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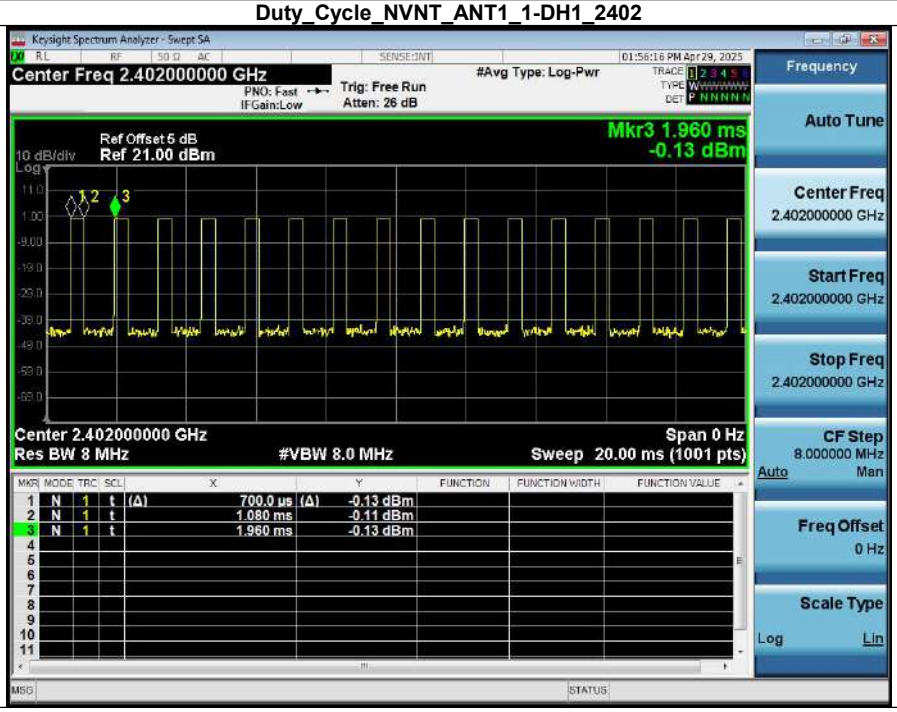
Report No.: MAX250422710P01-R01
FCC ID:2BO78-S500L
FCC_BT (Part15.247) Test Data

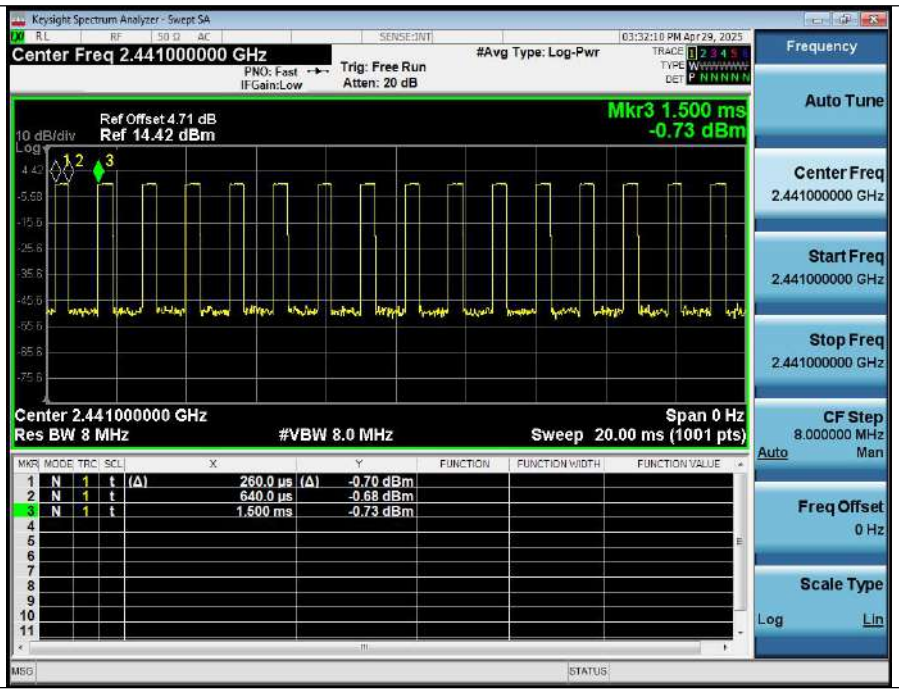
1. Duty Cycle

Condition	Antenna	Rate	Frequency (MHz)	Dutycycle(%)	Duty_factor
NVNT	ANT1	1-DH1	2402.00	30.16	5.21
NVNT	ANT1	1-DH1	2441.00	30.65	5.14
NVNT	ANT1	1-DH1	2480.00	31.75	4.98
NVNT	ANT1	2-DH1	2402.00	32.26	4.91
NVNT	ANT1	2-DH1	2441.00	31.75	4.98
NVNT	ANT1	2-DH1	2480.00	31.75	4.98
NVNT	ANT1	3-DH1	2402.00	32.26	4.91
NVNT	ANT1	3-DH1	2441.00	32.26	4.91
NVNT	ANT1	3-DH1	2480.00	31.75	4.98

