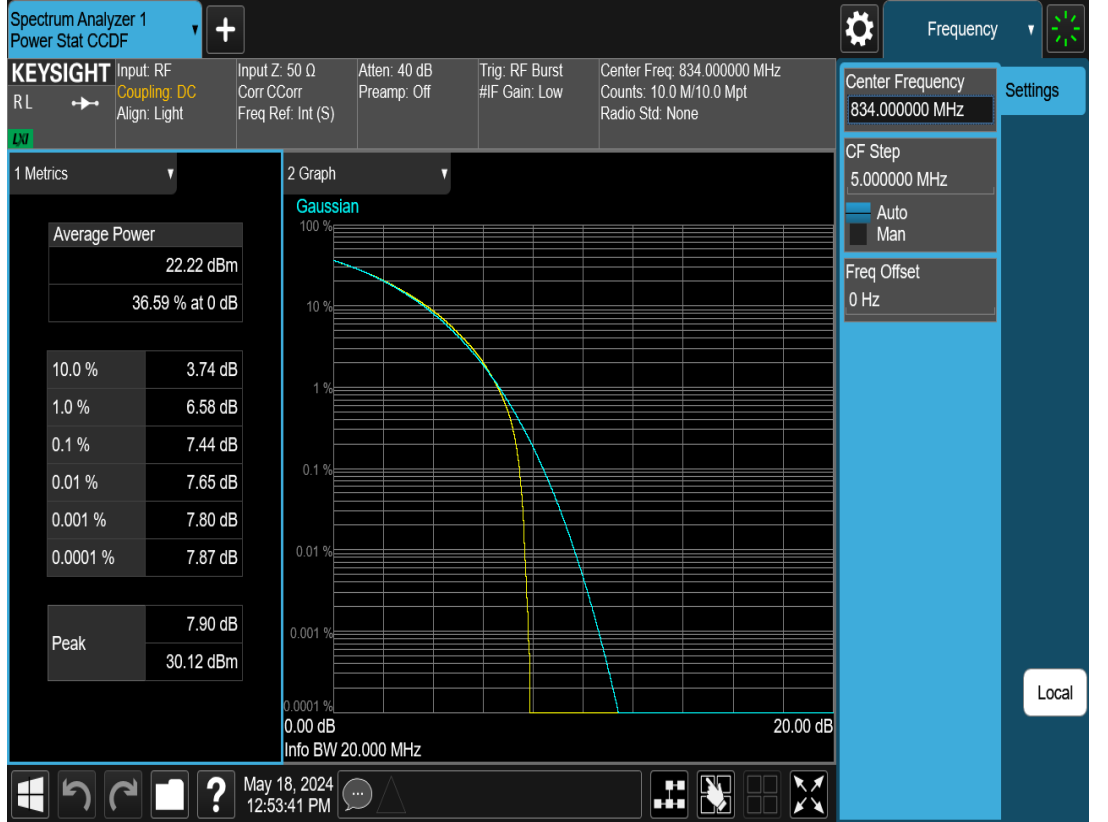
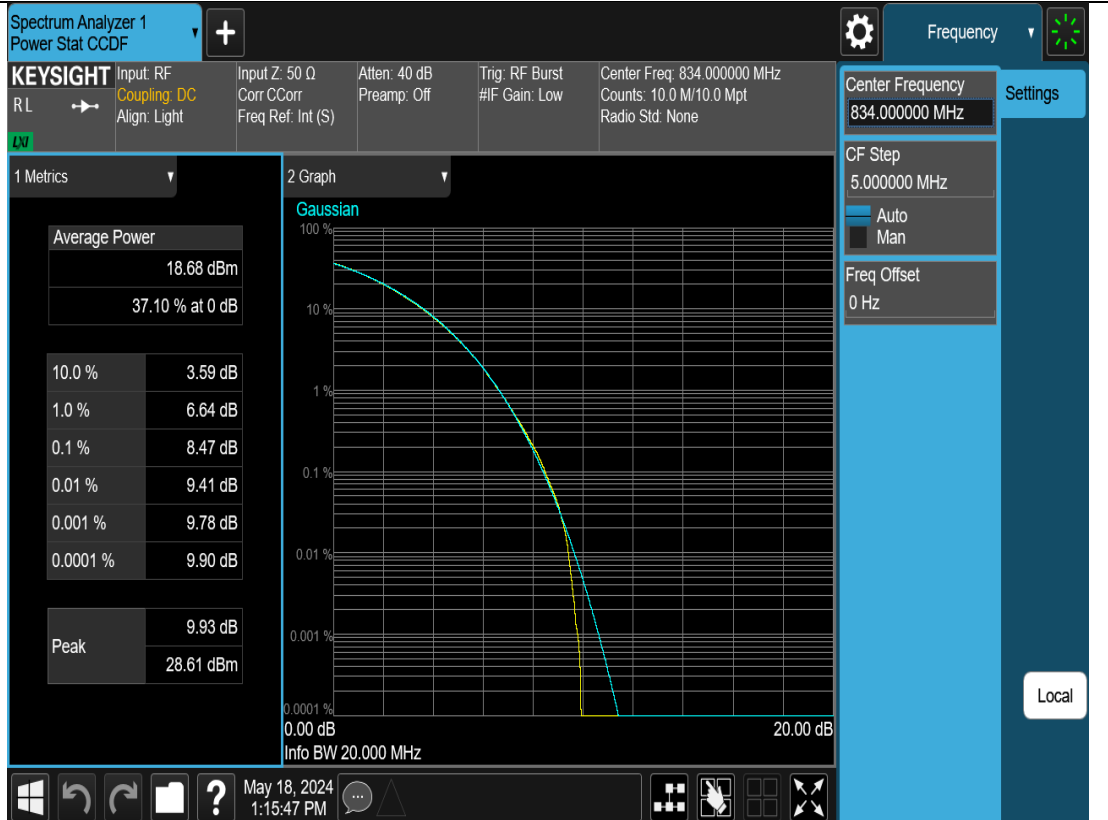


N5-20M-PAPR-L-CP-OFDM-QPSK-Outer\_Full



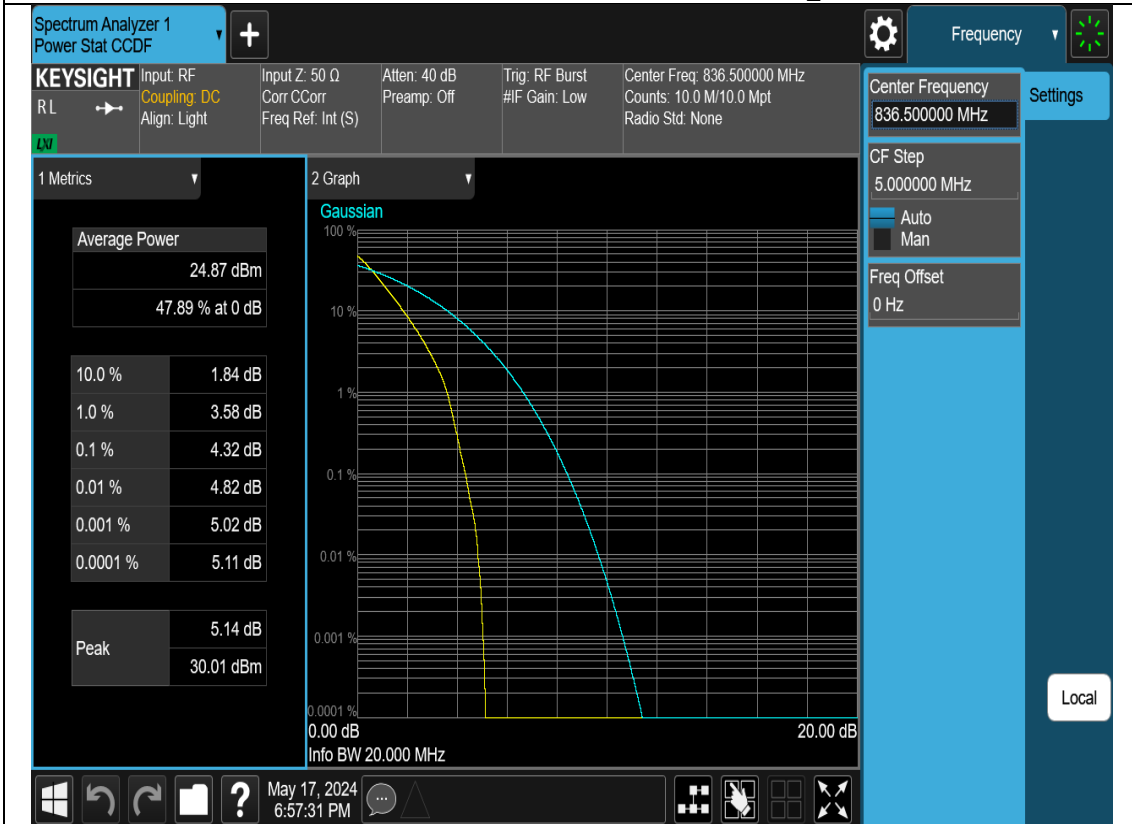
N5-20M-PAPR-L-CP-QPSK-256QAM-Outer\_Full



N5-20M-PAPR-L-CP-QPSK-16QAM-Outer\_Full



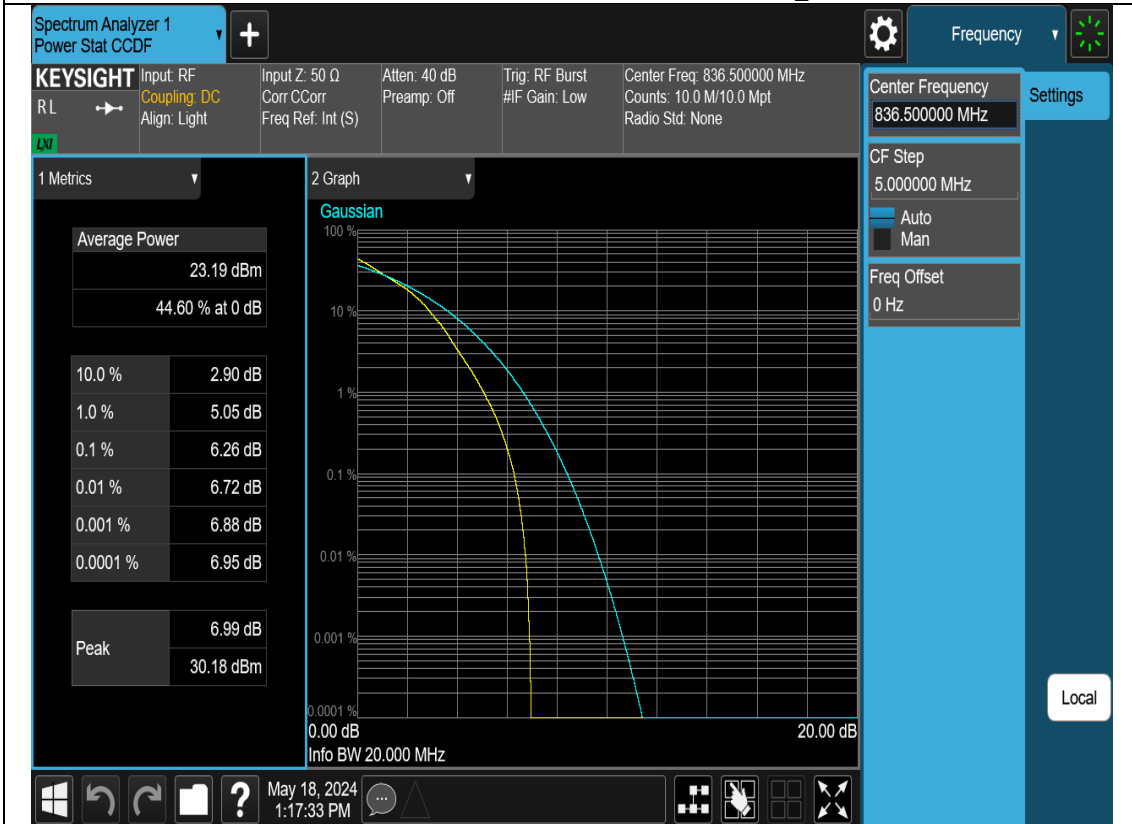
N5-20M-PAPR-M-DFT-s-OFDM-Pi2 BPSK-Outer\_Full



