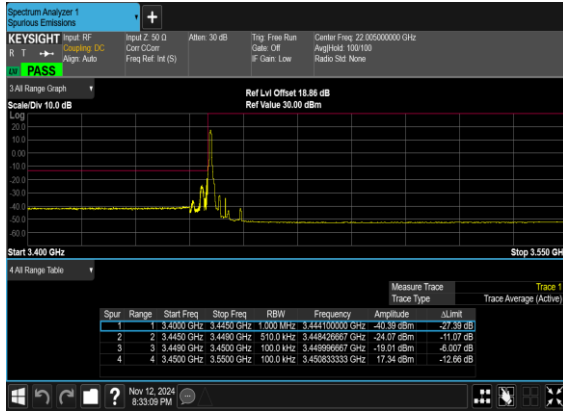




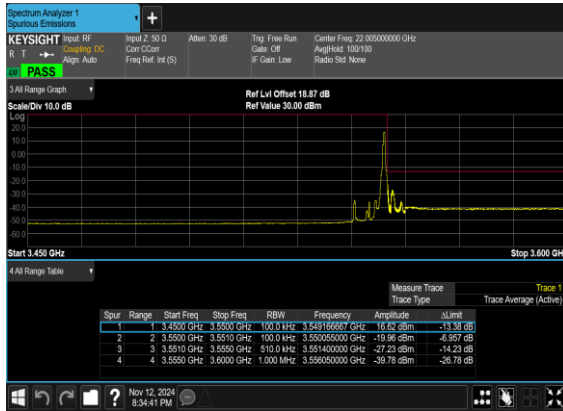
N77(10M)\_CP-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



N77(10M)\_CP-OFDM\_QPSK\_Outer\_Full\_Low\_CH



N77(10M)\_CP-OFDM\_QPSK\_Edge\_1RB\_Right\_High\_CH

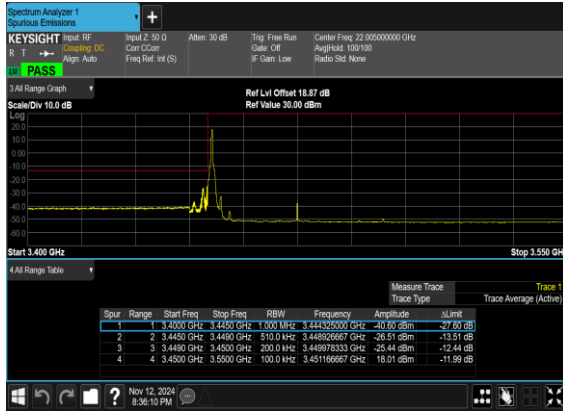


N77(10M)\_CP-OFDM\_QPSK\_Outer\_Full\_High\_CH





N77(50M)\_CP-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



N77(50M)\_CP-OFDM\_QPSK\_Outer\_Full\_Low\_CH



N77(50M)\_CP-OFDM\_QPSK\_Edge\_1RB\_Right\_High\_CH

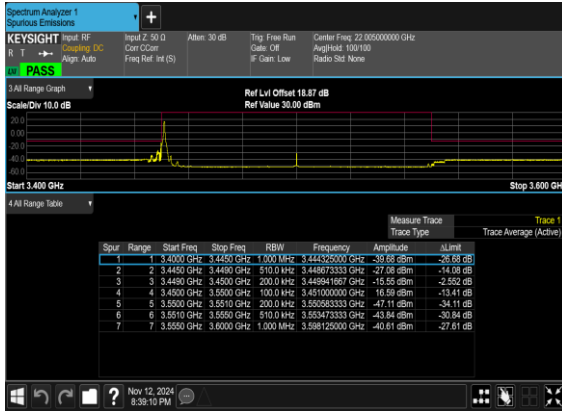


N77(50M)\_CP-OFDM\_QPSK\_Outer\_Full\_High\_CH

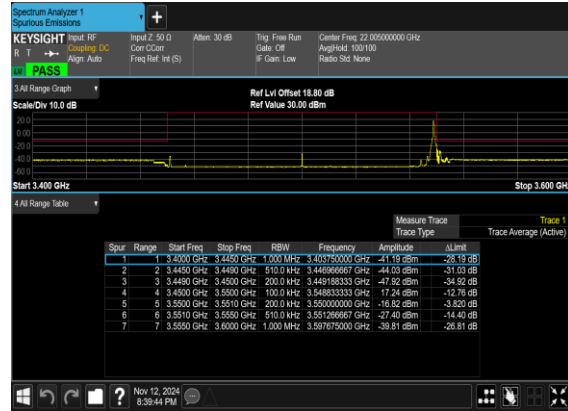




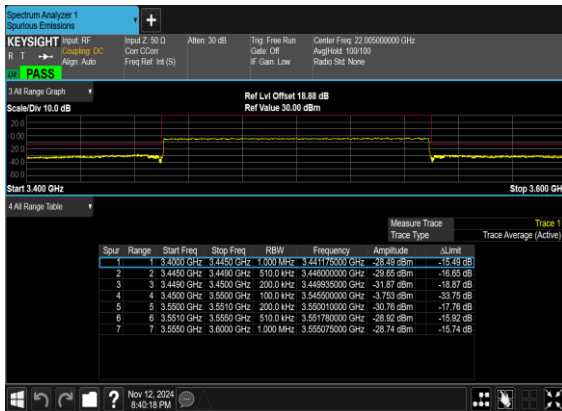
N77(100M)\_CP-
OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



N77(100M)\_CP-
OFDM\_QPSK\_Edge\_1RB\_Right\_Mid\_CH



N77(100M)\_CP-
OFDM\_QPSK\_Outer\_Full\_Mid\_CH





# FR1 N77 MIMO-ANT7

## Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (Hz)	Verdict	Environment
77	30	20	633334	3500.01	CP-OFDM QPSK	51@0	16.6	PASS	NV
77	30	20	633334	3500.01	CP-OFDM QPSK	51@0	17.6	PASS	LV
77	30	20	633334	3500.01	CP-OFDM QPSK	51@0	14.1	PASS	HV
77	30	20	633334	3500.01	CP-OFDM QPSK	51@0	15.5	PASS	-30°C
77	30	20	633334	3500.01	CP-OFDM QPSK	51@0	15.8	PASS	-20°C
77	30	20	633334	3500.01	CP-OFDM QPSK	51@0	15	PASS	-10°C
77	30	20	633334	3500.01	CP-OFDM QPSK	51@0	17.7	PASS	0°C
77	30	20	633334	3500.01	CP-OFDM QPSK	51@0	13.9	PASS	10°C
77	30	20	633334	3500.01	CP-OFDM QPSK	51@0	17.8	PASS	20°C
77	30	20	633334	3500.01	CP-OFDM QPSK	51@0	14.7	PASS	30°C
77	30	20	633334	3500.01	CP-OFDM QPSK	51@0	16.3	PASS	40°C
77	30	20	633334	3500.01	CP-OFDM QPSK	51@0	13.4	PASS	50°C

$|\text{MAX}(\Delta f)| = 17.8 \text{ Hz}$

Frequency Stability	Frequency (MHz)	Limit Line	Result
$f_L -  \text{MAX}(\Delta f) $	3450.788188	$\geq 3450 \text{ MHz}$	PASS
$f_H +  \text{MAX}(\Delta f) $	3548.638314	$\leq 3550 \text{ MHz}$	



### Peak to Average Ratio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
77	30	20	633334	3500.01	CP-OFDM QPSK	51@0	7.23	13	PASS

### N77(20M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH





### Occupied Bandwidth

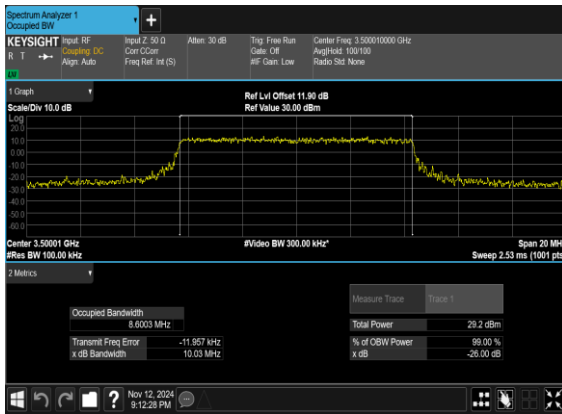
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB BW (MHz)
77	30	10	633334	3500.01	CP-OFDM QPSK	24@0	8.6003	10.03
77	30	10	633334	3500.01	CP-OFDM 16 QAM	24@0	8.5862	9.537
77	30	10	633334	3500.01	CP-OFDM 64 QAM	24@0	8.5727	9.718
77	30	10	633334	3500.01	CP-OFDM 256 QAM	24@0	8.5854	9.455
77	30	15	633334	3500.01	CP-OFDM QPSK	38@0	13.566	14.64
77	30	15	633334	3500.01	CP-OFDM 16 QAM	38@0	13.568	14.59
77	30	15	633334	3500.01	CP-OFDM 64 QAM	38@0	13.537	14.66
77	30	15	633334	3500.01	CP-OFDM 256 QAM	38@0	13.575	15.07
77	30	20	633334	3500.01	CP-OFDM QPSK	51@0	18.234	19.2
77	30	20	633334	3500.01	CP-OFDM 16 QAM	51@0	18.244	19.43
77	30	20	633334	3500.01	CP-OFDM 64 QAM	51@0	18.198	19.27
77	30	20	633334	3500.01	CP-OFDM 256 QAM	51@0	18.157	19.43
77	30	25	633334	3500.01	CP-OFDM QPSK	65@0	23.199	24.92
77	30	25	633334	3500.01	CP-OFDM 16 QAM	65@0	23.183	24.28
77	30	25	633334	3500.01	CP-OFDM 64 QAM	65@0	23.164	24.34
77	30	25	633334	3500.01	CP-OFDM 256 QAM	65@0	23.215	24.42
77	30	30	633334	3500.01	CP-OFDM QPSK	78@0	27.782	29.33
77	30	30	633334	3500.01	CP-OFDM 16 QAM	78@0	27.934	29.19
77	30	30	633334	3500.01	CP-OFDM 64 QAM	78@0	27.87	29.36
77	30	30	633334	3500.01	CP-OFDM 256 QAM	78@0	27.888	28.95
77	30	40	633334	3500.01	CP-OFDM QPSK	106@0	37.944	39.77
77	30	40	633334	3500.01	CP-OFDM 16 QAM	106@0	37.959	39.46
77	30	40	633334	3500.01	CP-OFDM 64 QAM	106@0	37.875	39.52



