# Test Report

**Product:** Tablet Keyboard
**Trade Mark:** GWAAN
**Model No:** A2
**Report Number:** SZNTT26030477E1-1
**Test Standards:** Article 2 paragraph 1 item (19)
**Date of Issue:** Jul. 31, 2026

**Prepared for**

GWAAN CO.,LTD.

2-2-20 Kitakoshigaya Koshigaya-city Saitama Japan

**Prepared by**

Shenzhen NTT Testing Technology Co.,Ltd.

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# Table of Contents

**1 GENERAL DESCRIPTION ..... 6**

1.1 DESCRIPTION OF EUT ..... 6
1.2 TEST MODE ..... 6
1.3 OPERATION CHANNEL LIST ..... 6
1.4 TEST CONDITONS ..... 7
1.5 TEST SETUP ..... 7
1.6 POWER SETTING CONFIGURATION PARAMETERS ..... 7
1.7 ANCILLARY EQUIPMENT ..... 8

**2 SUMMARY OF TEST RESULT ..... 9**

**3 TEST FACILITIES AND ACCREDITATIONS ..... 10**

3.1 TEST LABORATORY ..... 10
3.2 ENVIRONMENTAL CONDITIONS ..... 10
3.3 MEASUREMENT UNCERTAINTY ..... 10
3.4 TEST SOFTWARE ..... 10

**4 LIST OF TEST EQUIPMENT ..... 11**

4.1 LIST OF TEST EQUIPMENT ..... 11
4.2 CALIBRATION METHOD ..... 12
4.3 CALIBRATION AGENCY INFORMATION ..... 12

**5 TEST ITEM AND RESULTS ..... 13**

5.1 FREQUENCY TOLERANCE ..... 13
*5.1.1 Limits ..... 13*
*5.1.2 Test Procedures ..... 13*
*5.1.3 Test Setup ..... 13*
*5.1.4 Test Result ..... 13*
5.2 OCCUPIED BANDWIDTH AND SPREAD-SPECTRUM BANDWIDTH ..... 14
*5.2.1 Limits ..... 14*
*5.2.2 Test Procedures ..... 14*
*5.2.3 Test Setup ..... 14*
*5.2.4 Test Result ..... 14*
5.3 TX UNWANTED EMISSION ..... 15
*5.3.1 Limit ..... 15*
*5.3.2 Test Procedure ..... 15*
*5.3.3 Test Setup ..... 15*
*5.3.4 Test Results ..... 15*
5.4 ANTENNA POWER TOLERANCE ..... 16
*5.4.1 Limit ..... 16*
*5.4.2 Test Procedure ..... 16*
*5.4.3 Test Setup ..... 16*
*5.4.4 Test results ..... 16*
5.5 RX UNWANTED EMISSION ..... 17
*5.5.1 Limit ..... 17*
*5.5.2 Test Procedure ..... 17*
*5.5.3 Test Setup ..... 17*
*5.5.4 Test Results ..... 17*
5.6 EIRP ANTENNA POWER ..... 18
*5.6.1 Limit ..... 18*
*5.6.2 Test Procedure ..... 18*
*5.6.3 Test Setup ..... 18*
*5.6.4 Test Results ..... 18*
5.7 TRANSMISSION RADIATION ANGLE WIDTH (3DB BEAM WIDTH) ..... 19

*5.7.1 Limit* ..... *19*
*5.7.2 Test Procedure* ..... *19*
*5.7.3 Test Setup* ..... *19*
*5.7.4 Test Results* ..... *19*
5.8 RADIO INTERFERENCE PREVENTION CAPABILITY ..... 20
*5.8.1 Limit* ..... *20*
*5.8.2 Test Procedure* ..... *20*
*5.8.3 Test Setup* ..... *20*
*5.8.4 Test Results* ..... *20*
5.9 CARRIER SENSE ..... 21
*5.9.1 Limit* ..... *21*
*5.9.2 Test Procedure* ..... *21*
*5.9.3 Test Setup* ..... *22*
*5.9.4 Test Results* ..... *22*
**6 PHOTOGRAPHS OF THE TEST SETUP ..... 23**
**7 PHOTOGRAPHS OF THE EUT ..... 24**

| Revision History of This Test Report | | |
|---|---|---|
| Report Number | Description | Issued Date |
| SZNTT26030477E1-1 | Initial Issue | 2026-07-31 |
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# TEST RESULT CERTIFICATION

| | |
|---|---|
| Applicant's name.....: | GWAAN CO.,LTD. |
| Address..... : | 2-2-20 Kitakoshigaya Koshigaya-city Saitama Japan |
| Manufacturer's Name.....: | ShenZhen De Feng Yuan Technology Co., LTD |
| Address..... : | B721, Building B ZhiFu Zhaoye Science Park Hangcheng Street Sanwei communit, Baoan District, Shenzhen, Guangdong, China |
| **Product description** | |
| Product name..... : | Tablet Keyboard |
| Trademark .....: | GWAAN |
| Model Name ..... : | A2 |
| Serial Model.....: | N/A |
| Standards.....: | Article 2 paragraph 1 item (19) |
| Test procedure..... : | MIC Notice No.88 Appendix No.43 |
| **Date of Test** | |
| Date (s) of performance of tests..... : | Jul. 22, 2026~ Jul. 31, 2026 |
| Test Result.....: | Pass |
| This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Shenzhen NTT Testing Technology Co.,Ltd. | |

**Testing Engineer** : cindy Qin

(Cindy Qin)

**Technical Manager** : ken wu

(Ken Wu)

**Authorized Signatory** : Abel Yu

(Abel Yu)

Shenzhen NTT Testing Technology Co., Ltd. Special Seal for Inspection and Testing

# 1 General Description

## 1.1 Description of EUT

| | |
|---|---|
| Product name: | Tablet Keyboard |
| Model name: | A2 |
| Series Model: | N/A |
| Different of series model: | N/A |
| Operation frequency: | 2402-2480MHz |
| Modulation type: | GFSK |
| Bit Rate of transmitter: | 1 Mbps |
| Antenna type: | PCB Antenna |
| Antenna gain: | 2.58dBi |
| Max. output power: | -0.7dBm |
| Hardware version: | V1.0 |
| Software version: | V1.0 |
| Battery: | DC 3.7V, 150mAh |
| Power supply: | Battery: DC 3.7V, 150mAh<br>USB-C Input: DC 5V/1A |
| Adapter information: | N/A |
| Sample number: | SZNTT26030477 |

## 1.2 Test Mode

| Test Mode | Channel | Frequency (MHz) |
|---|---|---|
| BLE 1M | 01 | 2402 |
| BLE 1M | 20 | 2440 |
| BLE 1M | 40 | 2480 |

## 1.3 Operation Channel List

| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---|---|---|---|---|---|
| 01 | 2402 | 16 | 2432 | 31 | 2462 |
| 02 | 2404 | 17 | 2434 | 32 | 2464 |
| 03 | 2406 | 18 | 2436 | 33 | 2466 |

| | | | | | |
|---|---|---|---|---|---|
| 04 | 2408 | 19 | 2438 | 34 | 2468 |
| 05 | 2410 | 20 | 2440 | 35 | 2470 |
| 06 | 2412 | 21 | 2442 | 36 | 2472 |
| 07 | 2414 | 22 | 2444 | 37 | 2474 |
| 08 | 2416 | 23 | 2446 | 38 | 2476 |
| 09 | 2418 | 24 | 2448 | 39 | 2478 |
| 10 | 2420 | 25 | 2450 | 40 | 2480 |
| 11 | 2422 | 26 | 2452 | / | / |
| 12 | 2424 | 27 | 2454 | | |
| 13 | 2426 | 28 | 2456 | | |
| 14 | 2428 | 29 | 2458 | | |
| 15 | 2430 | 30 | 2460 | | |

## 1.4 Test Conditons

| Voltage Fluctuation Test | Normal Voltage | High Voltage +10% of Normal Voltage | Low Voltage -10% of Normal Voltage |
|---|---|---|---|
| DC Power | DC 3.7V | DC 4.07V | DC 3.33V |
| To RF Circuit | DC 3.3V | DC 3.3V | DC 3.3V |

Note:
1. Voltage Variation (%)= (Output high or Low Voltage - Output Normal Voltage)/ Output Normal Voltage* 100.
2. During the input supply voltage to the EUT from the external power source is varied by +/-10%, + / - 10% of the external power change, will not affect the voltage of the RF, so only operated in normal voltage to test all regulations.

## 1.5 Test Setup

See photographs of the test setup in the report for the actual setup and connections between EUT and support equipment.

## 1.6 Power setting configuration parameters

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters.

| Test software Version | | fcc_test_tool V2.4.3 | |
|---|---|---|---|
| Frequency | 2402 MHz | 2440 MHz | 2480 MHz |
| Parameters | Default | Default | Default |
| RF cable | | | |
| Description | Connector | Length | Supplied by |
| Antenna Cable | SMA | 10cm | Applicant |

Note: Disclaimer: the loss of RF cable is too small and can be ignored.

## 1.7 Ancillary Equipment

| Equipment | Model | S/N | Manufacturer |
|---|---|---|---|
| / | / | / | / |

# 2 Summary of Test Result

| No. | Test Item | Result | Remark |
|---|---|---|---|
| 1 | Frequency Tolerance Measurement | Pass | |
| 2 | Occupied Bandwidth and Spread-spectrum Bandwidth | Pass | |
| 3 | Tx Unwanted Emission Measurement | Pass | |
| 4 | Antenna Power Tolerance | Pass | |
| 5 | Rx Unwanted Emission Measurement | Pass | |
| 6 | Transmission Antenna Gain (EIRP Antenna Power) | Pass | |
| 7 | Transmission Radiation Angle Width (3dB Beamwidth) | N/A | |
| 8 | Radio Interference Prevention Capability | Pass | |
| 9 | Carrier Sense | N/A | |

Note: “N/A” means the test item not applicable.

# 3 Test Facilities and Accreditations

## 3.1 Test Laboratory

| | |
|---|---|
| Test Site | Shenzhen NTT Testing Technology Co.,Ltd. |
| Test Site Location | 1B, Building 2, Factory Building & 103, Building 3, Factory Building, Dayang Industrial Park No.4, Industrial Avenue, Tangwei Community, Fuhai Sub-district, Bao 'an District, Shenzhen City, China |
| Telephone: | 0755-27889935 |
| CNAS Registration No.: | L25606 |

## 3.2 Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

| | |
|---|---|
| Temperature: | 15ºC~35ºC |
| Relative Humidity: | 45%~85% |
| Air Pressure: | 98kPa~101kPa |

## 3.3 Measurement Uncertainty

Measurement Uncertainty for a Level of Confidence of 95 %, U=2xUc(y)

| Parameter | Uncertainty Criterion |
|---|---|
| Occupied Channel Bandwidth | ± 1.5 x 10-6 |
| RF output power, conducted | ±1.0dB |
| Power Spectral Density, conducted | ±2.2dB |
| Unwanted Emissions, conducted | ±2.8dB |
| Temperature | ±1°C |
| Supply voltages | ±3% |
| Time | ±2% |

## 3.4 Test Software

| Software name | Manufacturer | Model | Version |
|---|---|---|---|
| RF Test System | TACHOY | RFTest | V1.0.0 |

# 4 List of Test Equipment

## 4.1 List of Test Equipment

| Name | Model No. | Serial No. | Manufacturer | Date of Cal. | Due Cal. Date | Calibration Lab | Calibration Method |
|---|---|---|---|---|---|---|---|
| MXG Signal Analyzer | N9020A | MY50510202 | Agilent | 2025/9/08 | 2026/9/07 | Guangzhou LiSai Metrology & Test Co. ,Ltd. | c |
| MXG Vector Signal Generator | N5182A | MY50140020 | Agilent | 2025/9/08 | 2026/9/07 | Guangzhou LiSai Metrology & Test Co. ,Ltd. | c |
| Attenuation | PCL-10dB | 221126 | HTEC | 2025/9/08 | 2026/9/07 | Guangzhou LiSai Metrology & Test Co. ,Ltd. | c |
| MXG Analog Signal Generator | N5181A | MY47420919 | Agilent | 2025/9/08 | 2026/9/07 | Guangzhou LiSai Metrology & Test Co. ,Ltd. | c |
| Power Sensor | TR1029-2 | 512364 | Techoy | 2025/9/08 | 2026/9/07 | Guangzhou LiSai Metrology & Test Co. ,Ltd. | c |
| RF Swith | TR1029-1 | 512364 | Techoy | 2025/9/08 | 2026/9/07 | Guangzhou LiSai Metrology & Test Co. ,Ltd. | c |
| Power Meter | ML2495A | 10084 | Anritu | 2025/9/08 | 2026/9/07 | Guangzhou LiSai Metrology & Test Co. ,Ltd. | c |

## 4.2 Calibration Method

a) Calibration conducted by the National Institute of Information and Communications Technology NICT or a designated calibration agency under Article 102-18 paragraph.

b) Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No. 51 of 1992) .

c) Calibration conducted in foreign countries, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph.

d) Calibration, etc. conducted by using measuring instruments and other equipment listed in the right column of appended table No. 3, which shall have been given any type of calibration, etc. listed above from (a) to.

The all calibration corresponds to c) described above.

## 4.3 Calibration Agency information

| | |
|---|---|
| Test Site | Guangzhou Lisai Metrology & Test Co., Ltd. |
| Test Site Location | No.8, Nongkesuo South Street, Shiji, Panyu District, Guangzhou, Guangdong, China |
| Telephone: | (86-020) 31134076 |
| Fax: | (86-020) 31134076 |
| CNAS Registration No.: | L7127 |

# 5 Test Item And Results

## 5.1 Frequency Tolerance

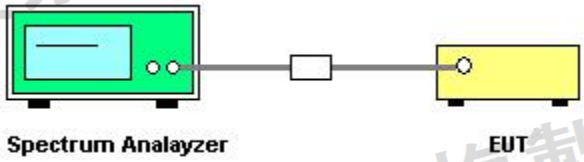
### 5.1.1 Limits

| Item | Limits |
|---|---|
| Frequency Tolerance | ±50ppm |

### 5.1.2 Test Procedures

1. Frequency accuracy of SA shall be less than 10% of limits tolerance (5ppm).
2. Setting of SA is following as: RB: 10kHz / VB: 10kHz / SPAN: 1MHz / Sweep time: Auto / Detect mode: Positive peak / Trace mode: Max hold.
3. The frequency tolerance test case is directly measured using spectrum analyzer. Then the frequency error formula is $(f-fc)/fc\times10^6$ ppm and the limit is less than ±50ppm.

### 5.1.3 Test Setup




### 5.1.4 Test Result

Please see the attachment for data.

