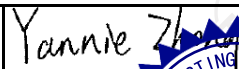
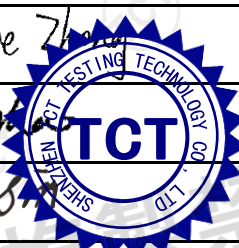




# MIC REPORT

|                                        |                                                                                                                                    |                                                                                       |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Test Report No..... :                  | TCT260717E004                                                                                                                      |                                                                                       |
| Date of issue..... :                   | Jul. 27, 2026                                                                                                                      |                                                                                       |
| Testing laboratory .....               | Shenzhen TCT Testing Technology Co., Ltd.                                                                                          |                                                                                       |
| Testing location/ address:             | 2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China            |                                                                                       |
| Applicant's name..... :                | Shenzhen Thousandshores Technology Co., Ltd                                                                                        |                                                                                       |
| Address..... :                         | Room 1101, Building B, Lotus Plaza, No. 3186 Nanshan Avenue, Majialong Community, Nantou Street, Nanshan District, Shenzhen, China |                                                                                       |
| Manufacturer's name ... :              | Shenzhen Thousandshores Technology Co., Ltd                                                                                        |                                                                                       |
| Address..... :                         | Room 1101, Building B, Lotus Plaza, No. 3186 Nanshan Avenue, Majialong Community, Nantou Street, Nanshan District, Shenzhen, China |                                                                                       |
| Standard(s) .....                      | Article 2, Paragraph1, item 19<br>MIC Notice No.88 Appendix No.43                                                                  |                                                                                       |
| Product Name..... :                    | 2.4G Dongle                                                                                                                        |                                                                                       |
| Trade Mark .....                       | iClever                                                                                                                            |                                                                                       |
| Model/Type reference..... :            | MD195-Dongle                                                                                                                       |                                                                                       |
| Rating(s)..... :                       | DC 5V                                                                                                                              |                                                                                       |
| Date of receipt of test item .....     | Jul. 17, 2026                                                                                                                      |                                                                                       |
| Date (s) of performance of test..... : | Jul. 17, 2026 ~ Jul. 27, 2026                                                                                                      |                                                                                       |
| Tested by (+signature) ... :           | Yannie ZHONG                                                                                                                       |  |
| Check by (+signature).... :            | Beryl ZHAO                                                                                                                         |  |
| Approved by (+signature):              | Tomsin                                                                                                                             |  |

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## 1. General Product Information

### 1.1. EUT description

|                           |                 |
|---------------------------|-----------------|
| Product Name.....         | 2.4G Dongle     |
| Model/Type reference..... | MD195-Dongle    |
| Hardware Version.....     | V2.0            |
| Software Version .....    | V1.0            |
| Operation Frequency ..... | 2403MHz~2480MHz |
| Number of Channel .....   | 16              |
| Modulation Type .....     | GFSK            |
| Antenna Type.....         | PCB Antenna     |
| Antenna Gain.....         | 2.24dBi         |
| Rating(s).....            | DC 5V           |

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

### 1.2. Model(s) list

None.

### 1.3. Operation Frequency

| Channel | Frequency | Channel | Frequency | Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|---------|-----------|---------|-----------|
| 0       | 2403MHz   | 4       | 2422MHz   | 8       | 2441MHz   | 12      | 2463MHz   |
| 1       | 2407MHz   | 5       | 2426MHz   | 9       | 2445MHz   | 13      | 2466MHz   |
| 2       | 2414MHz   | 6       | 2436MHz   | 10      | 2453MHz   | 14      | 2473MHz   |
| 3       | 2419MHz   | 7       | 2439MHz   | 11      | 2459MHz   | 15      | 2480MHz   |

Remark: Channel 0, 8 & 15 selected for test.

## 2. Test Result Summary

| Requirement                                        | Appendix No.43 | Result |
|----------------------------------------------------|----------------|--------|
| Frequency Deviation                                | Section 3      | PASS   |
| Occupied frequency bandwidth and Spread bandwidth  | Section 4      | PASS   |
| Secondary emission of radio wave                   | Section 7      | PASS   |
| Antenna power and deviation                        | Section 6      | PASS   |
| Spurious radiation or extraneous emission strength | Section 5      | PASS   |
| Transmitting antenna absolute gain                 | Section 8      | N/A    |
| Main lobe width of transmitting antenna            | Section 9      | N/A    |
| Interference suppression function                  | Section 10     | PASS   |
| Hopping frequency residence time                   | Section 11     | PASS   |

**Note:**

1. PASS: Test item meets the requirement.
2. Fail: Test item does not meet the requirement.
3. N/A: Test case does not apply to the test object.
4. The test result judgment is decided by the limit of test standard.

### 3. General Information

#### 3.1. Test environment and mode

| Operating Environment:                                                                                                                                                       |                                                                                                                                                  |                |                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|
| Temperature:                                                                                                                                                                 | 25.0 °C                                                                                                                                          |                |                |
| Humidity:                                                                                                                                                                    | 54 % RH                                                                                                                                          |                |                |
| Atmospheric Pressure:                                                                                                                                                        | 1010 mbar                                                                                                                                        |                |                |
| Voltage                                                                                                                                                                      |                                                                                                                                                  |                |                |
|                                                                                                                                                                              | Input voltage<br>(V)                                                                                                                             | voltage<br>(V) | Percent<br>(%) |
| Normal                                                                                                                                                                       | 5                                                                                                                                                | 3.3            |                |
| +10%                                                                                                                                                                         | 5.5                                                                                                                                              | 3.3            | 0              |
| -10%                                                                                                                                                                         | 4.5                                                                                                                                              | 3.3            | 0              |
| Note: When the input voltage is reduced or increased by 10%, the regulator voltage changes is less than 1%. So the following test items are conducted in the normal voltage. |                                                                                                                                                  |                |                |
| Test Mode:                                                                                                                                                                   |                                                                                                                                                  |                |                |
| Operation mode:                                                                                                                                                              | 1) Keep the EUT in continuous transmitting by select channel and modulations;<br>2) Keep the EUT in continuous receiver mode by each modulation. |                |                |

#### 3.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| Equipment | Model No. | Serial No. | FCC ID | Trade Name |
|-----------|-----------|------------|--------|------------|
| /         | /         | /          | /      | /          |

**Note:**

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

### 3.3. Test Instruments List

| Conducted Emission                          |            |                    |              |               |               |               |
|---------------------------------------------|------------|--------------------|--------------|---------------|---------------|---------------|
| Name                                        | Model No.  | Serial Number      | Manufacturer | Date of Cal.  | Due Date      | Calibrated by |
| Spectrum Analyzer                           | N9020A     | MY491006<br>19     | Agilent      | Jul. 15, 2026 | Jul. 14, 2027 | LiSai         |
| Filter box                                  | MW100-PSB  | MW210530<br>TCT-19 | MWRFTest     | /             | /             | /             |
| Power detector box                          | MW100-RFCB | MW210531<br>TCT    | MWRFTest     | Sep. 17, 2025 | Sep. 16, 2026 | LiSai         |
| Programable tempratuce and humidity chamber | JQ-2000    | 510101234          | JQ           | Jun. 25, 2026 | Jun. 24, 2027 | LiSai         |
| DC Power Supply                             | KR3005K    | 2203D0300<br>864   | Kingrang     | Jun. 25, 2026 | Jun. 24, 2027 | LiSai         |
| Attenuator                                  | VAT-10W2   | 2051               | MCL          | Jun. 25, 2026 | Jun. 24, 2027 | LiSai         |

Remark:

| Measuring Equipment Calibration Information                          |                                                                                                                                                                                                                       |                                            |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| Used                                                                 | Calibration Company Abbreviation                                                                                                                                                                                      | Full Name of calibration company           |
| <input checked="" type="checkbox"/>                                  | LiSai                                                                                                                                                                                                                 | Guangzhou LiSai Metrology & Test Co., Ltd. |
| Calibration Information (Article 24-2, Paragraph 4 of the Radio Act) |                                                                                                                                                                                                                       |                                            |
| <input type="checkbox"/>                                             | (a) Calibration conducted by the National Institute of Information and Communications Technology (NICT) or a designated calibration agency under Article 102-18-1 of the Radio Act                                    |                                            |
| <input type="checkbox"/>                                             | (b) Calibration conducted based on the regulations of Article 135 or 144 of the Measurement Act                                                                                                                       |                                            |
| <input checked="" type="checkbox"/>                                  | (c) Calibration conducted in foreign countries, which is equivalent to calibration conducted by the NICT or a designated calibration agency under Article 102-18-1 of the Radio Act                                   |                                            |
| <input type="checkbox"/>                                             | (d) Calibration, etc. conducted by using measuring instruments and other facilities listed at the bottom of appended table 3 of the Radio Act, which is to have been calibrated as described in (a) through (c) above |                                            |

#### 4. Test Facilities

Shenzhen TCT Testing Technology Co., Ltd.

Address: 2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict,  
Bao'an District, Shenzhen, Guangdong, China

TEL: +86-755-27673339

#### 5. Measurement Uncertainty

The reported uncertainty of measurement  $y \pm U$ , where expanded uncertainty  $U$  is based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95 %.

| No. | Item                          | MU            |
|-----|-------------------------------|---------------|
| 1   | RF power, conducted           | $\pm 0.12$ dB |
| 2   | Spurious emissions, conducted | $\pm 0.11$ dB |
| 3   | Temperature                   | $\pm 0.1$ °C  |
| 4   | Humidity                      | $\pm 1.0$ %   |

## 6. Test Results and Measurement Data

### 6.1. Frequency Deviation

#### 6.1.1. Test Specification

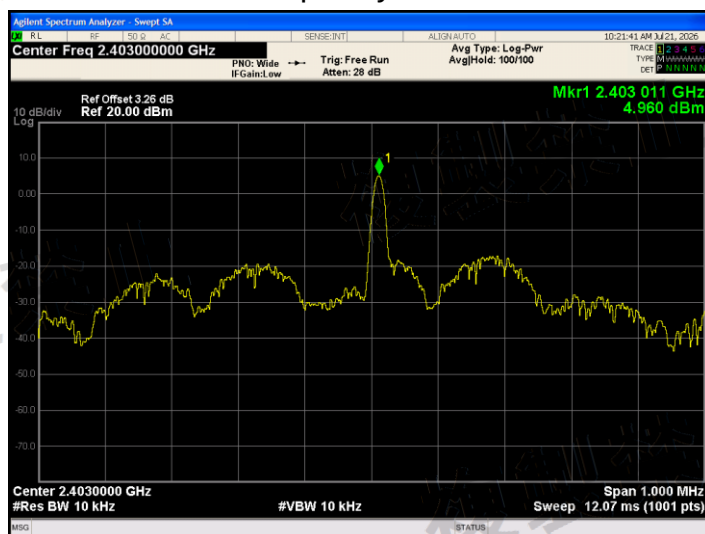
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Requirement:</b> | Article 2 paragraph 1 item 19                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Test Method:</b>      | Appendix No.43 Notification No.88 of MIC, 2004 section 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Limits:</b>           | ±50 ppm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Test Setup:</b>       |  <p>The diagram illustrates the test setup. On the left is a green box labeled 'Spectrum Analyzer'. A cable connects it to a yellow box on the right labeled 'EUT'.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Test Procedure:</b>   | <ol style="list-style-type: none"> <li>1. Frequency accuracy of SA shall be less than 10% of limits tolerance (5ppm)</li> <li>2. Setting of SA is following as: RBW:10 kHz / VBW:10 kHz</li> <li>3. Center Frequency: The center frequency of testing for EUT</li> <li>4. Sweep time: Auto</li> <li>5. Sweep mode: Continuous sweep</li> <li>6. Detect mode: Positive peak</li> <li>7. EUT have transmitted absence of modulation signal and fixed channelize. f is using the mark cursor to mark the peak frequency value, fc is declaring of channel frequency. Then the frequency error formula is <math>(f-f_c)/f_c \times 10^6</math> ppm and the limit is less than ± 50 ppm.</li> </ol> |
| <b>Test Result:</b>      | PASS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

