

**Antenna 2:**

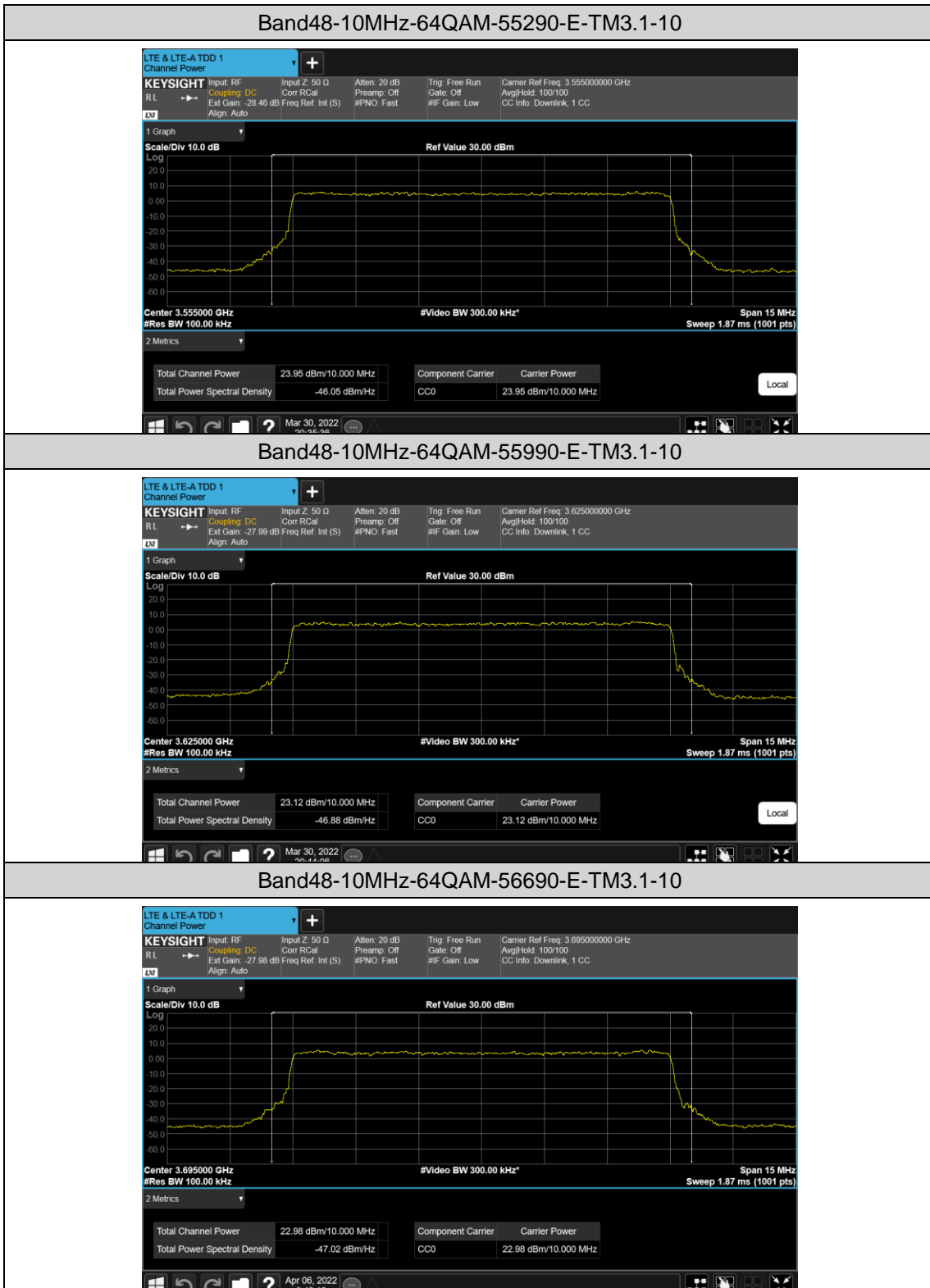
**Appendix A: Conducted Output Power**

**Test Result**

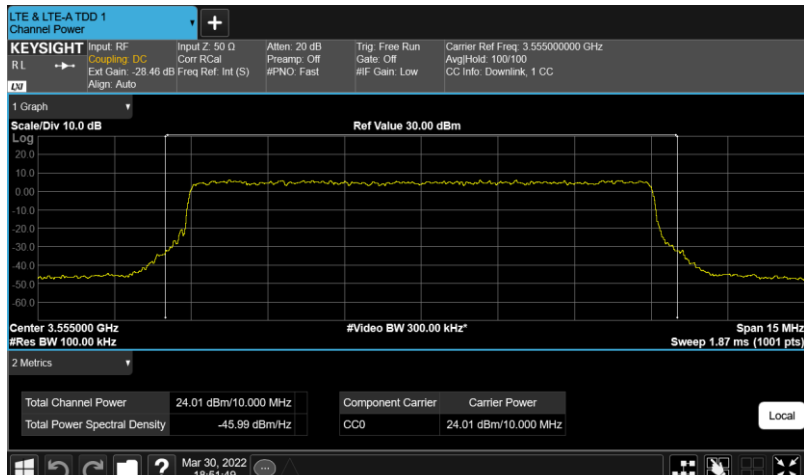
Band	Bandwidth	Modulation	Channel	Mode	Power (dBm/10MHz)
Band48	10MHz	64QAM	55290	E-TM3.1	23.95
Band48	10MHz	64QAM	55990	E-TM3.1	23.12
Band48	10MHz	64QAM	56690	E-TM3.1	22.98
Band48	10MHz	QPSK	55290	E-TM1.1	24.01
Band48	10MHz	QPSK	55990	E-TM1.1	23.25
Band48	10MHz	QPSK	56690	E-TM1.1	22.78
Band48	20MHz	64QAM	55340	E-TM3.1	21.22
Band48	20MHz	64QAM	55990	E-TM3.1	21.23
Band48	20MHz	64QAM	56640	E-TM3.1	20.81
Band48	20MHz	QPSK	55340	E-TM1.1	21.02
Band48	20MHz	QPSK	55990	E-TM1.1	20.72
Band48	20MHz	QPSK	56640	E-TM1.1	20.59

Band	Bandwidth	Modulation	Channel	Mode	Power (dBm/20MHz)
Band48	20MHz	64QAM	55340	E-TM3.1	23.90
Band48	20MHz	64QAM	55990	E-TM3.1	23.72
Band48	20MHz	64QAM	56640	E-TM3.1	23.49
Band48	20MHz	QPSK	55340	E-TM1.1	23.99
Band48	20MHz	QPSK	55990	E-TM1.1	23.37
Band48	20MHz	QPSK	56640	E-TM1.1	23.41

