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FCC ID BT

FCC_BT(Part15.247) Test Data

1.Dwell Time

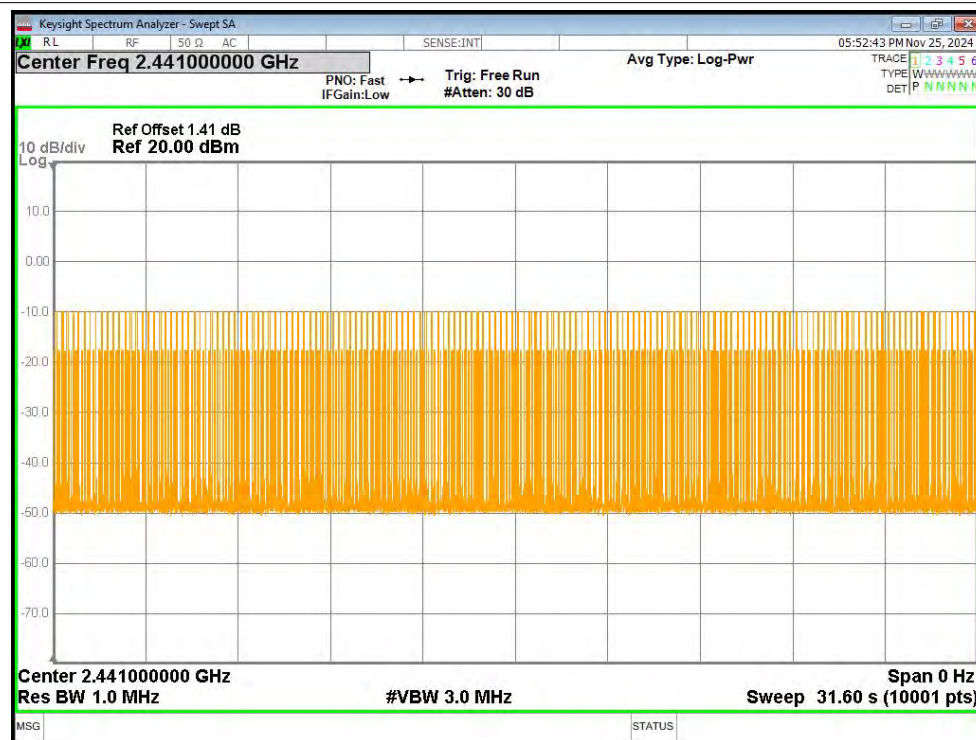
Mode	Frequency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
1-DH1	2441	0.375	119.25	318	31600	400	Pass
1-DH3	2441	1.632	257.856	158	31600	400	Pass
1-DH5	2441	2.88	311.04	108	31600	400	Pass
2-DH1	2441	0.379	120.143	317	31600	400	Pass
2-DH3	2441	1.638	245.7	150	31600	400	Pass
2-DH5	2441	2.879	270.626	94	31600	400	Pass
3-DH1	2441	0.387	122.292	316	31600	400	Pass
3-DH3	2441	1.637	243.913	149	31600	400	Pass
3-DH5	2441	2.888	297.464	103	31600	400	Pass

Test Graphs

Dwell NVNT 1-DH1 2441MHz Ant1 One Burst



Dwell NVNT 1-DH1 2441MHz Ant1 Accumulated



Keysight Spectrum Analyzer - Swept SA

Center Freq 2.441000000 GHz
Res BW 1.0 MHz
Span 0 Hz
Sweep 10.00 ms (10001 pts)

Ref Offset 1.41 dB
Ref 20.00 dBm

PNO: Fast IFGain: Low
Trig Delay-500.0 μs
Trig: Video
#Atten: 30 dB

Avg Type: Log-Pwr

TRACE 1 2 3 4 5 6
TYPE WWWWWWWW
DET P NNNNNN

ΔMkr1 1.632 ms
1.24 dB

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	Δ2	t	(Δ)	1.632 ms (Δ)	1.24 dB			
2	F	t		497.0 μs	-12.71 dBm			

Keysight Spectrum Analyzer - Swept SA

05:53:26 PM Nov 25, 2024

Center Freq 2.441000000 GHz

Avg Type: Log-Pwr

Ref Offset 1.41 dB

Ref 20.00 dBm

10 dB/div

Log

Center 2.441000000 GHz

Res BW 1.0 MHz

#VBW 3.0 MHz

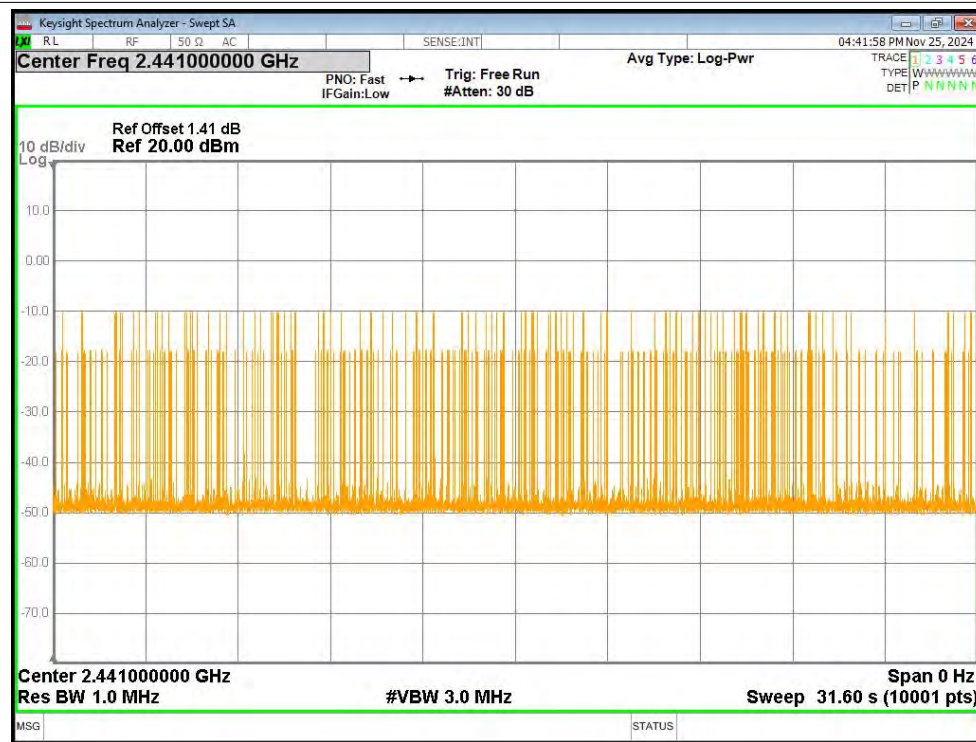
Span 0 Hz

Sweep 31.60 s (10001 pts)

Dwell NVNT 1-DH5 2441MHz Ant1 One Burst



Dwell NVNT 1-DH5 2441MHz Ant1 Accumulated



[illegible]

Keysight Spectrum Analyzer - Swept SA

05:54:09 PM Nov 25, 2024

Center Freq 2.441000000 GHz

Avg Type: Log-Pwr

Trace 1 2 3 4 5 6

Type: WWWWWW

Det: P NNNNN

PNO: Fast IFGain:Low Trig: Free Run #Atten: 30 dB

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

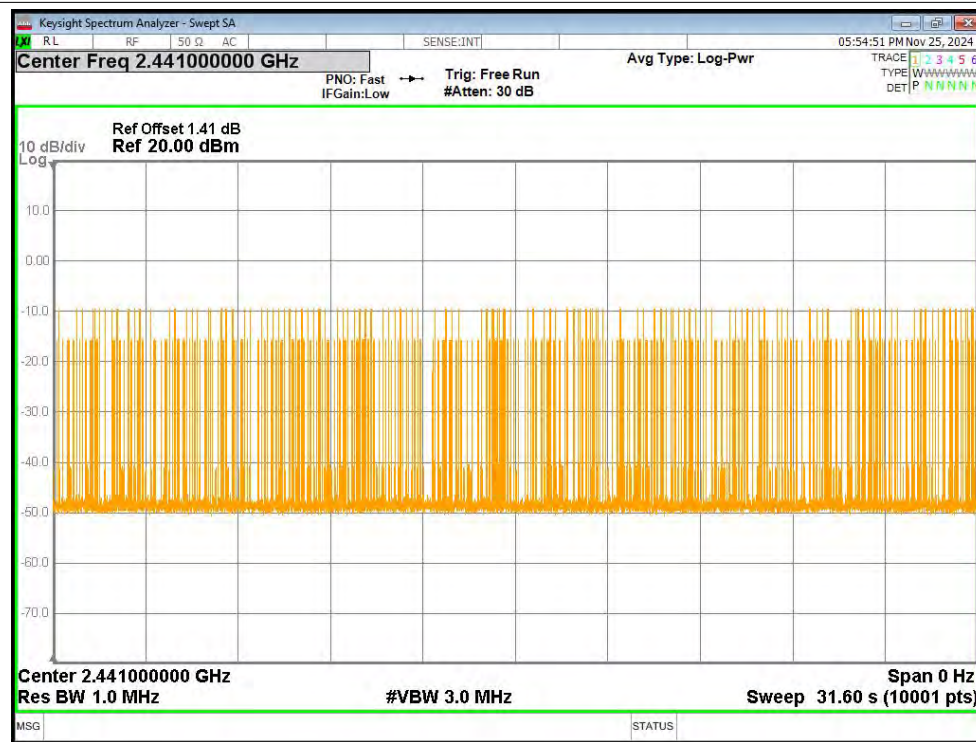
Sweep 31.60 s (10001 pts)

MSG STATUS

Dwell NVNT 2-DH3 2441MHz Ant1 One Burst



Dwell NVNT 2-DH3 2441MHz Ant1 Accumulated



Keysight Spectrum Analyzer - Swept SA

Center Freq 2.441000000 GHz

Trig Delay: 500.0 μ s
Trig: Video
#Atten: 30 dB

Avg Type: Log-Pwr

Ref Offset 1.41 dB
Ref 20.00 dBm

Δ Mkr1 2.879 ms
0.91 dB

10 dB/div
Log

Center 2.441000000 GHz
Res BW 1.0 MHz
#VBW 3.0 MHz
Sweep 10.00 ms (10001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	Δ 2	1	t	(Δ)	2.879 ms (Δ)	0.91 dB		
2	F	1	t		485.0 μ s	-22.75 dBm		

Keysight Spectrum Analyzer - Swept SA

05:23:01 PM Nov 25, 2024

Center Freq 2.441000000 GHz

Avg Type: Log-Pwr

Ref Offset 1.41 dB

Ref 20.00 dBm

10 dB/div

Log

Center 2.441000000 GHz

Res BW 1.0 MHz

#VBW 3.0 MHz

Span 0 Hz

Sweep 31.60 s (10001 pts)

The screenshot shows a Keysight Spectrum Analyzer interface. The main display area shows a spectrum plot with a center frequency of 2.441000000 GHz. The resolution bandwidth (Res BW) is 1.0 MHz, and the video bandwidth (#VBW) is 3.0 MHz. The sweep time is 10.00 ms. The signal level is approximately -24.66 dBm. The trace is labeled 'ΔMkr1' with a value of 387.0 μs and 1.09 dB. The reference offset is 1.41 dB, and the reference power is 20.00 dBm. The trigger delay is 500.0 μs, and the trigger type is Video. The attenuation (#Atten) is 30 dB. The PNO is Fast IF Gain: Low.

Keysight Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT 05:55:35 PM Nov 25, 2024

Center Freq 2.441000000 GHz Avg Type: Log-Pwr

PNO: Fast Trg: Free Run
IFGain:Low #Atten: 30 dB

TRACE 1 2 3 4 5 6
TYPE WWWWWW
DET P NNNNN

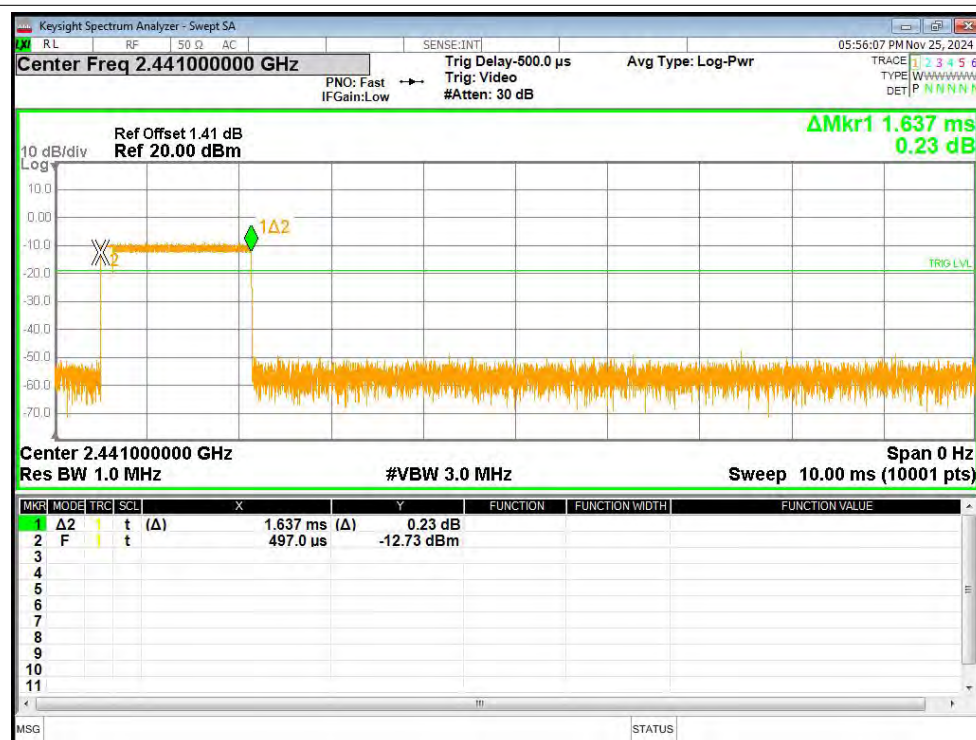
Ref Offset 1.41 dB
Ref 20.00 dBm

10 dB/div
Log

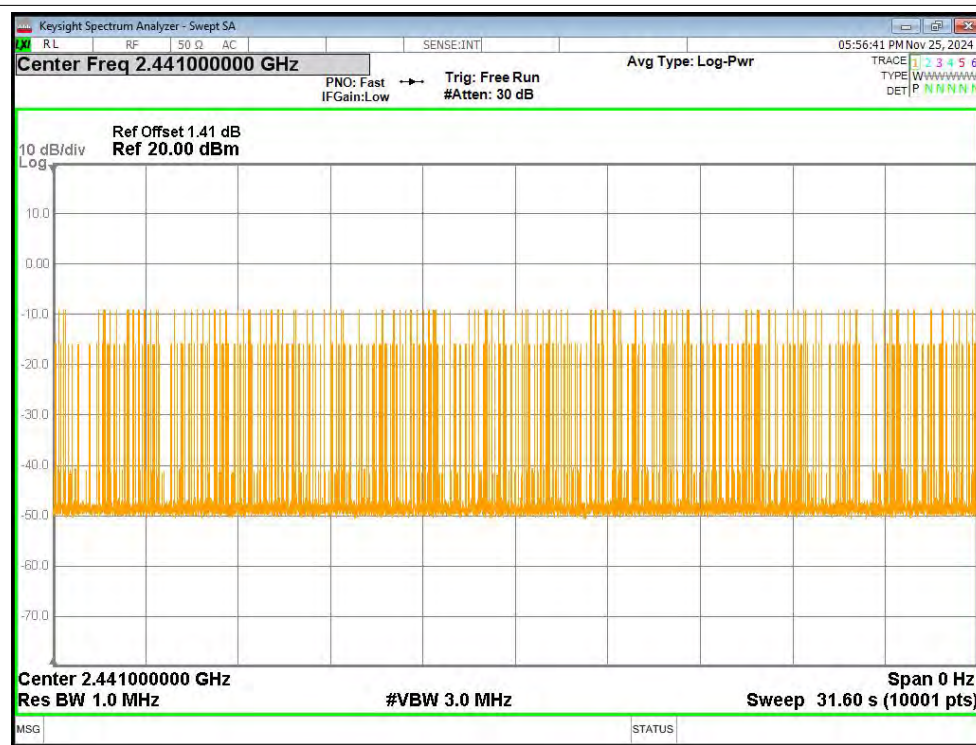
Center 2.441000000 GHz Span 0 Hz
Res BW 1.0 MHz #VBW 3.0 MHz Sweep 31.60 s (10001 pts)

MSG STATUS

Dwell NVNT 3-DH3 2441MHz Ant1 One Burst



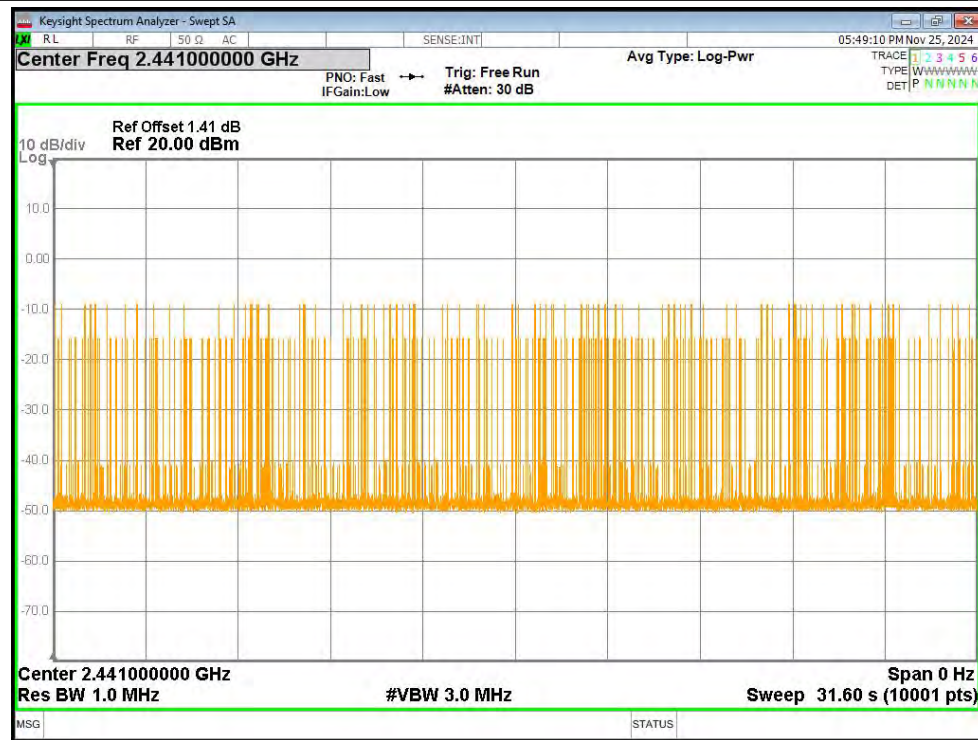
Dwell NVNT 3-DH3 2441MHz Ant1 Accumulated



Dwell NVNT 3-DH5 2441MHz Ant1 One Burst



Dwell NVNT 3-DH5 2441MHz Ant1 Accumulated

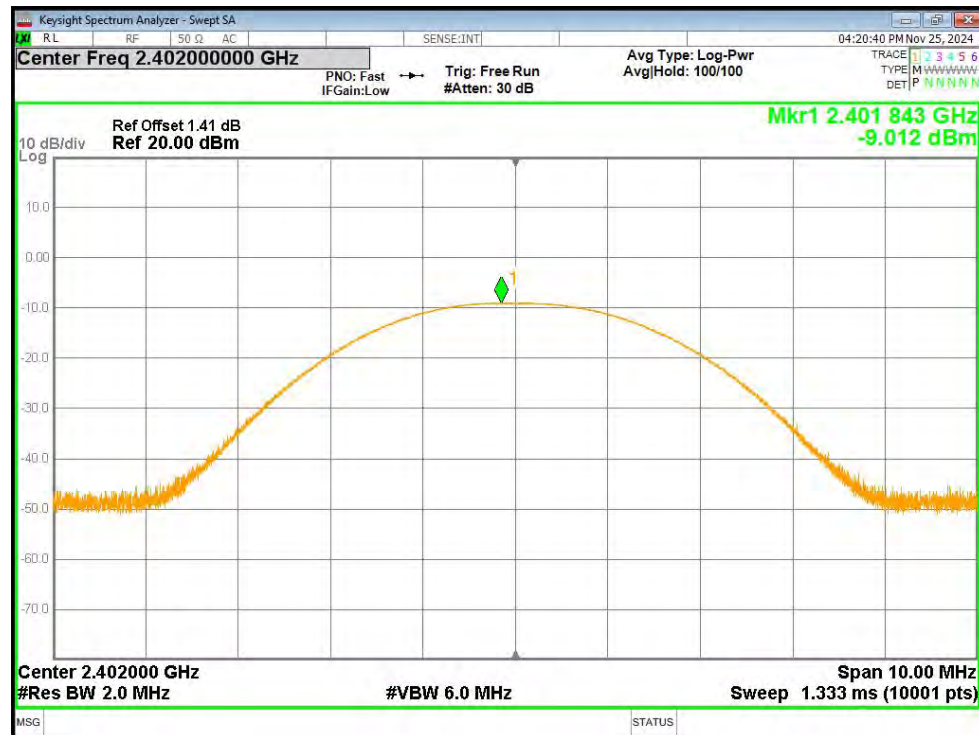


2.Maximum Peak Conducted Output Power

Mode	Frequency (MHz)	Total Power (dBm)	Limit (dBm)	Verdict
1-DH5	2402	-9.01	21	Pass
1-DH5	2441	-10.26	21	Pass
1-DH5	2480	-9.73	21	Pass
2-DH5	2402	-8.33	21	Pass
2-DH5	2441	-9.47	21	Pass
2-DH5	2480	-8.39	21	Pass
3-DH5	2402	-7.25	21	Pass
3-DH5	2441	-8.62	21	Pass
3-DH5	2480	-8.77	21	Pass

