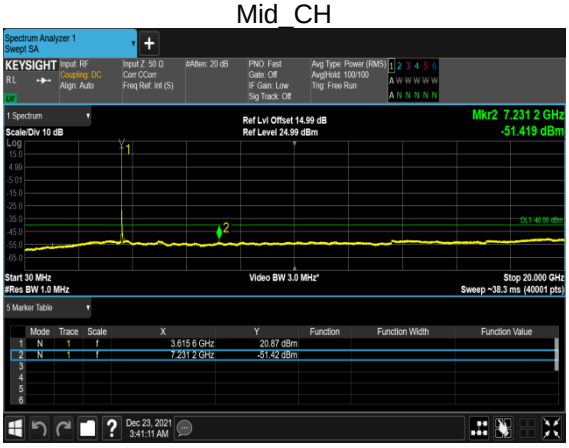
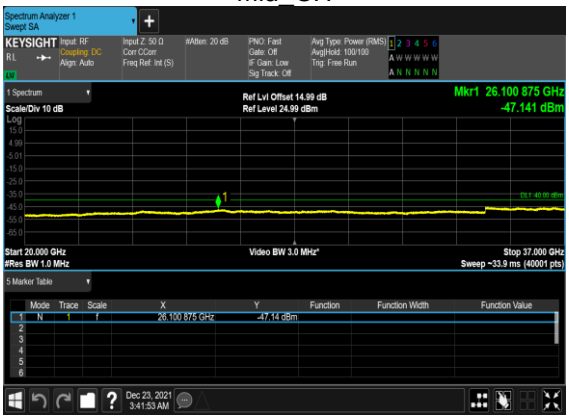
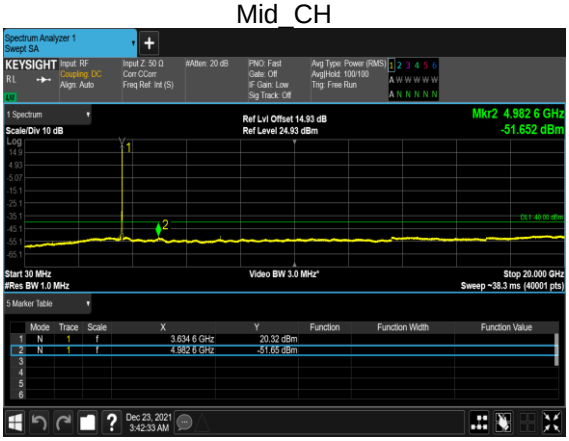
N48(20M)_CP-OFDM_QPSK_Edge_1RB_Left_Mid_CH



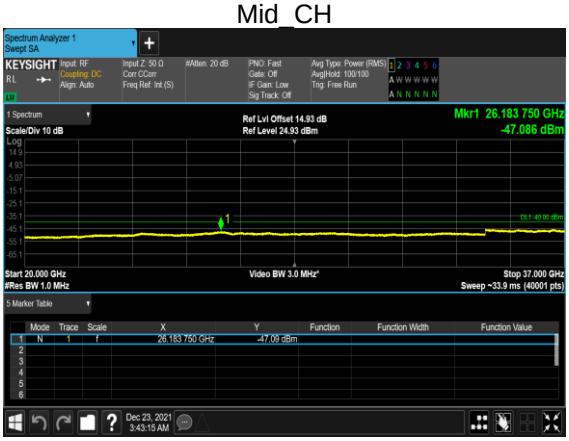
N48(20M)_CP-OFDM_QPSK_Edge_1RB_Left_Mid_CH



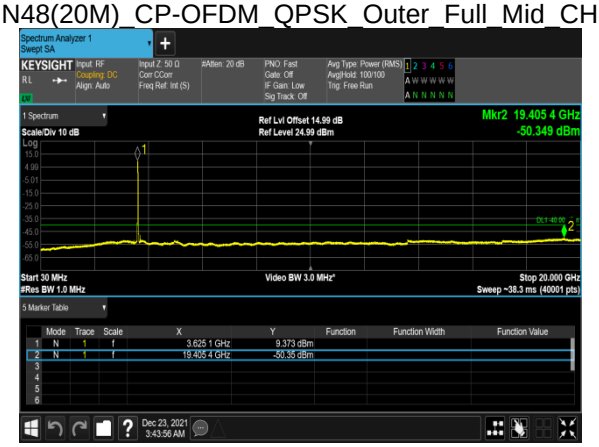
N48(20M)_CP-OFDM_QPSK_Edge_1RB_Right_Mid_CH



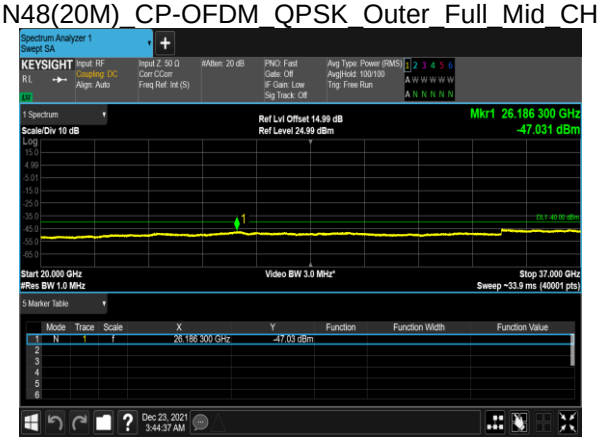
N48(20M)_CP-OFDM_QPSK_Edge_1RB_Right_Mid_CH



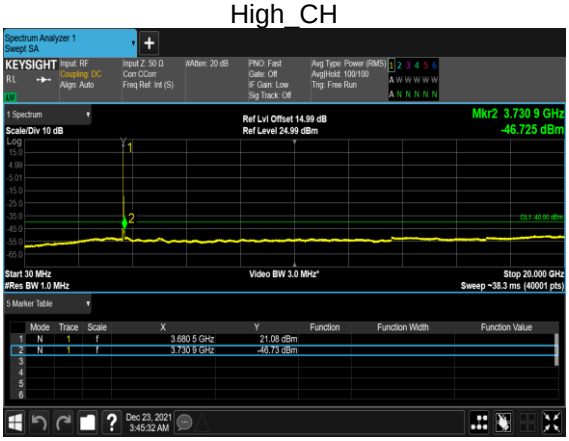
N48(20M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



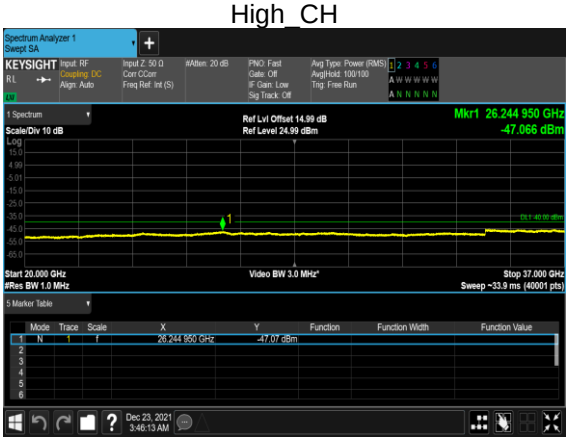
N48(20M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



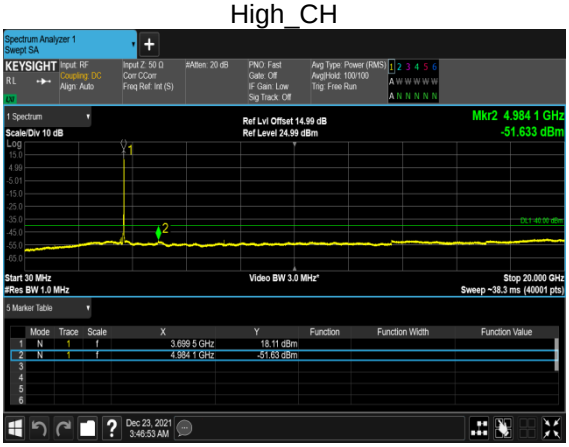
N48(20M)_CP-OFDM_QPSK_Edge_1RB_Left_High_CH



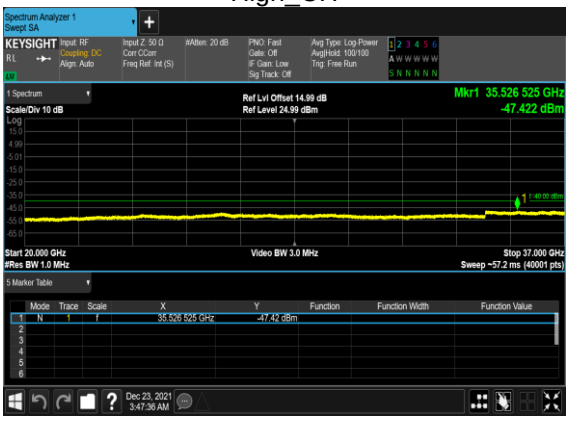
N48(20M)_CP-OFDM_QPSK_Edge_1RB_Left_High_CH



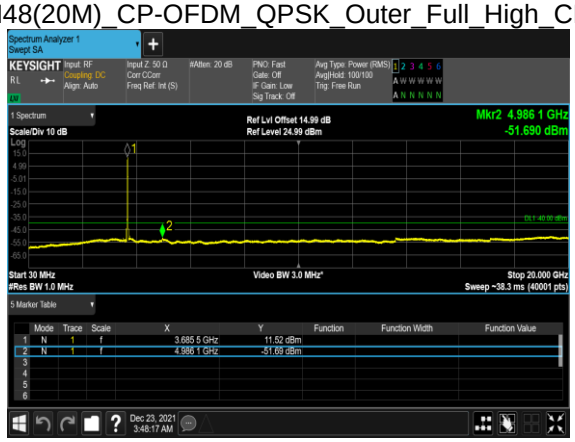
N48(20M)_CP-OFDM_QPSK_Edge_1RB_Right_High_CH



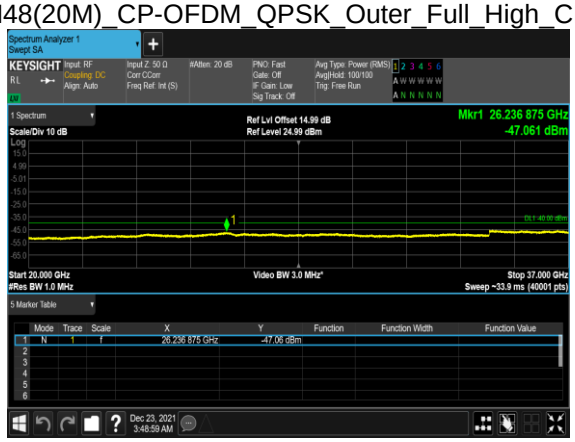
N48(20M)_CP-OFDM_QPSK_Edge_1RB_Right_High_CH



