



## Appendix A

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

Product Name: smart watch

Test Model: TB39

#### Environmental Conditions

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





### A.1 -20dB Bandwidth

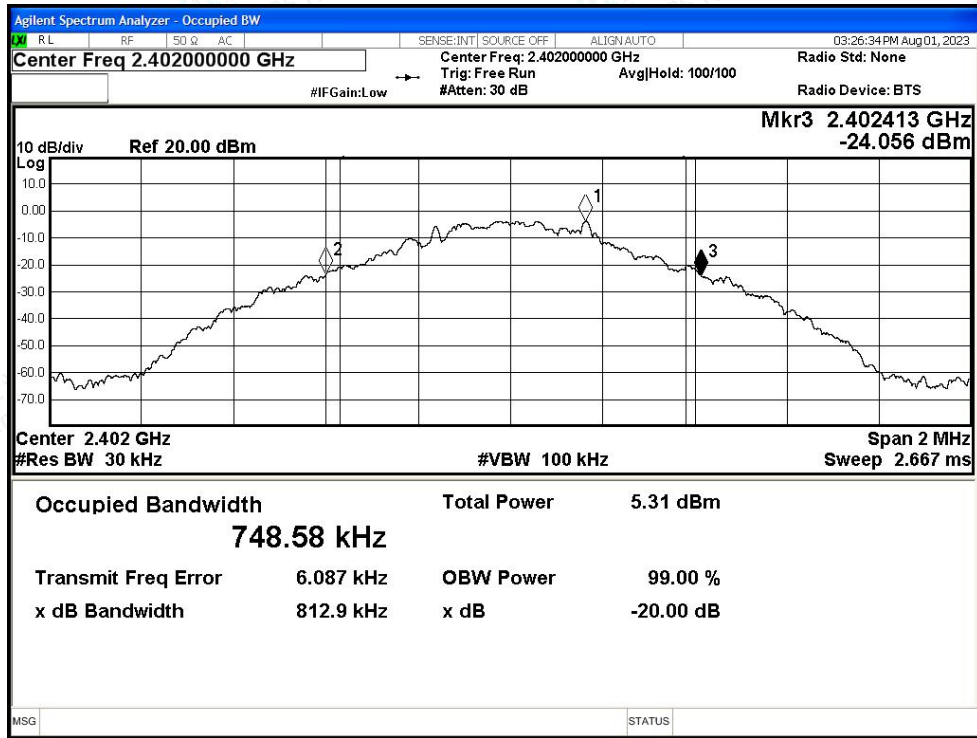
| Condition | Mode  | Frequency (MHz) | Antenna | -20 dB Bandwidth (MHz) | Limit -20 dB Bandwidth (MHz) | Verdict |
|-----------|-------|-----------------|---------|------------------------|------------------------------|---------|
| NVNT      | 1-DH5 | 2402            | Ant1    | 0.813                  | 0                            | Pass    |
| NVNT      | 1-DH5 | 2441            | Ant1    | 0.833                  | 0                            | Pass    |
| NVNT      | 1-DH5 | 2480            | Ant1    | 0.838                  | 0                            | Pass    |
| NVNT      | 2-DH5 | 2402            | Ant1    | 1.276                  | 0                            | Pass    |
| NVNT      | 2-DH5 | 2441            | Ant1    | 1.262                  | 0                            | Pass    |
| NVNT      | 2-DH5 | 2480            | Ant1    | 1.283                  | 0                            | Pass    |



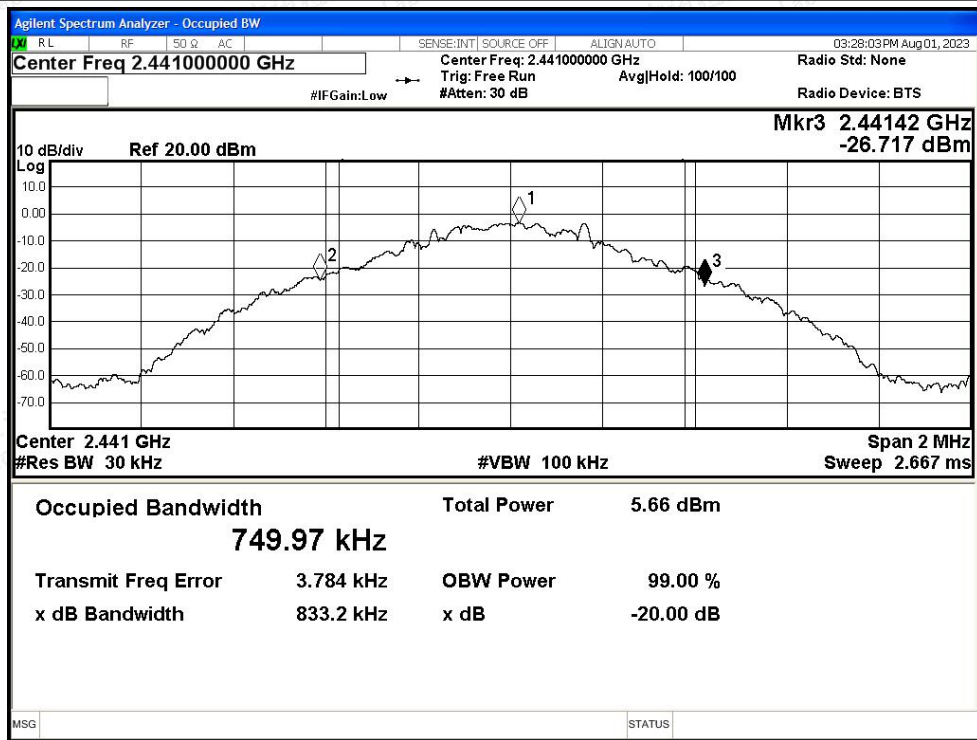


Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1

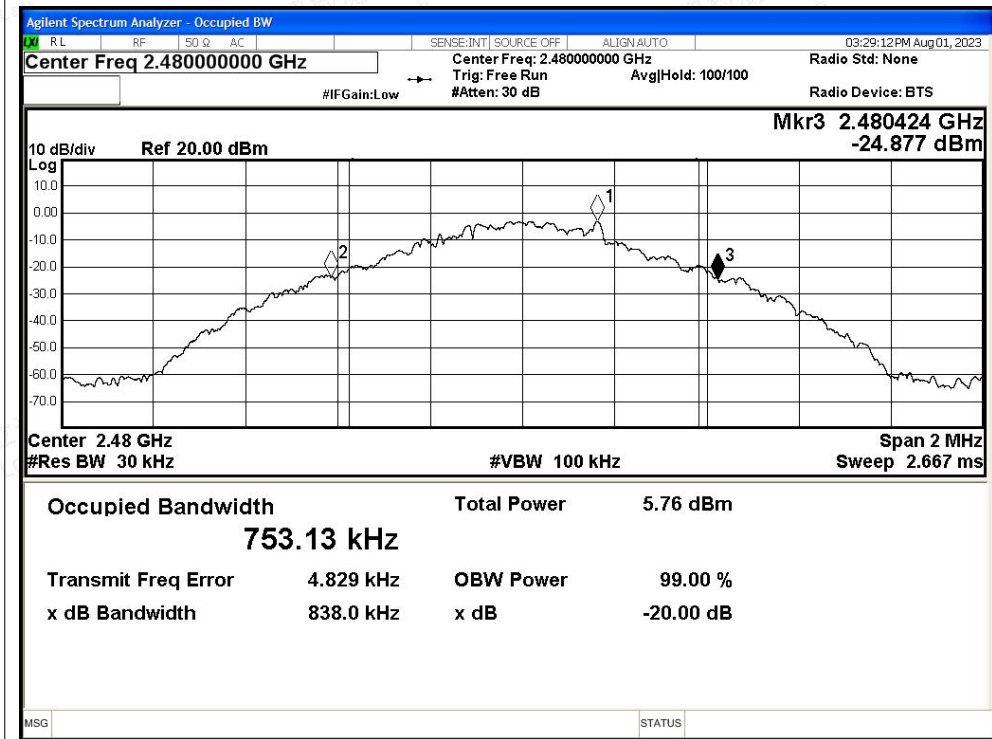


-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1

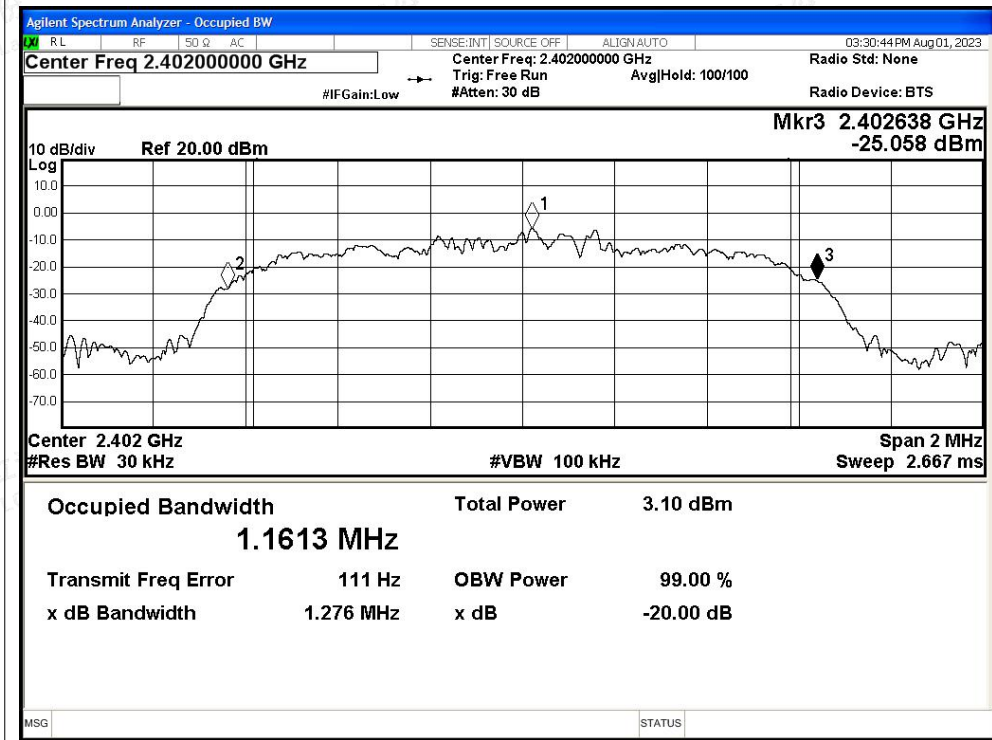




-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



Shenzhen LCS Compliance Testing Laboratory Ltd.