Test Graphs

Peak Power NVNT 1-DH5 2402MHz Ant1



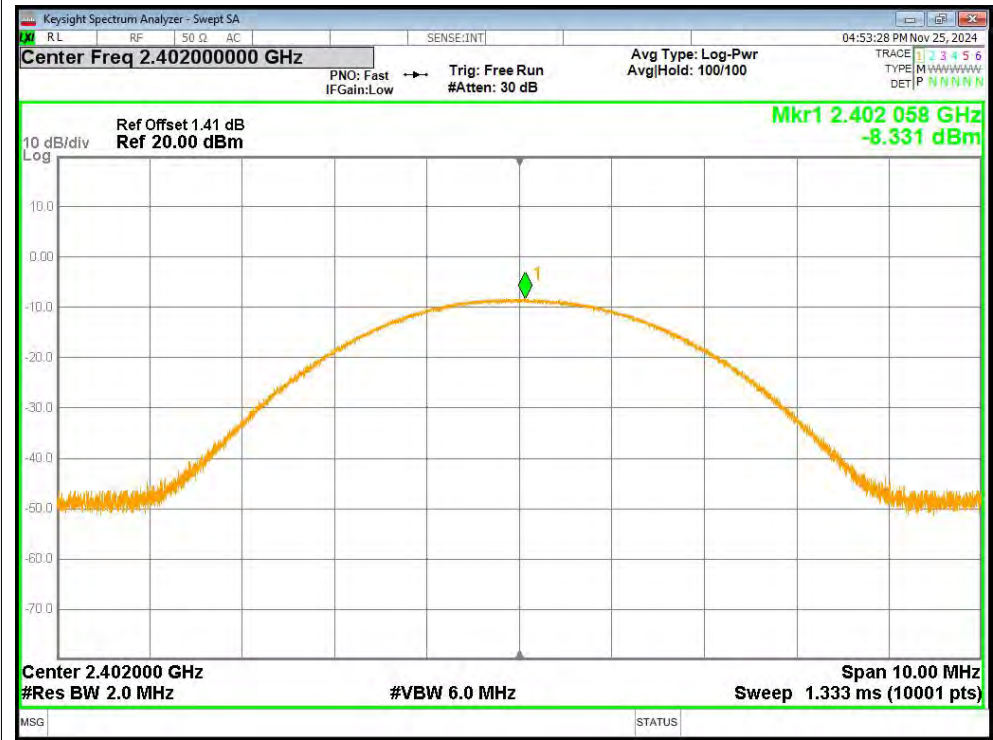
Peak Power NVNT 1-DH5 2441MHz Ant1



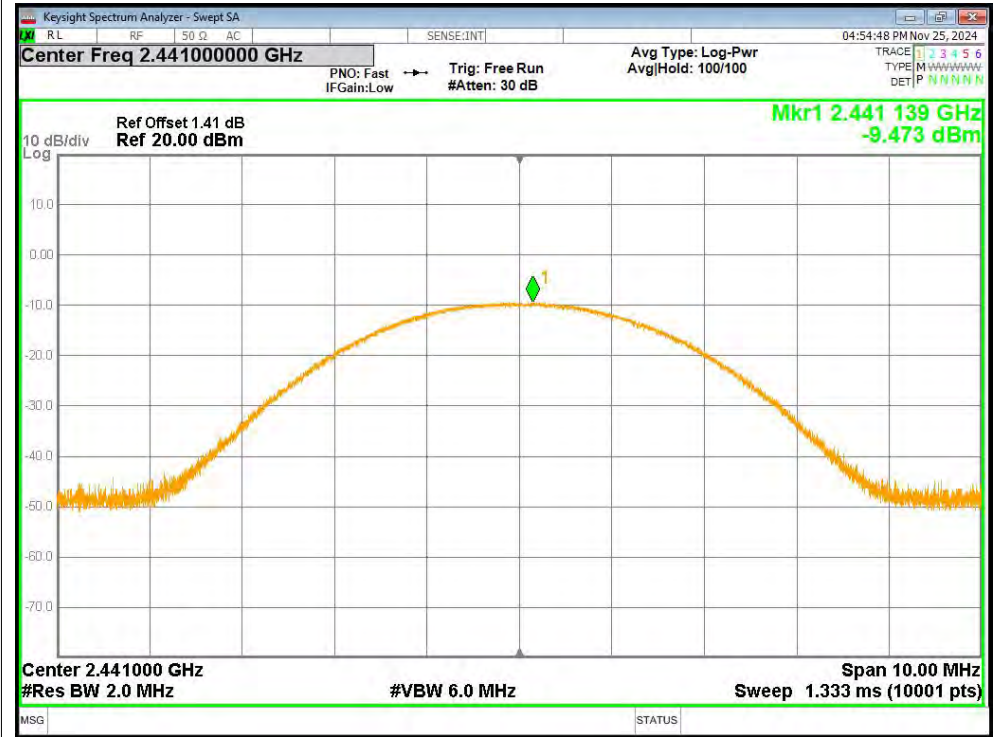
Peak Power NVNT 1-DH5 2480MHz Ant1



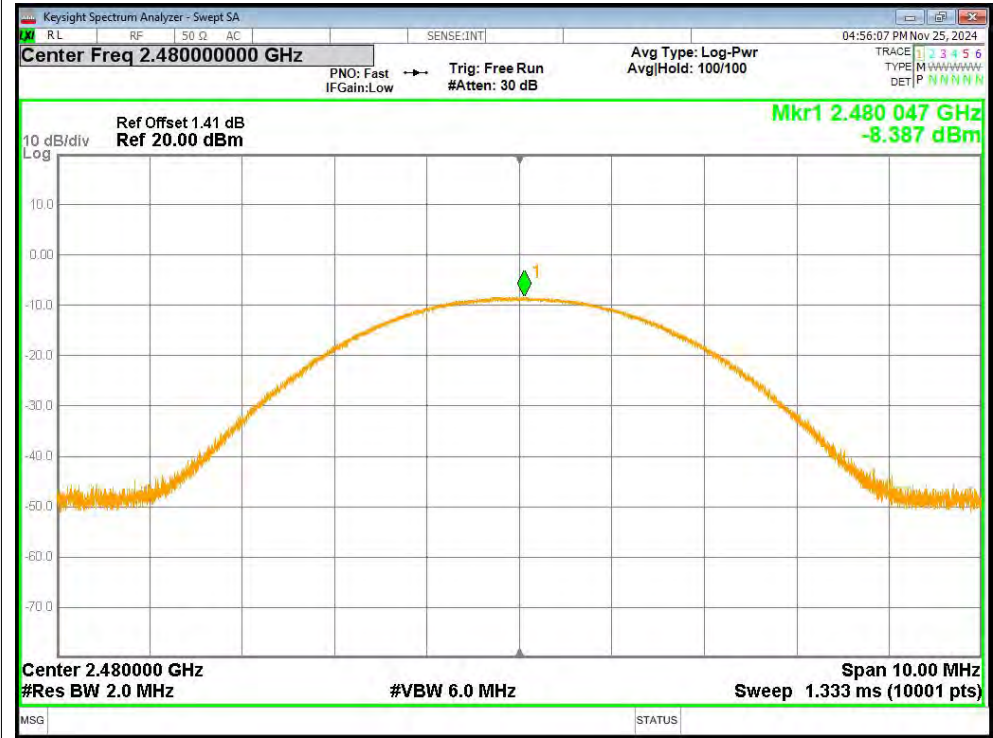
Peak Power NVNT 2-DH5 2402MHz Ant1



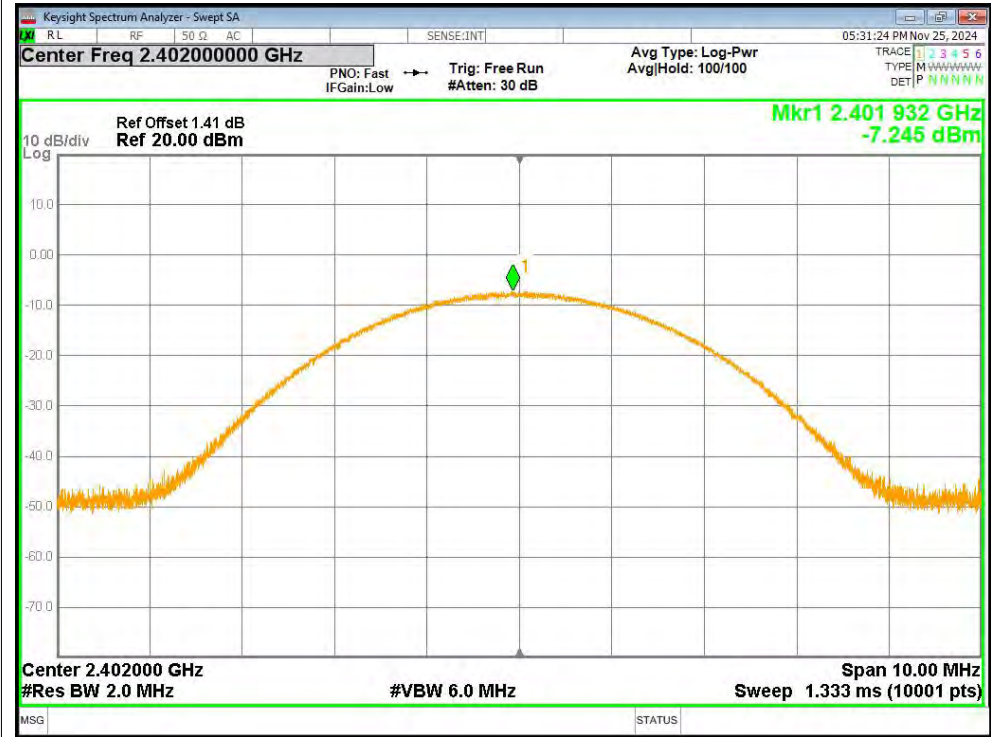
Peak Power NVNT 2-DH5 2441MHz Ant1



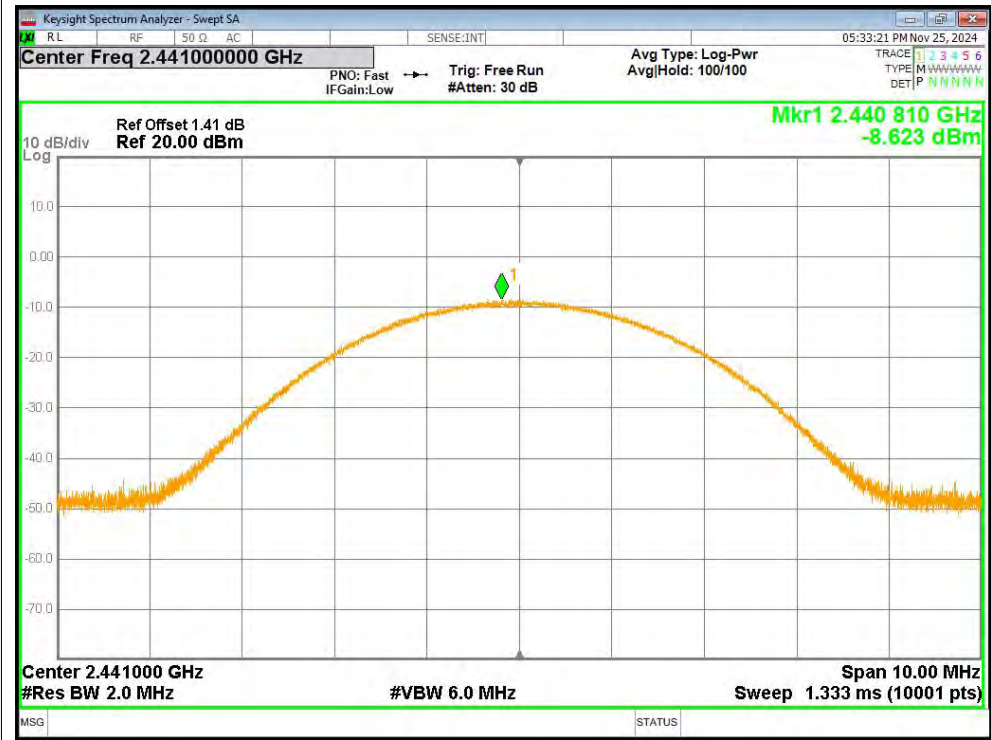
Peak Power NVNT 2-DH5 2480MHz Ant1



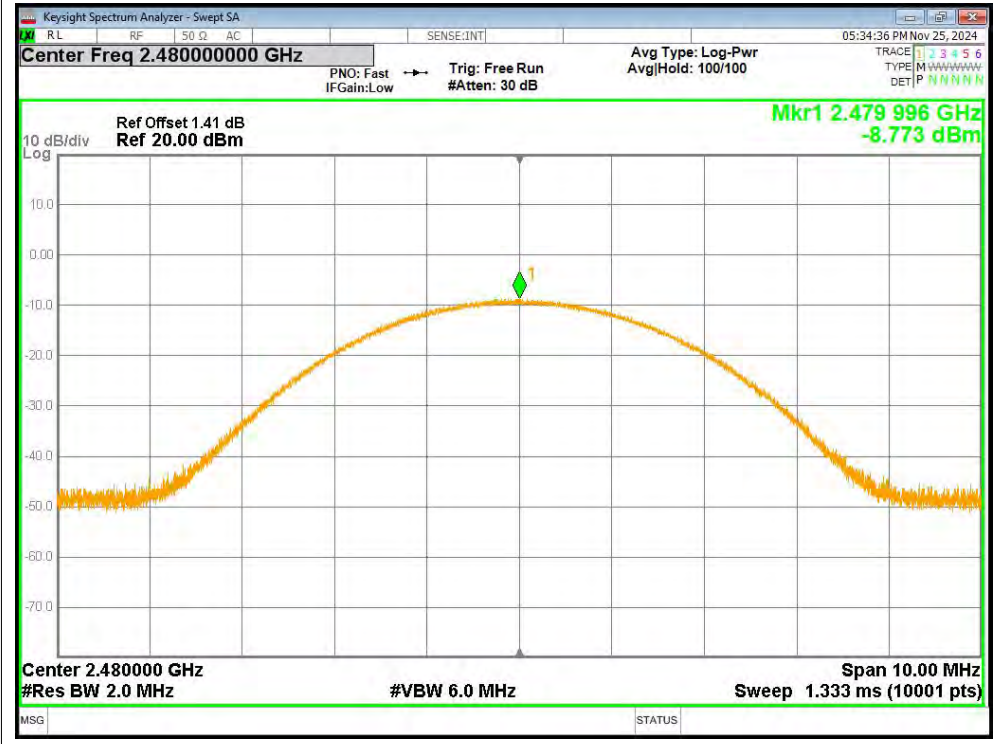
Peak Power NVNT 3-DH5 2402MHz Ant1



Peak Power NVNT 3-DH5 2441MHz Ant1



Peak Power NVNT 3-DH5 2480MHz Ant1



3.-20dB Bandwidth

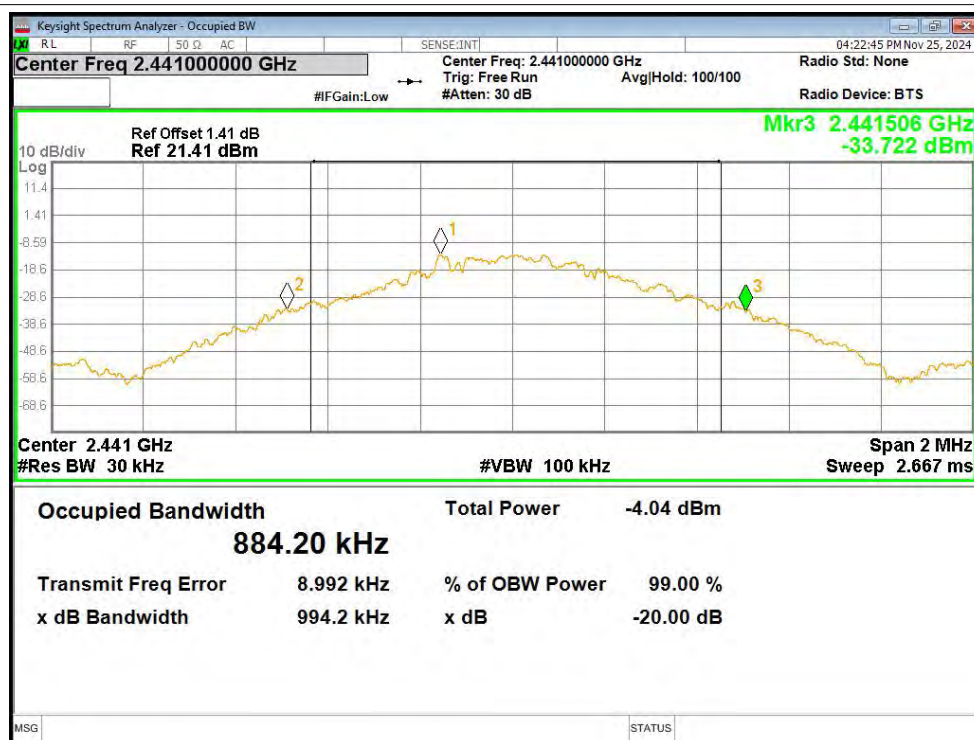
Mode	Frequency (MHz)	-20 dB Bandwidth (MHz)	Verdict
1-DH5	2402	0.96	Pass
1-DH5	2441	0.994	Pass
1-DH5	2480	1.028	Pass
2-DH5	2402	1.312	Pass
2-DH5	2441	1.307	Pass
2-DH5	2480	1.313	Pass
3-DH5	2402	1.301	Pass
3-DH5	2441	1.337	Pass
3-DH5	2480	1.287	Pass

Test Graphs

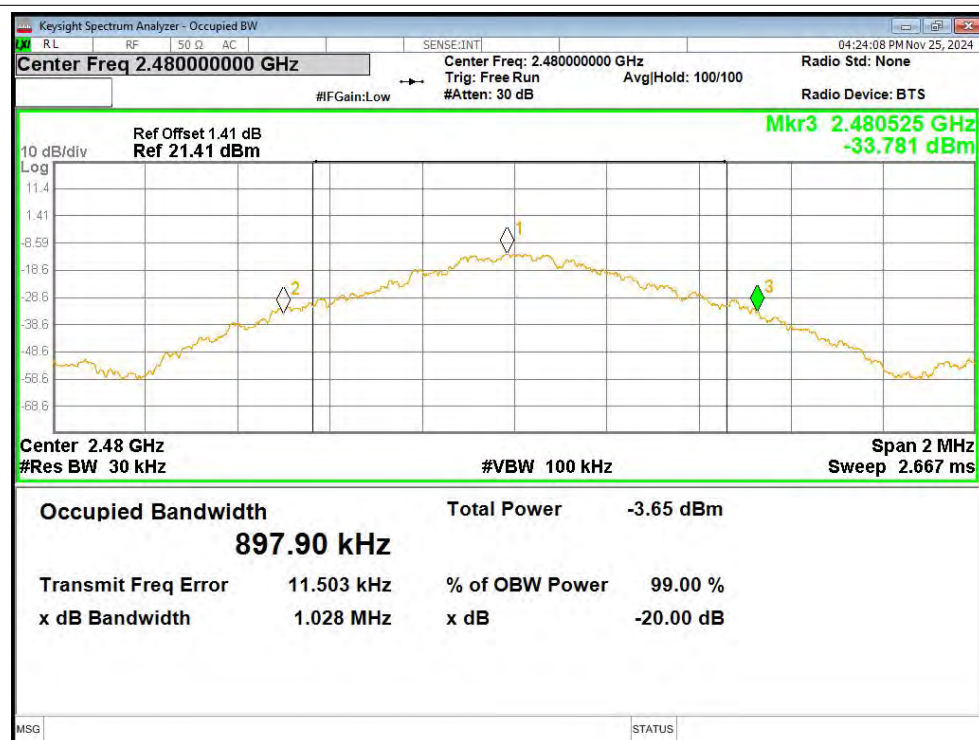
-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



