

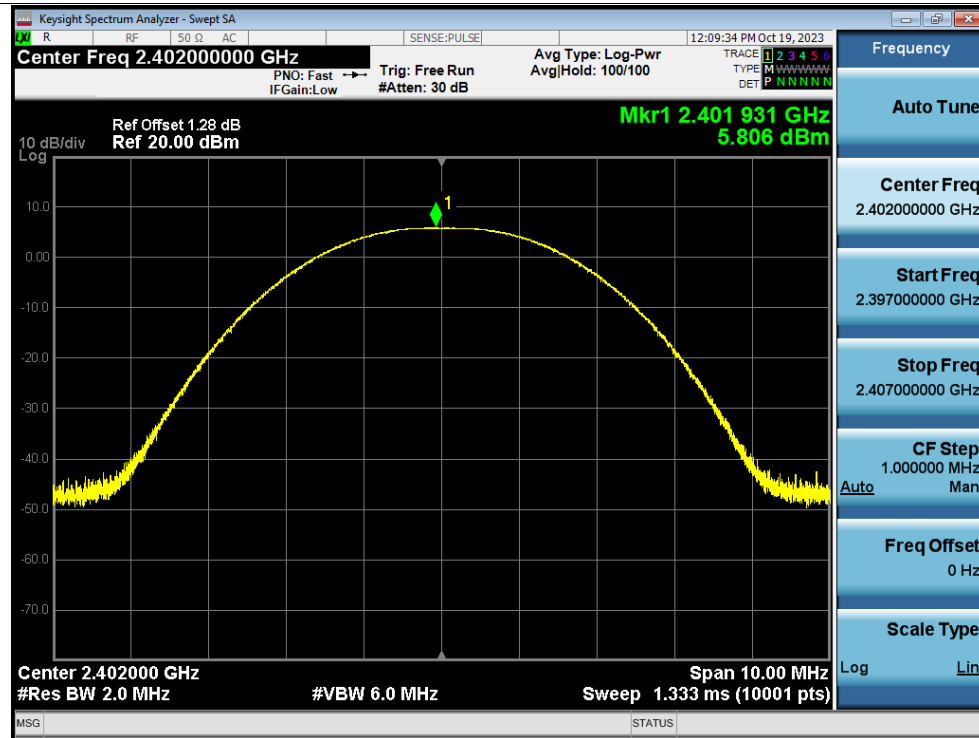
Appendix A

Maximum Conducted Output Power

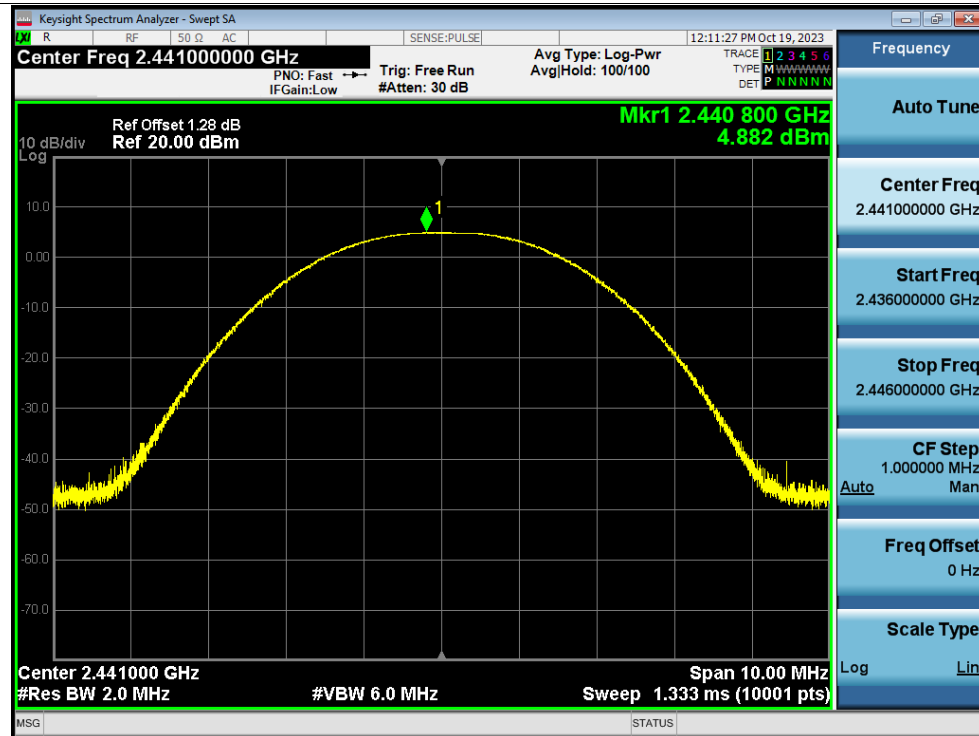
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	5.81	0	5.81	21	Pass
NVNT	1-DH5	2441	Ant1	4.88	0	4.88	21	Pass
NVNT	1-DH5	2480	Ant1	3.47	0	3.47	21	Pass
NVNT	2-DH5	2402	Ant1	6.42	0	6.42	21	Pass
NVNT	2-DH5	2441	Ant1	5.56	0	5.56	21	Pass
NVNT	2-DH5	2480	Ant1	4.24	0	4.24	21	Pass
NVNT	3-DH5	2402	Ant1	5.78	0	5.78	21	Pass
NVNT	3-DH5	2441	Ant1	4.93	0	4.93	21	Pass
NVNT	3-DH5	2480	Ant1	3.58	0	3.58	21	Pass

Test Graphs

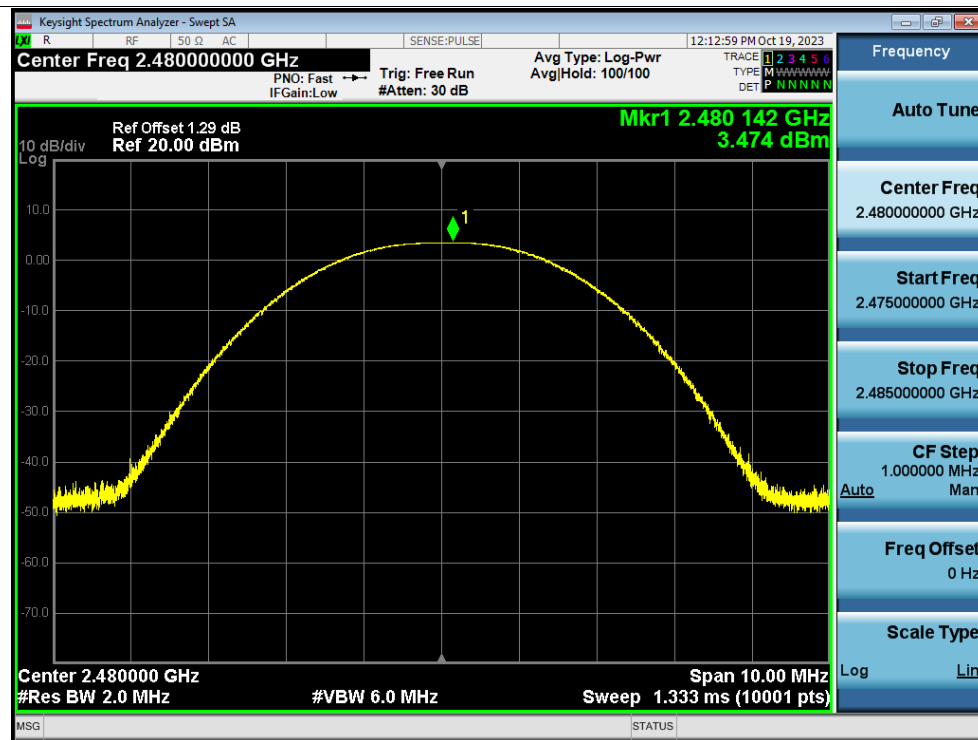
Power NVNT 1-DH5 2402MHz Ant1



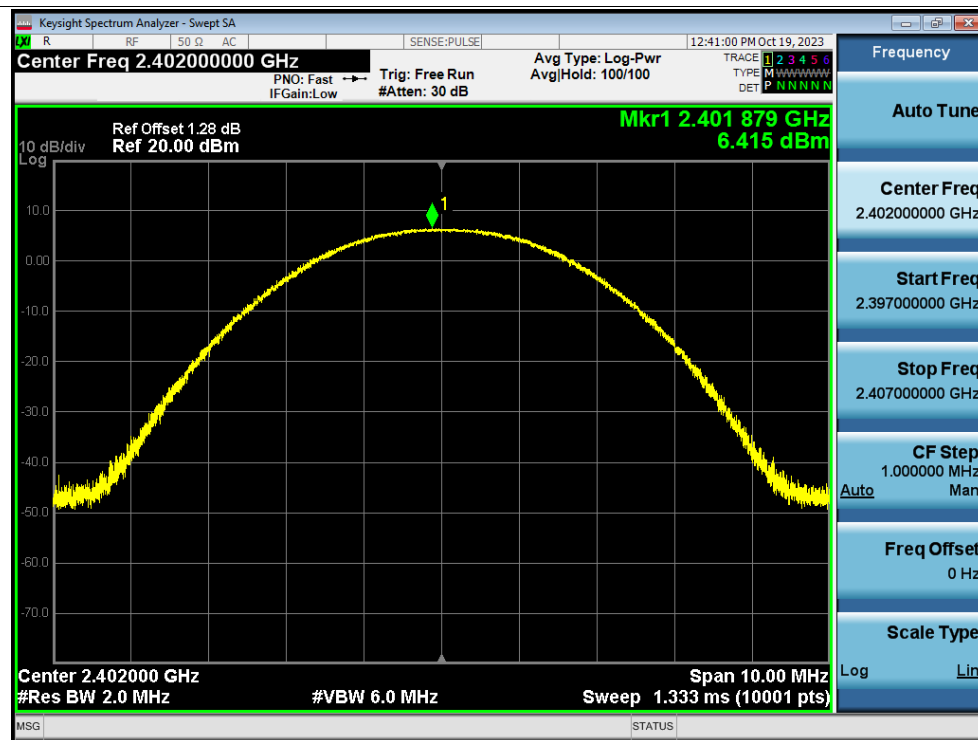
Power NVNT 1-DH5 2441MHz Ant1



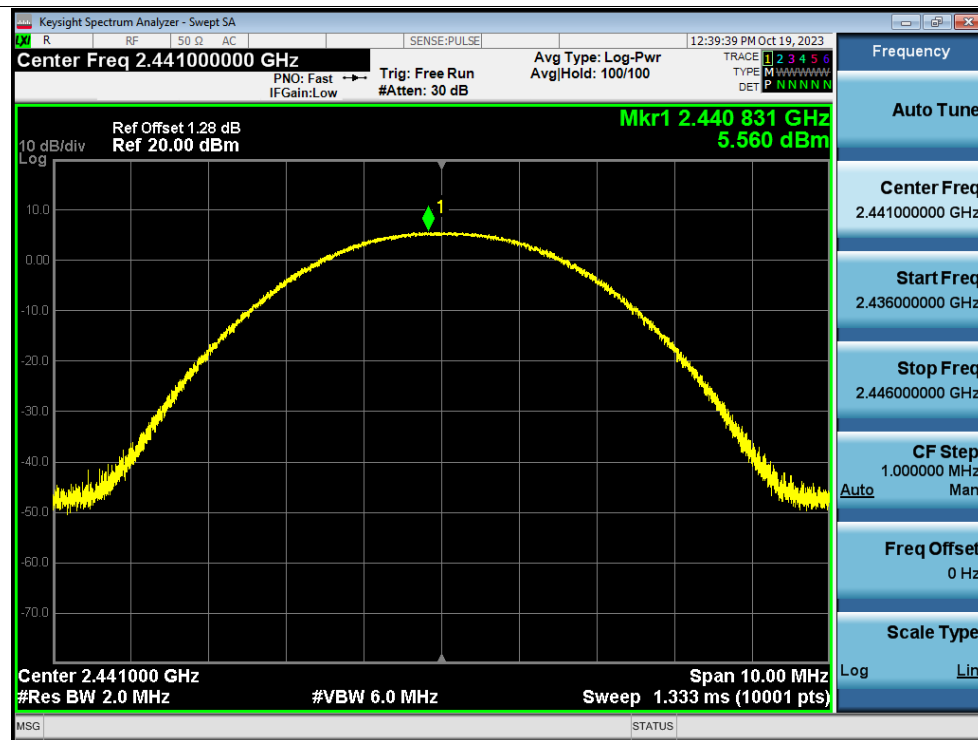
Power NVNT 1-DH5 2480MHz Ant1



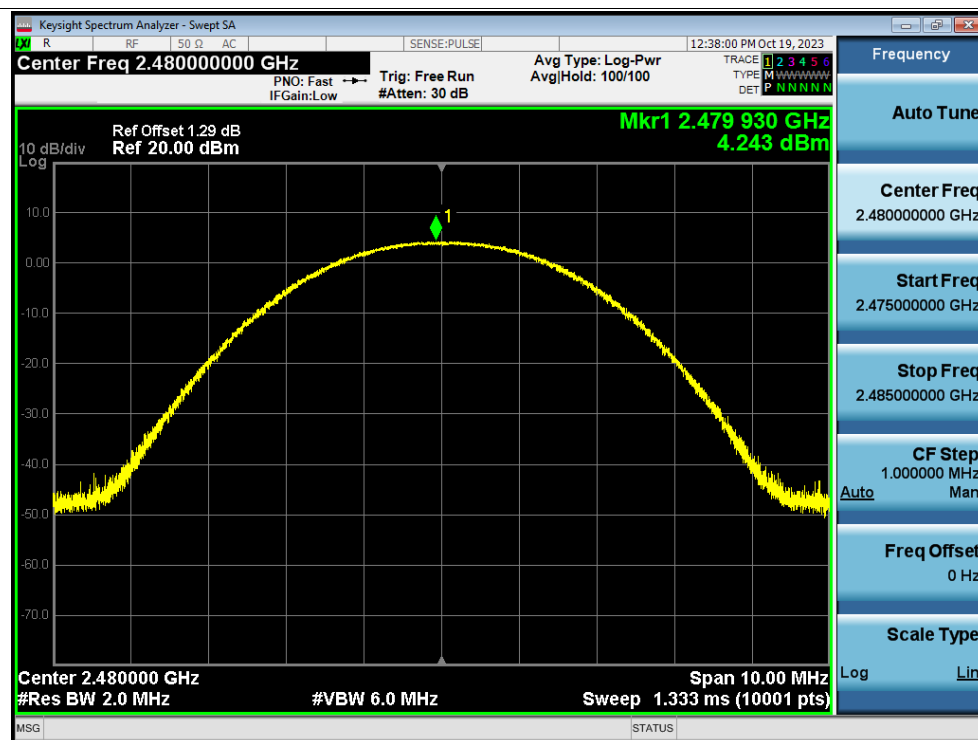
Power NVNT 2-DH5 2402MHz Ant1



Power NVNT 2-DH5 2441MHz Ant1



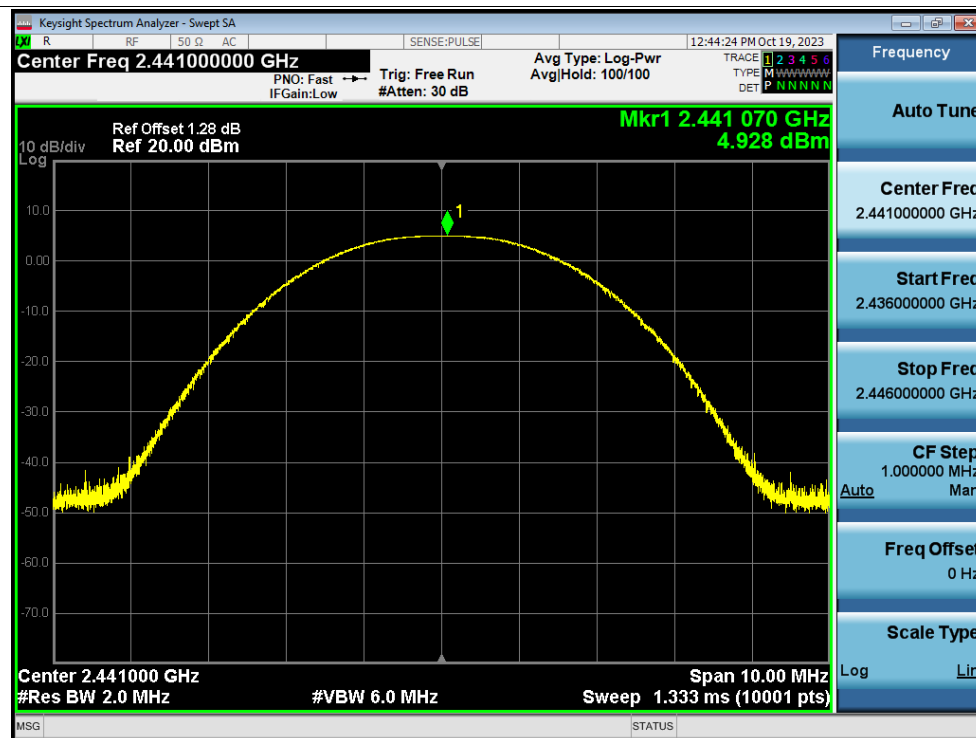
Power NVNT 2-DH5 2480MHz Ant1



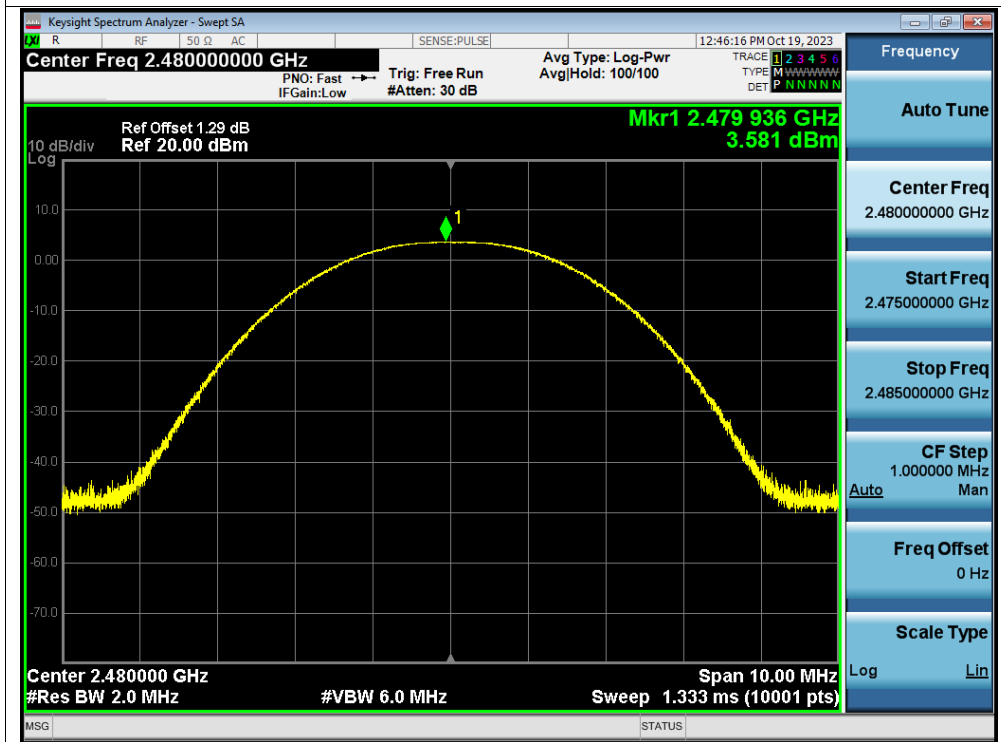
Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-DH5 2441MHz Ant1



