

99% & 26dB Bandwidth

Test Result

5G NR N38 SCS=30kHz 10MHz						
Modulation	CH	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	Low	Outer_Full	8.5767	9.567	/	Pass
CP-OFDM QPSK		Outer_Full	8.5822	9.793	/	Pass
DFT-s-OFDM PI/2 BPSK	Middle	Outer_Full	8.5521	9.666	/	Pass
CP-OFDM QPSK		Outer_Full	8.6104	9.749	/	Pass
DFT-s-OFDM PI/2 BPSK	High	Outer_Full	8.5817	9.814	/	Pass
CP-OFDM QPSK		Outer_Full	8.6114	9.513	/	Pass

5G NR N38 SCS=30kHz 15MHz						
Modulation	CH	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	Low	Outer_Full	12.928	14.51	/	Pass
CP-OFDM QPSK		Outer_Full	13.557	14.58	/	Pass
DFT-s-OFDM PI/2 BPSK	Middle	Outer_Full	12.871	13.85	/	Pass
CP-OFDM QPSK		Outer_Full	13.63	15.06	/	Pass
DFT-s-OFDM PI/2 BPSK	High	Outer_Full	12.892	14.31	/	Pass
CP-OFDM QPSK		Outer_Full	13.636	14.86	/	Pass

5G NR N38 SCS=30kHz 20MHz						
Modulation	CH	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	Low	Outer_Full	17.787	19.02	/	Pass
CP-OFDM QPSK		Outer_Full	18.218	19.4	/	Pass
DFT-s-OFDM PI/2 BPSK	Middle	Outer_Full	17.809	19.55	/	Pass
CP-OFDM QPSK		Outer_Full	18.215	19.49	/	Pass
DFT-s-OFDM PI/2 BPSK	High	Outer_Full	17.884	18.76	/	Pass
CP-OFDM QPSK		Outer_Full	18.21	19.65	/	Pass

Peak-Average Ratio

Test Result

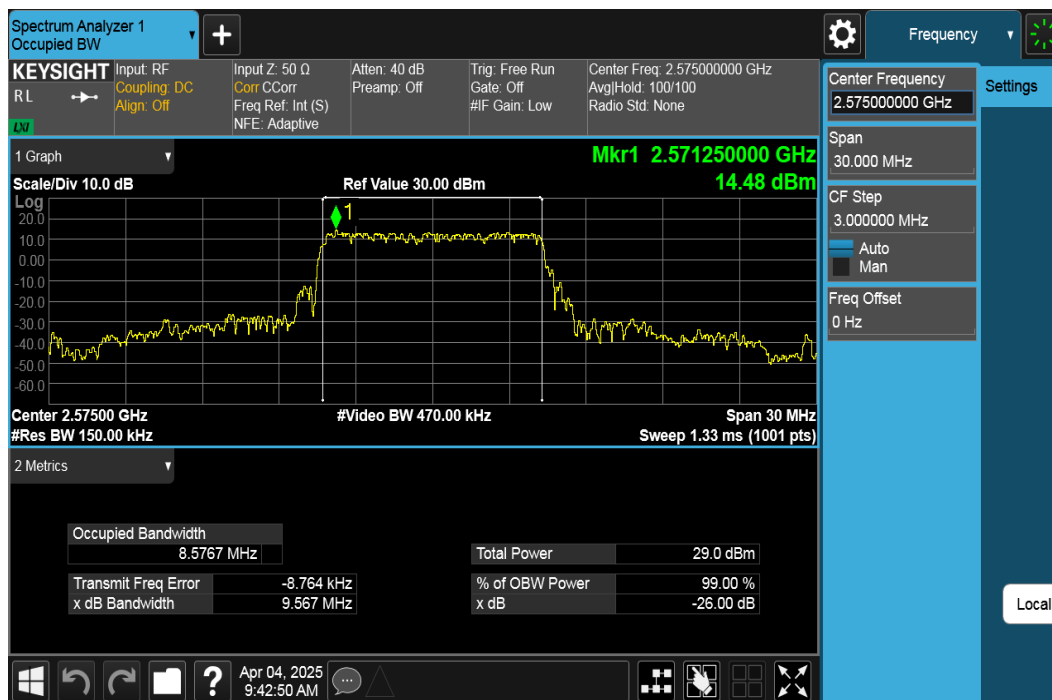
5G NR N38 SCS=30kHz 10MHz					
Modulation	CH	RB Allocation	Peak-Average Ratio (dB)	Limit	Verdict
DFT-s-OFDM PI/2 BPSK	Low	Outer_Full	4.03	<=13	Pass
CP-OFDM QPSK		Outer_Full	6.96	<=13	Pass
DFT-s-OFDM PI/2 BPSK	Middle	Outer_Full	3.92	<=13	Pass
CP-OFDM QPSK		Outer_Full	6.85	<=13	Pass
DFT-s-OFDM PI/2 BPSK	High	Outer_Full	4.12	<=13	Pass
CP-OFDM QPSK		Outer_Full	7.19	<=13	Pass

5G NR N38 SCS=30kHz 15MHz					
Modulation	CH	RB Allocation	Peak-Average Ratio (dB)	Limit	Verdict
DFT-s-OFDM PI/2 BPSK	Low	Outer_Full	4.21	<=13	Pass
CP-OFDM QPSK		Outer_Full	7.17	<=13	Pass
DFT-s-OFDM PI/2 BPSK	Middle	Outer_Full	4.14	<=13	Pass
CP-OFDM QPSK		Outer_Full	7.01	<=13	Pass
DFT-s-OFDM PI/2 BPSK	High	Outer_Full	4.27	<=13	Pass
CP-OFDM QPSK		Outer_Full	7.15	<=13	Pass

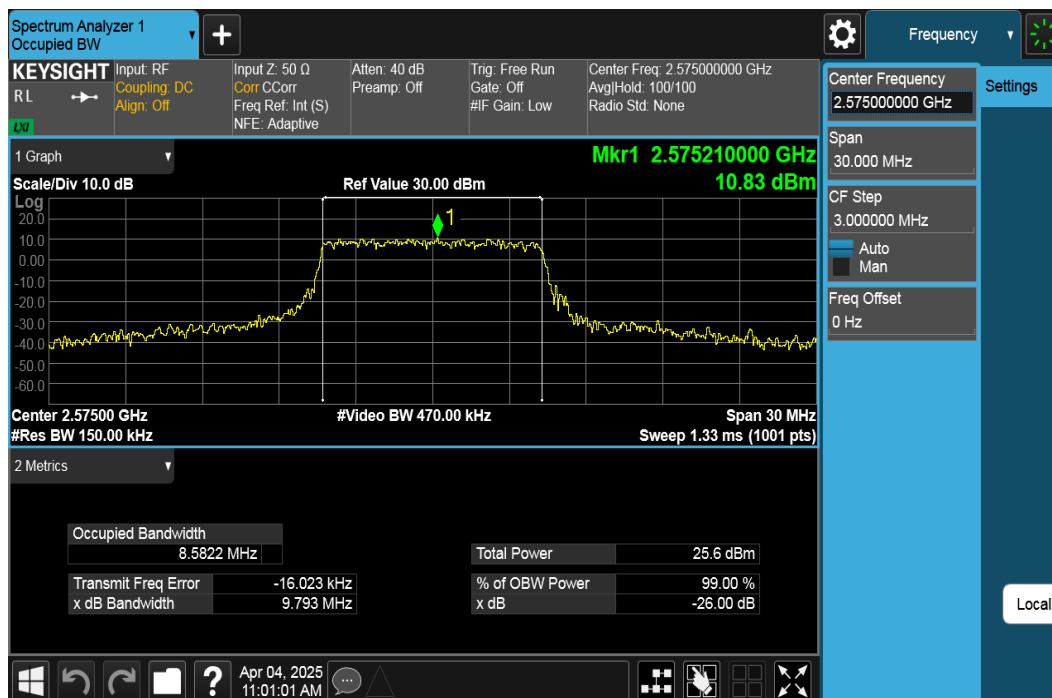
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Modulation	CH	RB Allocation	Peak-Average Ratio (dB)	Limit	Verdict
DFT-s-OFDM PI/2 BPSK	Low	Outer_Full	4.2	<=13	Pass
CP-OFDM QPSK		Outer_Full	7.13	<=13	Pass
DFT-s-OFDM PI/2 BPSK	Middle	Outer_Full	4.19	<=13	Pass
CP-OFDM QPSK		Outer_Full	7.13	<=13	Pass
DFT-s-OFDM PI/2 BPSK	High	Outer_Full	4.23	<=13	Pass
CP-OFDM QPSK		Outer_Full	7.27	<=13	Pass