## 5.2 Occupied Bandwidth And Spread-spectrum Bandwidth

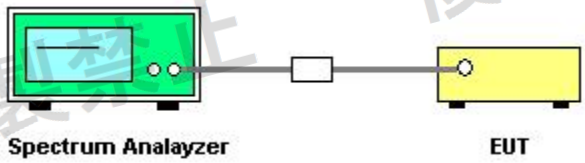
### 5.2.1 Limits

| Item | Limits |
|---|---|
| Occupied Bandwidth: | FH: 83.5MHz;<br>FH + DS: 83.5MHz;<br>FH + OFDM: 83.5MHz; OFDM: 83.5MHz or less<br>OFDM: 40MHz or less<br>Others: 26MHz or less |
| Spreading Bandwidth | No requirements |
| Spread Factor | No requirements |

### 5.2.2 Test Procedures

1. Setting of SA is following as: RB: 300kHz / VB: 300kHz / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold.
2. EUT have transmitted the maximum modulation signal and fixed channelize (For DSSS or OFDM Device). SA set to 99% of occupied bandwidth to measure occupied bandwidth.
3. SA set to 90% of occupied bandwidth to measure Spread Spectrum Bandwidth.
4. Spread Spectrum Factor = Spread Spectrum Bandwidth / modulation rate of EUT.

### 5.2.3 Test Setup




### 5.2.4 Test Result

Please see the attachment for data.

## 5.3 Tx Unwanted Emission

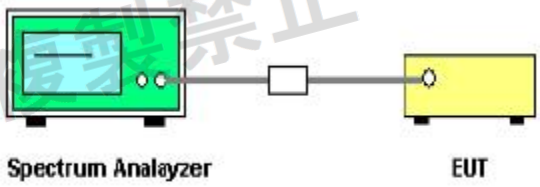
### 5.3.1 Limit

| Item | Limits |
|---|---|
| TX Spurious Emission | 30 to 1000 MHz: 0.25μW/MHz |
| | 1000 to 2387 MHz: 2.5μW/MHz |
| | 2387 to 2400 MHz: 25μW/MHz |
| | 2483.5 through 2496.5 MHz: 25μW/MHz |
| | Over 2496.5 MHz: 2.5μW/MHz |

### 5.3.2 Test Procedure

1. EUT have transmitted the maximum modulation signal and fixed channelize.
2. Setting of SA is following as: Below 1GHz RB:100KHz / VB:100KHz
   Above 1GHz RB:1MHz / VB:1MHz / AT: 30dB Ref: 20dBm / Sweep time: Auto
   Sweep Mode: Continuous sweep / Detect mode: Positive peak
   Trace mode: Max hold
3. Setting of SA is following as 30MHz and stop frequency 1000MHz Then to mark peak reading value + cable loss shall be less than 2.5μW.
4. Setting of SA is following as 1000MHz and stop frequency 2387MHz Then to mark peak reading value + cable loss shall be less than 2.5μW.
5. SA adjusted to start frequency 2387MHz and stop frequency 2400MHz. Then to mark peak reading value + cable loss shall be less than 25μW.
6. SA adjusted to start frequency 2483.5MHz and stop frequency 2496.5MHz Then to mark peak reading value + cable loss shall be less than 25μW
7. SA adjusted to start frequency 2496.5MHz and stop frequency 12500MHz Then to mark peak reading value + cable loss shall be less than 2.5μW
8. If the Result_Value is over the requirement, take total sum of 1MHz band centered at the spur frequency like ACLP measurement as Result_Value.

### 5.3.3 Test Setup




### 5.3.4 Test Results

Please see the attachment for data.

## 5.4 Antenna Power Tolerance

### 5.4.1 Limit

| Item | Limits |
|---|---|
| Antenna Power Density | (1) FH, FH+DS, FH+OFDM 3mW/MHz<br>(2) OFDM, DS other than (1) 10mW/MHz<br>(3) Other than (1) & (2) 10mW |
| Antenna Power Tolerance | +20% |

### 5.4.2 Test Procedure

In the case of using a frequency hopping method (including a combined method of direct or orthogonal frequency division multiplexing)

The frequency hopping interval in the frequency distribution of the frequency hopping is equal to or equal to or equal to or less than 1 MHz.

(a) a high frequency power meter is connected to the output of a pseudo load (attenuator) to measure total power.

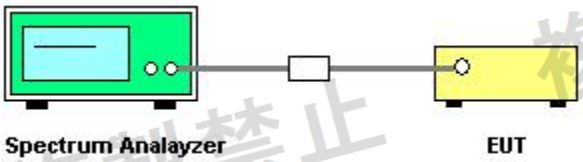
(a) the total power is divided by the diffusion band width to calculate the average power per 1 MHz.

(c) the antenna power is as follows.

A The value of the continuous wave (a).

B The value obtained by calculating the average power in the burst from the value of the burst wave and the transmission time.

### 5.4.3 Test Setup




### 5.4.4 Test results

Please see the attachment for data.

## 5.5 Rx Unwanted Emission

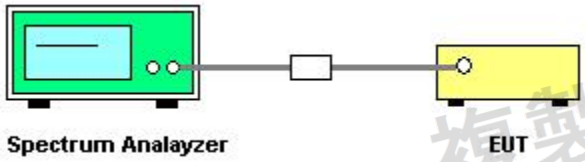
### 5.5.1 Limit

| Item | Limits |
|---|---|
| RX Spurious Emission | Below 1 GHz: 4 nW |
| | 1 GHz or higher: 20 nW |

### 5.5.2 Test Procedure

1. SA set RBW: 100kHz and VBW: 100kHz (blew 1GHz emissions)
2. RBW and VBW: 1MHz (above 1GHz emission)
3. Sweep time: Auto
4. Detect mode: Positive peak
5. Trace mode: Max hold

### 5.5.3 Test Setup




### 5.5.4 Test Results

Please see the attachment for data.

## 5.6 EIRP Antenna Power

### 5.6.1 Limit

| Modulation | Frequency band | Antenna power | Max EIRP | |
|---|---|---|---|---|
| | | | Non-directional | Beam directional$_{Note1}$ |
| DS | 2,400-2,483.5MHz | 10mW/MHz | 12.14dBm/MHz | 22.14dBm/MHz |
| OFDM1$_{Note2}$ | 2,400-2,483.5MHz | 10mW/MHz | 12.14dBm/MHz | 22.14dBm/MHz |
| OFDM2 | 2,400-2,483.5MHz | 5mW/MHz | 9.14dBm/MHz | 19.14dBm/MHz |
| FH,DS-FH,FH-OFDM | 2,400-2,483.5MHz | 3mW/MHz | 6.91dBm/MHz | 16.91dBm/MHz |
| | 2,427-2,470.75MHz | 10mW/MHz | 12.14dBm/MHz | 22.14dBm/MHz |
| Other than those above | 2,400-2,483.5MHz | 10mW | 12.14dBm | 22.14dBm |

Note: This test item will not be applied to the transmission antenna which has a gain of 2.14dBi or less.

### 5.6.2 Test Procedure

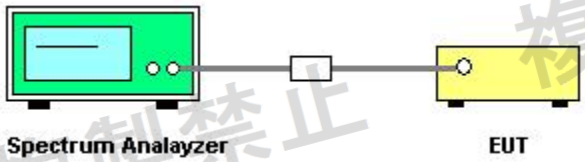
a. onnect the high frequency power meter to the attenuator and measure the total power.

b. Set the antenna power as follows:

(1) Continuous waves: value in a.

(2) Burst waves: value in b. and value calculated from the average power within bursts from rates of transmission times

### 5.6.3 Test Setup




### 5.6.4 Test Results

Please see the attachment for data.

Note: E.I.R.P (dBm) = Conducted power (dBm) + antenna gain (dBi).

## 5.7 Transmission Radiation Angle Width (3dB Beam width)

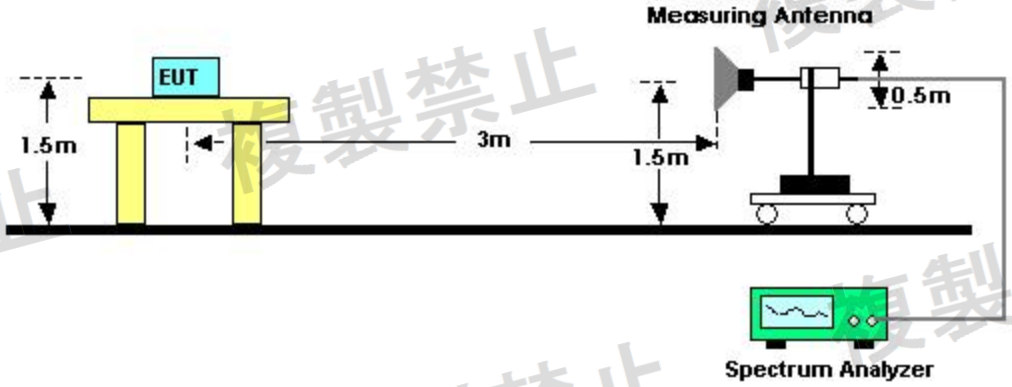
### 5.7.1 Limit

| Item | Limits |
|---|---|
| 3dB antenna beam width | 360/A (If A<1; then A=1)<br>A = {EIRP Power [mW] / 16.36 for DS, OFDM} or<br>A = {EIRP Power [mW] / 4.9 for FH} |
| Note: This test item is not applied for radio equipment with equivalent isotropic radiation power lower than 12.14dBm/MHz, but Antenna Power(Conducted) limit is 10 mW/MHz (10 dBm/MHz), So the test item will not be applied to the transmission antenna which has a gain of 2.14dBi or less. | |

### 5.7.2 Test Procedure

1. Set EUT and measuring antenna at the same height and roughly facing each other.
2. Set spectrum analyzer with condition in section 4.7.2 and tune reference level to observe receving signal position.
3. Rotate directions of the EUT horizontally and ertically to find the maximum receiving power.
4. Move the measuring antenna height up and down within ± 50cm of EUT height and swing it to find the maximum output of measuing antenna. The output level at the spectrum analyzer is read as “E”
5. Calculate permitted radiation angle in horizontal and vertical using EIRP measured in another test method.
6. Calculate 3dB antenna beam width by the formula below 360/A (If A<1; then A=1).
A = {EIRP Power [mW] / 16.36 for DS, OFDM} or
A = {EIRP Power [mW] / 4.9 for FH}

### 5.7.3 Test Setup




### 5.7.4 Test Results

Note: The EIRP is less than 12.14dBm, so it is not applicable.

## 5.8 Radio Interference Prevention Capability

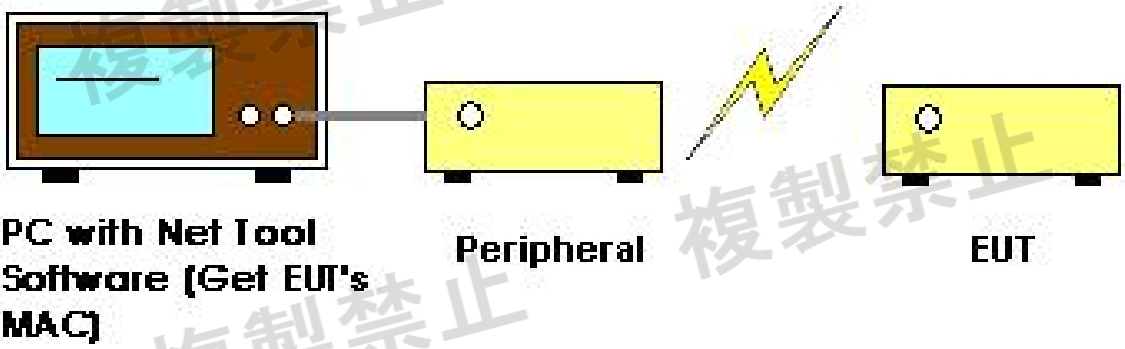
### 5.8.1 Limit

Product shall have the function of automatic transmission and reception of identification sign.

### 5.8.2 Test Procedure

1. In the case that the EUT has the function of automatically transmitting the identification code: a. Transmit the predetermined identification codes form EUT. b. Check the transmitted identification codes with the demodulator.
2. In the case of receiving the identification code: a. Transmit the predetermined identification codes form the counterpart. b. Check if communication is normal. c. Transmit the signals other than predetermined ID codes form the counterpart. d. check if the EUT stops the transmission, or if it displays that identification codes are different from the predetermined ones.

### 5.8.3 Test Setup




### 5.8.4 Test Results

Pass. The interference prevention function of EUT is good.
MAC address: 44:45:17:12:11:25

## 5.9 Carrier Sense

### 5.9.1 Limit

Only for radio equipment that uses orthogonal frequency division multiplexing with an occupied frequency bandwidth of more than 26 MHz and 38 MHz or less.

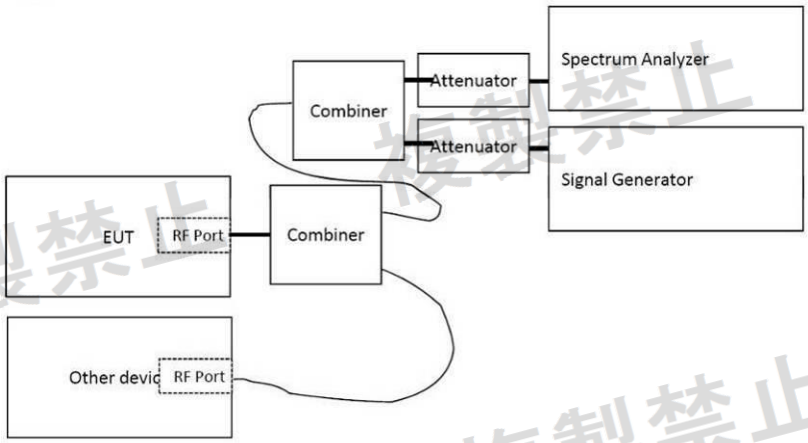
### 5.9.2 Test Procedure

1. Set the spectrum analyzer as shown in 2 (2).
(1) When testing with only test equipment
A. Set the spectrum analyzer as shown in 2 (2).
B. With the output of the standard signal generator not transmitted, put the test equipment into transmission operation and confirm with a spectrum analyzer that it emits orthogonal frequency division multiplexing radio waves with an occupied frequency bandwidth exceeding 26 MHz.
C. Put the test equipment in the receiving state.
D. With the output of the standard signal generator in the transmitting state, set the test equipment to the transmitting operation, and confirm with a spectrum analyzer that it does not emit orthogonal frequency division multiplexing radio waves whose occupied frequency bandwidth exceeds 26 MHz.
(2) When conducting a test using an external test device (excluding the case of (3))
A. Set the spectrum analyzer as shown in 2 (2).
B. Make the output of the standard signal generator not transmitted.
C. Connect a line between the test equipment and the external test equipment, and confirm with a spectrum analyzer that orthogonal frequency division multiplexing radio waves with an occupied frequency bandwidth exceeding 26 MHz at the test frequency are emitted.
D. Put the test equipment in the receiving state.
E With the output of the standard signal generator in the transmitting state, set the test equipment to the transmitting operation, and confirm with the spectrum analyzer that the orthogonal frequency division multiplexing radio wave whose occupied frequency bandwidth exceeds 26MHz is not emitted.
(3) When conducting a test using an external test device (a test device that has a transmission function in orthogonal frequency division multiplexing or other modulation methods with an occupied frequency bandwidth of 26 MHz or less, and spectrum analysis such as the FFT method) When using a vessel)

A. Set the spectrum analyzer as shown in 2(3).

B. Make the output of the standard signal generator not transmitted.
C. Connect a line between the test equipment and the external test equipment, and confirm with a spectrum analyzer that orthogonal frequency division multiplexing radio waves with an occupied frequency bandwidth exceeding 26 MHz at the test frequency are emitted.
D. Put the test equipment in the receiving state.
E With the output of the standard signal generator in the transmitting state, set the test equipment to the transmitting operation, and confirm with the spectrum analyzer that the orthogonal frequency division multiplexing radio wave whose occupied frequency bandwidth exceeds 26MHz is not emitted.

