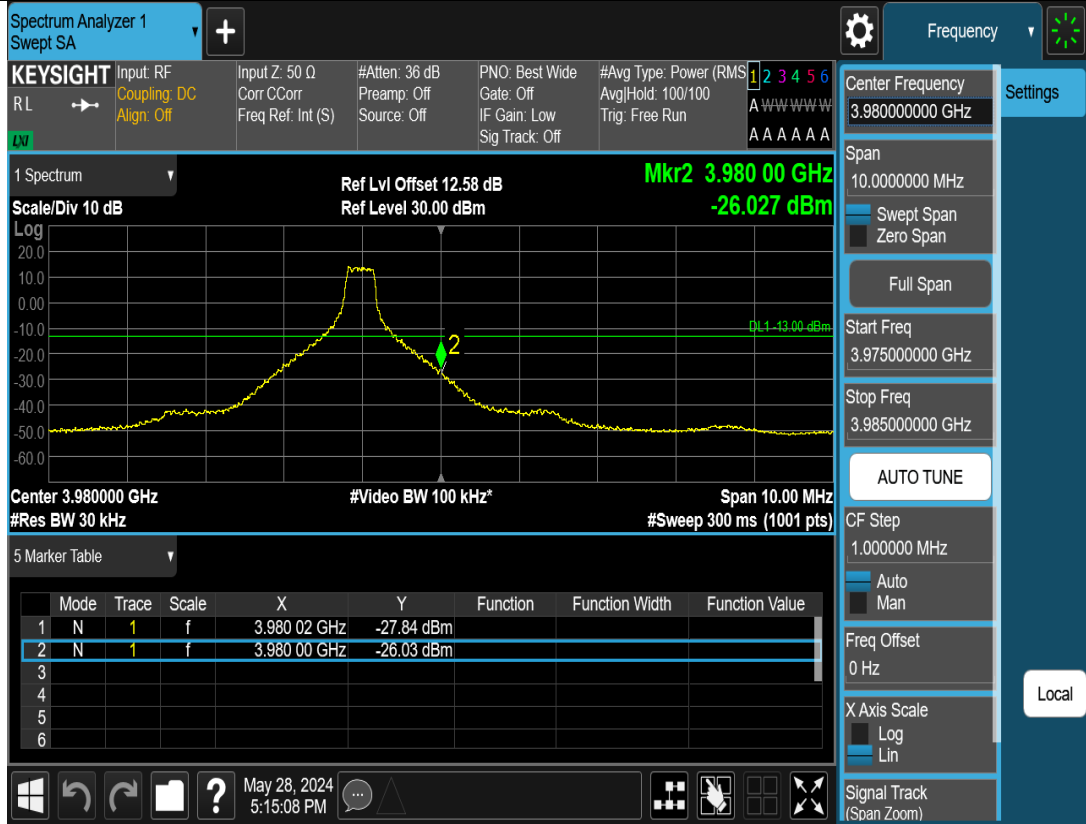
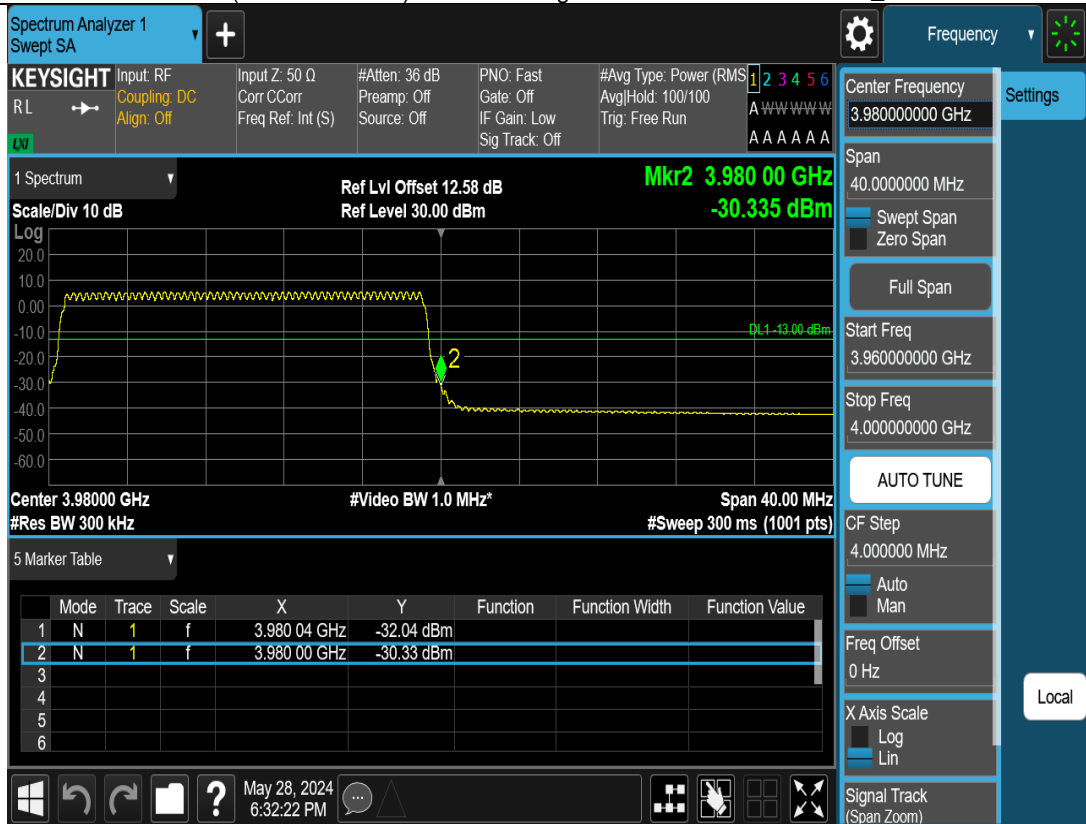


N77b(3700-3980MHz)-20M-Bandedge-H-DFT-s-OFDM-Pi2 BPSK-1RB_MAX



N77b(3700-3980MHz)-20M-Bandedge-H-CP-OFDM-QPSK-Outer_Full



N77b(3700-3980MHz)-20M-Bandedge-H-CP-OFDM-QPSK-1RB_MAX

Spectrum Analyzer 1
Swept SA

KEYSIGHT Input RF
RL → Coupling: DC
Align: Off

Input Z: 50 Ω #Atten: 36 dB PNO: Best Wide #Avg Type: Power (RMS) 1 2 3 4 5 6
Corr: CCorr Preamp: Off Gate: Off Avg/Hold: 100/100 A www www
Freq Ref: Int (S) Source: Off IF Gain: Low Trig: Free Run A A A A A A

1 Spectrum Ref Lvl Offset 12.58 dB **Mkr2 3.980 00 GHz**
Scale/Div 10 dB Ref Level 30.00 dBm **-28.998 dBm**

Center 3.980000 GHz #Video BW 100 kHz* Span 10.00 MHz
#Res BW 30 kHz #Sweep 300 ms (1001 pts)

5 Marker Table

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	3.980 02 GHz	-28.97 dBm		
2	N	1	f	3.980 00 GHz	-29.00 dBm		
3							
4							
5							
6							

Frequency

Center Frequency
3.980000000 GHz

Span
10.0000000 MHz

Swept Span
Zero Span

Full Span

Start Freq
3.975000000 GHz

Stop Freq
3.985000000 GHz

AUTO TUNE

CF Step
1.000000 MHz

Auto
Man

Freq Offset
0 Hz

X Axis Scale
Log
Lin

Signal Track
(Span Zoom)

Settings

Local

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Conducted spurious emissions test graph



N77b(3700-3980MHz)-10M-CSE-L-DFT-s-OFDM-Pi2 BPSK-1RB0-10GHz-40GHz

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Off

Input Z: 50 Ω Corr: C Corr Freq Ref: Int (S) #Atten: 36 dB Preamp: Off Source: Off PNO: Fast Gate: Off IF Gain: Low Sig Track: Off #Avg Type: Power (RMS) AvgHold: 100/100 Trig: Free Run

Center Frequency: 25.000000000 GHz

Span: 30.0000000 GHz

Start Freq: 10.000000000 GHz

Stop Freq: 40.000000000 GHz

Scale/Div 10 dB

Ref Lvl Offset 12.58 dB

Ref Level 30.00 dBm

Mkr1 38.346 0 GHz -27.788 dBm

Start 10.00 GHz #Res BW 1.0 MHz #Video BW 3.0 MHz* Stop 40.00 GHz #Sweep ~302 ms (60001 pts)

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	38.346 0 GHz			-27.79 dBm
2							
3							
4							
5							
6							

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N77b(3700-3980MHz)-10M-CSE-L-CP-OFDM-QPSK-1RB0-30MHz-10GHz

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Off

Input Z: 50 Ω Corr: C Corr Freq Ref: Int (S) #Atten: 36 dB Preamp: Off Source: Off PNO: Fast Gate: Off IF Gain: Low Sig Track: Off #Avg Type: Power (RMS) AvgHold: 100/100 Trig: Free Run

Center Frequency: 5.015000000 GHz

Span: 9.970000000 GHz

Start Freq: 30.0000000 MHz

Stop Freq: 10.000000000 GHz

Scale/Div 10 dB

Ref Lvl Offset 12.58 dB

Ref Level 30.00 dBm

Mkr2 4.867 8 GHz -36.201 dBm

Start 30 MHz #Res BW 1.0 MHz #Video BW 3.0 MHz* Stop 10.000 GHz #Sweep ~302 ms (25001 pts)

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	3.689 8 GHz			-37.60 dBm
2	N	1	f	4.867 8 GHz			-36.20 dBm
3							
4							
5							
6							

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N77b(3700-3980MHz)-10M-CSE-L-CP-OFDM-QPSK-1RB0-10GHz-40GHz

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Input Z: 50 Ω #Atten: 36 dB PNO: Fast #Avg Type: Power (RMS) 1 2 3 4 5 6
 RL Coupling: DC Corr: C Corr Preamp: Off Gate: Off Avg/Hold: 100/100 A www www www
 Align: Off Freq Ref: Int (S) Source: Off IF Gain: Low Trig: Free Run A A A A A A

Center Frequency 25.000000000 GHz Settings

Span 30.00000000 GHz
 Swept Span
 Zero Span
 Full Span

Start Freq 10.000000000 GHz
 Stop Freq 40.000000000 GHz

AUTO TUNE

CF Step 3.000000000 GHz
 Auto
 Man

Freq Offset 0 Hz

X Axis Scale Log Lin

Signal Track (Span Zoom)

Local

1 Spectrum Ref Lvl Offset 12.58 dB Mkr1 38.353 0 GHz
 Scale/Div 10 dB Ref Level 30.00 dBm -27.631 dBm

Start 10.00 GHz #Res BW 1.0 MHz #Video BW 3.0 MHz* Stop 40.00 GHz
 #Sweep ~302 ms (60001 pts)

5 Marker Table

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	38.353 0 GHz	-27.63 dBm		
2							
3							
4							
5							
6							

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N77b(3700-3980MHz)-10M-CSE-M-DFT-s-OFDM-Pi2 BPSK-1RB0-30MHz-10GHz

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Input Z: 50 Ω #Atten: 36 dB PNO: Fast #Avg Type: Power (RMS) 1 2 3 4 5 6
 RL Coupling: DC Corr: C Corr Preamp: Off Gate: Off Avg/Hold: 100/100 A www www www
 Align: Off Freq Ref: Int (S) Source: Off IF Gain: Low Trig: Free Run A A A A A A

