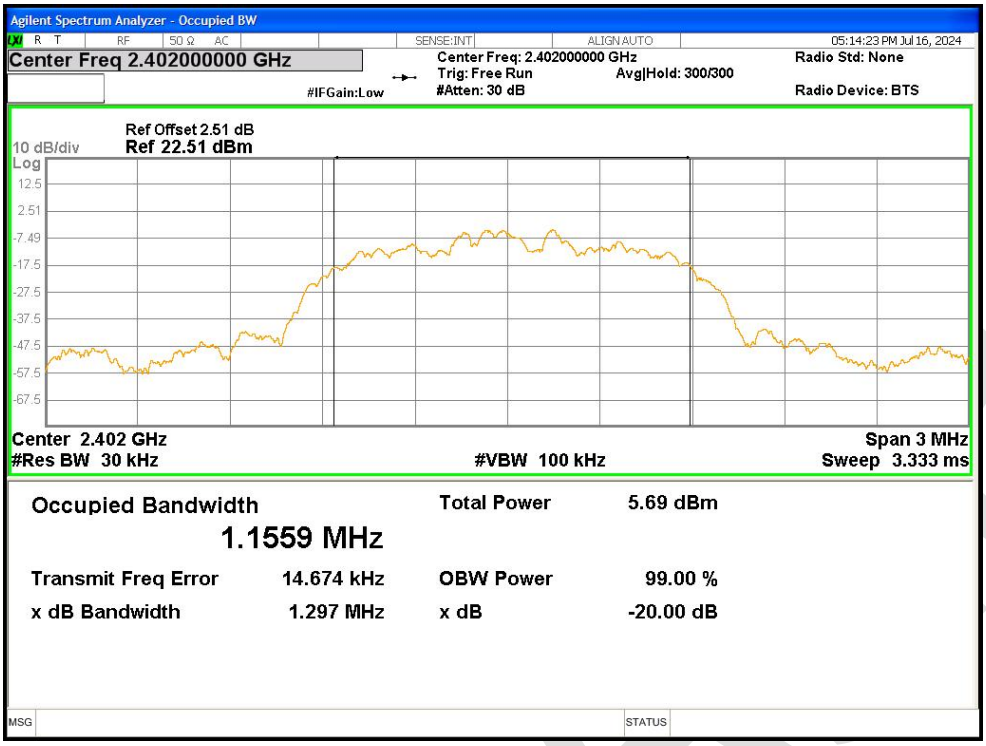
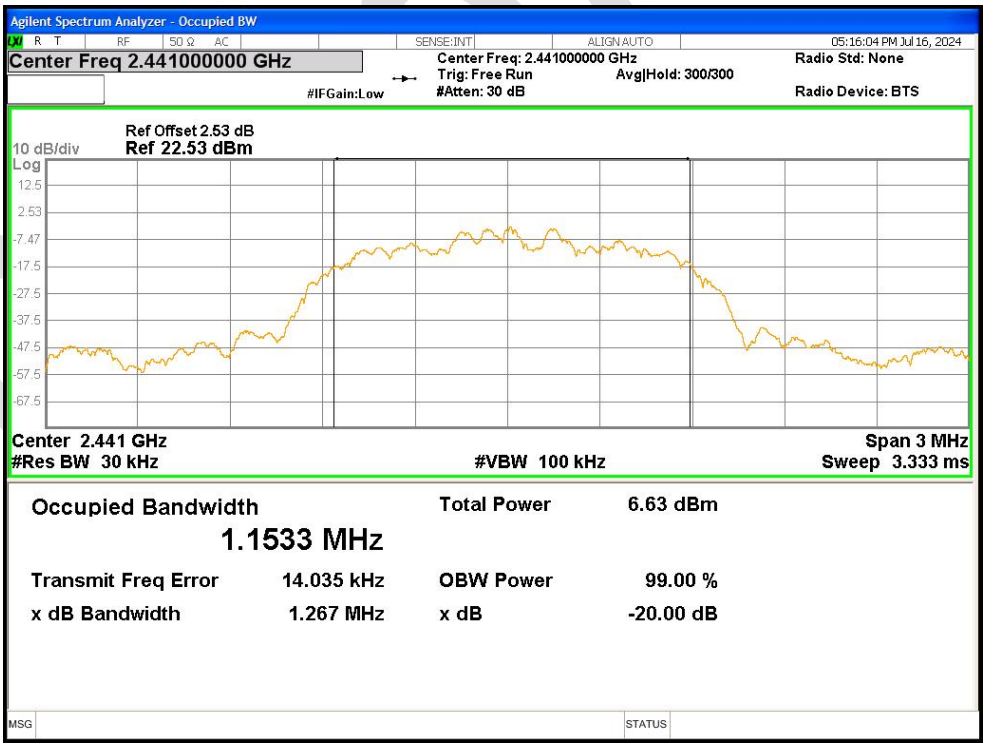
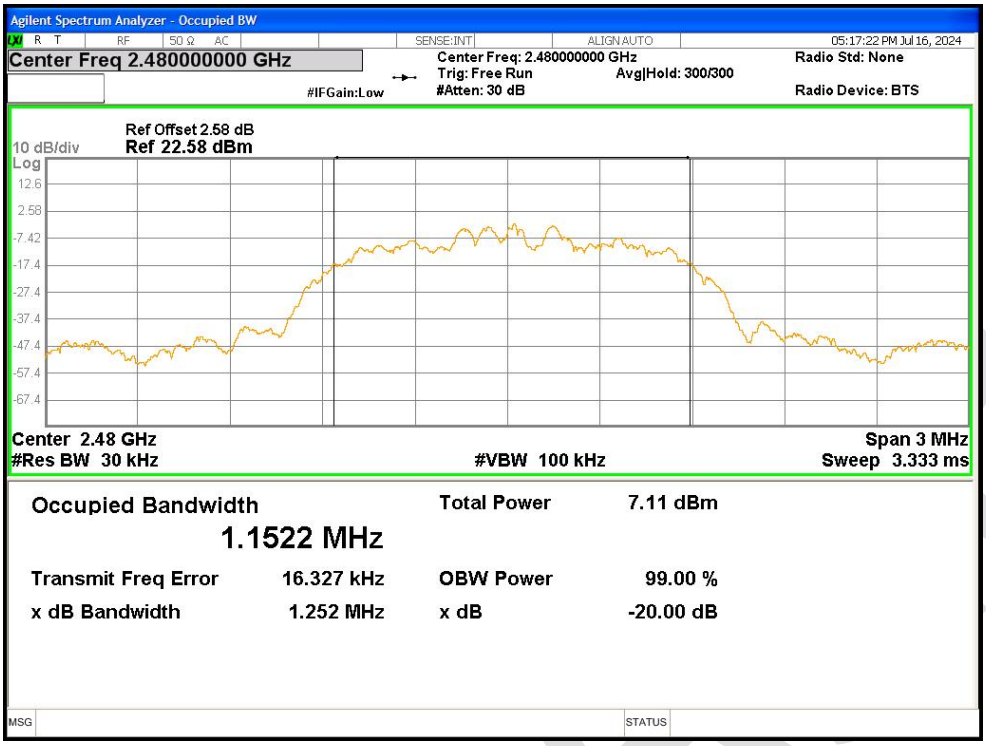


OBW NVNT 2-DH1 2441MHz Ant1



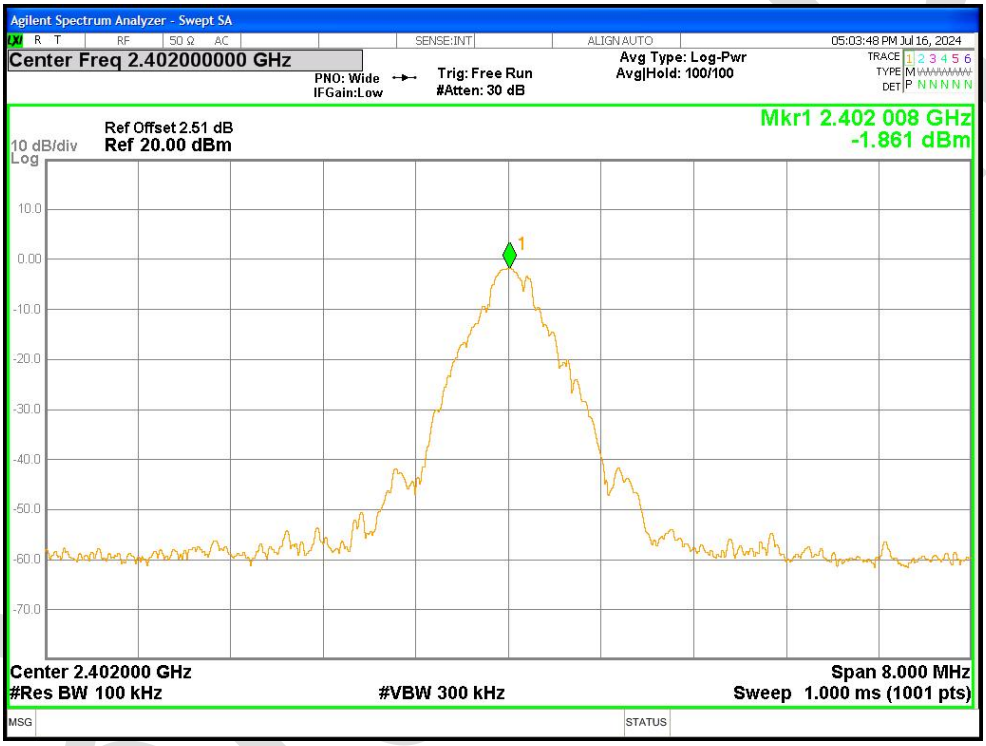
OBW NVNT 2-DH1 2480MHz Ant1


Agilent Spectrum Analyzer - Occupied BW
Center Freq 2.480000000 GHz
Center Freq: 2.480000000 GHz
Trig: Free Run
Avg|Hold: 300/300
#Atten: 30 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
05:17:22 PM Jul 16, 2024
Ref Offset 2.58 dB
10 dB/div
Ref 22.58 dBm
Log
12.6
2.58
-7.42
-17.4
-27.4
-37.4
-47.4
-57.4
-67.4
Center 2.48 GHz
#Res BW 30 kHz
#VBW 100 kHz
Span 3 MHz
Sweep 3.333 ms
Occupied Bandwidth
1.1522 MHz
Total Power 7.11 dBm
Transmit Freq Error 16.327 kHz
OBW Power 99.00 %
x dB Bandwidth 1.252 MHz
x dB -20.00 dB
MSG
STATUS

