

Appendix C

Maximum Conducted Output Power

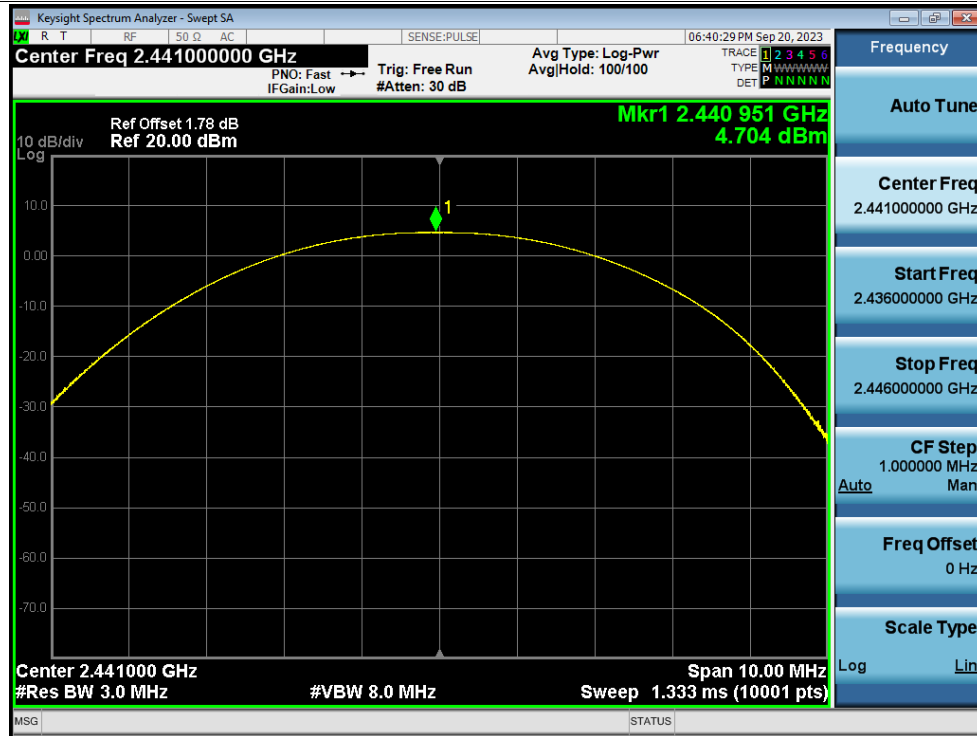
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	E.I.R.P (dBm)	E.I.R.P Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	5.33	0	5.33	21	8.31	<=36.02	Pass
NVNT	1-DH5	2441	Ant1	4.7	0	4.7	21	7.68	<=36.02	Pass
NVNT	1-DH5	2480	Ant1	5.34	0	5.34	21	8.32	<=36.02	Pass
NVNT	2-DH5	2402	Ant1	7.19	0	7.19	21	10.17	<=36.02	Pass
NVNT	2-DH5	2441	Ant1	6.75	0	6.75	21	9.73	<=36.02	Pass
NVNT	2-DH5	2480	Ant1	7.31	0	7.31	21	10.29	<=36.02	Pass
NVNT	3-DH5	2402	Ant1	8.36	0	8.36	21	11.34	<=36.02	Pass
NVNT	3-DH5	2441	Ant1	7.34	0	7.34	21	10.32	<=36.02	Pass
NVNT	3-DH5	2480	Ant1	7.92	0	7.92	21	10.90	<=36.02	Pass
Note1: Antenna Gain: 2.98dBi; Note2: E.I.R.P = Measured Power + Antenna Gain										

Test Graphs

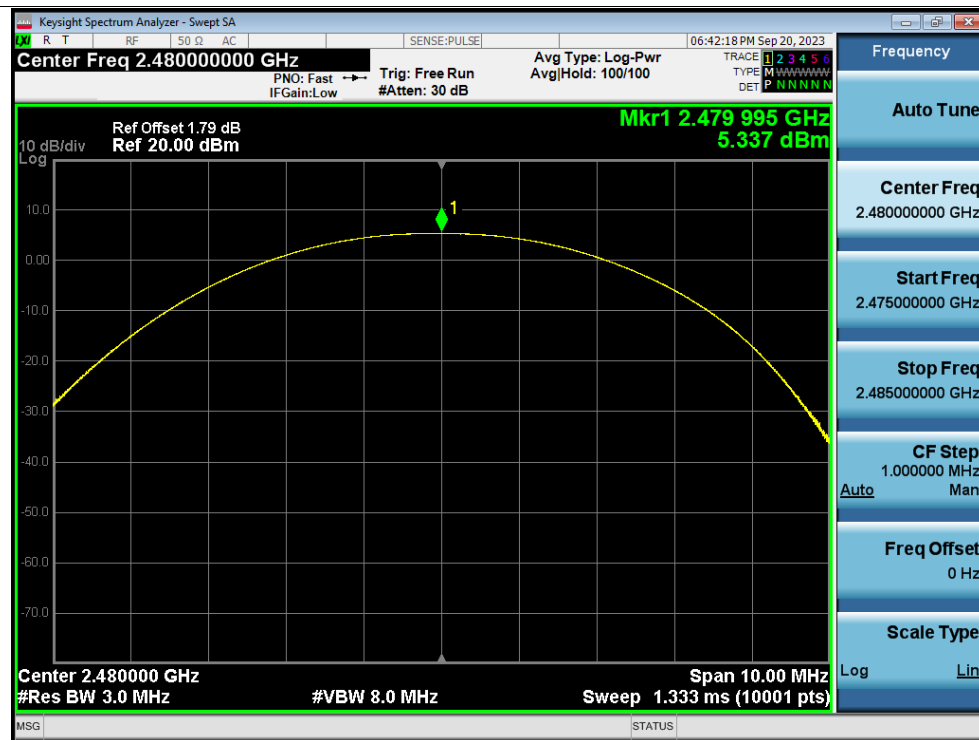
Power NVNT 1-DH5 2402MHz Ant1



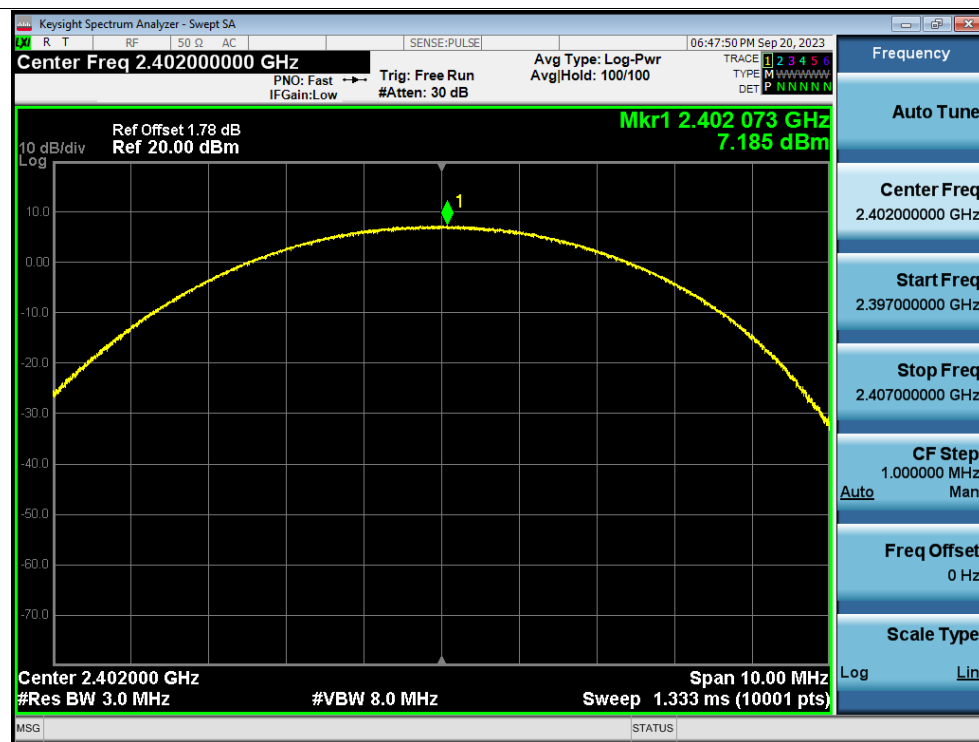
Power NVNT 1-DH5 2441MHz Ant1



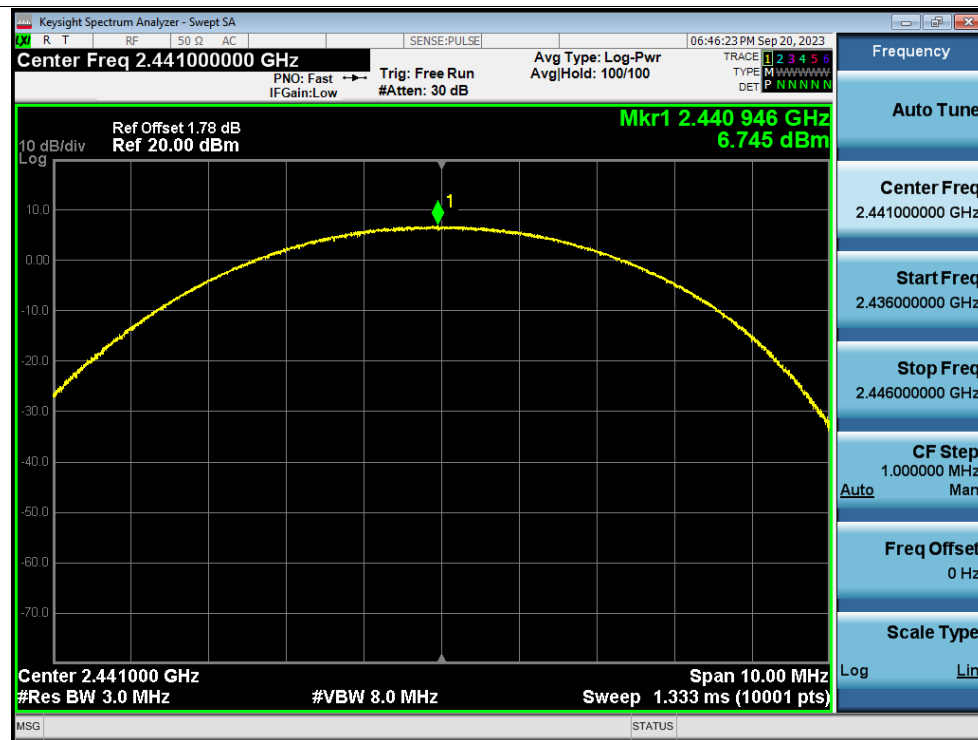
Power NVNT 1-DH5 2480MHz Ant1



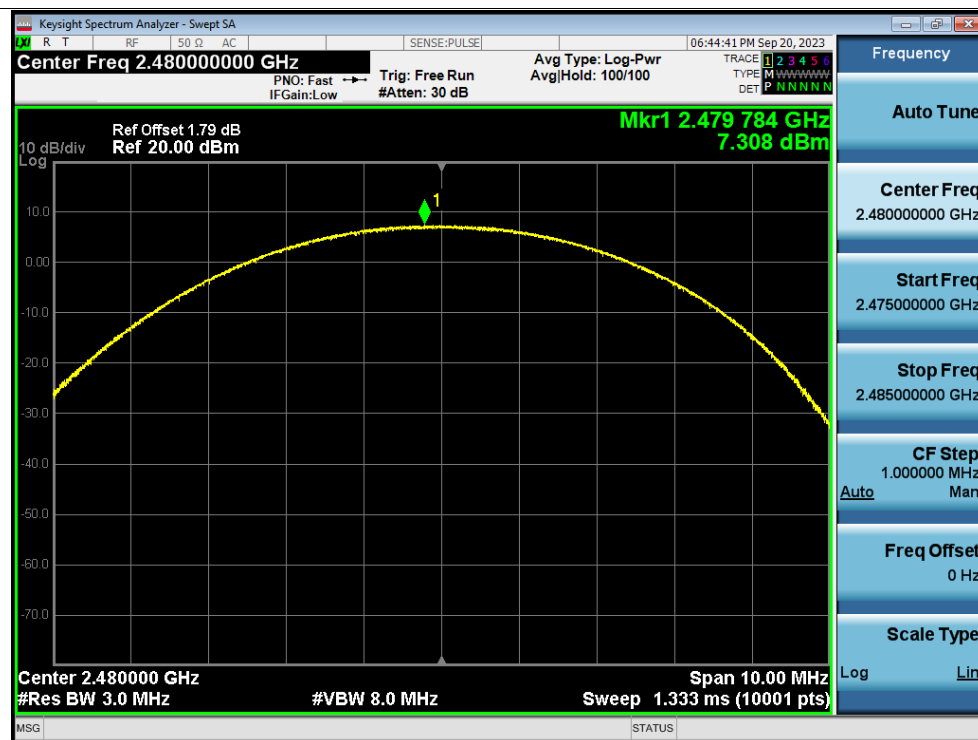
Power NVNT 2-DH5 2402MHz Ant1



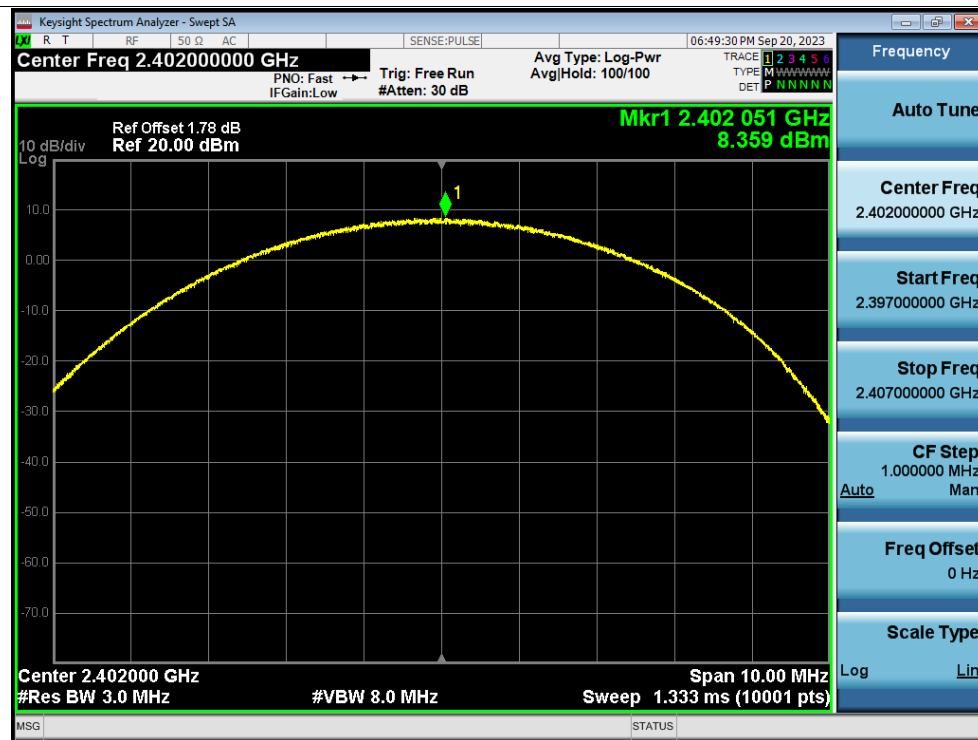
Power NVNT 2-DH5 2441MHz Ant1



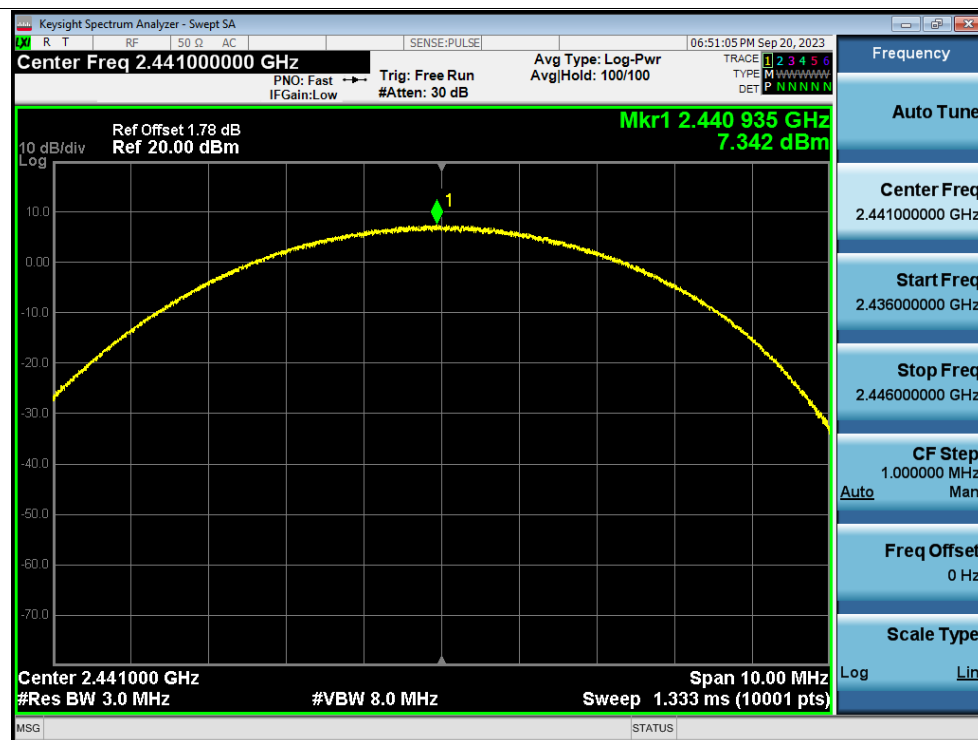
Power NVNT 2-DH5 2480MHz Ant1



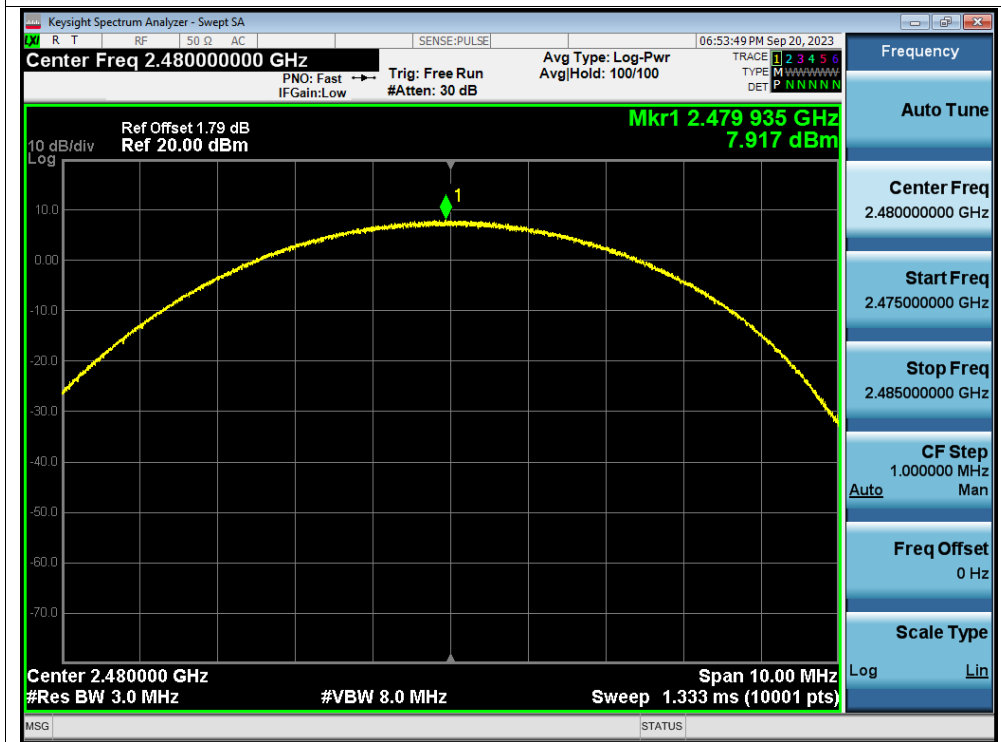
Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-DH5 2441MHz Ant1



