



## Appendix A

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

Product Name: Night Lamp

Test Model: JBPLU16

#### Environmental Conditions

|                    |           |
|--------------------|-----------|
| Temperature:       | 23.8° C   |
| Relative Humidity: | 52.1%     |
| ATM Pressure:      | 100.0 kPa |
| Test Engineer:     | Jay Luo   |
| Supervised by:     | Nick Peng |





## A.1 -6dB Bandwidth

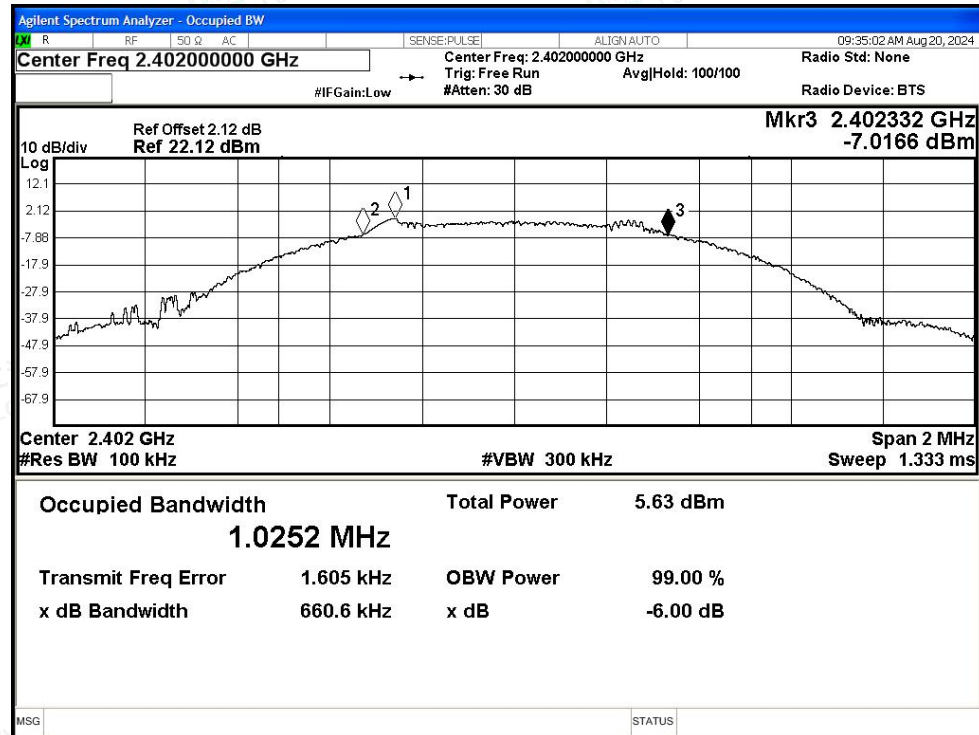
| Condition | Mode   | Frequency (MHz) | Antenna | -6 dB Bandwidth (MHz) | Limit -6 dB Bandwidth (MHz) | Verdict |
|-----------|--------|-----------------|---------|-----------------------|-----------------------------|---------|
| NVNT      | BLE 1M | 2402            | Ant1    | 0.661                 | $\geq 0.5$                  | Pass    |
| NVNT      | BLE 1M | 2440            | Ant1    | 0.649                 | $\geq 0.5$                  | Pass    |
| NVNT      | BLE 1M | 2480            | Ant1    | 0.656                 | $\geq 0.5$                  | Pass    |