### 6.1.2. Test Data

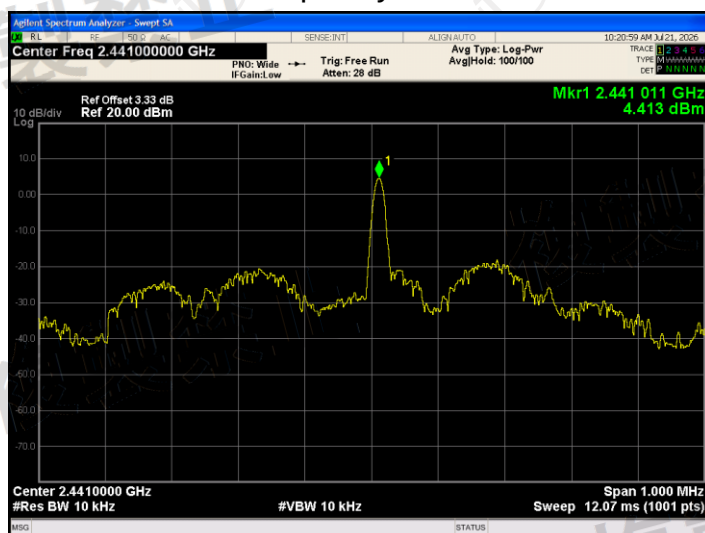
| Test conditions |       | Low          | Middle       | High         | Limit  | Result |
|-----------------|-------|--------------|--------------|--------------|--------|--------|
| Volt.(dc)       | Temp. |              |              |              |        |        |
| 5V              | 25°C  | 2403.011 MHz | 2441.011 MHz | 2480.011 MHz | ±50ppm | PASS   |
|                 |       | 4.58ppm      | 4.51ppm      | 4.44ppm      |        |        |

Test plots as follows:

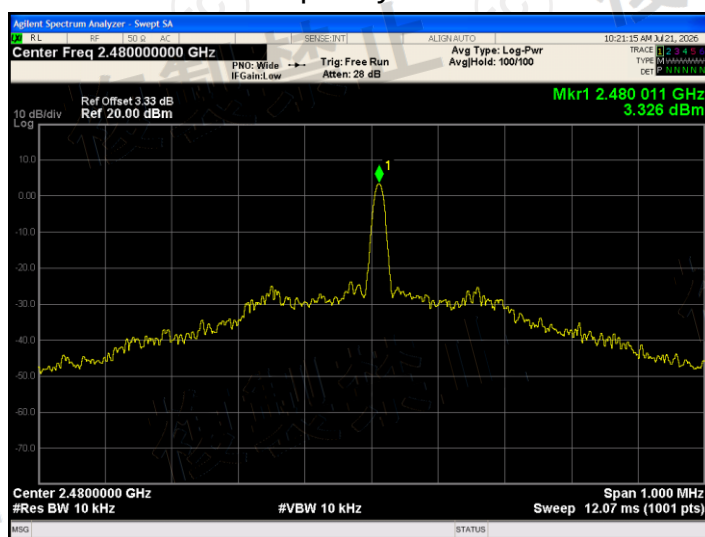
Test Frequency: 2403MHz



Test Frequency: 2441MHz



Test Frequency: 2480MHz



## 6.2. Occupied frequency bandwidth, Spread bandwidth

### 6.2.1. Test Specification

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Requirement:</b> | Article 2 paragraph 1 item 19                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Test Method:</b>      | Appendix No.43 Notification No.88 of MIC, 2004 section 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Limit:</b>            | 83.5 MHz for Occupied frequency bandwidth                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Test Setup:</b>       |  <p>The diagram illustrates the test setup. On the left is a green Spectrum Analyzer with a blue screen and two red dots. A black cable connects it to a yellow rectangular box on the right labeled 'EUT' (Equipment Under Test).</p>                                                                                                                                                                                                                                     |
| <b>Test Procedure:</b>   | <ol style="list-style-type: none"> <li>1. Setting of SA is following as: RBW:1000 kHz / VBW: 1000 kHz / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold</li> <li>2. EUT have transmitted the maximum modulation signal and fixed channelize (For DSSS or OFDM Device) or continuous maximum power of hopping mode (For FHSS Device).</li> <li>3. SA set to 99% of occupied bandwidth to measure occupied bandwidth. SA set to 90% of occupied bandwidth to measure Spread Spectrum Bandwidth.</li> </ol> |
| <b>Test Result:</b>      | PASS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

**6.2.2. Test Data**

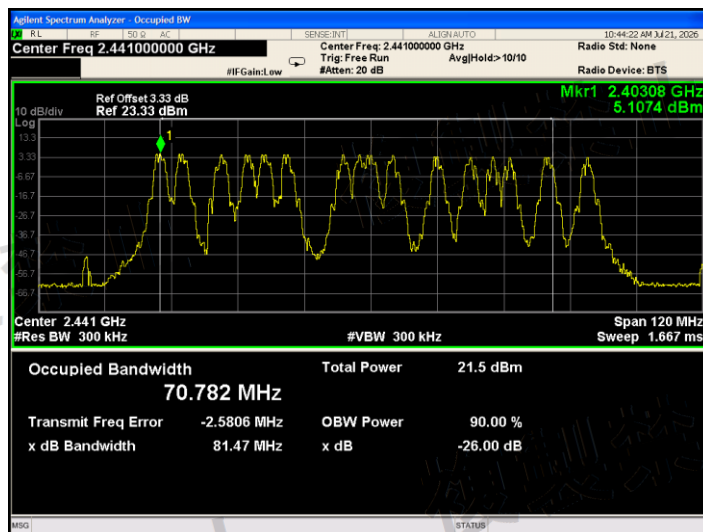
| Occupied Frequency Bandwidth |       |                 |              |             |        |
|------------------------------|-------|-----------------|--------------|-------------|--------|
| Test Condition               |       | Modulation Type | Result (MHz) | Limit (MHz) | Result |
| Volt.(dc)                    | Temp. |                 |              |             |        |
| 5V                           | 25°C  | GFSK            | 78.95        | ≤ 83.5      | PASS   |

| Spread Bandwidth |       |                 |              |
|------------------|-------|-----------------|--------------|
| Test Condition   |       | Modulation Type | Result (MHz) |
| Volt.(dc)        | Temp. |                 |              |
| 5V               | 25°C  | GFSK            | 70.78        |

Test plots as follows:

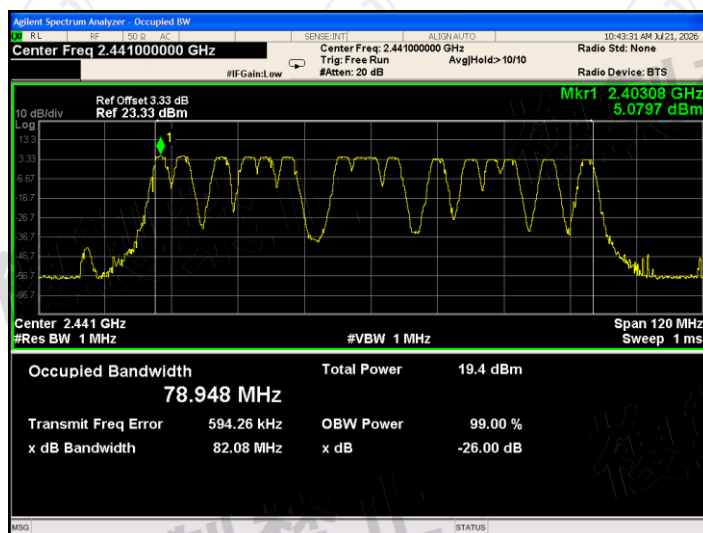
## Spread Bandwidth:

GFSK



## Occupied Bandwidth:

GFSK



### 6.3. Secondary emission of radio wave

#### 6.3.1. Test Specification

|                          |                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Requirement:</b> | Article 2 paragraph 1 item 19                                                                                                                                                                                                                                                                                                                            |
| <b>Test Method:</b>      | Appendix No.43 Notification No.88 of MIC, 2004 section 7                                                                                                                                                                                                                                                                                                 |
| <b>Limit:</b>            | 4 nW for below 1 GHz, 20 nW for above 1 GHz                                                                                                                                                                                                                                                                                                              |
| <b>Test Setup:</b>       |  <p>Spectrum Analyzer                      EUT</p>                                                                                                                                                                                                                     |
| <b>Test Procedure:</b>   | <ol style="list-style-type: none"> <li>1. EUT have the continuous reception mode and fixed only one channelize.</li> <li>2. Setting of SA is following as RB / VB: 100 kHz (below 1GHz emissions) / 1 MHz (above 1GHz emissions)<br/>/Sweep time: Auto / Sweep Mode: Continuous sweep /<br/>Detect mode: Positive peak / Trace mode: Max hold</li> </ol> |
| <b>Test Result:</b>      | PASS                                                                                                                                                                                                                                                                                                                                                     |