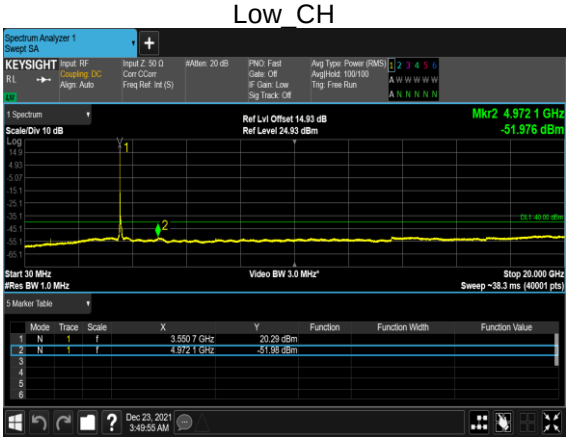
N48(20M)_CP-OFDM_QPSK_Outer_Full_High_CH



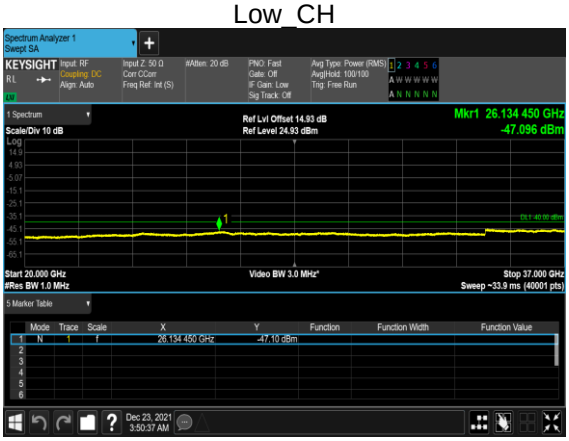
N48(20M)_CP-OFDM_QPSK_Outer_Full_High_CH



N48(50M)_CP-OFDM_QPSK_Edge_1RB_Left_Low_CH



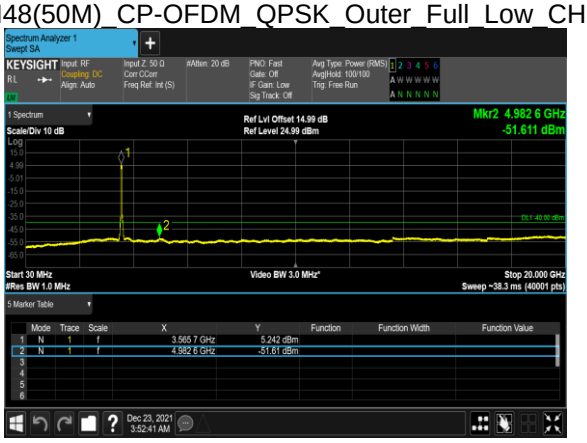
N48(50M)_CP-OFDM_QPSK_Edge_1RB_Left_Low_CH



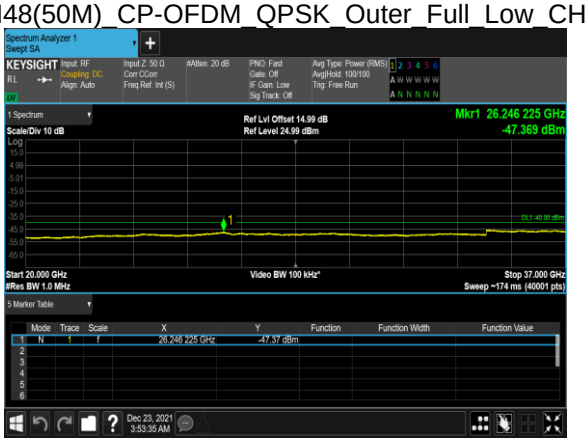
N48(50M)_CP-OFDM_QPSK_Edge_1RB_Right_Low_CH

N48(50M)_CP-OFDM_QPSK_Edge_1RB_Right_Low_CH

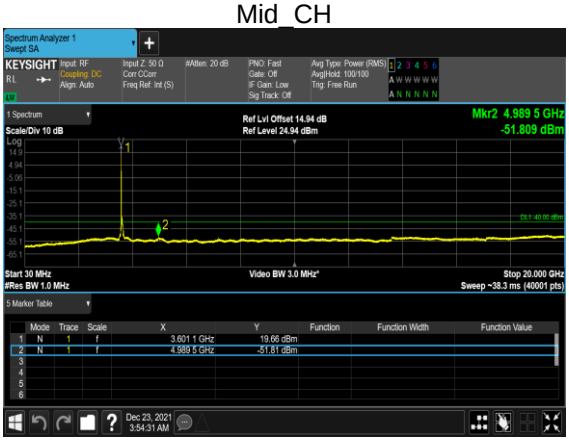
N48(50M)_CP-OFDM_QPSK_Outer_Full_Low_CH



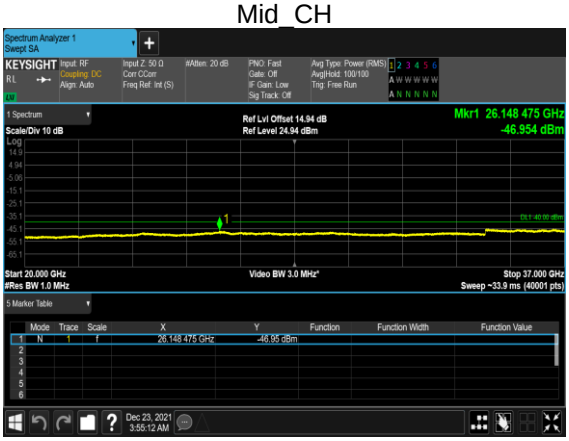
N48(50M)_CP-OFDM_QPSK_Outer_Full_Low_CH



N48(50M)_CP-OFDM_QPSK_Edge_1RB_Left_Mid_CH



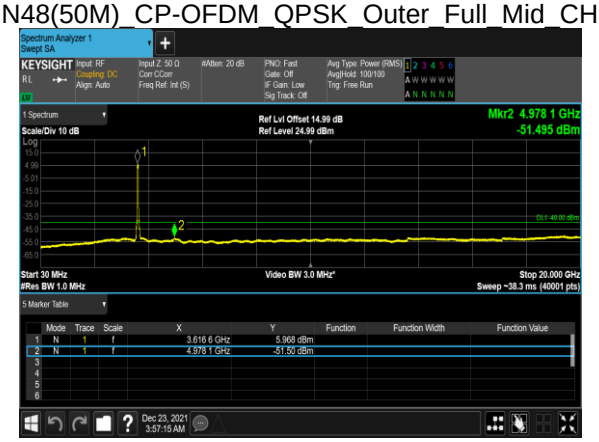
N48(50M)_CP-OFDM_QPSK_Edge_1RB_Left_Mid_CH



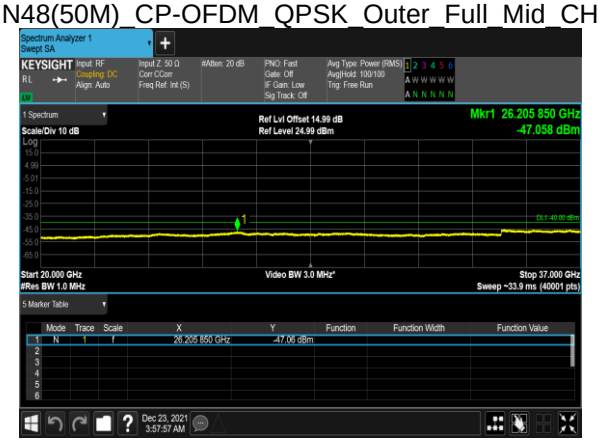
N48(50M)_CP-OFDM_QPSK_Edge_1RB_Right_Mid_CH

N48(50M)_CP-OFDM_QPSK_Edge_1RB_Right_Mid_CH

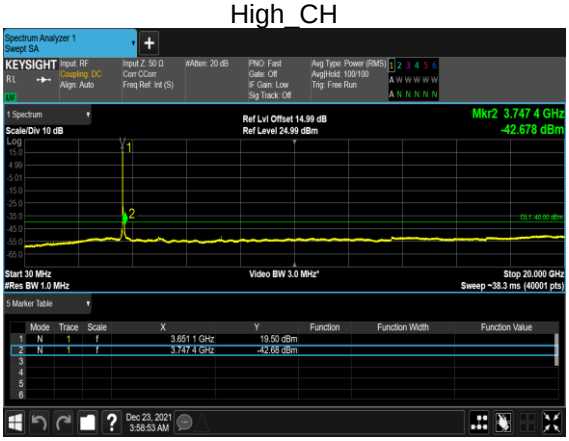
N48(50M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



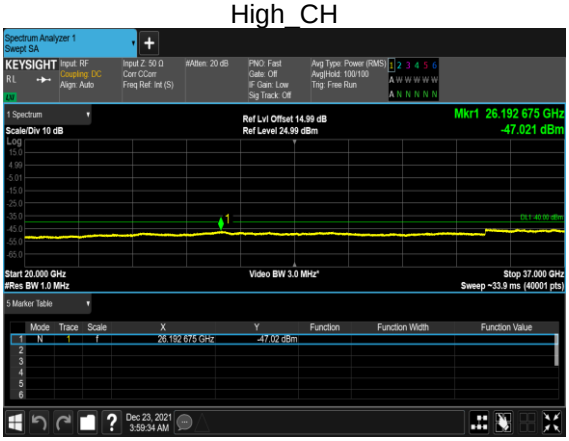
N48(50M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



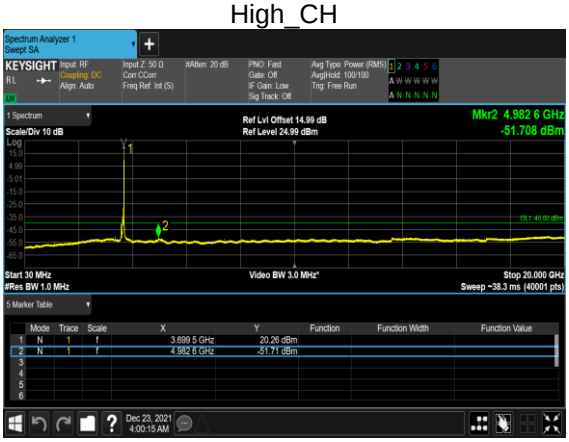
N48(50M)_CP-OFDM_QPSK_Edge_1RB_Left_High_CH



