

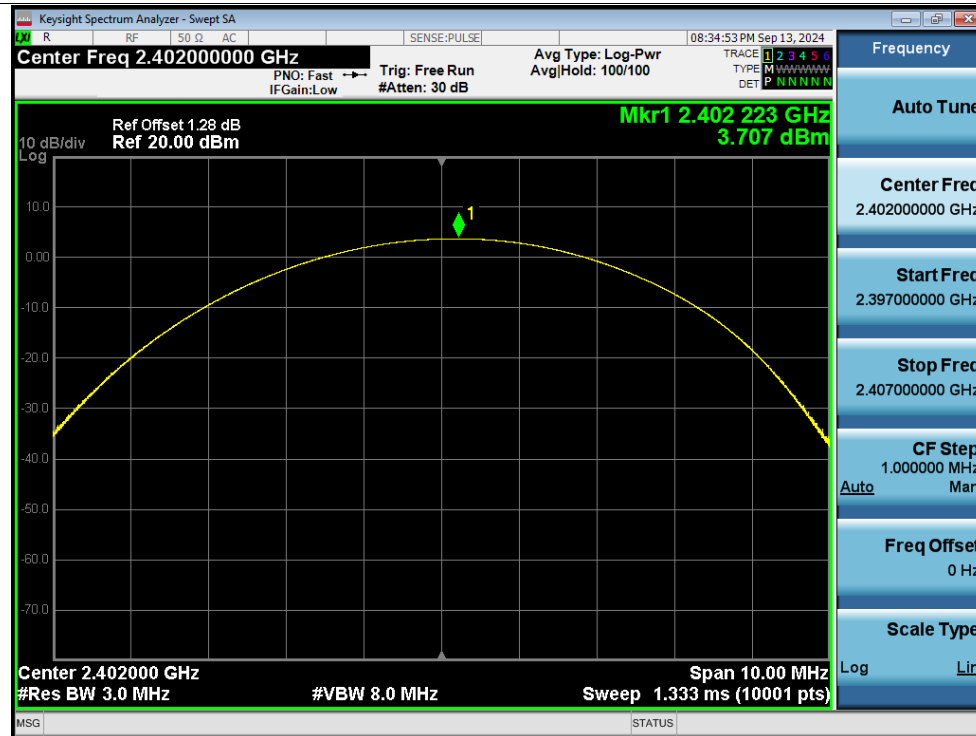
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	3.71	21	Pass
NVNT	1-DH5	2441	Ant1	4.43	21	Pass
NVNT	1-DH5	2480	Ant1	5.1	21	Pass
NVNT	2-DH5	2402	Ant1	2.7	21	Pass
NVNT	2-DH5	2441	Ant1	3.43	21	Pass
NVNT	2-DH5	2480	Ant1	4.1	21	Pass
NVNT	3-DH5	2402	Ant1	2.73	21	Pass
NVNT	3-DH5	2441	Ant1	3.43	21	Pass
NVNT	3-DH5	2480	Ant1	4.1	21	Pass

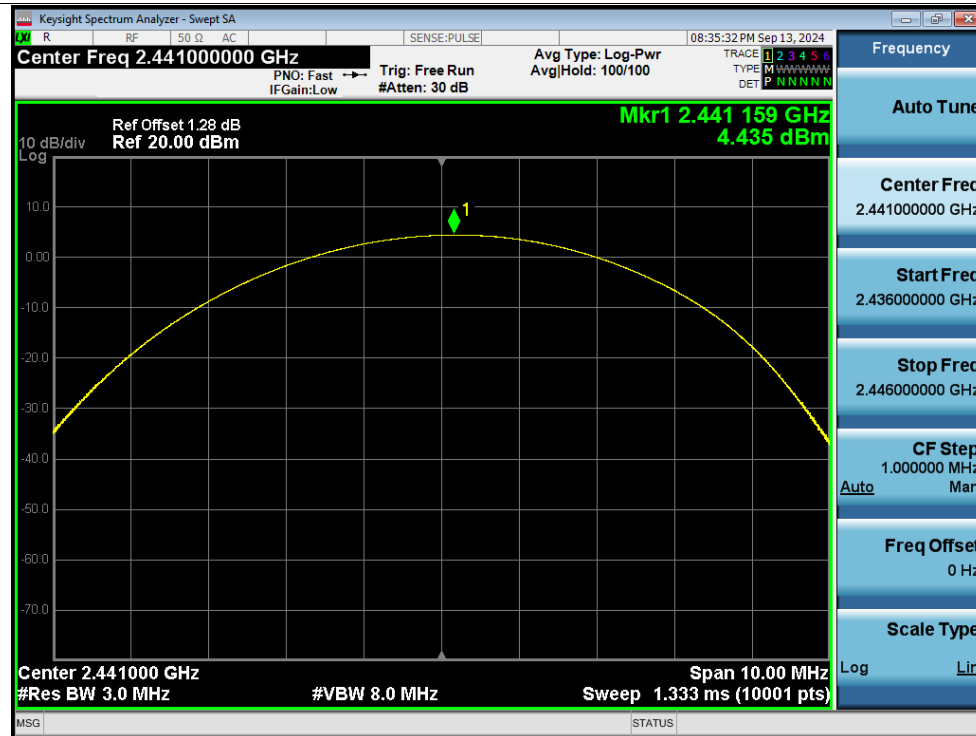
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Antenna Gain (dBi)	E.i.r.p.(dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	3.71	2.19	5.90	36.02	Pass
NVNT	1-DH5	2441	Ant1	4.43	2.19	6.62	36.02	Pass
NVNT	1-DH5	2480	Ant1	5.1	2.19	7.29	36.02	Pass
NVNT	2-DH5	2402	Ant1	2.7	2.19	4.89	36.02	Pass
NVNT	2-DH5	2441	Ant1	3.43	2.19	5.62	36.02	Pass
NVNT	2-DH5	2480	Ant1	4.1	2.19	6.29	36.02	Pass
NVNT	3-DH5	2402	Ant1	2.73	2.19	4.92	36.02	Pass
NVNT	3-DH5	2441	Ant1	3.43	2.19	5.62	36.02	Pass
NVNT	3-DH5	2480	Ant1	4.1	2.19	6.29	36.02	Pass

Test Graphs

Power NVNT 1-DH5 2402MHz Ant1



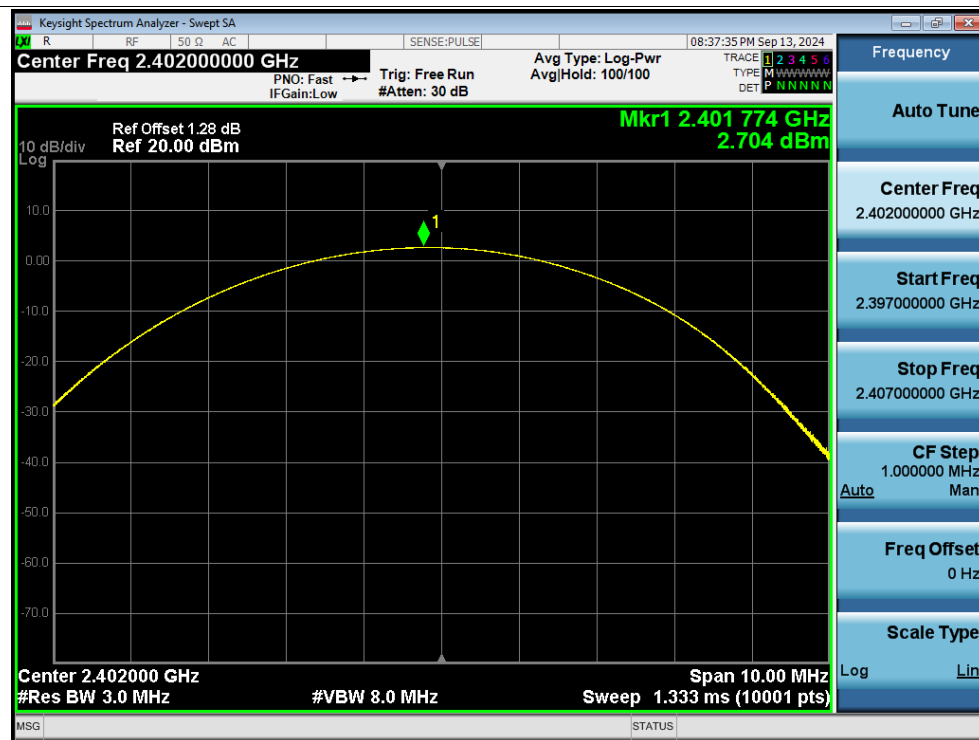
Power NVNT 1-DH5 2441MHz Ant1



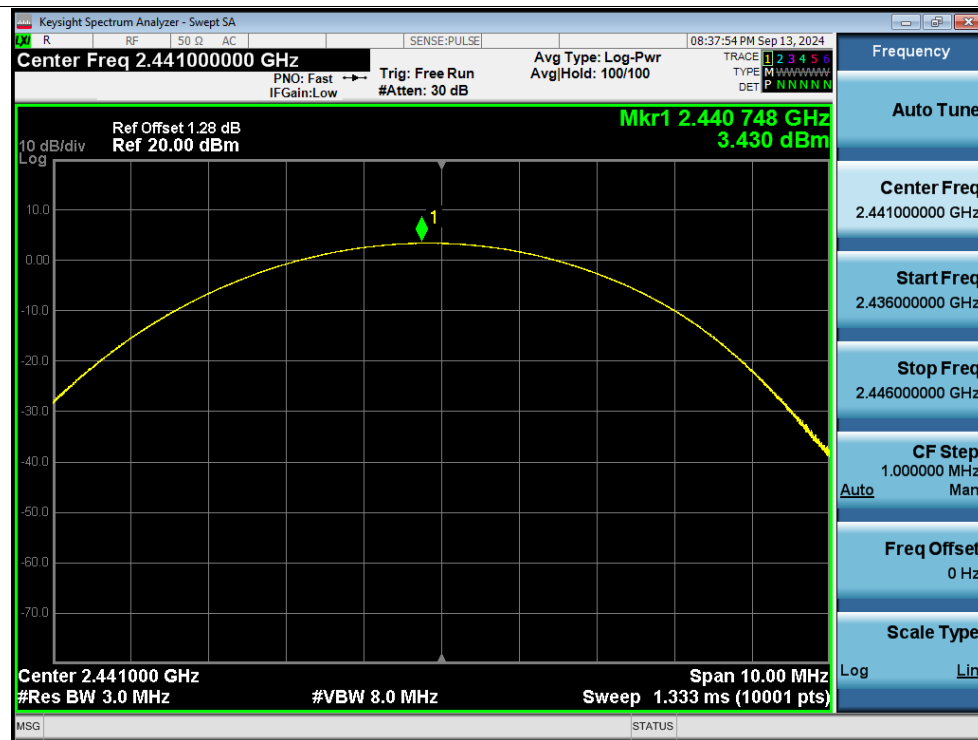
Power NVNT 1-DH5 2480MHz Ant1



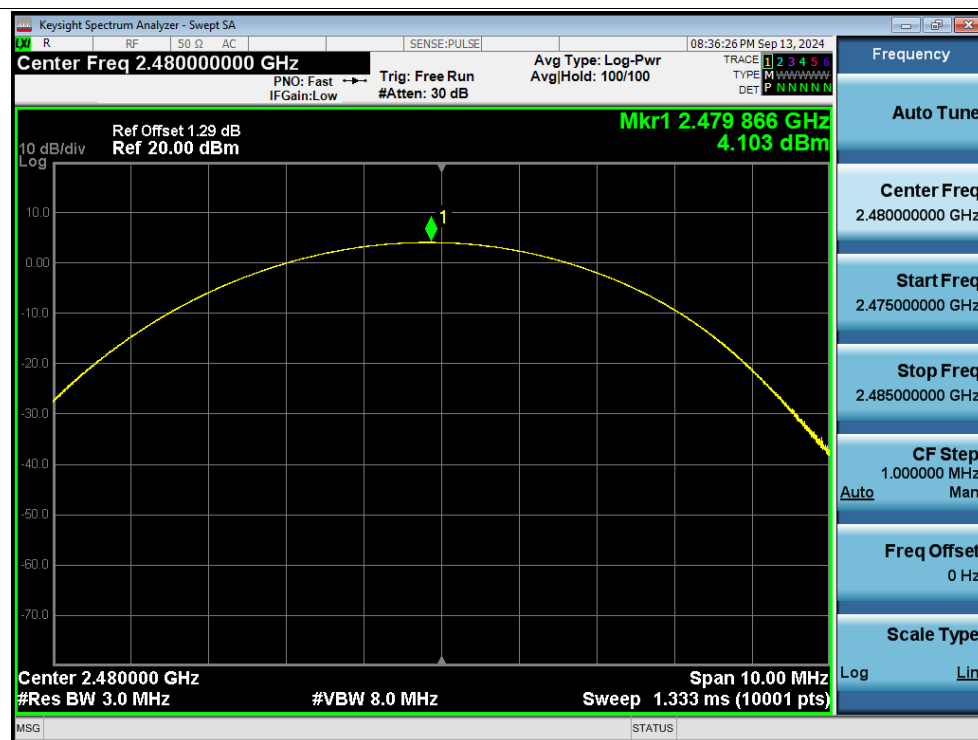
Power NVNT 2-DH5 2402MHz Ant1



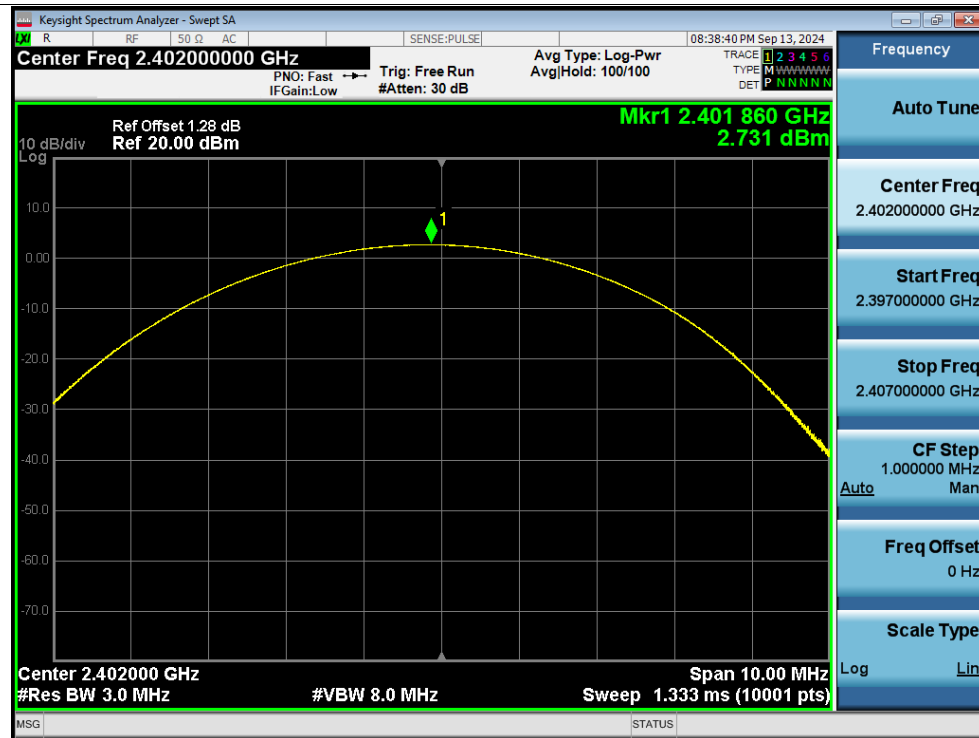
Power NVNT 2-DH5 2441MHz Ant1



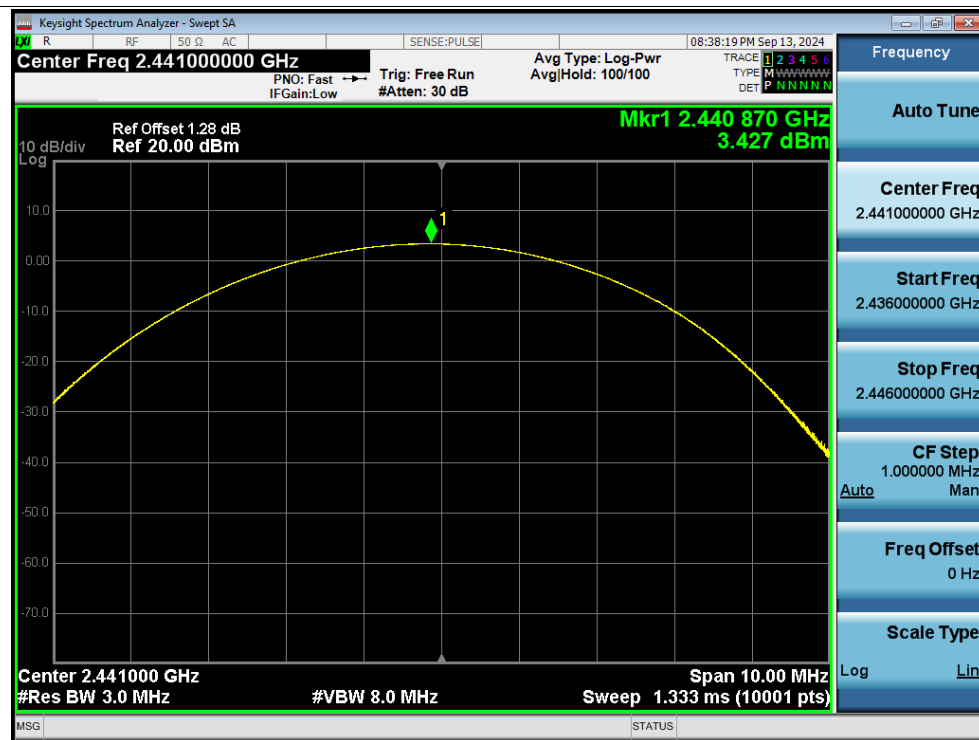
Power NVNT 2-DH5 2480MHz Ant1

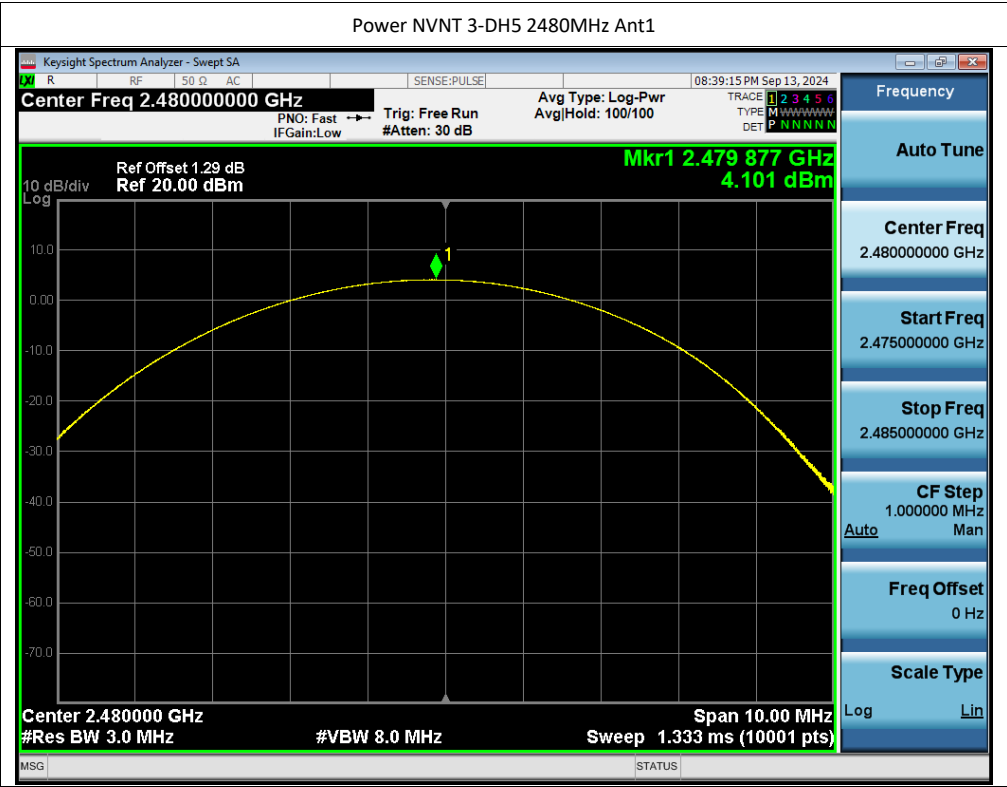


Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-DH5 2441MHz Ant1





-20dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.96	N/A	N/A
NVNT	1-DH5	2441	Ant1	0.96	N/A	N/A
NVNT	1-DH5	2480	Ant1	0.96	N/A	N/A
NVNT	2-DH5	2402	Ant1	1.27	N/A	N/A
NVNT	2-DH5	2441	Ant1	1.26	N/A	N/A
NVNT	2-DH5	2480	Ant1	1.22	N/A	N/A
NVNT	3-DH5	2402	Ant1	1.29	N/A	N/A
NVNT	3-DH5	2441	Ant1	1.26	N/A	N/A
NVNT	3-DH5	2480	Ant1	1.26	N/A	N/A

Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



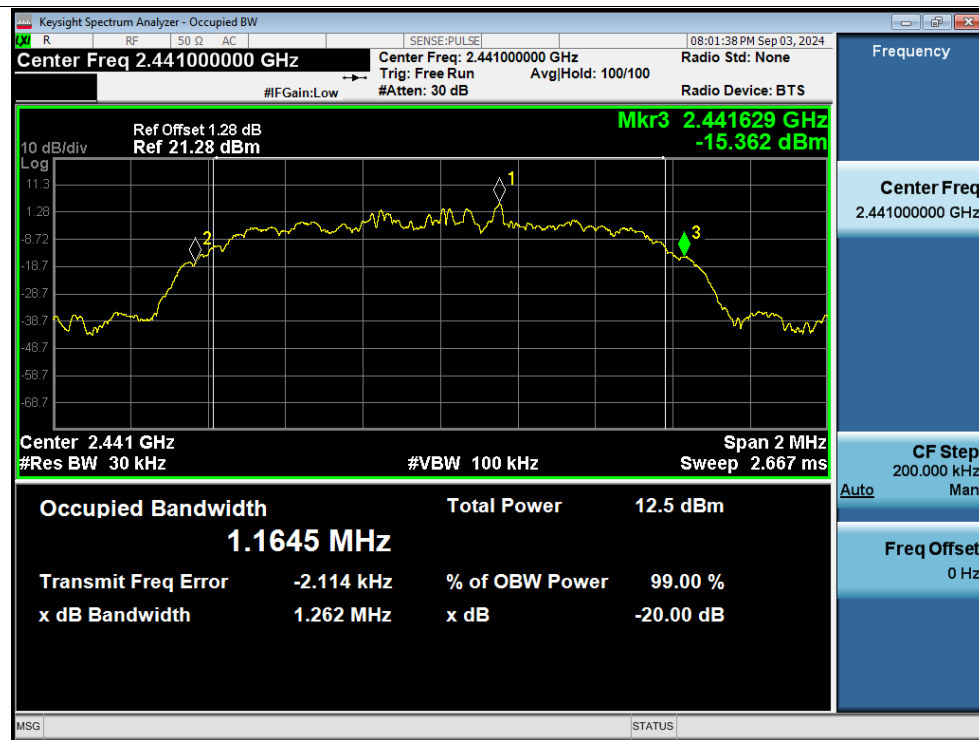
-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



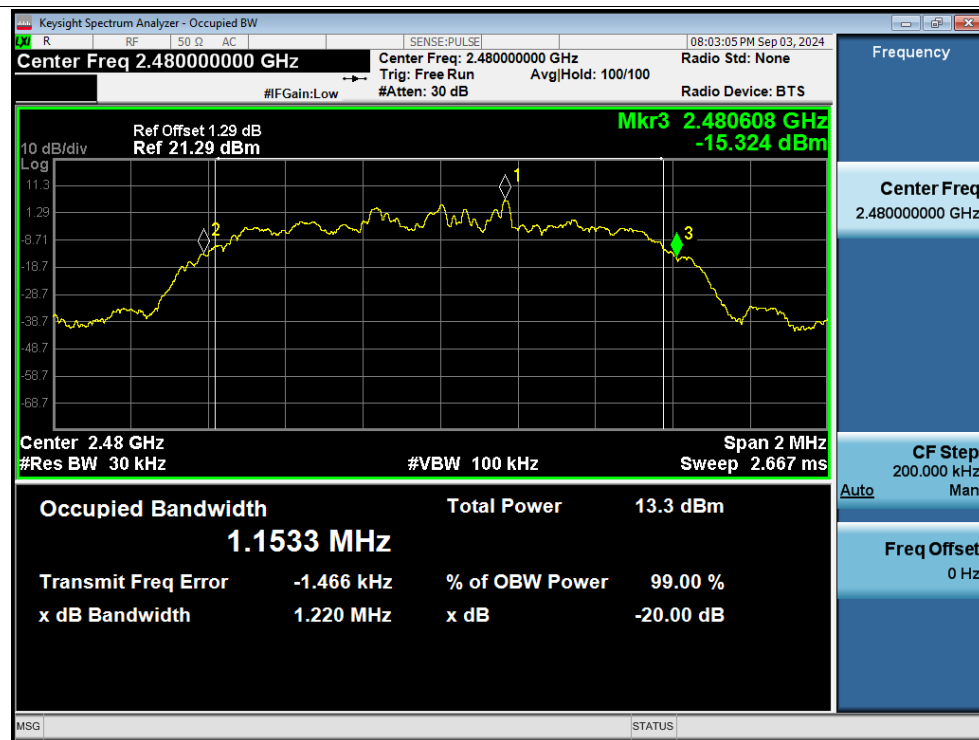
-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



-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



Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH5	2402	Ant1	0.874
NVNT	1-DH5	2441	Ant1	0.878
NVNT	1-DH5	2480	Ant1	0.868
NVNT	2-DH5	2402	Ant1	1.158
NVNT	2-DH5	2441	Ant1	1.172
NVNT	2-DH5	2480	Ant1	1.159
NVNT	3-DH5	2402	Ant1	1.155
NVNT	3-DH5	2441	Ant1	1.178
NVNT	3-DH5	2480	Ant1	1.159

Test Graphs

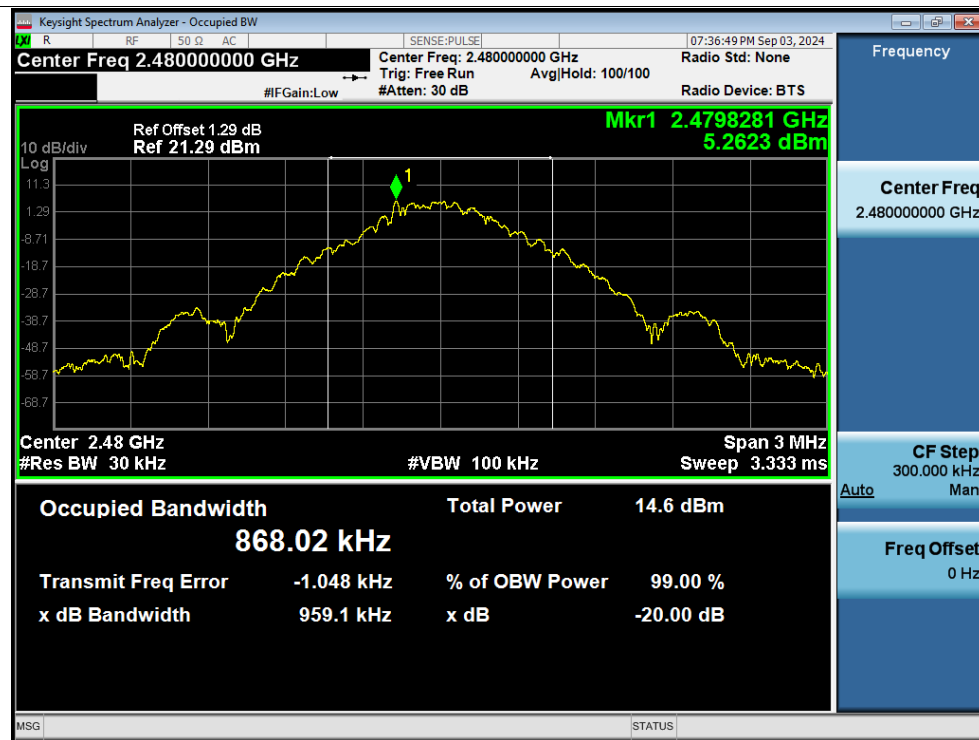
OBW NVNT 1-DH5 2402MHz Ant1



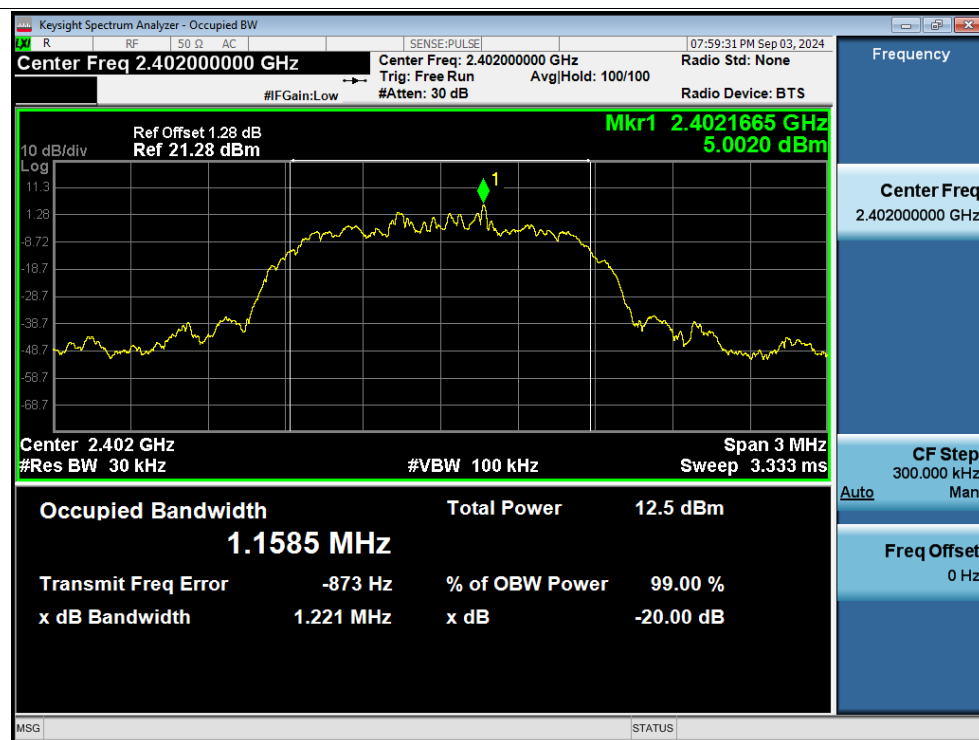
OBW NVNT 1-DH5 2441MHz Ant1



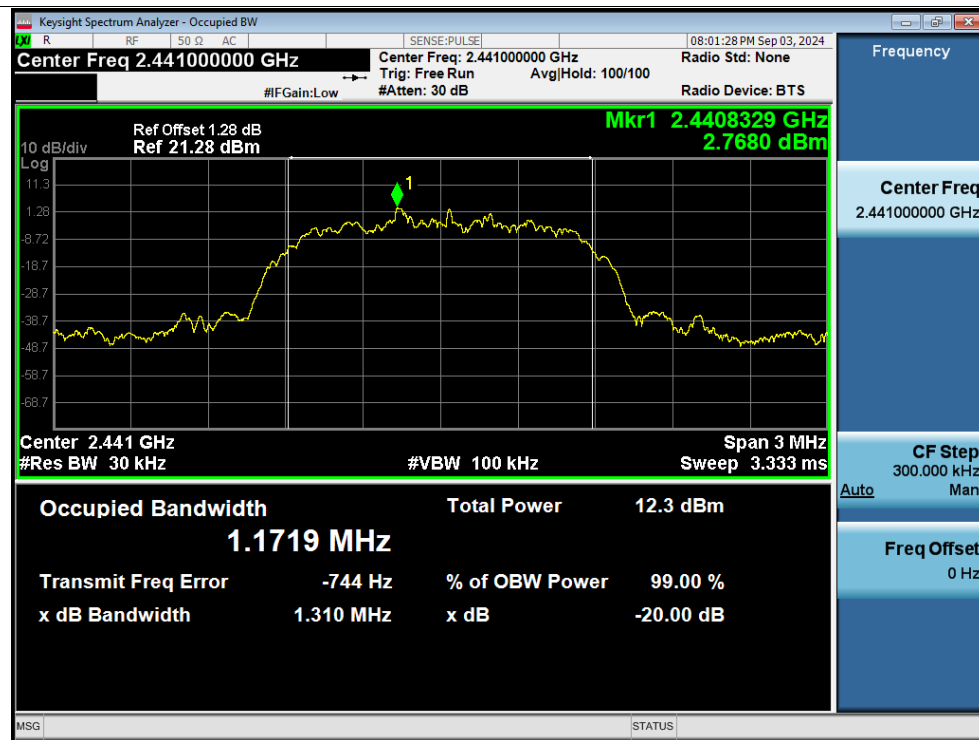
OBW NVNT 1-DH5 2480MHz Ant1



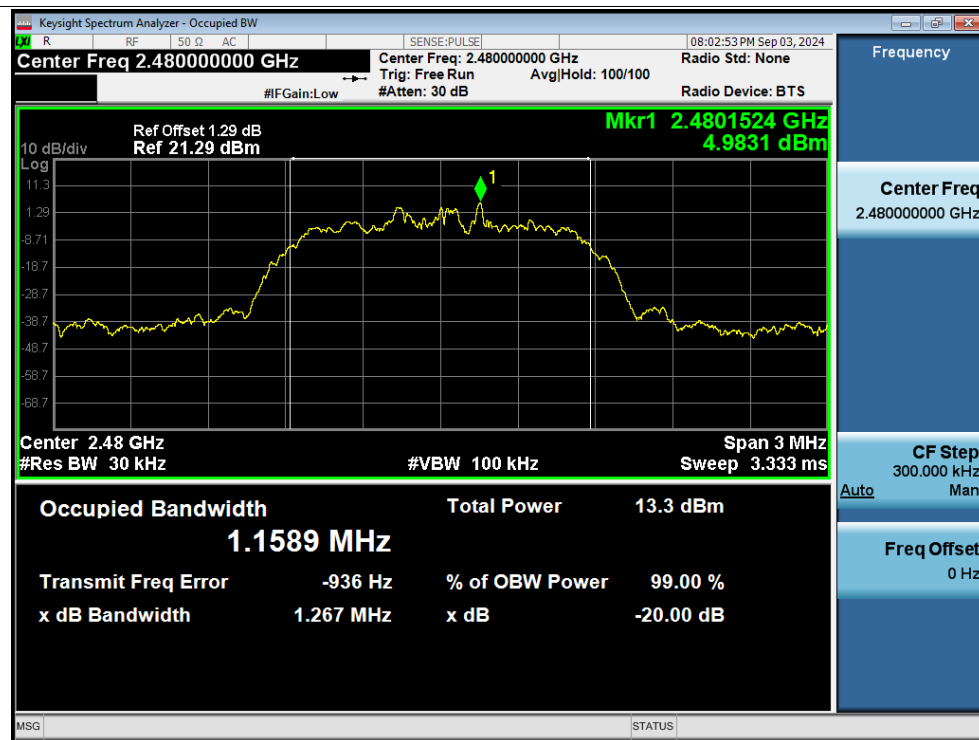
OBW NVNT 2-DH5 2402MHz Ant1



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

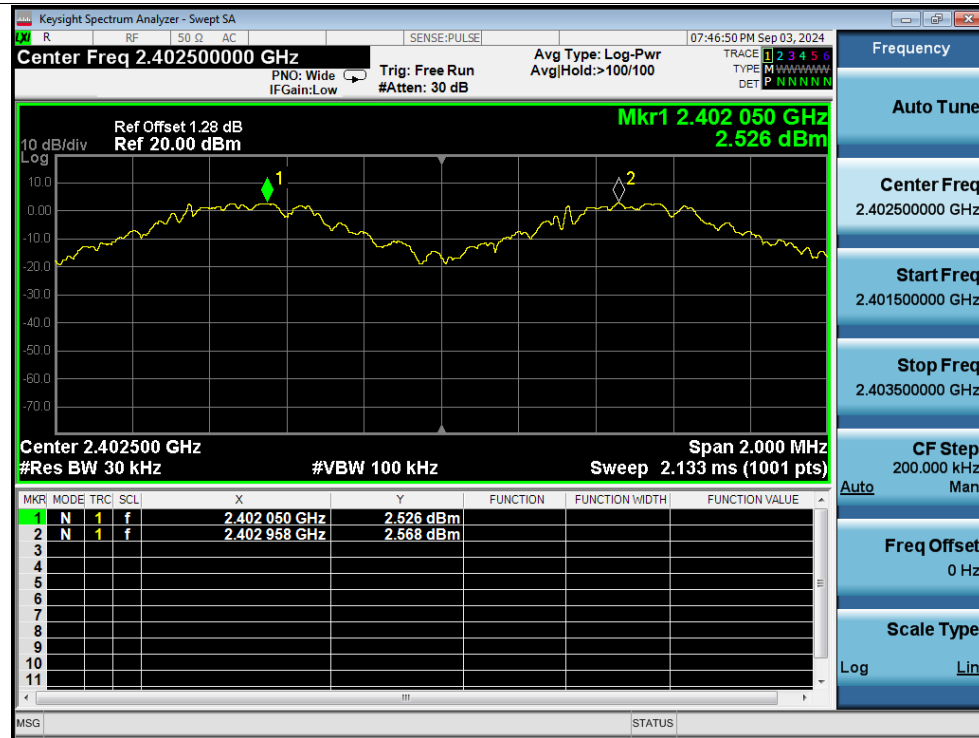


Carrier Frequencies Separation

Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2402.05	2402.958	0.908	0.64	Pass
NVNT	1-DH5	Ant1	2440.958	2442.04	1.082	0.64	Pass
NVNT	1-DH5	Ant1	2479.03	2479.994	0.964	0.64	Pass
NVNT	2-DH5	Ant1	2401.85	2402.954	1.104	0.847	Pass
NVNT	2-DH5	Ant1	2440.872	2442.038	1.166	0.84	Pass
NVNT	2-DH5	Ant1	2479.024	2480.176	1.152	0.813	Pass
NVNT	3-DH5	Ant1	2401.97	2403.158	1.188	0.86	Pass
NVNT	3-DH5	Ant1	2440.97	2441.96	0.99	0.84	Pass
NVNT	3-DH5	Ant1	2478.884	2480.028	1.144	0.84	Pass

