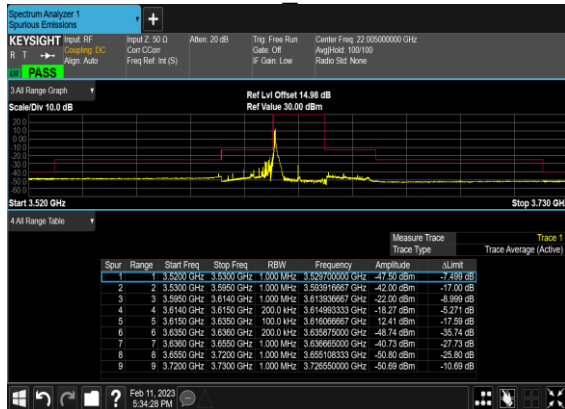
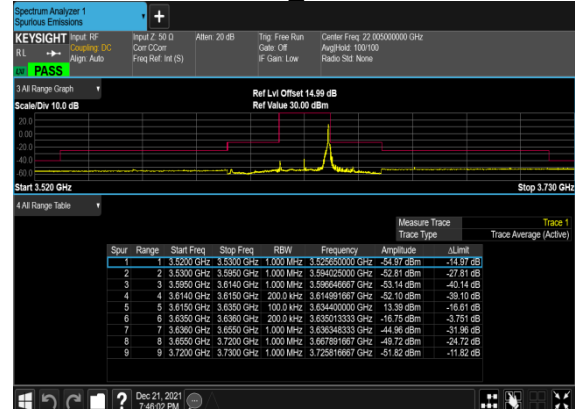
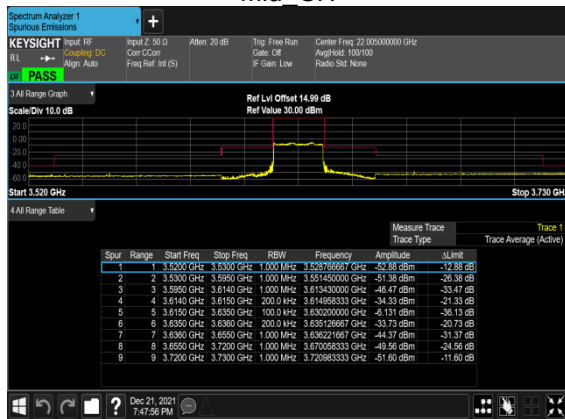
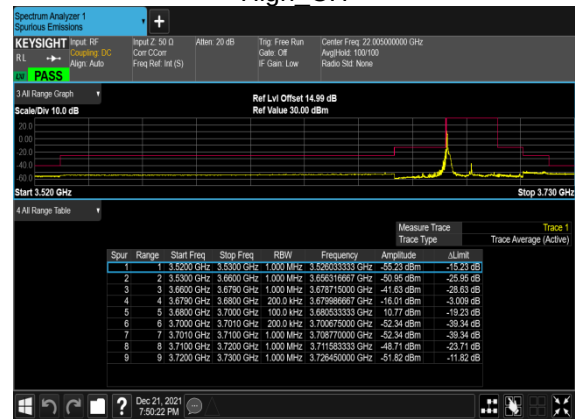
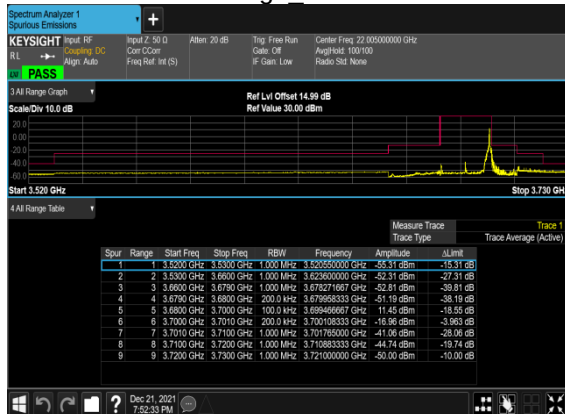
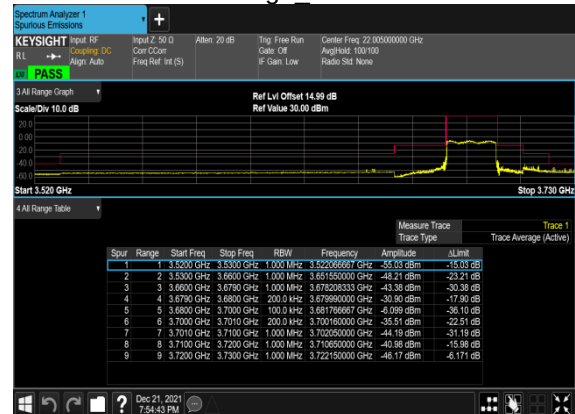
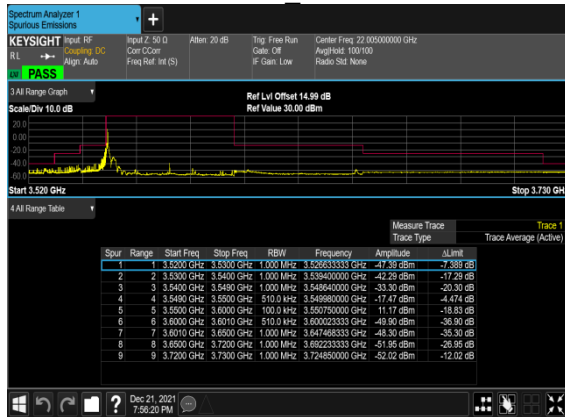


N48(20M)_CP-OFDM_QPSK_Edge_1RB_Left_
Mid CHN48(20M)_CP-OFDM_QPSK_Edge_1RB_Right_
Mid CHN48(20M)_CP-OFDM_QPSK_Outer_Full_
Mid CHN48(20M)_CP-OFDM_QPSK_Edge_1RB_Left_
High CHN48(20M)_CP-OFDM_QPSK_Edge_1RB_Right_
High CHN48(20M)_CP-OFDM_QPSK_Outer_Full_
High CH



