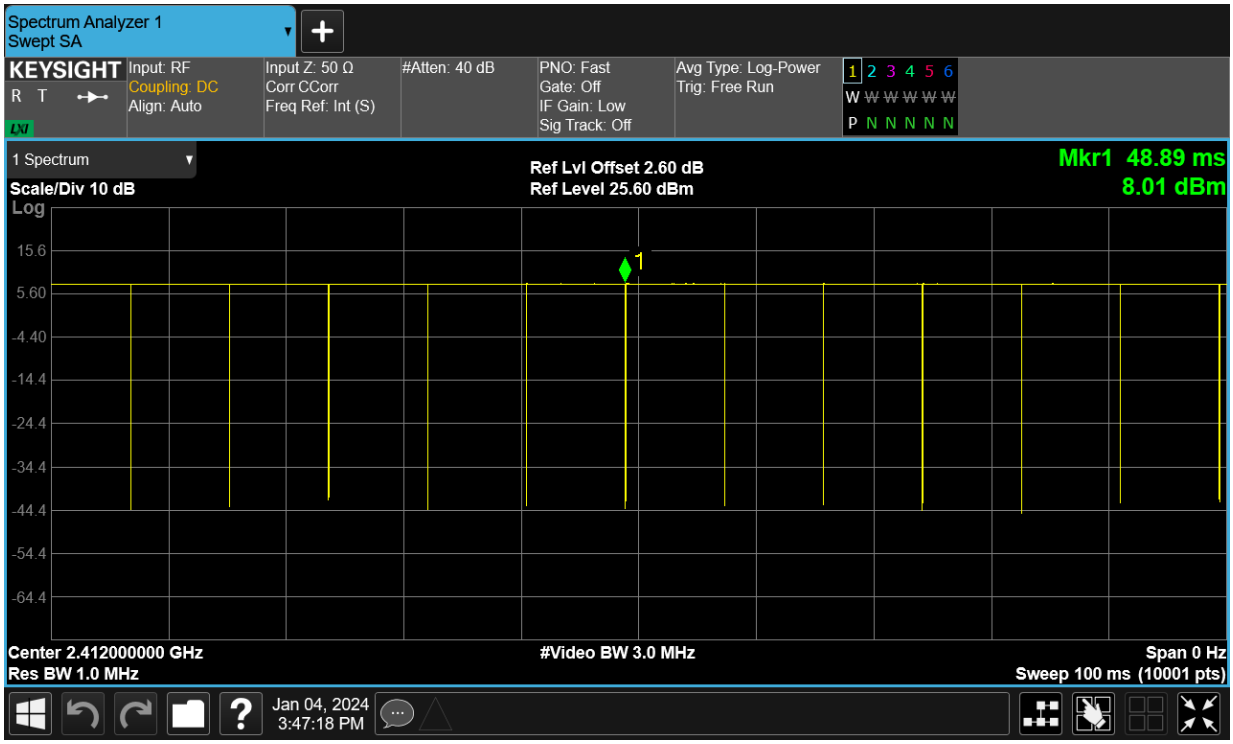
Test Data

Duty Cycle

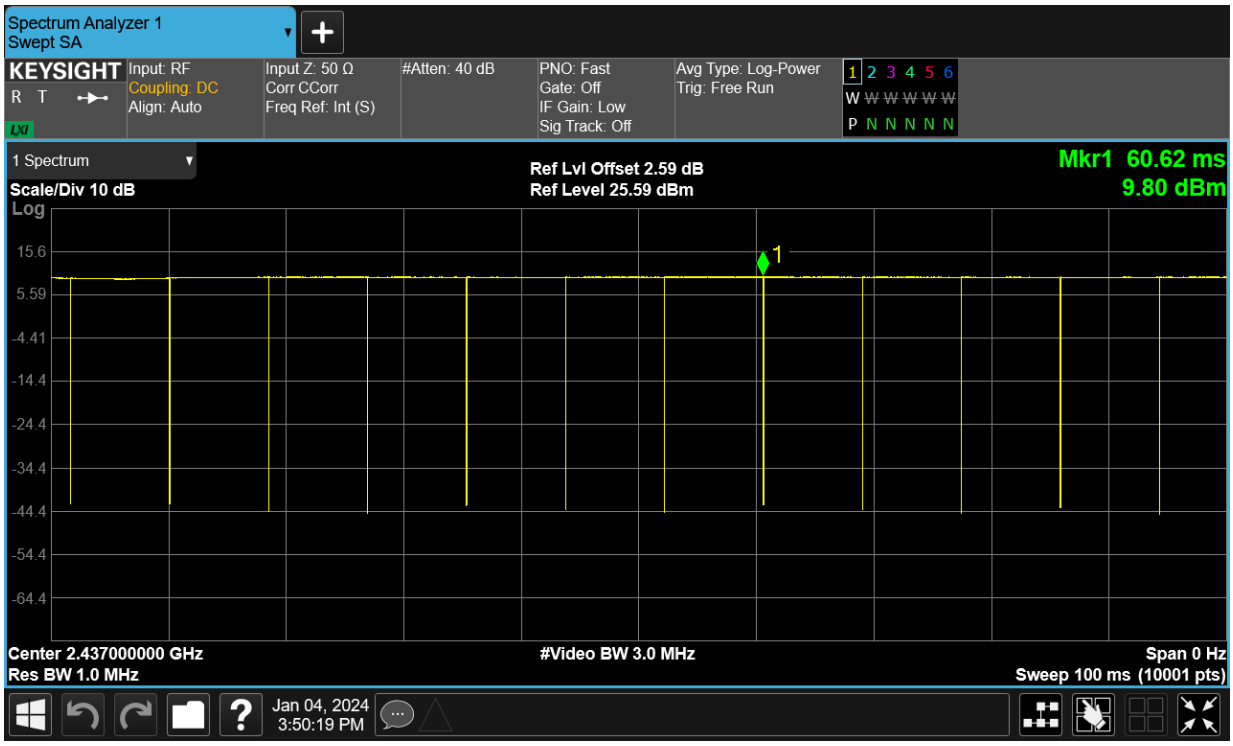
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	b	2412	Ant1	99.69	0.01
NVNT	b	2437	Ant1	99.68	0.01
NVNT	b	2462	Ant1	99.71	0.01
NVNT	g	2412	Ant1	97.42	0.11
NVNT	g	2437	Ant1	97.89	0.09
NVNT	g	2462	Ant1	97.89	0.09
NVNT	n20	2412	Ant1	97.69	0.1
NVNT	n20	2437	Ant1	97.78	0.1
NVNT	n20	2462	Ant1	97.78	0.1

Test Graphs

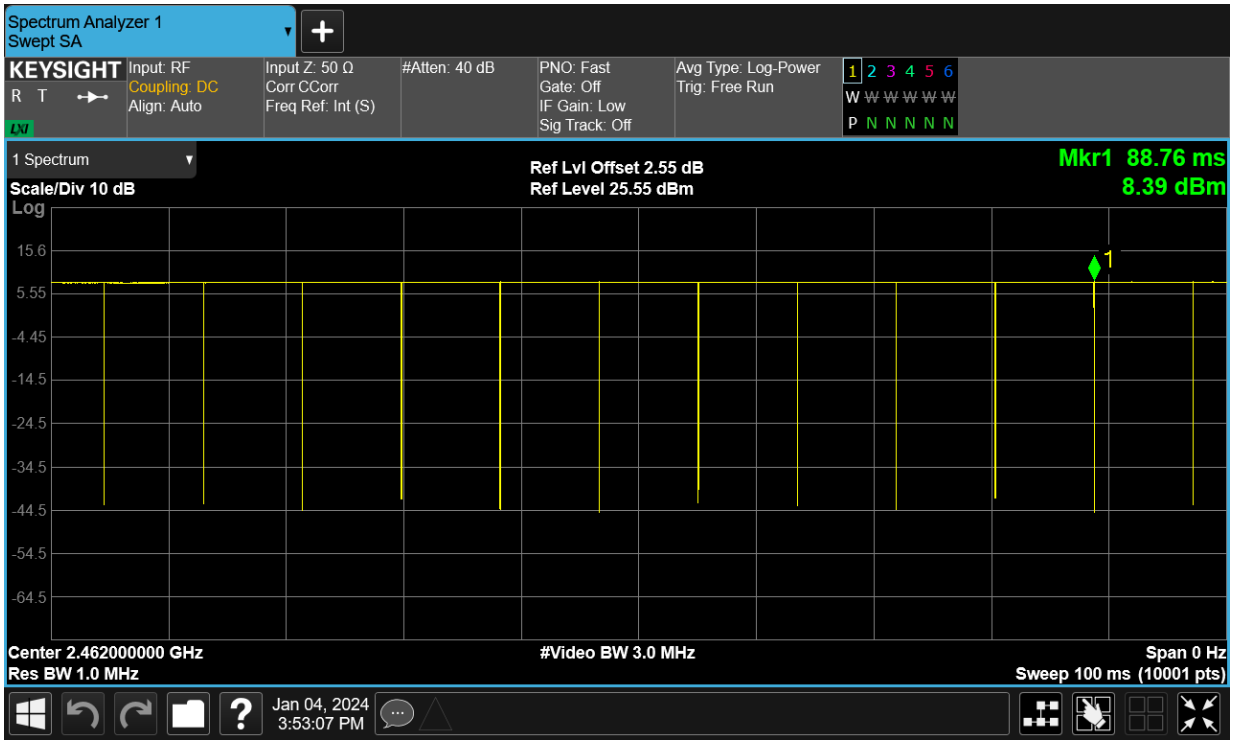
Duty Cycle NVNT b 2412MHz Ant1



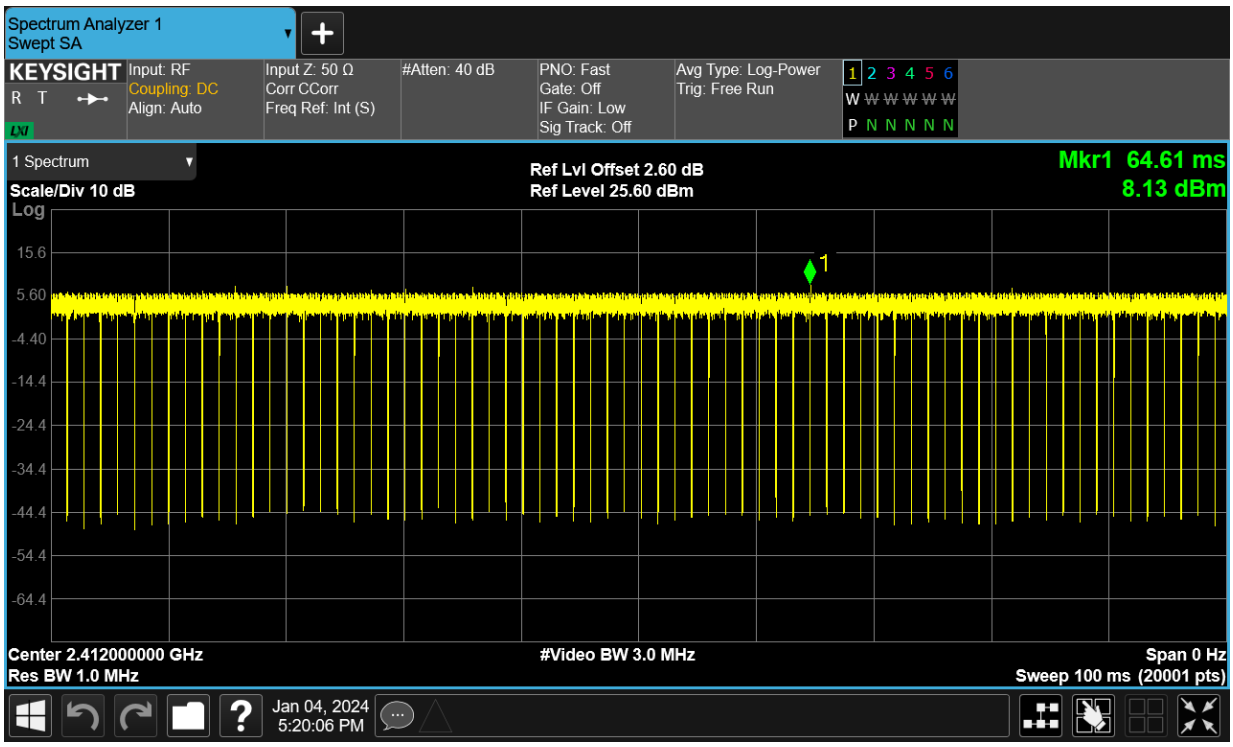
Duty Cycle NVNT b 2437MHz Ant1



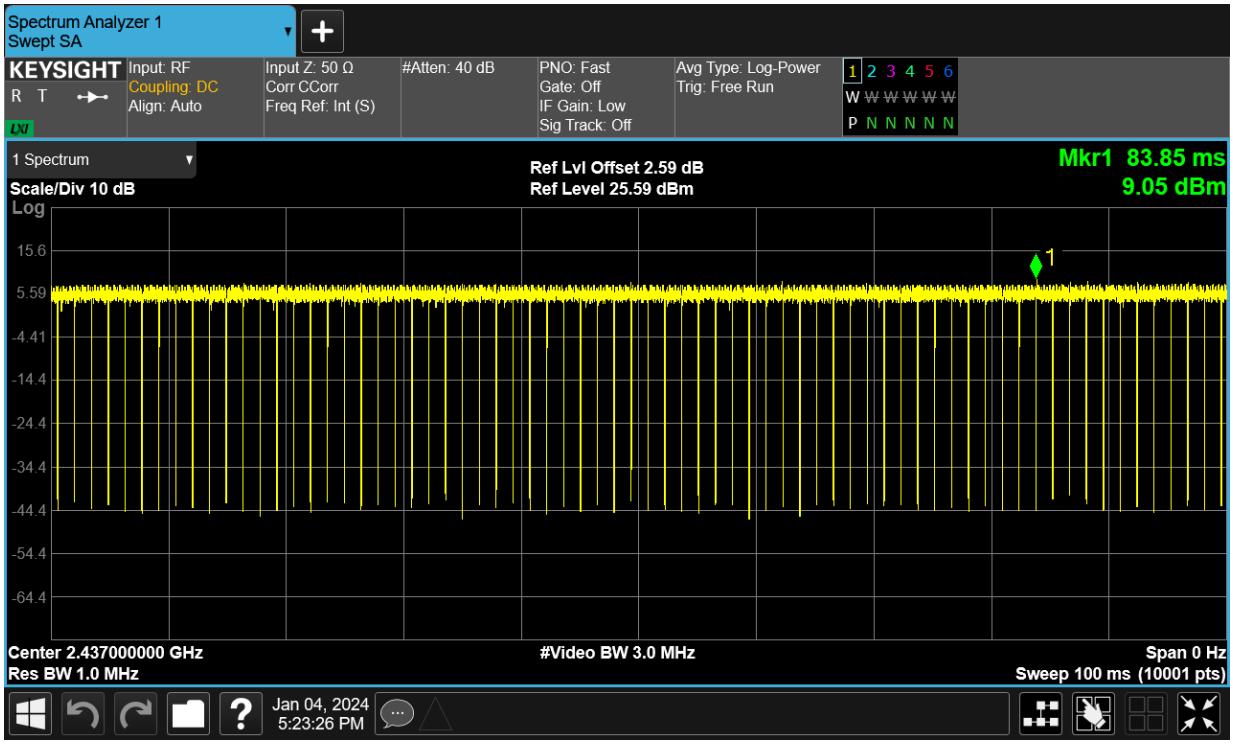
Duty Cycle NVNT b 2462MHz Ant1



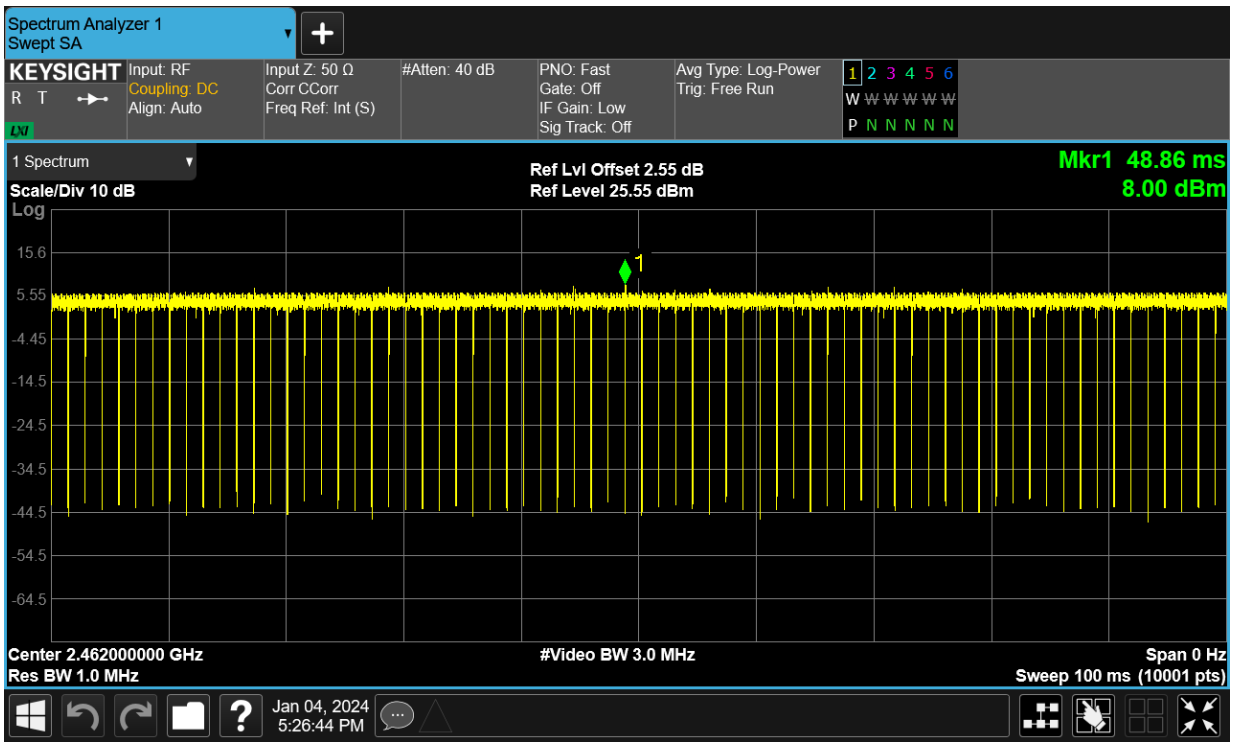
Duty Cycle NVNT g 2412MHz Ant1



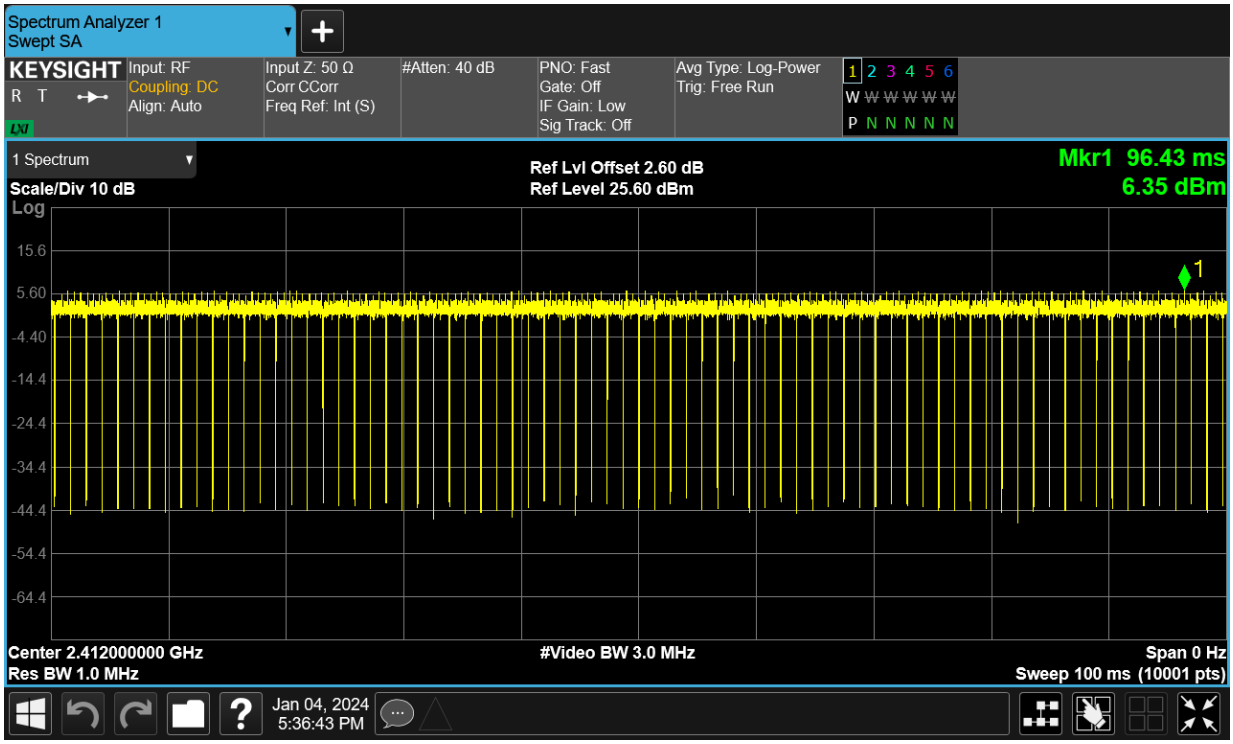
Duty Cycle NVNT g 2437MHz Ant1



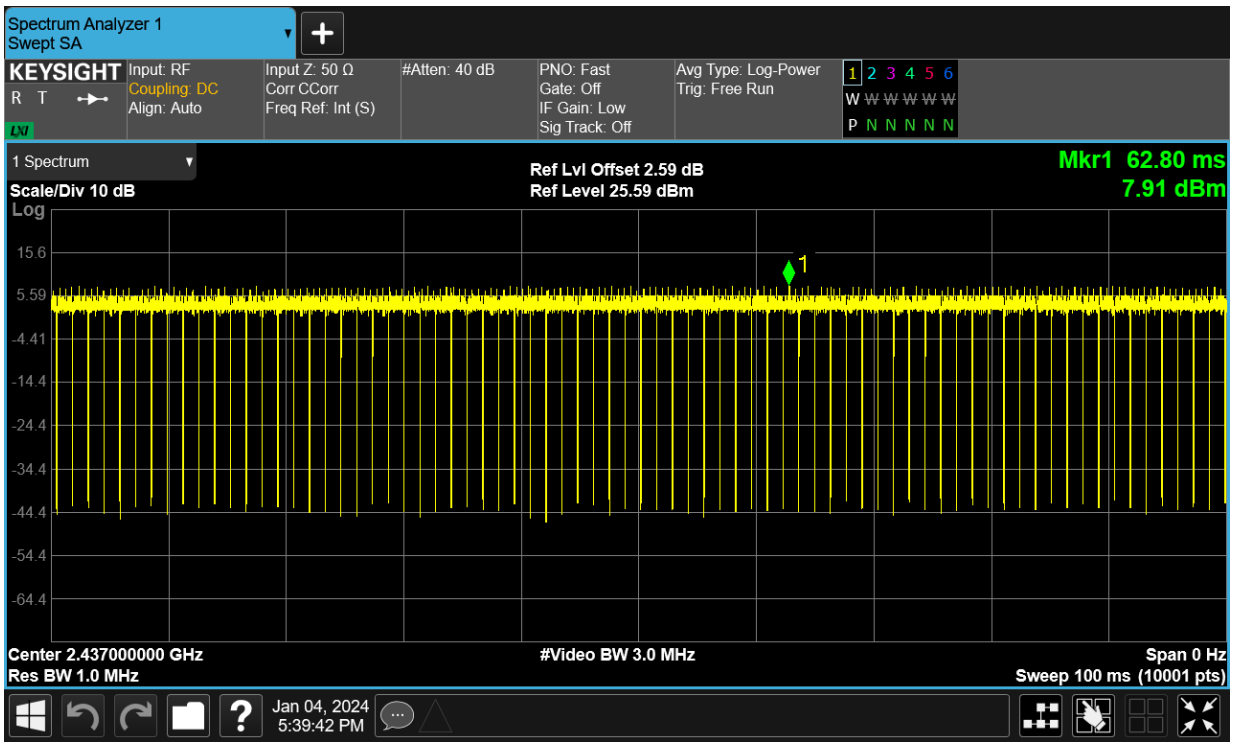
Duty Cycle NVNT g 2462MHz Ant1



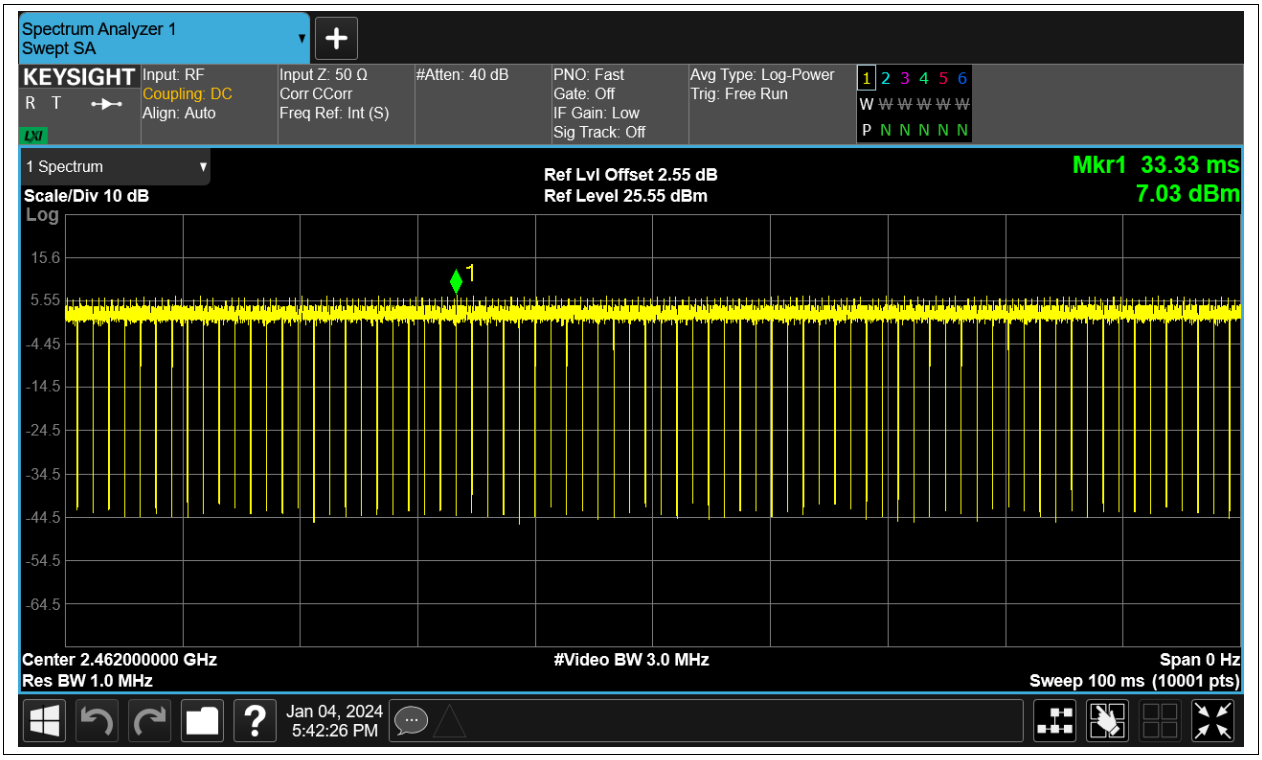
Duty Cycle NVNT n20 2412MHz Ant1



Duty Cycle NVNT n20 2437MHz Ant1



Duty Cycle NVNT n20 2462MHz Ant1


Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
#Atten: 40 dB
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
Avg Type: Log-Power
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 2.55 dB
Ref Level 25.55 dBm
Mkr1 33.33 ms
7.03 dBm
15.6
5.55
-4.45
-14.5
-24.5
-34.5
-44.5
-54.5
-64.5
Center 2.462000000 GHz
Res BW 1.0 MHz
#Video BW 3.0 MHz
Span 0 Hz
Sweep 100 ms (10001 pts)
Jan 04, 2024
5:42:26 PM

