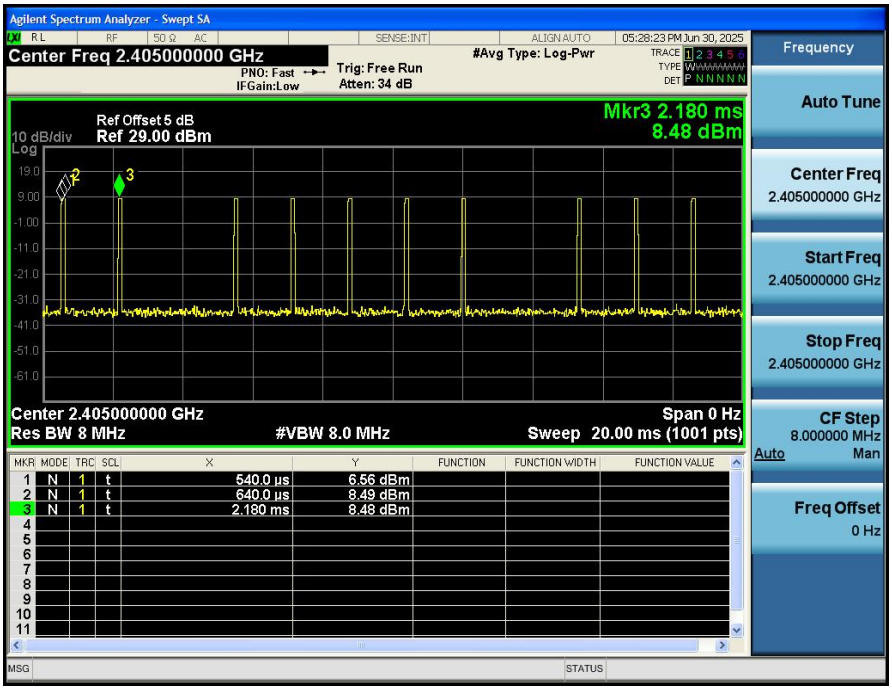
Appendix Test Data

Report No.:	1812C50292612503	Test Sample No.:	1-2-2
Start Test Date:	2025.6.17	Finish Test Date:	2025.6.30
Test Engineer:	Qiangfei Yang	Auditor:	Justin Feng
Temperature:	21.2℃	Relative Humidity:	53%
Pressure:	101kPa		

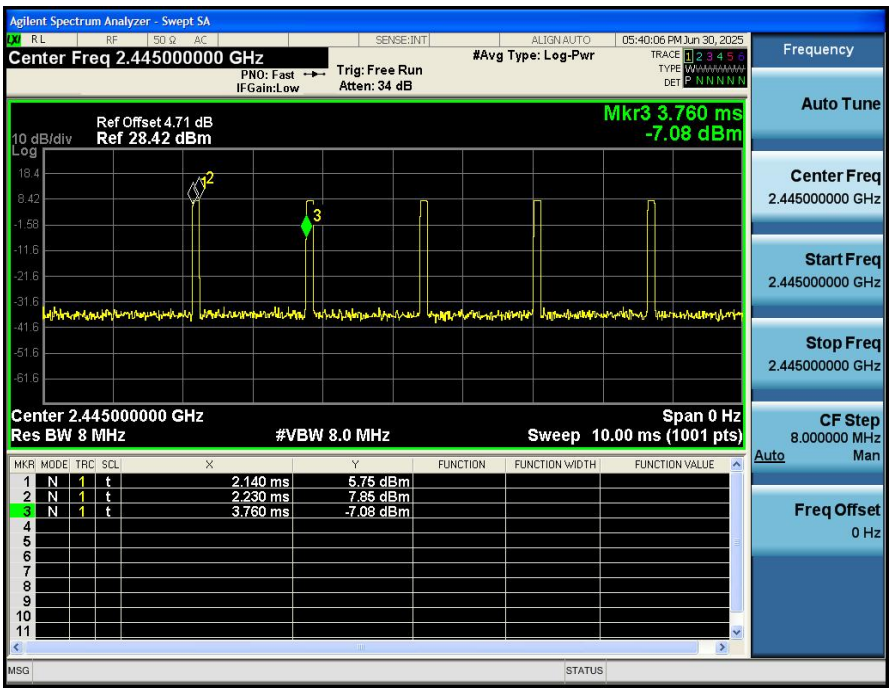
Appendix A: Duty Cycle

Condition	Antenna	Rate	Frequency (MHz)	Dutycycle(%)	Duty_factor
NVNT	ANT1	2.4G	2405.00	6.10	12.15
NVNT	ANT1	2.4G	2445.00	5.56	12.55
NVNT	ANT1	2.4G	2475.00	5.56	12.55

