

Antenna 0:

Appendix A: Effective (Isotropic) Radiated Power Output Data

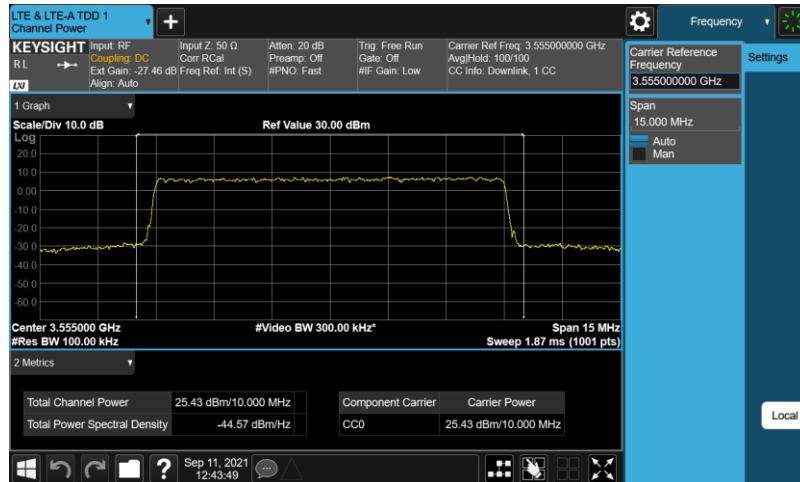
Test Result

Band	Bandwidth	Modulation	Channel	Mode	Power (dBm/10MHz)
Band48	10MHz	256QAM	55290	E-TM3.1A	25.43
Band48	10MHz	256QAM	55990	E-TM3.1A	24.36
Band48	10MHz	256QAM	56690	E-TM3.1A	24.40
Band48	10MHz	QPSK	55290	E-TM1.1	26.05
Band48	10MHz	QPSK	55990	E-TM1.1	25.01
Band48	10MHz	QPSK	56690	E-TM1.1	25.20
Band48	20MHz	256QAM	55340	E-TM3.1A	23.18
Band48	20MHz	256QAM	55990	E-TM3.1A	22.80
Band48	20MHz	256QAM	56640	E-TM3.1A	22.66
Band48	20MHz	QPSK	55340	E-TM1.1	22.99
Band48	20MHz	QPSK	55990	E-TM1.1	22.89
Band48	20MHz	QPSK	56640	E-TM1.1	22.51

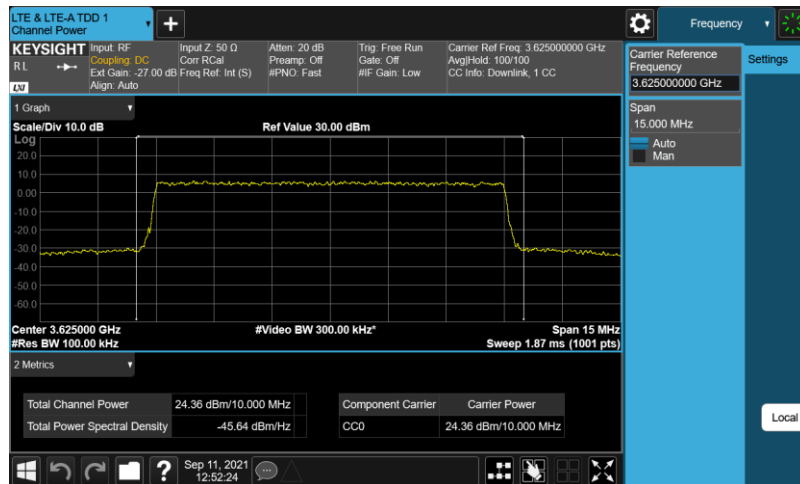
Band	Bandwidth	Modulation	Channel	Mode	Power (dBm/20MHz)
Band48	20MHz	256QAM	55340	E-TM3.1A	25.80
Band48	20MHz	256QAM	55990	E-TM3.1A	25.30
Band48	20MHz	256QAM	56640	E-TM3.1A	25.47
Band48	20MHz	QPSK	55340	E-TM1.1	25.54
Band48	20MHz	QPSK	55990	E-TM1.1	25.71
Band48	20MHz	QPSK	56640	E-TM1.1	25.18