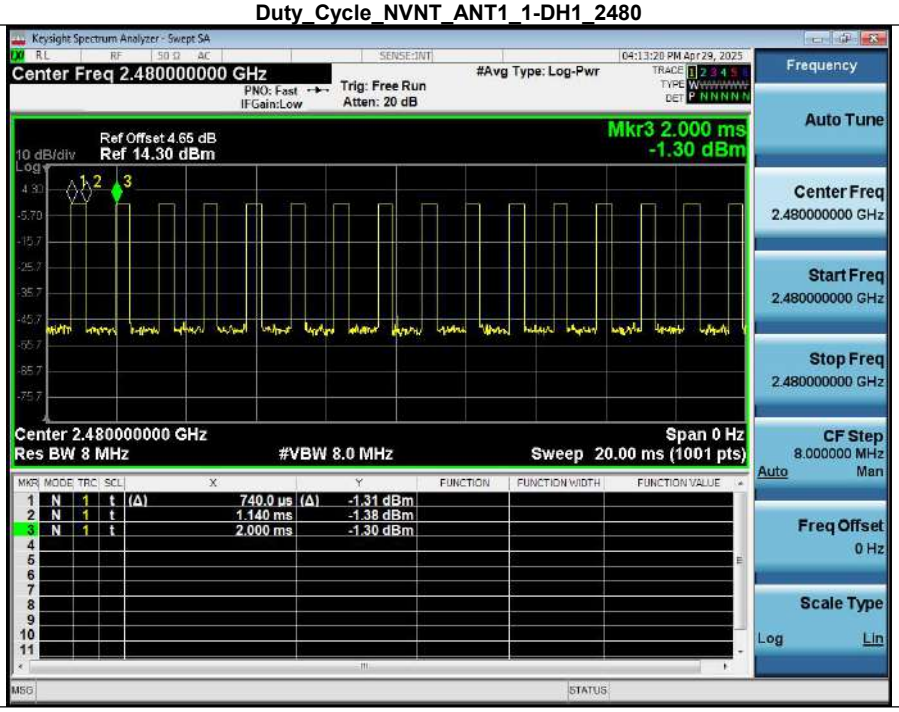
Duty_Cycle_NVNT_ANT1_1-DH1_2402



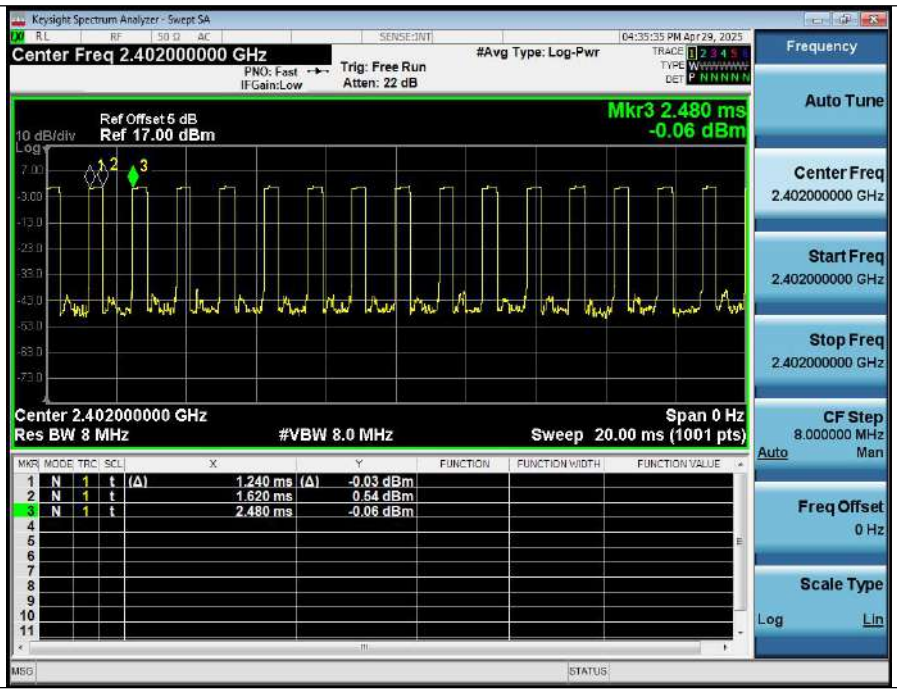
Duty_Cycle_NVNT_ANT1_1-DH1_2441



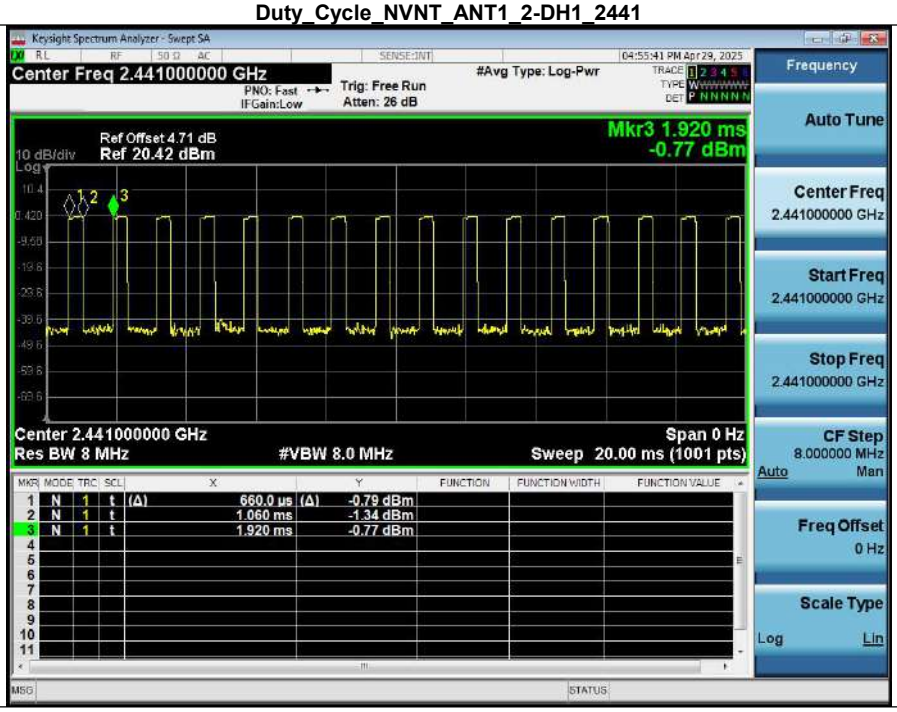
Duty_Cycle_NVNT_ANT1_1-DH1_2480



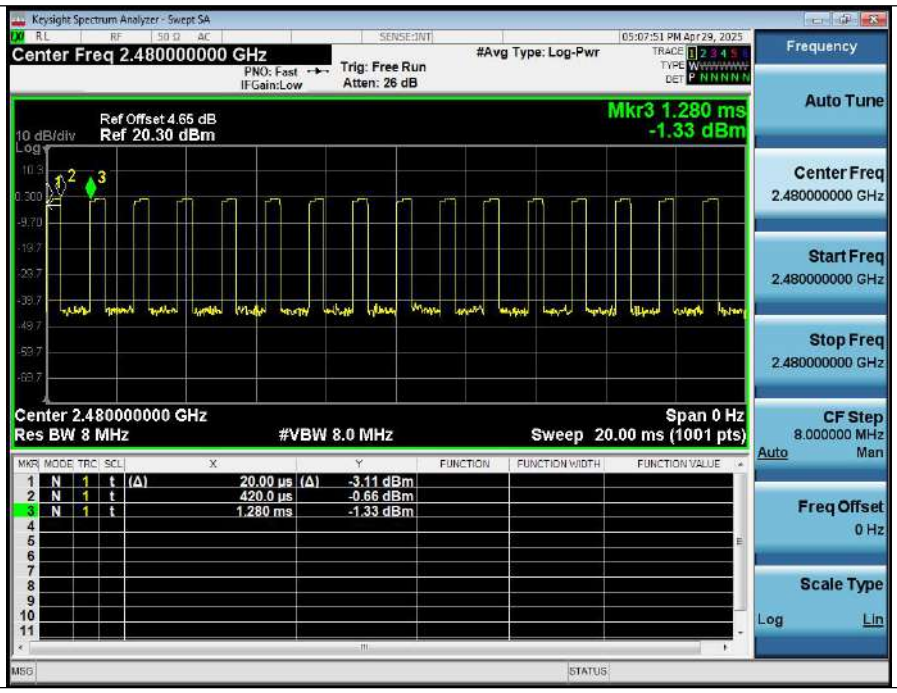
Duty_Cycle_NVNT_ANT1_2-DH1_2402



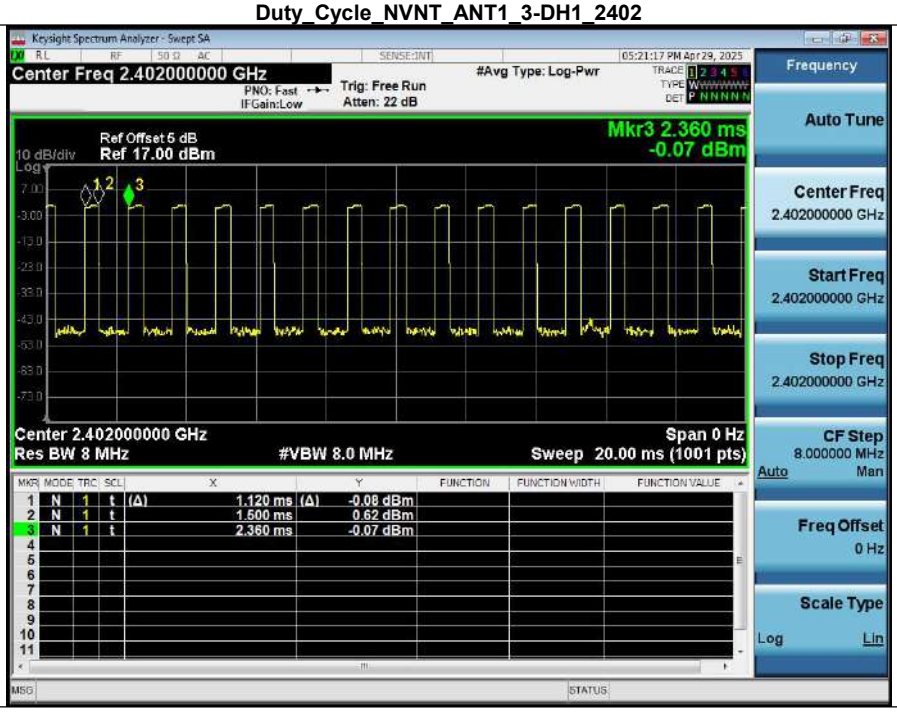
Duty_Cycle_NVNT_ANT1_2-DH1_2441



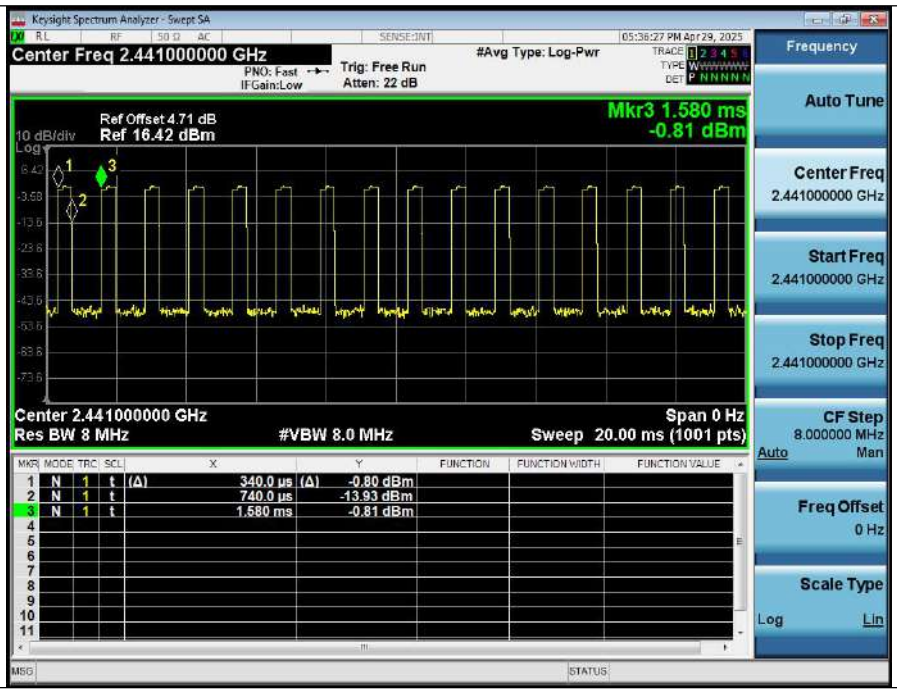
Duty_Cycle_NVNT_ANT1_2-DH1_2480



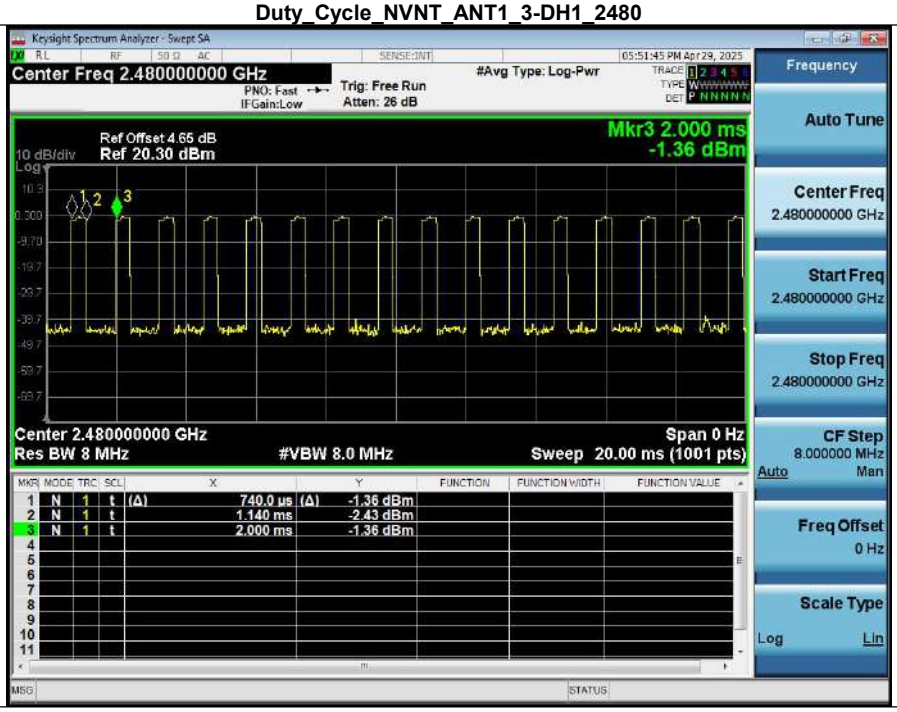
Duty_Cycle_NVNT_ANT1_3-DH1_2402



Duty_Cycle_NVNT_ANT1_3-DH1_2441



Duty_Cycle_NVNT_ANT1_3-DH1_2480



2. -20dB Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	-20dB BW(MHz)	if larger than CFS
NVNT	ANT1	1-DH1	2402.00	0.879	No
NVNT	ANT1	1-DH1	2441.00	0.920	No
NVNT	ANT1	1-DH1	2480.00	0.925	No
NVNT	ANT1	2-DH1	2402.00	1.272	Yes
NVNT	ANT1	2-DH1	2441.00	1.277	Yes
NVNT	ANT1	2-DH1	2480.00	1.268	Yes
NVNT	ANT1	3-DH1	2402.00	1.225	Yes
NVNT	ANT1	3-DH1	2441.00	1.225	Yes
NVNT	ANT1	3-DH1	2480.00	1.255	Yes

-20dB_Bandwidth_NVNT_ANT1_1-DH1_2402_00

-20dB_Bandwidth_NVNT_ANT1_1-DH1_2441_00

-20dB_Bandwidth_NVNT_ANT1_1-DH1_2480_00

-20dB_Bandwidth_NVNT_ANT1_2-DH1_2402_00

-20dB_Bandwidth_NVNT_ANT1_2-DH1_2441_00

-20dB_Bandwidth_NVNT_ANT1_2-DH1_2480_00

-20dB_Bandwidth_NVNT_ANT1_3-DH1_2402_00

-20dB_Bandwidth_NVNT_ANT1_3-DH1_2441_00

-20dB_Bandwidth_NVNT_ANT1_3-DH1_2480_00

Keysight Spectrum Analyzer - Occupied BW
Center Freq 2.480000000 GHz
Center Freq: 2.480000000 GHz
Trig: Free Run
Avg|Hold: 10/10
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
05:52:04 PM Apr 29, 2025
Frequency
Ref Offset 4.65 dB
10 dB/div
Ref 16.30 dBm
Center Freq
2.480000000 GHz
Center 2.48 GHz
#Res BW 30 kHz
#VBW 100 kHz
Span 3 MHz
Sweep 3.2 ms
CF Step
300.000 kHz
Auto
Man
Occupied Bandwidth
1.1563 MHz
Total Power 5.56 dBm
Transmit Freq Error 44.453 kHz
% of OBW Power 99.00 %
x dB Bandwidth 1.255 MHz
x dB -20.00 dB
Freq Offset
0 Hz
MSG
STATUS

3. 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99%%BW(MHz)
NVNT	ANT1	1-DH1	2402.00	0.837
NVNT	ANT1	1-DH1	2441.00	0.846
NVNT	ANT1	1-DH1	2480.00	0.852
NVNT	ANT1	2-DH1	2402.00	1.172
NVNT	ANT1	2-DH1	2441.00	1.174
NVNT	ANT1	2-DH1	2480.00	1.174
NVNT	ANT1	3-DH1	2402.00	1.149
NVNT	ANT1	3-DH1	2441.00	1.155
NVNT	ANT1	3-DH1	2480.00	1.156

99%_Occupied_Bandwidth_NVNT_ANT1_1-DH1_2402_00

99%_Occupied_Bandwidth_NVNT_ANT1_1-DH1_2441_00

99%_Occupied_Bandwidth_NVNT_ANT1_1-DH1_2480_00

99%_Occupied_Bandwidth_NVNT_ANT1_2-DH1_2402_00

99%_Occupied_Bandwidth_NVNT_ANT1_2-DH1_2441_00

99%_Occupied_Bandwidth_NVNT_ANT1_2-DH1_2480_00

99%_Occupied_Bandwidth_NVNT_ANT1_3-DH1_2402_00

99%_Occupied_Bandwidth_NVNT_ANT1_3-DH1_2441_00

99%_Occupied_Bandwidth_NVNT_ANT1_3-DH1_2480_00

Keysight Spectrum Analyzer - Occupied BW
Center Freq 2.480000000 GHz
Center Freq: 2.480000000 GHz
Trig: Free Run
Avg|Hold: 10/10
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
05:52:22 PM Apr 29, 2025
Frequency
Ref Offset 4.65 dB
10 dB/div
Ref 16.30 dBm
Center Freq
2.480000000 GHz
Center 2.48 GHz
#Res BW 30 kHz
#VBW 100 kHz
Span 3 MHz
Sweep 3.2 ms
CF Step
300.000 kHz
Auto
Man
Occupied Bandwidth
1.1558 MHz
Total Power 5.57 dBm
Transmit Freq Error 44.474 kHz
% of OBW Power 99.00 %
x dB Bandwidth 1.370 MHz
x dB -26.00 dB
Freq Offset
0 Hz
MSG
STATUS

4. Peak Output Power

Condition	Antenna	Modulation	Frequency (MHz)	Max. Conducted Power(dBm)	Max. Conducted Power(mW)	Limit(mW)	Result
NVNT	ANT1	1-DH1	2402.00	-0.12	0.97	1000	Pass
NVNT	ANT1	1-DH1	2441.00	-0.71	0.85	1000	Pass
NVNT	ANT1	1-DH1	2480.00	-1.26	0.75	1000	Pass
NVNT	ANT1	2-DH1	2402.00	0.65	1.16	125	Pass
NVNT	ANT1	2-DH1	2441.00	0.04	1.01	125	Pass
NVNT	ANT1	2-DH1	2480.00	-0.54	0.88	125	Pass
NVNT	ANT1	3-DH1	2402.00	1.15	1.30	125	Pass
NVNT	ANT1	3-DH1	2441.00	0.56	1.14	125	Pass
NVNT	ANT1	3-DH1	2480.00	0.05	1.01	125	Pass

Peak_Output_Power_NVNT_ANT1_1-DH1_2402_00

Peak_Output_Power_NVNT_ANT1_1-DH1_2441_00

Peak_Output_Power_NVNT_ANT1_1-DH1_2480_00

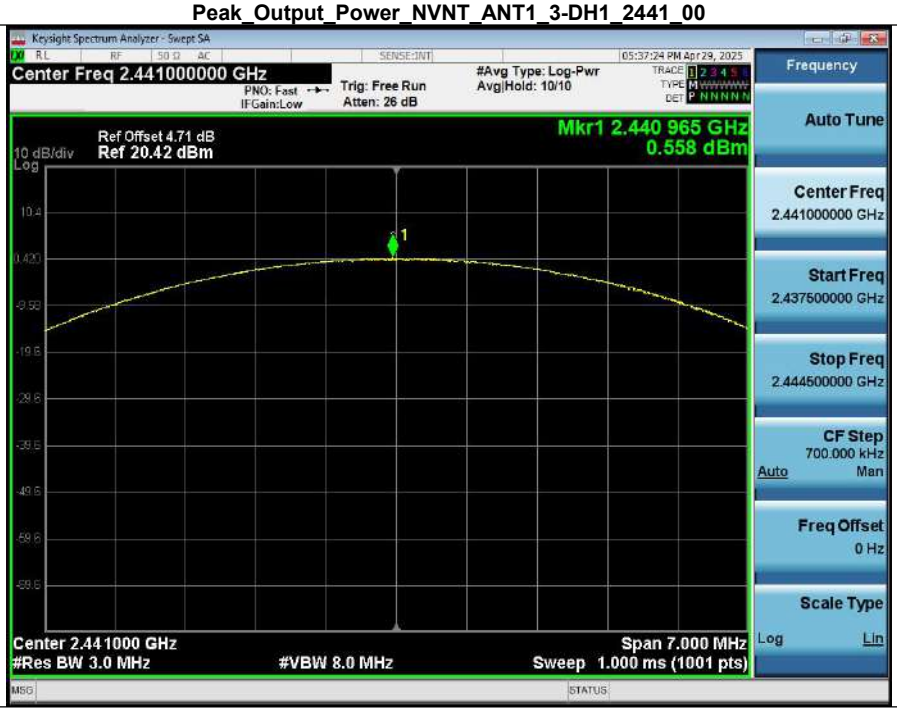
Peak_Output_Power_NVNT_ANT1_2-DH1_2402_00

Peak_Output_Power_NVNT_ANT1_2-DH1_2441_00

Peak_Output_Power_NVNT_ANT1_2-DH1_2480_00

Peak_Output_Power_NVNT_ANT1_3-DH1_2402_00

Peak_Output_Power_NVNT_ANT1_3-DH1_2441_00



Peak_Output_Power_NVNT_ANT1_3-DH1_2480_00

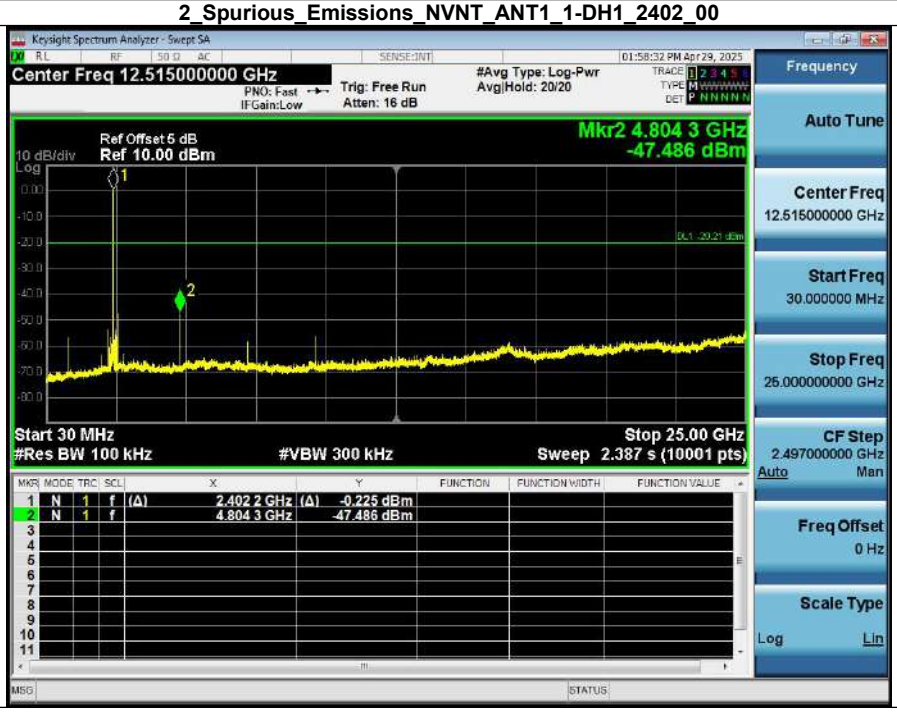
Keysight Spectrum Analyzer - Swept SA
05:52:42 PM Apr 29, 2025
Center Freq 2.480000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
#Avg Type: Log-Pwr
Avg|Hold: 10/10
Frequency
Auto Tune
Ref Offset 4.65 dB
10 dB/div
Ref 14.30 dBm
Log
Mkr1 2.480 077 GHz
0.051 dBm
Center Freq
2.480000000 GHz
Start Freq
2.476500000 GHz
Stop Freq
2.483500000 GHz
CF Step
700.000 kHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin
Center 2.480000 GHz
#Res BW 3.0 MHz
#VBW 8.0 MHz
Span 7.000 MHz
Sweep 1.000 ms (1001 pts)
MSG
STATUS

5. Spurious Emissions

Condition	Antenna	Modulation	TX Mode	Ref_level(dBm)	Spurious MAX.Value(dBm)	Limit	Result
NVNT	ANT1	1-DH1	2402.00	-0.214	-47.486	-20.214	Pass
NVNT	ANT1	1-DH1	2441.00	-0.842	-48.937	-20.842	Pass
NVNT	ANT1	1-DH1	2480.00	-1.367	-47.811	-21.367	Pass
NVNT	ANT1	2-DH1	2402.00	-0.209	-46.104	-20.209	Pass
NVNT	ANT1	2-DH1	2441.00	-0.889	-49.261	-20.889	Pass
NVNT	ANT1	2-DH1	2480.00	-1.422	-48.956	-21.422	Pass
NVNT	ANT1	3-DH1	2402.00	-0.247	-46.850	-20.247	Pass
NVNT	ANT1	3-DH1	2441.00	-0.925	-48.894	-20.925	Pass
NVNT	ANT1	3-DH1	2480.00	-1.451	-48.904	-21.451	Pass

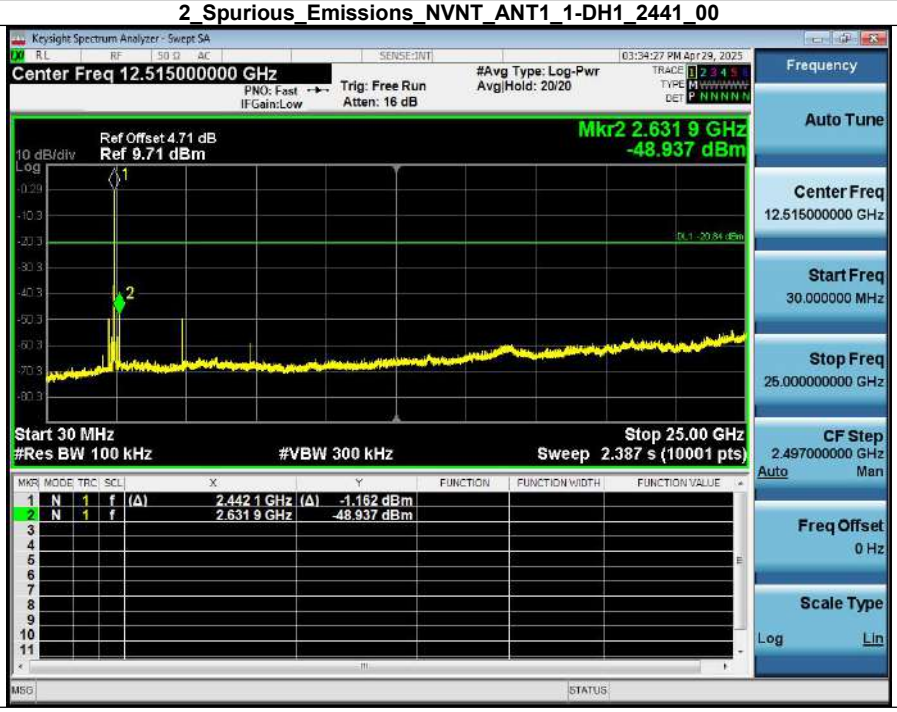
1_Reference_Level_NVNT_ANT1_1-DH1_2402_00

