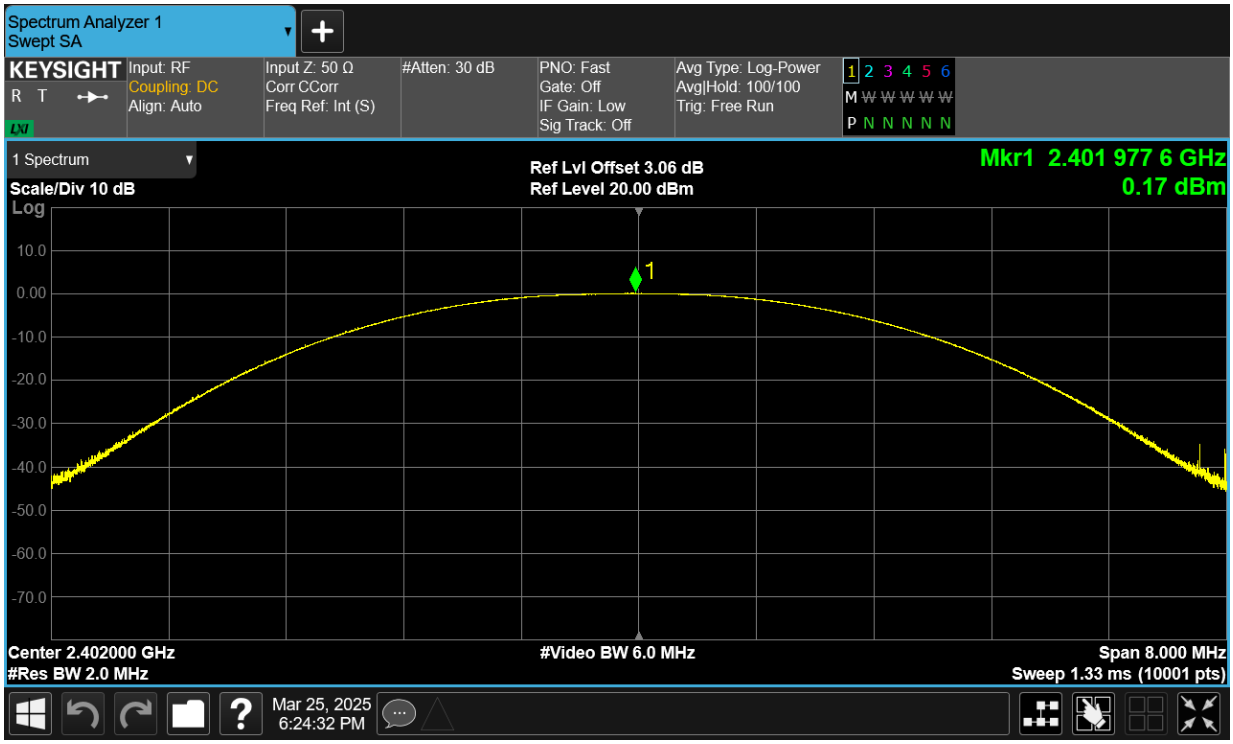
# Test Data

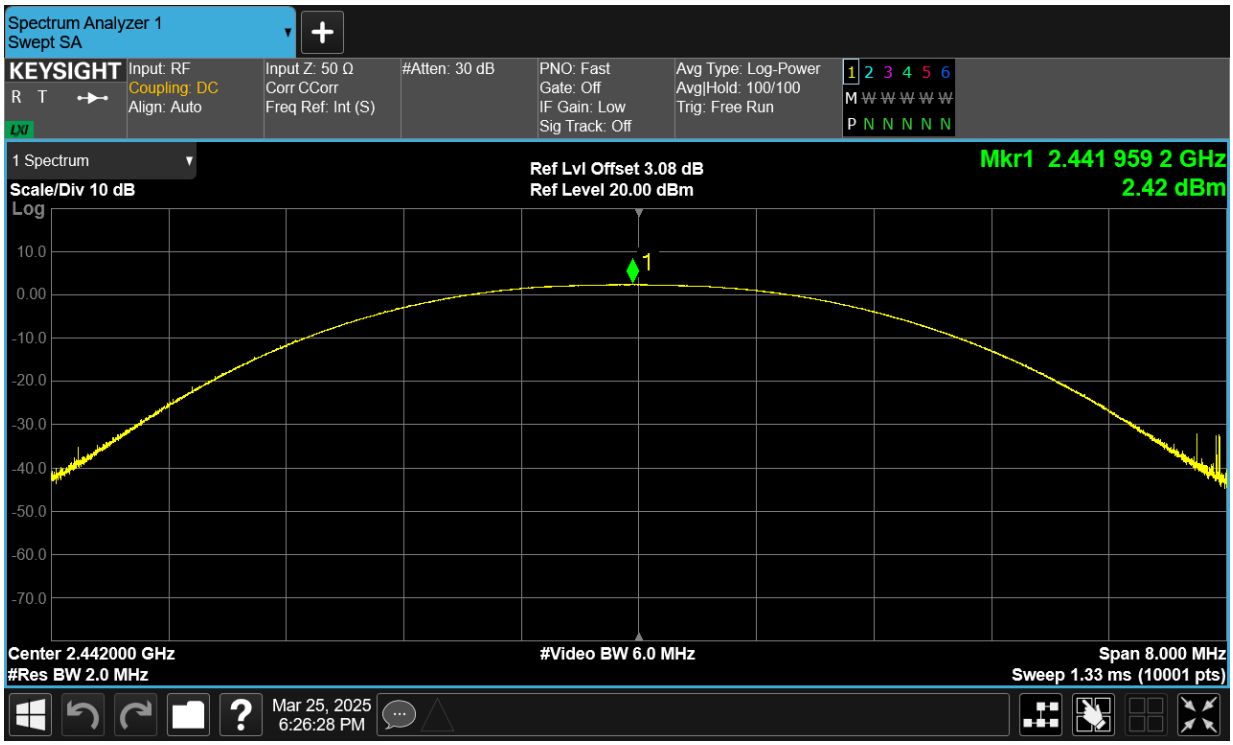
## Maximum Conducted Output Power

| Condition | Mode | Frequency (MHz) | Antenna | Conducted Power (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|---|
| NVNT | BLE | 2402 | Ant1 | 0.17 | 30 | Pass |
| NVNT | BLE | 2442 | Ant1 | 2.417 | 30 | Pass |
| NVNT | BLE | 2480 | Ant1 | 1.492 | 30 | Pass |

