

Table of Contents

1.Dwell Time	2
2.Maximum Peak Conducted Output Power	9
3.-20dB Bandwidth	15
4.Occupied Channel Bandwidth	21
5.Carrier Frequencies Separation	27
6.Number of Hopping Channel	31
7.Band Edge	35
8.Band Edge(Hopping)	42
9.Conducted RF Spurious Emission	47

FCC_BT(Part15.247) Test Data

1.Dwell Time

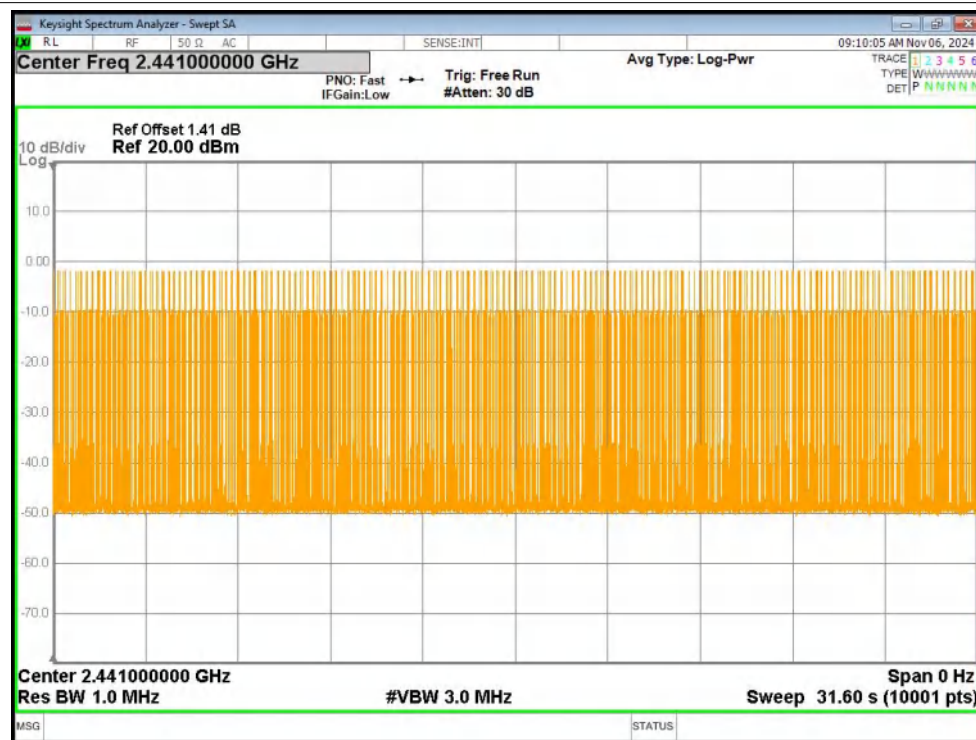
Mode	Frequency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
1-DH1	2441	0.382	121.858	319	31600	400	Pass
1-DH3	2441	1.637	247.187	151	31600	400	Pass
1-DH5	2441	2.886	331.89	115	31600	400	Pass
2-DH1	2441	0.39	124.02	318	31600	400	Pass
2-DH3	2441	1.637	266.831	163	31600	400	Pass
2-DH5	2441	2.891	303.555	105	31600	400	Pass

Test Graphs

Dwell NVNT 1-DH1 2441MHz Ant1 One Burst



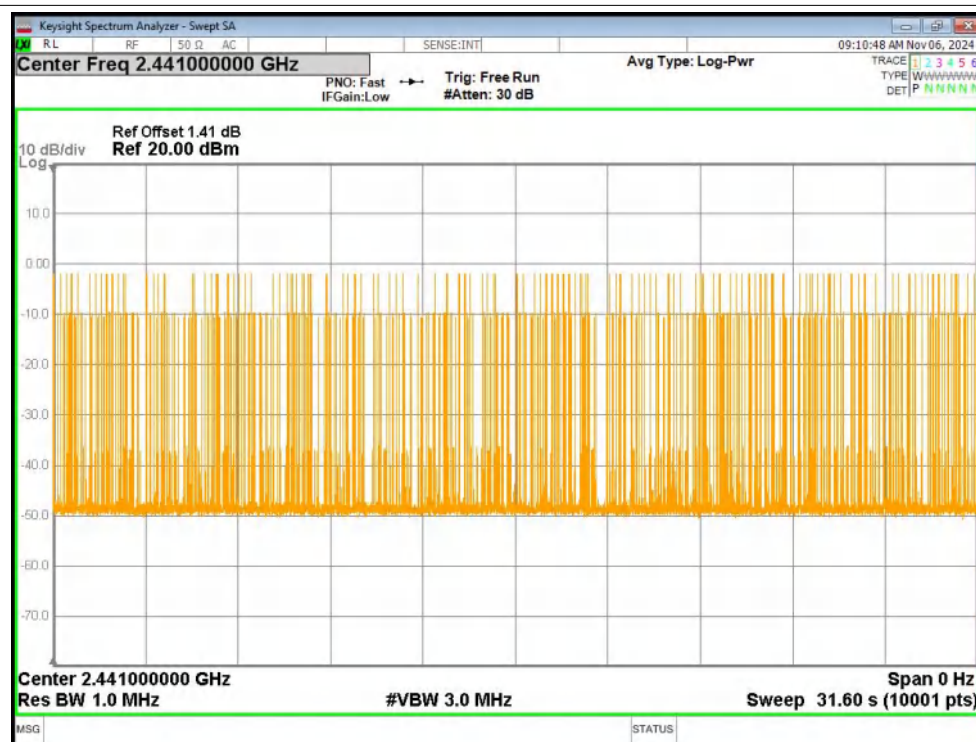
Dwell NVNT 1-DH1 2441MHz Ant1 Accumulated



Dwell NVNT 1-DH3 2441MHz Ant1 One Burst



Dwell NVNT 1-DH3 2441MHz Ant1 Accumulated



Keysight Spectrum Analyzer - Swept SA

Center Freq 2.441000000 GHz

Trig Delay: 500.0 μ s

Avg Type: Log-Pwr

PNO: Fast IFGain: Low

Trig: Video #Atten: 30 dB

Ref Offset 1.41 dB

Ref 20.00 dBm

Δ Mkr1 2.886 ms

0.78 dB

Center 2.441000000 GHz

Res BW 1.0 MHz

#VBW 3.0 MHz

Span 0 Hz

Sweep 10.00 ms (10001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	Δ 2	1	t	(Δ)	2.886 ms	(Δ)	0.78 dB	
2	F	1	t		496.0 μ s		-19.18 dBm	
3								
4								
5								
6								
7								
8								
9								
10								
11								

Keysight Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT 08:25:06 AM Nov 06, 2024

Center Freq 2.441000000 GHz PNO: Fast IFGain:Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr

TRACE 1 2 3 4 5 6
TYPE W W W W W W W W
DET P N N N N N N

10 dB/div
Log
Ref Offset 1.41 dB
Ref 20.00 dBm

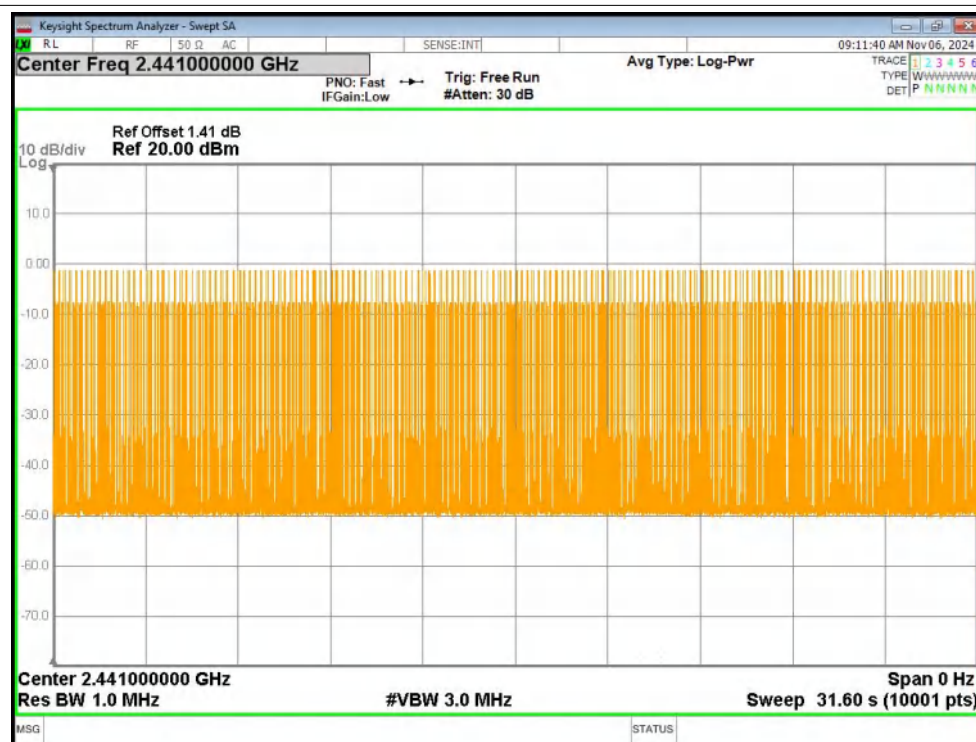
Center 2.441000000 GHz
Res BW 1.0 MHz
#VBW 3.0 MHz
Span 0 Hz
Sweep 31.60 s (10001 pts)

MSG STATUS

Dwell NVNT 2-DH1 2441MHz Ant1 One Burst



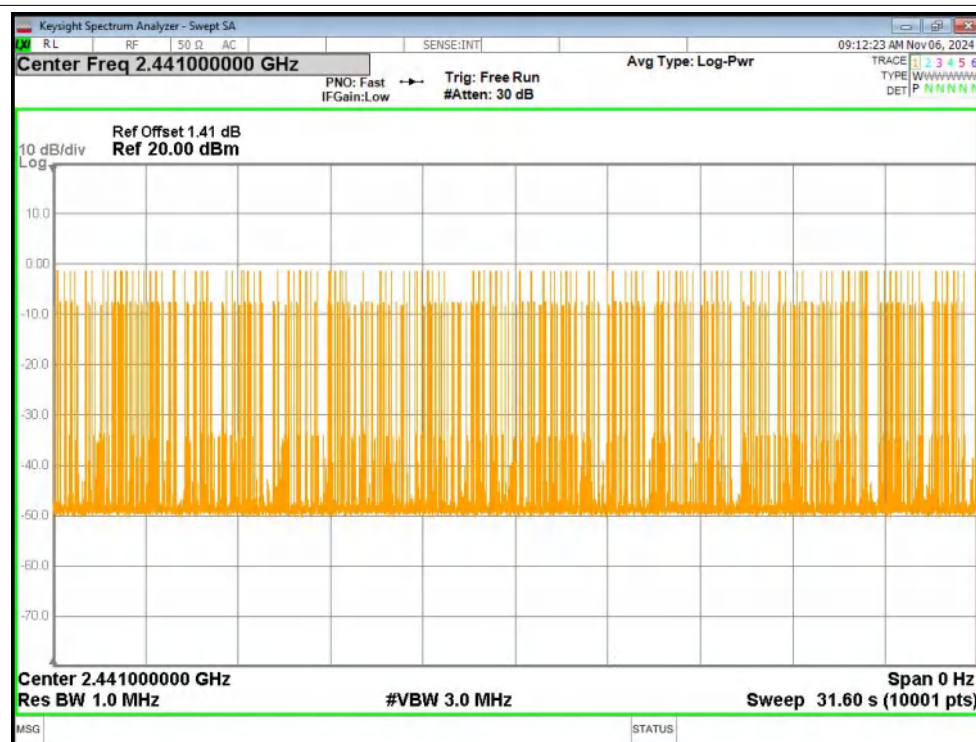
Dwell NVNT 2-DH1 2441MHz Ant1 Accumulated



Dwell NVNT 2-DH3 2441MHz Ant1 One Burst



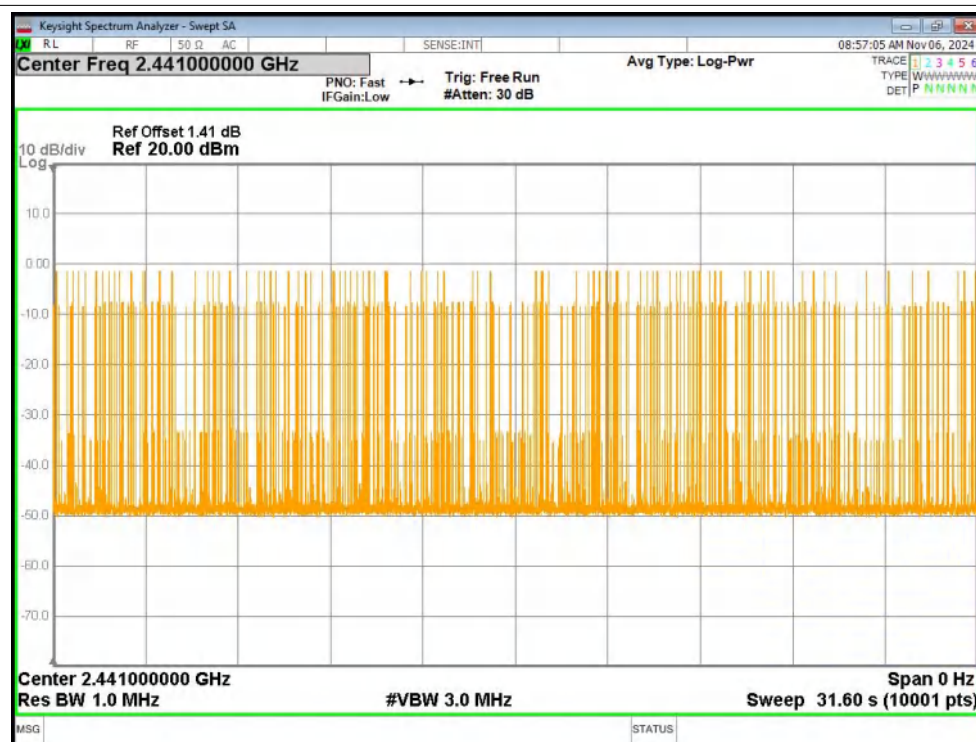
Dwell NVNT 2-DH3 2441MHz Ant1 Accumulated



Dwell NVNT 2-DH5 2441MHz Ant1 One Burst



Dwell NVNT 2-DH5 2441MHz Ant1 Accumulated

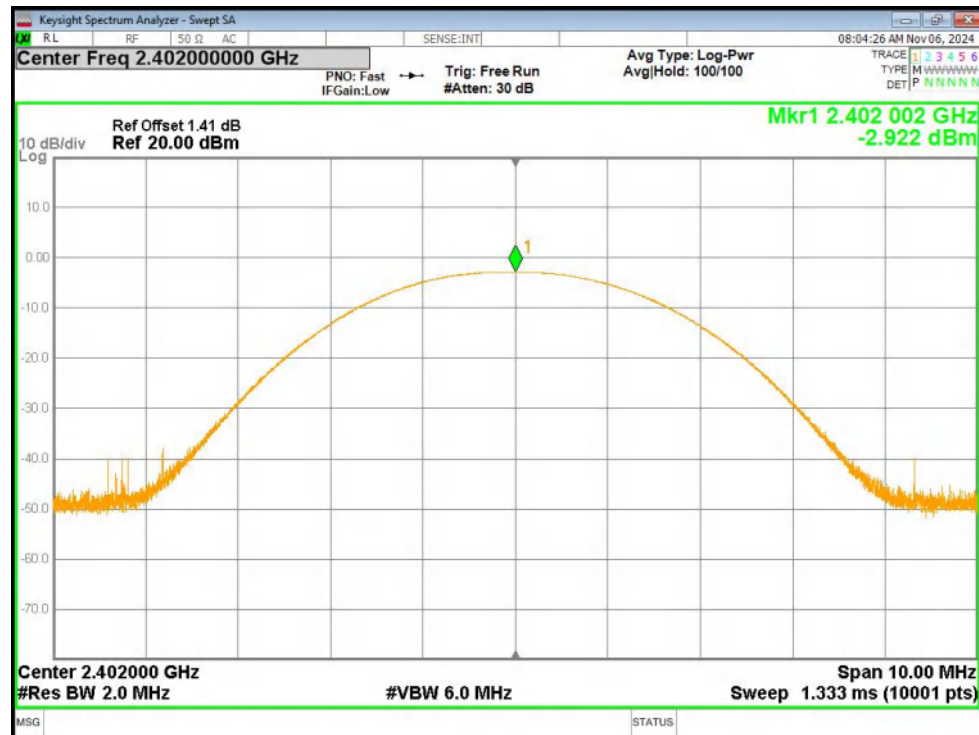


2.Maximum Peak Conducted Output Power

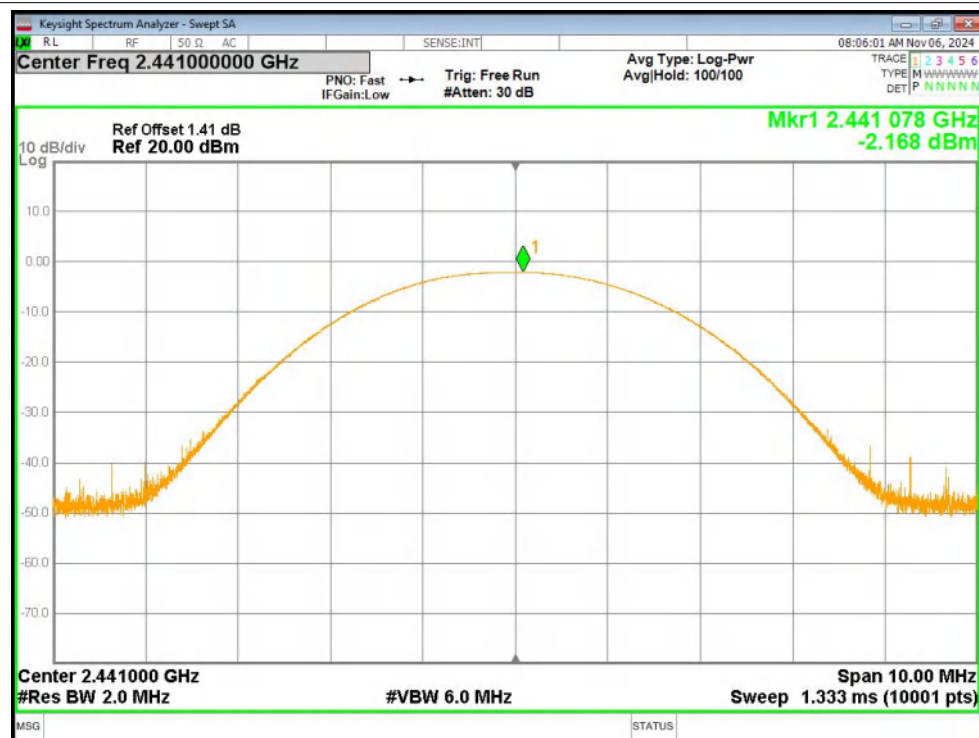
Mode	Frequency (MHz)	Total Power (dBm)	Limit (dBm)	Verdict
1-DH5	2402	-2.92	30	Pass
1-DH5	2441	-2.17	30	Pass
1-DH5	2480	-1.87	30	Pass
2-DH5	2402	-1.98	21	Pass
2-DH5	2441	-1.17	21	Pass
2-DH5	2480	-0.85	21	Pass