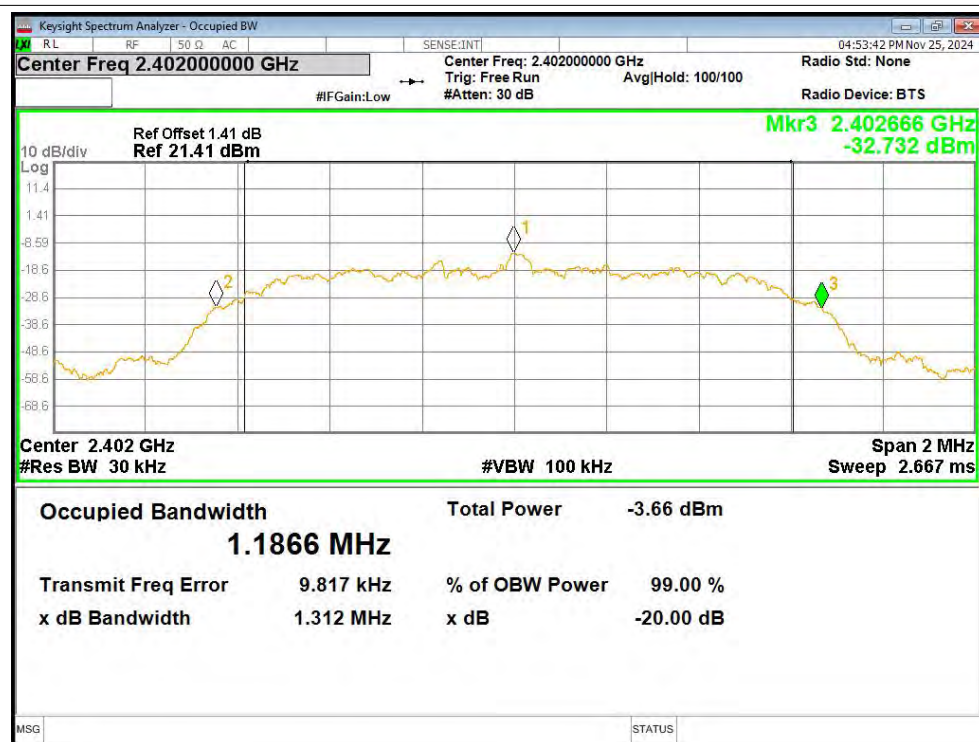
-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



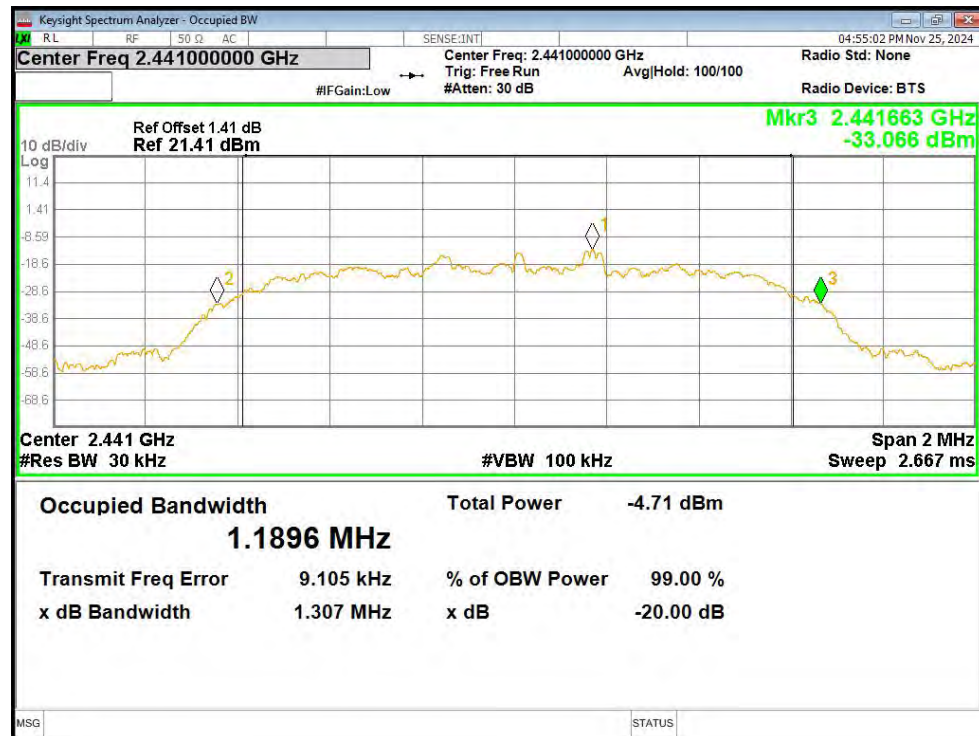
-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



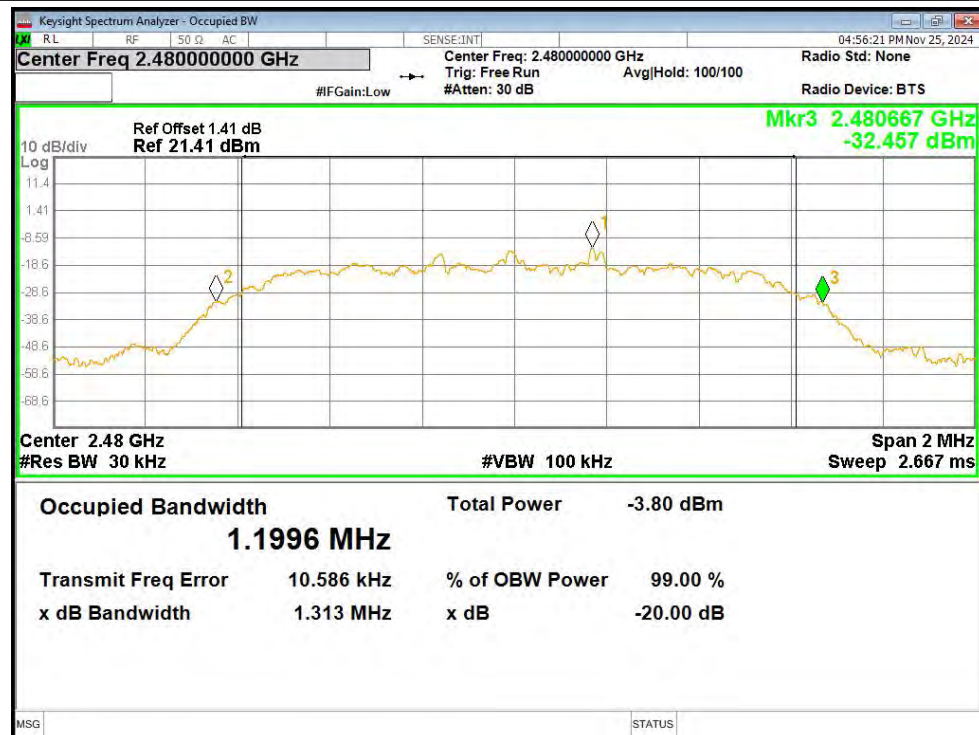
-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



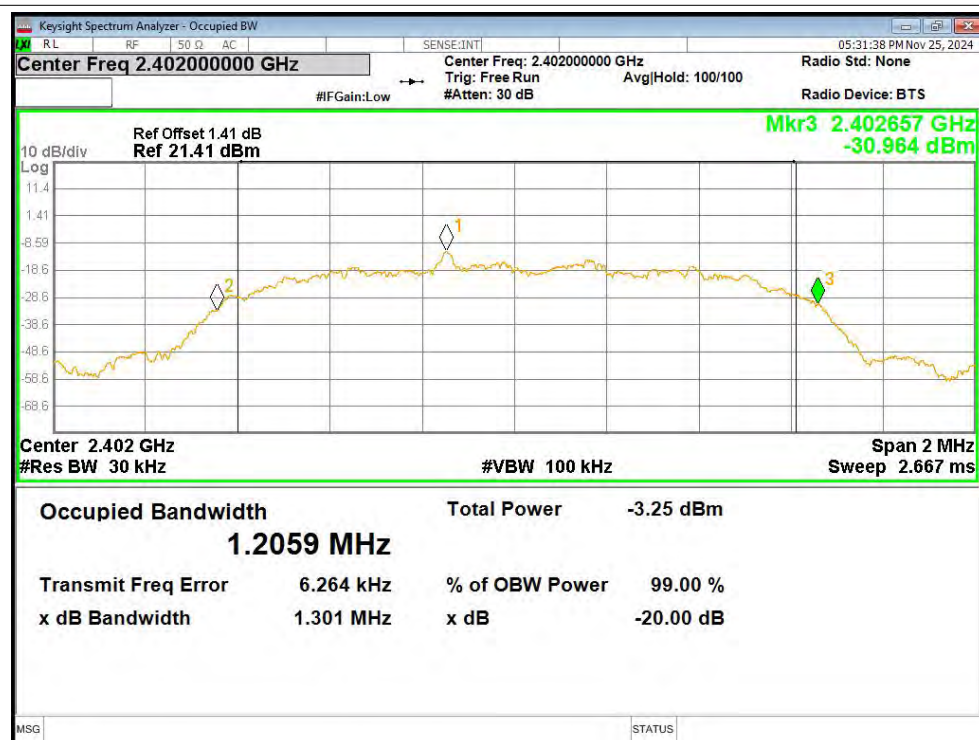
-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



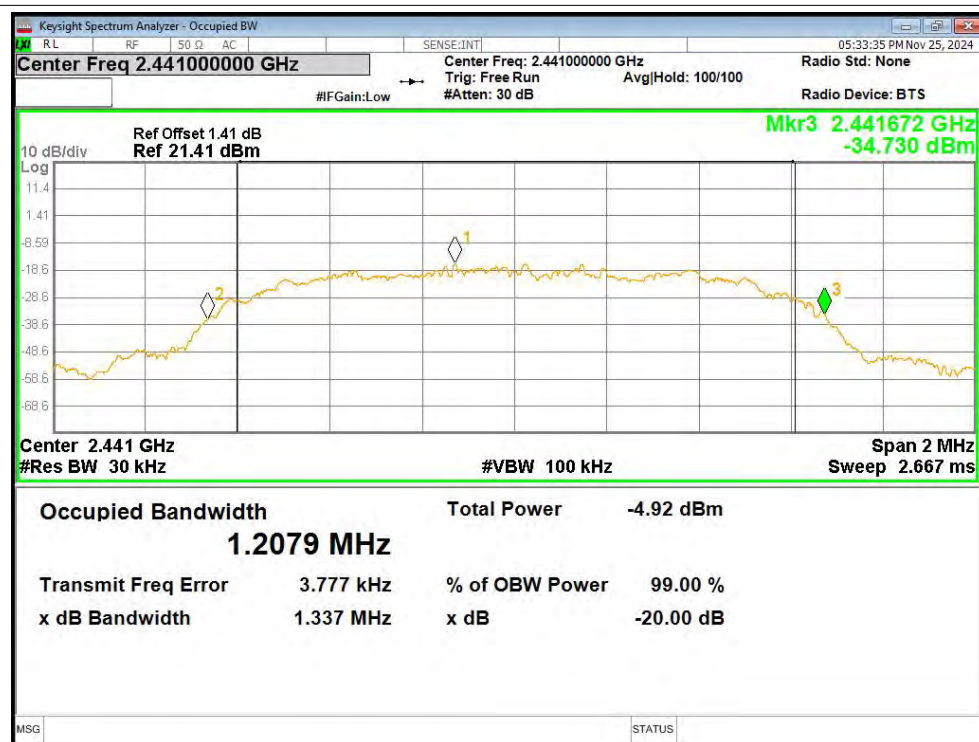
-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1



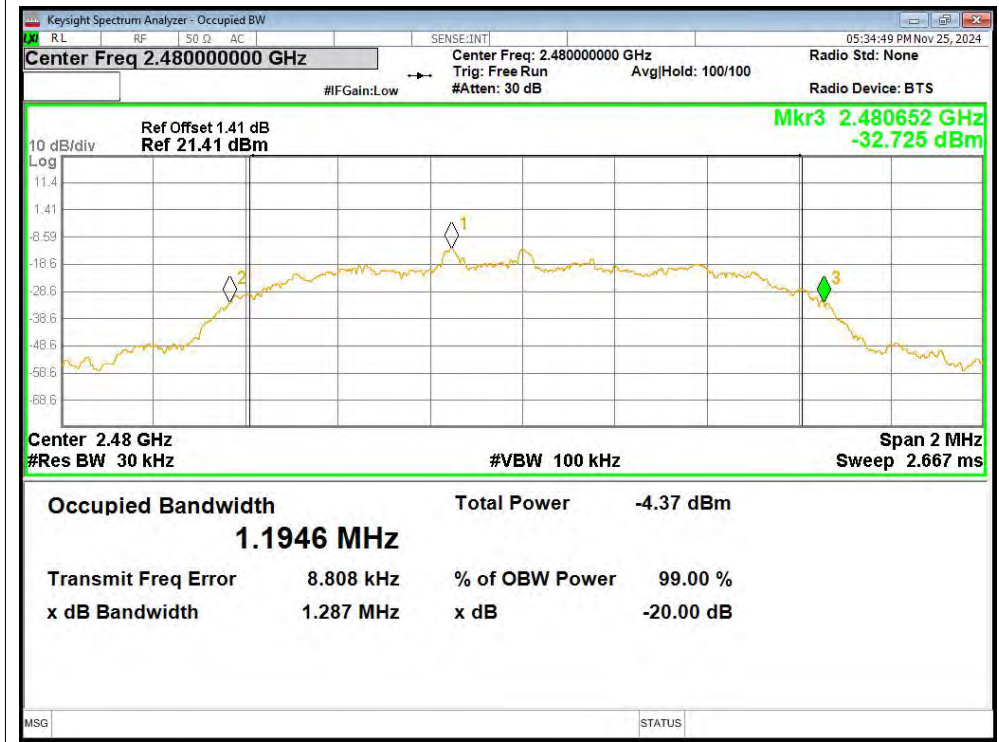
-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2480MHz Ant1

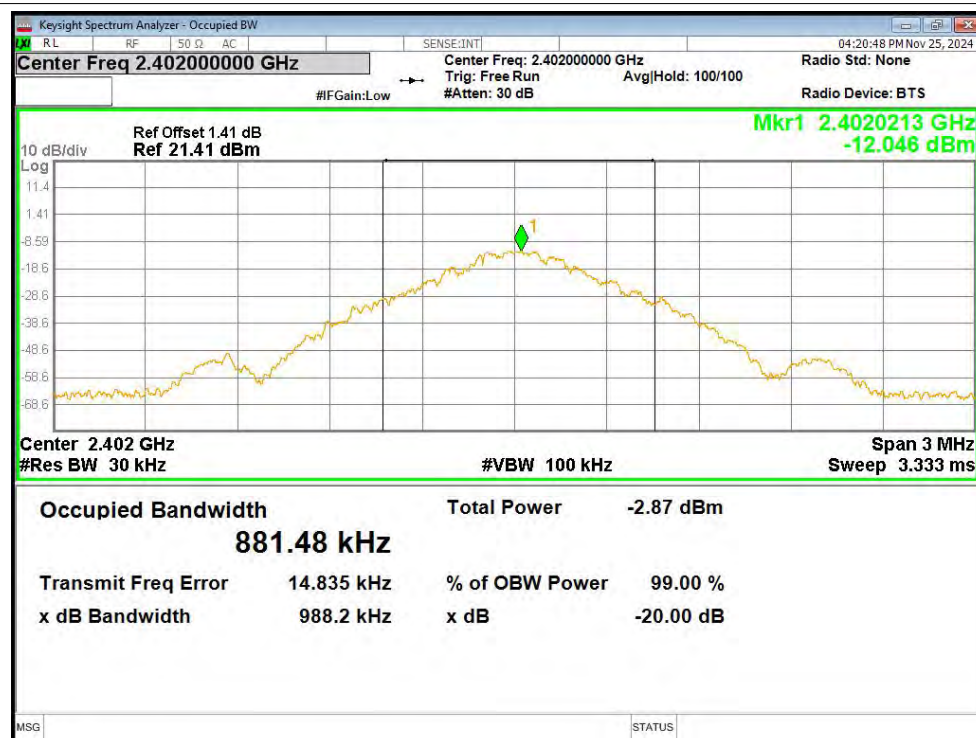


4.Occupied Channel Bandwidth

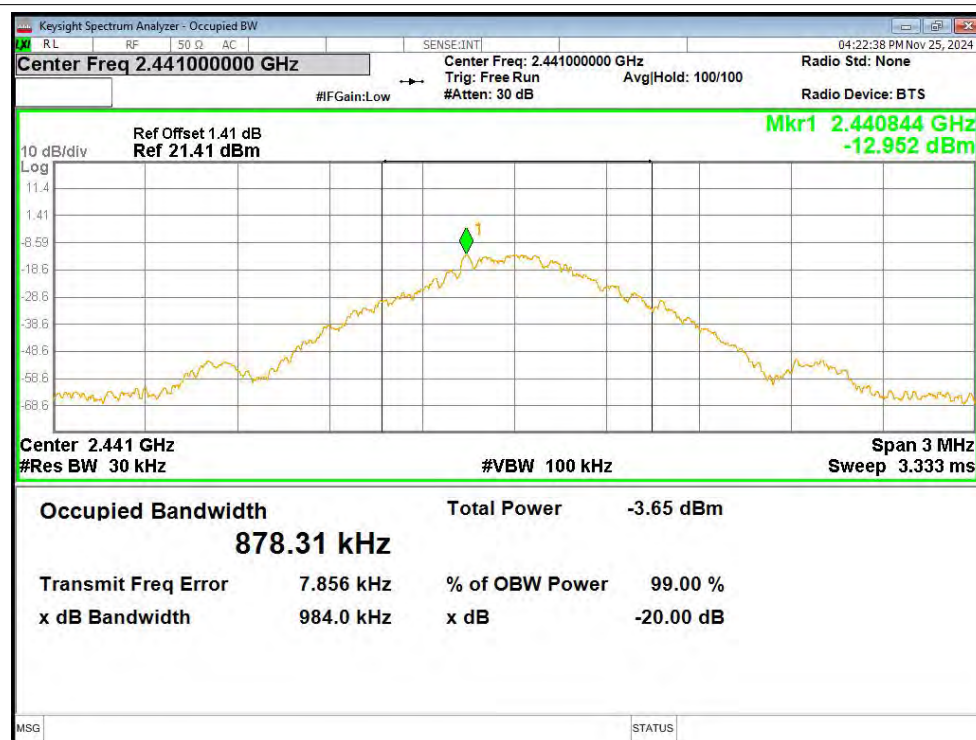
Mode	Frequency (MHz)	99% OBW (MHz)
1-DH5	2402	0.881
1-DH5	2441	0.878
1-DH5	2480	0.889
2-DH5	2402	1.194
2-DH5	2441	1.196
2-DH5	2480	1.193
3-DH5	2402	1.195
3-DH5	2441	1.207
3-DH5	2480	1.204