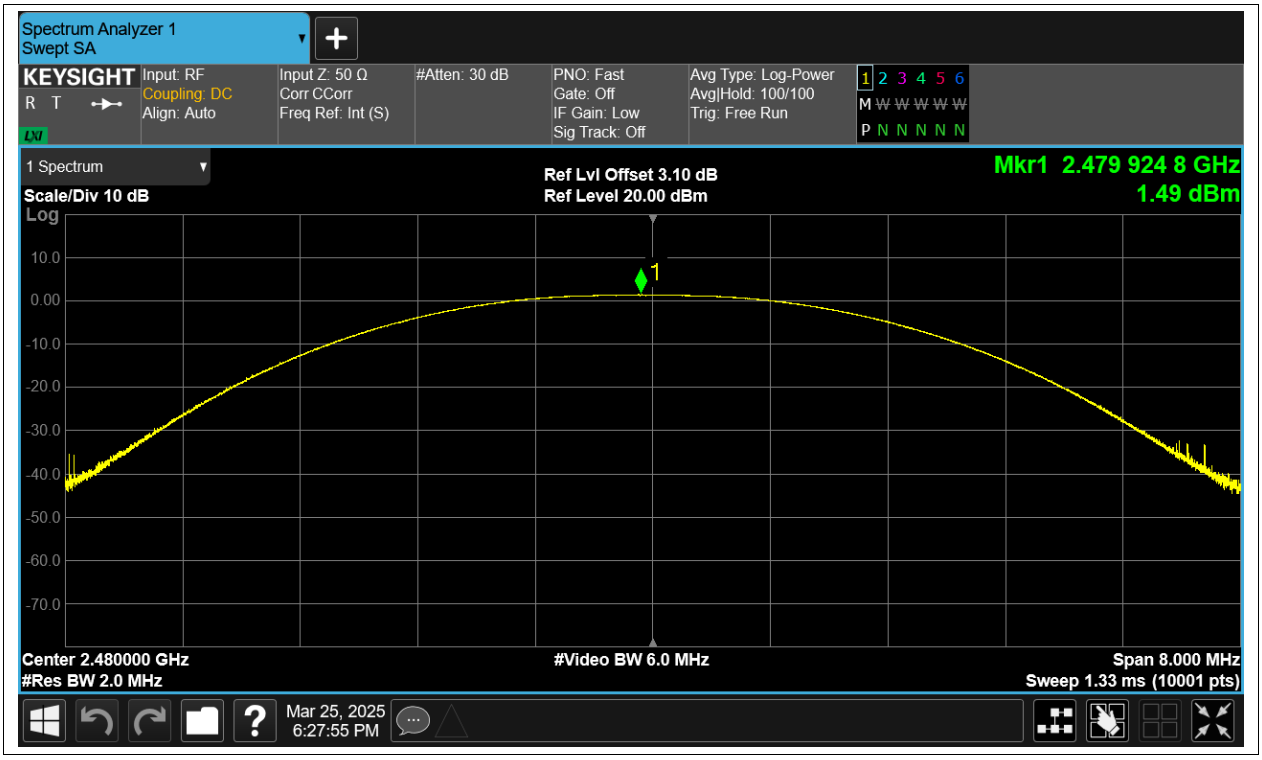
| Test Graphs |
| --- |
| Power NVNT BLE 2402MHz Ant1 |




| Power NVNT BLE 2442MHz Ant1 |
| --- |




| Power NVNT BLE 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: 30 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
Ref Lvl Offset 3.10 dB
Ref Level 20.00 dBm
Mkr1 2.479 924 8 GHz
1.49 dBm
Log
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 2.480000 GHz
#Res BW 2.0 MHz
#Video BW 6.0 MHz
Span 8.000 MHz
Sweep 1.33 ms (10001 pts)
Mar 25, 2025
6:27:55 PM

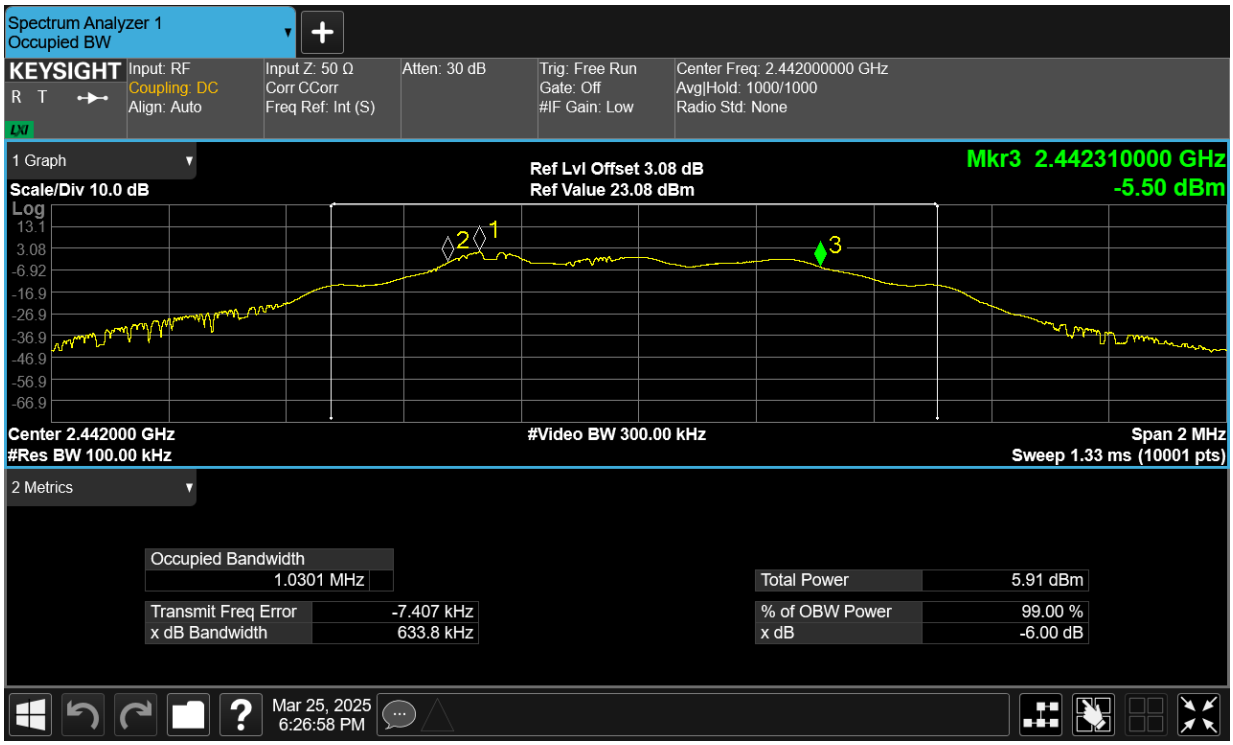
# -6dB Bandwidth

| Condition | Mode | Frequency (MHz) | Antenna | -6 dB Bandwidth (MHz) | limit | Verdic |
|---|---|---|---|---|---|---|
| NVNT | BLE | 2402 | Ant1 | 0.626 | 0.5 | Pass |
| NVNT | BLE | 2442 | Ant1 | 0.634 | 0.5 | Pass |
| NVNT | BLE | 2480 | Ant1 | 0.628 | 0.5 | Pass |

