

RF Test Data for Bluetooth (Conducted Measurements)

General Description of EUT	
Product Name:	Wireless Microphone RX
Test Model:	S70-RX
Sample ID:	HC-C-202507-0021-02-01-2#
Environmental Conditions	
Temperature:	23.8℃
Relative Humidity:	48%
Test Voltage:	DC 5V
Test Engineer:	Gold. zhang
Note: For a more detailed features description, please refer to the report TBR-C-202507-0021-12 The report only show the worst case data.	

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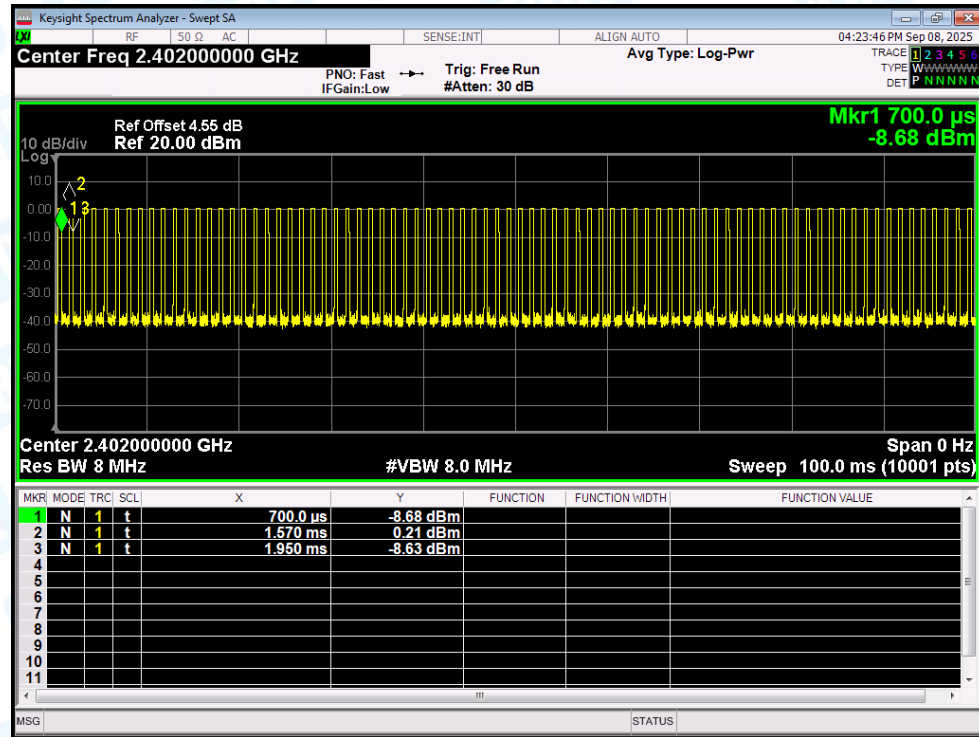
1. Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2441	Ant1	29.6	5.29	2.7
NVNT	1-DH1	2480	Ant1	29.6	5.29	2.7
NVNT	2-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2480	Ant1	30.4	5.17	2.63
NVNT	3-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	3-DH1	2441	Ant1	30.4	5.17	2.63
NVNT	3-DH1	2480	Ant1	30.4	5.17	2.63

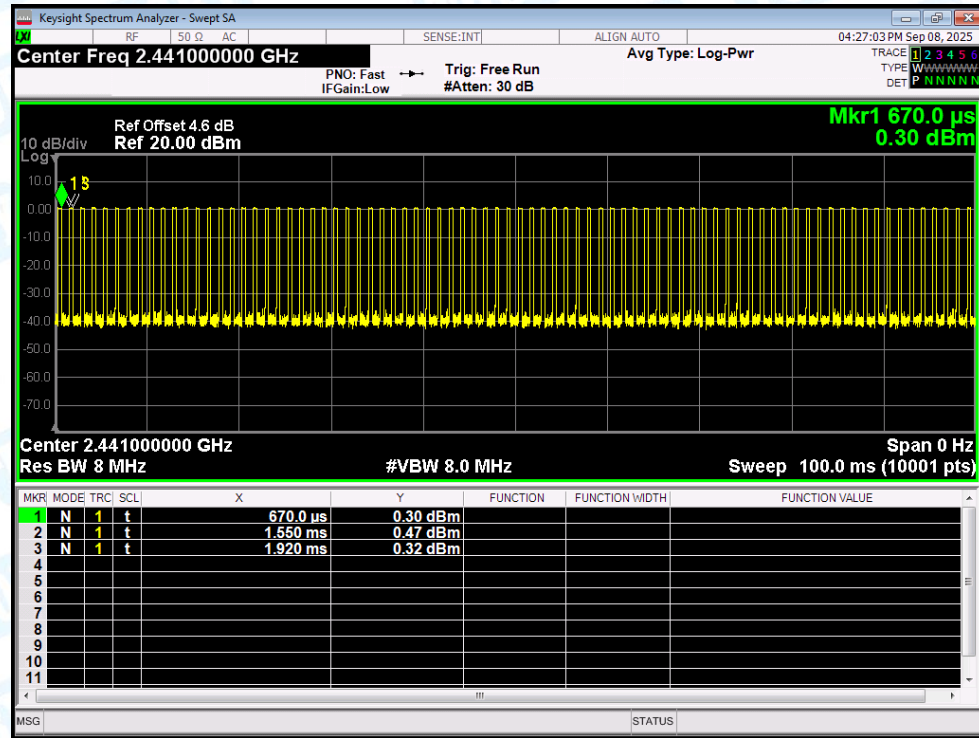
Note: RF Conducted test Offset= cable loss+ Attenuator(3dB).

Test Graphs

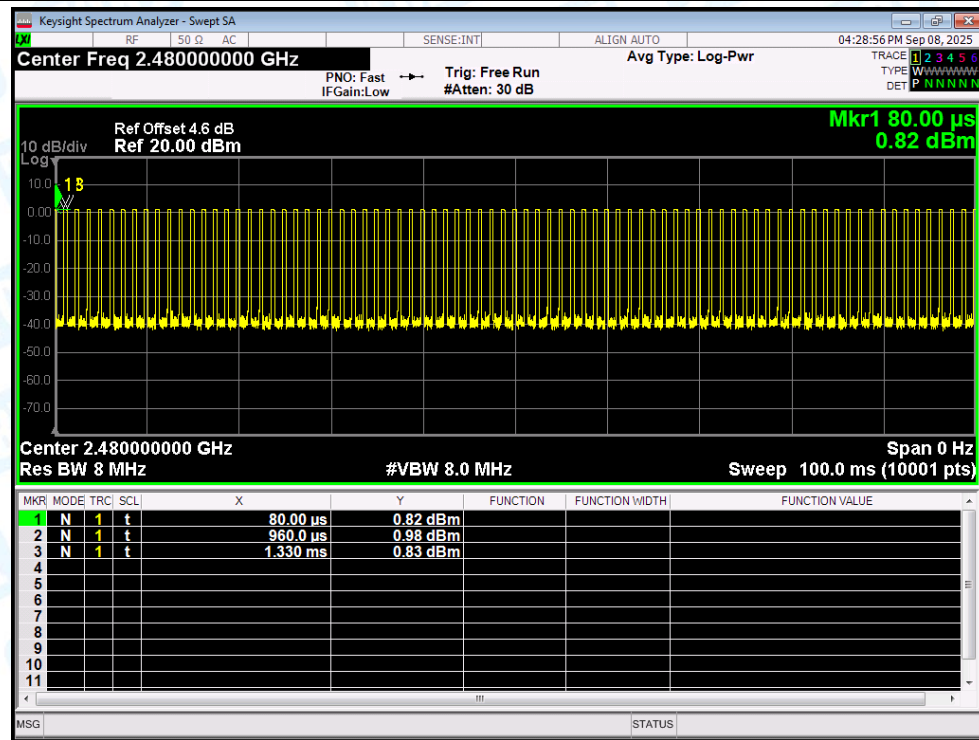
Duty Cycle NVNT 1-DH1 2402MHz Ant1



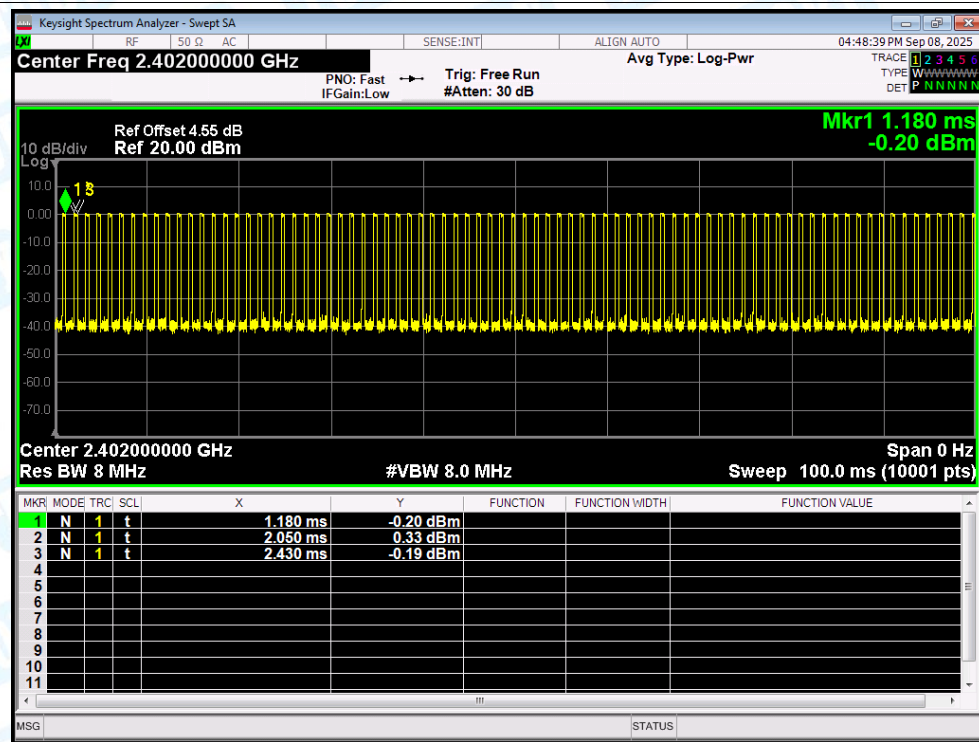
Duty Cycle NVNT 1-DH1 2441MHz Ant1



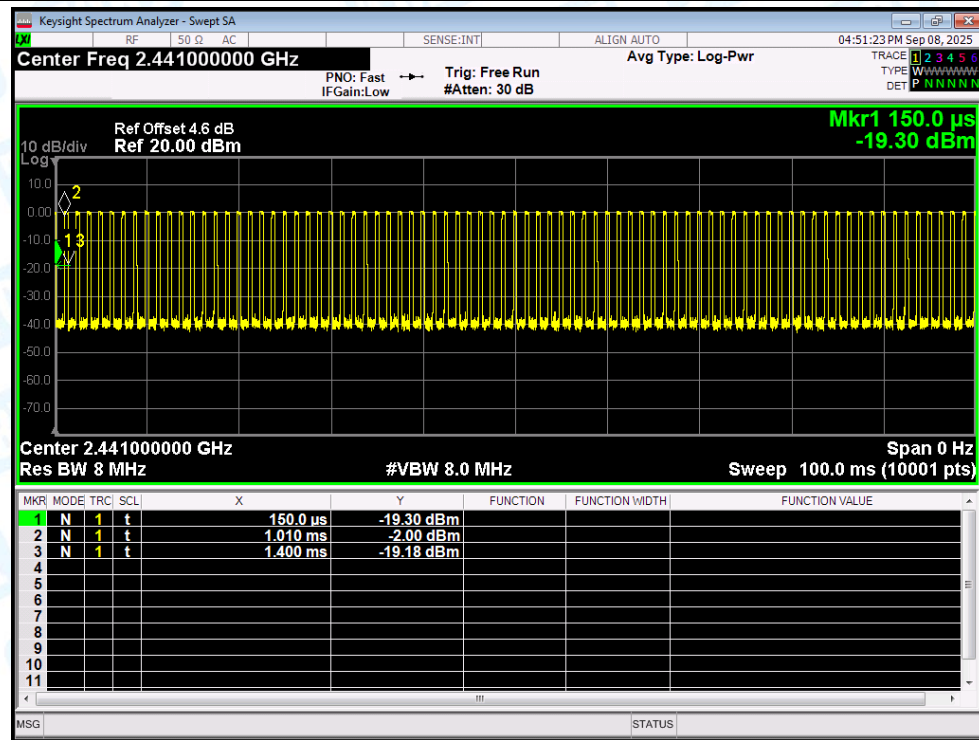
Duty Cycle NVNT 1-DH1 2480MHz Ant1



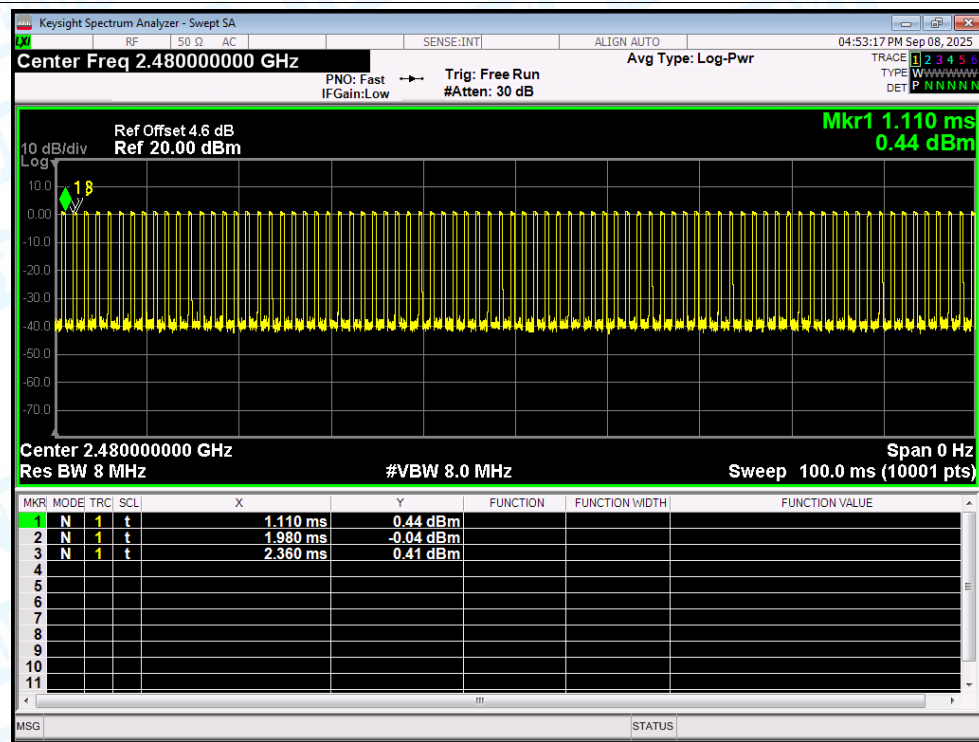
Duty Cycle NVNT 2-DH1 2402MHz Ant1



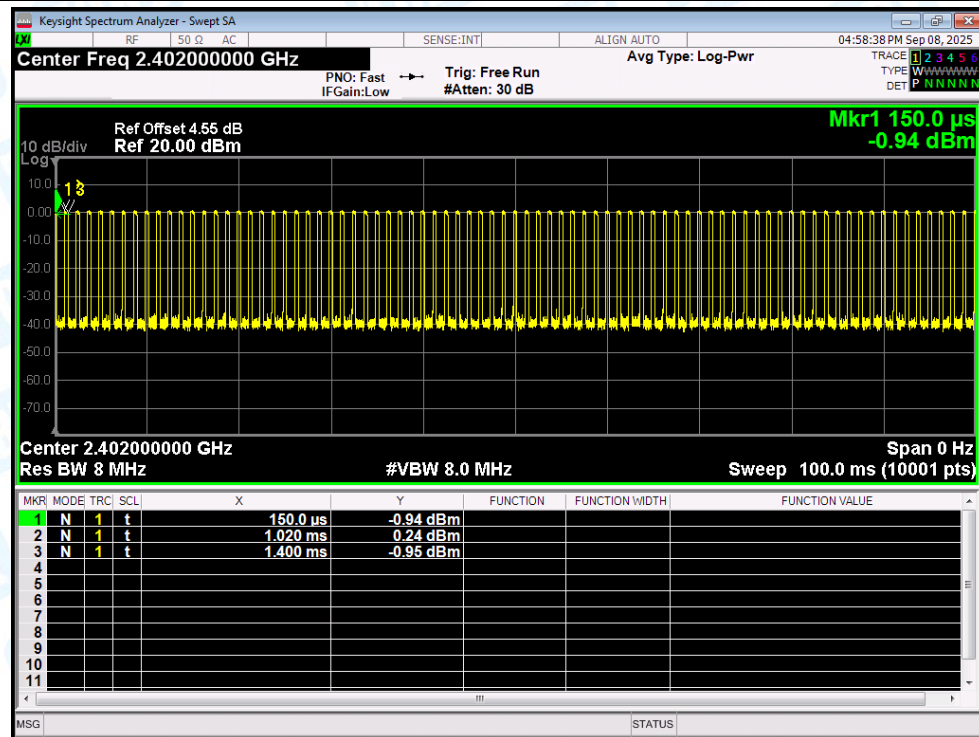
Duty Cycle NVNT 2-DH1 2441MHz Ant1



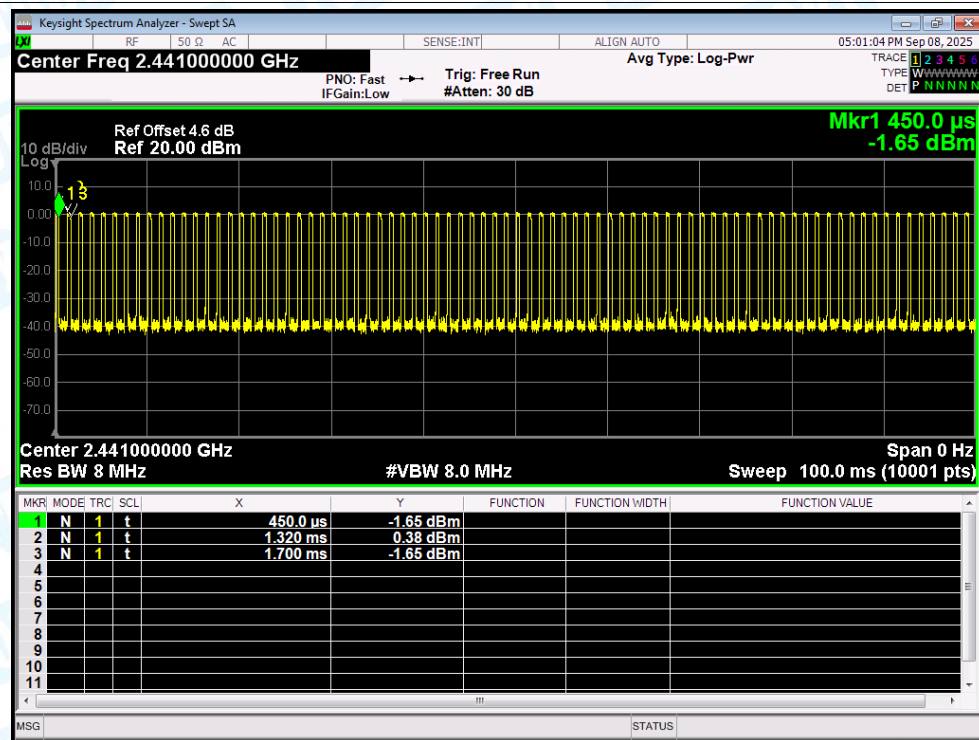
Duty Cycle NVNT 2-DH1 2480MHz Ant1

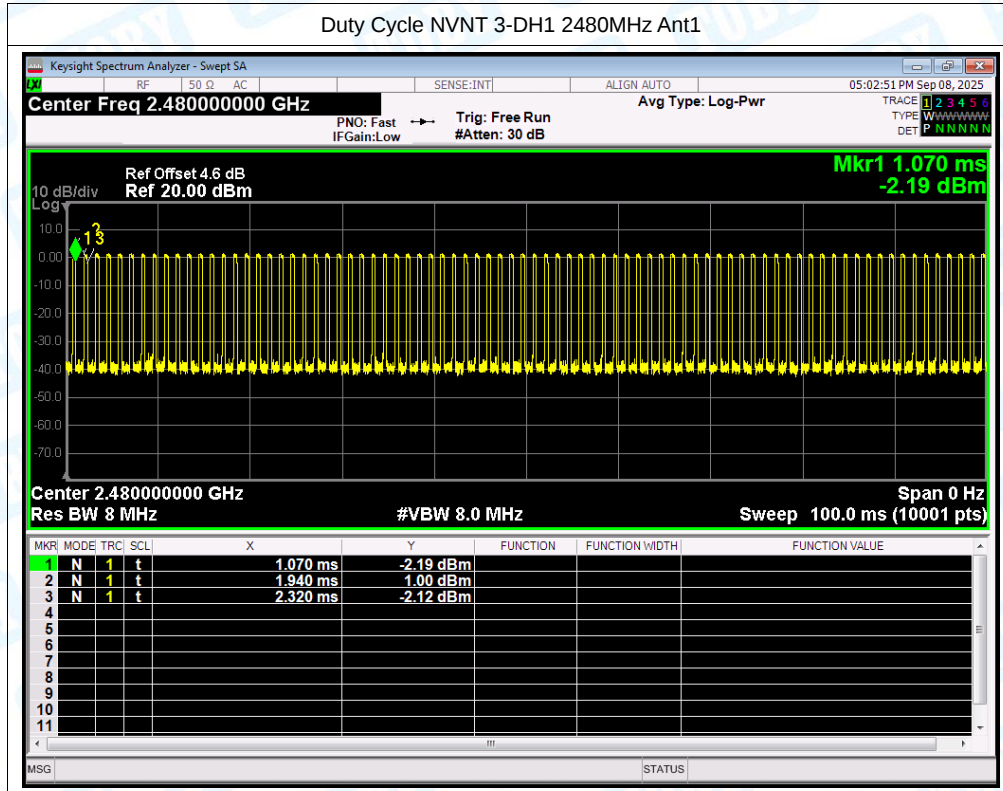


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1





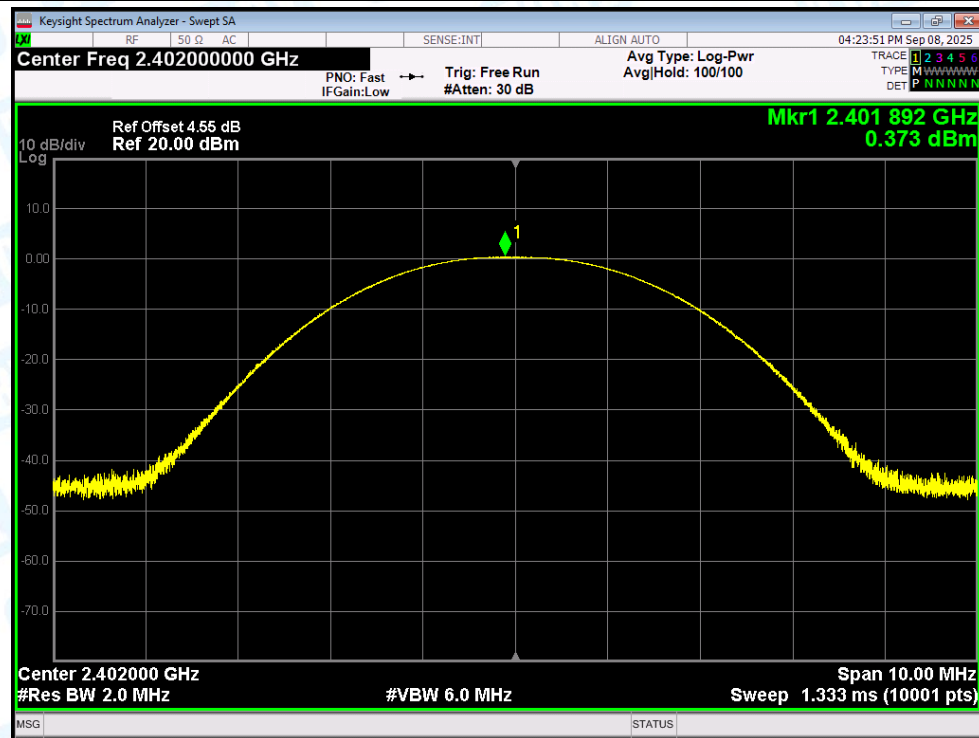
2. Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	0.373	21	Pass
NVNT	1-DH1	2441	Ant1	0.455	21	Pass
NVNT	1-DH1	2480	Ant1	1.01	21	Pass
NVNT	2-DH1	2402	Ant1	0.351	21	Pass
NVNT	2-DH1	2441	Ant1	0.41	21	Pass
NVNT	2-DH1	2480	Ant1	0.987	21	Pass
NVNT	3-DH1	2402	Ant1	0.464	21	Pass
NVNT	3-DH1	2441	Ant1	0.53	21	Pass
NVNT	3-DH1	2480	Ant1	1.113	21	Pass

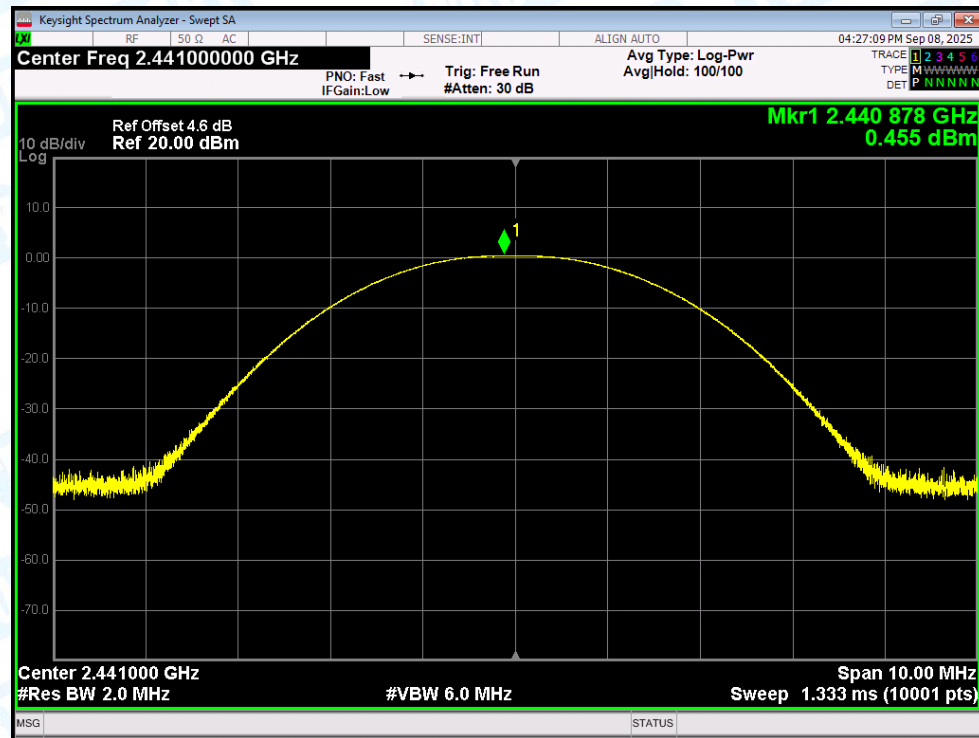
Note: RF Conducted test Offset= cable loss+ Attenuator(3dB).