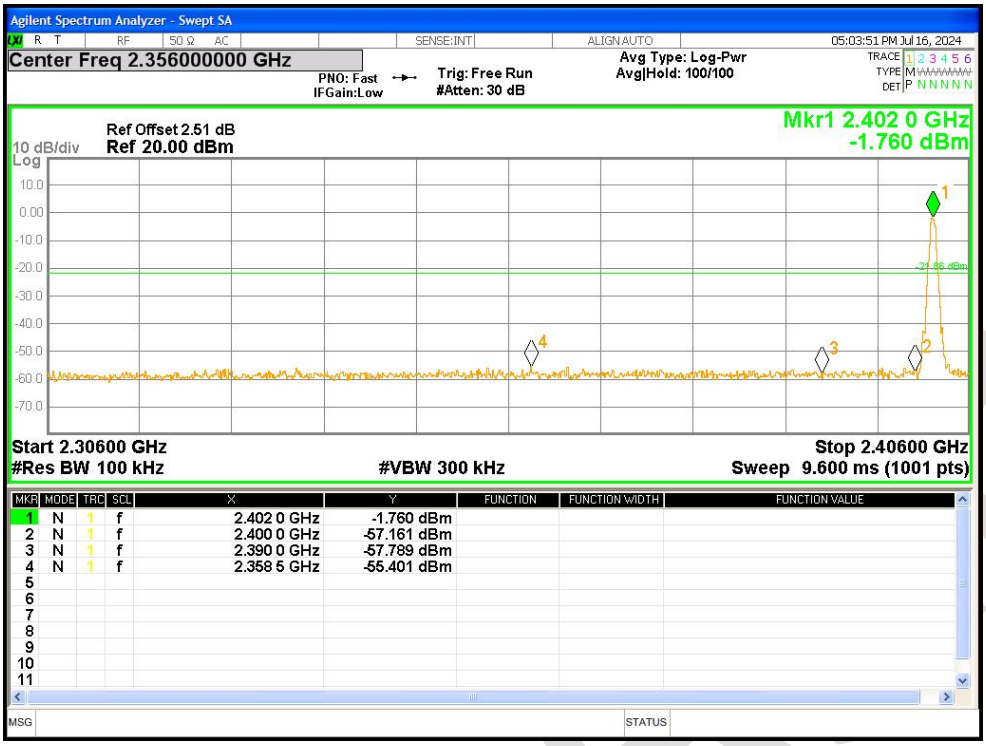
7.4 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-53.54	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-53.81	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-53.99	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-54.24	-20	Pass

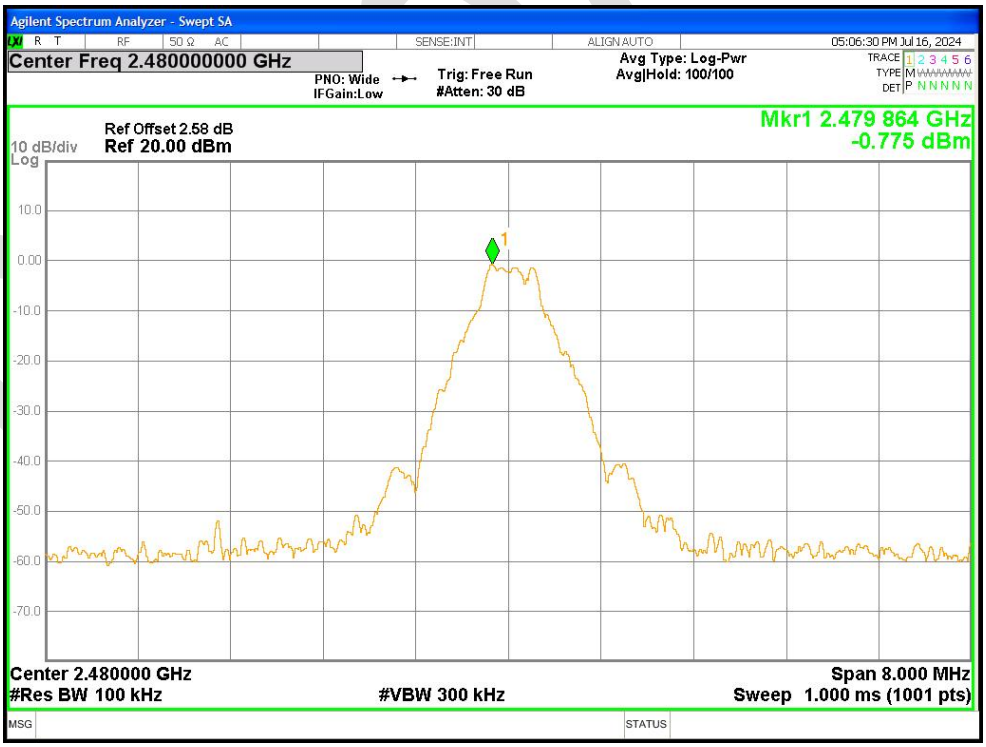
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



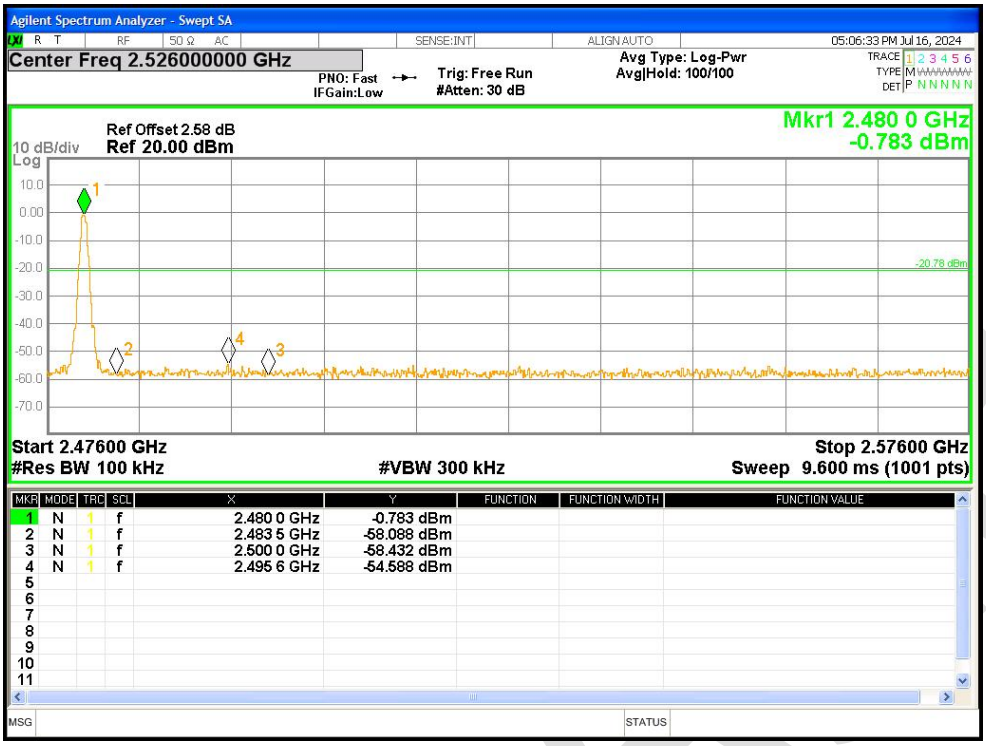
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



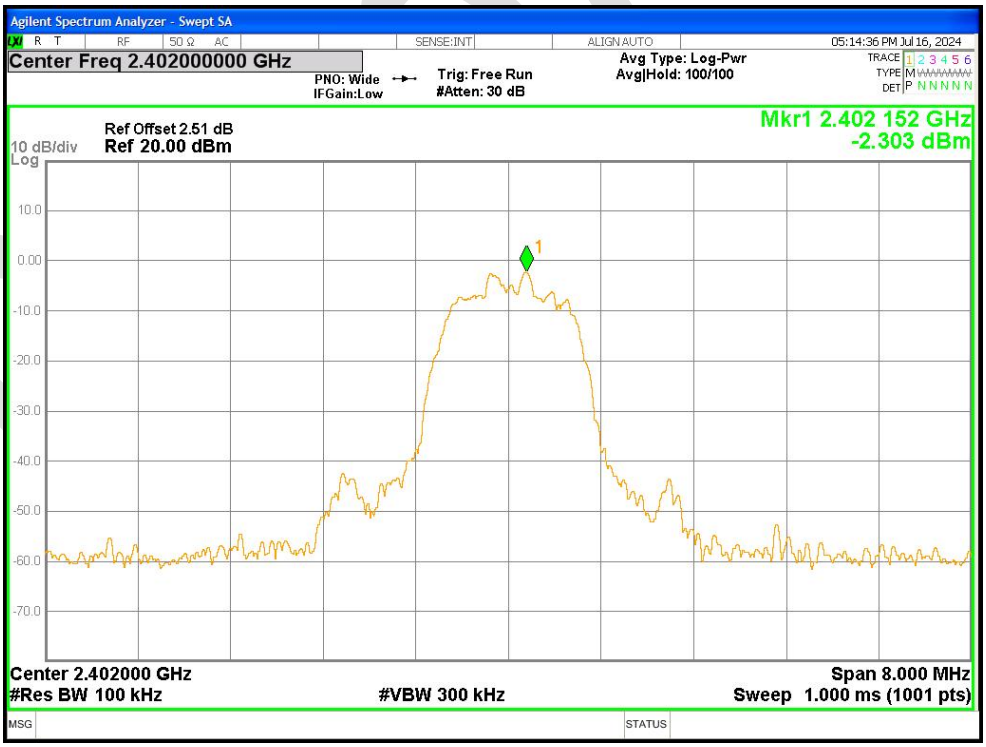
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