OBW Test graph

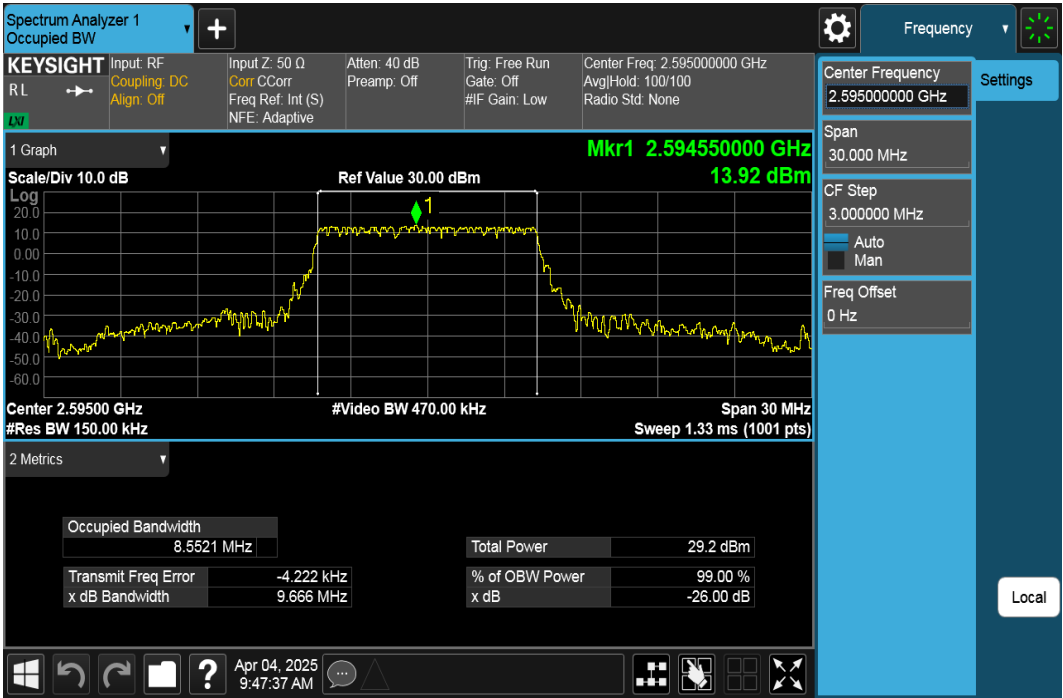
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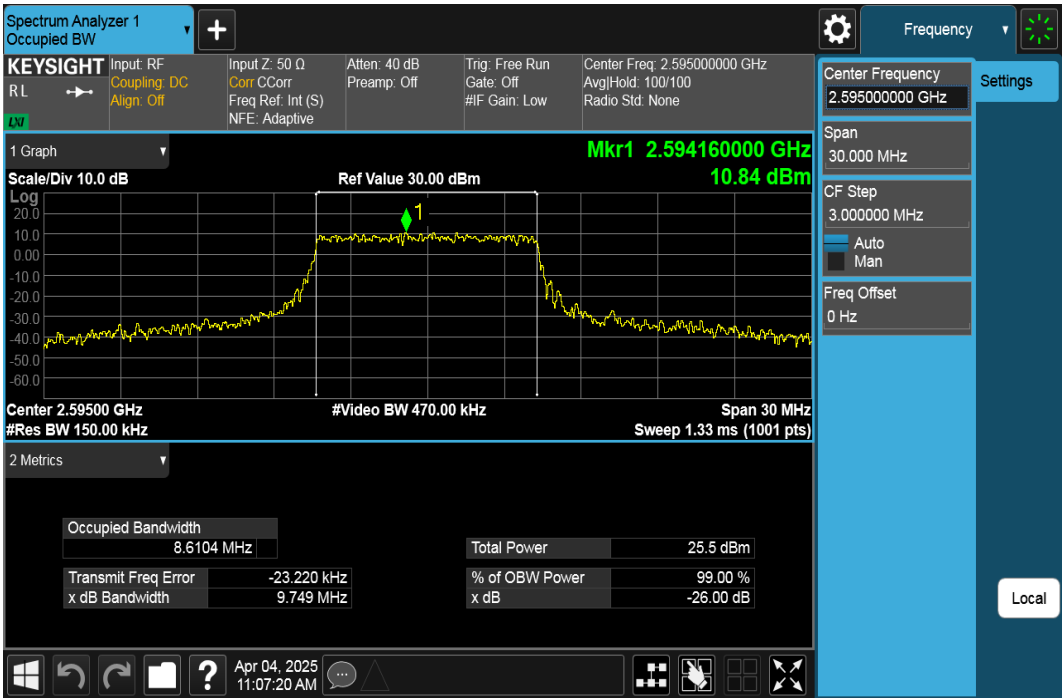
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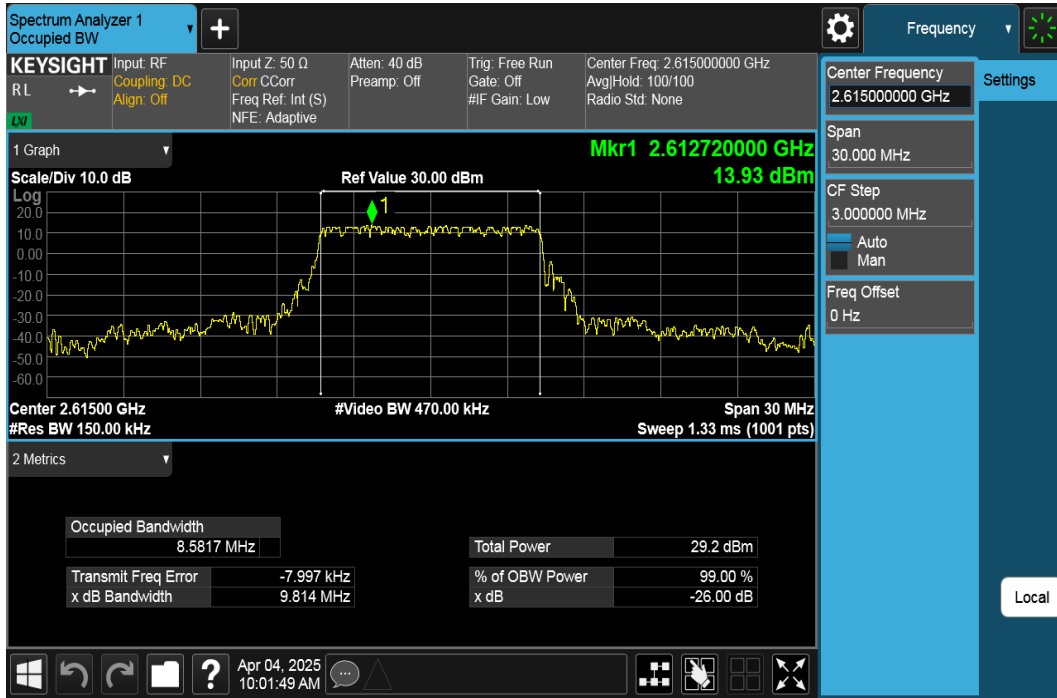
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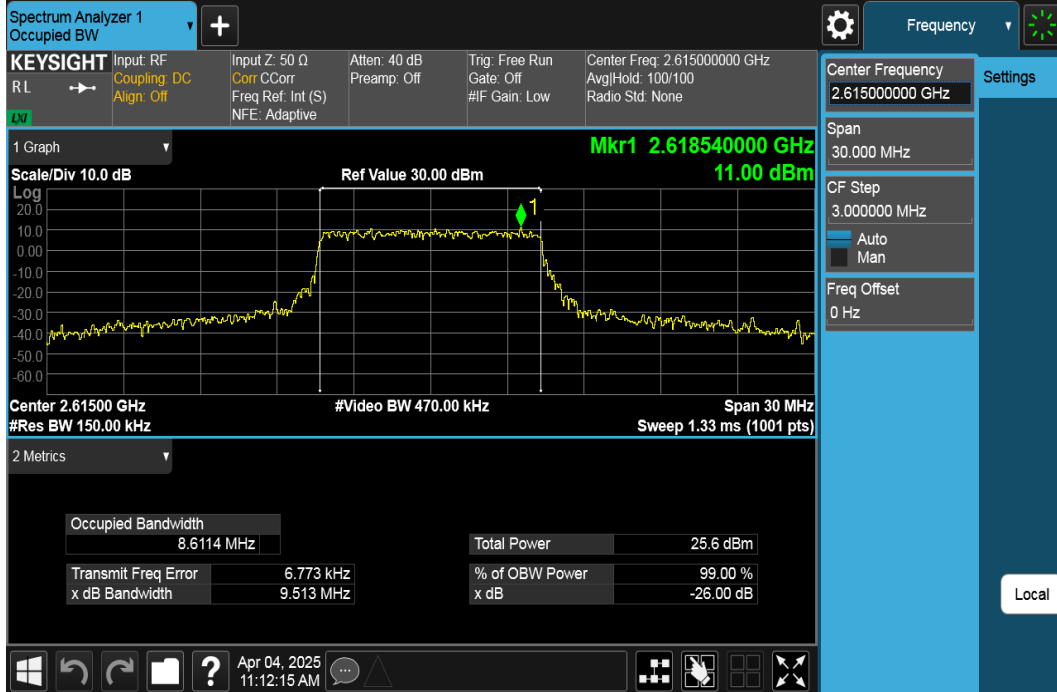
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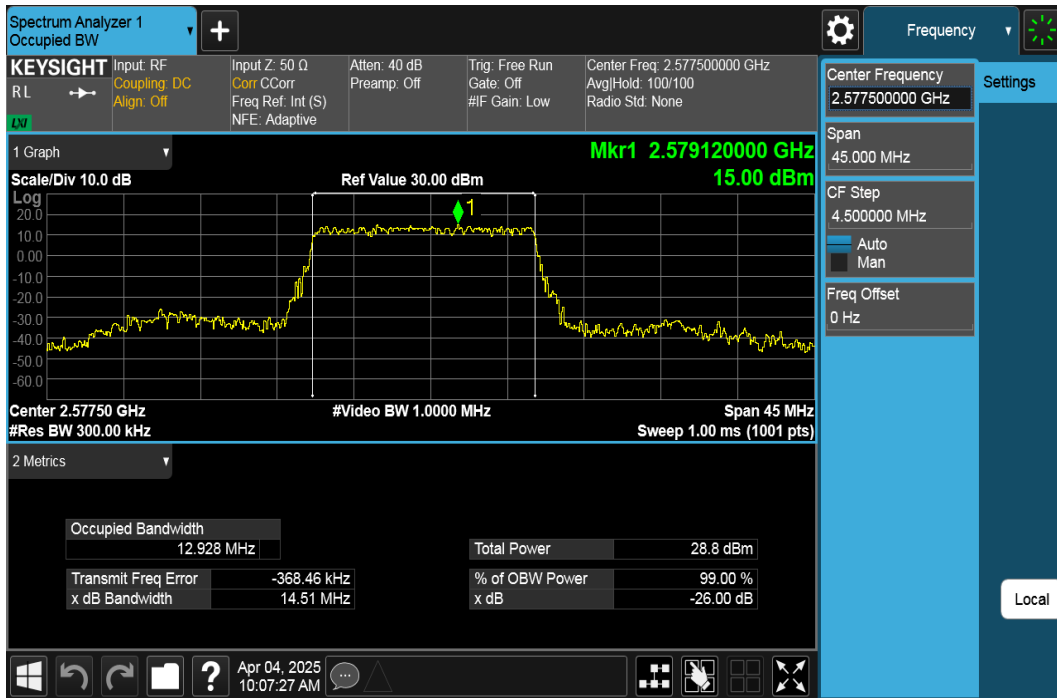
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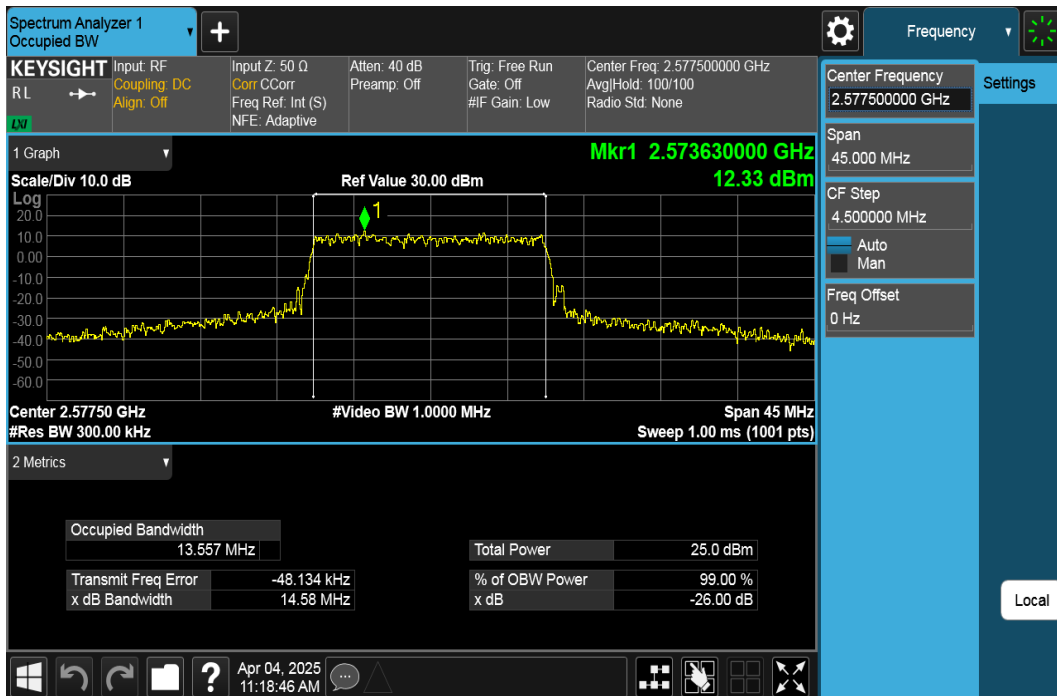
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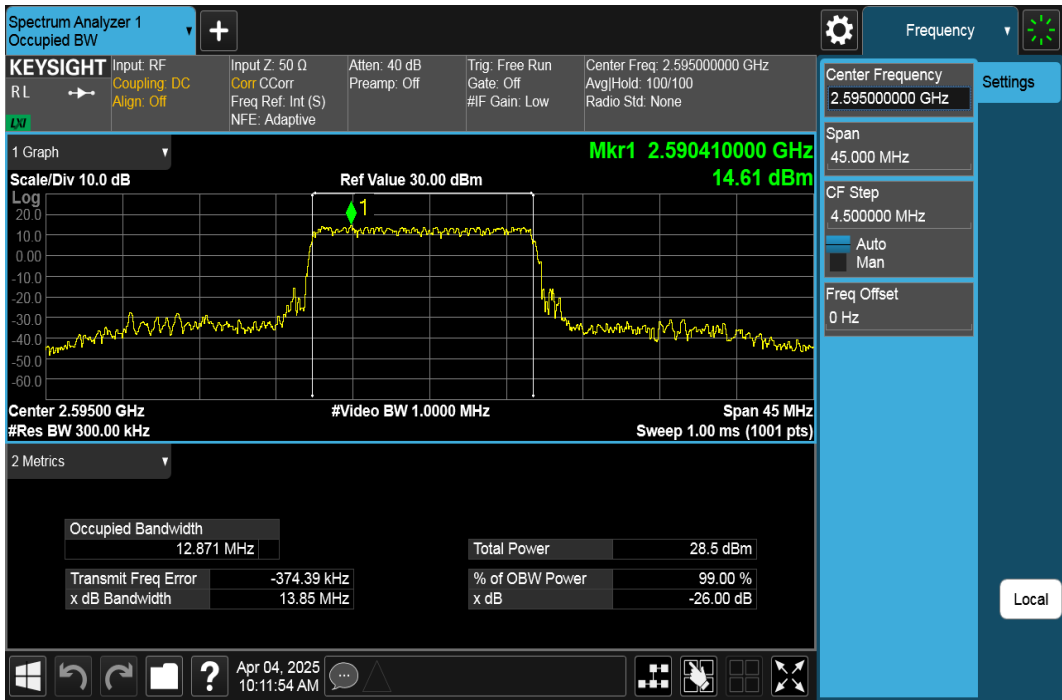
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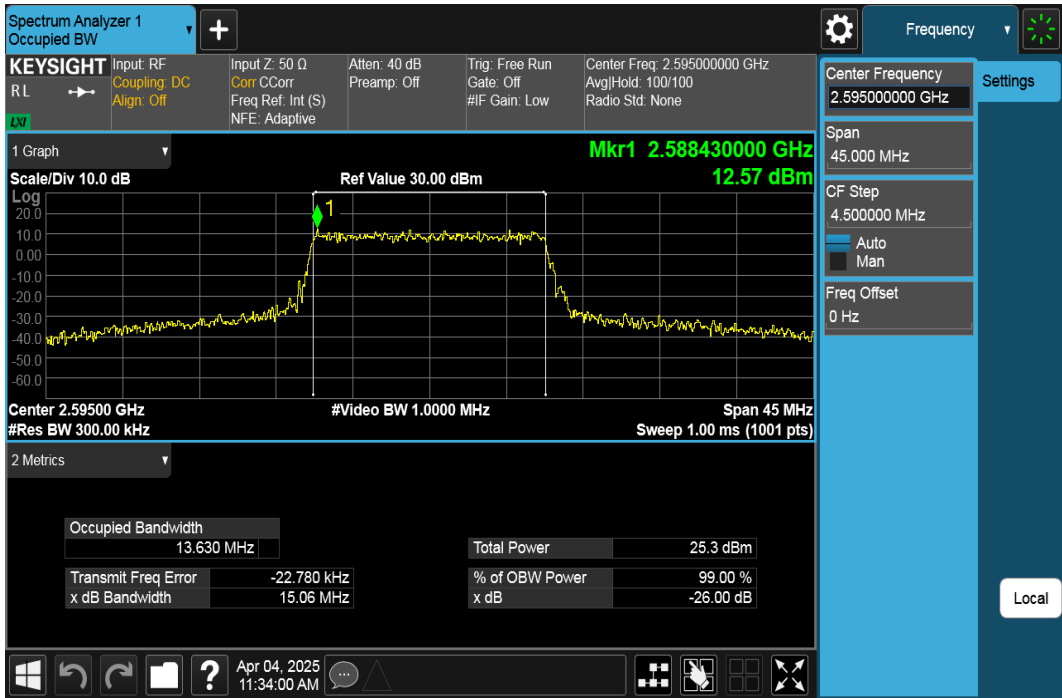
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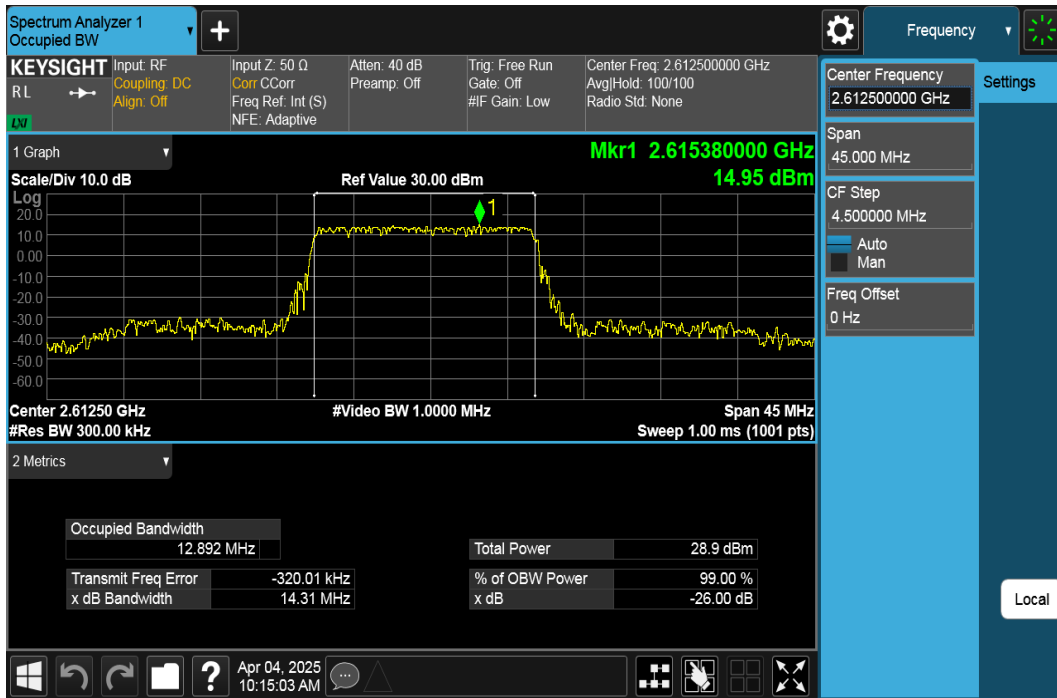
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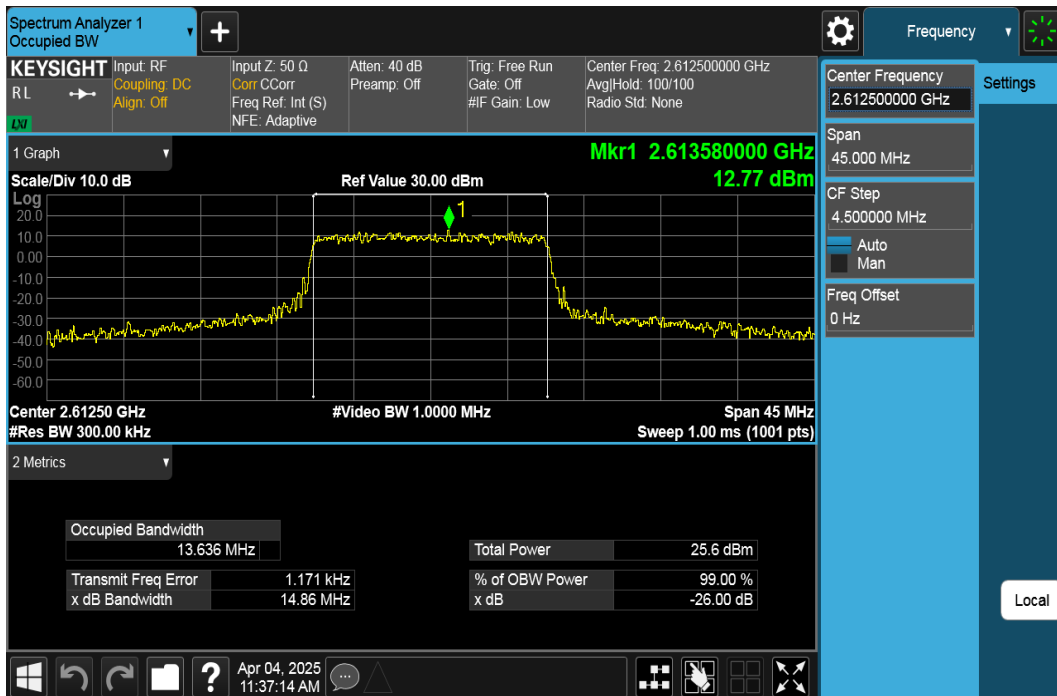
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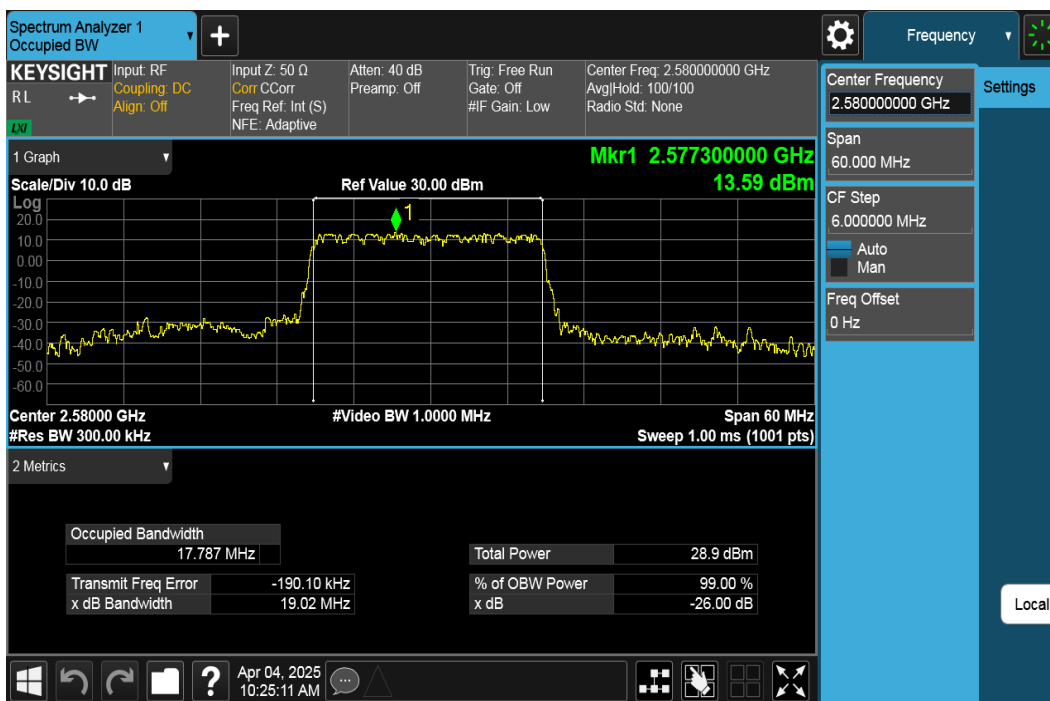
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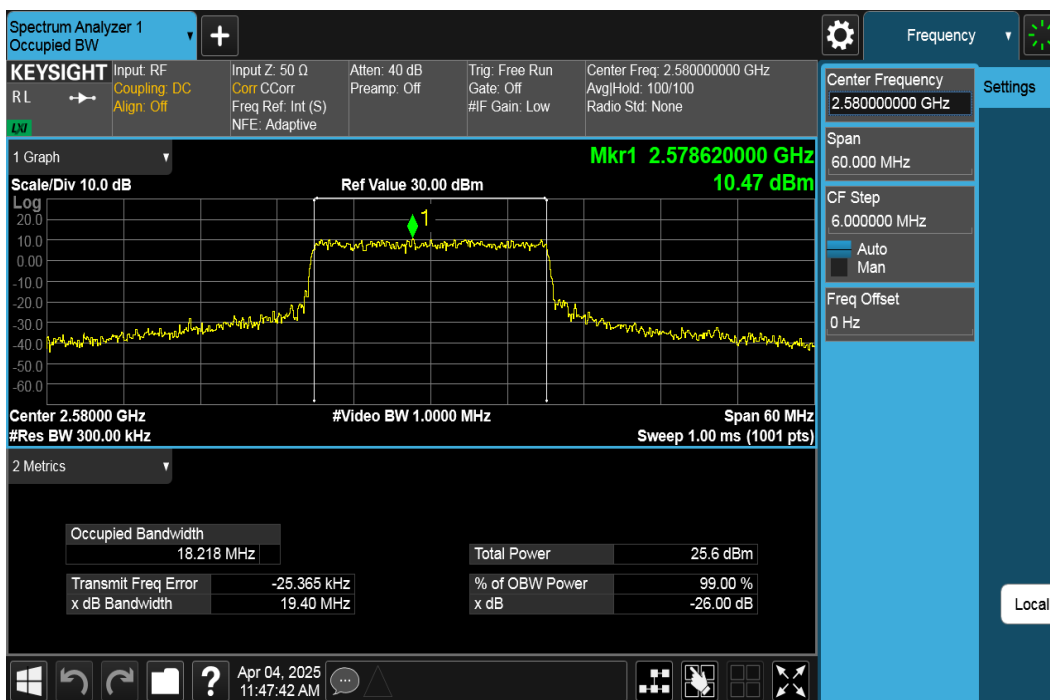
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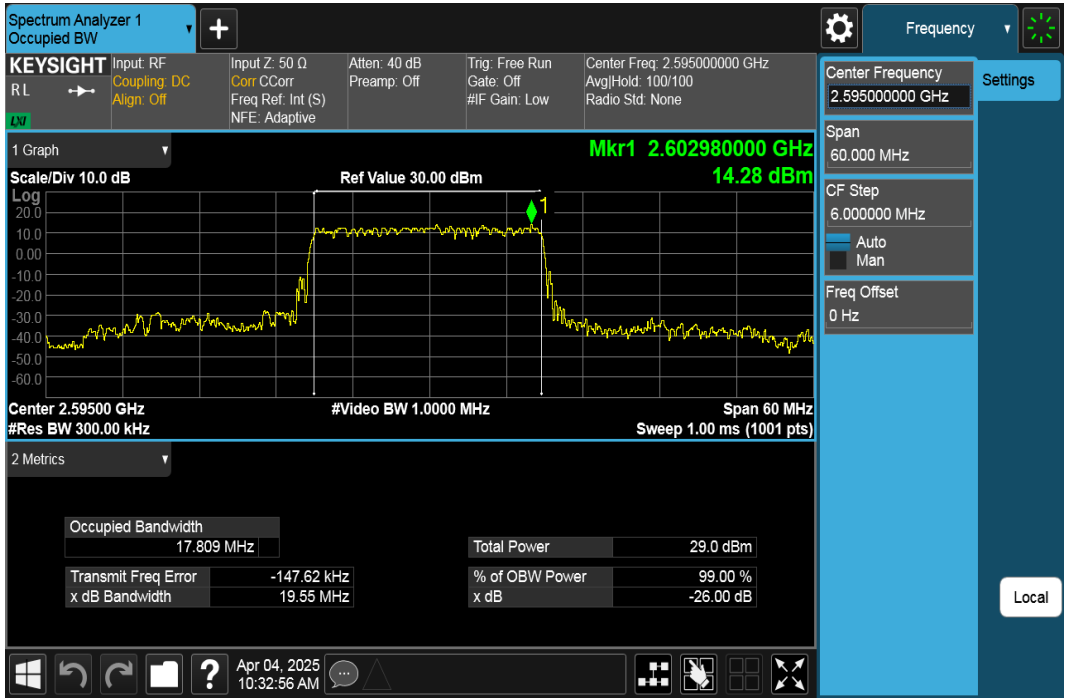
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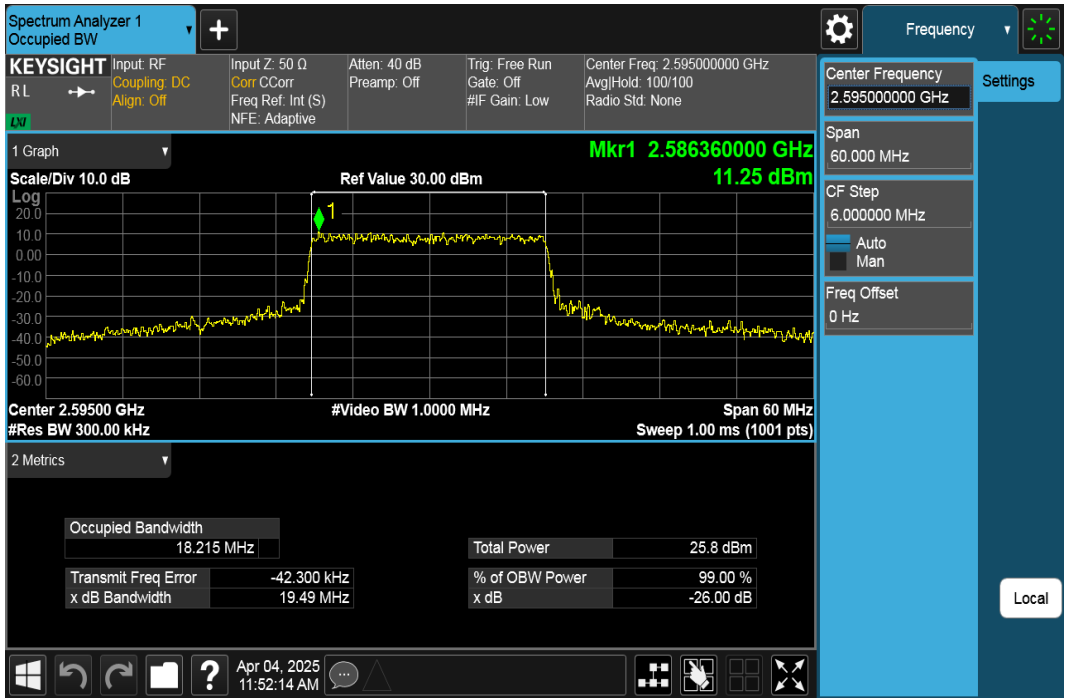
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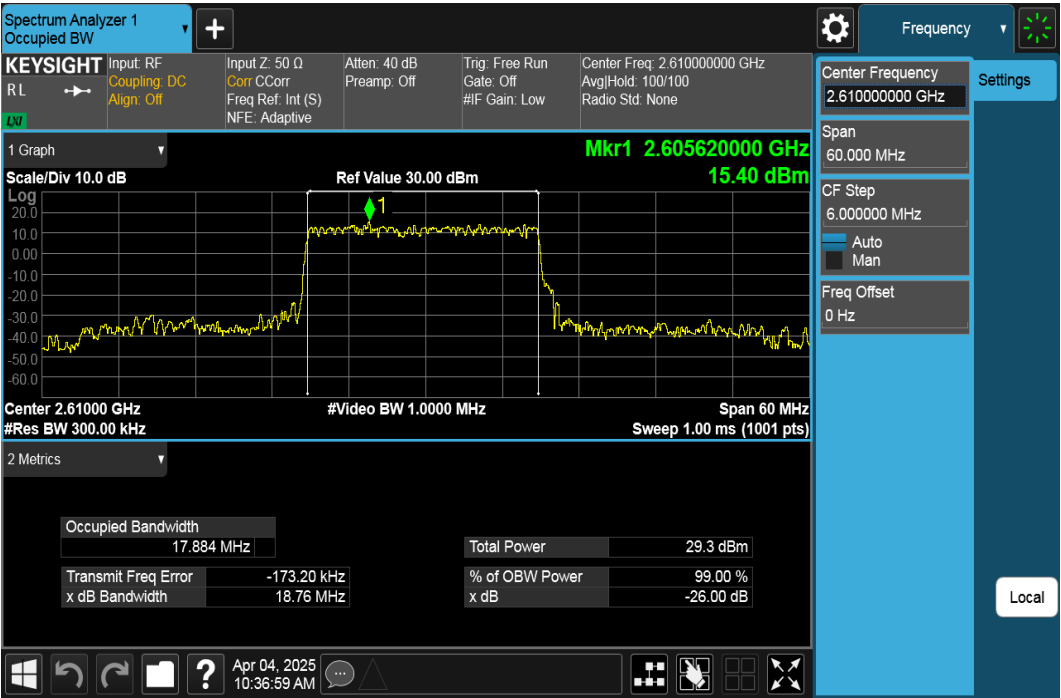
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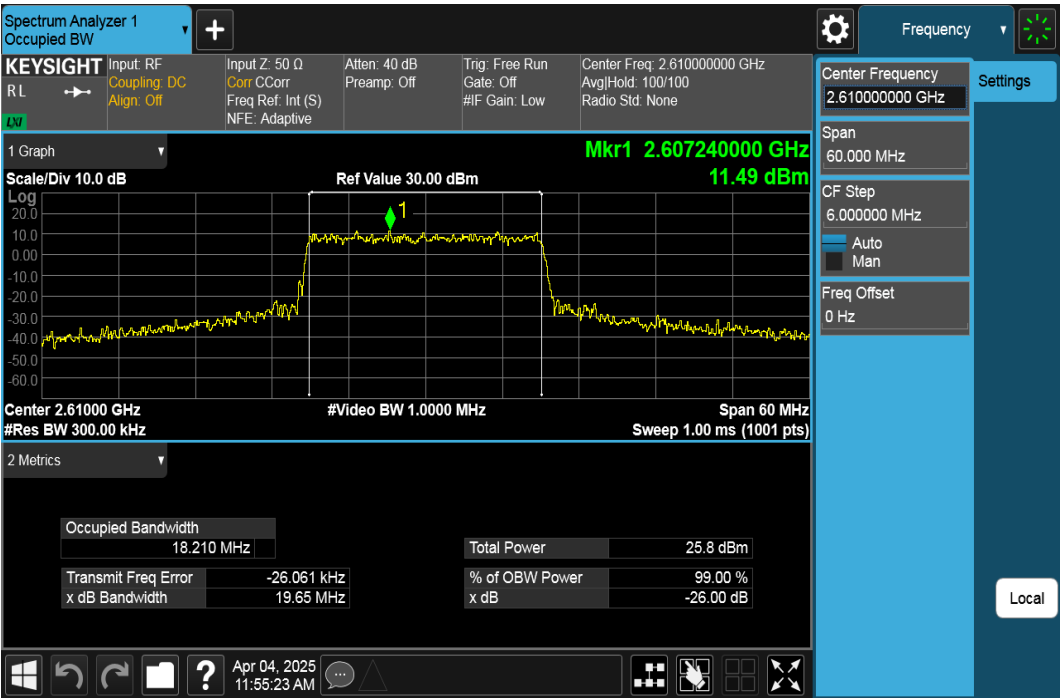
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N38-20M-OBW-HCH-DFT-s-OFDM-Pi2 BPSK-Outer_Full