Center Frequency 5.015000000 GHz Settings

Span 9.970000000 GHz
 Swept Span
 Zero Span
 Full Span

Start Freq 30.000000000 MHz
 Stop Freq 10.000000000 GHz

AUTO TUNE

CF Step 997.0000000 MHz
 Auto
 Man

Freq Offset 0 Hz

X Axis Scale Log Lin

Signal Track (Span Zoom)

Local

1 Spectrum Ref Lvl Offset 12.58 dB Mkr2 4.768 5 GHz
 Scale/Div 10 dB Ref Level 30.00 dBm -36.218 dBm

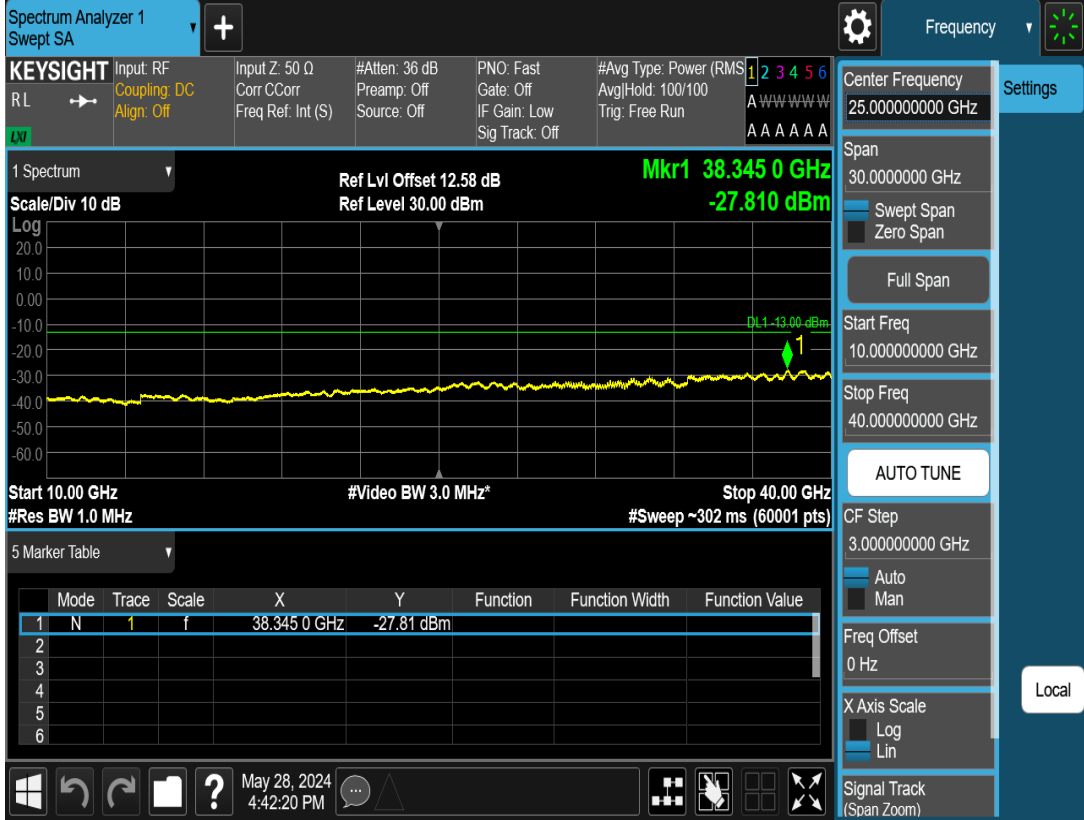
Start 30 MHz #Res BW 1.0 MHz #Video BW 3.0 MHz* Stop 10.000 GHz
 #Sweep ~302 ms (25001 pts)

5 Marker Table

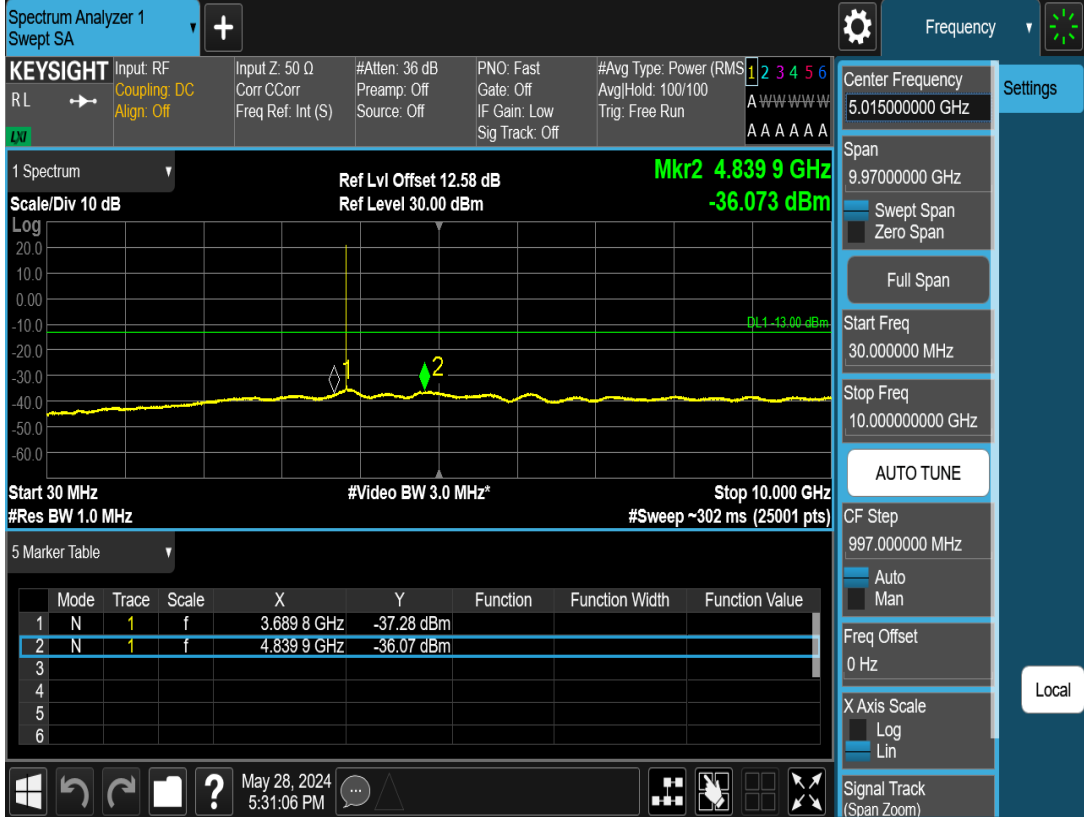
Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	3.689 8 GHz	-37.57 dBm		
2	N	1	f	4.768 5 GHz	-36.22 dBm		
3							
4							
5							
6							

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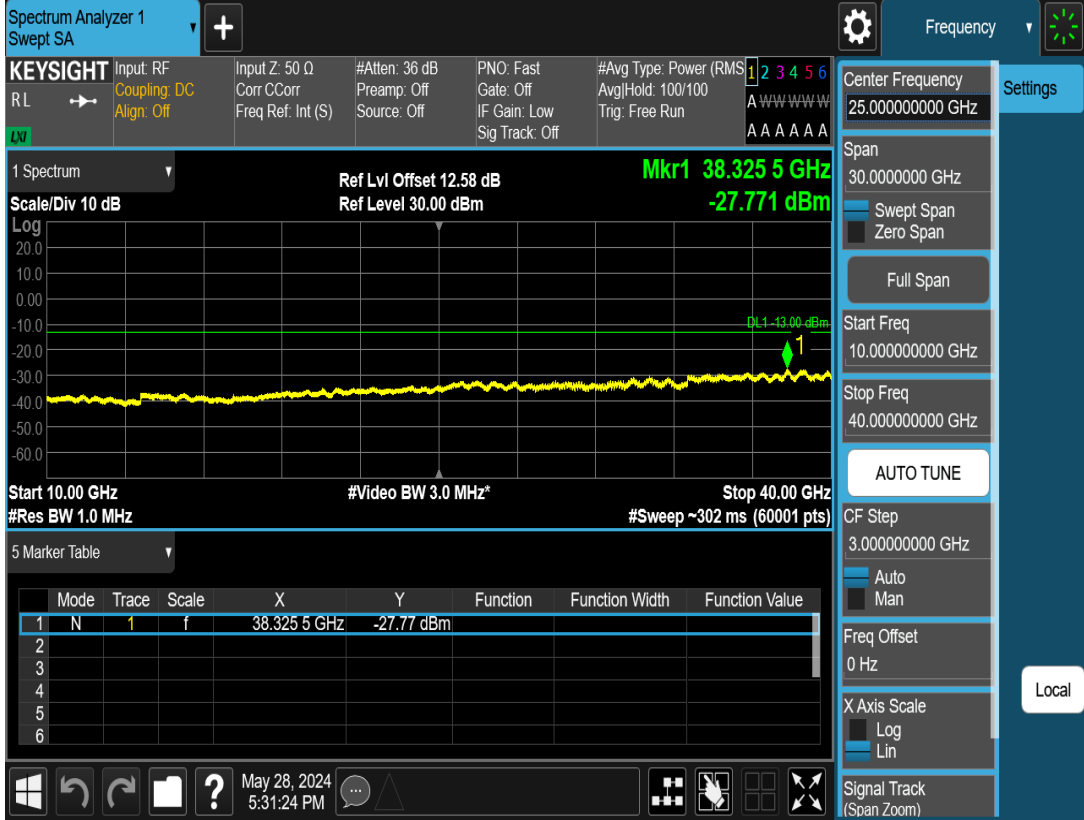
N77b(3700-3980MHz)-10M-CSE-M-DFT-s-OFDM-Pi2 BPSK-1RB0-10GHz-40GHz