Test Graphs

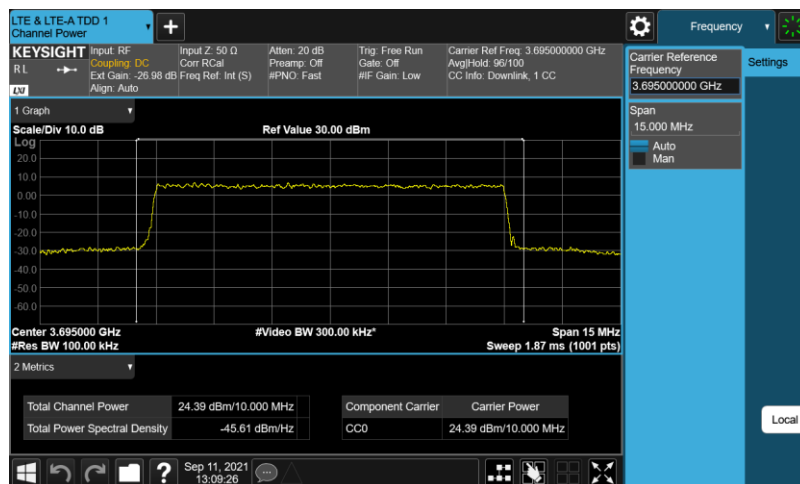
Band48-10MHz-256QAM-55290-E-TM3.1A-10



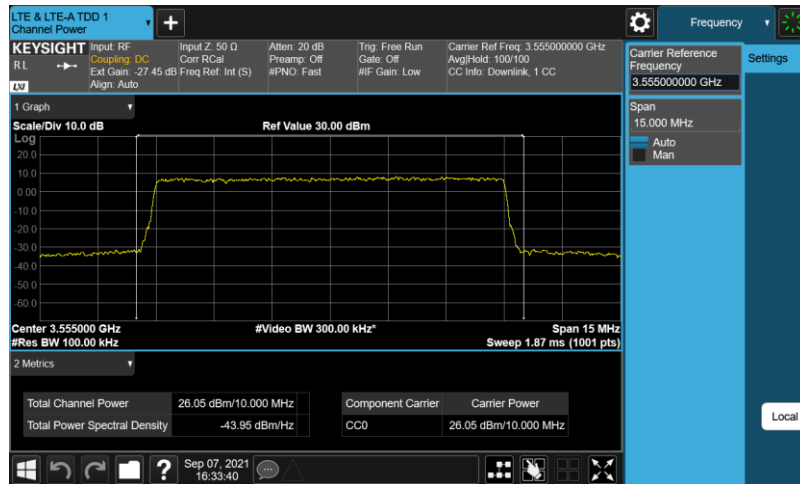
Band48-10MHz-256QAM-55990-E-TM3.1A-10



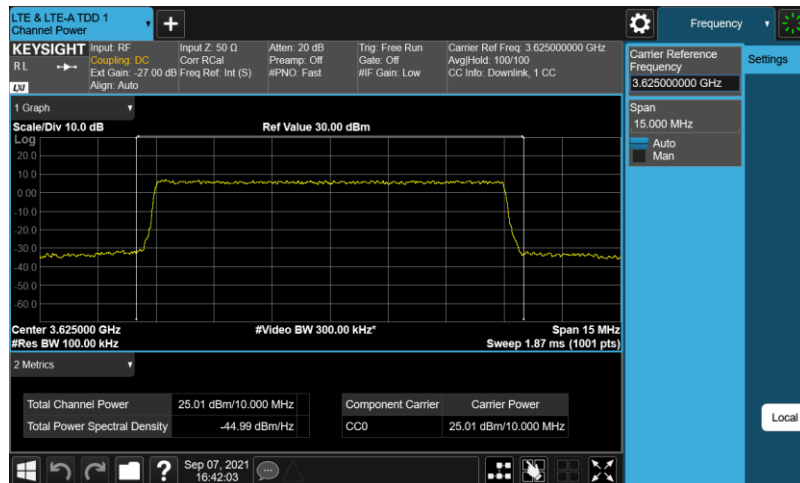
Band48-10MHz-256QAM-56690-E-TM3.1A-10



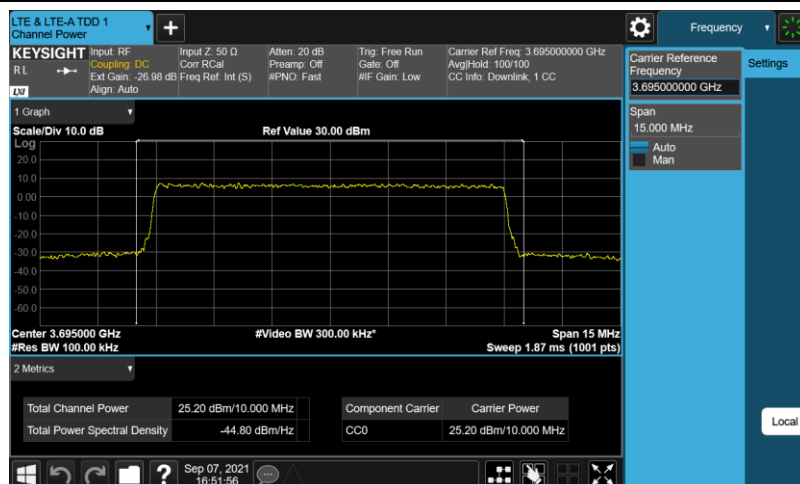
Band48-10MHz-QPSK-55290-E-TM1.1-10



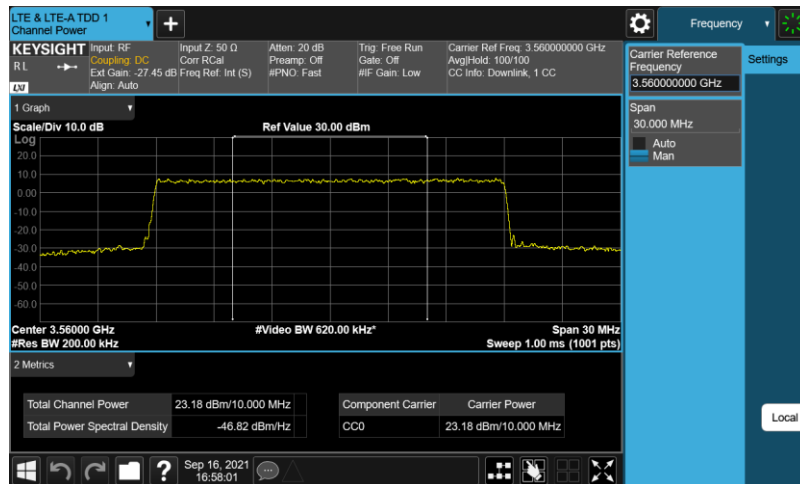
Band48-10MHz-QPSK-55990-E-TM1.1-10



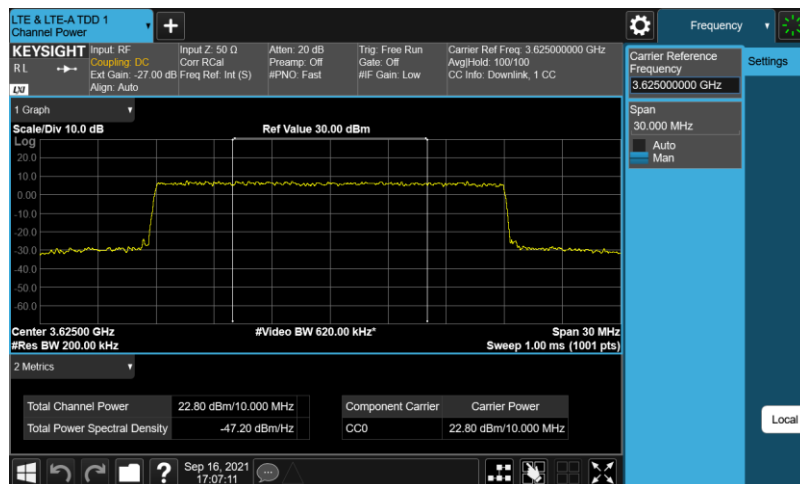
Band48-10MHz-QPSK-56690-E-TM1.1-10



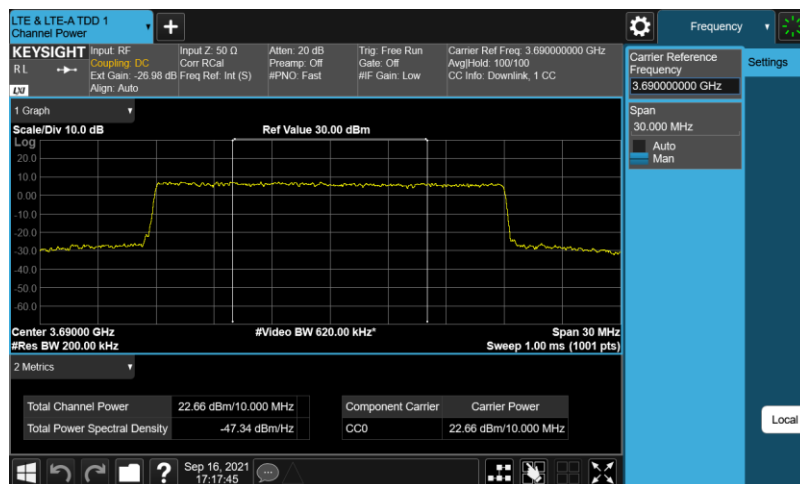
Band48-20MHz-256QAM-55340-E-TM3.1A-10



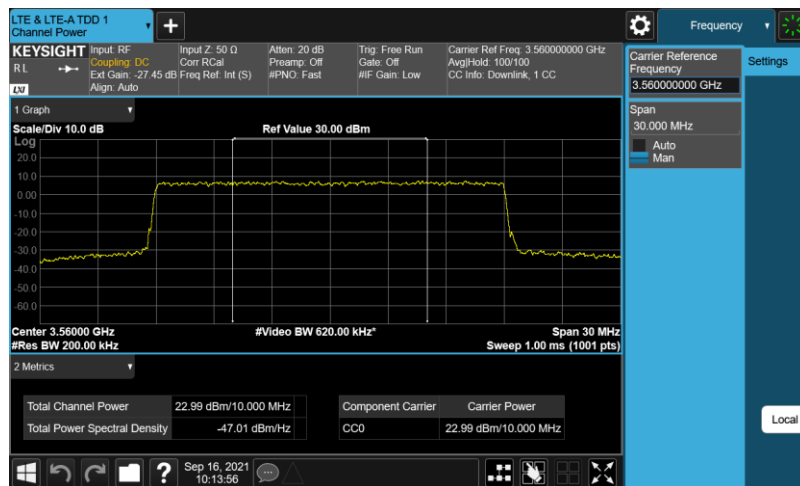
Band48-20MHz-256QAM-55990-E-TM3.1A-10



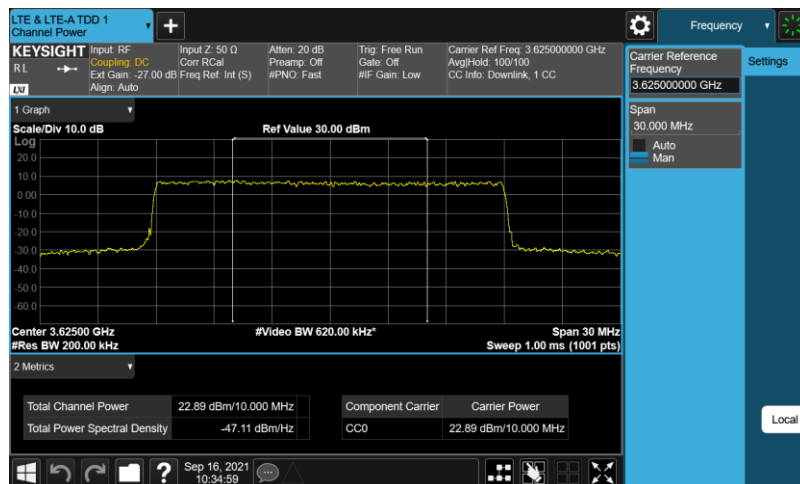
Band48-20MHz-256QAM-56640-E-TM3.1A-10



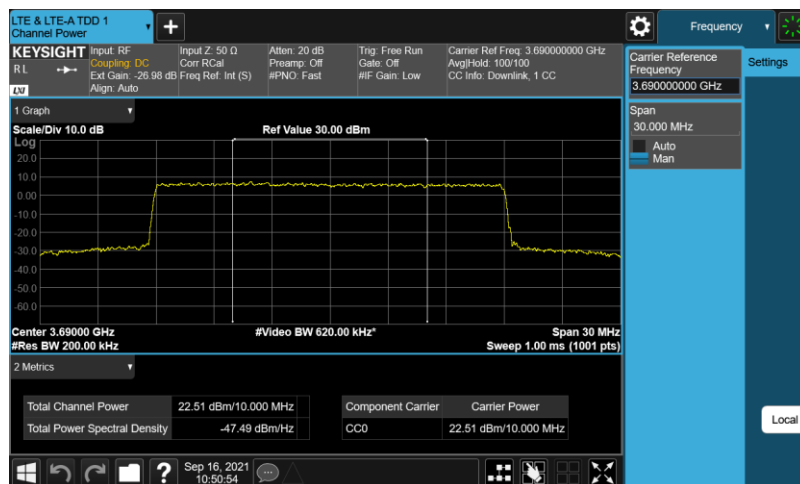
Band48-20MHz-QPSK-55340-E-TM1.1-10



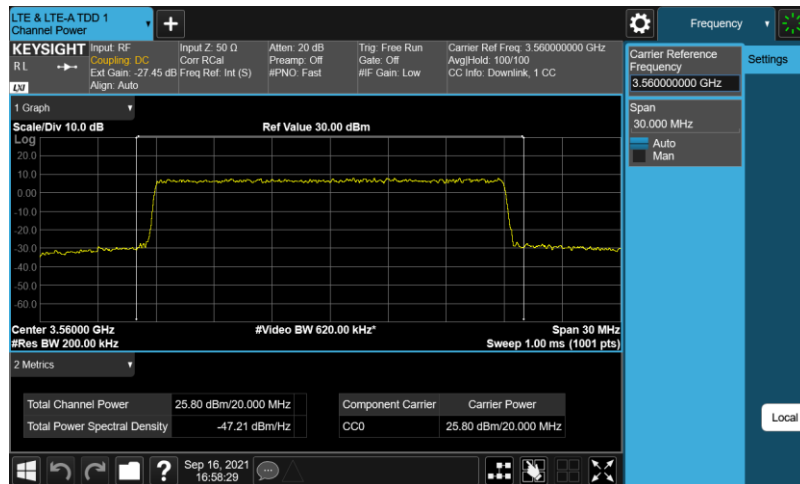
Band48-20MHz-QPSK-55990-E-TM1.1-10



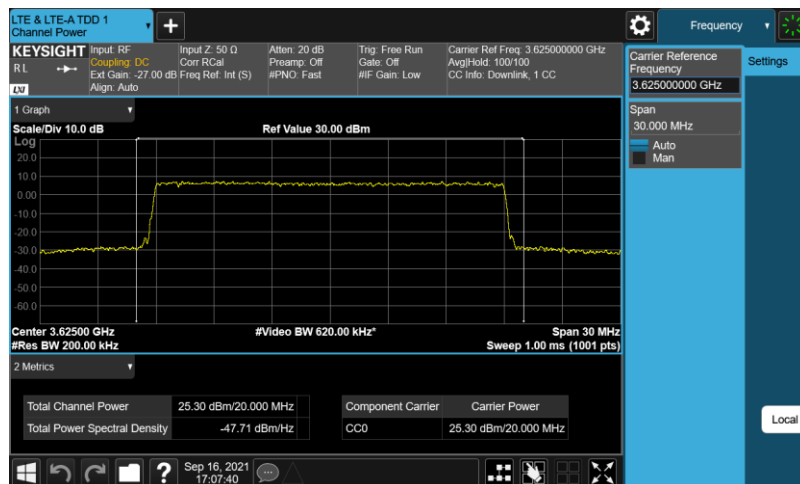
Band48-20MHz-QPSK-56640-E-TM1.1-10



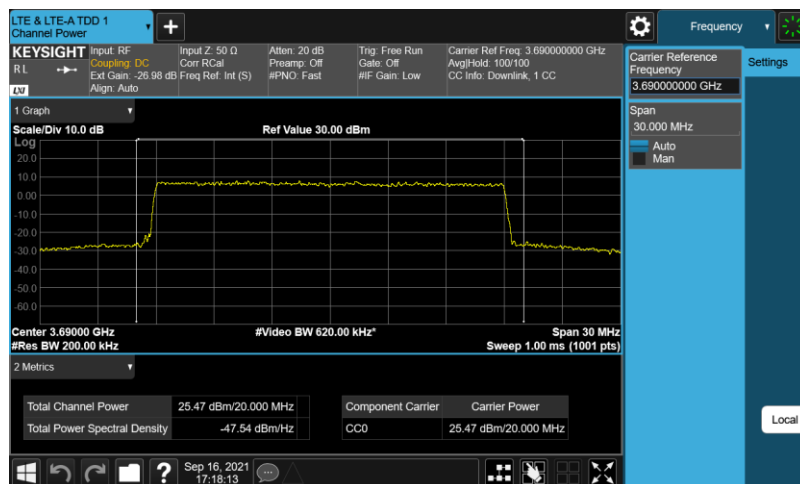