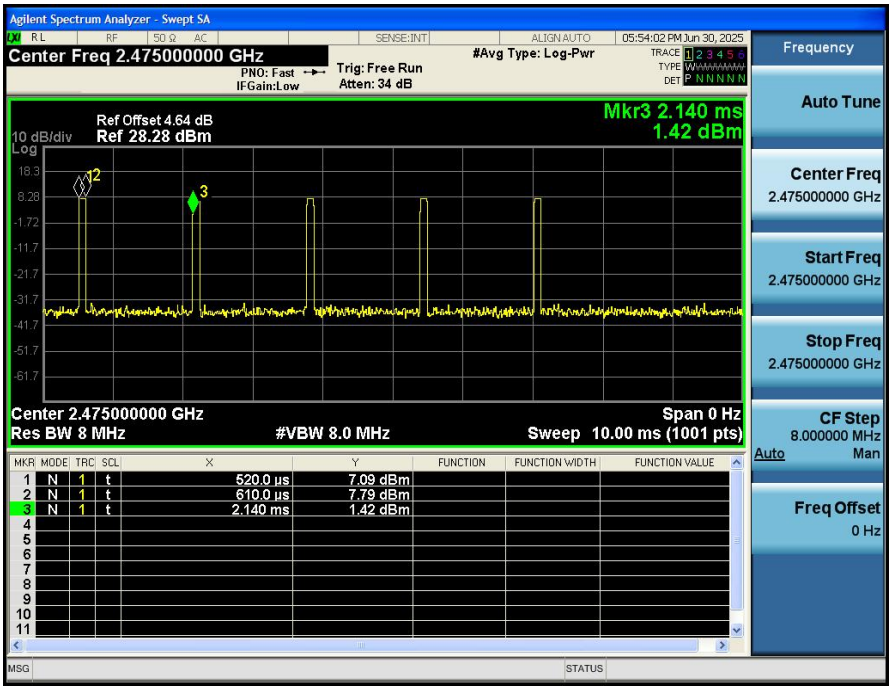
Duty_Cycle_NVNT_ANT1_2.4G_2405



Duty_Cycle_NVNT_ANT1_2.4G_2445



Duty_Cycle_NVNT_ANT1_2.4G_2475



Appendix B: -20dB Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	-20dB BW(MHz)	if larger than CFS
NVNT	ANT1	2.4G	2405.00	1.789	Yes
NVNT	ANT1	2.4G	2445.00	1.809	Yes
NVNT	ANT1	2.4G	2475.00	1.804	Yes

-20dB_Bandwidth_NVNT_ANT1_2.4G_2405_00

-20dB_Bandwidth_NVNT_ANT1_2.4G_2445_00

-20dB_Bandwidth_NVNT_ANT1_2.4G_2475_00

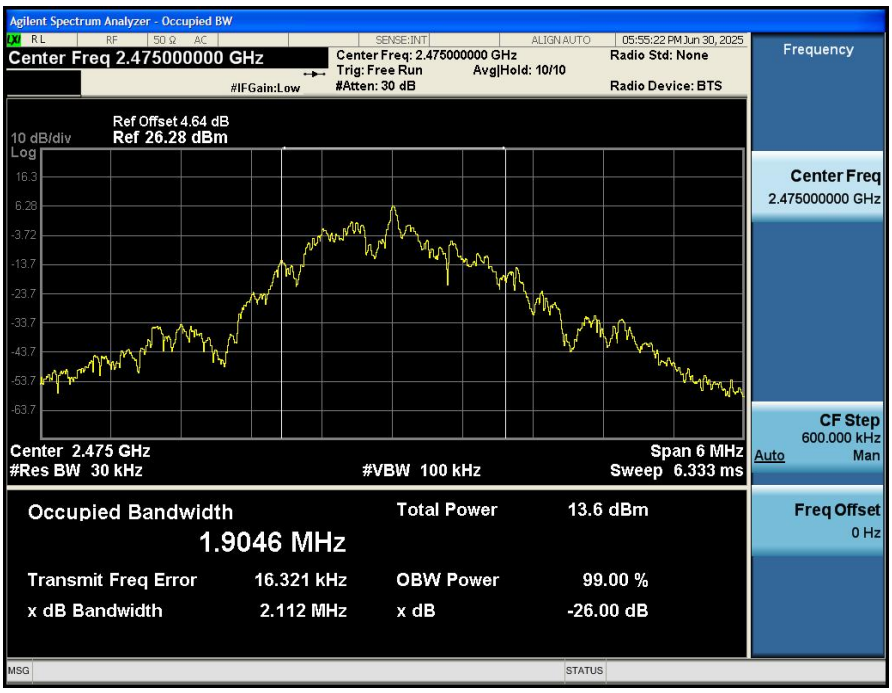
Appendix C: 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99%BW(MHz)
NVNT	ANT1	2.4G	2405.00	1.884
NVNT	ANT1	2.4G	2445.00	1.938
NVNT	ANT1	2.4G	2475.00	1.905