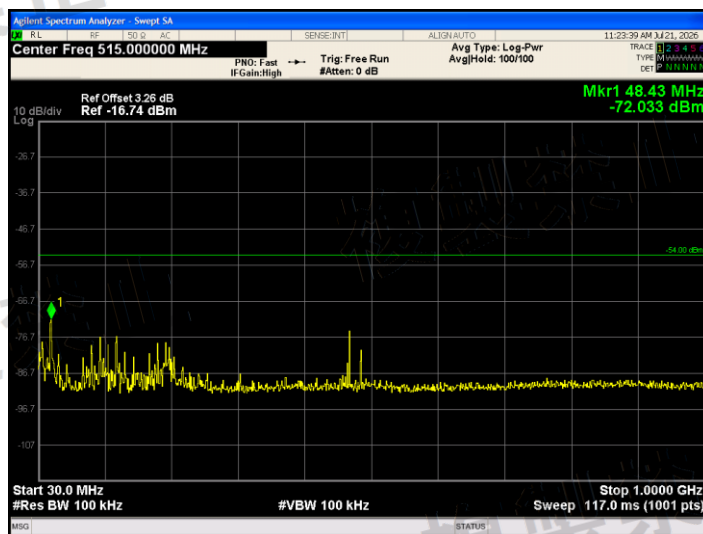
### 6.3.2. Test data

GFSK

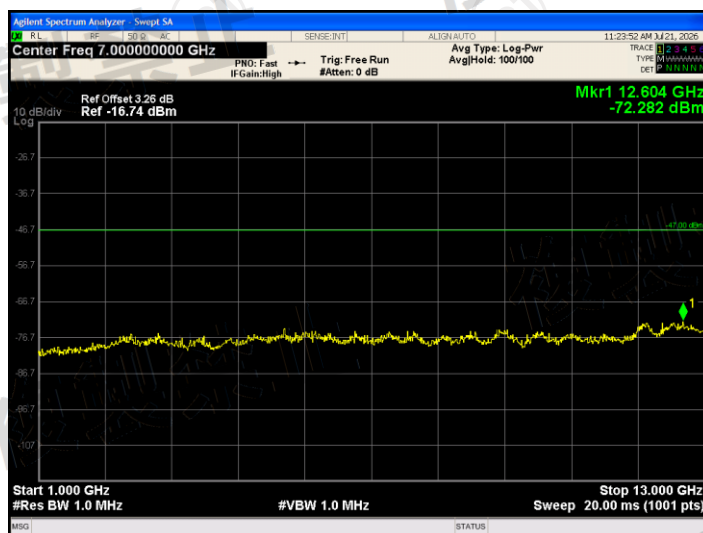
| Test conditions |       | Frequency Range (MHz) | Record Frequency (MHz) | Read Level (dBm) | Read Level (nW) | Limit (nW) | Result |
|-----------------|-------|-----------------------|------------------------|------------------|-----------------|------------|--------|
| Volt.(dc)       | Temp. |                       |                        |                  |                 |            |        |
| 5V              | 25°C  | 30-1000               | 48.43                  | -72.03           | 0.063           | 4          | PASS   |
|                 |       | 1000-13000            | 12604.00               | -72.28           | 0.059           | 20         |        |

Test plots as follows:

GFSK



30MHz~1GHz



1GHz~13GHz

## 6.4. Antenna power and deviation

### 6.4.1. Test Specification

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Requirement:</b> | Article 2 paragraph 1 item 19                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Test Method:</b>      | Appendix No.43 Notification No.88 of MIC, 2004 section 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Limit:</b>            | Antenna Power: 3mW/MHz<br>Deviation: + 20%<br>EIRP Limit: 6.91dBm/MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Test Setup:</b>       |  <p>Spectrum Analyzer      EUT</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Test Procedure:</b>   | <ol style="list-style-type: none"> <li>1. Setting of SA is following as: RBW:1000 kHz / VBW: 1000 kHz / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold</li> <li>2. EUT have transmitted the maximum modulation signal and fixed channel (For DSSS or OFDM Device) or continuous maximum power of hopping mode (For FHSS Device)</li> <li>3. When the trace is complete, find the peak value of the power envelope and calculate the antenna power</li> <li>4. Calculated the Maximum deviation and recorded the results.</li> </ol> |
| <b>Test Result:</b>      | PASS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## 6.4.2. Test data

| Test Condition |       | mode | Measured Power (dBm) | Antenna Power (mW/MHz) | Limit (mW/MHz) | Rated Power (mW/MHz) | Maximum Tolerance (%) | Limit(%) | Result |
|----------------|-------|------|----------------------|------------------------|----------------|----------------------|-----------------------|----------|--------|
| Volt. (dc)     | Temp. |      |                      |                        |                |                      |                       |          |        |
| 5V             | 25°C  | GFSK | 1.64                 | 0.021                  | 3              | 0.03                 | -30.00                | 20       | PASS   |

The Rated Power is 0.03mW/MHz, which declared by manufacturer.

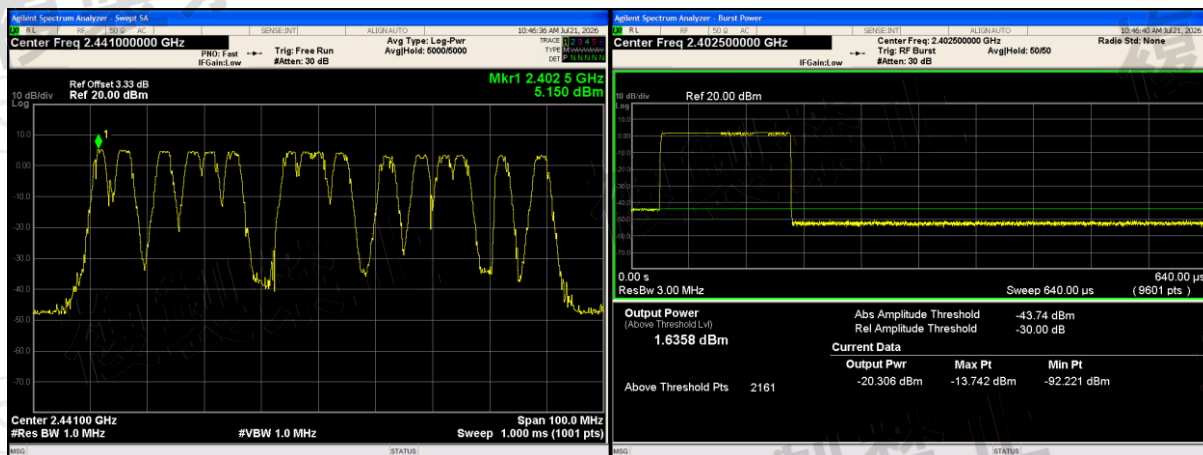
Antenna Power = Measured Power / Spread bandwidth

Where spreading bandwidth for 5V = 70.78MHz

Maximum Tolerance = (Antenna Power - Rated Power)/Rated power \* 100%

Test plots as follows:

## GFSK



## EIRP Power

| Test Condition |               | mode | Antenna Power<br>(dBm/MHz) | Antenna<br>Gain(dBi) | EIRP<br>(dBm/MHz) | EIRP Limit<br>(dBm/MHz) | Result |
|----------------|---------------|------|----------------------------|----------------------|-------------------|-------------------------|--------|
| Volt.<br>(dc)  | Temp.<br>(°C) |      |                            |                      |                   |                         |        |
| 7.4V           | 25°C          | GFSK | -16.78                     | 2.24                 | -14.54            | 6.91                    | PASS   |

Antenna Power = Measured Power / Spread bandwidth  
 HPBA=360°, when A = 1, EIRP(dBm/MHz)= Antenna Power(dBm/MHz)+ Antenna Gain(dBi)

## 6.5. Spurious Radiation Or Extraneous Emission Strength

### 6.5.1. Test Specification

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Requirement:</b> | Article 2 paragraph 1 item 19                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Test Method:</b>      | Appendix No.43 Notification No.88 of MIC, 2004 section 5                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Limit:</b>            | 30~1000MHz: 2.5μW/MHz (-26dBm)<br>1000~2387MHz: 2.5μW/MHz (-26dBm)<br>2387~ 2400MHz: 25μW/MHz (-16dBm)<br>2483.5~ 2496.5MHz: 25μW/MHz (-16dBm)<br>Over 2496.5MHz: 2.5μW/MHz (-26dBm)                                                                                                                                                                                                                                                                    |
| <b>Test Setup:</b>       |  <p>Spectrum Analyzer      EUT</p>                                                                                                                                                                                                                                                                                                                                    |
| <b>Test Procedure:</b>   | <ol style="list-style-type: none"> <li>1. EUT have transmitted the maximum modulation signal and fixed channelize.</li> <li>2. Setting of SA is following as: RBW: 1MHz / VBW: 1MHz/ Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: RMS / Trace mode: Max hold. EUT have transmitted the maximum modulation signal and fixed channel (For DSSS or OFDM Device) or continuous maximum power of hopping mode (For FHSS Device)</li> </ol> |
| <b>Test Result:</b>      | PASS                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

## 6.5.2. Test Data

### GFSK

#### Lowest

| Test Condition |       | Frequency Range (MHz) | Record Frequency (MHz) | Read Level (dBm) | Compensate for RBW(dB) | Result (dBm) | Result (μW/MHz) | Limit (μW/MHz) | Result |
|----------------|-------|-----------------------|------------------------|------------------|------------------------|--------------|-----------------|----------------|--------|
| Volt.(dc)      | Temp. |                       |                        |                  |                        |              |                 |                |        |
| 5V             | 25°C  | 30-1000               | 939.86                 | -65.37           | 10                     | -55.37       | 0.003           | 2.5            | PASS   |
|                |       | 1000-2387             | 2362.00                | -50.78           | /                      | -50.78       | 0.008           | 2.5            |        |
|                |       | 2387-2400             | 2399.97                | -25.60           | /                      | -25.60       | 2.754           | 25             |        |
|                |       | 2483.5-2496.5         | 2488.19                | -55.35           | /                      | -55.35       | 0.003           | 25             |        |
|                |       | 2496.5-13000          | 2612.00                | -38.45           | /                      | -38.45       | 0.143           | 2.5            |        |

Compensate 10dB is for Exchange rate of RBW, Exchange rate of RBW =  $10 \cdot \log_{10}(\text{Reference bandwidth}/\text{RBW at measurement}) = 10[\text{dB}]$ , where Reference bandwidth = 1 MHz, RBW at measurement = 100 kHz

#### Middle

| Test Condition |       | Frequency Range (MHz) | Record Frequency (MHz) | Read Level (dBm) | Compensate for RBW(dB) | Result (dBm) | Result (μW/MHz) | Limit (μW/MHz) | Result |
|----------------|-------|-----------------------|------------------------|------------------|------------------------|--------------|-----------------|----------------|--------|
| Volt.(dc)      | Temp. |                       |                        |                  |                        |              |                 |                |        |
| 5V             | 25°C  | 30-1000               | 903.00                 | -63.32           | 10                     | -53.32       | 0.005           | 2.5            | PASS   |
|                |       | 1000-2387             | 2355.10                | -47.43           | /                      | -47.43       | 0.018           | 2.5            |        |
|                |       | 2387-2400             | 2389.52                | -42.17           | /                      | -42.17       | 0.061           | 25             |        |
|                |       | 2483.5-2496.5         | 2487.02                | -55.88           | /                      | -55.88       | 0.003           | 25             |        |
|                |       | 2496.5-13000          | 2539.00                | -34.82           | /                      | -34.82       | 0.330           | 2.5            |        |

Compensate 10dB is for Exchange rate of RBW, Exchange rate of RBW =  $10 \cdot \log_{10}(\text{Reference bandwidth}/\text{RBW at measurement}) = 10[\text{dB}]$ , where Reference bandwidth = 1 MHz, RBW at measurement = 100 kHz

#### Highest

| Test Condition |       | Frequency Range (MHz) | Record Frequency (MHz) | Read Level (dBm) | Compensate for RBW(dB) | Result (dBm) | Result (μW/MHz) | Limit (μW/MHz) | Result |
|----------------|-------|-----------------------|------------------------|------------------|------------------------|--------------|-----------------|----------------|--------|
| Volt.(dc)      | Temp. |                       |                        |                  |                        |              |                 |                |        |
| 5V             | 25°C  | 30-1000               | 832.19                 | -65.31           | 10                     | -55.31       | 0.003           | 2.5            | PASS   |
|                |       | 1000-2387             | 2339.80                | -43.27           | /                      | -43.27       | 0.047           | 2.5            |        |
|                |       | 2387-2400             | 2391.62                | -56.17           | /                      | -56.17       | 0.002           | 25             |        |
|                |       | 2483.5-2496.5         | 2483.50                | -35.08           | /                      | -35.08       | 0.310           | 25             |        |
|                |       | 2496.5-13000          | 2518.00                | -32.81           | /                      | -32.81       | 0.524           | 2.5            |        |