Power NVNT 3-DH5 2480MHz Ant1



-20dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	1.061	0	Pass
NVNT	1-DH5	2441	Ant1	1.027	0	Pass
NVNT	1-DH5	2480	Ant1	1.044	0	Pass
NVNT	2-DH5	2402	Ant1	1.332	0	Pass
NVNT	2-DH5	2441	Ant1	1.329	0	Pass
NVNT	2-DH5	2480	Ant1	1.321	0	Pass
NVNT	3-DH5	2402	Ant1	1.042	0	Pass
NVNT	3-DH5	2441	Ant1	1.034	0	Pass
NVNT	3-DH5	2480	Ant1	1.029	0	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



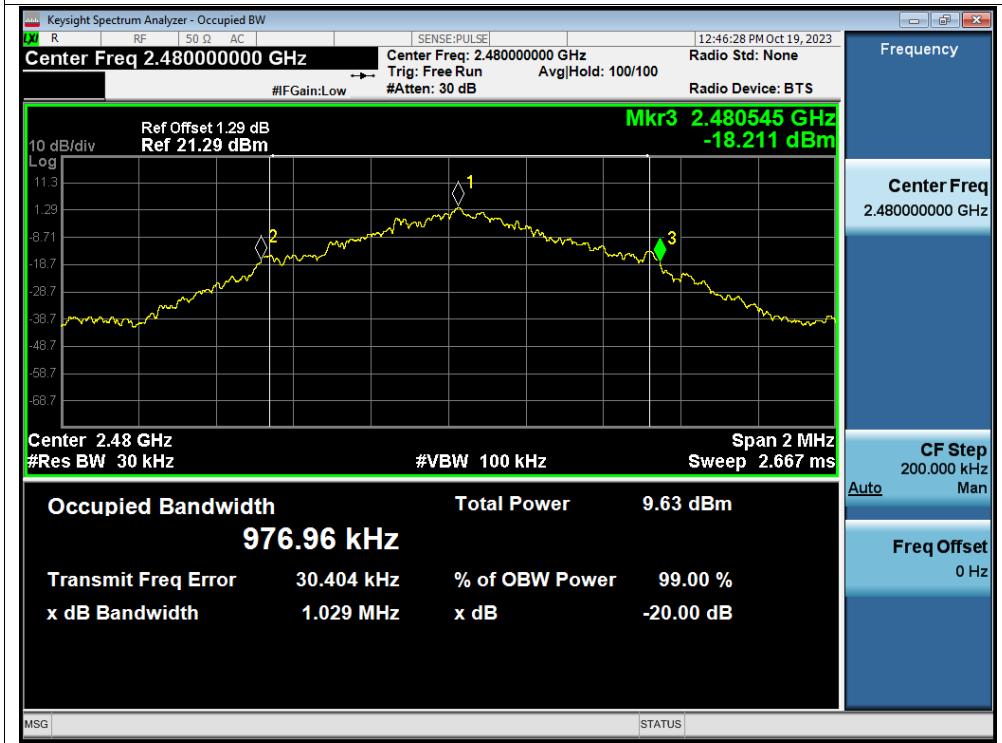
-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-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	0.945
NVNT	1-DH5	2441	Ant1	0.957
NVNT	1-DH5	2480	Ant1	0.958
NVNT	2-DH5	2402	Ant1	1.228
NVNT	2-DH5	2441	Ant1	1.225
NVNT	2-DH5	2480	Ant1	1.218
NVNT	3-DH5	2402	Ant1	0.957
NVNT	3-DH5	2441	Ant1	0.984
NVNT	3-DH5	2480	Ant1	0.965