N38-20M-OBW-HCH-CP-OFDM-QPSK-Outer_Full



PAPR Test graph

N38-10M-PAPR-LCH-DFT-s-OFDM-Pi2 BPSK-Outer_Full



N38-10M-PAPR-LCH-CP-OFDM-QPSK-Outer_Full



N38-10M-PAPR-MCH-DFT-s-OFDM-Pi2 BPSK-Outer_Full



N38-10M-PAPR-MCH-CP-OFDM-QPSK-Outer_Full



N38-10M-PAPR-HCH-DFT-s-OFDM-Pi2 BPSK-Outer_Full



N38-10M-PAPR-HCH-CP-OFDM-QPSK-Outer_Full



N38-15M-PAPR-LCH-DFT-s-OFDM-Pi2 BPSK-Outer_Full



N38-15M-PAPR-LCH-CP-OFDM-QPSK-Outer_Full



N38-15M-PAPR-MCH-DFT-s-OFDM-Pi2 BPSK-Outer_Full



N38-15M-PAPR-MCH-CP-OFDM-QPSK-Outer_Full



N38-15M-PAPR-HCH-DFT-s-OFDM-Pi2 BPSK-Outer_Full



N38-15M-PAPR-HCH-CP-OFDM-QPSK-Outer_Full



N38-20M-PAPR-LCH-DFT-s-OFDM-Pi2 BPSK-Outer_Full



N38-20M-PAPR-LCH-CP-OFDM-QPSK-Outer_Full



N38-20M-PAPR-MCH-DFT-s-OFDM-Pi2 BPSK-Outer_Full



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N38-20M-PAPR-HCH-DFT-s-OFDM-Pi2 BPSK-Outer_Full