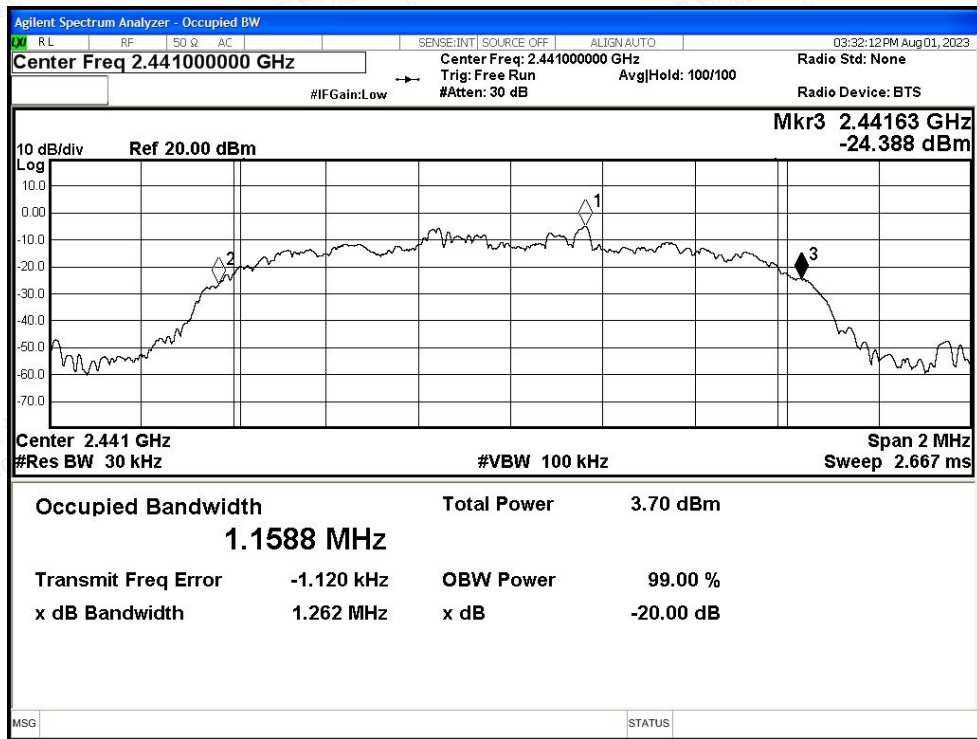
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

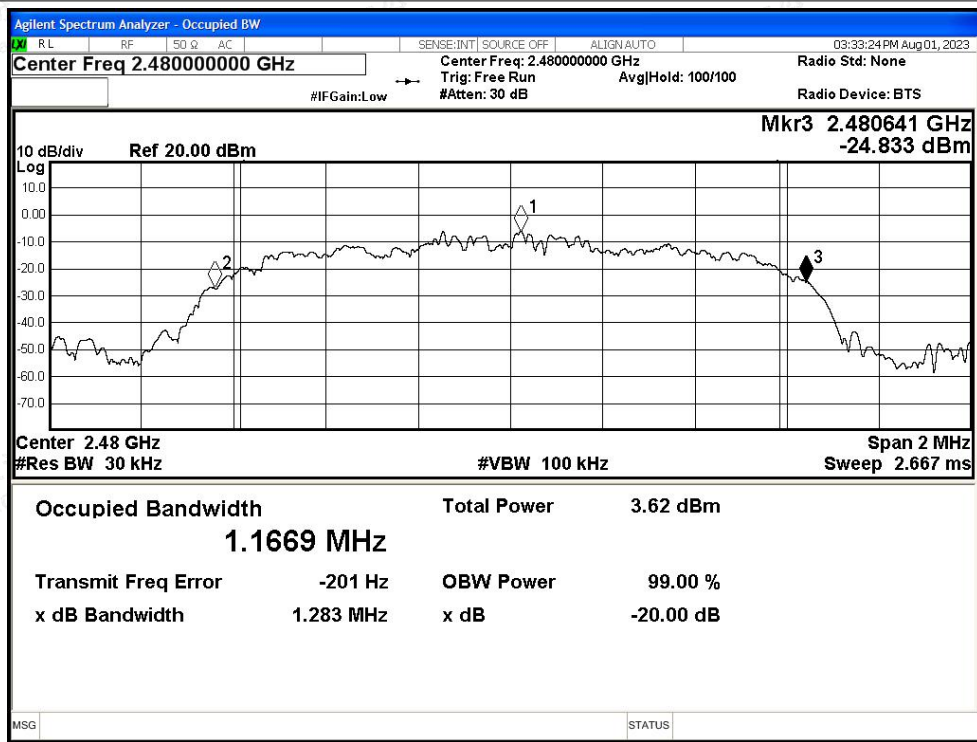
Scan code to check authenticity



-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1





### A.3 Maximum Conducted Output Power

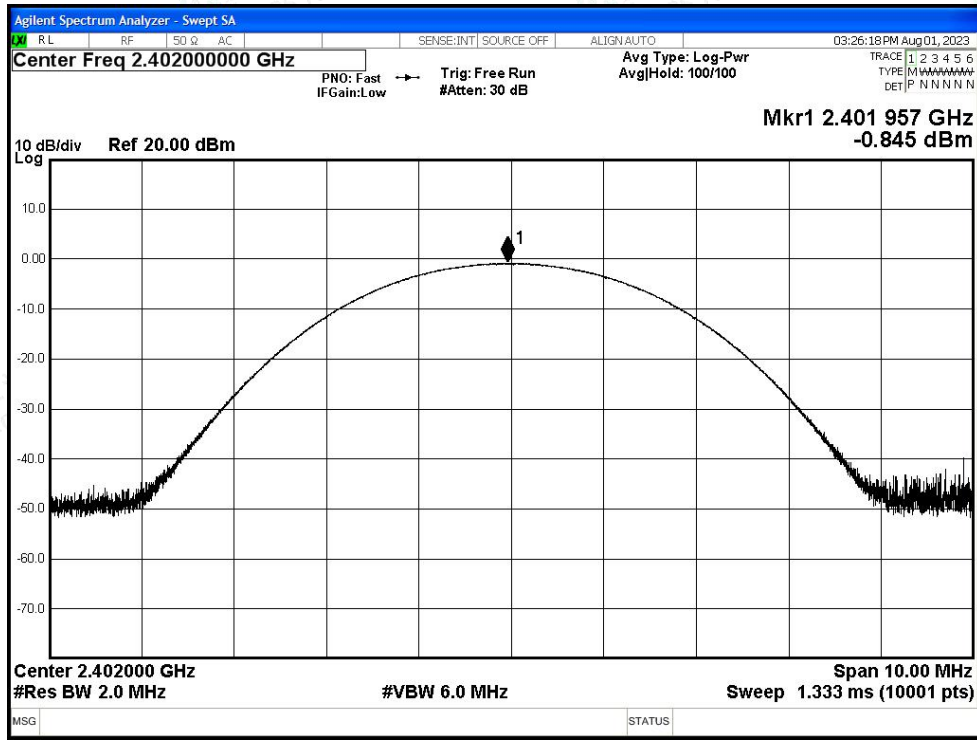
| Condition | Mode  | Frequency (MHz) | Antenna | Total Power (dBm) | Limit (dBm) | Verdict |
|-----------|-------|-----------------|---------|-------------------|-------------|---------|
| NVNT      | 1-DH5 | 2402            | Ant1    | -0.85             | 21          | Pass    |
| NVNT      | 1-DH5 | 2441            | Ant1    | -0.4              | 21          | Pass    |
| NVNT      | 1-DH5 | 2480            | Ant1    | -0.25             | 21          | Pass    |
| NVNT      | 2-DH5 | 2402            | Ant1    | -1.45             | 21          | Pass    |
| NVNT      | 2-DH5 | 2441            | Ant1    | -1                | 21          | Pass    |
| NVNT      | 2-DH5 | 2480            | Ant1    | -0.88             | 21          | Pass    |



