

N48(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



N48(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



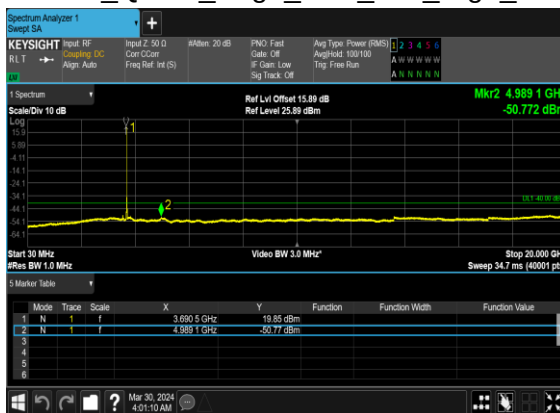
N48(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



N48(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



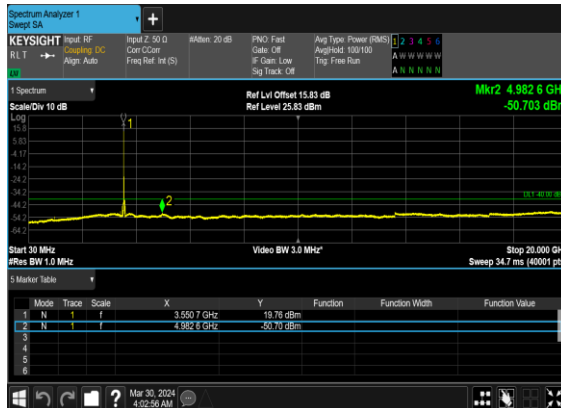
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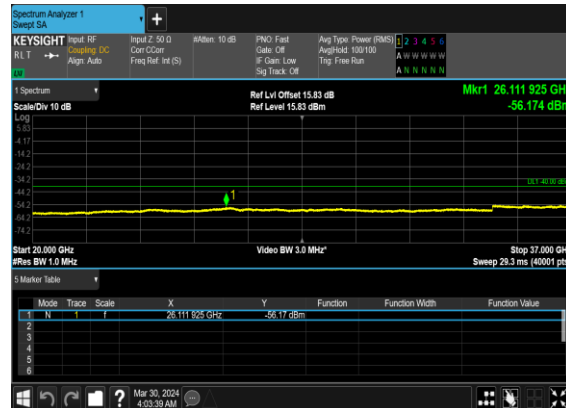
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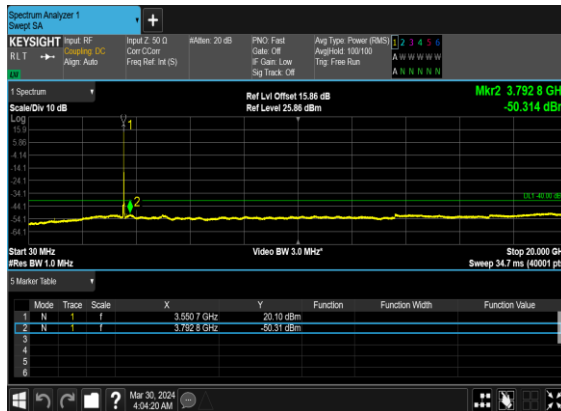
N48(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



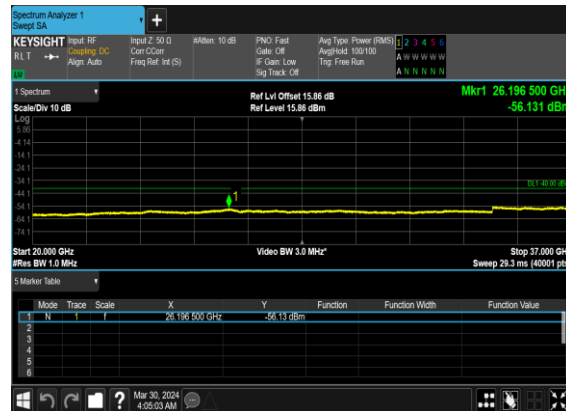
N48(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



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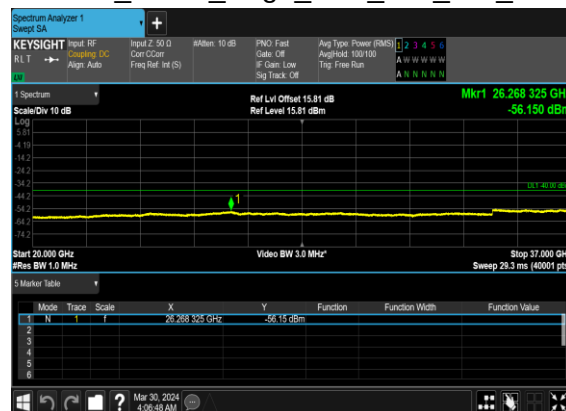
N48(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



N48(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



N48(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



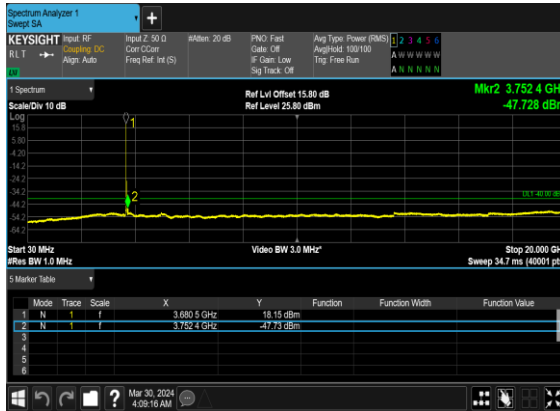
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OFDM_QPSK_Edge_1RB_Left_Mid_CH



N48(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH



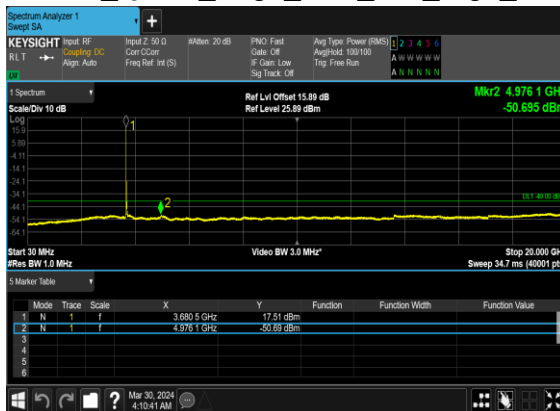
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OFDM_BPSK_Edge_1RB_Left_High_CH



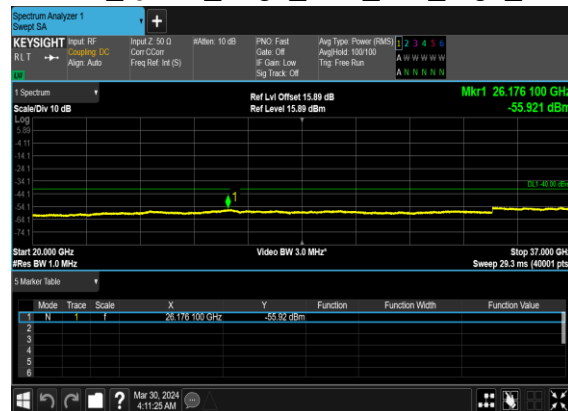
N48(20M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_High_CH



N48(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH



N48(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH



N48(40M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Low_CH



N48(40M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Low_CH



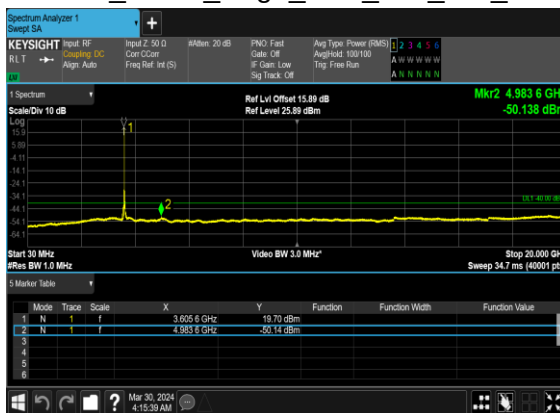
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OFDM_QPSK_Edge_1RB_Left_Low_CH