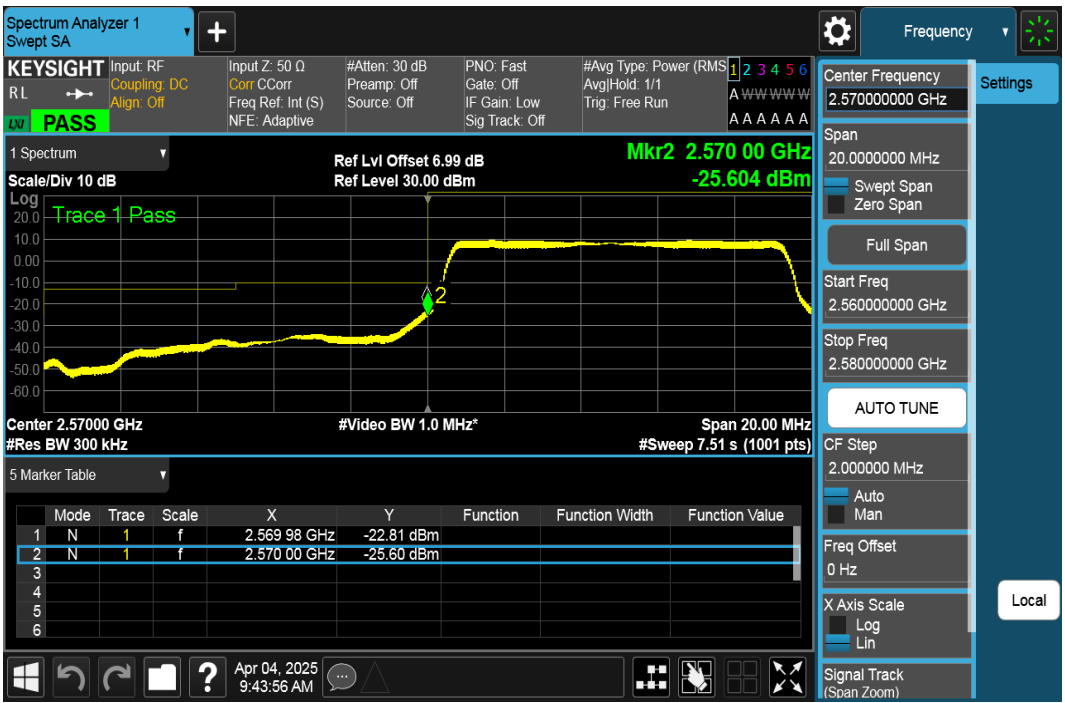
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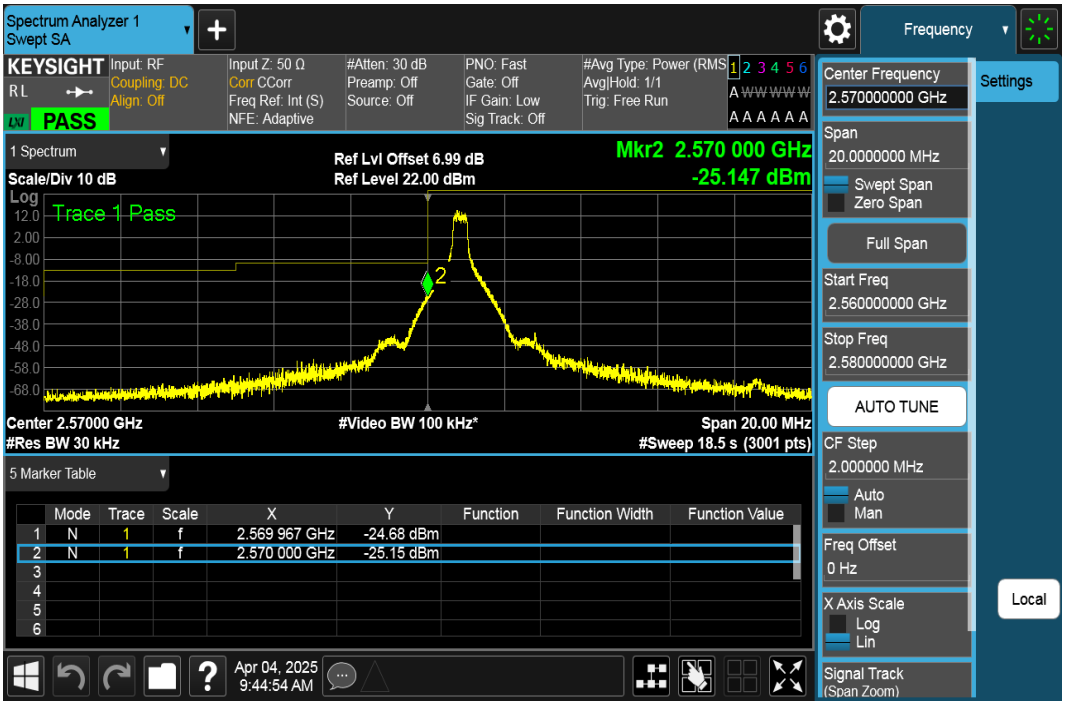
Bandedge

test graph

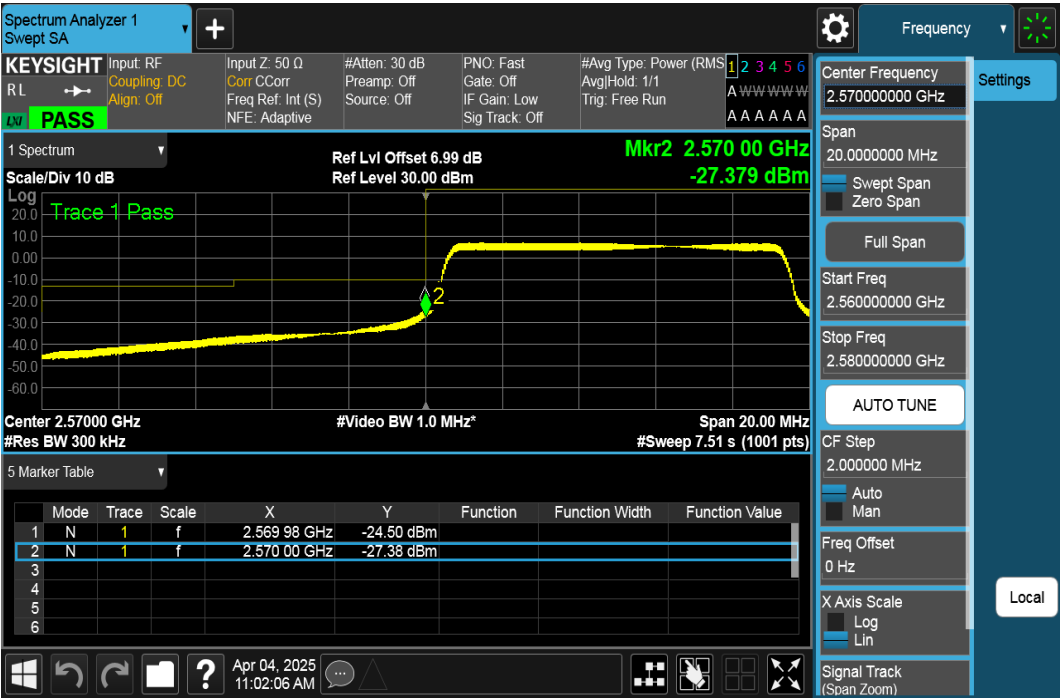
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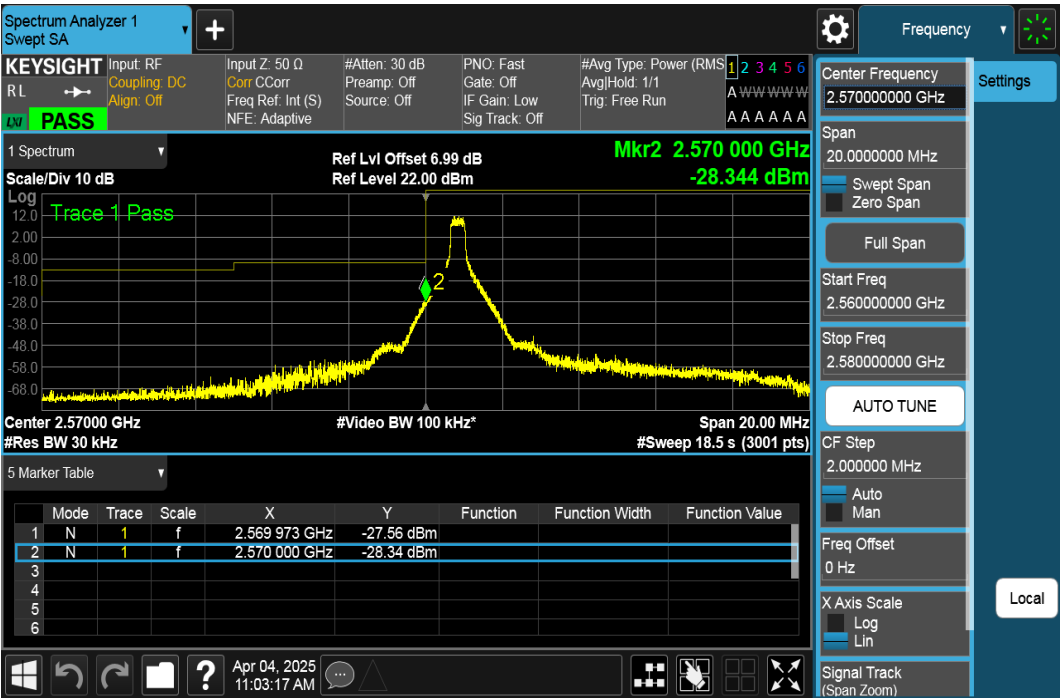
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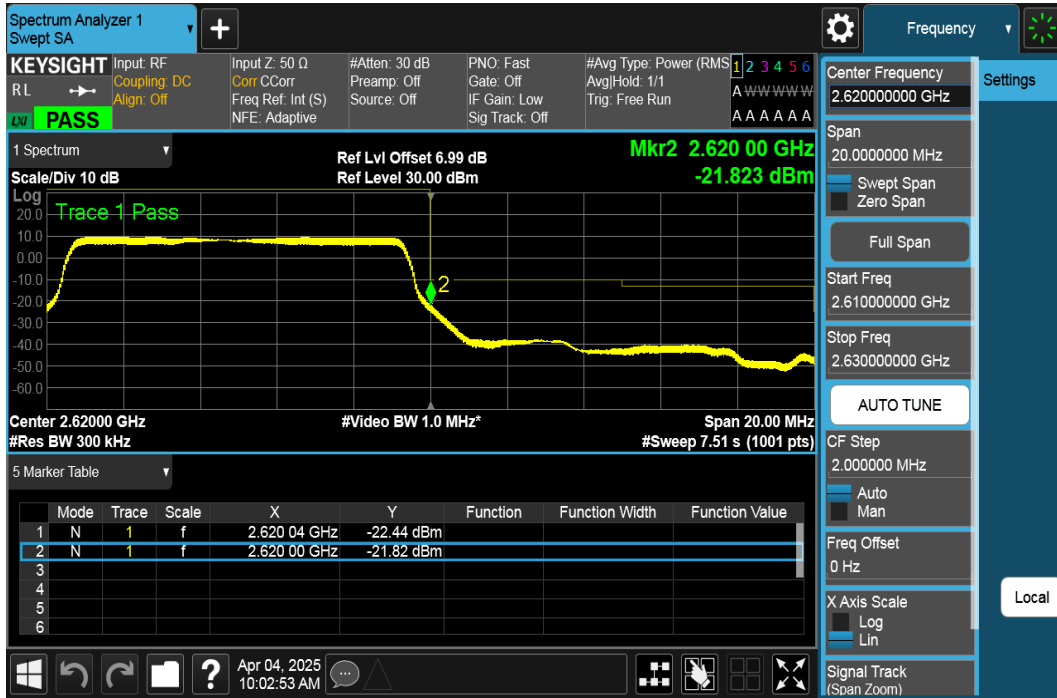
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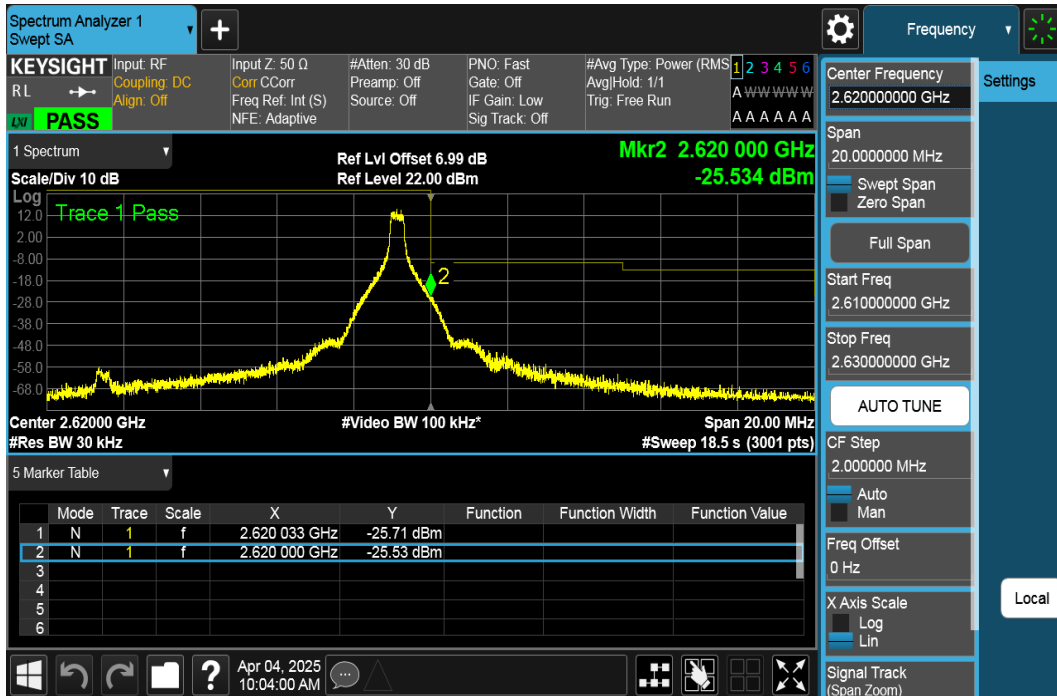
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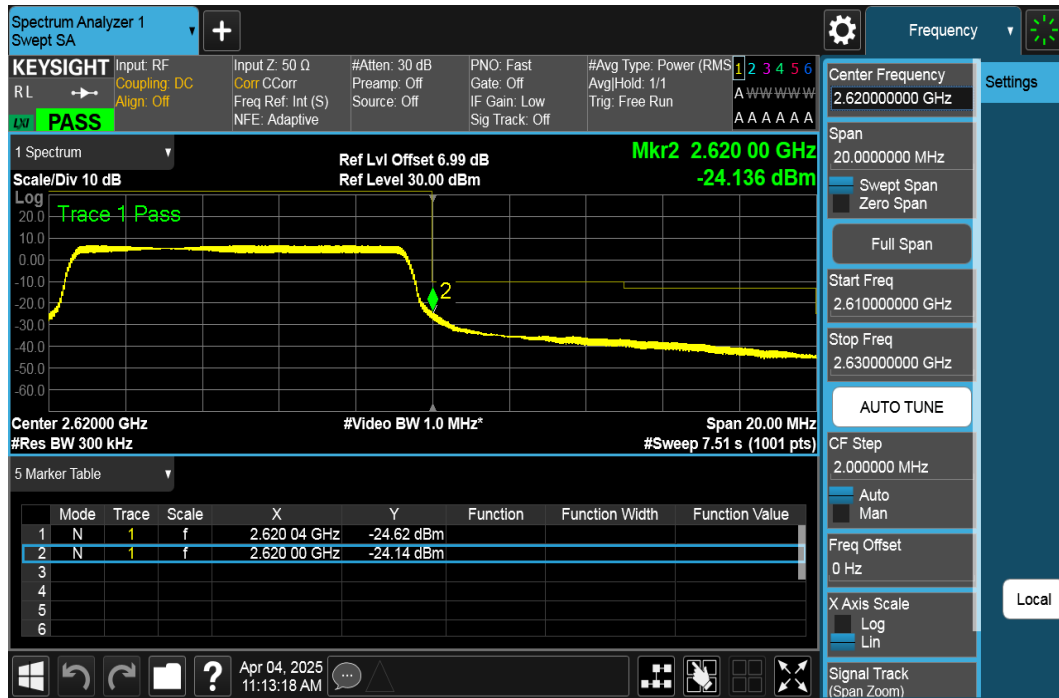
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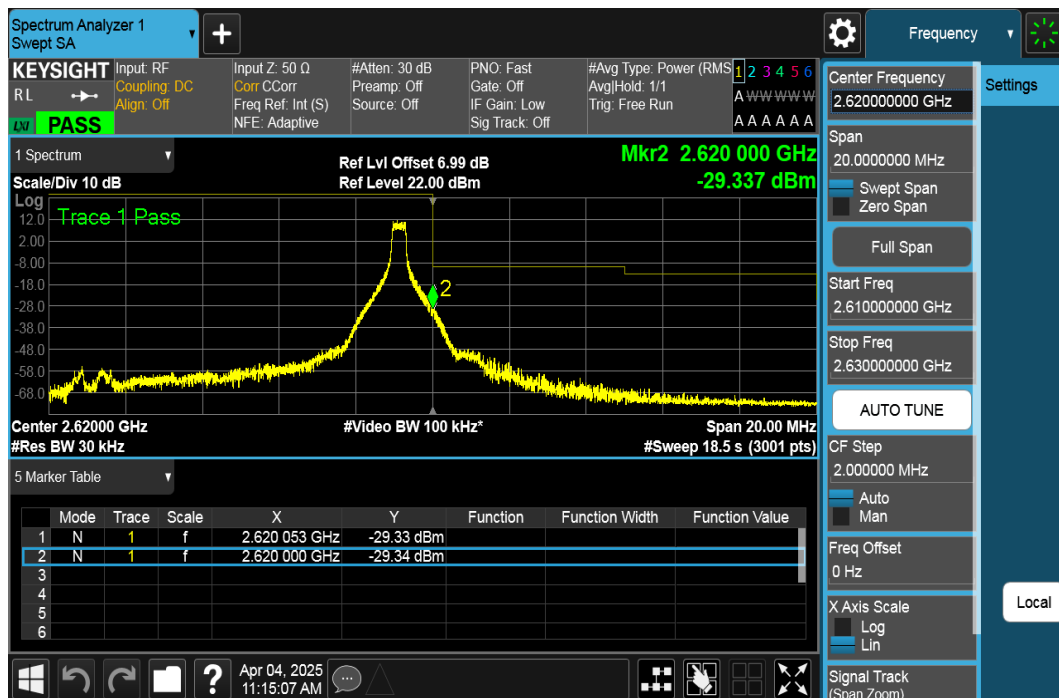
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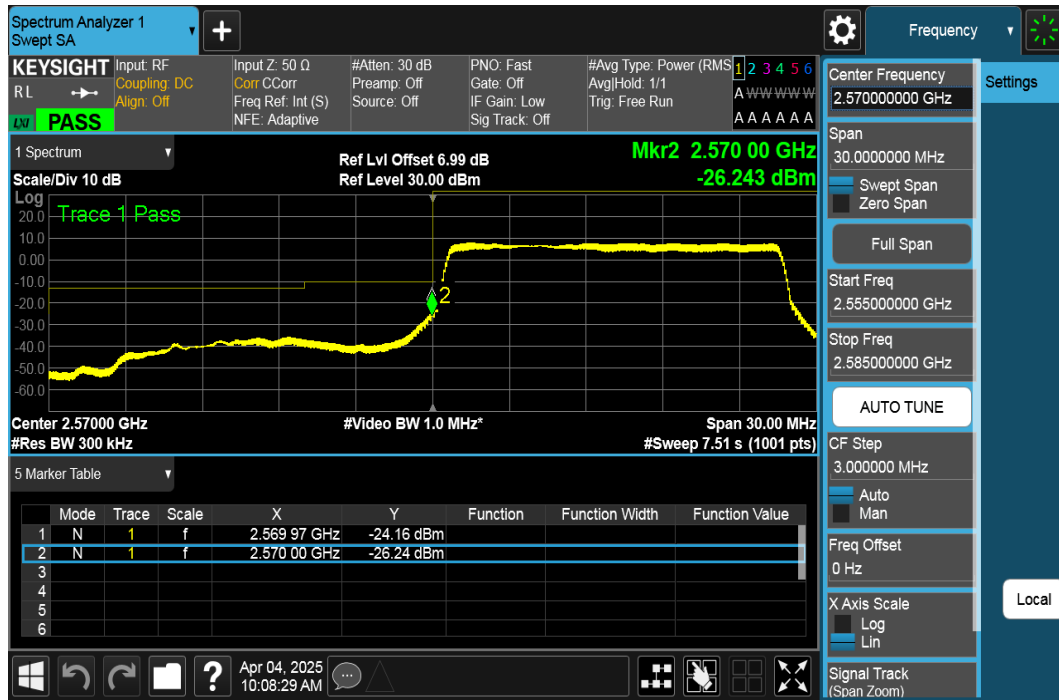
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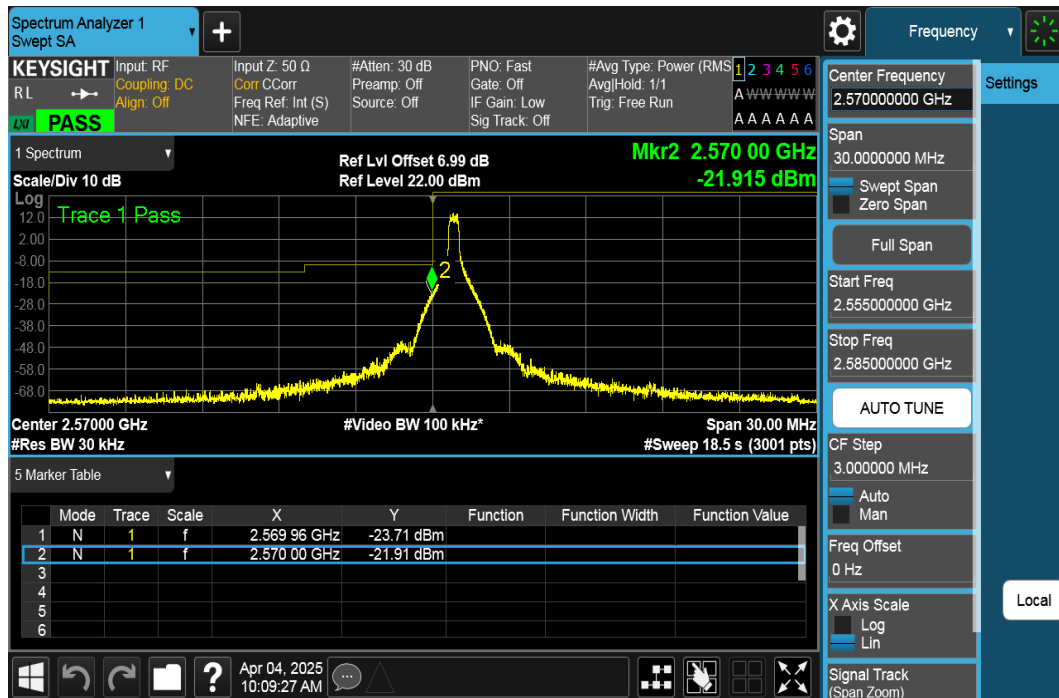
N38-10M-Bandedge-HCH-CP-OFDM-QPSK-1RB_MAX