Test Graphs

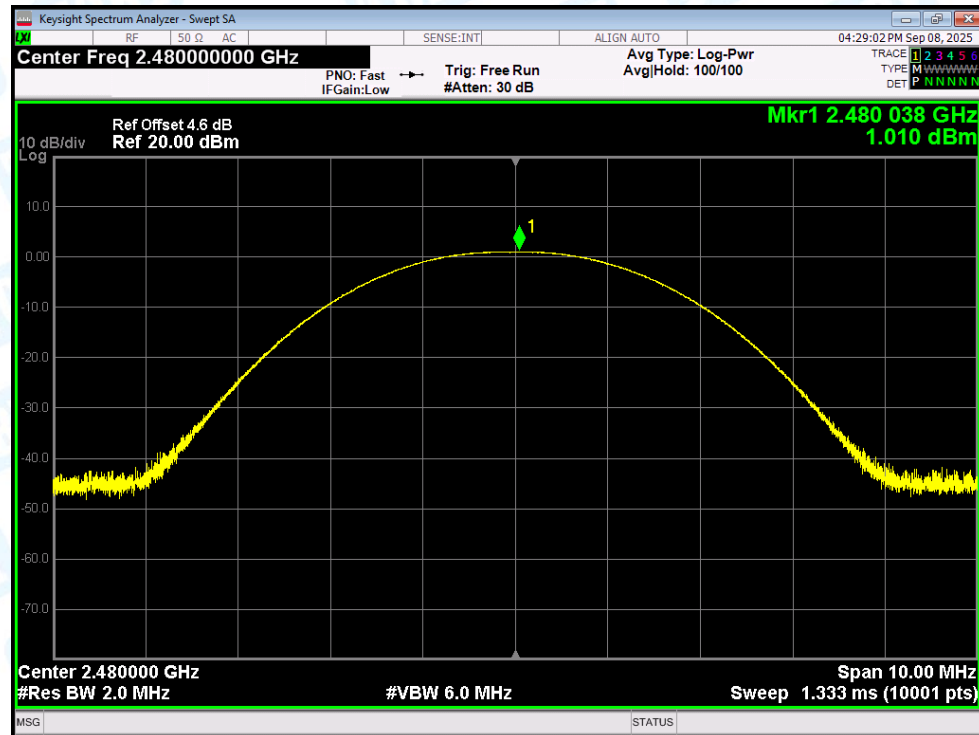
Power NVNT 1-DH1 2402MHz Ant1



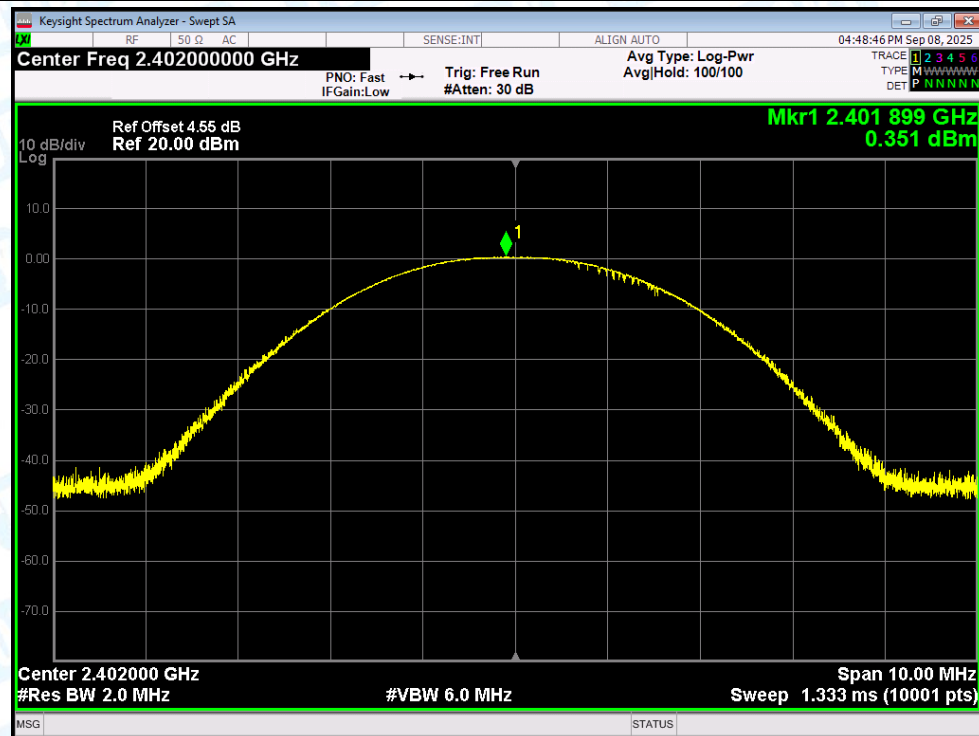
Power NVNT 1-DH1 2441MHz Ant1



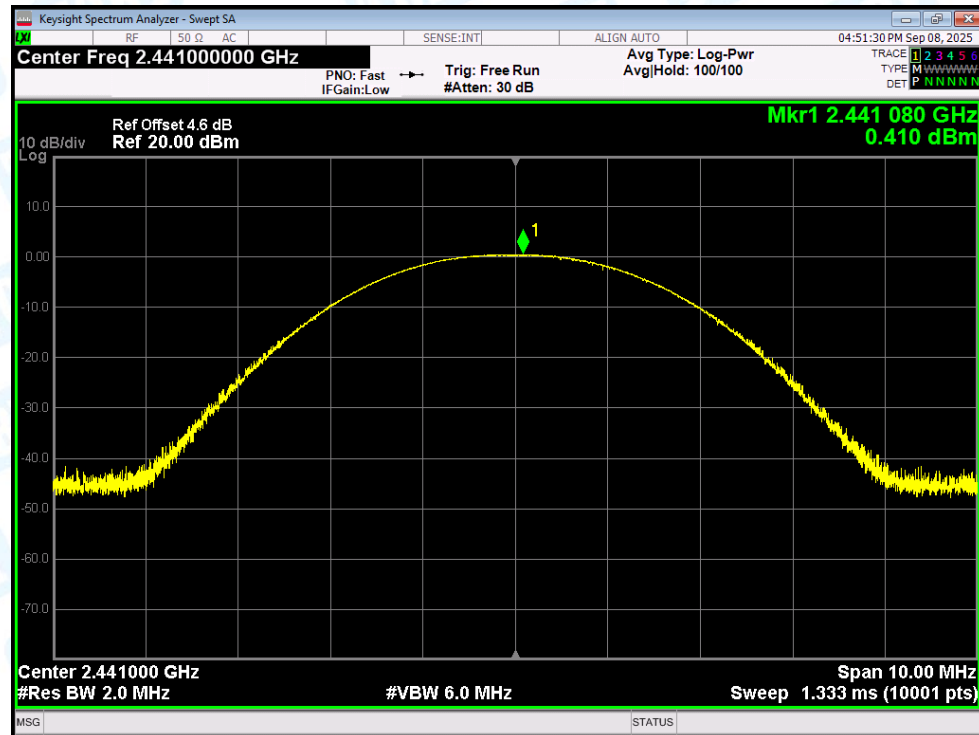
Power NVNT 1-DH1 2480MHz Ant1



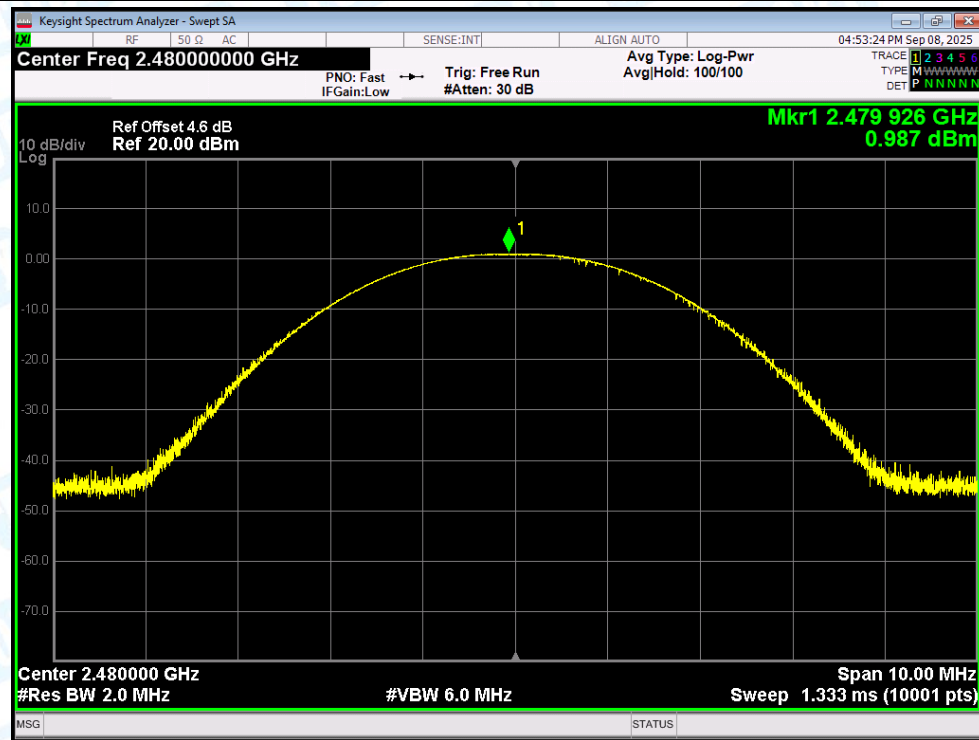
Power NVNT 2-DH1 2402MHz Ant1



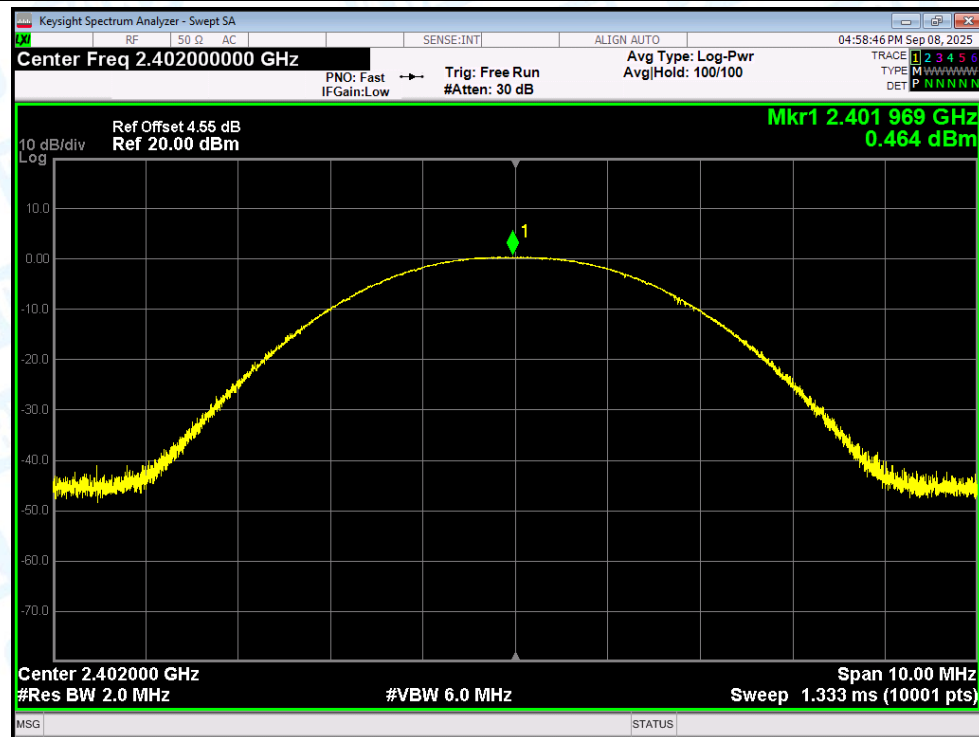
Power NVNT 2-DH1 2441MHz Ant1



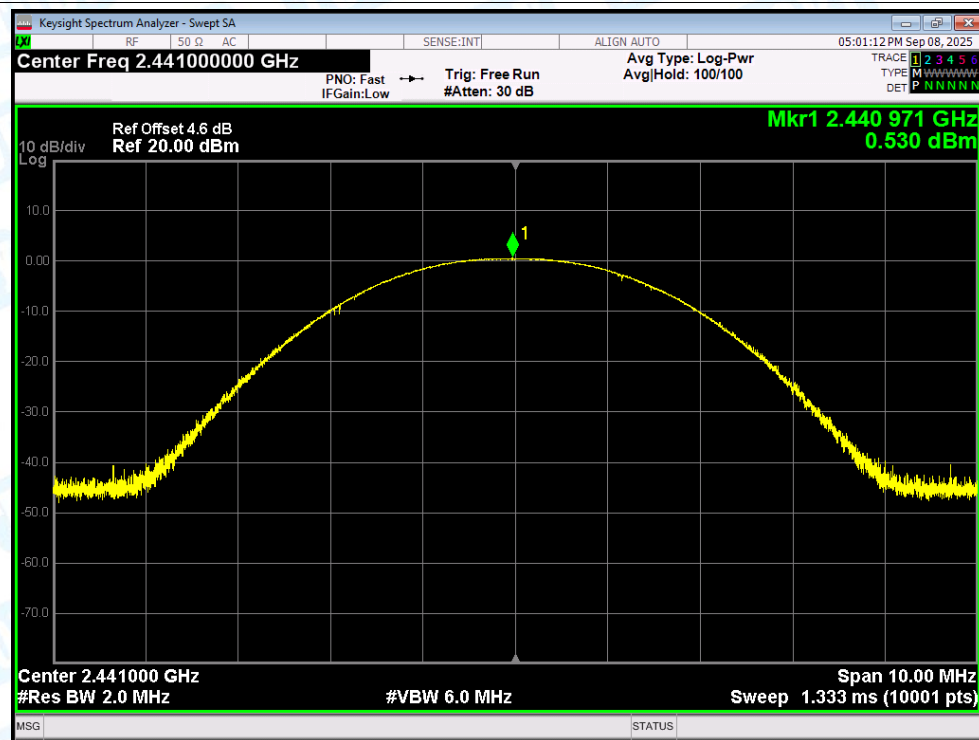
Power NVNT 2-DH1 2480MHz Ant1

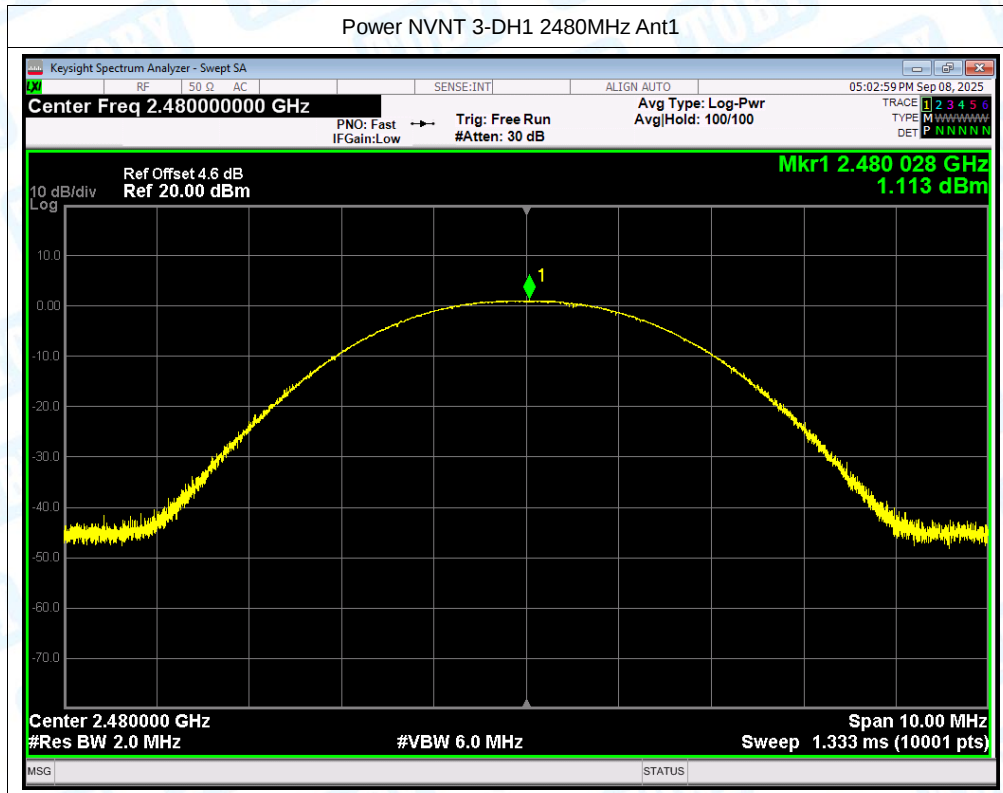


Power NVNT 3-DH1 2402MHz Ant1



Power NVNT 3-DH1 2441MHz Ant1





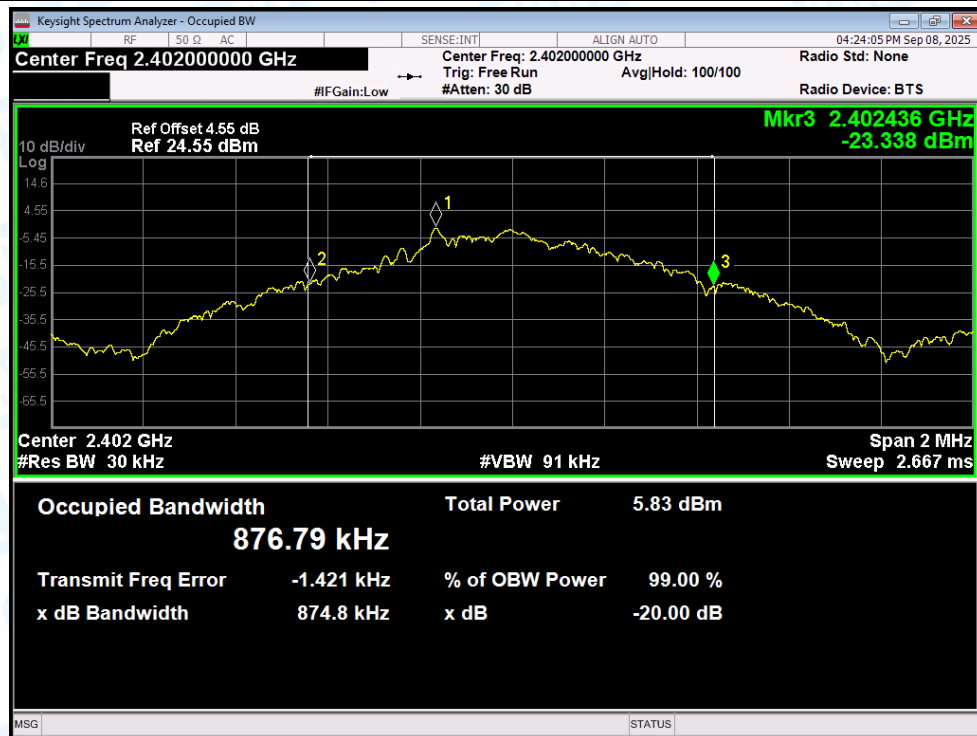
3. -20dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.87	----	Pass
NVNT	1-DH1	2441	Ant1	0.96	----	Pass
NVNT	1-DH1	2480	Ant1	0.86	----	Pass
NVNT	2-DH1	2402	Ant1	1.20	----	Pass
NVNT	2-DH1	2441	Ant1	1.19	----	Pass
NVNT	2-DH1	2480	Ant1	1.16	----	Pass
NVNT	3-DH1	2402	Ant1	1.21	----	Pass
NVNT	3-DH1	2441	Ant1	1.21	----	Pass
NVNT	3-DH1	2480	Ant1	1.20	----	Pass

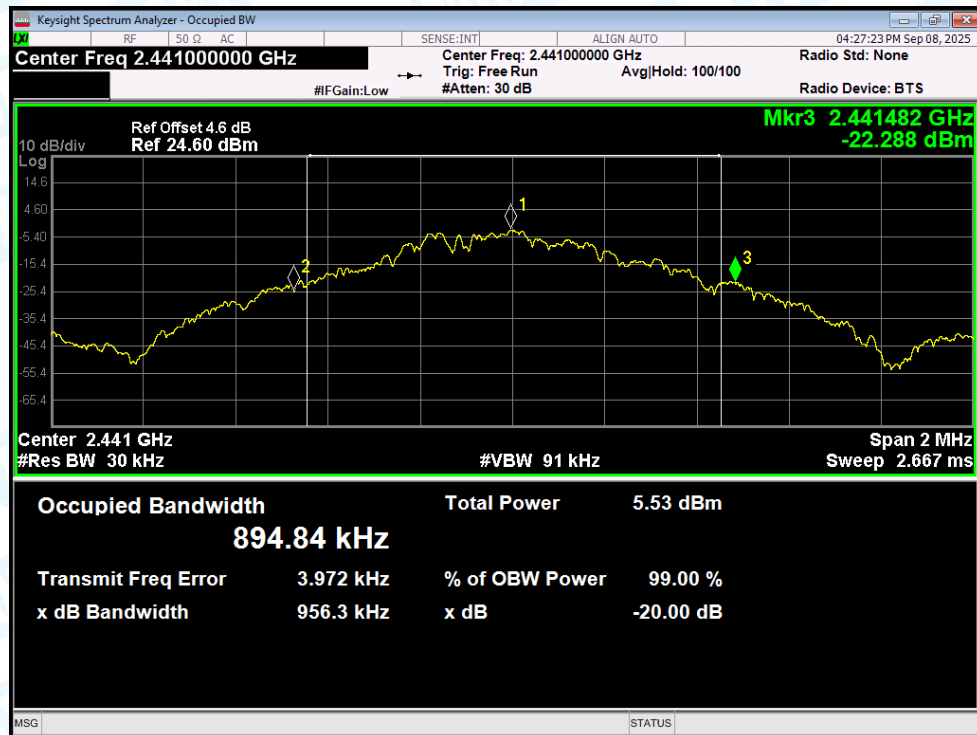
Note: RF Conducted test Offset= cable loss+ Attenuator(3dB).

Test Graphs

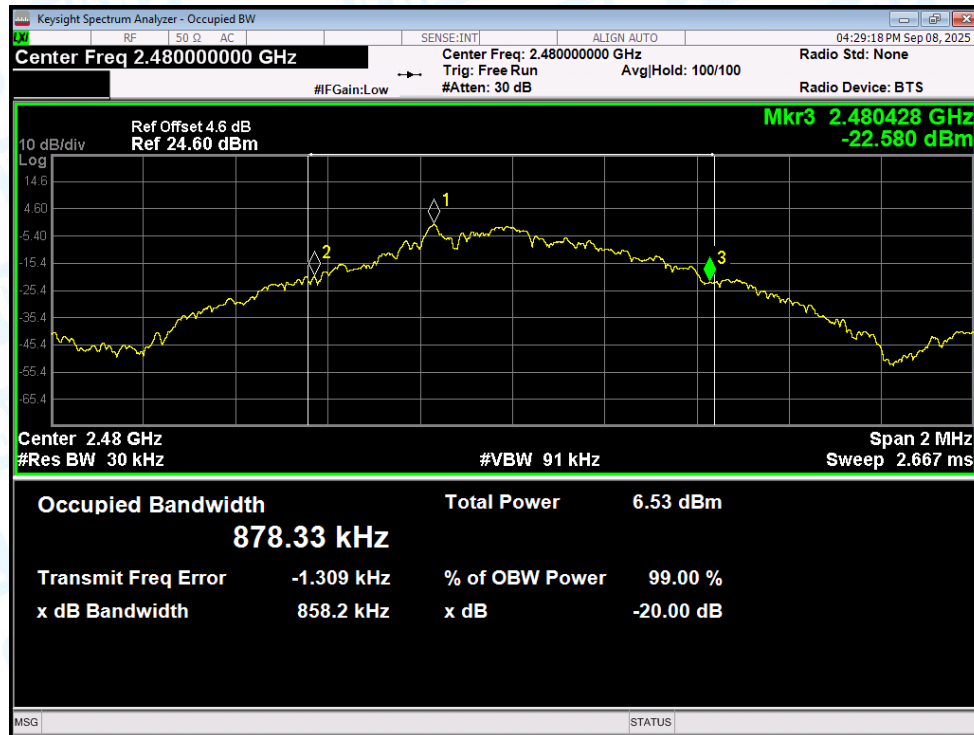
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



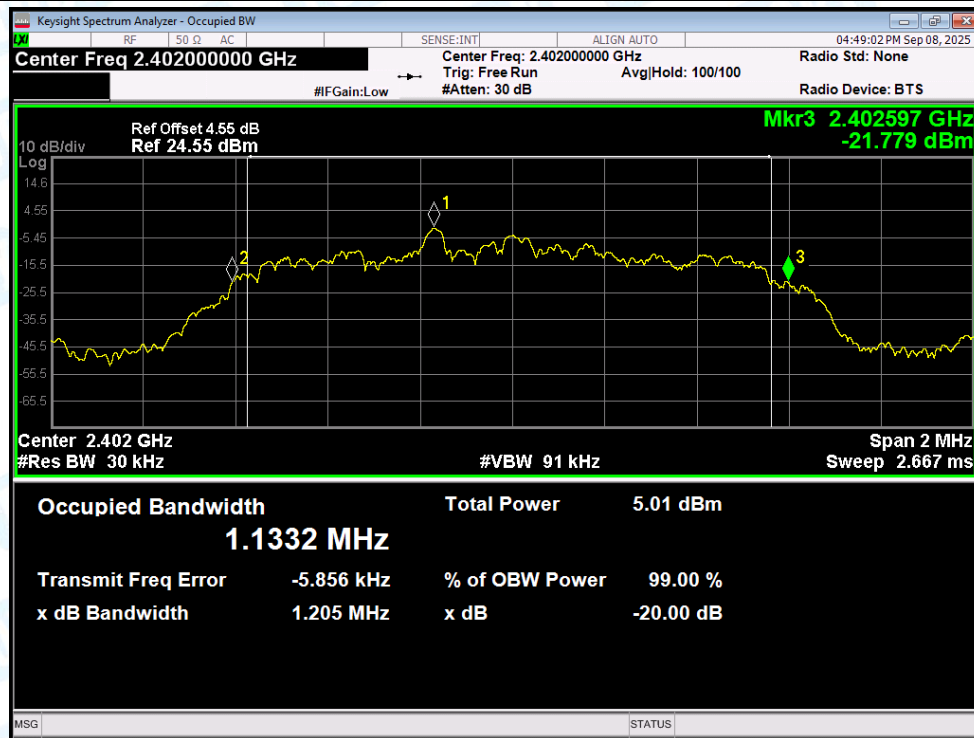
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