Compensate 10dB is for Exchange rate of RBW, Exchange rate of RBW =  $10 \cdot \log_{10}(\text{Reference bandwidth}/\text{RBW at measurement}) = 10[\text{dB}]$ , where Reference bandwidth = 1 MHz, RBW at measurement = 100 kHz

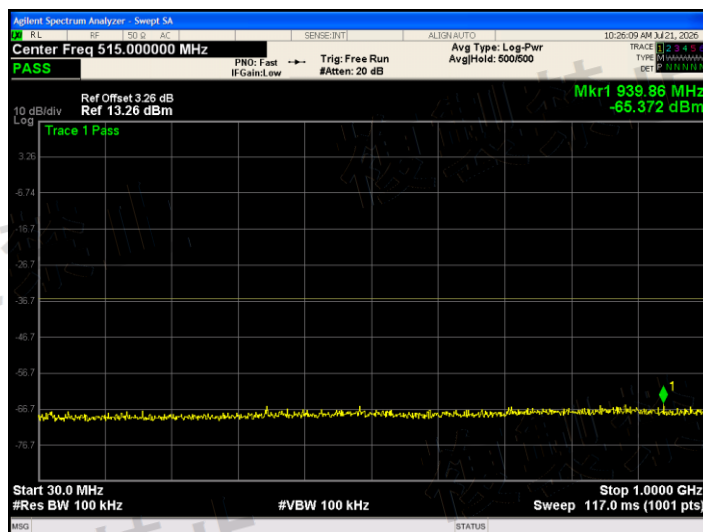
## Hopping

| Test Condition |       | Frequency Range (MHz) | Record Frequency (MHz) | Read Level (dBm) | Compensate for RBW(dB) | Result (dBm) | Result (μW/MHz) | Limit (μW/MHz) | Result |
|----------------|-------|-----------------------|------------------------|------------------|------------------------|--------------|-----------------|----------------|--------|
| Volt.(dc)      | Temp. |                       |                        |                  |                        |              |                 |                |        |
| 5V             | 25°C  | 30-1000               | 887.48                 | -65.92           | 10                     | -55.92       | 0.003           | 2.5            | PASS   |
|                |       | 1000-2387             | 2338.50                | -48.82           | /                      | -48.82       | 0.013           | 2.5            |        |
|                |       | 2387-2400             | 2389.69                | -41.90           | /                      | -41.90       | 0.065           | 25             |        |
|                |       | 2483.5-2496.5         | 2483.51                | -32.43           | /                      | -32.43       | 0.571           | 25             |        |
|                |       | 2496.5-13000          | 7265.00                | -42.76           | /                      | -42.76       | 0.053           | 2.5            |        |

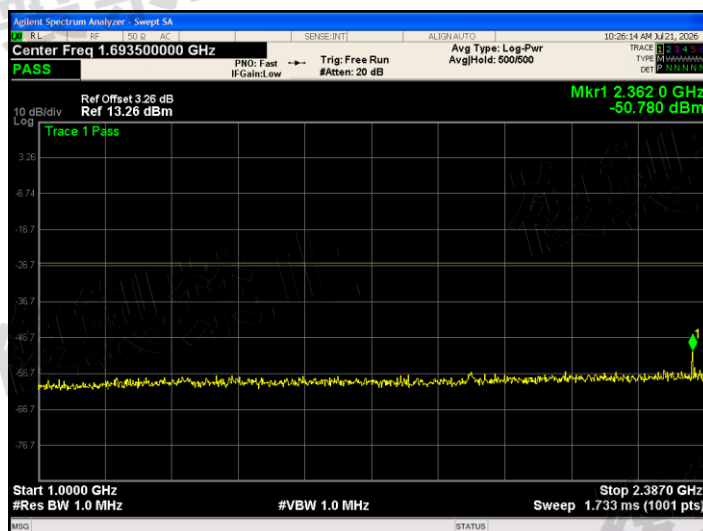
Compensate 10dB is for Exchange rate of RBW, Exchange rate of RBW =  $10 \cdot \log_{10}(\text{Reference bandwidth}/\text{RBW at measurement}) = 10[\text{dB}]$ , where Reference bandwidth = 1 MHz, RBW at measurement = 100 kHz

Test plots as follows:

