



## Appendix A

### RF Test Data for BT (Conducted Measurement)

Product Name: SOUNDPRO WATERPROOF MAGNETIC SPEAKER-BLACK

Test Model: 101736-001B

#### Environmental Conditions

|                    |           |
|--------------------|-----------|
| Temperature:       | 23.1° C   |
| Relative Humidity: | 52.3%     |
| ATM Pressure:      | 100.0 kPa |
| Test Engineer:     | Nick Peng |
| Supervised by:     | Ling Zhu  |





## A.1 -20dB Bandwidth

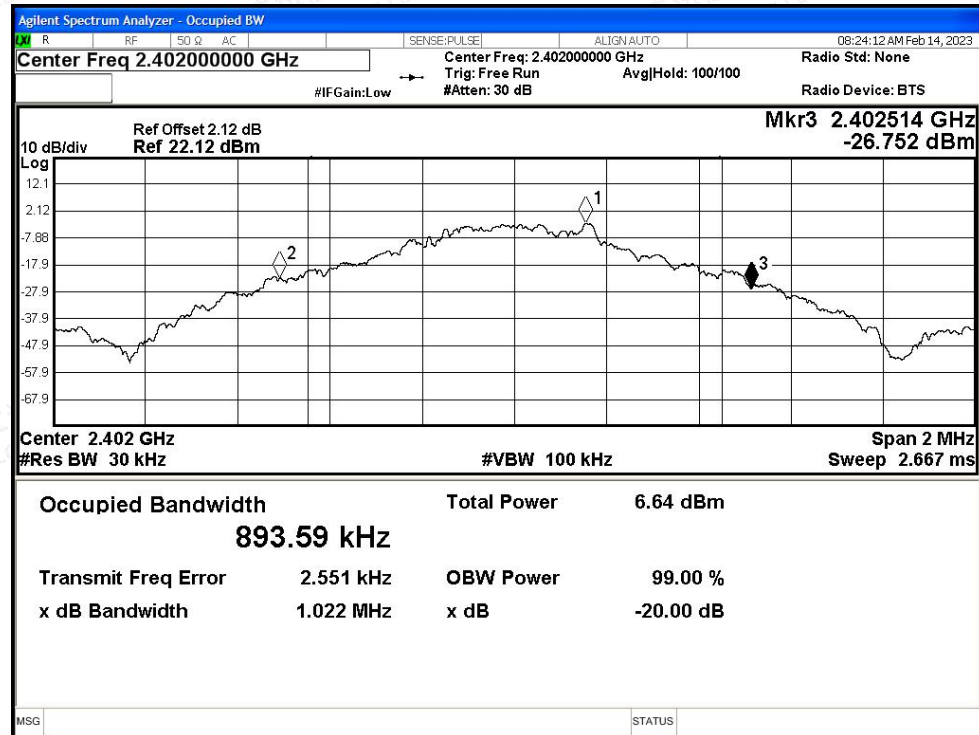
| Condition | Mode  | Frequency (MHz) | Antenna | -20 dB Bandwidth (MHz) | Limit -20 dB Bandwidth (MHz) | Verdict |
|-----------|-------|-----------------|---------|------------------------|------------------------------|---------|
| NVNT      | 1-DH5 | 2402            | Ant1    | 1.022                  | N/A                          | Pass    |
| NVNT      | 1-DH5 | 2441            | Ant1    | 1.019                  | N/A                          | Pass    |
| NVNT      | 1-DH5 | 2480            | Ant1    | 0.96                   | N/A                          | Pass    |
| NVNT      | 2-DH5 | 2402            | Ant1    | 1.312                  | N/A                          | Pass    |
| NVNT      | 2-DH5 | 2441            | Ant1    | 1.305                  | N/A                          | Pass    |
| NVNT      | 2-DH5 | 2480            | Ant1    | 1.276                  | N/A                          | Pass    |



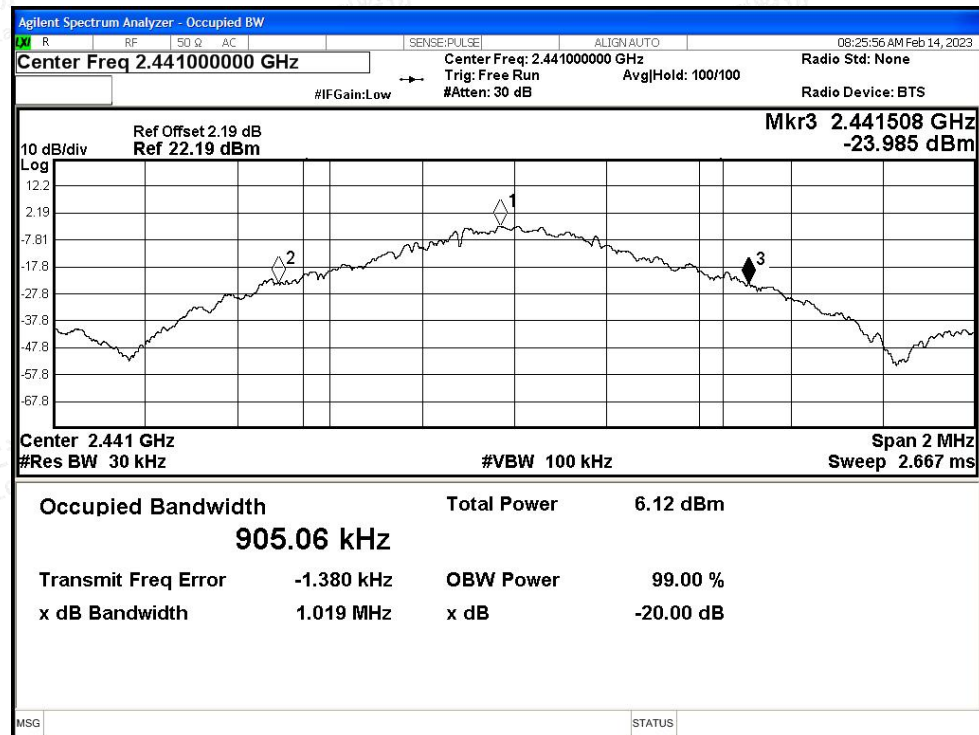


## Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



Shenzhen LCS Compliance Testing Laboratory Ltd.

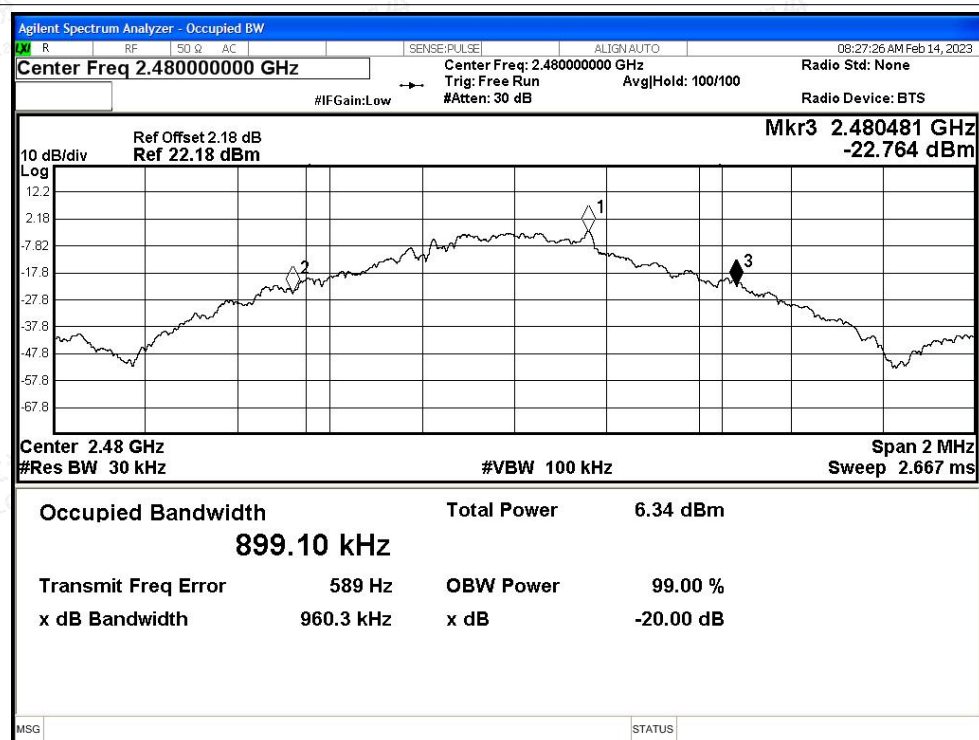
Add: 101, 201 Bldg A &amp; 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