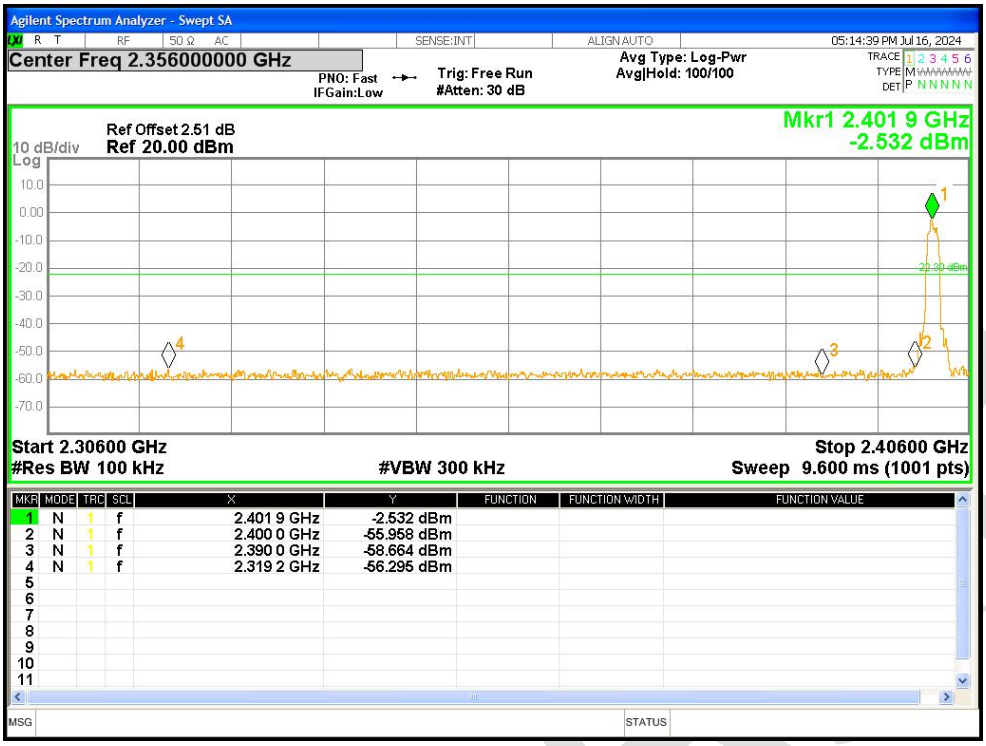
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



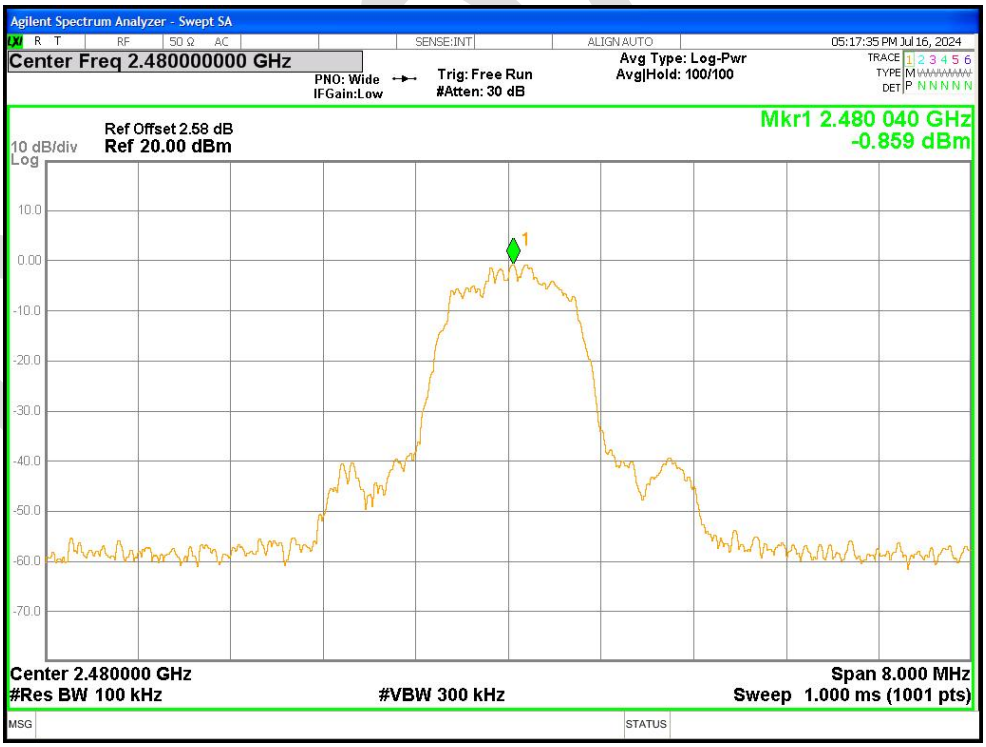
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



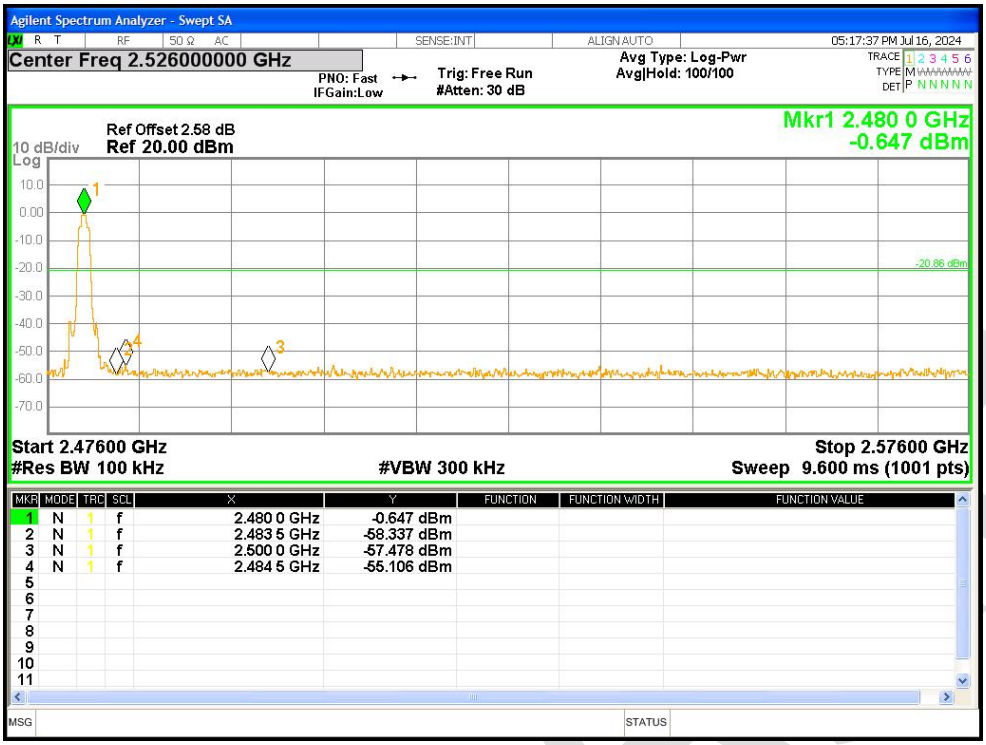
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



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



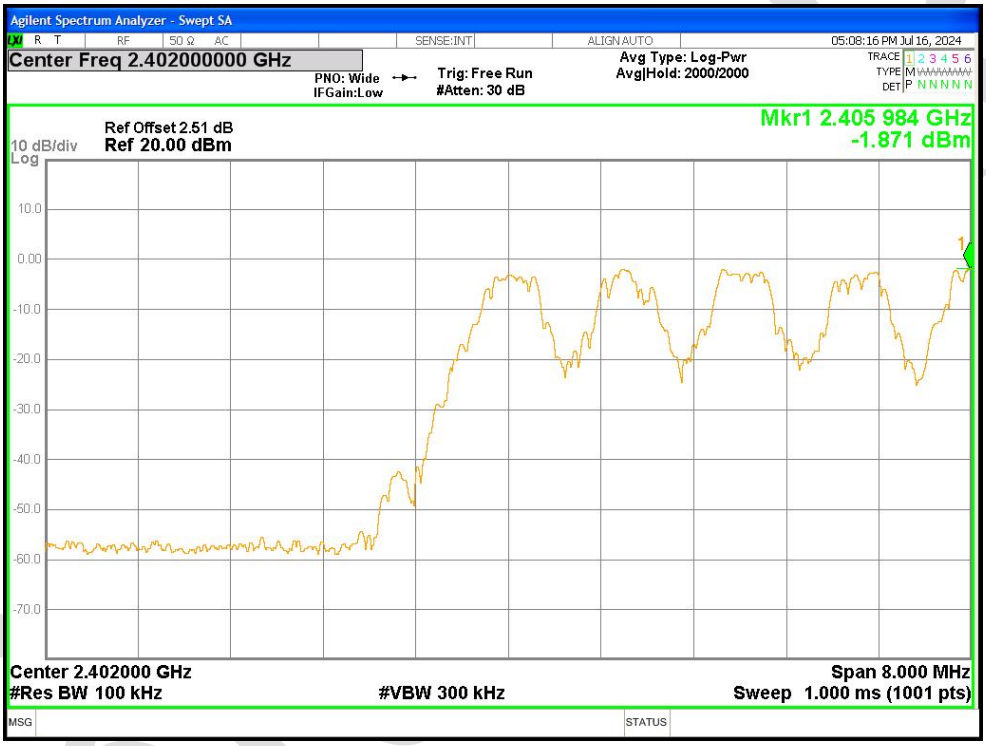
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.526000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 100/100
05:17:37 PM Jul 16, 2024
Ref Offset 2.58 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 2.480 0 GHz
-0.647 dBm
-20.86 dBm
Start 2.47600 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.57600 GHz
Sweep 9.600 ms (1001 pts)
1 N 1 f 2.480 0 GHz -0.647 dBm
2 N 1 f 2.483 5 GHz -58.337 dBm
3 N 1 f 2.500 0 GHz -57.478 dBm
4 N 1 f 2.484 5 GHz -55.106 dBm

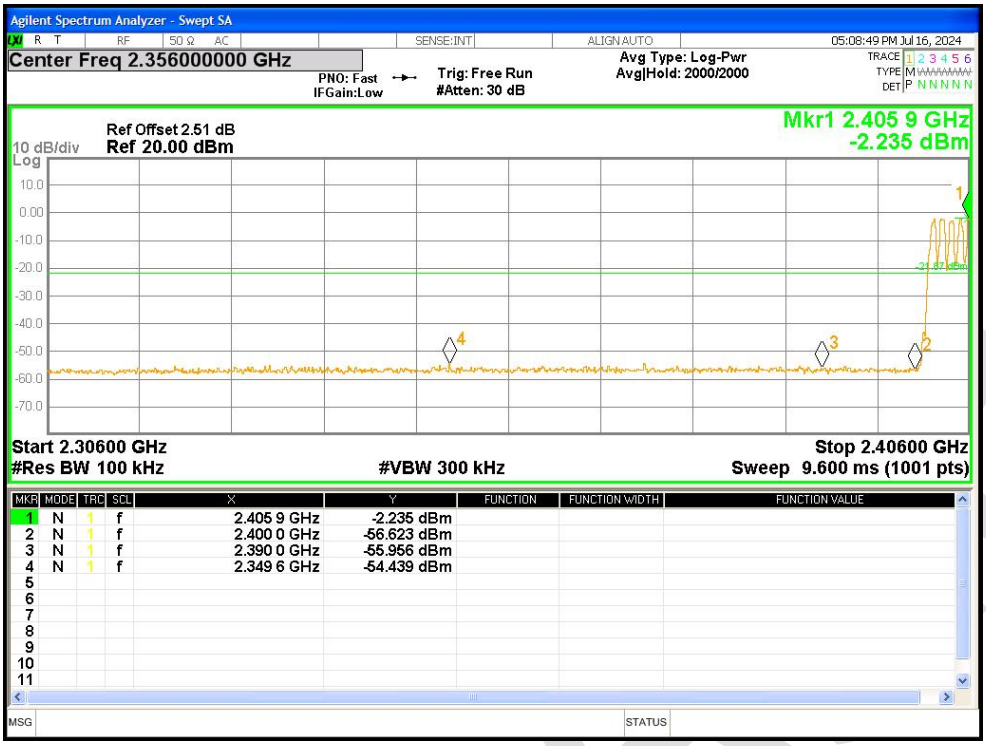
7.5 Band Edge(Hopping)

