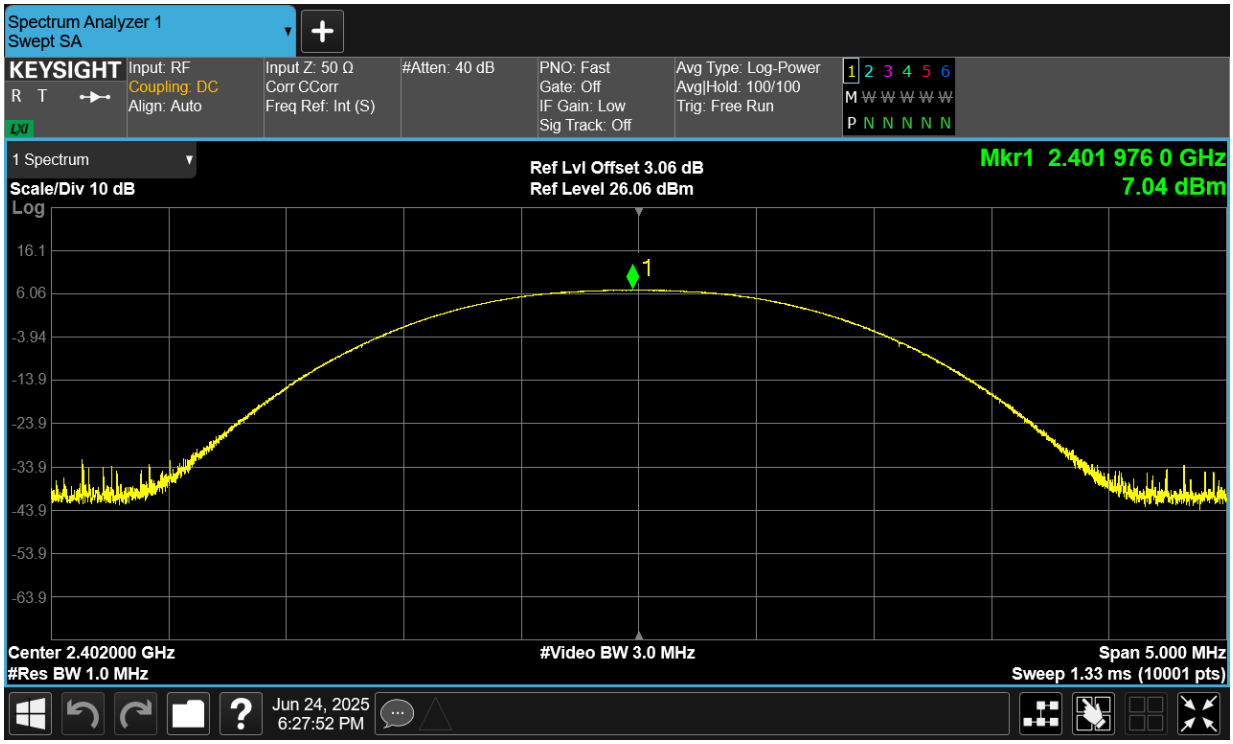
Test Data

Maximum Conducted Output Power

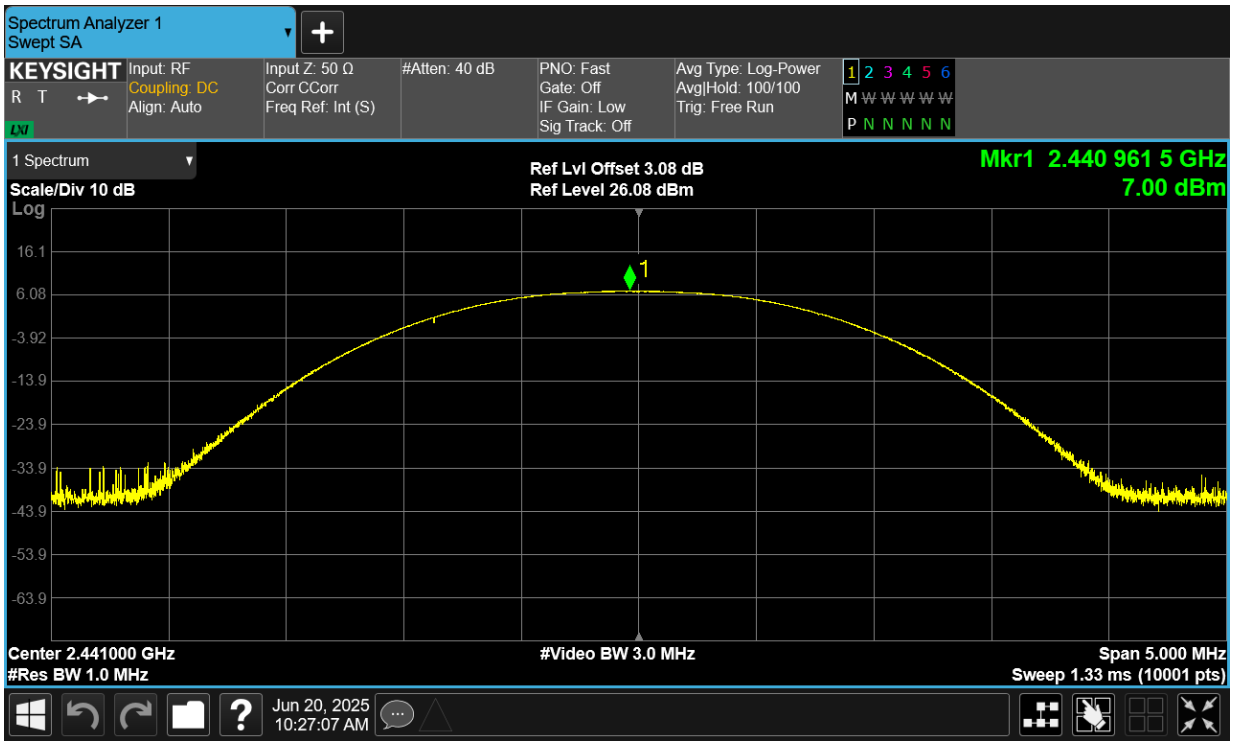
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	7.039	30	Pass
NVNT	1-DH1	2441	Ant1	7	30	Pass
NVNT	1-DH1	2480	Ant1	7.435	30	Pass
NVNT	2-DH1	2402	Ant1	6.57	21	Pass
NVNT	2-DH1	2441	Ant1	6.41	21	Pass
NVNT	2-DH1	2480	Ant1	6.987	21	Pass
NVNT	3-DH1	2402	Ant1	6.706	21	Pass
NVNT	3-DH1	2441	Ant1	6.664	21	Pass
NVNT	3-DH1	2480	Ant1	7.207	21	Pass

Test Graphs

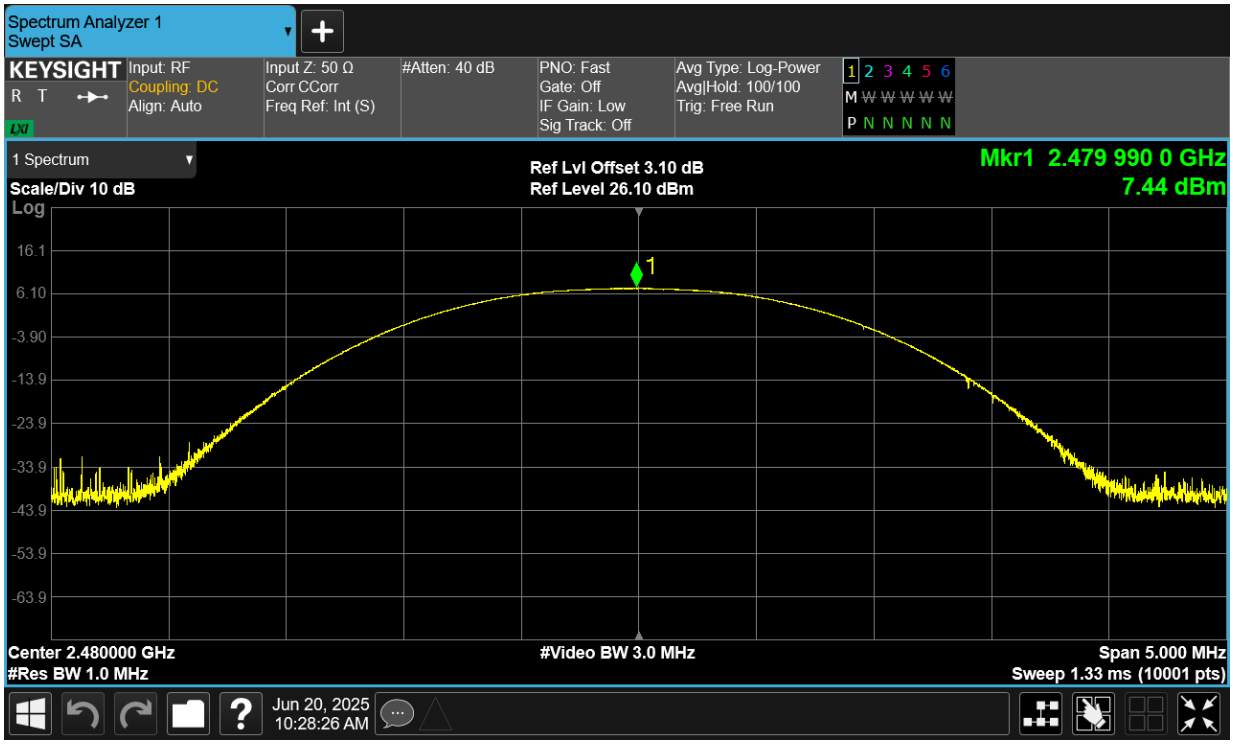
Power NVNT 1-DH1 2402MHz Ant1



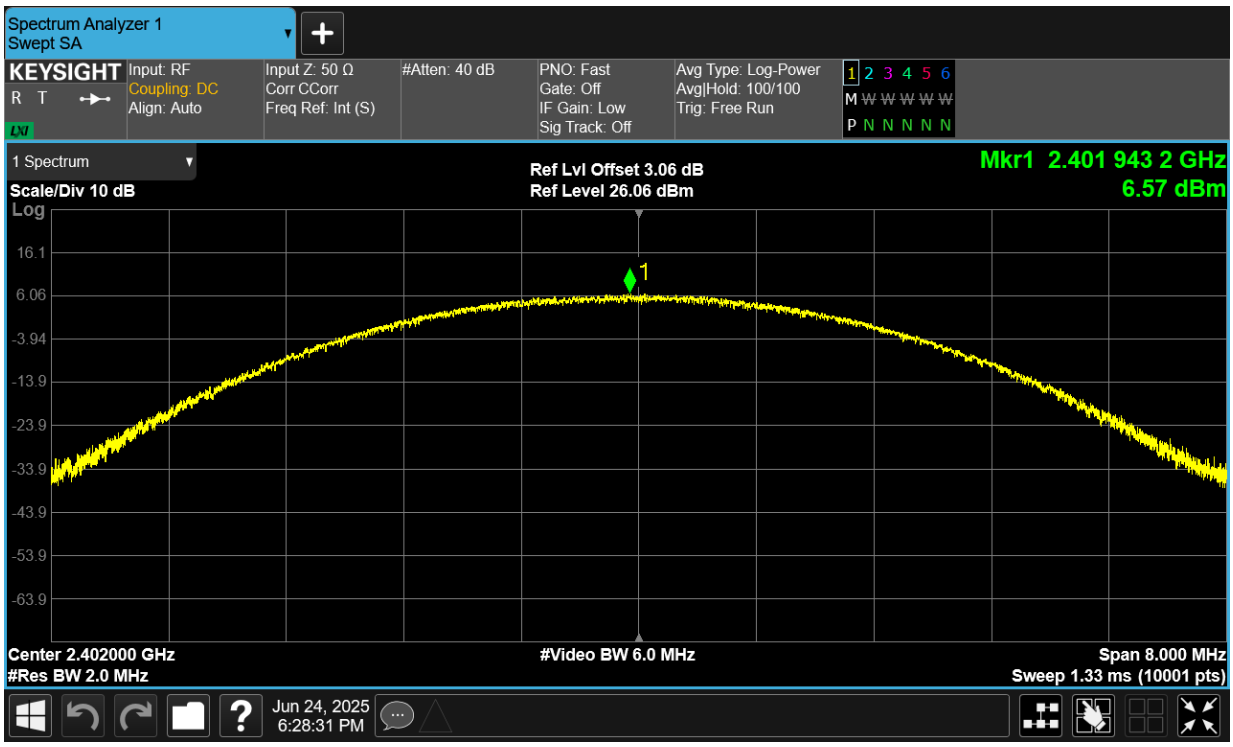
Power NVNT 1-DH1 2441MHz Ant1



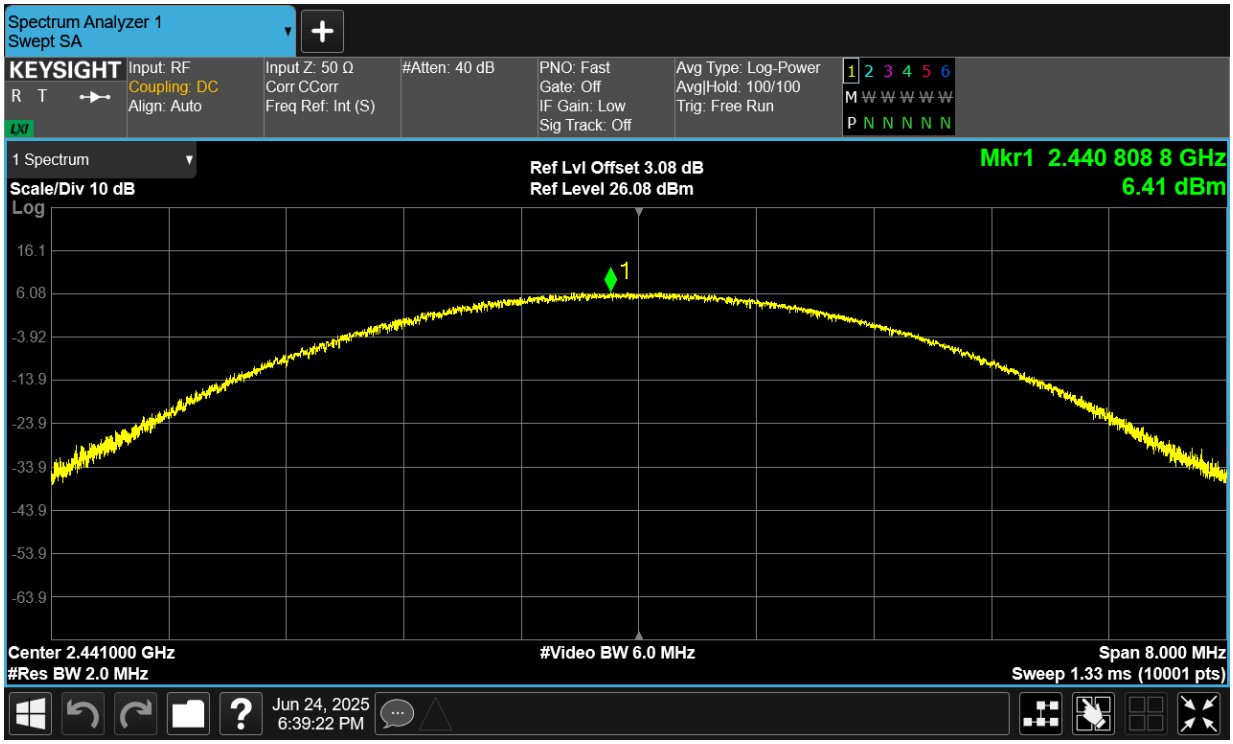
Power NVNT 1-DH1 2480MHz Ant1



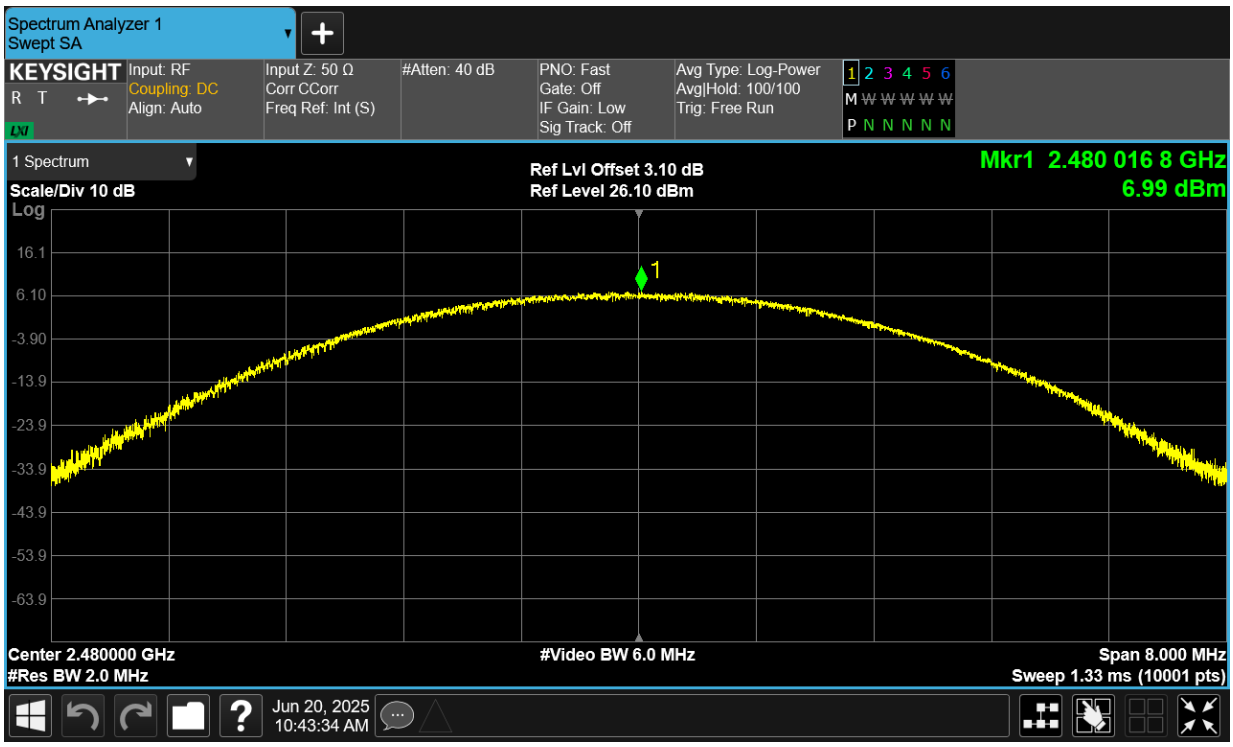
Power NVNT 2-DH1 2402MHz Ant1



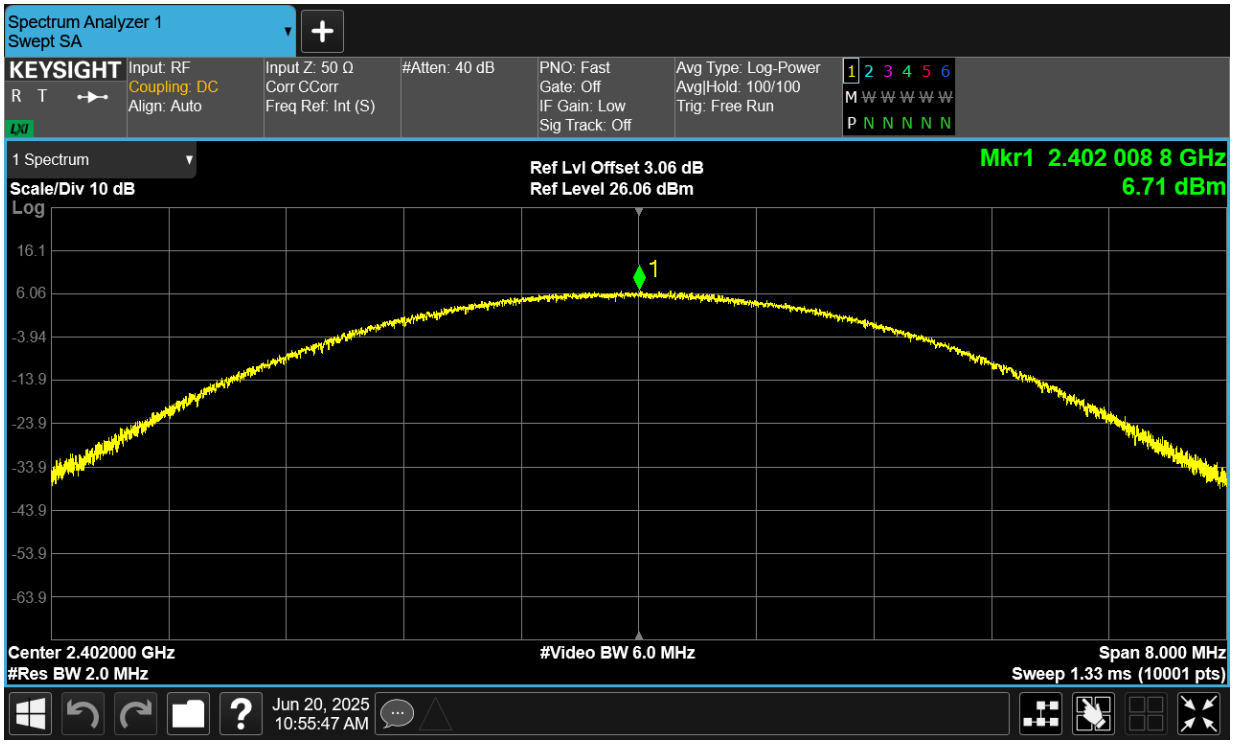
Power NVNT 2-DH1 2441MHz Ant1



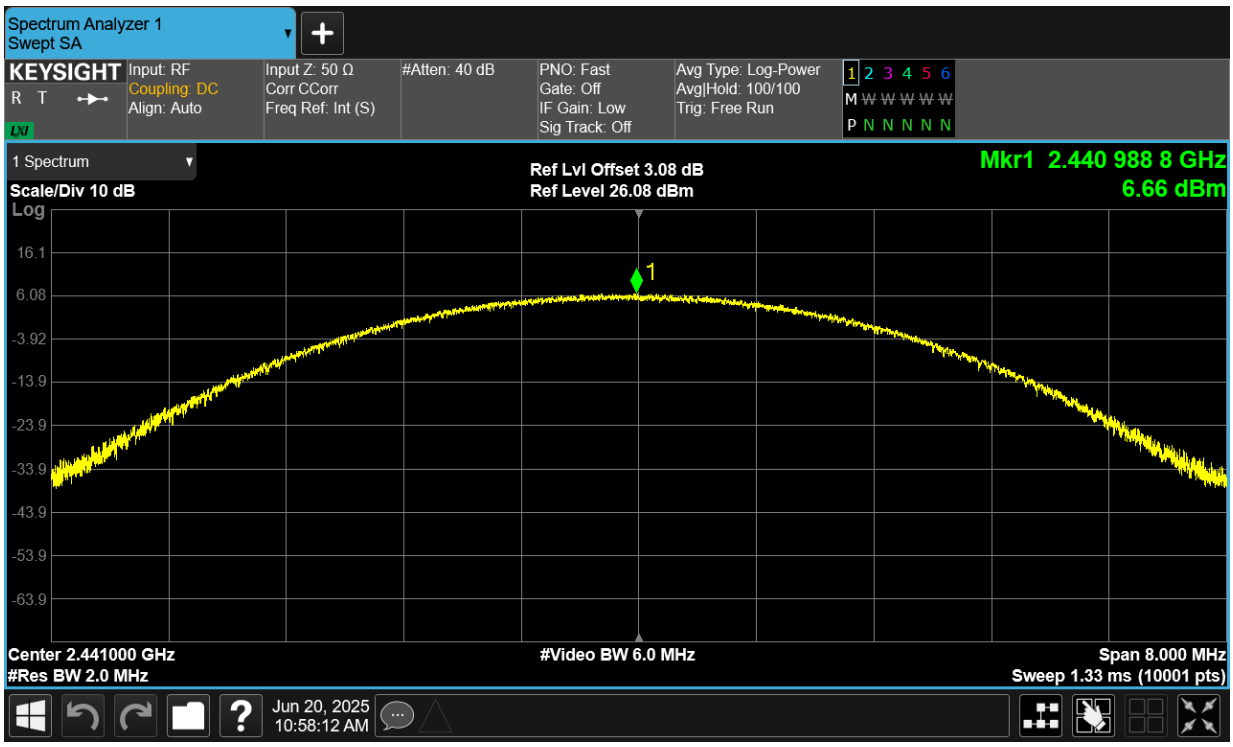
Power NVNT 2-DH1 2480MHz Ant1



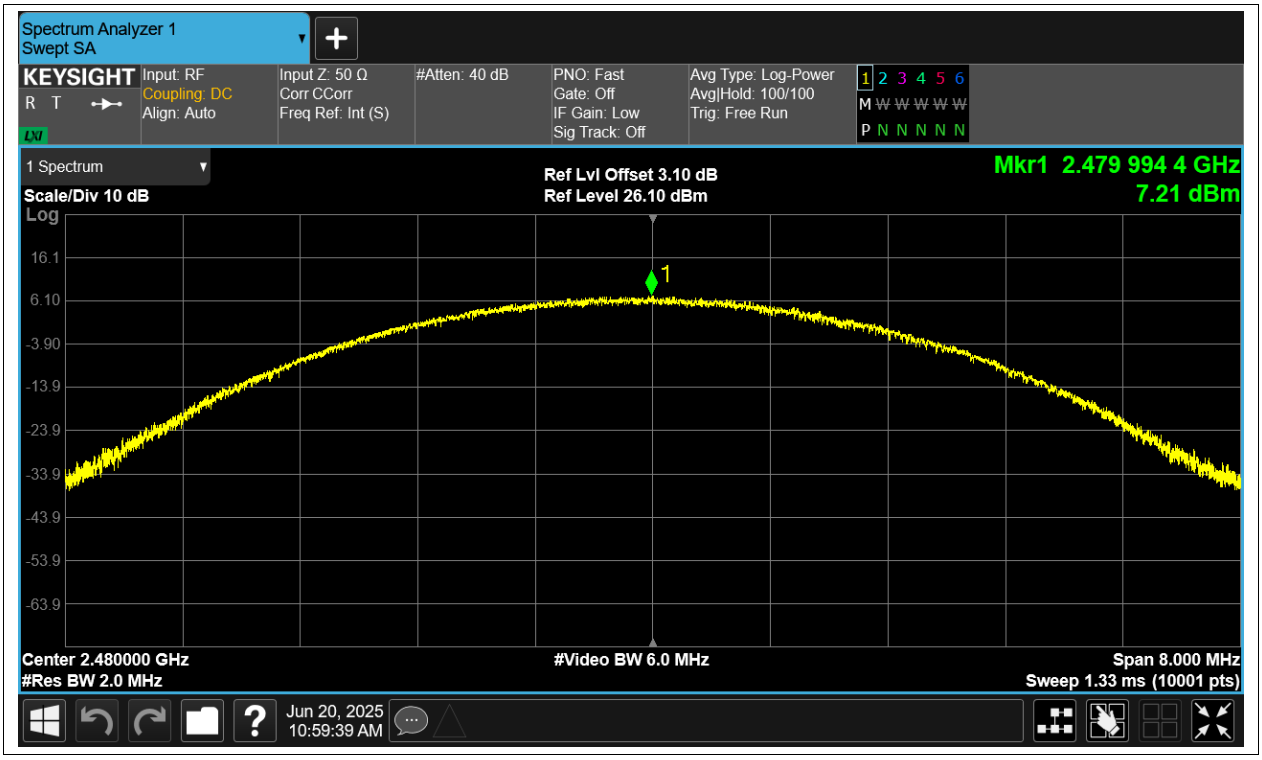
Power NVNT 3-DH1 2402MHz Ant1



Power NVNT 3-DH1 2441MHz Ant1



Power NVNT 3-DH1 2480MHz 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
Avg|Hold: 100/100
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 3.10 dB
Ref Level 26.10 dBm
Mkr1 2.479 994 4 GHz
7.21 dBm
16.1
6.10
-3.90
-13.9
-23.9
-33.9
-43.9
-53.9
-63.9
Center 2.480000 GHz
#Res BW 2.0 MHz
#Video BW 6.0 MHz
Span 8.000 MHz
Sweep 1.33 ms (10001 pts)
Jun 20, 2025
10:59:39 AM