Band48-20MHz-256QAM-55340-E-TM3.1A-20



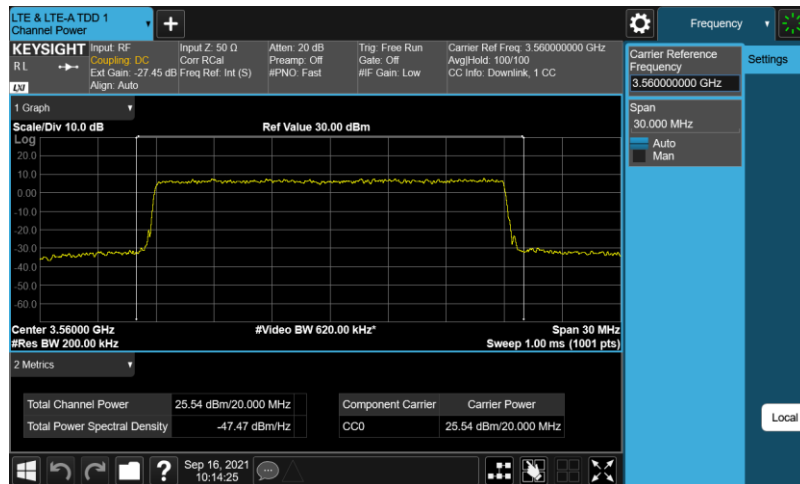
Band48-20MHz-256QAM-55990-E-TM3.1A-20



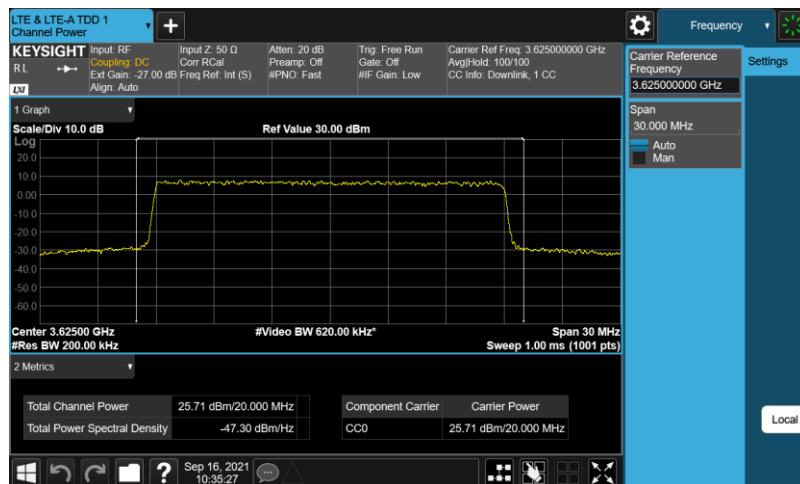
Band48-20MHz-256QAM-56640-E-TM3.1A-20



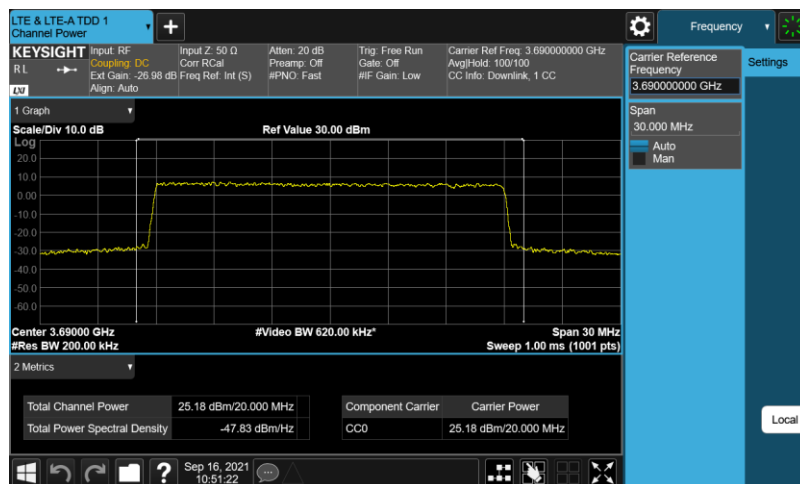
Band48-20MHz-QPSK-55340-E-TM1.1-20



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



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



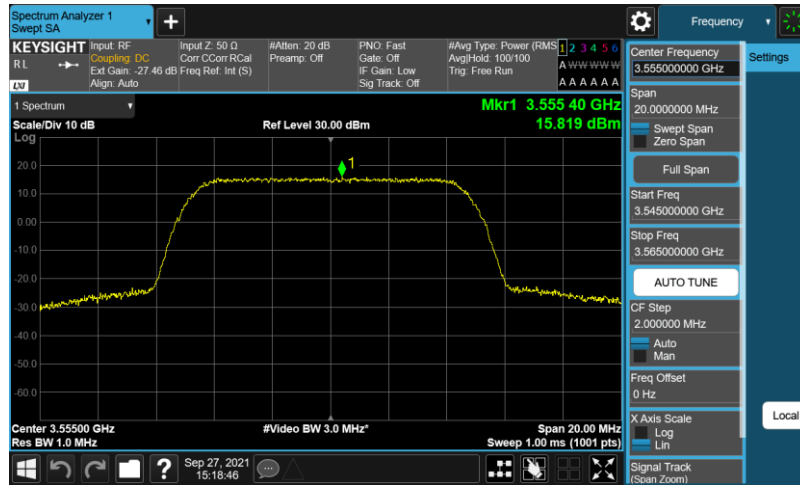
Appendix B: Power Spectral Density

Test Result

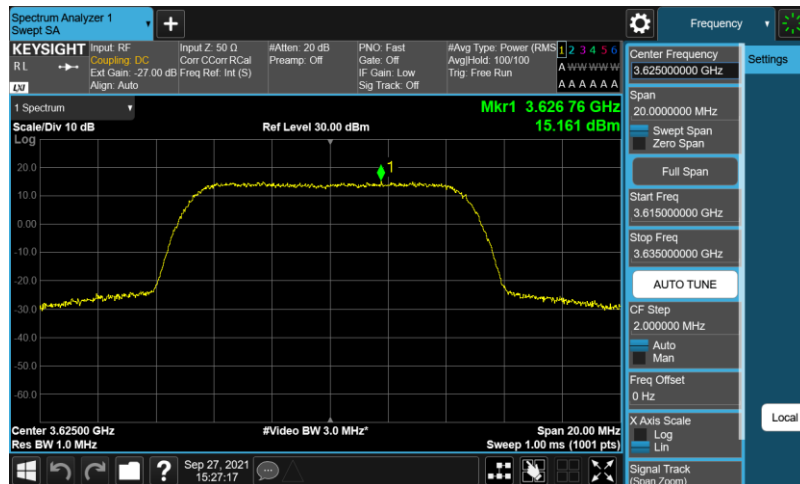
Band	Bandwidth	Modulation	Channel	Mode	PSD (dBm/MHz)
Band48	10MHz	256QAM	55290	E-TM3.1A	15.82
Band48	10MHz	256QAM	55990	E-TM3.1A	15.16
Band48	10MHz	256QAM	56690	E-TM3.1A	15.36
Band48	10MHz	QPSK	55290	E-TM1.1	15.72
Band48	10MHz	QPSK	55990	E-TM1.1	15.14
Band48	10MHz	QPSK	56690	E-TM1.1	15.11
Band48	20MHz	256QAM	55340	E-TM3.1A	12.80
Band48	20MHz	256QAM	55990	E-TM3.1A	12.42
Band48	20MHz	256QAM	56640	E-TM3.1A	13.08
Band48	20MHz	QPSK	55340	E-TM1.1	13.00
Band48	20MHz	QPSK	55990	E-TM1.1	12.67
Band48	20MHz	QPSK	56640	E-TM1.1	12.70

