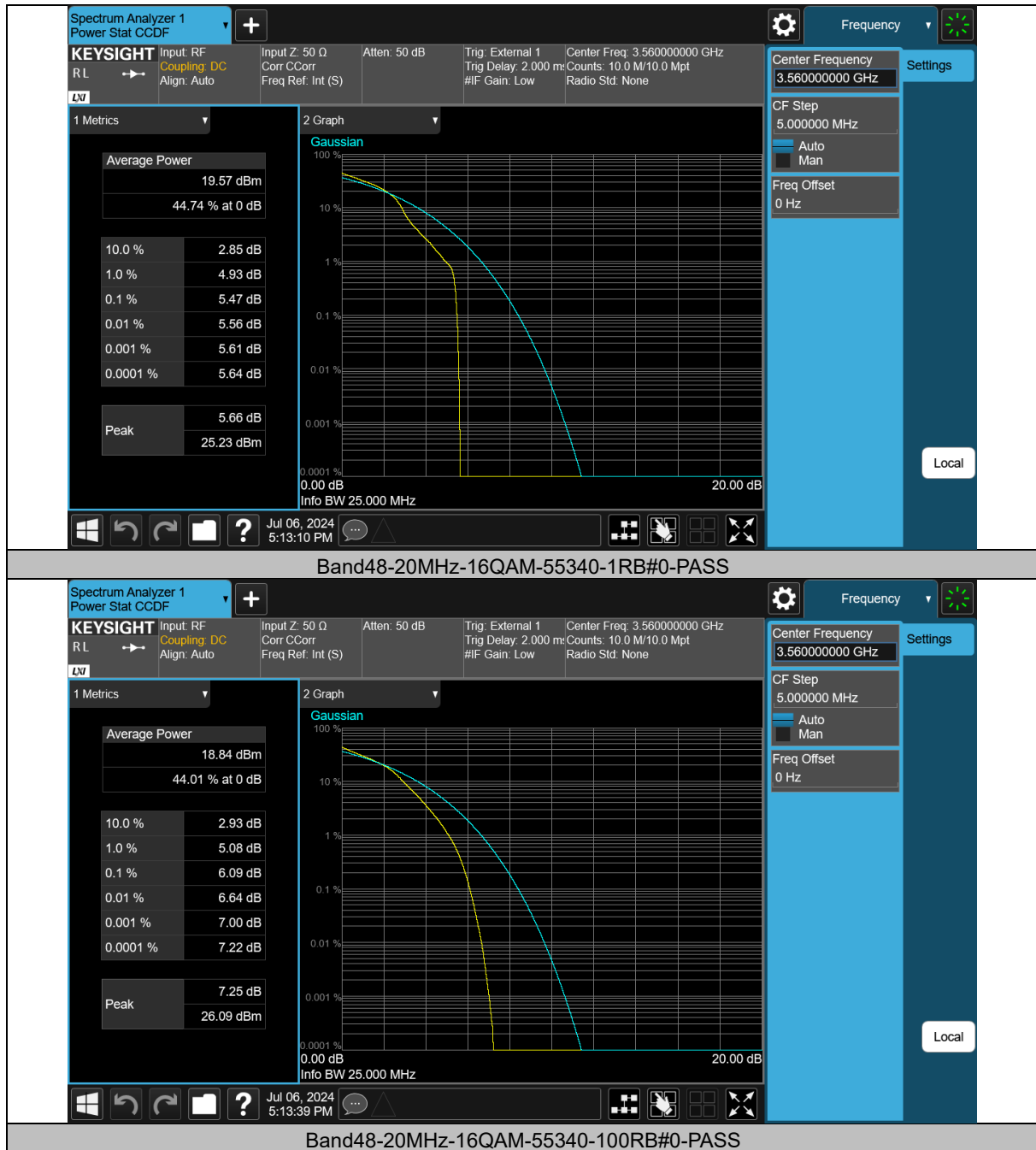
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band48	20MHz	QPSK	55340	1RB#0	3.50	13	PASS
Band48	20MHz	QPSK	55340	100RB#0	5.26	13	PASS
Band48	20MHz	QPSK	55990	1RB#0	3.46	13	PASS
Band48	20MHz	QPSK	55990	100RB#0	5.16	13	PASS
Band48	20MHz	QPSK	56640	1RB#0	3.43	13	PASS
Band48	20MHz	QPSK	56640	100RB#0	5.17	13	PASS
Band48	20MHz	16QAM	55340	1RB#0	5.47	13	PASS
Band48	20MHz	16QAM	55340	100RB#0	6.09	13	PASS
Band48	20MHz	16QAM	55990	1RB#0	5.35	13	PASS
Band48	20MHz	16QAM	55990	100RB#0	6.02	13	PASS
Band48	20MHz	16QAM	56640	1RB#0	5.21	13	PASS
Band48	20MHz	16QAM	56640	100RB#0	6.02	13	PASS

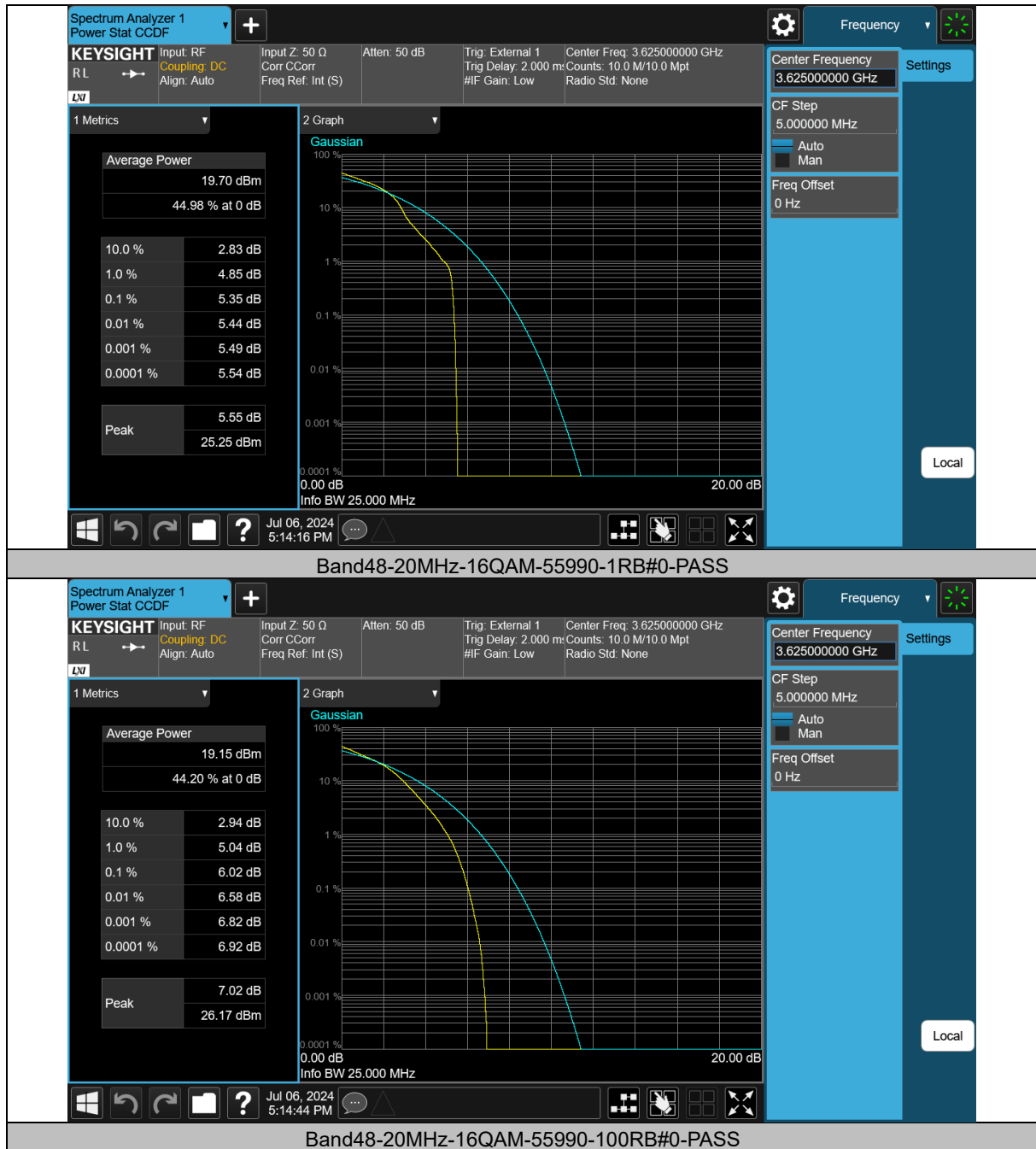
TEST GRAPHS