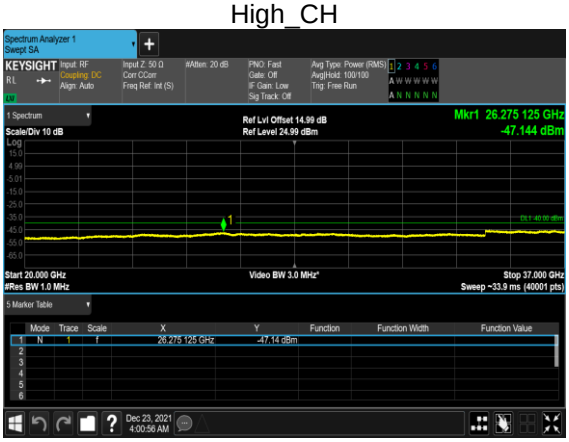
N48(50M)_CP-OFDM_QPSK_Edge_1RB_Left_High_CH



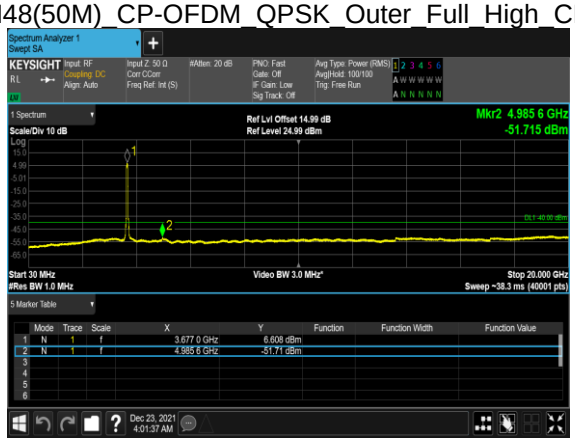
N48(50M)_CP-OFDM_QPSK_Edge_1RB_Right_High_CH



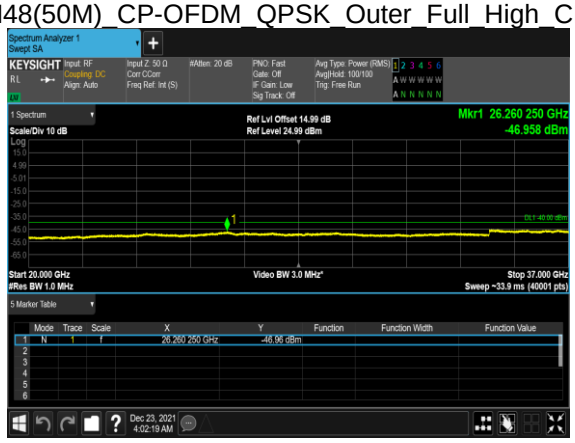
N48(50M)_CP-OFDM_QPSK_Edge_1RB_Right_High_CH



N48(50M)_CP-OFDM_QPSK_Outer_Full_High_CH



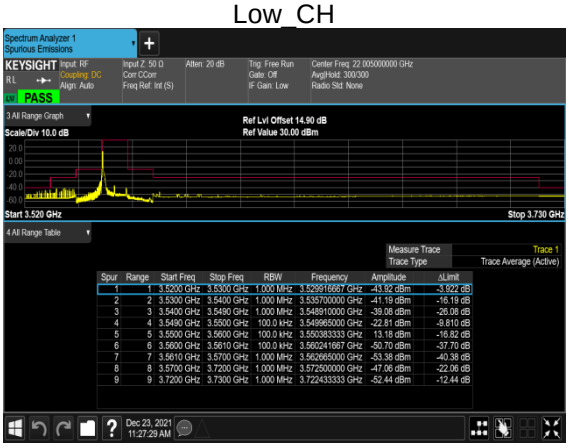
N48(50M)_CP-OFDM_QPSK_Outer_Full_High_CH



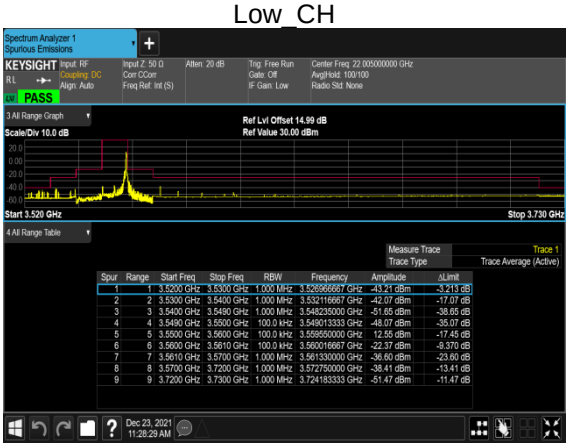
A5.5 Conducted Band Edge

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	**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	**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	**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	**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	**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	**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	**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	**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	**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	**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	**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	**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	**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	**PASS**

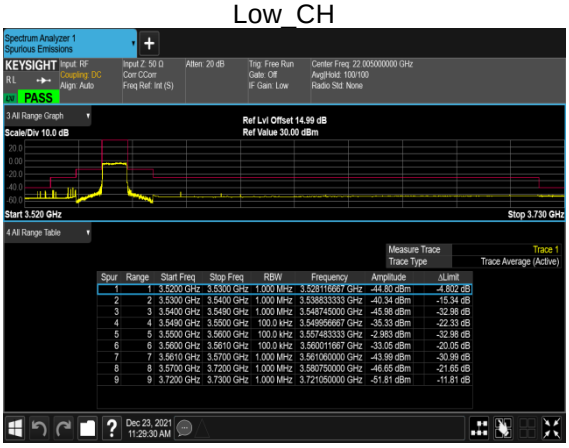
N48(10M)_CP-OFDM_QPSK_Edge_1RB_Left_Low_CH



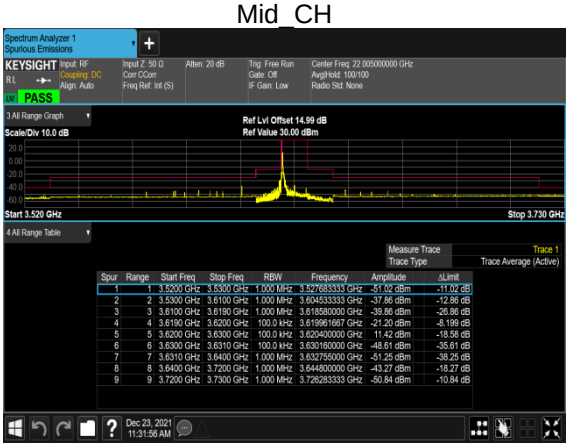
N48(10M)_CP-OFDM_QPSK_Edge_1RB_Right_Low_CH



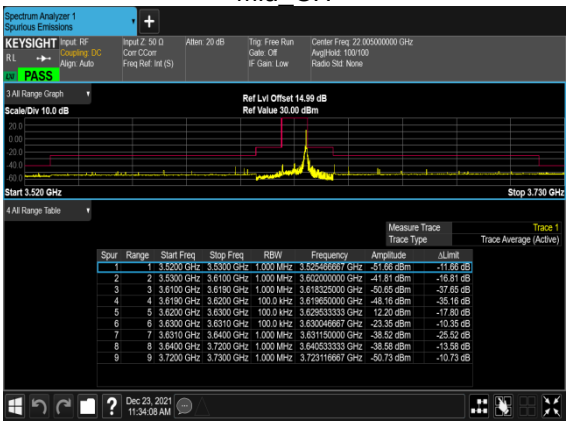
N48(10M)_CP-OFDM_QPSK_Outer_Full_Low_CH



N48(10M)_CP-OFDM_QPSK_Edge_1RB_Left_Mid_CH

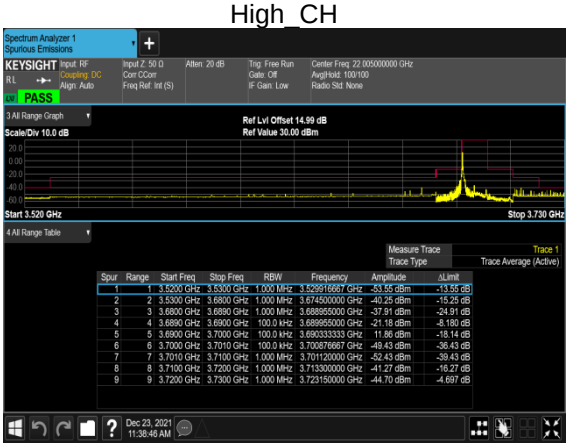


N48(10M)_CP-OFDM_QPSK_Edge_1RB_Right_Mid_CH

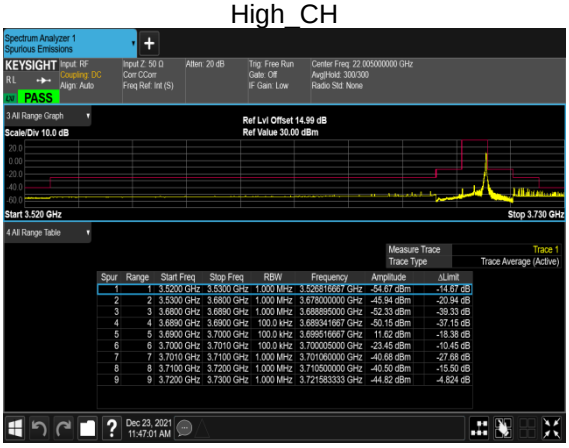


N48(10M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

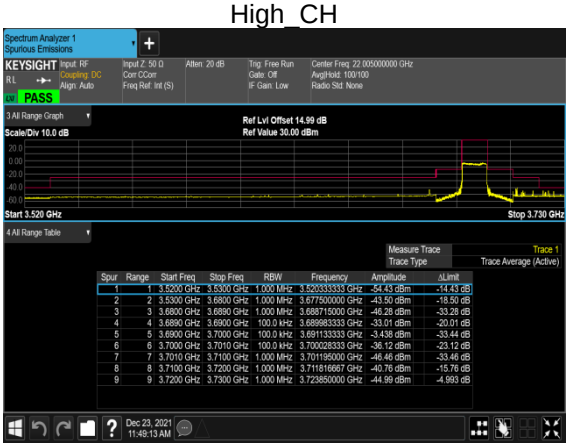
N48(10M)_CP-OFDM_QPSK_Edge_1RB_Left_High_CH