Test Graphs

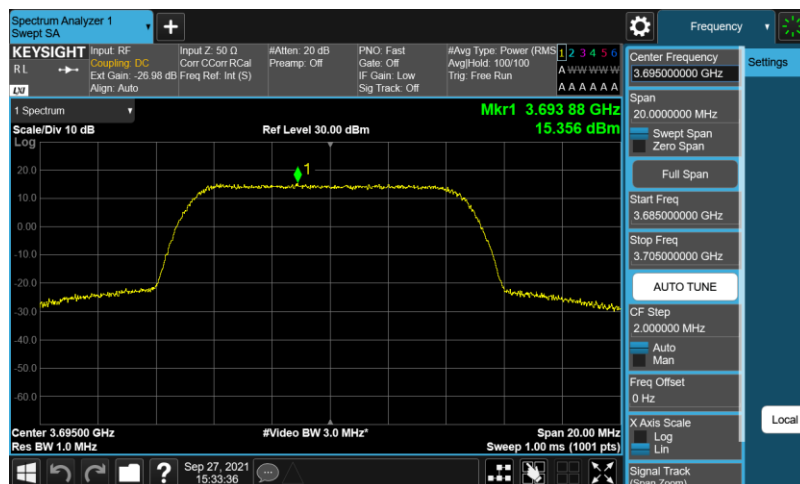
Band48-10MHz-256QAM-55290-E-TM3.1A



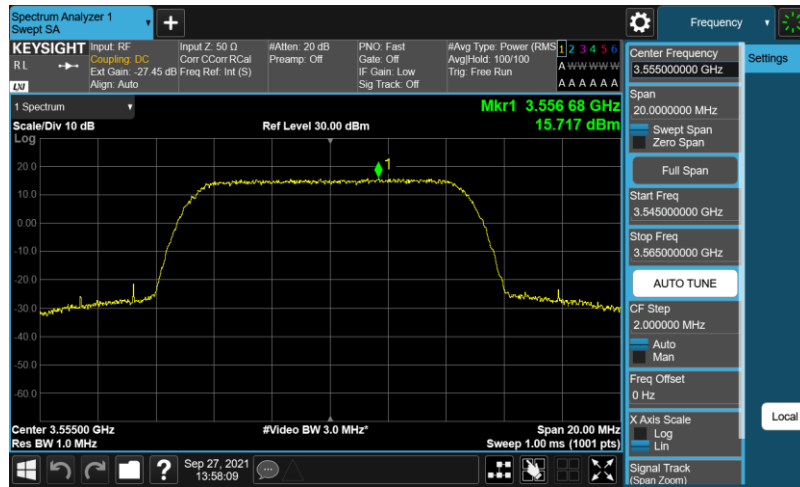
Band48-10MHz-256QAM-55990-E-TM3.1A



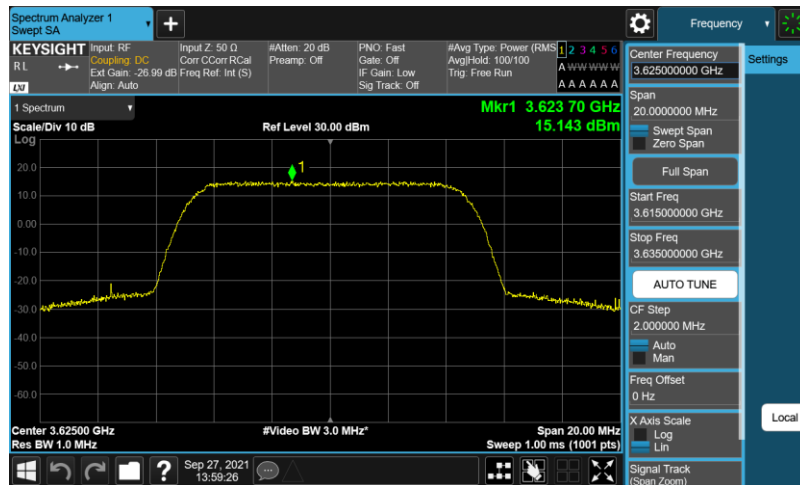
Band48-10MHz-256QAM-56690-E-TM3.1A



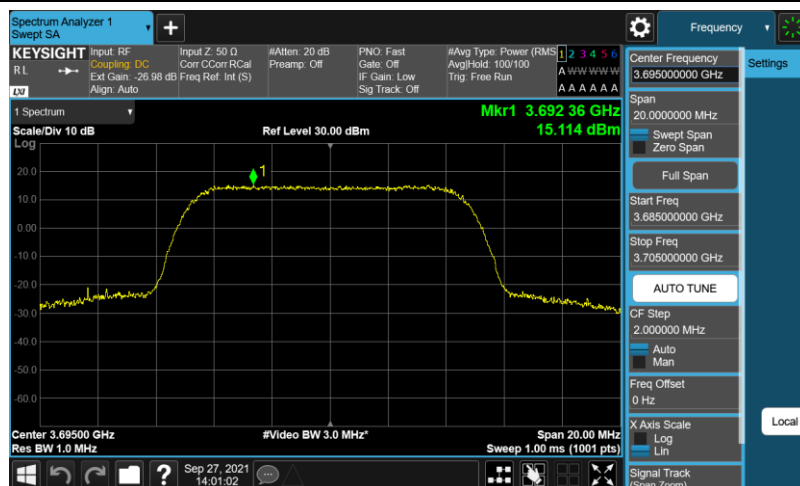
Band48-10MHz-QPSK-55290-E-TM1.1



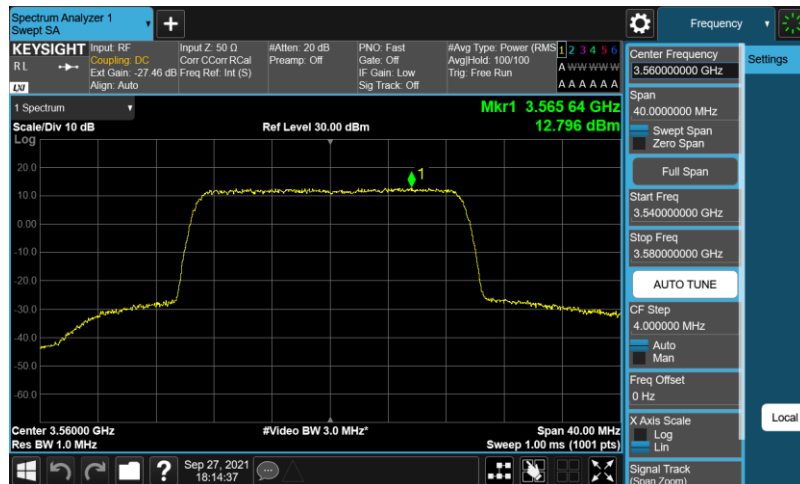
Band48-10MHz-QPSK-55990-E-TM1.1



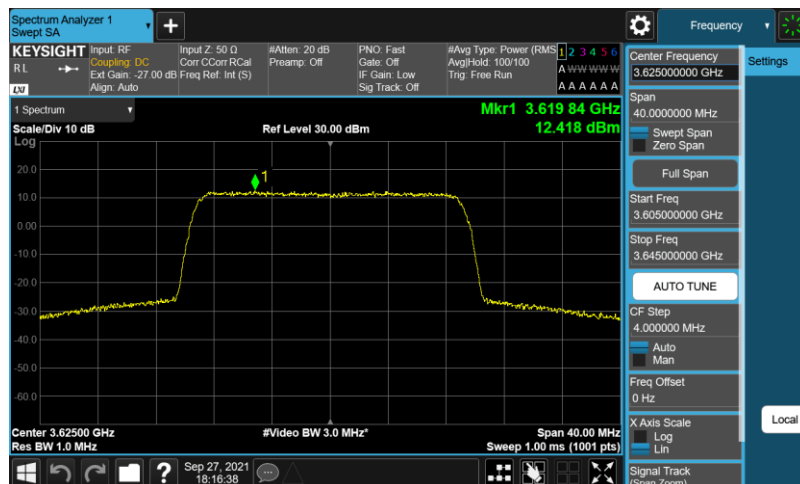
Band48-10MHz-QPSK-56690-E-TM1.1



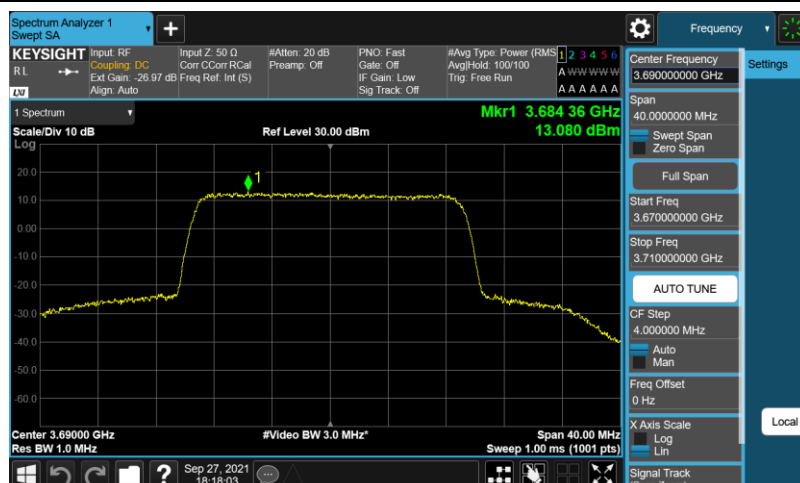
Band48-20MHz-256QAM-55340-E-TM3.1A



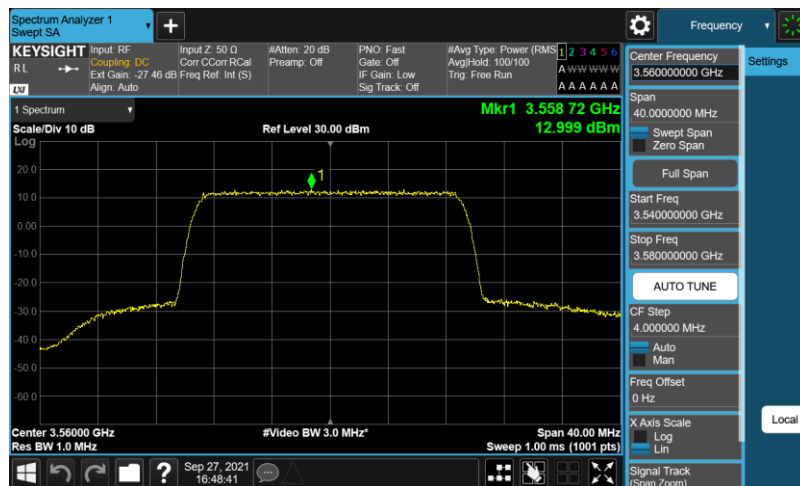
Band48-20MHz-256QAM-55990-E-TM3.1A



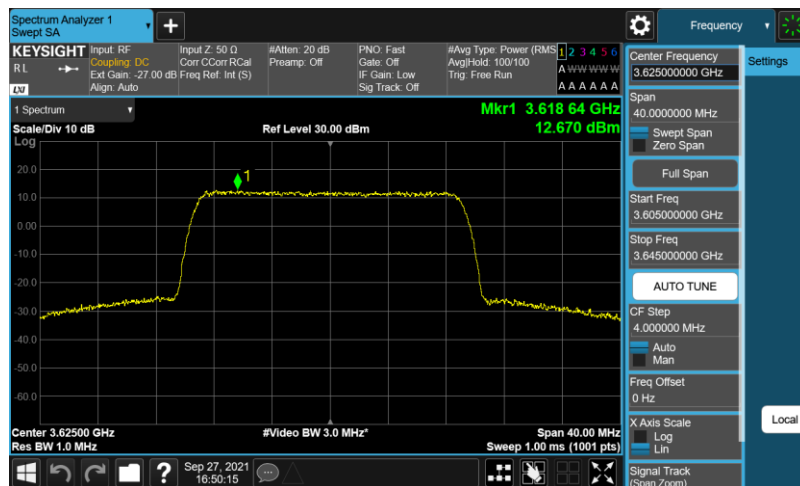
Band48-20MHz-256QAM-56640-E-TM3.1A



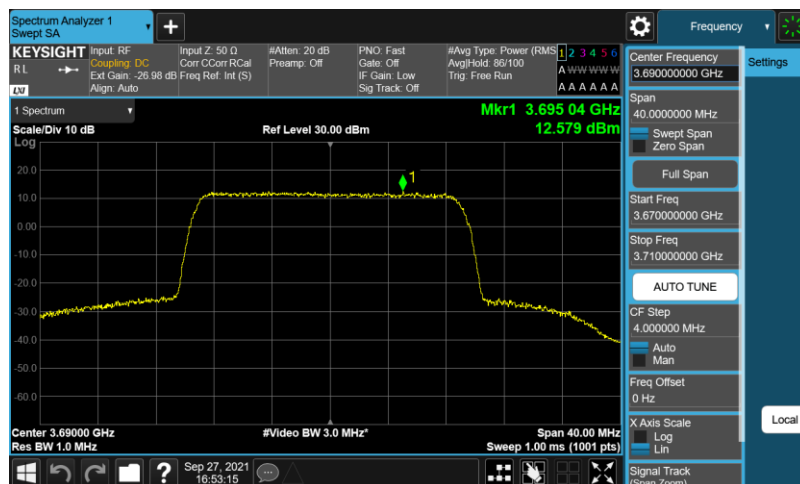
Band48-20MHz-QPSK-55340-E-TM1.1



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