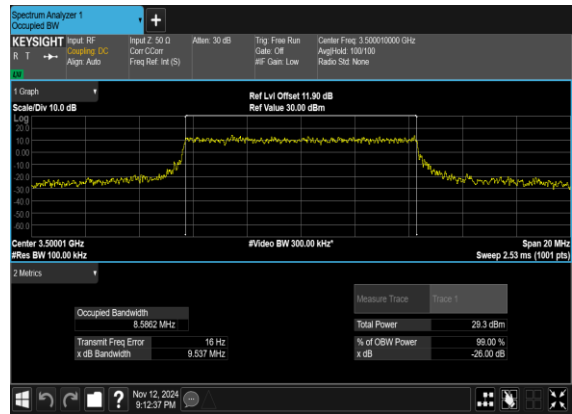
77	30	40	633334	3500.01	CP-OFDM 256 QAM	106@0	37.834	39.07
77	30	50	633334	3500.01	CP-OFDM QPSK	133@0	47.421	49.14
77	30	50	633334	3500.01	CP-OFDM 16 QAM	133@0	47.514	49.41
77	30	50	633334	3500.01	CP-OFDM 64 QAM	133@0	47.419	49.06
77	30	50	633334	3500.01	CP-OFDM 256 QAM	133@0	47.361	49.37
77	30	60	633334	3500.01	CP-OFDM QPSK	162@0	57.78	60.03
77	30	60	633334	3500.01	CP-OFDM 16 QAM	162@0	57.832	59.72
77	30	60	633334	3500.01	CP-OFDM 64 QAM	162@0	57.9	59.87
77	30	60	633334	3500.01	CP-OFDM 256 QAM	162@0	57.892	59.95
77	30	70	633334	3500.01	CP-OFDM QPSK	189@0	67.607	69.71
77	30	70	633334	3500.01	CP-OFDM 16 QAM	189@0	67.346	69.73
77	30	70	633334	3500.01	CP-OFDM 64 QAM	189@0	67.426	69.92
77	30	70	633334	3500.01	CP-OFDM 256 QAM	189@0	67.486	69.87
77	30	80	633334	3500.01	CP-OFDM QPSK	217@0	77.379	80.13
77	30	80	633334	3500.01	CP-OFDM 16 QAM	217@0	77.365	79.94
77	30	80	633334	3500.01	CP-OFDM 64 QAM	217@0	77.505	80.01
77	30	80	633334	3500.01	CP-OFDM 256 QAM	217@0	77.248	79.91
77	30	90	633334	3500.01	CP-OFDM QPSK	245@0	87.294	90.29
77	30	90	633334	3500.01	CP-OFDM 16 QAM	245@0	87.323	90.17
77	30	90	633334	3500.01	CP-OFDM 64 QAM	245@0	87.588	90.39
77	30	90	633334	3500.01	CP-OFDM 256 QAM	245@0	87.511	90.31
77	30	100	633334	3500.01	CP-OFDM QPSK	273@0	97.341	100.5
77	30	100	633334	3500.01	CP-OFDM 16 QAM	273@0	97.505	100.7
77	30	100	633334	3500.01	CP-OFDM 64 QAM	273@0	97.49	100.6
77	30	100	633334	3500.01	CP-OFDM 256 QAM	273@0	97.323	100.6



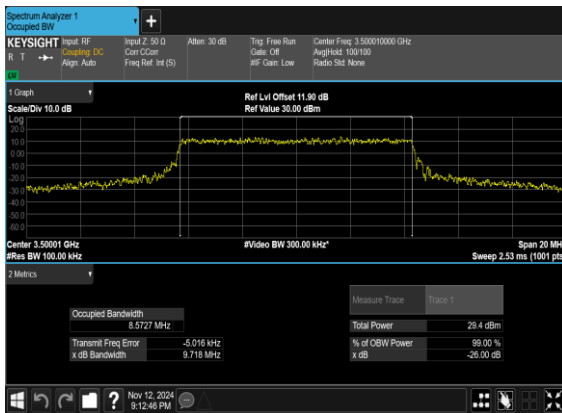
N77(10M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



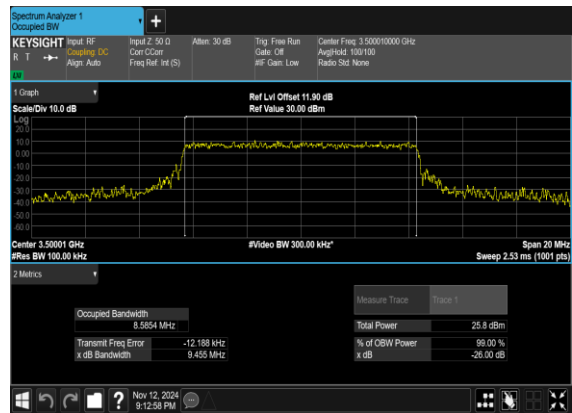
N77(10M)\_CP-OFDM\_16 QAM\_Outer\_Full\_Mid\_CH



N77(10M)\_CP-OFDM\_64 QAM\_Outer\_Full\_Mid\_CH

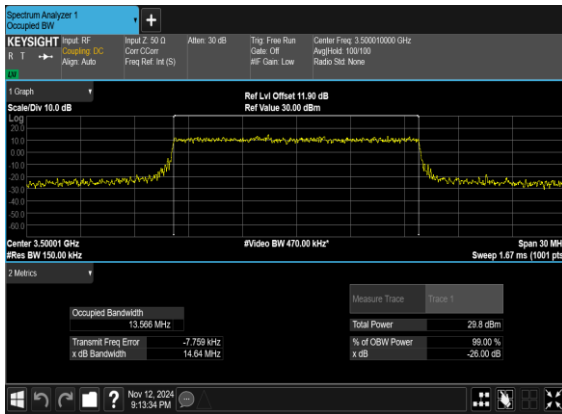


N77(10M)\_CP-OFDM\_256 QAM\_Outer\_Full\_Mid\_CH

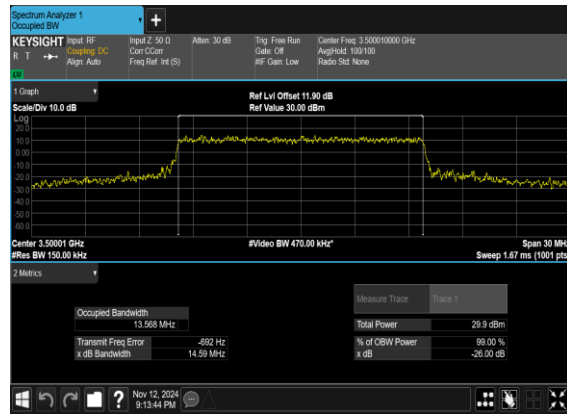




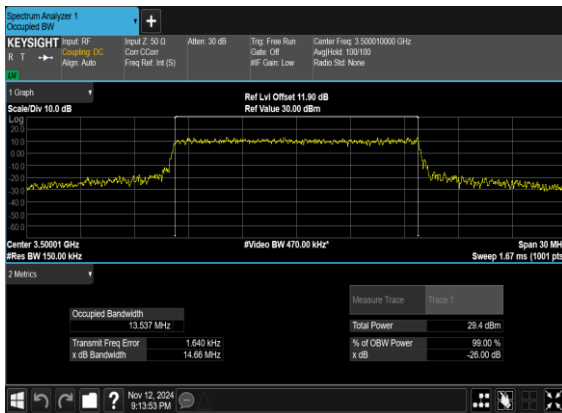
N77(15M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



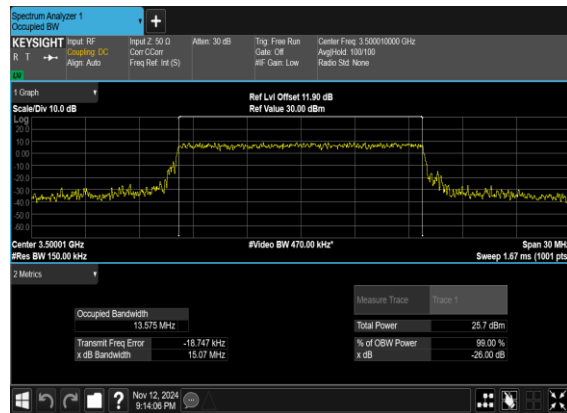
N77(15M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



N77(15M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH

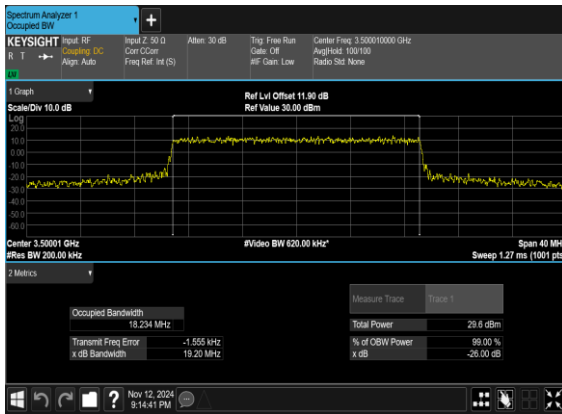


N77(15M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH

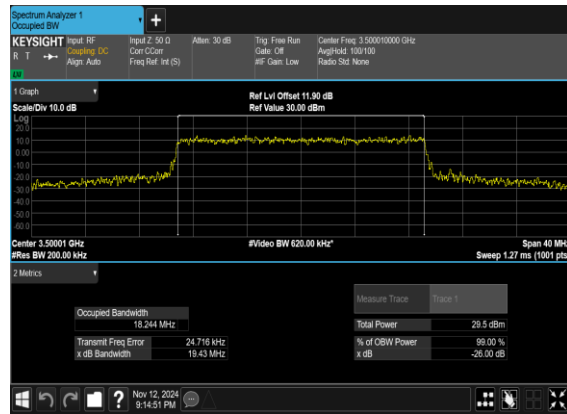




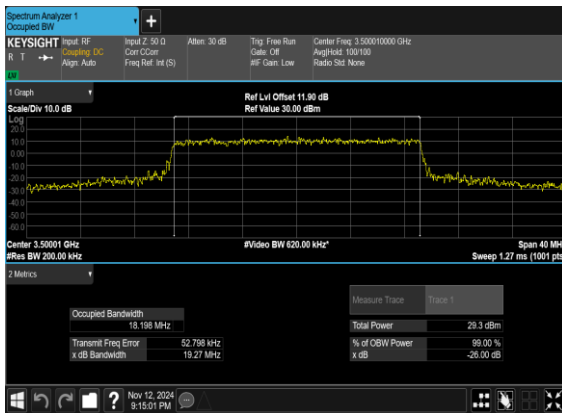
N77(20M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