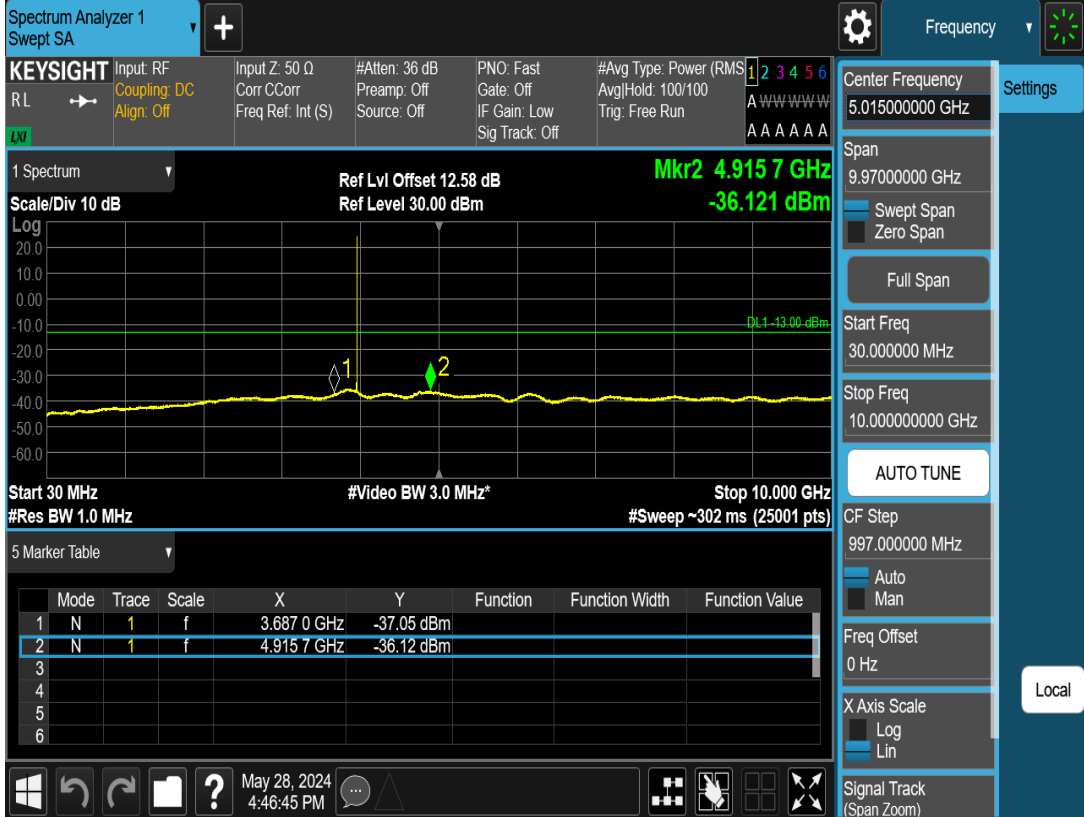
N77b(3700-3980MHz)-10M-CSE-M-CP-OFDM-QPSK-1RB0-30MHz-10GHz



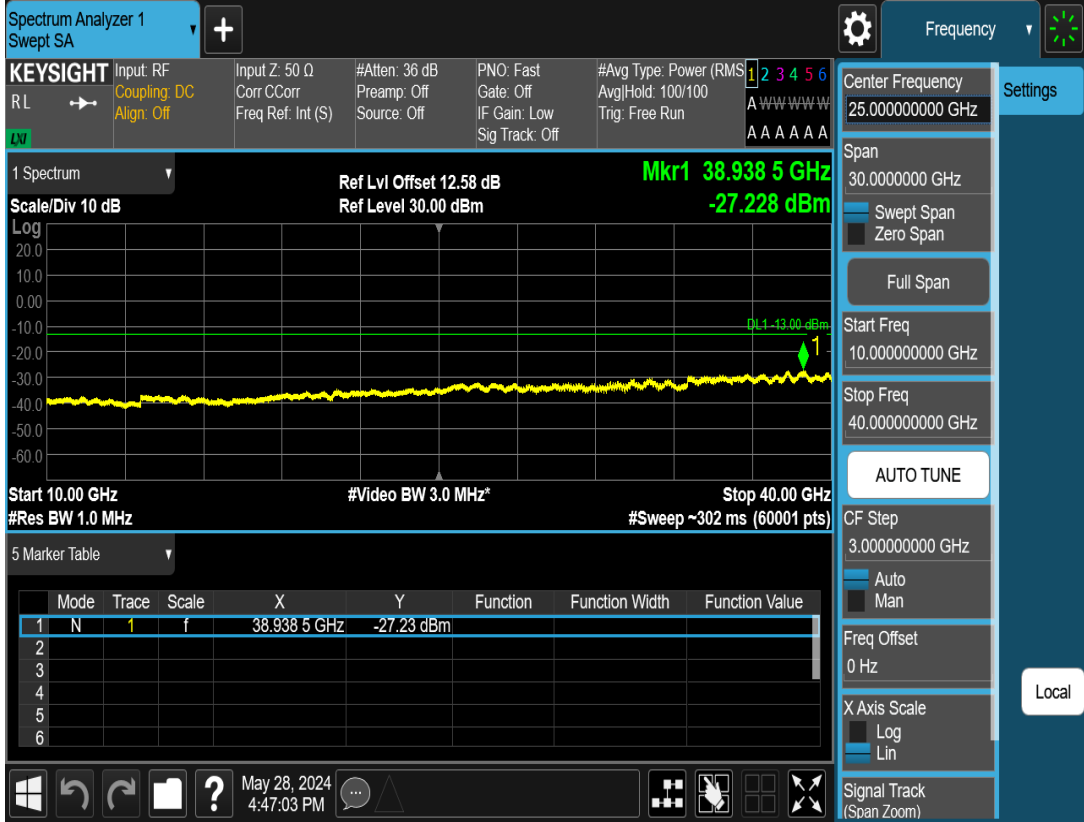
N77b(3700-3980MHz)-10M-CSE-M-CP-OFDM-QPSK-1RB0-10GHz-40GHz



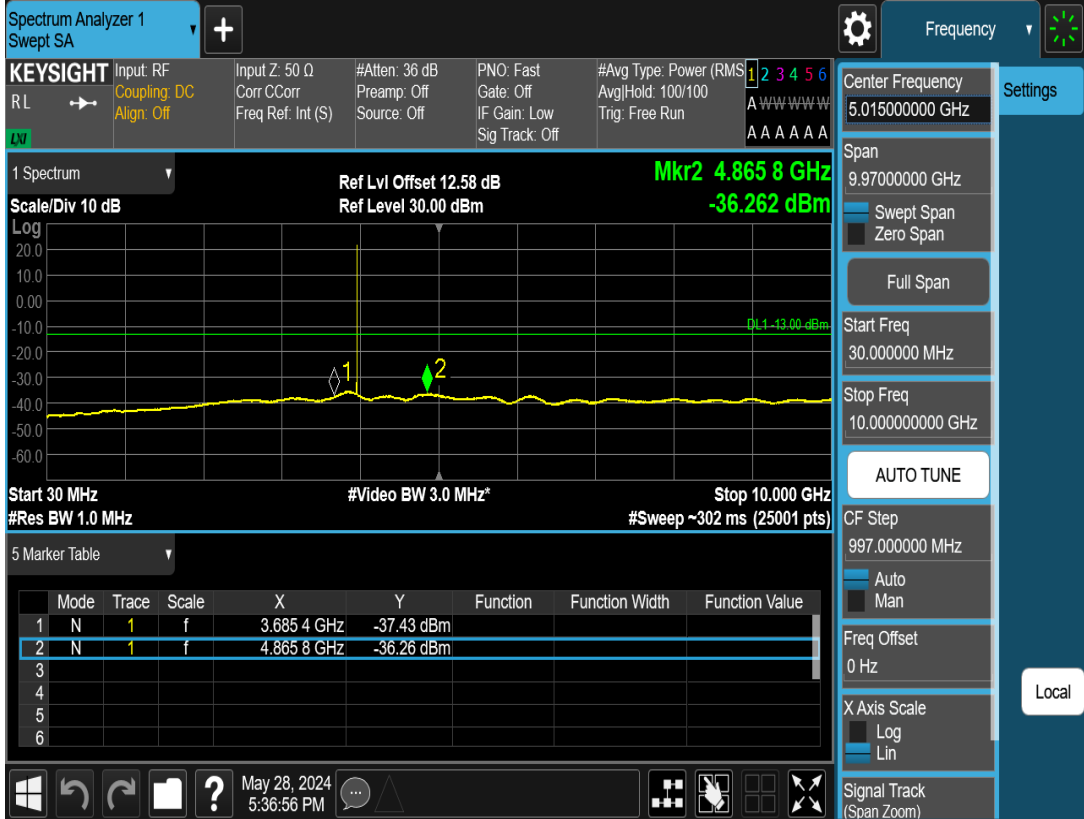
N77b(3700-3980MHz)-10M-CSE-H-DFT-s-OFDM-Pi2 BPSK-1RB0-30MHz-10GHz



N77b(3700-3980MHz)-10M-CSE-H-DFT-s-OFDM-Pi2 BPSK-1RB0-10GHz-40GHz



N77b(3700-3980MHz)-10M-CSE-H-CP-OFDM-QPSK-1RB0-30MHz-10GHz



N77b(3700-3980MHz)-10M-CSE-H-CP-OFDM-QPSK-1RB0-10GHz-40GHz

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Input Z: 50 Ω #Atten: 36 dB PNO: Fast #Avg Type: Power (RMS) 1 2 3 4 5 6
 RL Coupling: DC Corr CCorr Preamp: Off Gate: Off Avg/Hold: 100/100 A www www www
 Align: Off Freq Ref: Int (S) Source: Off IF Gain: Low Trig: Free Run A A A A A A

Center Frequency 25.000000000 GHz Settings

Span 30.0000000 GHz
 Swept Span
 Zero Span
 Full Span

Start Freq 10.000000000 GHz
 Stop Freq 40.000000000 GHz

AUTO TUNE

CF Step 3.000000000 GHz
 Auto
 Man

Freq Offset 0 Hz

X Axis Scale Log Lin

Signal Track (Span Zoom)

Local

1 Spectrum Ref Lvl Offset 12.58 dB Mkr1 38.338 5 GHz
 Scale/Div 10 dB Ref Level 30.00 dBm -27.544 dBm

Start 10.00 GHz #Res BW 1.0 MHz #Video BW 3.0 MHz* Stop 40.00 GHz
 #Sweep ~302 ms (60001 pts)

5 Marker Table

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	38.338 5 GHz			-27.54 dBm
2							
3							
4							
5							
6							

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N77b(3700-3980MHz)-15M-CSE-L-DFT-s-OFDM-Pi2 BPSK-1RB0-30MHz-10GHz

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Input Z: 50 Ω #Atten: 36 dB PNO: Fast #Avg Type: Power (RMS) 1 2 3 4 5 6
 RL Coupling: DC Corr CCorr Preamp: Off Gate: Off Avg/Hold: 100/100 A www www www
 Align: Off Freq Ref: Int (S) Source: Off IF Gain: Low Trig: Free Run A A A A A A

Center Frequency 5.015000000 GHz Settings

Span 9.970000000 GHz
 Swept Span
 Zero Span
 Full Span

Start Freq 30.0000000 MHz
 Stop Freq 10.000000000 GHz

AUTO TUNE

CF Step 997.0000000 MHz
 Auto
 Man

Freq Offset 0 Hz

X Axis Scale Log Lin

Signal Track (Span Zoom)