2_Spurious_Emissions_NVNT_ANT1_1-DH1_2402_00



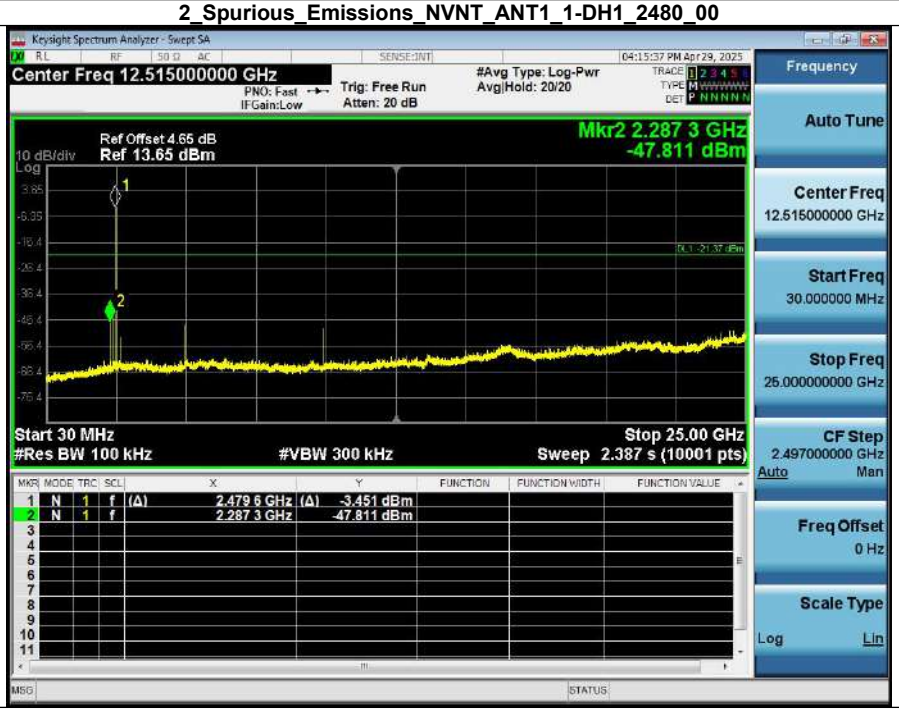
1_Reference_Level_NVNT_ANT1_1-DH1_2441_00

2_Spurious_Emissions_NVNT_ANT1_1-DH1_2441_00

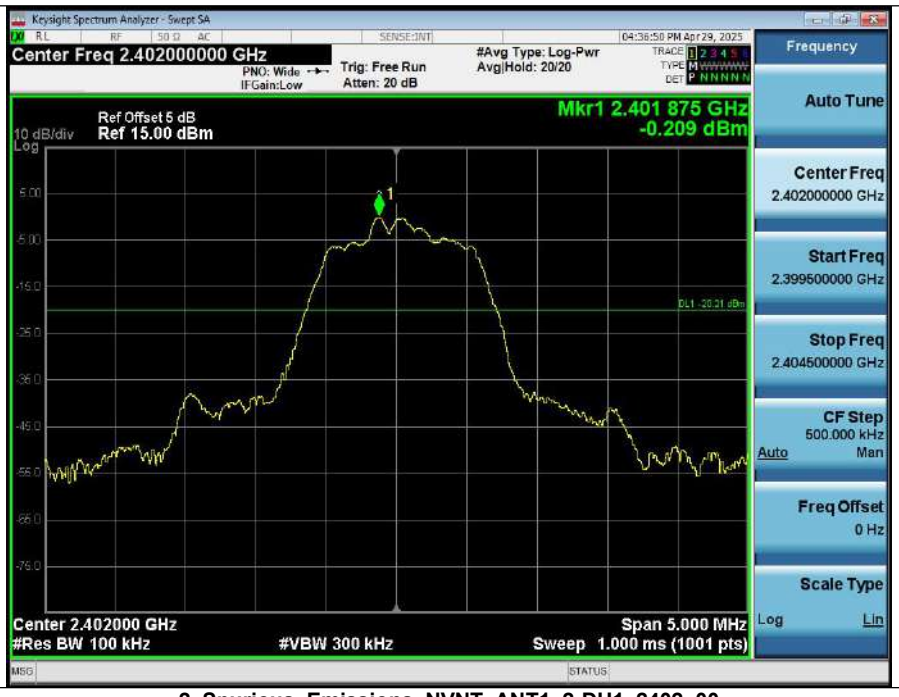


1_Reference_Level_NVNT_ANT1_1-DH1_2480_00

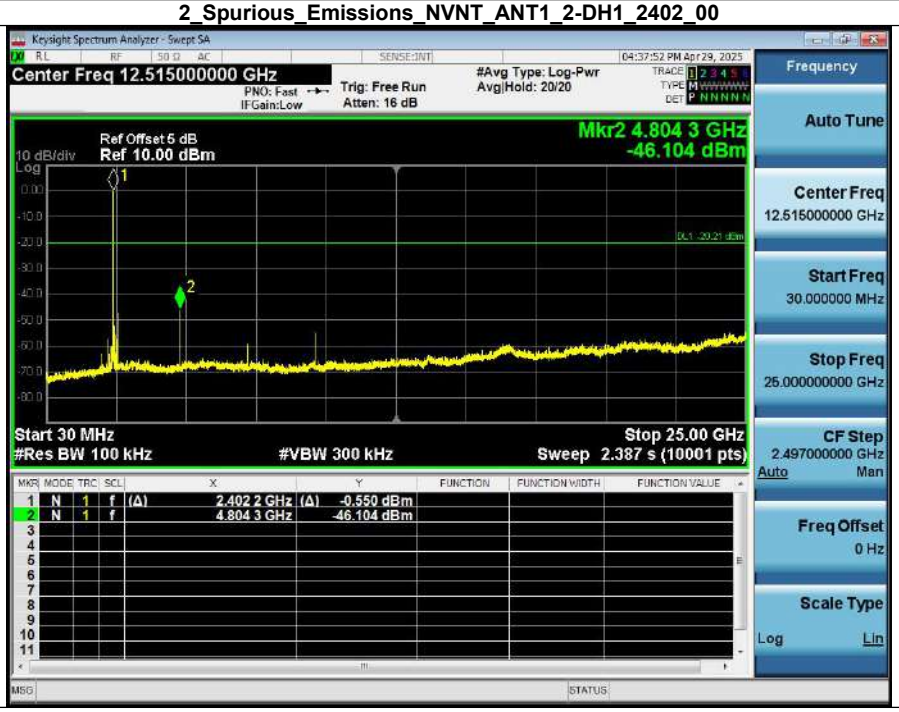
2_Spurious_Emissions_NVNT_ANT1_1-DH1_2480_00



1_Reference_Level_NVNT_ANT1_2-DH1_2402_00

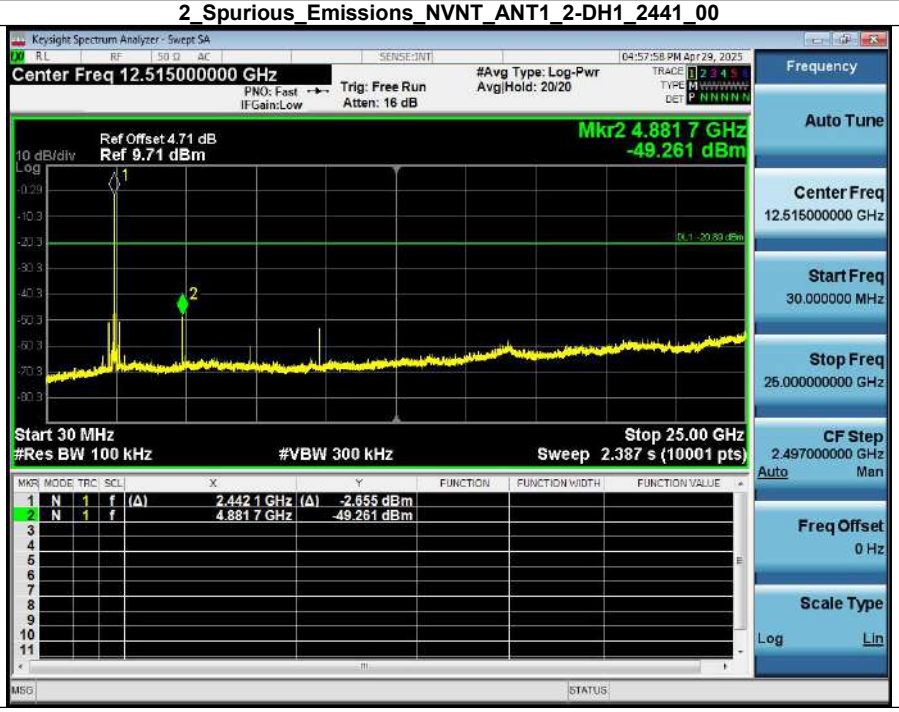


2_Spurious_Emissions_NVNT_ANT1_2-DH1_2402_00



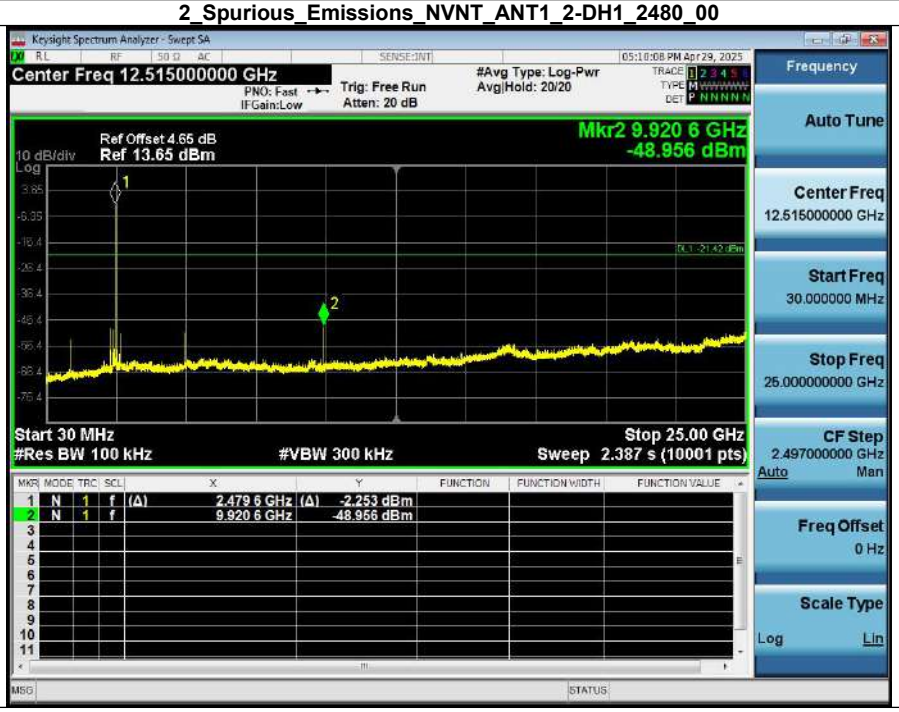
1_Reference_Level_NVNT_ANT1_2-DH1_2441_00

2_Spurious_Emissions_NVNT_ANT1_2-DH1_2441_00

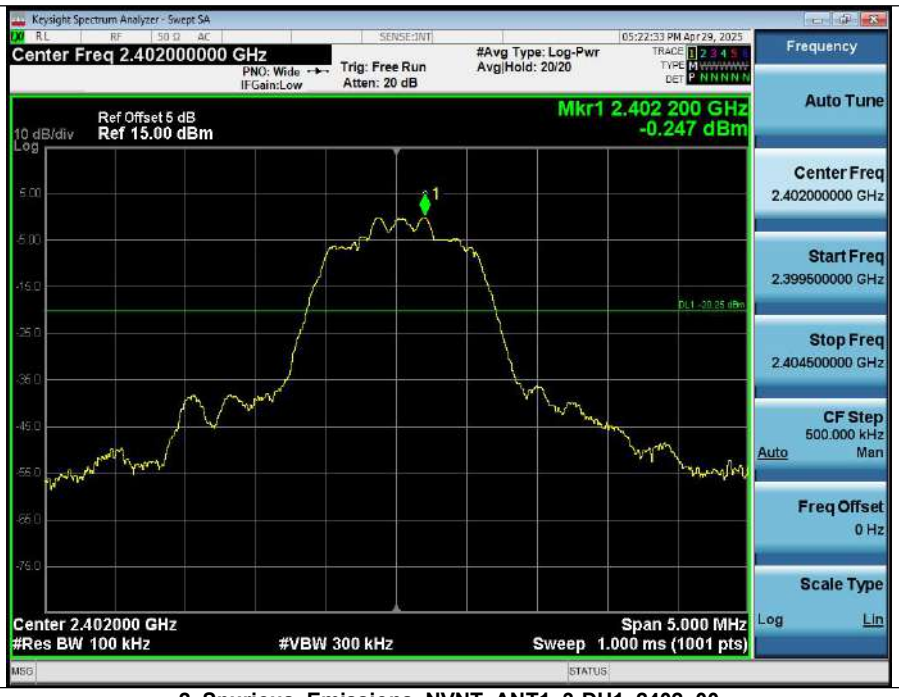


1_Reference_Level_NVNT_ANT1_2-DH1_2480_00

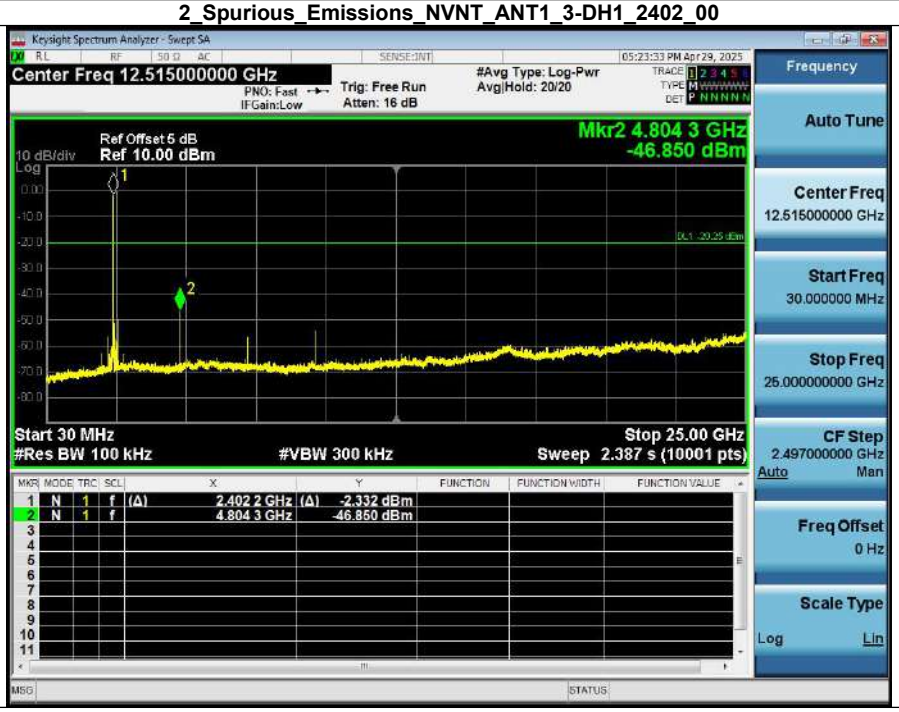
2_Spurious_Emissions_NVNT_ANT1_2-DH1_2480_00



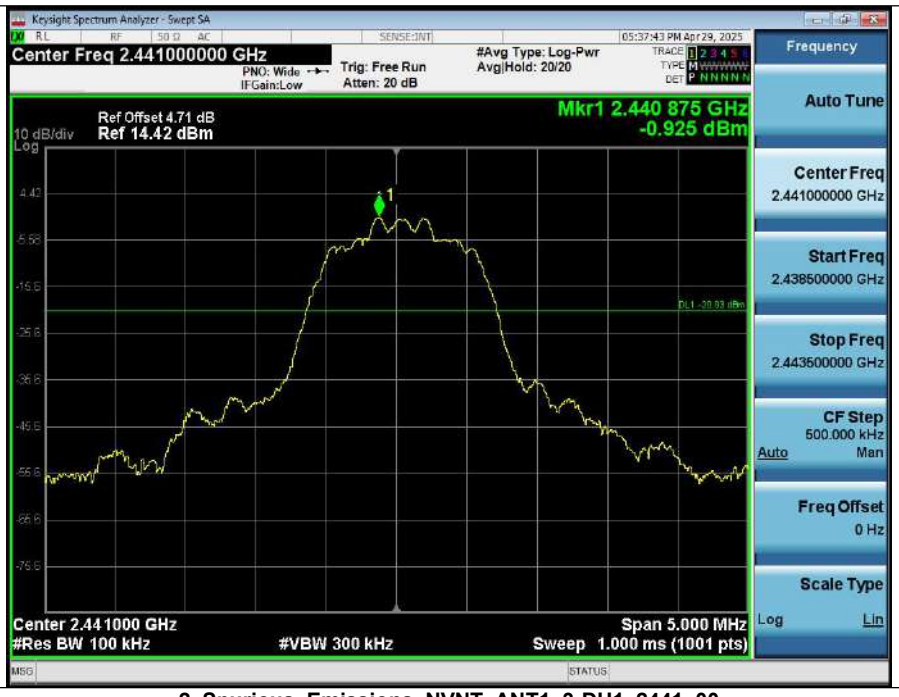
1_Reference_Level_NVNT_ANT1_3-DH1_2402_00