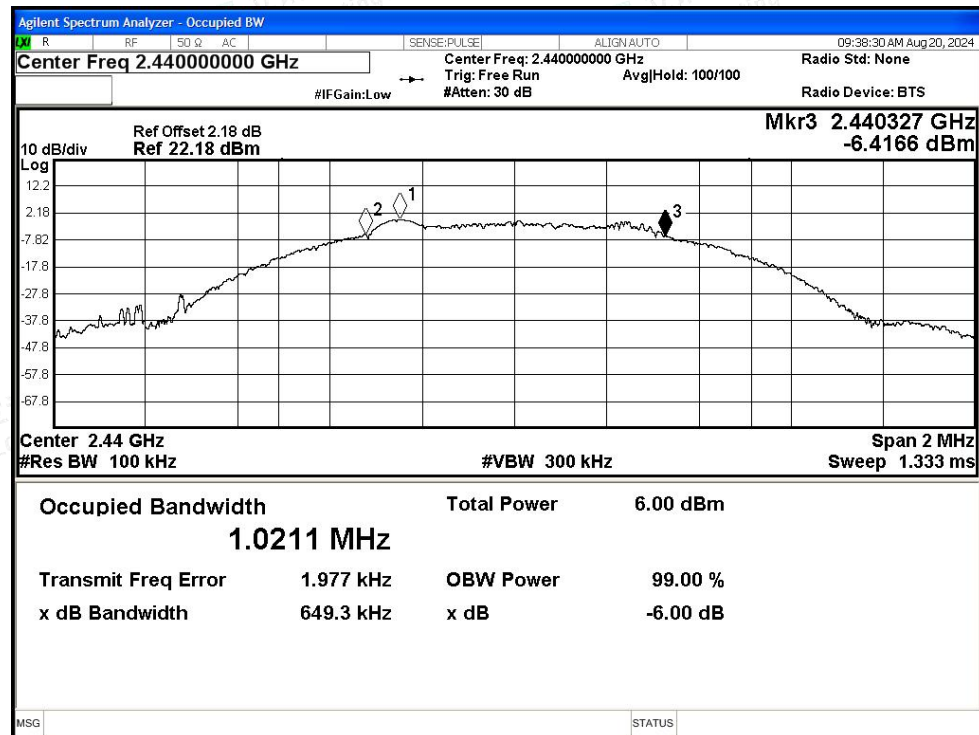


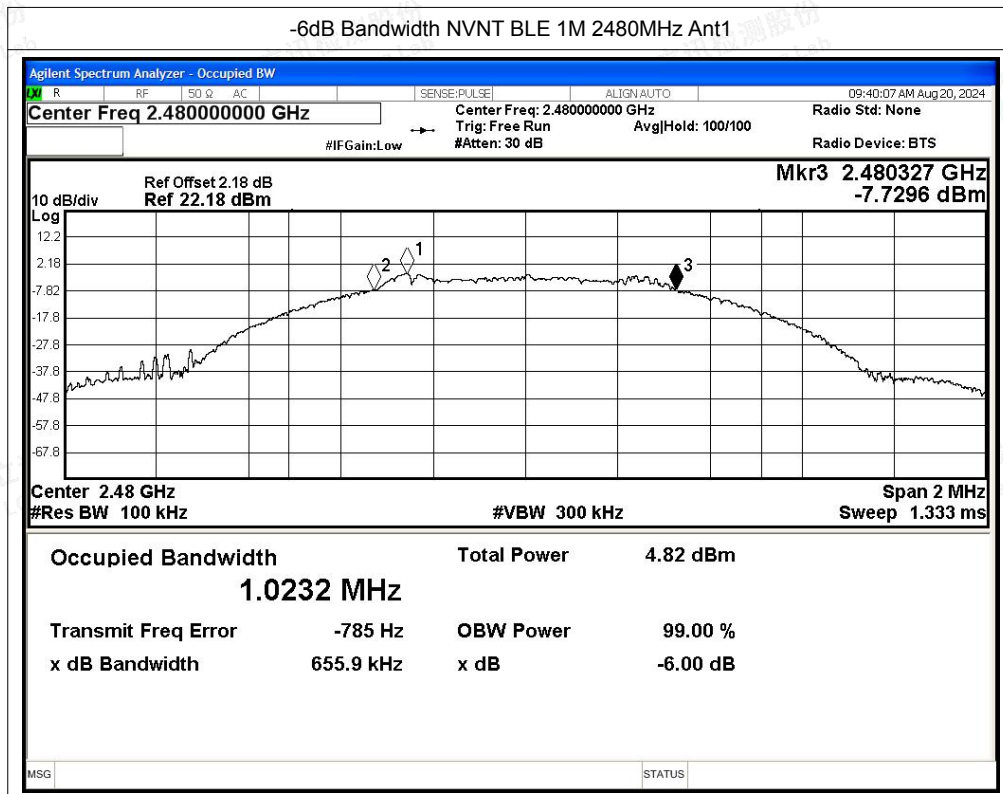
## Test Graphs

-6dB Bandwidth NVNT BLE 1M 2402MHz Ant1



-6dB Bandwidth NVNT BLE 1M 2440MHz Ant1







## A.2 Maximum peak Conducted Output Power

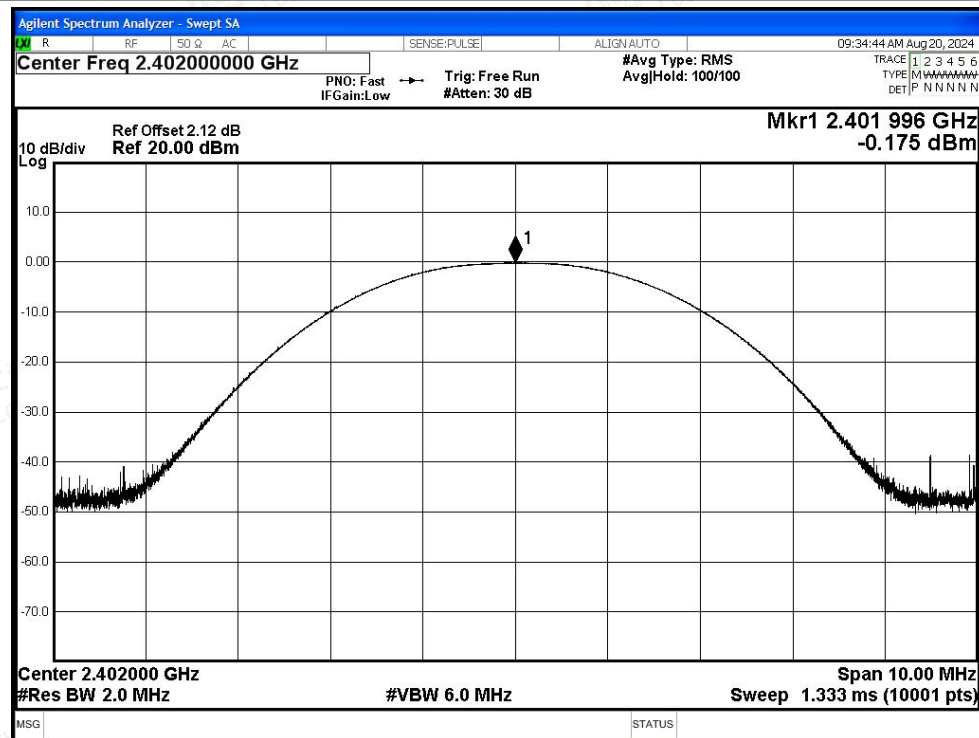
| Condition | Mode   | Frequency (MHz) | Antenna | Conducted Power (dBm) | Limit (dBm) | Verdict |
|-----------|--------|-----------------|---------|-----------------------|-------------|---------|
| NVNT      | BLE 1M | 2402            | Ant1    | -0.18                 | 30          | Pass    |
| NVNT      | BLE 1M | 2440            | Ant1    | 0.19                  | 30          | Pass    |
| NVNT      | BLE 1M | 2480            | Ant1    | -0.98                 | 30          | Pass    |