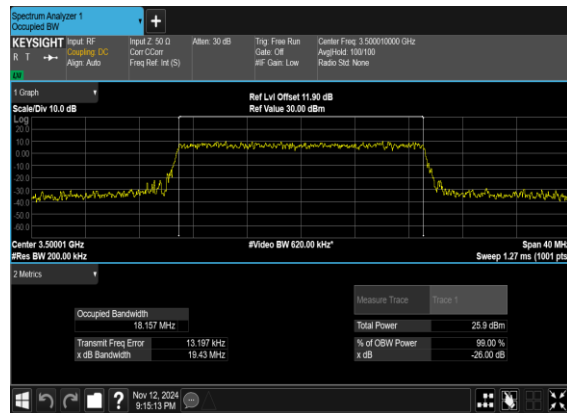
N77(20M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



N77(20M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH

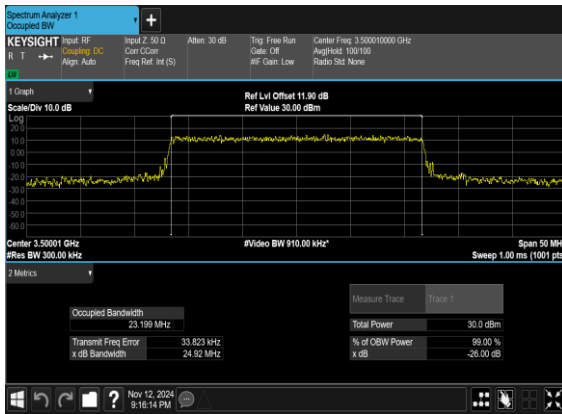


N77(20M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH

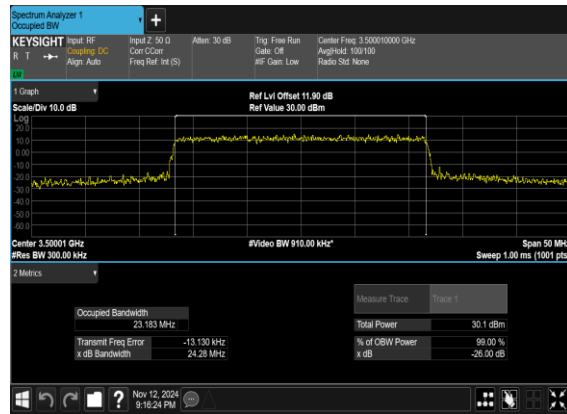




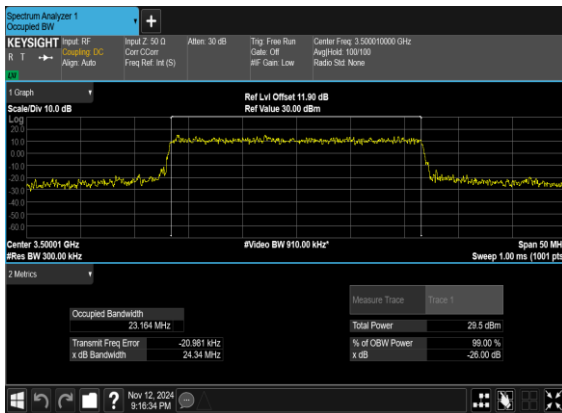
N77(25M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



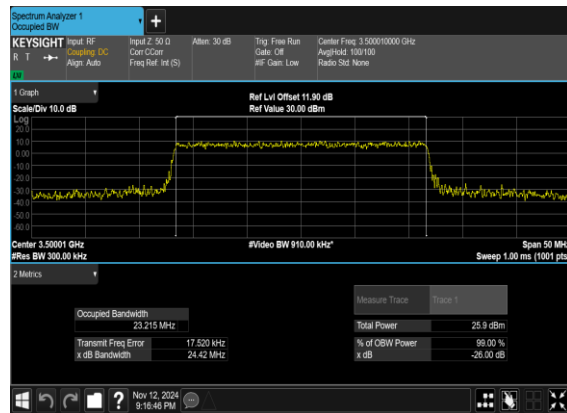
N77(25M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



N77(25M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH

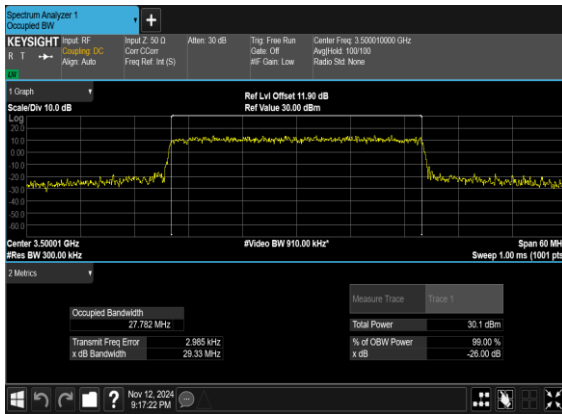


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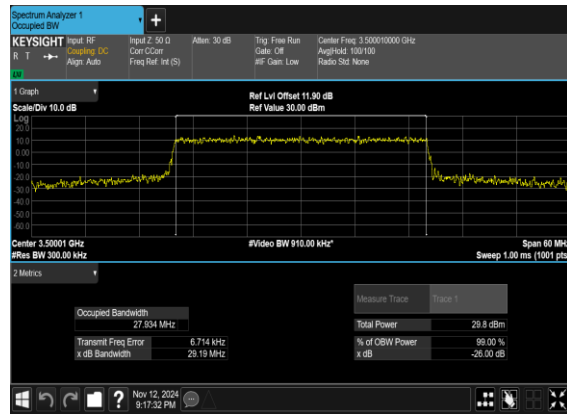




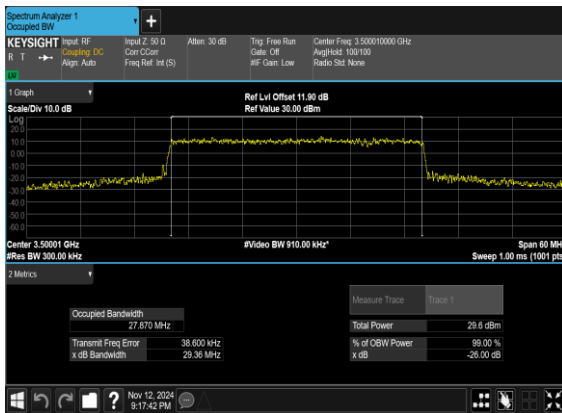
N77(30M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



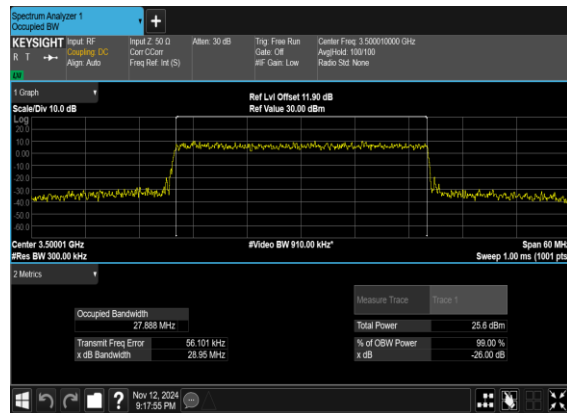
N77(30M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



N77(30M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH

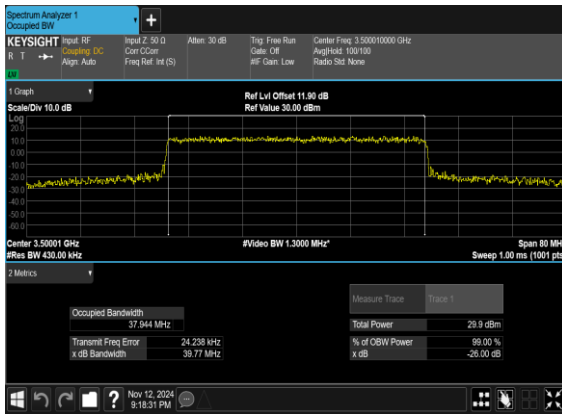


N77(30M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH

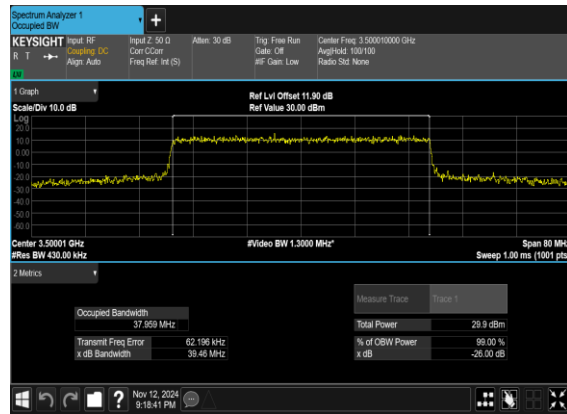




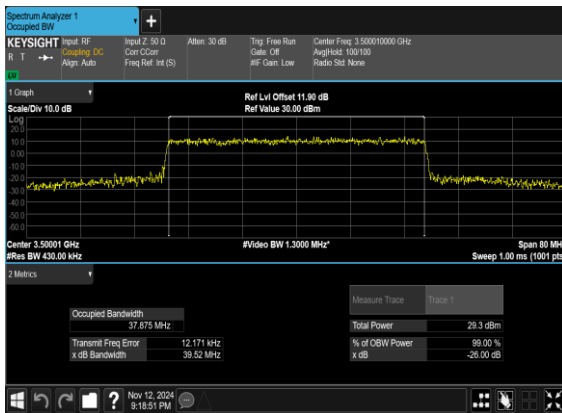
N77(40M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



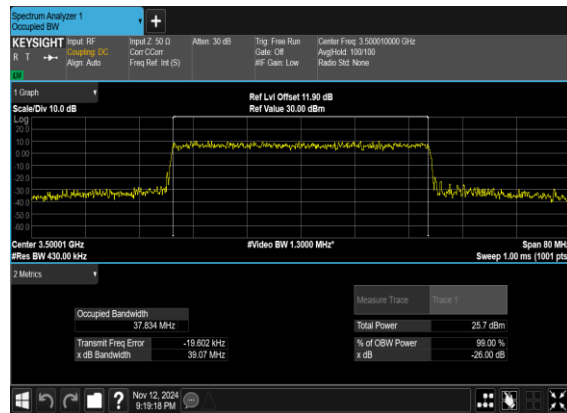
N77(40M)\_CP-OFDM\_16\_QAM\_Outer\_Full\_Mid\_CH