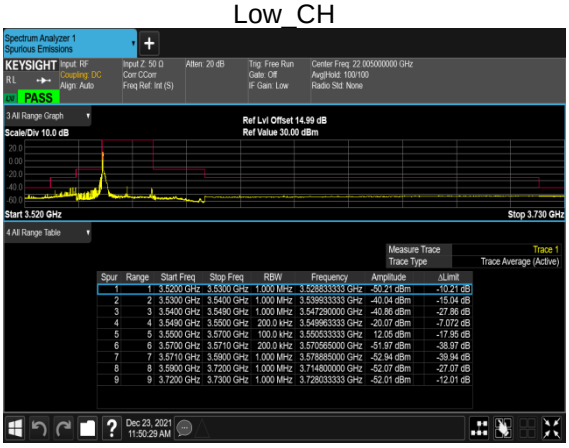
N48(10M)_CP-OFDM_QPSK_Edge_1RB_Right_High_CH



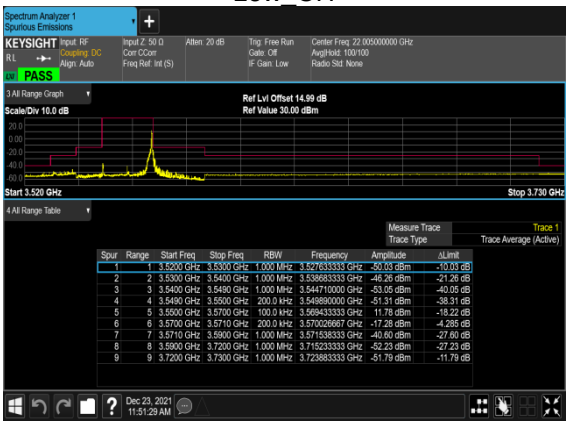
N48(10M)_CP-OFDM_QPSK_Outer_Full_High_CH



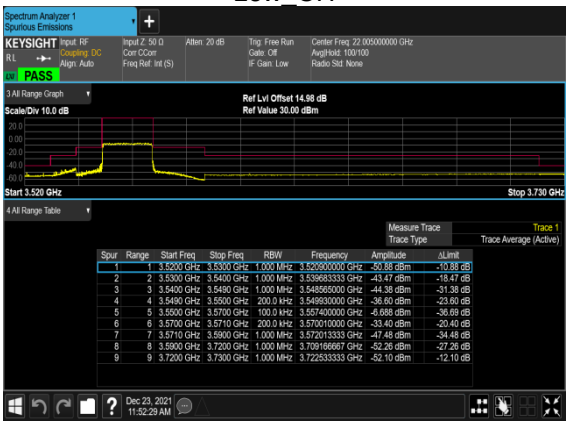
N48(20M)_CP-OFDM_QPSK_Edge_1RB_Left_Low_CH



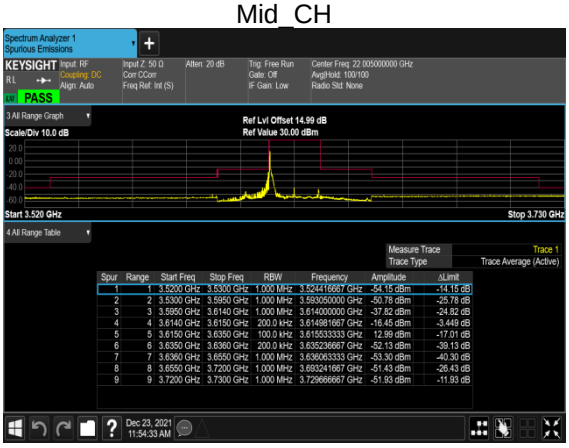
N48(20M)_CP-OFDM_QPSK_Edge_1RB_Right_Low_CH



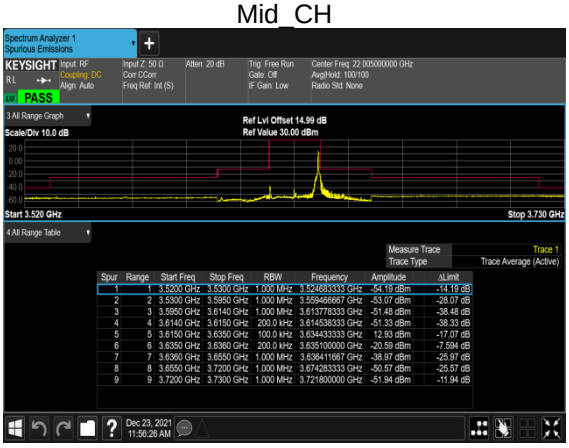
N48(20M)_CP-OFDM_QPSK_Outer_Full_Low_CH



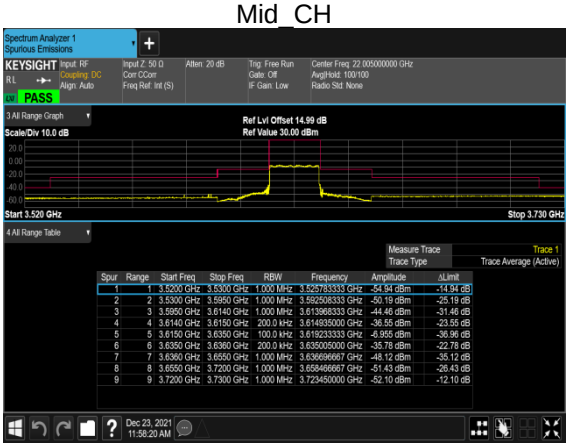
N48(20M)_CP-OFDM_QPSK_Edge_1RB_Left_Mid_CH



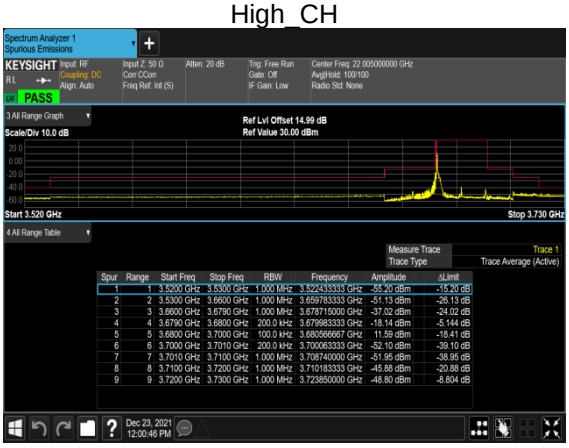
N48(20M)_CP-OFDM_QPSK_Edge_1RB_Right_Mid_CH



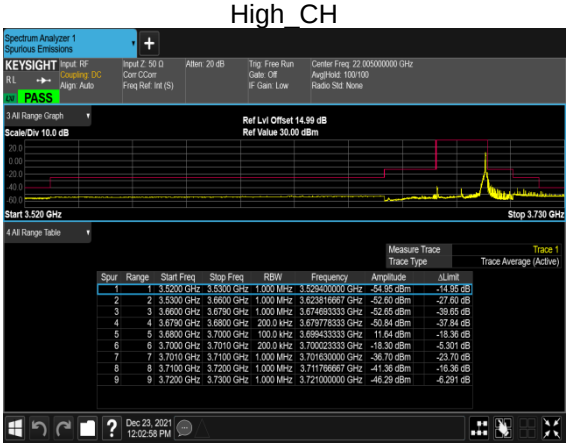
N48(20M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



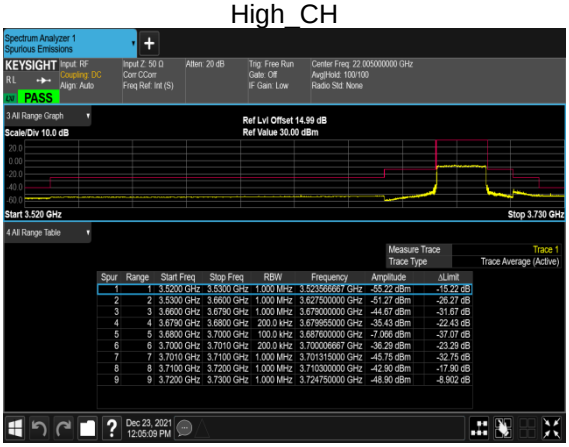
N48(20M)_CP-OFDM_QPSK_Edge_1RB_Left_High_CH



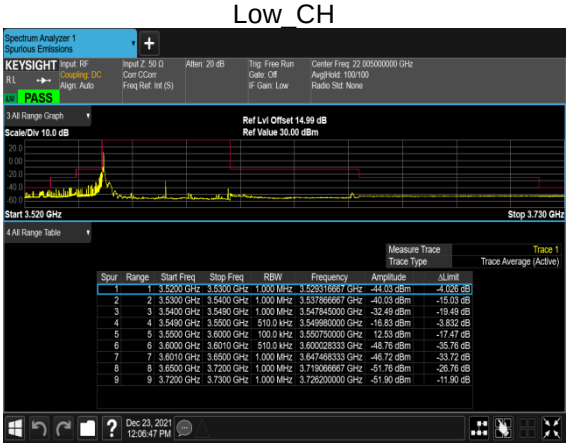
N48(20M)_CP-OFDM_QPSK_Edge_1RB_Right_High_CH



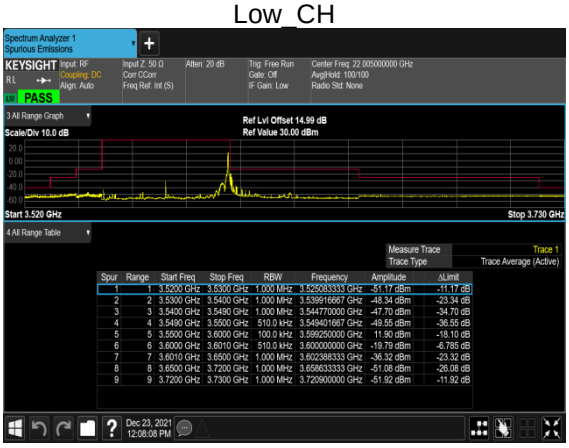
N48(20M)_CP-OFDM_QPSK_Outer_Full_High_CH



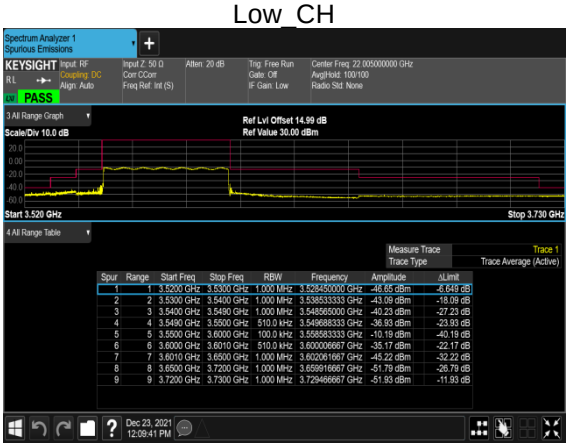
N48(50M)_CP-OFDM_QPSK_Edge_1RB_Left_Low_CH