Local

1 Spectrum Ref Lvl Offset 12.58 dB Mkr2 4.906 1 GHz
 Scale/Div 10 dB Ref Level 30.00 dBm -36.198 dBm

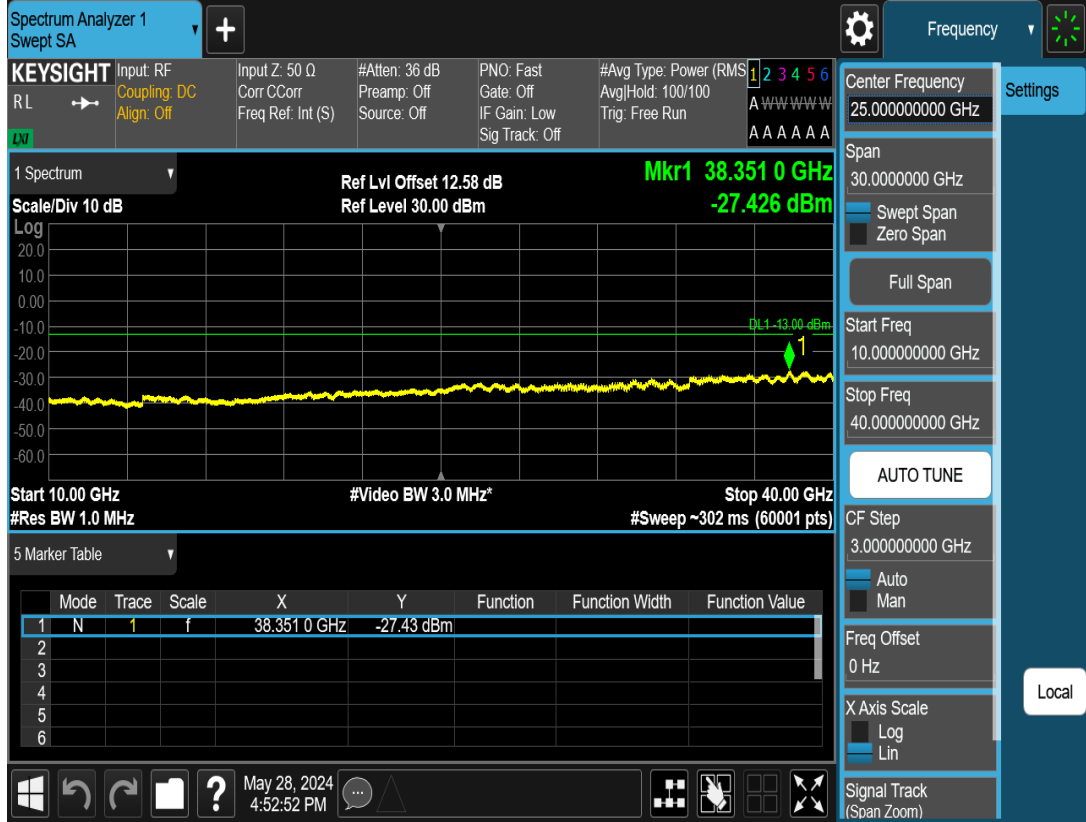
Start 30 MHz #Res BW 1.0 MHz #Video BW 3.0 MHz* Stop 10.000 GHz
 #Sweep ~302 ms (25001 pts)

5 Marker Table

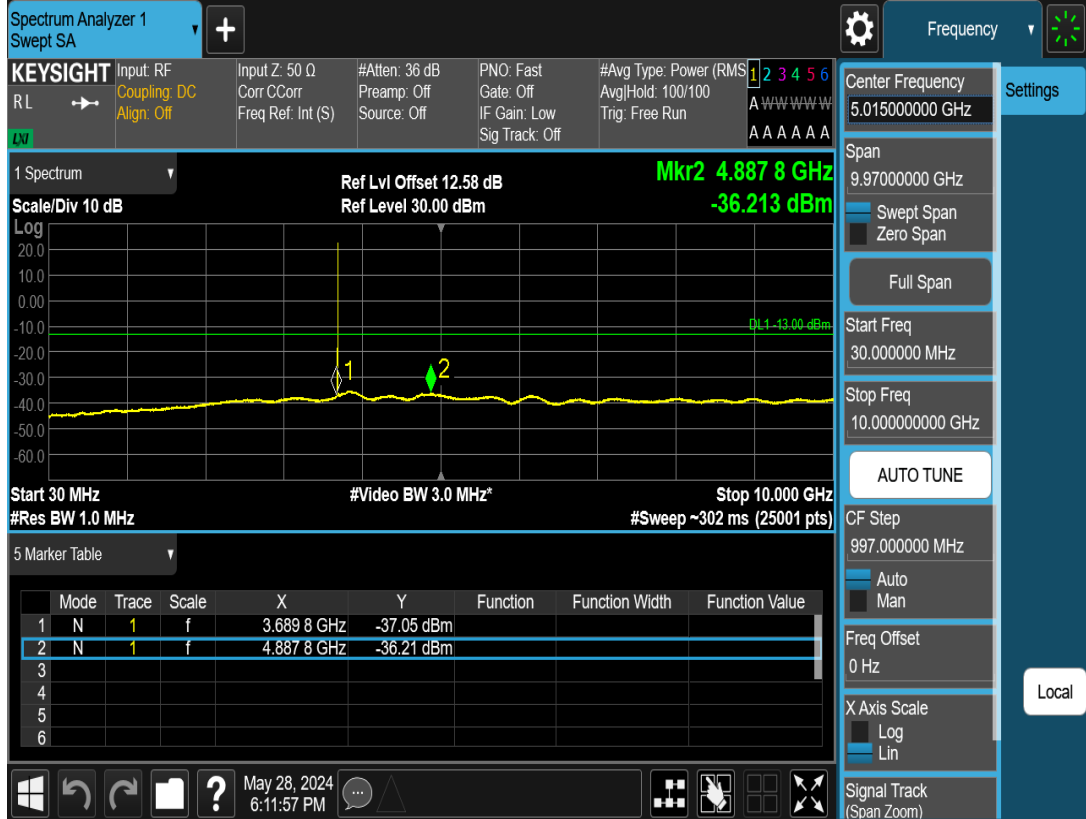
Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	3.689 8 GHz			-37.18 dBm
2	N	1	f	4.906 1 GHz			-36.20 dBm
3							
4							
5							
6							

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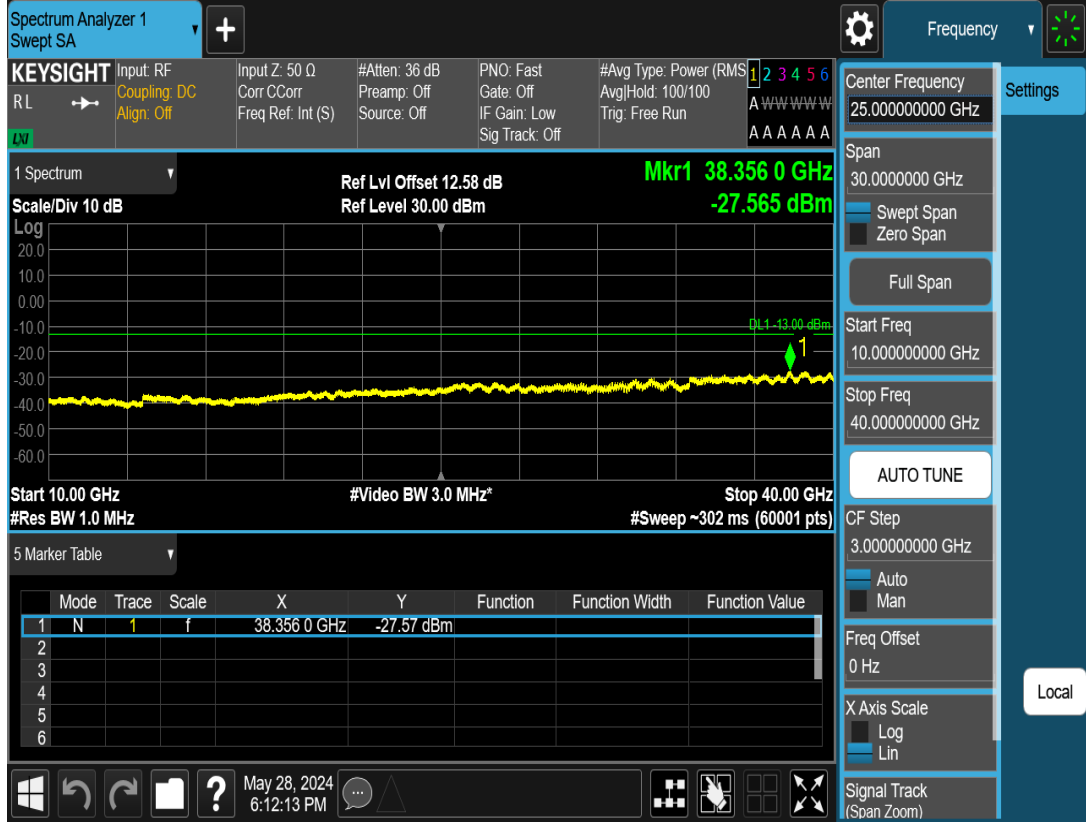
N77b(3700-3980MHz)-15M-CSE-L-DFT-s-OFDM-Pi2 BPSK-1RB0-10GHz-40GHz



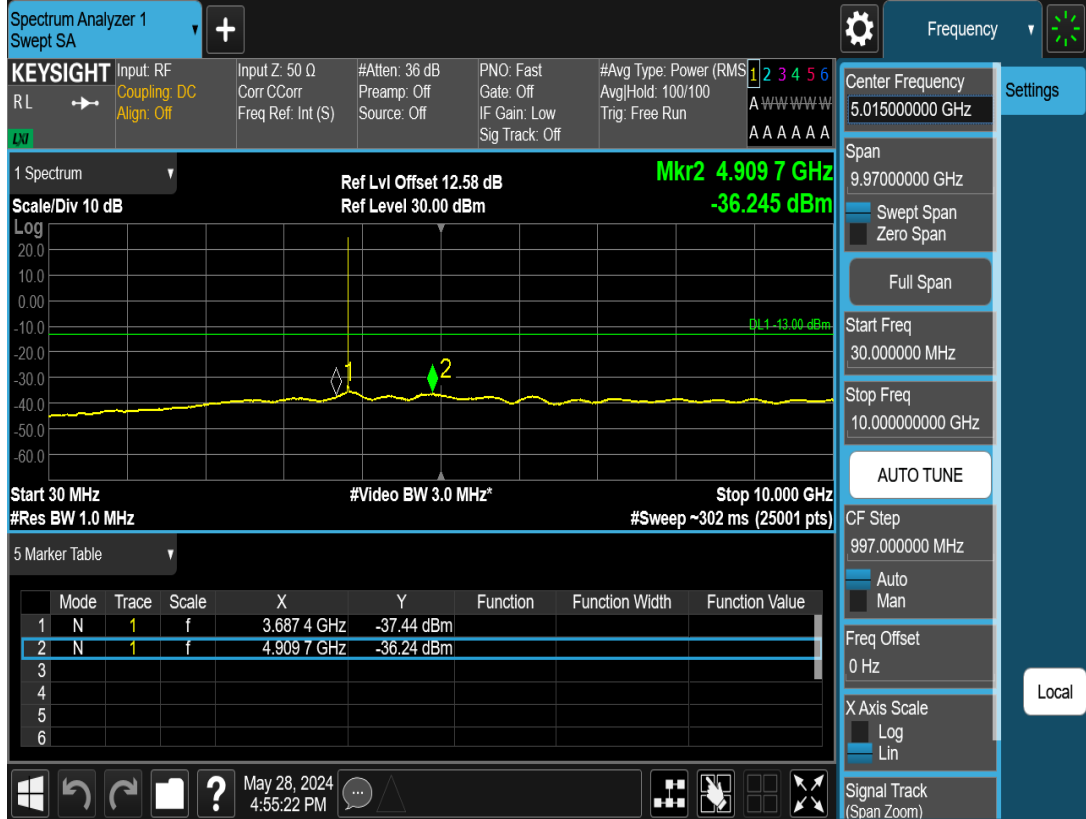
N77b(3700-3980MHz)-15M-CSE-L-CP-OFDM-QPSK-1RB0-30MHz-10GHz