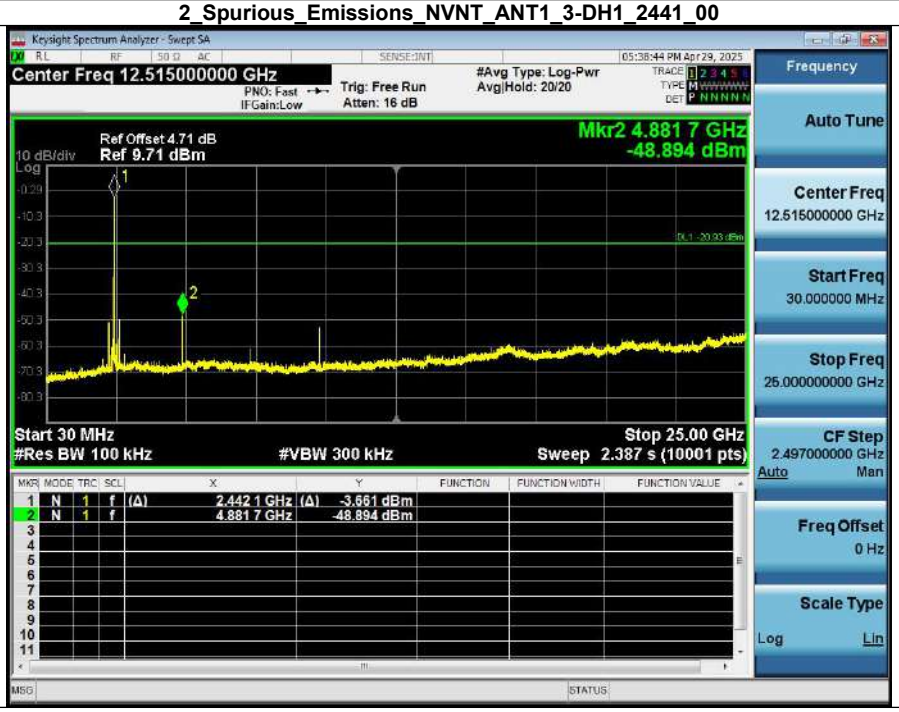
2_Spurious_Emissions_NVNT_ANT1_3-DH1_2402_00



1_Reference_Level_NVNT_ANT1_3-DH1_2441_00

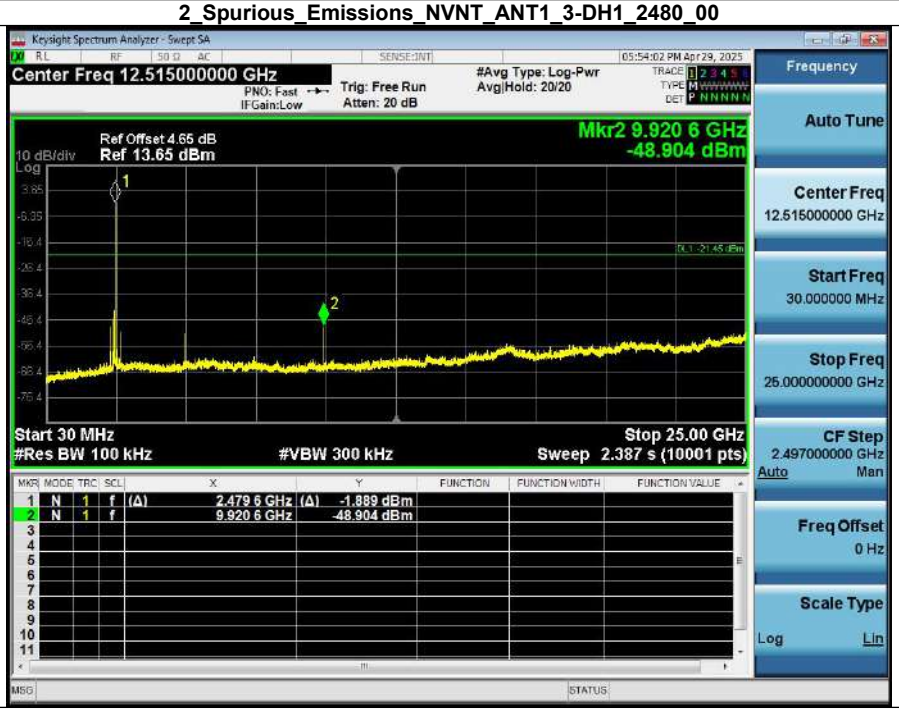


2_Spurious_Emissions_NVNT_ANT1_3-DH1_2441_00



1_Reference_Level_NVNT_ANT1_3-DH1_2480_00

2_Spurious_Emissions_NVNT_ANT1_3-DH1_2480_00

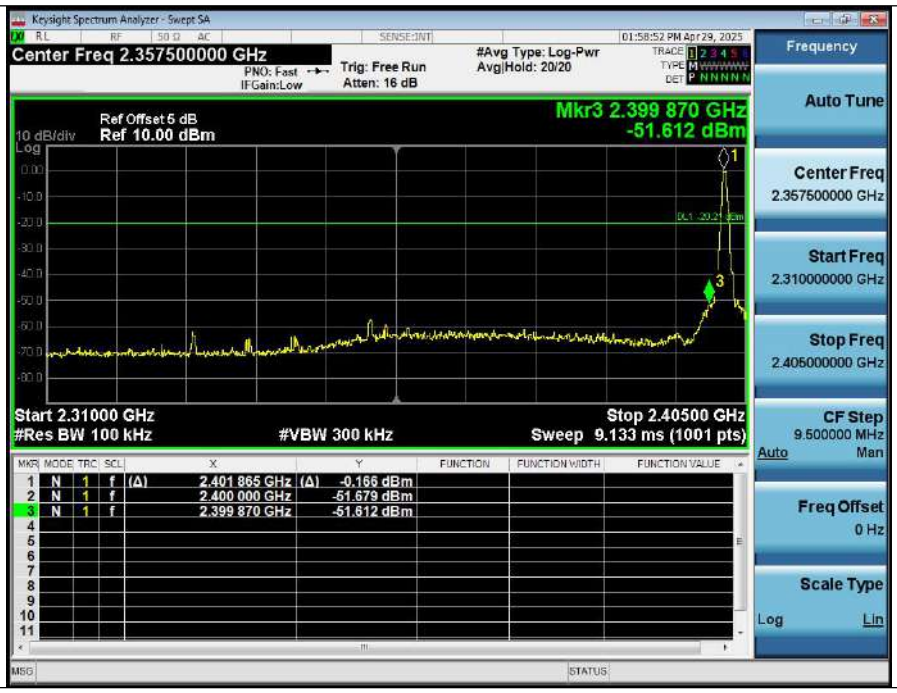


6. Bandedge

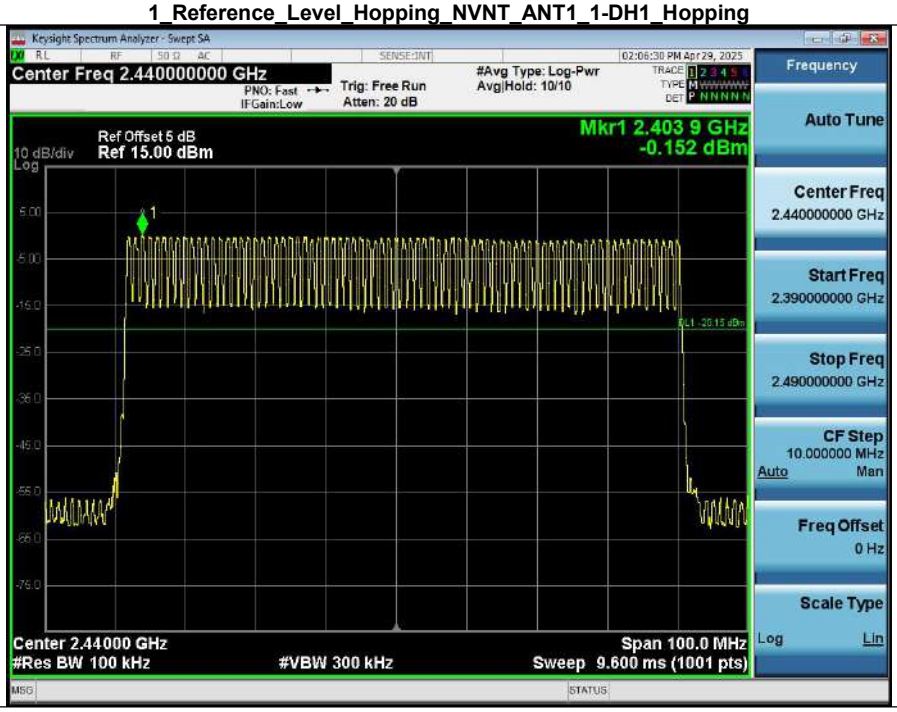
Condition	Antenna	Modulation	TX Mode	Ref_level(dBm)	Bandedge MAX.Value	Limit	Result
NVNT	ANT1	1-DH1	2402.00	-0.214	-51.612	-20.214	Pass
NVNT	ANT1	1-DH1	Hopping_LCH	-0.152	-52.178	-20.152	Pass
NVNT	ANT1	1-DH1	2480.00	-1.367	-61.419	-21.367	Pass
NVNT	ANT1	1-DH1	Hopping_HCH	-0.503	-56.840	-20.503	Pass
NVNT	ANT1	2-DH1	2402.00	-0.209	-50.882	-20.209	Pass
NVNT	ANT1	2-DH1	Hopping_LCH	-0.178	-51.527	-20.178	Pass
NVNT	ANT1	2-DH1	2480.00	-1.422	-62.230	-21.422	Pass
NVNT	ANT1	2-DH1	Hopping_HCH	-0.593	-56.591	-20.593	Pass
NVNT	ANT1	3-DH1	2402.00	-0.247	-49.410	-20.247	Pass
NVNT	ANT1	3-DH1	Hopping_LCH	-0.209	-49.124	-20.209	Pass
NVNT	ANT1	3-DH1	2480.00	-1.451	-61.762	-21.451	Pass
NVNT	ANT1	3-DH1	Hopping_HCH	-0.488	-56.442	-20.488	Pass