Power NVNT 3-DH5 2480MHz Ant1



-20dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.954	Pass
NVNT	1-DH5	2441	Ant1	0.958	Pass
NVNT	1-DH5	2480	Ant1	0.952	Pass
NVNT	2-DH5	2402	Ant1	1.361	Pass
NVNT	2-DH5	2441	Ant1	1.365	Pass
NVNT	2-DH5	2480	Ant1	1.365	Pass
NVNT	3-DH5	2402	Ant1	1.346	Pass
NVNT	3-DH5	2441	Ant1	1.348	Pass
NVNT	3-DH5	2480	Ant1	1.347	Pass

Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



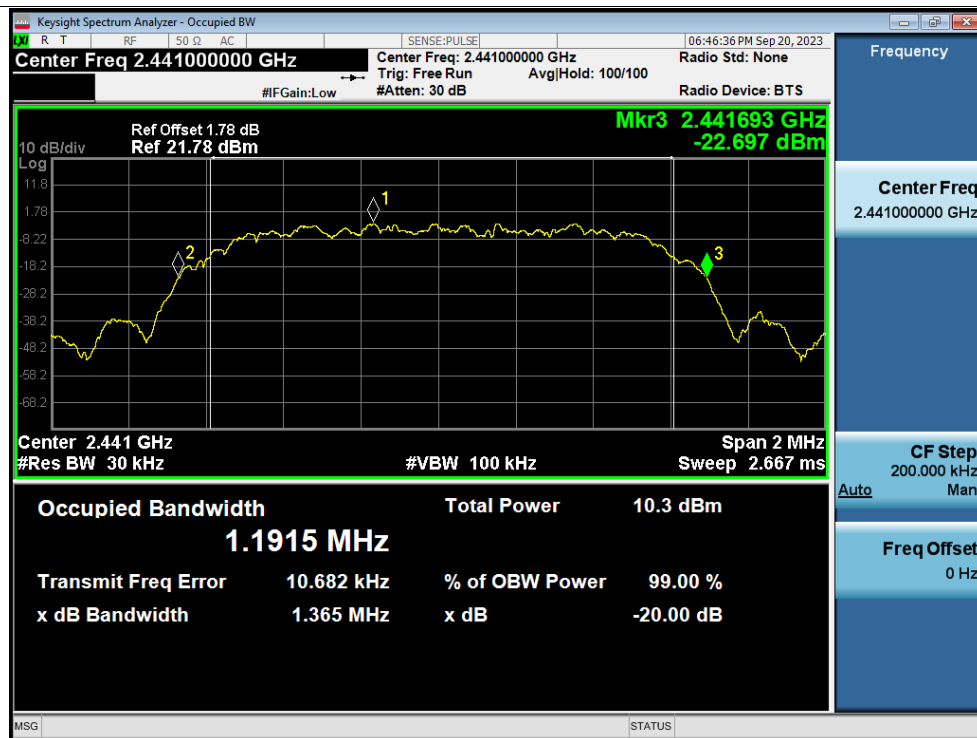
-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



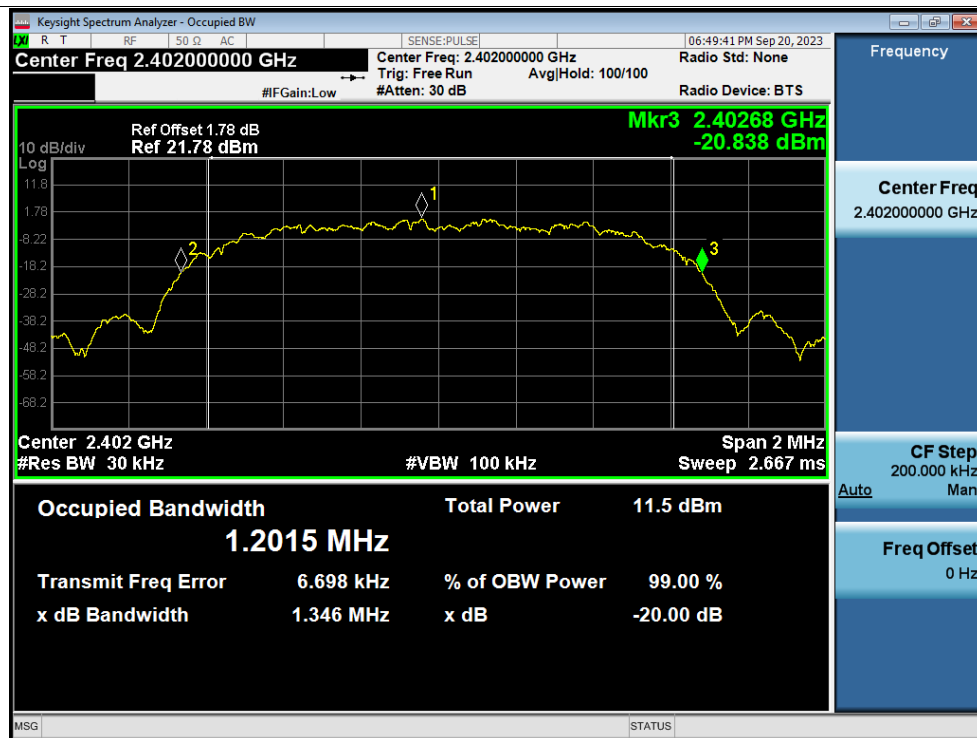
-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1



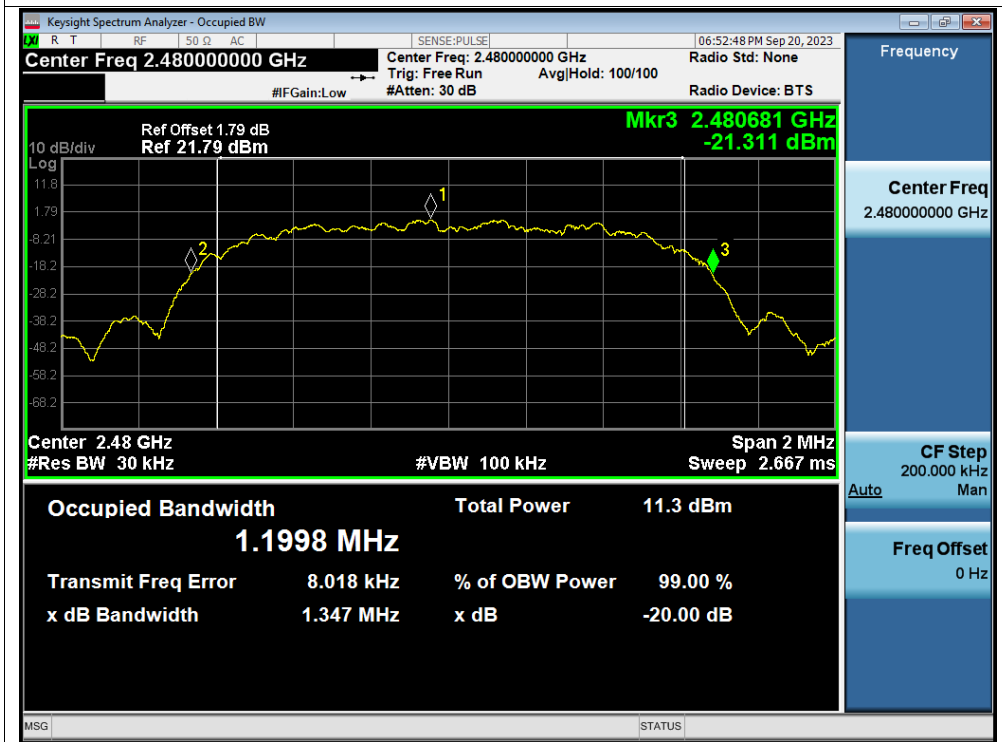
-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2480MHz Ant1



Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH5	2402	Ant1	0.886
NVNT	1-DH5	2441	Ant1	0.893
NVNT	1-DH5	2480	Ant1	0.898
NVNT	2-DH5	2402	Ant1	1.194
NVNT	2-DH5	2441	Ant1	1.194
NVNT	2-DH5	2480	Ant1	1.192
NVNT	3-DH5	2402	Ant1	1.202
NVNT	3-DH5	2441	Ant1	1.187
NVNT	3-DH5	2480	Ant1	1.202

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



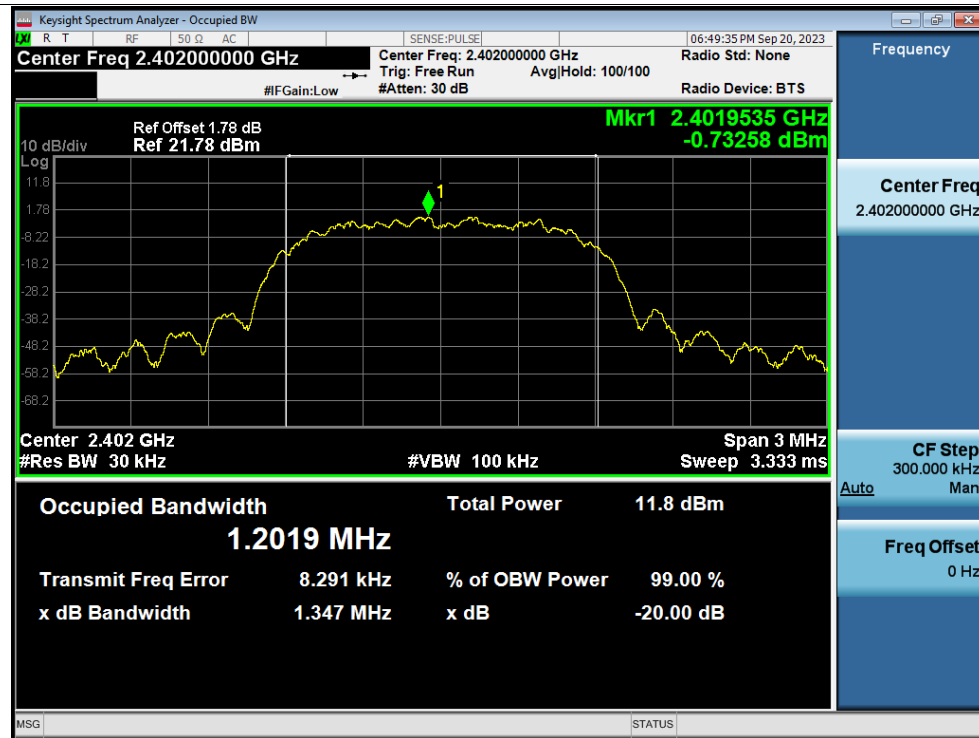
OBW NVNT 2-DH5 2441MHz Ant1



OBW NVNT 2-DH5 2480MHz Ant1



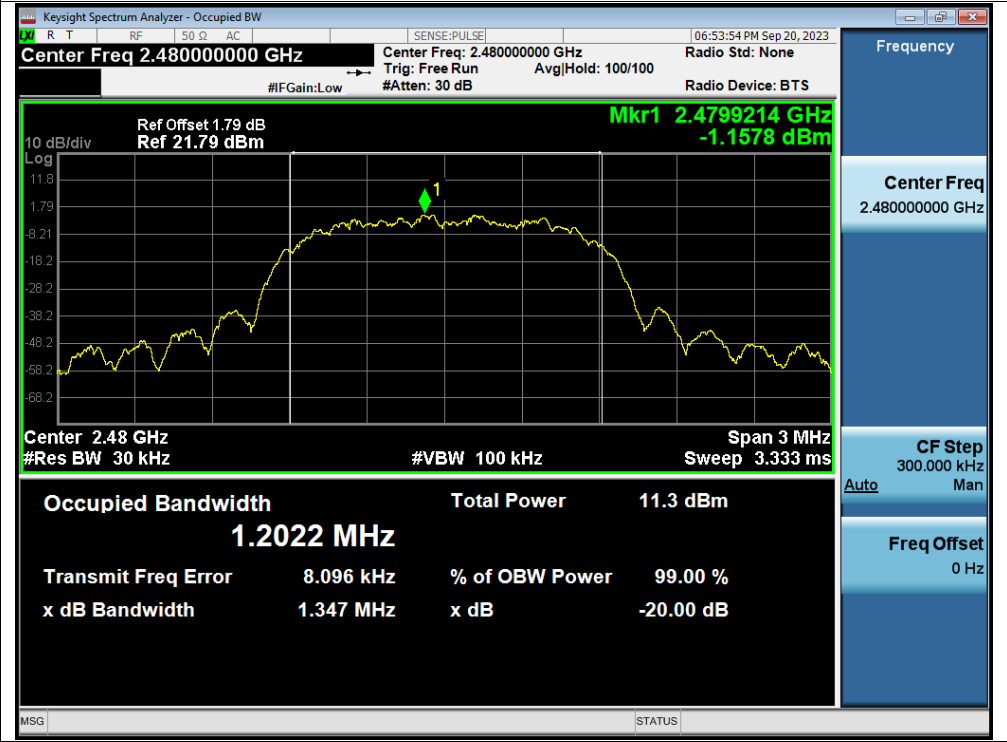
OBW NVNT 3-DH5 2402MHz Ant1



OBW NVNT 3-DH5 2441MHz Ant1



OBW NVNT 3-DH5 2480MHz Ant1

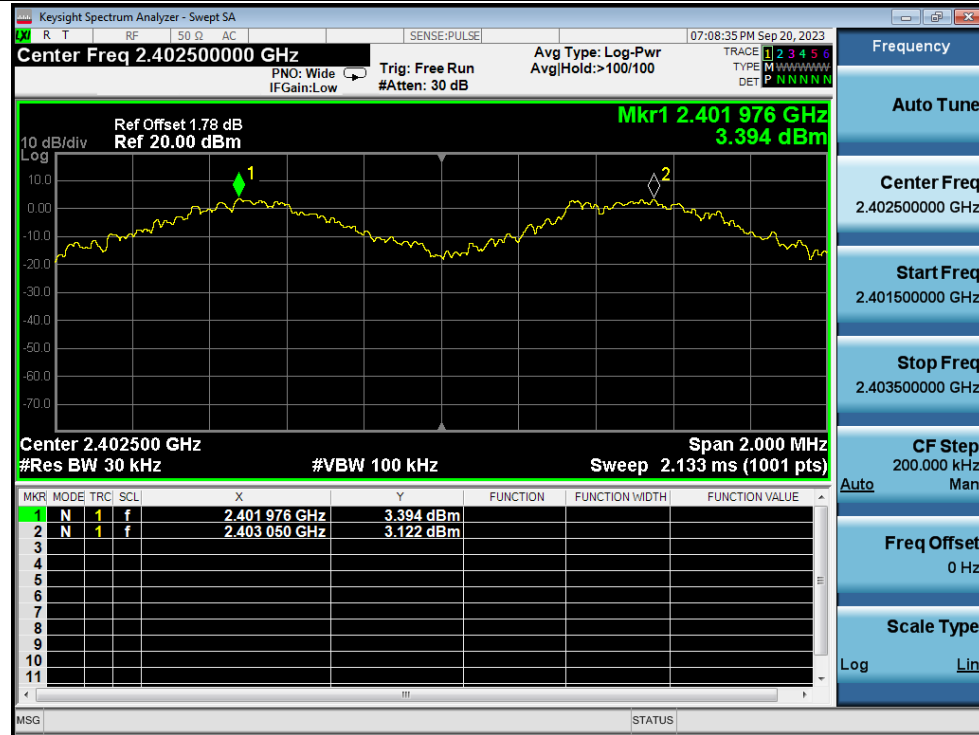


Carrier Frequencies Separation

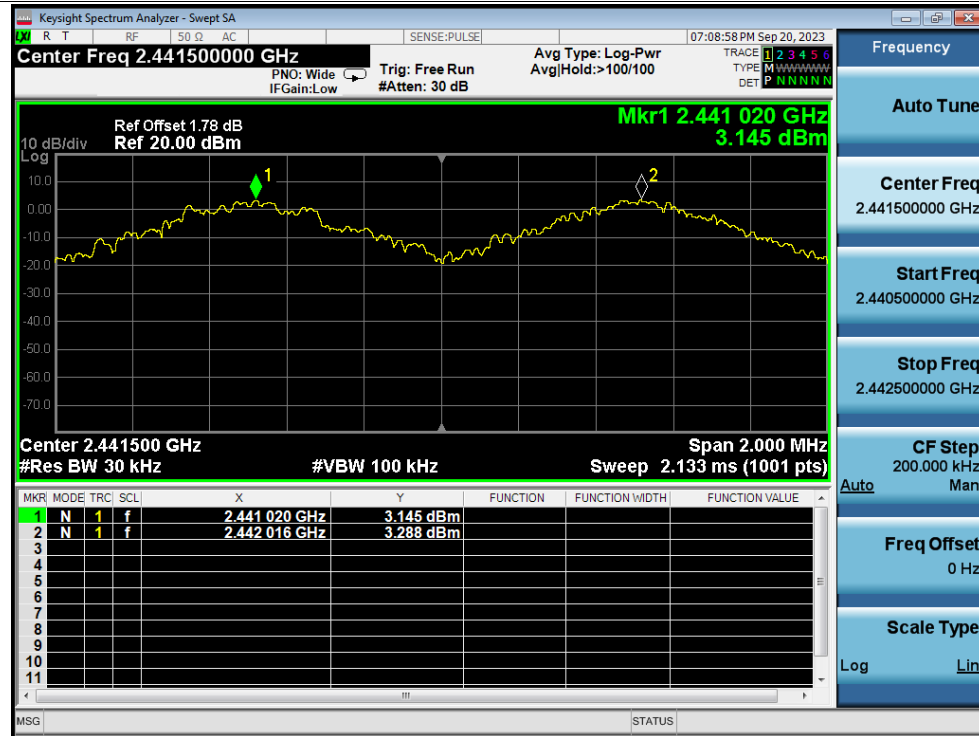
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2401.976	2403.05	1.074	0.636	Pass
NVNT	1-DH5	Ant1	2441.02	2442.016	0.996	0.639	Pass
NVNT	1-DH5	Ant1	2478.954	2480.032	1.078	0.635	Pass
NVNT	2-DH5	Ant1	2401.846	2403.01	1.164	0.907	Pass
NVNT	2-DH5	Ant1	2440.848	2441.992	1.144	0.91	Pass
NVNT	2-DH5	Ant1	2478.958	2479.978	1.02	0.91	Pass
NVNT	3-DH5	Ant1	2402	2402.942	0.942	0.897	Pass
NVNT	3-DH5	Ant1	2440.984	2441.974	0.99	0.899	Pass
NVNT	3-DH5	Ant1	2478.684	2479.682	0.998	0.898	Pass

