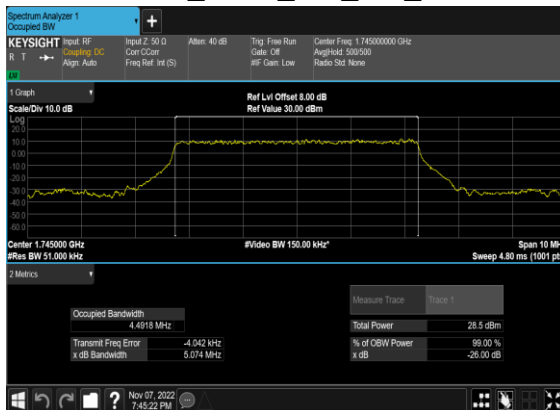


Occupied Bandwidth

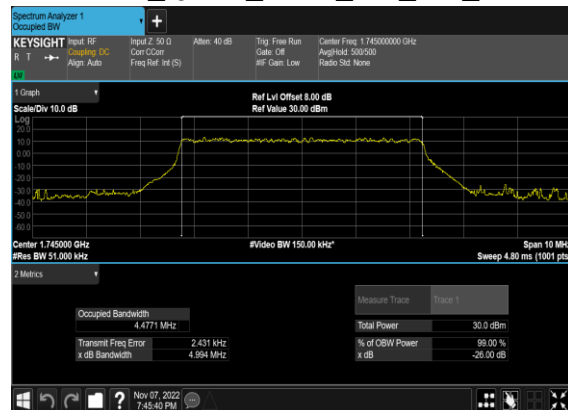
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB OBW (MHz)
66	15	5	349000	1745.0	DFT-s-OFDM PI/2 BPSK	25@0	4.4918	5.074
66	15	5	349000	1745.0	DFT-s-OFDM QPSK	25@0	4.4771	4.994
66	15	5	349000	1745.0	CP-OFDM QPSK	25@0	4.4802	5.092
66	15	5	349000	1745.0	CP-OFDM 16 QAM	25@0	4.4908	5.171
66	15	5	349000	1745.0	CP-OFDM 64 QAM	25@0	4.4616	4.989
66	15	5	349000	1745.0	CP-OFDM 256 QAM	25@0	4.4783	5.055
66	15	10	349000	1745.0	DFT-s-OFDM PI/2 BPSK	50@0	8.9092	9.524
66	15	10	349000	1745.0	DFT-s-OFDM QPSK	50@0	8.9334	9.689
66	15	10	349000	1745.0	CP-OFDM QPSK	52@0	9.2761	10.09
66	15	10	349000	1745.0	CP-OFDM 16 QAM	52@0	9.2988	9.985
66	15	10	349000	1745.0	CP-OFDM 64 QAM	52@0	9.2878	9.95
66	15	10	349000	1745.0	CP-OFDM 256 QAM	52@0	9.2752	9.941
66	15	15	349000	1745.0	DFT-s-OFDM PI/2 BPSK	75@0	13.389	14.27
66	15	15	349000	1745.0	DFT-s-OFDM QPSK	75@0	13.444	14.38
66	15	15	349000	1745.0	CP-OFDM QPSK	79@0	14.083	14.97
66	15	15	349000	1745.0	CP-OFDM 16 QAM	79@0	14.082	15.0
66	15	15	349000	1745.0	CP-OFDM 64 QAM	79@0	14.112	14.99
66	15	15	349000	1745.0	CP-OFDM 256 QAM	79@0	14.074	15.02
66	15	20	349000	1745.0	DFT-s-OFDM PI/2 BPSK	100@0	17.918	18.82
66	15	20	349000	1745.0	DFT-s-OFDM QPSK	100@0	17.867	18.92
66	15	20	349000	1745.0	CP-OFDM QPSK	106@0	18.899	19.92
66	15	20	349000	1745.0	CP-OFDM 16 QAM	106@0	18.912	19.84
66	15	20	349000	1745.0	CP-OFDM 64 QAM	106@0	18.9	19.89
66	15	20	349000	1745.0	CP-OFDM 256 QAM	106@0	18.919	19.95
66	15	25	349000	1745.0	DFT-s-OFDM PI/2 BPSK	128@0	22.86	23.93

66	15	25	349000	1745.0	DFT-s-OFDM QPSK	128@0	22.857	23.87
66	15	25	349000	1745.0	CP-OFDM QPSK	133@0	23.74	24.84
66	15	25	349000	1745.0	CP-OFDM 16 QAM	133@0	23.708	24.83
66	15	25	349000	1745.0	CP-OFDM 64 QAM	133@0	23.769	24.74
66	15	25	349000	1745.0	CP-OFDM 256 QAM	133@0	23.727	24.79
66	15	30	349000	1745.0	DFT-s-OFDM PI/2 BPSK	160@0	28.581	29.73
66	15	30	349000	1745.0	DFT-s-OFDM QPSK	160@0	28.533	29.69
66	15	30	349000	1745.0	CP-OFDM QPSK	160@0	28.541	29.84
66	15	30	349000	1745.0	CP-OFDM 16 QAM	160@0	28.531	29.73
66	15	30	349000	1745.0	CP-OFDM 64 QAM	160@0	28.527	29.74
66	15	30	349000	1745.0	CP-OFDM 256 QAM	160@0	28.483	29.72
66	15	40	349000	1745.0	DFT-s-OFDM PI/2 BPSK	216@0	38.576	40.11
66	15	40	349000	1745.0	DFT-s-OFDM QPSK	216@0	38.481	40.01
66	15	40	349000	1745.0	CP-OFDM QPSK	216@0	38.476	40.14
66	15	40	349000	1745.0	CP-OFDM 16 QAM	216@0	38.585	40.08
66	15	40	349000	1745.0	CP-OFDM 64 QAM	216@0	38.564	40.03
66	15	40	349000	1745.0	CP-OFDM 256 QAM	216@0	38.483	40.02

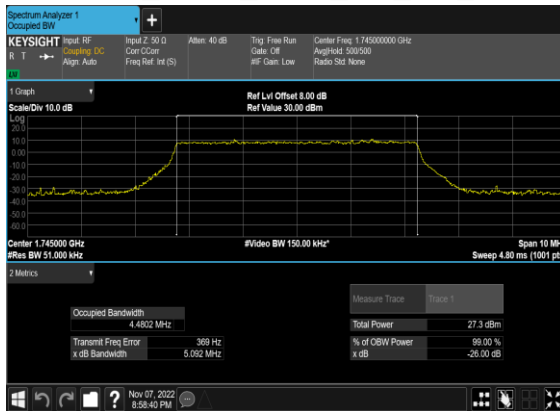
N66(5M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Mid_CH



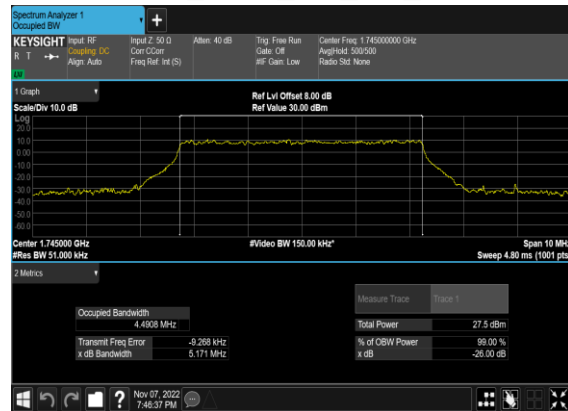
N66(5M)_DFT-s-
OFDM_QPSK_Outer_Full_Mid_CH



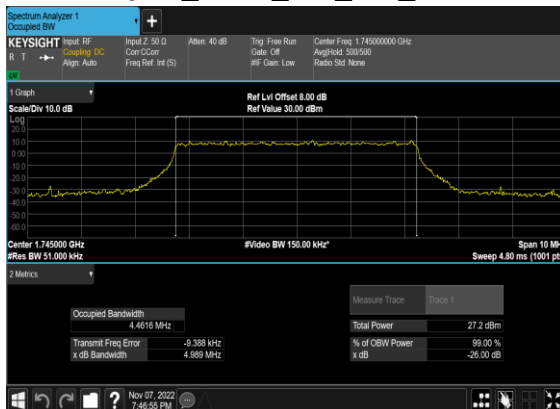
N66(5M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



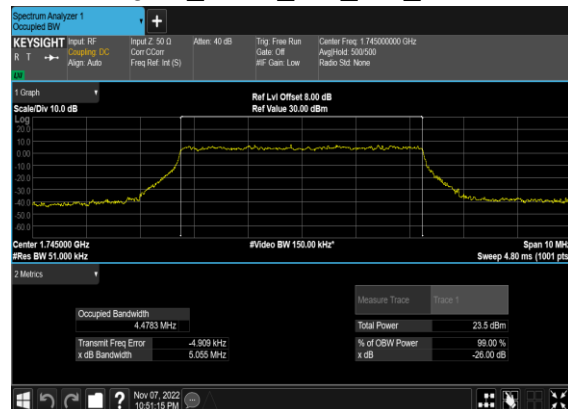
N66(5M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



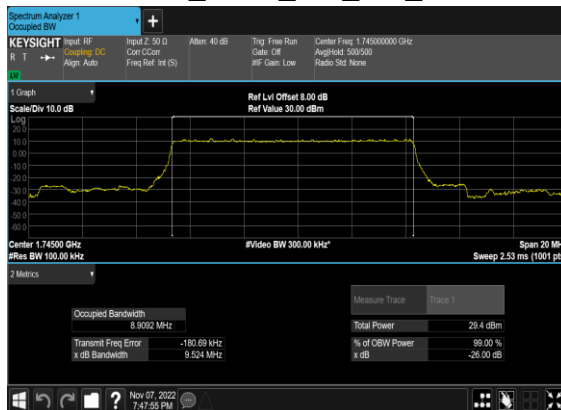
N66(5M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH



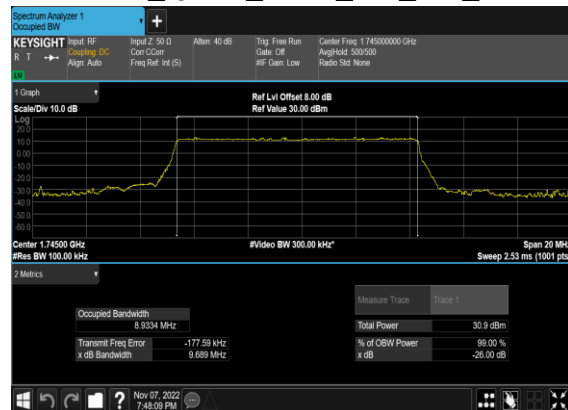
N66(5M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH



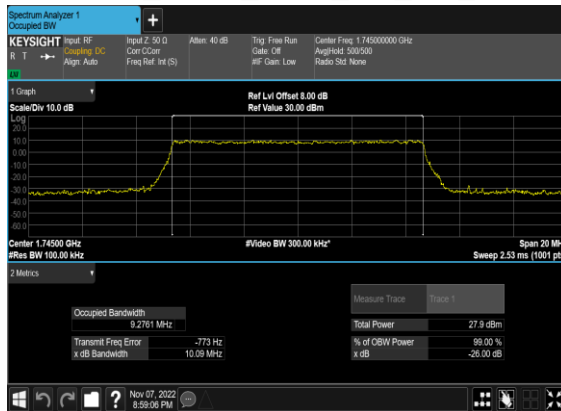
N66(10M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Mid_CH



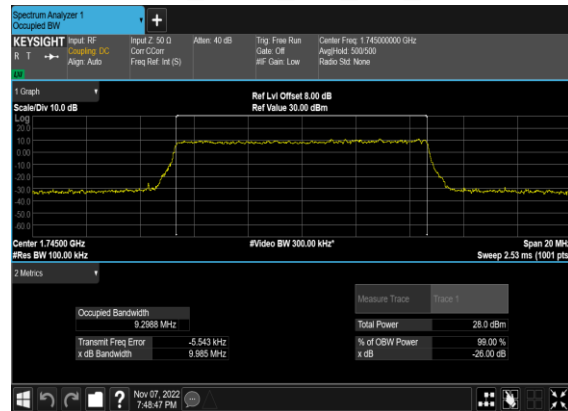
N66(10M)_DFT-s-
OFDM_QPSK_Outer_Full_Mid_CH