Maximum Conducted Output Power

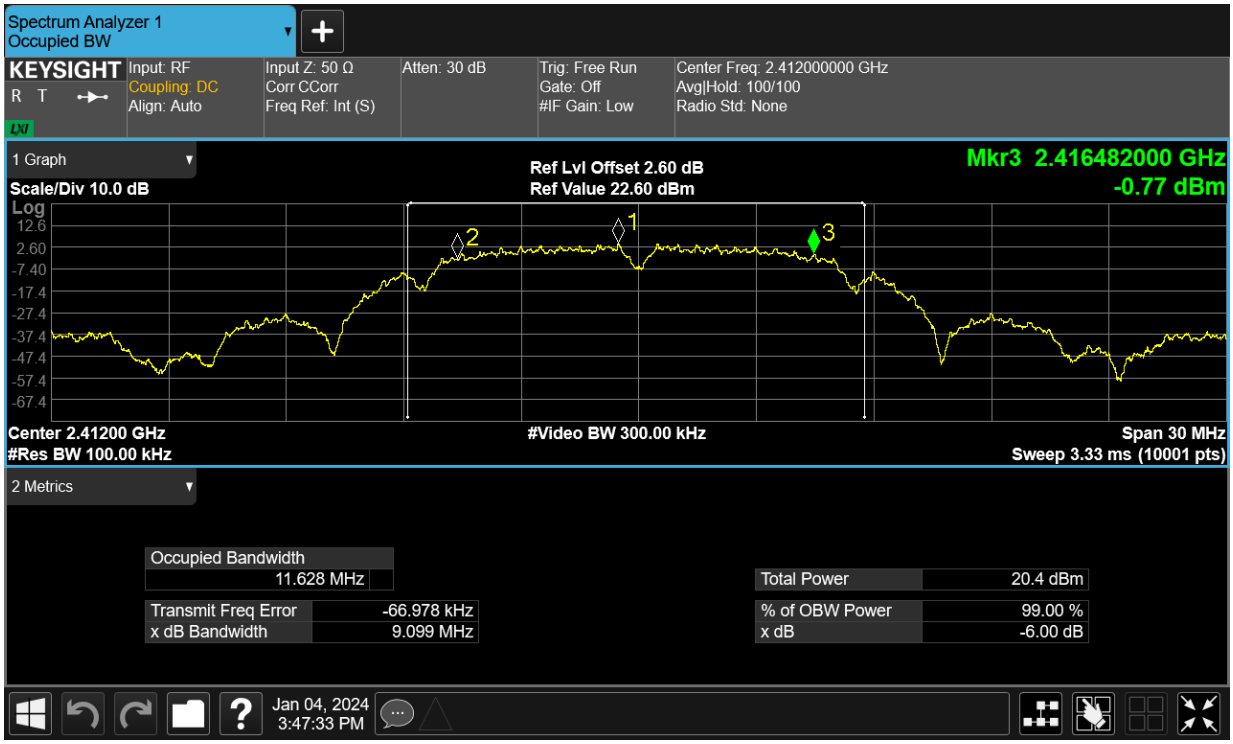
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	14.43	0.01	14.44	30	Pass
NVNT	b	2437	Ant1	16.11	0.01	16.12	30	Pass
NVNT	b	2462	Ant1	14.18	0.01	14.19	30	Pass
NVNT	g	2412	Ant1	12.17	0.11	12.28	30	Pass
NVNT	g	2437	Ant1	13.4	0.09	13.49	30	Pass
NVNT	g	2462	Ant1	11.77	0.09	11.86	30	Pass
NVNT	n20	2412	Ant1	10.39	0.1	10.49	30	Pass
NVNT	n20	2437	Ant1	11.83	0.1	11.93	30	Pass
NVNT	n20	2462	Ant1	10.28	0.1	10.38	30	Pass

-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	limit	Verdic
NVNT	b	2412	Ant1	9.099	0.5	Pass
NVNT	b	2437	Ant1	9.056	0.5	Pass
NVNT	b	2462	Ant1	9.041	0.5	Pass
NVNT	g	2412	Ant1	16.353	0.5	Pass
NVNT	g	2437	Ant1	16.322	0.5	Pass
NVNT	g	2462	Ant1	16.356	0.5	Pass
NVNT	n20	2412	Ant1	17.582	0.5	Pass
NVNT	n20	2437	Ant1	17.533	0.5	Pass
NVNT	n20	2462	Ant1	17.285	0.5	Pass