Test Graphs

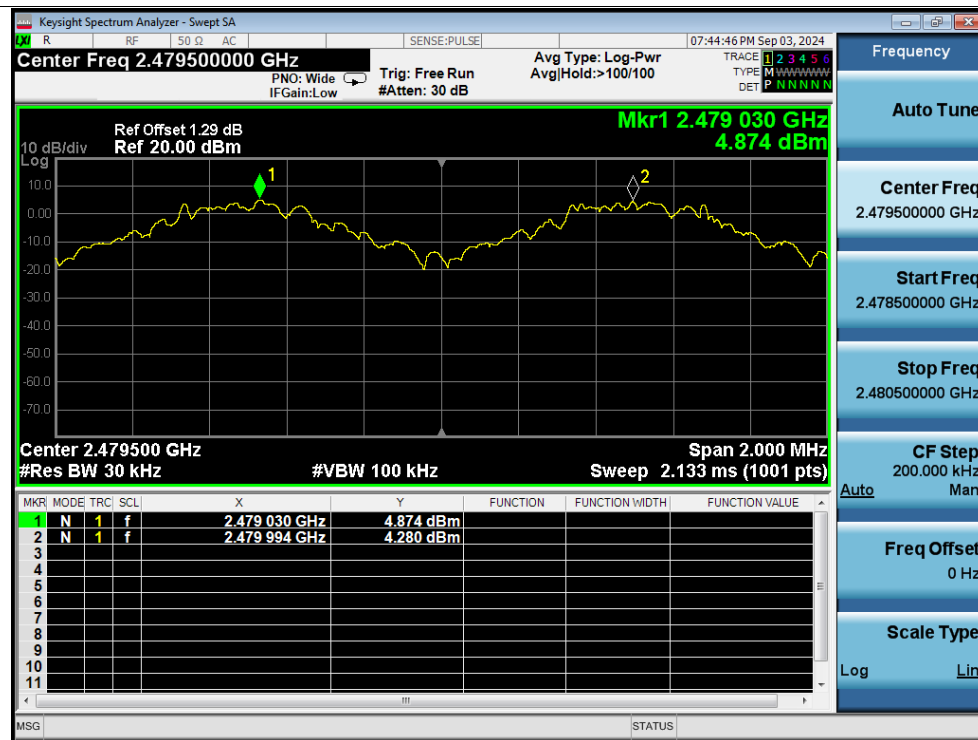
CFS NVNT 1-DH5 2402MHz Ant1



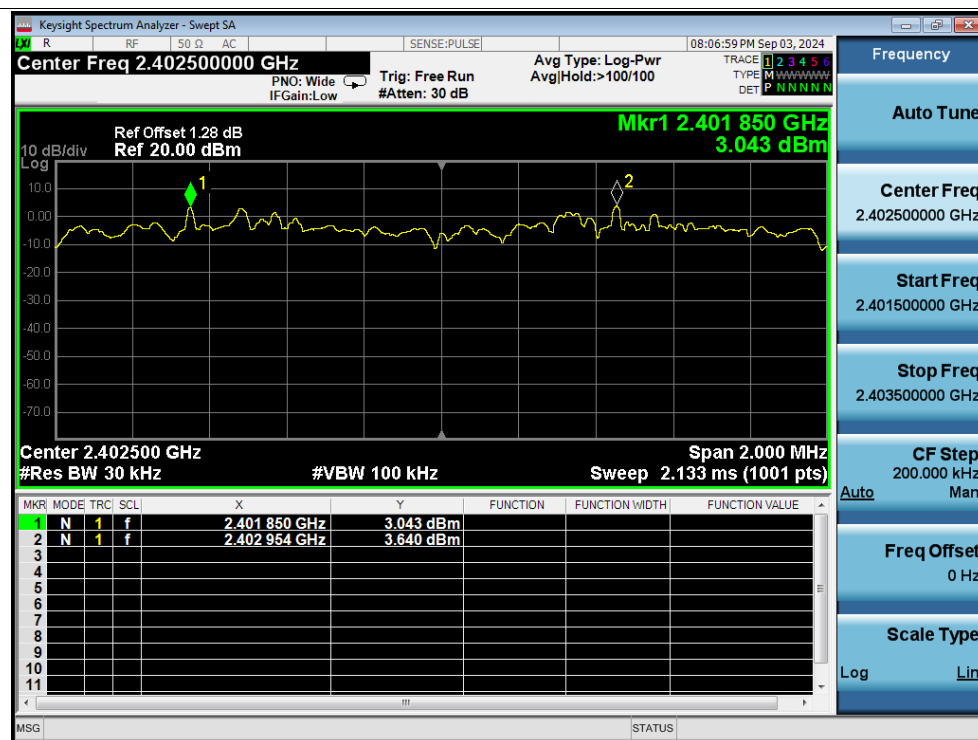
CFS NVNT 1-DH5 2441MHz Ant1



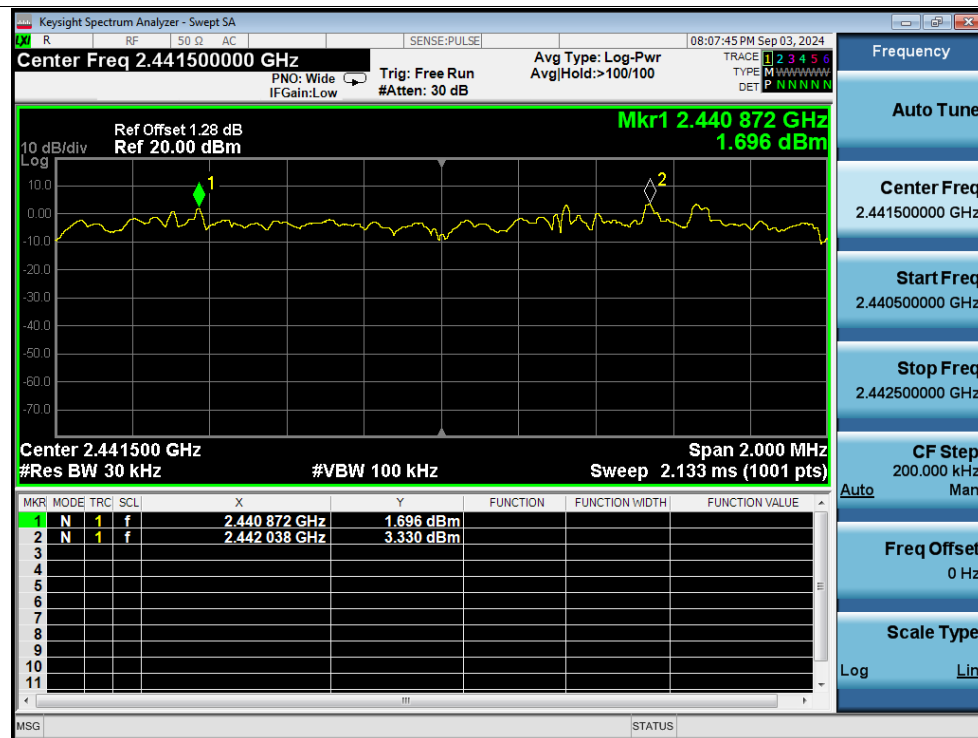
CFS NVNT 1-DH5 2480MHz Ant1



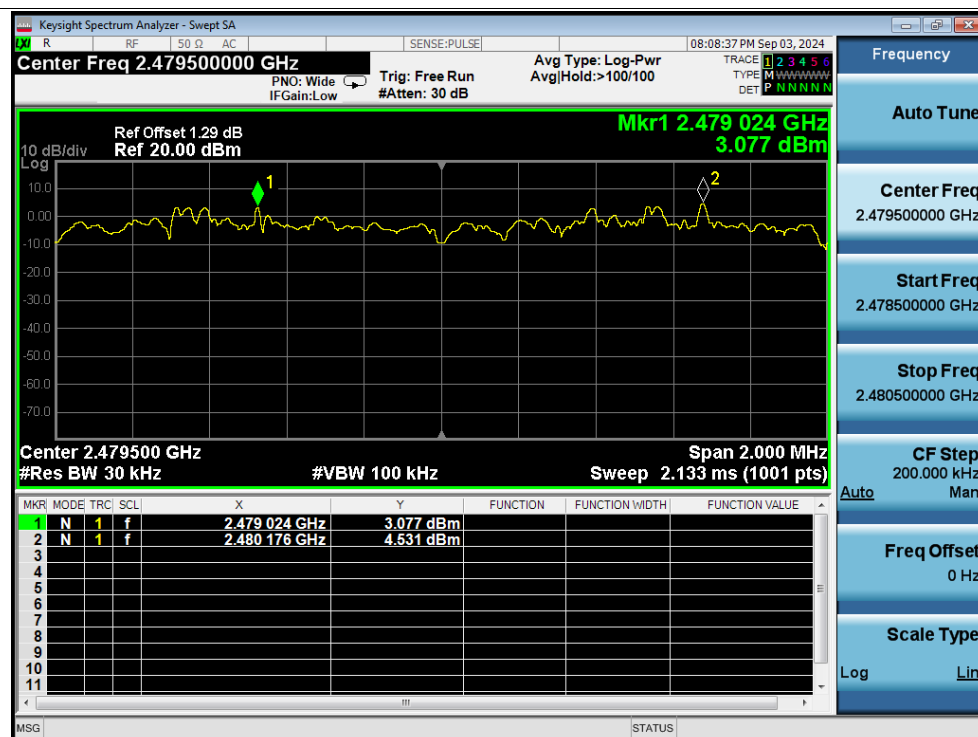
CFS NVNT 2-DH5 2402MHz Ant1



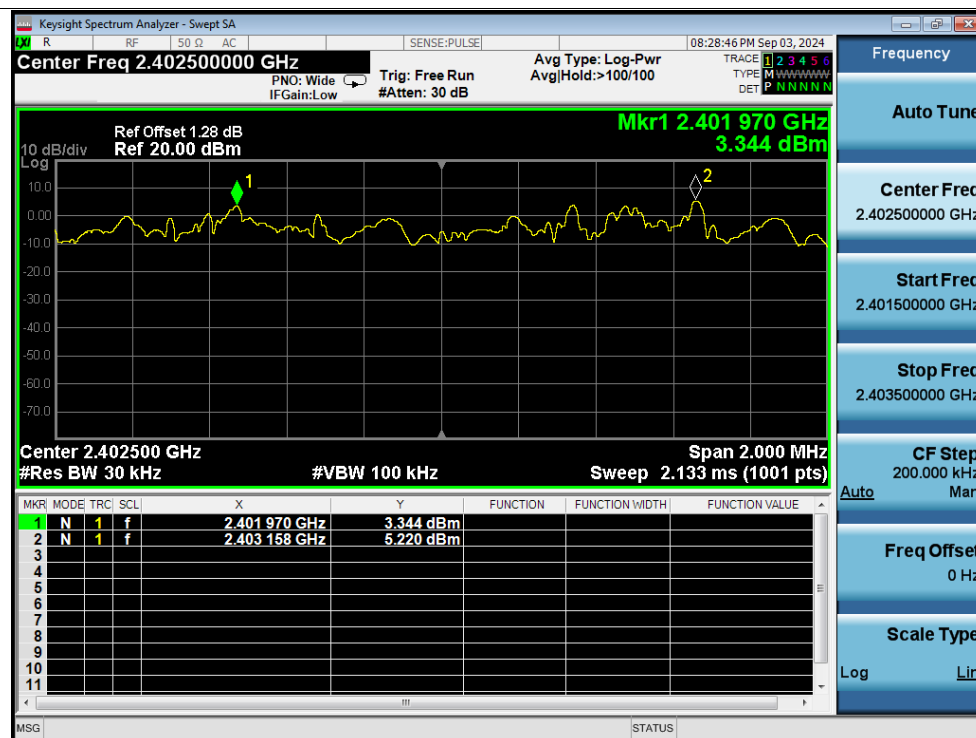
CFS NVNT 2-DH5 2441MHz Ant1



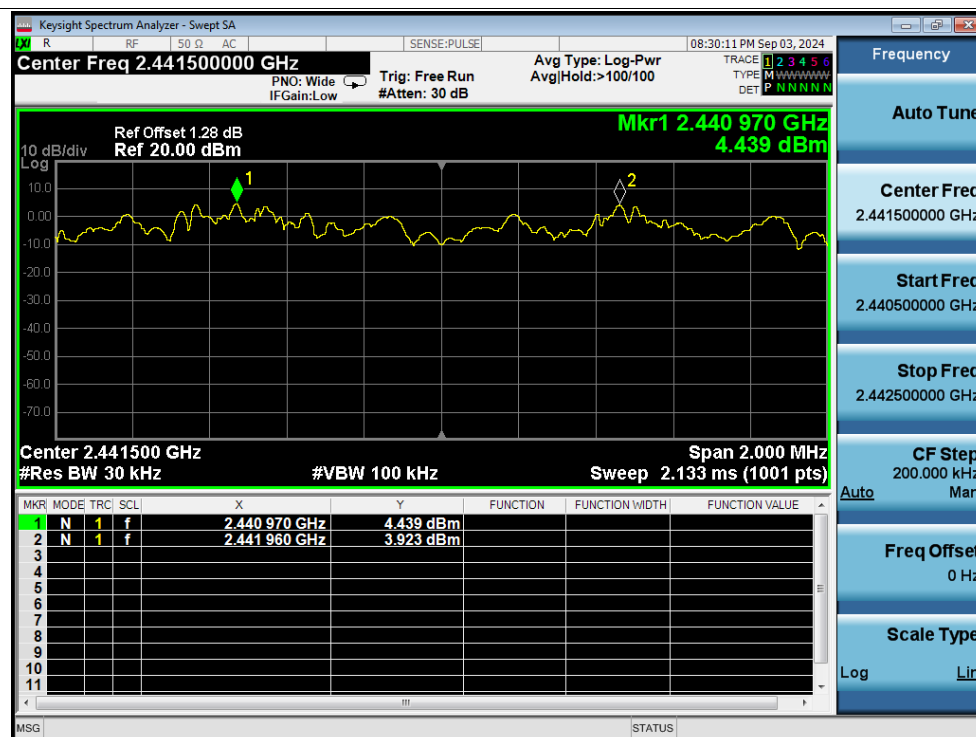
CFS NVNT 2-DH5 2480MHz Ant1



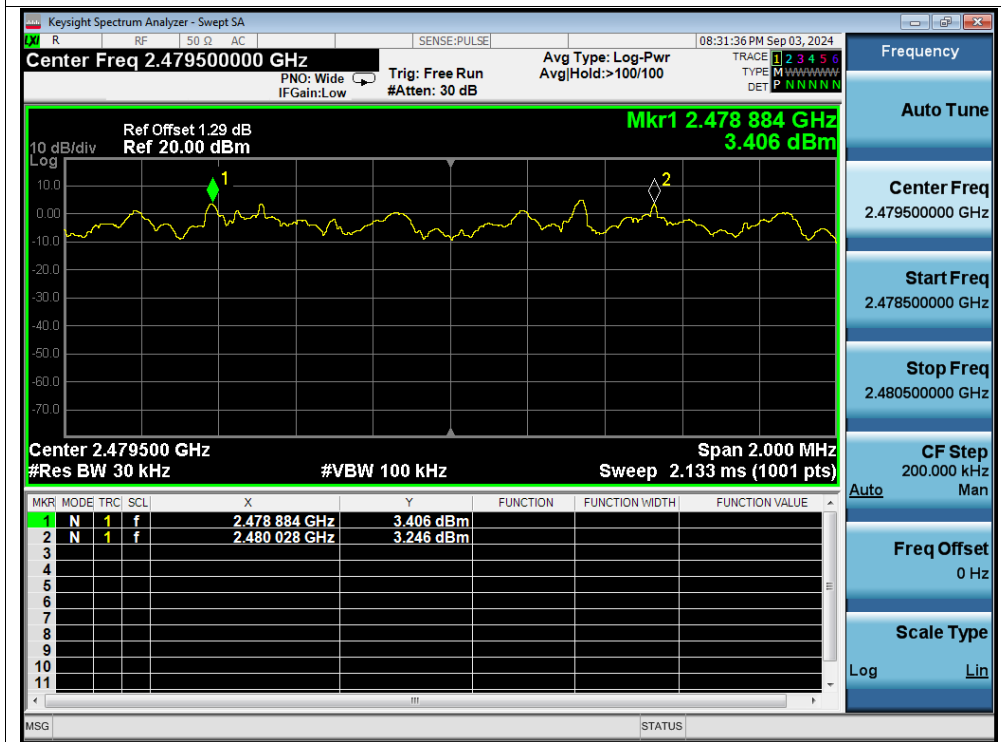
CFS NVNT 3-DH5 2402MHz Ant1



CFS NVNT 3-DH5 2441MHz Ant1



CFS NVNT 3-DH5 2480MHz Ant1

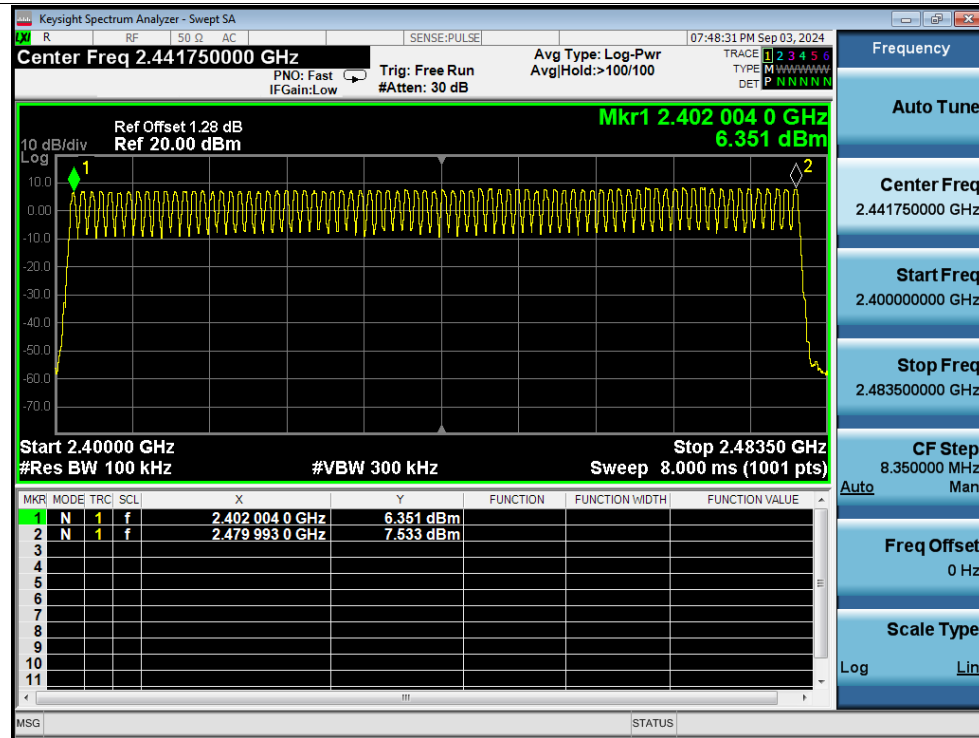


Number of Hopping Channel

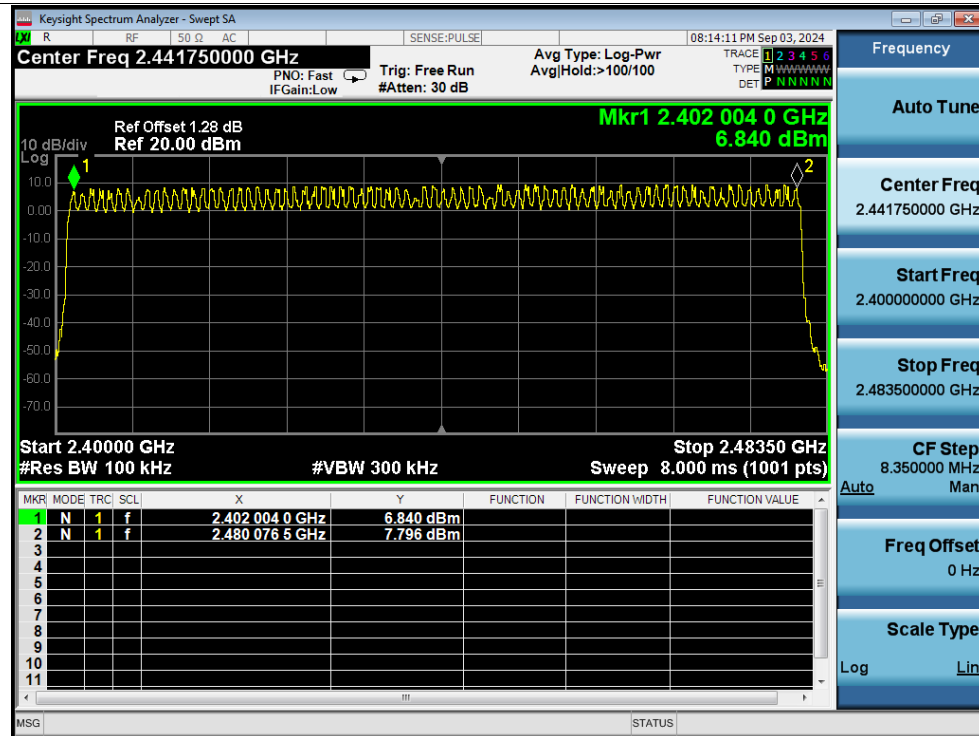
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass

Test Graphs

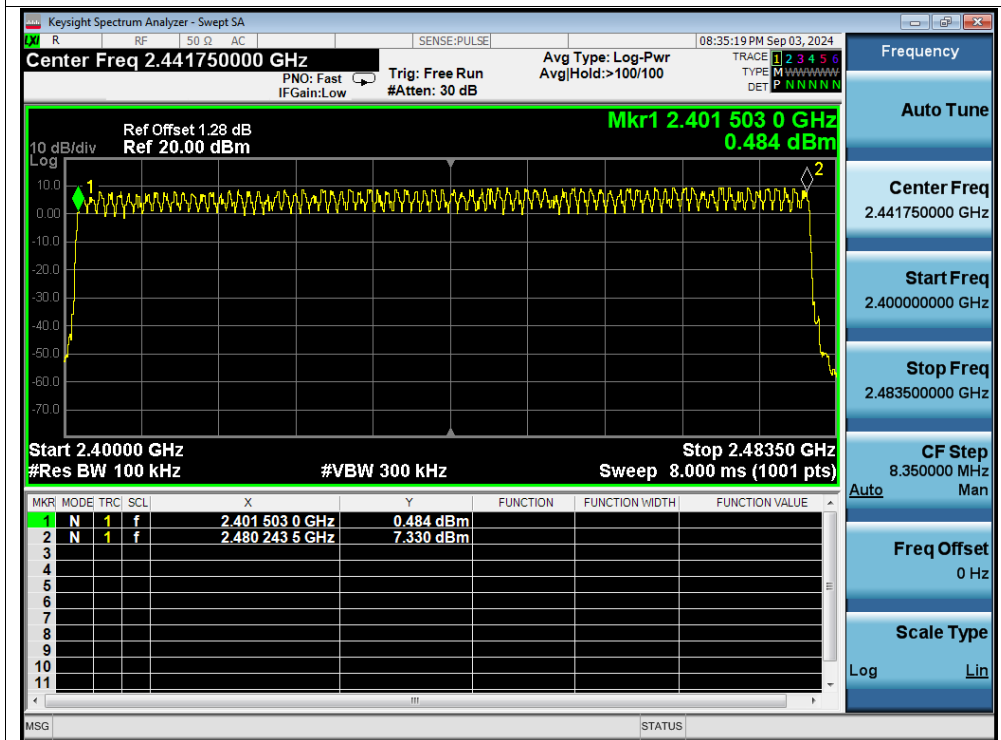
Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1



Hopping No. NVNT 3-DH5 2402MHz Ant1

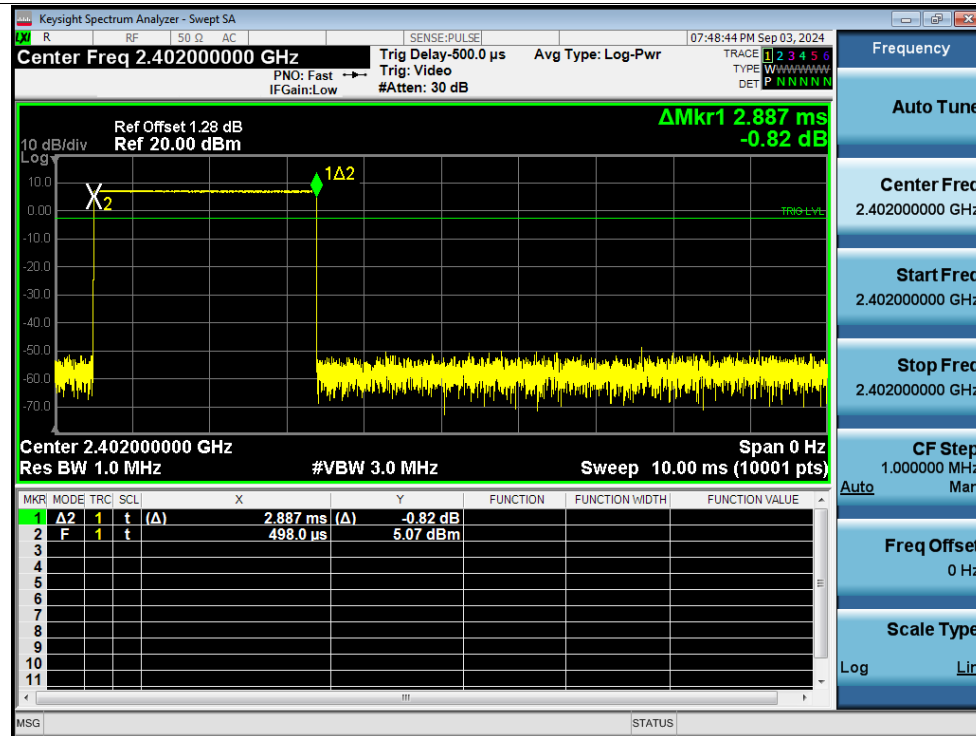


Dwell Time

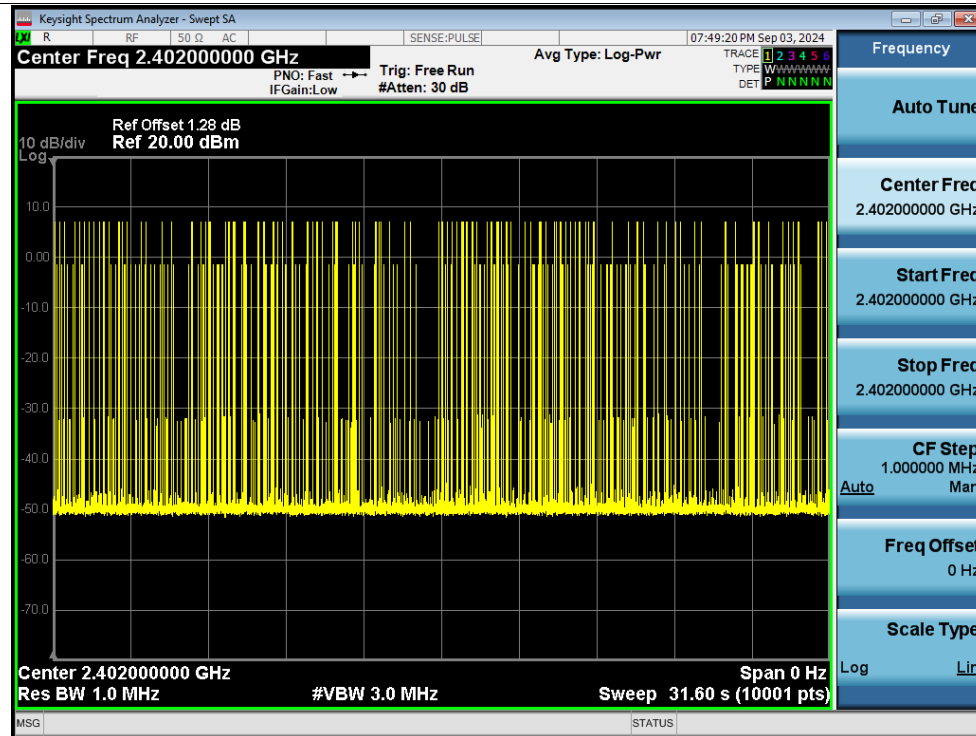
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.887	346.44	120	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.887	323.344	112	31600	400	Pass
NVNT	1-DH5	2480	Ant1	2.887	317.57	110	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.891	268.863	93	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.891	297.773	103	31600	400	Pass
NVNT	2-DH5	2480	Ant1	2.891	289.1	100	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.893	306.658	106	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.894	312.552	108	31600	400	Pass
NVNT	3-DH5	2480	Ant1	2.893	318.23	110	31600	400	Pass

Test Graphs

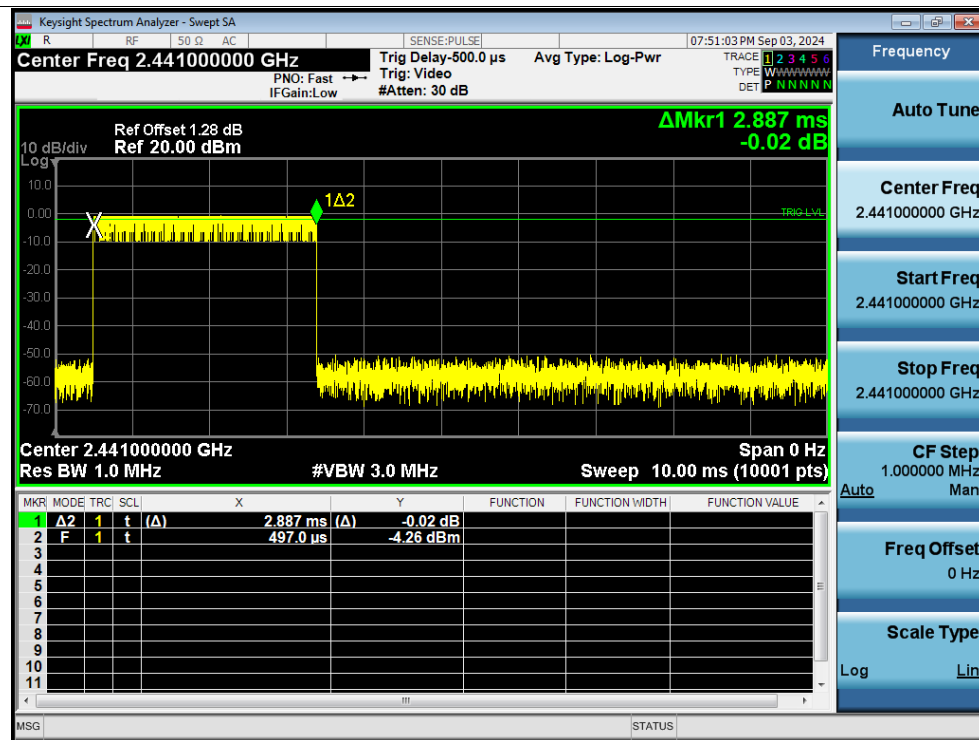
Dwell NVNT 1-DH5 2402MHz Ant1 One Burst



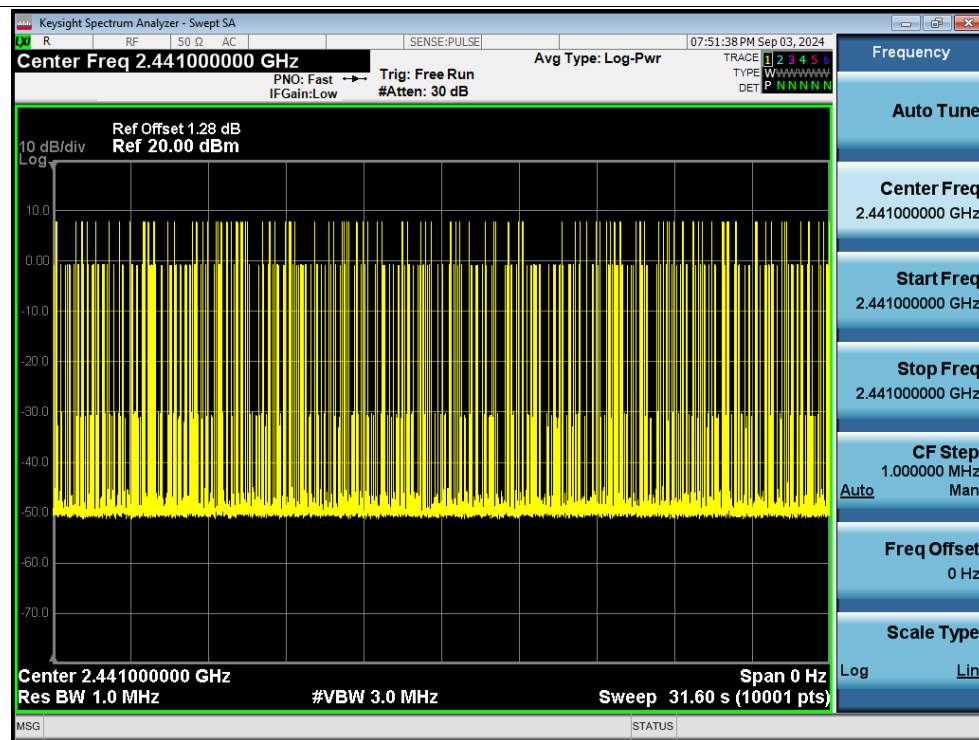
Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated



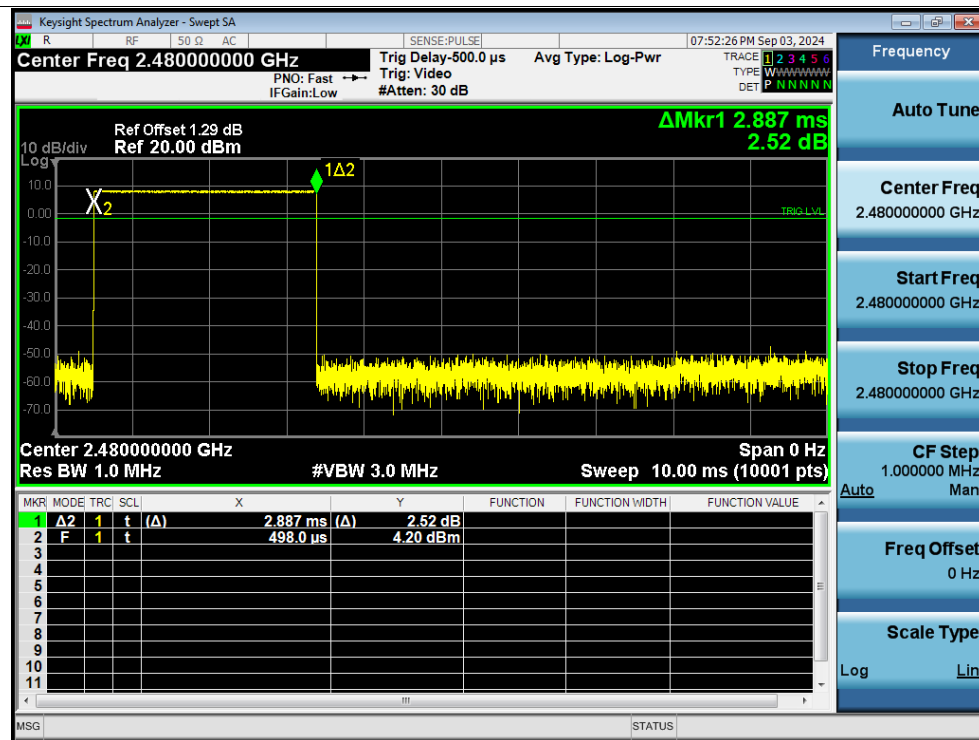
Dwell NVNT 1-DH5 2441MHz Ant1 One Burst



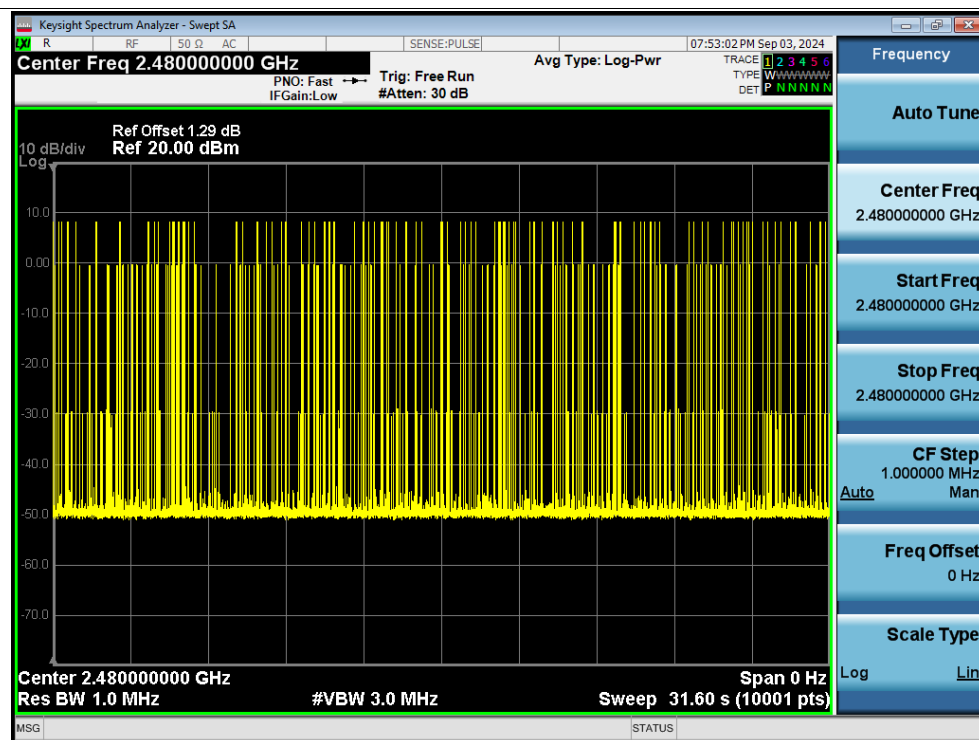
Dwell NVNT 1-DH5 2441MHz Ant1 Accumulated