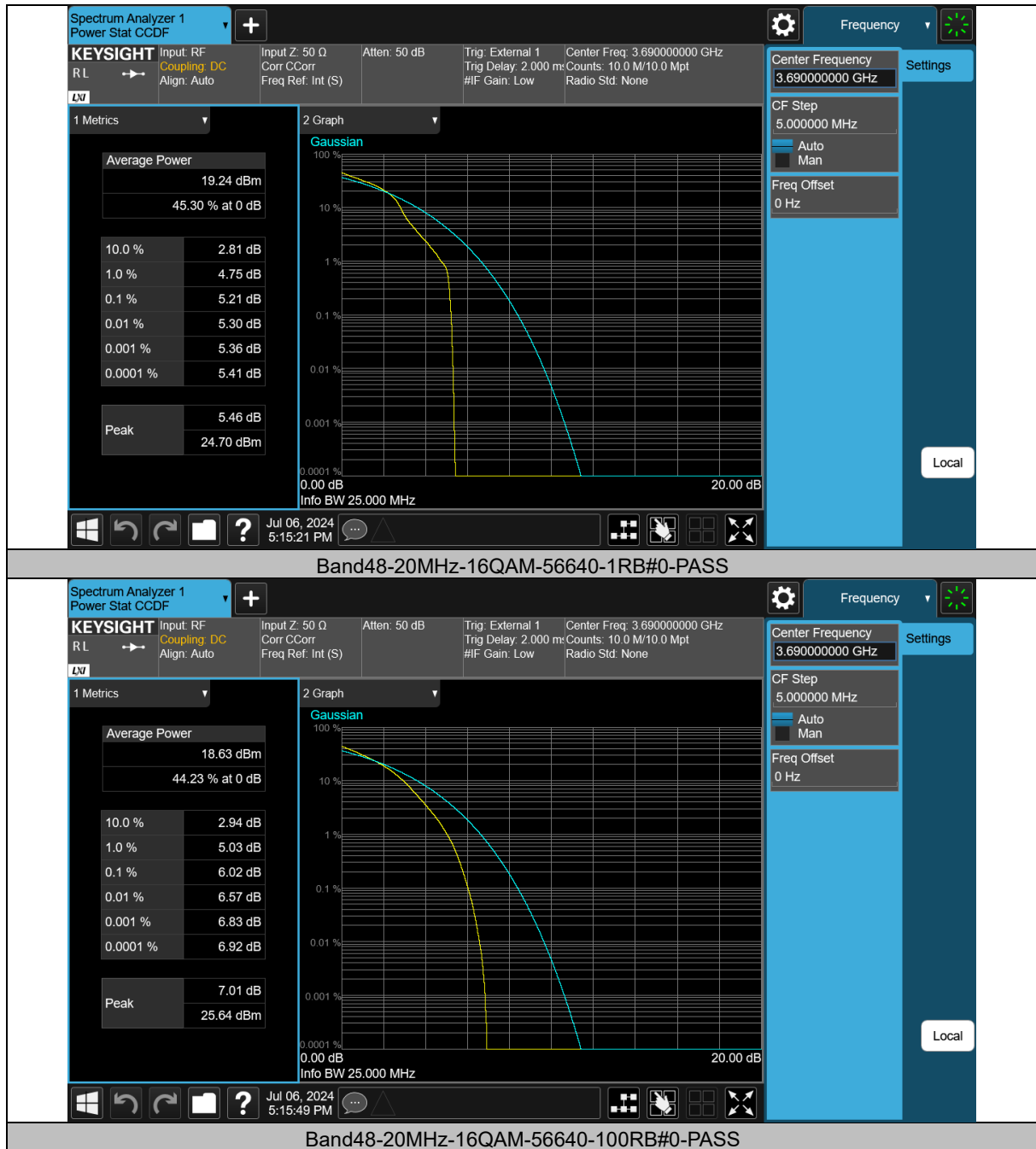








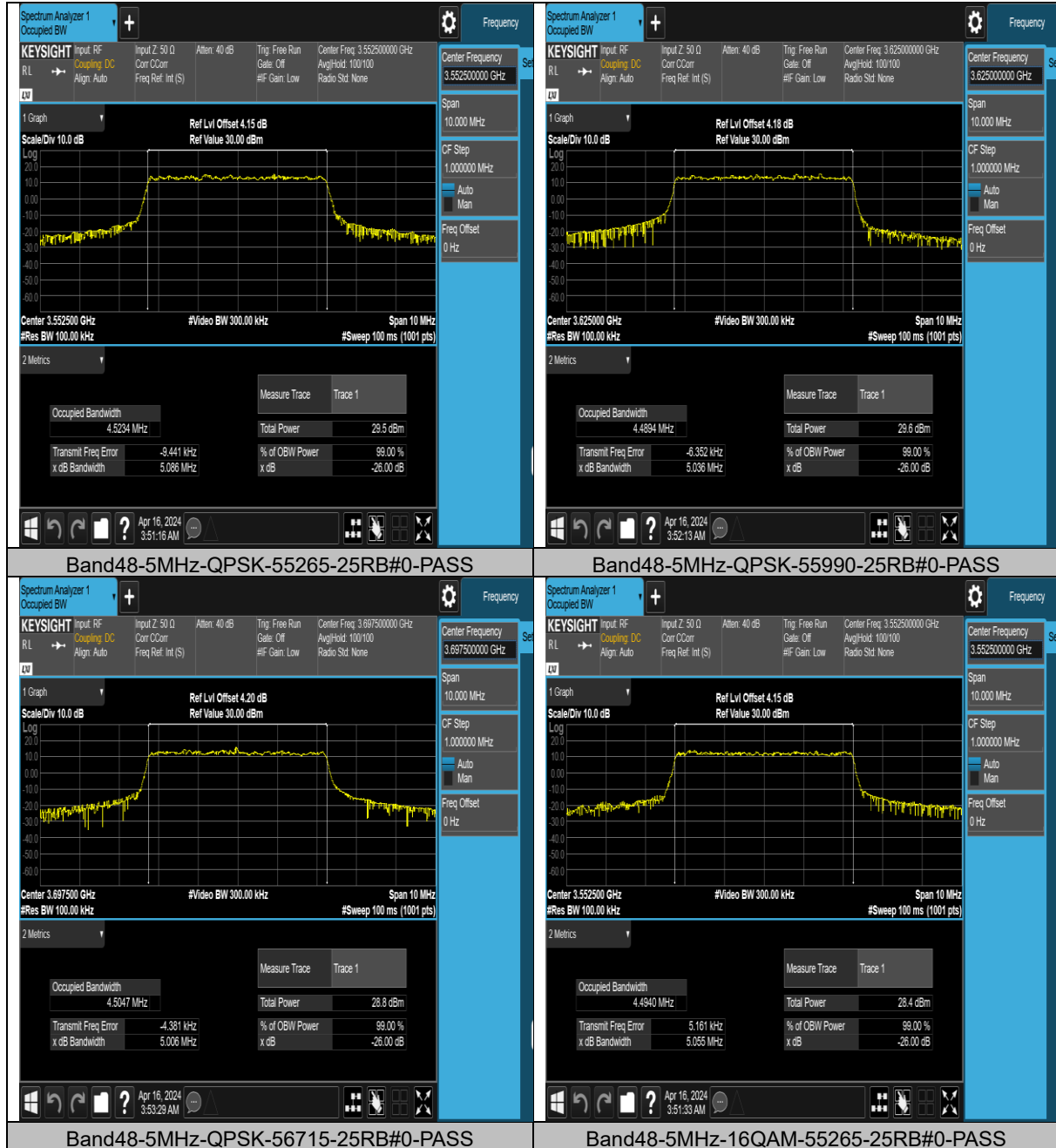


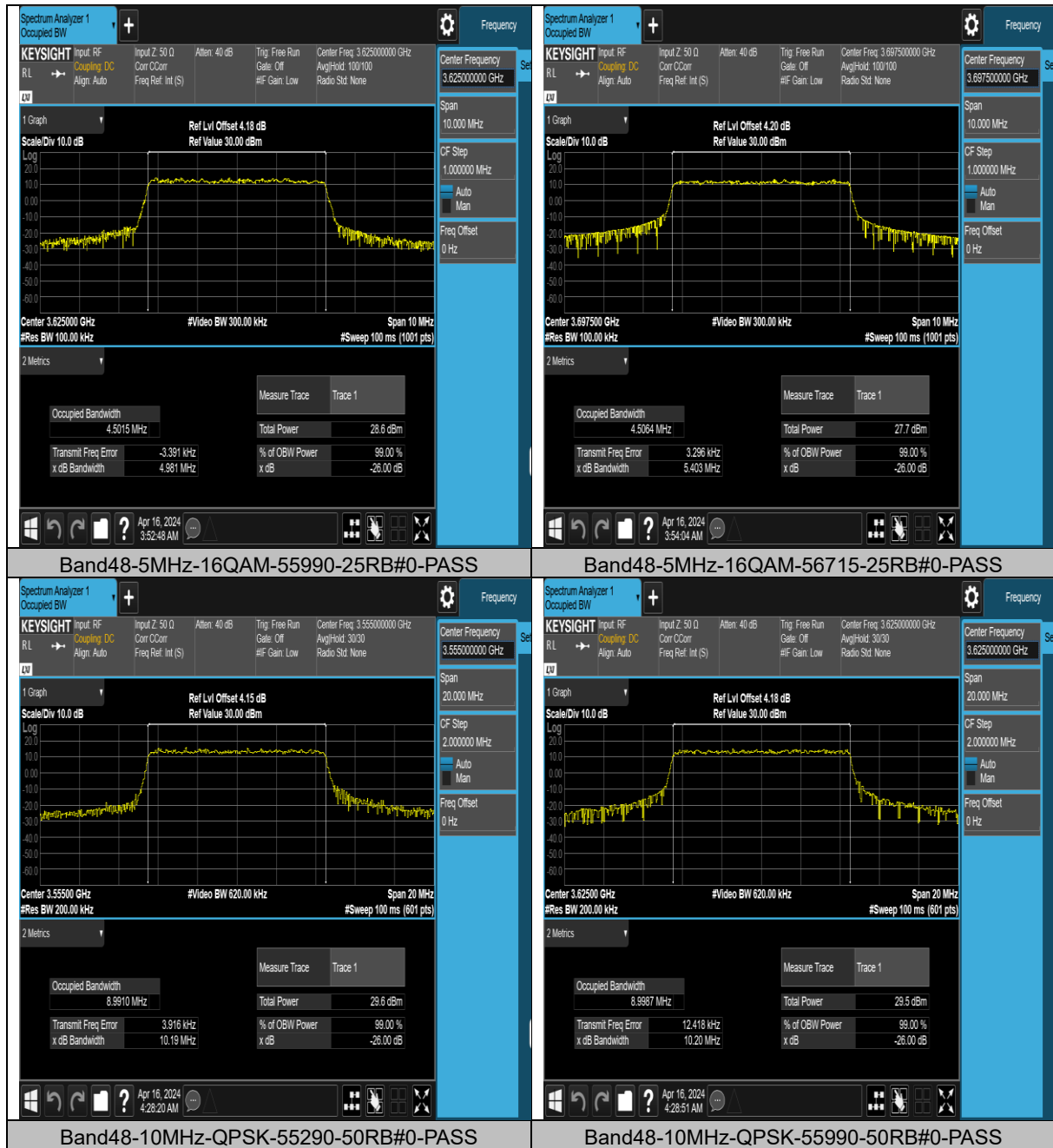


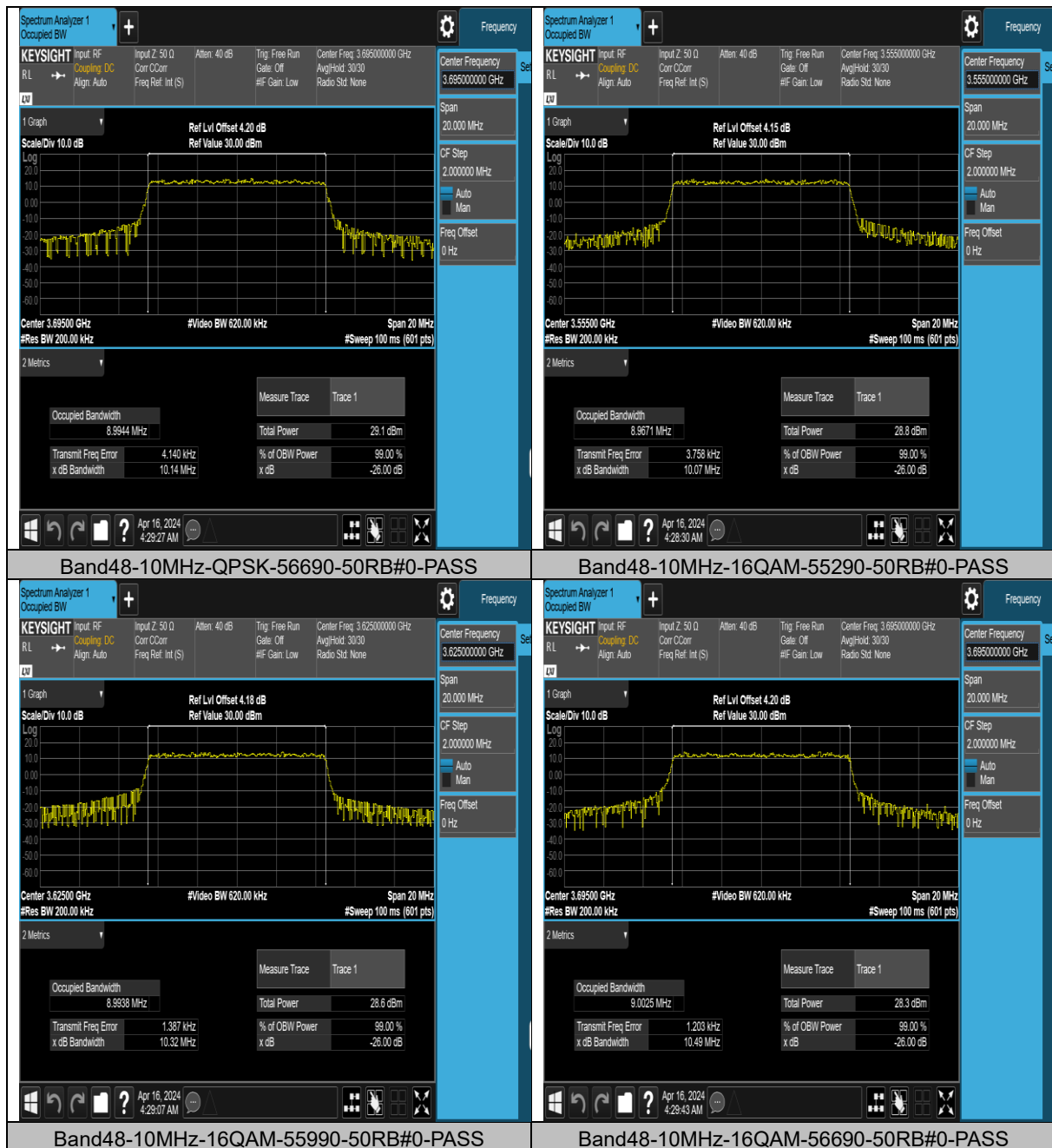
26DB BANDWIDTH AND OCCUPIED BANDWIDTH TEST RESULT

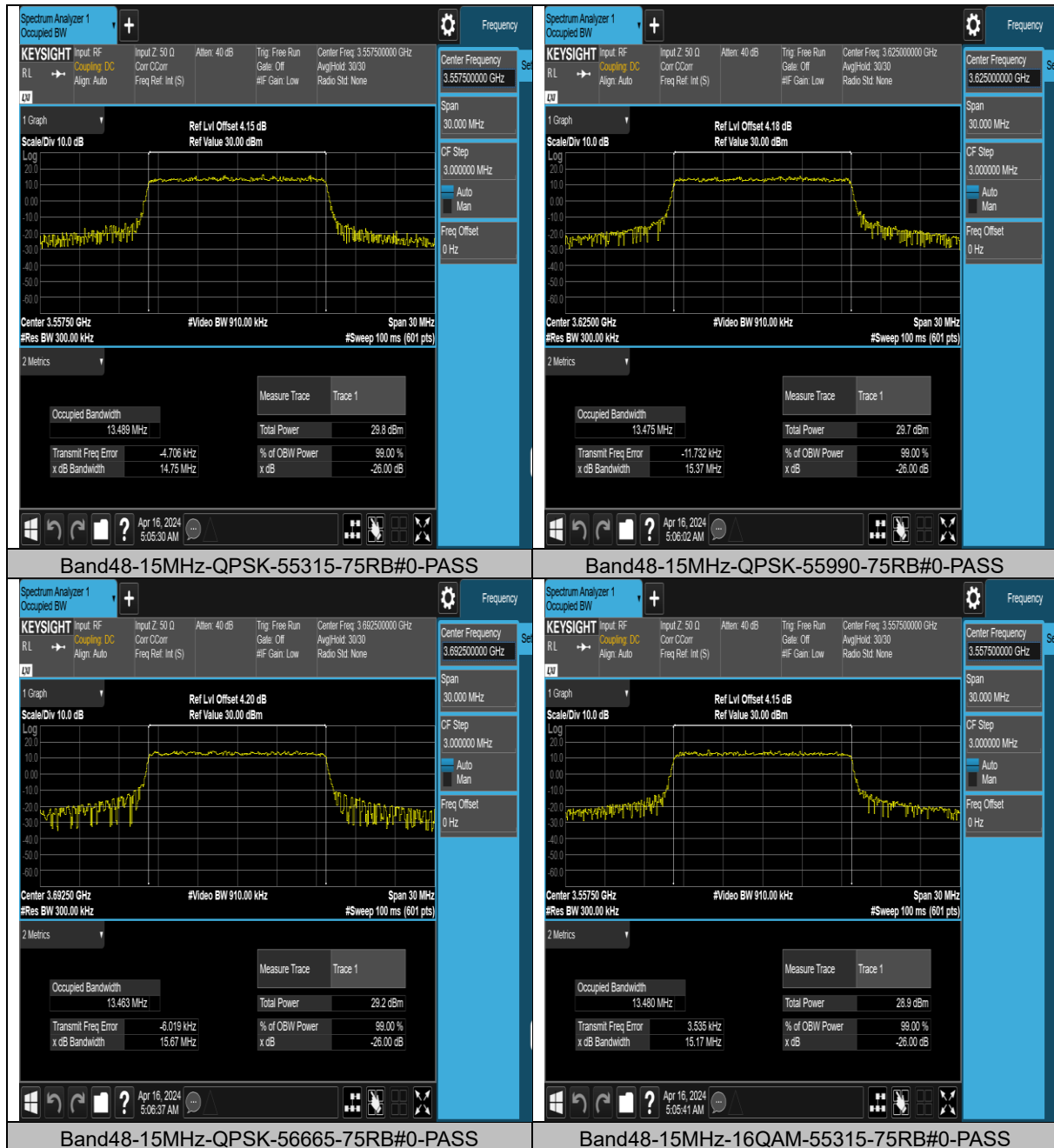
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band48	5MHz	QPSK	55265	25RB#0	4.5234	5.086	PASS
Band48	5MHz	QPSK	55990	25RB#0	4.4894	5.036	PASS
Band48	5MHz	QPSK	56715	25RB#0	4.5047	5.006	PASS
Band48	5MHz	16QAM	55265	25RB#0	4.4940	5.055	PASS
Band48	5MHz	16QAM	55990	25RB#0	4.5015	4.981	PASS
Band48	5MHz	16QAM	56715	25RB#0	4.5064	5.403	PASS
Band48	10MHz	QPSK	55290	50RB#0	8.9910	10.19	PASS
Band48	10MHz	QPSK	55990	50RB#0	8.9987	10.20	PASS