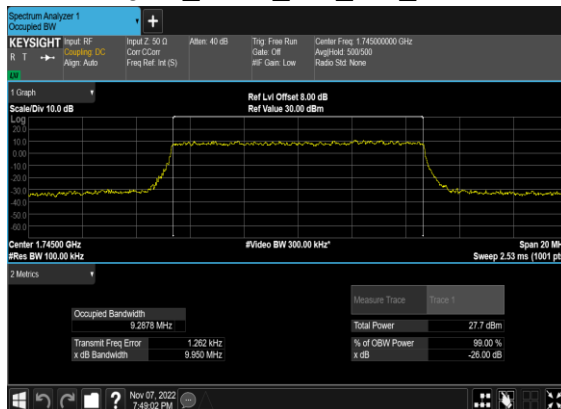
N66(10M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



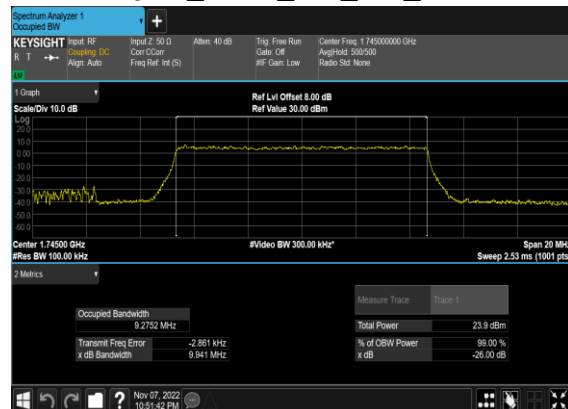
N66(10M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



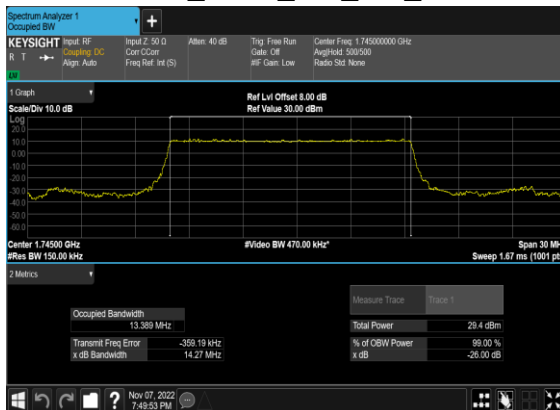
N66(10M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH



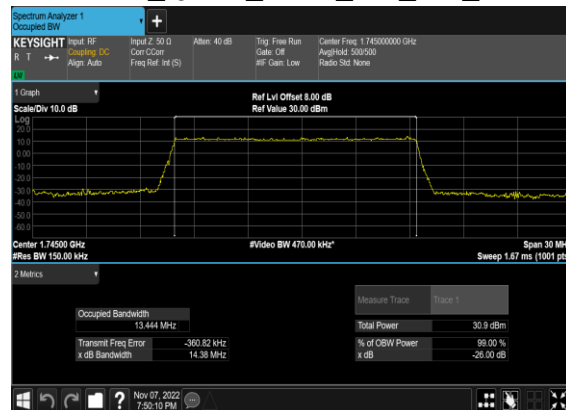
N66(10M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH



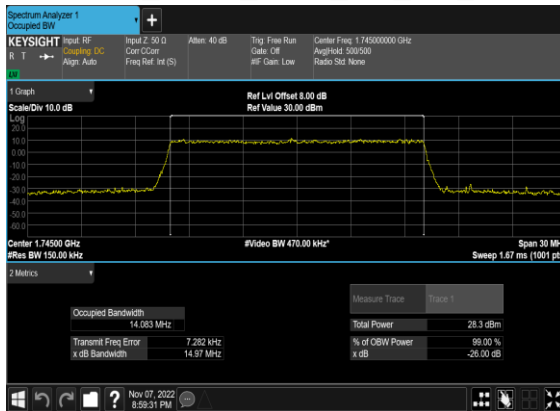
N66(15M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Mid_CH



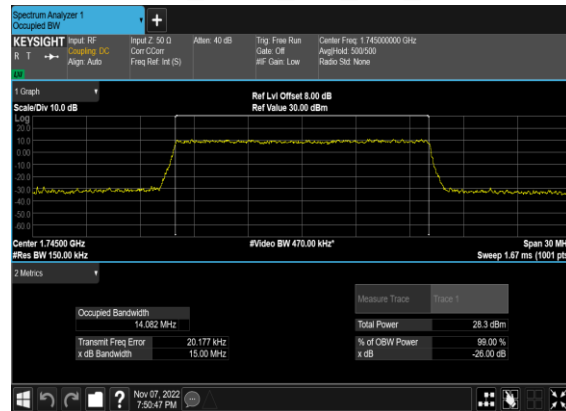
N66(15M)_DFT-s-
OFDM_QPSK_Outer_Full_Mid_CH



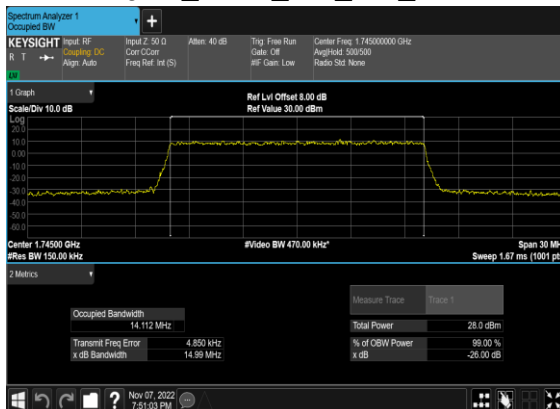
N66(15M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



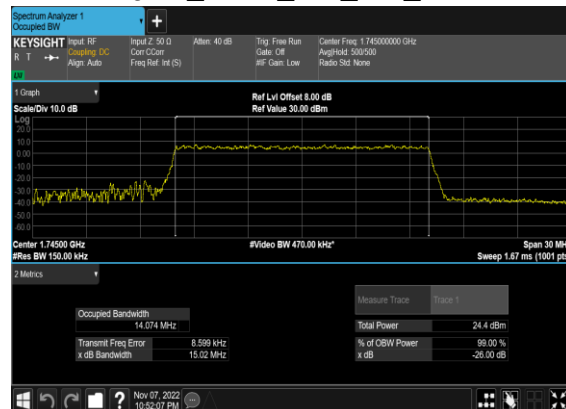
N66(15M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



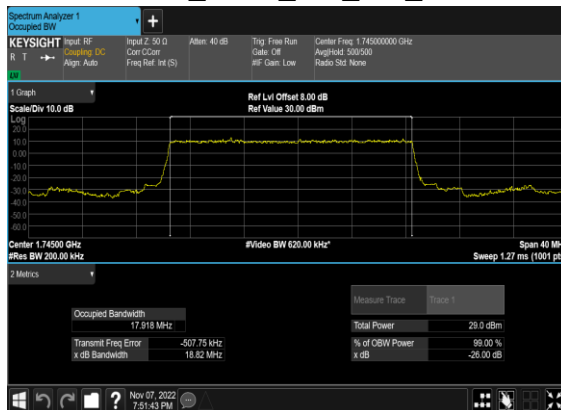
N66(15M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH



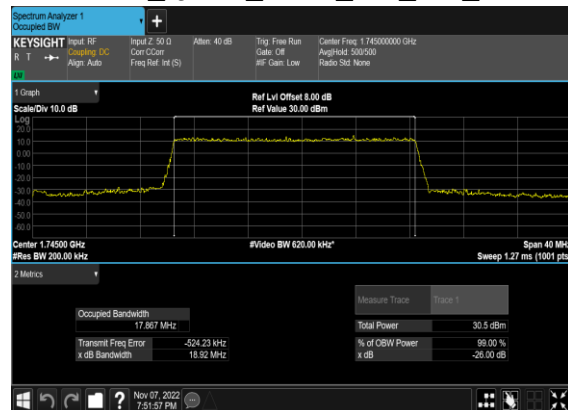
N66(15M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH



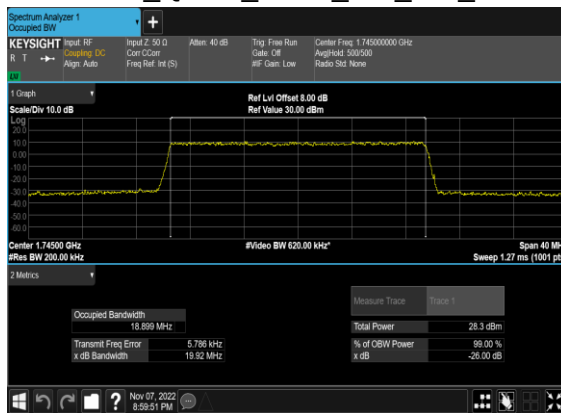
N66(20M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Mid_CH



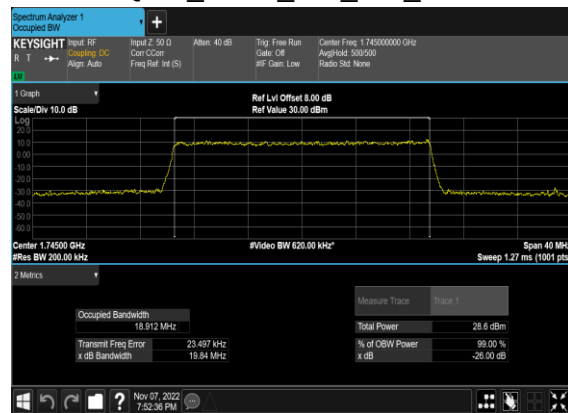
N66(20M)_DFT-s-
OFDM_QPSK_Outer_Full_Mid_CH



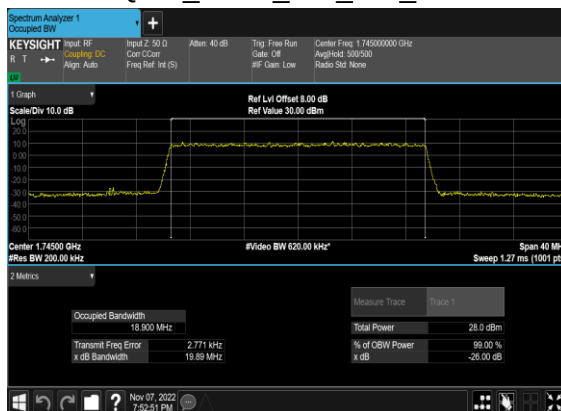
N66(20M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



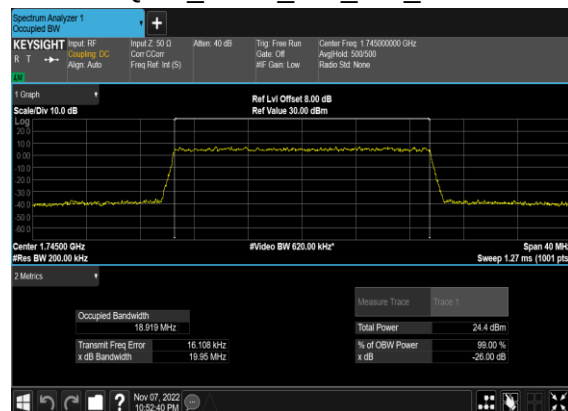
N66(20M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



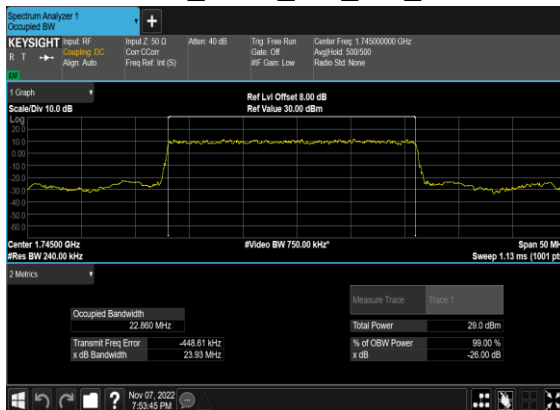
N66(20M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH



