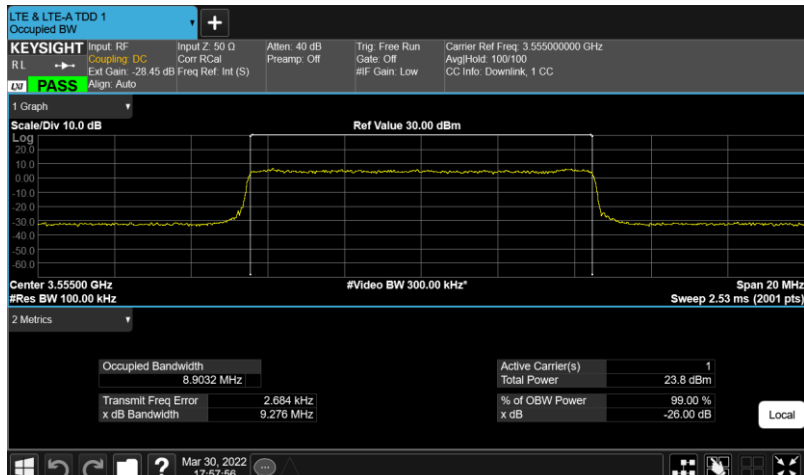
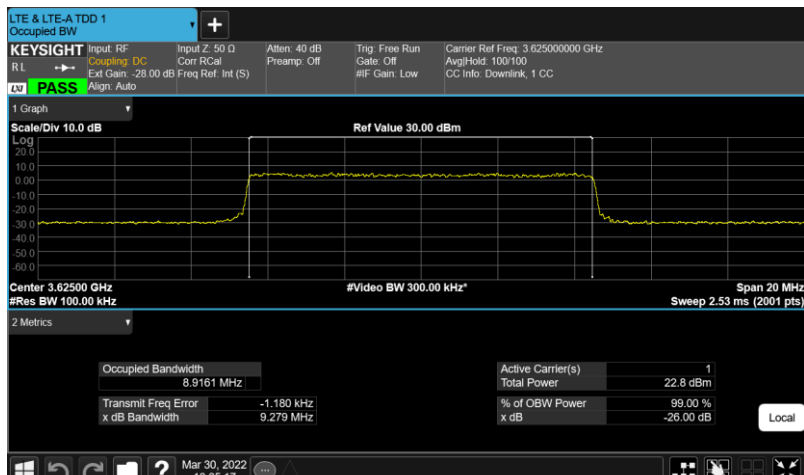