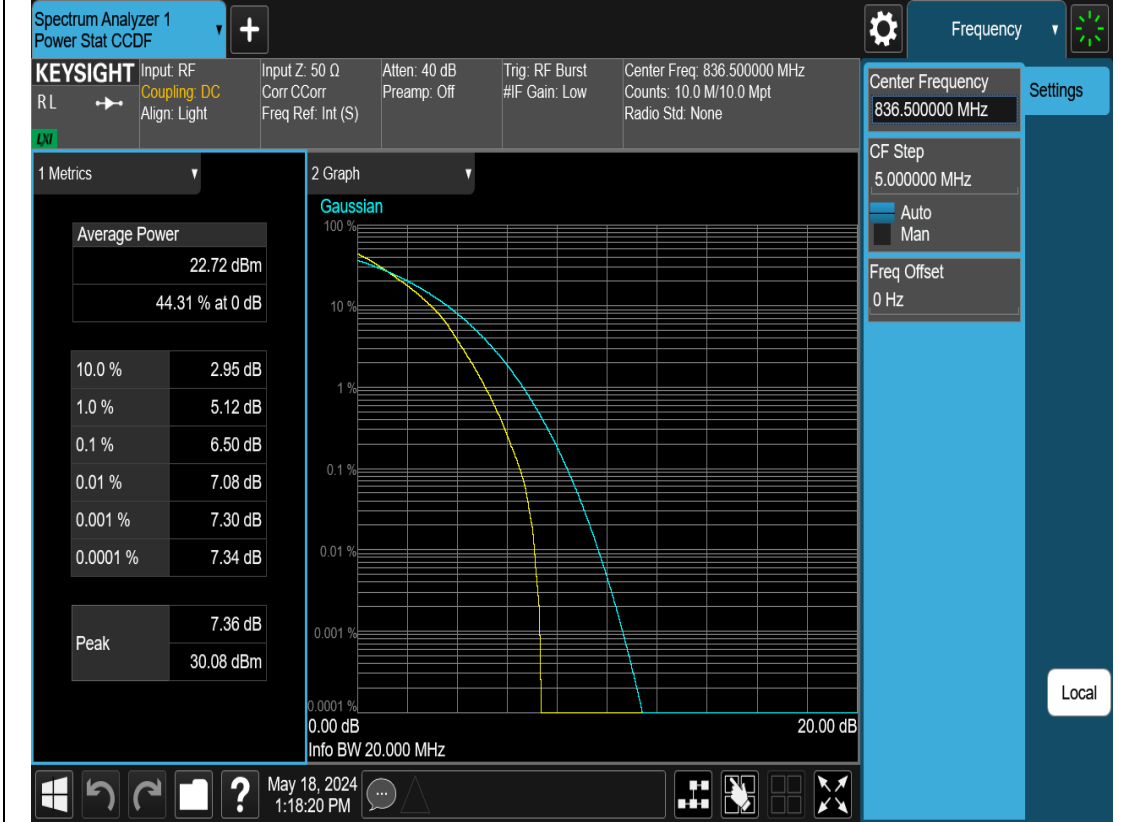
N5-20M-PAPR-M-DFT-s-OFDM-QPSK-Outer\_Full



N5-20M-PAPR-M-DFT-s-OFDM-16QAM-Outer\_Full



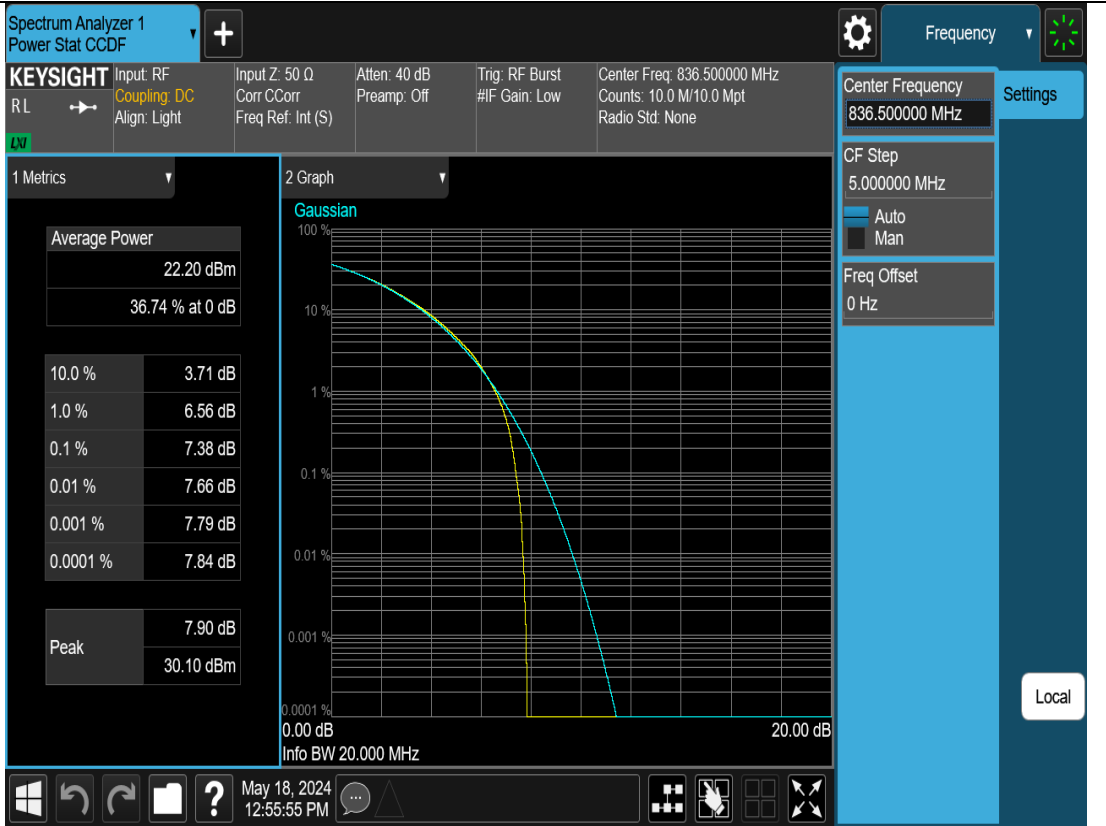
N5-20M-PAPR-M-DFT-s-OFDM-64QAM-Outer\_Full



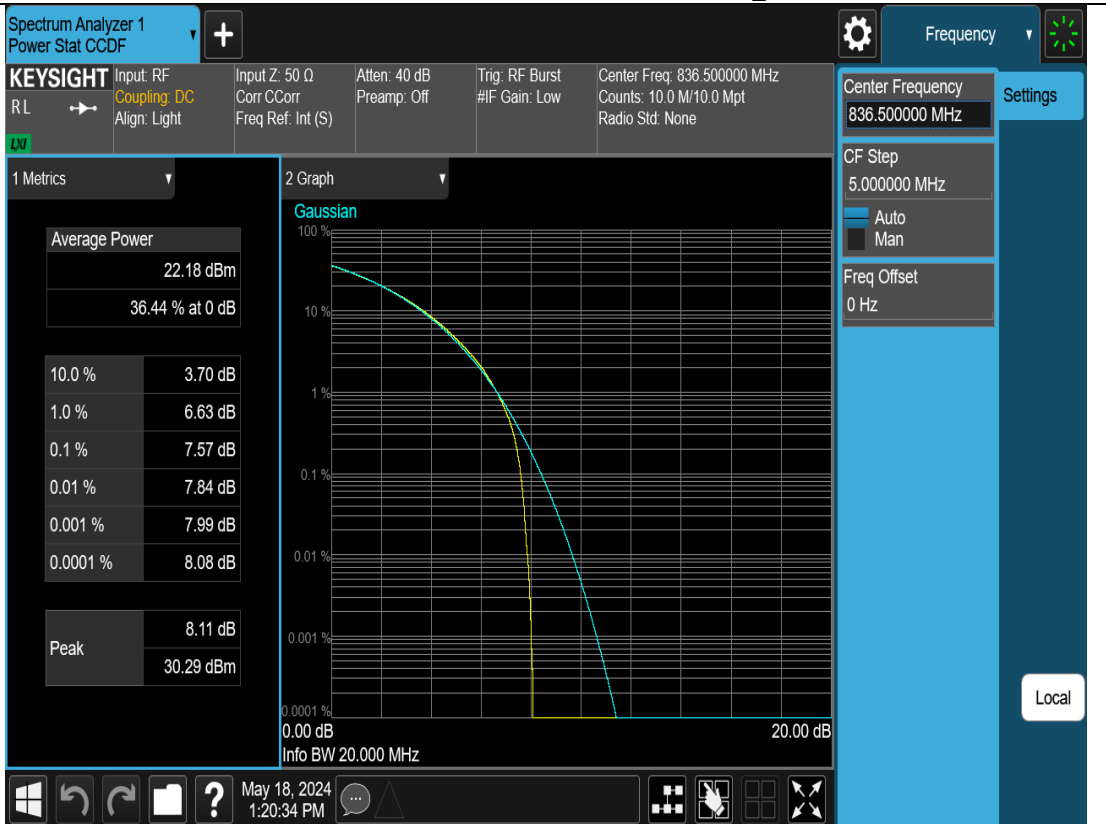
N5-20M-PAPR-M-DFT-s-OFDM-256QAM-Outer\_Full



N5-20M-PAPR-M-CP-OFDM-QPSK-Outer\_Full



N5-20M-PAPR-M-CP-OFDM-16QAM-Outer\_Full



N5-20M-PAPR-M-CP-OFDM-64QAM-Outer\_Full

Spectrum Analyzer 1  
Power Stat CCDF

KEYSIGHT Input RF  
RL Coupling: DC  
Align: Light

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

Atten: 40 dB  
Preamp: Off

Trig: RF Burst  
#IF Gain: Low

Center Freq: 836.500000 MHz  
Counts: 10.0 M/10.0 Mpt  
Radio Std: None

Center Frequency: 836.500000 MHz

CF Step: 5.000000 MHz

Freq Offset: 0 Hz

1 Metrics

Average Power

21.74 dBm

36.18 % at 0 dB

10.0 %	3.68 dB
1.0 %	6.72 dB
0.1 %	8.03 dB
0.01 %	8.43 dB
0.001 %	8.55 dB
0.0001 %	8.60 dB

Peak

8.64 dB

30.38 dBm

2 Graph

Gaussian

0.0001 %  
0.001 %  
0.01 %  
0.1 %  
1 %  
10 %  
100 %

0.00 dB  
20.00 dB

Info BW 20.000 MHz

May 18, 2024  
1:21:31 PM

Local

N5-20M-PAPR-M-CP-OFDM-256QAM-Outer\_Full

Spectrum Analyzer 1  
Power Stat CCDF

KEYSIGHT Input RF  
RL Coupling: DC  
Align: Light

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

Atten: 40 dB  
Preamp: Off

Trig: RF Burst  
#IF Gain: Low

Center Freq: 836.500000 MHz  
Counts: 10.0 M/10.0 Mpt  
Radio Std: None

Center Frequency: 836.500000 MHz

CF Step: 5.000000 MHz

Freq Offset: 0 Hz

1 Metrics

Average Power

18.74 dBm

36.83 % at 0 dB

10.0 %	3.60 dB
1.0 %	6.66 dB
0.1 %	8.49 dB
0.01 %	9.30 dB
0.001 %	9.76 dB
0.0001 %	9.84 dB