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-52.56	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-53.15	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-52.9	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-52.12	-20	Pass

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

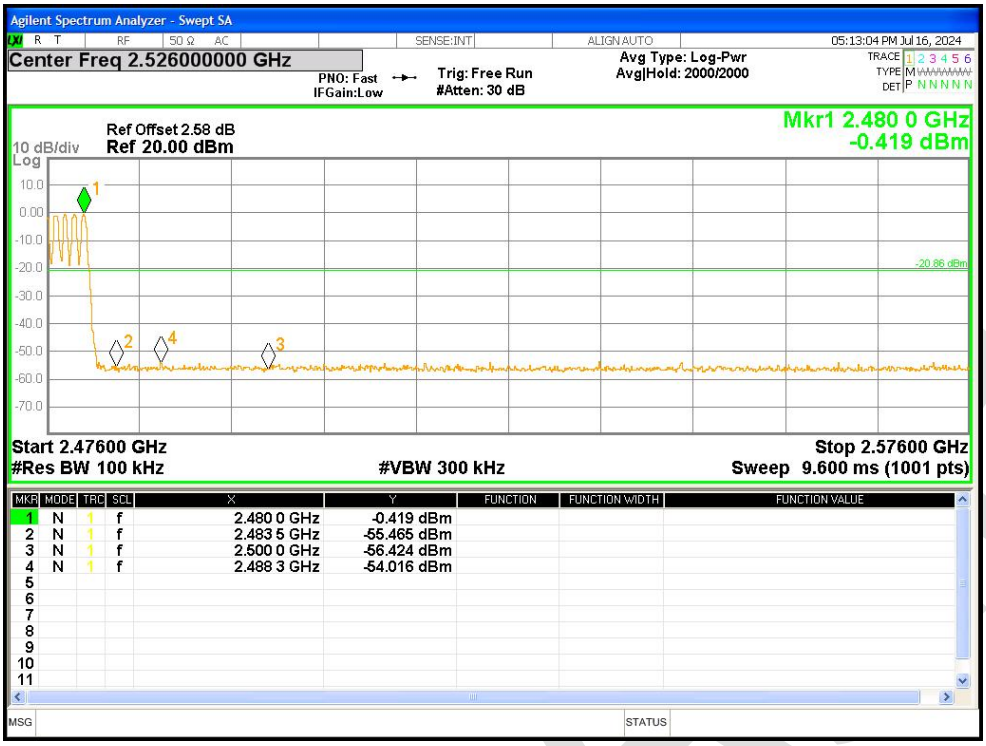


Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission

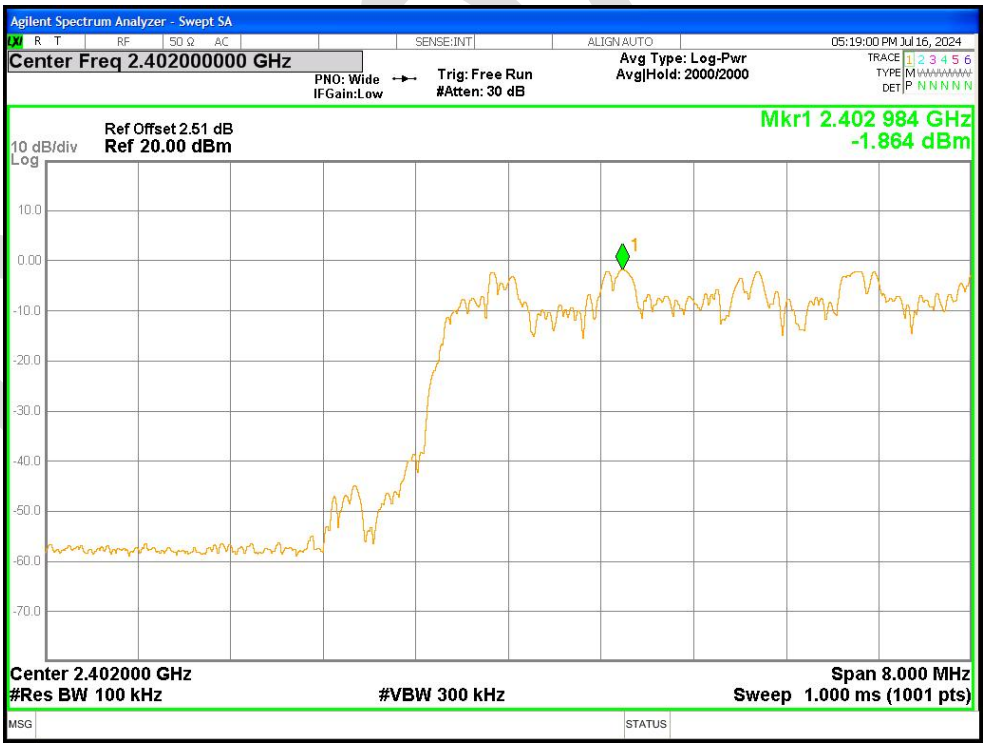


Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Ref

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

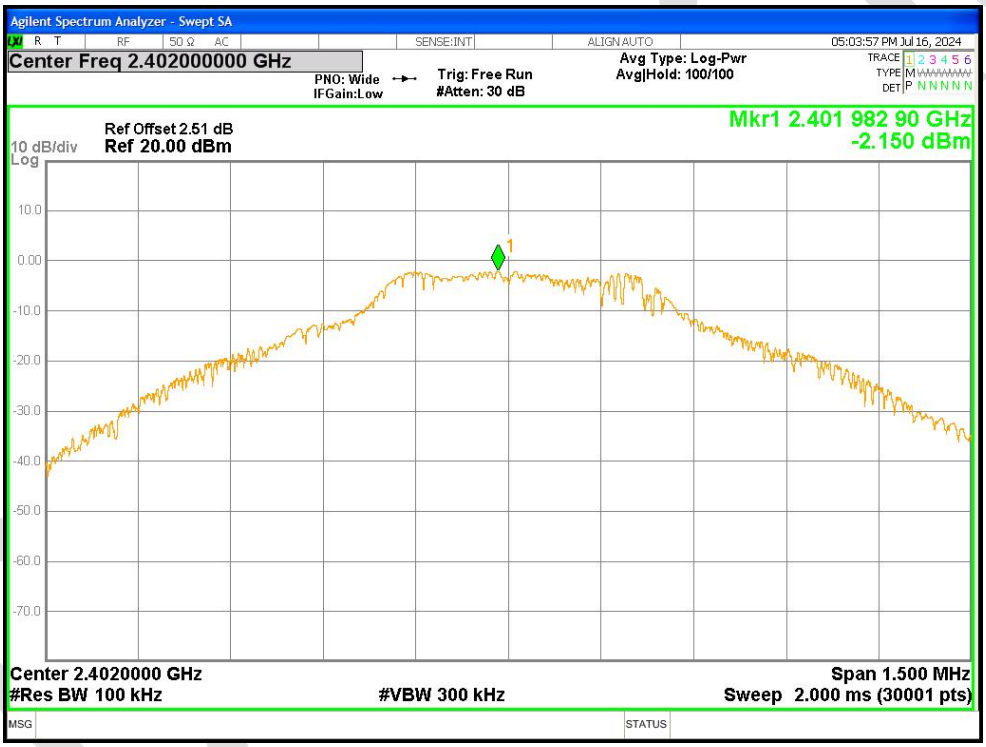
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Emission

Agilent Spectrum Analyzer - Swept SA
Center Freq 2.526000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 2000/2000
05:24:26 PM Jul 16, 2024
Ref Offset 2.58 dB
10 dB/div
Ref 20.00 dBm
Mkr1 2.479 0 GHz
-0.606 dBm
-20.89 dBm
Start 2.47600 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.57600 GHz
Sweep 9.600 ms (1001 pts)
1 N 1 f 2.479 0 GHz -0.606 dBm
2 N 1 f 2.483 5 GHz -56.075 dBm
3 N 1 f 2.500 0 GHz -55.955 dBm
4 N 1 f 2.498 0 GHz -53.013 dBm

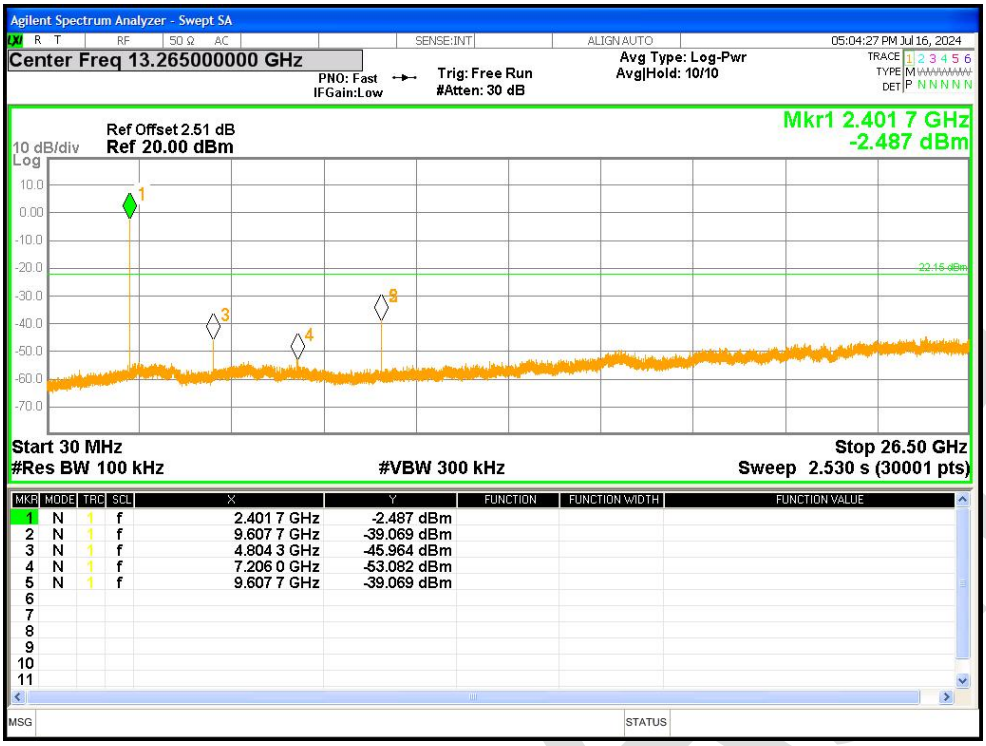
7.6 Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-36.91	-20	Pass
NVNT	1-DH1	2441	Ant1	-39.03	-20	Pass
NVNT	1-DH1	2480	Ant1	-44.06	-20	Pass
NVNT	2-DH1	2402	Ant1	-37.39	-20	Pass
NVNT	2-DH1	2441	Ant1	-39.71	-20	Pass
NVNT	2-DH1	2480	Ant1	-39.74	-20	Pass