-20dB Bandwidth

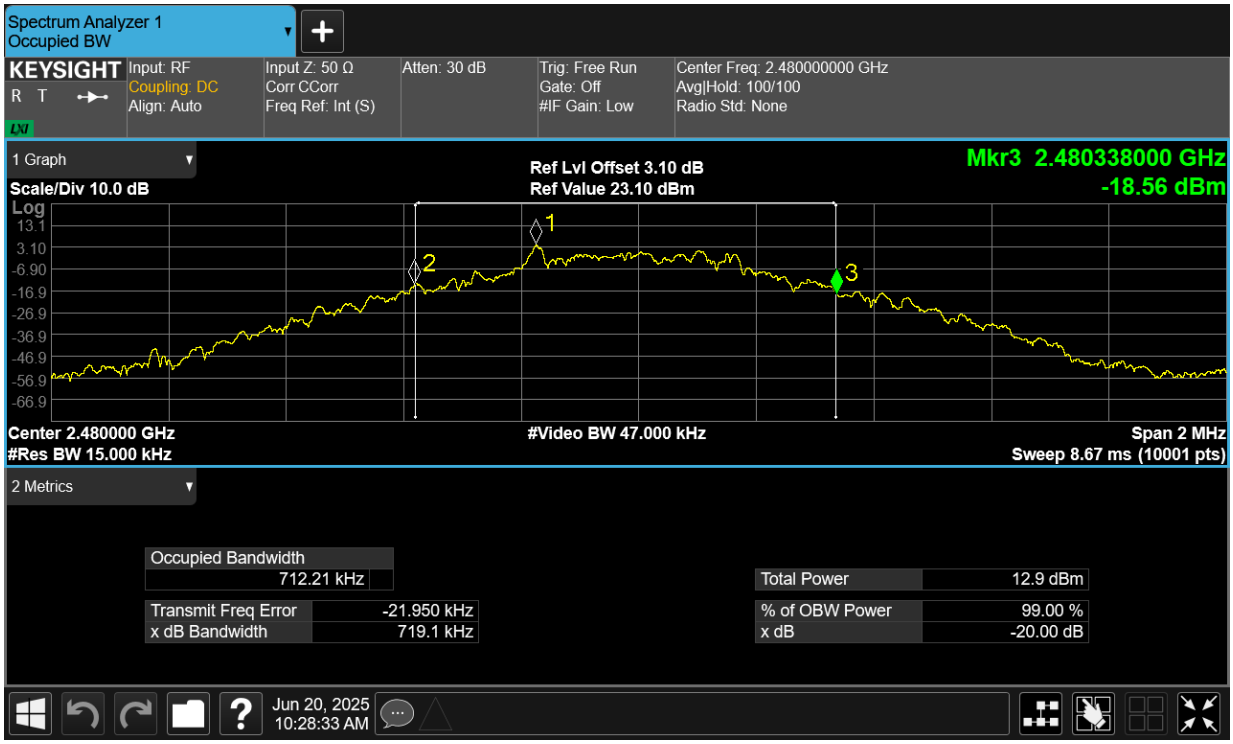
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)
NVNT	1-DH1	2402	Ant1	0.719
NVNT	1-DH1	2441	Ant1	0.718
NVNT	1-DH1	2480	Ant1	0.719
NVNT	2-DH1	2402	Ant1	1.247
NVNT	2-DH1	2441	Ant1	1.246
NVNT	2-DH1	2480	Ant1	1.25
NVNT	3-DH1	2402	Ant1	1.253
NVNT	3-DH1	2441	Ant1	1.271
NVNT	3-DH1	2480	Ant1	1.261

Test Graphs

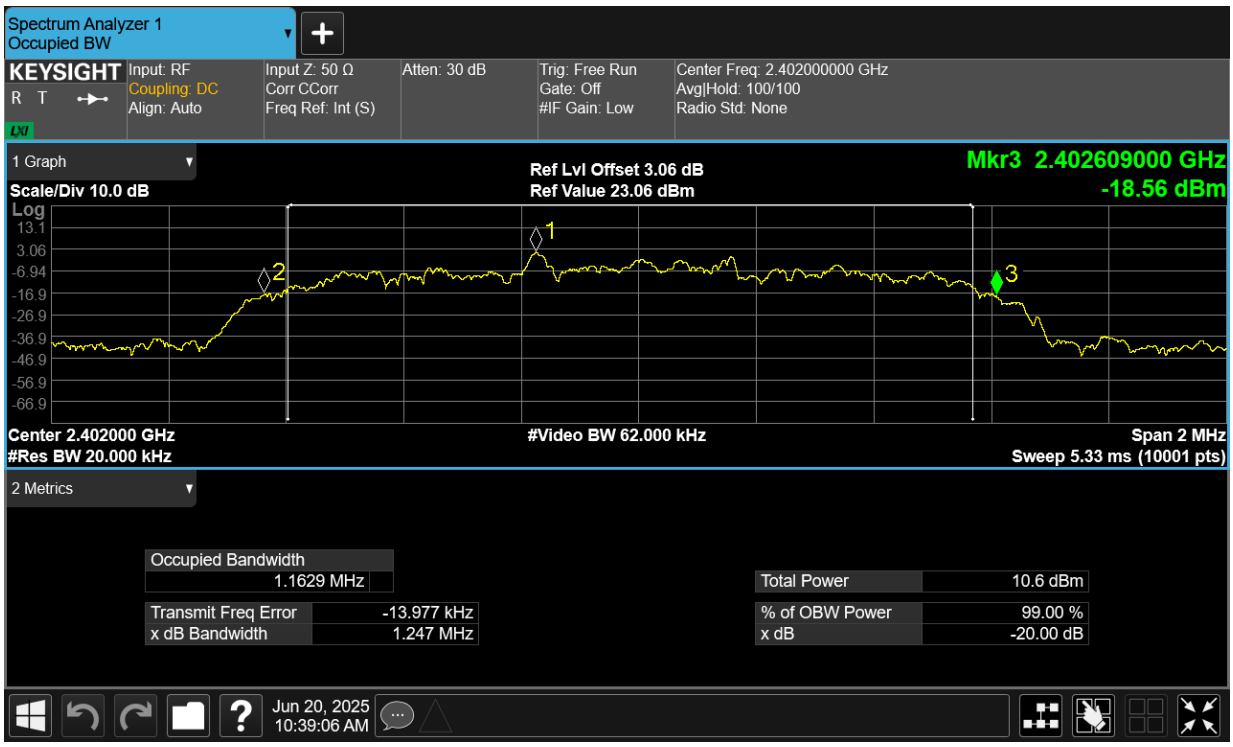
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1

-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1

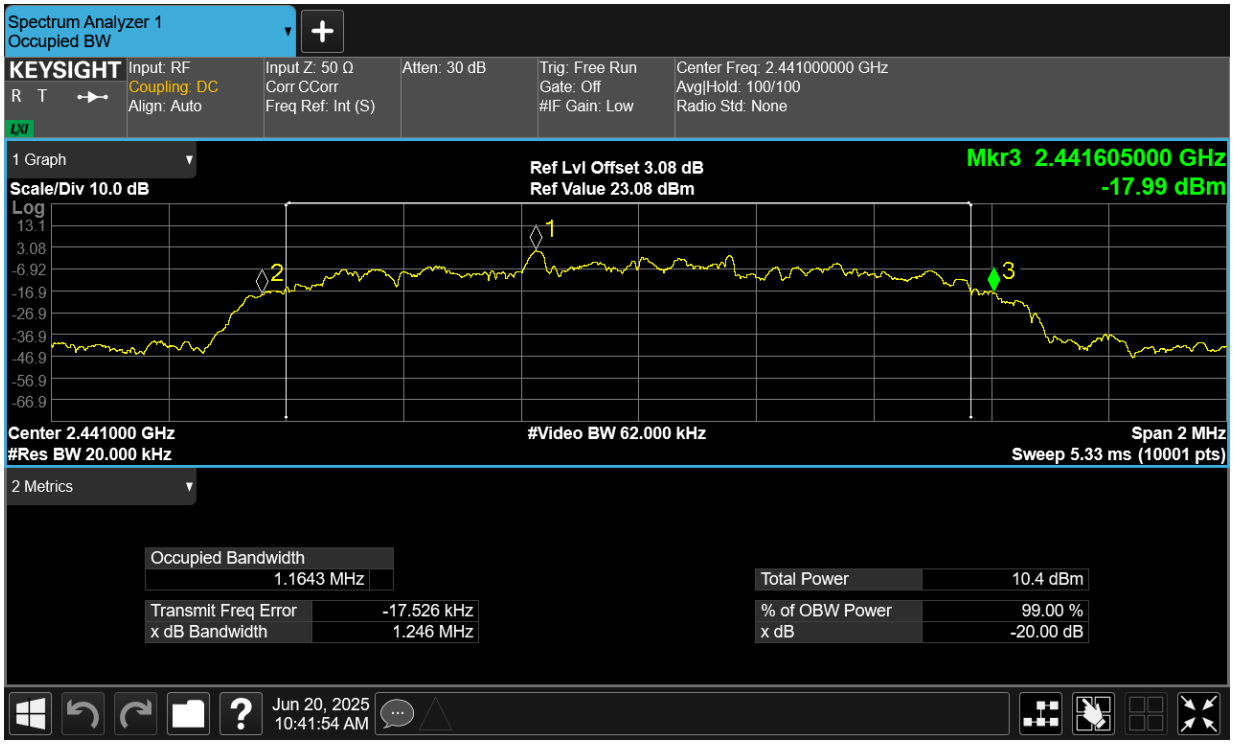
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



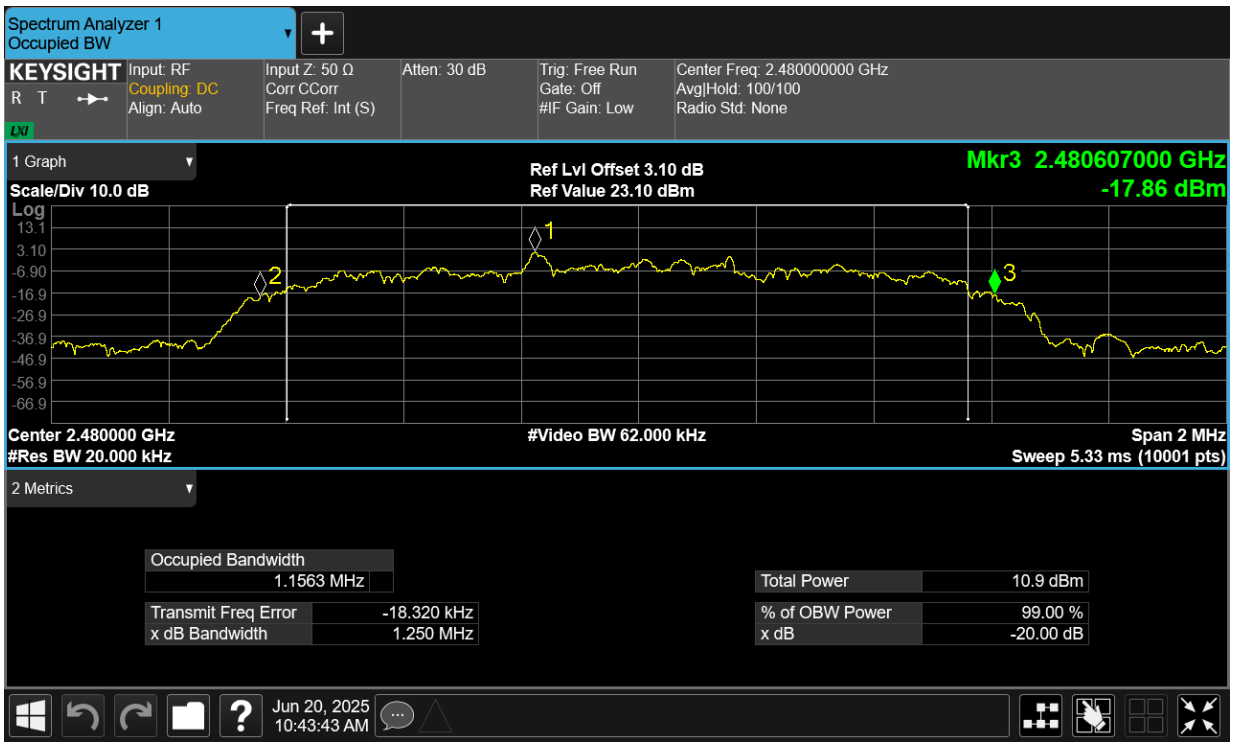
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



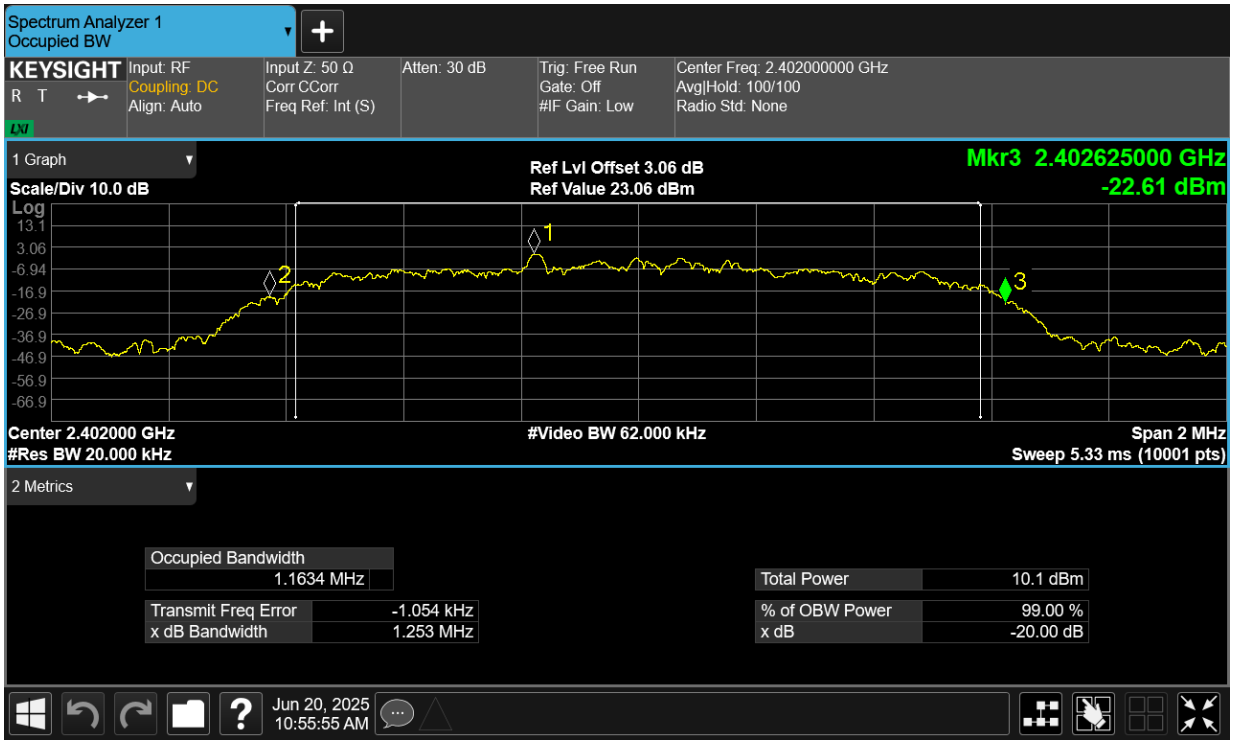
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



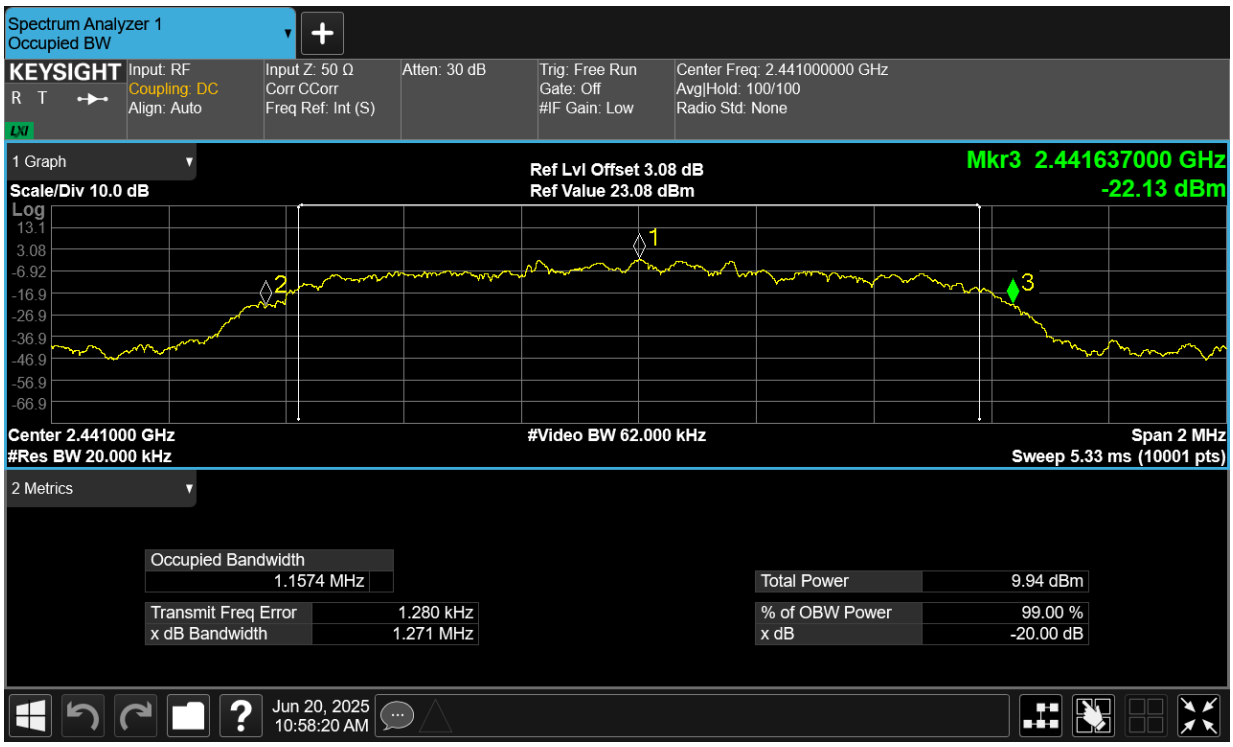
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1



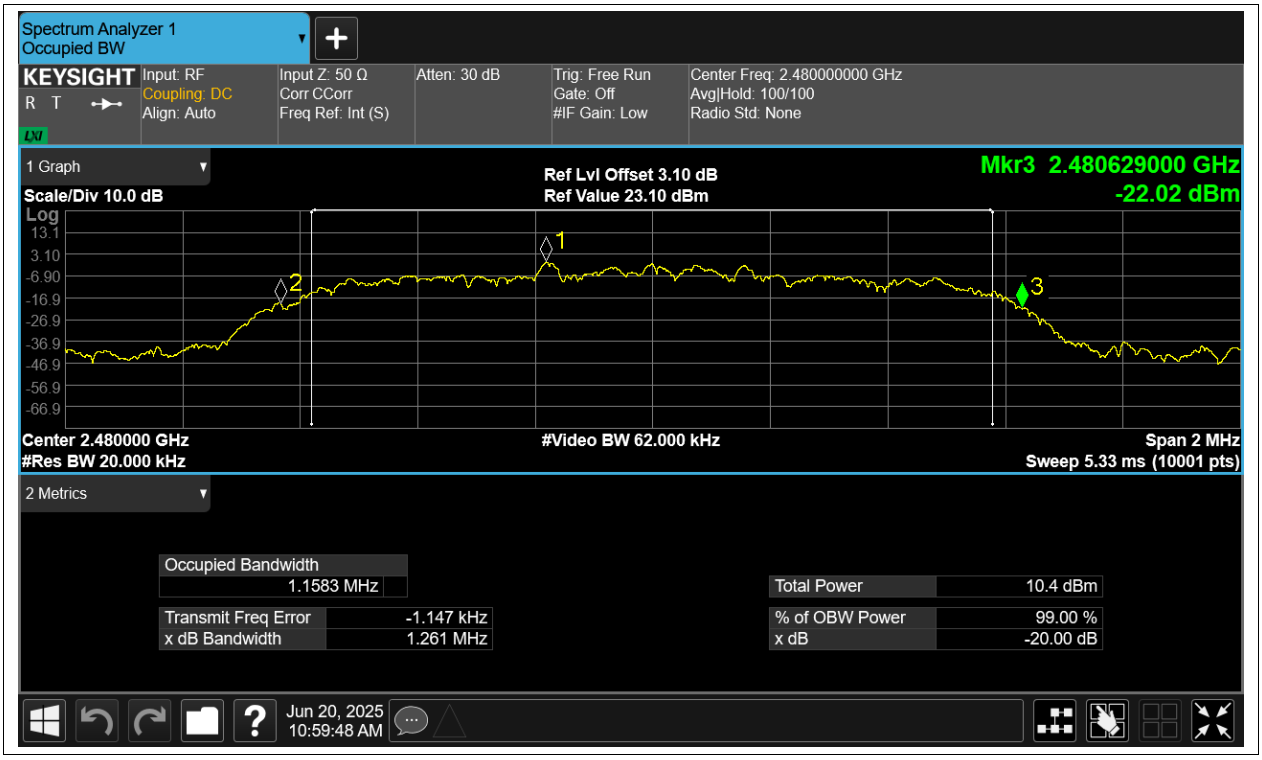
-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2480MHz Ant1

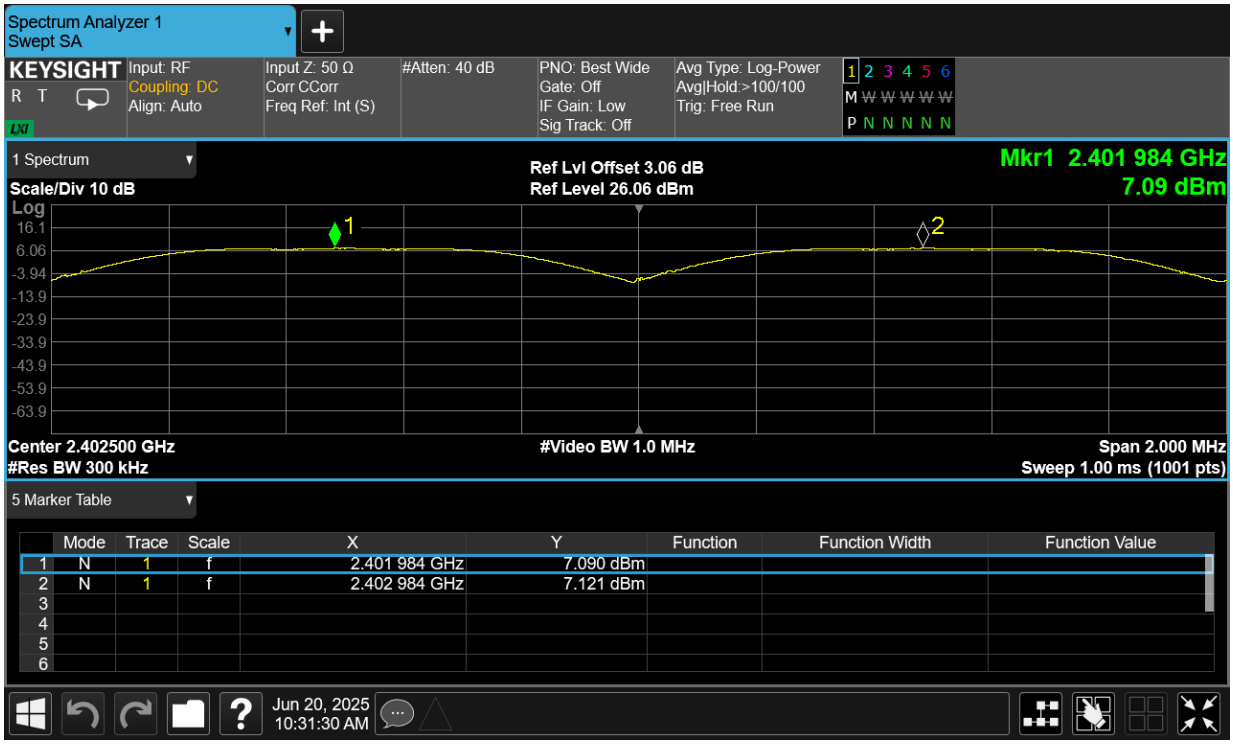

Spectrum Analyzer 1
Occupied BW
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
Atten: 30 dB
Trig: Free Run
Gate: Off
#IF Gain: Low
Center Freq: 2.480000000 GHz
Avg|Hold: 100/100
Radio Std: None
1 Graph
Scale/Div 10.0 dB
Ref Lvl Offset 3.10 dB
Ref Value 23.10 dBm
Mkr3 2.480629000 GHz
-22.02 dBm
Center 2.480000 GHz
#Res BW 20.000 kHz
#Video BW 62.000 kHz
Span 2 MHz
Sweep 5.33 ms (10001 pts)
2 Metrics
Occupied Bandwidth
1.1583 MHz
Transmit Freq Error -1.147 kHz
x dB Bandwidth 1.261 MHz
Total Power 10.4 dBm
% of OBW Power 99.00 %
x dB -20.00 dB
Jun 20, 2025
10:59:48 AM

Carrier Frequencies Separation

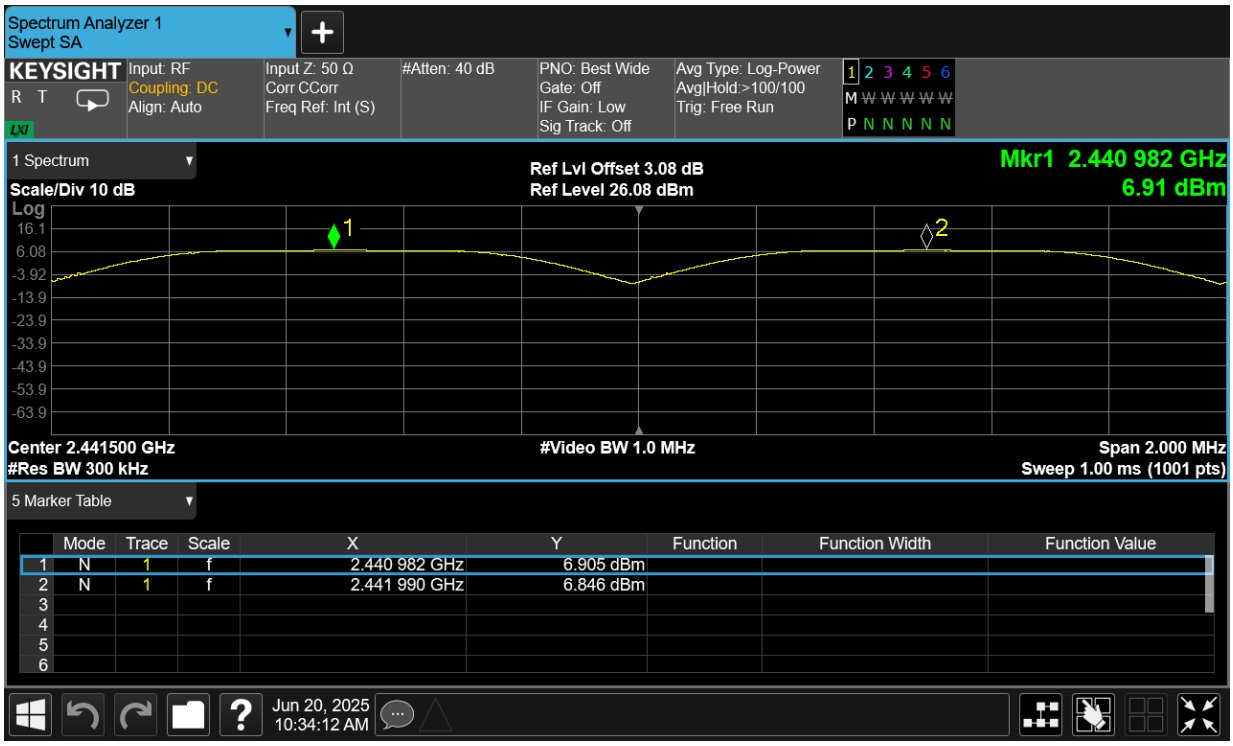
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2401.984	2402.984	1	0.719	Pass
NVNT	1-DH1	Ant1	2440.982	2441.99	1.008	0.718	Pass
NVNT	1-DH1	Ant1	2478.968	2479.986	1.018	0.719	Pass
NVNT	2-DH1	Ant1	2402.134	2403.132	0.998	0.831	Pass
NVNT	2-DH1	Ant1	2441.092	2442.142	1.05	0.831	Pass
NVNT	2-DH1	Ant1	2479.108	2480.128	1.02	0.833	Pass
NVNT	3-DH1	Ant1	2402.02	2403	0.98	0.835	Pass
NVNT	3-DH1	Ant1	2440.842	2442.014	1.172	0.847	Pass
NVNT	3-DH1	Ant1	2479.002	2480	0.998	0.841	Pass