99%_Occupied_Bandwidth_NVNT_ANT1_2.4G_2405_00

99%_Occupied_Bandwidth_NVNT_ANT1_2.4G_2445_00

99%_Occupied_Bandwidth_NVNT_ANT1_2.4G_2475_00



Appendix D: Peak Output Power

Condition	Antenna	Modulation	Frequency (MHz)	Max. Conducted Power(dBm)	Max. Conducted Power(mW)	Limit(mW)	Result
NVNT	ANT1	2.4G	2405.00	**8.51**	7.09	125	Pass
NVNT	ANT1	2.4G	2445.00	7.81	6.04	125	Pass
NVNT	ANT1	2.4G	2475.00	7.79	6.02	125	Pass

Peak_Output_Power_NVNT_ANT1_2.4G_2405_00

Peak_Output_Power_NVNT_ANT1_2.4G_2445_00

Peak_Output_Power_NVNT_ANT1_2.4G_2475_00

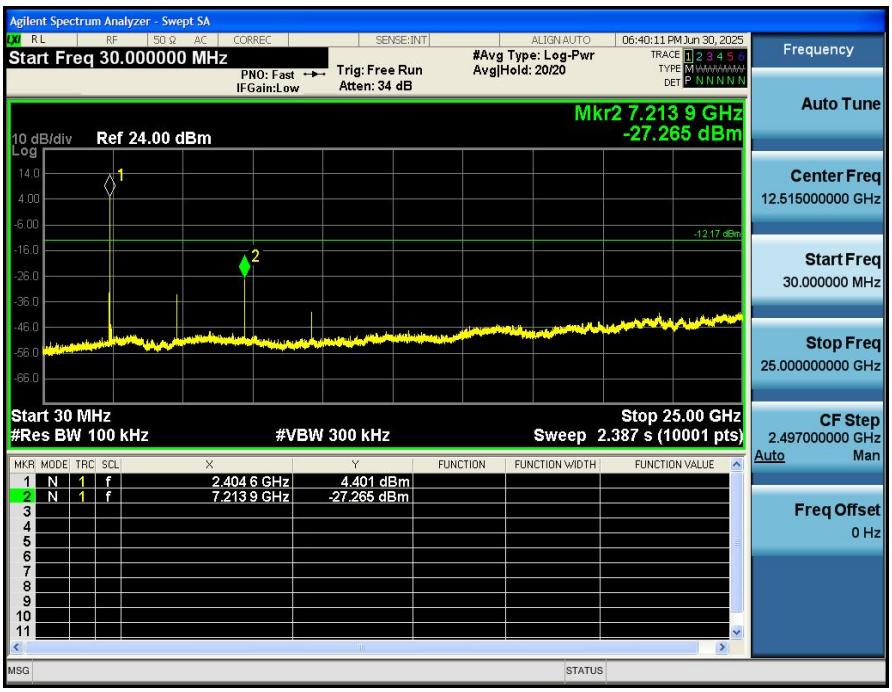
Appendix E: Spurious Emissions

Condition	Antenna	Modulation	TX Mode	Ref_level(dBm)	Spurious MAX.Value(dBm)	Limit	Result
NVNT	ANT1	2.4G	2405.00	7.834	-27.265	-12.166	Pass
NVNT	ANT1	2.4G	2445.00	7.299	-25.622	-12.701	Pass
NVNT	ANT1	2.4G	2475.00	7.140	-26.220	-12.860	Pass

Note:Regarding the spurious emissions from 30MHz to 26.5GHz, the cable lose have been set in the 'Input Correction' of the Spectrum Analyzer during the test.