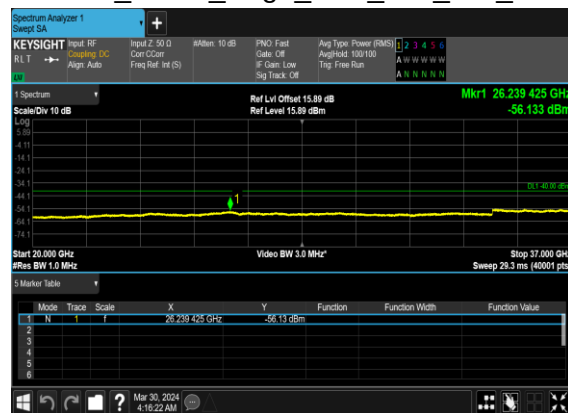
N48(40M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH



N48(40M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Mid_CH



N48(40M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Mid_CH



N48(40M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH



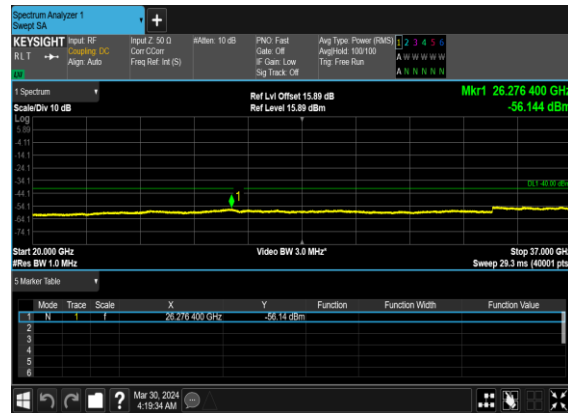
N48(40M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH



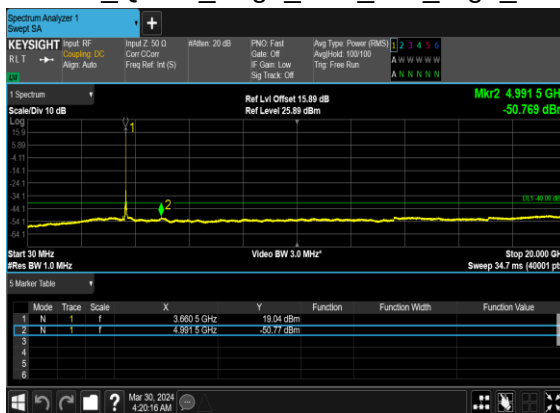
N48(40M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_High_CH



N48(40M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_High_CH



N48(40M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH



N48(40M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH

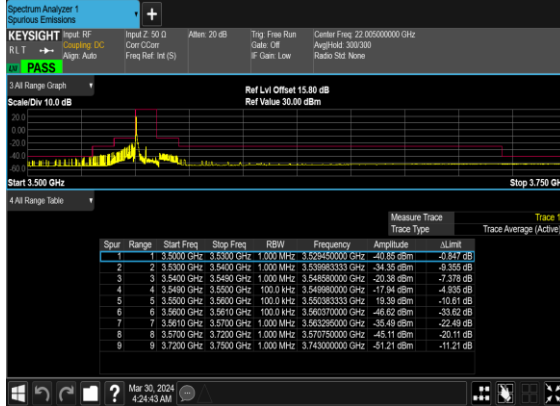


Conducted Band Edge

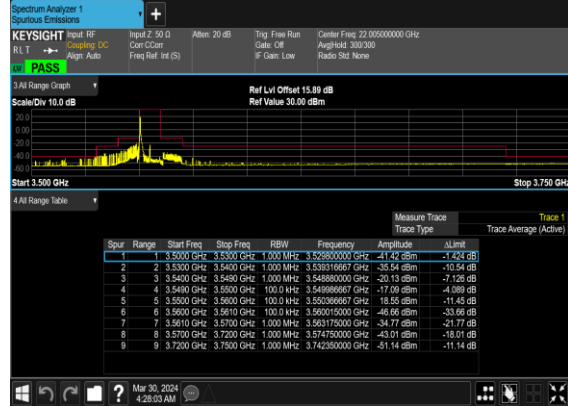
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
48	15	10	637000	3555.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	15	10	637000	3555.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	15	10	637000	3555.0	DFT-s-OFDM BPSK	1@51	see graph	PASS
48	15	10	637000	3555.0	DFT-s-OFDM QPSK	1@51	see graph	PASS
48	15	10	637000	3555.0	DFT-s-OFDM BPSK	50@0	see graph	PASS
48	15	10	637000	3555.0	DFT-s-OFDM QPSK	50@0	see graph	PASS
48	15	10	641666	3624.99	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	15	10	641666	3624.99	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	15	10	641666	3624.99	DFT-s-OFDM BPSK	1@51	see graph	PASS
48	15	10	641666	3624.99	DFT-s-OFDM QPSK	1@51	see graph	PASS
48	15	10	641666	3624.99	DFT-s-OFDM BPSK	50@0	see graph	PASS
48	15	10	641666	3624.99	DFT-s-OFDM QPSK	50@0	see graph	PASS
48	15	10	646332	3694.98	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	15	10	646332	3694.98	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	15	10	646332	3694.98	DFT-s-OFDM BPSK	1@51	see graph	PASS
48	15	10	646332	3694.98	DFT-s-OFDM QPSK	1@51	see graph	PASS
48	15	10	646332	3694.98	DFT-s-OFDM BPSK	50@0	see graph	PASS
48	15	10	646332	3694.98	DFT-s-OFDM QPSK	50@0	see graph	PASS
48	15	20	637334	3560.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	15	20	637334	3560.01	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	15	20	637334	3560.01	DFT-s-OFDM BPSK	1@105	see graph	PASS
48	15	20	637334	3560.01	DFT-s-OFDM QPSK	1@105	see graph	PASS
48	15	20	637334	3560.01	DFT-s-OFDM BPSK	100@0	see graph	PASS
48	15	20	637334	3560.01	DFT-s-OFDM QPSK	100@0	see graph	PASS
48	15	20	641666	3624.99	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	15	20	641666	3624.99	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	15	20	641666	3624.99	DFT-s-OFDM BPSK	1@105	see graph	PASS
48	15	20	641666	3624.99	DFT-s-OFDM QPSK	1@105	see graph	PASS
48	15	20	641666	3624.99	DFT-s-OFDM BPSK	100@0	see graph	PASS
48	15	20	641666	3624.99	DFT-s-OFDM QPSK	100@0	see graph	PASS
48	15	20	646000	3690.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	15	20	646000	3690.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	15	20	646000	3690.0	DFT-s-OFDM BPSK	1@105	see graph	PASS
48	15	20	646000	3690.0	DFT-s-OFDM QPSK	1@105	see graph	PASS
48	15	20	646000	3690.0	DFT-s-OFDM BPSK	100@0	see graph	PASS
48	15	20	646000	3690.0	DFT-s-OFDM QPSK	100@0	see graph	PASS
48	15	40	638000	3570.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	15	40	638000	3570.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	15	40	638000	3570.0	DFT-s-OFDM BPSK	1@215	see graph	PASS
48	15	40	638000	3570.0	DFT-s-OFDM QPSK	1@215	see graph	PASS