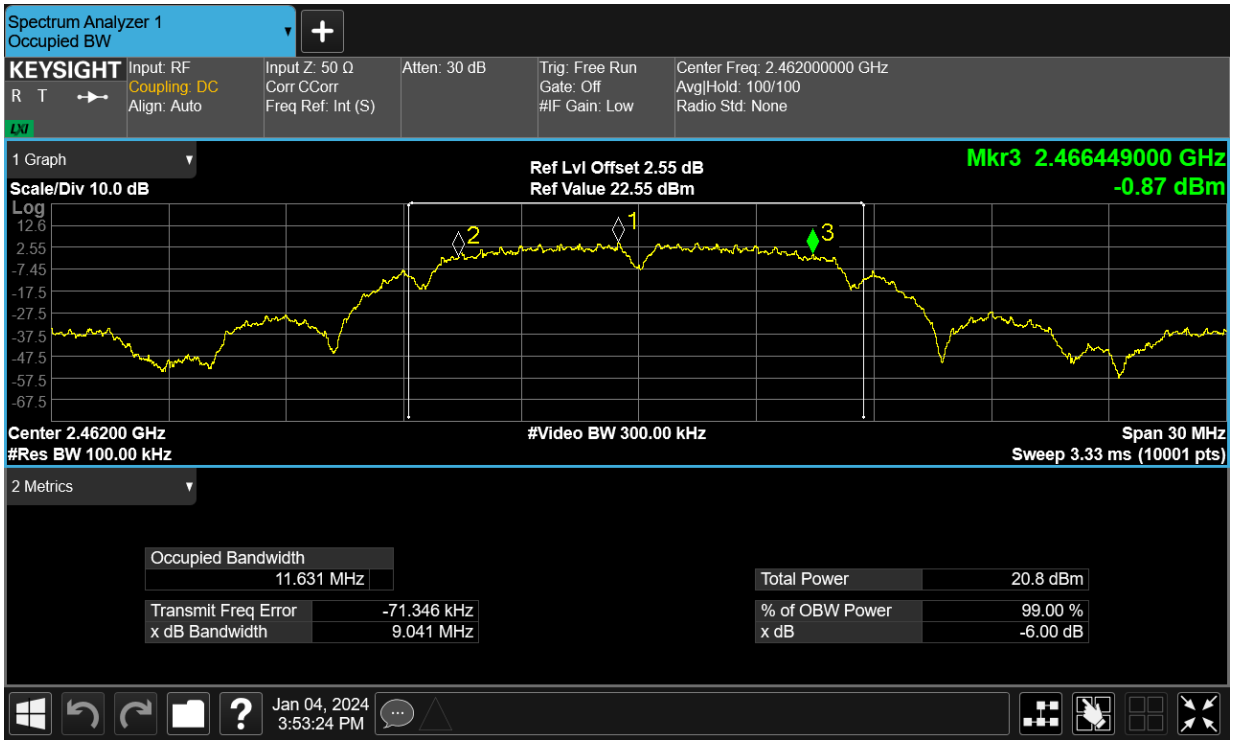
Test Graphs

-6dB Bandwidth NVNT b 2412MHz Ant1

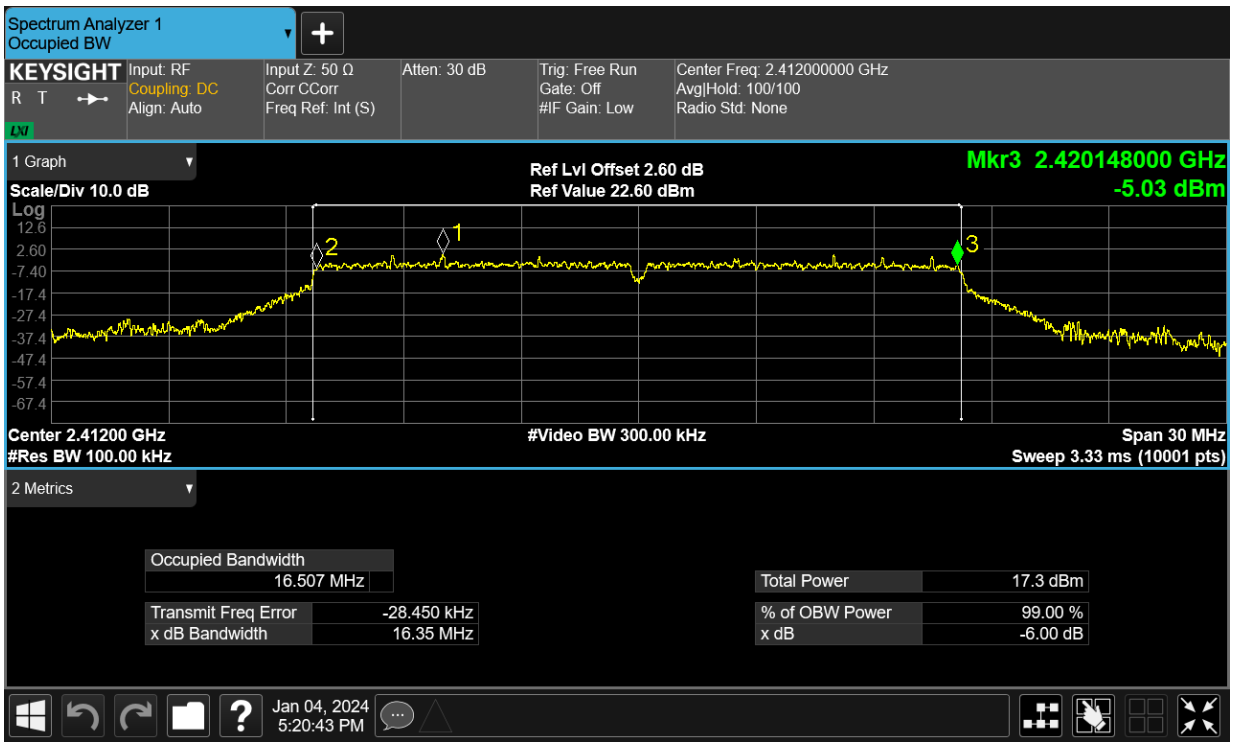


-6dB Bandwidth NVNT b 2437MHz Ant1

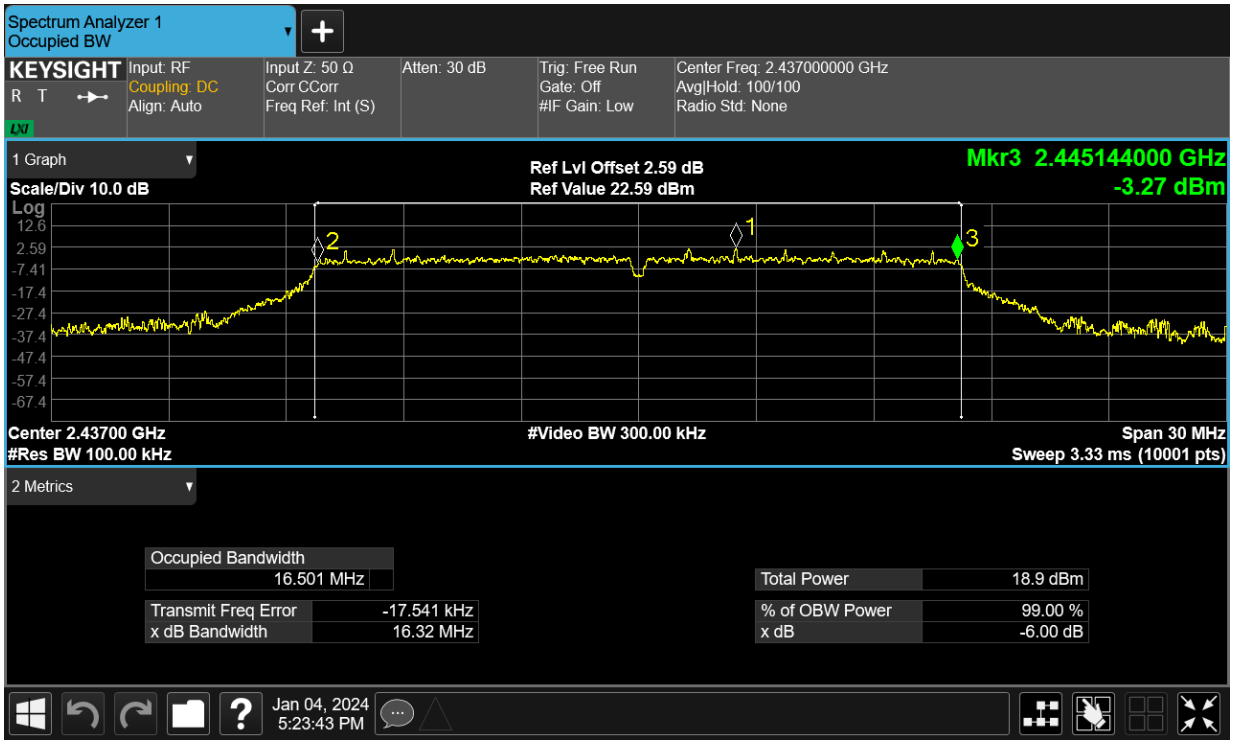
-6dB Bandwidth NVNT b 2462MHz Ant1



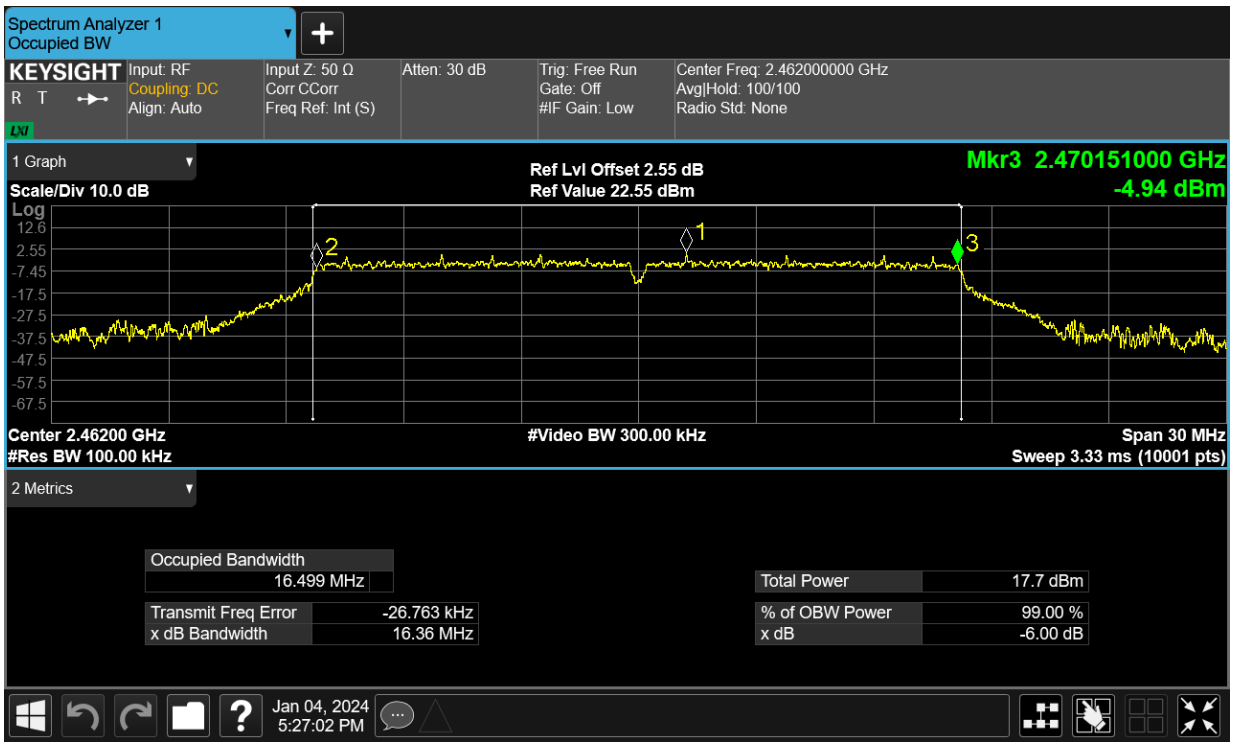
-6dB Bandwidth NVNT g 2412MHz Ant1



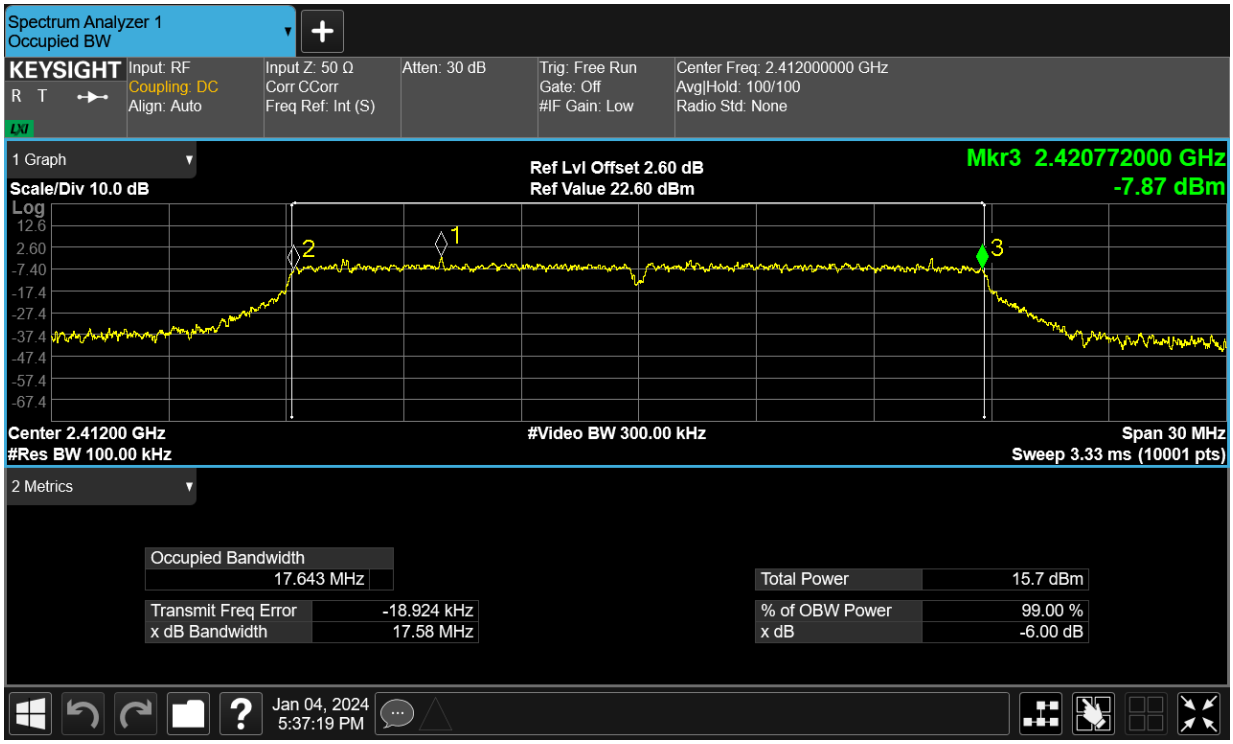
-6dB Bandwidth NVNT g 2437MHz Ant1



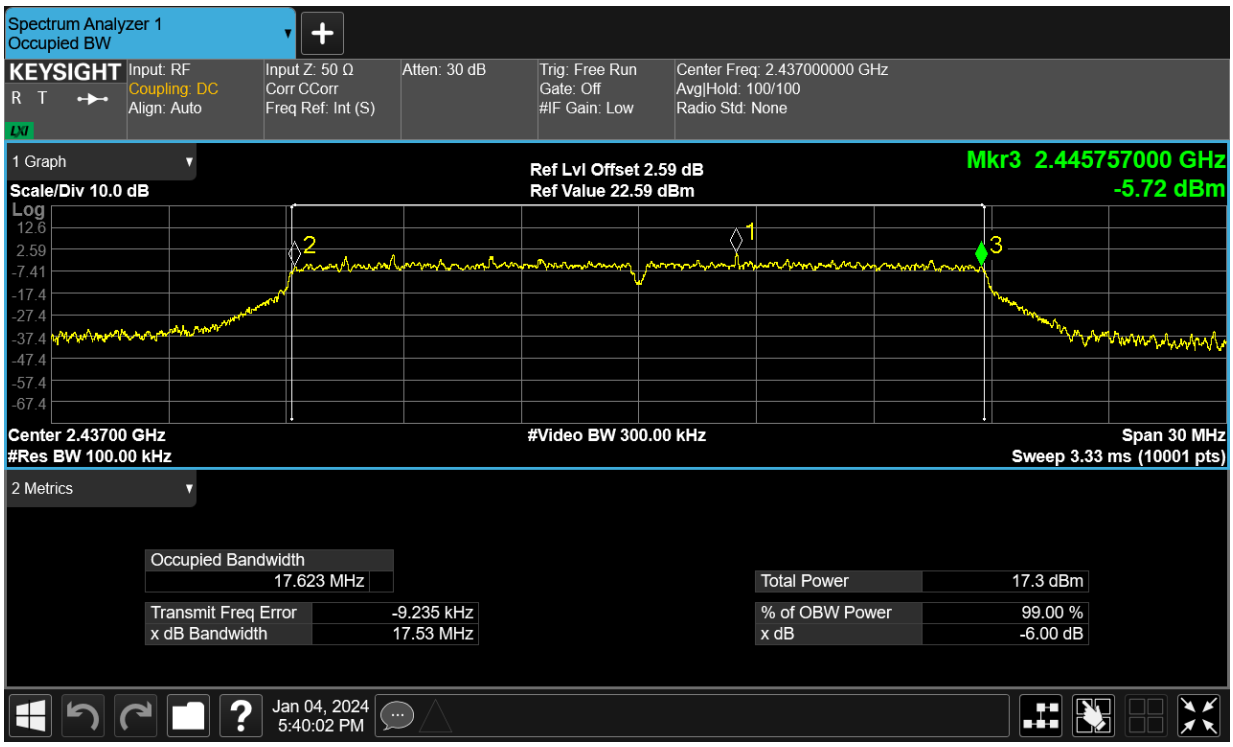
-6dB Bandwidth NVNT g 2462MHz Ant1



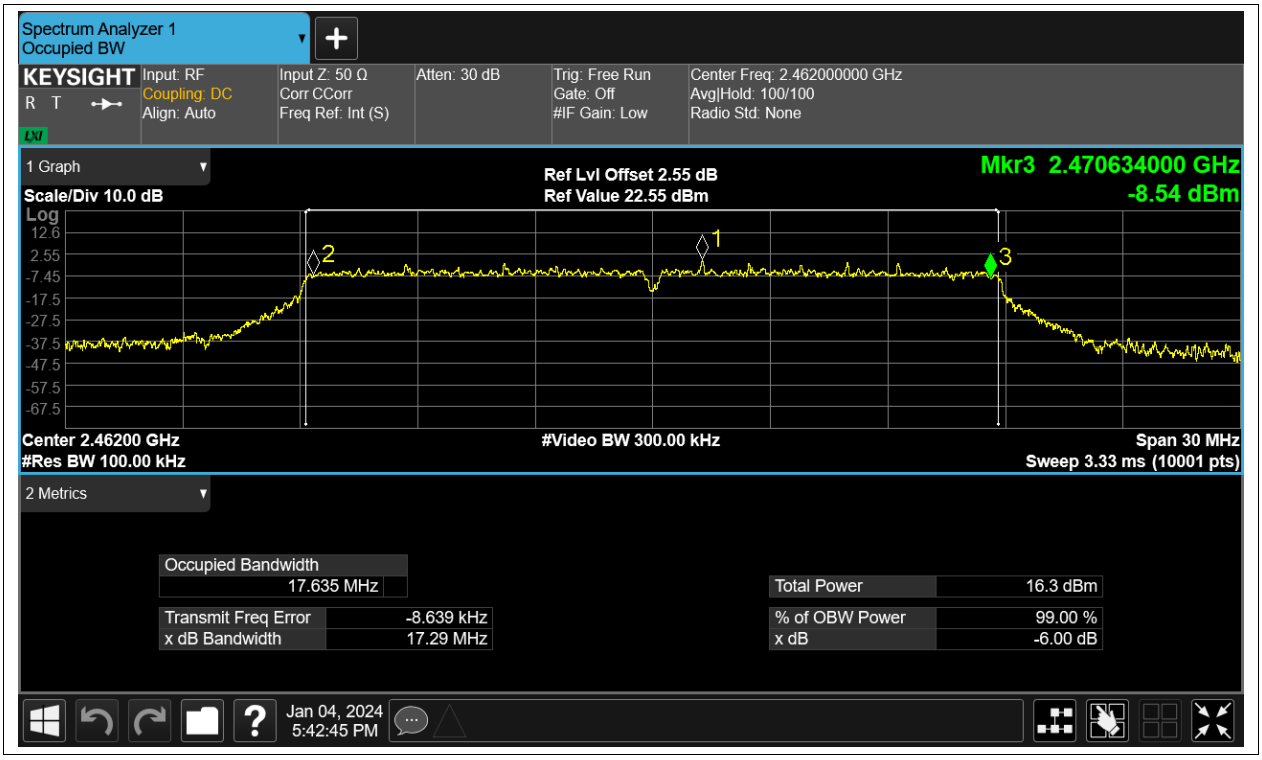
-6dB Bandwidth NVNT n20 2412MHz Ant1



-6dB Bandwidth NVNT n20 2437MHz Ant1



-6dB Bandwidth NVNT n20 2462MHz Ant1

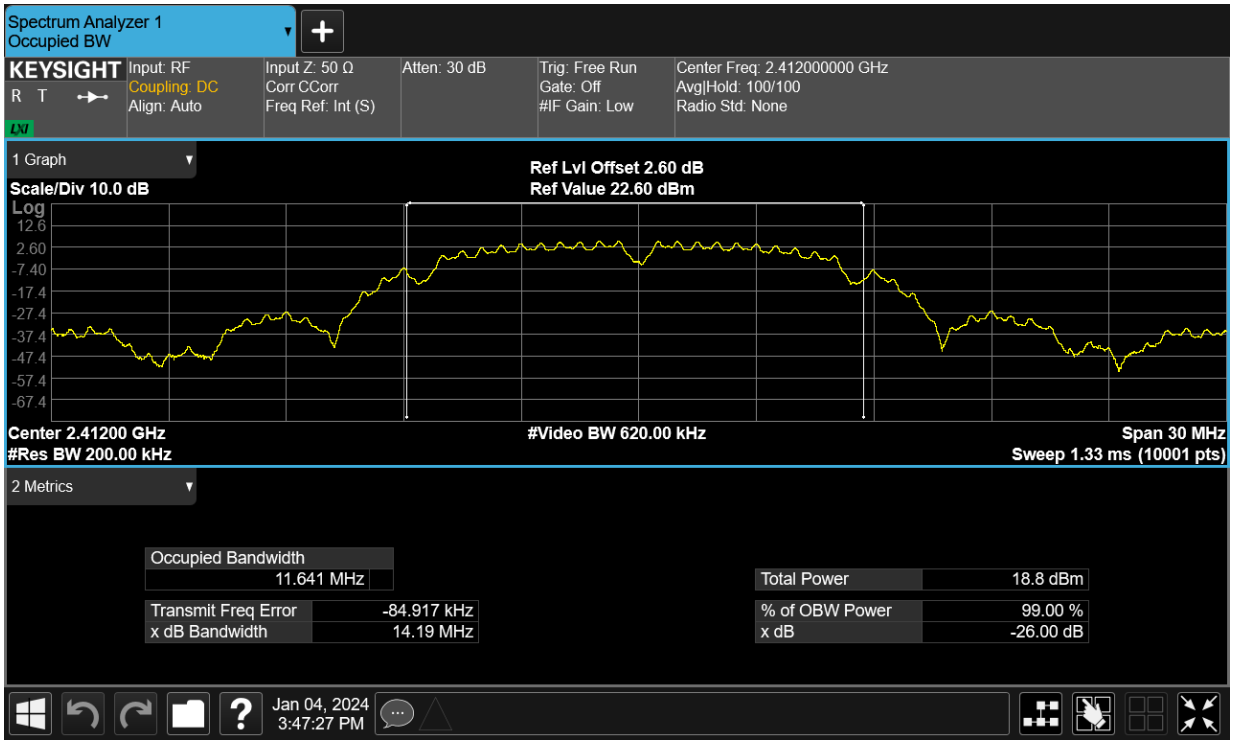

Spectrum Analyzer 1
Occupied BW
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
Atten: 30 dB
Trig: Free Run
Gate: Off
#IF Gain: Low
Center Freq: 2.462000000 GHz
Avg|Hold: 100/100
Radio Std: None
1 Graph
Scale/Div 10.0 dB
Ref Lvl Offset 2.55 dB
Ref Value 22.55 dBm
Mkr3 2.470634000 GHz
-8.54 dBm
Center 2.46200 GHz
#Res BW 100.00 kHz
#Video BW 300.00 kHz
Span 30 MHz
Sweep 3.33 ms (10001 pts)
2 Metrics
Occupied Bandwidth
17.635 MHz
Transmit Freq Error -8.639 kHz
x dB Bandwidth 17.29 MHz
Total Power 16.3 dBm
% of OBW Power 99.00 %
x dB -6.00 dB
Jan 04, 2024
5:42:45 PM

Occupied Channel Bandwidth

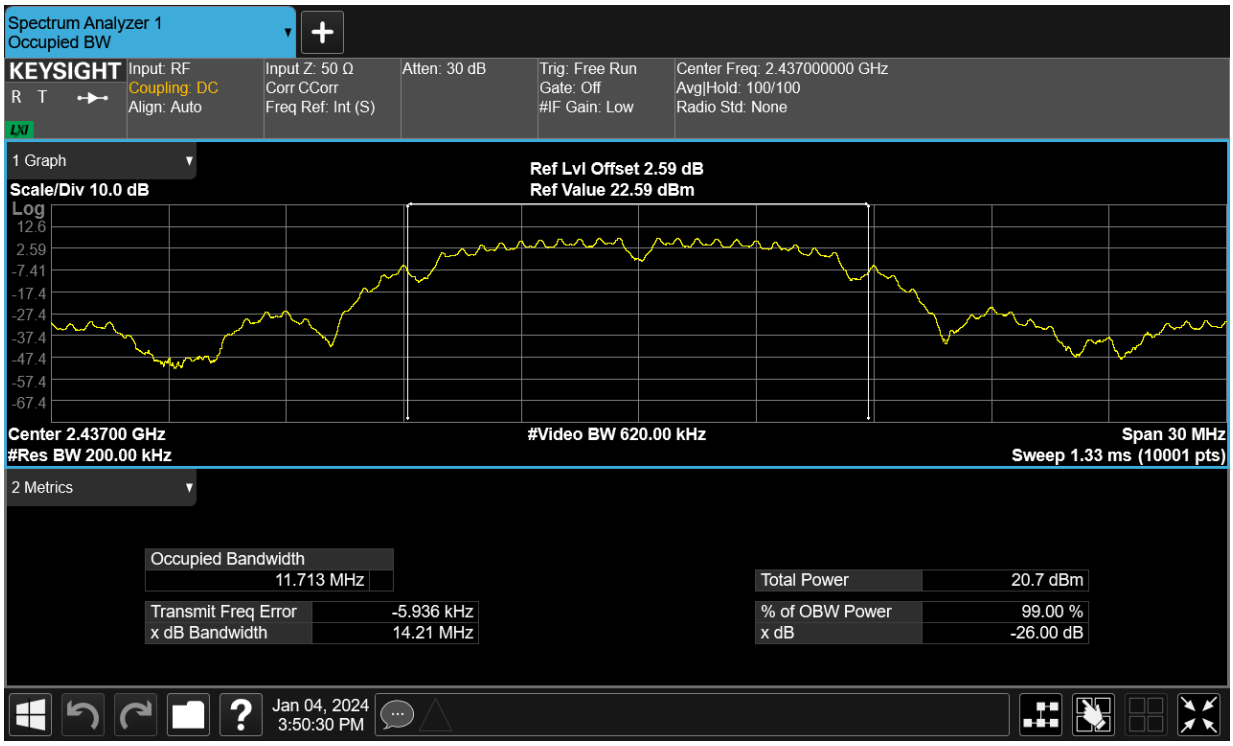
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	11.641
NVNT	b	2437	Ant1	11.713
NVNT	b	2462	Ant1	11.683
NVNT	g	2412	Ant1	16.706
NVNT	g	2437	Ant1	16.661
NVNT	g	2462	Ant1	16.691
NVNT	n20	2412	Ant1	17.692
NVNT	n20	2437	Ant1	17.661
NVNT	n20	2462	Ant1	17.718