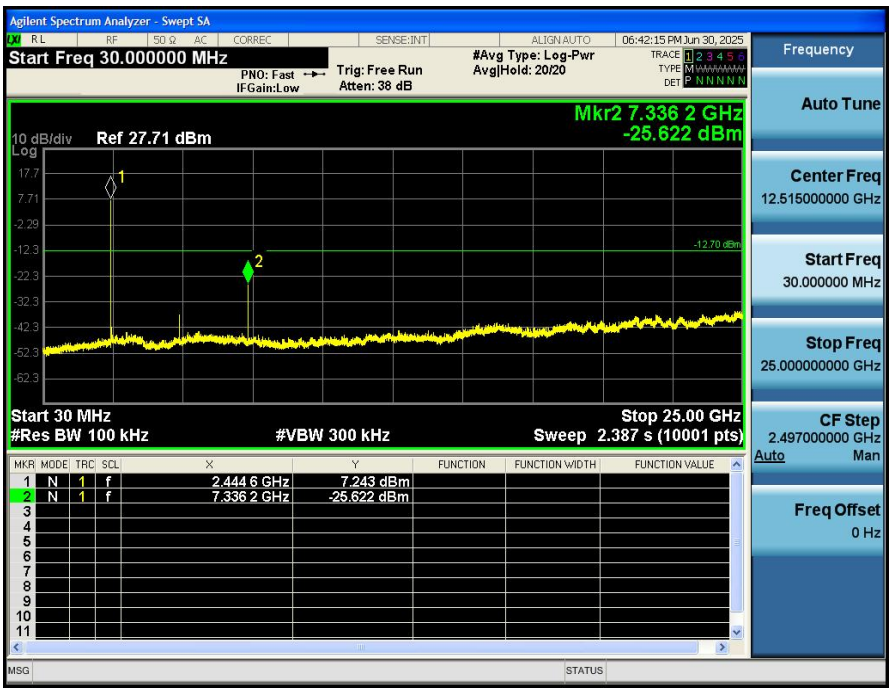
1_Reference_Level_NVNT_ANT1_2.4G_2405_00

2_Spurious_Emissions_NVNT_ANT1_2.4G_2405_00



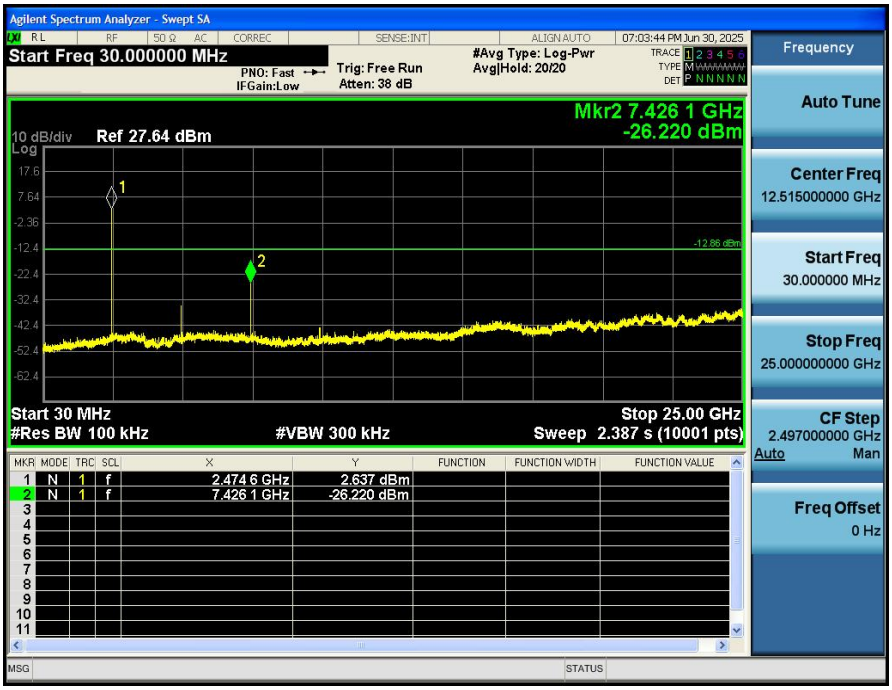
1_Reference_Level_NVNT_ANT1_2.4G_2445_00

