

# TEST REPORT

**Reference No.**..... : WTF25D12344453W003  
**Applicant**..... : KAZE Global Trading  
**Address**..... : Kuwano Building 2F, 6-23-4, Jingumae, Shibuya-ku, Tokyo, Japan  
**Manufacturer**..... : Shenzhen Smart Care Technology Limited  
**Address**..... : Building 2, 1st, 4th, 6th Floor, Anda Electronic Industrial Park, Heping Community, Fuhai Sub-district, Bao'an District, Shenzhen, China  
**Product**..... : AI Glasses  
**Model(s)**..... : Y1  
**Standards**..... : Article 2 Paragraph 1 of Item 19  
MIC Notice No.88 Appendix No.43  
**Date of Receipt Sample**.... : 2025-12-31  
**Date of Test**..... : 2026-01-13 to 2026-01-16  
**Date of Issue**..... : 2026-01-28  
**Test Result**..... : **Pass**

**Remarks:**

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company.

The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

**Prepared By:**

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3 Revision History

| Test Report No.    | Date of Receipt Sample | Date of Test             | Date of Issue | Purpose  | Comment | Approved |
|--------------------|------------------------|--------------------------|---------------|----------|---------|----------|
| WTF25D12344453W003 | 2025-12-31             | 2026-01-13 to 2026-01-16 | 2026-01-28    | Original | -       | Valid    |

## 4 General Information

### 4.1 General Description of E.U.T.

|                    |                                                                                                                                                                                           |                                                                                                                                                                      |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product:           |                                                                                                                                                                                           | AI Glasses                                                                                                                                                           |
| Model(s):          |                                                                                                                                                                                           | Y1                                                                                                                                                                   |
| Model Description: |                                                                                                                                                                                           | N/A                                                                                                                                                                  |
| Hardware version:  |                                                                                                                                                                                           | GJ02-MB-V13                                                                                                                                                          |
| Software version:  |                                                                                                                                                                                           | V4.0.3.136                                                                                                                                                           |
| Radio type:        |                                                                                                                                                                                           | WLAN                                                                                                                                                                 |
| WLAN               | Technical:                                                                                                                                                                                | 2.4G-802.11b/g/n(HT20/40)/ax(HE20/40)                                                                                                                                |
|                    | Modulation:                                                                                                                                                                               | DSSS, OFDM                                                                                                                                                           |
|                    | Subcarriers:                                                                                                                                                                              | 802.11 g/n/ax: 3.2 subcarriers/MHz (312.5 kHz spacing)                                                                                                               |
|                    | Frequency range:                                                                                                                                                                          | 802.11b/g/n HT20/ax HE20: 2412~2472MHz,<br>802.11n HT40/ax HE40: 2422~2462MHz                                                                                        |
|                    | Output power:                                                                                                                                                                             | 802.11b: 2.00mW/MHz<br>802.11g: 1.00mW/MHz<br>802.11n (HT20): 0.50mW/MHz<br>802.11n (HT40): 0.20mW/MHz<br>802.11ax (HE20): 0.50mW/MHz<br>802.11ax (HE40): 0.20mW/MHz |
|                    | Antenna installation:                                                                                                                                                                     | FPC Antenna                                                                                                                                                          |
|                    | Antenna gain:                                                                                                                                                                             | 2.98dBi                                                                                                                                                              |
|                    | Note:<br>#: The antenna gain is provided by the applicant, and the applicant should be responsible for its authenticity, WALTEK lab has not verified the authenticity of its information. |                                                                                                                                                                      |

### 4.2 Details of E.U.T.

Power Supply Technical: Charge Voltage DC 5V

Battery: DC 3.85V 220mAh

### 4.3 Channel List

| Channel No. | Frequency (MHz) | Channel No. | Frequency (MHz) | Channel No. | Frequency (MHz) | Channel No. | Frequency (MHz) |
|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|
| 1           | 2412            | 2           | 2417            | 3           | 2422            | 4           | 2427            |
| 5           | 2432            | 6           | 2437            | 7           | 2442            | 8           | 2447            |
| 9           | 2452            | 10          | 2457            | 11          | 2462            | 12          | 2467            |
| 13          | 2472            |             |                 |             |                 |             |                 |

#### 4.4 General condition

Ambient Condition: 22.6°C, 48 %RH

##### 4.4.1 Environmental condition of test site

###### Voltage fluctuation

1. In the case of a characteristic test in the technical regulations conformity certification

The power supply supplies the voltage rating.

2. Other cases

The power supply supplies the voltage rating and the voltage rating  $\pm 10\%$ . However, when it can be confirmed that the change of the input voltage to the wireless part circuit of the testing machine is  $\pm 1\%$  or less when the input voltage to the testing machine from the external source changes at  $\pm 10\%$ , examines it only by the voltage rating.

###### Power Supply Voltage Fluctuation Test

| Voltage                                                                                                                                                                                                                      | Input Voltage | Radio Unit Voltage |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------------|
| High Voltage                                                                                                                                                                                                                 | 3.85V         | DC 3.3V            |
| Normal Voltage                                                                                                                                                                                                               | 3.465V        | DC 3.3V            |
| Low Voltage                                                                                                                                                                                                                  | 4.235V        | DC 3.3V            |
| Note:<br>1. The power supply to the RF unit is via a voltage regulator circuit.<br>2. The Power Supply Voltage Fluctuation of radio units is less than 1%,<br>so the test only rated voltage (Normal voltage) with DC 3.85V. |               |                    |

###### Note:

The EUT is powered by USB port (5VDC or built-in battery 3.85VDC), and there is a voltage regulator circuit on the mainboard.

#### 4.4.2 Test Mode

All test mode(s) and condition(s) mentioned were considered and evaluated respectively by performing full tests, the worst data were recorded and reported.

Have been confirmed the fluctuation of power supply to the RF circuit of EUT (excluding power source) is equal to or less than +/-1% when the power supply to the product varies at +/-10% by Manufacturer.

| Test mode                                    | Low channel | Middle channel | High channel |
|----------------------------------------------|-------------|----------------|--------------|
| Transmitting(802.11b/g/n20/ax20)             | 2412MHz     | 2442MHz        | 2472MHz      |
| Transmitting(802.11n40/ax40)                 | 2422MHz     | 2442MHz        | 2462MHz      |
| Receiving(802.11b/g/n20/ax20)                | 2412MHz     | 2442MHz        | 2472MHz      |
| Receiving(802.11n40/ax40)                    | 2422MHz     | 2442MHz        | 2462MHz      |
| Normal Operation                             | 2412MHz     | 2442MHz        | 2472MHz      |
| Normal Operation                             | 2422MHz     | 2442MHz        | 2462MHz      |
| Note: Only full RU is supported for 802.11ax |             |                |              |

#### 4.5 Test Equipment

| Item | Equipment                            | Manufacturer      | Model No.    | Serial No.   | Last Calibration Date    | Calibration Due Date     |
|------|--------------------------------------|-------------------|--------------|--------------|--------------------------|--------------------------|
| 1    | EXA Signal Analyzer                  | Malaysia Keysight | N9010A       | MY50520207   | 2025-04-19               | 2026-04-18               |
| 2    | Spectrum Analyzer                    | R&S               | FSP30        | 100091       | 2025-04-19               | 2026-04-18               |
| 3    | DC power supply                      | Agilent           | E3640A       | MY40006693   | 2025-04-19               | 2026-04-18               |
| 4    | Temperature & Humidity Chamber       | Agilent           | TH-1P-B      | WIT-05121302 | 2025-11-15               | 2026-11-14               |
| 5    | Temperature/ Humidity Meter          | Agilent           | ZC1-2        | TR7-TH       | 2025-05-29               | 2026-05-28               |
| 6    | ESG VECTOR SIGNAL GENERATOR          | Malaysia Keysight | E4438C       | MY45092536   | 2025-04-19               | 2026-04-18               |
| 7.   | USB Wideband Power Sensor            | Keysight          | U2021XA      | SG5440003    | 2025-04-19               | 2026-04-18               |
| 8.   | Universal Radio Communication Tester | R&S               | CMW 500      | 127818       | 2025-04-19               | 2026-04-18               |
| 9.   | Attenuator                           | ShangHai HuaXiang | TS2-6dB-1G-A | 20070707     | 2025-01-10<br>2026-01-08 | 2026-01-09<br>2027-01-07 |
| 10.  | Power Splitter                       | Mini-Circuits     | ZNPD1-50-S+  | SUU2751527   | 2025-01-10<br>2026-01-08 | 2026-01-09<br>2027-01-07 |

**Remark:**

- (a) Calibration conducted by the National Institute of Information and Communications Technology (NICT) in Japan (hereinafter referred to as "NICT") or a designated calibration agency under Article 102-18 paragraph (1) in JRL.
- (b) Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Act (Act No. 51 of 1992).
- (c) Calibration conducted in countries except Japan, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1).
- (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 (c)
- From JRL Article 24-2, paragraph 4, Item 2
1. All Equipments Calibration use the calibration method (c).
  2. All Equipments Calibration in GUANG ZHOU GRG METROLOGY&TEST CO., LTD./ No.163.Pingyun Rd, West of HuangPu Ave. Guangzhou, Guangdong, China.
  3. Regarding the measuring device, Article 24-2, Paragraph 4 of the Radio Law.

#### 4.6 Measurement Uncertainty

| Parameter                                        | Uncertainty                   |
|--------------------------------------------------|-------------------------------|
| Radio Frequency                                  | $\pm 1 \times 10^{-7}$ Hz     |
| RF Power                                         | $\pm 0.42$ dB                 |
| RF Power Density                                 | $\pm 0.7$ dB                  |
| Conducted Spurious Emissions                     | $\pm 2.76$ dB (9kHz~26500MHz) |
| Confidence interval: 95%. Confidence factor: k=2 |                               |

## 5 Test Summary

| Test Items                                                                                                                                                                                    | Result |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| <b>Transmitting equipment</b>                                                                                                                                                                 |        |
| Antenna Power                                                                                                                                                                                 | PASS   |
| Tolerances for Antenna Power                                                                                                                                                                  | PASS   |
| Frequency Tolerance                                                                                                                                                                           | PASS   |
| Transmission Rate                                                                                                                                                                             | N/A    |
| Occupied Frequency Bandwidth                                                                                                                                                                  | PASS   |
| Spread Bandwidth                                                                                                                                                                              | N/A    |
| Process Gain                                                                                                                                                                                  | N/A    |
| Spurious emission intensity                                                                                                                                                                   | PASS   |
| Half-power beam width                                                                                                                                                                         | Note1  |
| Carrier sense function                                                                                                                                                                        | PASS   |
| <b>Receiving equipment</b>                                                                                                                                                                    |        |
| Secondary Radiated Emissions                                                                                                                                                                  | PASS   |
| <b>Controlling equipment</b>                                                                                                                                                                  |        |
| Interference prevention function                                                                                                                                                              | PASS   |
| N/A is an abbreviation for Not Applicable.<br>Note1 means the max EIRP is 5.287dBm/MHz (antenna power dBm/MHz + antenna gain dBi) that is less than 12.14dBm/MHz, the test is not applicable. |        |

## **6 Measurements of Transmitting Equipment**

### **6.1 Antenna Power and Antenna Power Tolerances**

#### **6.1.1 Test Requirement**

Article 2, Paragraph 1, Item (19).

#### **6.1.2 Limit**

- a. The antenna power of a transmitting equipment (with a frequency band of 2,427 - 2,470.75 MHz, for spread spectrum systems using FH systems, hybrid systems of DS and FH, or hybrid systems of FH and OFDM) shall be such that the mean power within a bandwidth of 1 MHz is 3 mW or less in the case of modulation using a standard coding test signal with the same transmission rate as that of the modulation signal.
- b. The antenna power of a transmitting equipment using a spread spectrum system other than any of those in "a" and the OFDM system shall be such that the mean power within a bandwidth of 1 MHz is 10 mW or less for the 20MHz system and 5 mW or less for the 40MHz system in the case of modulation using a standard coding test signal with the same transmission rate as that of the modulation signal.
- c. The antenna power of a transmitting equipment using systems other than any of those in "a" or "b" shall be 10 mW or less for the 20MHz system and 5 mW or less for the 40MHz system.