Test Graphs

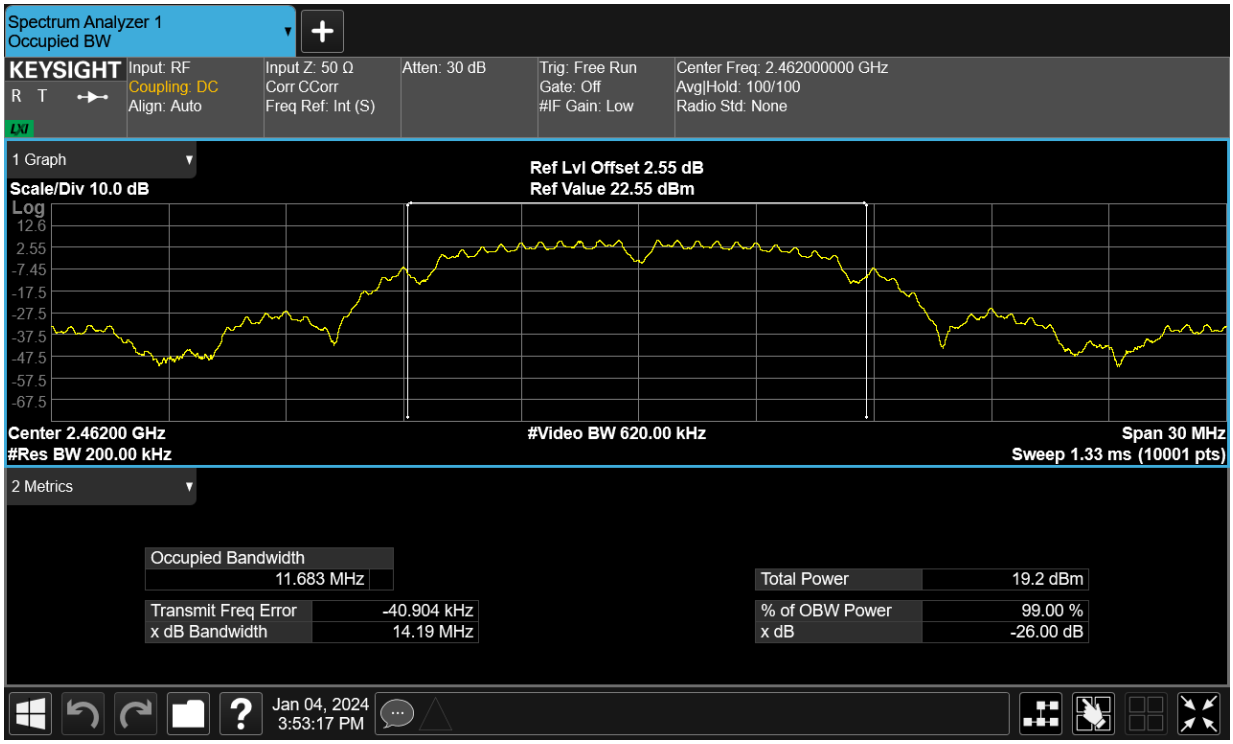
OBW NVNT b 2412MHz Ant1



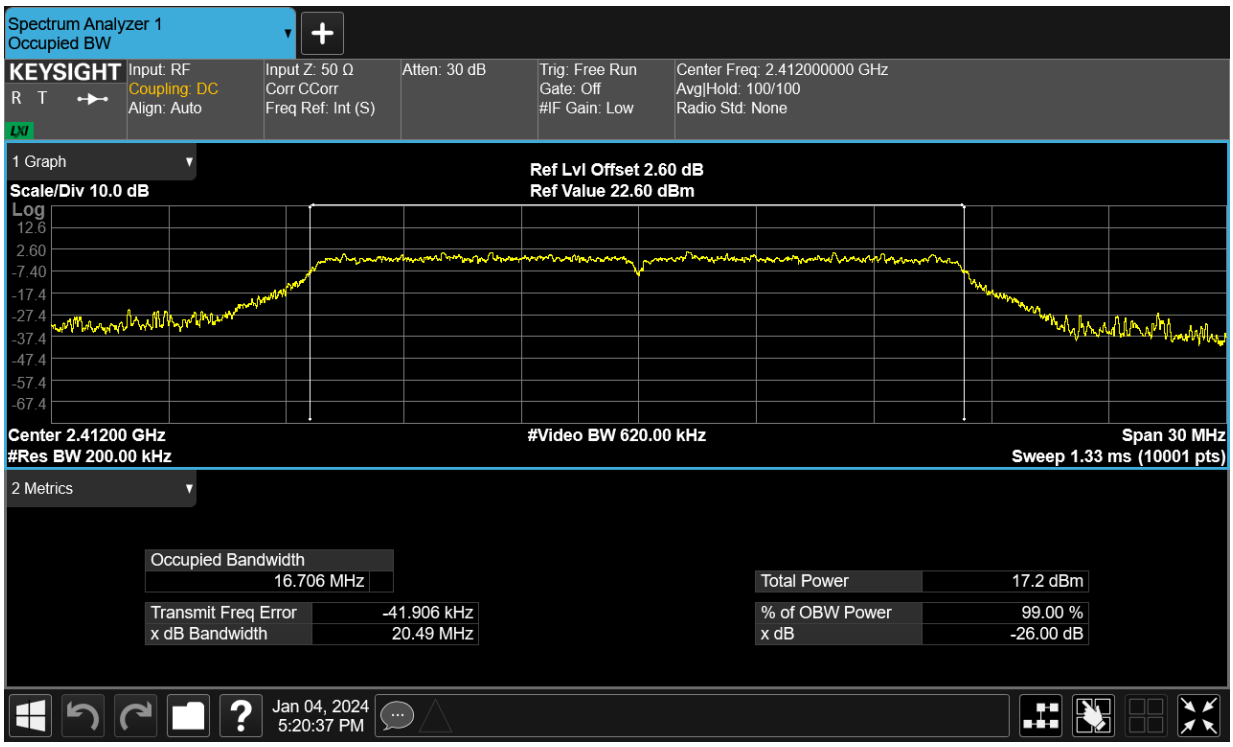
OBW NVNT b 2437MHz Ant1



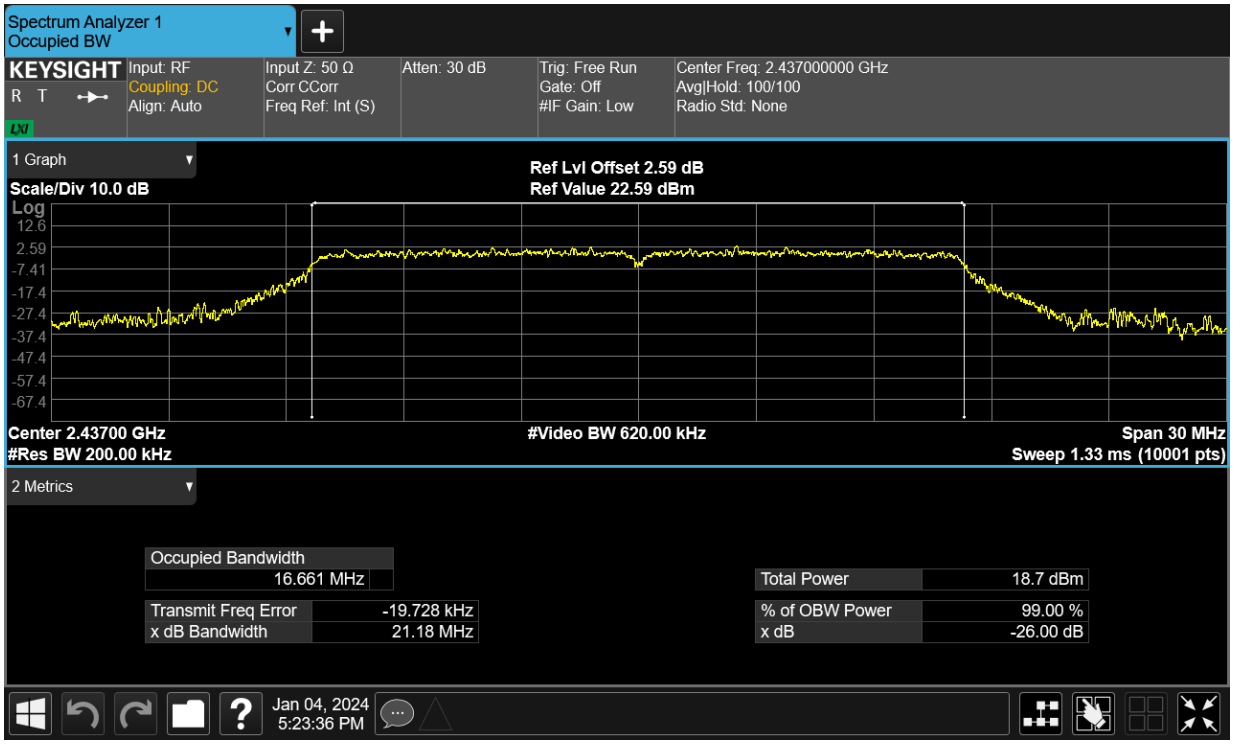
OBW NVNT b 2462MHz Ant1



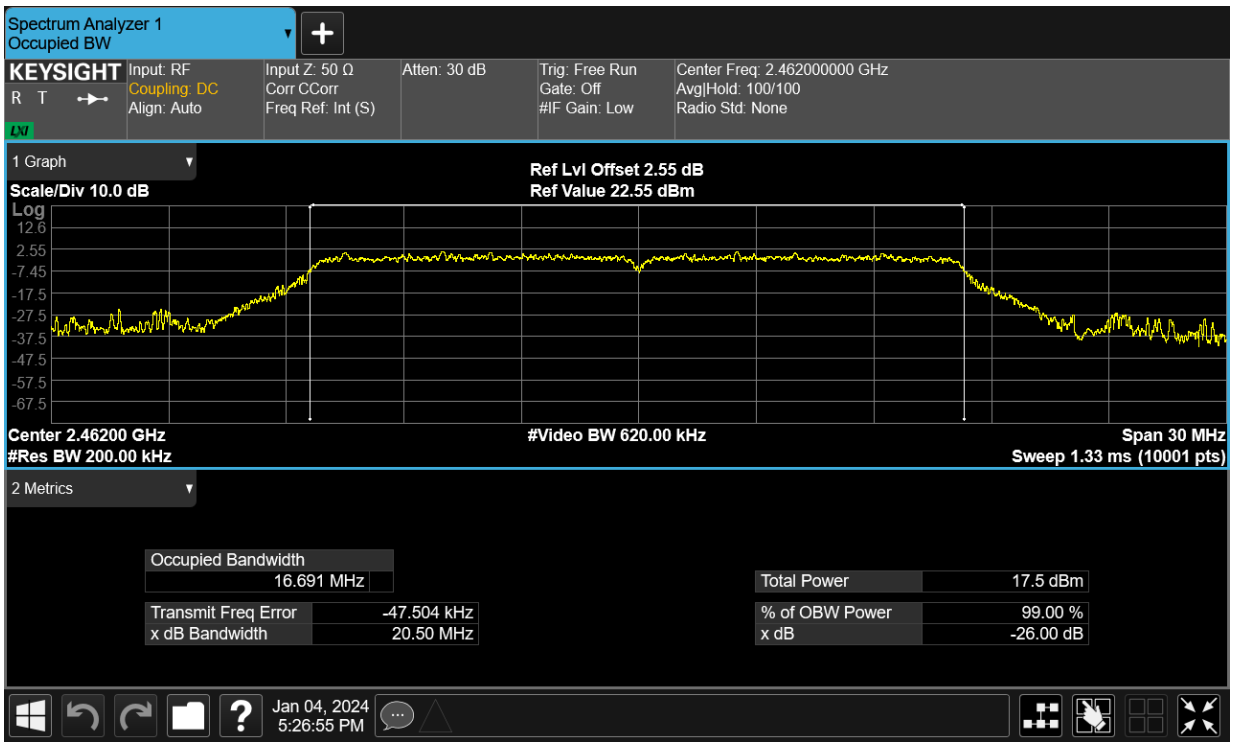
OBW NVNT g 2412MHz Ant1



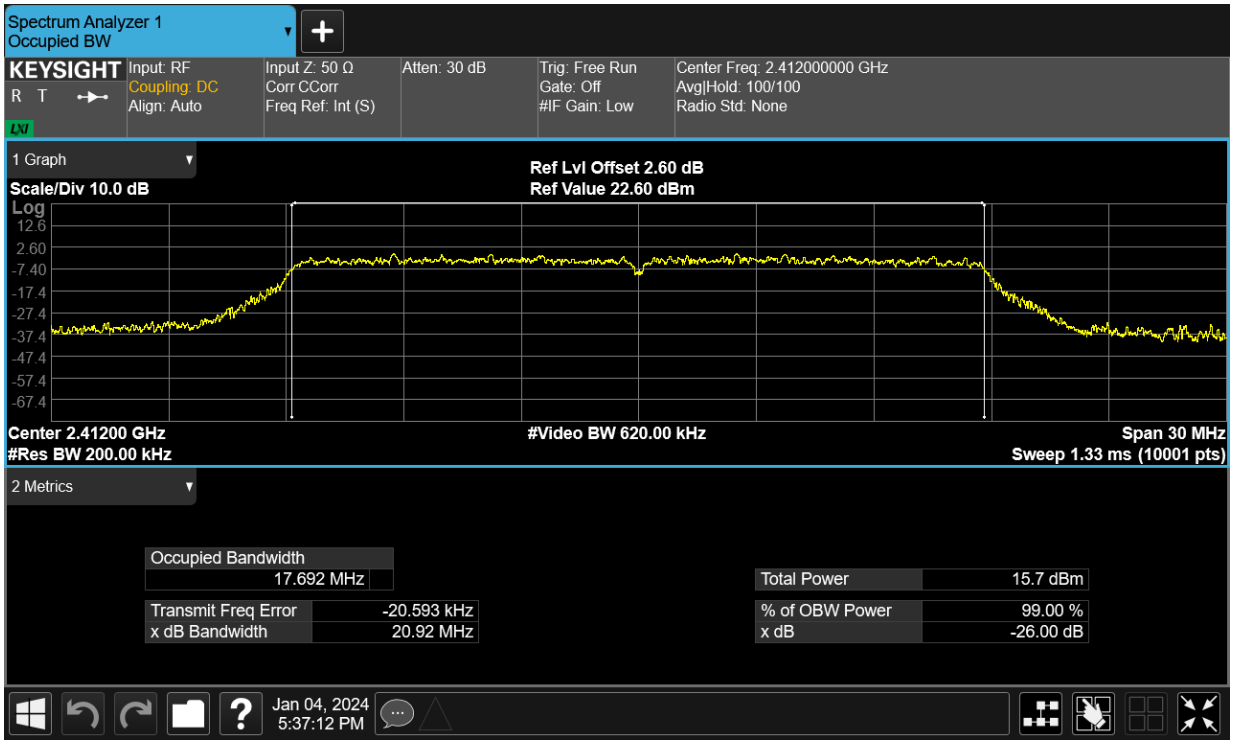
OBW NVNT g 2437MHz Ant1



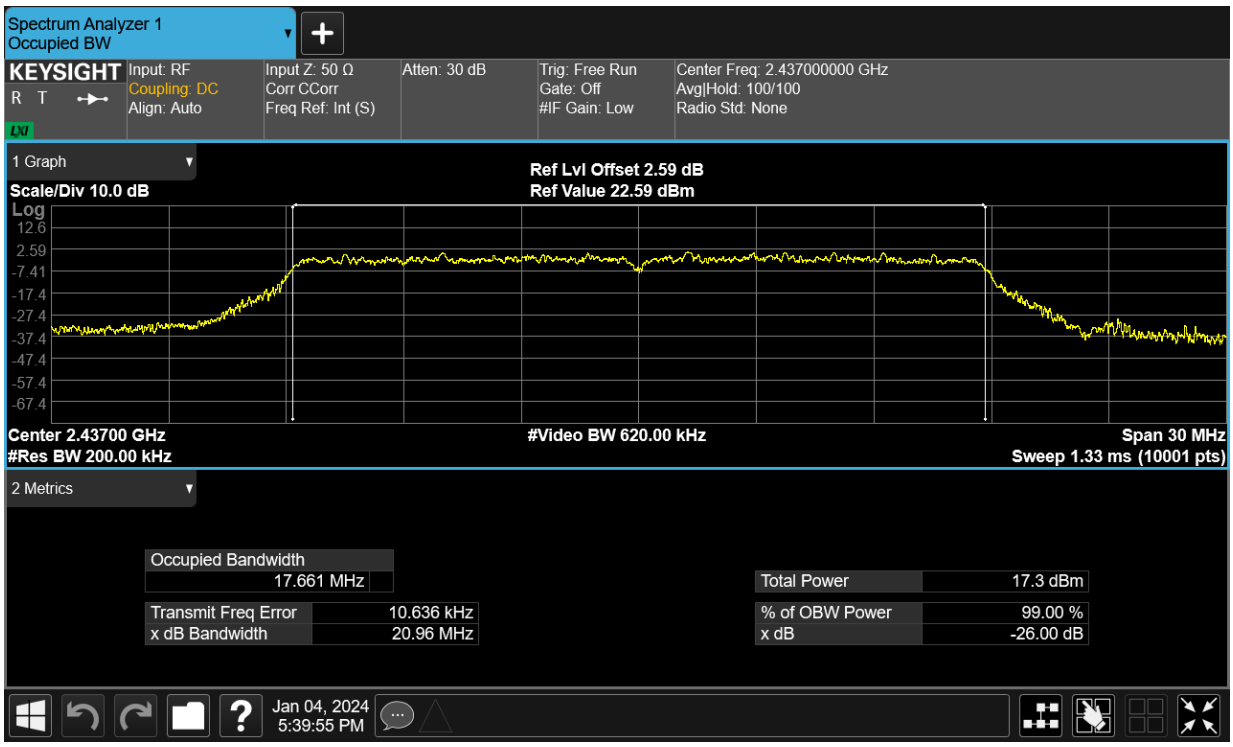
OBW NVNT g 2462MHz Ant1



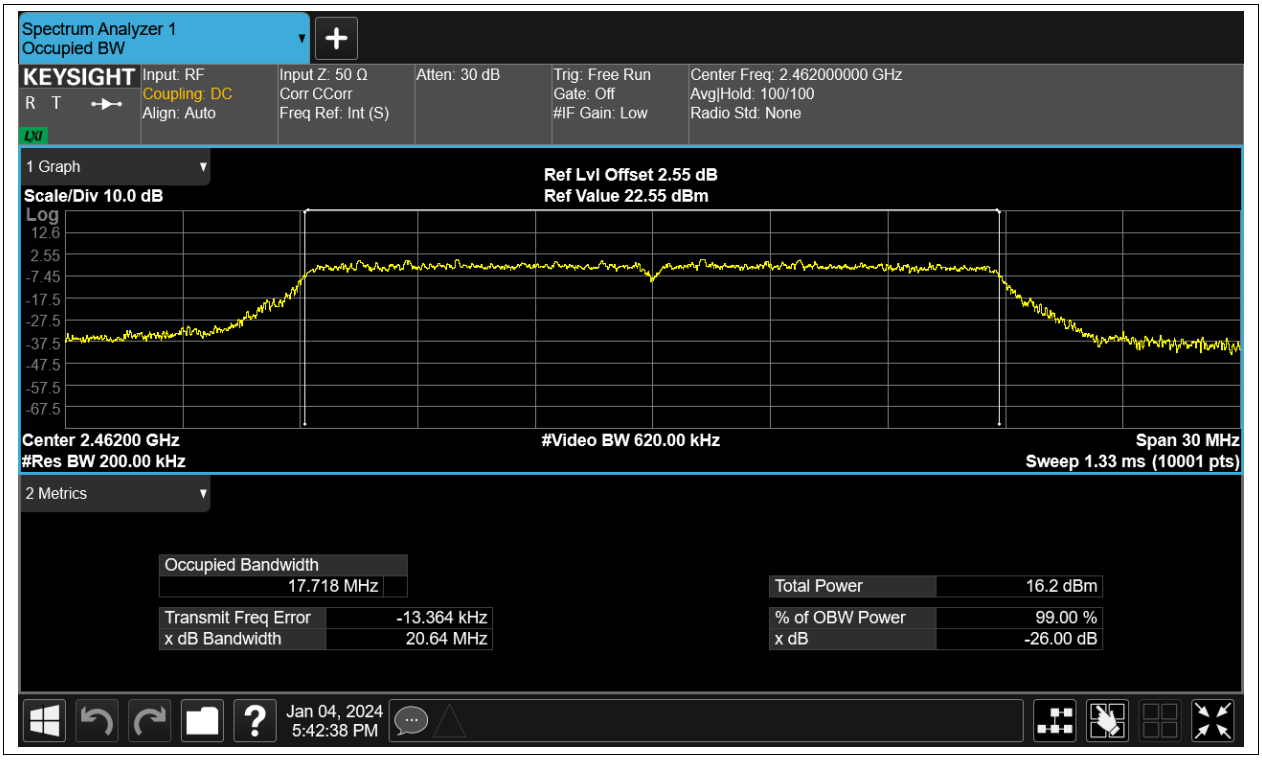
OBW NVNT n20 2412MHz Ant1



OBW NVNT n20 2437MHz Ant1



OBW NVNT n20 2462MHz Ant1

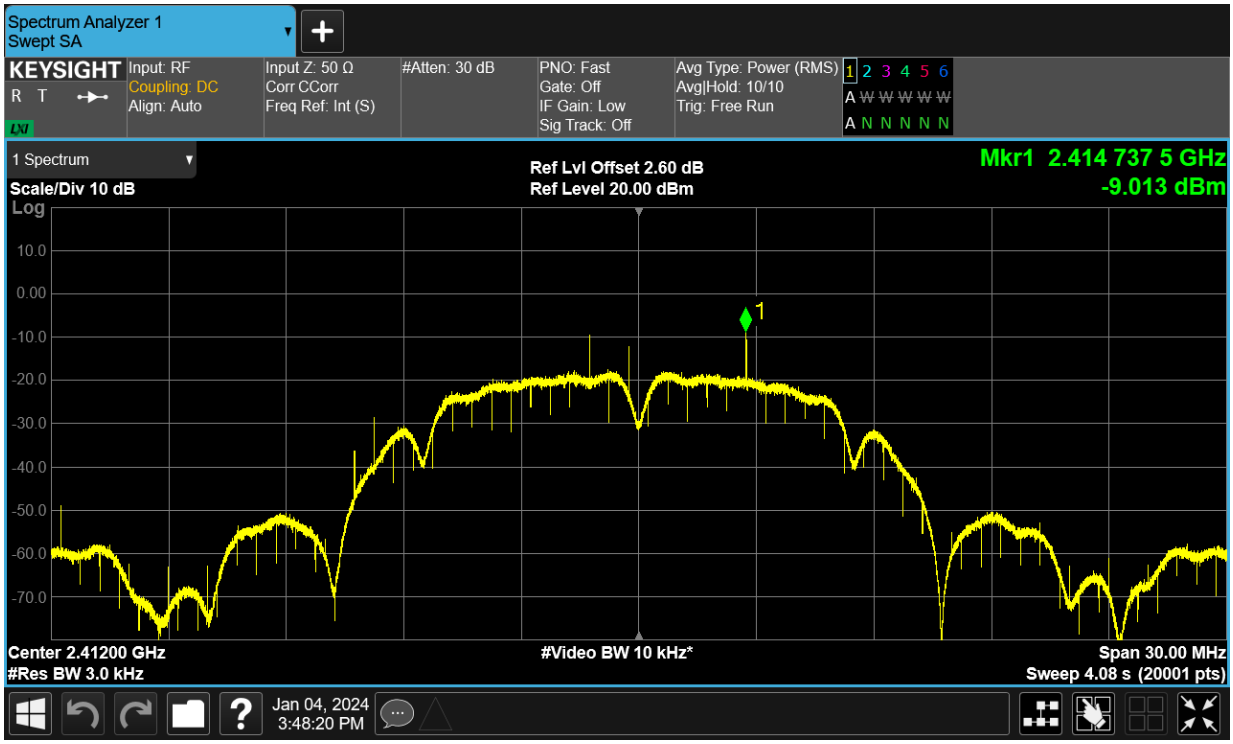

Spectrum Analyzer 1
Occupied BW
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
Atten: 30 dB
Trig: Free Run
Gate: Off
#IF Gain: Low
Center Freq: 2.462000000 GHz
Avg|Hold: 100/100
Radio Std: None
1 Graph
Scale/Div 10.0 dB
Ref Lvl Offset 2.55 dB
Ref Value 22.55 dBm
Log
12.6
2.55
-7.45
-17.5
-27.5
-37.5
-47.5
-57.5
-67.5
Center 2.46200 GHz
#Res BW 200.00 kHz
#Video BW 620.00 kHz
Span 30 MHz
Sweep 1.33 ms (10001 pts)
2 Metrics
Occupied Bandwidth
17.718 MHz
Transmit Freq Error -13.364 kHz
x dB Bandwidth 20.64 MHz
Total Power 16.2 dBm
% of OBW Power 99.00 %
x dB -26.00 dB
Jan 04, 2024
5:42:38 PM

Maximum Power Spectral Density Level

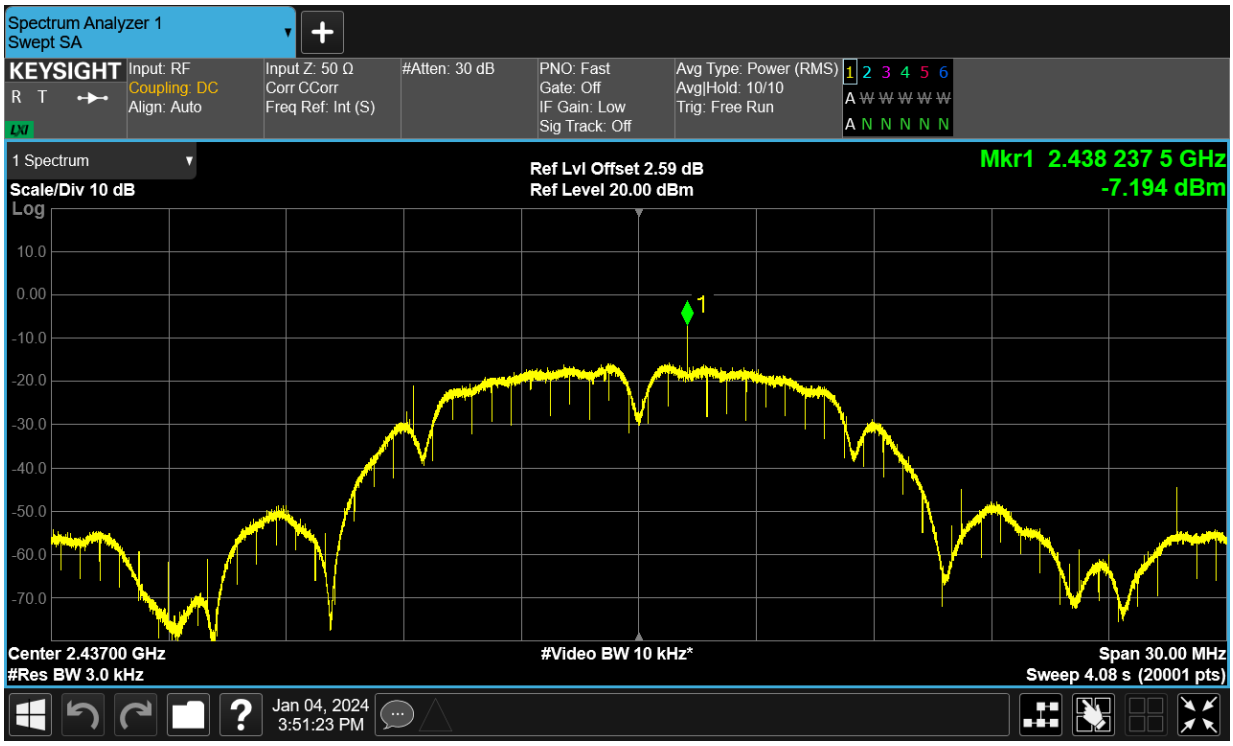
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	-9.013	8	Pass
NVNT	b	2437	Ant1	-7.194	8	Pass
NVNT	b	2462	Ant1	-12.162	8	Pass
NVNT	g	2412	Ant1	-19.916	8	Pass
NVNT	g	2437	Ant1	-19.418	8	Pass
NVNT	g	2462	Ant1	-20.498	8	Pass
NVNT	n20	2412	Ant1	-22.333	8	Pass
NVNT	n20	2437	Ant1	-21.323	8	Pass
NVNT	n20	2462	Ant1	-21.866	8	Pass