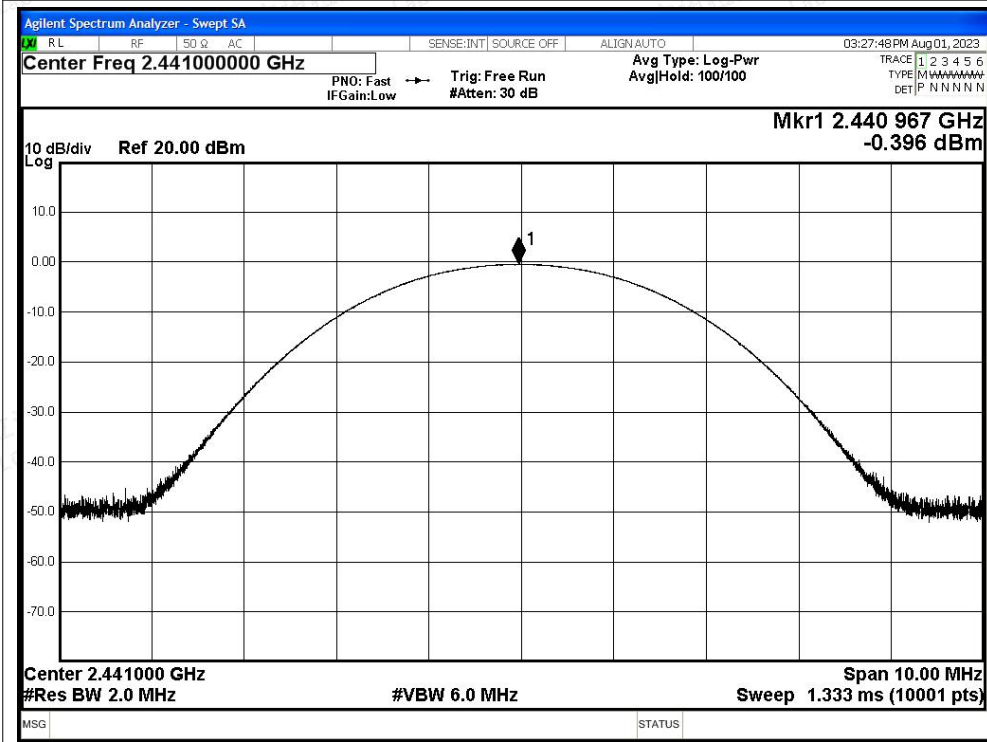


Test Graphs

Power NVNT 1-DH5 2402MHz Ant1

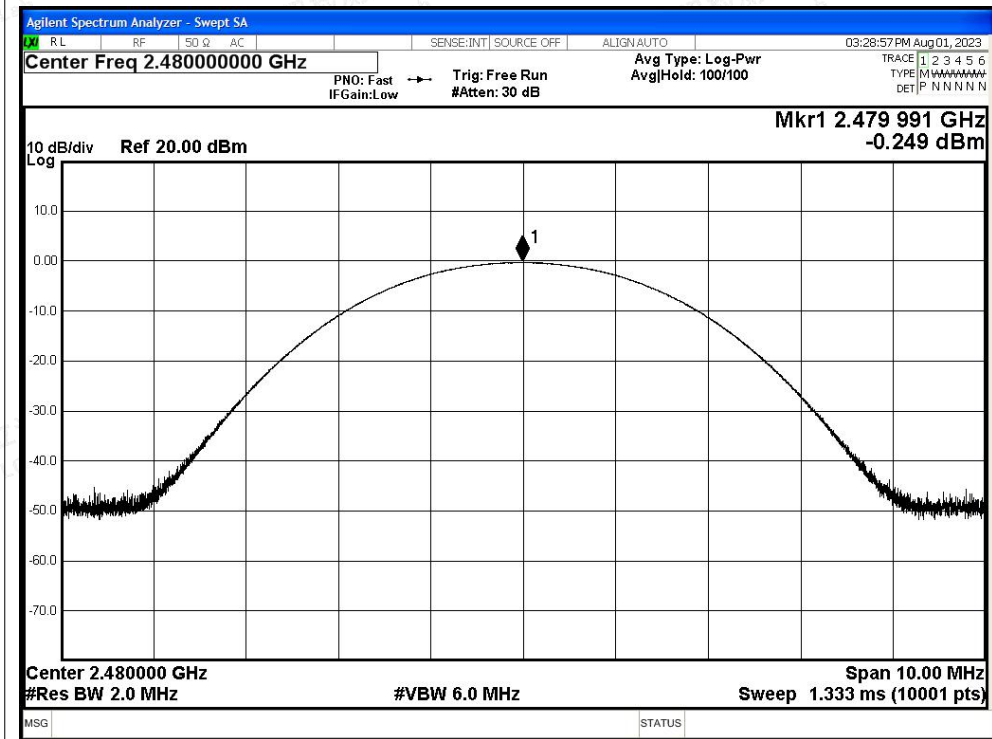


Power NVNT 1-DH5 2441MHz Ant1

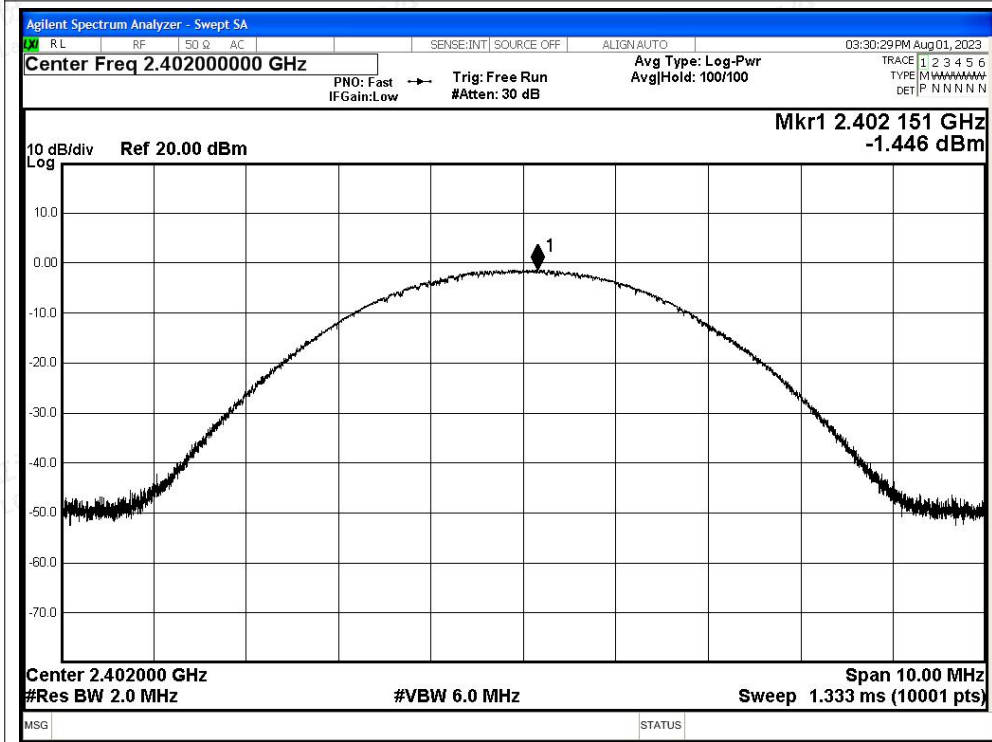




Power NVNT 1-DH5 2480MHz Ant1



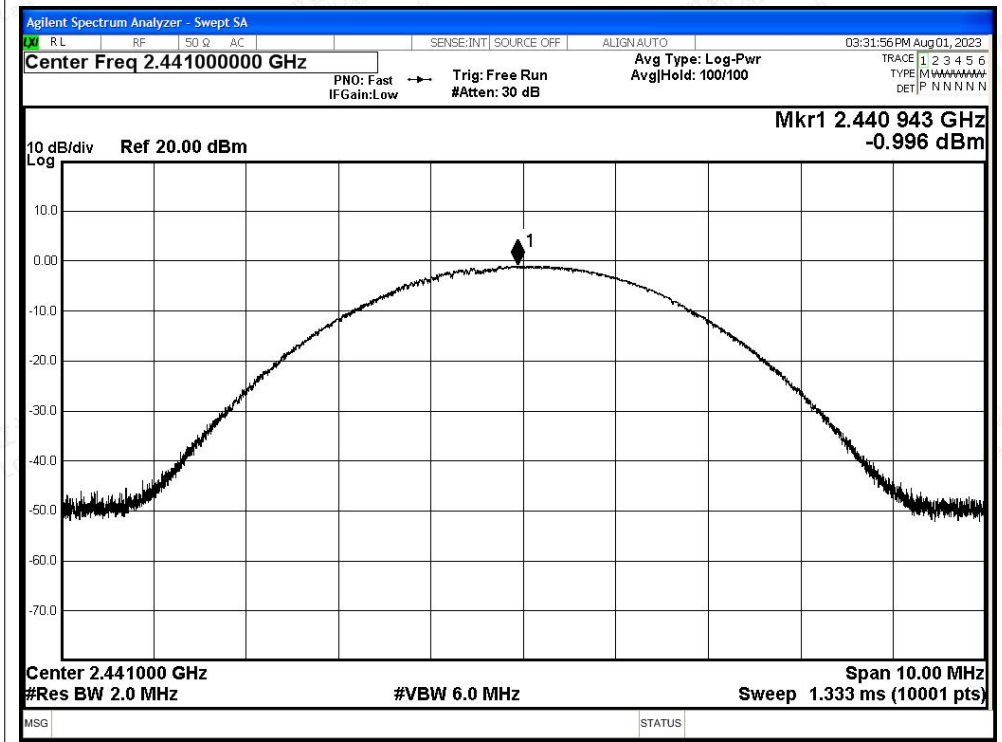
Power NVNT 2-DH5 2402MHz Ant1



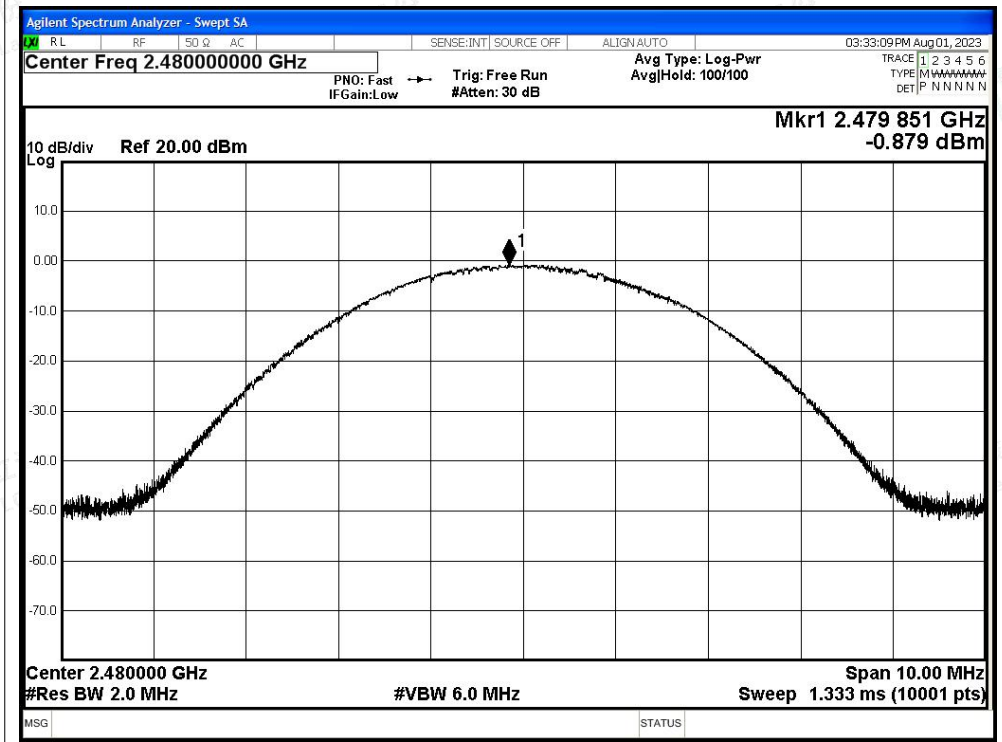




Power NVNT 2-DH5 2441MHz Ant1



Power NVNT 2-DH5 2480MHz Ant1





## A.4 Carrier Frequencies Separation

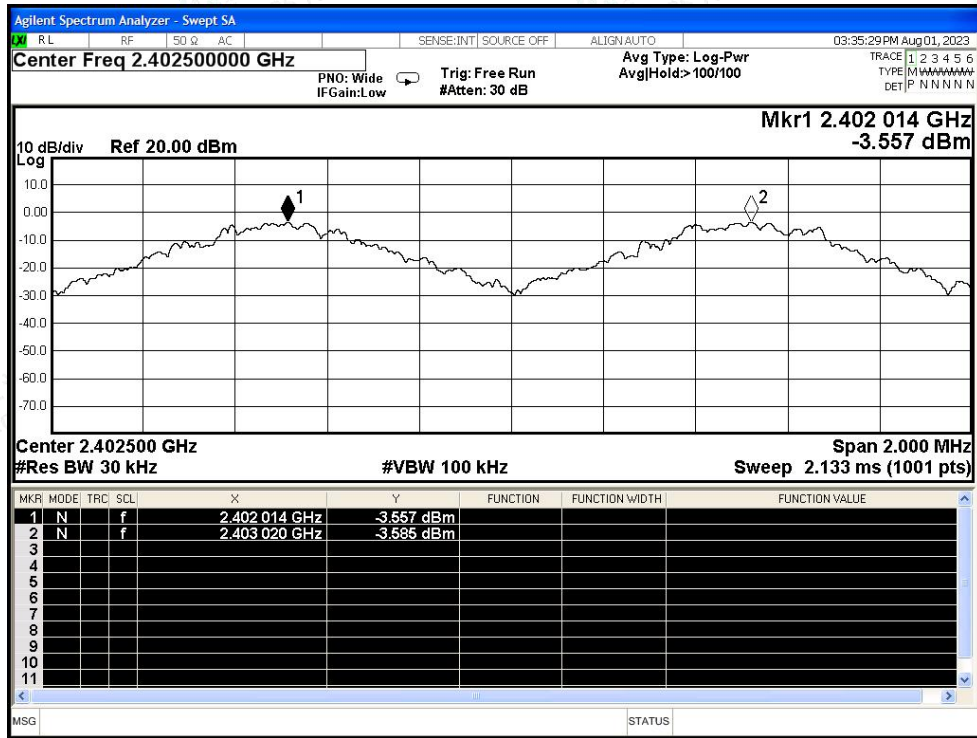
| Condition | Mode  | Antenna | Hopping Freq1 (MHz) | Hopping Freq2 (MHz) | HFS (MHz) | Limit (MHz) | Verdict |
|-----------|-------|---------|---------------------|---------------------|-----------|-------------|---------|
| NVNT      | 1-DH5 | Ant1    | 2402.014            | 2403.02             | 1.006     | 0.559       | Pass    |
| NVNT      | 2-DH5 | Ant1    | 2401.826            | 2403.024            | 1.198     | 0.855       | Pass    |