Test Graphs

CFS NVNT 1-DH5 2402MHz Ant1



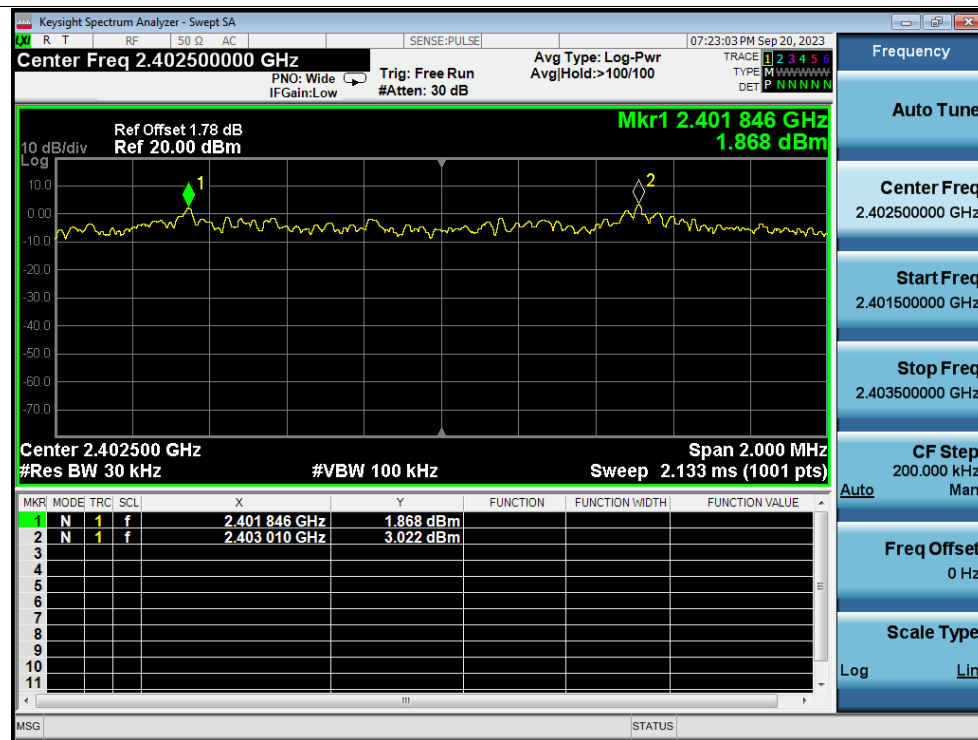
CFS NVNT 1-DH5 2441MHz Ant1



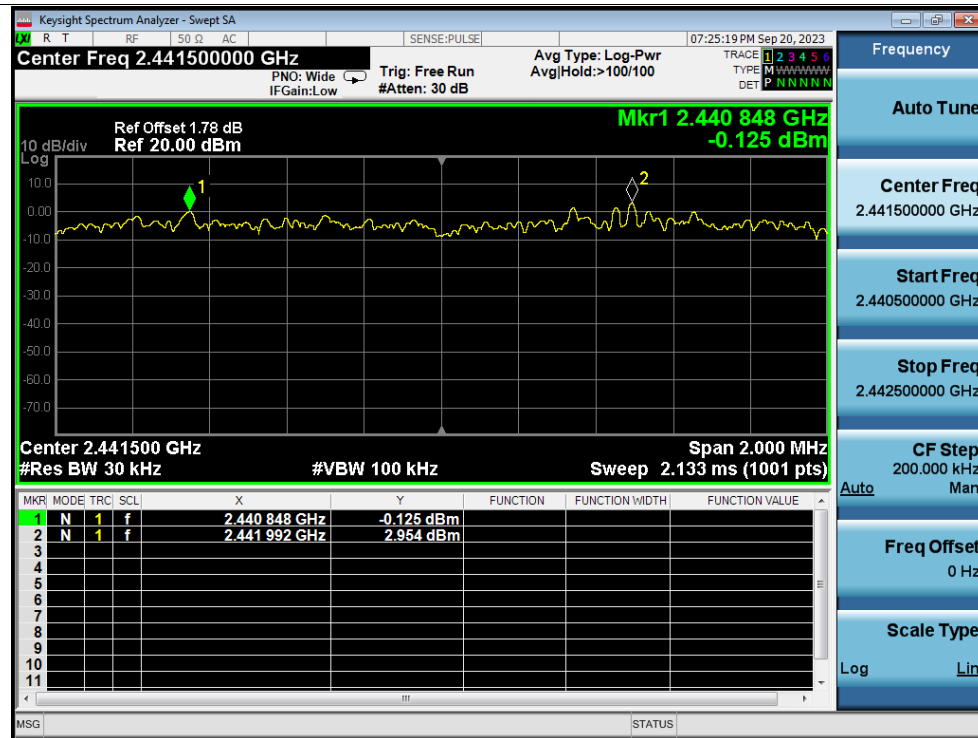
CFS NVNT 1-DH5 2480MHz Ant1



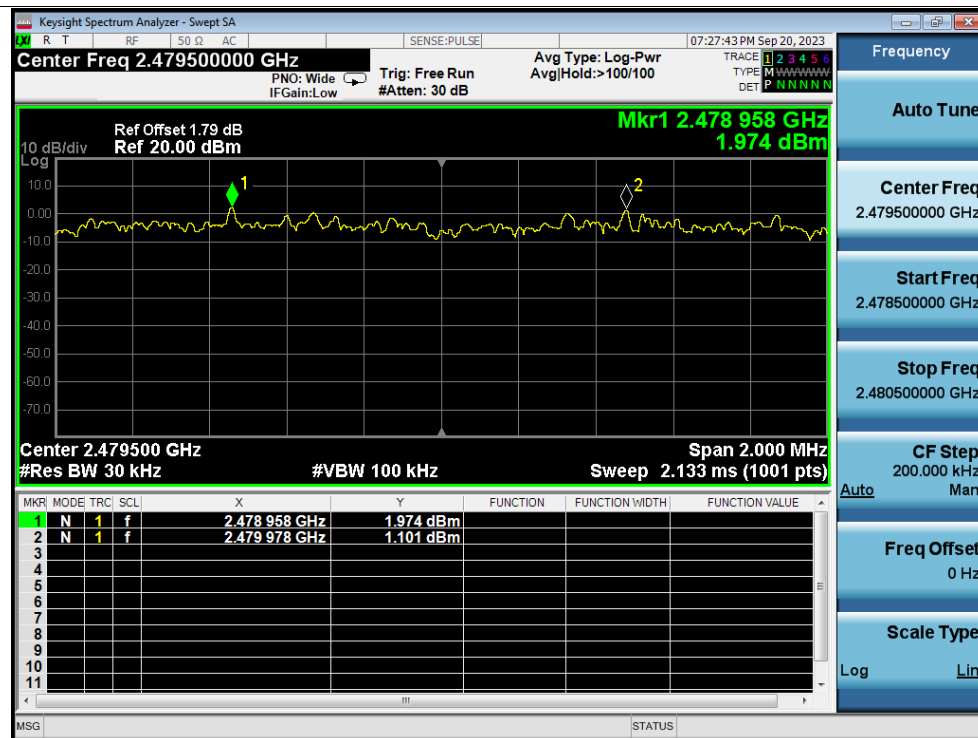
CFS NVNT 2-DH5 2402MHz Ant1



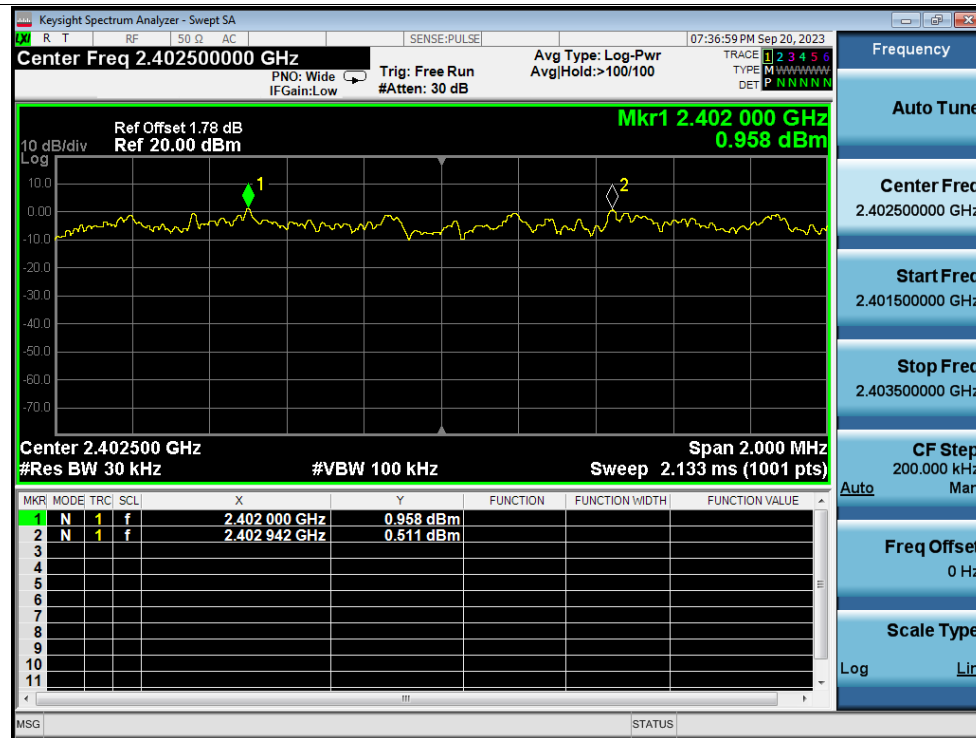
CFS NVNT 2-DH5 2441MHz Ant1



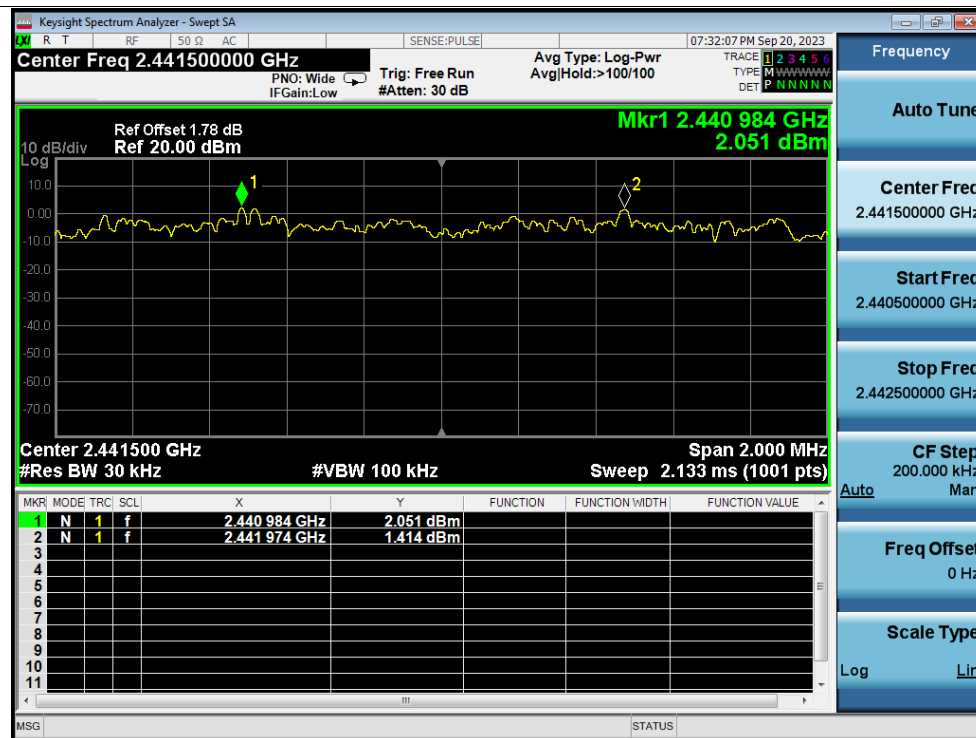
CFS NVNT 2-DH5 2480MHz Ant1



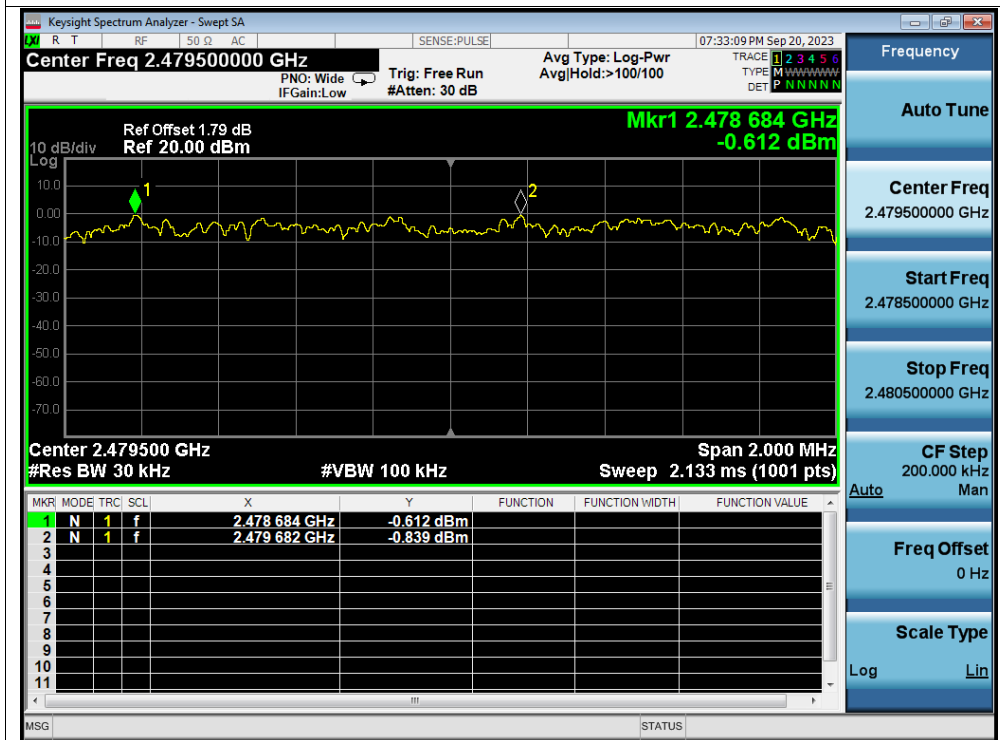
CFS NVNT 3-DH5 2402MHz Ant1



CFS NVNT 3-DH5 2441MHz Ant1



CFS NVNT 3-DH5 2480MHz Ant1

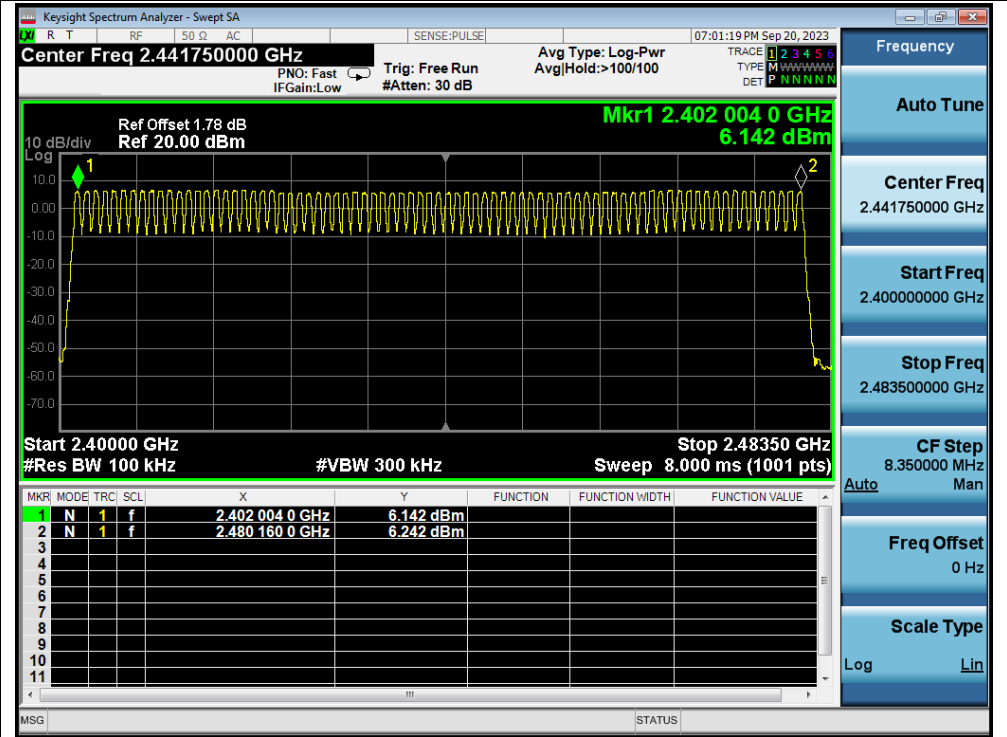


Number of Hopping Channel

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



Keysight Spectrum Analyzer - Swept SA

R T RF S0 B AC SENSE:PULSE 07:23:27 PM Sep 20, 2023

Center Freq 2.441750000 GHz

PNO: Fast IFGain:Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg|Hold:>100/100

TRACE 1 2 3 4 5 6 TYPE M N P W X Y Z DET P N N N N N N

Ref Offset 1.78 dB Ref 20.00 dBm

Mkr1 2.4017535 GHz 1.917 dBm

Start 2.40000 GHz Stop 2.48350 GHz
#Res BW 100 kHz #VBW 300 kHz Sweep 8.000 ms (1001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.4017535 GHz	1.917 dBm			
2	N	1	f	2.4804105 GHz	1.556 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq 2.441750000 GHz