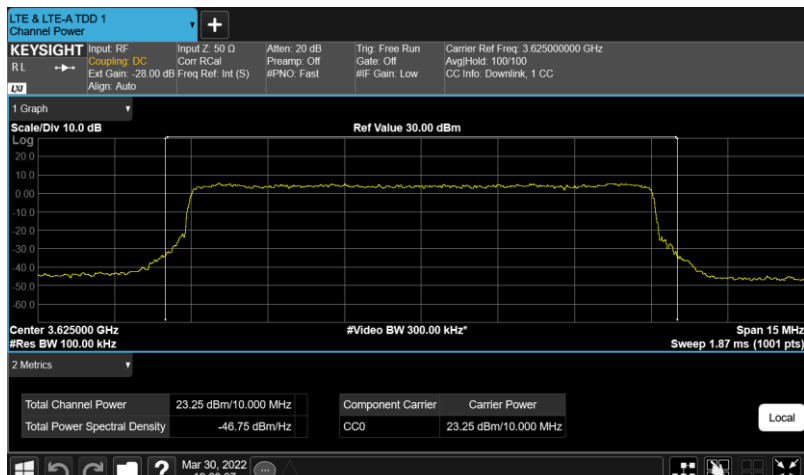
Test Graphs



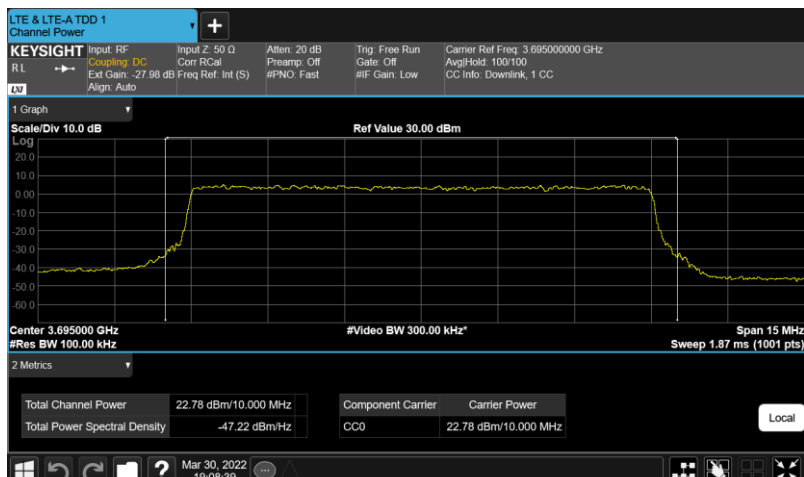
Band48-10MHz-QPSK-55290-E-TM1.1-10



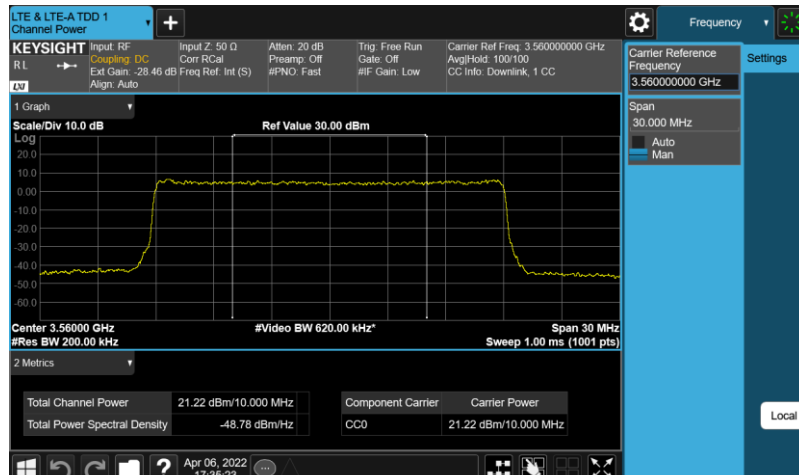
Band48-10MHz-QPSK-55990-E-TM1.1-10



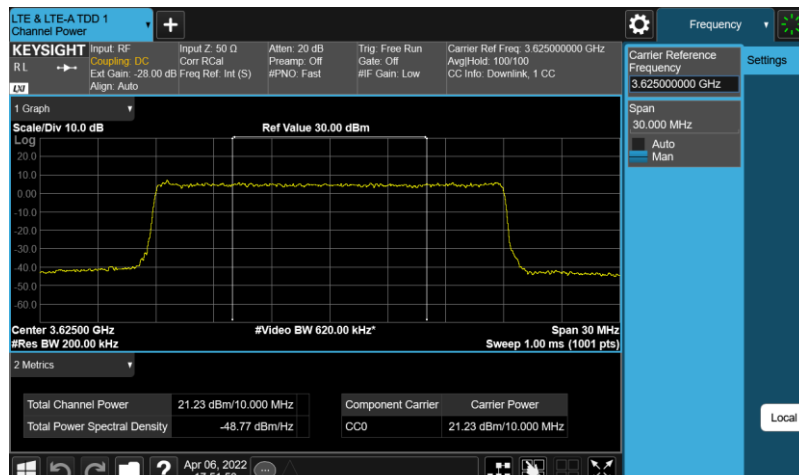
Band48-10MHz-QPSK-56690-E-TM1.1-10



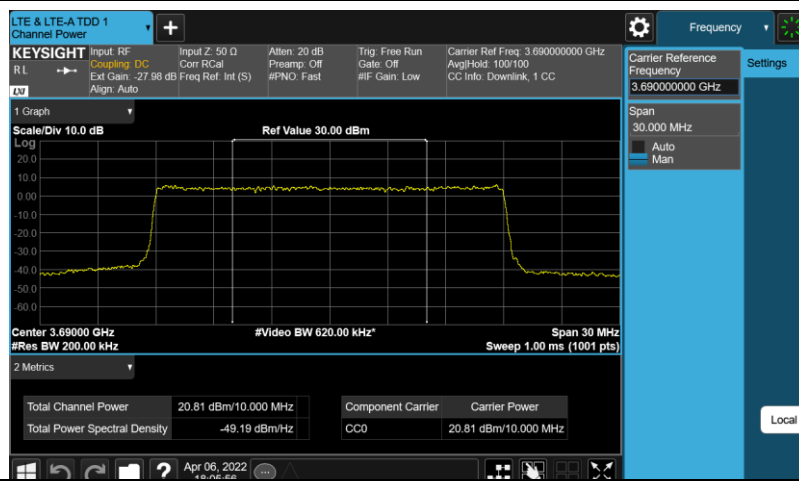
Band48-20MHz-64QAM-55340-E-TM3.1-10



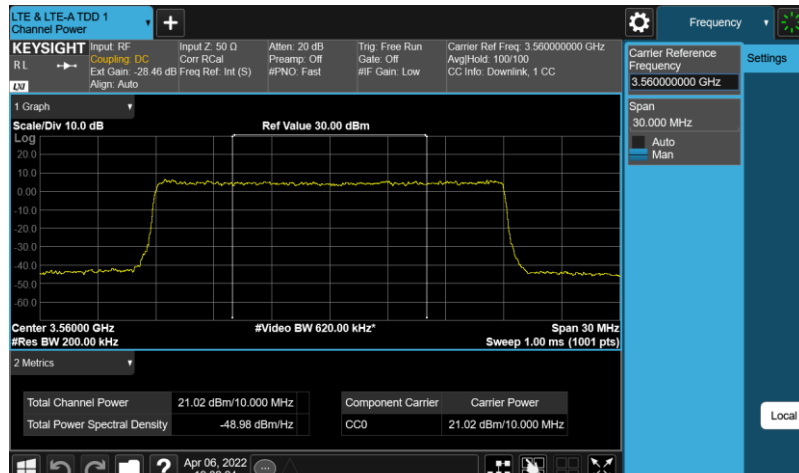
Band48-20MHz-64QAM-55990-E-TM3.1-10



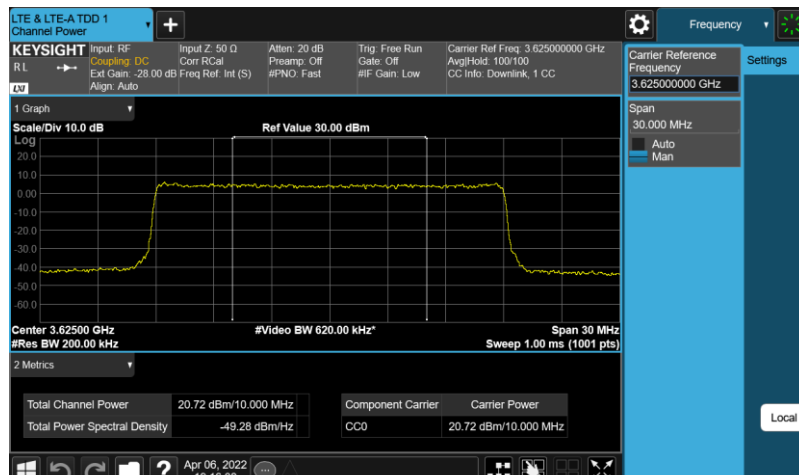
Band48-20MHz-64QAM-56640-E-TM3.1-10



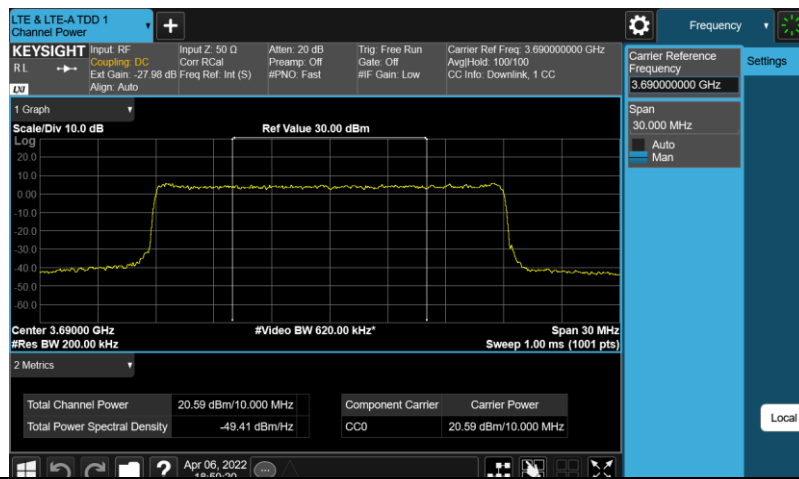
Band48-20MHz-QPSK-55340-E-TM1.1-10



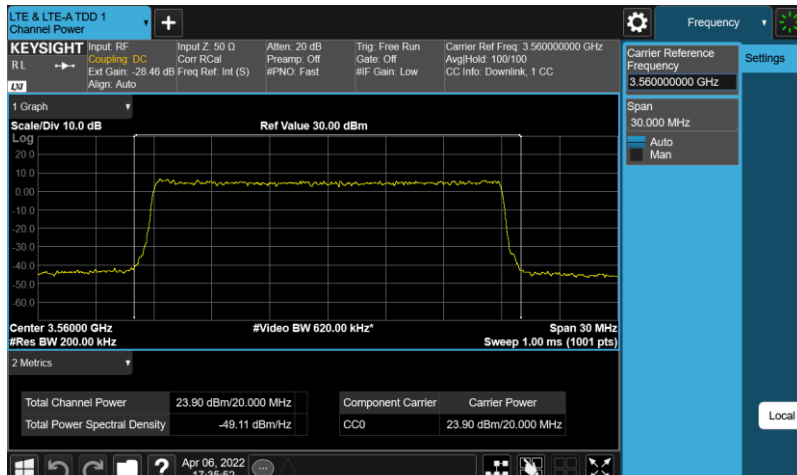
Band48-20MHz-QPSK-55990-E-TM1.1-10



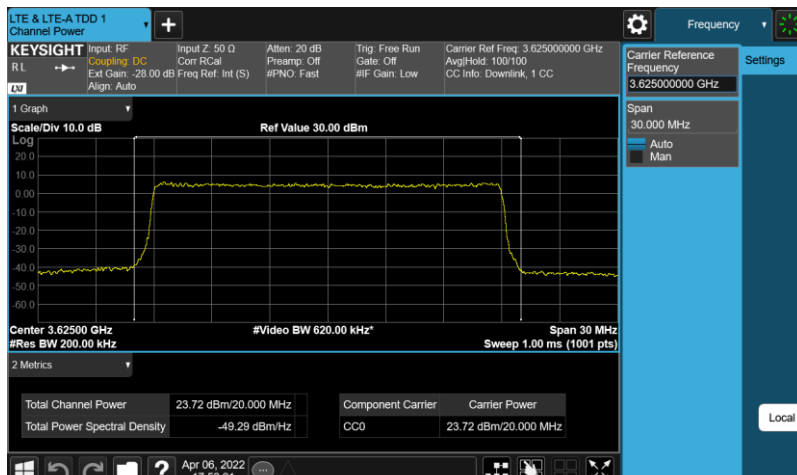
Band48-20MHz-QPSK-56640-E-TM1.1-10



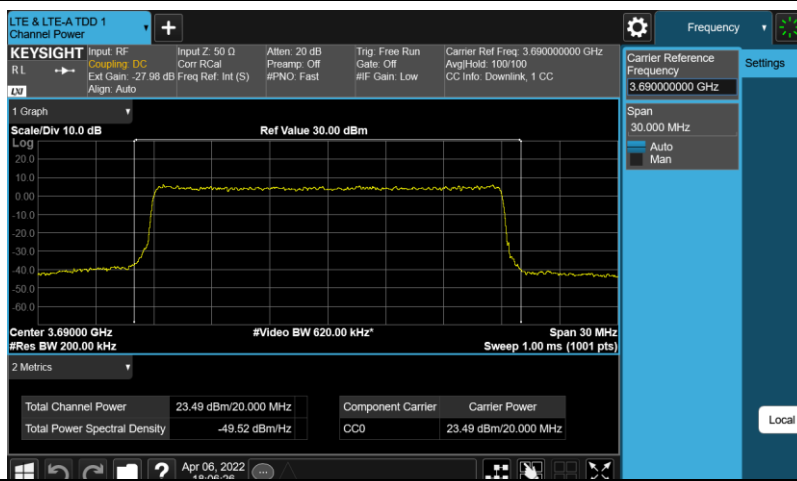
Band48-20MHz-64QAM-55340-E-TM3.1-20



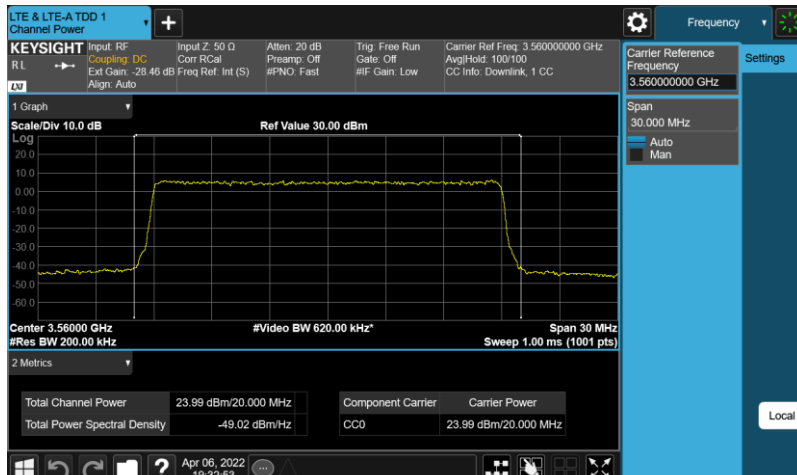
