FCC ID:2BPKS-CP21
Report No.:NCT25023296E1-1
FCC_BT (Part15.247) Test Data

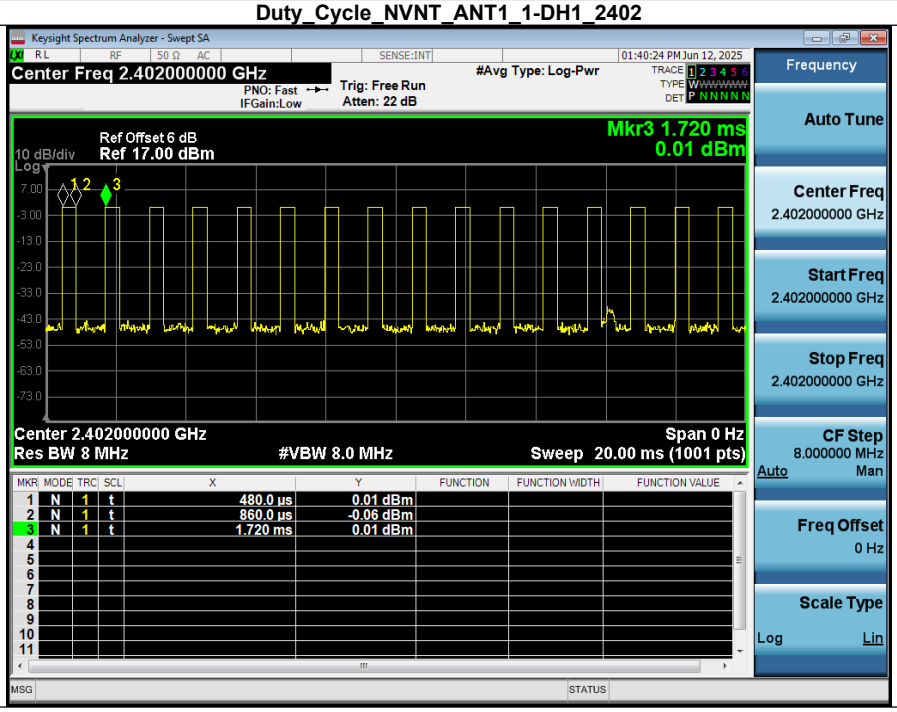
Table of Contents

1. Duty Cycle 2
2. -20dB Bandwidth 7
3. 99% Occupied Bandwidth 12
4. Peak Output Power 17
5. Spurious Emissions 22
6. Bandedge 31
7. Carrier Frequencies Separation (Hopping) 44
8. Number of Hopping Channel (Hopping) 49
9. Dwell Time (Hopping) 51

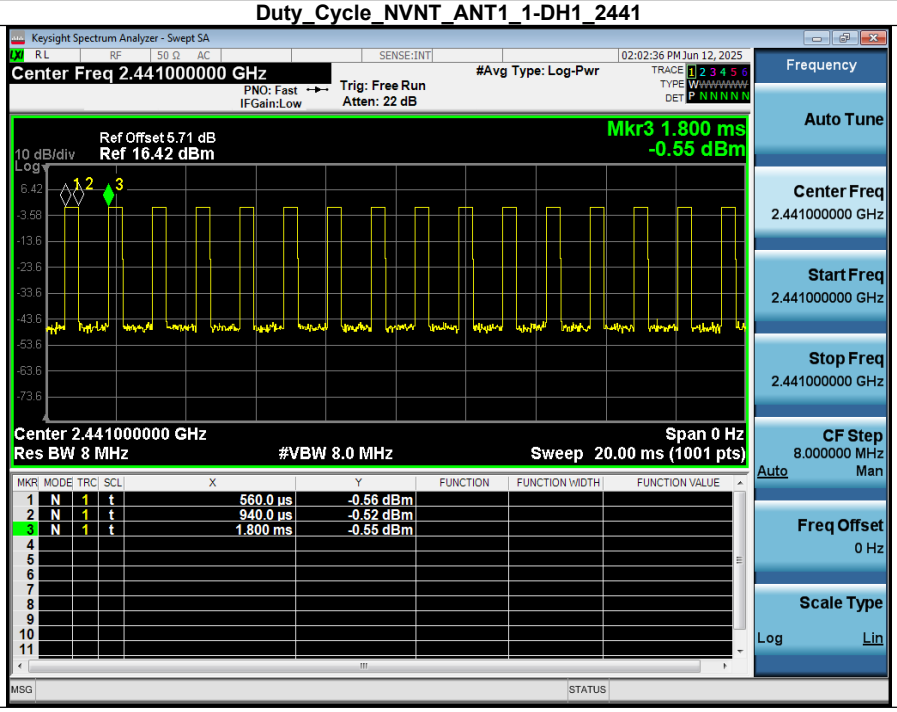
1. Duty Cycle

Condition	Antenna	Rate	Frequency (MHz)	Dutycycle(%)	Duty_factor
NVNT	ANT1	1-DH1	2402.00	30.65	5.14
NVNT	ANT1	1-DH1	2441.00	30.65	5.14
NVNT	ANT1	1-DH1	2480.00	30.65	5.14
NVNT	ANT1	2-DH1	2402.00	31.75	4.98
NVNT	ANT1	2-DH1	2441.00	33.33	4.77
NVNT	ANT1	2-DH1	2480.00	31.75	4.98
NVNT	ANT1	3-DH1	2402.00	31.75	4.98
NVNT	ANT1	3-DH1	2441.00	31.75	4.98
NVNT	ANT1	3-DH1	2480.00	33.33	4.77

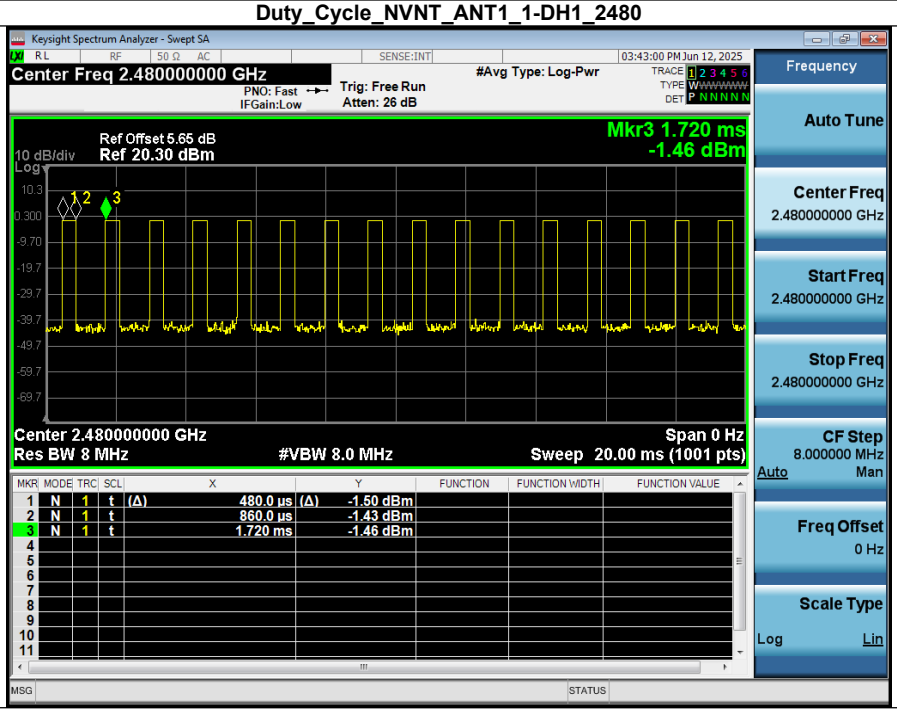
Duty_Cycle_NVNT_ANT1_1-DH1_2402



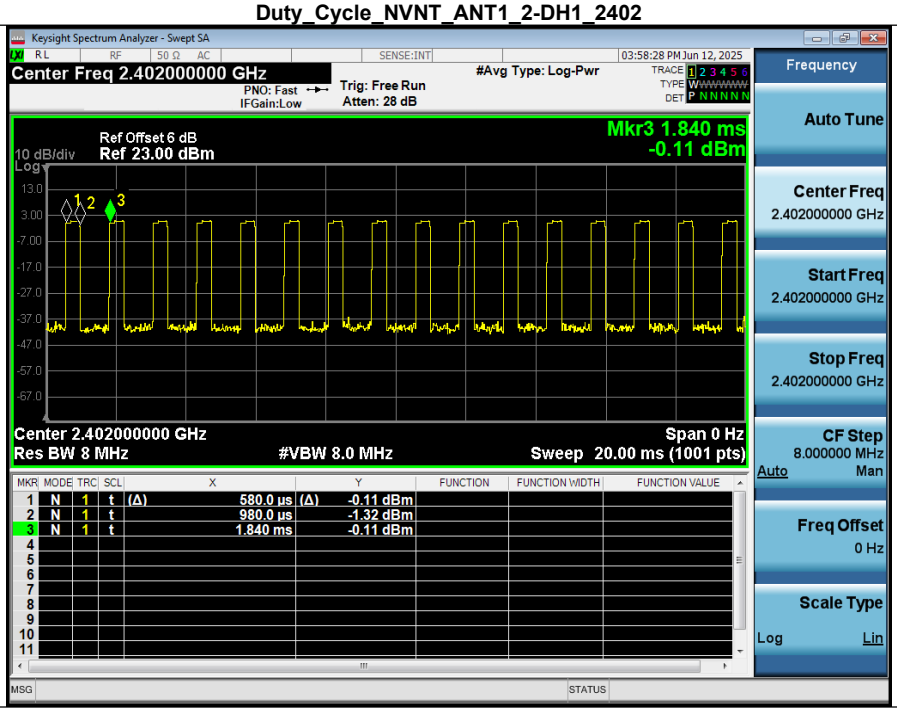
Duty_Cycle_NVNT_ANT1_1-DH1_2441



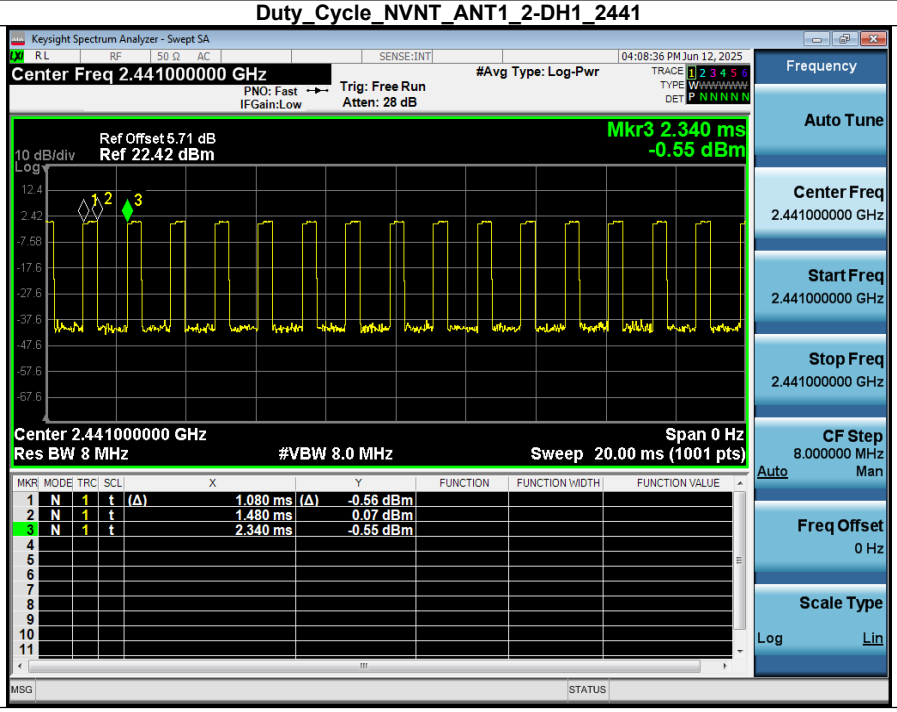
Duty_Cycle_NVNT_ANT1_1-DH1_2480



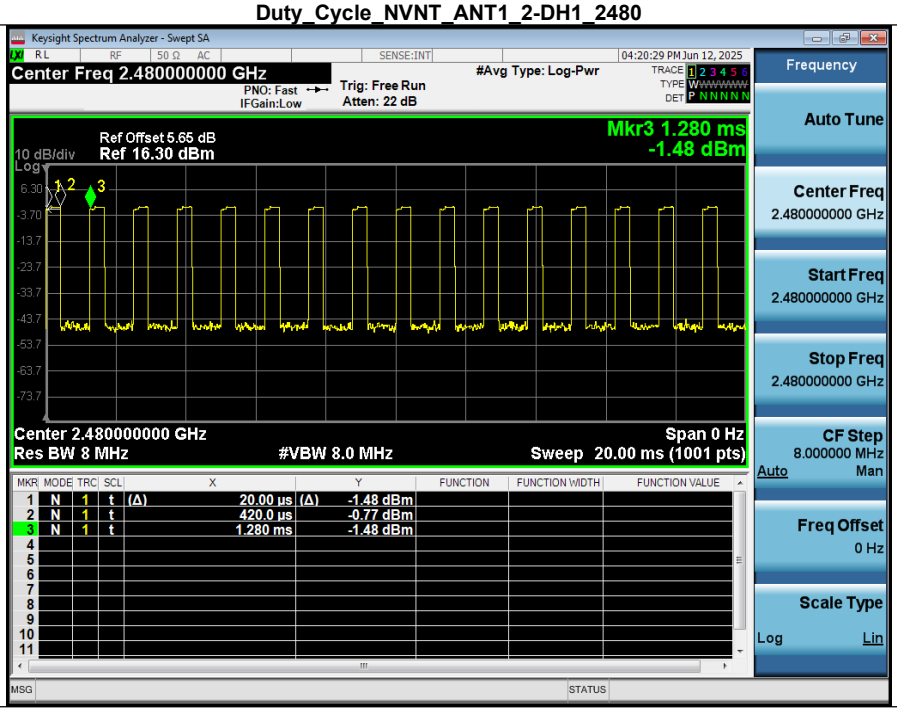
Duty_Cycle_NVNT_ANT1_2-DH1_2402



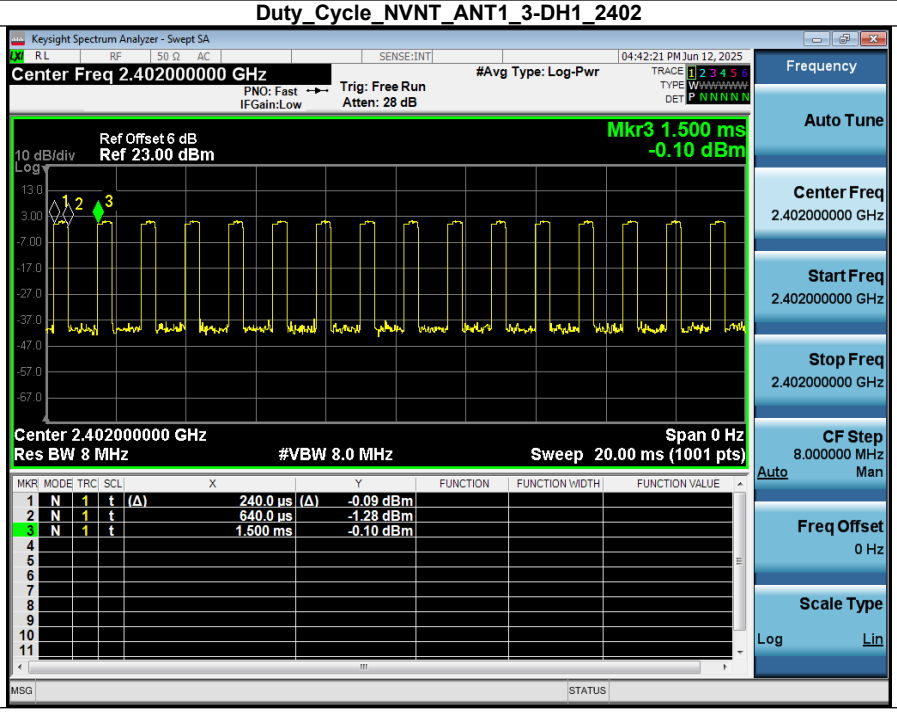
Duty_Cycle_NVNT_ANT1_2-DH1_2441



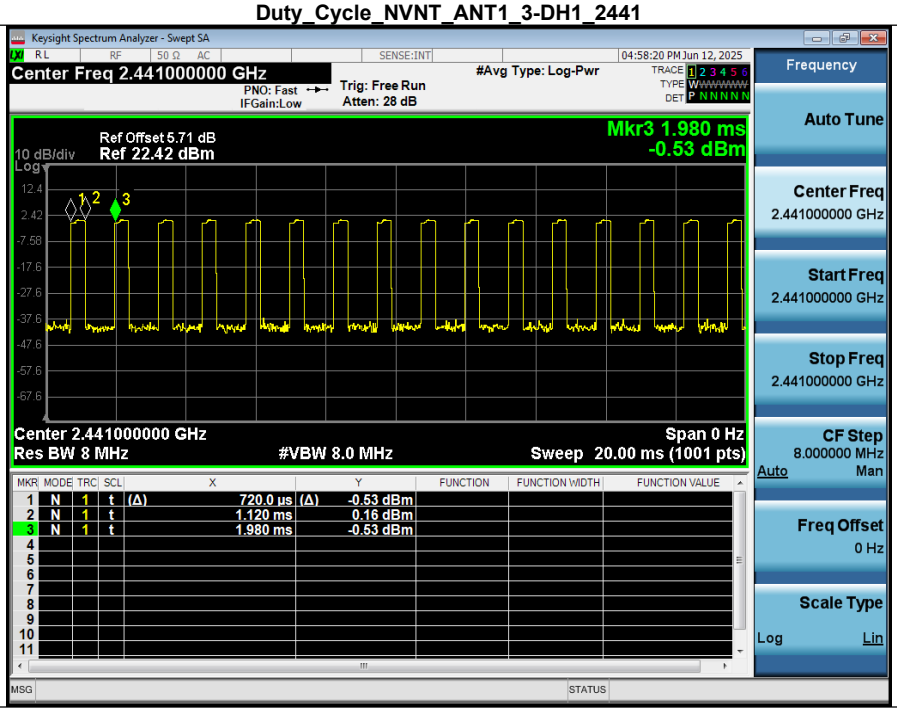
Duty_Cycle_NVNT_ANT1_2-DH1_2480



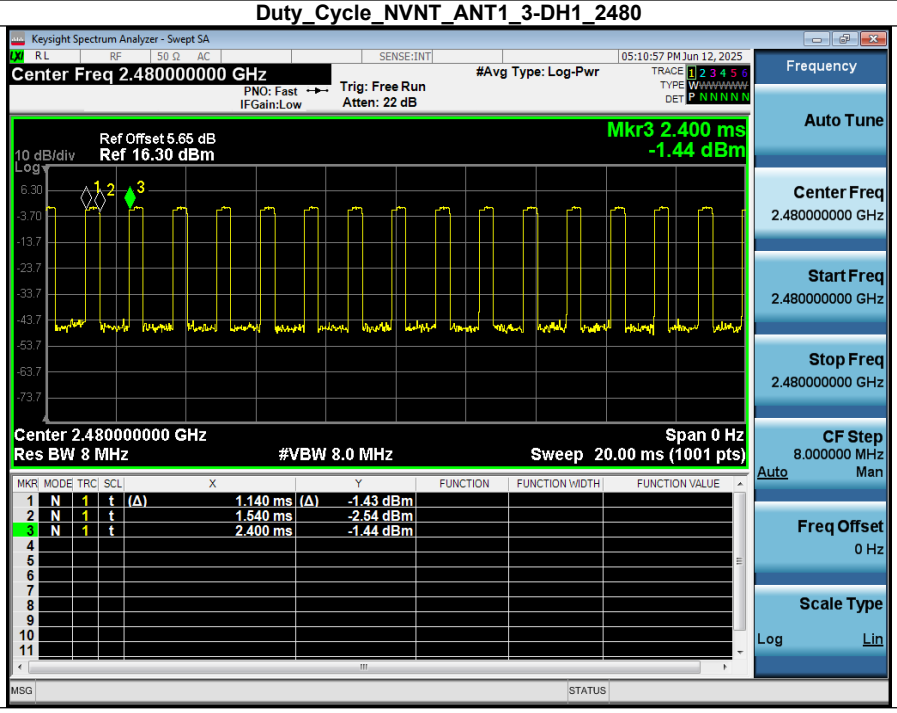
Duty_Cycle_NVNT_ANT1_3-DH1_2402



Duty_Cycle_NVNT_ANT1_3-DH1_2441



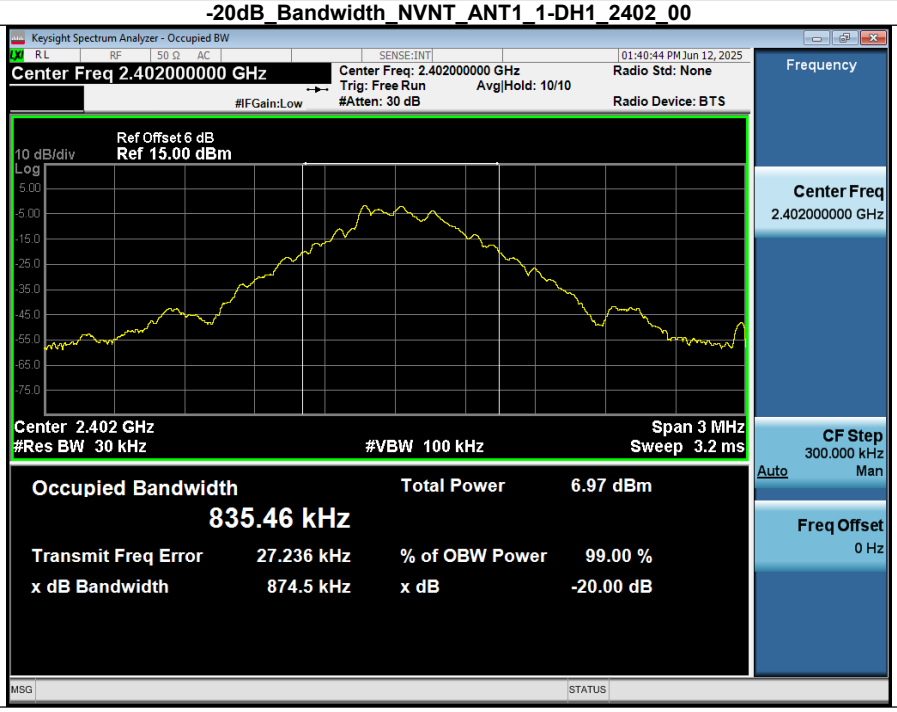
Duty_Cycle_NVNT_ANT1_3-DH1_2480



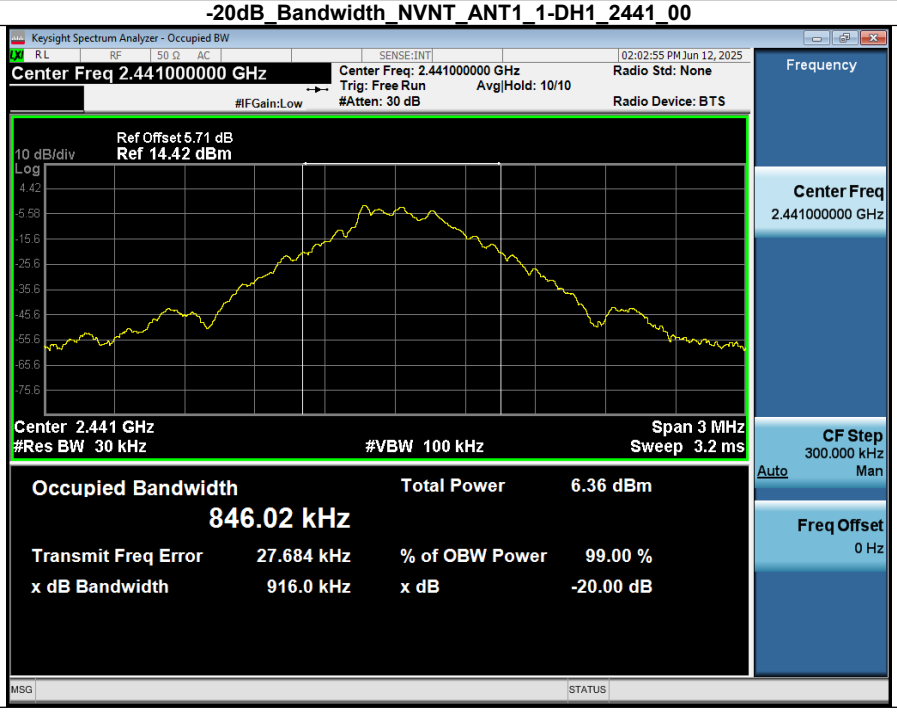
2. -20dB Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	-20dB BW(MHz)	if larger than CFS
NVNT	ANT1	1-DH1	2402.00	0.874	No
NVNT	ANT1	1-DH1	2441.00	0.916	No
NVNT	ANT1	1-DH1	2480.00	0.921	No
NVNT	ANT1	2-DH1	2402.00	1.270	Yes
NVNT	ANT1	2-DH1	2441.00	1.278	Yes
NVNT	ANT1	2-DH1	2480.00	1.270	Yes
NVNT	ANT1	3-DH1	2402.00	1.226	Yes
NVNT	ANT1	3-DH1	2441.00	1.225	Yes
NVNT	ANT1	3-DH1	2480.00	1.250	Yes