N77b(3700-3980MHz)-15M-CSE-L-CP-OFDM-QPSK-1RB0-10GHz-40GHz



N77b(3700-3980MHz)-15M-CSE-M-DFT-s-OFDM-Pi2 BPSK-1RB0-30MHz-10GHz



N77b(3700-3980MHz)-15M-CSE-M-DFT-s-OFDM-Pi2 BPSK-1RB0-10GHz-40GHz

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Off

Input Z: 50 Ω Corr: C Corr Freq Ref: Int (S) #Atten: 36 dB Preamp: Off Source: Off PNO: Fast Gate: Off IF Gain: Low Sig Track: Off #Avg Type: Power (RMS) AvgHold: 100/100 Trig: Free Run

Center Frequency: 25.000000000 GHz

Span: 30.0000000 GHz

Start Freq: 10.000000000 GHz

Stop Freq: 40.000000000 GHz

Scale/Div 10 dB

Ref Lvl Offset 12.58 dB Ref Level 30.00 dBm

Mkr1 38.347 5 GHz -27.822 dBm

Start 10.00 GHz #Res BW 1.0 MHz #Video BW 3.0 MHz* Stop 40.00 GHz #Sweep ~302 ms (60001 pts)

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	38.347 5 GHz			-27.82 dBm
2							
3							
4							
5							
6							

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N77b(3700-3980MHz)-15M-CSE-M-CP-OFDM-QPSK-1RB0-30MHz-10GHz

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Off

Input Z: 50 Ω Corr: C Corr Freq Ref: Int (S) #Atten: 36 dB Preamp: Off Source: Off PNO: Fast Gate: Off IF Gain: Low Sig Track: Off #Avg Type: Power (RMS) AvgHold: 100/100 Trig: Free Run

Center Frequency: 5.015000000 GHz

Span: 9.970000000 GHz

Start Freq: 30.0000000 MHz

Stop Freq: 10.000000000 GHz

Scale/Div 10 dB

Ref Lvl Offset 12.58 dB Ref Level 30.00 dBm

Mkr2 4.880 6 GHz -36.280 dBm

Start 30 MHz #Res BW 1.0 MHz #Video BW 3.0 MHz* Stop 10.000 GHz #Sweep ~302 ms (25001 pts)

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	3.687 4 GHz			-37.38 dBm
2	N	1	f	4.880 6 GHz			-36.28 dBm
3							
4							
5							
6							

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N77b(3700-3980MHz)-15M-CSE-M-CP-OFDM-QPSK-1RB0-10GHz-40GHz

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Off

Input Z: 50 Ω Corr: C Corr Freq Ref: Int (S) #Atten: 36 dB Preamp: Off Source: Off PNO: Fast Gate: Off IF Gain: Low Sig Track: Off #Avg Type: Power (RMS) 1 2 3 4 5 6 Avg/Hold: 100/100 Trig: Free Run

Center Frequency: 25.00000000 GHz

Span: 30.00000000 GHz

Start Freq: 10.00000000 GHz

Stop Freq: 40.00000000 GHz

Scale/Div 10 dB

Ref Lvl Offset 12.58 dB

Ref Level 30.00 dBm

Mkr1 38.300 0 GHz -27.564 dBm

DL1 -13.00 dBm

Start 10.00 GHz #Res BW 1.0 MHz #Video BW 3.0 MHz* Stop 40.00 GHz #Sweep ~302 ms (60001 pts)

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	38.300 0 GHz			-27.56 dBm
2							
3							
4							
5							
6							

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N77b(3700-3980MHz)-15M-CSE-H-DFT-s-OFDM-Pi2 BPSK-1RB0-30MHz-10GHz

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Off

Input Z: 50 Ω Corr: C Corr Freq Ref: Int (S) #Atten: 36 dB Preamp: Off Source: Off PNO: Fast Gate: Off IF Gain: Low Sig Track: Off #Avg Type: Power (RMS) 1 2 3 4 5 6 Avg/Hold: 100/100 Trig: Free Run

Center Frequency: 5.015000000 GHz

Span: 9.970000000 GHz

Start Freq: 30.00000000 MHz

Stop Freq: 10.000000000 GHz

Scale/Div 10 dB

Ref Lvl Offset 12.58 dB

Ref Level 30.00 dBm

Mkr2 4.770 5 GHz -36.064 dBm

DL1 -13.00 dBm

Start 30 MHz #Res BW 1.0 MHz #Video BW 3.0 MHz* Stop 10.000 GHz #Sweep ~302 ms (25001 pts)

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	3.687 8 GHz			-37.34 dBm
2	N	1	f	4.770 5 GHz			-36.06 dBm
3							
4							
5							
6							

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N77b(3700-3980MHz)-15M-CSE-H-DFT-s-OFDM-Pi2 BPSK-1RB0-10GHz-40GHz

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Input Z: 50 Ω #Atten: 36 dB PNO: Fast #Avg Type: Power (RMS) 1 2 3 4 5 6
 RL Coupling: DC Corr C/Corr Preamp: Off Gate: Off Avg/Hold: 100/100 A www www www
 Align: Off Freq Ref: Int (S) Source: Off IF Gain: Low Trig: Free Run A A A A A A

Center Frequency 25.000000000 GHz Settings

Span 30.0000000 GHz
 Swept Span
 Zero Span
 Full Span

Start Freq 10.000000000 GHz
 Stop Freq 40.000000000 GHz

AUTO TUNE

CF Step 3.000000000 GHz
 Auto
 Man

Freq Offset 0 Hz

X Axis Scale Log
 Lin

Signal Track (Span Zoom)

Local

1 Spectrum Ref Lvl Offset 12.58 dB Mkr1 38.339 5 GHz
 Scale/Div 10 dB Ref Level 30.00 dBm -27.548 dBm

Log

Start 10.00 GHz #Video BW 3.0 MHz* Stop 40.00 GHz
 #Res BW 1.0 MHz #Sweep ~302 ms (60001 pts)

5 Marker Table

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	38.339 5 GHz	-27.61 dBm		
2							
3							
4							
5							
6							

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N77b(3700-3980MHz)-15M-CSE-H-CP-OFDM-QPSK-1RB0-30MHz-10GHz

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Input Z: 50 Ω #Atten: 36 dB PNO: Fast #Avg Type: Power (RMS) 1 2 3 4 5 6
 RL Coupling: DC Corr C/Corr Preamp: Off Gate: Off Avg/Hold: 100/100 A www www www
 Align: Off Freq Ref: Int (S) Source: Off IF Gain: Low Trig: Free Run A A A A A A

Center Frequency 5.015000000 GHz Settings

Span 9.970000000 GHz
 Swept Span
 Zero Span
 Full Span

Start Freq 30.0000000 MHz
 Stop Freq 10.000000000 GHz

AUTO TUNE

CF Step 997.0000000 MHz
 Auto
 Man

Freq Offset 0 Hz

X Axis Scale Log
 Lin

Signal Track (Span Zoom)

Local

1 Spectrum Ref Lvl Offset 12.58 dB Mkr2 4.770 1 GHz
 Scale/Div 10 dB Ref Level 30.00 dBm -36.174 dBm

Log

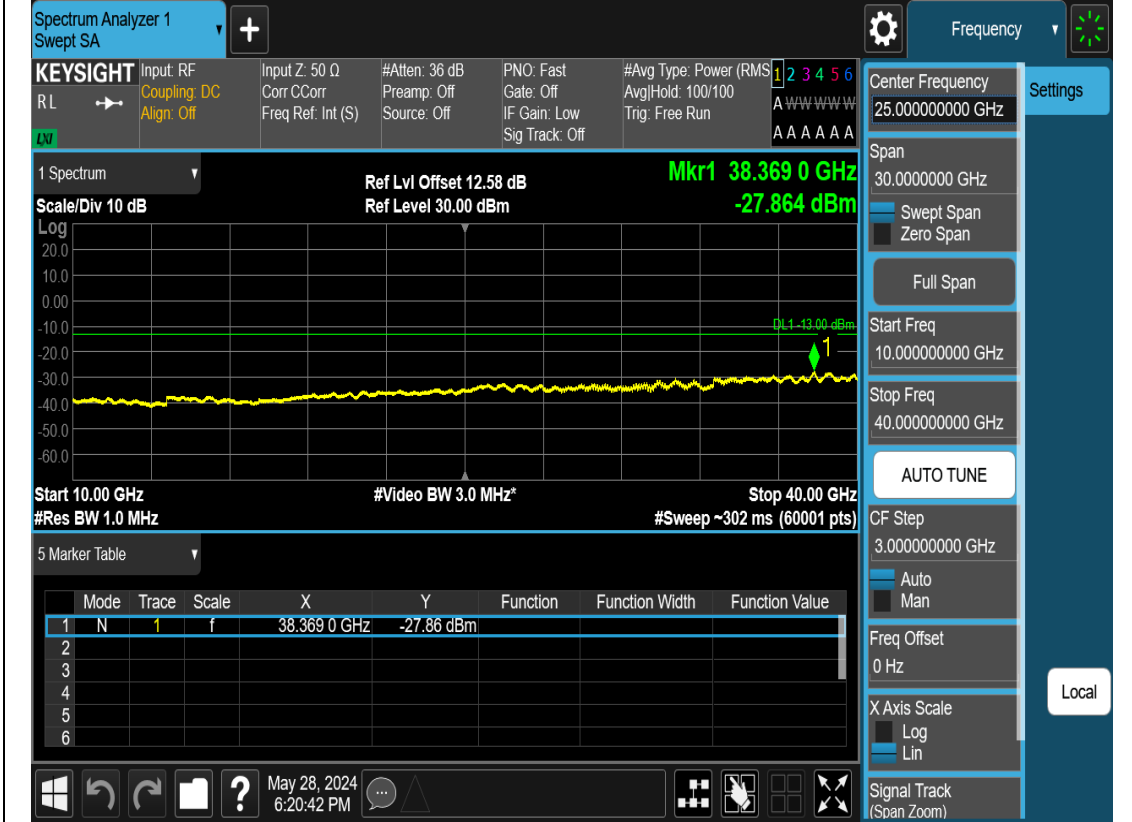
Start 30 MHz #Video BW 3.0 MHz* Stop 10.000 GHz
 #Res BW 1.0 MHz #Sweep ~302 ms (25001 pts)