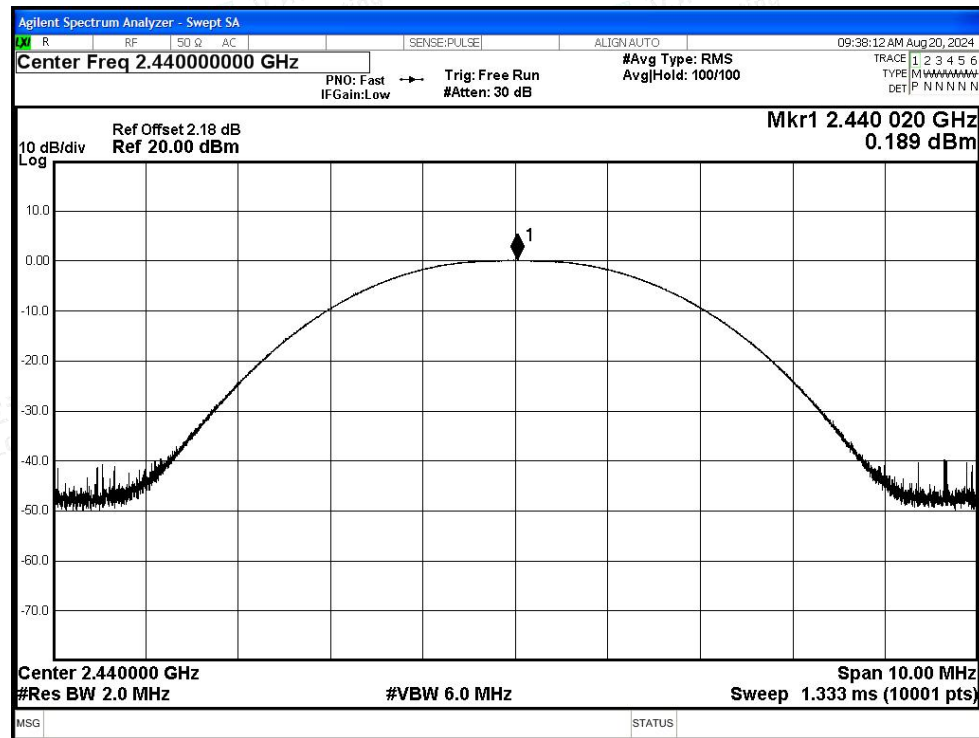


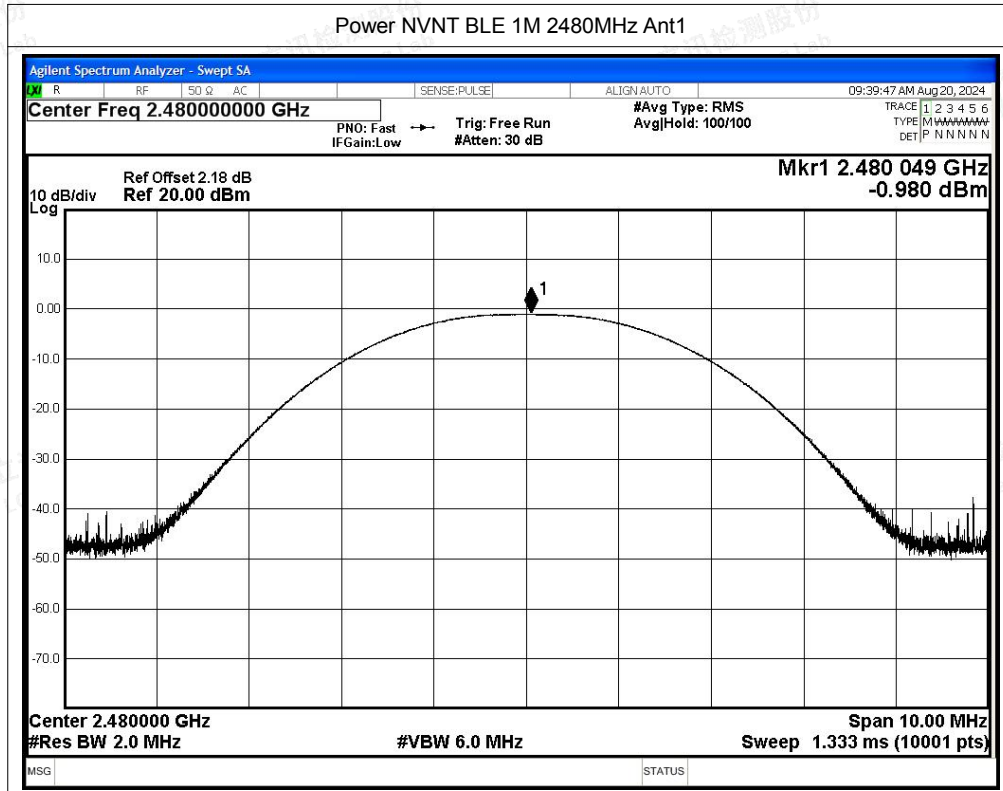
## Test Graphs

Power NVNT BLE 1M 2402MHz Ant1



Power NVNT BLE 1M 2440MHz Ant1







### A.3 Maximum Power Spectral Density Level

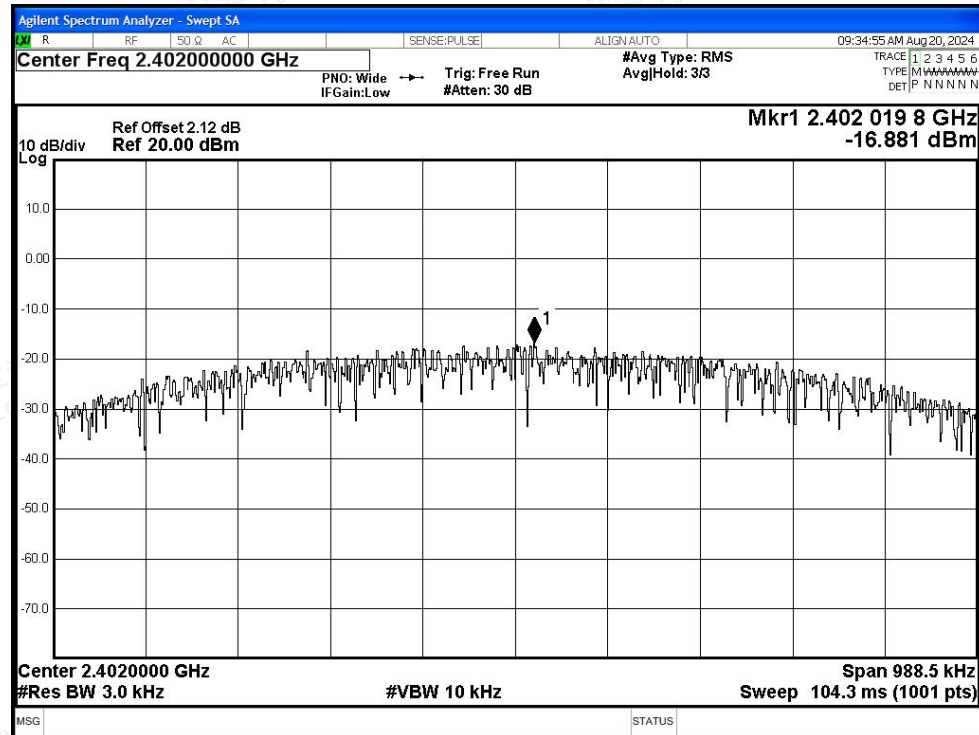
| Condition | Mode   | Frequency (MHz) | Antenna | Conducted PSD (dBm/3kHz) | Limit (dBm/3kHz) | Verdict |
|-----------|--------|-----------------|---------|--------------------------|------------------|---------|
| NVNT      | BLE 1M | 2402            | Ant1    | -16.88                   | 8                | Pass    |
| NVNT      | BLE 1M | 2440            | Ant1    | -16.47                   | 8                | Pass    |
| NVNT      | BLE 1M | 2480            | Ant1    | -17.93                   | 8                | Pass    |