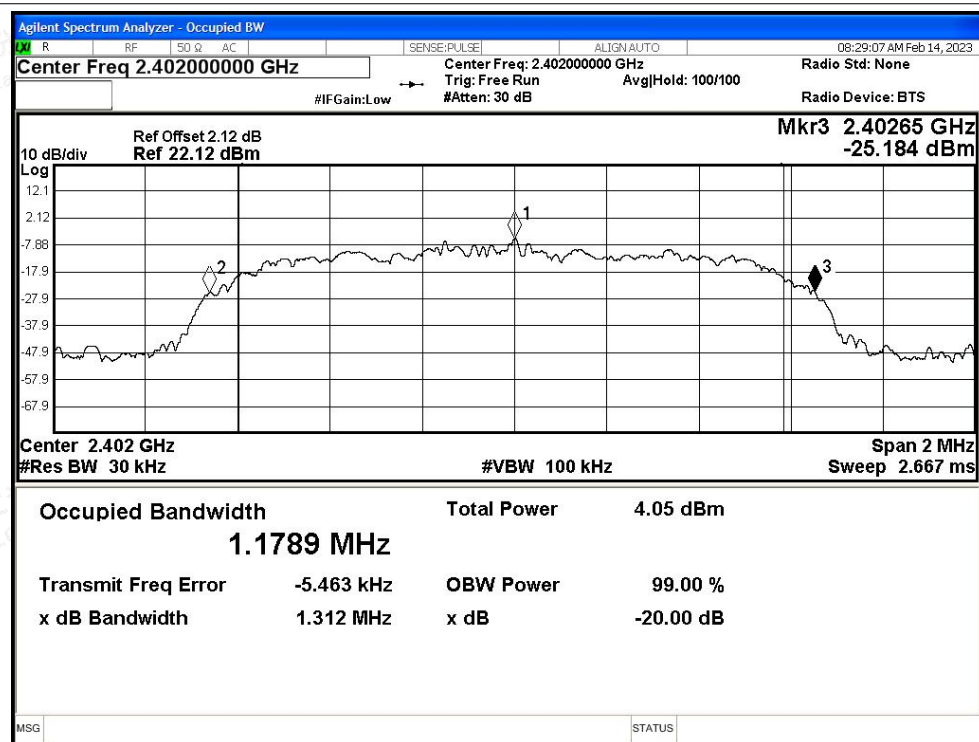
Scan code to check authenticity



## -20dB Bandwidth NVNT 1-DH5 2480MHz Ant1

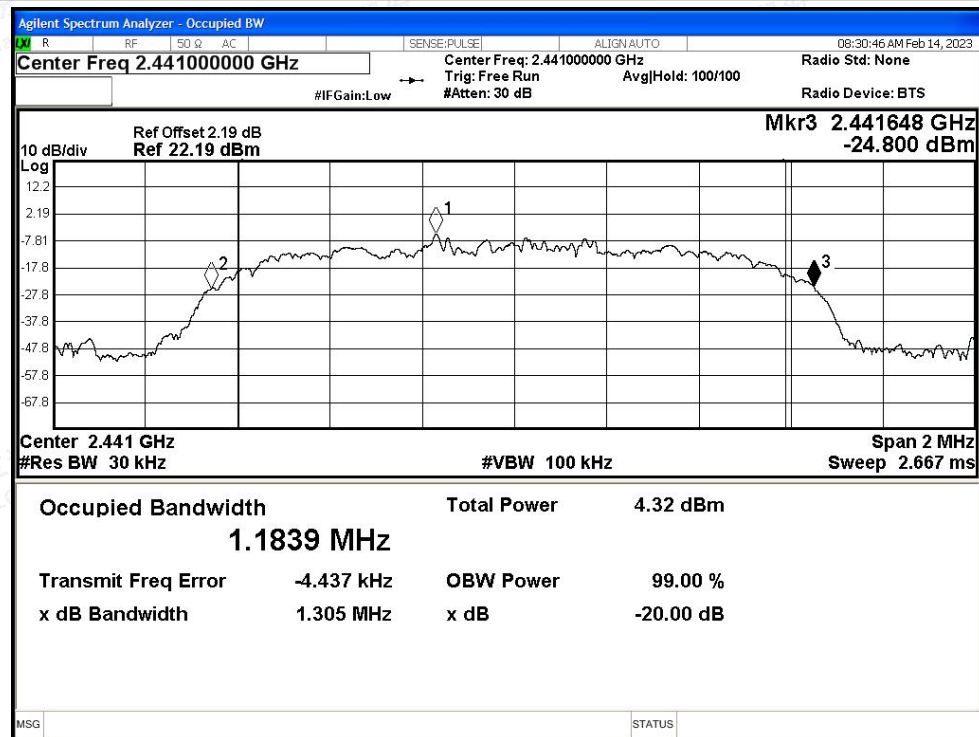


## -20dB Bandwidth NVNT 2-DH5 2402MHz Ant1

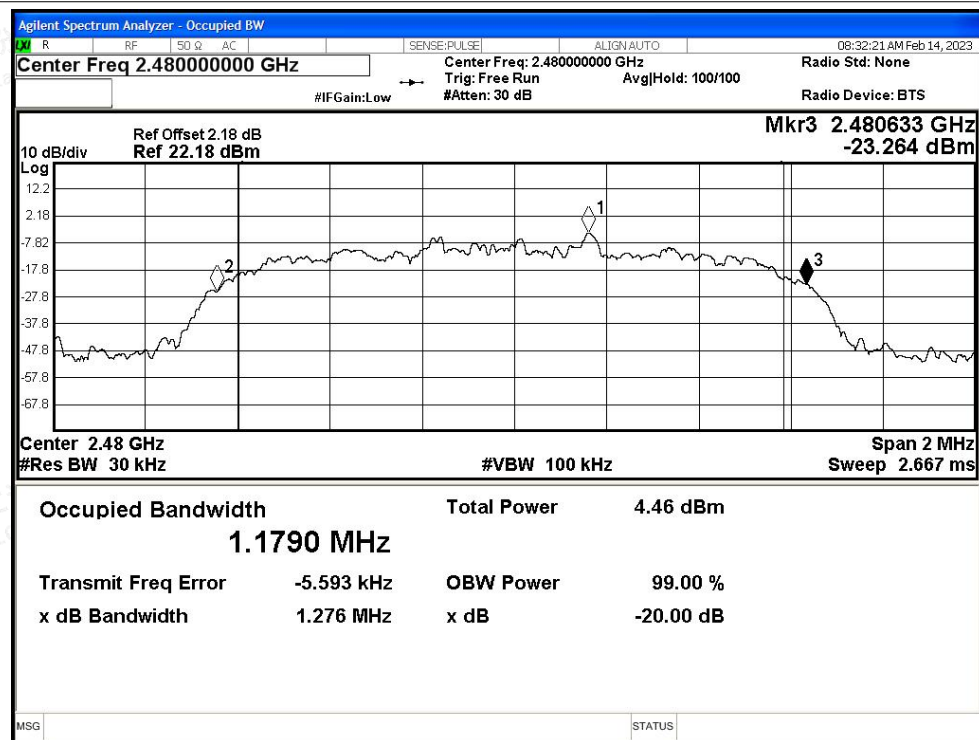




## -20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



## -20dB Bandwidth NVNT 2-DH5 2480MHz Ant1





## A.2 Maximum Conducted Output Power

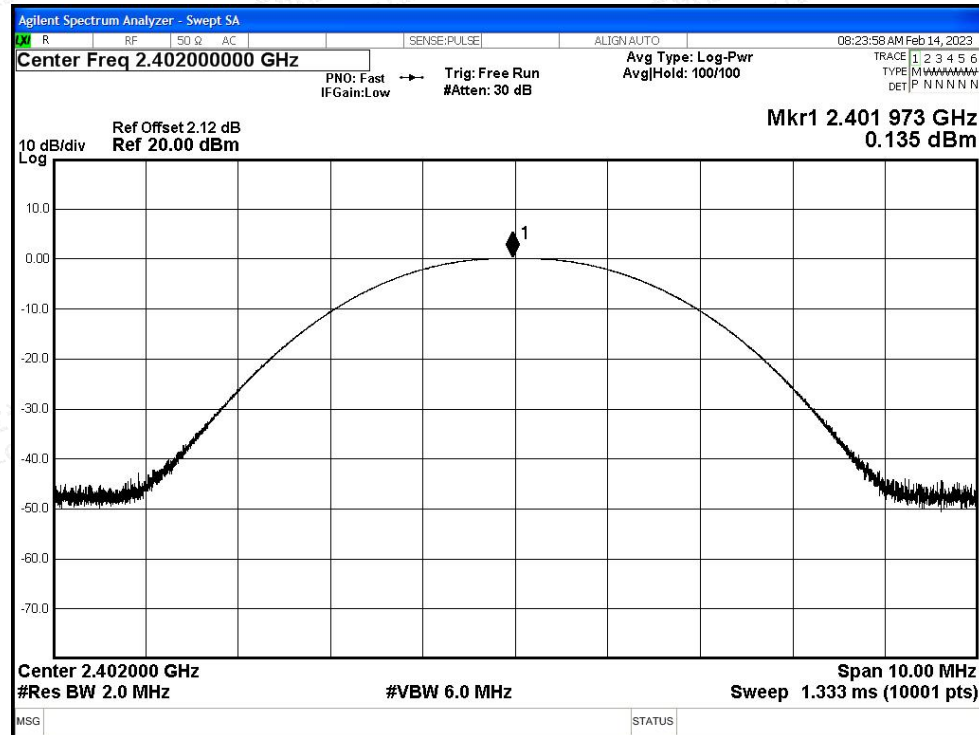
| Condition | Mode  | Frequency (MHz) | Antenna | Total Power (dBm) | Limit (dBm) | Verdict |
|-----------|-------|-----------------|---------|-------------------|-------------|---------|
| NVNT      | 1-DH5 | 2402            | Ant1    | 0.14              | 21          | Pass    |
| NVNT      | 1-DH5 | 2441            | Ant1    | 0.27              | 21          | Pass    |
| NVNT      | 1-DH5 | 2480            | Ant1    | 0.02              | 21          | Pass    |
| NVNT      | 2-DH5 | 2402            | Ant1    | -0.18             | 21          | Pass    |
| NVNT      | 2-DH5 | 2441            | Ant1    | -0.02             | 21          | Pass    |
| NVNT      | 2-DH5 | 2480            | Ant1    | -0.17             | 21          | Pass    |



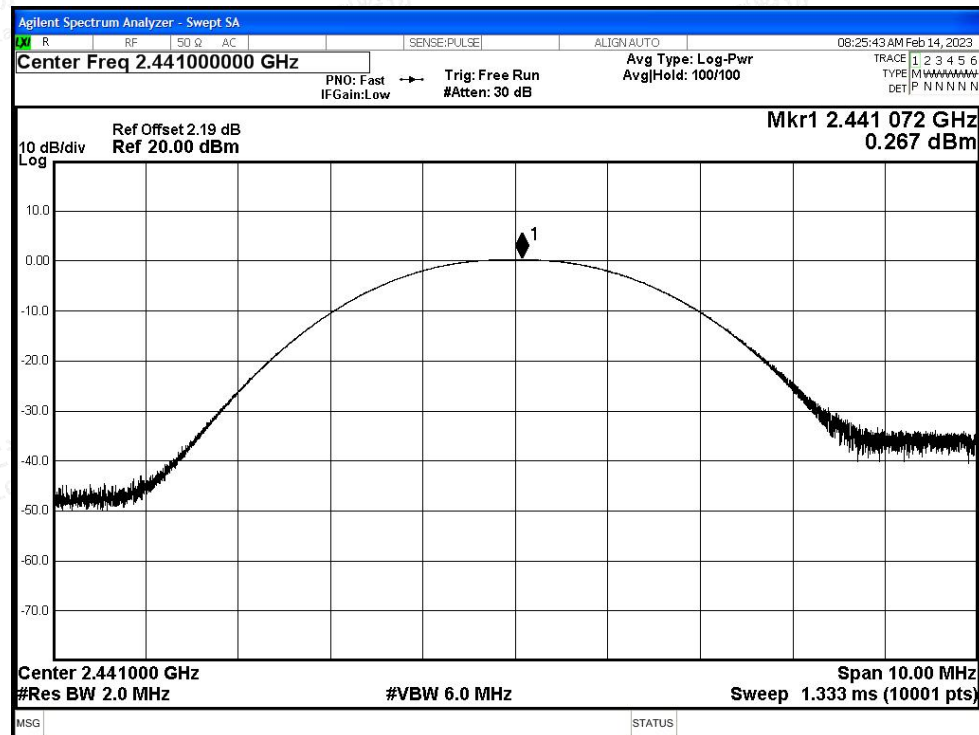


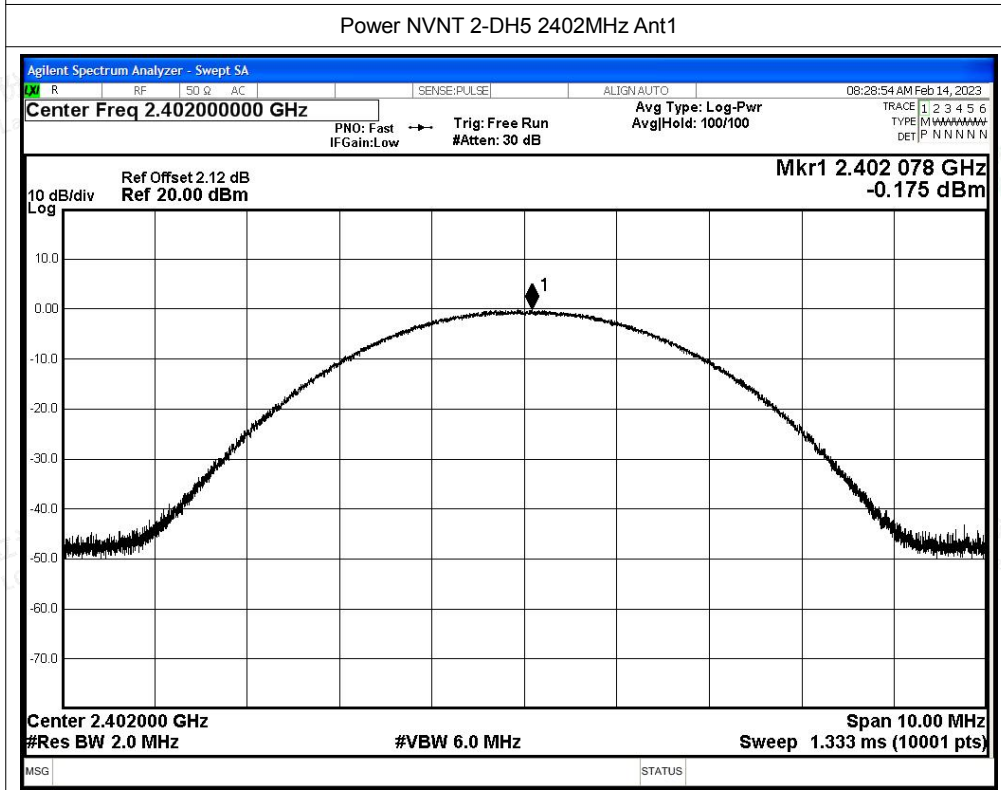
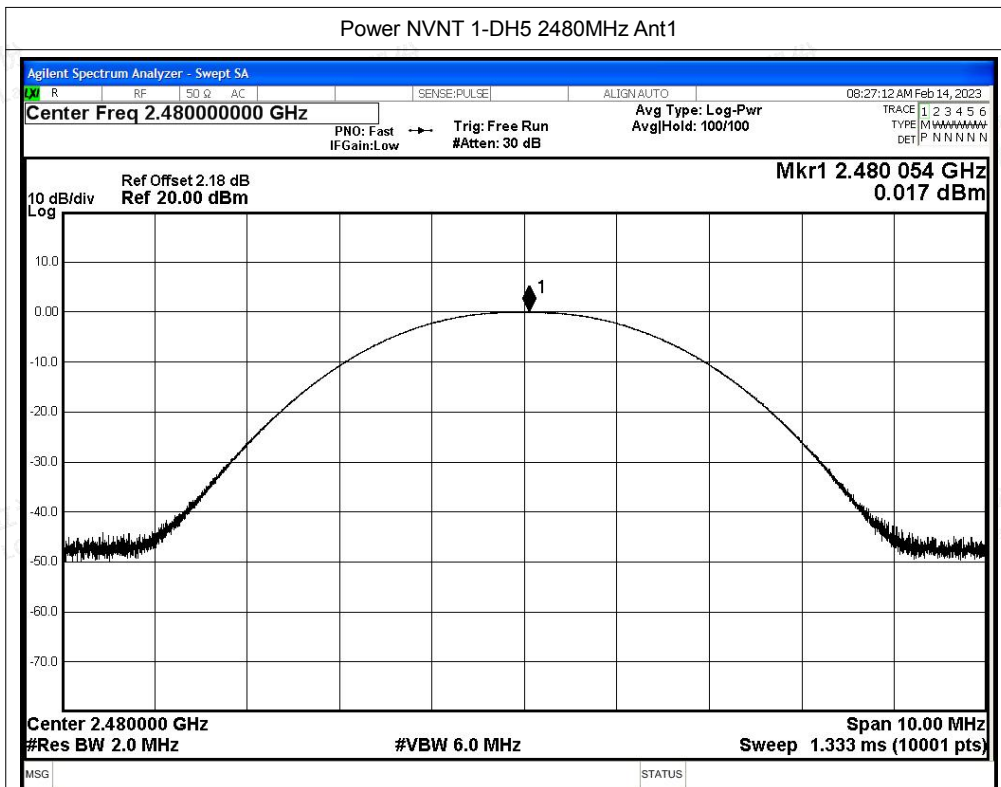
## Test Graphs