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



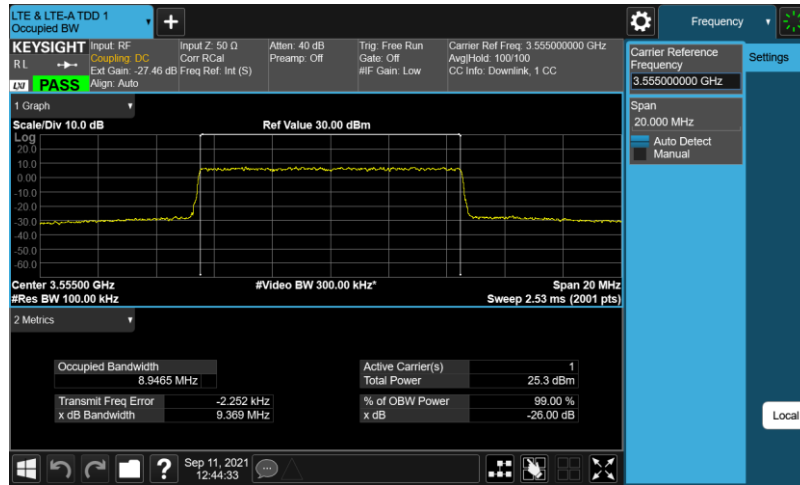
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

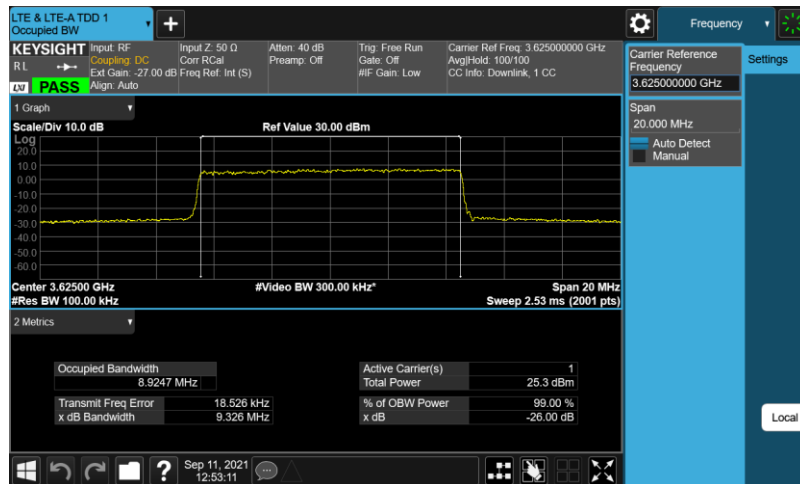
Band	Bandwidth	Modulation	Channel	Mode	99%(MHz)	EBW(MHz)
Band48	10MHz	256QAM	55290	E-TM3.1A	8.9465	9.369
Band48	10MHz	256QAM	55990	E-TM3.1A	8.9247	9.326
Band48	10MHz	256QAM	56690	E-TM3.1A	8.9419	9.293
Band48	10MHz	QPSK	55290	E-TM1.1	8.9409	9.311
Band48	10MHz	QPSK	55990	E-TM1.1	8.9400	9.340
Band48	10MHz	QPSK	56690	E-TM1.1	8.9345	9.335
Band48	20MHz	256QAM	55340	E-TM3.1A	17.863	18.63
Band48	20MHz	256QAM	55990	E-TM3.1A	17.898	18.79
Band48	20MHz	256QAM	56640	E-TM3.1A	17.855	18.58
Band48	20MHz	QPSK	55340	E-TM1.1	17.855	18.60
Band48	20MHz	QPSK	55990	E-TM1.1	17.847	18.60
Band48	20MHz	QPSK	56640	E-TM1.1	17.847	18.56