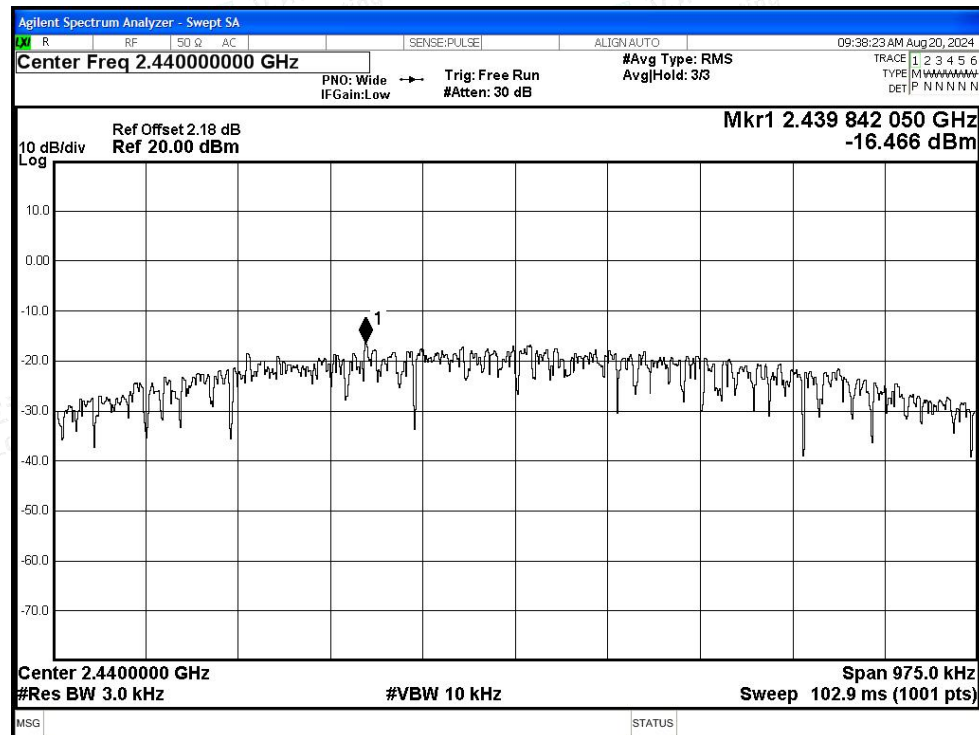


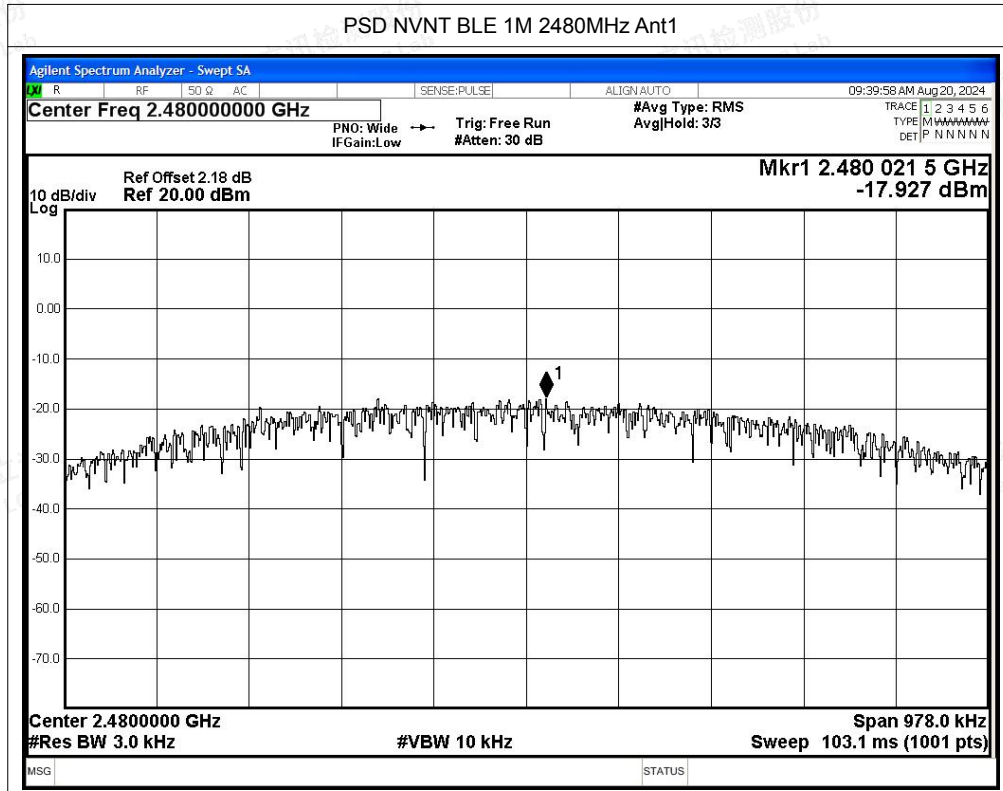
## Test Graphs

PSD NVNT BLE 1M 2402MHz Ant1



PSD NVNT BLE 1M 2440MHz Ant1







### A.4 Band Edge

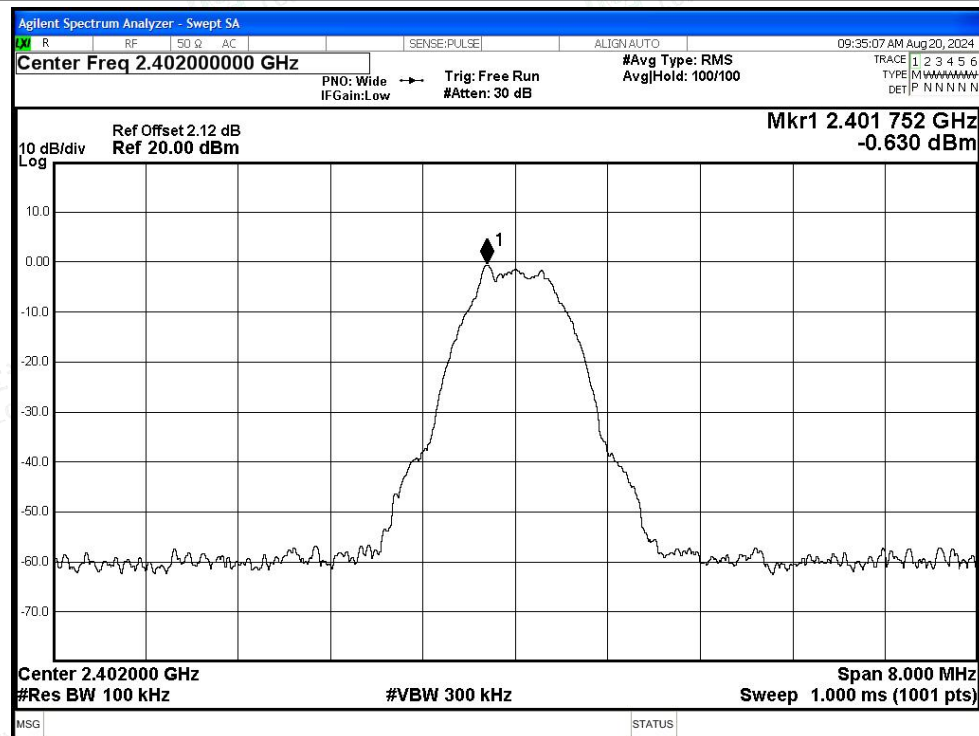
| Condition | Mode   | Frequency (MHz) | Antenna | Max Value (dBc) | Limit (dBc) | Verdict |
|-----------|--------|-----------------|---------|-----------------|-------------|---------|
| NVNT      | BLE 1M | 2402            | Ant1    | -56.54          | -20         | Pass    |
| NVNT      | BLE 1M | 2480            | Ant1    | -54.49          | -20         | Pass    |



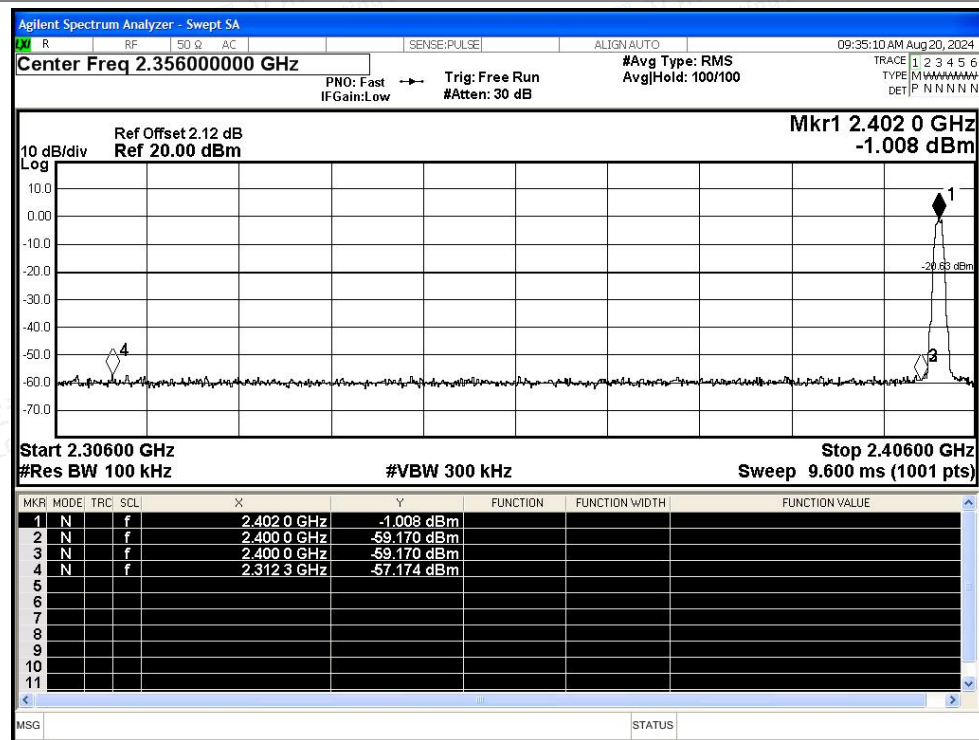


## Test Graphs

## Band Edge NVNT BLE 1M 2402MHz Ant1 Ref



## Band Edge NVNT BLE 1M 2402MHz Ant1 Emission



Shenzhen LCS Compliance Testing Laboratory Ltd.

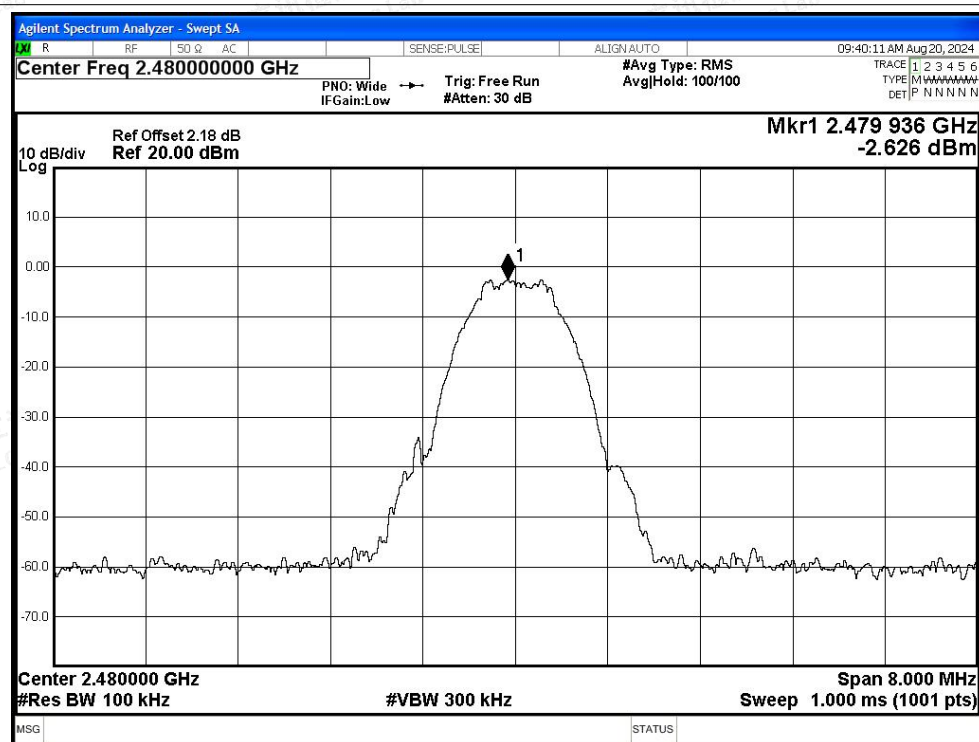
Add: 101, 201 Bldg A &amp; 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

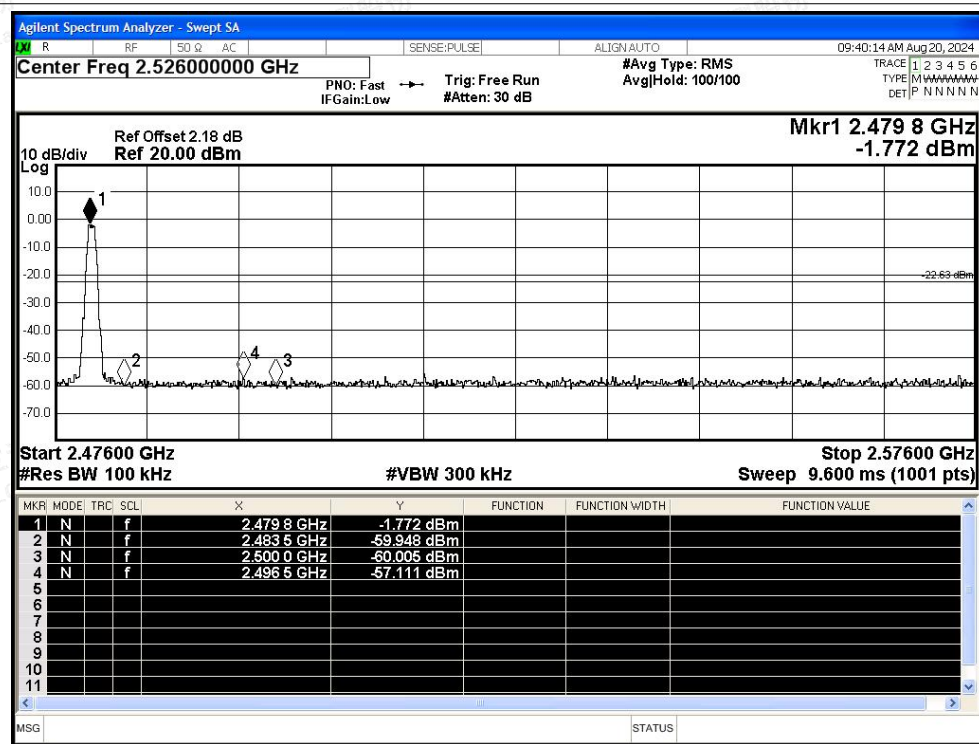
Scan code to check authenticity



## Band Edge NVNT BLE 1M 2480MHz Ant1 Ref



## Band Edge NVNT BLE 1M 2480MHz Ant1 Emission



Shenzhen LCS Compliance Testing Laboratory Ltd.