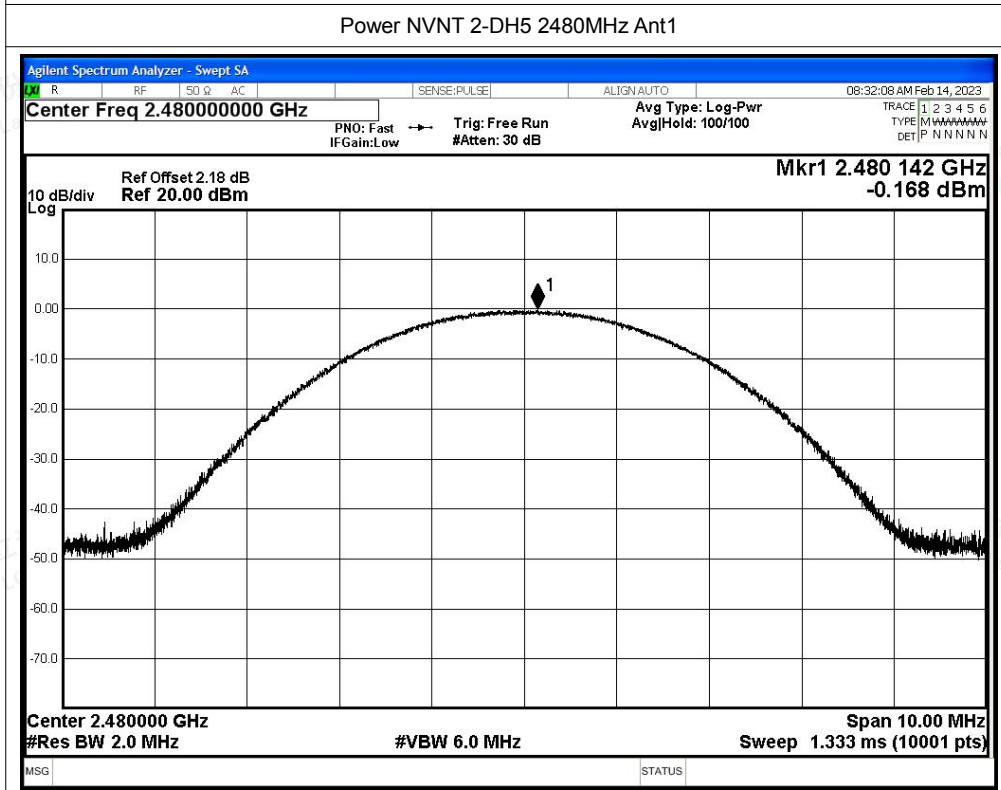
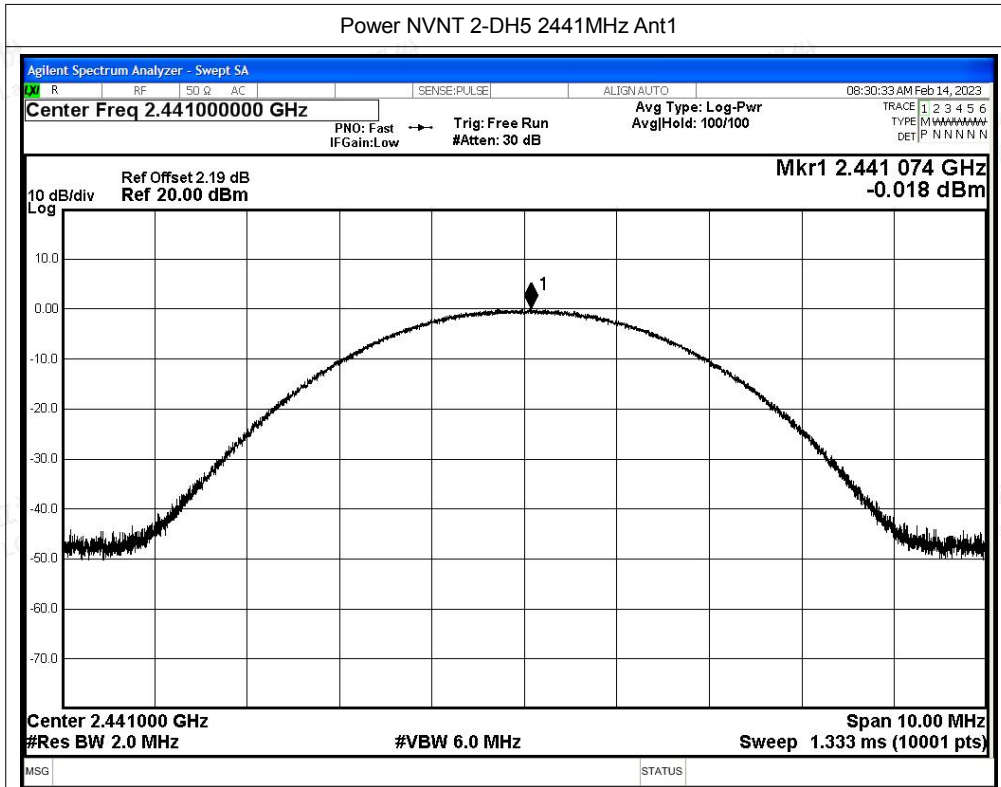
Power NVNT 1-DH5 2402MHz Ant1



Power NVNT 1-DH5 2441MHz Ant1









### A.3 Carrier Frequencies Separation

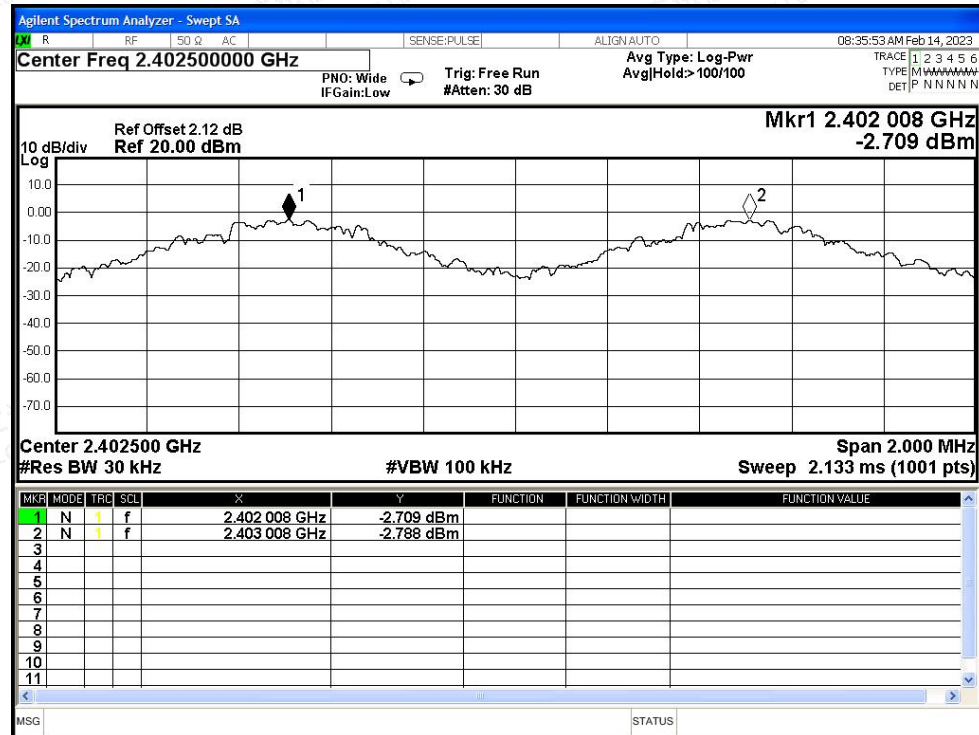
| Condition | Mode  | Antenna | Hopping Freq1 (MHz) | Hopping Freq2 (MHz) | HFS (MHz) | Limit (MHz) | Verdict |
|-----------|-------|---------|---------------------|---------------------|-----------|-------------|---------|
| NVNT      | 1-DH5 | Ant1    | 2402.008            | 2403.008            | 1         | 0.681       | Pass    |
| NVNT      | 2-DH5 | Ant1    | 2401.996            | 2403                | 1.004     | 0.875       | Pass    |