48	15	40	638000	3570.0	DFT-s-OFDM BPSK	216@0	see graph	PASS
48	15	40	638000	3570.0	DFT-s-OFDM QPSK	216@0	see graph	PASS
48	15	40	641666	3624.99	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	15	40	641666	3624.99	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	15	40	641666	3624.99	DFT-s-OFDM BPSK	1@215	see graph	PASS
48	15	40	641666	3624.99	DFT-s-OFDM QPSK	1@215	see graph	PASS
48	15	40	641666	3624.99	DFT-s-OFDM BPSK	216@0	see graph	PASS
48	15	40	641666	3624.99	DFT-s-OFDM QPSK	216@0	see graph	PASS
48	15	40	645332	3679.98	DFT-s-OFDM BPSK	1@0	see graph	PASS
48	15	40	645332	3679.98	DFT-s-OFDM QPSK	1@0	see graph	PASS
48	15	40	645332	3679.98	DFT-s-OFDM BPSK	1@215	see graph	PASS
48	15	40	645332	3679.98	DFT-s-OFDM QPSK	1@215	see graph	PASS
48	15	40	645332	3679.98	DFT-s-OFDM BPSK	216@0	see graph	PASS
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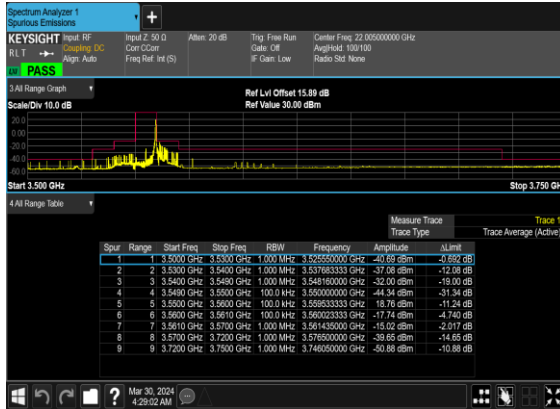
N48(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



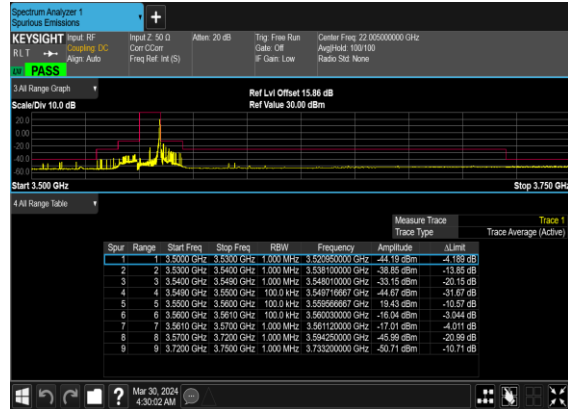
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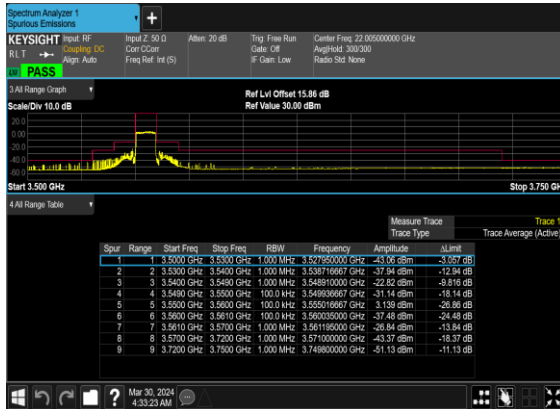
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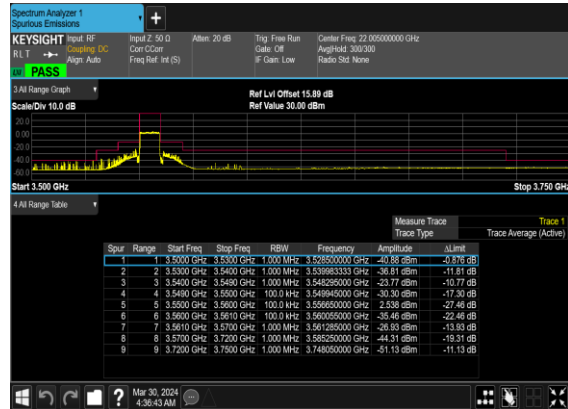
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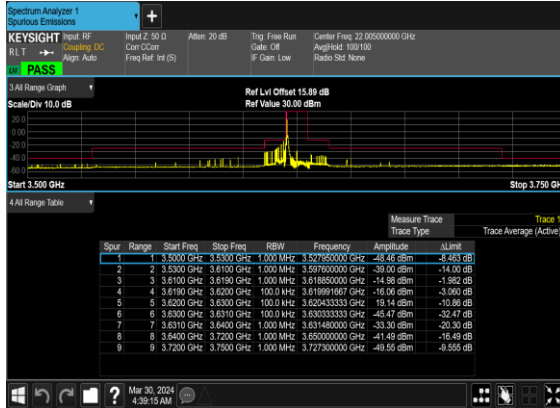
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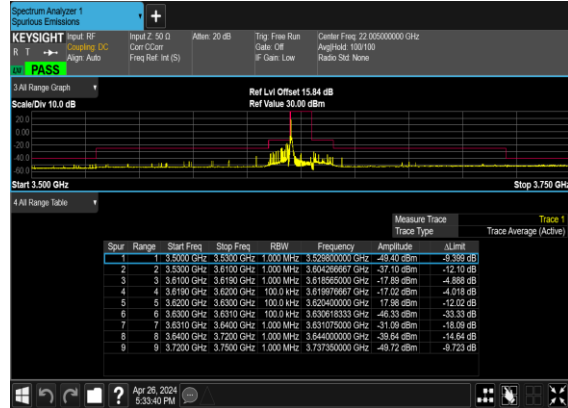
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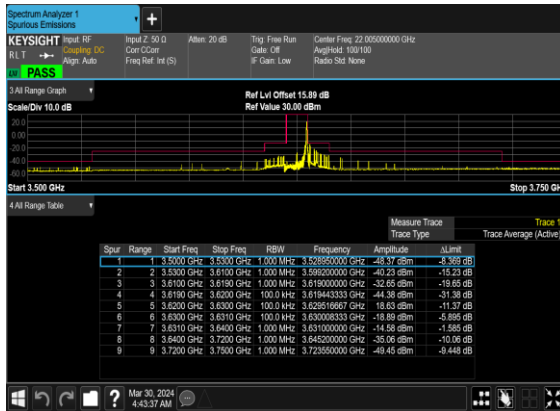
N48(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