Test Graphs

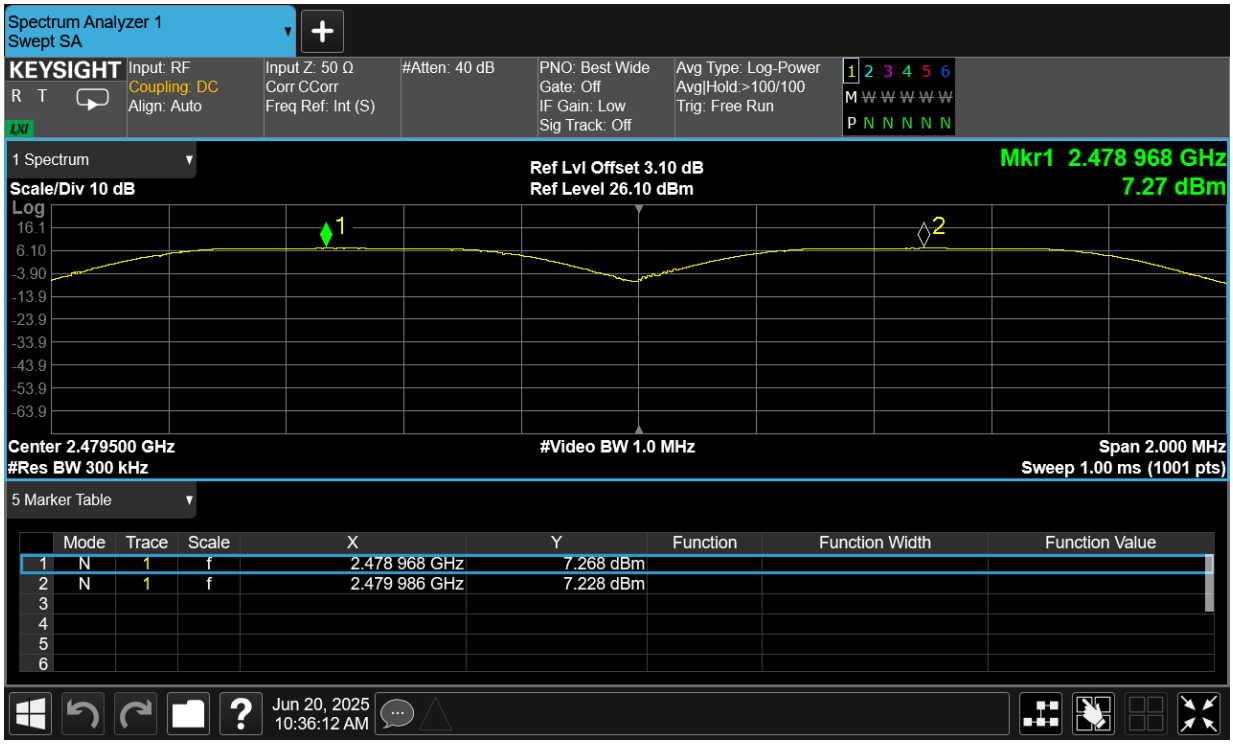
CFS NVNT 1-DH1 2402MHz Ant1



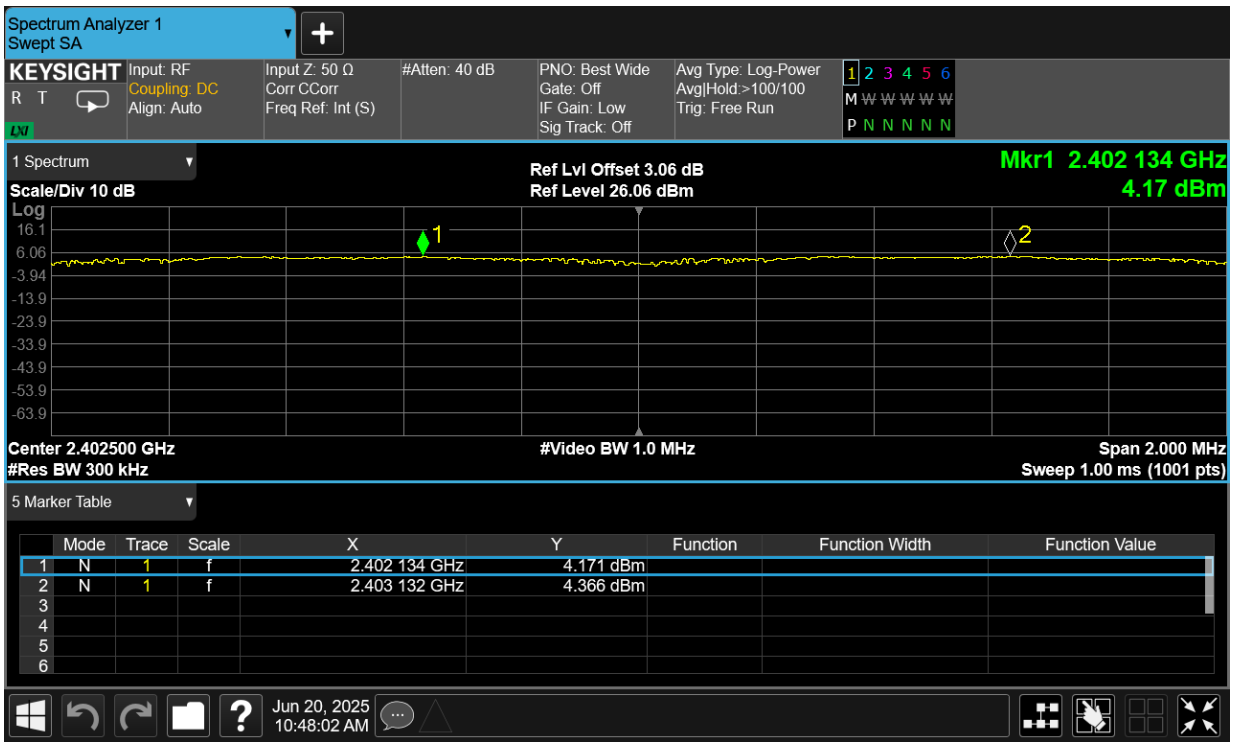
CFS NVNT 1-DH1 2441MHz Ant1



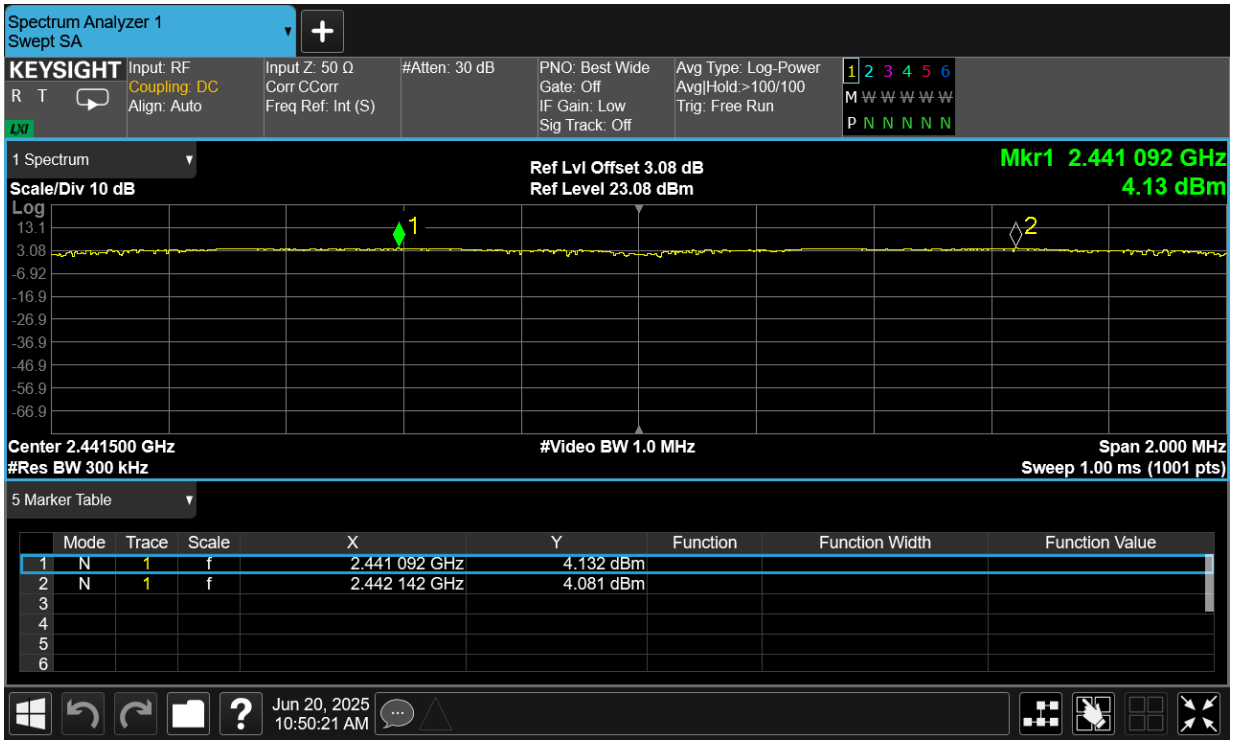
CFS NVNT 1-DH1 2480MHz Ant1



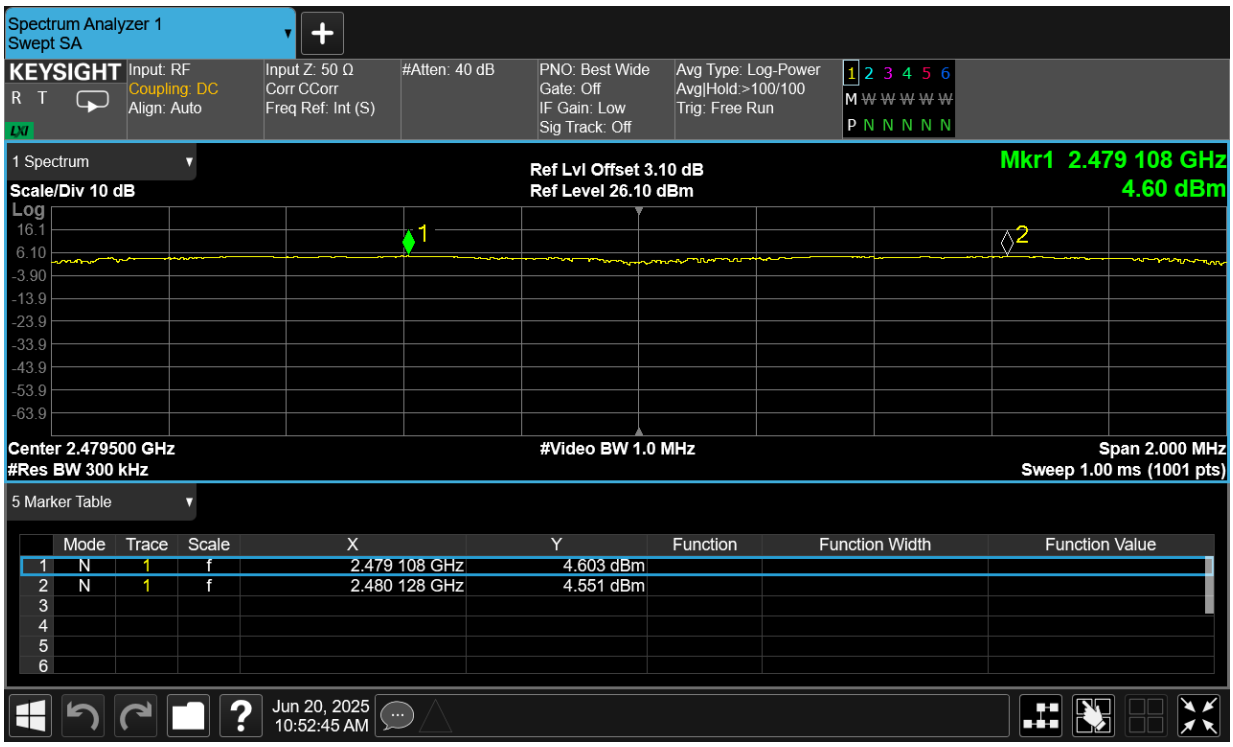
CFS NVNT 2-DH1 2402MHz Ant1



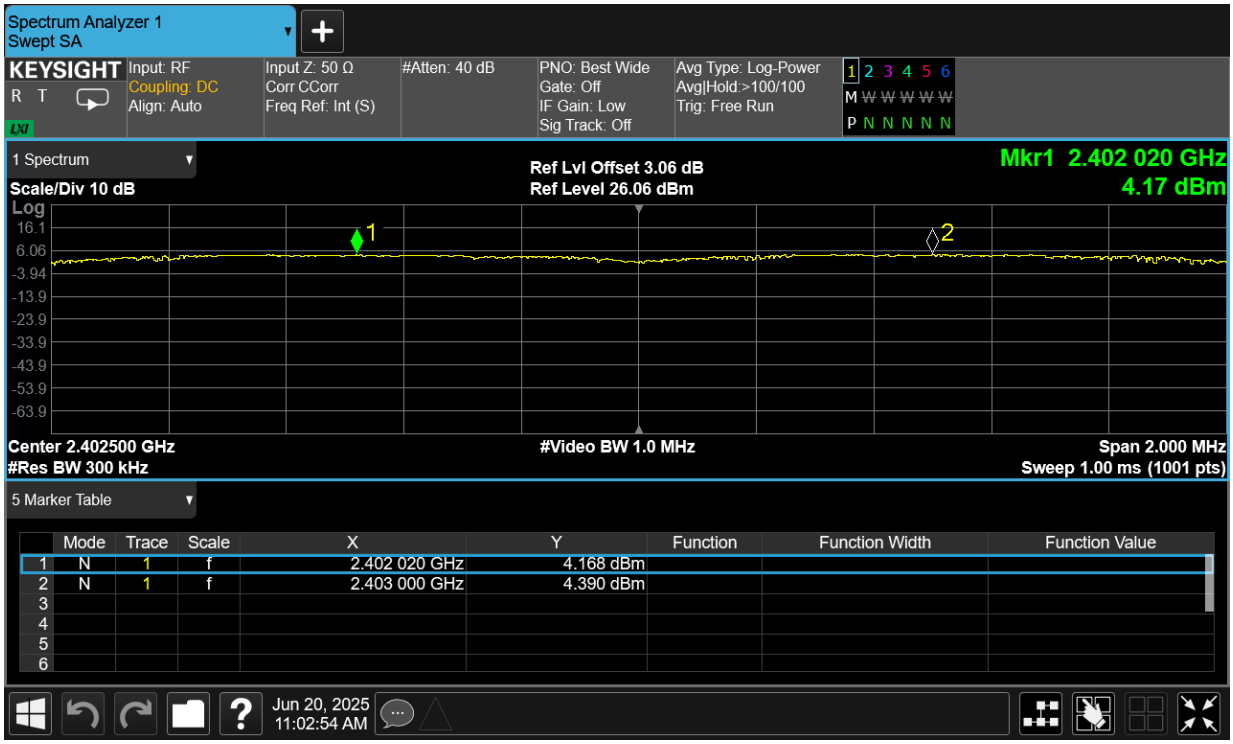
CFS NVNT 2-DH1 2441MHz Ant1



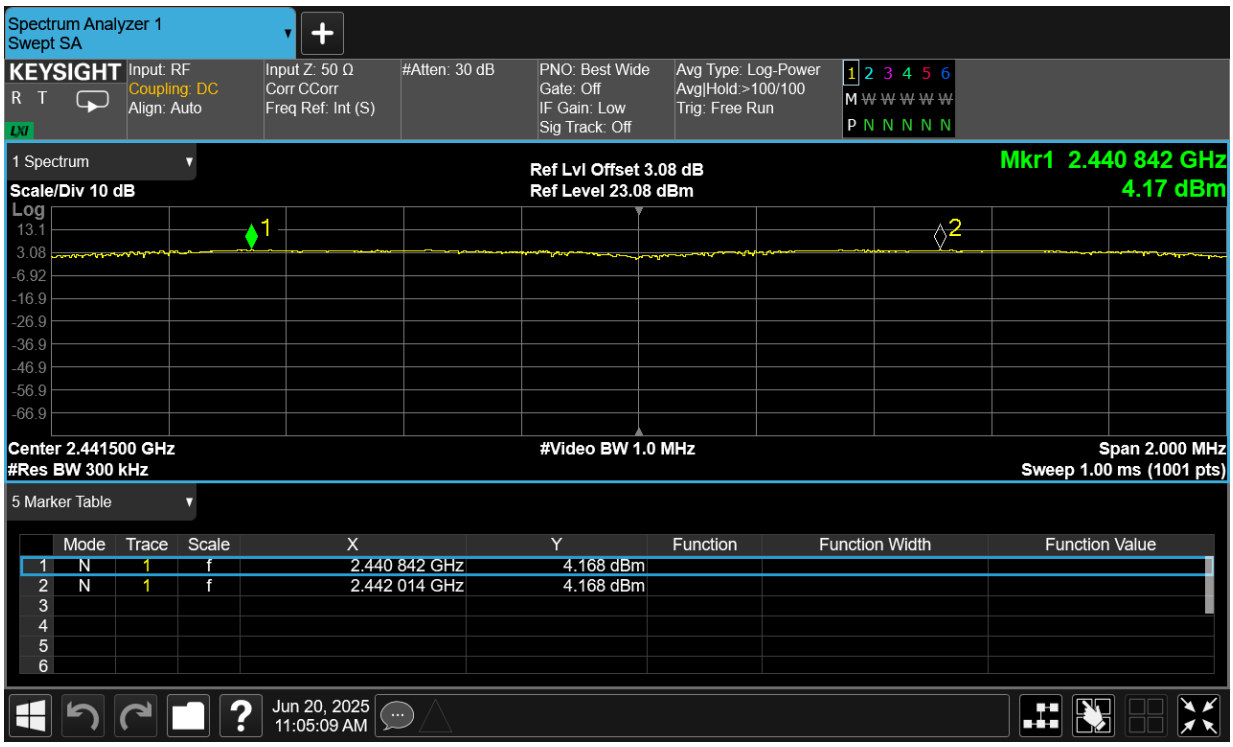
CFS NVNT 2-DH1 2480MHz Ant1



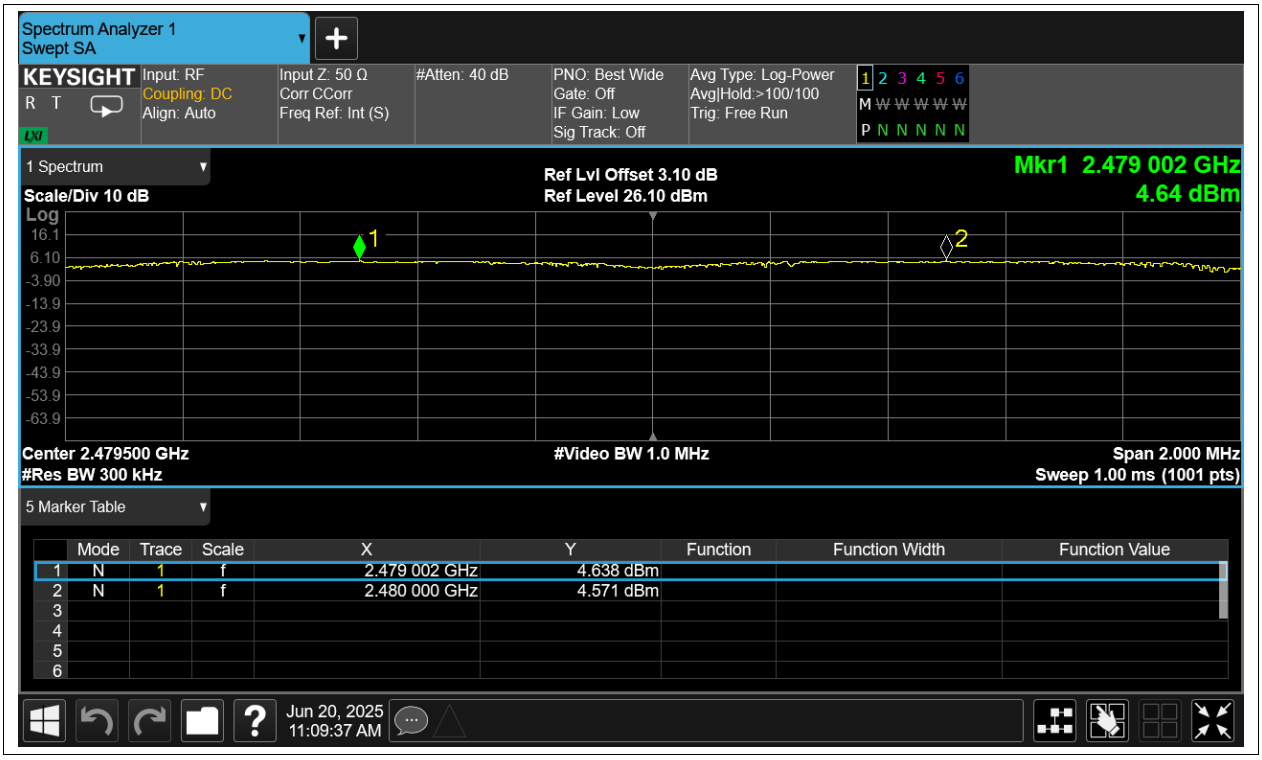
CFS NVNT 3-DH1 2402MHz Ant1



CFS NVNT 3-DH1 2441MHz Ant1



CFS NVNT 3-DH1 2480MHz Ant1

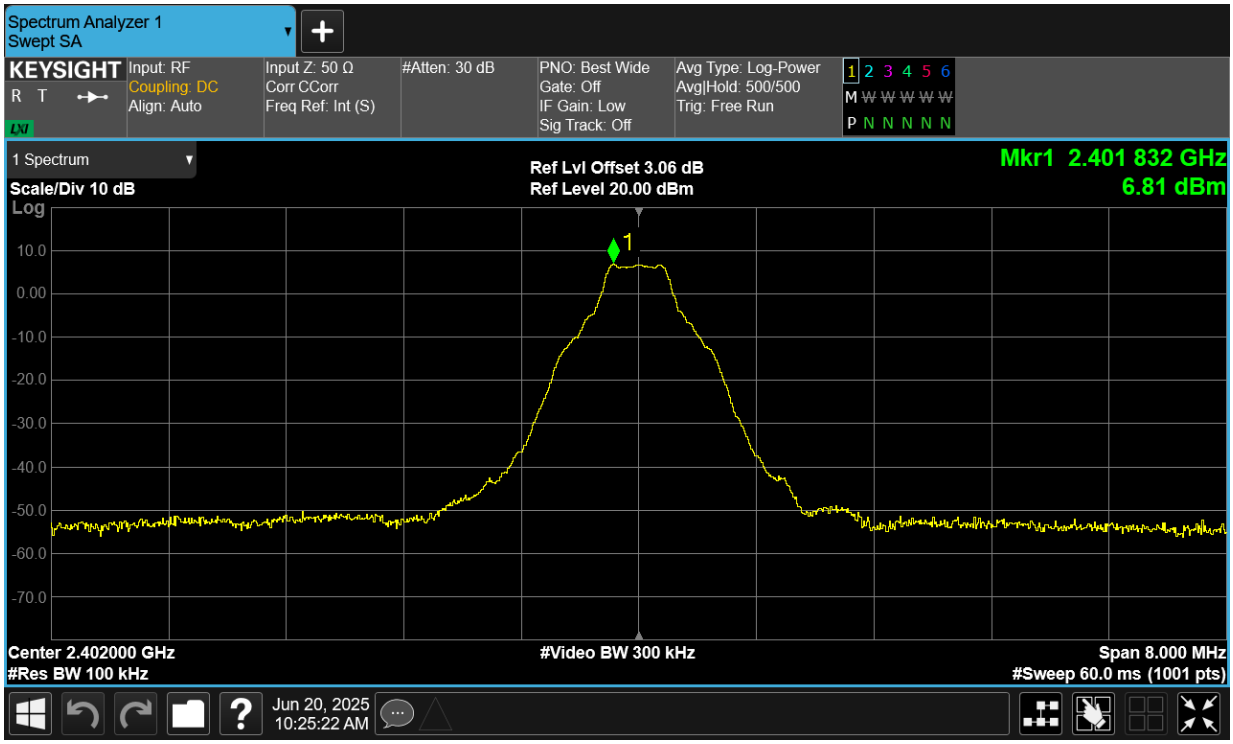

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
#Atten: 40 dB
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
Avg Type: Log-Power
Avg|Hold:>100/100
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Ref Lvl Offset 3.10 dB
Ref Level 26.10 dBm
Mkr1 2.479 002 GHz
4.64 dBm
Center 2.479500 GHz
#Res BW 300 kHz
#Video BW 1.0 MHz
Span 2.000 MHz
Sweep 1.00 ms (1001 pts)
5 Marker Table
Mode Trace Scale X Y Function Function Width Function Value
1 N 1 f 2.479 002 GHz 4.638 dBm
2 N 1 f 2.480 000 GHz 4.571 dBm
Jun 20, 2025
11:09:37 AM

Band Edge

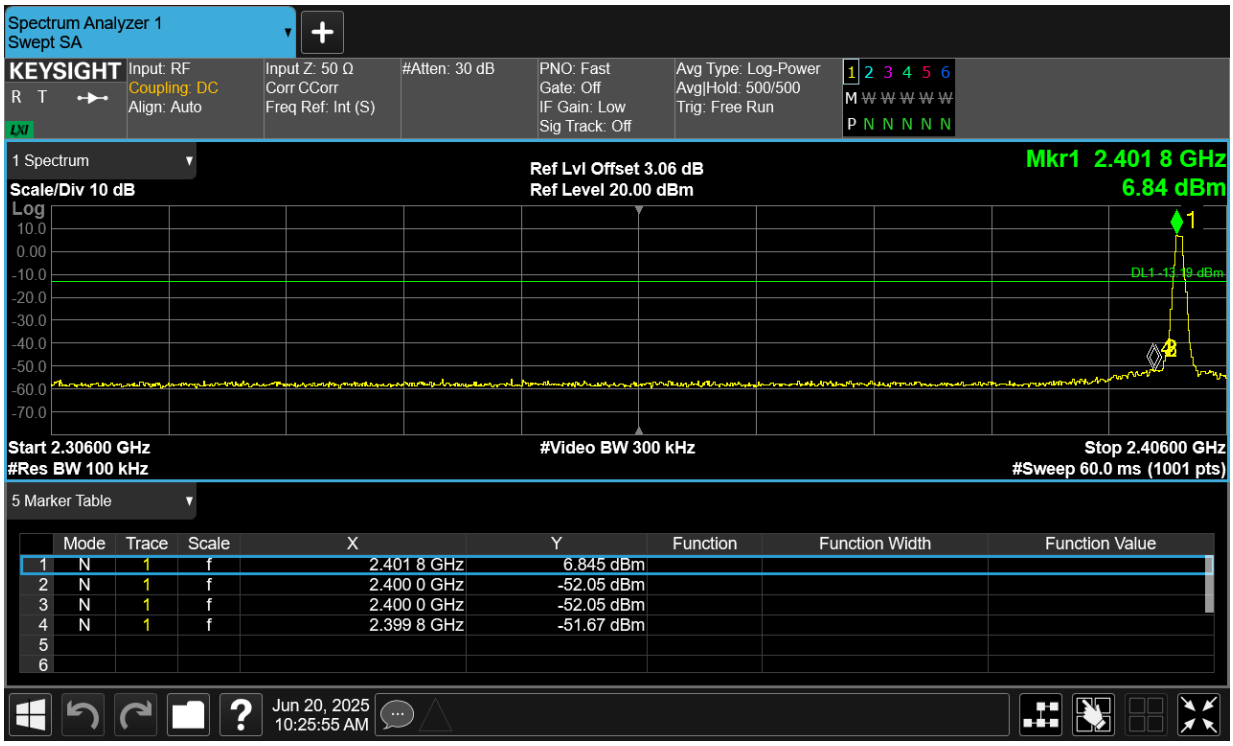
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-58.48	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-58.59	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-52.24	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-59.08	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-54.23	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-59.43	-20	Pass

Test Graphs

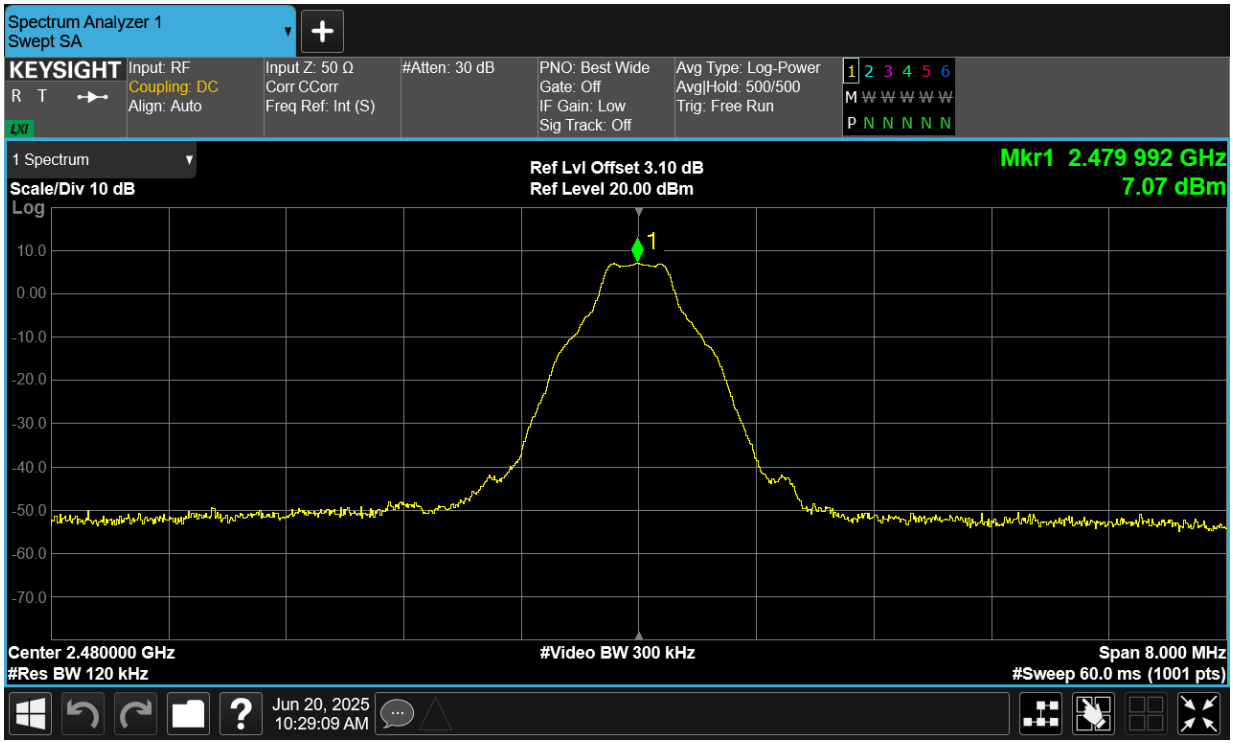
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



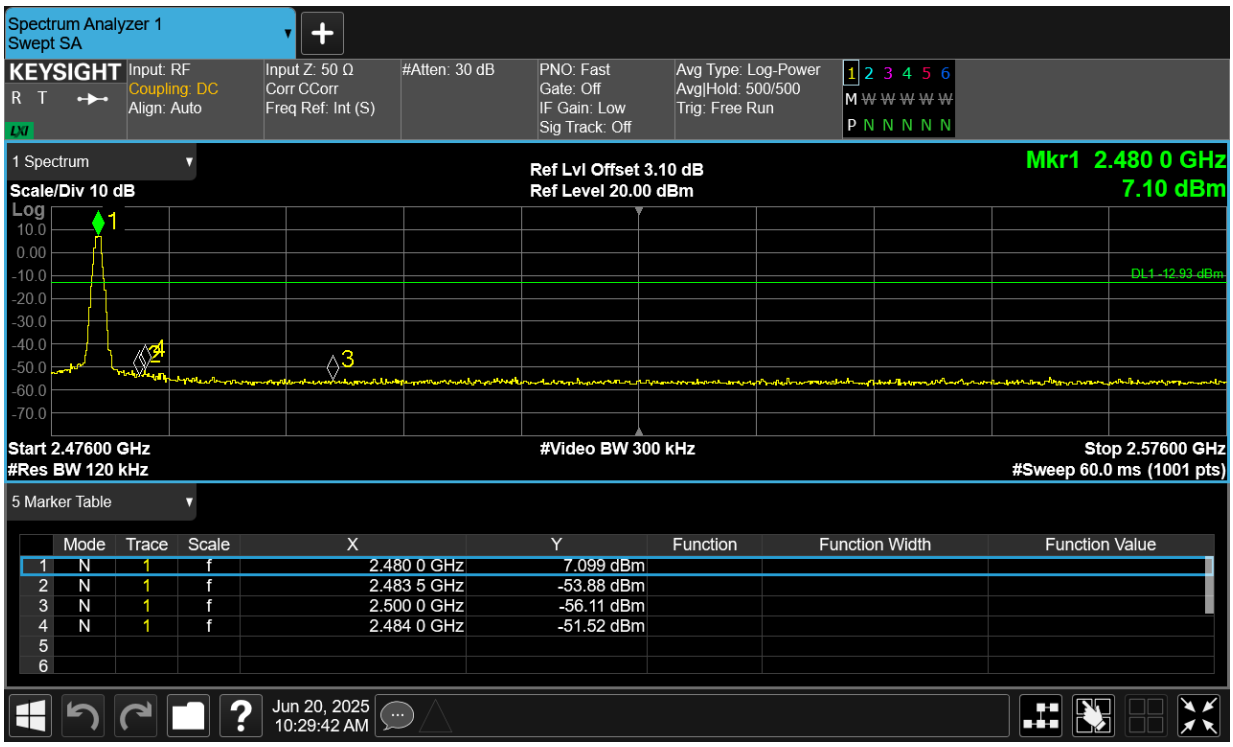
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