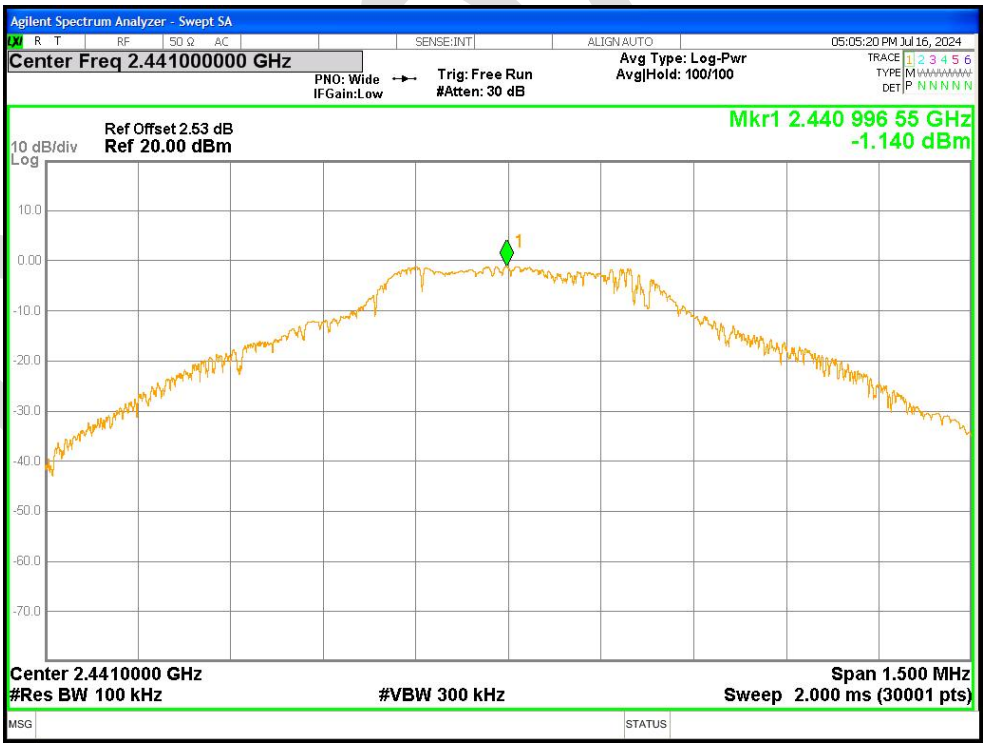
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



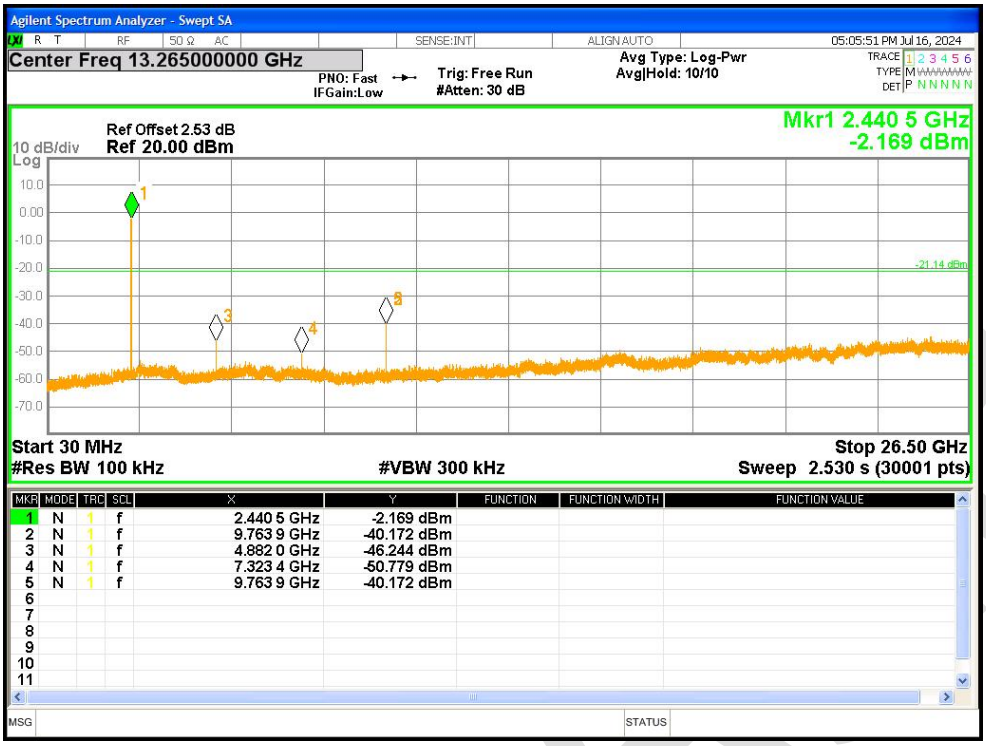
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



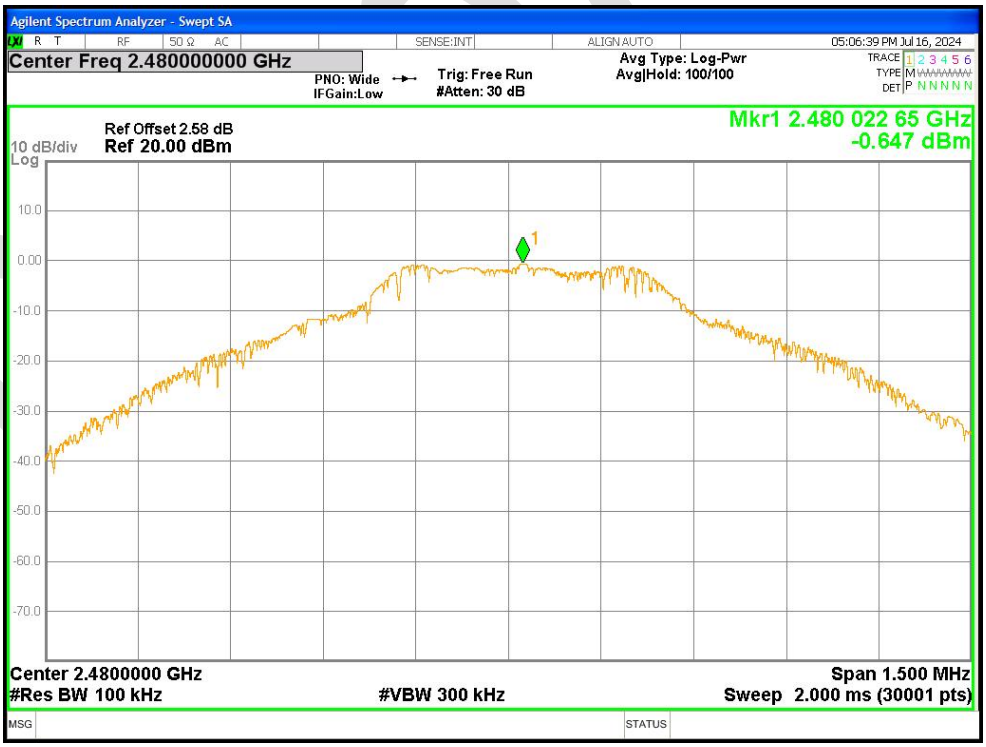
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



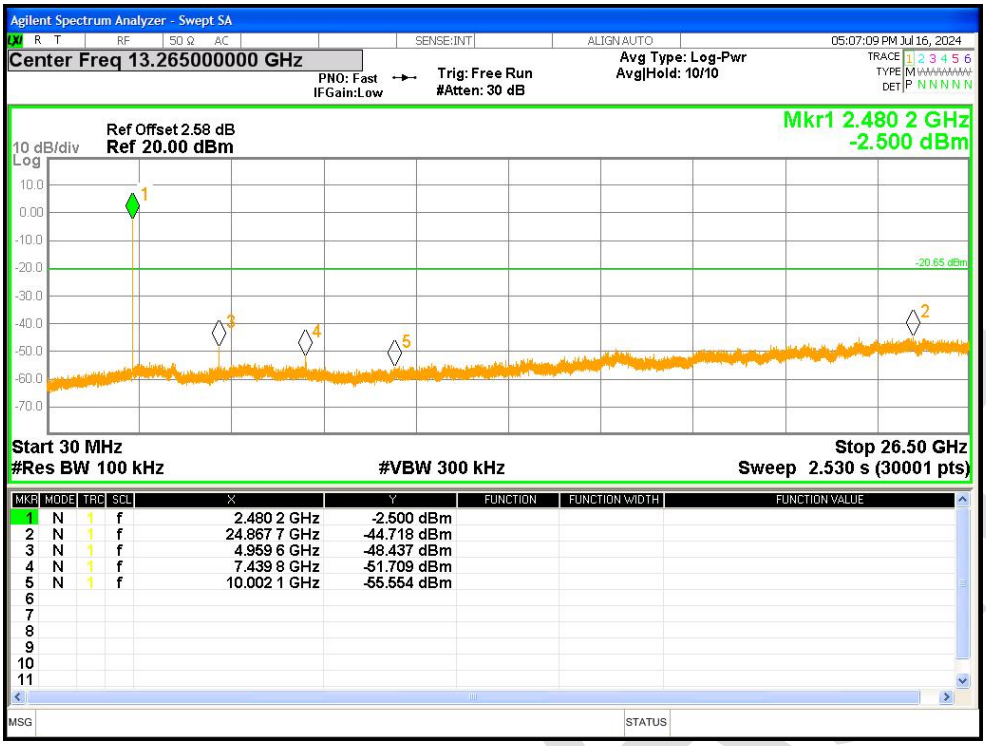
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