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## A.5 Conducted RF Spurious Emission

| Condition | Mode   | Frequency (MHz) | Antenna | Max Value (dBc) | Limit (dBc) | Verdict |
|-----------|--------|-----------------|---------|-----------------|-------------|---------|
| NVNT      | BLE 1M | 2402            | Ant1    | -54.29          | -20         | Pass    |
| NVNT      | BLE 1M | 2440            | Ant1    | -51.46          | -20         | Pass    |
| NVNT      | BLE 1M | 2480            | Ant1    | -54.1           | -20         | Pass    |

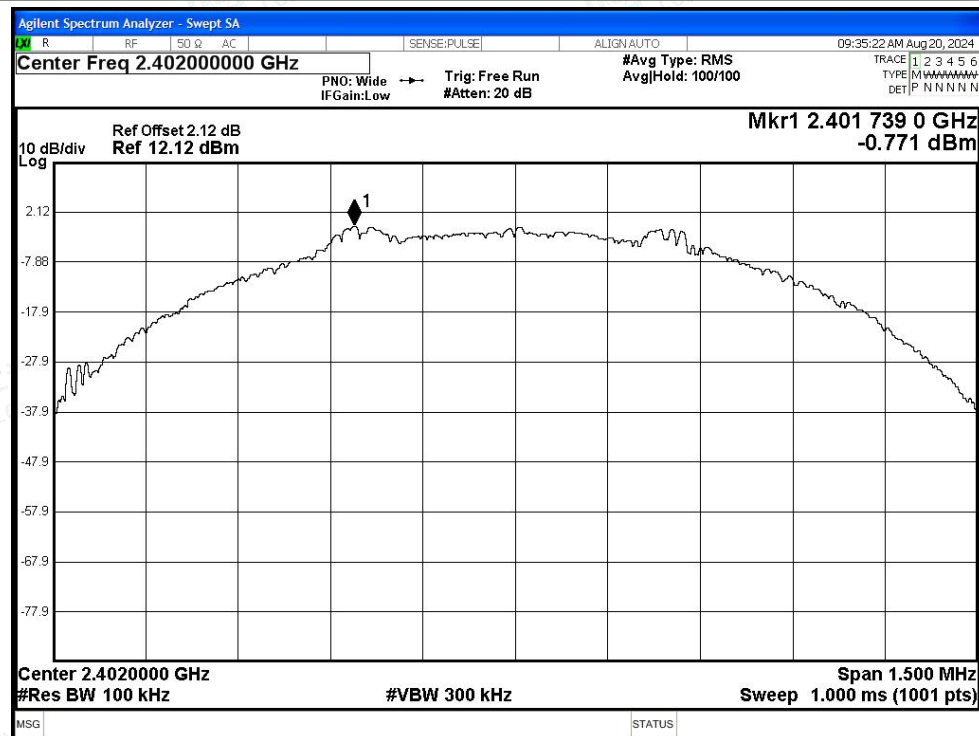


Shenzhen LCS Compliance Testing Laboratory Ltd.  
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China  
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com  
Scan code to check authenticity

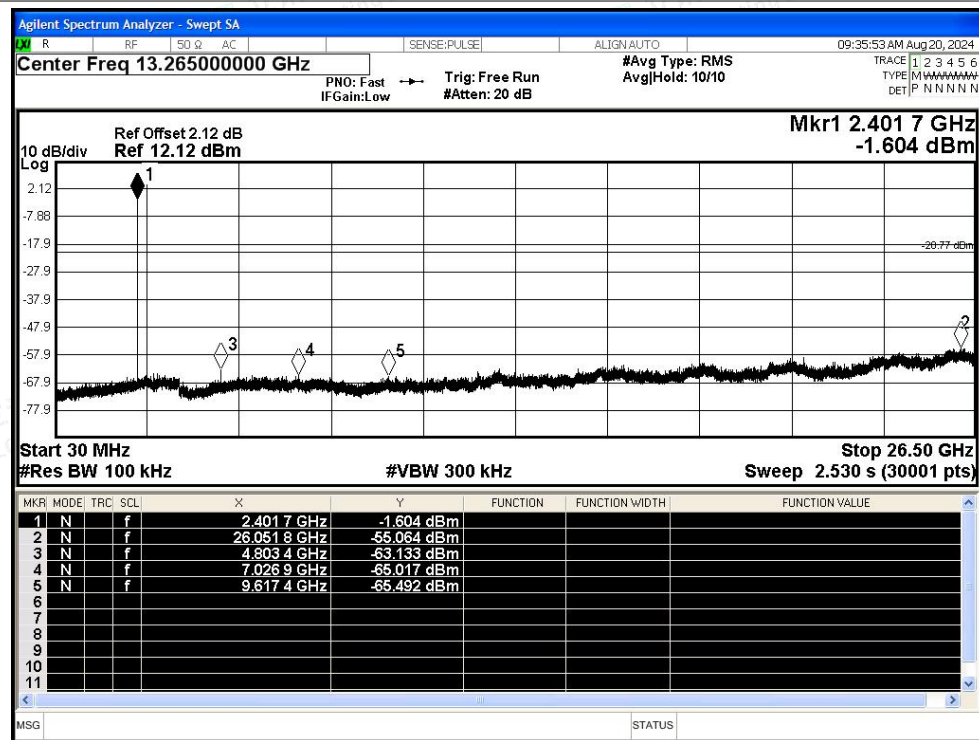


## Test Graphs

Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Ref



Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Emission



Shenzhen LCS Compliance Testing Laboratory Ltd.

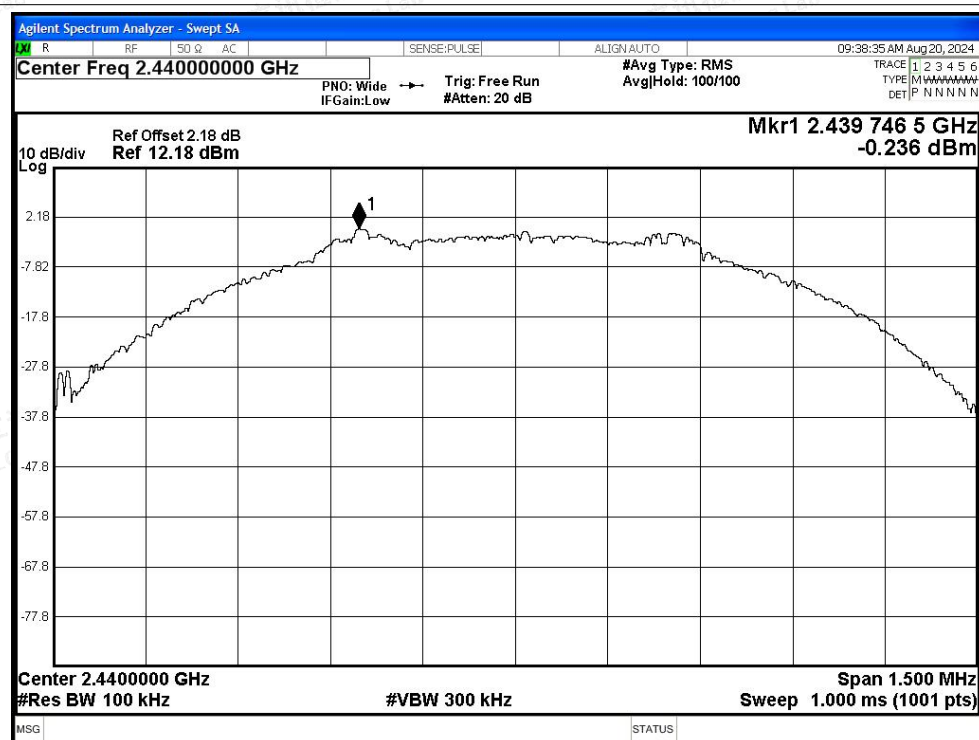
Add: 101, 201 Bldg A &amp; 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