Test Graphs

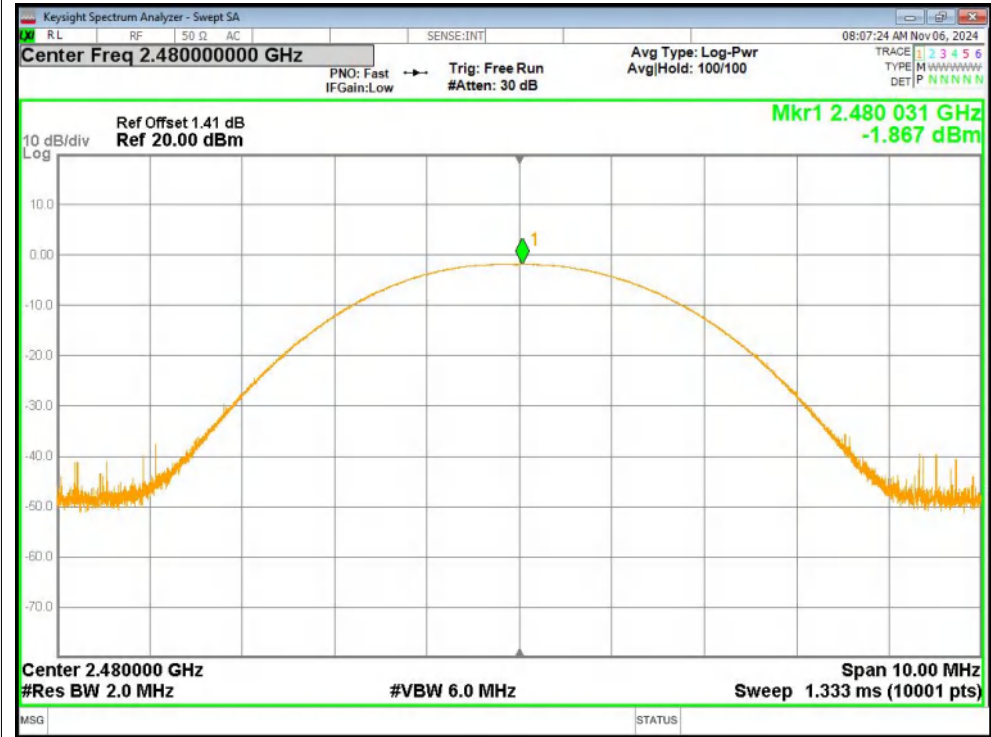
Peak Power NVNT 1-DH5 2402MHz Ant1



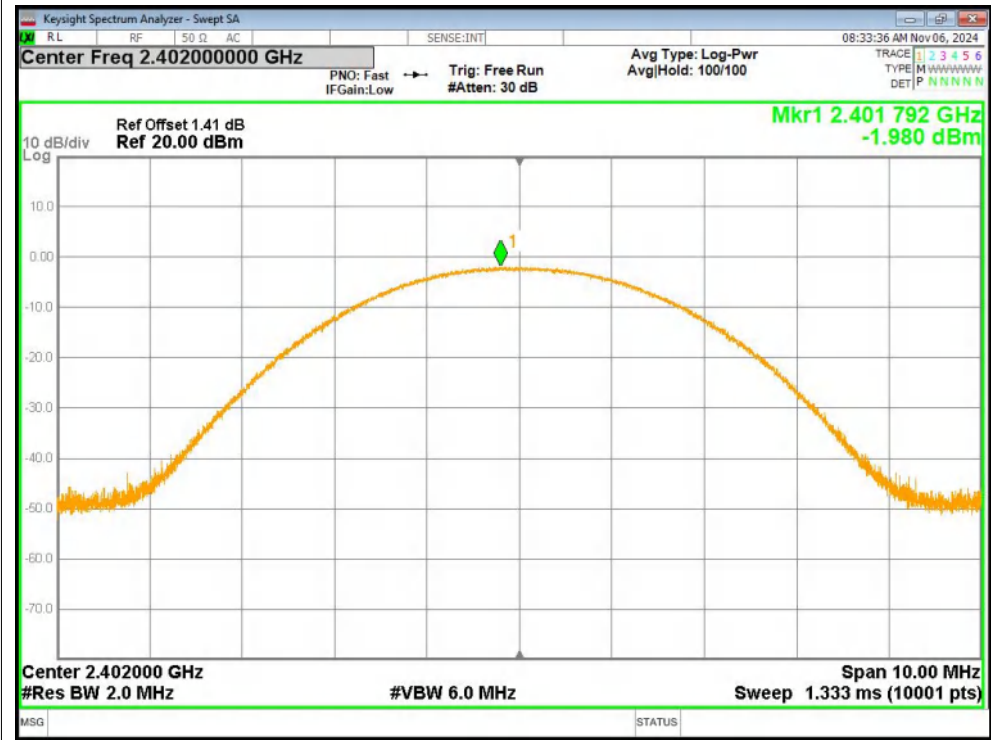
Peak Power NVNT 1-DH5 2441MHz Ant1



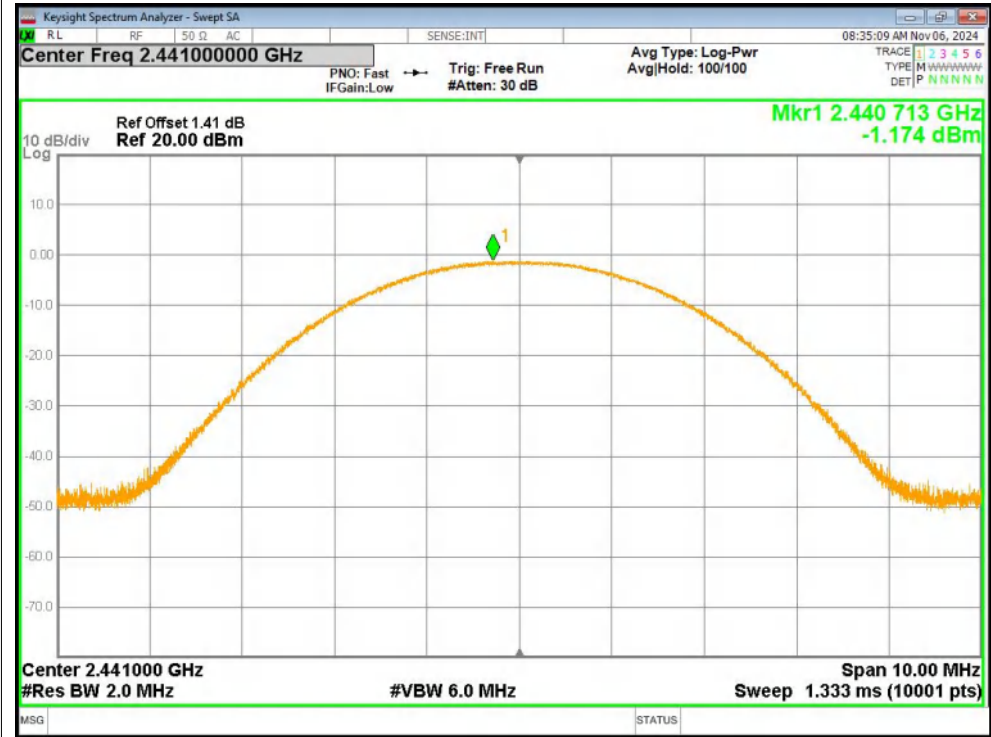
Peak Power NVNT 1-DH5 2480MHz Ant1



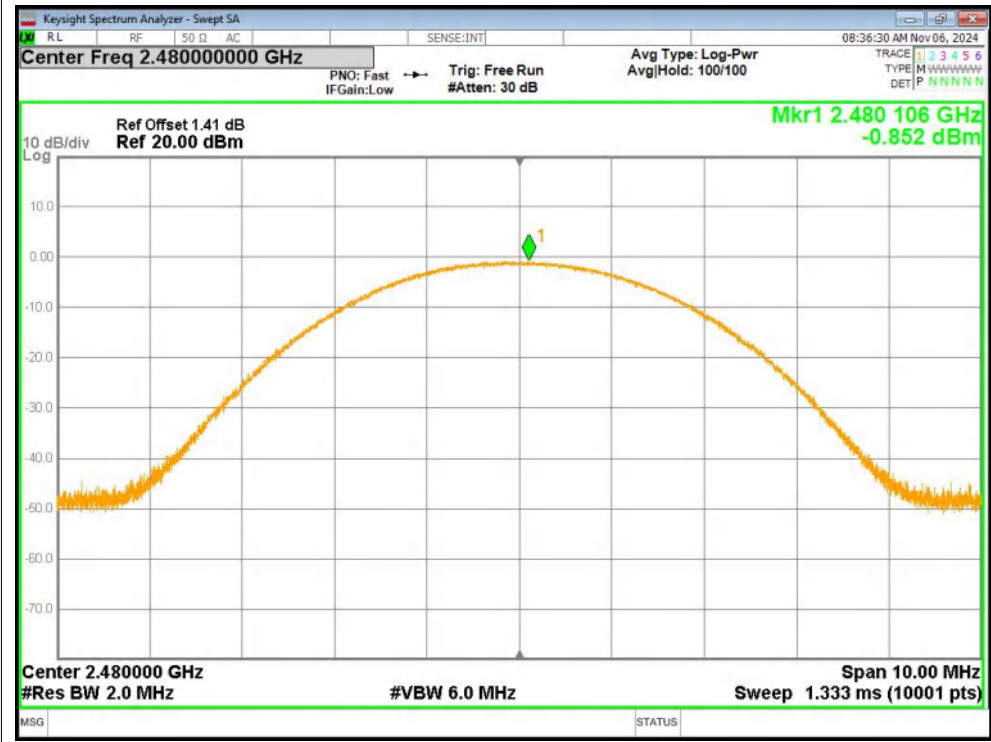
Peak Power NVNT 2-DH5 2402MHz Ant1



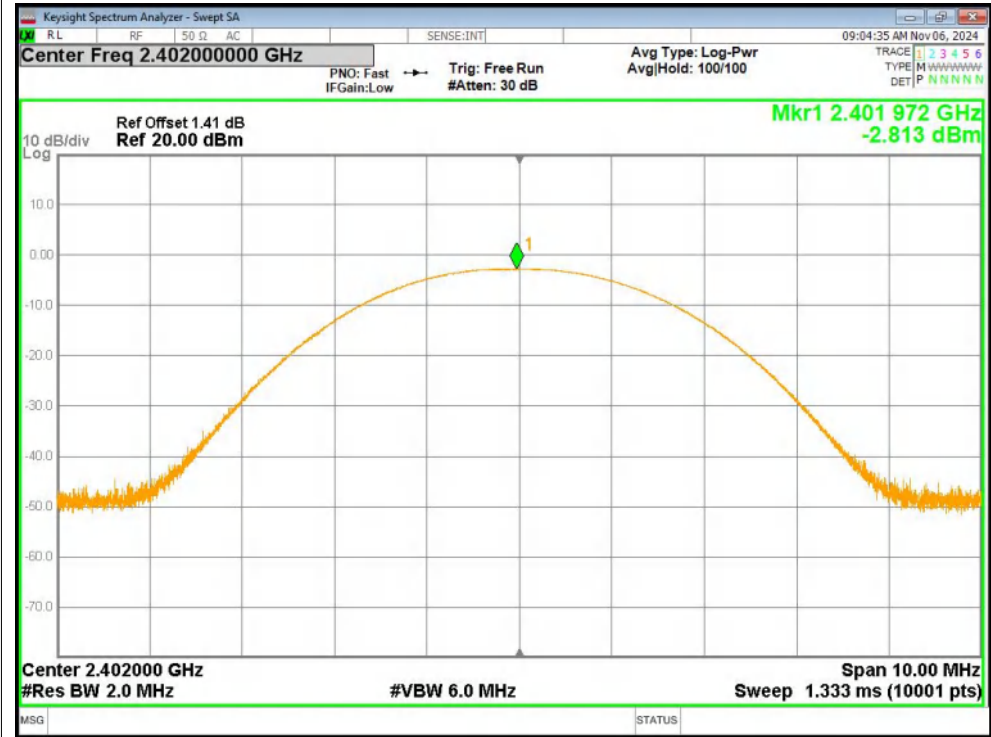
Peak Power NVNT 2-DH5 2441MHz Ant1



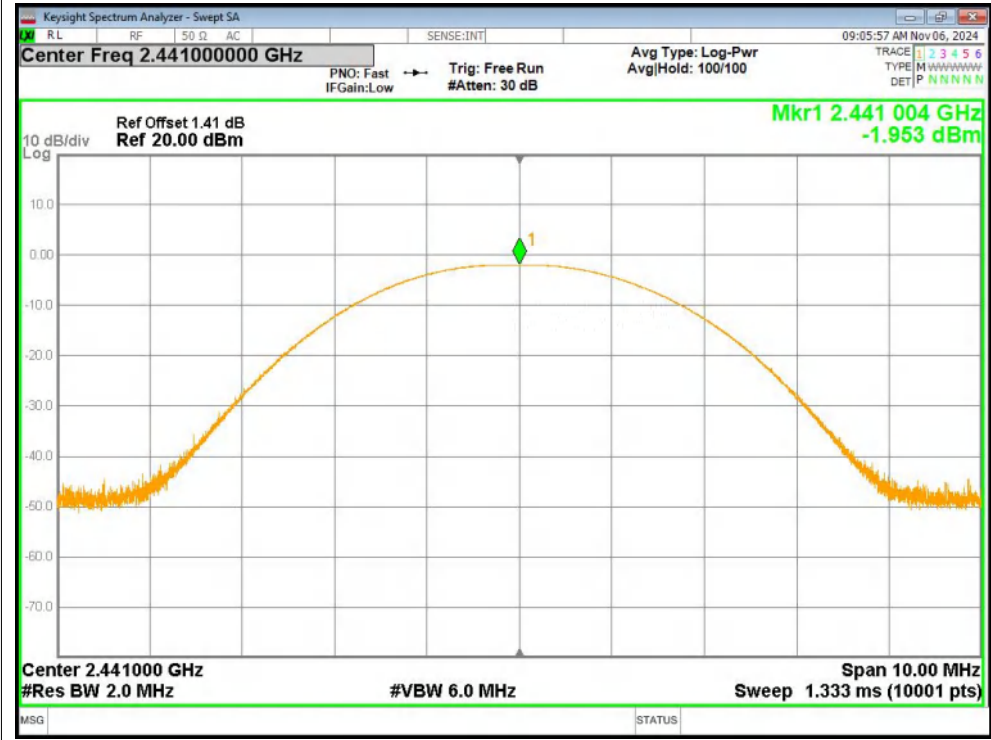
Peak Power NVNT 2-DH5 2480MHz Ant1



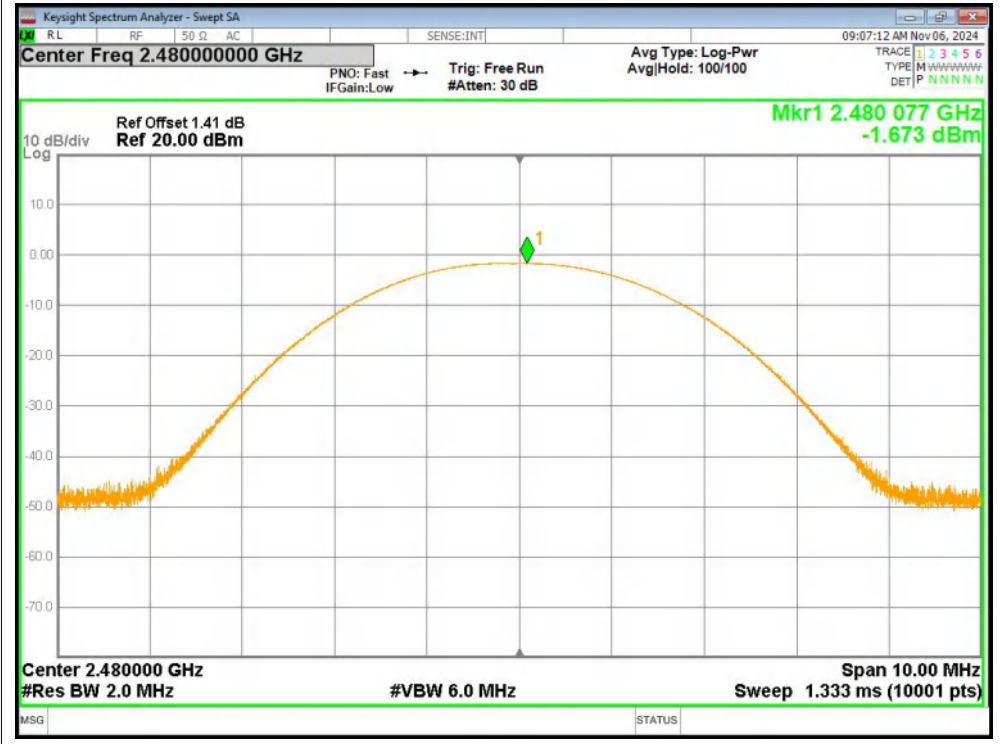
Peak Power NVNT 3-DH5 2402MHz Ant1



Peak Power NVNT 3-DH5 2441MHz Ant1



Peak Power NVNT 3-DH5 2480MHz Ant1

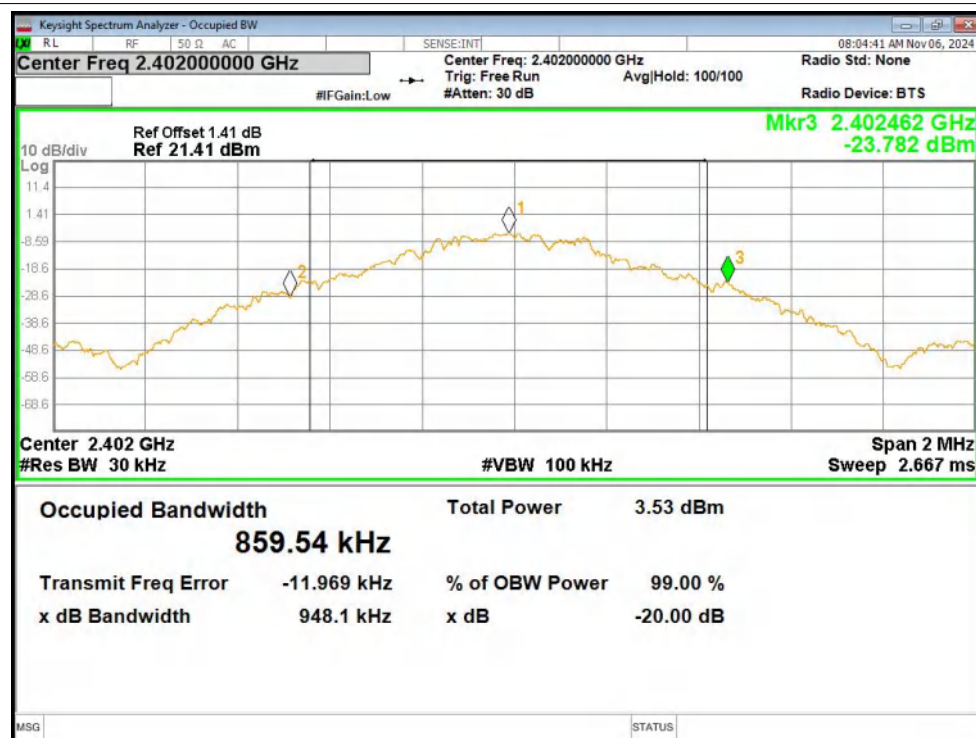


3.-20dB Bandwidth

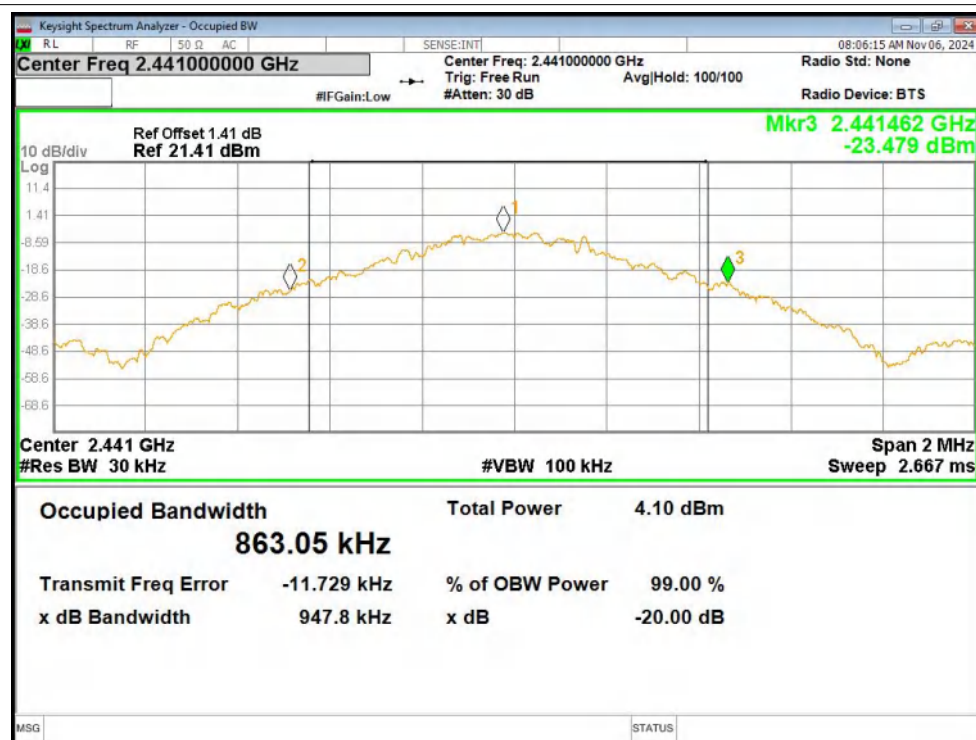
Mode	Frequency (MHz)	-20 dB Bandwidth (MHz)	Verdict
1-DH5	2402	0.948	Pass
1-DH5	2441	0.948	Pass
1-DH5	2480	0.930	Pass
2-DH5	2402	1.286	Pass
2-DH5	2441	1.262	Pass
2-DH5	2480	1.281	Pass

Test Graphs

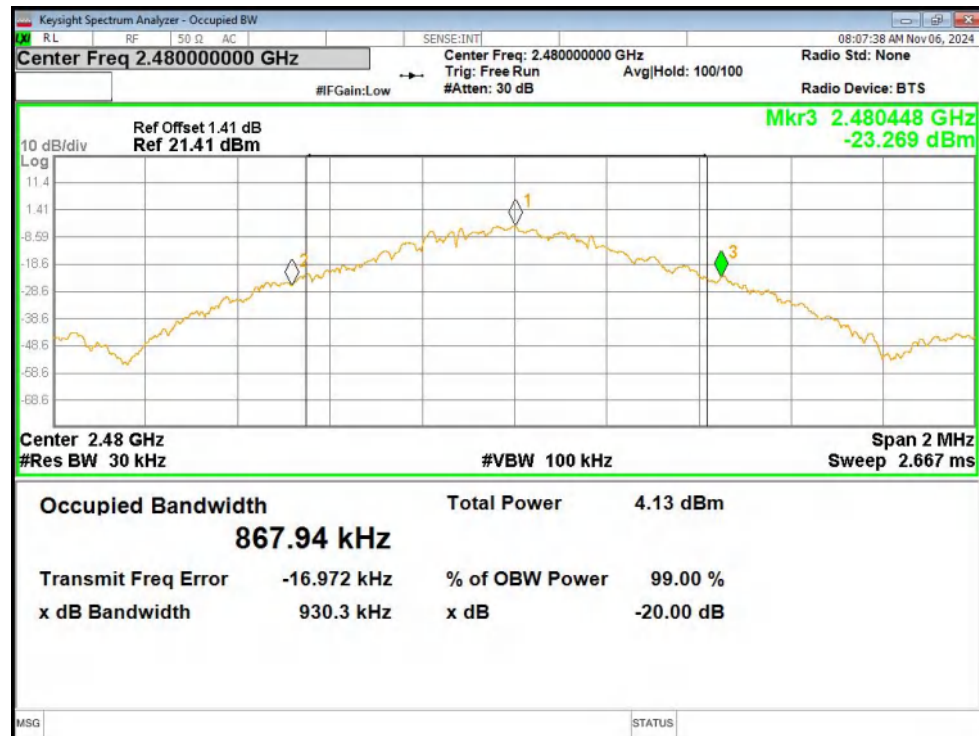
-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