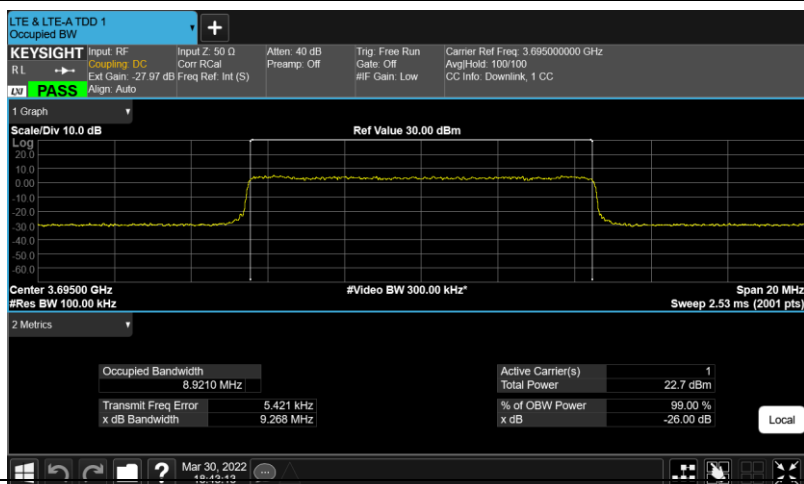
Band48-10MHz-QPSK-55290-E-TM1.1



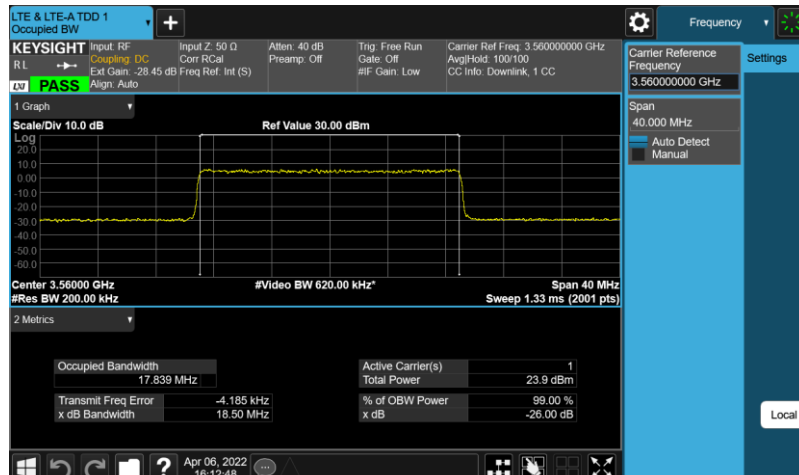
Band48-10MHz-QPSK-55990-E-TM1.1



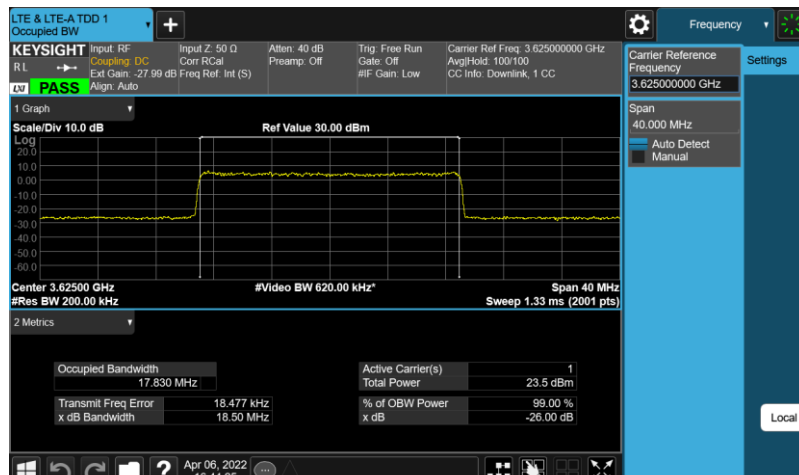
Band48-10MHz-QPSK-56690-E-TM1.1



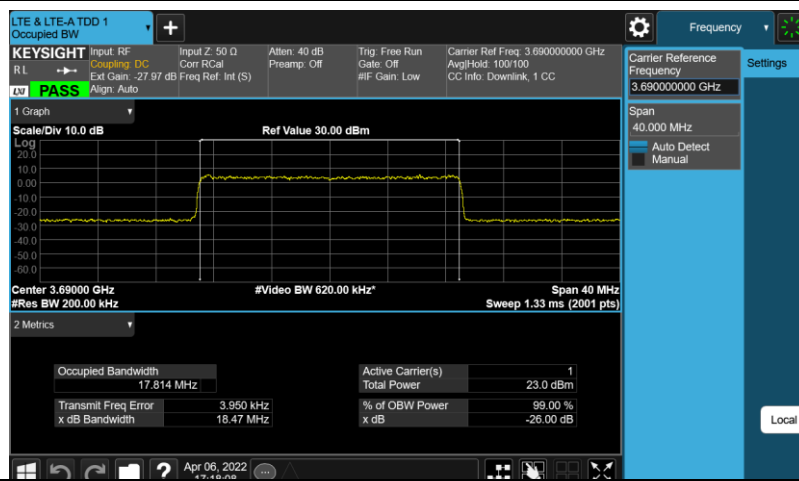
Band48-20MHz-64QAM-55340-E-TM3.1



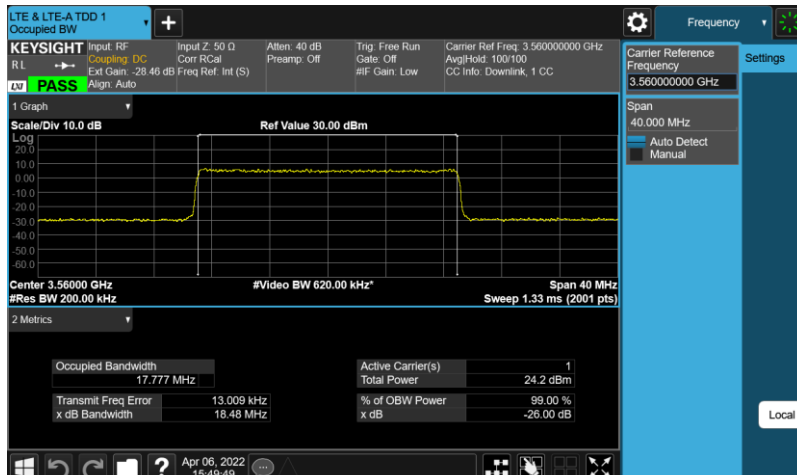
Band48-20MHz-64QAM-55990-E-TM3.1



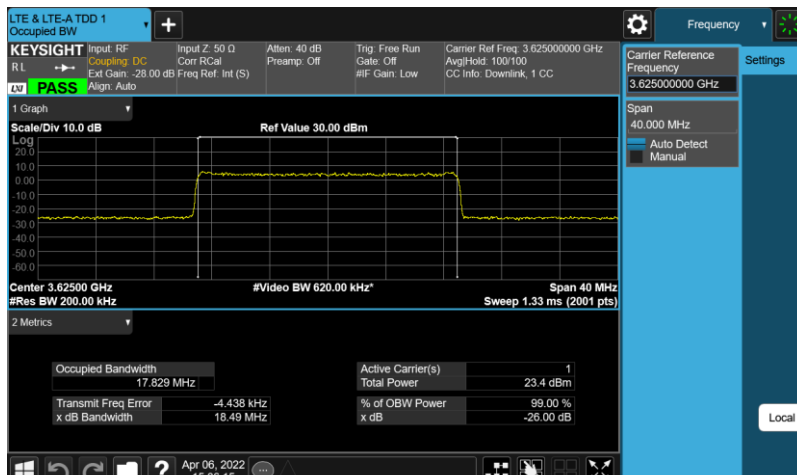
Band48-20MHz-64QAM-56640-E-TM3.1



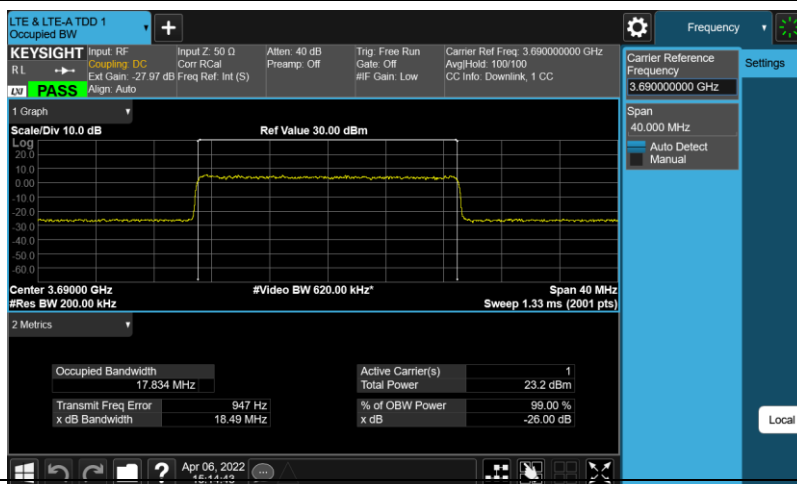
Band48-20MHz-QPSK-55340-E-TM1.1



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	80	0.022	within the authorized bands
Band48	10MHz	64QAM	55990	E-TM3.1	120	25	78	0.022	
Band48	10MHz	64QAM	55990	E-TM3.1	138	25	69	0.019	
Band48	10MHz	QPSK	55990	E-TM1.1	102	25	70	0.019	
Band48	10MHz	QPSK	55990	E-TM1.1	120	25	71	0.020	
Band48	10MHz	QPSK	55990	E-TM1.1	138	25	66	0.018	
Band48	20MHz	64QAM	55990	E-TM3.1	102	25	78	0.022	
Band48	20MHz	64QAM	55990	E-TM3.1	120	25	71	0.020	
Band48	20MHz	64QAM	55990	E-TM3.1	138	25	66	0.018	
Band48	20MHz	QPSK	55990	E-TM1.1	102	25	94	0.026	
Band48	20MHz	QPSK	55990	E-TM1.1	120	25	73	0.020	
Band48	20MHz	QPSK	55990	E-TM1.1	138	25	65	0.018	

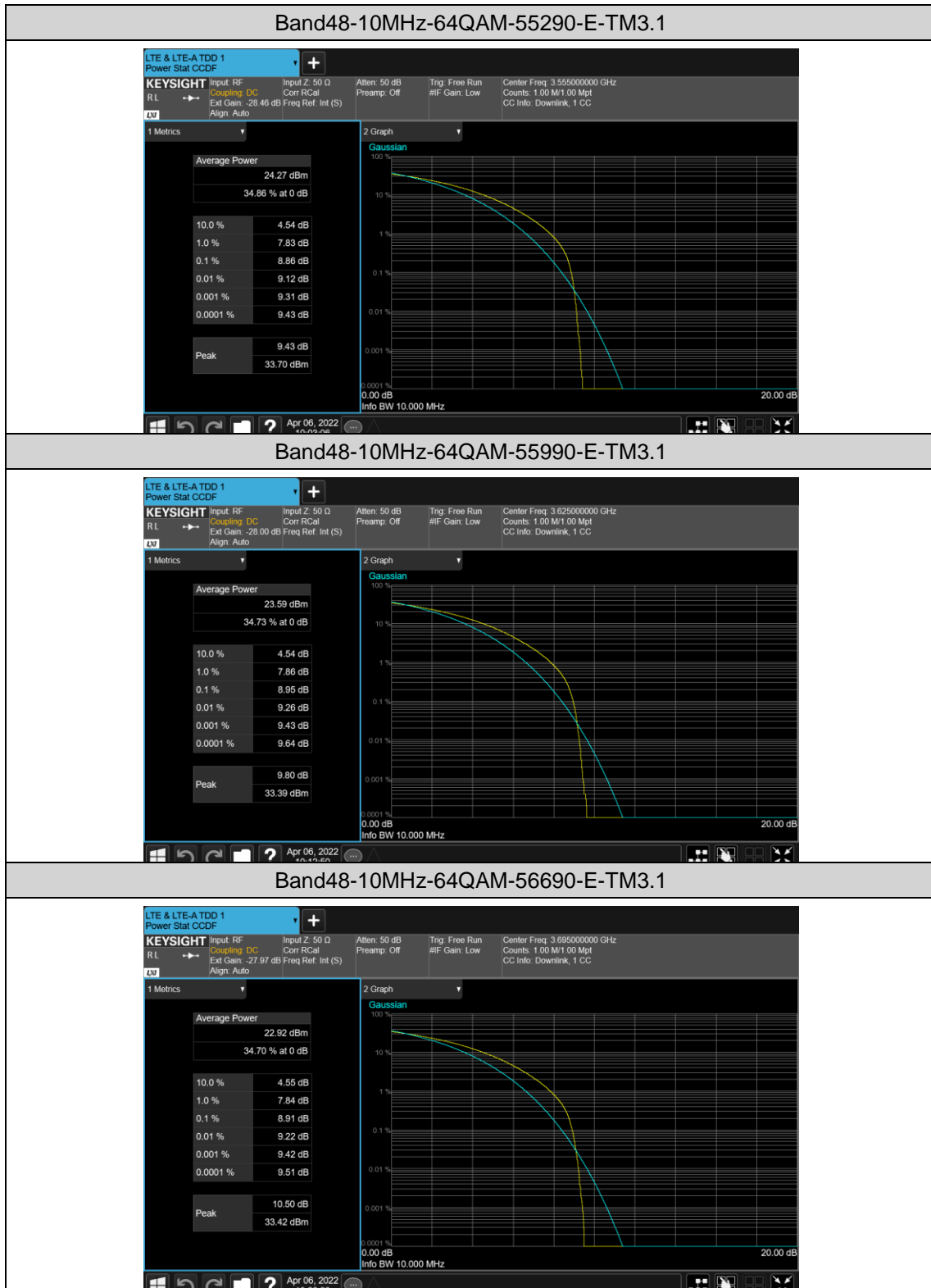
Temperature measurement									
Band	Bandwidth	Modulation	Channel	Mode	Voltage [Vac]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)
Band48	10MHz	64QAM	55990	E-TM3.1	120	-30	76	0.021	within the authorized bands
Band48	10MHz	64QAM	55990	E-TM3.1	120	-20	80	0.022	
Band48	10MHz	64QAM	55990	E-TM3.1	120	-10	69	0.019	
Band48	10MHz	64QAM	55990	E-TM3.1	120	0	74	0.020	
Band48	10MHz	64QAM	55990	E-TM3.1	120	10	72	0.020	
Band48	10MHz	64QAM	55990	E-TM3.1	120	20	78	0.022	
Band48	10MHz	64QAM	55990	E-TM3.1	120	30	73	0.020	
Band48	10MHz	64QAM	55990	E-TM3.1	120	40	79	0.022	
Band48	10MHz	64QAM	55990	E-TM3.1	120	50	81	0.022	
Band48	10MHz	QPSK	55990	E-TM1.1	120	-30	69	0.019	
Band48	10MHz	QPSK	55990	E-TM1.1	120	-20	64	0.018	
Band48	10MHz	QPSK	55990	E-TM1.1	120	-10	72	0.020	
Band48	10MHz	QPSK	55990	E-TM1.1	120	0	73	0.020	
Band48	10MHz	QPSK	55990	E-TM1.1	120	10	73	0.020	
Band48	10MHz	QPSK	55990	E-TM1.1	120	20	77	0.021	
Band48	10MHz	QPSK	55990	E-TM1.1	120	30	76	0.021	

Band48	10MHz	QPSK	55990	E-TM1.1	120	40	68	0.019
Band48	10MHz	QPSK	55990	E-TM1.1	120	50	64	0.018
Band48	20MHz	64QAM	55990	E-TM3.1	120	-30	73	0.020
Band48	20MHz	64QAM	55990	E-TM3.1	120	-20	72	0.020
Band48	20MHz	64QAM	55990	E-TM3.1	120	-10	68	0.019
Band48	20MHz	64QAM	55990	E-TM3.1	120	0	73	0.020
Band48	20MHz	64QAM	55990	E-TM3.1	120	10	74	0.020
Band48	20MHz	64QAM	55990	E-TM3.1	120	20	79	0.022
Band48	20MHz	64QAM	55990	E-TM3.1	120	30	67	0.018
Band48	20MHz	64QAM	55990	E-TM3.1	120	40	75	0.021
Band48	20MHz	64QAM	55990	E-TM3.1	120	50	79	0.022
Band48	20MHz	QPSK	55990	E-TM1.1	120	-30	74	0.020
Band48	20MHz	QPSK	55990	E-TM1.1	120	-20	75	0.021
Band48	20MHz	QPSK	55990	E-TM1.1	120	-10	69	0.019
Band48	20MHz	QPSK	55990	E-TM1.1	120	0	73	0.020
Band48	20MHz	QPSK	55990	E-TM1.1	120	10	77	0.021
Band48	20MHz	QPSK	55990	E-TM1.1	120	20	68	0.019
Band48	20MHz	QPSK	55990	E-TM1.1	120	30	74	0.020
Band48	20MHz	QPSK	55990	E-TM1.1	120	40	76	0.021
Band48	20MHz	QPSK	55990	E-TM1.1	120	50	71	0.020

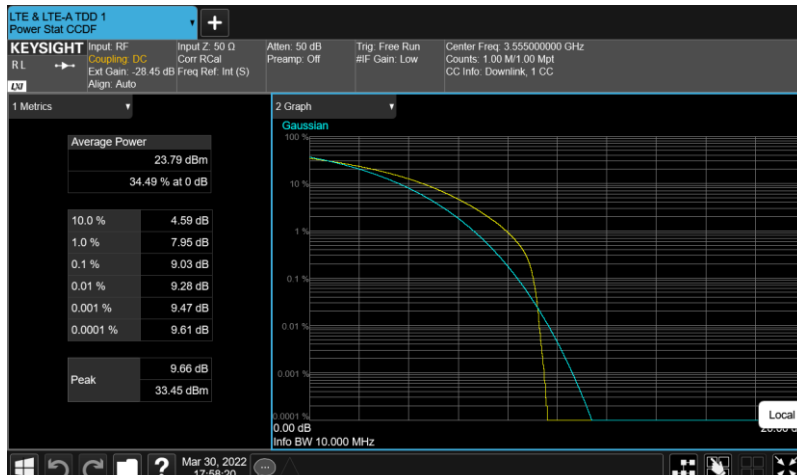
Appendix E: Peak-to-Average Ratio(CCDF)**Test Result**

Band	Bandwidth	Modulation	Channel	Mode	Result(dBm)
Band48	10MHz	64QAM	55290	E-TM3.1	8.86
Band48	10MHz	64QAM	55990	E-TM3.1	8.95
Band48	10MHz	64QAM	56690	E-TM3.1	8.91
Band48	10MHz	QPSK	55290	E-TM1.1	9.03
Band48	10MHz	QPSK	55990	E-TM1.1	9.08
Band48	10MHz	QPSK	56690	E-TM1.1	8.98
Band48	20MHz	64QAM	55340	E-TM3.1	9.01
Band48	20MHz	64QAM	55990	E-TM3.1	8.87
Band48	20MHz	64QAM	56640	E-TM3.1	8.96
Band48	20MHz	QPSK	55340	E-TM1.1	8.62
Band48	20MHz	QPSK	55990	E-TM1.1	8.86
Band48	20MHz	QPSK	56640	E-TM1.1	9.07