Band48	10MHz	QPSK	56690	50RB#0	8.9944	10.14	PASS
Band48	10MHz	16QAM	55290	50RB#0	8.9671	10.07	PASS
Band48	10MHz	16QAM	55990	50RB#0	8.9938	10.32	PASS
Band48	10MHz	16QAM	56690	50RB#0	9.0025	10.49	PASS
Band48	15MHz	QPSK	55315	75RB#0	13.489	14.75	PASS
Band48	15MHz	QPSK	55990	75RB#0	13.475	15.37	PASS
Band48	15MHz	QPSK	56665	75RB#0	13.463	15.67	PASS
Band48	15MHz	16QAM	55315	75RB#0	13.480	15.17	PASS
Band48	15MHz	16QAM	55990	75RB#0	13.468	14.88	PASS
Band48	15MHz	16QAM	56665	75RB#0	13.508	16.05	PASS
Band48	20MHz	QPSK	55340	100RB#0	17.969	20.32	PASS
Band48	20MHz	QPSK	55990	100RB#0	17.940	20.34	PASS
Band48	20MHz	QPSK	56640	100RB#0	17.944	19.73	PASS
Band48	20MHz	16QAM	55340	100RB#0	17.966	19.65	PASS
Band48	20MHz	16QAM	55990	100RB#0	17.950	19.92	PASS
Band48	20MHz	16QAM	56640	100RB#0	17.958	21.16	PASS

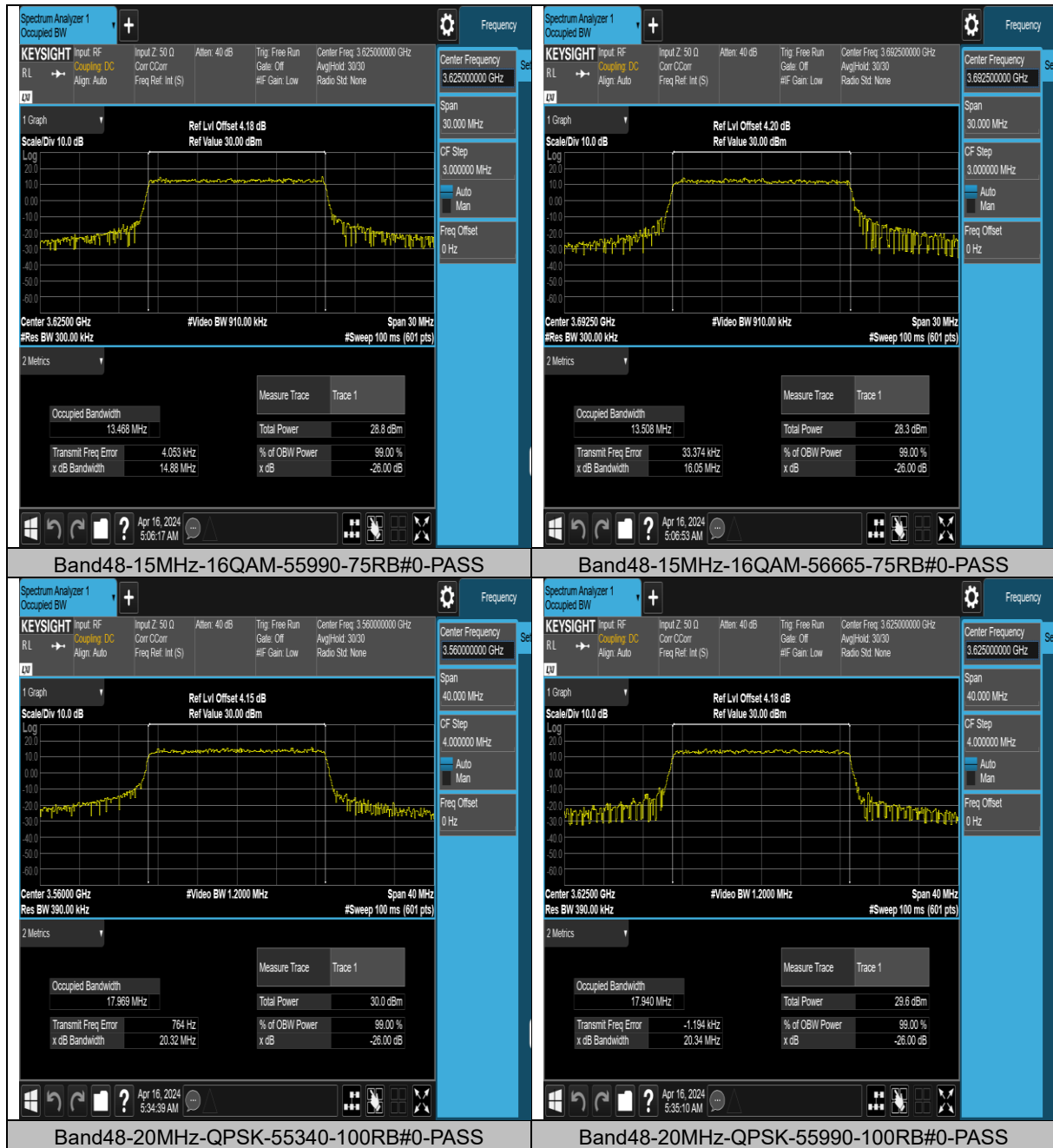
TEST GRAPHS

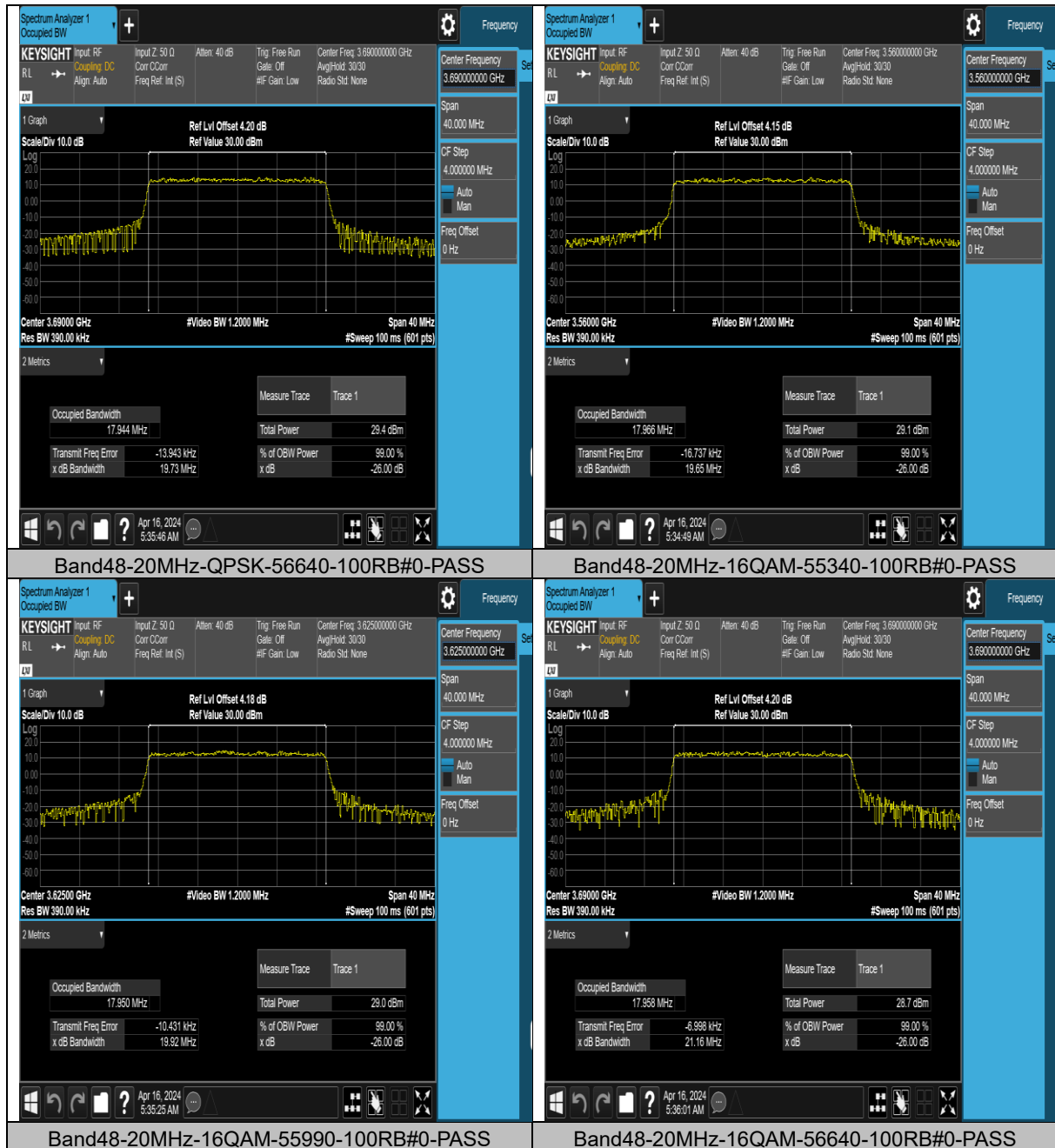












BAND EDGE TEST RESULT

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band48	5MHz	QPSK	55265	1RB#0	-24.24	PASS
Band48	5MHz	QPSK	55265	1RB#24	-53.50	PASS
Band48	5MHz	QPSK	55265	25RB#0	-35.11	PASS
Band48	5MHz	QPSK	55990	1RB#0	-53.47	PASS
Band48	5MHz	QPSK	55990	1RB#24	-53.60	PASS
Band48	5MHz	QPSK	55990	25RB#0	-38.29	PASS
Band48	5MHz	QPSK	56715	1RB#0	-52.63	PASS
Band48	5MHz	QPSK	56715	1RB#24	-24.35	PASS
Band48	5MHz	QPSK	56715	25RB#0	-52.59	PASS