Band48-20MHz-64QAM-55990-E-TM3.1-20



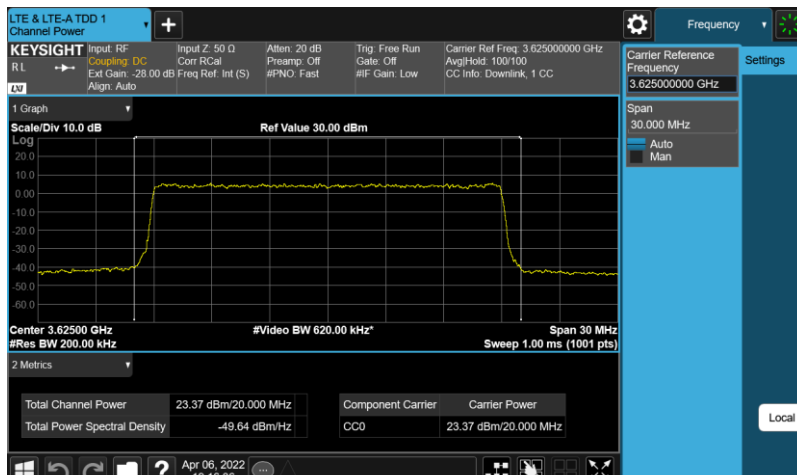
Band48-20MHz-64QAM-56640-E-TM3.1-20



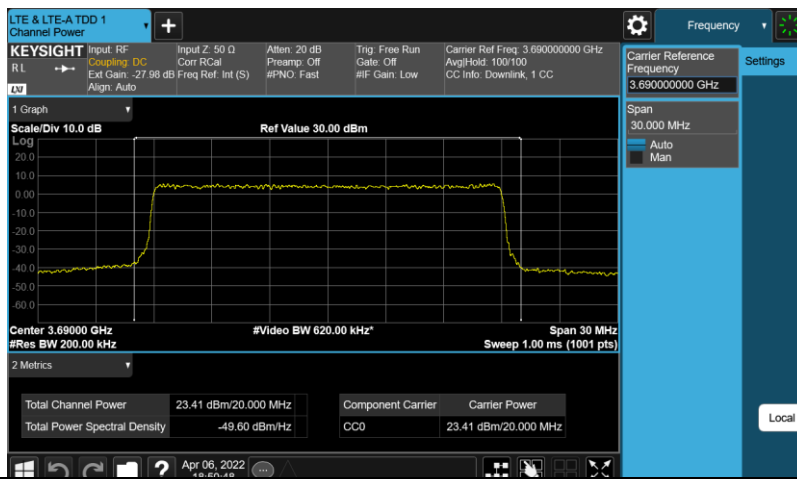
Band48-20MHz-QPSK-55340-E-TM1.1-20



Band48-20MHz-QPSK-55990-E-TM1.1-20



Band48-20MHz-QPSK-56640-E-TM1.1-20



## Appendix B: Power Spectral Density

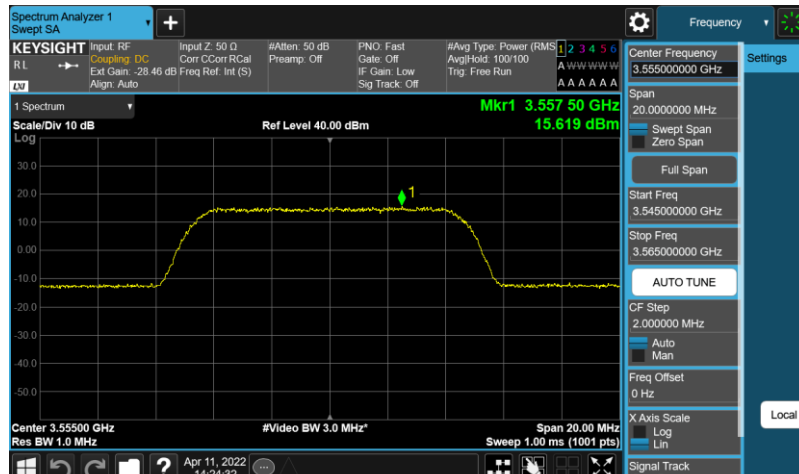
### Test Result

Band	Bandwidth	Modulation	Channel	Mode	PSD (dBm/MHz)
Band48	10MHz	64QAM	55290	E-TM3.1	15.619
Band48	10MHz	64QAM	55990	E-TM3.1	16.109
Band48	10MHz	64QAM	56690	E-TM3.1	15.191
Band48	10MHz	QPSK	55290	E-TM1.1	15.420
Band48	10MHz	QPSK	55990	E-TM1.1	15.308
Band48	10MHz	QPSK	56690	E-TM1.1	15.364
Band48	20MHz	64QAM	55340	E-TM3.1	12.494
Band48	20MHz	64QAM	55990	E-TM3.1	12.885
Band48	20MHz	64QAM	56640	E-TM3.1	13.751
Band48	20MHz	QPSK	55340	E-TM1.1	12.707
Band48	20MHz	QPSK	55990	E-TM1.1	12.194
Band48	20MHz	QPSK	56640	E-TM1.1	13.222