Test Graphs

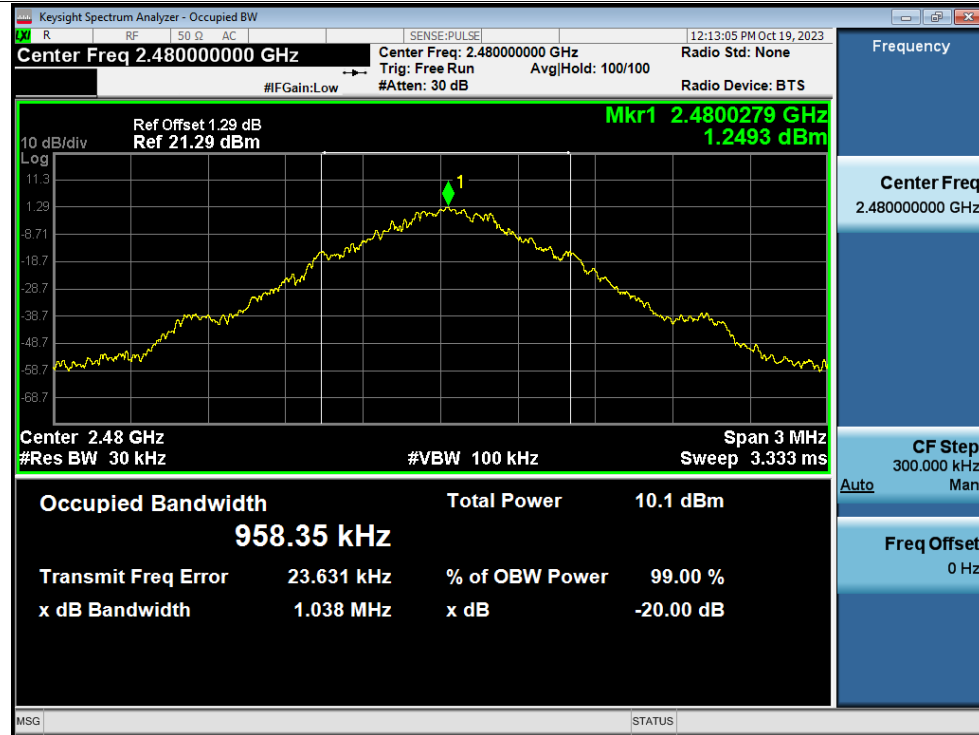
OBW NVNT 1-DH5 2402MHz Ant1



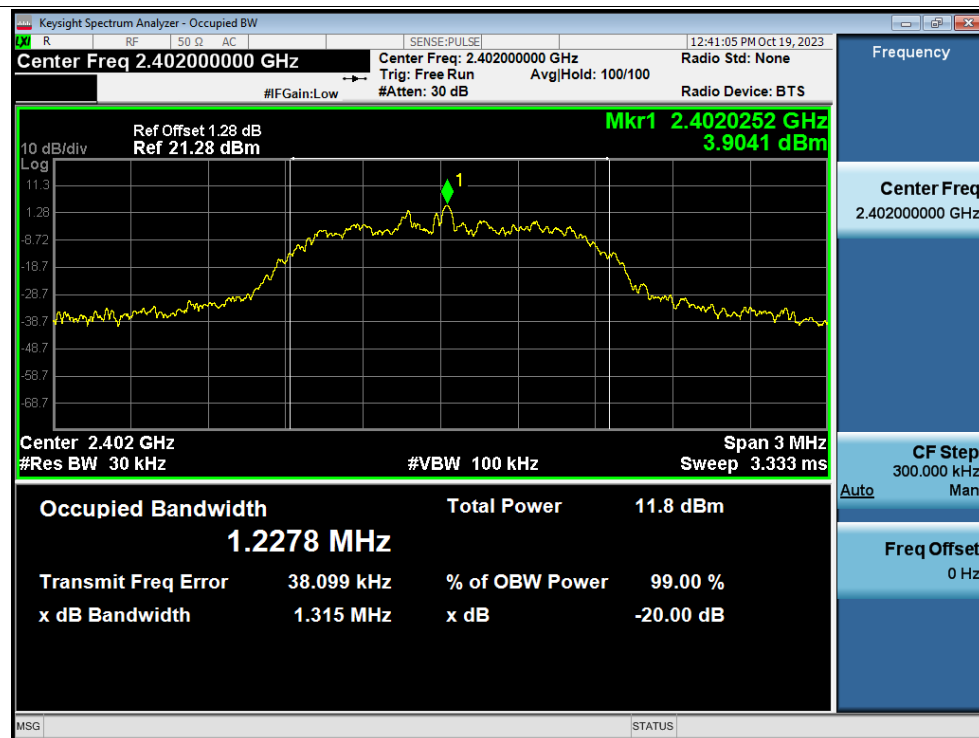
OBW NVNT 1-DH5 2441MHz Ant1



OBW NVNT 1-DH5 2480MHz Ant1



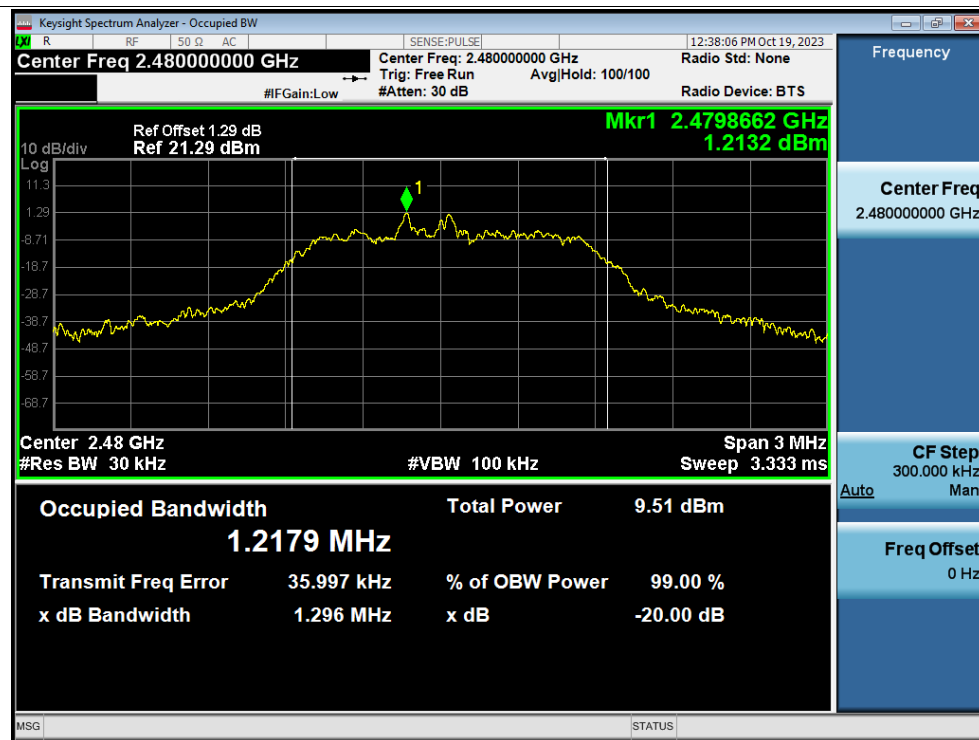
OBW NVNT 2-DH5 2402MHz Ant1



OBW NVNT 2-DH5 2441MHz Ant1



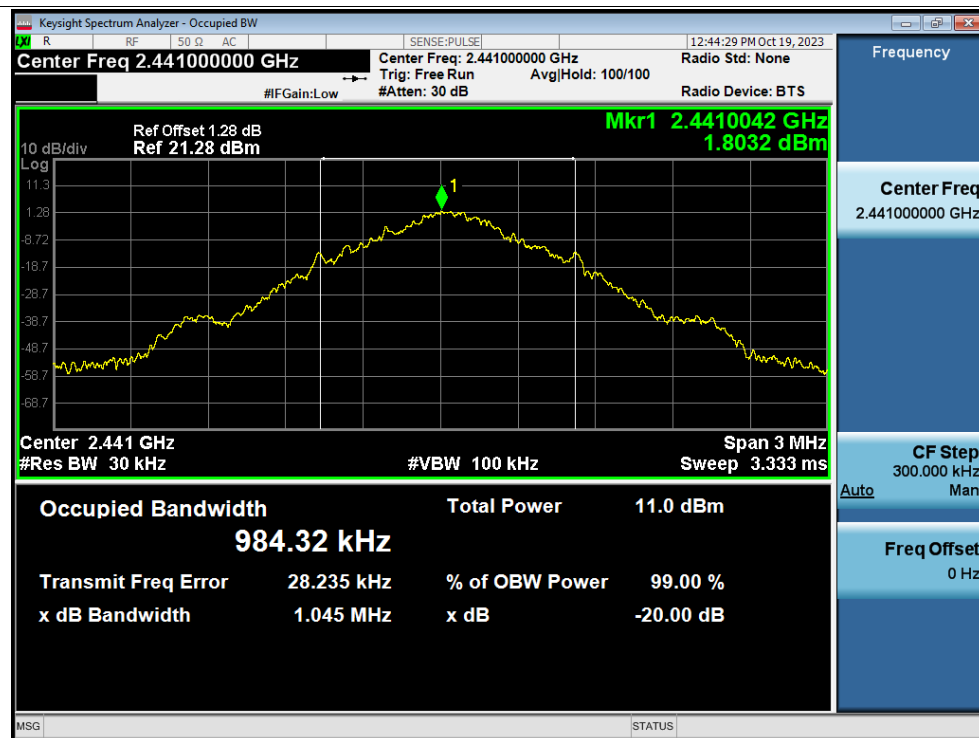
OBW NVNT 2-DH5 2480MHz Ant1



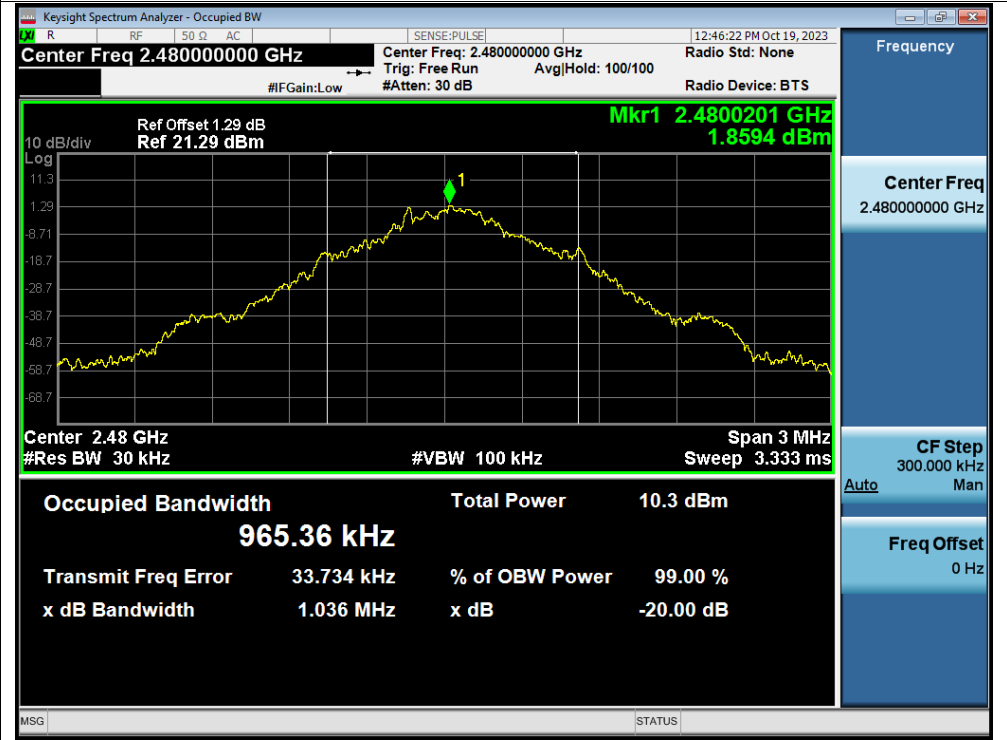
OBW NVNT 3-DH5 2402MHz Ant1



OBW NVNT 3-DH5 2441MHz Ant1



OBW NVNT 3-DH5 2480MHz Ant1

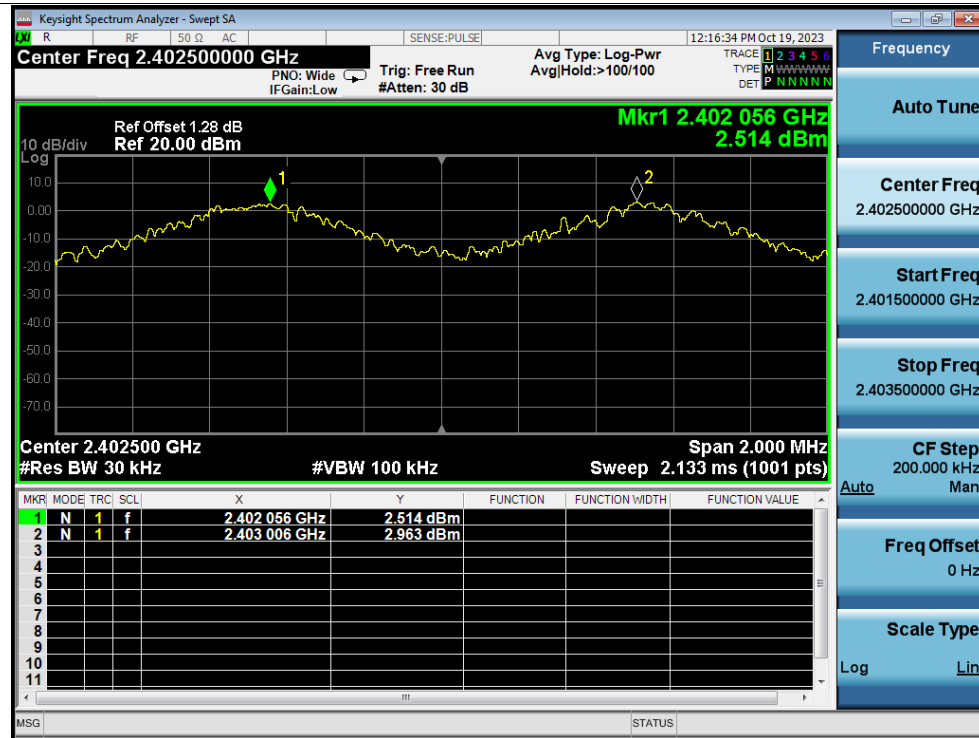


Carrier Frequencies Separation

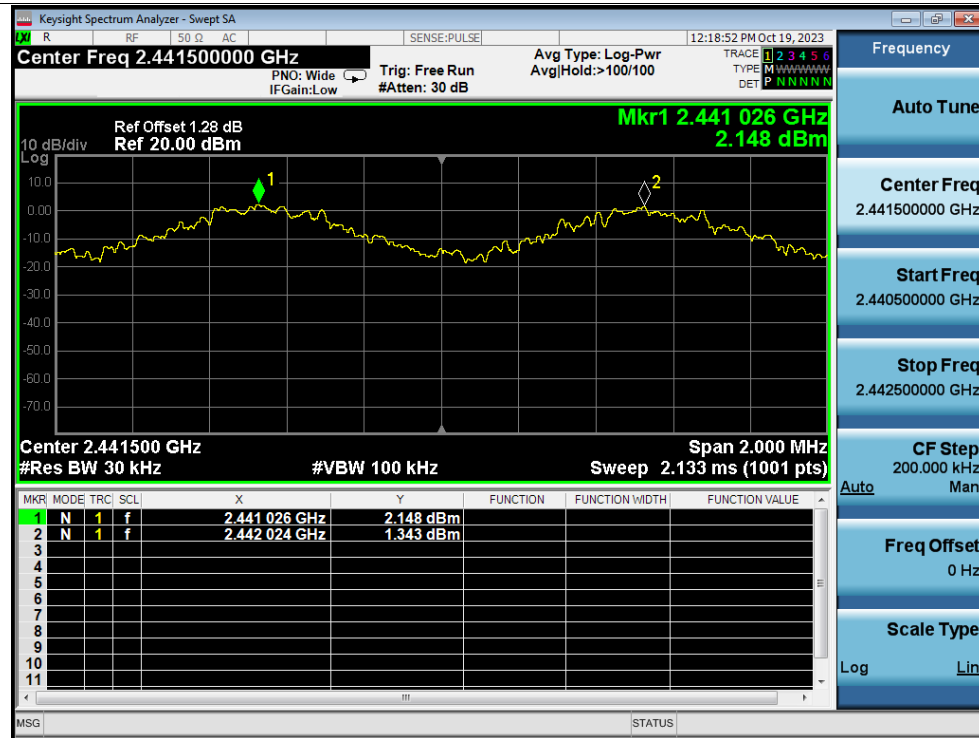
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2402.056	2403.006	0.95	0.707	Pass
NVNT	1-DH5	Ant1	2441.026	2442.024	0.998	0.685	Pass
NVNT	1-DH5	Ant1	2479.052	2480.014	0.962	0.696	Pass
NVNT	2-DH5	Ant1	2402.004	2403.012	1.008	0.025	Pass
NVNT	2-DH5	Ant1	2441.016	2442.016	1	0.025	Pass
NVNT	2-DH5	Ant1	2478.88	2479.866	0.986	0.025	Pass
NVNT	3-DH5	Ant1	2402.022	2402.986	0.964	0.695	Pass
NVNT	3-DH5	Ant1	2441.026	2442.054	1.028	0.689	Pass
NVNT	3-DH5	Ant1	2479.064	2480.022	0.958	0.686	Pass

Test Graphs

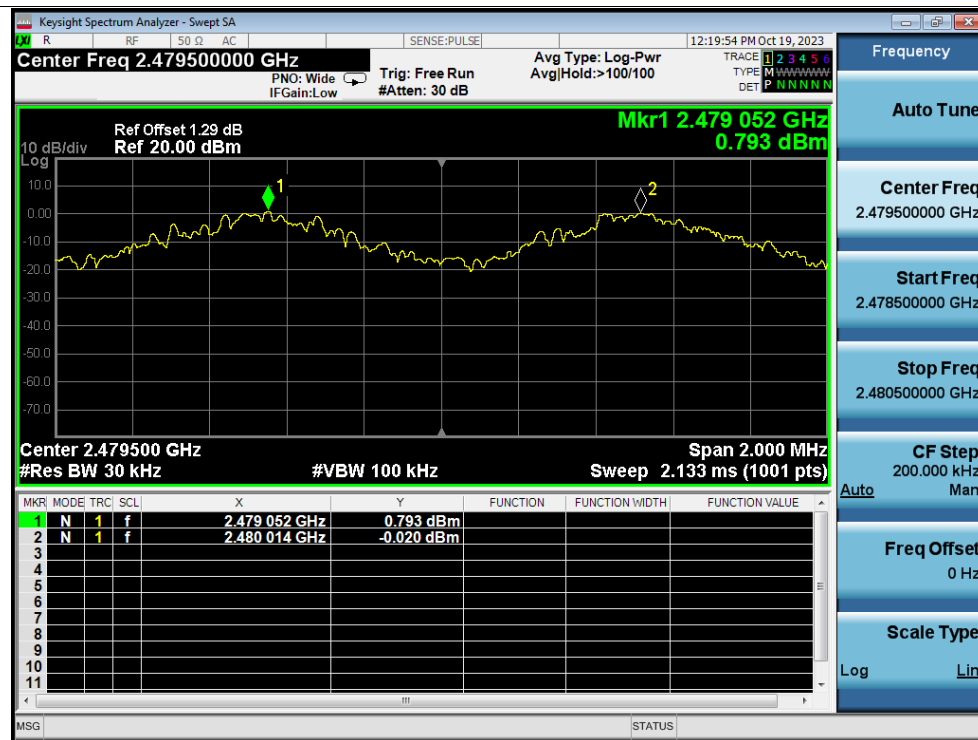
CFS NVNT 1-DH5 2402MHz Ant1



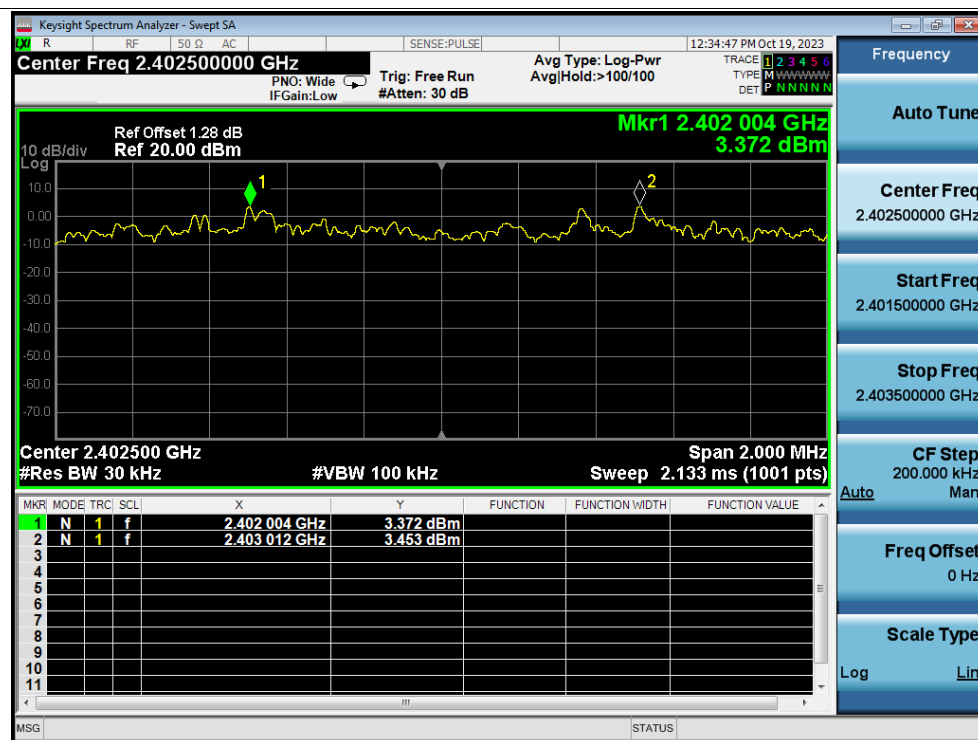
CFS NVNT 1-DH5 2441MHz Ant1



CFS NVNT 1-DH5 2480MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2441MHz Ant1

Keysight Spectrum Analyzer - Swept SA

R F 50 Ω AC SENSE:PULSE 12:35:37 PM Oct 19, 2023

Center Freq 2.441500000 GHz PNO: Wide IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr 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 N N

Ref Offset 1.28 dB Ref 20.00 dBm

Mkr1 2.441 016 GHz 0.198 dBm

10 dB/div Log

Center 2.441500 GHz #Res BW 30 kHz #VBW 100 kHz Span 2.000 MHz Sweep 2.133 ms (1001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.441 016 GHz	0.198 dBm			
2	N	1	f	2.442 016 GHz	0.925 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq
2.441500000 GHz

Start Freq
2.440500000 GHz

Stop Freq
2.442500000 GHz

CF Step
200.000 kHz Man

Auto

Freq Offset
0 Hz

Scale Type
Log Lin

CFS NVNT 2-DH5 2480MHz Ant1

Keysight Spectrum Analyzer - Swept SA
R RF 50 Ω AC SENSE:PULSE 12:36:27 PM Oct 19, 2023
Center Freq 2.479500000 GHz PNO: Wide Trig: Free Run Avg Type: Log-Pwr TRACE 1 2 3 4 5 6
IF Gain: Low #Atten: 30 dB Avg Hold: >100/100 TYPE M W W W W W W W
DET P N N N N N N N

Ref Offset 1.29 dB
Ref 20.00 dBm

Mkr1 2.478 880 GHz
-2.567 dBm

10 dB/div
Log

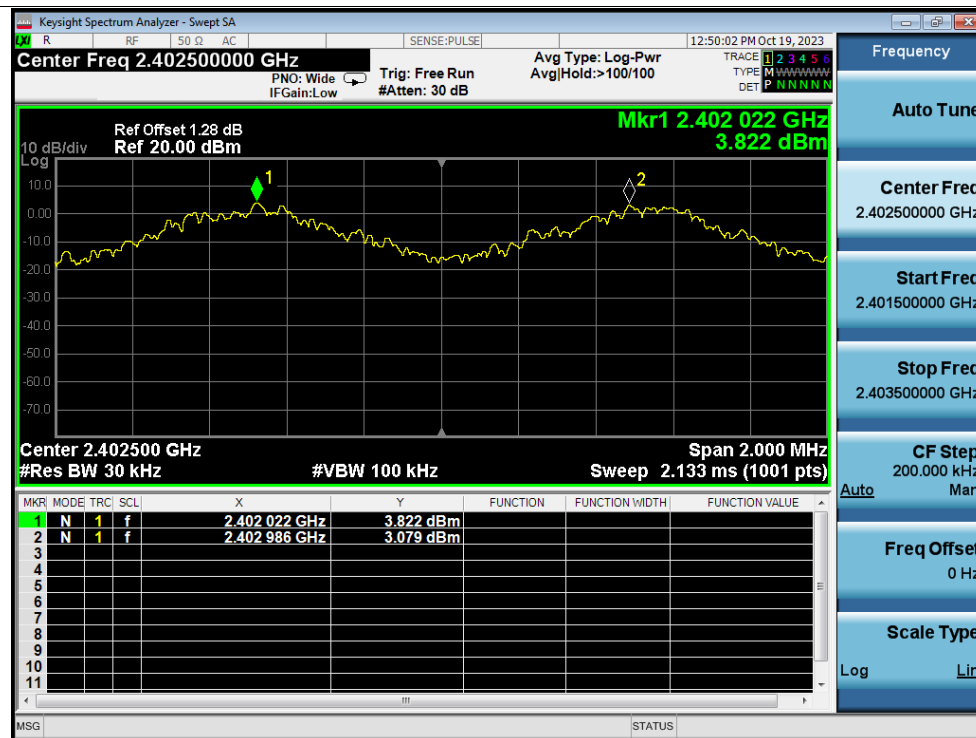
Center 2.479500 GHz Span 2.000 MHz
#Res BW 30 kHz #VBW 100 kHz Sweep 2.133 ms (1001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.478 880 GHz	-2.567 dBm			
2	N	1	f	2.479 866 GHz	1.265 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								

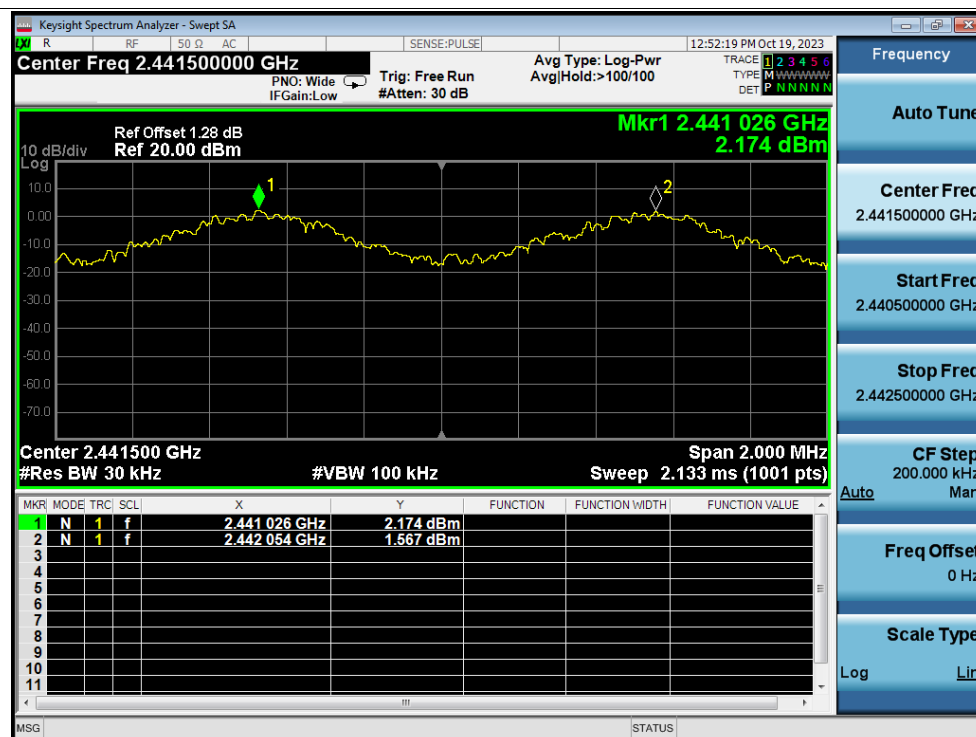
MSG STATUS

Frequency Auto Tune Center Freq 2.479500000 GHz Start Freq 2.478500000 GHz Stop Freq 2.480500000 GHz CF Step 200.000 kHz Man Auto Freq Offset 0 Hz Scale Type Log Lin

CFS NVNT 3-DH5 2402MHz Ant1



CFS NVNT 3-DH5 2441MHz Ant1



CFS NVMT 3-DH5 2480MHz Ant1

Keysight Spectrum Analyzer - Swept SA

R RE 50 Q AC SENSE:PULSE 12:57:39 PM Oct 19, 2023

Center Freq 2.47950000 GHz PNO: Wide IFGain:Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr AvgHold: >100/100

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

Ref Offset 1.29 dB Ref 20.00 dBm

Mkr1 2.479 064 GHz 0.496 dBm

10 dB/div Log

Center 2.479500 GHz Span 2.000 MHz
#Res BW 30 kHz #VBW 100 kHz Sweep 2.133 ms (1001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.479 064 GHz	0.496 dBm			
2	N	1	f	2.480 022 GHz	2.022 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq 2.47950000 GHz

Start Freq 2.478500000 GHz

Stop Freq 2.480500000 GHz

CF Step 200.000 kHz

Man

Auto

Freq Offset 0 Hz

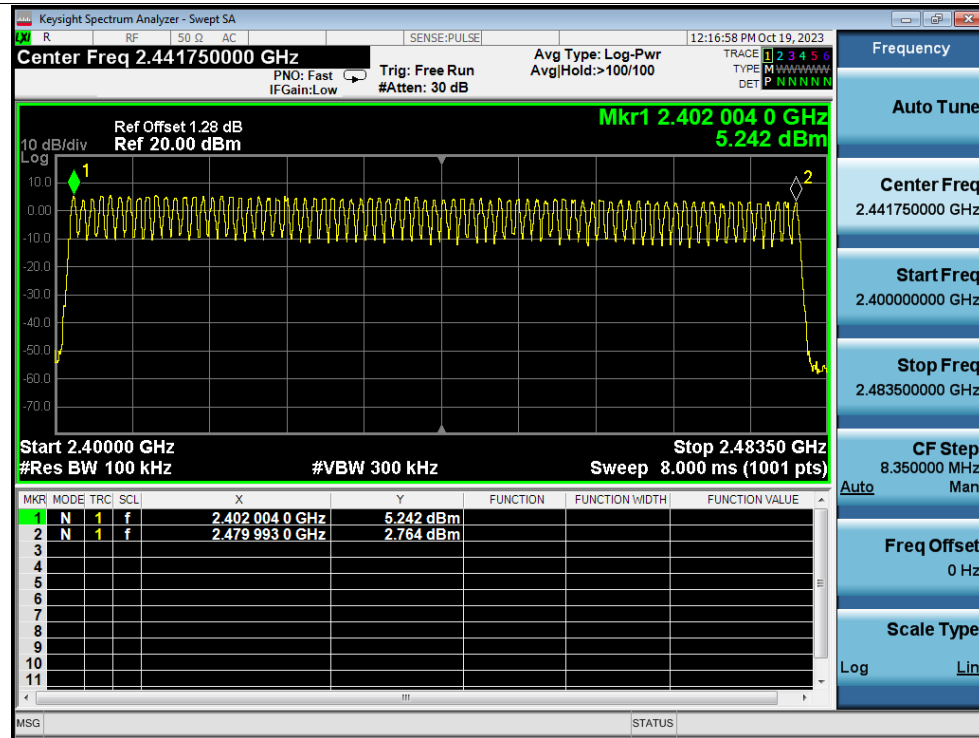
Scale Type Log Lin

Number of Hopping Channel

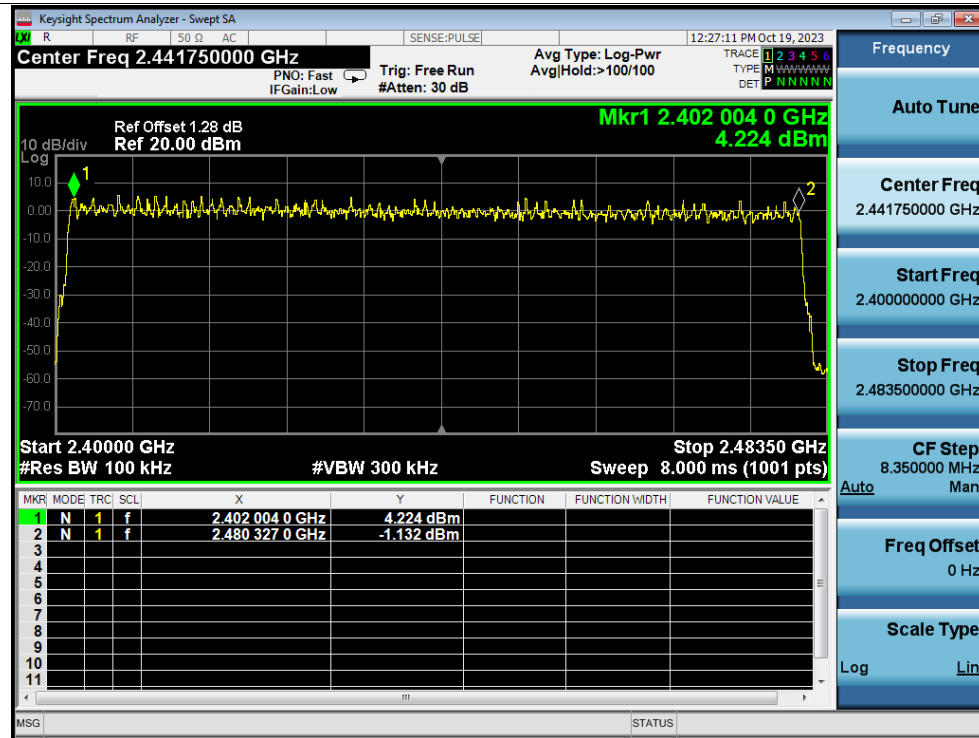
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass

Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1



Keysight Spectrum Analyzer - Swept SA

R RE 50 Q AC SENSE:PULSE 12:50:26 PM Oct 19, 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 WWWWWW DET P NNNNN

Ref Offset 1.28 dB Ref 20.00 dBm

Mkr1 2.402 004 0 GHz 5.551 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	2.402 004 0 GHz	5.551 dBm			
2	N	1	f	2.480 076 5 GHz	2.744 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

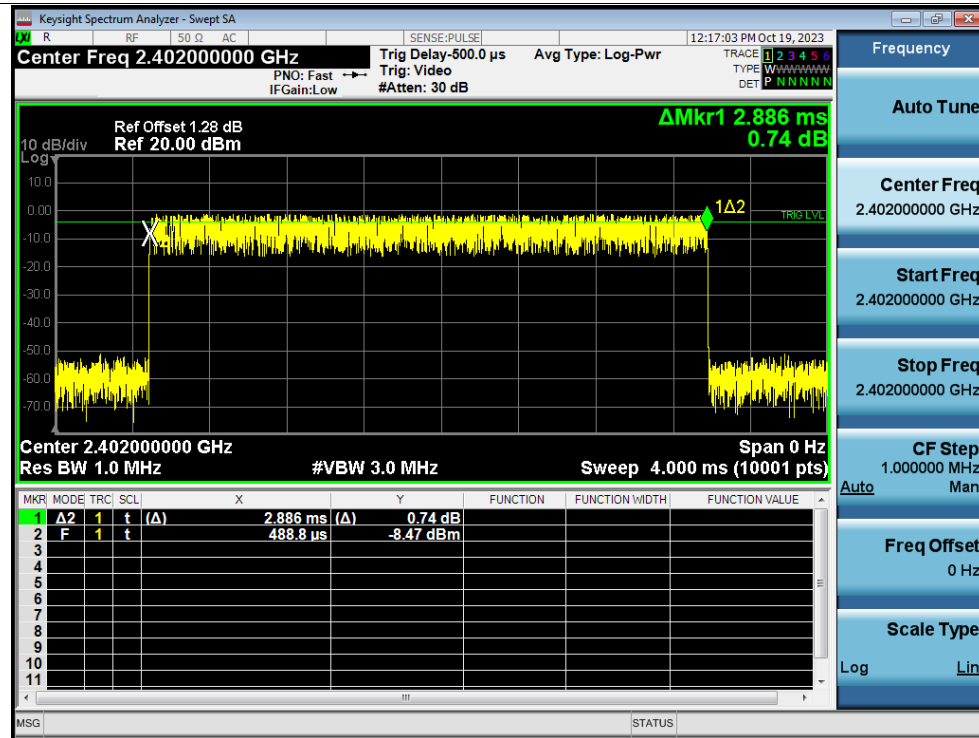
Scale Type Log Lin

Dwell Time

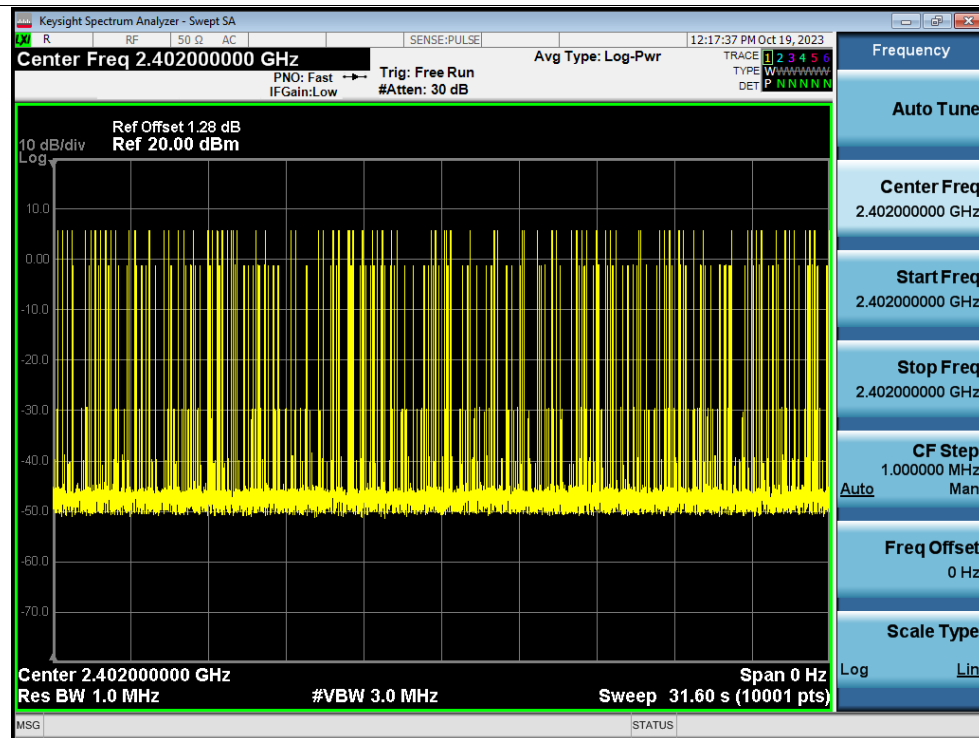
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.886	291.486	101	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.885	282.73	98	31600	400	Pass
NVNT	1-DH5	2480	Ant1	2.885	291.385	101	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.885	363.51	126	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.891	320.901	111	31600	400	Pass
NVNT	2-DH5	2480	Ant1	2.892	315.228	109	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.362	243.286	103	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.362	262.182	111	31600	400	Pass
NVNT	3-DH5	2480	Ant1	2.362	255.096	108	31600	400	Pass

Test Graphs

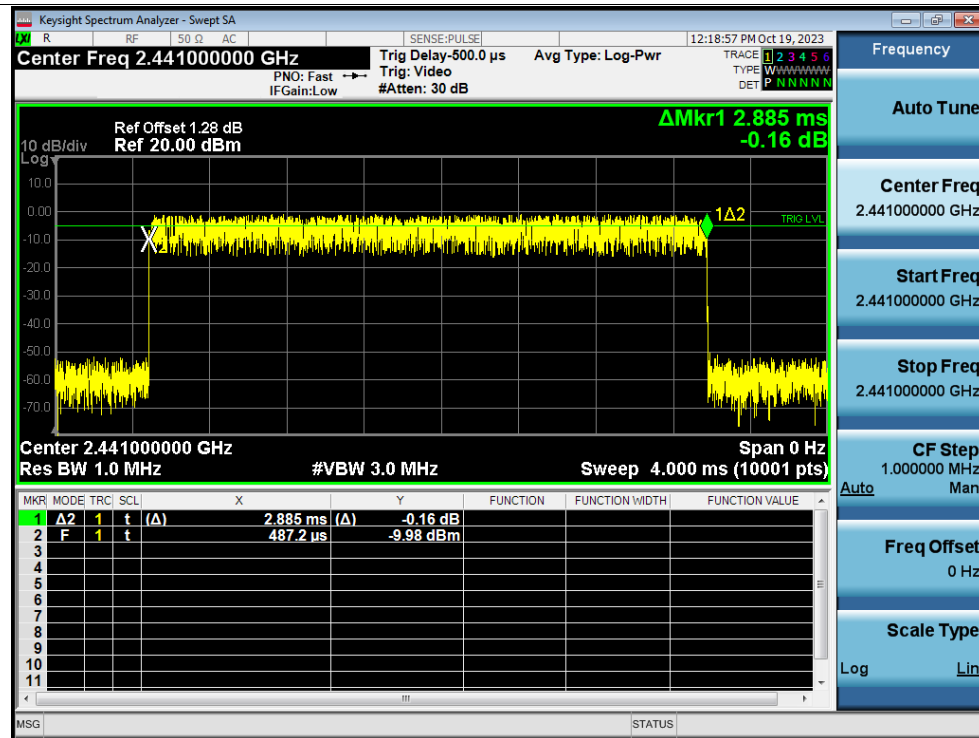
Dwell NVNT 1-DH5 2402MHz Ant1 One Burst



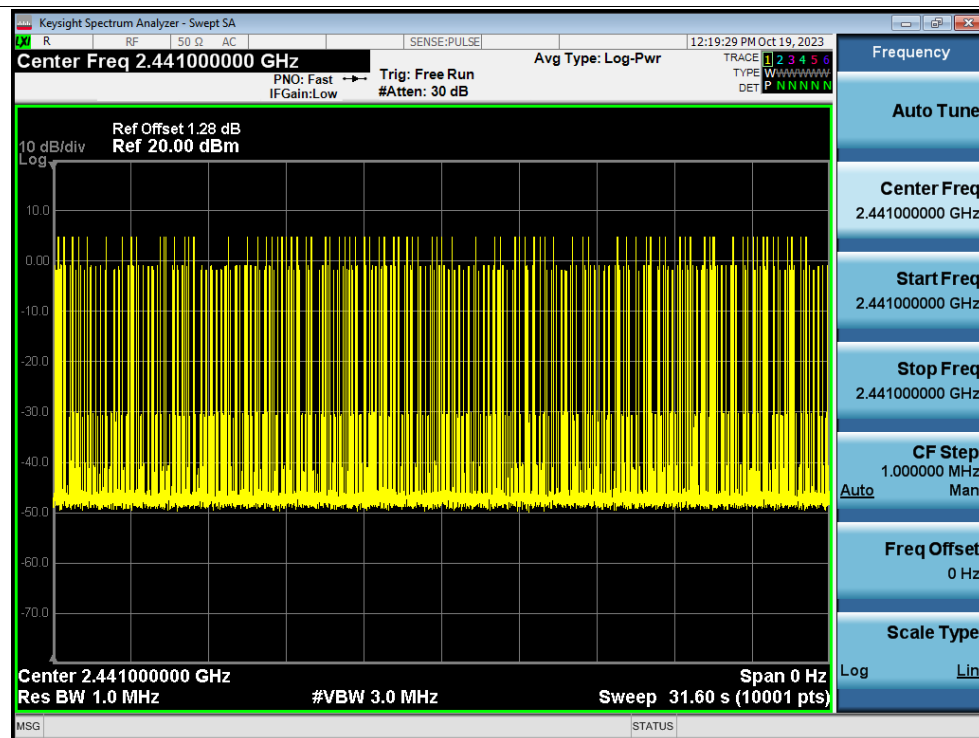
Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated



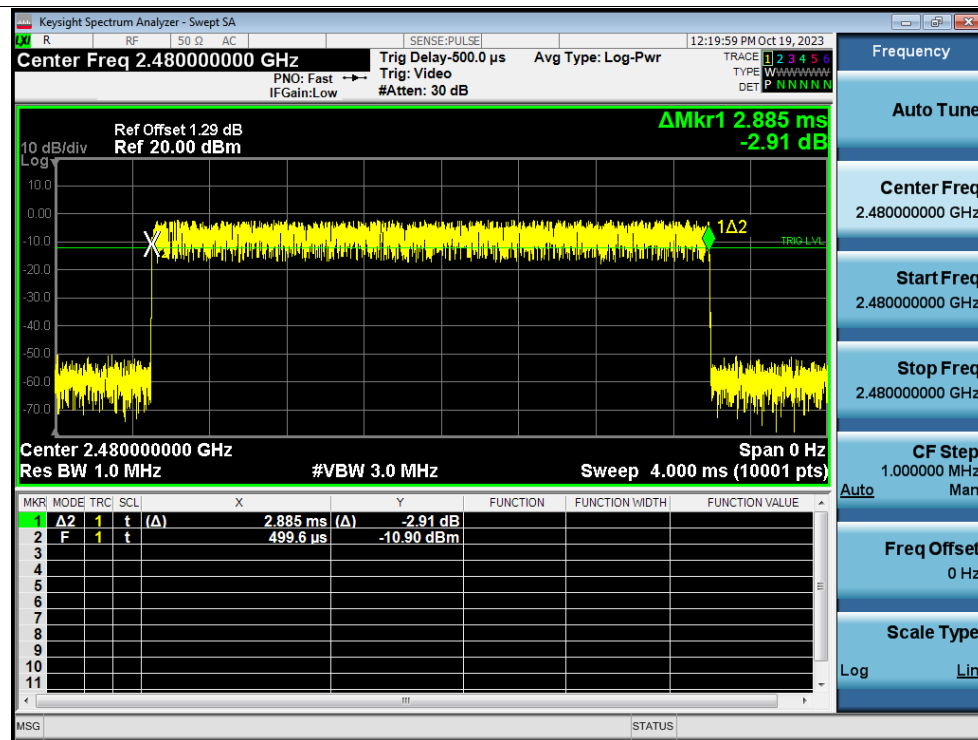
Dwell NVNT 1-DH5 2441MHz Ant1 One Burst



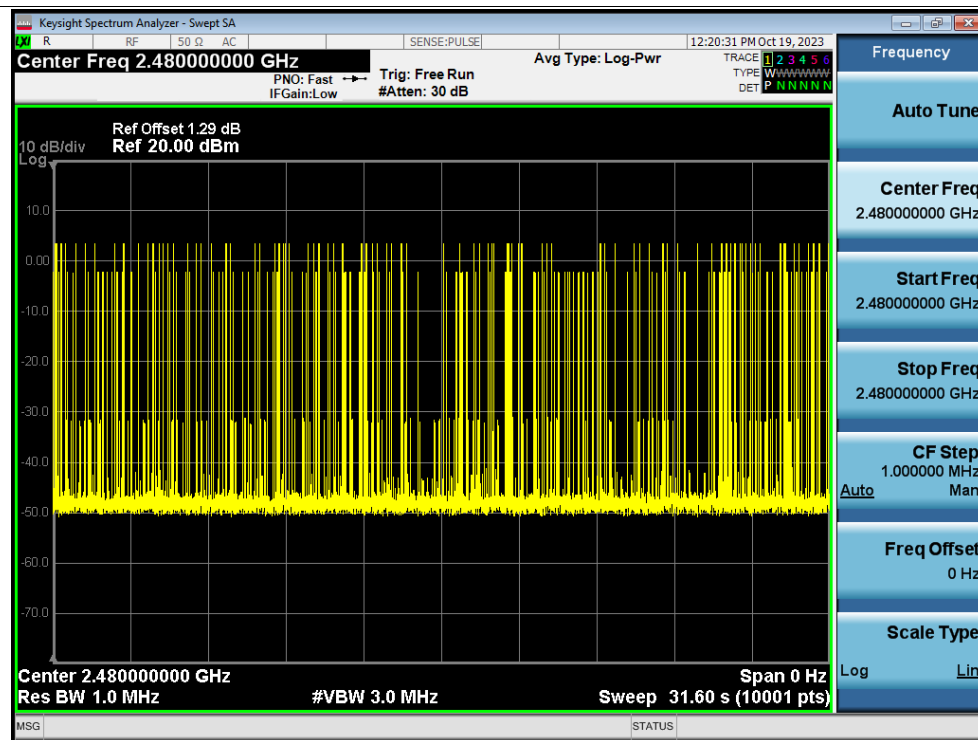
Dwell NVNT 1-DH5 2441MHz Ant1 Accumulated



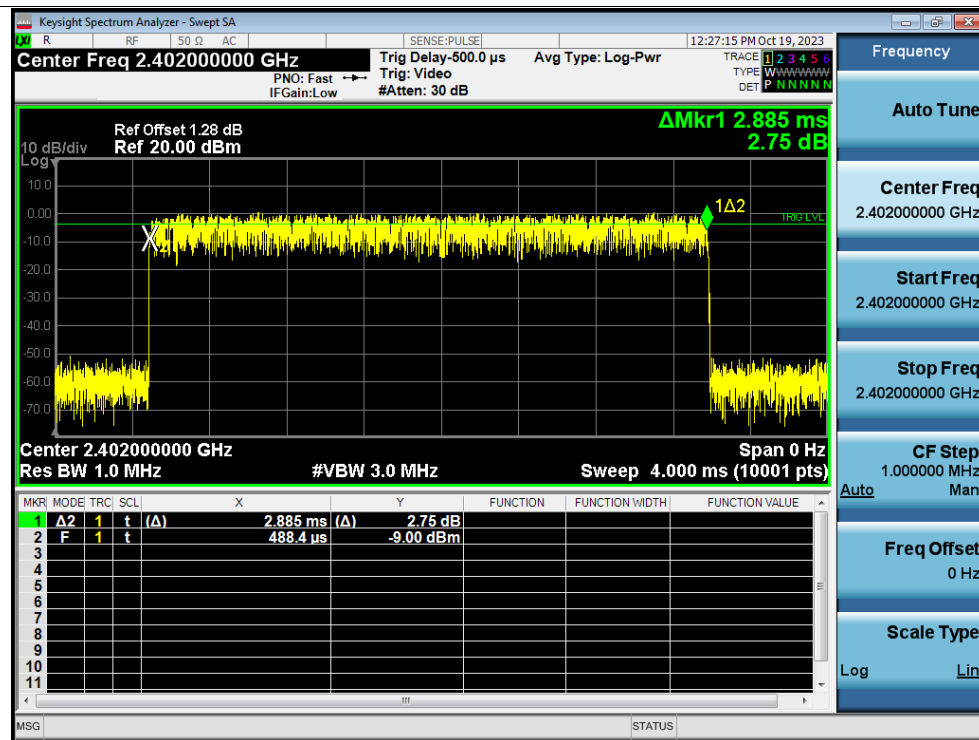
Dwell NVNT 1-DH5 2480MHz Ant1 One Burst



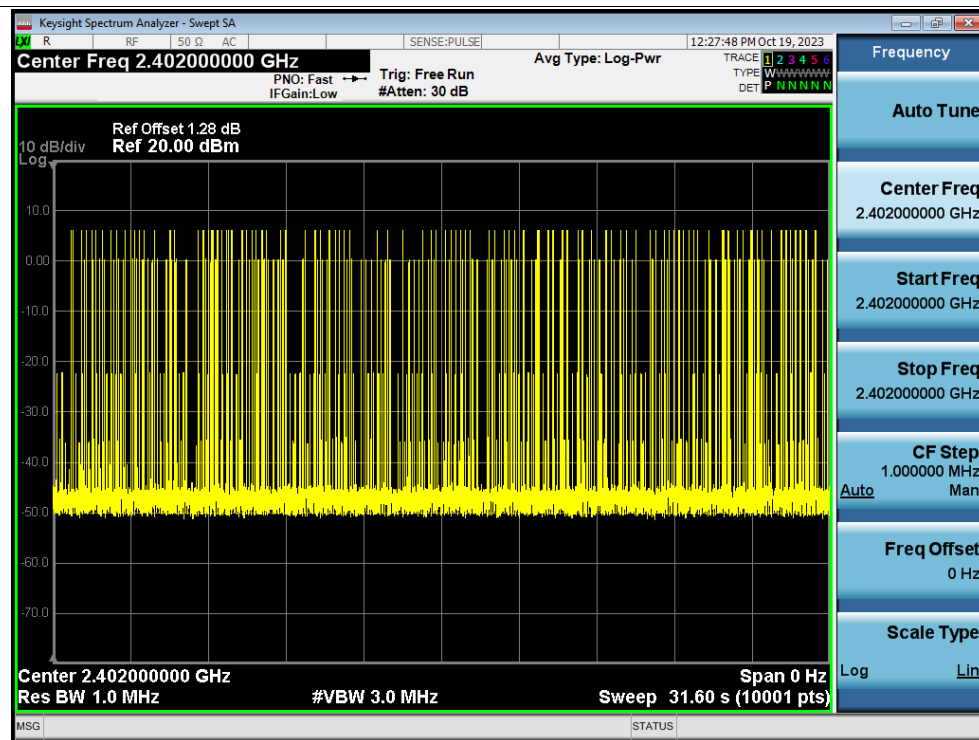
Dwell NVNT 1-DH5 2480MHz Ant1 Accumulated