Band48	5MHz	16QAM	55265	1RB#0	-53.39	PASS
Band48	5MHz	16QAM	55265	1RB#24	-53.37	PASS
Band48	5MHz	16QAM	55265	25RB#0	-35.52	PASS
Band48	5MHz	16QAM	55990	1RB#0	-53.61	PASS
Band48	5MHz	16QAM	55990	1RB#24	-53.47	PASS
Band48	5MHz	16QAM	55990	25RB#0	-53.63	PASS
Band48	5MHz	16QAM	56715	1RB#0	-52.89	PASS
Band48	5MHz	16QAM	56715	1RB#24	-52.81	PASS
Band48	5MHz	16QAM	56715	25RB#0	-52.89	PASS
Band48	10MHz	QPSK	55290	1RB#0	-53.24	PASS
Band48	10MHz	QPSK	55290	1RB#49	-53.19	PASS
Band48	10MHz	QPSK	55290	50RB#0	-45.84	PASS
Band48	10MHz	QPSK	55990	1RB#0	-53.26	PASS
Band48	10MHz	QPSK	55990	1RB#49	-53.29	PASS
Band48	10MHz	QPSK	55990	50RB#0	-53.57	PASS
Band48	10MHz	QPSK	56690	1RB#0	-53.26	PASS