Test Graphs

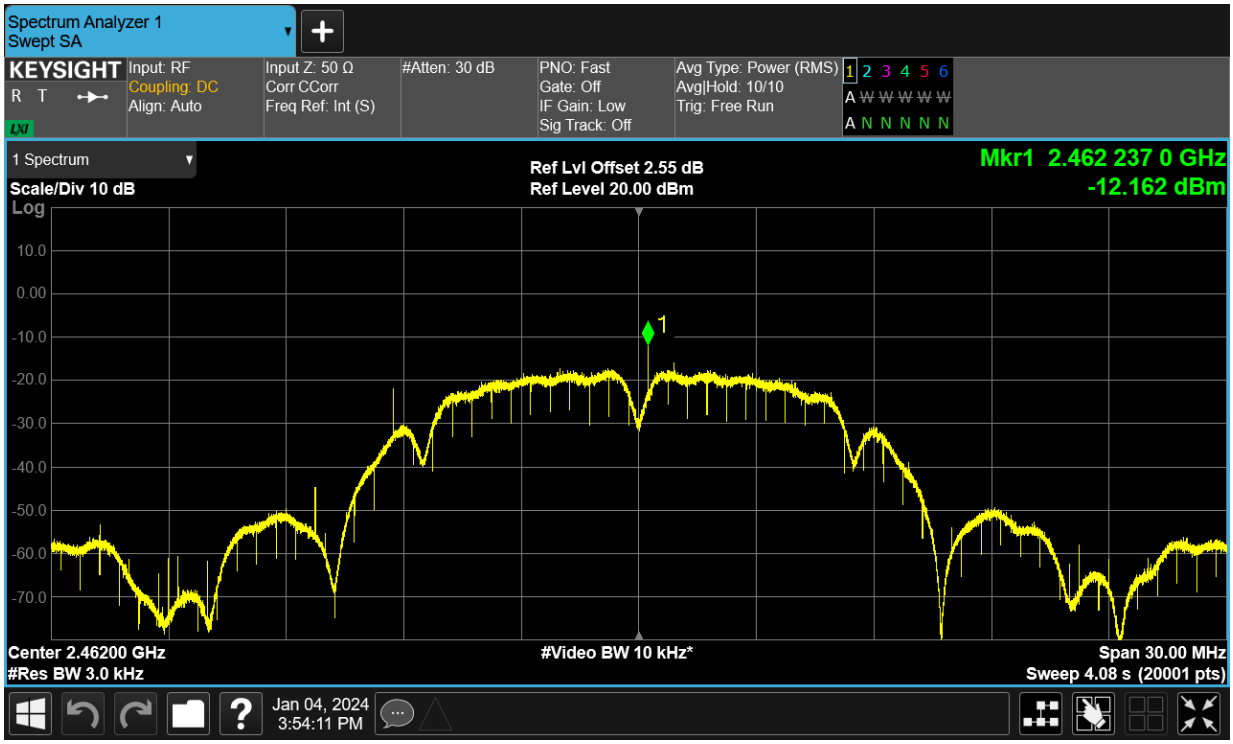
PSD NVNT b 2412MHz Ant1



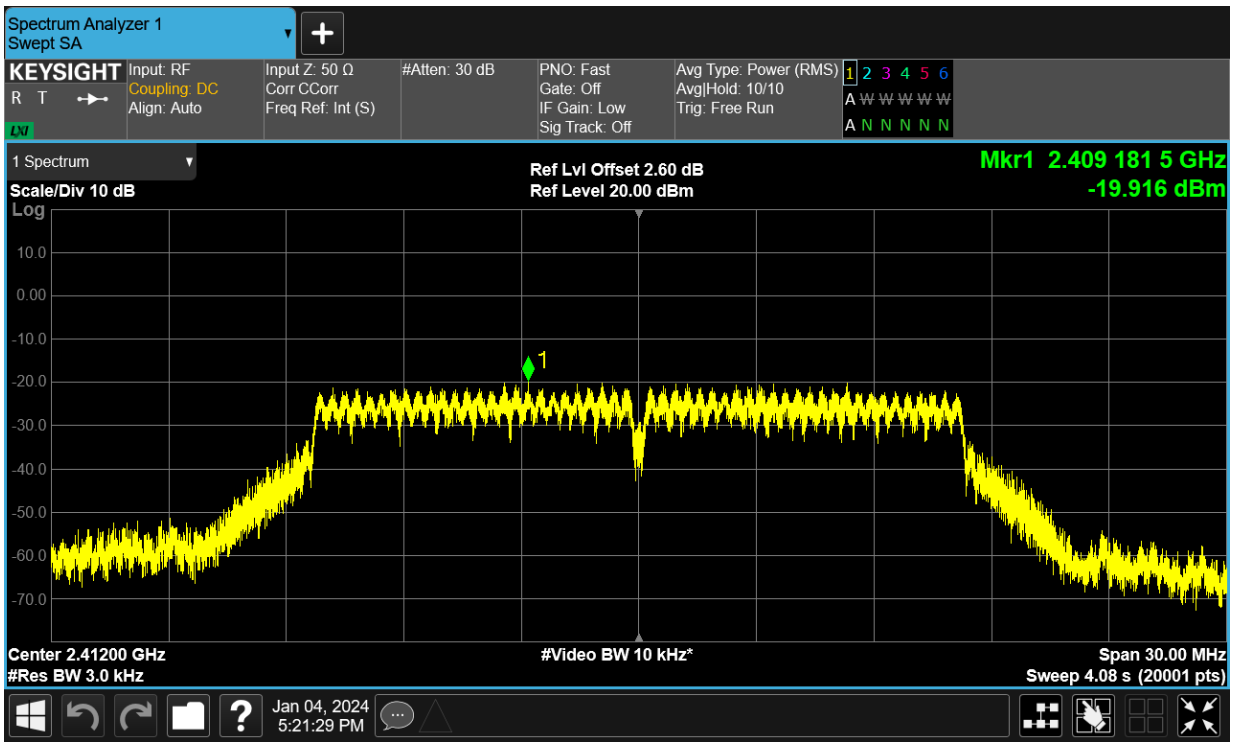
PSD NVNT b 2437MHz Ant1



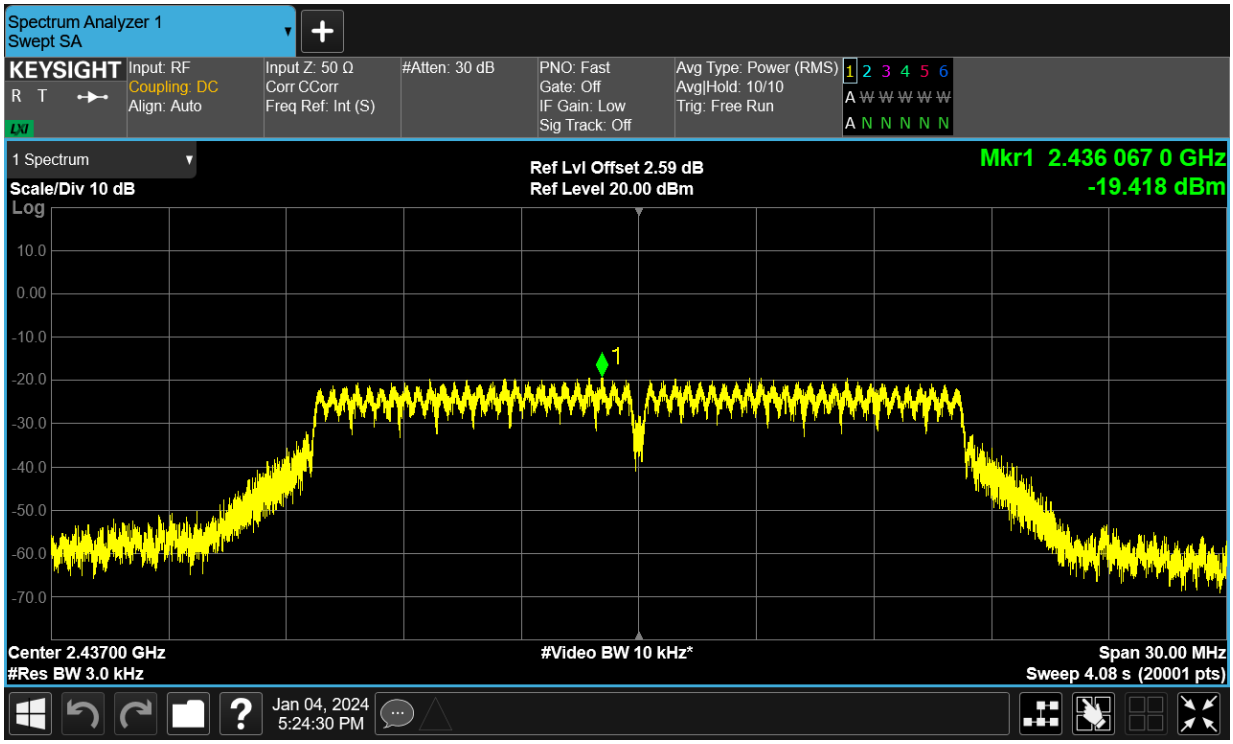
PSD NVNT b 2462MHz Ant1



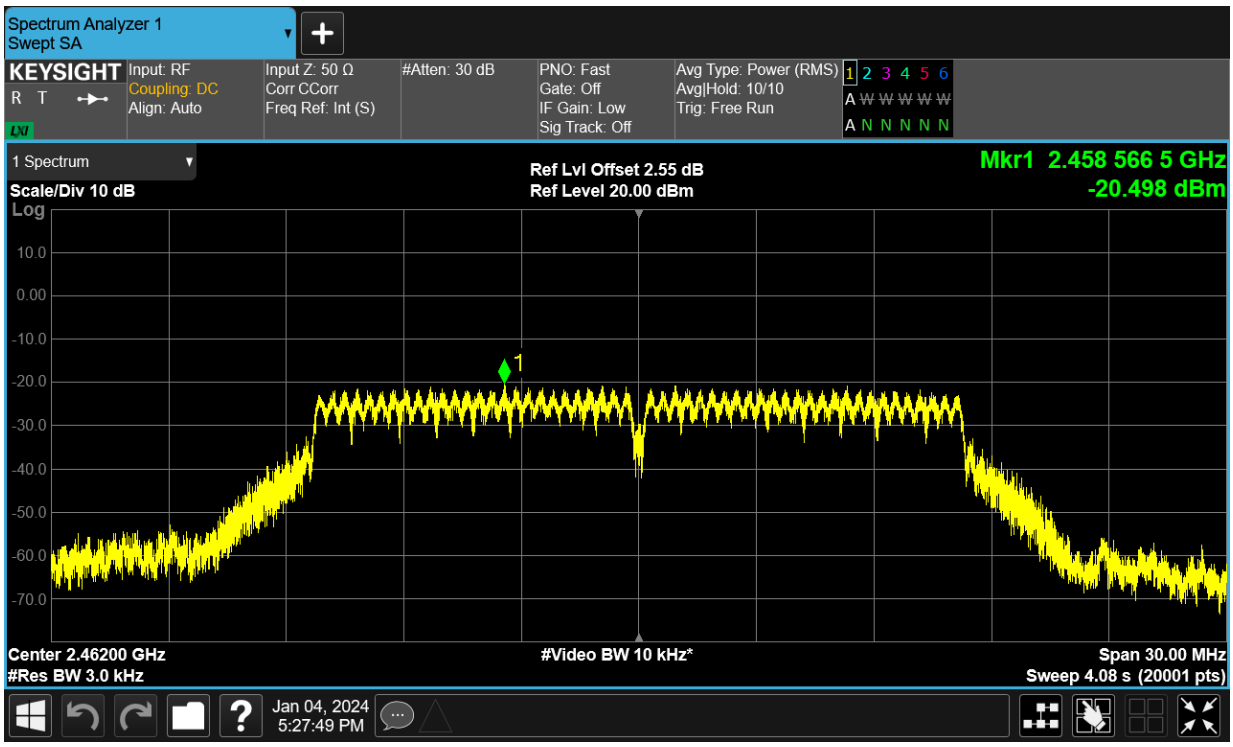
PSD NVNT g 2412MHz Ant1



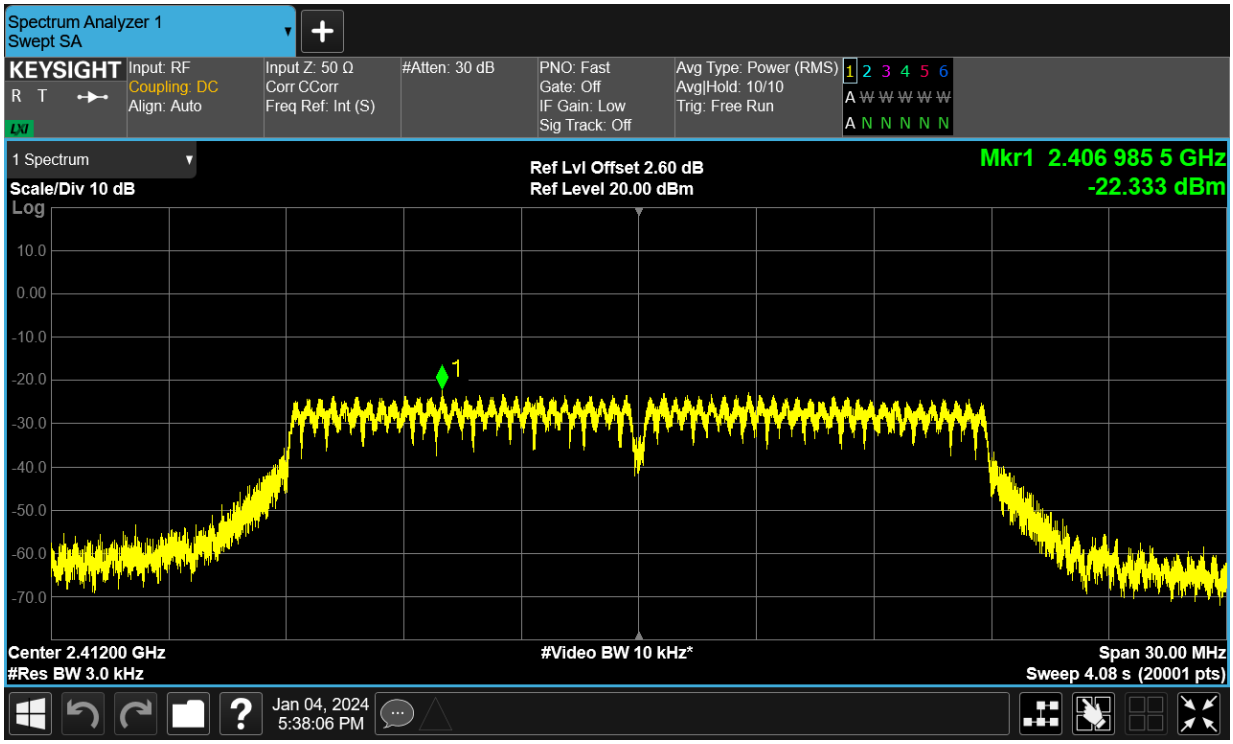
PSD NVNT g 2437MHz Ant1



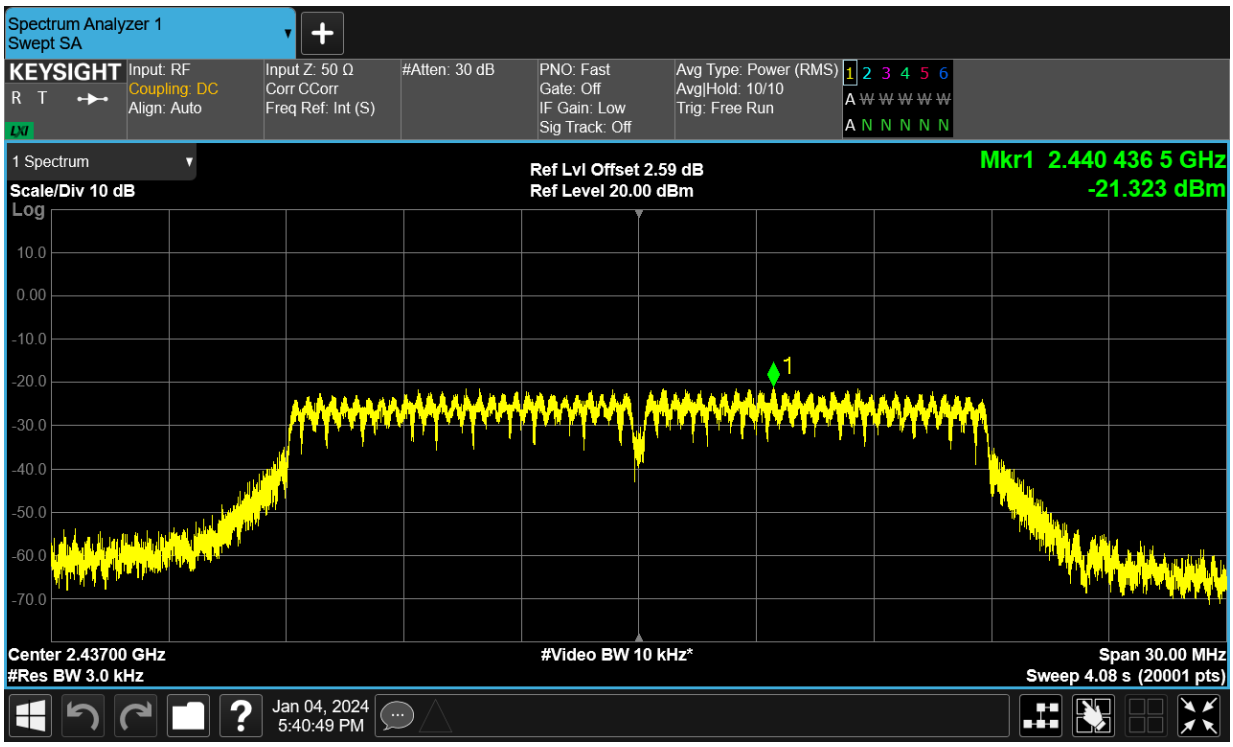
PSD NVNT g 2462MHz Ant1



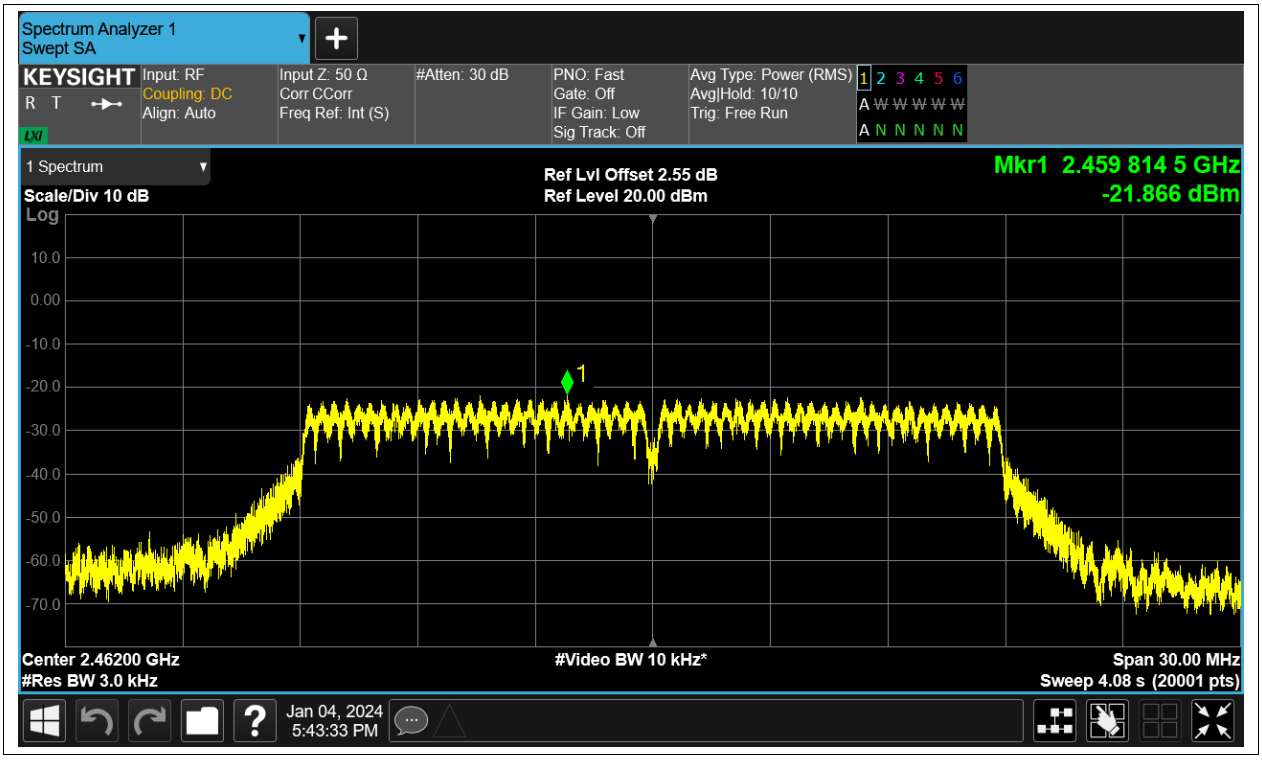
PSD NVNT n20 2412MHz Ant1



PSD NVNT n20 2437MHz Ant1



PSD NVNT n20 2462MHz Ant1

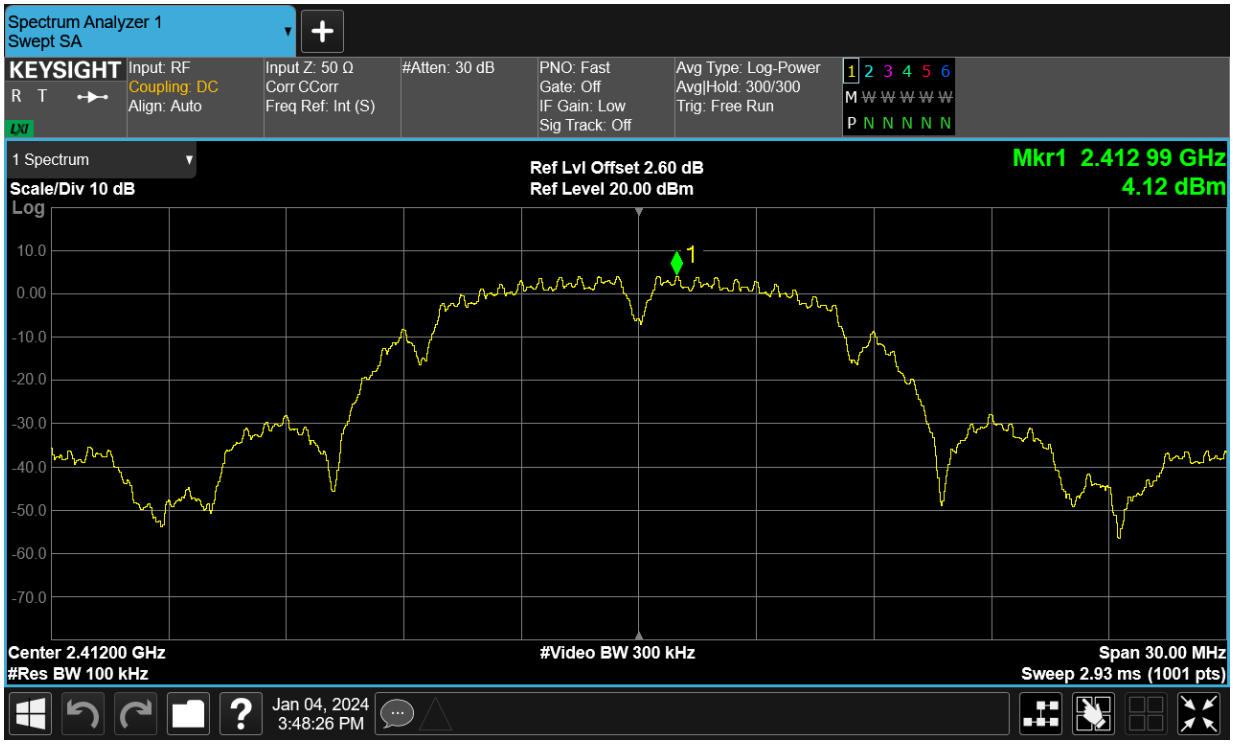

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
#Atten: 30 dB
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
Avg Type: Power (RMS)
Avg|Hold: 10/10
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 2.55 dB
Ref Level 20.00 dBm
Mkr1 2.459 814 5 GHz
-21.866 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 2.46200 GHz
#Res BW 3.0 kHz
#Video BW 10 kHz*
Span 30.00 MHz
Sweep 4.08 s (20001 pts)
Jan 04, 2024
5:43:33 PM

Band Edge

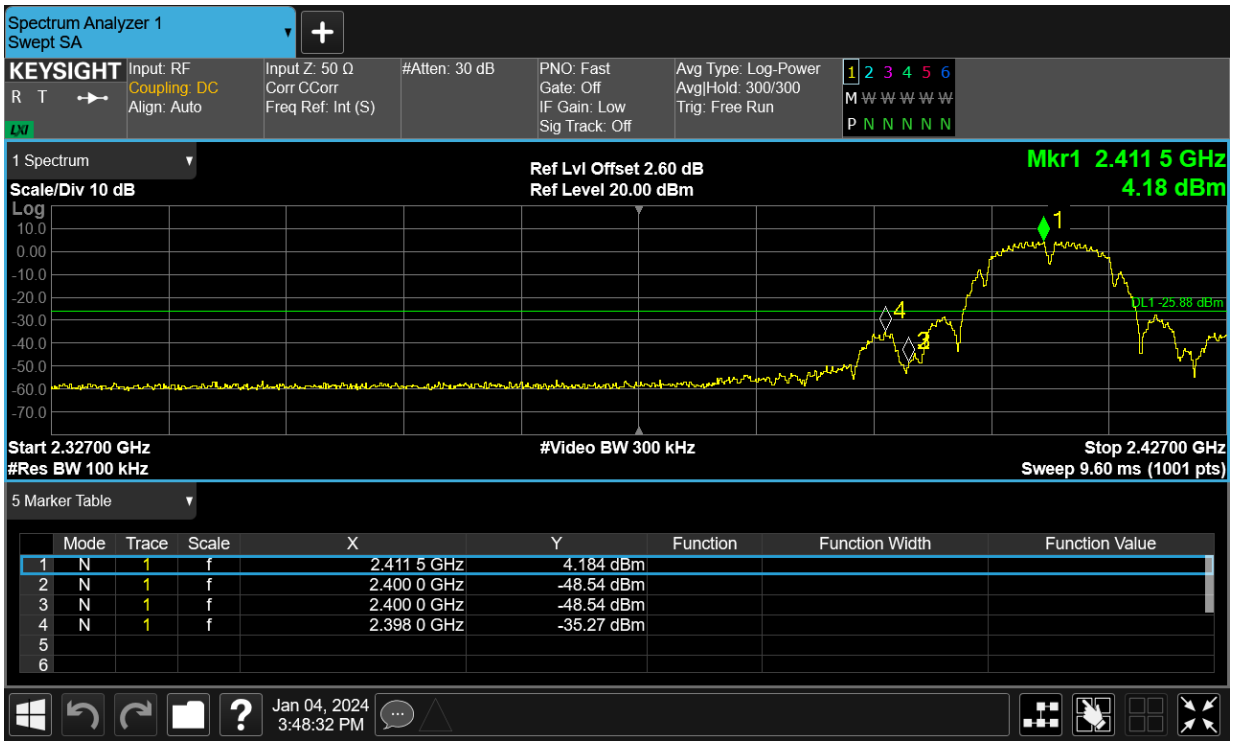
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-39.39	-30	Pass
NVNT	b	2462	Ant1	-60.24	-30	Pass
NVNT	g	2412	Ant1	-30.62	-30	Pass
NVNT	g	2462	Ant1	-43.52	-30	Pass
NVNT	n20	2412	Ant1	-33.15	-30	Pass
NVNT	n20	2462	Ant1	-46.19	-30	Pass