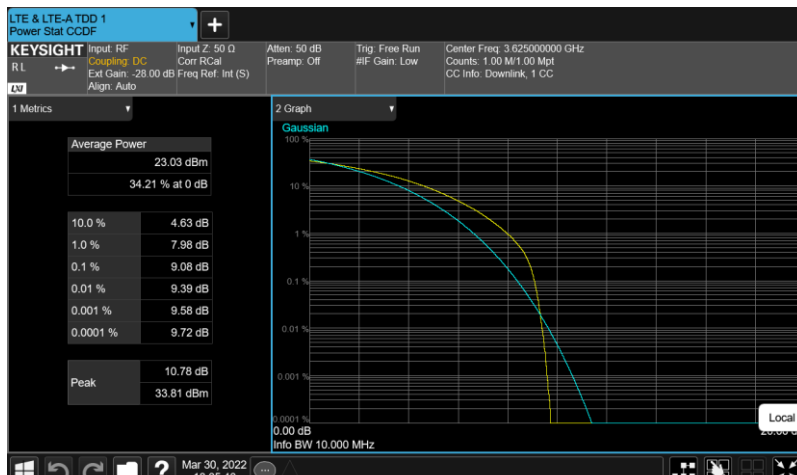
Test Graphs



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



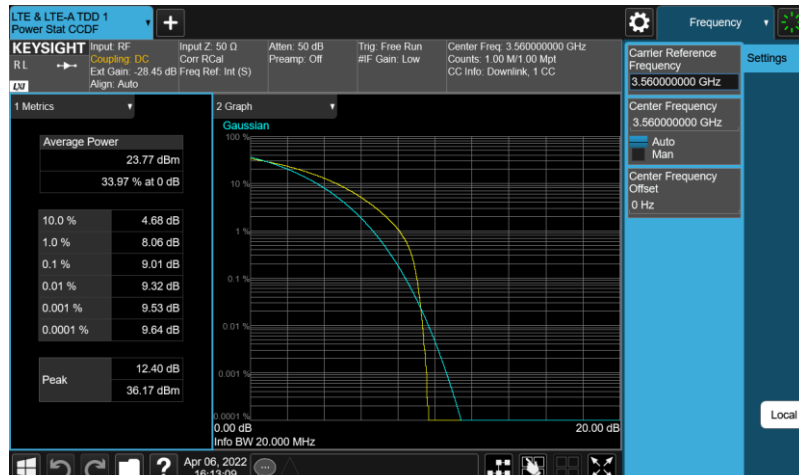
Band48-10MHz-QPSK-55990-E-TM1.1



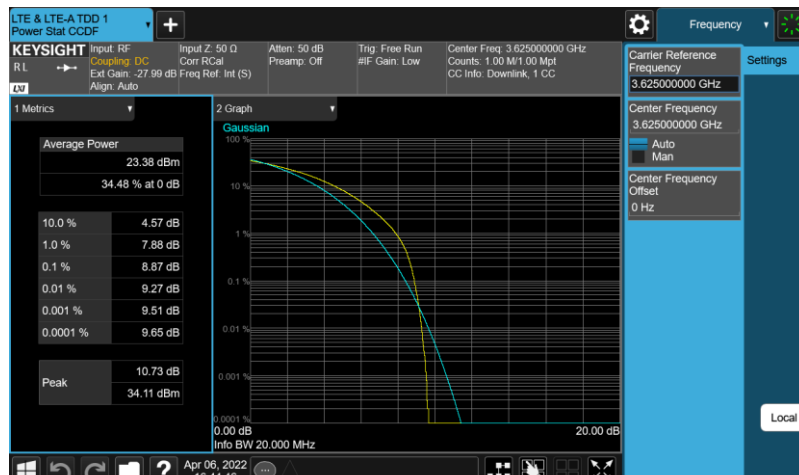
Band48-10MHz-QPSK-56690-E-TM1.1



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



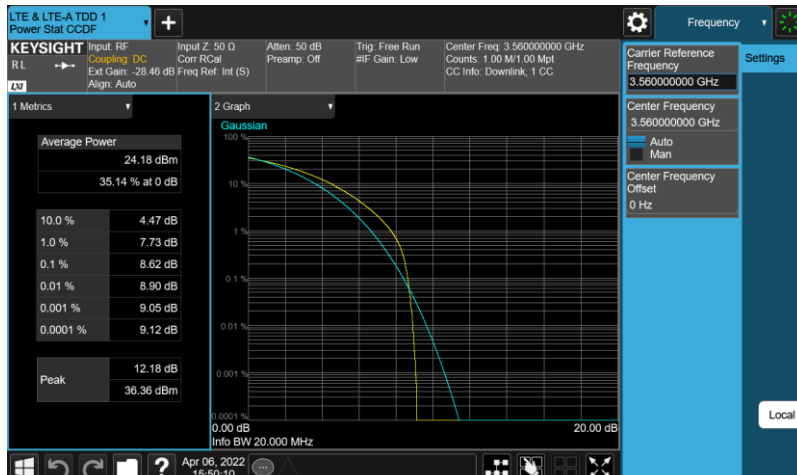
Band48-20MHz-64QAM-55990-E-TM3.1



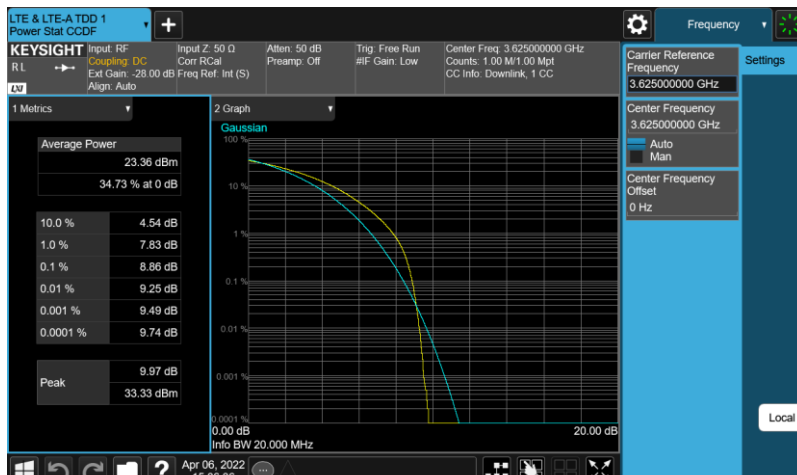
Band48-20MHz-64QAM-56640-E-TM3.1



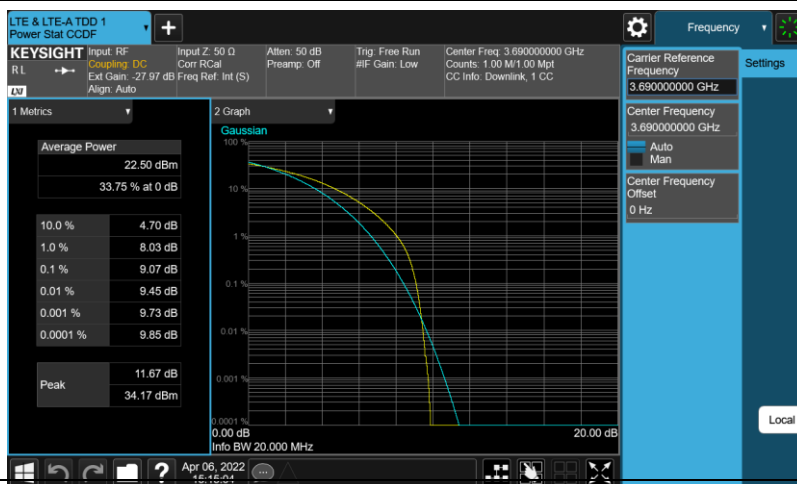
Band48-20MHz-QPSK-55340-E-TM1.1



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

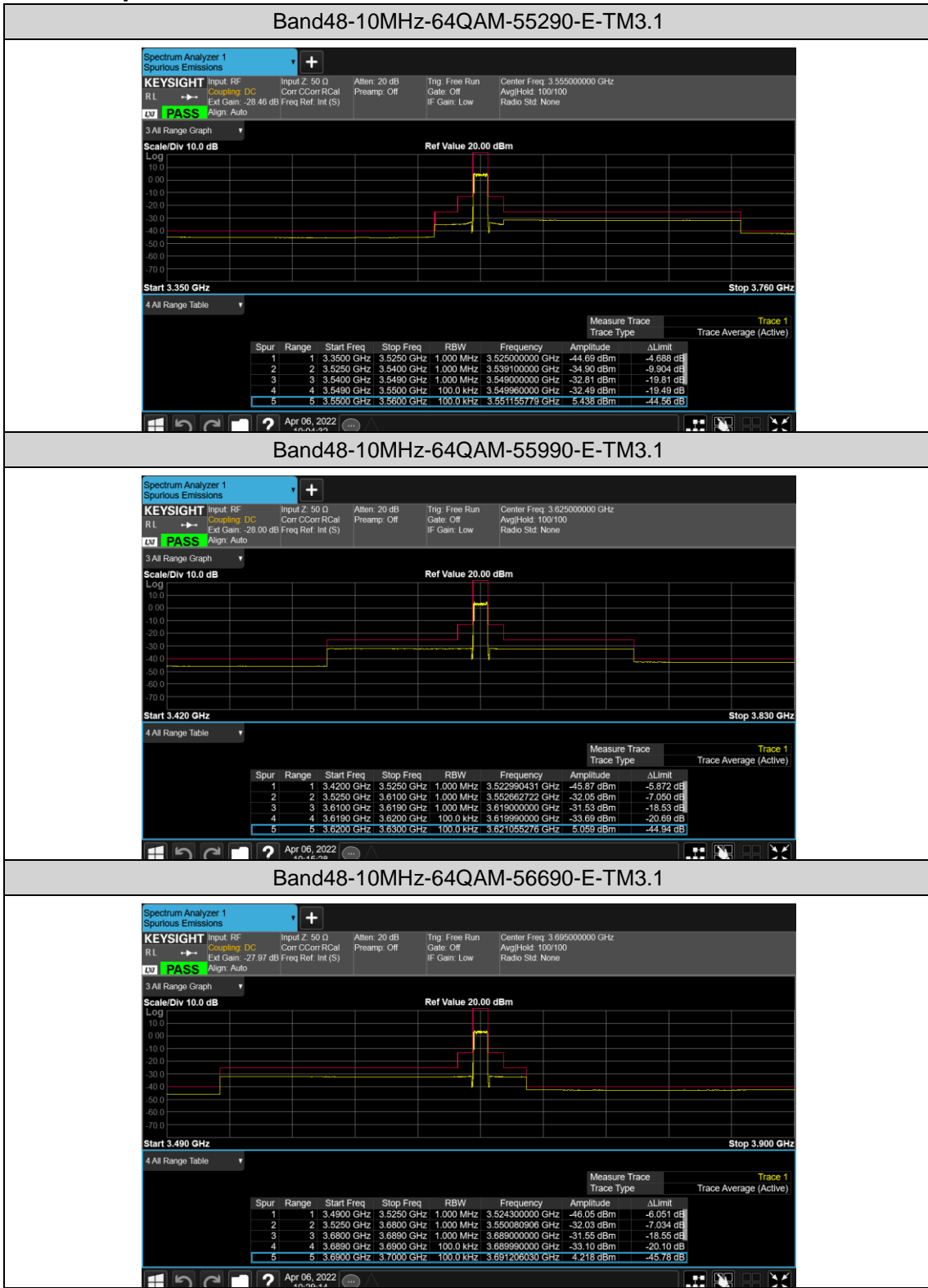


Band48-20MHz-QPSK-56640-E-TM1.1

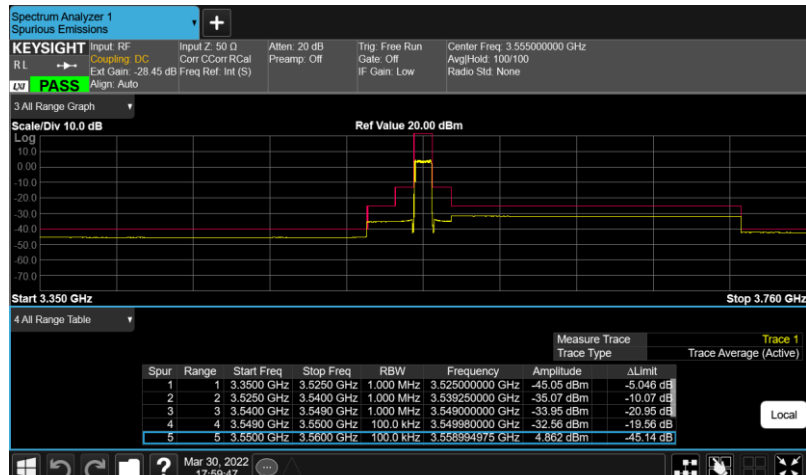


Appendix F: Emission Mask

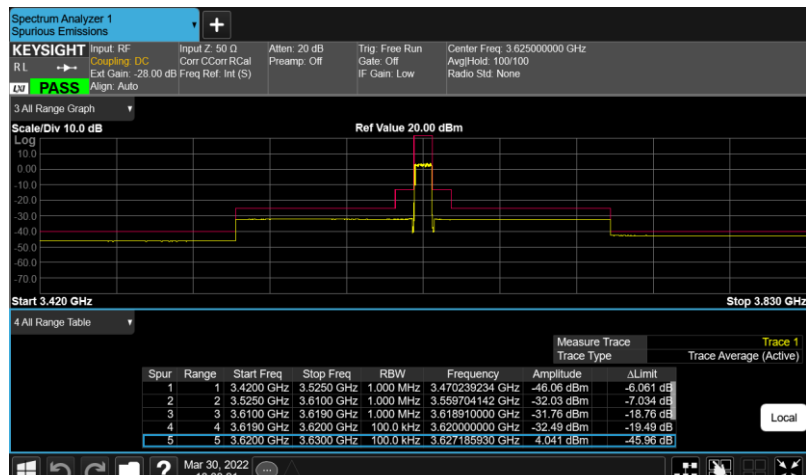
Test Graphs



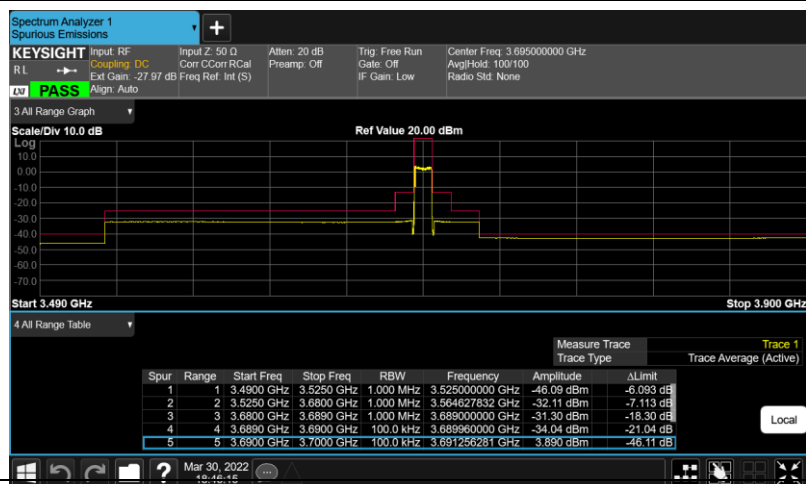
Band48-10MHz-QPSK-55290-E-TM1.1



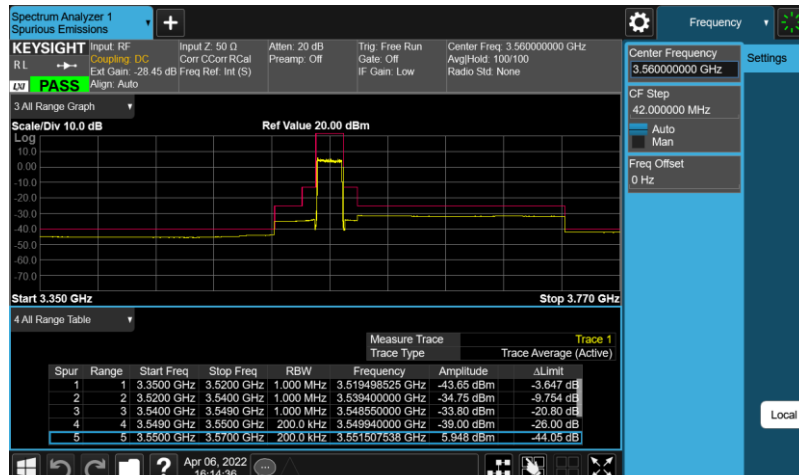
Band48-10MHz-QPSK-55990-E-TM1.1



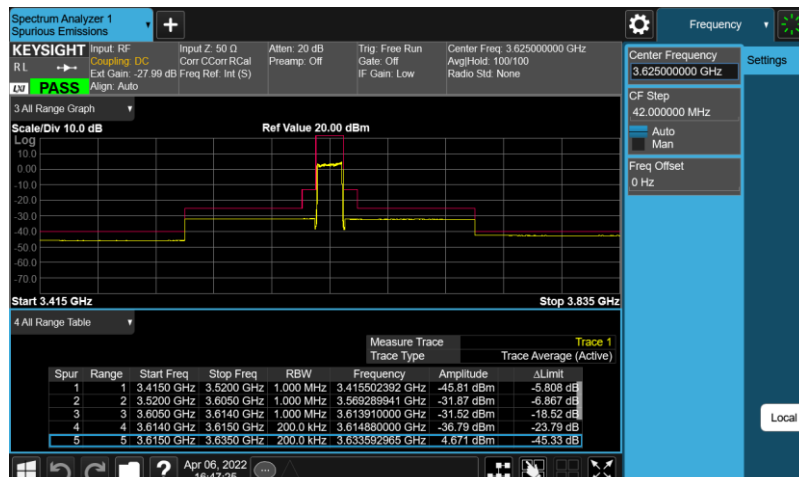
Band48-10MHz-QPSK-56690-E-TM1.1



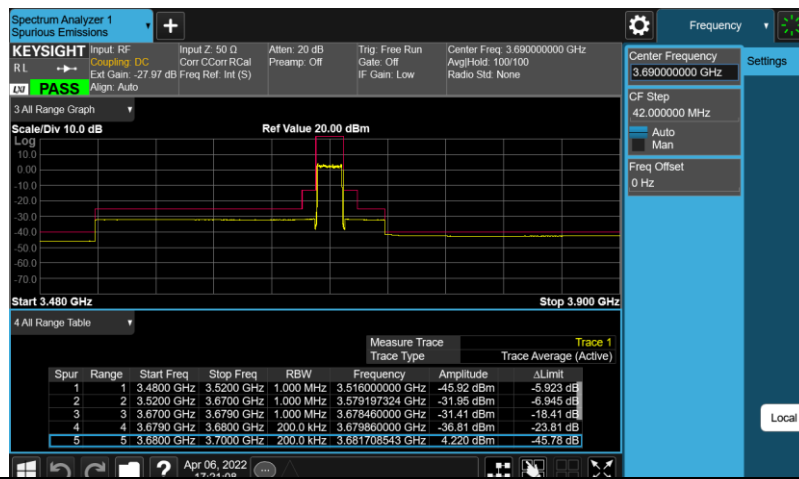
Band48-20MHz-64QAM-55340-E-TM3.1



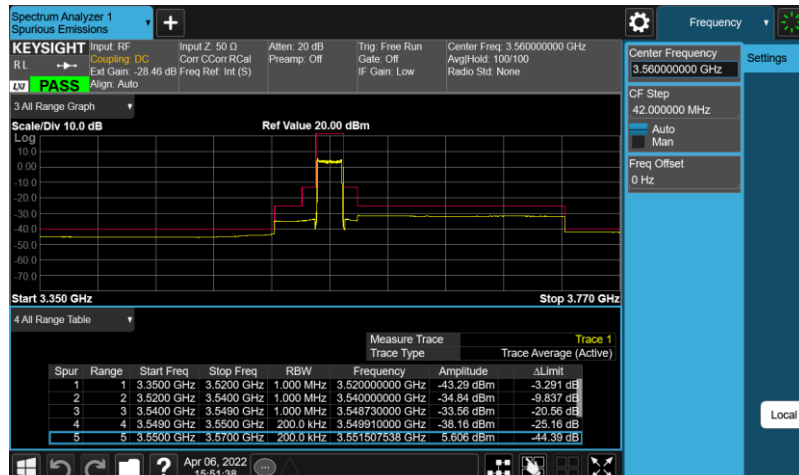
Band48-20MHz-64QAM-55990-E-TM3.1