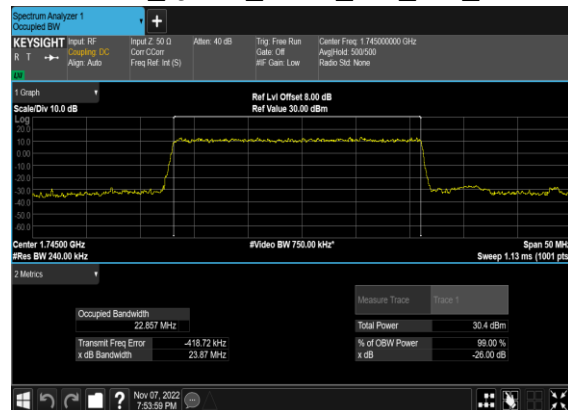
N66(20M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH



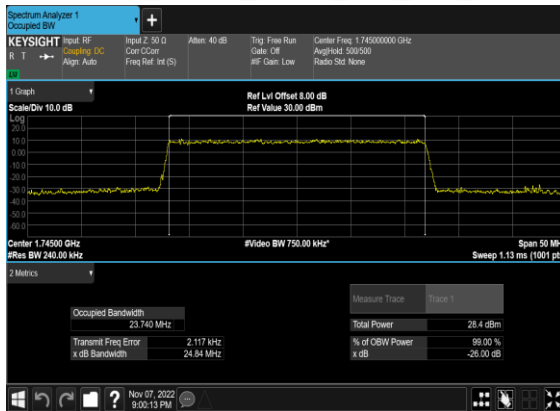
N66(25M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Mid_CH



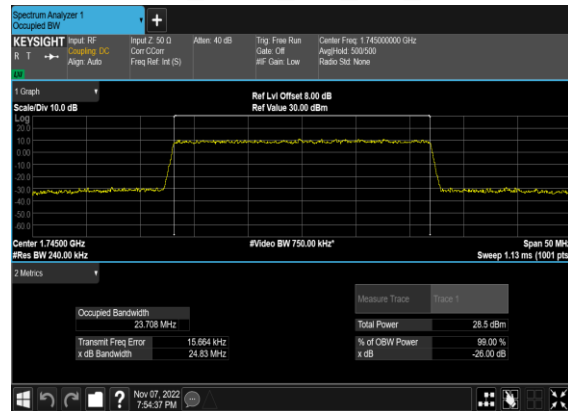
N66(25M)_DFT-s-
OFDM_QPSK_Outer_Full_Mid_CH



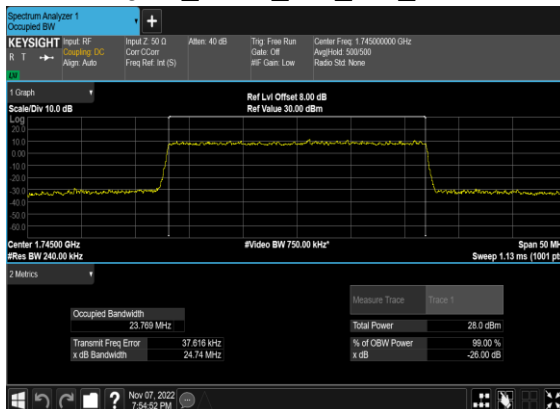
N66(25M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



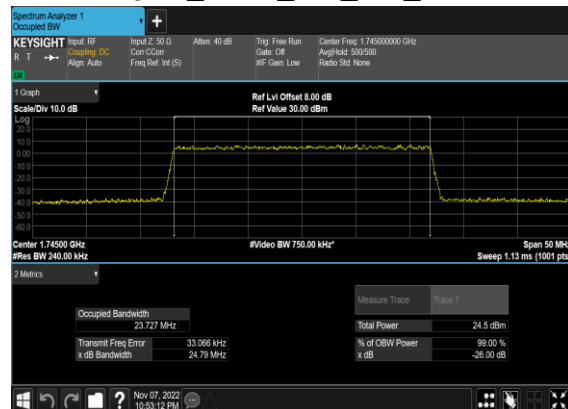
N66(25M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



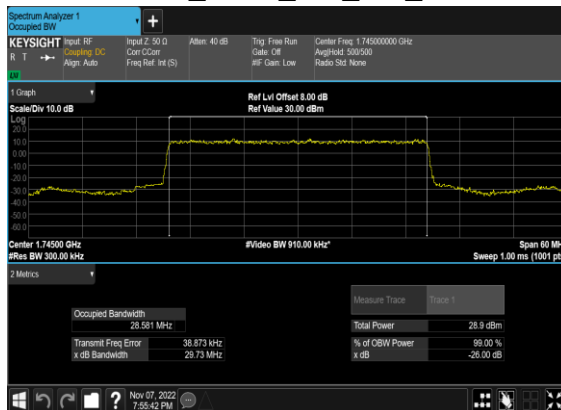
N66(25M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH



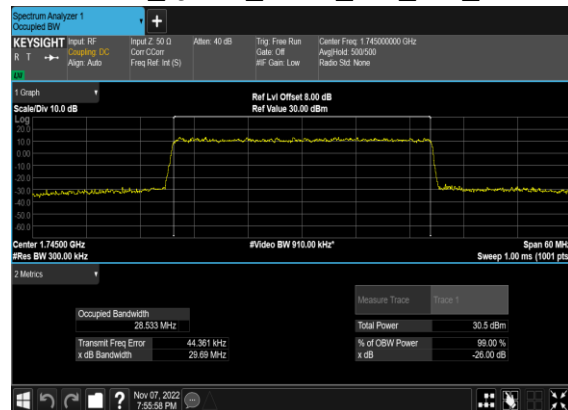
N66(25M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH



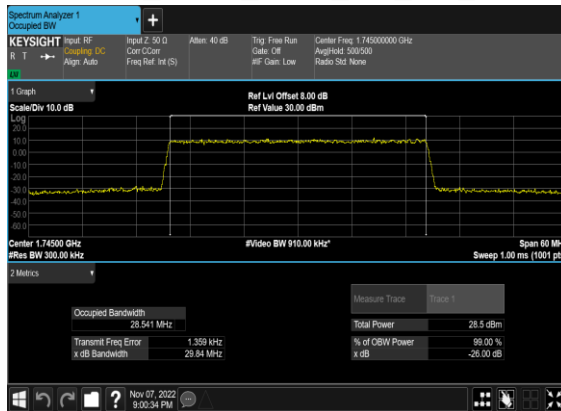
N66(30M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Mid_CH



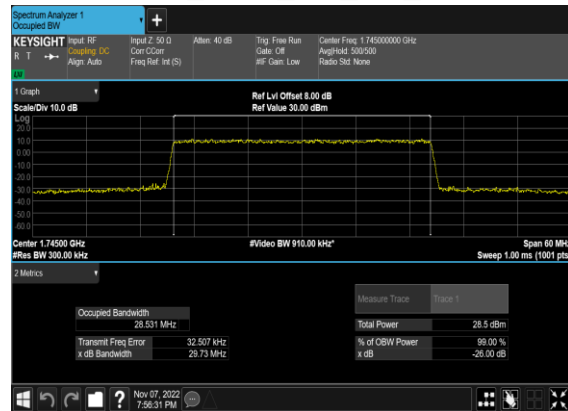
N66(30M)_DFT-s-
OFDM_QPSK_Outer_Full_Mid_CH



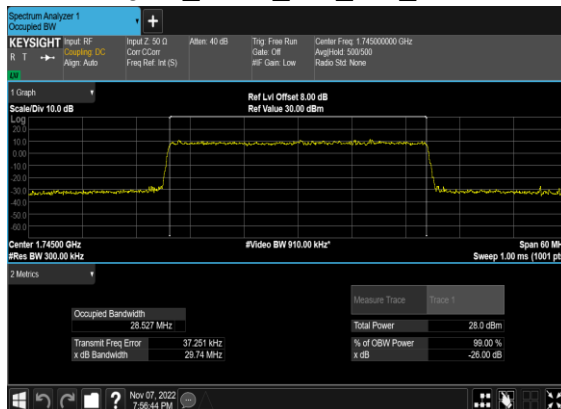
N66(30M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



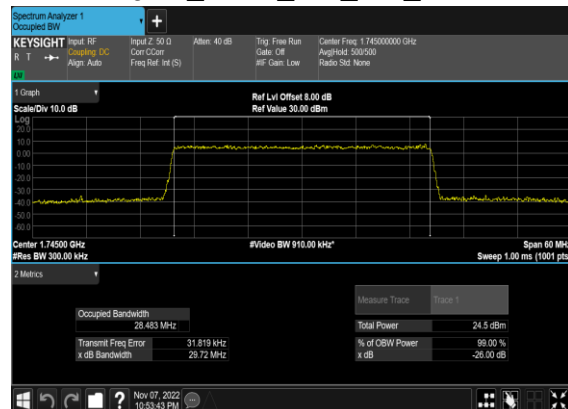
N66(30M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



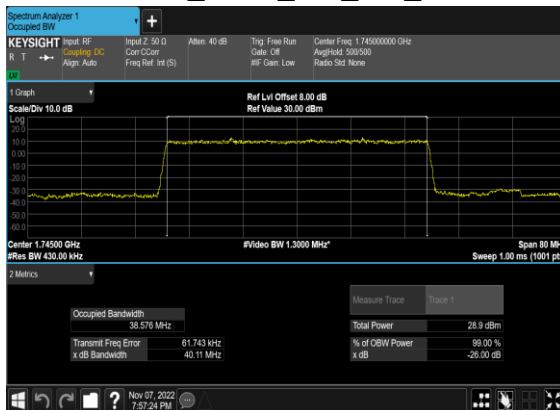
N66(30M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH



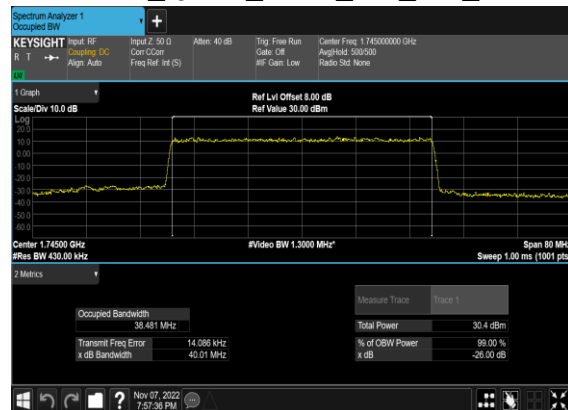
N66(30M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH



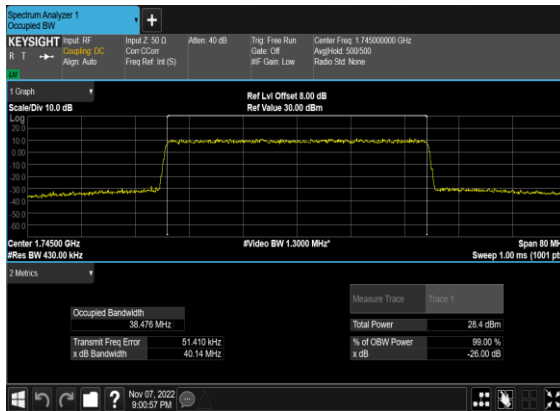
N66(40M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Mid_CH



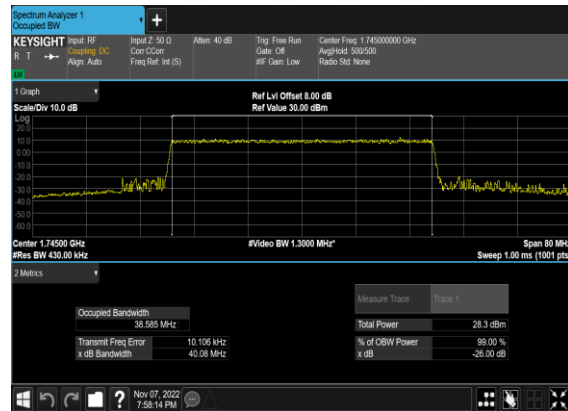
N66(40M)_DFT-s-
OFDM_QPSK_Outer_Full_Mid_CH