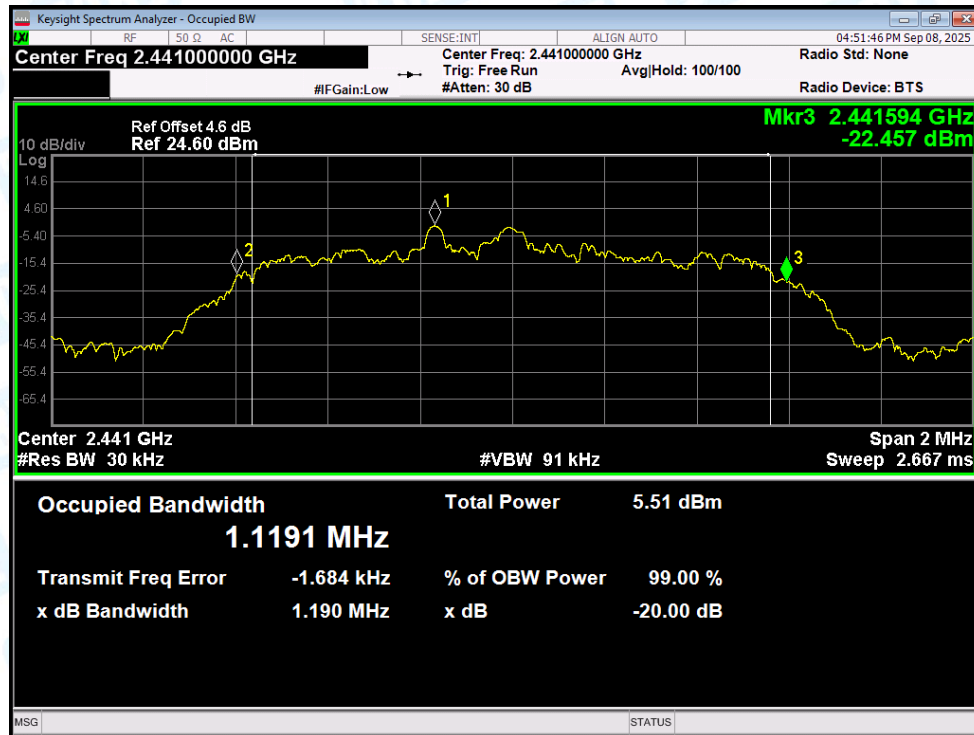
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



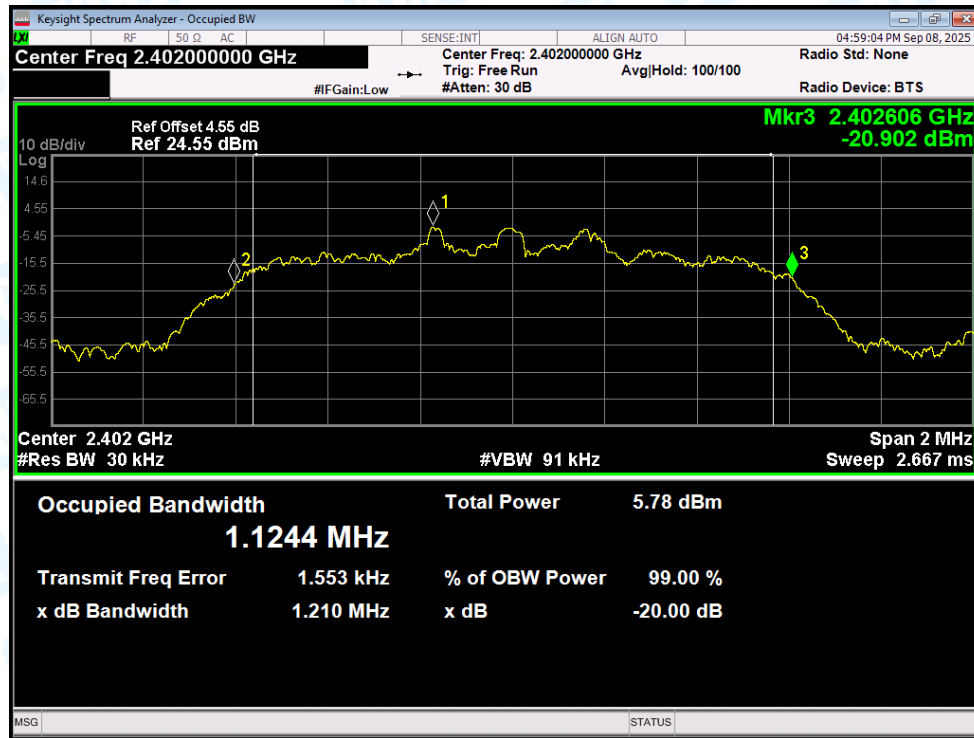
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



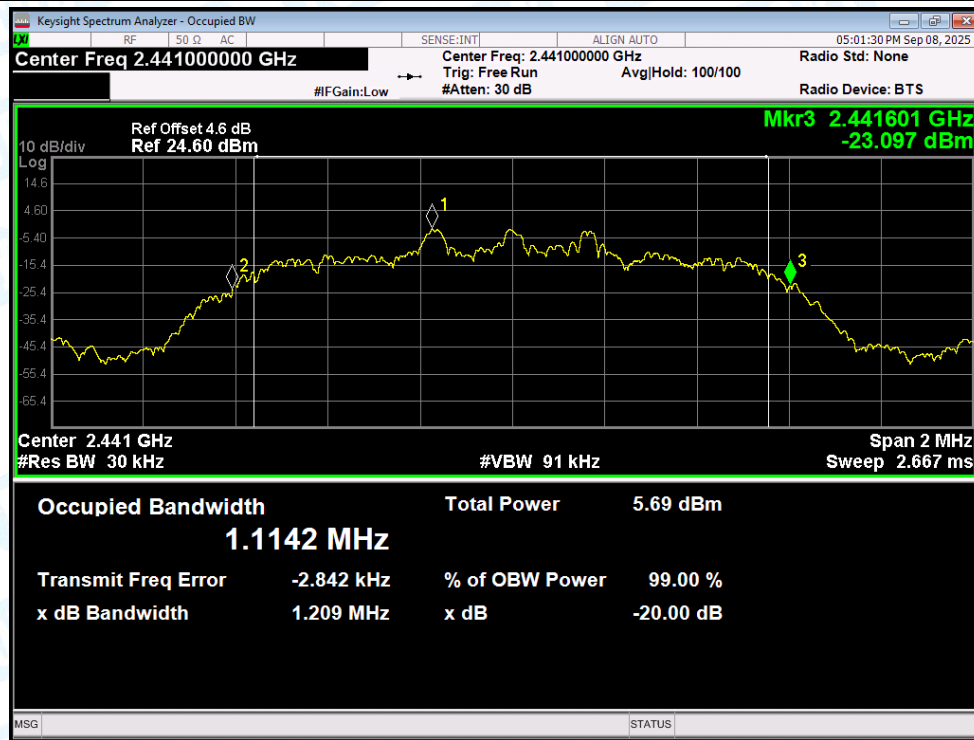
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

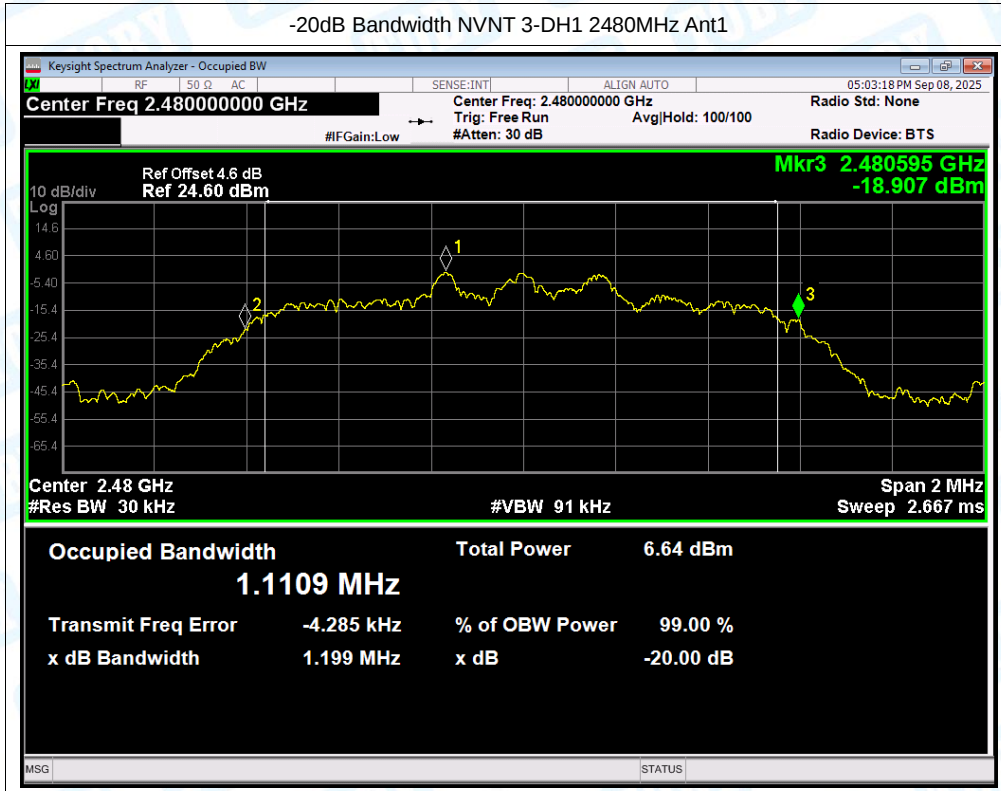


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1





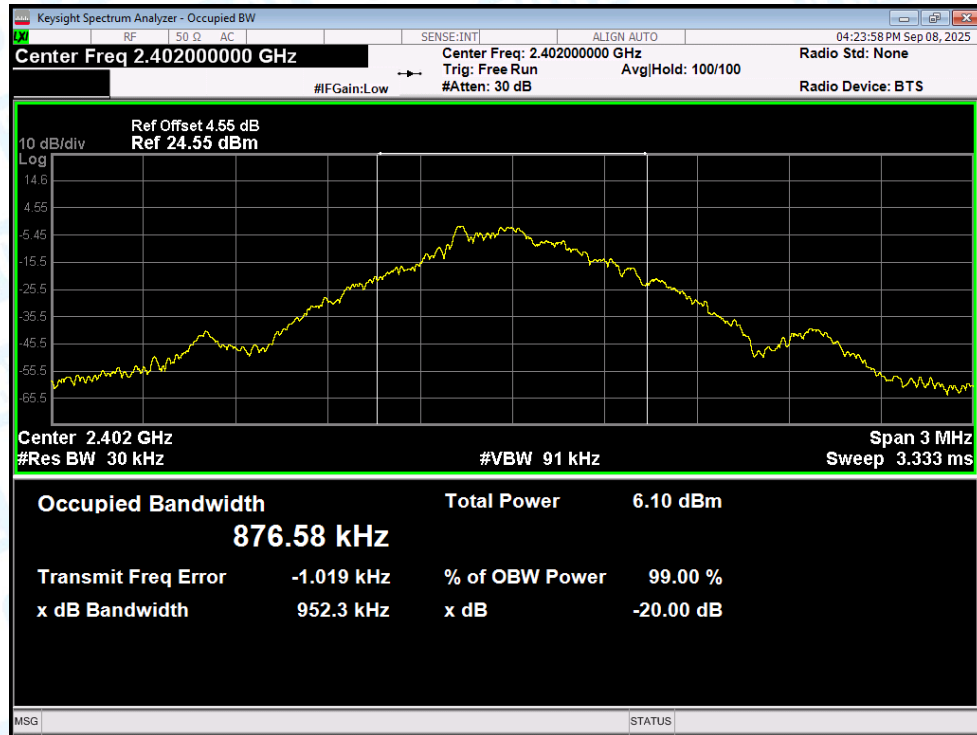
4. Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.877
NVNT	1-DH1	2441	Ant1	0.877
NVNT	1-DH1	2480	Ant1	0.878
NVNT	2-DH1	2402	Ant1	1.139
NVNT	2-DH1	2441	Ant1	1.127
NVNT	2-DH1	2480	Ant1	1.127
NVNT	3-DH1	2402	Ant1	1.127
NVNT	3-DH1	2441	Ant1	1.127
NVNT	3-DH1	2480	Ant1	1.108

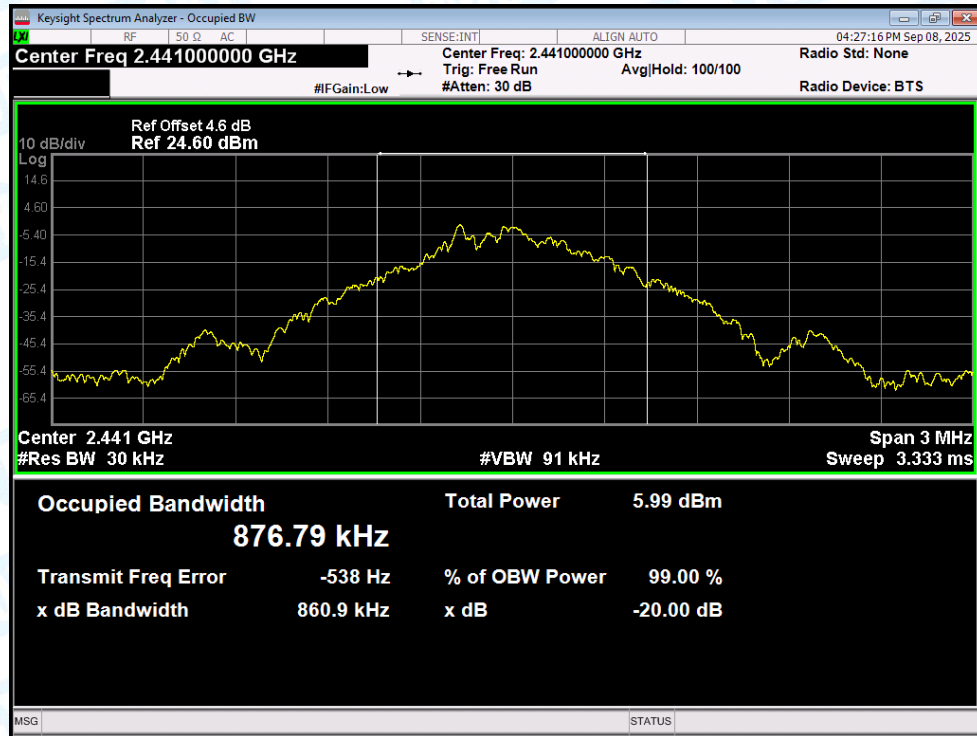
Note: RF Conducted test Offset= cable loss+ Attenuator(3dB).

Test Graphs

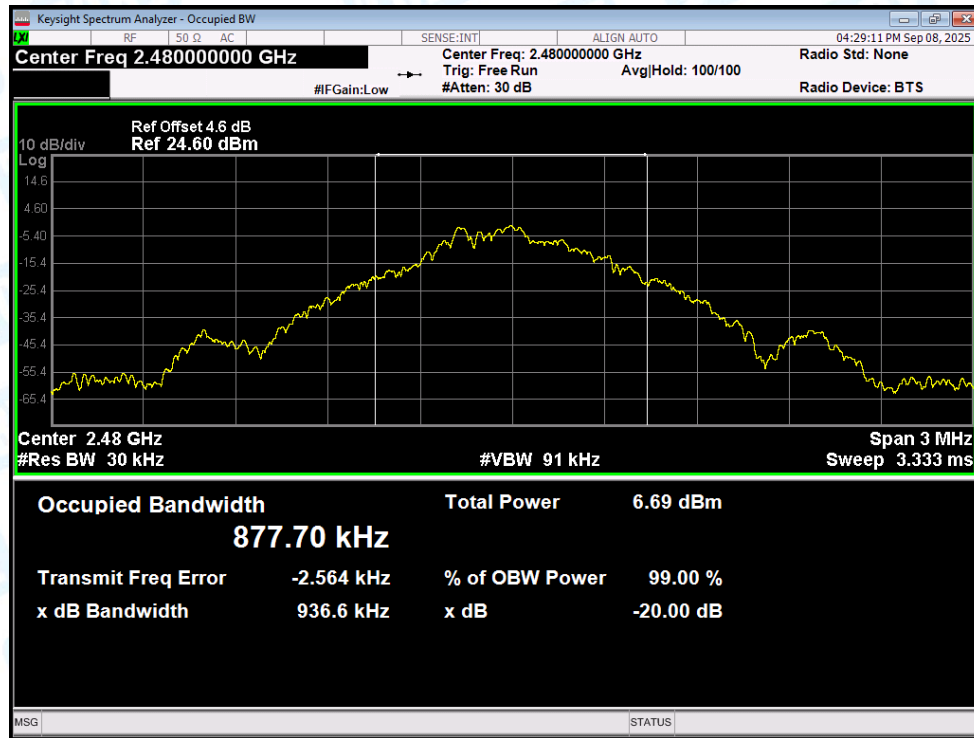
OBW NVNT 1-DH1 2402MHz Ant1



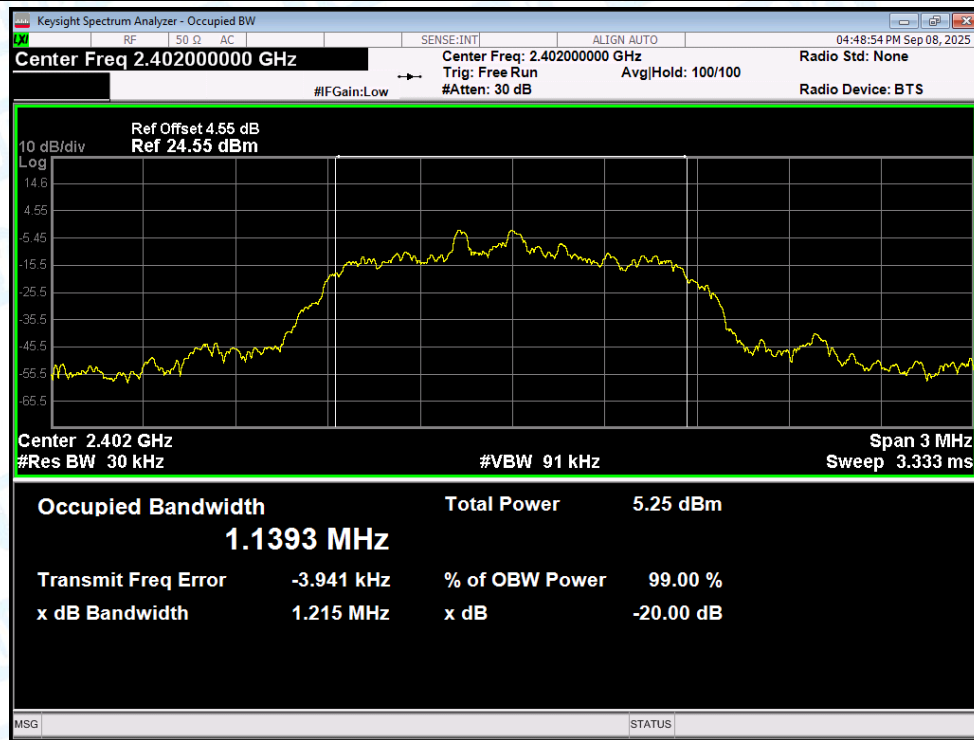
OBW NVNT 1-DH1 2441MHz Ant1



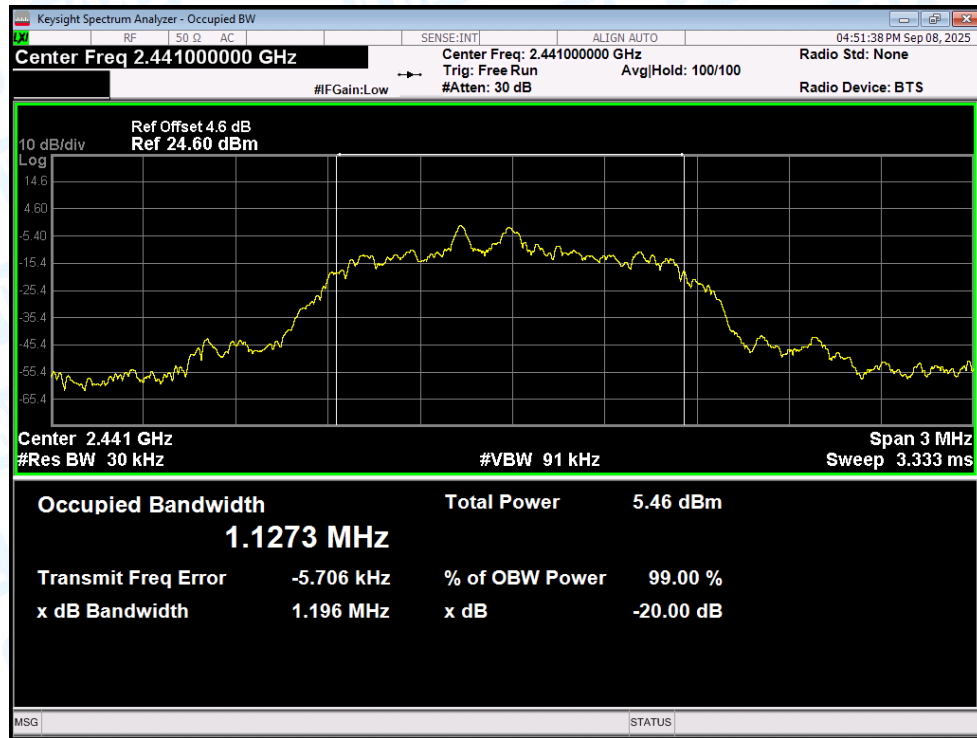
OBW NVNT 1-DH1 2480MHz Ant1



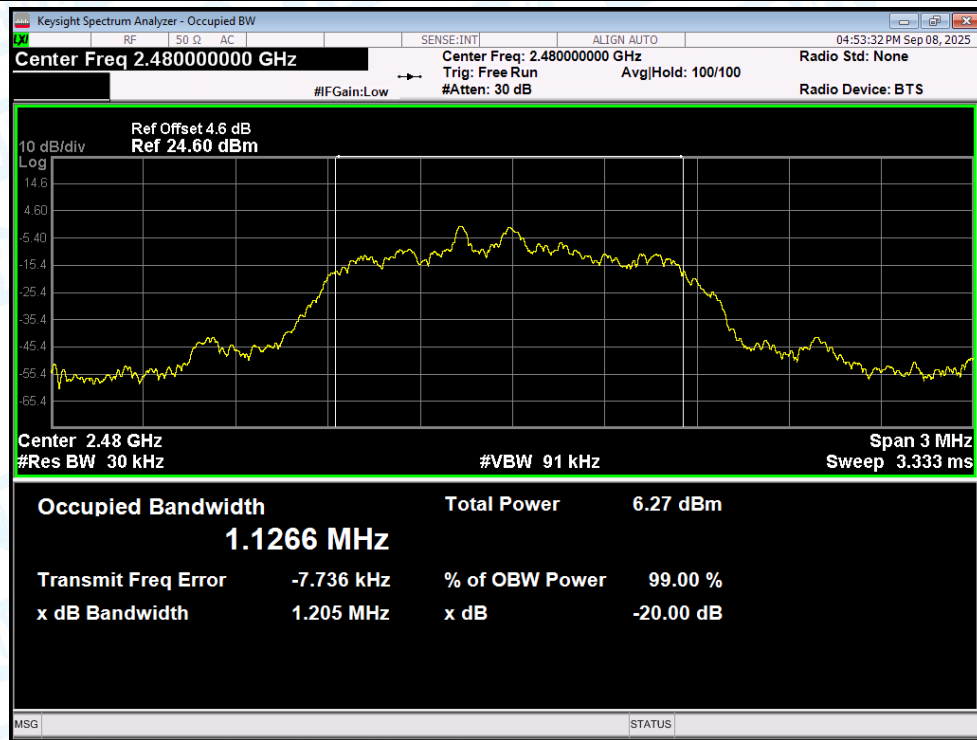
OBW NVNT 2-DH1 2402MHz Ant1



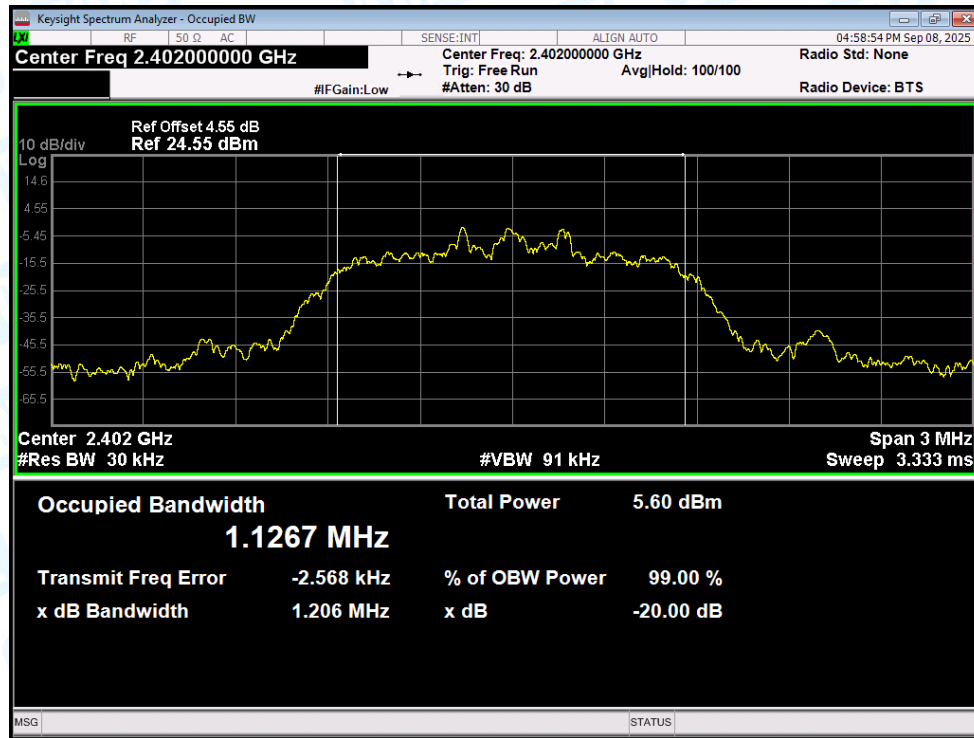
OBW NVNT 2-DH1 2441MHz Ant1



OBW NVNT 2-DH1 2480MHz Ant1

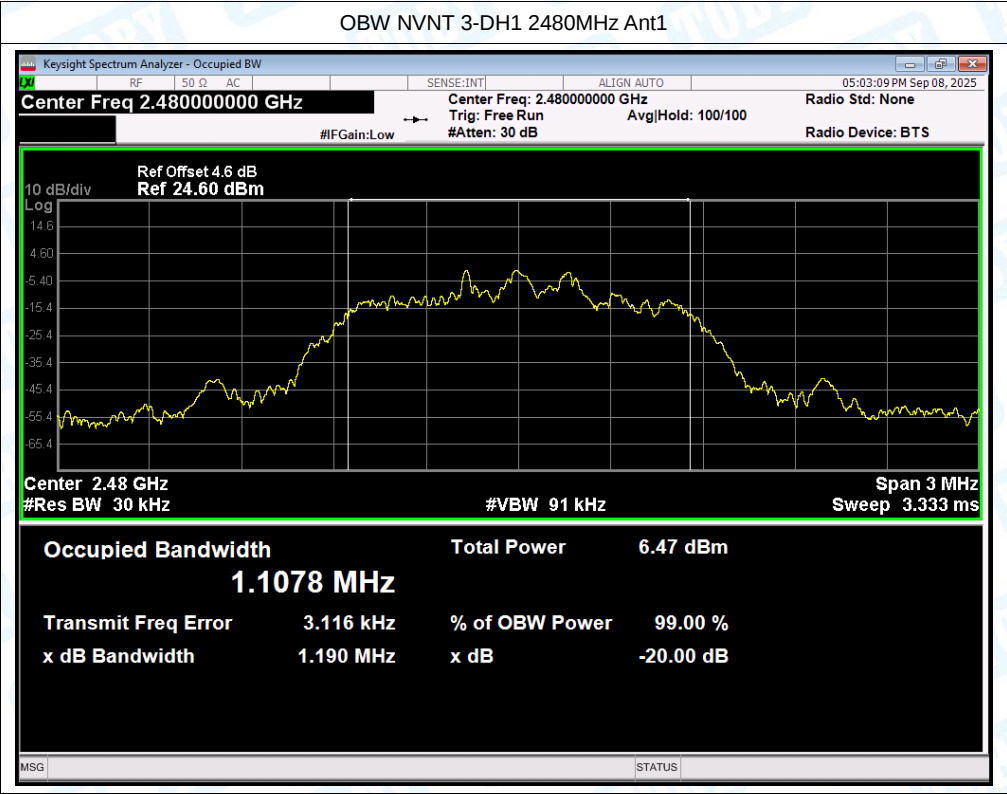


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1





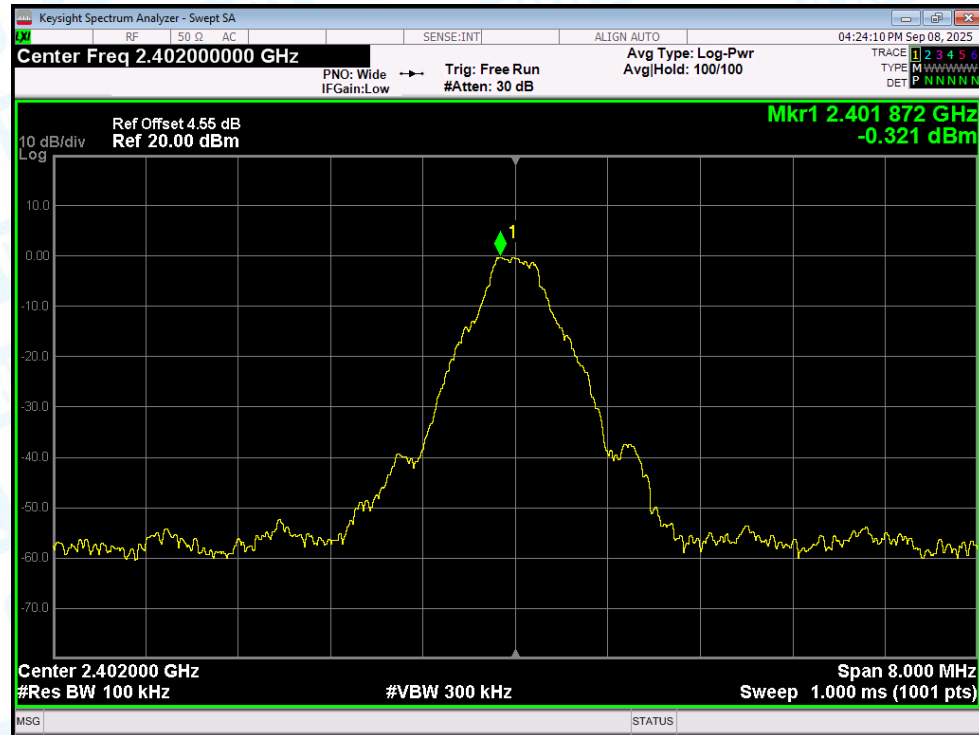
5. Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-54.31	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-54.34	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-54.93	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-54.11	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-53.19	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-55.24	-20	Pass