Test Graphs

-6dB Bandwidth NVNT BLE 2402MHz Ant1


-6dB Bandwidth NVNT BLE 2442MHz Ant1



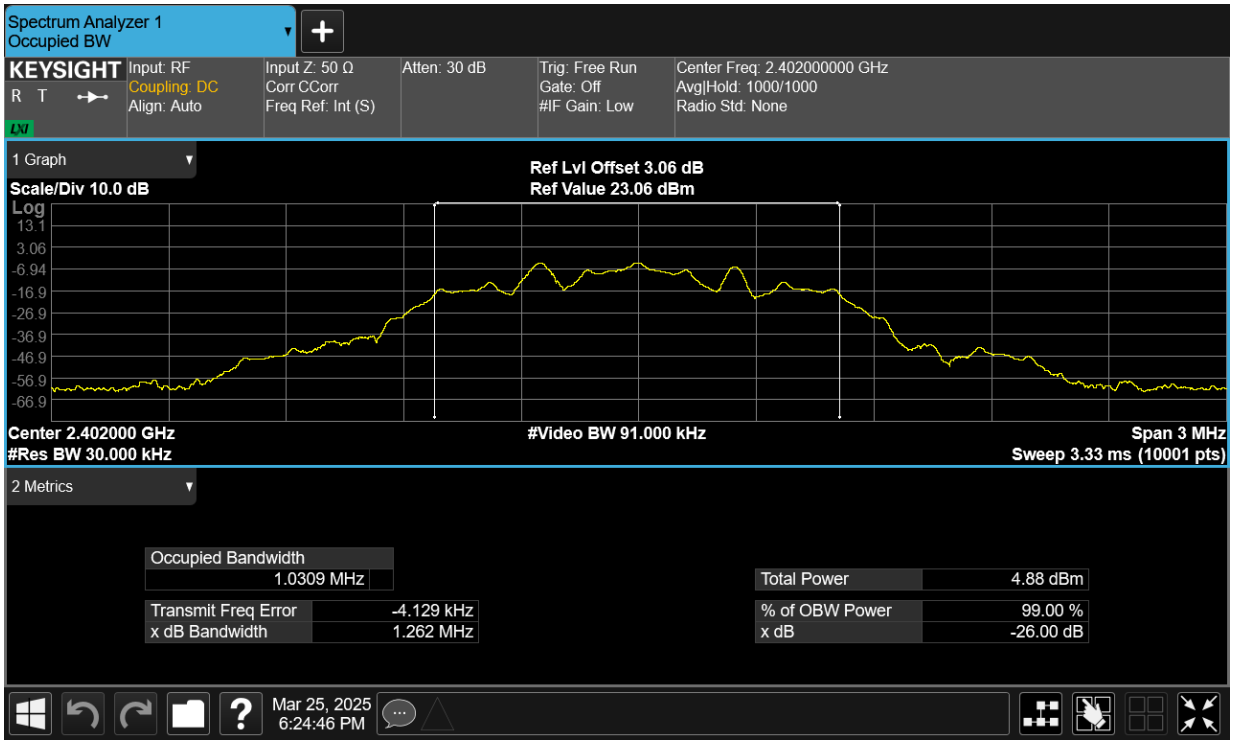

-6dB Bandwidth NVNT BLE 2480MHz Ant1


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: 1000/1000
Radio Std: None
1 Graph
Ref Lvl Offset 3.10 dB
Ref Value 23.10 dBm
Mkr3 2.480306000 GHz
-6.18 dBm
Scale/Div 10.0 dB
Log
13.1
3.10
-6.90
-16.9
-26.9
-36.9
-46.9
-56.9
-66.9
Center 2.480000 GHz
#Res BW 100.00 kHz
#Video BW 300.00 kHz
Span 2 MHz
Sweep 1.33 ms (10001 pts)
2 Metrics
Occupied Bandwidth
1.0252 MHz
Transmit Freq Error -7.518 kHz
x dB Bandwidth 627.8 kHz
Total Power 5.12 dBm
% of OBW Power 99.00 %
x dB -6.00 dB
Mar 25, 2025
6:28:24 PM

# Occupied Channel Bandwidth

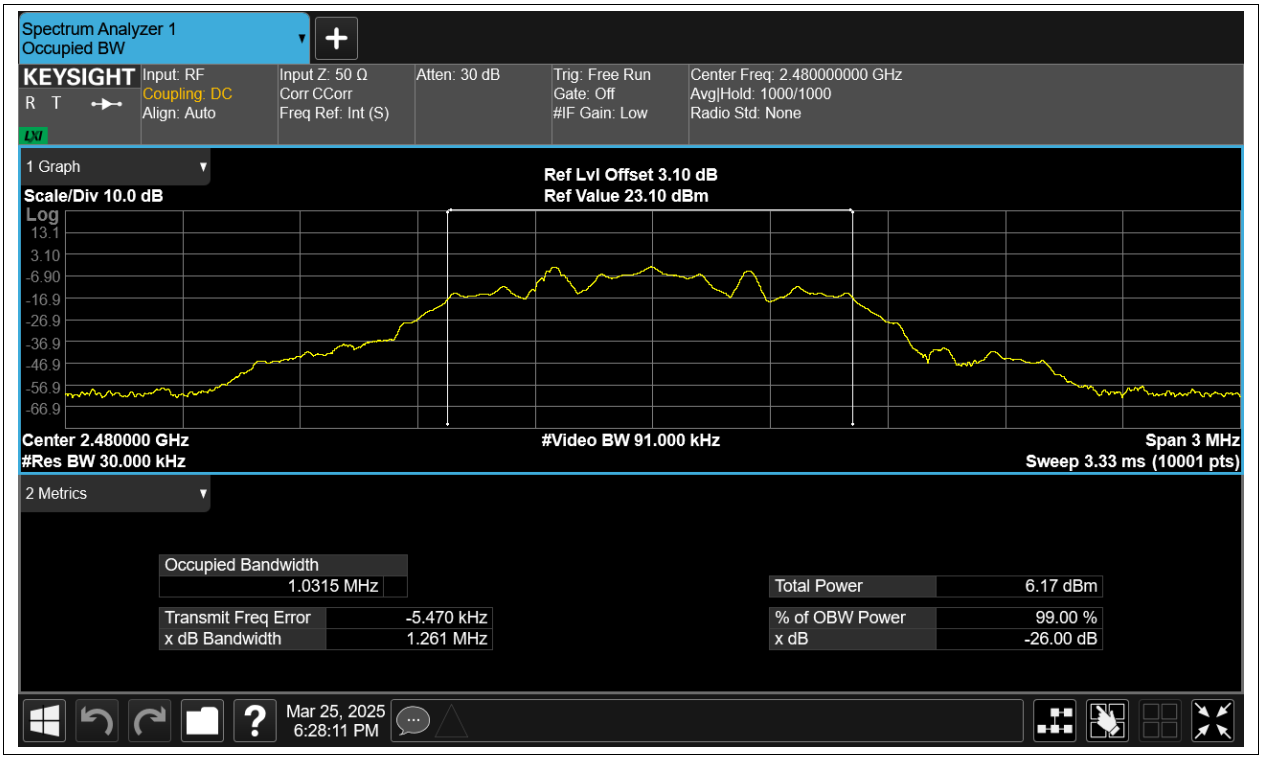
| Condition | Mode | Frequency (MHz) | Antenna | 99% OBW (MHz) |
|---|---|---|---|---|
| NVNT | BLE | 2402 | Ant1 | 1.031 |
| NVNT | BLE | 2442 | Ant1 | 1.03 |
| NVNT | BLE | 2480 | Ant1 | 1.032 |