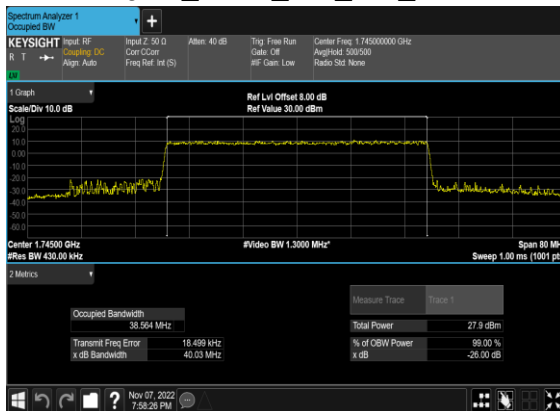
N66(40M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



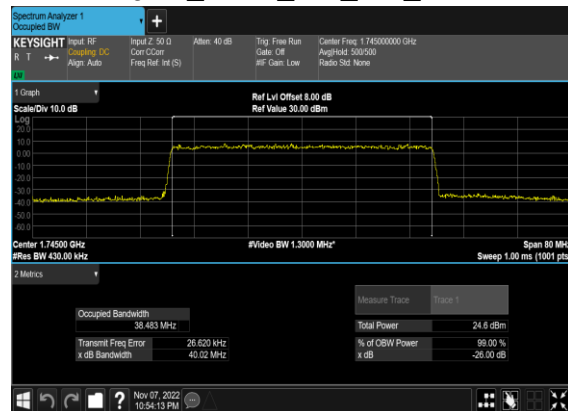
N66(40M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



N66(40M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH



N66(40M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH

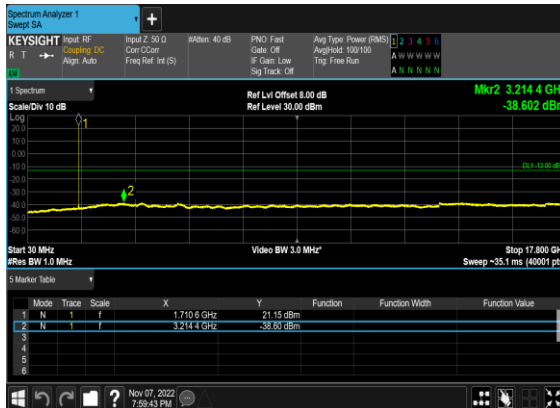


Conducted Spurious Emissions

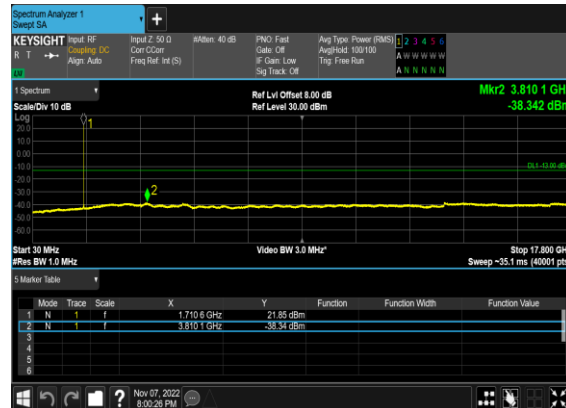
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
66	15	5	342500	1712.5	DFT-s-OFDM BPSK	1@0	see graph	---
66	15	5	342500	1712.5	DFT-s-OFDM BPSK	1@0	see graph	PASS
66	15	5	342500	1712.5	DFT-s-OFDM QPSK	1@0	see graph	---
66	15	5	342500	1712.5	DFT-s-OFDM QPSK	1@0	see graph	PASS
66	15	5	349000	1745.0	DFT-s-OFDM BPSK	1@0	see graph	---
66	15	5	349000	1745.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
66	15	5	349000	1745.0	DFT-s-OFDM QPSK	1@0	see graph	---
66	15	5	349000	1745.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
66	15	5	355500	1777.5	DFT-s-OFDM BPSK	1@0	see graph	---
66	15	5	355500	1777.5	DFT-s-OFDM BPSK	1@0	see graph	PASS
66	15	5	355500	1777.5	DFT-s-OFDM QPSK	1@0	see graph	---
66	15	5	355500	1777.5	DFT-s-OFDM QPSK	1@0	see graph	PASS
66	15	20	344000	1720.0	DFT-s-OFDM BPSK	1@0	see graph	---
66	15	20	344000	1720.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
66	15	20	344000	1720.0	DFT-s-OFDM QPSK	1@0	see graph	---
66	15	20	344000	1720.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
66	15	20	349000	1745.0	DFT-s-OFDM BPSK	1@0	see graph	---
66	15	20	349000	1745.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
66	15	20	349000	1745.0	DFT-s-OFDM QPSK	1@0	see graph	---
66	15	20	349000	1745.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
66	15	20	354000	1770.0	DFT-s-OFDM BPSK	1@0	see graph	---
66	15	20	354000	1770.0	DFT-s-OFDM BPSK	1@0	see graph	PASS

66	15	20	354000	1770.0	DFT-s-OFDM QPSK	1@0	see graph	---
66	15	20	354000	1770.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
66	15	40	346000	1730.0	DFT-s-OFDM BPSK	1@0	see graph	---
66	15	40	346000	1730.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
66	15	40	346000	1730.0	DFT-s-OFDM QPSK	1@0	see graph	---
66	15	40	346000	1730.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
66	15	40	349000	1745.0	DFT-s-OFDM BPSK	1@0	see graph	---
66	15	40	349000	1745.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
66	15	40	349000	1745.0	DFT-s-OFDM QPSK	1@0	see graph	---
66	15	40	349000	1745.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
66	15	40	352000	1760.0	DFT-s-OFDM BPSK	1@0	see graph	---
66	15	40	352000	1760.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
66	15	40	352000	1760.0	DFT-s-OFDM QPSK	1@0	see graph	---
66	15	40	352000	1760.0	DFT-s-OFDM QPSK	1@0	see graph	PASS

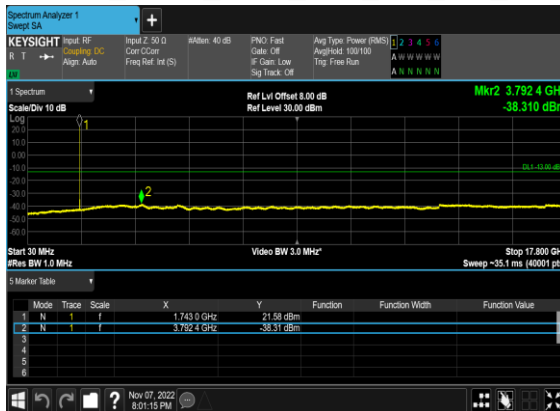
N66(5M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Low_CH



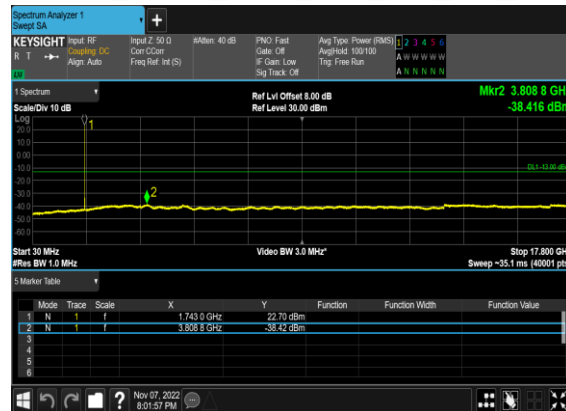
N66(5M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



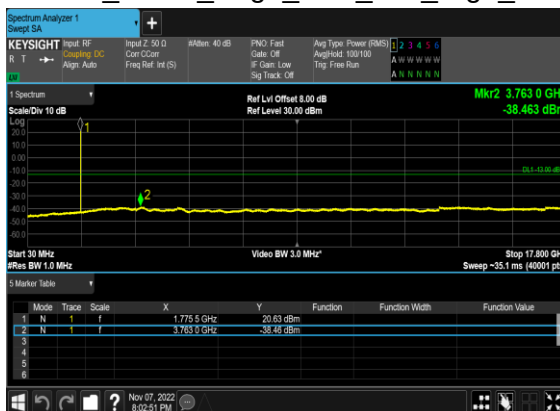
N66(5M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Mid_CH



N66(5M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH



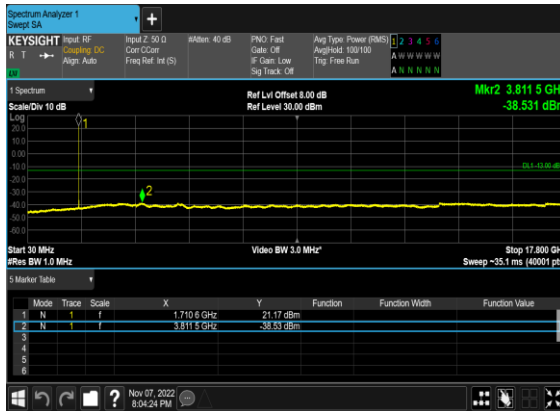
N66(5M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_High_CH



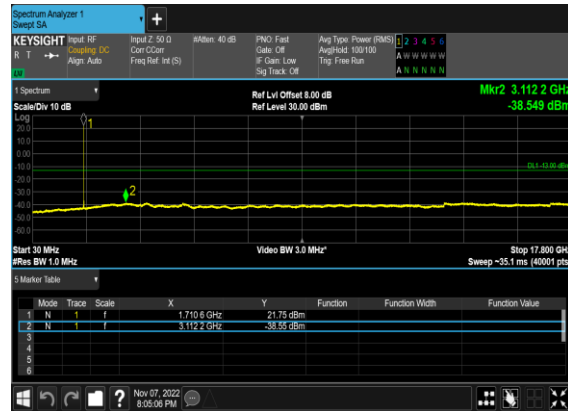
N66(5M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH



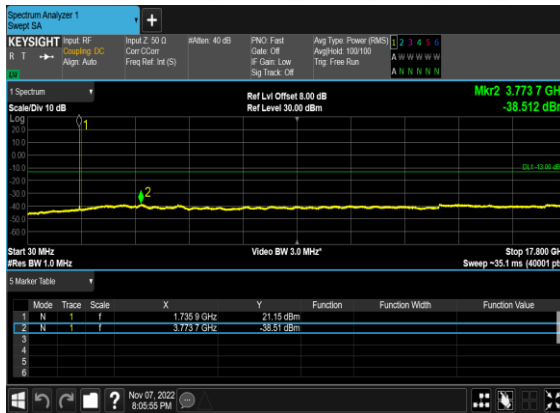
N66(20M)_DFT-s- OFDM_BPSK_Edge_1RB_Left_Low_CH



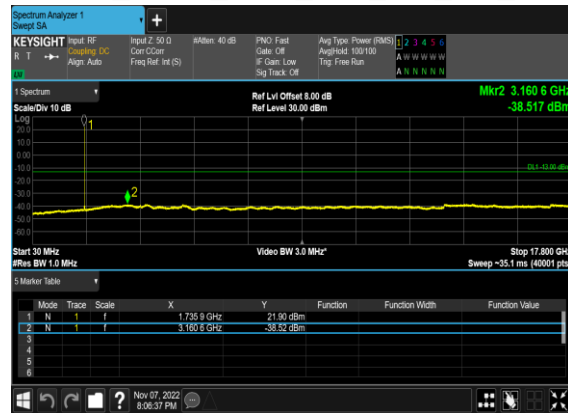
N66(20M)_DFT-s- OFDM_QPSK_Edge_1RB_Left_Low_CH



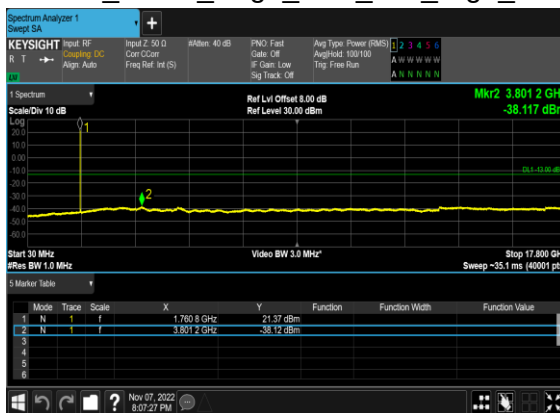
N66(20M)_DFT-s- OFDM_BPSK_Edge_1RB_Left_Mid_CH