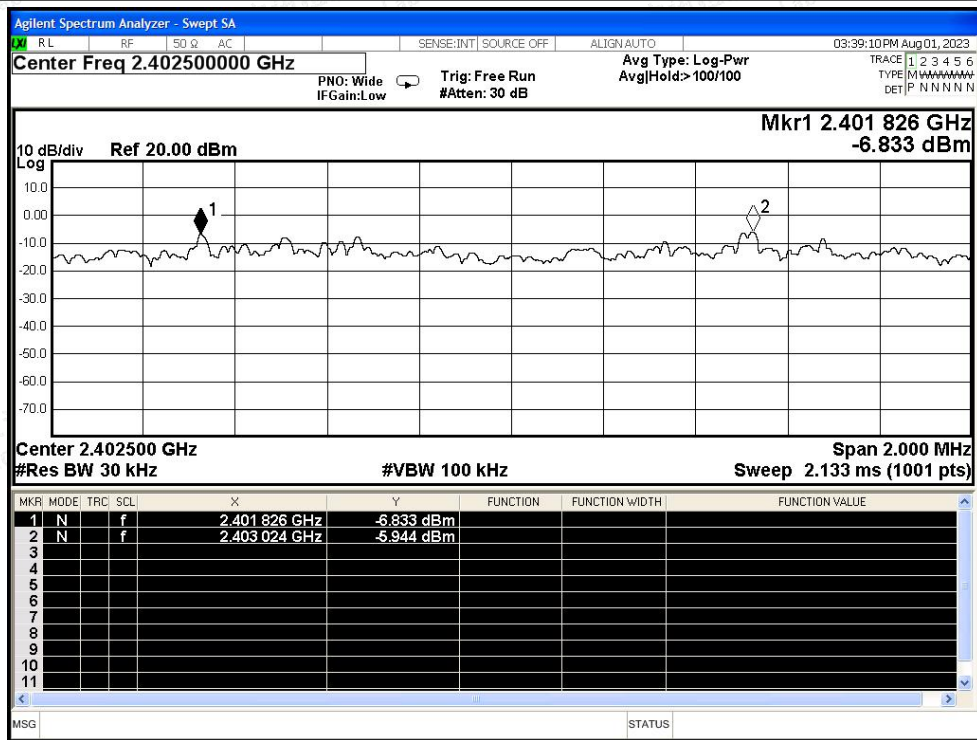


Test Graphs

CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1





## A.6 Number of Hopping Channel

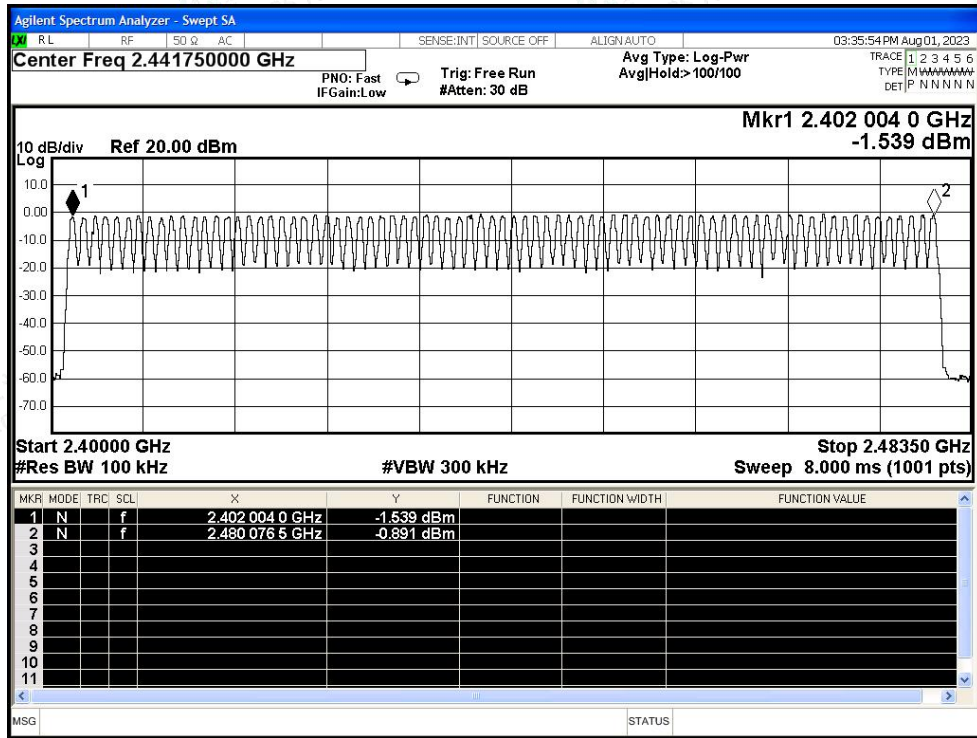
| Condition | Mode  | Antenna | Hopping Number | Limit | Verdict |
|-----------|-------|---------|----------------|-------|---------|
| NVNT      | 1-DH5 | Ant1    | 79             | 15    | Pass    |
| NVNT      | 2-DH5 | Ant1    | 79             | 15    | Pass    |



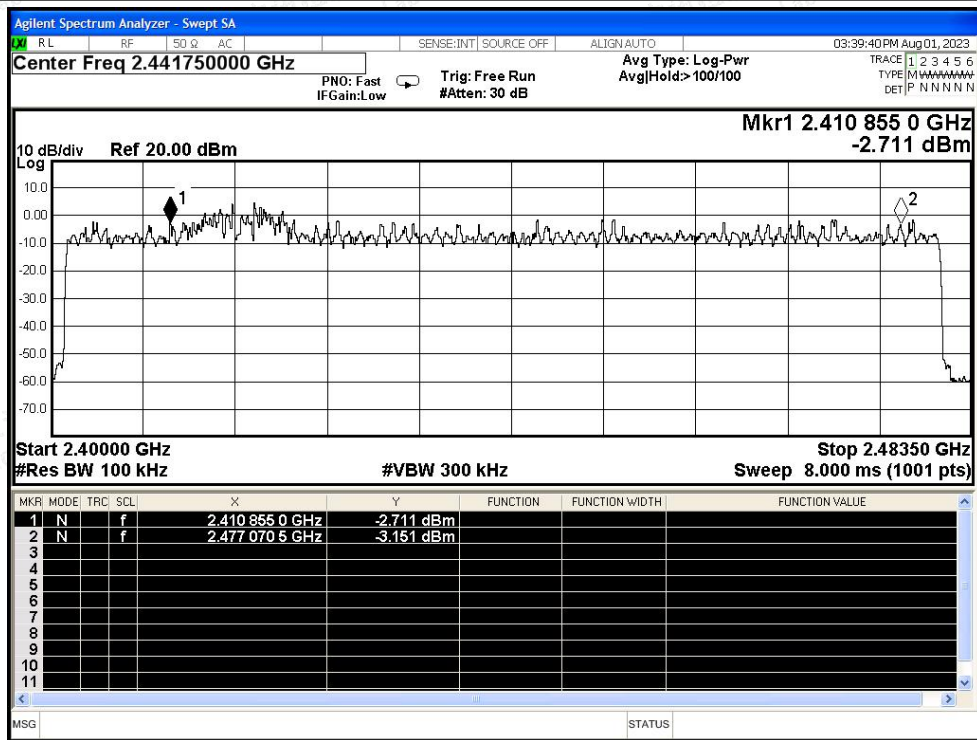


Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1





## A.5 Dwell Time

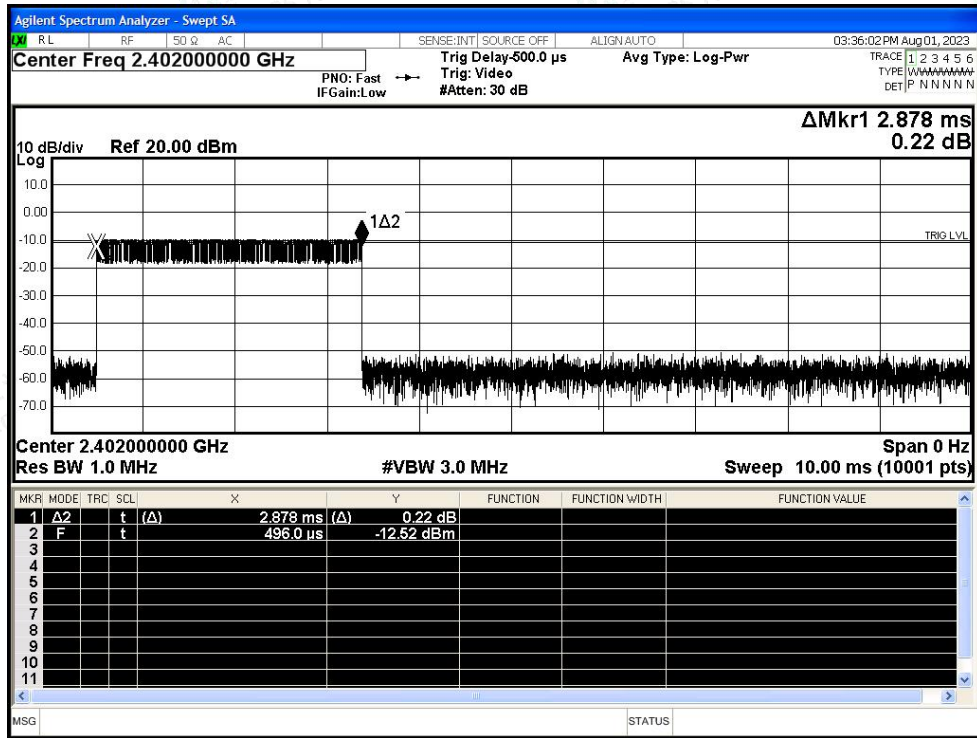
| Condition | Mode  | Frequency (MHz) | Antenna | Pulse Time (ms) | Total Dwell Time (ms) | Burst Count | Period Time (ms) | Limit (ms) | Verdict |
|-----------|-------|-----------------|---------|-----------------|-----------------------|-------------|------------------|------------|---------|
| NVNT      | 1-DH5 | 2402            | Ant1    | 2.878           | 319.458               | 111         | 31600            | 400        | Pass    |
| NVNT      | 2-DH5 | 2402            | Ant1    | 2.88            | 285.12                | 99          | 31600            | 400        | Pass    |