Peak

9.88 dB

28.62 dBm

2 Graph

Gaussian

0.0001 %  
0.001 %  
0.01 %  
0.1 %  
1 %  
10 %  
100 %

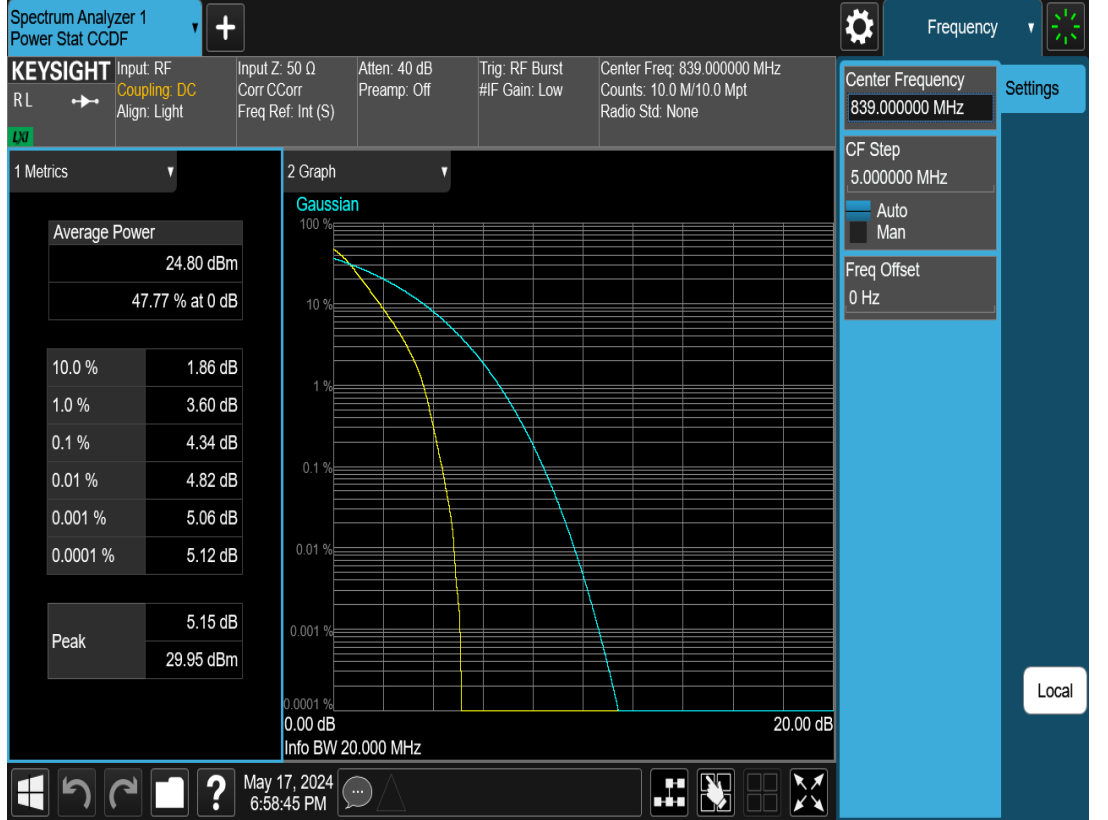
0.00 dB  
20.00 dB

Info BW 20.000 MHz

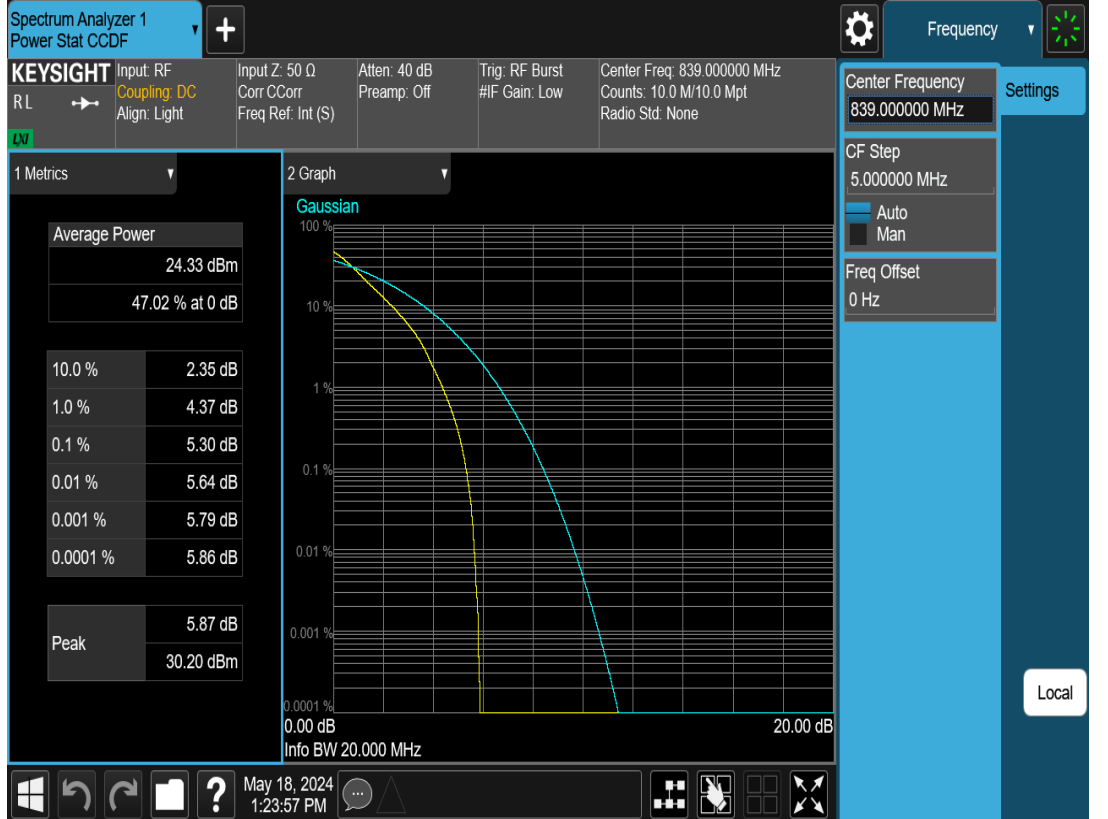
May 18, 2024  
1:22:37 PM

Local

N5-20M-PAPR-H-DFT-s-OFDM-Pi2 BPSK-Outer\_Full



N5-20M-PAPR-H-DFT-s-OFDM-QPSK-Outer\_Full



N5-20M-PAPR-H-DFT-s-OFDM-16QAM-Outer\_Full

Spectrum Analyzer 1  
Power Stat CCDF

KEYSIGHT Input RF  
R.L. Coupling: DC  
Align: Light

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

Atten: 40 dB  
Preamp: Off

Trig: RF Burst  
#IF Gain: Low

Center Freq: 839.000000 MHz  
Counts: 10.0 M/10.0 Mpt  
Radio Std: None

Center Frequency: 839.000000 MHz  
CF Step: 5.000000 MHz  
Freq Offset: 0 Hz

1 Metrics

Average Power  
23.29 dBm  
44.93 % at 0 dB

10.0 %	2.92 dB
1.0 %	5.06 dB
0.1 %	6.23 dB
0.01 %	6.69 dB
0.001 %	6.89 dB
0.0001 %	7.01 dB

Peak  
7.04 dB  
30.33 dBm

2 Graph  
Gaussian

0.0001 %  
0.001 %  
0.01 %  
0.1 %  
1 %  
10 %  
100 %

0.00 dB  
20.00 dB

Info BW 20.000 MHz

May 18, 2024  
1:24:51 PM

Local

N5-20M-PAPR-H-DFT-s-OFDM-64QAM-Outer\_Full

Spectrum Analyzer 1  
Power Stat CCDF

KEYSIGHT Input RF  
R.L. Coupling: DC  
Align: Light

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

Atten: 40 dB  
Preamp: Off

Trig: RF Burst  
#IF Gain: Low

Center Freq: 839.000000 MHz  
Counts: 10.0 M/10.0 Mpt  
Radio Std: None

Center Frequency: 839.000000 MHz  
CF Step: 5.000000 MHz  
Freq Offset: 0 Hz

1 Metrics

Average Power  
22.80 dBm  
44.33 % at 0 dB

10.0 %	2.97 dB
1.0 %	5.12 dB
0.1 %	6.44 dB
0.01 %	6.97 dB
0.001 %	7.23 dB
0.0001 %	7.27 dB

Peak  
7.30 dB  
30.10 dBm

2 Graph  
Gaussian

0.0001 %  
0.001 %  
0.01 %  
0.1 %  
1 %  
10 %  
100 %

0.00 dB  
20.00 dB

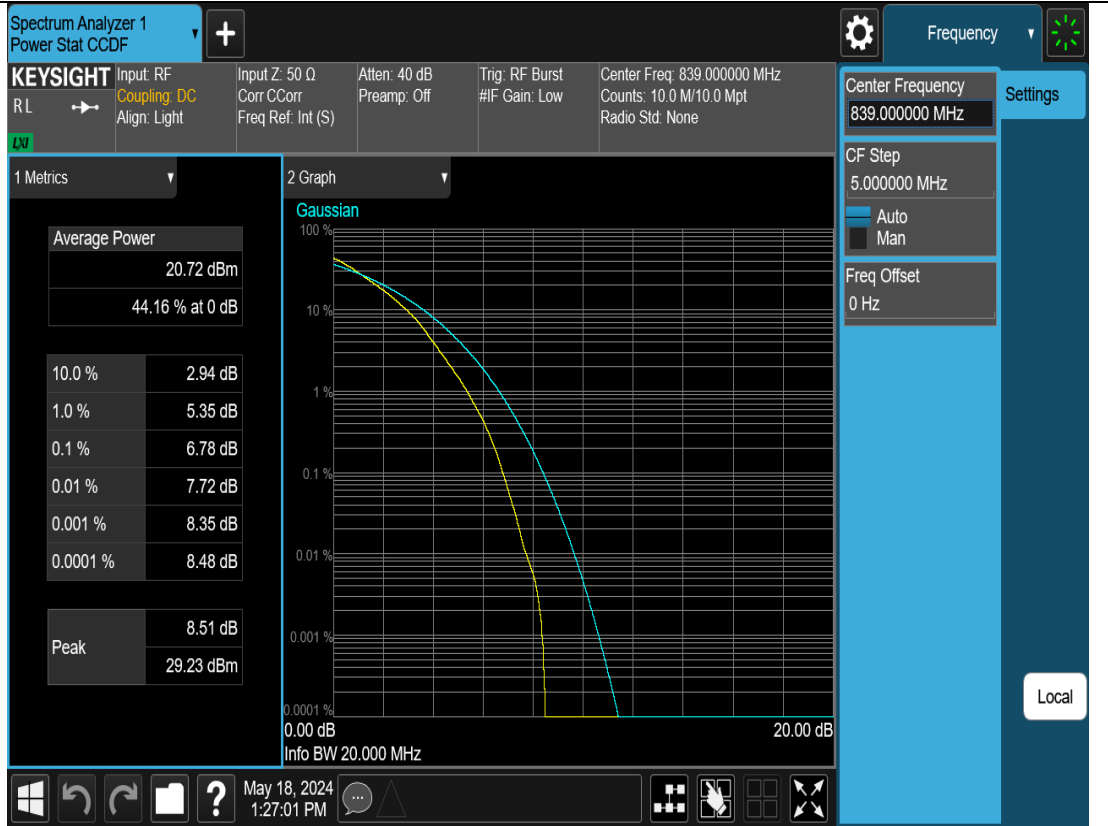
Info BW 20.000 MHz

May 18, 2024  
1:26:04 PM

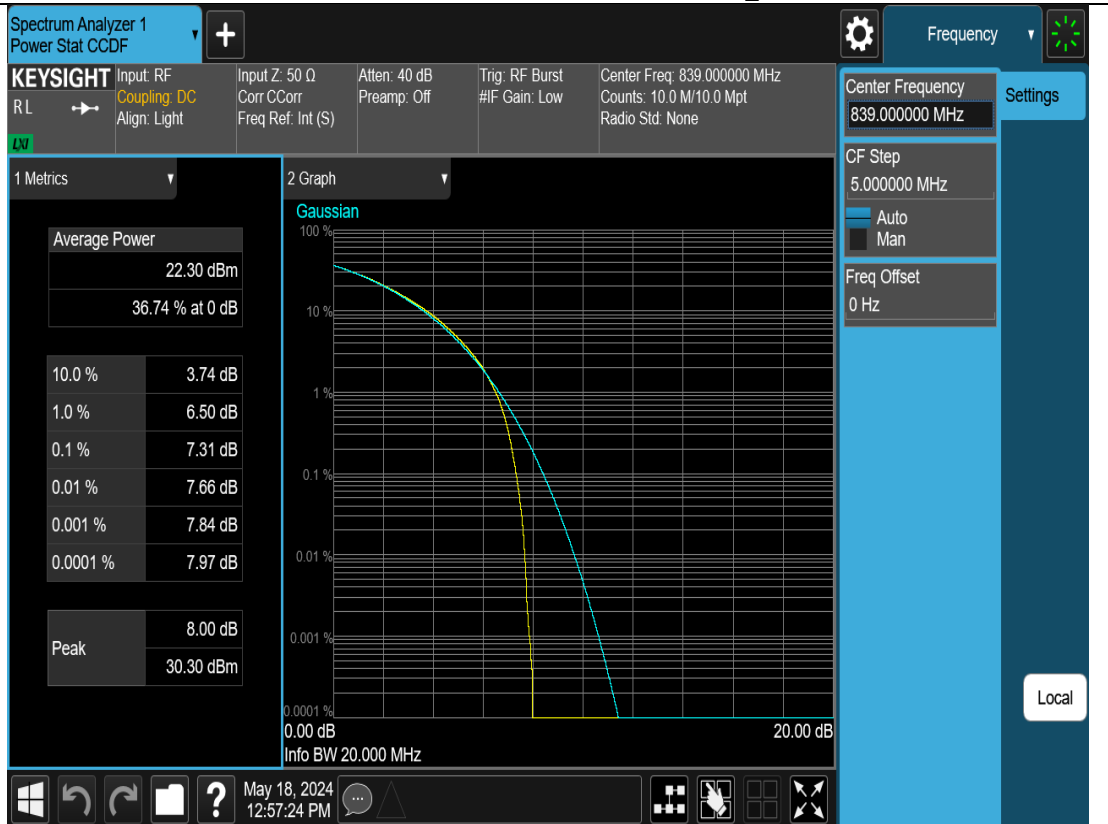
Local



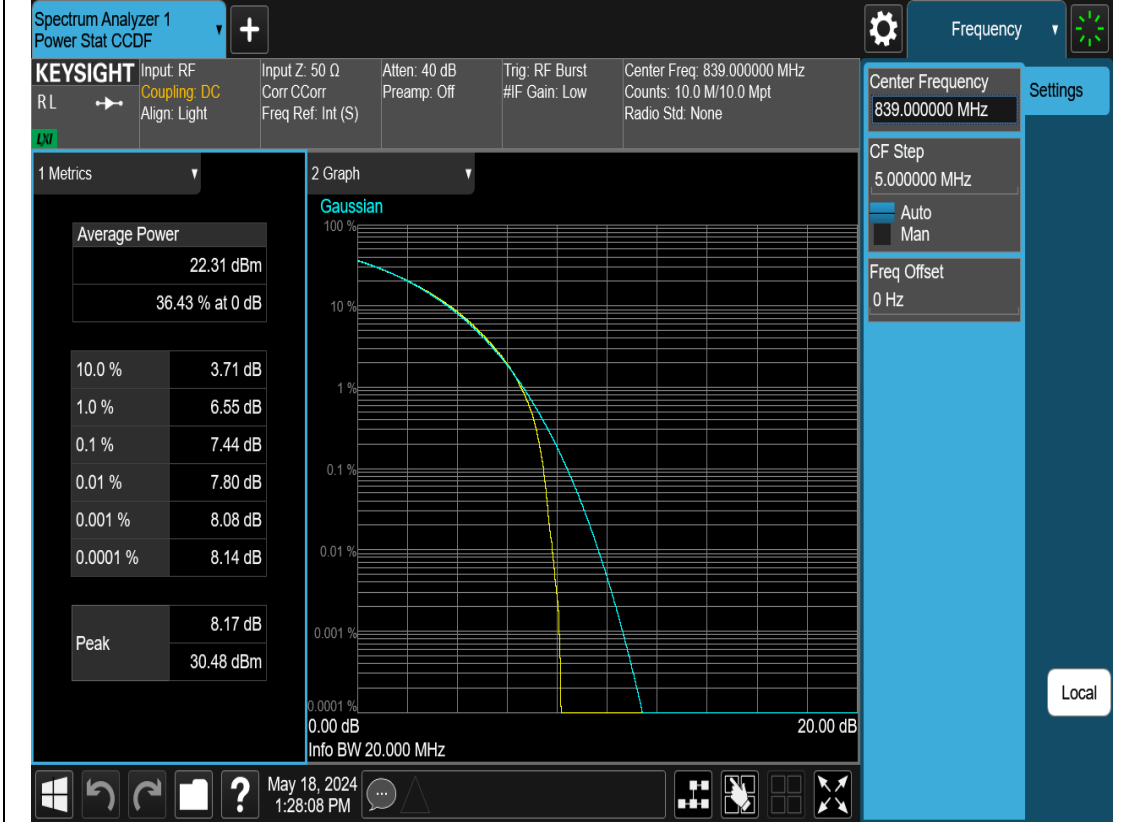
N5-20M-PAPR-H-DFT-s-OFDM-256QAM-Outer\_Full