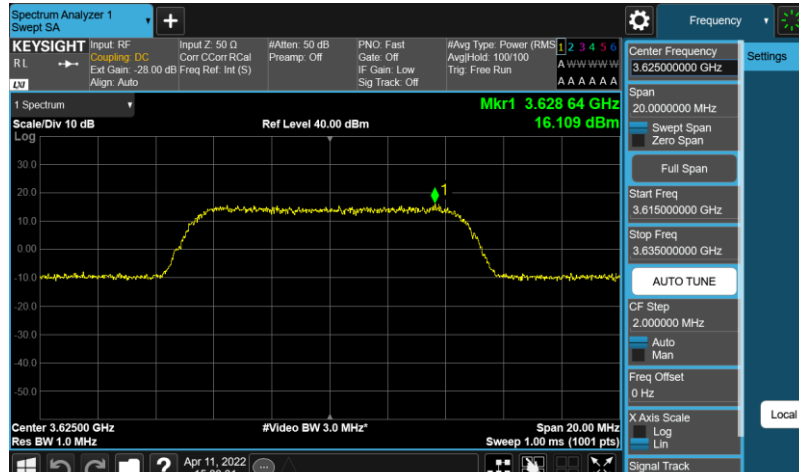


Test Graphs

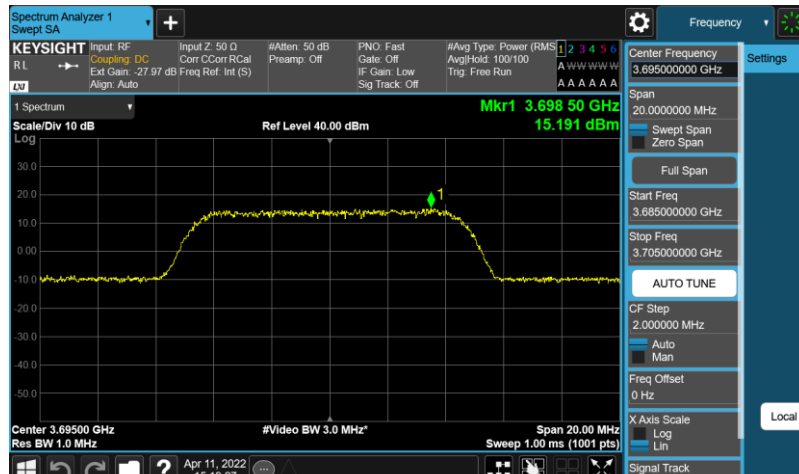
Band48-10MHz-64QAM-55290-E-TM3.1



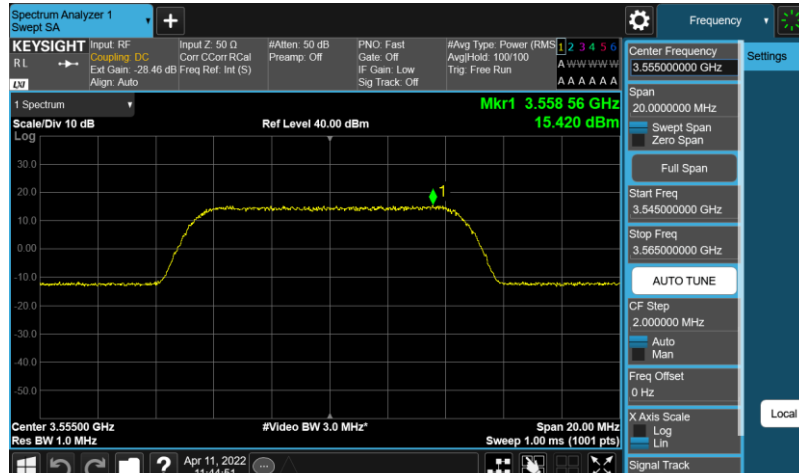
Band48-10MHz-64QAM-55990-E-TM3.1



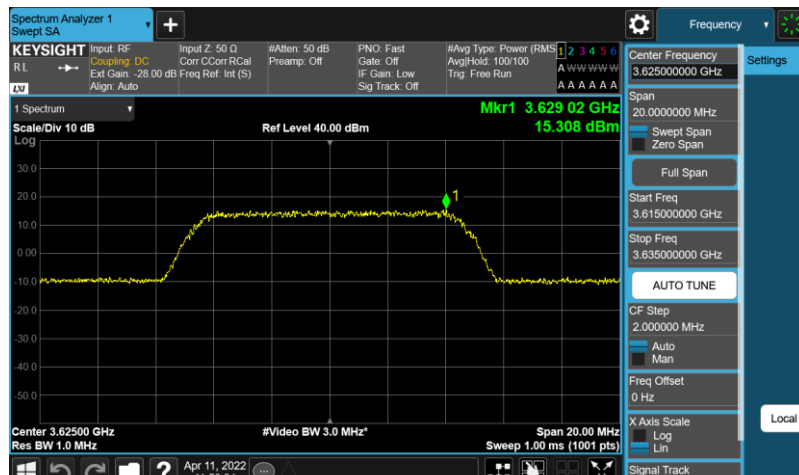
Band48-10MHz-64QAM-56690-E-TM3.1



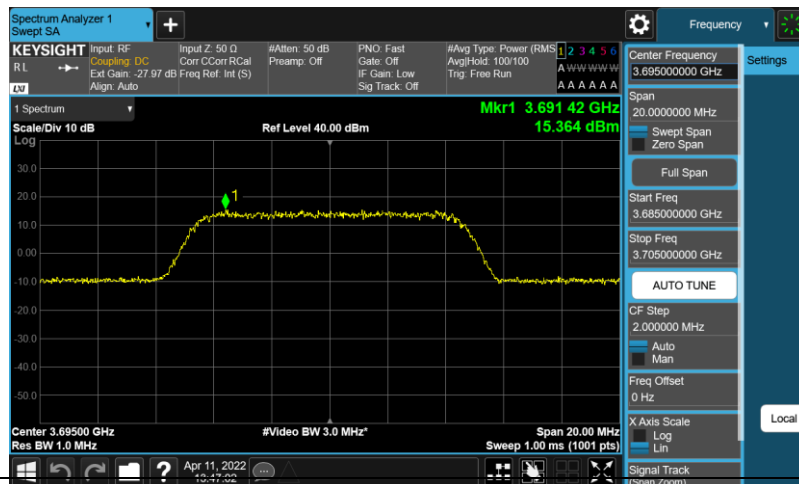
Band48-10MHz-QPSK-55290-E-TM1.1



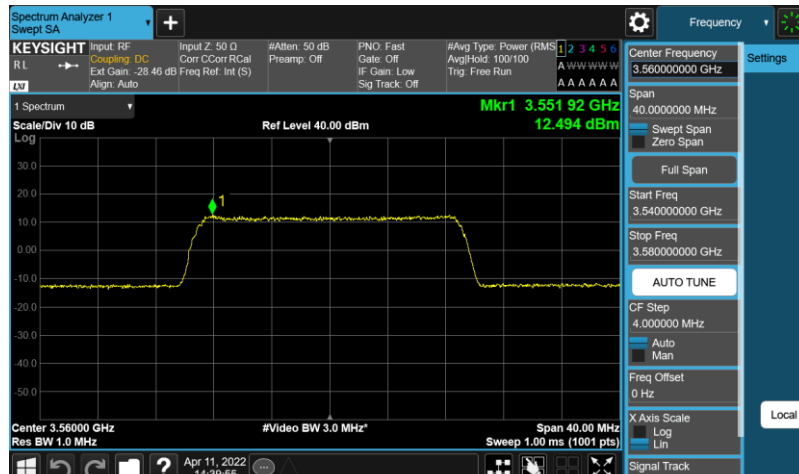
Band48-10MHz-QPSK-55990-E-TM1.1



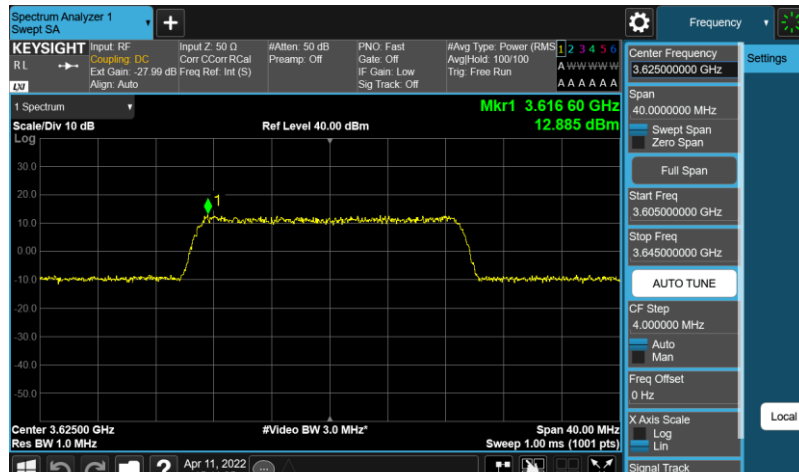
Band48-10MHz-QPSK-56690-E-TM1.1



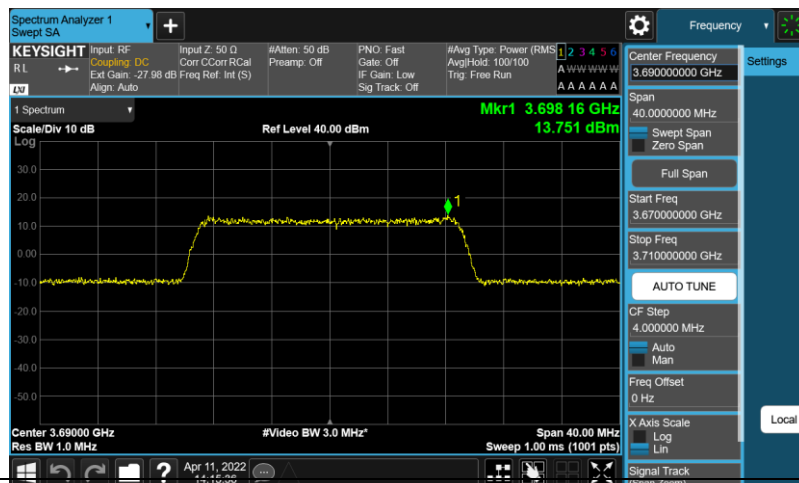
Band48-20MHz-64QAM-55340-E-TM3.1



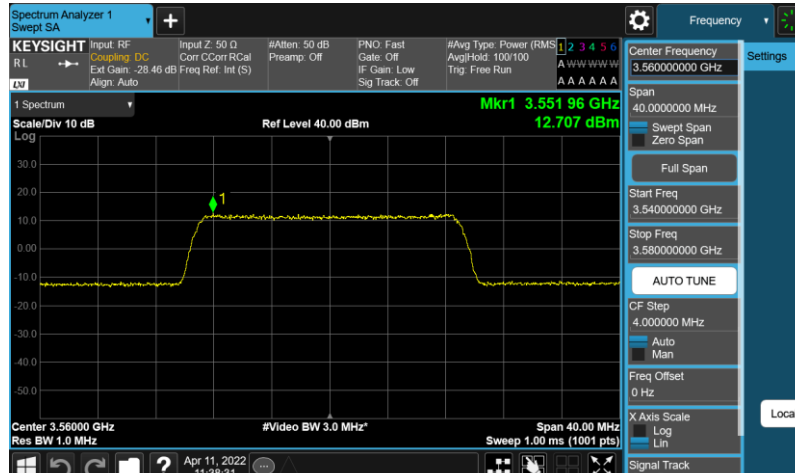
Band48-20MHz-64QAM-55990-E-TM3.1



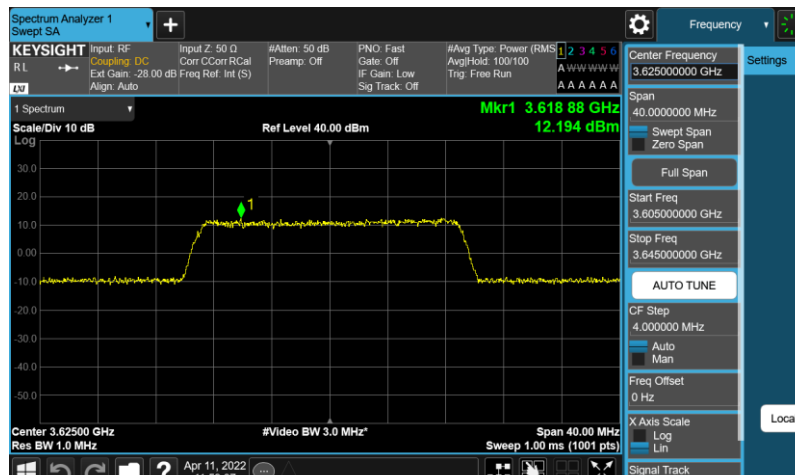
Band48-20MHz-64QAM-56640-E-TM3.1



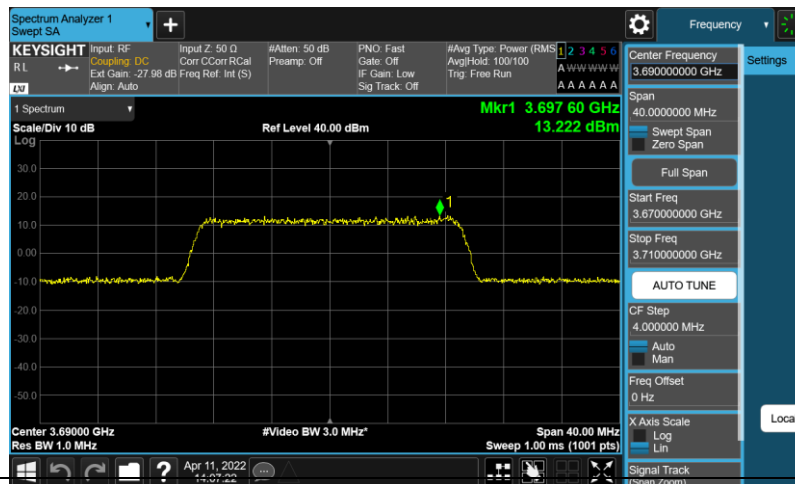
Band48-20MHz-QPSK-55340-E-TM1.1



Band48-20MHz-QPSK-55990-E-TM1.1



Band48-20MHz-QPSK-56640-E-TM1.1



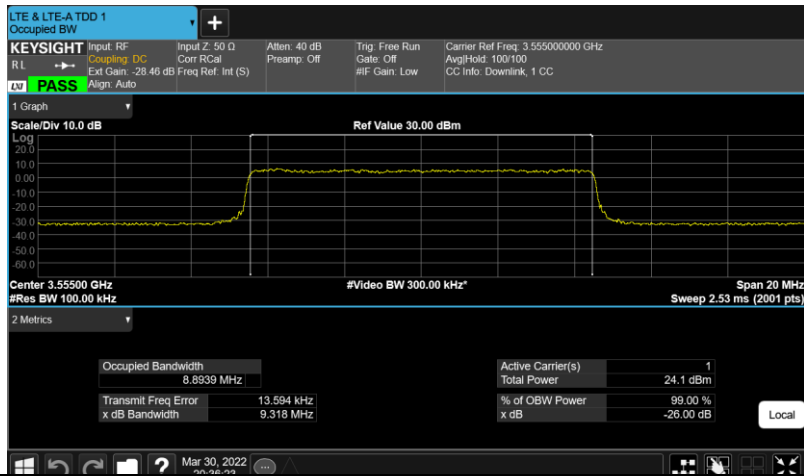
## Appendix C: 26dB Bandwidth and Occupied Bandwidth