1_Reference_Level_NVNT_ANT1_1-DH1_2402_00

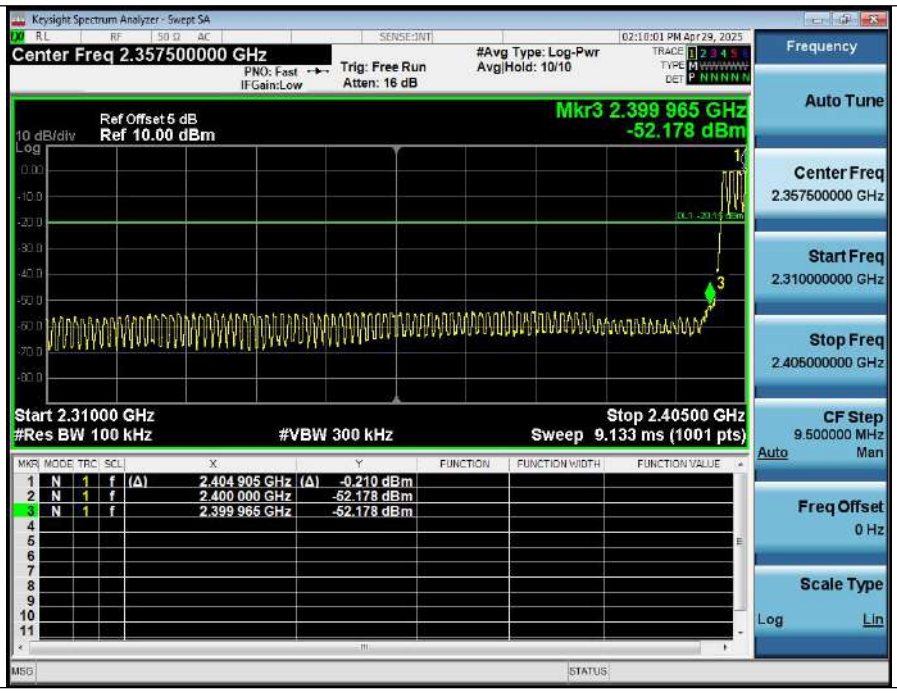
2_Bandedge_NVNT_ANT1_1-DH1_2402_00



1_Reference_Level_Hopping_NVNT_ANT1_1-DH1_Hopping

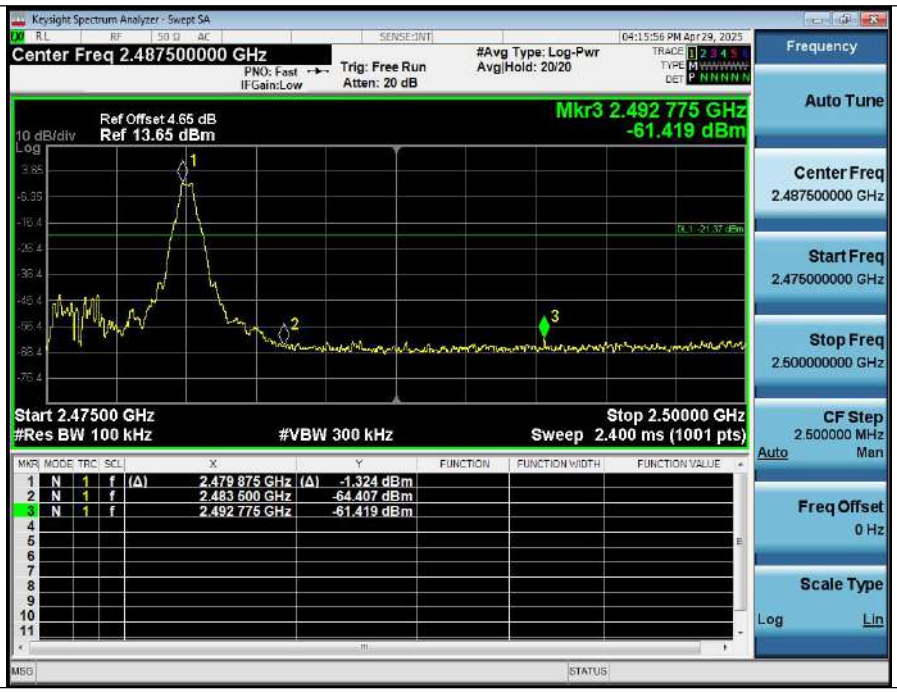


2_Band_Edge_(Hopping)_NVNT_ANT1_1-DH1_Hopping

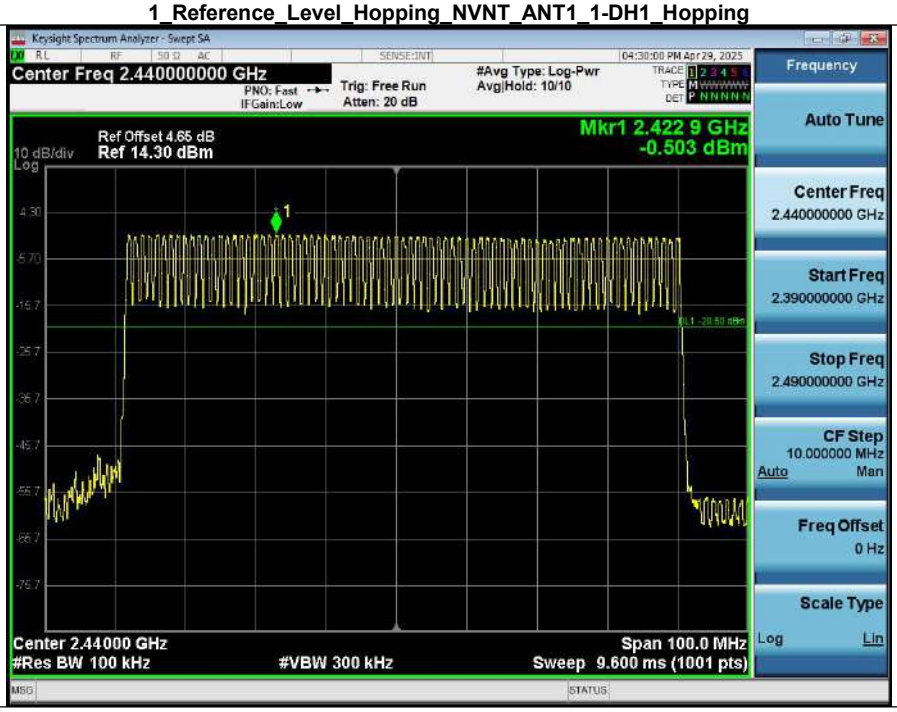


1_Reference_Level_NVNT_ANT1_1-DH1_2480_00

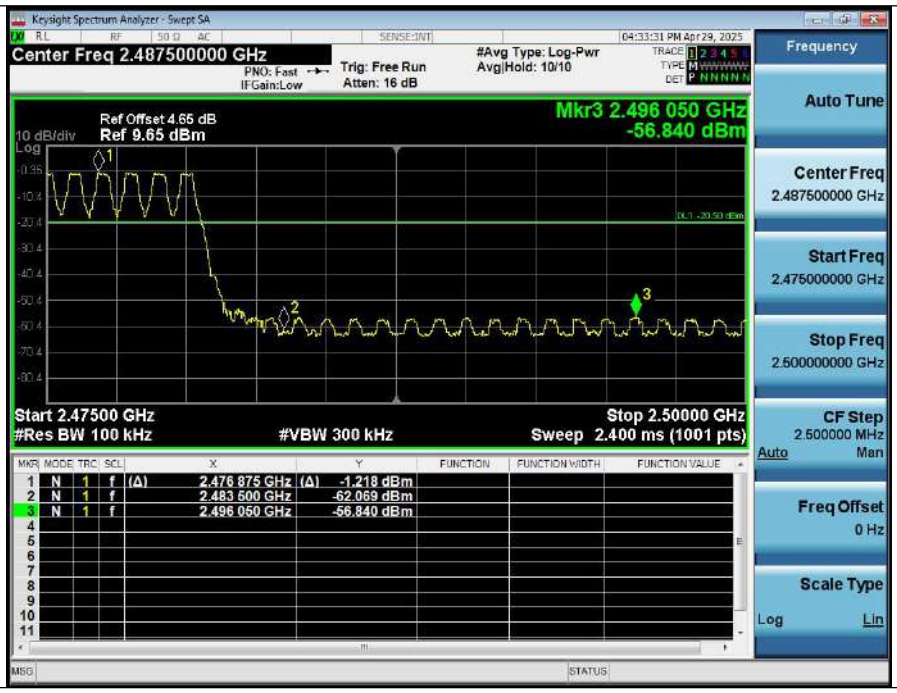
2_Bandedge_NVNT_ANT1_1-DH1_2480_00



1_Reference_Level_Hopping_NVNT_ANT1_1-DH1_Hopping

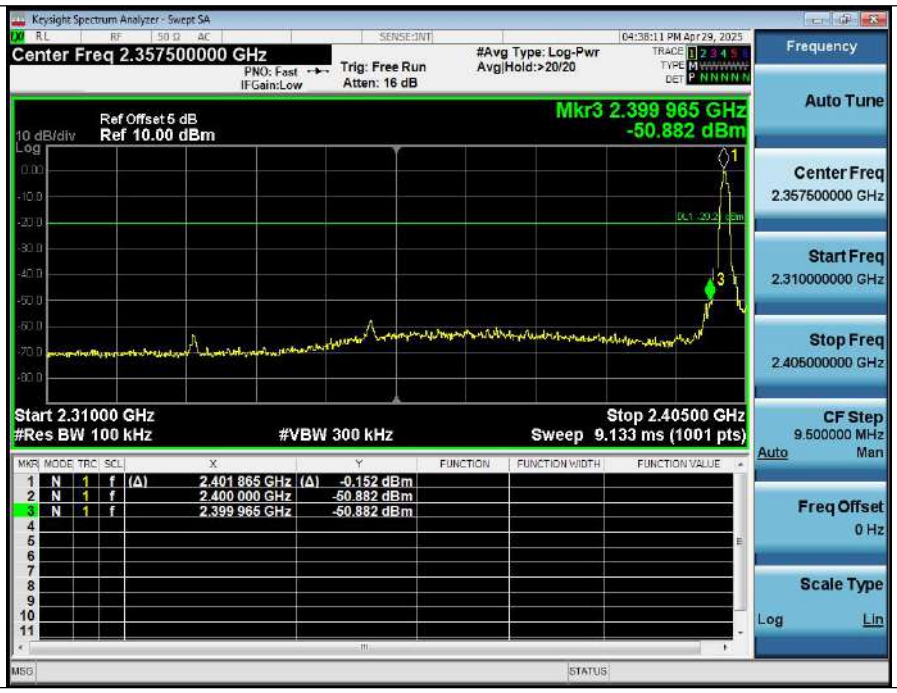


2_Band_Edge_(Hopping)_NVNT_ANT1_1-DH1_Hopping

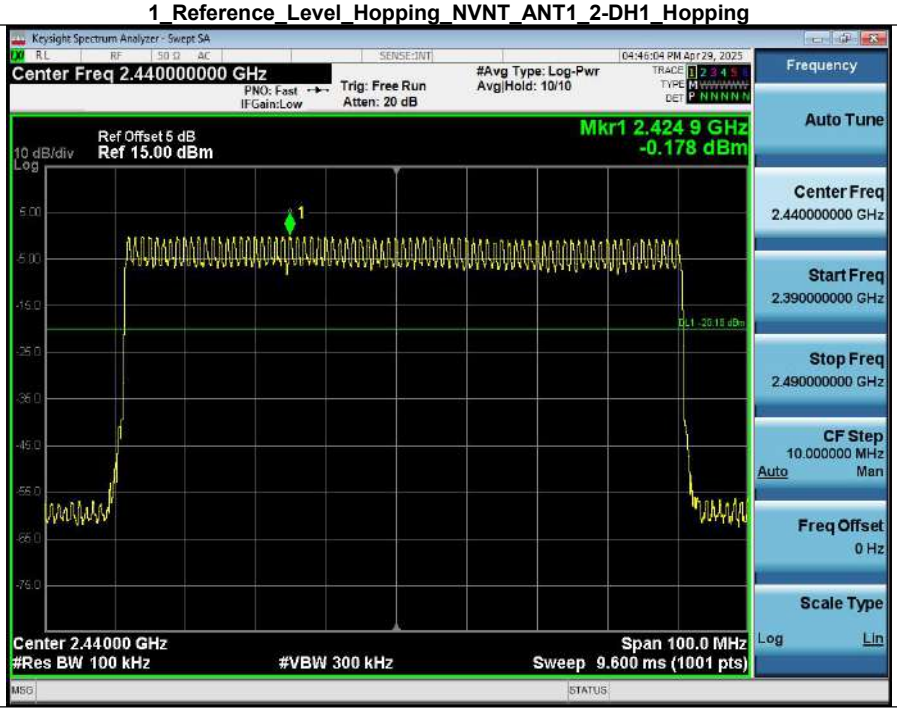


1_Reference_Level_NVNT_ANT1_2-DH1_2402_00

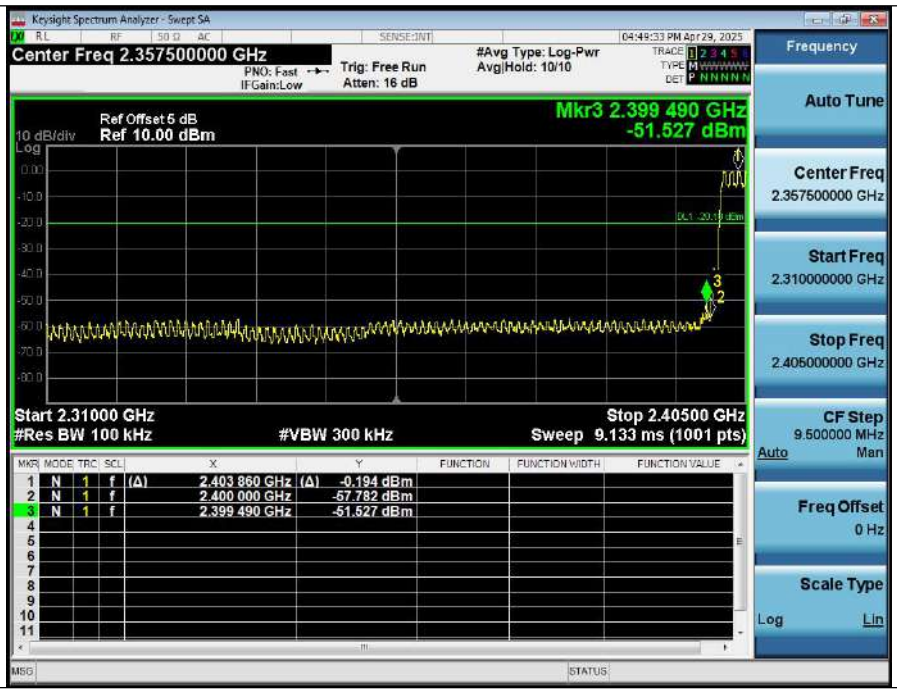
2_Bandedge_NVNT_ANT1_2-DH1_2402_00



1_Reference_Level_Hopping_NVNT_ANT1_2-DH1_Hopping

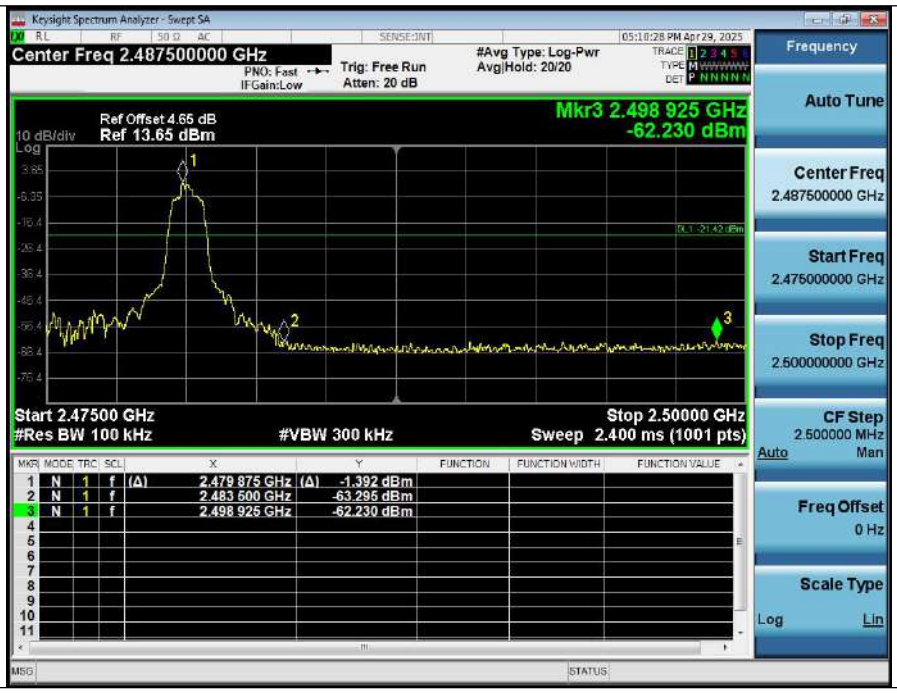


2_Band_Edge_(Hopping)_NVNT_ANT1_2-DH1_Hopping

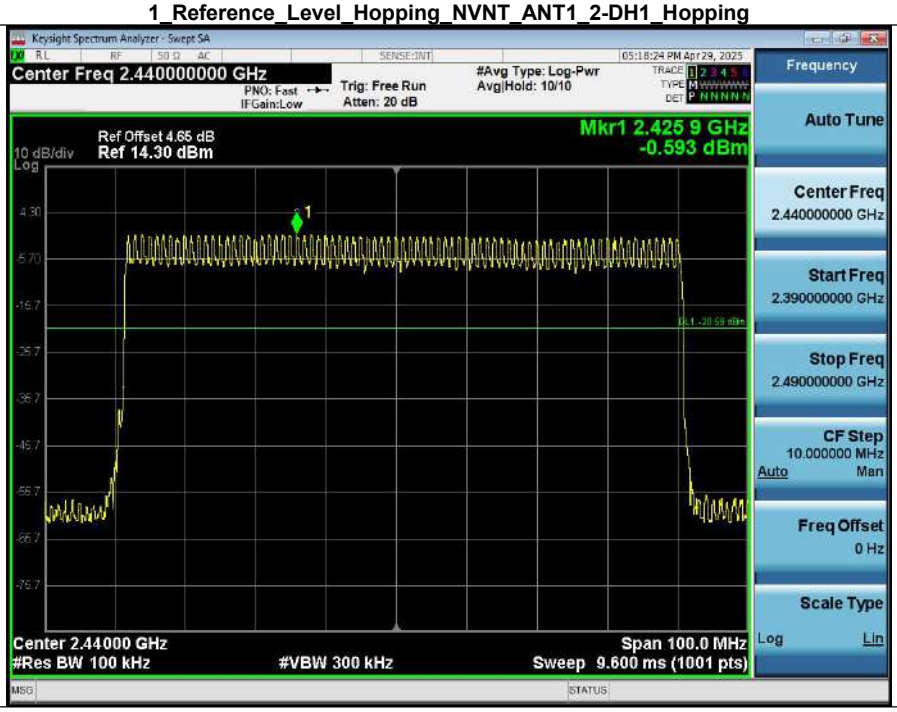


1_Reference_Level_NVNT_ANT1_2-DH1_2480_00

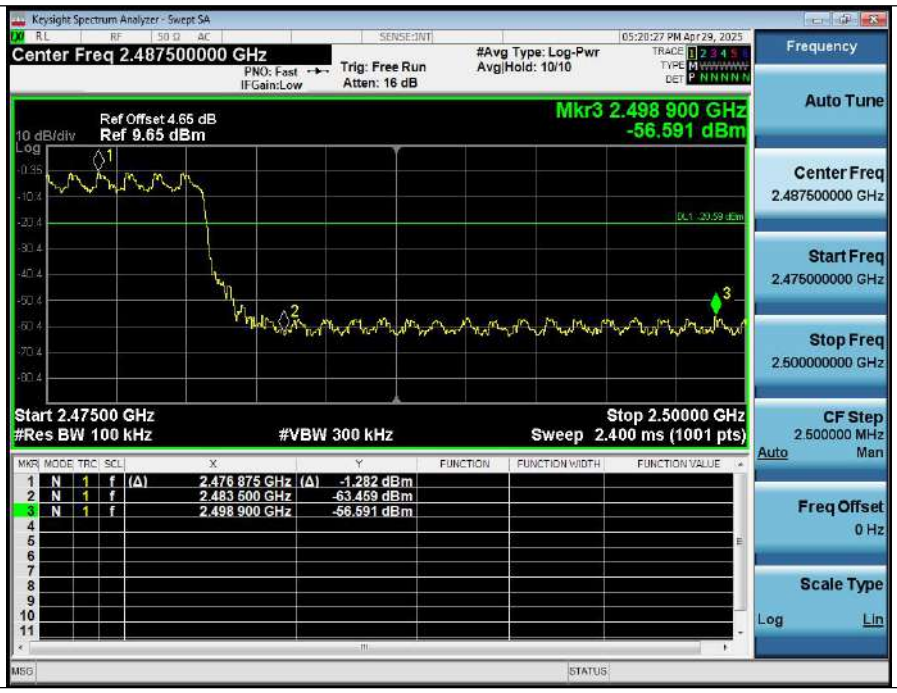
2_Bandedge_NVNT_ANT1_2-DH1_2480_00



1_Reference_Level_Hopping_NVNT_ANT1_2-DH1_Hopping

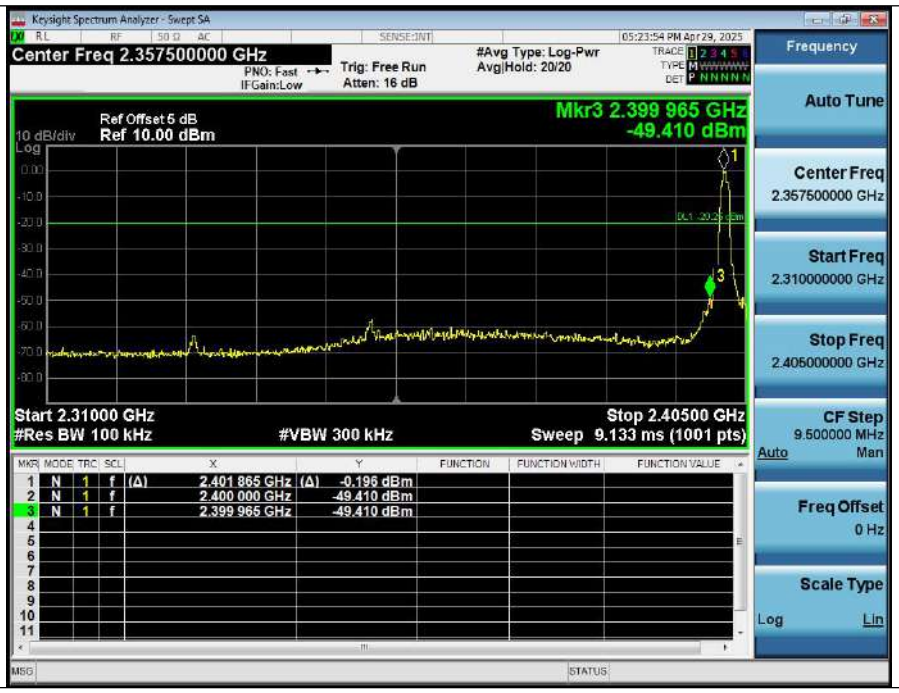


2_Band_Edge_(Hopping)_NVNT_ANT1_2-DH1_Hopping

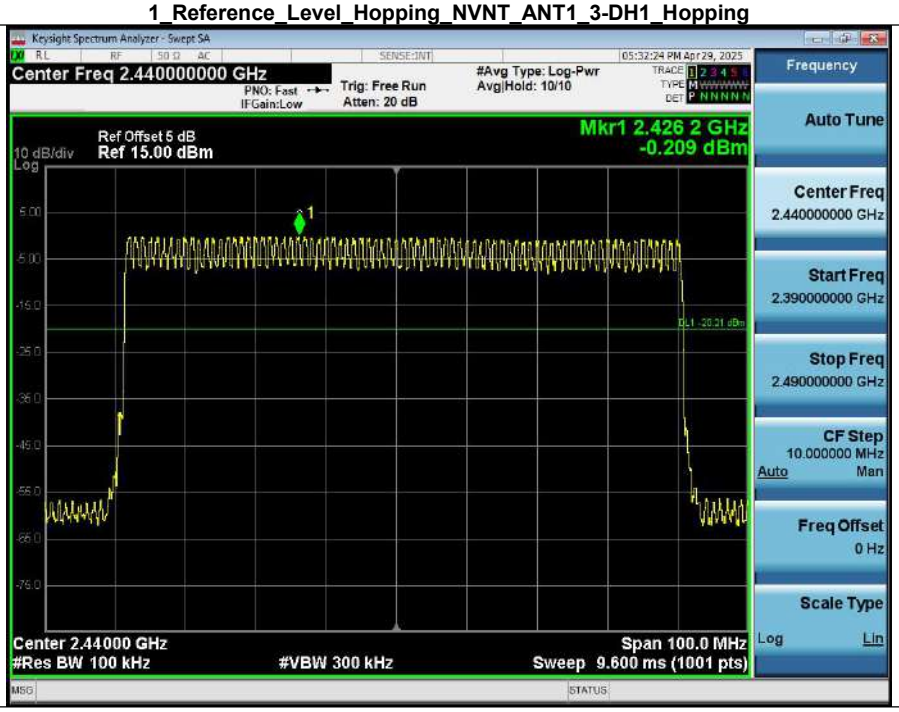


1_Reference_Level_NVNT_ANT1_3-DH1_2402_00

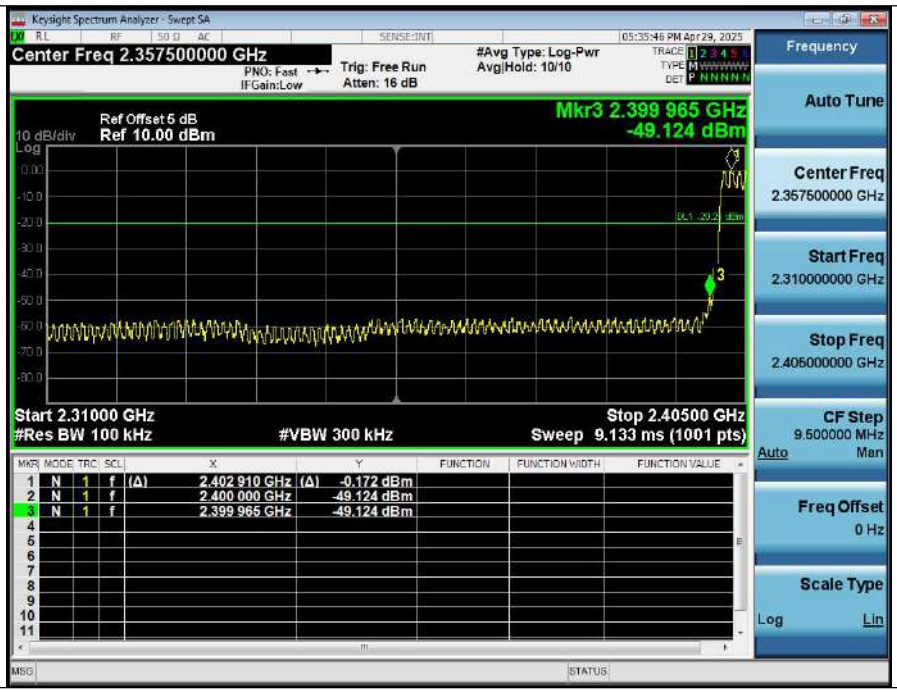
2_Bandedge_NVNT_ANT1_3-DH1_2402_00



1_Reference_Level_Hopping_NVNT_ANT1_3-DH1_Hopping

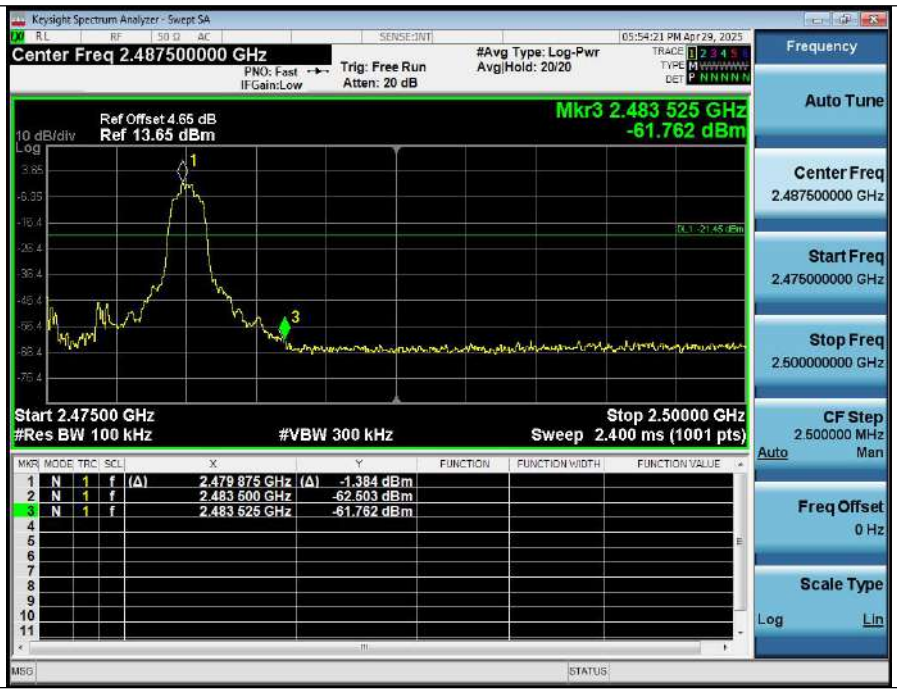


2_Band_Edge_(Hopping)_NVNT_ANT1_3-DH1_Hopping

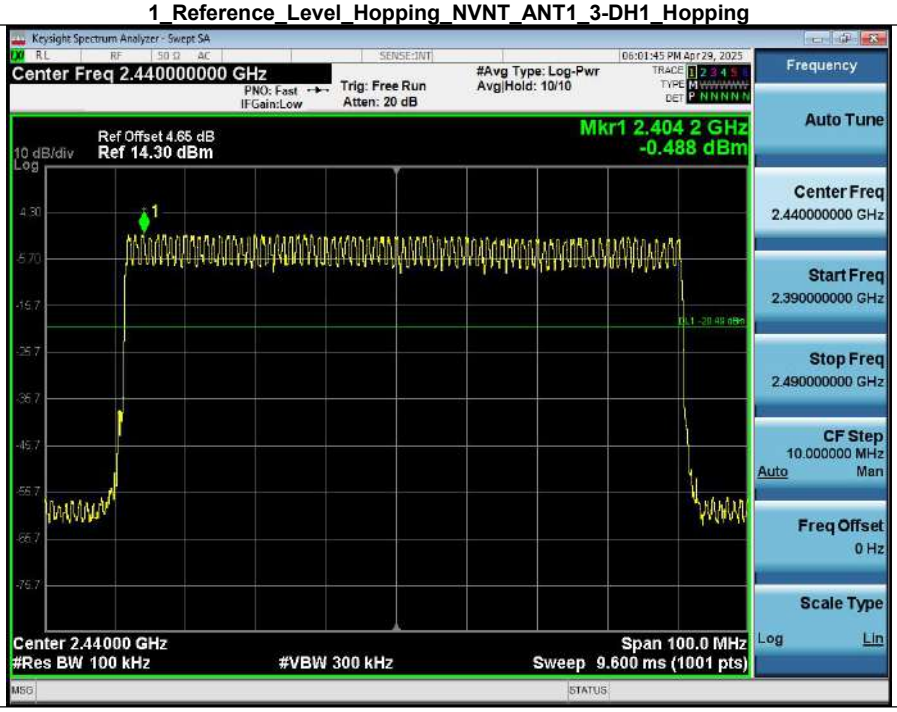


1_Reference_Level_NVNT_ANT1_3-DH1_2480_00

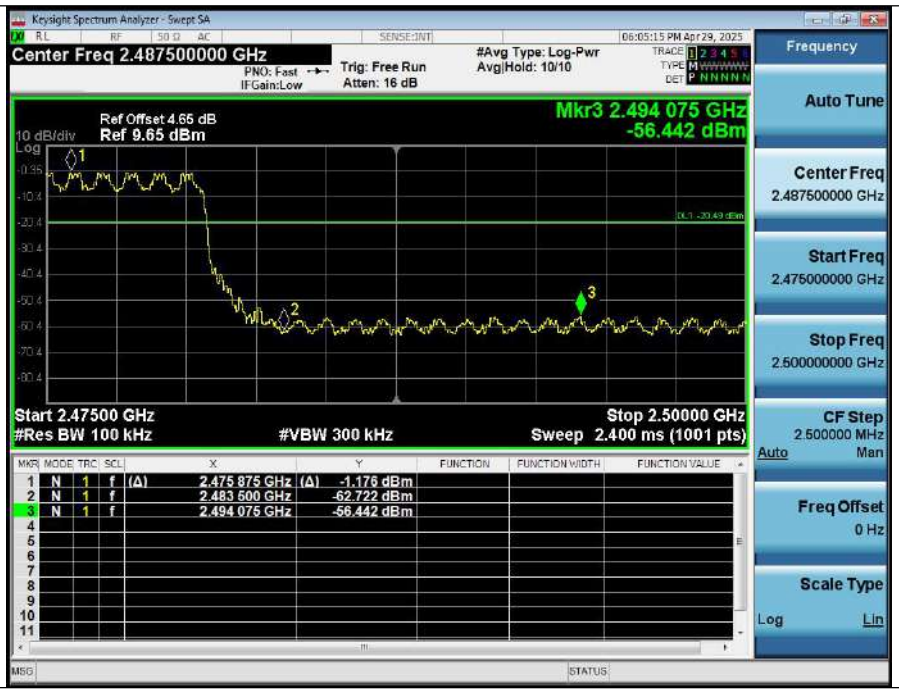
2_Bandedge_NVNT_ANT1_3-DH1_2480_00



1_Reference_Level_Hopping_NVNT_ANT1_3-DH1_Hopping



2_Band_Edge_(Hopping)_NVNT_ANT1_3-DH1_Hopping


Keysight Spectrum Analyzer - Swept SA
Center Freq 2.487500000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 16 dB
#Avg Type: Log-Pwr
Avg|Hold: 10/10
08:05:15 PM Apr 29, 2025