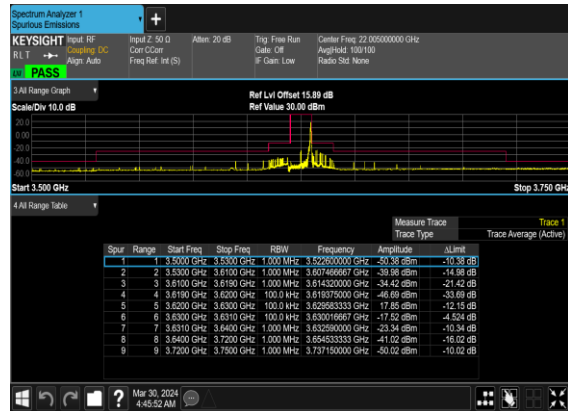
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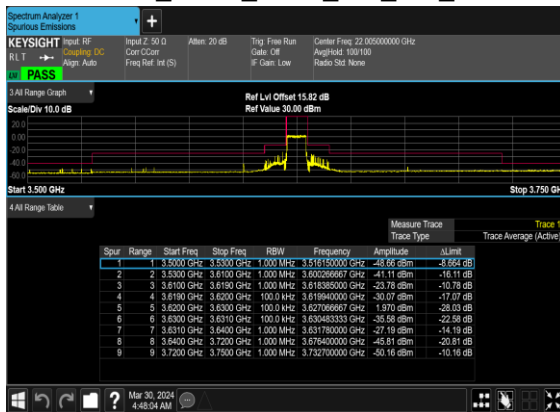
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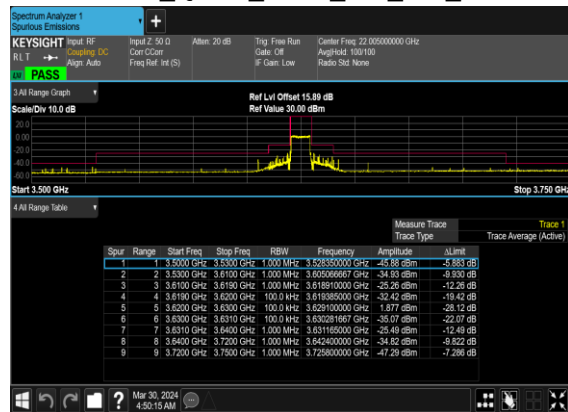
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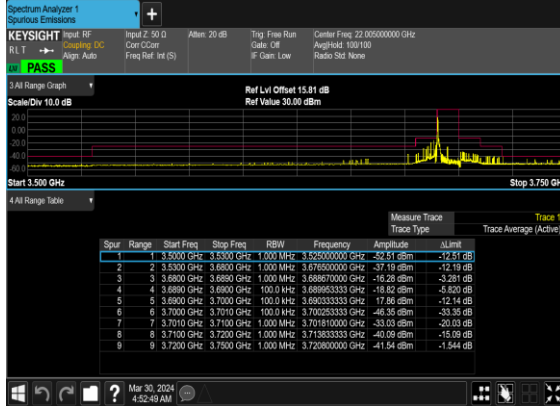
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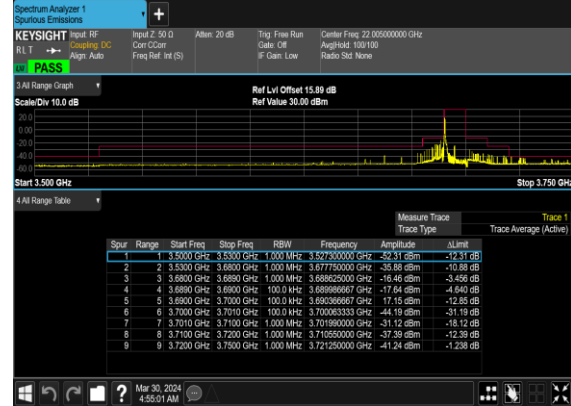
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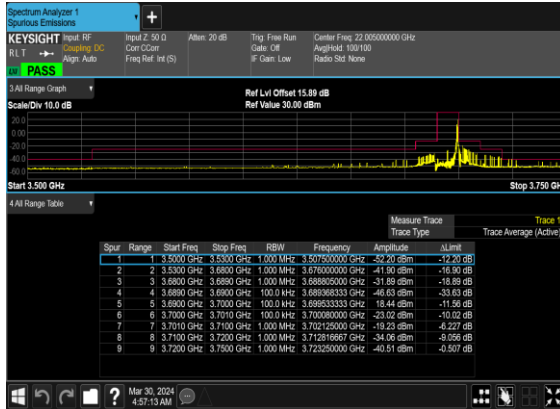
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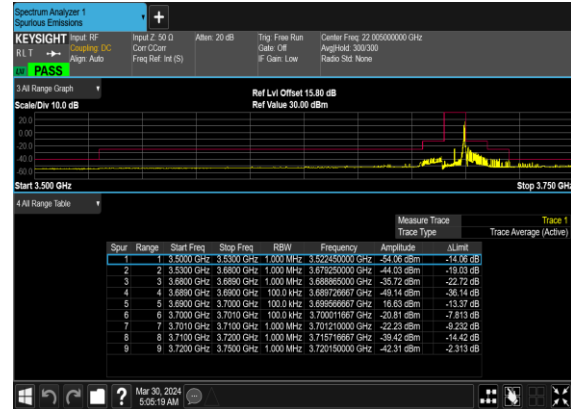
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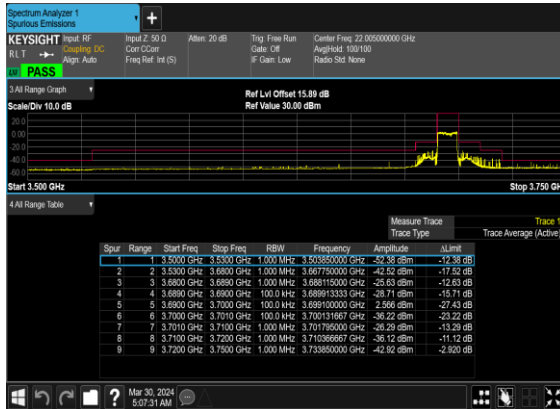
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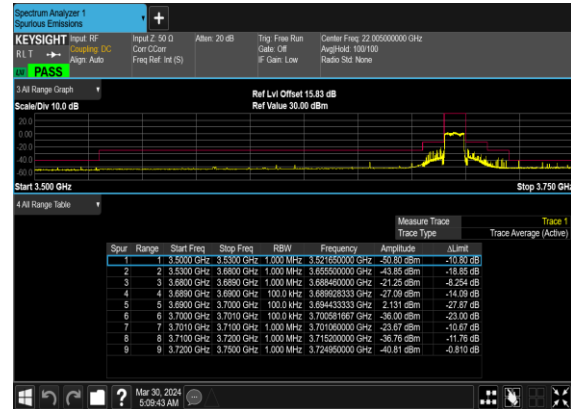
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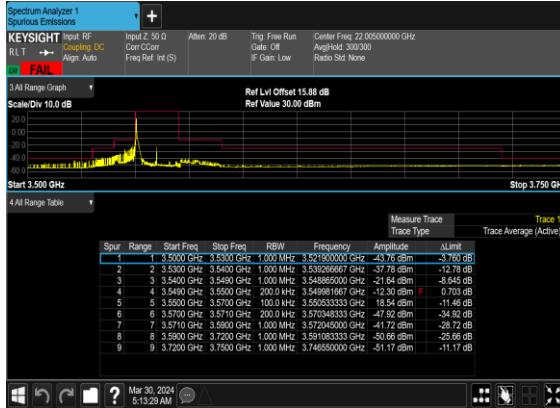
N48(10M)_DFT-s- OFDM_BPSK_Outer_Full_High_CH