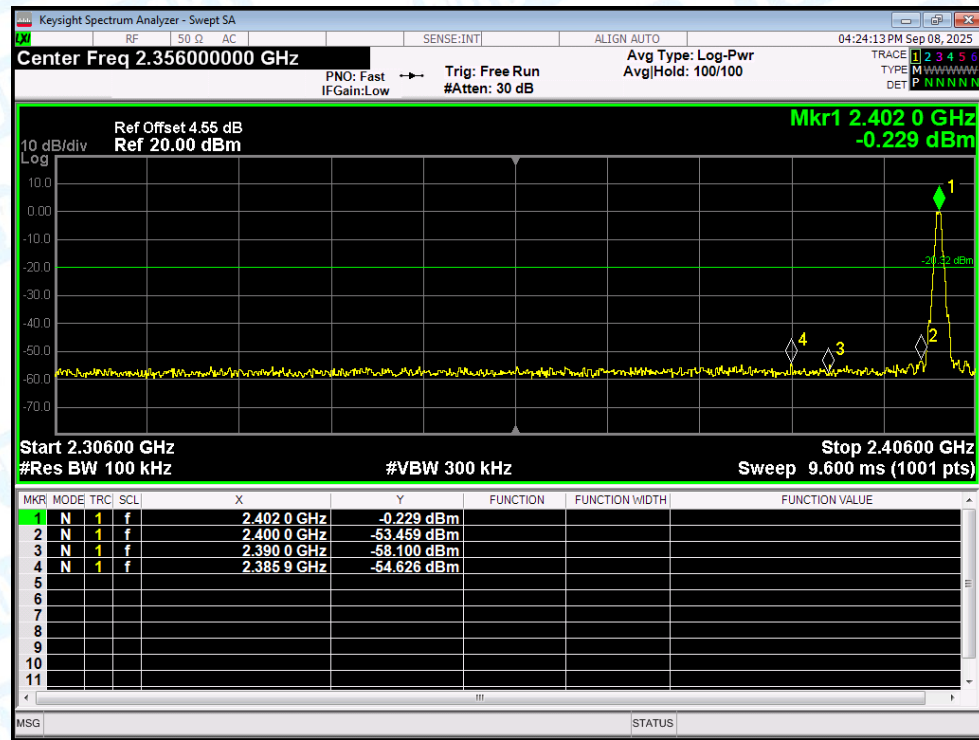
Note: RF Conducted test Offset= cable loss+ Attenuator(3dB).

Test Graphs

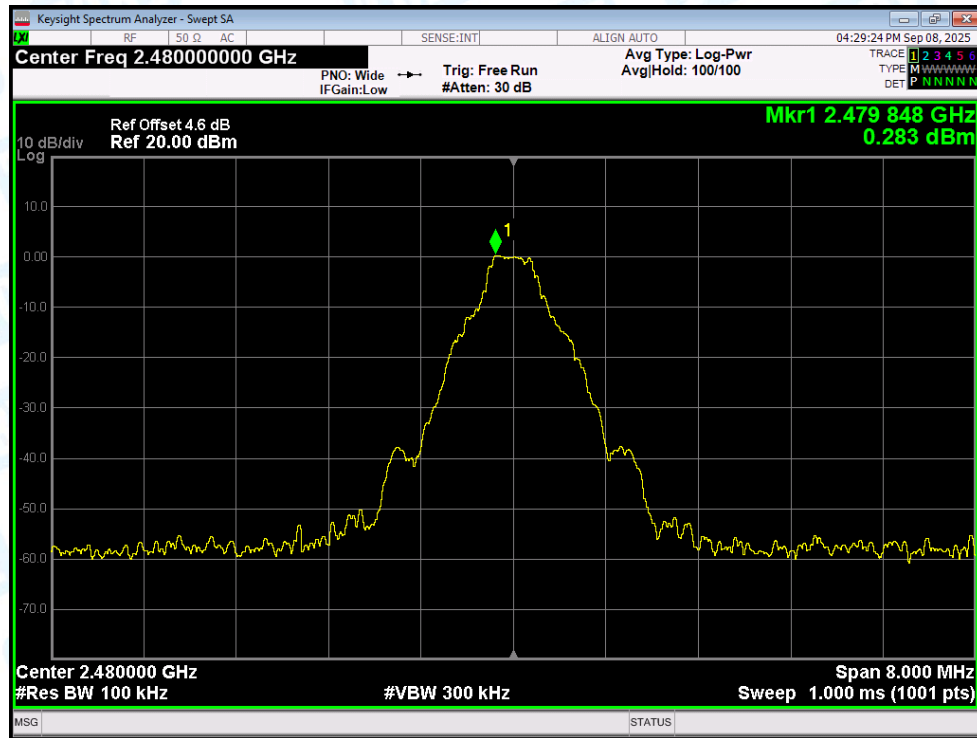
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



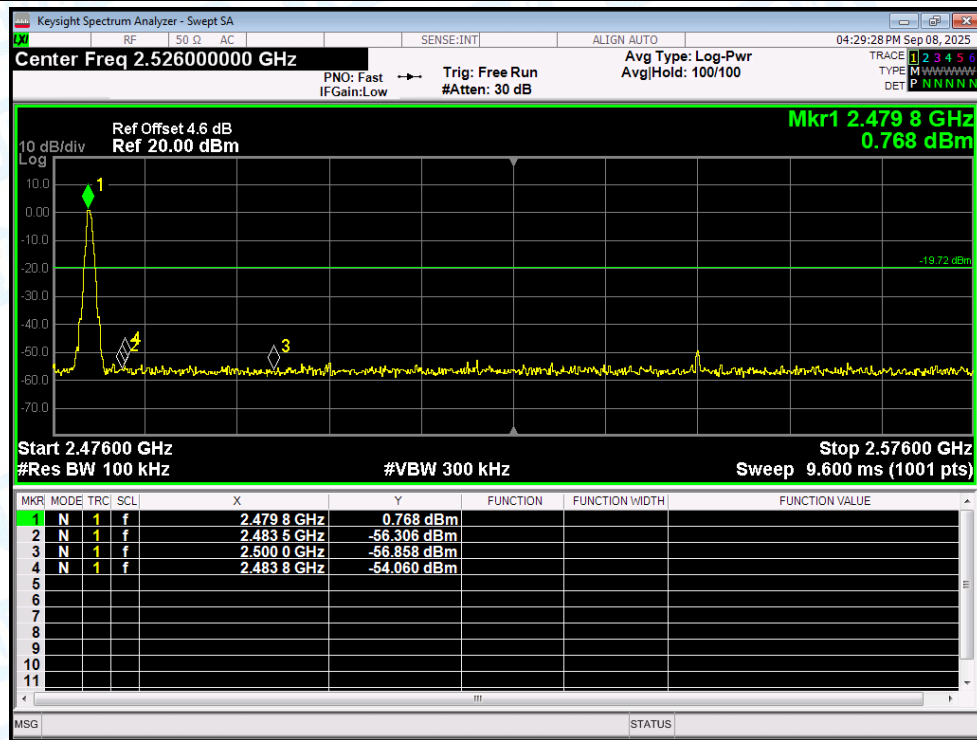
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



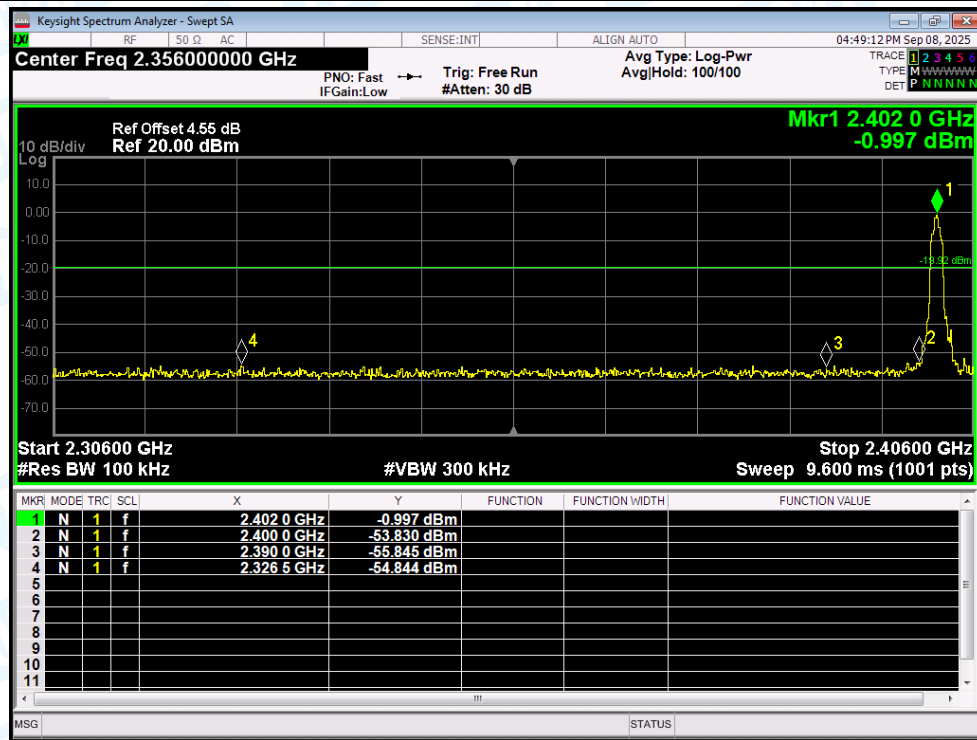
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission

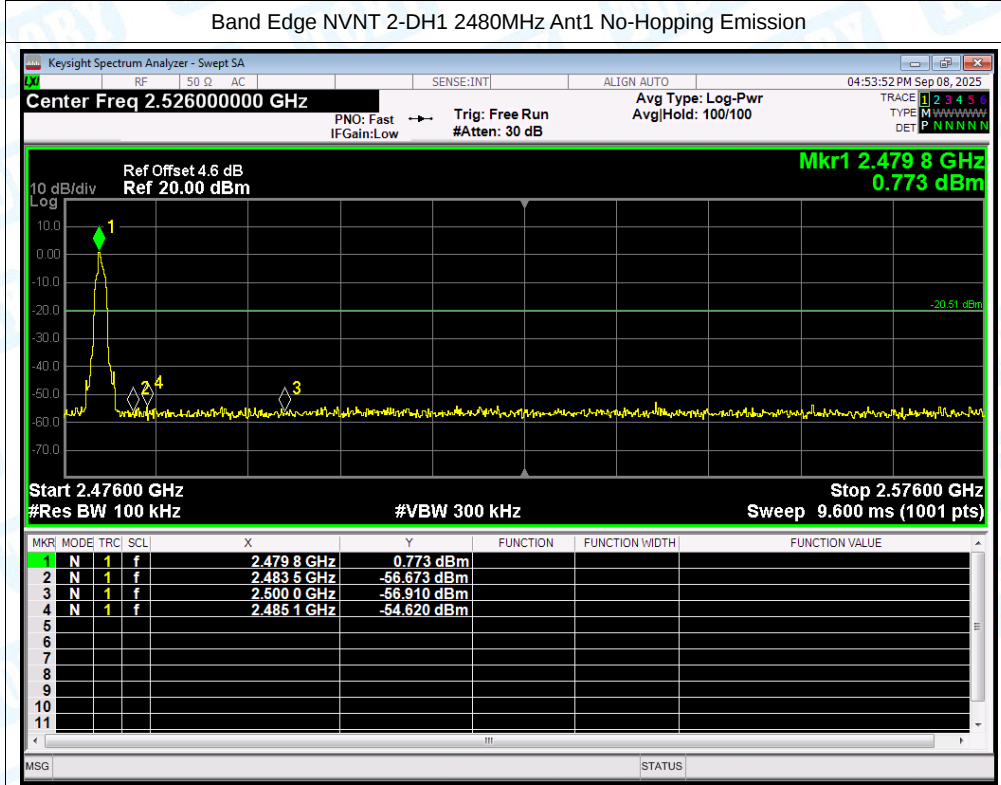
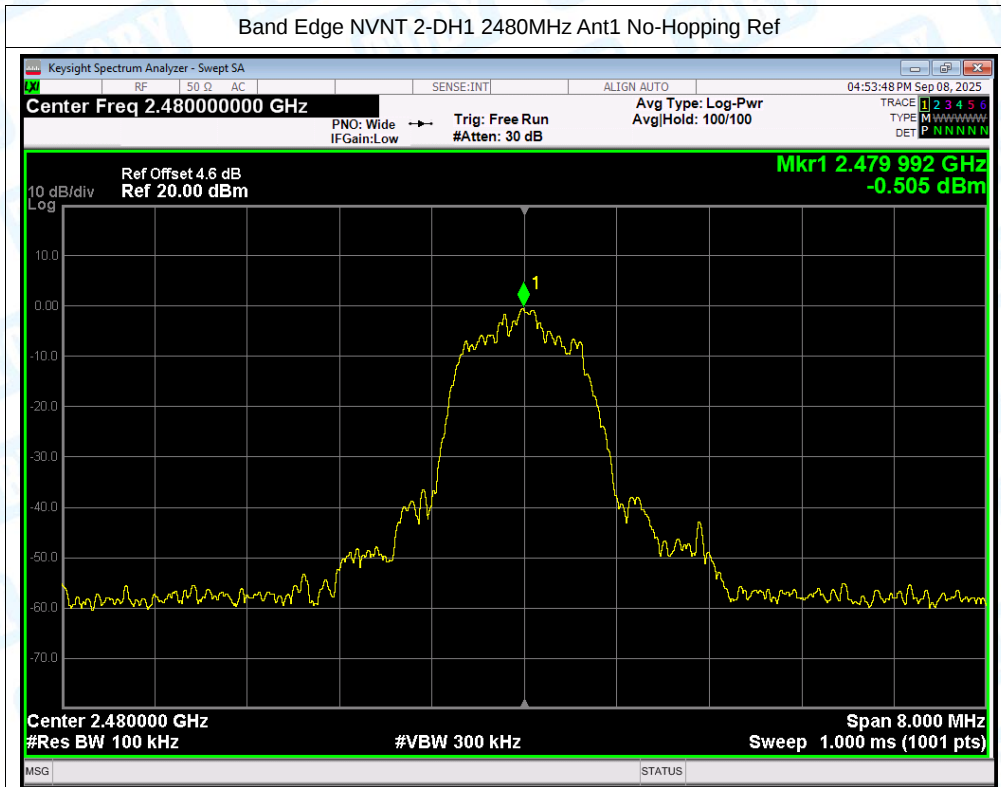


Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission

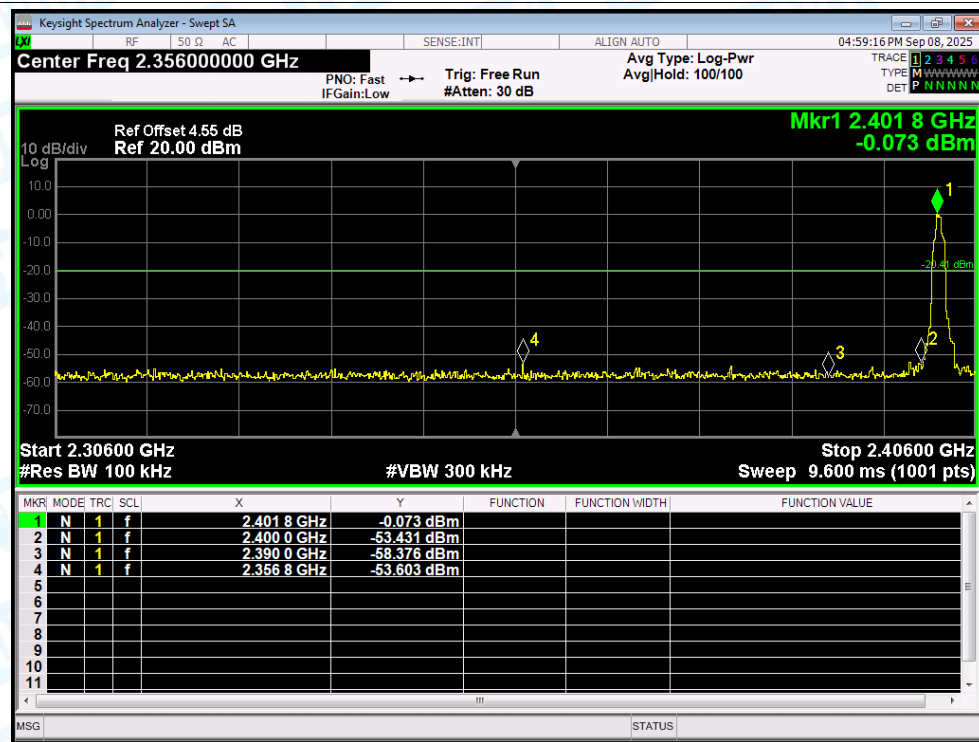




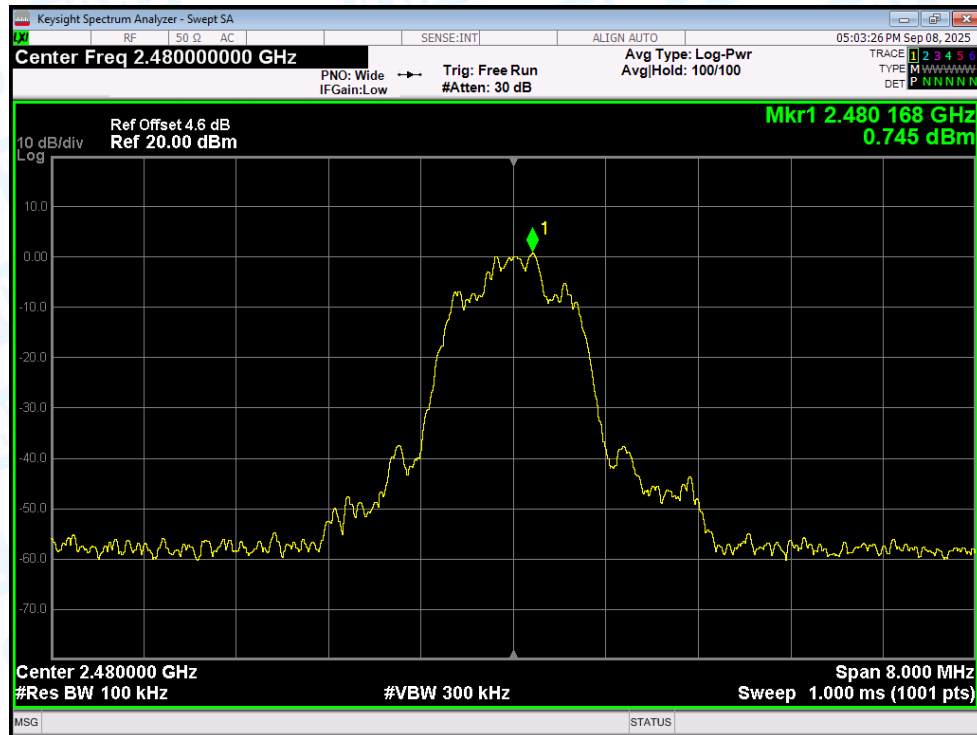
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



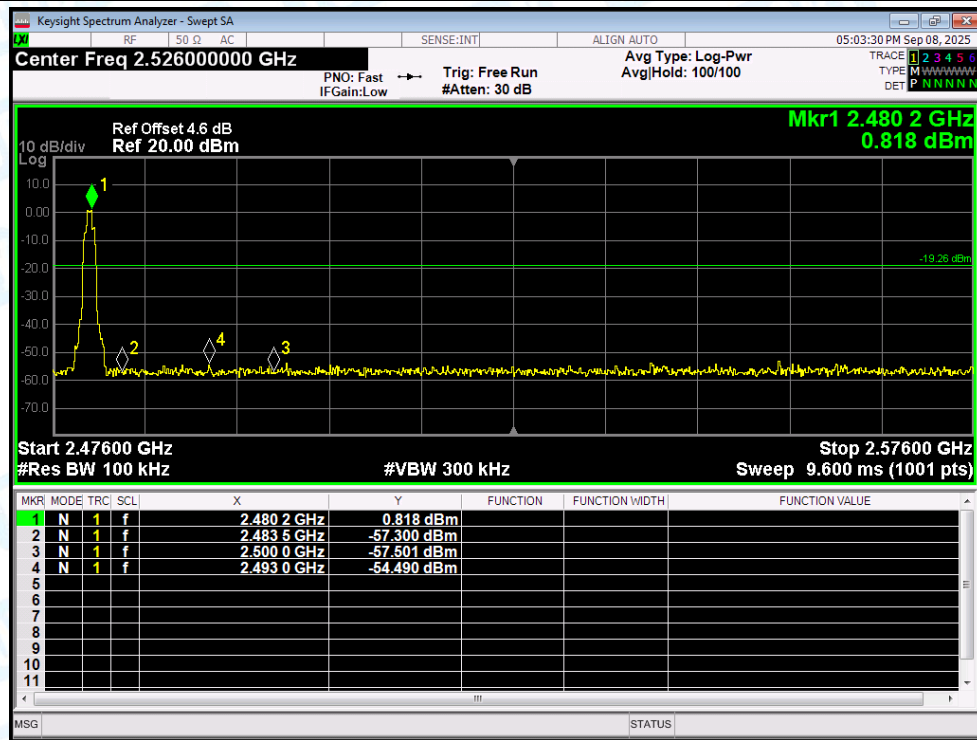
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



Band Edge NVNT 3-DH1 2480MHz Ant1 No-Hopping Ref



Band Edge NVNT 3-DH1 2480MHz Ant1 No-Hopping Emission



6. Band Edge(Hopping)

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-53.35	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-53.95	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-53.01	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-54.15	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-54.15	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-53.31	-20	Pass

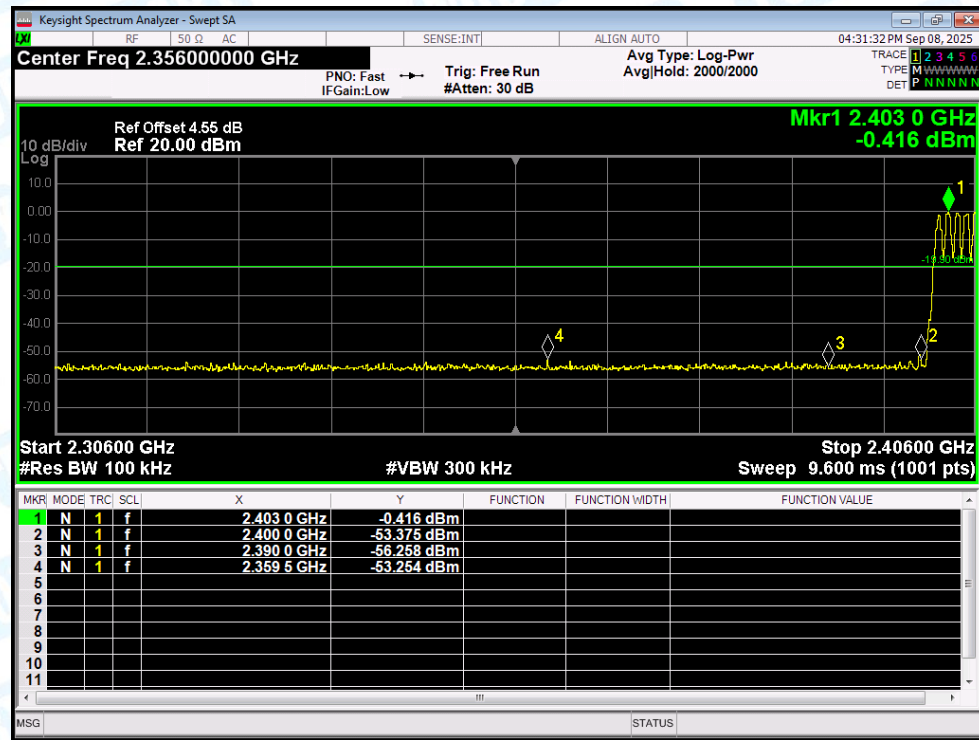
Note: RF Conducted test Offset= cable loss+ Attenuator(3dB).