N38-15M-Bandedge-LCH-DFT-s-OFDM-Pi2 BPSK-Outer_Full



N38-15M-Bandedge-LCH-DFT-s-OFDM-Pi2 BPSK-1RB0



The screenshot displays a Spectrum Analyzer 1 interface. The top section shows the input signal as a yellow trace on a logarithmic scale. A marker is placed at the peak of the signal, labeled 'Mkr2 2.570 00 GHz -28.934 dBm'. The center frequency is 2.570000 GHz, and the span is 30.00 MHz. The resolution bandwidth (Res BW) is 300 kHz, and the video bandwidth (Video BW) is 1.0 MHz. The sweep time is 7.51 s (1001 pts).

Below the trace is a table with 5 columns: Mode, Trace, Scale, X, Y, Function, Function Width, and Function Value. The table contains two rows of data, both with a '1' in the Trace column.

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	2.569 97 GHz	-26.27 dBm		
2	N	1	f	2.570 00 GHz	-28.93 dBm		
3							
4							
5							
6							

Spectrum Analyzer 1

Swept SA

+

KEYSIGHT

Input: 25.0 Ω

Corr: DC

Align: Off

Input Z: 50 Ω

Corr: CC

Freq Ref: Int (S)

NFE: Adaptive

#Atten: 30 dB

Preamp: Off

Source: Off

PNO: Fast

Gate: Off

IF Gain: Low

Sig Track: Off

#Avg Type: Power (RMS)

Avg/Hold: 1/1

Trig: Free Run

1 2 3 4 5 6

AAAAWWWW

AAAAAA

Center Frequency

2.570000000 GHz

Span

30.00000000 MHz

Sweep Span

Zero Span

Full Span

Start Freq

2.555000000 GHz

Stop Freq

2.585000000 GHz

AUTO TUNE

CF Step

3.000000000 MHz

Auto

Man

Freq Offset

0 Hz

X Axis Scale

Log

Lin

Signal Track (Span Zoom)

Settings

Local

1 Spectrum

Scale/Div 10 dB

Log

Trace 1 Pass

Ref Lvl Offset 6.99 dB

Ref Level 22.00 dBm

Mkr 2 2.570 00 GHz

-29.131 dBm

Center 2.57000 GHz

#Res BW 30 kHz

#Video BW 100 kHz*

Span 30.00 MHz

#Sweep 18.5 s (3001 pts)

5 Marker Table

	Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	2.569 93 GHz	-26.67 dBm			
2	N	1	f	2.570 00 GHz	-29.13 dBm			
3								
4								
5								
6								

Windows

Navigation

Help

Apr 04, 2025

11:31:33 AM

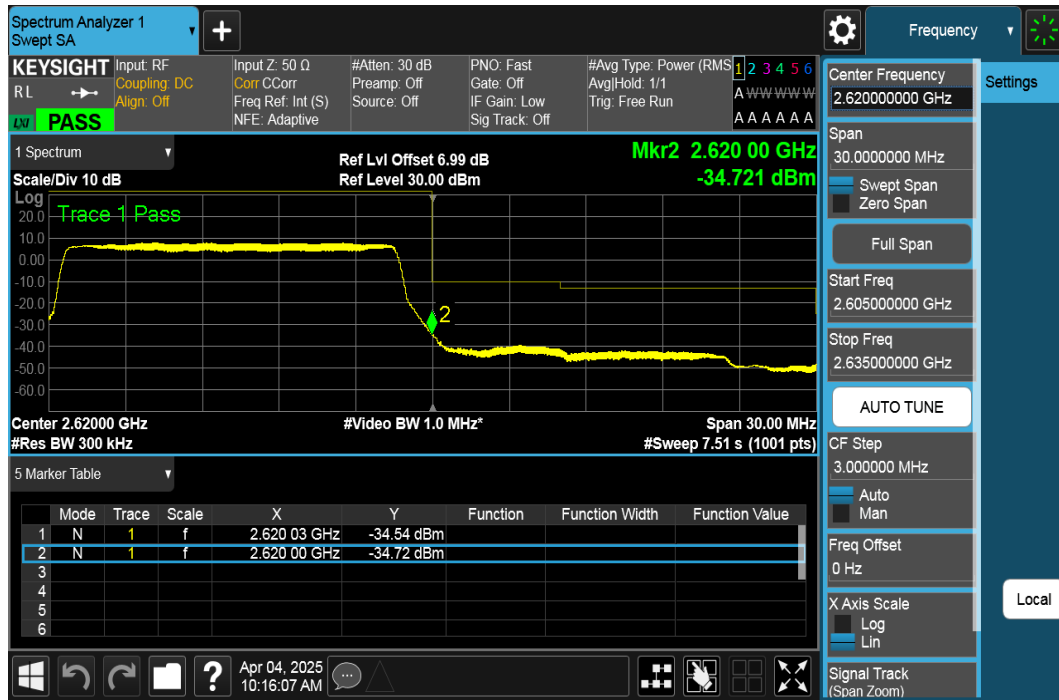
Grid

Cursor

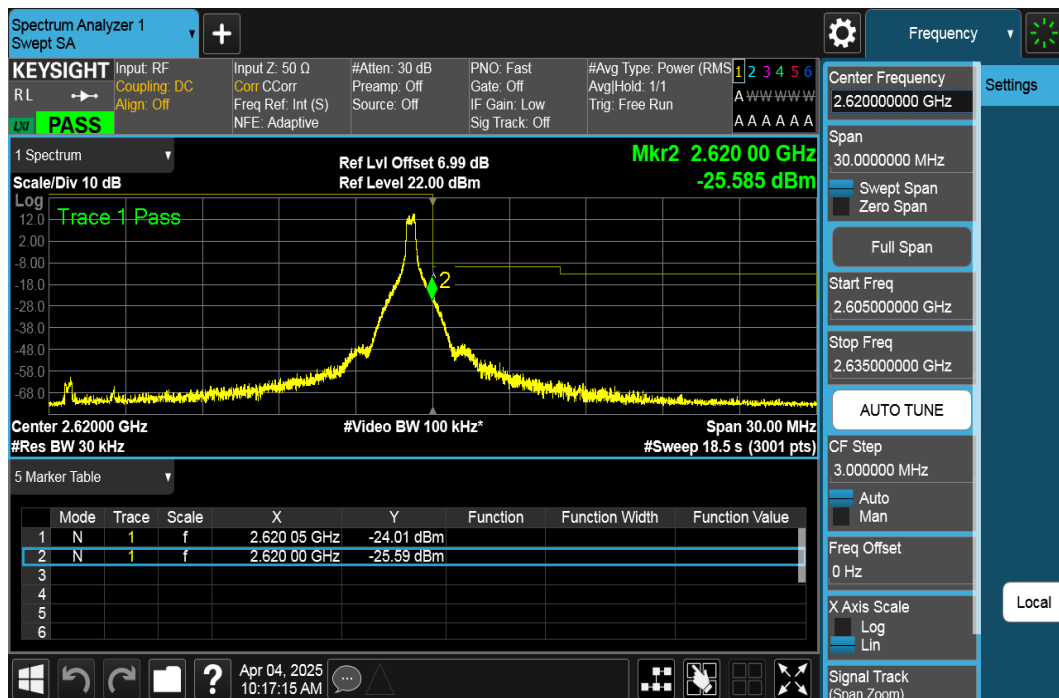
Zoom In

Zoom Out

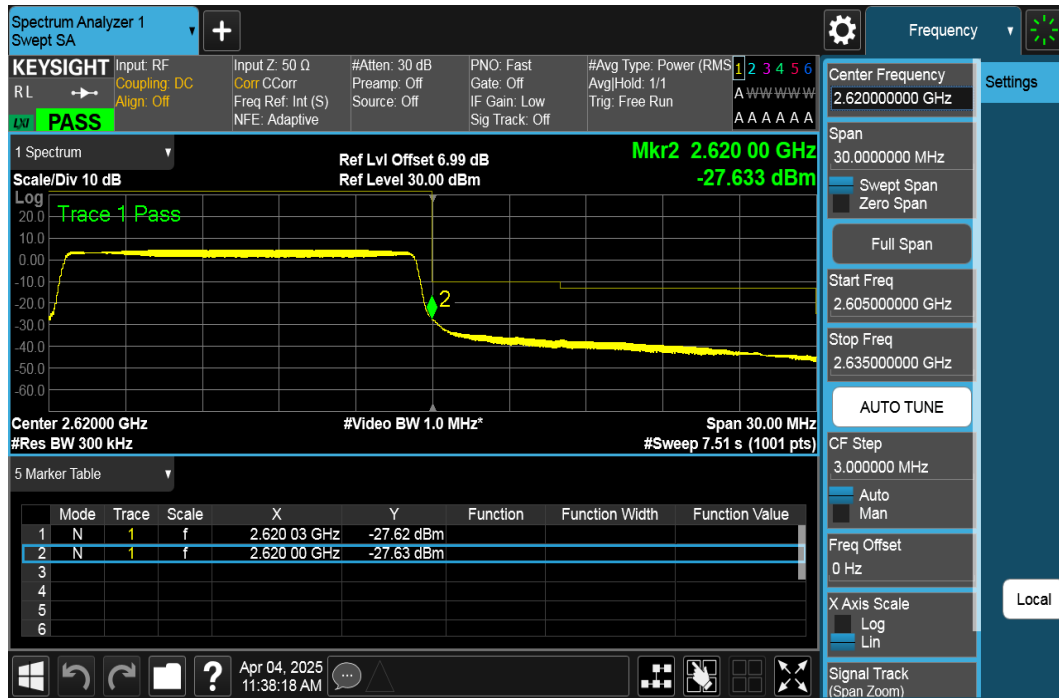
N38-15M-Bandedge-HCH-DFT-s-OFDM-Pi2 BPSK-Outter_Full