Ref Offset 4.65 dB
10 dB/div
Ref 9.65 dBm
Mkr3 2.494 075 GHz
-56.442 dBm
Start 2.47500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.50000 GHz
Sweep 2.400 ms (1001 pts)
1 N 1 f (Δ) 2.475 875 GHz (Δ) -1.176 dBm
2 N 1 f 2.483 500 GHz -62.722 dBm
3 N 1 f 2.494 075 GHz -56.442 dBm
Frequency
Auto Tune
Center Freq
2.487500000 GHz
Start Freq
2.475000000 GHz
Stop Freq
2.500000000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin

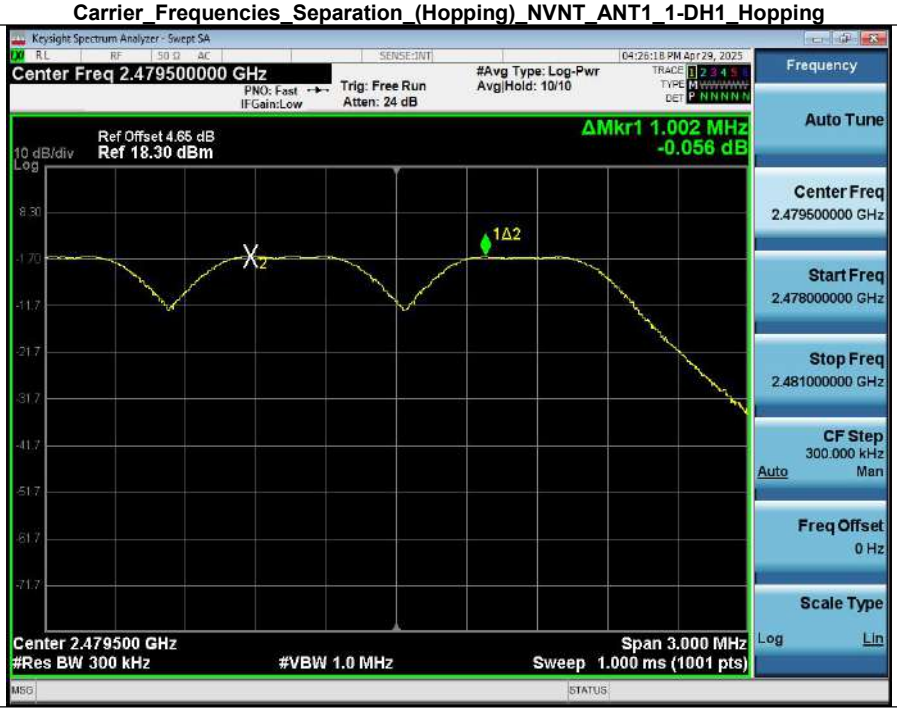
7. Carrier Frequencies Separation (Hopping)

Condition	Antenna	Modulation	Frequency(MHz)	Hopping NO.0 (MHz)	Hopping NO.1 (MHz)	Carrier Frequencies Separation(MHz)	Limit(MHz)	Result
NVNT	ANT1	1-DH1	2402.00	2401.882	2402.863	0.98	0.879	Pass
NVNT	ANT1	1-DH1	2441.00	2440.882	2441.875	0.99	0.920	Pass
NVNT	ANT1	1-DH1	2480.00	2478.879	2479.881	1.00	0.925	Pass
NVNT	ANT1	2-DH1	2402.00	2402.035	2403.055	1.02	0.848	Pass
NVNT	ANT1	2-DH1	2441.00	2440.876	2441.875	1.00	0.851	Pass
NVNT	ANT1	2-DH1	2480.00	2478.882	2479.875	0.99	0.845	Pass
NVNT	ANT1	3-DH1	2402.00	2402.050	2402.875	0.82	0.817	Pass
NVNT	ANT1	3-DH1	2441.00	2440.876	2441.866	0.99	0.817	Pass
NVNT	ANT1	3-DH1	2480.00	2478.879	2479.875	1.00	0.837	Pass

Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_1-DH1_Hopping

Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_1-DH1_Hopping

Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_1-DH1_Hopping



Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_2-DH1_Hopping

Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_2-DH1_Hopping

Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_2-DH1_Hopping

Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_3-DH1_Hopping

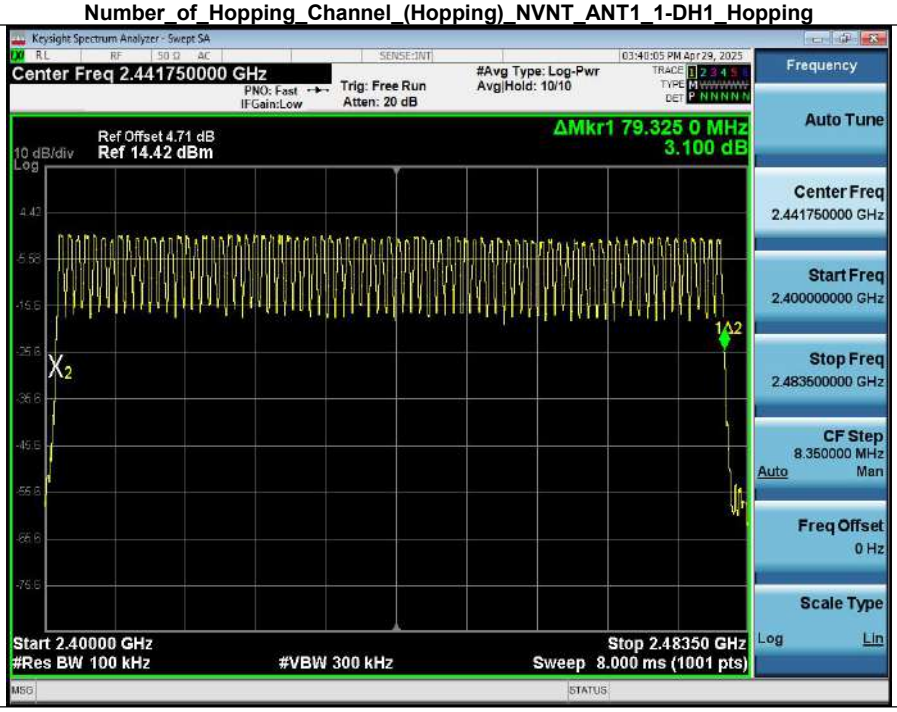
Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_3-DH1_Hopping

Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_3-DH1_Hopping

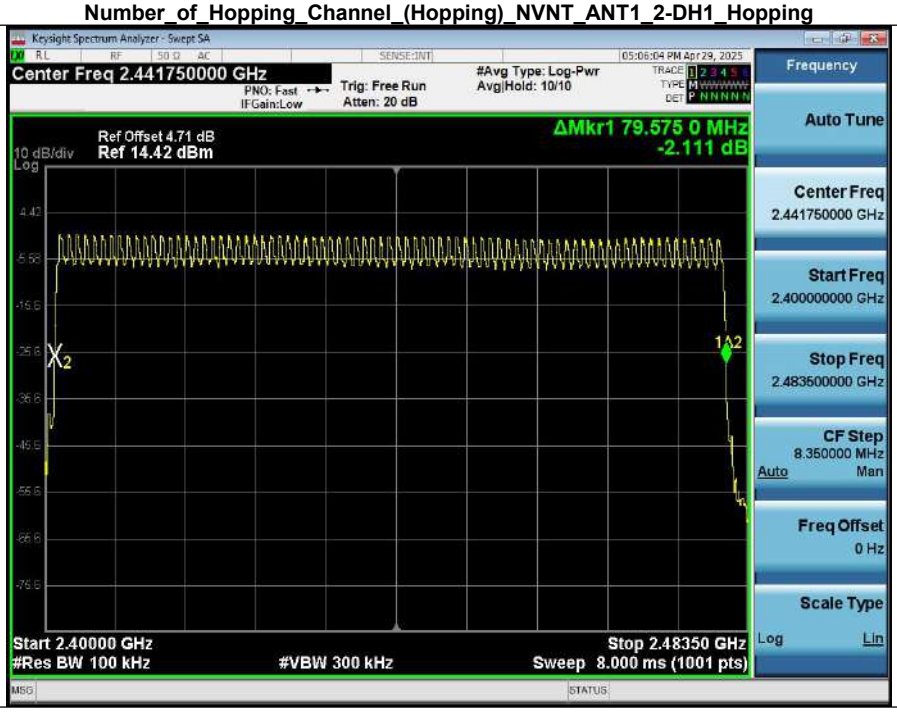
8. Number of Hopping Channel (Hopping)