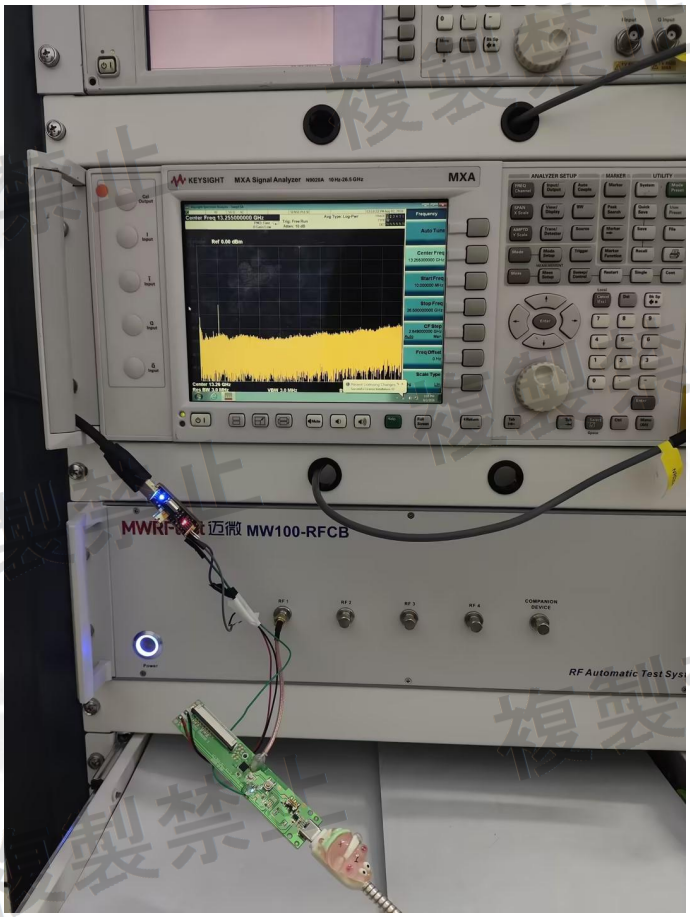
### 5.9.3 Test Setup




### 5.9.4 Test Results

Note: not applicable.

# 6 Photographs of the Test Setup



# 7 Photographs of the EUT

Please see EUT Photo for details.

****** END OF REPORT ******

# RF Test Data

Frequency Error ..... 2
Antenna Power ..... 5
EIRP Power ..... 8
Occupied Channel Bandwidth ..... 9
Spreading Bandwidth ..... 12
Tx Spurious Emission ..... 15
Rx Spurious Emission ..... 25

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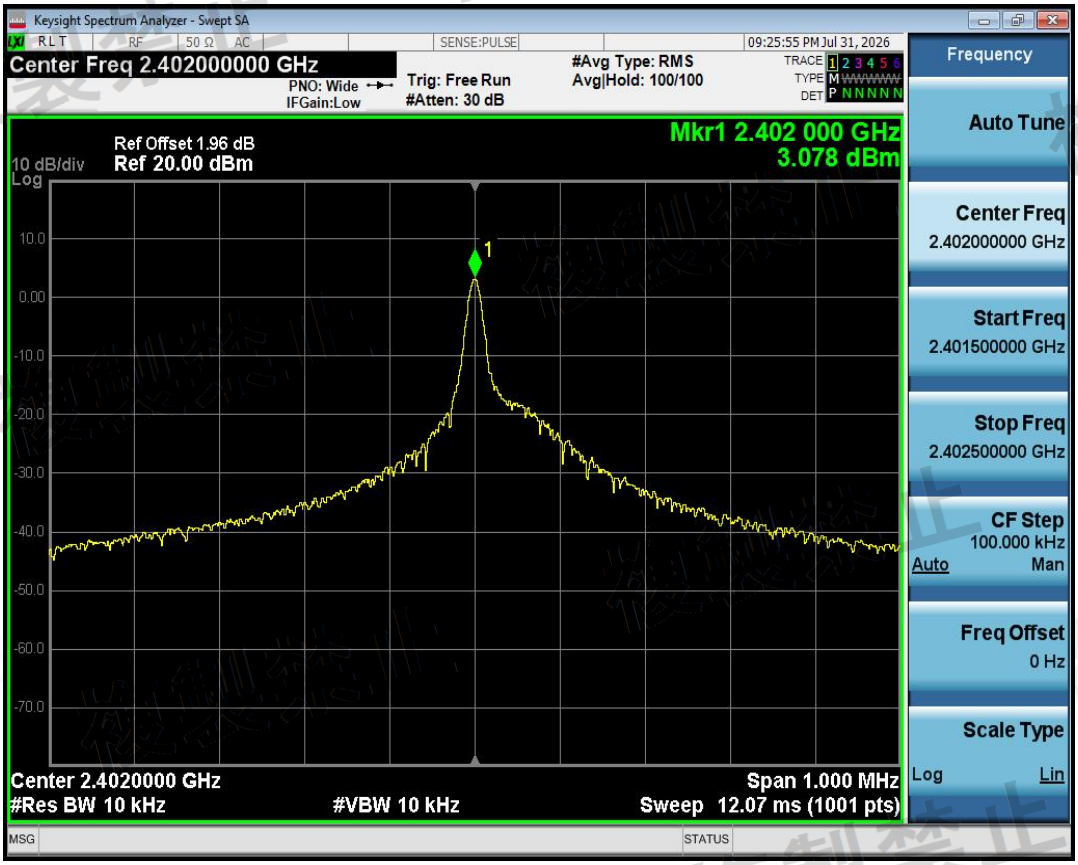
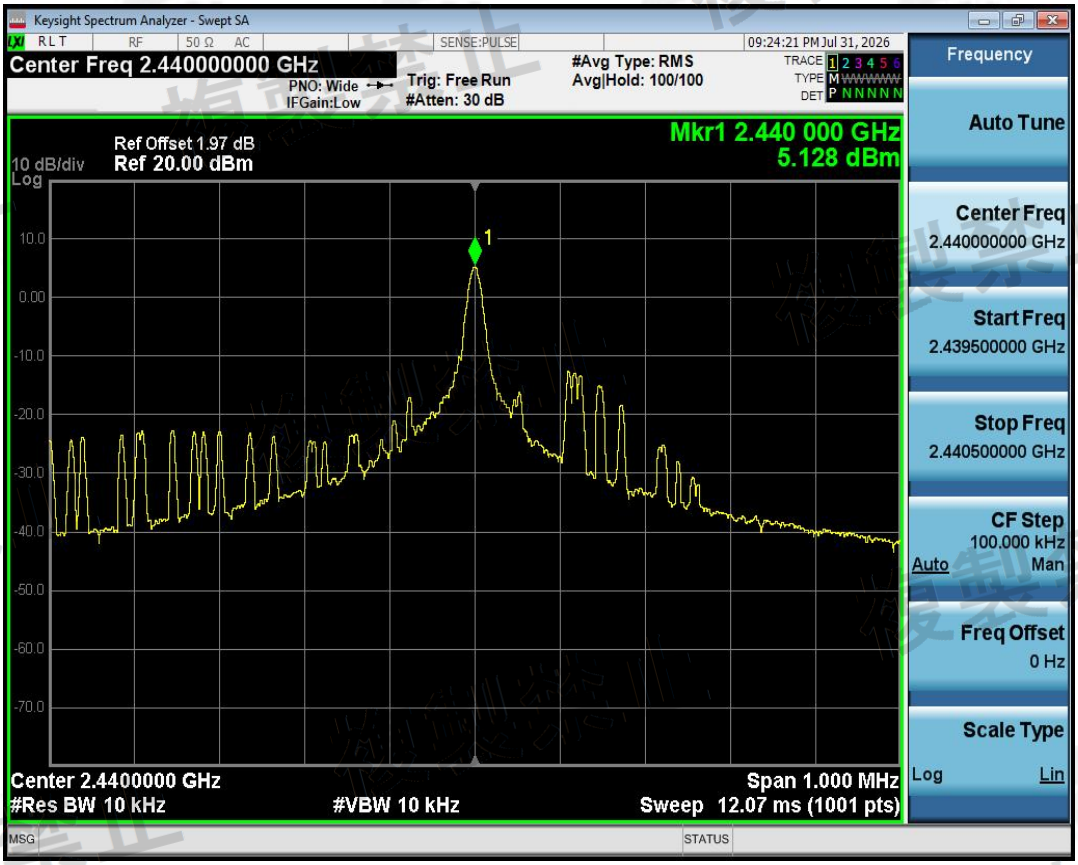
# Frequency Error

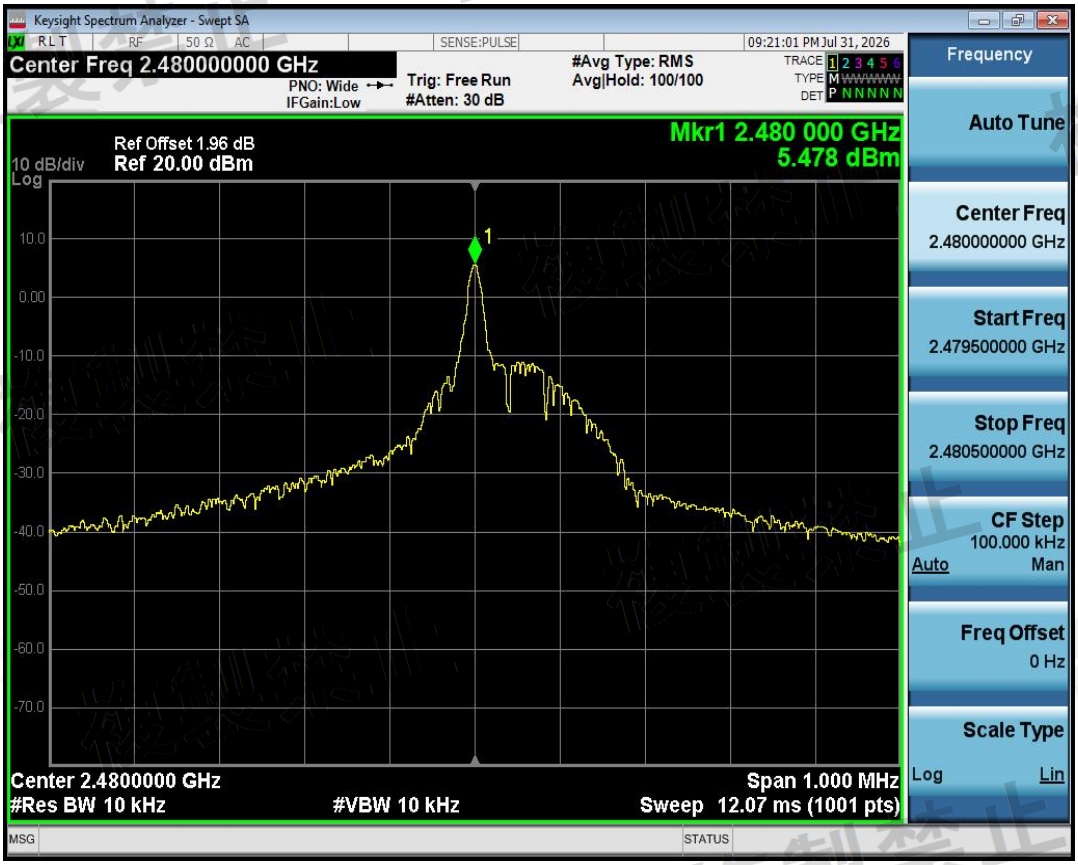
| Condition | Mode | Frequency (MHz) | Antenna | Measured Frequency (MHz) | Frequency Error (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
|---|---|---|---|---|---|---|---|---|
| NVNT | BLE 1M | 2402 | Ant1 | 2402 | 0 | 0 | 50 | Pass |
| NVNT | BLE 1M | 2440 | Ant1 | 2440 | 0 | 0 | 50 | Pass |
| NVNT | BLE 1M | 2480 | Ant1 | 2480 | 0 | 0 | 50 | Pass |