N77(40M)\_CP-OFDM\_64\_QAM\_Outer\_Full\_Mid\_CH

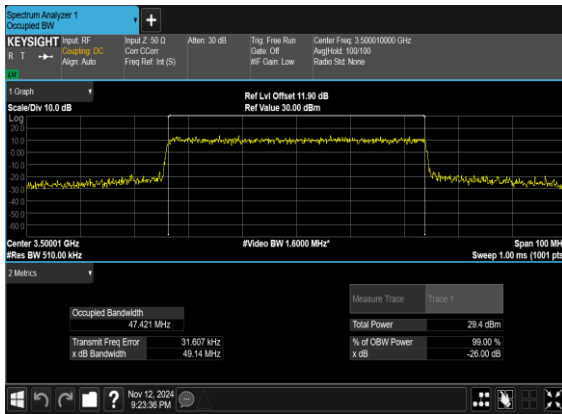


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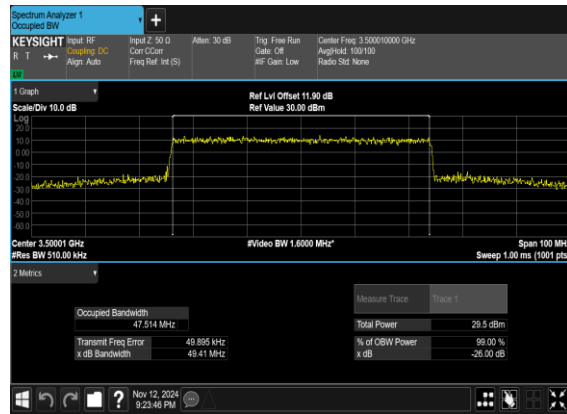




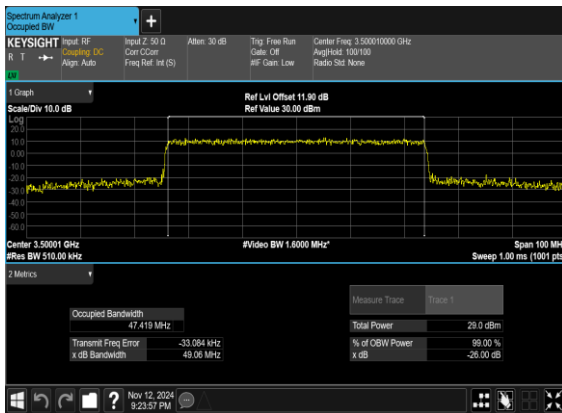
N77(50M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



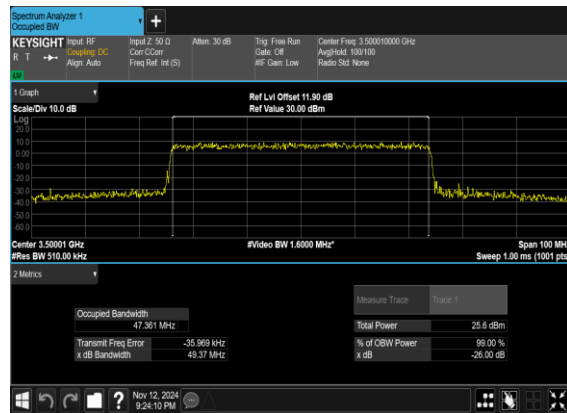
N77(50M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



N77(50M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH

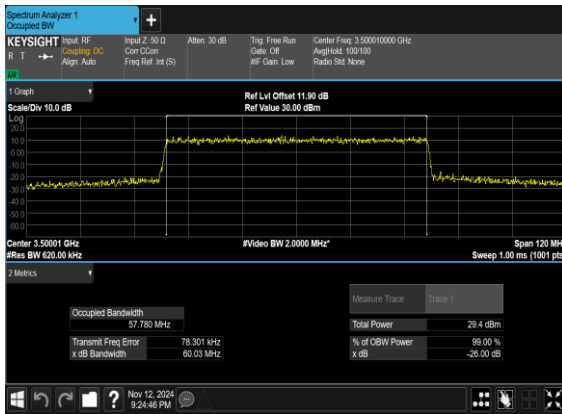


N77(50M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH

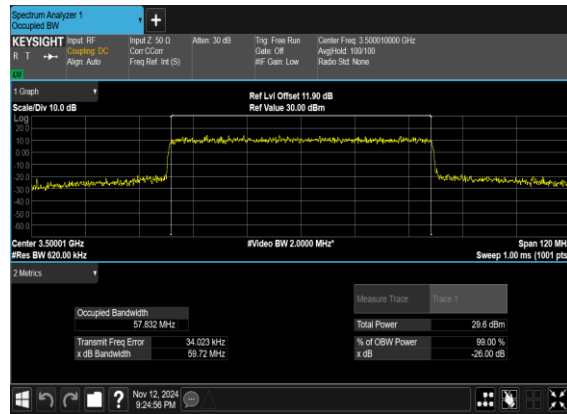




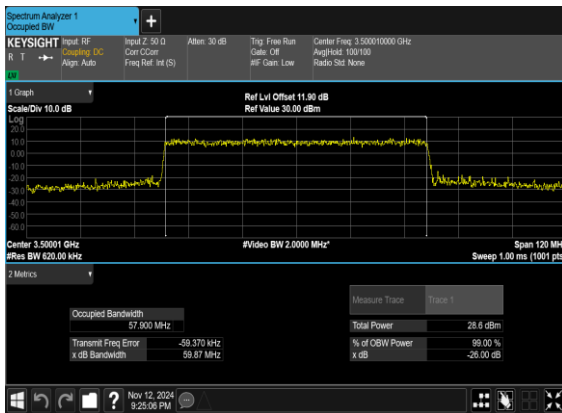
N77(60M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



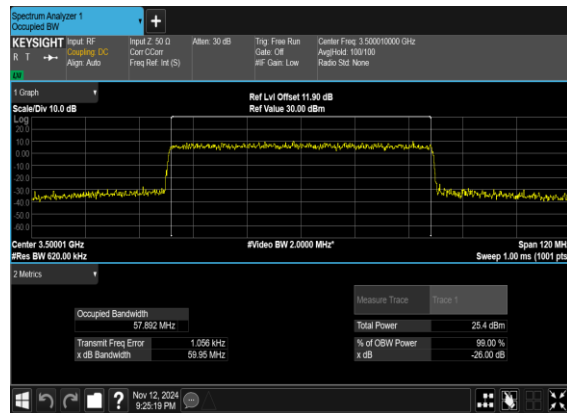
N77(60M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



N77(60M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH

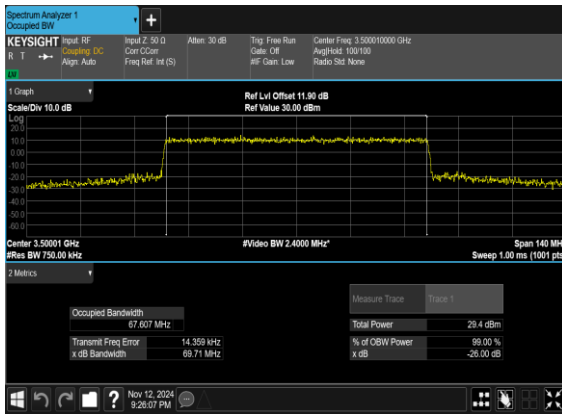


N77(60M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH

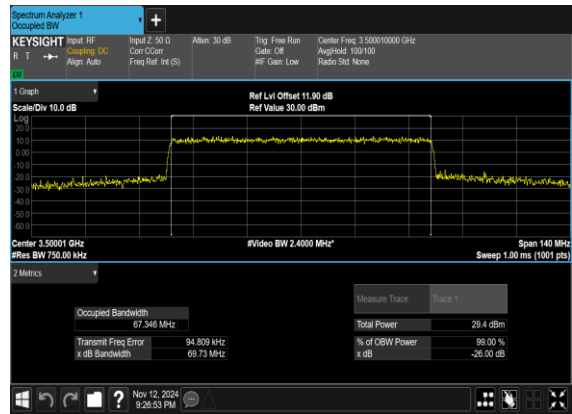




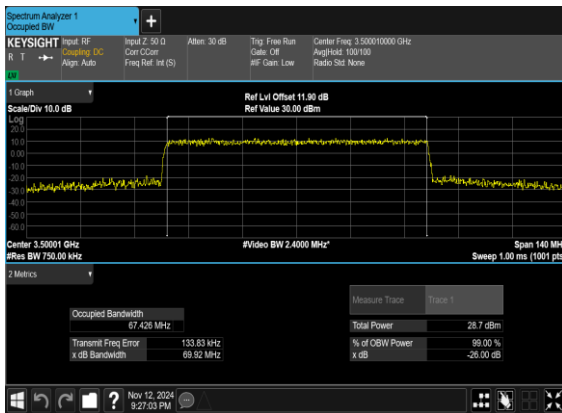
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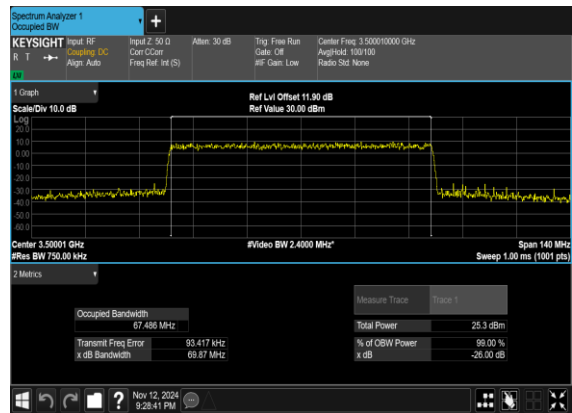
N77(70M)\_CP-OFDM\_16 QAM\_Outer\_Full\_Mid\_CH