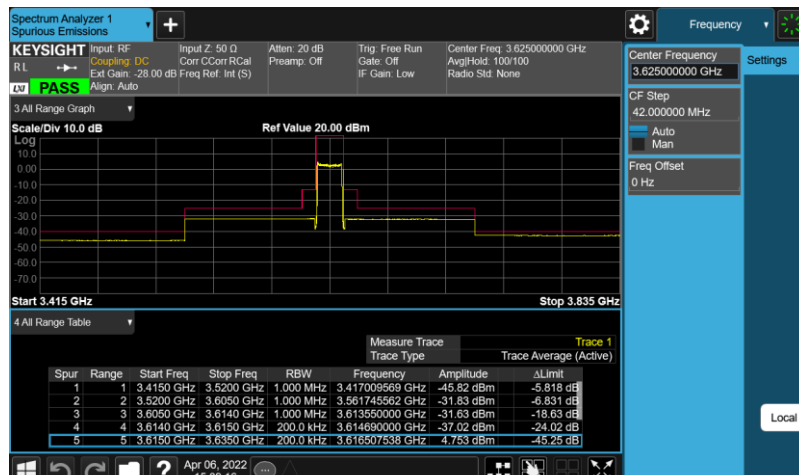
Band48-20MHz-64QAM-56640-E-TM3.1



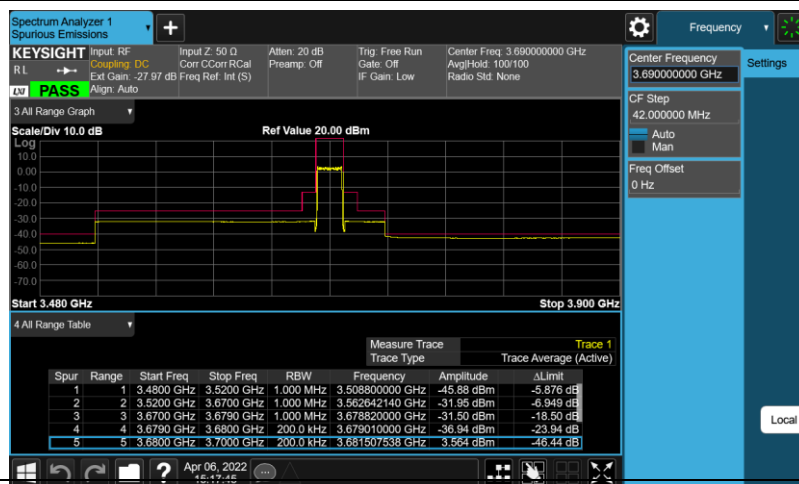
Band48-20MHz-QPSK-55340-E-TM1.1



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



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



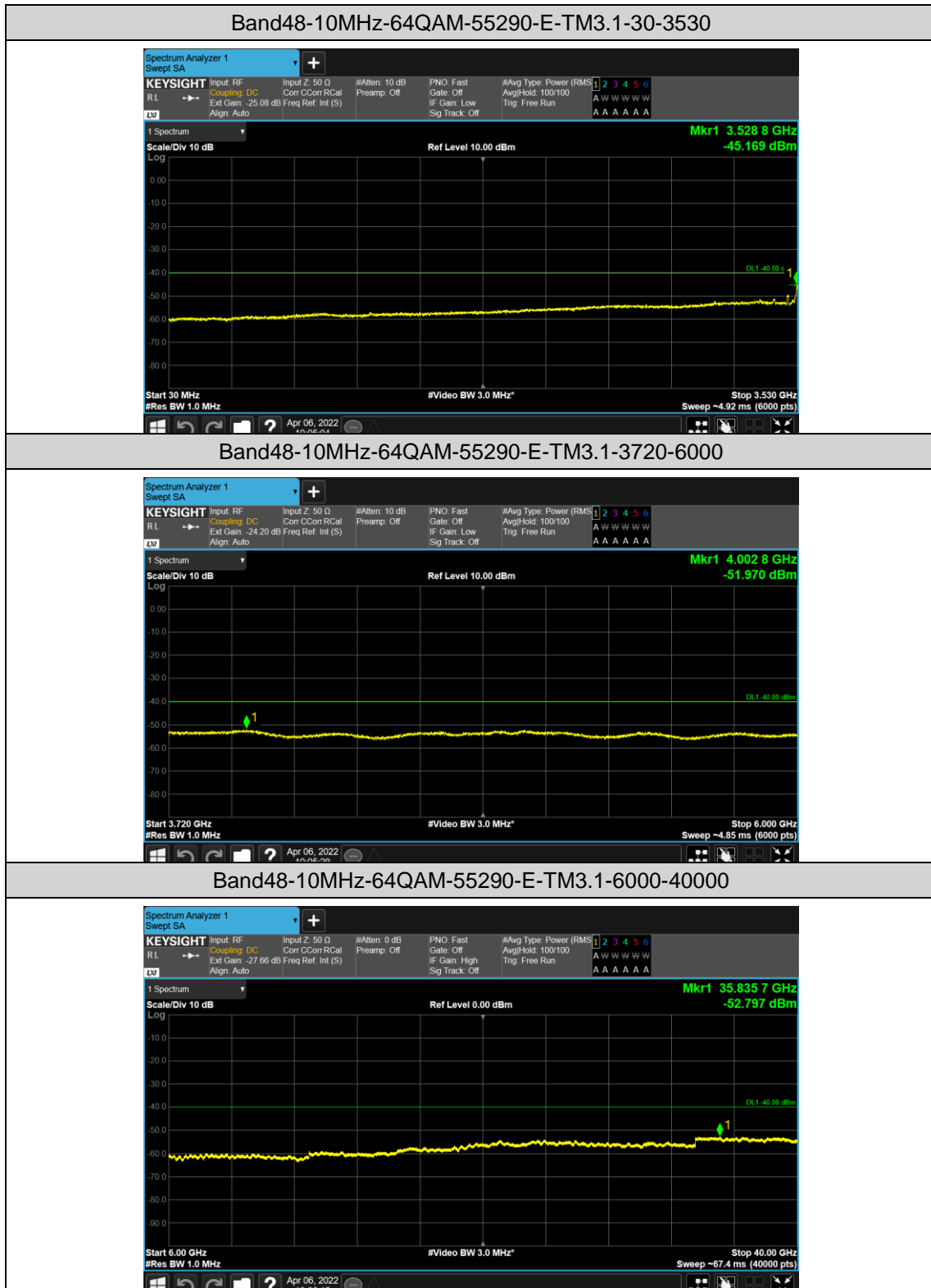
Appendix G: Conducted Spurious Emission

Test Result

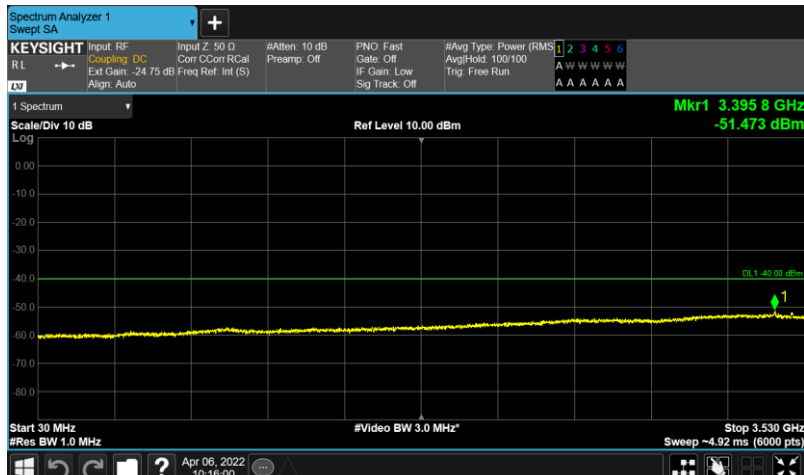
Band	Bandwidth	Modulation	Channel	Mode	Test Frequency(MHz)	Result (dBm)	Verdict
Band48	10MHz	64QAM	55290	E-TM3.1	30-3530	-45.17	PASS
Band48	10MHz	64QAM	55290	E-TM3.1	3720-6000	-51.97	PASS
Band48	10MHz	64QAM	55290	E-TM3.1	6000-40000	-52.80	PASS
Band48	10MHz	64QAM	55990	E-TM3.1	30-3530	-51.47	PASS
Band48	10MHz	64QAM	55990	E-TM3.1	3720-6000	-52.00	PASS
Band48	10MHz	64QAM	55990	E-TM3.1	6000-40000	-52.80	PASS
Band48	10MHz	64QAM	56690	E-TM3.1	30-3530	-51.71	PASS
Band48	10MHz	64QAM	56690	E-TM3.1	3720-6000	-47.49	PASS
Band48	10MHz	64QAM	56690	E-TM3.1	6000-40000	-52.72	PASS
Band48	10MHz	QPSK	55290	E-TM1.1	30-3530	-47.02	PASS
Band48	10MHz	QPSK	55290	E-TM1.1	3720-6000	-52.06	PASS
Band48	10MHz	QPSK	55290	E-TM1.1	6000-40000	-52.61	PASS
Band48	10MHz	QPSK	55990	E-TM1.1	30-3530	-52.04	PASS
Band48	10MHz	QPSK	55990	E-TM1.1	3720-6000	-52.09	PASS