N48(10M)_DFT-s- OFDM_QPSK_Outer_Full_High_CH



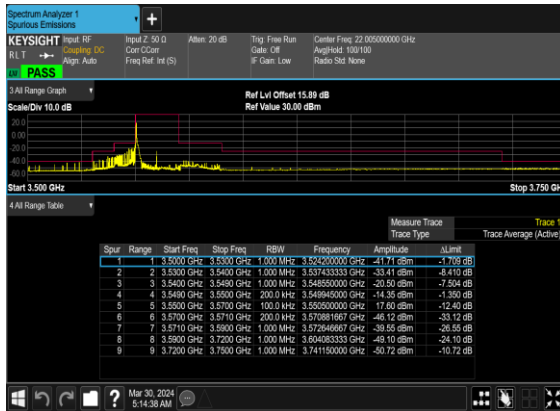
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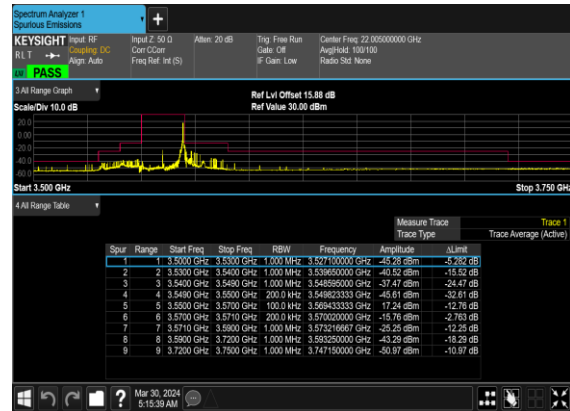
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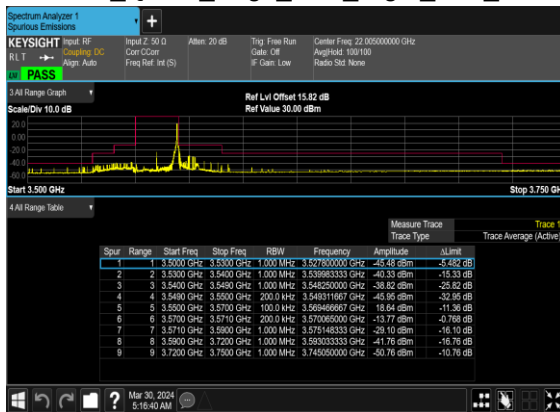
N48(20M)_DFT-s- OFDM_QPSK_Edge_1RB_Left_Low_CH



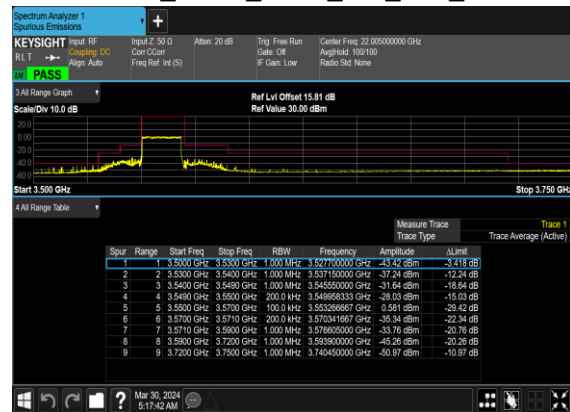
N48(20M)_DFT-s- OFDM_BPSK_Edge_1RB_Right_Low_CH



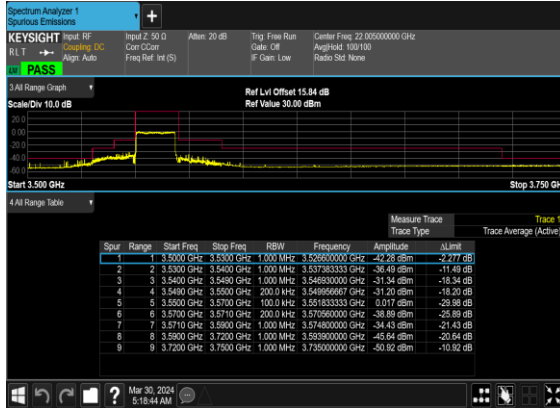
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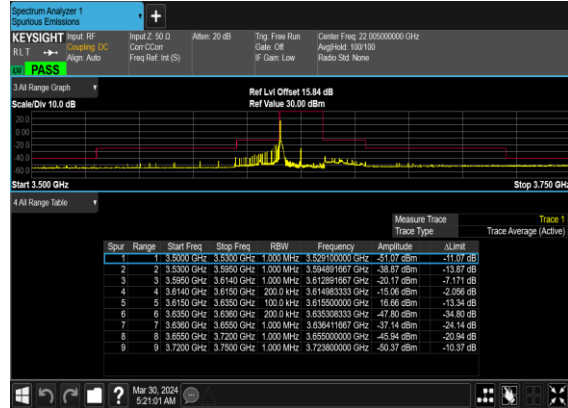
N48(20M)_DFT-s- OFDM_BPSK_Outer_Full_Low_CH



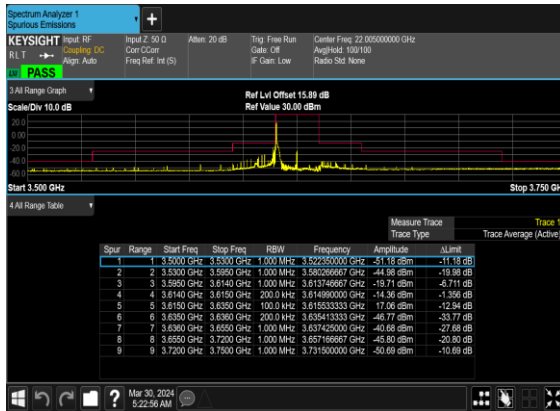
N48(20M)_DFT-s-
OFDM_QPSK_Outer_Full_Low_CH



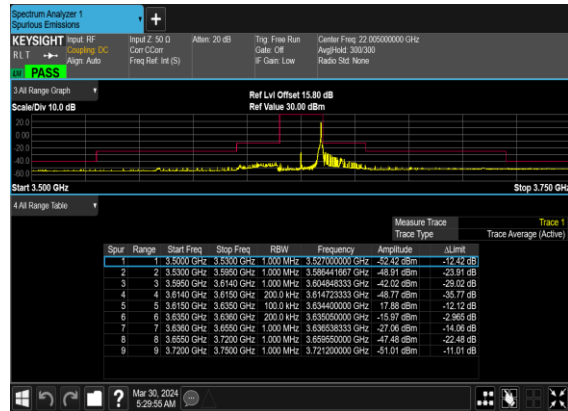
N48(20M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Mid_CH



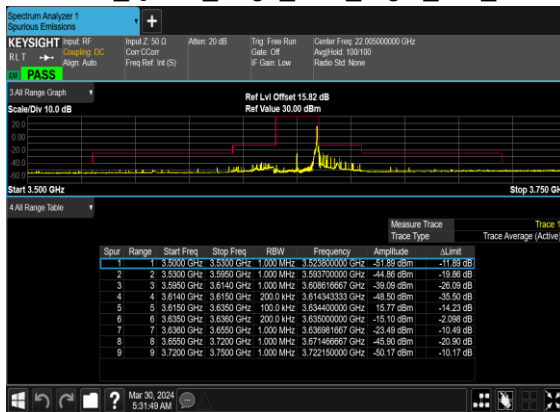
N48(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH



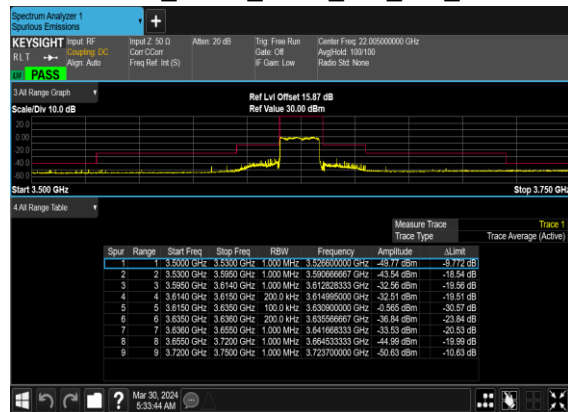
N48(20M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_Mid_CH



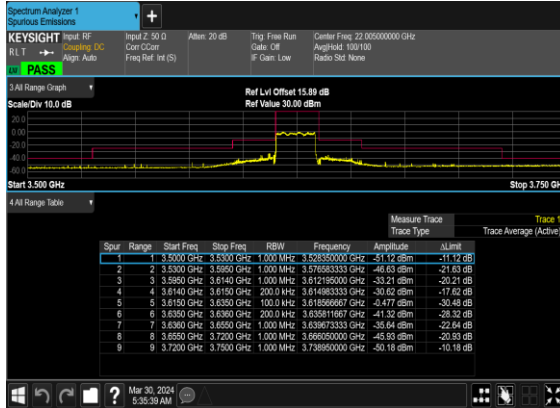
N48(20M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_Mid_CH