Test Graphs

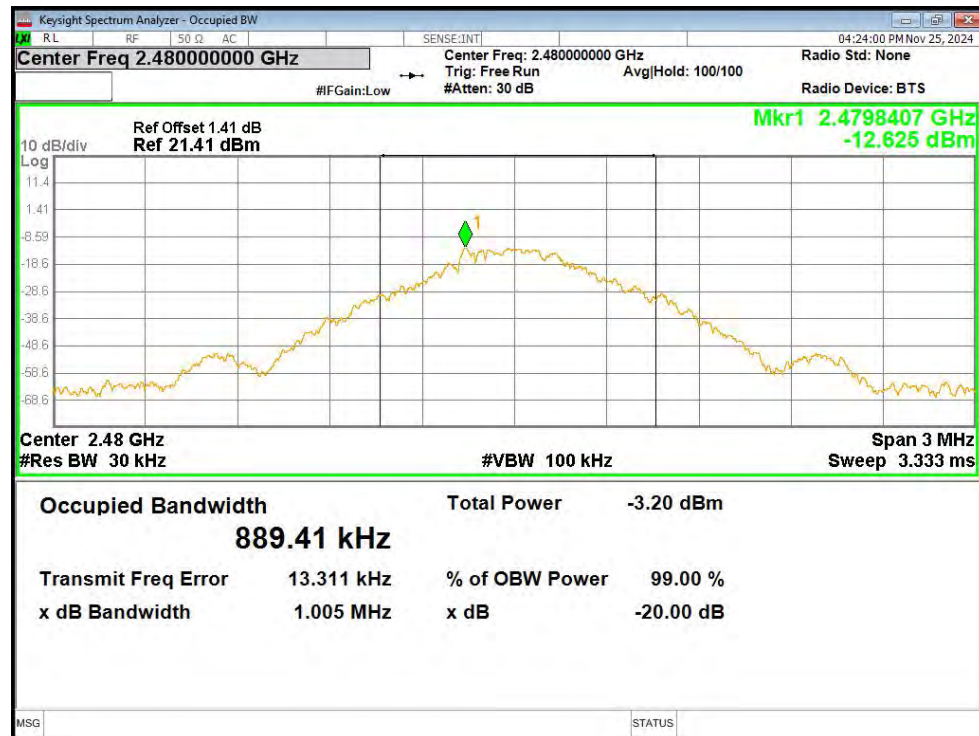
OBW NVNT 1-DH5 2402MHz Ant1



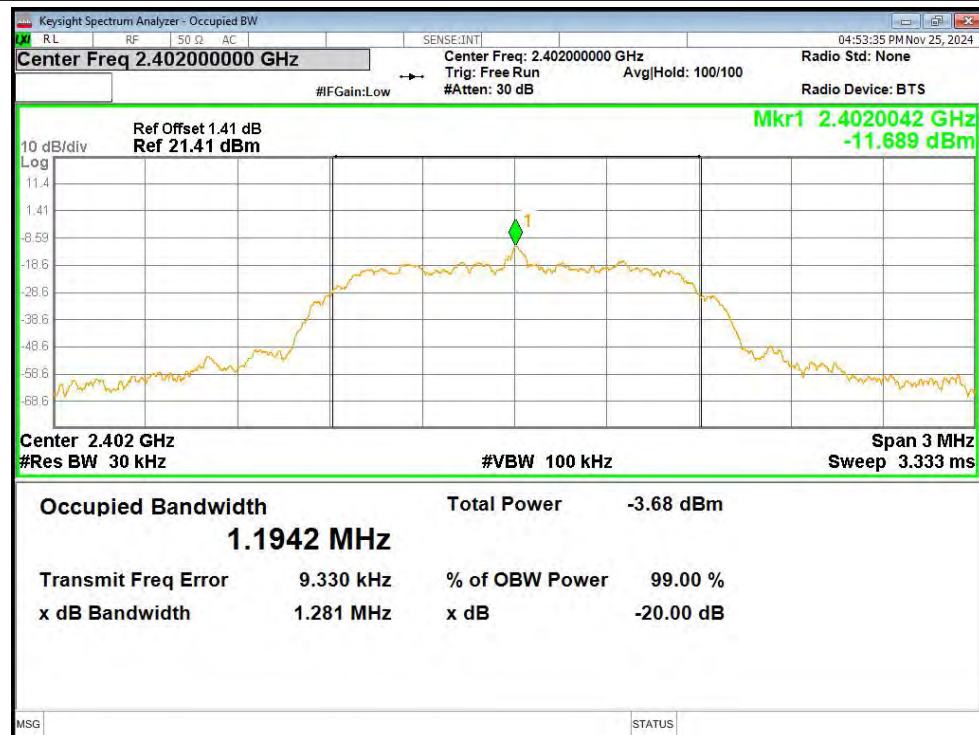
OBW NVNT 1-DH5 2441MHz Ant1



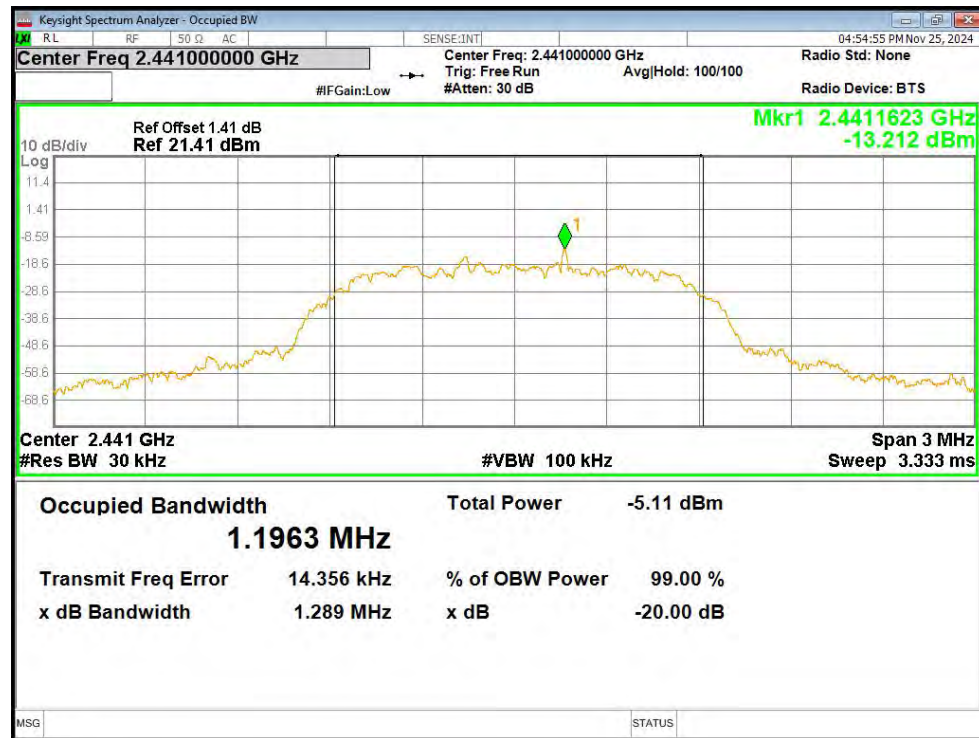
OBW NVNT 1-DH5 2480MHz Ant1



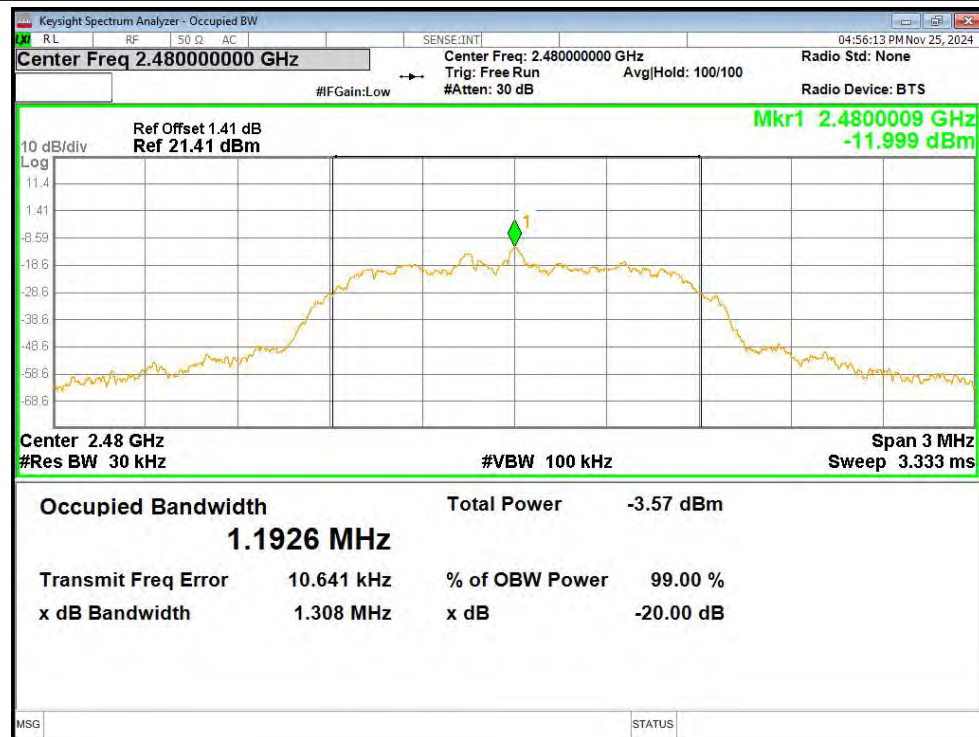
OBW NVNT 2-DH5 2402MHz Ant1



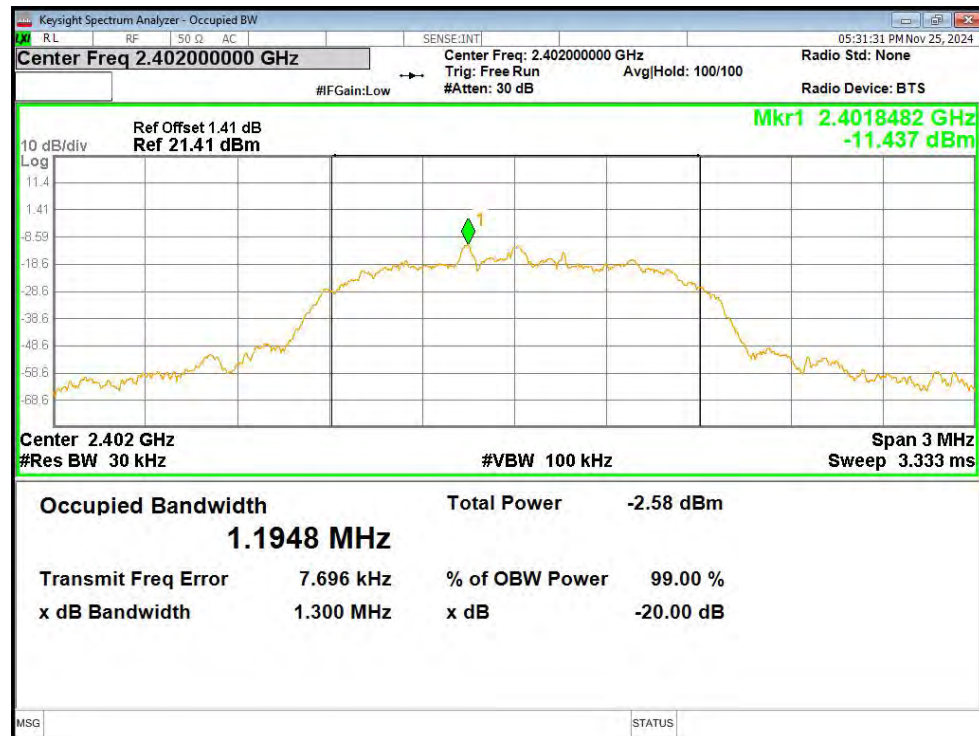
OBW NVNT 2-DH5 2441MHz Ant1



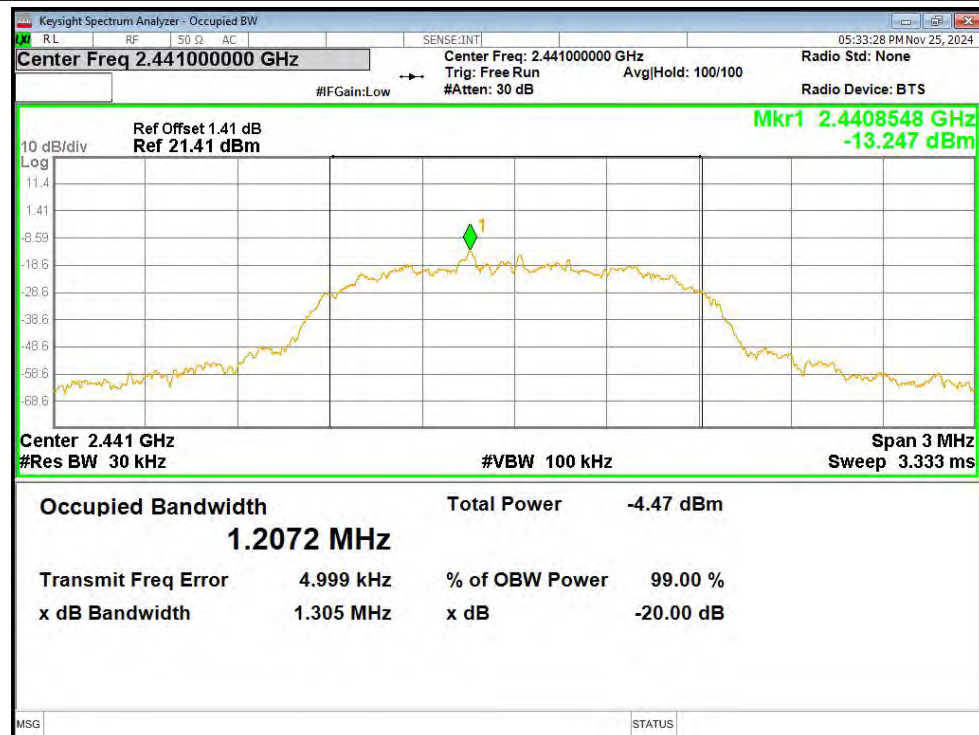
OBW NVNT 2-DH5 2480MHz Ant1



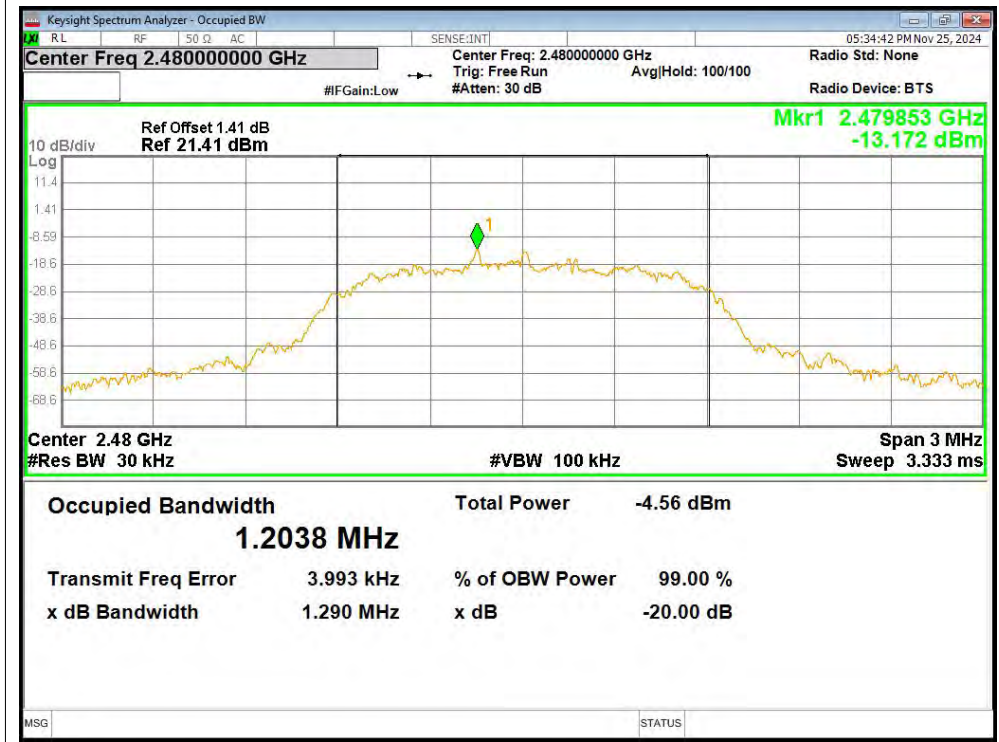
OBW NVNT 3-DH5 2402MHz Ant1



OBW NVNT 3-DH5 2441MHz Ant1



OBW NVNT 3-DH5 2480MHz Ant1



5.Carrier Frequencies Separation

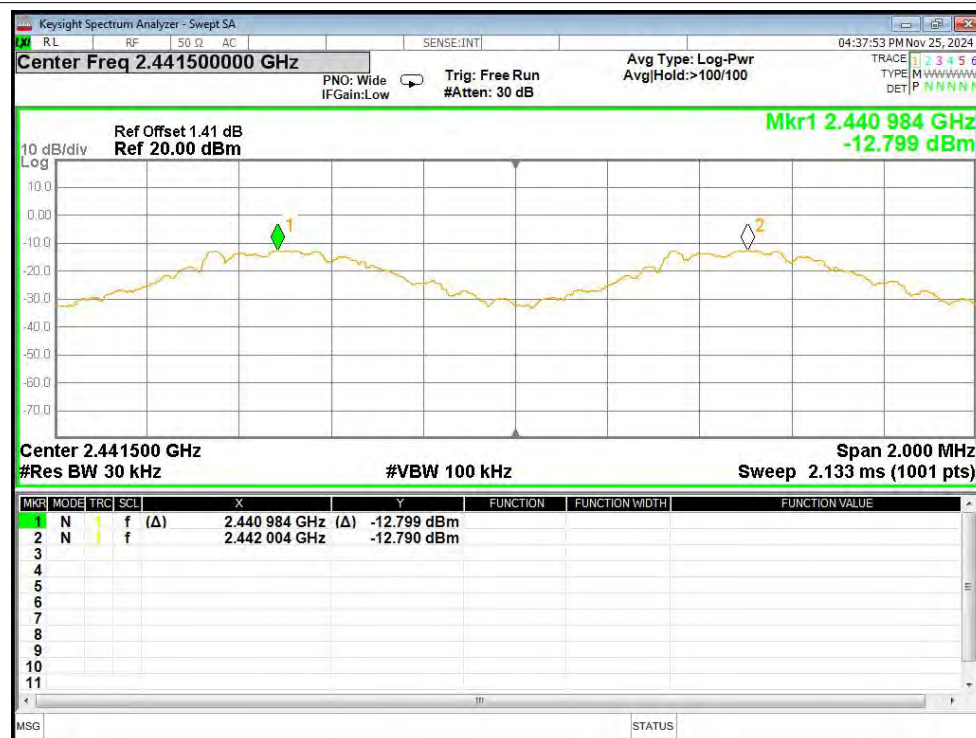
Mode	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
1-DH5	2402.004	2403.004	1	0.64	Pass
1-DH5	2440.984	2442.004	1.02	0.663	Pass
1-DH5	2478.982	2479.844	0.862	0.685	Pass
2-DH5	2401.988	2403.008	1.02	0.875	Pass
2-DH5	2440.996	2442.17	1.174	0.871	Pass
2-DH5	2478.998	2480.004	1.006	0.875	Pass
3-DH5	2401.846	2403.006	1.16	0.867	Pass
3-DH5	2440.856	2441.844	0.988	0.891	Pass
3-DH5	2478.854	2479.846	0.992	0.858	Pass