Start Freq 2.400000000 GHz

Stop Freq 2.483500000 GHz

CF Step 8.350000 MHz Man

Auto

Freq Offset 0 Hz

Scale Type Log Lin

Hopping No. NVNT 3-DH5 2402MHz Ant1

Keysight Spectrum Analyzer - Swept SA

R T RF S0 Ω AC SENSE:PULSE 07:30:16 PM Sep 20, 2023

Center Freq 2.441750000 GHz PNO: Fast Trig: Free Run Avg Type: Log-Pwr
IFGain:Low #Atten: 30 dB Avg|Hold:>100/100

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

Ref Offset 1.78 dB
Ref 20.00 dBm

Mkr1 2.401 503 0 GHz -0.483 dBm

10 dB/div Log

Start 2.40000 GHz Stop 2.48350 GHz
#Res BW 100 kHz #VBW 300 kHz Sweep 8.000 ms (1001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.401 503 0 GHz	-0.483 dBm			
2	N	1	f	2.480 327 0 GHz	-2.615 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								

Frequency

Auto Tune

Center Freq 2.441750000 GHz

Start Freq 2.400000000 GHz

Stop Freq 2.483500000 GHz

CF Step 8.350000 MHz Man

Autu

Freq Offset 0 Hz

Scale Type Log Lin

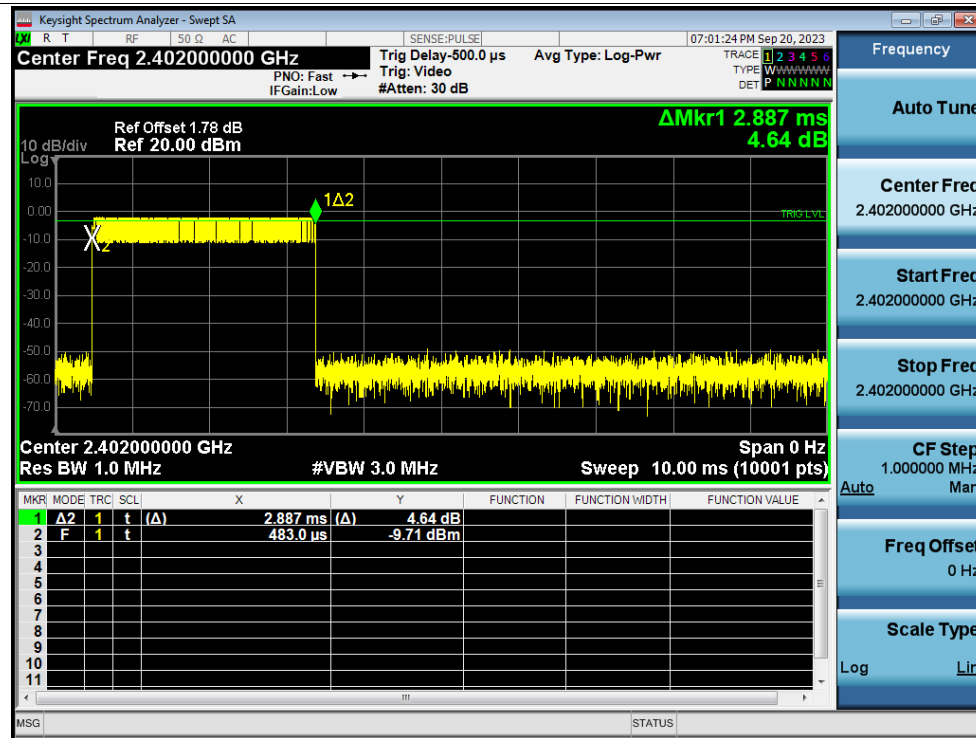
MSG STATUS

Dwell Time

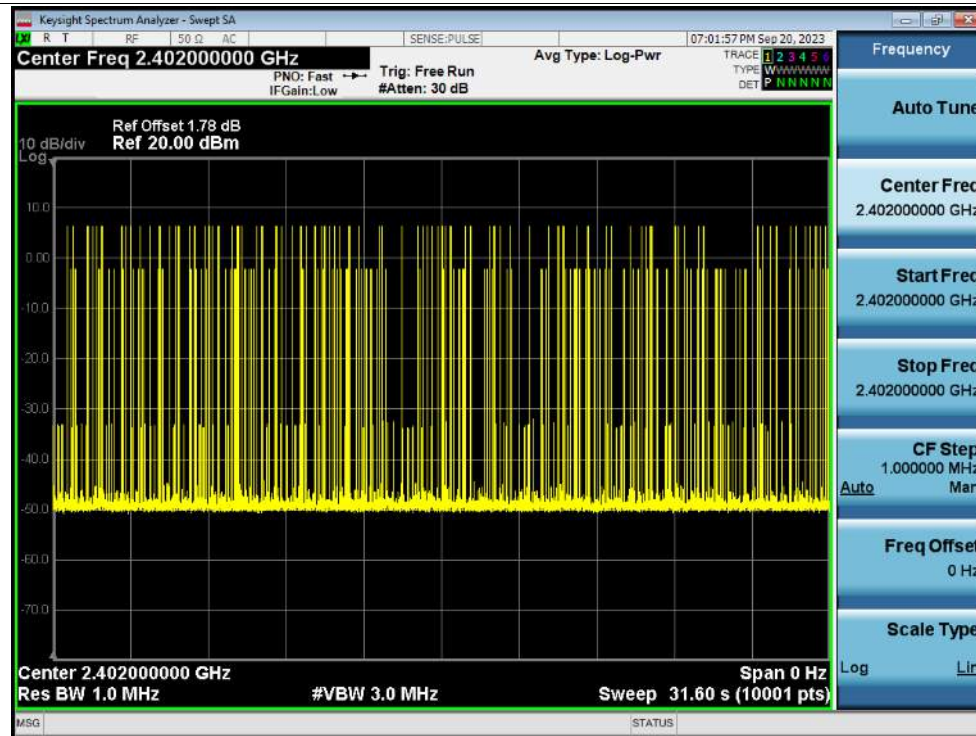
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.887	300.248	104	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.887	297.361	103	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.891	306.446	106	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.891	309.337	107	31600	400	Pass
NVNT	2-DH5	2480	Ant1	2.891	286.209	99	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.893	341.374	118	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.893	306.658	106	31600	400	Pass
NVNT	3-DH5	2480	Ant1	2.894	300.976	104	31600	400	Pass

Test Graphs

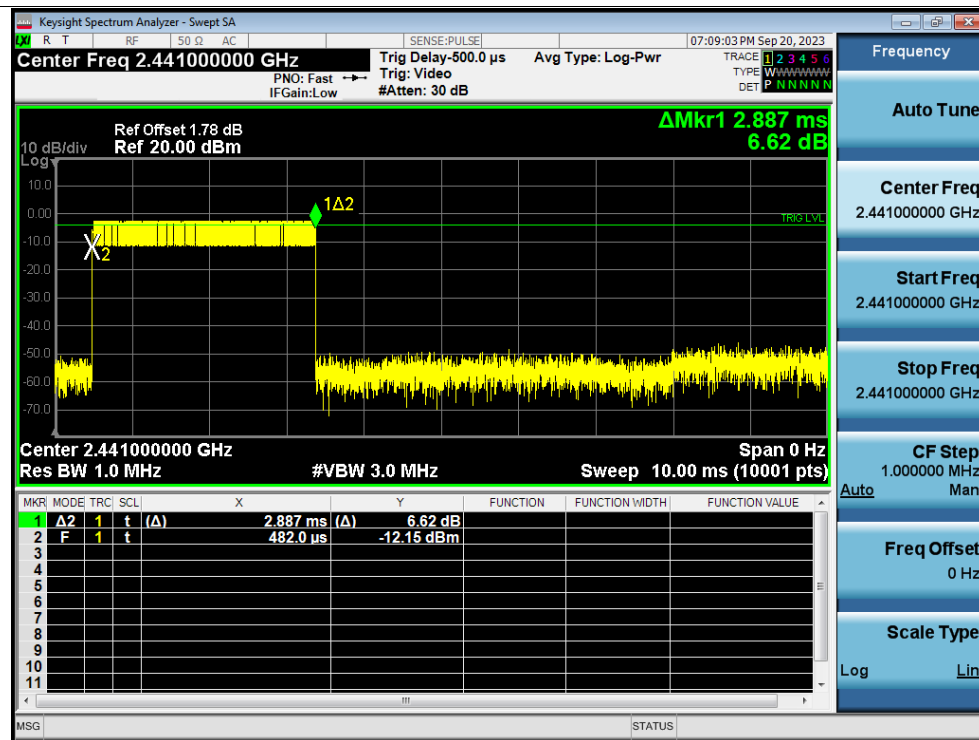
Dwell NVNT 1-DH5 2402MHz Ant1 One Burst



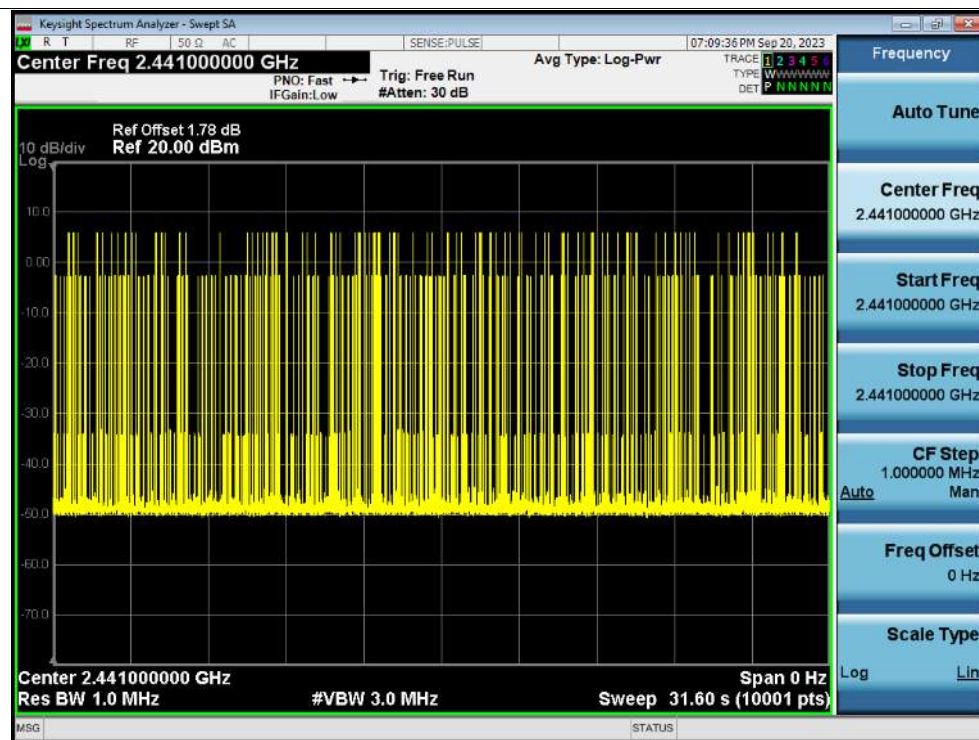
Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated



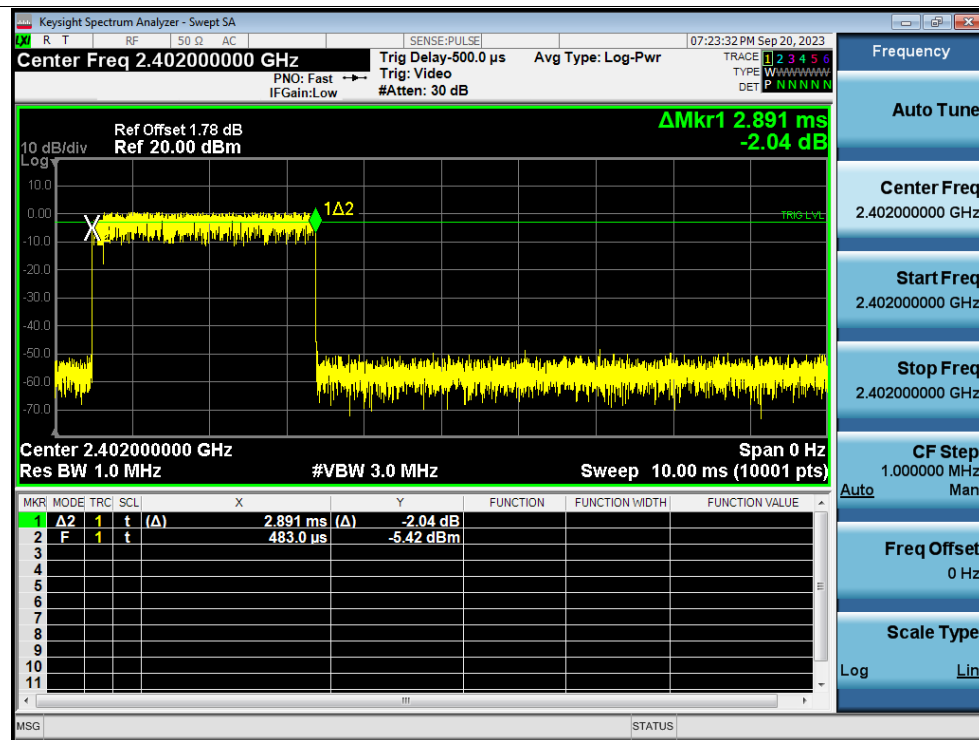
Dwell NVNT 1-DH5 2441MHz Ant1 One Burst



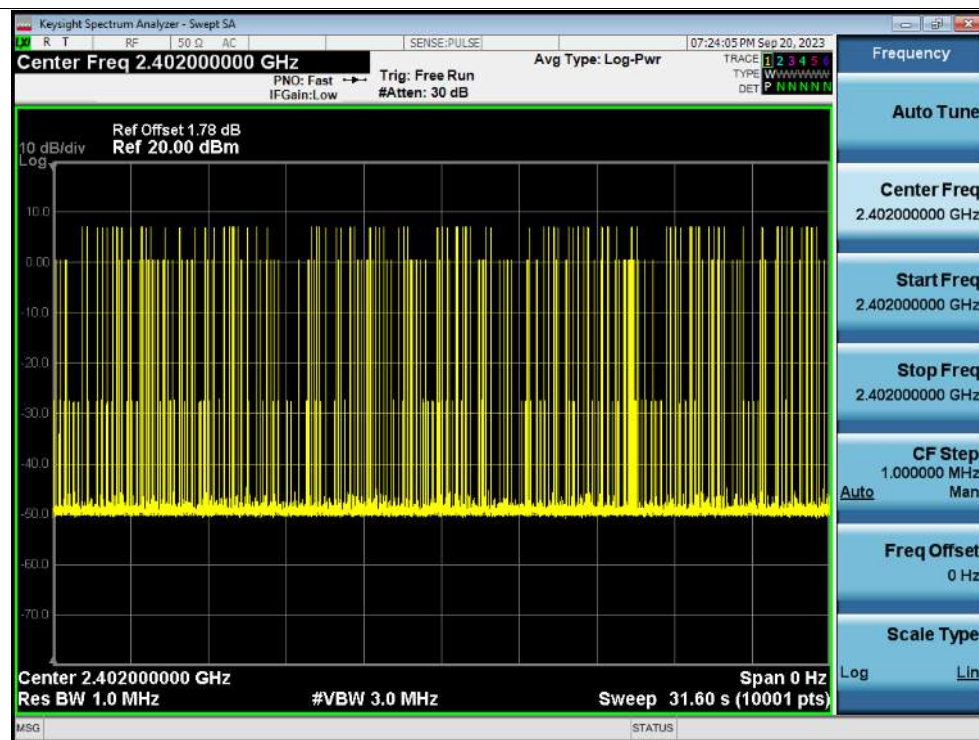
Dwell NVNT 1-DH5 2441MHz Ant1 Accumulated



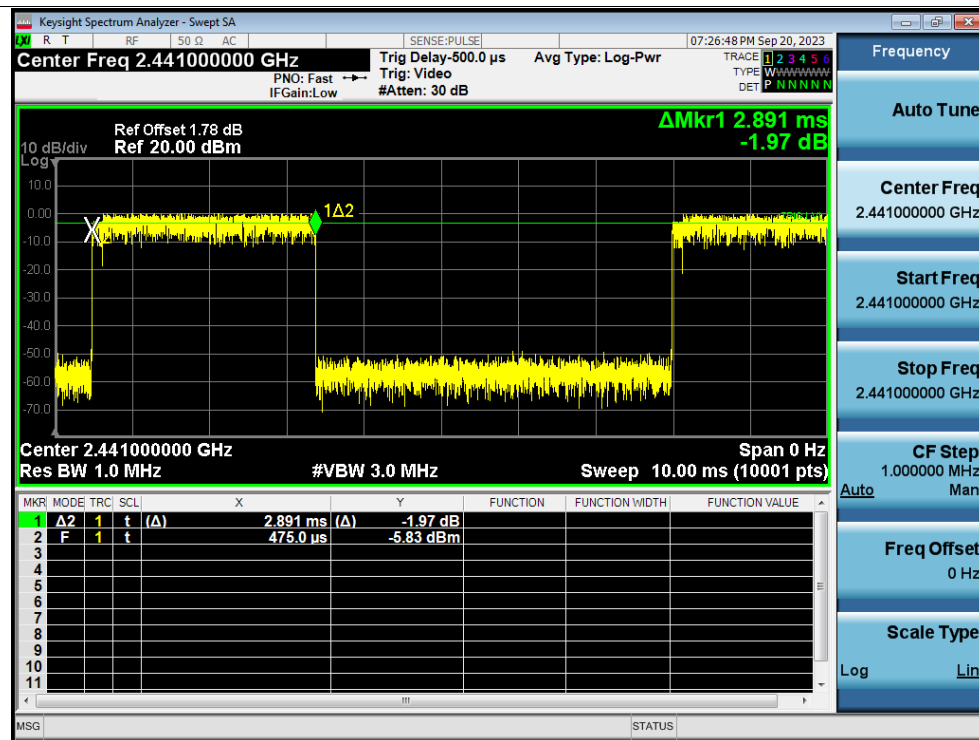
Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