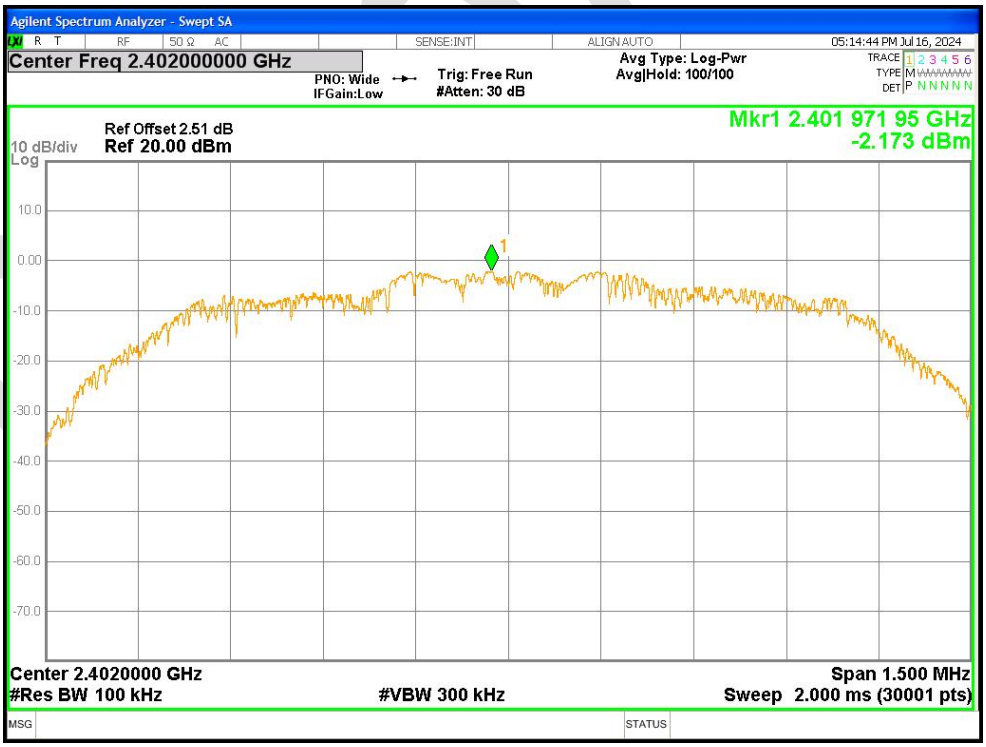
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



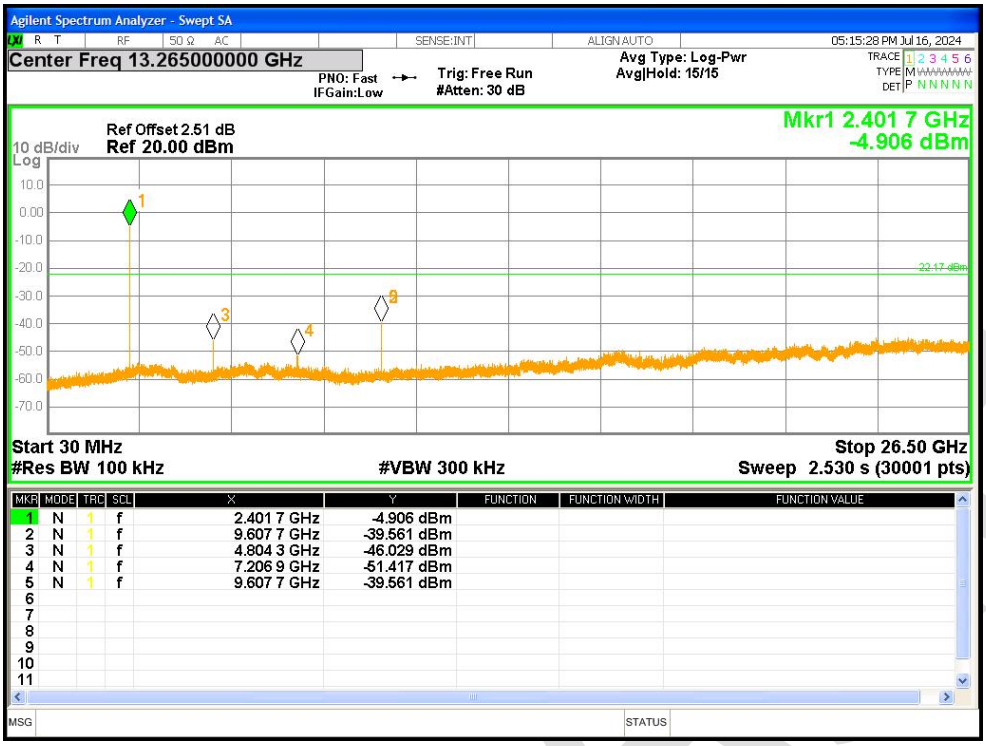
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



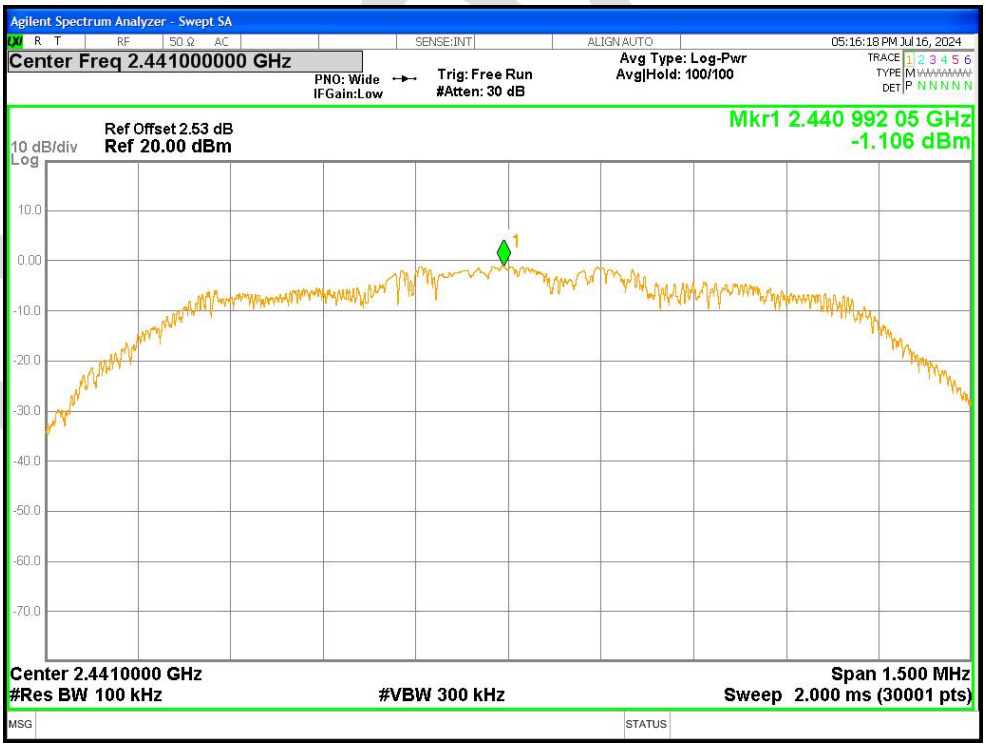
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



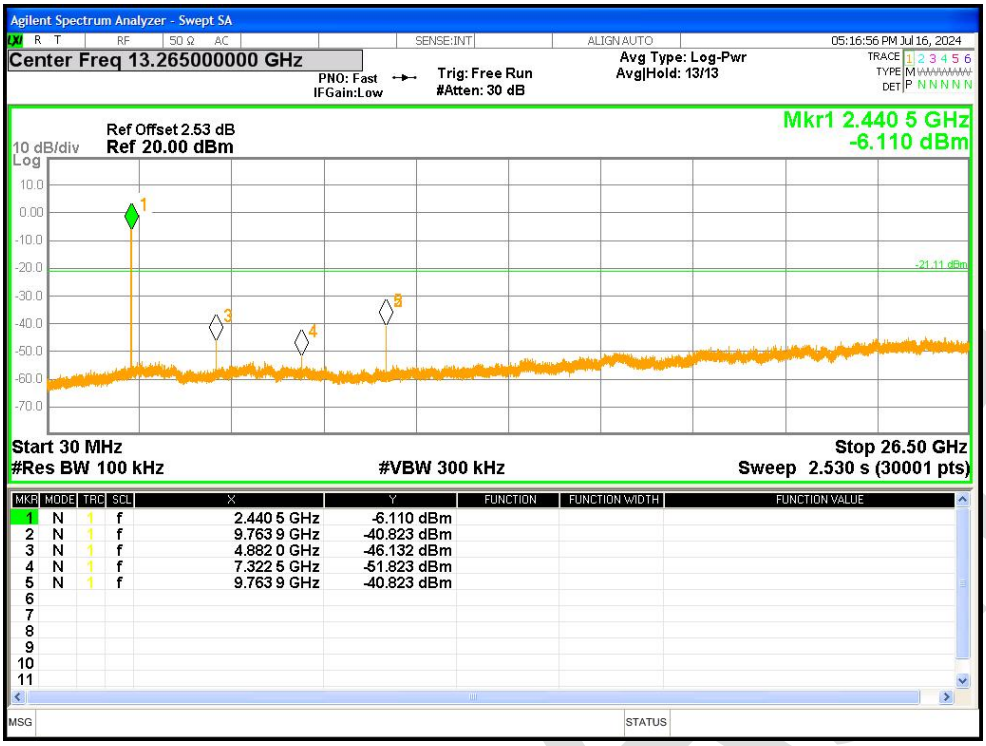
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