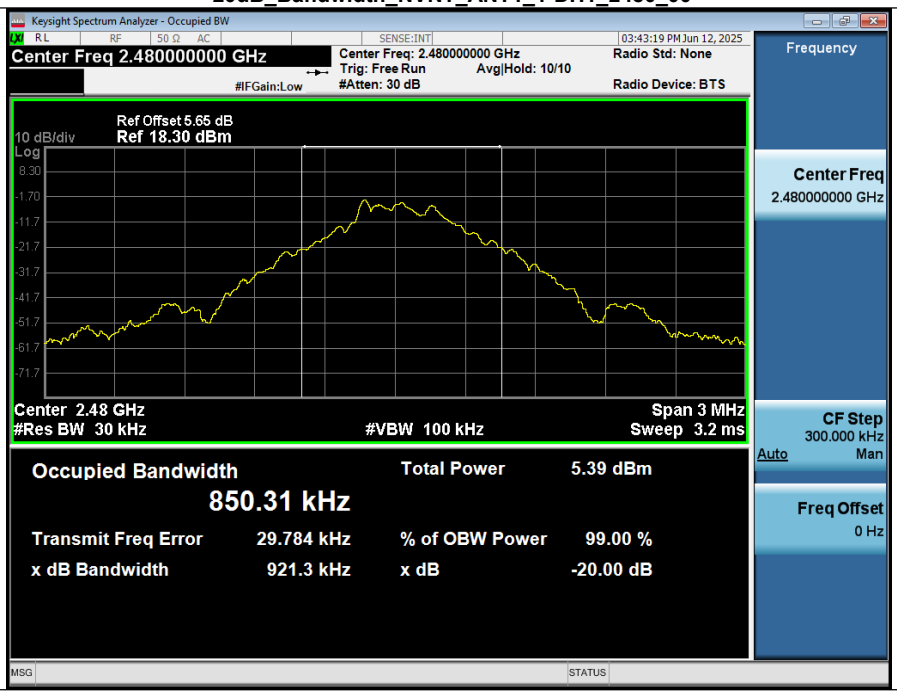
-20dB_Bandwidth_NVNT_ANT1_1-DH1_2402_00



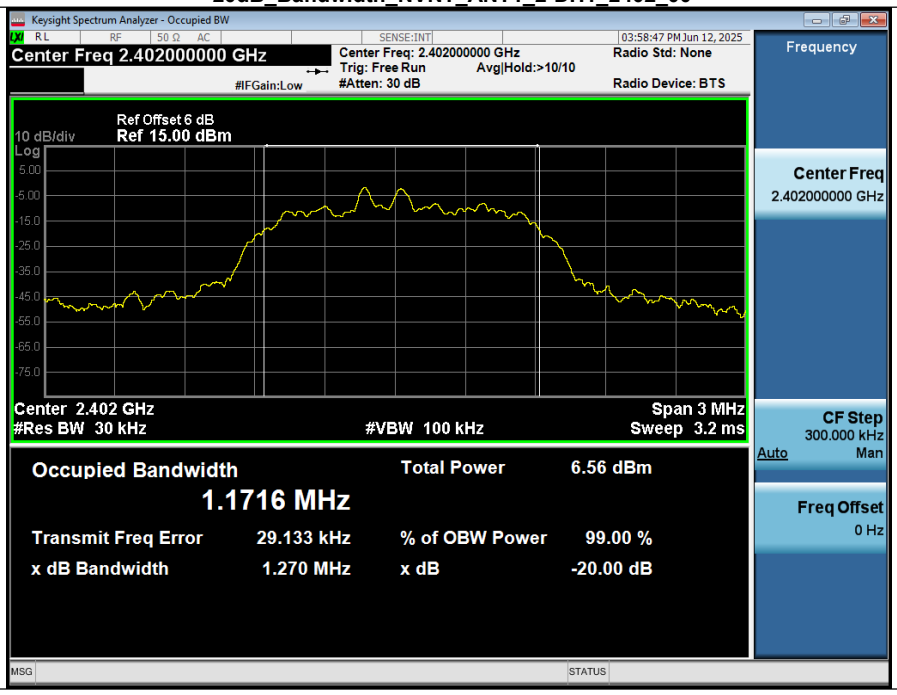
-20dB_Bandwidth_NVNT_ANT1_1-DH1_2441_00



-20dB_Bandwidth_NVNT_ANT1_1-DH1_2480_00

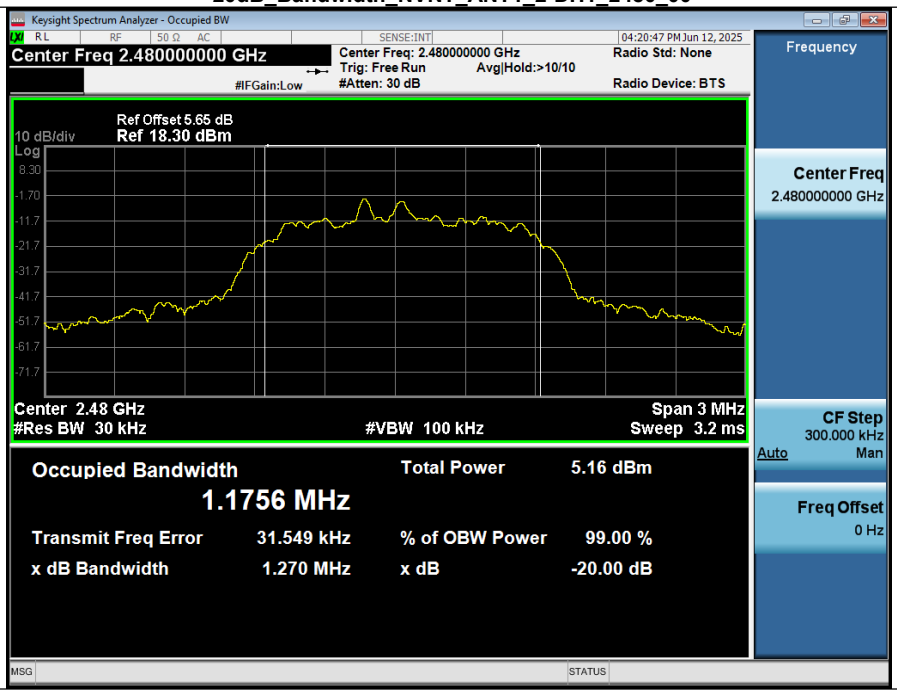


-20dB_Bandwidth_NVNT_ANT1_2-DH1_2402_00



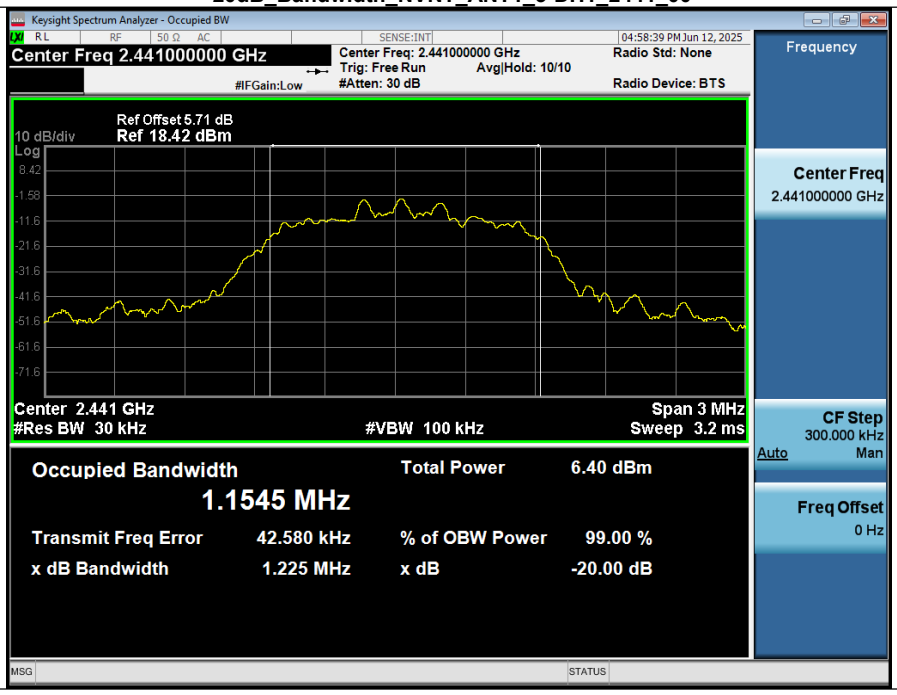
-20dB_Bandwidth_NVNT_ANT1_2-DH1_2441_00

-20dB_Bandwidth_NVNT_ANT1_2-DH1_2480_00



-20dB_Bandwidth_NVNT_ANT1_3-DH1_2402_00

-20dB_Bandwidth_NVNT_ANT1_3-DH1_2441_00

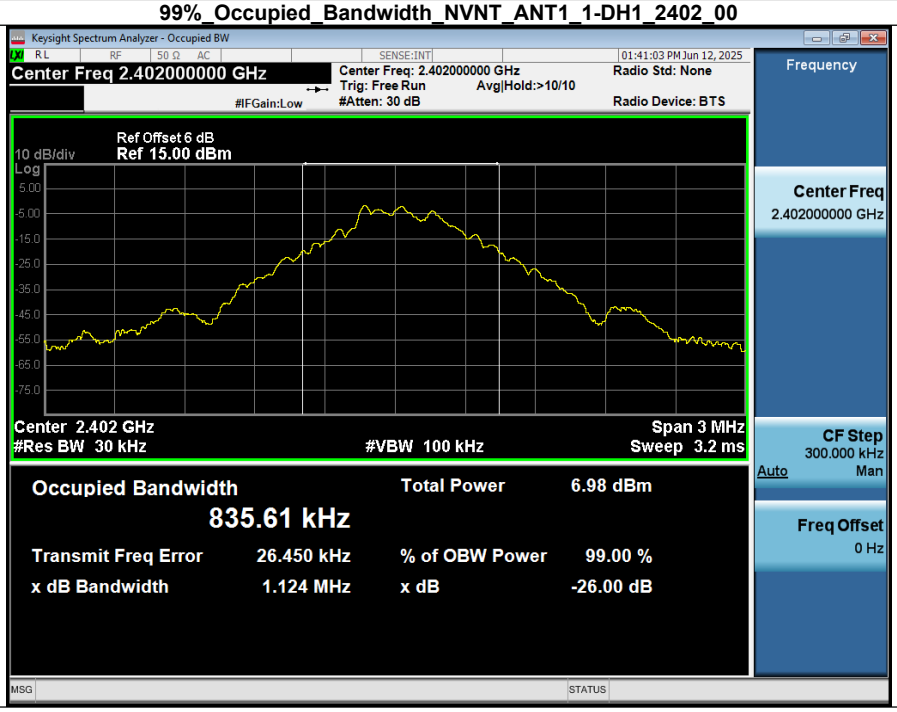


-20dB_Bandwidth_NVNT_ANT1_3-DH1_2480_00

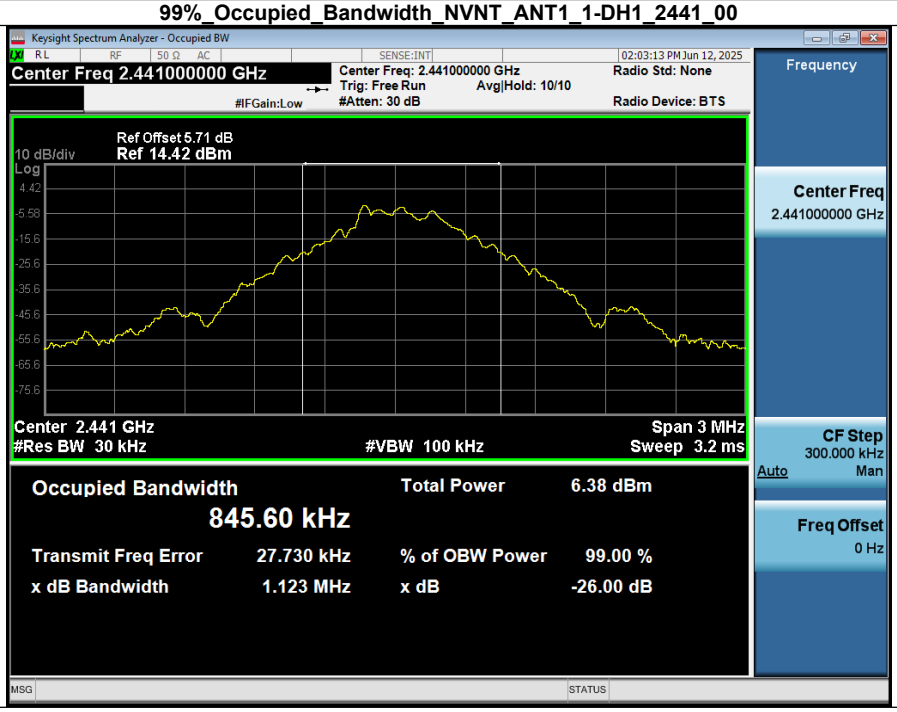
3. 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99%%BW(MHz)
NVNT	ANT1	1-DH1	2402.00	0.836
NVNT	ANT1	1-DH1	2441.00	0.846
NVNT	ANT1	1-DH1	2480.00	0.851
NVNT	ANT1	2-DH1	2402.00	1.173
NVNT	ANT1	2-DH1	2441.00	1.173
NVNT	ANT1	2-DH1	2480.00	1.174
NVNT	ANT1	3-DH1	2402.00	1.150
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

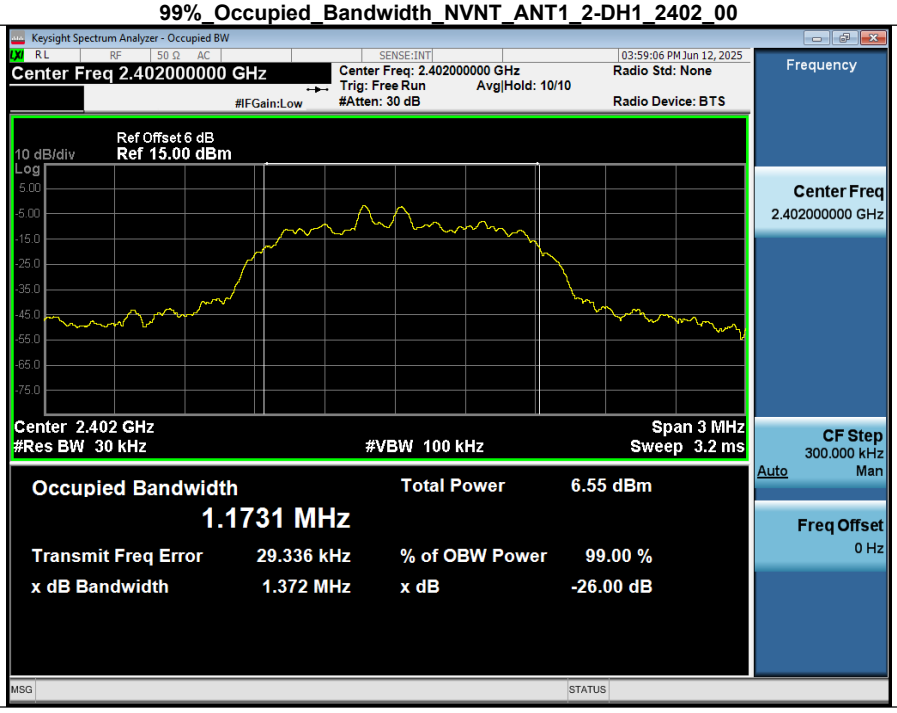


99%_Occupied_Bandwidth_NVNT_ANT1_1-DH1_2441_00

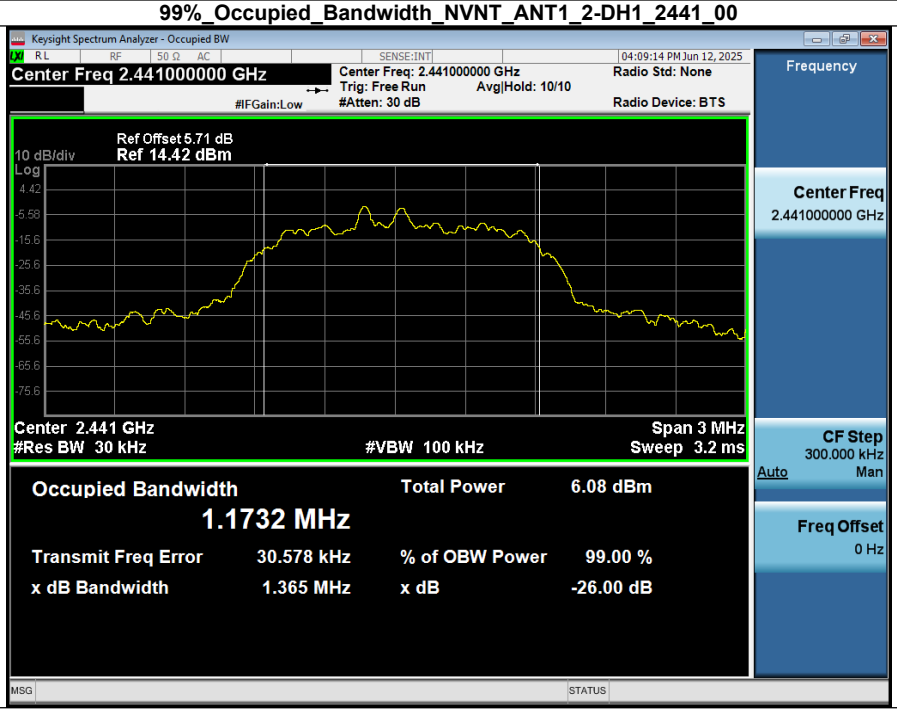


99%_Occupied_Bandwidth_NVNT_ANT1_1-DH1_2480_00

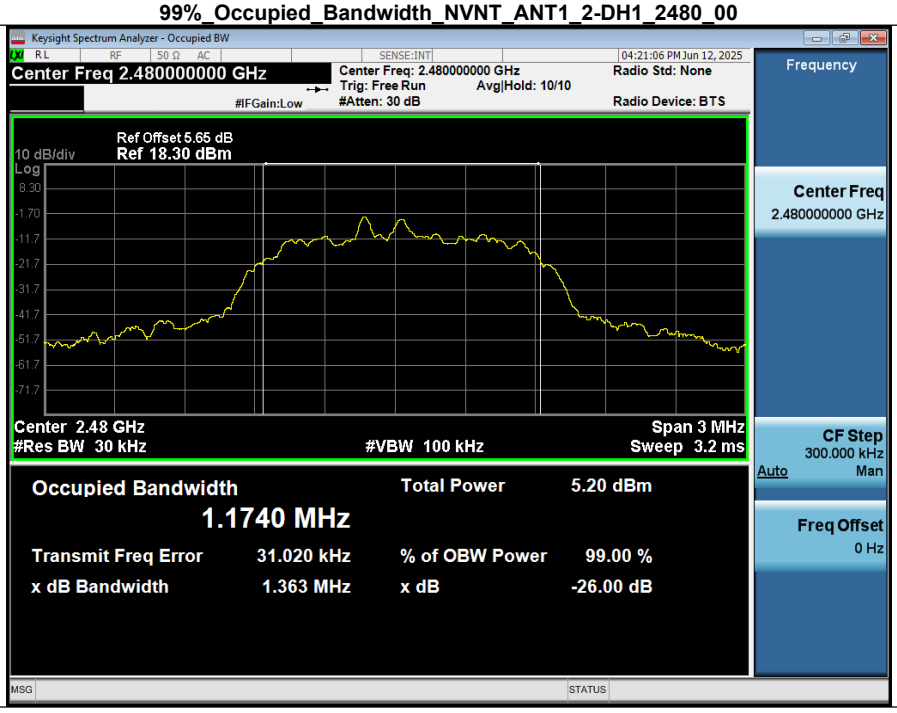
99%_Occupied_Bandwidth_NVNT_ANT1_2-DH1_2402_00



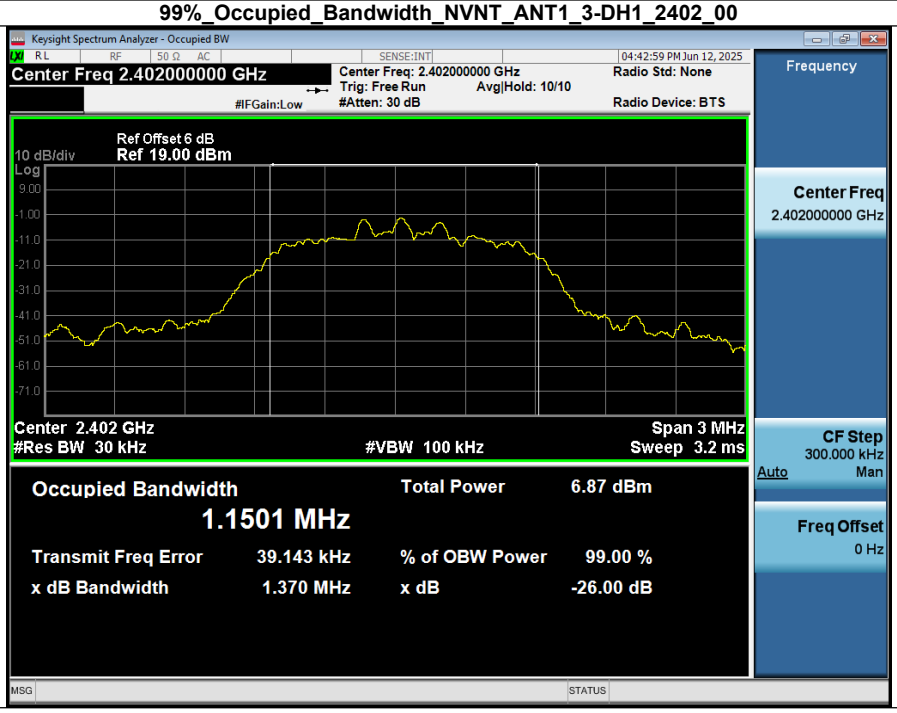
99%_Occupied_Bandwidth_NVNT_ANT1_2-DH1_2441_00



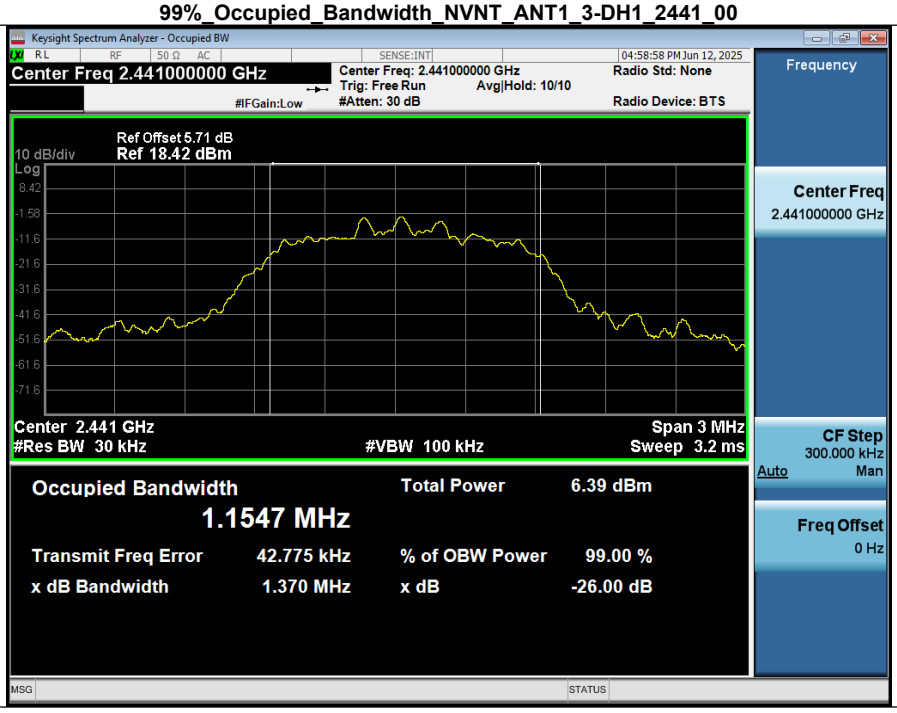
99%_Occupied_Bandwidth_NVNT_ANT1_2-DH1_2480_00



99%_Occupied_Bandwidth_NVNT_ANT1_3-DH1_2402_00



99%_Occupied_Bandwidth_NVNT_ANT1_3-DH1_2441_00

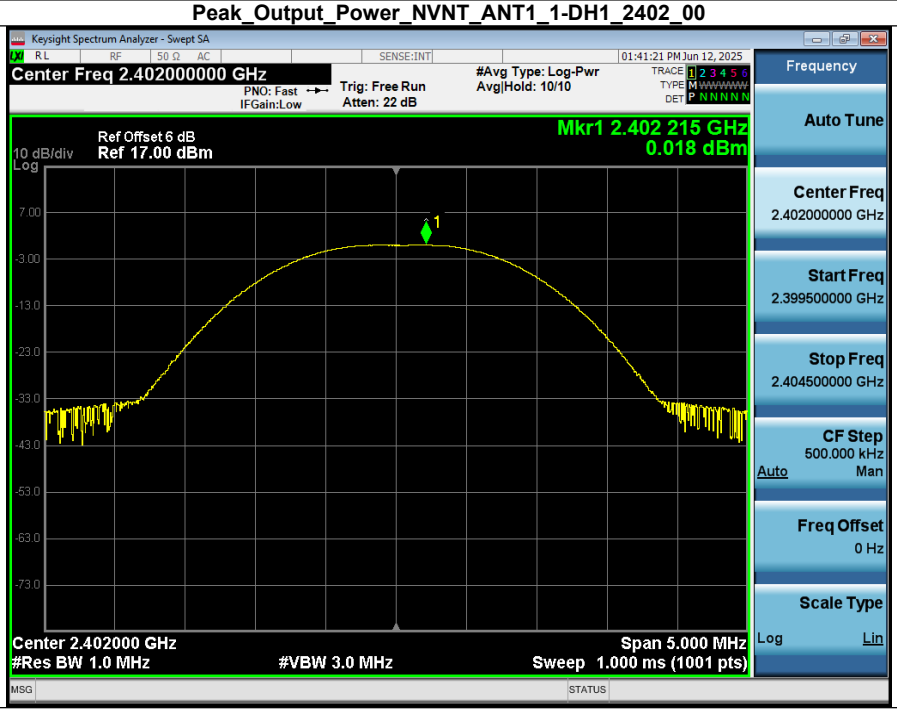


99%_Occupied_Bandwidth_NVNT_ANT1_3-DH1_2480_00

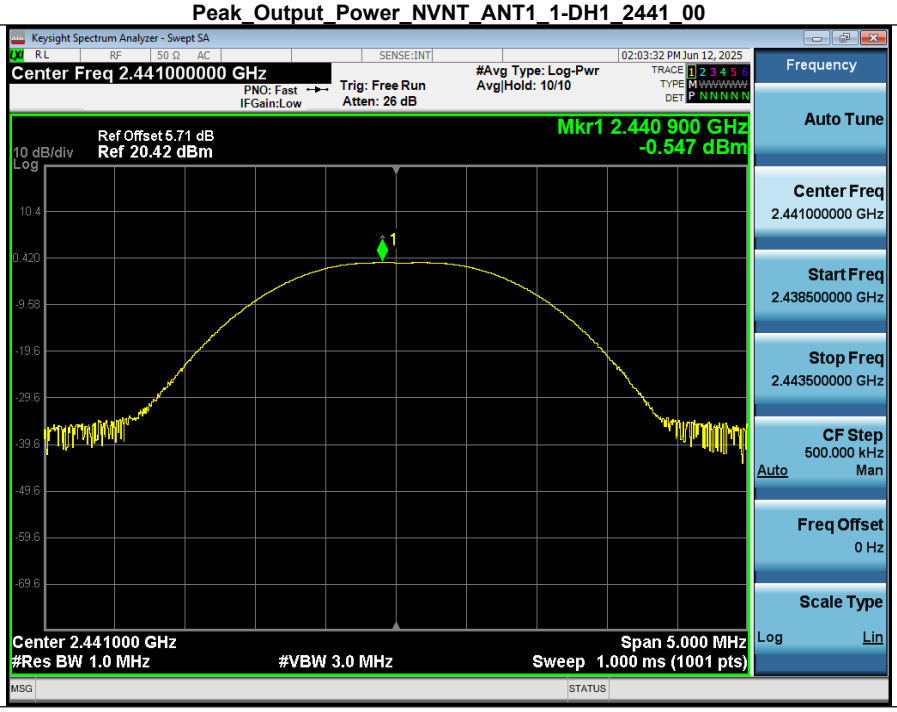
4. Peak Output Power

Condition	Antenna	Modulation	Frequency (MHz)	Max. Conducted Power(dBm)	Max. Conducted Power(mW)	Limit(mW)	Result
NVNT	ANT1	1-DH1	2402.00	0.02	1.00	1000	Pass
NVNT	ANT1	1-DH1	2441.00	-0.55	0.88	1000	Pass
NVNT	ANT1	1-DH1	2480.00	-1.44	0.72	1000	Pass
NVNT	ANT1	2-DH1	2402.00	0.69	1.17	125	Pass
NVNT	ANT1	2-DH1	2441.00	0.22	1.05	125	Pass
NVNT	ANT1	2-DH1	2480.00	-0.63	0.86	125	Pass
NVNT	ANT1	3-DH1	2402.00	1.21	1.32	125	Pass
NVNT	ANT1	3-DH1	2441.00	0.82	1.21	125	Pass
NVNT	ANT1	3-DH1	2480.00	0.01	1.00	125	Pass