Test Graphs

Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref



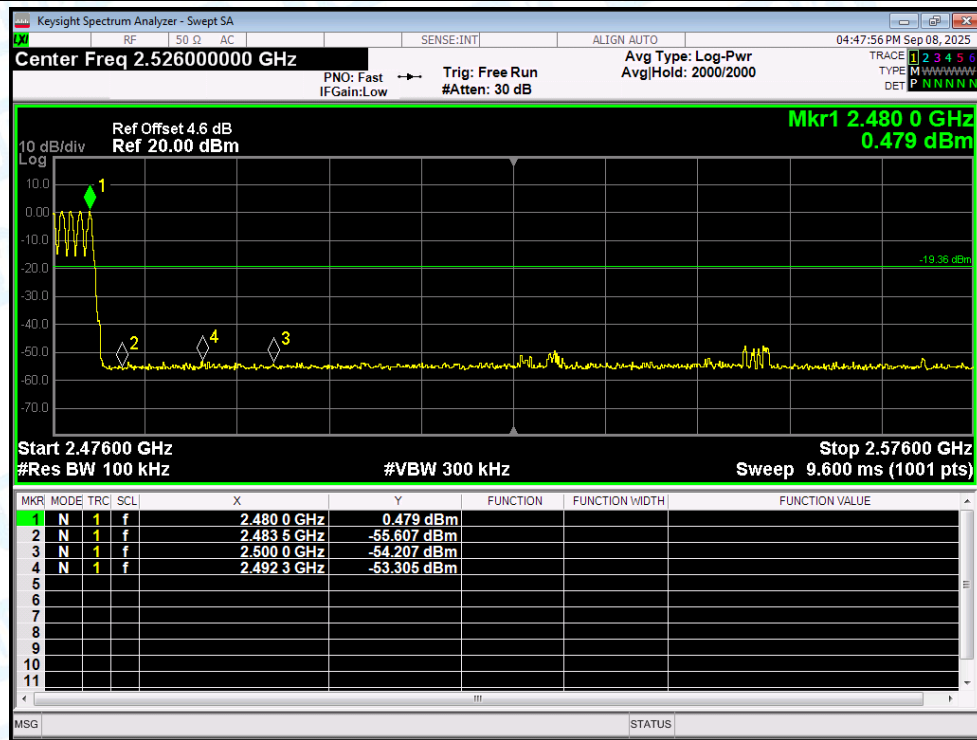
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Ref



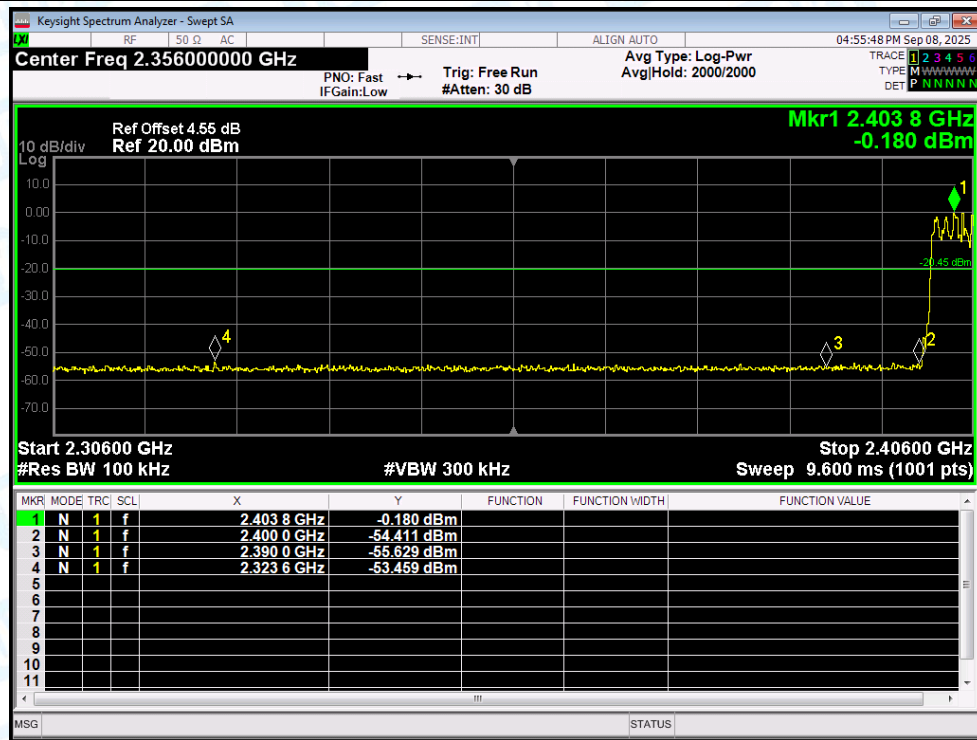
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Ref



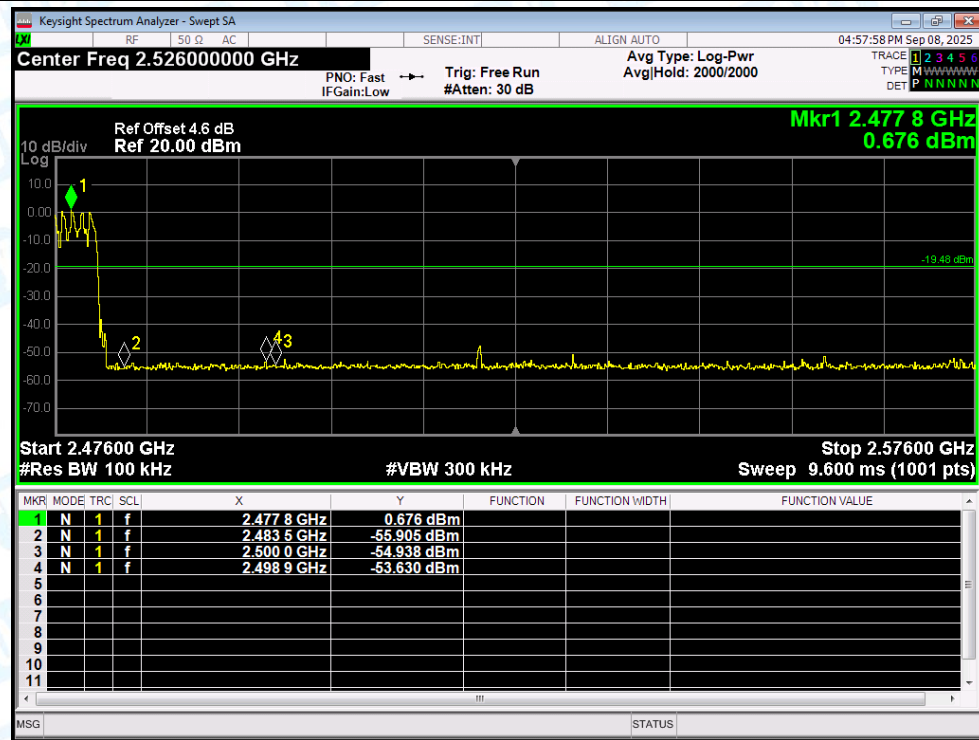
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Ref



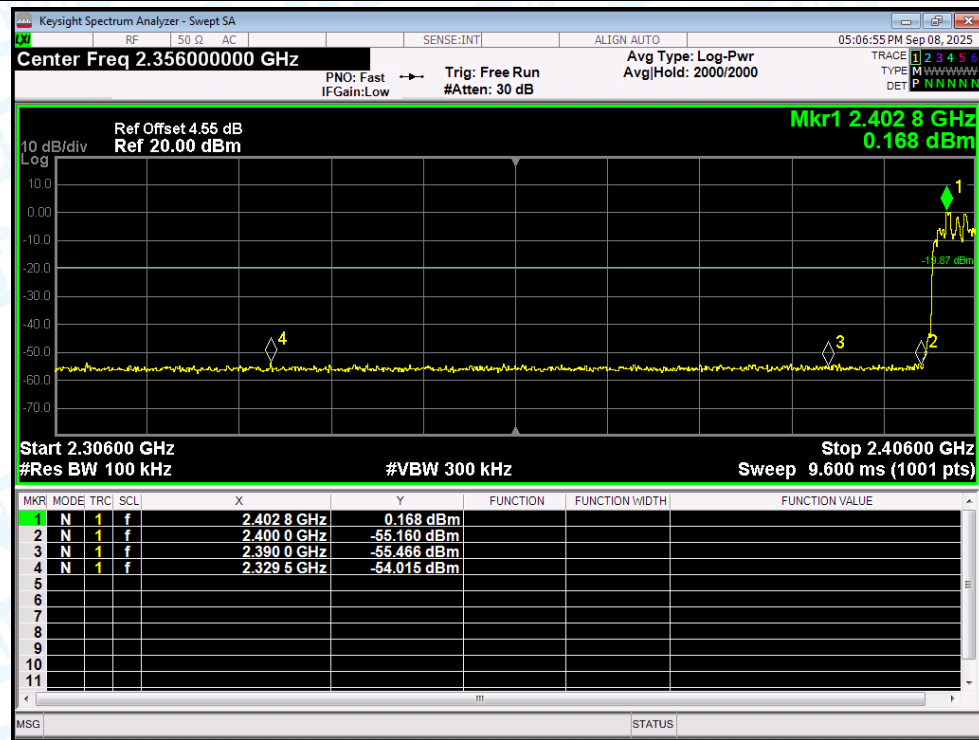
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Emission

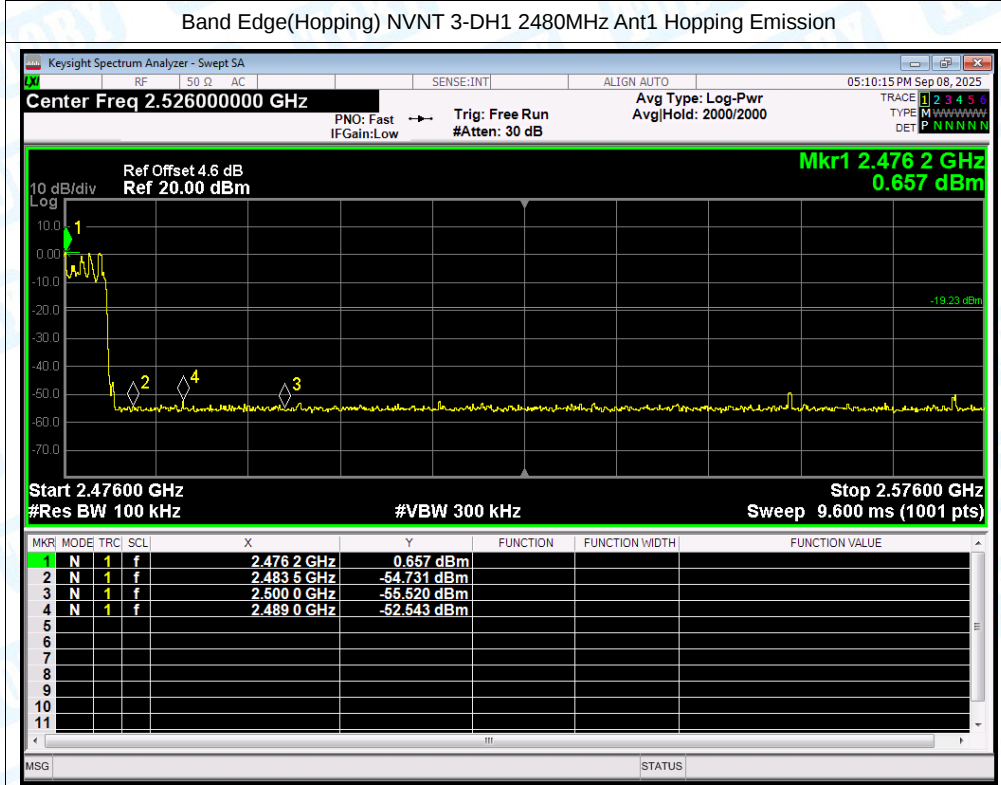


Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Emission





7. Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-48.73	-20	Pass
NVNT	1-DH1	2441	Ant1	-49.1	-20	Pass
NVNT	1-DH1	2480	Ant1	-49.94	-20	Pass
NVNT	2-DH1	2402	Ant1	-49.27	-20	Pass
NVNT	2-DH1	2441	Ant1	-47.45	-20	Pass
NVNT	2-DH1	2480	Ant1	-49.66	-20	Pass
NVNT	3-DH1	2402	Ant1	-48.87	-20	Pass
NVNT	3-DH1	2441	Ant1	-49.33	-20	Pass
NVNT	3-DH1	2480	Ant1	-49.84	-20	Pass

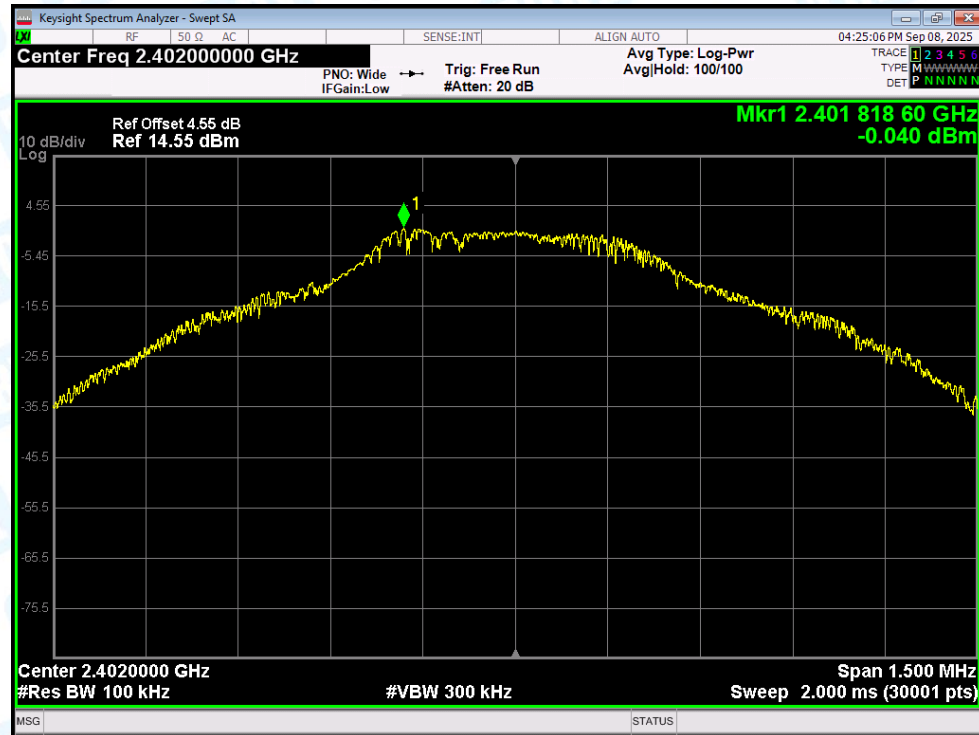
Note: RF Conducted test Offset= cable loss+ Attenuator(3dB).

Remark: Regarding the spurious emissions from 30MHz to 26.5GHz, the cable loss and attenuator factor have been set in the 'Offset' of the Spectrum Analyzer during the test.

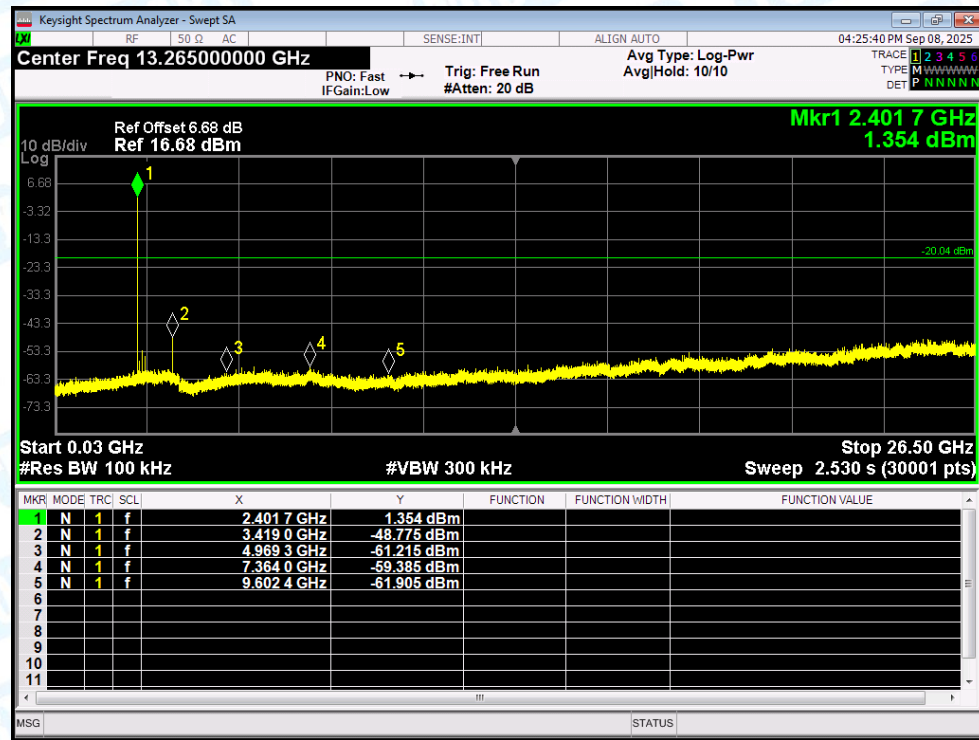
For conducted spurious emission test, 'Offset' is the maximum value in the range of test.

Test Graphs

Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



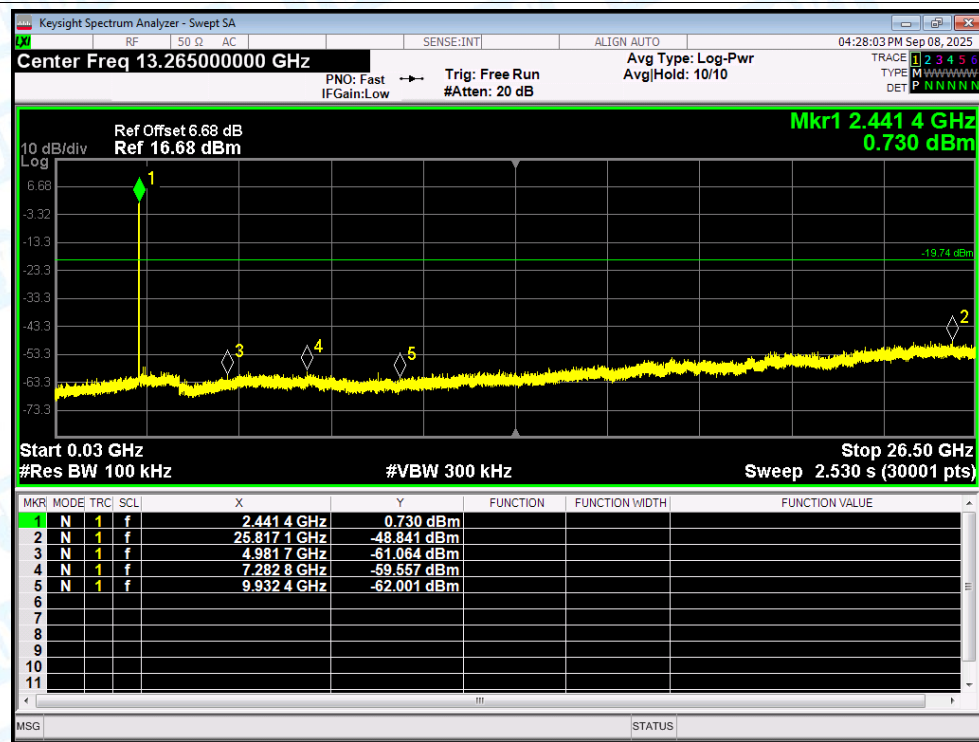
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



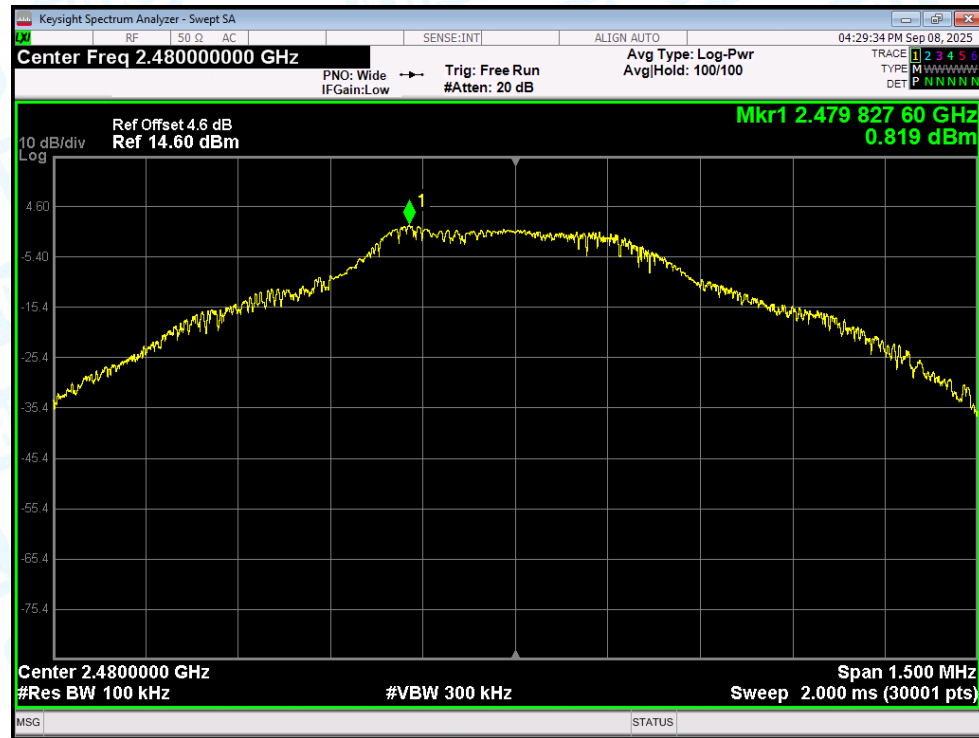
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



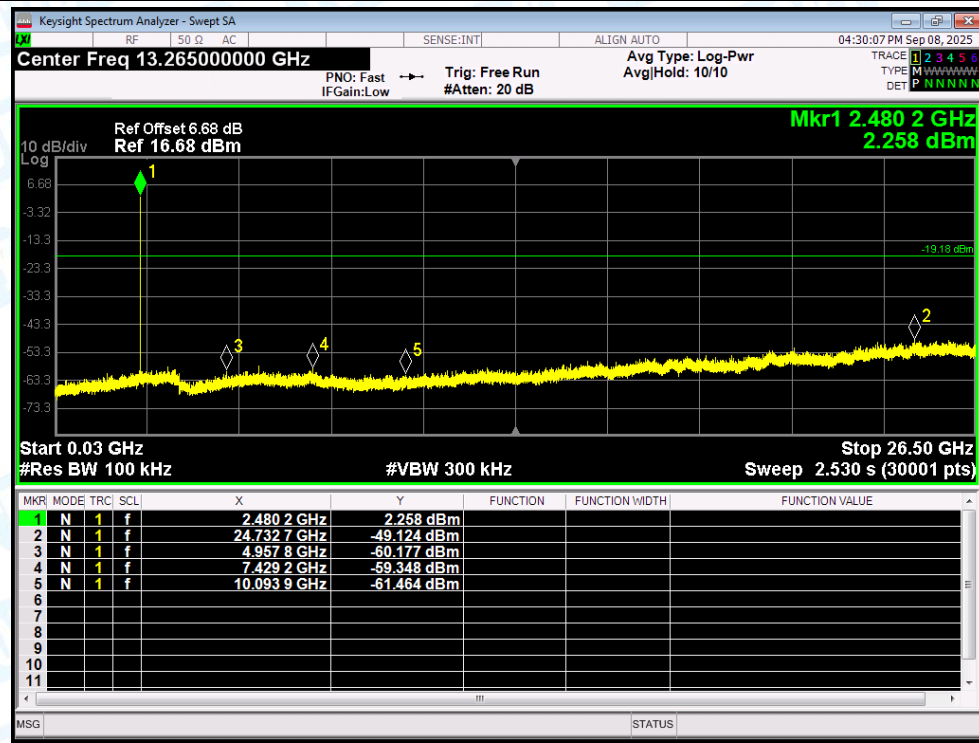
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



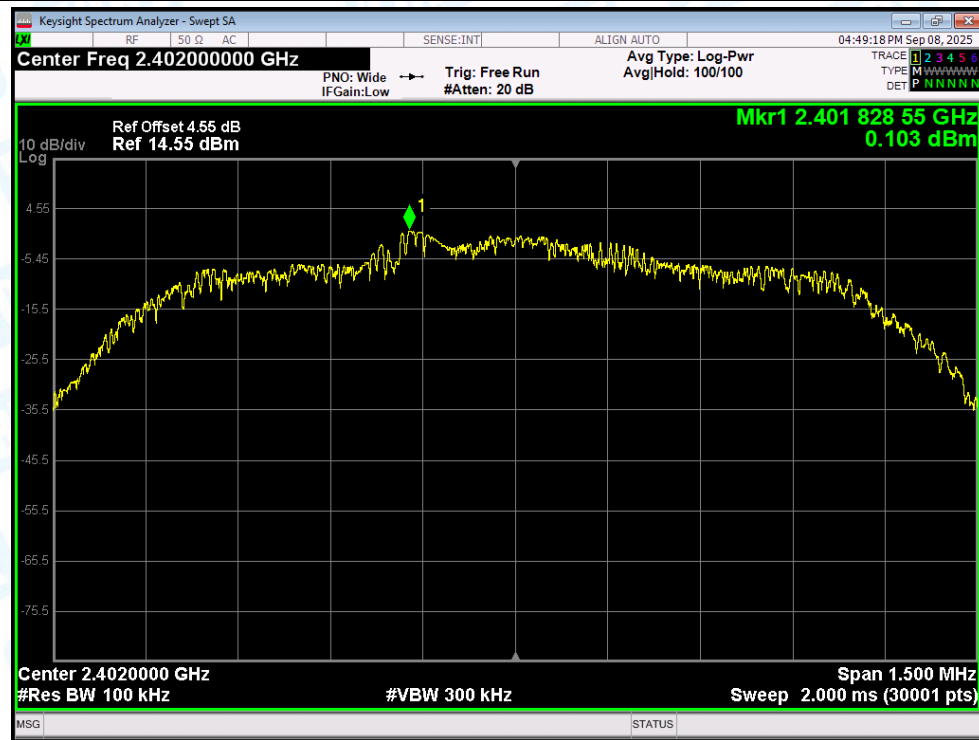
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



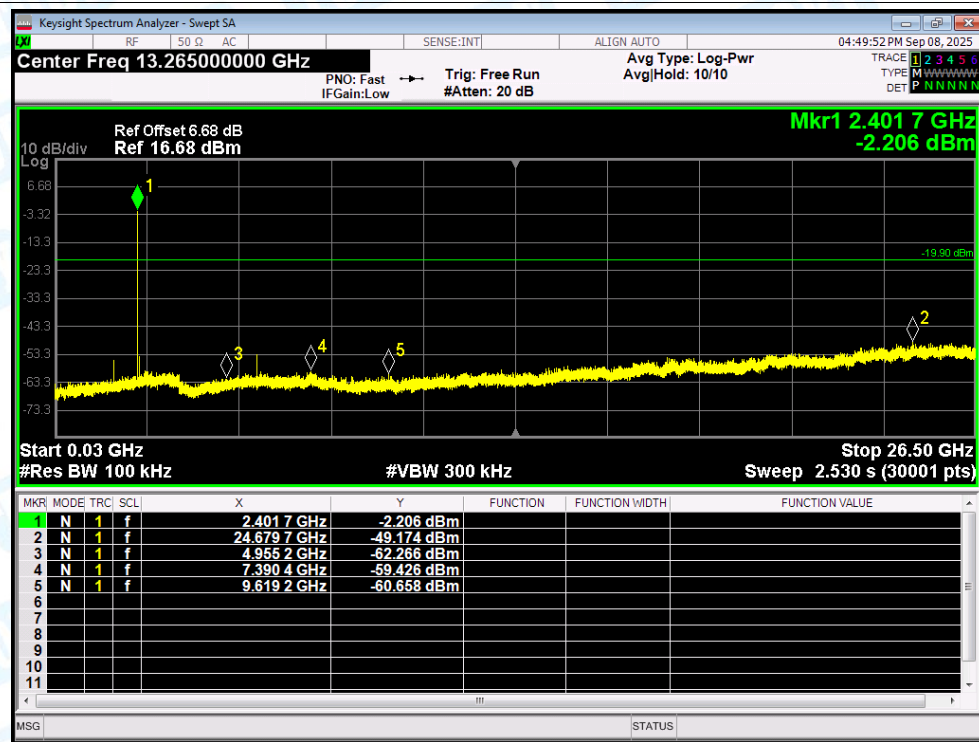
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