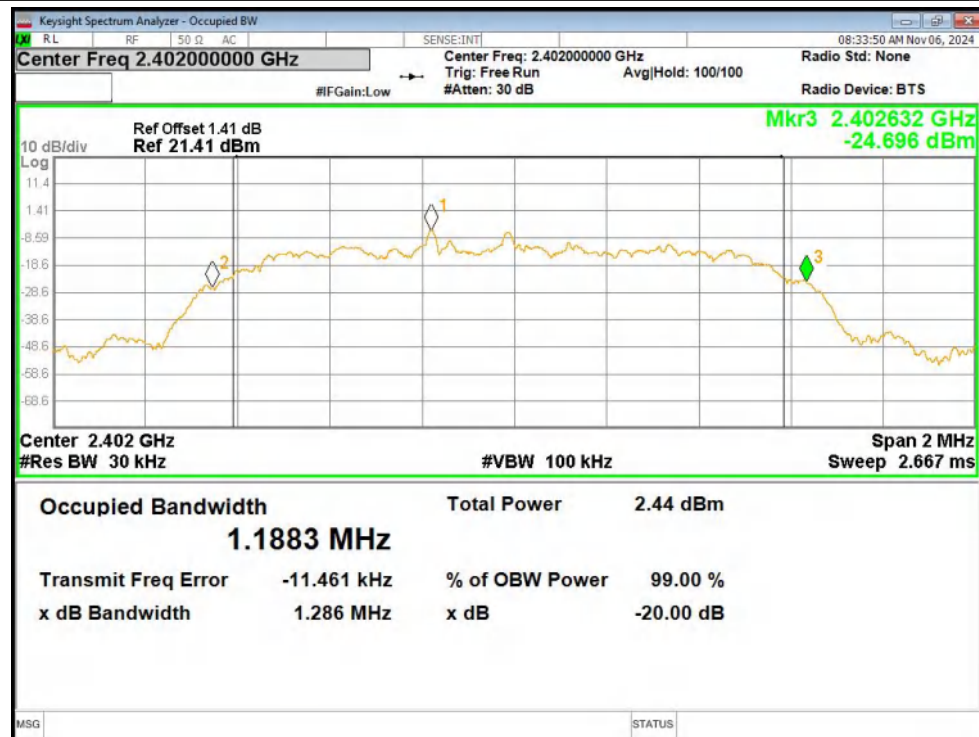
-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



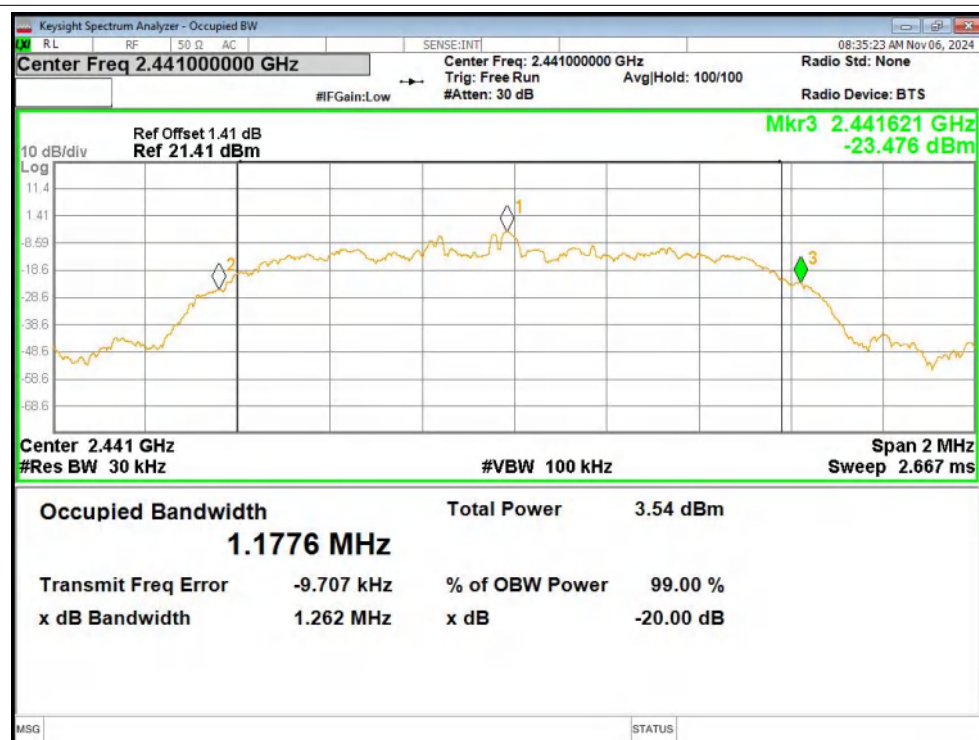
-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



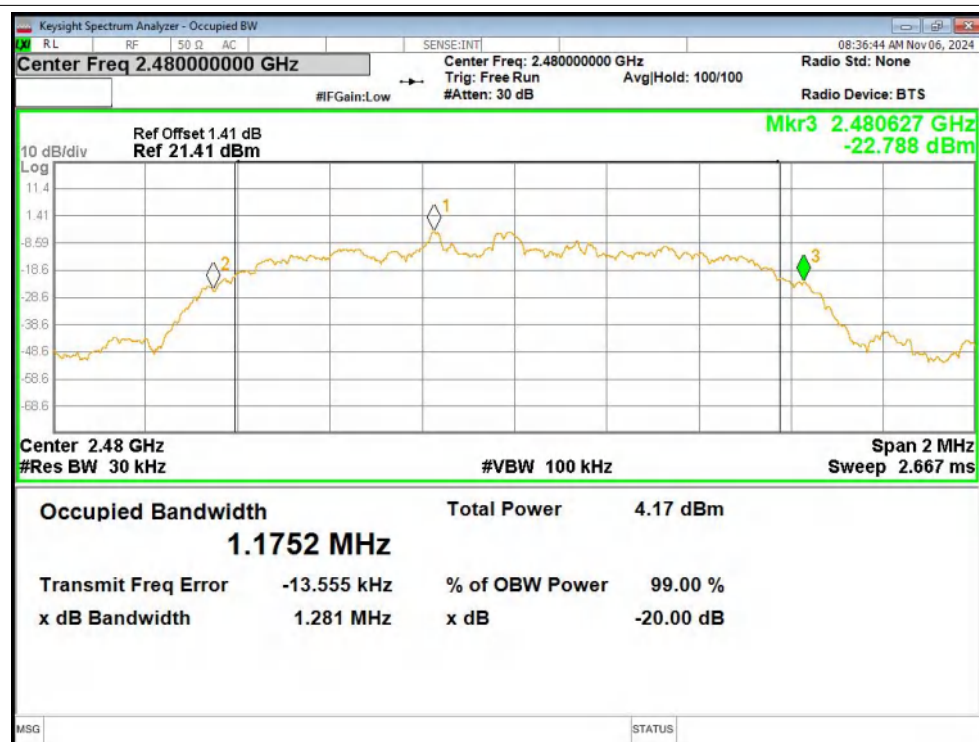
-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



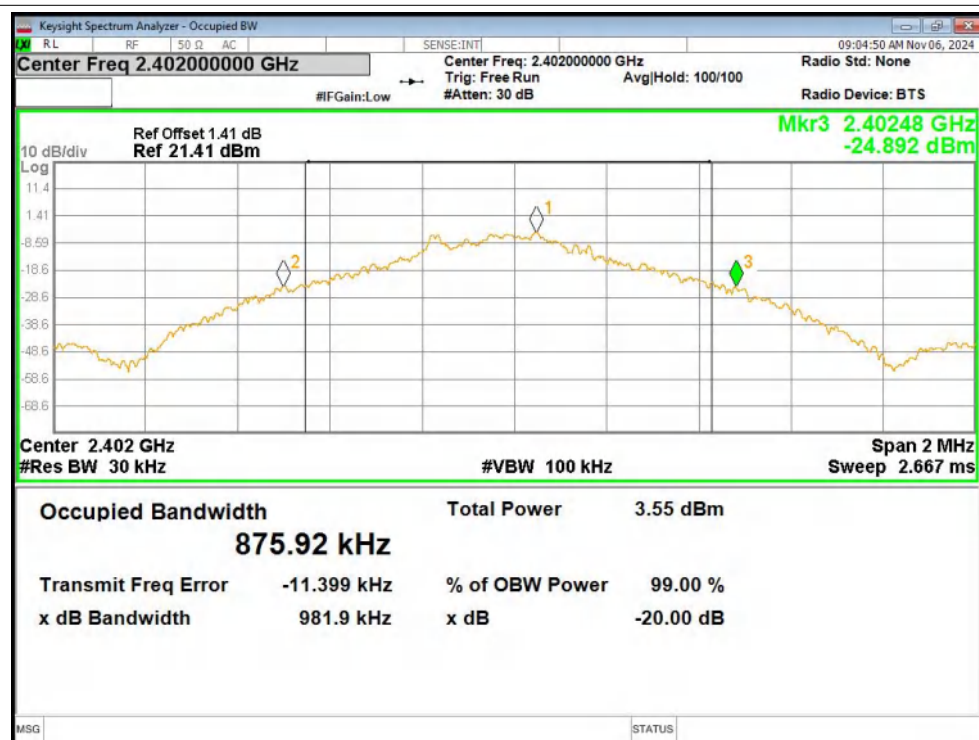
-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



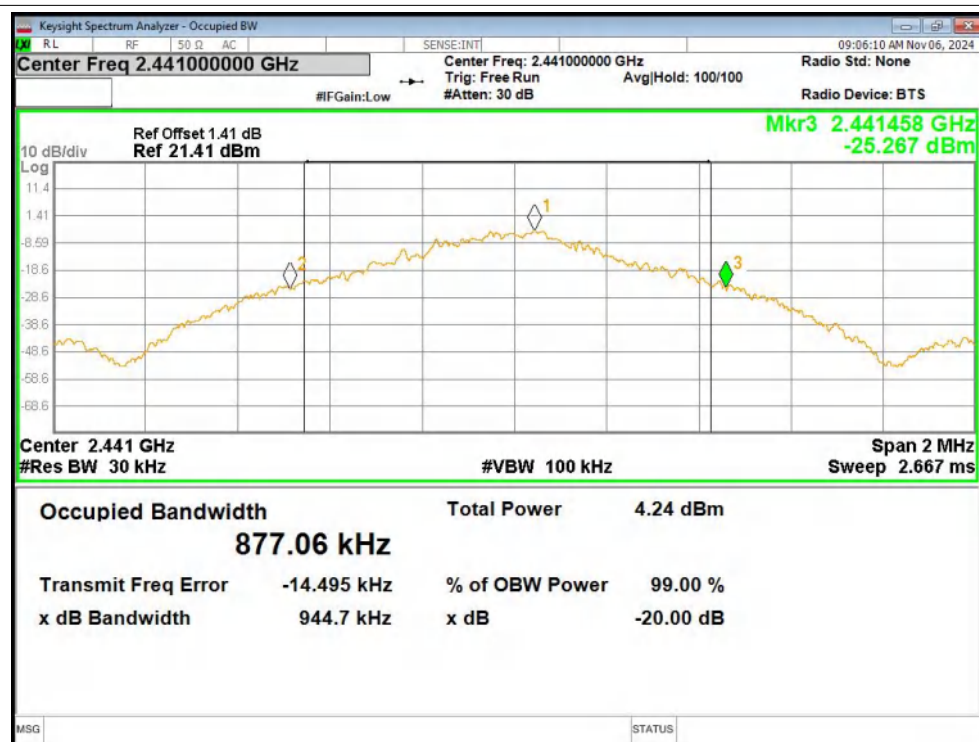
-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1



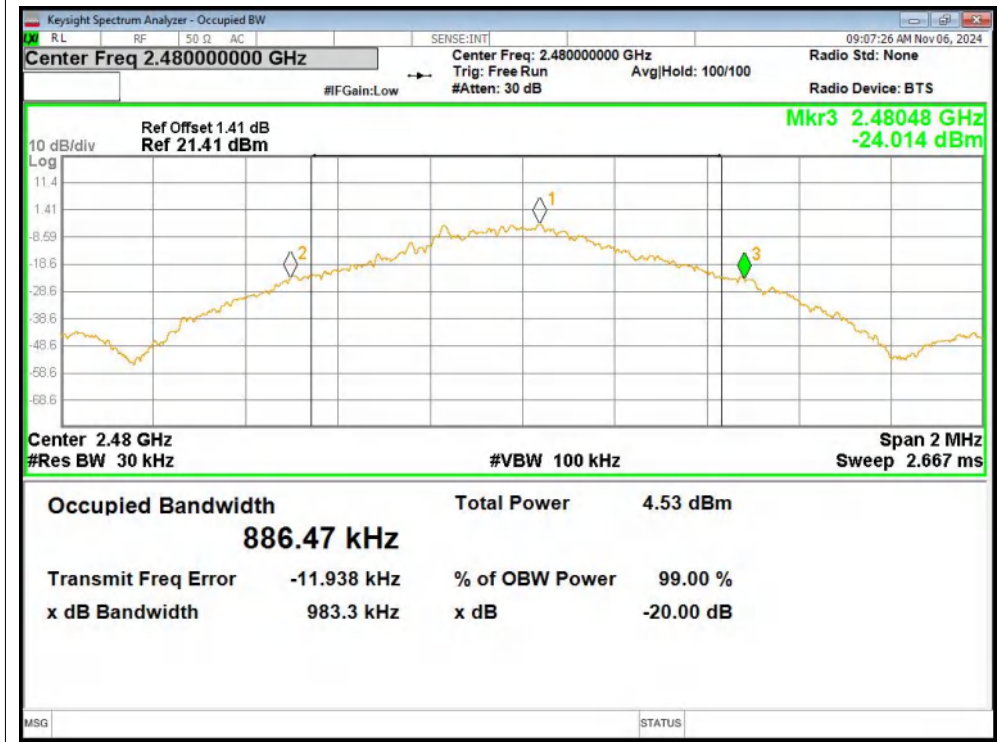
-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2480MHz Ant1

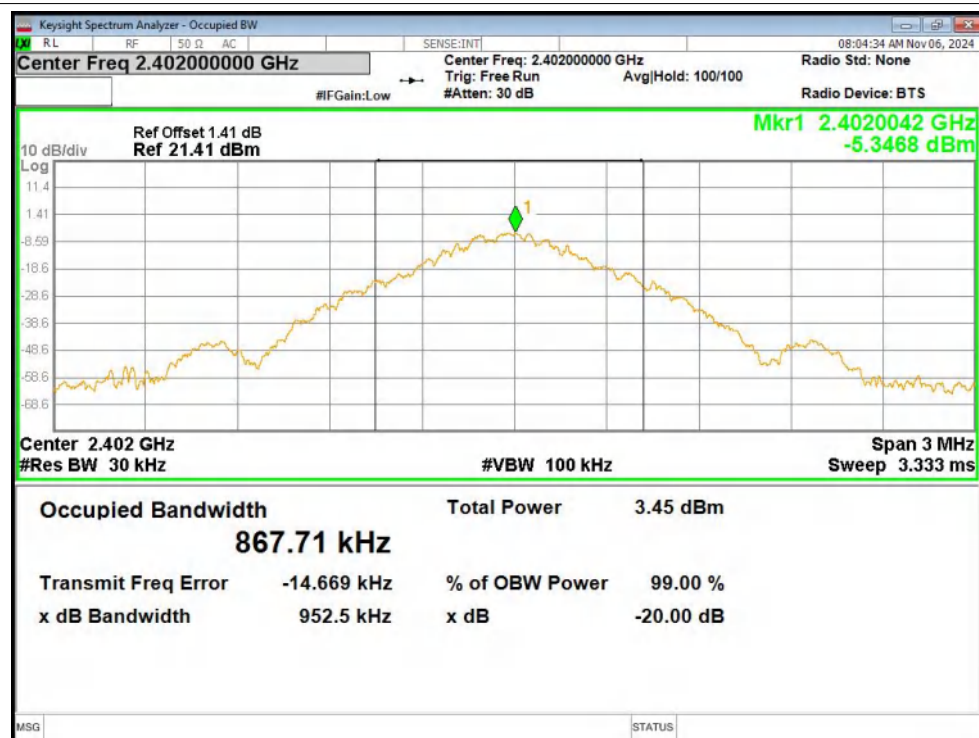


4.Occupied Channel Bandwidth

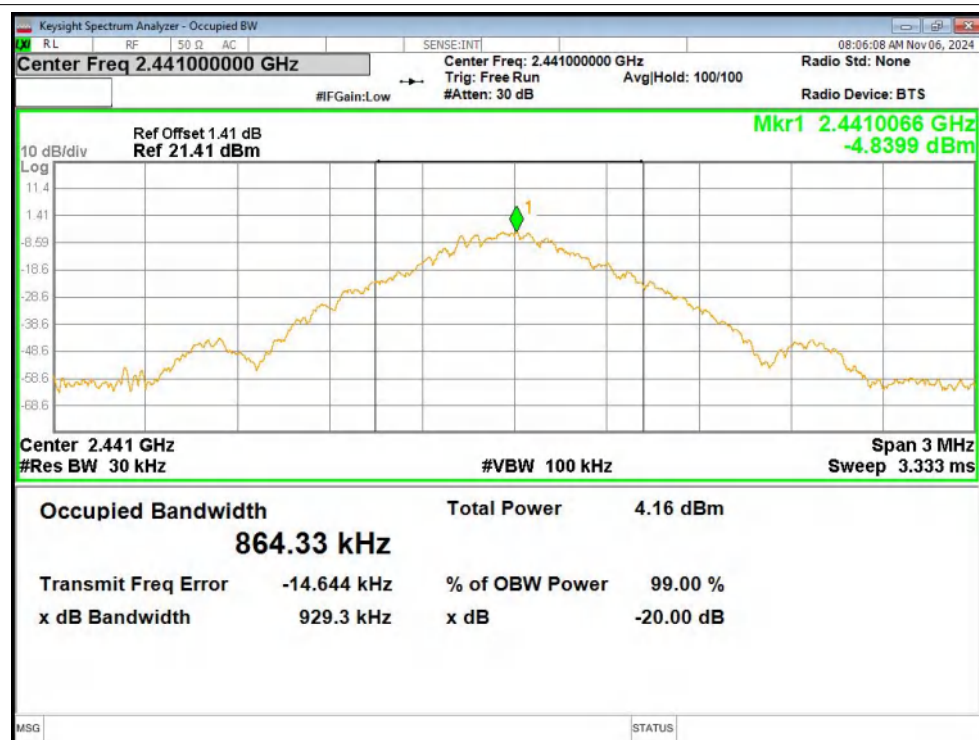
Mode	Frequency (MHz)	99% OBW (MHz)
1-DH5	2402	0.868
1-DH5	2441	0.864
1-DH5	2480	0.867
2-DH5	2402	1.174
2-DH5	2441	1.18
2-DH5	2480	1.181