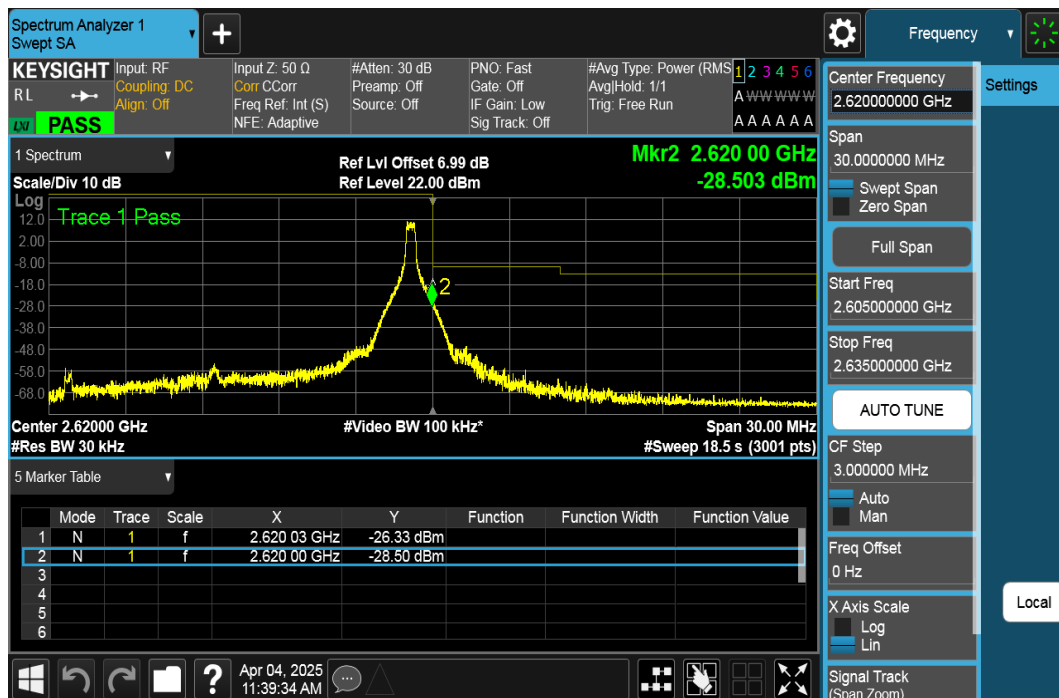
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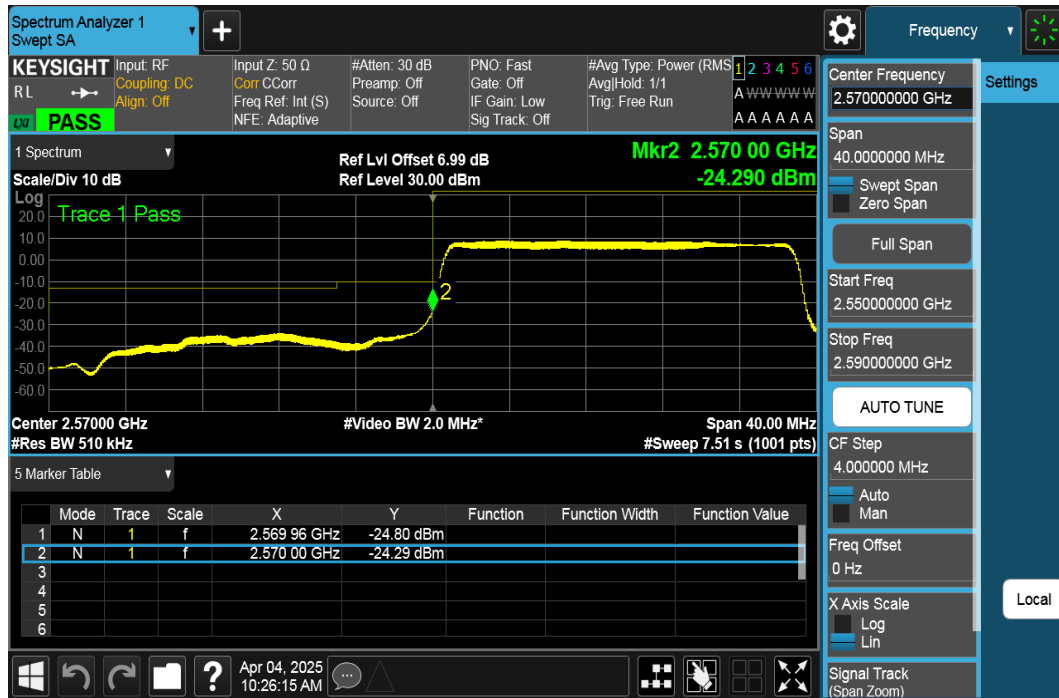
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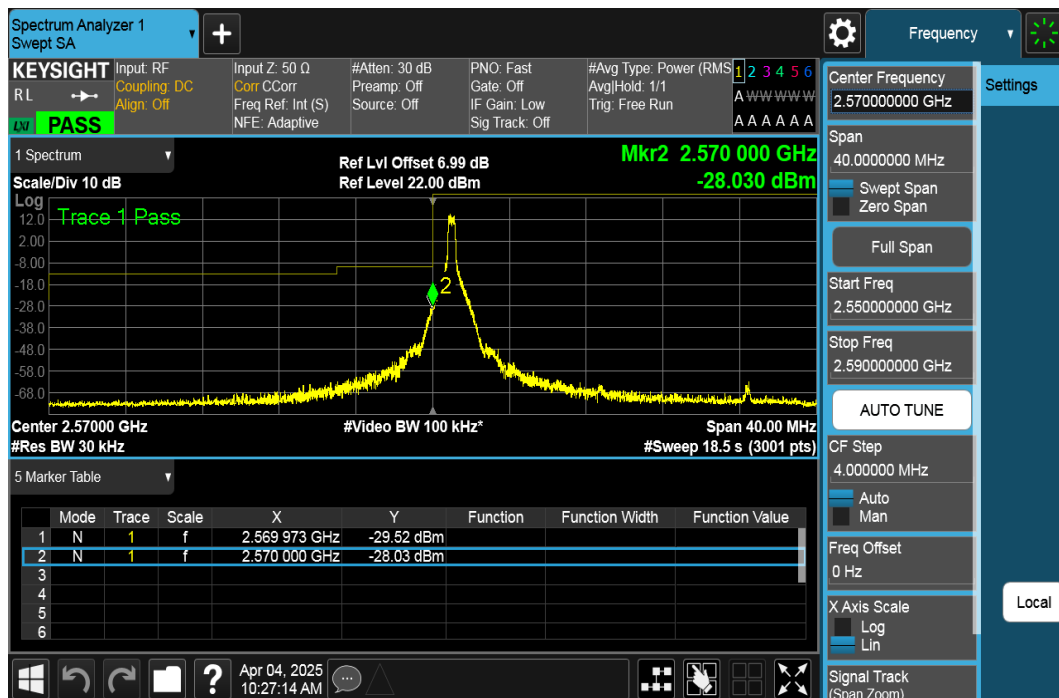
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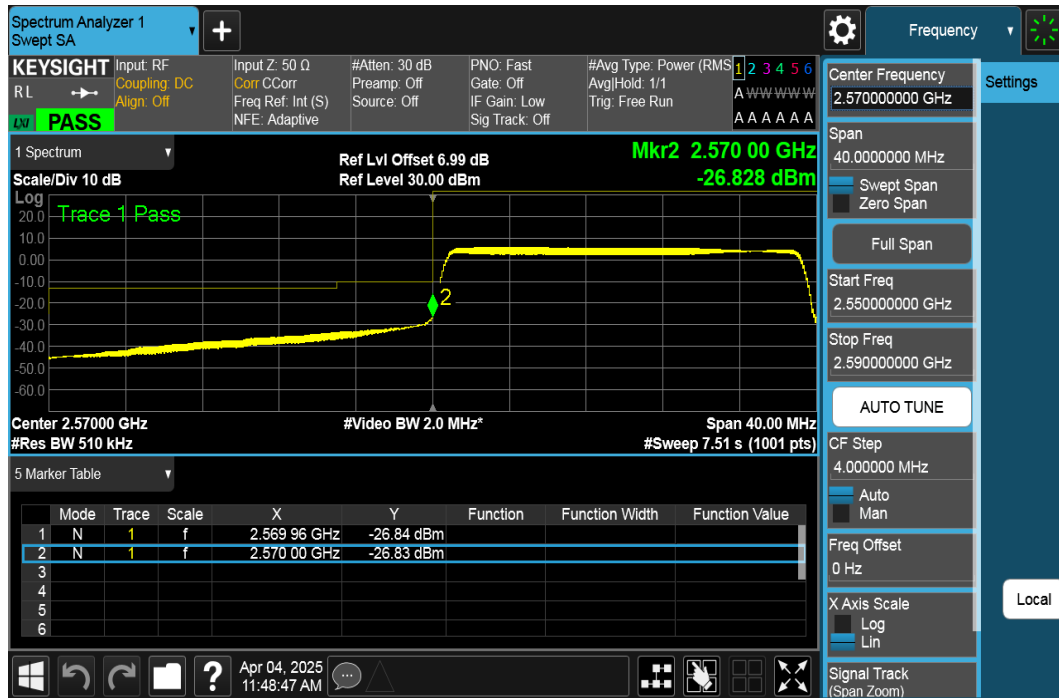
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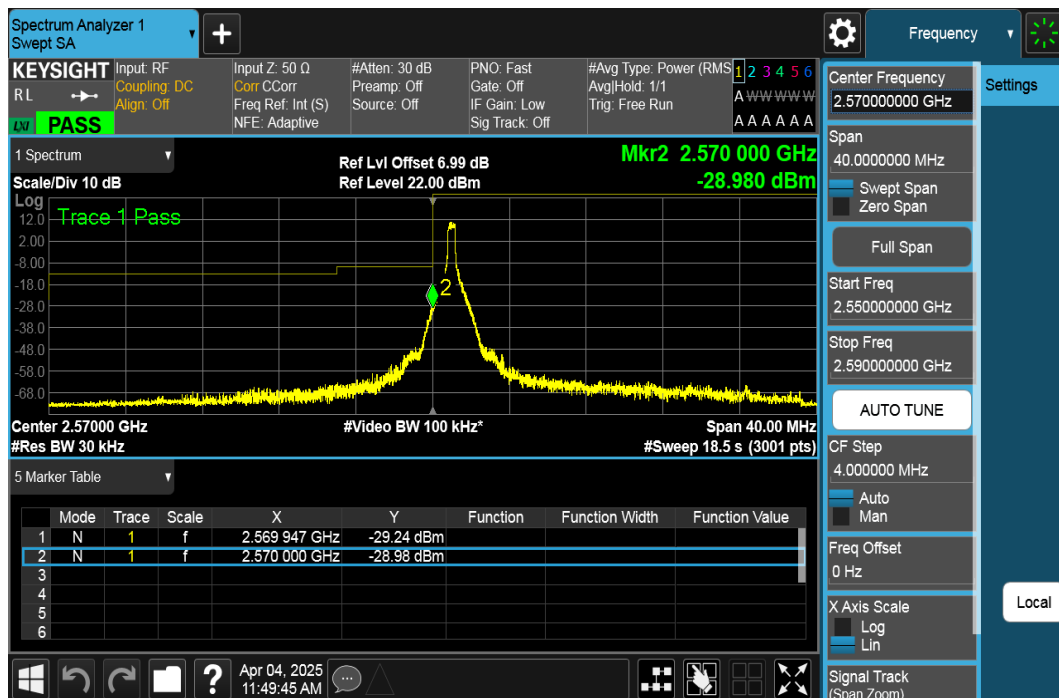
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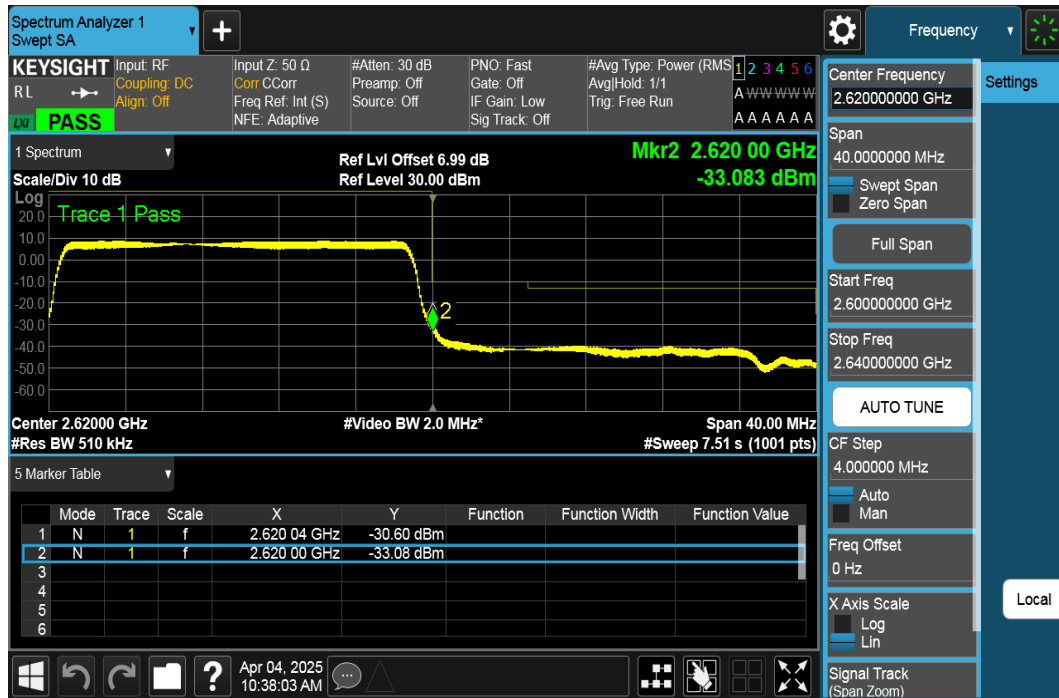
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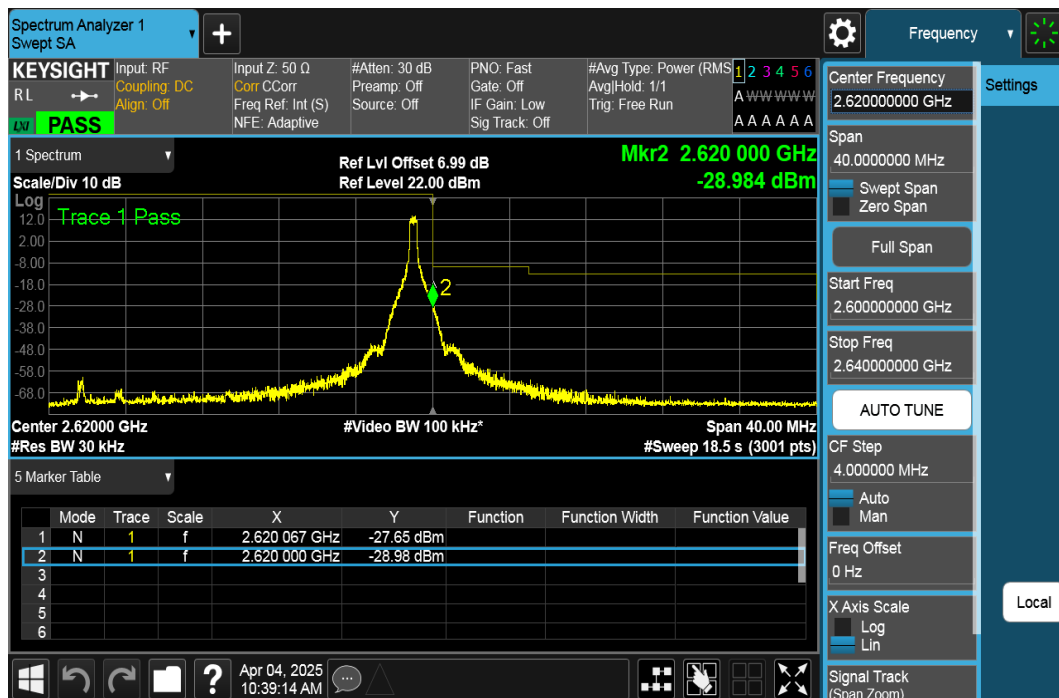
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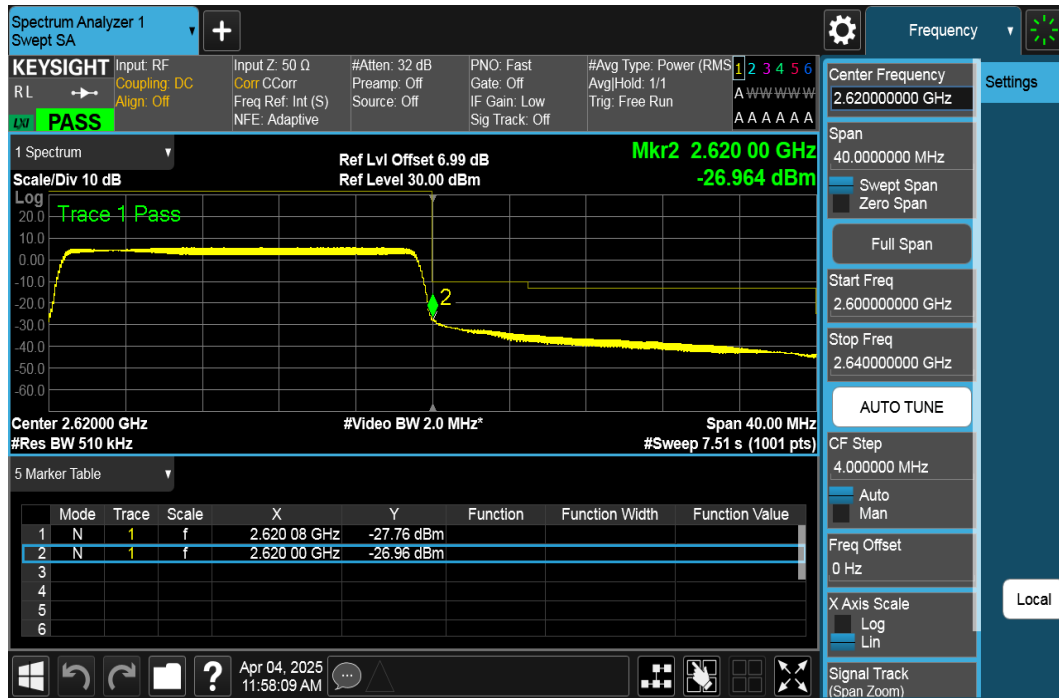
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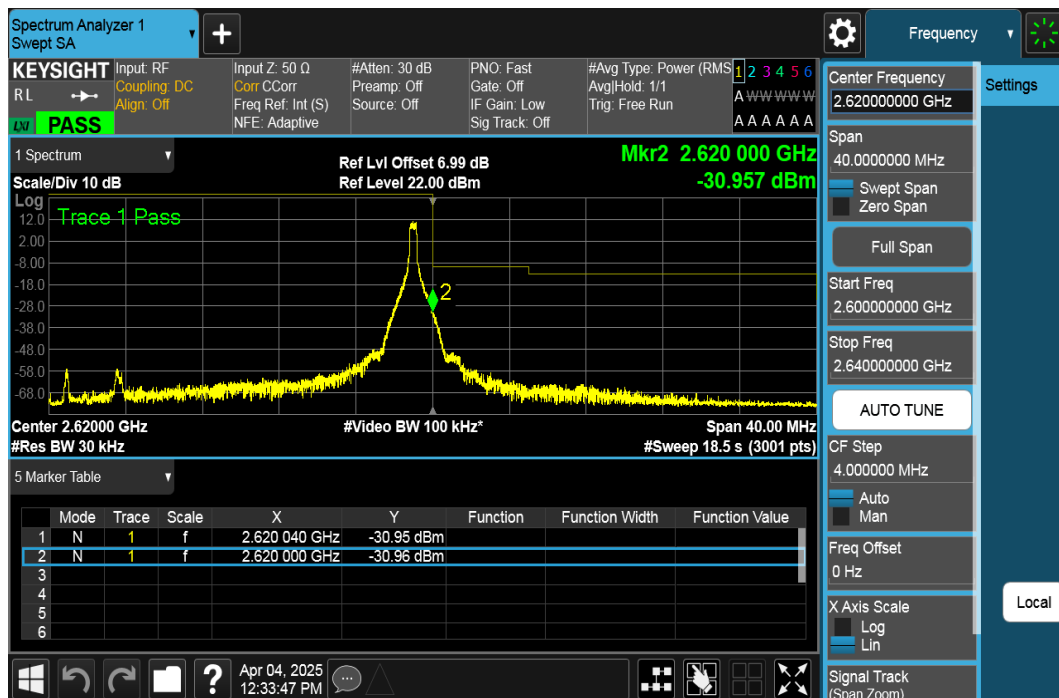
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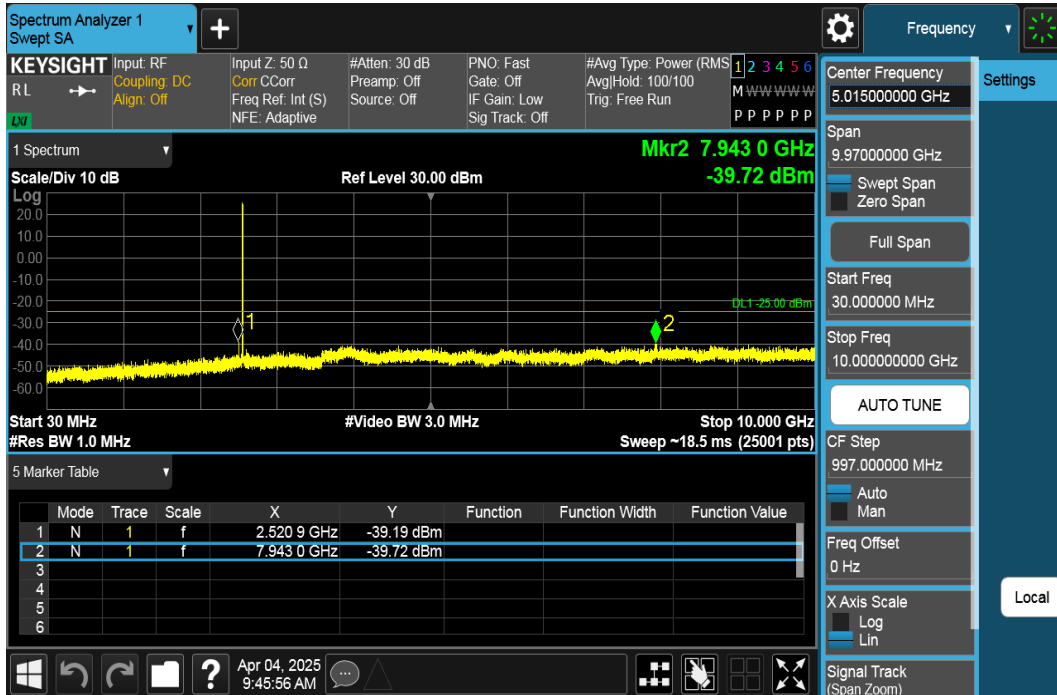
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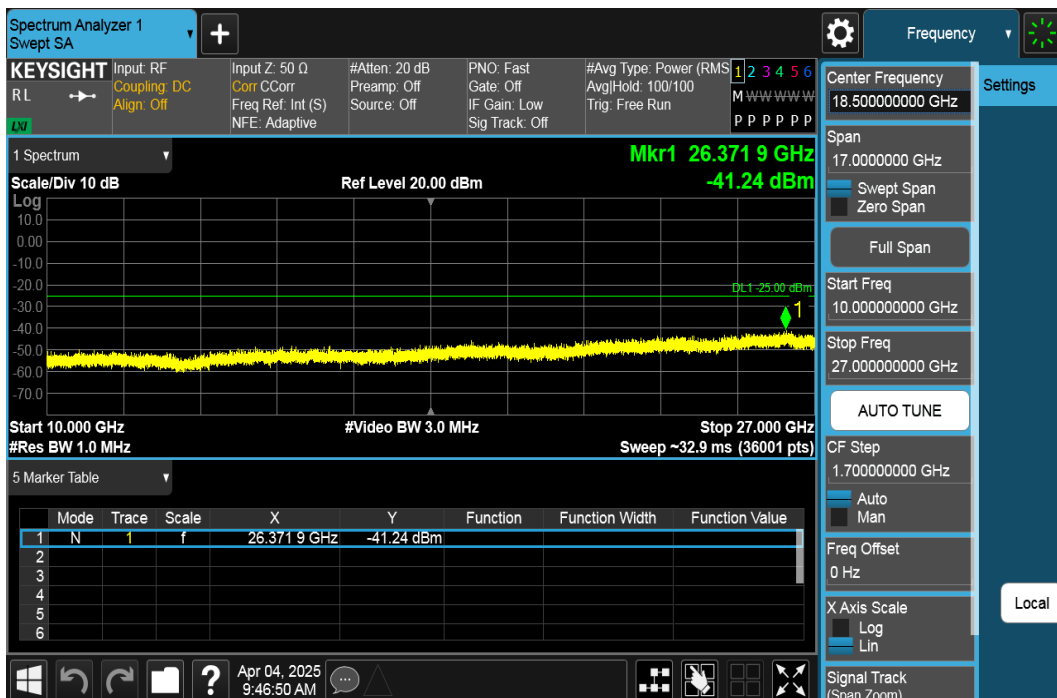
Conducted spurious emissions