N77(70M)\_CP-OFDM\_64 QAM\_Outer\_Full\_Mid\_CH

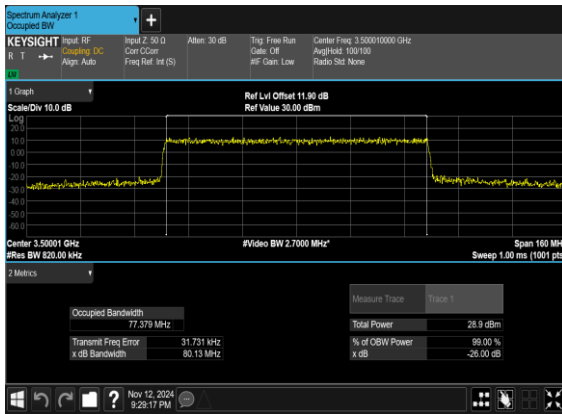


N77(70M)\_CP-OFDM\_256 QAM\_Outer\_Full\_Mid\_CH

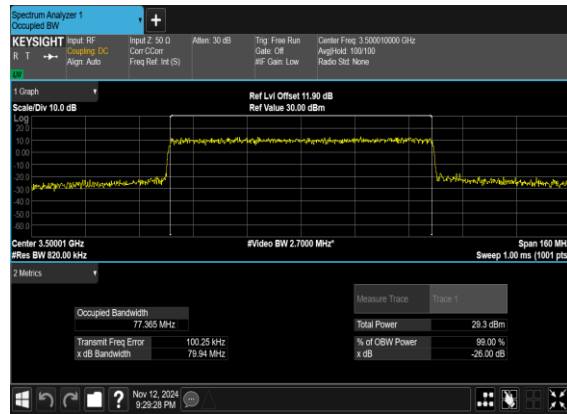




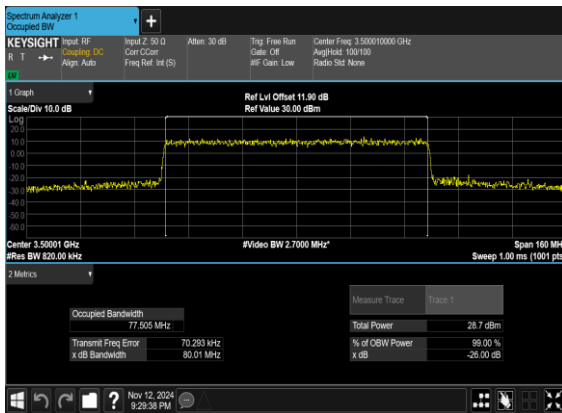
N77(80M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



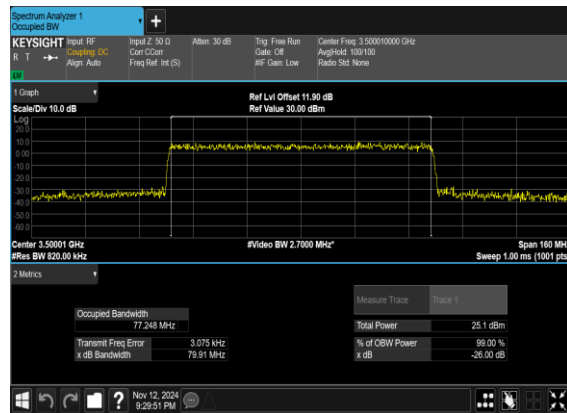
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N77(80M)\_CP-OFDM\_64 QAM\_Outer\_Full\_Mid\_CH

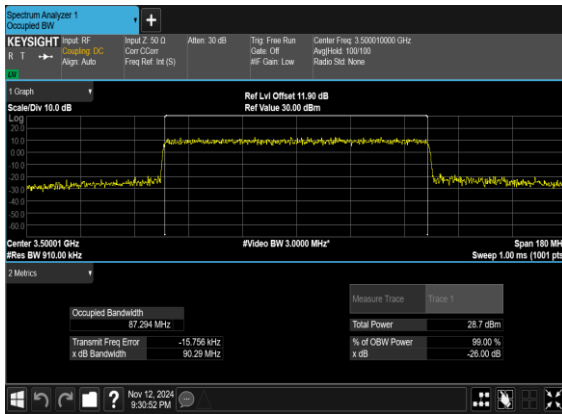


N77(80M)\_CP-OFDM\_256 QAM\_Outer\_Full\_Mid\_CH

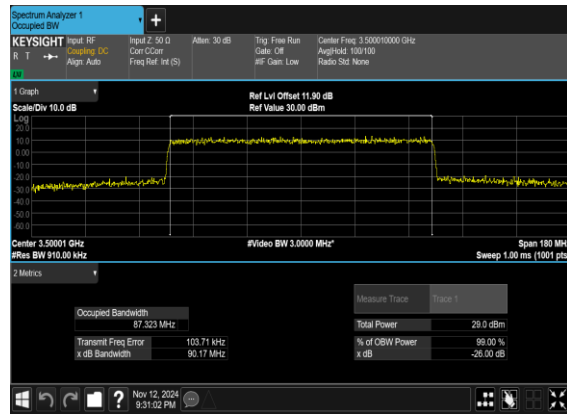




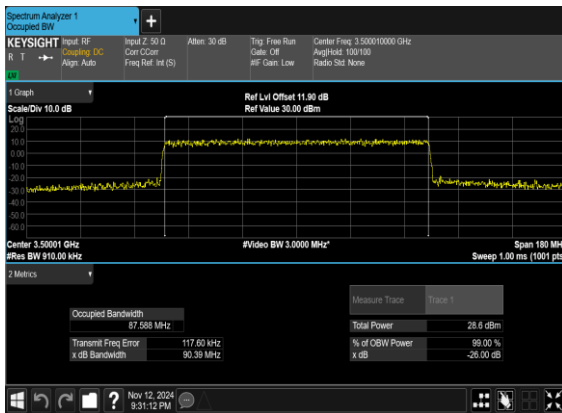
N77(90M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



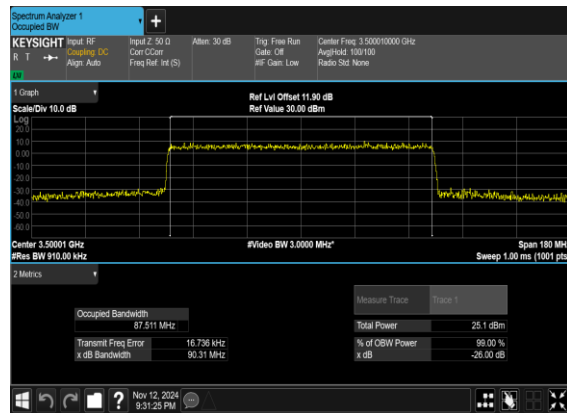
N77(90M)\_CP-OFDM\_16 QAM\_Outer\_Full\_Mid\_CH



N77(90M)\_CP-OFDM\_64 QAM\_Outer\_Full\_Mid\_CH

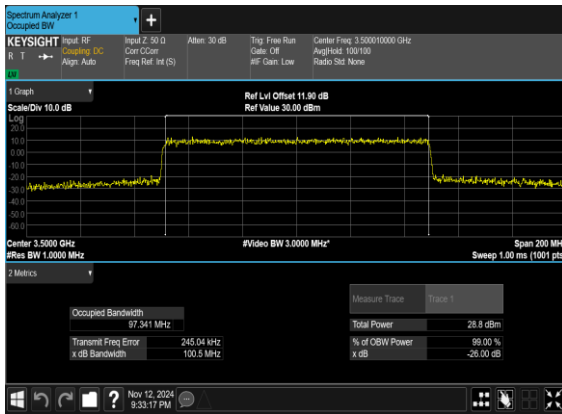


N77(90M)\_CP-OFDM\_256 QAM\_Outer\_Full\_Mid\_CH

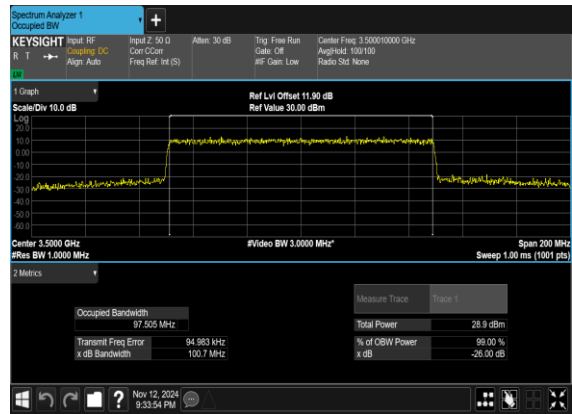




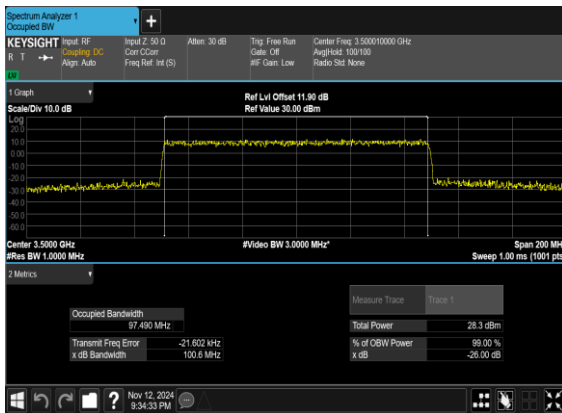
N77(100M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



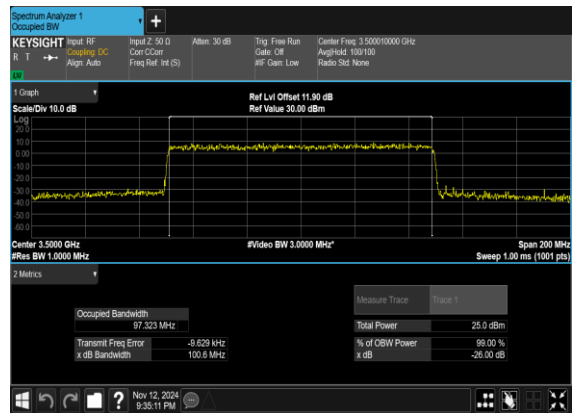
N77(100M)\_CP-OFDM\_16\_QAM\_Outer\_Full\_Mid\_CH