Test Graphs

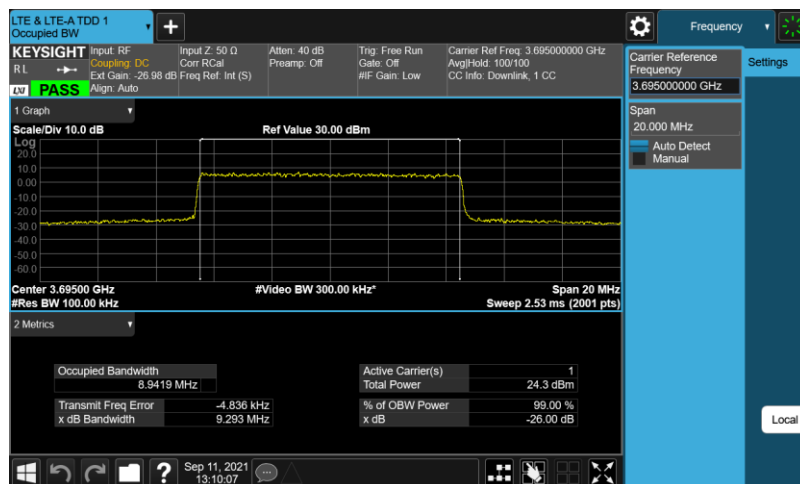
Band48-10MHz-256QAM-55290-E-TM3.1A



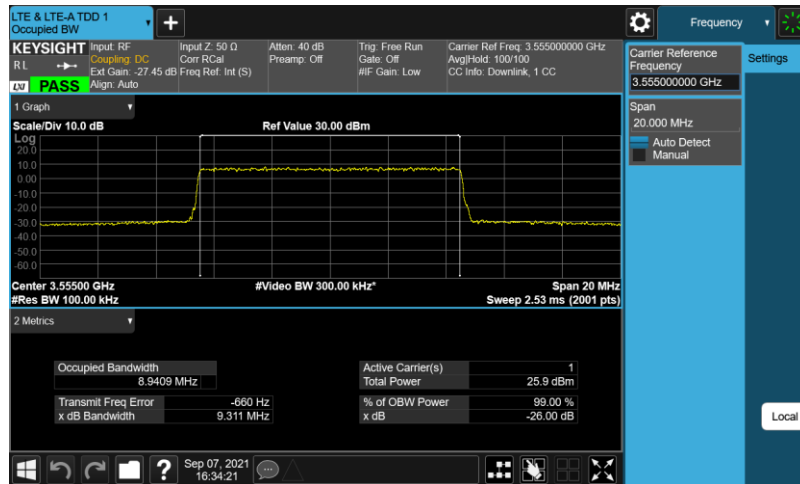
Band48-10MHz-256QAM-55990-E-TM3.1A



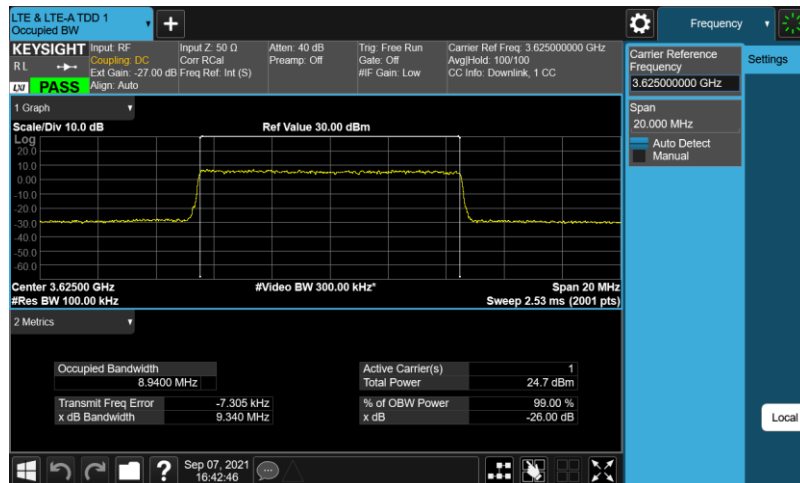
Band48-10MHz-256QAM-56690-E-TM3.1A



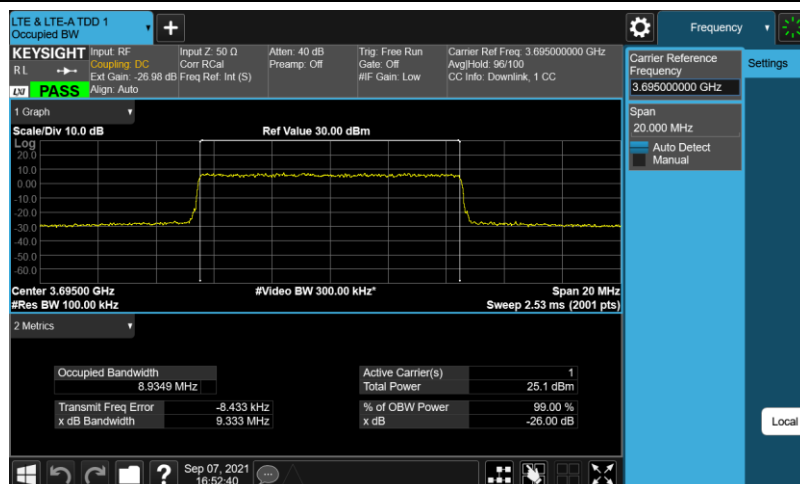
Band48-10MHz-QPSK-55290-E-TM1.1



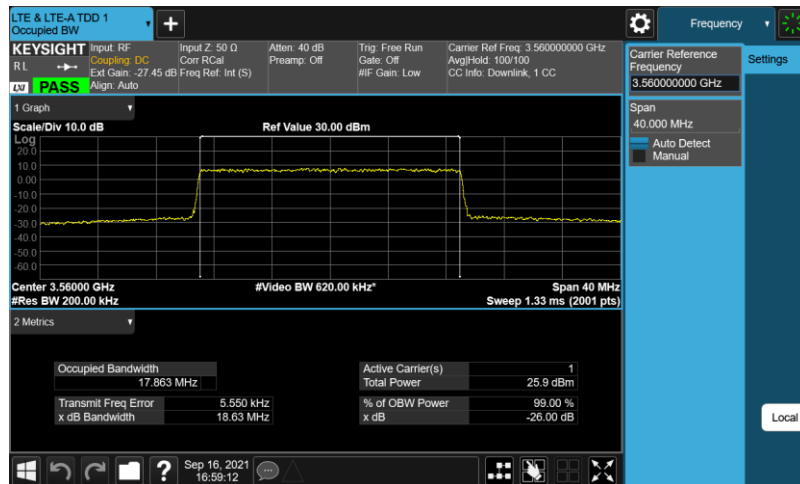
Band48-10MHz-QPSK-55990-E-TM1.1



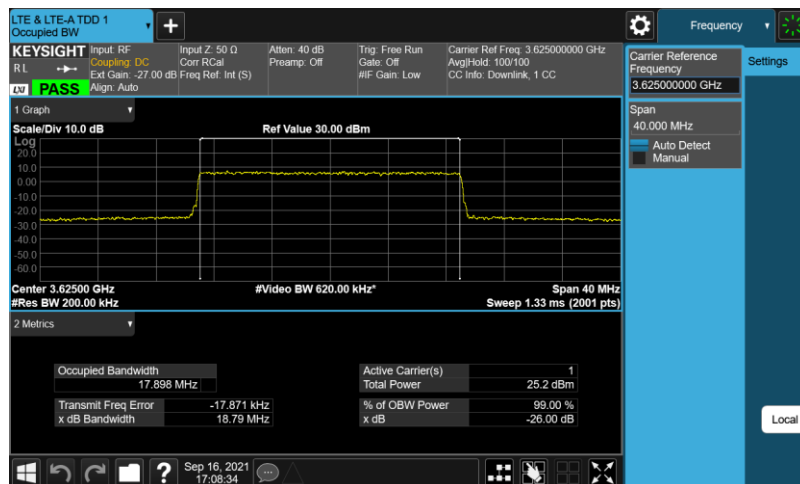
Band48-10MHz-QPSK-56690-E-TM1.1



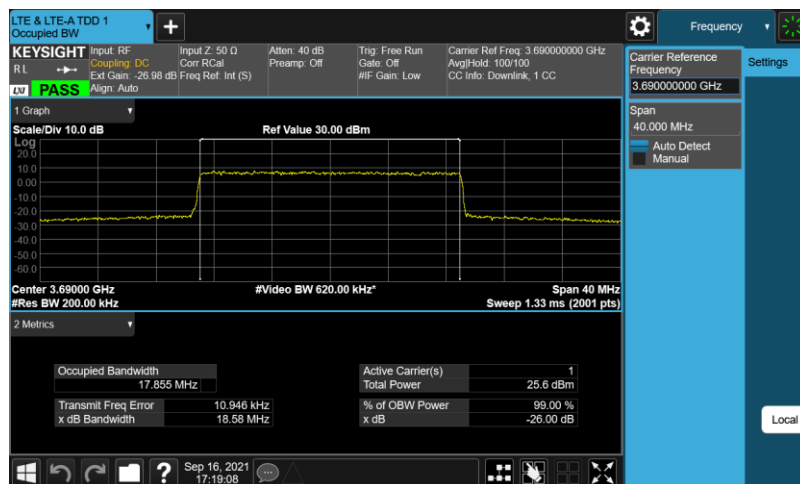
Band48-20MHz-256QAM-55340-E-TM3.1A



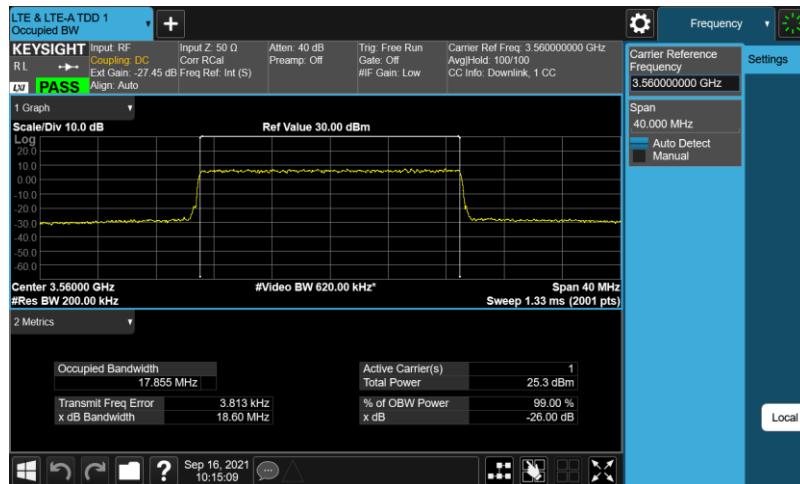
Band48-20MHz-256QAM-55990-E-TM3.1A



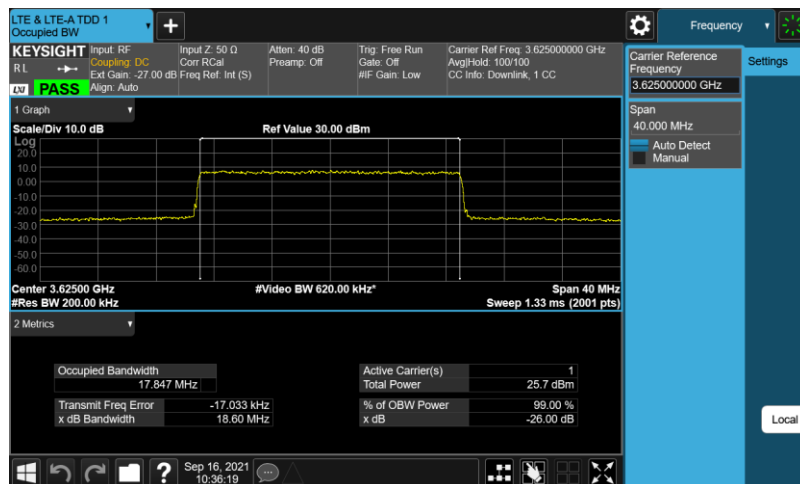
Band48-20MHz-256QAM-56640-E-TM3.1A



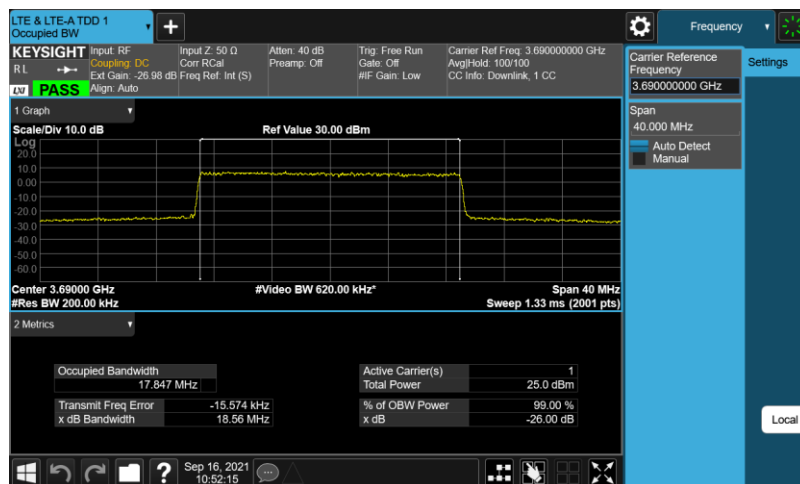
Band48-20MHz-QPSK-55340-E-TM1.1



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	256QAM	55990	E-TM3.1A	102	25	76	0.021	within the authorized bands
Band48	10MHz	256QAM	55990	E-TM3.1A	120	25	78	0.022	
Band48	10MHz	256QAM	55990	E-TM3.1A	138	25	76	0.021	
Band48	10MHz	QPSK	55990	E-TM1.1	102	25	75	0.021	
Band48	10MHz	QPSK	55990	E-TM1.1	120	25	77	0.021	
Band48	10MHz	QPSK	55990	E-TM1.1	138	25	75	0.021	
Band48	20MHz	256QAM	55990	E-TM3.1A	102	25	74	0.020	
Band48	20MHz	256QAM	55990	E-TM3.1A	120	25	72	0.020	
Band48	20MHz	256QAM	55990	E-TM3.1A	138	25	76	0.021	
Band48	20MHz	QPSK	55990	E-TM1.1	102	25	72	0.020	
Band48	20MHz	QPSK	55990	E-TM1.1	120	25	74	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	256QAM	55990	E-TM3.1A	120	-30	56	0.015	within the authorized bands
Band48	10MHz	256QAM	55990	E-TM3.1A	120	-20	55	0.015	
Band48	10MHz	256QAM	55990	E-TM3.1A	120	-10	56	0.015	
Band48	10MHz	256QAM	55990	E-TM3.1A	120	0	58	0.016	
Band48	10MHz	256QAM	55990	E-TM3.1A	120	10	60	0.017	
Band48	10MHz	256QAM	55990	E-TM3.1A	120	20	55	0.015	
Band48	10MHz	256QAM	55990	E-TM3.1A	120	30	58	0.016	
Band48	10MHz	256QAM	55990	E-TM3.1A	120	40	56	0.015	
Band48	10MHz	256QAM	55990	E-TM3.1A	120	50	55	0.015	