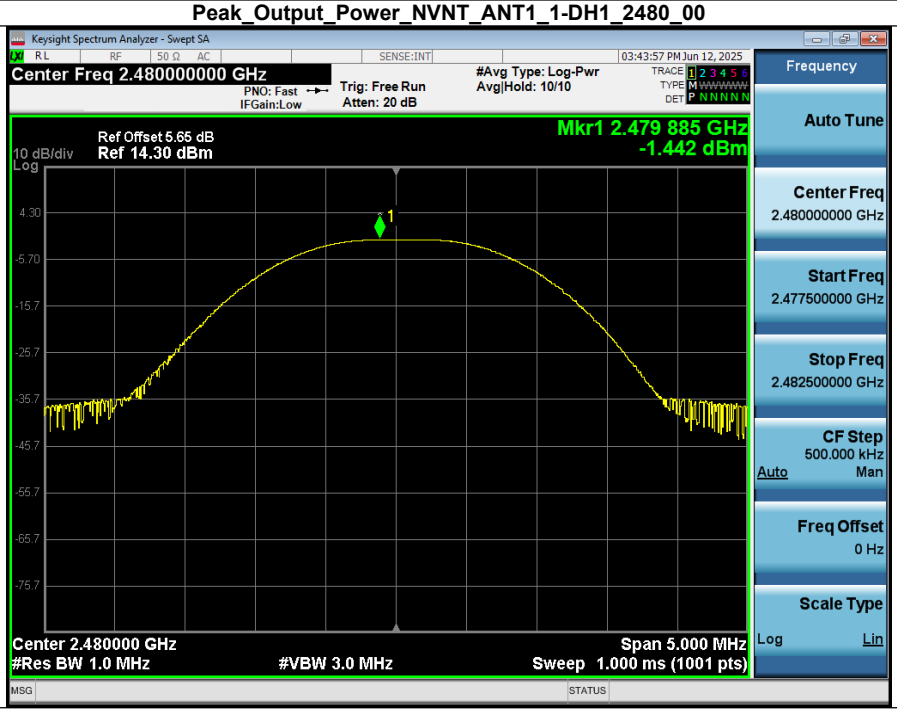
Peak_Output_Power_NVNT_ANT1_1-DH1_2402_00



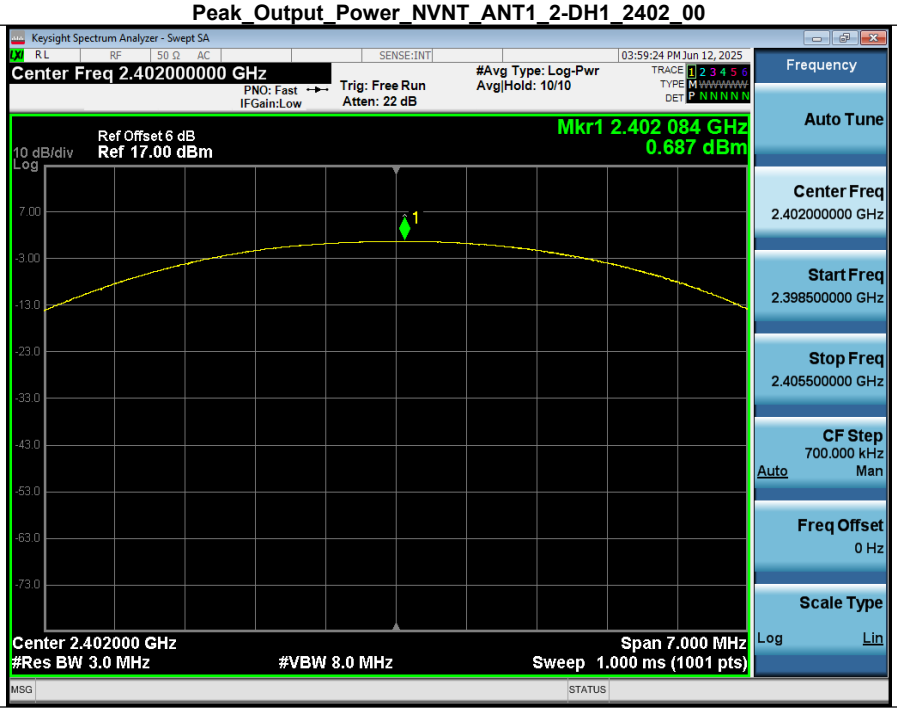
Peak_Output_Power_NVNT_ANT1_1-DH1_2441_00



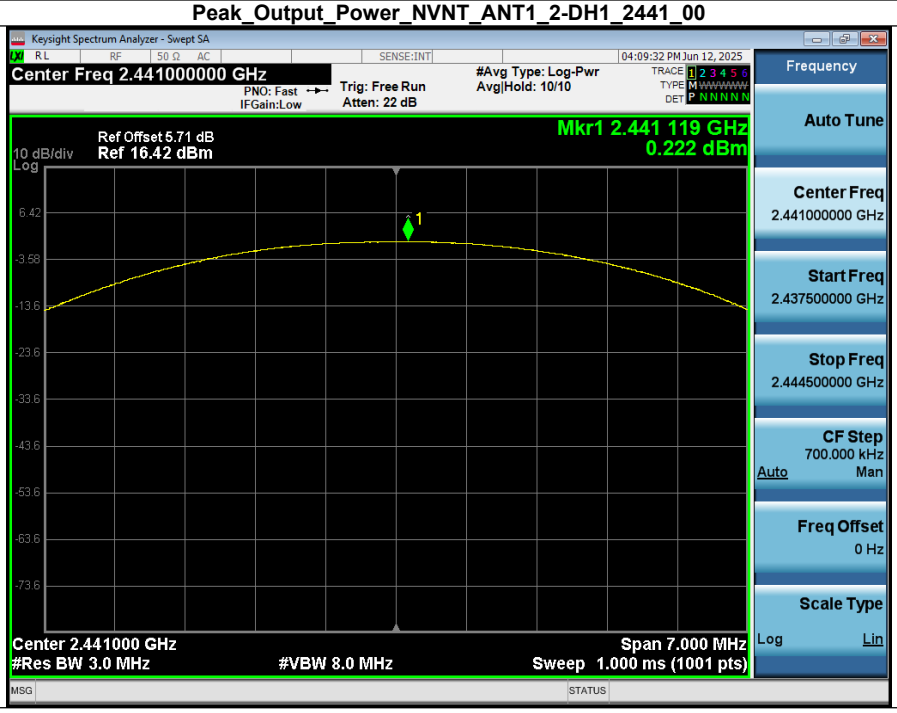
Peak_Output_Power_NVNT_ANT1_1-DH1_2480_00



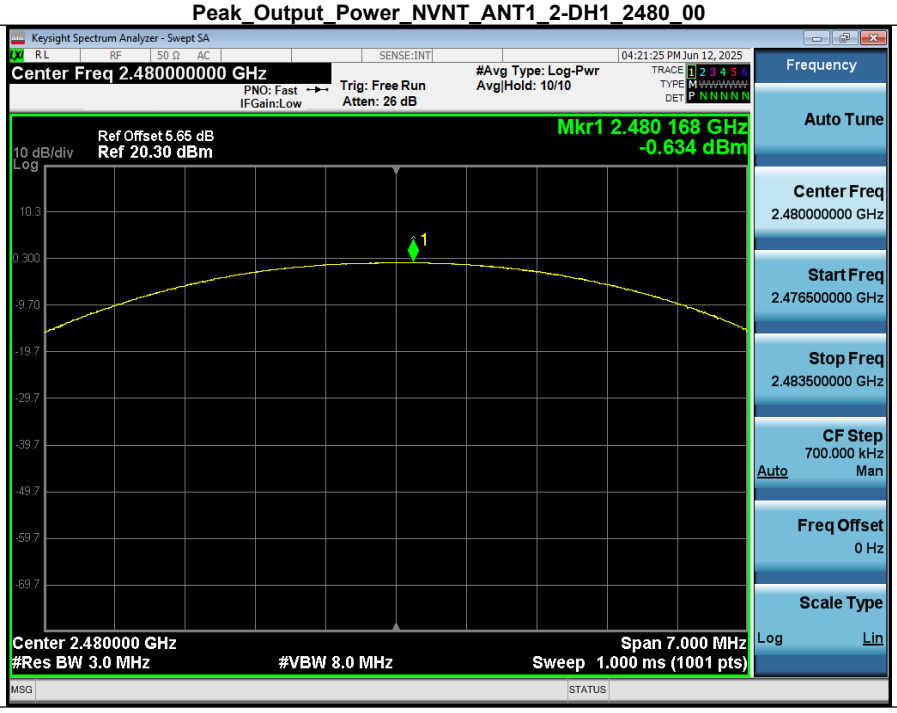
Peak_Output_Power_NVNT_ANT1_2-DH1_2402_00



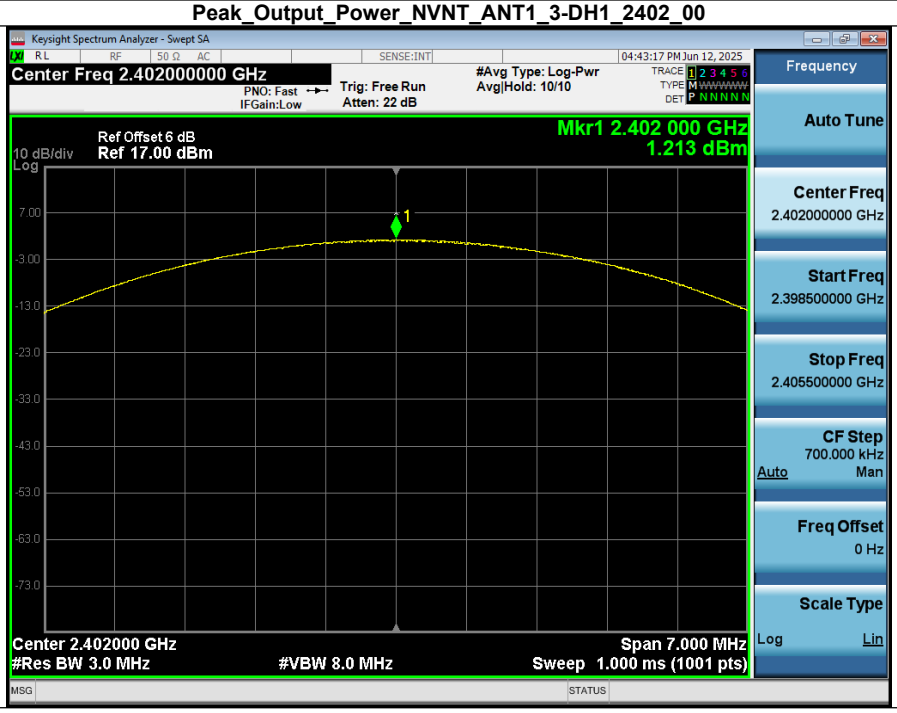
Peak_Output_Power_NVNT_ANT1_2-DH1_2441_00



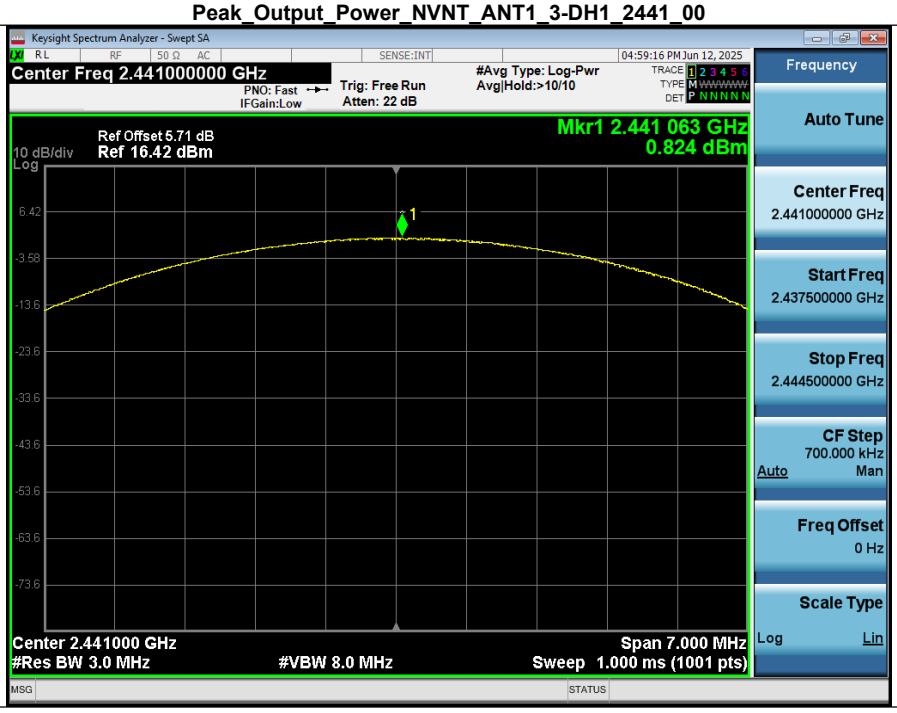
Peak_Output_Power_NVNT_ANT1_2-DH1_2480_00



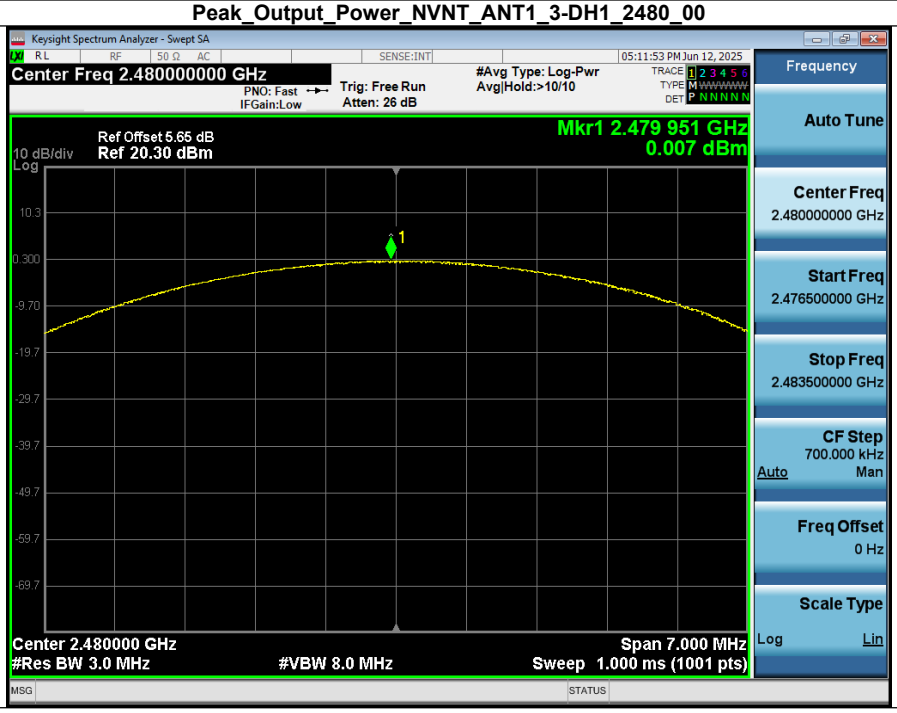
Peak_Output_Power_NVNT_ANT1_3-DH1_2402_00



Peak_Output_Power_NVNT_ANT1_3-DH1_2441_00



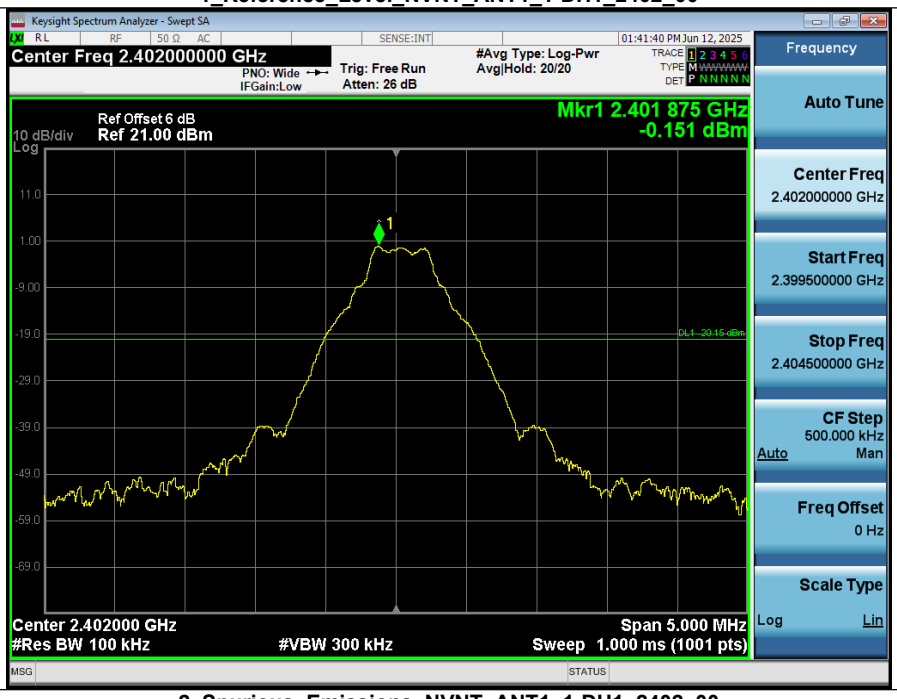
Peak_Output_Power_NVNT_ANT1_3-DH1_2480_00



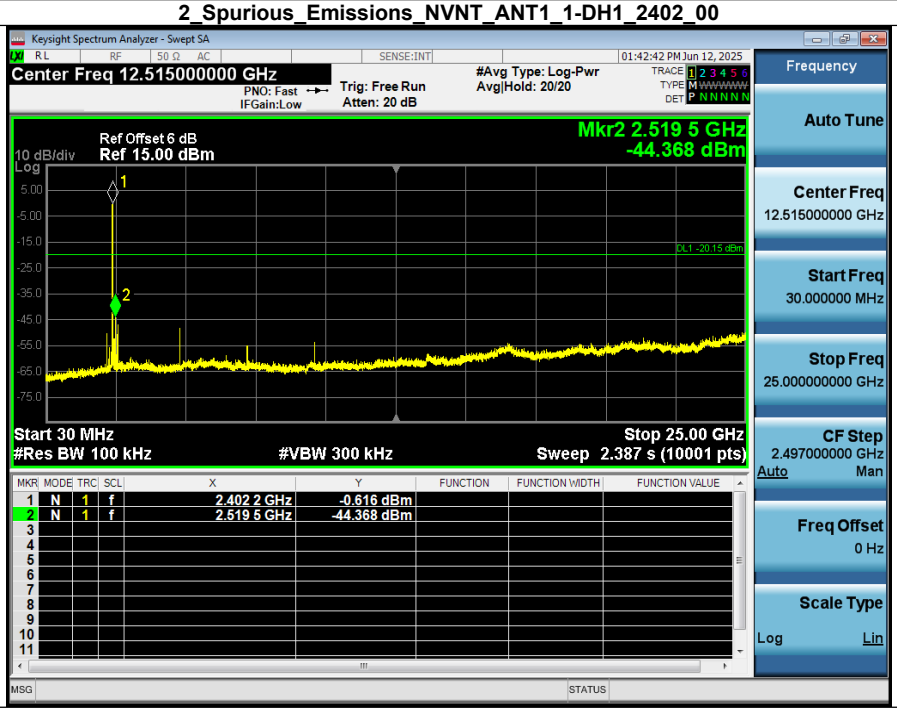
5. Spurious Emissions

Condition	Antenna	Modulation	TX Mode	Ref_level(dBm)	Spurious MAX.Value(dBm)	Limit	Result
NVNT	ANT1	1-DH1	2402.00	-0.151	-44.368	-20.151	Pass
NVNT	ANT1	1-DH1	2441.00	-0.668	-48.248	-20.668	Pass
NVNT	ANT1	1-DH1	2480.00	-1.604	-46.425	-21.604	Pass
NVNT	ANT1	2-DH1	2402.00	-0.267	-48.678	-20.267	Pass
NVNT	ANT1	2-DH1	2441.00	-0.685	-49.145	-20.685	Pass
NVNT	ANT1	2-DH1	2480.00	-1.562	-47.309	-21.562	Pass
NVNT	ANT1	3-DH1	2402.00	-0.274	-46.996	-20.274	Pass
NVNT	ANT1	3-DH1	2441.00	-0.672	-47.154	-20.672	Pass
NVNT	ANT1	3-DH1	2480.00	-1.533	-48.079	-21.533	Pass

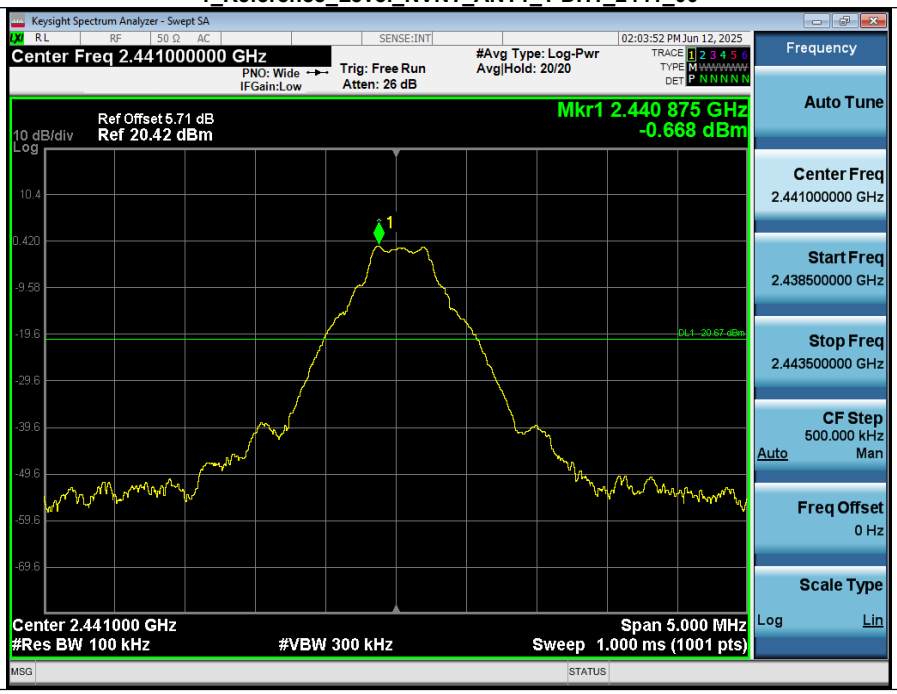
1_Reference_Level_NVNT_ANT1_1-DH1_2402_00



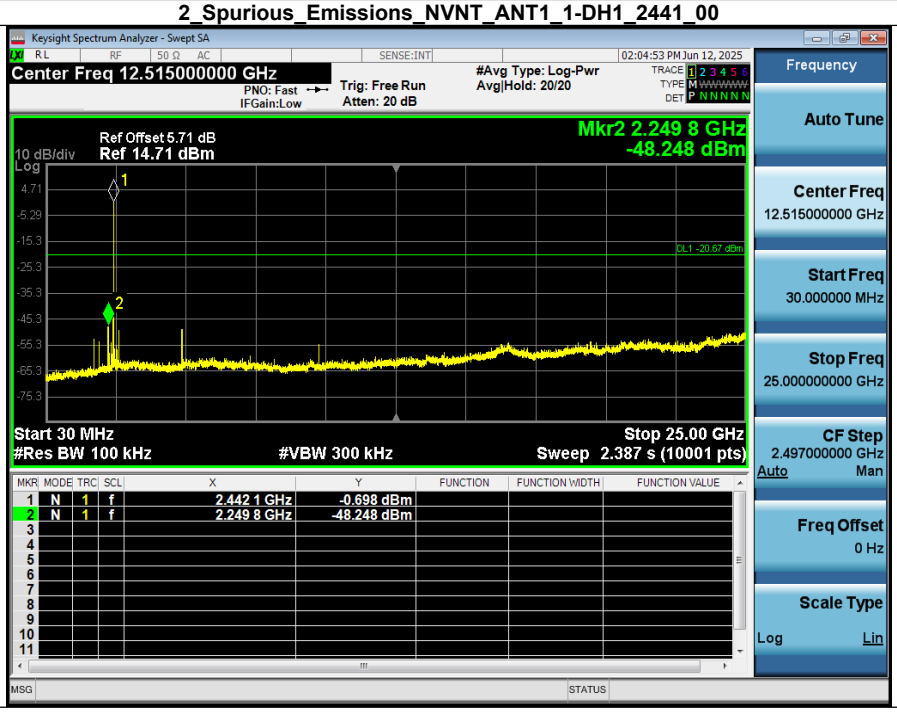
2_Spurious_Emissions_NVNT_ANT1_1-DH1_2402_00