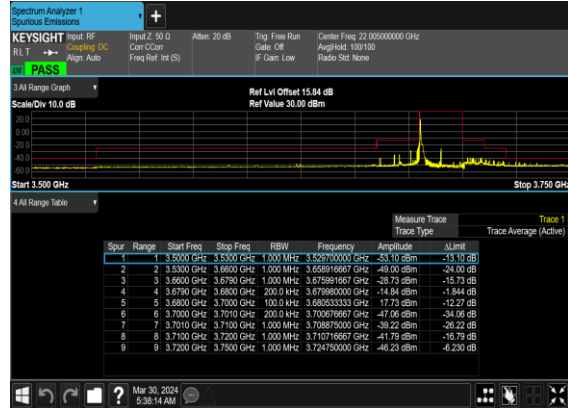
N48(20M)_DFT-s-
OFDM_BPSK_Outer_Full_Mid_CH



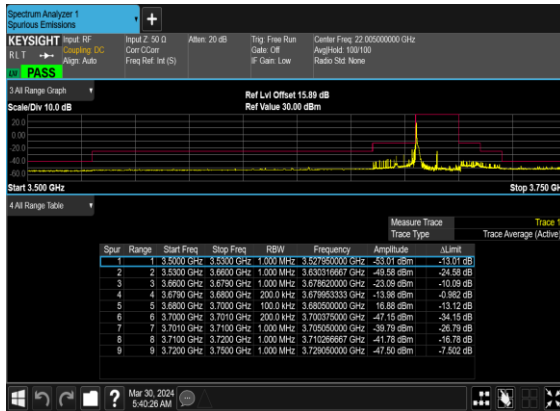
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OFDM_QPSK_Outer_Full_Mid_CH



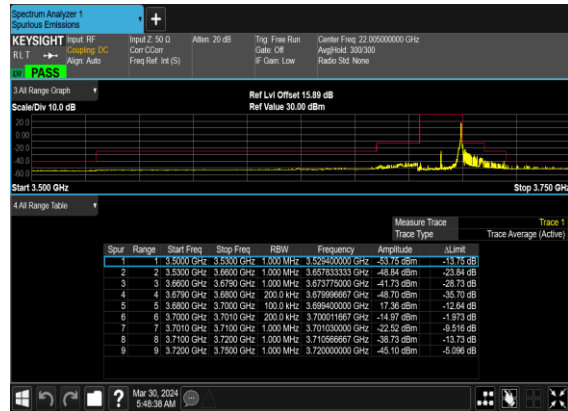
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OFDM_BPSK_Edge_1RB_Left_High_CH



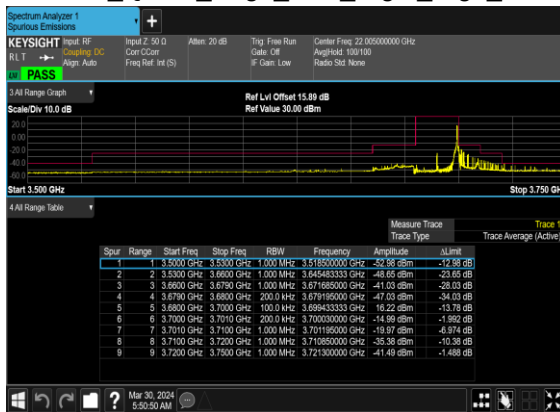
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OFDM_QPSK_Edge_1RB_Left_High_CH



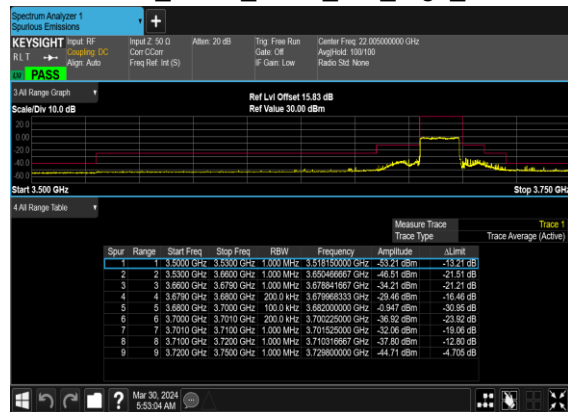
N48(20M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_High_CH



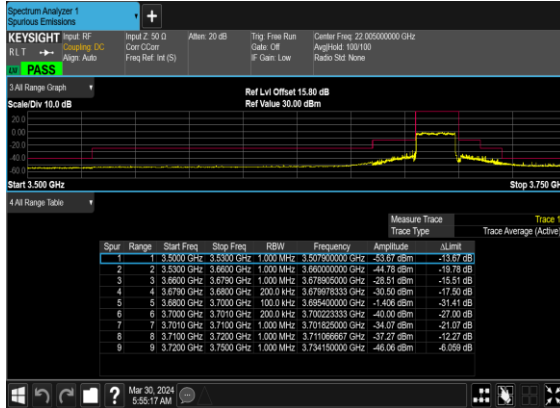
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OFDM_QPSK_Edge_1RB_Right_High_CH



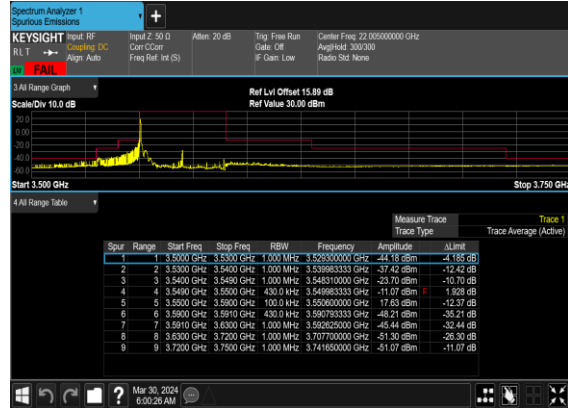
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OFDM_BPSK_Outer_Full_High_CH



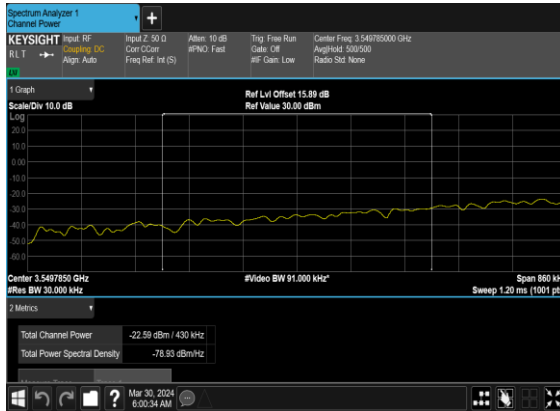
N48(20M)_DFT-s- OFDM_QPSK_Outer_Full_High_CH



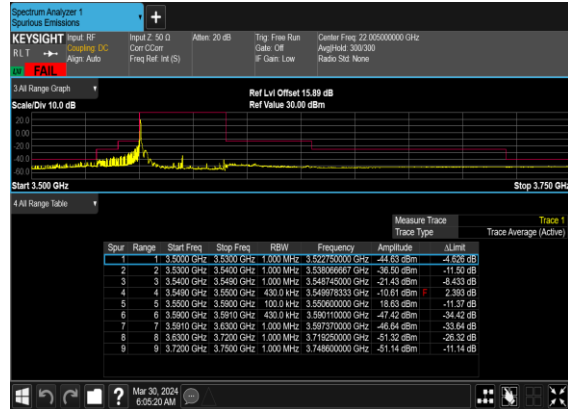
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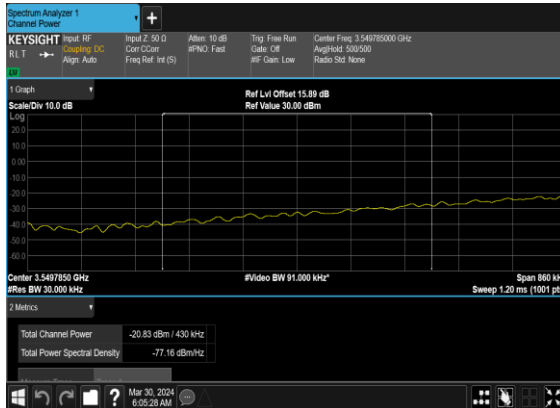
N48(40M)_DFT-s- OFDM_BPSK_Edge_1RB_Left_Low_CH_chp_ PASS