Band48	10MHz	QPSK	55990	E-TM1.1	6000-40000	-52.58	PASS
Band48	10MHz	QPSK	56690	E-TM1.1	30-3530	-51.69	PASS
Band48	10MHz	QPSK	56690	E-TM1.1	3720-6000	-48.28	PASS
Band48	10MHz	QPSK	56690	E-TM1.1	6000-40000	-52.77	PASS
Band48	20MHz	64QAM	55340	E-TM3.1	30-3530	-42.91	PASS
Band48	20MHz	64QAM	55340	E-TM3.1	3720-6000	-52.00	PASS
Band48	20MHz	64QAM	55340	E-TM3.1	6000-40000	-52.64	PASS
Band48	20MHz	64QAM	55990	E-TM3.1	30-3530	-51.91	PASS
Band48	20MHz	64QAM	55990	E-TM3.1	3720-6000	-51.74	PASS
Band48	20MHz	64QAM	55990	E-TM3.1	6000-40000	-52.54	PASS
Band48	20MHz	64QAM	56640	E-TM3.1	30-3530	-52.23	PASS
Band48	20MHz	64QAM	56640	E-TM3.1	3720-6000	-41.33	PASS
Band48	20MHz	64QAM	56640	E-TM3.1	6000-40000	-52.60	PASS
Band48	20MHz	QPSK	55340	E-TM1.1	30-3530	-40.12	PASS
Band48	20MHz	QPSK	55340	E-TM1.1	3720-6000	-51.92	PASS
Band48	20MHz	QPSK	55340	E-TM1.1	6000-40000	-52.55	PASS
Band48	20MHz	QPSK	55990	E-TM1.1	30-3530	-48.28	PASS

Band48	20MHz	QPSK	55990	E-TM1.1	3720-6000	-51.95	PASS
Band48	20MHz	QPSK	55990	E-TM1.1	6000-40000	-52.53	PASS
Band48	20MHz	QPSK	56640	E-TM1.1	30-3530	-52.00	PASS
Band48	20MHz	QPSK	56640	E-TM1.1	3720-6000	-42.07	PASS
Band48	20MHz	QPSK	56640	E-TM1.1	6000-40000	-52.33	PASS