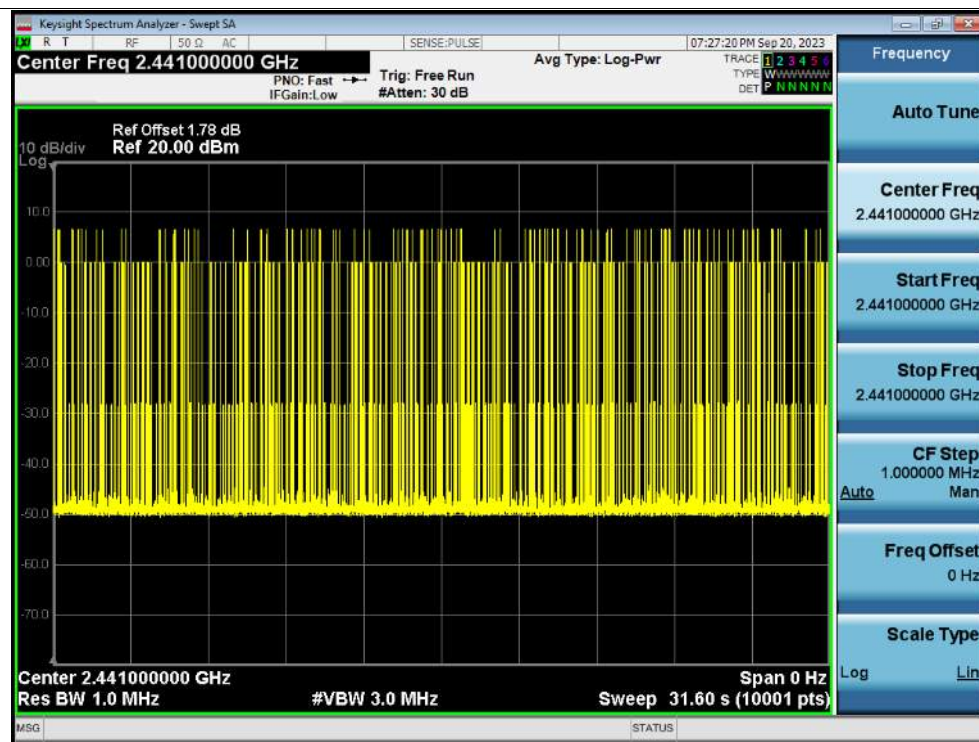
Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated



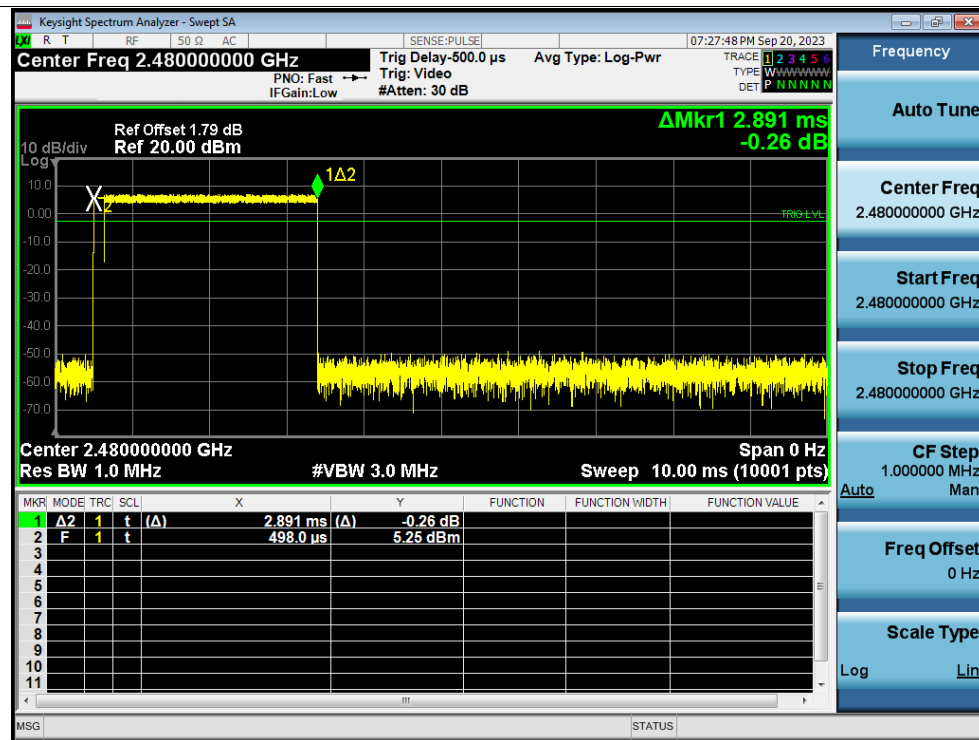
Dwell NVNT 2-DH5 2441MHz Ant1 One Burst



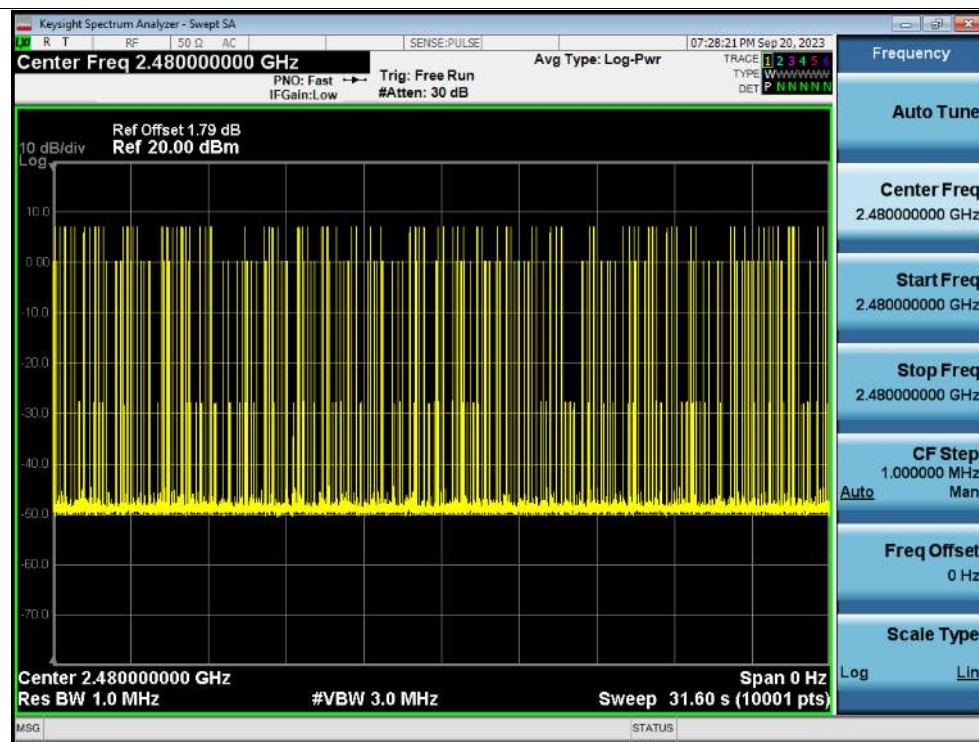
Dwell NVNT 2-DH5 2441MHz Ant1 Accumulated



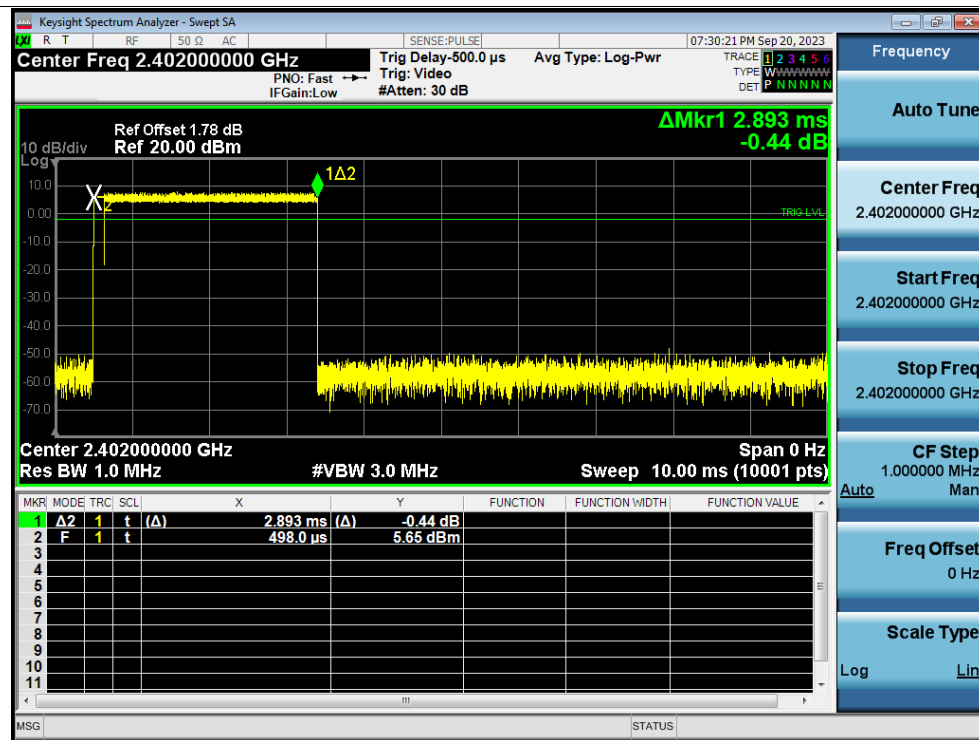
Dwell NVNT 2-DH5 2480MHz Ant1 One Burst



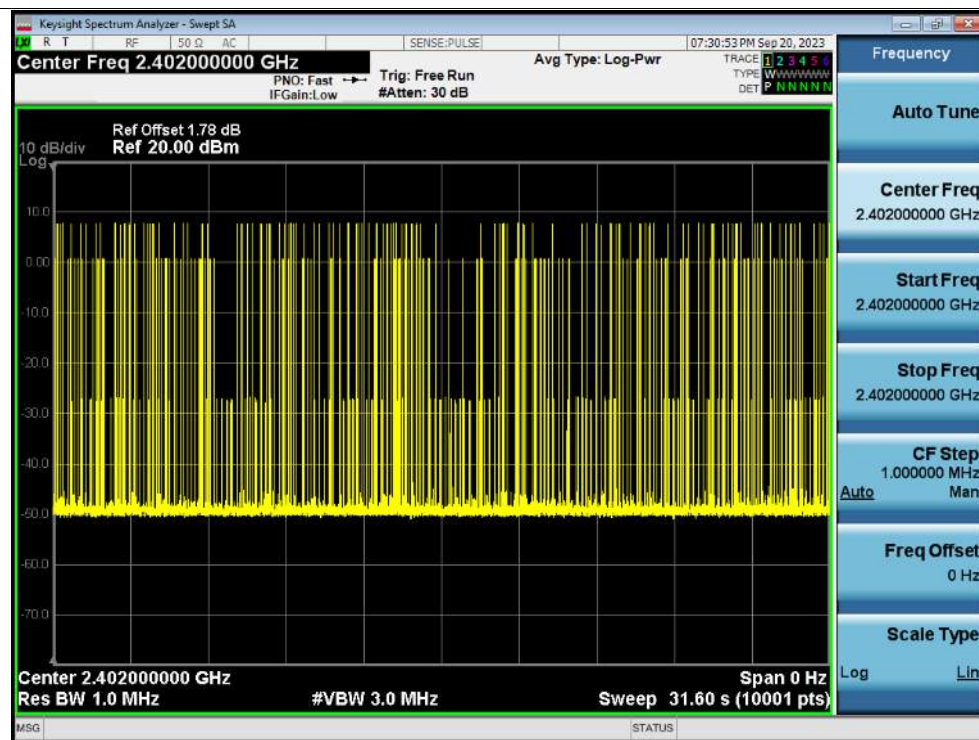
Dwell NVNT 2-DH5 2480MHz Ant1 Accumulated



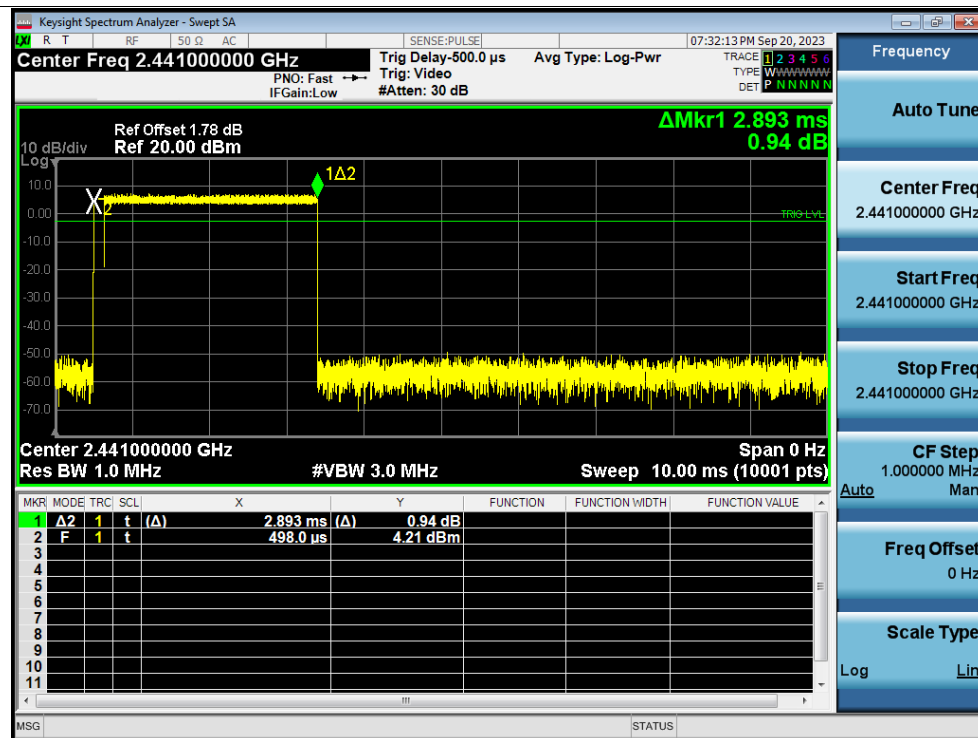
Dwell NVNT 3-DH5 2402MHz Ant1 One Burst



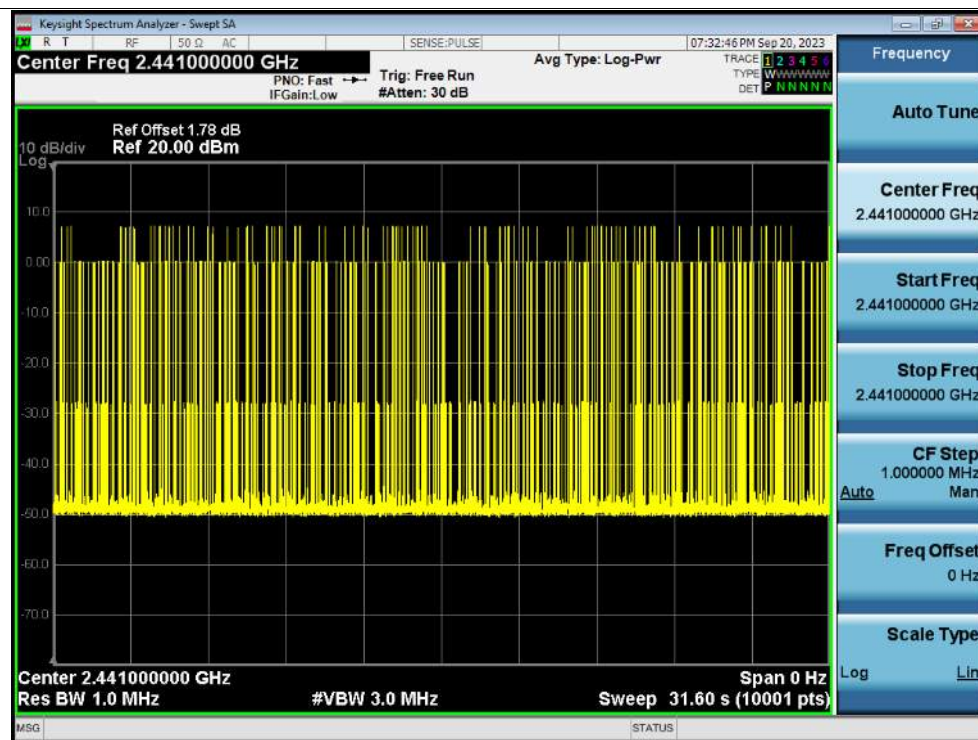
Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated



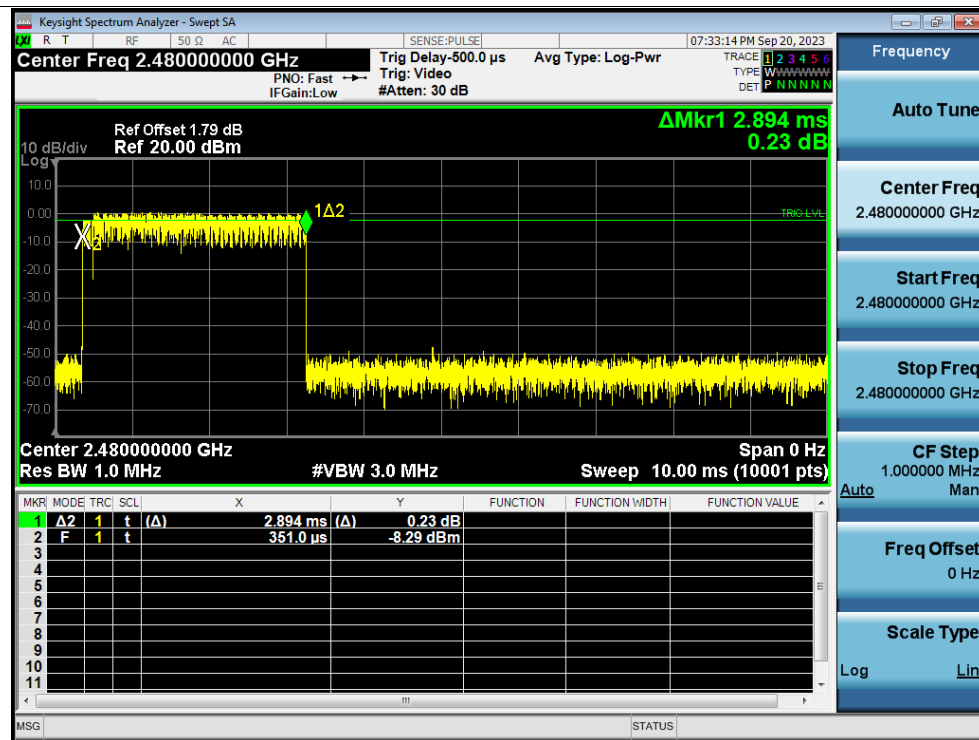
Dwell NVNT 3-DH5 2441MHz Ant1 One Burst



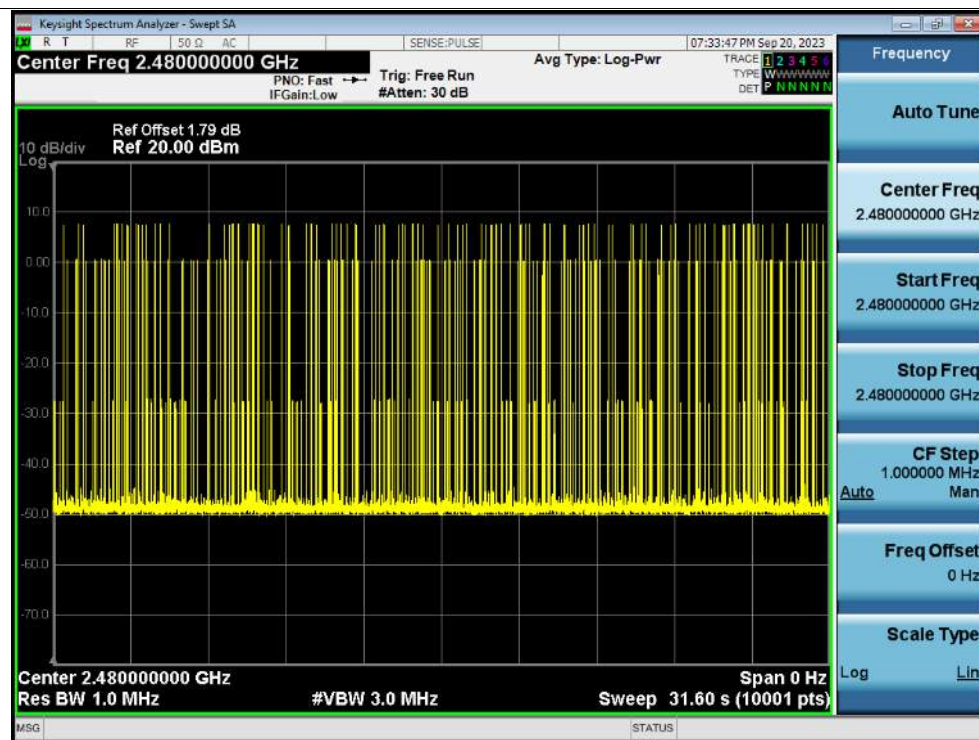
Dwell NVNT 3-DH5 2441MHz Ant1 Accumulated