N77(100M)\_CP-OFDM\_64\_QAM\_Outer\_Full\_Mid\_CH



N77(100M)\_CP-OFDM\_256\_QAM\_Outer\_Full\_Mid\_CH





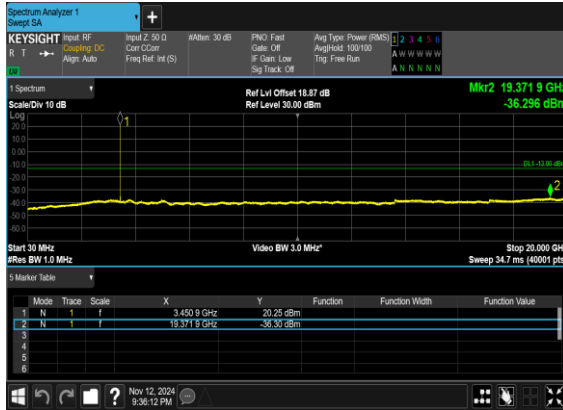
### Conducted Spurious Emissions

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
77	30	10	630334	3455.01	CP-OFDM QPSK	1@0	see graph	---
77	30	10	630334	3455.01	CP-OFDM QPSK	1@0	see graph	PASS
77	30	10	630334	3455.01	CP-OFDM QPSK	1@0	see graph	PASS
77	30	10	633334	3500.01	CP-OFDM QPSK	1@0	see graph	---
77	30	10	633334	3500.01	CP-OFDM QPSK	1@0	see graph	PASS
77	30	10	633334	3500.01	CP-OFDM QPSK	1@0	see graph	PASS
77	30	10	636332	3544.98	CP-OFDM QPSK	1@0	see graph	---
77	30	10	636332	3544.98	CP-OFDM QPSK	1@0	see graph	PASS
77	30	10	636332	3544.98	CP-OFDM QPSK	1@0	see graph	PASS
77	30	50	631668	3475.02	CP-OFDM QPSK	1@0	see graph	---
77	30	50	631668	3475.02	CP-OFDM QPSK	1@0	see graph	PASS
77	30	50	631668	3475.02	CP-OFDM QPSK	1@0	see graph	PASS
77	30	50	633334	3500.01	CP-OFDM QPSK	1@0	see graph	---
77	30	50	633334	3500.01	CP-OFDM QPSK	1@0	see graph	PASS
77	30	50	633334	3500.01	CP-OFDM QPSK	1@0	see graph	PASS
77	30	50	635000	3525.0	CP-OFDM QPSK	1@0	see graph	---
77	30	50	635000	3525.0	CP-OFDM QPSK	1@0	see graph	PASS
77	30	50	635000	3525.0	CP-OFDM QPSK	1@0	see graph	PASS
77	30	100	633334	3500.01	CP-OFDM QPSK	1@0	see graph	---
77	30	100	633334	3500.01	CP-OFDM QPSK	1@0	see graph	PASS

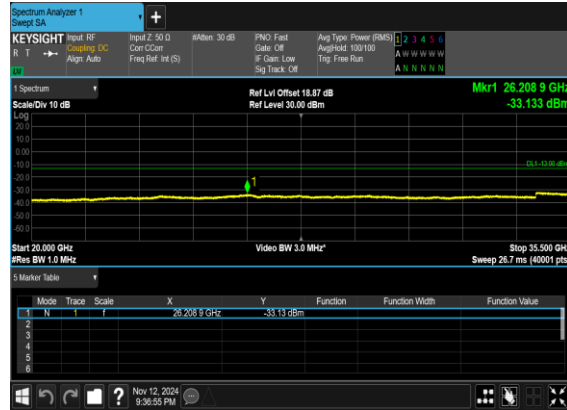


77	30	100	633334	3500.01	CP-OFDM QPSK	1@0	see graph	PASS
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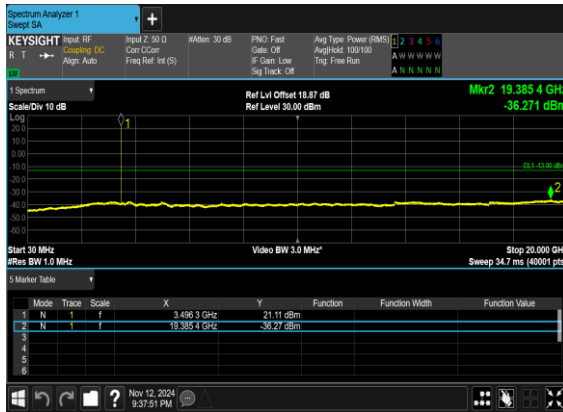
N77(10M)\_CP-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



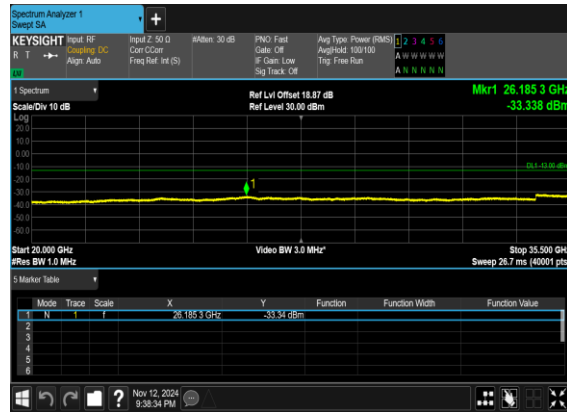
N77(10M)\_CP-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



N77(10M)\_CP-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH

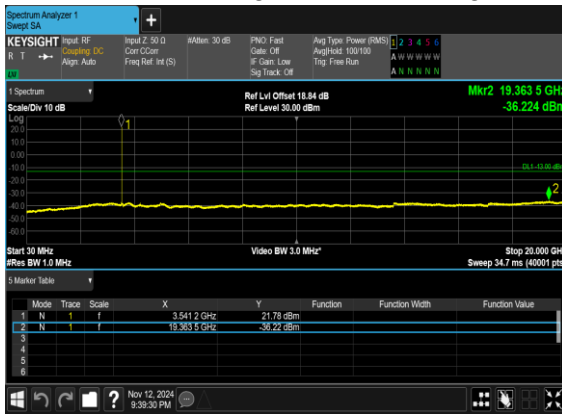


N77(10M)\_CP-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH

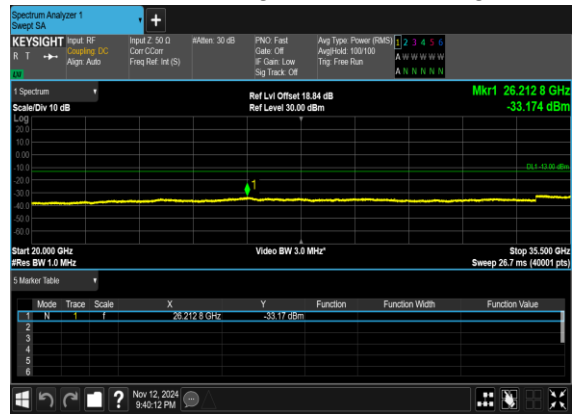




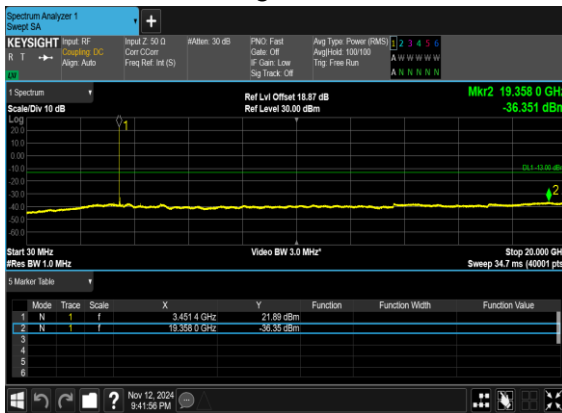
N77(10M)\_CP-  
OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



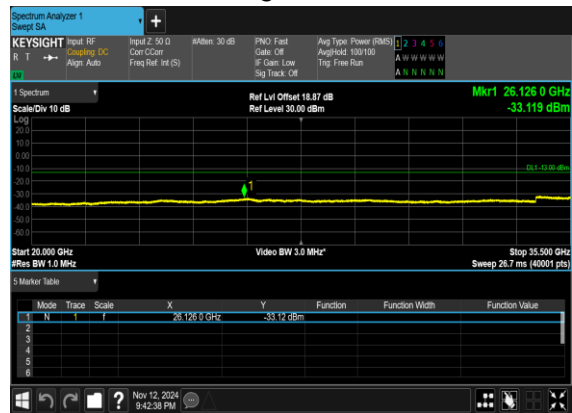
N77(10M)\_CP-  
OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



N77(50M)\_CP-  
OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH

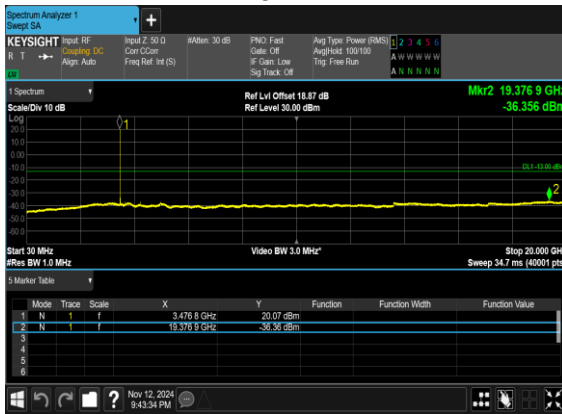


N77(50M)\_CP-  
OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH

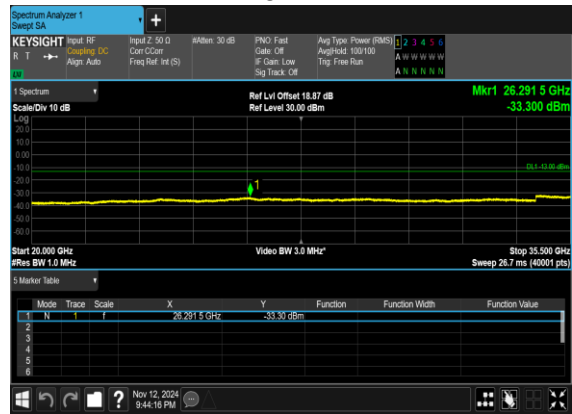




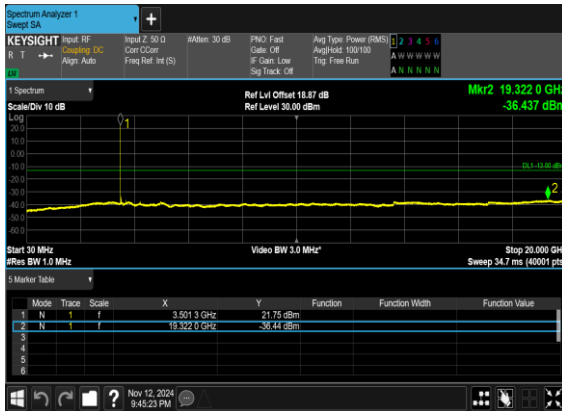
N77(50M)\_CP-  
OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



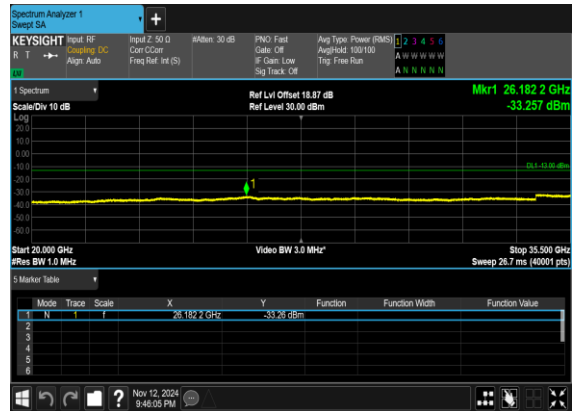
N77(50M)\_CP-  
OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