Test Graphs

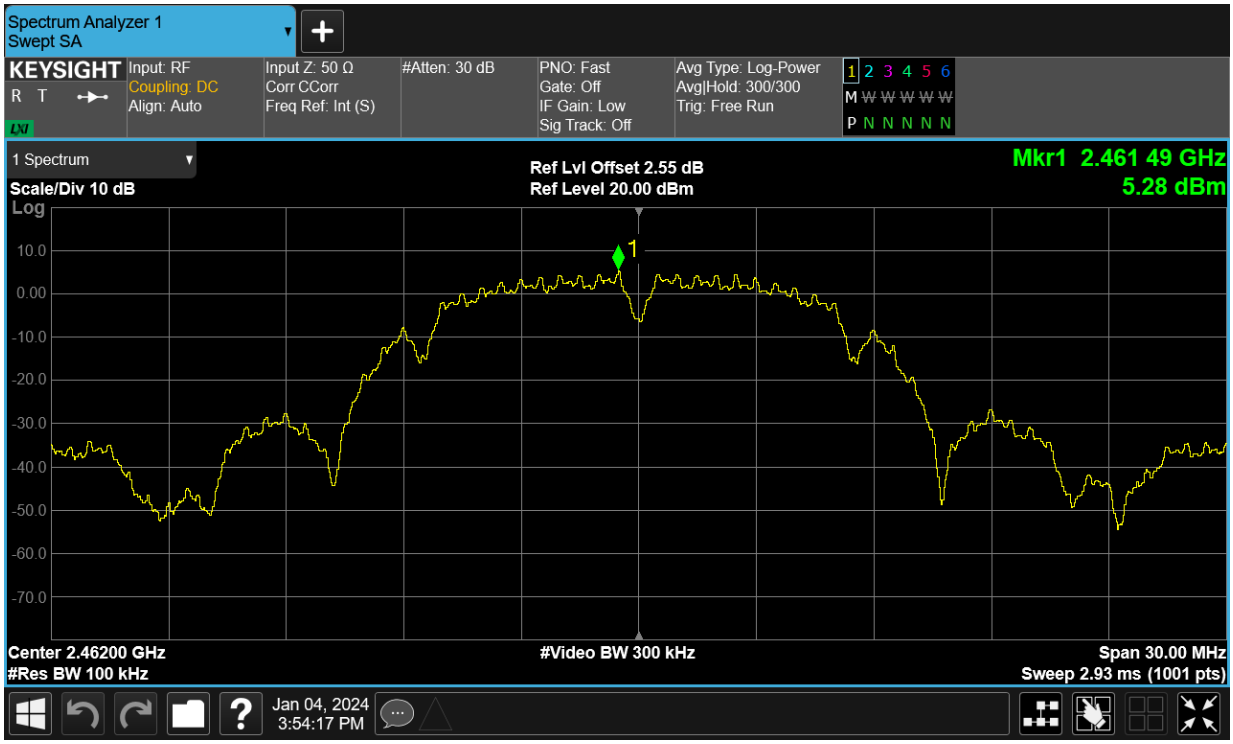
Band Edge NVNT b 2412MHz Ant1 Ref



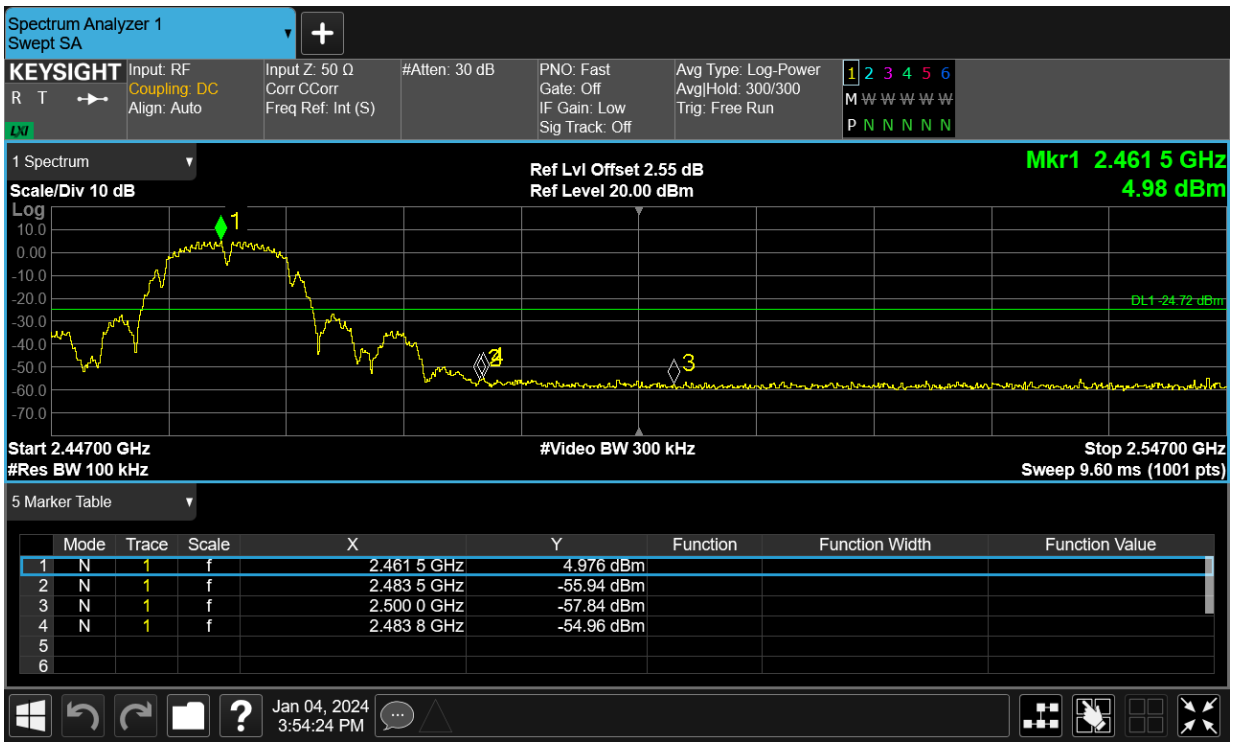
Band Edge NVNT b 2412MHz Ant1 Emission



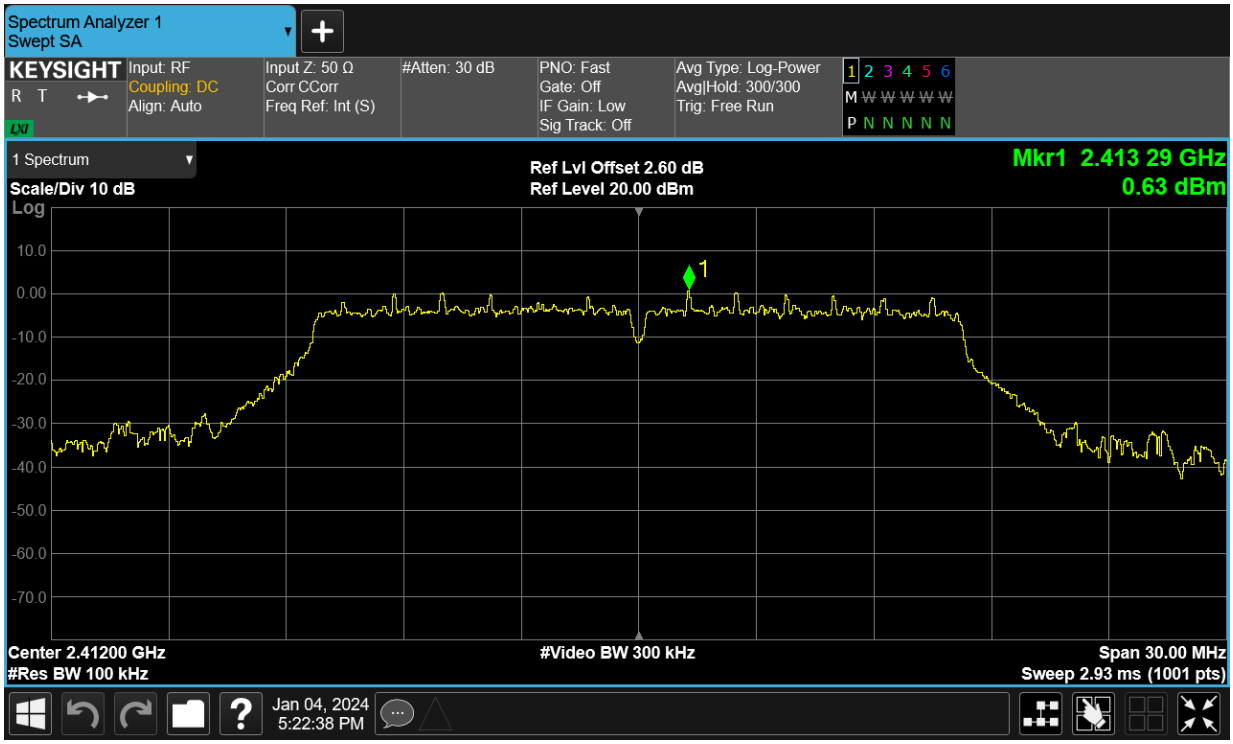
Band Edge NVNT b 2462MHz Ant1 Ref



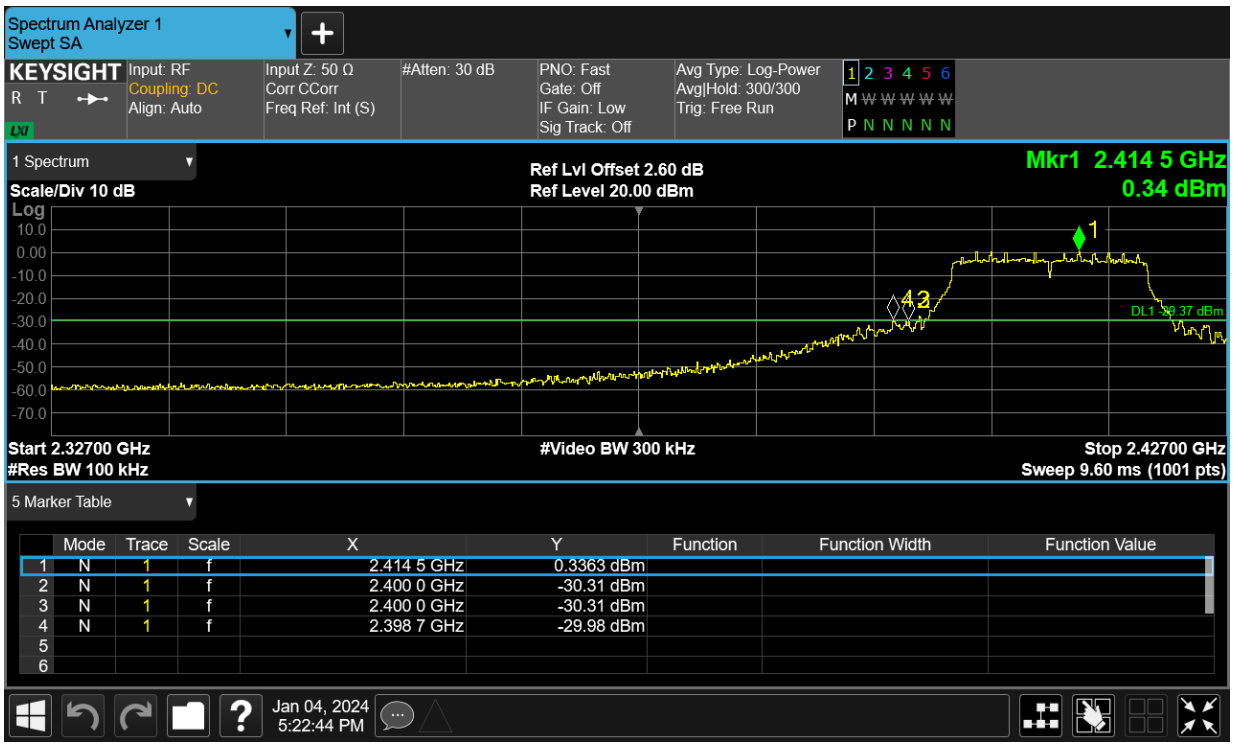
Band Edge NVNT b 2462MHz Ant1 Emission



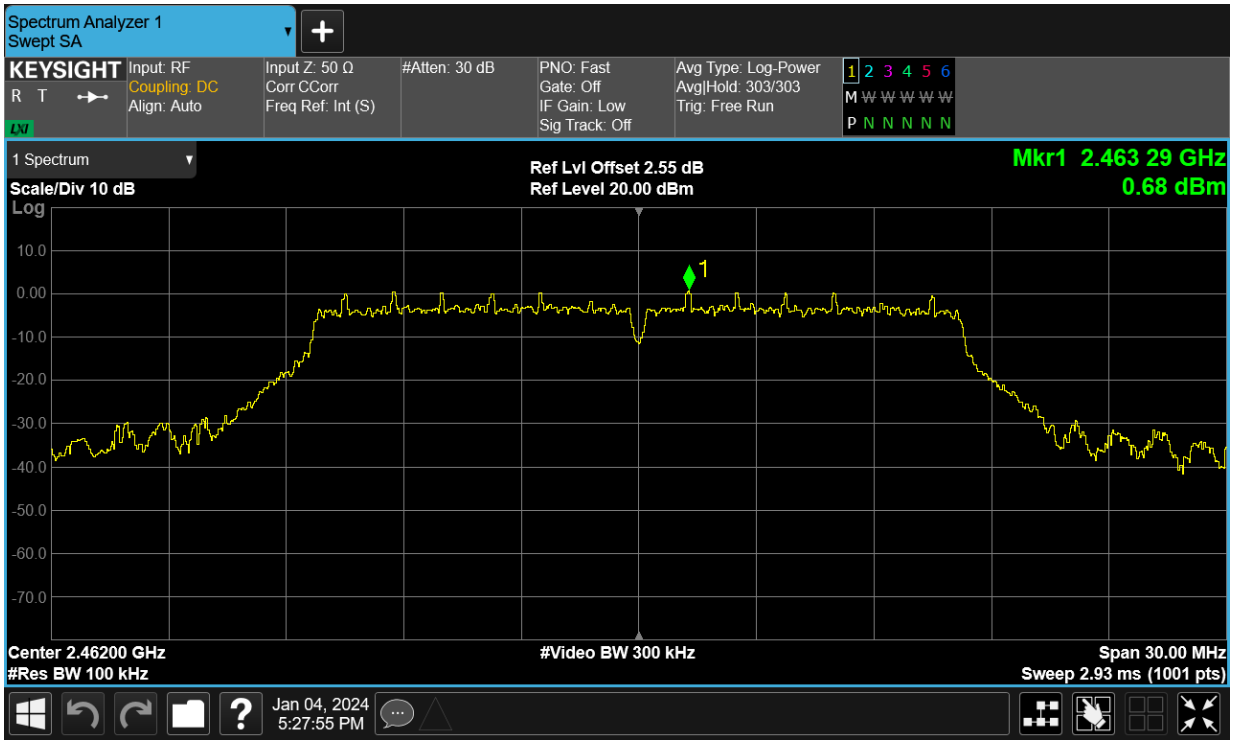
Band Edge NVNT g 2412MHz Ant1 Ref



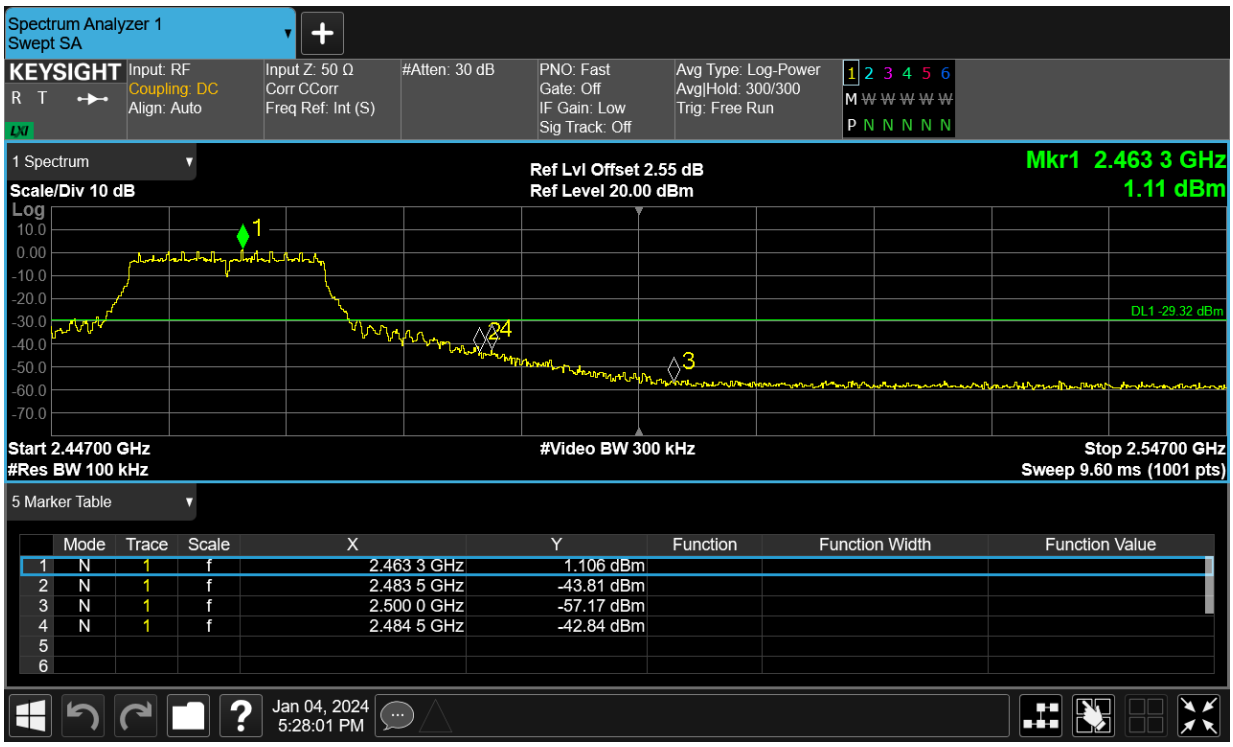
Band Edge NVNT g 2412MHz Ant1 Emission



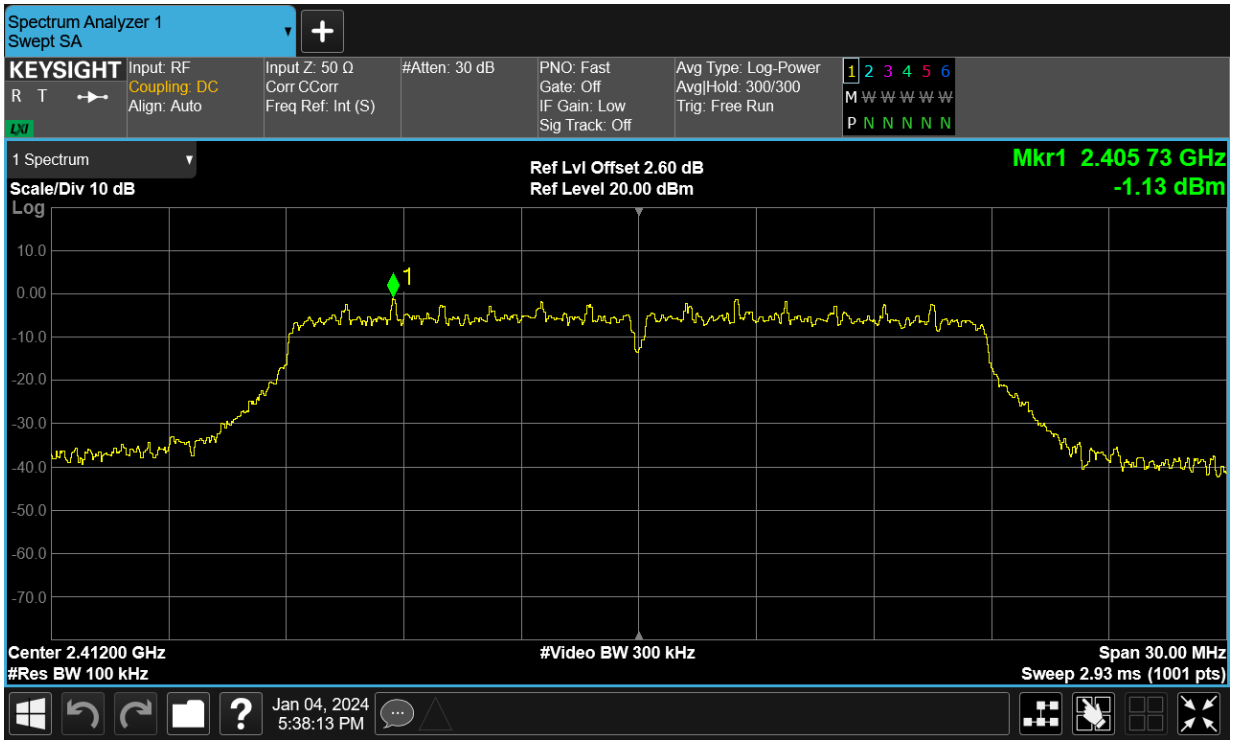
Band Edge NVNT g 2462MHz Ant1 Ref



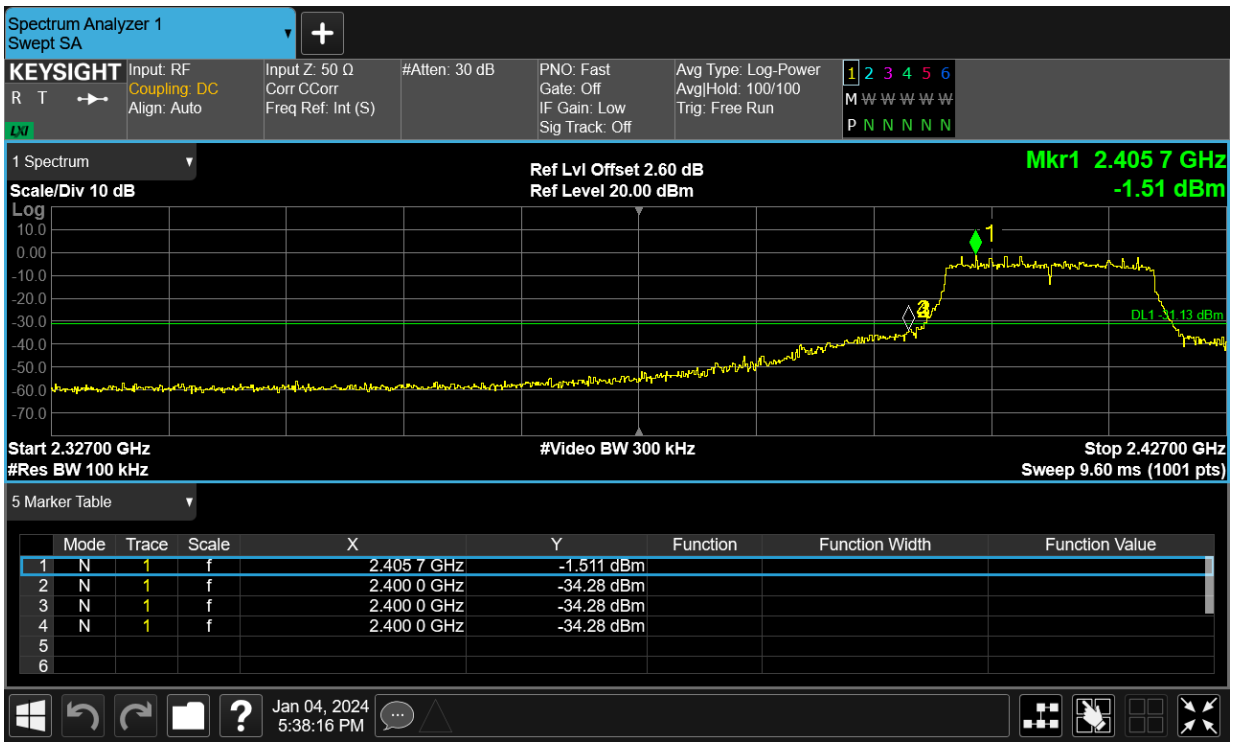
Band Edge NVNT g 2462MHz Ant1 Emission



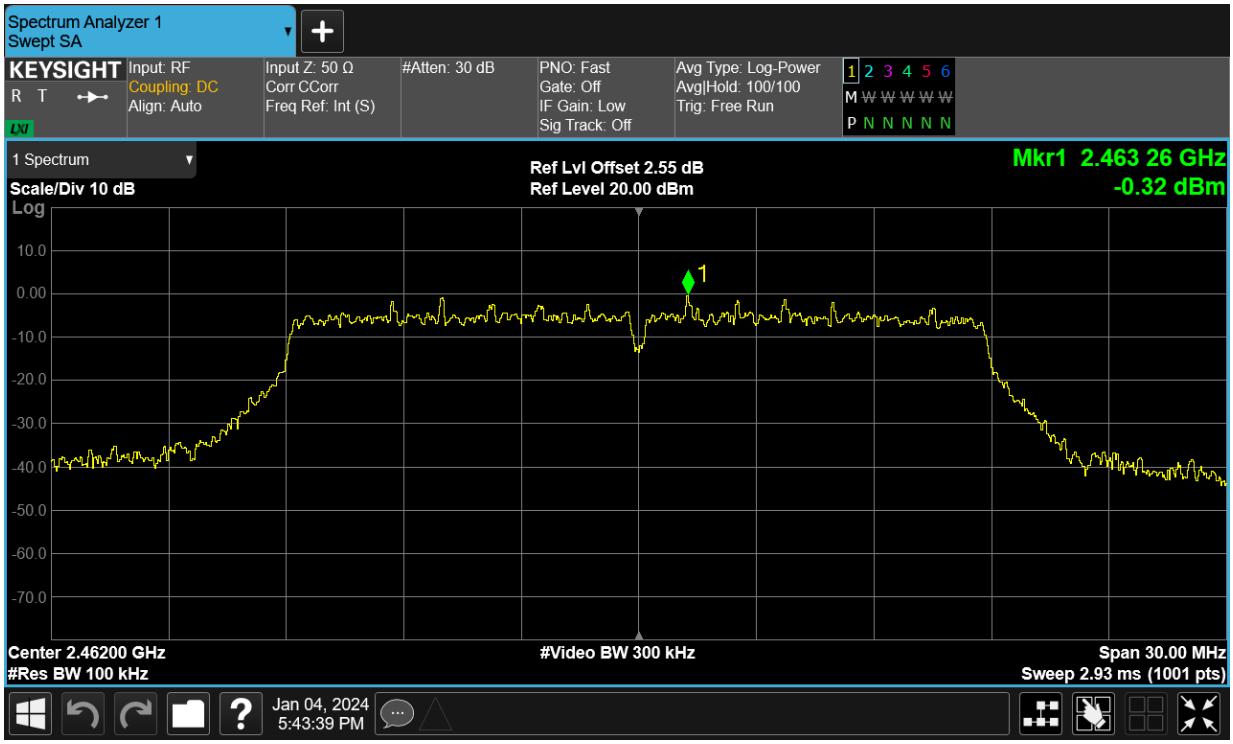
Band Edge NVNT n20 2412MHz Ant1 Ref



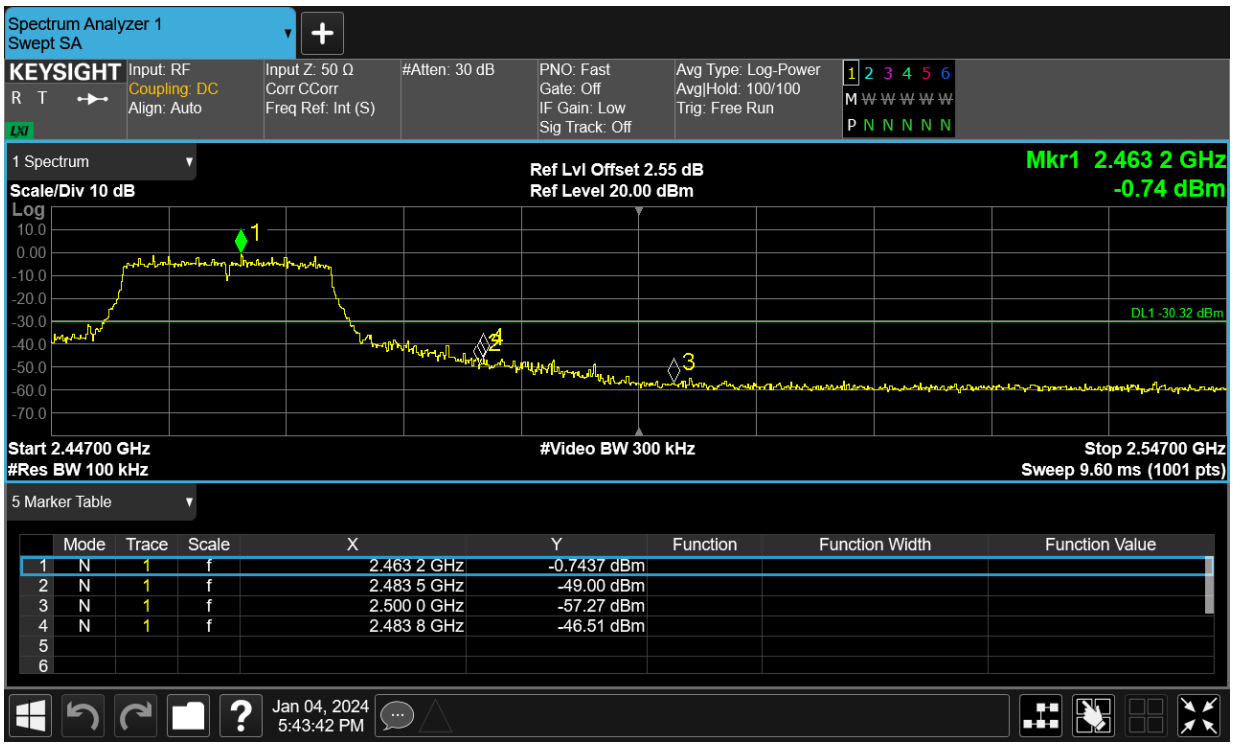
Band Edge NVNT n20 2412MHz Ant1 Emission



Band Edge NVNT n20 2462MHz Ant1 Ref



Band Edge NVNT n20 2462MHz Ant1 Emission

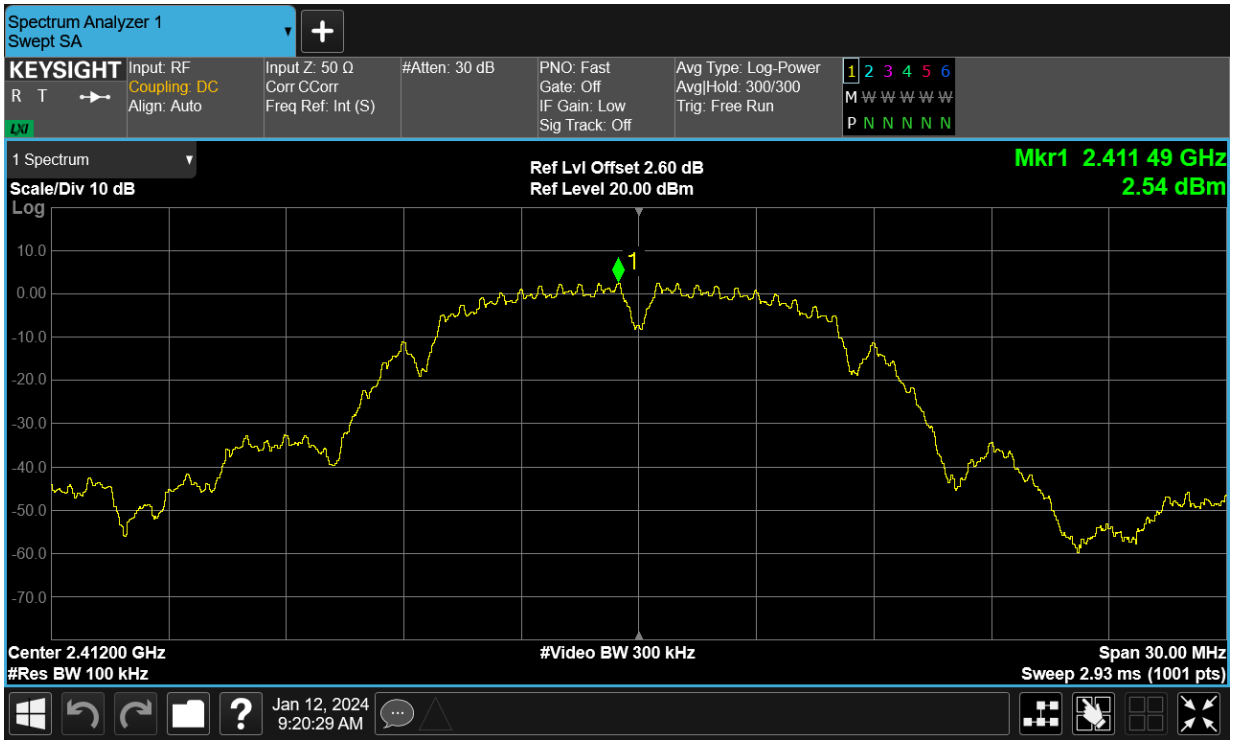


Conducted RF Spurious Emission

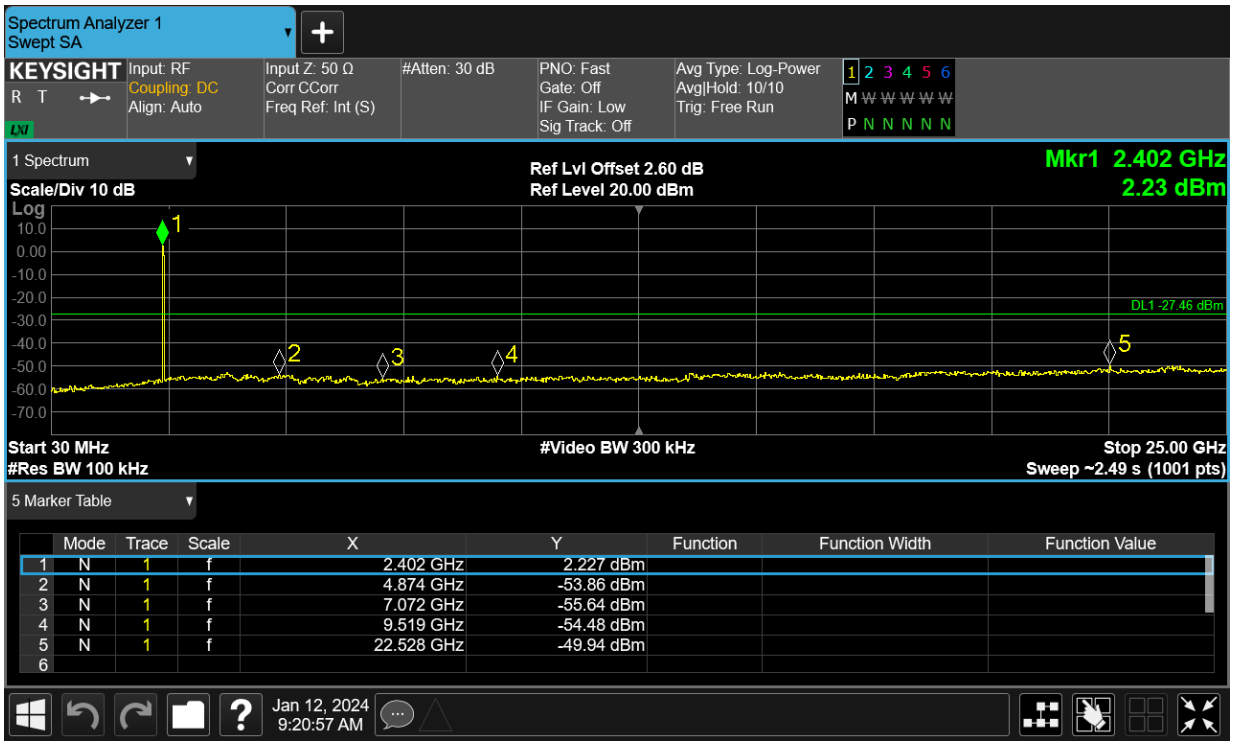
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-52.48	-30	Pass
NVNT	b	2437	Ant1	-50.57	-30	Pass
NVNT	b	2462	Ant1	-52.72	-30	Pass
NVNT	g	2412	Ant1	-48.45	-30	Pass
NVNT	g	2437	Ant1	-45.67	-30	Pass
NVNT	g	2462	Ant1	-48.62	-30	Pass
NVNT	n20	2412	Ant1	-45.75	-30	Pass
NVNT	n20	2437	Ant1	-41.84	-30	Pass
NVNT	n20	2462	Ant1	-46.79	-30	Pass