| Test Graphs |
| --- |
| OBW NVNT BLE 2402MHz Ant1 |




| OBW NVNT BLE 2442MHz Ant1 |
| --- |

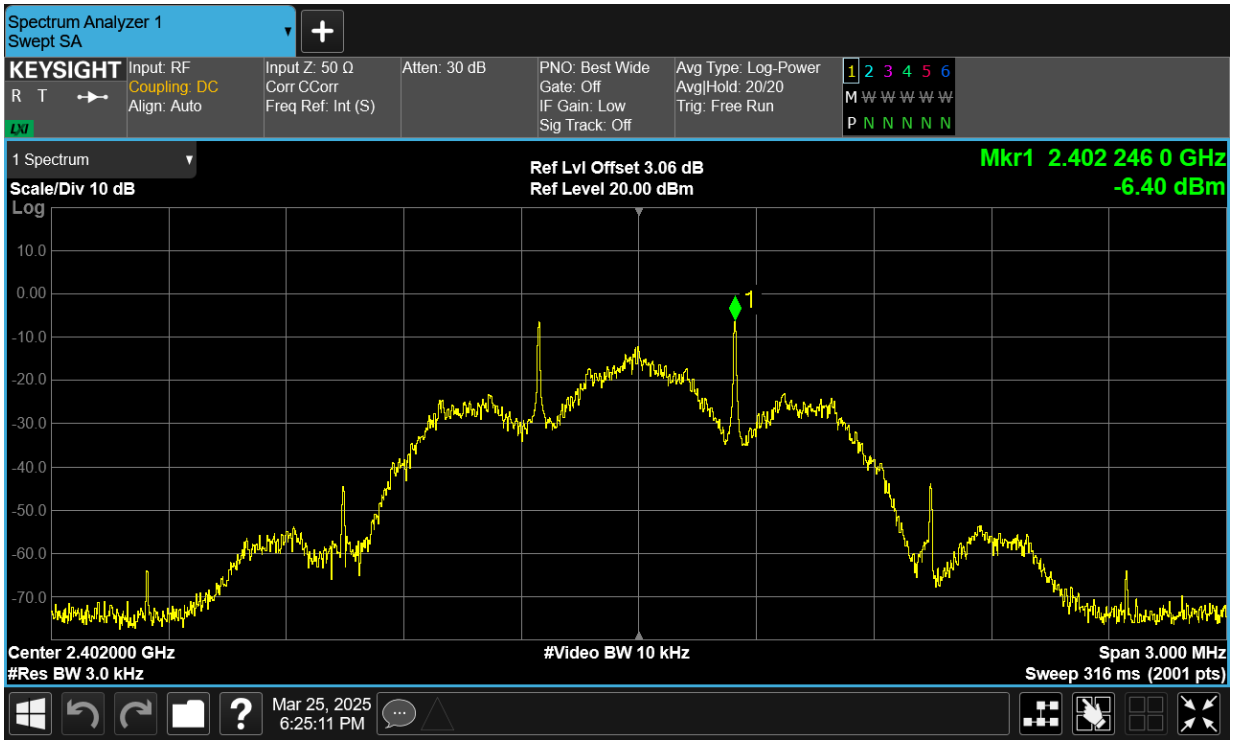

| OBW NVNT BLE 2480MHz Ant1 |
| --- |


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: 1000/1000
Radio Std: None
1 Graph
Ref Lvl Offset 3.10 dB
Ref Value 23.10 dBm
Scale/Div 10.0 dB
Log
13.1
3.10
-6.90
-16.9
-26.9
-36.9
-46.9
-56.9
-66.9
Center 2.480000 GHz
#Res BW 30.000 kHz
#Video BW 91.000 kHz
Span 3 MHz
Sweep 3.33 ms (10001 pts)
2 Metrics
Occupied Bandwidth
1.0315 MHz
Total Power
6.17 dBm
Transmit Freq Error
-5.470 kHz
% of OBW Power
99.00 %
x dB Bandwidth
1.261 MHz
x dB
-26.00 dB
Mar 25, 2025
6:28:11 PM

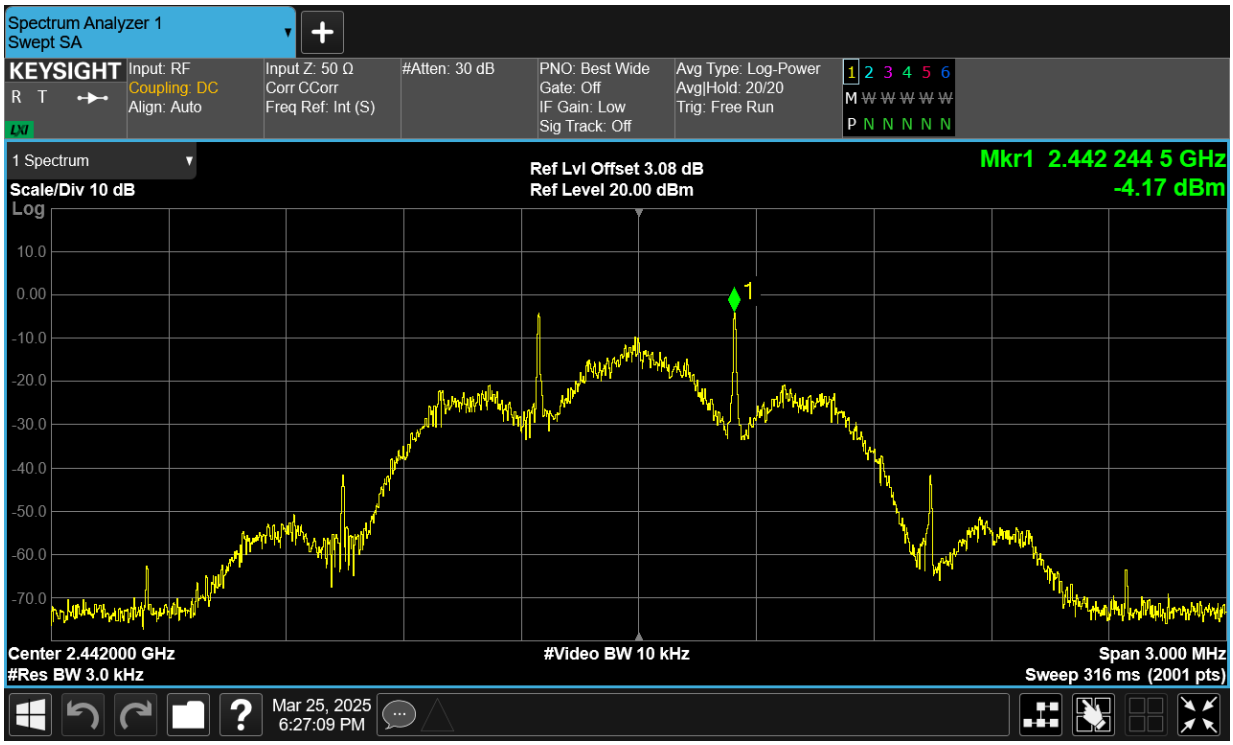
# Maximum Power Spectral Density Level

| Condition | Mode | Frequency (MHz) | Antenna | Max PSD (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|---|
| NVNT | BLE | 2402 | Ant1 | -6.396 | 8 | Pass |
| NVNT | BLE | 2442 | Ant1 | -4.174 | 8 | Pass |
| NVNT | BLE | 2480 | Ant1 | -5.138 | 8 | Pass |

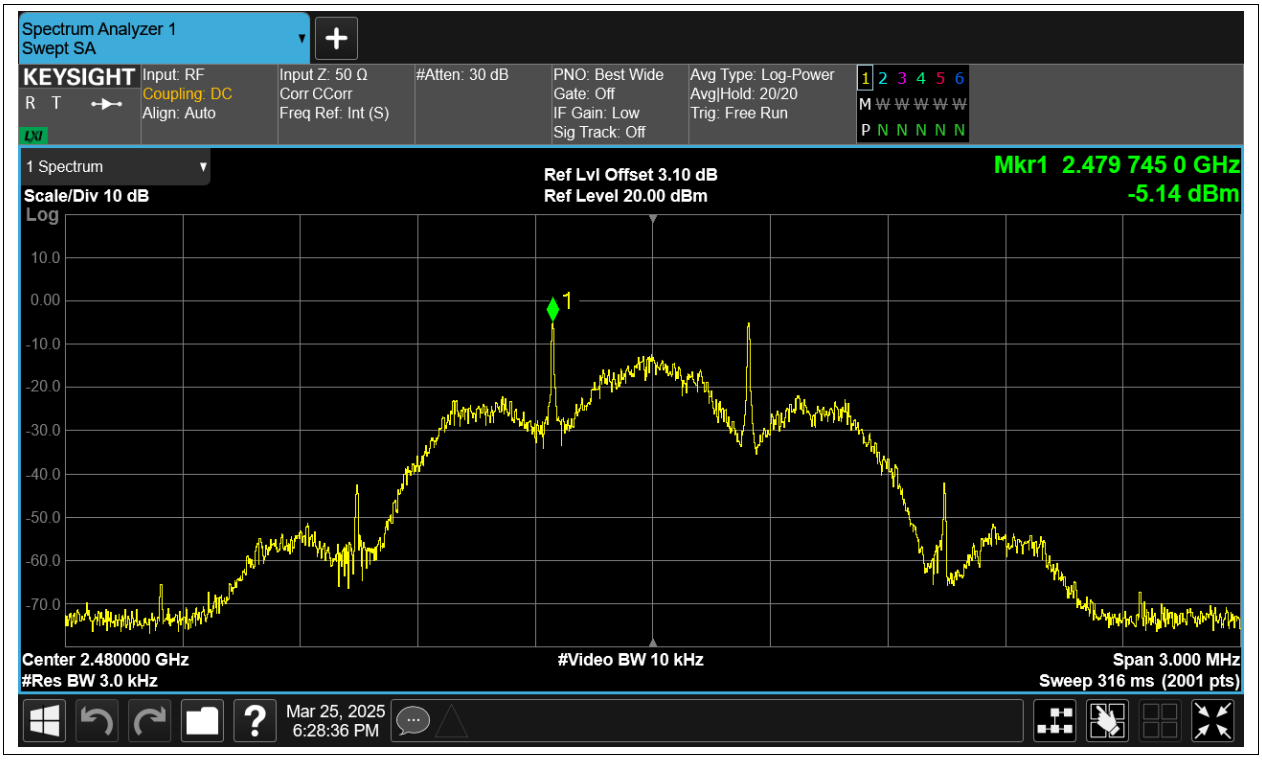
| Test Graphs |
| --- |
| PSD NVNT BLE 2402MHz Ant1 |