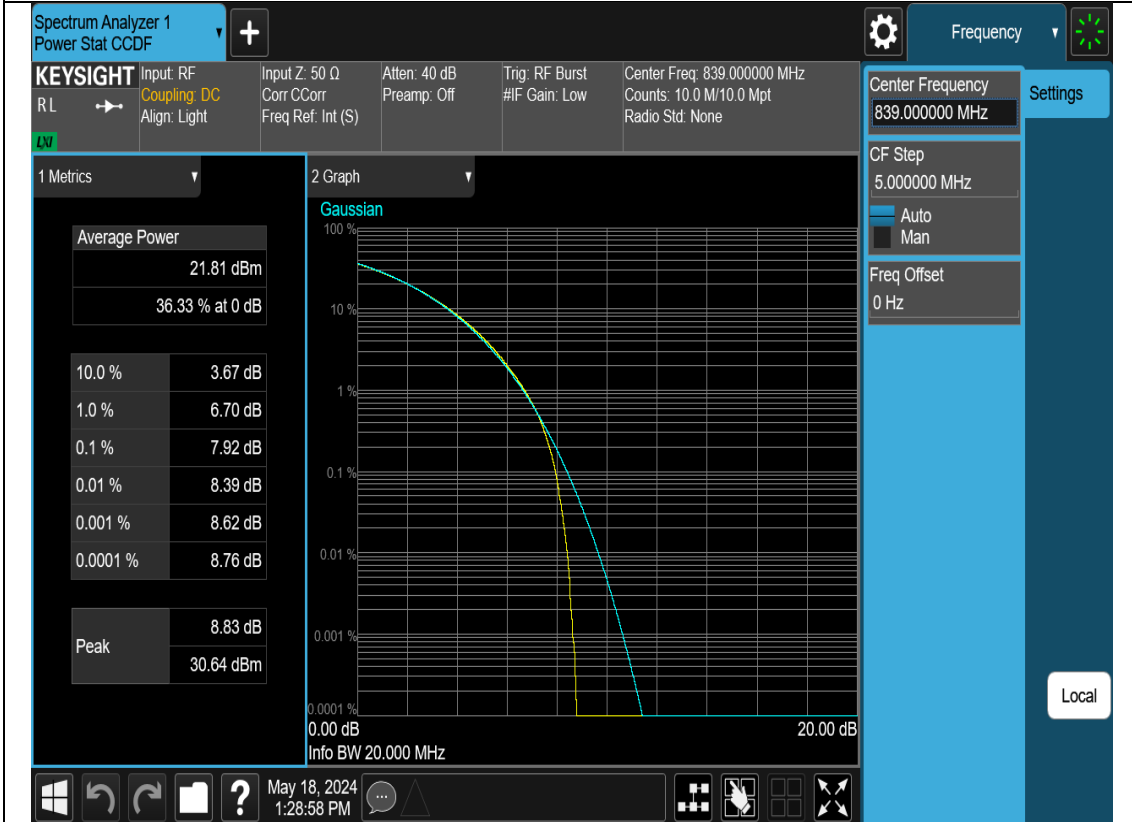
N5-20M-PAPR-H-CP-OFDM-QPSK-Outer\_Full



N5-20M-PAPR-H-CP-OFDM-16QAM-Outer\_Full



N5-20M-PAPR-H-CP-OFDM-64QAM-Outer\_Full



N5-20M-PAPR-H-CP-OFDM-256QAM-Outer\_Full

Spectrum Analyzer 1  
Power Stat CCDF

KEYSIGHT Input RF  
RL Coupling: DC  
Align: Light

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

Atten: 40 dB  
Preamp: Off

Trig: RF Burst  
#F Gain: Low

Center Freq: 839.000000 MHz  
Counts: 10.0 M/10.0 Mpt  
Radio Std: None

Center Frequency  
839.000000 MHz

CF Step  
5.000000 MHz

Auto  
Man

Freq Offset  
0 Hz

Settings

Local

1 Metrics

Average Power

Average Power	18.78 dBm
	36.94 % at 0 dB

10.0 %	3.60 dB
1.0 %	6.65 dB
0.1 %	8.41 dB
0.01 %	9.28 dB
0.001 %	9.62 dB
0.0001 %	9.72 dB

Peak

9.76 dB
28.54 dBm

2 Graph

Gaussian

0.0001 %  
0.001 %  
0.01 %  
0.1 %  
1 %  
10 %  
100 %

0.00 dB  
20.00 dB

Info BW 20.000 MHz

May 18, 2024  
1:30:05 PM

Bandedge test graph



N5-5M-Bandedge-L-DFT-s-OFDM-Pi2 BPSK-1RB0

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Light

Input Z: 50 Ω Corr: C Corr Freq Ref: Int (S) #Atten: 36 dB Preamp: Off Source: Off PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off #Avg Type: Power (RMS) Avg/Hold: 1000/1000 Trig: Free Run

Center Frequency 824.000000 MHz

Span 10.000000 MHz

Start Freq 819.000000 MHz

Stop Freq 829.000000 MHz

AUTO TUNE

CF Step 1.000000 MHz

Freq Offset 0 Hz

X Axis Scale Log

Signal Track (Span Zoom)

Ref Lvl Offset 15.50 dB Ref Level 30.00 dBm

Mkr2 824.00 MHz -14.489 dBm

DL1 -13.00 dBm

Scale/Div 10 dB

Log

Center 824.000 MHz #Res BW 30 kHz #Video BW 100 kHz\* Span 10.00 MHz Sweep 13.7 ms (1001 pts)

5 Marker Table

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	823.98 MHz	-16.73 dBm		
2	N	1	f	824.00 MHz	-14.49 dBm		
3							
4							
5							
6							

May 17, 2024 6:34:10 PM

N5-5M-Bandedge-L-CP-OFDM-QPSK-Outer\_Full

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Light

Input Z: 50 Ω Corr: C Corr Freq Ref: Int (S) #Atten: 36 dB Preamp: Off Source: Off PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off #Avg Type: Power (RMS) Avg/Hold: 1000/1000 Trig: Free Run

Center Frequency 824.000000 MHz

Span 10.000000 MHz

Start Freq 819.000000 MHz

Stop Freq 829.000000 MHz

AUTO TUNE

CF Step 1.000000 MHz

Freq Offset 0 Hz

X Axis Scale Log

Signal Track (Span Zoom)

Ref Lvl Offset 15.50 dB Ref Level 30.00 dBm

Mkr2 824.00 MHz -23.173 dBm

DL1 -13.00 dBm

Scale/Div 10 dB

Log

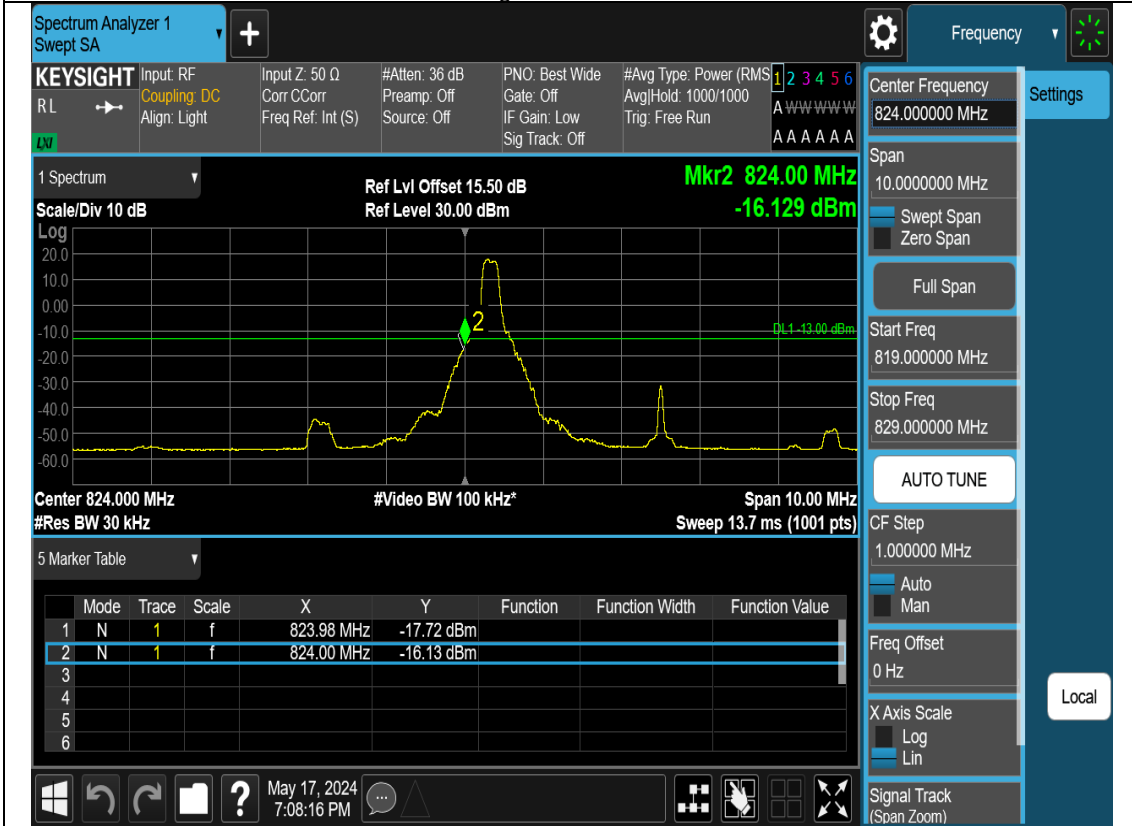
Center 824.000 MHz #Res BW 100 kHz #Video BW 300 kHz\* Span 10.00 MHz Sweep 1.27 ms (1001 pts)

5 Marker Table

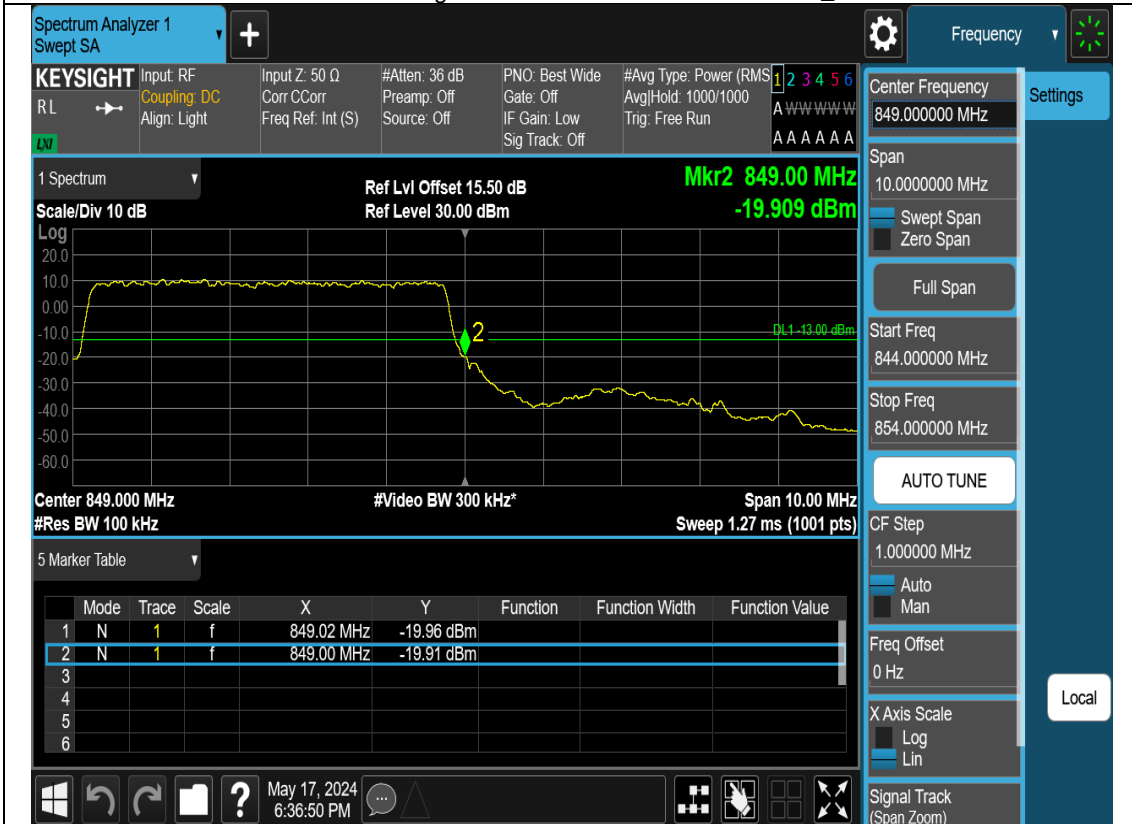
Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	823.96 MHz	-19.35 dBm		
2	N	1	f	824.00 MHz	-23.17 dBm		
3							
4							
5							
6							