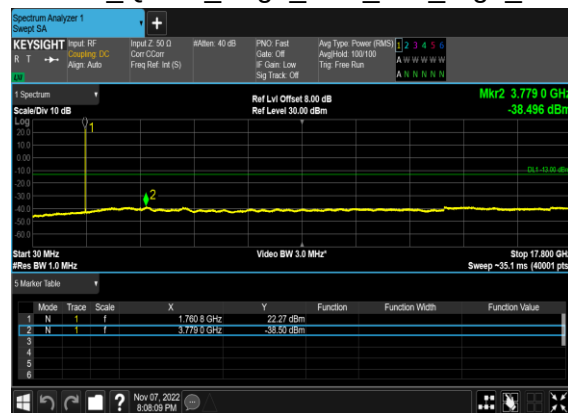
N66(20M)_DFT-s- OFDM_QPSK_Edge_1RB_Left_Mid_CH



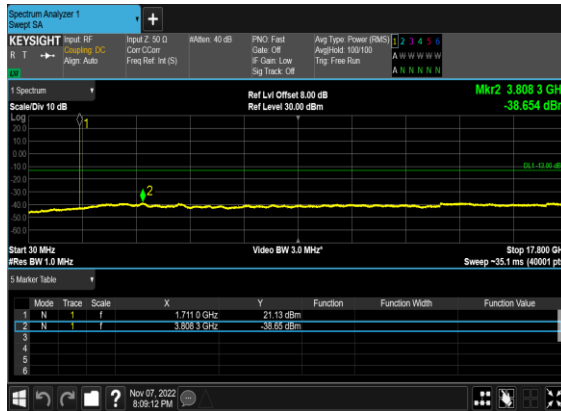
N66(20M)_DFT-s- OFDM_BPSK_Edge_1RB_Left_High_CH



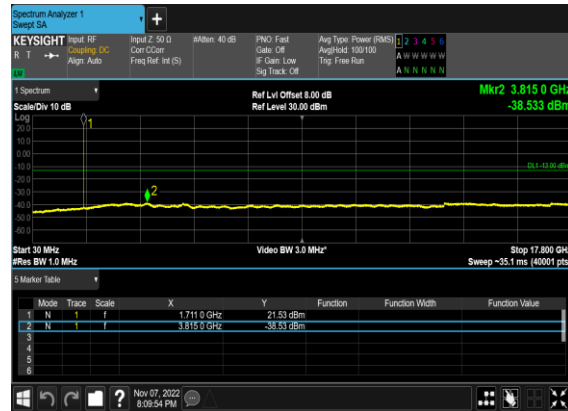
N66(20M)_DFT-s- OFDM_QPSK_Edge_1RB_Left_High_CH



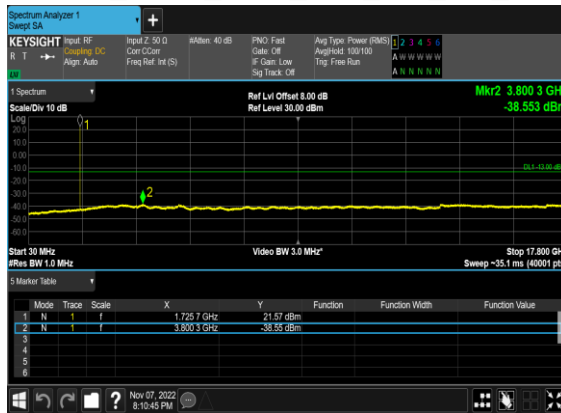
N66(40M)_DFT-s- OFDM_BPSK_Edge_1RB_Left_Low_CH



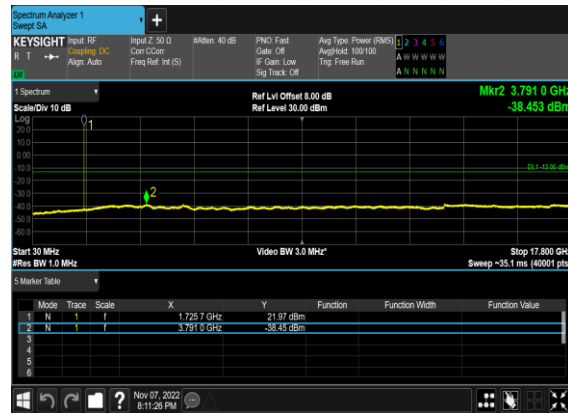
N66(40M)_DFT-s- OFDM_QPSK_Edge_1RB_Left_Low_CH



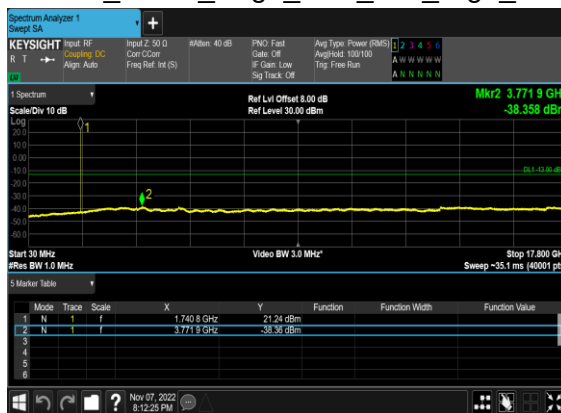
N66(40M)_DFT-s- OFDM_BPSK_Edge_1RB_Left_Mid_CH



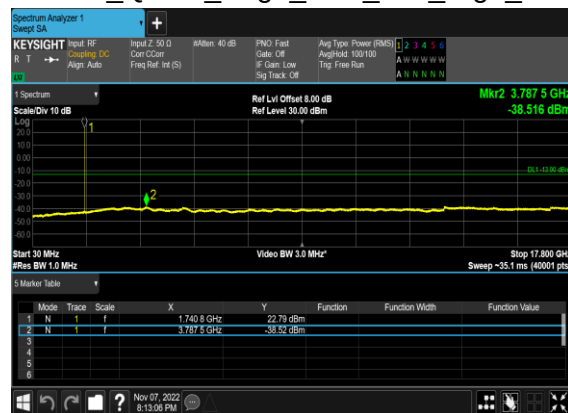
N66(40M)_DFT-s- OFDM_QPSK_Edge_1RB_Left_Mid_CH



N66(40M)_DFT-s- OFDM_BPSK_Edge_1RB_Left_High_CH



N66(40M)_DFT-s- OFDM_QPSK_Edge_1RB_Left_High_CH



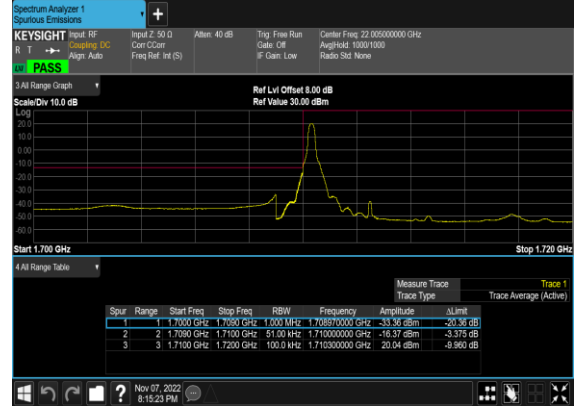
Conducted Band Edge

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
66	15	5	342500	1712.5	DFT-s-OFDM BPSK	1@0	see graph	PASS
66	15	5	342500	1712.5	DFT-s-OFDM QPSK	1@0	see graph	PASS
66	15	5	342500	1712.5	DFT-s-OFDM BPSK	25@0	see graph	PASS
66	15	5	342500	1712.5	DFT-s-OFDM QPSK	25@0	see graph	PASS
66	15	5	355500	1777.5	DFT-s-OFDM BPSK	1@24	see graph	PASS
66	15	5	355500	1777.5	DFT-s-OFDM QPSK	1@24	see graph	PASS
66	15	5	355500	1777.5	DFT-s-OFDM BPSK	25@0	see graph	PASS
66	15	5	355500	1777.5	DFT-s-OFDM QPSK	25@0	see graph	PASS
66	15	20	344000	1720.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
66	15	20	344000	1720.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
66	15	20	344000	1720.0	DFT-s-OFDM BPSK	100@0	see graph	PASS
66	15	20	344000	1720.0	DFT-s-OFDM QPSK	100@0	see graph	PASS
66	15	20	354000	1770.0	DFT-s-OFDM BPSK	1@105	see graph	PASS
66	15	20	354000	1770.0	DFT-s-OFDM QPSK	1@105	see graph	PASS
66	15	20	354000	1770.0	DFT-s-OFDM BPSK	100@0	see graph	PASS
66	15	20	354000	1770.0	DFT-s-OFDM QPSK	100@0	see graph	PASS
66	15	40	346000	1730.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
66	15	40	346000	1730.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
66	15	40	346000	1730.0	DFT-s-OFDM BPSK	216@0	see graph	PASS
66	15	40	346000	1730.0	DFT-s-OFDM QPSK	216@0	see graph	PASS
66	15	40	352000	1760.0	DFT-s-OFDM BPSK	1@215	see graph	PASS
66	15	40	352000	1760.0	DFT-s-OFDM QPSK	1@215	see graph	PASS
66	15	40	352000	1760.0	DFT-s-OFDM BPSK	216@0	see graph	PASS
66	15	40	352000	1760.0	DFT-s-OFDM QPSK	216@0	see graph	PASS

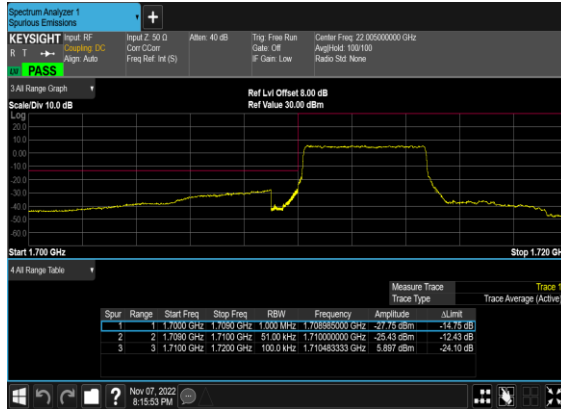
N66(5M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Low_CH



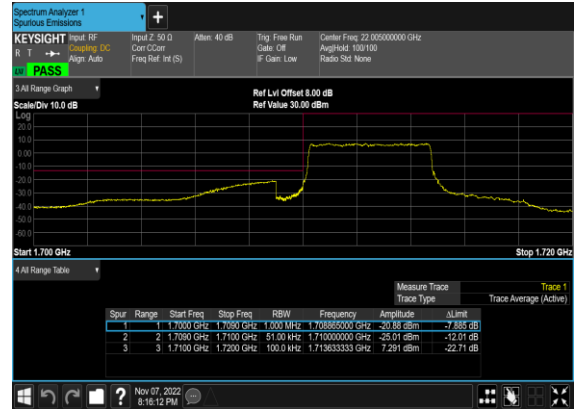
N66(5M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



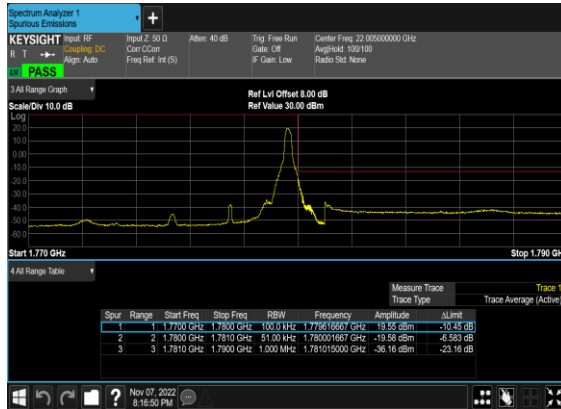
N66(5M)_DFT-s-
OFDM_BPSK_Outer_Full_Low_CH