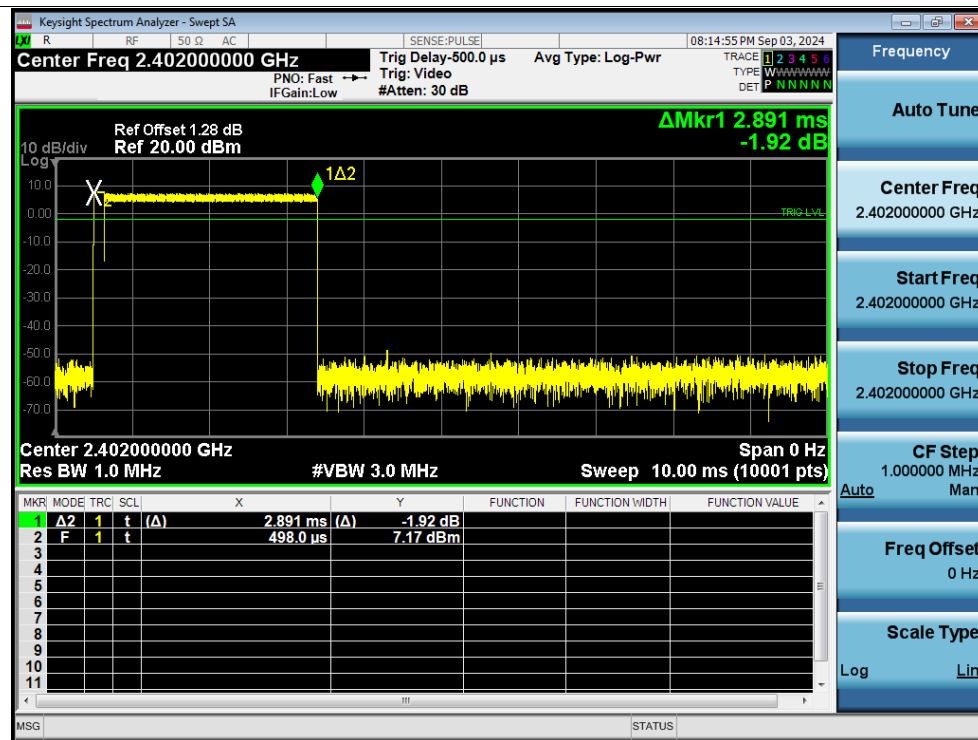
Dwell NVNT 1-DH5 2480MHz Ant1 One Burst



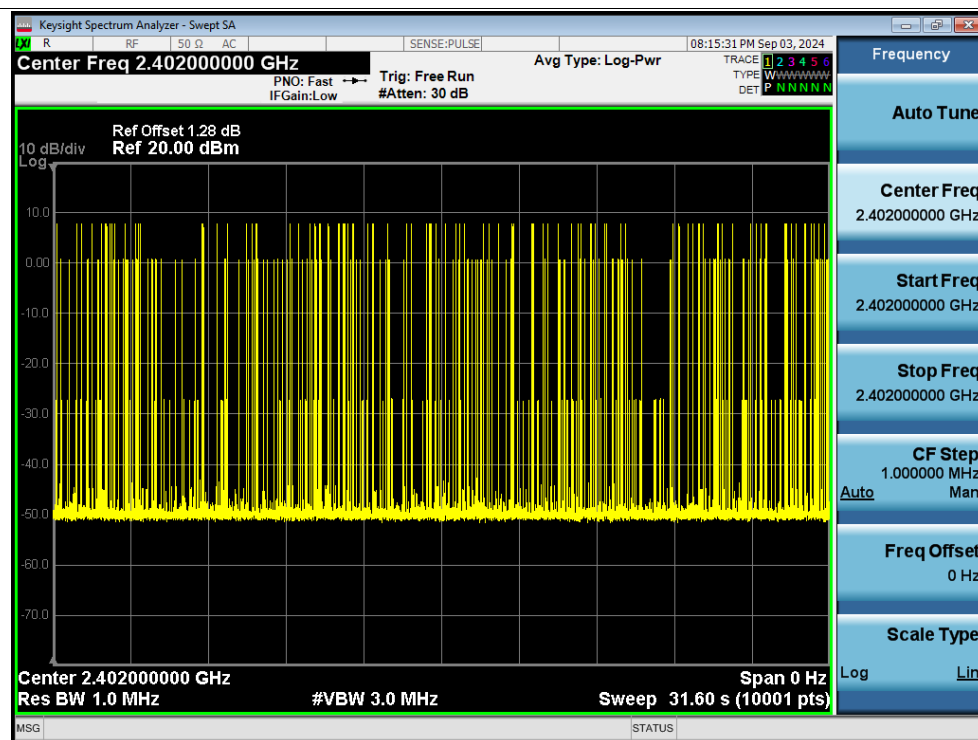
Dwell NVNT 1-DH5 2480MHz Ant1 Accumulated



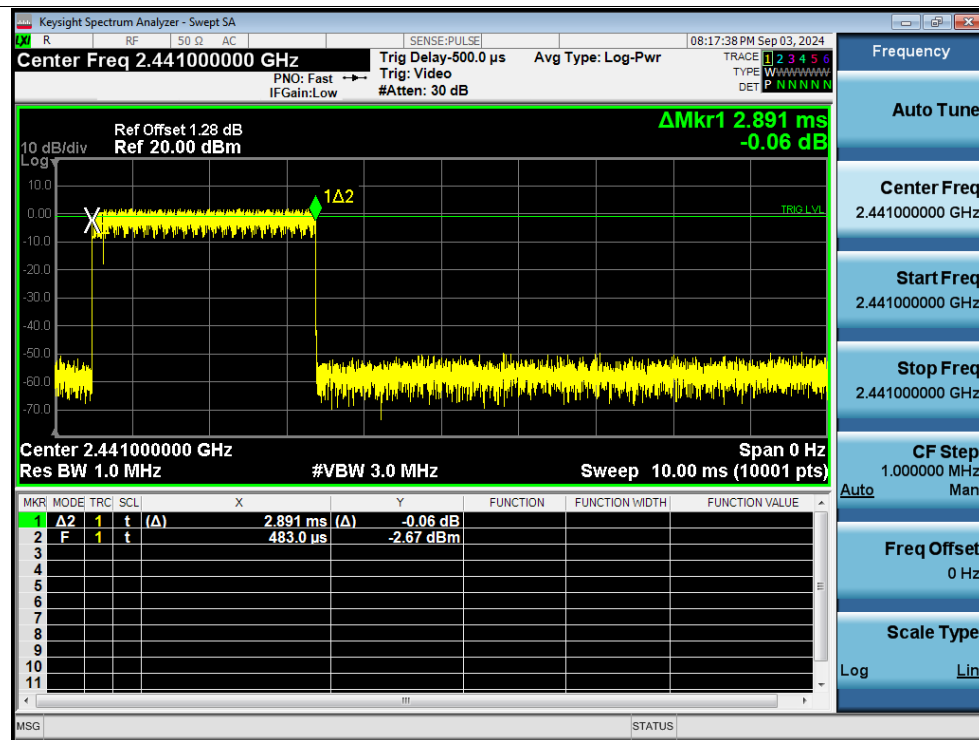
Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



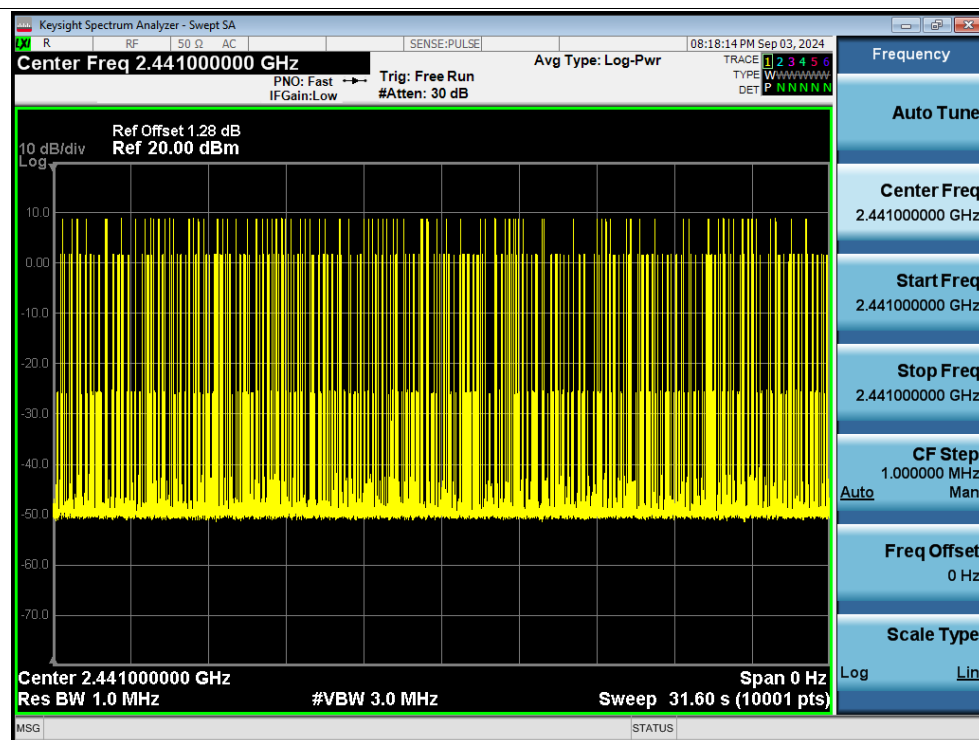
Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated



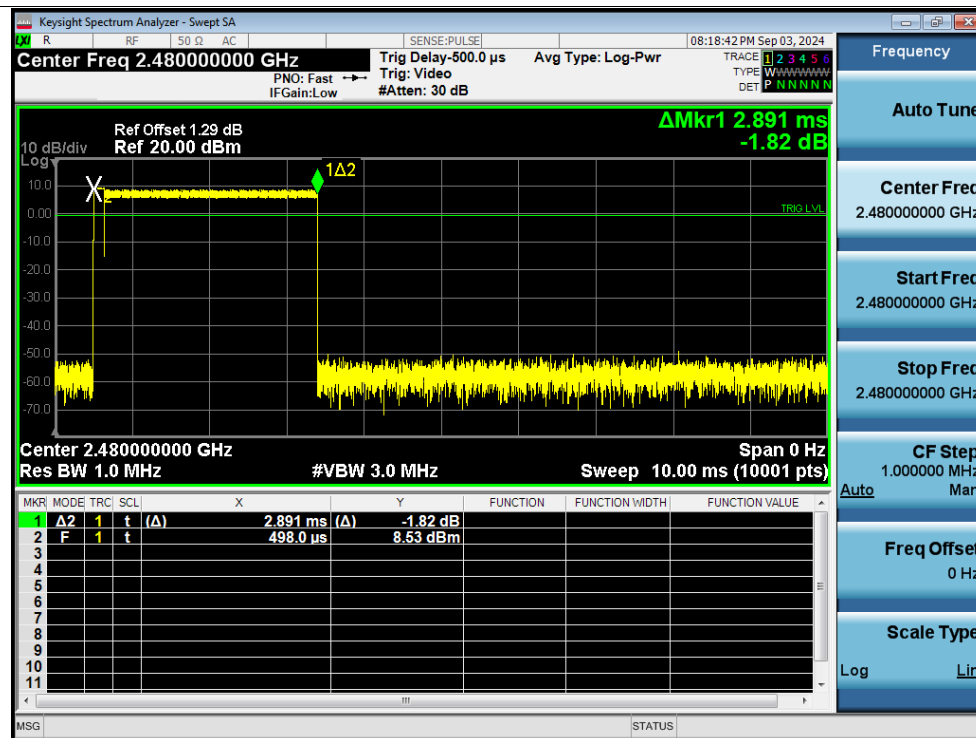
Dwell NVNT 2-DH5 2441MHz Ant1 One Burst



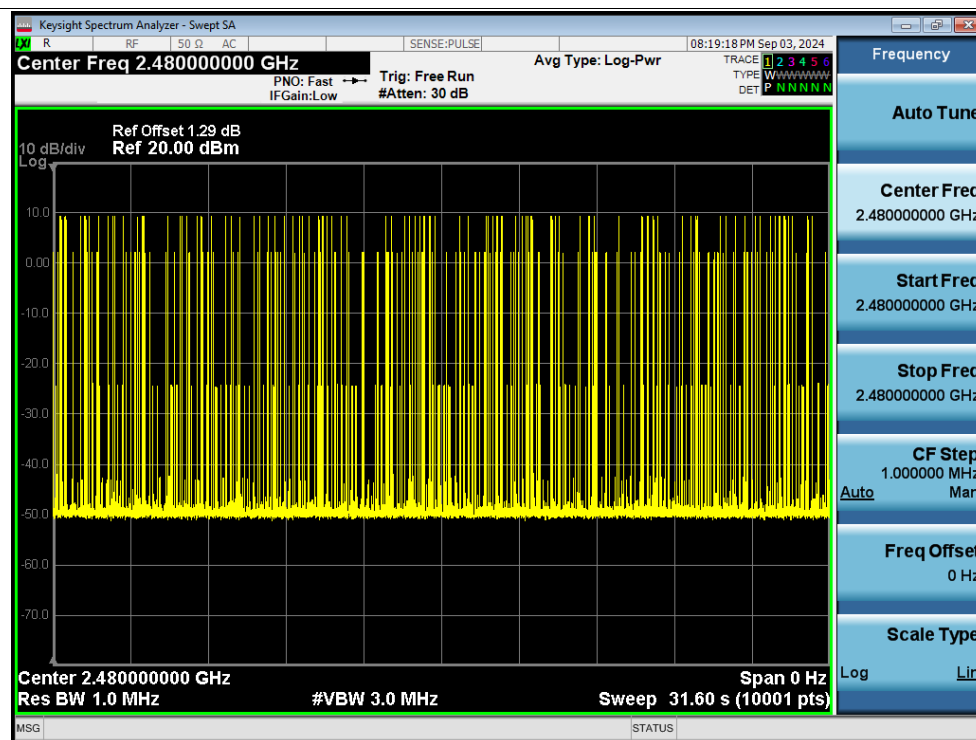
Dwell NVNT 2-DH5 2441MHz Ant1 Accumulated



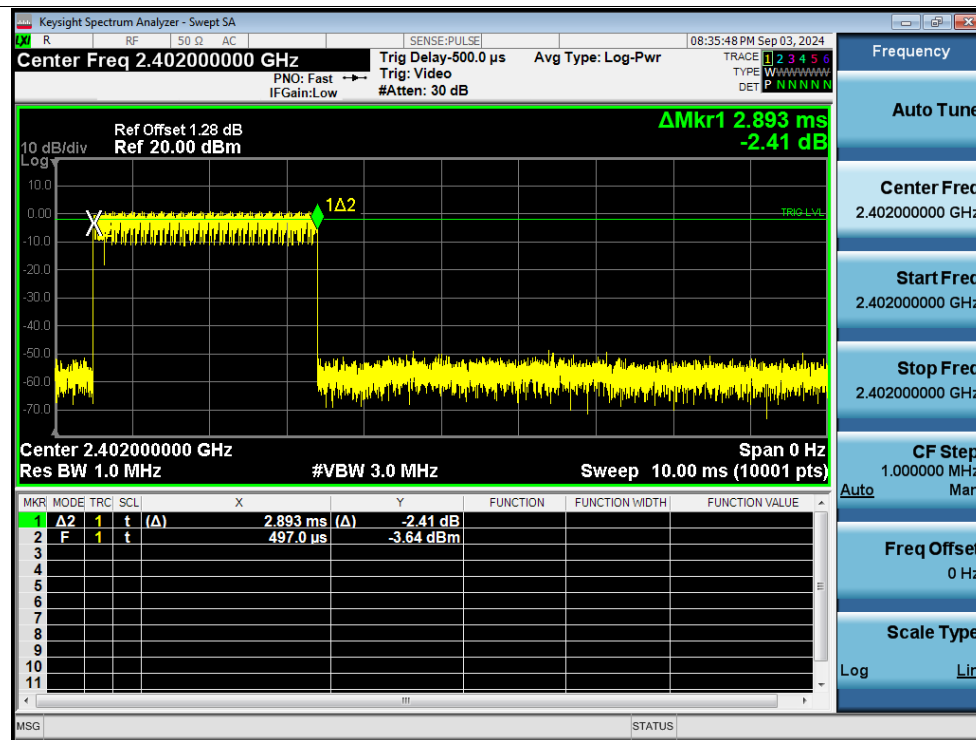
Dwell NVNT 2-DH5 2480MHz Ant1 One Burst



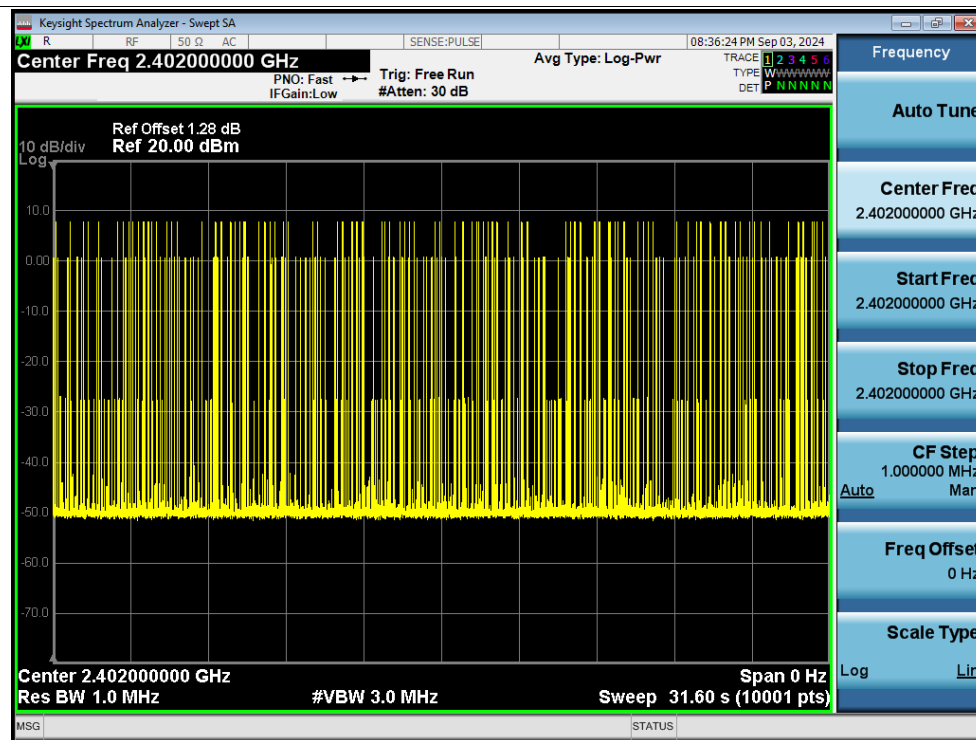
Dwell NVNT 2-DH5 2480MHz Ant1 Accumulated