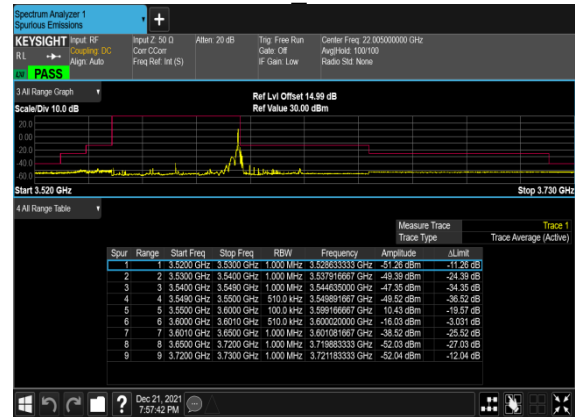
N48(50M)_CP-OFDM_QPSK_Edge_1RB_Left_

Low CH



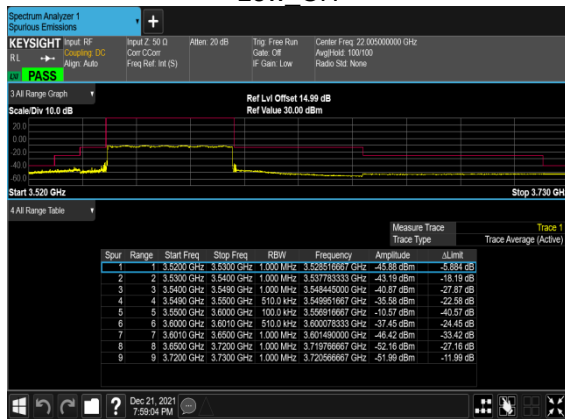
N48(50M)_CP-OFDM_QPSK_Edge_1RB_Right_

Low CH



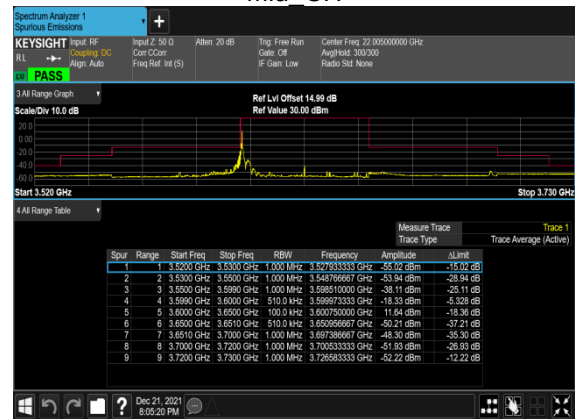
N48(50M)_CP-OFDM_QPSK_Outer_Full_

Low CH



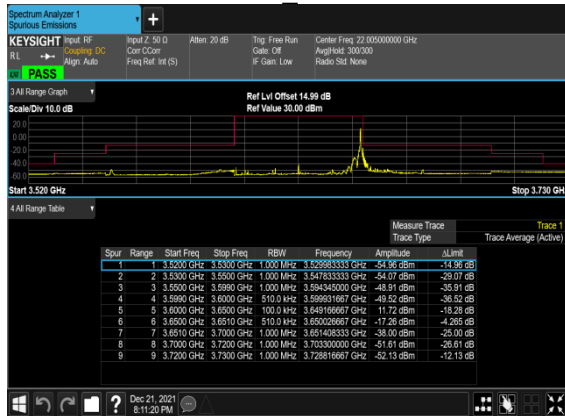
N48(50M)_CP-OFDM_QPSK_Edge_1RB_Left_

Mid CH



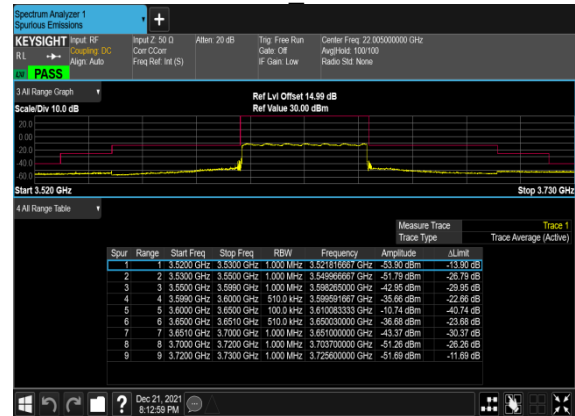
N48(50M)_CP-OFDM_QPSK_Edge_1RB_Right_

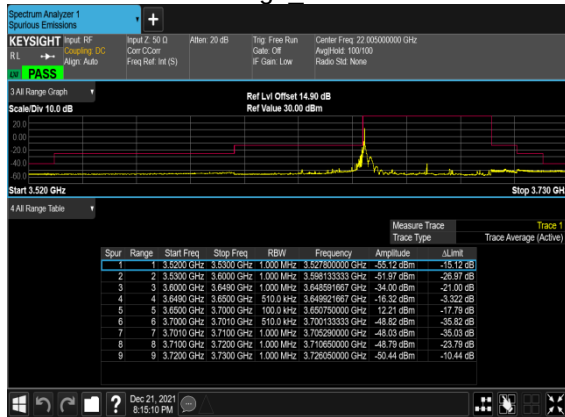
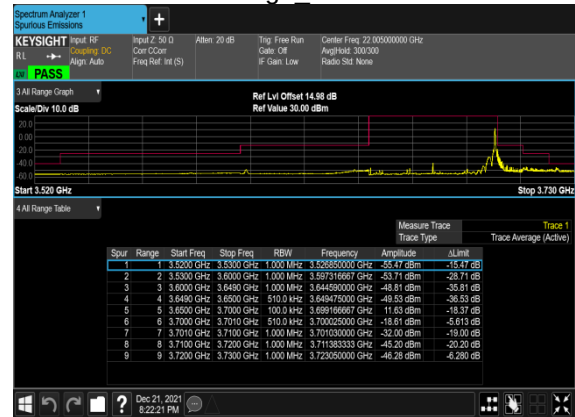
Mid CH



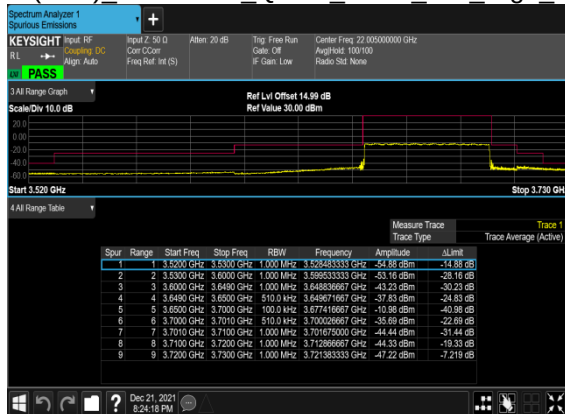
N48(50M)_CP-OFDM_QPSK_Outer_Full_

Mid CH



N48(50M)_CP-OFDM_QPSK_Edge_1RB_Left_
High CHN48(50M)_CP-OFDM_QPSK_Edge_1RB_Right_
High CH

N48(50M) CP-OFDM QPSK Outer Full High CH



**A5. FR1 N48 MIMO-ANT6 – SCS 15kHz****A5.1 Frequency Stability**

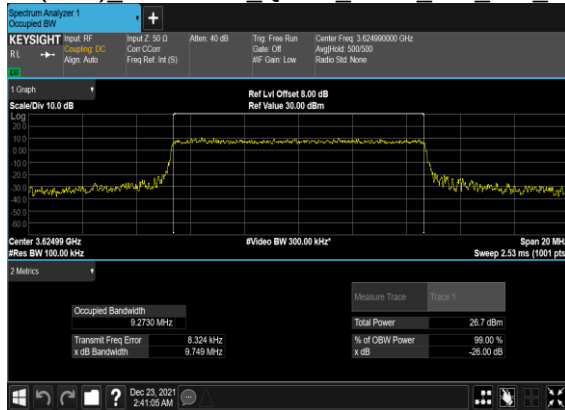
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
48	15	20	641666	3624.99	CP-OFDM QPSK	106@0	0.0519	PASS	NV
48	15	20	641666	3624.99	CP-OFDM QPSK	106@0	0.0462	PASS	LV
48	15	20	641666	3624.99	CP-OFDM QPSK	106@0	0.0446	PASS	HV
48	15	20	641666	3624.99	CP-OFDM QPSK	106@0	0.0469	PASS	-30℃
48	15	20	641666	3624.99	CP-OFDM QPSK	106@0	0.0058	PASS	-20℃
48	15	20	641666	3624.99	CP-OFDM QPSK	106@0	0.0495	PASS	-10℃
48	15	20	641666	3624.99	CP-OFDM QPSK	106@0	0.0532	PASS	0℃
48	15	20	641666	3624.99	CP-OFDM QPSK	106@0	0.0421	PASS	10℃
48	15	20	641666	3624.99	CP-OFDM QPSK	106@0	0.0255	PASS	20℃
48	15	20	641666	3624.99	CP-OFDM QPSK	106@0	0.0621	PASS	30℃
48	15	20	641666	3624.99	CP-OFDM QPSK	106@0	0.0249	PASS	40℃
48	15	20	641666	3624.99	CP-OFDM QPSK	106@0	0.0032	PASS	50℃

**A5.2 Occupied Bandwidth**

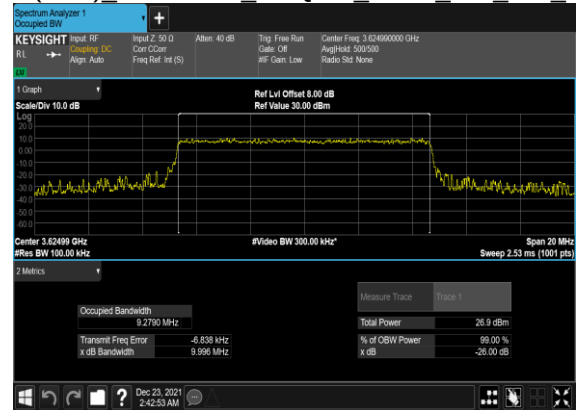
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB OBW (MHz)
48	15	10	641666	3624.99	CP-OFDM QPSK	52@0	9.273	9.749
48	15	10	641666	3624.99	CP-OFDM 16 QAM	52@0	9.279	9.996
48	15	10	641666	3624.99	CP-OFDM 64 QAM	52@0	9.2956	9.882
48	15	10	641666	3624.99	CP-OFDM 256 QAM	52@0	9.2724	9.801
48	15	15	641666	3624.99	CP-OFDM QPSK	79@0	14.103	14.81
48	15	15	641666	3624.99	CP-OFDM 16 QAM	79@0	14.106	14.73
48	15	15	641666	3624.99	CP-OFDM 64 QAM	79@0	14.088	14.79
48	15	15	641666	3624.99	CP-OFDM 256 QAM	79@0	14.069	14.7
48	15	20	641666	3624.99	CP-OFDM QPSK	106@0	18.914	19.73
48	15	20	641666	3624.99	CP-OFDM 16 QAM	106@0	18.927	19.61
48	15	20	641666	3624.99	CP-OFDM 64 QAM	106@0	18.91	19.74
48	15	20	641666	3624.99	CP-OFDM 256 QAM	106@0	18.919	19.83
48	15	40	641666	3624.99	CP-OFDM QPSK	216@0	38.449	39.98
48	15	40	641666	3624.99	CP-OFDM 16 QAM	216@0	38.566	39.88
48	15	40	641666	3624.99	CP-OFDM 64 QAM	216@0	38.515	39.97
48	15	40	641666	3624.99	CP-OFDM 256 QAM	216@0	38.433	39.95
48	15	50	641666	3624.99	CP-OFDM QPSK	270@0	48.148	49.75
48	15	50	641666	3624.99	CP-OFDM 16 QAM	270@0	48.23	49.86
48	15	50	641666	3624.99	CP-OFDM 64 QAM	270@0	48.152	49.99
48	15	50	641666	3624.99	CP-OFDM 256 QAM	270@0	48.173	49.73