Test Graphs

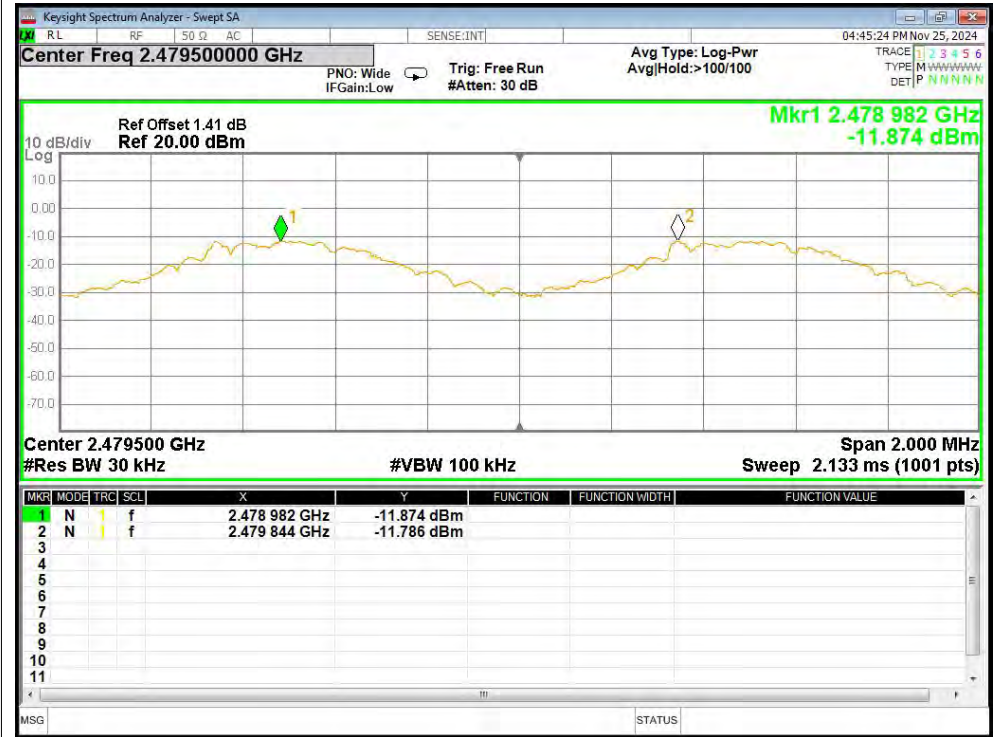
CFS NVNT 1-DH5 2402MHz Ant1



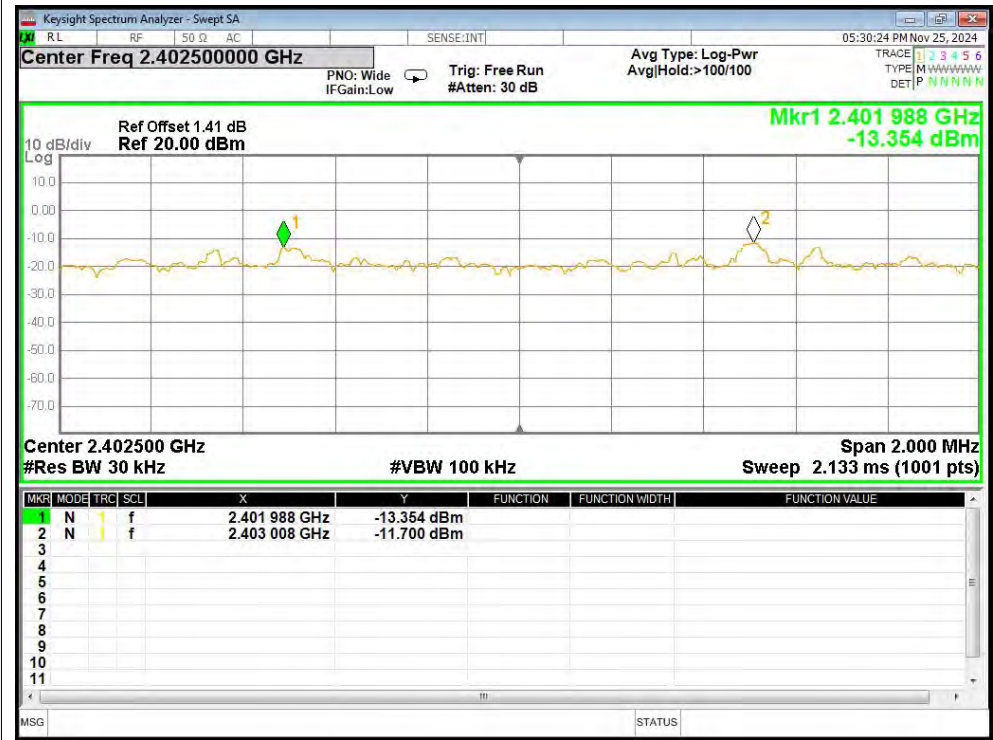
CFS NVNT 1-DH5 2441MHz Ant1



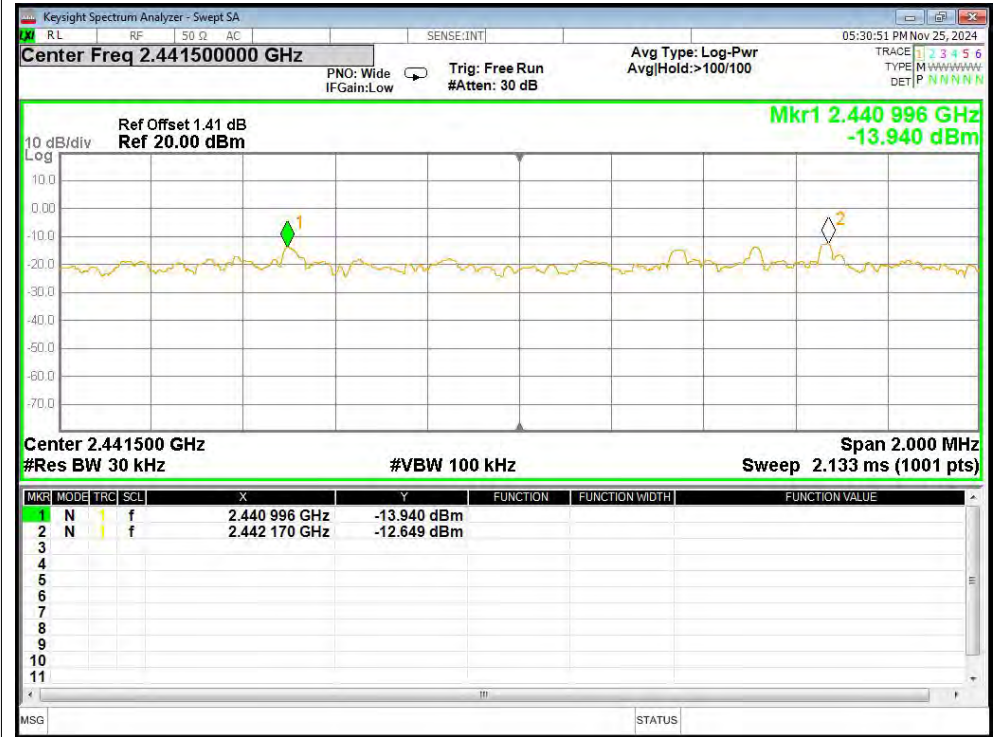
CFS NVNT 1-DH5 2480MHz Ant1



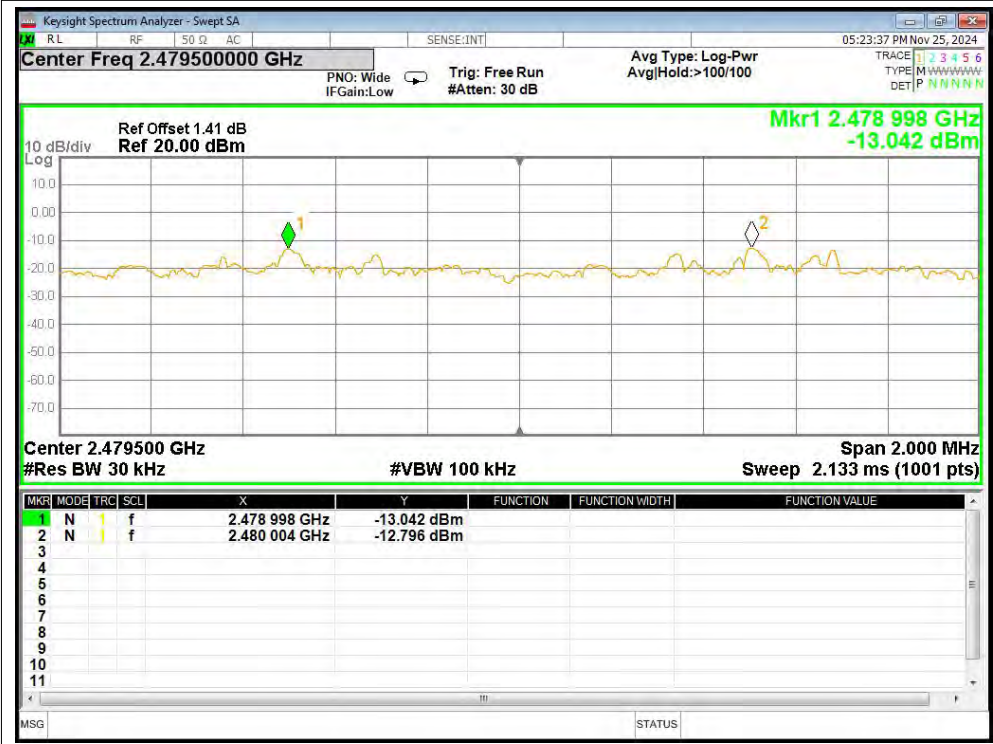
CFS NVNT 2-DH5 2402MHz Ant1



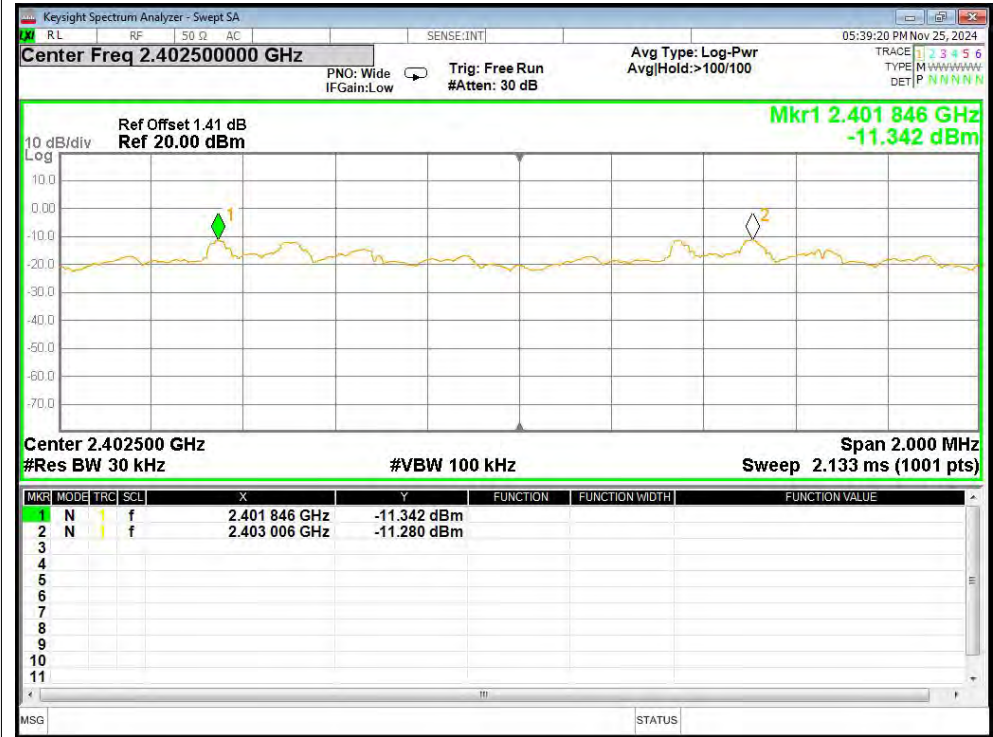
CFS NVNT 2-DH5 2441MHz Ant1



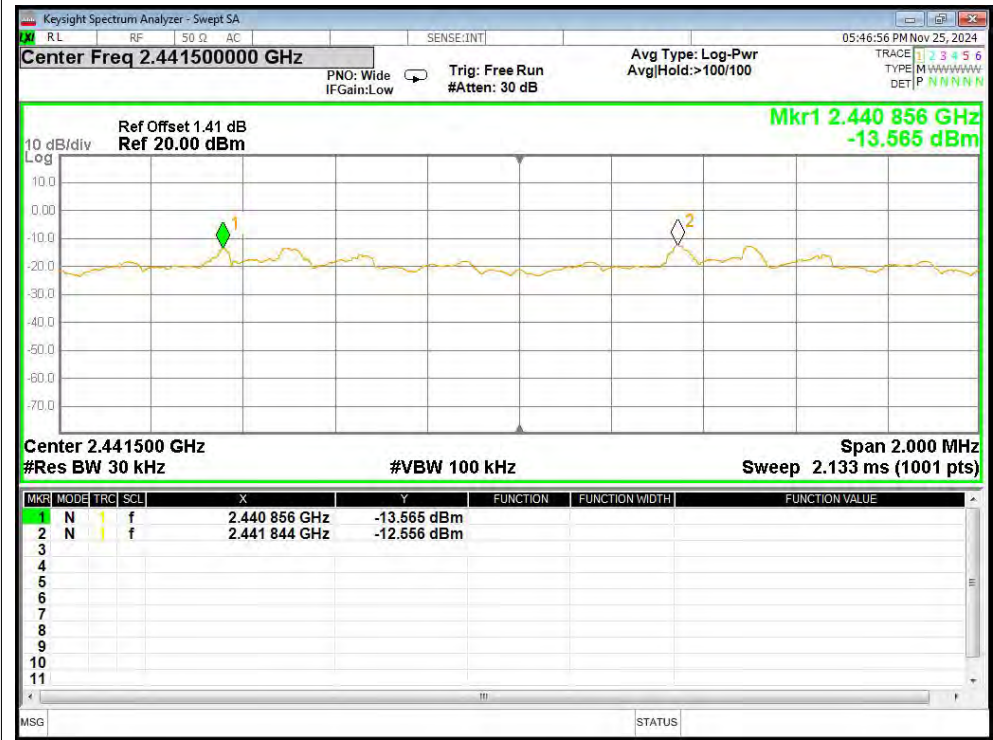
CFS NVNT 2-DH5 2480MHz Ant1



CFS NVNT 3-DH5 2402MHz Ant1



CFS NVNT 3-DH5 2441MHz Ant1



CFS NVNT 3-DH5 2480MHz Ant1



6.Number of Hopping Channel

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

Test Graphs

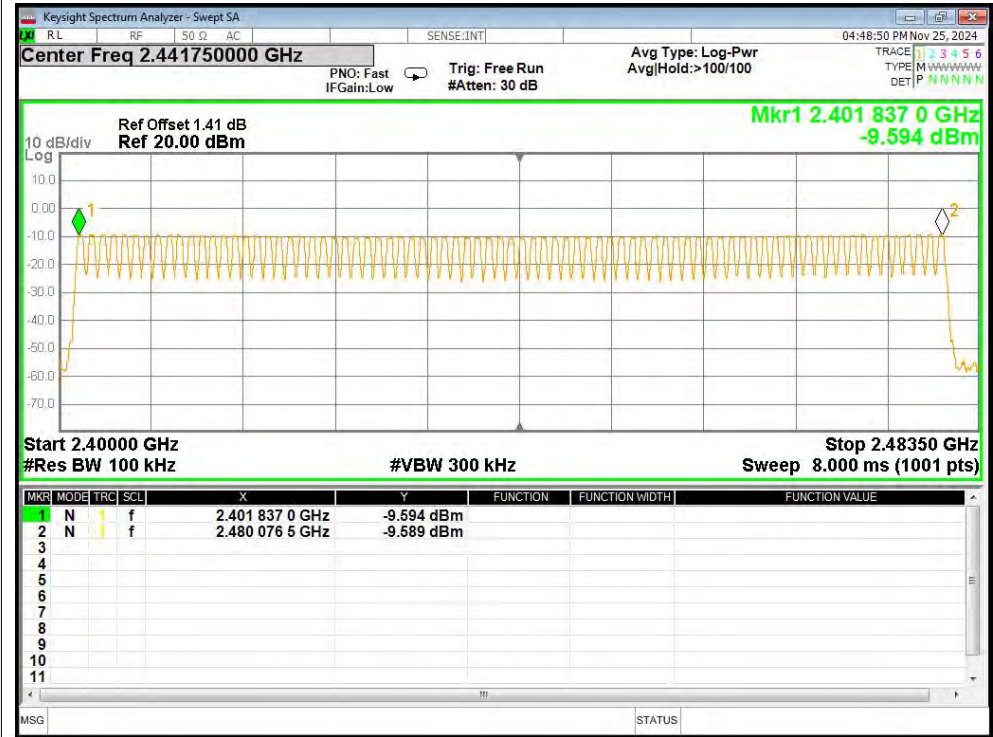
Hopping No. NVNT 1-DH5 2402MHz Ant1



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



Hopping No. NVNT 3-DH5 2402MHz Ant1



Hopping No. NVNT 3-DH5 2441MHz Ant1



Hopping No. NVNT 3-DH5 2480MHz Ant1

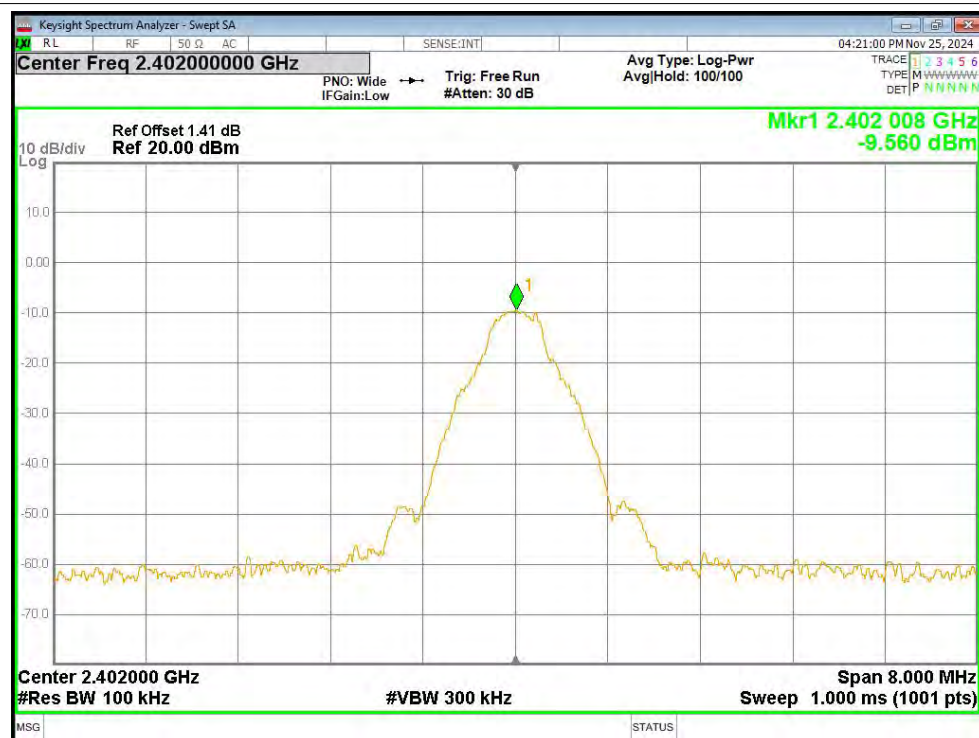


7.Band Edge

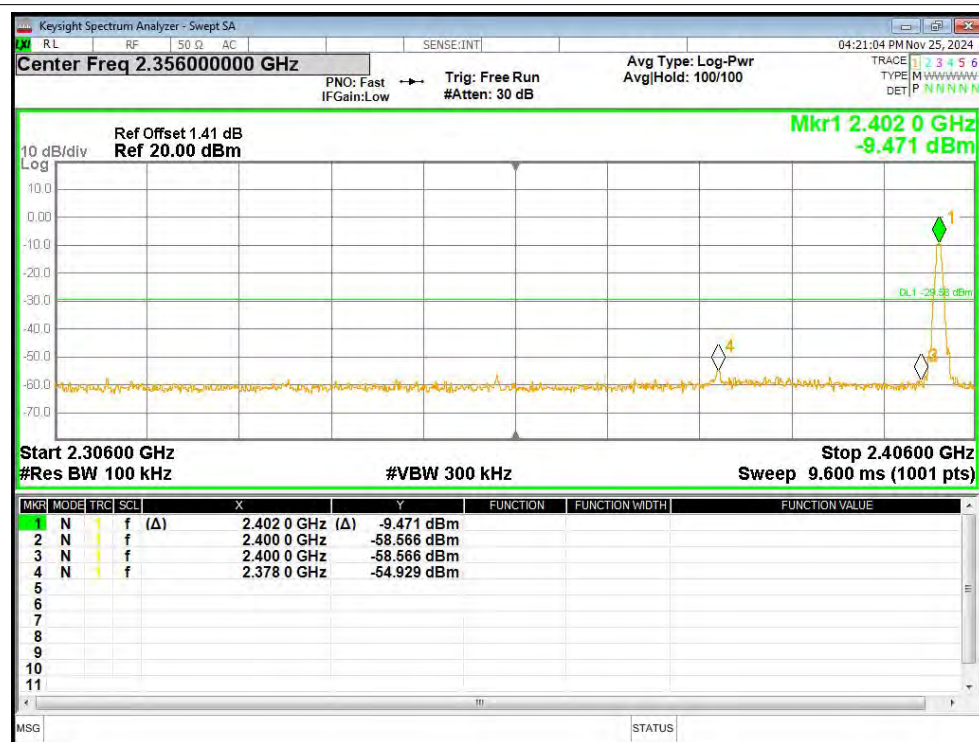
Mode	Frequency (MHz)	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
1-DH5	2402	No-Hopping	-45.36	-20	Pass
1-DH5	2480	No-Hopping	-46.92	-20	Pass
2-DH5	2402	No-Hopping	-43.53	-20	Pass
2-DH5	2480	No-Hopping	-44.97	-20	Pass
3-DH5	2402	No-Hopping	-45.84	-20	Pass
3-DH5	2480	No-Hopping	-43.02	-20	Pass

Test Graphs

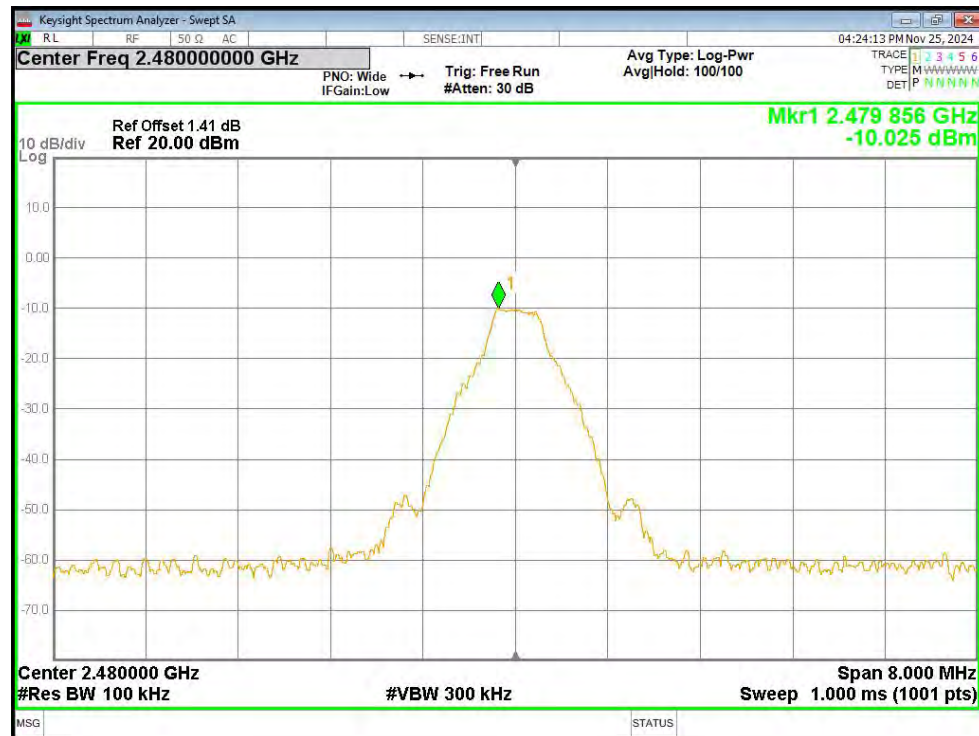
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