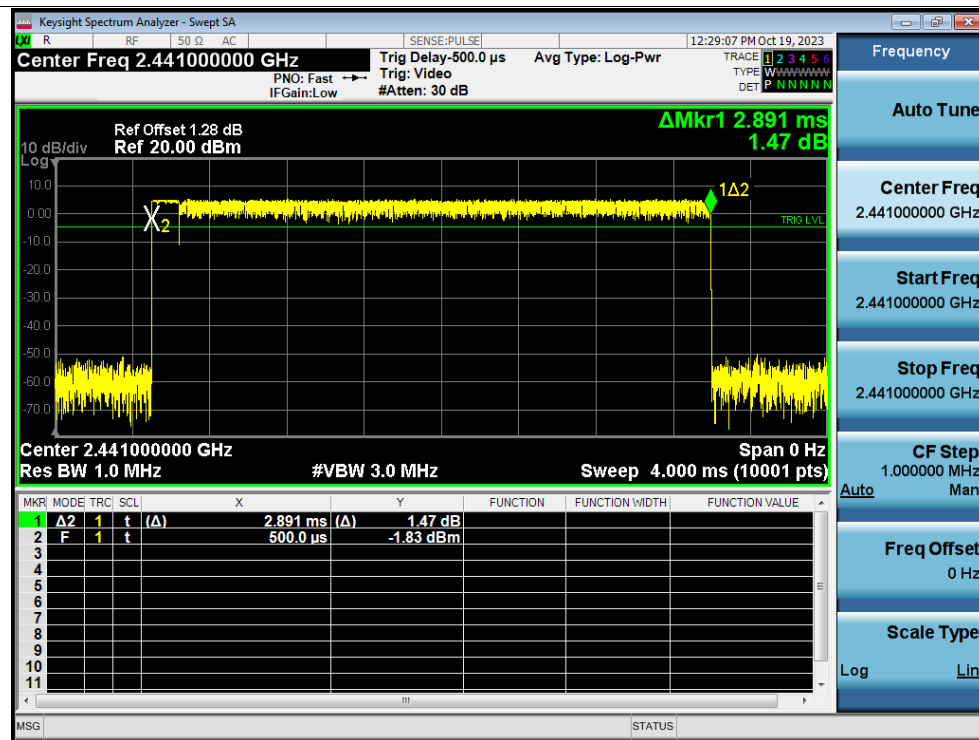
Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



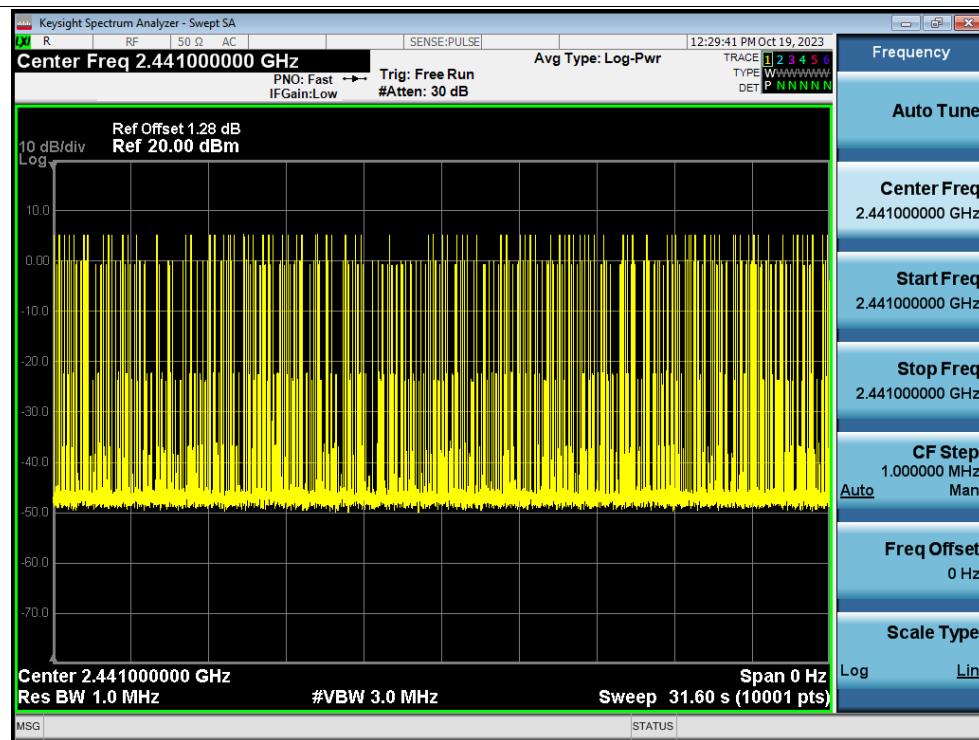
Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated



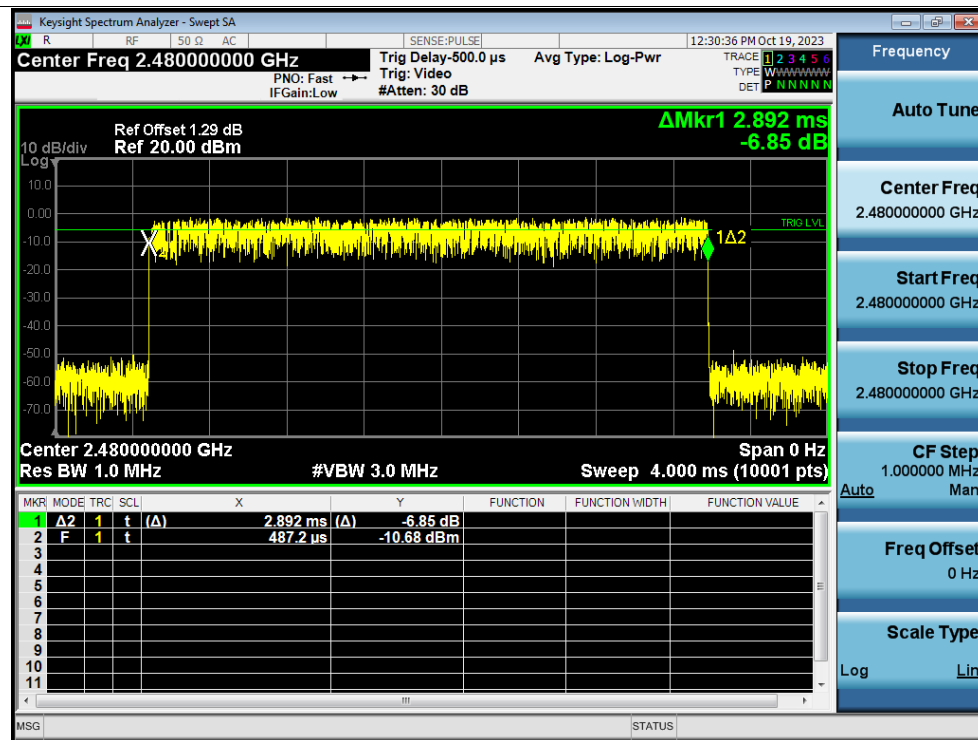
Dwell NVNT 2-DH5 2441MHz Ant1 One Burst



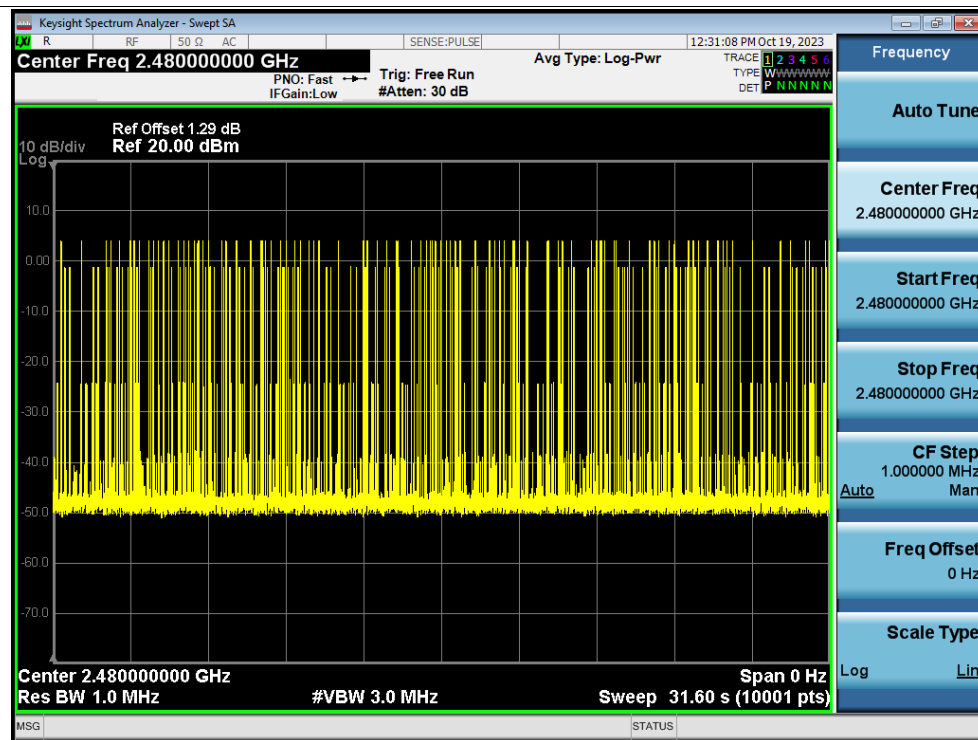
Dwell NVNT 2-DH5 2441MHz Ant1 Accumulated



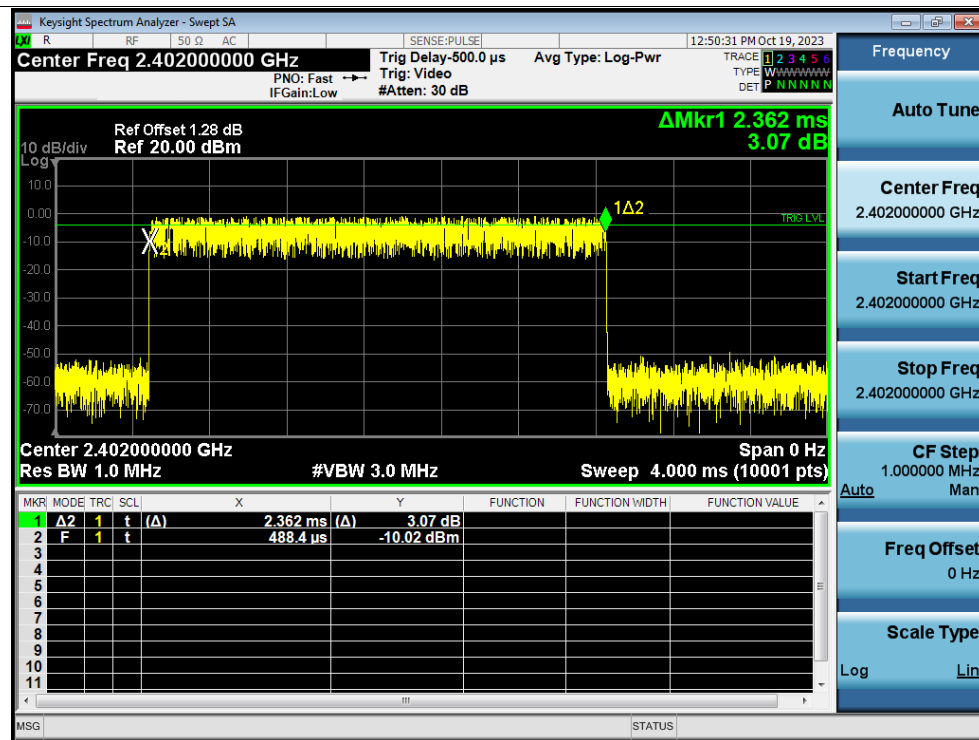
Dwell NVNT 2-DH5 2480MHz Ant1 One Burst



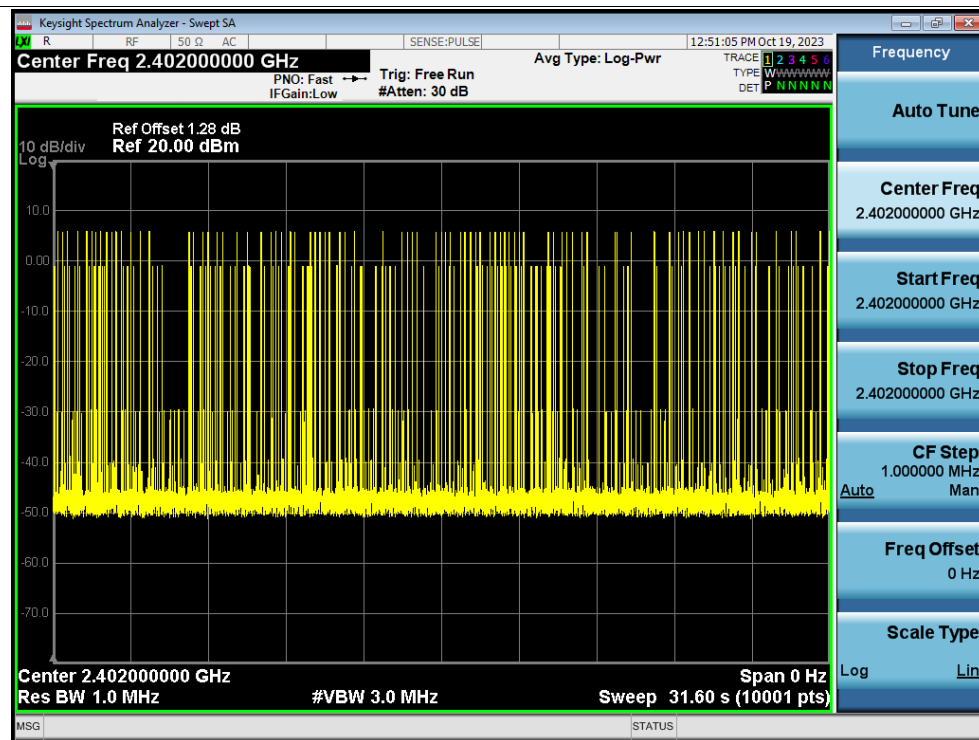
Dwell NVNT 2-DH5 2480MHz Ant1 Accumulated



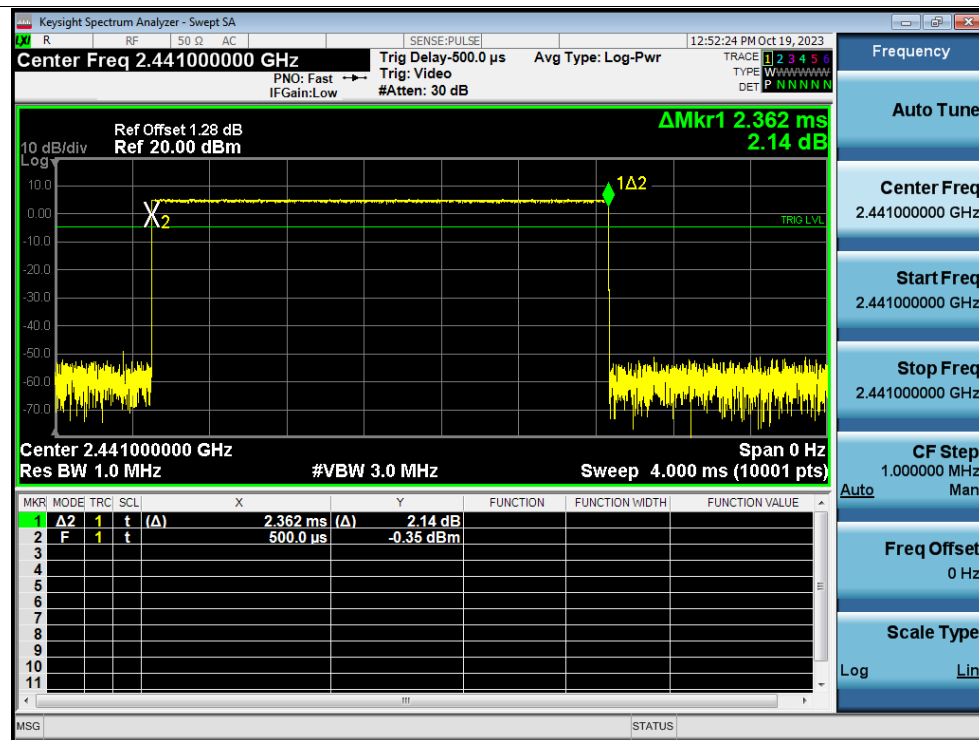
Dwell NVNT 3-DH5 2402MHz Ant1 One Burst



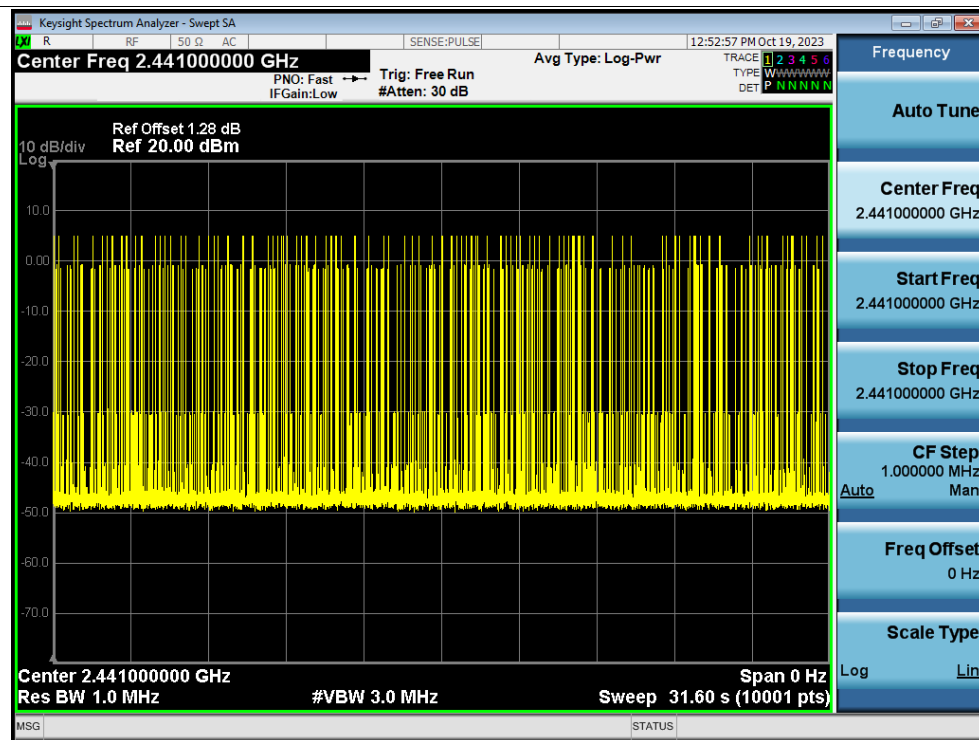
Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated



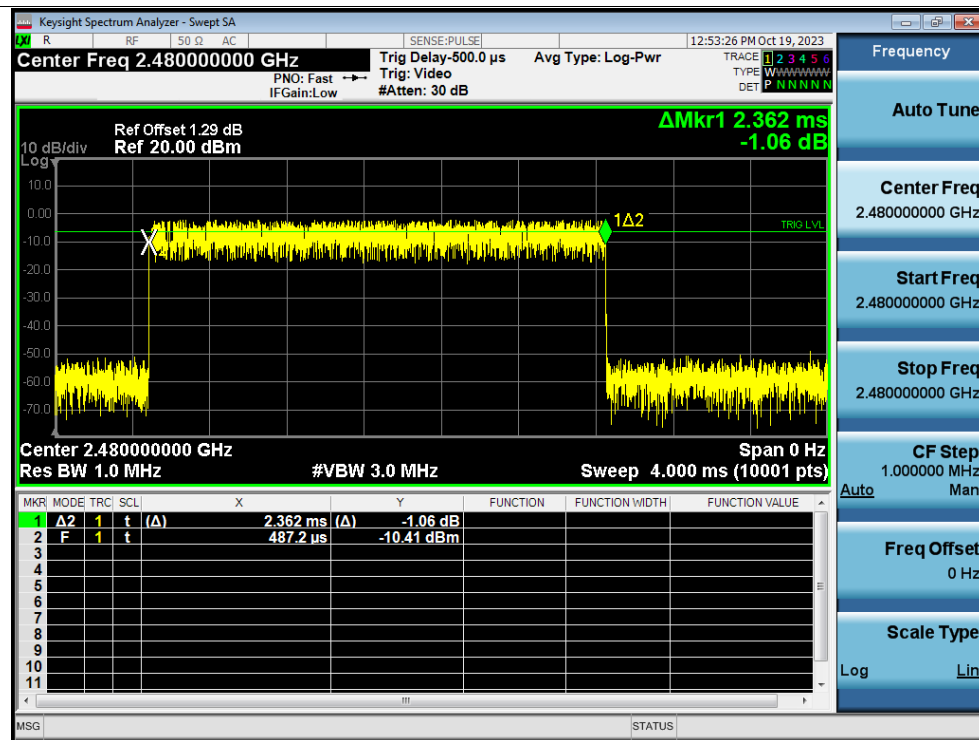
Dwell NVNT 3-DH5 2441MHz Ant1 One Burst



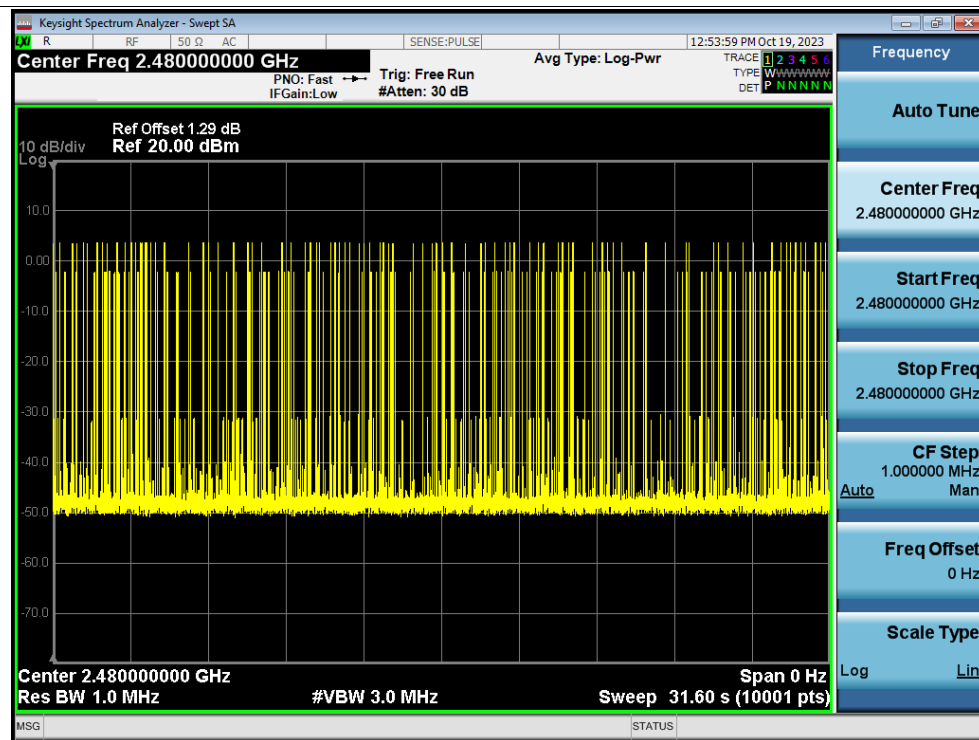
Dwell NVNT 3-DH5 2441MHz Ant1 Accumulated



Dwell NVNT 3-DH5 2480MHz Ant1 One Burst



Dwell NVNT 3-DH5 2480MHz Ant1 Accumulated

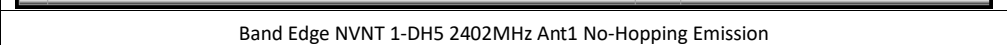


Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-57.36	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-59.09	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-53.89	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-60.38	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-56.5	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-60.4	-20	Pass

Test Graphs

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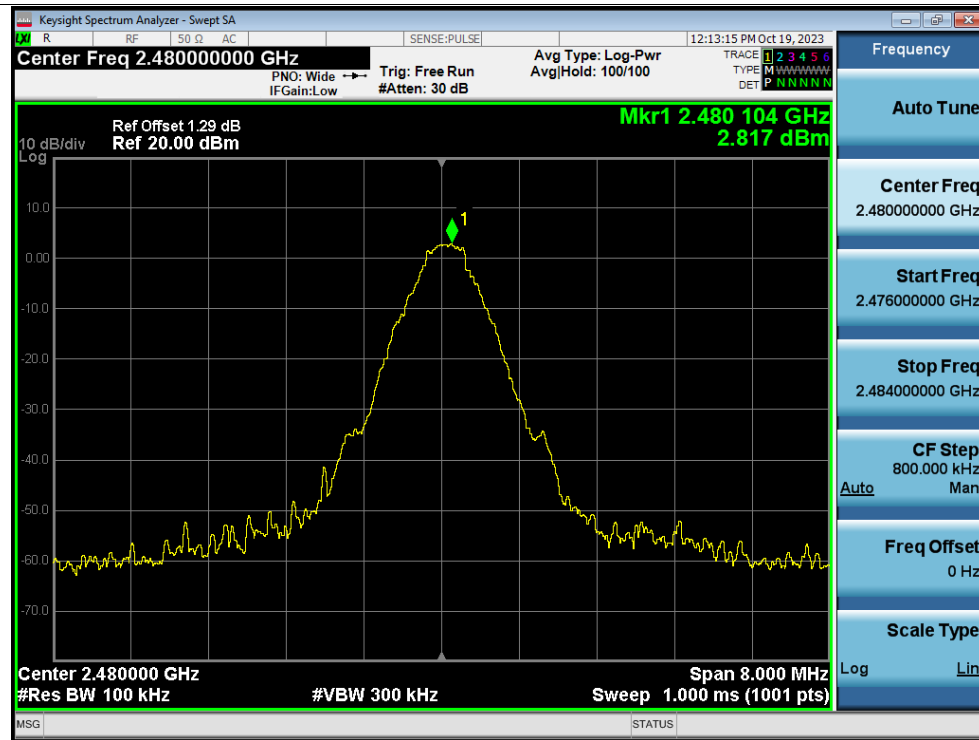


The screenshot shows the Keysight Spectrum Analyzer - Swept SA interface. The plot area displays a frequency spectrum with a prominent peak at approximately 1.4 GHz. The x-axis represents frequency in GHz, ranging from 1.3 to 1.5. The y-axis represents power in dBm, ranging from -100 to 0. The peak is labeled with a value of -10.0 dBm. The interface includes various control buttons and a data table at the bottom.

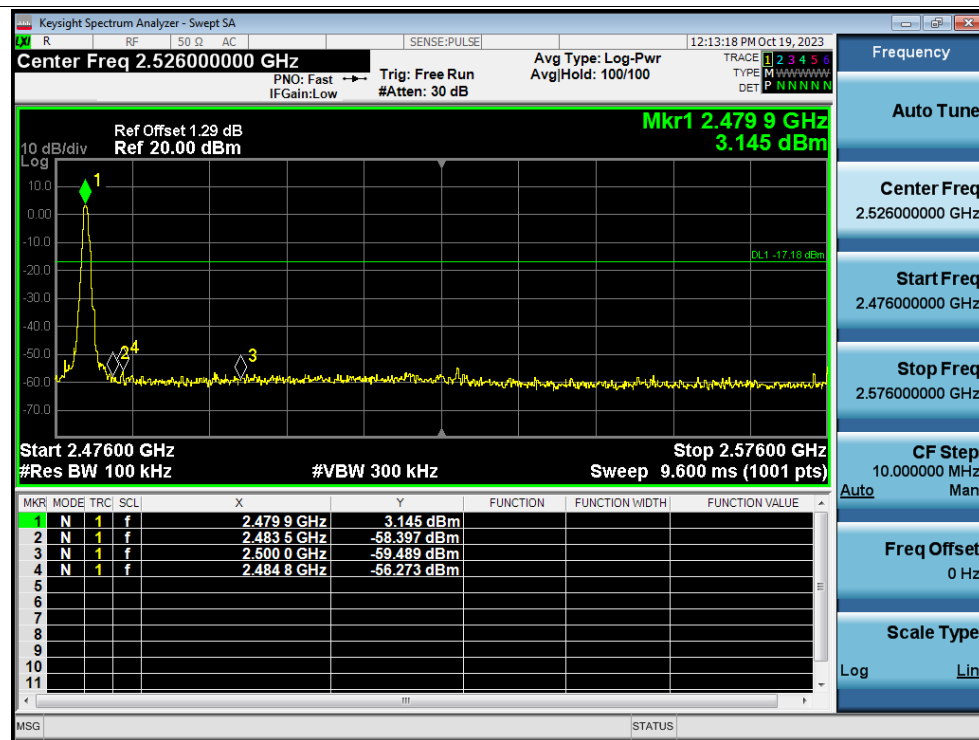
Frequency (GHz)	Power (dBm)
1.3	-100.0
1.4	-10.0
1.5	-100.0



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

Keysight Spectrum Analyzer - Swept SA

Center Freq 2.40200000 GHz

Ref Offset 1.28 dB
Ref 20.00 dBm

Mkr1 2.402 008 GHz
5.208 dBm

Center 2.402000 GHz
#Res BW 100 kHz
#VBW 300 kHz

Span 8.000 MHz
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
Man

Freq Offset
0 Hz

Scale Type
Log

The figure is a screenshot of a Keysight Spectrum Analyzer. The main display area shows a spectral plot with a yellow trace. The x-axis represents frequency, and the y-axis represents power in dBm. A prominent peak is visible at 2.402 GHz, marked with a green diamond and the number '1'. The peak's power level is indicated as 5.208 dBm. The plot has a logarithmic scale. The interface includes various control panels: a top panel with settings like 'Center Freq', 'Span', and 'Sweep'; a right-hand panel with 'Frequency' settings like 'Auto Tune', 'Center Freq', 'Start Freq', 'Stop Freq', 'CF Step', 'Freq Offset', and 'Scale Type'; and a bottom panel with 'MSG' and 'STATUS' indicators.

Keysight Spectrum Analyzer - Swept SA

Center Freq 2.356000000 GHz

PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB

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

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

12:41:20 PM Oct 19, 2023

Ref Offset 1.28 dB
Ref 20.00 dBm

Mkr1 2.4019 GHz
5.441 dBm

10 dB/div Log

Start 2.306000 GHz Stop 2.406000 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	f	f	2.4019 GHz	5.441 dBm			
2	N	f	f	2.4000 GHz	-52.313 dBm			
3	N	f	f	2.4000 GHz	-52.313 dBm			
4	N	f	f	2.3999 GHz	-48.689 dBm			

Auto Tune

Center Freq 2.356000000 GHz

Start Freq 2.306000000 GHz

Stop Freq 2.406000000 GHz

CF Step 10.000000 MHz Man

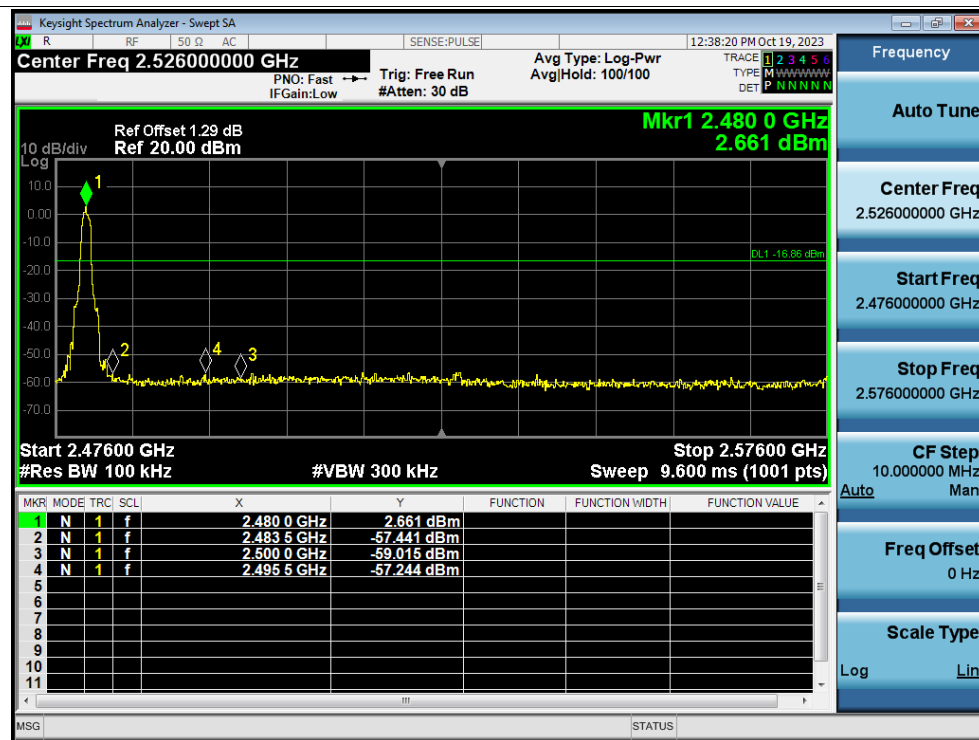
Freq Offset 0 Hz

Scale Type Log Lin

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



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



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

Keysight Spectrum Analyzer - Swept SA

Center Freq 2.40200000 GHz

Ref Offset 1.28 dB
Ref 20.00 dBm

Mkr1 2.402 024 GHz
5.163 dBm

10 dB/div
Log

Center 2.402000 GHz
#Res BW 100 kHz

Span 8.000 MHz
Sweep 1.000 ms (1001 pts)

Trig: Free Run
#Atten: 30 dB

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

Frequency

Auto Tune

Center Freq
2.402000000 GHz

Start Freq
2.398000000 GHz

Stop Freq
2.406000000 GHz

CF Step
800.000 kHz
Man

Freq Offset
0 Hz

Scale Type
Log

Trace	Type	Det
1	M	PK

Keysight Spectrum Analyzer - Swept SA

R RF 50 Ω AC SENSE:PULSE 12:42:56 PM Oct 19, 2023

Center Freq 2.35600000 GHz Avg Type: Log-Pwr Avg|Hold: 100/100 PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB TRACE 1 2 3 4 5 6 TYPE M NNNNNN DET P NNNNN

Ref Offset 1.28 dB Ref 20.00 dBm

Mkr1 2.402 1 GHz 5.424 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	2.402 1 GHz	5.424 dBm			
2	N	1	f	2.400 0 GHz	-52.295 dBm			
3	N	1	f	2.400 0 GHz	-52.295 dBm			
4	N	1	f	2.399 4 GHz	-51.350 dBm			
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq 2.35600000 GHz