Band48	10MHz	QPSK	56690	1RB#49	-52.48	PASS
Band48	10MHz	QPSK	56690	50RB#0	-49.15	PASS
Band48	10MHz	16QAM	55290	1RB#0	-53.59	PASS
Band48	10MHz	16QAM	55290	1RB#49	-53.45	PASS
Band48	10MHz	16QAM	55290	50RB#0	-46.29	PASS
Band48	10MHz	16QAM	55990	1RB#0	-53.36	PASS
Band48	10MHz	16QAM	55990	1RB#49	-53.66	PASS
Band48	10MHz	16QAM	55990	50RB#0	-53.45	PASS
Band48	10MHz	16QAM	56690	1RB#0	-53.06	PASS
Band48	10MHz	16QAM	56690	1RB#49	-52.81	PASS
Band48	10MHz	16QAM	56690	50RB#0	-50.58	PASS
Band48	15MHz	QPSK	55315	1RB#0	-53.28	PASS
Band48	15MHz	QPSK	55315	1RB#74	-53.17	PASS
Band48	15MHz	QPSK	55315	75RB#0	-40.57	PASS
Band48	15MHz	QPSK	55990	1RB#0	-53.43	PASS
Band48	15MHz	QPSK	55990	1RB#74	-53.31	PASS