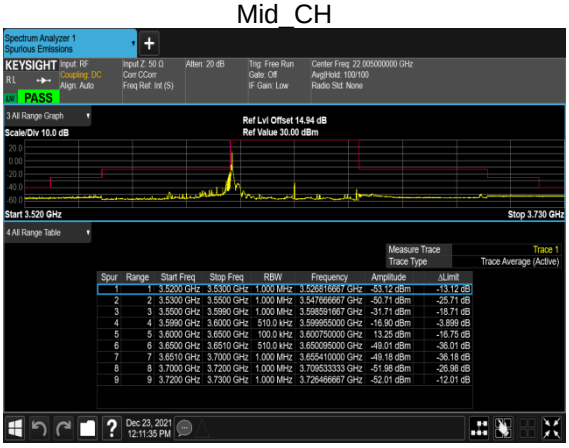
N48(50M)_CP-OFDM_QPSK_Edge_1RB_Right_Low_CH



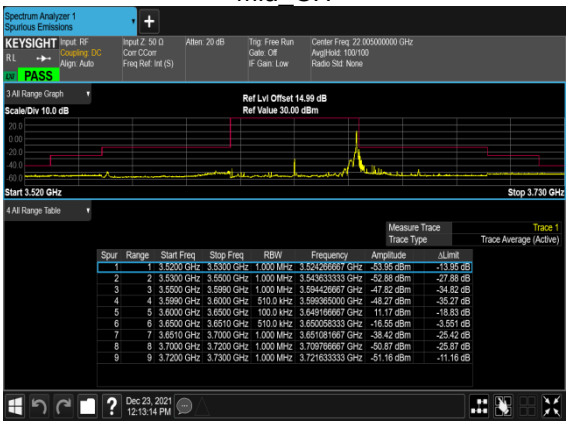
N48(50M)_CP-OFDM_QPSK_Outer_Full_Low_CH



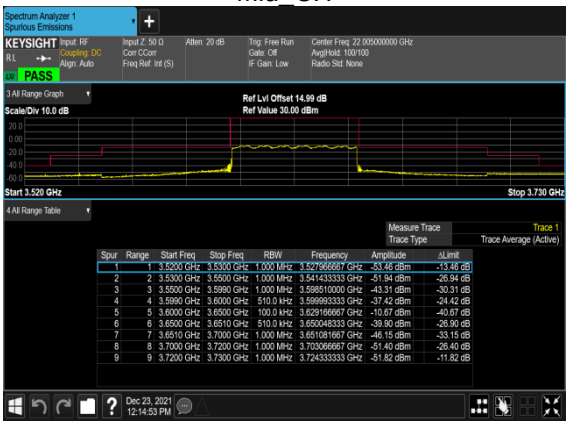
N48(50M)_CP-OFDM_QPSK_Edge_1RB_Left_Mid_CH



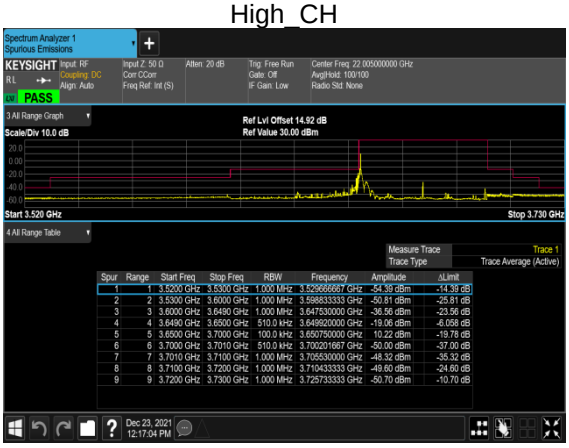
N48(50M)_CP-OFDM_QPSK_Edge_1RB_Right_Mid_CH



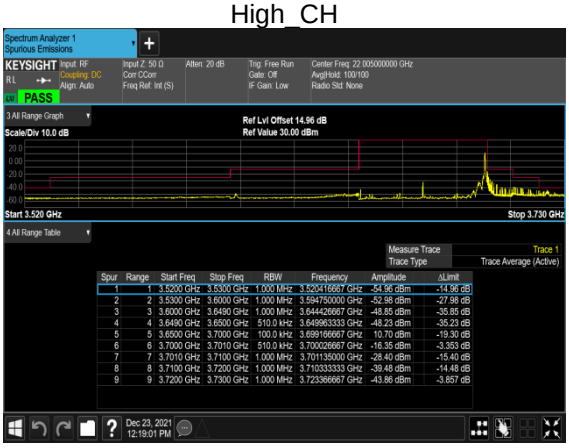
N48(50M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



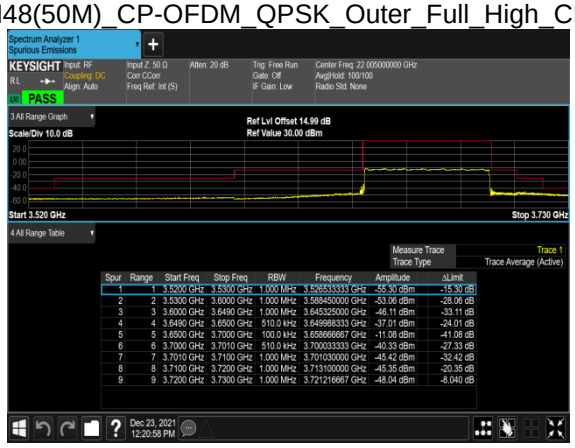
N48(50M)_CP-OFDM_QPSK_Edge_1RB_Left_High_CH



N48(50M)_CP-OFDM_QPSK_Edge_1RB_Right_High_CH



N48(50M)_CP-OFDM_QPSK_Outer_Full_High_CH



A6. FR1 N48 MIMO-ANT5 – SCS 30kHz

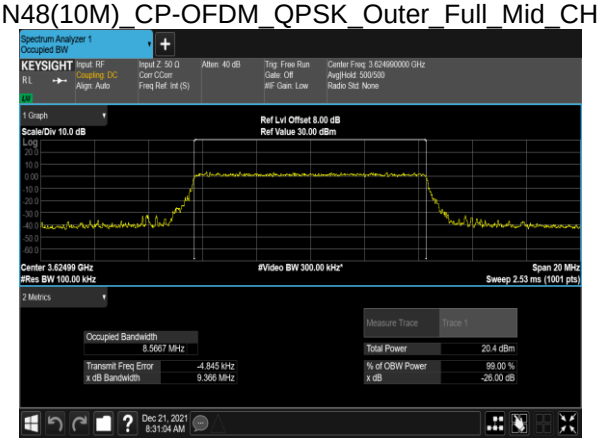
A6.1 Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
48	30	20	641666	3624.99	CP-OFDM QPSK	51@0	0.0398	**PASS**	NV
48	30	20	641666	3624.99	CP-OFDM QPSK	51@0	0.0479	**PASS**	LV
48	30	20	641666	3624.99	CP-OFDM QPSK	51@0	0.0478	**PASS**	HV
48	30	20	641666	3624.99	CP-OFDM QPSK	51@0	0.0514	**PASS**	-30℃
48	30	20	641666	3624.99	CP-OFDM QPSK	51@0	0.0564	**PASS**	-20℃
48	30	20	641666	3624.99	CP-OFDM QPSK	51@0	0.0054	**PASS**	-10℃
48	30	20	641666	3624.99	CP-OFDM QPSK	51@0	0.0694	**PASS**	0℃
48	30	20	641666	3624.99	CP-OFDM QPSK	51@0	0.0499	**PASS**	10℃
48	30	20	641666	3624.99	CP-OFDM QPSK	51@0	0.0279	**PASS**	20℃
48	30	20	641666	3624.99	CP-OFDM QPSK	51@0	0.0673	**PASS**	30℃
48	30	20	641666	3624.99	CP-OFDM QPSK	51@0	0.0386	**PASS**	40℃
48	30	20	641666	3624.99	CP-OFDM QPSK	51@0	0.0646	**PASS**	50℃