Test Graphs

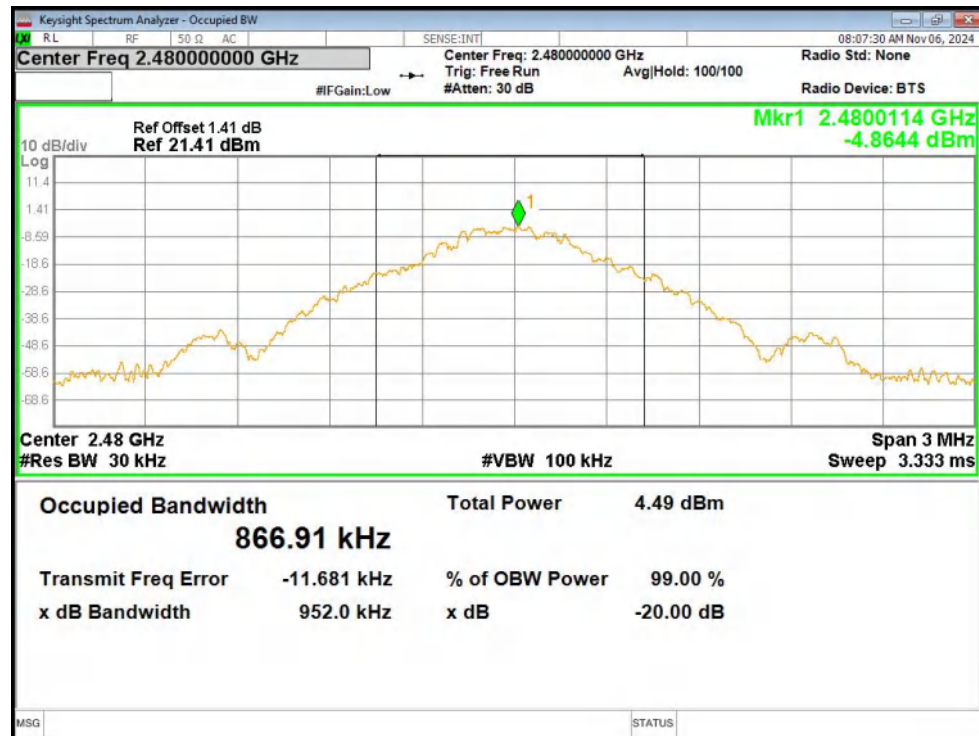
OBW NVNT 1-DH5 2402MHz Ant1



OBW NVNT 1-DH5 2441MHz Ant1



OBW NVNT 1-DH5 2480MHz Ant1



OBW NVNT 2-DH5 2402MHz Ant1



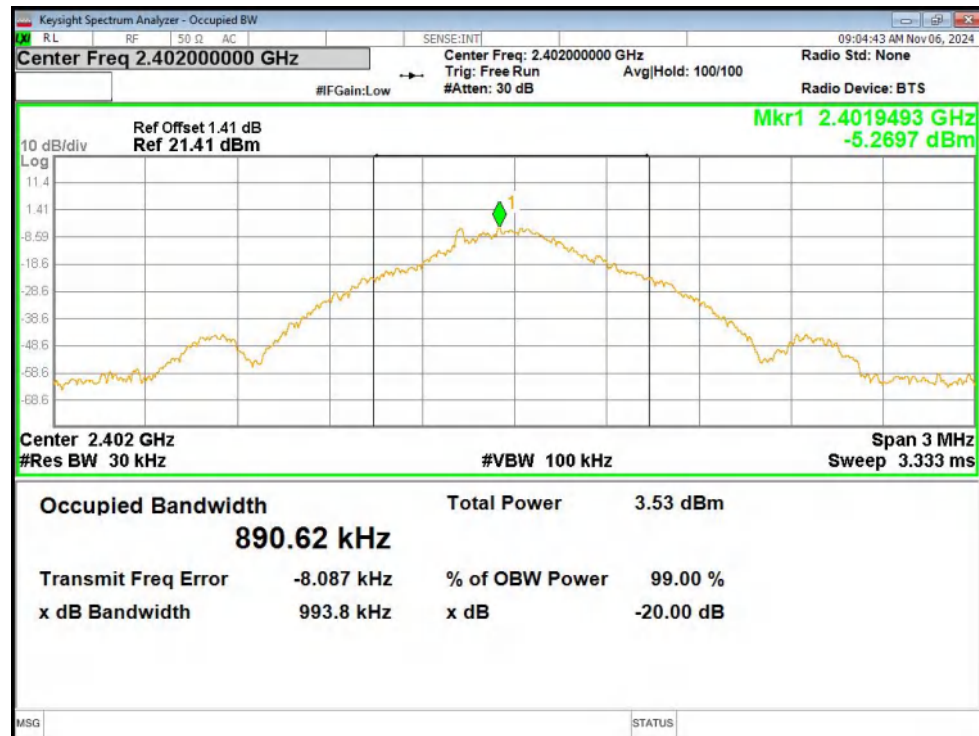
OBW NVNT 2-DH5 2441MHz Ant1



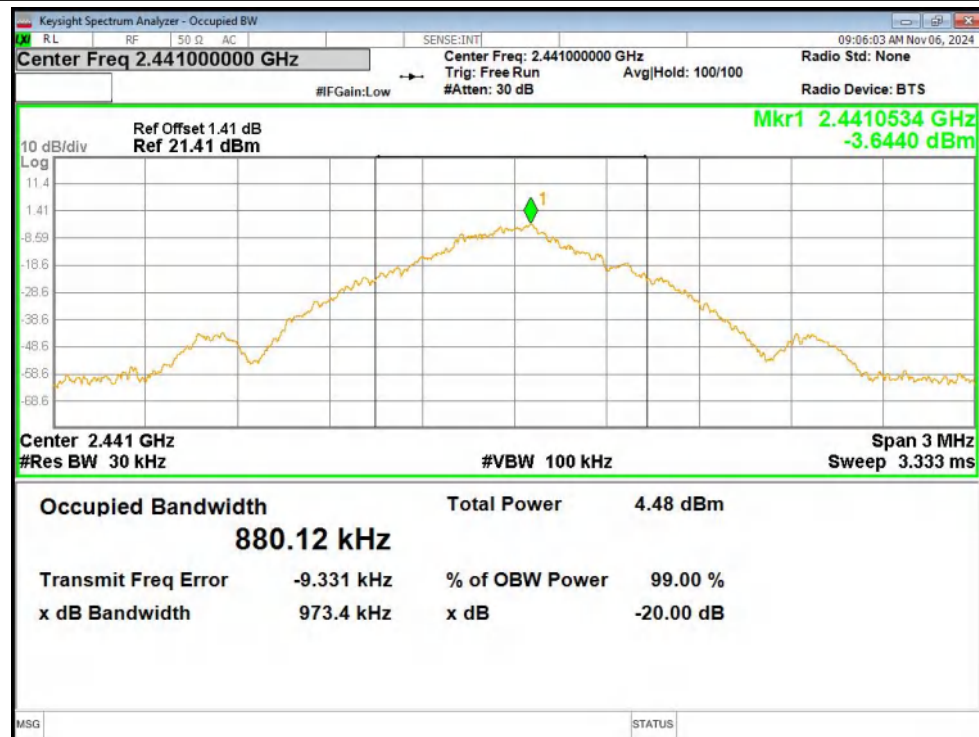
OBW NVNT 2-DH5 2480MHz Ant1



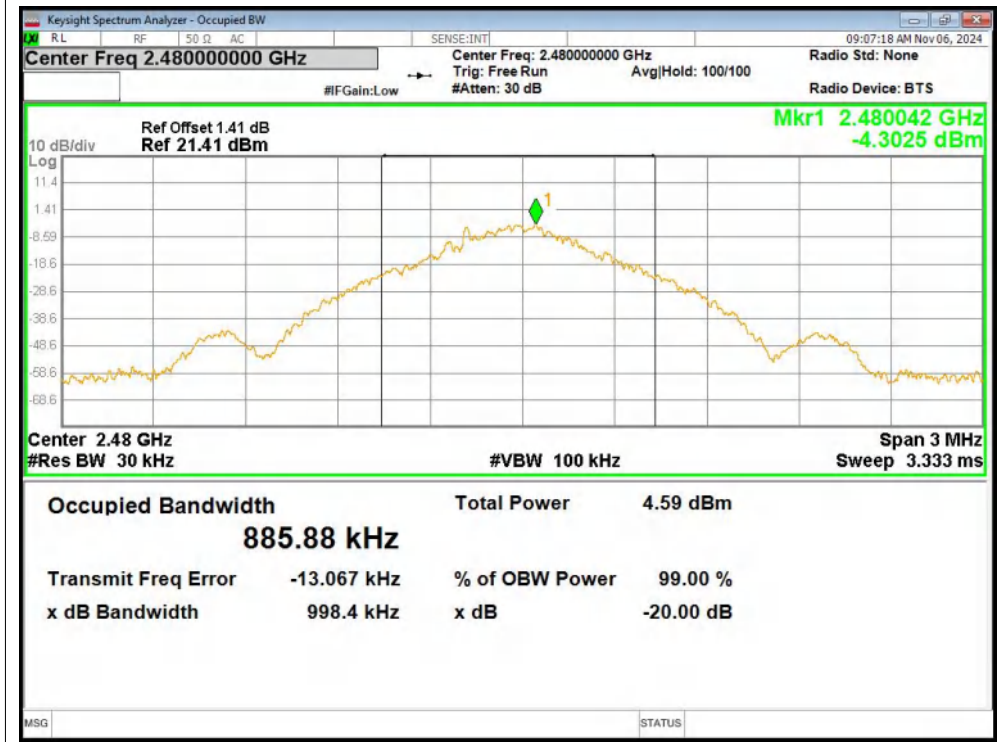
OBW NVNT 3-DH5 2402MHz Ant1



OBW NVNT 3-DH5 2441MHz Ant1



OBW NVNT 3-DH5 2480MHz Ant1

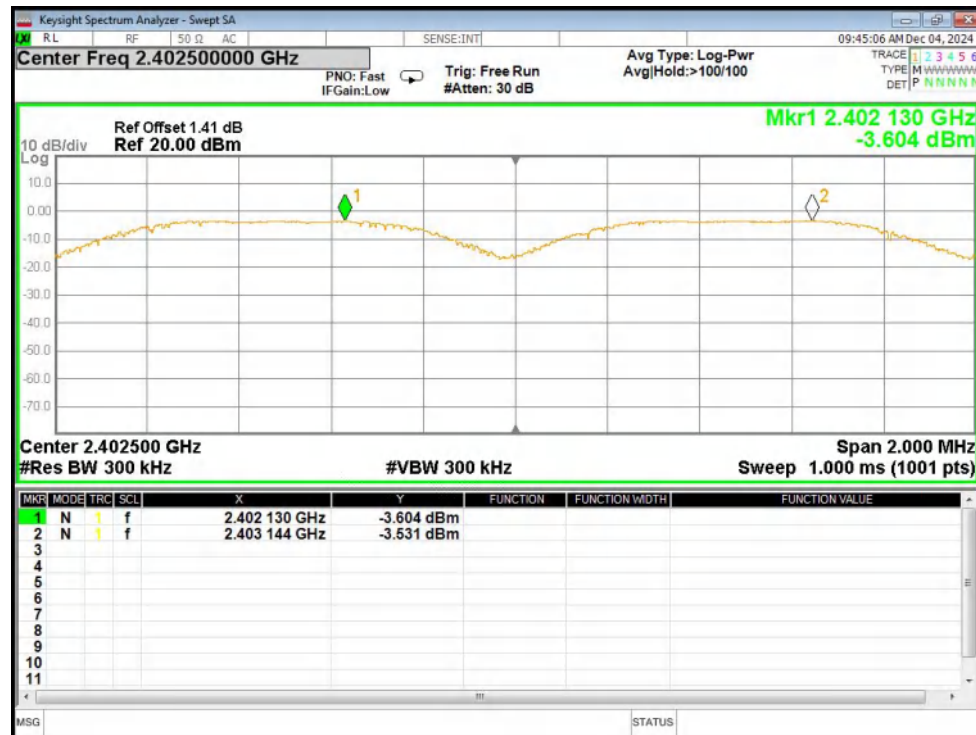


5.Carrier Frequencies Separation

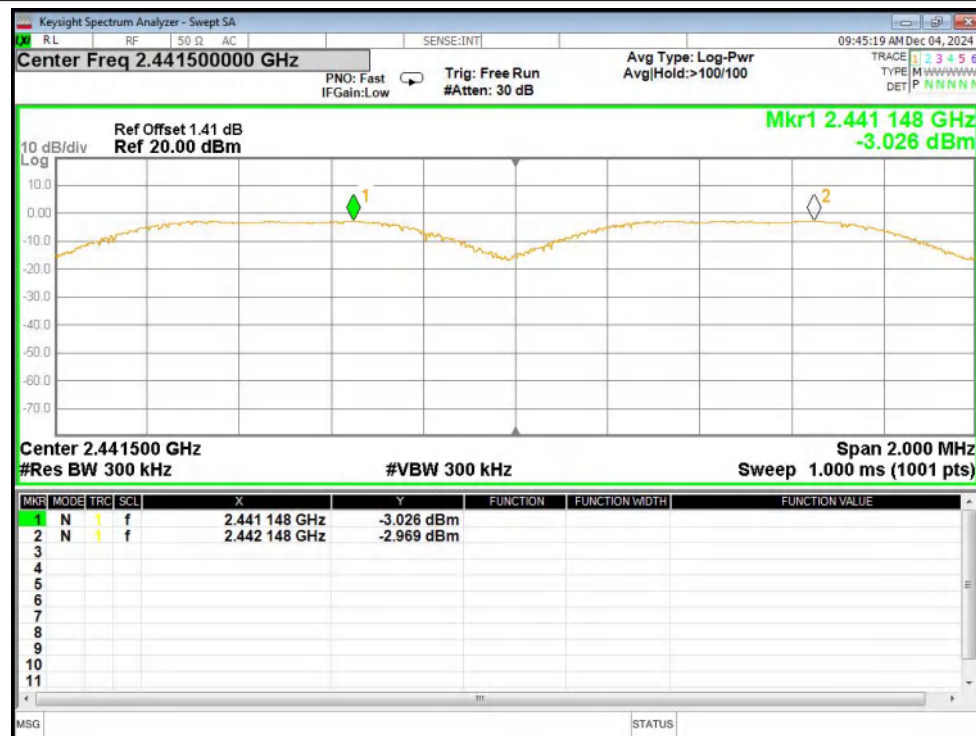
Mode	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
1-DH5	2402	2402.982	0.948	0.632	Pass
1-DH5	2440.982	2441.986	0.948	0.632	Pass
1-DH5	2479	2480.002	0.930	0.62	Pass
2-DH5	2401.98	2402.98	1	0.857	Pass
2-DH5	2440.976	2441.986	1.01	0.841	Pass
2-DH5	2478.992	2479.848	0.856	0.854	Pass

Test Graphs

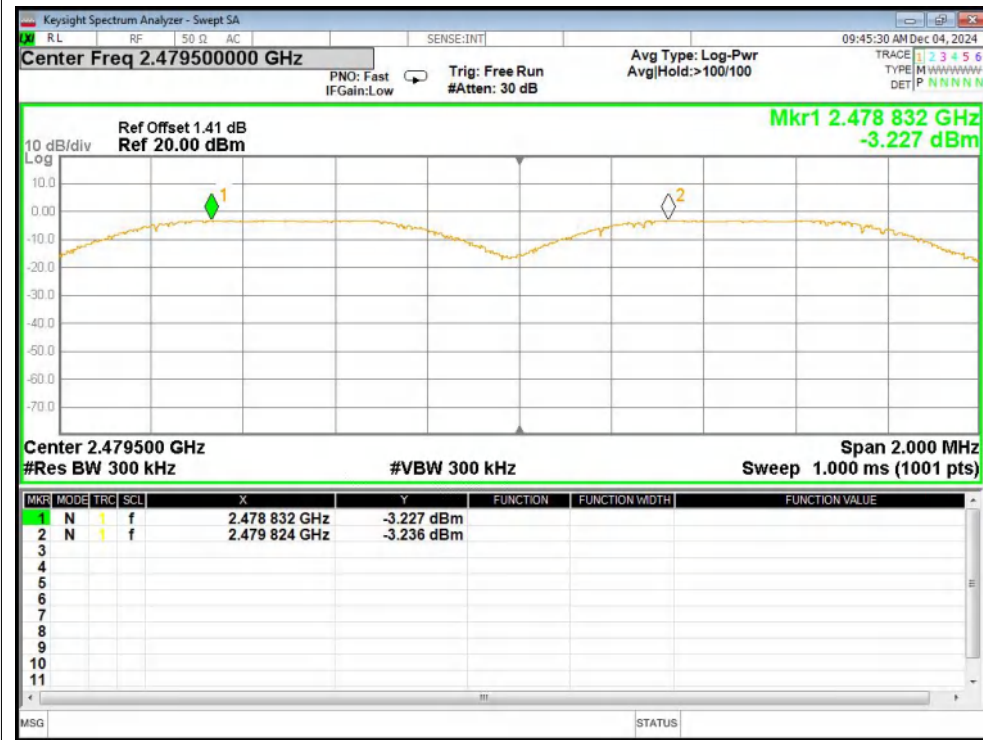
CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 1-DH5 2441MHz Ant1



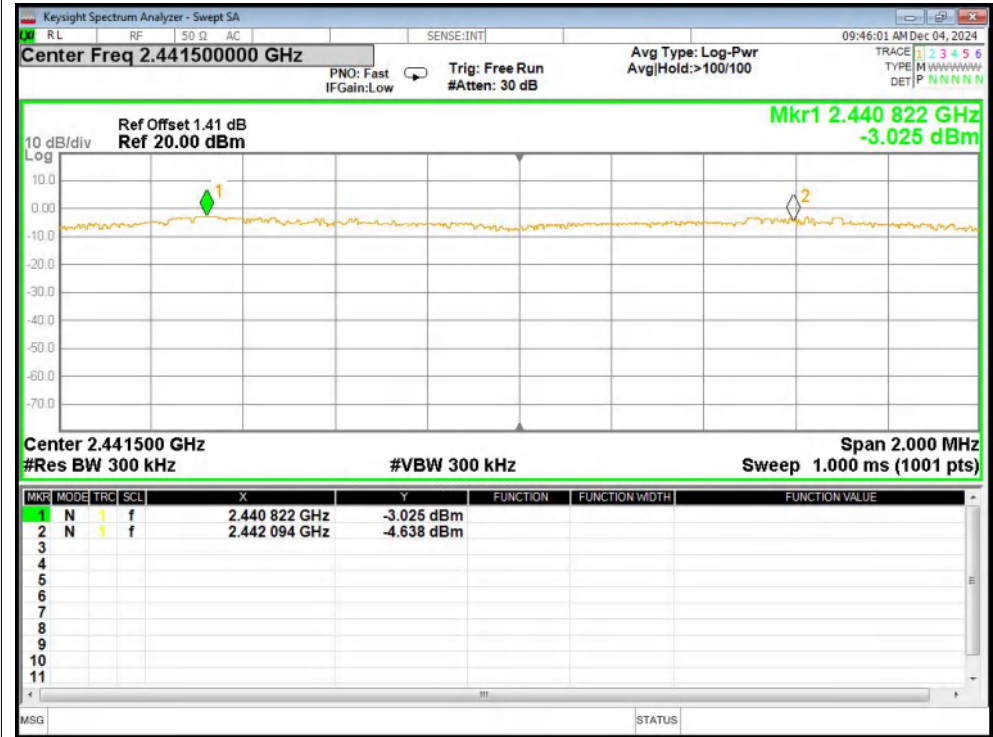
CFS NVNT 1-DH5 2480MHz Ant1



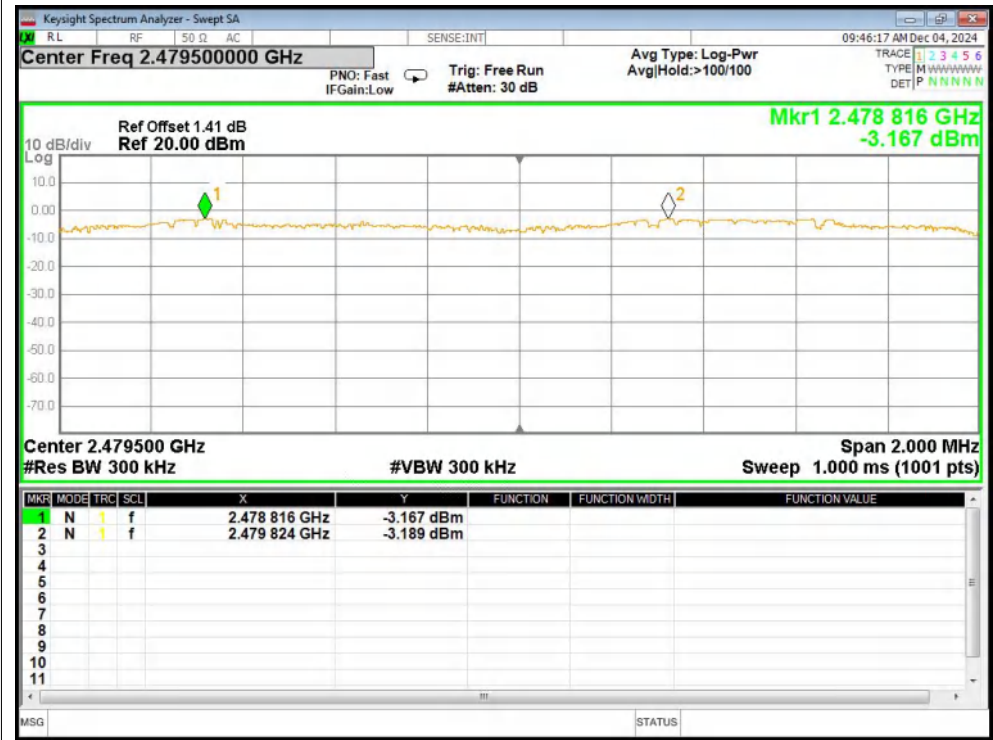
CFS NVNT 2-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2441MHz Ant1



CFS NVNT 2-DH5 2480MHz Ant1

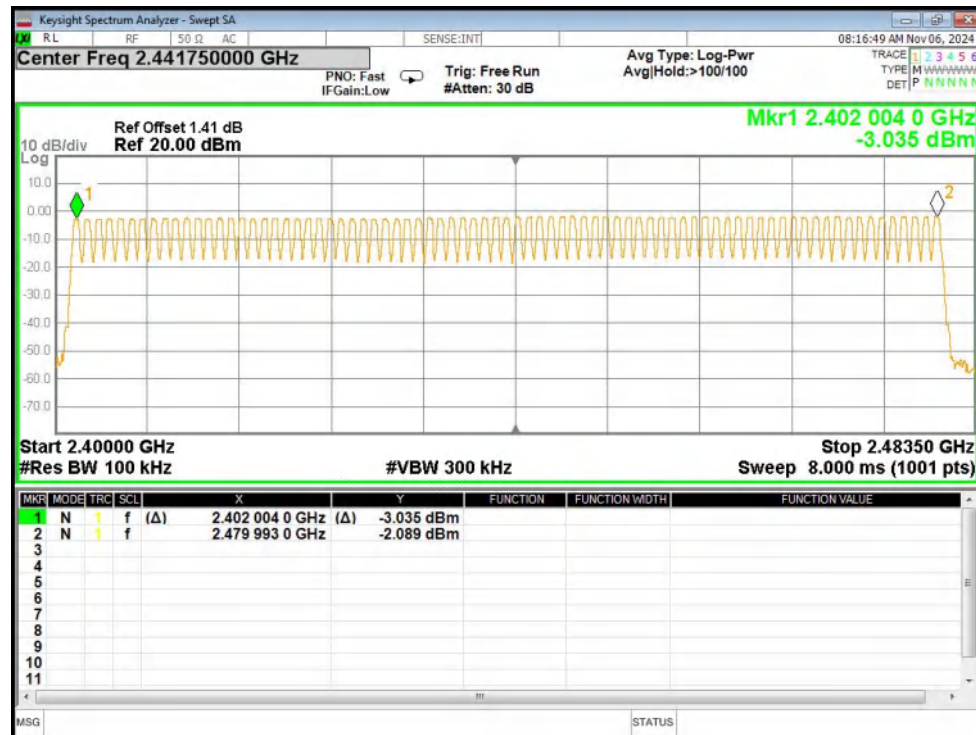


6.Number of Hopping Channel

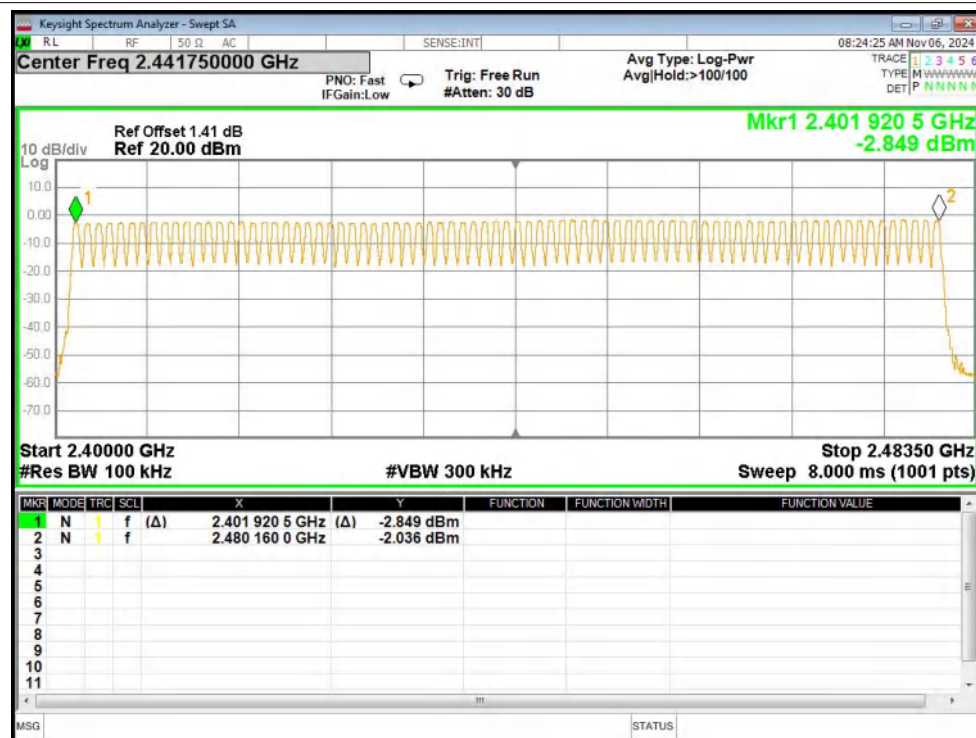
Mode	Hopping Number	Limit	Verdict
1-DH5	79	15	Pass
2-DH5	79	15	Pass