test graph

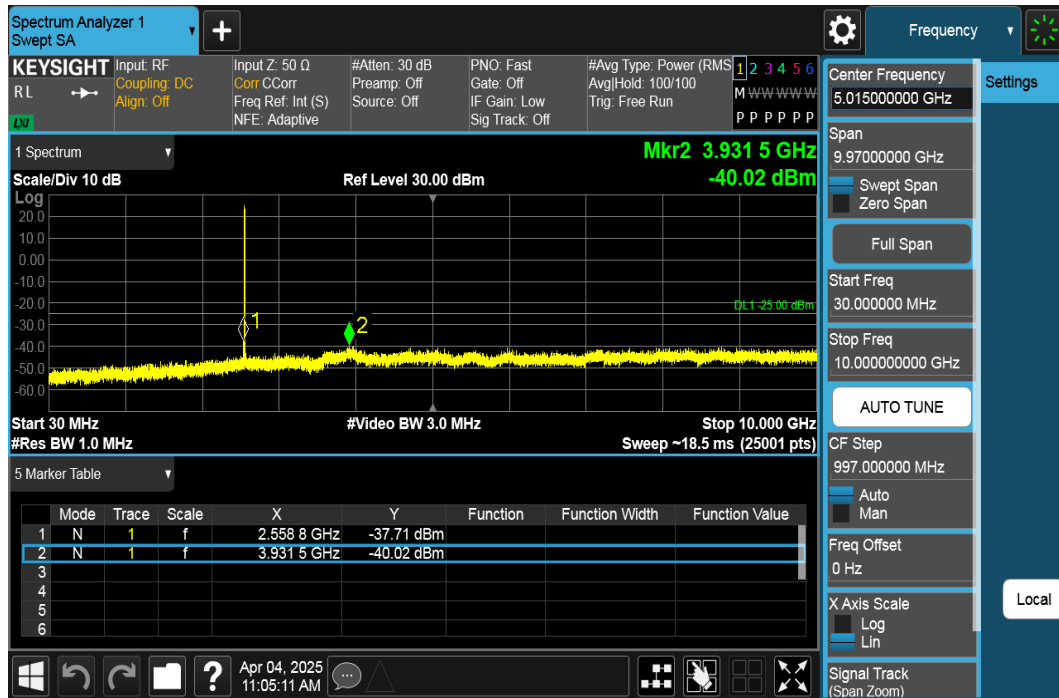
N38-10M-CSE-LCH-DFT-s-OFDM-Pi2 BPSK-1RB0-30MHz-10GHz



N38-10M-CSE-LCH-DFT-s-OFDM-Pi2 BPSK-1RB0-10GHz-26GHz



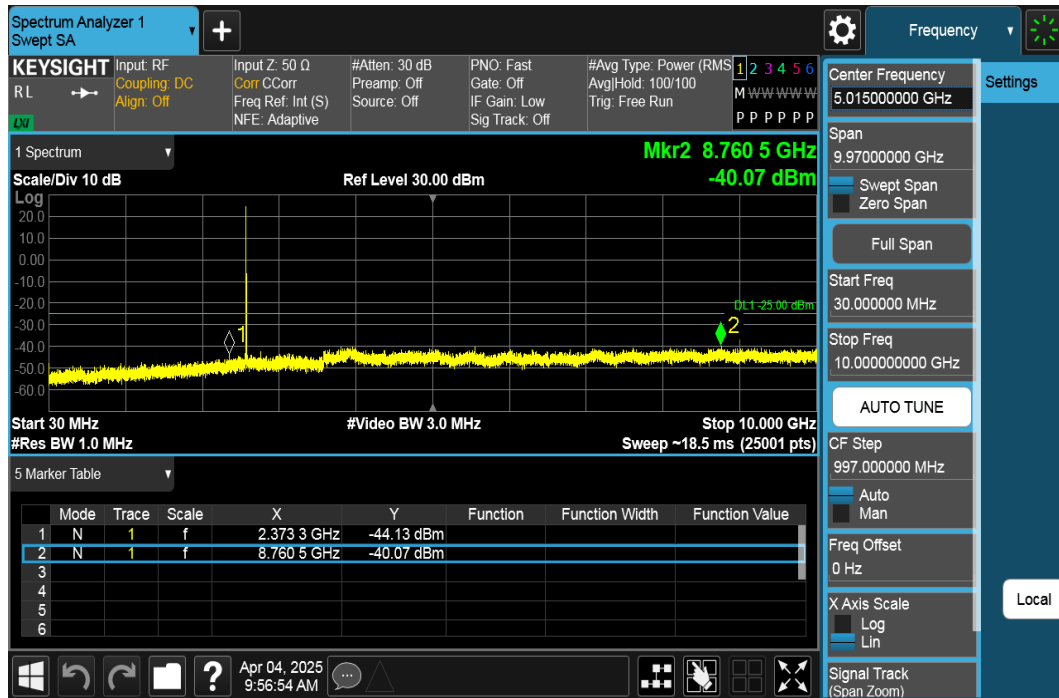
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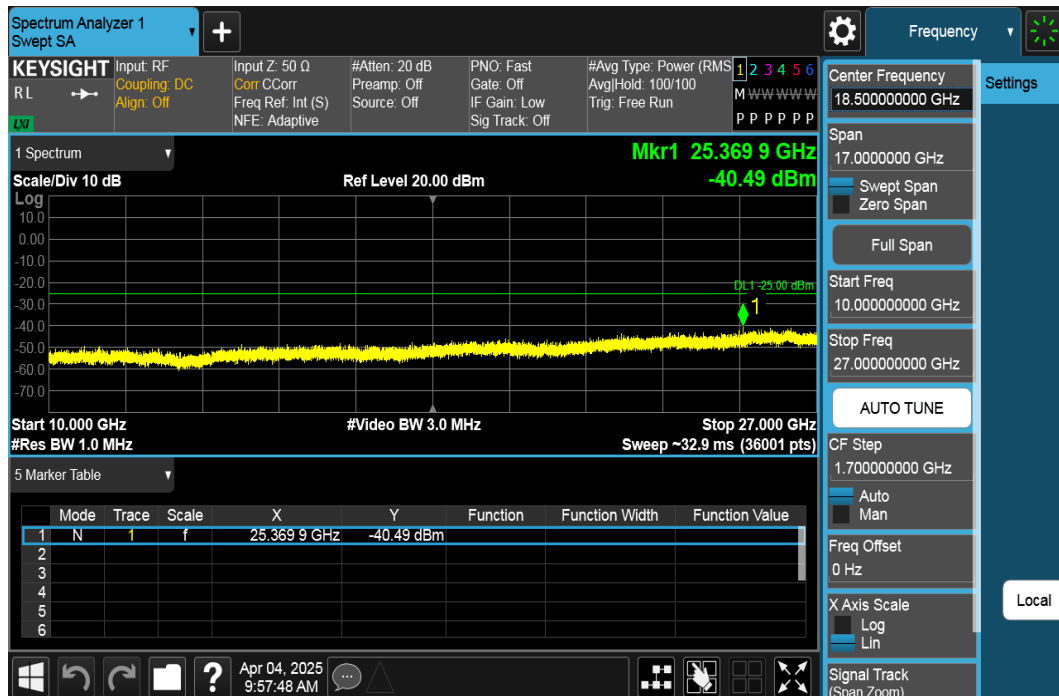
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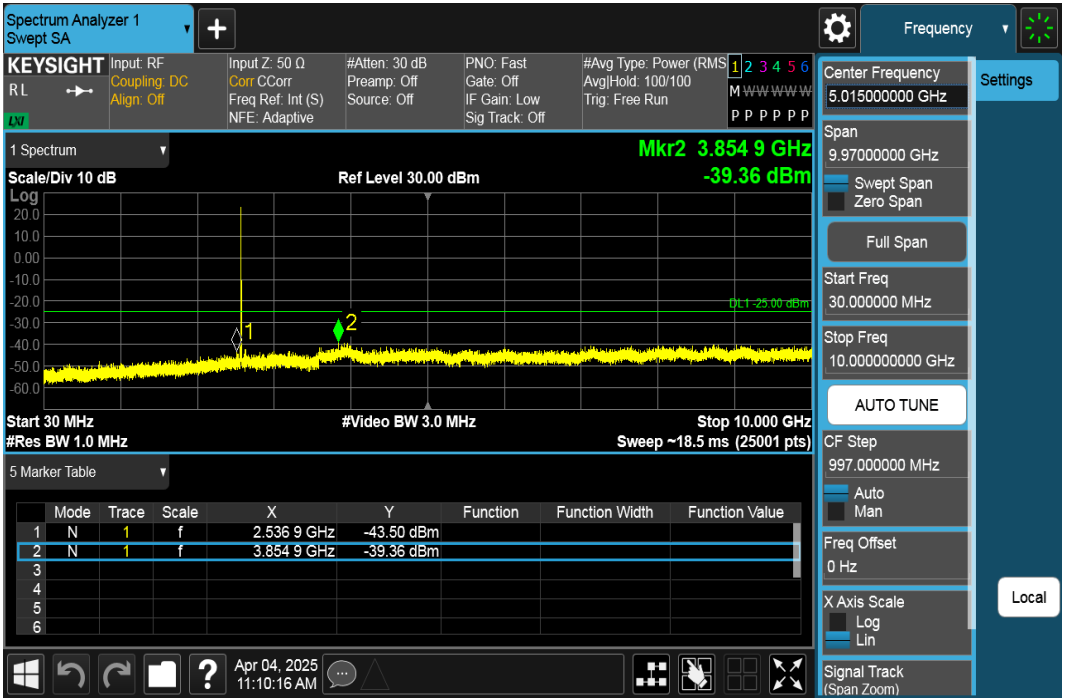
N38-10M-CSE-MCH-DFT-s-OFDM-Pi2 BPSK-1RB0-30MHz-10GHz