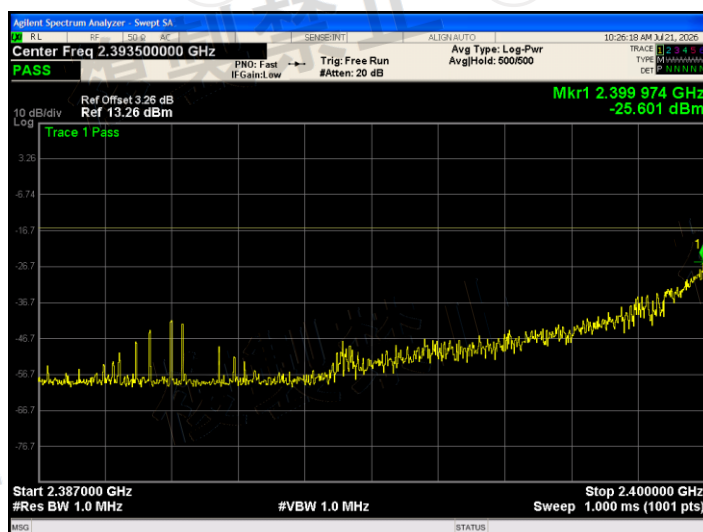
Lowest channel  
30MHz ~1000MHz



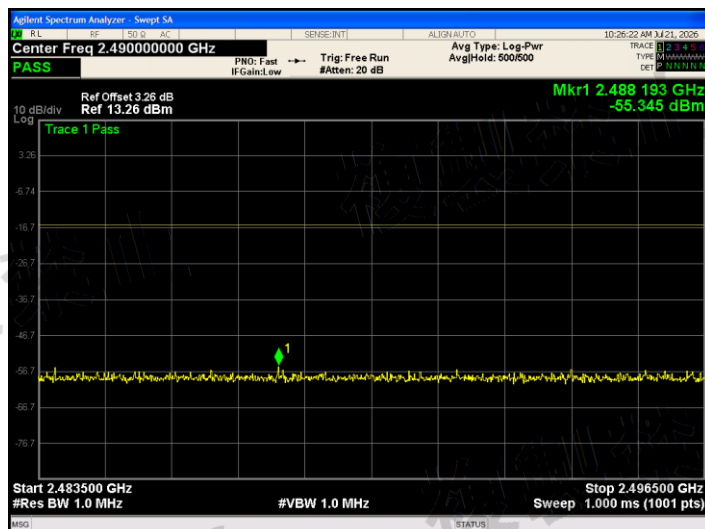
1000MHz ~2387MHz



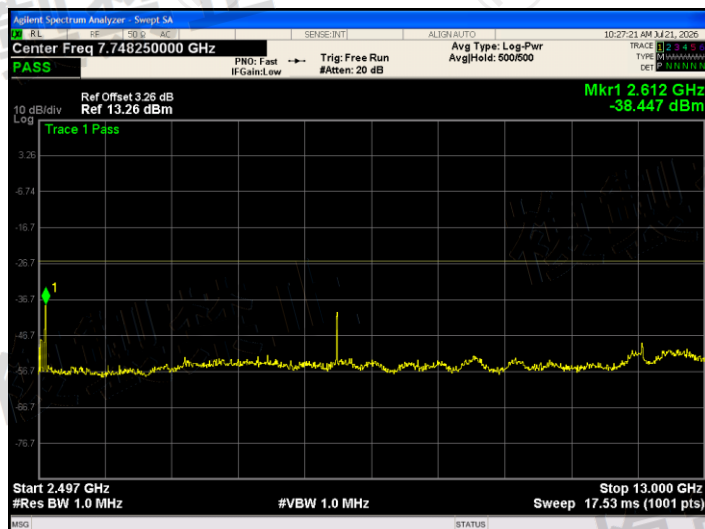
2387MHz ~2400MHz



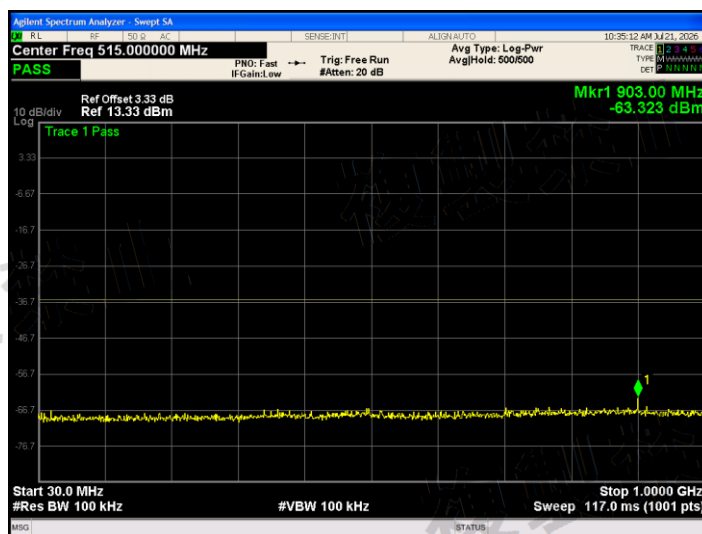
2483.5MHz ~ 2496.5MHz



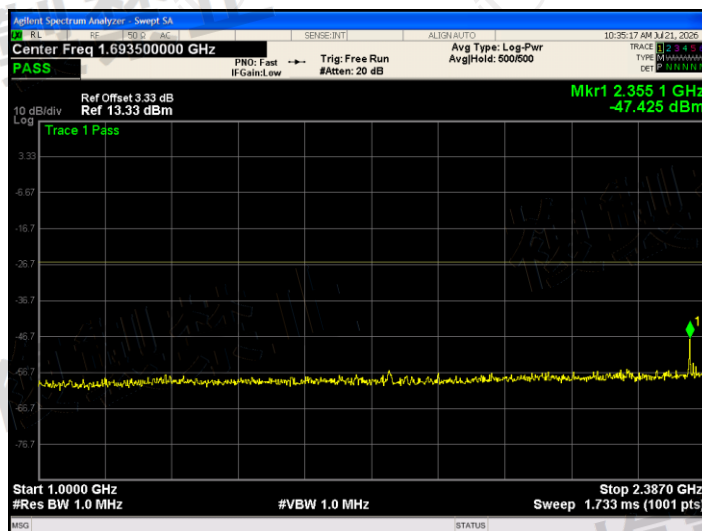
2497MHz ~ 13000MHz



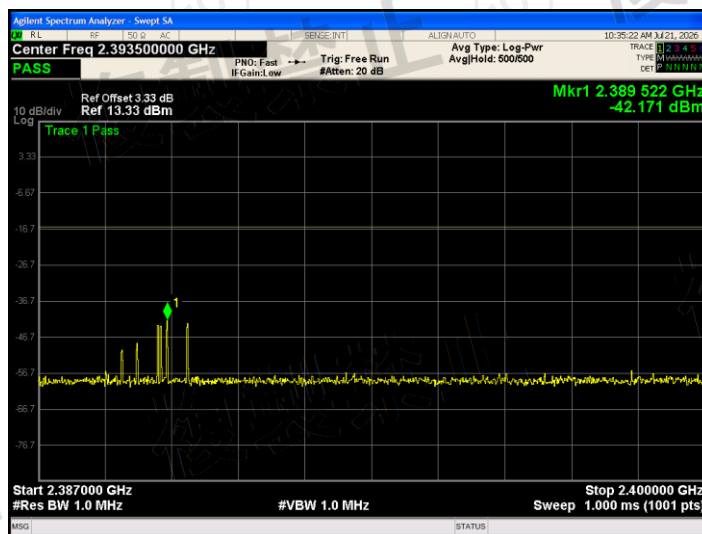
## Middle channel 30MHz ~1000MHz



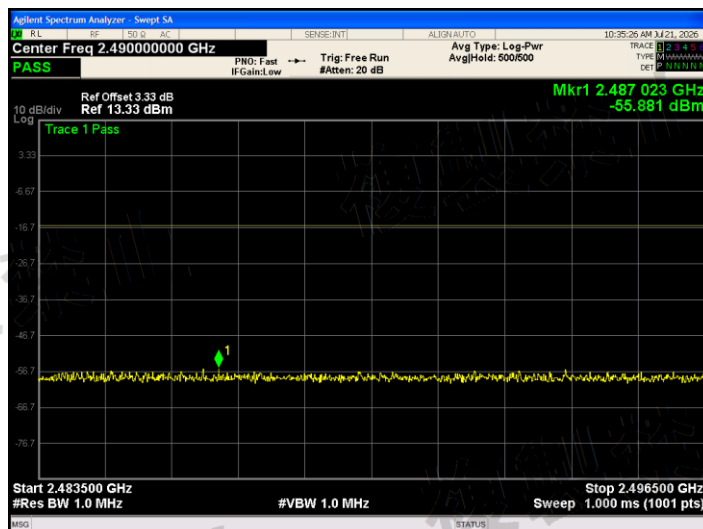
## 1000MHz ~2387MHz



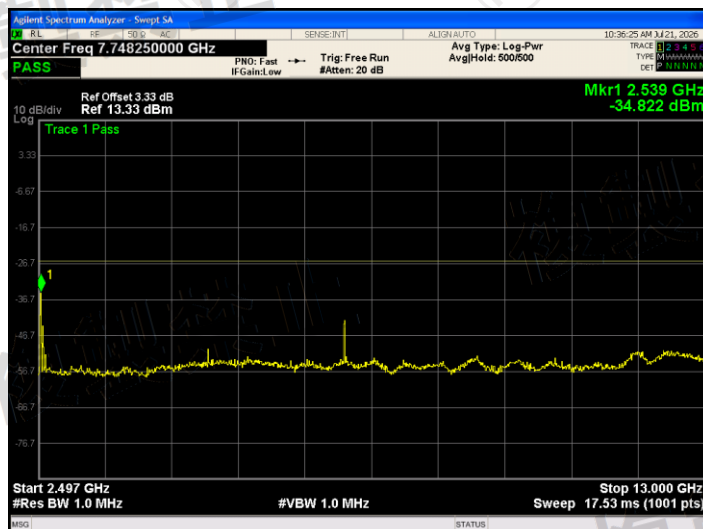
## 2387MHz ~2400MHz



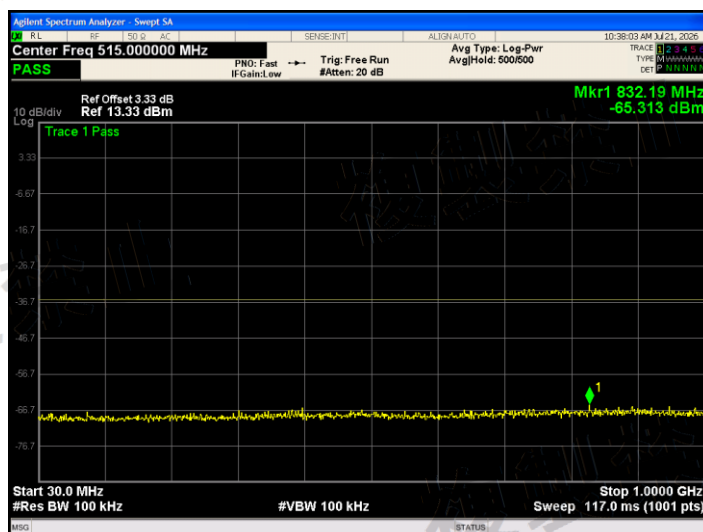
2483.5MHz ~2496.5MHz



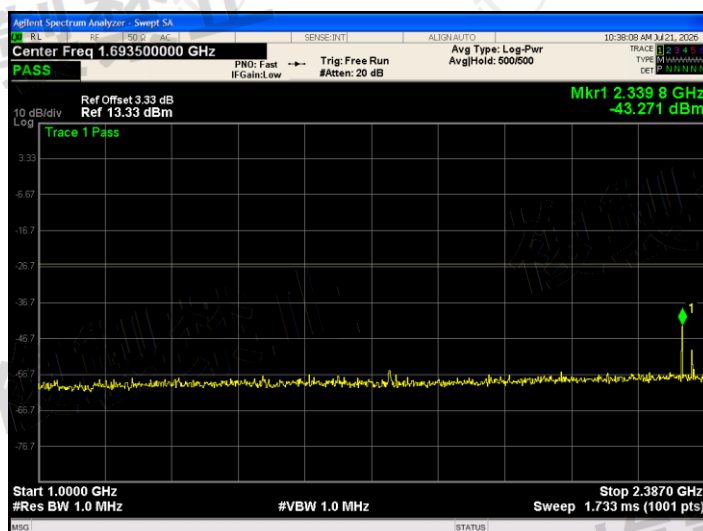
2497MHz ~13000MHz



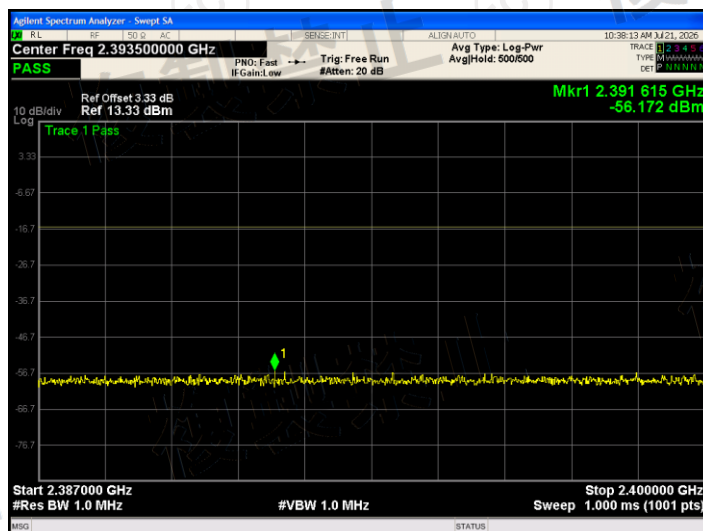
Highest channel  
30MHz ~1000MHz



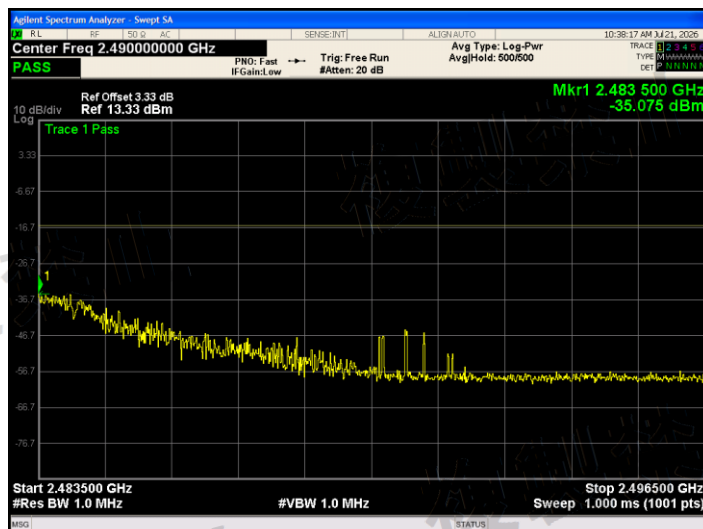
1000MHz ~2387MHz



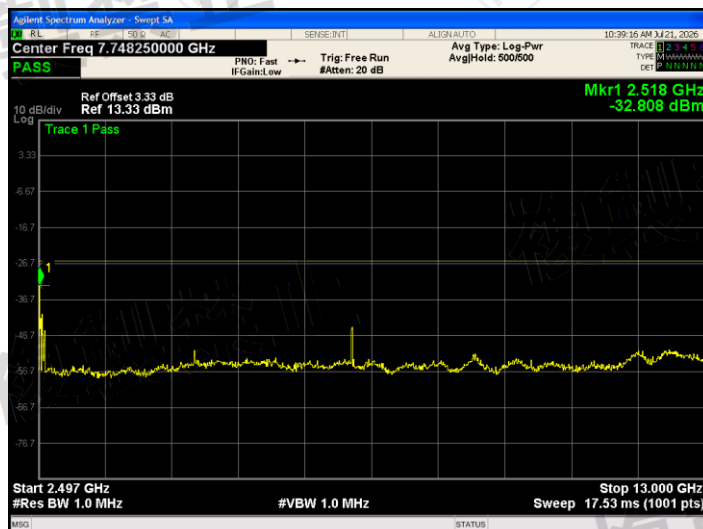
2387MHz ~2400MHz



2483.5MHz ~2496.5MHz

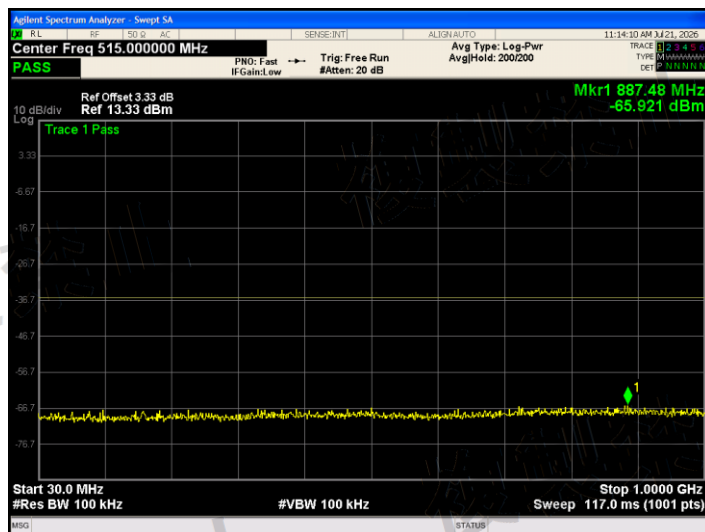


2497MHz ~13000MHz

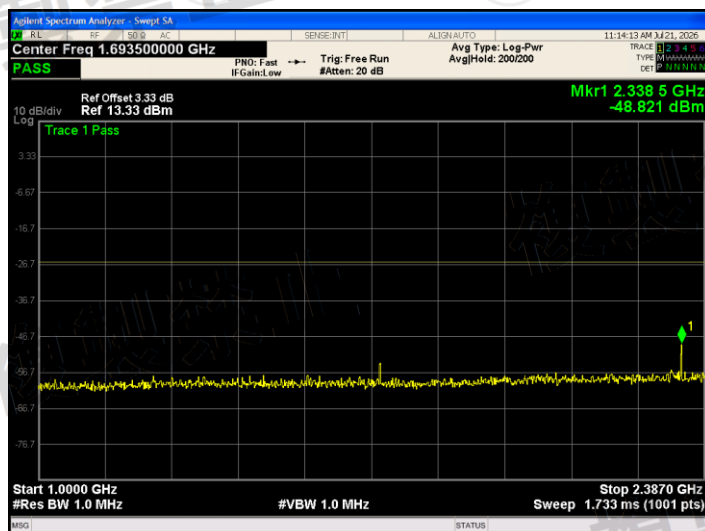


## Hopping

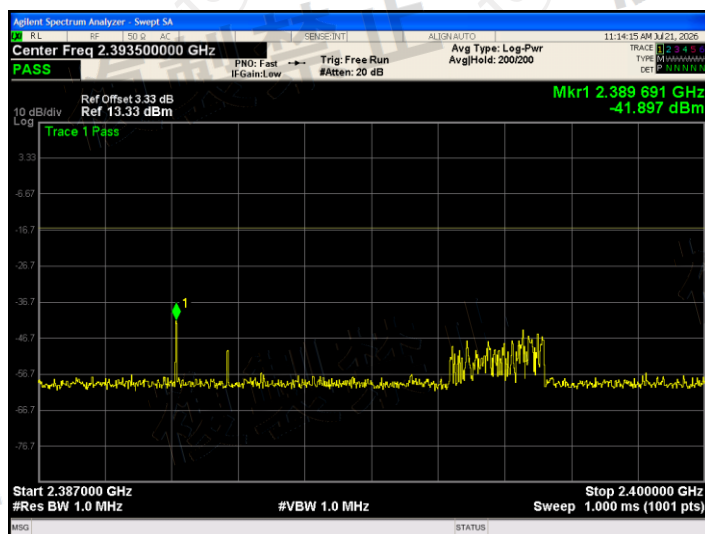
30MHz ~ 1000MHz



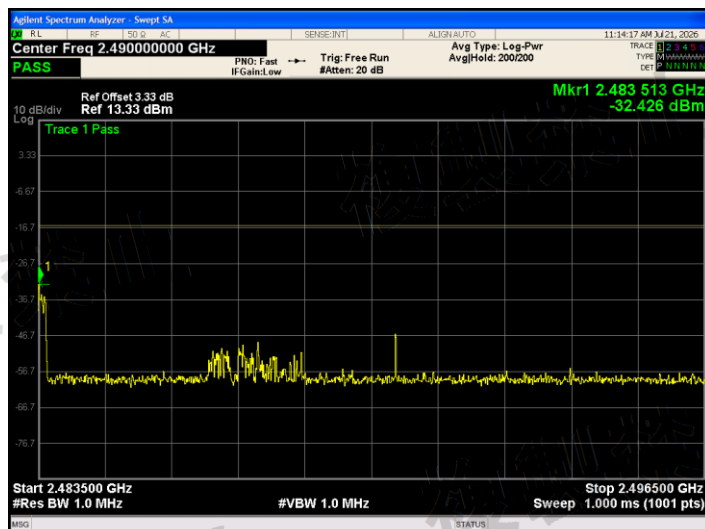
1000MHz ~ 2387MHz



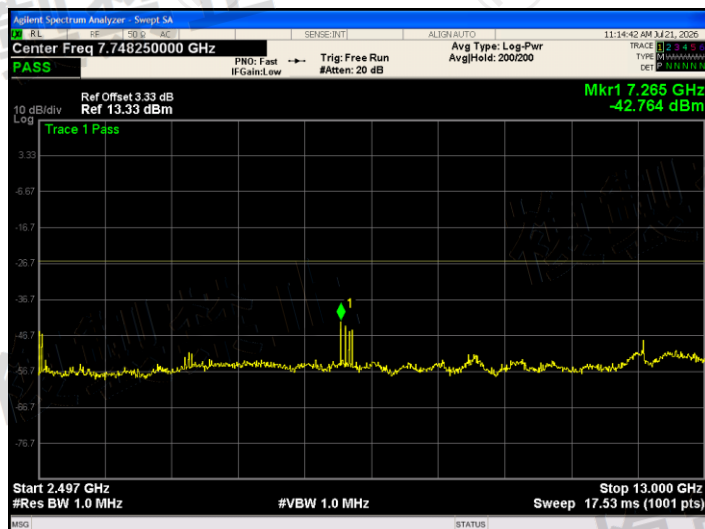
2387MHz ~ 2400MHz



2483.5MHz ~2496.5MHz

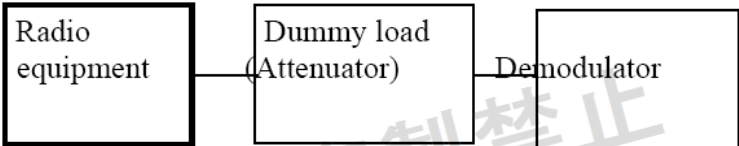
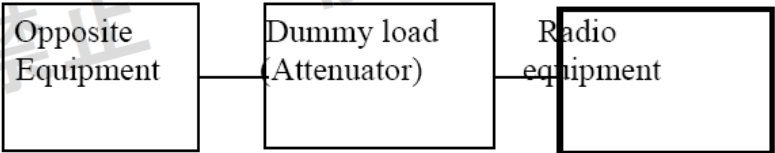


2497MHz ~13000MHz



## 6.6. Interference suppression function

### 6.6.1. Test Specification

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Requirement:</b> | Article 2 paragraph 1 item 19                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Test Method:</b>      | Appendix No.43 Notification No.88 of MIC, 2004 section 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Operation Mode:</b>   | Usual operation condition.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Test setup:</b>       | <p>(1) Transmission of identification code</p>  <pre> graph LR     A[Radio equipment] --- B["Dummy load (Attenuator)"]     B --- C[Demodulator]         </pre> <p>(2) Reception of identification code</p>  <pre> graph LR     A[Opposite Equipment] --- B["Dummy load (Attenuator)"]     B --- C[Radio equipment]         </pre>                                                                                                                                                                                                                 |