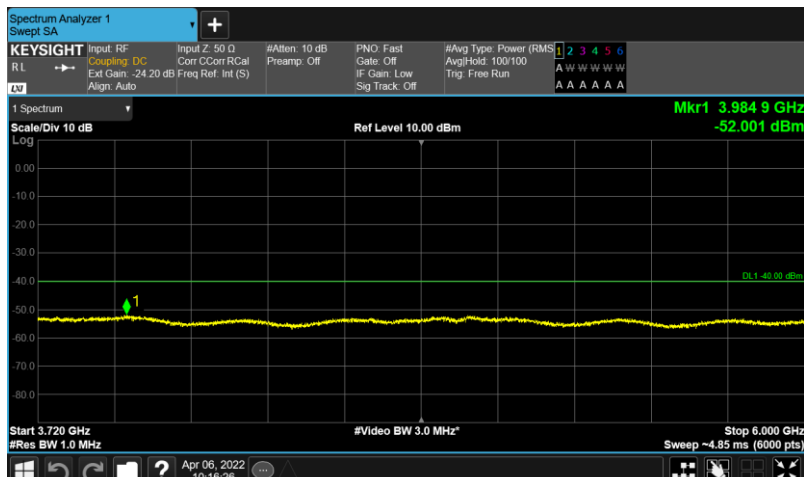
Test Graphs



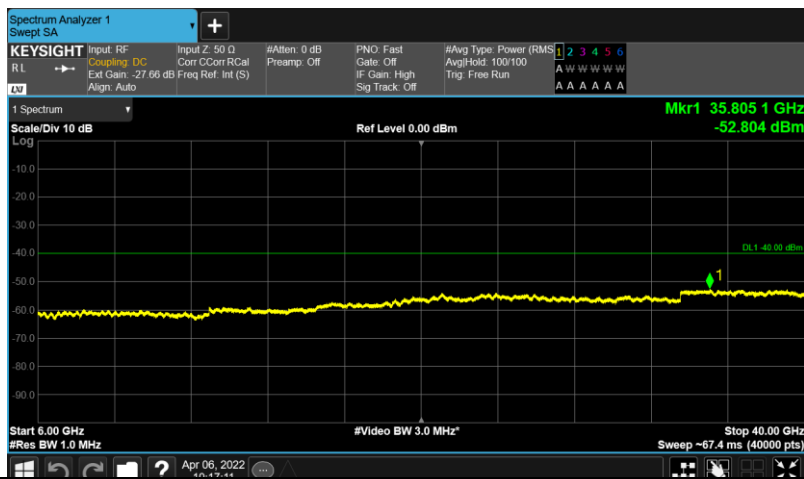
Band48-10MHz-64QAM-55990-E-TM3.1-30-3530



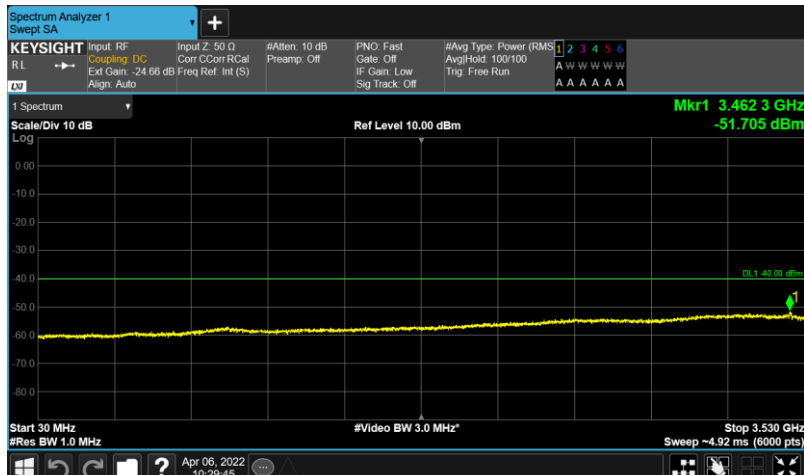
Band48-10MHz-64QAM-55990-E-TM3.1-3720-6000



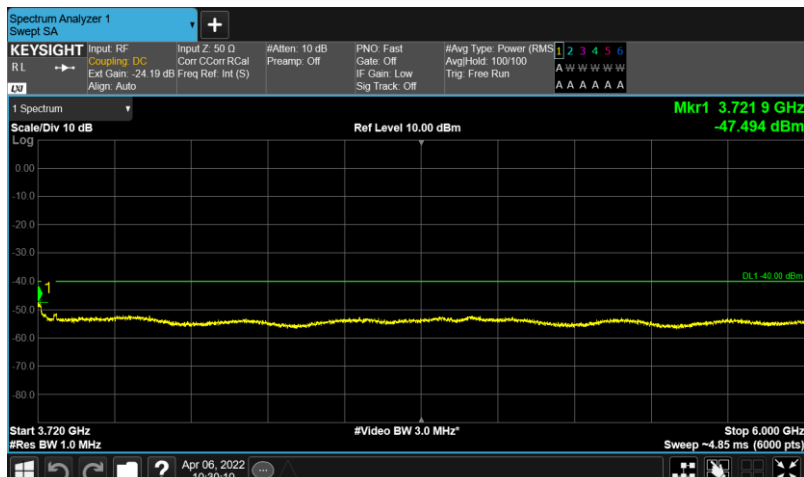
Band48-10MHz-64QAM-55990-E-TM3.1-6000-40000



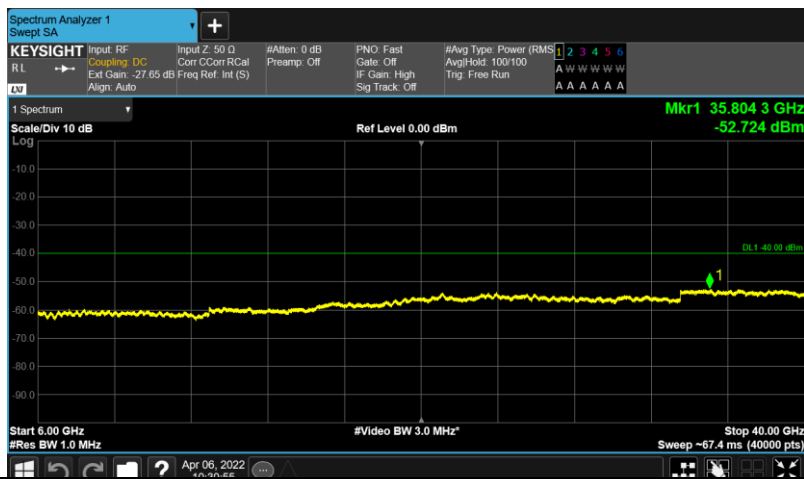
Band48-10MHz-64QAM-56690-E-TM3.1-30-3530



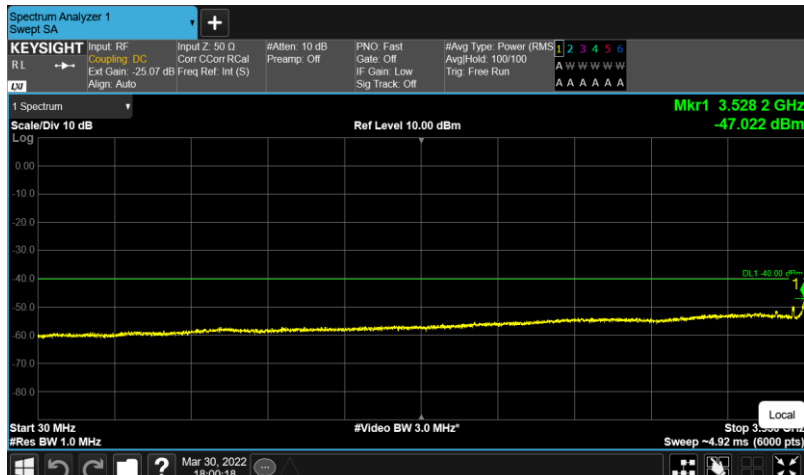
Band48-10MHz-64QAM-56690-E-TM3.1-3720-6000



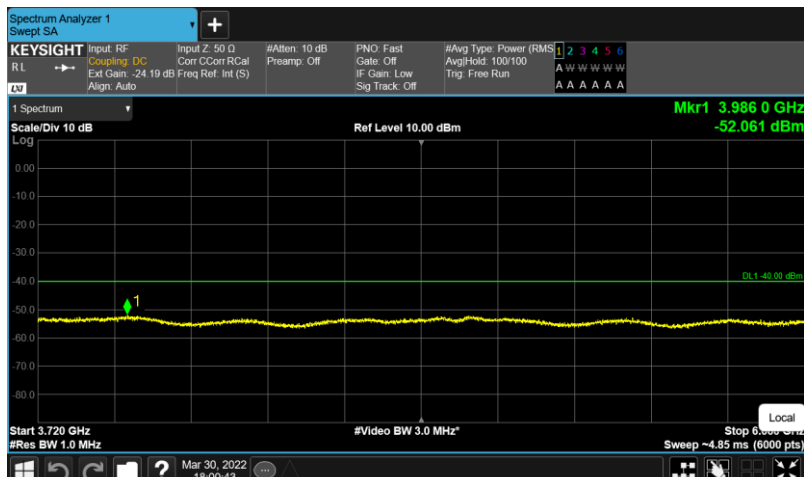
Band48-10MHz-64QAM-56690-E-TM3.1-6000-40000



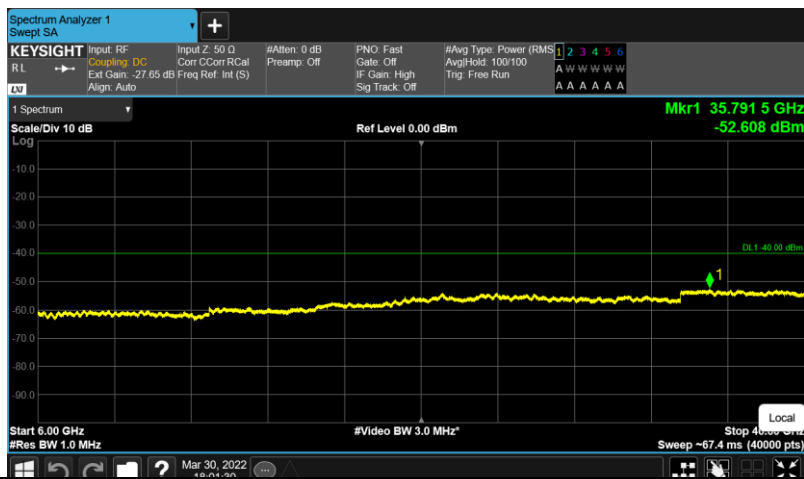
Band48-10MHz-QPSK-55290-E-TM1.1-30-3530



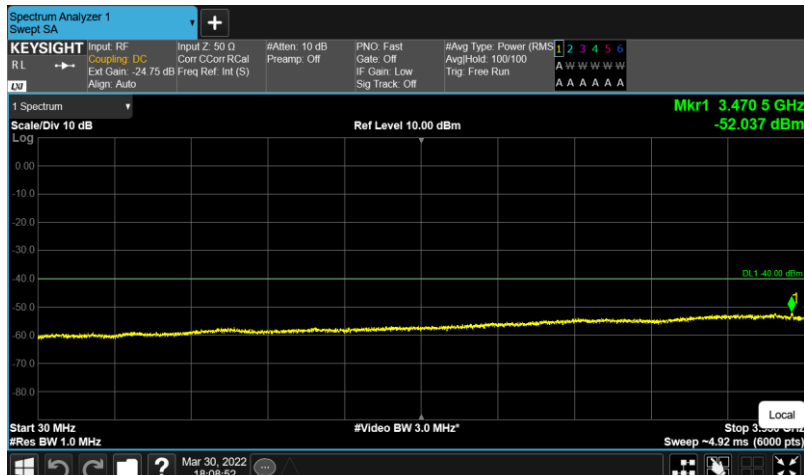
Band48-10MHz-QPSK-55290-E-TM1.1-3720-6000