Band48	10MHz	QPSK	55990	E-TM1.1	120	-30	57	0.016	
Band48	10MHz	QPSK	55990	E-TM1.1	120	-20	55	0.015	
Band48	10MHz	QPSK	55990	E-TM1.1	120	-10	60	0.017	
Band48	10MHz	QPSK	55990	E-TM1.1	120	0	62	0.017	
Band48	10MHz	QPSK	55990	E-TM1.1	120	10	66	0.018	
Band48	10MHz	QPSK	55990	E-TM1.1	120	20	62	0.017	
Band48	10MHz	QPSK	55990	E-TM1.1	120	30	58	0.016	

Band48	10MHz	QPSK	55990	E-TM1.1	120	40	56	0.015	
Band48	10MHz	QPSK	55990	E-TM1.1	120	50	62	0.017	
Band48	20MHz	256QAM	55990	E-TM3.1A	120	-30	68	0.019	
Band48	20MHz	256QAM	55990	E-TM3.1A	120	-20	72	0.020	
Band48	20MHz	256QAM	55990	E-TM3.1A	120	-10	72	0.020	
Band48	20MHz	256QAM	55990	E-TM3.1A	120	0	68	0.019	
Band48	20MHz	256QAM	55990	E-TM3.1A	120	10	65	0.018	
Band48	20MHz	256QAM	55990	E-TM3.1A	120	20	70	0.019	
Band48	20MHz	256QAM	55990	E-TM3.1A	120	30	71	0.020	
Band48	20MHz	256QAM	55990	E-TM3.1A	120	40	70	0.019	
Band48	20MHz	256QAM	55990	E-TM3.1A	120	50	74	0.020	
Band48	20MHz	QPSK	55990	E-TM1.1	120	-30	78	0.022	
Band48	20MHz	QPSK	55990	E-TM1.1	120	-20	76	0.021	
Band48	20MHz	QPSK	55990	E-TM1.1	120	-10	78	0.022	
Band48	20MHz	QPSK	55990	E-TM1.1	120	0	75	0.021	
Band48	20MHz	QPSK	55990	E-TM1.1	120	10	78	0.022	
Band48	20MHz	QPSK	55990	E-TM1.1	120	20	77	0.021	
Band48	20MHz	QPSK	55990	E-TM1.1	120	30	77	0.021	
Band48	20MHz	QPSK	55990	E-TM1.1	120	40	76	0.021	
Band48	20MHz	QPSK	55990	E-TM1.1	120	50	74	0.020	

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

Test Result

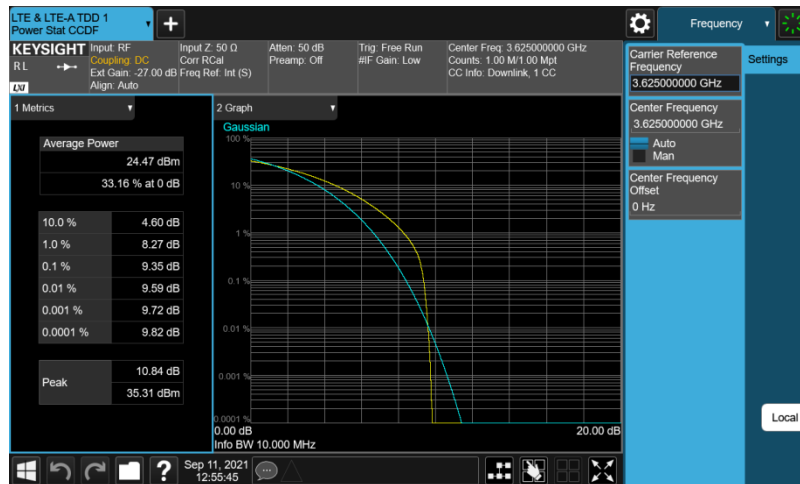
Band	Bandwidth	Modulation	Channel	Mode	Result(dBm)
Band48	10MHz	256QAM	55290	E-TM3.1A	9.38
Band48	10MHz	256QAM	55990	E-TM3.1A	9.35
Band48	10MHz	256QAM	56690	E-TM3.1A	9.50
Band48	10MHz	QPSK	55290	E-TM1.1	9.14
Band48	10MHz	QPSK	55990	E-TM1.1	9.16
Band48	10MHz	QPSK	56690	E-TM1.1	9.30
Band48	20MHz	256QAM	55340	E-TM3.1A	9.02
Band48	20MHz	256QAM	55990	E-TM3.1A	9.08
Band48	20MHz	256QAM	56640	E-TM3.1A	9.46
Band48	20MHz	QPSK	55340	E-TM1.1	10.31
Band48	20MHz	QPSK	55990	E-TM1.1	9.93
Band48	20MHz	QPSK	56640	E-TM1.1	9.86