Dwell NVNT 3-DH5 2480MHz Ant1 One Burst



Dwell NVNT 3-DH5 2480MHz Ant1 Accumulated

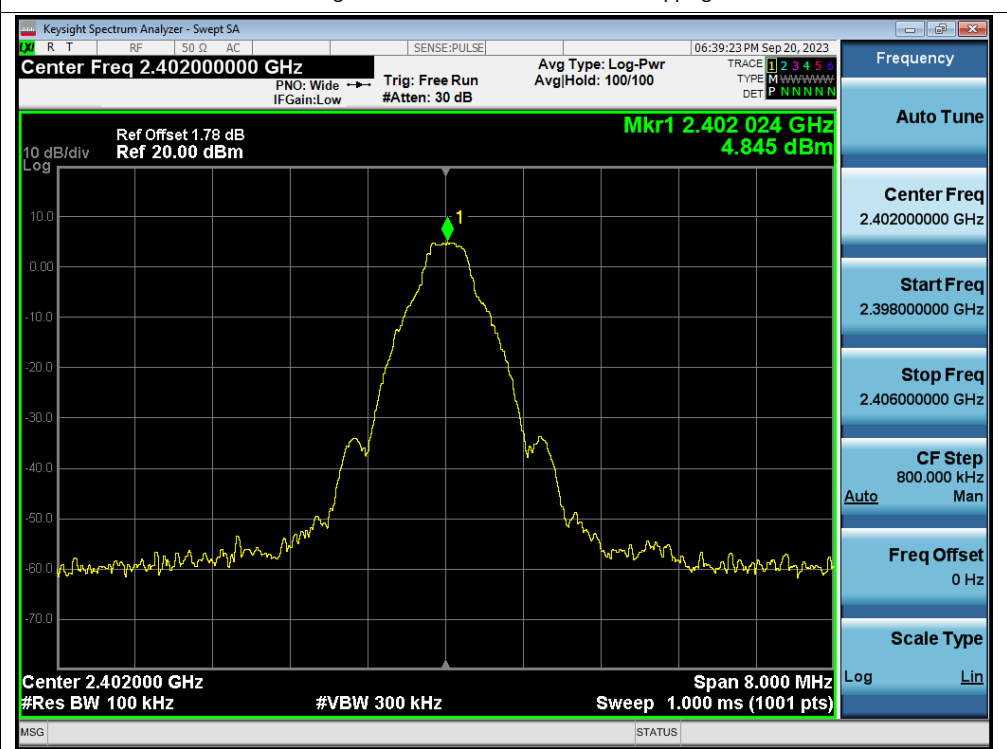


Band Edge

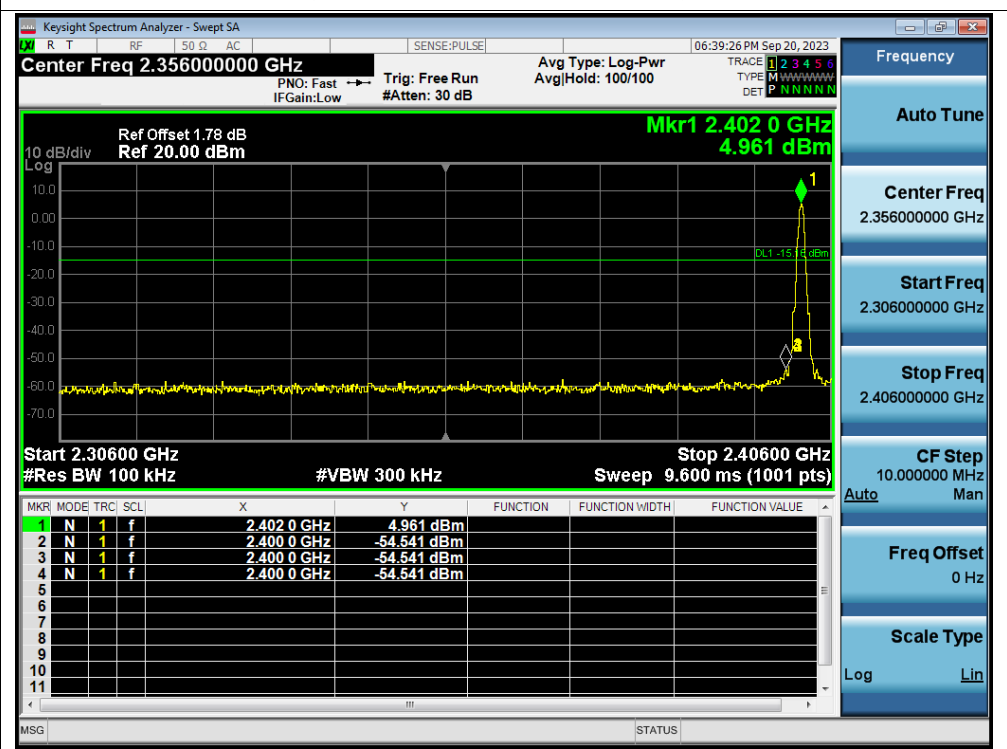
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-59.39	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-61.89	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-54.78	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-59.81	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-56.11	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-59.23	-20	Pass

Test Graphs

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



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



Keysight Spectrum Analyzer - Swept SA

RF 50.0 AC SENSE:PULSE 06:42:37 PM Sep 20, 2023

Center Freq 2.48000000 GHz PNO: Wide Trig: Free Run Avg Type: Log-Pwr
IFGain:Low #Atten: 30 dB AvgHold: 100/100

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

Ref Offset 1.79 dB
Ref 20.00 dBm

Mkr1 2.480 024 GHz
4.702 dBm

10 dB/div
Log

Center Freq 2.48000000 GHz
Span 8.000 MHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.000 ms (1001 pts)

Frequency
Auto Tune
Center Freq 2.480000000 GHz
Start Freq 2.476000000 GHz
Stop Freq 2.484000000 GHz
CF Step 800.000 kHz
Auto Man
Freq Offset 0 Hz
Scale Type Log Lin

The figure displays the Keysight Spectrum Analyzer - Sweep SA interface. The main window shows a frequency spectrum plot with a yellow trace. The plot has a logarithmic scale from -70 dBm to 10 dBm/div. A green horizontal line indicates the noise floor at approximately -15.30 dBm. Four peaks are labeled with numbers 1 through 4. Peak 1 is the highest, followed by peak 4, then peak 3, and finally peak 2.

Measurement Parameters:

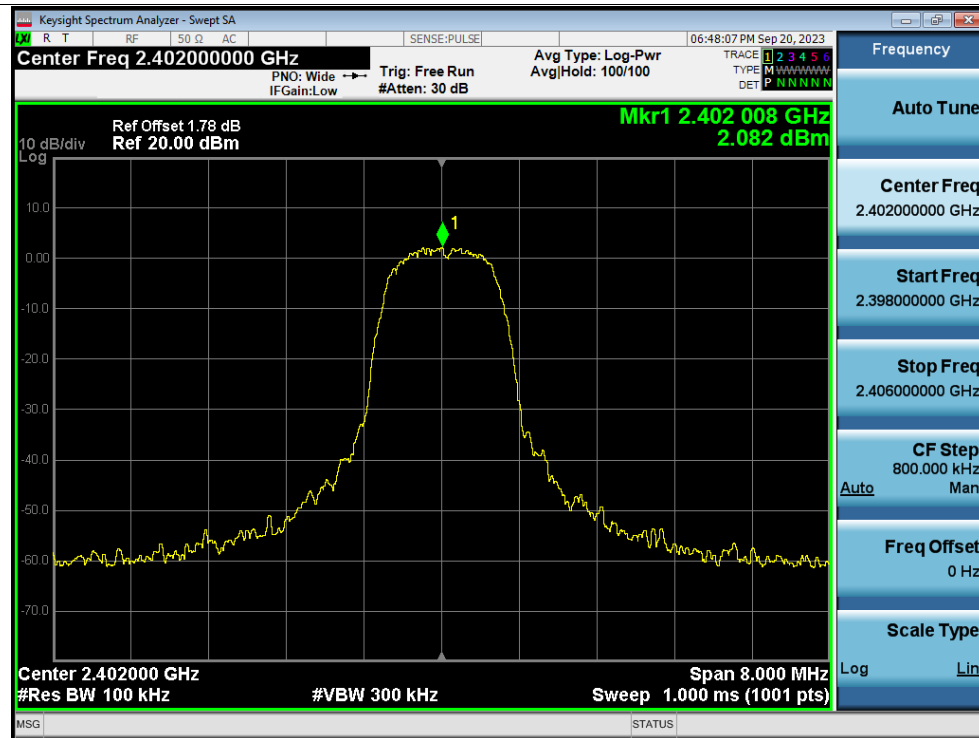
- Center Freq: 2.526000000 GHz
- PNO: Fast → IF Gain: Low
- Trig: Free Run #Atten: 30 dB
- Avg Type: Log-Pwr Avg/Hold: 100/100
- Date/Time: 06:42:40 PM Sep 20, 2023
- TRACE 1 2 3 4 5 6 TYPE M N N N N N DET P N N N N N
- Ref Offset 1.79 dB Ref 20.00 dBm
- Mkr1 2.480 0 GHz 4.770 dBm
- Start 2.47600 GHz Stop 2.57600 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	2.480 0 GHz	4.770 dBm			
2	N	1	f	2.483 5 GHz	-60.200 dBm			
3	N	1	f	2.500 0 GHz	-60.461 dBm			
4	N	1	f	2.494 2 GHz	-57.191 dBm			
5								
6								
7								
8								
9								
10								
11								

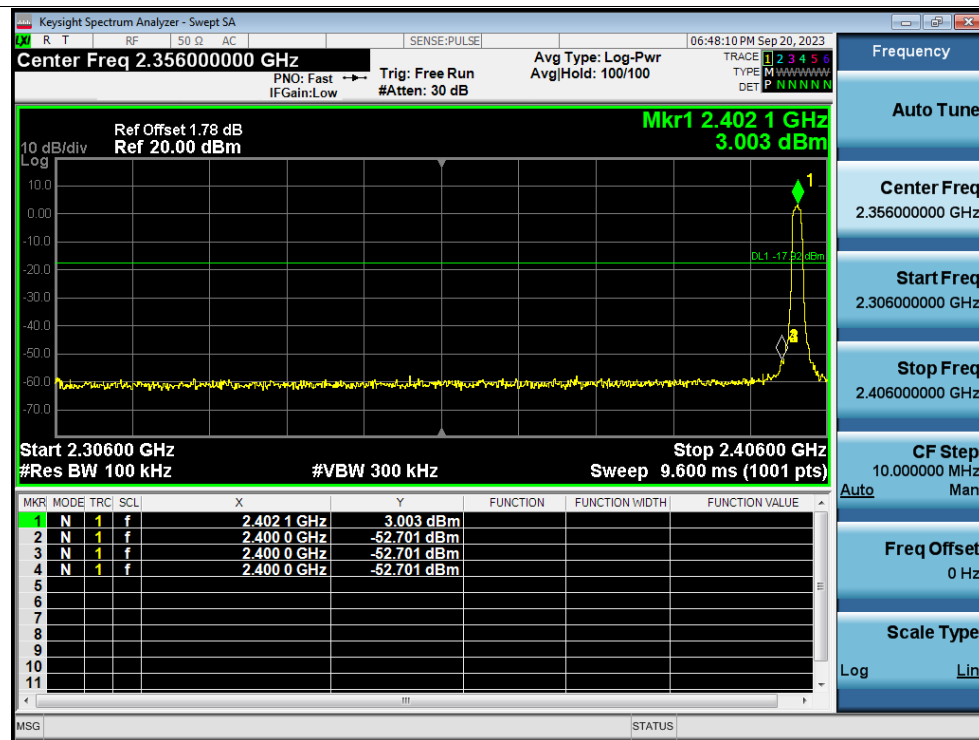
Frequency Settings:

- Auto Tune
- Center Freq: 2.526000000 GHz
- Start Freq: 2.476000000 GHz
- Stop Freq: 2.576000000 GHz
- CF Step: 10.000000 MHz
- Freq Offset: 0 Hz
- Scale Type: Log Lin

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



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



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

Keysight Spectrum Analyzer - Swept SA

Center Freq 2.48000000 GHz

PNO: Wide → Trig: Free Run Avg Type: Log-Pwr

IFGain:Low #Atten: 30 dB Avg|Hold: 100/100

06:44:56 PM Sep 20, 2023

TRACE 1 2 3 4 5 6

TYPE M NNNNNN

DET P NNNNNN

Ref Offset 1.79 dB

Ref 20.00 dBm

Mkr1 2.480 048 GHz

2.855 dBm

10 dB/div

Log

Center 2.480000 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 2.48000000 GHz

Start Freq 2.476000000 GHz

Stop Freq 2.484000000 GHz

CF Step 800.000 kHz

Man

Auto

Freq Offset 0 Hz

Scale Type Log Lin

Keysight Spectrum Analyzer - Swept SA

Center Freq 2.52600000 GHz

Ref Offset 1.79 dB
Ref 20.00 dBm

10 dB/div
Log

Mkr1 2.480 1 GHz
3.041 dBm

Start 2.47600 GHz
#Res BW 100 kHz

Stop 2.57600 GHz
Sweep 9.600 ms (1001 pts)

#VBW 300 kHz

Trig: Free Run
#Atten: 30 dB

Avg Type: Log-Pwr
Avg|Hold: 100/100

Trace 1 2 3 4 5 6
Type M N N N N N
Det P N N N N N

Mkr	Mode	Trc	Scl	X	Y	Function	Function Width	Function Value
1	N	1	f	2.480 1 GHz	3.041 dBm			
2	N	1	f	2.483 5 GHz	-59.967 dBm			
3	N	1	f	2.500 0 GHz	-59.730 dBm			
4	N	1	f	2.485 1 GHz	-56.950 dBm			
5								
6								
7								
8								
9								
10								
11								