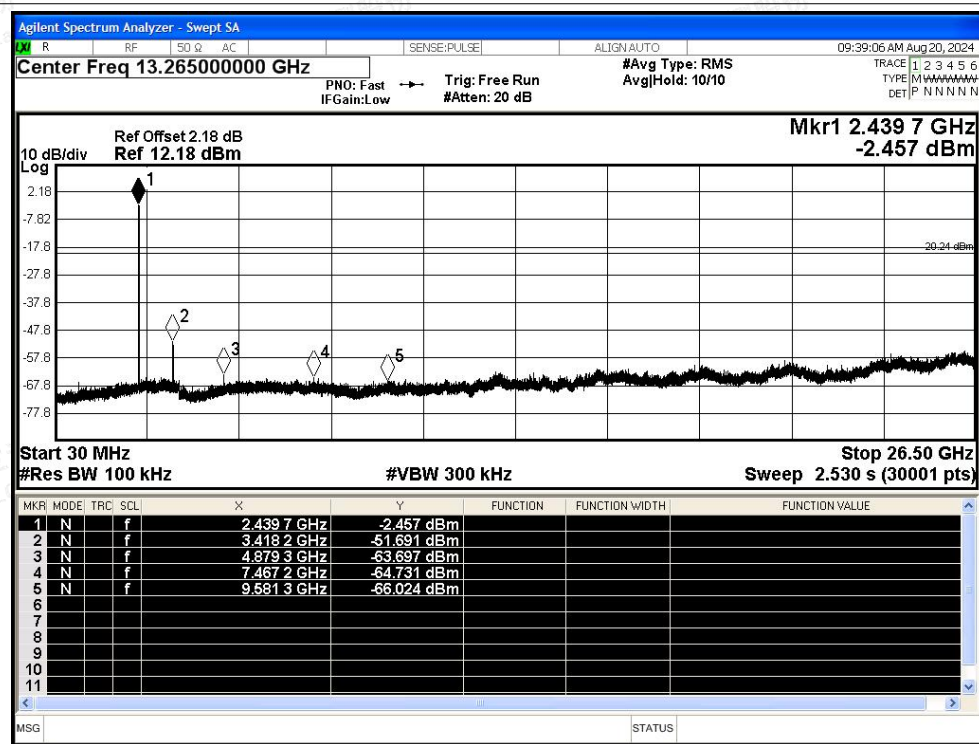
Scan code to check authenticity



## Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Ref



## Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Emission



Shenzhen LCS Compliance Testing Laboratory Ltd.

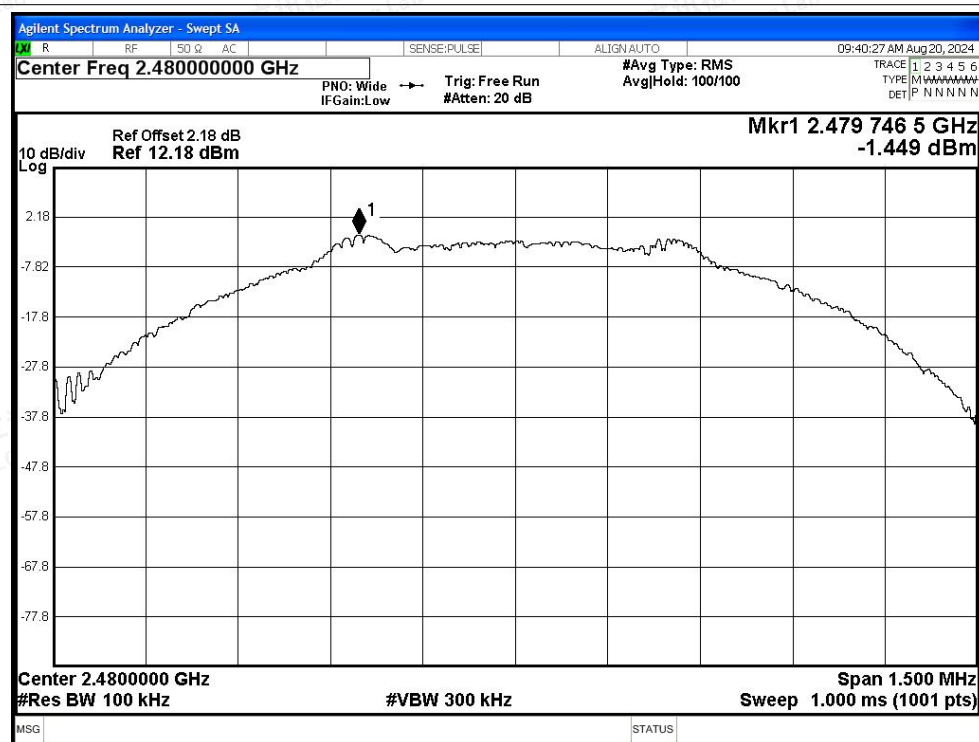
Add: 101, 201 Bldg A &amp; 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

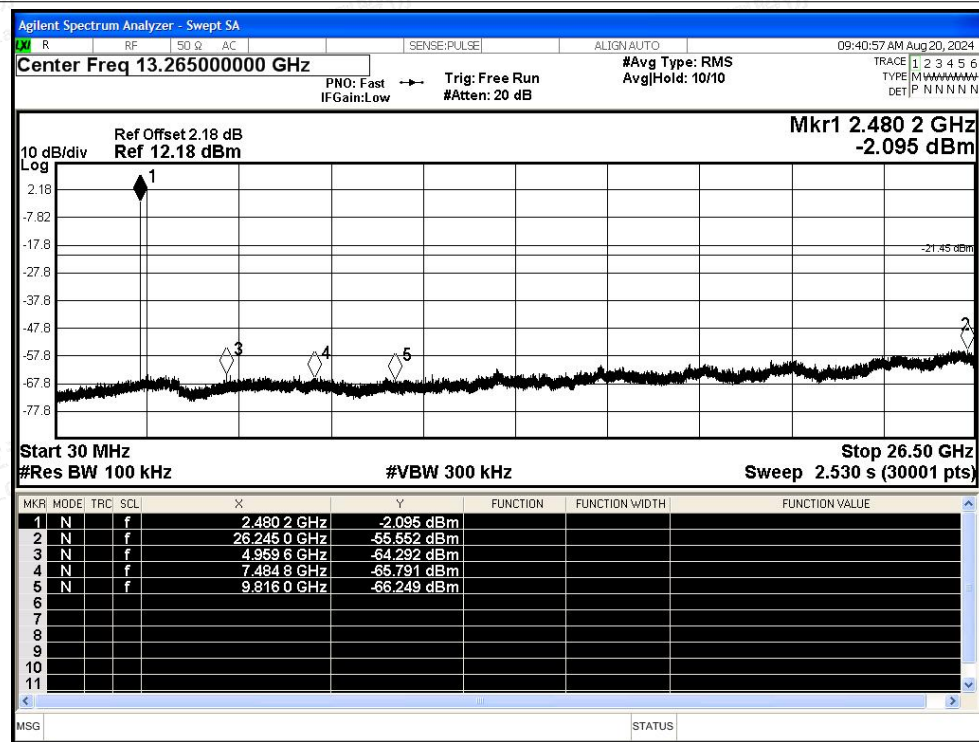
Scan code to check authenticity



## Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Ref



## Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Emission



Shenzhen LCS Compliance Testing Laboratory Ltd.