Test Graphs

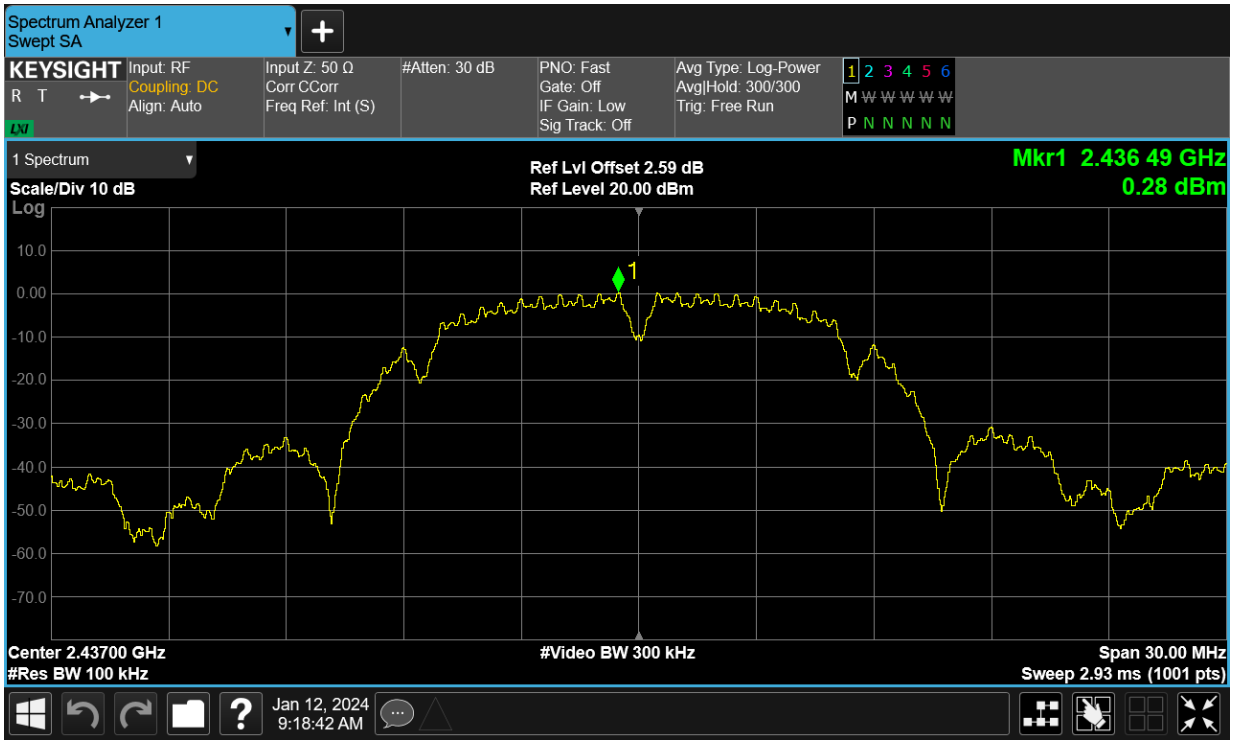
Tx. Spurious NVNT b 2412MHz Ant1 Ref



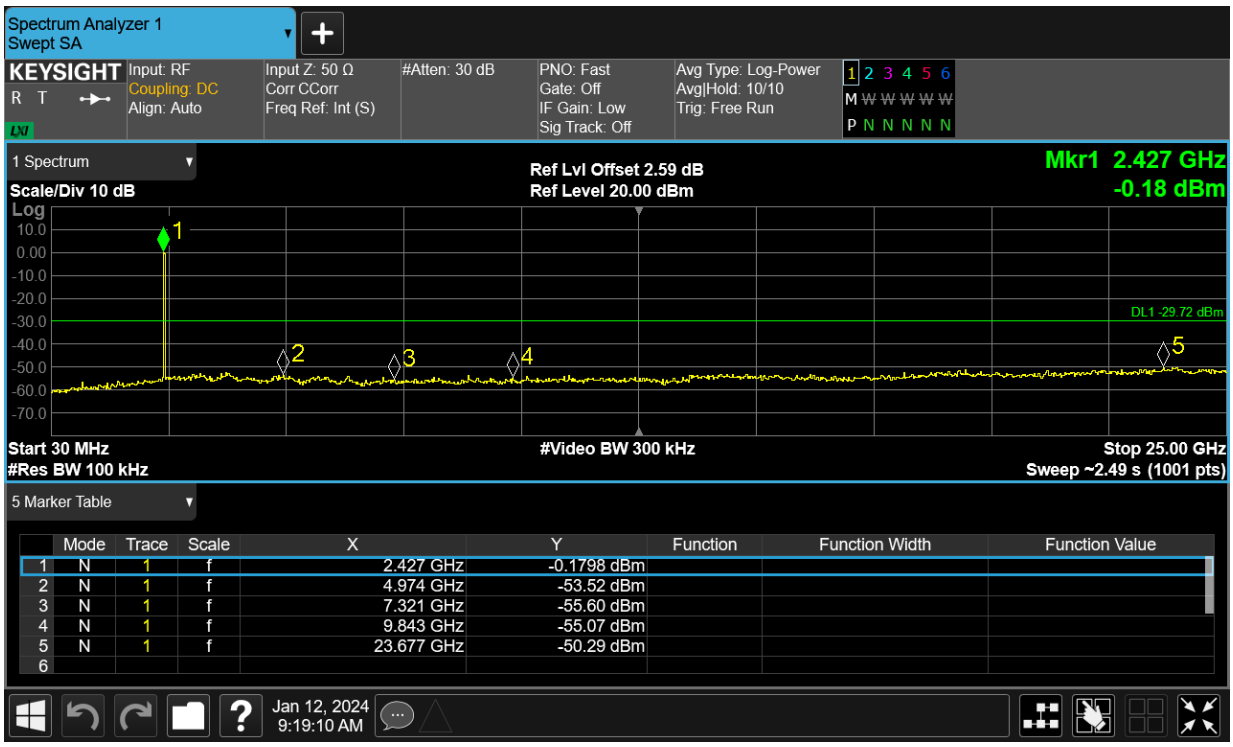
Tx. Spurious NVNT b 2412MHz Ant1 Emission



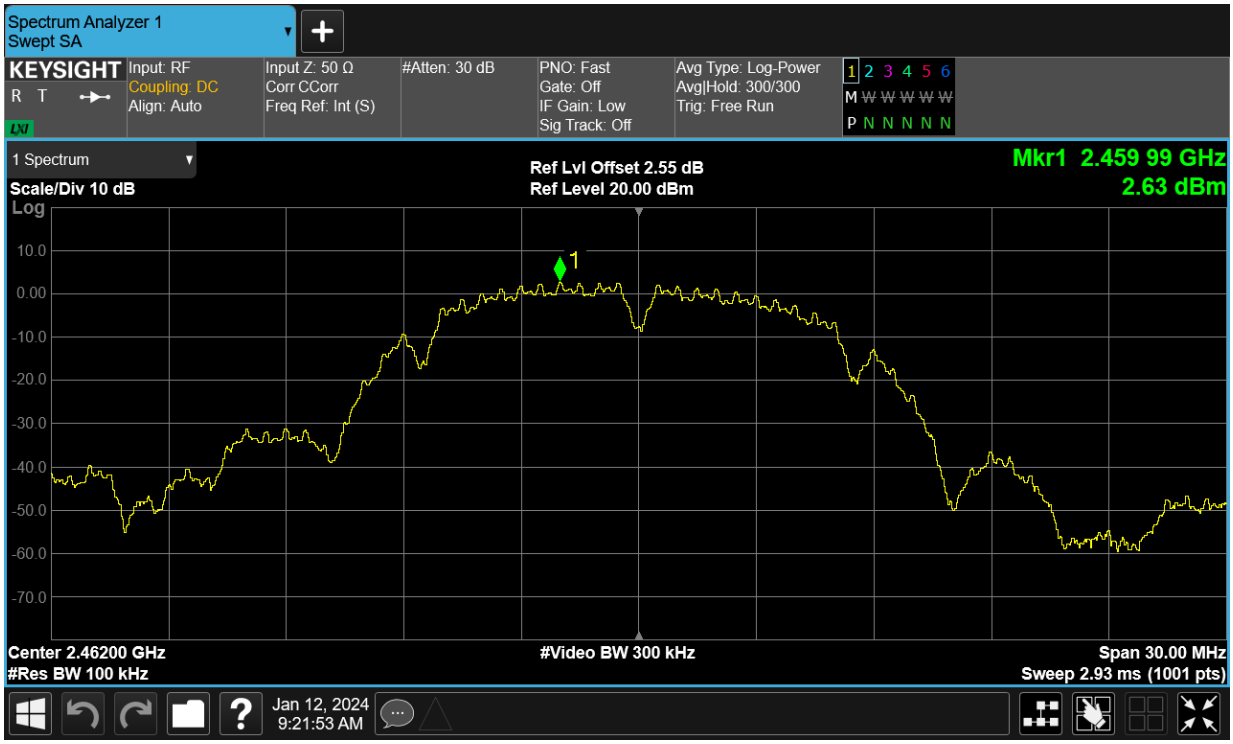
Tx. Spurious NVNT b 2437MHz Ant1 Ref



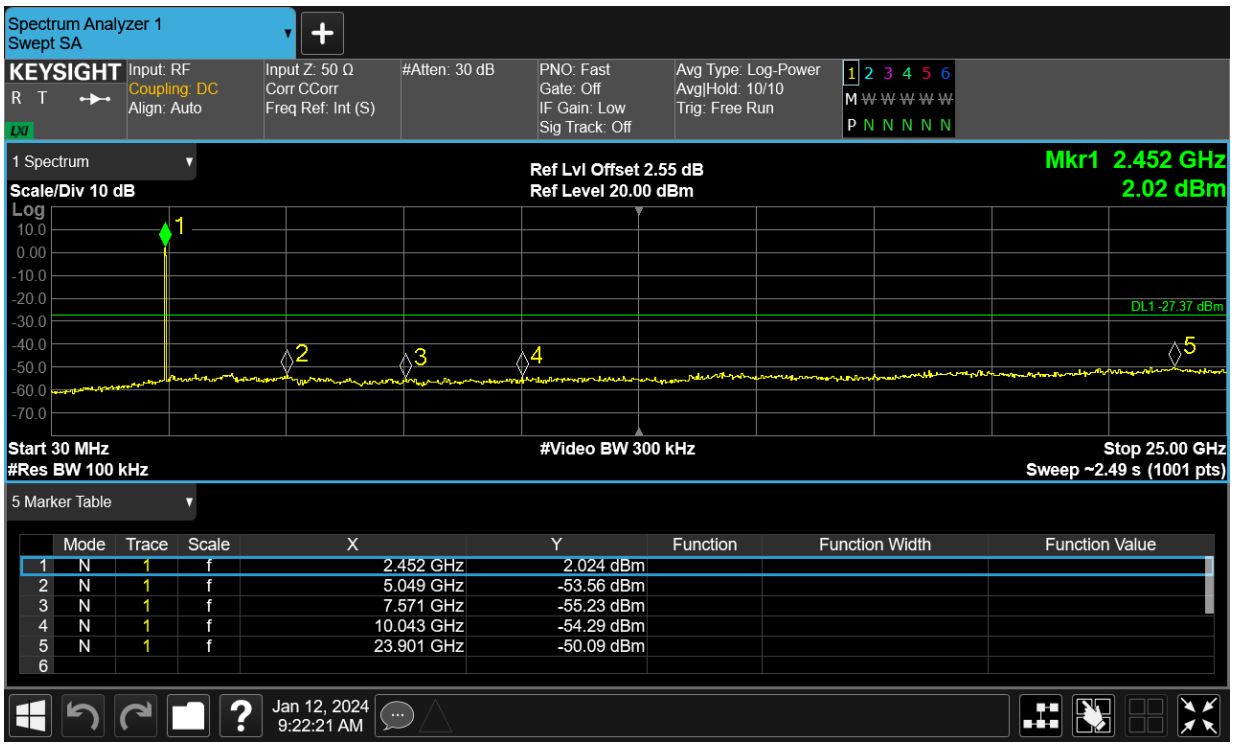
Tx. Spurious NVNT b 2437MHz Ant1 Emission



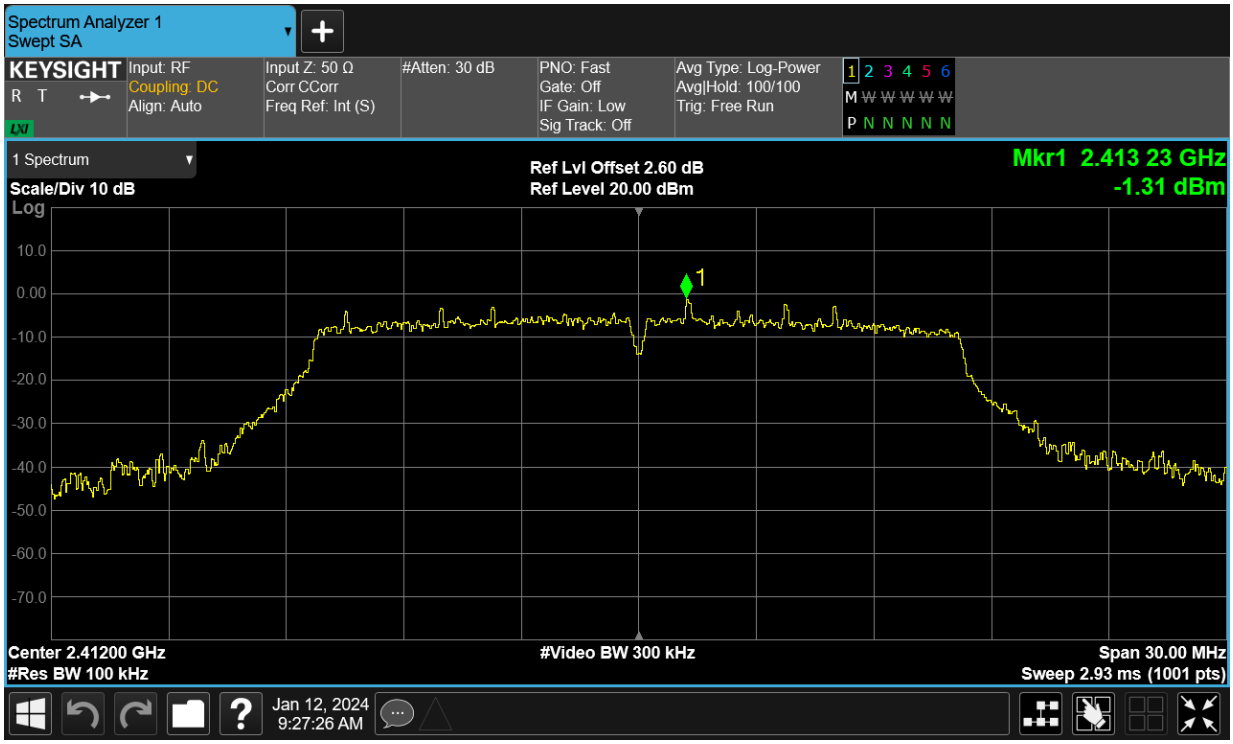
Tx. Spurious NVNT b 2462MHz Ant1 Ref



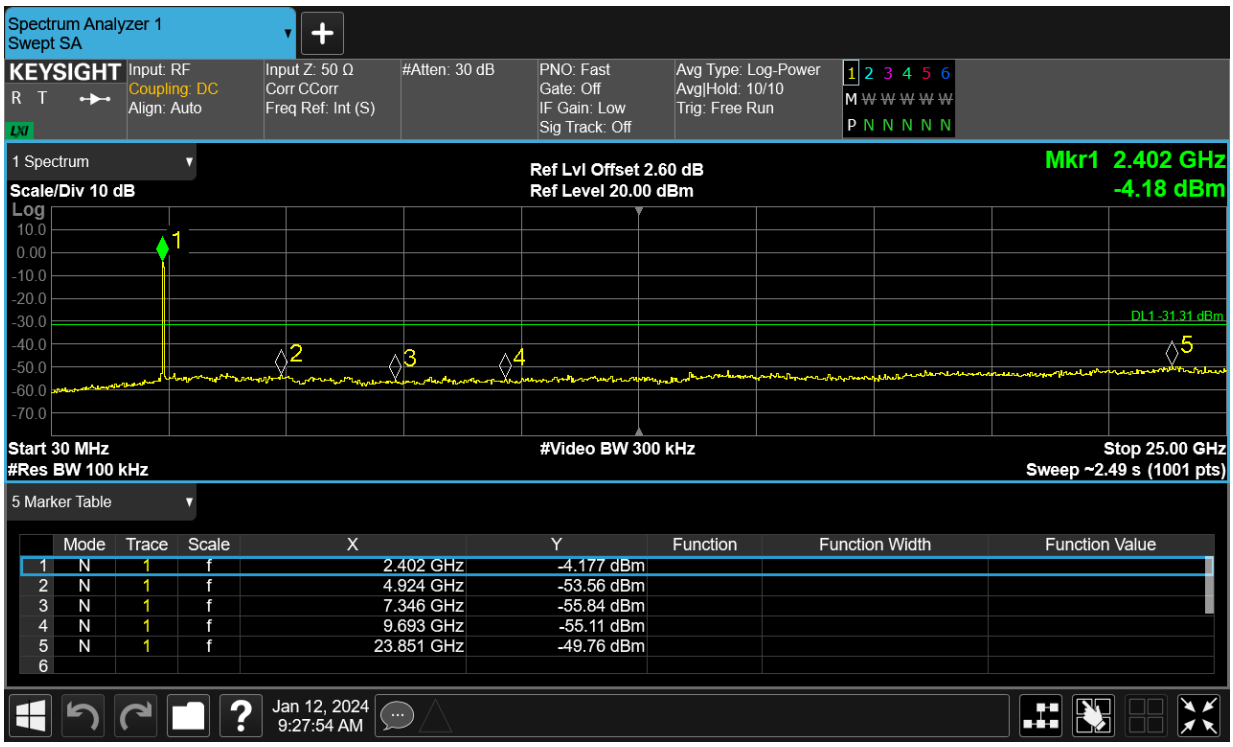
Tx. Spurious NVNT b 2462MHz Ant1 Emission



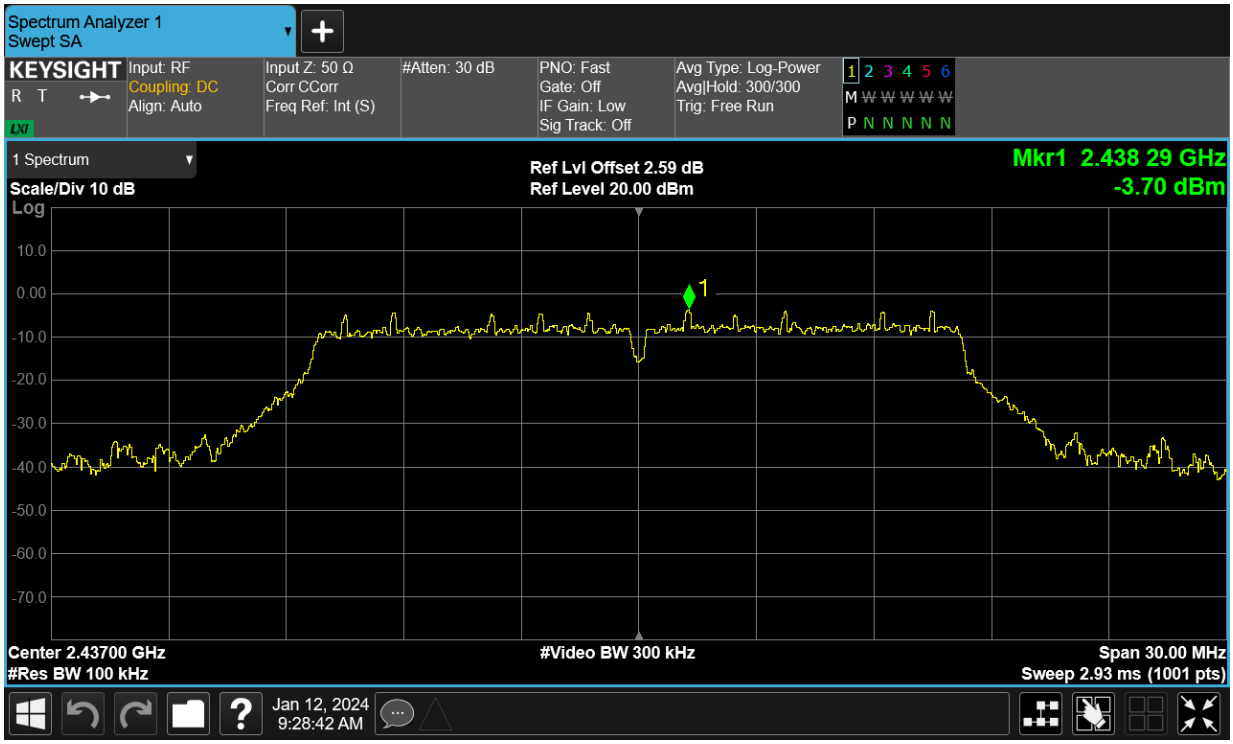
Tx. Spurious NVNT g 2412MHz Ant1 Ref



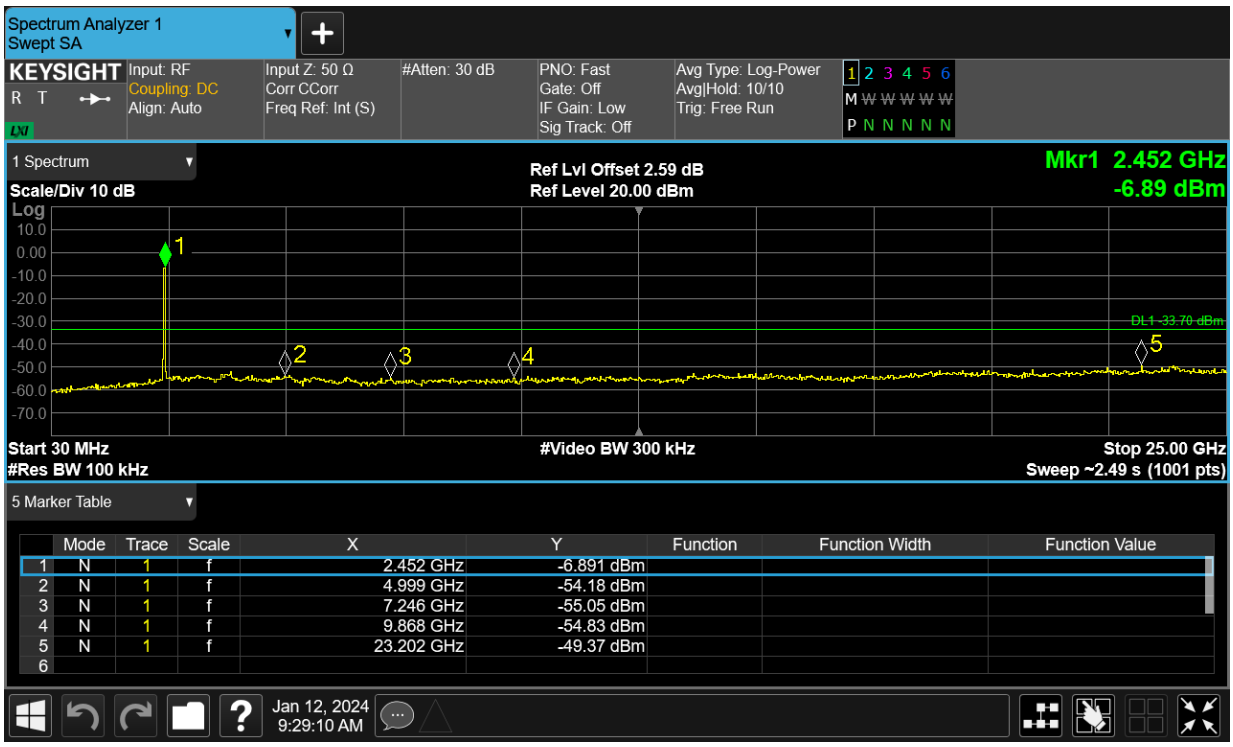
Tx. Spurious NVNT g 2412MHz Ant1 Emission