Auto Tune

Center Freq
2.526000000 GHz

Start Freq
2.476000000 GHz

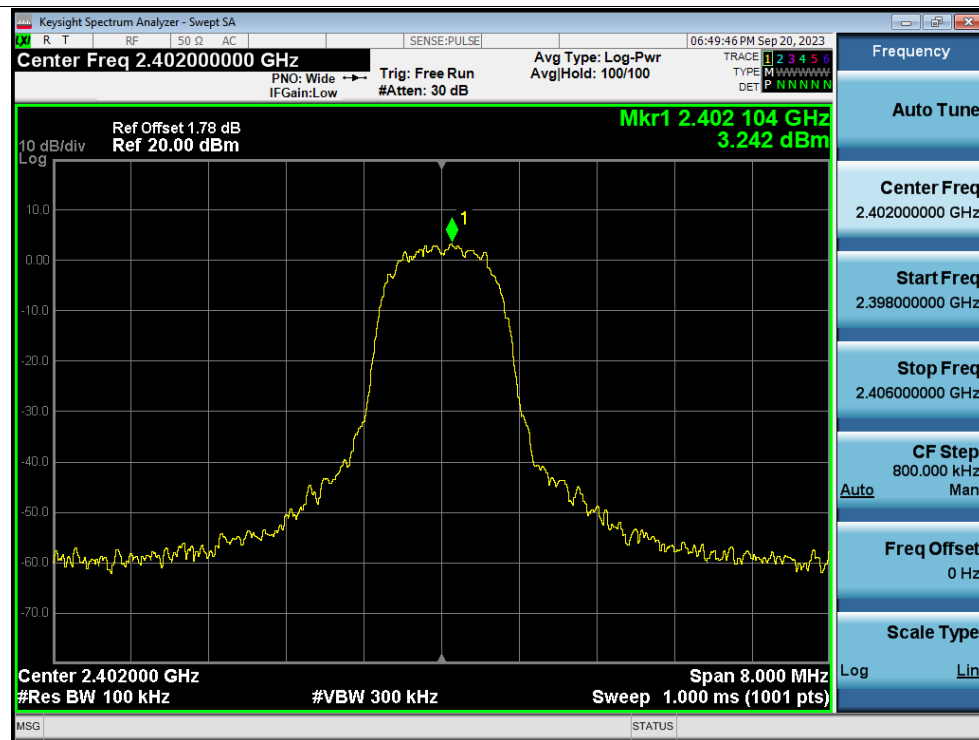
Stop Freq
2.576000000 GHz

CF Step
10.000000 MHz
Man

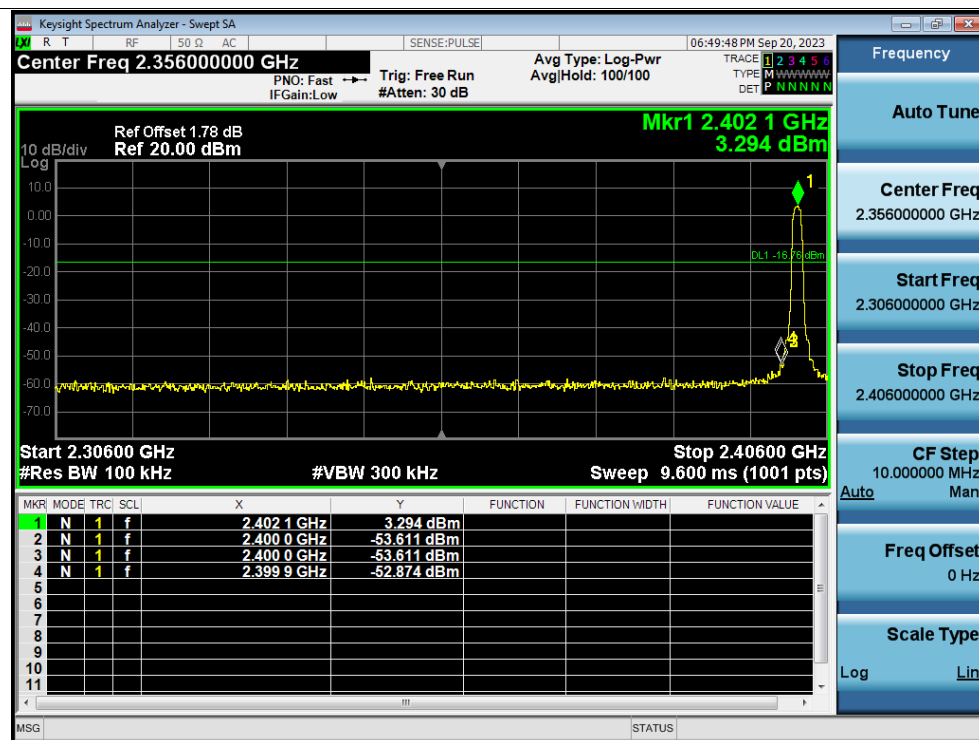
Freq Offset
0 Hz

Scale Type
Log Lin

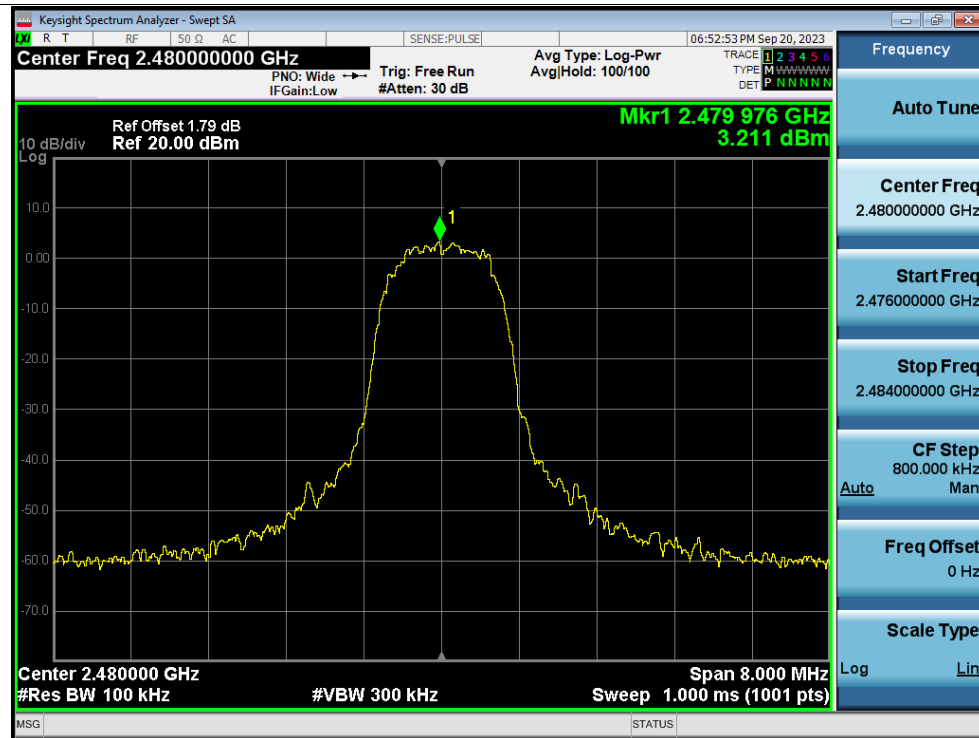
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref



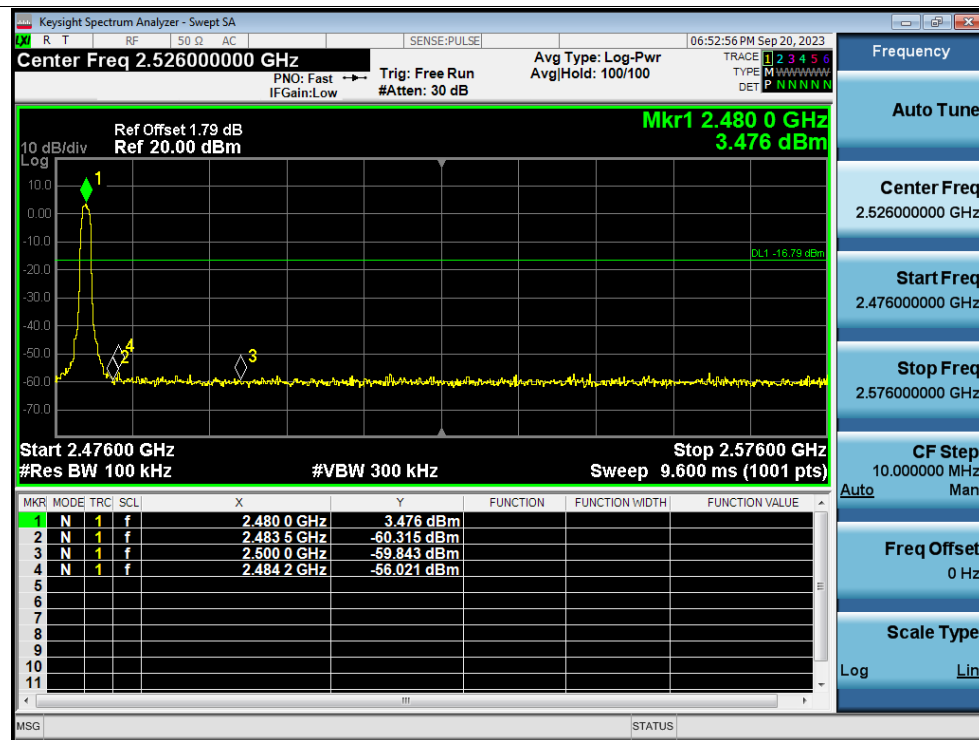
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission



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



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



Band Edge(Hopping)

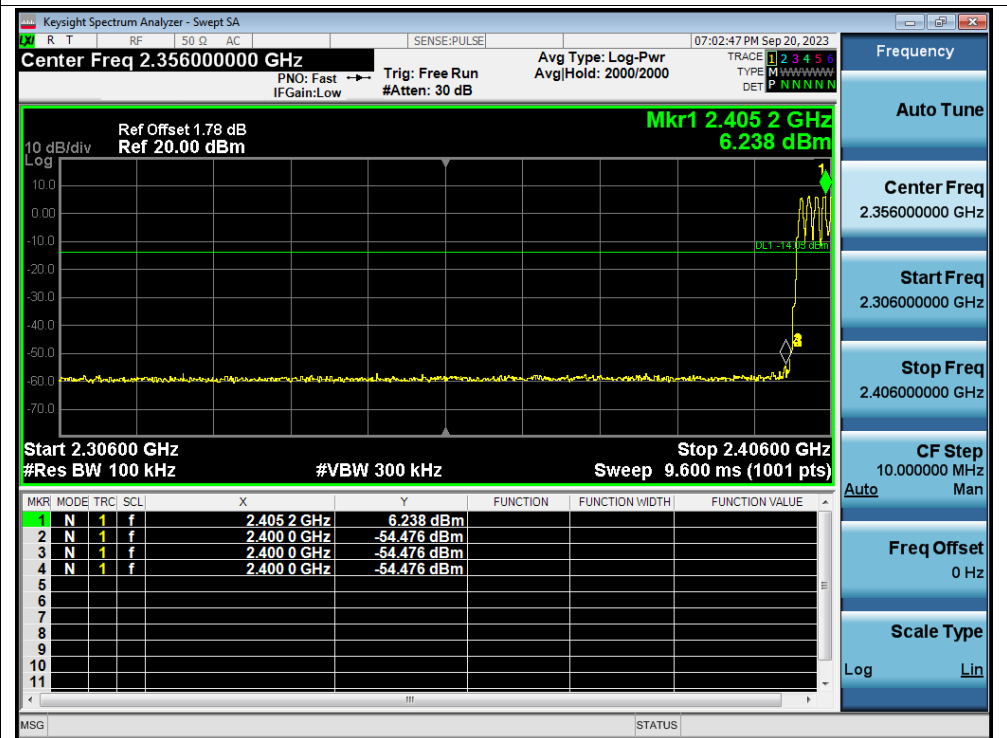
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-60.42	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-61.5	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-60.51	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-61.57	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-60.66	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-63.03	-20	Pass

Test Graphs

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



Keysight Spectrum Analyzer - Swept SA

R T RF 50.0 AC SENSE:PULSE 07:15:47 PM Sep 20, 2023

Center Freq 2.480000000 GHz PNO: Wide → Trig: Free Run Avg Type: Log-Pwr
IF Gain: Low #Atten: 30 dB Avg/Hold: 2000/2000

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

Ref Offset 1.79 dB
Ref 20.00 dBm

Mkr1 2.479 016 GHz
5.955 dBm

10 dB/div
Log

Center 2.480000 GHz Span 8.000 MHz
#Res BW 100 kHz #VBW 300 kHz Sweep 1.000 ms (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
2.480000000 GHz

Start Freq
2.476000000 GHz

Stop Freq
2.484000000 GHz

CF Step
800.000 kHz
Auto Man

Freq Offset
0 Hz

Scale Type
Log Lin

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

Keysight Spectrum Analyzer - Swept SA

R T RF 50.0 AC SENSE:PULSE 07:16:20 PM Sep 20, 2023

Center Freq 2.526000000 GHz PNO: Fast IFGain:Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg/Hold: 2000/2000

TRACE 1 2.475 0 TYPE: MHHHMM P NNNNN DET

Ref Offset 1.79 dB Ref 20.00 dBm Mkr1 2.476 2 GHz 6.251 dBm

10 dB/div Log

Start 2.47600 GHz Stop 2.57600 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	2.476 2 GHz	6.251 dBm			
2	N	1	f	2.483 5 GHz	-57.307 dBm			
3	N	1	f	2.500 0 GHz	-59.187 dBm			
4	N	1	f	2.494 3 GHz	-55.545 dBm			
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq 2.526000000 GHz

Start Freq 2.476000000 GHz

Stop Freq 2.576000000 GHz

CF Step 10.000000 MHz Man

Freq Offset 0 Hz

Scale Type Log Lin

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

Keysight Spectrum Analyzer - Swept SA

Center Freq 2.402000000 GHz

Ref Offset 1.78 dB
Ref 20.00 dBm

10 dB/div
Log

Mkr1 2.404 032 GHz
5.020 dBm

Center Freq 2.402000000 GHz

Start Freq 2.398000000 GHz

Stop Freq 2.406000000 GHz

CF Step 800.000 kHz

Freq Offset 0 Hz

Scale Type Log

Center 2.402000 GHz

#Res BW 100 kHz

#VBW 300 kHz

Span 8.000 MHz

Sweep 1.000 ms (1001 pts)

The image shows a Keysight Spectrum Analyzer interface. The main display area shows a spectrum plot with a yellow trace. A peak is marked with a green diamond and labeled '1'. The peak frequency is 2.404032 GHz and the power level is 5.020 dBm. The plot has a logarithmic scale (Log) and a span of 8.000 MHz. The center frequency is 2.402000 GHz. The resolution bandwidth (Res BW) is 100 kHz and the video bandwidth (VBW) is 300 kHz. The sweep time is 1.000 ms. The plot shows a signal that rises sharply from -60 dBm to -10 dBm between 2.398 GHz and 2.402 GHz, then remains relatively flat with some noise around -10 dBm until 2.406 GHz. The interface includes various control buttons and readouts for frequency, power, and bandwidth.

Keysight Spectrum Analyzer - Swept SA

Center Freq 2.356000000 GHz

Ref Offset 1.78 dB
Ref 20.00 dBm

Mkr1 2.402 0 GHz
5.677 dBm

Start 2.30600 GHz
#Res BW 100 kHz

Stop 2.40600 GHz
Sweep 9.600 ms (1001 pts)

Auto Tune

Center Freq
2.356000000 GHz

Start Freq
2.306000000 GHz

Stop Freq
2.406000000 GHz

CF Step
10.000000 MHz

Auto Man

Freq Offset
0 Hz

Scale Type
Log Lin

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.402 0 GHz	5.677 dBm			
2	N	1	f	2.400 0 GHz	-56.010 dBm			
3	N	1	f	2.400 0 GHz	-56.010 dBm			
4	N	1	f	2.399 7 GHz	-55.495 dBm			

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

Keysight Spectrum Analyzer - Swept SA

Center Freq 2.48000000 GHz

PNO: Wide → Trig: Free Run #Atten: 30 dB

Avg Type: Log-Pwr Avg|Hold: 2000/2000

07:28:38 PM Sep 20, 2023

TRACE 1 2 3 4 5 6

TYPE M M M M M M M M

DET P N N N N N N

Ref Offset 1.79 dB

Ref 20.00 dBm

10 dB/div

Log

Mkr1 2.479 152 GHz

4.910 dBm

1

Center Freq 2.480000 GHz

#Res BW 100 kHz

#VBW 300 kHz

Span 8.000 MHz

Sweep 1.000 ms (1001 pts)

Auto Tune

Center Freq 2.480000000 GHz

Start Freq 2.476000000 GHz

Stop Freq 2.484000000 GHz

CF Step 800.000 kHz

Man

Auto

Freq Offset 0 Hz

Scale Type

Log Lin

MSG STATUS

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

Keysight Spectrum Analyzer - Swept SA

R T RF 50 Ω AC SENSE:PUSE 07:29:13 PM Sep 20, 2023

Center Freq 2.526000000 GHz PNO: Fast → Trig: Free Run Avg Type: Log-Pwr Avg|Hold: 2000/2000 TRACE 1 2 3 4 5 6 TYPE M W W W W W W W DET P N N N N N N N

Ref Offset 1.79 dB Ref 20.00 dB Mkr1 2.477 1 GHz 5.160 dBm

10 dB/div Log

Start 2.47600 GHz Stop 2.57600 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	2.477 1 GHz	5.160 dBm			
2	N	1	f	2.483 5 GHz	-59.235 dBm			
3	N	1	f	2.500 0 GHz	-58.557 dBm			
4	N	1	f	2.486 6 GHz	-56.666 dBm			
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq 2.526000000 GHz

Start Freq 2.476000000 GHz

Stop Freq 2.576000000 GHz

CF Step 10.000000 MHz Man

Auto

Freq Offset 0 Hz

Scale Type Log Lin

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

Keysight Spectrum Analyzer - Swept SA

R T RF 50 Ω AC SENSE:PULSE 07:31:09 PM Sep 20, 2023

Center Freq 2.402000000 GHz PNO: Wide → Trig: Free Run Avg Type: Log-Pwr Avg|Hold: 2000/2000 TRACE 1 2 3 4 5 6
IFGain:Low #Atten: 30 dB TYPE: MWWWNNW DET: P NNNNN

Ref Offset 1.78 dB
Ref 20.00 dBm

10 dB/div
Log

Mkr1 2.403 008 GHz
5.978 dBm

1

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

Frequency

Auto Tune

Center Freq
2.402000000 GHz

Start Freq
2.398000000 GHz

Stop Freq
2.406000000 GHz

CF Step
800.000 kHz
Auto Man

Freq Offset
0 Hz

Scale Type
Log Lin

MSG STATUS

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

Keysight Spectrum Analyzer - Swept SA

R T RF 50 Ω AC SENSE:PULSE 07:31:43 PM Sep 20, 2023

Center Freq 2.356000000 GHz PNO: Fast → Trig: Free Run Avg Type: Log-Pwr Avg|Hold: 2000/2000 TRACE 1 2 3 4 5 6 TYPE M W W W W W W W DET P N N N N N N

Ref Offset 1.78 dB Ref 20.00 dBm

10 dB/div Log

Mkr1 2.406 0 GHz 6.116 dBm

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	2.406 0 GHz	6.116 dBm			
2	N	1	f	2.400 0 GHz	-56.318 dBm			
3	N	1	f	2.400 0 GHz	-56.318 dBm			
4	N	1	f	2.399 8 GHz	-54.681 dBm			
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

Keysight Spectrum Analyzer - Swept SA

Center Freq 2.480000000 GHz

Ref Offset 1.79 dB
Ref 20.00 dBm

10 dB/div
Log

Mkr1 2.479 848 GHz
5.902 dBm

Center 2.480000 GHz
#Res BW 100 kHz
#VBW 300 kHz

Span 8.000 MHz
Sweep 1.000 ms (1001 pts)

Frequency

Auto Tune

Center Freq
2.480000000 GHz

Start Freq
2.476000000 GHz

Stop Freq
2.484000000 GHz

CF Step
800.000 kHz
Man

Freq Offset
0 Hz

Scale Type
Log

Keysight Spectrum Analyzer - Swept SA

Center Freq 2.52600000 GHz

Ref Offset 1.79 dB
Ref 20.00 dBm

Mkr1 2.479 0 GHz
5.827 dBm

Start 2.47600 GHz
#Res BW 100 kHz

Stop 2.57600 GHz
#VBW 300 kHz
Sweep 9.600 ms (1001 pts)

Mkr	Mode	Trc	SCL	X	Y	Function	Function Width	Function Value
1	N	1	f	2.479 0 GHz	5.827 dBm			
2	N	1	f	2.483 5 GHz	-58.120 dBm			
3	N	1	f	2.500 0 GHz	-58.243 dBm			
4	N	1	f	2.484 3 GHz	-57.133 dBm			
5								
6								
7								
8								
9								
10								
11								