### Test Result

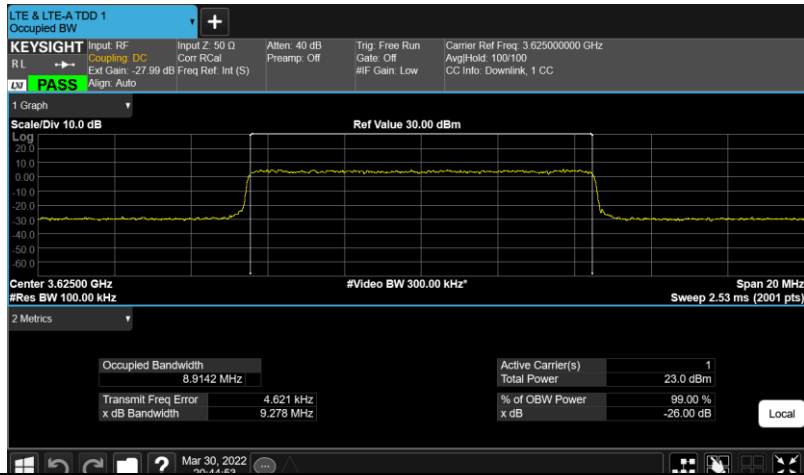
Band	Bandwidth	Modulation	Channel	Mode	99%(MHz)	EBW(MHz)
Band48	10MHz	64QAM	55290	E-TM3.1	8.8939	9.318
Band48	10MHz	64QAM	55990	E-TM3.1	8.9142	9.278
Band48	10MHz	64QAM	56690	E-TM3.1	8.9171	9.335
Band48	10MHz	QPSK	55290	E-TM1.1	8.9114	9.369
Band48	10MHz	QPSK	55990	E-TM1.1	8.9228	9.299
Band48	10MHz	QPSK	56690	E-TM1.1	8.9252	9.289
Band48	20MHz	64QAM	55340	E-TM3.1	17.807	18.45
Band48	20MHz	64QAM	55990	E-TM3.1	17.830	18.49
Band48	20MHz	64QAM	56640	E-TM3.1	17.824	18.47
Band48	20MHz	QPSK	55340	E-TM1.1	17.796	18.45
Band48	20MHz	QPSK	55990	E-TM1.1	17.820	18.46
Band48	20MHz	QPSK	56640	E-TM1.1	17.822	18.48