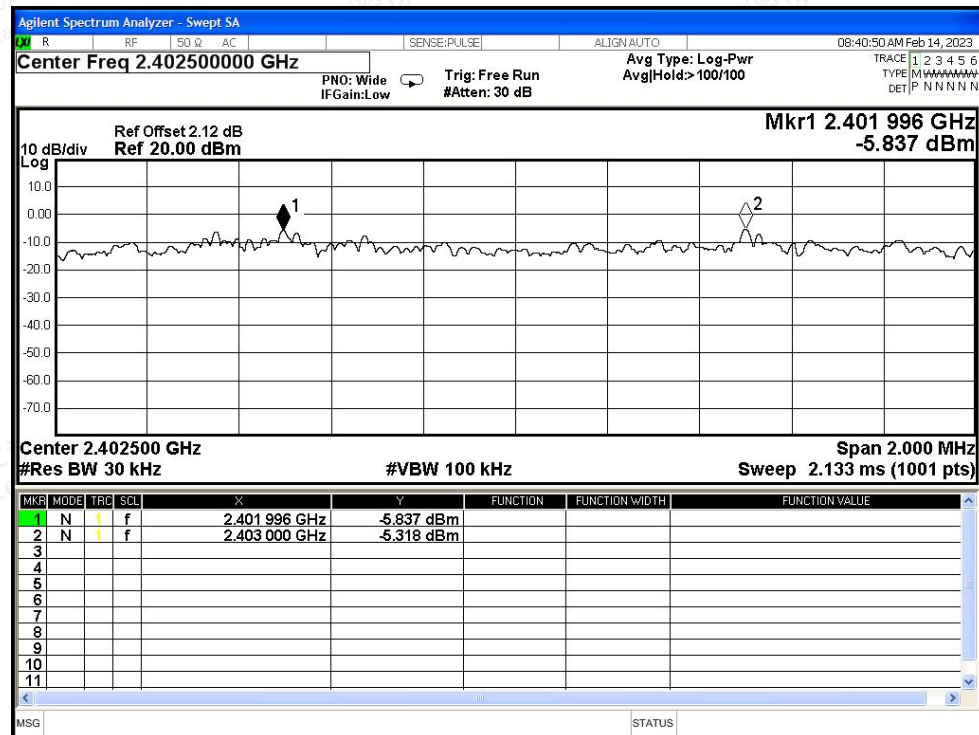


## Test Graphs

## CFS NVNT 1-DH5 2402MHz Ant1



## CFS NVNT 2-DH5 2402MHz Ant1





A.4 Dwell Time

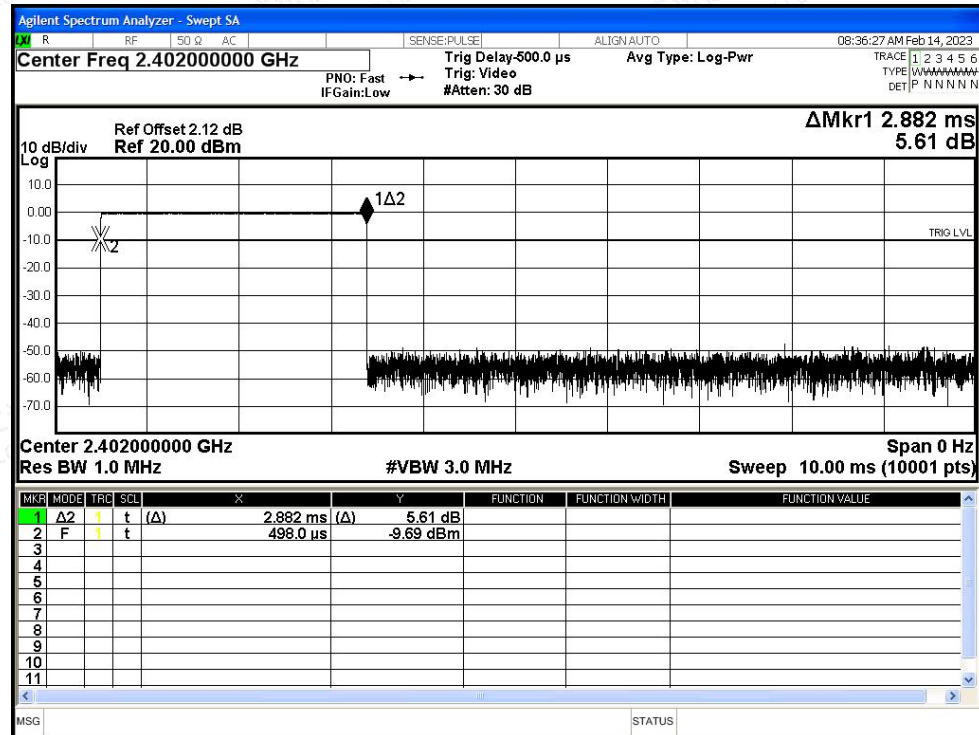
| Condition | Mode  | Frequency<br>(MHz) | Antenna | Pulse<br>Time (ms) | Total Dwell<br>Time (ms) | Burst<br>Count | Period<br>Time (ms) | Limit<br>(ms) | Verdict |
|-----------|-------|--------------------|---------|--------------------|--------------------------|----------------|---------------------|---------------|---------|
| NVNT      | 1-DH5 | 2402               | Ant1    | 2.882              | 291.082                  | 101            | 31600               | 400           | Pass    |
| NVNT      | 2-DH5 | 2402               | Ant1    | 2.88               | 302.4                    | 105            | 31600               | 400           | Pass    |



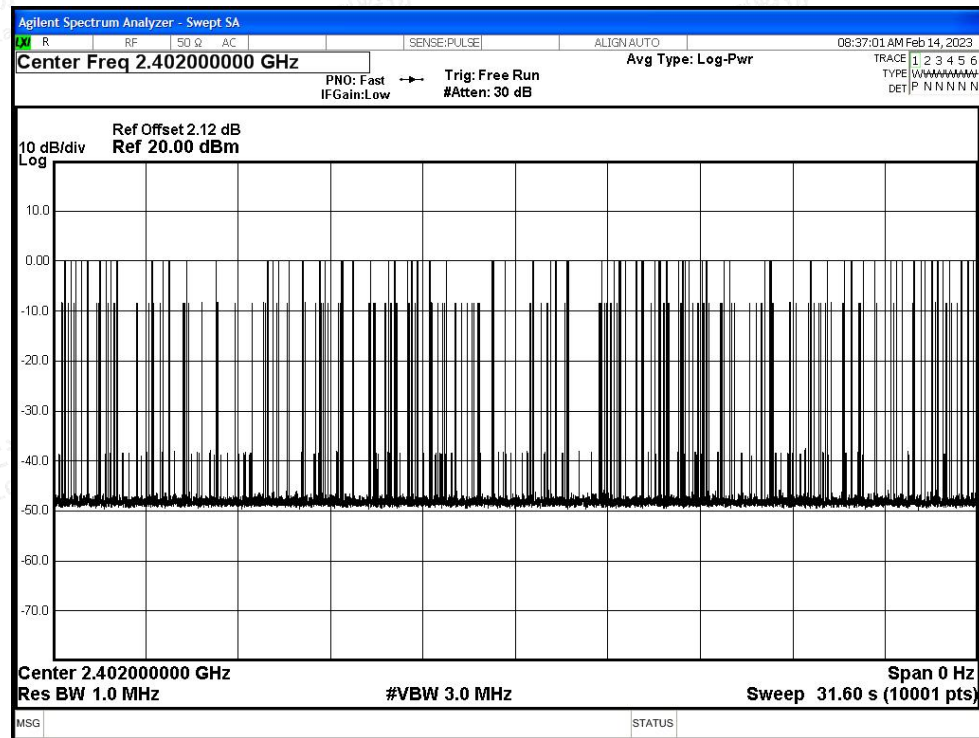


## Test Graphs

## Dwell NVNT 1-DH5 2402MHz Ant1 One Burst

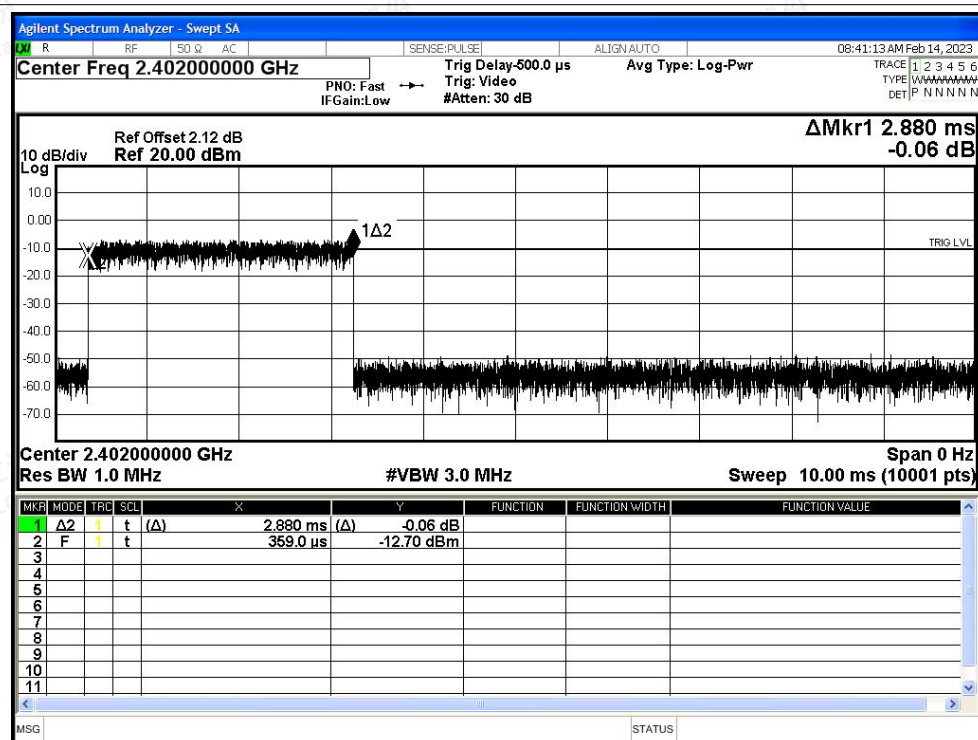


## Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated

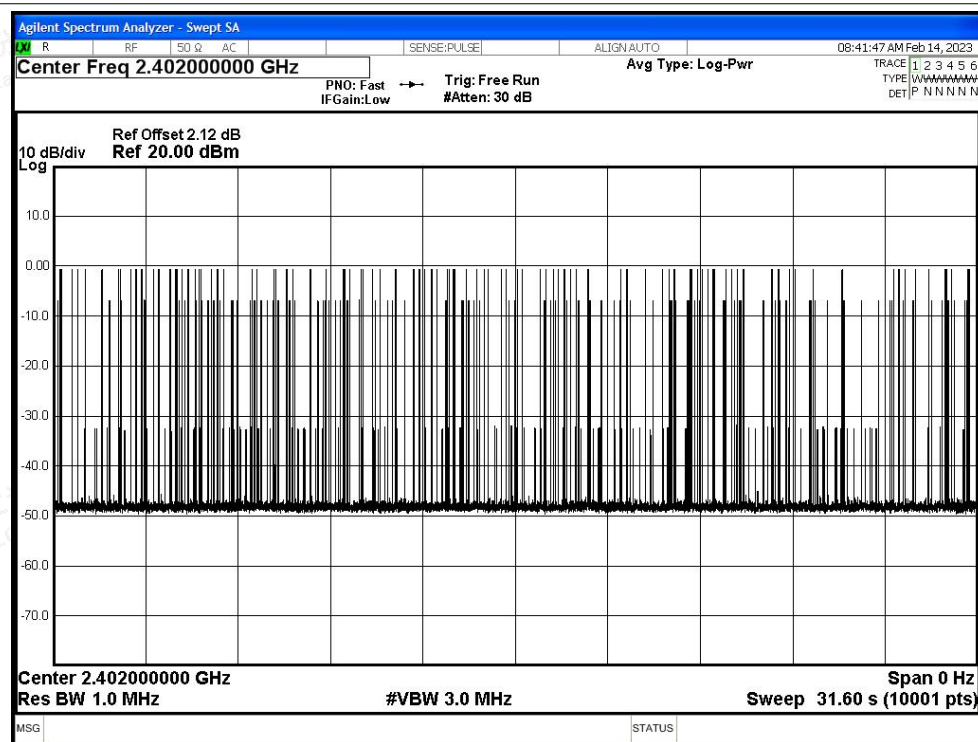




## Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



## Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated





### A.5 Number of Hopping Channel

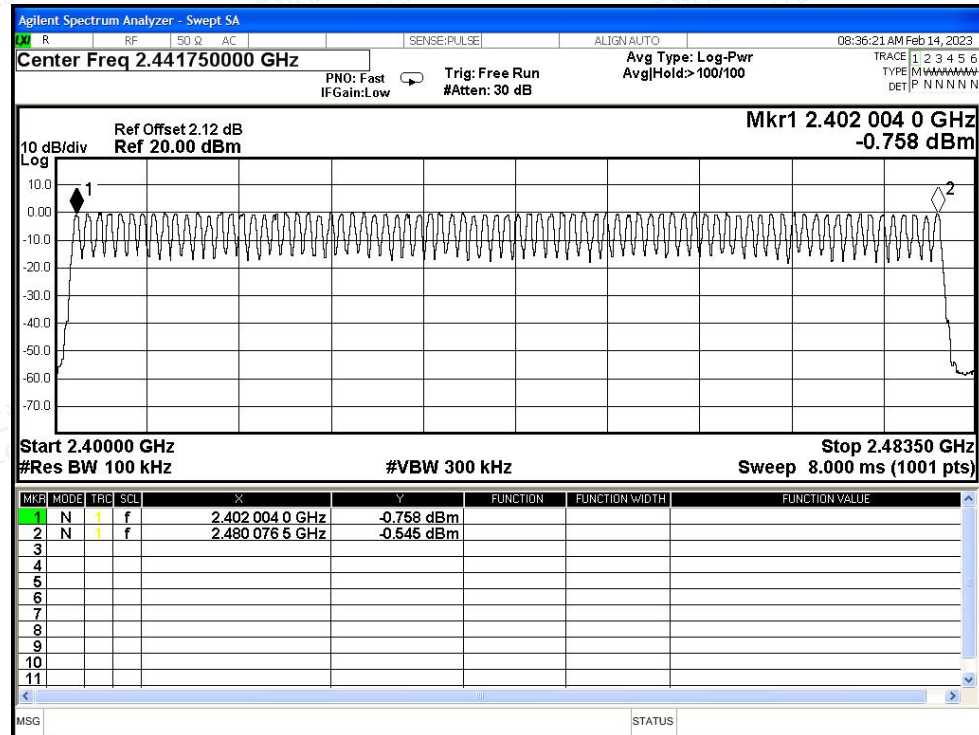
| Condition | Mode  | Antenna | Hopping Number | Limit | Verdict |
|-----------|-------|---------|----------------|-------|---------|
| NVNT      | 1-DH5 | Ant1    | 79             | 15    | Pass    |
| NVNT      | 2-DH5 | Ant1    | 79             | 15    | Pass    |