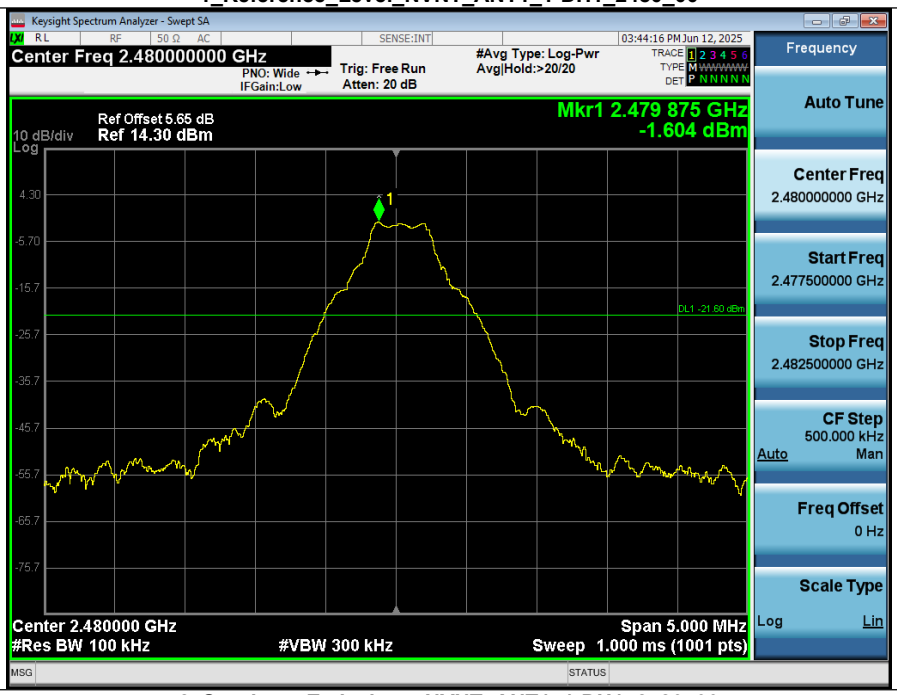
1_Reference_Level_NVNT_ANT1_1-DH1_2441_00



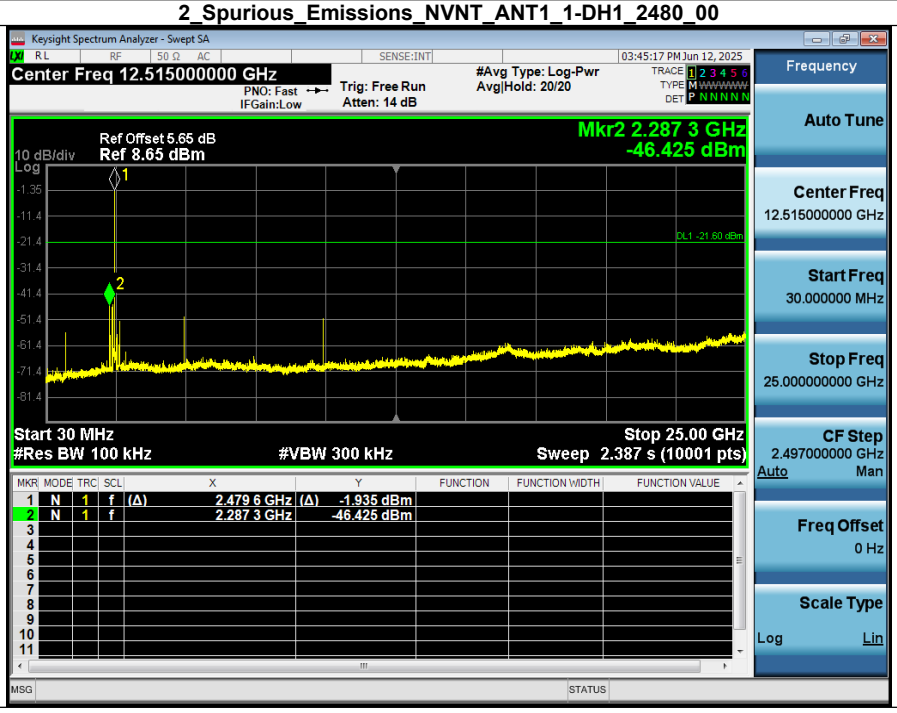
2_Spurious_Emissions_NVNT_ANT1_1-DH1_2441_00



1_Reference_Level_NVNT_ANT1_1-DH1_2480_00

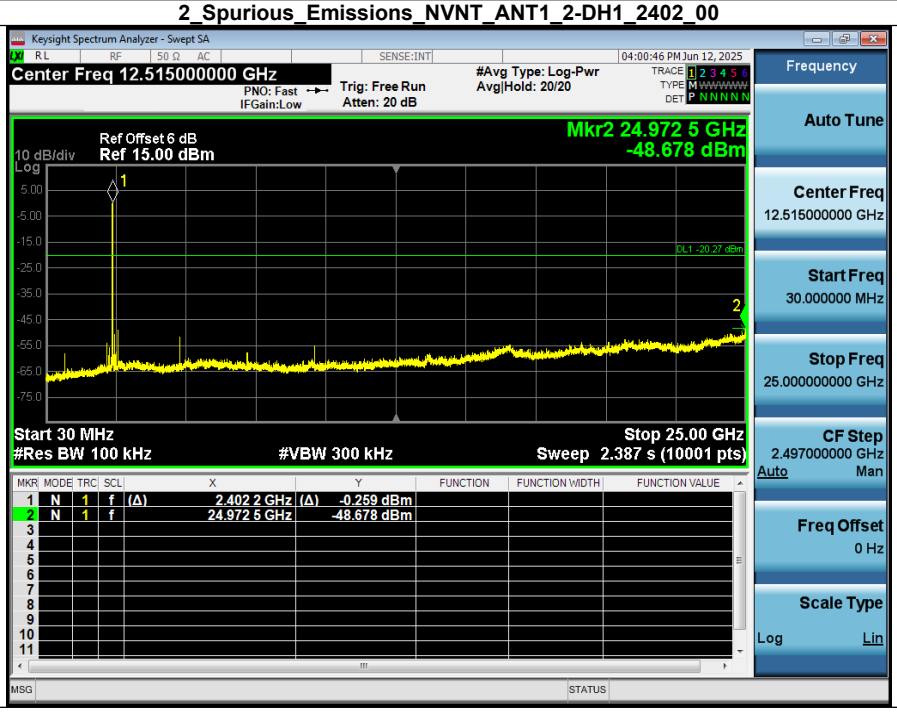


2_Spurious_Emissions_NVNT_ANT1_1-DH1_2480_00



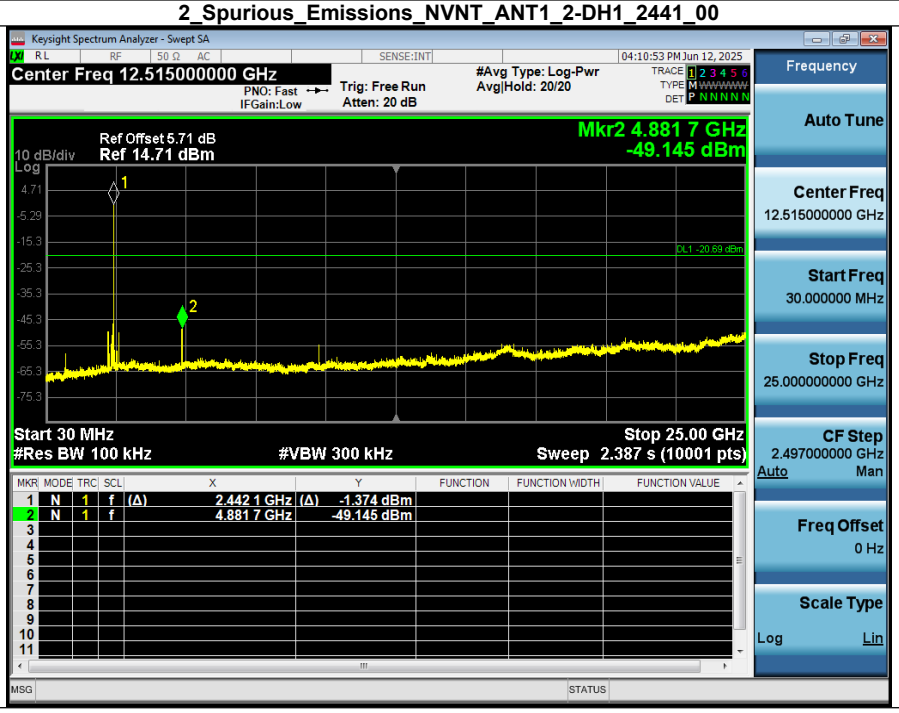
1_Reference_Level_NVNT_ANT1_2-DH1_2402_00

2_Spurious_Emissions_NVNT_ANT1_2-DH1_2402_00



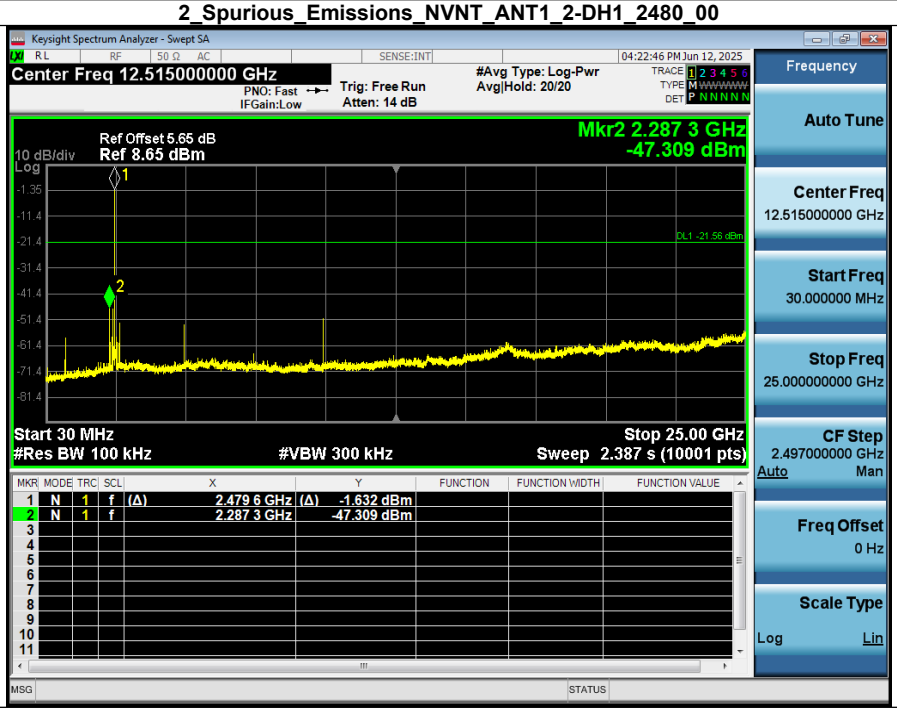
1_Reference_Level_NVNT_ANT1_2-DH1_2441_00

2_Spurious_Emissions_NVNT_ANT1_2-DH1_2441_00



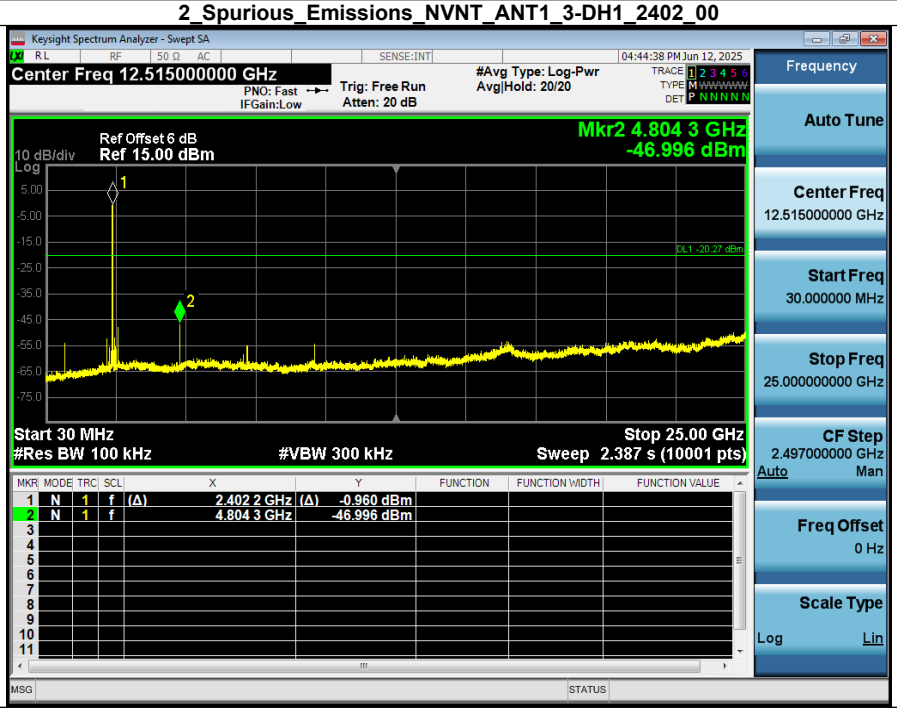
1_Reference_Level_NVNT_ANT1_2-DH1_2480_00

2_Spurious_Emissions_NVNT_ANT1_2-DH1_2480_00



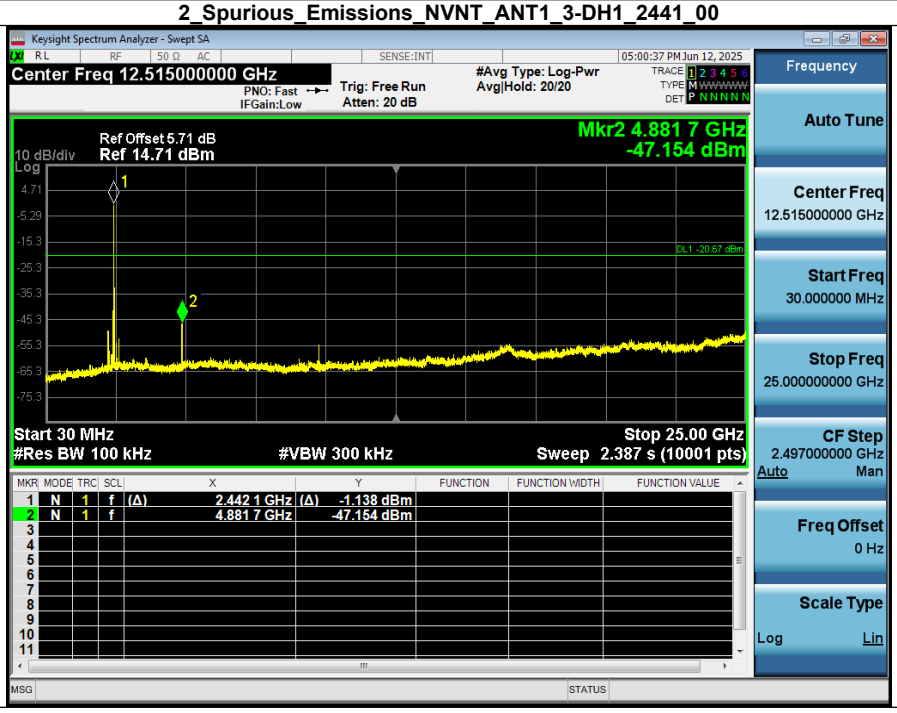
1_Reference_Level_NVNT_ANT1_3-DH1_2402_00

2_Spurious_Emissions_NVNT_ANT1_3-DH1_2402_00



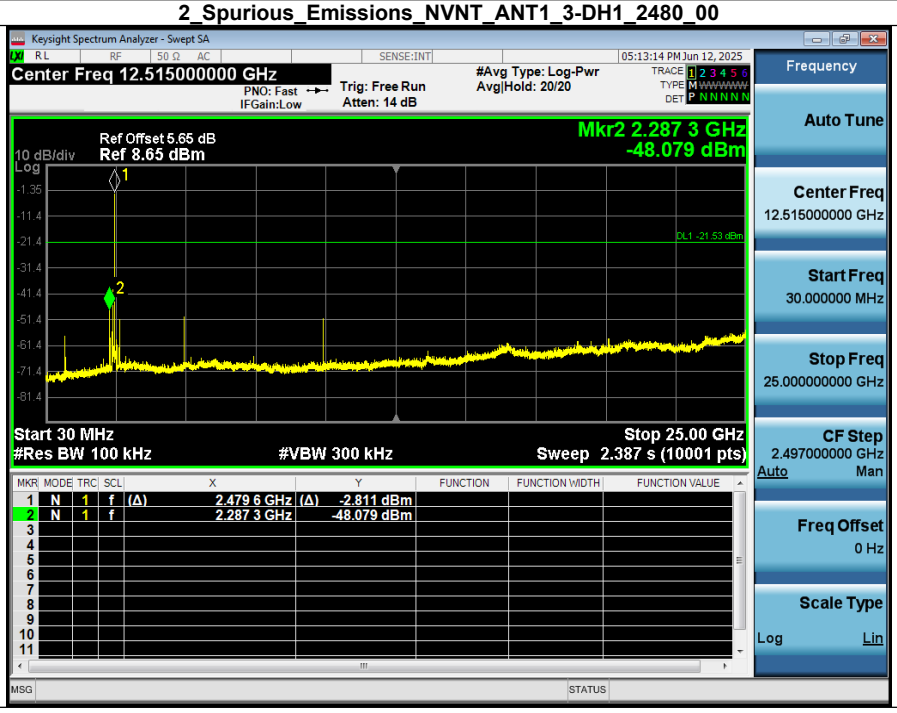
1_Reference_Level_NVNT_ANT1_3-DH1_2441_00

2_Spurious_Emissions_NVNT_ANT1_3-DH1_2441_00



1_Reference_Level_NVNT_ANT1_3-DH1_2480_00

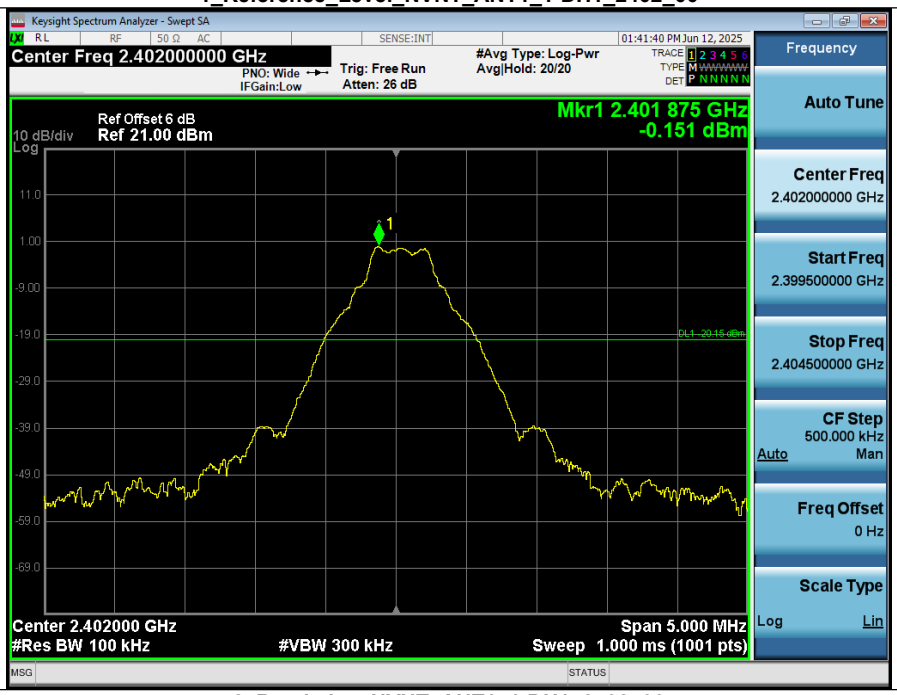
2_Spurious_Emissions_NVNT_ANT1_3-DH1_2480_00



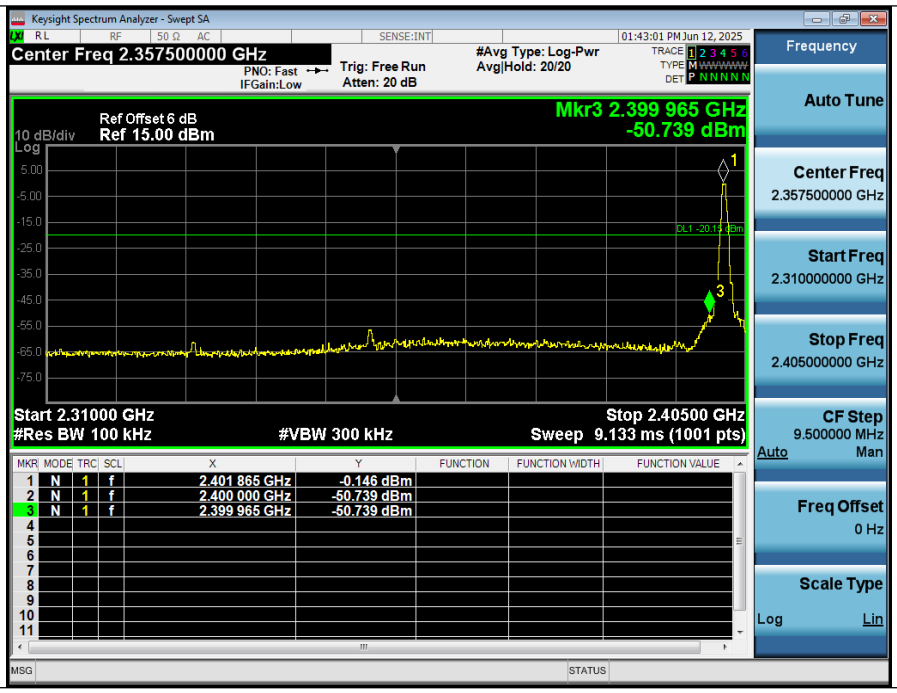
6. Bandedge

Condition	Antenna	Modulation	TX Mode	Ref_level(dBm)	Bandedge MAX.Value	Limit	Result
NVNT	ANT1	1-DH1	2402.00	-0.151	-50.739	-20.151	Pass
NVNT	ANT1	1-DH1	Hopping_LCH	-0.029	-52.384	-20.029	Pass
NVNT	ANT1	1-DH1	2480.00	-1.604	-61.359	-21.604	Pass
NVNT	ANT1	1-DH1	Hopping_HCH	-0.431	-54.221	-20.431	Pass
NVNT	ANT1	2-DH1	2402.00	-0.267	-49.640	-20.267	Pass
NVNT	ANT1	2-DH1	Hopping_LCH	-0.062	-56.476	-20.062	Pass
NVNT	ANT1	2-DH1	2480.00	-1.562	-62.914	-21.562	Pass
NVNT	ANT1	2-DH1	Hopping_HCH	-0.424	-54.576	-20.424	Pass
NVNT	ANT1	3-DH1	2402.00	-0.274	-49.119	-20.274	Pass
NVNT	ANT1	3-DH1	Hopping_LCH	-0.105	-54.201	-20.105	Pass
NVNT	ANT1	3-DH1	2480.00	-1.533	-63.903	-21.533	Pass
NVNT	ANT1	3-DH1	Hopping_HCH	-0.423	-53.845	-20.423	Pass

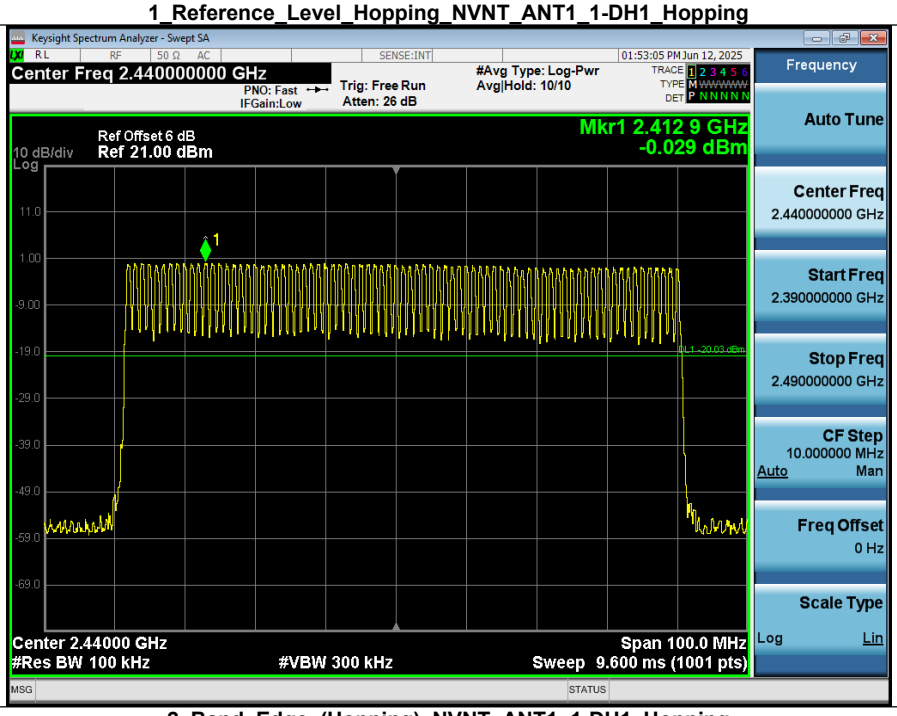
1_Reference_Level_NVNT_ANT1_1-DH1_2402_00