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

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## A.6 Duty Cycle

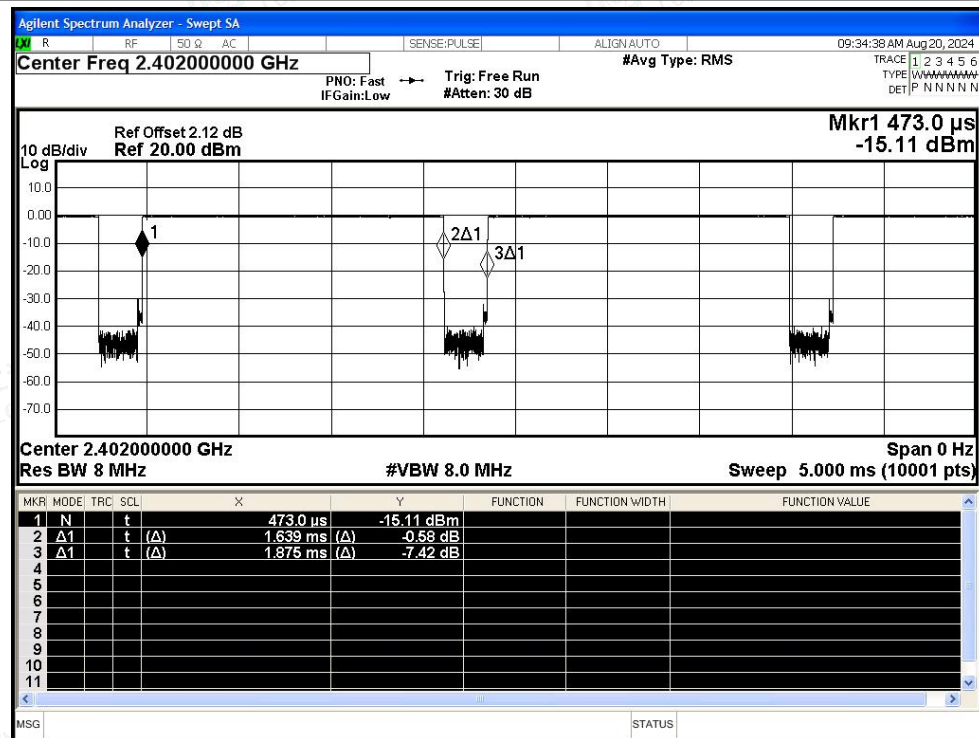
| Condition | Mode   | Frequency (MHz) | Antenna | Duty Cycle (%) | Correction Factor (dB) | 1/T (kHz) |
|-----------|--------|-----------------|---------|----------------|------------------------|-----------|
| NVNT      | BLE 1M | 2402            | Ant1    | 87.39          | 0.59                   | 0.61      |
| NVNT      | BLE 1M | 2440            | Ant1    | 87.39          | 0.59                   | 0.61      |
| NVNT      | BLE 1M | 2480            | Ant1    | 87.39          | 0.59                   | 0.61      |