Upper limit of the tolerance for antenna power shall be 20%.

#### **6.1.3 Measuring Instruments and setting**

Please refer to section 4 in this report. The following table is the setting of the spectrum.

#### **6.1.4 Test Procedures**

##### **Step 1**

Connect the UUT to the spectrum analyzer and use the following settings:

Center Frequency: The center frequency of the UUT test channel

RBW: 1MHz

VBW: 1MHz

Span: Wide enough to cover the total power envelope of the signal of the UUT

Detector: Peak

Trance Mode: Max Hold

Find the Peak value for the power envelope and record the frequency.

##### **Step 2**

Change the spectrum analyzer and use the following settings:

Center Frequency: Record frequency of step 1.

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RBW: 1MHz

VBW: 1MHz

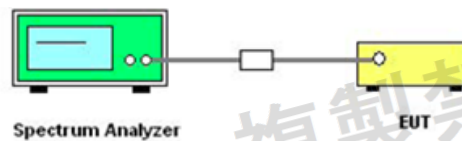
Span: 0Hz

Sweep time: enough to capture the signal burst.

Detector: RMS

Capture the burst signal power and record it.

#### 6.1.5 Test Setup Layout



#### 6.1.6 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

## 6.1.7 Test Result

| Modulation    | Channel | Antenna Power (dBm/MHz) | Test Result for Antenna Power (mW/MHz) | Antenna power Limit (mW/MHz) | Declared Antenna Power (mW/MHz) | Tolerance(%) | Tolerance Limit (%) |
|---------------|---------|-------------------------|----------------------------------------|------------------------------|---------------------------------|--------------|---------------------|
| 802.11b       | Low     | 1.232                   | 1.328                                  | 10.00                        | 2.00                            | -33.60       | +20                 |
|               | Middle  | 1.962                   | 1.571                                  | 10.00                        | 2.00                            | -21.45       | +20                 |
|               | High    | 2.307                   | 1.701                                  | 10.00                        | 2.00                            | -14.95       | +20                 |
| 802.11g       | Low     | -0.386                  | 0.915                                  | 10.00                        | 1.00                            | -8.50        | +20                 |
|               | Middle  | -0.625                  | 0.866                                  | 10.00                        | 1.00                            | -13.40       | +20                 |
|               | High    | -1.798                  | 0.661                                  | 10.00                        | 1.00                            | -33.90       | +20                 |
| 802.11n-HT20  | Low     | -4.078                  | 0.391                                  | 10.00                        | 0.50                            | -21.80       | +20                 |
|               | Middle  | -5.654                  | 0.272                                  | 10.00                        | 0.50                            | -45.60       | +20                 |
|               | High    | -5.287                  | 0.296                                  | 10.00                        | 0.50                            | -40.80       | +20                 |
| 802.11n-HT40  | Low     | -8.447                  | 0.143                                  | 5.00                         | 0.20                            | -28.50       | +20                 |
|               | Middle  | -8.153                  | 0.153                                  | 5.00                         | 0.20                            | -23.50       | +20                 |
|               | High    | -9.101                  | 0.123                                  | 5.00                         | 0.20                            | -38.50       | +20                 |
| 802.11ax-HE20 | Low     | -6.576                  | 0.22                                   | 10.00                        | 0.50                            | -56.00       | +20                 |
|               | Middle  | -6.757                  | 0.211                                  | 10.00                        | 0.50                            | -57.80       | +20                 |
|               | High    | -7.122                  | 0.194                                  | 10.00                        | 0.50                            | -61.20       | +20                 |
| 802.11ax-HE40 | Low     | -9.508                  | 0.112                                  | 5.00                         | 0.20                            | -44.00       | +20                 |
|               | Middle  | -11.487                 | 0.071                                  | 5.00                         | 0.20                            | -64.50       | +20                 |
|               | High    | -9.586                  | 0.11                                   | 5.00                         | 0.20                            | -45.00       | +20                 |

Note:

The max EIRP is 5.287dBm/MHz (antenna power dBm/MHz + antenna gain dBi) that is less than 12.14dBm/MHz.

## 6.2 Frequency Tolerance

### 6.2.1 Test Requirement

Article 2, Paragraph 1, Item (19).

### 6.2.2 Limit

According to Article 2-1, the Tolerance of frequency:  $\pm 50 \times 10^{-6}$ .

### 6.2.3 Measuring Instruments and setting

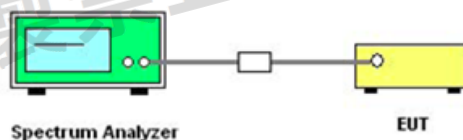
Please refer to section 4 in this report. The following table is the setting of the spectrum.

| Spectrum Parameter | Setting         |
|--------------------|-----------------|
| Span Frequency     | 500 KHz         |
| RB/VB              | 10 kHz / 10 kHz |

### 6.2.4 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: 500KHz
- 3 Center Frequency: The center frequency of testing for EUT
- 4 Sweep time: Auto
- 5 Detect mode: Positive peak
- 6 EUT have transmitted absence of modulation signal and fixed channelize. f is using the mark cursor to mark the peak frequency value,  $f_c$  is declaring of channel frequency. Then the frequency error formula is  $(f_c - f) / f_c \times 10^6 \text{ ppm}$  and the limit is less than  $\pm 50 \text{ ppm}$

### 6.2.5 Test Setup Layout



### 6.2.6 Test Deviation

There is no deviation with the original standard.

### 6.2.7 EUT Operation during Test

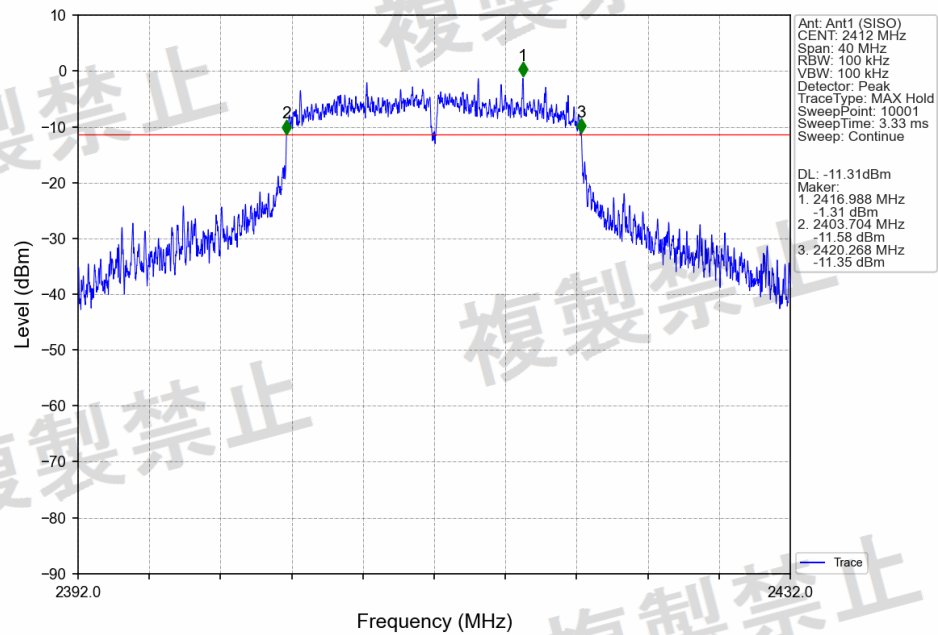
The EUT was placed on the test table and programmed in un-modulation function.

**6.2.8 Test Result**

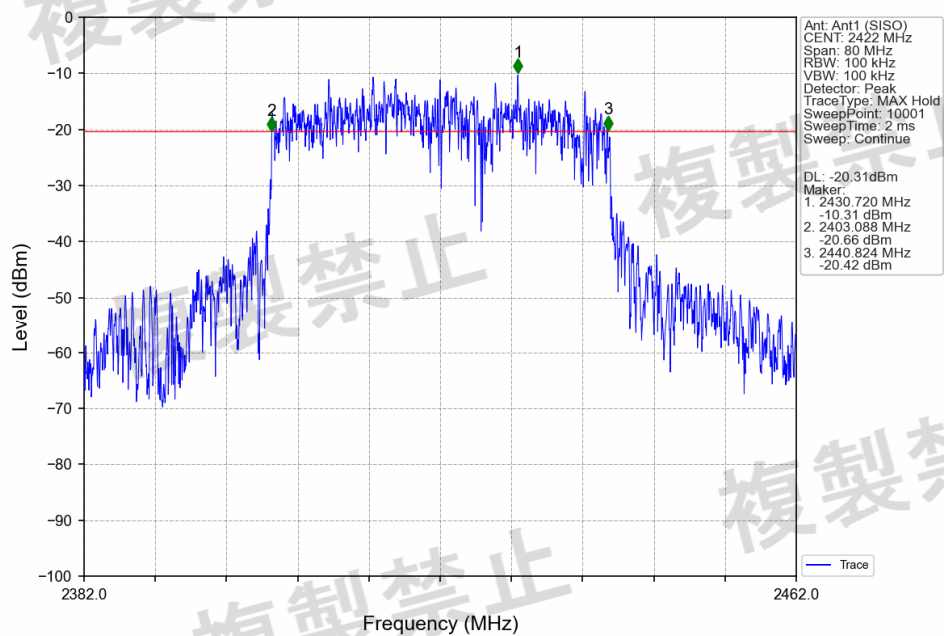
| Frequency (MHz) | Result (MHz) | Tolerance (kHz) | Tolerance (ppm) | Limit |
|-----------------|--------------|-----------------|-----------------|-------|
| 2412.00         | 2411.986     | -14             | -5.80           | ±50   |
| 2422.00         | 2421.956     | -44             | -18.17          | ±50   |
| 2442.00         | 2441.960     | -40             | -16.38          | ±50   |
| 2462.00         | 2461.896     | -104            | -42.24          | ±50   |
| 2472.00         | 2471.970     | -30             | -12.14          | ±50   |