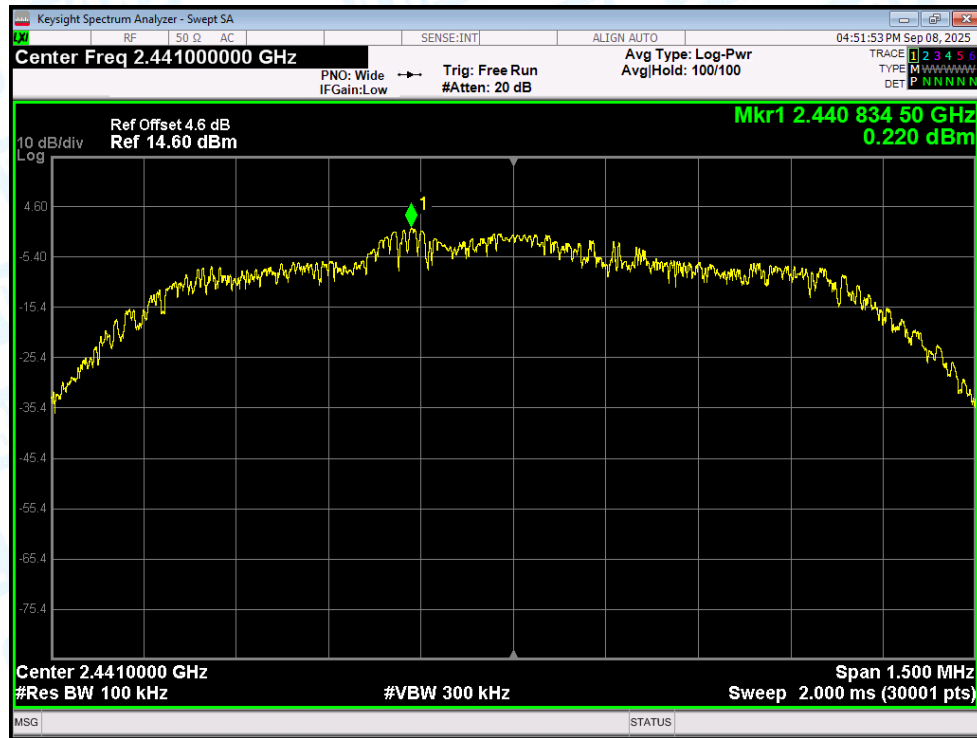
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



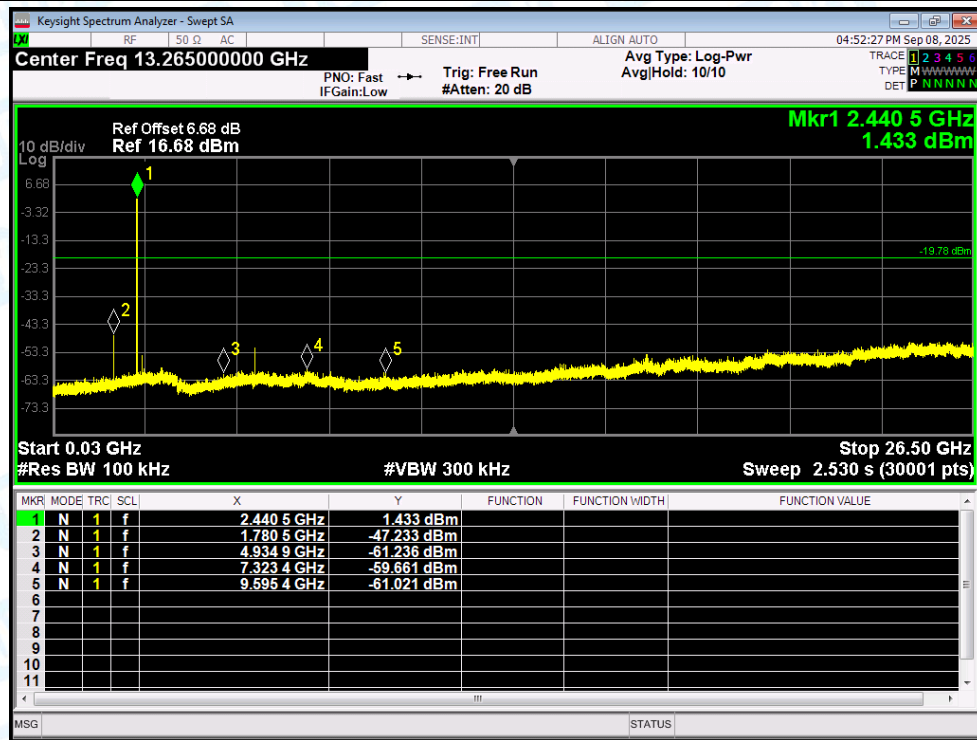
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



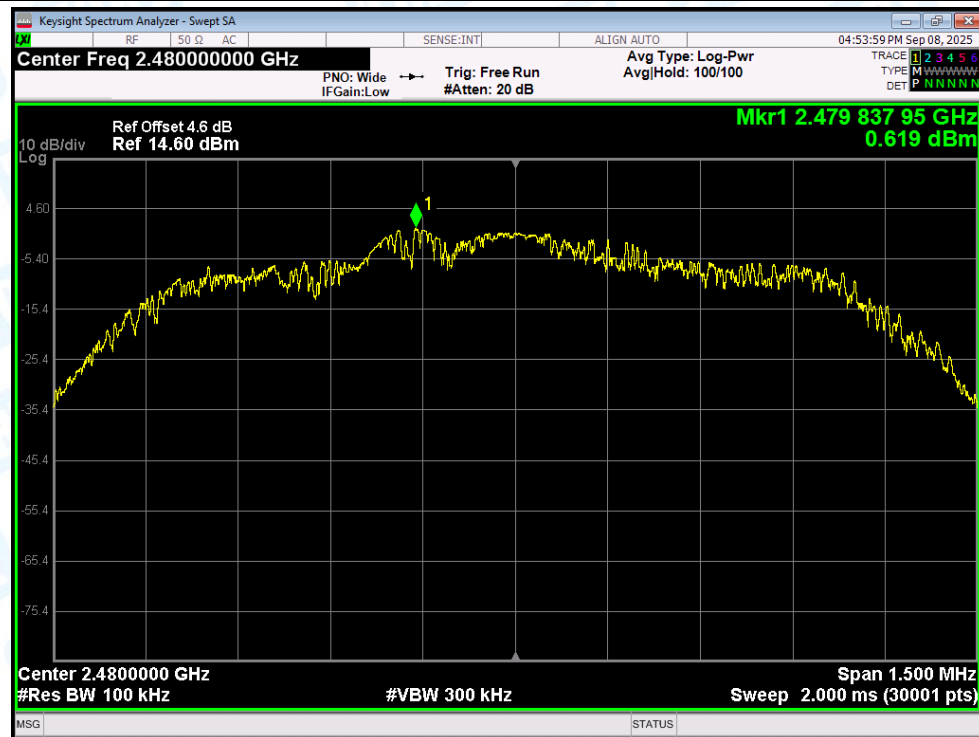
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



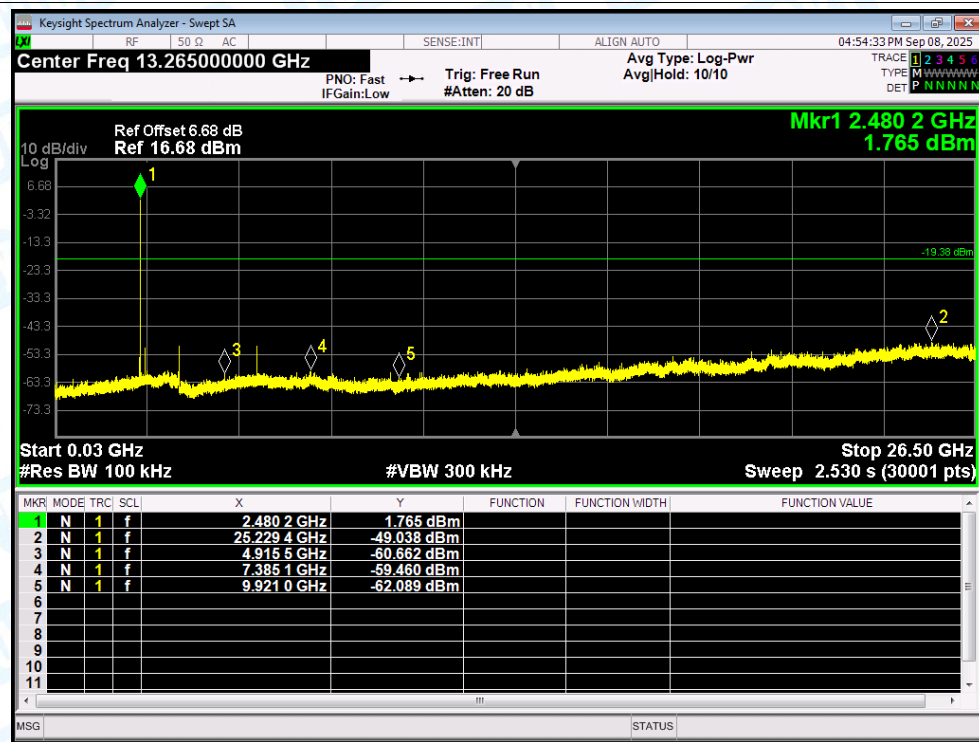
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



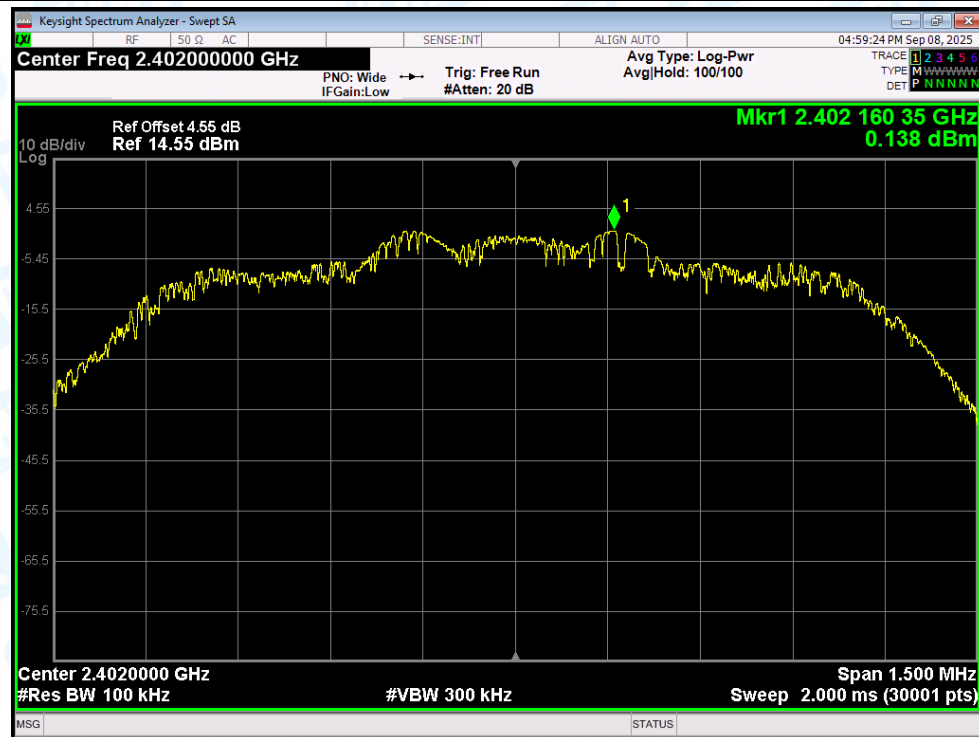
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



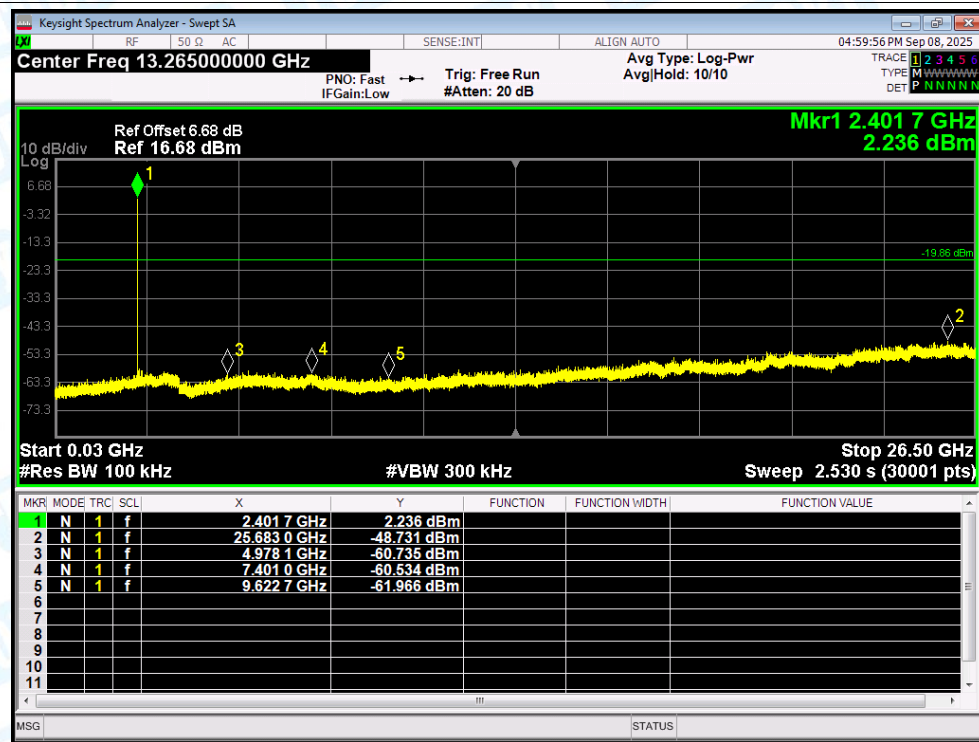
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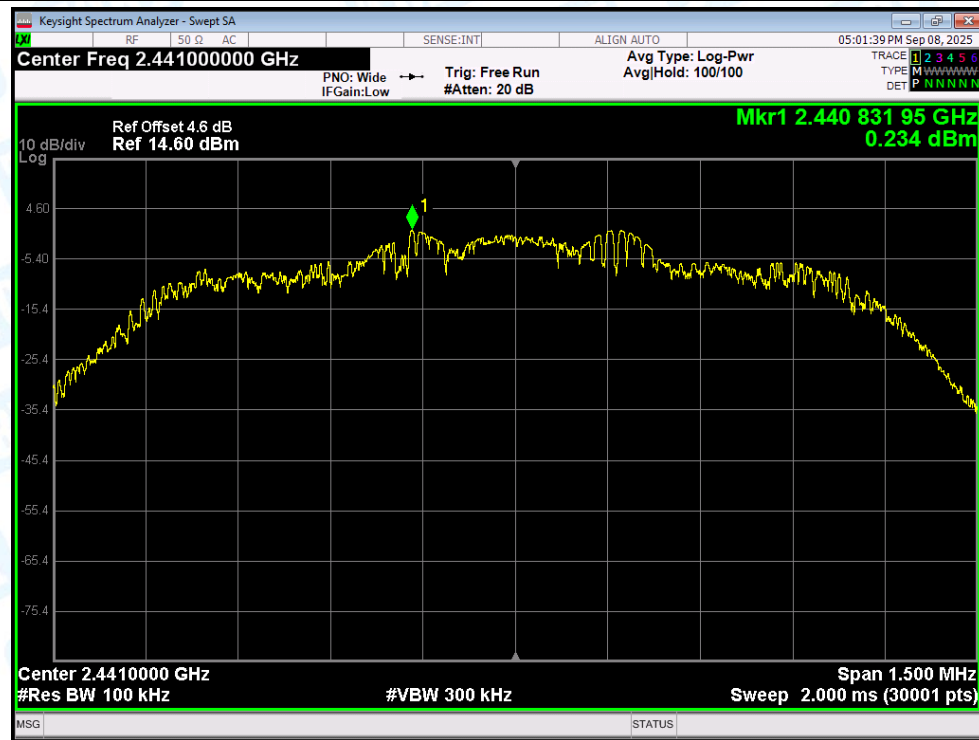
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



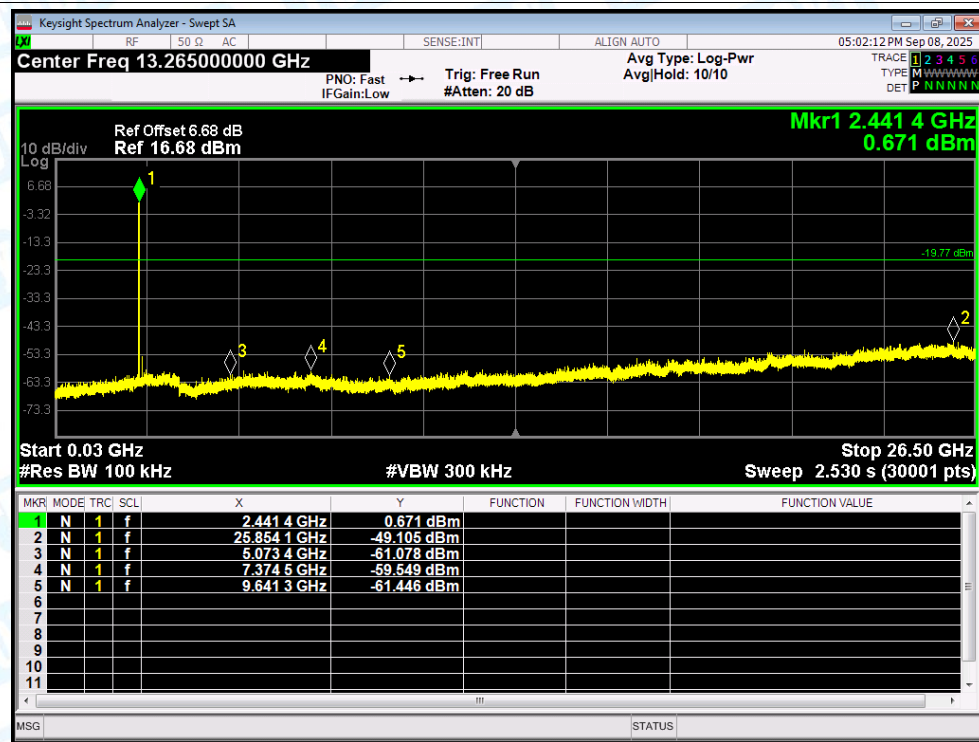
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Emission



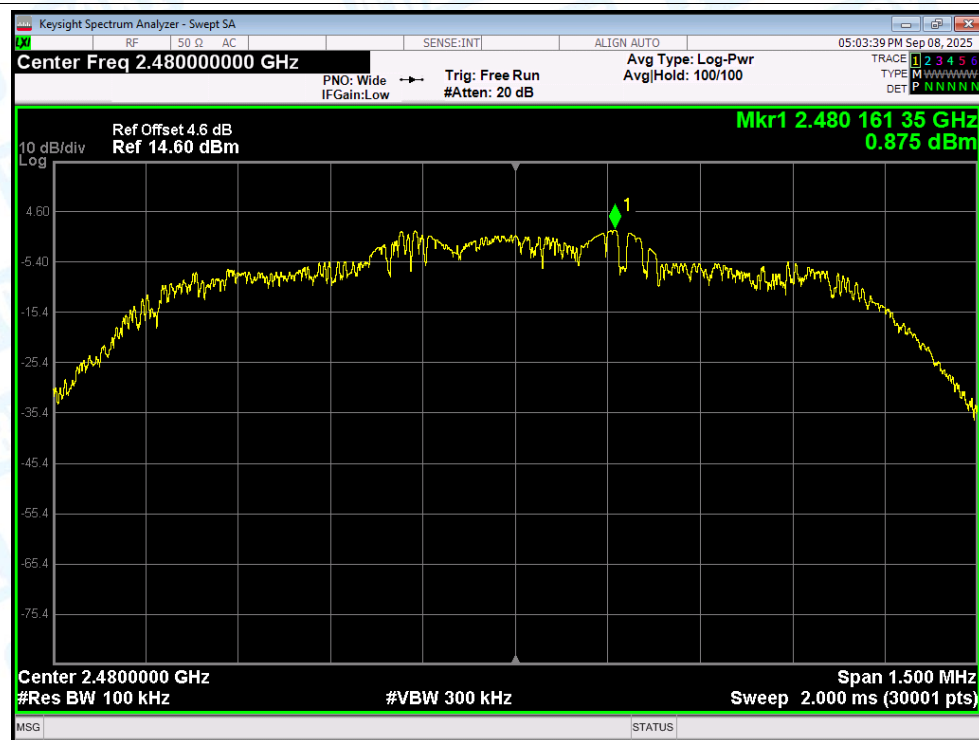
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref



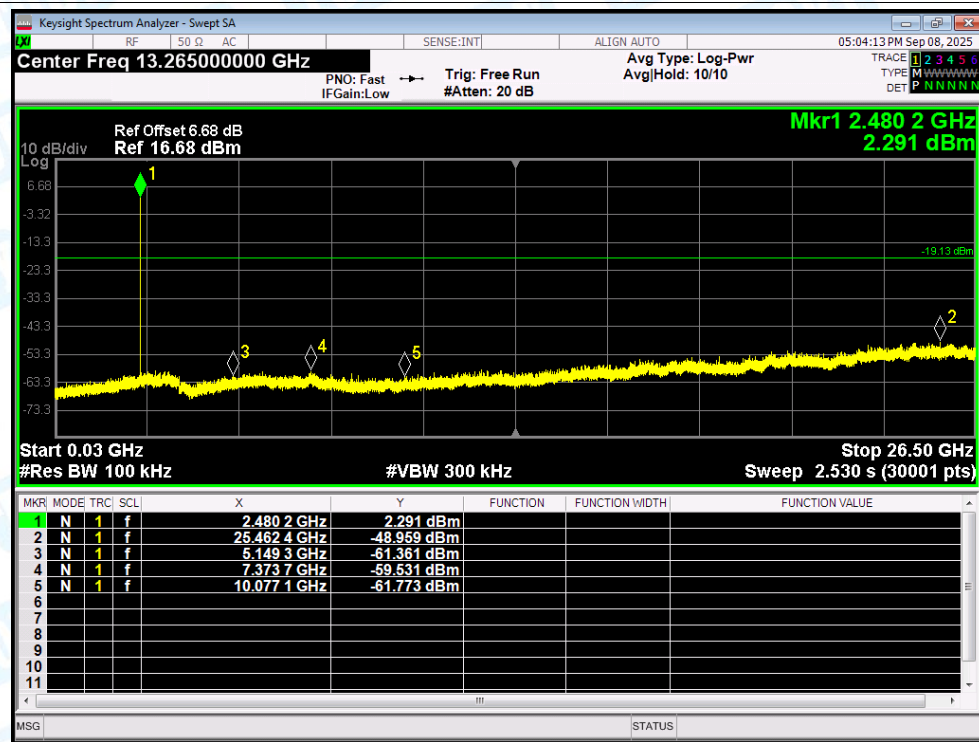
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission



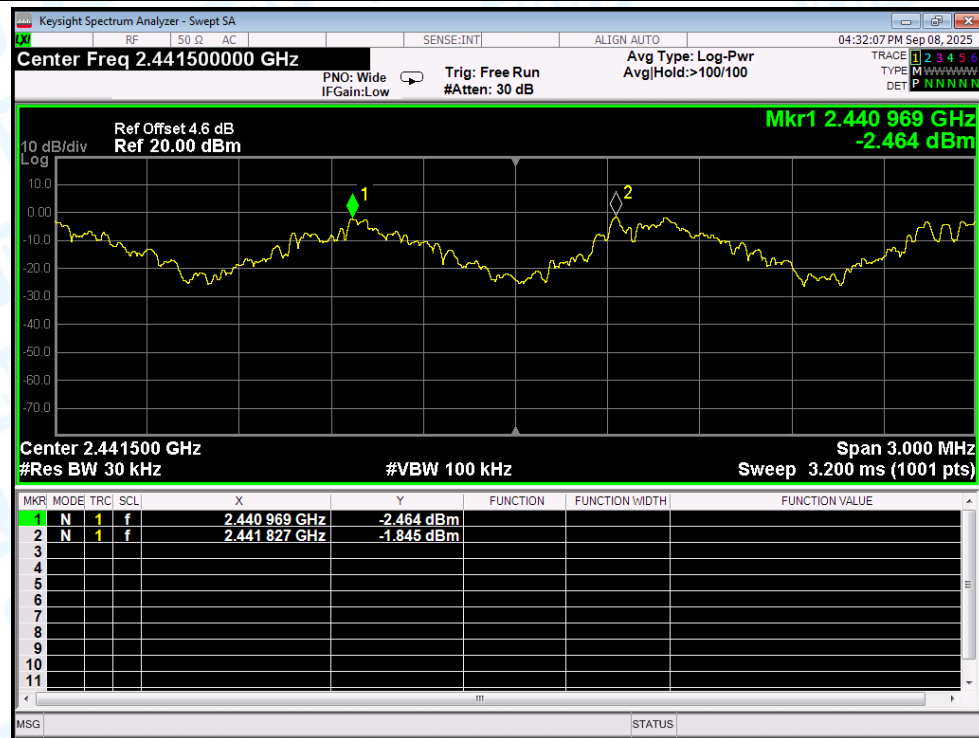
8. Carrier Frequencies Separation

Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.969	2441.827	0.858	0.64	Pass
NVNT	2-DH1	Ant1	2440.837	2441.833	0.996	0.80	Pass
NVNT	3-DH1	Ant1	2440.831	2442.16	1.329	0.807	Pass

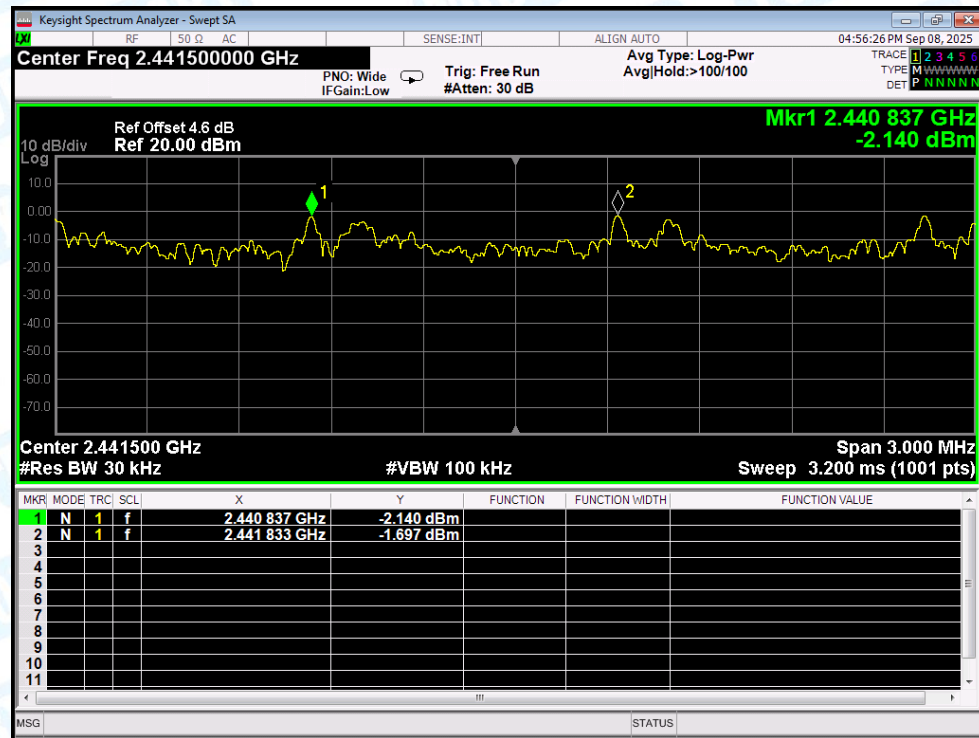
Note: RF Conducted test Offset= cable loss+ Attenuator(3dB).