May 17, 2024 7:07:43 PM

N5-5M-Bandedge-L-CP-OFDM-QPSK-1RB0



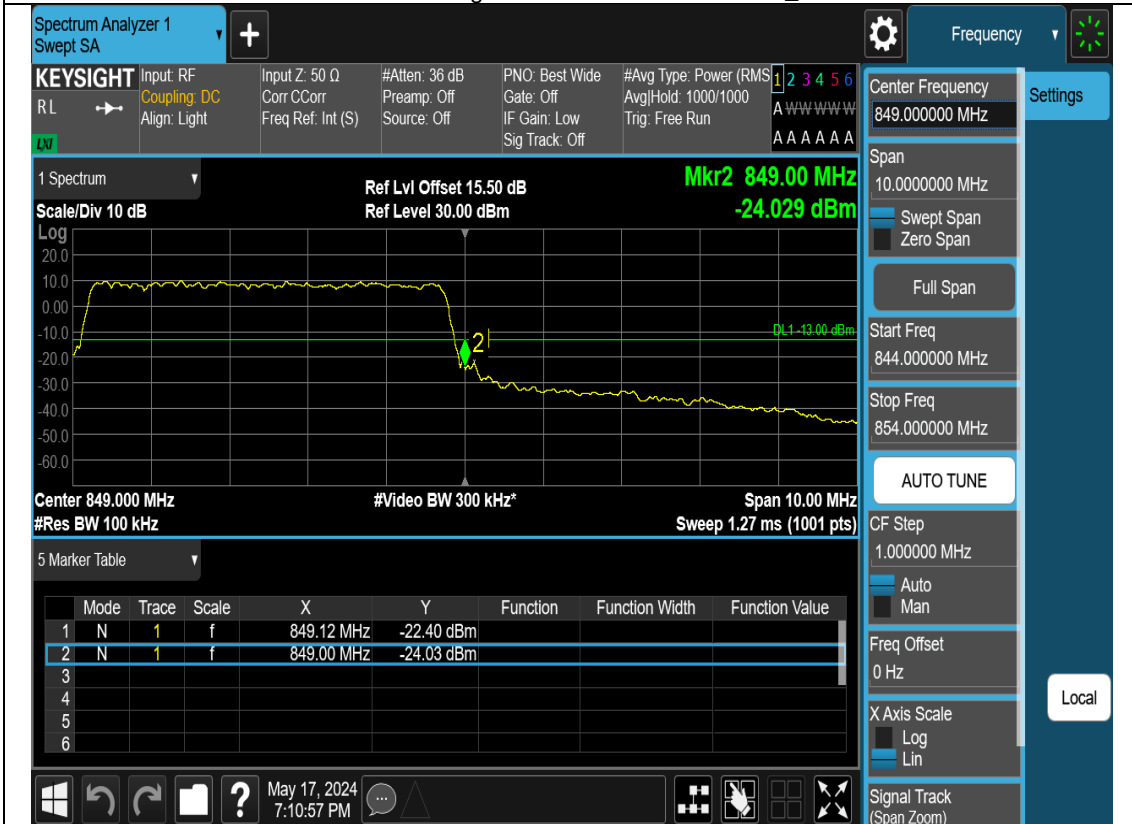
N5-5M-Bandedge-H-DFT-s-OFDM-Pi2 BPSK-Outer\_Full



N5-5M-Bandedge-H-DFT-s-OFDM-Pi2 BPSK-1RB\_MAX



N5-5M-Bandedge-H-CP-OFDM-QPSK-Outer\_Full



N5-5M-Bandedge-H-CP-OFDM-QPSK-1RB\_MAX

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Light

Input Z: 50 Ω Corr: C Corr Freq Ref: Int (S) #Atten: 36 dB Preamp: Off Source: Off PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off #Avg Type: Power (RMS) AvglHold: 1000/1000 Trig: Free Run

Center Frequency 849.000000 MHz

Span 10.000000 MHz

Start Freq 844.000000 MHz

Stop Freq 854.000000 MHz

AUTO TUNE

CF Step 1.000000 MHz

Freq Offset 0 Hz

X Axis Scale Log

Signal Track (Span Zoom)

Ref Lvl Offset 15.50 dB Ref Level 30.00 dBm

Mkr2 849.00 MHz -17.094 dBm

DL1 -13.00 dBm

Center 849.000 MHz #Res BW 30 kHz #Video BW 100 kHz\* Sweep 13.7 ms (1001 pts)

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	849.04 MHz	-20.29 dBm		
2	N	1	f	849.00 MHz	-17.09 dBm		
3							
4							
5							
6							

May 17, 2024 7:13:15 PM

N5-10M-Bandedge-L-DFT-s-OFDM-Pi2 BPSK-Outer\_Full

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Light

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) AvglHold: 1000/1000 Trig: Free Run

Center Frequency 824.000000 MHz

Span 20.000000 MHz

Start Freq 814.000000 MHz

Stop Freq 834.000000 MHz

AUTO TUNE

CF Step 2.000000 MHz

Freq Offset 0 Hz

X Axis Scale Log

Signal Track (Span Zoom)

Ref Lvl Offset 15.50 dB Ref Level 30.00 dBm

Mkr2 824.00 MHz -22.343 dBm

DL1 -13.00 dBm

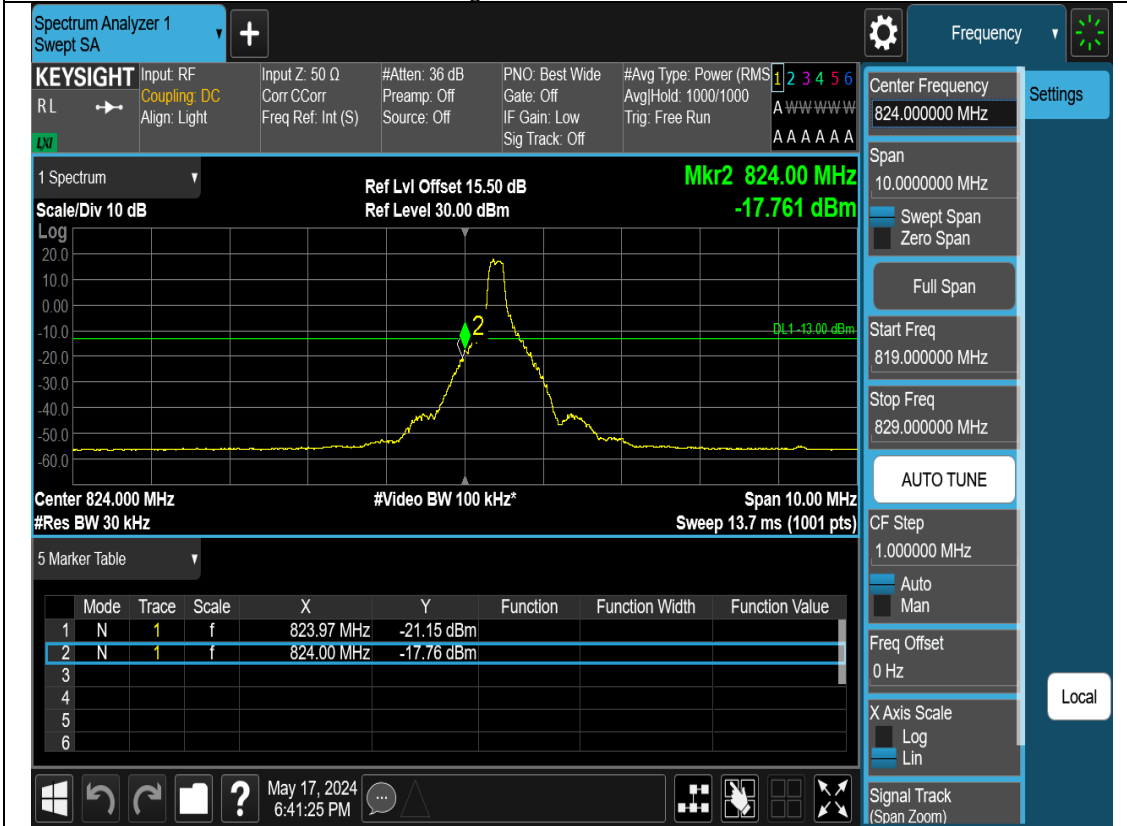
Center 824.00 MHz #Res BW 150 kHz #Video BW 470 kHz\* Sweep 1.13 ms (1001 pts)

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	823.98 MHz	-22.28 dBm		
2	N	1	f	824.00 MHz	-22.34 dBm		
3							
4							
5							
6							

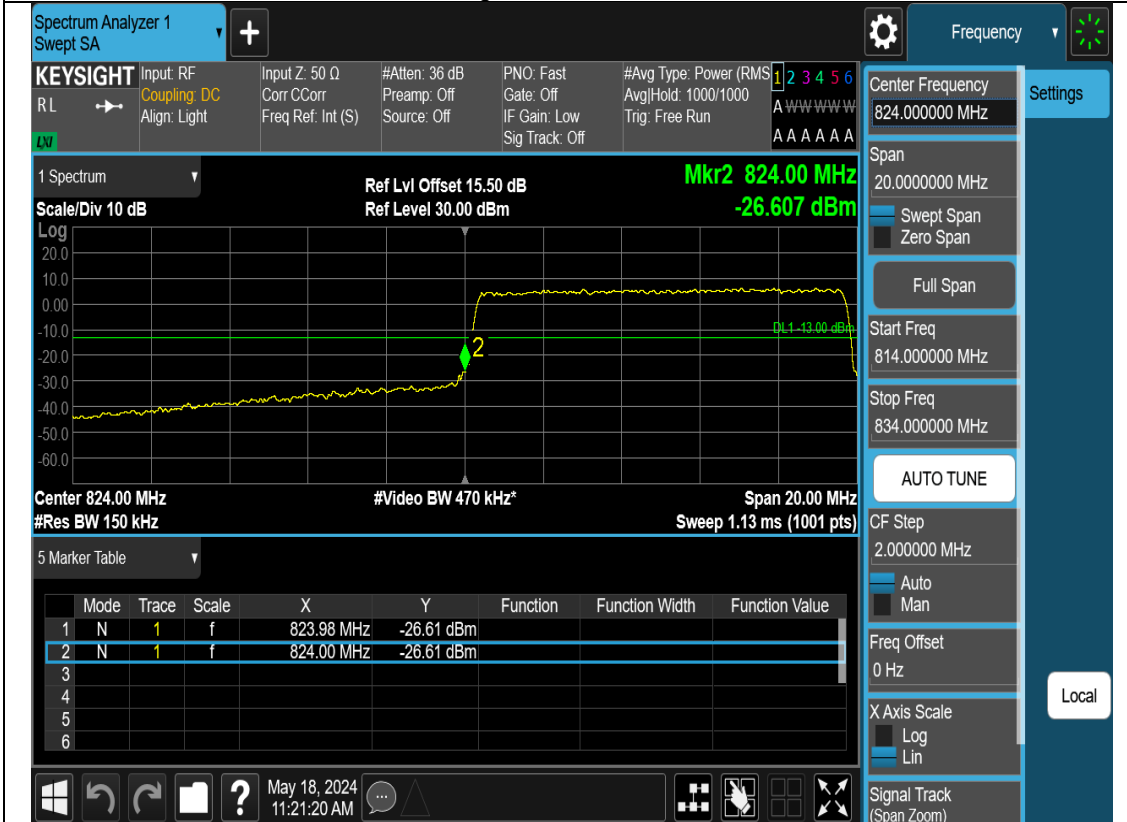
May 17, 2024 6:40:51 PM



N5-10M-Bandedge-L-DFT-s-OFDM-Pi2 BPSK-1RB0



N5-10M-Bandedge-L-CP-OFDM-QPSK-Outer\_Full



N5-10M-Bandedge-L-CP-OFDM-QPSK-1RB0

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Light

Input Z: 50 Ω Corr: C Corr Freq Ref: Int (S) #Atten: 36 dB Preamp: Off Source: Off PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off #Avg Type: Power (RMS) 1 2 3 4 5 6 Avg/Hold: 1000/1000 Trig: Free Run A A A A A A

Center Frequency 824.000000 MHz

Span 10.000000 MHz

Start Freq 819.000000 MHz

Stop Freq 829.000000 MHz

AUTO TUNE

CF Step 1.000000 MHz

Freq Offset 0 Hz

X Axis Scale Log Lin

Signal Track (Span Zoom)

Ref Lvl Offset 15.50 dB Ref Level 30.00 dB

Mkr2 824.00 MHz -21.359 dBm

DL1 -13.00 dBm

Center 824.000 MHz #Res BW 30 kHz #Video BW 100 kHz\* Sweep 13.7 ms (1001 pts)

5 Marker Table

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	823.98 MHz	-22.16 dBm		
2	N	1	f	824.00 MHz	-21.36 dBm		
3							
4							
5							
6							

May 18, 2024 11:21:53 AM

N5-10M-Bandedge-H-DFT-s-OFDM-Pi2 BPSK-Outer\_Full

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Light

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: 1000/1000 Trig: Free Run A A A A A A

Center Frequency 849.000000 MHz

Span 20.000000 MHz

Start Freq 839.000000 MHz

Stop Freq 859.000000 MHz

AUTO TUNE

CF Step 2.000000 MHz

Freq Offset 0 Hz

X Axis Scale Log Lin

Signal Track (Span Zoom)