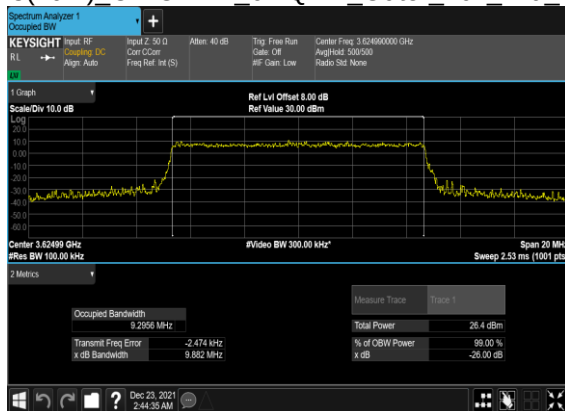
N48(10M) CP-OFDM QPSK Outer Full Mid CH



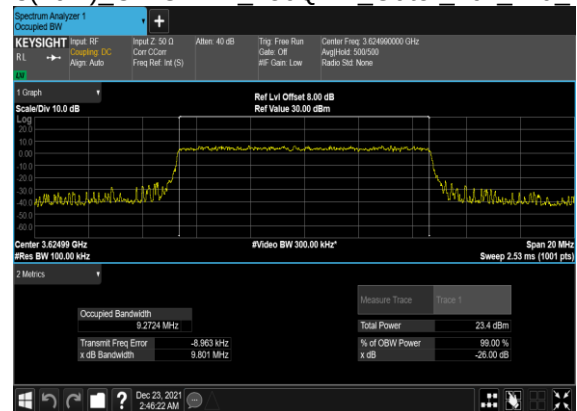
N48(10M) CP-OFDM 16 QAM Outer Full Mid CH



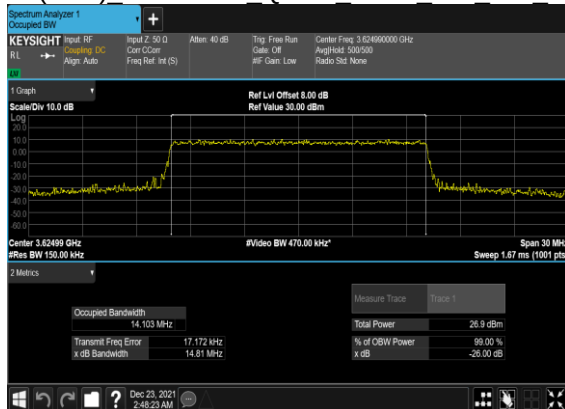
N48(10M) CP-OFDM 64 QAM Outer Full Mid CH



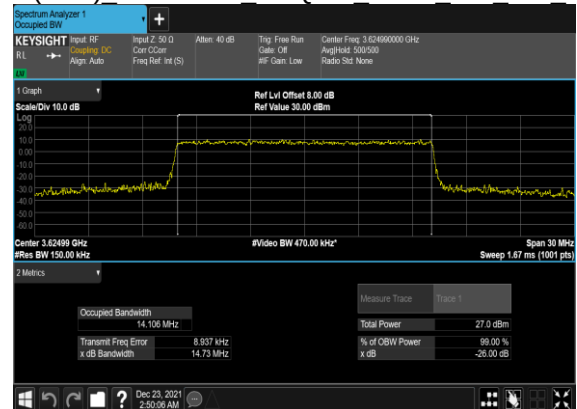
N48(10M) CP-OFDM 256QAM Outer Full Mid CH



N48(15M) CP-OFDM QPSK Outer Full Mid CH

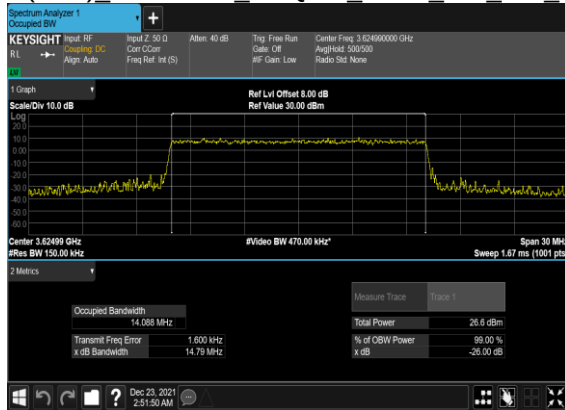


N48(15M) CP-OFDM 16 QAM Outer Full Mid CH

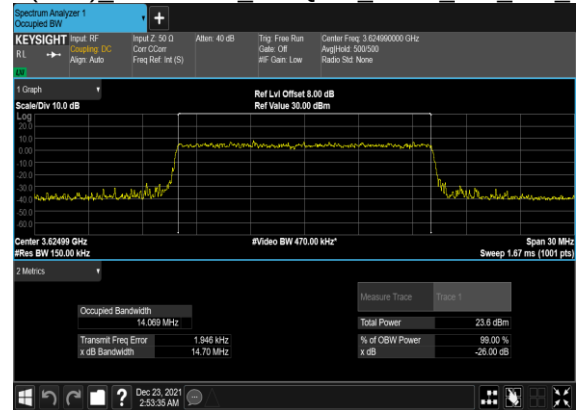




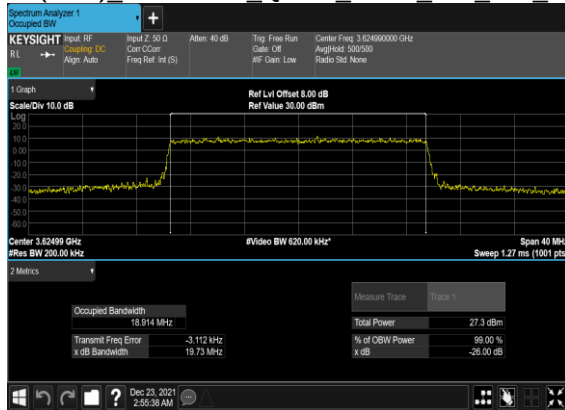
N48(15M) CP-OFDM 64 QAM Outer Full Mid CH



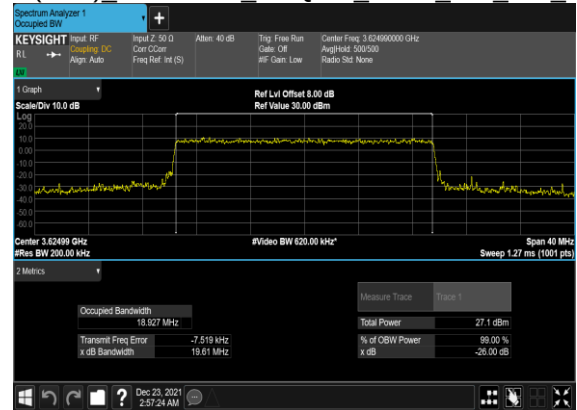
N48(15M) CP-OFDM 256QAM Outer Full Mid CH



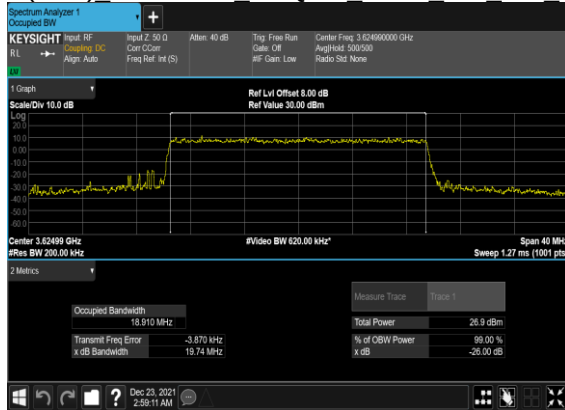
N48(20M) CP-OFDM QPSK Outer Full Mid CH



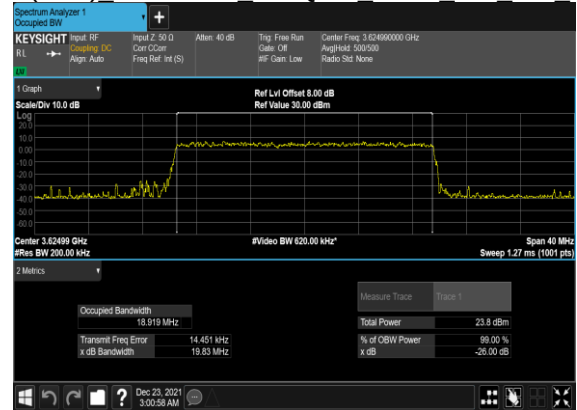
N48(20M) CP-OFDM 16 QAM Outer Full Mid CH