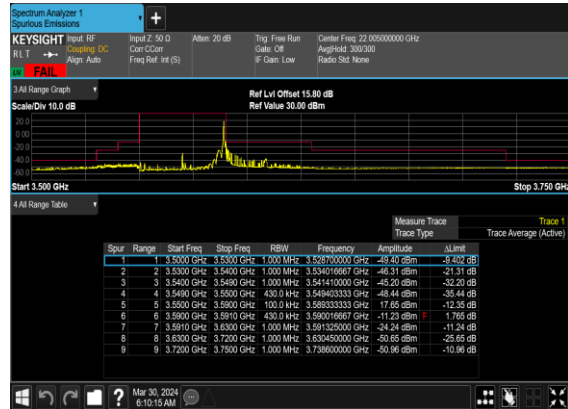
N48(40M)_DFT-s- OFDM_QPSK_Edge_1RB_Left_Low_CH



N48(40M)_DFT-s- OFDM_QPSK_Edge_1RB_Left_Low_CH_chp_ PASS



N48(40M)_DFT-s- OFDM_BPSK_Edge_1RB_Right_Low_CH



Keysight Spectrum Analyzer 1 Channel Power

Input: RF Output: DC Att: 10 dB #NO: Fast Trig: Free Run Gate: Off Ref: Gain Low Center Freq: 3.590215000 GHz Res: 40 Hz Span: 860 kHz Sweep: 1.20 ms (1001 pts)

Scale/Div 10.0 dB Log

Ref Level Offset 15.00 dB Ref Value 30.00 dBm

Center 3.5902150 GHz #Res BW 30.00 kHz #Video BW 91.000 kHz Span 860 kHz Sweep 1.20 ms (1001 pts)

2 Metrics

Total Channel Power	-20.71 dBm / 430 kHz
Total Power Spectral Density	-77.06 dBm/MHz

Spectrum Analyzer 1
Spectrum Emulations

KEYSIGHT Input Ref: **Amplitude DC**
R/L T $\rightarrow$ **Align Auto**

Input 2: 50.0
Cen Freq: 3.500 GHz
Ref Freq: Ref (S)

Att: 20 dB
Tsp Freq: 22.000000000 GHz
Ampl: 44.300300
Range: Stop None

FAIL

3.4 GHz Range Graph
Scale/Div 10.0 dB
Ret Lvl Offset: 15.59 dB
Ret Value: 30.00 dBm

Start 3.500 GHz
Stop 3.750 GHz

3.4 GHz Range Table

Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δf [MHz]
1	1	3.5000 GHz	3.5000 GHz	1.000 MHz	3.529110000 GHz	-47.59 dBm	-7.394 dB
2	2	3.5300 GHz	3.5400 GHz	1.000 MHz	3.534816667 GHz	-45.19 dBm	-20.19 dB
3	3	3.5400 GHz	3.5450 GHz	1.000 MHz	3.545280000 GHz	-44.28 dBm	-51.28 dB
4	4	3.5450 GHz	3.5500 GHz	430.0 kHz	3.549669667 GHz	-47.53 dBm	-34.53 dB
5	5	3.5500 GHz	3.5600 GHz	100.0 kHz	3.569533333 GHz	-18.27 dBm	-11.73 dB
6	6	3.5800 GHz	3.5910 GHz	430.0 kHz	3.590035000 GHz	-10.91 dBm	2.845 dB
7	7	3.6910 GHz	3.6930 GHz	1.000 MHz	3.692620000 GHz	-27.16 dBm	-14.16 dB
8	8	3.6300 GHz	3.7200 GHz	1.000 MHz	3.636960000 GHz	-51.06 dBm	-26.06 dB
9	9	3.7200 GHz	3.7500 GHz	1.000 MHz	3.736900000 GHz	-51.20 dBm	-11.20 dB

Spectrum Analyzer 1
Channel Power

KEYSIGHT Input: RF
Coupling: DC
Align: Auto

R.T. →

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

Att'n: 10 dB
#NO: Fast

Trig: Free Run
Gate: Off
#F: Gain Low

Center Freq: 3.590215000 GHz
Agi: 40 dB
Video Std: None

1 Graph

Scale/Div: 10.0 dB

Log

Ref Lut Offset: 19.09 dB
Ref Value: 30.06 dBm

Center: 3.5902150 GHz
#Res BW: 30.000 kHz

#Video BW: 91.000 kHz

Span: 860 kHz
Sweep: 1.20 ms (1001 pts)

2 Metrics

Total Channel Power	-21.99 dBm / 430 kHz
Total Power Spectral Density	-76.32 dBm/Hz

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KEYSIGHT Input Ref. **3.5000 GHz**
 R.L.T. **→** **Channel DC**
Use PASS **Algo. Auto**

Input 2: 50.0
 Corr C-Corr
 Freq Ref: 1st (S)

Att: 20 dB

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

Center Freq: 22.005000000 GHz
 Aegrid: 100100
 Ratio Std: None

3.40 Range Graph
 Scale/Div: 10.0 dB
 Ref Lvl Offset: 15.52 dBm
 Ref Value: 30.00 dBm

Start: 3.500 GHz
 Stop: 3.750 GHz

3.40 Range Table

Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	ΔLme
1	1	3.5000 GHz	3.5000 GHz	1.000 MHz	3.528200000 GHz	-40.77 dBm	-0.765 dB
2	2	3.5000 GHz	3.5400 GHz	1.000 MHz	3.555666667 GHz	-37.87 dBm	-12.87 dB
3	3	3.5400 GHz	3.5450 GHz	1.000 MHz	3.547820000 GHz	-31.68 dBm	-8.69 dB
4	4	3.5400 GHz	3.5500 GHz	430.0 kHz	3.546971667 GHz	-30.24 dBm	-17.24 dB
5	5	3.5500 GHz	3.5500 GHz	100.0 kHz	3.556666667 GHz	-3.090 dBm	-33.09 dB
6	6	3.5900 GHz	3.5910 GHz	430.0 kHz	3.590878333 GHz	-30.19 dBm	-17.19 dB
7	7	3.5910 GHz	3.6300 GHz	1.000 MHz	3.597880000 GHz	-38.21 dBm	-23.21 dB
8	8	3.6300 GHz	3.7200 GHz	1.000 MHz	3.637200000 GHz	-45.40 dBm	-20.40 dB
9	9	3.7200 GHz	3.7500 GHz	1.000 MHz	3.741650000 GHz	-50.44 dBm	-10.44 dB

Spectrum Analyzer 1
Software Emulation

KEYSIGHT Input RF
R.L.T. $\leftrightarrow$ Coupling DC
Align Auto

Input 2, 50.0 GHz
Corr Coef
Freq Ref Int (S)