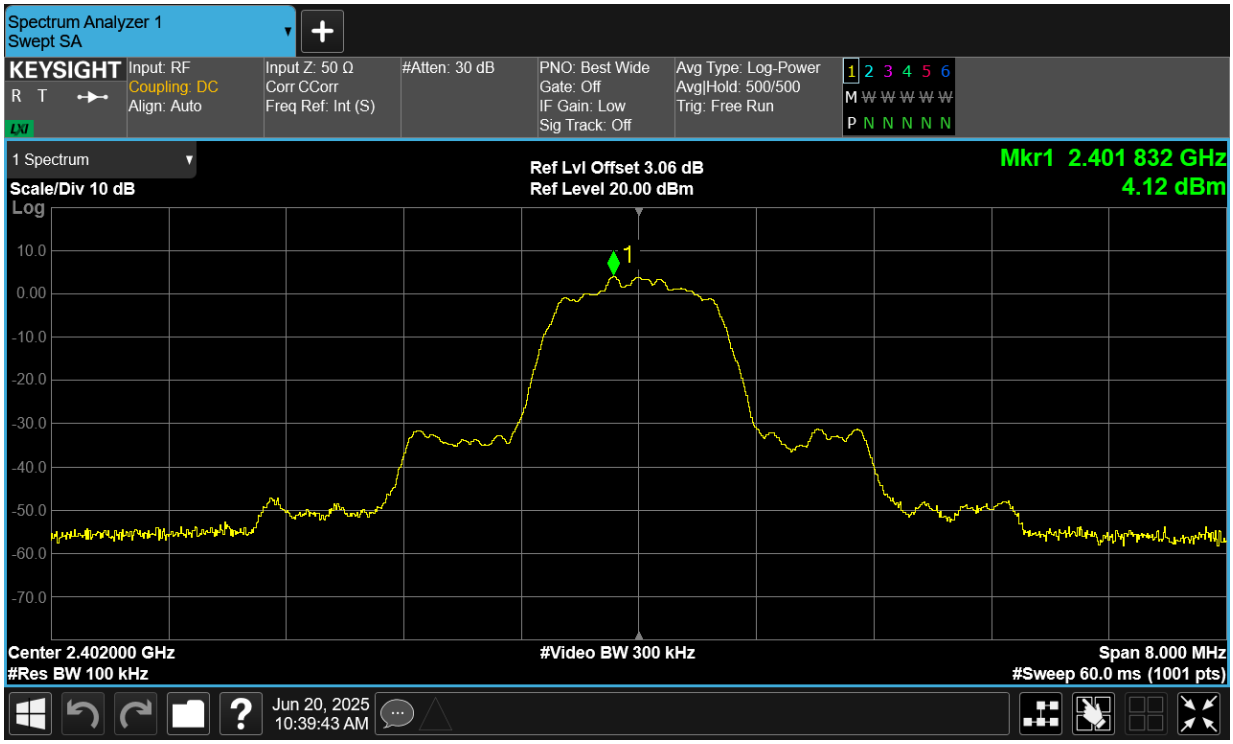
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



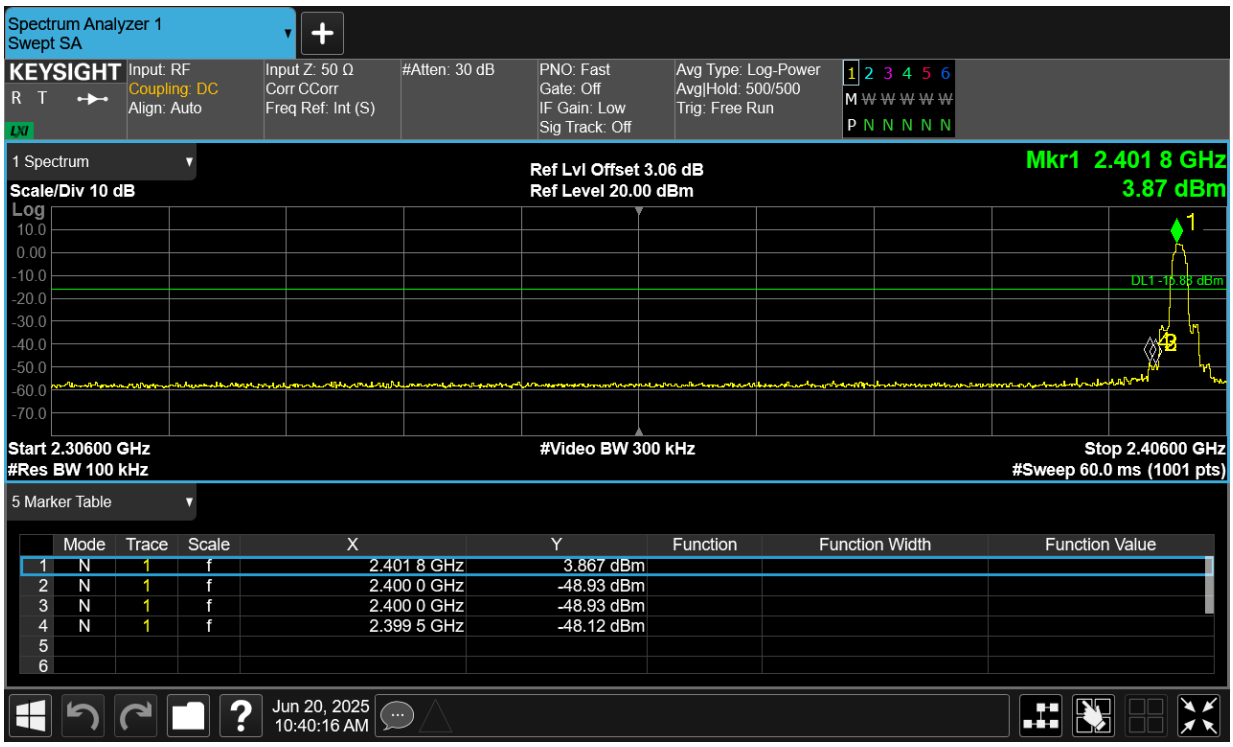
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



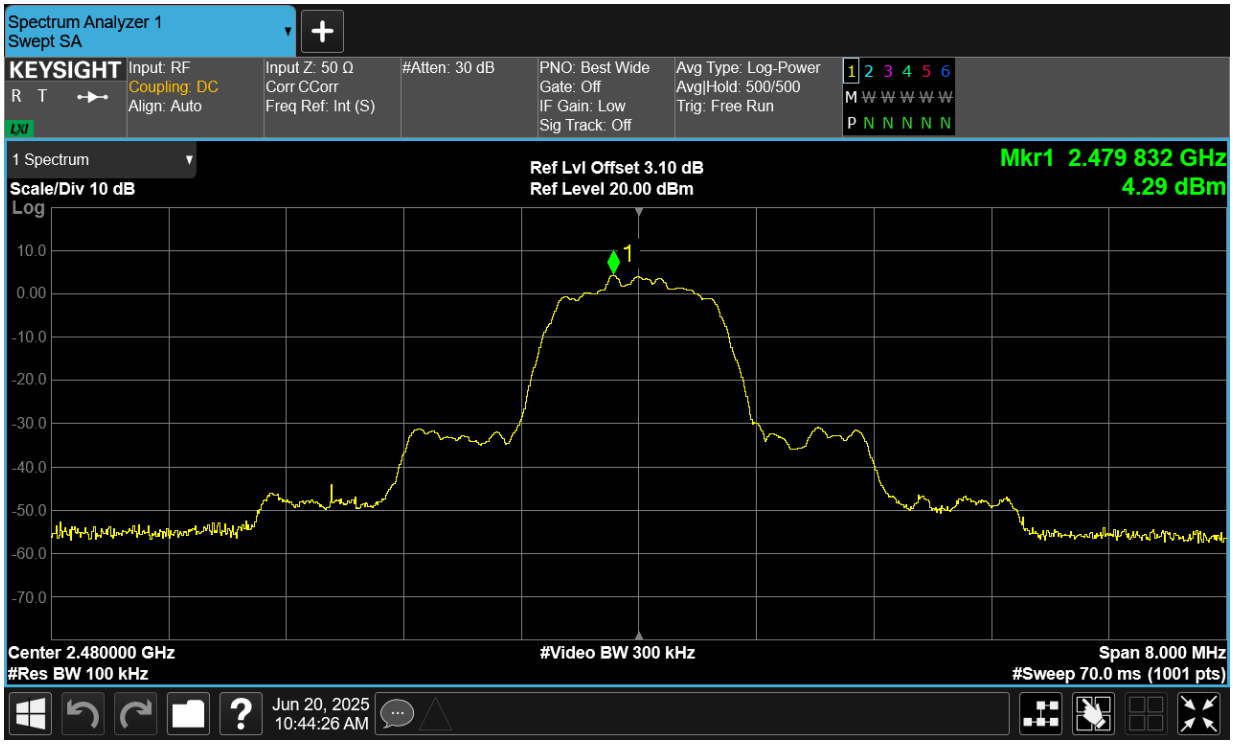
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



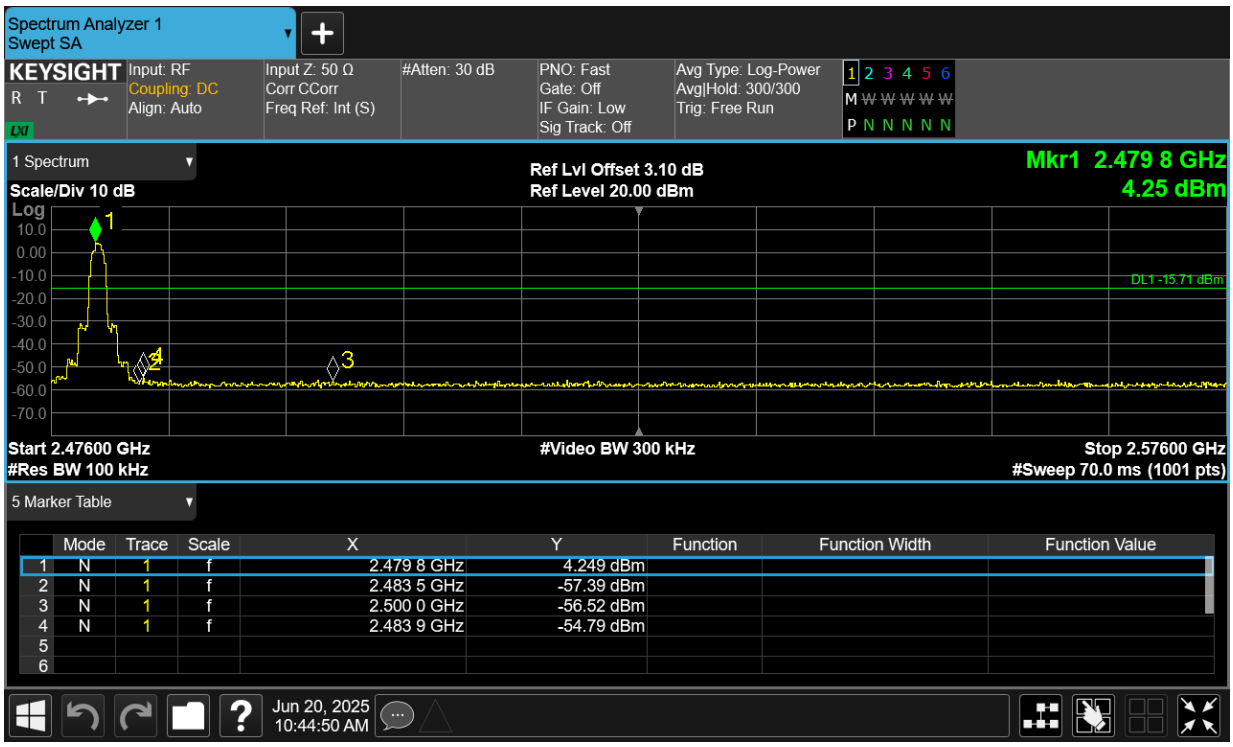
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



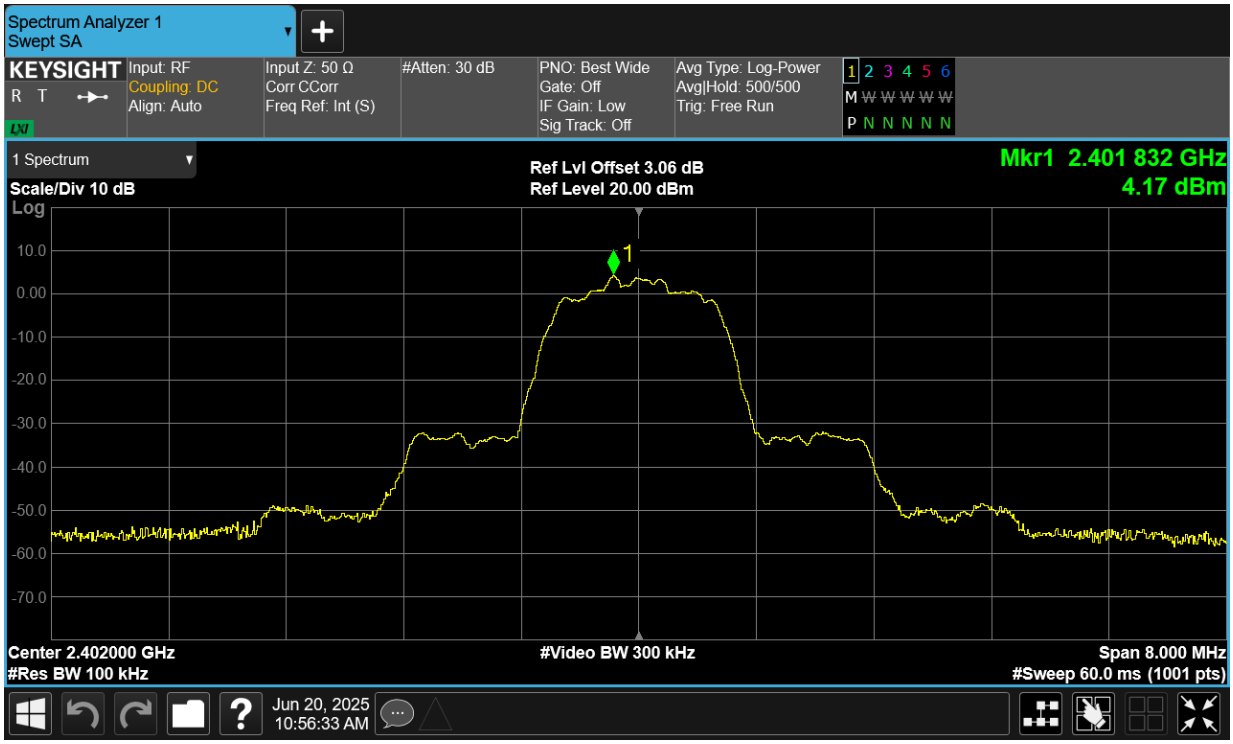
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



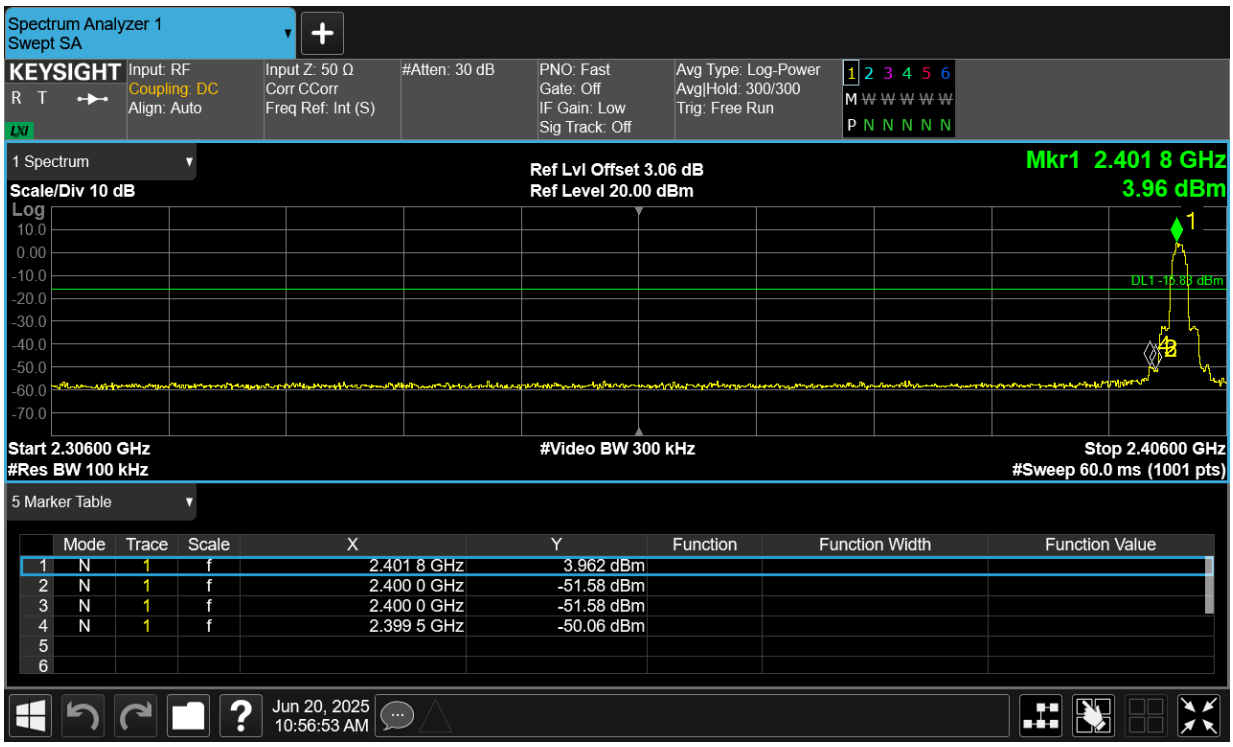
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



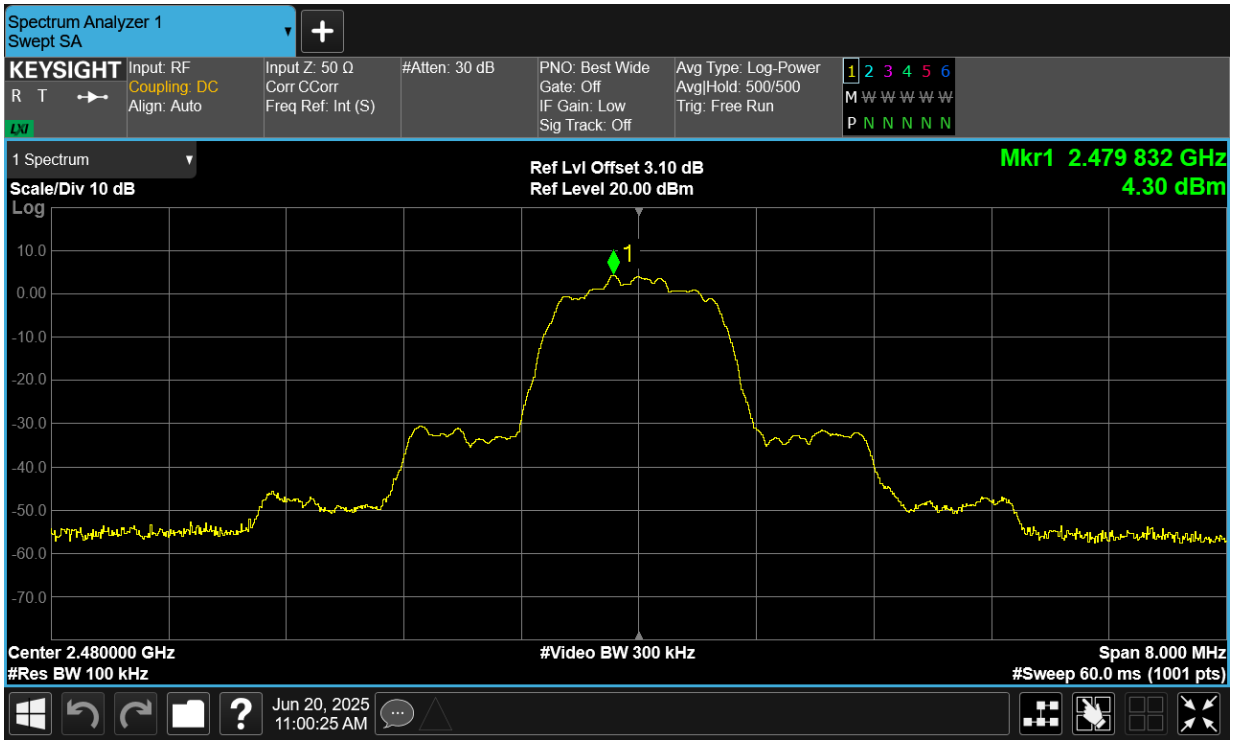
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



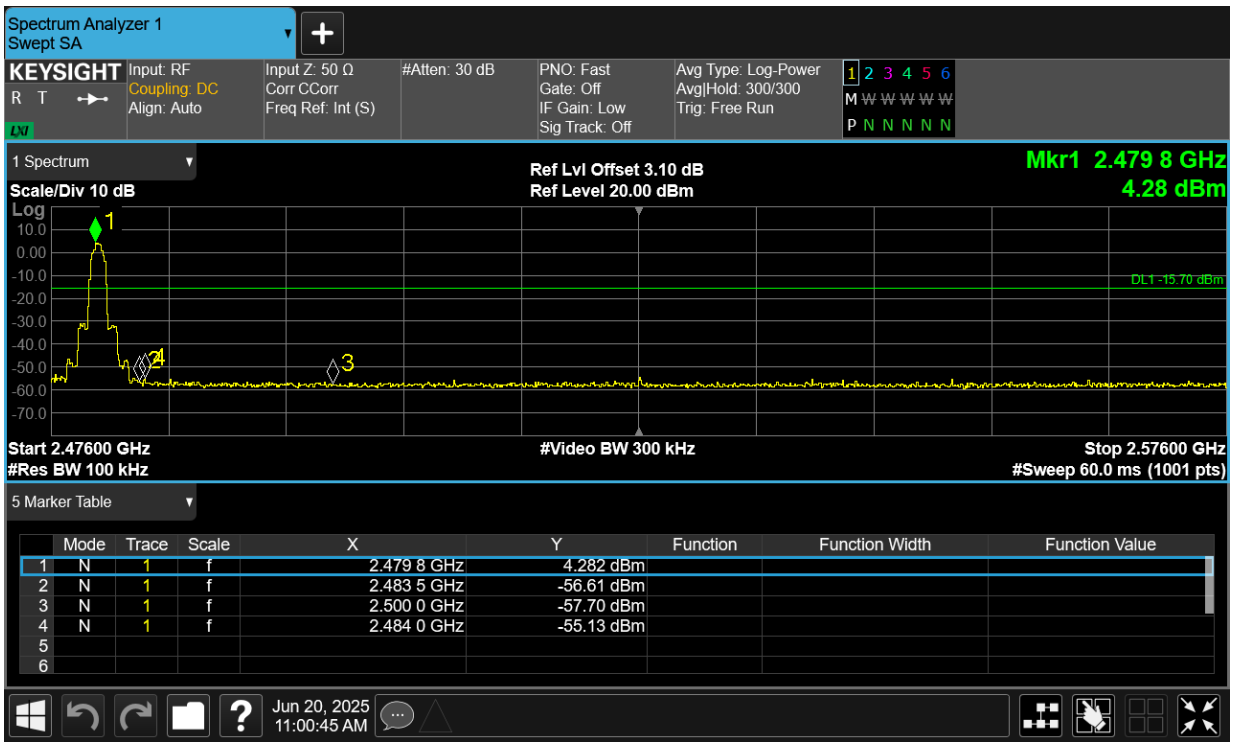
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



Band Edge NVNT 3-DH1 2480MHz Ant1 No-Hopping Ref



Band Edge NVNT 3-DH1 2480MHz Ant1 No-Hopping Emission

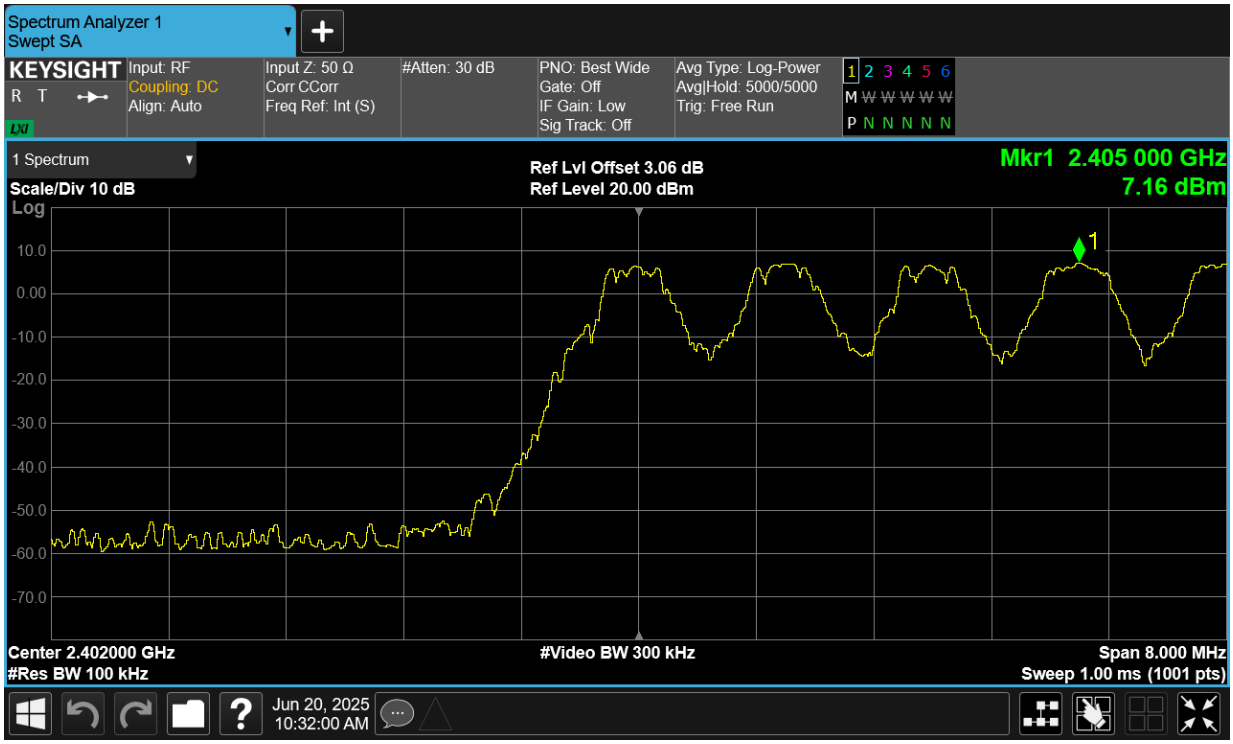


Band Edge(Hopping)

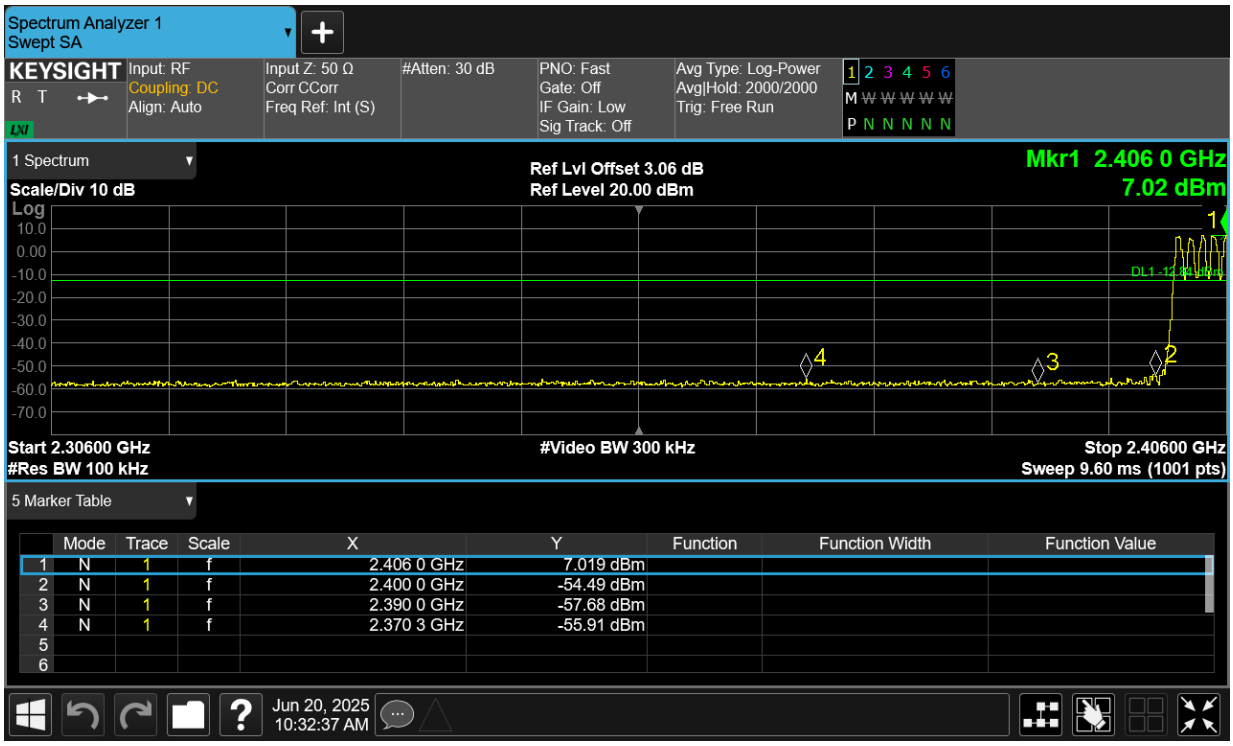
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-63.07	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-63.12	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-59.93	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-59.79	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-59.76	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-59.8	-20	Pass