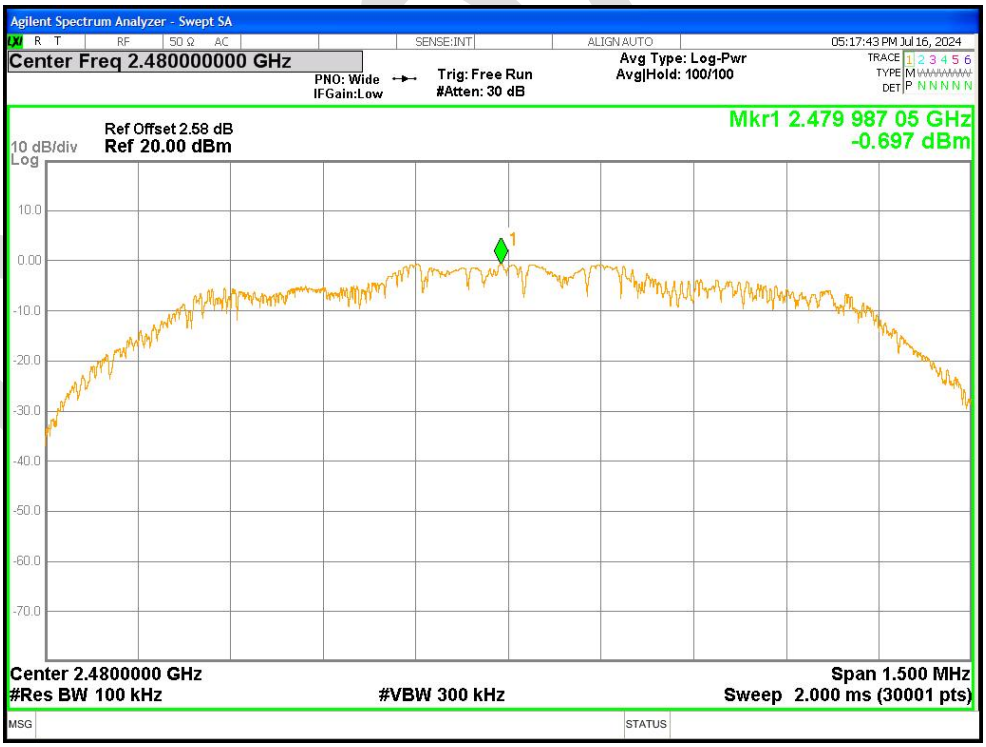
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



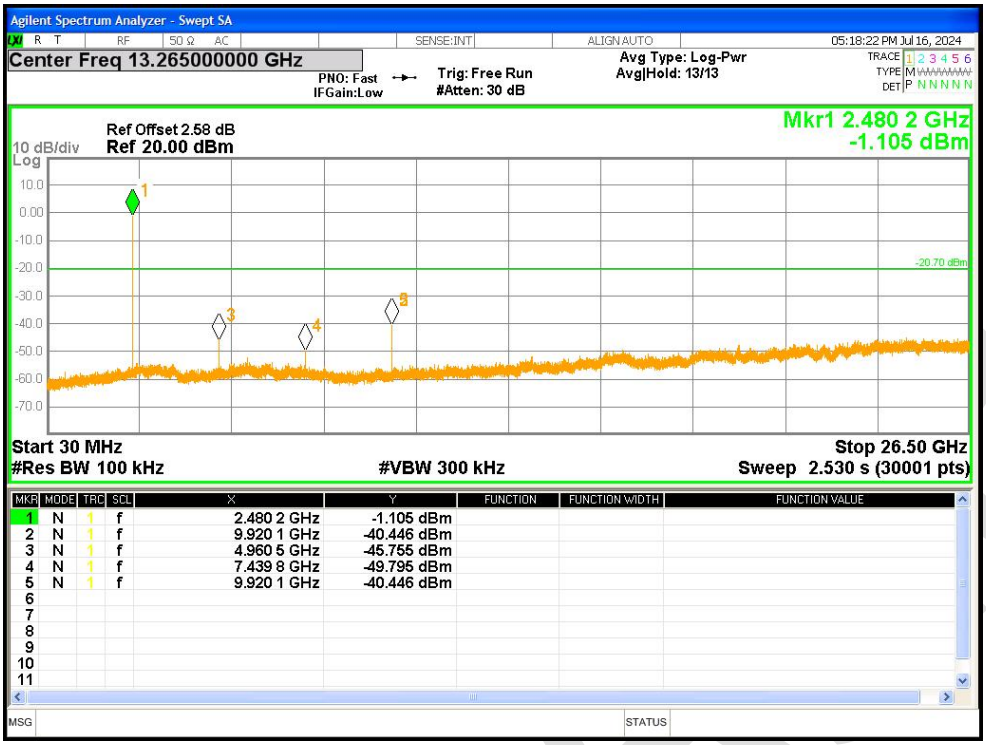
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



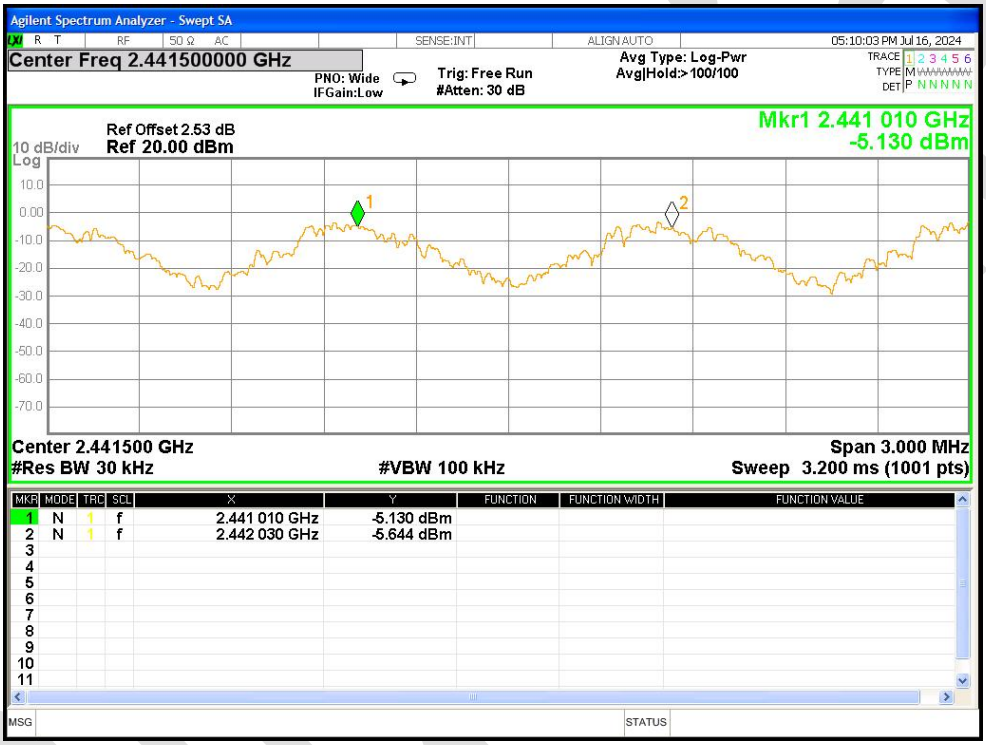
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.265000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 13/13
05:18:22 PM Jul 16, 2024
Ref Offset 2.58 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 2.480 2 GHz
-1.105 dBm
-20.70 dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 26.50 GHz
Sweep 2.530 s (30001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.480 2 GHz -1.105 dBm
2 N 1 f 9.920 1 GHz -40.446 dBm
3 N 1 f 4.960 5 GHz -45.755 dBm
4 N 1 f 7.439 8 GHz -49.795 dBm
5 N 1 f 9.920 1 GHz -40.446 dBm
MSG
STATUS

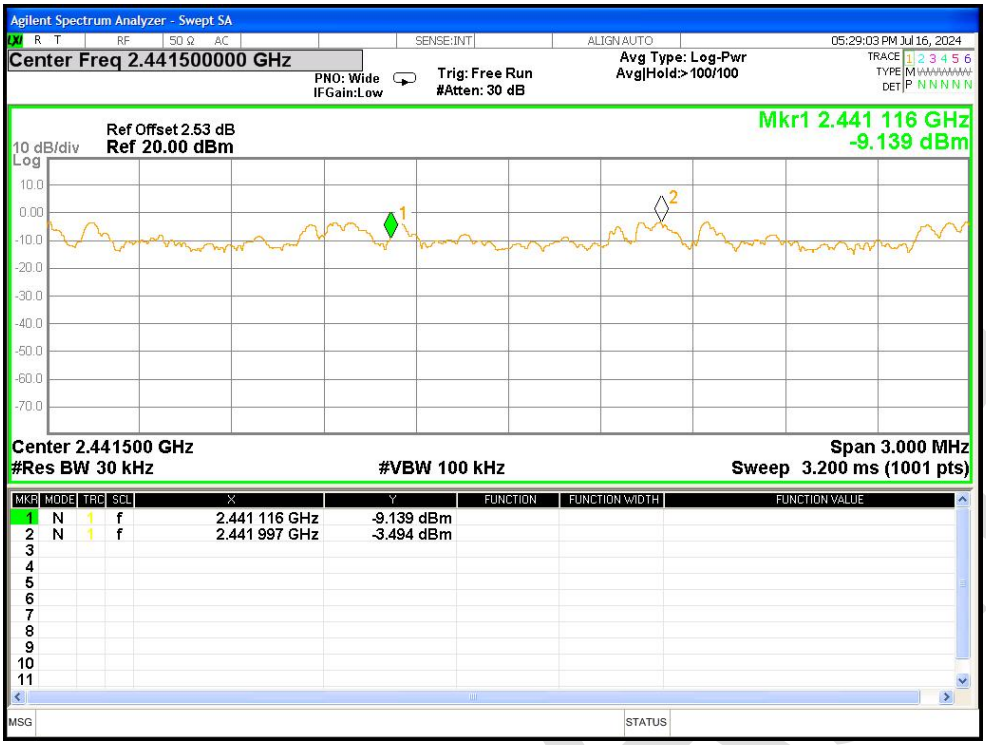
7.7 Carrier Frequencies Separation

Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2441.0095	2442.0295	1.02	0.934	Pass
NVNT	2-DH1	Ant1	2441.116	2441.9965	0.8805	0.841	Pass