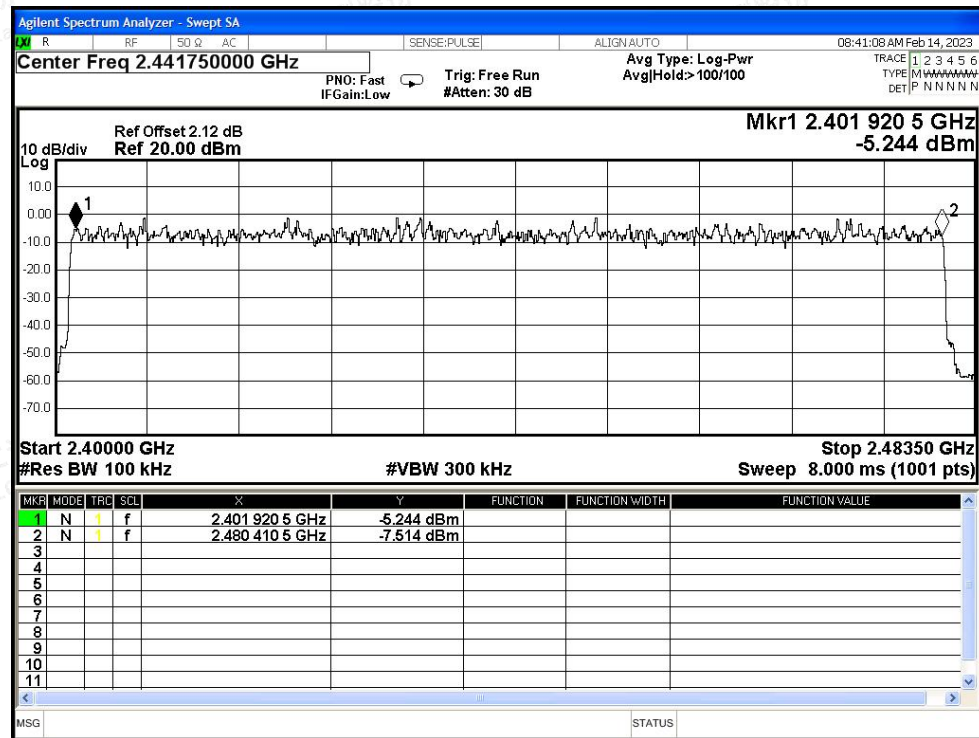


## Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1





## A.6 Band Edge

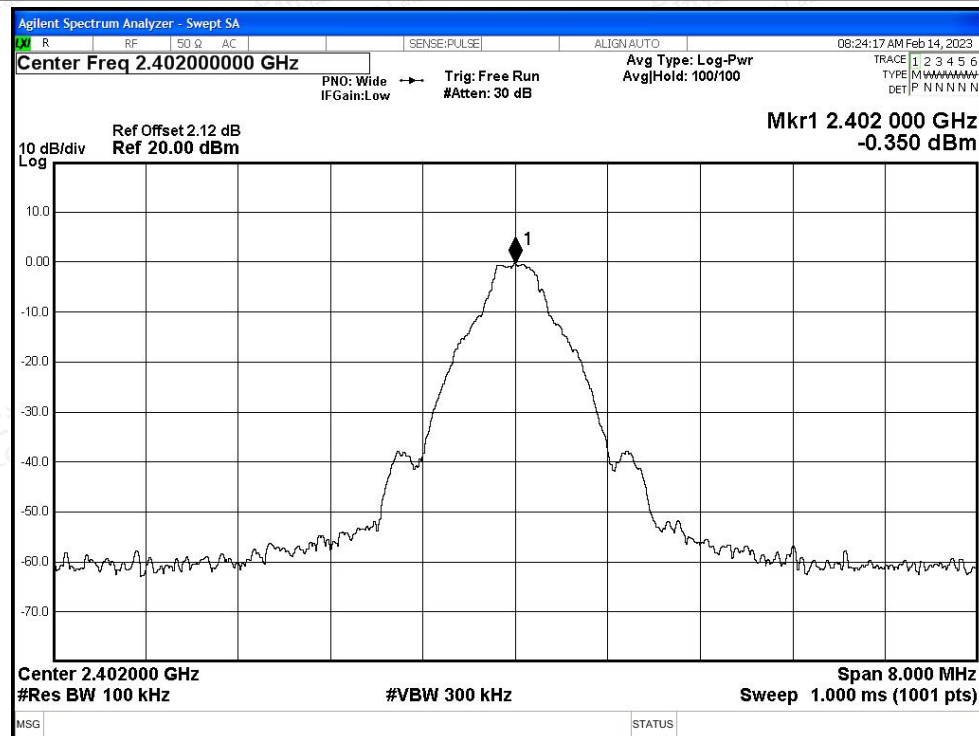
| Condition | Mode  | Frequency (MHz) | Antenna | Hopping Mode | Max Value (dBc) | Limit (dBc) | Verdict |
|-----------|-------|-----------------|---------|--------------|-----------------|-------------|---------|
| NVNT      | 1-DH5 | 2402            | Ant1    | No-Hopping   | -56.06          | -20         | Pass    |
| NVNT      | 1-DH5 | 2480            | Ant1    | No-Hopping   | -56.1           | -20         | Pass    |
| NVNT      | 2-DH5 | 2402            | Ant1    | No-Hopping   | -55.36          | -20         | Pass    |
| NVNT      | 2-DH5 | 2480            | Ant1    | No-Hopping   | -54.83          | -20         | Pass    |