2_Spurious_Emissions_NVNT_ANT1_2.4G_2445_00



1_Reference_Level_NVNT_ANT1_2.4G_2475_00

2_Spurious_Emissions_NVNT_ANT1_2.4G_2475_00


Agilent Spectrum Analyzer - Swept SA
Start Freq 30.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 38 dB
#Avg Type: Log-Pwr
Avg|Hold: 20/20
07:03:44 PM Jun 30, 2025
Mkr2 7.426 1 GHz
-26.220 dBm
10 dB/div
Ref 27.64 dBm
Log
-12.86 dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.00 GHz
Sweep 2.387 s (10001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.474 6 GHz 2.637 dBm
2 N 1 f 7.426 1 GHz -26.220 dBm
Frequency
Auto Tune
Center Freq
12.515000000 GHz
Start Freq
30.000000 MHz
Stop Freq
25.000000000 GHz
CF Step
2.497000000 GHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

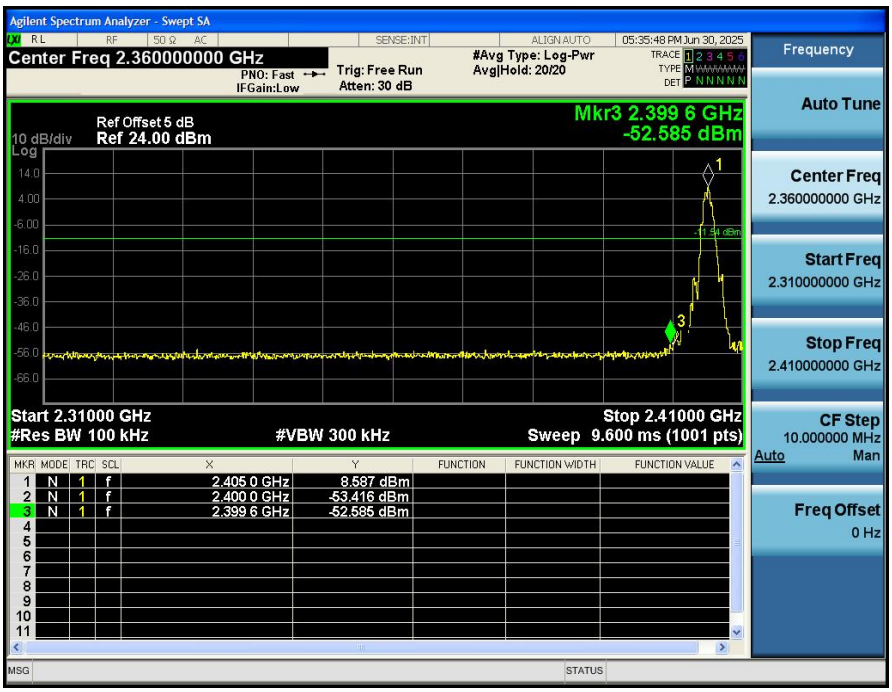
Appendix F: Bandedge

Condition	Antenna	Modulation	TX Mode	Ref_level(dBm)	Bandedge MAX.Value	Limit	Result
NVNT	ANT1	2.4G	2405.00	8.463	-52.585	-11.537	Pass
NVNT	ANT1	2.4G	Hopping_LCH	8.473	-53.343	-11.527	Pass
NVNT	ANT1	2.4G	2475.00	7.785	-50.814	-12.215	Pass
NVNT	ANT1	2.4G	Hopping_HCH	7.664	-53.584	-12.336	Pass

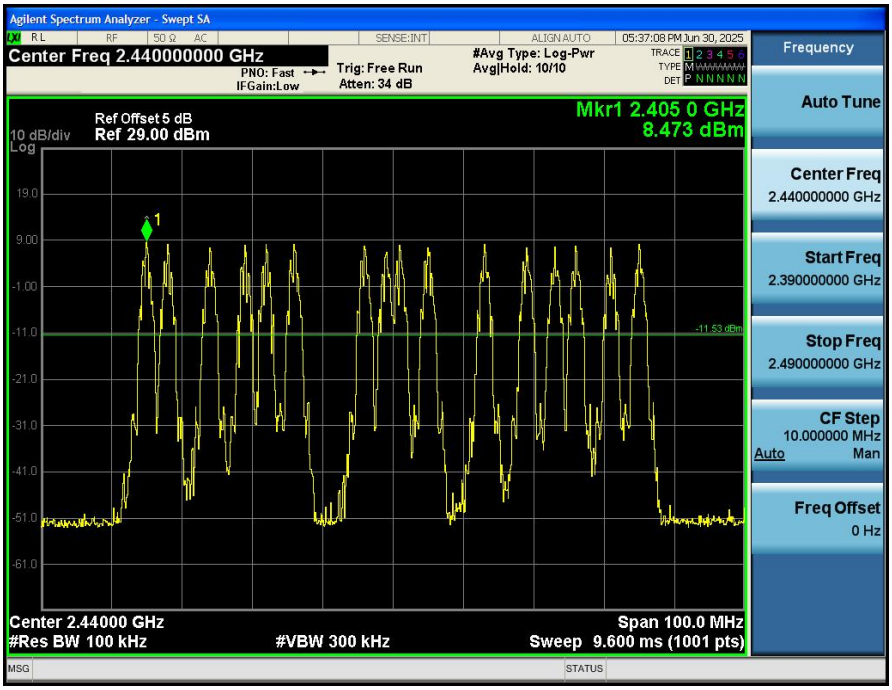
Remark:1. Regarding the spurious emissions from 30MHz to 26.5GHz, the cable lose have been set in the 'offset' of the Spectrum Analyzer during the test.