Ref Lvl Offset 15.50 dB Ref Level 30.00 dB

Mkr2 849.00 MHz -31.037 dBm

DL1 -13.00 dBm

Center 849.00 MHz #Res BW 150 kHz #Video BW 470 kHz\* Sweep 1.13 ms (1001 pts)

5 Marker Table

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	849.50 MHz	-31.33 dBm		
2	N	1	f	849.00 MHz	-31.04 dBm		
3							
4							
5							
6							

May 17, 2024 6:44:06 PM

N5-10M-Bandedge-H-DFT-s-OFDM-Pi2 BPSK-1RB\_MAX

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Light

Input Z: 50 Ω Corr: C Corr Freq Ref: Int (S) #Atten: 36 dB Preamp: Off Source: Off PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off #Avg Type: Power (RMS) Avg/Hold: 1000/1000 Trig: Free Run

Center Frequency 849.000000 MHz

Span 10.000000 MHz

Start Freq 844.000000 MHz

Stop Freq 854.000000 MHz

AUTO TUNE

CF Step 1.000000 MHz

Freq Offset 0 Hz

X Axis Scale Log

Signal Track (Span Zoom)

Ref Lvl Offset 15.50 dB Ref Level 30.00 dBm

Mkr2 849.00 MHz -21.091 dBm

DL1 -13.00 dBm

Center 849.000 MHz #Res BW 30 kHz #Video BW 100 kHz\* Span 10.00 MHz Sweep 13.7 ms (1001 pts)

5 Marker Table

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	849.02 MHz	-21.14 dBm		
2	N	1	f	849.00 MHz	-21.09 dBm		
3							
4							
5							
6							

May 17, 2024 6:44:53 PM

N5-10M-Bandedge-H-CP-OFDM-QPSK-Outer\_Full

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Light

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) Avg/Hold: 1000/1000 Trig: Free Run

Center Frequency 849.000000 MHz

Span 20.000000 MHz

Start Freq 839.000000 MHz

Stop Freq 859.000000 MHz

AUTO TUNE

CF Step 2.000000 MHz

Freq Offset 0 Hz

X Axis Scale Log

Signal Track (Span Zoom)

Ref Lvl Offset 15.50 dB Ref Level 30.00 dBm

Mkr2 849.00 MHz -23.936 dBm

DL1 -13.00 dBm

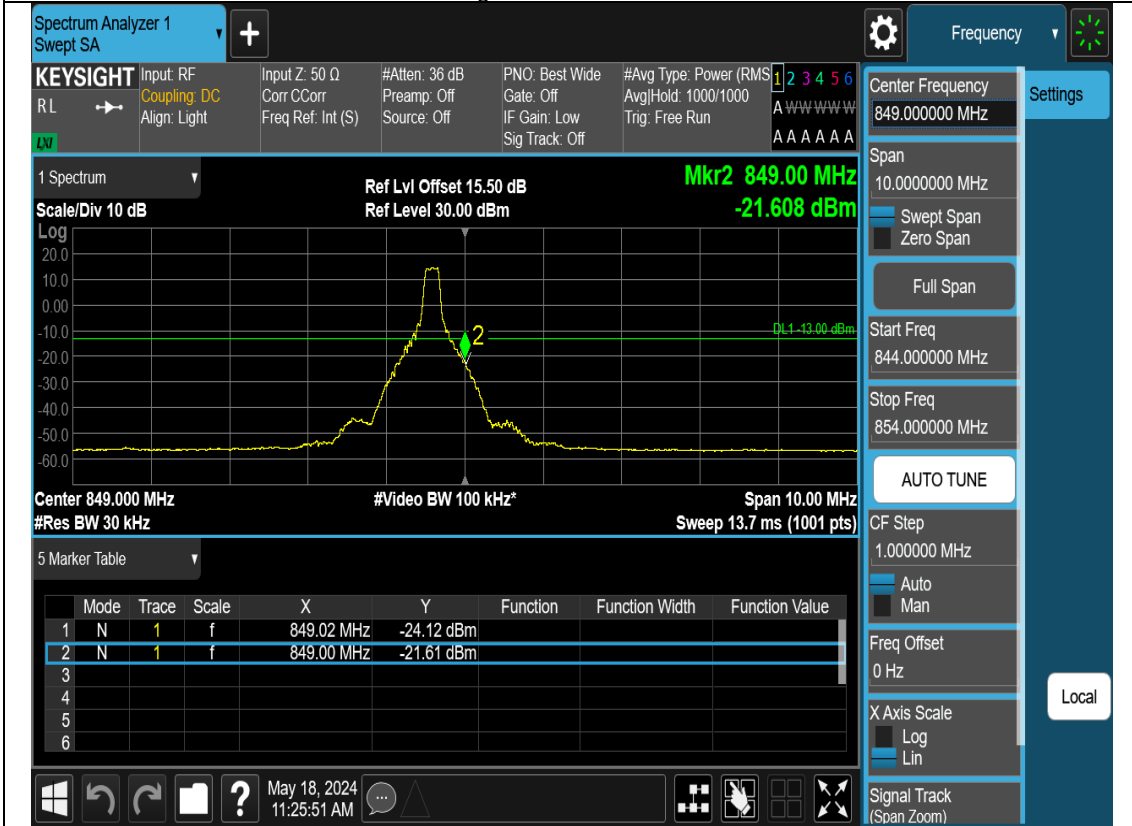
Center 849.00 MHz #Res BW 150 kHz #Video BW 470 kHz\* Span 20.00 MHz Sweep 1.13 ms (1001 pts)

5 Marker Table

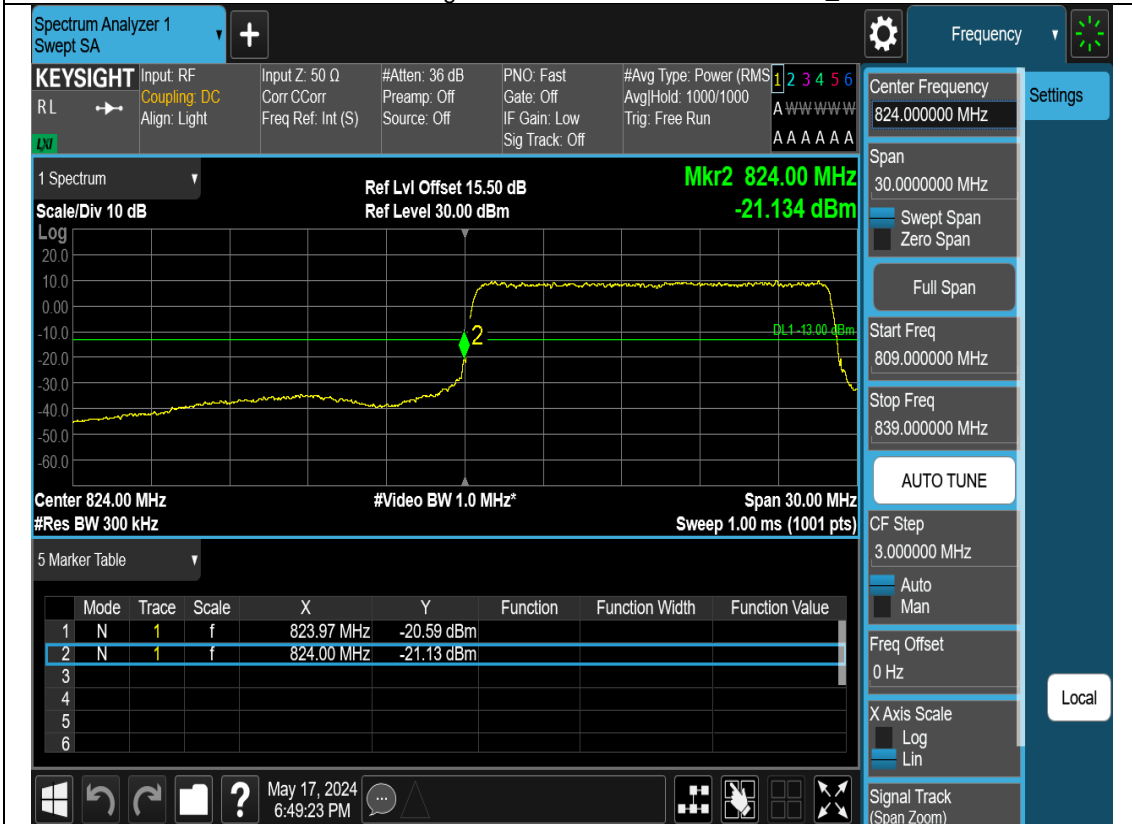
Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	849.02 MHz	-24.49 dBm		
2	N	1	f	849.00 MHz	-23.94 dBm		
3							
4							
5							
6							

May 18, 2024 11:24:56 AM

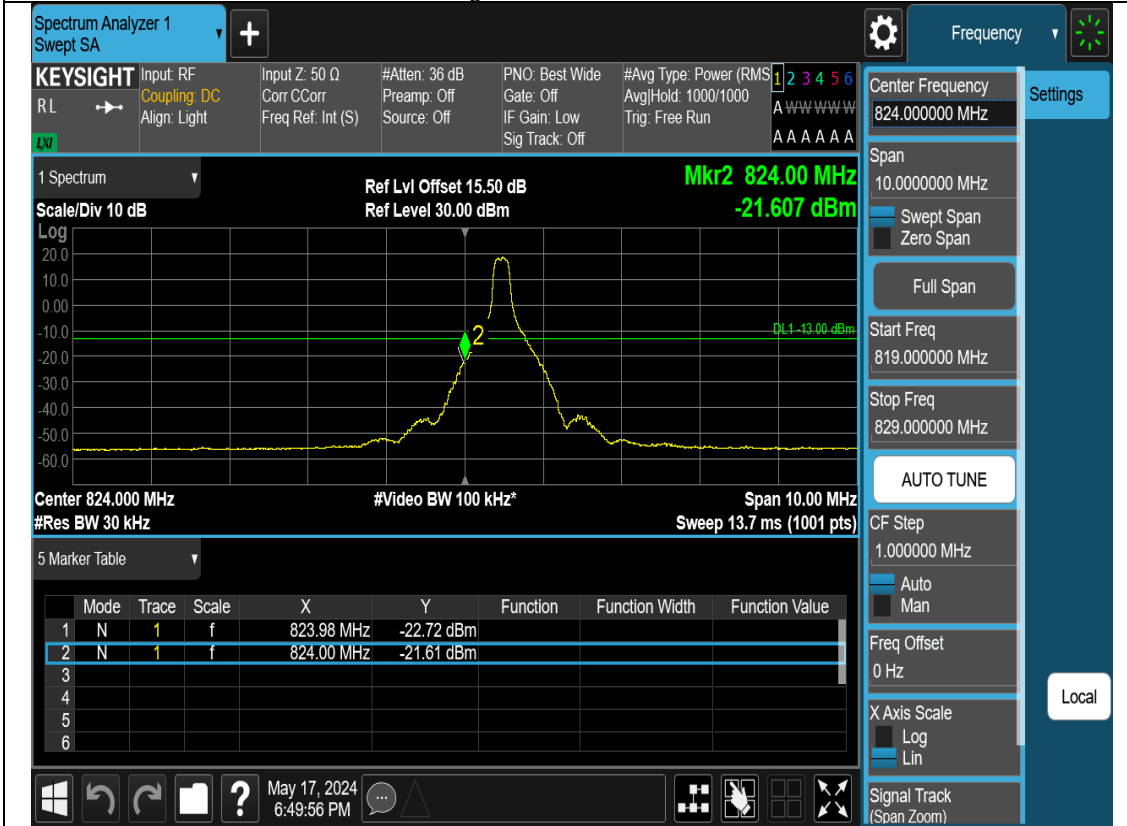
N5-10M-Bandedge-H-CP-OFDM-QPSK-1RB\_MAX



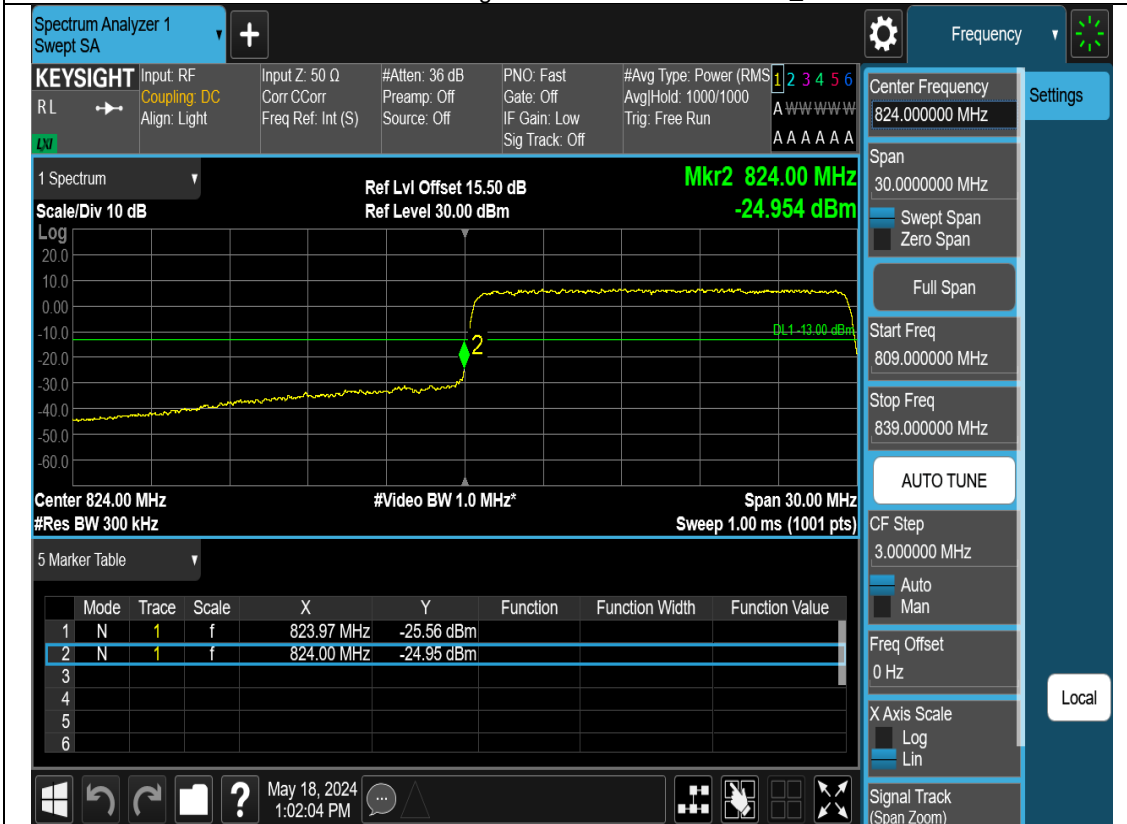
N5-15M-Bandedge-L-DFT-s-OFDM-Pi2 BPSK-Outer\_Full