## Test Plots

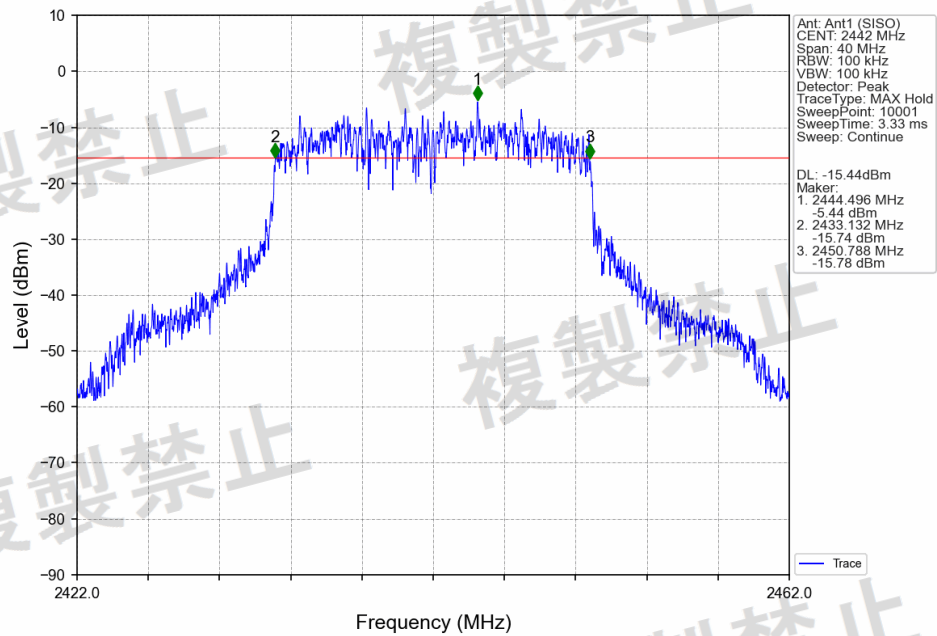
## Channel 2412MHz



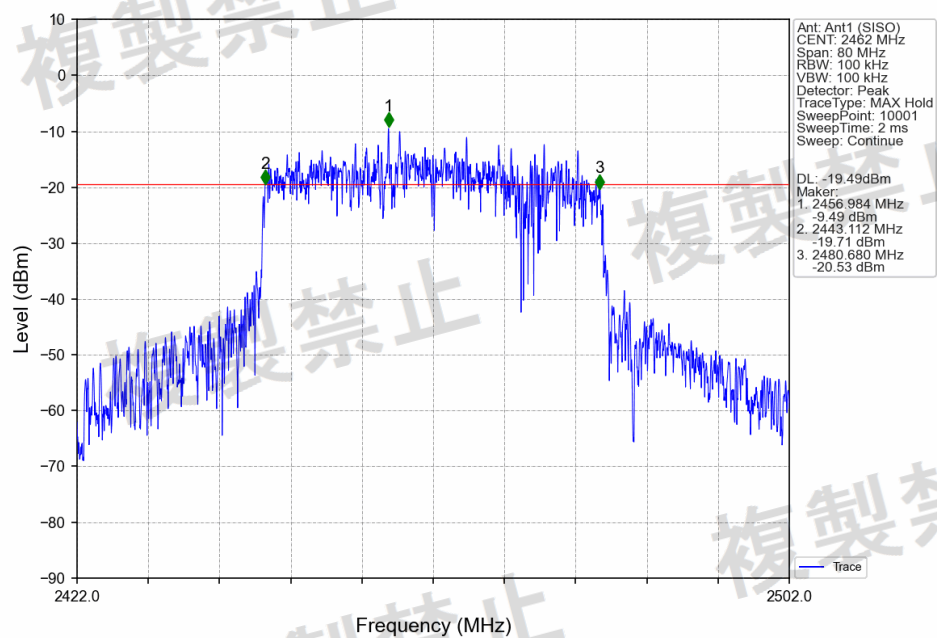
## Channel 2422MHz



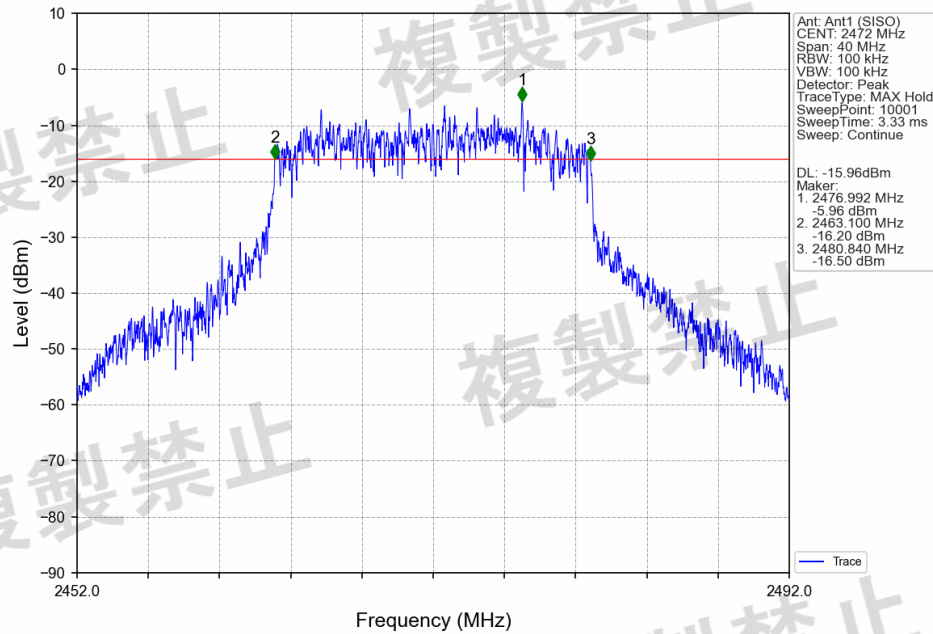
Channel 2442MHz



Channel 2462MHz



## Channel 2472MHz



## 6.3 Occupied Frequency Bandwidth

### 6.3.1 Test Requirement

Article 2, Paragraph 1, Item (19).

### 6.3.2 Limit

According to Radio Law of Japan item 19 of Article 2 Paragraph 1, permissible value for occupied bandwidth using the FH system, a hybrid system combining DS and FH systems, or a hybrid system combining FH and OFDM systems shall be 83.5 MHz or less, while necessary bandwidth (minimum occupied bandwidth sufficient to ensure information transmission of required quality at a required transmission rate for the system used under specified conditions for a given emission type) using a system other than any of the above shall be 26 MHz or less for the 20MHz system, for the 40MHz system, shall be 26-40MHz.

### 6.3.3 Measuring Instruments and setting

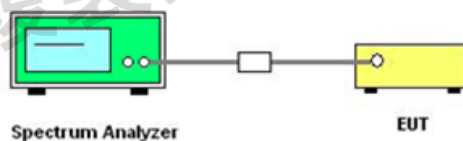
Please refer to section 4 in this report. The following table is the setting of the spectrum.

| Spectrum Parameter | Setting                  |
|--------------------|--------------------------|
| Span Frequency     | 2 to 3.5 times the limit |
| RB/VB              | 300kHz                   |

### 6.3.4 Test Procedures

- Setting of SA is following as:  
RB/VB: 300kHz  
SPAN: 2 to 3.5 times the limit  
Sweep time: Auto  
Sweep Mode: Continuous sweep  
Detect mode: Positive peak  
Trace mode: Max hold
- 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). SA set to 99% of occupied bandwidth to measure occupied bandwidth. The limit is less than 26MHz (For DSSS or OFDM Device) or 83.5MHz (For FHSS Device).

### 6.3.5 Test Setup Layout



### 6.3.6 Test Deviation

There is no deviation with the original standard.

### 6.3.7 EUT Operation during Test

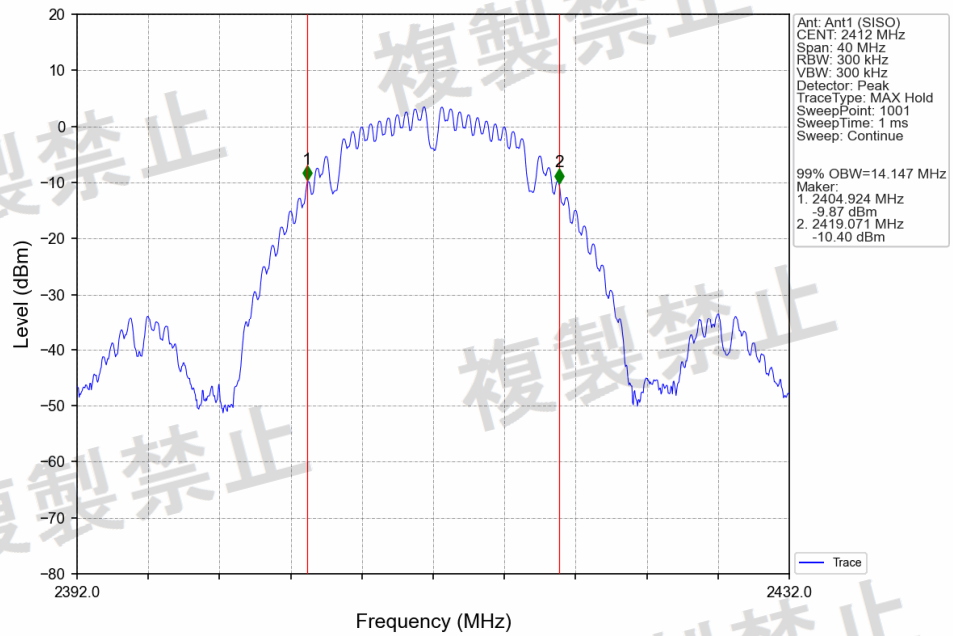
The EUT was programmed to be in continuously transmitting mode.

### 6.3.8 Test Result

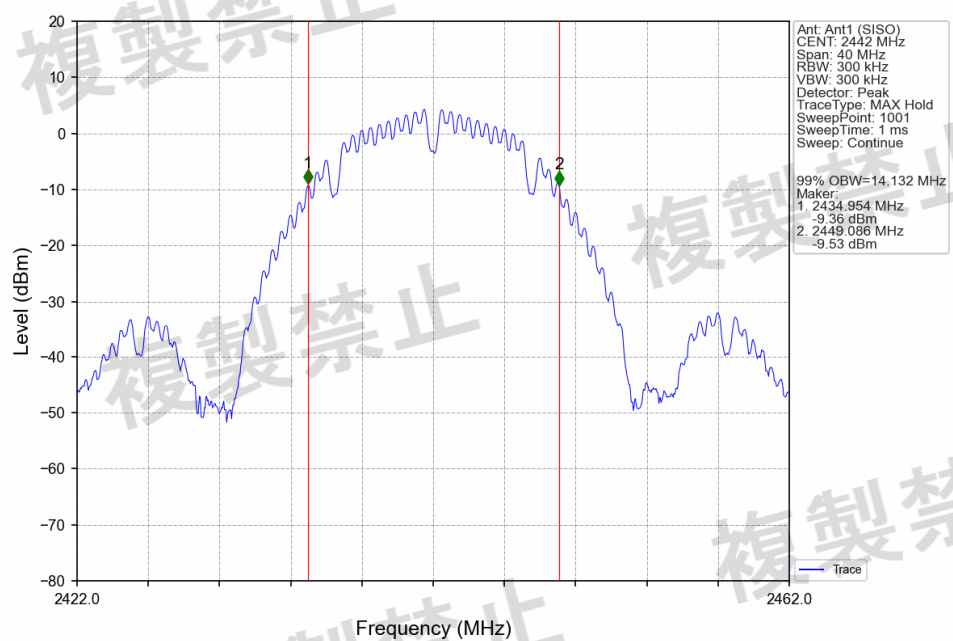
| Modulation    | Channel | Occupied Frequency Bandwidth (MHz) | Limit (MHz) |
|---------------|---------|------------------------------------|-------------|
| 802.11b       | Low     | 14.147                             | < 26        |
|               | Middle  | 14.132                             | < 26        |
|               | High    | 14.160                             | < 26        |
| 802.11g       | Low     | 17.879                             | < 26        |
|               | Middle  | 17.758                             | < 26        |
|               | High    | 18.244                             | < 26        |
| 802.11n-HT20  | Low     | 17.784                             | < 26        |
|               | Middle  | 17.764                             | < 26        |
|               | High    | 17.759                             | < 26        |
| 802.11n-HT40  | Low     | 36.157                             | 26-40       |
|               | Middle  | 36.113                             | 26-40       |
|               | High    | 36.106                             | 26-40       |
| 802.11ax-HE20 | Low     | 19.026                             | < 26        |
|               | Middle  | 19.010                             | < 26        |
|               | High    | 18.883                             | < 26        |
| 802.11ax-HE40 | Low     | 37.844                             | 26-40       |
|               | Middle  | 37.794                             | 26-40       |
|               | High    | 37.796                             | 26-40       |