Start Freq 2.30600000 GHz

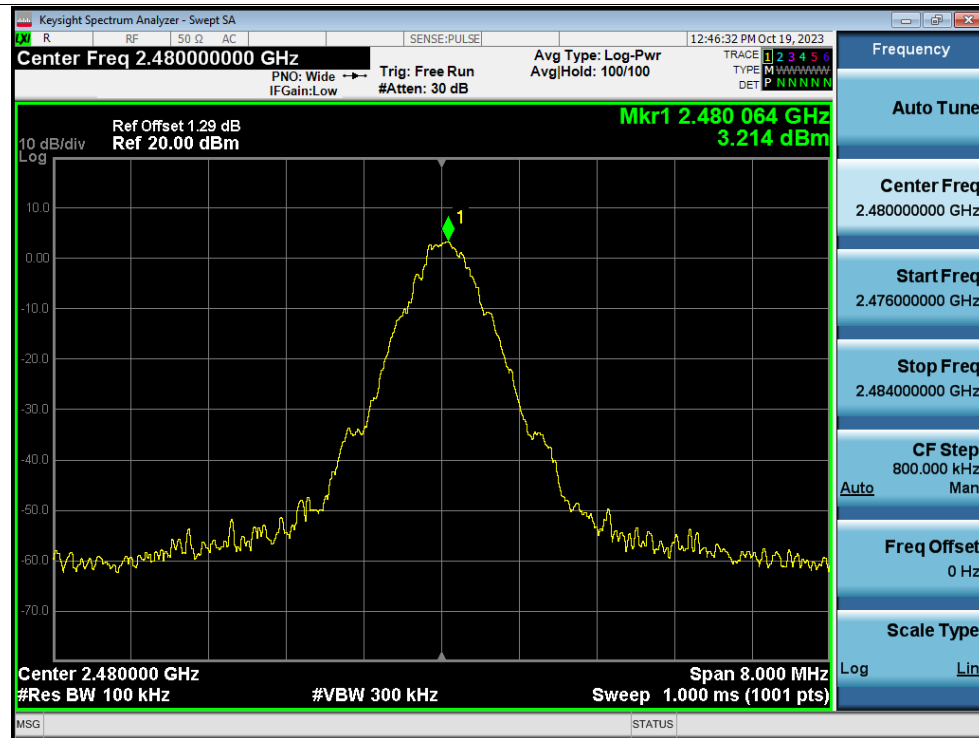
Stop Freq 2.40600000 GHz

CF Step 10.00000 MHz Man

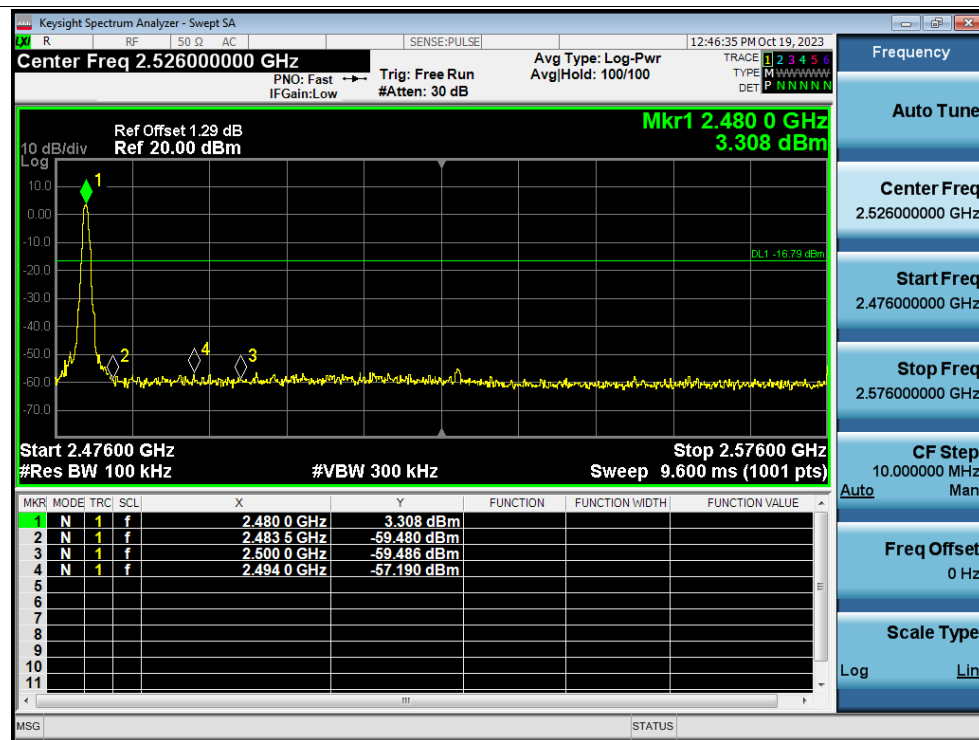
Freq Offset 0 Hz

Scale Type Log Lin

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



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



Band Edge(Hopping)

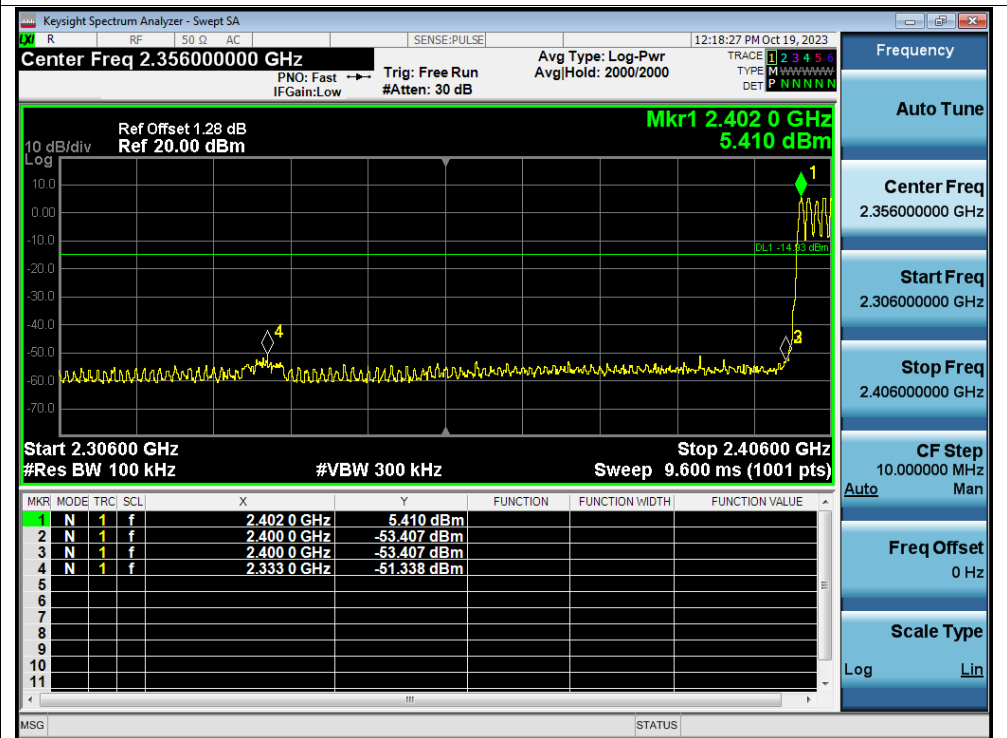
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-56.4	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-55.89	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-58.55	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-57.57	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-57.95	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-56.31	-20	Pass

Test Graphs

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



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



Keysight Spectrum Analyzer - Swept SA

Center Freq 2.480000000 GHz

Ref Offset 1.29 dB
Ref 20.00 dBm

Mkr1 2.476 880 GHz
3.145 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 1.29 dB
Ref 20.00 dBm

10 dB/div
Log

Start 2.4760 GHz
#Res BW 100 kHz

Stop 2.5760 GHz
Sweep 9.600 ms (1001 pts)

Marker 1: 2.479 1 GHz, -3.167 dBm

Marker 2: 2.483 5 GHz, -57.744 dBm

Marker 3: 2.500 0 GHz, -52.748 dBm

Marker 4: 2.500 0 GHz, -52.748 dBm

DL1 -16.86 dBm

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

MSG

STATUS

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

Keysight Spectrum Analyzer - Swept SA

R RF 50.0 AC SENSE:PULSE 12:36:55 PM Oct 19, 2023

Center Freq 2.402000000 GHz PNO: Wide Trg: Free Run Avg Type: Log-Pwr TRAC 1 2 3 4 5 6
IFGain:Low #Atten: 30 dB Avg|Hold: 2000/2000 TYPE: M N N N N N N N N N N N N N N N
DET: P N N N N N N

Ref Offset 1.28 dB
Ref 20.00 dBm

Mkr1 2.403184 GHz
5.257 dBm

10 dB/div
Log

Center 2.402000 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
2.402000000 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

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

Keysight Spectrum Analyzer - Swept SA

R RF 50 Ω AC SENSE:PULSE 12:37:27 PM Oct 19, 2023

Center Freq 2.356000000 GHz PNO: Fast Trig: Free Run Avg Type: Log-Pwr AvgHold: 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 IFGain:Low #Atten: 30 dB

Ref Offset 1.28 dB Mkr1 2.405 2 GHz
Ref 20.00 dBm 5.610 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	2.405 2 GHz	5.610 dBm			
2	N	1	f	2.400 0 GHz	-53.297 dBm			
3	N	1	f	2.400 0 GHz	-53.297 dBm			
4	N	1	f	2.400 0 GHz	-53.297 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 2-DH5 2480MHz Ant1 Hopping Ref

Keysight Spectrum Analyzer - Swept SA
R RF 50.0 AC SENSE:PULSE 12:31:25 PM Oct 19, 2023

Center Freq 2.48000000 GHz Avg Type: Log-Pwr Avg|Hold: 2000/2000
PNO: Wide IFGain:Low Trig: Free Run #Atten: 30 dB 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 1.29 dB
Ref 20.00 dBm

Mkr1 2.476 880 GHz
3.208 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 Man
Freq Offset 0 Hz
Scale Type Log Lin

Band Edge(Hopping) NVNT 2-DHS 240MHz Ant1 Hopping Emission

Keysight Spectrum Analyzer - Swept SA
R RF 50 Ω AC SENSE:PULSE 12:31:59 PM Oct 19, 2023

Center Freq 2.526000000 GHz PNO: Fast IF Gain: Low 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 1.29 dB Ref 20.00 dBm Mkr1 2.479 9 GHz 2.681 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	2.479 9 GHz	2.681 dBm			
2	N	1	f	2.483 5 GHz	-58.224 dBm			
3	N	1	f	2.500 0 GHz	-56.205 dBm			
4	N	1	f	2.496 0 GHz	-54.363 dBm			
5								
6								
7								
8								
9								
10								
11								

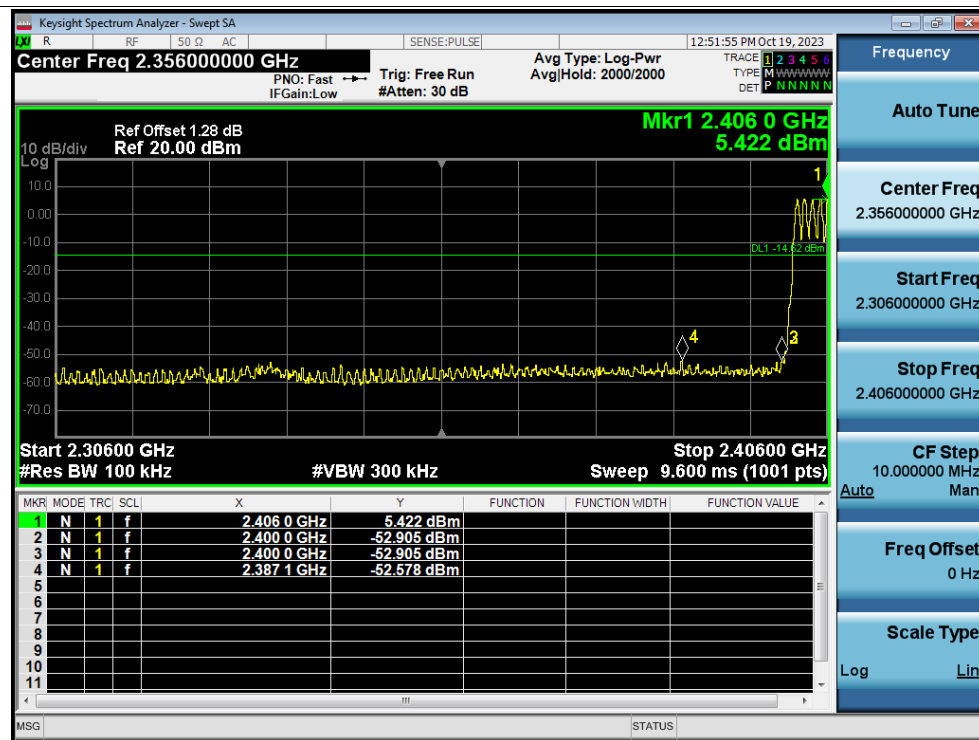
MSG STATUS

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

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



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



Keysight Spectrum Analyzer - Swept SA

Center Freq 2.48000000 GHz

Ref Offset 1.29 dB
Ref 20.00 dBm

10 dB/div
Log

Trig: Free Run
#Atten: 30 dB

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

Frequency

Auto Tune

Center Freq
2.48000000 GHz

Start Freq
2.476000000 GHz

Stop Freq
2.484000000 GHz

CF Step
800.000 kHz
Man

Freq Offset
0 Hz

Scale Type
Log

MSG

STATUS

Mkr1 2.478 040 GHz
3.16 dBm

Center Freq 2.480000 GHz

Span 8.000 MHz

#Res BW 100 kHz

#VBW 300 kHz

Sweep 1.000 ms (1001 pts)

Keysight Spectrum Analyzer - Swept SA

Center Freq 2.526000000 GHz

Ref Offset 1.29 dB
Ref 20.00 dBm

Mkr1 2.478 0 GHz
3.290 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: 2000/2000

12:54:49 PM Oct 19, 2023

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

10 dB/div
Log

DL1 -16.83 dBm

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.478 0 GHz	3.290 dBm			
2	N	1	f	2.483 5 GHz	-57.330 dBm			
3	N	1	f	2.500 0 GHz	-53.974 dBm			
4	N	1	f	2.494 0 GHz	-53.142 dBm			
5								
6								
7								
8								
9								
10								
11								

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

MSG

STATUS

Conducted RF Spurious Emission

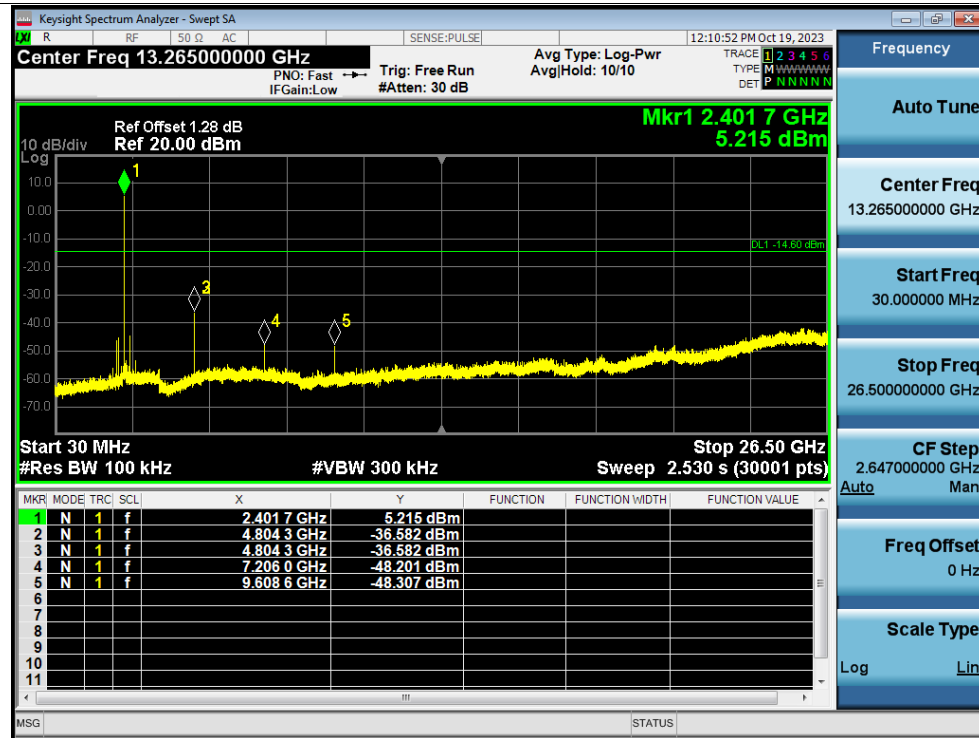
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-41.98	-20	Pass
NVNT	1-DH5	2441	Ant1	-40.86	-20	Pass
NVNT	1-DH5	2480	Ant1	-40.89	-20	Pass
NVNT	2-DH5	2402	Ant1	-39.98	-20	Pass
NVNT	2-DH5	2441	Ant1	-42.03	-20	Pass
NVNT	2-DH5	2480	Ant1	-42.04	-20	Pass
NVNT	3-DH5	2402	Ant1	-42.13	-20	Pass
NVNT	3-DH5	2441	Ant1	-41.45	-20	Pass
NVNT	3-DH5	2480	Ant1	-40.16	-20	Pass

Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



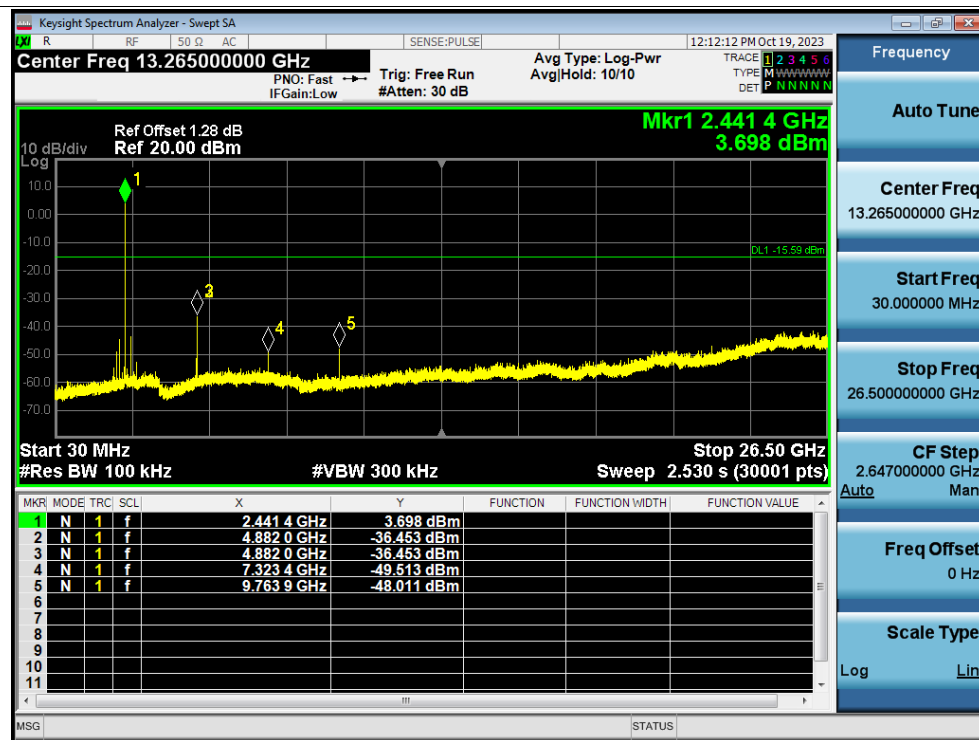
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