Condition	Antenna	Modulation	Hopping Num	Limit	Result
NVNT	ANT1	1-DH1	79	15	Pass
NVNT	ANT1	2-DH1	79	15	Pass
NVNT	ANT1	3-DH1	79	15	Pass

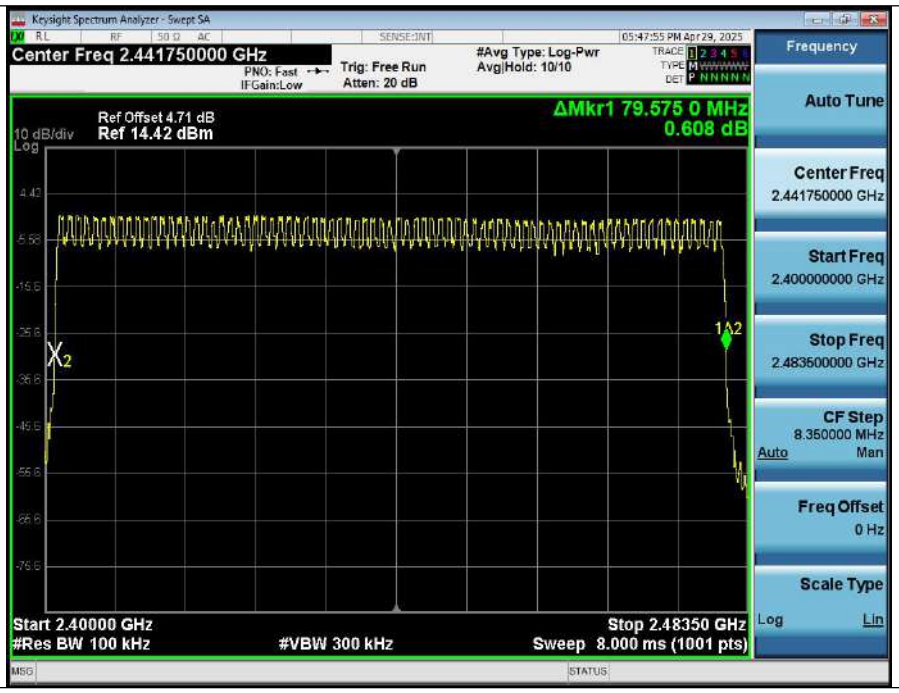
Number_of_Hopping_Channel_(Hopping)_NVNT_ANT1_1-DH1_Hopping



Number_of_Hopping_Channel_(Hopping)_NVNT_ANT1_2-DH1_Hopping



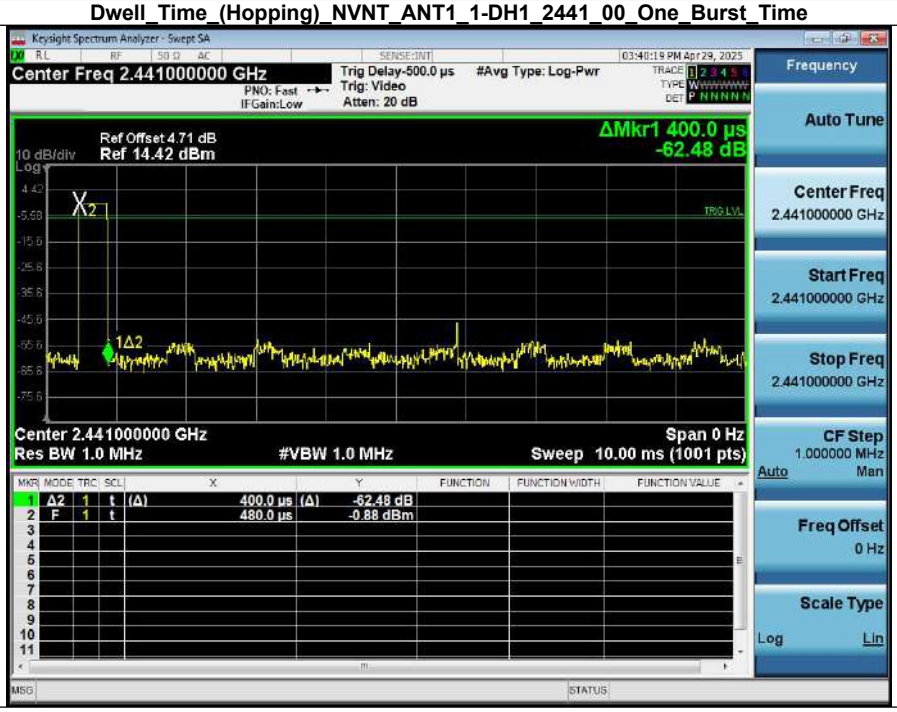
Number_of_Hopping_Channel_(Hopping)_NVNT_ANT1_3-DH1_Hopping


Keysight Spectrum Analyzer - Swept SA
Center Freq 2.441750000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
#Avg Type: Log-Pwr
Avg|Hold: 10/10
05:47:55 PM Apr 29, 2025
Ref Offset 4.71 dB
10 dB/div
Ref 14.42 dBm
Log
ΔMkr1 79.575 0 MHz
0.608 dB
Start 2.40000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.48350 GHz
Sweep 8.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq
2.441750000 GHz
Start Freq
2.400000000 GHz
Stop Freq
2.483500000 GHz
CF Step
8.350000 MHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin

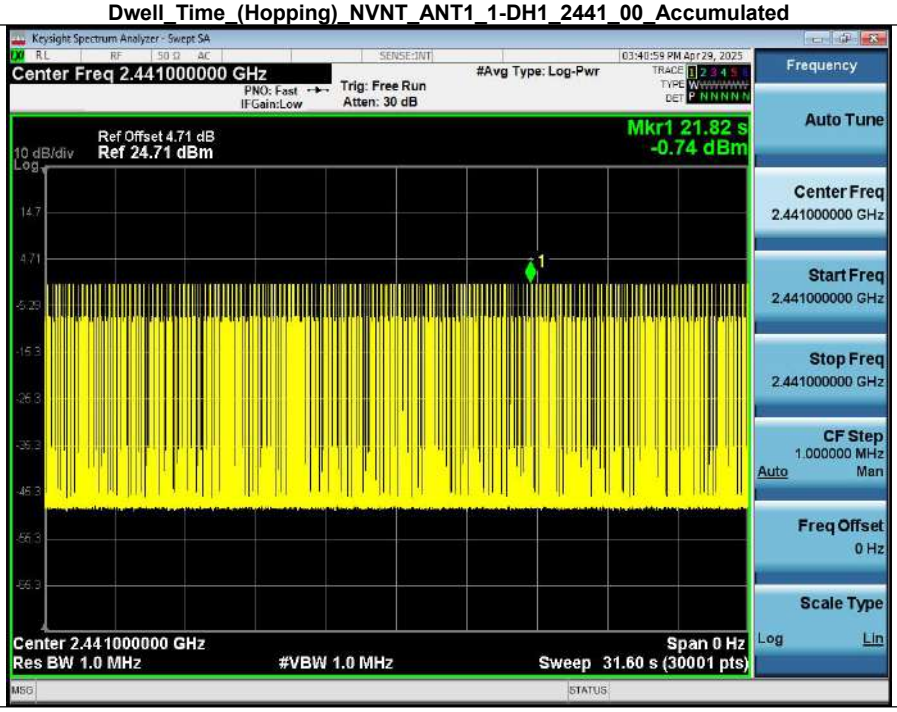
9. Dwell Time (Hopping)

Condition	Antenna	Packet Type	Pulse Time(ms)	Hops	Dwell Time(ms)	Limit(s)	Result
NVNT	ANT1	1-DH1	0.400	320.00	128.000	0.40	Pass
NVNT	ANT1	2-DH1	0.400	320.00	128.000	0.40	Pass
NVNT	ANT1	3-DH1	0.400	318.00	127.200	0.40	Pass
NVNT	ANT1	1-DH3	1.650	167.00	275.550	0.40	Pass
NVNT	ANT1	1-DH5	2.900	108.00	313.200	0.40	Pass
NVNT	ANT1	2-DH3	1.650	155.00	255.750	0.40	Pass
NVNT	ANT1	2-DH5	2.910	120.00	349.200	0.40	Pass
NVNT	ANT1	3-DH3	1.650	164.00	270.600	0.40	Pass
NVNT	ANT1	3-DH5	2.910	115.00	334.650	0.40	Pass

Dwell_Time_(Hopping)_NVNT_ANT1_1-DH1_2441_00_One_Burst_Time

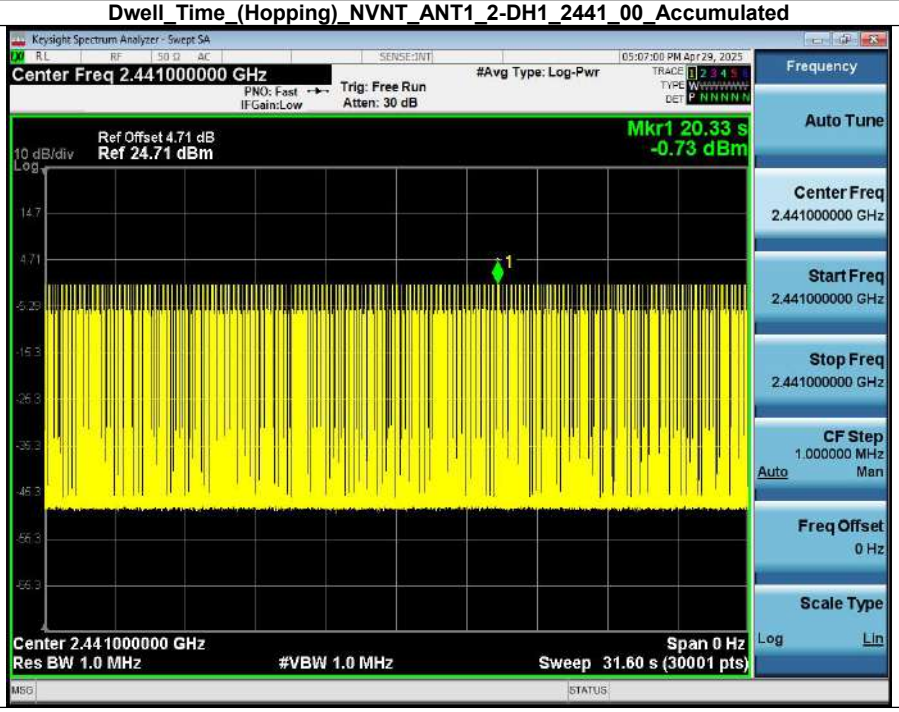


Dwell_Time_(Hopping)_NVNT_ANT1_1-DH1_2441_00_Accumulated

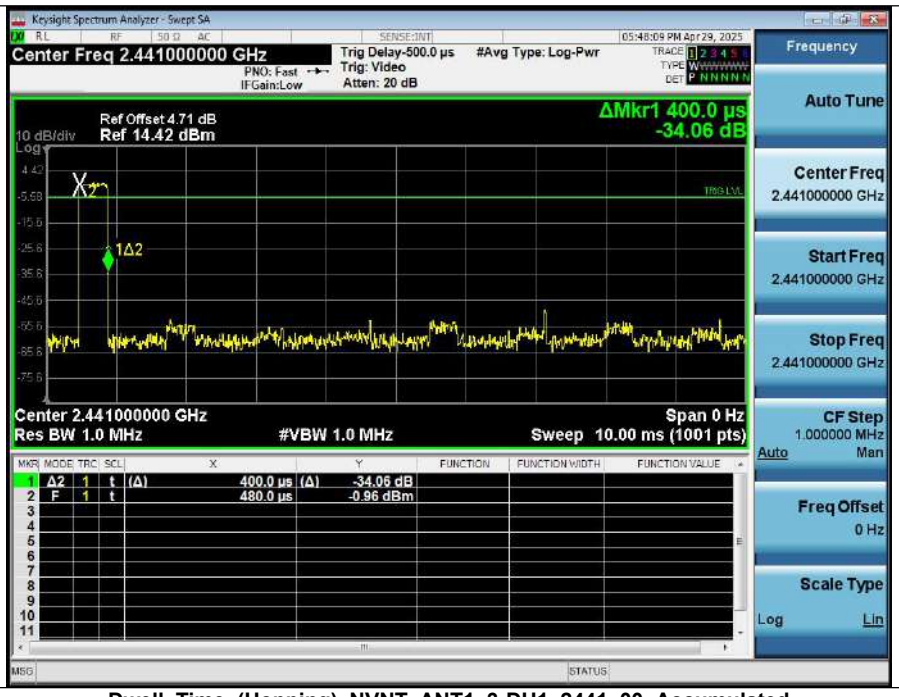


Dwell_Time_(Hopping)_NVNT_ANT1_2-DH1_2441_00_One_Burst_Time

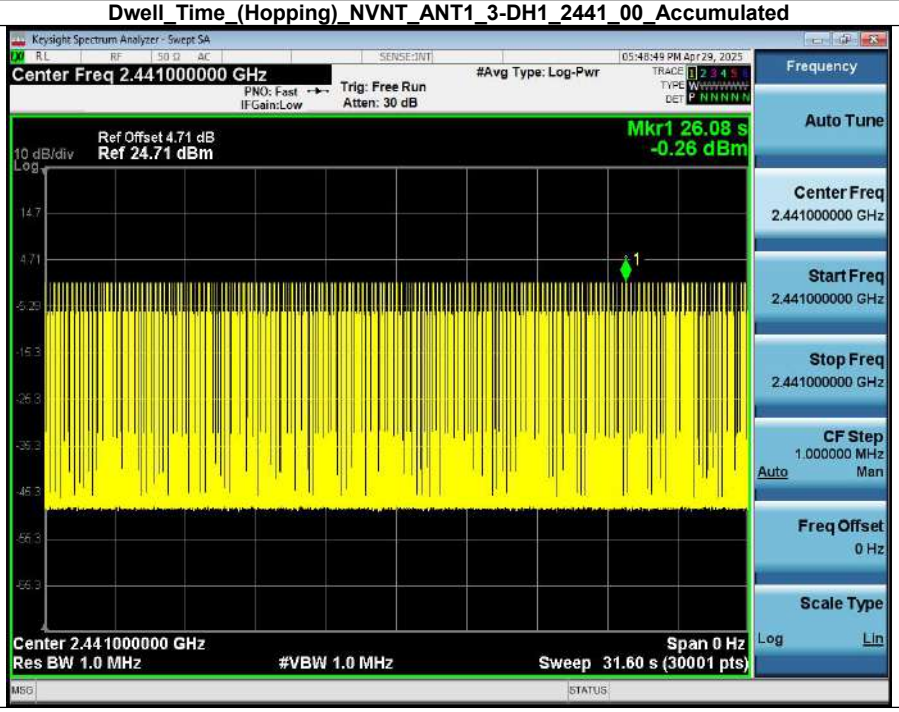
Dwell_Time_(Hopping)_NVNT_ANT1_2-DH1_2441_00_Accumulated



Dwell_Time_(Hopping)_NVNT_ANT1_3-DH1_2441_00_One_Burst_Time

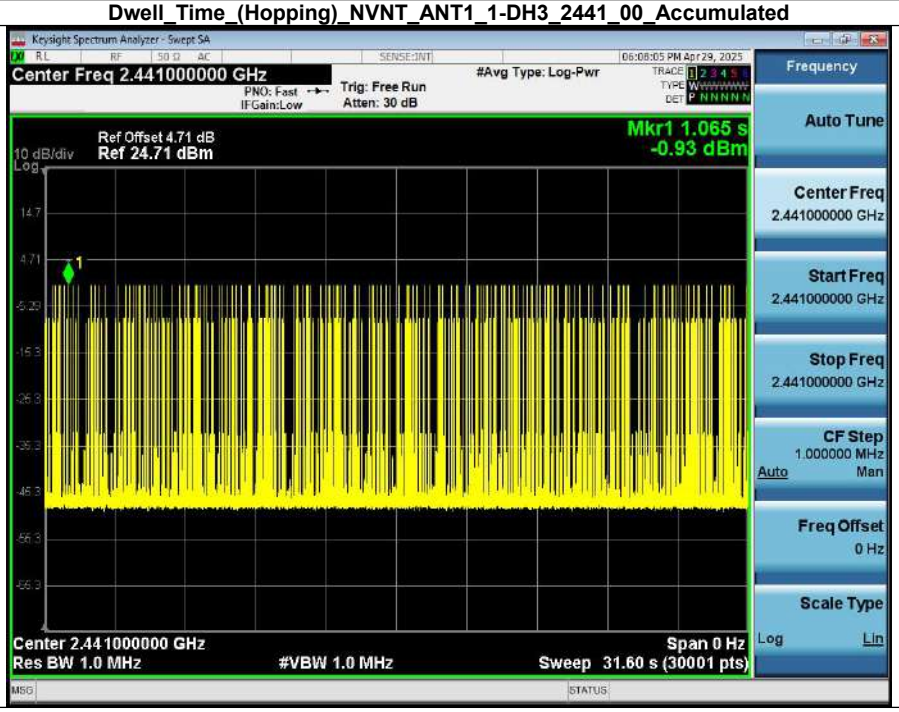


Dwell_Time_(Hopping)_NVNT_ANT1_3-DH1_2441_00_Accumulated



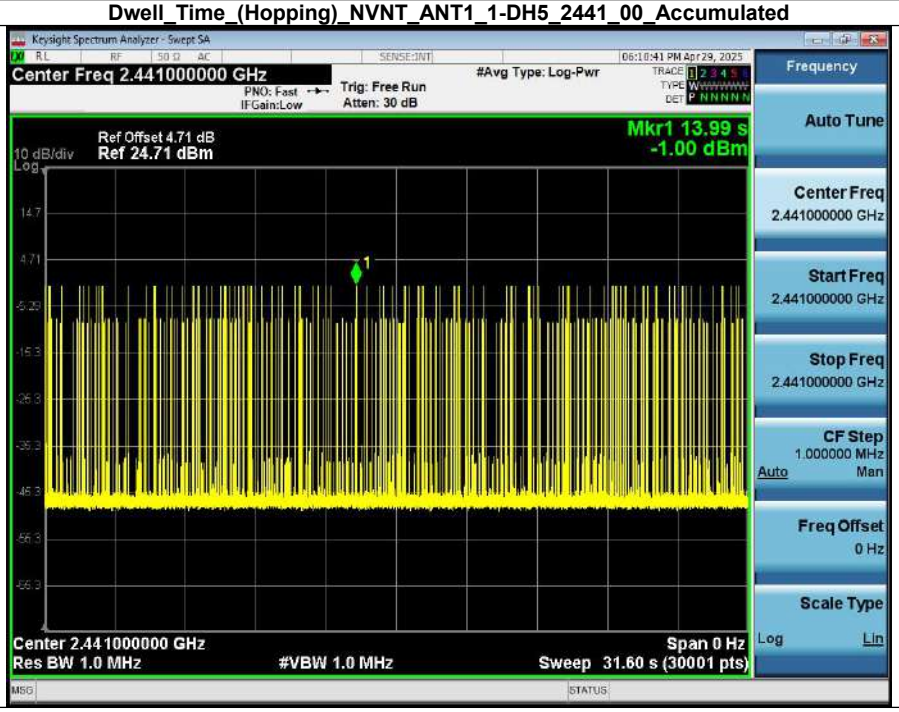
Dwell_Time_(Hopping)_NVNT_ANT1_1-DH3_2441_00_One_Burst_Time