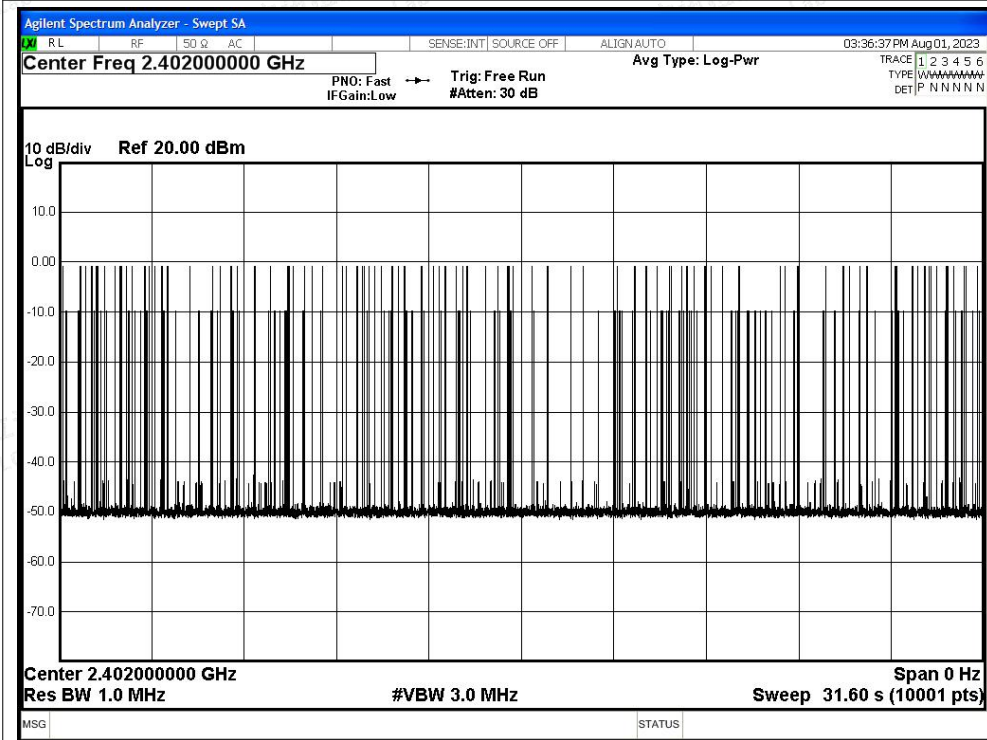


Test Graphs

Dwell NVNT 1-DH5 2402MHz Ant1 One Burst

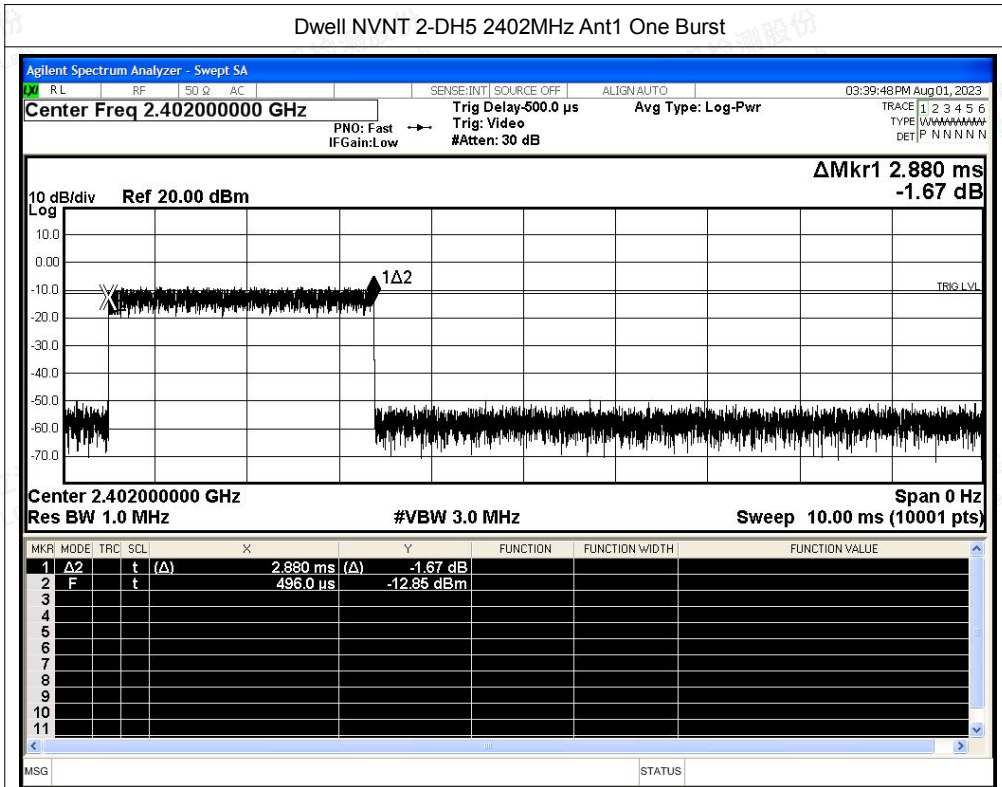


Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated

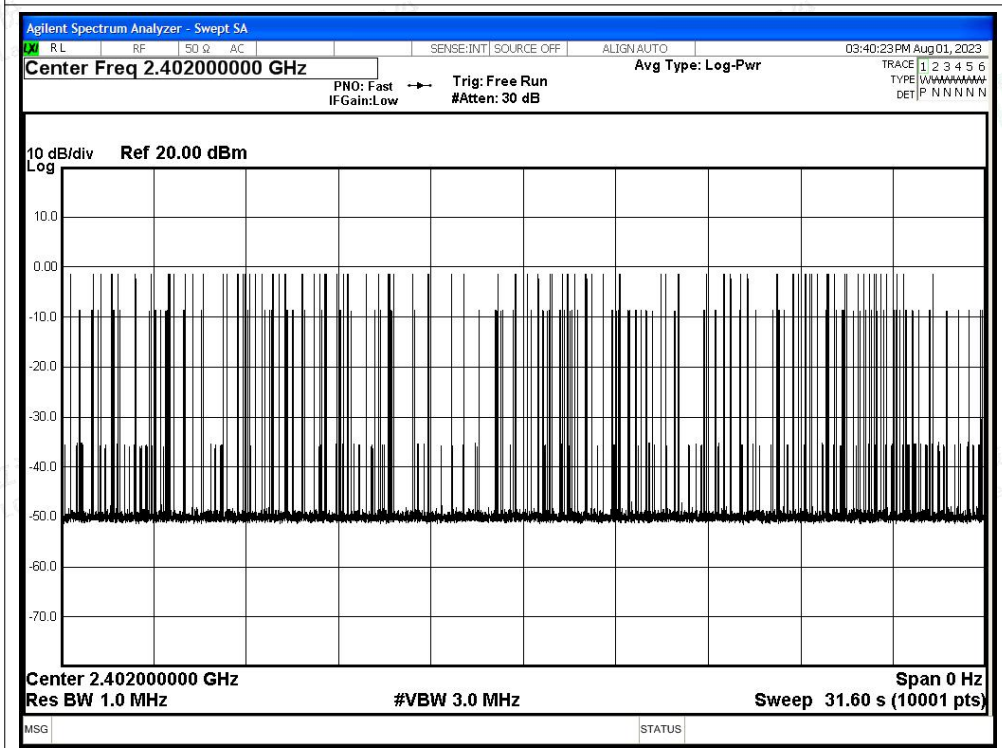




Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated







## A.7 Band Edge

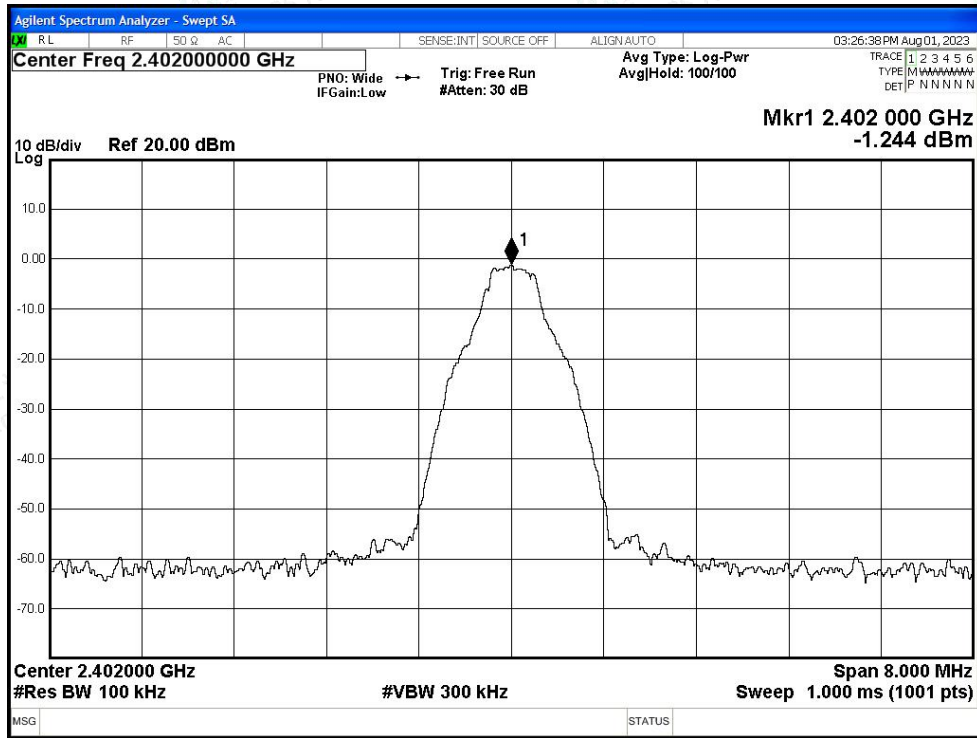
| Condition | Mode  | Frequency (MHz) | Antenna | Hopping Mode | Max Value (dBc) | Limit (dBc) | Verdict |
|-----------|-------|-----------------|---------|--------------|-----------------|-------------|---------|
| NVNT      | 1-DH5 | 2402            | Ant1    | No-Hopping   | -57.56          | -20         | Pass    |
| NVNT      | 1-DH5 | 2480            | Ant1    | No-Hopping   | -57.43          | -20         | Pass    |
| NVNT      | 2-DH5 | 2402            | Ant1    | No-Hopping   | -54.07          | -20         | Pass    |
| NVNT      | 2-DH5 | 2480            | Ant1    | No-Hopping   | -51.89          | -20         | Pass    |