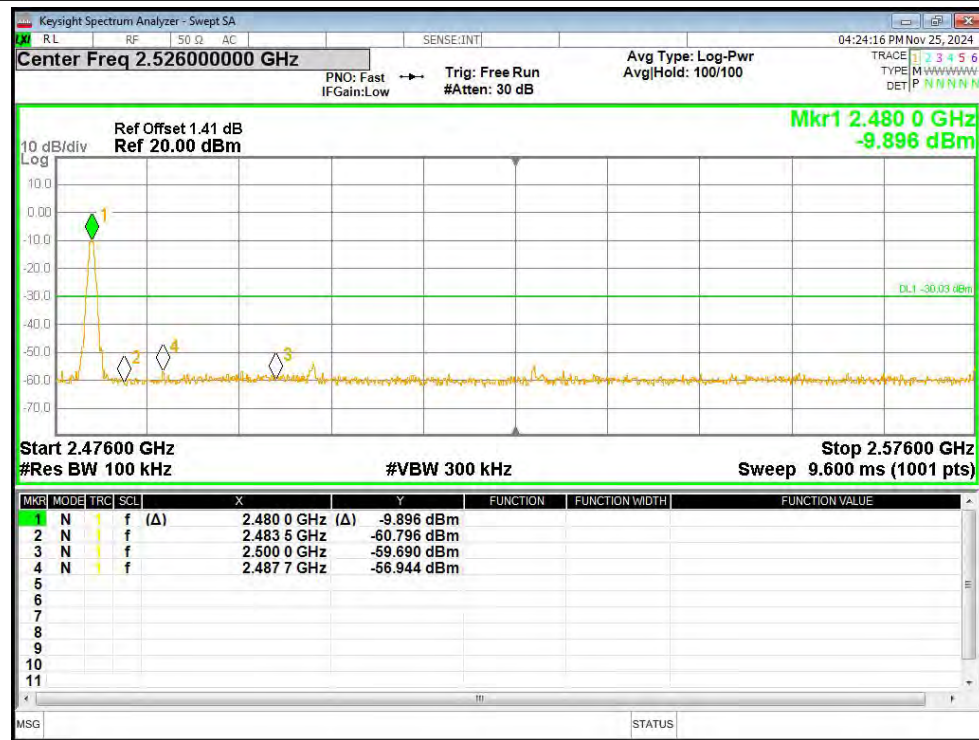
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission



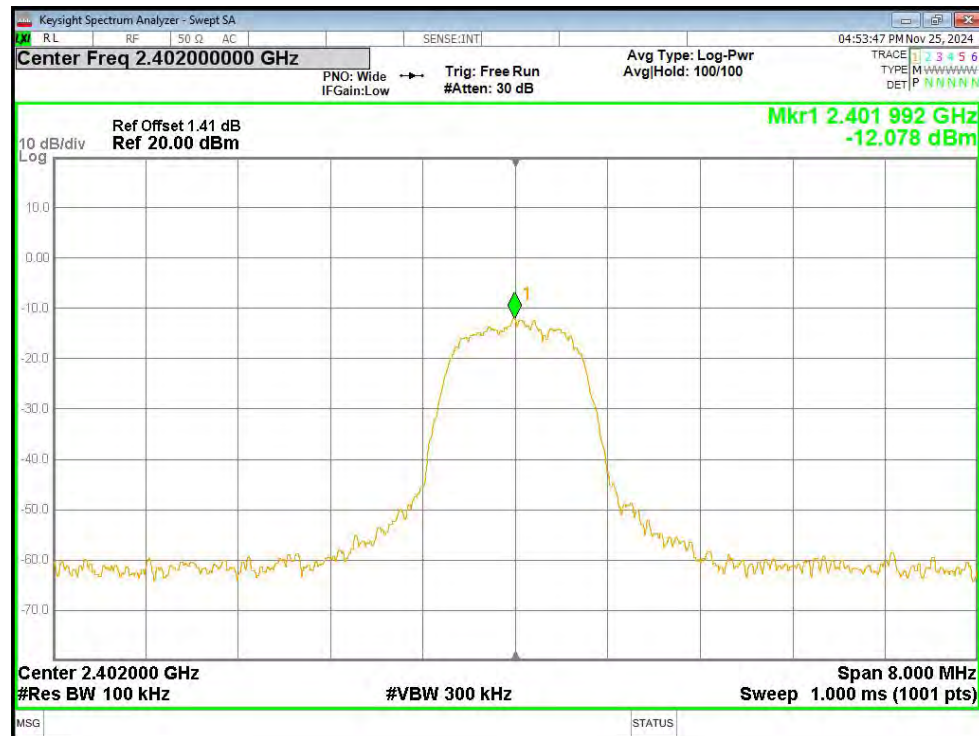
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



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



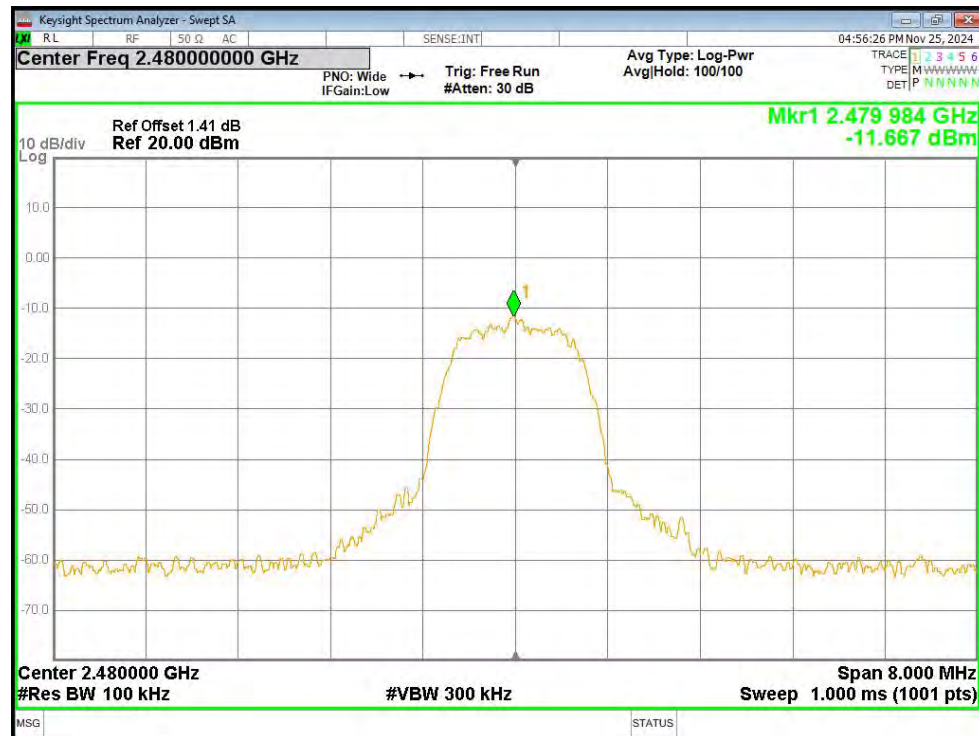
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



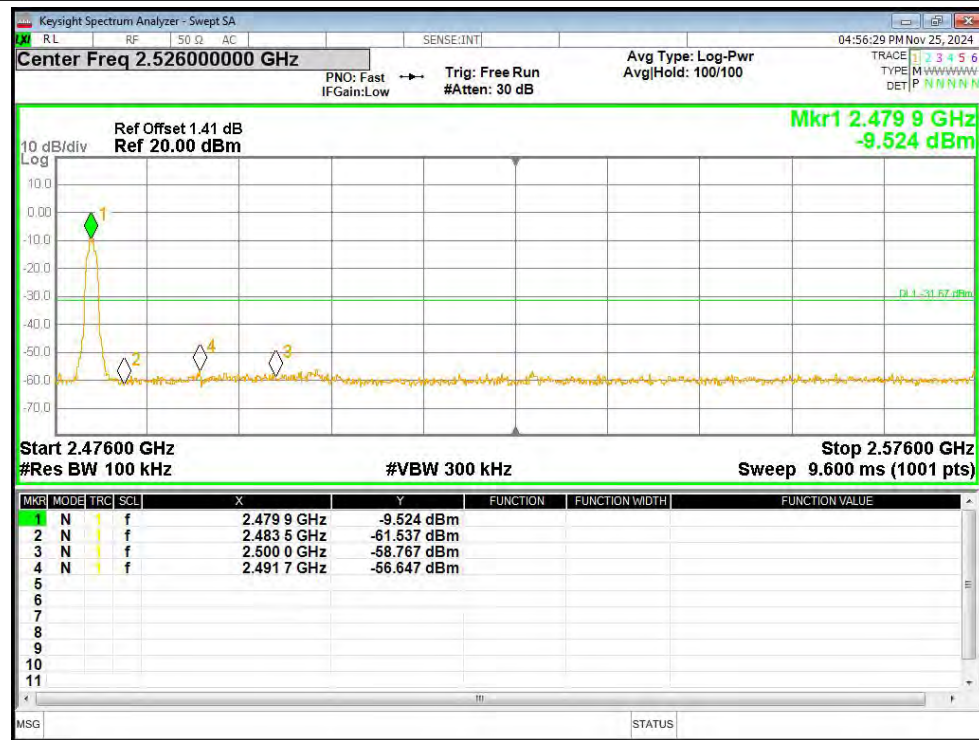
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission



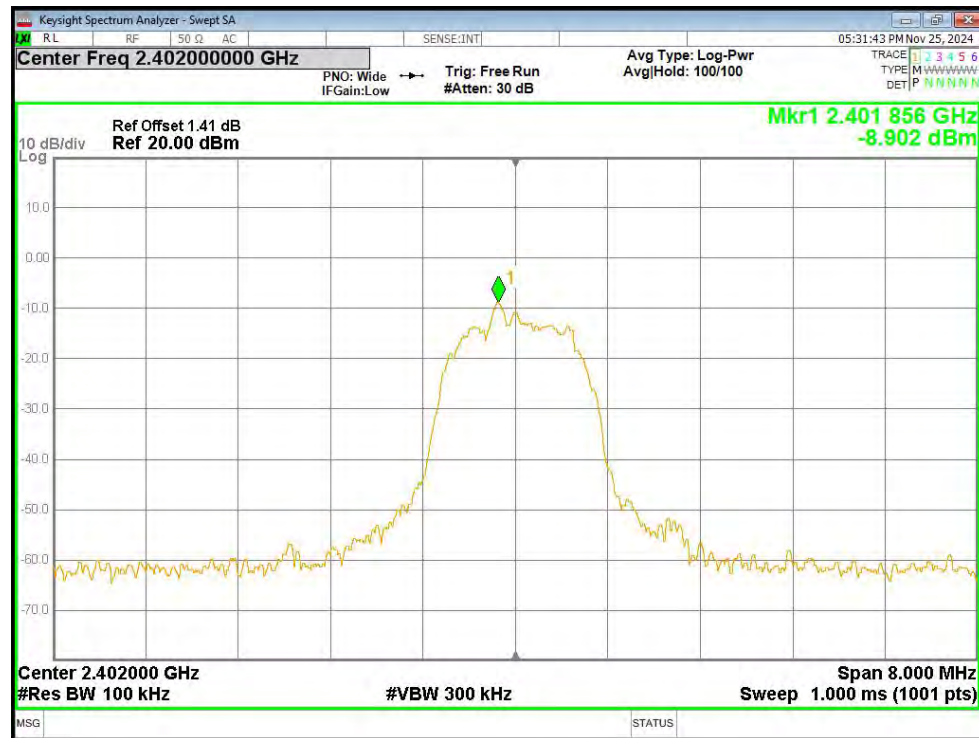
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



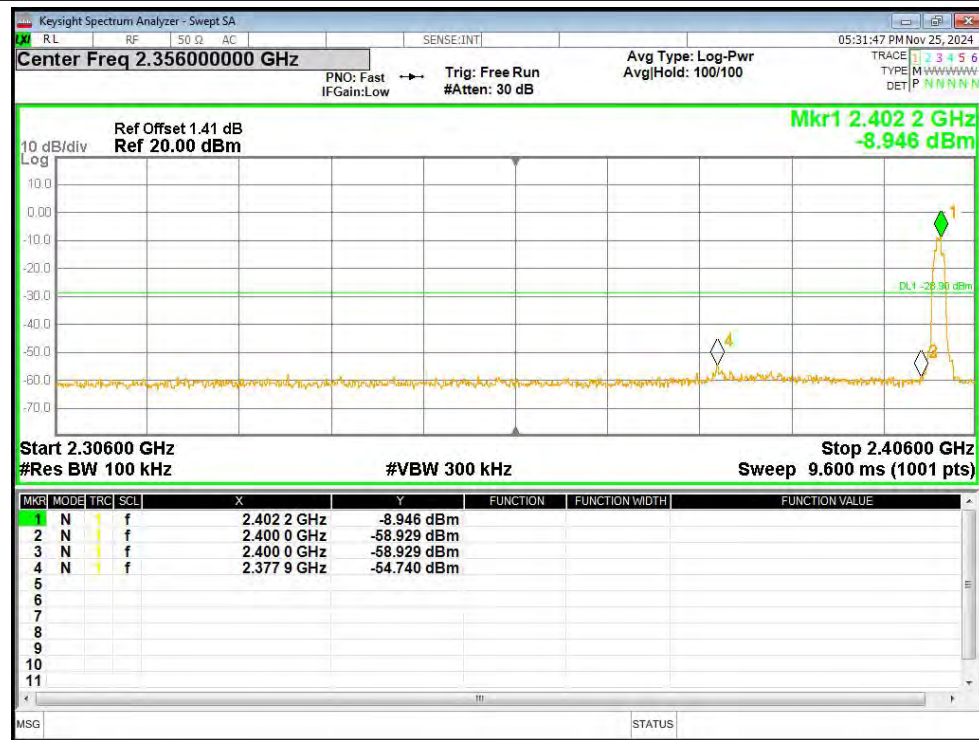
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission



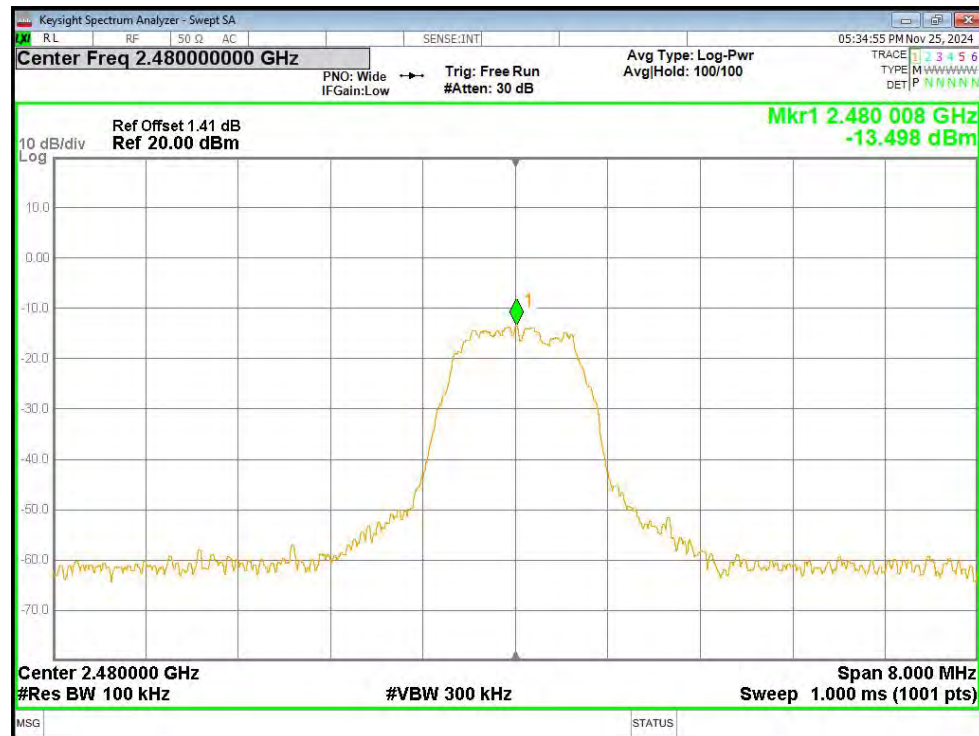
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref



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

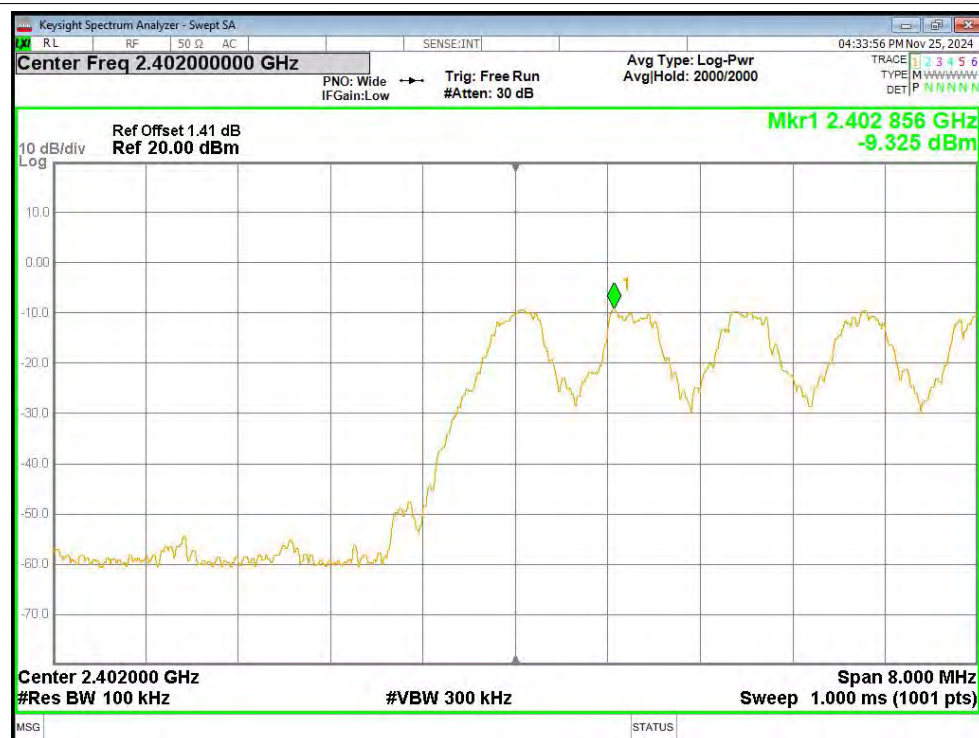


8.Band Edge(Hopping)

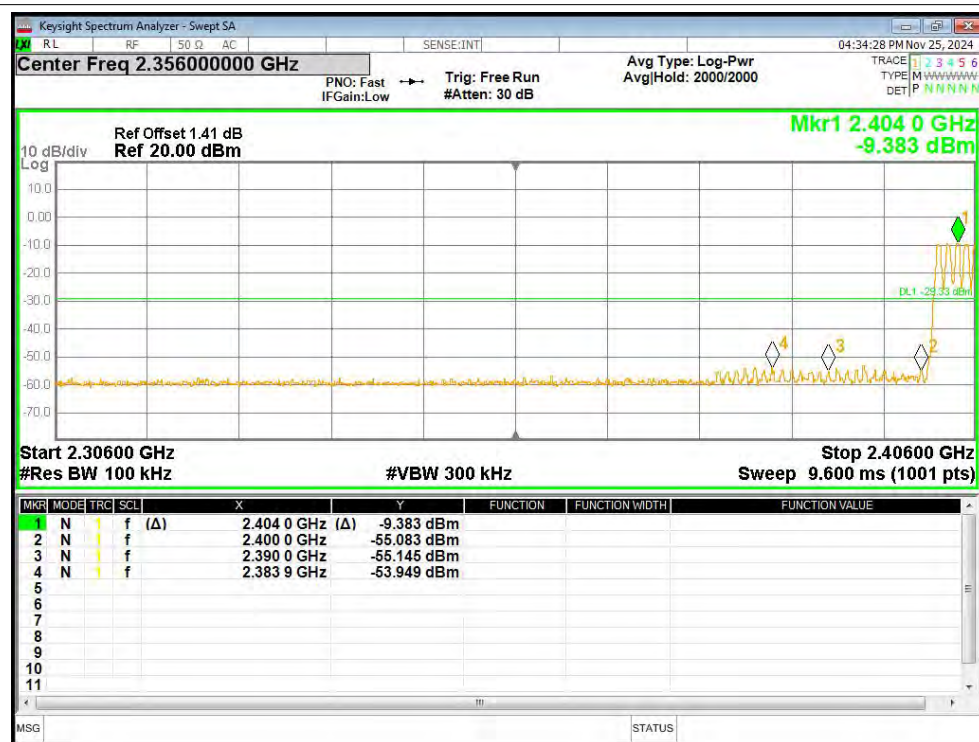
Mode	Frequency (MHz)	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
1-DH5	2402	Hopping	-44.61	-20	Pass
1-DH5	2480	Hopping	-44.9	-20	Pass
2-DH5	2402	Hopping	-44.26	-20	Pass
2-DH5	2480	Hopping	-42.96	-20	Pass
3-DH5	2402	Hopping	-45.15	-20	Pass
3-DH5	2480	Hopping	-44.28	-20	Pass