N77(50M)\_CP-  
OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH

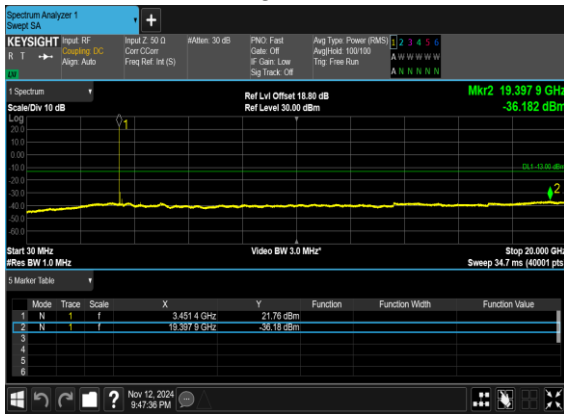


N77(50M)\_CP-  
OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH

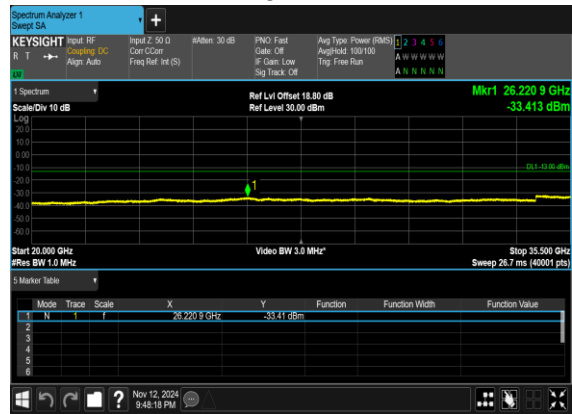




N77(100M)\_CP-  
OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



N77(100M)\_CP-  
OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



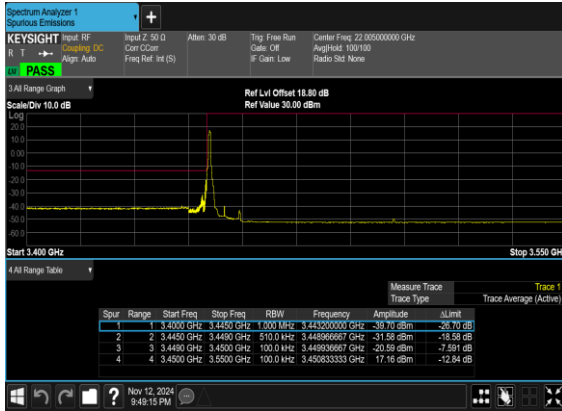


### Conducted Band Edge

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
77	30	10	630334	3455.01	CP-OFDM QPSK	1@0	see graph	PASS
77	30	10	630334	3455.01	CP-OFDM QPSK	24@0	see graph	PASS
77	30	10	636332	3544.98	CP-OFDM QPSK	1@23	see graph	PASS
77	30	10	636332	3544.98	CP-OFDM QPSK	24@0	see graph	PASS
77	30	50	631668	3475.02	CP-OFDM QPSK	1@0	see graph	PASS
77	30	50	631668	3475.02	CP-OFDM QPSK	133@0	see graph	PASS
77	30	50	635000	3525.0	CP-OFDM QPSK	1@132	see graph	PASS
77	30	50	635000	3525.0	CP-OFDM QPSK	133@0	see graph	PASS
77	30	100	633334	3500.01	CP-OFDM QPSK	1@0	see graph	PASS
77	30	100	633334	3500.01	CP-OFDM QPSK	1@272	see graph	PASS
77	30	100	633334	3500.01	CP-OFDM QPSK	273@0	see graph	PASS



N77(10M)\_CP-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



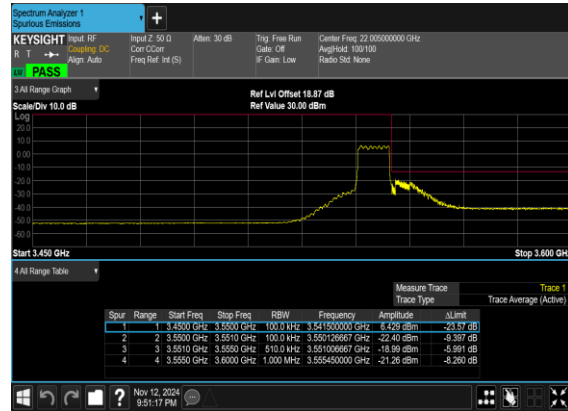
N77(10M)\_CP-OFDM\_QPSK\_Outer\_Full\_Low\_CH



N77(10M)\_CP-OFDM\_QPSK\_Edge\_1RB\_Right\_High\_CH

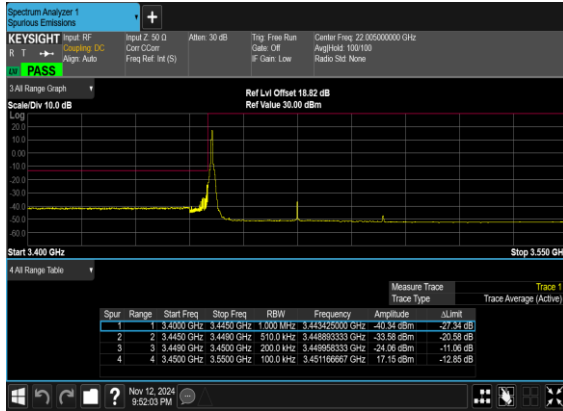


N77(10M)\_CP-OFDM\_QPSK\_Outer\_Full\_High\_CH





N77(50M)\_CP-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



N77(50M)\_CP-OFDM\_QPSK\_Outer\_Full\_Low\_CH



N77(50M)\_CP-OFDM\_QPSK\_Edge\_1RB\_Right\_High\_CH

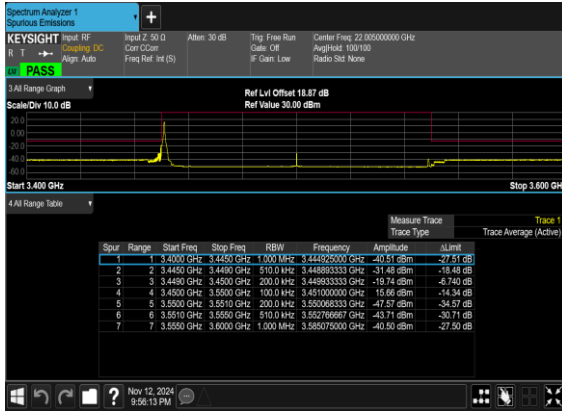


N77(50M)\_CP-OFDM\_QPSK\_Outer\_Full\_High\_CH

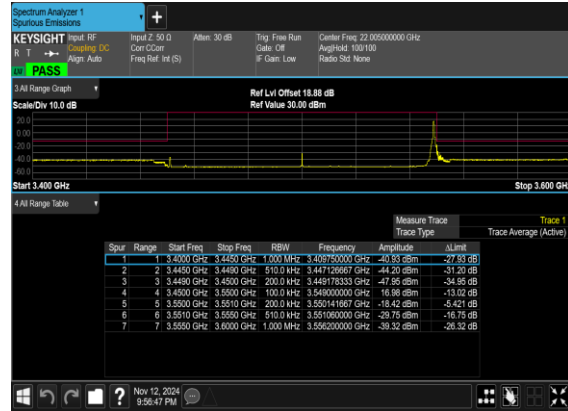




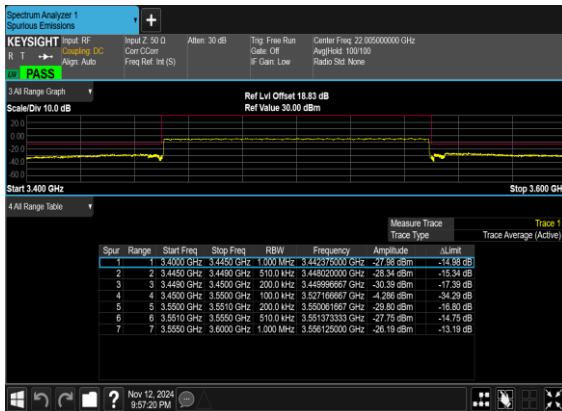
N77(100M)\_CP-
OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