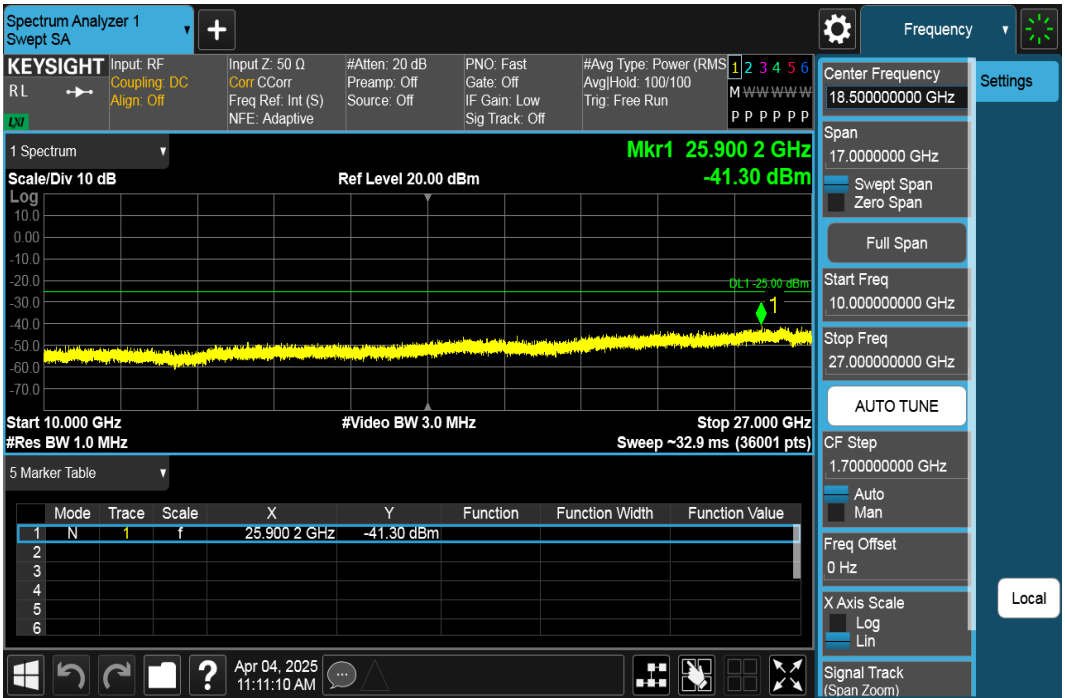
N38-10M-CSE-MCH-DFT-s-OFDM-Pi2 BPSK-1RB0-10GHz-26GHz



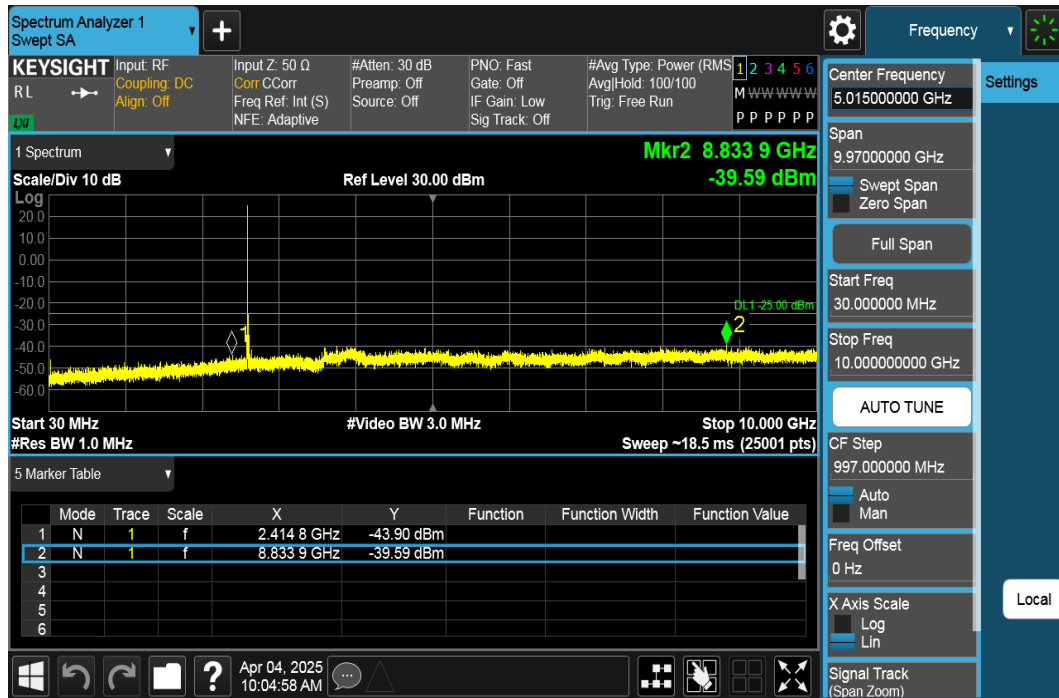
N38-10M-CSE-MCH-CP-OFDM-QPSK-1RB0-30MHz-10GHz



N38-10M-CSE-MCH-CP-OFDM-QPSK-1RB0-10GHz-26GHz



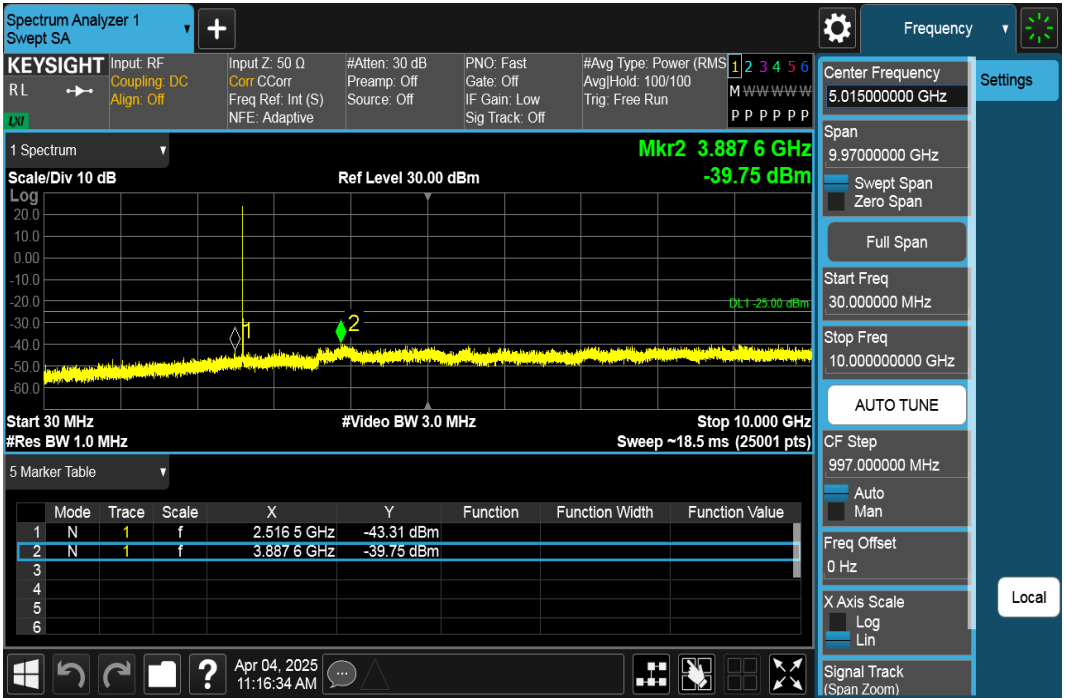
N38-10M-CSE-HCH-DFT-s-OFDM-Pi2 BPSK-1RB0-30MHz-10GHz



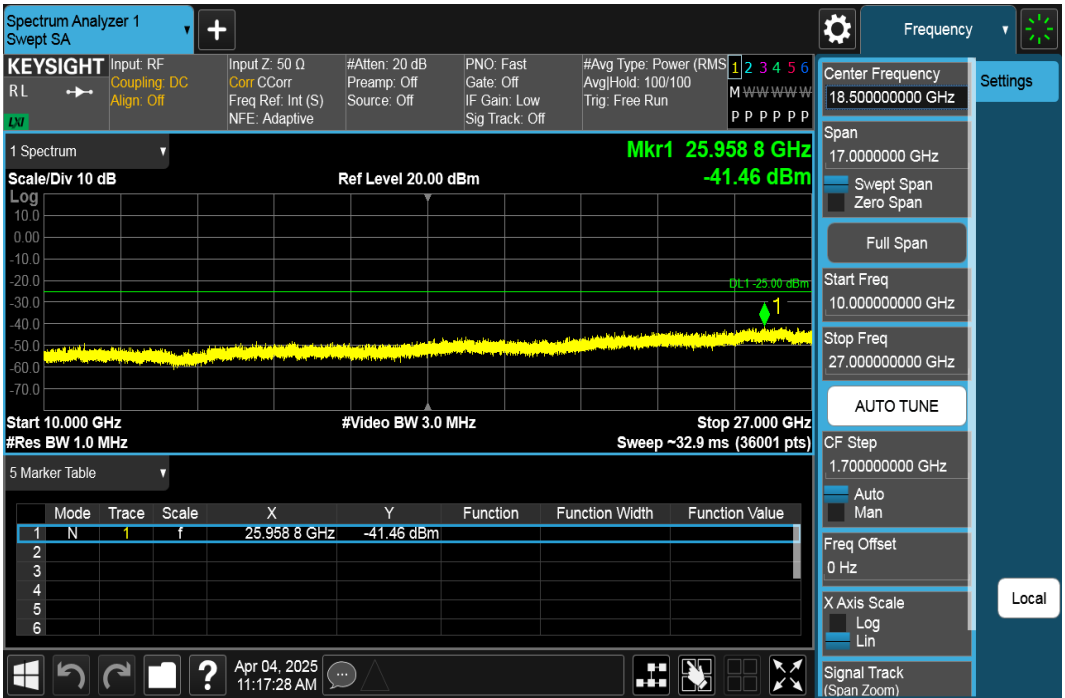
N38-10M-CSE-HCH-DFT-s-OFDM-Pi2 BPSK-1RB0-10GHz-26GHz



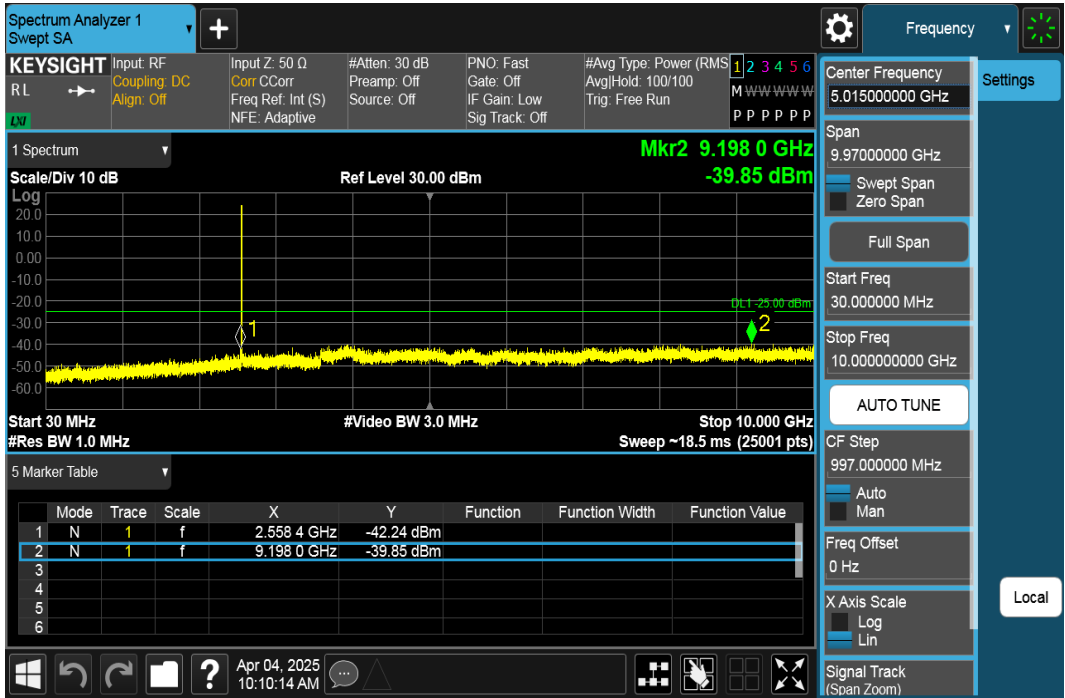
N38-10M-CSE-HCH-CP-OFDM-QPSK-1RB0-30MHz-10GHz



N38-10M-CSE-HCH-CP-OFDM-QPSK-1RB0-10GHz-26GHz



N38-15M-CSE-LCH-DFT-s-OFDM-Pi2 BPSK-1RB0-30MHz-10GHz



N38-15M-CSE-LCH-DFT-s-OFDM-Pi2 BPSK-1RB0-10GHz-26GHz