Test Graphs

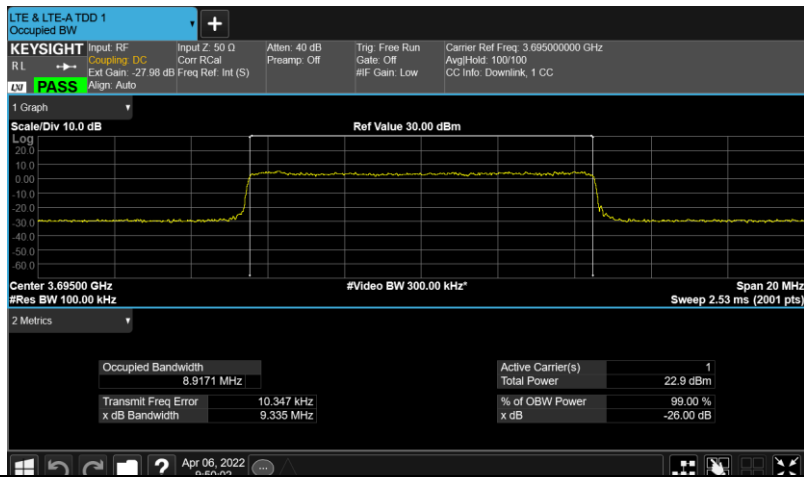
Band48-10MHz-64QAM-55290-E-TM3.1



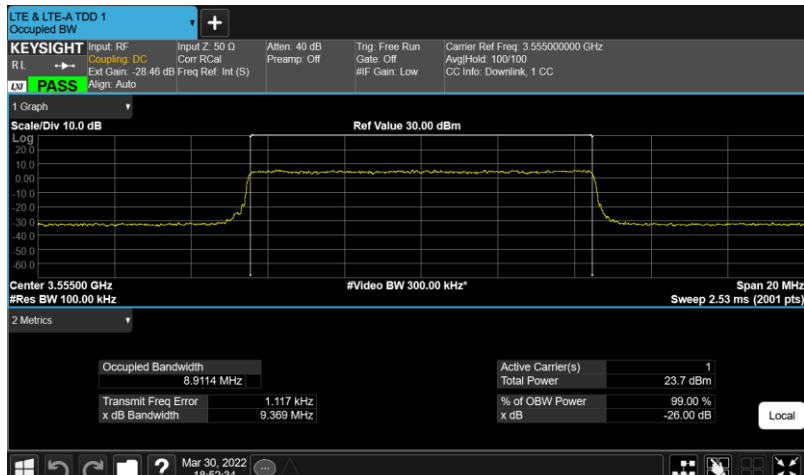
Band48-10MHz-64QAM-55990-E-TM3.1



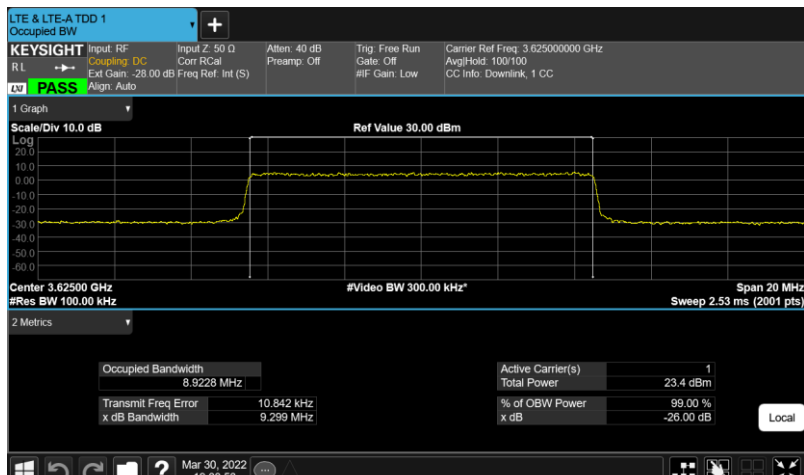
Band48-10MHz-64QAM-56690-E-TM3.1



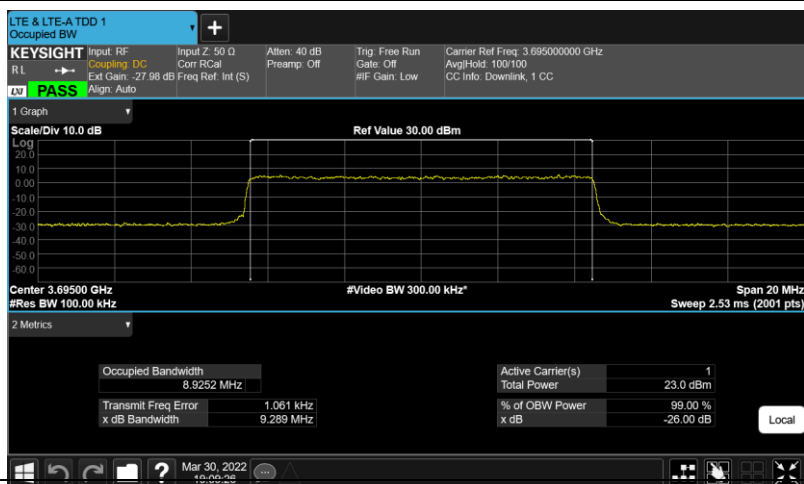
Band48-10MHz-QPSK-55290-E-TM1.1



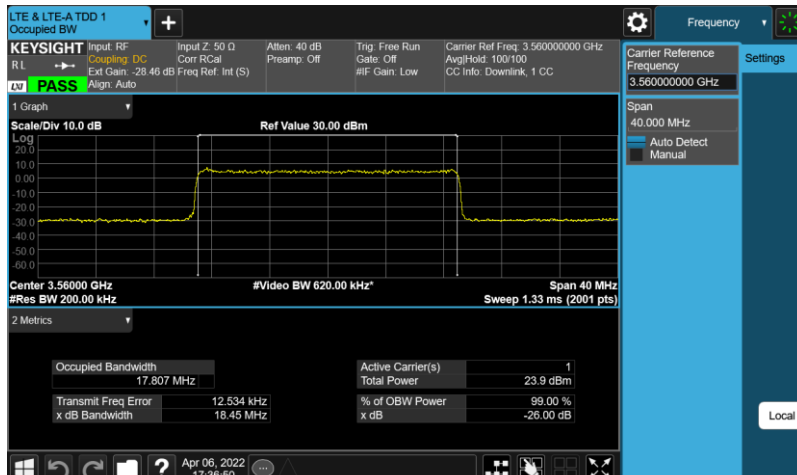
Band48-10MHz-QPSK-55990-E-TM1.1



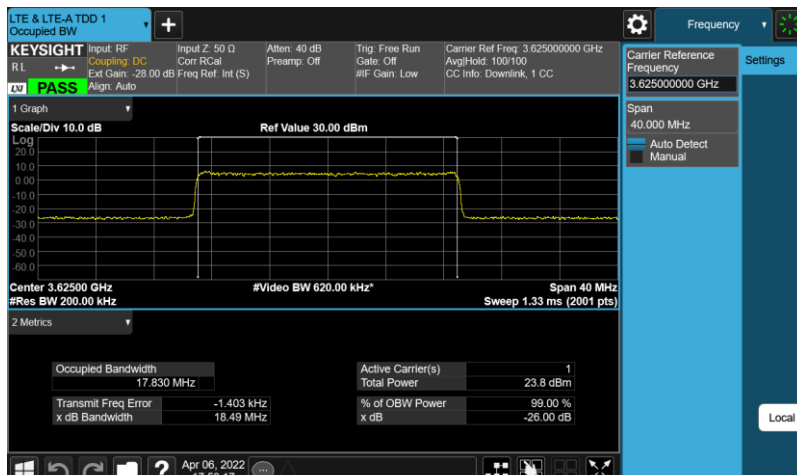
Band48-10MHz-QPSK-56690-E-TM1.1



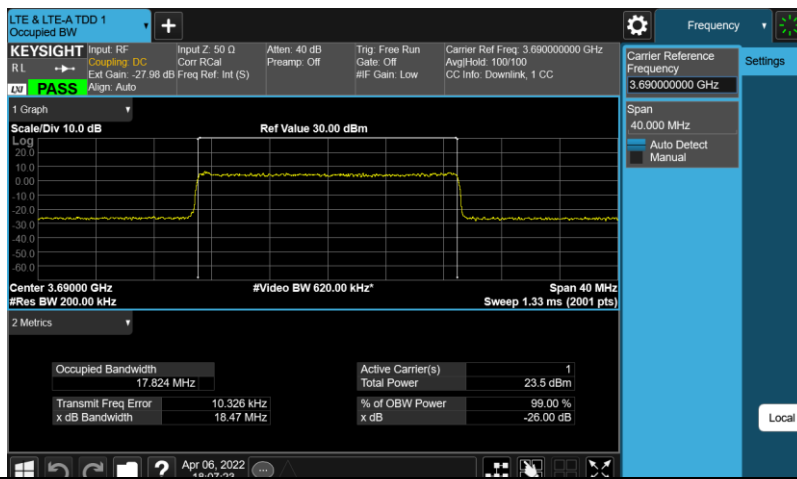
Band48-20MHz-64QAM-55340-E-TM3.1



Band48-20MHz-64QAM-55990-E-TM3.1

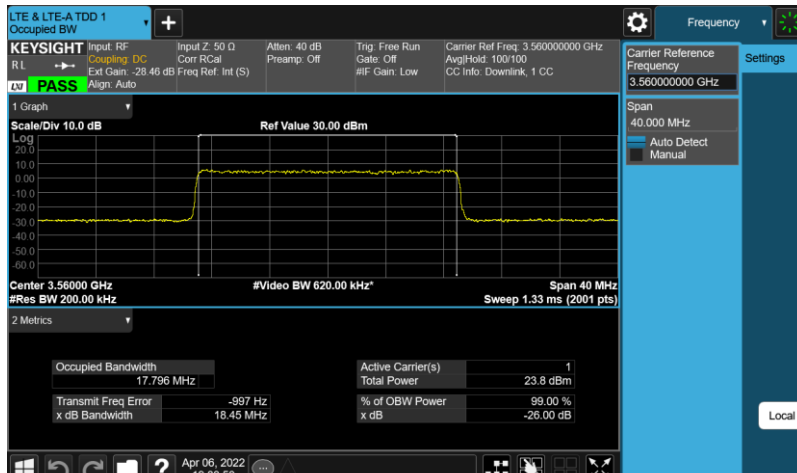


Band48-20MHz-64QAM-56640-E-TM3.1

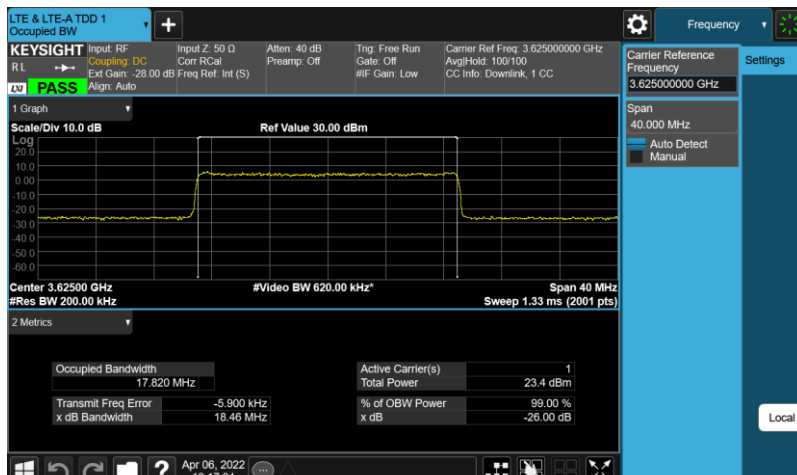




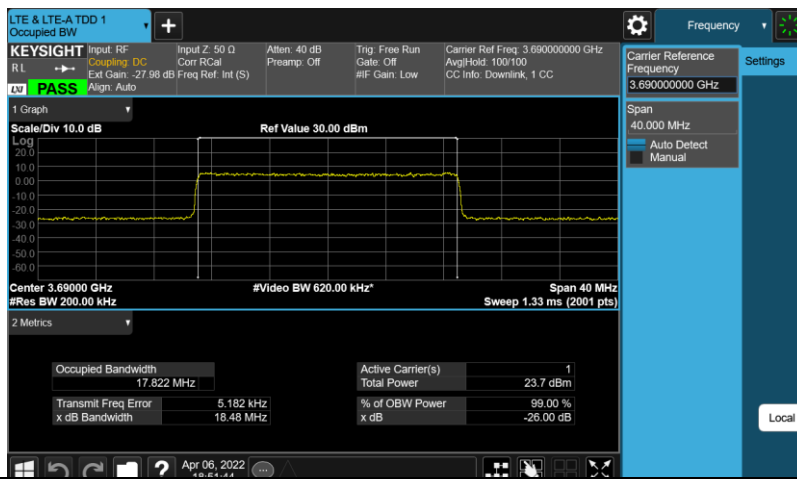
Band48-20MHz-QPSK-55340-E-TM1.1



Band48-20MHz-QPSK-55990-E-TM1.1



Band48-20MHz-QPSK-56640-E-TM1.1



## Appendix D: Frequency Stability

### Test Result

Voltage measurement									
Band	Bandwidth	Modulation	Channel	Mode	Voltage [Vac]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)
Band48	10MHz	64QAM	55990	E-TM3.1	102	25	78	0.022	within the authorized bands
Band48	10MHz	64QAM	55990	E-TM3.1	120	25	69	0.019	
Band48	10MHz	64QAM	55990	E-TM3.1	138	25	77	0.021	
Band48	10MHz	QPSK	55990	E-TM1.1	102	25	74	0.020	
Band48	10MHz	QPSK	55990	E-TM1.1	120	25	75	0.021	
Band48	10MHz	QPSK	55990	E-TM1.1	138	25	73	0.020	
Band48	20MHz	64QAM	55990	E-TM3.1	102	25	71	0.020	
Band48	20MHz	64QAM	55990	E-TM3.1	120	25	72	0.020	
Band48	20MHz	64QAM	55990	E-TM3.1	138	25	70	0.019	
Band48	20MHz	QPSK	55990	E-TM1.1	102	25	69	0.019	
Band48	20MHz	QPSK	55990	E-TM1.1	120	25	72	0.020	
Band48	20MHz	QPSK	55990	E-TM1.1	138	25	75	0.021	

Temperature measurement									
Band	Bandwidth	Modulation	Channel	Mode	Voltage [Vac]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)
Band48	10MHz	64QAM	55990	E-TM3.1	120	-30	72	0.020	within the authorized bands
Band48	10MHz	64QAM	55990	E-TM3.1	120	-20	74	0.020	
Band48	10MHz	64QAM	55990	E-TM3.1	120	-10	71	0.020	
Band48	10MHz	64QAM	55990	E-TM3.1	120	0	66	0.018	
Band48	10MHz	64QAM	55990	E-TM3.1	120	10	65	0.018	
Band48	10MHz	64QAM	55990	E-TM3.1	120	20	64	0.018	
Band48	10MHz	64QAM	55990	E-TM3.1	120	30	69	0.019	
Band48	10MHz	64QAM	55990	E-TM3.1	120	40	63	0.017	
Band48	10MHz	64QAM	55990	E-TM3.1	120	50	65	0.018	
Band48	10MHz	QPSK	55990	E-TM1.1	120	-30	72	0.020	
Band48	10MHz	QPSK	55990	E-TM1.1	120	-20	74	0.020	
Band48	10MHz	QPSK	55990	E-TM1.1	120	-10	69	0.019	
Band48	10MHz	QPSK	55990	E-TM1.1	120	0	64	0.018	
Band48	10MHz	QPSK	55990	E-TM1.1	120	10	58	0.016	
Band48	10MHz	QPSK	55990	E-TM1.1	120	20	64	0.018	
Band48	10MHz	QPSK	55990	E-TM1.1	120	30	69	0.019	

Band48	10MHz	QPSK	55990	E-TM1.1	120	40	61	0.017
Band48	10MHz	QPSK	55990	E-TM1.1	120	50	63	0.017
Band48	20MHz	64QAM	55990	E-TM3.1	120	-30	69	0.019
Band48	20MHz	64QAM	55990	E-TM3.1	120	-20	61	0.017
Band48	20MHz	64QAM	55990	E-TM3.1	120	-10	67	0.018
Band48	20MHz	64QAM	55990	E-TM3.1	120	0	65	0.018
Band48	20MHz	64QAM	55990	E-TM3.1	120	10	72	0.020
Band48	20MHz	64QAM	55990	E-TM3.1	120	20	73	0.020
Band48	20MHz	64QAM	55990	E-TM3.1	120	30	71	0.020
Band48	20MHz	64QAM	55990	E-TM3.1	120	40	59	0.016
Band48	20MHz	64QAM	55990	E-TM3.1	120	50	57	0.016
Band48	20MHz	QPSK	55990	E-TM1.1	120	-30	63	0.017
Band48	20MHz	QPSK	55990	E-TM1.1	120	-20	59	0.016
Band48	20MHz	QPSK	55990	E-TM1.1	120	-10	58	0.016
Band48	20MHz	QPSK	55990	E-TM1.1	120	0	62	0.017
Band48	20MHz	QPSK	55990	E-TM1.1	120	10	68	0.019
Band48	20MHz	QPSK	55990	E-TM1.1	120	20	67	0.018
Band48	20MHz	QPSK	55990	E-TM1.1	120	30	67	0.018
Band48	20MHz	QPSK	55990	E-TM1.1	120	40	65	0.018
Band48	20MHz	QPSK	55990	E-TM1.1	120	50	66	0.018