N48(20M) CP-OFDM 64 QAM Outer Full Mid CH

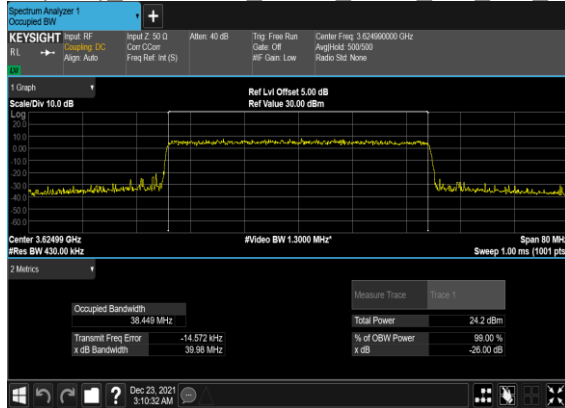


N48(20M) CP-OFDM 256QAM Outer Full Mid CH

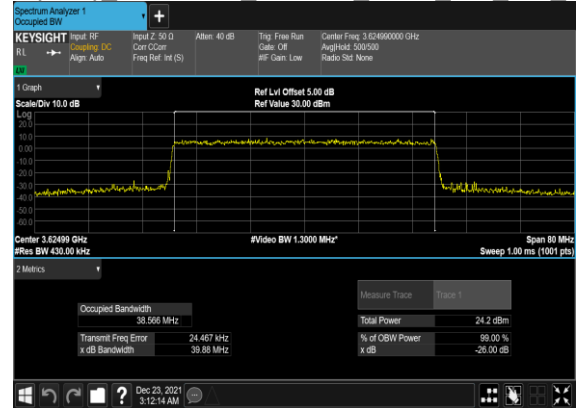




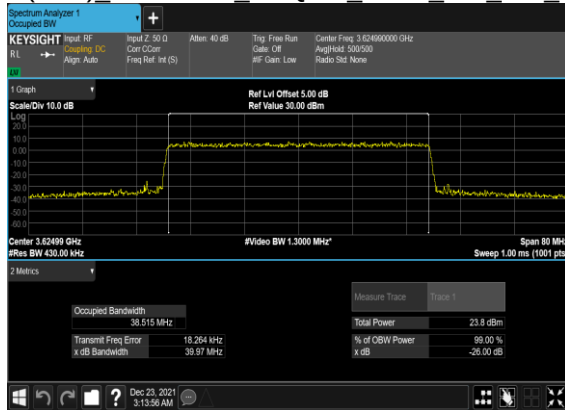
N48(40M) CP-OFDM QPSK Outer Full Mid CH



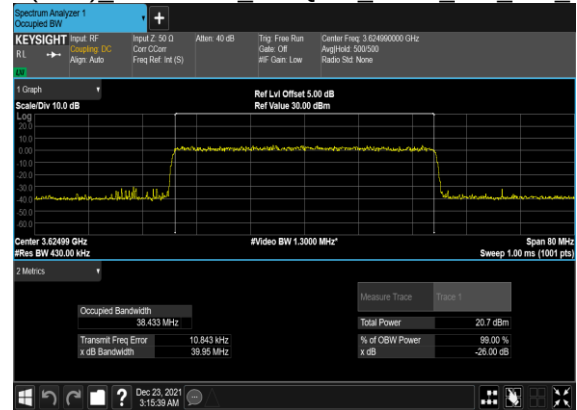
N48(40M) CP-OFDM 16 QAM Outer Full Mid CH



N48(40M) CP-OFDM 64 QAM Outer Full Mid CH



N48(40M) CP-OFDM 256QAM Outer Full Mid CH



N48(50M) CP-OFDM QPSK Outer Full Mid CH

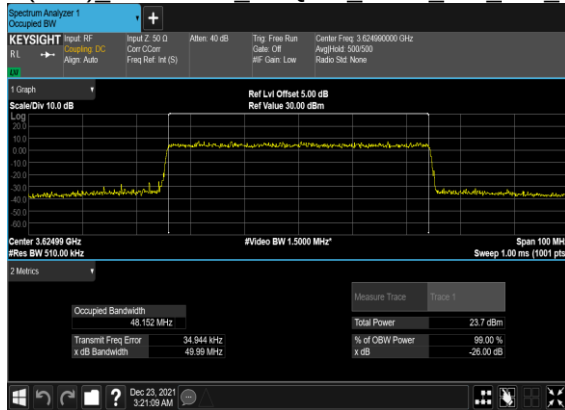


N48(50M) CP-OFDM 16 QAM Outer Full Mid CH

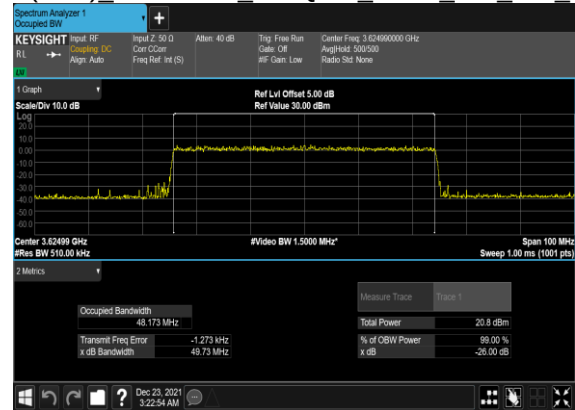




N48(50M) CP-OFDM 64 QAM Outer Full Mid CH



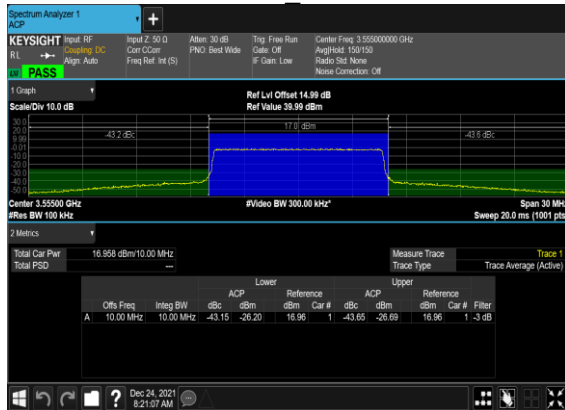
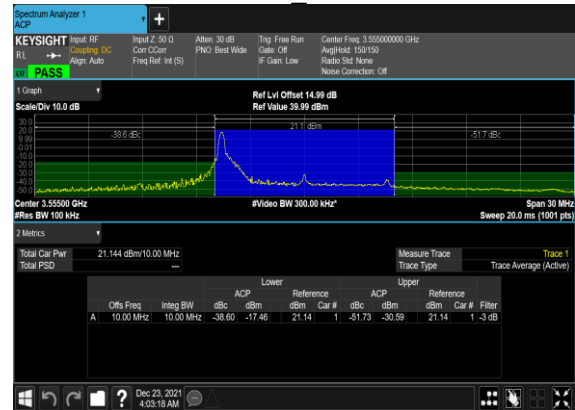
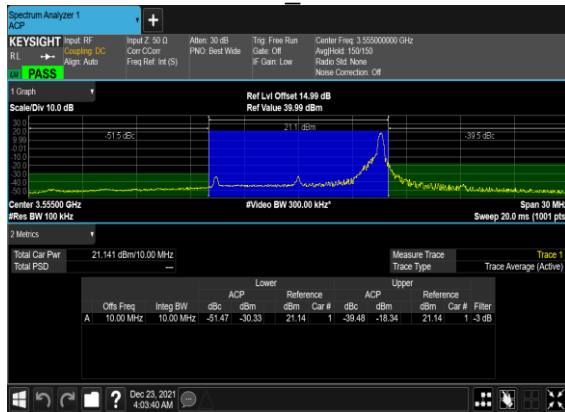
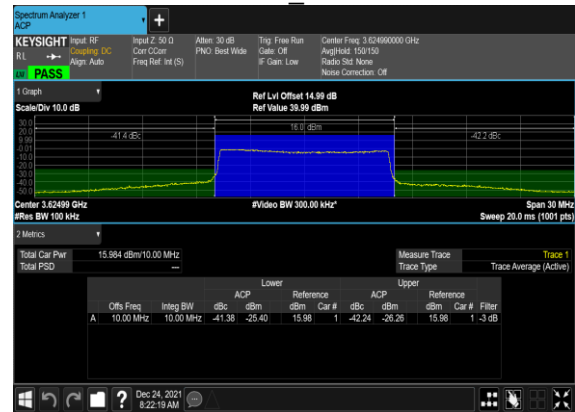
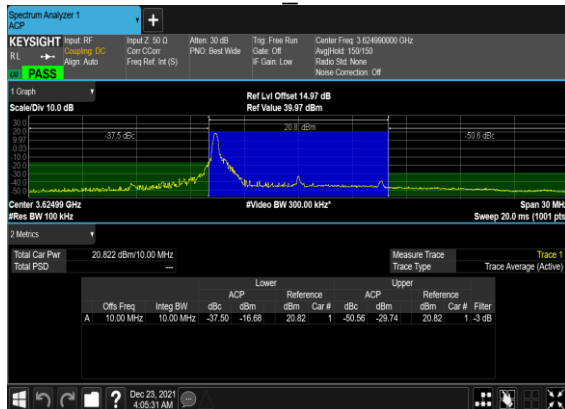
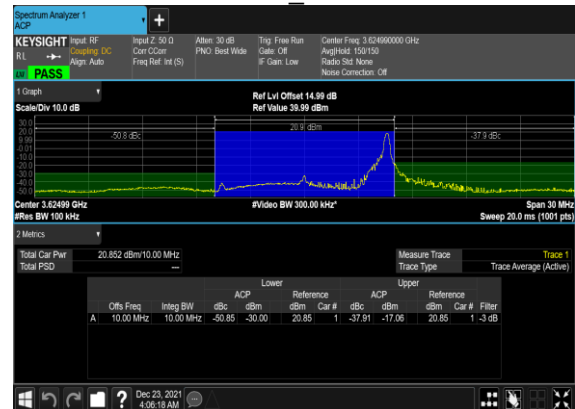
N48(50M) CP-OFDM 256QAM Outer Full Mid CH