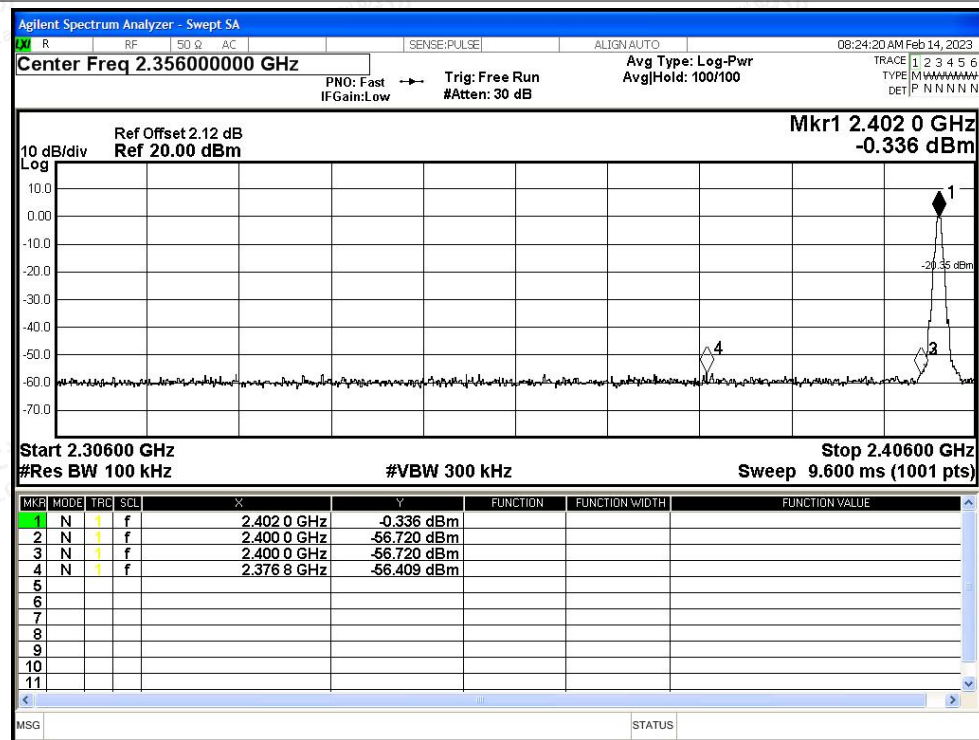


## Test Graphs

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

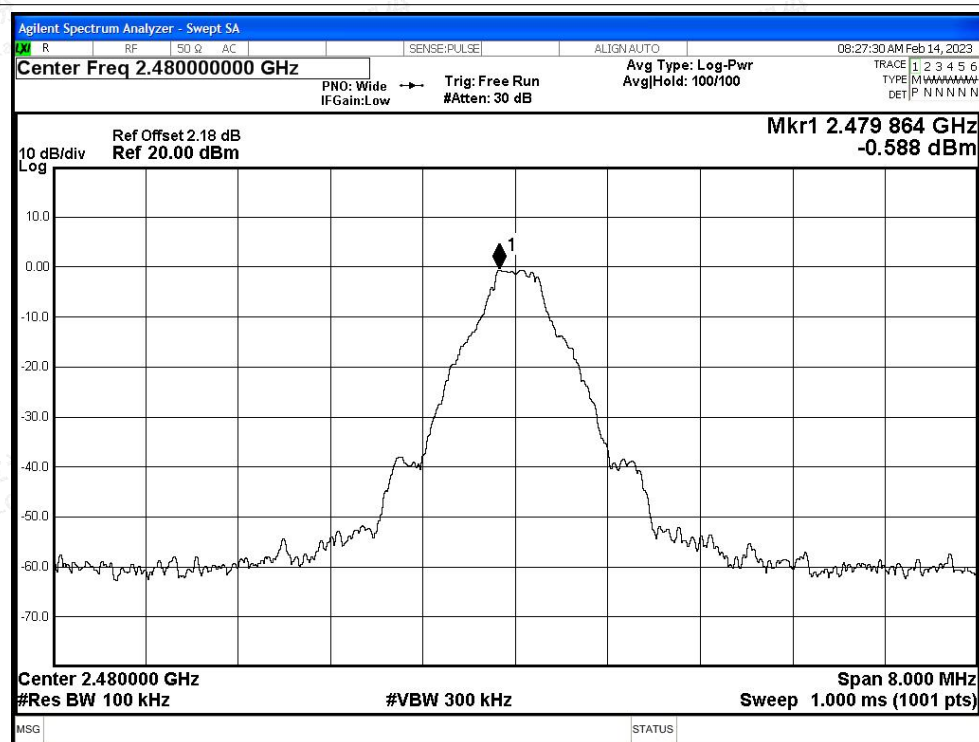


## Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission

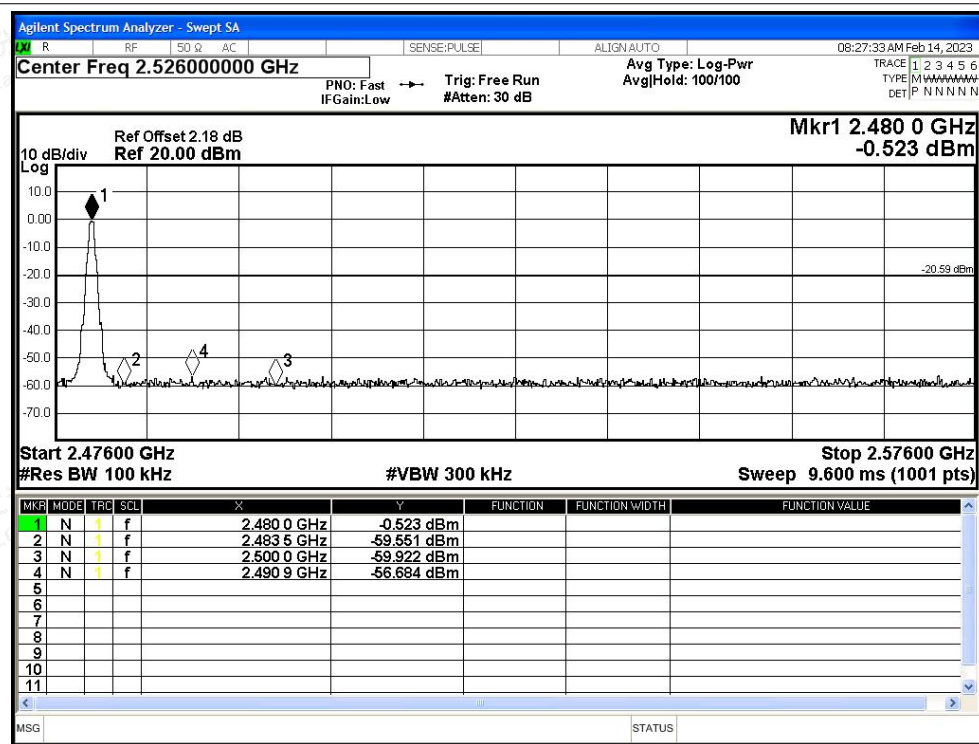




## Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref

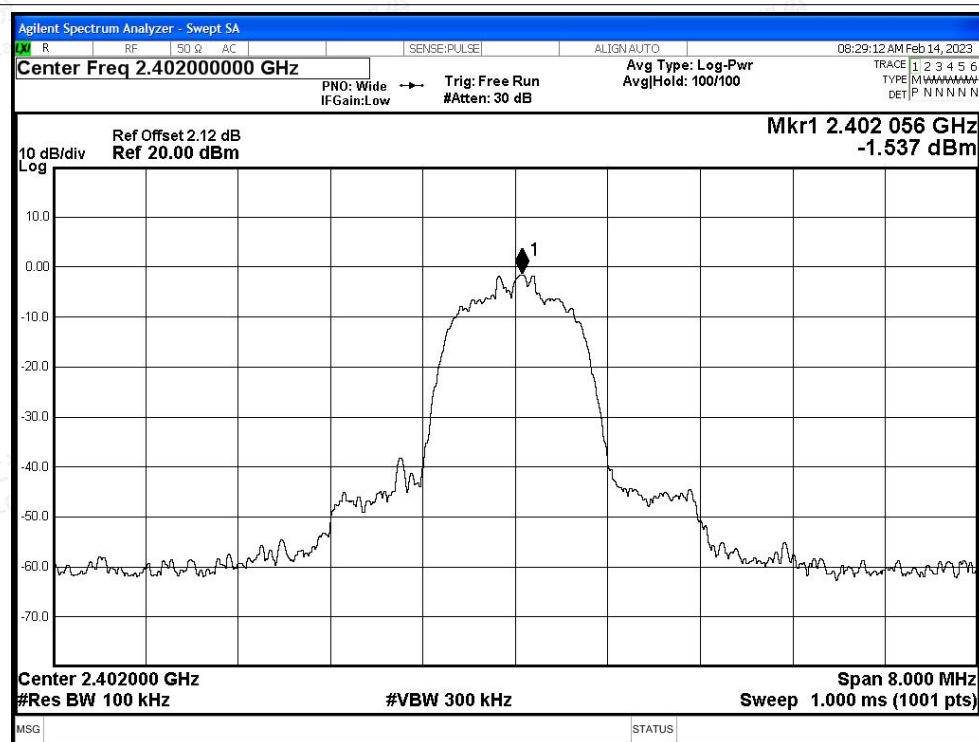


## Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission

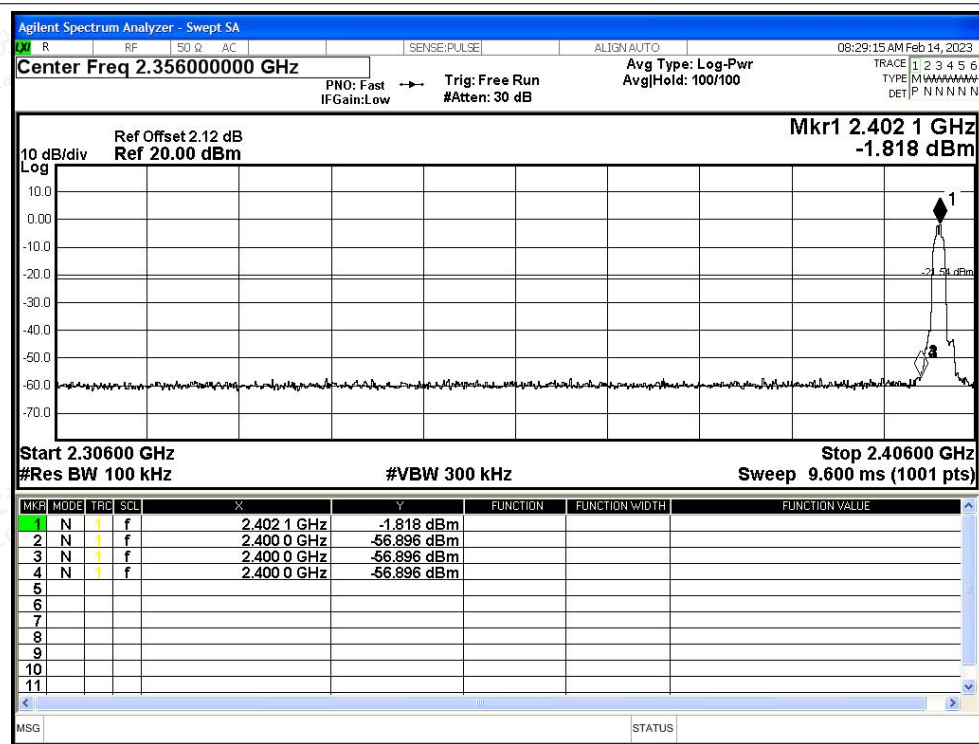




## Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref

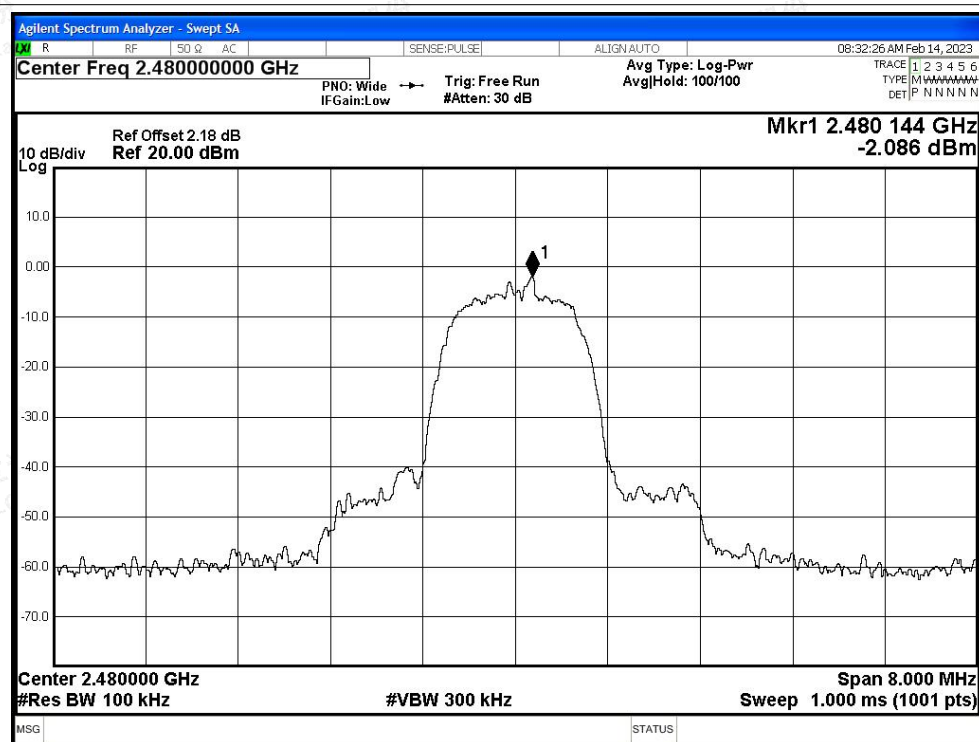


## Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission

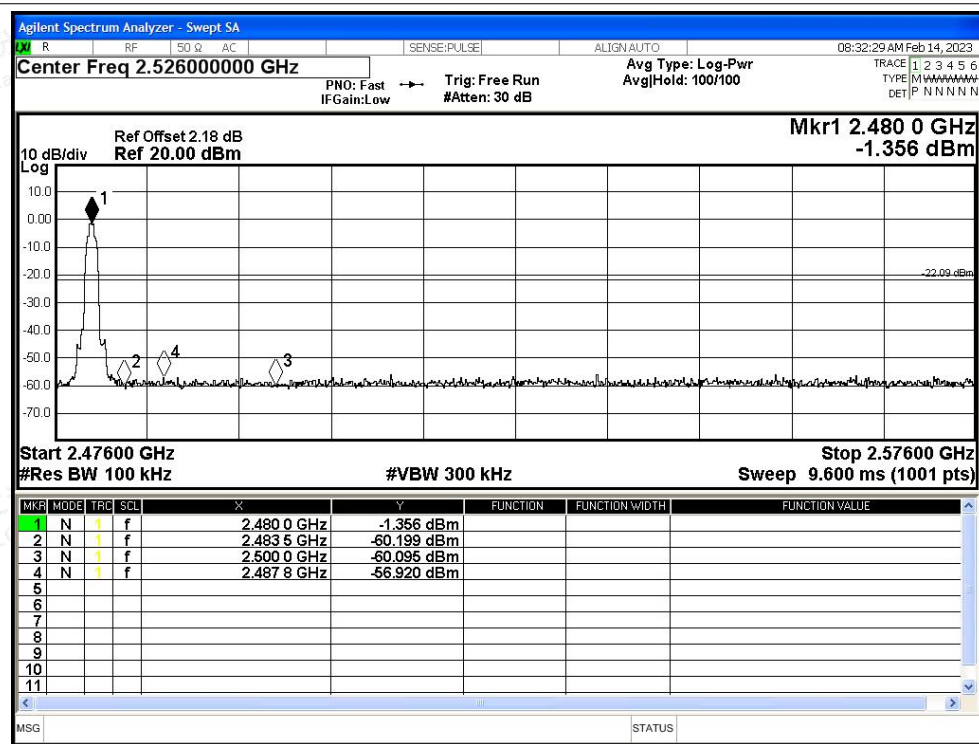




## Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



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



**(Hopping)**

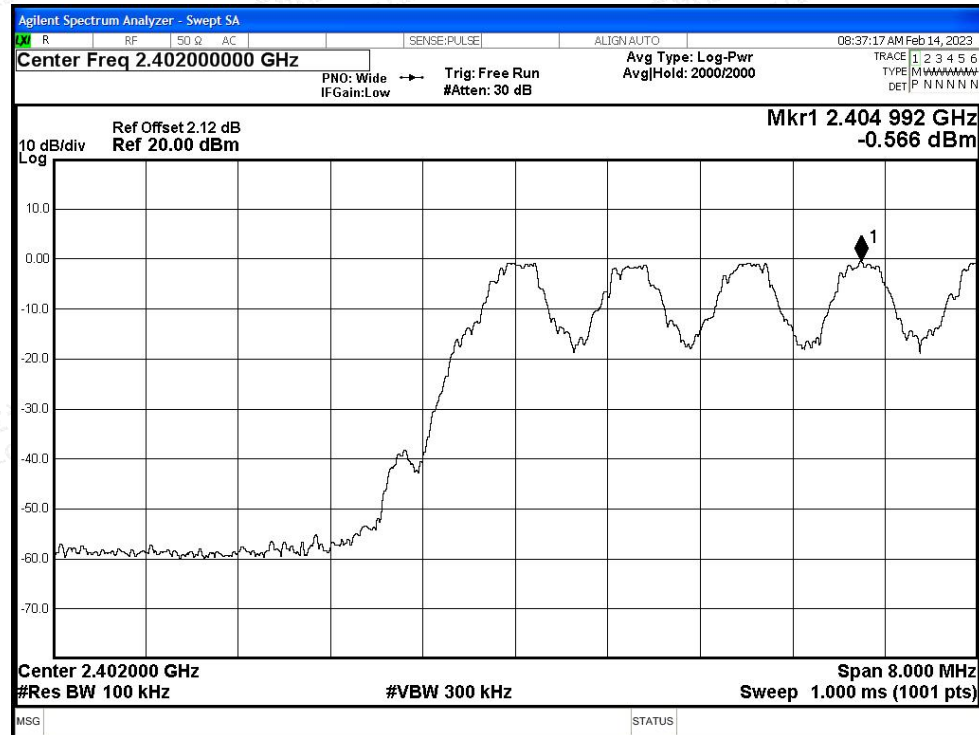
| Condition | Mode  | Frequency (MHz) | Antenna | Hopping Mode | Max Value (dBc) | Limit (dBc) | Verdict |
|-----------|-------|-----------------|---------|--------------|-----------------|-------------|---------|
| NVNT      | 1-DH5 | 2402            | Ant1    | Hopping      | -55.57          | -20         | Pass    |
| NVNT      | 1-DH5 | 2480            | Ant1    | Hopping      | -55.27          | -20         | Pass    |
| NVNT      | 2-DH5 | 2402            | Ant1    | Hopping      | -54.13          | -20         | Pass    |
| NVNT      | 2-DH5 | 2480            | Ant1    | Hopping      | -53.17          | -20         | Pass    |