| <b>Test Procedure:</b>   | <p>1 The radio equipment with automatic transmitting function of identification code</p> <p>A. Transmit the assigned identification code from the radio equipment.</p> <p>B. Confirm the identification code received by the demodulator.</p> <p>2 The radio equipment with automatic receiving function of identification code</p> <p>A. Transmit the assigned identification code from the opposite equipment.</p> <p>B. Confirm that the usual communication is available.</p> <p>C. Transmit the identification code distinct from the assigned one from the opposite equipment.</p> <p>D. Confirm that the radio equipment is stopped or an indication is displayed as the identification code is different.</p> |
| <b>Test results:</b>     | GOOD, The device has the function of automatic transmission and reception of identification sign. The MAC address is D5:F1:E4:92:67:4C.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

## 6.7. Hopping Frequency Residence Time

### 6.7.1. Test Specification

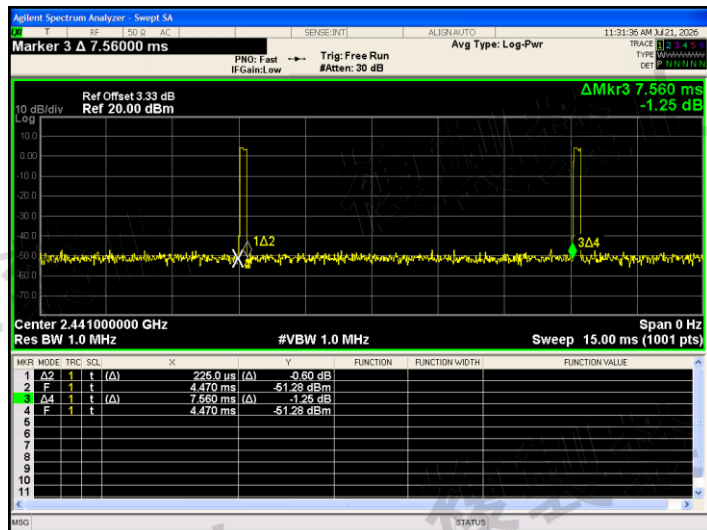
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Requirement:</b> | Article 2 paragraph 1 item 19                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Test Method:</b>      | Appendix No.43 Notification No.88 of MIC, 2004 section 13                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Limit:</b>            | 0.4 Second                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Test setup:</b>       |  <p>The diagram illustrates the test setup. On the left is a green Spectrum Analyzer with a blue screen and two red indicator lights. A black cable connects it to a yellow rectangular box on the right labeled 'EUT' (Equipment Under Test).</p>                                                                                                                                                                        |
| <b>Test Mode:</b>        | Hopping Mode                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Test Procedure:</b>   | <ol style="list-style-type: none"> <li>1. Connect EUT antenna terminal to the spectrum analyzer with a low loss cable. Equipment mode: spectrum analyzer, detector function: Peak RBW=1MHz, VBW=1MHz, Span=zero.</li> <li>2. Adjust the center frequency of spectrum analyzer on any frequency be measured.</li> <li>3. Measure the Dwell Time by spectrum analyzer Marker-Delta function.</li> <li>4. Repeat above procedures until all frequencies and modulation mode measured were complete.</li> </ol> |
| <b>Test results:</b>     | PASS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