N77(100M)\_CP-
OFDM\_QPSK\_Edge\_1RB\_Right\_Mid\_CH



N77(100M)\_CP-
OFDM\_QPSK\_Outer\_Full\_Mid\_CH





Software Version: 23.06.1602

# ULMIMO P27Q N78 ANT7+4

## Transmitter Conducted Output Power and EIRP, (G<sub>T</sub> - L<sub>c</sub>)= -0.5dB

NR Band	SCS	Band Width	Arfcn	Freq (MHz)	Modulation	RB	ANT7 Power (dBm)	ANT4 Power (dBm)	Conducted Power (dBm)	EIRP (dBm)	EIRP (W)
78	30	10	630334	3455.01	CP-OFDM QPSK	1@1	22.03	22.41	25.23	24.73	0.2972
78	30	10	630334	3455.01	CP-OFDM 16 QAM	1@1	21.91	22.02	24.98	24.48	0.2805
78	30	10	633334	3500.01	CP-OFDM QPSK	1@1	22.03	22.28	25.17	24.67	0.2931
78	30	10	633334	3500.01	CP-OFDM 16 QAM	1@1	21.88	22.04	24.97	24.47	0.2799
78	30	10	636332	3544.98	CP-OFDM QPSK	1@1	21.99	22.2	25.11	24.61	0.2891
78	30	10	636332	3544.98	CP-OFDM 16 QAM	1@1	22.03	22.26	25.16	24.66	0.2924
78	30	15	630500	3457.5	CP-OFDM QPSK	1@1	22.05	22.49	25.29	24.79	0.3013
78	30	15	630500	3457.5	CP-OFDM 16 QAM	1@1	22.09	22.6	25.36	24.86	0.3062
78	30	15	633334	3500.01	CP-OFDM QPSK	1@1	22.1	22.4	25.26	24.76	0.2992
78	30	15	633334	3500.01	CP-OFDM 16 QAM	1@1	21.89	21.93	24.92	24.42	0.2767
78	30	15	636166	3542.49	CP-OFDM QPSK	1@1	22.07	22.37	25.23	24.73	0.2972
78	30	15	636166	3542.49	CP-OFDM 16 QAM	1@1	21.89	21.89	24.90	24.4	0.2754
78	30	20	630668	3460.02	CP-OFDM QPSK	1@1	22.14	22.62	25.40	24.9	0.3090
78	30	20	630668	3460.02	CP-OFDM 16 QAM	1@1	21.95	22.15	25.06	24.56	0.2858
78	30	20	633334	3500.01	CP-OFDM QPSK	1@1	22.14	22.49	25.33	24.83	0.3041
78	30	20	633334	3500.01	CP-OFDM 16 QAM	1@1	22.03	22.15	25.10	24.6	0.2884
78	30	20	636000	3540	CP-OFDM QPSK	1@1	22.06	22.33	25.21	24.71	0.2958
78	30	20	636000	3540	CP-OFDM 16 QAM	1@1	21.94	21.76	24.86	24.36	0.2729
78	30	25	630834	3462.51	CP-OFDM QPSK	1@1	22.16	22.55	25.37	24.87	0.3069
78	30	25	630834	3462.51	CP-OFDM 16 QAM	1@1	21.97	22.08	25.04	24.54	0.2844
78	30	25	633334	3500.01	CP-OFDM QPSK	1@1	22.04	22.42	25.24	24.74	0.2979
78	30	25	633334	3500.01	CP-OFDM 16 QAM	1@1	21.97	22.05	25.02	24.52	0.2831
78	30	25	635832	3537.48	CP-OFDM QPSK	1@1	22.03	22.29	25.17	24.67	0.2931
78	30	25	635832	3537.48	CP-OFDM 16 QAM	1@1	22	21.94	24.98	24.48	0.2805
78	30	30	631000	3465	CP-OFDM QPSK	1@1	22.17	22.71	25.46	24.96	0.3133
78	30	30	631000	3465	CP-OFDM 16 QAM	1@1	22.08	22.25	25.18	24.68	0.2938
78	30	30	633334	3500.01	CP-OFDM QPSK	1@1	22.15	22.51	25.34	24.84	0.3048
78	30	30	633334	3500.01	CP-OFDM 16 QAM	1@1	22.12	22.08	25.11	24.61	0.2891
78	30	30	635666	3534.99	CP-OFDM QPSK	1@1	22.12	22.53	25.34	24.84	0.3048
78	30	30	635666	3534.99	CP-OFDM 16 QAM	1@1	22.02	22.21	25.13	24.63	0.2904
78	30	40	631334	3470.01	CP-OFDM QPSK	1@1	22.33	22.81	25.59	25.09	0.3228
78	30	40	631334	3470.01	CP-OFDM 16 QAM	1@1	22.11	22.28	25.21	24.71	0.2958
78	30	40	633334	3500.01	CP-OFDM QPSK	1@1	22.31	22.69	25.51	25.01	0.3170
78	30	40	633334	3500.01	CP-OFDM 16 QAM	1@1	22.18	22.13	25.17	24.67	0.2931
78	30	40	635332	3529.98	CP-OFDM QPSK	1@1	22.32	22.76	25.56	25.06	0.3206
78	30	40	635332	3529.98	CP-OFDM 16 QAM	1@1	22.24	22.19	25.23	24.73	0.2972
78	30	50	631668	3475.02	CP-OFDM QPSK	1@1	21.96	22.35	25.17	24.67	0.2931
78	30	50	631668	3475.02	CP-OFDM 16 QAM	1@1	21.78	21.94	24.87	24.37	0.2735



78	30	50	633334	3500.01	CP-OFDM QPSK	1@1	21.9	22.36	25.15	24.65	0.2917
78	30	50	633334	3500.01	CP-OFDM 16 QAM	1@1	21.8	21.97	24.90	24.4	0.2754
78	30	50	635000	3525	CP-OFDM QPSK	1@1	21.91	22.42	25.18	24.68	0.2938
78	30	50	635000	3525	CP-OFDM 16 QAM	1@1	21.85	21.98	24.93	24.43	0.2773
78	30	60	632000	3480	CP-OFDM QPSK	1@1	22.04	22.57	25.32	24.82	0.3034
78	30	60	632000	3480	CP-OFDM 16 QAM	1@1	21.86	22.12	25.00	24.5	0.2818
78	30	60	633334	3500.01	CP-OFDM QPSK	1@1	21.93	22.56	25.27	24.77	0.2999
78	30	60	633334	3500.01	CP-OFDM 16 QAM	1@1	21.8	22.06	24.94	24.44	0.2780
78	30	60	634666	3519.99	CP-OFDM QPSK	1@1	22.07	22.48	25.29	24.79	0.3013
78	30	60	634666	3519.99	CP-OFDM 16 QAM	1@1	21.85	22.08	24.98	24.48	0.2805
78	30	70	632334	3485.01	CP-OFDM QPSK	1@1	21.99	22.53	25.28	24.78	0.3006
78	30	70	632334	3485.01	CP-OFDM 16 QAM	1@1	21.76	22.12	24.95	24.45	0.2786
78	30	70	633334	3500.01	CP-OFDM QPSK	1@1	21.99	22.57	25.30	24.8	0.3020
78	30	70	633334	3500.01	CP-OFDM 16 QAM	1@1	21.78	22.22	25.02	24.52	0.2831
78	30	70	634332	3514.98	CP-OFDM QPSK	1@1	21.93	22.49	25.23	24.73	0.2972
78	30	70	634332	3514.98	CP-OFDM 16 QAM	1@1	21.84	21.93	24.90	24.4	0.2754
78	30	80	632668	3490.02	CP-OFDM QPSK	1@1	22.02	22.44	25.25	24.75	0.2985
78	30	80	632668	3490.02	CP-OFDM 16 QAM	1@1	21.87	21.97	24.93	24.43	0.2773
78	30	80	633334	3500.01	CP-OFDM QPSK	1@1	21.92	22.51	25.24	24.74	0.2979
78	30	80	633334	3500.01	CP-OFDM 16 QAM	1@1	21.74	22.06	24.91	24.41	0.2761
78	30	80	634000	3510	CP-OFDM QPSK	1@1	22	22.39	25.21	24.71	0.2958
78	30	80	634000	3510	CP-OFDM 16 QAM	1@1	21.82	21.98	24.91	24.41	0.2761
78	30	90	633000	3495	CP-OFDM QPSK	1@1	22.04	22.39	25.23	24.73	0.2972
78	30	90	633000	3495	CP-OFDM 16 QAM	1@1	21.76	22.21	25.00	24.5	0.2818
78	30	90	633334	3500.01	CP-OFDM QPSK	1@1	21.93	22.56	25.27	24.77	0.2999
78	30	90	633334	3500.01	CP-OFDM 16 QAM	1@1	21.68	22.13	24.92	24.42	0.2767
78	30	90	633666	3504.99	CP-OFDM QPSK	1@1	21.96	22.54	25.27	24.77	0.2999
78	30	90	633666	3504.99	CP-OFDM 16 QAM	1@1	21.8	22.17	25.00	24.5	0.2818
78	30	100	633334	3500.01	CP-OFDM QPSK	137@68	22.33	22.16	25.26	24.76	0.2992
78	30	100	633334	3500.01	CP-OFDM QPSK	1@1	22.36	22.59	25.49	24.99	0.3155
78	30	100	633334	3500.01	CP-OFDM QPSK	1@271	22.49	22.71	25.61	25.11	0.3243
78	30	100	633334	3500.01	CP-OFDM 16 QAM	137@68	21.37	21.68	24.54	24.04	0.2535
78	30	100	633334	3500.01	CP-OFDM 16 QAM	1@1	21.69	22.16	24.94	24.44	0.2780
78	30	100	633334	3500.01	CP-OFDM 16 QAM	1@271	21.5	21.24	24.38	23.88	0.2443
78	30	100	633334	3500.01	CP-OFDM 64 QAM	137@68	19.79	20.14	22.98	22.48	0.1770
78	30	100	633334	3500.01	CP-OFDM 64 QAM	1@1	19.92	20.35	23.15	22.65	0.1841
78	30	100	633334	3500.01	CP-OFDM 64 QAM	1@271	19.77	19.48	22.64	22.14	0.1637
78	30	100	633334	3500.01	CP-OFDM 256 QAM	137@68	16.81	17.14	19.99	19.49	0.0889
78	30	100	633334	3500.01	CP-OFDM 256 QAM	1@1	17.03	17.74	20.41	19.91	0.0979
78	30	100	633334	3500.01	CP-OFDM 256 QAM	1@271	16.81	16.88	19.86	19.36	0.0863



## Appendix B. Test Results of Radiated Test

### Radiated Spurious Emission

Test Engineer :	Bruce	Temperature :	23~25°C
		Relative Humidity :	41~42%

Note: Pre-scanned harmonic for the different antenna combinations, we choose the worst antenna mode to perform final test.

N77 SA / NR 100MHz / QPSK / ANT9								
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	6900	-53.77	-13	-40.77	-63.98	3.03	13.24	H
	10356	-54.32	-13	-41.32	-63.77	3.56	13.01	H
	13800	-56.93	-13	-43.93	-66.45	3.92	13.44	H
	6900	-56.16	-13	-43.16	-66.37	3.03	13.24	V
	10356	-56.74	-13	-43.74	-66.19	3.56	13.01	V
	13800	-59.05	-13	-46.05	-68.57	3.92	13.44	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

N77 UL MIMO / NR 100MHz / QPSK(Ant.7+4)								
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	6900	-57.85	-13	-44.85	-68.06	3.03	13.24	H
	10356	-47.49	-13	-34.49	-56.94	3.56	13.01	H
	13824	-59.53	-13	-46.53	-69.05	3.92	13.44	H
	6900	-60.19	-13	-47.19	-70.40	3.03	13.24	V
	10356	-54.86	-13	-41.86	-64.31	3.56	13.01	V
	13824	-59.75	-13	-46.75	-69.27	3.92	13.44	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EN-DC_41A_n77A / LTE 20MHz + NR 100MHz / QPSK (ANT1+9)								
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	6900	-54.36	-13	-41.36	-64.57	3.03	13.24	H
	10356	-58.52	-13	-45.52	-67.97	3.56	13.01	H
	13824	-58.07	-13	-45.07	-67.59	3.92	13.44	H
	6900	-55.08	-13	-42.08	-65.29	3.03	13.24	V
	10356	-56.66	-13	-43.66	-66.11	3.56	13.01	V
	13824	-58.49	-13	-45.49	-68.01	3.92	13.44	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



EN-DC_13A_n77A / LTE 10MHz + NR 100MHz / QPSK (ANT0+9) – Other PA								
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	6900	-59.65	-13	-46.65	-69.86	3.03	13.24	H
	10368	-59.82	-13	-46.82	-69.27	3.56	13.01	H
	13824	-58.08	-13	-45.08	-67.60	3.92	13.44	H
	6900	-58.87	-13	-45.87	-69.08	3.03	13.24	V
	10368	-60.24	-13	-47.24	-69.69	3.56	13.01	V
	13824	-58.02	-13	-45.02	-67.54	3.92	13.44	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.