## Appendix E: Peak-to-Average Ratio(CCDF)

### Test Result

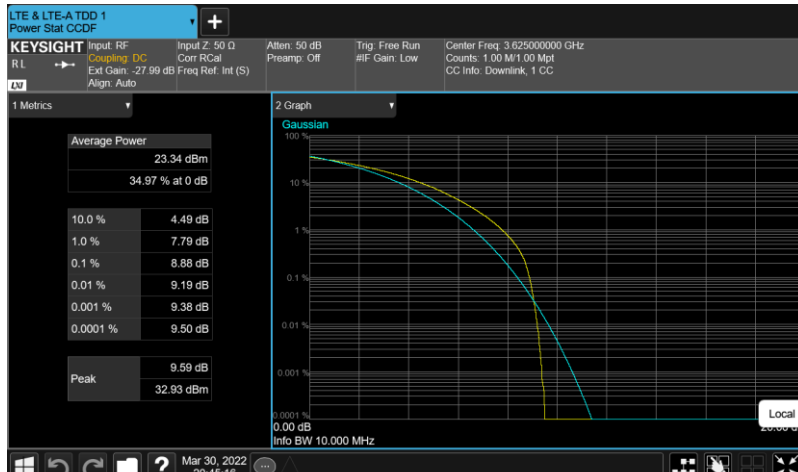
Band	Bandwidth	Modulation	Channel	Mode	Result(dBm)
Band48	10MHz	64QAM	55290	E-TM3.1	8.97
Band48	10MHz	64QAM	55990	E-TM3.1	8.88
Band48	10MHz	64QAM	56690	E-TM3.1	8.86
Band48	10MHz	QPSK	55290	E-TM1.1	9.03
Band48	10MHz	QPSK	55990	E-TM1.1	8.93
Band48	10MHz	QPSK	56690	E-TM1.1	8.89
Band48	20MHz	64QAM	55340	E-TM3.1	8.90
Band48	20MHz	64QAM	55990	E-TM3.1	9.04
Band48	20MHz	64QAM	56640	E-TM3.1	8.96
Band48	20MHz	QPSK	55340	E-TM1.1	8.66
Band48	20MHz	QPSK	55990	E-TM1.1	8.82
Band48	20MHz	QPSK	56640	E-TM1.1	8.72

Test Graphs

Band48-10MHz-64QAM-55290-E-TM3.1



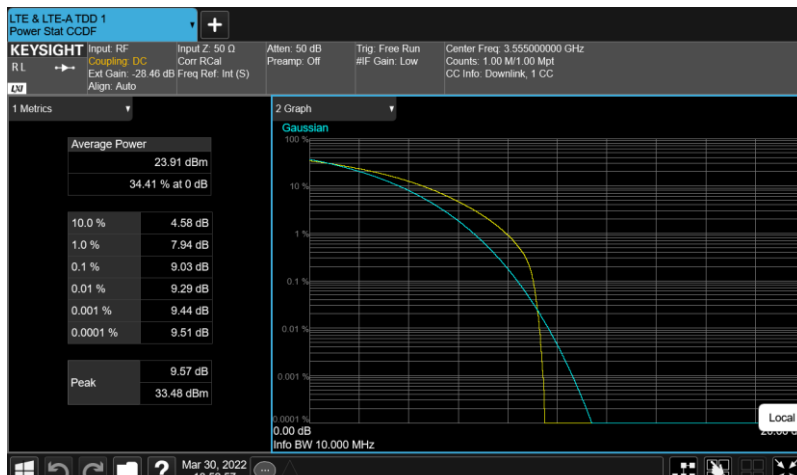
Band48-10MHz-64QAM-55990-E-TM3.1



Band48-10MHz-64QAM-56690-E-TM3.1



Band48-10MHz-QPSK-55290-E-TM1.1



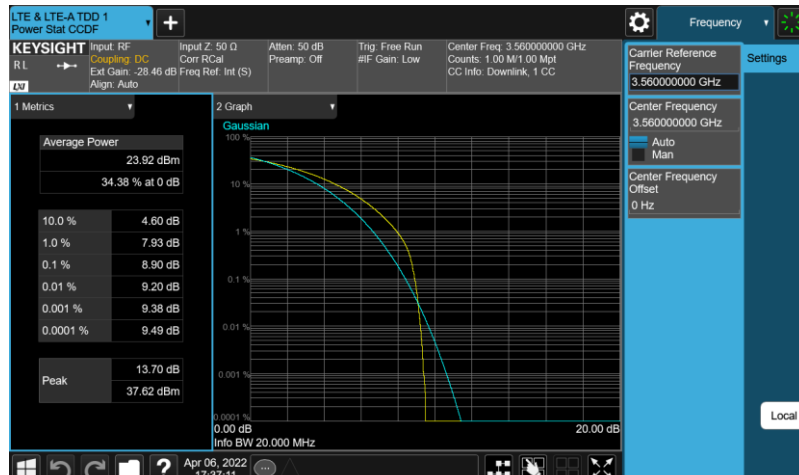
Band48-10MHz-QPSK-55990-E-TM1.1



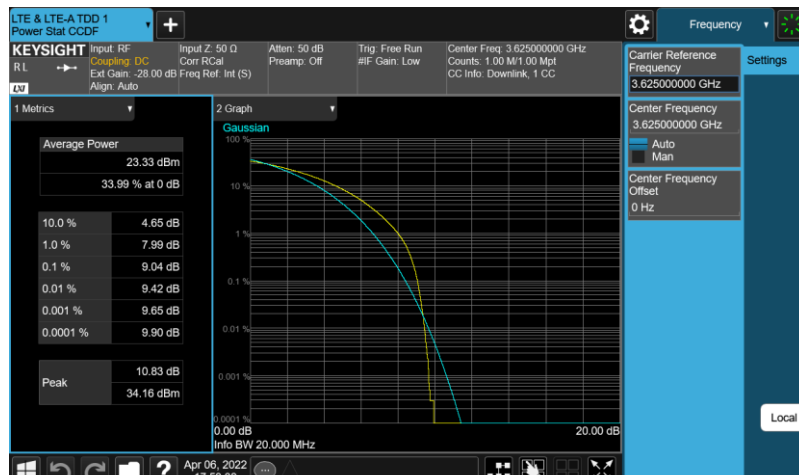
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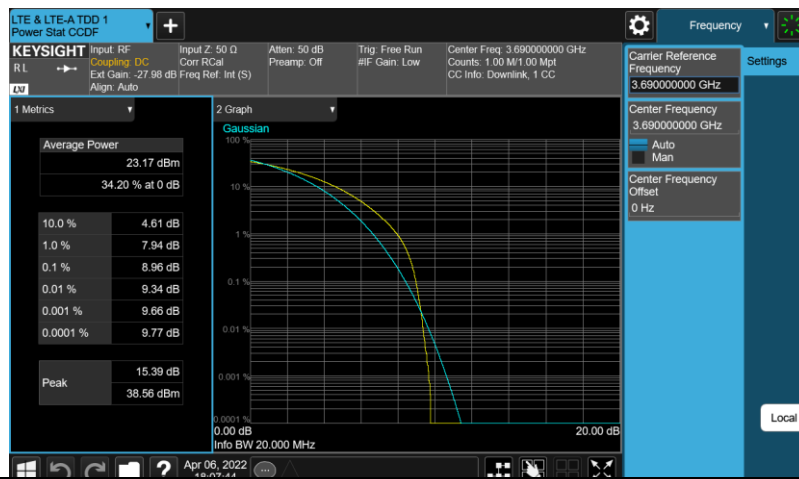
Band48-20MHz-64QAM-55340-E-TM3.1