### 6.7.2. Test Data

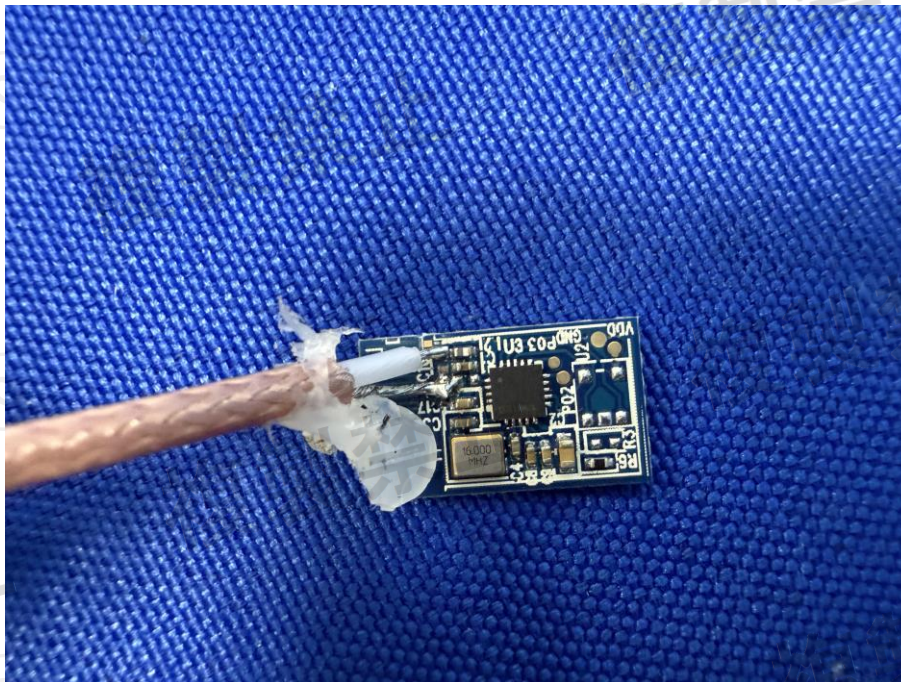
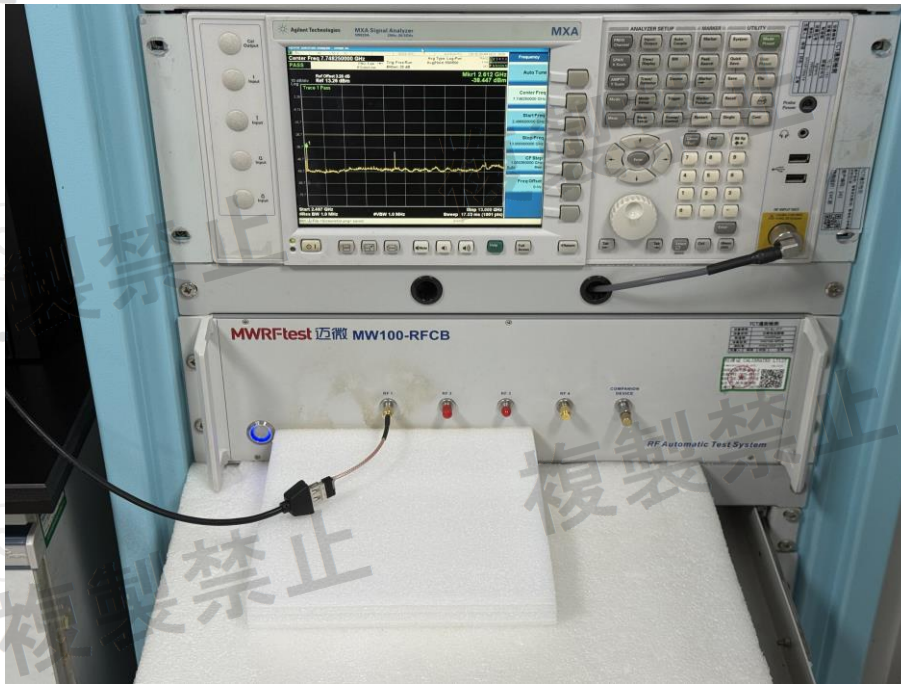
| Mode                                                                                                                                                                                                                                                  | Hopping Type | Sending time of 1 burst(ms) | Burst cycle (ms) | Dwell time (s) | Limit (s) | Result |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------------|------------------|----------------|-----------|--------|
| GFSK                                                                                                                                                                                                                                                  | DH1          | 0.23                        | 7.56             | 0.05           | 0.4       | PASS   |
| Dwell time : ( 0.4(s) x spreading factor x sending time of 1 burst (s)) / (burst cycle (s) x No. of Hopping Channel)<br>Spreading rate: Spread Bandwidth / Transmission rate<br>Where spreading factor for GFSK = 70.78, No. of Hopping Channel = 16. |              |                             |                  |                |           |        |

Test plot as follows:

DH1

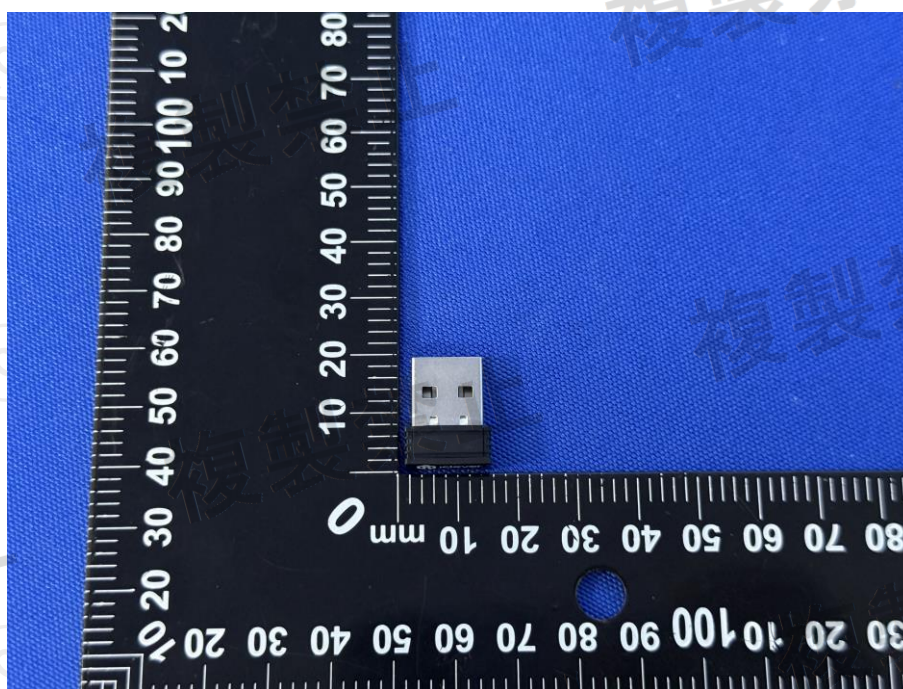
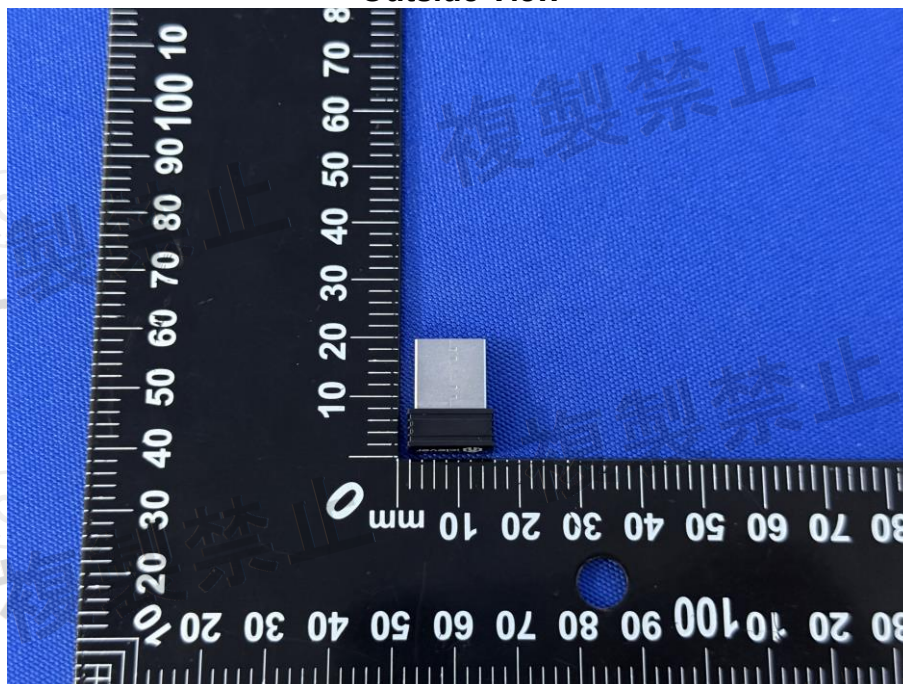


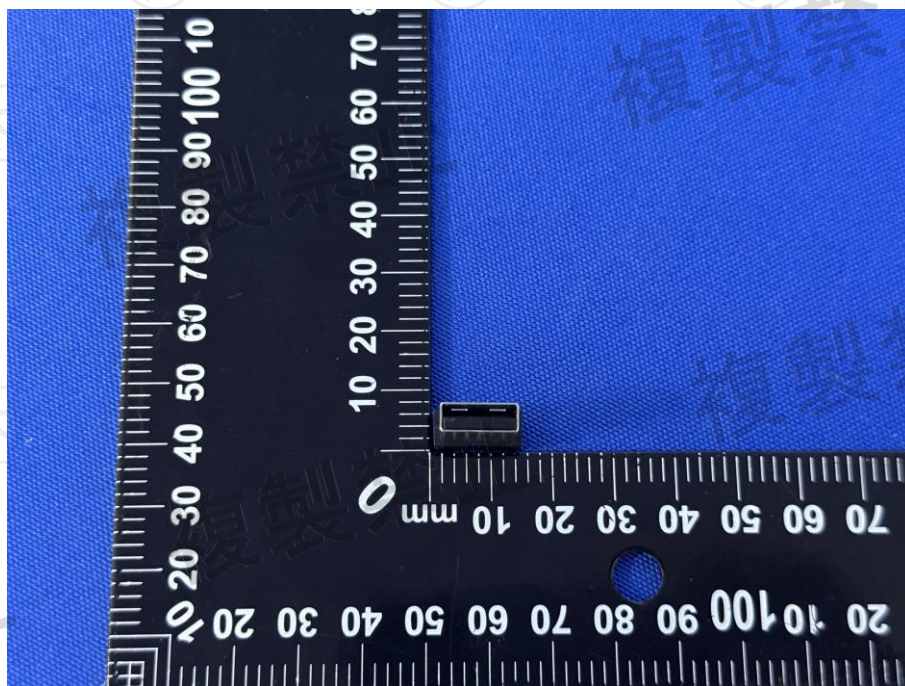
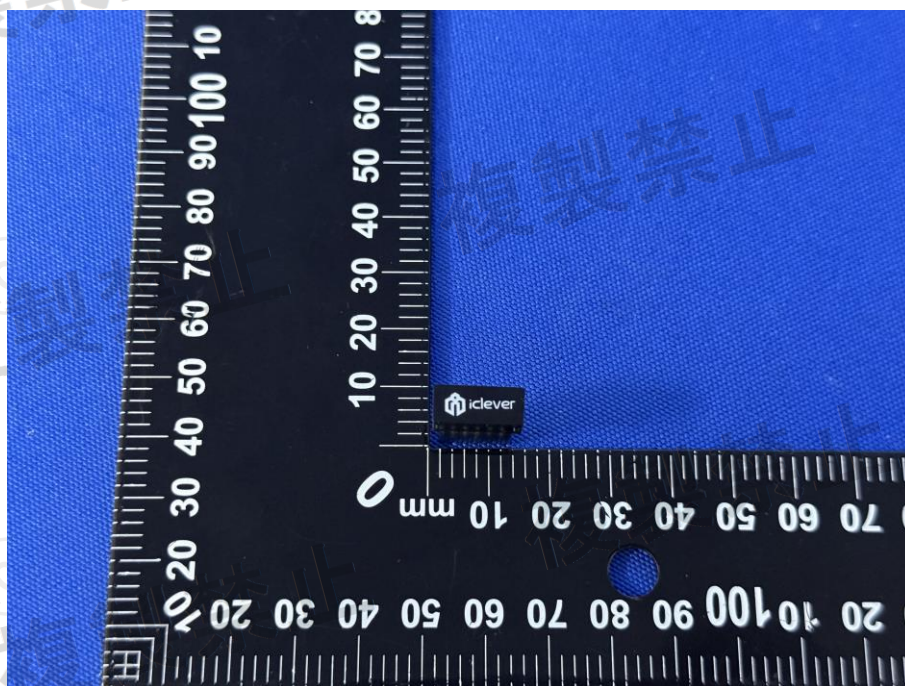
## 7. Photographs of Test Configuration