1_Reference_Level_NVNT_ANT1_2.4G_2405_00

2_Bandedge_NVNT_ANT1_2.4G_2405_00



1_Reference_Level_Hopping_NVNT_ANT1_2.4G_Hopping

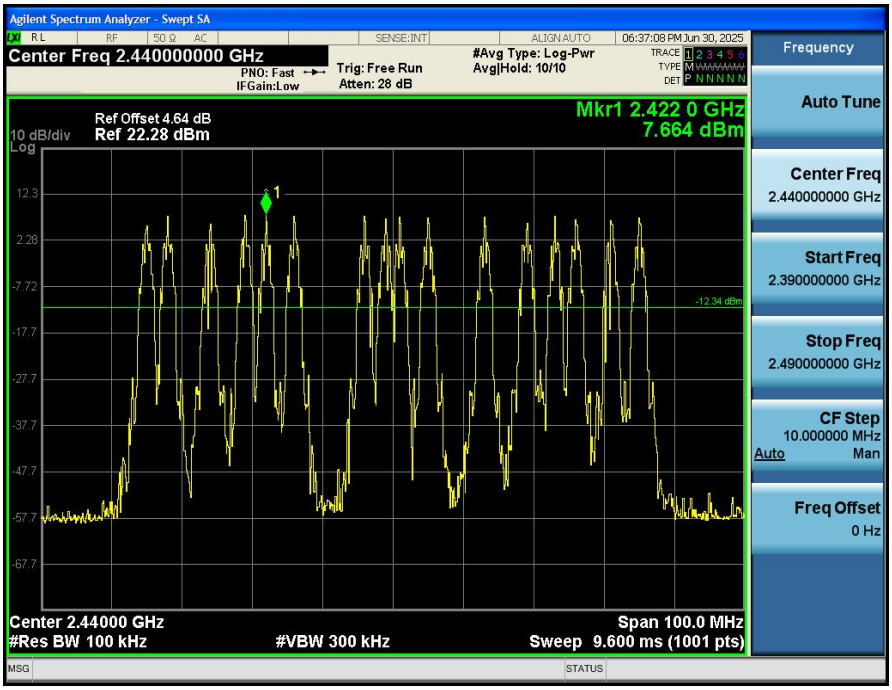


2_Band_Edge_(Hopping)_NVNT_ANT1_2.4G_Hopping

1_Reference_Level_NVNT_ANT1_2.4G_2475_00

2_Bandedge_NVNT_ANT1_2.4G_2475_00

1_Reference_Level_Hopping_NVNT_ANT1_2.4G_Hopping



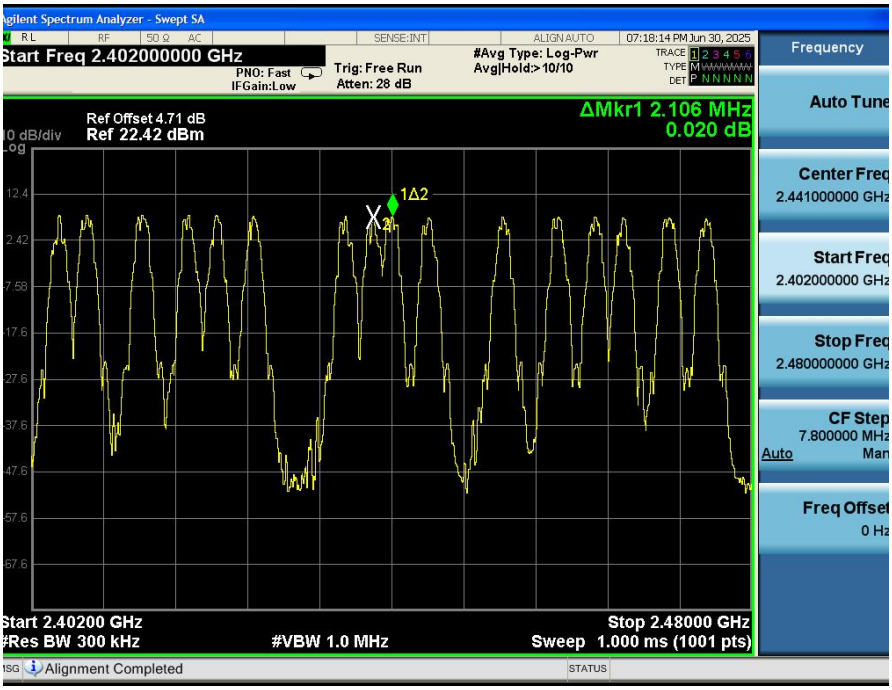
2_Band_Edge_(Hopping)_NVNT_ANT1_2.4G_Hopping

Agilent Spectrum Analyzer - Swept SA
Center Freq 2.482500000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 24 dB
#Avg Type: Log-Pwr
Avg|Hold: 10/10
06:37:52 PM Jun 30, 2025
Ref Offset 4.64 dB
10 dB/div
Ref 17.64 dBm
Log