Test Graphs

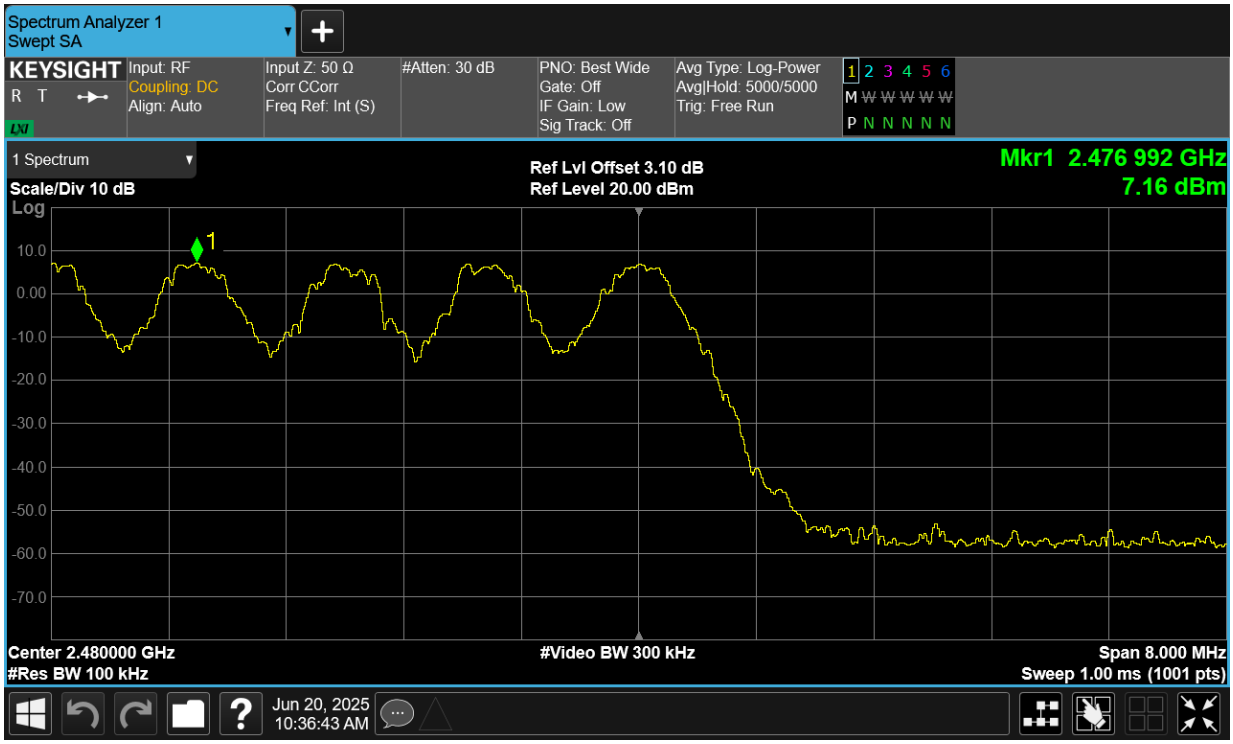
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref



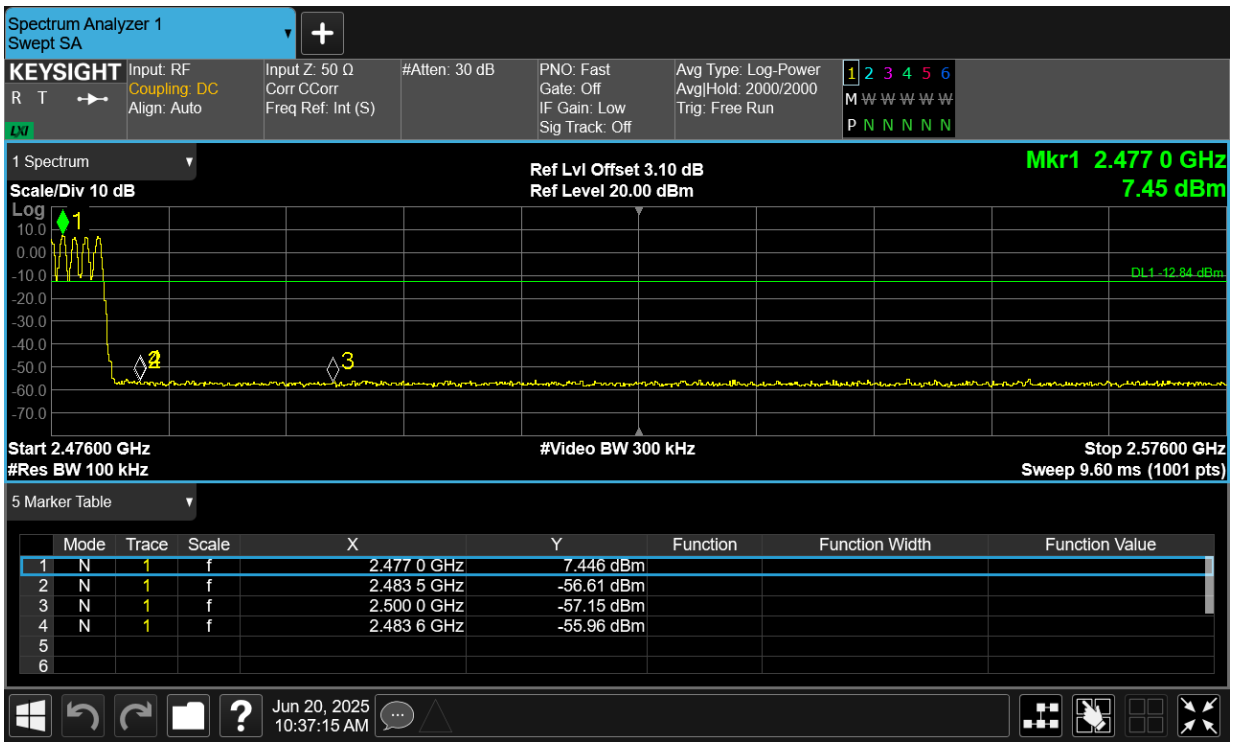
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



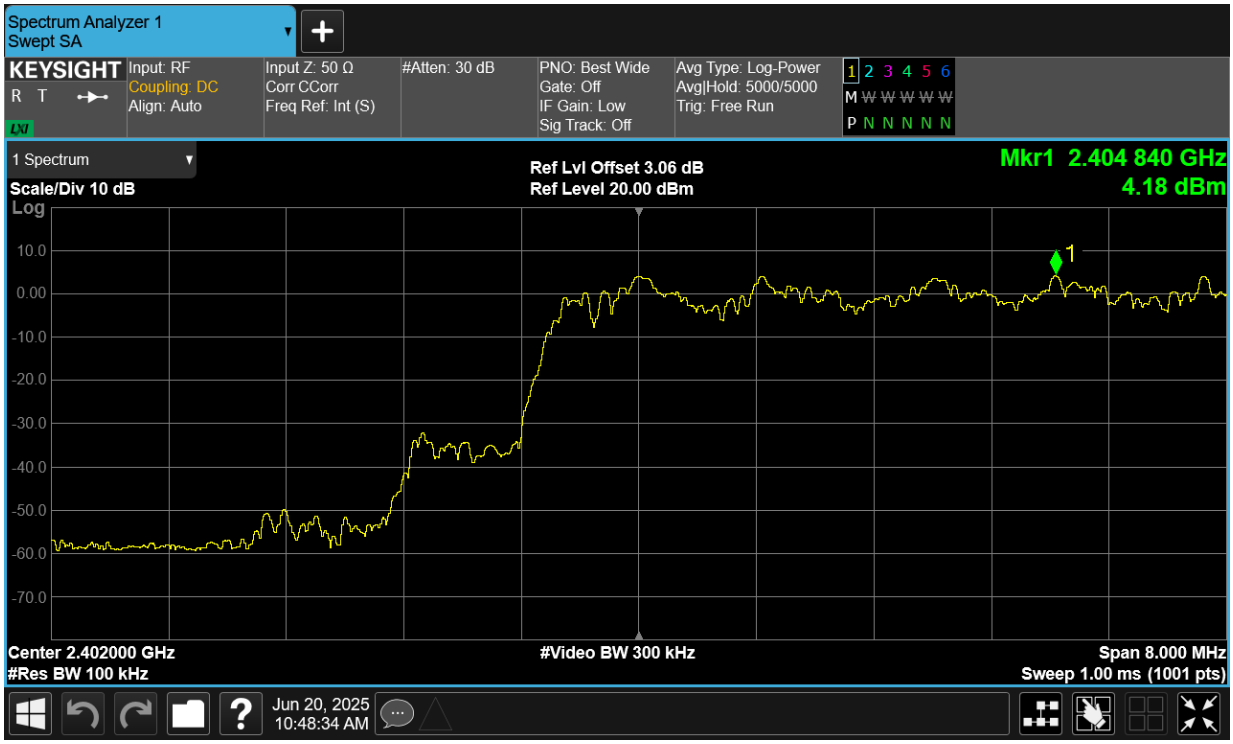
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Ref



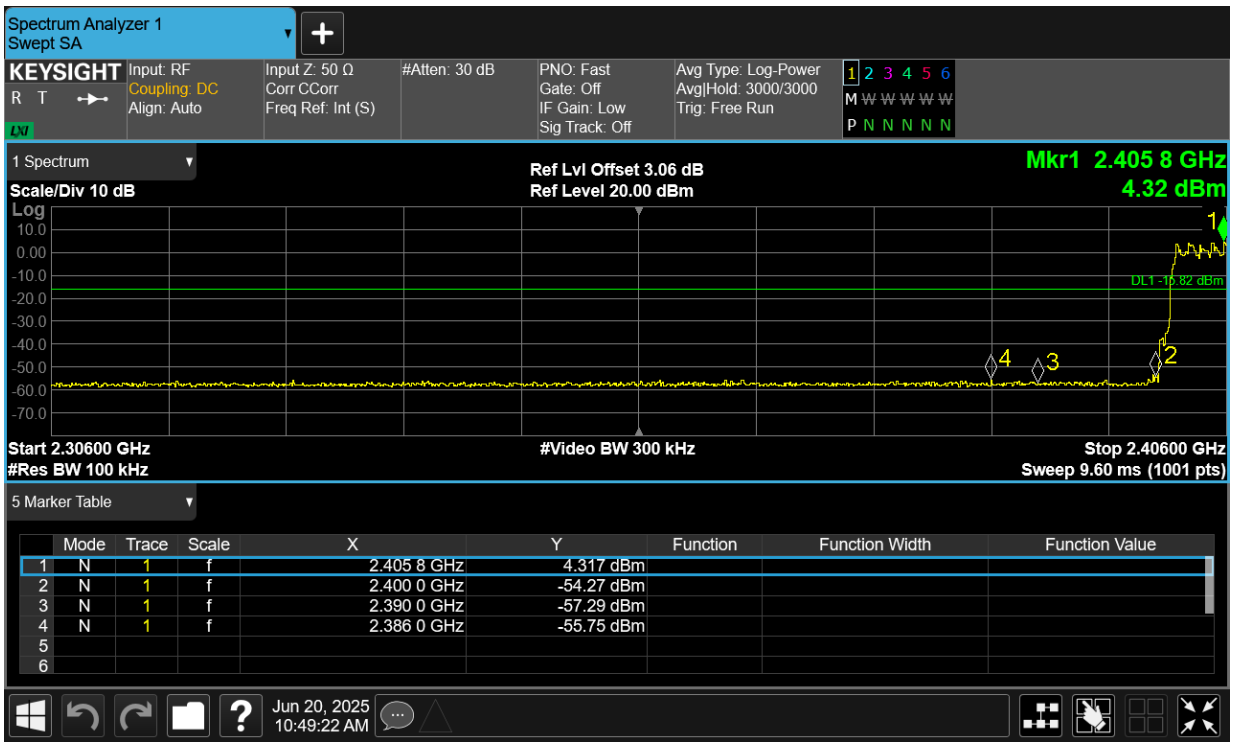
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



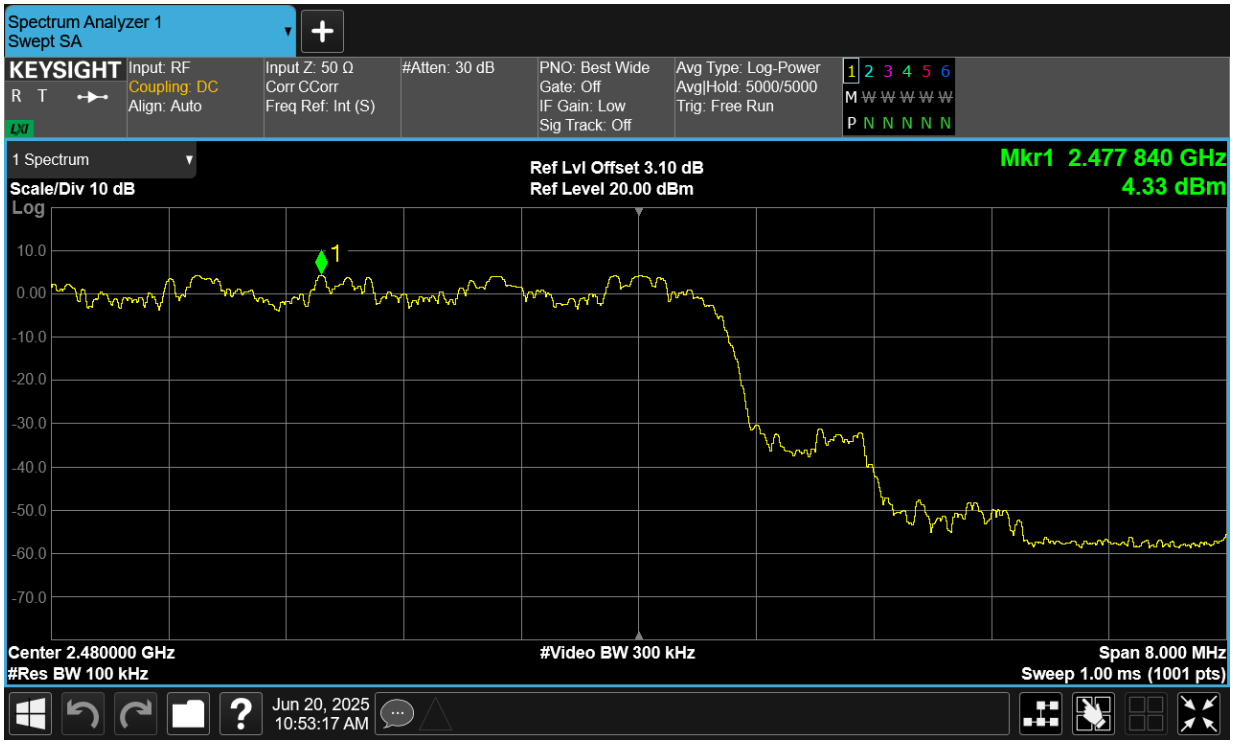
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Ref



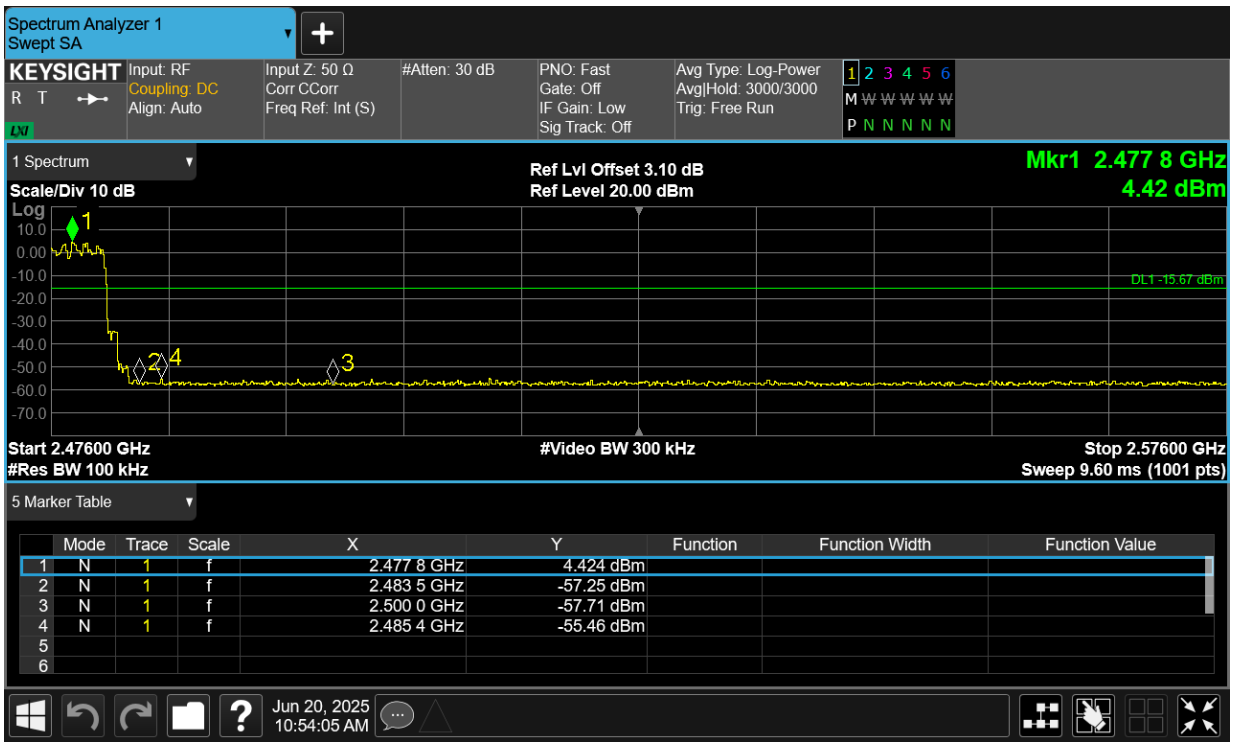
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission



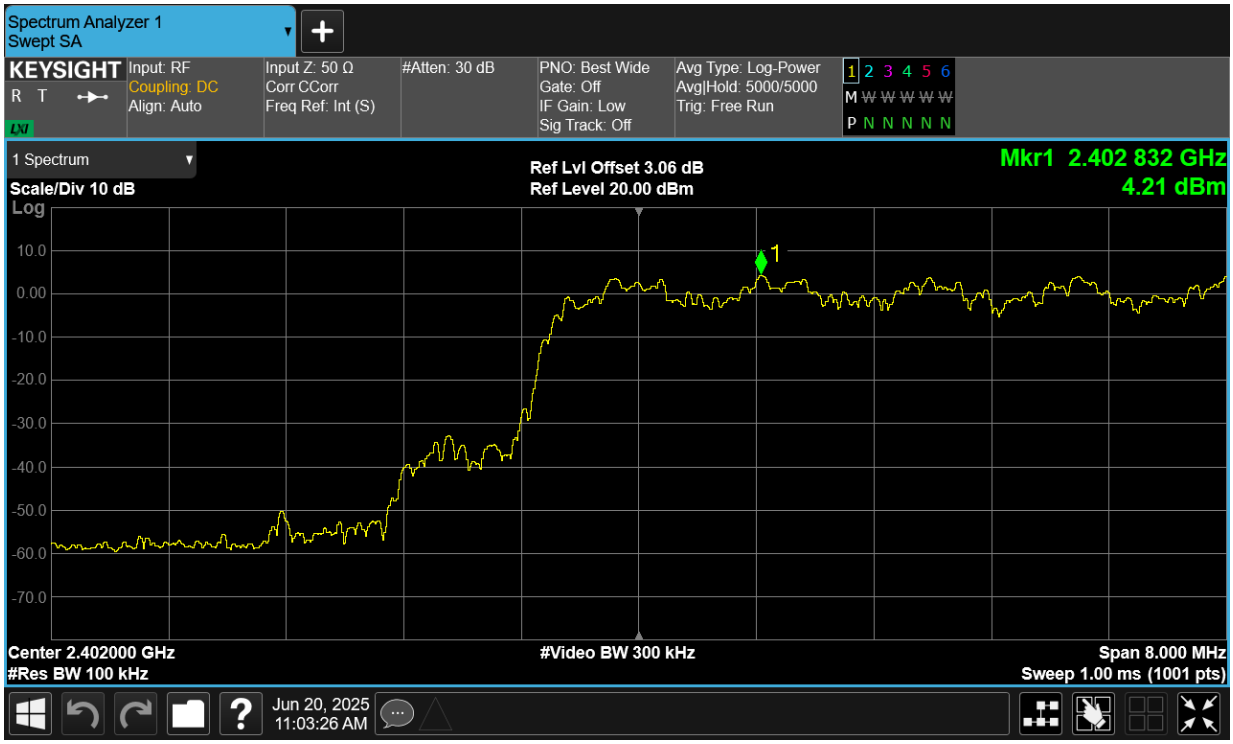
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Ref



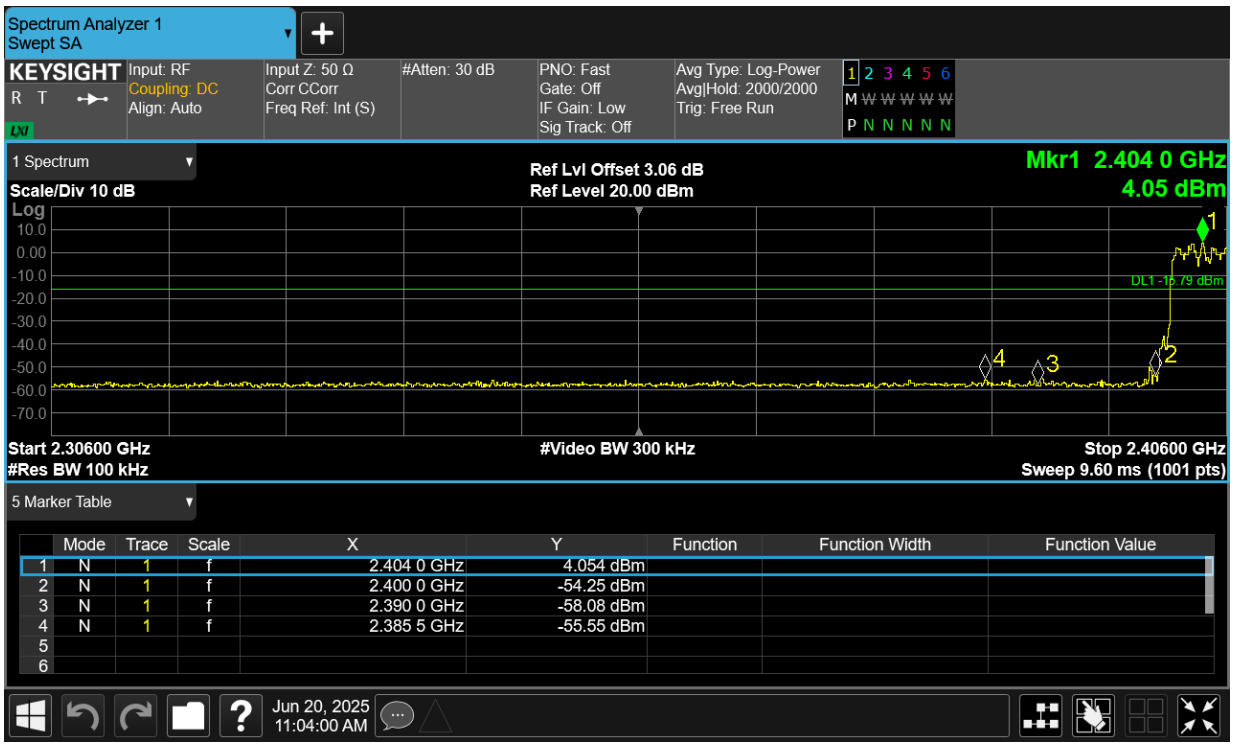
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Ref

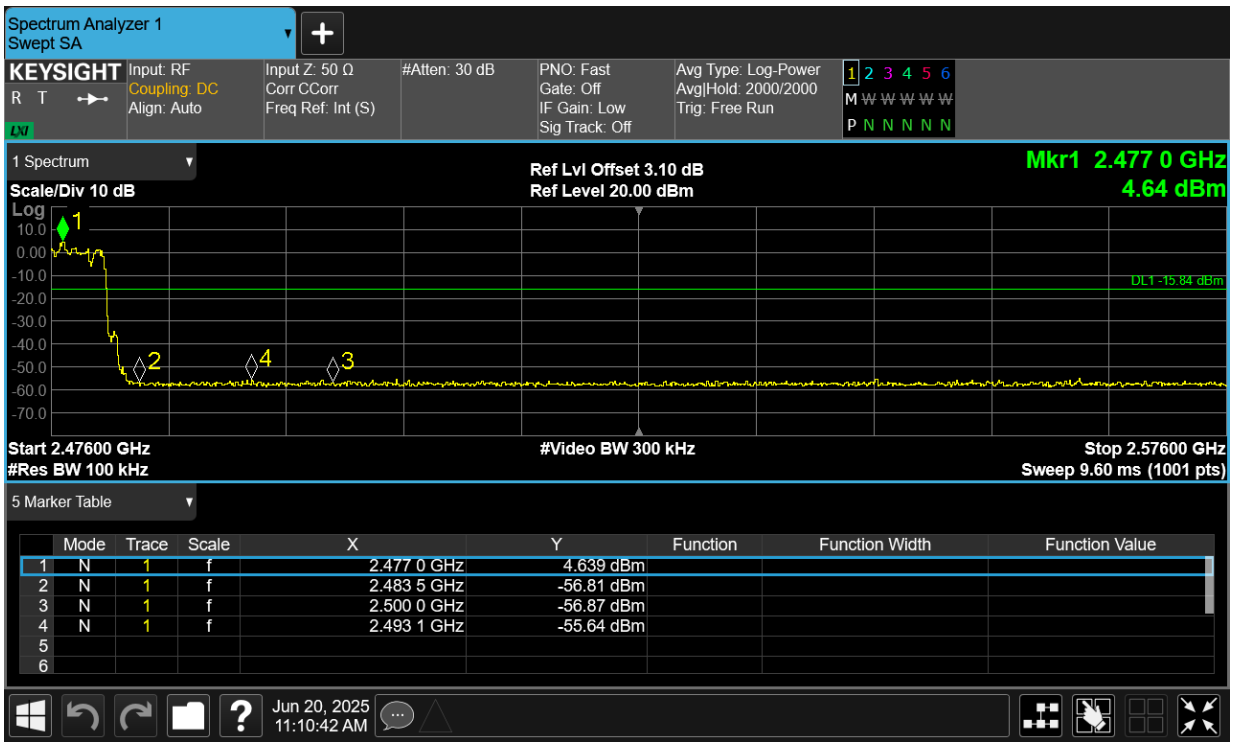


Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 3-DH1 2480MHz Ant1 Hopping Ref

Band Edge(Hopping) NVNT 3-DH1 2480MHz Ant1 Hopping Emission

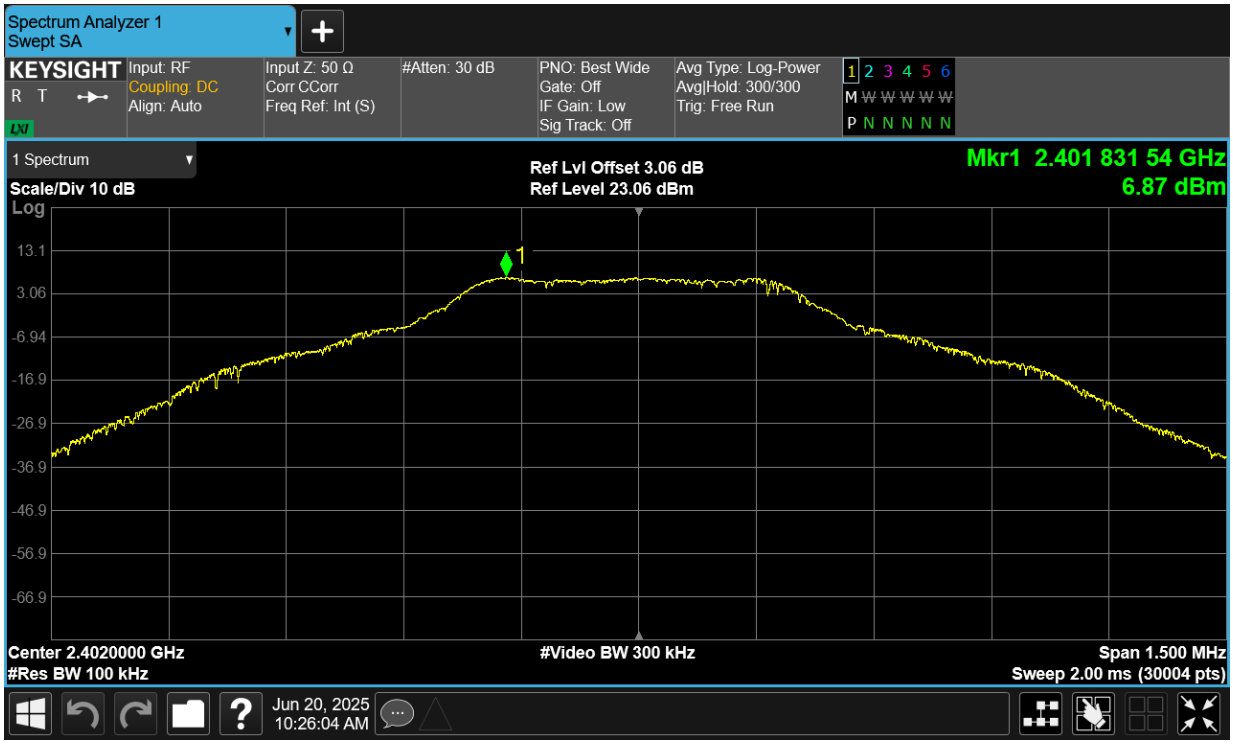


Conducted RF Spurious Emission

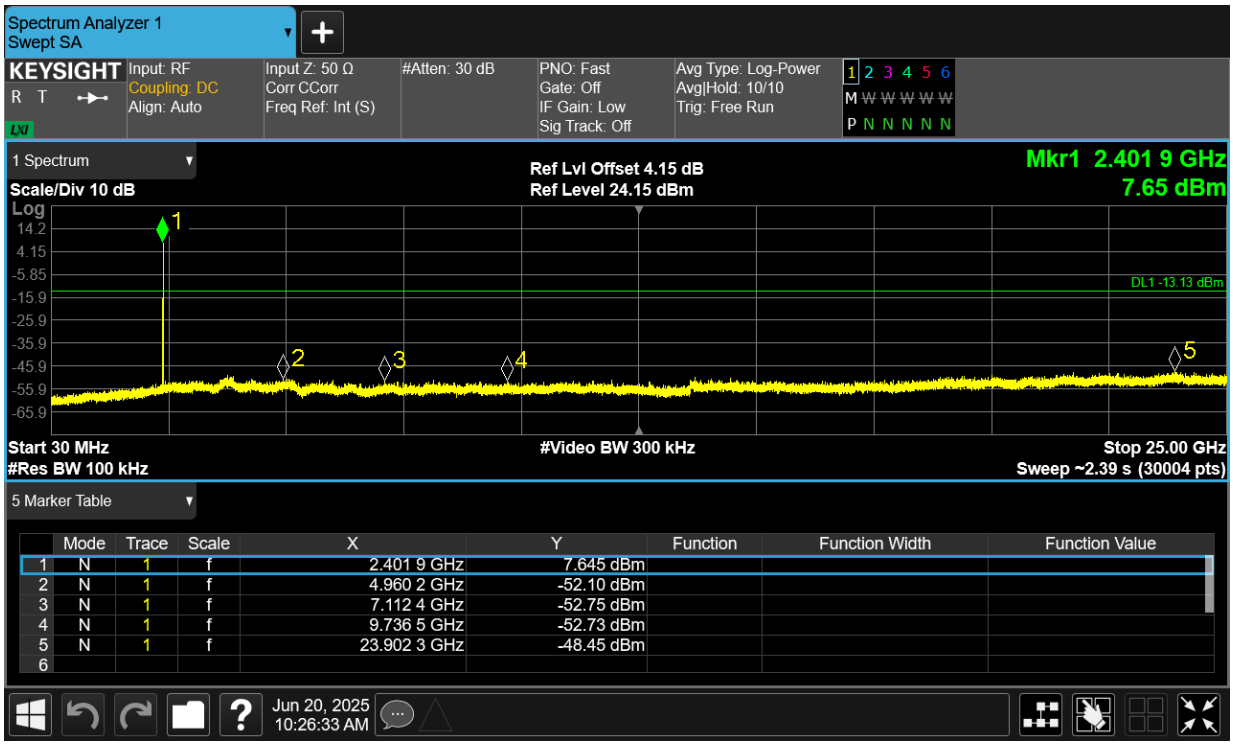
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-55.32	-20	Pass
NVNT	1-DH1	2441	Ant1	-54.34	-20	Pass
NVNT	1-DH1	2480	Ant1	-55.63	-20	Pass
NVNT	2-DH1	2402	Ant1	-52.31	-20	Pass
NVNT	2-DH1	2441	Ant1	-52.14	-20	Pass
NVNT	2-DH1	2480	Ant1	-52.57	-20	Pass
NVNT	3-DH1	2402	Ant1	-52.31	-20	Pass
NVNT	3-DH1	2441	Ant1	-51.85	-20	Pass
NVNT	3-DH1	2480	Ant1	-52.43	-20	Pass

Test Graphs

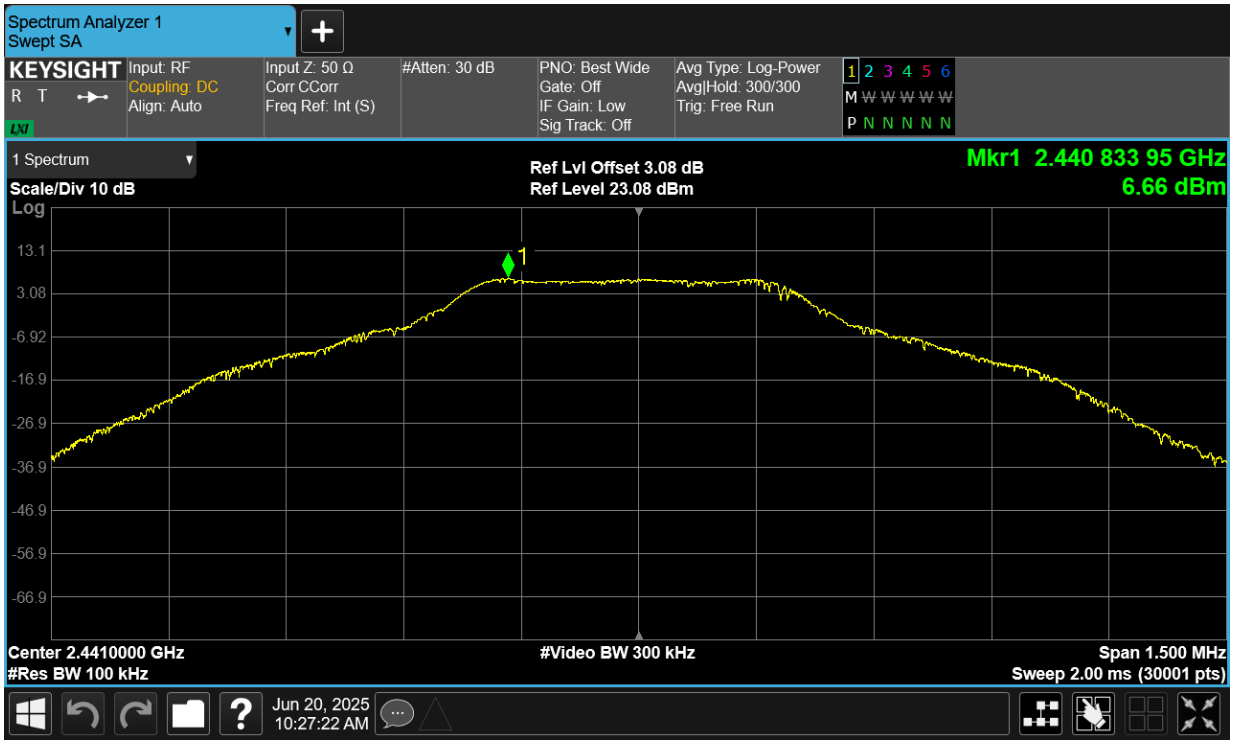
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



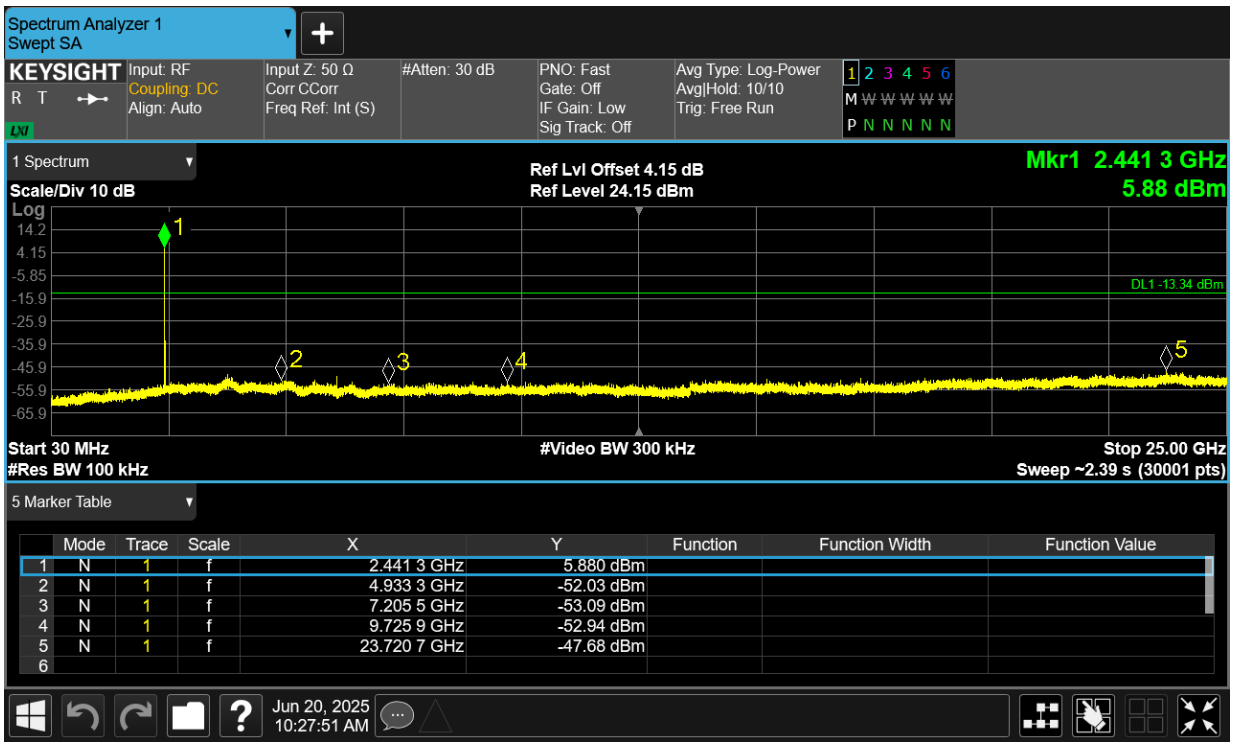
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



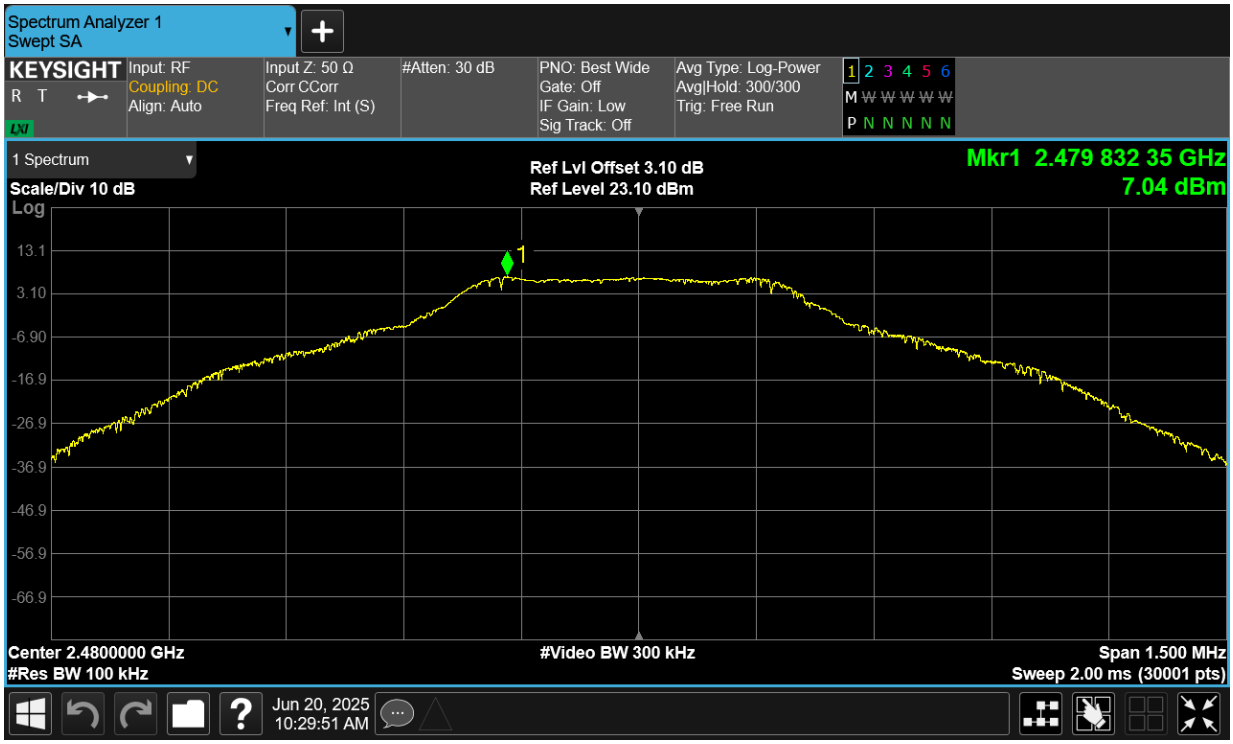
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



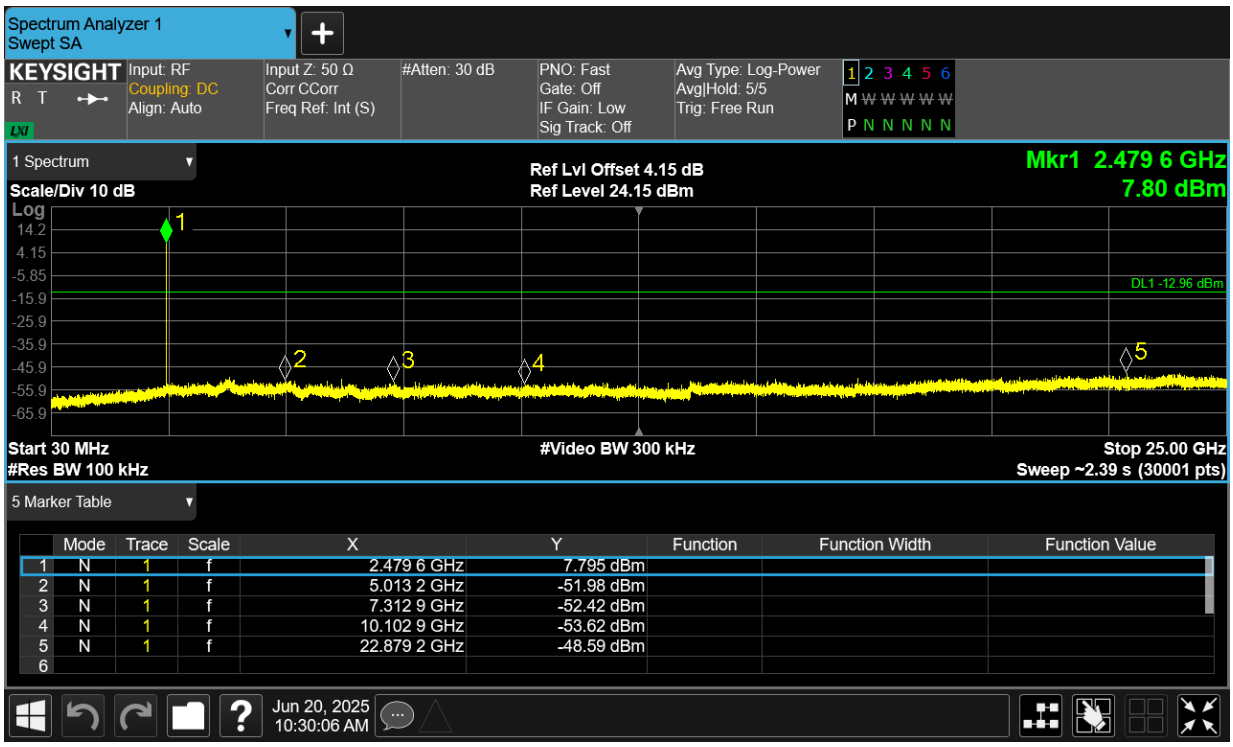
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



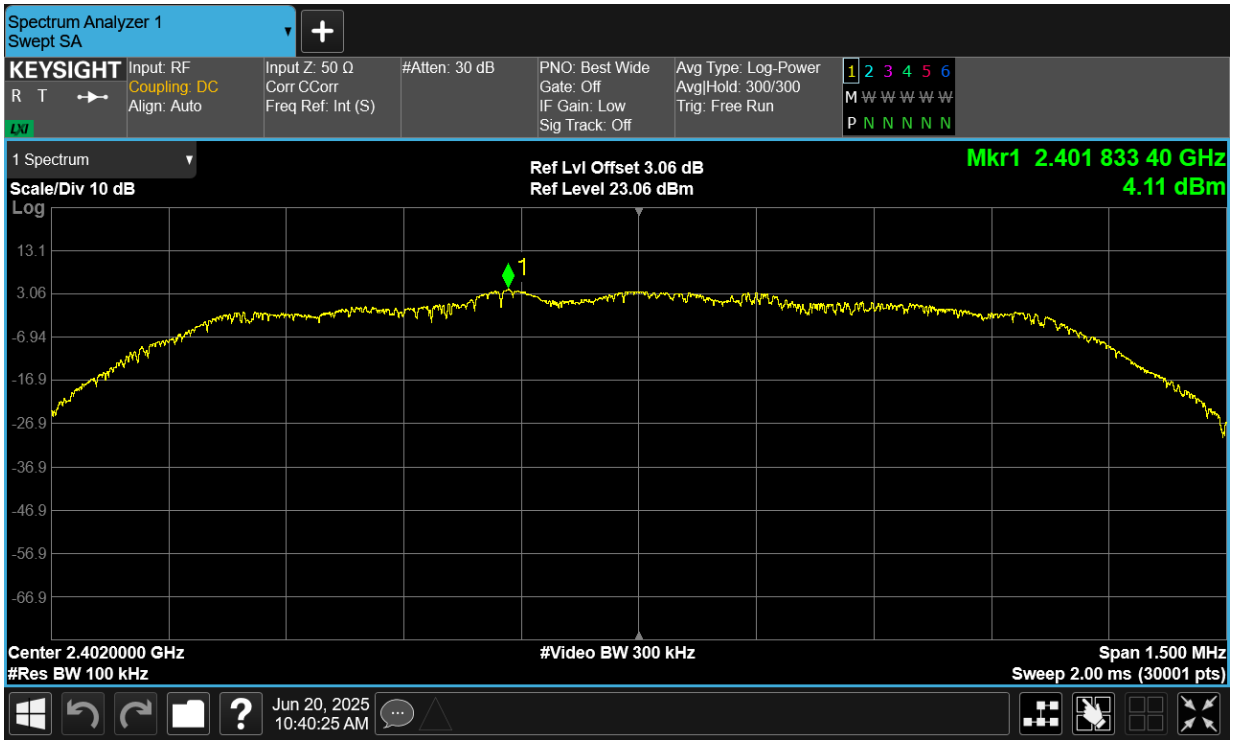
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



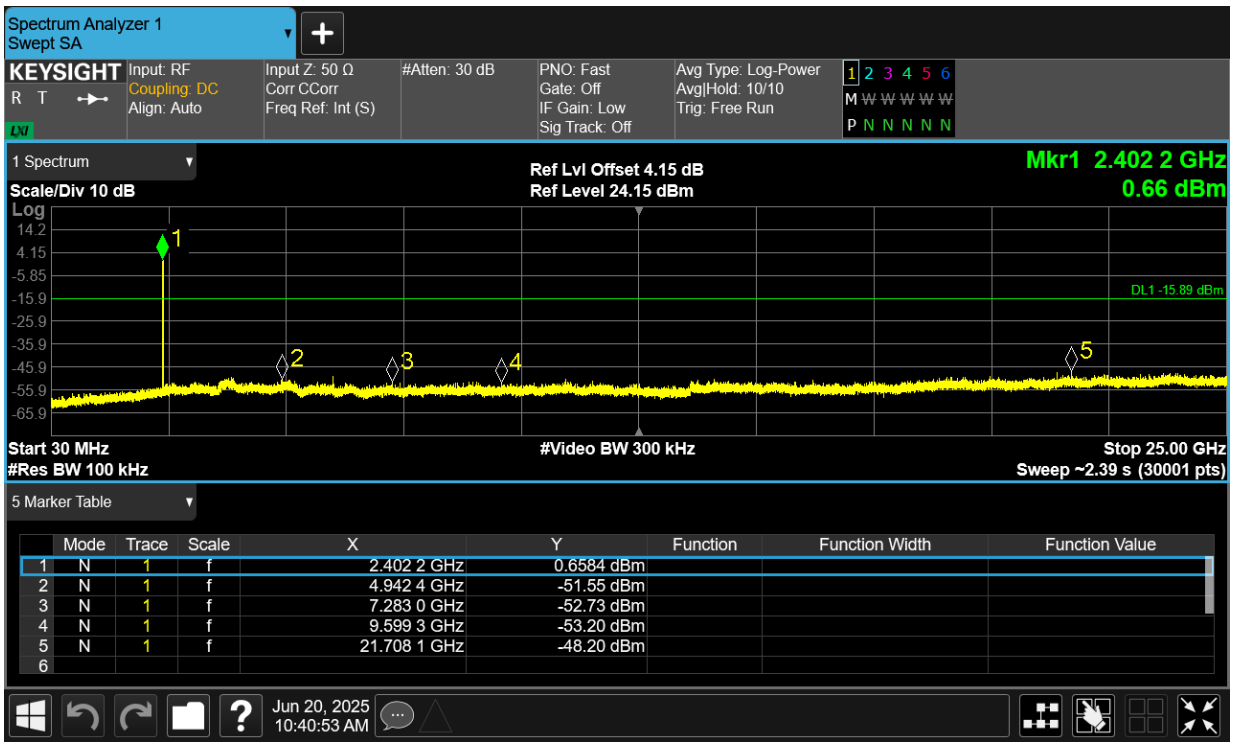
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



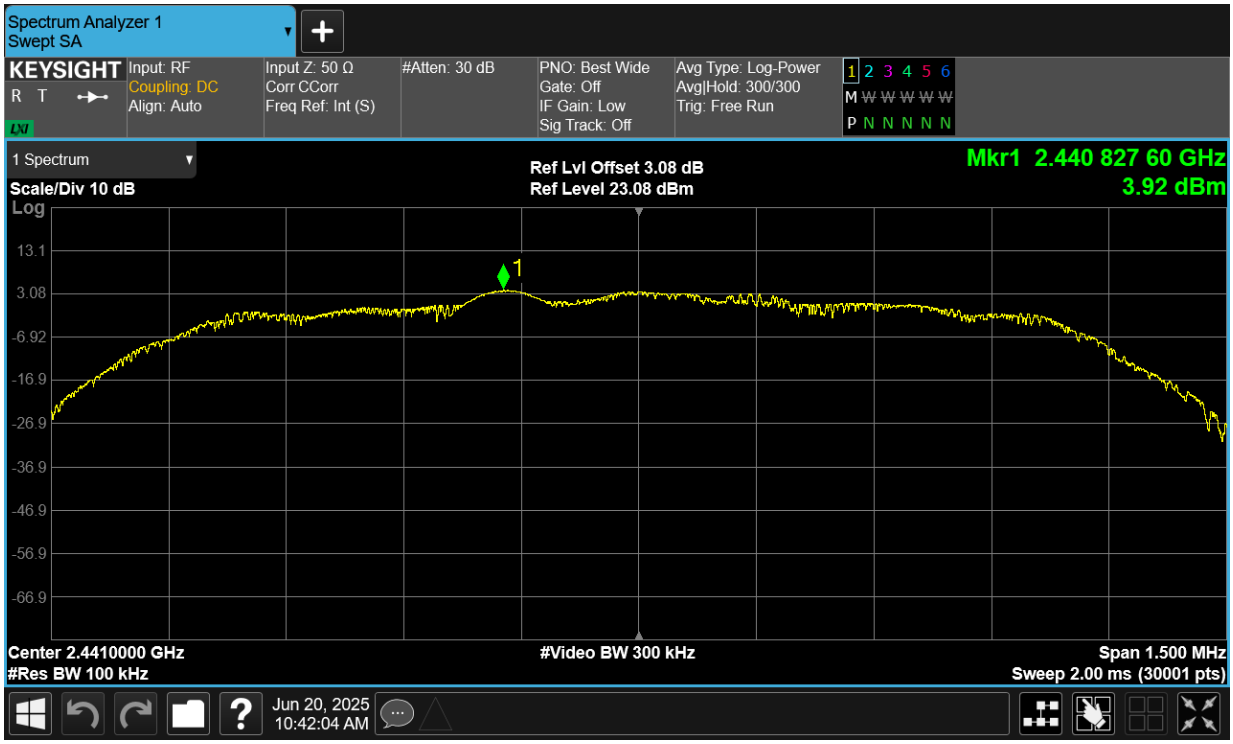
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



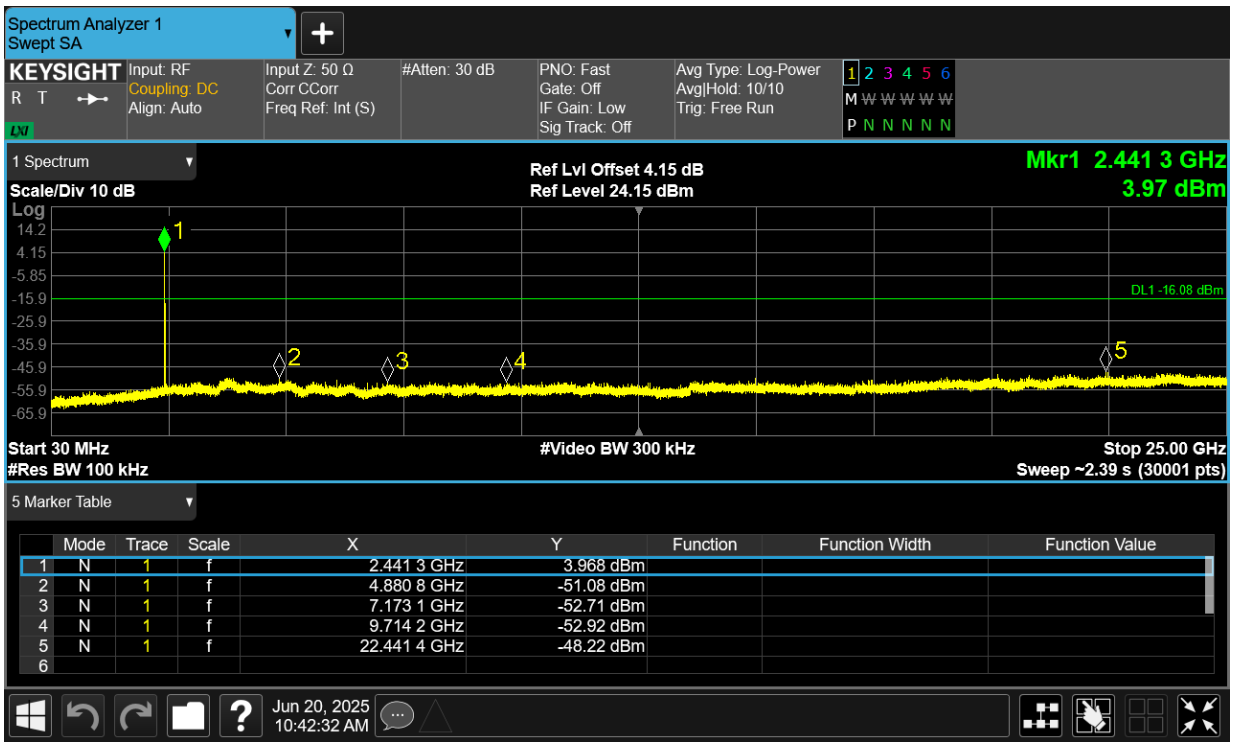
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



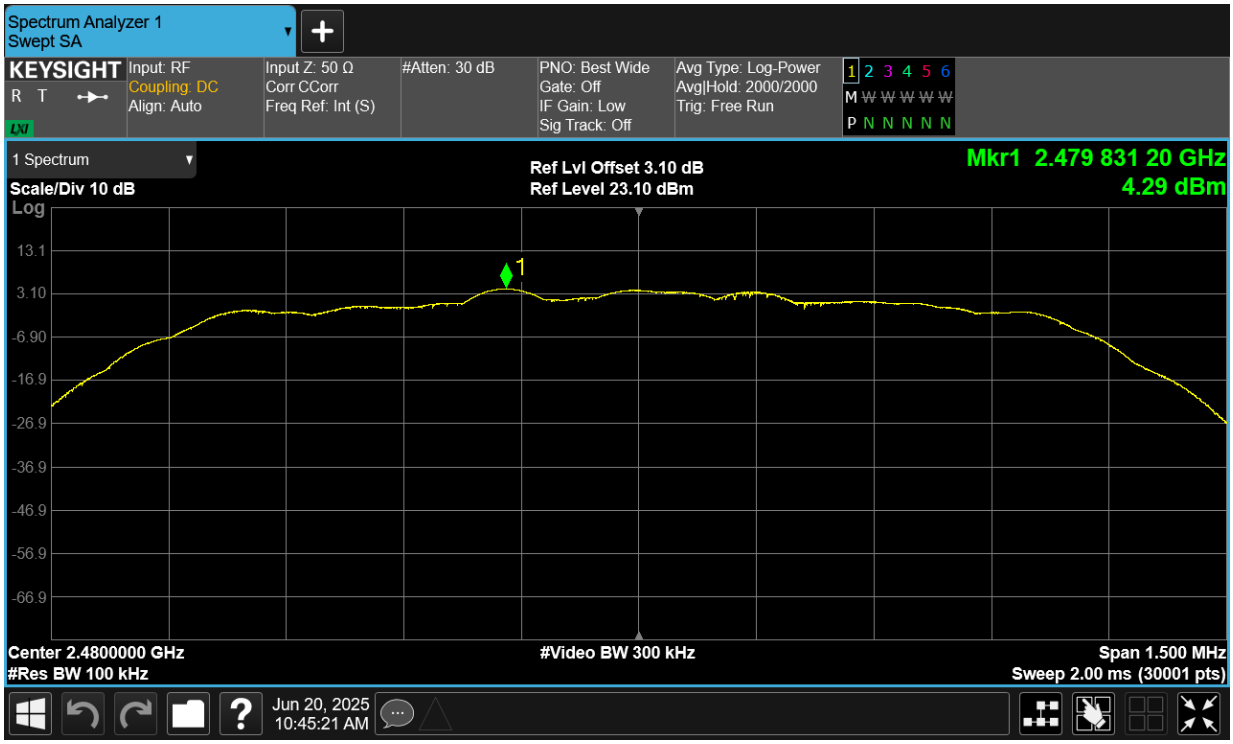
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