| PSD NVNT BLE 2442MHz Ant1 |
| --- |




| PSD NVNT BLE 2480MHz Ant1 |
| --- |

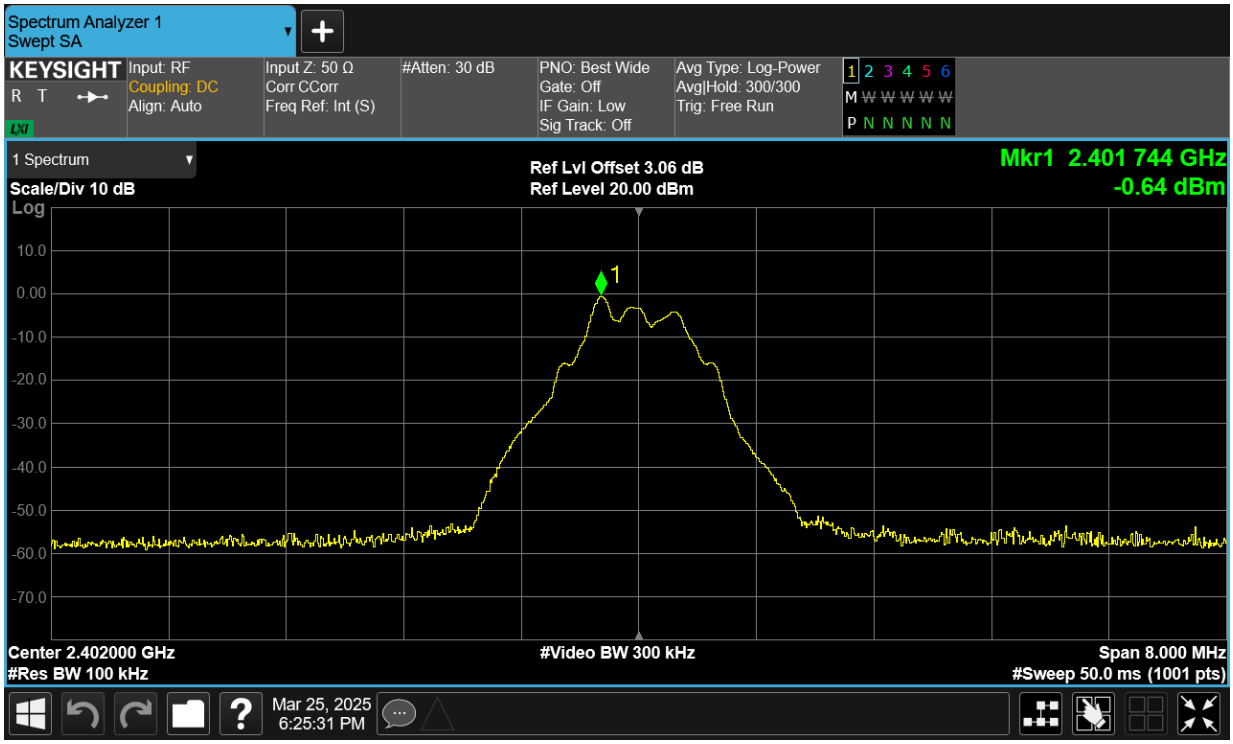

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
#Atten: 30 dB
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
Avg Type: Log-Power
Avg|Hold: 20/20
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 3.10 dB
Ref Level 20.00 dBm
Mkr1 2.479 745 0 GHz
-5.14 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 2.480000 GHz
#Res BW 3.0 kHz
#Video BW 10 kHz
Span 3.000 MHz
Sweep 316 ms (2001 pts)
Mar 25, 2025
6:28:36 PM

# Band Edge

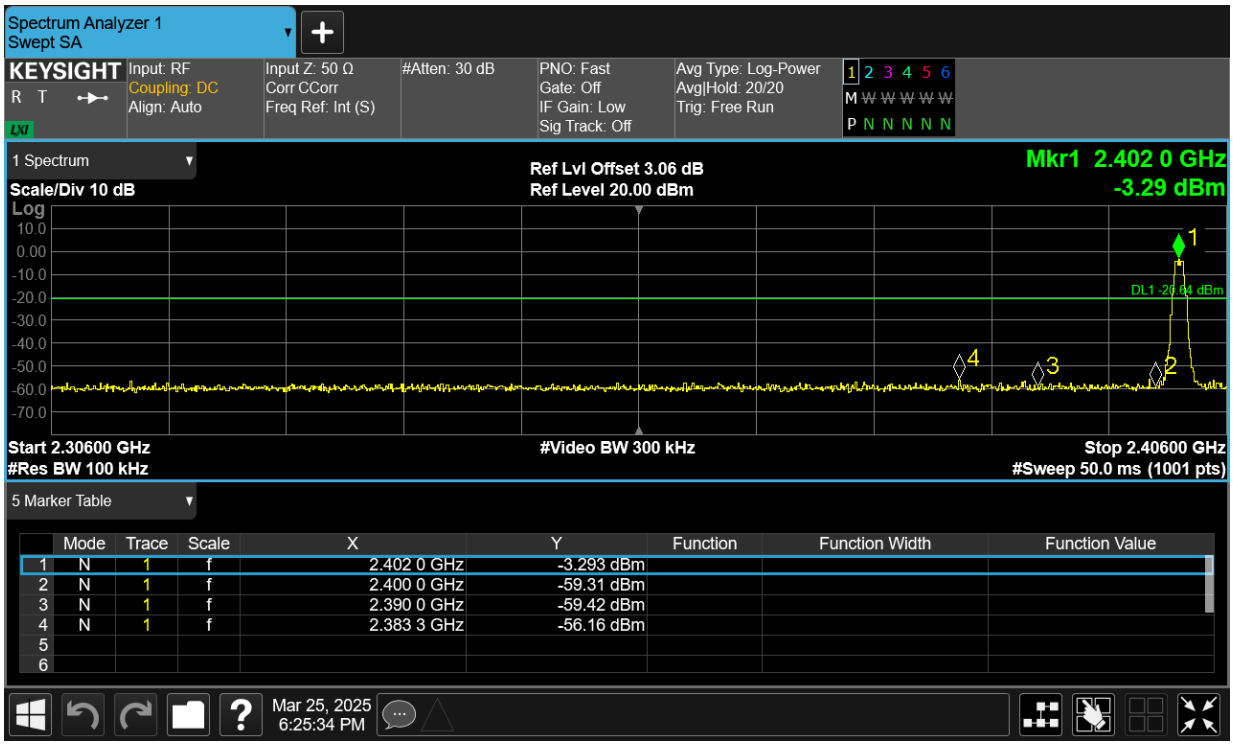
| Condition | Mode | Frequency (MHz) | Antenna | Max Value (dBc) | Limit (dBc) | Verdict |
|---|---|---|---|---|---|---|
| NVNT | BLE | 2402 | Ant1 | -55.52 | -20 | Pass |
| NVNT | BLE | 2480 | Ant1 | -56.9 | -20 | Pass |