Dwell_Time_(Hopping)_NVNT_ANT1_1-DH3_2441_00_Accumulated



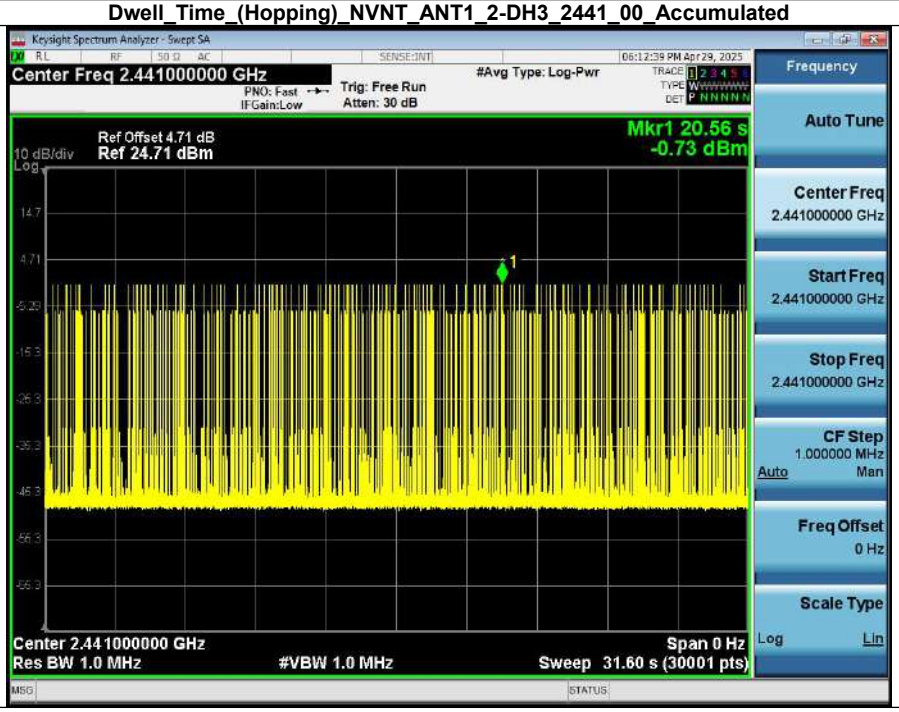
Dwell_Time_(Hopping)_NVNT_ANT1_1-DH5_2441_00_One_Burst_Time

Dwell_Time_(Hopping)_NVNT_ANT1_1-DH5_2441_00_Accumulated

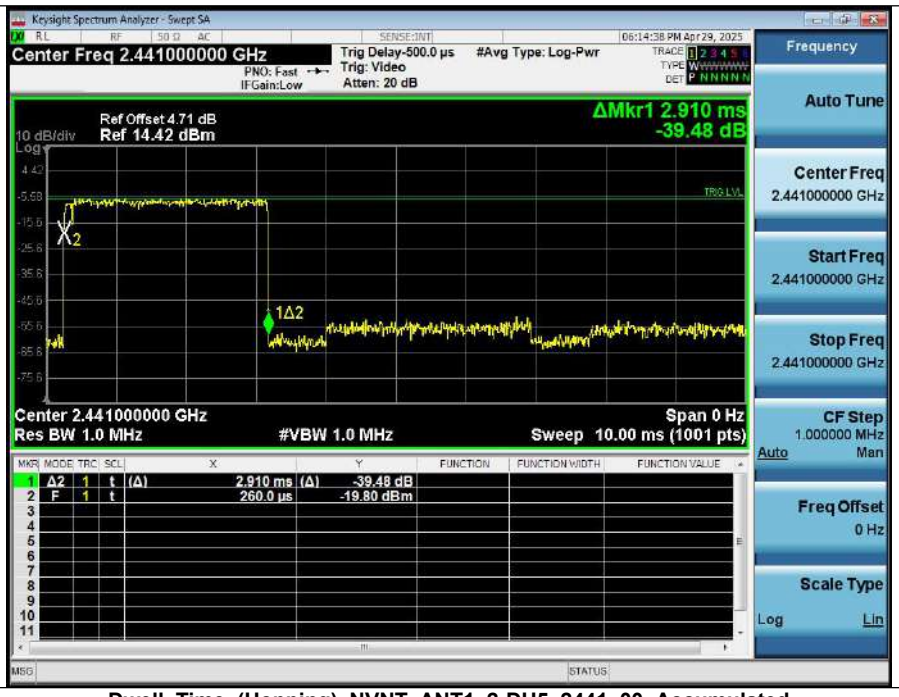


Dwell_Time_(Hopping)_NVNT_ANT1_2-DH3_2441_00_One_Burst_Time

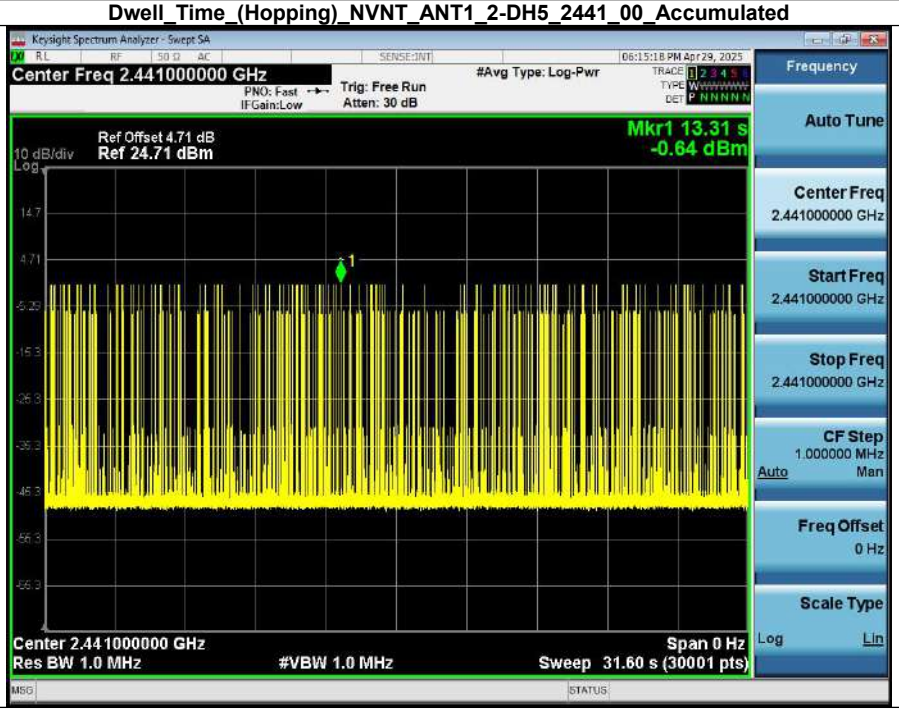
Dwell_Time_(Hopping)_NVNT_ANT1_2-DH3_2441_00_Accumulated



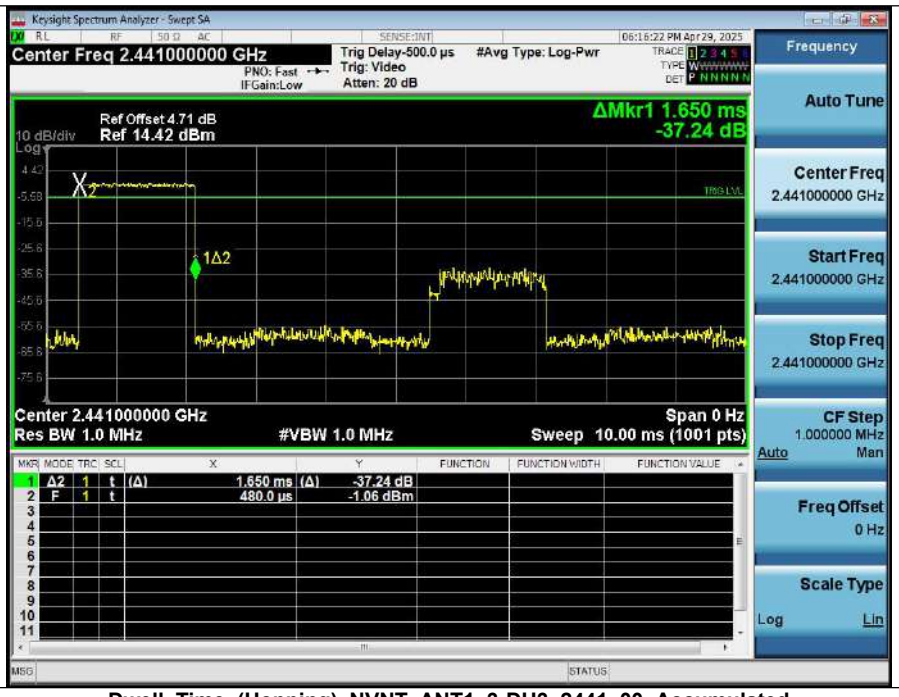
Dwell_Time_(Hopping)_NVNT_ANT1_2-DH5_2441_00_One_Burst_Time



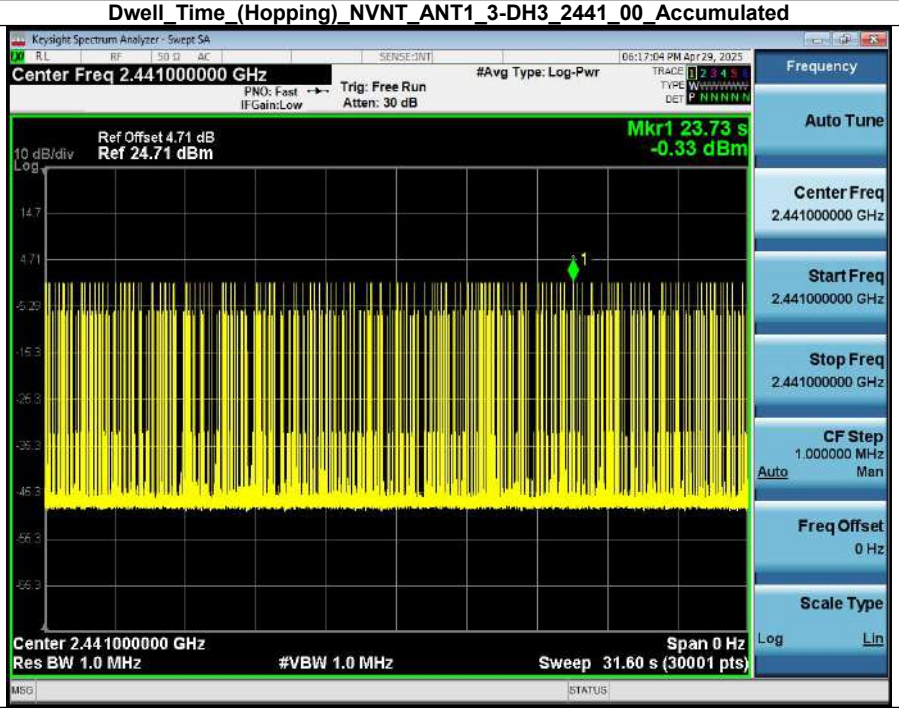
Dwell_Time_(Hopping)_NVNT_ANT1_2-DH5_2441_00_Accumulated



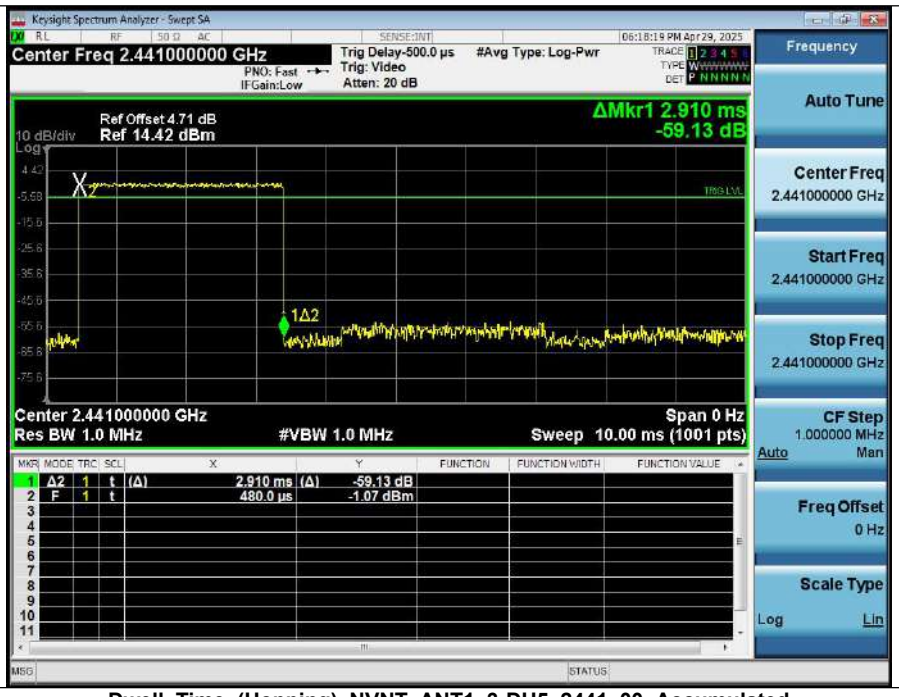
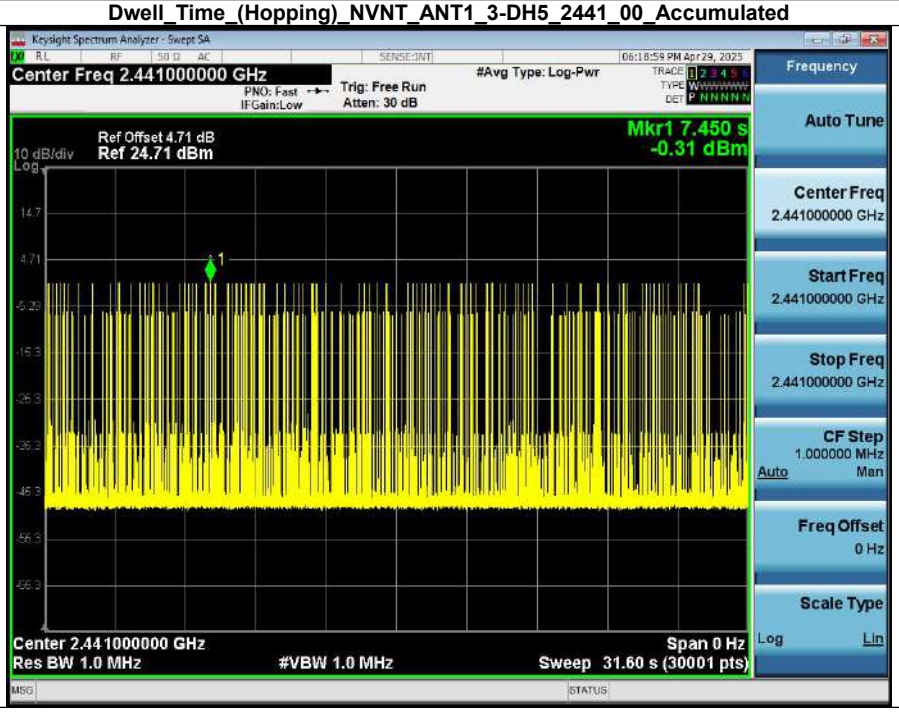
Dwell_Time_(Hopping)_NVNT_ANT1_3-DH3_2441_00_One_Burst_Time



Dwell_Time_(Hopping)_NVNT_ANT1_3-DH3_2441_00_Accumulated



Dwell_Time_(Hopping)_NVNT_ANT1_3-DH5_2441_00_One_Burst_Time



Dwell_Time_(Hopping)_NVNT_ANT1_3-DH5_2441_00_Accumulated