Test Graphs

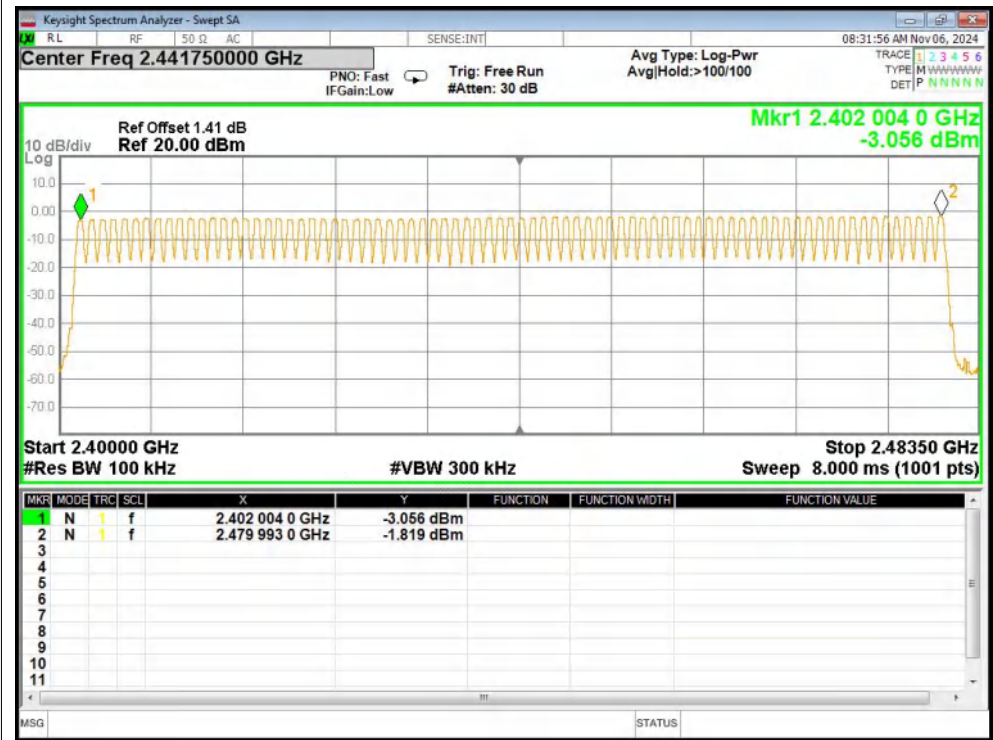
Hopping No. NVNT 1-DH5 2402MHz Ant1



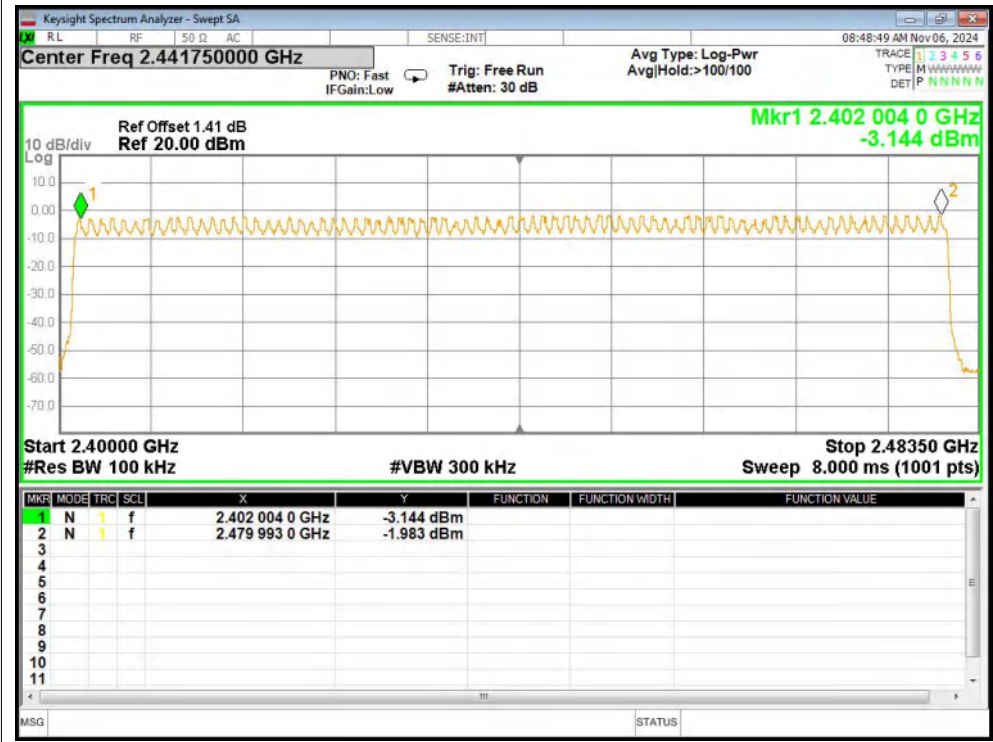
Hopping No. NVNT 1-DH5 2441MHz Ant1



Hopping No. NVNT 1-DH5 2480MHz Ant1



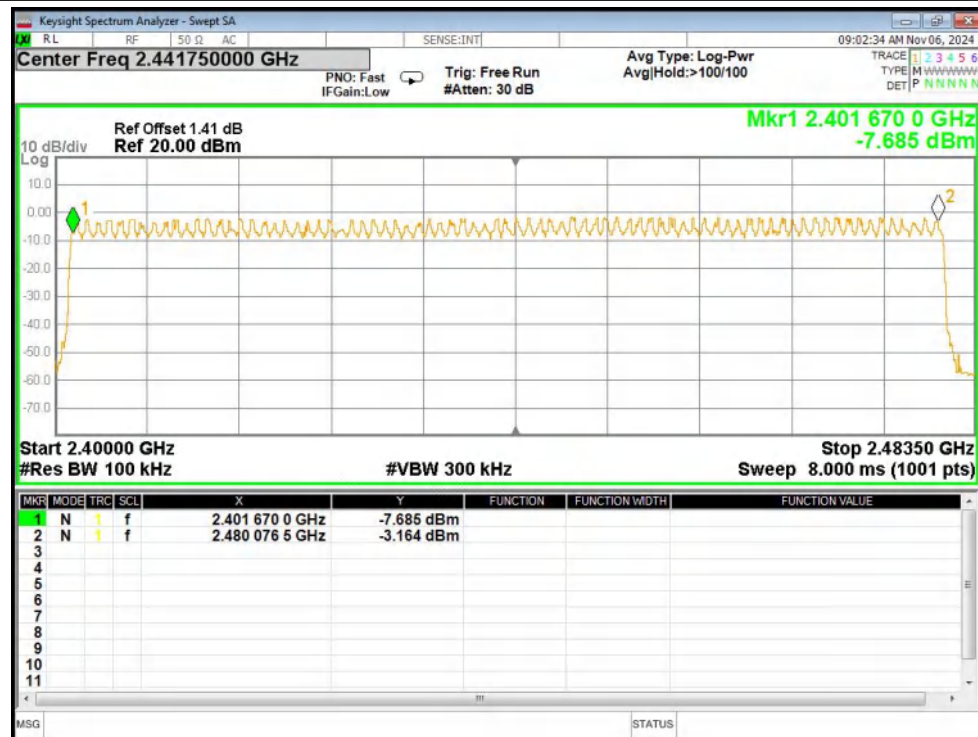
Hopping No. NVNT 2-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2441MHz Ant1



Hopping No. NVNT 2-DH5 2480MHz Ant1

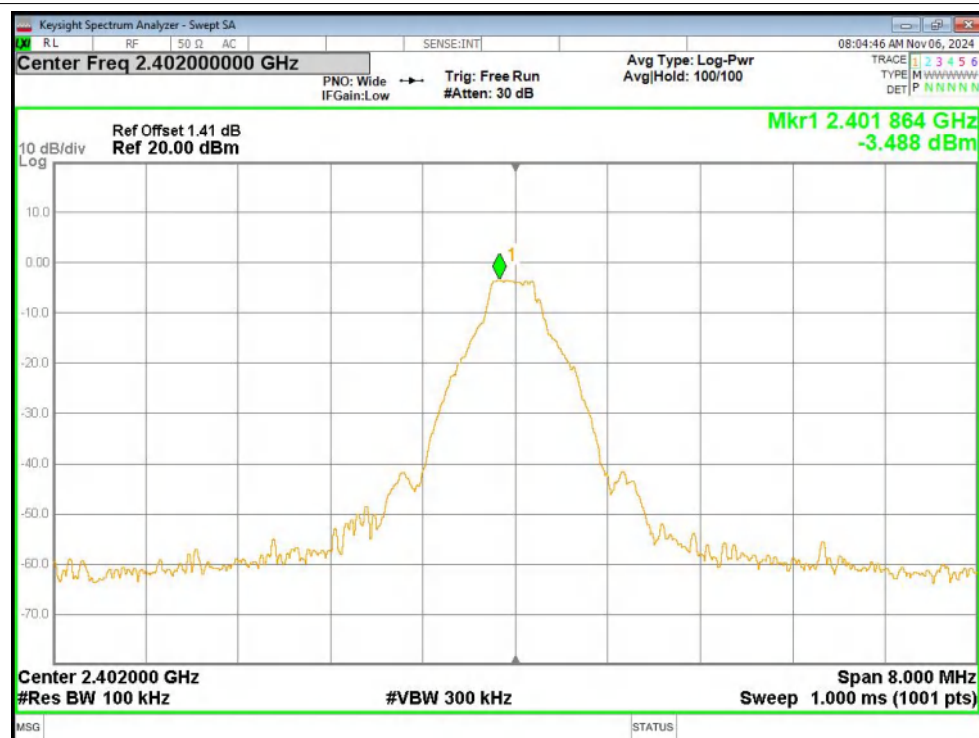


7.Band Edge

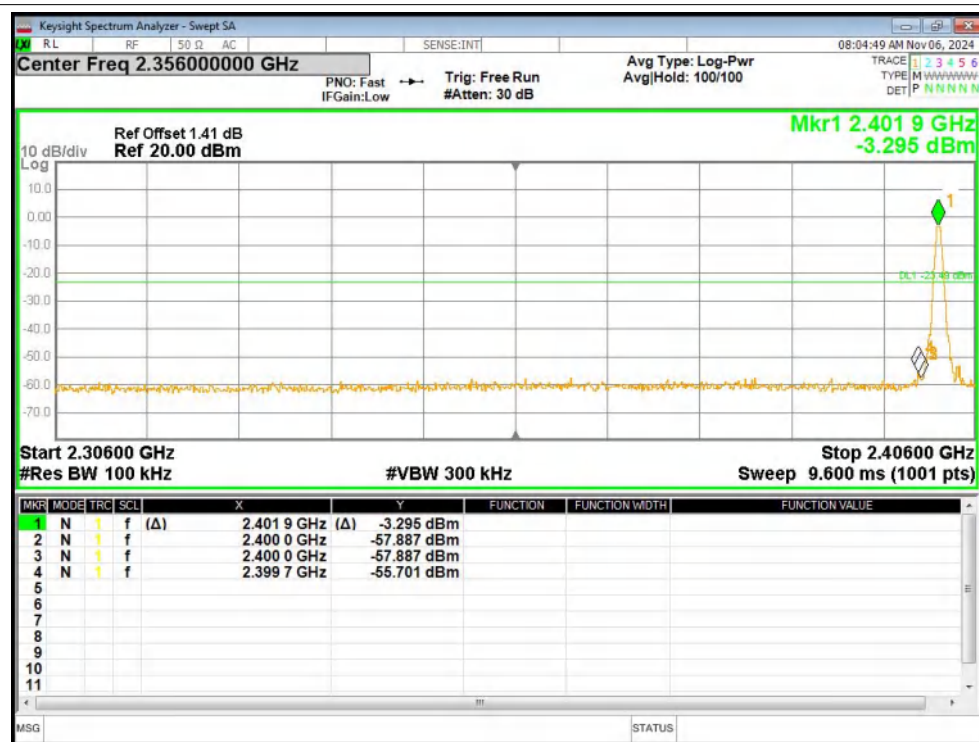
Mode	Frequency (MHz)	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
1-DH5	2402	No-Hopping	-52.21	-20	Pass
1-DH5	2480	No-Hopping	-56.04	-20	Pass
2-DH5	2402	No-Hopping	-52.57	-20	Pass
2-DH5	2480	No-Hopping	-55.98	-20	Pass

Test Graphs

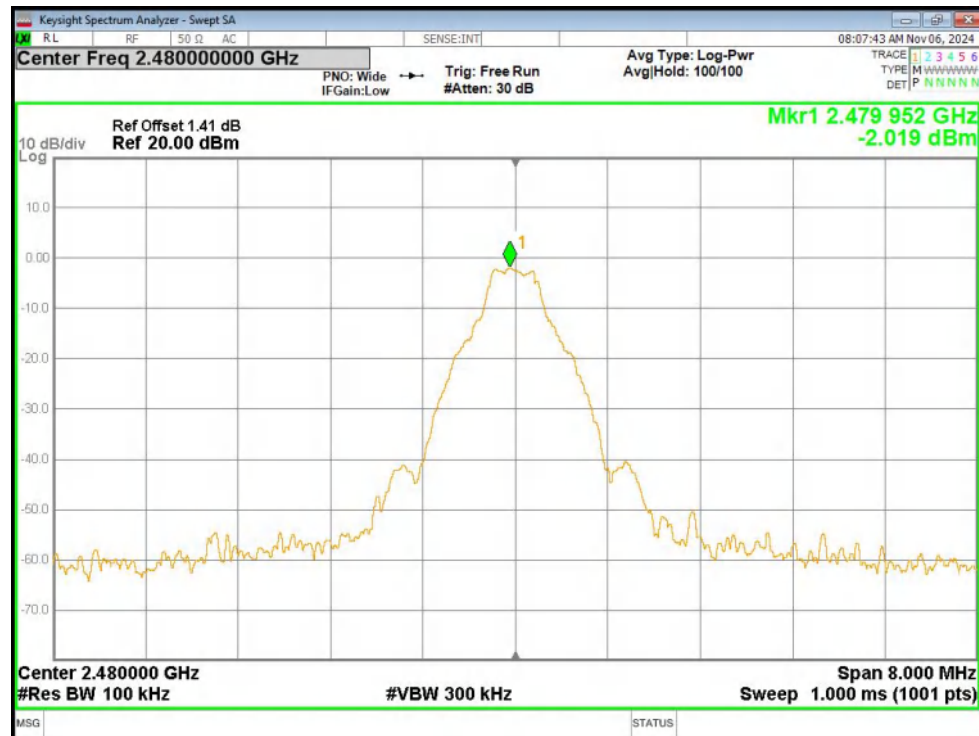
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



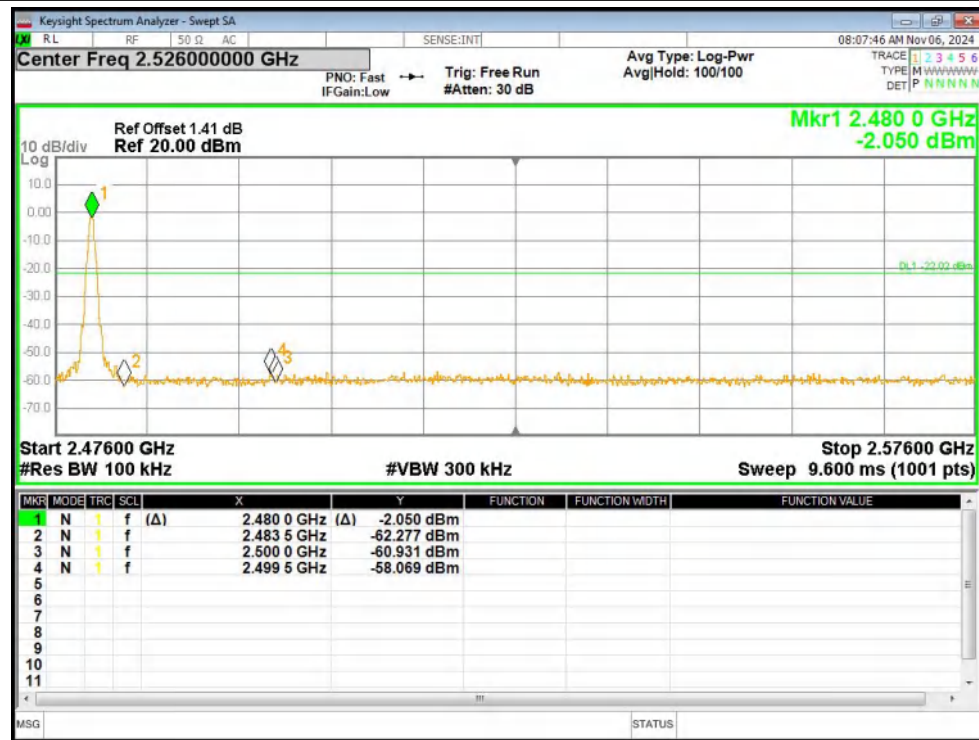
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission



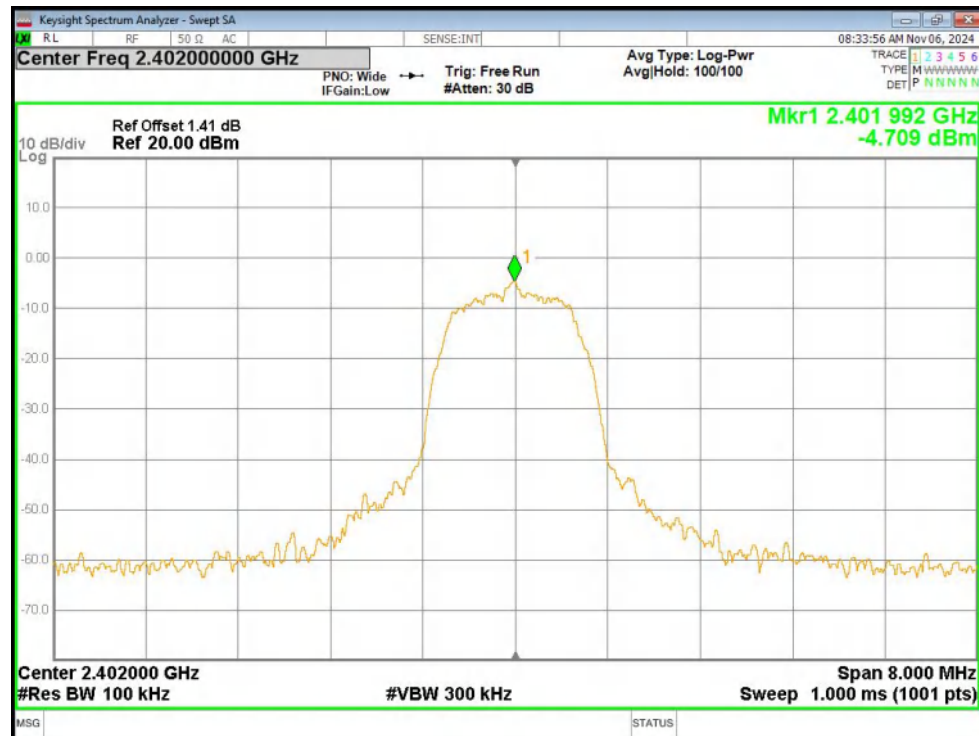
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



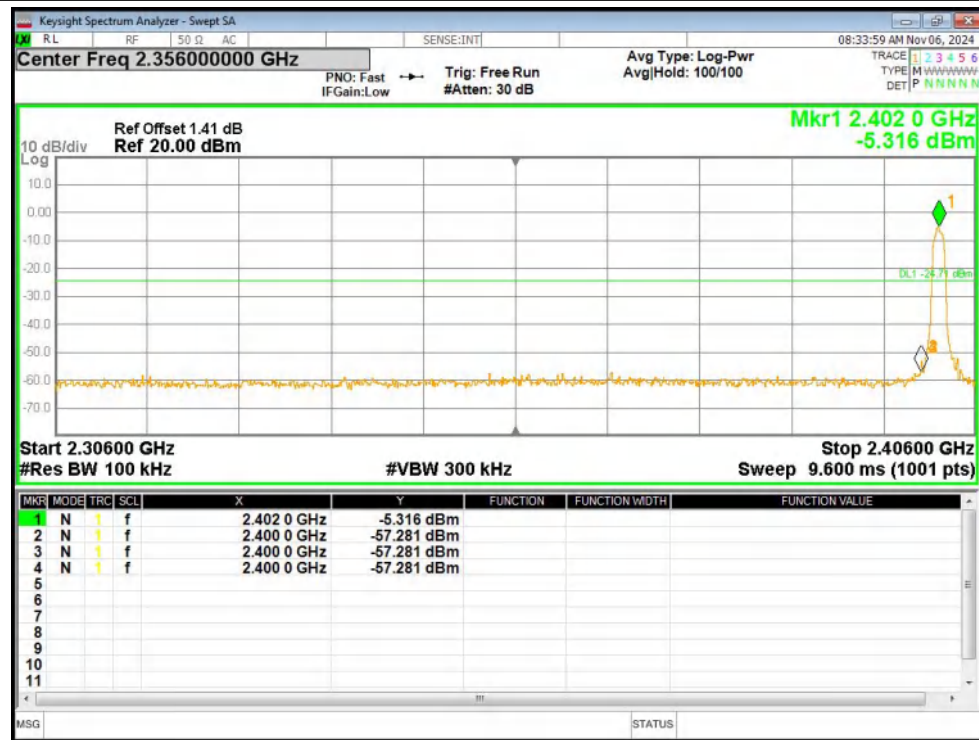
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission



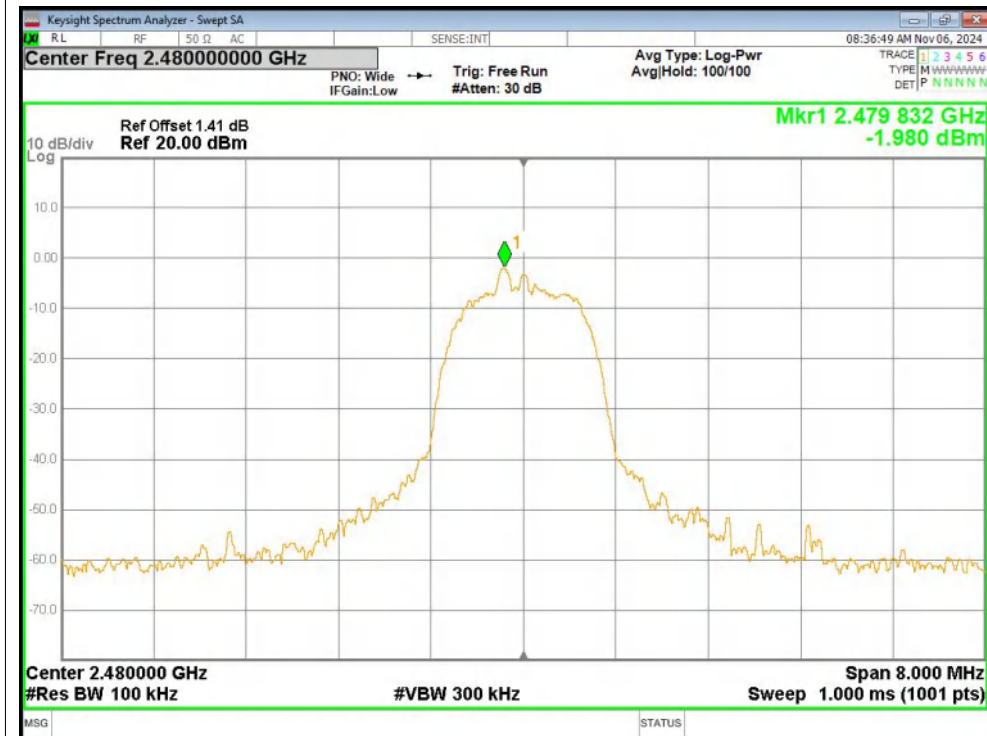
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission



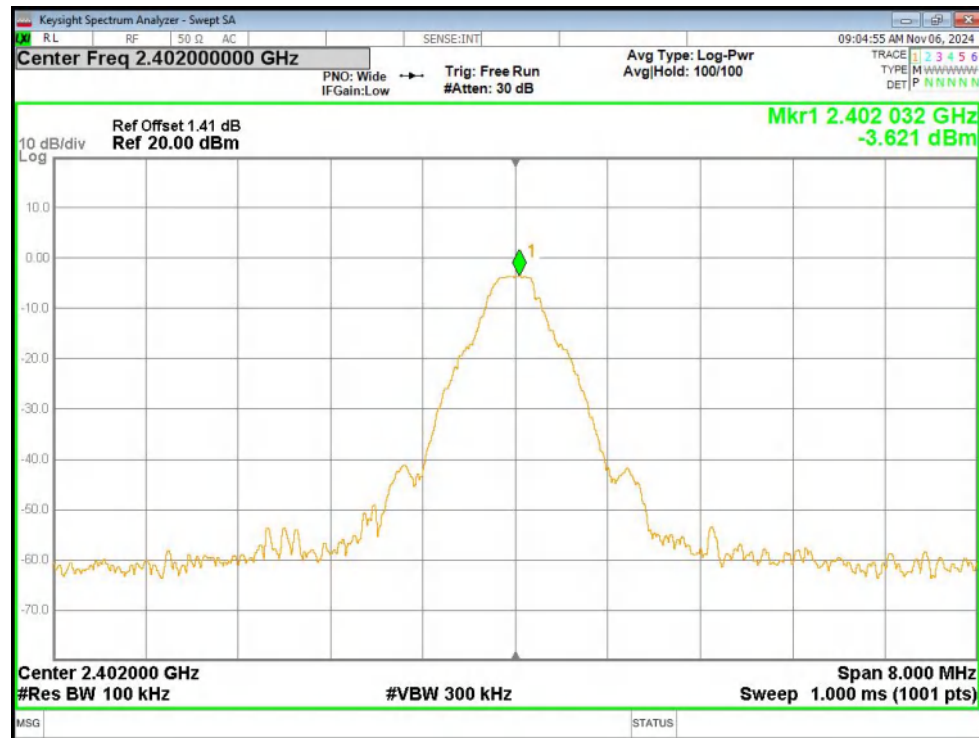
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



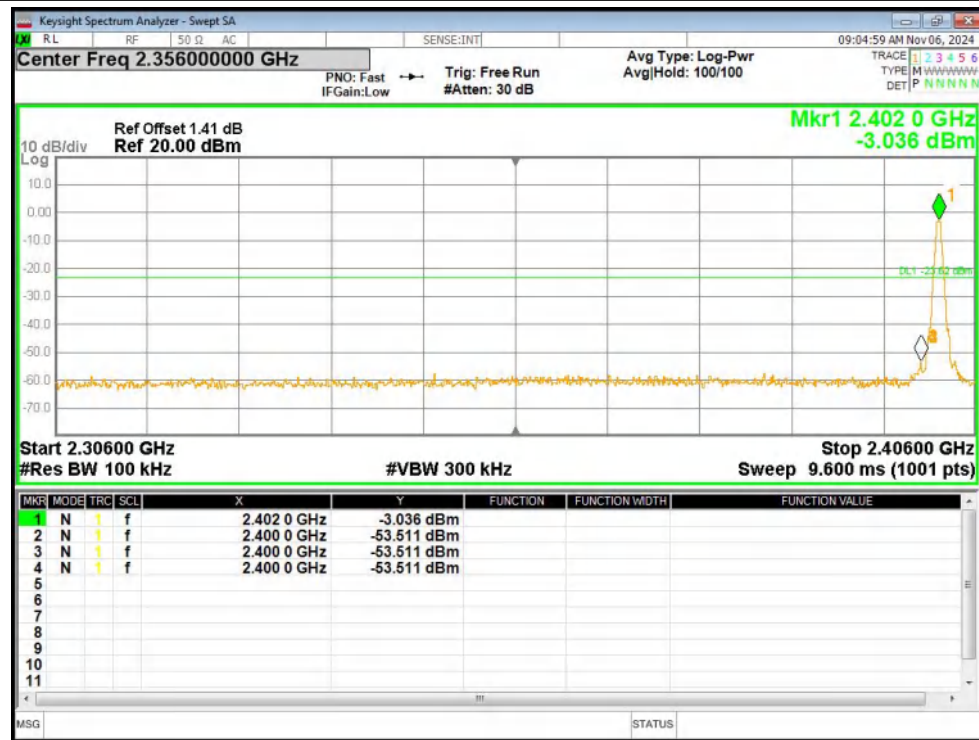
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission



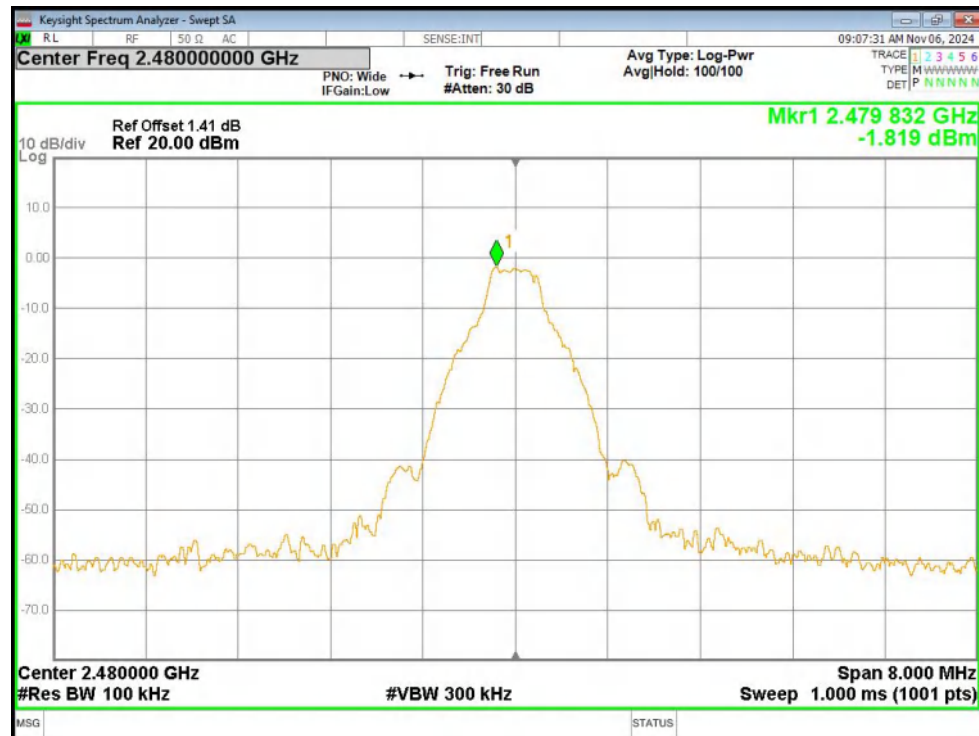
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref



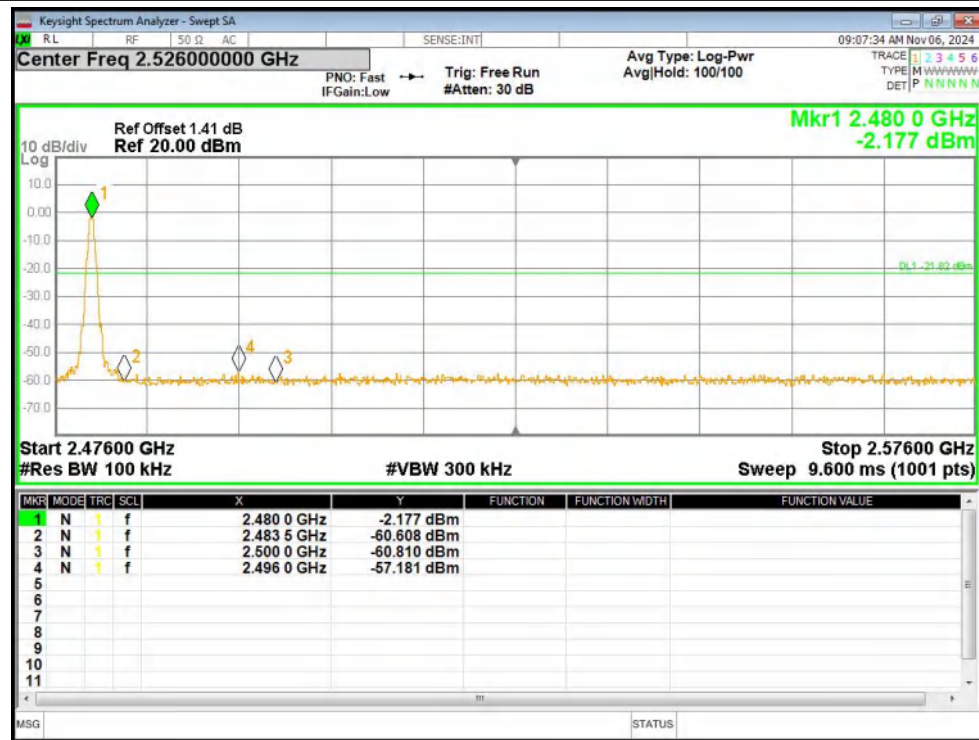
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission



Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Ref



Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Emission

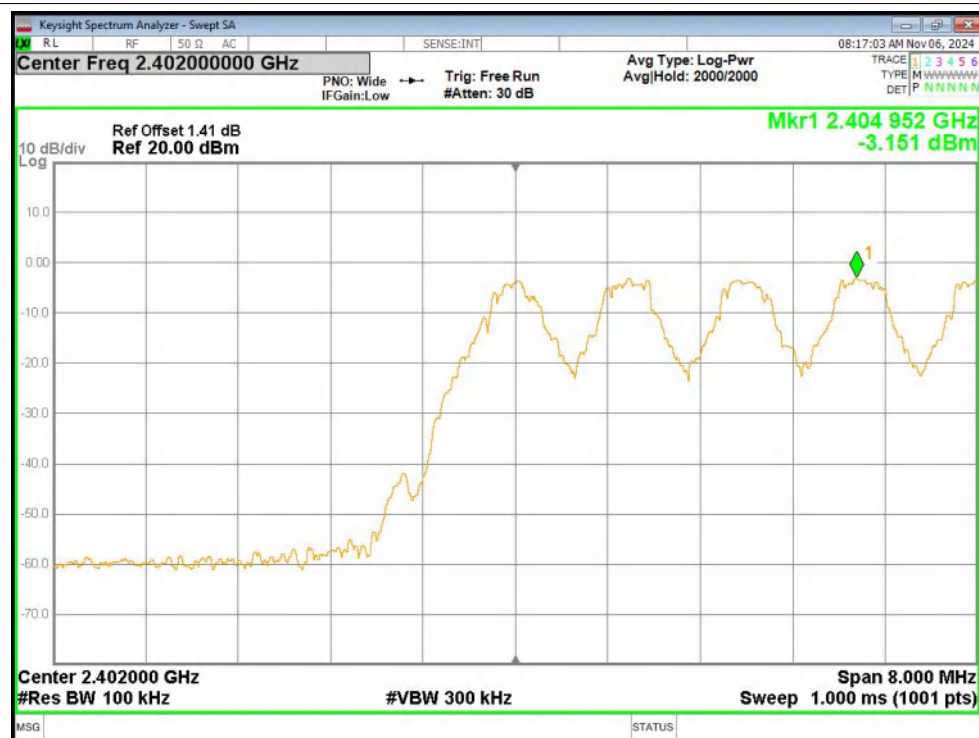


8.Band Edge(Hopping)

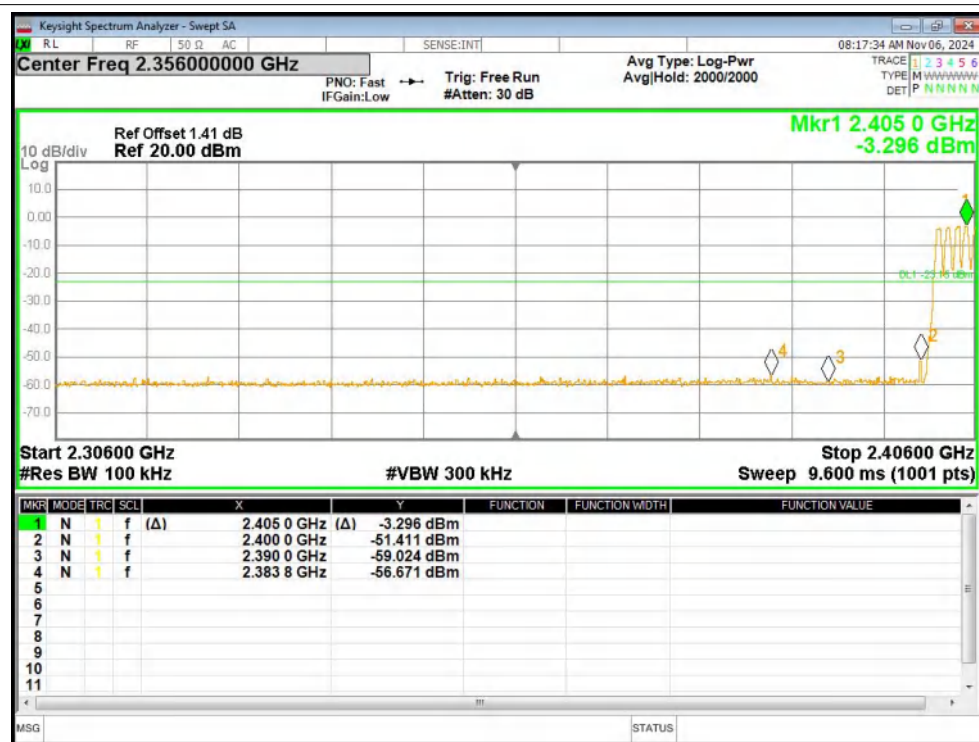
Mode	Frequency (MHz)	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
1-DH5	2402	Hopping	-53.52	-20	Pass
1-DH5	2480	Hopping	-54.57	-20	Pass
2-DH5	2402	Hopping	-53.61	-20	Pass
2-DH5	2480	Hopping	-53.63	-20	Pass

Test Graphs

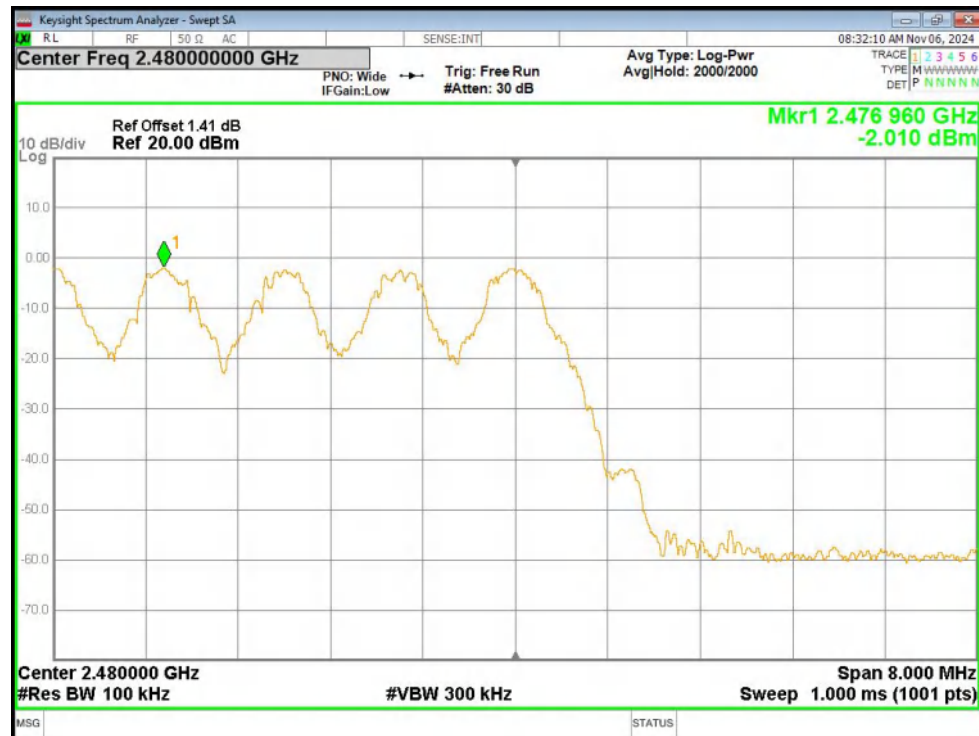
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref



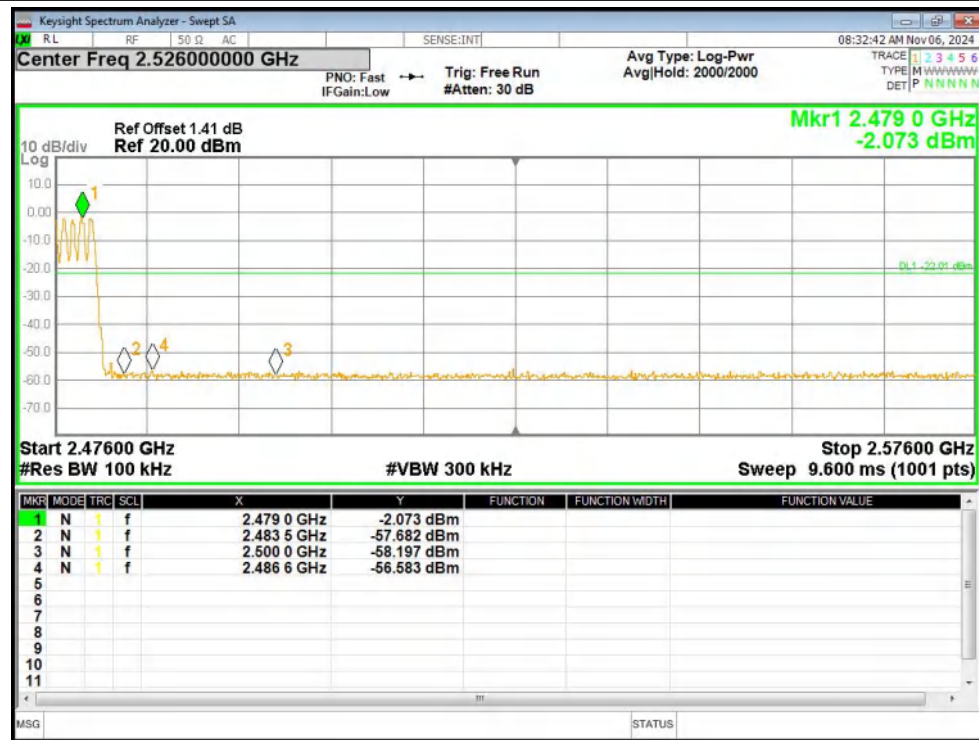
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission



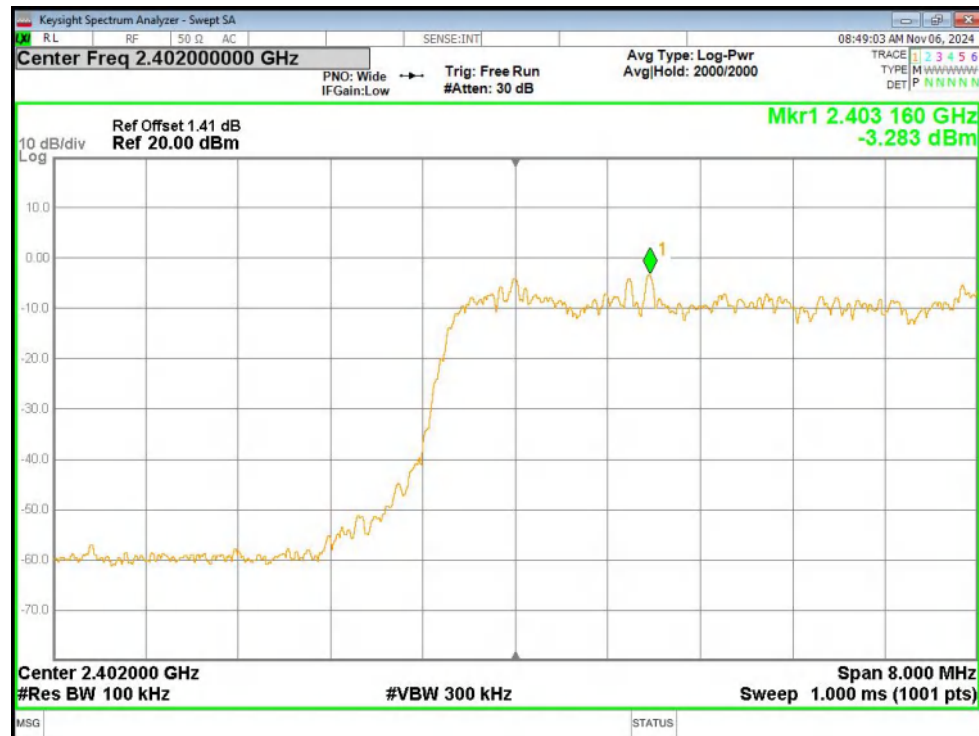
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref



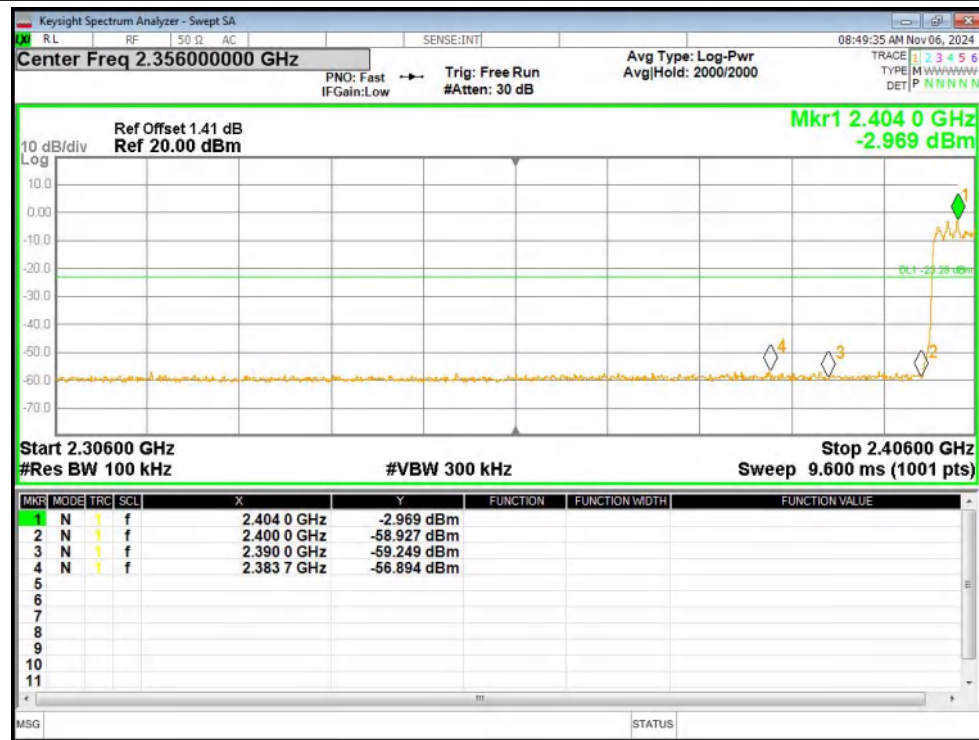
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Ref



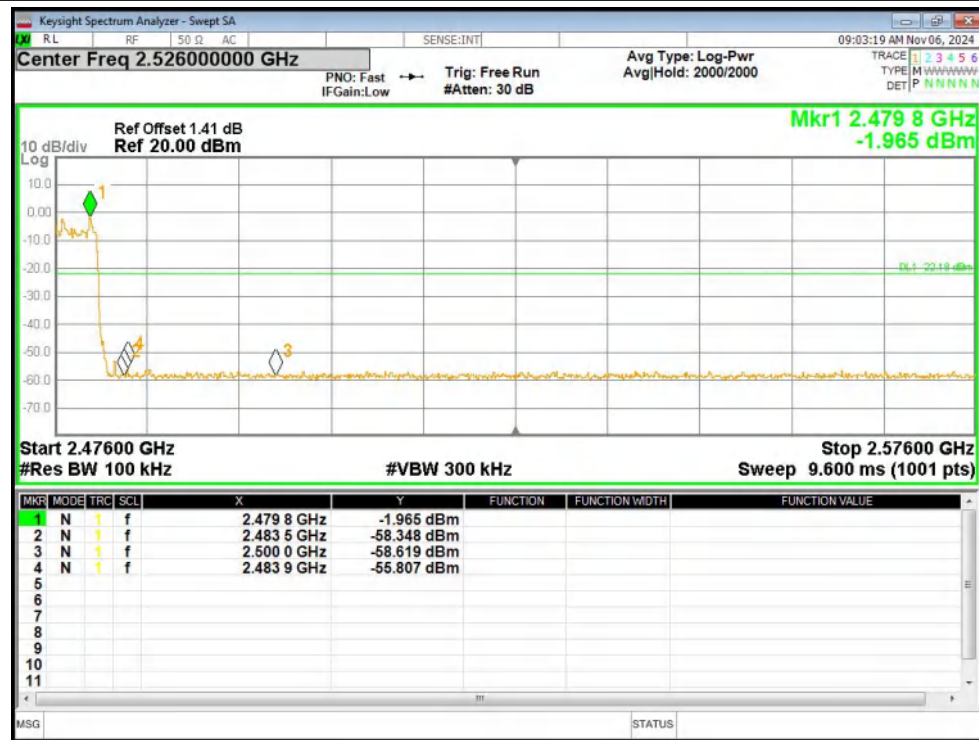
Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Emission

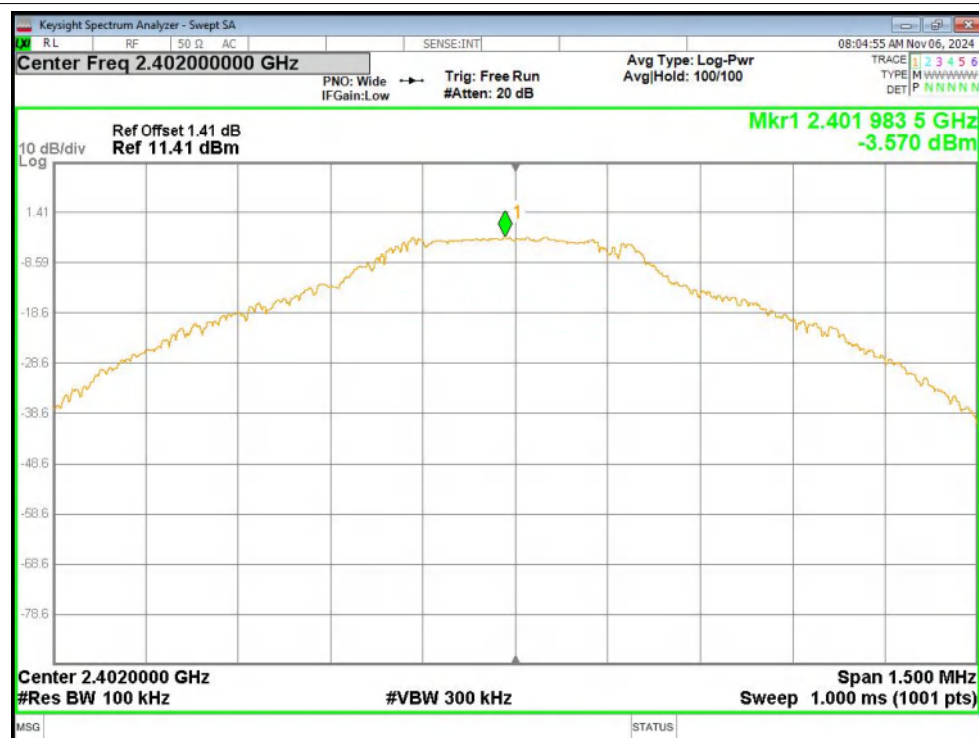


9. Conducted RF Spurious Emission

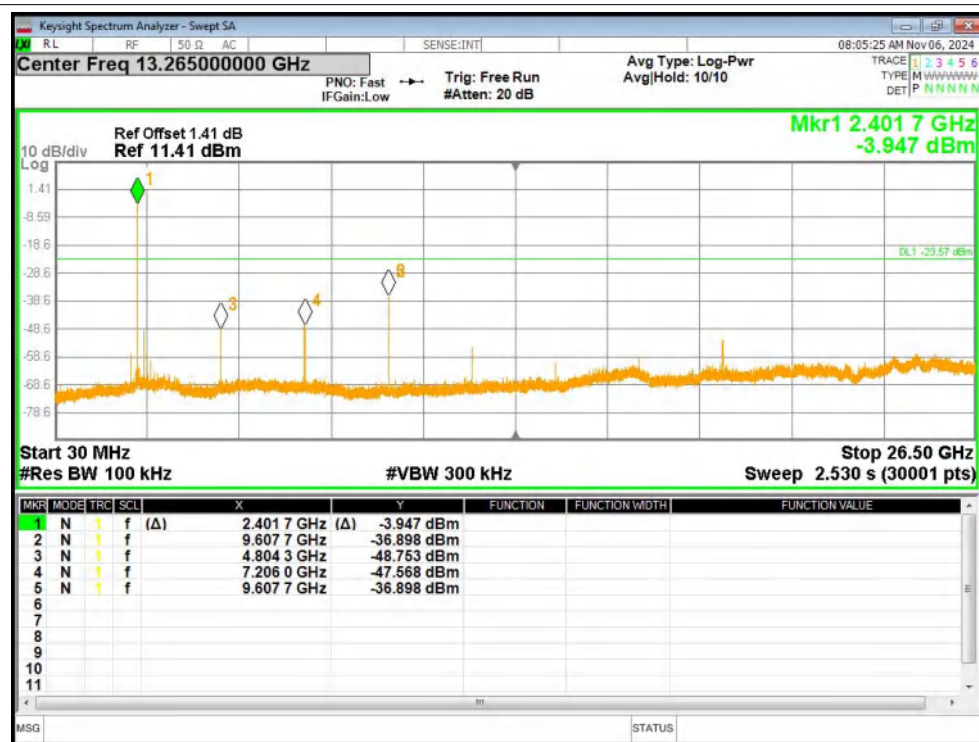
Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
1-DH5	2402	-33.32	-20	Pass
1-DH5	2441	-32.46	-20	Pass
1-DH5	2480	-31.13	-20	Pass
2-DH5	2402	-33.48	-20	Pass
2-DH5	2441	-32.45	-20	Pass
2-DH5	2480	-31.29	-20	Pass

Test Graphs

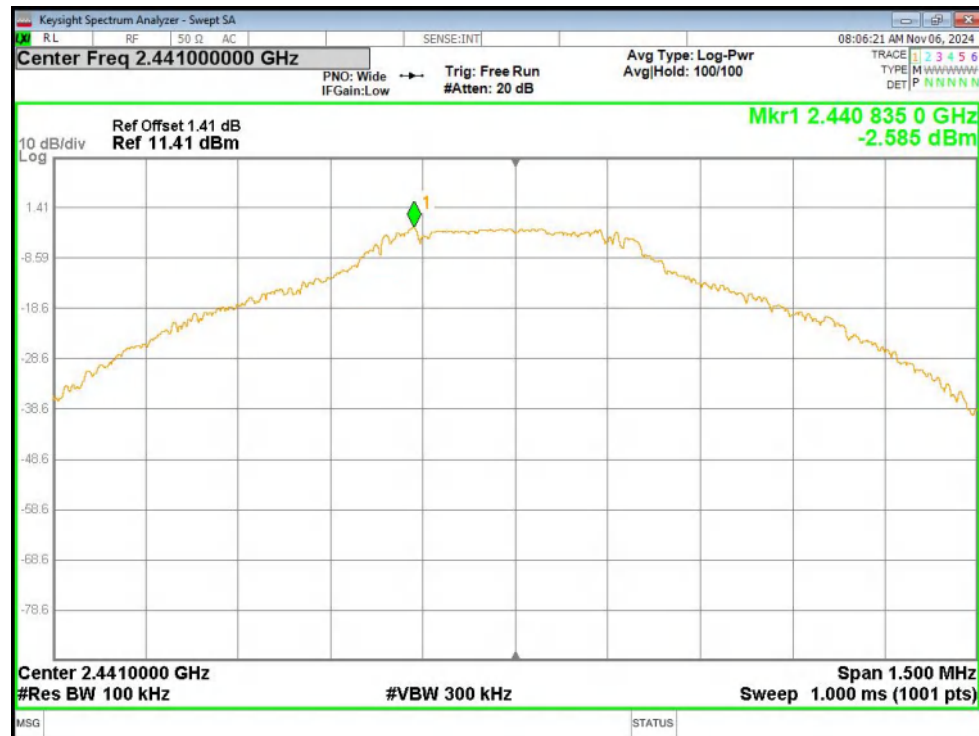
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



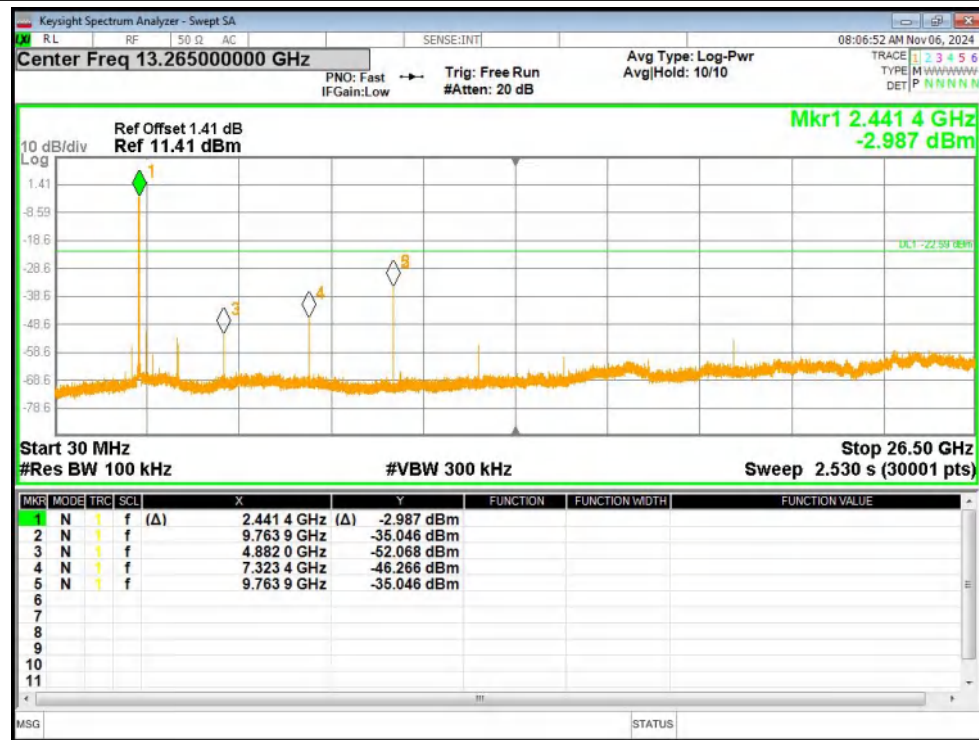
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



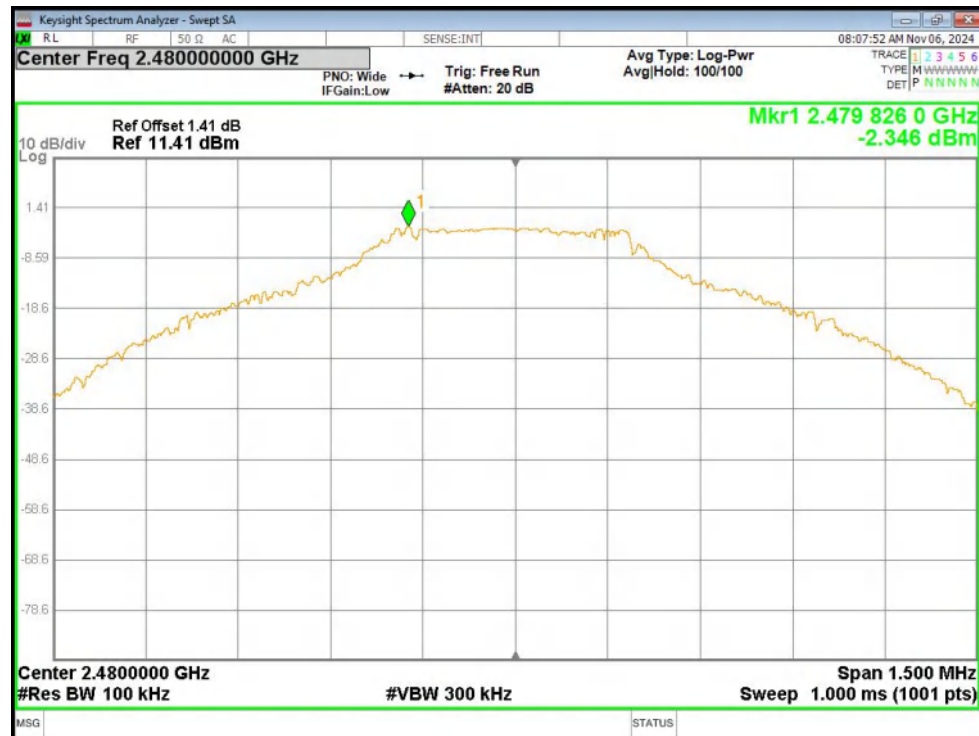
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



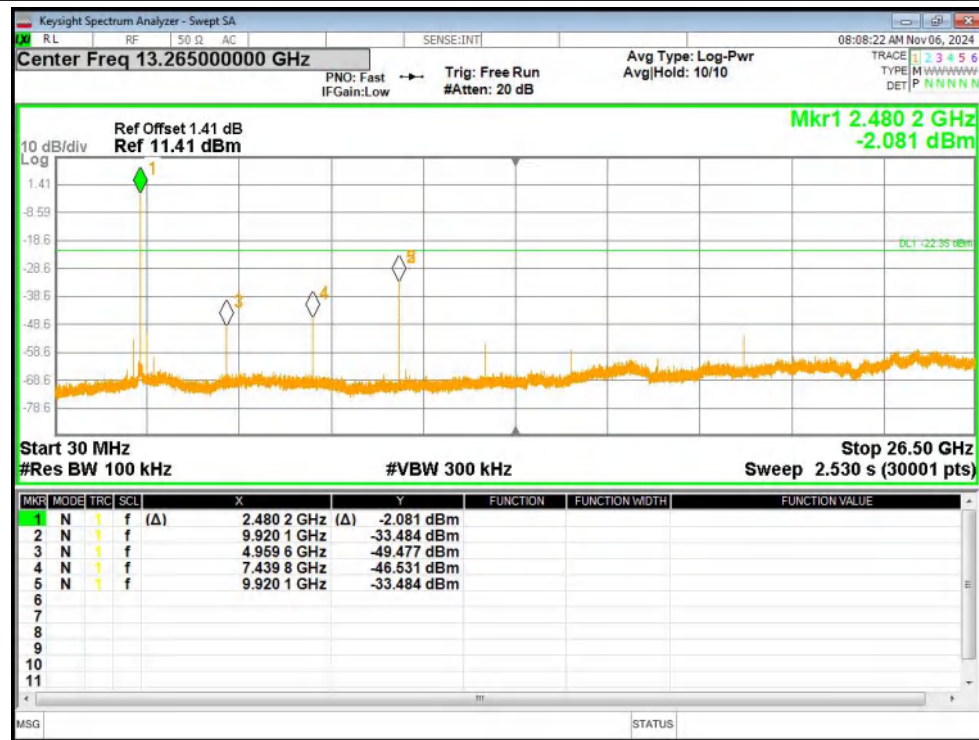
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