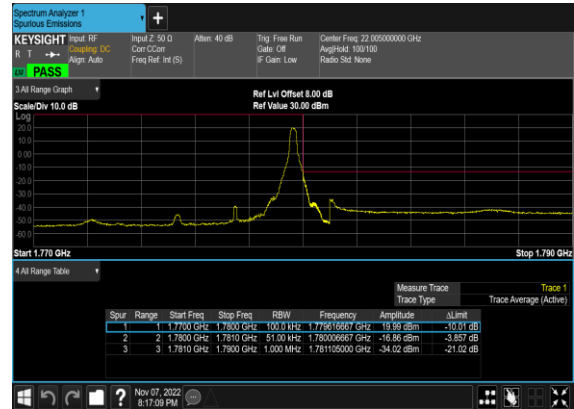
N66(5M)_DFT-s-
OFDM_QPSK_Outer_Full_Low_CH



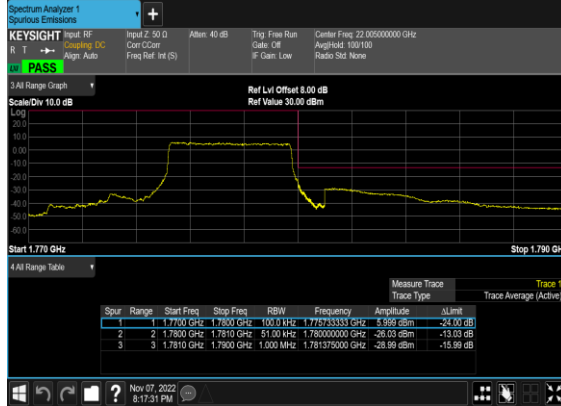
N66(5M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_High_CH



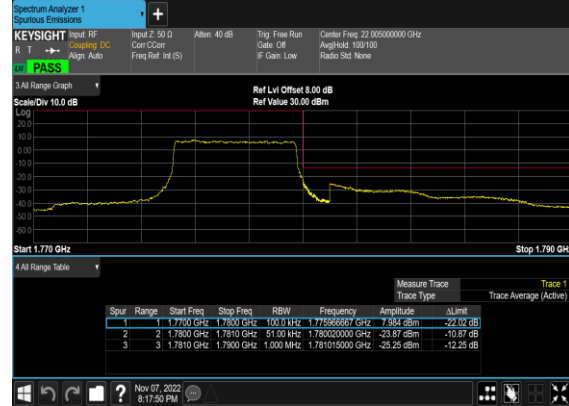
N66(5M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_High_CH



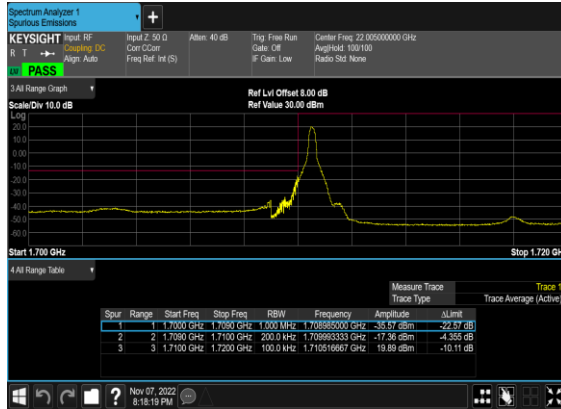
N66(5M)_DFT-s-
OFDM_BPSK_Outer_Full_High_CH



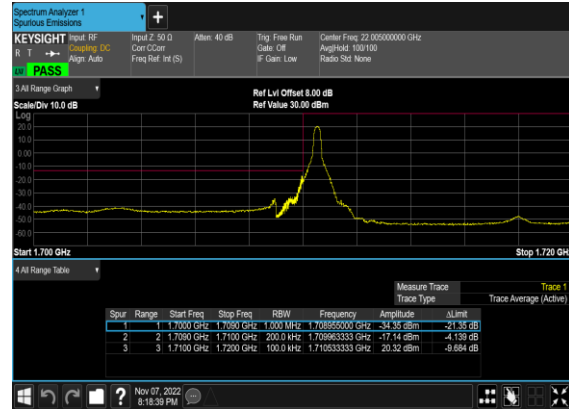
N66(5M)_DFT-s-
OFDM_QPSK_Outer_Full_High_CH



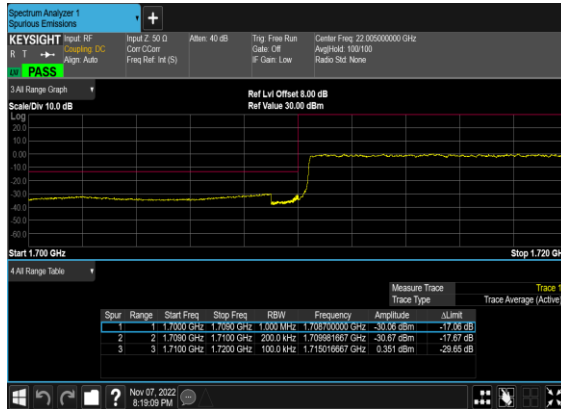
N66(20M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Low_CH



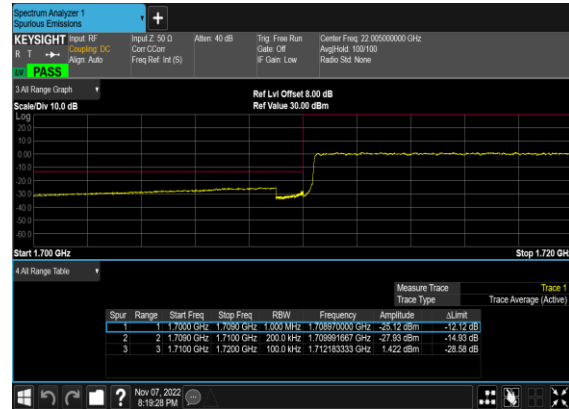
N66(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



N66(20M)_DFT-s-
OFDM_BPSK_Outer_Full_Low_CH



N66(20M)_DFT-s-
OFDM_QPSK_Outer_Full_Low_CH



N66(20M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_High_CH



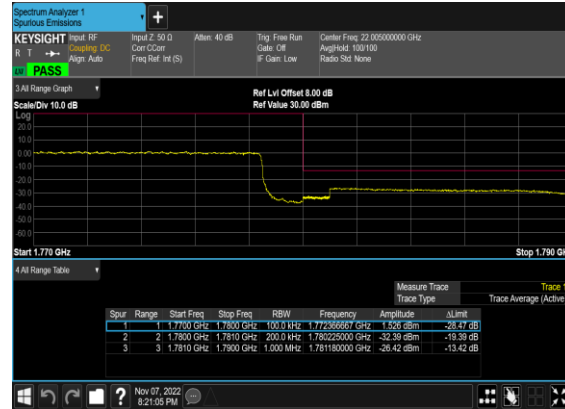
N66(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_High_CH



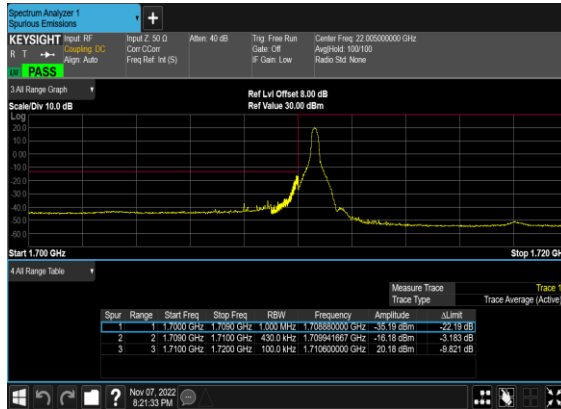
N66(20M)_DFT-s-
OFDM_BPSK_Outer_Full_High_CH



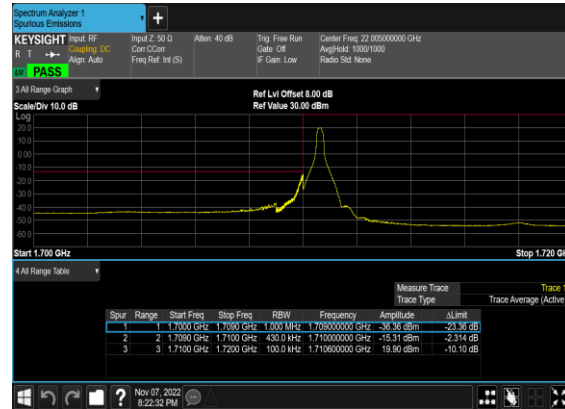
N66(20M)_DFT-s-
OFDM_QPSK_Outer_Full_High_CH



N66(40M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Low_CH



N66(40M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



The screenshot displays a Spectrum Analyzer interface with the following components:

- Top Panel:**
 - Spectrum Analyzer 1** (Title)
 - Channel Power** (Indicator)
 - KEYSIGHT** (Logo)
 - Input RF** (Dropdown menu)
 - Coupling DC** (Dropdown menu)
 - Align Auto** (Button)
 - Input 2: 50.0** (Text)
 - Corr Corr** (Text)
 - Freq Ref: Int (S)** (Text)
 - Att: 30.0 dB** (Text)
 - #FNO: Fast** (Text)
 - Trig: Free Run** (Text)
 - Gate: Off** (Text)
 - #F: Cam Low** (Text)
 - Center Freq: 1.709785000 GHz** (Text)
 - Avg/Hold: 500/500** (Text)
 - Radio Std: None** (Text)
- Main Display:**
 - Graph** (Label)
 - Scale Div 10.0 dB** (Text)
 - Ref Lvl Offset 8.00 dB** (Text)
 - Ref Value 30.00 dBm** (Text)
 - #Video BW 91.000 kHz** (Text)
 - Span 860 MHz** (Text)
 - Sweep 1.20 ms (1001 pts)** (Text)
- Bottom Panel:**
 - Center 1.7097850 GHz** (Text)
 - #Res BW 30.000 kHz** (Text)
 - 2 Metrics** (Text)
 - Total Channel Power** (Text)
 - 30.04 dBm / 430 kHz** (Text)
 - Total Power Spectral Density** (Text)
 - 86.37 dBm/Hz** (Text)

The screenshot displays the Keysight Spectrum Analyzer 1 interface. The top section shows the instrument name and various settings: Input Freq (19.2 GHz), Span (20.0 GHz), Center Freq (22.00000000 GHz), and other parameters. The main display area shows a spectral plot with a yellow trace representing the signal. The plot has a logarithmic scale on the y-axis (dBm) and a linear scale on the x-axis (Frequency). A significant signal is visible at approximately 17.00 GHz. Below the plot, a table titled "Start 1.70 GHz" provides detailed information about the measured signals.

Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	ΔLimit
1	1	1.7000 GHz	1.7200 GHz	100.0 kHz	1.707633333 GHz	-34.59 dBm	-21.69 dB
2	1	1.7000 GHz	1.7200 GHz	100.0 kHz	1.705633333 GHz	-31.04 dBm	-18.04 dB
3	1	1.7000 GHz	1.7200 GHz	100.0 kHz	1.715633333 GHz	-33.13 dBm	-20.13 dB

Spectrum Analyzer 1
Source: Emulation

KEYSIGHT Input RF
R T → **Coupling DC**
Align: Auto

Input Z: 50 Ω
Corr: Corr
Freq Ref: Int (S)

Att: 40 dB

Trig: Free Run
Gate: Off
IF: Gain: Low

Center Freq: 22.00000000 GHz
AmpHd: 100.10V
Radio Std: None

PS PASS

3.4k Range Graph

Scale/Div: 10.0 dB

Ref Lvl Offset: 8.00 dBm
Ref Value: 38.00 dBm

Start: 1.700 GHz

Stop: 1.720 GHz

4.4k Range Table

Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Unit
1	1	1.7000 GHz	1.7000 GHz	100.0 Hz	1.700000000 GHz	-27.50 dBm	-14.70 dB
2	2	1.7090 GHz	1.7100 GHz	430.0 Hz	1.709966667 GHz	-29.50 dBm	-16.50 dB
3	3	1.7100 GHz	1.7200 GHz	100.0 Hz	1.711913333 GHz	-1.580 dBm	-31.58 dB

Nov 07, 2022
8:23:28 PM

Spectrum Analyzer 1
Spurious Emissions

KEYSIGHT Input RF
R T → Coupling DC
Align: Auto
Input 2: 50.0
Com CCR
Frag Ref: 101 (S)
Aloin: 40 dB
Trig: Free Run
Gate: Off
IF Gain: Low
Center Freq: 22.005000000 GHz
Avalfhd: 100/100
Radio Stz: None

Pass

3 All Range Graph
Scale/Div 10.0 dB
Ref Lvl Offset 8.00 dB
Ref Value 30.00 dBm

Start 1.770 GHz
Stop 1.790 GHz

4 All Range Table

Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δf/dB
1	1	1.7800 GHz	1.7800 GHz	100.0 Hz	1.780000000 GHz	-19.00 dBm	-30.40 dB
2	2	1.7800 GHz	1.7810 GHz	43.0 kHz	1.78001667 GHz	-16.90 dBm	-3.90 dB
3	3	1.7810 GHz	1.7800 GHz	1.000 MHz	1.781060000 GHz	-37.78 dBm	-24.78 dB

Measure Trace
Trace Type
Trace Average (Active)

Nov 07, 2022
8:24:06 PM

Keysight Spectrum Analyzer 1
Spurious Emissions

KEYSIGHT Input: RF, Ref: Coupling: DC, R: 1, T: 1, Graph: Auto

Input Z: 50 Ω, Center Freq: 22.000000000 GHz, Avg Hold: 1000/1000, Freq Ref: Int (S), Att: 40 dB, Trig: Freq Run, Gate: Off, IF Gain: Low, Radio Std: None

Log PASS

3 dB Range Graph, Scale Div: 10.0 dB, Ref Lvl Offset: 8.00 dB, Ref Value: 30.00 dBm

Start: 1.770 GHz, Stop: 1.790 GHz

Trace 1: Measure Trace, Trace Average (Active)

Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Unit
1	1	1.7700 GHz	1.7800 GHz	100.0 Hz	1.7793000000 GHz	-10.74 dBm	-10.26 dB
2	2	1.7800 GHz	1.7810 GHz	430.0 Hz	1.78001667 GHz	-17.17 dBm	-4.175 dB
3	3	1.7810 GHz	1.7900 GHz	1.000 MHz	1.7810600000 GHz	-37.39 dBm	-24.39 dB

Nov 07, 2022 8:25:05 PM

Spectrum Analyzer 1
Spurious Emissions

KEYSIGHT Input: RF, Coupling: DC, Span: Auto, Input Z: 50 Ω, Con: C-Cat, Freq Ref: Int (S), Att: 40 dB, Trig: Free Run, Gate: Off, IF Cam: Low, Center Freq: 22.005000000 GHz, Augg: 100/100, Radio Std: None

View: PASS

1 All Range Graph

Scale/Div: 10.0 dB

Ref Lvl Offset: 8.00 dB
Ref Value: 30.80 dBm

Log

Start: 1.770 GHz

Stop: 1.790 GHz

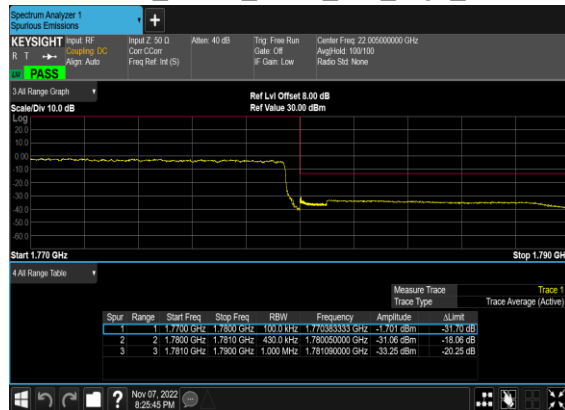
4 All Range Table

Measure Trace
Trace Type
Trace Average: Active

Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	dBm
1	1	1.7700 GHz	1.7800 GHz	100.0 kHz	1.77823333 GHz	-9.35 dBm	-30.95 dB
2	2	1.7800 GHz	1.7810 GHz	430.0 kHz	1.78025000 GHz	-35.17 dBm	-22.17 dB
3	3	1.7810 GHz	1.7900 GHz	1.000 MHz	1.782830000 GHz	-36.92 dBm	-23.92 dB

Nov 07, 2022
8:25:25 PM

N66(40M)_DFT-s- OFDM_QPSK_Outer_Full_High_CH



FR1 N71

Transmitter Conducted Output Power And ERP, ($G_T - L_C$)=-4dBi

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	ERP(dBm)	ERP(W)
71	15	5	133100	665.5	DFT-s-OFDM QPSK	1@1	24.28	18.13	0.0650
71	15	5	133100	665.5	DFT-s-OFDM 16 QAM	1@1	23.41	17.26	0.0532
71	15	5	136100	680.5	DFT-s-OFDM QPSK	1@1	24.18	18.03	0.0635
71	15	5	136100	680.5	DFT-s-OFDM 16 QAM	1@1	23.14	16.99	0.0500
71	15	5	139100	695.5	DFT-s-OFDM QPSK	1@1	24.12	17.97	0.0627
71	15	5	139100	695.5	DFT-s-OFDM 16 QAM	1@1	23.18	17.03	0.0505
71	15	10	133600	668.0	DFT-s-OFDM QPSK	1@1	24.27	18.12	0.0649
71	15	10	133600	668.0	DFT-s-OFDM 16 QAM	1@1	23.39	17.24	0.0530
71	15	10	136100	680.5	DFT-s-OFDM QPSK	1@1	24.13	17.98	0.0628
71	15	10	136100	680.5	DFT-s-OFDM 16 QAM	1@1	23.21	17.06	0.0508
71	15	10	138600	693.0	DFT-s-OFDM QPSK	1@1	24.21	18.06	0.0640
71	15	10	138600	693.0	DFT-s-OFDM 16 QAM	1@1	23.19	17.04	0.0506
71	15	15	134100	670.5	DFT-s-OFDM QPSK	1@1	24.3	18.15	0.0653
71	15	15	134100	670.5	DFT-s-OFDM 16 QAM	1@1	23.46	17.31	0.0538
71	15	15	136100	680.5	DFT-s-OFDM QPSK	1@1	24.29	18.14	0.0652
71	15	15	136100	680.5	DFT-s-OFDM 16 QAM	1@1	23.35	17.2	0.0525
71	15	15	138100	690.5	DFT-s-OFDM QPSK	1@1	24.18	18.03	0.0635
71	15	15	138100	690.5	DFT-s-OFDM 16 QAM	1@1	23.21	17.06	0.0508
71	15	20	134600	673.0	DFT-s-OFDM PI/2 BPSK	50@25	22.69	16.54	0.0451
71	15	20	134600	673.0	DFT-s-OFDM PI/2 BPSK	1@1	22.74	16.59	0.0456
71	15	20	134600	673.0	DFT-s-OFDM PI/2 BPSK	1@104	22.71	16.56	0.0453
71	15	20	134600	673.0	DFT-s-OFDM QPSK	50@25	24.22	18.07	0.0641

71	15	20	134600	673.0	DFT-s-OFDM QPSK	1@1	24.15	18	0.0631
71	15	20	134600	673.0	DFT-s-OFDM QPSK	1@104	24.17	18.02	0.0634
71	15	20	134600	673.0	DFT-s-OFDM 16 QAM	50@25	23.26	17.11	0.0514
71	15	20	134600	673.0	DFT-s-OFDM 16 QAM	1@1	23.36	17.21	0.0526
71	15	20	134600	673.0	DFT-s-OFDM 16 QAM	1@104	23.31	17.16	0.0520
71	15	20	134600	673.0	DFT-s-OFDM 64 QAM	50@25	21.73	15.58	0.0361
71	15	20	134600	673.0	DFT-s-OFDM 64 QAM	1@1	21.87	15.72	0.0373
71	15	20	134600	673.0	DFT-s-OFDM 64 QAM	1@104	21.79	15.64	0.0366
71	15	20	134600	673.0	DFT-s-OFDM 256 QAM	50@25	19.37	13.22	0.0210
71	15	20	134600	673.0	DFT-s-OFDM 256 QAM	1@1	19.48	13.33	0.0215
71	15	20	134600	673.0	DFT-s-OFDM 256 QAM	1@104	19.44	13.29	0.0213
71	15	20	134600	673.0	CP-OFDM QPSK	53@26	22.79	16.64	0.0461
71	15	20	134600	673.0	CP-OFDM QPSK	1@1	22.85	16.7	0.0468
71	15	20	134600	673.0	CP-OFDM QPSK	1@104	22.62	16.47	0.0444
71	15	20	136100	680.5	DFT-s-OFDM PI/2 BPSK	50@25	22.71	16.56	0.0453
71	15	20	136100	680.5	DFT-s-OFDM PI/2 BPSK	1@1	22.7	16.55	0.0452
71	15	20	136100	680.5	DFT-s-OFDM PI/2 BPSK	1@104	22.67	16.52	0.0449
71	15	20	136100	680.5	DFT-s-OFDM QPSK	50@25	24.3	18.15	0.0653
71	15	20	136100	680.5	DFT-s-OFDM QPSK	1@1	24.3	18.15	0.0653
71	15	20	136100	680.5	DFT-s-OFDM QPSK	1@104	24.19	18.04	0.0637
71	15	20	136100	680.5	DFT-s-OFDM 16 QAM	50@25	23.27	17.12	0.0515
71	15	20	136100	680.5	DFT-s-OFDM 16 QAM	1@1	23.37	17.22	0.0527
71	15	20	136100	680.5	DFT-s-OFDM 16 QAM	1@104	23.34	17.19	0.0524
71	15	20	136100	680.5	DFT-s-OFDM 64 QAM	50@25	21.81	15.66	0.0368
71	15	20	136100	680.5	DFT-s-OFDM 64 QAM	1@1	21.8	15.65	0.0367
71	15	20	136100	680.5	DFT-s-OFDM 64 QAM	1@104	21.7	15.55	0.0359
71	15	20	136100	680.5	DFT-s-OFDM 256 QAM	50@25	19.7	13.55	0.0226

71	15	20	136100	680.5	DFT-s-OFDM 256 QAM	1@1	19.41	13.26	0.0212
71	15	20	136100	680.5	DFT-s-OFDM 256 QAM	1@104	19.45	13.3	0.0214
71	15	20	136100	680.5	CP-OFDM QPSK	53@26	22.8	16.65	0.0462
71	15	20	136100	680.5	CP-OFDM QPSK	1@1	22.88	16.73	0.0471
71	15	20	136100	680.5	CP-OFDM QPSK	1@104	22.74	16.59	0.0456
71	15	20	137600	688.0	DFT-s-OFDM PI/2 BPSK	50@25	22.64	16.49	0.0446
71	15	20	137600	688.0	DFT-s-OFDM PI/2 BPSK	1@1	22.67	16.52	0.0449
71	15	20	137600	688.0	DFT-s-OFDM PI/2 BPSK	1@104	22.6	16.45	0.0442
71	15	20	137600	688.0	DFT-s-OFDM QPSK	50@25	24.12	17.97	0.0627
71	15	20	137600	688.0	DFT-s-OFDM QPSK	1@1	24.31	18.16	0.0655
71	15	20	137600	688.0	DFT-s-OFDM QPSK	1@104	24.16	18.01	0.0632
71	15	20	137600	688.0	DFT-s-OFDM 16 QAM	50@25	23.13	16.98	0.0499
71	15	20	137600	688.0	DFT-s-OFDM 16 QAM	1@1	23.29	17.14	0.0518
71	15	20	137600	688.0	DFT-s-OFDM 16 QAM	1@104	23.33	17.18	0.0522
71	15	20	137600	688.0	DFT-s-OFDM 64 QAM	50@25	21.66	15.51	0.0356
71	15	20	137600	688.0	DFT-s-OFDM 64 QAM	1@1	21.81	15.66	0.0368
71	15	20	137600	688.0	DFT-s-OFDM 64 QAM	1@104	21.7	15.55	0.0359
71	15	20	137600	688.0	DFT-s-OFDM 256 QAM	50@25	19.58	13.43	0.0220
71	15	20	137600	688.0	DFT-s-OFDM 256 QAM	1@1	19.45	13.3	0.0214
71	15	20	137600	688.0	DFT-s-OFDM 256 QAM	1@104	19.44	13.29	0.0213
71	15	20	137600	688.0	CP-OFDM QPSK	53@26	22.69	16.54	0.0451
71	15	20	137600	688.0	CP-OFDM QPSK	1@1	22.81	16.66	0.0463
71	15	20	137600	688.0	CP-OFDM QPSK	1@104	22.78	16.63	0.0460