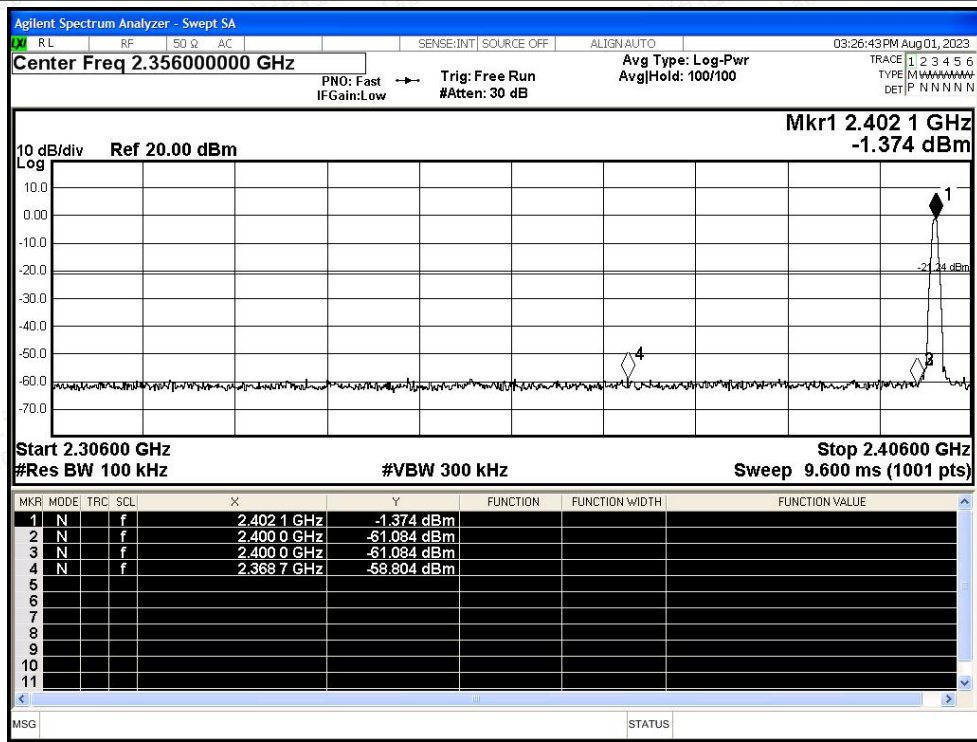


Test Graphs

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

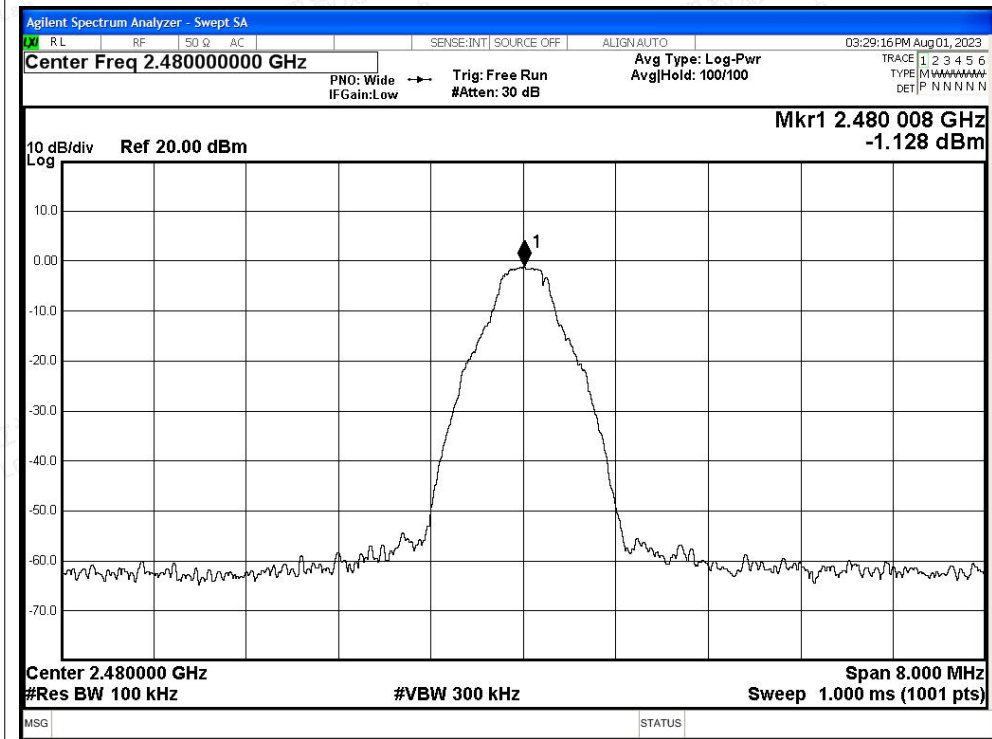


Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission

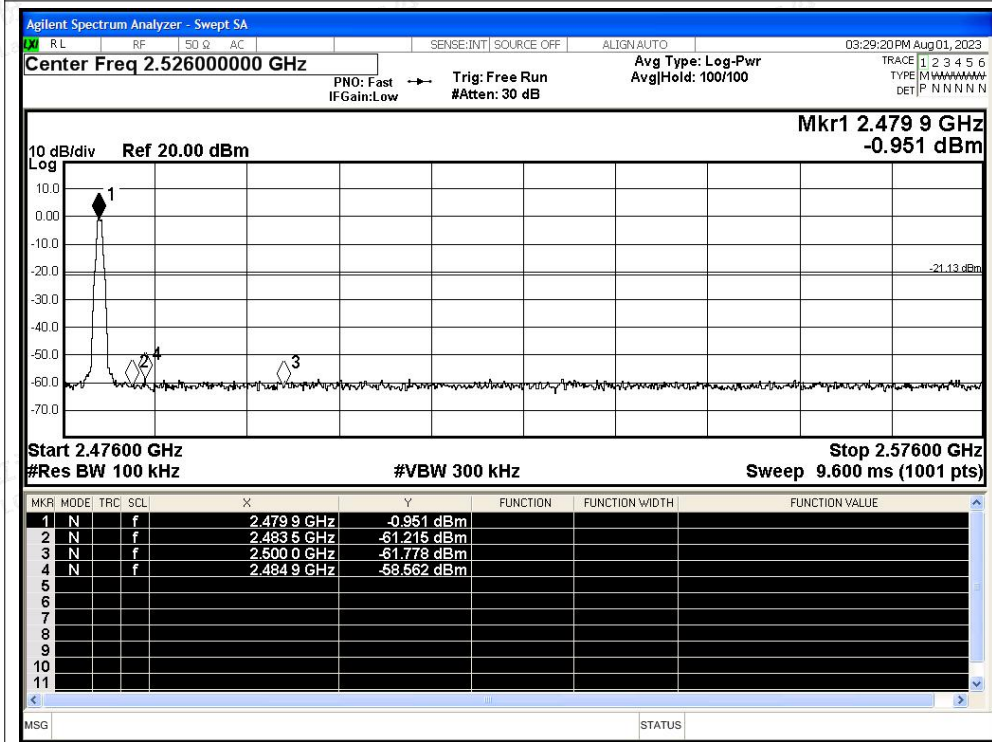




Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref

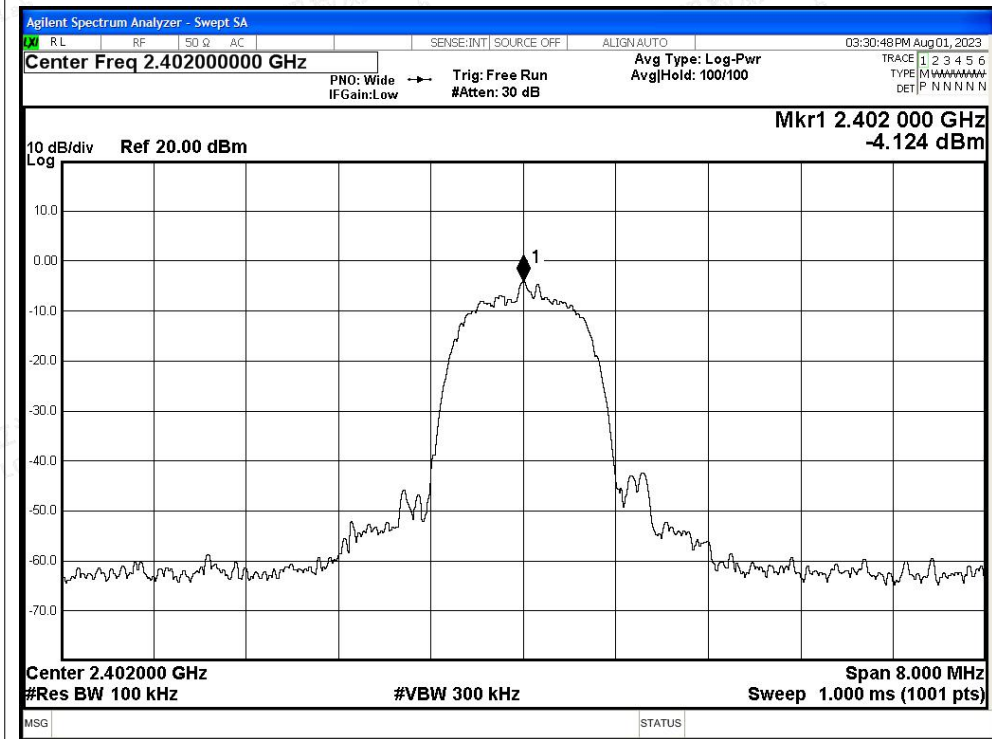


Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission

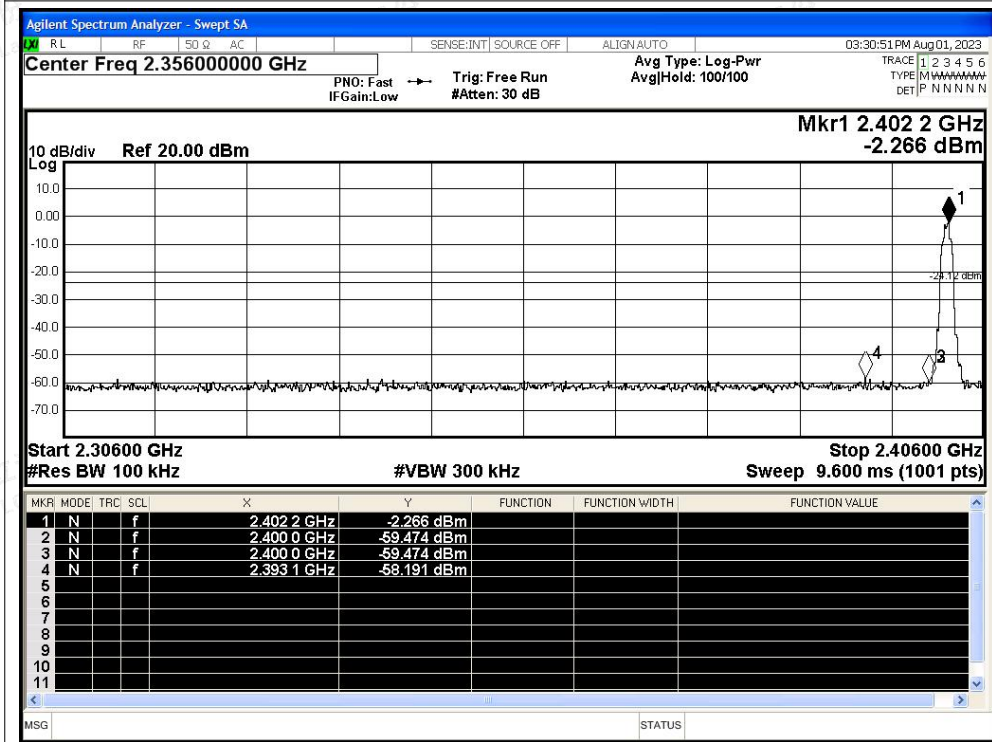




Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref

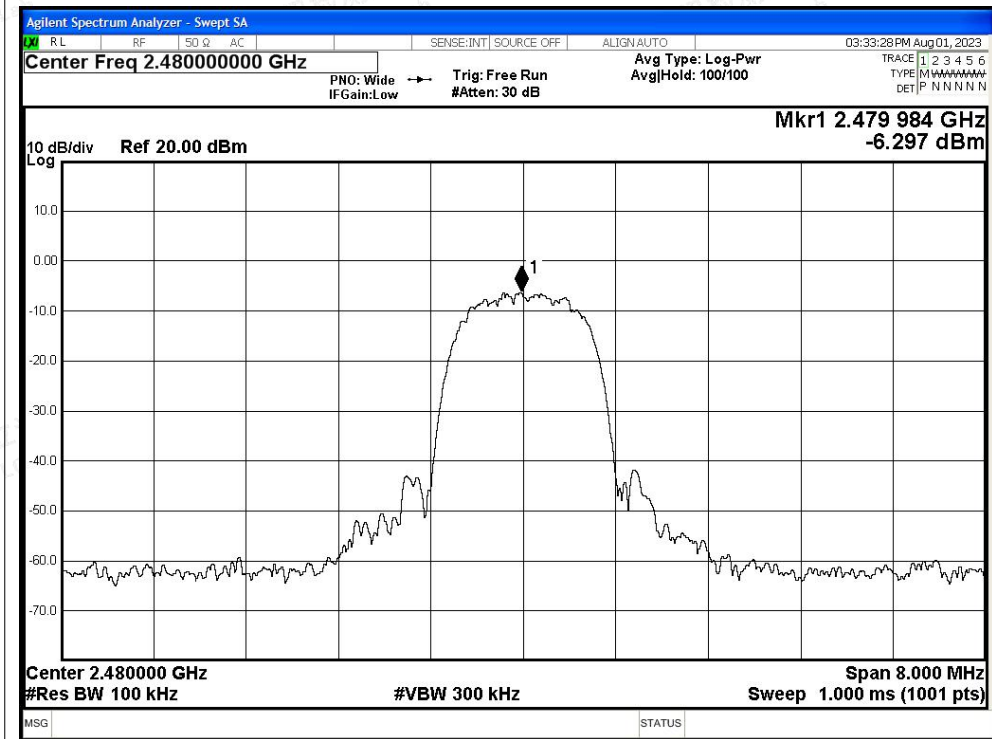


Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission

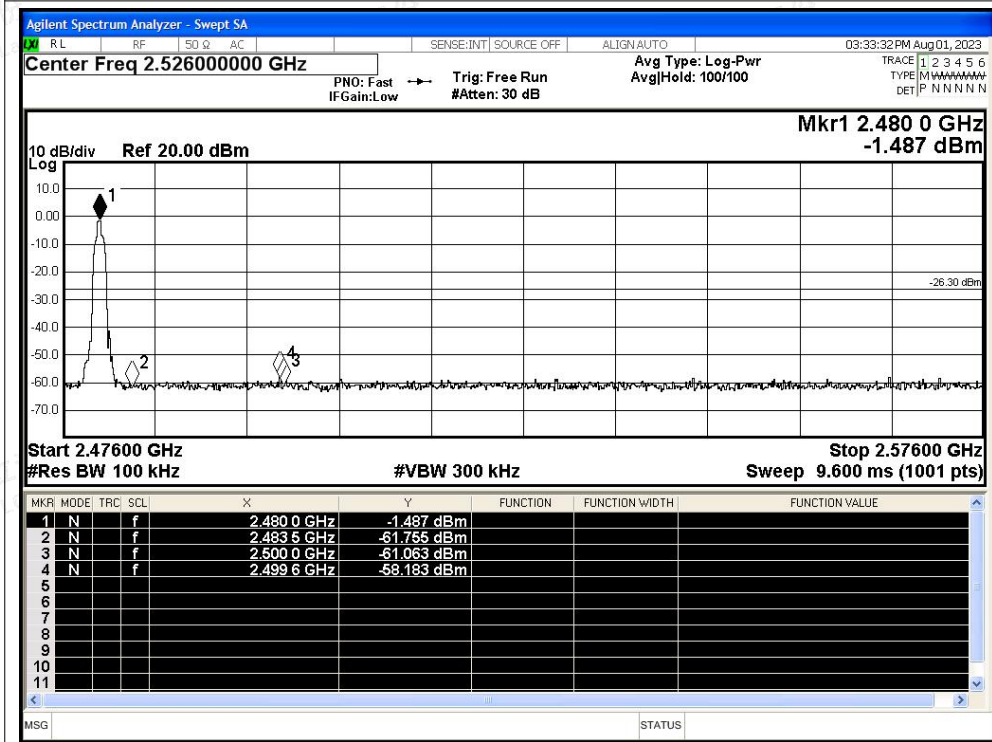




Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