Test Graphs

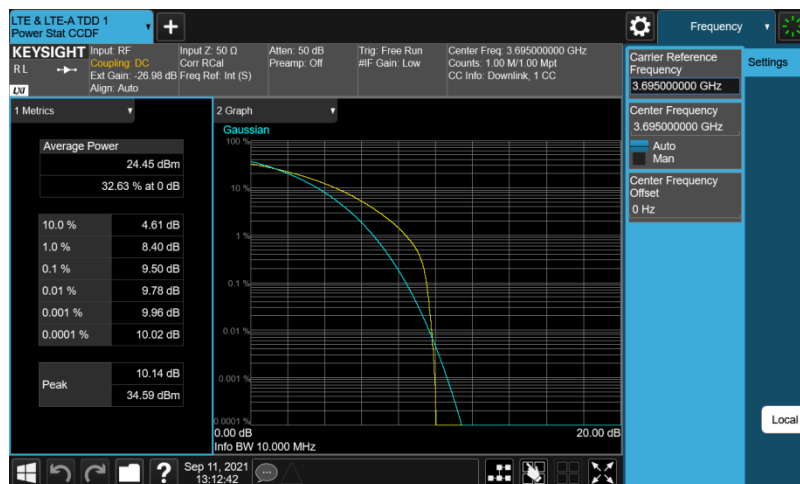
Band48-10MHz-256QAM-55290-E-TM3.1A



Band48-10MHz-256QAM-55990-E-TM3.1A



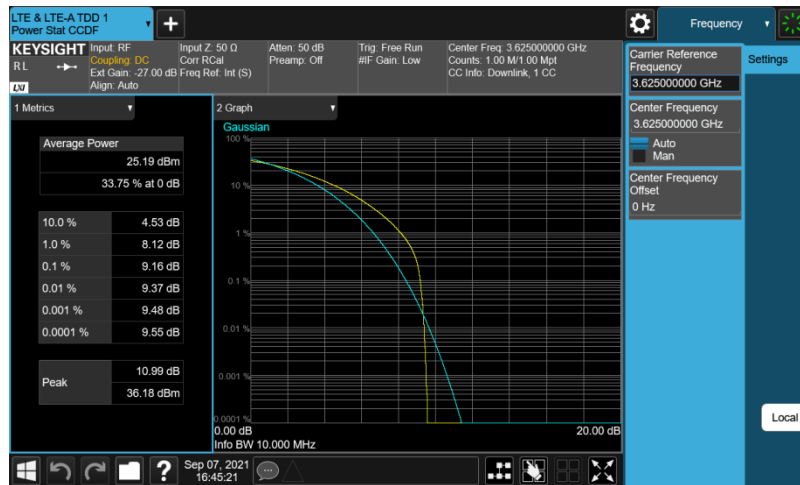
Band48-10MHz-256QAM-56690-E-TM3.1A



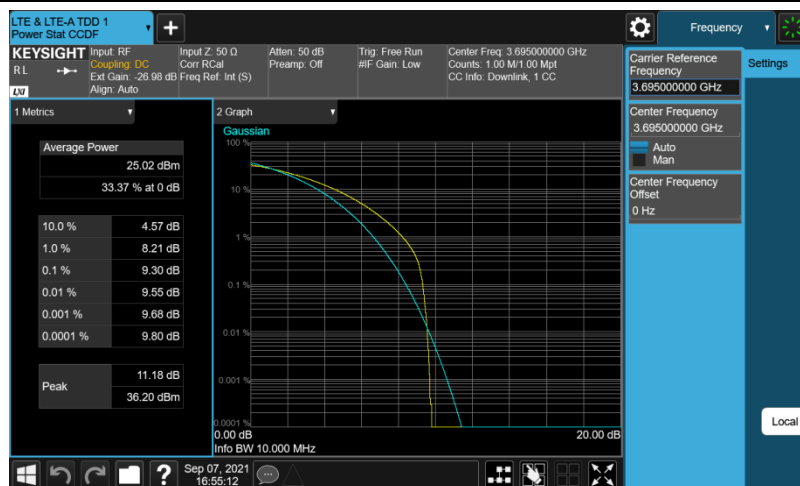
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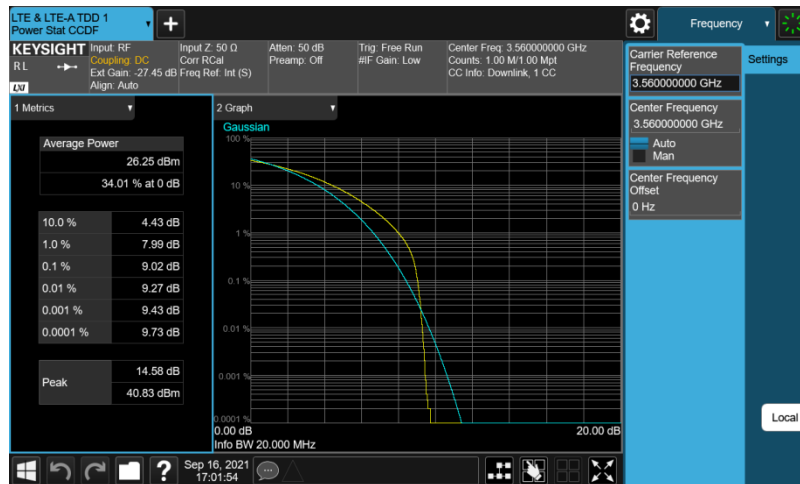
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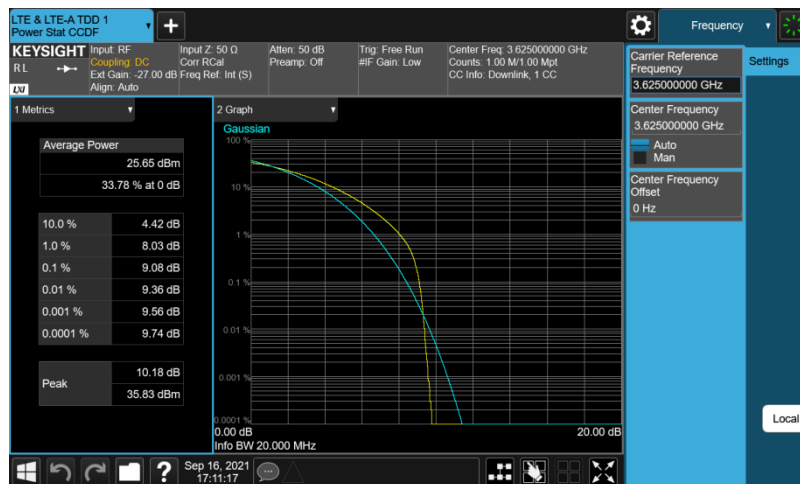
Band48-10MHz-QPSK-56690-E-TM1.1



Band48-20MHz-256QAM-55340-E-TM3.1A



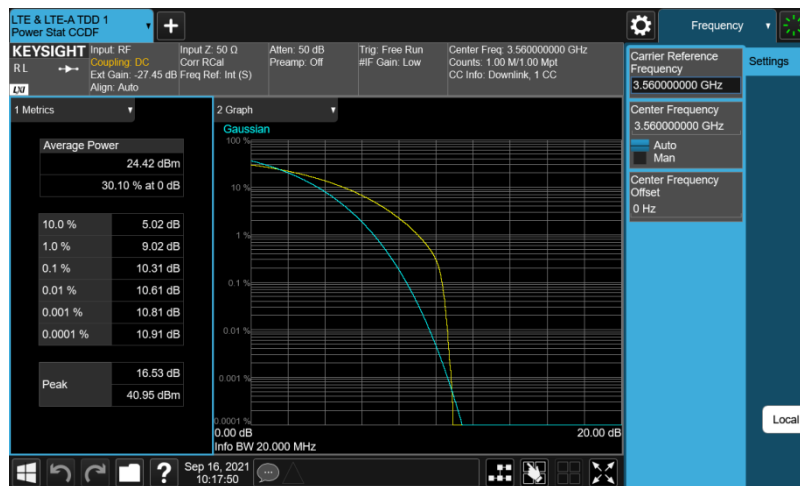
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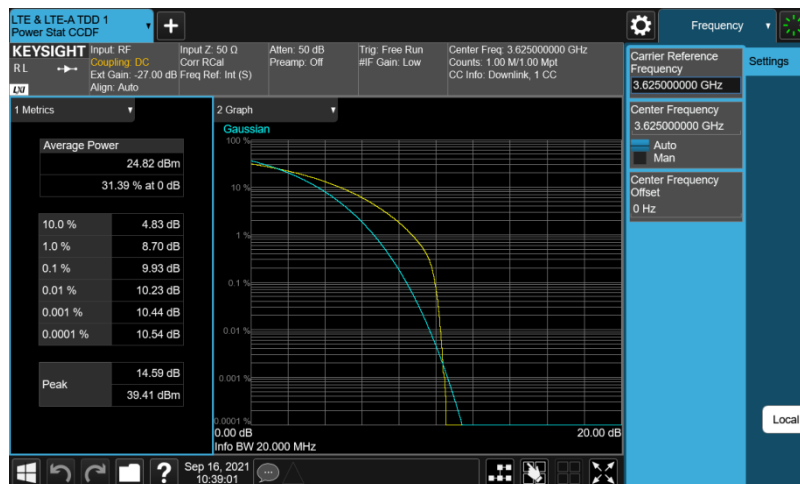
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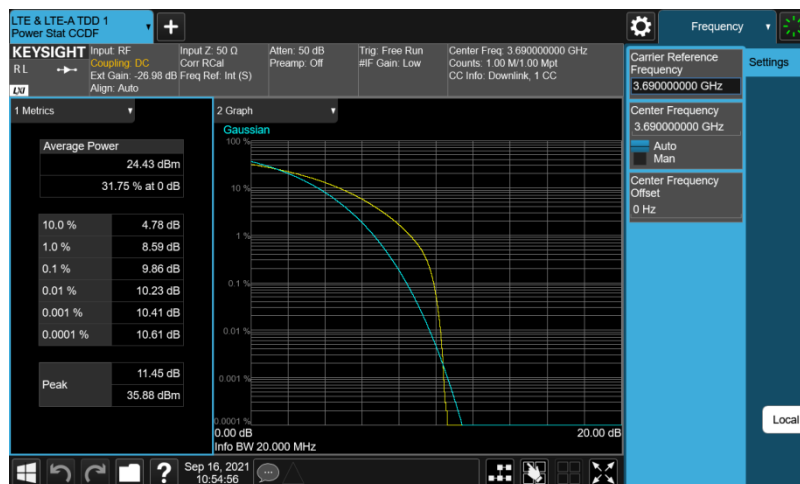
Band48-20MHz-QPSK-55340-E-TM1.1



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



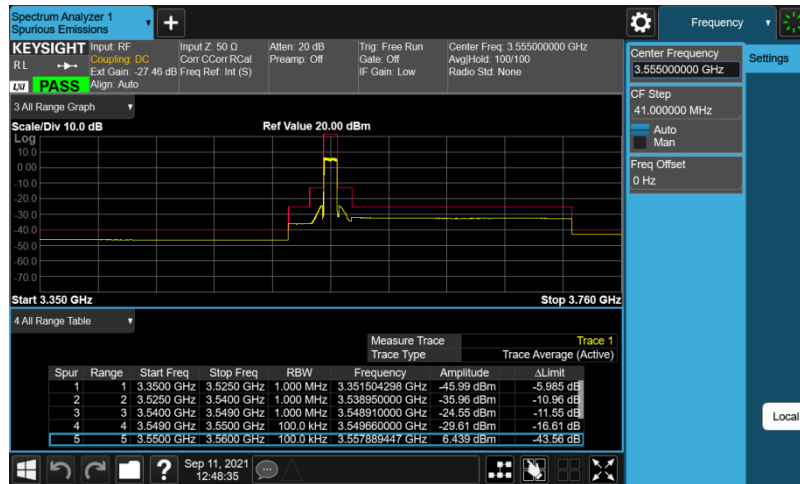
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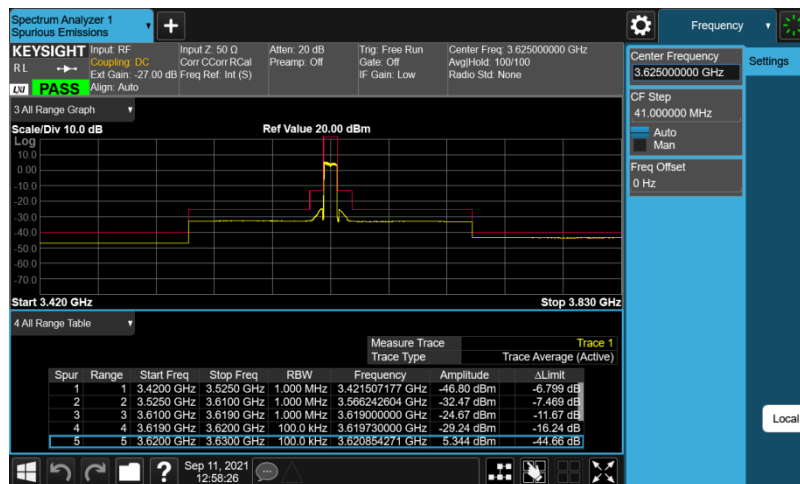
Appendix F: Emission Mask

Test Graphs

Band48-10MHz-256QAM-55290-E-TM3.1A



Band48-10MHz-256QAM-55990-E-TM3.1A



Band48-10MHz-256QAM-56690-E-TM3.1A