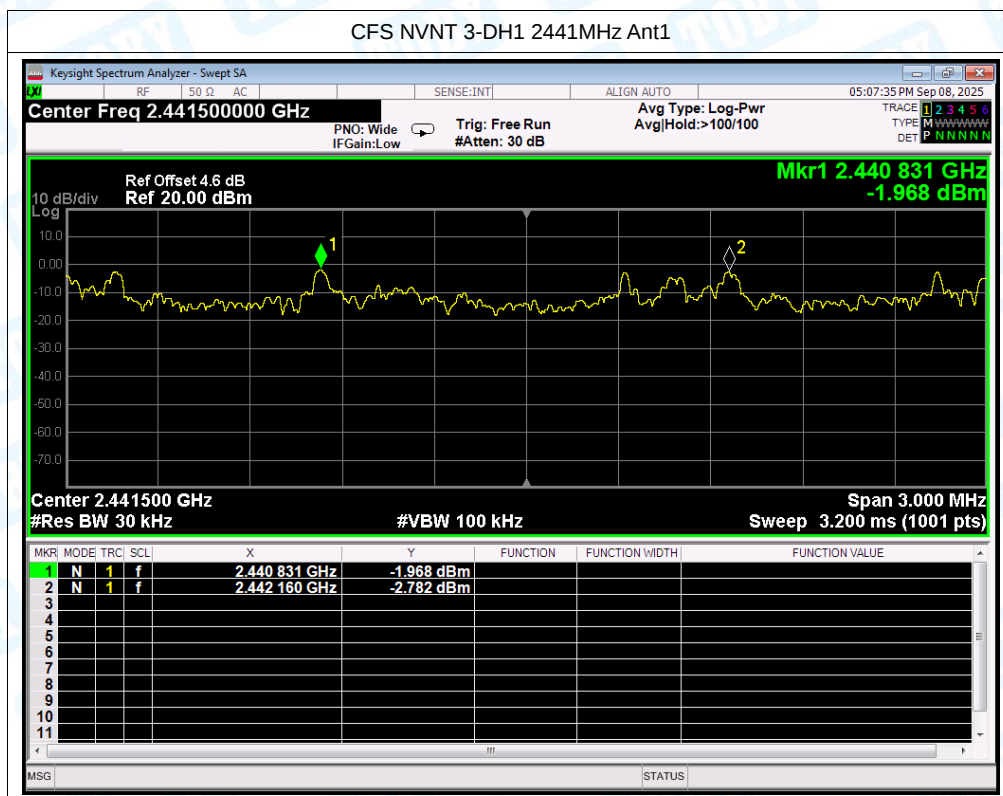
Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1





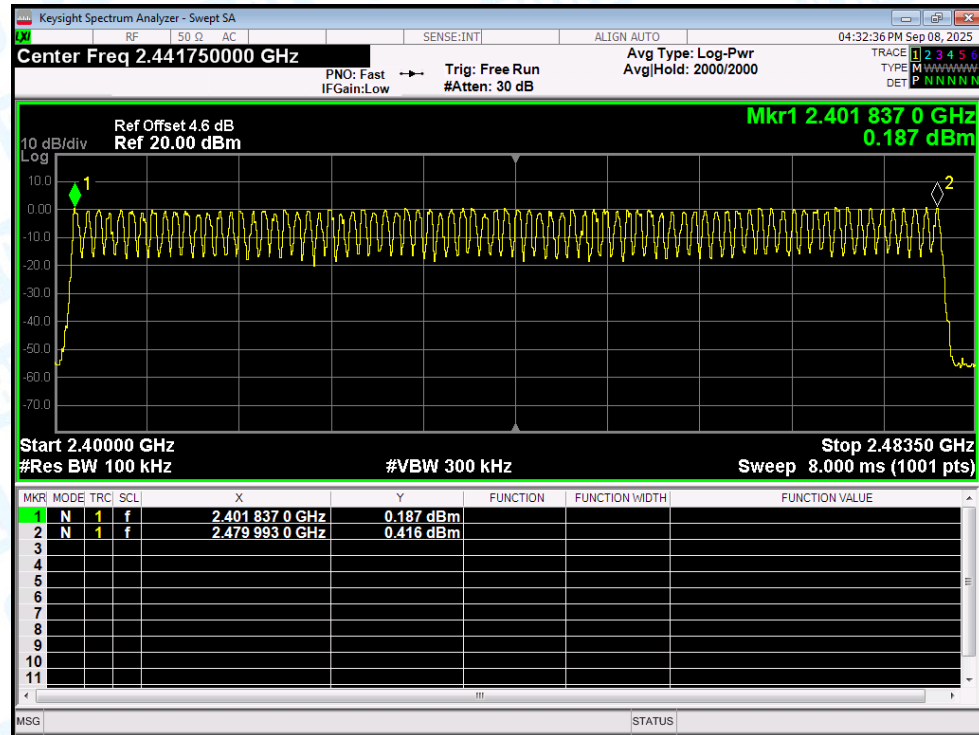
9. Number of Hopping Channel

Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

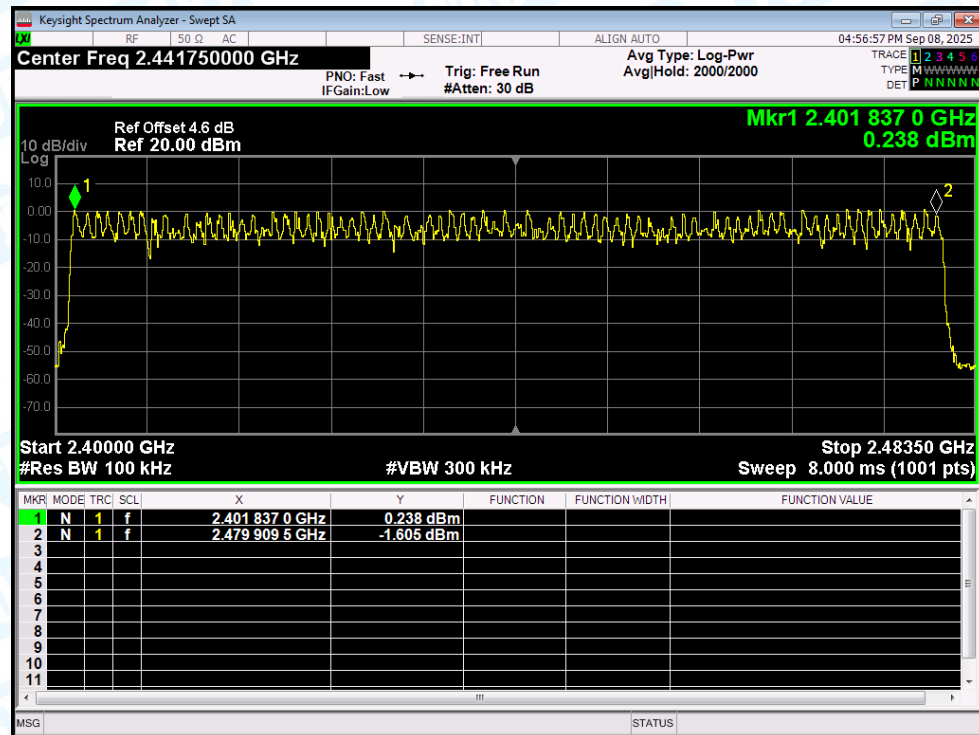
Note: RF Conducted test Offset= cable loss+ Attenuator(3dB).

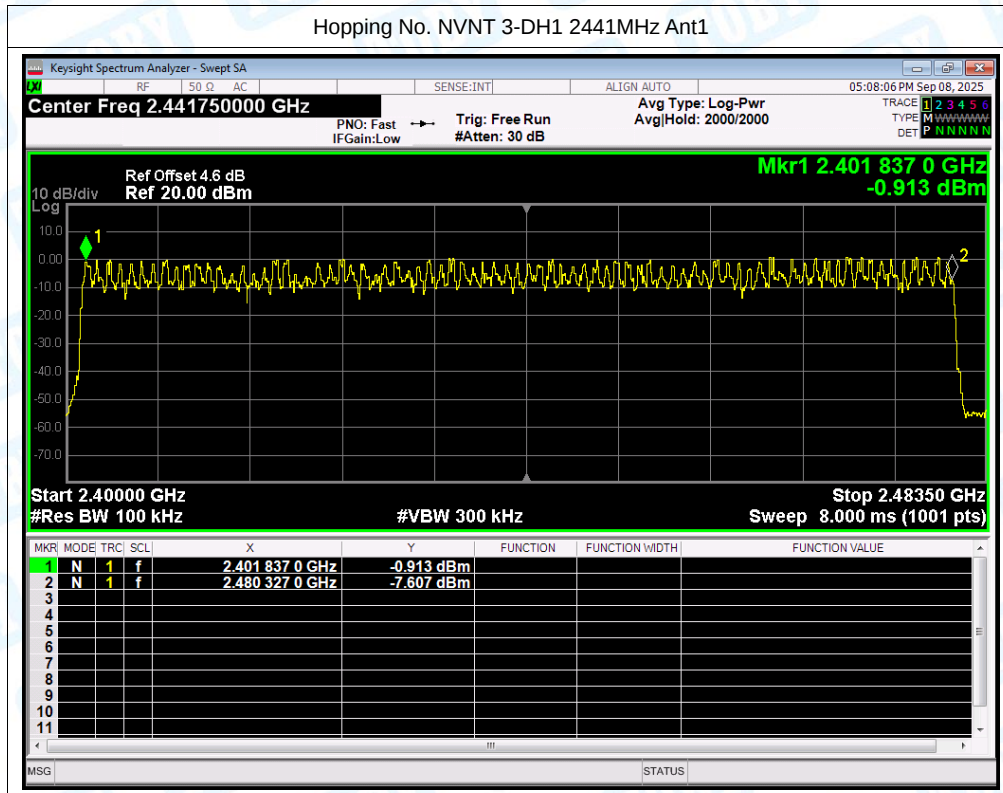
Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1





10. Dwell Time

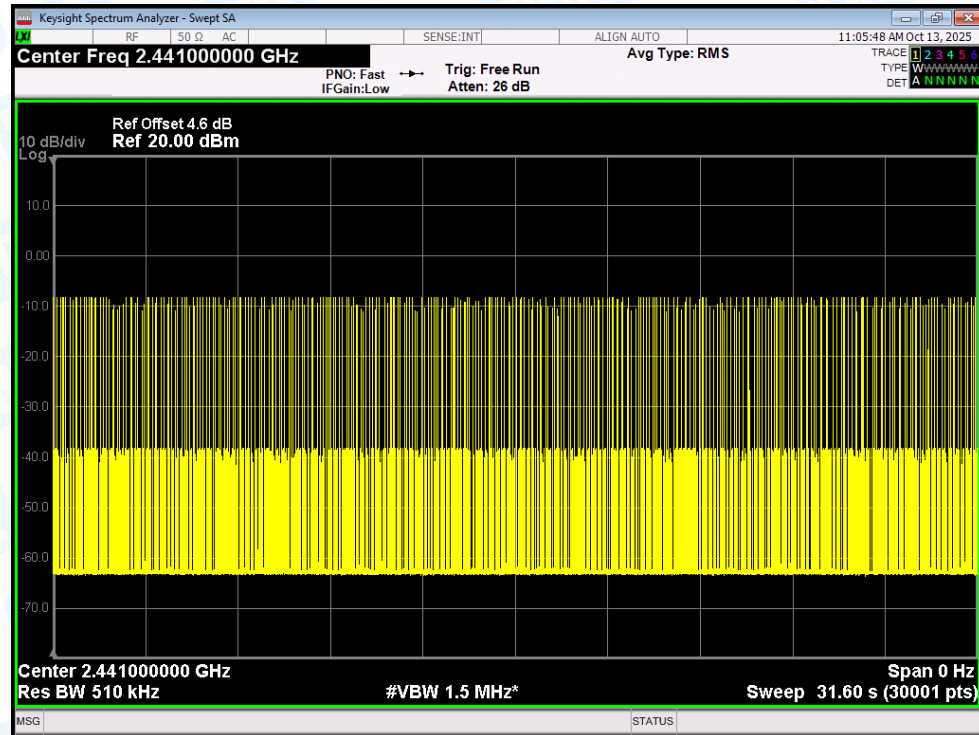
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Burst Number	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.373	118.614	31600	318	400	Pass
NVNT	1-DH3	2441	Ant1	1.62	257.58	31600	159	400	Pass
NVNT	1-DH5	2441	Ant1	2.868	304.008	31600	106	400	Pass
NVNT	2-DH1	2441	Ant1	0.38	121.98	31600	321	400	Pass
NVNT	2-DH3	2441	Ant1	1.633	259.647	31600	159	400	Pass
NVNT	2-DH5	2441	Ant1	2.88	308.16	31600	107	400	Pass
NVNT	3-DH1	2441	Ant1	0.381	121.539	31600	319	400	Pass
NVNT	3-DH3	2441	Ant1	1.631	259.329	31600	159	400	Pass
NVNT	3-DH5	2441	Ant1	2.882	305.492	31600	106	400	Pass

1DH1 Total of Dwell= Pulse Time*(1600/2)*31.6/79
 1DH3 Total of Dwell= Pulse Time*(1600/4)*31.6/79
 1DH5 Total of Dwell= Pulse Time*(1600/6)*31.6/79
 2DH1 Total of Dwell= Pulse Time*(1600/2)*31.6/79
 2DH3 Total of Dwell= Pulse Time*(1600/4)*31.6/79
 2DH5 Total of Dwell= Pulse Time*(1600/6)*31.6/79
 3DH1 Total of Dwell= Pulse Time*(1600/2)*31.6/79
 3DH3 Total of Dwell= Pulse Time*(1600/4)*31.6/79
 3DH5 Total of Dwell= Pulse Time*(1600/6)*31.6/79

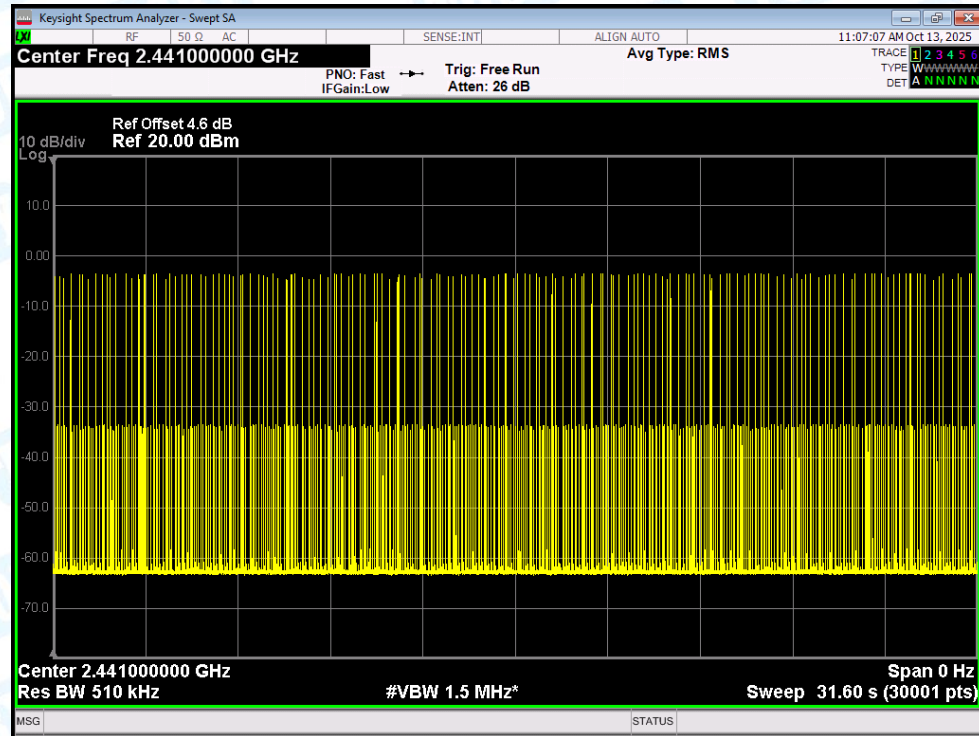
Note: RF Conducted test Offset= cable loss+ Attenuator(3dB).