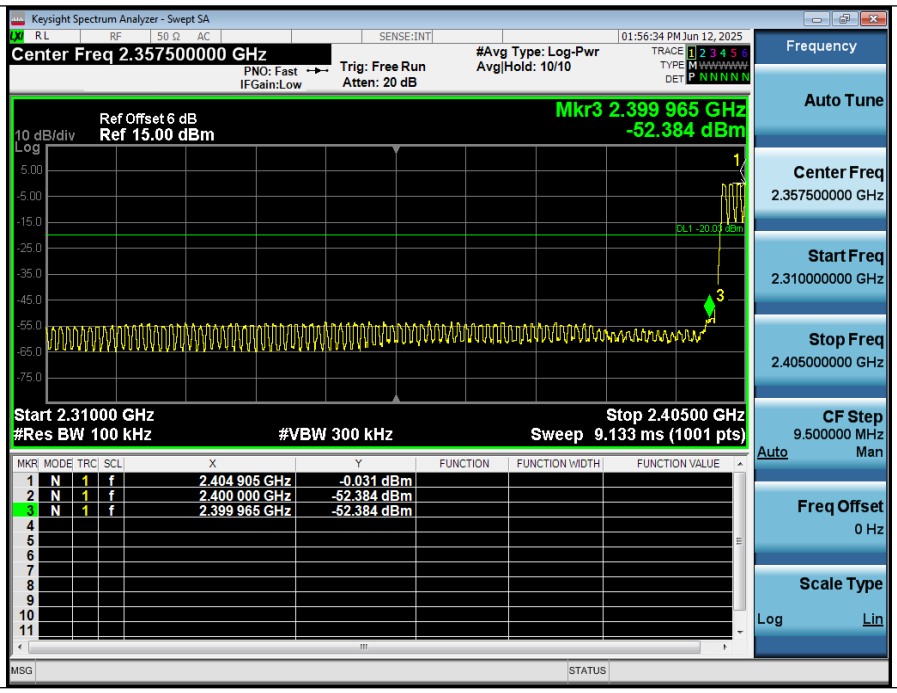
2_Bandedge_NVNT_ANT1_1-DH1_2402_00



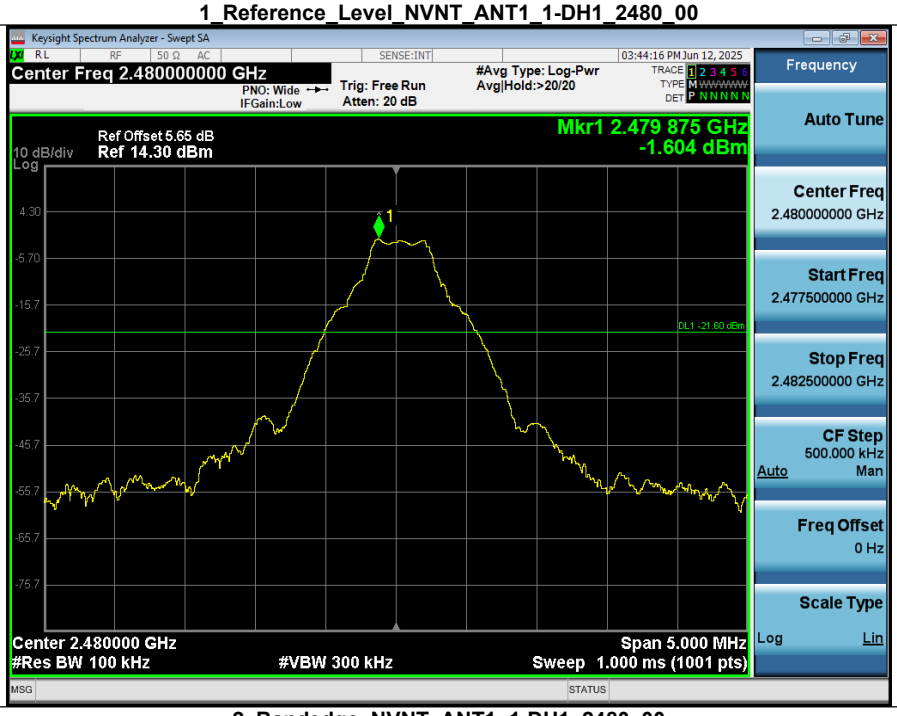
1_Reference_Level_Hopping_NVNT_ANT1_1-DH1_Hopping



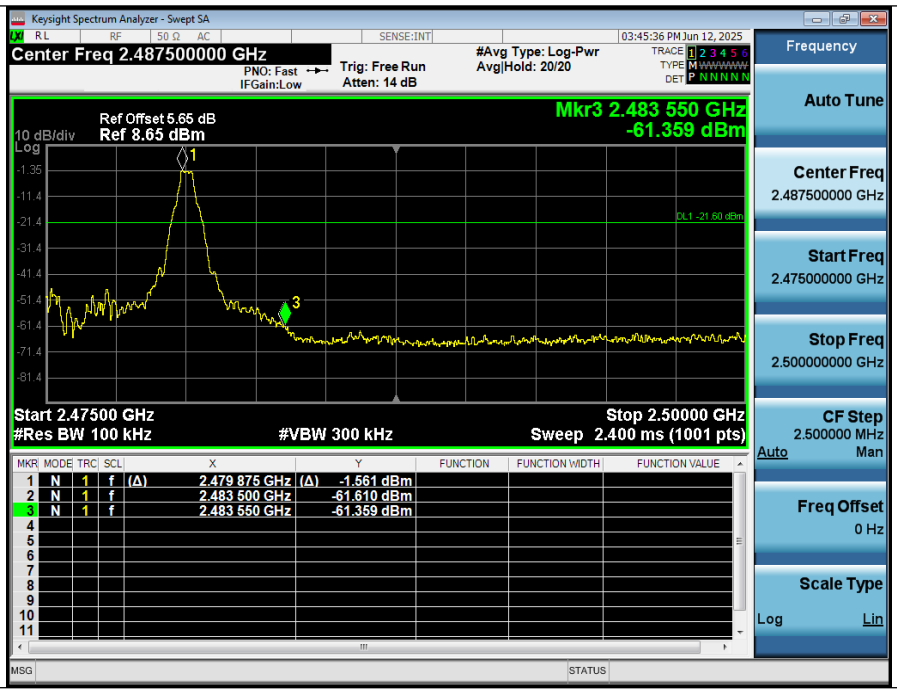
2_Band_Edge_(Hopping)_NVNT_ANT1_1-DH1_Hopping



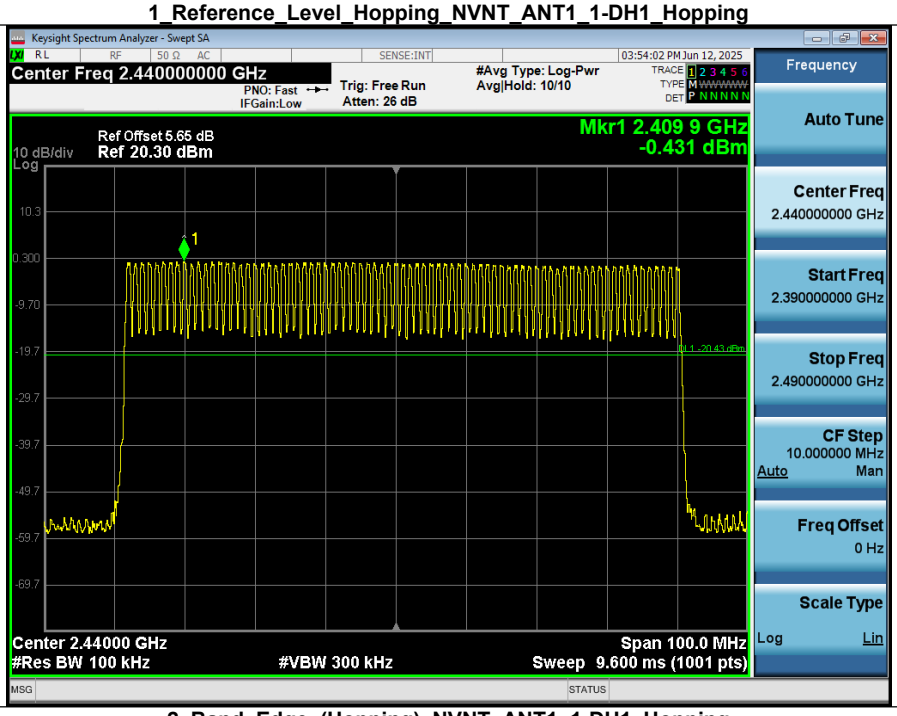
1_Reference_Level_NVNT_ANT1_1-DH1_2480_00



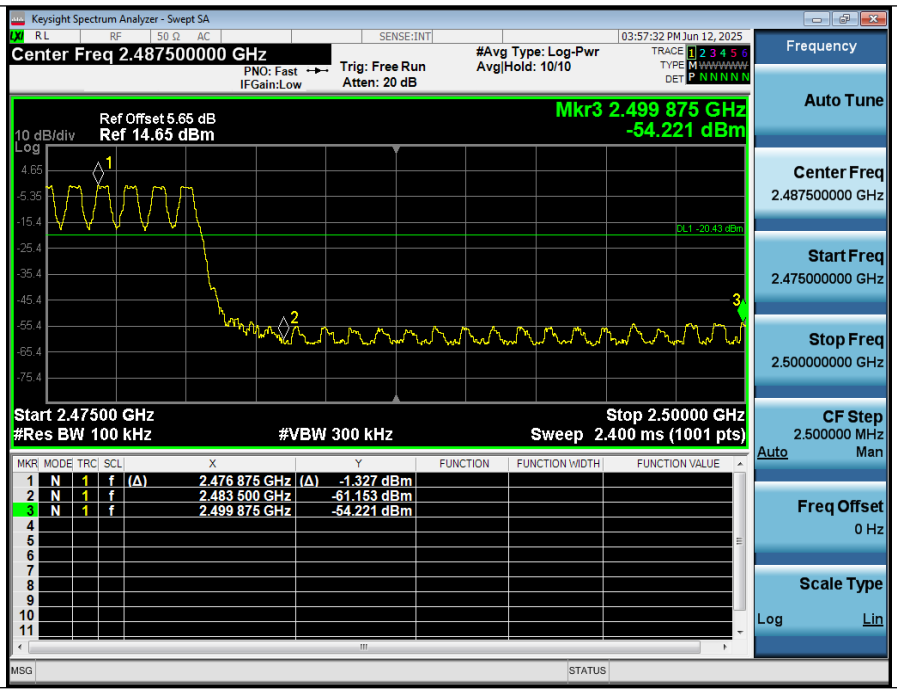
2_Bandedge_NVNT_ANT1_1-DH1_2480_00



1_Reference_Level_Hopping_NVNT_ANT1_1-DH1_Hopping

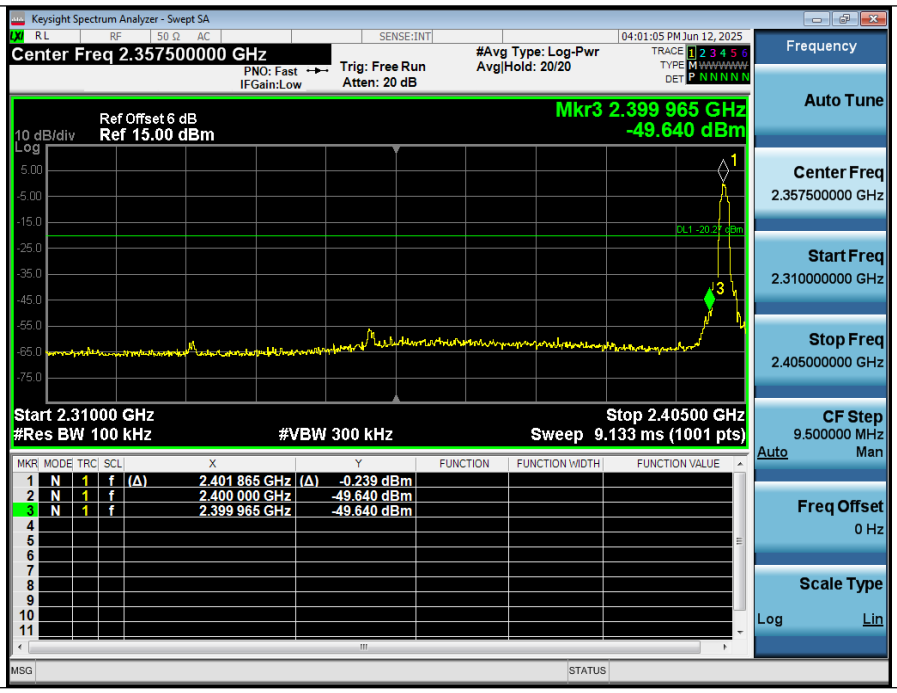


2_Band_Edge_(Hopping)_NVNT_ANT1_1-DH1_Hopping

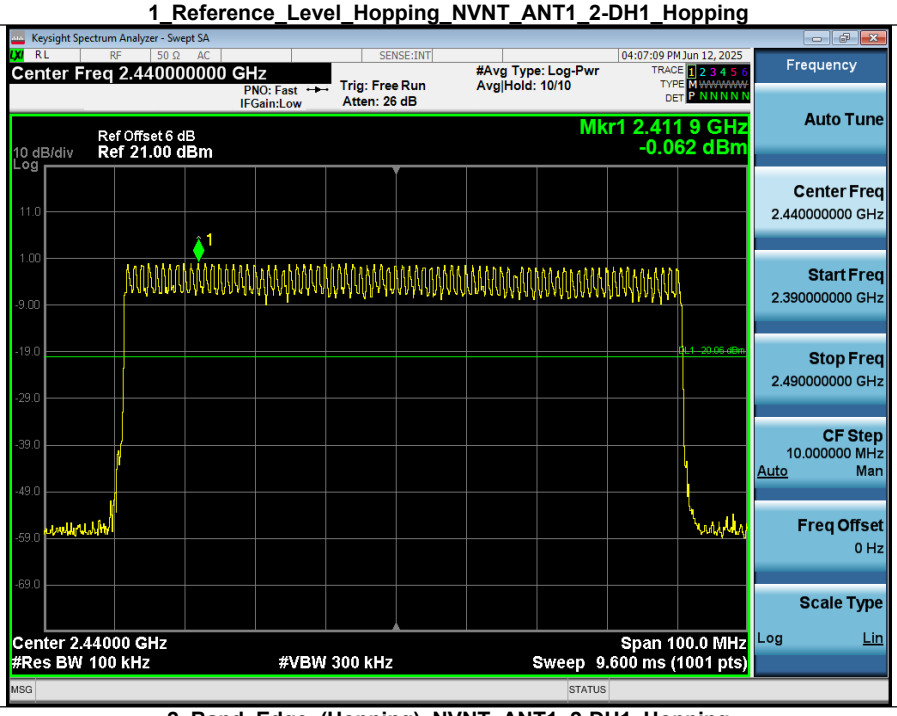


1_Reference_Level_NVNT_ANT1_2-DH1_2402_00

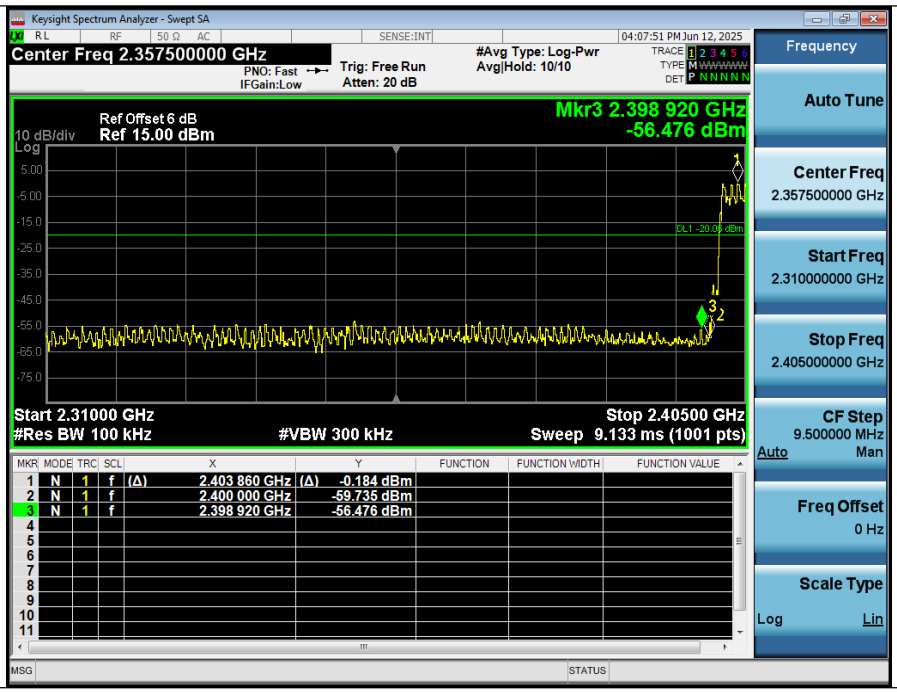
2_Bandedge_NVNT_ANT1_2-DH1_2402_00



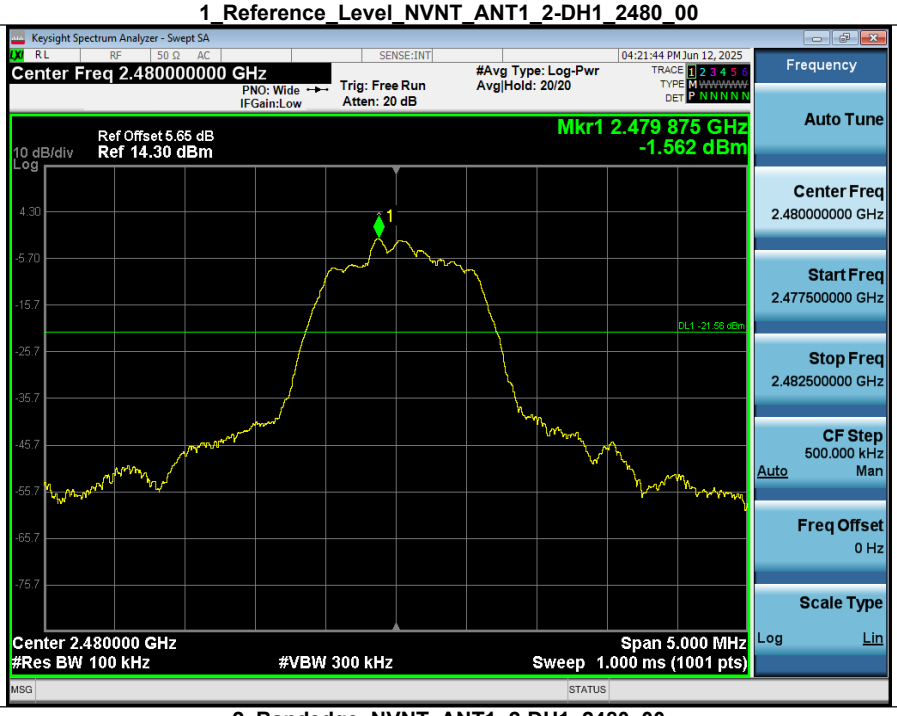
1_Reference_Level_Hopping_NVNT_ANT1_2-DH1_Hopping



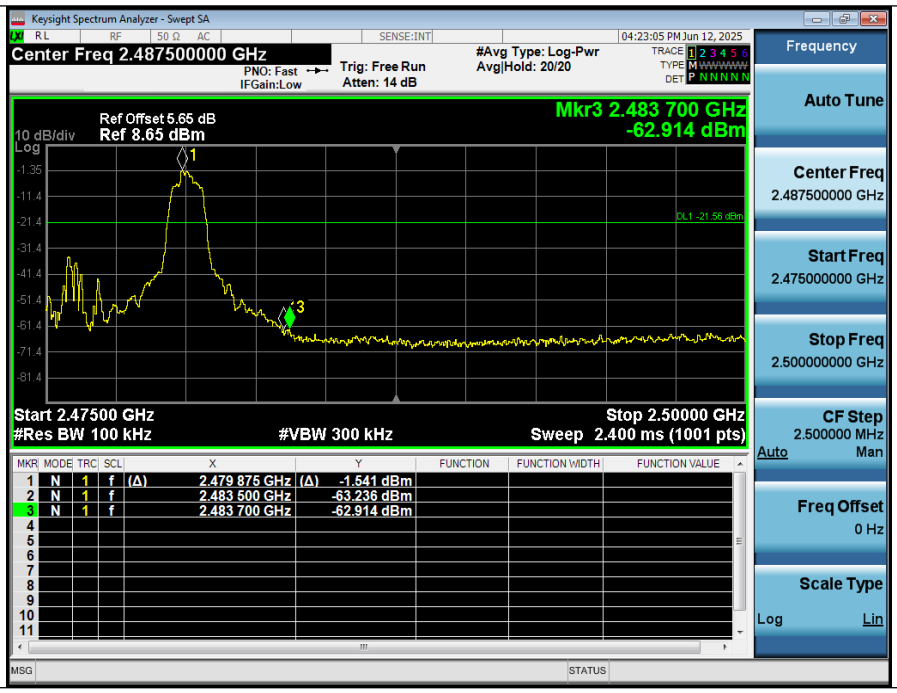
2_Band_Edge_(Hopping)_NVNT_ANT1_2-DH1_Hopping



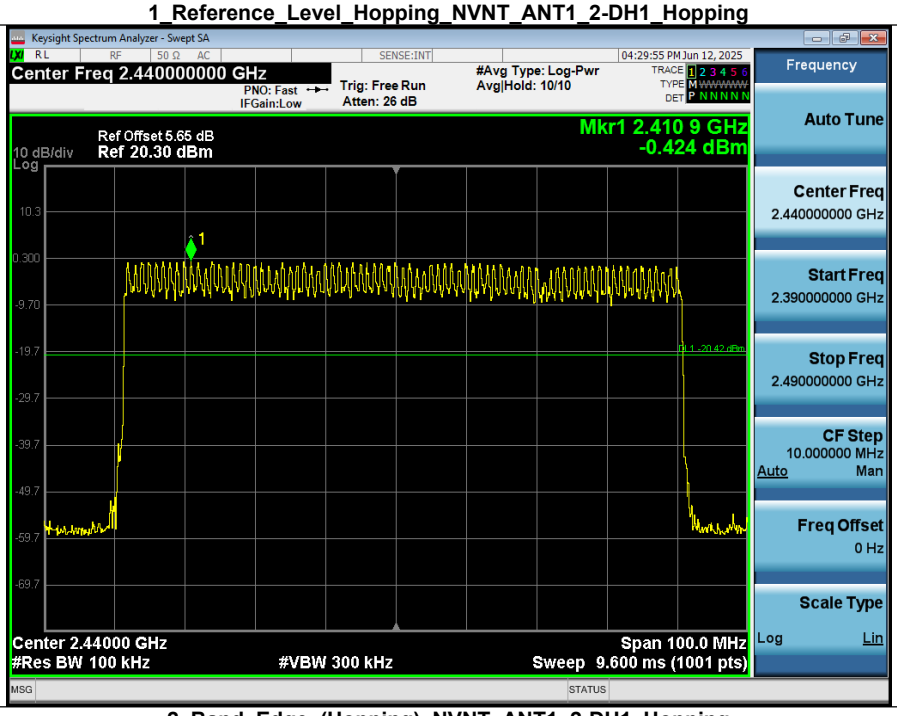
1_Reference_Level_NVNT_ANT1_2-DH1_2480_00