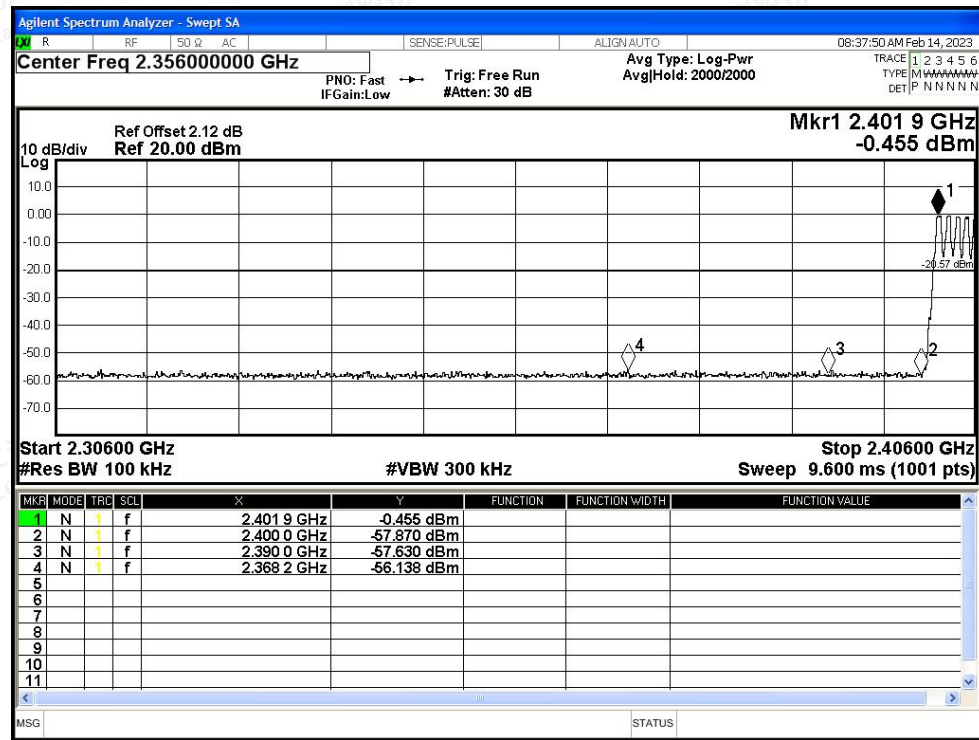


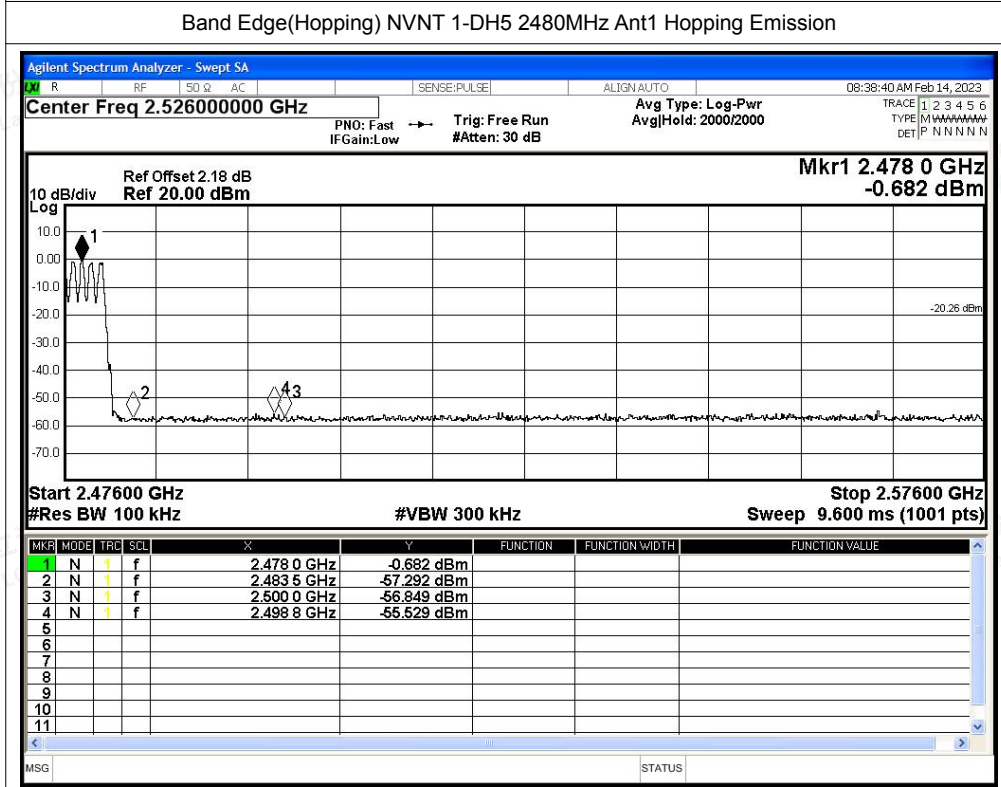
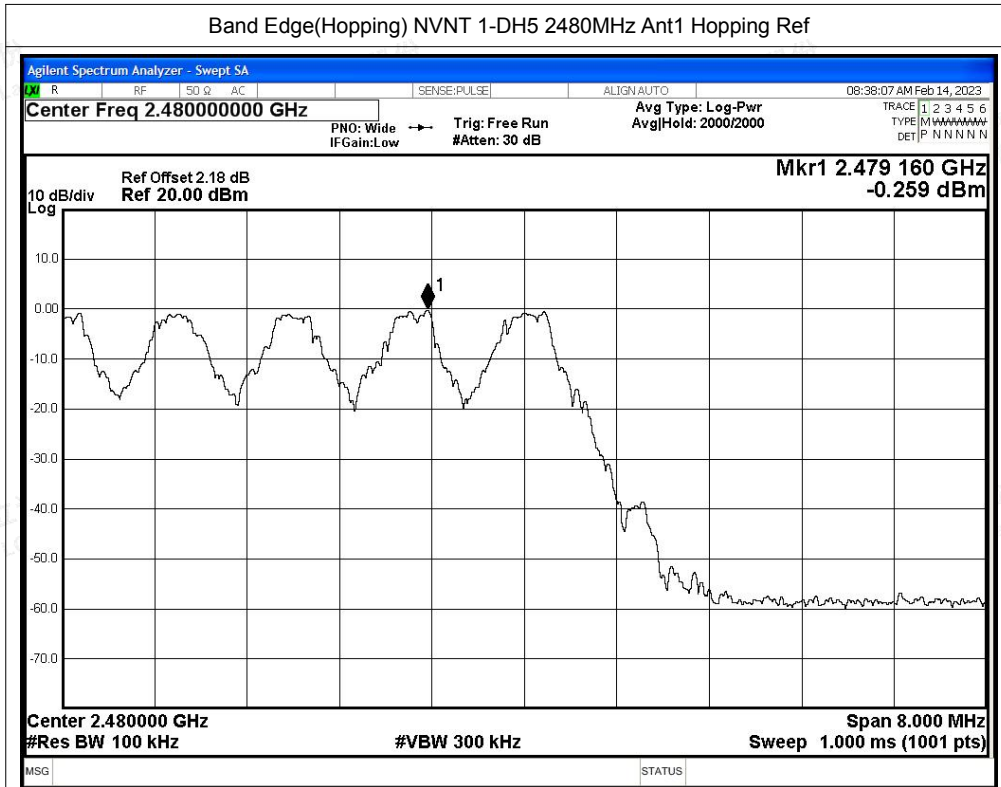
## Test Graphs