Test Graphs

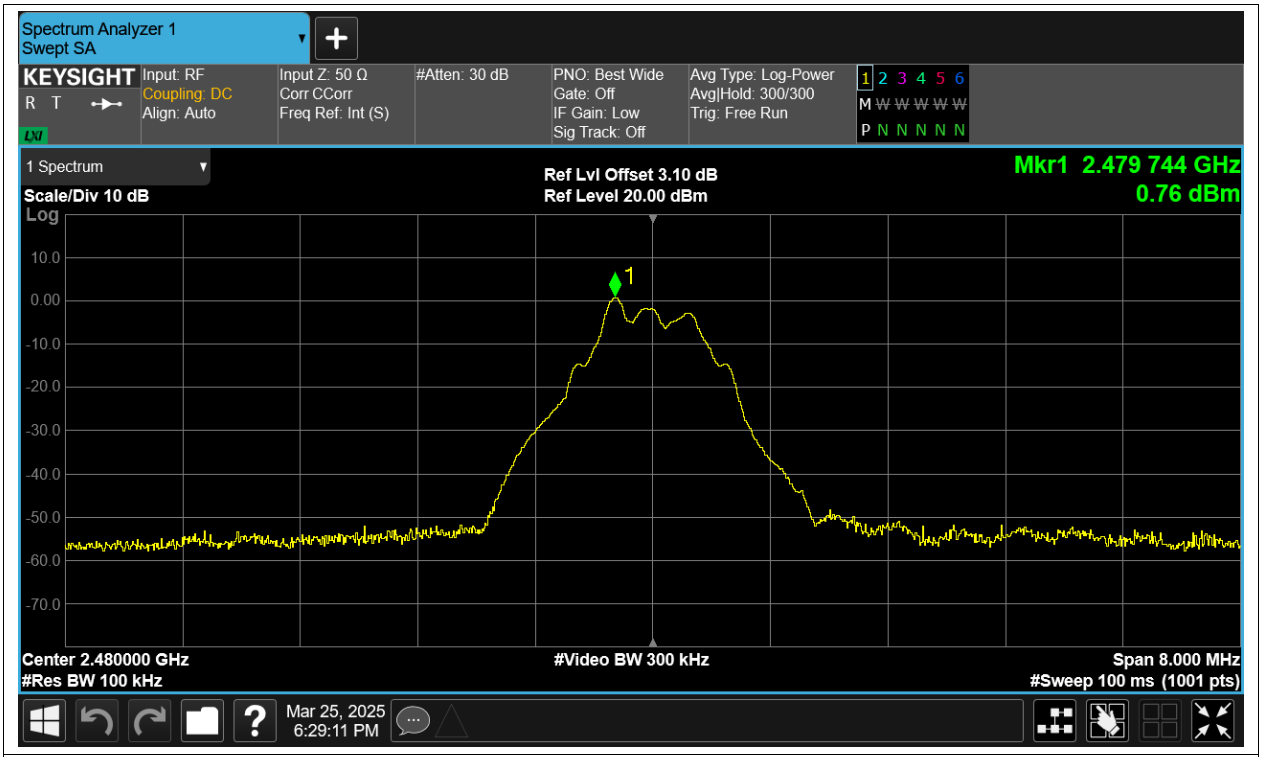
Band Edge NVNT BLE 2402MHz Ant1 Ref



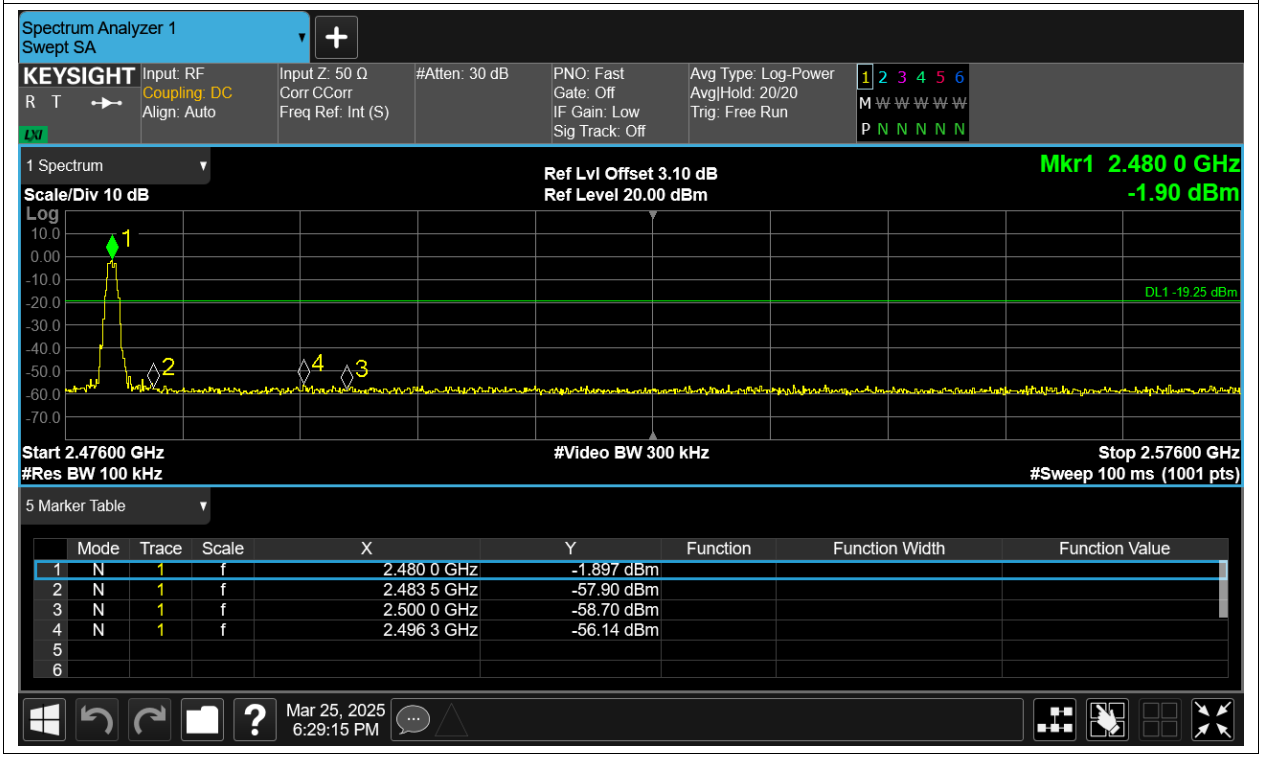

Band Edge NVNT BLE 2402MHz Ant1 Emission




Band Edge NVNT BLE 2480MHz Ant1 Ref




Band Edge NVNT BLE 2480MHz Ant1 Emission

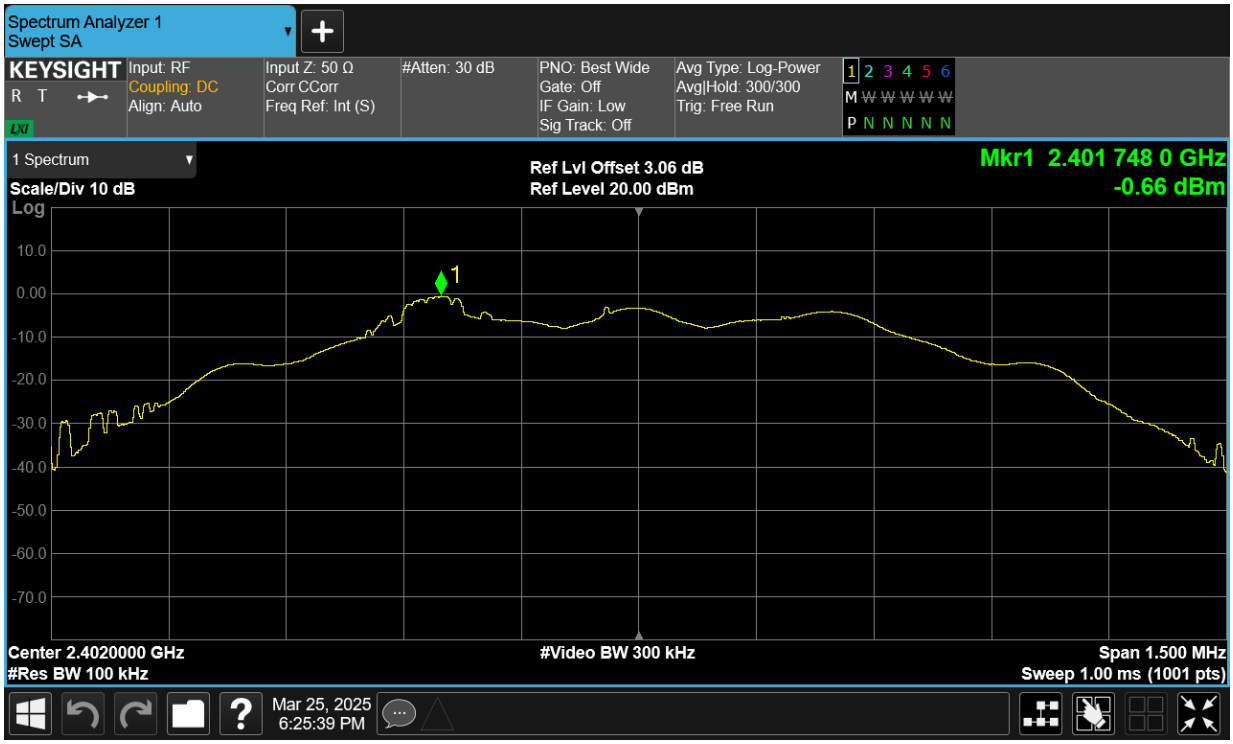