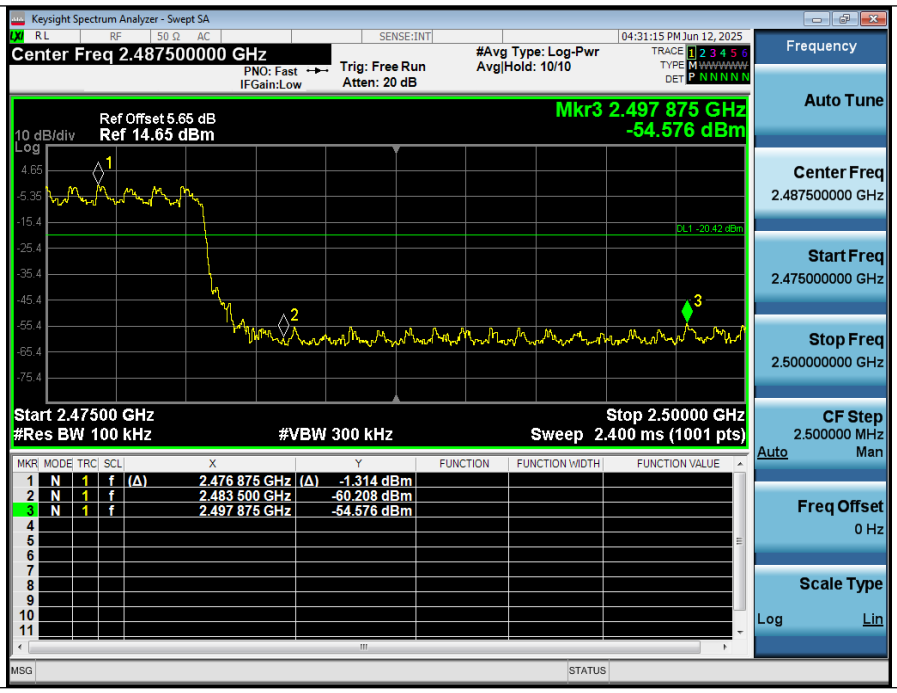
2_Bandedge_NVNT_ANT1_2-DH1_2480_00



1_Reference_Level_Hopping_NVNT_ANT1_2-DH1_Hopping

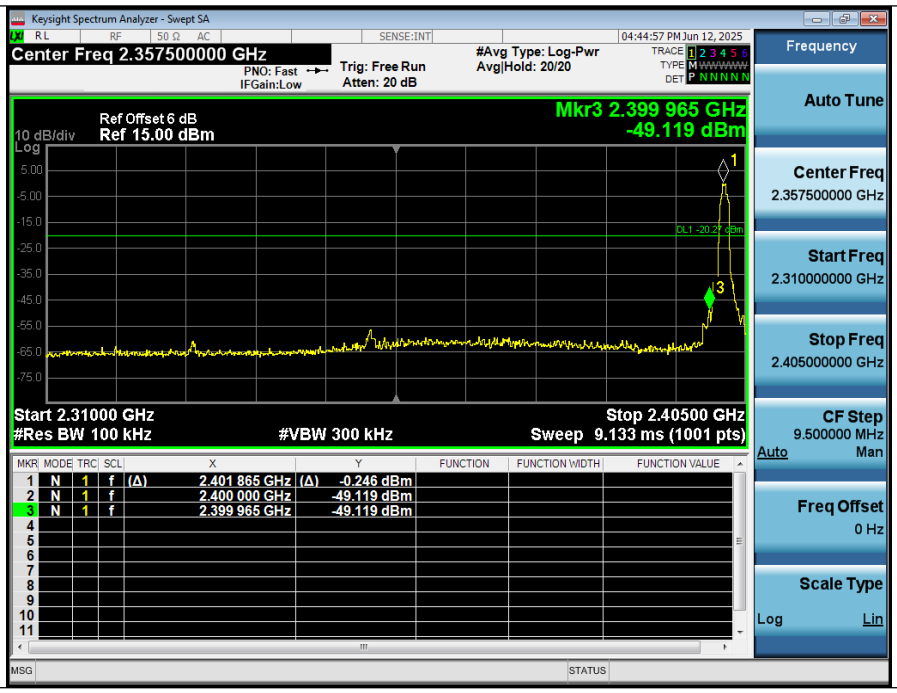


2_Band_Edge_(Hopping)_NVNT_ANT1_2-DH1_Hopping

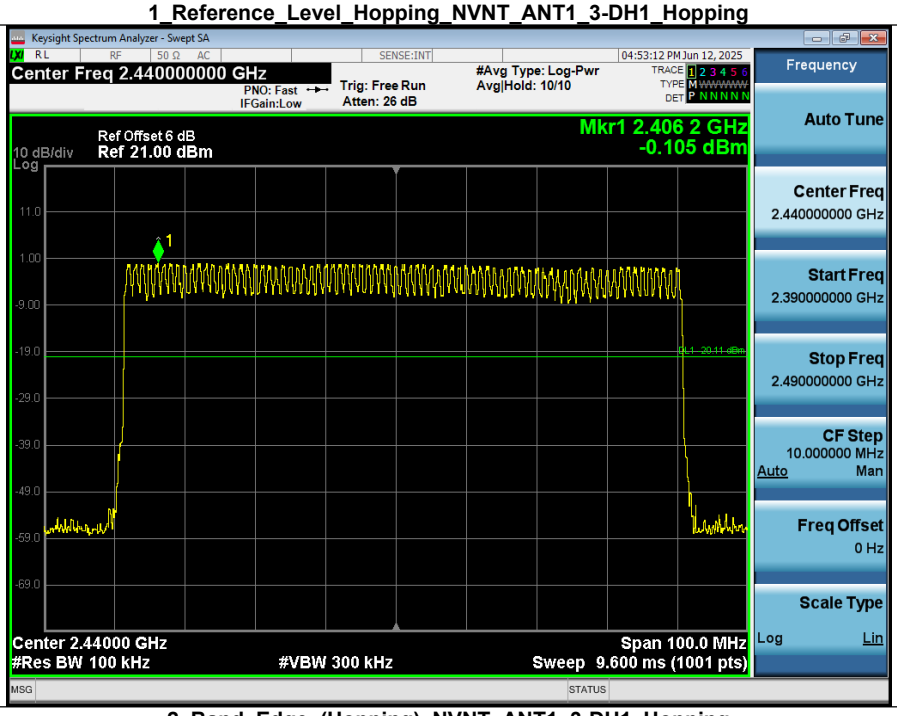


1_Reference_Level_NVNT_ANT1_3-DH1_2402_00

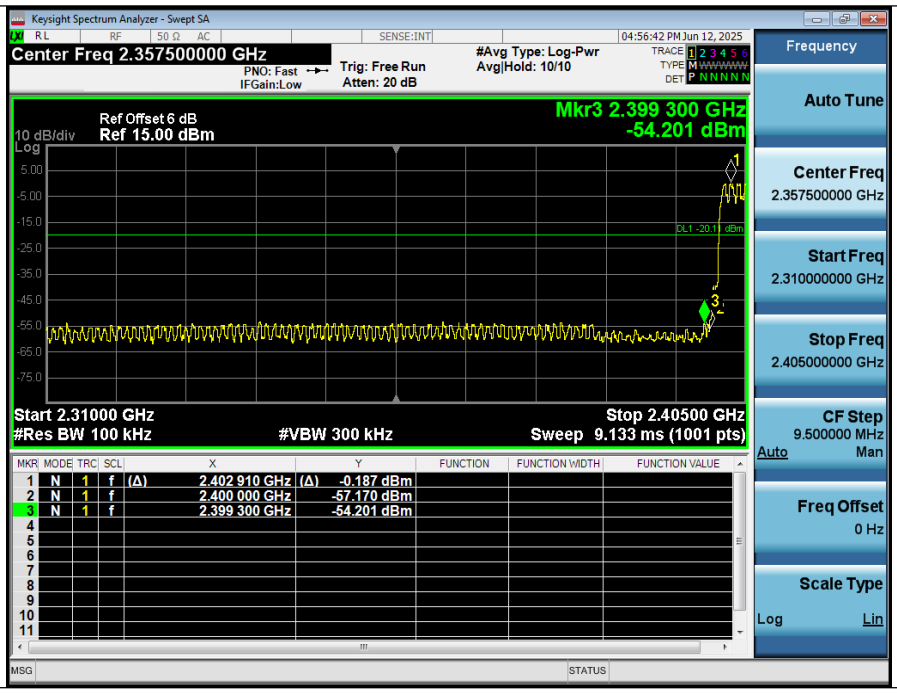
2_Bandedge_NVNT_ANT1_3-DH1_2402_00



1_Reference_Level_Hopping_NVNT_ANT1_3-DH1_Hopping

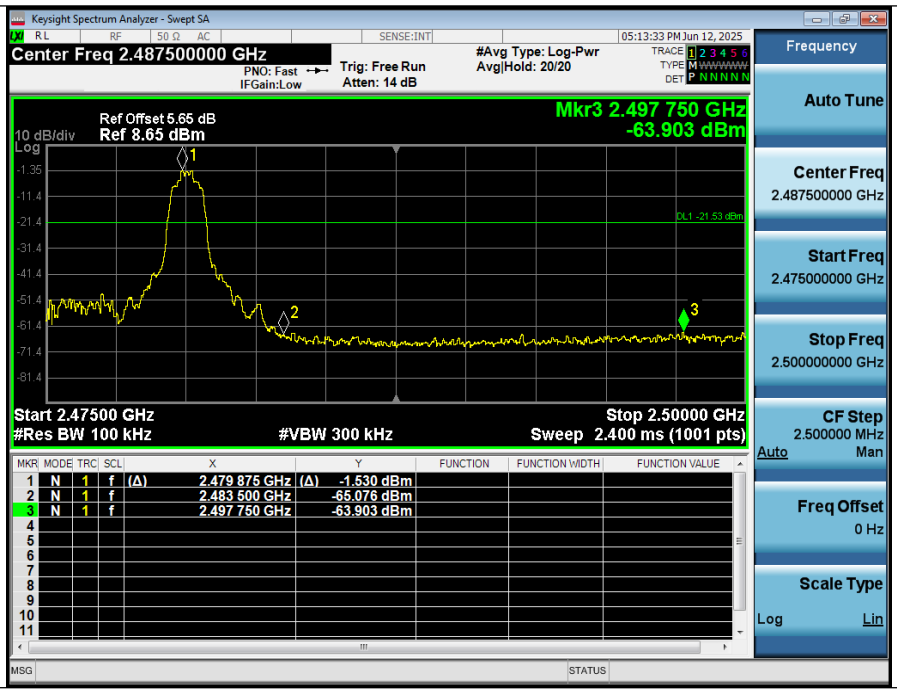


2_Band_Edge_(Hopping)_NVNT_ANT1_3-DH1_Hopping

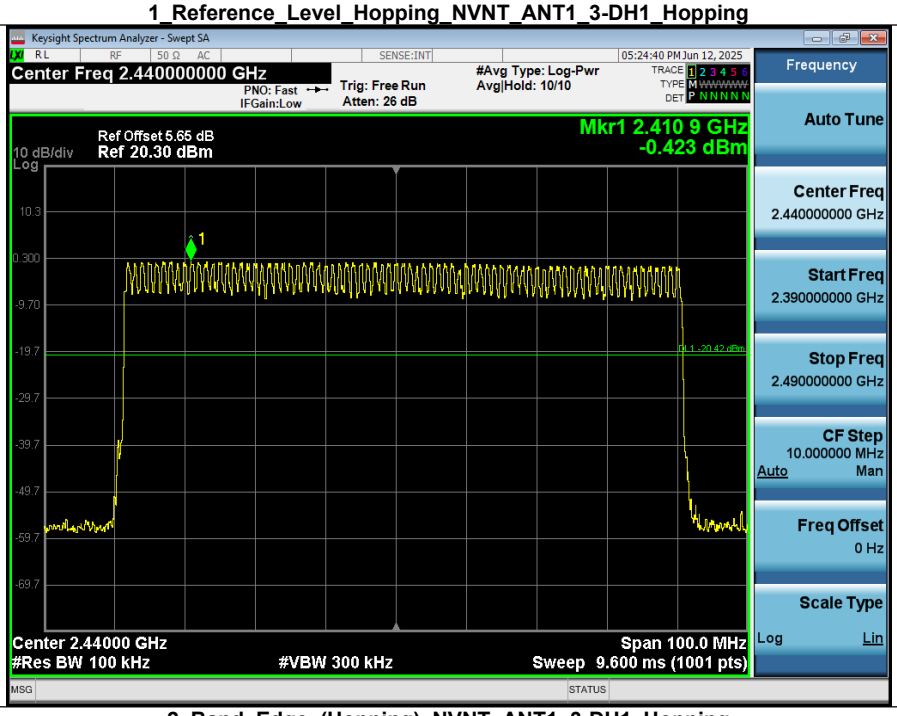


1_Reference_Level_NVNT_ANT1_3-DH1_2480_00

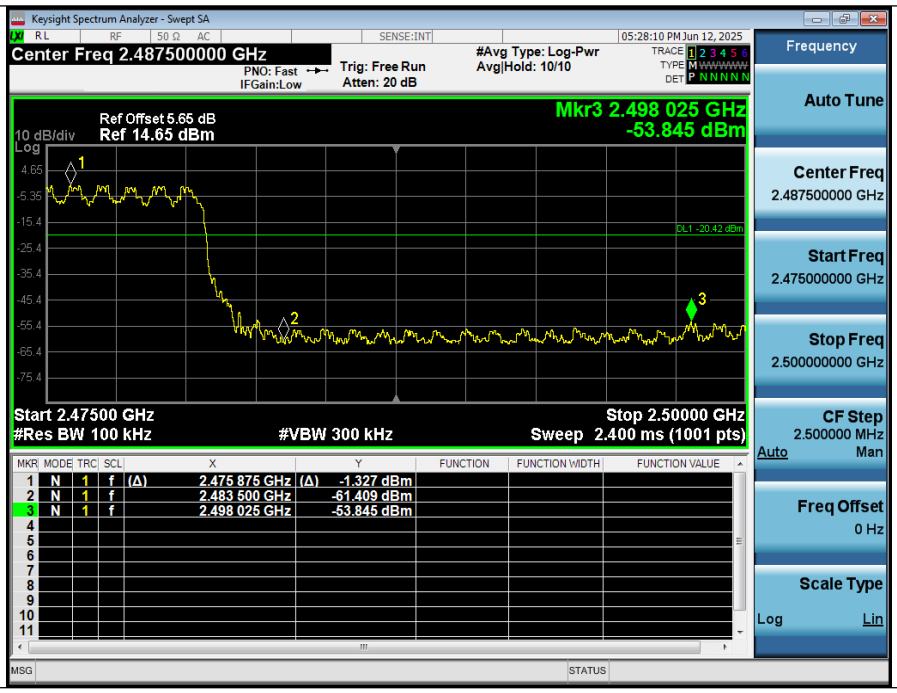
2_Bandedge_NVNT_ANT1_3-DH1_2480_00



1_Reference_Level_Hopping_NVNT_ANT1_3-DH1_Hopping



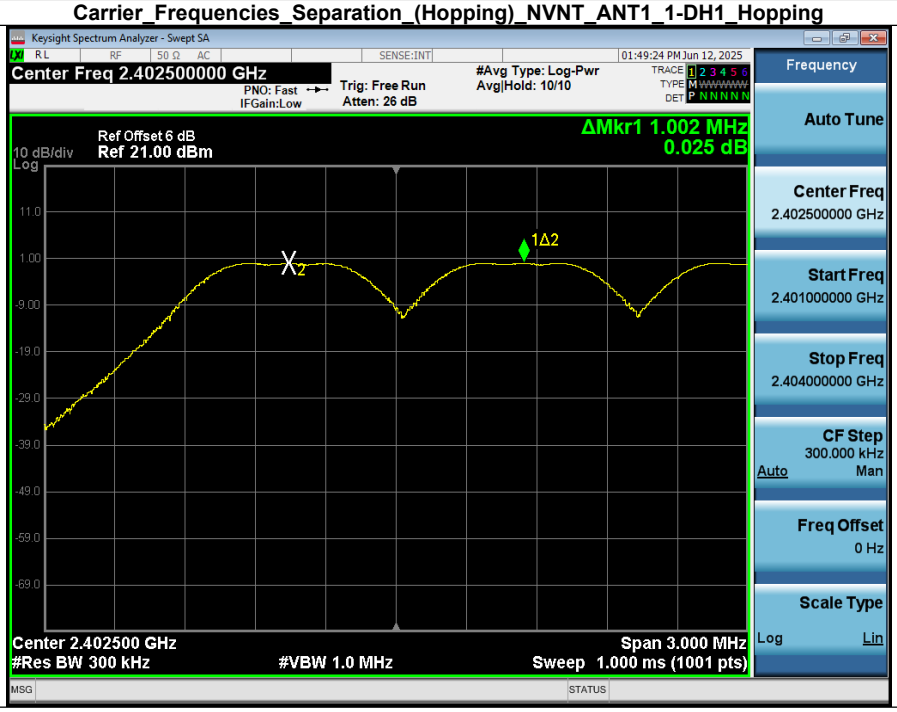
2_Band_Edge_(Hopping)_NVNT_ANT1_3-DH1_Hopping


Keysight Spectrum Analyzer - Swept SA
Center Freq 2.487500000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
#Avg Type: Log-Pwr
Avg|Hold: 10/10
05:28:10 PM Jun 12, 2025
Ref Offset 5.65 dB
10 dB/div
Ref 14.65 dBm
Mkr3 2.498 025 GHz
-53.845 dBm
DL1 -20.42 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) -1.327 dBm
2 N 1 f 2.483 500 GHz -61.409 dBm
3 N 1 f 2.498 025 GHz -53.845 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

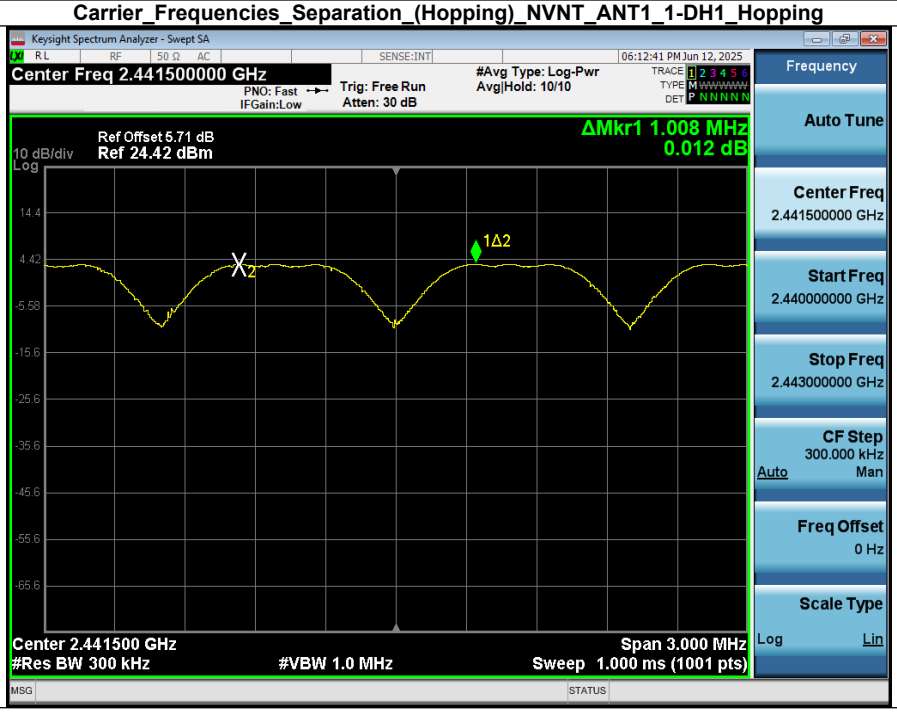
7. Carrier Frequencies Separation (Hopping)

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	2402.044	2403.046	1.00	0.874	Pass
NVNT	ANT1	1-DH1	2441.00	2440.831	2441.839	1.01	0.916	Pass
NVNT	ANT1	1-DH1	2480.00	2478.837	2479.842	1.00	0.921	Pass
NVNT	ANT1	2-DH1	2402.00	2401.828	2402.833	1.00	0.847	Pass
NVNT	ANT1	2-DH1	2441.00	2440.876	2441.872	1.00	0.852	Pass
NVNT	ANT1	2-DH1	2480.00	2478.870	2479.872	1.00	0.847	Pass
NVNT	ANT1	3-DH1	2402.00	2401.831	2402.836	1.00	0.817	Pass
NVNT	ANT1	3-DH1	2441.00	2440.840	2441.833	0.99	0.817	Pass
NVNT	ANT1	3-DH1	2480.00	2478.879	2479.875	1.00	0.833	Pass

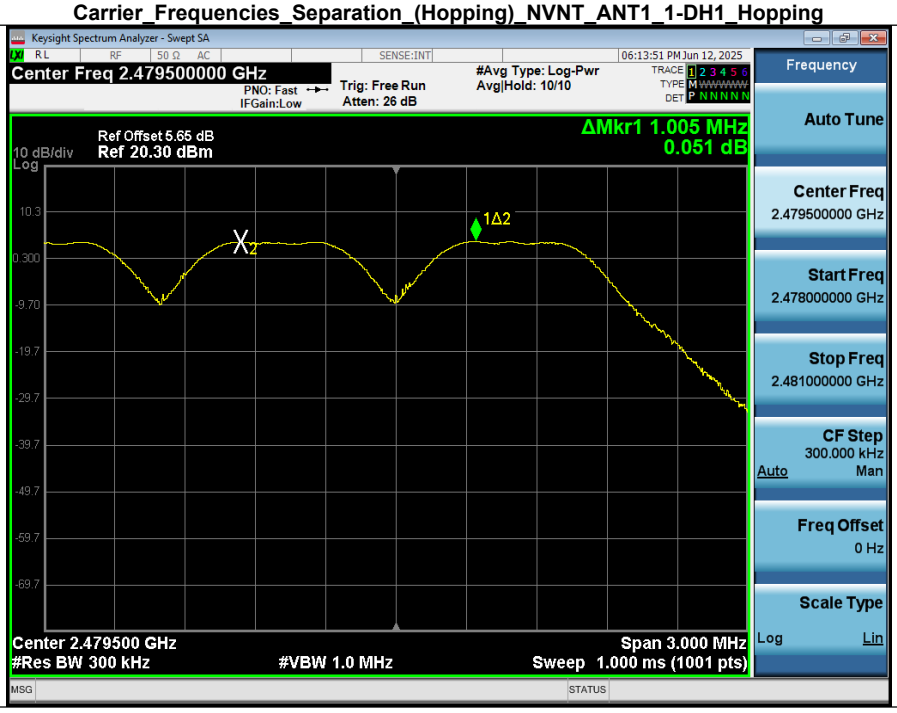
Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_1-DH1_Hopping



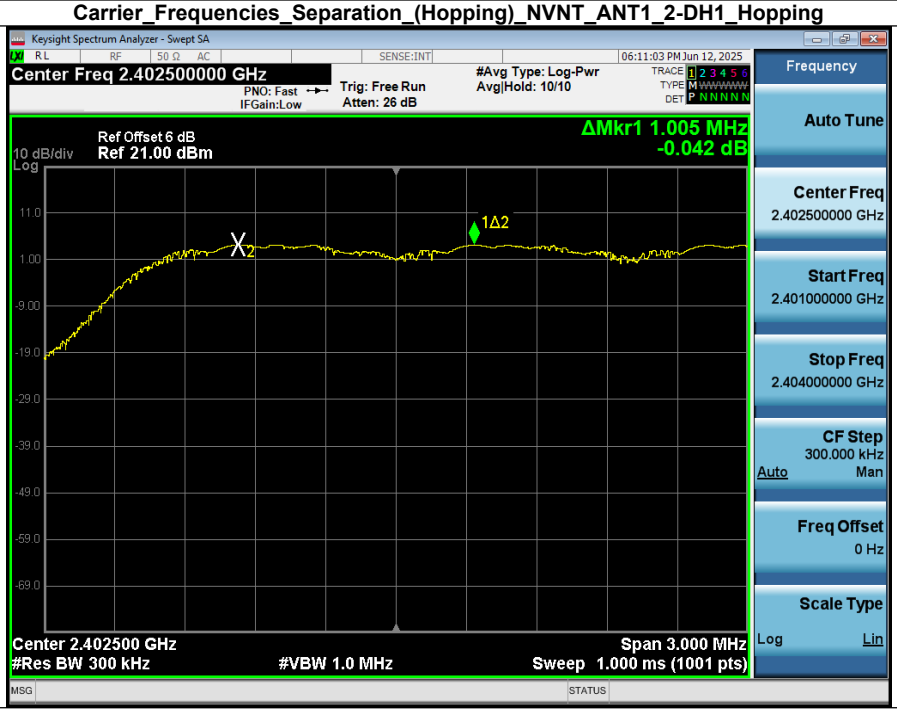
Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_1-DH1_Hopping



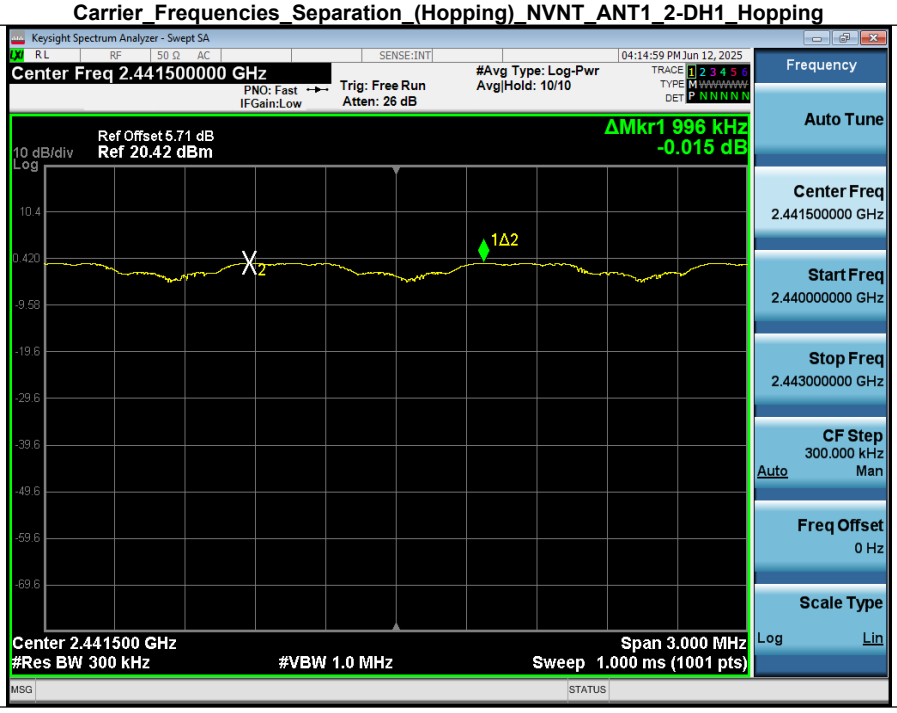
Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_1-DH1_Hopping



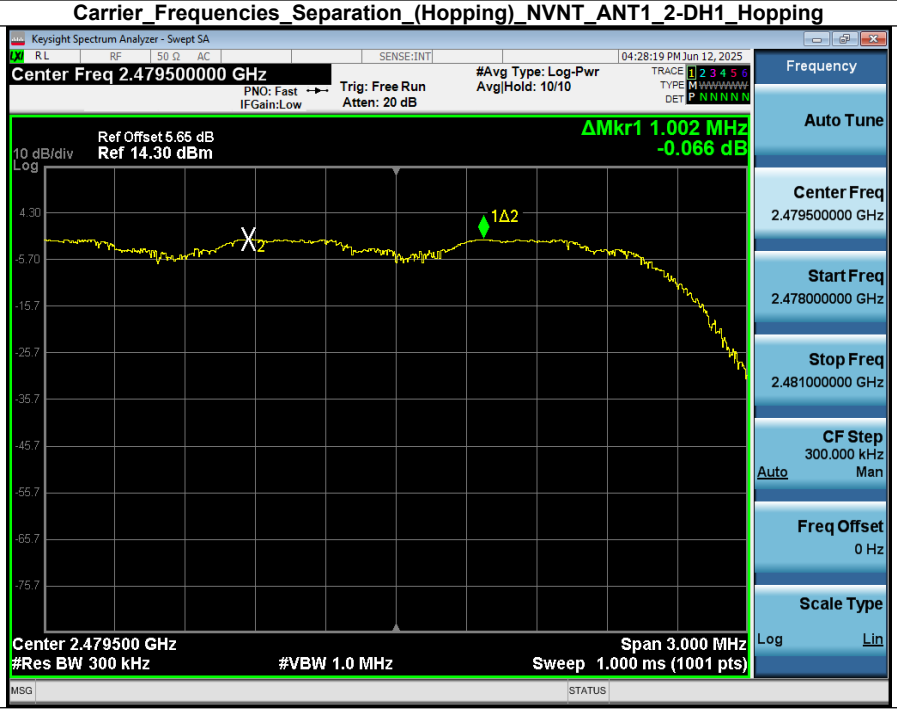
Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_2-DH1_Hopping