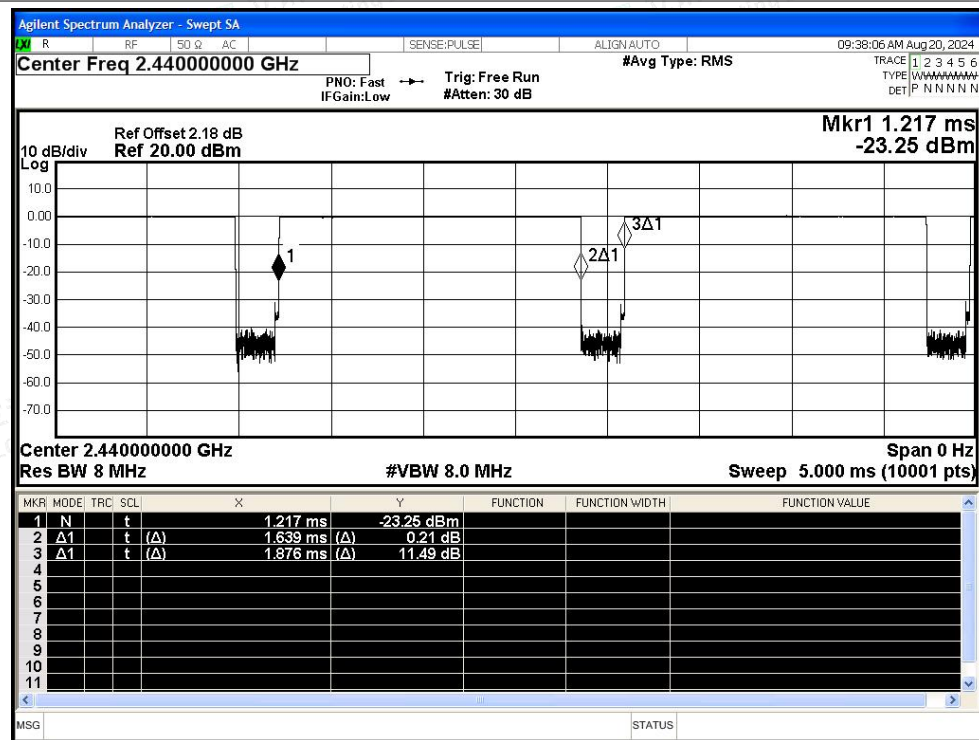


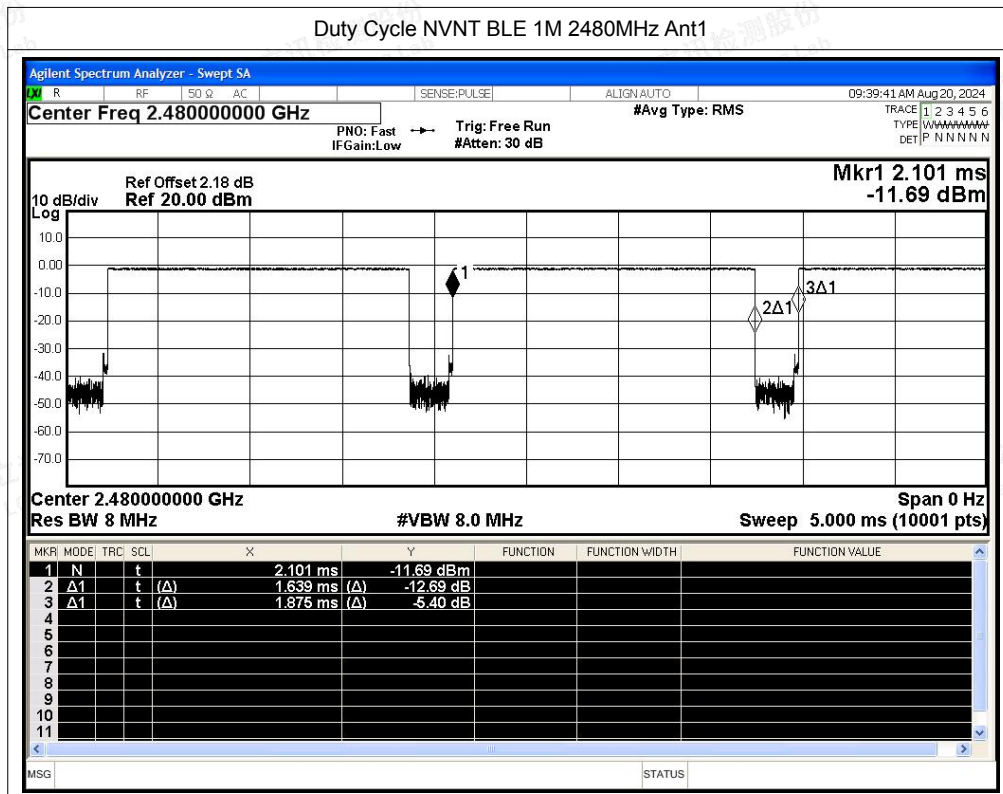
## Test Graphs

Duty Cycle NVNT BLE 1M 2402MHz Ant1



Duty Cycle NVNT BLE 1M 2440MHz Ant1







## A.7 Restrict Band

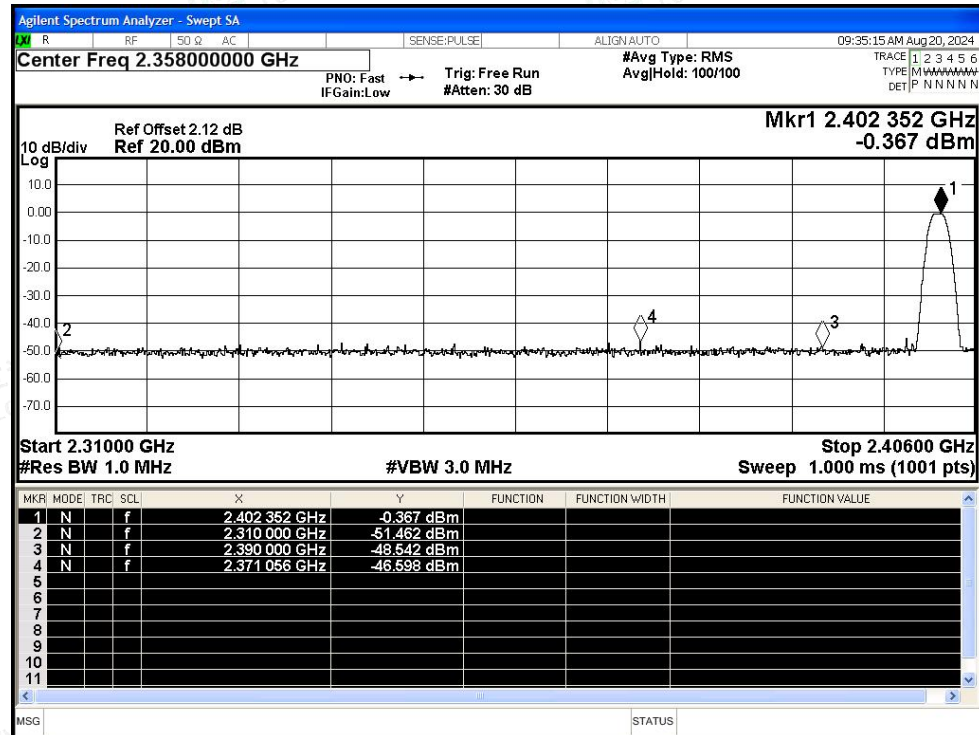
| Condition | Mode   | Frequency (MHz) | Antenna | Spur Freq (MHz) | Power (dBm) | Gain (dBi) | Duty Factor (dB) | E (dBuV/m) | Detector | Limit (dBuV/m) | Verdict |
|-----------|--------|-----------------|---------|-----------------|-------------|------------|------------------|------------|----------|----------------|---------|
| NVNT      | BLE 1M | 2402            | Ant1    | 2310            | -51.46      | 2.50       | -                | 46.30      | Peak     | 74             | Pass    |
| NVNT      | BLE 1M | 2402            | Ant1    | 2310            | -59.09      | 2.50       | 0.59             | 39.26      | Average  | 54             | Pass    |
| NVNT      | BLE 1M | 2402            | Ant1    | 2371.056        | -46.6       | 2.50       | -                | 51.16      | Peak     | 74             | Pass    |
| NVNT      | BLE 1M | 2402            | Ant1    | 2385.168        | -57.5       | 2.50       | 0.59             | 40.85      | Average  | 54             | Pass    |
| NVNT      | BLE 1M | 2402            | Ant1    | 2390            | -48.54      | 2.50       | -                | 49.22      | Peak     | 74             | Pass    |
| NVNT      | BLE 1M | 2402            | Ant1    | 2390            | -58.67      | 2.50       | 0.59             | 39.68      | Average  | 54             | Pass    |
| NVNT      | BLE 1M | 2480            | Ant1    | 2483.5          | -49.02      | 2.50       | -                | 48.74      | Peak     | 74             | Pass    |
| NVNT      | BLE 1M | 2480            | Ant1    | 2483.5          | -57.92      | 2.50       | 0.59             | 40.43      | Average  | 54             | Pass    |
| NVNT      | BLE 1M | 2480            | Ant1    | 2487.136        | -45.89      | 2.50       | -                | 51.87      | Peak     | 74             | Pass    |
| NVNT      | BLE 1M | 2480            | Ant1    | 2483.56         | -57.02      | 2.50       | 0.59             | 41.33      | Average  | 54             | Pass    |
| NVNT      | BLE 1M | 2480            | Ant1    | 2500            | -49.24      | 2.50       | -                | 48.52      | Peak     | 74             | Pass    |
| NVNT      | BLE 1M | 2480            | Ant1    | 2500            | -57.82      | 2.50       | 0.59             | 40.53      | Average  | 54             | Pass    |



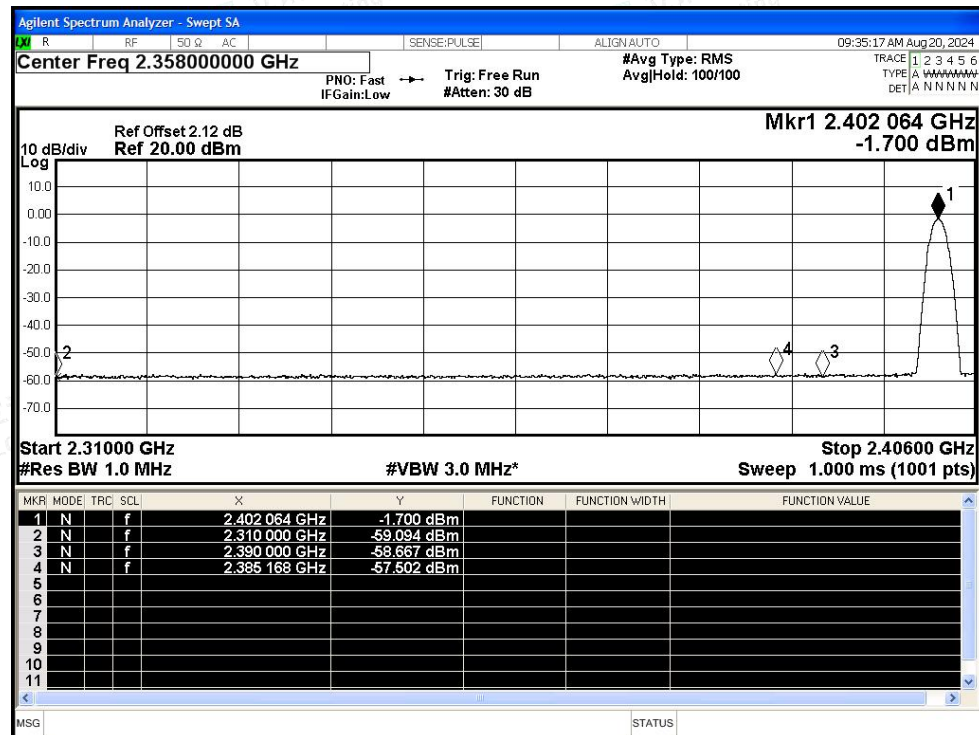


## Test Graphs

## Restrict Band NVNT BLE 1M 2402MHz Ant1 Peak

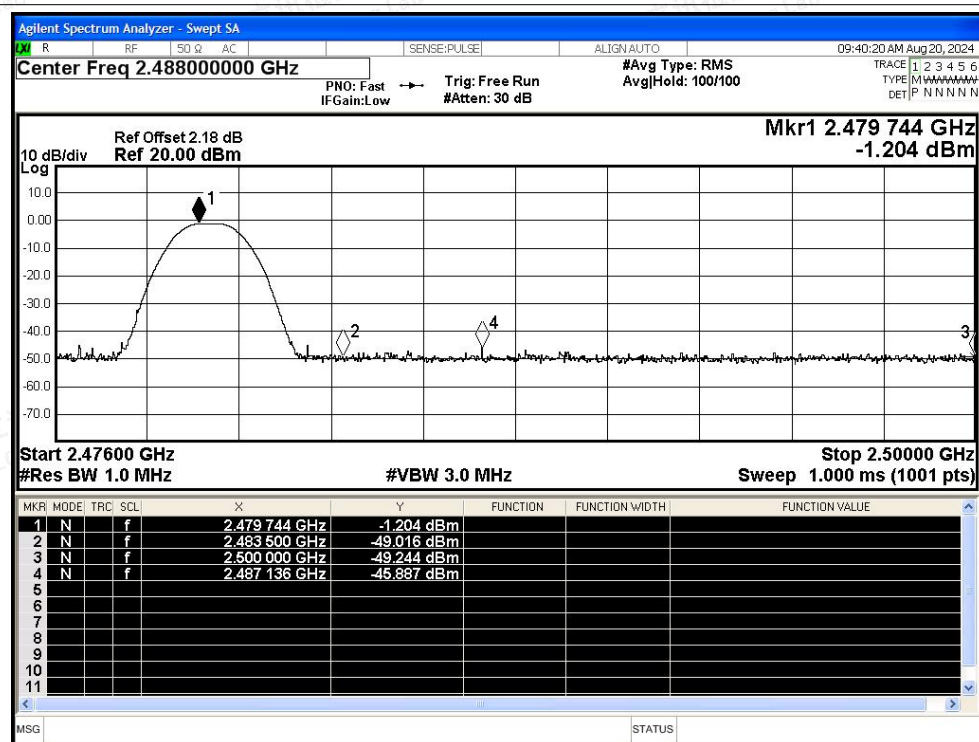


## Restrict Band NVNT BLE 1M 2402MHz Ant1 Average





## Restrict Band NVNT BLE 1M 2480MHz Ant1 Peak



## Restrict Band NVNT BLE 1M 2480MHz Ant1 Average