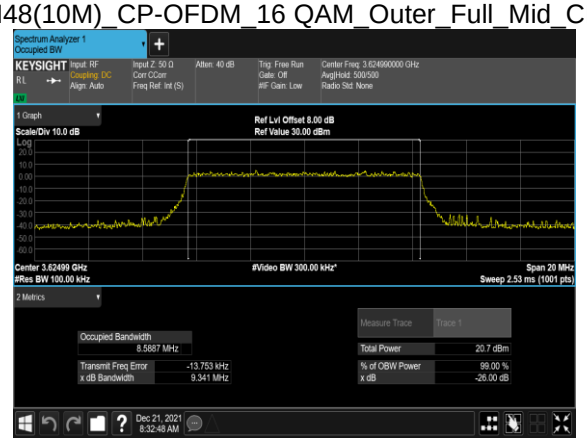
A6.2 Occupied Bandwidth

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB OBW (MHz)
48	30	10	641666	3624.99	CP-OFDM QPSK	24@0	8.5667	9.366
48	30	10	641666	3624.99	CP-OFDM 16 QAM	24@0	8.5887	9.341
48	30	10	641666	3624.99	CP-OFDM 64 QAM	24@0	8.5711	9.423
48	30	10	641666	3624.99	CP-OFDM 256 QAM	24@0	8.5873	9.318
48	30	15	641666	3624.99	CP-OFDM QPSK	38@0	13.567	14.57
48	30	15	641666	3624.99	CP-OFDM 16 QAM	38@0	13.55	14.45
48	30	15	641666	3624.99	CP-OFDM 64 QAM	38@0	13.569	14.58
48	30	15	641666	3624.99	CP-OFDM 256 QAM	38@0	13.541	14.32
48	30	20	641666	3624.99	CP-OFDM QPSK	51@0	18.195	19.31
48	30	20	641666	3624.99	CP-OFDM 16 QAM	51@0	18.165	19.45
48	30	20	641666	3624.99	CP-OFDM 64 QAM	51@0	18.182	19.22
48	30	20	641666	3624.99	CP-OFDM 256 QAM	51@0	18.232	19.2
48	30	40	641666	3624.99	CP-OFDM QPSK	106@0	37.81	39.48
48	30	40	641666	3624.99	CP-OFDM 16 QAM	106@0	37.816	39.35
48	30	40	641666	3624.99	CP-OFDM 64 QAM	106@0	37.811	39.47
48	30	40	641666	3624.99	CP-OFDM 256 QAM	106@0	37.846	39.62
48	30	50	641666	3624.99	CP-OFDM QPSK	133@0	47.481	49.31
48	30	50	641666	3624.99	CP-OFDM 16 QAM	133@0	47.496	49.4
48	30	50	641666	3624.99	CP-OFDM 64 QAM	133@0	47.425	49.31
48	30	50	641666	3624.99	CP-OFDM 256 QAM	133@0	47.442	49.5
48	30	60	641666	3624.99	CP-OFDM QPSK	162@0	57.774	59.78
48	30	60	641666	3624.99	CP-OFDM 16 QAM	162@0	57.846	59.78
48	30	60	641666	3624.99	CP-OFDM 64 QAM	162@0	57.813	59.86
48	30	60	641666	3624.99	CP-OFDM 256 QAM	162@0	57.753	59.83
48	30	80	641666	3624.99	CP-OFDM QPSK	217@0	77.566	80.12
48	30	80	641666	3624.99	CP-OFDM 16 QAM	217@0	77.41	80.19
48	30	80	641666	3624.99	CP-OFDM 64 QAM	217@0	77.351	81.03
48	30	80	641666	3624.99	CP-OFDM 256 QAM	217@0	77.445	80.1
48	30	100	641666	3624.99	CP-OFDM QPSK	273@0	97.305	100.5
48	30	100	641666	3624.99	CP-OFDM 16 QAM	273@0	97.151	101.3
48	30	100	641666	3624.99	CP-OFDM 64 QAM	273@0	97.277	100.6
48	30	100	641666	3624.99	CP-OFDM 256 QAM	273@0	97.353	100.6

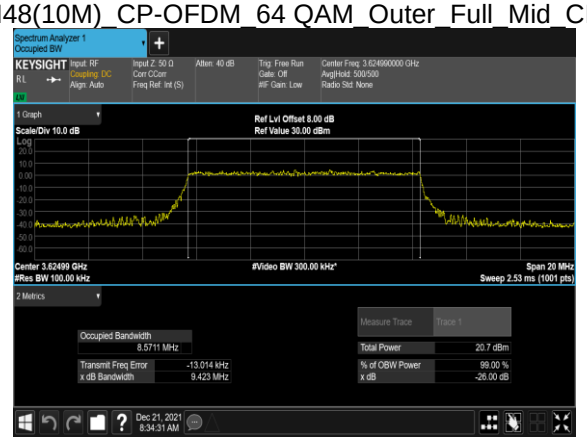
N48(10M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



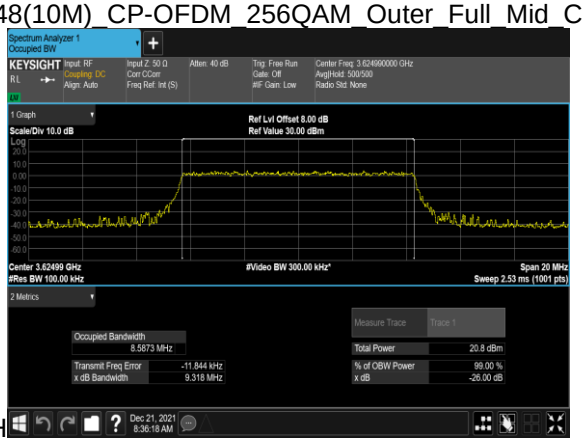
N48(10M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N48(10M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

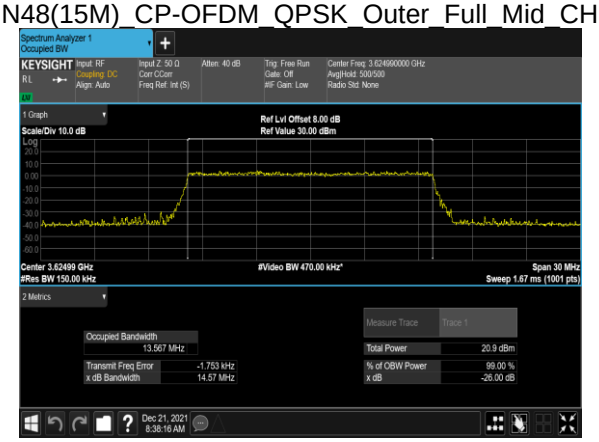


N48(10M)_CP-OFDM_256QAM_Outer_Full_Mid_C

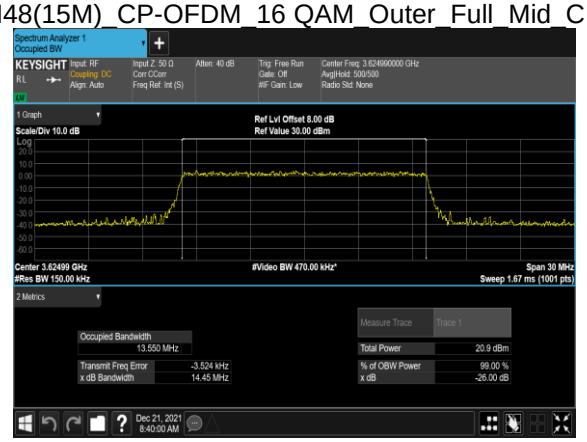


H

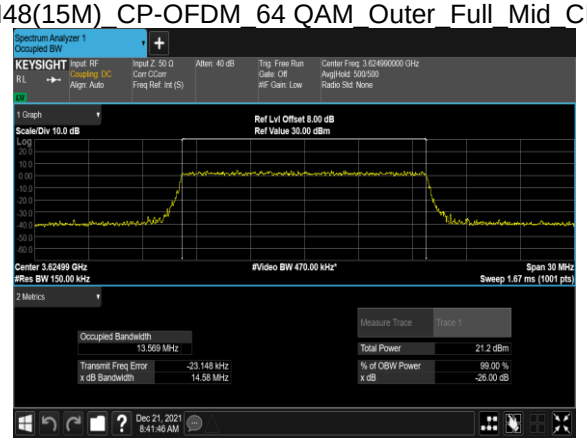
N48(15M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



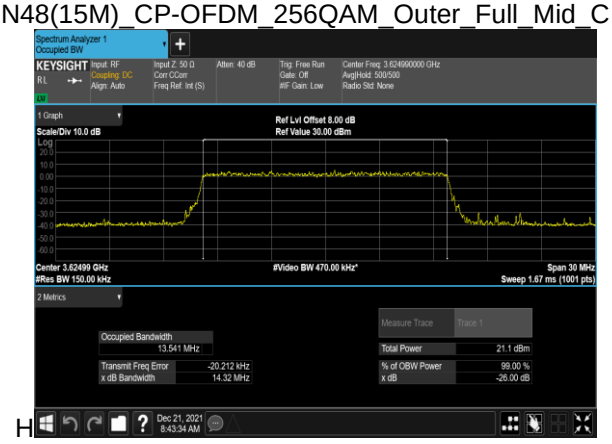
N48(15M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N48(15M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

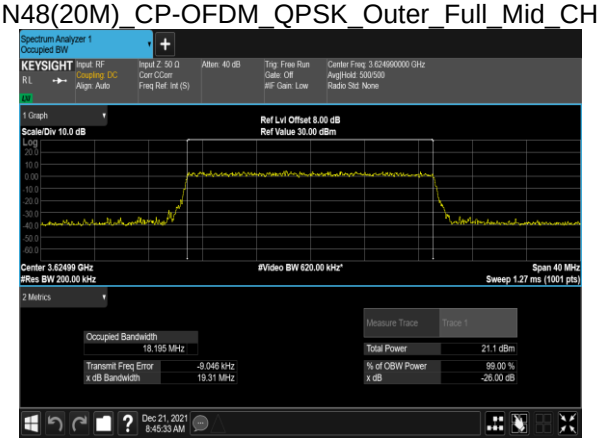


N48(15M)_CP-OFDM_256QAM_Outer_Full_Mid_C

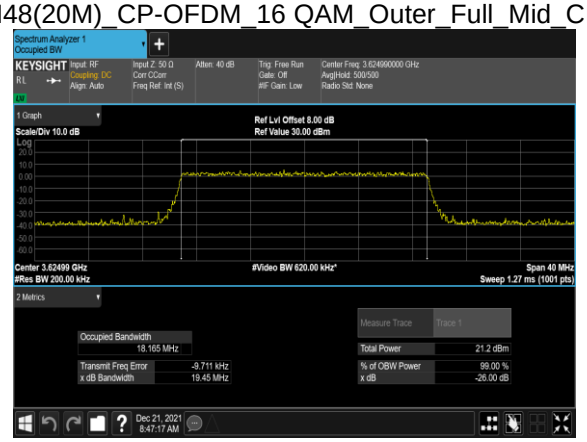


H

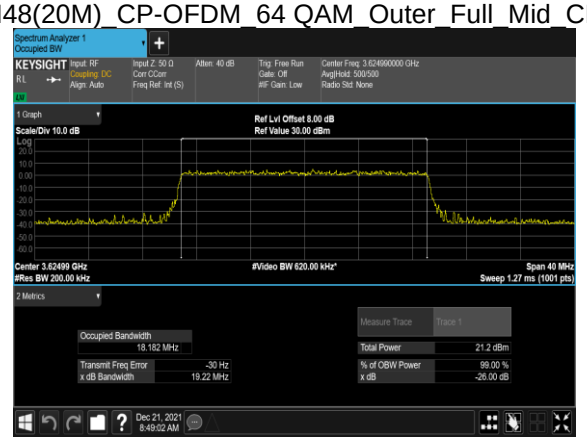
N48(20M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



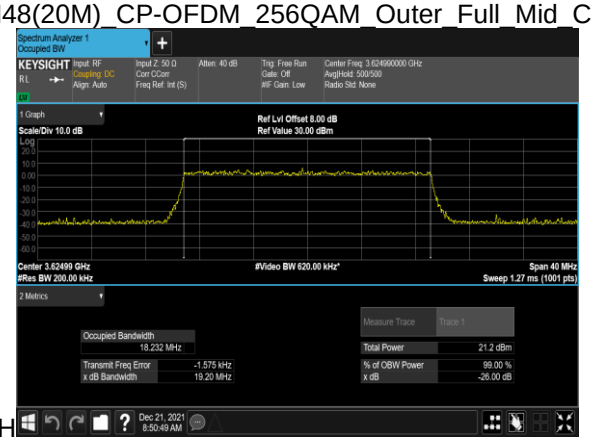
N48(20M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N48(20M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