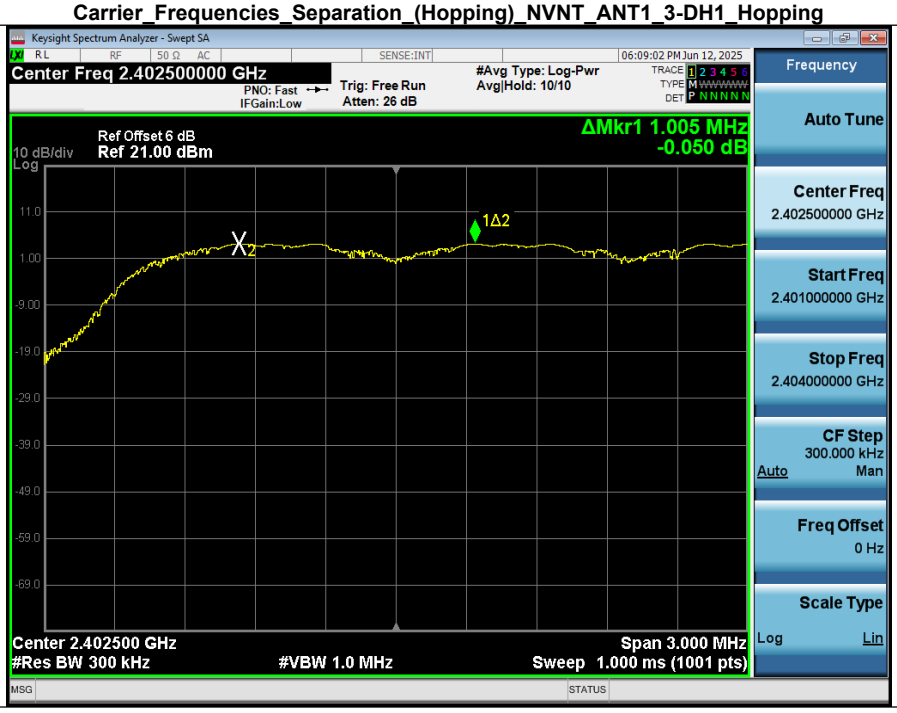
Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_2-DH1_Hopping



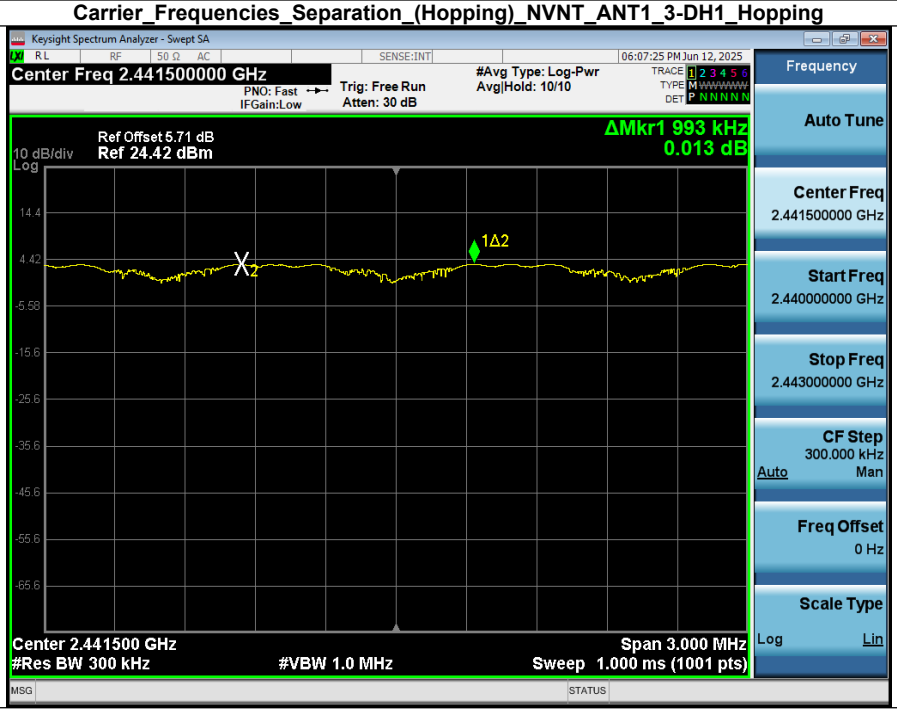
Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_2-DH1_Hopping



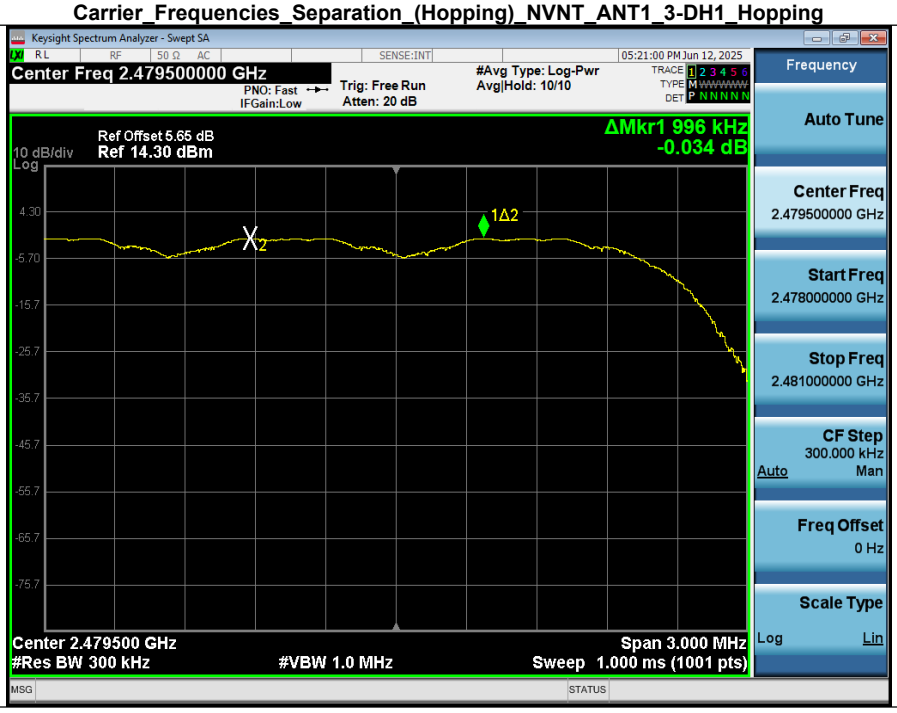
Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_3-DH1_Hopping



Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_3-DH1_Hopping



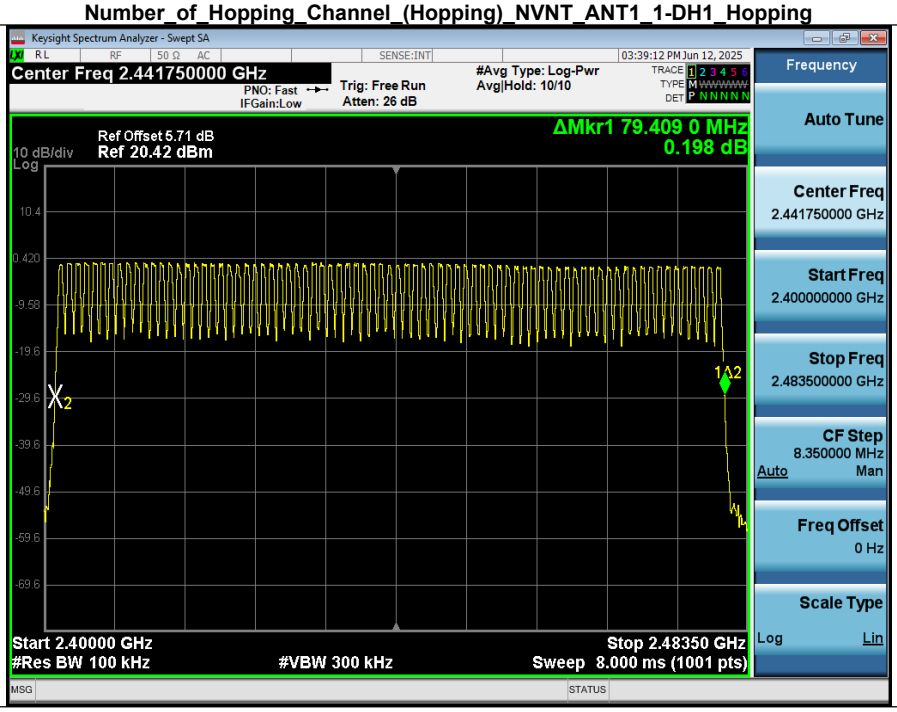
Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_3-DH1_Hopping



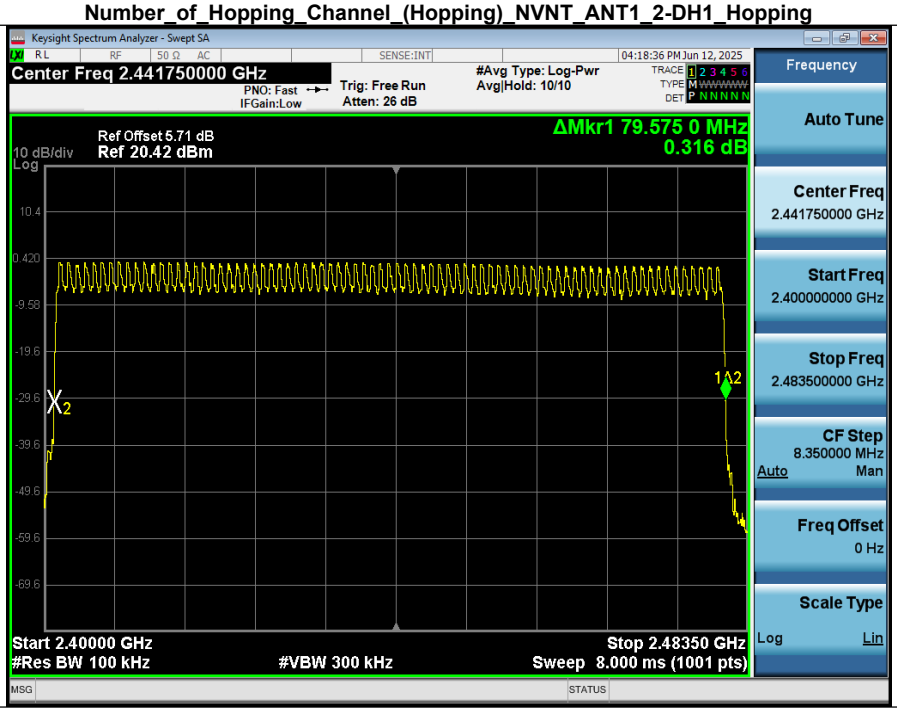
8. Number of Hopping Channel (Hopping)

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

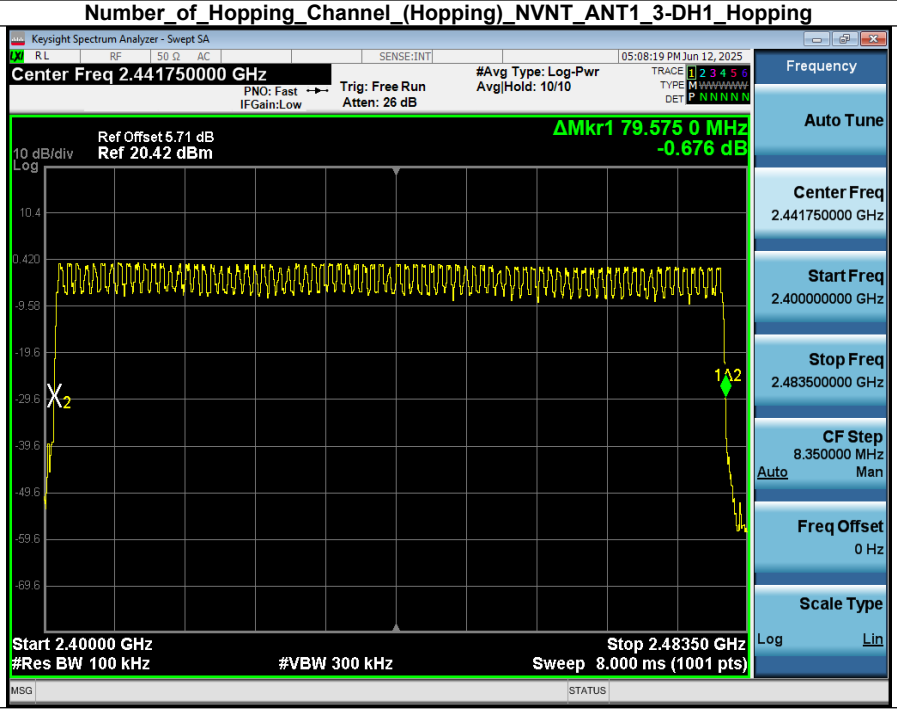
Number_of_Hopping_Channel_(Hopping)_NVNT_ANT1_1-DH1_Hopping



Number_of_Hopping_Channel_(Hopping)_NVNT_ANT1_2-DH1_Hopping



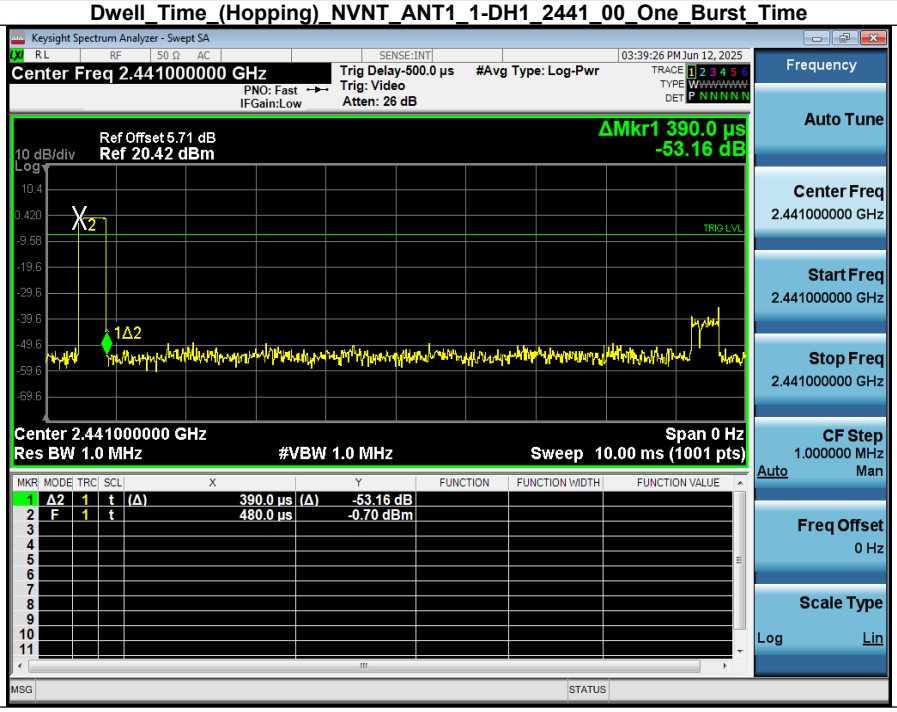
Number_of_Hopping_Channel_(Hopping)_NVNT_ANT1_3-DH1_Hopping



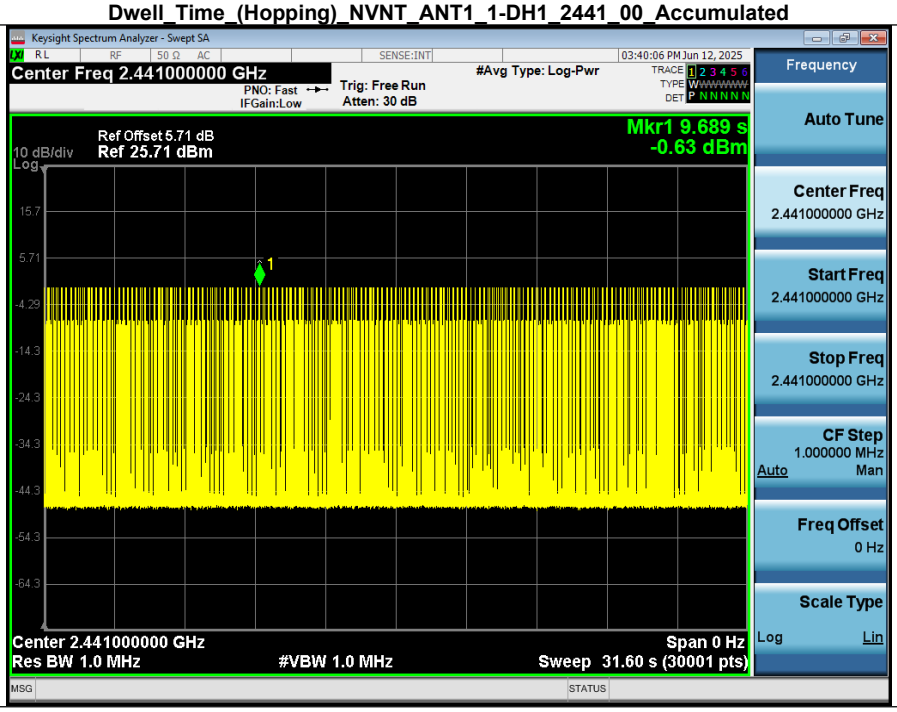
9. Dwell Time (Hopping)

Condition	Antenna	Packet Type	Pulse Time(ms)	Hops	Dwell Time(ms)	Limit(s)	Result
NVNT	ANT1	1-DH1	0.390	319.00	124.410	0.40	Pass
NVNT	ANT1	2-DH1	0.400	321.00	128.400	0.40	Pass
NVNT	ANT1	3-DH1	0.410	320.00	131.200	0.40	Pass
NVNT	ANT1	1-DH3	1.650	153.00	252.450	0.40	Pass
NVNT	ANT1	1-DH5	2.900	107.00	310.300	0.40	Pass
NVNT	ANT1	2-DH3	1.650	162.00	267.300	0.40	Pass
NVNT	ANT1	2-DH5	2.900	119.00	345.100	0.40	Pass
NVNT	ANT1	3-DH3	1.650	163.00	268.950	0.40	Pass
NVNT	ANT1	3-DH5	2.910	95.00	276.450	0.40	Pass

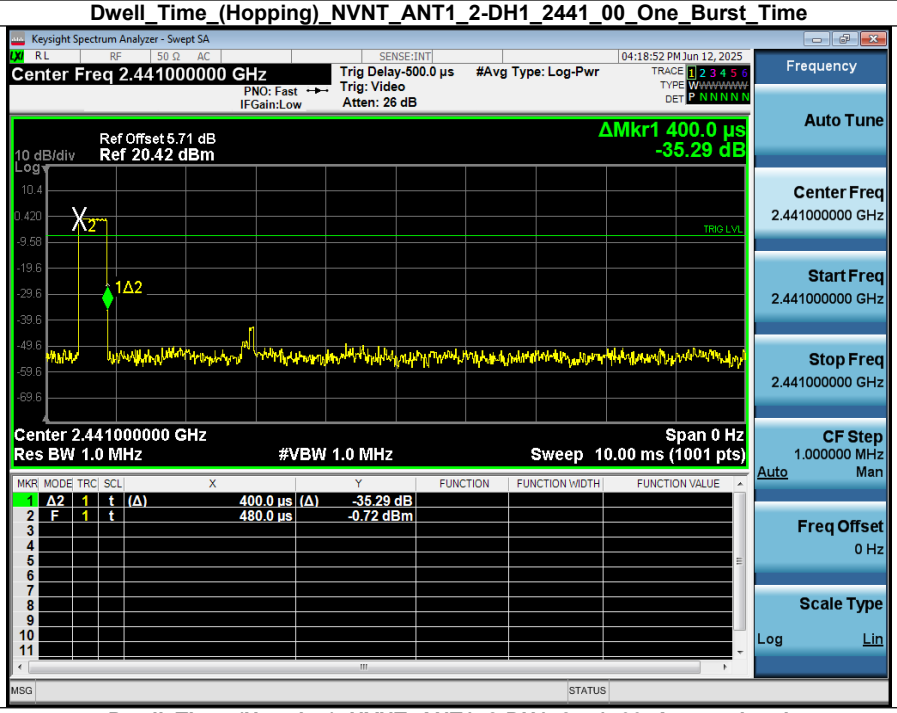
Dwell_Time_(Hopping)_NVNT_ANT1_1-DH1_2441_00_One_Burst_Time



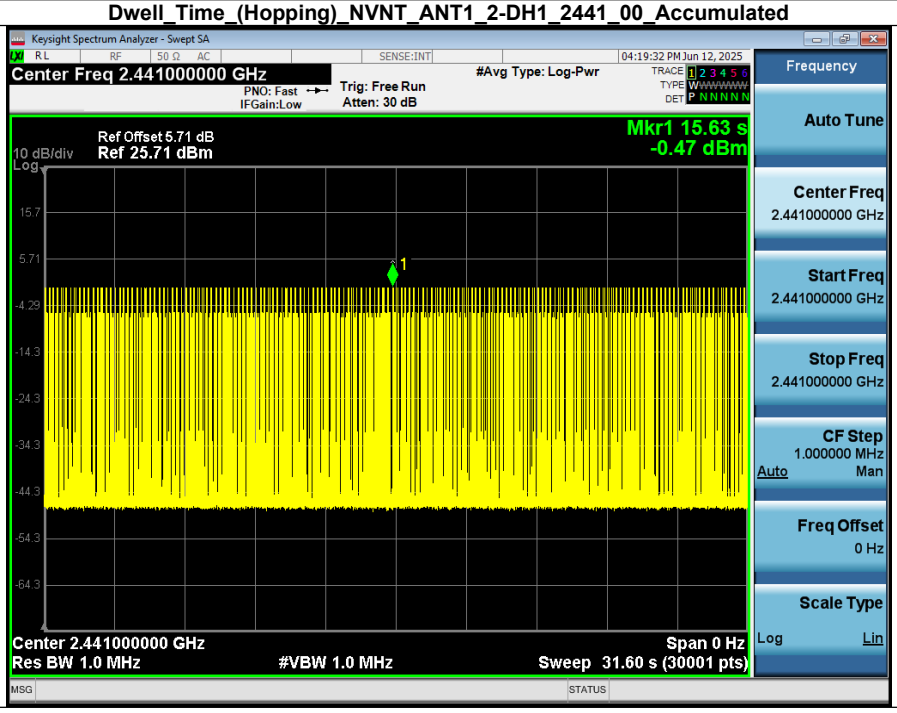
Dwell_Time_(Hopping)_NVNT_ANT1_1-DH1_2441_00_Accumulated



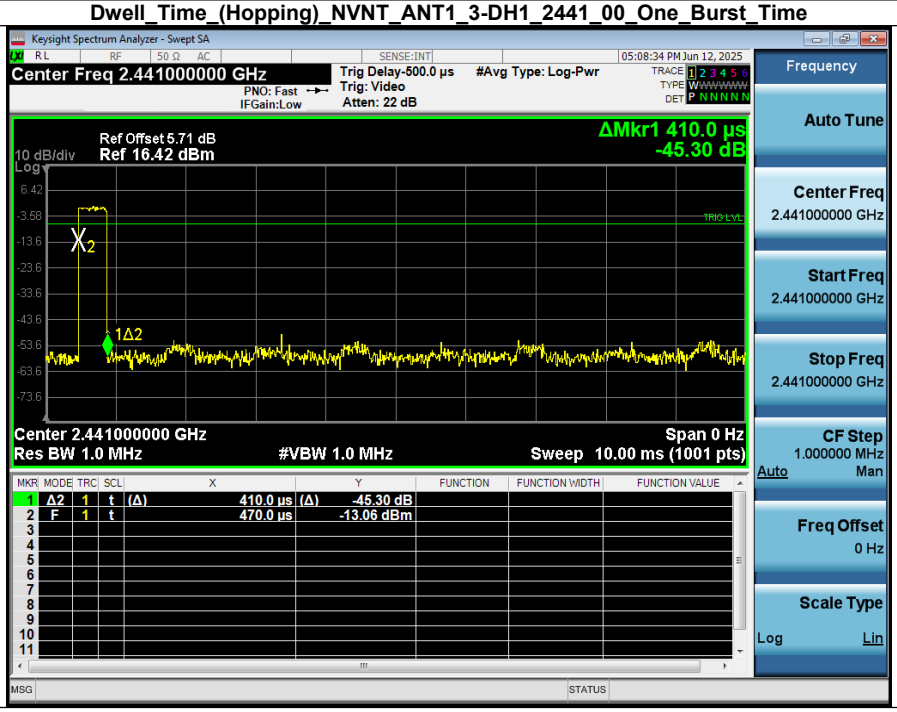
Dwell_Time_(Hopping)_NVNT_ANT1_2-DH1_2441_00_One_Burst_Time



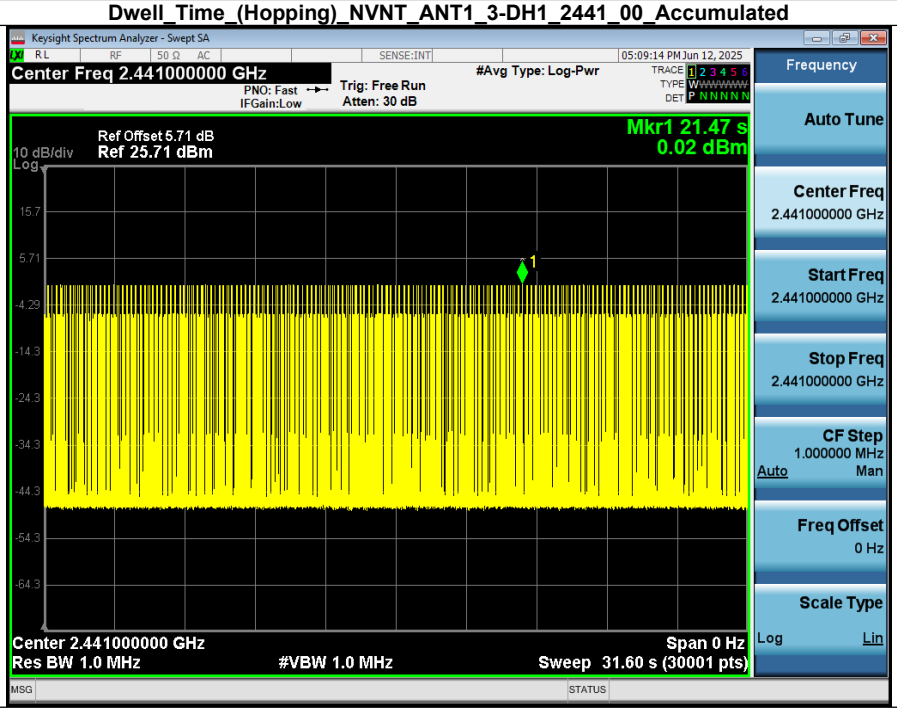
Dwell_Time_(Hopping)_NVNT_ANT1_2-DH1_2441_00_Accumulated