# Conducted RF Spurious Emission

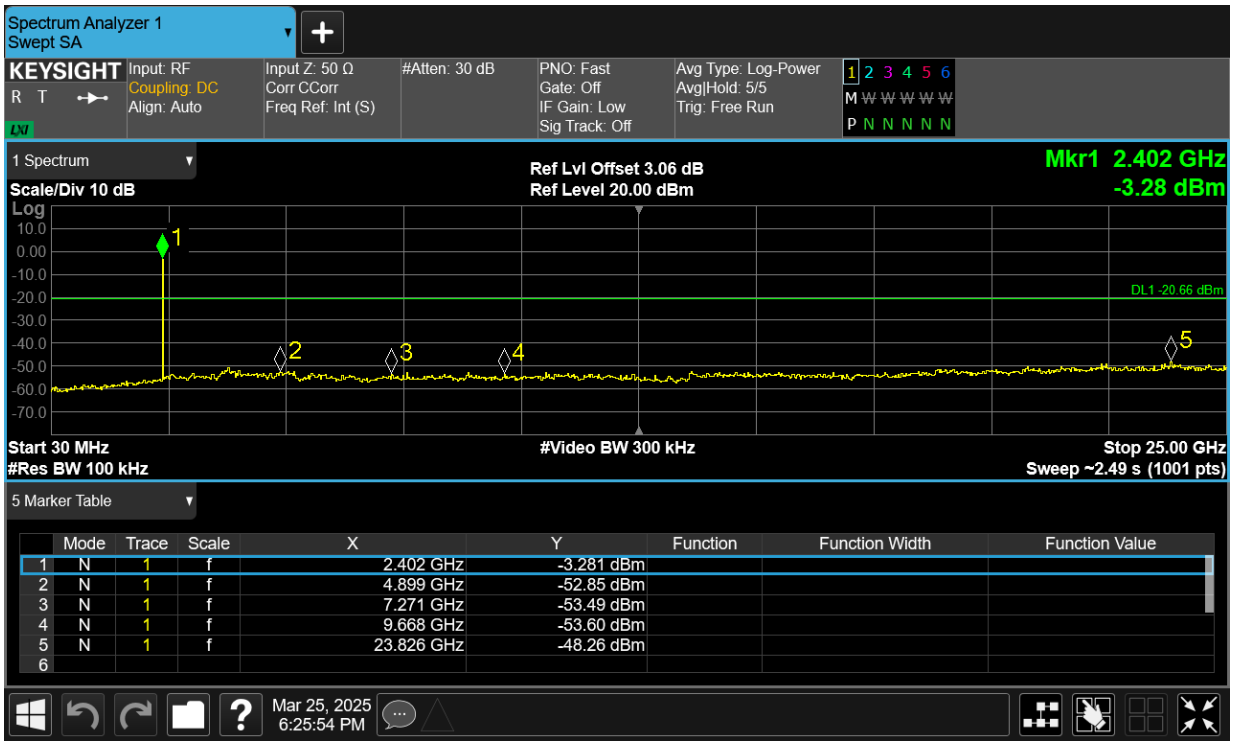
| Condition | Mode | Frequency (MHz) | Antenna | Max Value (dBc) | Limit (dBc) | Verdict |
|---|---|---|---|---|---|---|
| NVNT | BLE | 2402 | Ant1 | -47.6 | -20 | Pass |
| NVNT | BLE | 2442 | Ant1 | -50.53 | -20 | Pass |
| NVNT | BLE | 2480 | Ant1 | -49.53 | -20 | Pass |