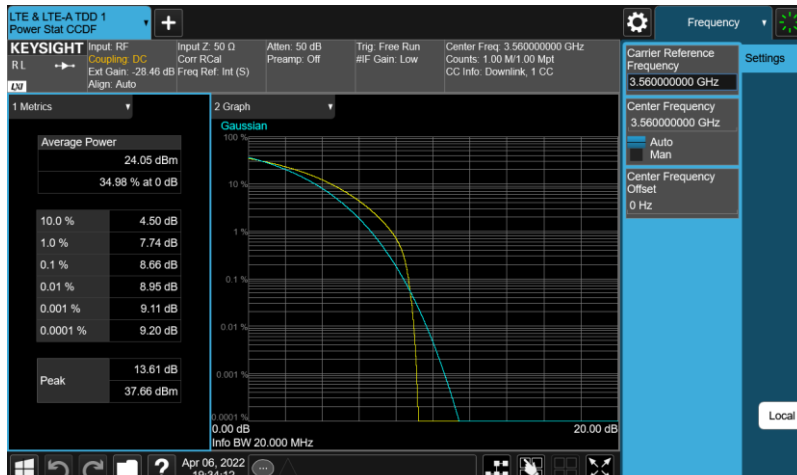
Band48-20MHz-64QAM-55990-E-TM3.1



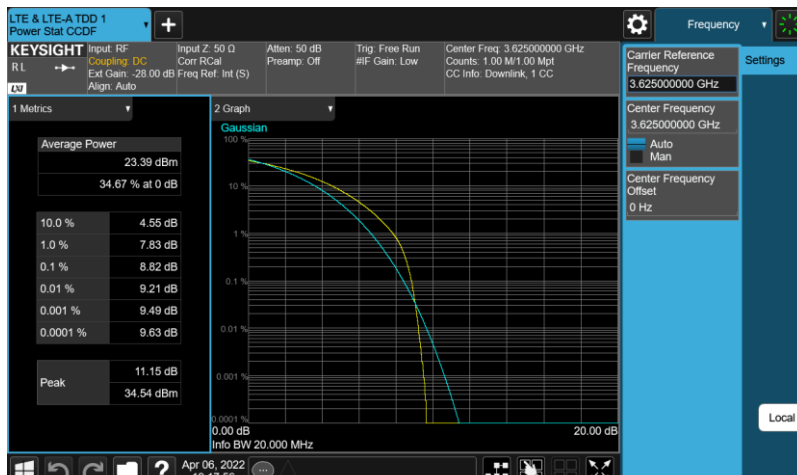
Band48-20MHz-64QAM-56640-E-TM3.1



Band48-20MHz-QPSK-55340-E-TM1.1



Band48-20MHz-QPSK-55990-E-TM1.1



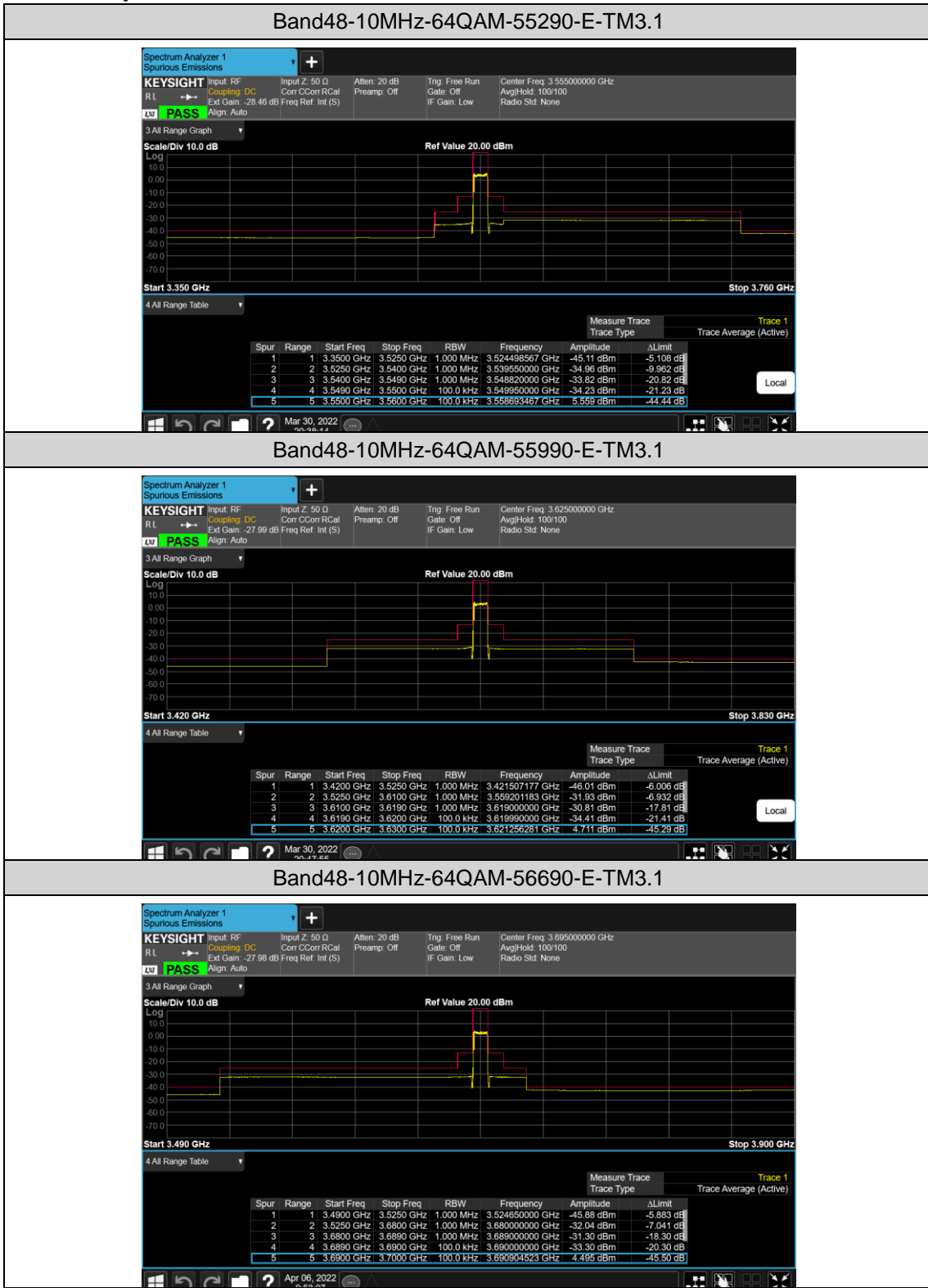
Band48-20MHz-QPSK-56640-E-TM1.1



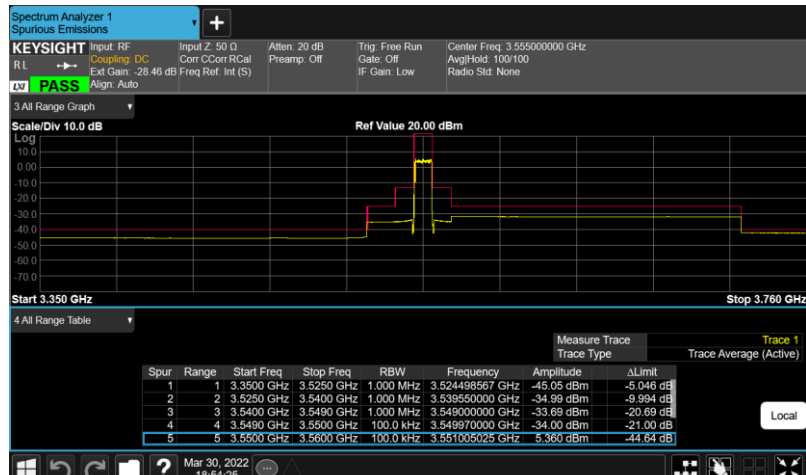


## Appendix F: Emission Mask

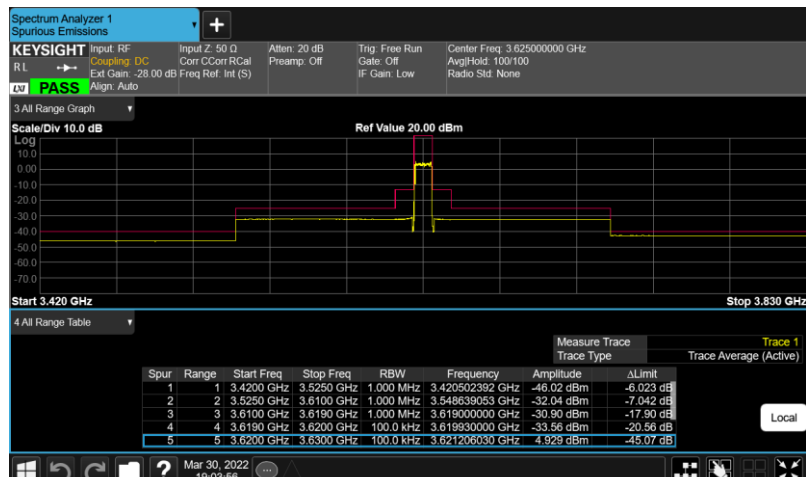
### Test Graphs



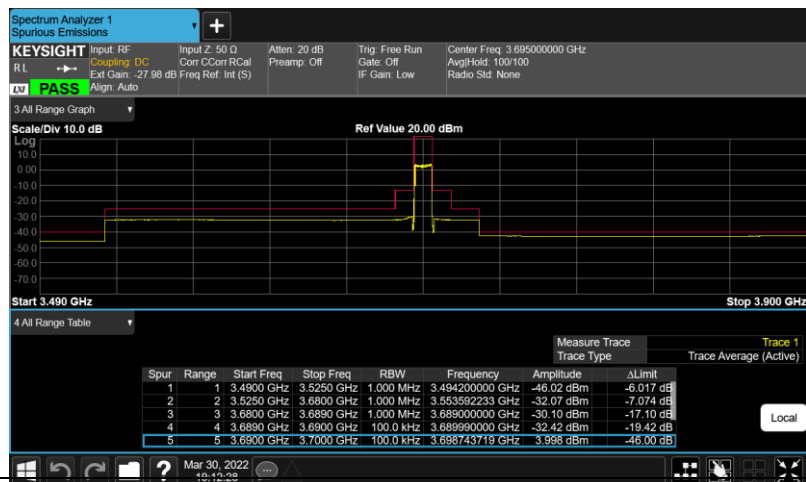
Band48-10MHz-QPSK-55290-E-TM1.1



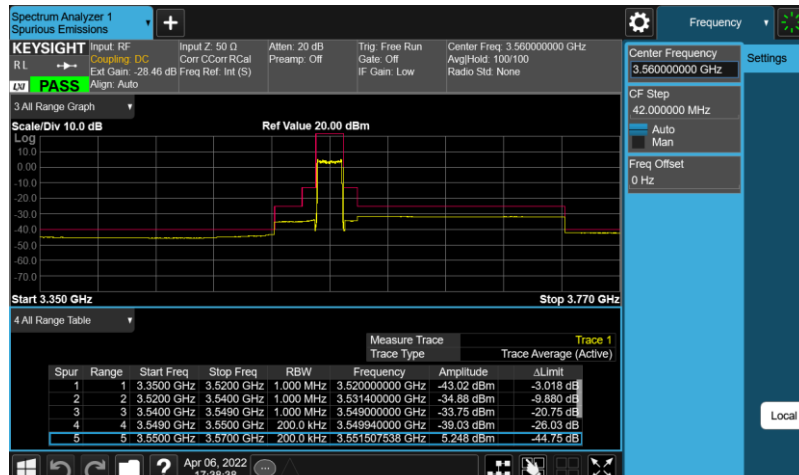
Band48-10MHz-QPSK-55990-E-TM1.1



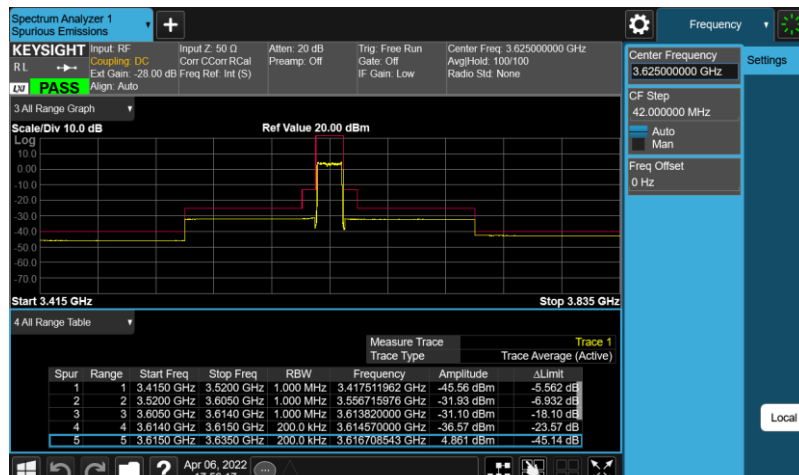
Band48-10MHz-QPSK-56690-E-TM1.1



Band48-20MHz-64QAM-55340-E-TM3.1



Band48-20MHz-64QAM-55990-E-TM3.1



Band48-20MHz-64QAM-56640-E-TM3.1