N5-15M-Bandedge-L-DFT-s-OFDM-Pi2 BPSK-1RB0



N5-15M-Bandedge-L-CP-OFDM-QPSK-Outer\_Full



N5-15M-Bandedge-L-CP-OFDM-QPSK-1RB0

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Light

Input Z: 50 Ω Corr: C Corr Freq Ref: Int (S) #Atten: 36 dB Preamp: Off Source: Off PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off #Avg Type: Power (RMS) AvglHold: 1000/1000 Trig: Free Run

Center Frequency 824.000000 MHz

Span 10.000000 MHz

Start Freq 819.000000 MHz

Stop Freq 829.000000 MHz

AUTO TUNE

CF Step 1.000000 MHz

Freq Offset 0 Hz

X Axis Scale Log

Signal Track (Span Zoom)

Ref Lvl Offset 15.50 dB Ref Level 30.00 dBm

Mkr2 824.00 MHz -23.132 dBm

DL1 -13.00 dBm

Center 824.000 MHz #Res BW 30 kHz #Video BW 100 kHz\* Sweep 13.7 ms (1001 pts)

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	823.98 MHz	-26.45 dBm		
2	N	1	f	824.00 MHz	-23.13 dBm		
3							
4							
5							
6							

May 18, 2024 1:02:37 PM

N5-15M-Bandedge-H-DFT-s-OFDM-Pi2 BPSK-Outer\_Full

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Light

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) AvglHold: 1000/1000 Trig: Free Run

Center Frequency 849.000000 MHz

Span 30.000000 MHz

Start Freq 834.000000 MHz

Stop Freq 864.000000 MHz

AUTO TUNE

CF Step 3.000000 MHz

Freq Offset 0 Hz

X Axis Scale Log

Signal Track (Span Zoom)

Ref Lvl Offset 15.50 dB Ref Level 30.00 dBm

Mkr2 849.00 MHz -32.272 dBm

DL1 -13.00 dBm

Center 849.00 MHz #Res BW 300 kHz #Video BW 1.0 MHz\* Sweep 1.00 ms (1001 pts)

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	849.12 MHz	-32.35 dBm		
2	N	1	f	849.00 MHz	-32.27 dBm		
3							
4							
5							
6							

May 17, 2024 6:52:36 PM

N5-15M-Bandedge-H-DFT-s-OFDM-Pi2 BPSK-1RB\_MAX

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Light

Input Z: 50 Ω Corr: C Corr Freq Ref: Int (S) #Atten: 36 dB Preamp: Off Source: Off PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off #Avg Type: Power (RMS) 1 2 3 4 5 6 Avg/Hold: 1000/1000 Trig: Free Run A A A A A A

Center Frequency 849.000000 MHz

Span 10.000000 MHz

Start Freq 844.000000 MHz

Stop Freq 854.000000 MHz

AUTO TUNE

CF Step 1.000000 MHz

Freq Offset 0 Hz

X Axis Scale Log Lin

Signal Track (Span Zoom)

Ref Lvl Offset 15.50 dB Ref Level 30.00 dBm

Mkr2 849.00 MHz -21.850 dBm

DL1 -13.00 dBm

Center 849.000 MHz #Res BW 30 kHz #Video BW 100 kHz\* Sweep 13.7 ms (1001 pts)

5 Marker Table

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	849.02 MHz	-23.68 dBm		
2	N	1	f	849.00 MHz	-21.85 dBm		
3							
4							
5							
6							

May 17, 2024 6:53:14 PM

N5-15M-Bandedge-H-CP-OFDM-QPSK-Outer\_Full

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Light

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: 1000/1000 Trig: Free Run A A A A A A

Center Frequency 849.000000 MHz

Span 30.000000 MHz

Start Freq 834.000000 MHz

Stop Freq 864.000000 MHz

AUTO TUNE

CF Step 3.000000 MHz

Freq Offset 0 Hz

X Axis Scale Log Lin

Signal Track (Span Zoom)

Ref Lvl Offset 15.50 dB Ref Level 30.00 dBm

Mkr2 849.00 MHz -17.640 dBm

DL1 -13.00 dBm

Center 849.00 MHz #Res BW 300 kHz #Video BW 1.0 MHz\* Sweep 1.00 ms (1001 pts)

5 Marker Table

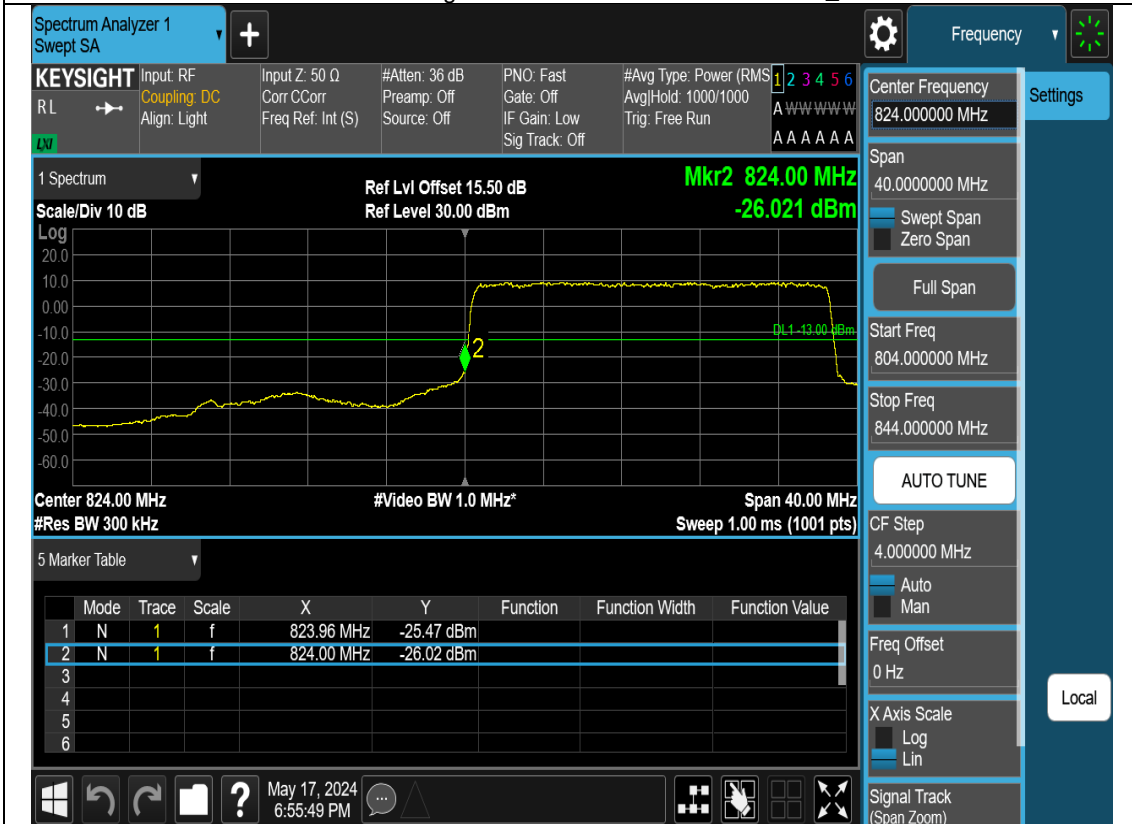
Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	849.03 MHz	-20.95 dBm		
2	N	1	f	849.00 MHz	-17.64 dBm		
3							
4							
5							
6							

May 18, 2024 1:05:46 PM

N5-15M-Bandedge-H-CP-OFDM-QPSK-1RB\_MAX



N5-20M-Bandedge-L-DFT-s-OFDM-Pi2 BPSK-Outer\_Full

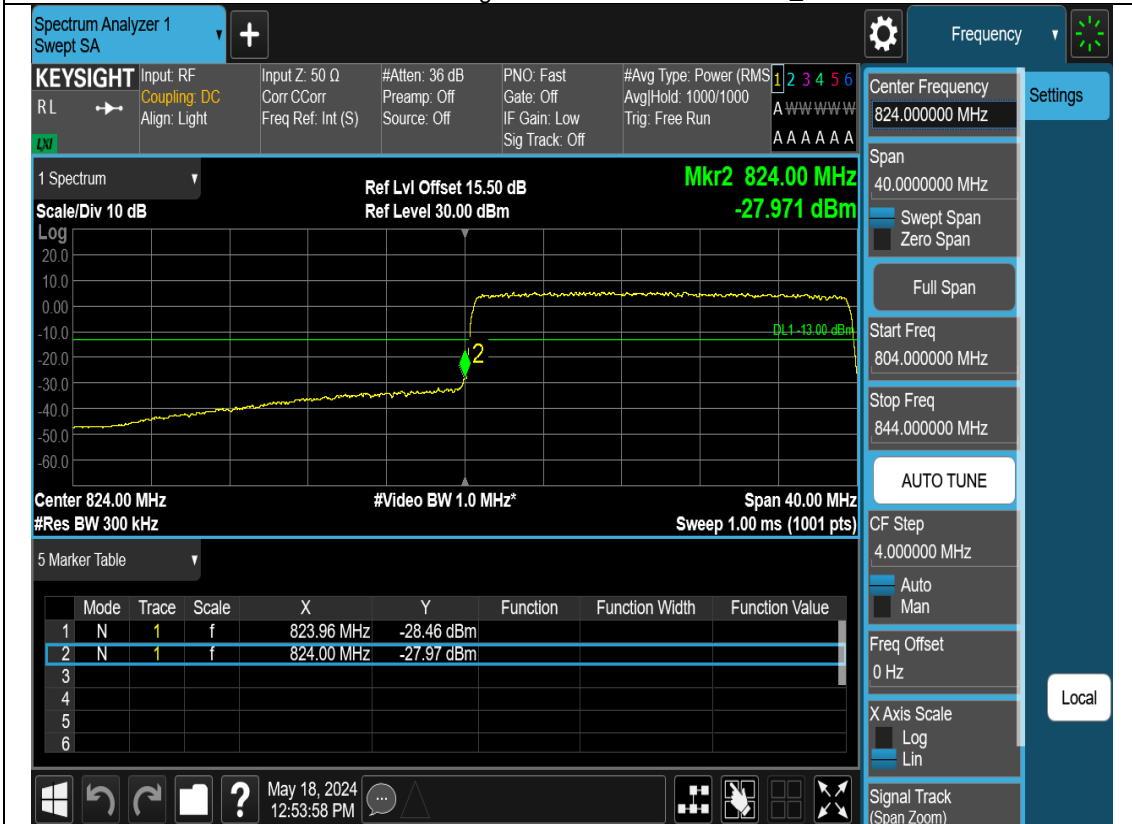




N5-20M-Bandedge-L-DFT-s-OFDM-Pi2 BPSK-1RB0



N5-20M-Bandedge-L-CP-OFDM-QPSK-Outer\_Full



N5-20M-Bandedge-L-CP-OFDM-QPSK-1RB0

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Light

Input Z: 50 Ω Corr: C Corr Freq Ref: Int (S) #Atten: 36 dB Preamp: Off Source: Off PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off #Avg Type: Power (RMS) Avg/Hold: 1000/1000 Trig: Free Run

Center Frequency 824.000000 MHz

Span 10.000000 MHz

Start Freq 819.000000 MHz

Stop Freq 829.000000 MHz

AUTO TUNE

CF Step 1.000000 MHz

Freq Offset 0 Hz

X Axis Scale Log

Signal Track (Span Zoom)

Ref Lvl Offset 15.50 dB Ref Level 30.00 dBm

Mkr2 824.00 MHz -29.647 dBm

Scale/Div 10 dB

Log

Center 824.000 MHz #Res BW 30 kHz #Video BW 100 kHz\* Sweep 13.7 ms (1001 pts)

5 Marker Table

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	823.97 MHz	-29.60 dBm		
2	N	1	f	824.00 MHz	-29.65 dBm		
3							
4							
5							
6							

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N5-20M-Bandedge-H-DFT-s-OFDM-Pi2 BPSK-Outer\_Full

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Light

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) Avg/Hold: 1000/1000 Trig: Free Run