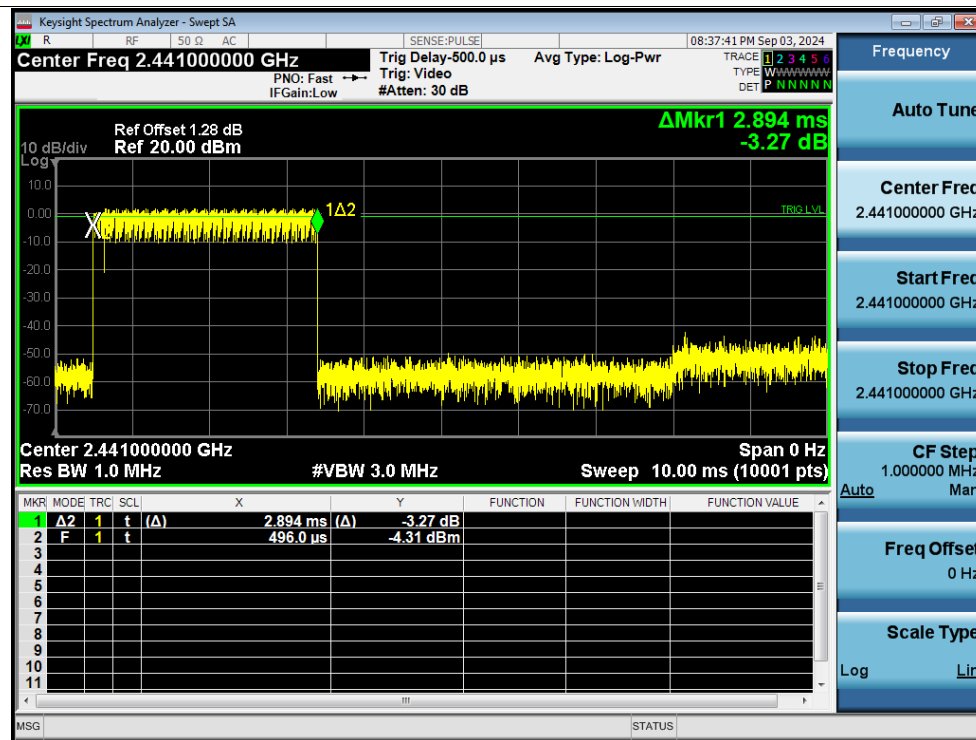
Dwell NVNT 3-DH5 2402MHz Ant1 One Burst



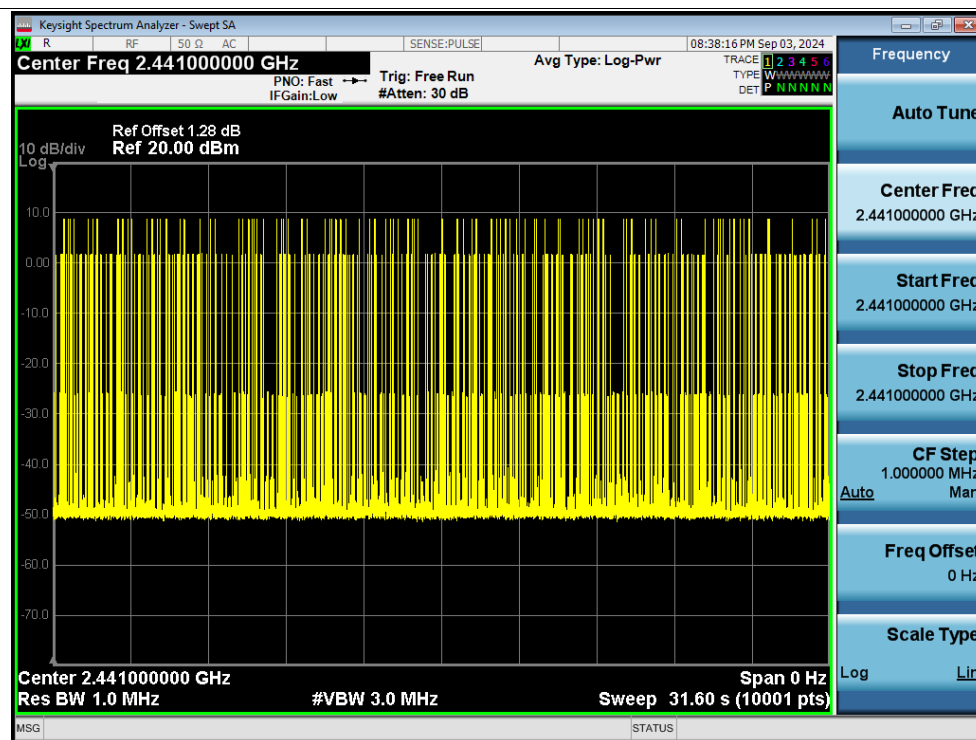
Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated



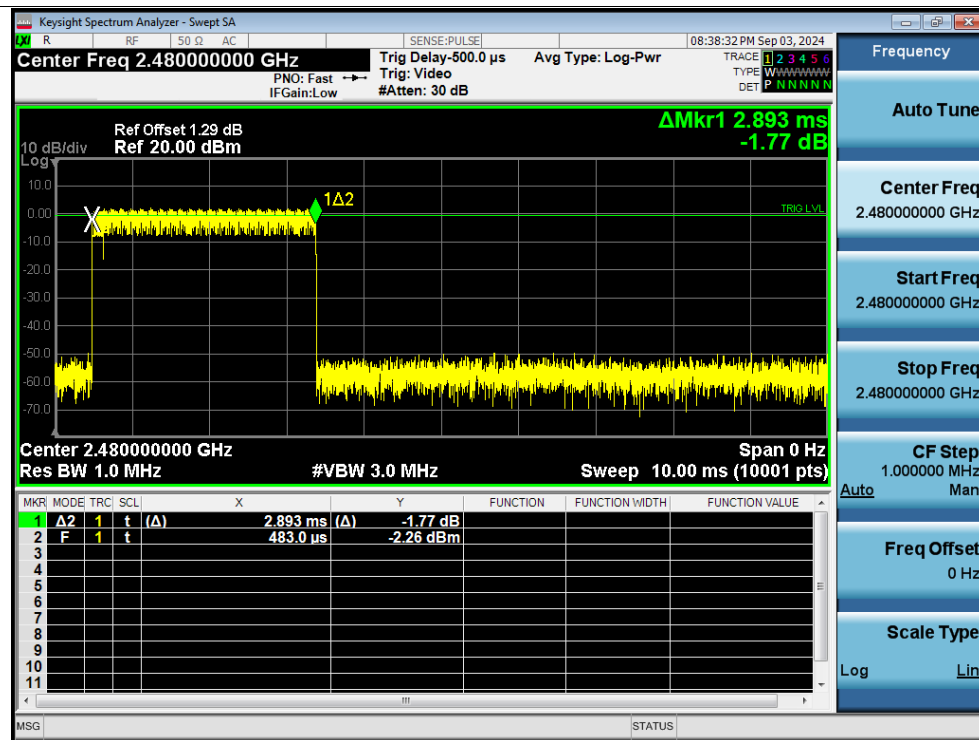
Dwell NVNT 3-DH5 2441MHz Ant1 One Burst



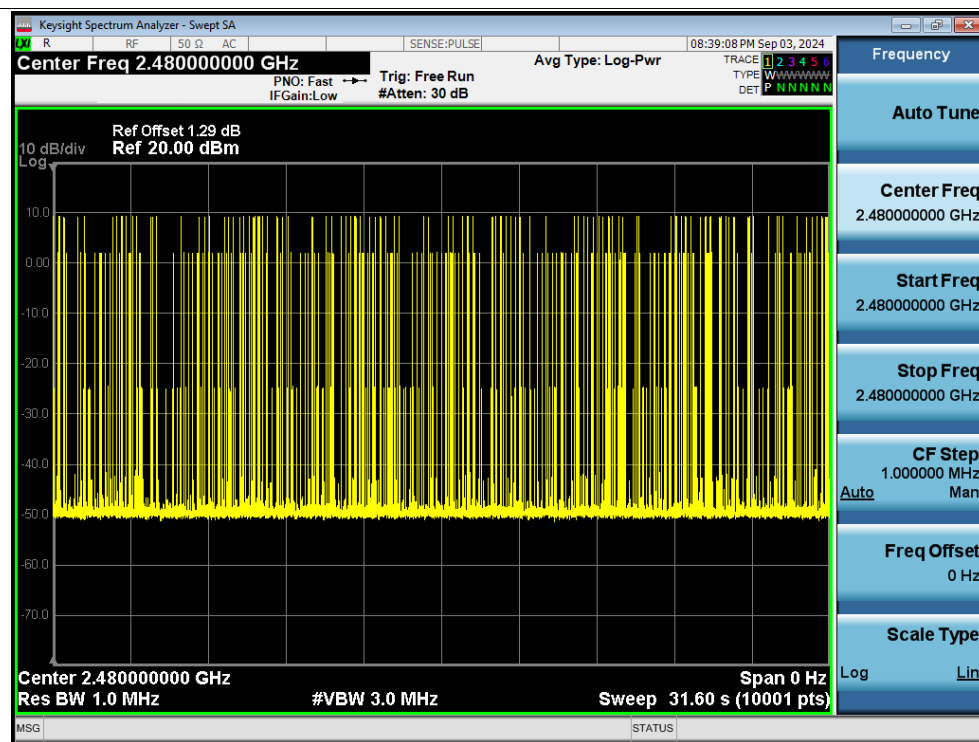
Dwell NVNT 3-DH5 2441MHz Ant1 Accumulated



Dwell NVNT 3-DH5 2480MHz Ant1 One Burst



Dwell NVNT 3-DH5 2480MHz Ant1 Accumulated



Band Edge

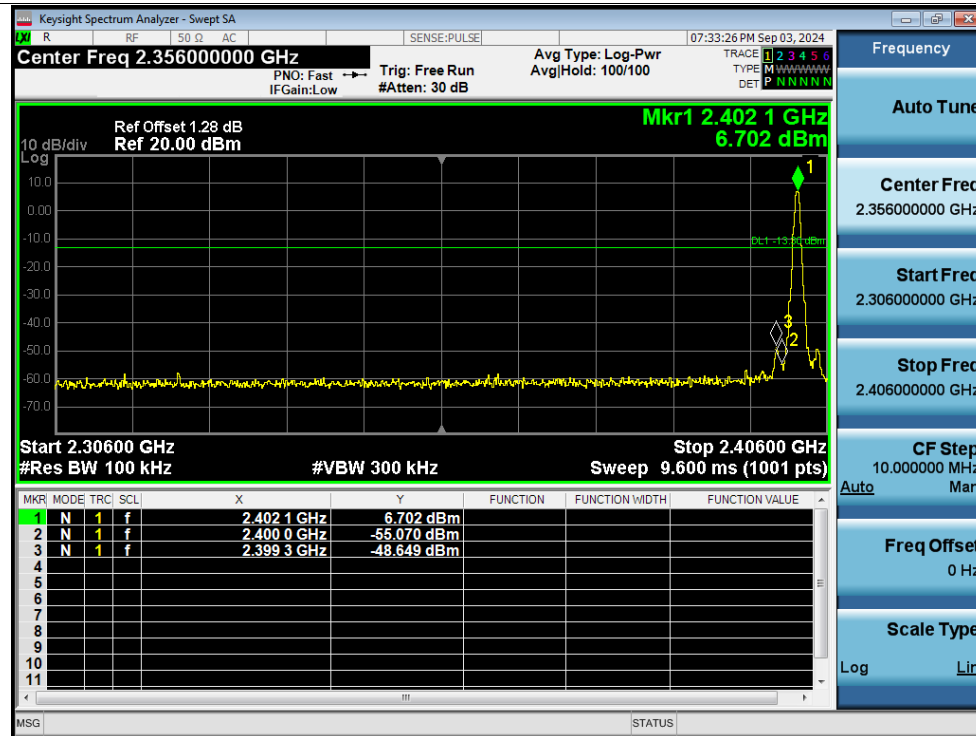
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-55.35	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-63.38	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-56.03	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-65.1	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-55.98	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-65.97	-20	Pass

Test Graphs

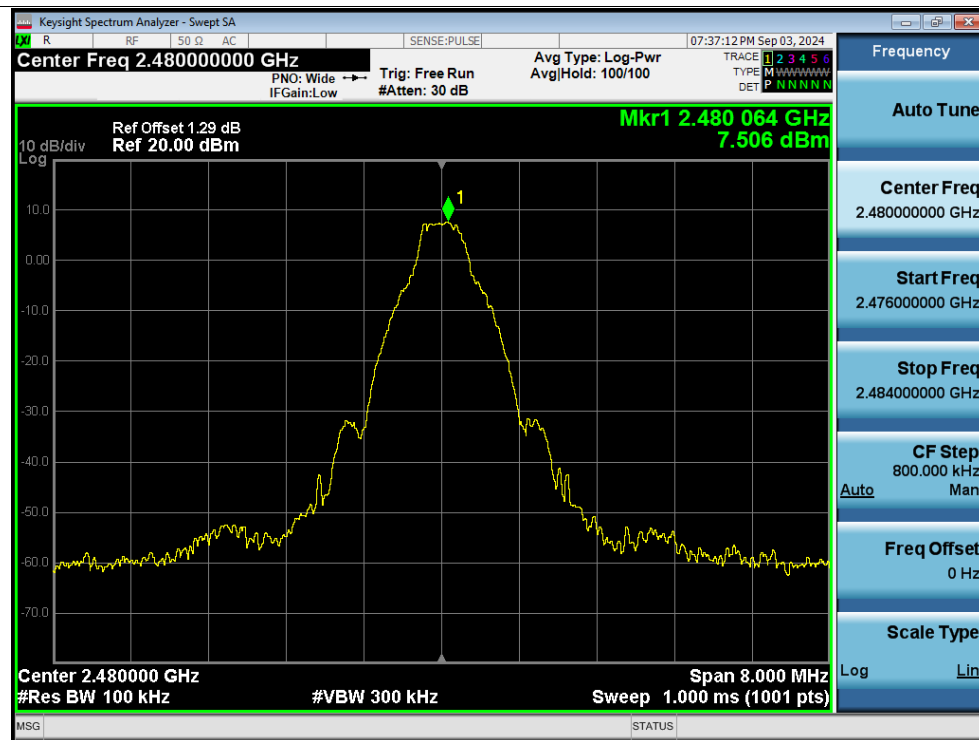
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



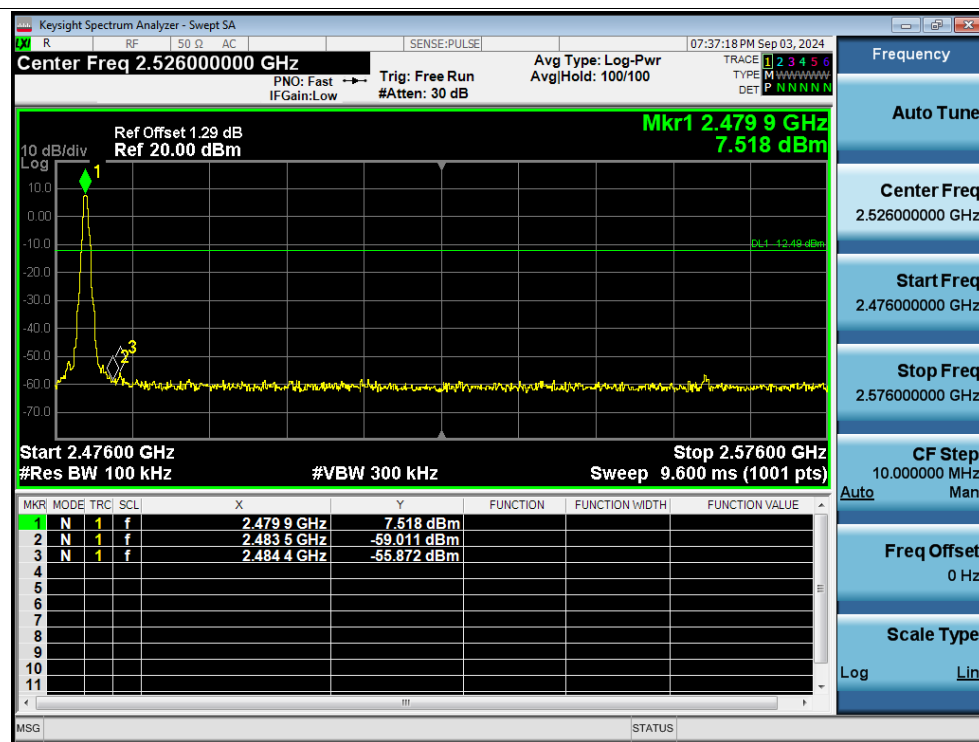
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission



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



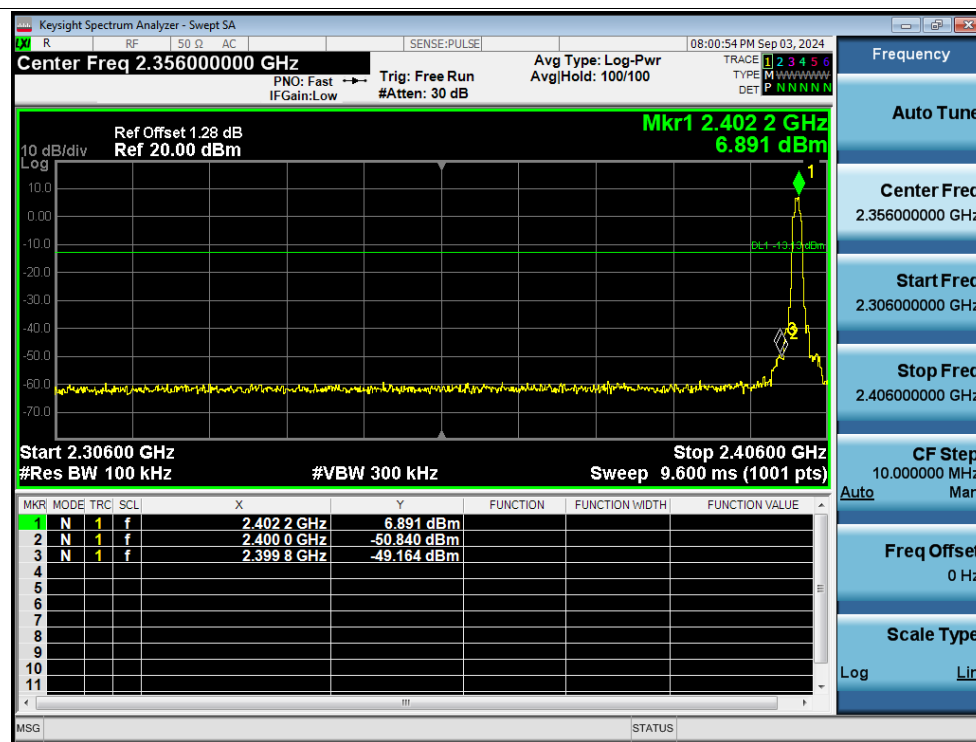
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission



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



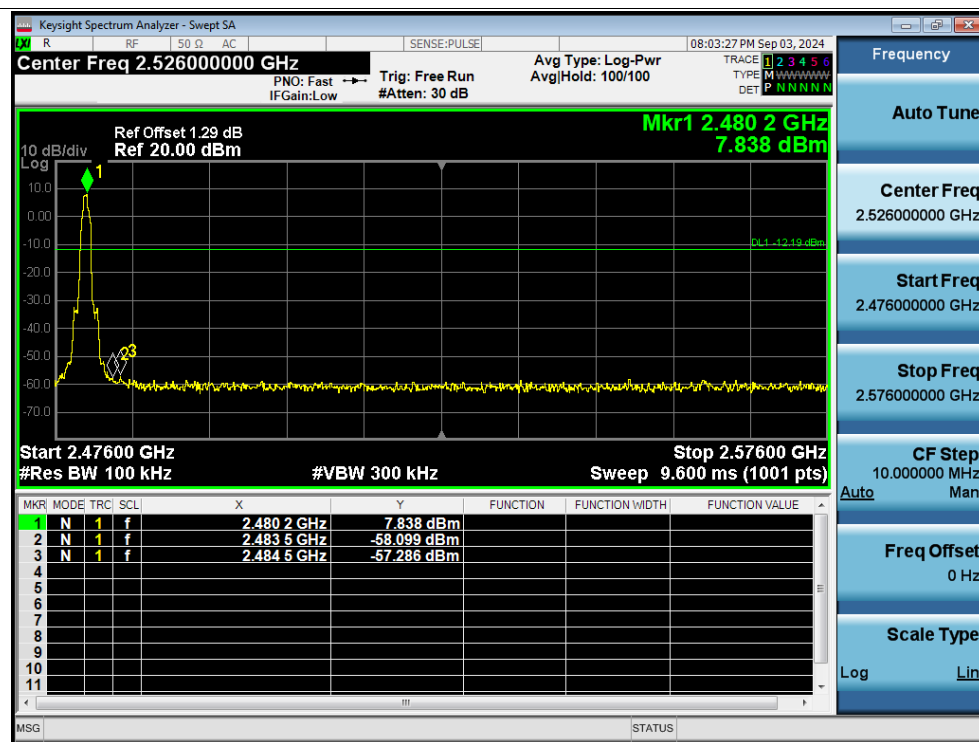
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission



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



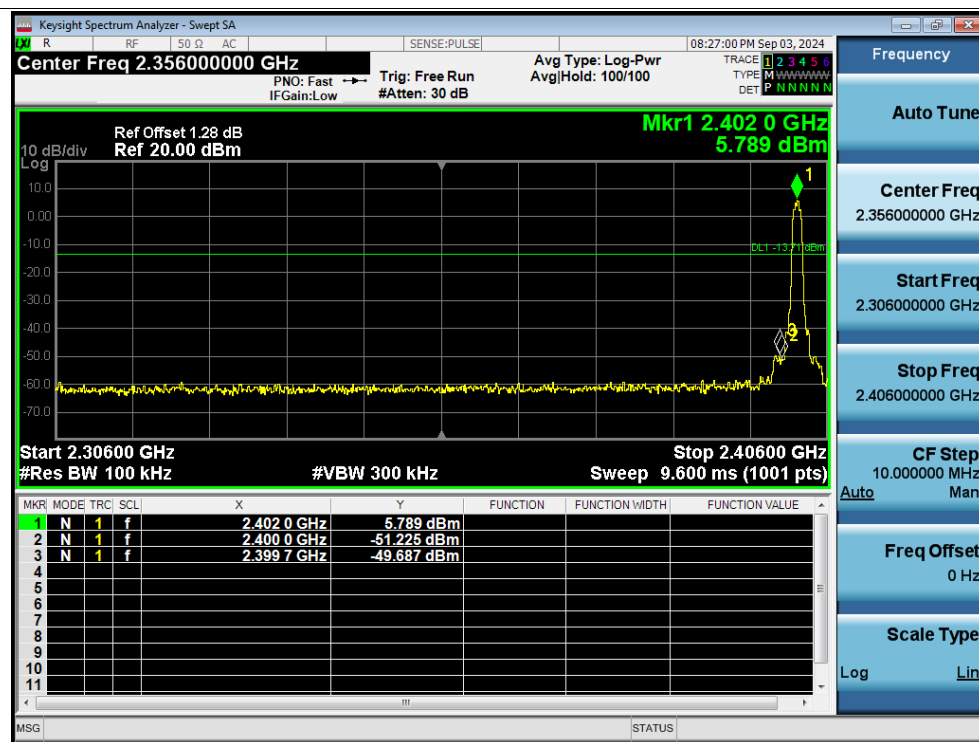
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission



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



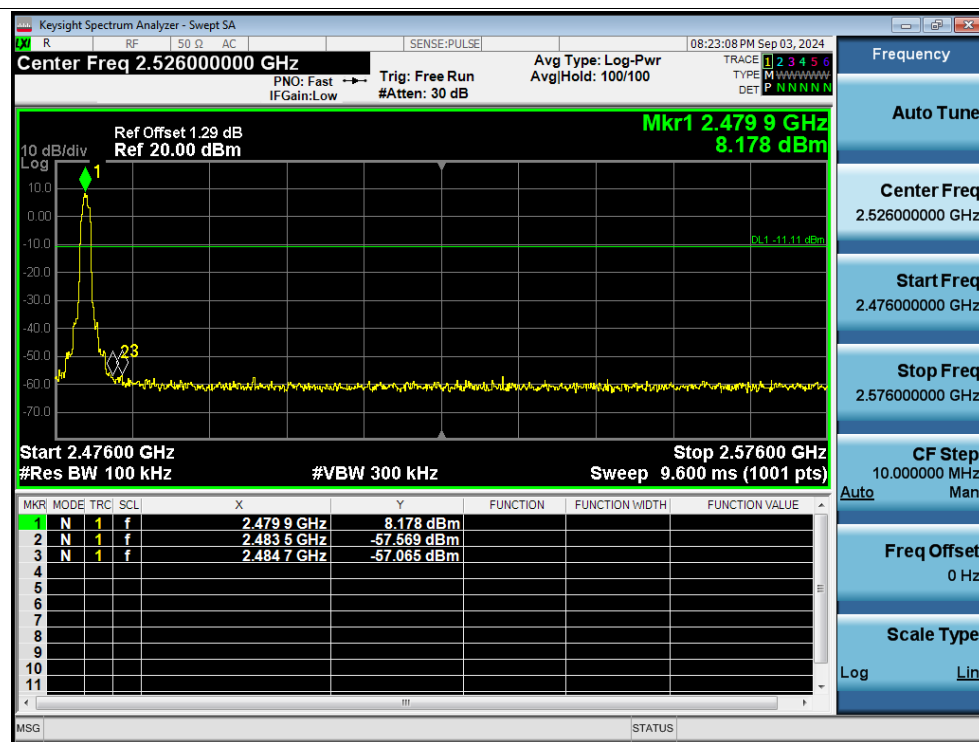
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission



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



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



Band Edge(Hopping)

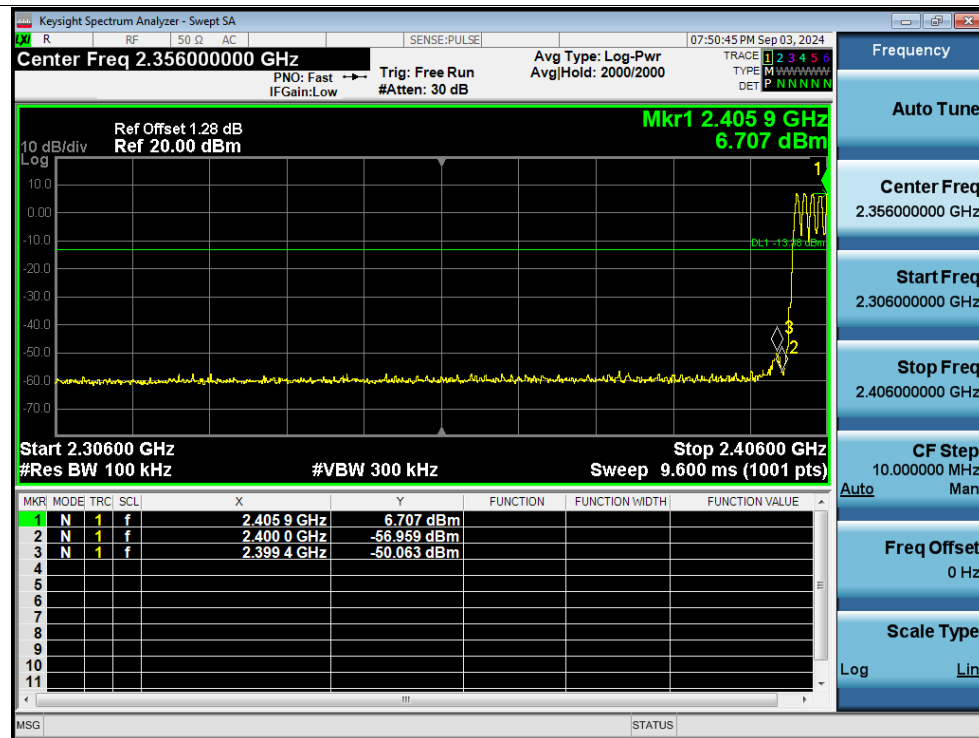
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-56.68	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-65.06	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-60.04	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-64.84	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-56.94	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-66.37	-20	Pass

Test Graphs

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



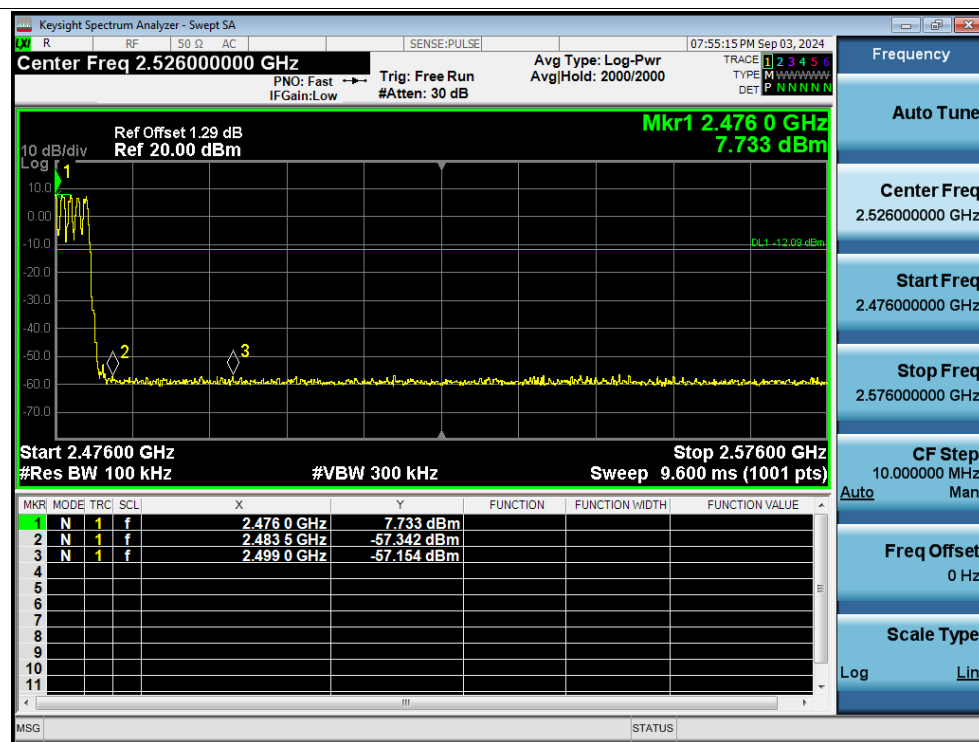
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission



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



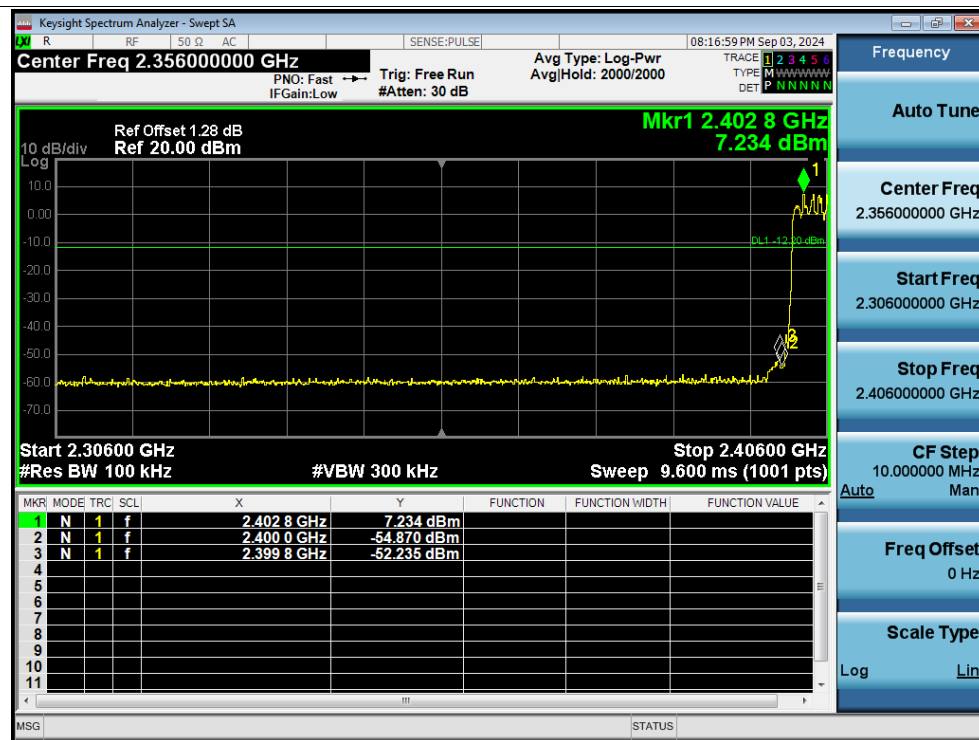
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission



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



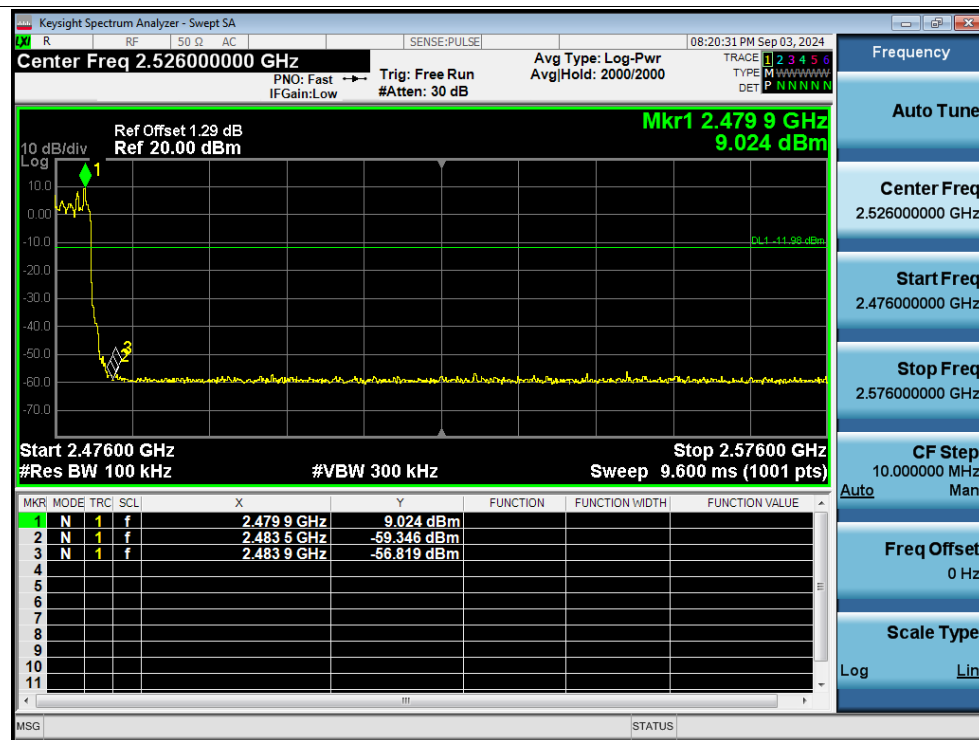
Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Emission



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

Keysight Spectrum Analyzer - Swept SA

RF 50.0 AC SENSE:PULSE 08:36:48 PM Sep 03, 2024

Center Freq 2.402000000 GHz PNO: Wide IFGain:Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg|Hold: 2000/2000

TRACE 1 2 3 4 5 6 TYPE M N N N N N N P N N N N N N

Ref Offset 1.28 dB Ref 20.00 dBm

10 dB/div Log

Mkr1 2.404 880 GHz 6.208 dBm

Center 2.402000 GHz #Res BW 100 kHz #VBW 300 kHz Span 8.000 MHz Sweep 1.000 ms (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq 2.402000000 GHz

Start Freq 2.398000000 GHz

Stop Freq 2.406000000 GHz

CF Step 800.000 kHz Man

Auto

Freq Offset 0 Hz

Scale Type Log Lin

Band Edge(Hopping) NVNT 3-DHS 5400MHz Ant1 Hopping Emission

Keysight Spectrum Analyzer - Swept SA

R RF 50 Ω AC SENSE:PULSE 08:37:24 PM Sep 03, 2024

Center Freq 2.356000000 GHz PNO: Fast Trig: Free Run Avg Type: Log-Pwr Avg|Hold: 2000/2000

Ref Offset 1.28 dB Ref 20.00 dBm Mkr1 2.403 9 GHz 7.289 dBm

10 dB/div Log

Start 2.30600 GHz Stop 2.40600 GHz

#Res BW 100 kHz #VBW 300 kHz Sweep 9.600 ms (1001 pts)

Mkr	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.403 9 GHz	7.289 dBm			
2	N	1	f	2.400 0 GHz	-54.112 dBm			
3	N	1	f	2.399 8 GHz	-50.734 dBm			
4								
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq 2.356000000 GHz