Test Graphs

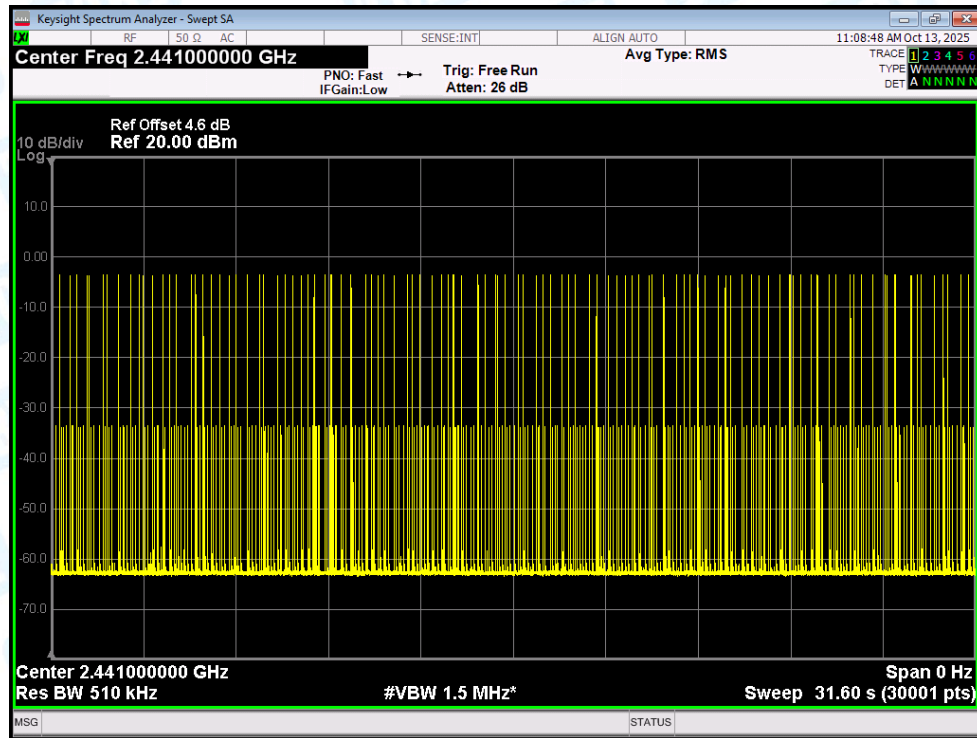
Dwell NVNT 1-DH1 2441MHz Ant1



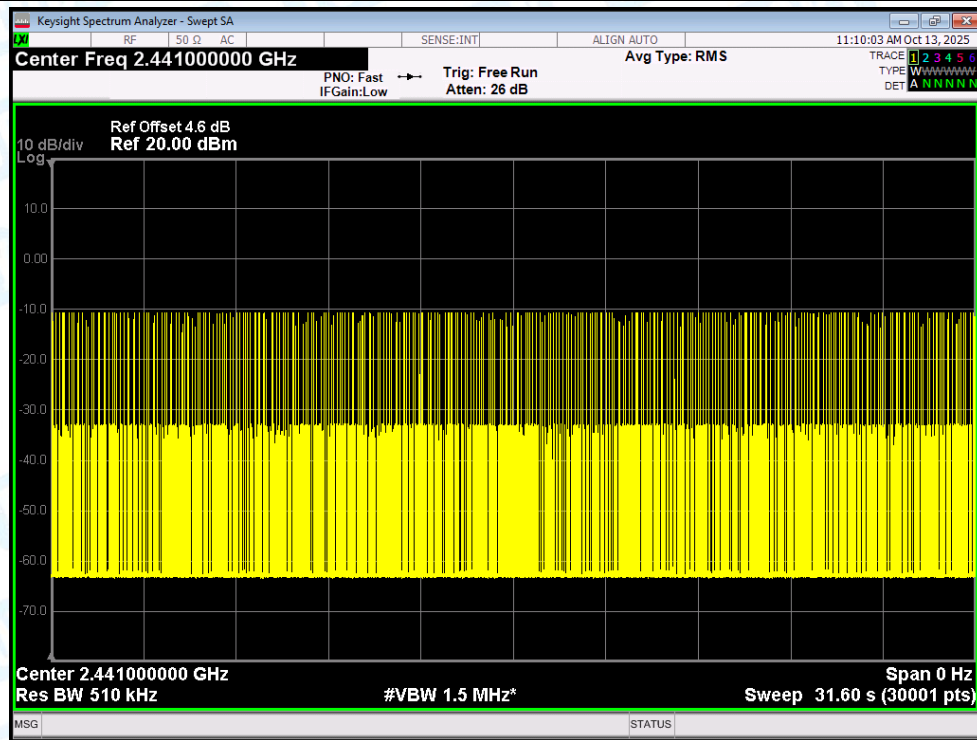
Dwell NVNT 1-DH3 2441MHz Ant1



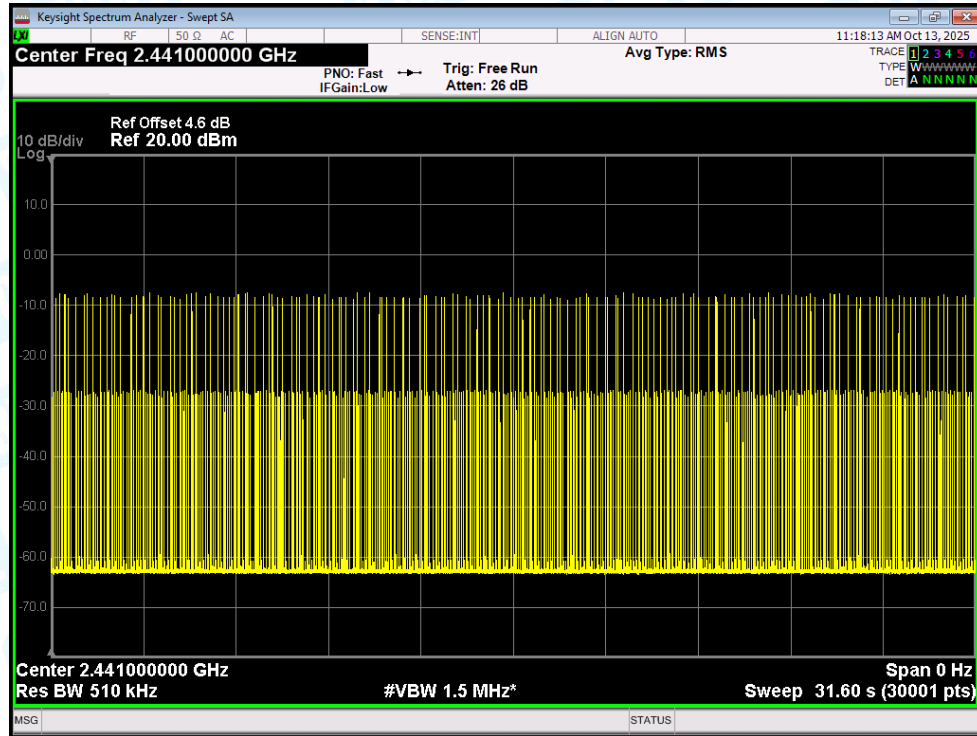
Dwell NVNT 1-DH5 2441MHz Ant1



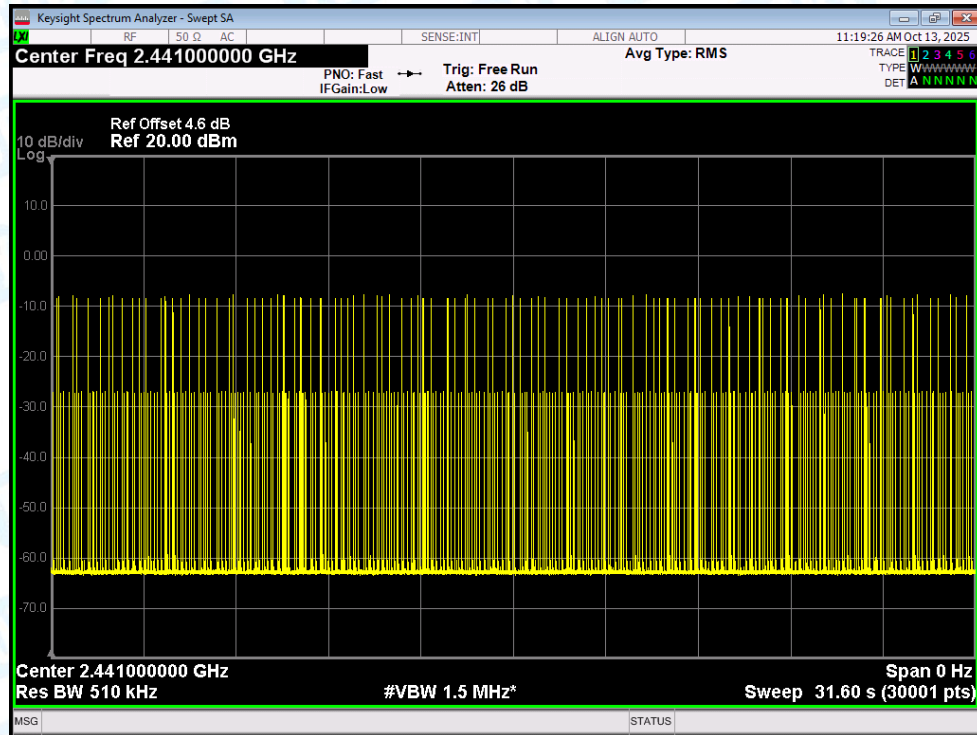
Dwell NVNT 2-DH1 2441MHz Ant1



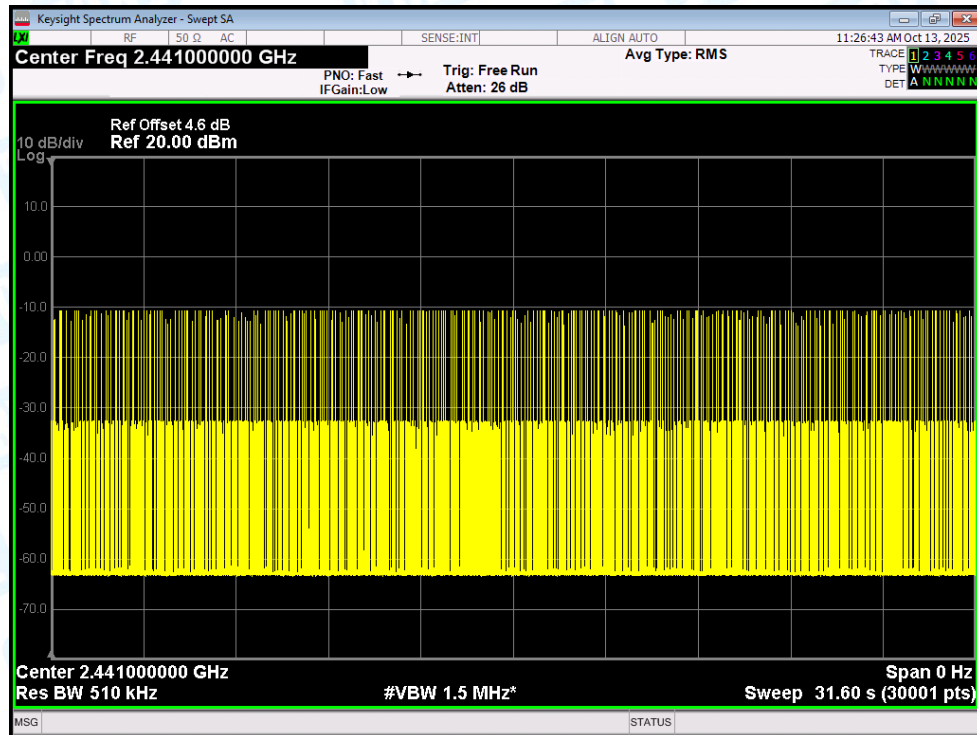
Dwell NVNT 2-DH3 2441MHz Ant1



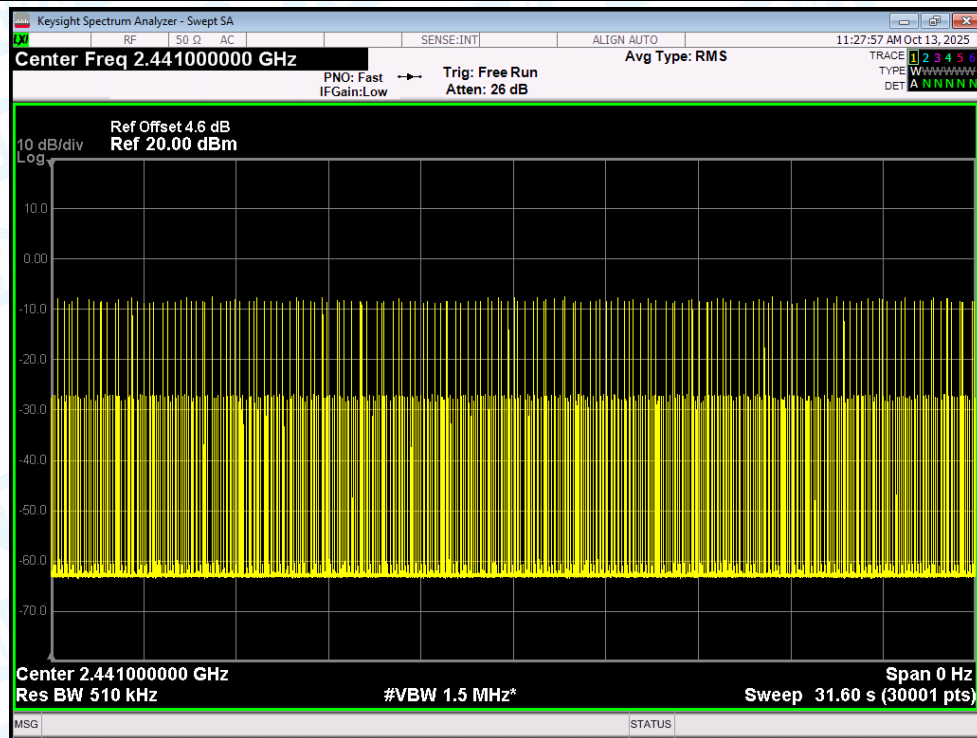
Dwell NVNT 2-DH5 2441MHz Ant1

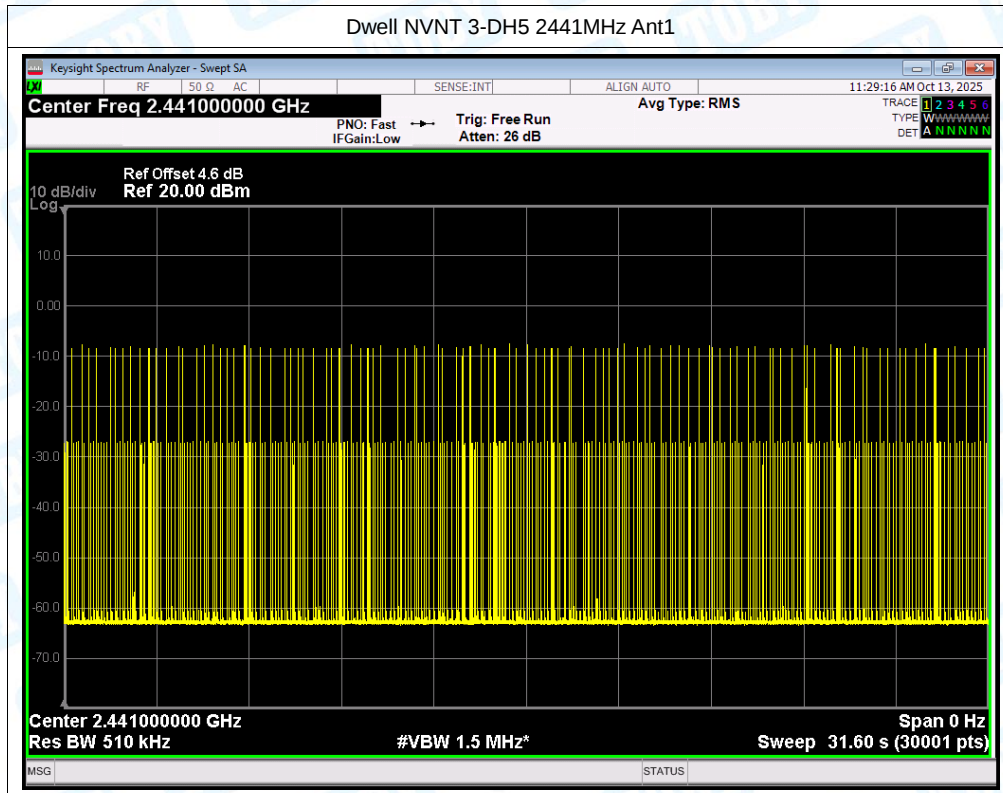


Dwell NVNT 3-DH1 2441MHz Ant1



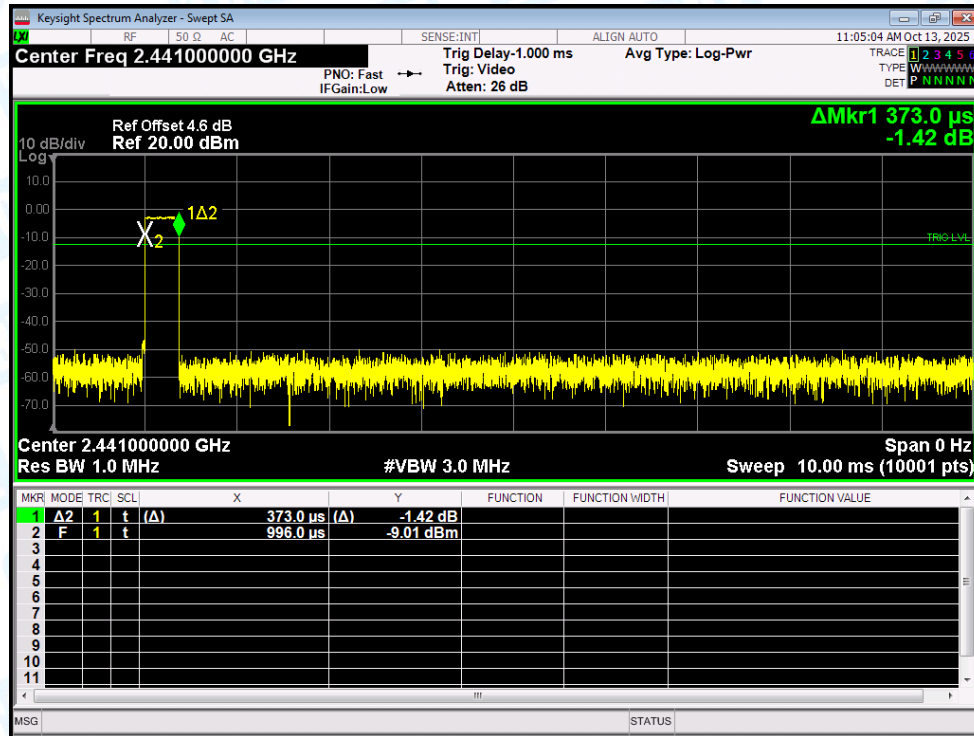
Dwell NVNT 3-DH3 2441MHz Ant1



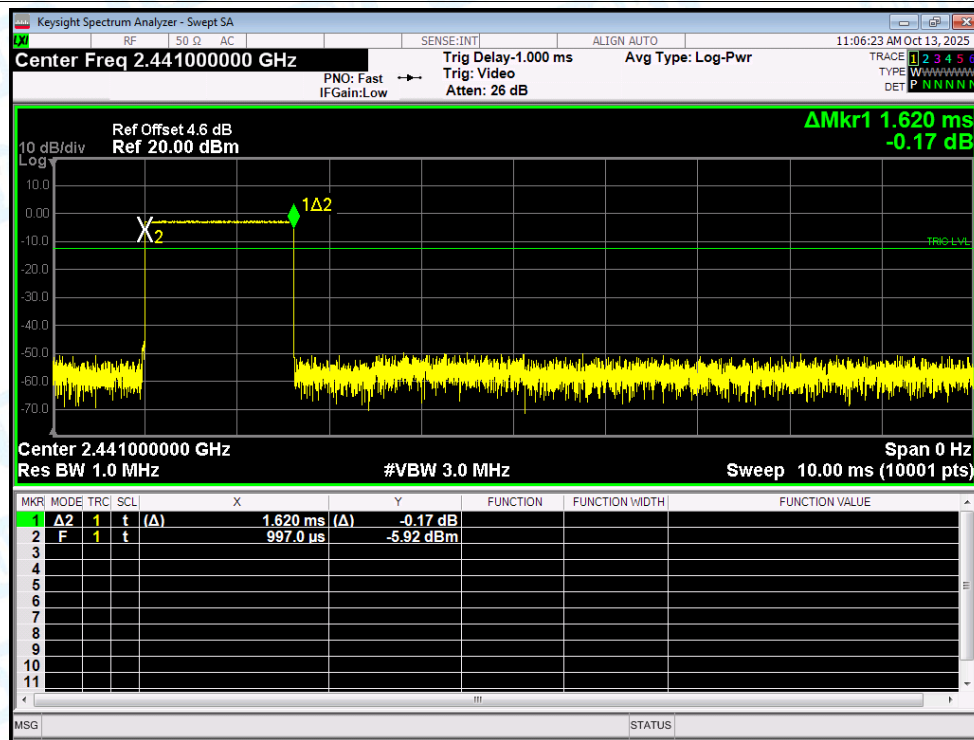


Test Graphs

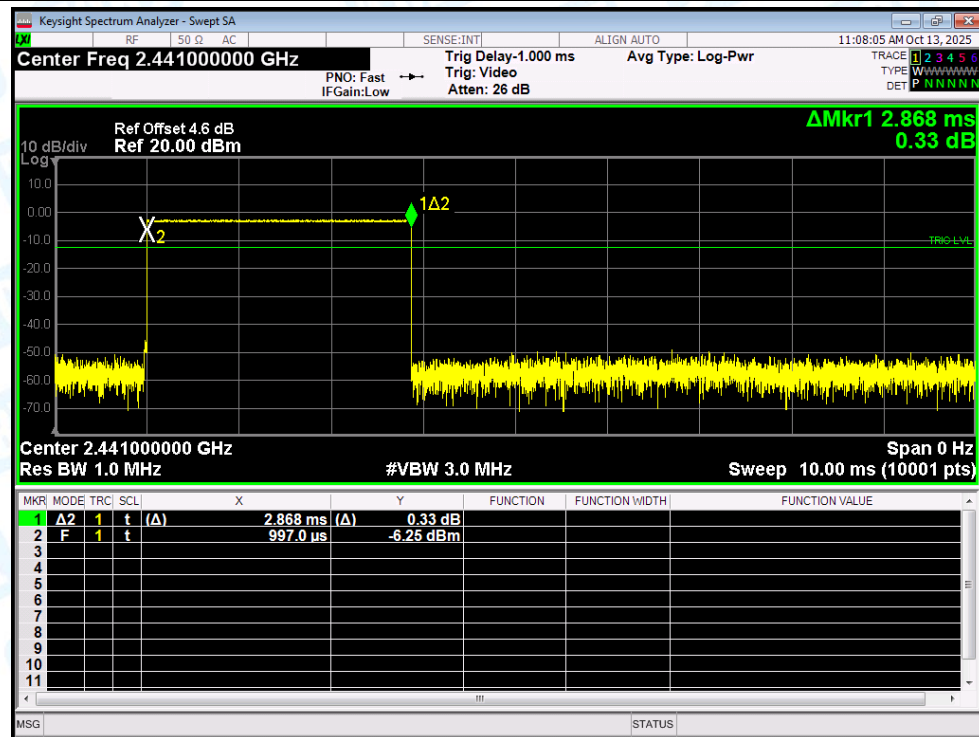
One Burst NVNT 1-DH1 2441MHz Ant1 One Burst



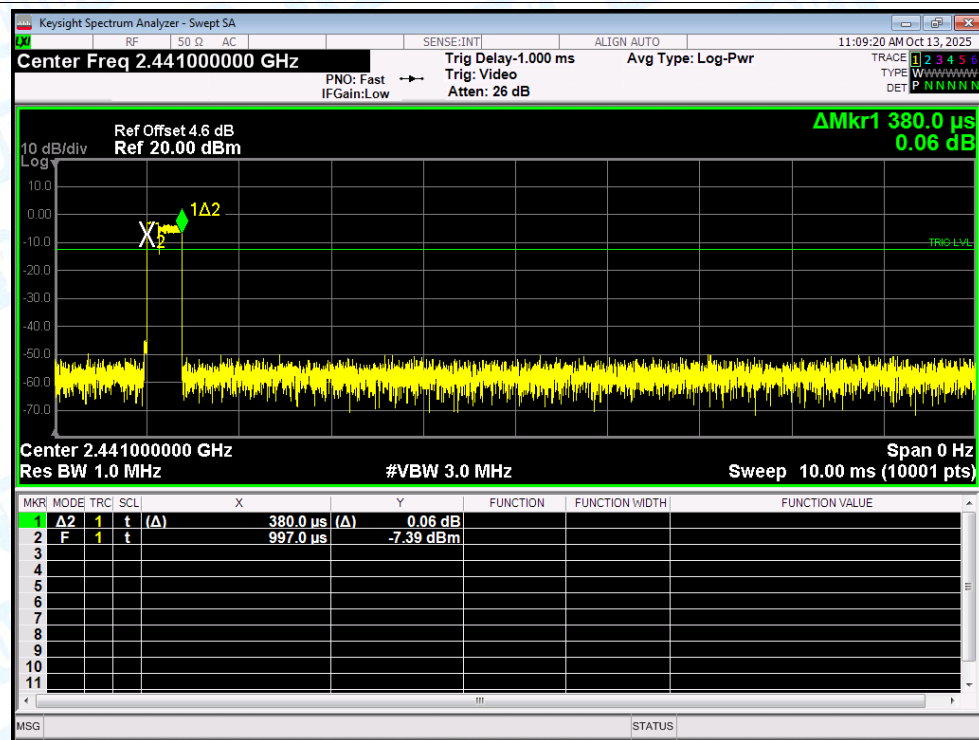
One Burst NVNT 1-DH3 2441MHz Ant1 One Burst



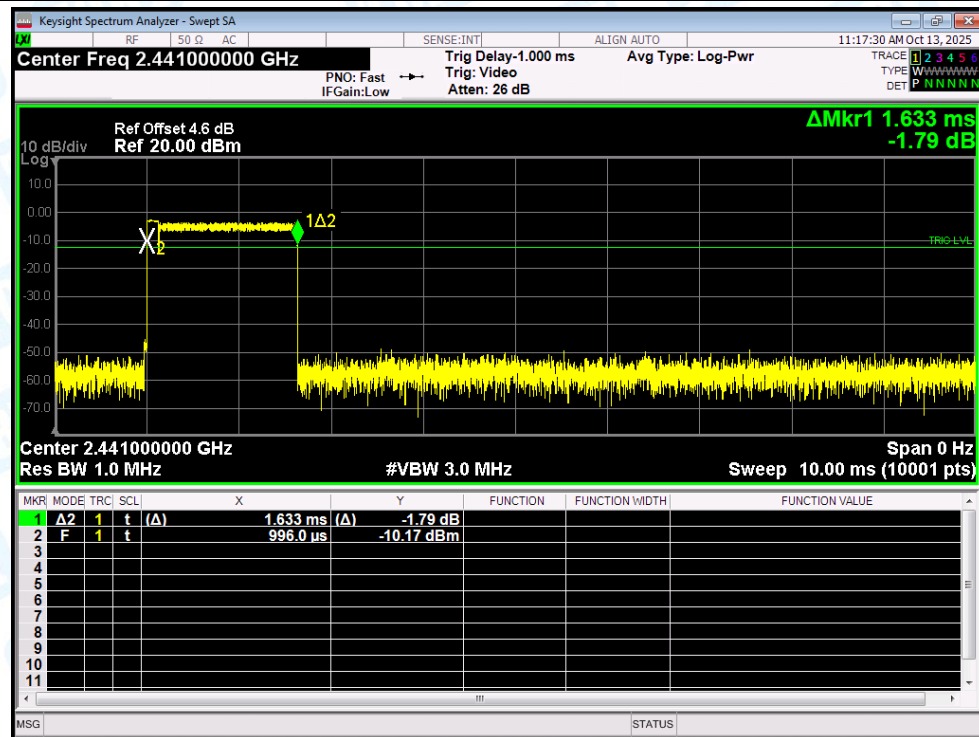
One Burst NVNT 1-DH5 2441MHz Ant1 One Burst



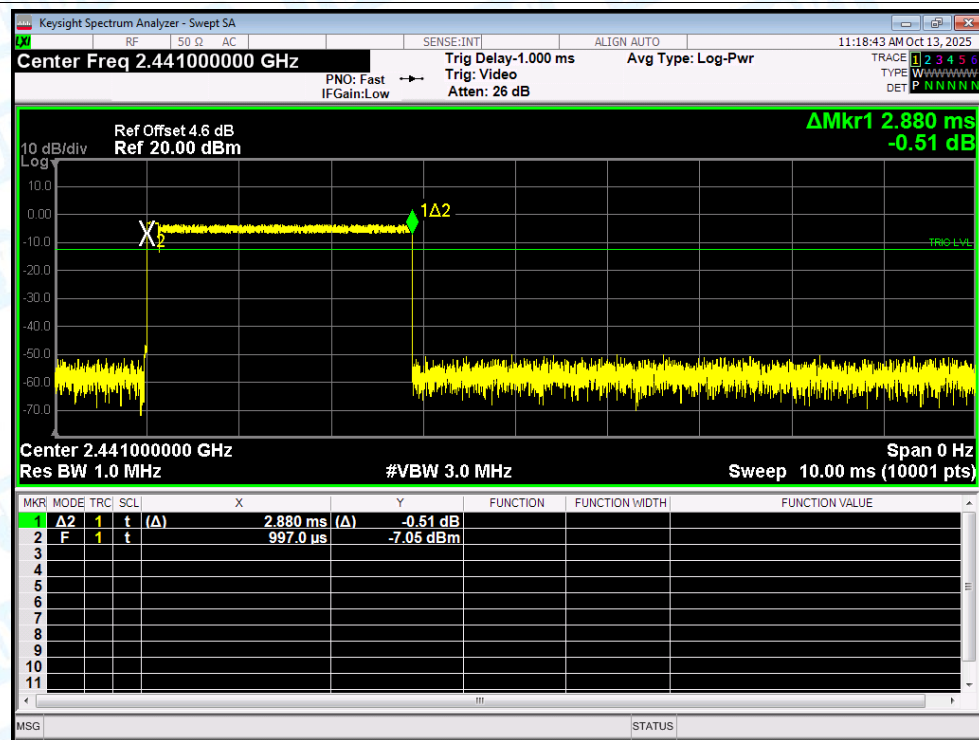
One Burst NVNT 2-DH1 2441MHz Ant1 One Burst



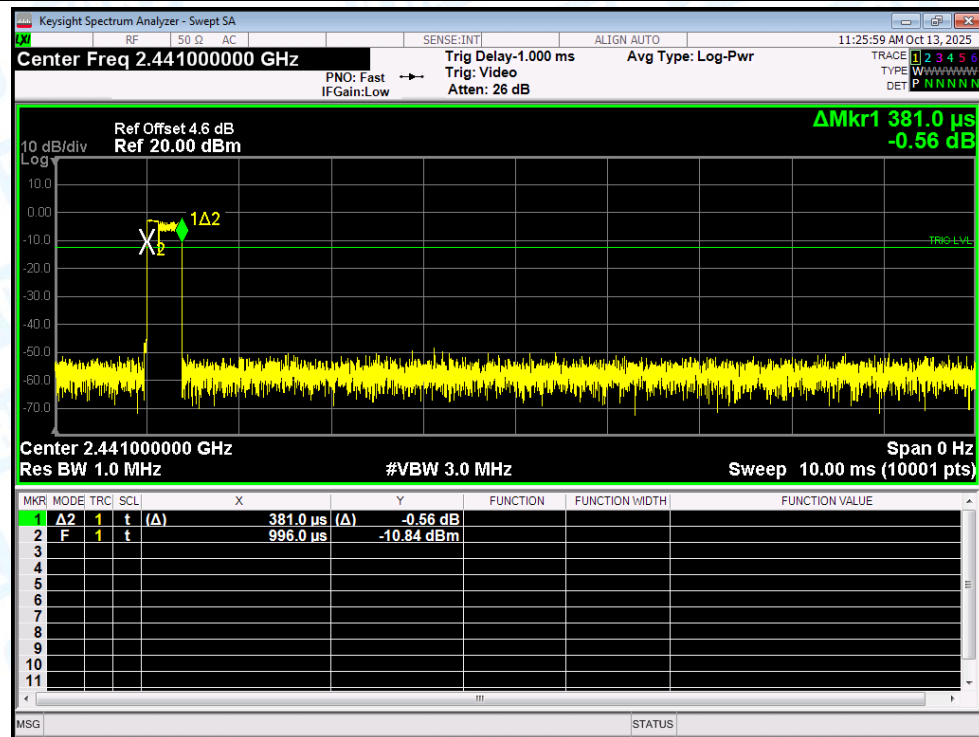
One Burst NVNT 2-DH3 2441MHz Ant1 One Burst



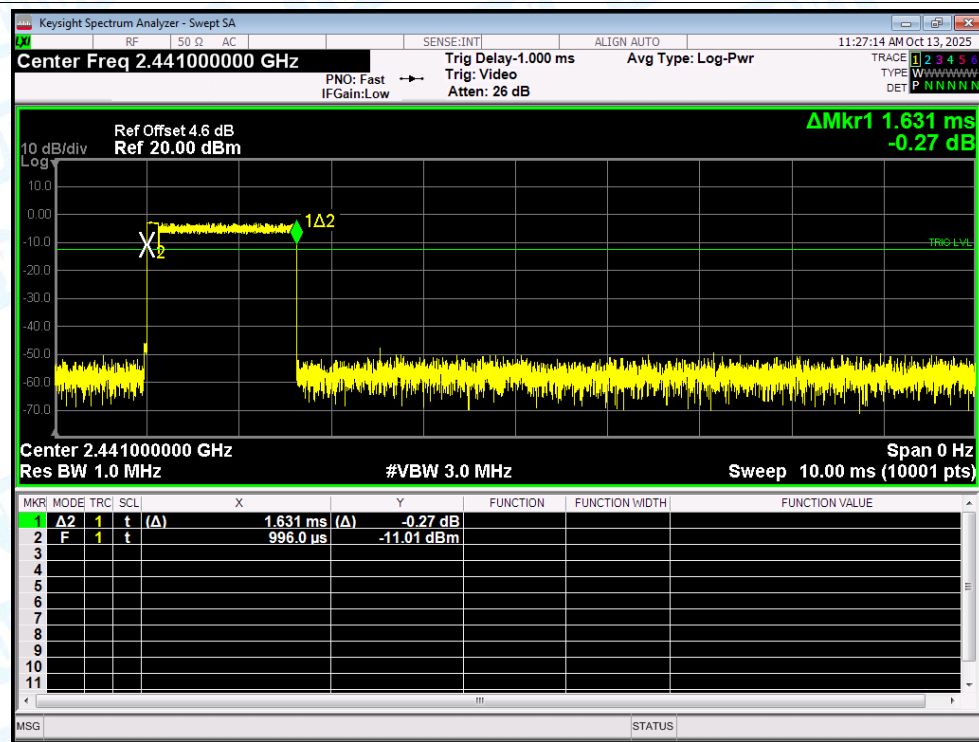
One Burst NVNT 2-DH5 2441MHz Ant1 One Burst

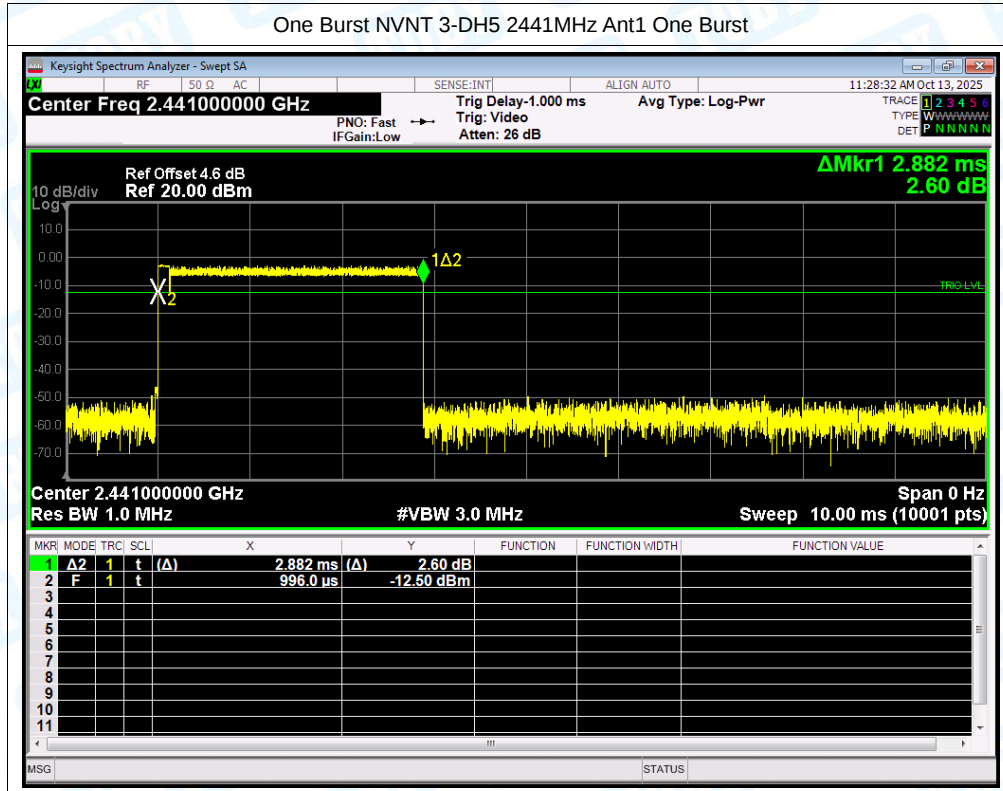


One Burst NVNT 3-DH1 2441MHz Ant1 One Burst



One Burst NVNT 3-DH3 2441MHz Ant1 One Burst





-----END OF THE REPORT-----