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





### (Hopping)

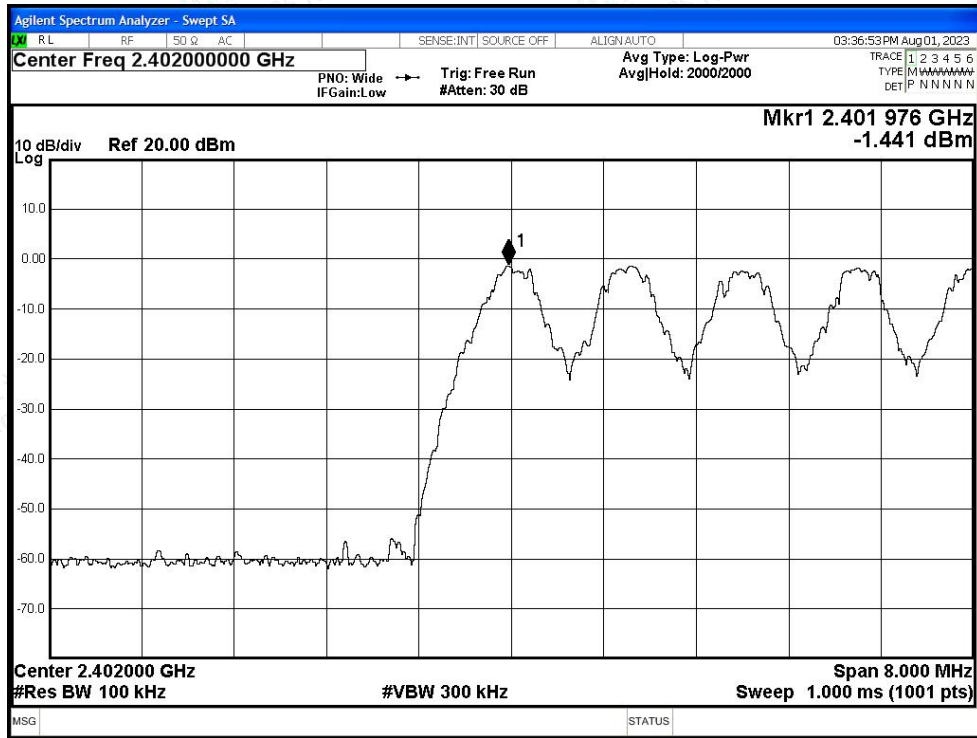
| Condition | Mode  | Frequency (MHz) | Antenna | Hopping Mode | Max Value (dBc) | Limit (dBc) | Verdict |
|-----------|-------|-----------------|---------|--------------|-----------------|-------------|---------|
| NVNT      | 1-DH5 | 2402            | Ant1    | Hopping      | -56.12          | -20         | Pass    |
| NVNT      | 1-DH5 | 2480            | Ant1    | Hopping      | -56.83          | -20         | Pass    |
| NVNT      | 2-DH5 | 2402            | Ant1    | Hopping      | -53.36          | -20         | Pass    |
| NVNT      | 2-DH5 | 2480            | Ant1    | Hopping      | -56.52          | -20         | Pass    |