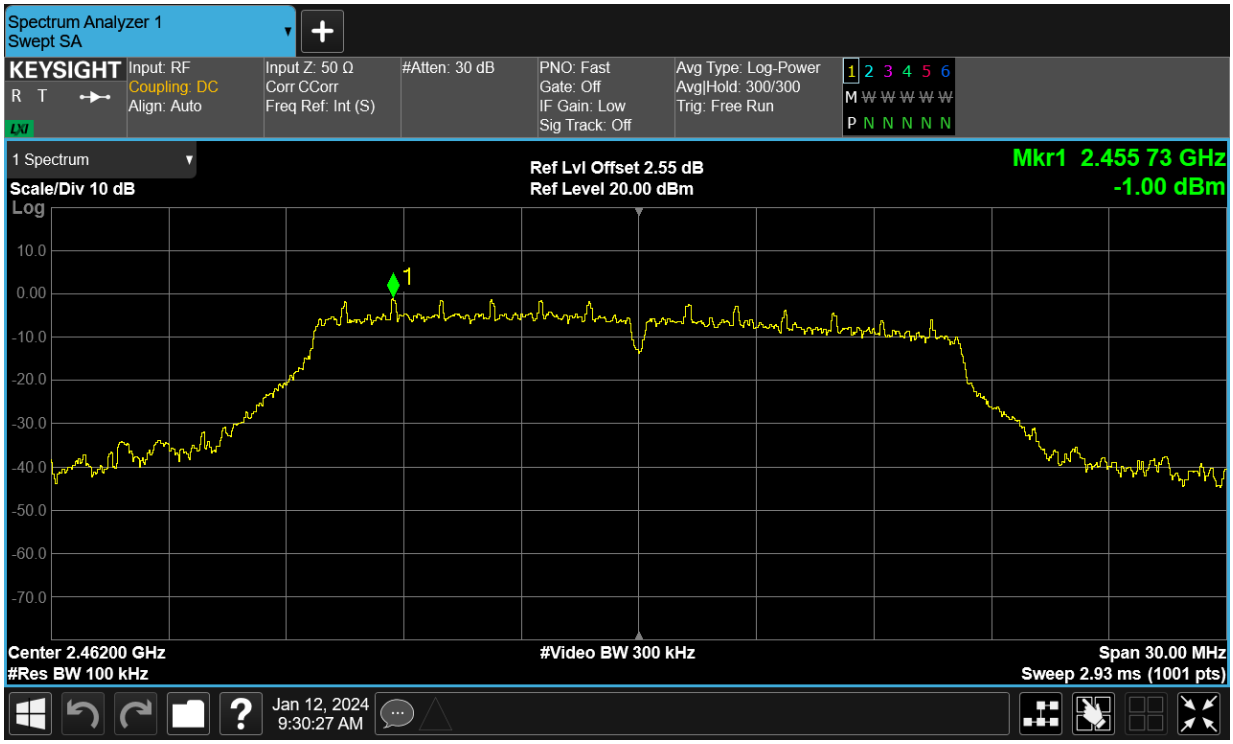
Tx. Spurious NVNT g 2437MHz Ant1 Ref



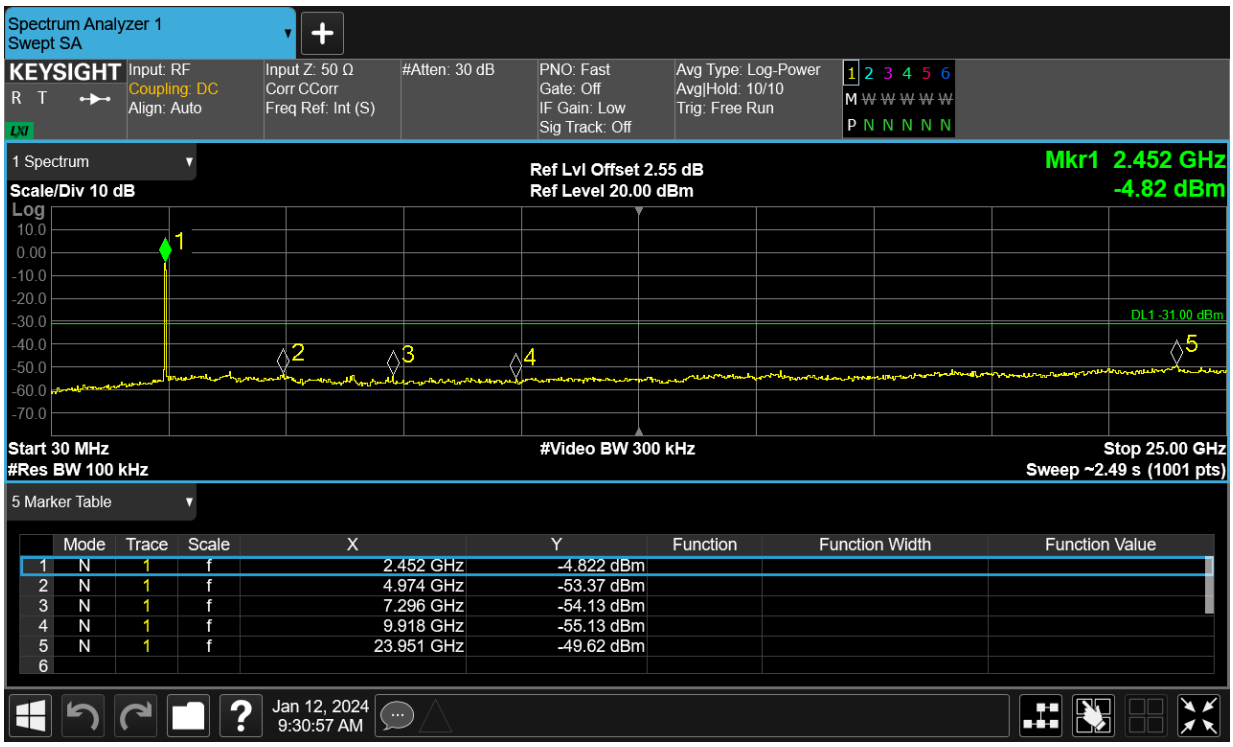
Tx. Spurious NVNT g 2437MHz Ant1 Emission



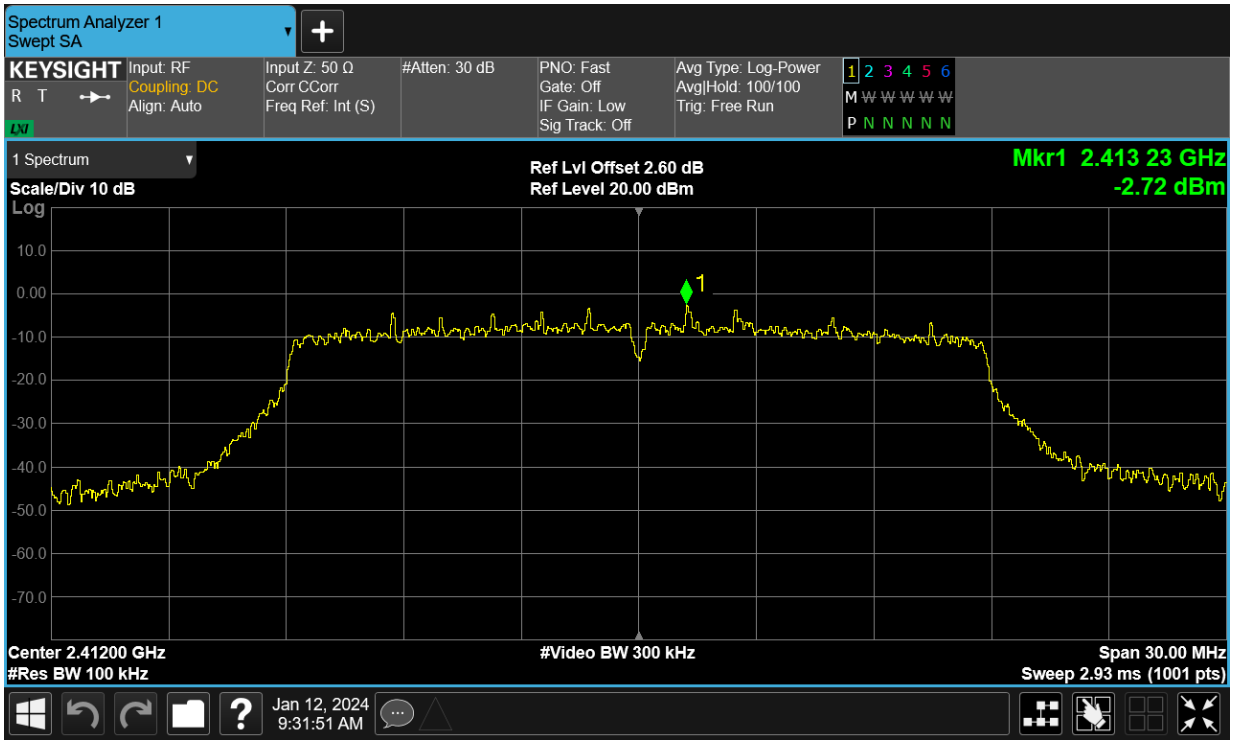
Tx. Spurious NVNT g 2462MHz Ant1 Ref



Tx. Spurious NVNT g 2462MHz Ant1 Emission



Tx. Spurious NVNT n20 2412MHz Ant1 Ref



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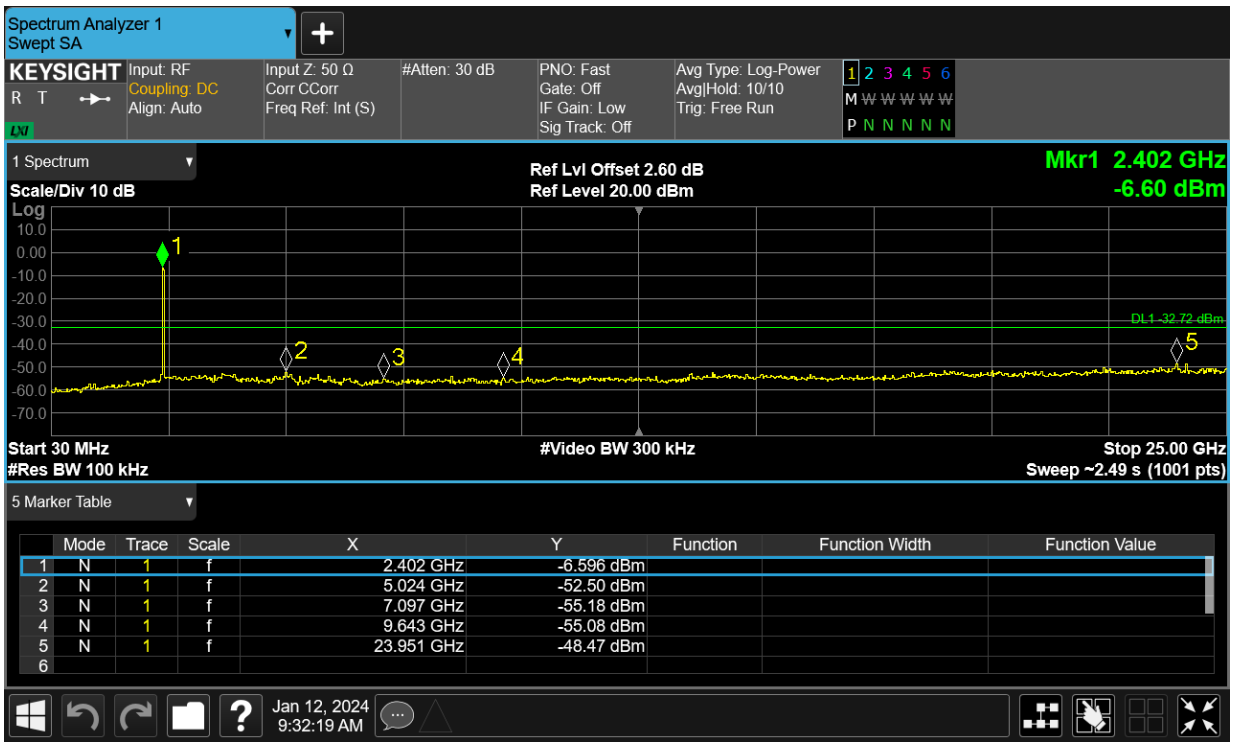

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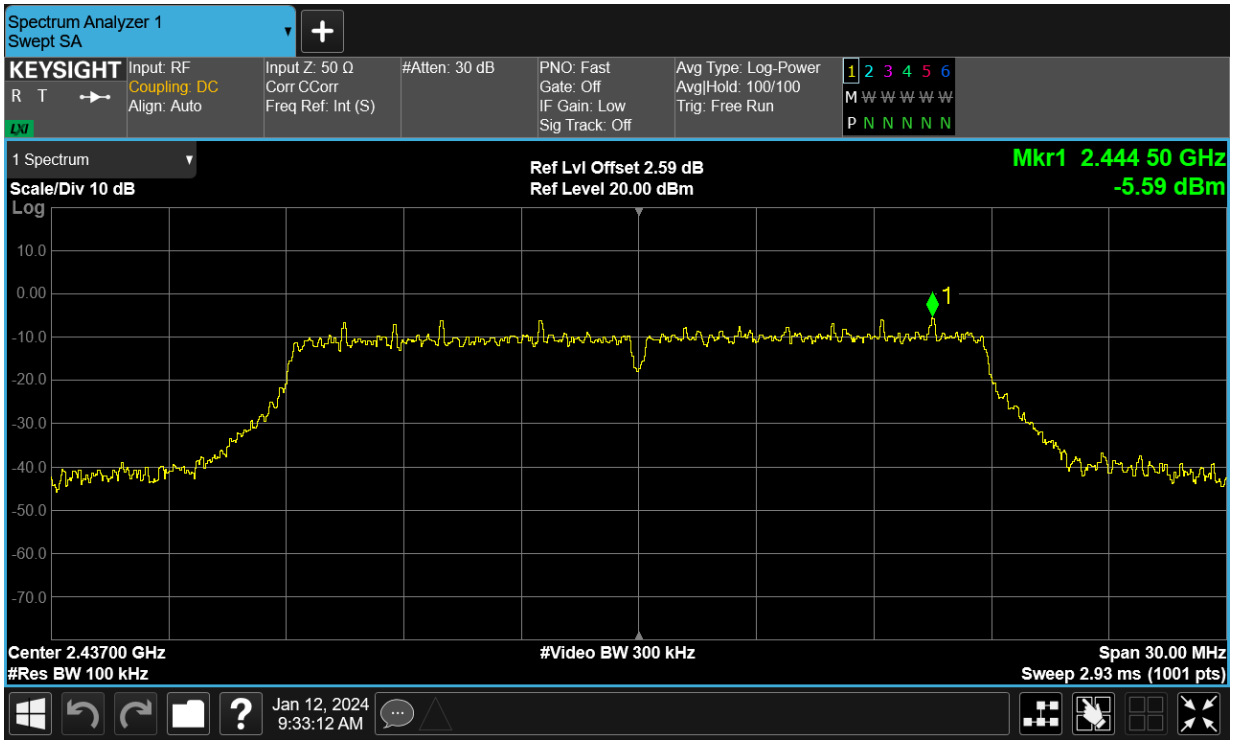
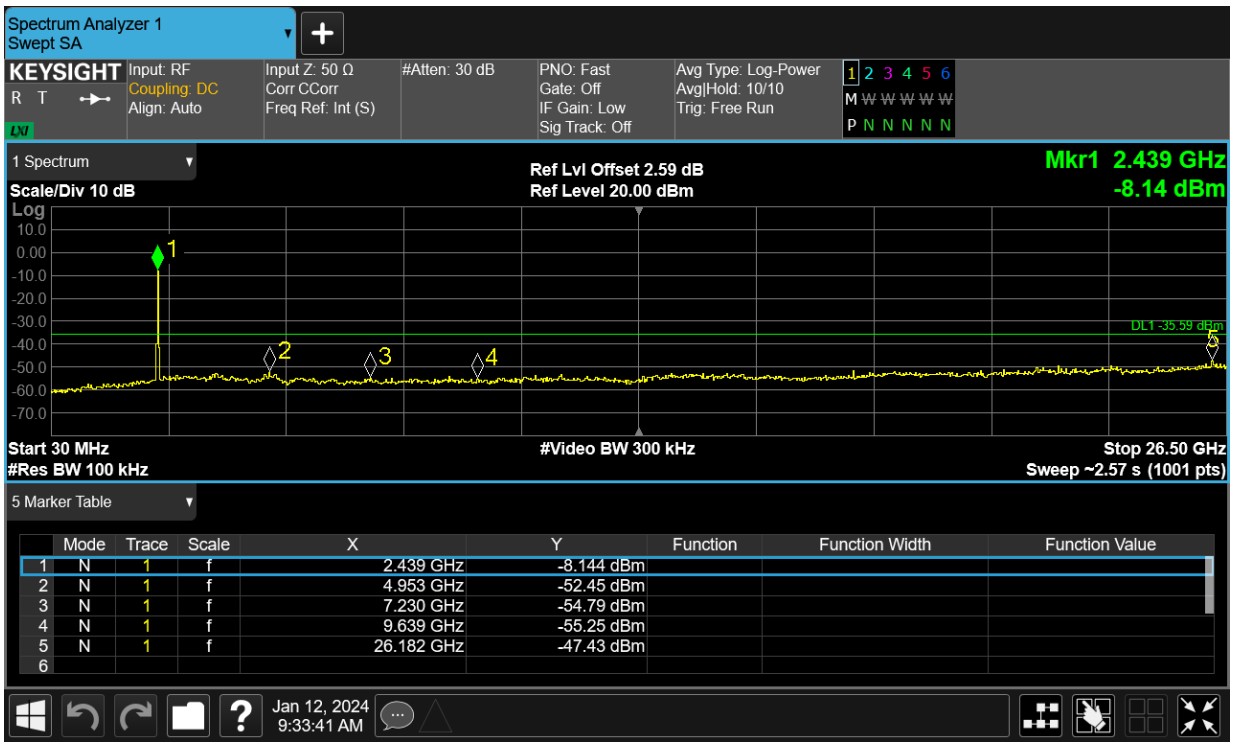
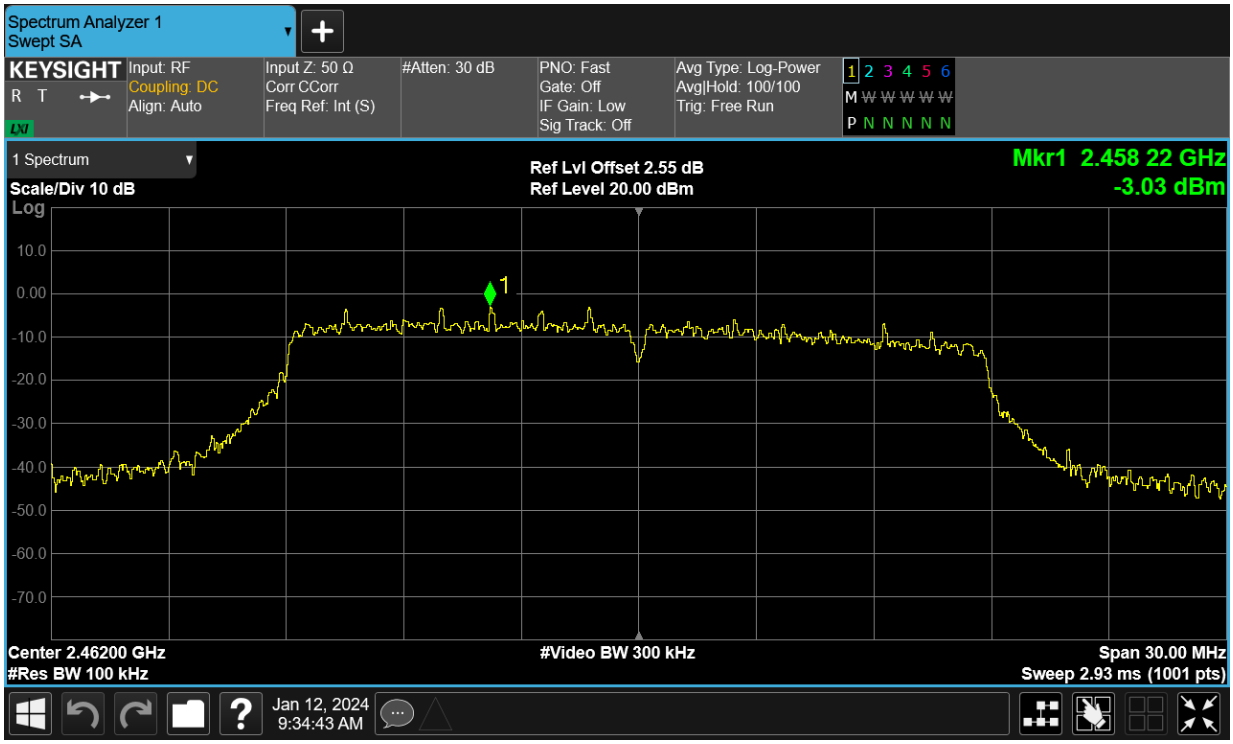
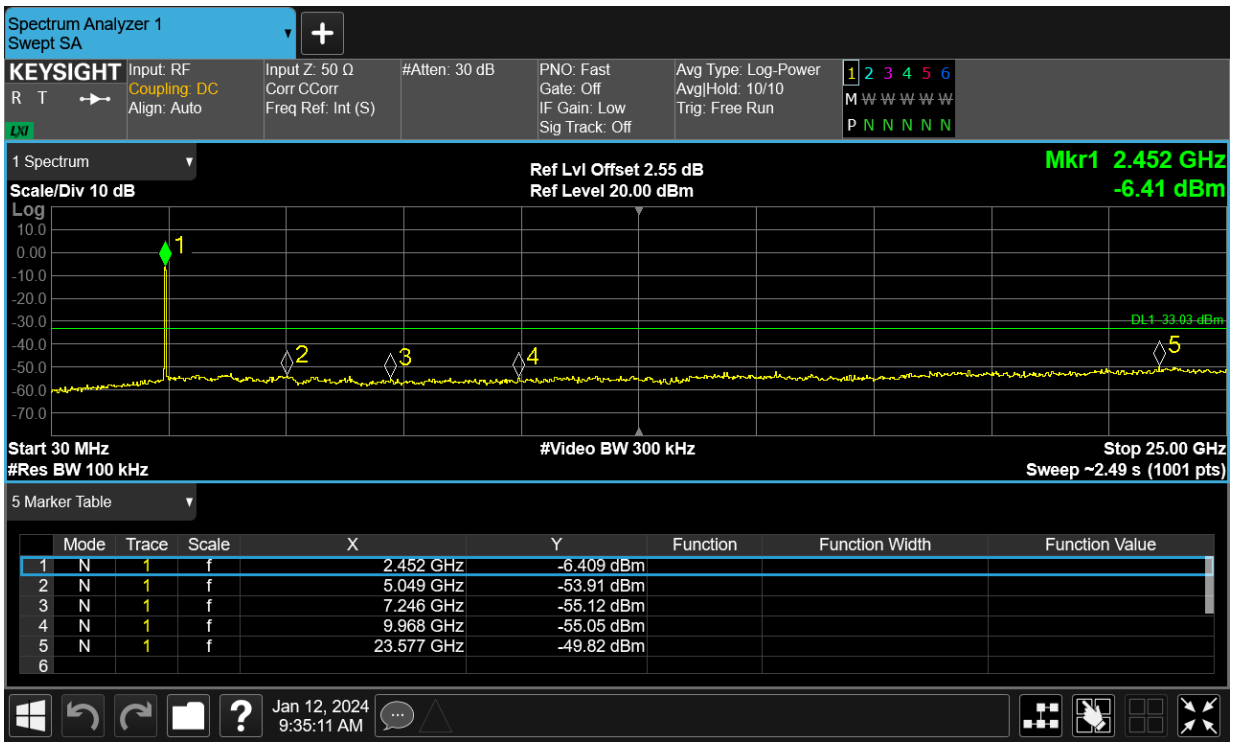


Tx. Spurious NVNT n20 2437MHz Ant1 Emission



Tx. Spurious NVNT n20 2462MHz Ant1 Ref



Tx. Spurious NVNT n20 2462MHz Ant1 Emission