## Test Plots

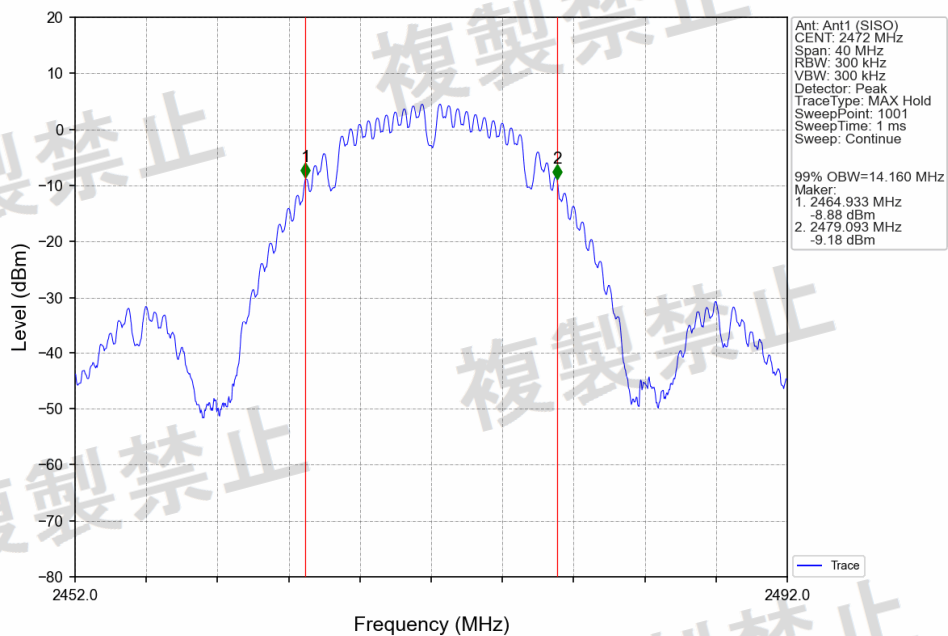
## 802.11b: Low Channel



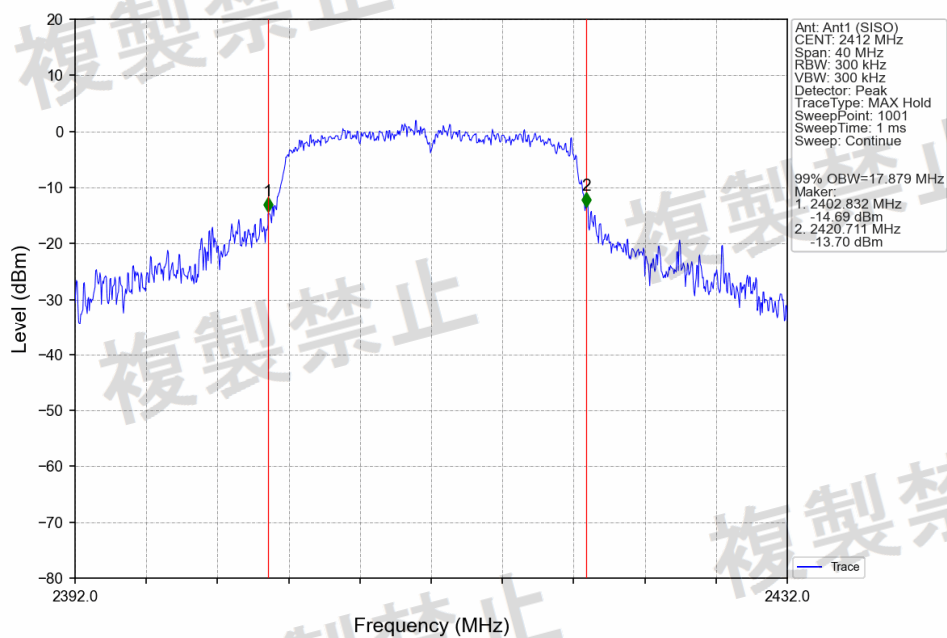
## 802.11b: Middle Channel



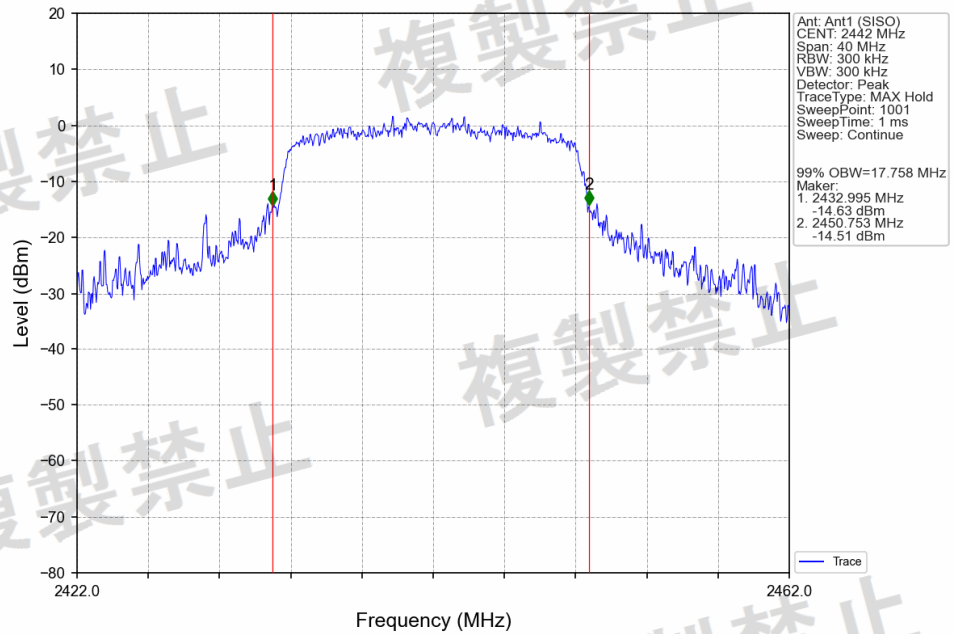
## 802.11b: High Channel



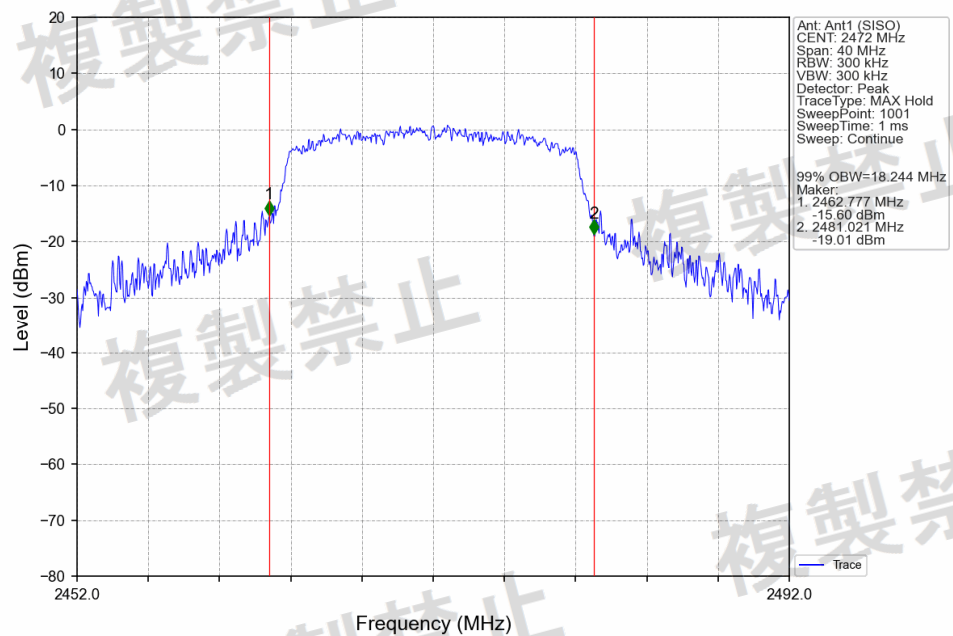
## 802.11g: Low Channel



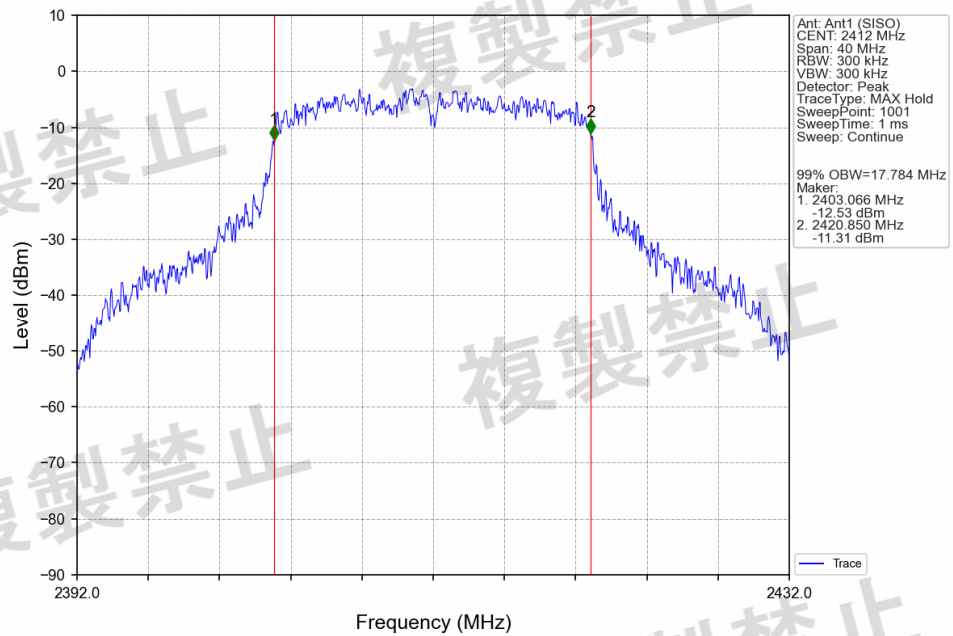
802.11g: Middle Channel



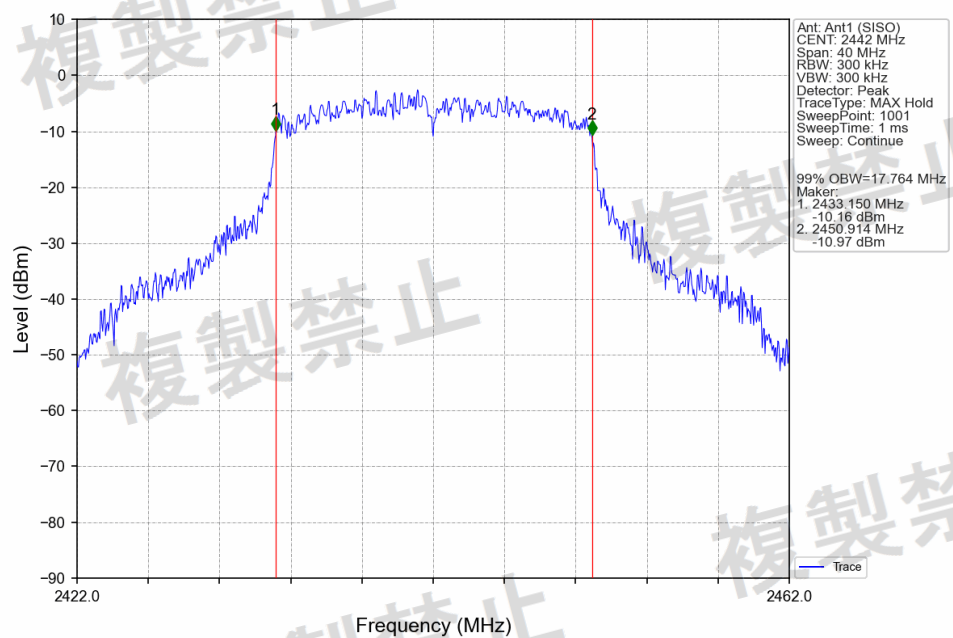
802.11g: High Channel



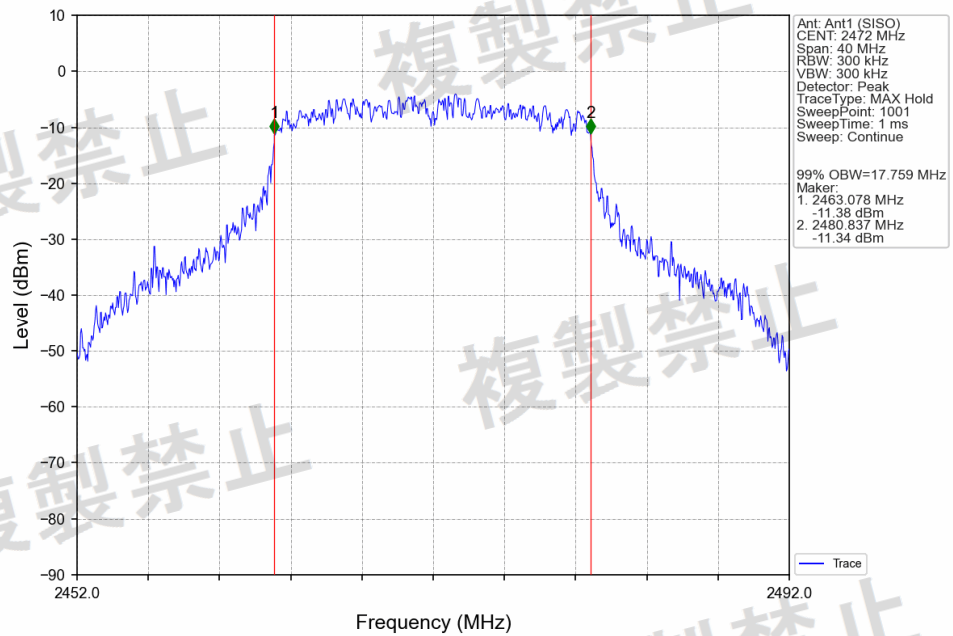
802.11n-HT20: Low Channel



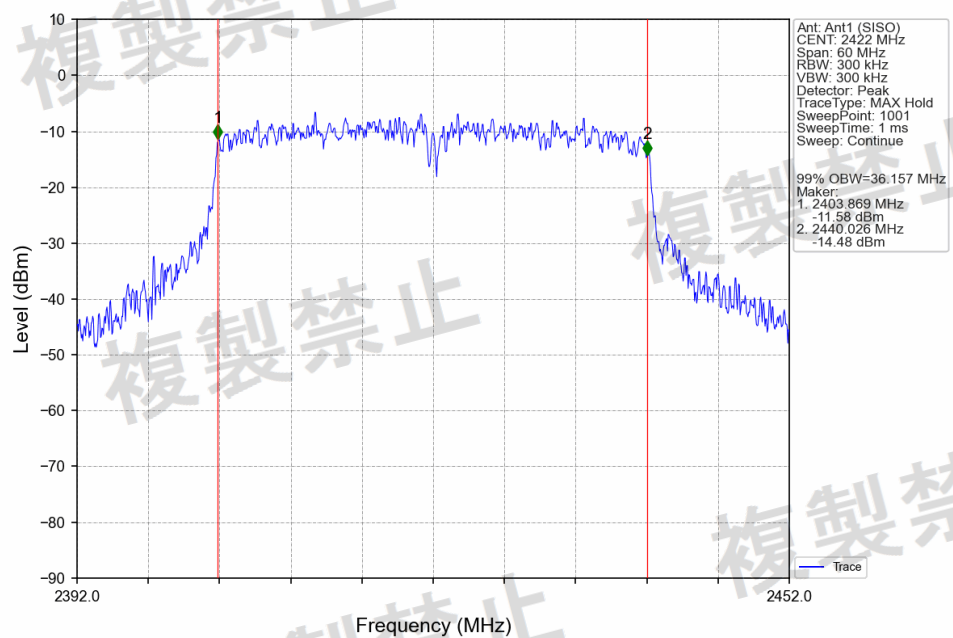
802.11n-HT20: Middle Channel



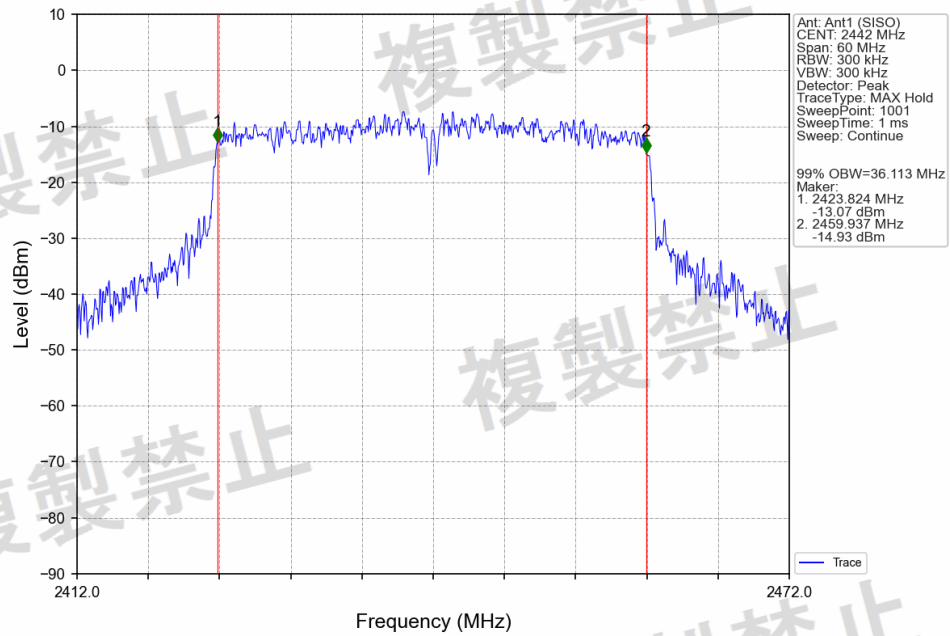
## 802.11n-HT20: High Channel



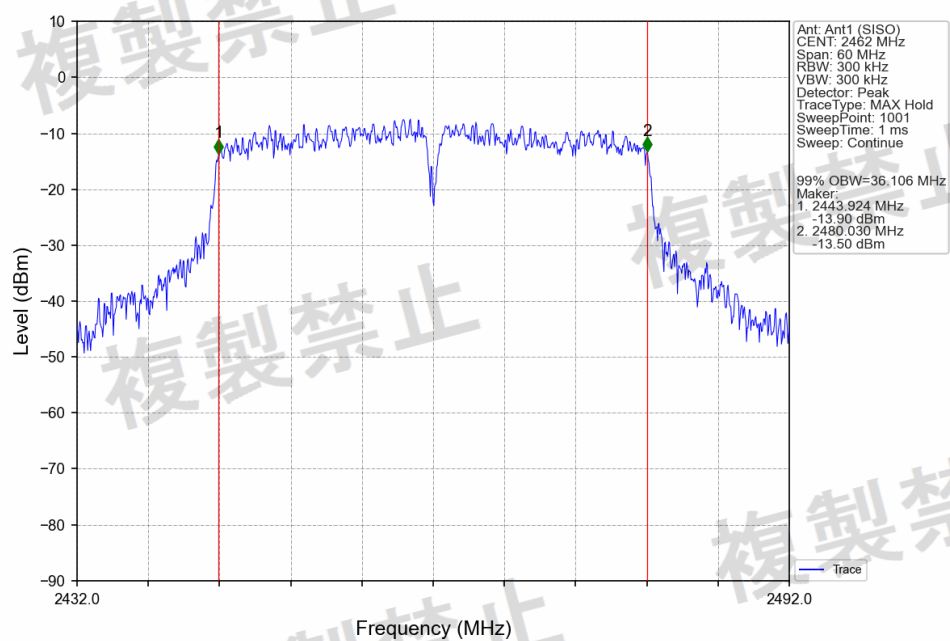
## 802.11n-HT40: Low Channel



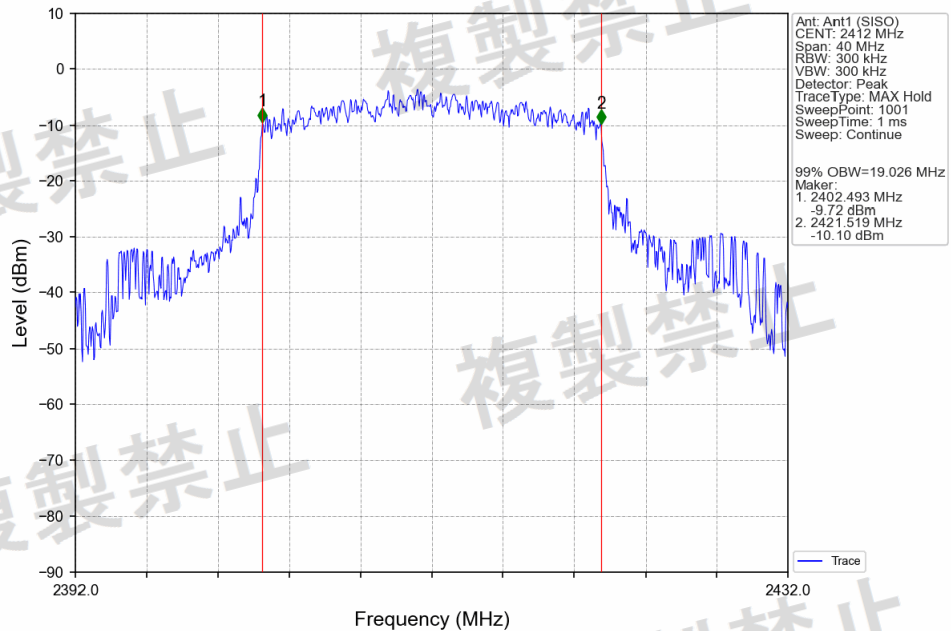
802.11n-HT40: Middle Channel



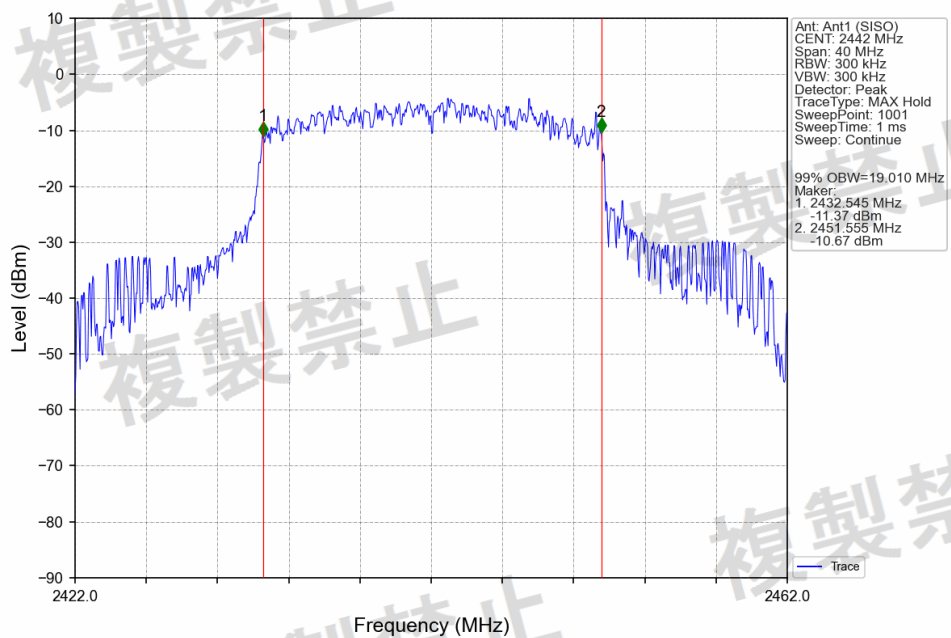
802.11n-HT40: High Channel



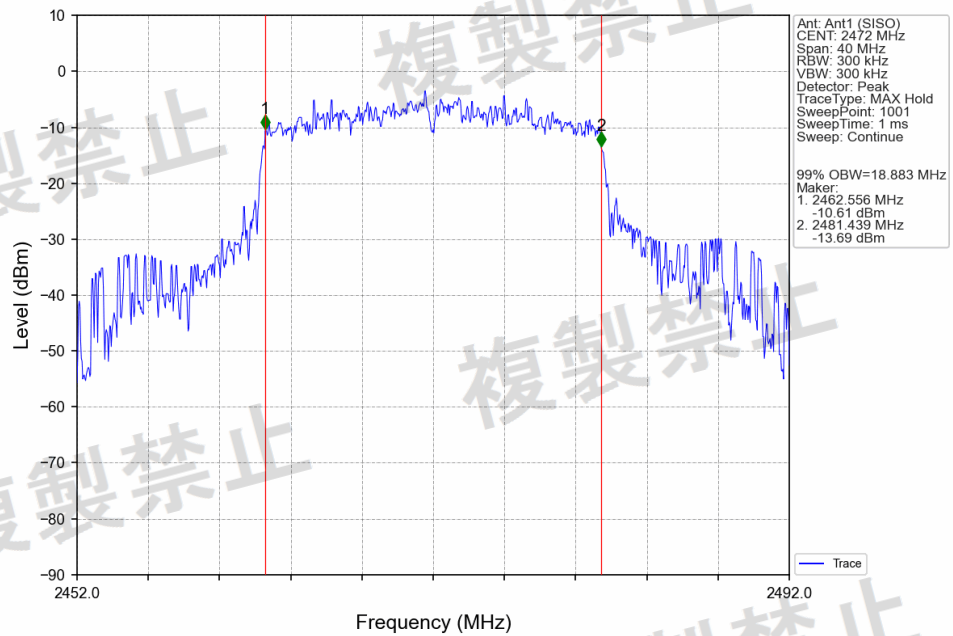
## 802.11ax-HE20: Low Channel



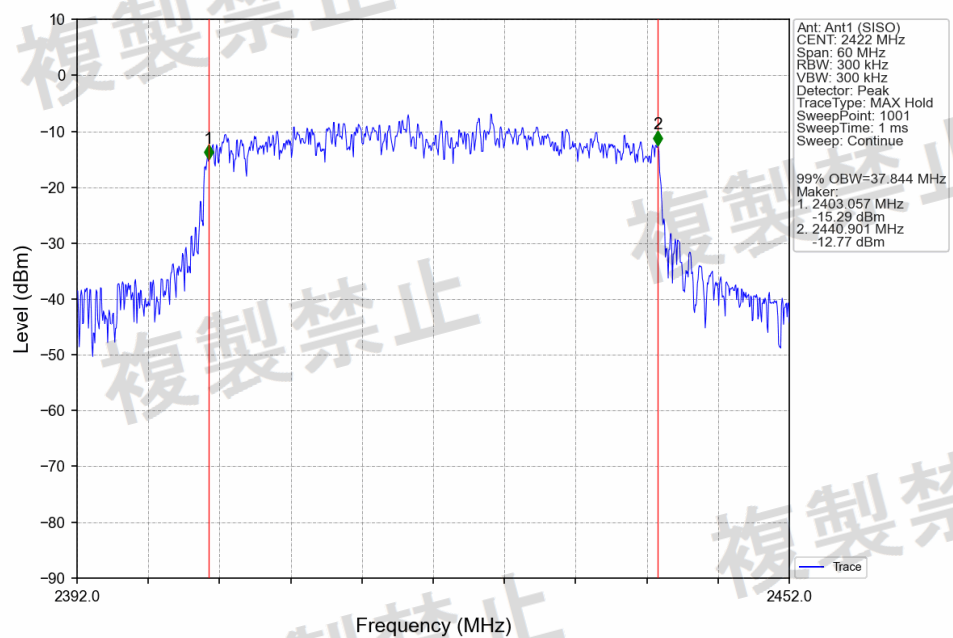
## 802.11ax-HE20: Middle Channel



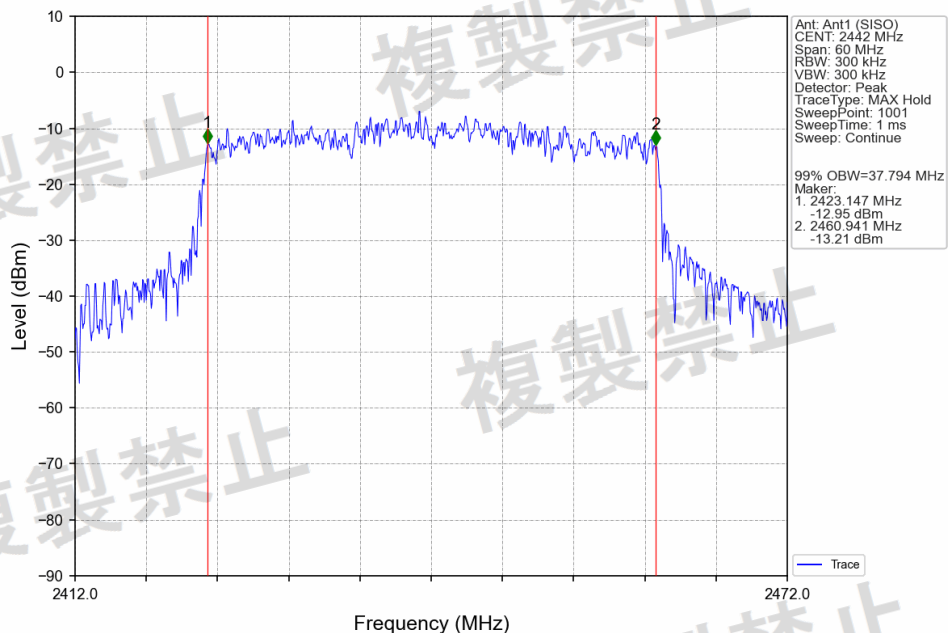
## 802.11ax-HE20: High Channel



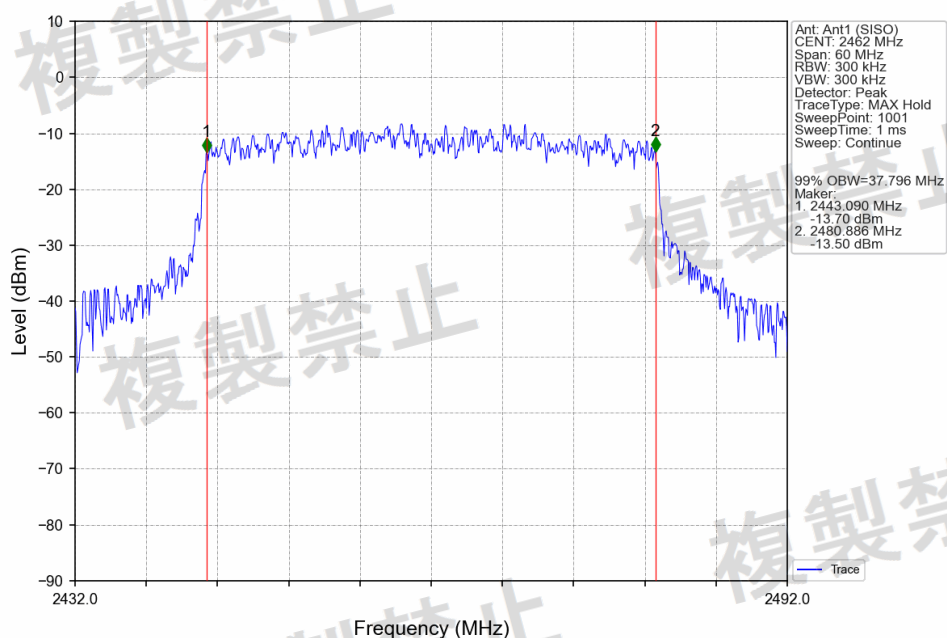
## 802.11ax-HE40: Low Channel



## 802.11ax-HE40: Middle Channel



## 802.11ax-HE40: High Channel



## 6.4 Spurious Emission Intensity

### 6.4.1 Test Requirement

Article 2, Paragraph 1, Item (19).

### 6.4.2 Limit

According to Article 2-1, permissible mean power of spurious emission of each frequency supplied to a feeder, that is, mean power of spurious emission in the 1 MHz bandwidth at frequency  $f$  other than frequency band used shall be as follows: a.  $2,387\text{MHz} \leq f \leq 2,400\text{MHz}$  and  $2,483.5\text{MHz} < f \leq 2,496.5\text{MHz}$  25  $\mu\text{W}$  or less b.  $2,387\text{MHz} > f$  and  $2,496.5\text{MHz} < f$  2.5  $\mu\text{W}$  or less.

### 6.4.3 Measuring Instruments and setting

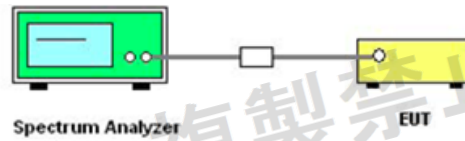
Please refer to section 4 in this report. The following table is the setting of the spectrum.

| Spectrum Parameter | Setting                             |
|--------------------|-------------------------------------|
| Attenuation        | Auto                                |
| RB/VB              | 100KHz(Below 1GHz);1MHz(Above 1GHz) |
| Detector           | Peak                                |
| Trace              | Max Hold                            |
| Sweep Time         | Auto                                |

### 6.4.4 Test Procedures

- 1 EUT have transmitted the maximum modulation signal and fixed channelize.
- 2 Setting of SA is following as: RB:1MHz / VB:1MHz / 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 2387MHz Then to mark peak reading value + cable loss shall be less than 2.5 $\mu\text{W}$ .
- 4 SA adjusted to start frequency 2387MHz and stop frequency 2400MHz. Then to mark peak reading value + cable loss shall be less than 25 $\mu\text{W}$ .
- 5 SA adjusted to start frequency 2483.5MHz and stop frequency 2496.5MHz Then to mark peak reading value + cable loss shall be less than 25 $\mu\text{W}$
- 6 SA adjusted to start frequency 2496.5MHz and stop frequency 12500MHz Then to mark peak reading value + cable loss shall be less than 2.5 $\mu\text{W}$
- 7 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.

#### 6.4.5 Test Setup Layout



#### 6.4.6 Test Deviation

There is no deviation with the original standard.

#### 6.4.7 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

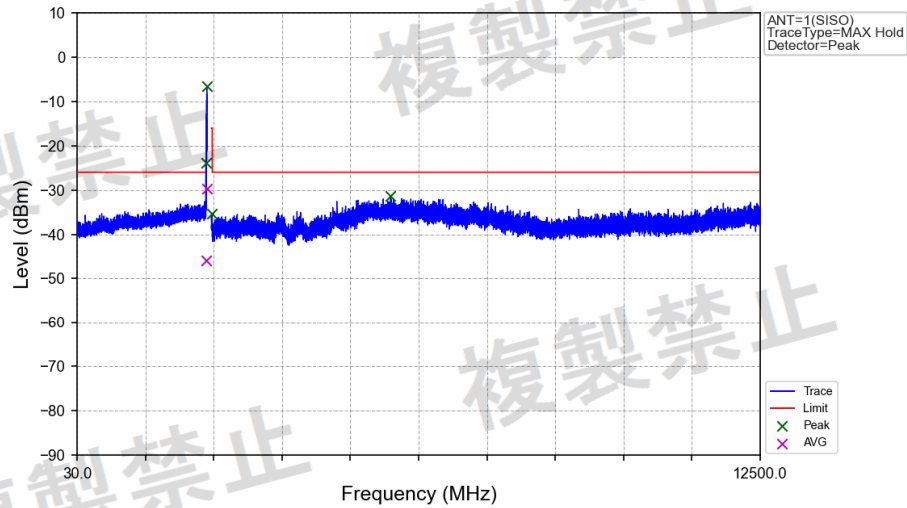
**6.4.8 Test Result**

| Modulation                                        | Channel | Test Mode    | Test Result |
|---------------------------------------------------|---------|--------------|-------------|
| 802.11b                                           | Low     | Transmitting | PASS        |
|                                                   | Middle  | Transmitting | PASS        |
|                                                   | High    | Transmitting | PASS        |
| 802.11g                                           | Low     | Transmitting | PASS        |
|                                                   | Middle  | Transmitting | PASS        |
|                                                   | High    | Transmitting | PASS        |
| 802.11n-HT20                                      | Low     | Transmitting | PASS        |
|                                                   | Middle  | Transmitting | PASS        |
|                                                   | High    | Transmitting | PASS        |
| 802.11n-HT40                                      | Low     | Transmitting | PASS        |
|                                                   | Middle  | Transmitting | PASS        |
|                                                   | High    | Transmitting | PASS        |
| 802.11ax-HE20                                     | Low     | Transmitting | PASS        |
|                                                   | Middle  | Transmitting | PASS        |
|                                                   | High    | Transmitting | PASS        |
| 802.11ax-HE40                                     | Low     | Transmitting | PASS        |
|                                                   | Middle  | Transmitting | PASS        |
|                                                   | High    | Transmitting | PASS        |
| Remark: Only the worst case was reported(802.11g) |         |              |             |