Center Frequency 849.000000 MHz

Span 40.000000 MHz

Start Freq 829.000000 MHz

Stop Freq 869.000000 MHz

AUTO TUNE

CF Step 4.000000 MHz

Freq Offset 0 Hz

X Axis Scale Log

Signal Track (Span Zoom)

Ref Lvl Offset 15.50 dB Ref Level 30.00 dBm

Mkr2 849.00 MHz -32.523 dBm

Scale/Div 10 dB

Log

Center 849.00 MHz #Res BW 300 kHz #Video BW 1.0 MHz\* Sweep 1.00 ms (1001 pts)

5 Marker Table

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	849.12 MHz	-32.15 dBm		
2	N	1	f	849.00 MHz	-32.52 dBm		
3							
4							
5							
6							

May 17, 2024 6:59:02 PM

N5-20M-Bandedge-H-DFT-s-OFDM-Pi2 BPSK-1RB\_MAX

Spectrum Analyzer 1 Swept SA

**KEYSIGHT** Input RF Coupling: DC Align: Light

Input Z: 50 Ω Corr: C Corr Freq Ref: Int (S) #Atten: 36 dB Preamp: Off Source: Off PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off #Avg Type: Power (RMS) AvglHold: 1000/1000 Trig: Free Run

Center Frequency: 849.000000 MHz

Span: 10.000000 MHz

Start Freq: 844.000000 MHz

Stop Freq: 854.000000 MHz

Center 849.000 MHz #Res BW 30 kHz #Video BW 100 kHz\* Sweep 13.7 ms (1001 pts)

Scale/Div 10 dB Ref Lvl Offset 15.50 dB Ref Level 30.00 dBm

Mkr2 849.00 MHz -27.949 dBm

DL1 -13.00 dBm

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	849.03 MHz	-29.49 dBm		
2	N	1	f	849.00 MHz	-27.95 dBm		
3							
4							
5							
6							

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N5-20M-Bandedge-H-CP-OFDM-QPSK-Outer\_Full

Spectrum Analyzer 1 Swept SA

**KEYSIGHT** Input RF Coupling: DC Align: Light

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) AvglHold: 1000/1000 Trig: Free Run

Center Frequency: 849.000000 MHz

Span: 40.000000 MHz

Start Freq: 829.000000 MHz

Stop Freq: 869.000000 MHz

Center 849.00 MHz #Res BW 300 kHz #Video BW 1.0 MHz\* Sweep 1.00 ms (1001 pts)

Scale/Div 10 dB Ref Lvl Offset 15.50 dB Ref Level 30.00 dBm

Mkr2 849.00 MHz -26.253 dBm

DL1 -13.00 dBm

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	849.04 MHz	-30.04 dBm		
2	N	1	f	849.00 MHz	-26.25 dBm		
3							
4							
5							
6							

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N5-20M-Bandedge-H-CP-OFDM-QPSK-1RB\_MAX

**Spectrum Analyzer 1**  
Swept SA

**KEYSIGHT** Input: RF  
R.L. Coupling: DC  
Align: Light

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

#Atten: 36 dB  
Preamp: Off  
Source: Off

PNO: Best Wide  
Gate: Off  
IF Gain: Low  
Sig Track: Off

#Avg Type: Power (RMS)  
Avg/Hold: 1000/1000  
Trig: Free Run

1 2 3 4 5 6  
A W W W W W  
A A A A A A

Frequency

Center Frequency  
849.000000 MHz

Span  
10.000000 MHz

Swept Span  
Zero Span

Full Span

Start Freq  
844.000000 MHz

Stop Freq  
854.000000 MHz

AUTO TUNE

CF Step  
1.000000 MHz

Auto  
Man

Freq Offset  
0 Hz

X Axis Scale  
Log  
Lin

Signal Track  
(Span Zoom)

1 Spectrum

Scale/Div 10 dB

Log

Ref Lvl Offset 15.50 dB  
Ref Level 30.00 dBm

Mkr2 849.00 MHz  
-28.776 dBm

DL1 -13.00 dBm

Center 849.000 MHz #Video BW 100 kHz\* Span 10.00 MHz  
#Res BW 30 kHz Sweep 13.7 ms (1001 pts)

5 Marker Table

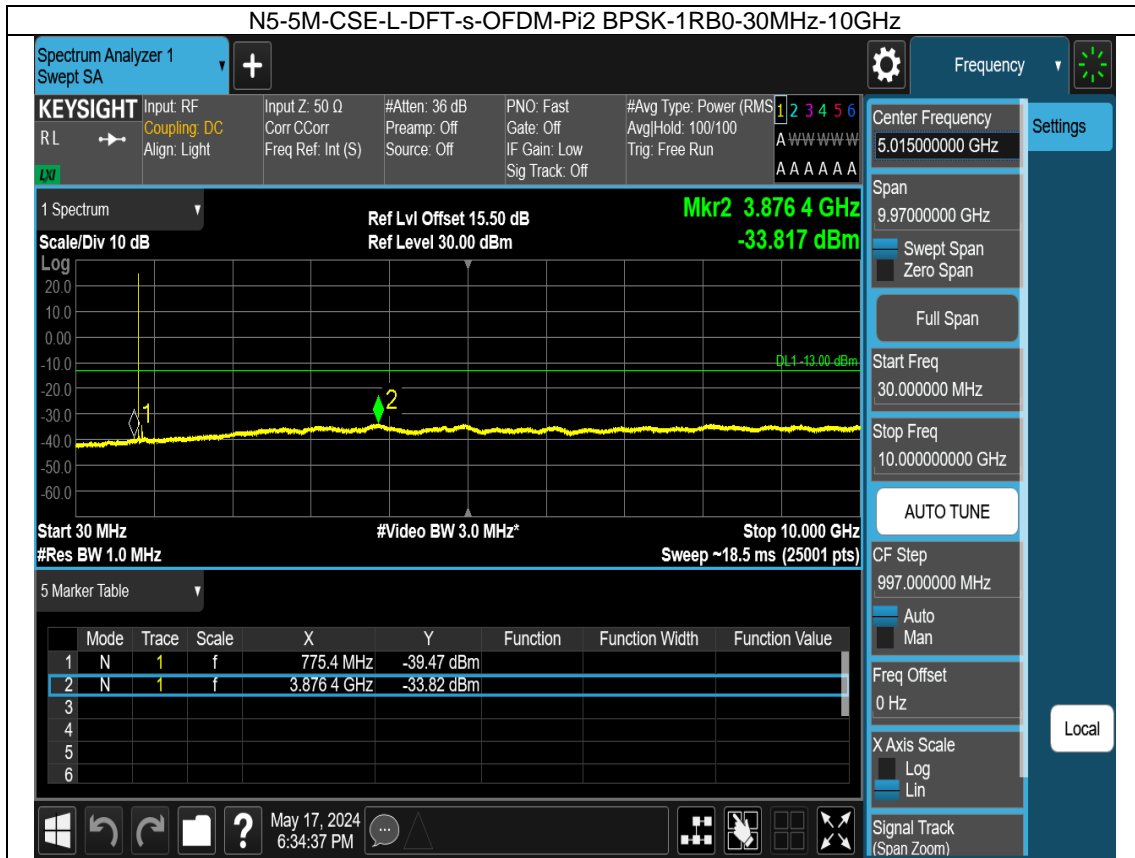
Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	849.02 MHz	-30.95 dBm		
2	N	1	f	849.00 MHz	-28.78 dBm		
3							
4							
5							
6							

Windows
Refresh
Home
Help

May 18, 2024  
12:59:23 PM

Grid
Zoom
Zoom In
Zoom Out

Conducted spurious emissions test graph



N5-5M-CSE-L-CP-OFDM-QPSK-1RB0-30MHz-10GHz

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Light

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) Avg/Hold: 100/100 Trig: Free Run

Center Frequency 5.015000000 GHz

Span 9.970000000 GHz

Scale/Div 10 dB Ref Lvl Offset 15.50 dB Ref Level 30.00 dBm

Mkr2 3.867 7 GHz -33.723 dBm

Start 30 MHz #Res BW 1.0 MHz #Video BW 3.0 MHz\* Stop 10.000 GHz Sweep ~18.5 ms (25001 pts)

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	807.3 MHz	-39.64 dBm		
2	N	1	f	3.867 7 GHz	-33.72 dBm		
3							
4							
5							
6							

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N5-5M-CSE-M-DFT-s-OFDM-Pi2 BPSK-1RB0-30MHz-10GHz

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Light

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) Avg/Hold: 100/100 Trig: Free Run

Center Frequency 5.015000000 GHz

Span 9.970000000 GHz

Scale/Div 10 dB Ref Lvl Offset 15.50 dB Ref Level 30.00 dBm

Mkr2 3.891 2 GHz -33.803 dBm

Start 30 MHz #Res BW 1.0 MHz #Video BW 3.0 MHz\* Stop 10.000 GHz Sweep ~18.5 ms (25001 pts)

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	781.7 MHz	-39.72 dBm		
2	N	1	f	3.891 2 GHz	-33.80 dBm		
3							
4							
5							
6							

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N5-5M-CSE-M-CP-OFDM-QPSK-1RB0-30MHz-10GHz

Spectrum Analyzer 1 Swept SA

**KEYSIGHT** Input RF: Coupling: DC, Align: Light  
 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), Avg/Hold: 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 15.50 dB  
 Ref Level 30.00 dBm

Mkr2 3.862 5 GHz  
 -33.675 dBm

Start 30 MHz #Res BW 1.0 MHz #Video BW 3.0 MHz\* Stop 10.000 GHz  
 Sweep ~18.5 ms (25001 pts)

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	749.8 MHz	-39.55 dBm		
2	N	1	f	3.862 5 GHz	-33.67 dBm		
3							
4							
5							
6							

May 17, 2024 7:09:58 PM

N5-5M-CSE-H-DFT-s-OFDM-Pi2 BPSK-1RB0-30MHz-10GHz

Spectrum Analyzer 1 Swept SA

**KEYSIGHT** Input RF: Coupling: DC, Align: Light  
 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), Avg/Hold: 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 15.50 dB  
 Ref Level 30.00 dBm

Mkr2 891.0 MHz  
 -31.660 dBm

Start 30 MHz #Res BW 1.0 MHz #Video BW 3.0 MHz\* Stop 10.000 GHz  
 Sweep ~18.5 ms (25001 pts)

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	808.1 MHz	-39.52 dBm		
2	N	1	f	891.0 MHz	-31.66 dBm		
3							
4							
5							
6							

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N5-5M-CSE-H-CP-OFDM-QPSK-1RB0-30MHz-10GHz

Spectrum Analyzer 1 Swept SA

**KEYSIGHT** Input RF Coupling: DC Align: Light

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) Avg/Hold: 100/100 Trig: Free Run

Center Frequency: 5.015000000 GHz

Span: 9.970000000 GHz

Scale/Div 10 dB Ref Lvl Offset 15.50 dB Ref Level 30.00 dBm

Mkr2 3.860 5 GHz -33.714 dBm

Start 30 MHz #Res BW 1.0 MHz #Video BW 3.0 MHz\* Stop 10.000 GHz Sweep ~18.5 ms (25001 pts)

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	805.3 MHz	-39.83 dBm		
2	N	1	f	3.860 5 GHz	-33.71 dBm		
3							
4							
5							
6							

May 17, 2024 7:13:48 PM

N5-10M-CSE-L-DFT-s-OFDM-Pi2 BPSK-1RB0-30MHz-10GHz

Spectrum Analyzer 1 Swept SA

**KEYSIGHT** Input RF Coupling: DC Align: Light

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) Avg/Hold: 100/100 Trig: Free Run

Center Frequency: 5.015000000 GHz

Span: 9.970000000 GHz

Scale/Div 10 dB Ref Lvl Offset 15.50 dB Ref Level 30.00 dBm

Mkr2 871.9 MHz -32.451 dBm

Start 30 MHz #Res BW 1.0 MHz #Video BW 3.0 MHz\* Stop 10.000 GHz Sweep ~18.5 ms (25001 pts)

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	782.5 MHz	-39.55 dBm		
2	N	1	f	871.9 MHz	-32.45 dBm		
3							
4							
5							
6							

May 17, 2024 6:41:51 PM



N5-10M-CSE-L-CP-OFDM-QPSK-1RB0-30MHz-10GHz

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Light

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

Scale/Div 10 dB Ref Lvl Offset 15.50 dB Ref Level 30.00 dBm

Mkr2 3.887 6 GHz -33.921 dBm

Start 30 MHz #Res BW 1.0 MHz #Video BW 3.0 MHz\* Stop 10.000 GHz Sweep ~18.5 ms (25001 pts)

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	765.4 MHz	-40.00 dBm		
2	N	1	f	3.887 6 GHz	-33.92 dBm		
3							
4							
5							
6							

May 18, 2024 11:22:20 AM

N5-10M-CSE-M-DFT-s-OFDM-Pi2 BPSK-1RB0-30MHz-10GHz

Spectrum Analyzer 1 Swept SA

KEYSIGHT Input RF Coupling: DC Align: Light

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

Scale/Div 10 dB Ref Lvl Offset 15.50 dB Ref Level 30.00 dBm

Mkr2 3.876 0 GHz -33.794 dBm

Start 30 MHz #Res BW 1.0 MHz #Video BW 3.0 MHz\* Stop 10.000 GHz Sweep ~18.5 ms (25001 pts)

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	763.0 MHz	-39.61 dBm		
2	N	1	f	3.876 0 GHz	-33.79 dBm		
3							
4							
5							
6							

May 17, 2024 6:43:06 PM