Mkr3 2.486 420 GHz
-53.584 dBm
-12.34 dBm
Start 2.46500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.50000 GHz
Sweep 3.400 ms (1001 pts)
1 N 1 f 2.466 015 GHz 7.382 dBm
2 N 1 f 2.483 500 GHz -60.898 dBm
3 N 1 f 2.486 420 GHz -53.584 dBm
Frequency
Auto Tune
Center Freq
2.482500000 GHz
Start Freq
2.465000000 GHz
Stop Freq
2.500000000 GHz
CF Step
3.500000 MHz
Auto
Man
Freq Offset
0 Hz

Appendix G: 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	2.4G	2445.00	2438.989	2441.095	2.106	1.206	Pass

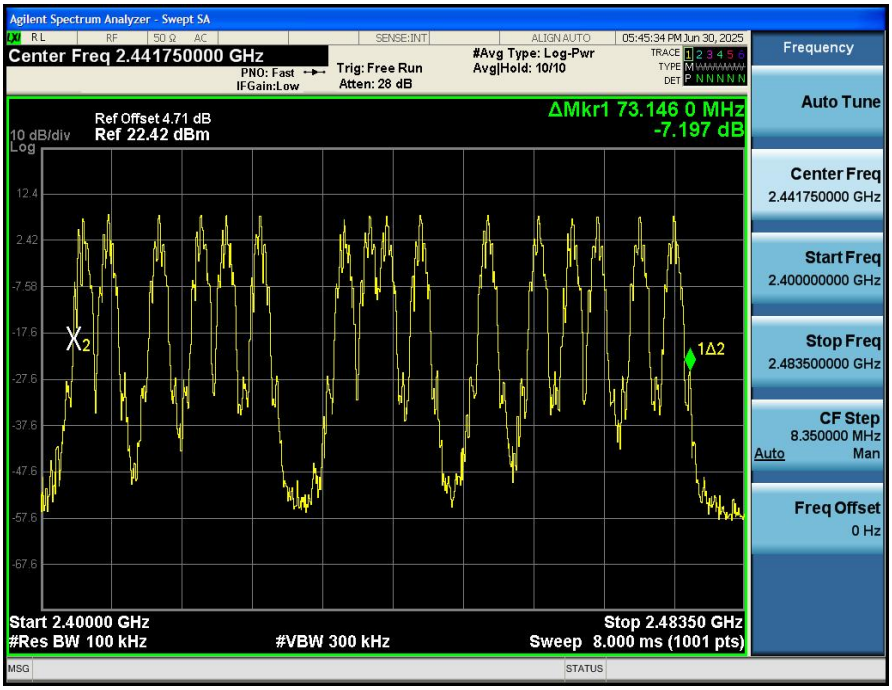
Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_2.4G_Hopping



Appendix H: Number of Hopping Channel (Hopping)