Start Freq 2.306000000 GHz

Stop Freq 2.406000000 GHz

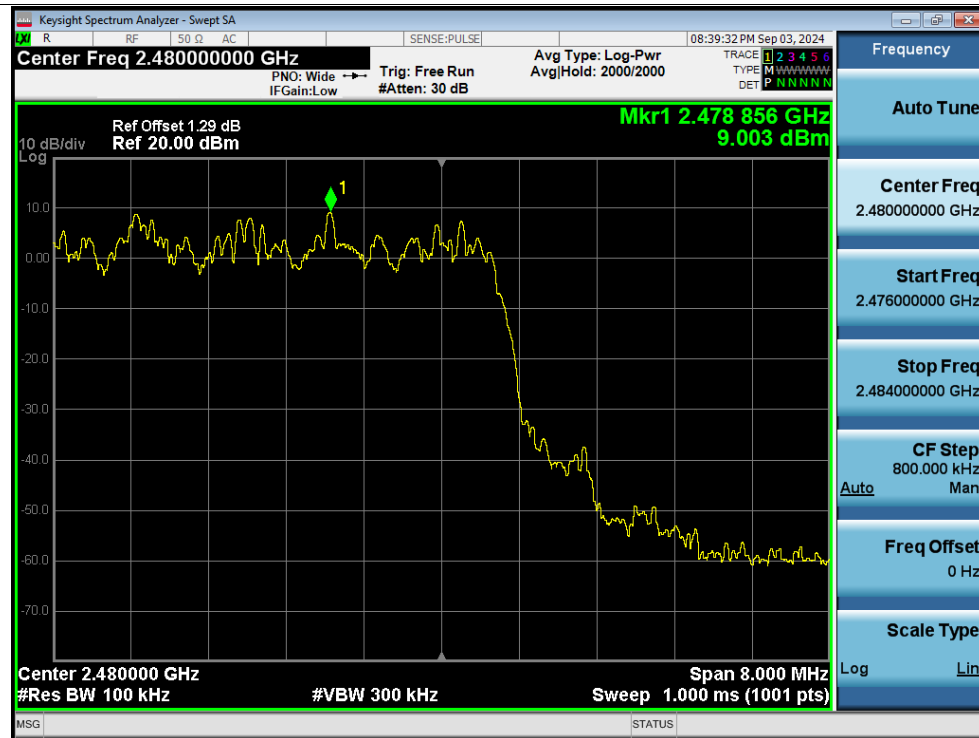
CF Step 10.000000 MHz Man

Auto

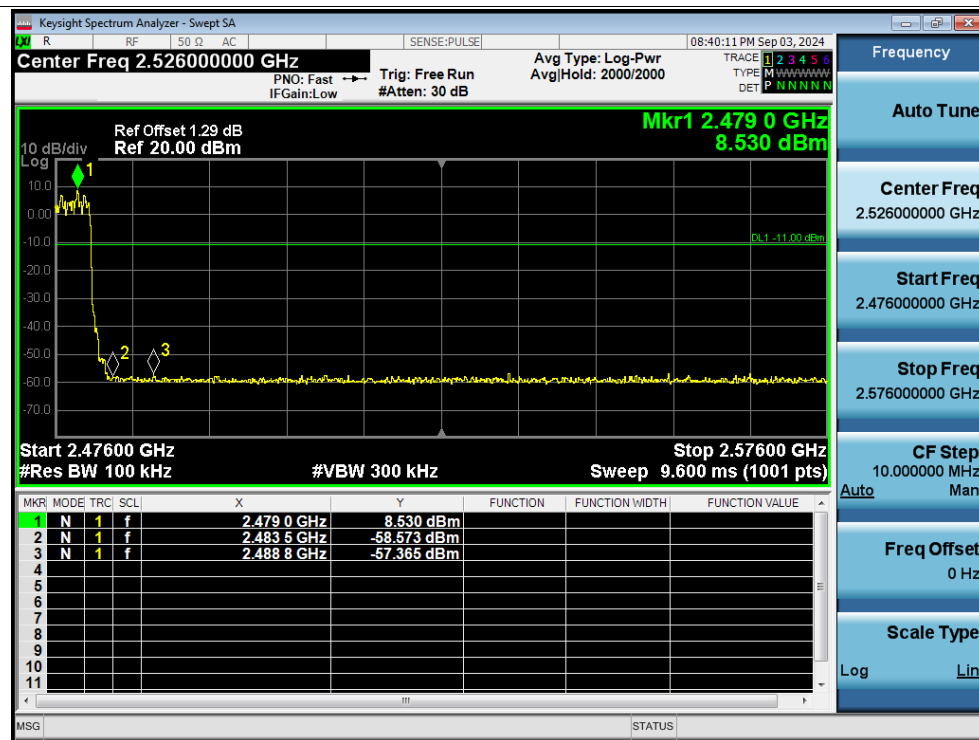
Freq Offset 0 Hz

Scale Type Log Lin

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



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



Conducted RF Spurious Emission

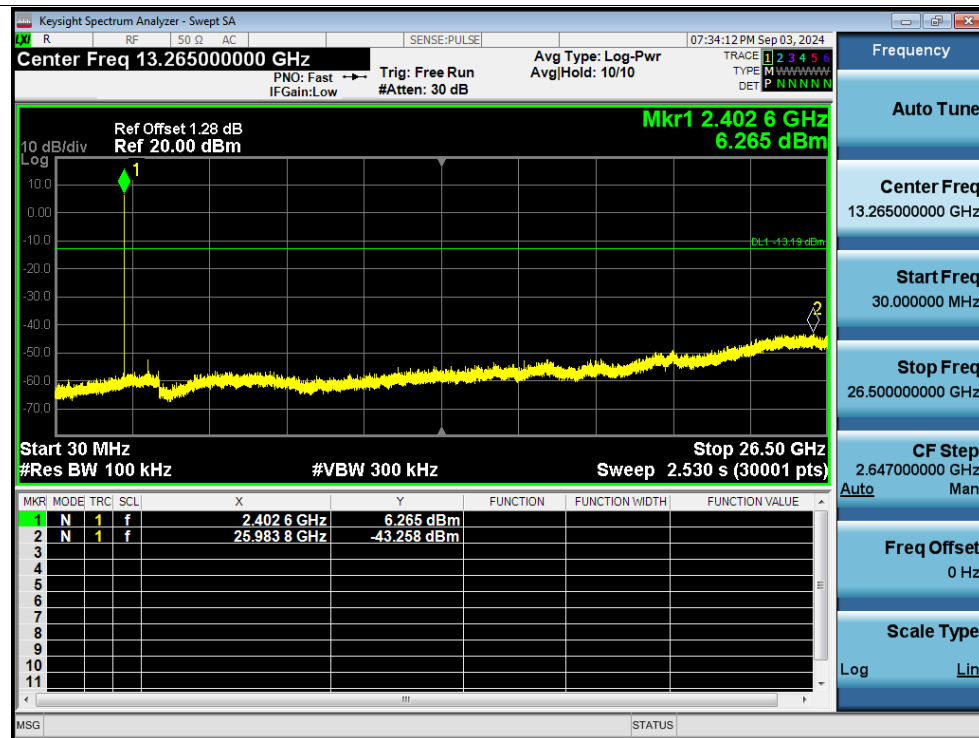
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-50.08	-20	Pass
NVNT	1-DH5	2441	Ant1	-49.86	-20	Pass
NVNT	1-DH5	2480	Ant1	-50.31	-20	Pass
NVNT	2-DH5	2402	Ant1	-49.83	-20	Pass
NVNT	2-DH5	2441	Ant1	-50.43	-20	Pass
NVNT	2-DH5	2480	Ant1	-50.51	-20	Pass
NVNT	3-DH5	2402	Ant1	-49.99	-20	Pass
NVNT	3-DH5	2441	Ant1	-51.28	-20	Pass
NVNT	3-DH5	2480	Ant1	-51.38	-20	Pass

Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



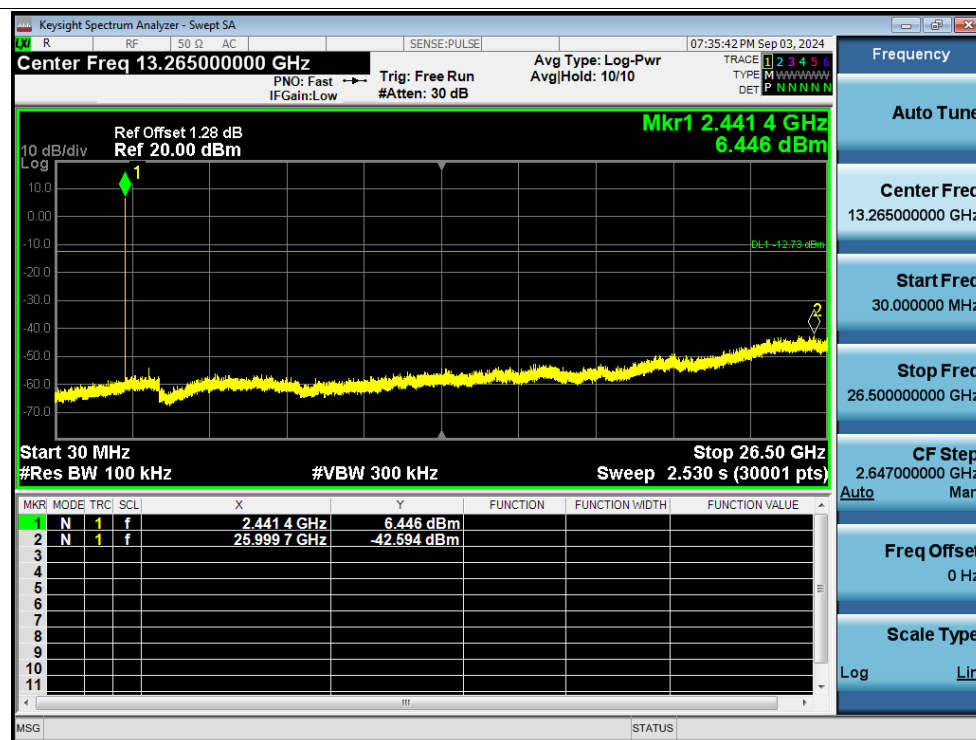
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



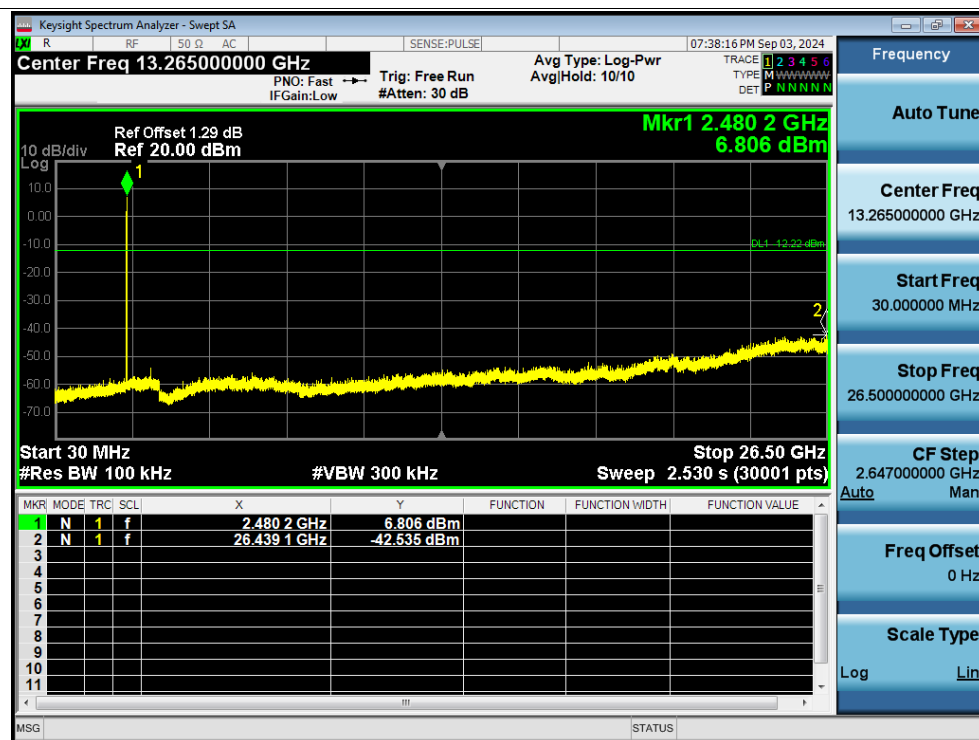
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



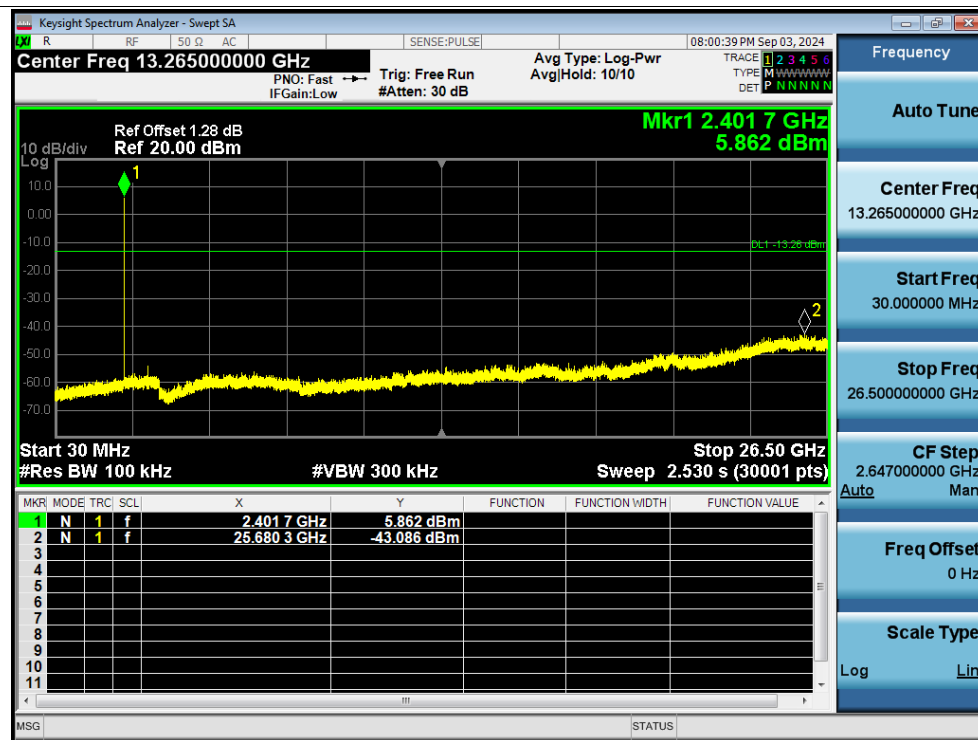
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



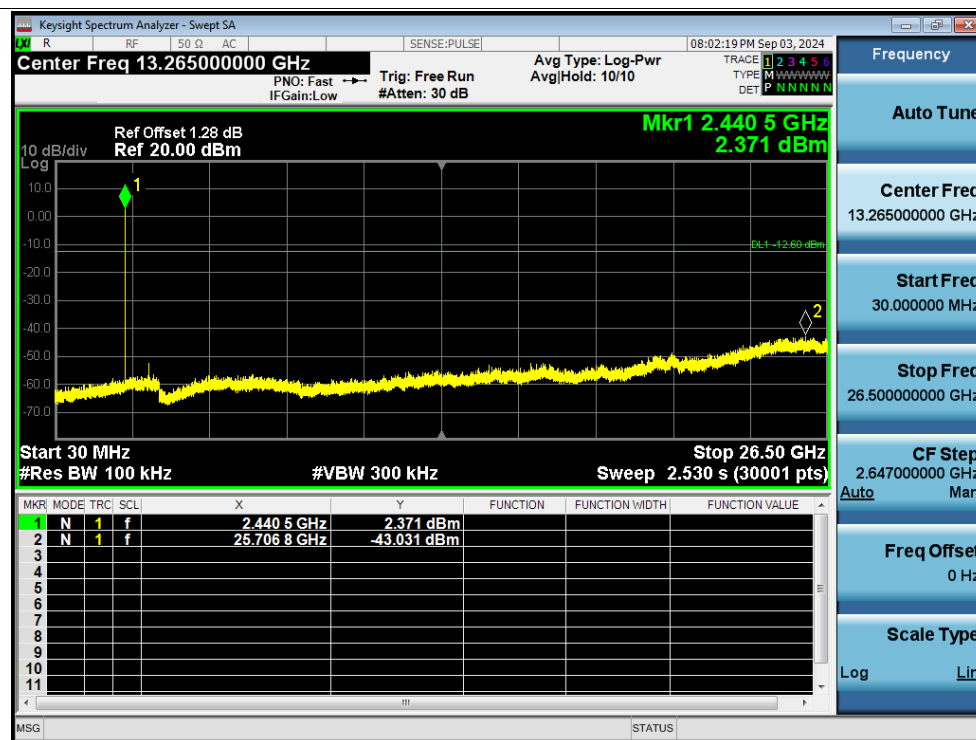
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



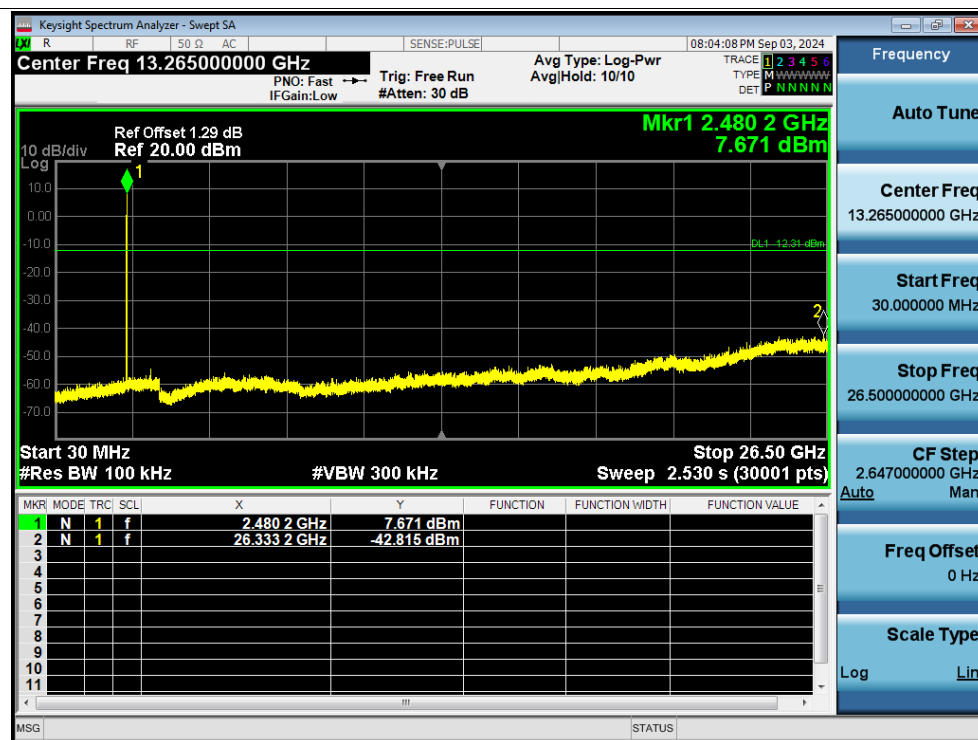
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



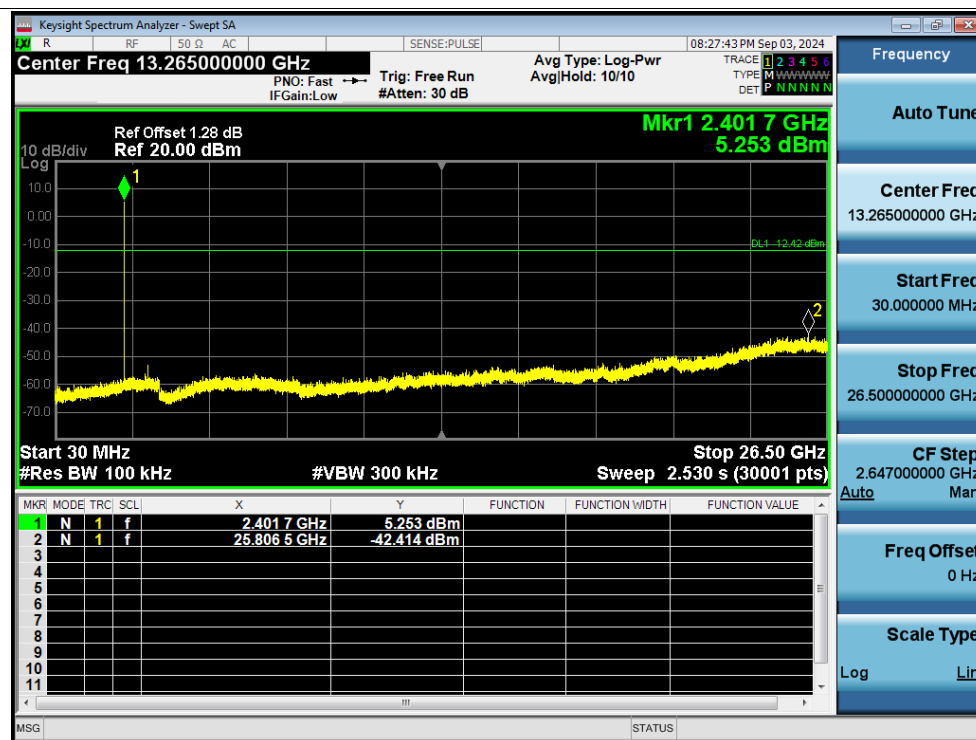
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission



Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Ref



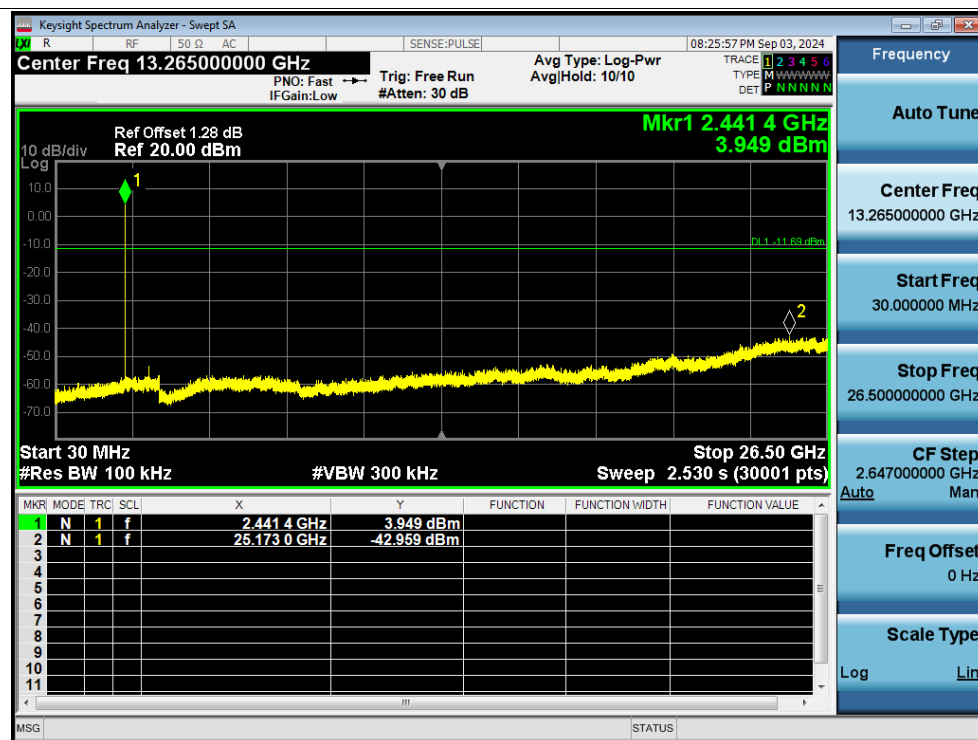
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Emission



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