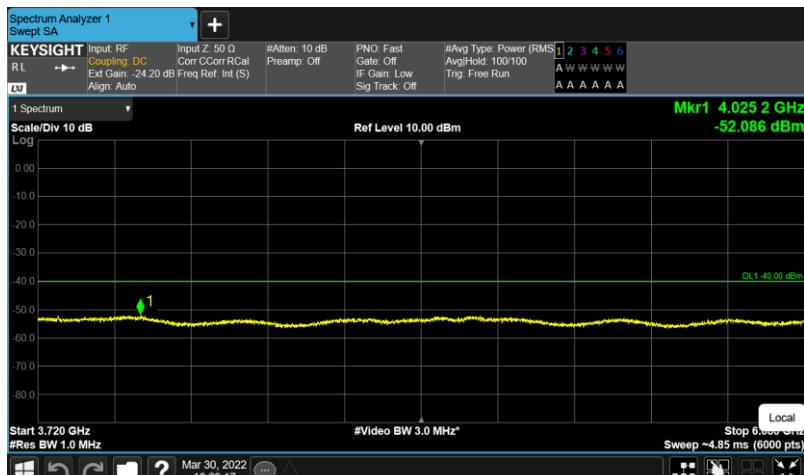
Band48-10MHz-QPSK-55290-E-TM1.1-6000-40000



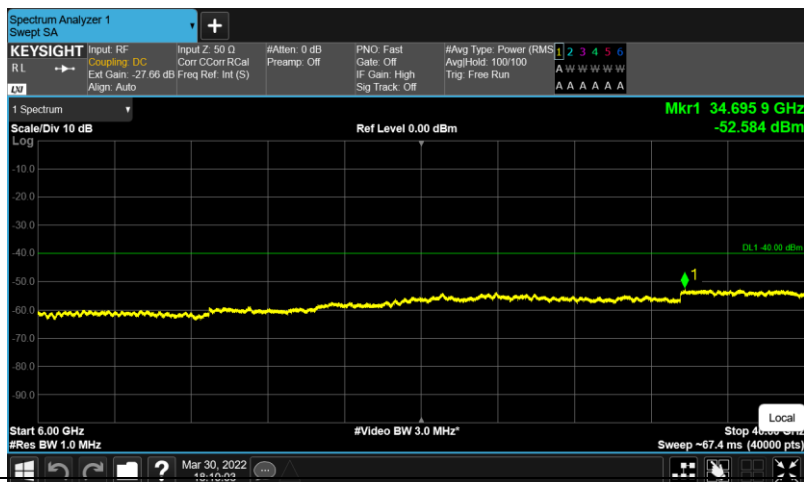
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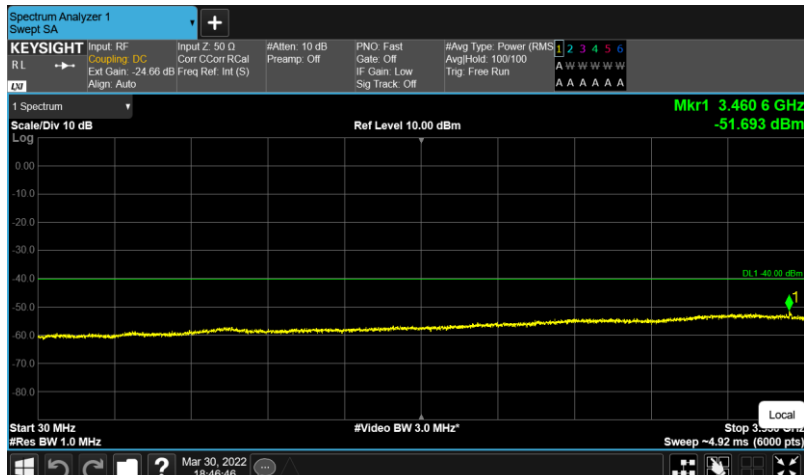
Band48-10MHz-QPSK-55990-E-TM1.1-3720-6000



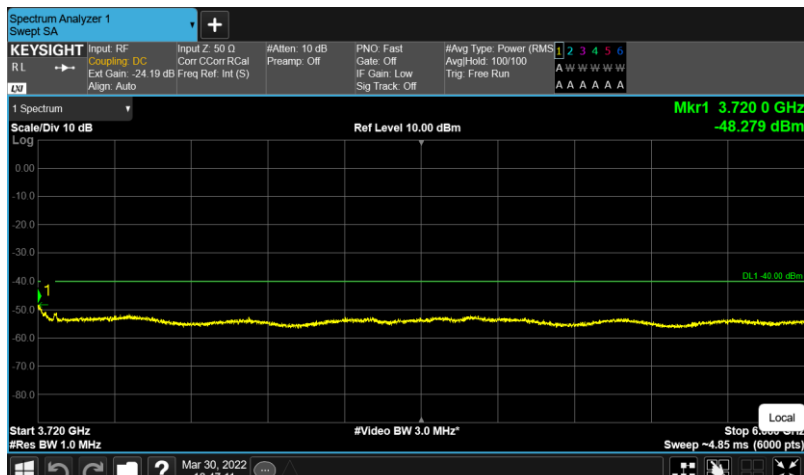
Band48-10MHz-QPSK-55990-E-TM1.1-6000-40000



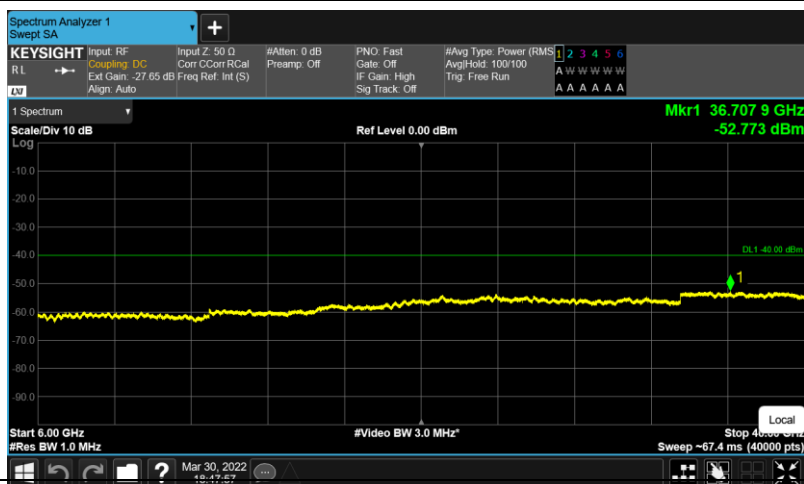
Band48-10MHz-QPSK-56690-E-TM1.1-30-3530



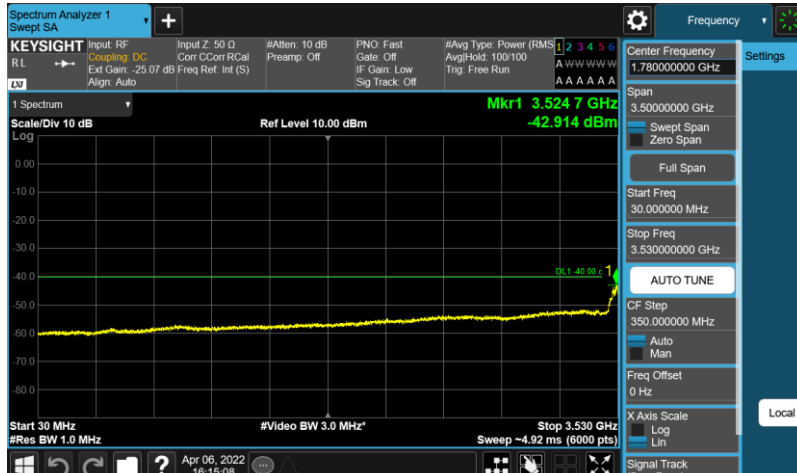
Band48-10MHz-QPSK-56690-E-TM1.1-3720-6000



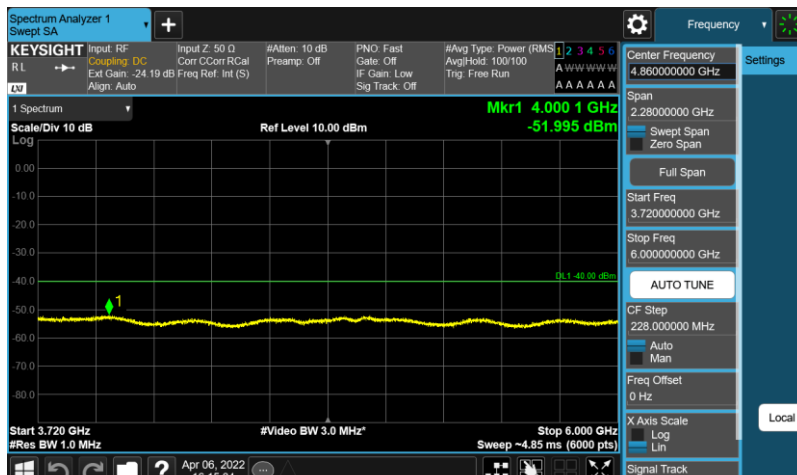
Band48-10MHz-QPSK-56690-E-TM1.1-6000-40000