Attenu 20 dB

Trig Free Run
Gate Off
IF Gain Low

Center Freq 22.05000000 GHz
Avg/Hold 10/100
Radio Std None

3.41 Range Graph
Scale/Div 10.0 dB

Ref Lvl Offset 15.59 dB
Ref Value 30.0 dBm

Start 3.500 GHz

Stop 3.750 GHz

4.01 Range Table

Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Offset
1	1	3.5000 GHz	3.5300 GHz	1.000 MHz	3.527500000 GHz	-21.78 dBm	-1.881 dB
2	2	3.5300 GHz	3.5400 GHz	1.000 MHz	3.537500000 GHz	-37.67 dBm	-12.67 dB
3	3	3.5400 GHz	3.5490 GHz	1.000 MHz	3.544860000 GHz	-28.76 dBm	-15.76 dB
4	4	3.5490 GHz	3.5500 GHz	430.0 MHz	3.549319667 GHz	-30.21 dBm	-17.21 dB
5	5	3.5500 GHz	3.5600 GHz	1.000 MHz	3.573333333 GHz	-3.435 dBm	-33.43 dB
6	6	3.5600 GHz	3.5910 GHz	430.0 MHz	3.560016667 GHz	-26.41 dBm	-13.41 dB
7	7	3.5910 GHz	3.6300 GHz	1.000 MHz	3.606666667 GHz	-36.61 dBm	-29.61 dB
8	8	3.6300 GHz	3.7200 GHz	1.000 MHz	3.633150000 GHz	-46.27 dBm	-21.27 dB
9	9	3.7200 GHz	3.7500 GHz	1.000 MHz	3.742750000 GHz	-50.60 dBm	-10.60 dB

Spectrum Analyzer 1
Spurious Emissions

KEYSIGHT Input RF Input 2: 90.0 GHz
R/L T + Coaxial DC Corr Coax
Align: Auto Freq Test (Int) IF Gain: Low Radio Std: None

3.4 GHz Range
Scale/Div 10.0 dB
Start 3.500 GHz
4 All Range Table

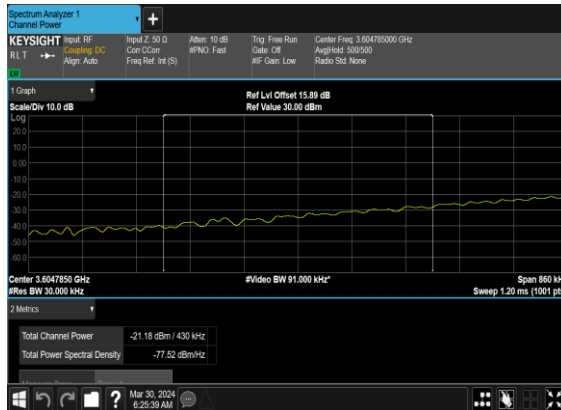
Ref Lvl Offset 15.89 dB
Ref Value 30.00 dBm

Stop 3.750 GHz

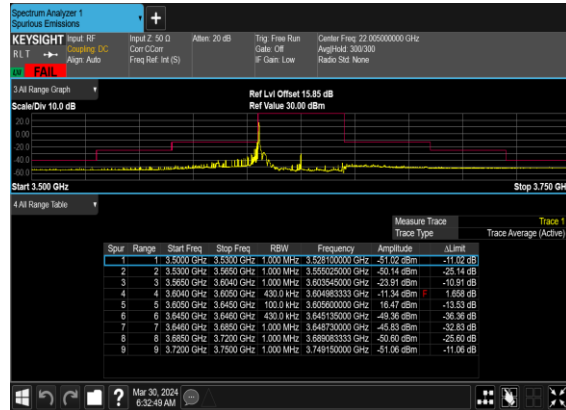
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	ΔLvl
					Trace Type	Trace Average	(Active)
1	1	3.5000 GHz	3.5000 GHz	1.000 MHz	3.512300000 GHz	-32.17 dBm	-14.17 dB
2	2	3.5300 GHz	3.5650 GHz	1.000 MHz	3.562725000 GHz	-48.93 dBm	-23.93 dB
3	3	3.5850 GHz	3.6040 GHz	1.000 MHz	3.603540000 GHz	-23.82 dBm	-10.82 dB
4	4	3.6300 GHz	3.6500 GHz	430.0 MHz	3.648491667 GHz	-11.83 dBm	-1.47 dB
5	5	3.6050 GHz	3.6450 GHz	10.00 MHz	3.605600000 GHz	-17.54 dBm	-12.46 dB
6	6	3.6450 GHz	3.6480 GHz	430.0 MHz	3.645190000 GHz	-49.26 dBm	-36.26 dB
7	7	3.6450 GHz	3.6850 GHz	1.000 MHz	3.647620000 GHz	-44.68 dBm	-31.89 dB
8	8	3.6850 GHz	3.7200 GHz	1.000 MHz	3.688850000 GHz	-51.23 dBm	-26.23 dB
9	9	3.7200 GHz	3.7500 GHz	1.000 MHz	3.745000000 GHz	-51.04 dBm	-11.04 dB

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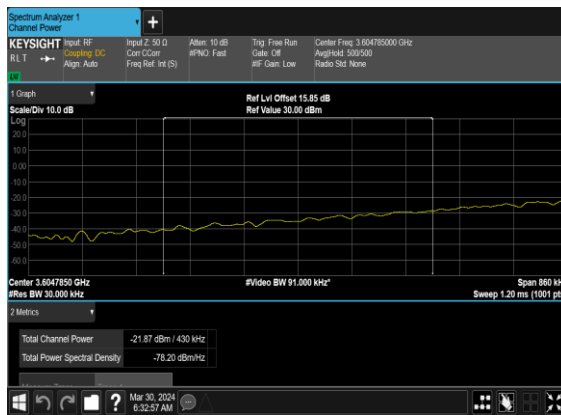
N48(40M)_DFT-s- OFDM_BPSK_Edge_1RB_Left_Mid_CH_Chp_P ASS



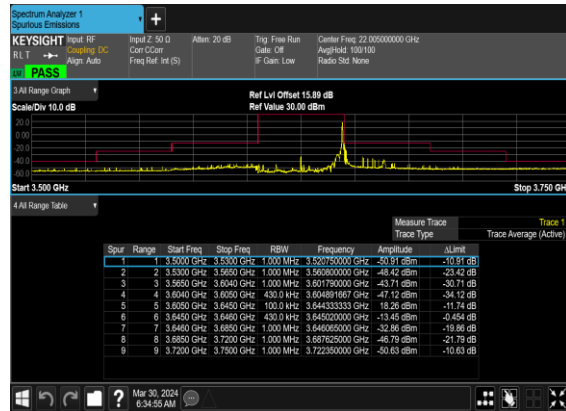
N48(40M)_DFT-s- OFDM_QPSK_Edge_1RB_Left_Mid_CH



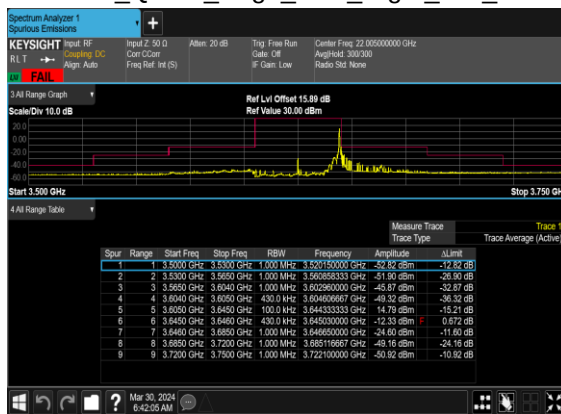
N48(40M)_DFT-s- OFDM_QPSK_Edge_1RB_Left_Mid_CH_Chp_P PASS



N48(40M)_DFT-s- OFDM_BPSK_Edge_1RB_Right_Mid_CH



N48(40M)_DFT-s- OFDM_QPSK_Edge_1RB_Right_Mid_CH



N48(40M)_DFT-s- OFDM_QPSK_Edge_1RB_Right_Mid_CH_Chp_P PASS