5 Marker Table

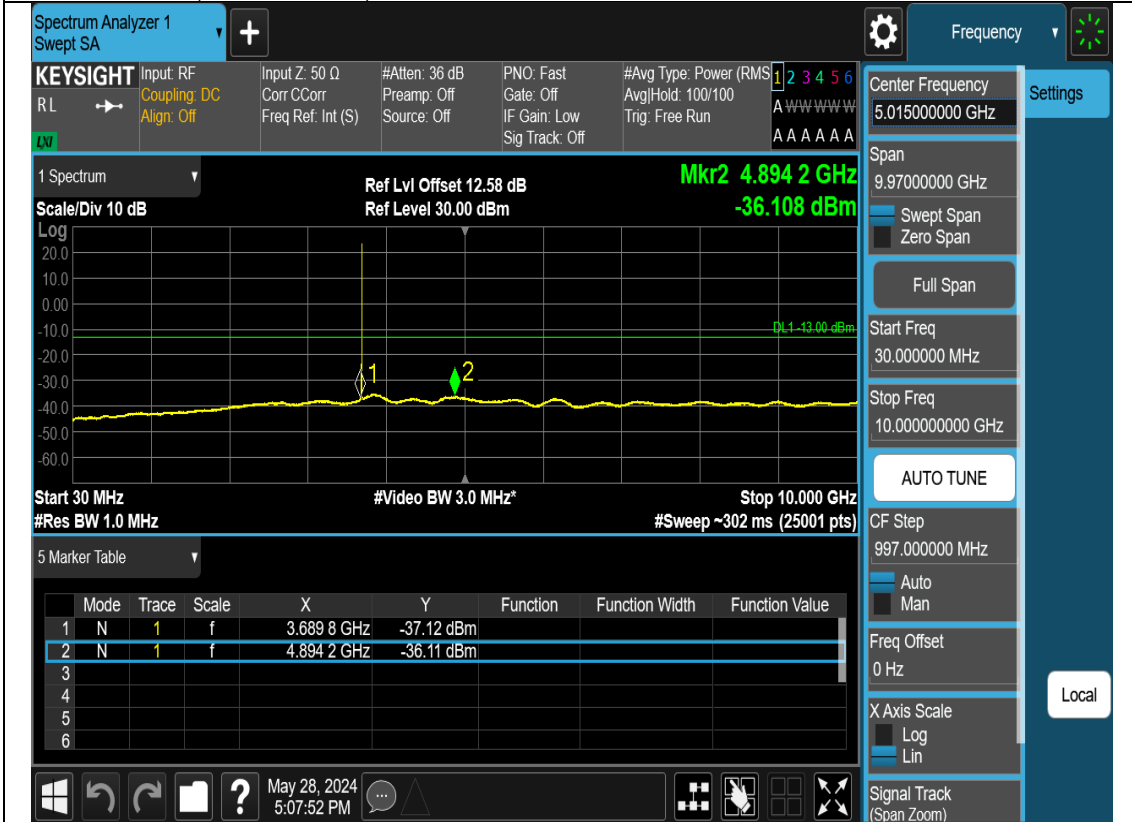
Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	3.689 4 GHz	-37.33 dBm		
2	N	1	f	4.770 1 GHz	-36.17 dBm		
3							
4							
5							
6							

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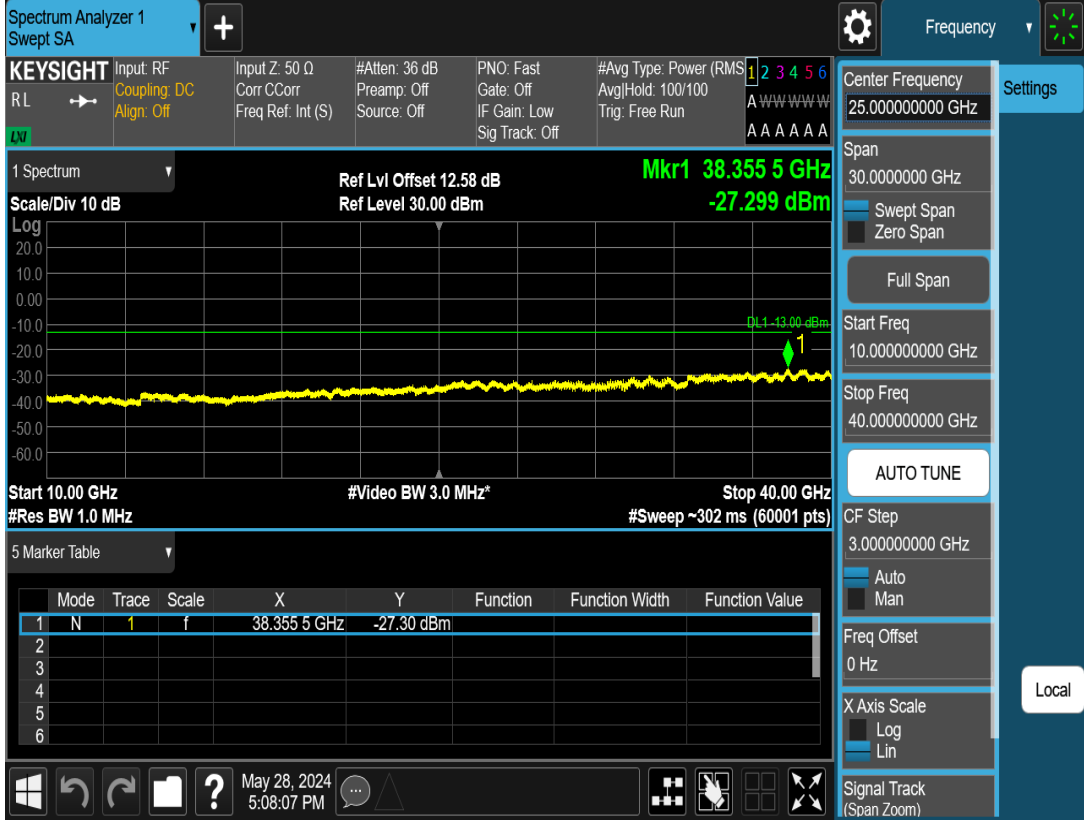
N77b(3700-3980MHz)-15M-CSE-H-CP-OFDM-QPSK-1RB0-10GHz-40GHz



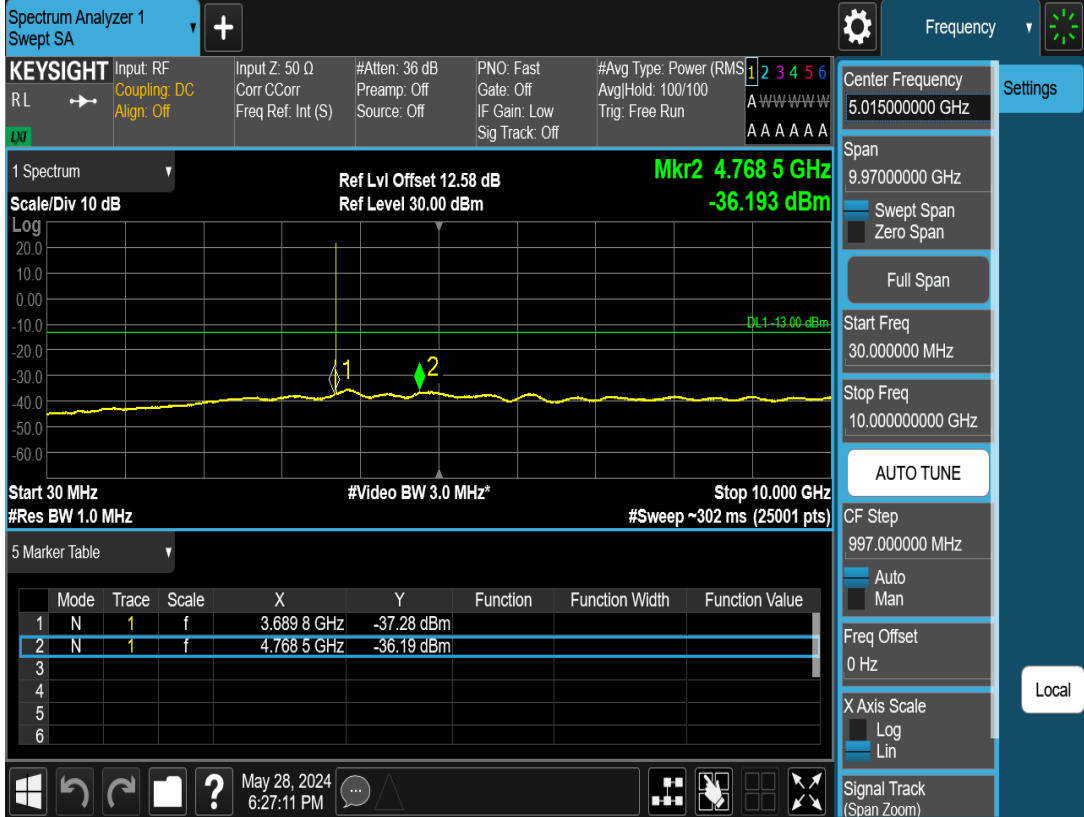
N77b(3700-3980MHz)-20M-CSE-L-DFT-s-OFDM-Pi2 BPSK-1RB0-30MHz-10GHz



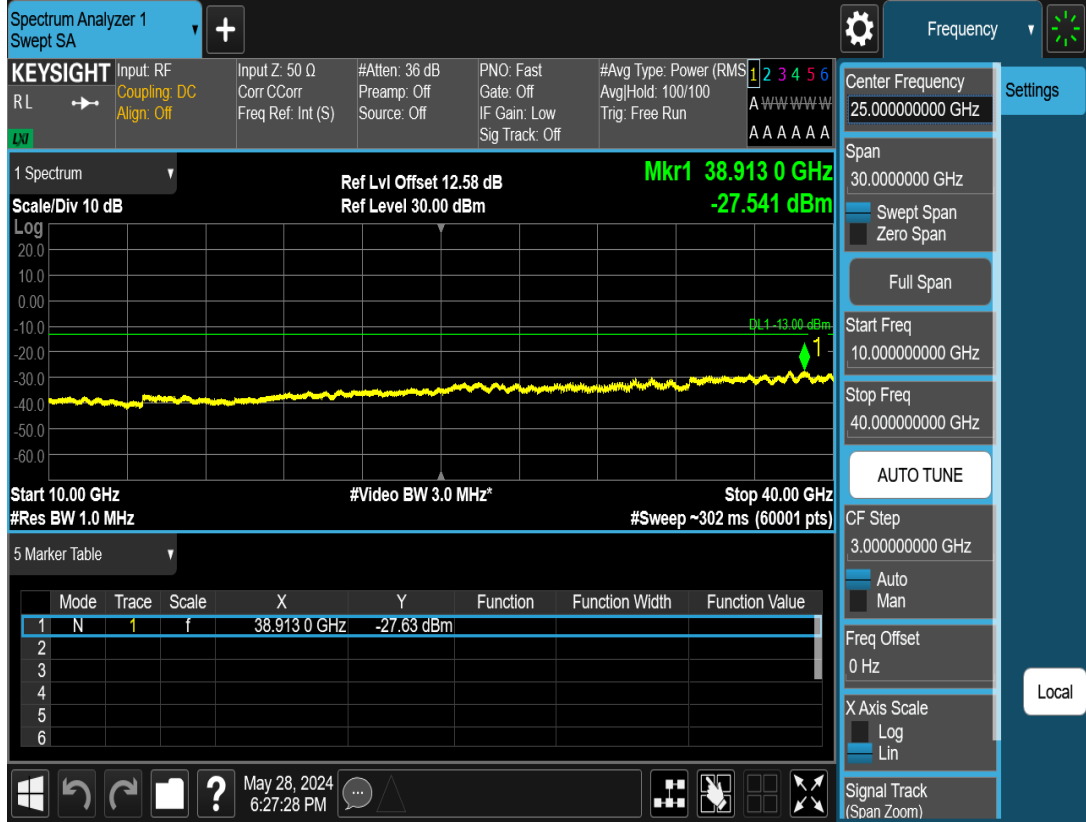
N77b(3700-3980MHz)-20M-CSE-L-DFT-s-OFDM-Pi2 BPSK-1RB0-10GHz-40GHz