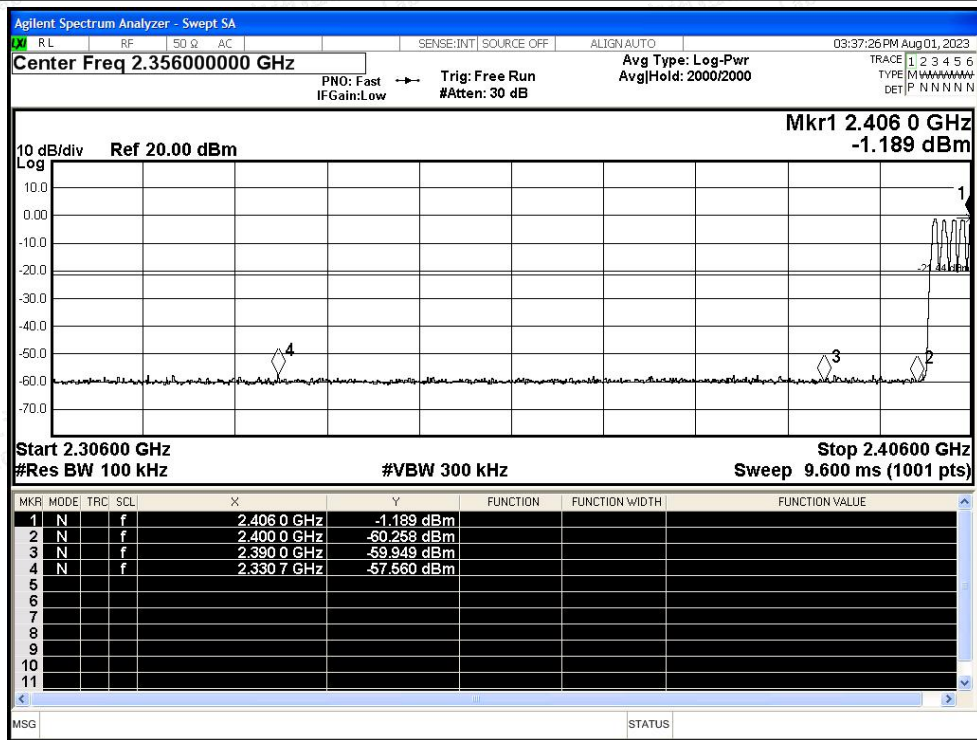


Test Graphs

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

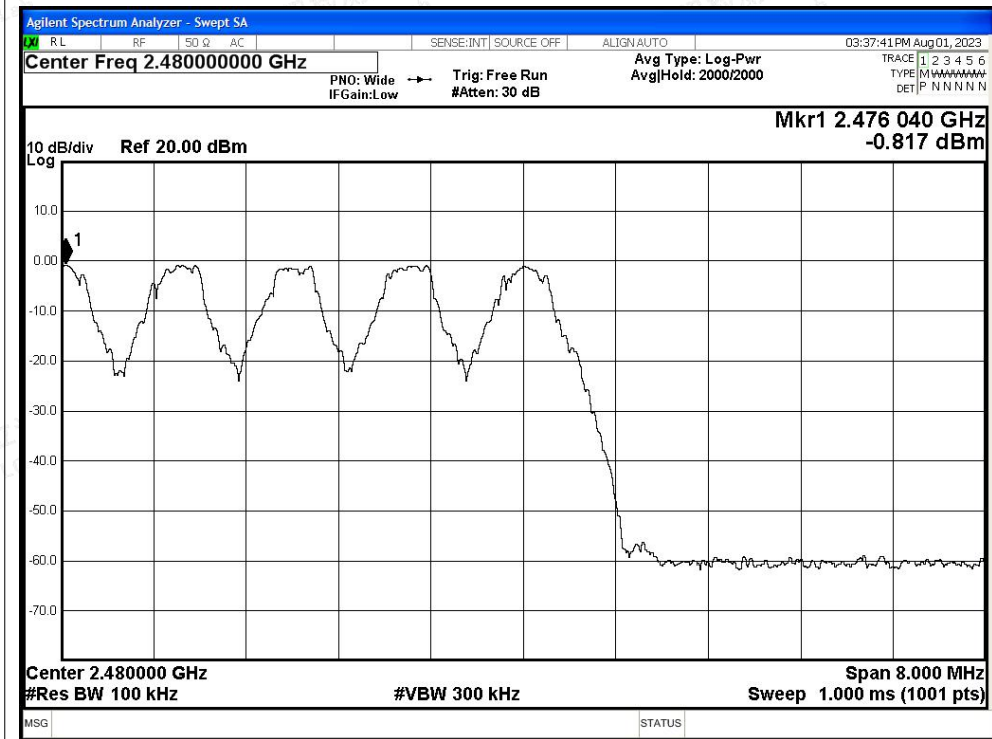


Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission

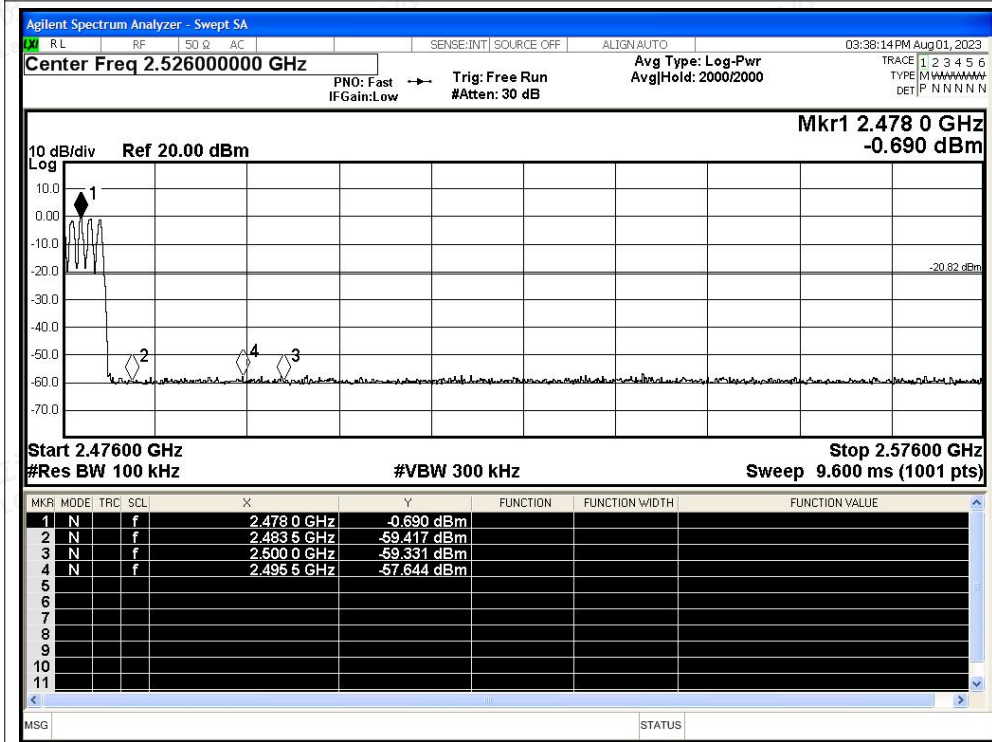




Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission



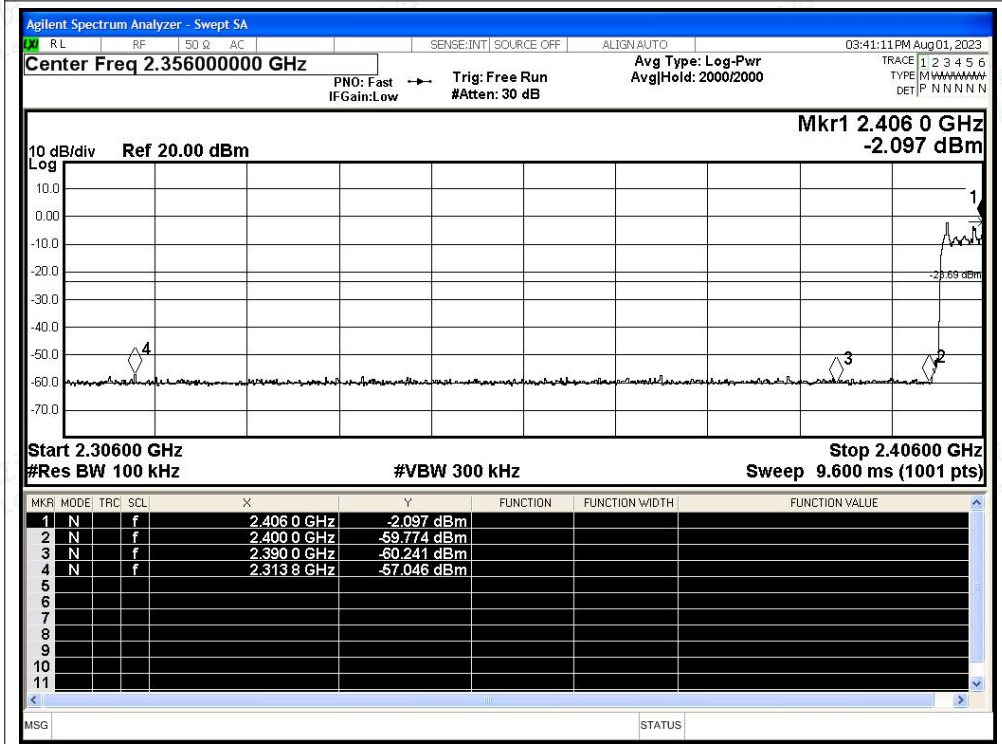




Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Ref

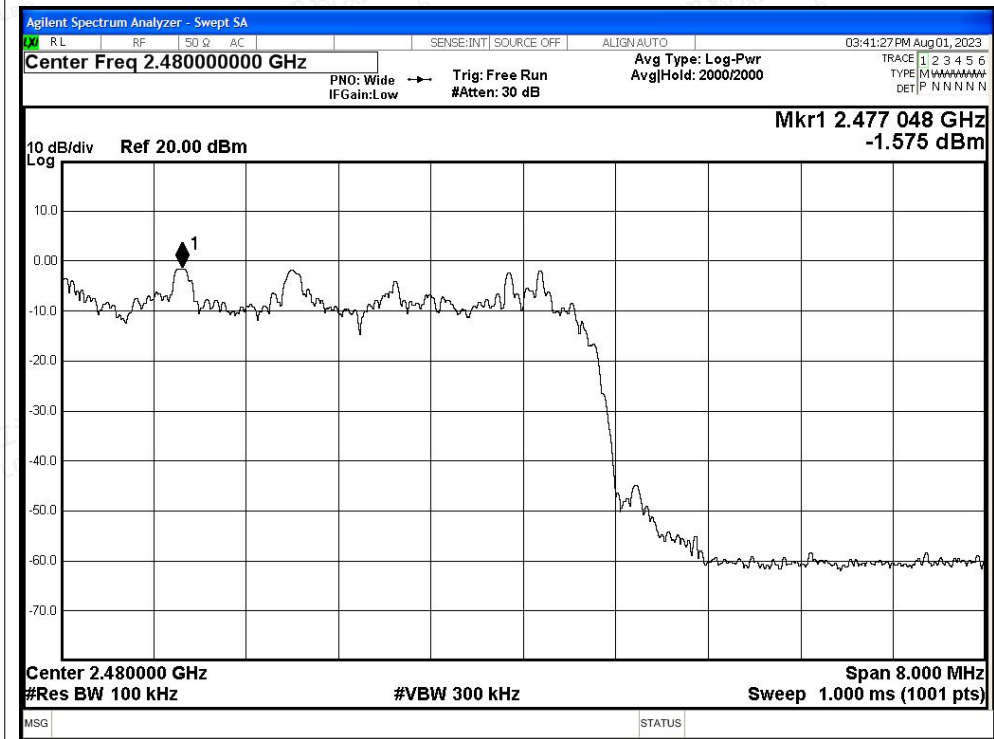


Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Emission

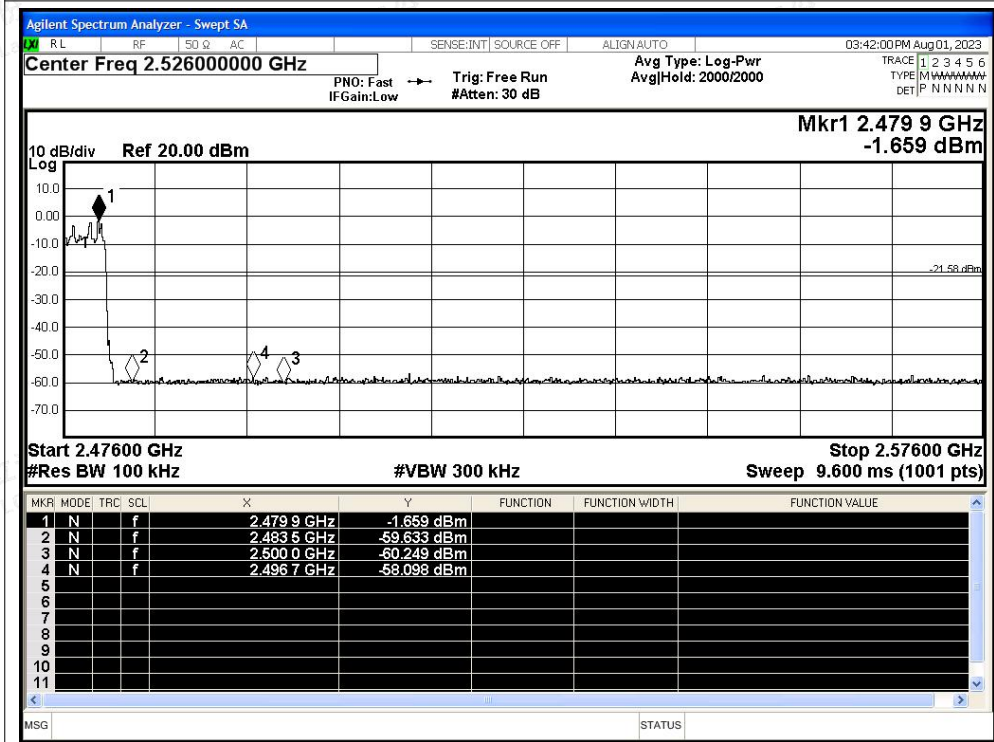




Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



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





## A.8 Conducted RF Spurious Emission

| Condition | Mode  | Frequency (MHz) | Antenna | Max Value (dBc) | Limit (dBc) | Verdict |
|-----------|-------|-----------------|---------|-----------------|-------------|---------|
| NVNT      | 1-DH5 | 2402            | Ant1    | -56.47          | -20         | Pass    |
| NVNT      | 1-DH5 | 2441            | Ant1    | -56.19          | -20         | Pass    |
| NVNT      | 1-DH5 | 2480            | Ant1    | -57.29          | -20         | Pass    |
| NVNT      | 2-DH5 | 2402            | Ant1    | -55.32          | -20         | Pass    |
| NVNT      | 2-DH5 | 2441            | Ant1    | -56.13          | -20         | Pass    |
| NVNT      | 2-DH5 | 2480            | Ant1    | -55.67          | -20         | Pass    |