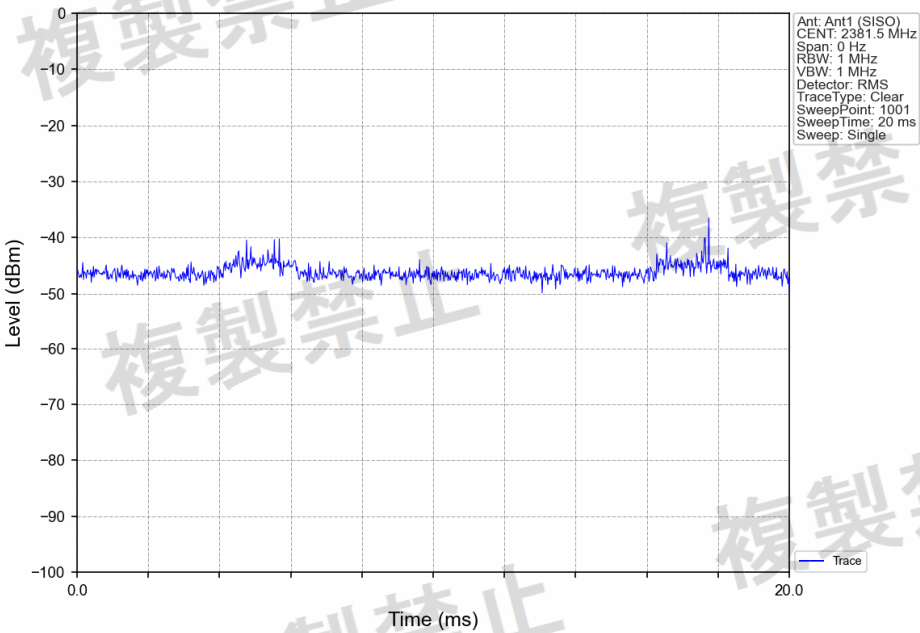
| Modulation | Channel | Band (MHz)    | Frequency (MHz) | Max Value (dBm) | Max Value ( $\mu$ W/MHz) | Limit ( $\mu$ W/MHz) |
|------------|---------|---------------|-----------------|-----------------|--------------------------|----------------------|
| 802.11g    | Low     | 30-2387       | 2381.5          | -46.01          | 0.025                    | 2.5                  |
|            |         | 2387-2400     | 2398.388        | -29.65          | 1.084                    | 25                   |
|            |         | 2483.5-2496.5 | 2484.501        | -35.41          | 0.288                    | 25                   |
|            |         | 2496.5-12500  | 5754            | -31.44          | 0.718                    | 2.5                  |
|            | Middle  | 30-2387       | 2384.5          | -38.47          | 0.142                    | 2.5                  |
|            |         | 2387-2400     | 2398.908        | -23.17          | 4.819                    | 25                   |
|            |         | 2483.5-2496.5 | 2483.955        | -26.57          | 2.203                    | 25                   |
|            |         | 2496.5-12500  | 5942.5          | -40.46          | 0.090                    | 2.5                  |
|            | High    | 30-2387       | 2095            | -42.27          | 0.059                    | 2.5                  |
|            |         | 2387-2400     | 2393.032        | -35.85          | 0.260                    | 25                   |
|            |         | 2483.5-2496.5 | 2484.397        | -28.56          | 1.393                    | 25                   |
|            |         | 2496.5-12500  | 6121            | -40.79          | 0.083                    | 2.5                  |

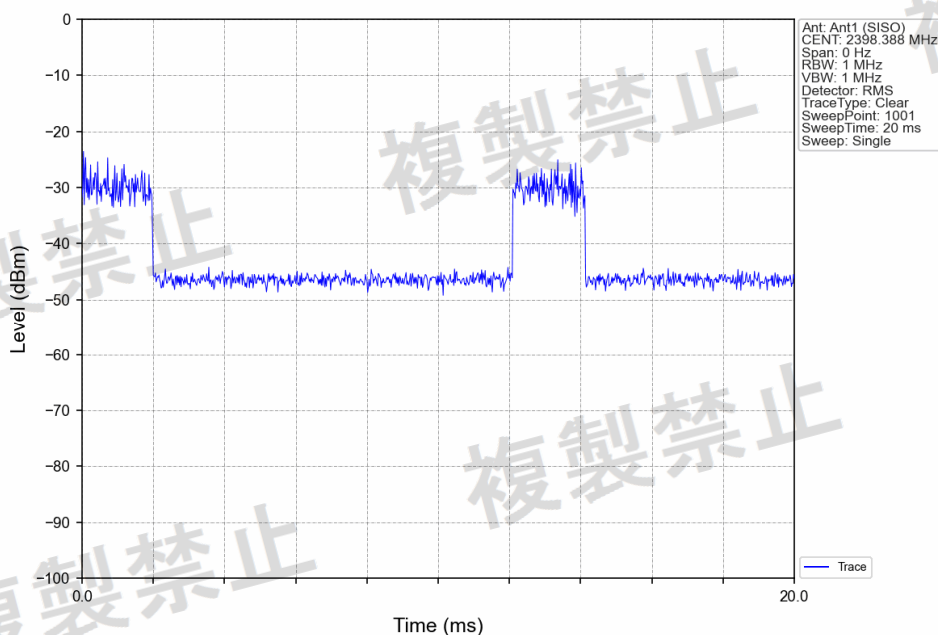
Test Plots (802.11g)

Low Channel

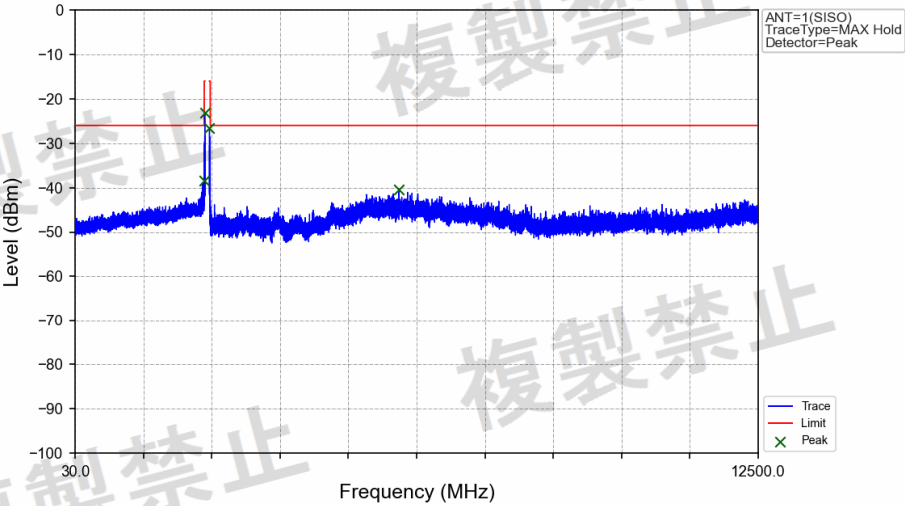


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 2381.500   | -23.80         | -46.01         | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2398.388   | -6.53          | -29.65         | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2484.501   | -35.41         | /              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 5754.000   | -31.44         | /              | -26         | Pass   |



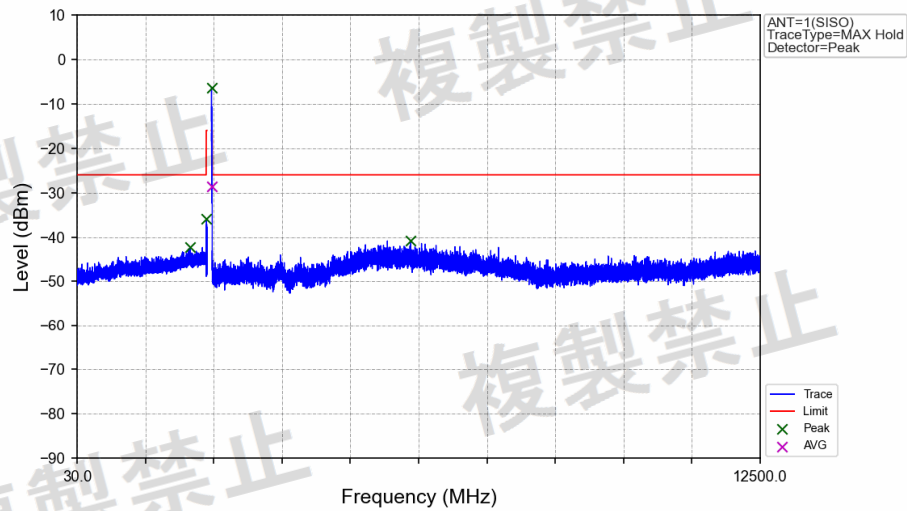


Middle Channel

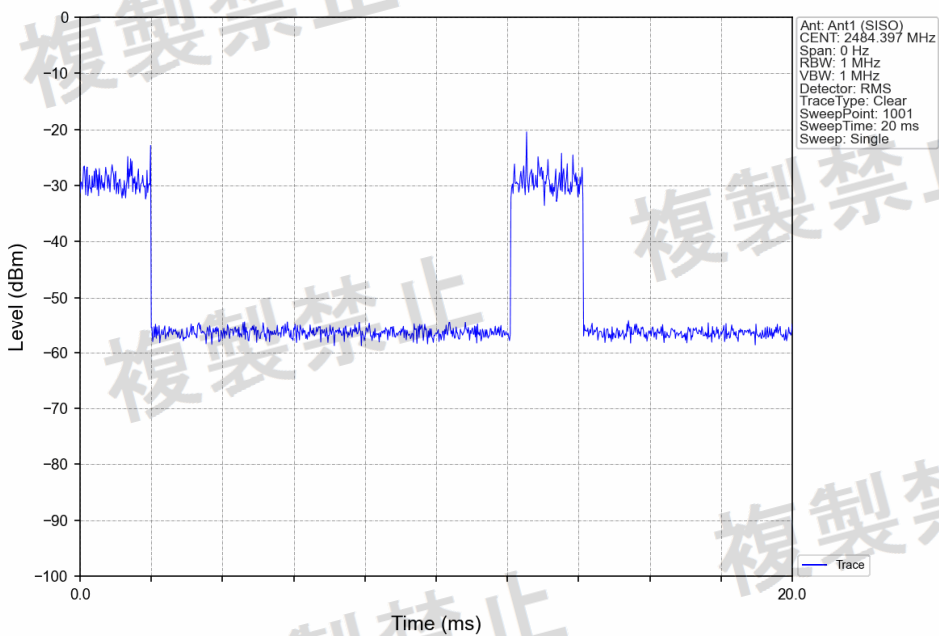


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 2384.500   | -38.47         | /              | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2398.908   | -23.17         | /              | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2483.955   | -26.57         | /              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 5942.500   | -40.46         | /              | -26         | Pass   |

High Channel



| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 2095.000   | -42.27         | /              | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2393.032   | -35.85         | /              | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2484.397   | -6.30          | -28.56         | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 6121.000   | -40.79         | /              | -26         | Pass   |



## 6.5 Carrier Sense Capability

### 6.5.1 Test Requirement

Article 2, Paragraph 1, Item (19).

### 6.5.2 Limit

EUT stop RF transmission signal after carrier inject to EUT.

### 6.5.3 Measuring Instruments and Setting

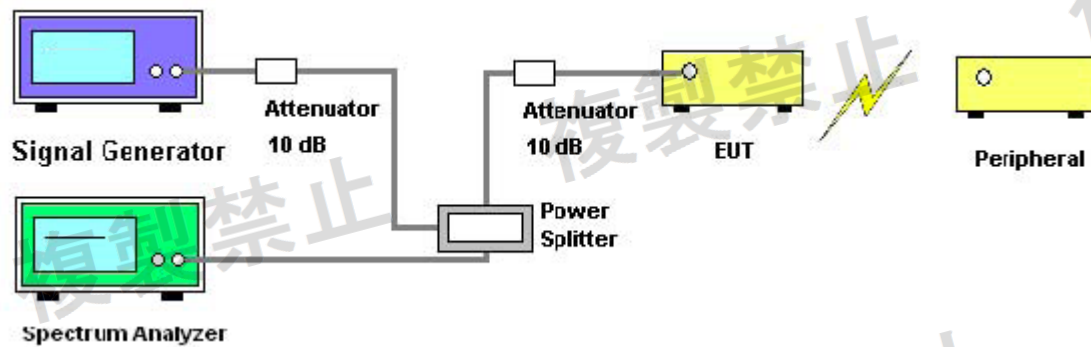
Please refer to section 4 in this report. The following table is the setting of the spectrum analyzer.

| Spectrum Parameter | Setting    |
|--------------------|------------|
| Attenuation        | Auto       |
| RB/VB              | 1MHz       |
| Span               | 50MHz      |
| Sweep              | Continuous |
| Detector           | Peak       |
| Trigger mode       | Video      |

### 6.5.4 Test Procedures

- 1 SSG adjusted the frequency as same as the EUT transmitted signal and emitted the absence of modulation from SSG and power level is  $(On\ 22.79 + Gr - 20 \cdot \log(f)) [dBm]$  (Gr: dBi; f: MHz). Then turn off the RF signal of SSG.
- 2 EUT have transmitted the maximum modulation signal and fixed channelize.
- 3 Setting of SA is following as: RB:1MHz / VB:1MHz / SPAN: 50MHz / AT: 10dB / Ref: 0dBm / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak.
- 4 SSG RF Signal On.
- 5 EUT shall be stop the transmitted any signal and SSG RF Signal Off. Then EUT will be continuous transmitted signal.