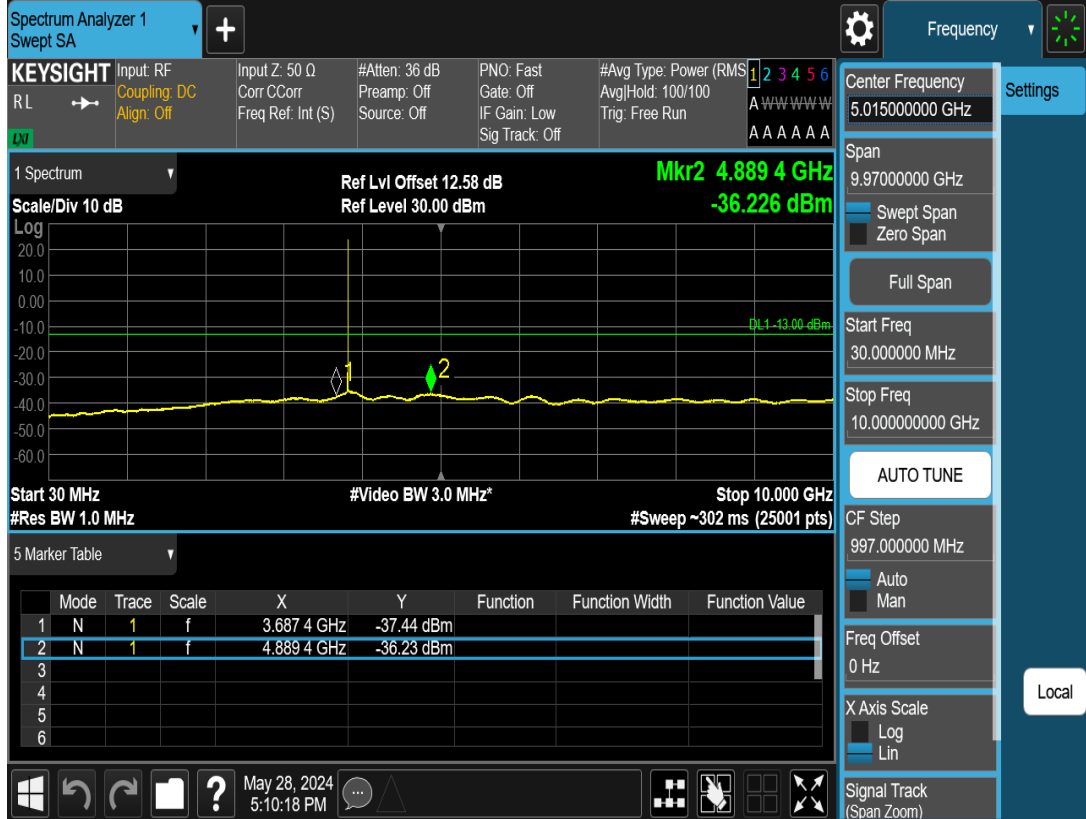
N77b(3700-3980MHz)-20M-CSE-L-CP-OFDM-QPSK-1RB0-30MHz-10GHz



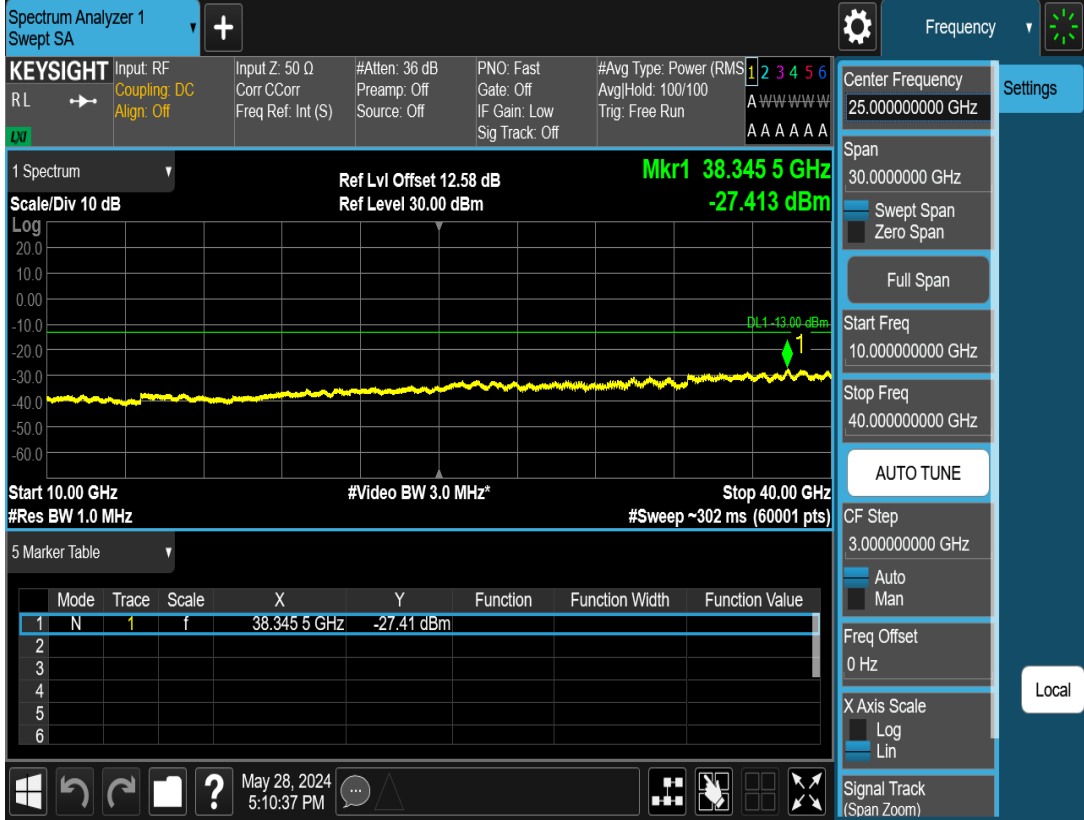
N77b(3700-3980MHz)-20M-CSE-L-CP-OFDM-QPSK-1RB0-10GHz-40GHz



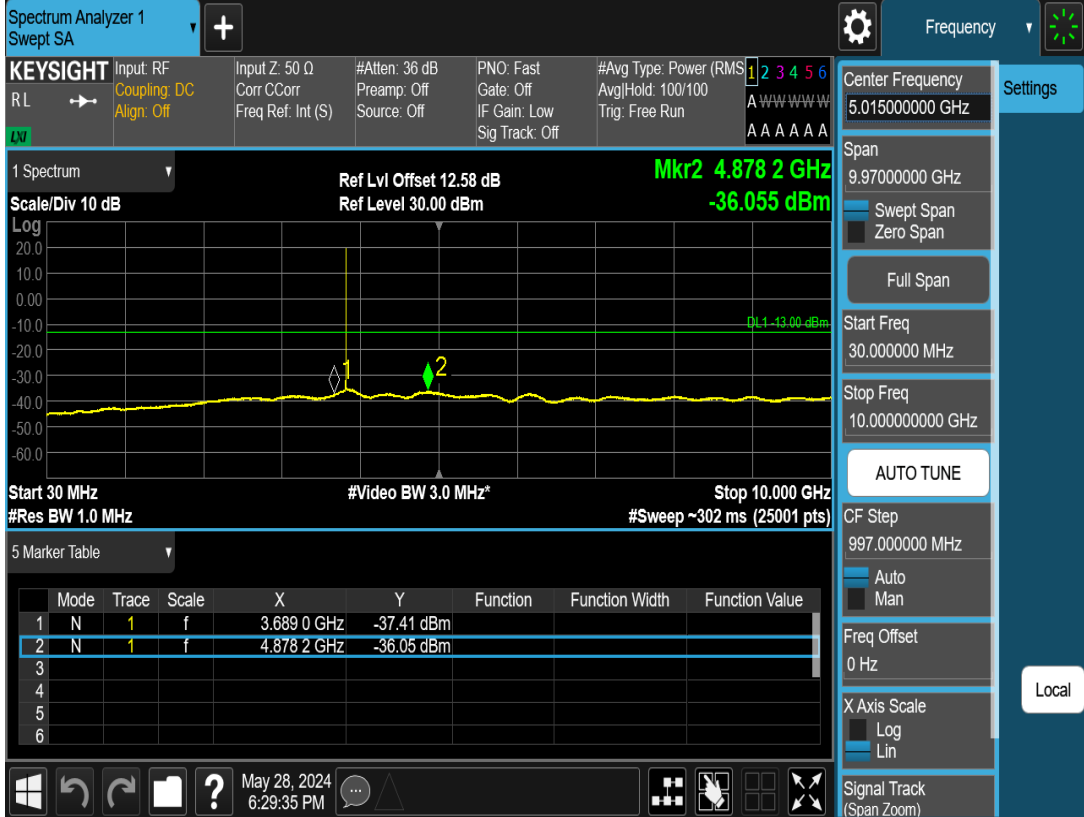
N77b(3700-3980MHz)-20M-CSE-M-DFT-s-OFDM-Pi2 BPSK-1RB0-30MHz-10GHz



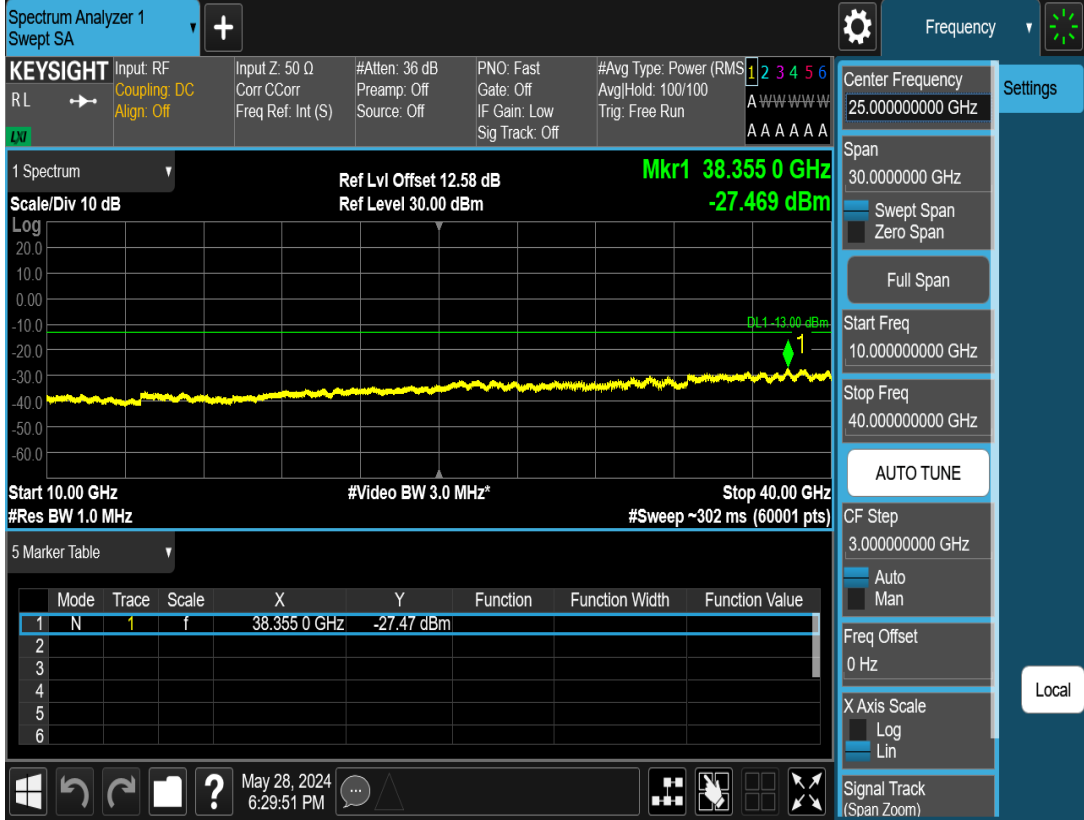
N77b(3700-3980MHz)-20M-CSE-M-DFT-s-OFDM-Pi2 BPSK-1RB0-10GHz-40GHz