Condition	Antenna	Modulation	Hopping Num	Limit	Result
NVNT	ANT1	2.4G	16	15	Pass

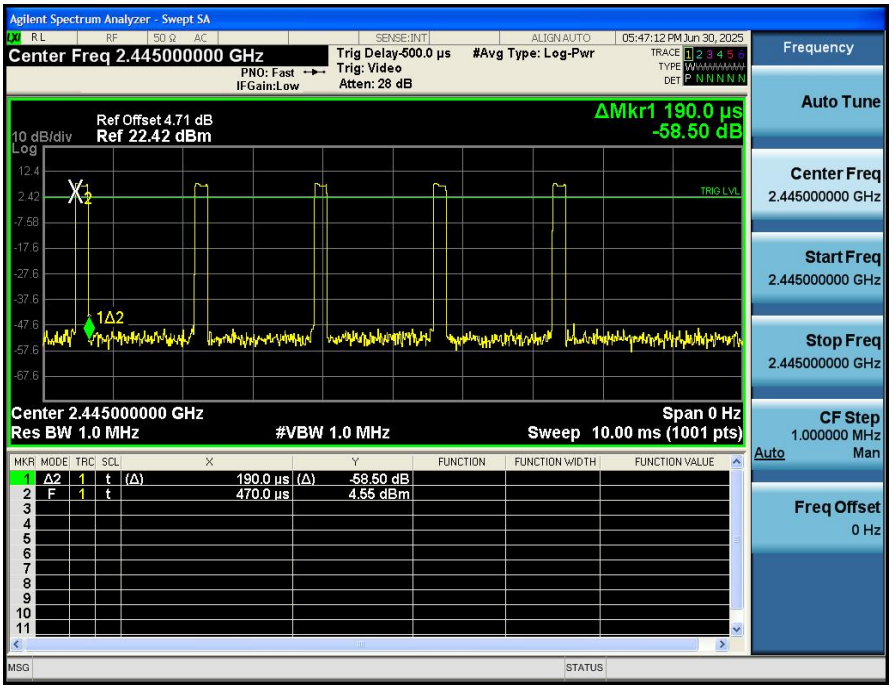
Number_of_Hopping_Channel_(Hopping)_NVNT_ANT1_2.4G_Hopping



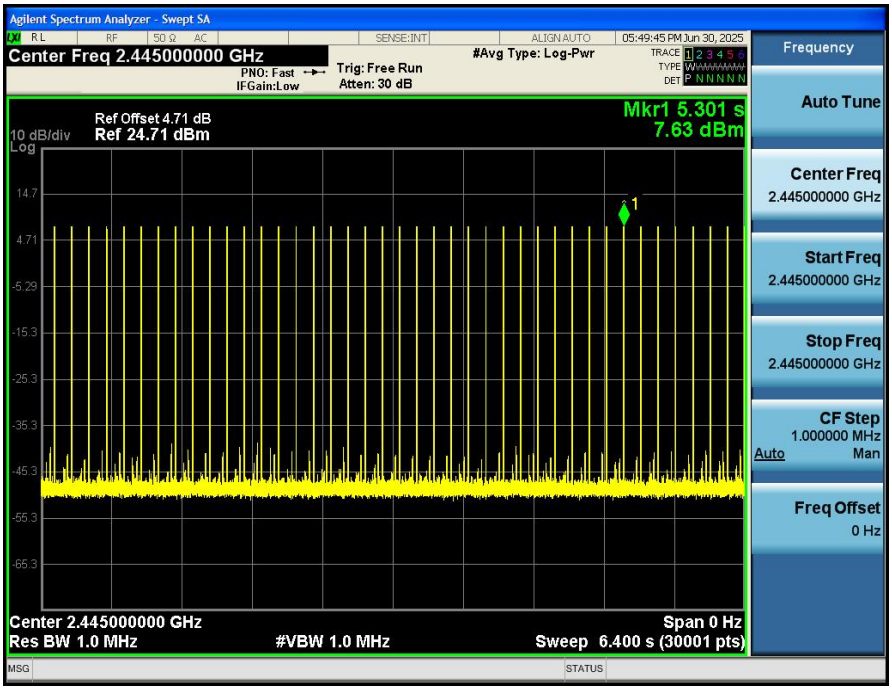
Appendix I: Dwell Time (Hopping)

Condition	Antenna	Packet Type	Pulse Time(ms)	Hops	Dwell Time(ms)	Limit(s)	Result
NVNT	ANT1	2.4G	0.190	205.00	38.950	0.40	Pass

Dwell_Time_(Hopping)_NVNT_ANT1_2.4G_2445_00_One_Burst_Time



Dwell_Time_(Hopping)_NVNT_ANT1_2.4G_2445_00_Accumulated



---END---