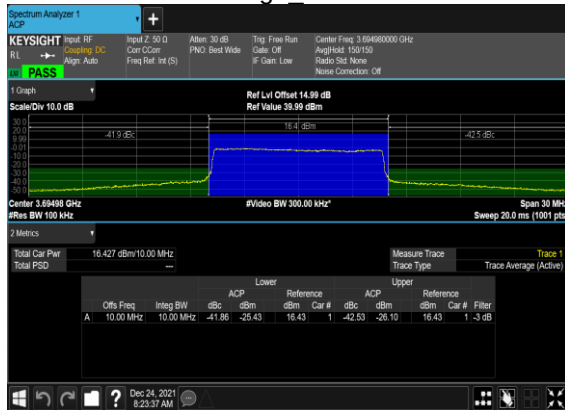
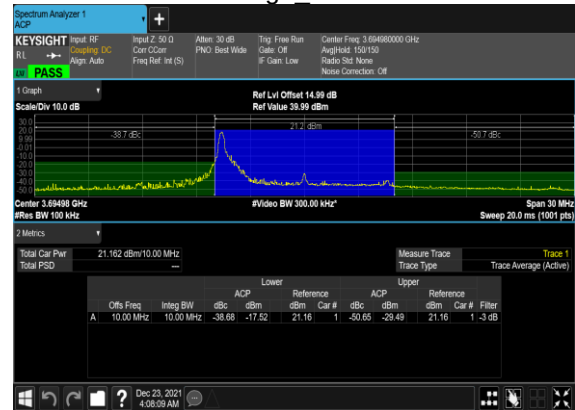
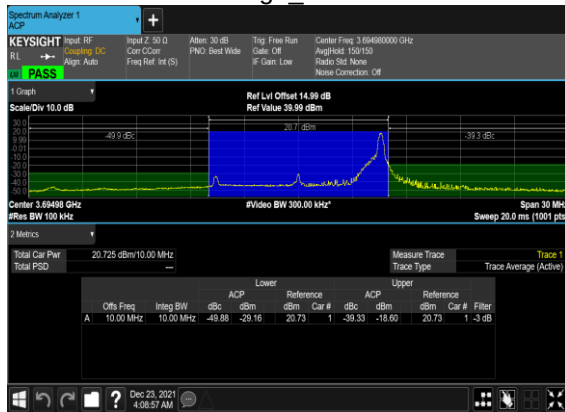
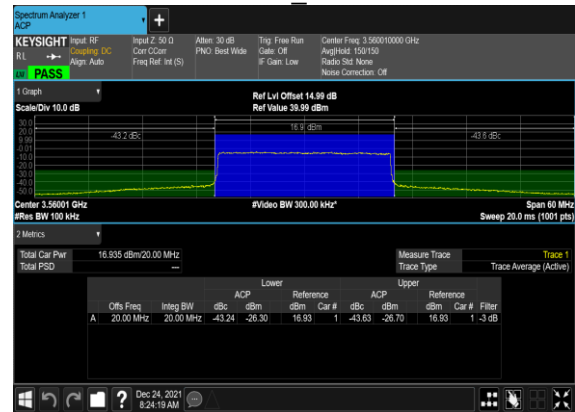
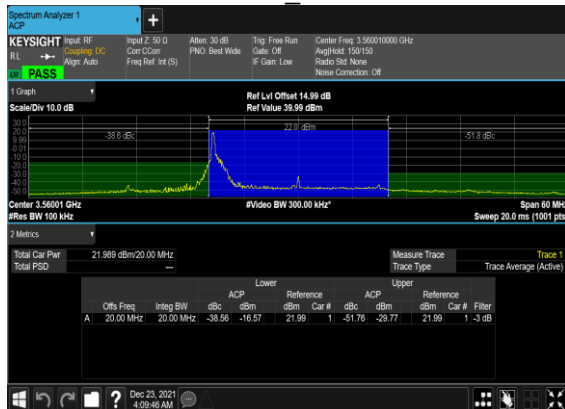
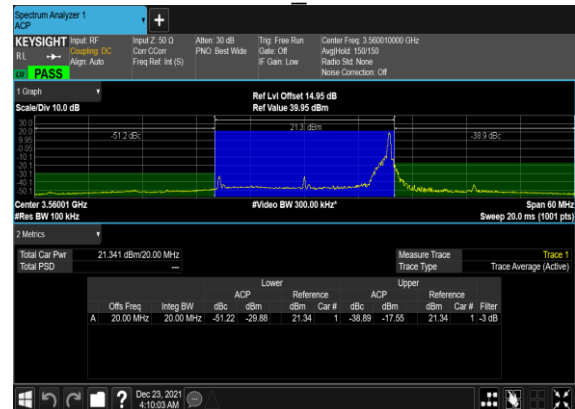




A5.3 Adjacent Channel Leakage Ratio

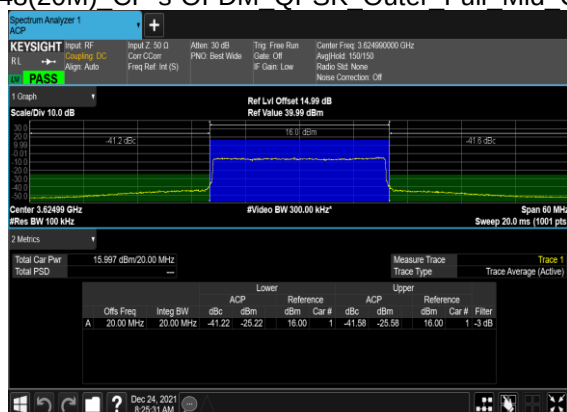
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Lower Margin	Upper Margin	Result	Verdict
48	15	10	637000	3555.0	CP-s-OFDM QPSK	52@0	-13.15	-13.65	see graph	PASS
48	15	10	637000	3555.0	CP-s-OFDM QPSK	1@0	-8.6	-21.73	see graph	PASS
48	15	10	637000	3555.0	CP-s-OFDM QPSK	1@51	-21.47	-9.48	see graph	PASS
48	15	10	641666	3624.99	CP-s-OFDM QPSK	52@0	-11.38	-12.24	see graph	PASS
48	15	10	641666	3624.99	CP-s-OFDM QPSK	1@0	-7.5	-20.56	see graph	PASS
48	15	10	641666	3624.99	CP-s-OFDM QPSK	1@51	-20.85	-7.91	see graph	PASS
48	15	10	646332	3694.98	CP-s-OFDM QPSK	52@0	-11.86	-12.53	see graph	PASS
48	15	10	646332	3694.98	CP-s-OFDM QPSK	1@0	-8.68	-20.65	see graph	PASS
48	15	10	646332	3694.98	CP-s-OFDM QPSK	1@51	-19.88	-9.33	see graph	PASS
48	15	20	637334	3560.01	CP-s-OFDM QPSK	106@0	-13.24	-13.63	see graph	PASS
48	15	20	637334	3560.01	CP-s-OFDM QPSK	1@0	-8.56	-21.76	see graph	PASS
48	15	20	637334	3560.01	CP-s-OFDM QPSK	1@105	-21.22	-8.89	see graph	PASS
48	15	20	641666	3624.99	CP-s-OFDM QPSK	106@0	-11.22	-11.58	see graph	PASS
48	15	20	641666	3624.99	CP-s-OFDM QPSK	1@0	-8.37	-18.69	see graph	PASS
48	15	20	641666	3624.99	CP-s-OFDM QPSK	1@105	-22.25	-10.88	see graph	PASS
48	15	20	646000	3690.0	CP-s-OFDM QPSK	106@0	-11.73	-12.19	see graph	PASS
48	15	20	646000	3690.0	CP-s-OFDM QPSK	1@0	-8.11	-19.13	see graph	PASS
48	15	20	646000	3690.0	CP-s-OFDM QPSK	1@105	-19.27	-8.14	see graph	PASS
48	15	50	638334	3575.01	CP-s-OFDM QPSK	270@0	-11.93	-12.06	see graph	PASS
48	15	50	638334	3575.01	CP-s-OFDM QPSK	1@0	-11.41	-16.37	see graph	PASS
48	15	50	638334	3575.01	CP-s-OFDM QPSK	1@269	-16.48	-11.97	see graph	PASS
48	15	50	641666	3624.99	CP-s-OFDM QPSK	270@0	-11.73	-11.73	see graph	PASS
48	15	50	641666	3624.99	CP-s-OFDM QPSK	1@0	-11.26	-14.76	see graph	PASS
48	15	50	641666	3624.99	CP-s-OFDM QPSK	1@269	-16.73	-12.9	see graph	PASS
48	15	50	645000	3675.0	CP-s-OFDM QPSK	270@0	-11.28	-11.57	see graph	PASS
48	15	50	645000	3675.0	CP-s-OFDM QPSK	1@0	-10.65	-15.7	see graph	PASS
48	15	50	645000	3675.0	CP-s-OFDM QPSK	1@269	-15.29	-10.41	see graph	PASS