Test Graphs

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



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



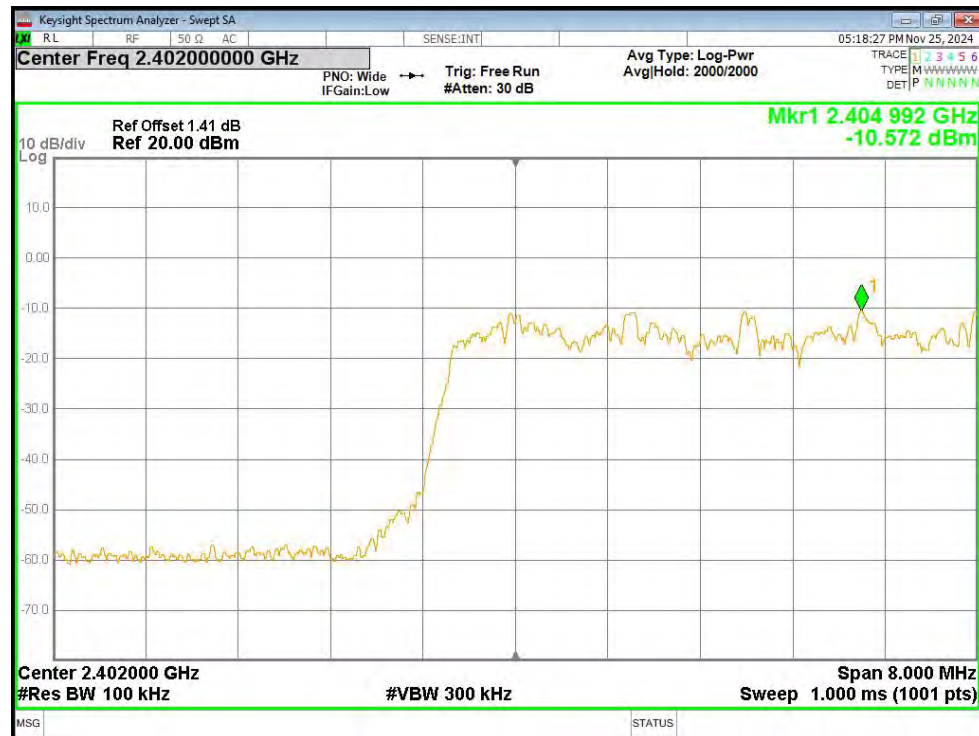
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref



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



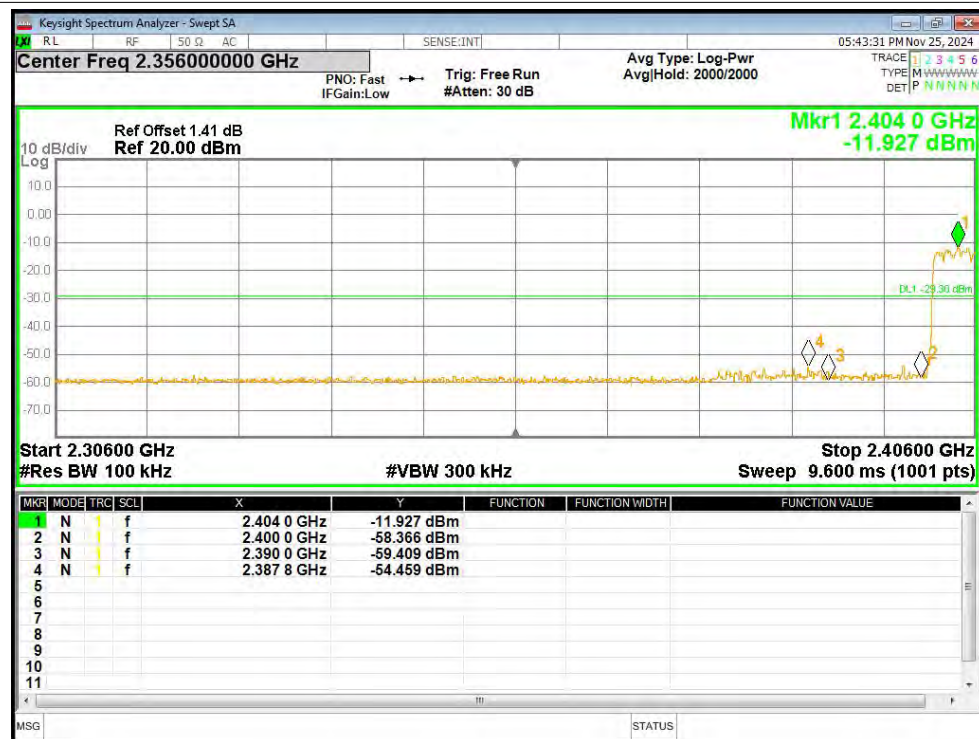
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Emission

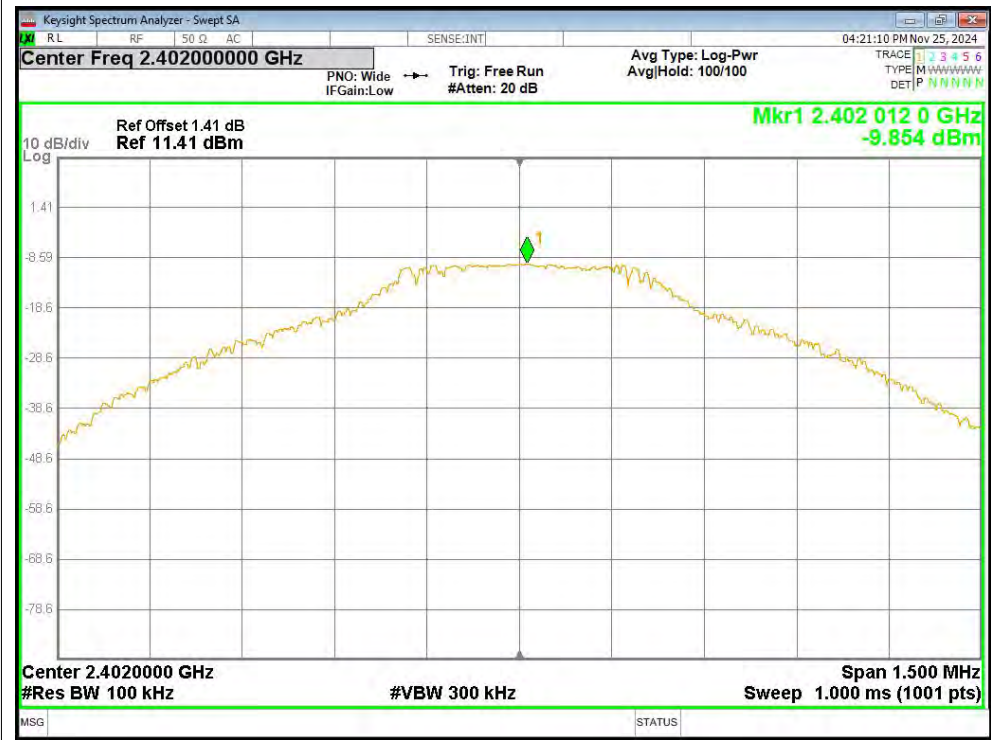


9. Conducted RF Spurious Emission

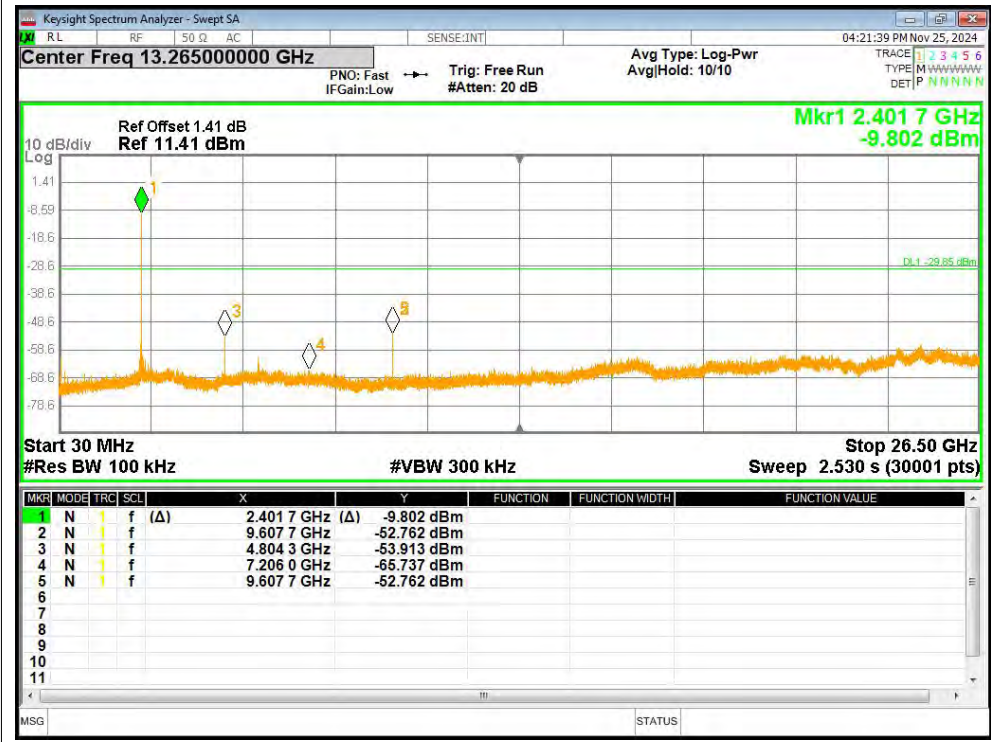
Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
1-DH5	2402	-42.91	-20	Pass
1-DH5	2441	-39.91	-20	Pass
1-DH5	2480	-40.12	-20	Pass
2-DH5	2402	-42.27	-20	Pass
2-DH5	2441	-39.59	-20	Pass
2-DH5	2480	-39.86	-20	Pass
3-DH5	2402	-42.56	-20	Pass
3-DH5	2441	-39.37	-20	Pass
3-DH5	2480	-39.5	-20	Pass

Test Graphs

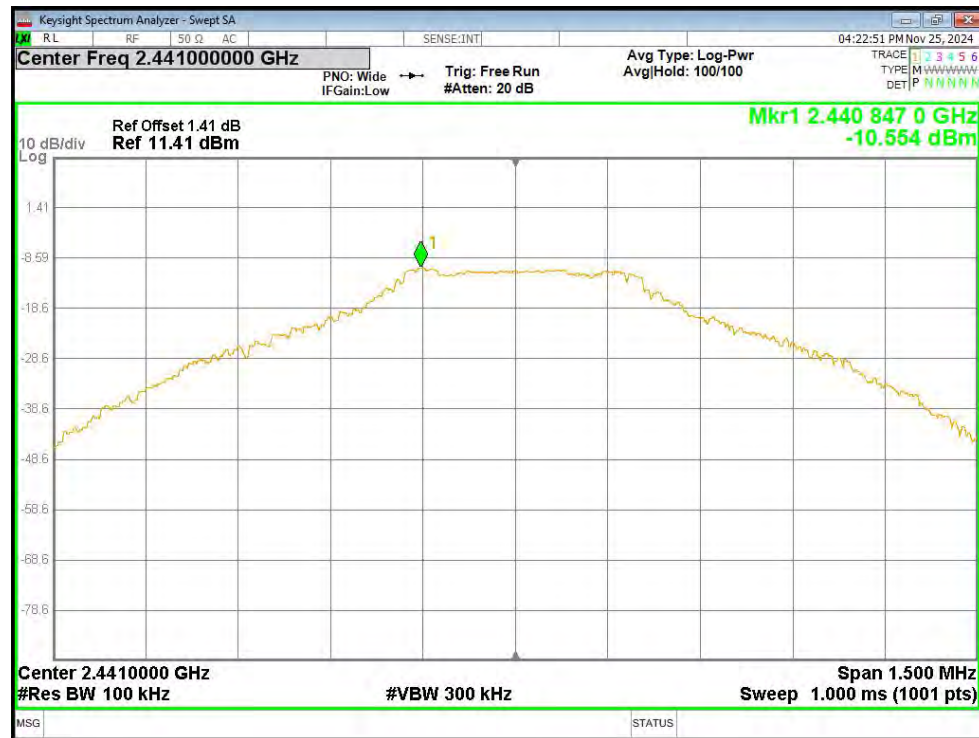
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



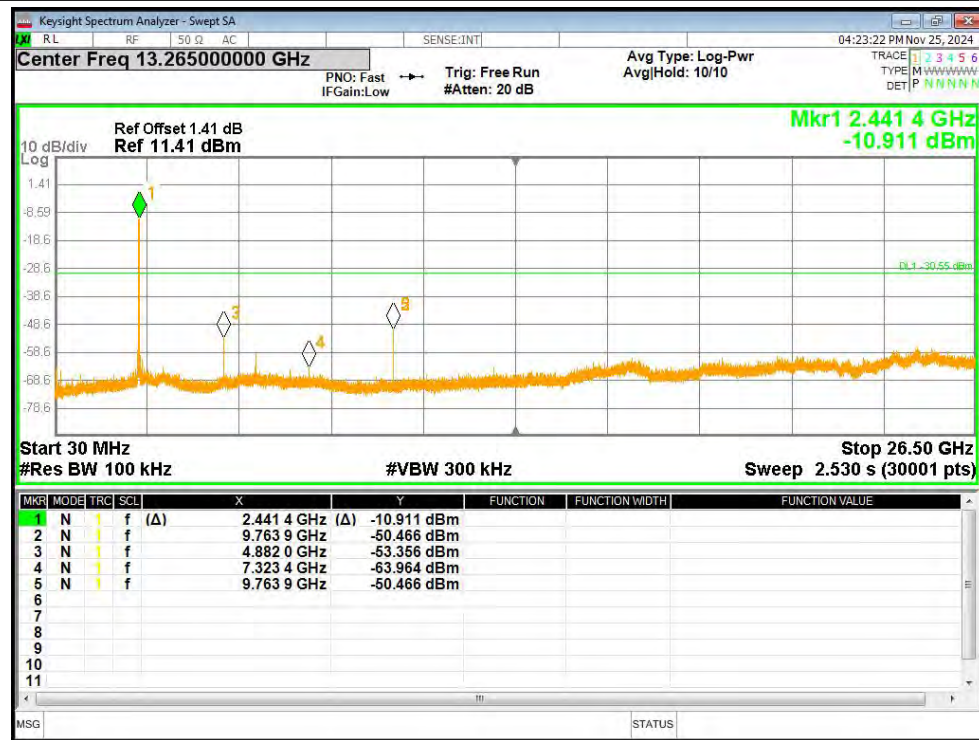
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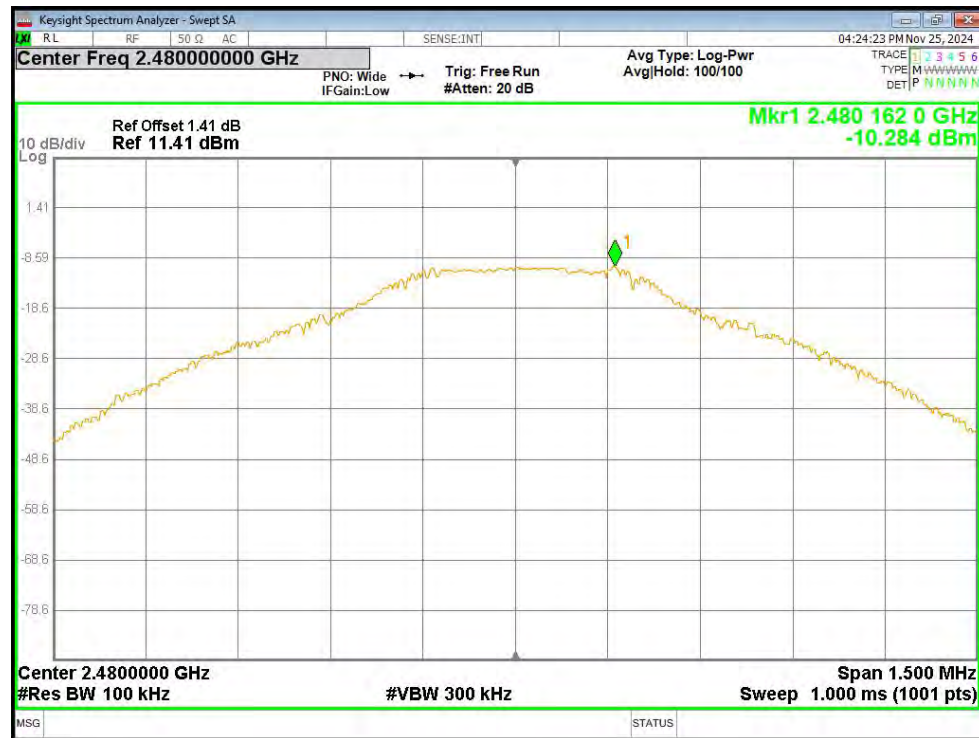
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



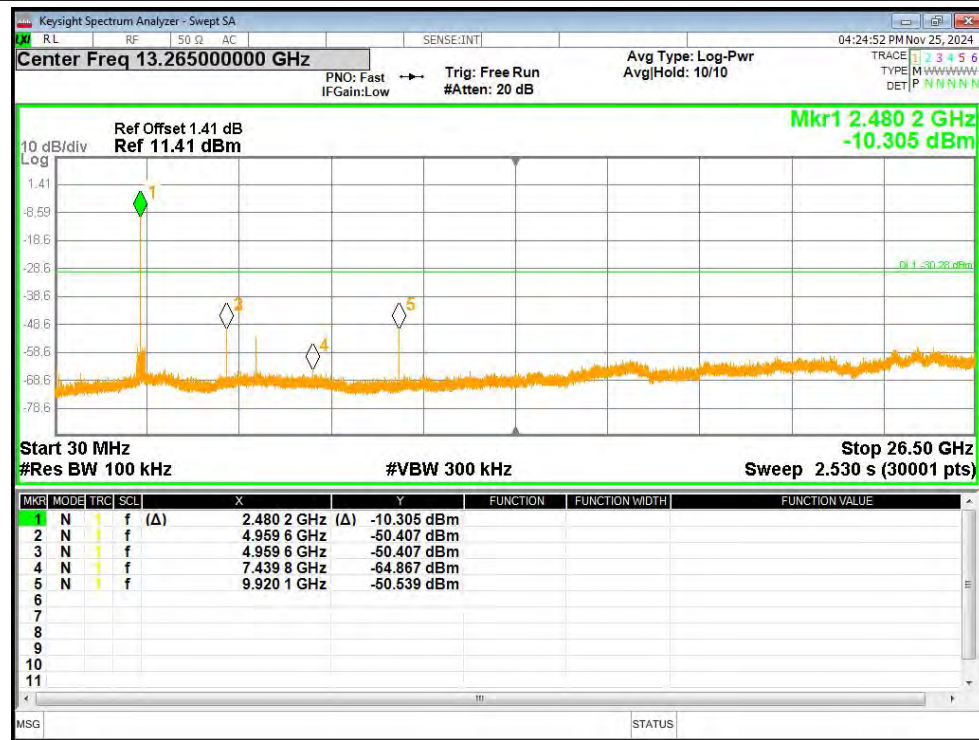
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