Freq. Error NVNT BLE 1M 2402MHz Ant1



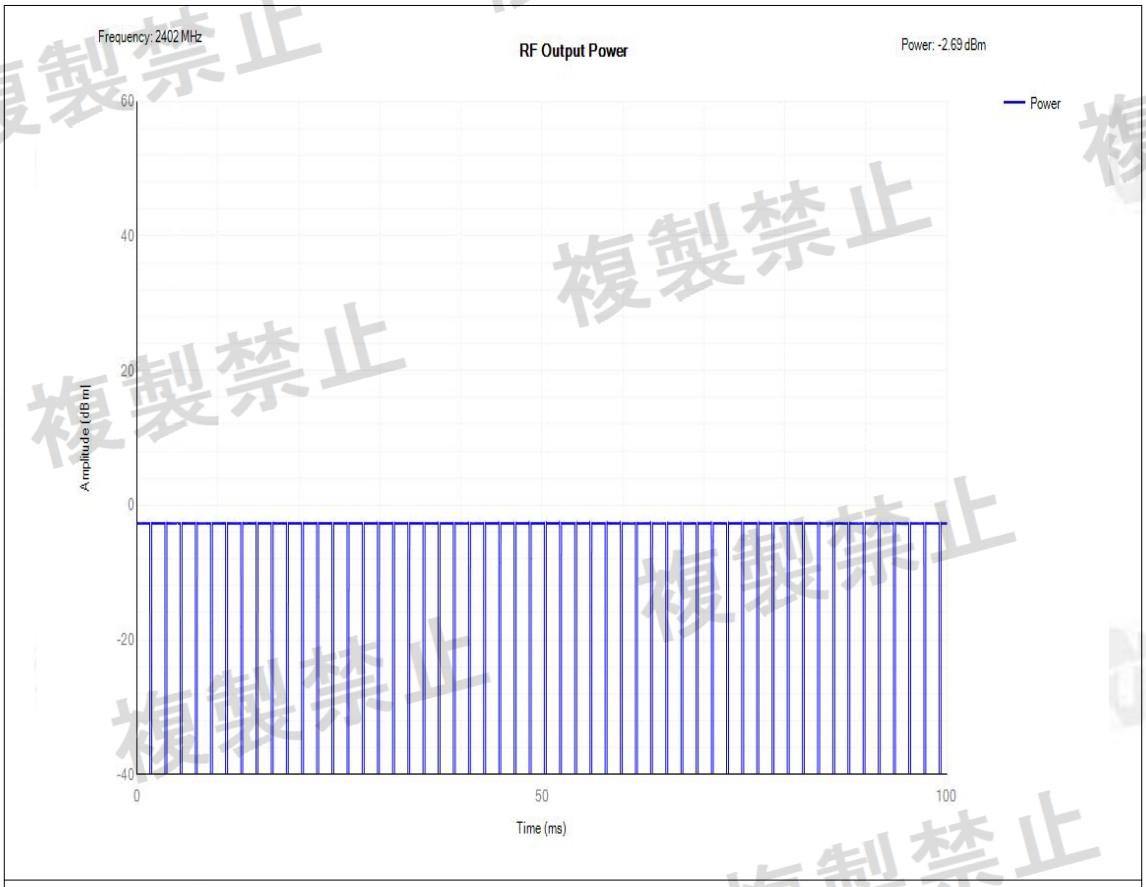

Freq. Error NVNT BLE 1M 2440MHz Ant1



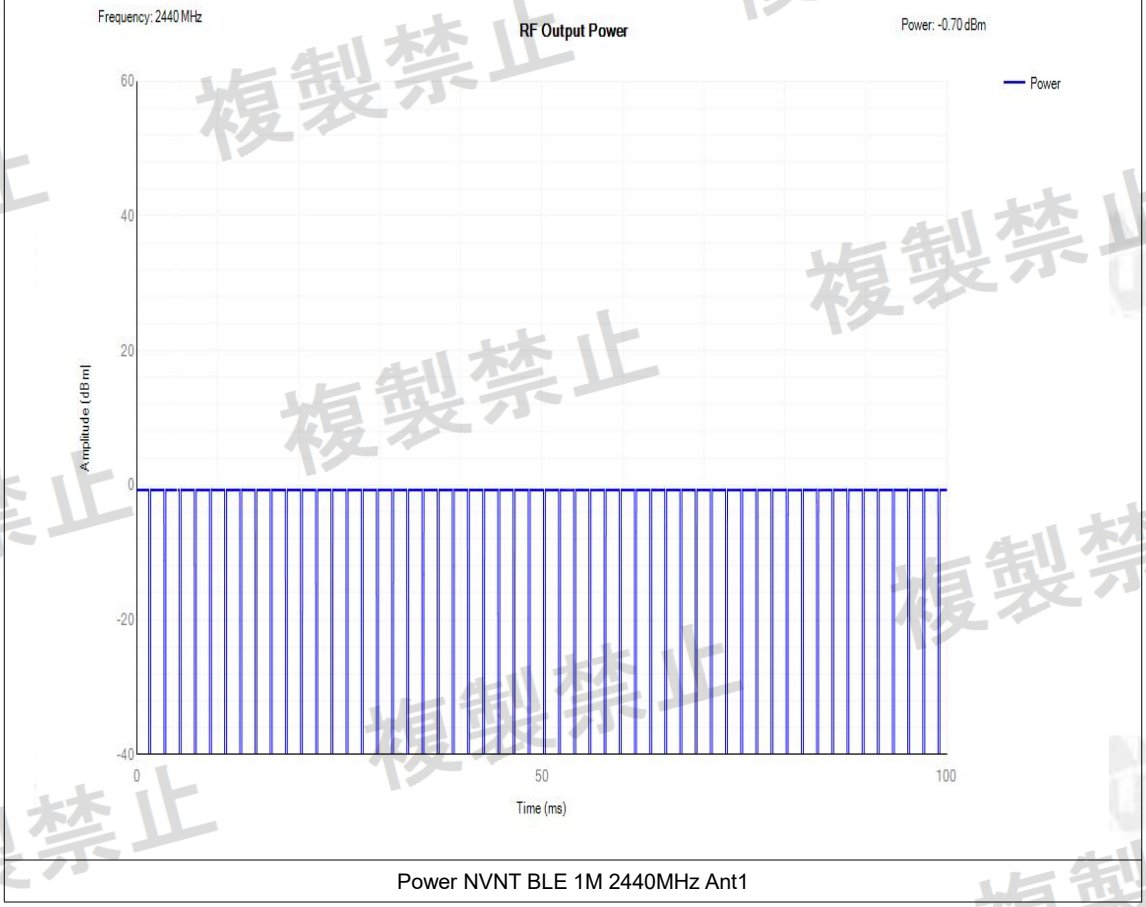

Freq. Error NVNT BLE 1M 2480MHz Ant1

## Antenna Power

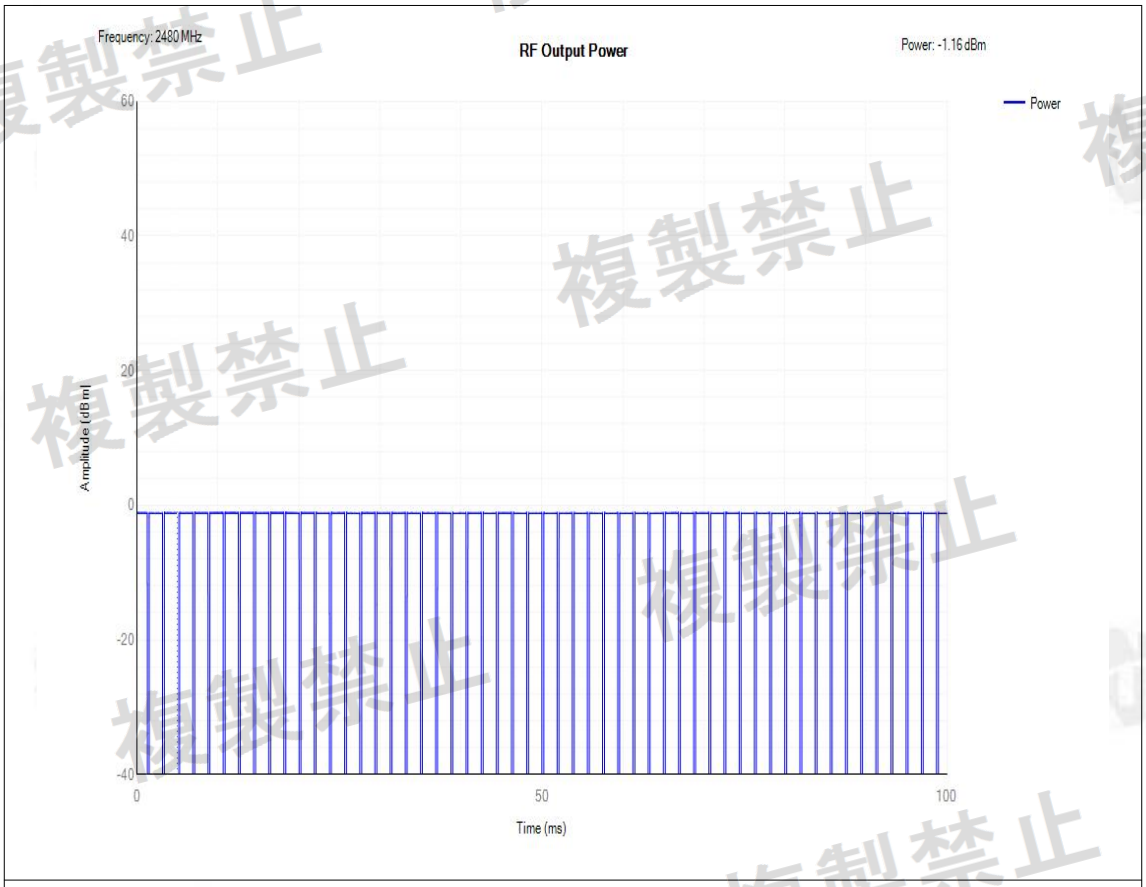
| Condition | Mode | Frequency (MHz) | Antenna | Power (dBm) | Power (mW) | Limit (mW) | Declared Power (mW) | Tolerance (%) | Upper Limit (%) | Verdict |
|---|---|---|---|---|---|---|---|---|---|---|
| NVNT | BLE 1M | 2402 | Ant1 | -2.69 | 0.538 | 10 | 1 | -46.2 | 20 | Pass |
| NVNT | BLE 1M | 2440 | Ant1 | -0.7 | 0.851 | 10 | 1 | -14.9 | 20 | Pass |
| NVNT | BLE 1M | 2480 | Ant1 | -1.16 | 0.766 | 10 | 1 | -23.4 | 20 | Pass |




Power NVNT BLE 1M 2402MHz Ant1




Power NVNT BLE 1M 2440MHz Ant1




Power NVNT BLE 1M 2480MHz Ant1

# EIRP Power

| Condition | Mode | Frequency (MHz) | Antenna | Antenna Power (mW) | Antenna Power (dBm) | Gain (dBi) | EIRP Power (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|---|---|---|---|
| NVNT | BLE 1M | 2402 | Ant1 | 0.538 | -2.69 | 2.58 | -0.11 | 12.14 | Pass |
| NVNT | BLE 1M | 2440 | Ant1 | 0.851 | -0.7 | 2.58 | 1.88 | 12.14 | Pass |
| NVNT | BLE 1M | 2480 | Ant1 | 0.766 | -1.16 | 2.58 | 1.42 | 12.14 | Pass |

# Occupied Channel Bandwidth

| Condition | Mode | Frequency (MHz) | Antenna | 99% OBW (MHz) | Lower Limit (MHz) | Upper Limit (MHz) | Verdict |
|---|---|---|---|---|---|---|---|
| NVNT | BLE 1M | 2402 | Ant1 | 1.2521 | N/A | 26 | Pass |
| NVNT | BLE 1M | 2440 | Ant1 | 1.2568 | N/A | 26 | Pass |
| NVNT | BLE 1M | 2480 | Ant1 | 1.2295 | N/A | 26 | Pass |

OBW NVNT BLE 1M 2402MHz Ant1

OBW NVNT BLE 1M 2440MHz Ant1

OBW NVNT BLE 1M 2480MHz Ant1

# Spreading Bandwidth

| Condition | Mode | Frequency (MHz) | Antenna | 90% OBW (MHz) |
|---|---|---|---|---|
| NVNT | BLE 1M | 2402 | Ant1 | 0.78917 |
| NVNT | BLE 1M | 2440 | Ant1 | 0.81033 |
| NVNT | BLE 1M | 2480 | Ant1 | 0.75654 |

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Spreading Bandwidth NVNT BLE 1M 2402MHz Ant1

Spreading Bandwidth NVNT BLE 1M 2440MHz Ant1

Spreading Bandwidth NVNT BLE 1M 2480MHz Ant1

# Tx Spurious Emission

| Condition | Mode | Frequency (MHz) | Antenna | Range (MHz) | Emission Frequency (MHz) | Max Peak Value (dBm/MHz) | Max RMS Value (dBm/MHz) | Max Peak Value (uW/MHz) | Max RMS Value (uW/MHz) | Limit Start (uW/MHz) | Limit Stop (uW/MHz) | Verdict |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NVNT | BLE 1M | 2402 | Ant1 | 30-1000 | 834.81 | -56.78 | NA | 0.0021 | NA | 0.25 | 0.25 | Pass |
| NVNT | BLE 1M | 2402 | Ant1 | 1000-2387 | 2033.59 | -46.90 | NA | 0.0204 | NA | 2.5 | 2.5 | Pass |
| NVNT | BLE 1M | 2402 | Ant1 | 2387-2400 | 2399.99 | -41.98 | NA | 0.0634 | NA | 25 | 25 | Pass |
| NVNT | BLE 1M | 2402 | Ant1 | 2483.5-2496.5 | 2486.63 | -45.90 | NA | 0.0257 | NA | 25 | 25 | Pass |
| NVNT | BLE 1M | 2402 | Ant1 | 2496.5-13000 | 6316.62 | -44.46 | NA | 0.0358 | NA | 2.5 | 2.5 | Pass |
| NVNT | BLE 1M | 2440 | Ant1 | 30-1000 | 854.60 | -57.10 | NA | 0.0019 | NA | 0.25 | 0.25 | Pass |
| NVNT | BLE 1M | 2440 | Ant1 | 1000-2387 | 2193.10 | -46.65 | NA | 0.0216 | NA | 2.5 | 2.5 | Pass |
| NVNT | BLE 1M | 2440 | Ant1 | 2387-2400 | 2399.14 | -46.69 | NA | 0.0214 | NA | 25 | 25 | Pass |
| NVNT | BLE 1M | 2440 | Ant1 | 2483.5-2496.5 | 2484.60 | -46.46 | NA | 0.0226 | NA | 25 | 25 | Pass |
| NVNT | BLE 1M | 2440 | Ant1 | 2496.5-13000 | 2516.46 | -39.68 | NA | 0.1076 | NA | 2.5 | 2.5 | Pass |
| NVNT | BLE 1M | 2480 | Ant1 | 30-1000 | 789.61 | -57.60 | NA | 0.0017 | NA | 0.25 | 0.25 | Pass |
| NVNT | BLE 1M | 2480 | Ant1 | 1000-2387 | 2187.13 | -46.61 | NA | 0.0218 | NA | 2.5 | 2.5 | Pass |
| NVNT | BL | 2480 | Ant1 | 2387-24 | 2388. | -46.82 | NA | 0.020 | NA | 25 | 25 | Pas |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | E 1M | | | 00 | 78 | | | 8 | | | | s |
| NVNT | BL E 1M | 2480 | Ant1 | 2483.5-2496.5 | 2484.66 | -42.22 | NA | 0.06 | NA | 25 | 25 | Pass |
| NVNT | BL E 1M | 2480 | Ant1 | 2496.5-13000 | 5708.47 | -44.64 | NA | 0.0344 | NA | 2.5 | 2.5 | Pass |