### 6.5.5 Test Setup Layout



### 6.5.6 Test Deviation

There is no deviation with the original standard.

### 6.5.7 EUT Operation during Test

The EUT was programmed to be in normal operation mode.

### 6.5.8 Test Result

**Test Result:** Compliant

## 7 Measurements of Receiving Equipment

### 7.1 Secondary Radiated Emissions

#### 7.1.1 Test Requirement

Article 2, Paragraph 1, Item (19).

#### 7.1.2 Limit

According to Article 2-1, the limit on secondary emissions radiated from the receiving equipment within which the function of other radio equipment will not be impaired shall be, in terms of the power of a dummy antenna circuit that has the same electrical constant as the receiving antenna, 4 nW or less at a frequency below 1 GHz and 20 nW or less at a frequency of 1 GHz or higher as measured using the circuit.

#### 7.1.3 Measuring Instruments and setting

Please refer to section 4 in this report. The following table is the setting of the spectrum.

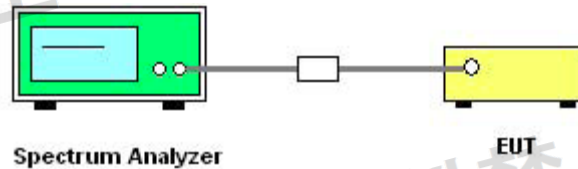
| Spectrum Parameter | Setting                                                       |
|--------------------|---------------------------------------------------------------|
| Attenuation        | Auto                                                          |
| RB/VB              | 100 kHz (below 1GHz emissions) / 1 MHz (above 1GHz emissions) |
| Detector           | Peak                                                          |
| Trace              | Max Hold                                                      |
| Sweep Time         | Auto                                                          |

#### 7.1.4 Test Procedures

- 1 EUT has the continuous reception mode and fixed only one channelize.
- 2 Setting of SA is following as RB / VB: 100 kHz (below 1GHz emissions) / 1 MHz (above 1GHz emissions) / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold
- 3 SA set RB: 100kHz and VB: 100kHz. Then adjust to start frequency 30MHz and stop frequency 1000MHz. Search to mark peak reading value + cable loss shall be less than 4nW
- 4 SA set RB: 1MHz and VB: 1MHz. Then adjust to start frequency 1000MHz and stop frequency 12500MHz. Search to mark peak reading value + cable loss shall be less than 20nW

5 If power level of lower emissions are more than 1/10 of limit (0.4nW for  $f < 1\text{GHz}$ , 2nW for  $f \geq 1\text{GHz}$ ), all those are to be indicated in the 2nd and 3rd lines. If others are 1/10 or less more of the limit, no necessary to be indicated

#### 7.1.5 Test Setup Layout



#### 7.1.6 Test Deviation

There is no deviation with the original standard.

#### 7.1.7 EUT Operation during Test

The EUT was programmed to be in receiving mode.

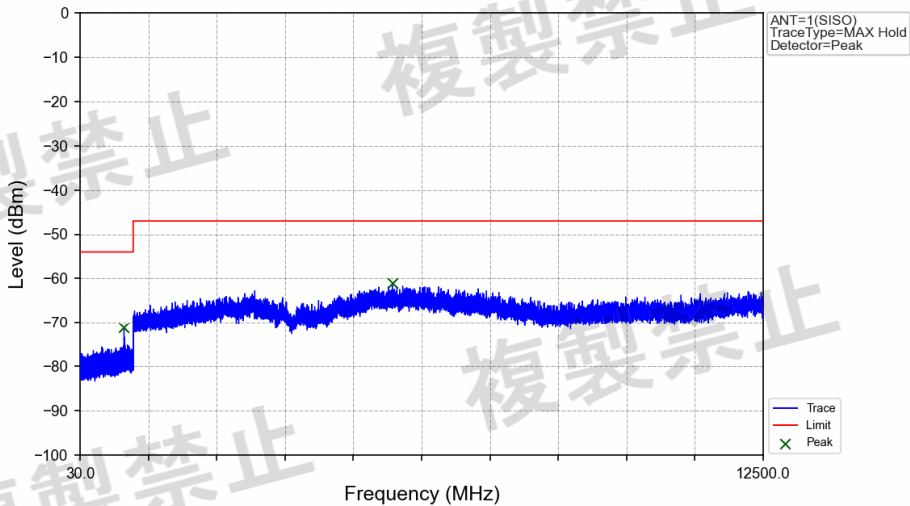
## 7.1.8 Test Result

| Modulation                                        | Channel | Test Mode | Test Result |
|---------------------------------------------------|---------|-----------|-------------|
| 802.11b                                           | Low     | Receiving | PASS        |
|                                                   | Middle  | Receiving | PASS        |
|                                                   | High    | Receiving | PASS        |
| 802.11g                                           | Low     | Receiving | PASS        |
|                                                   | Middle  | Receiving | PASS        |
|                                                   | High    | Receiving | PASS        |
| 802.11n-HT20                                      | Low     | Receiving | PASS        |
|                                                   | Middle  | Receiving | PASS        |
|                                                   | High    | Receiving | PASS        |
| 802.11n-HT40                                      | Low     | Receiving | PASS        |
|                                                   | Middle  | Receiving | PASS        |
|                                                   | High    | Receiving | PASS        |
| 802.11ax-HE20                                     | Low     | Receiving | PASS        |
|                                                   | Middle  | Receiving | PASS        |
|                                                   | High    | Receiving | PASS        |
| 802.11ax-HE40                                     | Low     | Receiving | PASS        |
|                                                   | Middle  | Receiving | PASS        |
|                                                   | High    | Receiving | PASS        |
| Remark: Only the worst case was reported(802.11b) |         |           |             |

| Modulation | Channel | Band (MHz) | Frequency (MHz) | Max Value (dBm) | Max Value (nW) | Limit (nW) |
|------------|---------|------------|-----------------|-----------------|----------------|------------|
| 802.11b    | Low     | 30-1000    | 833             | -71.23          | 0.075          | 4          |
|            |         | 1000-12500 | 5730            | -61.07          | 0.782          | 20         |
|            | Middle  | 30-1000    | 970.85          | -75.15          | 0.031          | 4          |
|            |         | 1000-12500 | 5996            | -61.11          | 0.774          | 20         |
|            | High    | 30-1000    | 449.35          | -74.51          | 0.035          | 4          |
|            |         | 1000-12500 | 3410            | -57.43          | 1.807          | 20         |

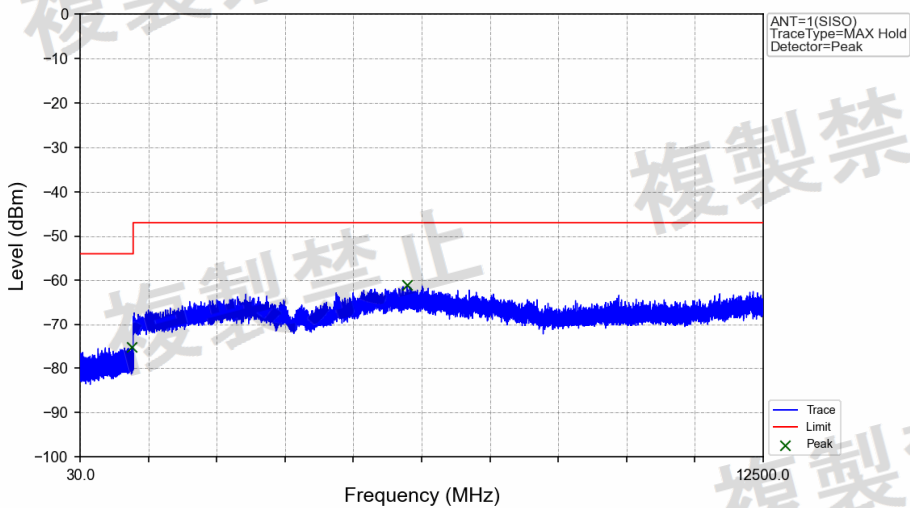
Test Plot (802.11b)

Low Channel



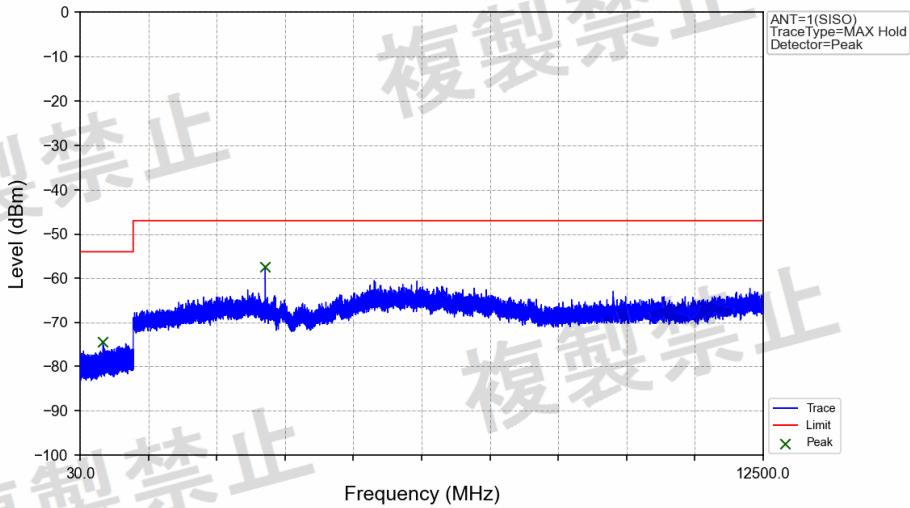
| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 833.000    | -71.23         | /              | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 5730.000   | -61.07         | /              | -47         | Pass   |

Middle Channel



| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 970.850    | -75.15         | /              | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 5996.000   | -61.11         | /              | -47         | Pass   |

High Channel



| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 449.350    | -74.51         | /              | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 3410.000   | -57.43         | /              | -47         | Pass   |

## 8 Measurements of Telecommunications circuit connection equipment

### 8.1 Interference prevention function

#### 8.1.1 Test Requirement

Test requirement is in Clause 3.5(2), the identification code shall be 48 bits long.

#### 8.1.2 Conditions etc. of test equipment

- (1) The demodulator shall be able to demodulate the transmitting signal from the radio equipment and display contents of the identification code.
- (2) The opposite equipment shall be able to transmit the identification code as same as the transmitting signal from the radio equipment

#### 8.1.3 Test Procedure

- (1) The radio equipment with automatic transmitting function of identification code A. Transmit the assigned identification code from the radio equipment. B. Confirm the identification code received by the demodulator.
- (2) The radio equipment with automatic receiving function of identification code A. Transmit the assigned identification code from the opposite equipment.

#### 8.1.4 Test Setup Layout



#### 8.1.5 Test Deviation

There is no deviation with the original standard.

#### 8.1.6 EUT Operation during Test

The EUT was programmed to be in normal operation mode.

**8.1.7 Test Result**

| Item                | Modulation    | Test mode        | Results |
|---------------------|---------------|------------------|---------|
| Identification code | 802.11b       | Normal Operation | PASS    |
| Identification code | 802.11g       | Normal Operation | PASS    |
| Identification code | 802.11n-HT20  | Normal Operation | PASS    |
| Identification code | 802.11n-HT40  | Normal Operation | PASS    |
| Identification code | 802.11ax-HE20 | Normal Operation | PASS    |
| Identification code | 802.11ax-HE40 | Normal Operation | PASS    |

Identification code: 88:00:33:77:0E:97

## 9 Test Setup View



## 10 Photographs - Constructional Details

Note: Please refer to appendix: Appendix-Y1-Photos

===== End of Report =====