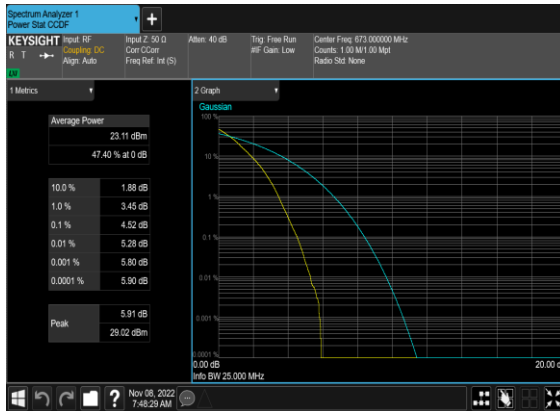
Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0042	PASS	NV
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0021	PASS	LV
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0050	PASS	HV
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0026	PASS	-30°C
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0042	PASS	-20°C
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0031	PASS	-10°C
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0034	PASS	0°C
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0029	PASS	10°C
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0042	PASS	20°C
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0055	PASS	30°C
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0024	PASS	40°C
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0021	PASS	50°C

Peak to Average Radio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
71	15	20	134600	673.0	DFT-s-OFDM PI/2 BPSK	100@0	4.52	13	PASS
71	15	20	134600	673.0	DFT-s-OFDM PI/2 BPSK	1@0	4.39	13	PASS
71	15	20	134600	673.0	DFT-s-OFDM QPSK	100@0	5.49	13	PASS
71	15	20	134600	673.0	DFT-s-OFDM QPSK	1@0	5.45	13	PASS
71	15	20	136100	680.5	DFT-s-OFDM PI/2 BPSK	100@0	4.7	13	PASS
71	15	20	136100	680.5	DFT-s-OFDM PI/2 BPSK	1@0	4.47	13	PASS
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	5.77	13	PASS
71	15	20	136100	680.5	DFT-s-OFDM QPSK	1@0	5.58	13	PASS
71	15	20	137600	688.0	DFT-s-OFDM PI/2 BPSK	100@0	4.71	13	PASS
71	15	20	137600	688.0	DFT-s-OFDM PI/2 BPSK	1@0	4.39	13	PASS
71	15	20	137600	688.0	DFT-s-OFDM QPSK	100@0	5.89	13	PASS
71	15	20	137600	688.0	DFT-s-OFDM QPSK	1@0	5.76	13	PASS

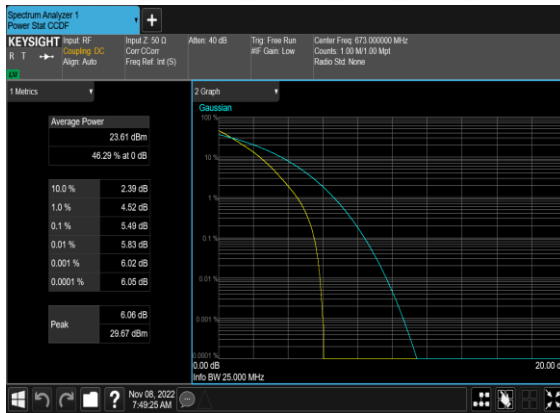
N71(20M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Low_CH



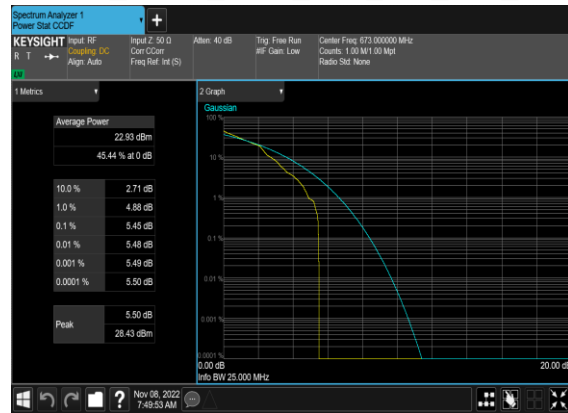
N71(20M)_DFT-s-OFDM_PI_2-
BPSK_Edge_1RB_Left_Low_CH



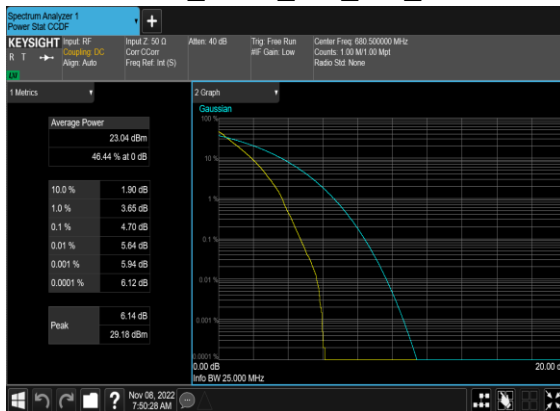
N71(20M)_DFT-s-
OFDM_QPSK_Outer_Full_Low_CH



N71(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



N71(20M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Mid_CH



N71(20M)_DFT-s-OFDM_PI_2-
BPSK_Edge_1RB_Left_Mid_CH



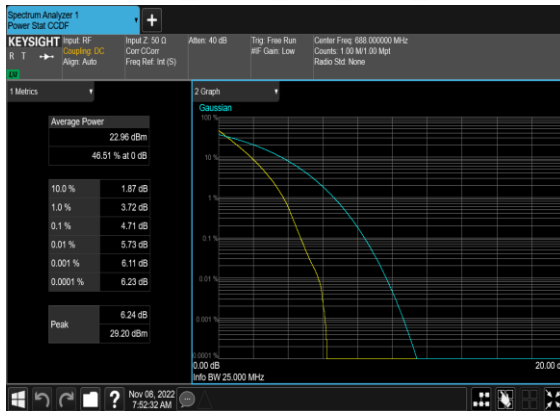
N71(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



N71(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



N71(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_High_CH



N71(20M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_High_CH



N71(20M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



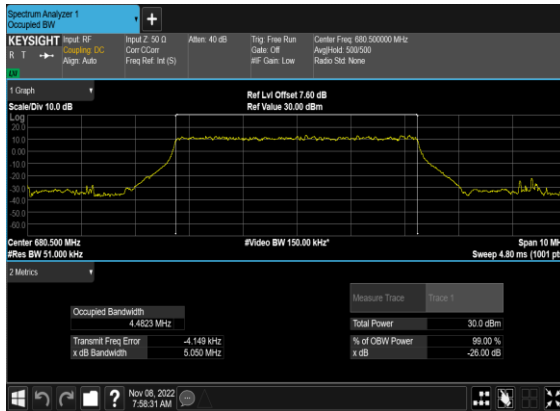
N71(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



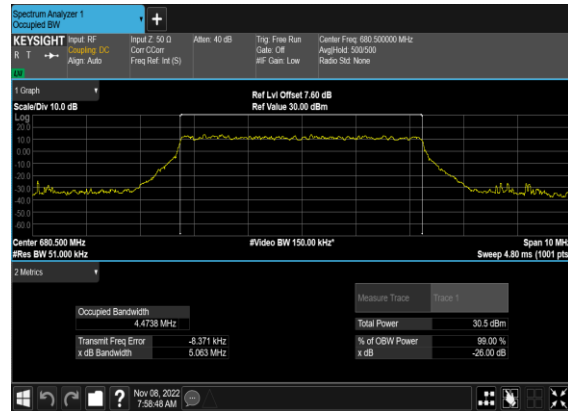
Occupied Bandwidth

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB OBW (MHz)
71	15	5	136100	680.5	DFT-s-OFDM PI/2 BPSK	25@0	4.4823	5.05
71	15	5	136100	680.5	DFT-s-OFDM QPSK	25@0	4.4738	5.063
71	15	5	136100	680.5	CP-OFDM QPSK	25@0	4.4671	5.05
71	15	5	136100	680.5	CP-OFDM 16 QAM	25@0	4.4757	5.102
71	15	5	136100	680.5	CP-OFDM 64 QAM	25@0	4.4671	5.027
71	15	5	136100	680.5	CP-OFDM 256 QAM	25@0	4.488	5.135
71	15	10	136100	680.5	DFT-s-OFDM PI/2 BPSK	50@0	8.8951	9.524
71	15	10	136100	680.5	DFT-s-OFDM QPSK	50@0	8.9239	9.706
71	15	10	136100	680.5	CP-OFDM QPSK	52@0	9.2813	10.09
71	15	10	136100	680.5	CP-OFDM 16 QAM	52@0	9.2927	10.11
71	15	10	136100	680.5	CP-OFDM 64 QAM	52@0	9.2714	10.07
71	15	10	136100	680.5	CP-OFDM 256 QAM	52@0	9.2801	10.05
71	15	15	136100	680.5	DFT-s-OFDM PI/2 BPSK	75@0	13.384	14.3
71	15	15	136100	680.5	DFT-s-OFDM QPSK	75@0	13.391	14.35
71	15	15	136100	680.5	CP-OFDM QPSK	79@0	14.077	14.89
71	15	15	136100	680.5	CP-OFDM 16 QAM	79@0	14.087	15.01
71	15	15	136100	680.5	CP-OFDM 64 QAM	79@0	14.089	14.91
71	15	15	136100	680.5	CP-OFDM 256 QAM	79@0	14.063	15.09
71	15	20	136100	680.5	DFT-s-OFDM PI/2 BPSK	100@0	17.9	18.76
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	17.832	18.78
71	15	20	136100	680.5	CP-OFDM QPSK	106@0	18.887	20.02
71	15	20	136100	680.5	CP-OFDM 16 QAM	106@0	18.896	19.97
71	15	20	136100	680.5	CP-OFDM 64 QAM	106@0	18.892	19.8
71	15	20	136100	680.5	CP-OFDM 256 QAM	106@0	18.914	19.94

N71(5M)_DFT-s-OFDM_PI_2-
BPSK_Outer_Full_Mid_CH



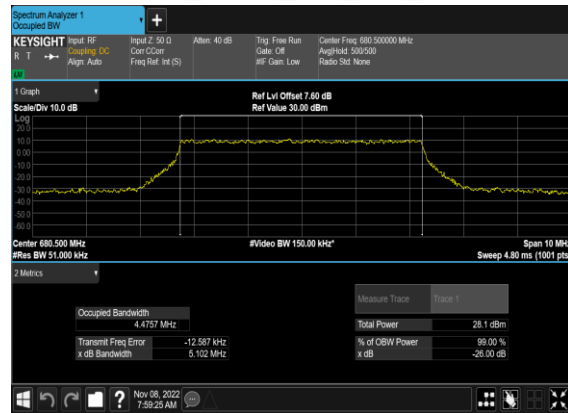
N71(5M)_DFT-s-
OFDM_QPSK_Outer_Full_Mid_CH



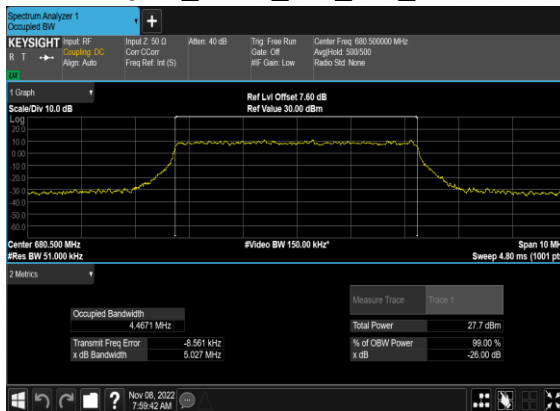
N71(5M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



N71(5M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



N71(5M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH



N71(5M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH