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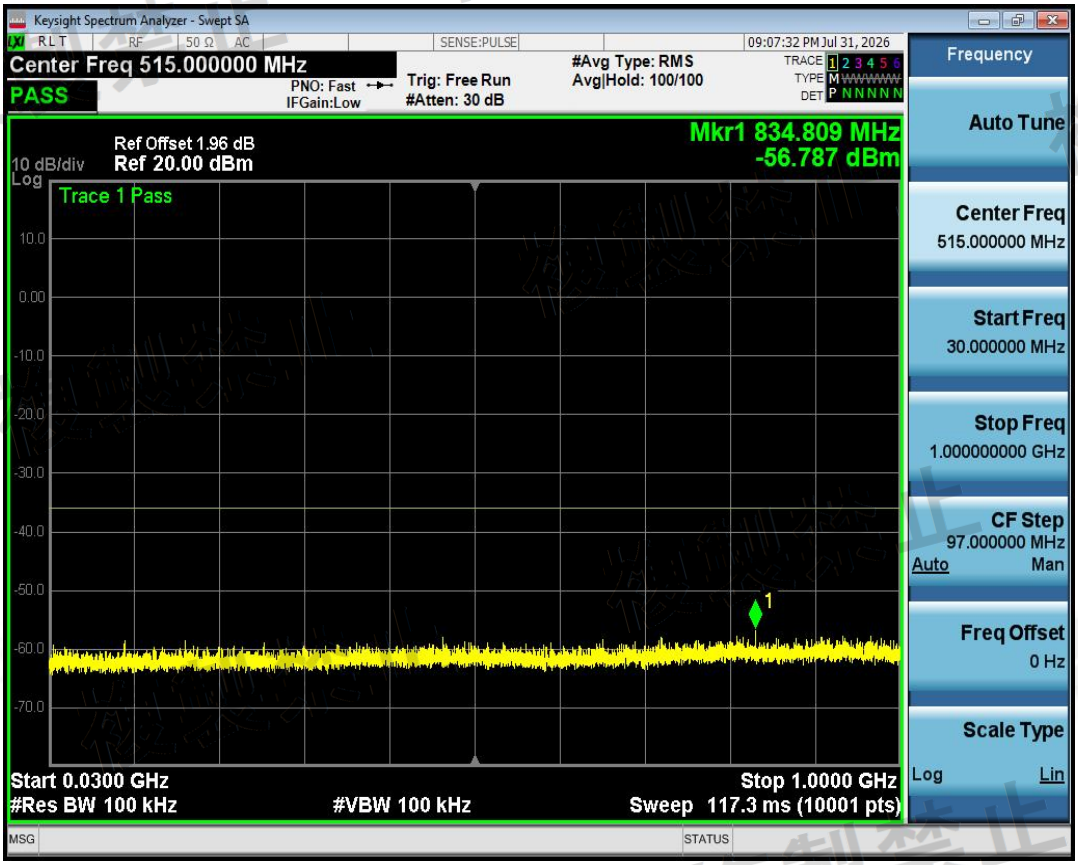
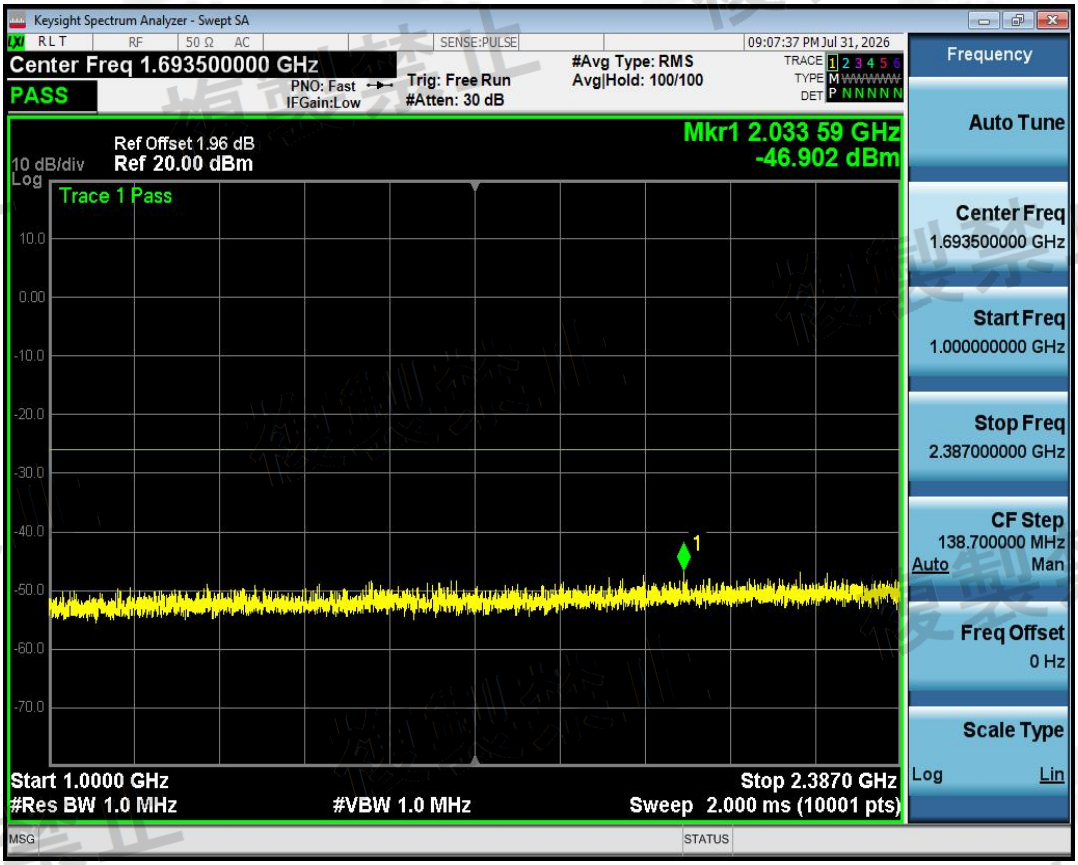
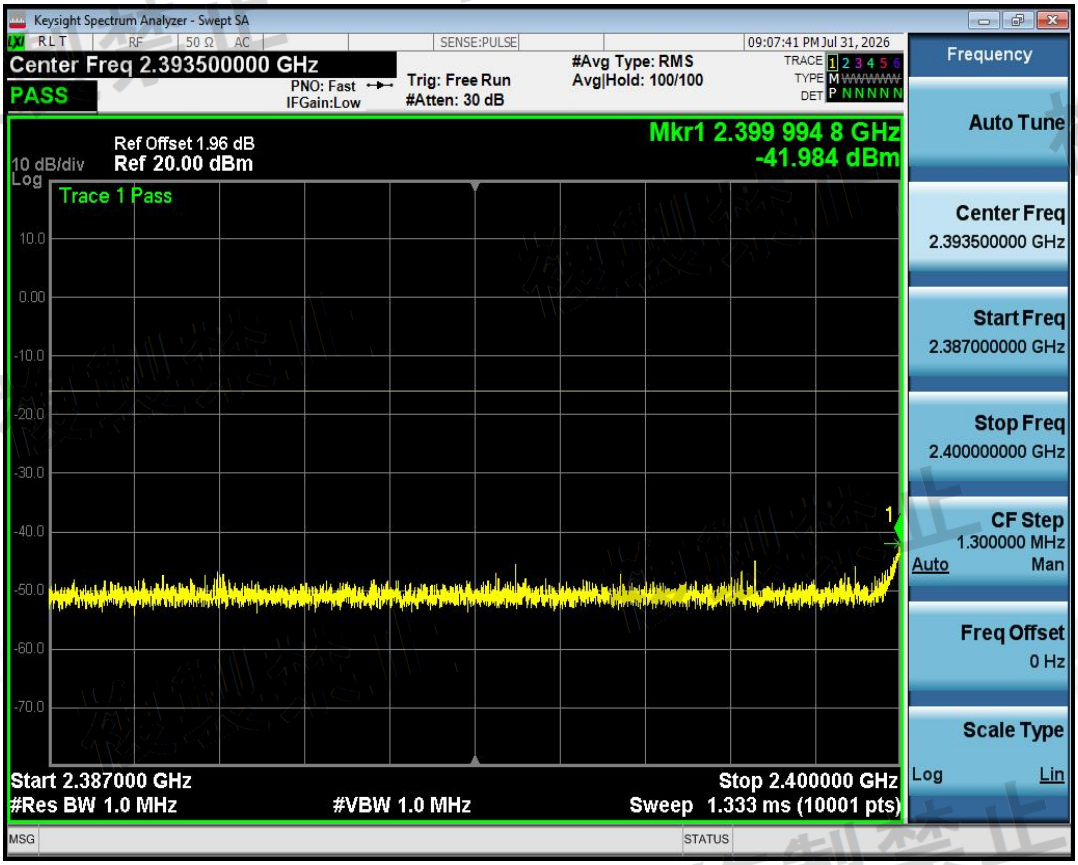