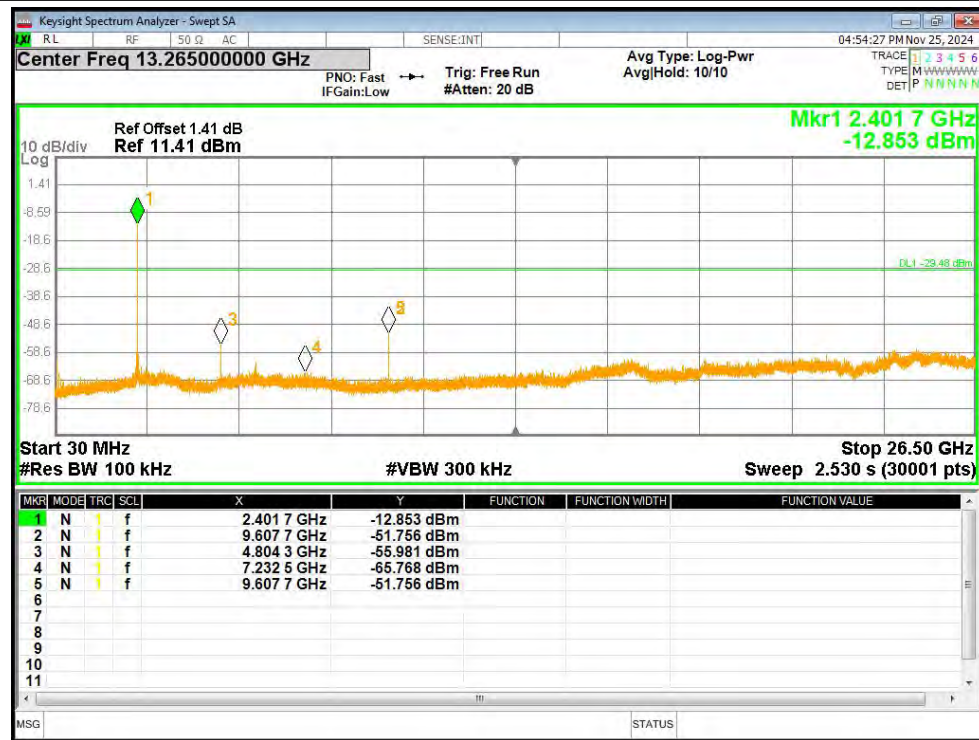
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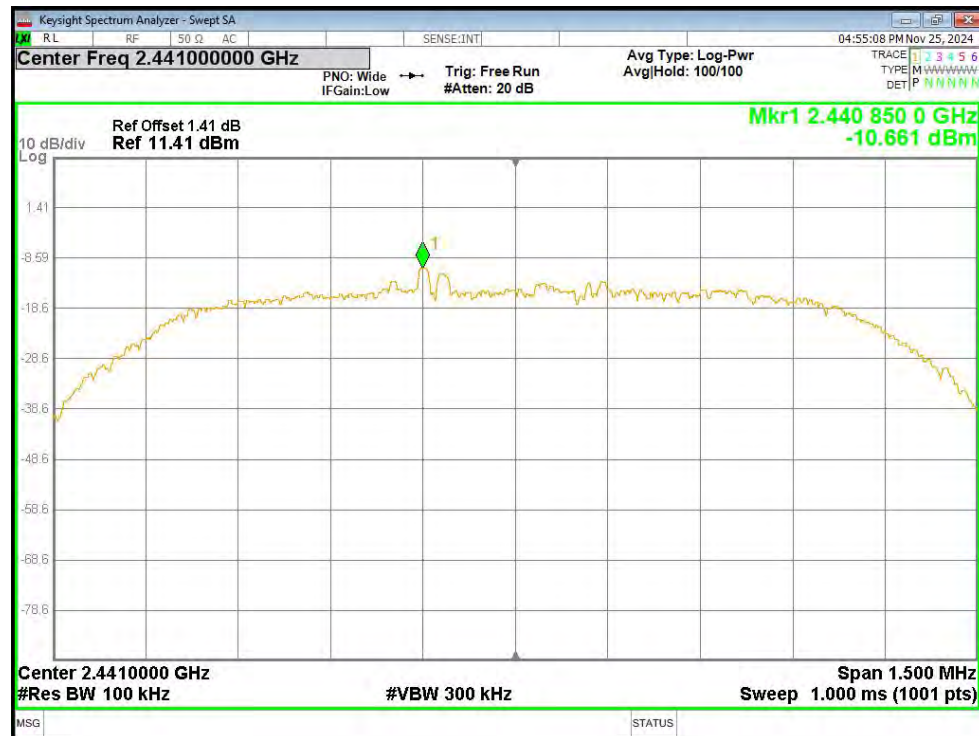
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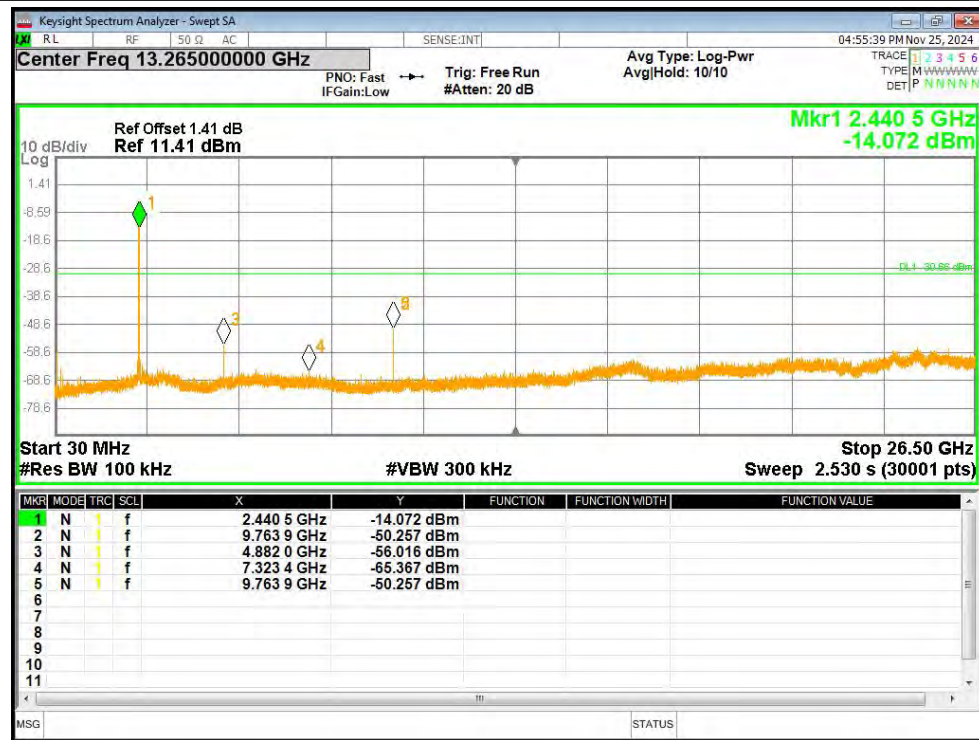
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



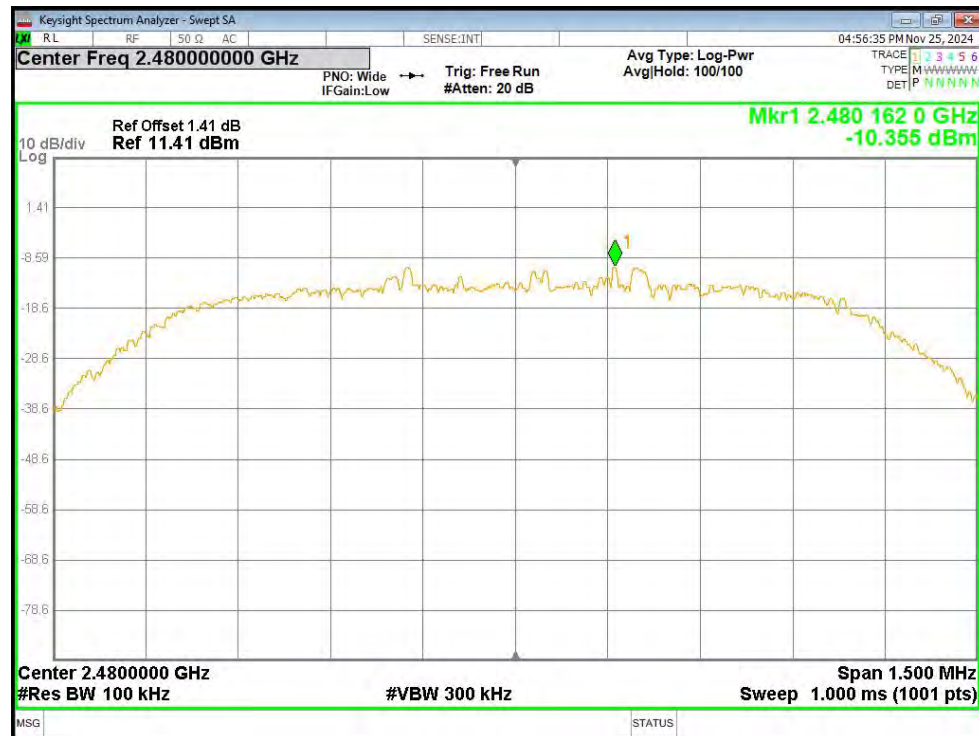
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



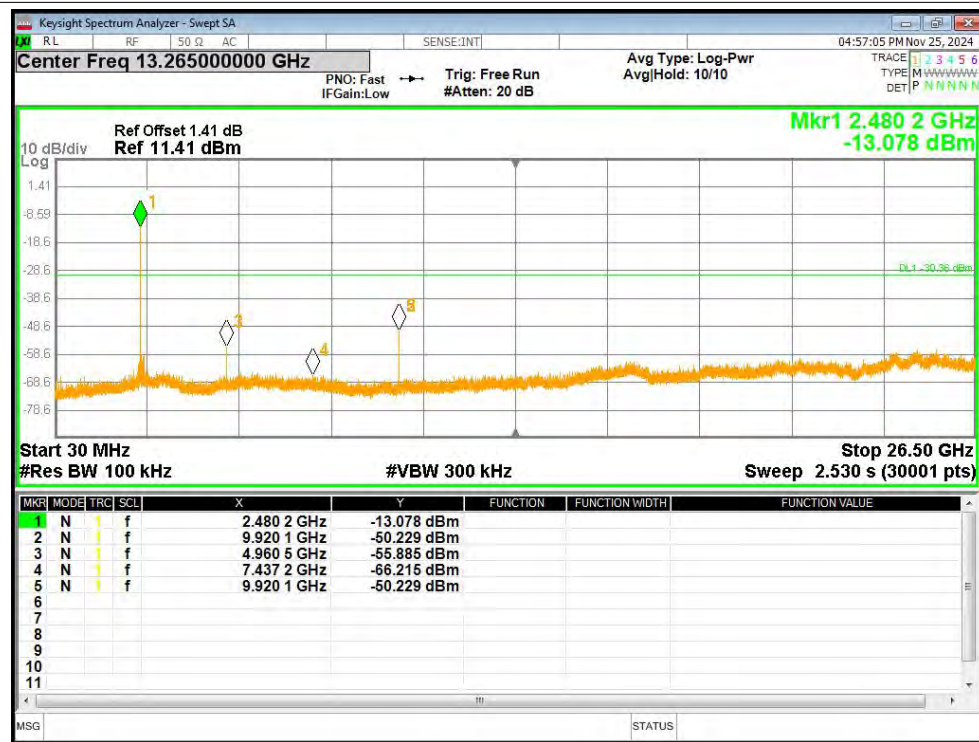
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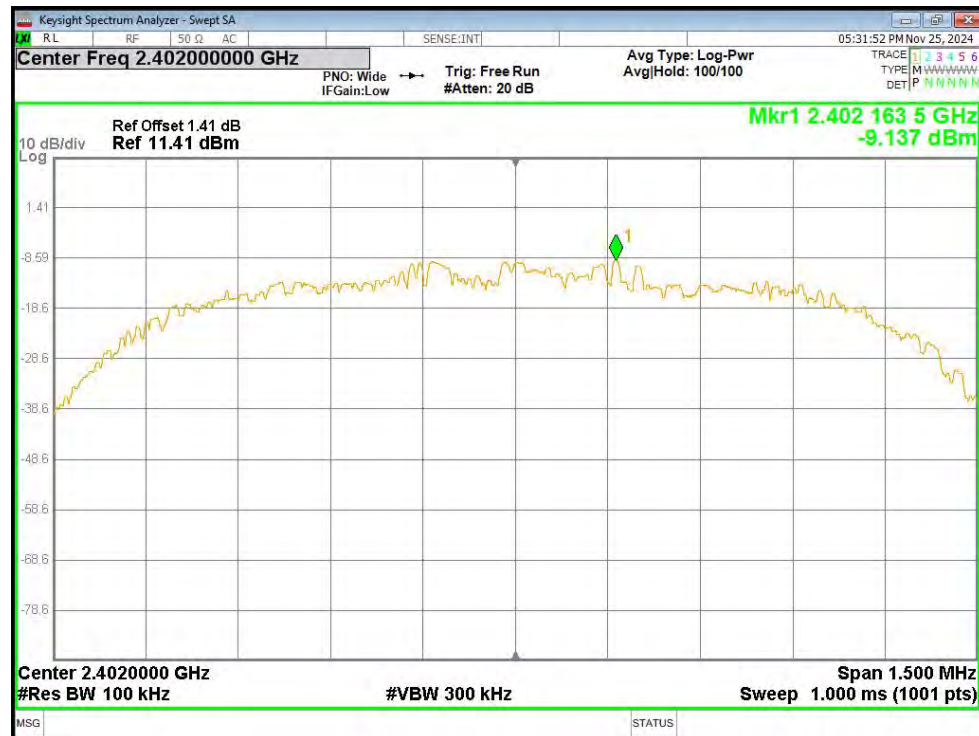
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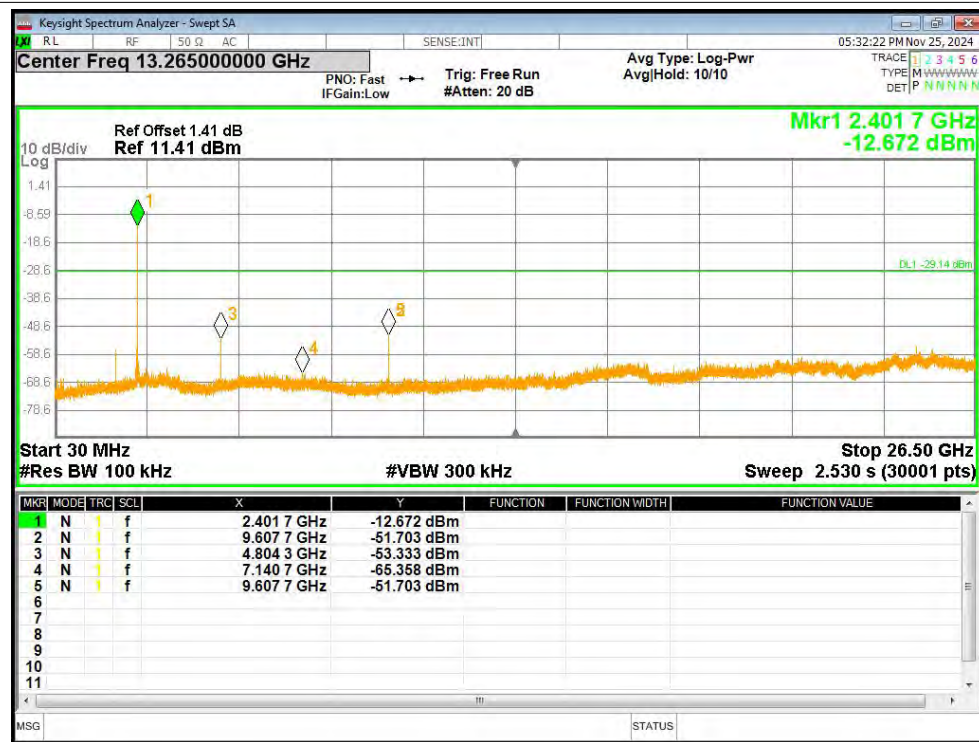
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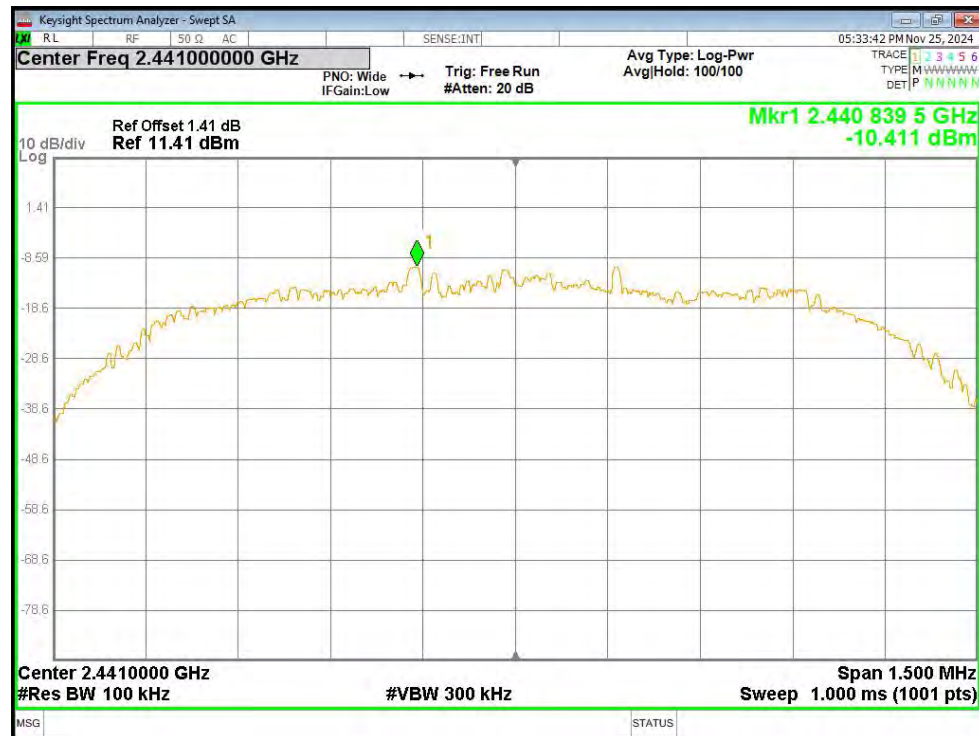
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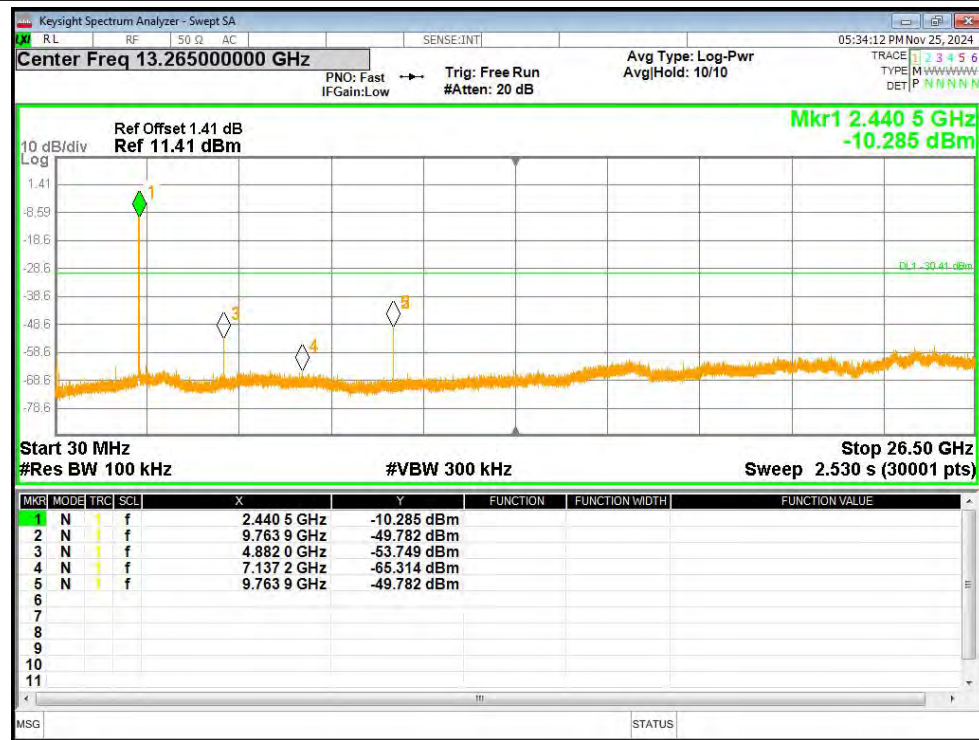
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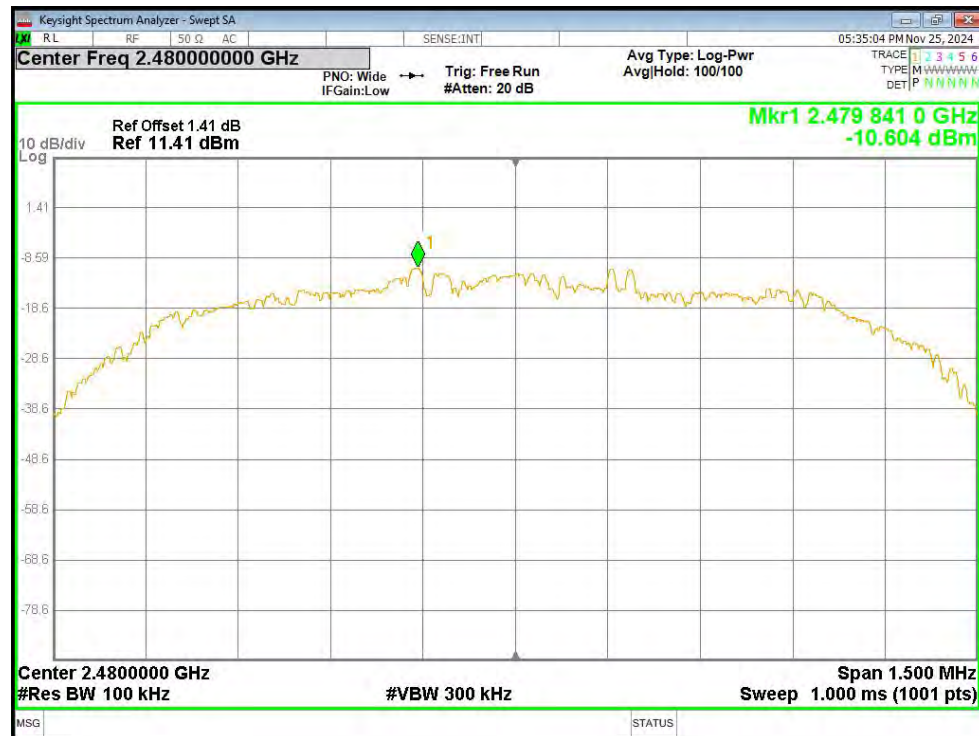
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission