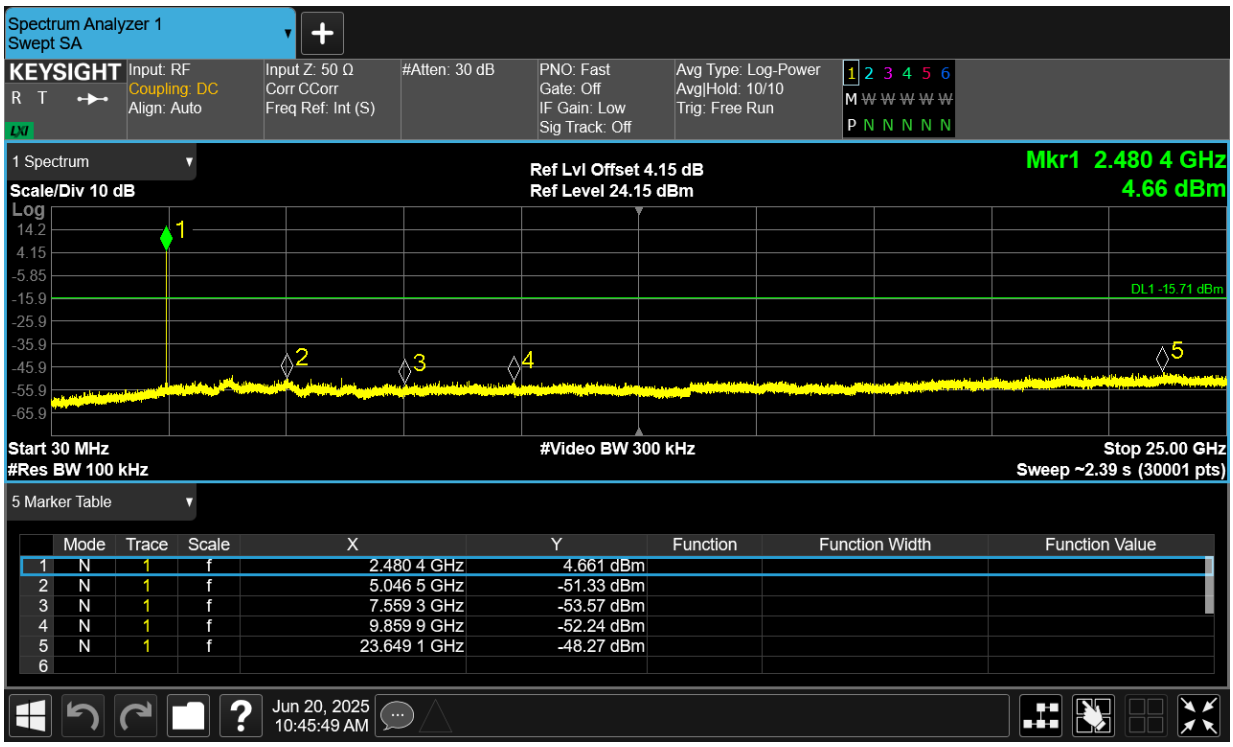
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



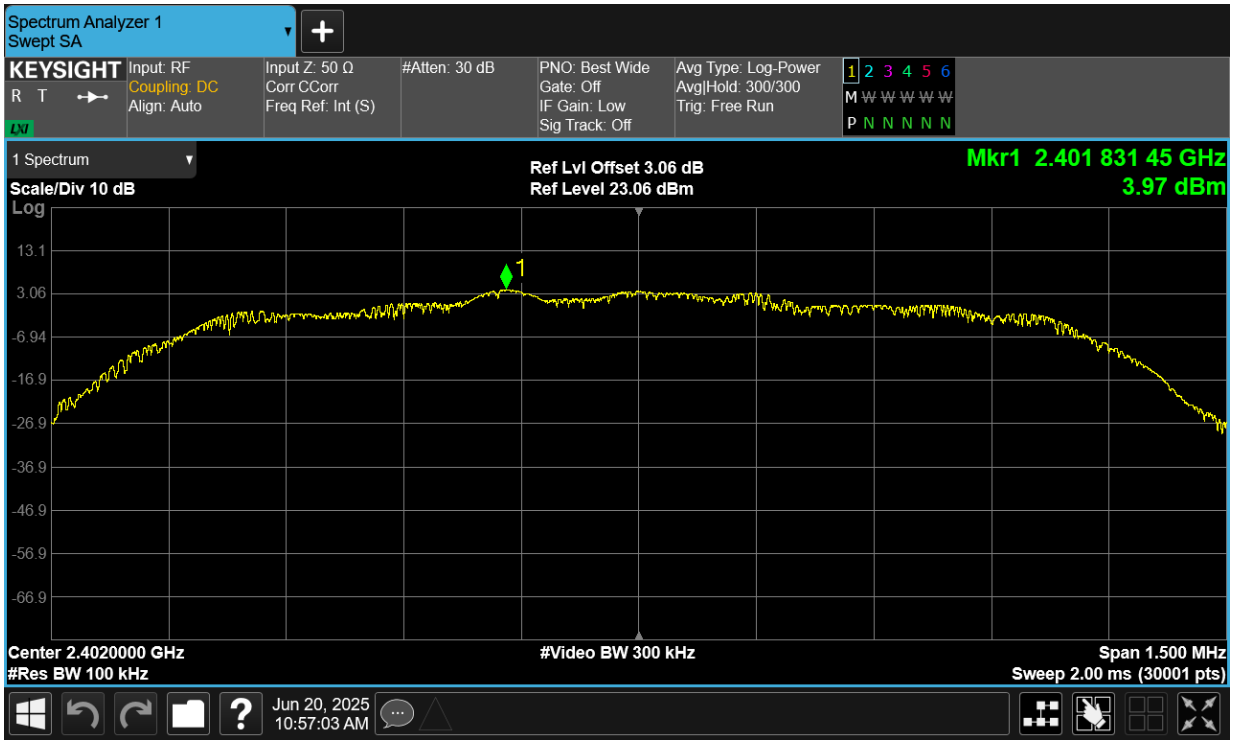
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



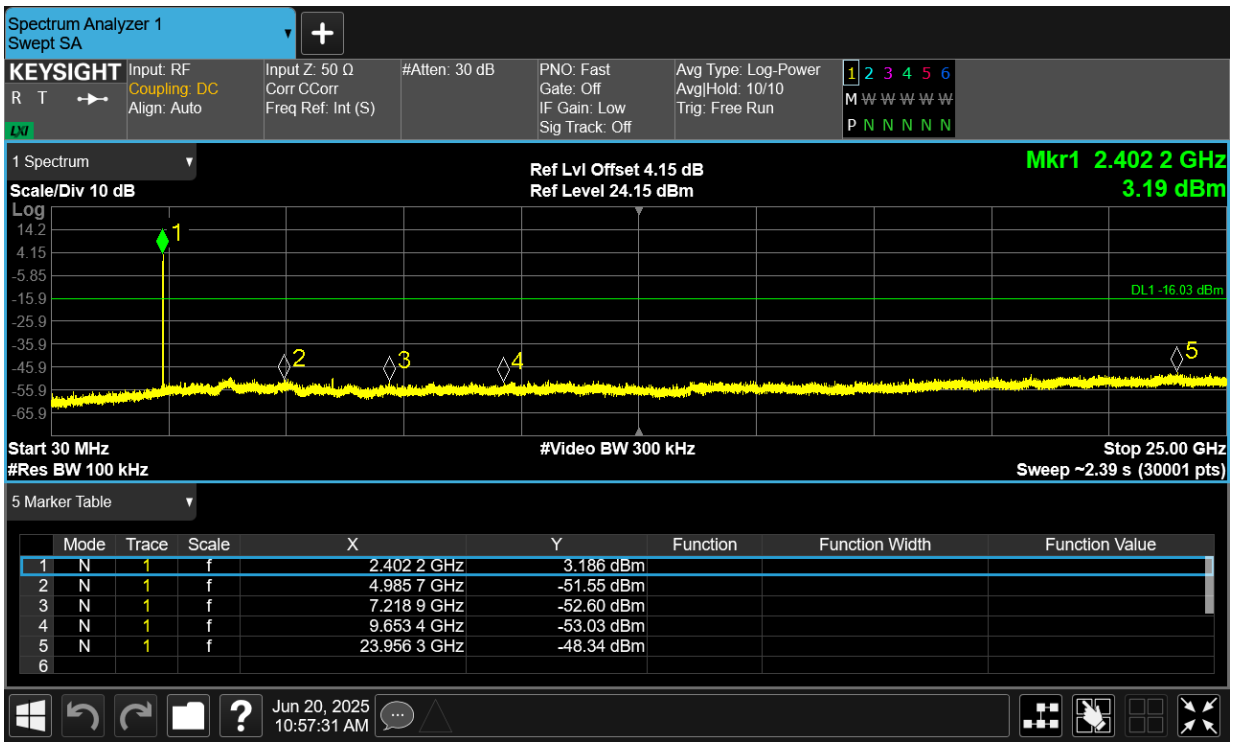
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission



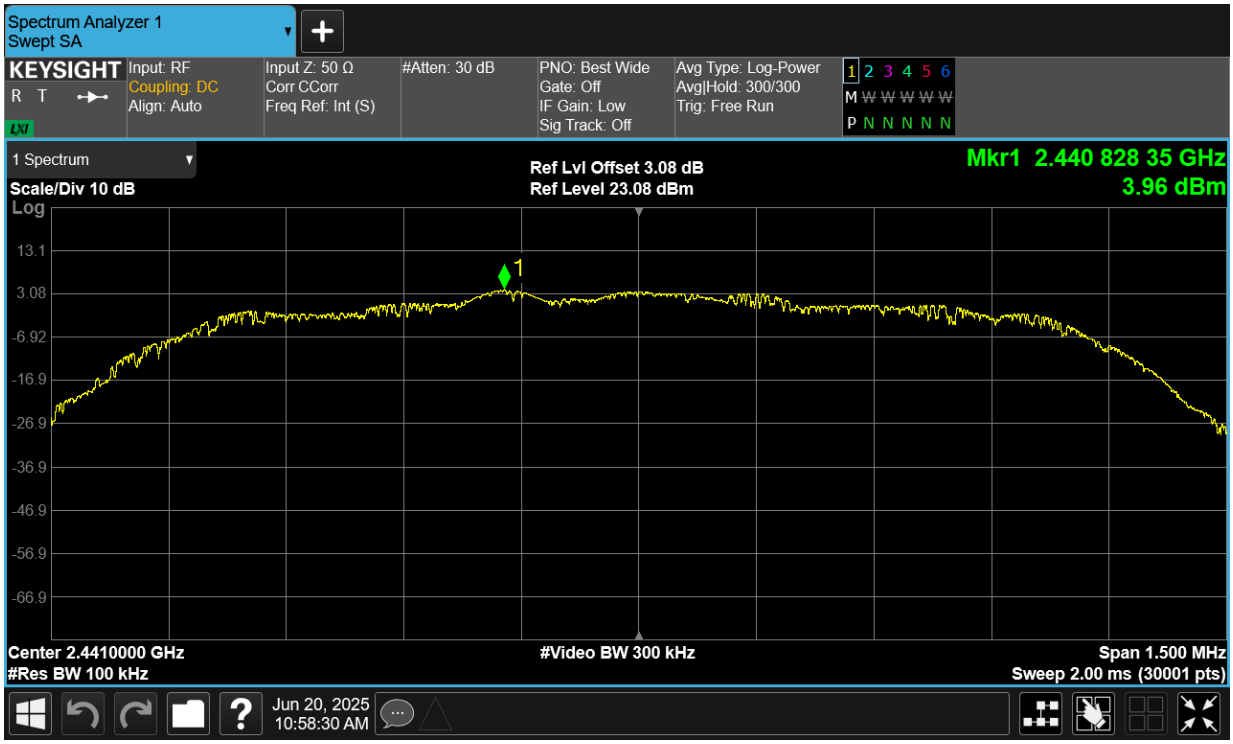
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



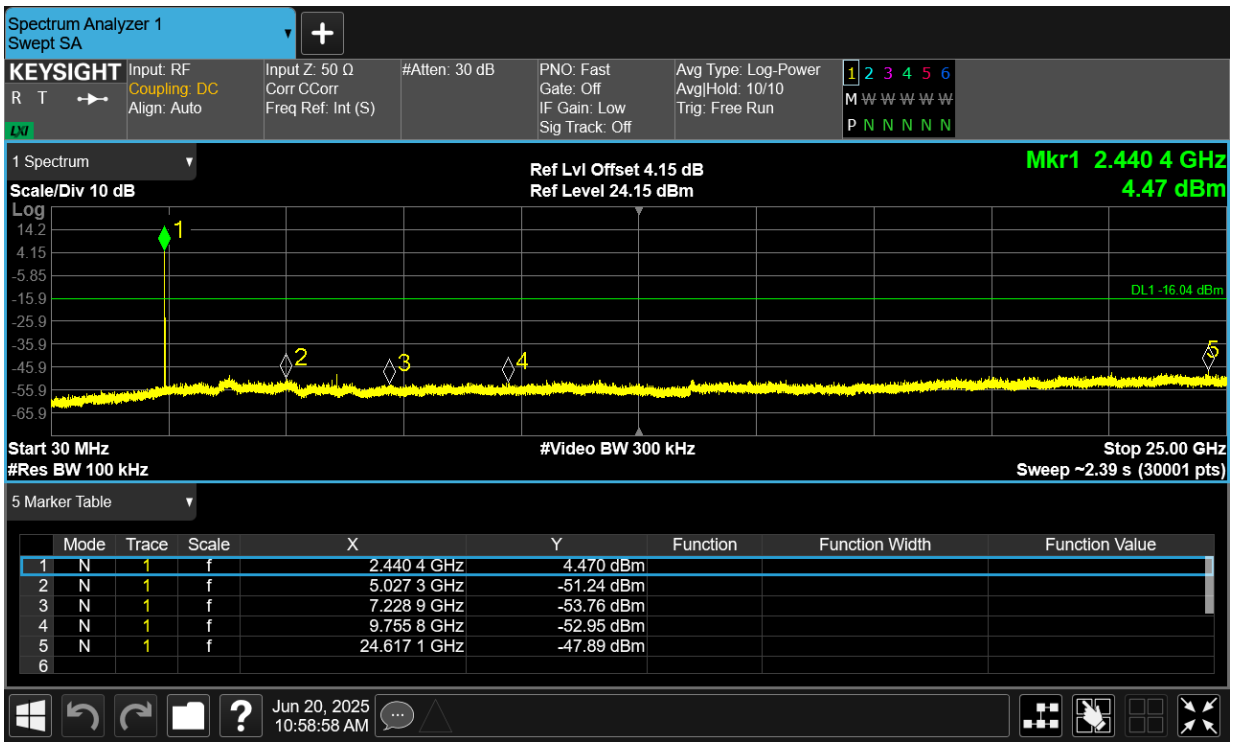
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Emission



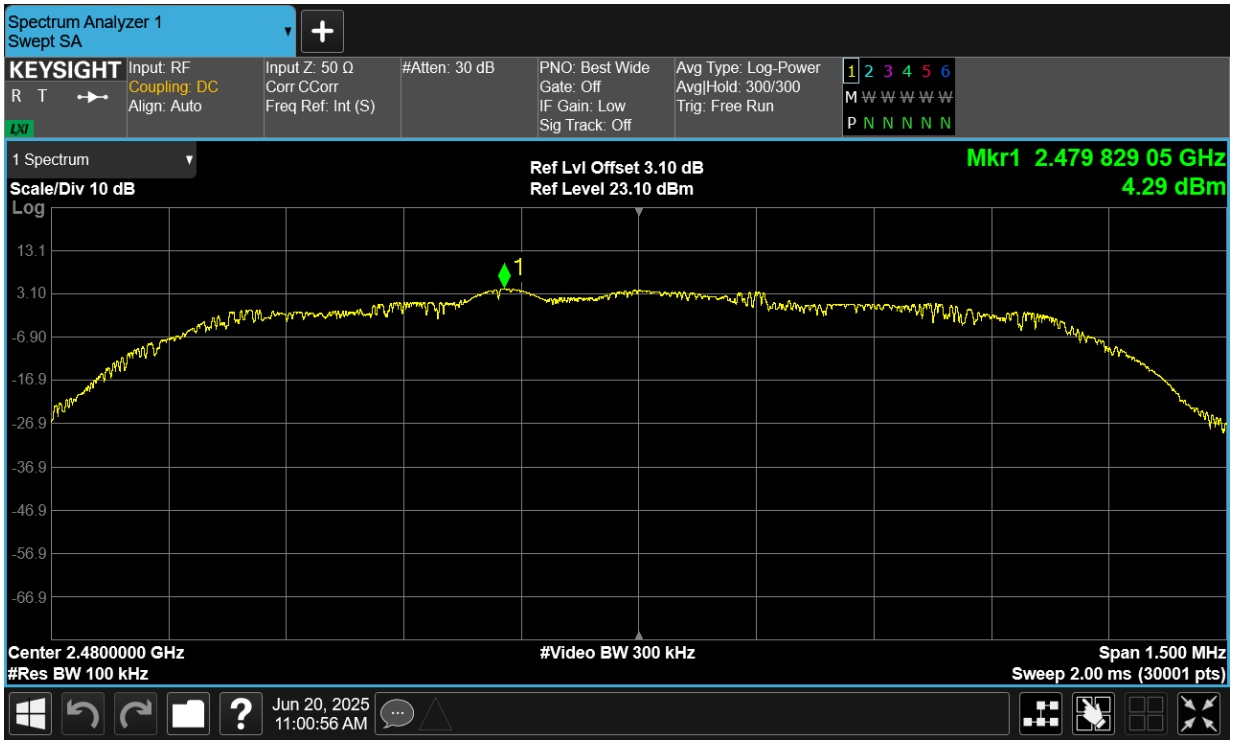
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref



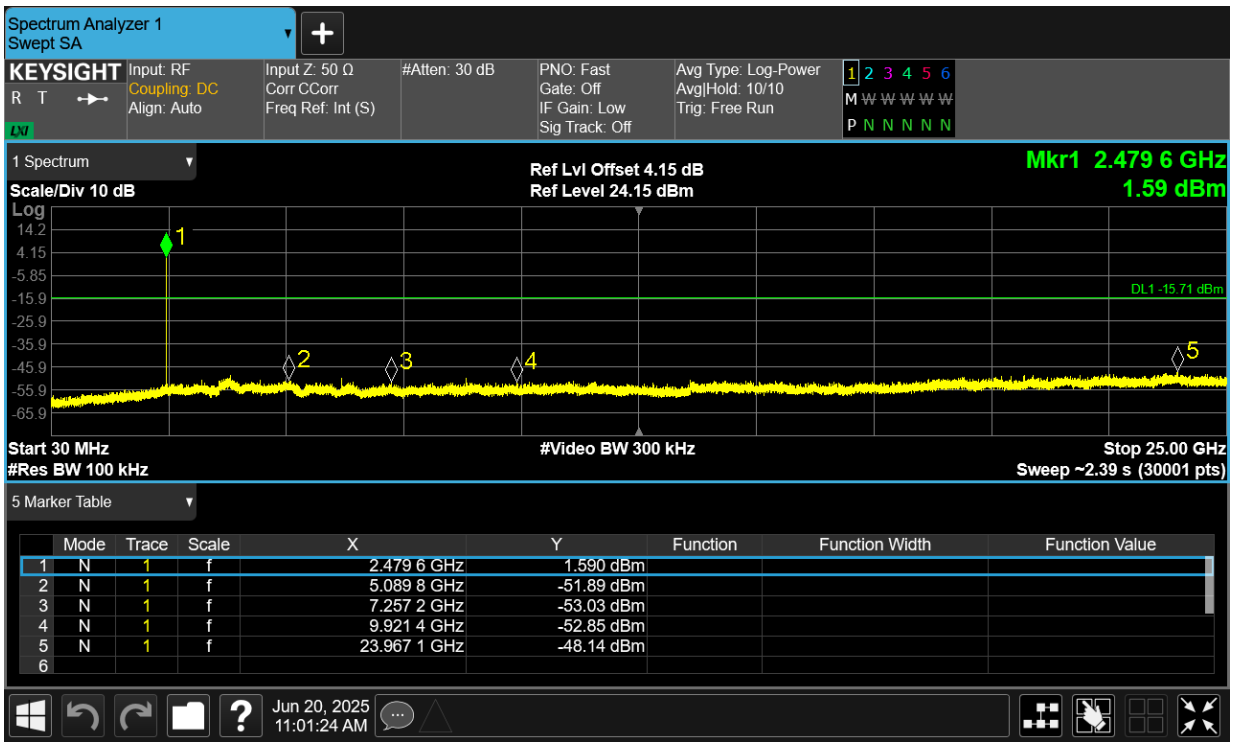
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

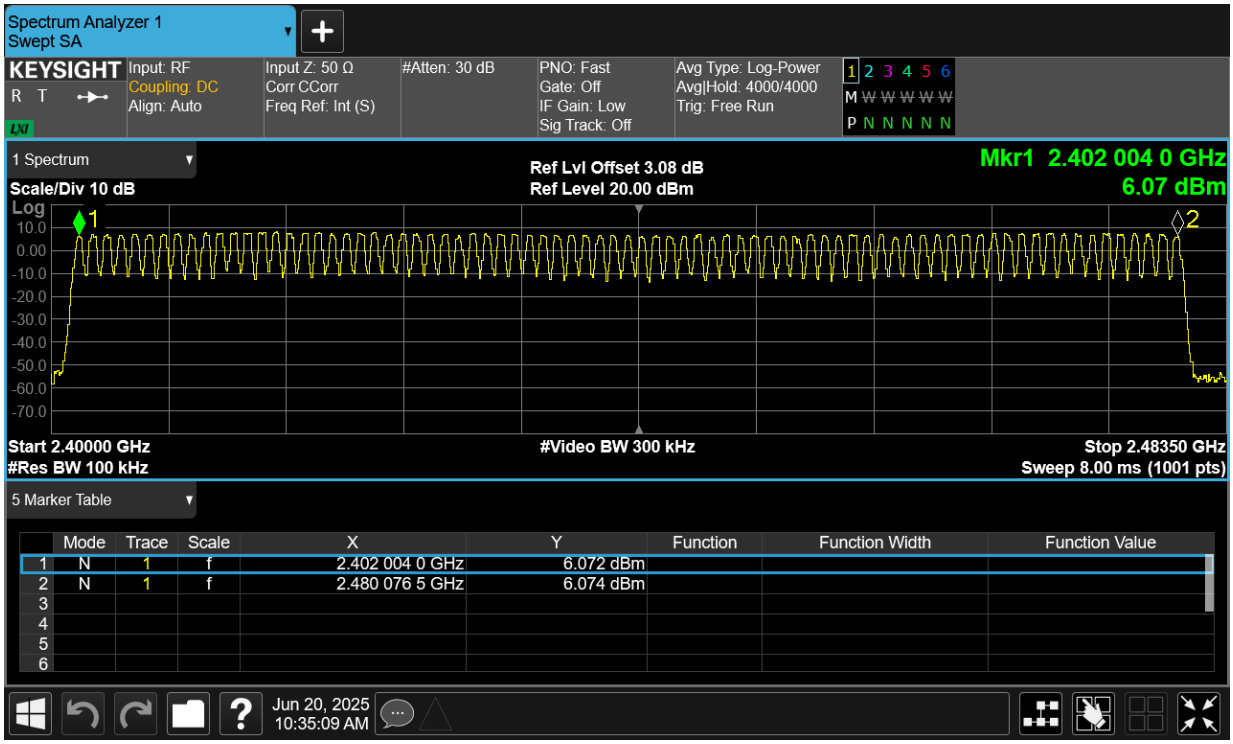


Number of Hopping Channel

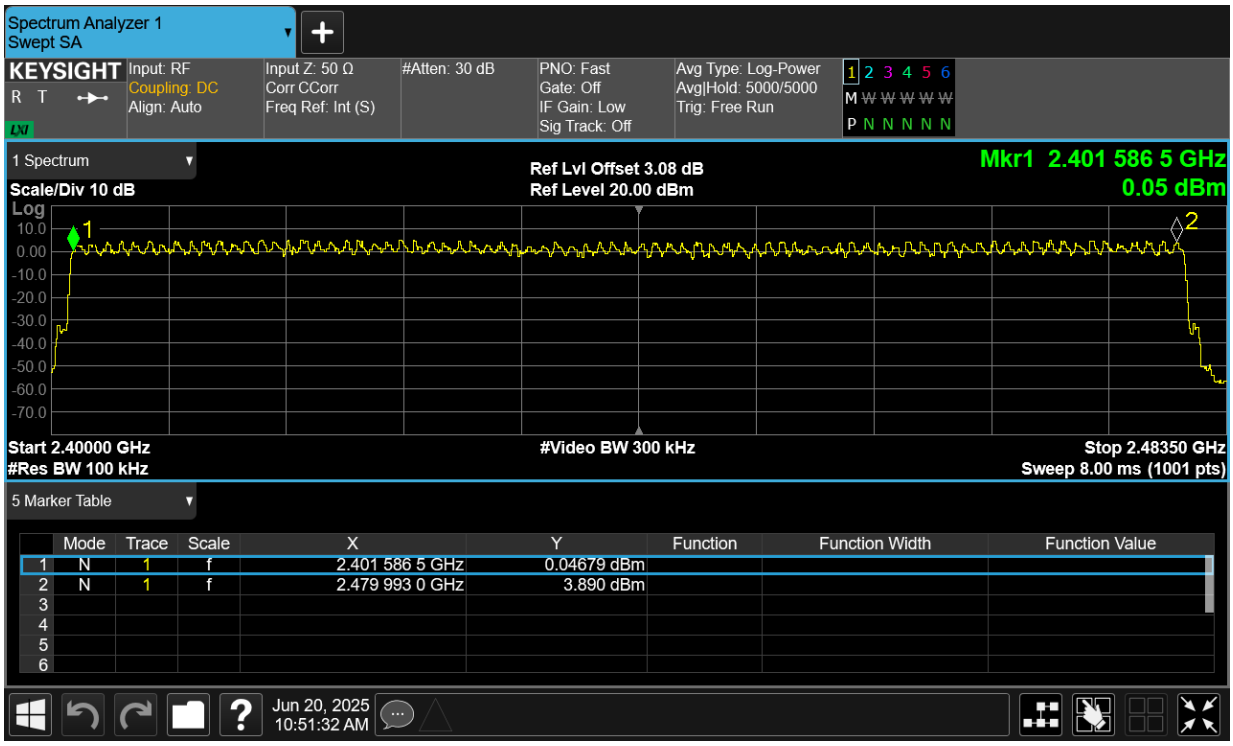
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

Test Graphs

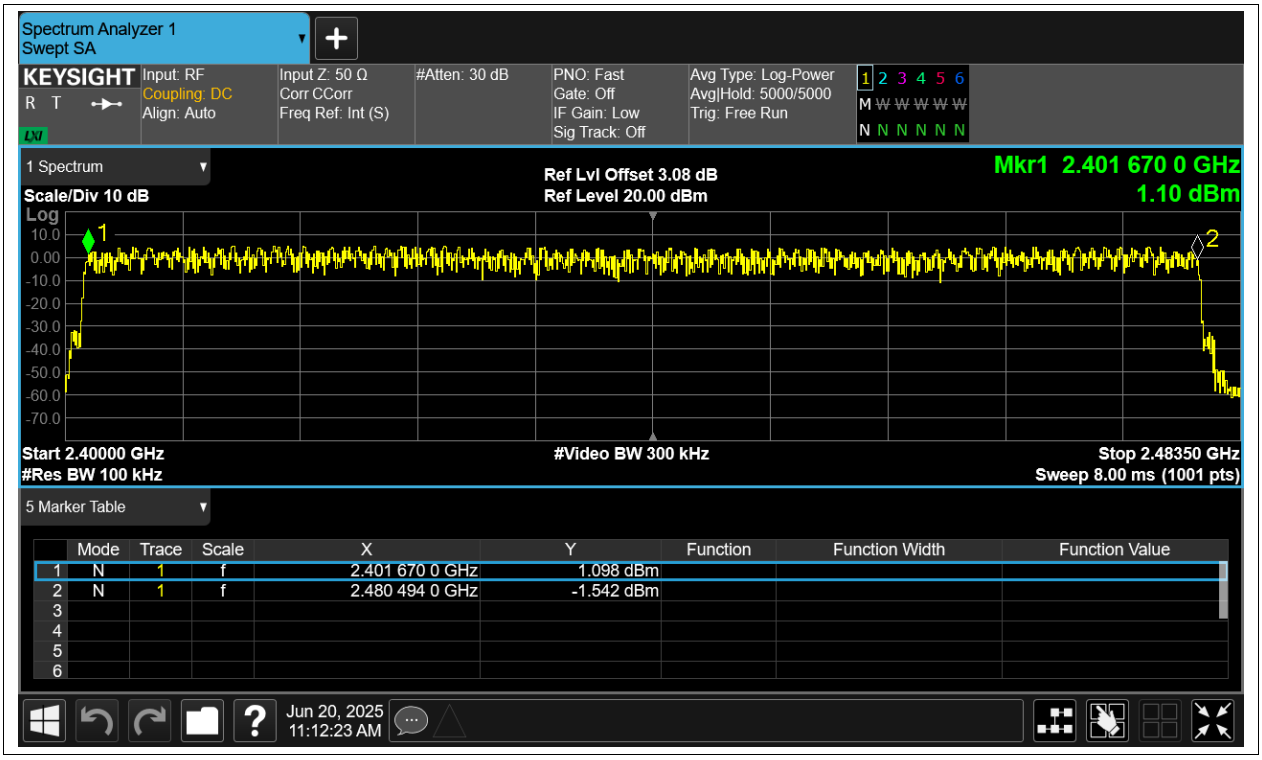
Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