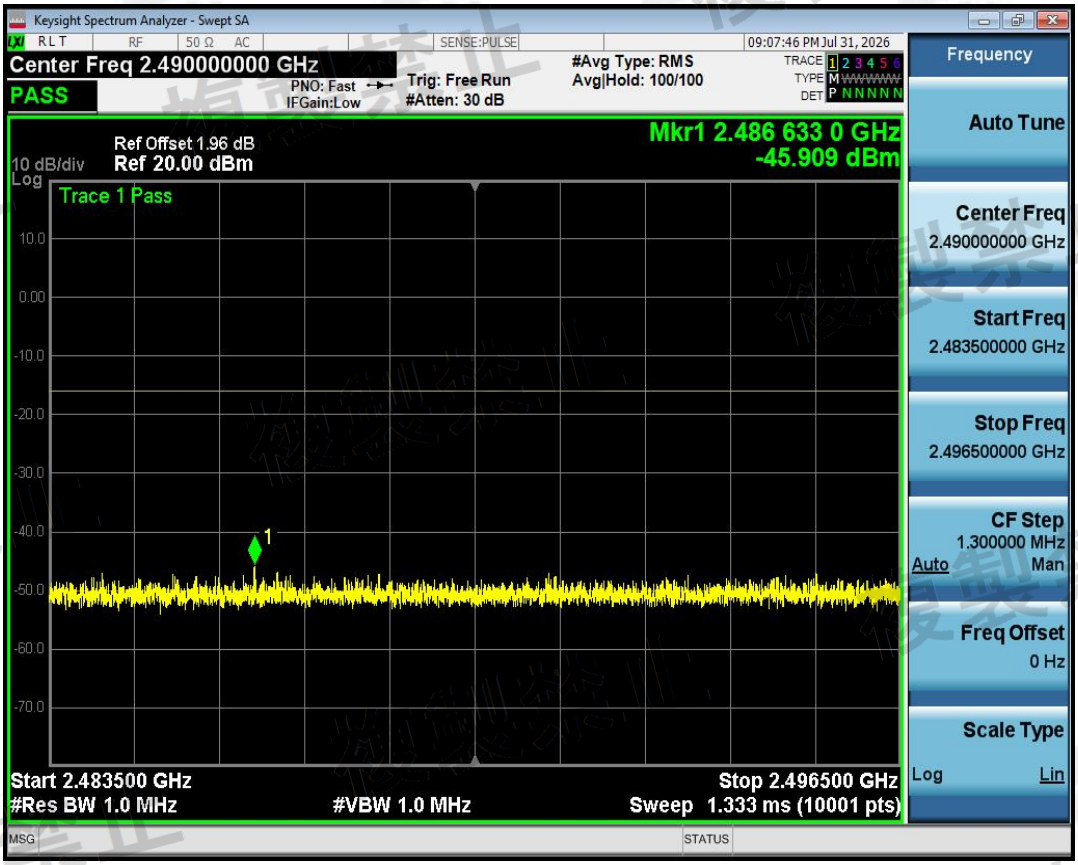

Tx. Spurious NVNT BLE 1M 2402MHz Ant1 @ 30MHz-1000MHz



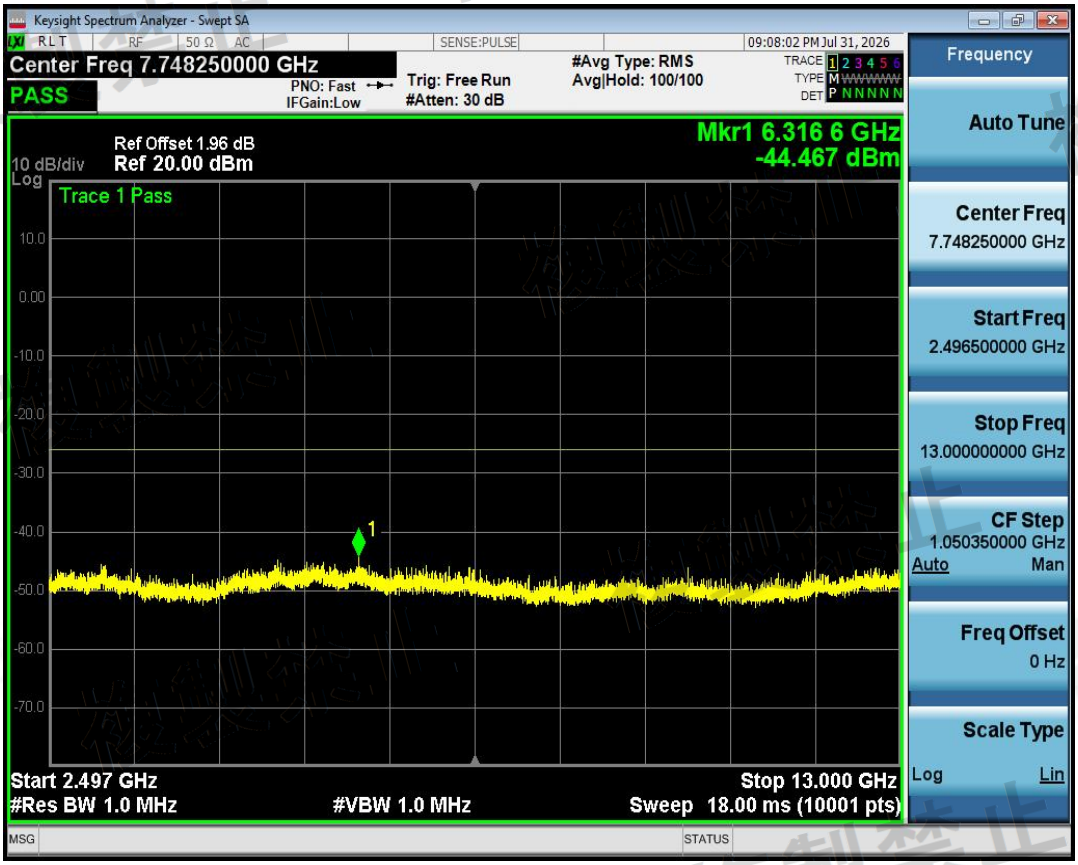

Tx. Spurious NVNT BLE 1M 2402MHz Ant1 @ 1000MHz-2387MHz



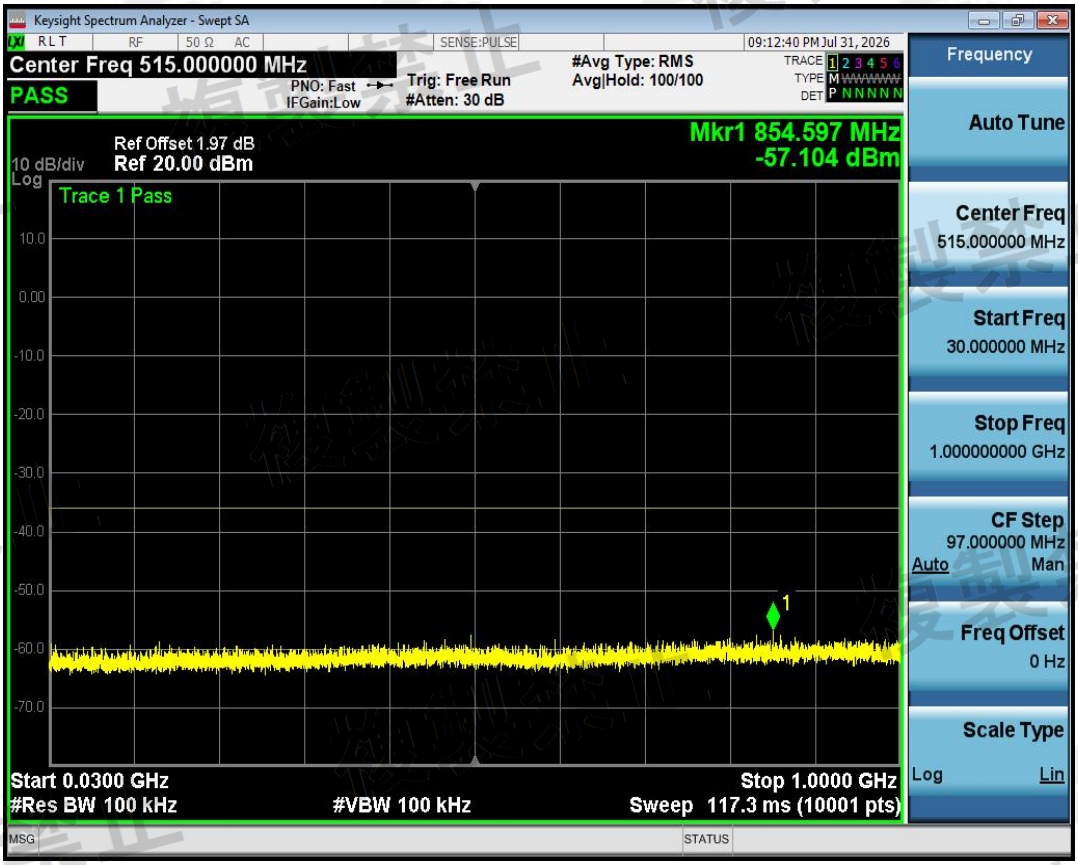

Tx. Spurious NVNT BLE 1M 2402MHz Ant1 @ 2387MHz-2400MHz



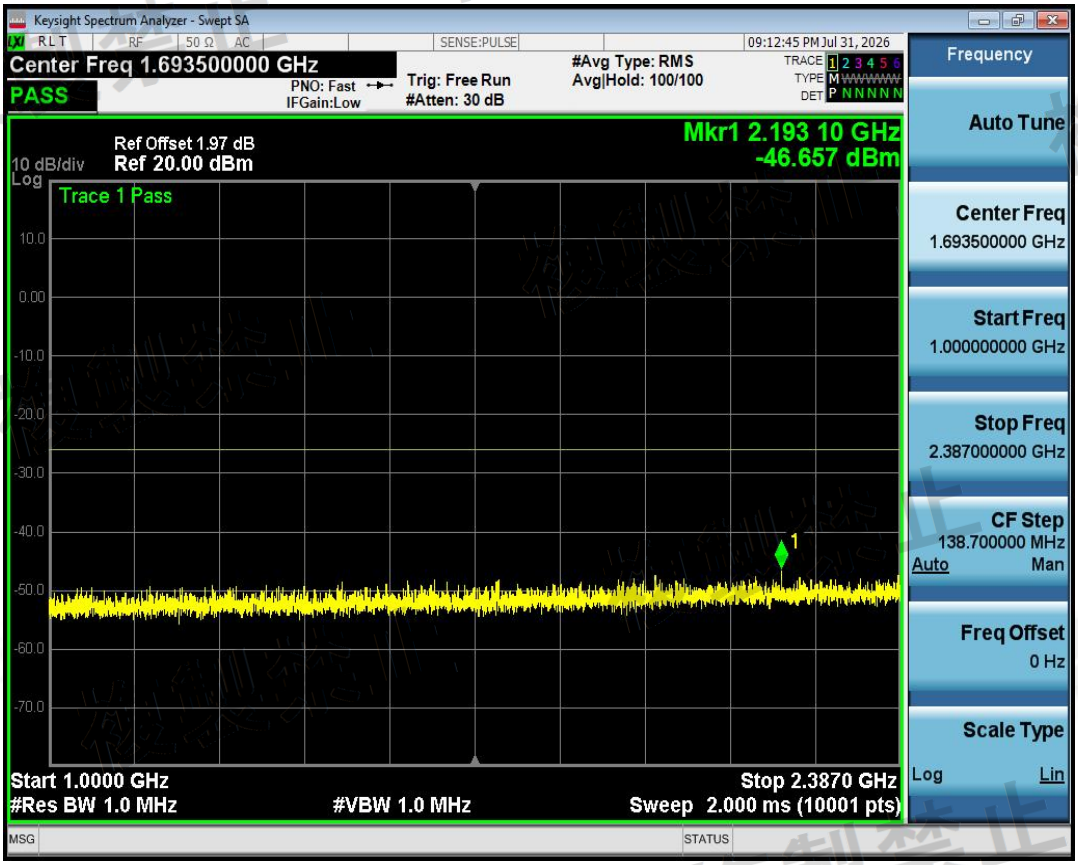

Tx. Spurious NVNT BLE 1M 2402MHz Ant1 @ 2483.5MHz-2496.5MHz



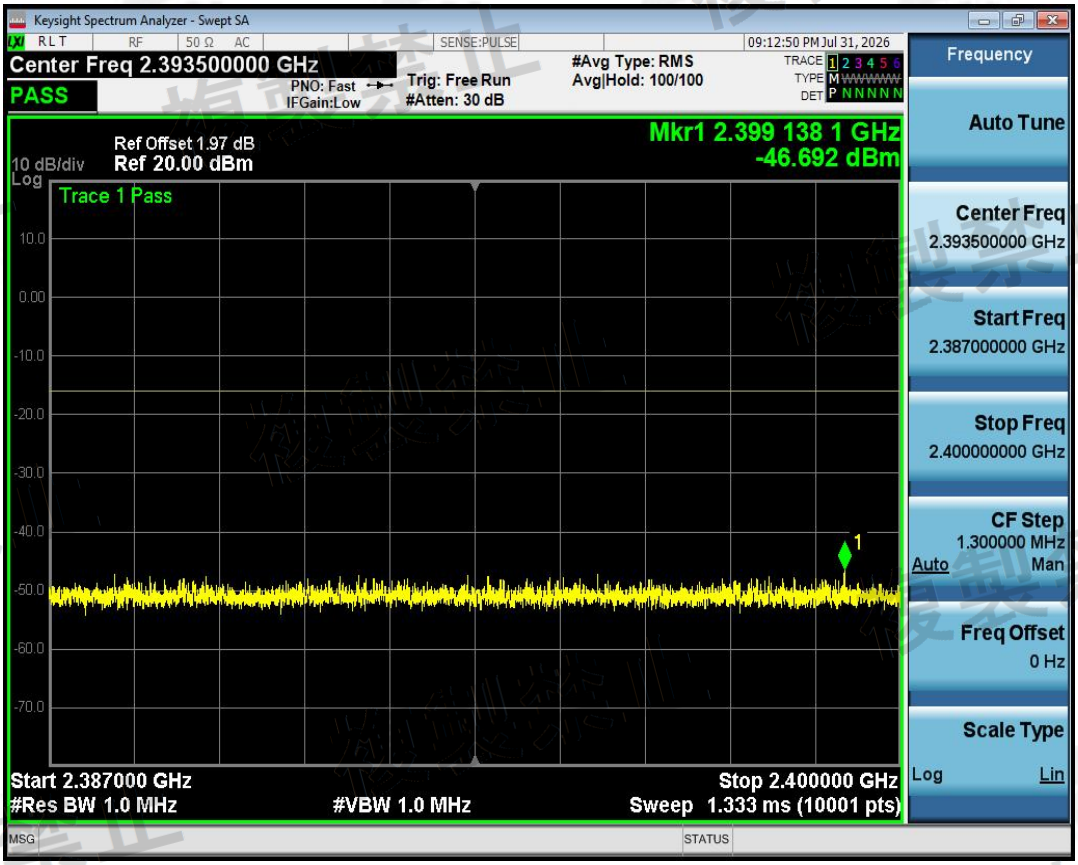

Tx. Spurious NVNT BLE 1M 2402MHz Ant1 @ 2496.5MHz-13000MHz



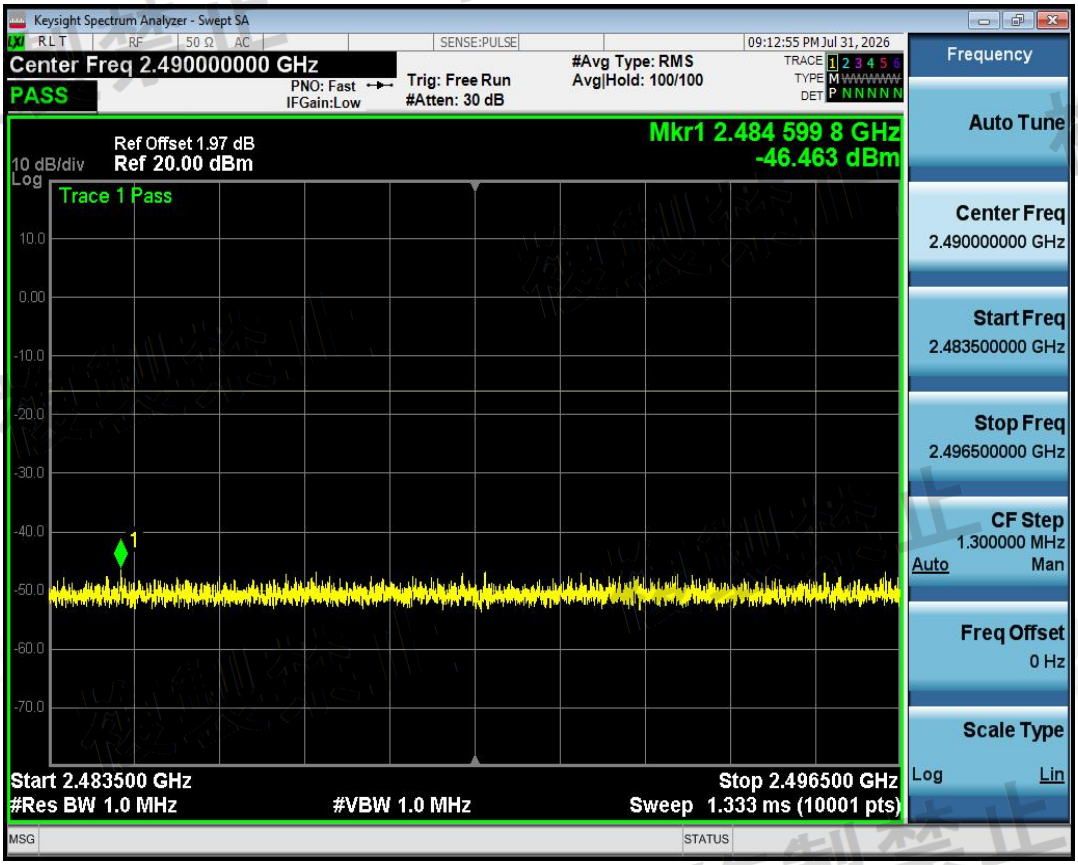

Tx. Spurious NVNT BLE 1M 2440MHz Ant1 @ 30MHz-1000MHz



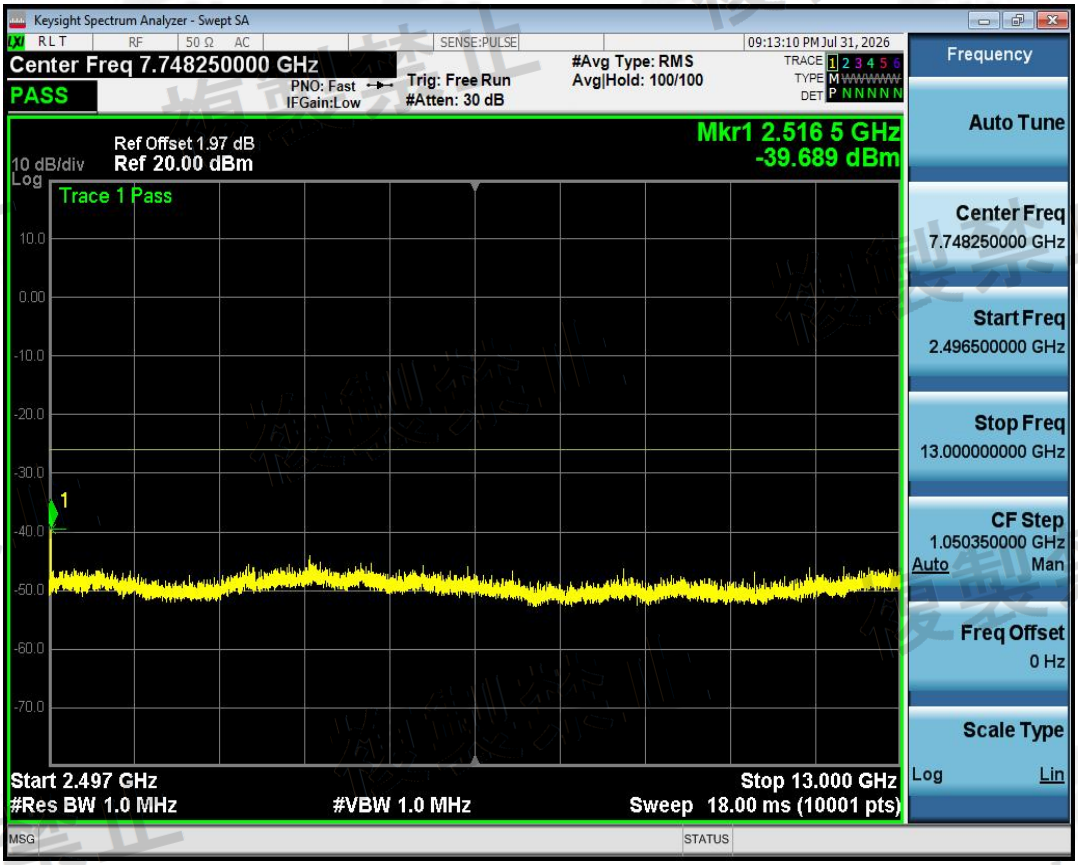

Tx. Spurious NVNT BLE 1M 2440MHz Ant1 @ 1000MHz-2387MHz