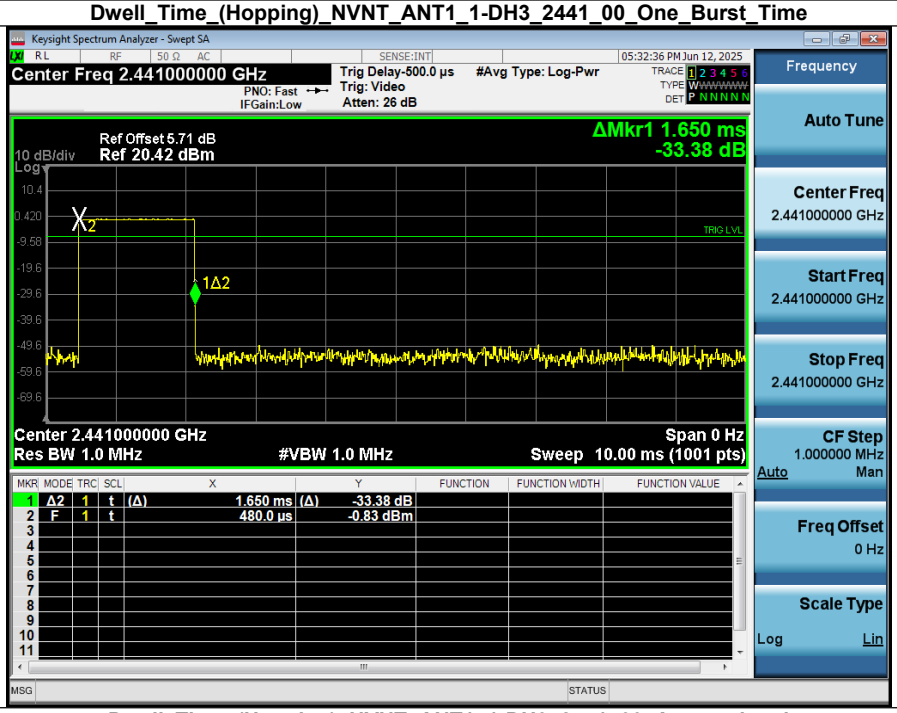
Dwell_Time_(Hopping)_NVNT_ANT1_3-DH1_2441_00_One_Burst_Time



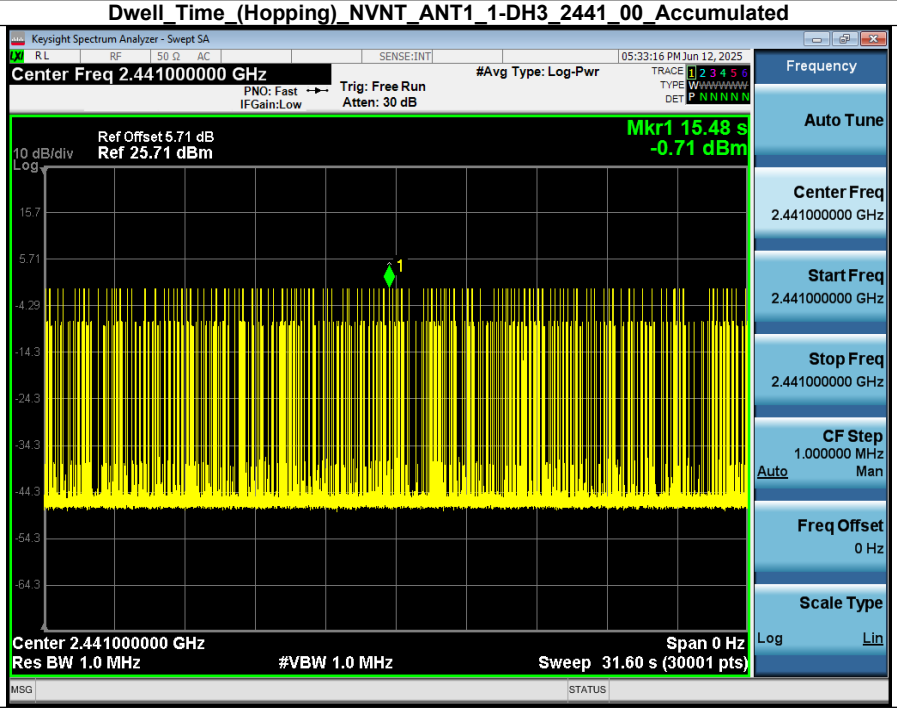
Dwell_Time_(Hopping)_NVNT_ANT1_3-DH1_2441_00_Accumulated



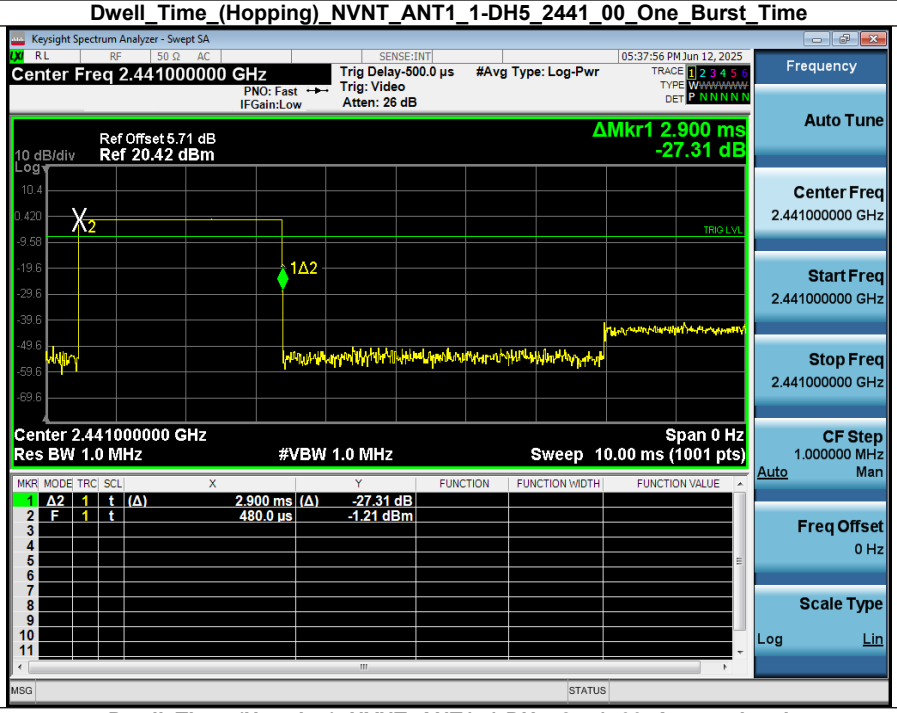
Dwell_Time_(Hopping)_NVNT_ANT1_1-DH3_2441_00_One_Burst_Time



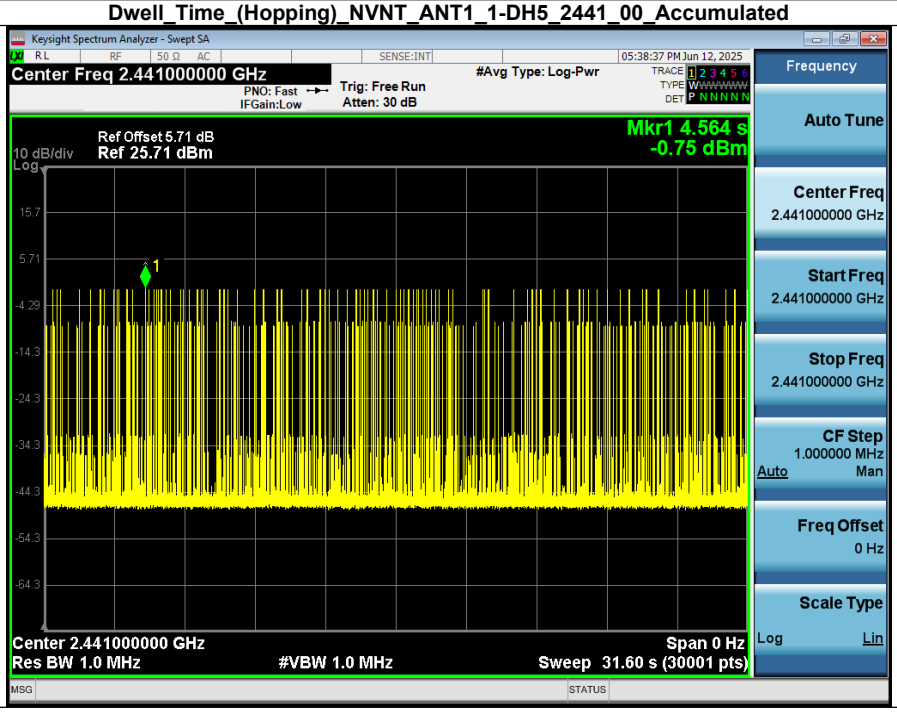
Dwell_Time_(Hopping)_NVNT_ANT1_1-DH3_2441_00_Accumulated



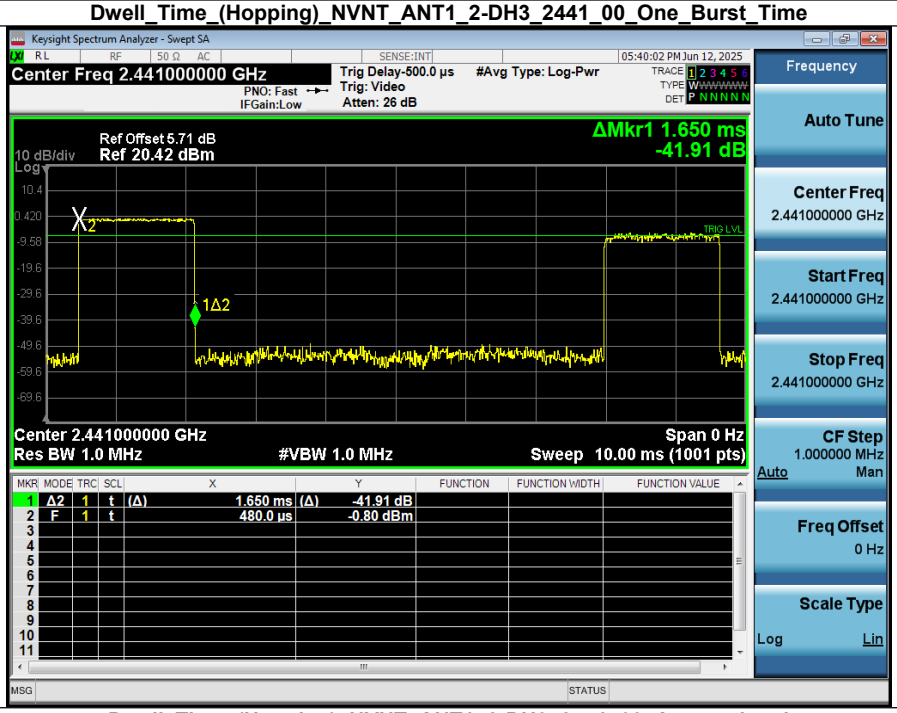
Dwell_Time_(Hopping)_NVNT_ANT1_1-DH5_2441_00_One_Burst_Time



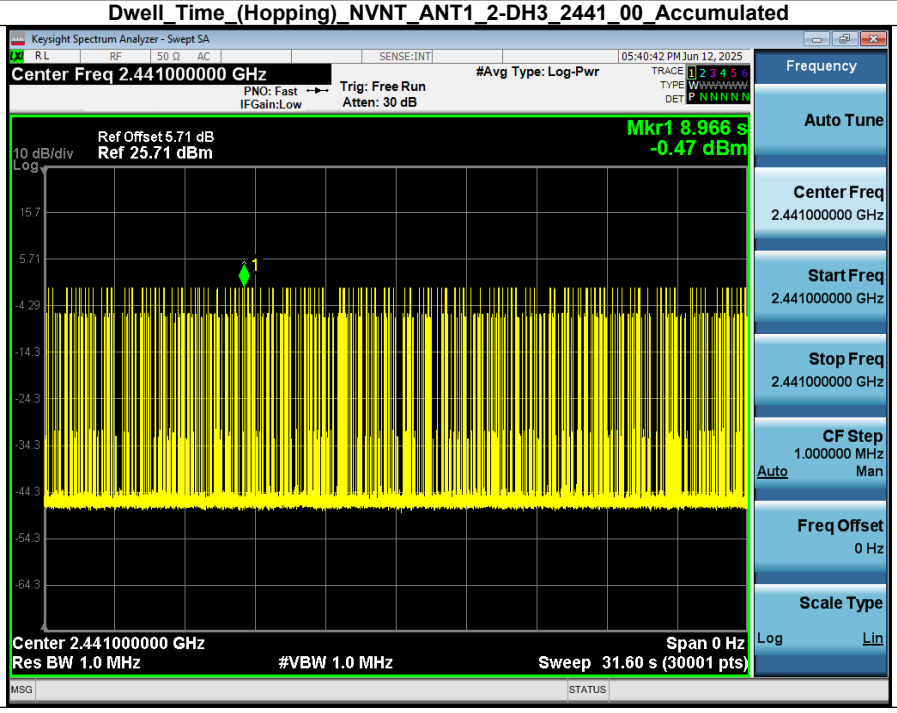
Dwell_Time_(Hopping)_NVNT_ANT1_1-DH5_2441_00_Accumulated



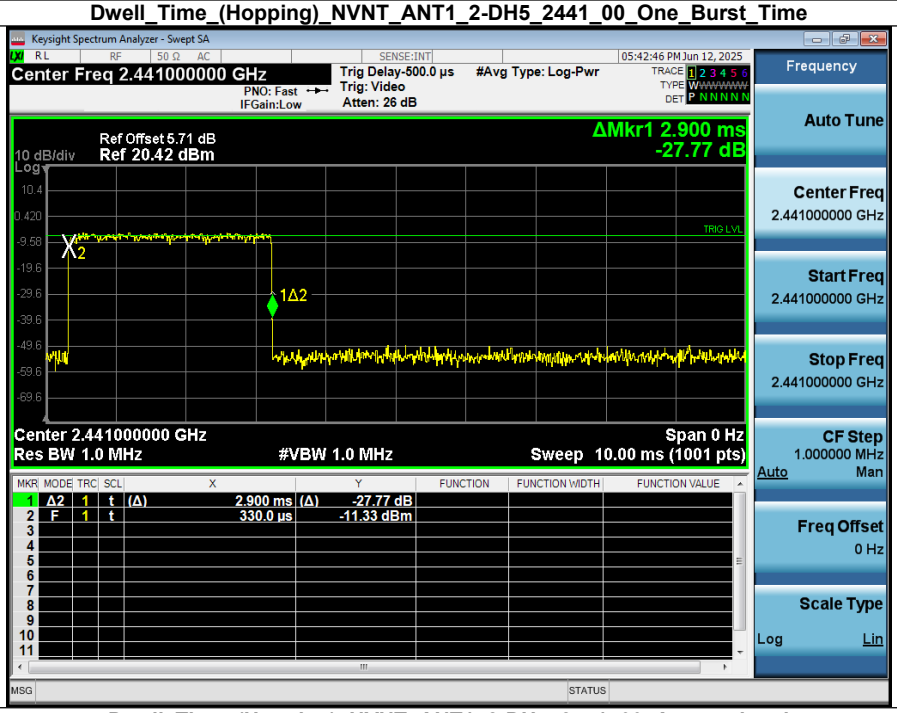
Dwell_Time_(Hopping)_NVNT_ANT1_2-DH3_2441_00_One_Burst_Time



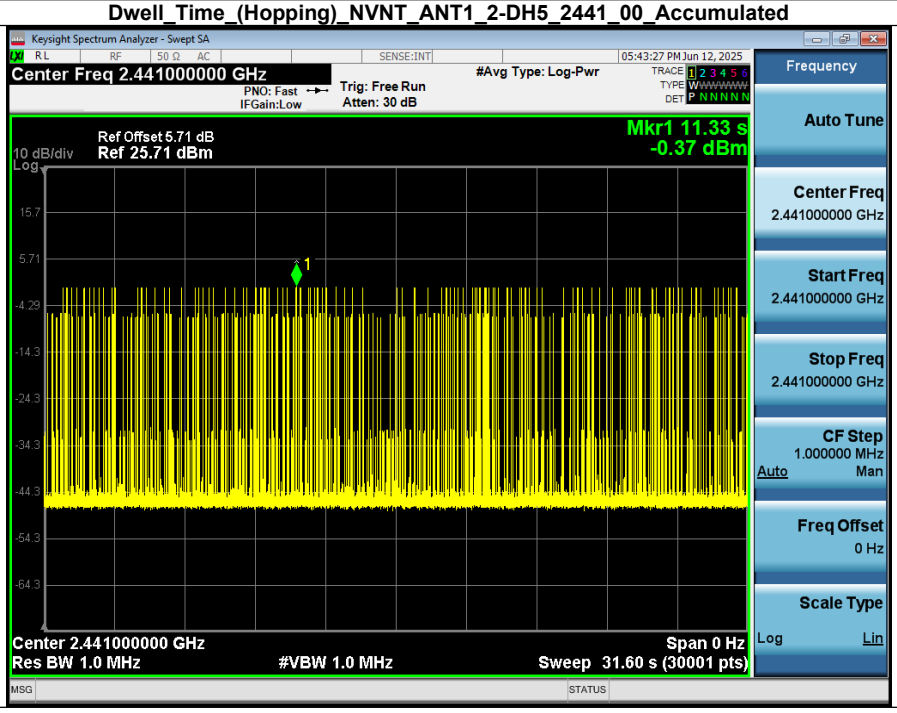
Dwell_Time_(Hopping)_NVNT_ANT1_2-DH3_2441_00_Accumulated



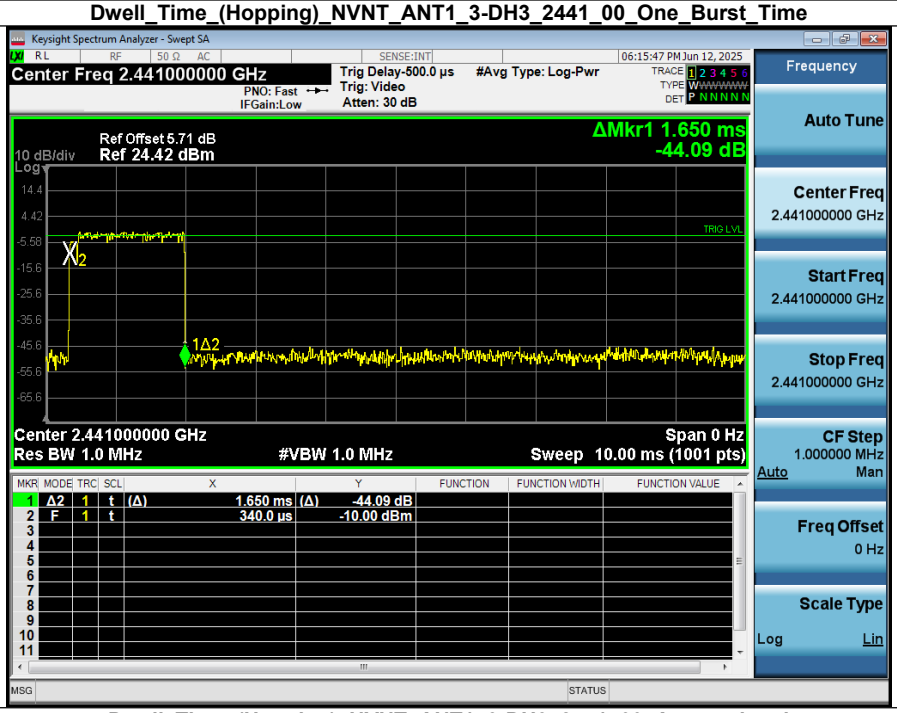
Dwell_Time_(Hopping)_NVNT_ANT1_2-DH5_2441_00_One_Burst_Time



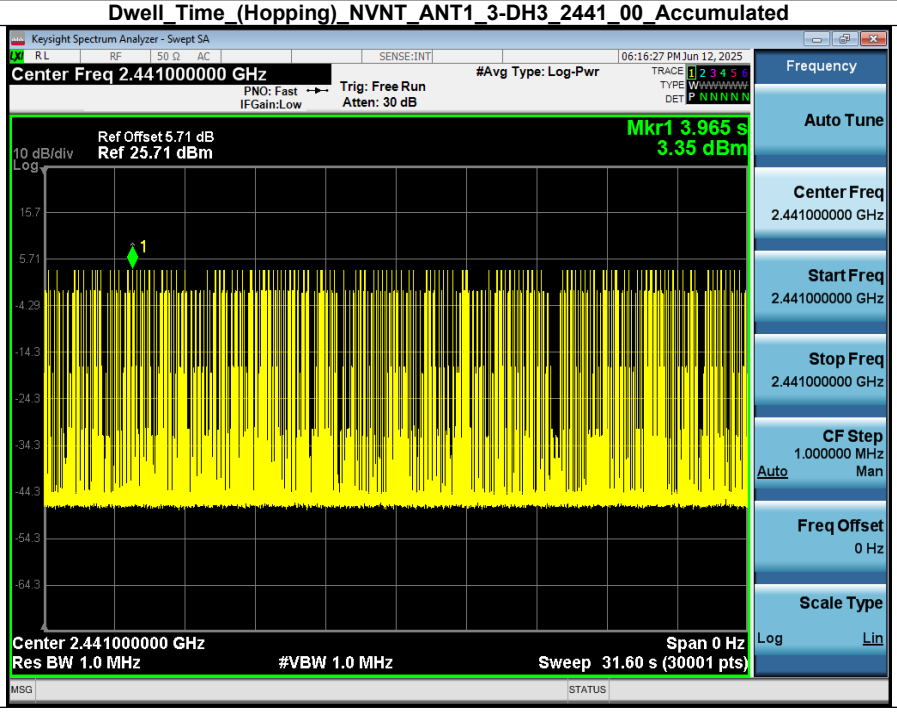
Dwell_Time_(Hopping)_NVNT_ANT1_2-DH5_2441_00_Accumulated



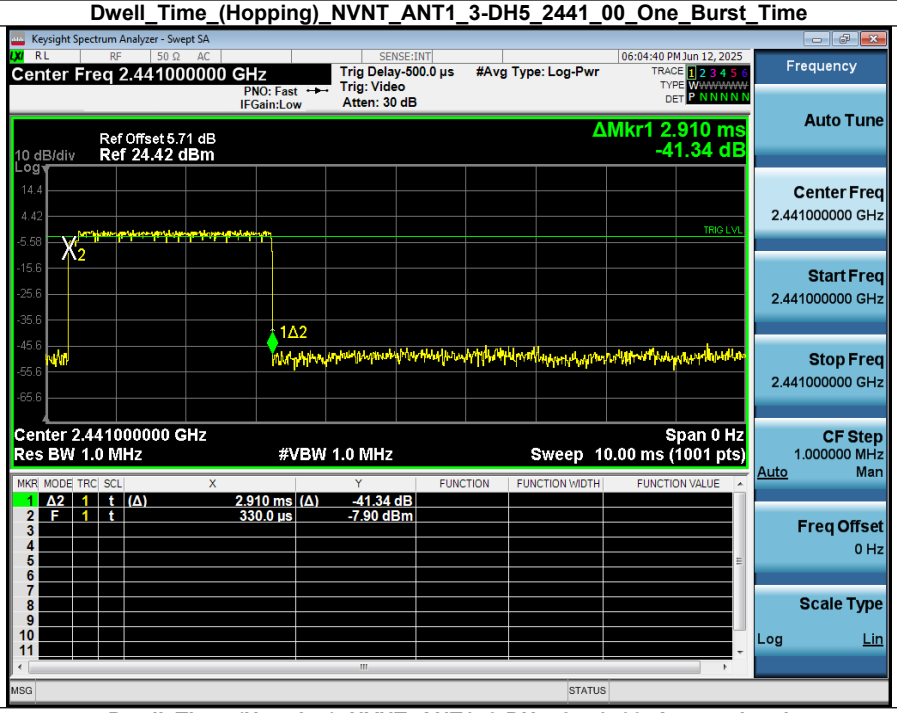
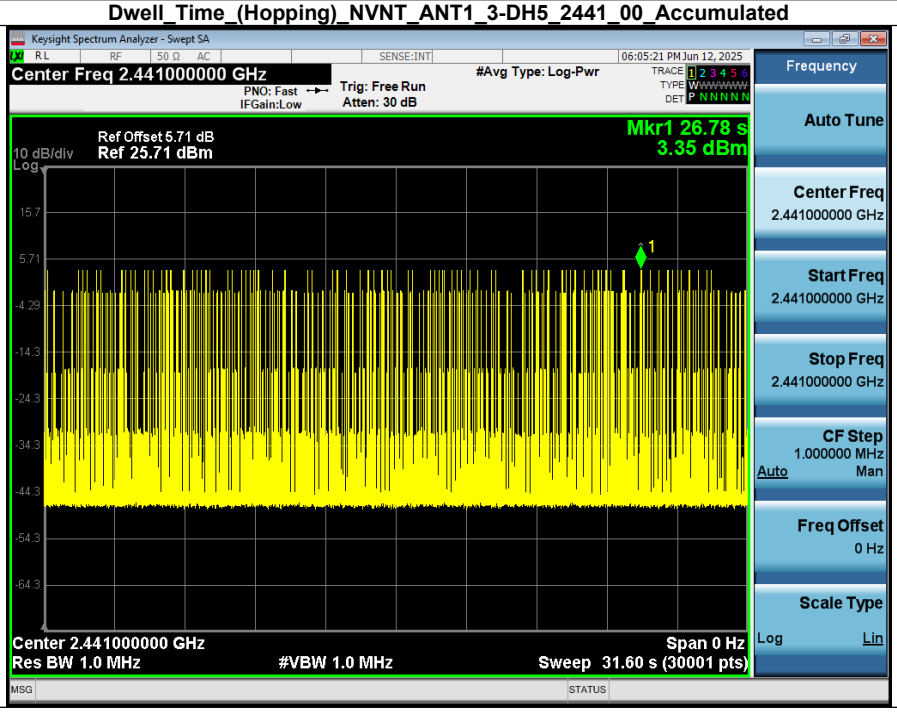
Dwell_Time_(Hopping)_NVNT_ANT1_3-DH3_2441_00_One_Burst_Time



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