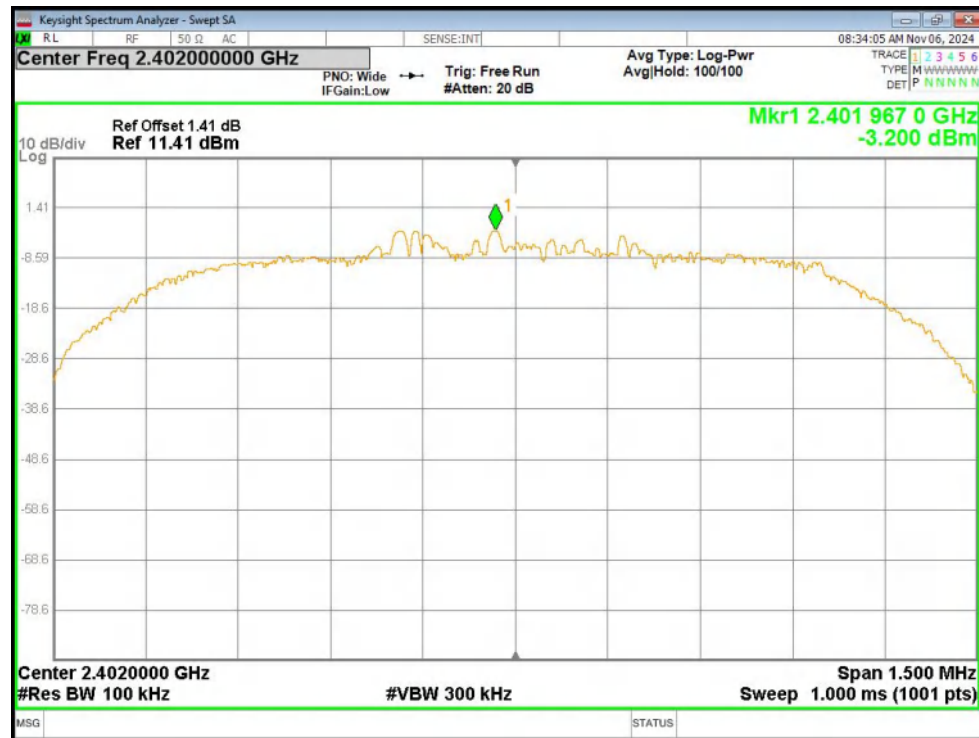
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



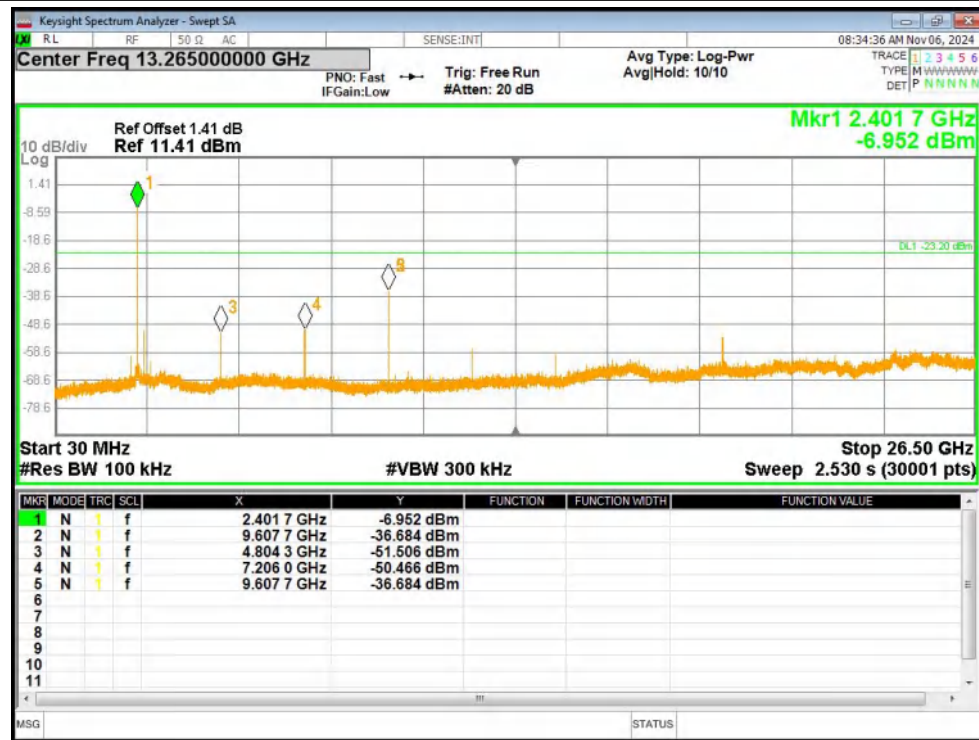
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



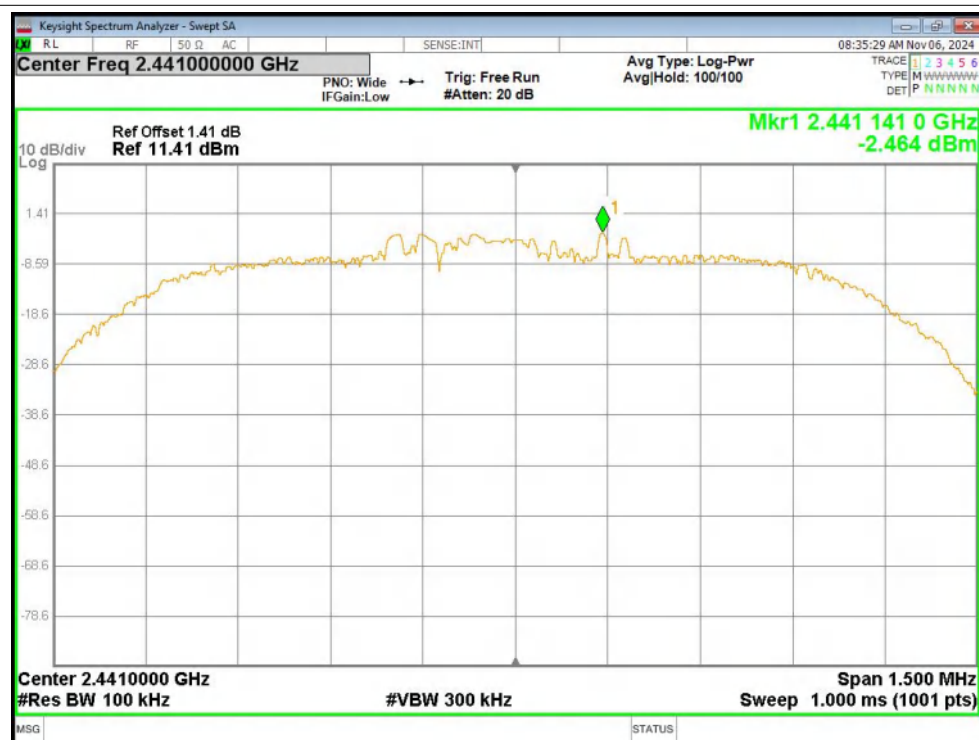
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



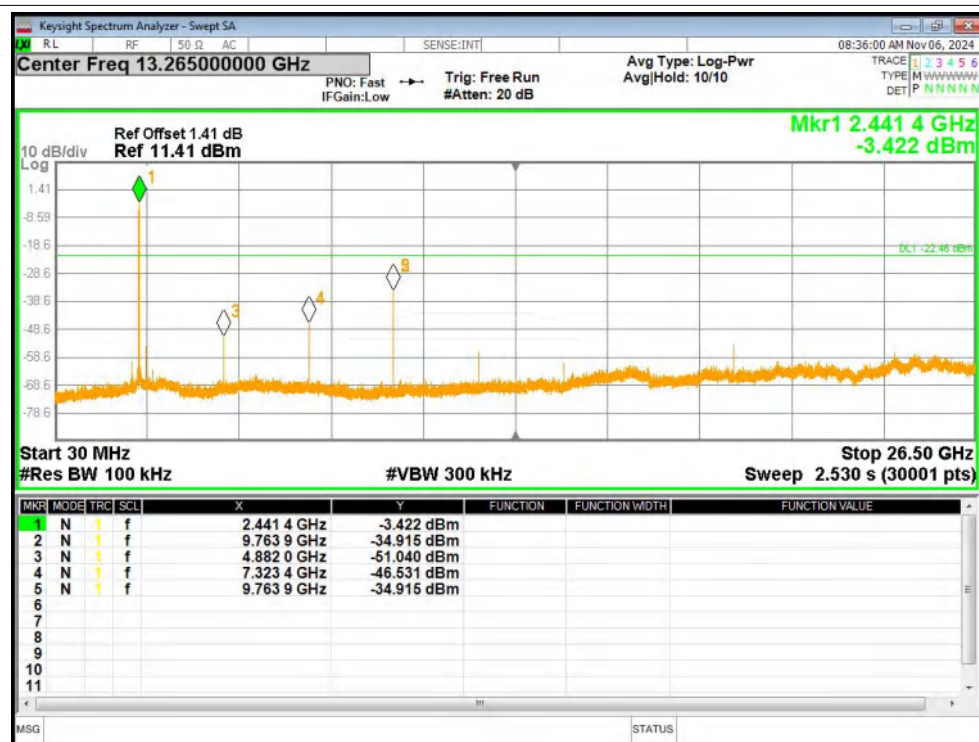
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



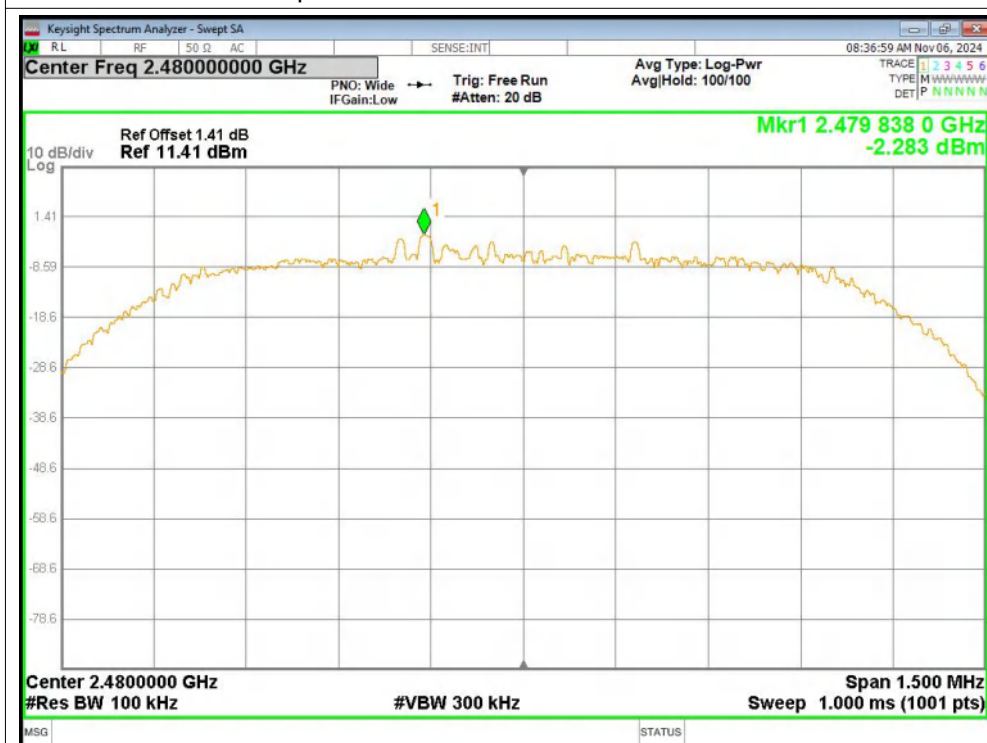
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



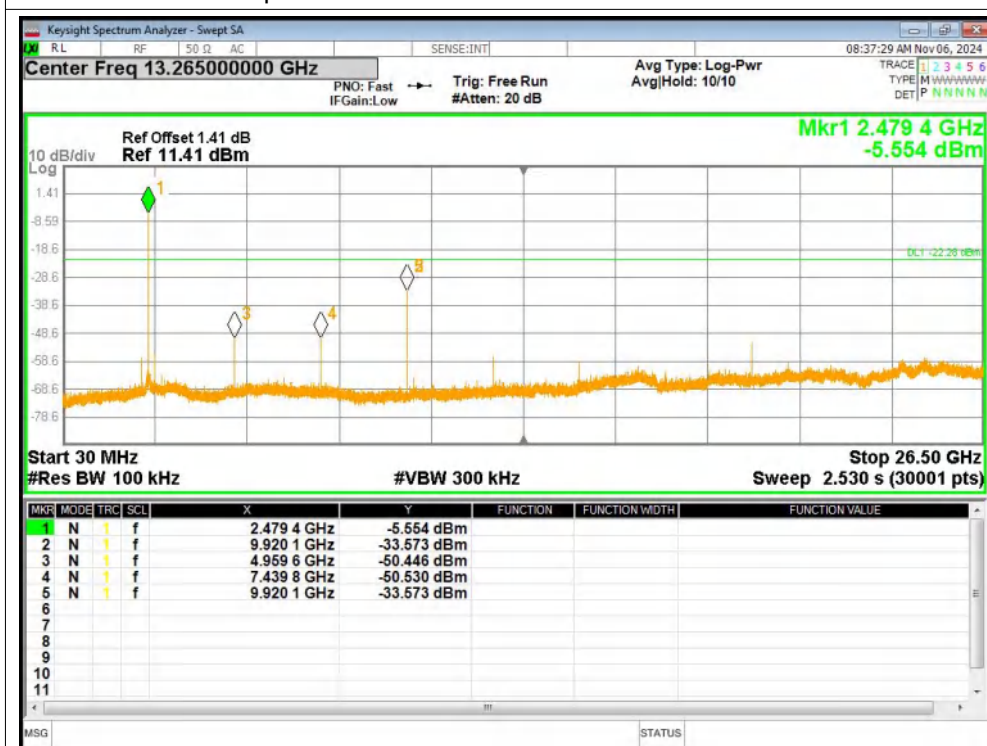
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission



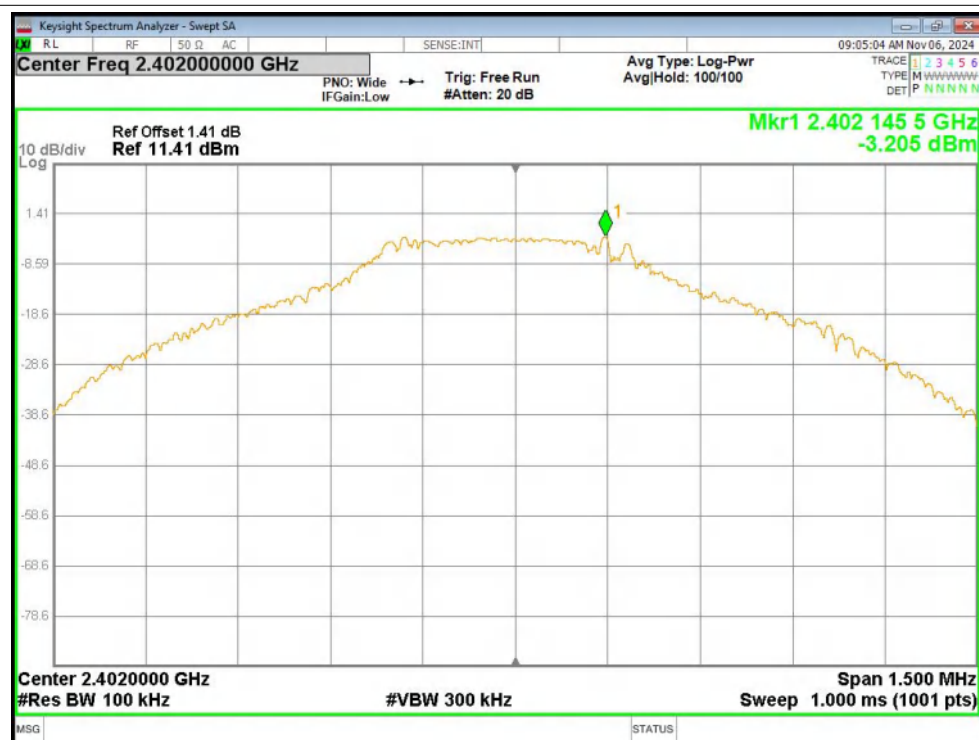
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



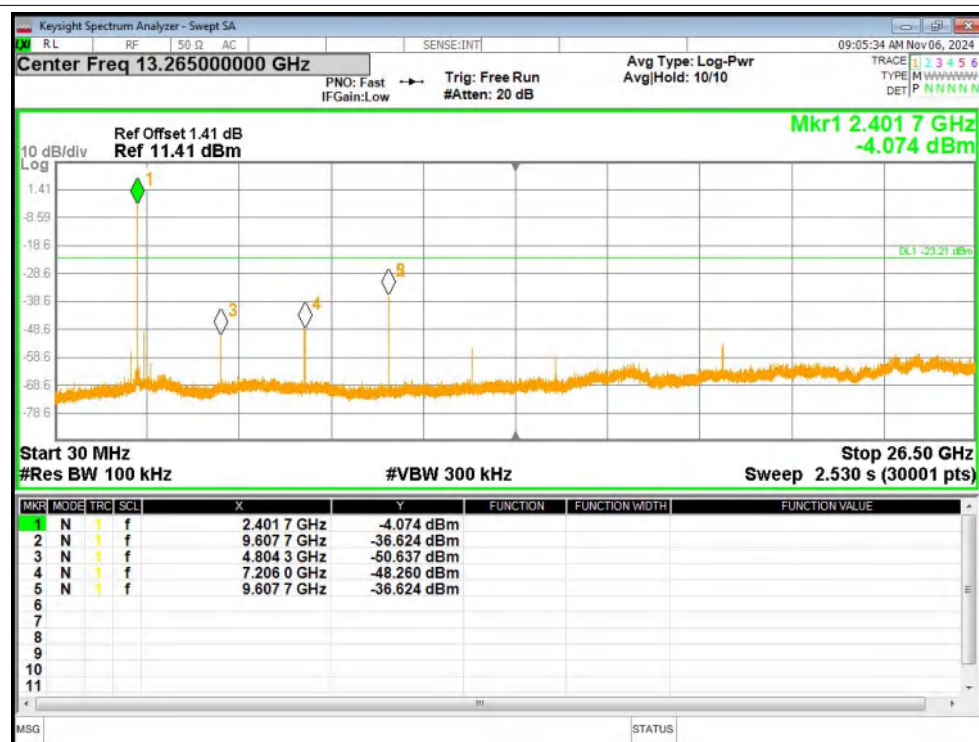
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission



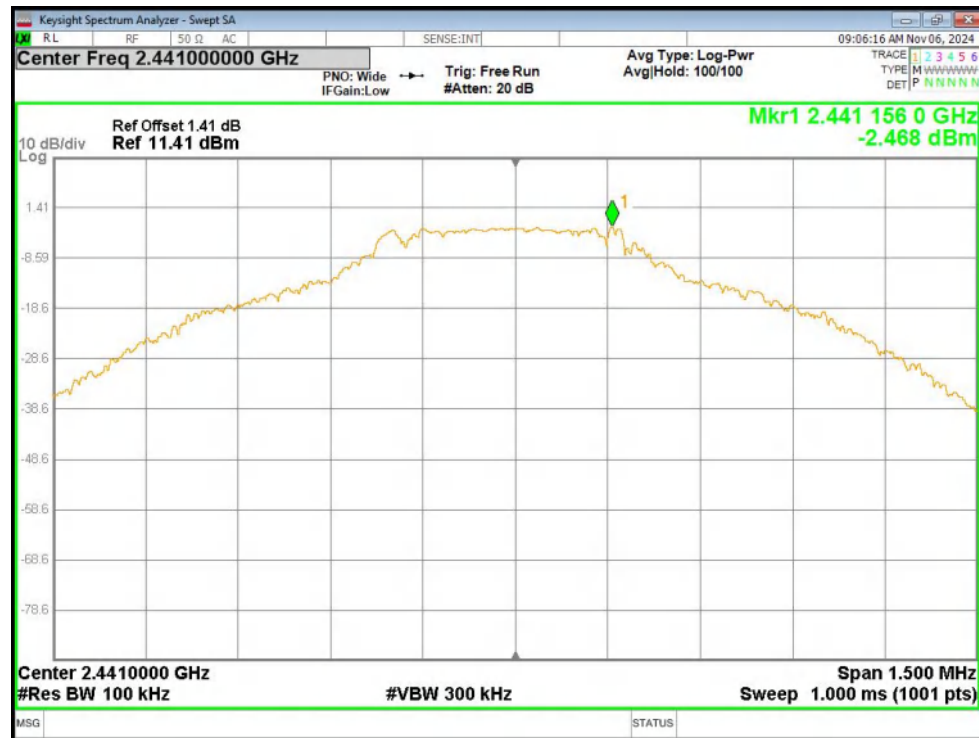
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Ref



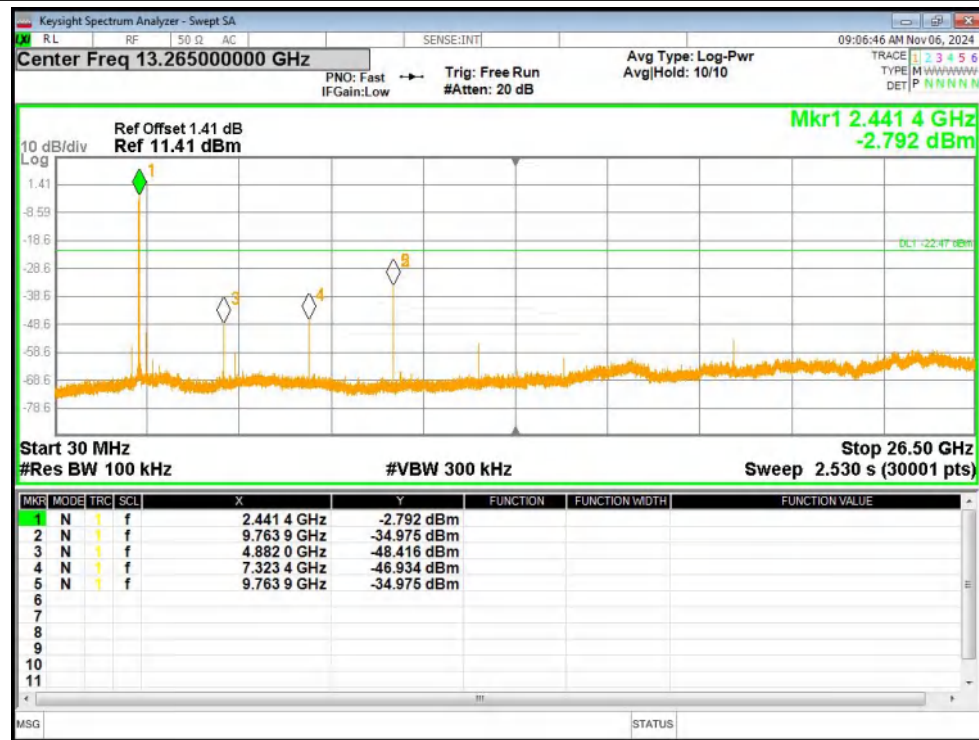
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Emission



Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission