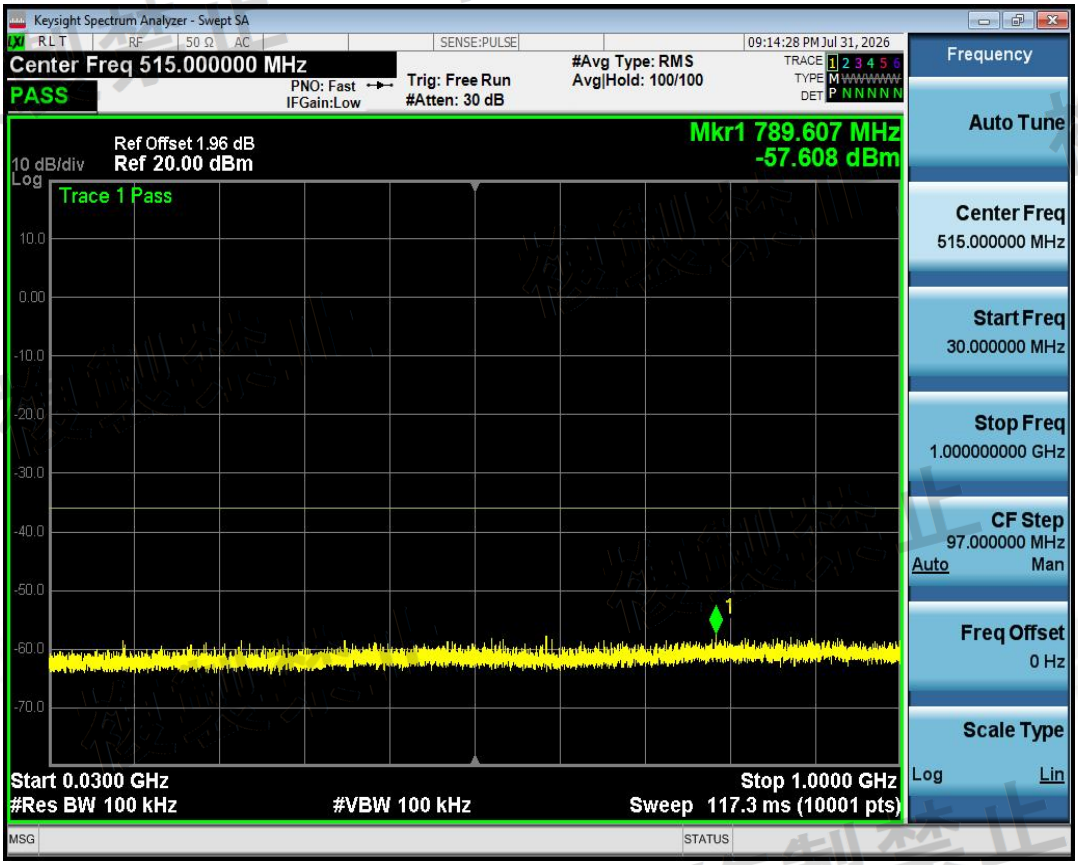

Tx. Spurious NVNT BLE 1M 2440MHz Ant1 @ 2387MHz-2400MHz



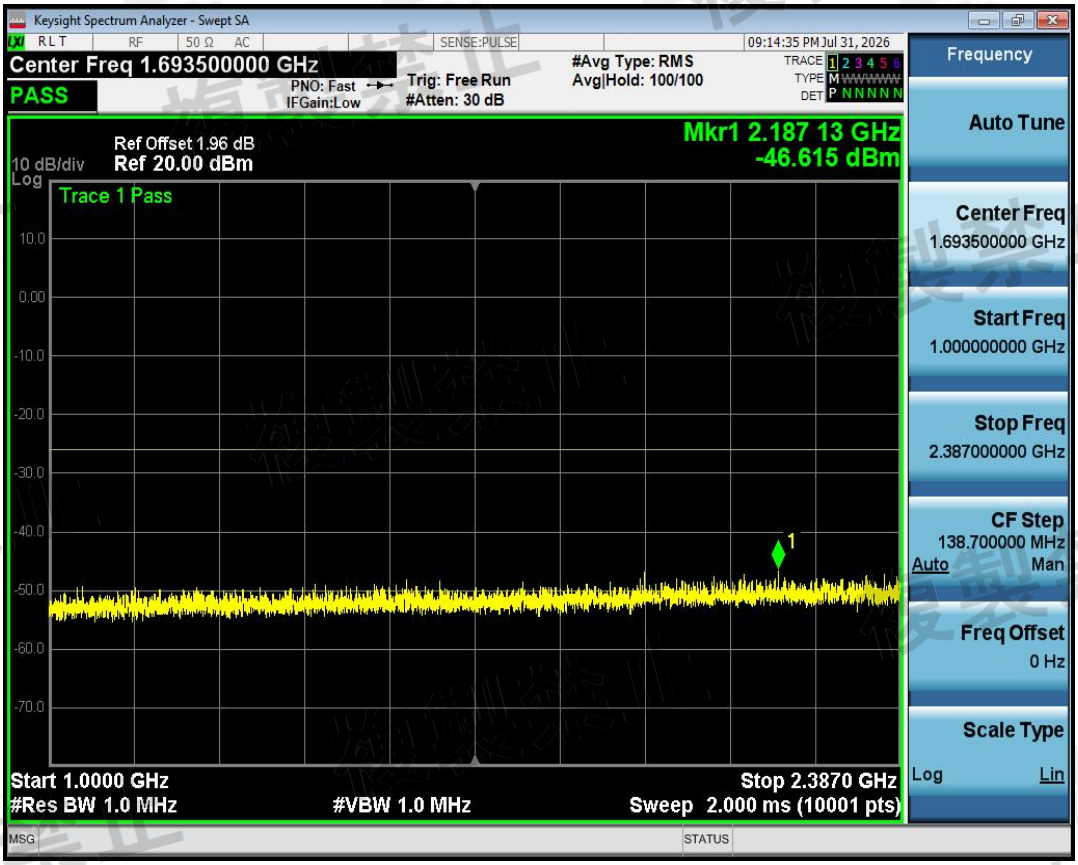

Tx. Spurious NVNT BLE 1M 2440MHz Ant1 @ 2483.5MHz-2496.5MHz



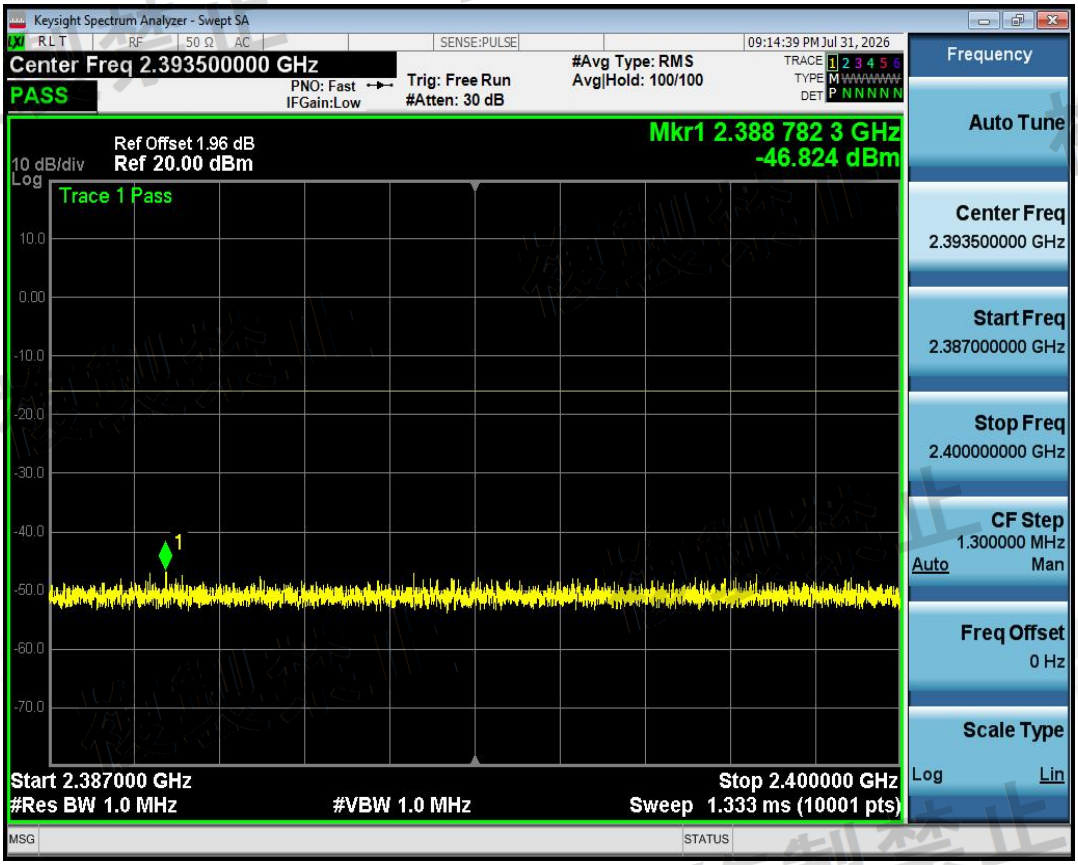

Tx. Spurious NVNT BLE 1M 2440MHz Ant1 @ 2496.5MHz-13000MHz



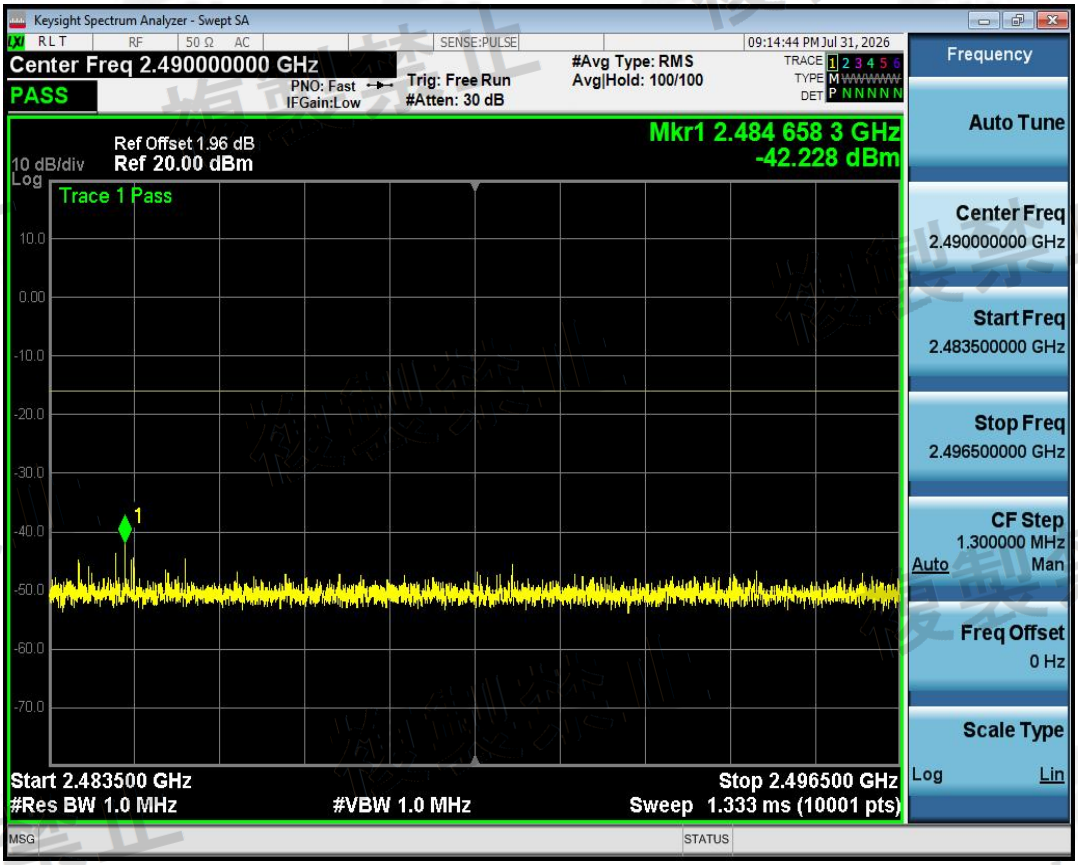

Tx. Spurious NVNT BLE 1M 2480MHz Ant1 @ 30MHz-1000MHz




Tx. Spurious NVNT BLE 1M 2480MHz Ant1 @ 1000MHz-2387MHz




Tx. Spurious NVNT BLE 1M 2480MHz Ant1 @ 2387MHz-2400MHz

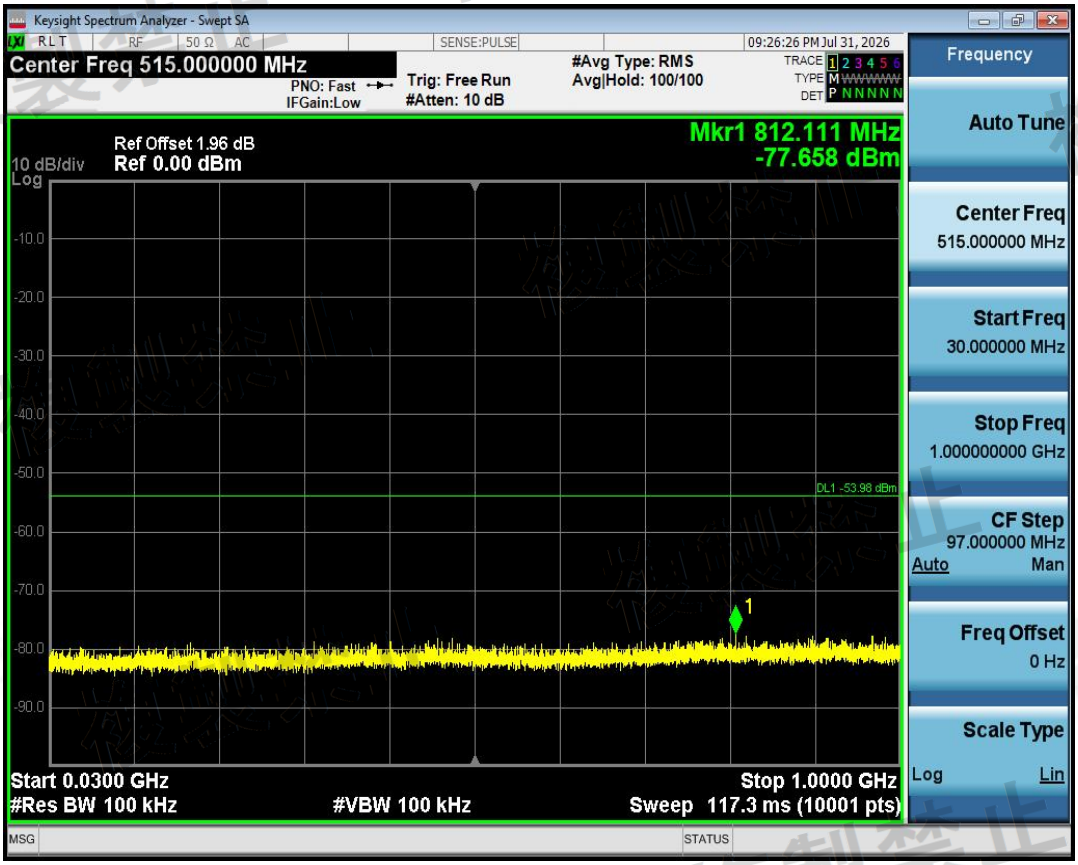



Tx. Spurious NVNT BLE 1M 2480MHz Ant1 @ 2483.5MHz-2496.5MHz

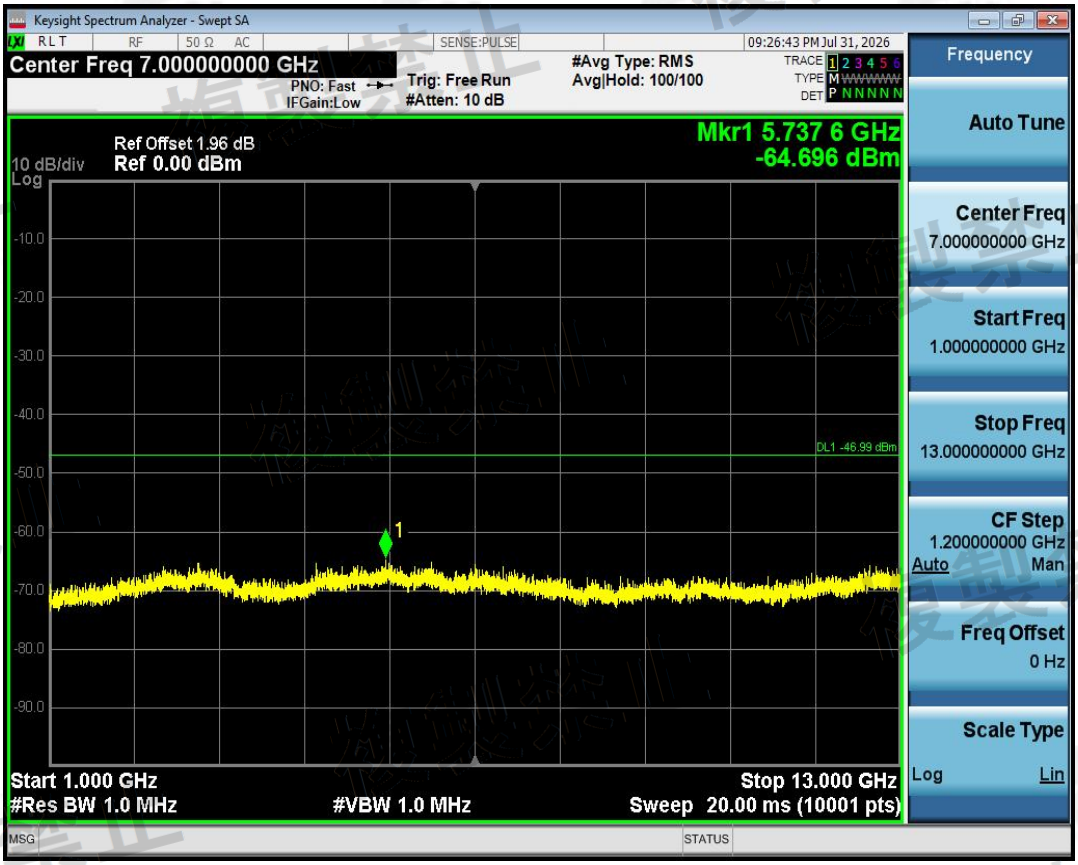
Tx. Spurious NVNT BLE 1M 2480MHz Ant1 @ 2496.5MHz-13000MHz

# Rx Spurious Emission

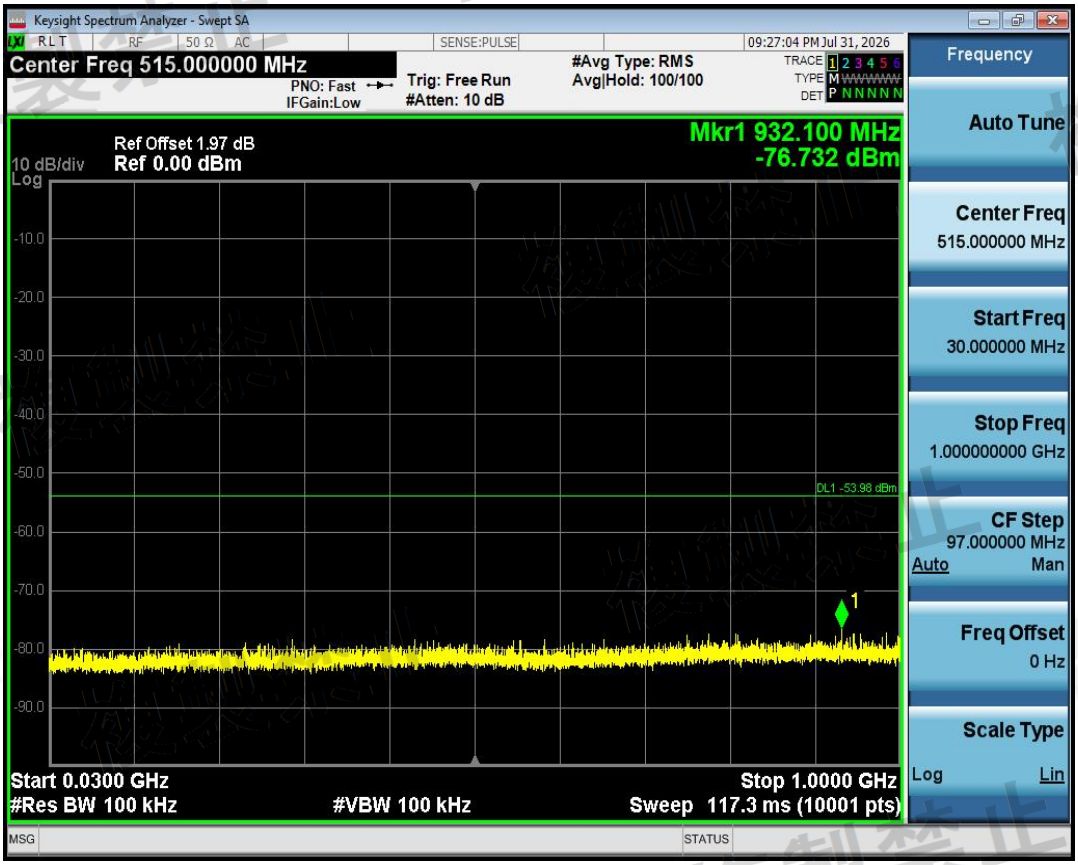
| Condition | Mode | Frequency (MHz) | Antenna | Range (MHz) | Emission Frequency (MHz) | Max Peak Value (dBm) | Max RMS Value (dBm) | Max Peak Value (nW) | Max RMS Value (nW) | Limit (nW) | Verdict |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NVNT | BLE 1M | 2402 | Ant1 | 30-1000 | 812.11 | -77.66 | NA | 0.0171 | NA | 4 | Pass |
| NVNT | BLE 1M | 2402 | Ant1 | 1000-13000 | 5737.60 | -64.70 | NA | 0.3388 | NA | 20 | Pass |
| NVNT | BLE 1M | 2440 | Ant1 | 30-1000 | 932.10 | -76.73 | NA | 0.0212 | NA | 4 | Pass |
| NVNT | BLE 1M | 2440 | Ant1 | 1000-13000 | 5198.80 | -61.88 | NA | 0.6486 | NA | 20 | Pass |
| NVNT | BLE 1M | 2480 | Ant1 | 30-1000 | 863.42 | -77.23 | NA | 0.0189 | NA | 4 | Pass |
| NVNT | BLE 1M | 2480 | Ant1 | 1000-13000 | 5851.60 | -65.05 | NA | 0.3126 | NA | 20 | Pass |



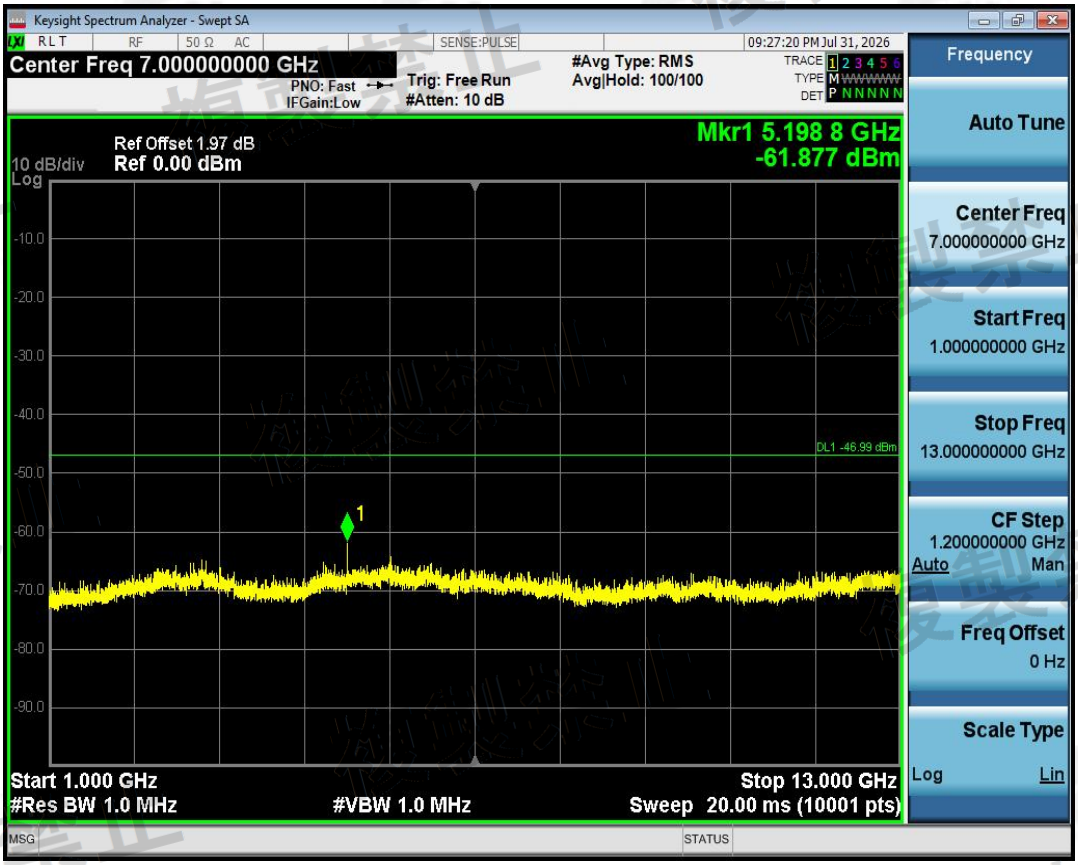

Rx. Spurious NVNT BLE 1M 2402MHz Ant1 @ 30MHz-1000MHz



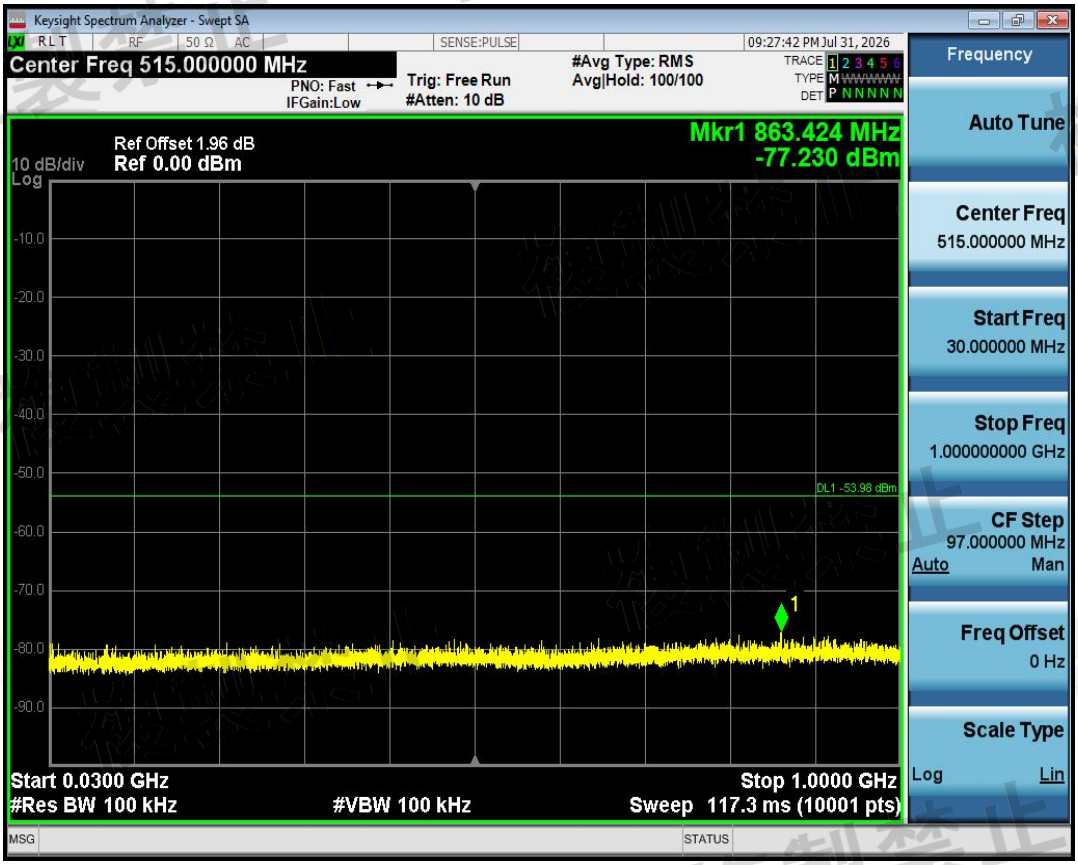

Rx. Spurious NVNT BLE 1M 2402MHz Ant1 @ 1000MHz-13000MHz



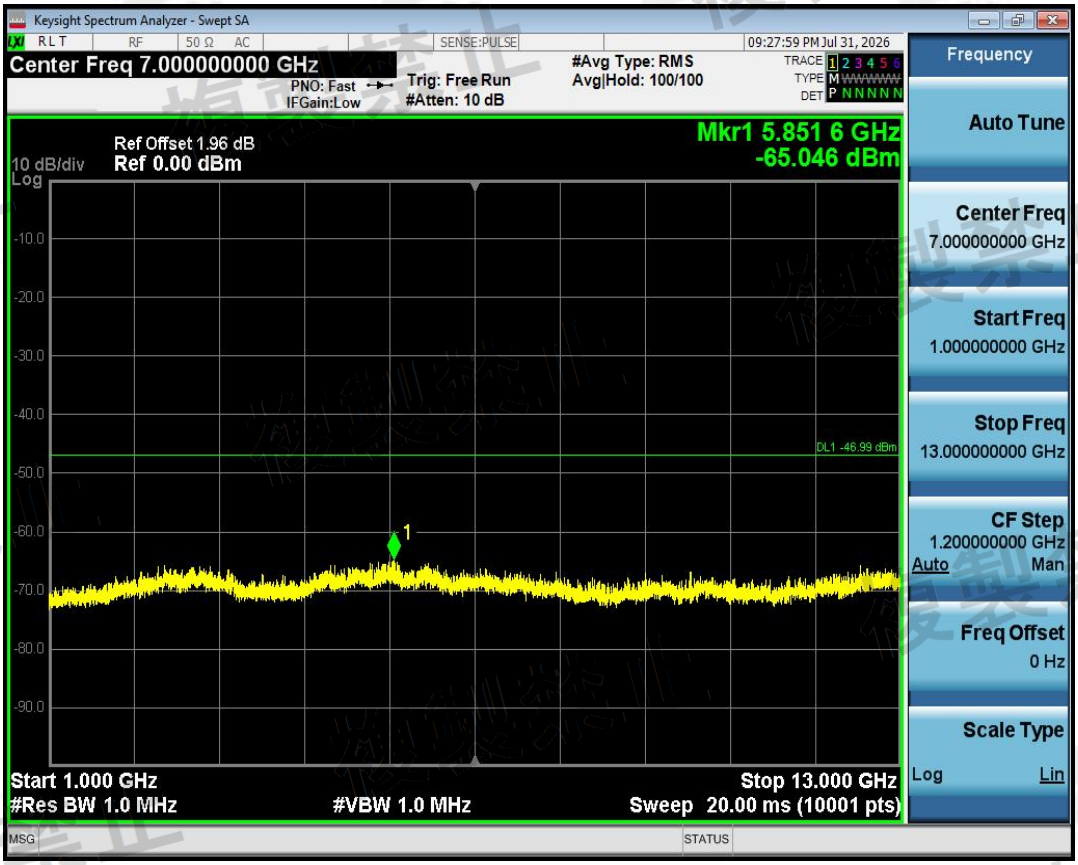

Rx. Spurious NVNT BLE 1M 2440MHz Ant1 @ 30MHz-1000MHz




Rx. Spurious NVNT BLE 1M 2440MHz Ant1 @ 1000MHz-13000MHz




Rx. Spurious NVNT BLE 1M 2480MHz Ant1 @ 30MHz-1000MHz




Rx. Spurious NVNT BLE 1M 2480MHz Ant1 @ 1000MHz-13000MHz