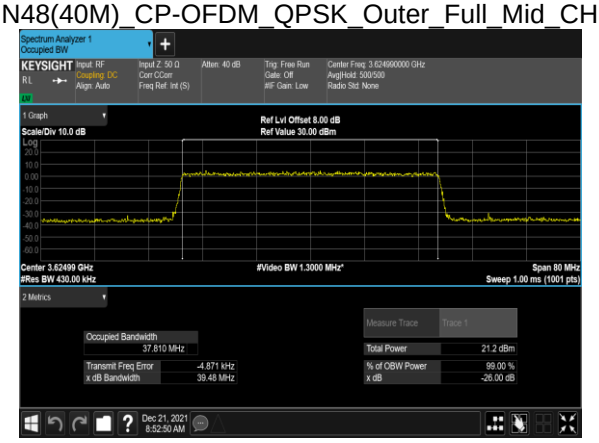


N48(20M)_CP-OFDM_256QAM_Outer_Full_Mid_C

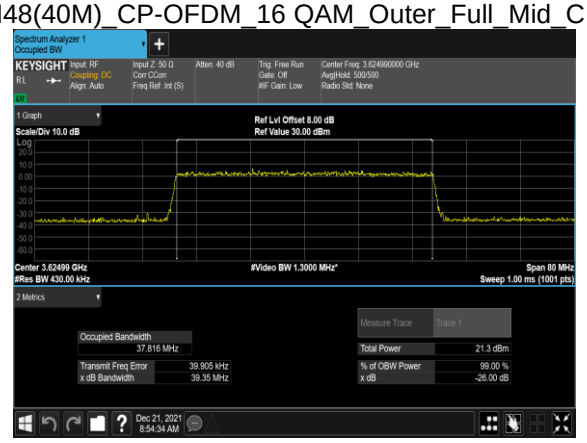


H

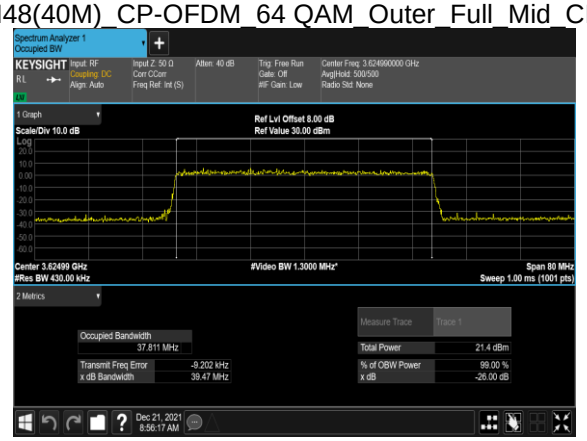
N48(40M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



N48(40M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

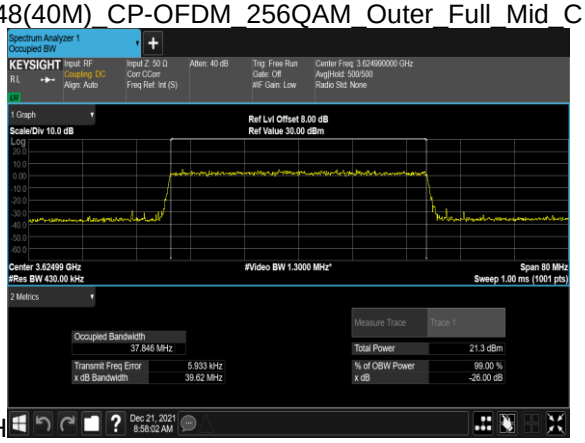


N48(40M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

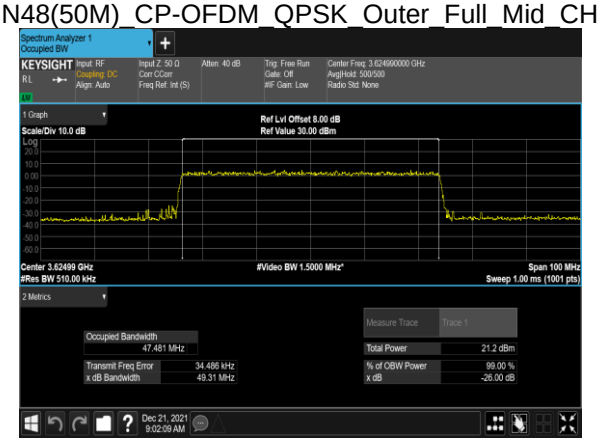


N48(40M)_CP-OFDM_256QAM_Outer_Full_Mid_C

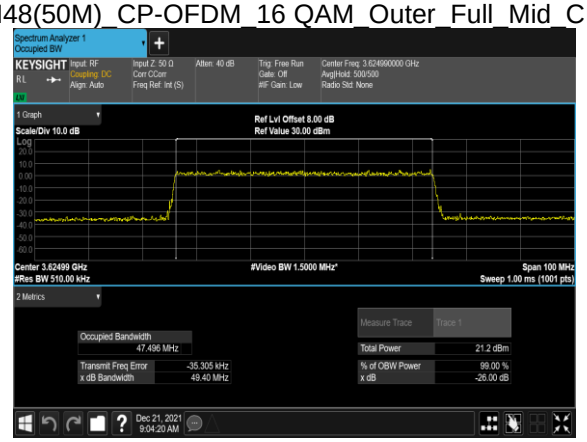
H



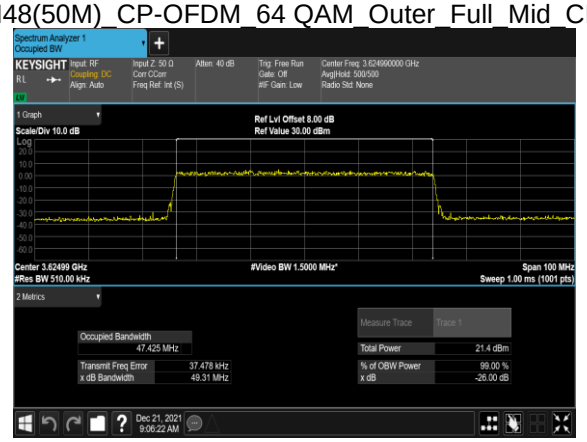
N48(50M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



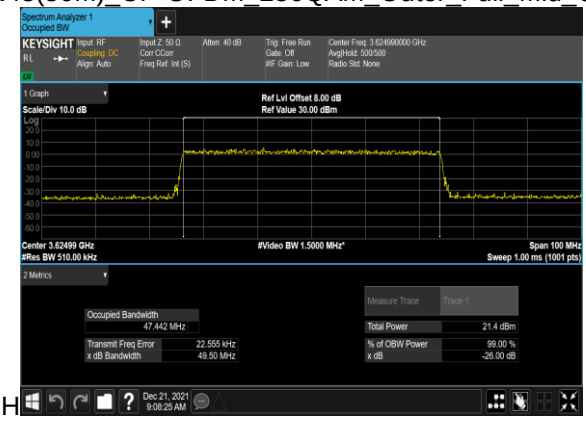
N48(50M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N48(50M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

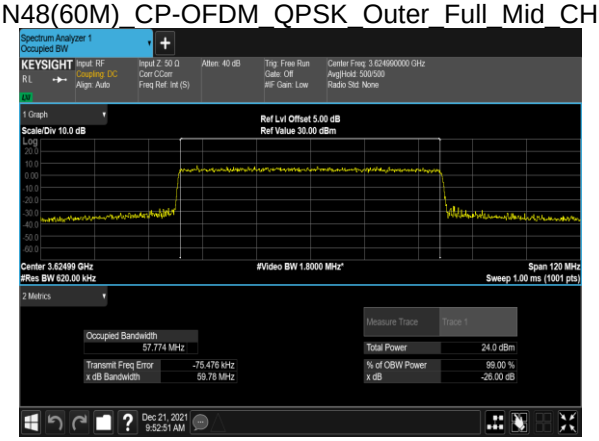


N48(50M)_CP-OFDM_256QAM_Outer_Full_Mid_C

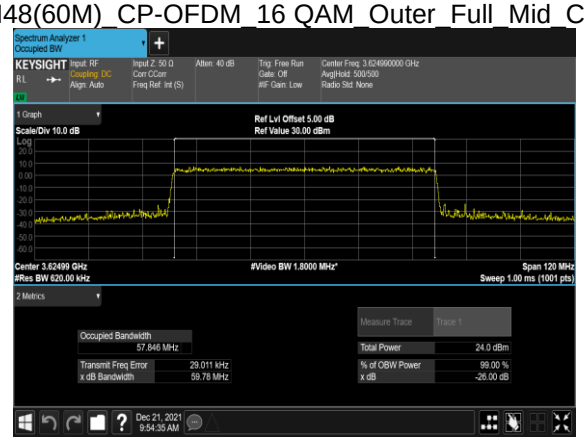


H

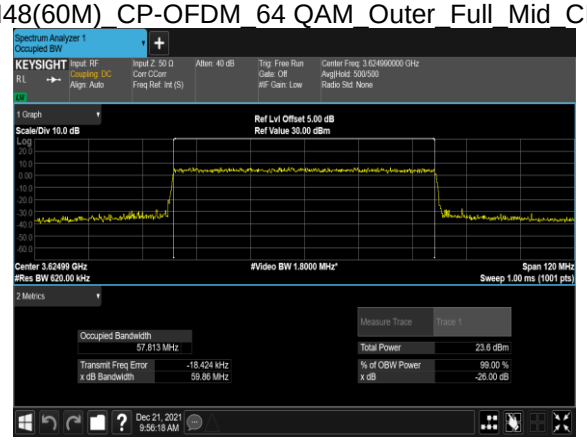
N48(60M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



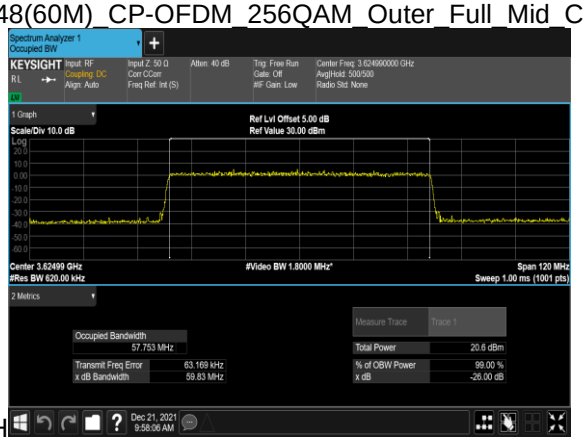
N48(60M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N48(60M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