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



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



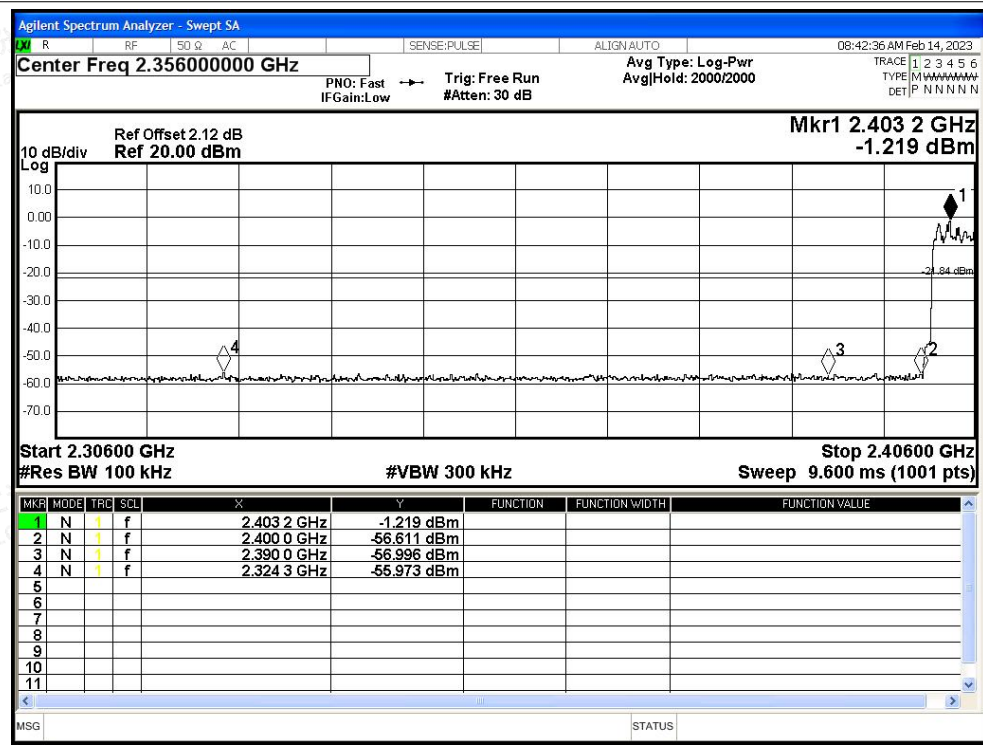




## Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Ref

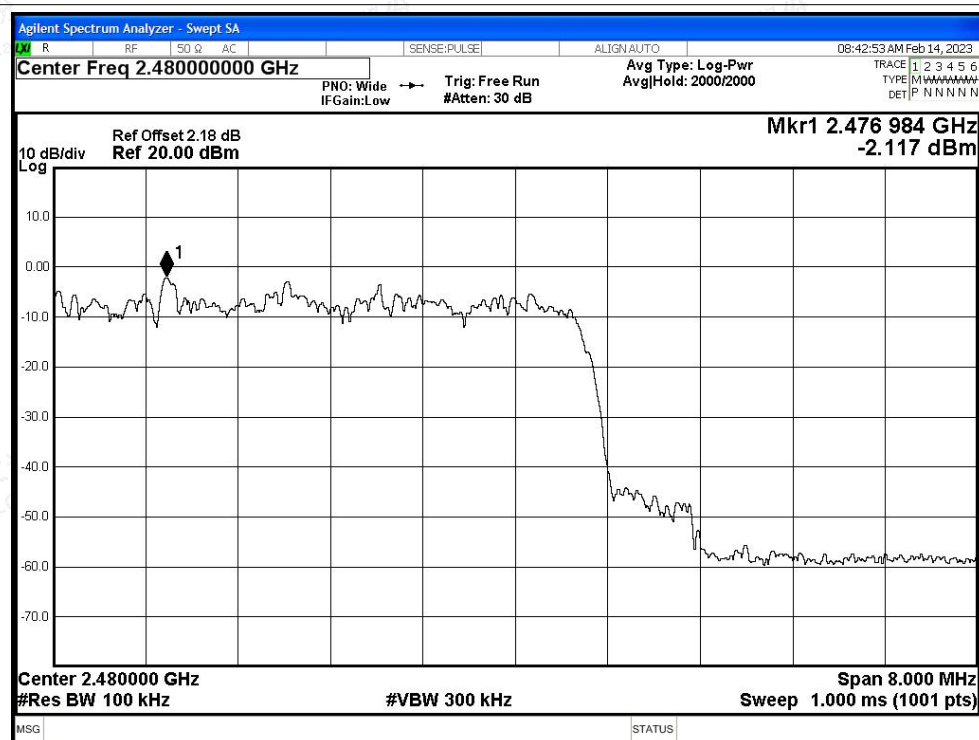


## Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Emission

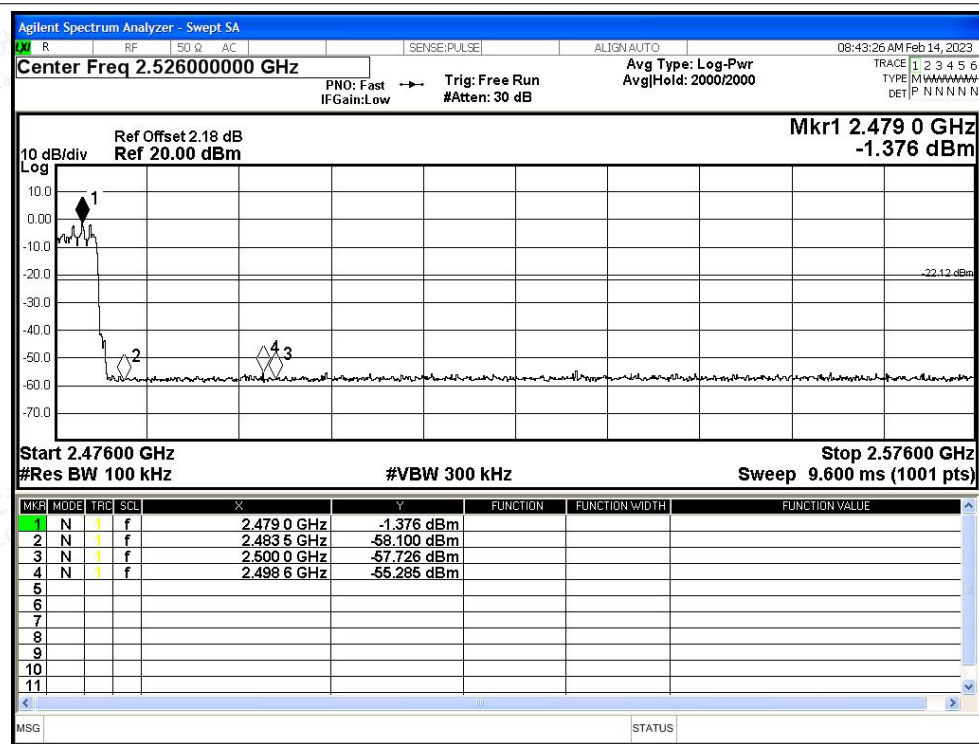




## Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



## Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Emission





## A.7 Conducted RF Spurious Emission

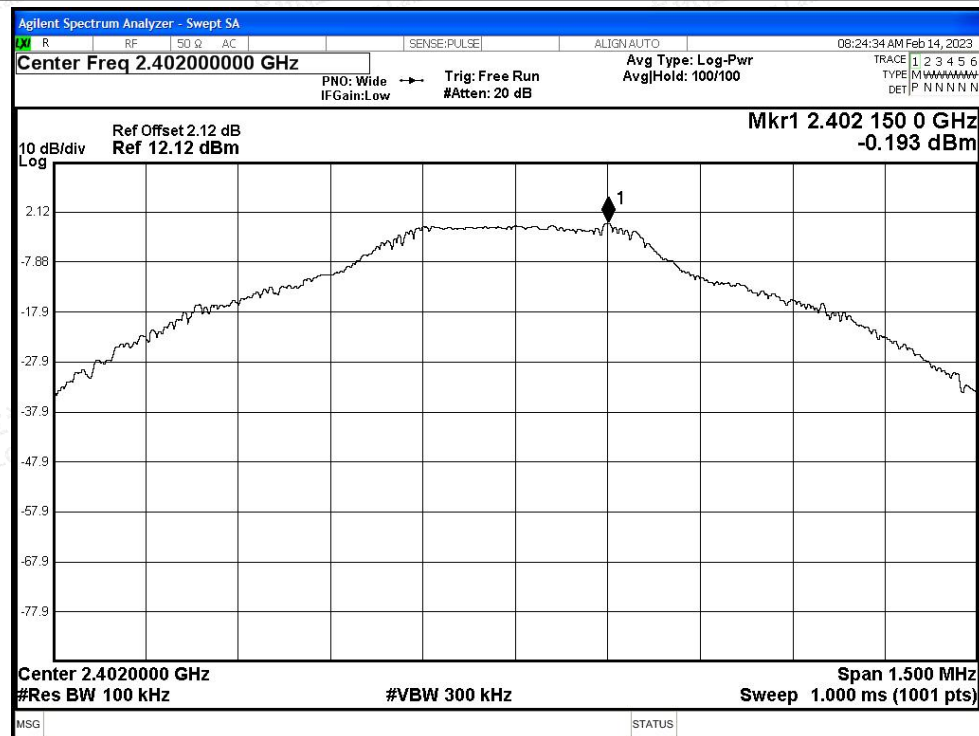
| Condition | Mode  | Frequency (MHz) | Antenna | Max Value (dBc) | Limit (dBc) | Verdict |
|-----------|-------|-----------------|---------|-----------------|-------------|---------|
| NVNT      | 1-DH5 | 2402            | Ant1    | -55.32          | -20         | Pass    |
| NVNT      | 1-DH5 | 2441            | Ant1    | -55.09          | -20         | Pass    |
| NVNT      | 1-DH5 | 2480            | Ant1    | -54.5           | -20         | Pass    |
| NVNT      | 2-DH5 | 2402            | Ant1    | -53.97          | -20         | Pass    |
| NVNT      | 2-DH5 | 2441            | Ant1    | -52.4           | -20         | Pass    |
| NVNT      | 2-DH5 | 2480            | Ant1    | -50.61          | -20         | Pass    |



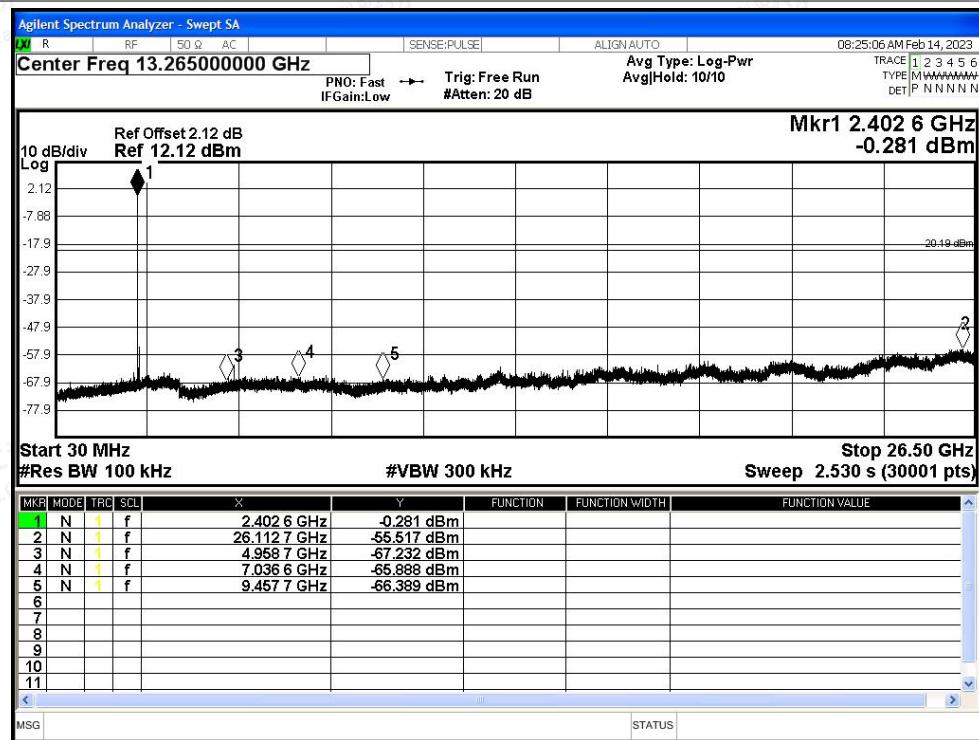


## Test Graphs

## Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref

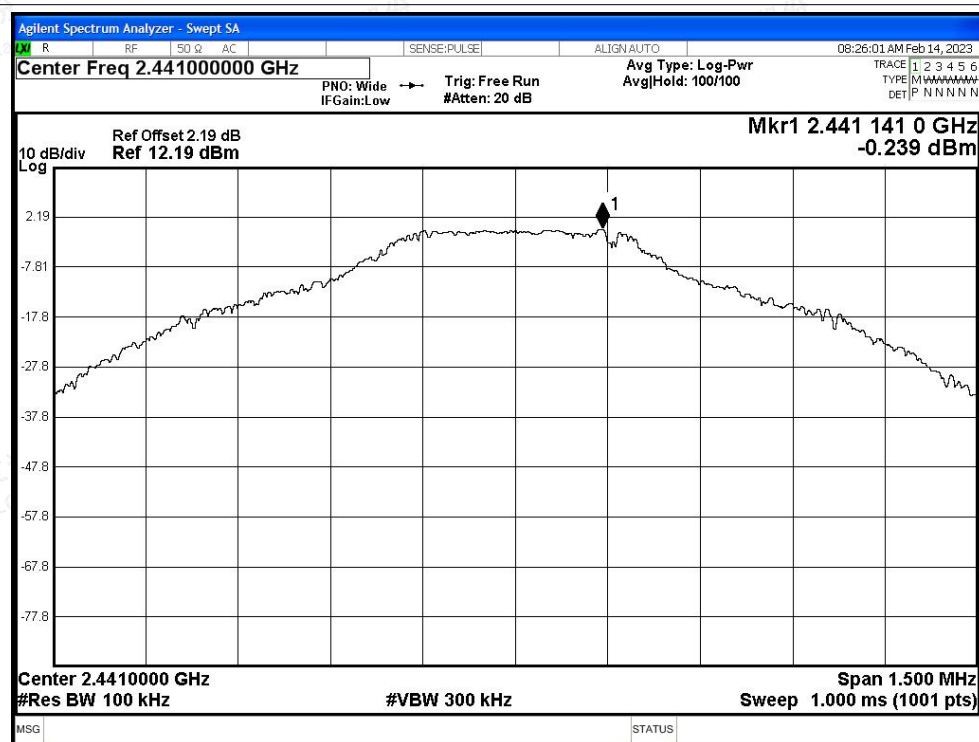


## Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission





## Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



## Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission