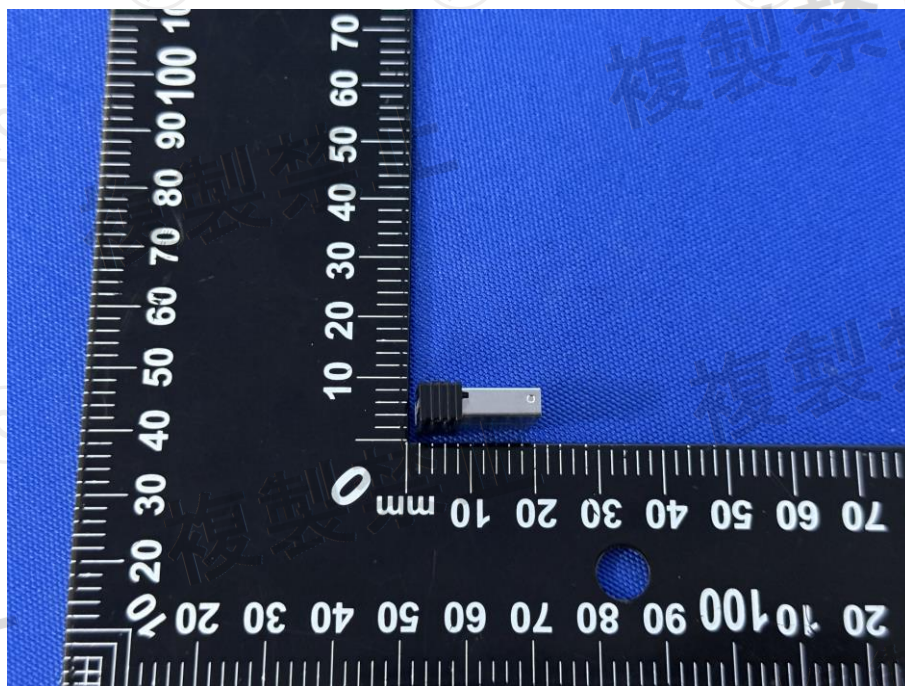
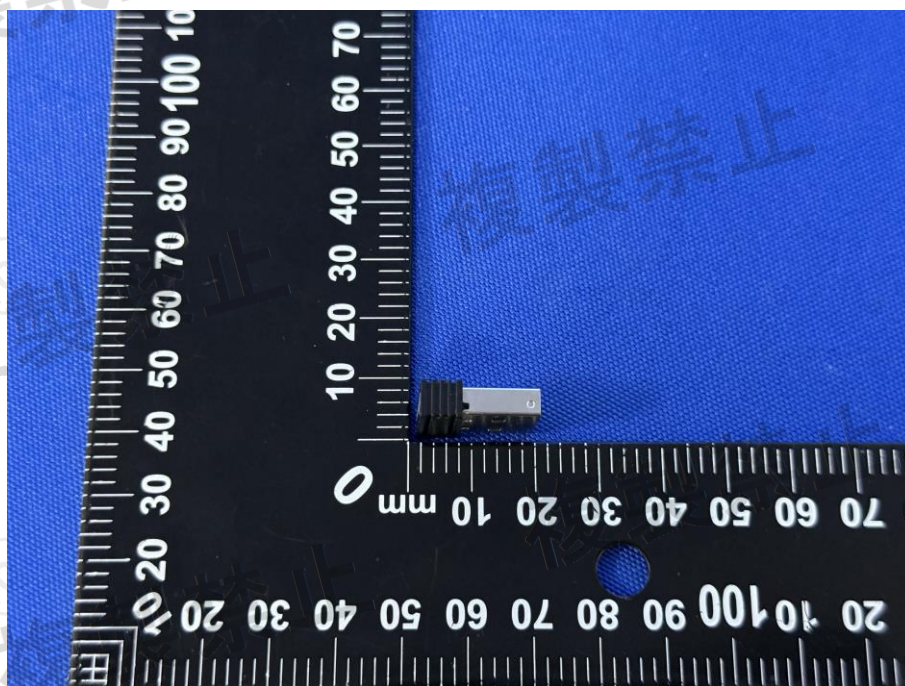


## 8. Photographs of EUT

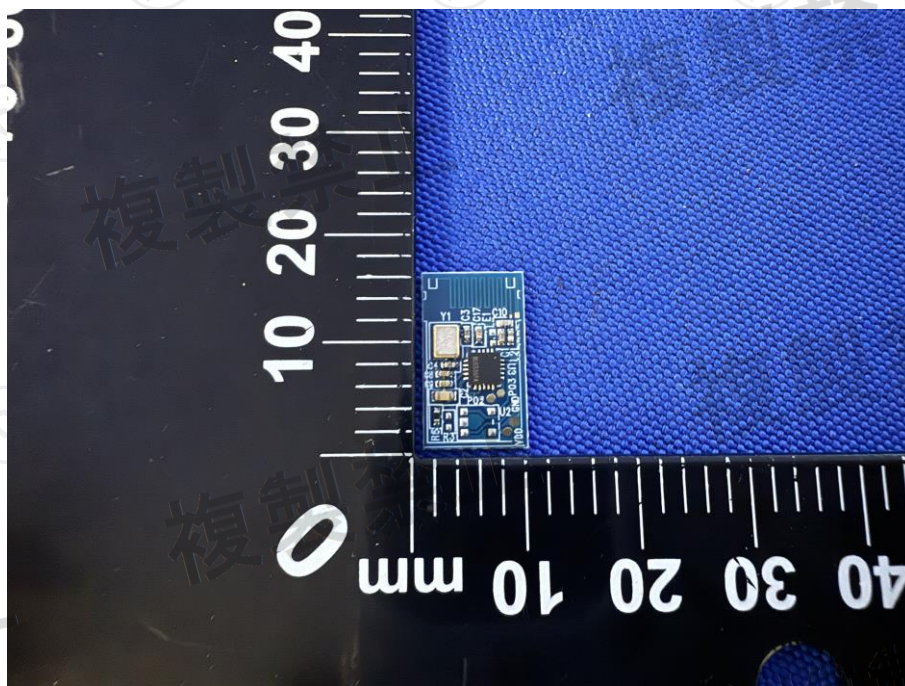
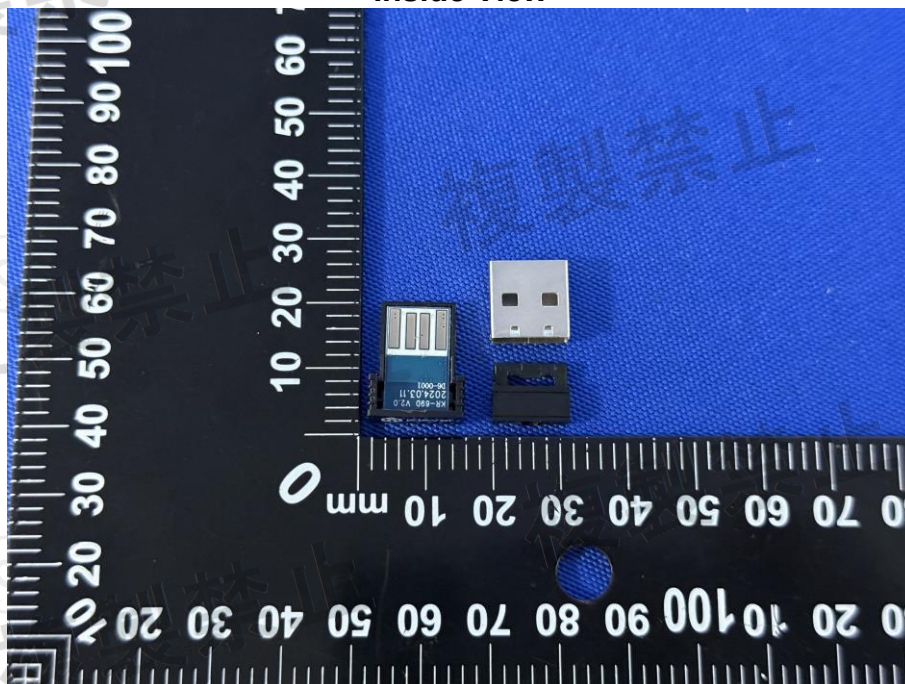
Outside View

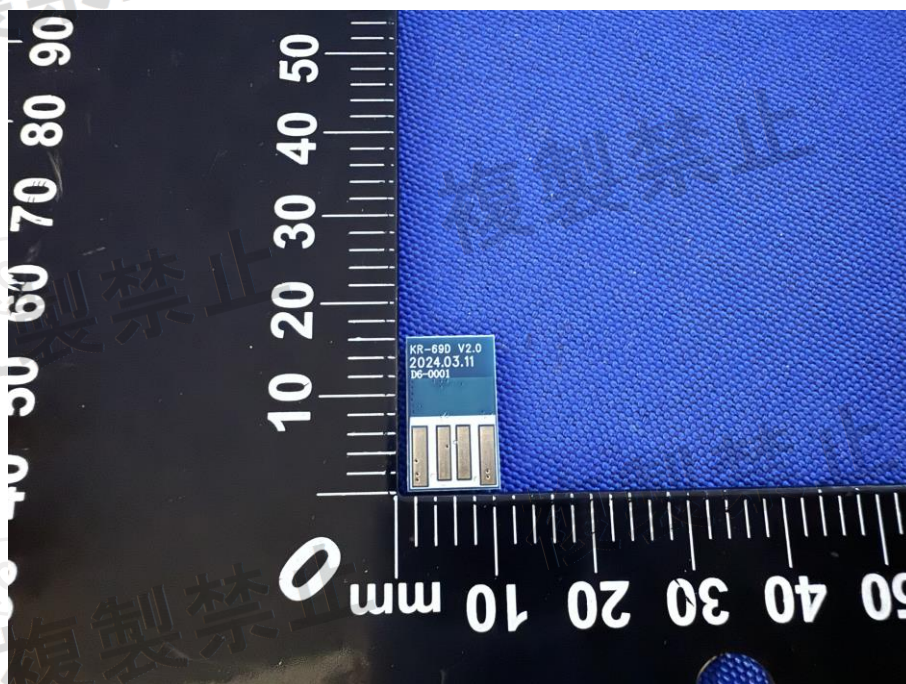






Inside View





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