N48(10M)_CP-s-OFDM_QPSK_Outer_Full_
Low_CHN48(10M)_CP-s-OFDM_QPSK_Edge_1RB_Left_
Low_CHN48(10M)_CP-s-OFDM_QPSK_Edge_1RB_Right_
Low_CHN48(10M)_CP-s-OFDM_QPSK_Outer_Full_
Mid_CHN48(10M)_CP-s-OFDM_QPSK_Edge_1RB_Left_
Mid_CHN48(10M)_CP-s-OFDM_QPSK_Edge_1RB_Right_
Mid_CH

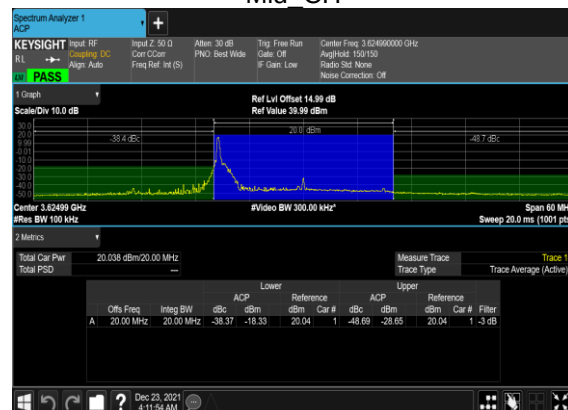
N48(10M)_CP-s-OFDM_QPSK_Outer_Full_
High_CHN48(10M)_CP-s-OFDM_QPSK_Edge_1RB_Left_
High_CHN48(10M)_CP-s-OFDM_QPSK_Edge_1RB_Right_
High_CHN48(20M)_CP-s-OFDM_QPSK_Outer_Full_
Low_CHN48(20M)_CP-s-OFDM_QPSK_Edge_1RB_Left_
Low_CHN48(20M)_CP-s-OFDM_QPSK_Edge_1RB_Right_
Low_CH



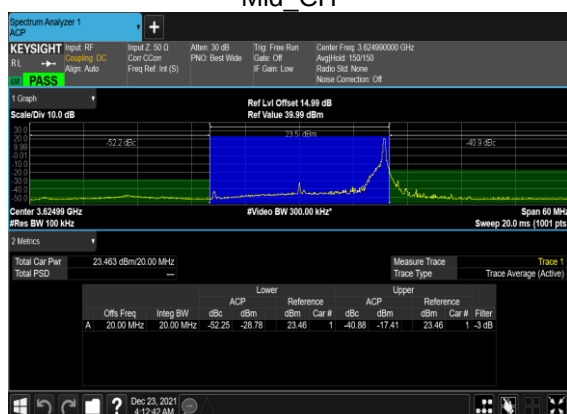
N48(20M)_CP-s-OFDM_QPSK_Outer_Full_Mid_CH



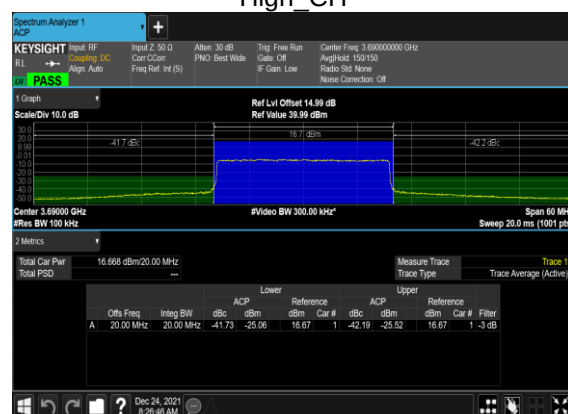
N48(20M)_CP-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



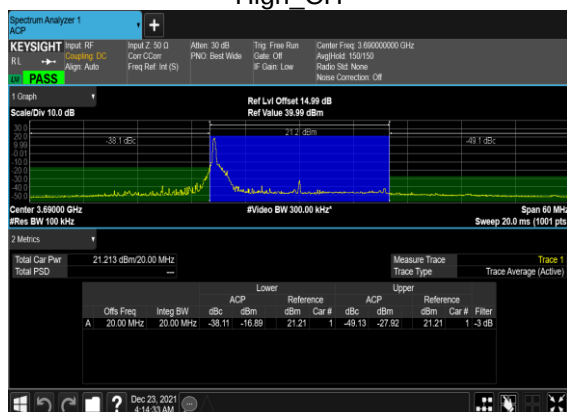
N48(20M)_CP-s-OFDM_QPSK_Edge_1RB_Right_Mid_CH



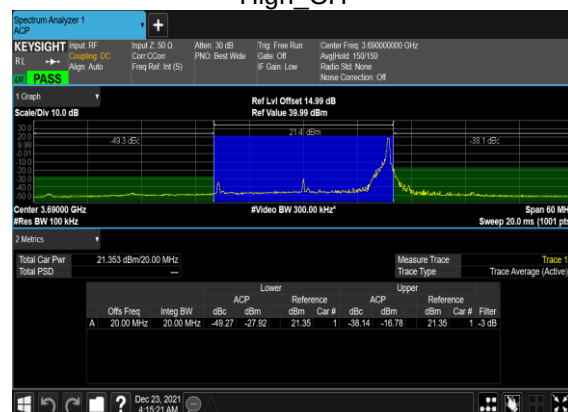
N48(20M)_CP-s-OFDM_QPSK_Outer_Full_High_CH

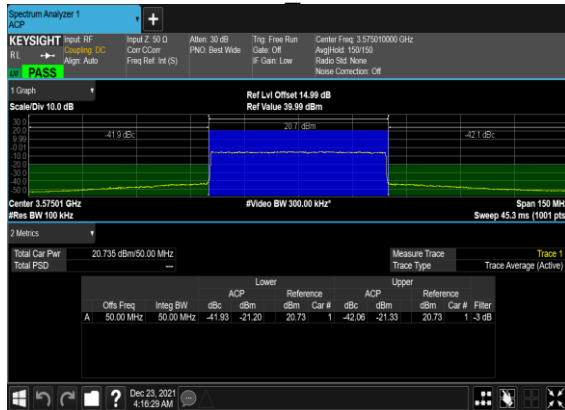
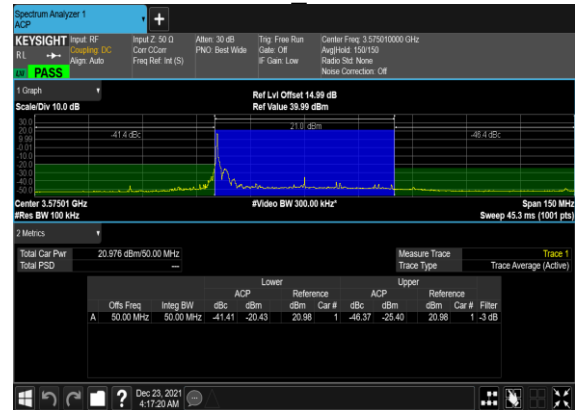
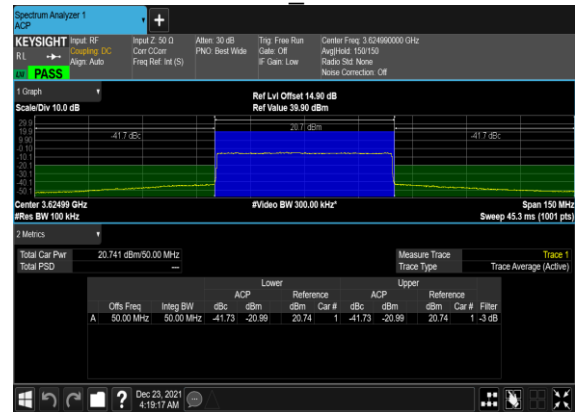
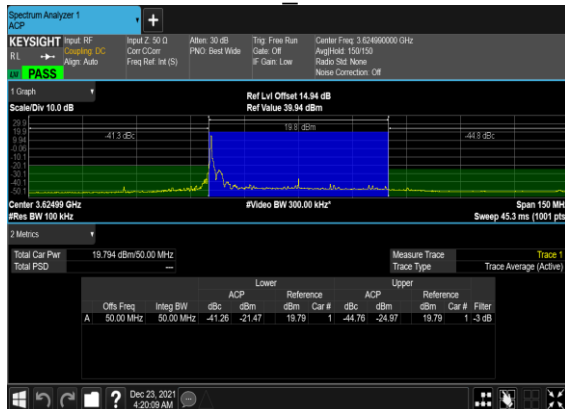
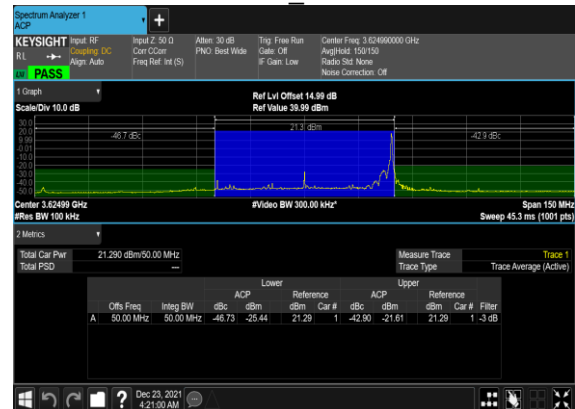