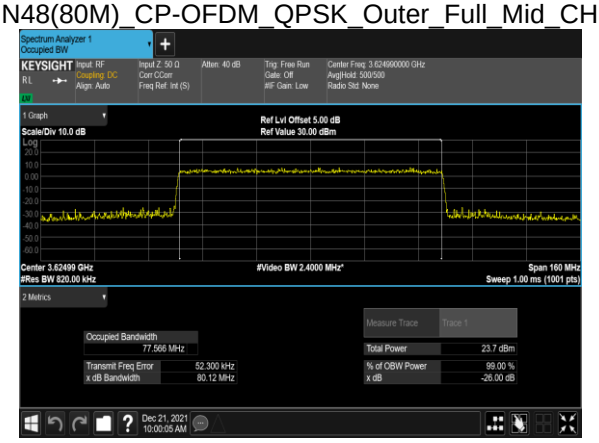


N48(60M)_CP-OFDM_256QAM_Outer_Full_Mid_C

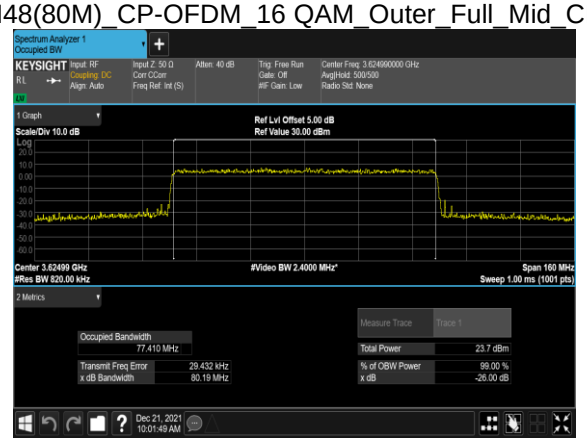


H

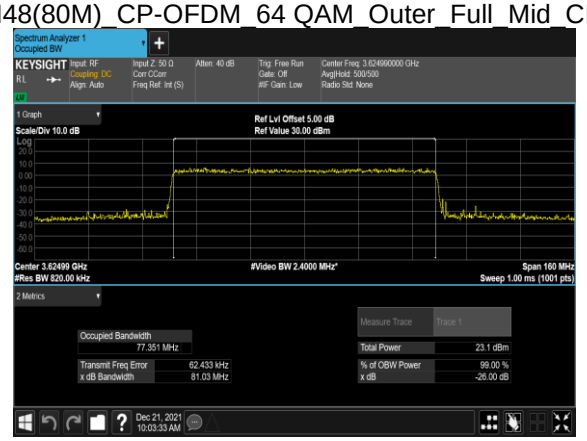
N48(80M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



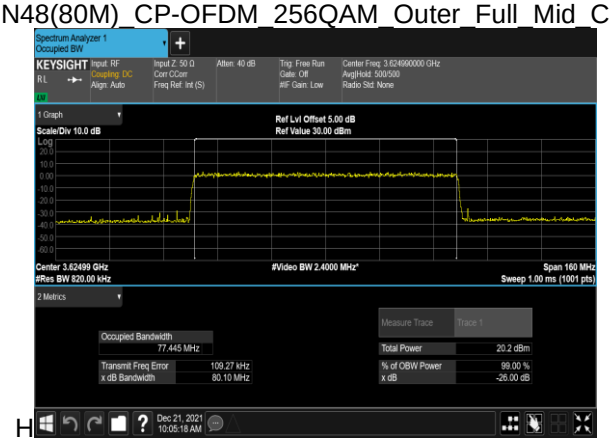
N48(80M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N48(80M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

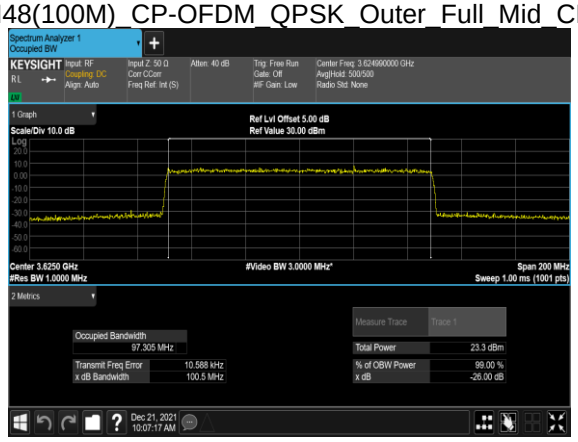


N48(80M)_CP-OFDM_256QAM_Outer_Full_Mid_C

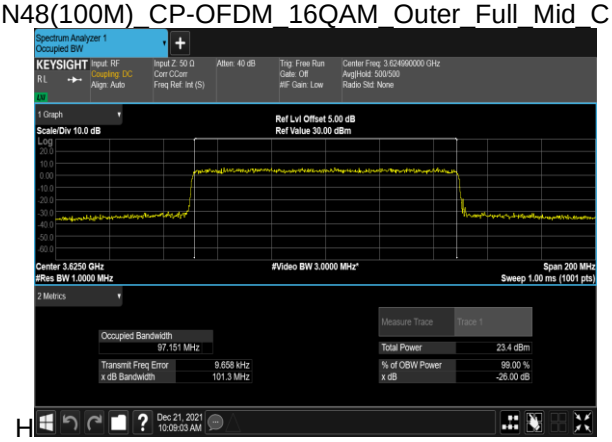


H

N48(100M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

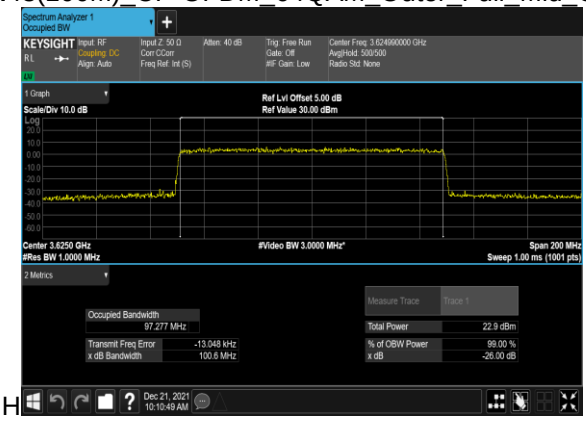


N48(100M)_CP-OFDM_16QAM_Outer_Full_Mid_C

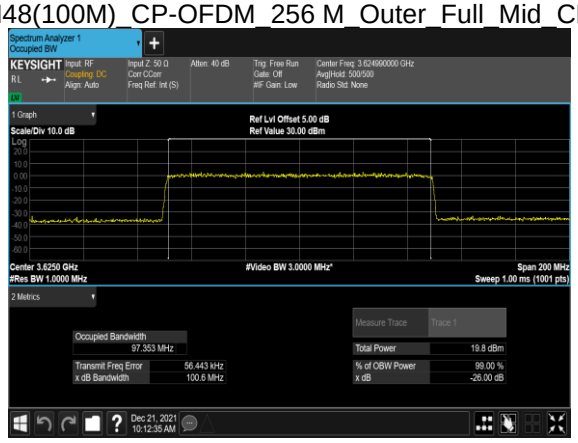


H

N48(100M)_CP-OFDM_64QAM_Outer_Full_Mid_CH



N48(100M)_CP-OFDM_256 M_Outer_Full_Mid_CH



A6.3 Adjacent Channel Leakage Ratio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Lower Margin	Upper Margin	Result	Verdict
48	30	10	637000	3555.0	CP-OFDM QPSK	24@0	-15.93	-16.03	**see graph**	PASS
48	30	10	637000	3555.0	CP-OFDM QPSK	1@0	-12.58	-18.56	**see graph**	PASS
48	30	10	637000	3555.0	CP-OFDM QPSK	1@23	-18.48	-13.24	**see graph**	PASS
48	30	10	641666	3624.99	CP-OFDM QPSK	24@0	-14.84	-14.94	**see graph**	PASS
48	30	10	641666	3624.99	CP-OFDM QPSK	1@0	-11.92	-15.26	**see graph**	PASS
48	30	10	641666	3624.99	CP-OFDM QPSK	1@23	-15.63	-10.8	**see graph**	PASS
48	30	10	646332	3694.98	CP-OFDM QPSK	24@0	-14.45	-14.66	**see graph**	PASS
48	30	10	646332	3694.98	CP-OFDM QPSK	1@0	-11.62	-16.1	**see graph**	PASS
48	30	10	646332	3694.98	CP-OFDM QPSK	1@23	-16.5	-12.58	**see graph**	PASS
48	30	50	638334	3575.01	CP-OFDM QPSK	133@0	-10.86	-10.28	**see graph**	PASS
48	30	50	638334	3575.01	CP-OFDM QPSK	1@0	-8.21	-10.5	**see graph**	PASS
48	30	50	638334	3575.01	CP-OFDM QPSK	1@132	-11.46	-8.43	**see graph**	PASS
48	30	50	641666	3624.99	CP-OFDM QPSK	133@0	-10.62	-9.88	**see graph**	PASS
48	30	50	641666	3624.99	CP-OFDM QPSK	1@0	-7.52	-9.83	**see graph**	PASS
48	30	50	641666	3624.99	CP-OFDM QPSK	1@132	-11.17	-7.95	**see graph**	PASS
48	30	50	645000	3675.0	CP-OFDM QPSK	133@0	-10.43	-9.71	**see graph**	PASS
48	30	50	645000	3675.0	CP-OFDM QPSK	1@0	-6.97	-8.77	**see graph**	PASS
48	30	50	645000	3675.0	CP-OFDM QPSK	1@132	-5.97	-3.13	**see graph**	PASS
48	30	100	640000	3600.0	CP-OFDM QPSK	273@0	-9.73	-7.22	**see graph**	PASS
48	30	100	640000	3600.0	CP-OFDM QPSK	1@0	-7.43	-6.74	**see graph**	PASS
48	30	100	640000	3600.0	CP-OFDM QPSK	1@272	-10.11	-6.03	**see graph**	PASS
48	30	100	641666	3624.99	CP-OFDM QPSK	273@0	-9.6	-6.96	**see graph**	PASS
48	30	100	641666	3624.99	CP-OFDM QPSK	1@0	-7.74	-6.52	**see graph**	PASS
48	30	100	641666	3624.99	CP-OFDM QPSK	1@272	-9.55	-5.31	**see graph**	PASS
48	30	100	643332	3649.98	CP-OFDM QPSK	273@0	-9.69	-6.77	**see graph**	PASS
48	30	100	643332	3649.98	CP-OFDM QPSK	1@0	-6.89	-6.25	**see graph**	PASS
48	30	100	643332	3649.98	CP-OFDM QPSK	1@272	-9.28	-5.02	**see graph**	PASS