Frequency

Auto Tune

Center Freq
2.52600000 GHz

Start Freq
2.47600000 GHz

Stop Freq
2.57600000 GHz

CF Step
10.000000 MHz
Man

Auto

Freq Offset
0 Hz

Scale Type
Log Lin

Conducted RF Spurious Emission

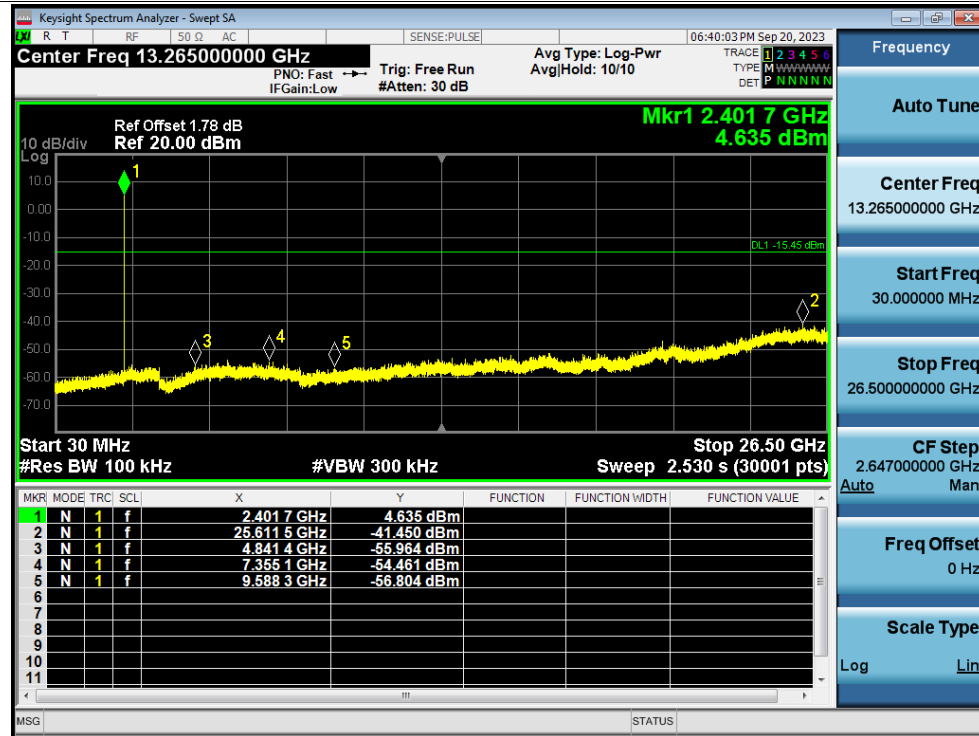
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-46	-20	Pass
NVNT	1-DH5	2441	Ant1	-45.97	-20	Pass
NVNT	1-DH5	2480	Ant1	-46.23	-20	Pass
NVNT	2-DH5	2402	Ant1	-44.83	-20	Pass
NVNT	2-DH5	2441	Ant1	-44.06	-20	Pass
NVNT	2-DH5	2480	Ant1	-44.93	-20	Pass
NVNT	3-DH5	2402	Ant1	-44.78	-20	Pass
NVNT	3-DH5	2441	Ant1	-43.44	-20	Pass
NVNT	3-DH5	2480	Ant1	-44.69	-20	Pass

Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



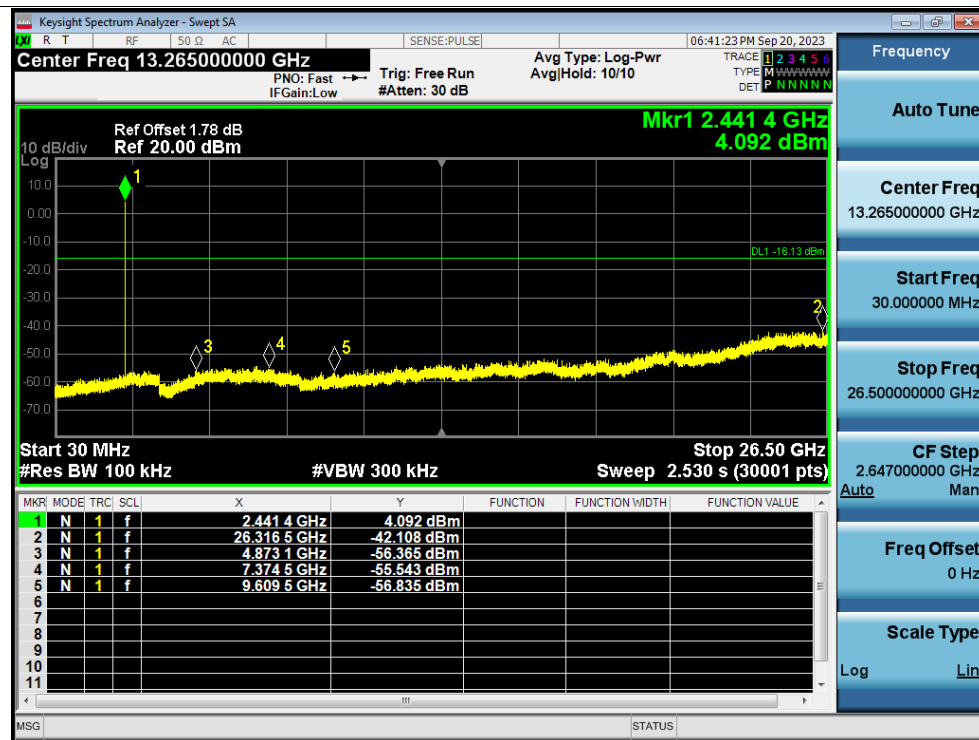
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



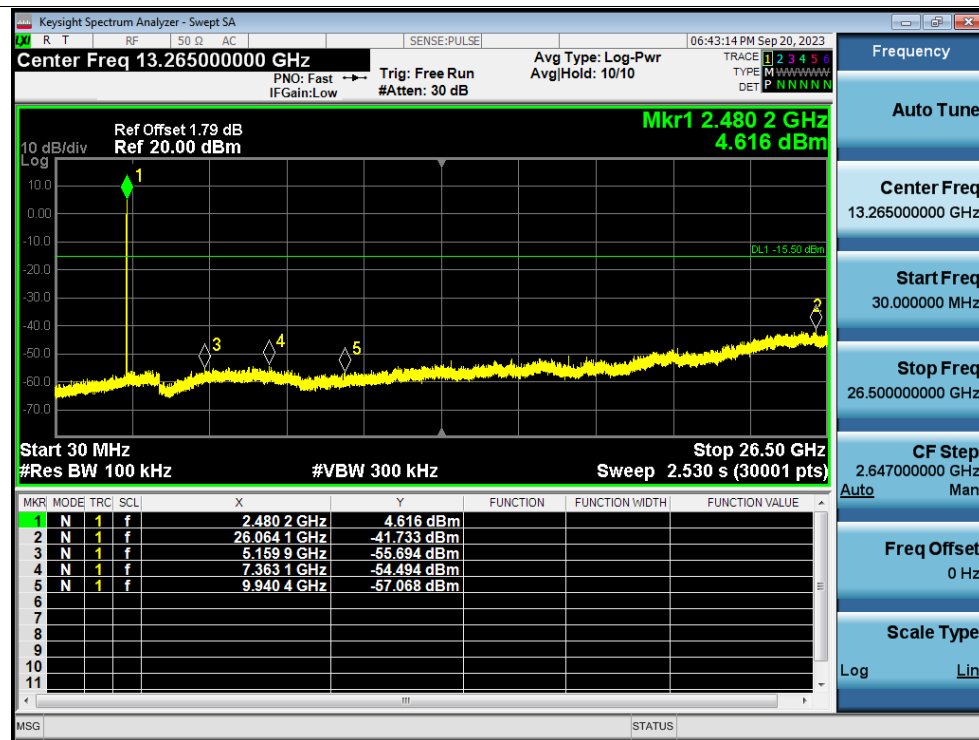
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



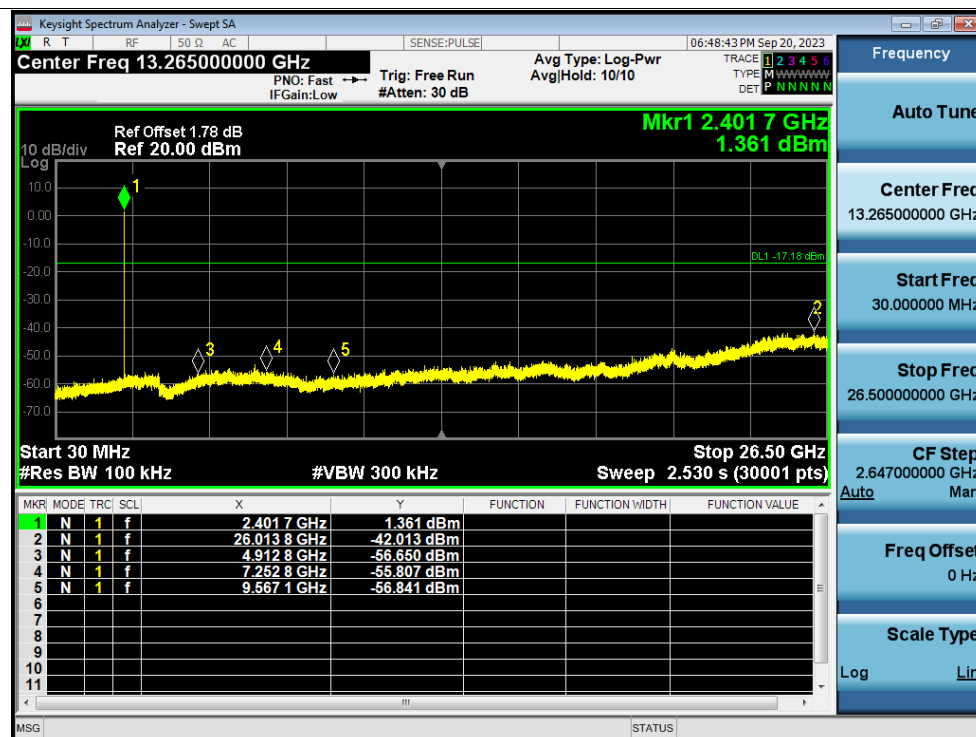
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



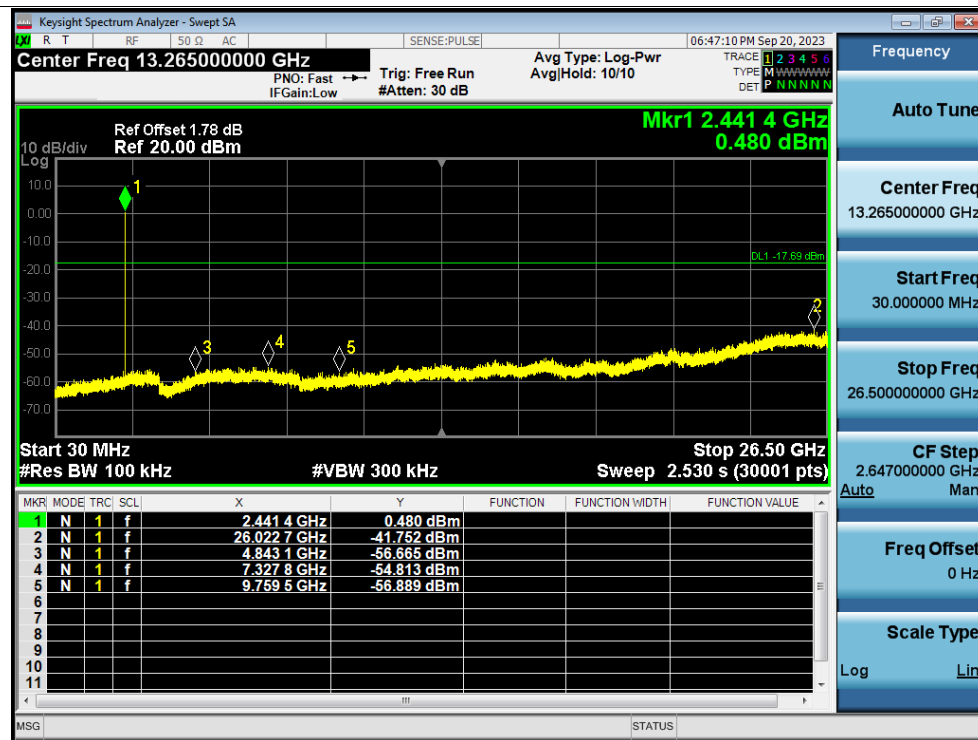
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



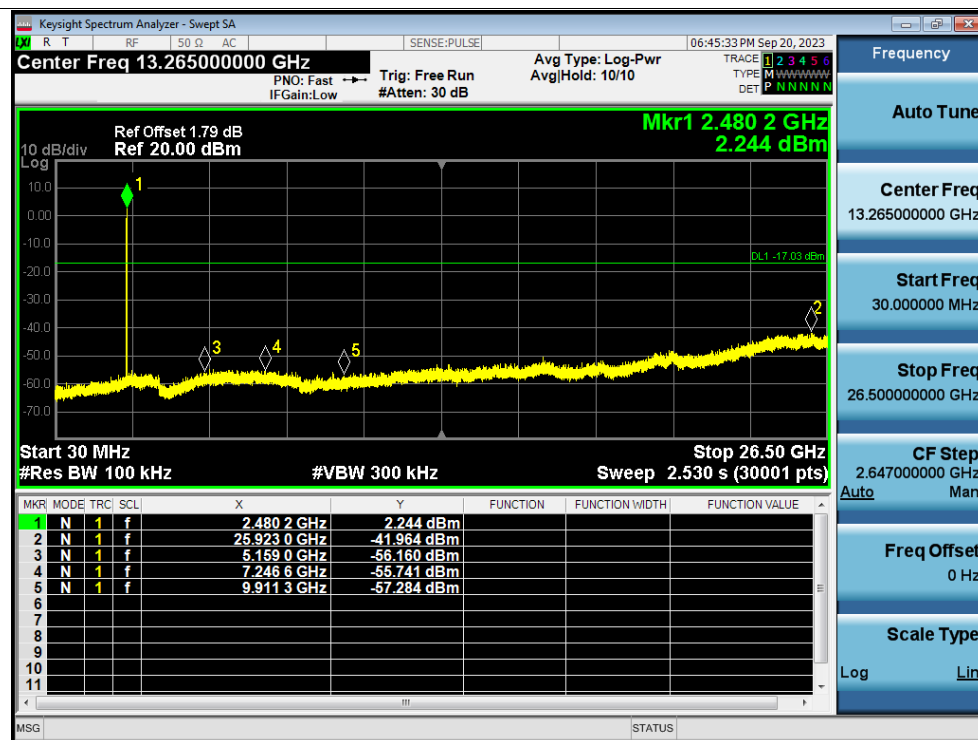
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



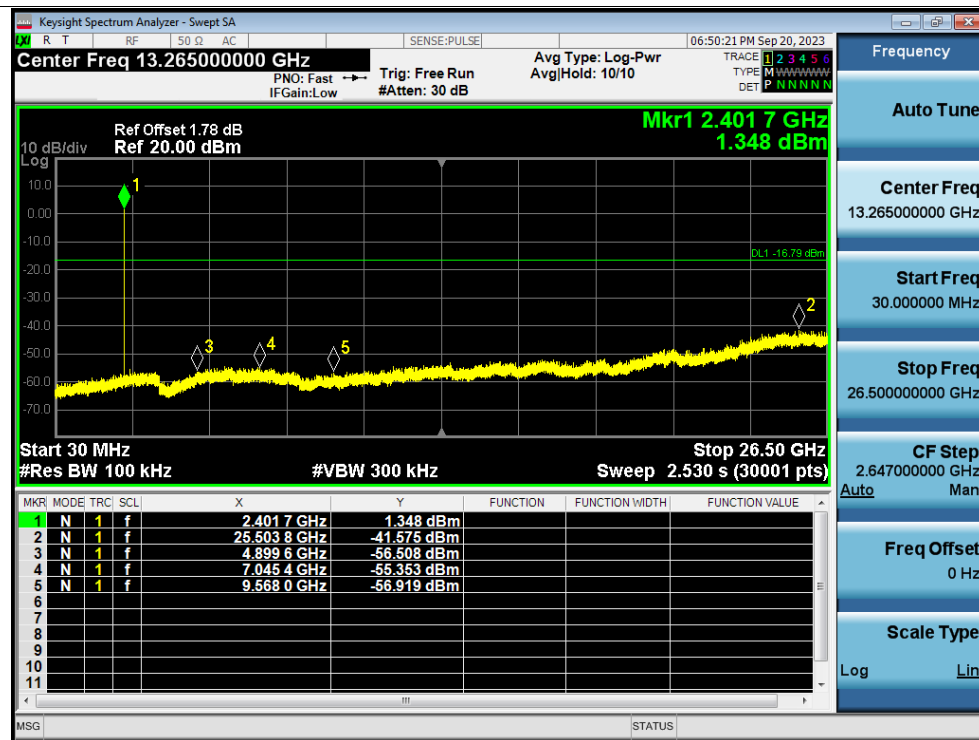
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission



Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Ref



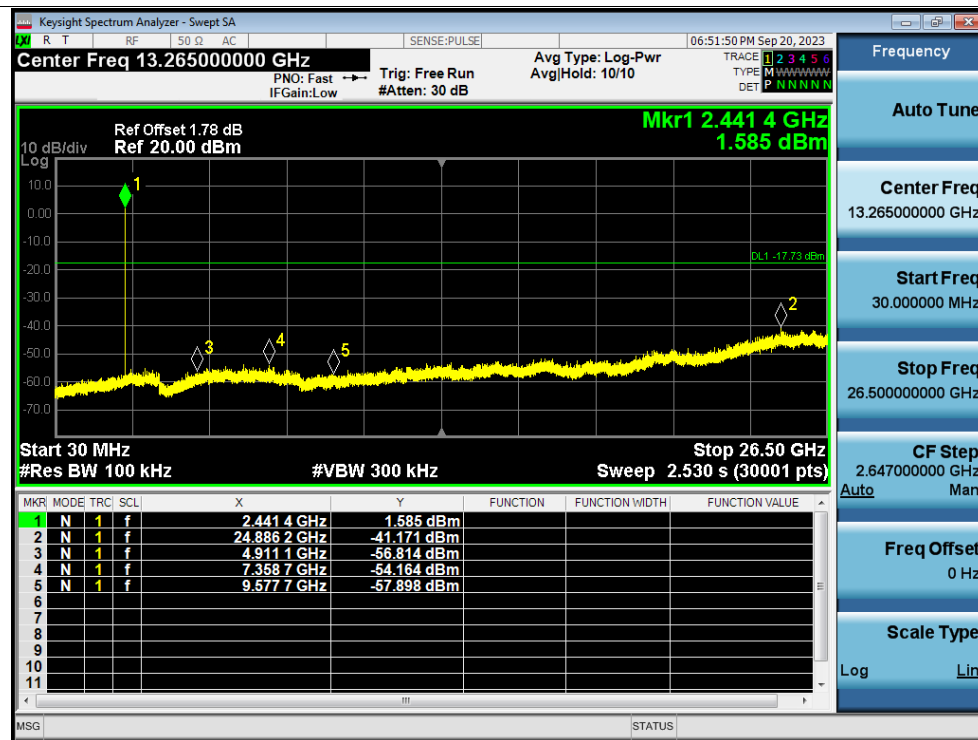
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Emission



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