N48(20M)_CP-s-OFDM_QPSK_Edge_1RB_Left_High_CH



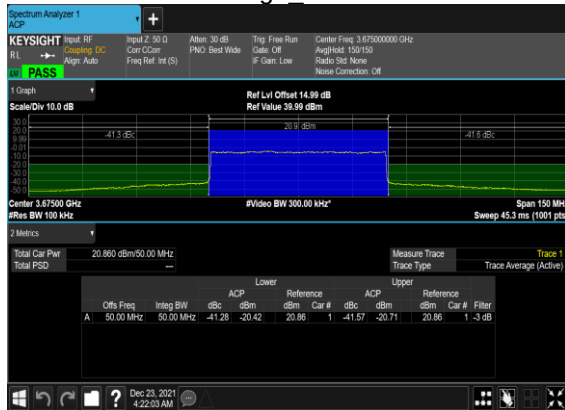
N48(20M)_CP-s-OFDM_QPSK_Edge_1RB_Right_High_CH



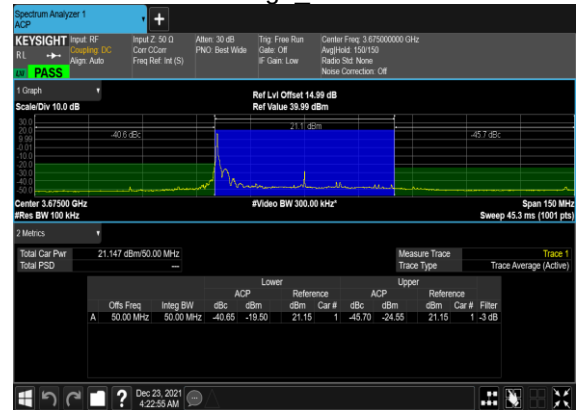
N48(50M)_CP-s-OFDM_QPSK_Outer_Full_
Low CHN48(50M)_CP-s-OFDM_QPSK_Edge_1RB_Left_
Low CHN48(50M)_CP-s-OFDM_QPSK_Edge_1RB_Right_
Low CHN48(50M)_CP-s-OFDM_QPSK_Outer_Full_
Mid CHN48(50M)_CP-s-OFDM_QPSK_Edge_1RB_Left_
Mid CHN48(50M)_CP-s-OFDM_QPSK_Edge_1RB_Right_
Mid CH



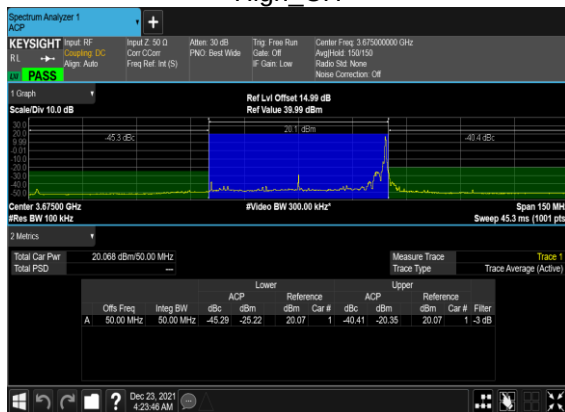
N48(50M)_CP-s-OFDM_QPSK_Outer_Full_
High_CH



N48(50M)_CP-s-OFDM_QPSK_Edge_1RB_Left_
High_CH



N48(50M)_CP-s-OFDM_QPSK_Edge_1RB_Right_
High_CH





A5.4 Conducted Spurious Emissions

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
48	15	10	637000	3555.0	CP-OFDM QPSK	1@0	see graph	---
48	15	10	637000	3555.0	CP-OFDM QPSK	1@0	see graph	PASS
48	15	10	637000	3555.0	CP-OFDM QPSK	1@0	see graph	PASS
48	15	10	637000	3555.0	CP-OFDM QPSK	1@51	see graph	---
48	15	10	637000	3555.0	CP-OFDM QPSK	1@51	see graph	PASS
48	15	10	637000	3555.0	CP-OFDM QPSK	1@51	see graph	PASS
48	15	10	637000	3555.0	CP-OFDM QPSK	52@0	see graph	---
48	15	10	637000	3555.0	CP-OFDM QPSK	52@0	see graph	PASS
48	15	10	637000	3555.0	CP-OFDM QPSK	52@0	see graph	PASS
48	15	10	641666	3624.99	CP-OFDM QPSK	1@0	see graph	---
48	15	10	641666	3624.99	CP-OFDM QPSK	1@0	see graph	PASS
48	15	10	641666	3624.99	CP-OFDM QPSK	1@0	see graph	PASS
48	15	10	641666	3624.99	CP-OFDM QPSK	1@51	see graph	---
48	15	10	641666	3624.99	CP-OFDM QPSK	1@51	see graph	PASS
48	15	10	641666	3624.99	CP-OFDM QPSK	1@51	see graph	PASS
48	15	10	641666	3624.99	CP-OFDM QPSK	52@0	see graph	---
48	15	10	641666	3624.99	CP-OFDM QPSK	52@0	see graph	PASS
48	15	10	641666	3624.99	CP-OFDM QPSK	52@0	see graph	PASS
48	15	10	646332	3694.98	CP-OFDM QPSK	1@0	see graph	---
48	15	10	646332	3694.98	CP-OFDM QPSK	1@0	see graph	PASS
48	15	10	646332	3694.98	CP-OFDM QPSK	1@0	see graph	PASS
48	15	10	646332	3694.98	CP-OFDM QPSK	1@51	see graph	---
48	15	10	646332	3694.98	CP-OFDM QPSK	1@51	see graph	PASS
48	15	10	646332	3694.98	CP-OFDM QPSK	1@51	see graph	PASS
48	15	10	646332	3694.98	CP-OFDM QPSK	52@0	see graph	---
48	15	10	646332	3694.98	CP-OFDM QPSK	52@0	see graph	PASS
48	15	10	646332	3694.98	CP-OFDM QPSK	52@0	see graph	PASS
48	15	20	637334	3560.01	CP-OFDM QPSK	1@0	see graph	---
48	15	20	637334	3560.01	CP-OFDM QPSK	1@0	see graph	PASS
48	15	20	637334	3560.01	CP-OFDM QPSK	1@0	see graph	PASS
48	15	20	637334	3560.01	CP-OFDM QPSK	1@105	see graph	---
48	15	20	637334	3560.01	CP-OFDM QPSK	1@105	see graph	PASS
48	15	20	637334	3560.01	CP-OFDM QPSK	1@105	see graph	PASS



48	15	20	637334	3560.01	CP-OFDM QPSK	106@0	see graph	---
48	15	20	637334	3560.01	CP-OFDM QPSK	106@0	see graph	PASS
48	15	20	637334	3560.01	CP-OFDM QPSK	106@0	see graph	PASS
48	15	20	641666	3624.99	CP-OFDM QPSK	1@0	see graph	---
48	15	20	641666	3624.99	CP-OFDM QPSK	1@0	see graph	PASS
48	15	20	641666	3624.99	CP-OFDM QPSK	1@0	see graph	PASS
48	15	20	641666	3624.99	CP-OFDM QPSK	1@105	see graph	---
48	15	20	641666	3624.99	CP-OFDM QPSK	1@105	see graph	PASS
48	15	20	641666	3624.99	CP-OFDM QPSK	1@105	see graph	PASS
48	15	20	641666	3624.99	CP-OFDM QPSK	106@0	see graph	---
48	15	20	641666	3624.99	CP-OFDM QPSK	106@0	see graph	PASS
48	15	20	641666	3624.99	CP-OFDM QPSK	106@0	see graph	PASS
48	15	20	646000	3690.0	CP-OFDM QPSK	1@0	see graph	---
48	15	20	646000	3690.0	CP-OFDM QPSK	1@0	see graph	PASS
48	15	20	646000	3690.0	CP-OFDM QPSK	1@0	see graph	PASS
48	15	20	646000	3690.0	CP-OFDM QPSK	1@105	see graph	---
48	15	20	646000	3690.0	CP-OFDM QPSK	1@105	see graph	PASS
48	15	20	646000	3690.0	CP-OFDM QPSK	1@105	see graph	PASS
48	15	20	646000	3690.0	CP-OFDM QPSK	106@0	see graph	---
48	15	20	646000	3690.0	CP-OFDM QPSK	106@0	see graph	PASS
48	15	20	646000	3690.0	CP-OFDM QPSK	106@0	see graph	PASS
48	15	50	638334	3575.01	CP-OFDM QPSK	1@0	see graph	---
48	15	50	638334	3575.01	CP-OFDM QPSK	1@0	see graph	PASS
48	15	50	638334	3575.01	CP-OFDM QPSK	1@0	see graph	PASS
48	15	50	638334	3575.01	CP-OFDM QPSK	1@269	see graph	---
48	15	50	638334	3575.01	CP-OFDM QPSK	1@269	see graph	PASS
48	15	50	638334	3575.01	CP-OFDM QPSK	1@269	see graph	PASS
48	15	50	638334	3575.01	CP-OFDM QPSK	270@0	see graph	---
48	15	50	638334	3575.01	CP-OFDM QPSK	270@0	see graph	PASS
48	15	50	638334	3575.01	CP-OFDM QPSK	270@0	see graph	PASS
48	15	50	641666	3624.99	CP-OFDM QPSK	1@0	see graph	---
48	15	50	641666	3624.99	CP-OFDM QPSK	1@0	see graph	PASS
48	15	50	641666	3624.99	CP-OFDM QPSK	1@0	see graph	PASS
48	15	50	641666	3624.99	CP-OFDM QPSK	1@269	see graph	---
48	15	50	641666	3624.99	CP-OFDM QPSK	1@269	see graph	PASS