Test Graphs

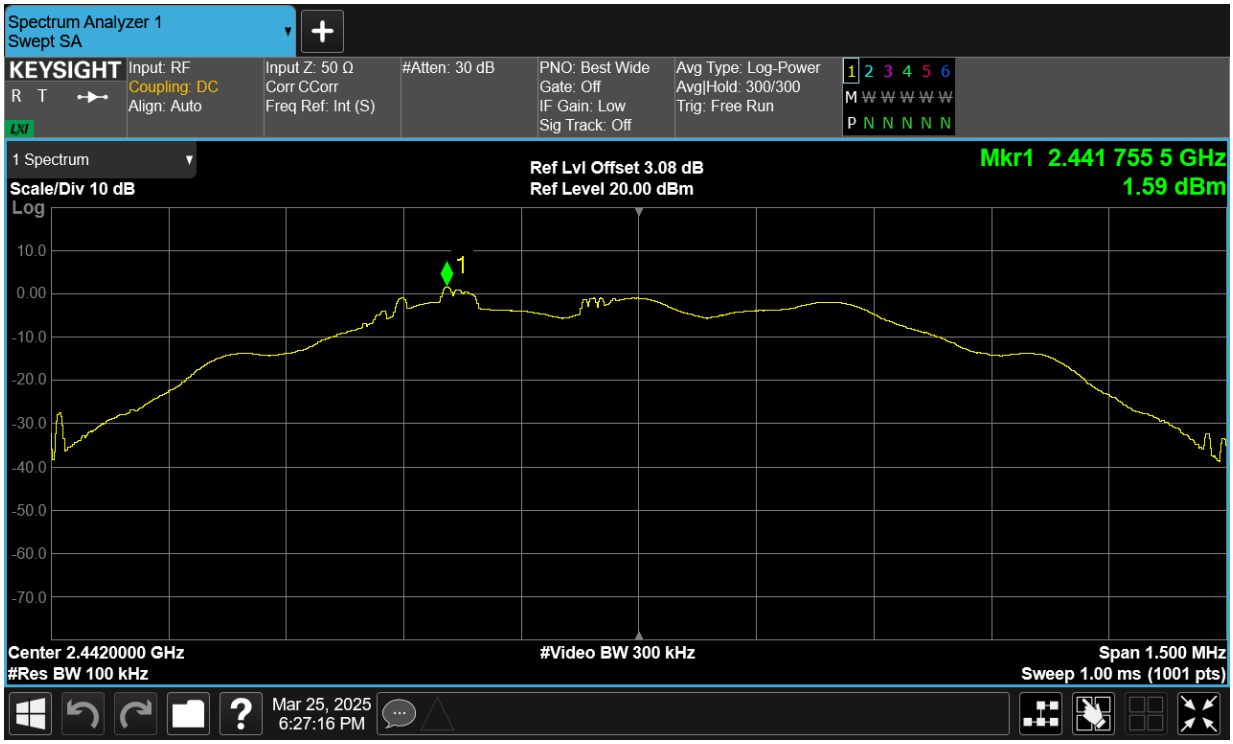
Tx. Spurious NVNT BLE 2402MHz Ant1 Ref



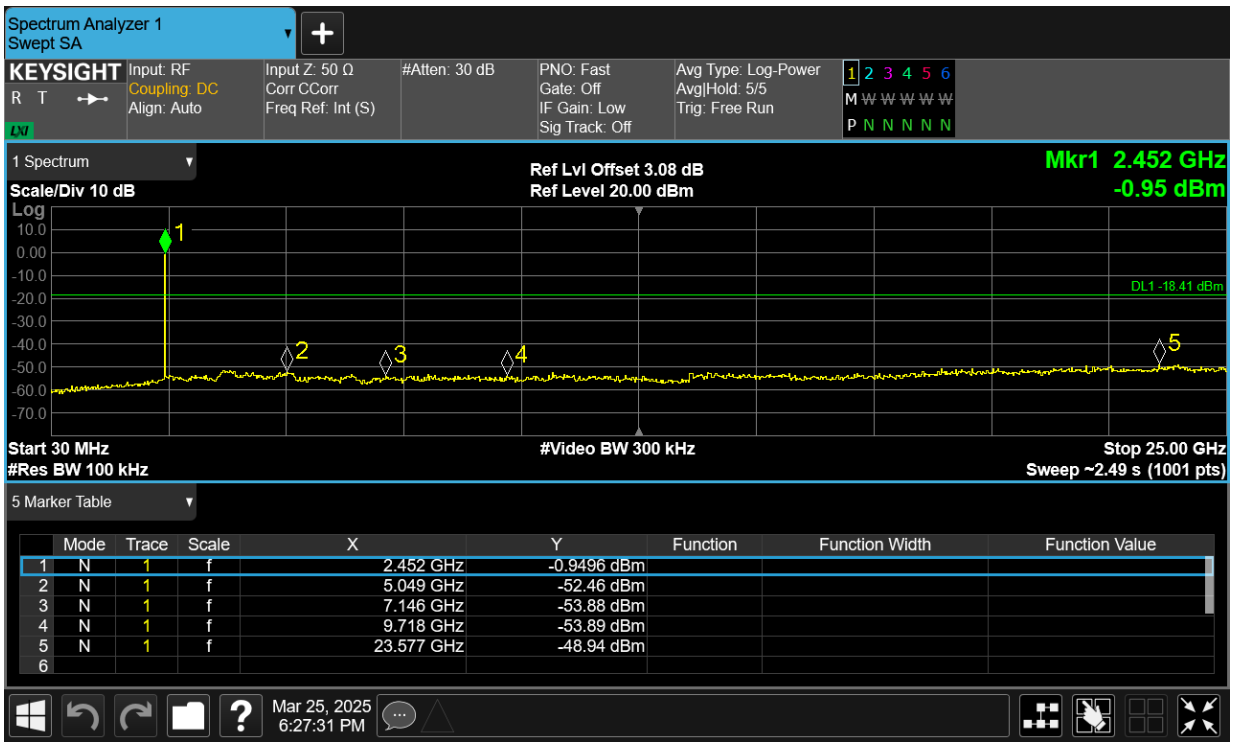

Tx. Spurious NVNT BLE 2402MHz Ant1 Emission



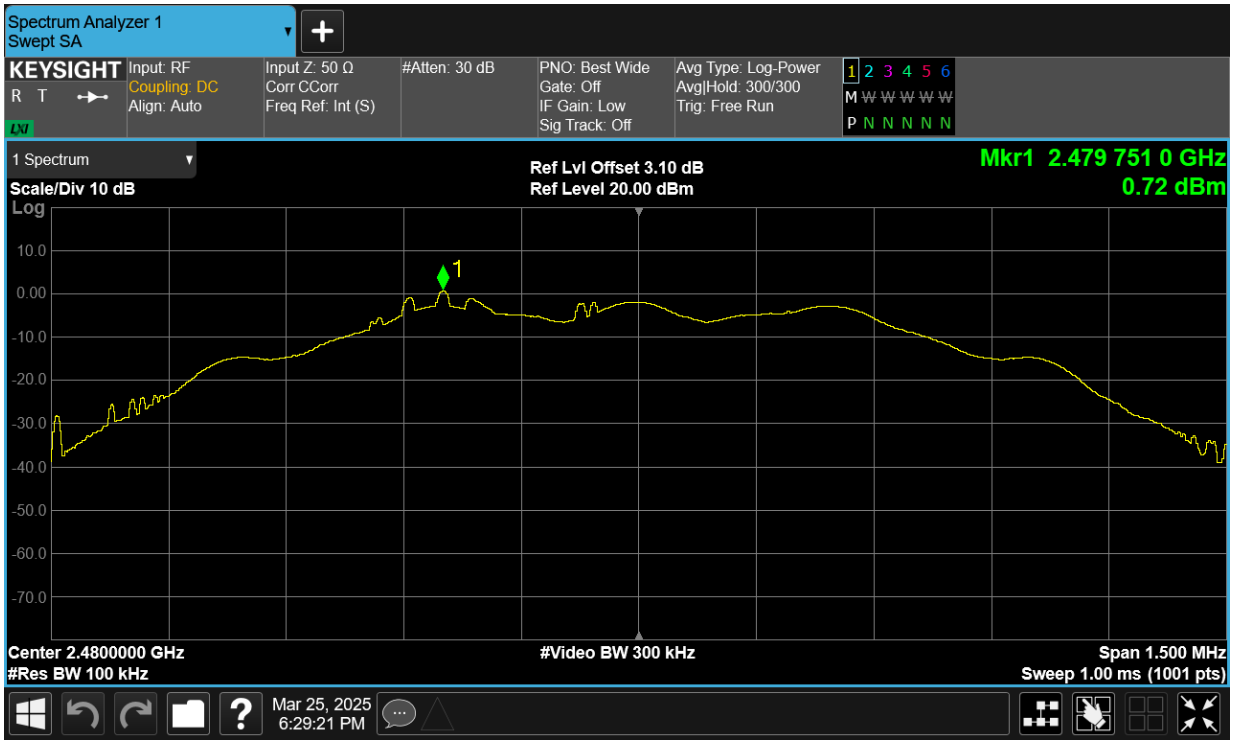

Tx. Spurious NVNT BLE 2442MHz Ant1 Ref




Tx. Spurious NVNT BLE 2442MHz Ant1 Emission




Tx. Spurious NVNT BLE 2480MHz Ant1 Ref




Tx. Spurious NVNT BLE 2480MHz Ant1 Emission