Hopping No. NVNT 3-DH1 2441MHz Ant1

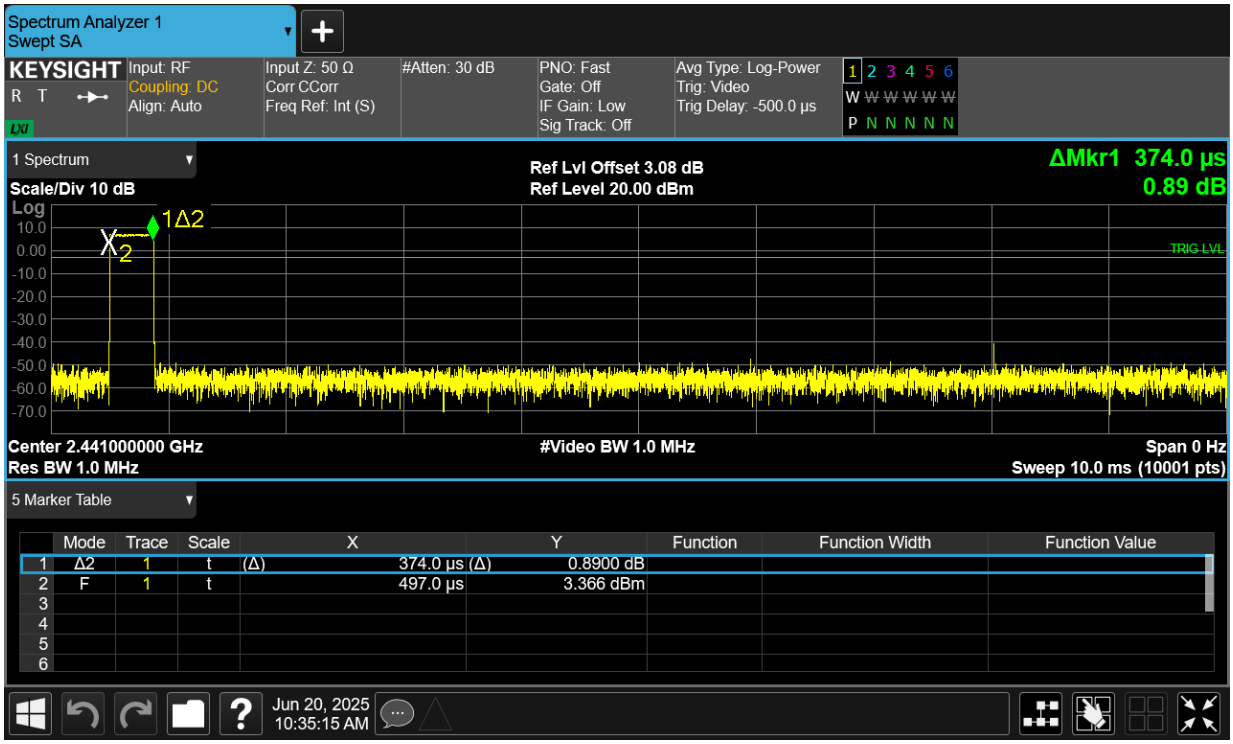

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
#Atten: 30 dB
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
Avg Type: Log-Power
Avg|Hold: 5000/5000
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Ref Lvl Offset 3.08 dB
Ref Level 20.00 dBm
Mkr1 2.401 670 0 GHz
1.10 dBm
Start 2.40000 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 2.48350 GHz
Sweep 8.00 ms (1001 pts)
5 Marker Table
Mode Trace Scale X Y Function Function Width Function Value
1 N 1 f 2.401 670 0 GHz 1.098 dBm
2 N 1 f 2.480 494 0 GHz -1.542 dBm
Jun 20, 2025
11:12:23 AM

Dwell Time

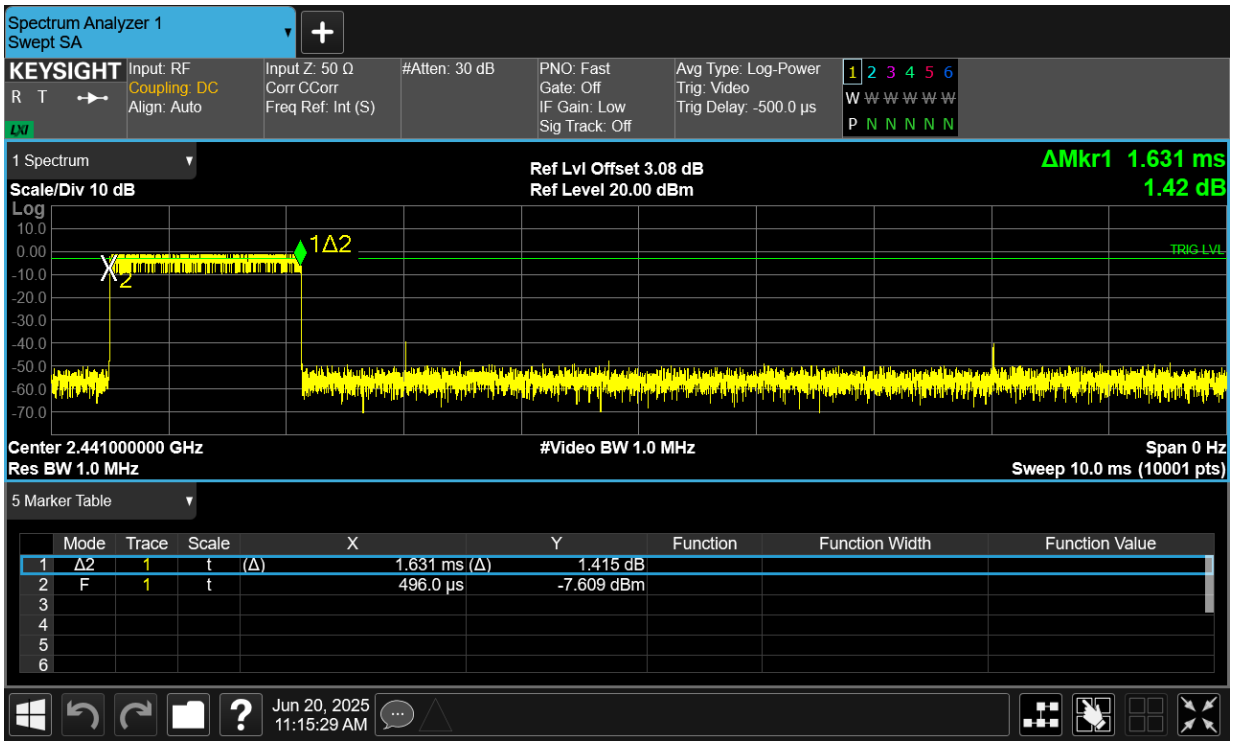
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.374	119.68	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.631	260.96	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.879	307.093	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.382	122.24	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.634	261.44	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.883	307.52	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.38	121.6	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.631	260.96	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.884	307.627	31600	400	Pass

Test Graphs

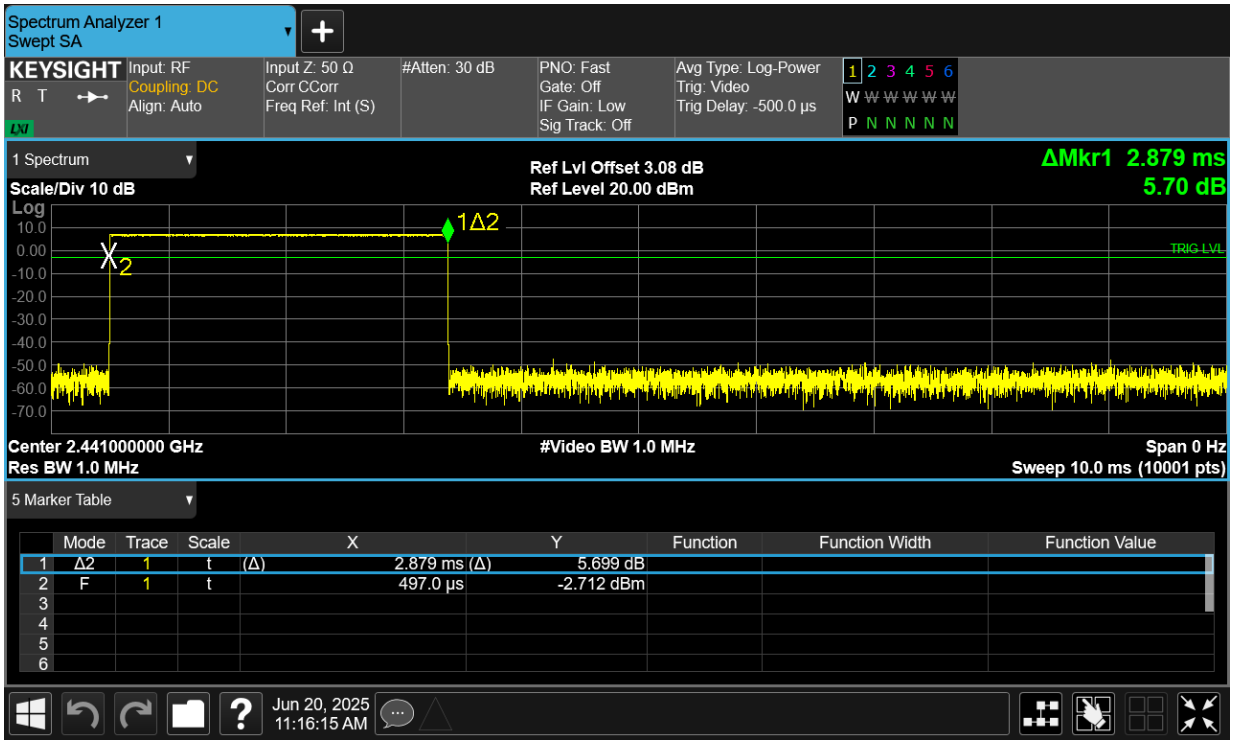
Dwell NVNT 1-DH1 2441MHz Ant1



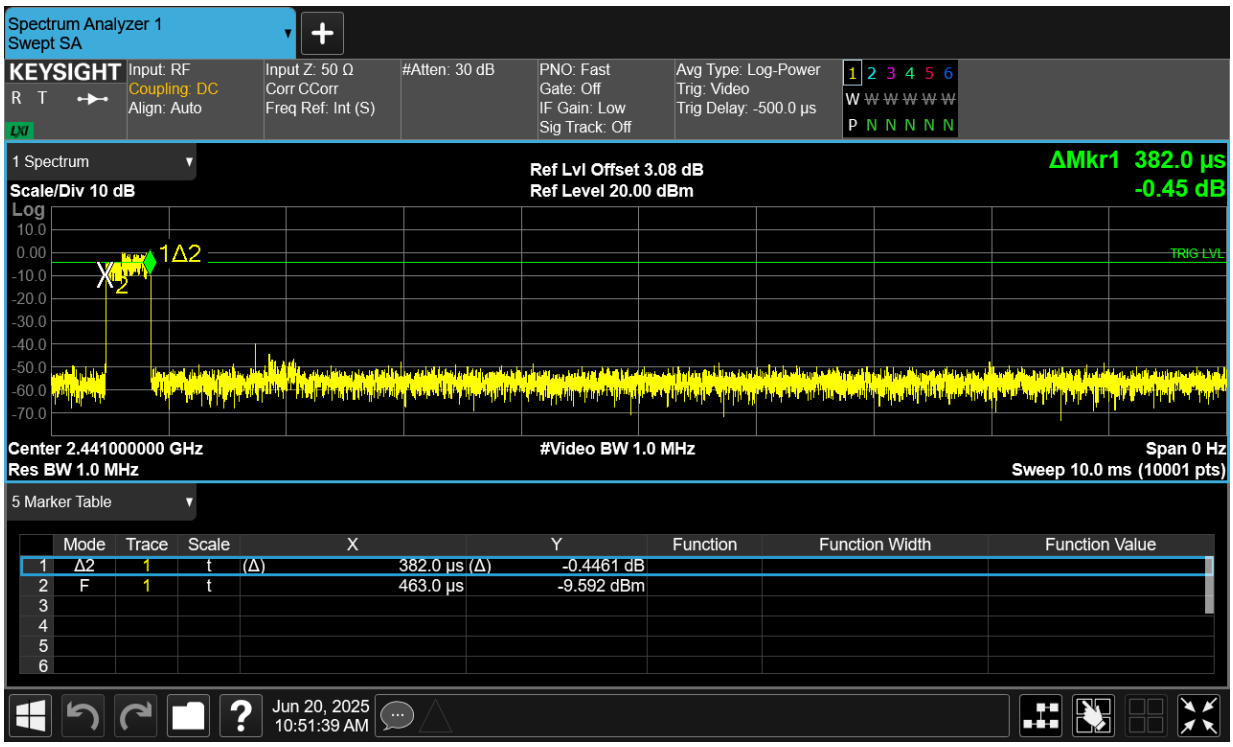
Dwell NVNT 1-DH3 2441MHz Ant1



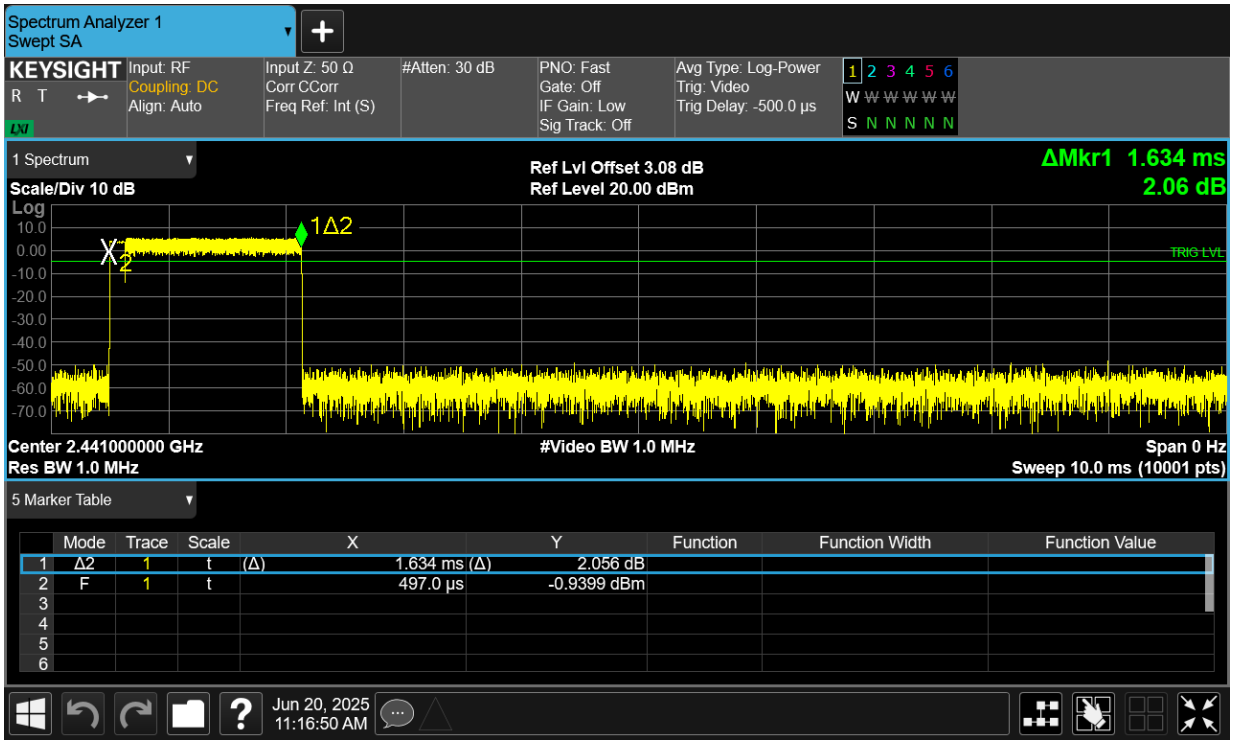
Dwell NVNT 1-DH5 2441MHz Ant1



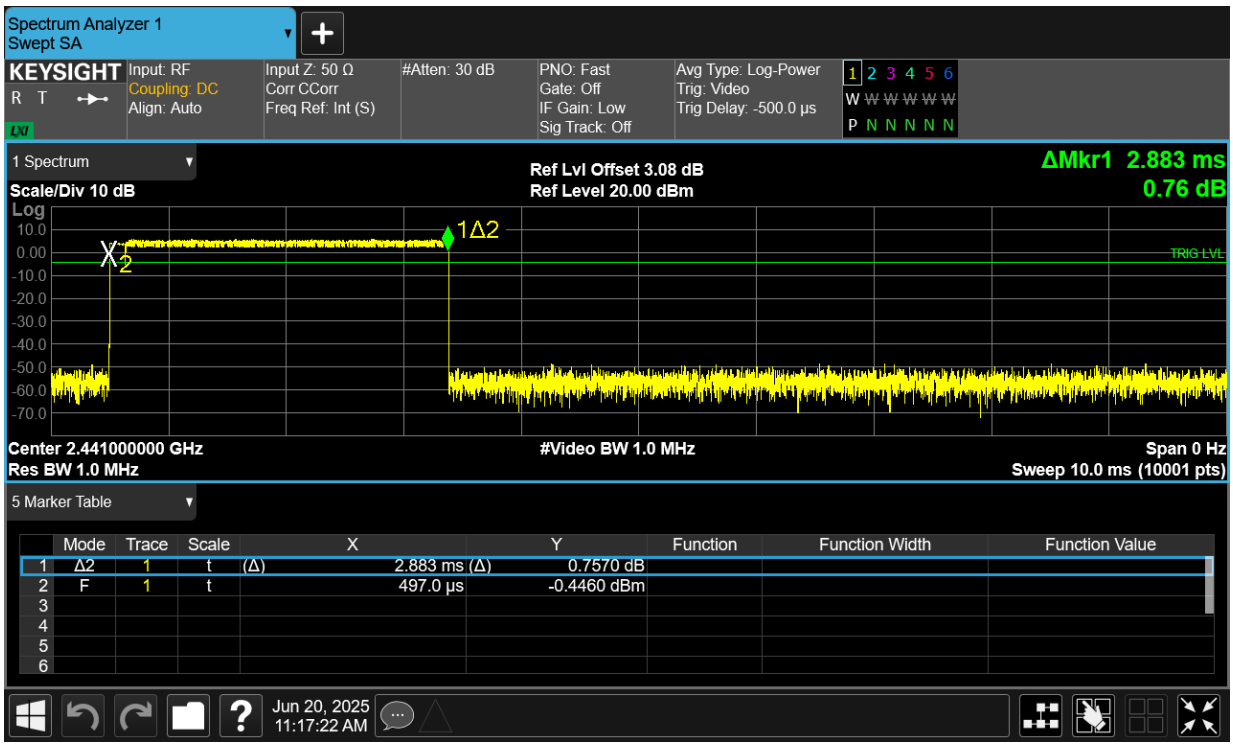
Dwell NVNT 2-DH1 2441MHz Ant1



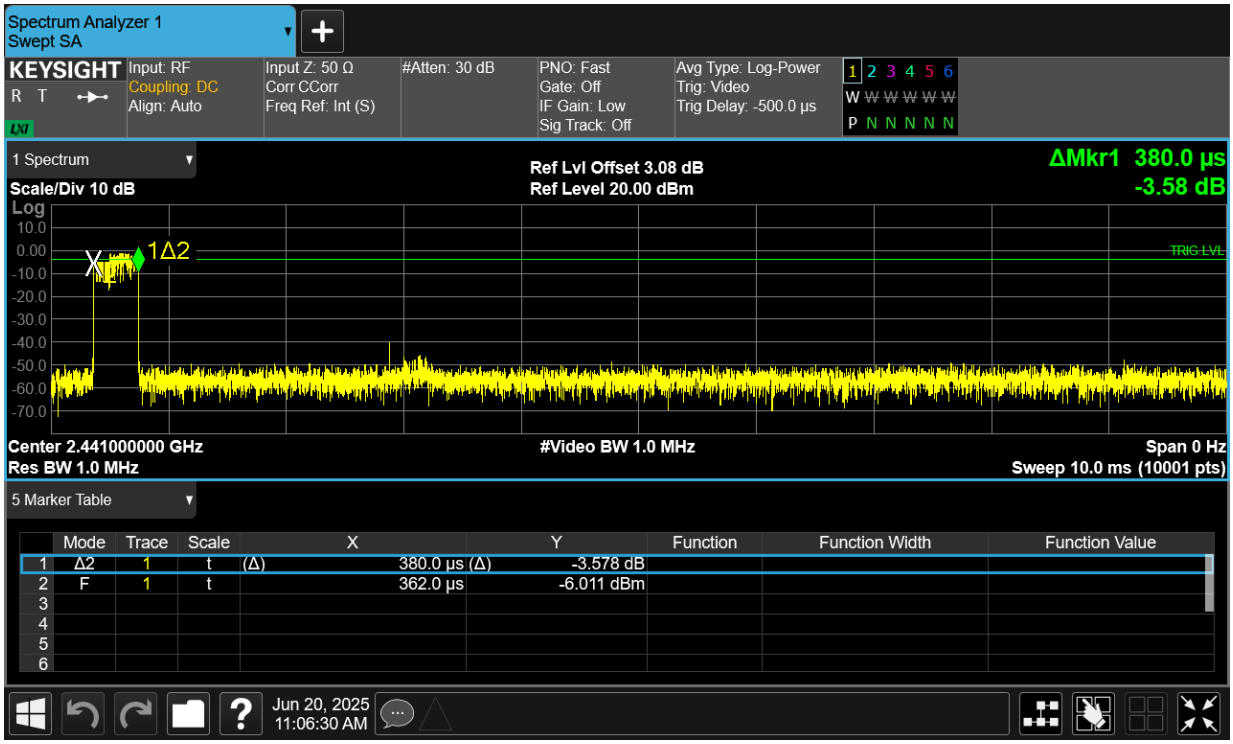
Dwell NVNT 2-DH3 2441MHz Ant1



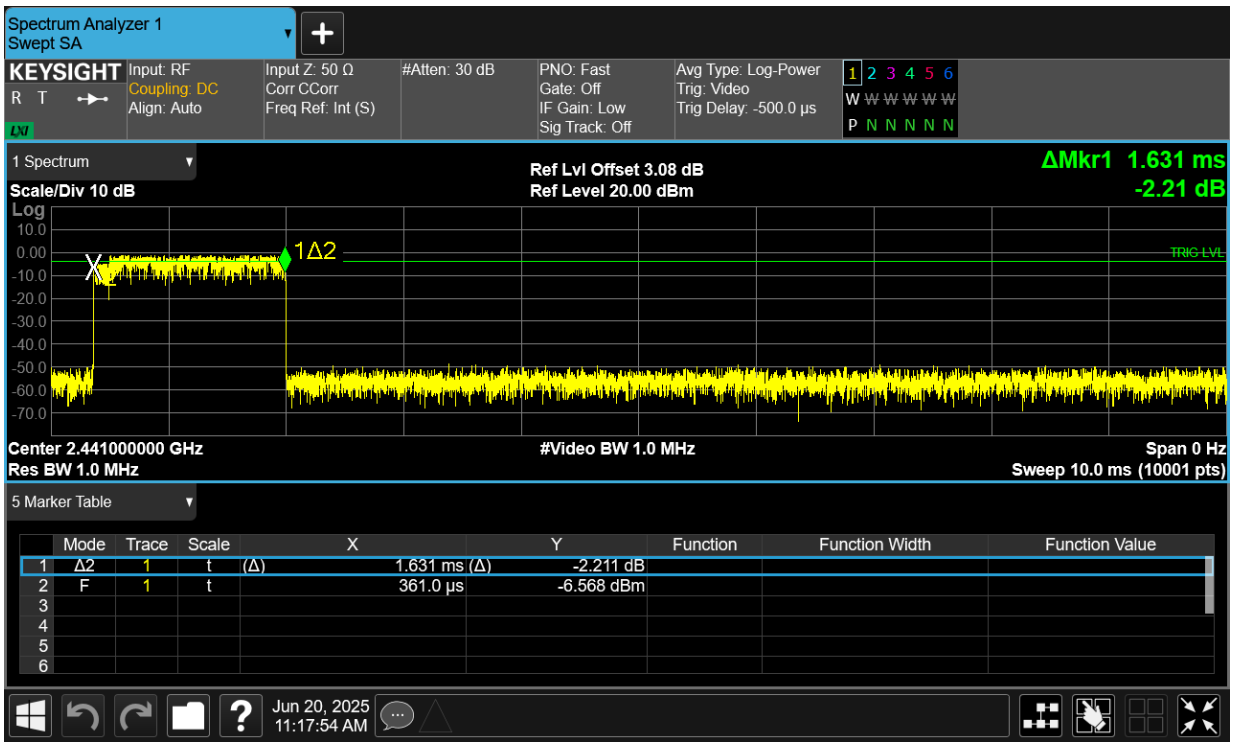
Dwell NVNT 2-DH5 2441MHz Ant1



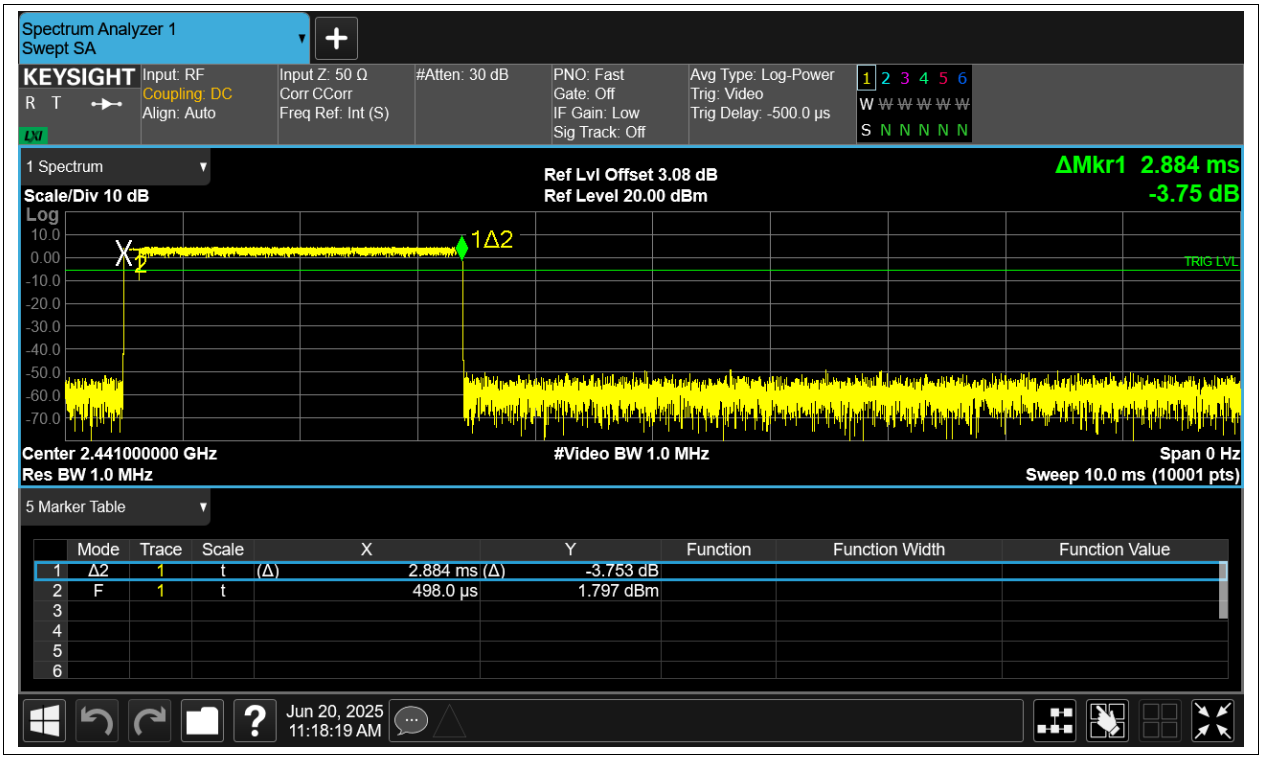
Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1



Dwell NVNT 3-DH5 2441MHz 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: Log-Power
Trig: Video
Trig Delay: -500.0 µs
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 3.08 dB
Ref Level 20.00 dBm
ΔMkr1 2.884 ms
-3.75 dB
1Δ2
TRIG LVL
Center 2.441000000 GHz
Res BW 1.0 MHz
#Video BW 1.0 MHz
Span 0 Hz
Sweep 10.0 ms (10001 pts)
5 Marker Table
Mode Trace Scale X Y Function Function Width Function Value
1 Δ2 1 t (Δ) 2.884 ms (Δ) -3.753 dB
2 F 1 t 498.0 µs 1.797 dBm
Jun 20, 2025
11:18:19 AM