48	15	50	641666	3624.99	CP-OFDM QPSK	1@269	see graph	PASS
48	15	50	641666	3624.99	CP-OFDM QPSK	270@0	see graph	---
48	15	50	641666	3624.99	CP-OFDM QPSK	270@0	see graph	PASS
48	15	50	641666	3624.99	CP-OFDM QPSK	270@0	see graph	PASS
48	15	50	645000	3675.0	CP-OFDM QPSK	1@0	see graph	---
48	15	50	645000	3675.0	CP-OFDM QPSK	1@0	see graph	PASS
48	15	50	645000	3675.0	CP-OFDM QPSK	1@0	see graph	PASS
48	15	50	645000	3675.0	CP-OFDM QPSK	1@269	see graph	---
48	15	50	645000	3675.0	CP-OFDM QPSK	1@269	see graph	PASS
48	15	50	645000	3675.0	CP-OFDM QPSK	1@269	see graph	PASS
48	15	50	645000	3675.0	CP-OFDM QPSK	270@0	see graph	---
48	15	50	645000	3675.0	CP-OFDM QPSK	270@0	see graph	PASS
48	15	50	645000	3675.0	CP-OFDM QPSK	270@0	see graph	PASS



N48(10M)_CP-OFDM_QPSK_Edge_1RB_Left_

Low CH



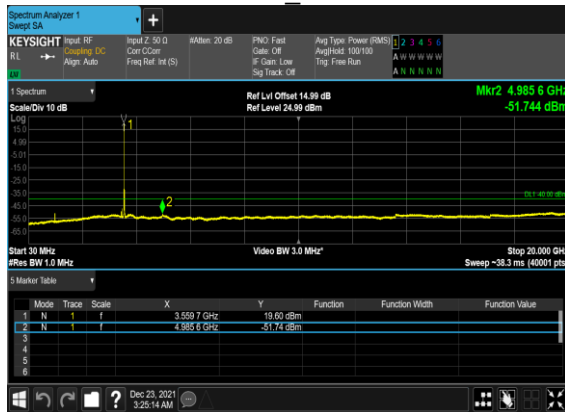
N48(10M)_CP-OFDM_QPSK_Edge_1RB_Left_

Low CH



N48(10M)_CP-OFDM_QPSK_Edge_1RB_Right_

Low CH

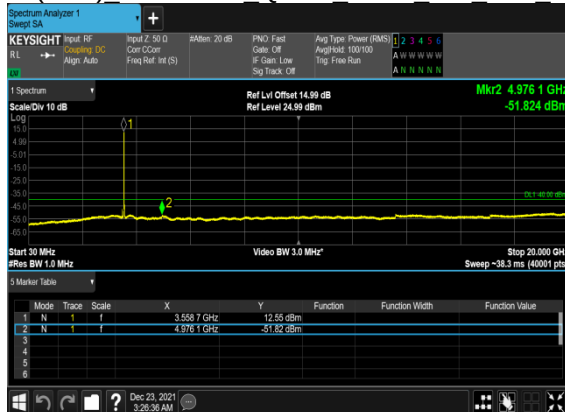


N48(10M)_CP-OFDM_QPSK_Edge_1RB_Right_

Low CH

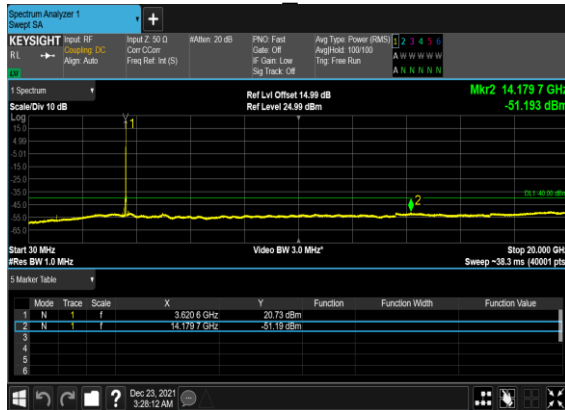


N48(10M)_CP-OFDM_QPSK_Outer_Full_Low_CH

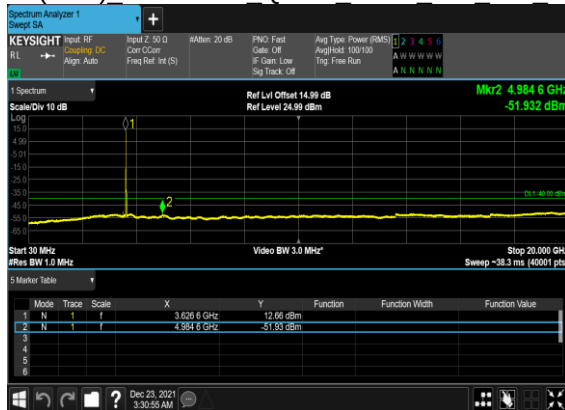


N48(10M)_CP-OFDM_QPSK_Outer_Full_Low_CH



N48(10M)_CP-OFDM_QPSK_Edge_1RB_Left_
Mid_CHN48(10M)_CP-OFDM_QPSK_Edge_1RB_Left_
Mid_CHN48(10M)_CP-OFDM_QPSK_Edge_1RB_Right_
Mid_CHN48(10M)_CP-OFDM_QPSK_Edge_1RB_Right_
Mid_CH

N48(10M) CP-OFDM QPSK Outer Full Mid CH



N48(10M) CP-OFDM QPSK Outer Full Mid CH



N48(10M)_CP-OFDM_QPSK_Edge_1RB_Left_
High_CHN48(10M)_CP-OFDM_QPSK_Edge_1RB_Left_
High_CHN48(10M)_CP-OFDM_QPSK_Edge_1RB_Right_
High_CHN48(10M)_CP-OFDM_QPSK_Edge_1RB_Right_
High_CH

N48(10M)_CP-OFDM_QPSK_Outer_Full_High_CH



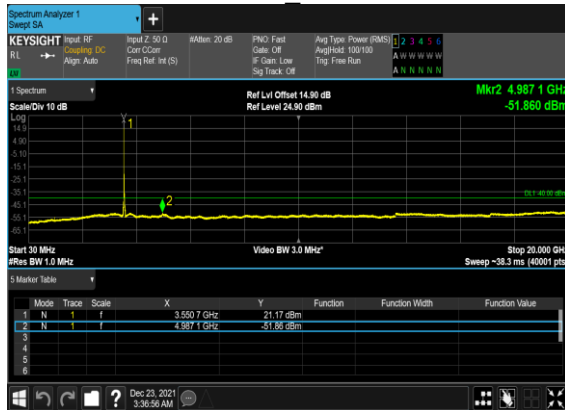
N48(10M)_CP-OFDM_QPSK_Outer_Full_High_CH





N48(20M)_CP-OFDM_QPSK_Edge_1RB_Left_

Low CH



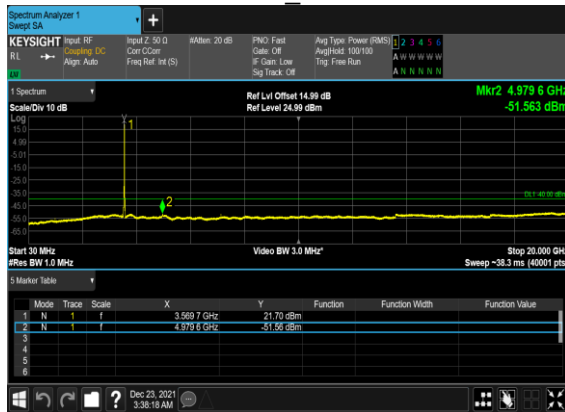
N48(20M)_CP-OFDM_QPSK_Edge_1RB_Left_

Low CH



N48(20M)_CP-OFDM_QPSK_Edge_1RB_Right_

Low CH

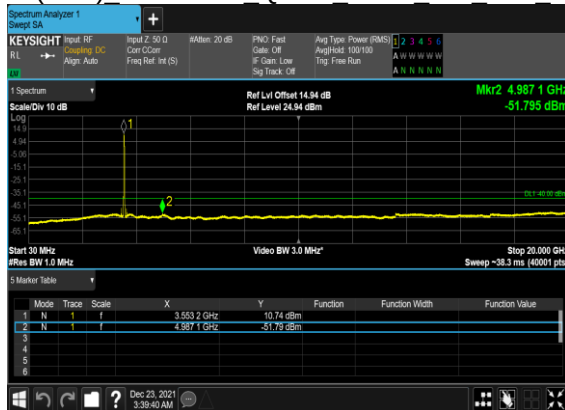


N48(20M)_CP-OFDM_QPSK_Edge_1RB_Right_

Low CH



N48(20M)_CP-OFDM_QPSK_Outer_Full_Low_CH



N48(20M)_CP-OFDM_QPSK_Outer_Full_Low_CH