Band48-20MHz-64QAM-55340-E-TM3.1-30-3530



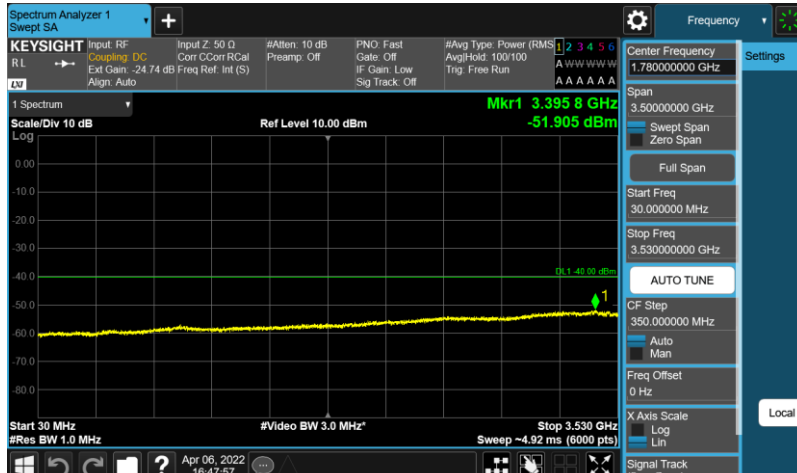
Band48-20MHz-64QAM-55340-E-TM3.1-3720-6000



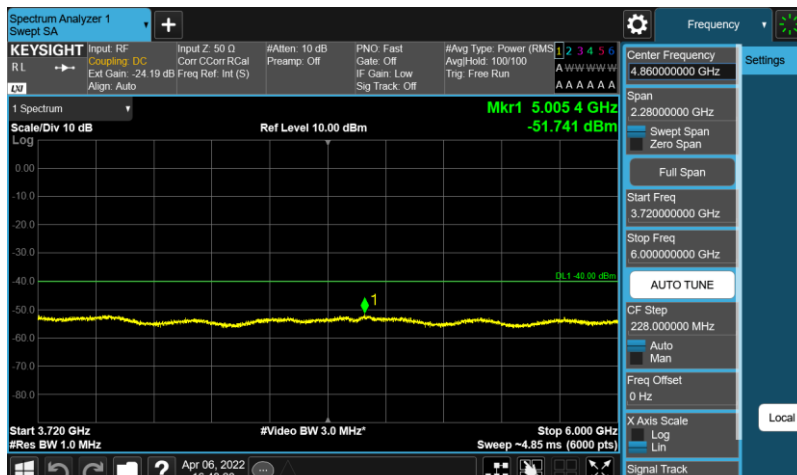
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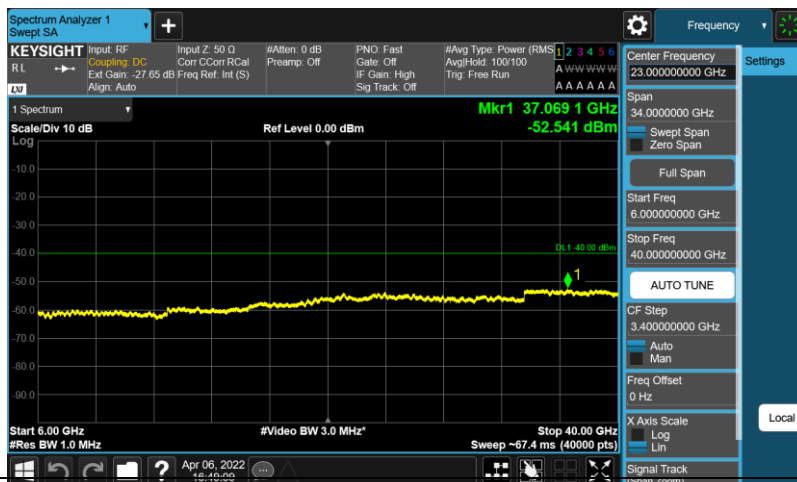
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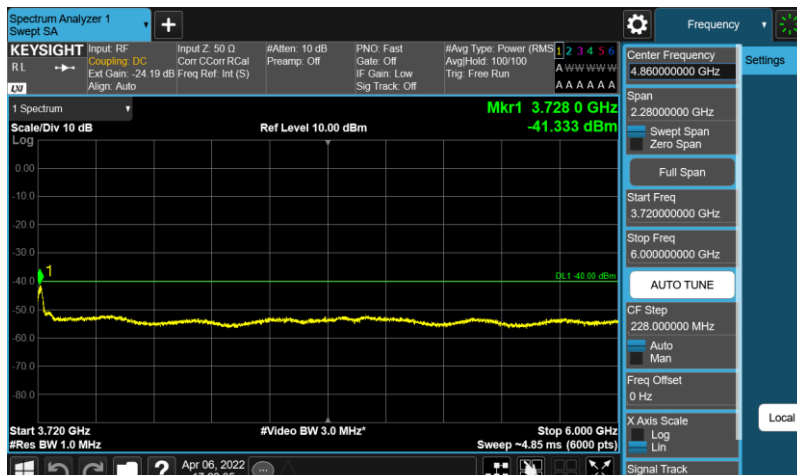
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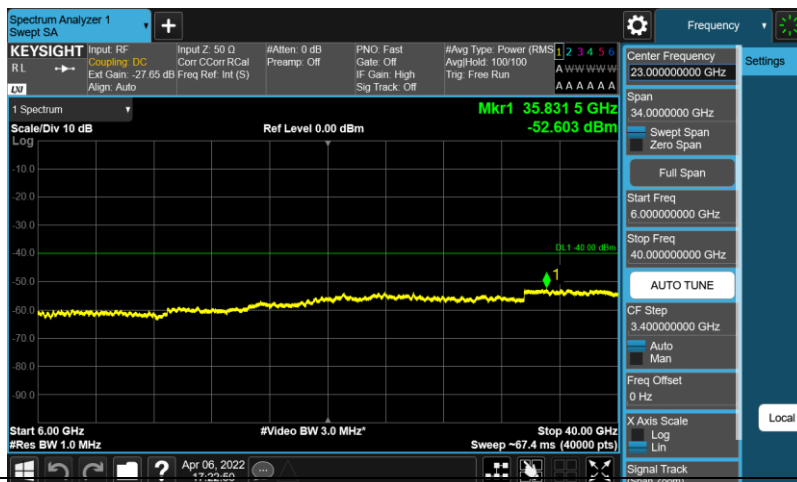
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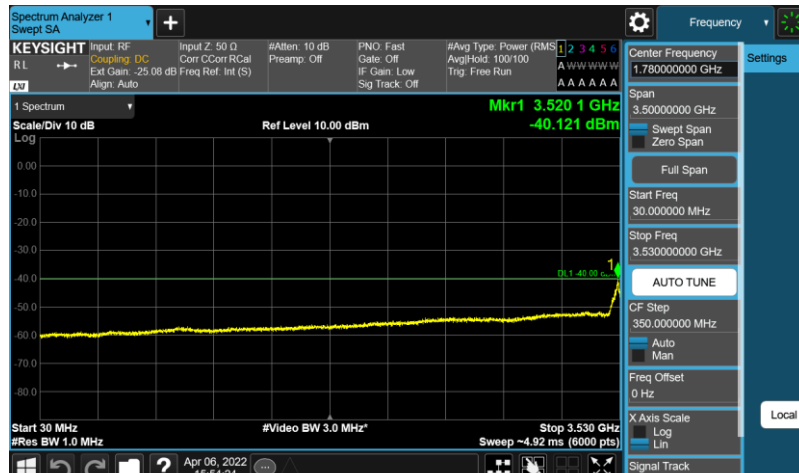
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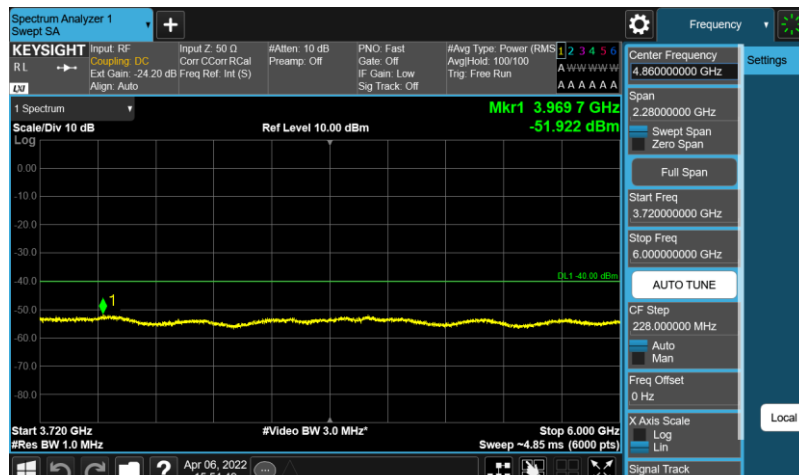
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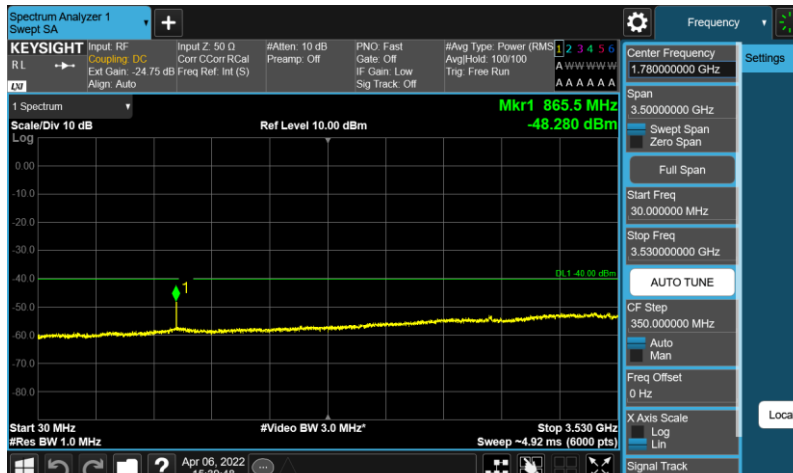
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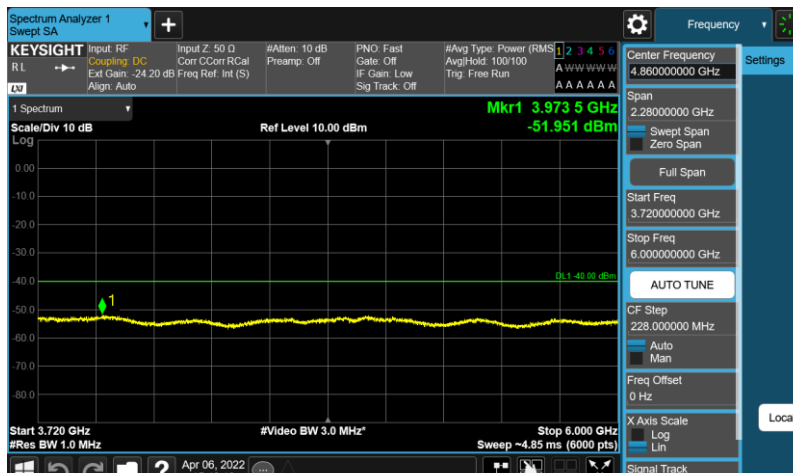
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Band48-20MHz-QPSK-55990-E-TM1.1-3720-6000



Band48-20MHz-QPSK-55990-E-TM1.1-6000-40000