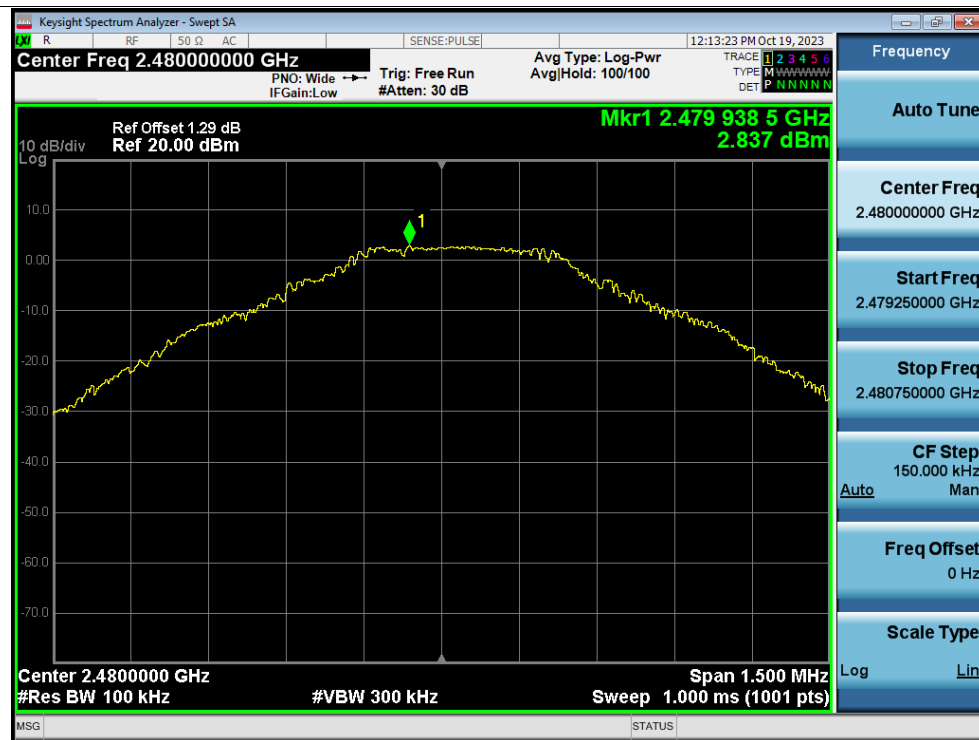
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



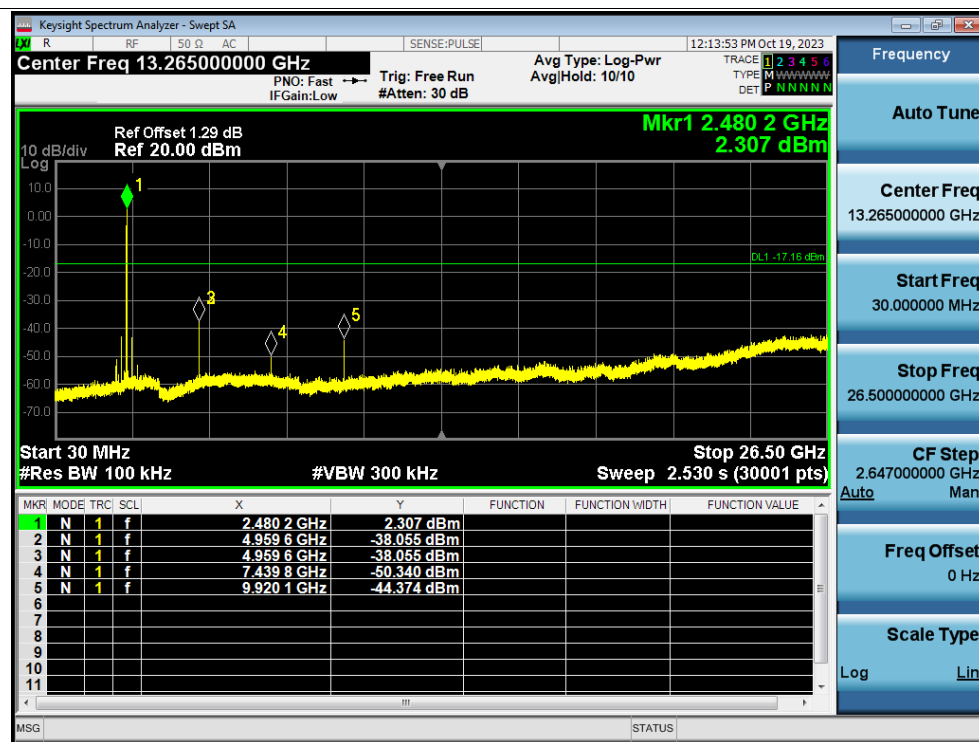
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



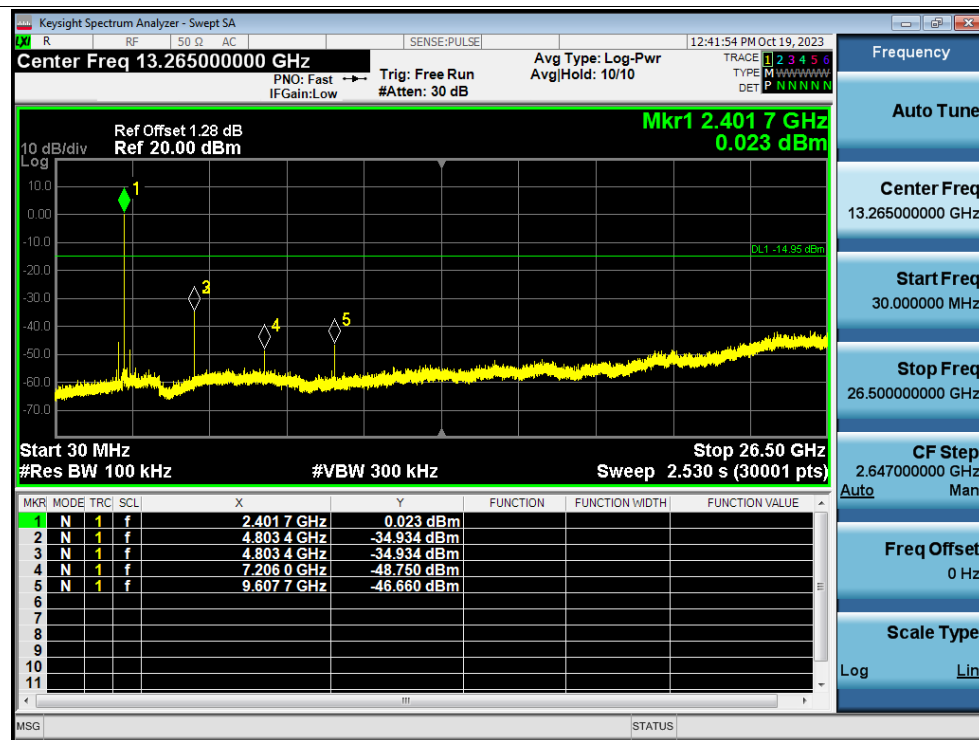
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



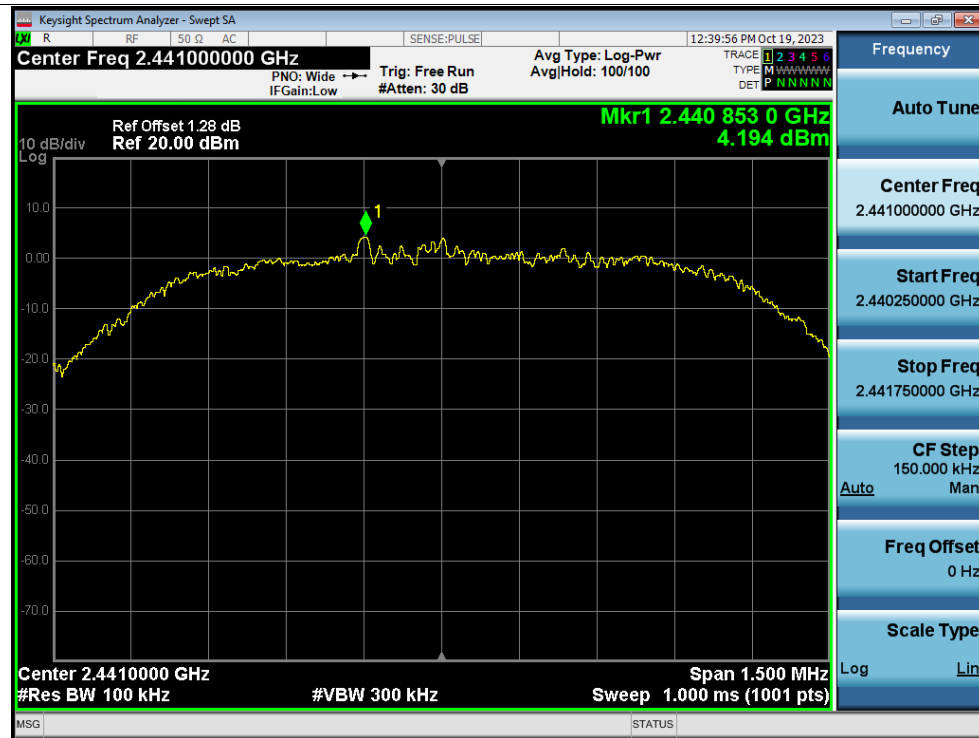
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



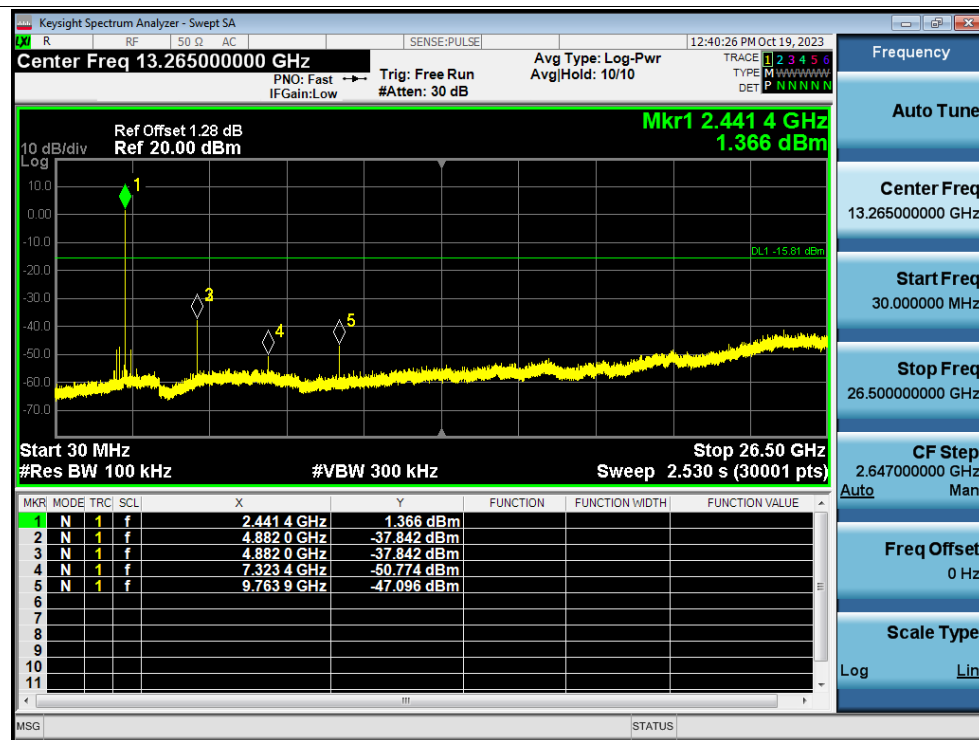
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



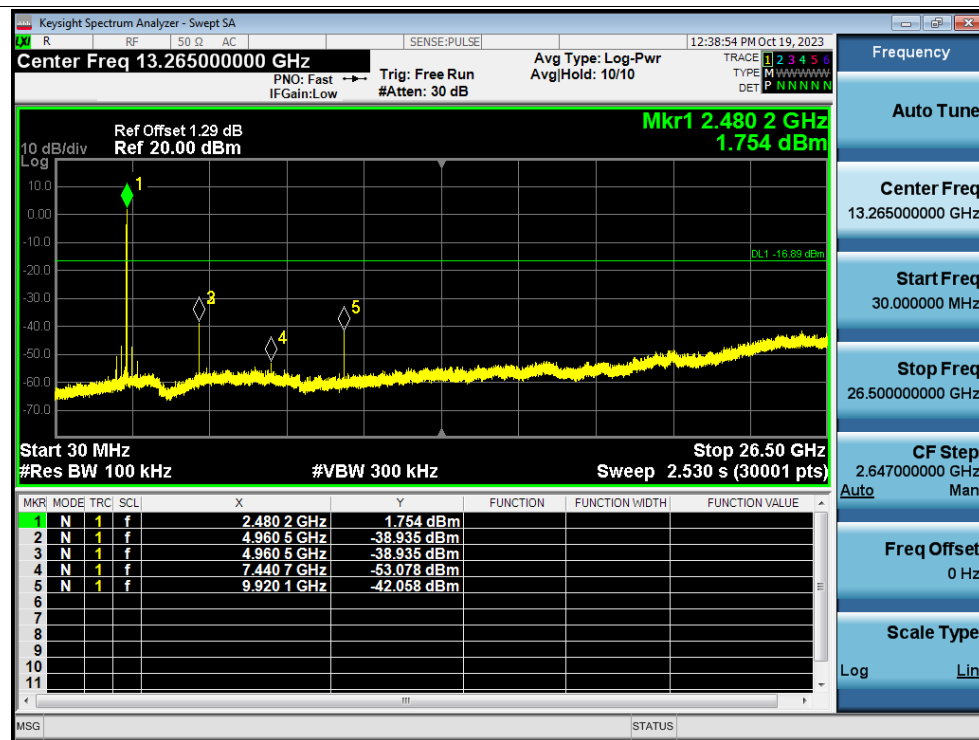
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



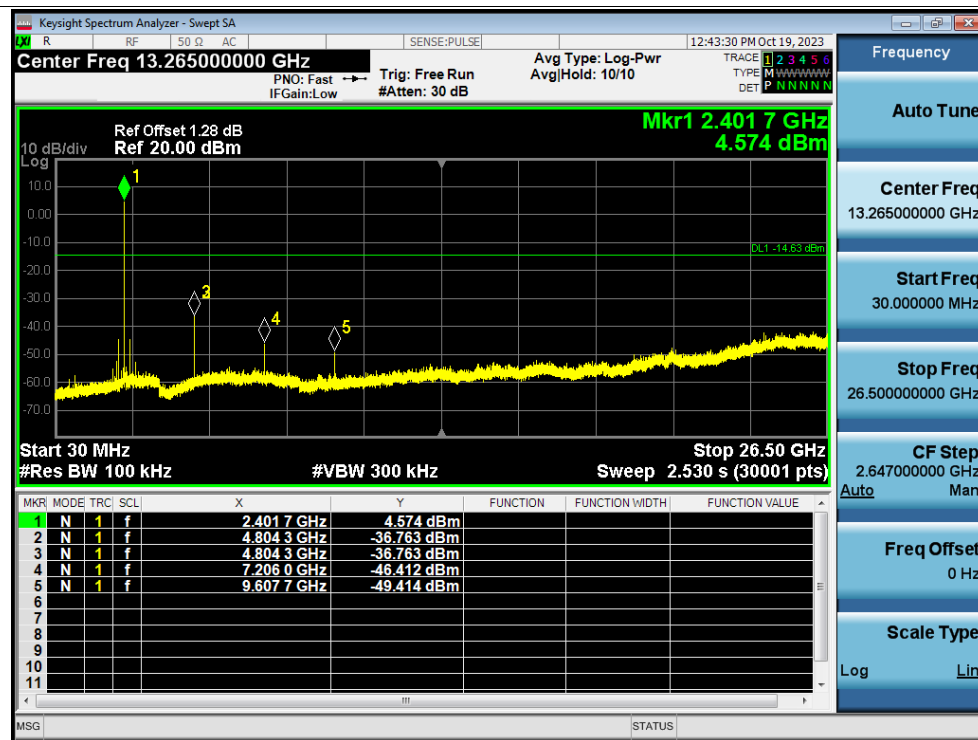
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission



Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Ref



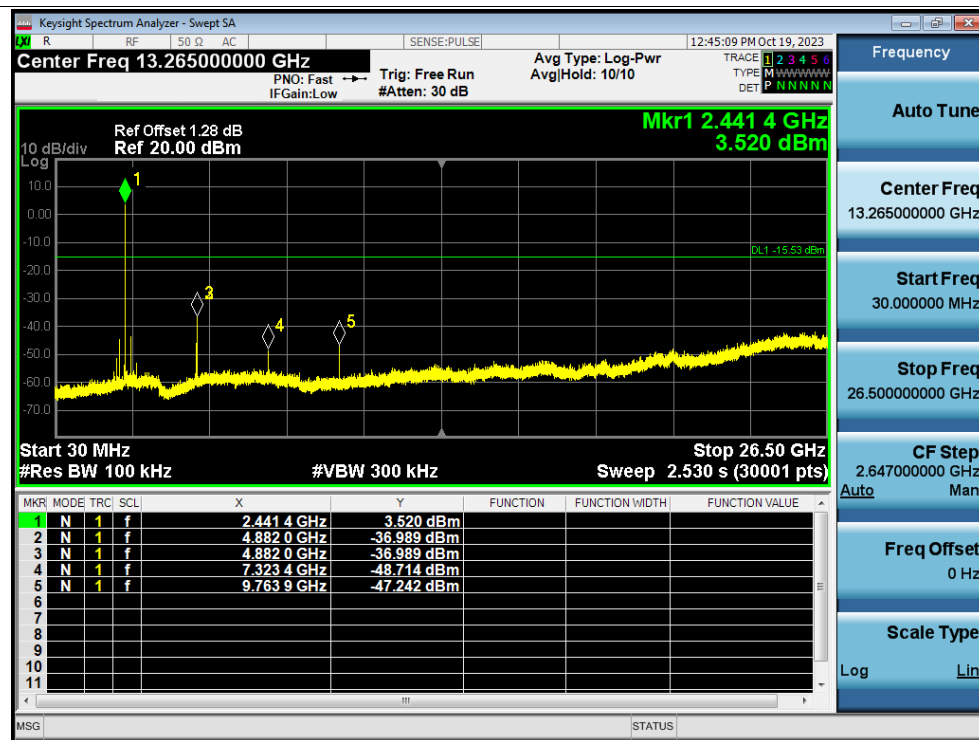
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Emission



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