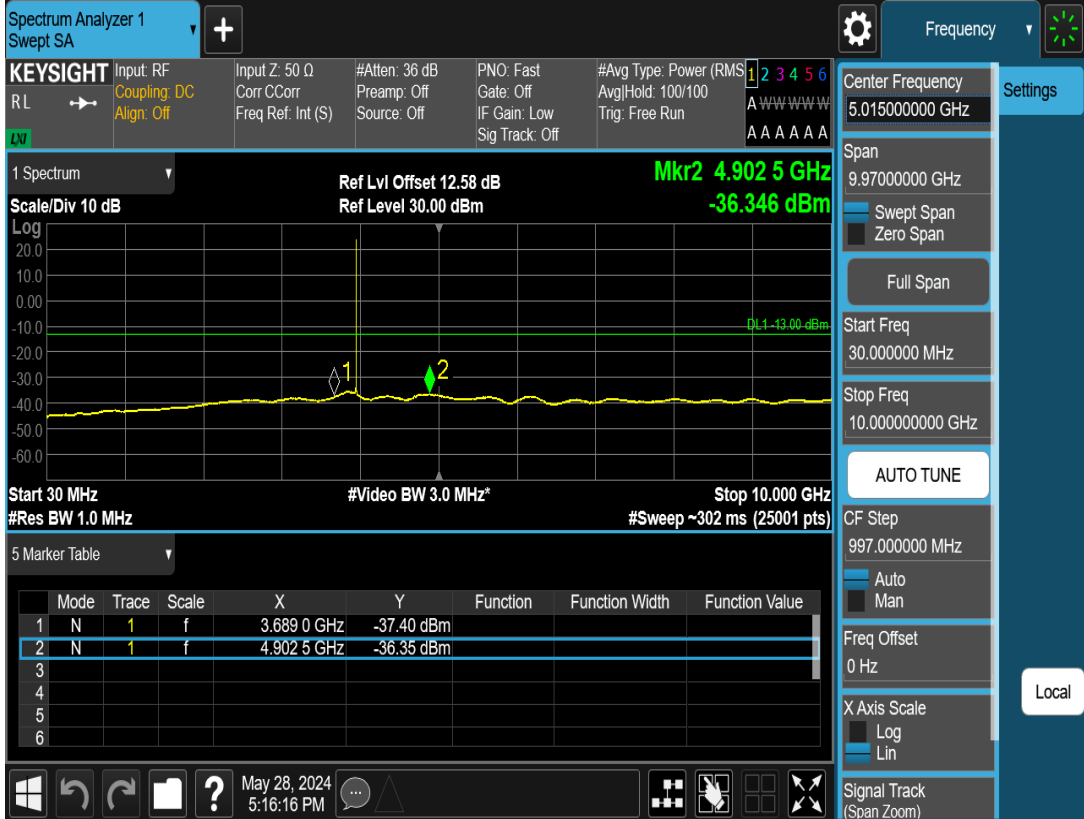
N77b(3700-3980MHz)-20M-CSE-M-CP-OFDM-QPSK-1RB0-30MHz-10GHz



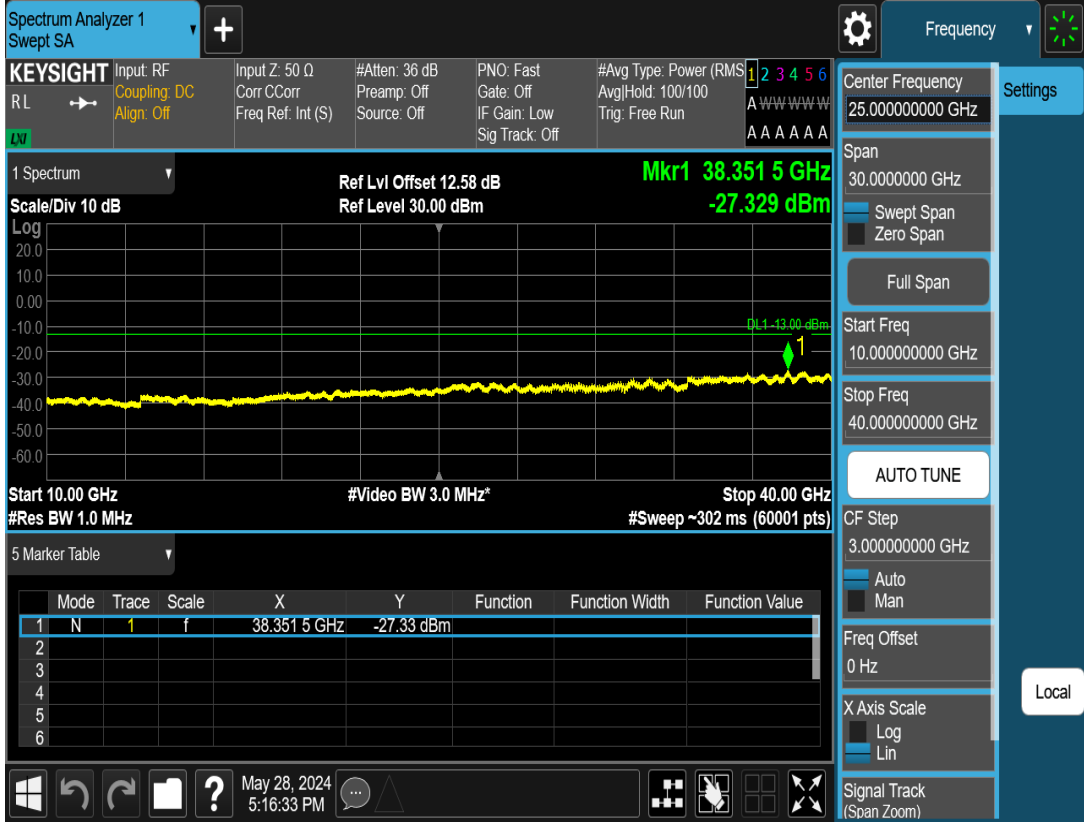
N77b(3700-3980MHz)-20M-CSE-M-CP-OFDM-QPSK-1RB0-10GHz-40GHz



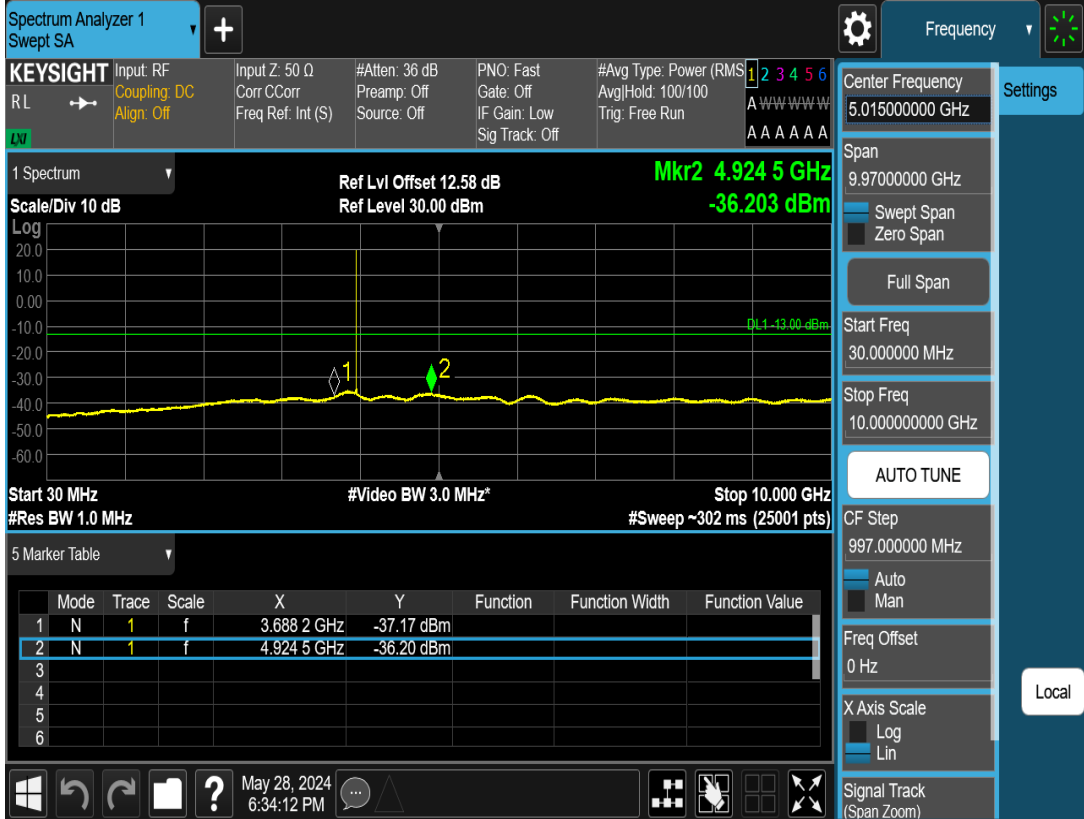
N77b(3700-3980MHz)-20M-CSE-H-DFT-s-OFDM-Pi2 BPSK-1RB0-30MHz-10GHz



N77b(3700-3980MHz)-20M-CSE-H-DFT-s-OFDM-Pi2 BPSK-1RB0-10GHz-40GHz



N77b(3700-3980MHz)-20M-CSE-H-CP-OFDM-QPSK-1RB0-30MHz-10GHz



N77b(3700-3980MHz)-20M-CSE-H-CP-OFDM-QPSK-1RB0-10GHz-40GHz

Spectrum Analyzer 1
Swept SA

KEYSIGHT Input RF
RL → Coupling: DC
Align: Off

Input Z: 50 Ω #Atten: 36 dB PNO: Fast #Avg Type: Power (RMS) 1 2 3 4 5 6
Corr: CCorr Preamp: Off Gate: Off Avg/Hold: 100/100
Freq Ref: Int (S) Source: Off IF Gain: Low Trig: Free Run
Sig Track: Off

1 Spectrum Ref Lvl Offset 12.58 dB **Mkr1 38.337 0 GHz**
Scale/Div 10 dB Ref Level 30.00 dBm **-27.546 dBm**

Start 10.00 GHz #Video BW 3.0 MHz* Stop 40.00 GHz
#Res BW 1.0 MHz #Sweep ~302 ms (60001 pts)

5 Marker Table

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	38.337 0 GHz	-27.55 dBm		
2							
3							
4							
5							
6							

Frequency

Center Frequency
25.000000000 GHz

Span
30.0000000 GHz

Swept Span
Zero Span

Full Span

Start Freq
10.000000000 GHz

Stop Freq
40.000000000 GHz

AUTO TUNE

CF Step
3.000000000 GHz

Auto
Man

Freq Offset
0 Hz

X Axis Scale
Log
Lin

Signal Track
(Span Zoom)

Settings

Local

May 28, 2024 6:34:31 PM