CFS NVNT 1-DH1 2441MHz Ant1



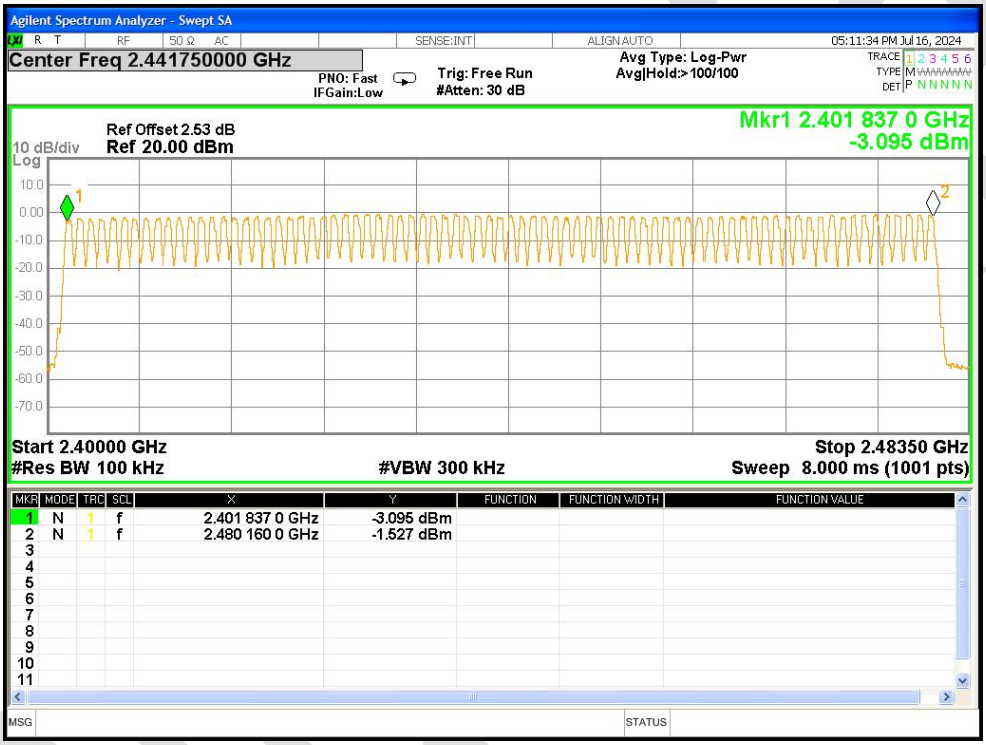
CFS NVNT 2-DH1 2441MHz Ant1


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441500000 GHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
05:29:03 PM Jul 16, 2024
Ref Offset 2.53 dB
10 dB/div
Ref 20.00 dBm
Mkr1 2.441 116 GHz
-9.139 dBm
Center 2.441500 GHz
#Res BW 30 kHz
#VBW 100 kHz
Span 3.000 MHz
Sweep 3.200 ms (1001 pts)
1 N 1 f 2.441 116 GHz -9.139 dBm
2 N 1 f 2.441 997 GHz -3.494 dBm

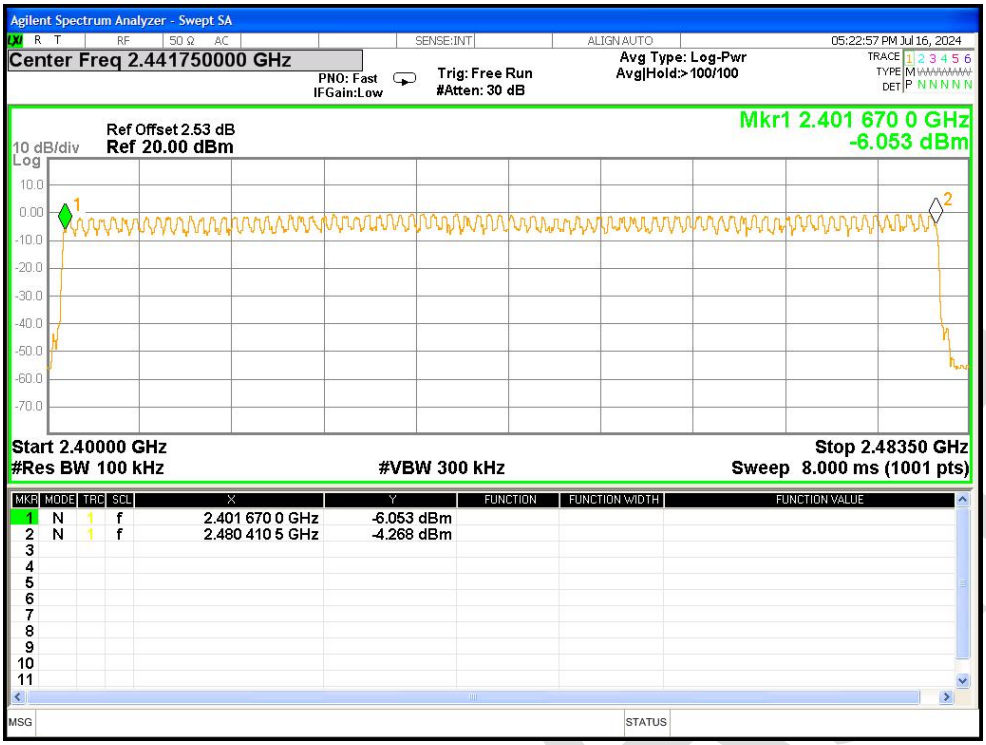
7.8 Number of Hopping Channel

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

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1

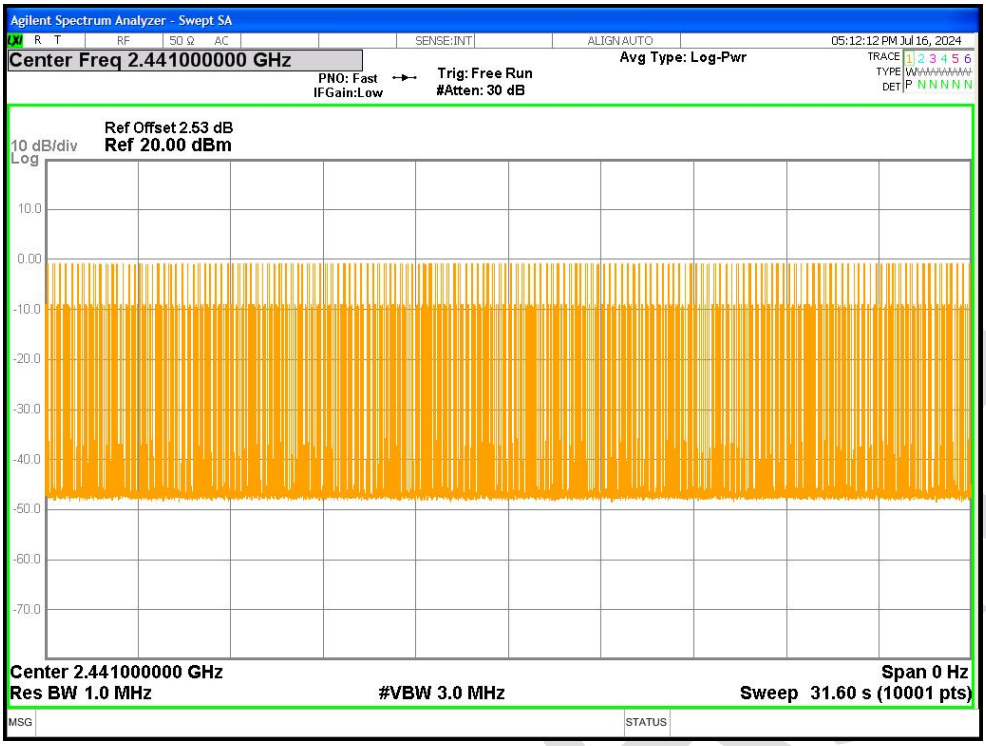

Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441750000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
05:22:57 PM Jul 16, 2024
Ref Offset 2.53 dB
10 dB/div
Ref 20.00 dBm
Mkr1 2.401 670 0 GHz
-6.053 dBm
Start 2.40000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.48350 GHz
Sweep 8.000 ms (1001 pts)
1 N 1 f 2.401 670 0 GHz -6.053 dBm
2 N 1 f 2.480 410 5 GHz -4.268 dBm

7.9 Dwell Time

Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.402	127.836	318	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.658	270.254	163	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.906	299.318	103	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.411	130.698	318	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.905	336.98	116	31600	400	Pass

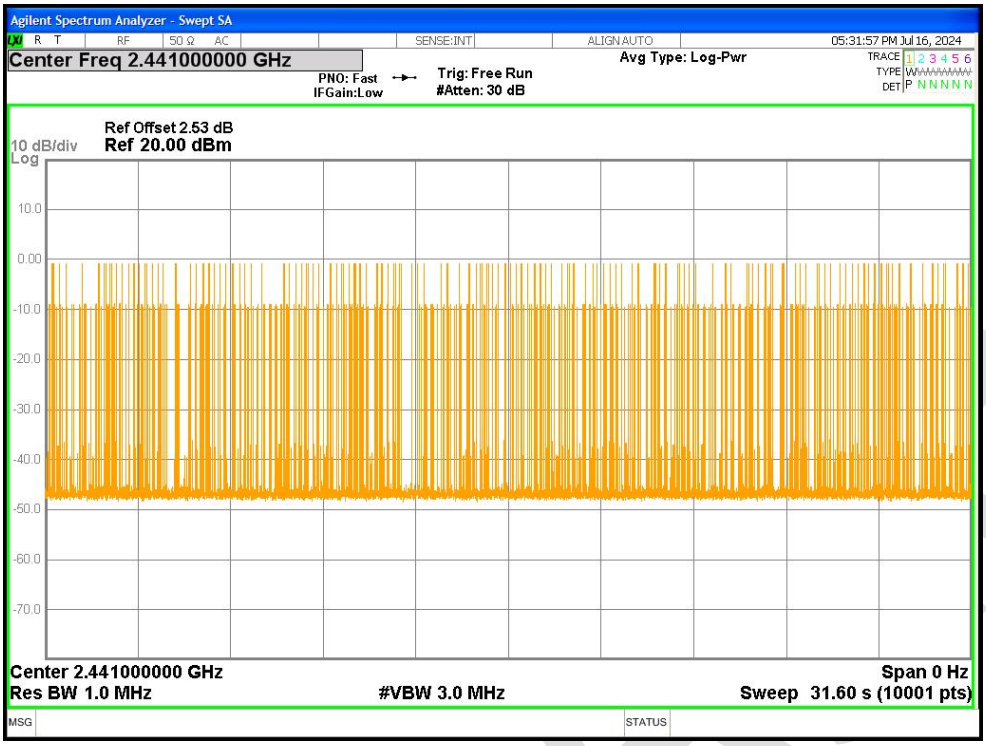
Dwell NVNT 1-DH1 2441MHz Ant1 One Burst

Dwell NVNT 1-DH1 2441MHz Ant1 Accumulated



Dwell NVNT 1-DH3 2441MHz Ant1 One Burst

Dwell NVNT 1-DH3 2441MHz Ant1 Accumulated



Dwell NVNT 1-DH5 2441MHz Ant1 One Burst

Dwell NVNT 1-DH5 2441MHz Ant1 Accumulated