Band48	15MHz	QPSK	55990	75RB#0	-53.50	PASS
Band48	15MHz	QPSK	56665	1RB#0	-53.19	PASS
Band48	15MHz	QPSK	56665	1RB#74	-52.49	PASS
Band48	15MHz	QPSK	56665	75RB#0	-45.52	PASS
Band48	15MHz	16QAM	55315	1RB#0	-53.35	PASS

Band48	15MHz	16QAM	55315	1RB#74	-53.49	PASS
Band48	15MHz	16QAM	55315	75RB#0	-41.36	PASS
Band48	15MHz	16QAM	55990	1RB#0	-53.43	PASS
Band48	15MHz	16QAM	55990	1RB#74	-53.13	PASS
Band48	15MHz	16QAM	55990	75RB#0	-53.43	PASS
Band48	15MHz	16QAM	56665	1RB#0	-53.34	PASS
Band48	15MHz	16QAM	56665	1RB#74	-52.76	PASS
Band48	15MHz	16QAM	56665	75RB#0	-45.86	PASS
Band48	20MHz	QPSK	55340	1RB#0	-53.06	PASS
Band48	20MHz	QPSK	55340	1RB#99	-53.72	PASS
Band48	20MHz	QPSK	55340	100RB#0	-42.73	PASS
Band48	20MHz	QPSK	55990	1RB#0	-53.02	PASS
Band48	20MHz	QPSK	55990	1RB#99	-53.35	PASS
Band48	20MHz	QPSK	55990	100RB#0	-53.54	PASS
Band48	20MHz	QPSK	56640	1RB#0	-53.45	PASS
Band48	20MHz	QPSK	56640	1RB#99	-52.59	PASS
Band48	20MHz	QPSK	56640	100RB#0	-47.77	PASS
Band48	20MHz	16QAM	55340	1RB#0	-53.55	PASS
Band48	20MHz	16QAM	55340	1RB#99	-53.57	PASS
Band48	20MHz	16QAM	55340	100RB#0	-42.16	PASS
Band48	20MHz	16QAM	55990	1RB#0	-53.36	PASS
Band48	20MHz	16QAM	55990	1RB#99	-53.29	PASS
Band48	20MHz	16QAM	55990	100RB#0	-53.29	PASS
Band48	20MHz	16QAM	56640	1RB#0	-53.13	PASS
Band48	20MHz	16QAM	56640	1RB#99	-52.89	PASS
Band48	20MHz	16QAM	56640	100RB#0	-47.54	PASS

TEST GRAPHS

