

# RF TEST REPORT

## Client Information:

Applicant: Guangzhou Gewu E-Commerce Co., Ltd.  
Applicant add.: Room 114, No. 1, Chuangyi 4th Lane, Longdong, Tianhe District, Guangzhou, China  
Manufacturer: Guangzhou Gewu E-Commerce Co., Ltd.  
Manufacturer add.: Room 114, No. 1, Chuangyi 4th Lane, Longdong, Tianhe District, Guangzhou, China

## Product Information:

Product Name: 2.4G Wireless Remote Controller  
Model No.: 2.4G WXYKQ  
Brand Name: N/A  
Test samples.: AIT23112801001  
FCC ID: 2BDPE-2-4GWXYKQ  
Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.249

## Prepared By:

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Date of Receipt: 2023.11.28

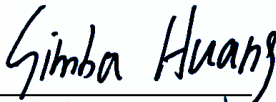
Date of Test: 2023.11.28-2023.12.05

Date of Issue: 2023.12.05

Test Result: Pass

This device described above has been tested by Dongguan Yaxu (AiT) Technology Limited and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Reviewed by:   
Simba Huang

Approved by:   
Seal.chen

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## 1. TEST SUMMARY

### 1.1. TEST STANDARDS

The tests were performed according to following standards:

**FCC Rules Part 15.249:** Operation within the bands 902-928 MHz, 2400-2483.5 MHz, 5725-5875 MHz, and 24.0-24.25 GHz.

**ANSI C63.10-2013:** American National Standard for Testing Unlicensed Wireless Devices.

### 1.2. REPORT VERSION

| Revised No. | Date of issue | Description |
|-------------|---------------|-------------|
| 01          | 2023.12.05    | Original    |
|             |               |             |
|             |               |             |
|             |               |             |

### 1.3. TEST DESCRIPTION

| FCC Rules Part 15.249                 |                                                                     |        |               |
|---------------------------------------|---------------------------------------------------------------------|--------|---------------|
| Test Item                             | Section in CFR 47                                                   | Result | Test Engineer |
|                                       | FCC                                                                 |        |               |
| Antenna requirement                   | 15.203                                                              | Pass   | Simba Huang   |
| AC Power Line Conducted Emissions     | 15.207                                                              | N/A    | /             |
| 20dB Bandwidth                        | Section 15.215(c)                                                   | Pass   | Simba Huang   |
| Band edge & Restricted band Emissions | Section 15.249(d), Section 15.205(a)                                | Pass   | Simba Huang   |
| Radiated Spurious Emissions           | Section 15.205(a), Section 15.209(a), Section 15.249, Section 15.35 | Pass   | Simba Huang   |

Note:

1. The measurement uncertainty is not included in the test result.
2. "N/A" indicates that it is not applicable.

### 1.4. TABLE OF CARRIER FREQUENCY

| Channel Number | Frequency MHz | Channel Number | Frequency MHz | Channel Number | Frequency MHz |
|----------------|---------------|----------------|---------------|----------------|---------------|
| 1              | 2475          | /              | /             | /              | /             |

## 1.5. MEASUREMENT UNCERTAINTY

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 2 "system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device. Below is the best Measurement Uncertainty

| Test Item                                                                                             | Frequency Range | Measurement Uncertainty | Notes |
|-------------------------------------------------------------------------------------------------------|-----------------|-------------------------|-------|
| Radiated Emission                                                                                     | 0.009MHz-30MHz  | 3.10dB                  | (1)   |
| Radiated Emission                                                                                     | 30MHz-1GHz      | 3.75dB                  | (1)   |
| Radiated Emission                                                                                     | 1GHz-18GHz      | 3.88dB                  | (1)   |
| Radiated Emission                                                                                     | 18GHz-40GHz     | 3.88dB                  | (1)   |
| AC Power Line Conducted Emission                                                                      | 0.15MHz ~ 30MHz | 1.20dB                  | (1)   |
| Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%. |                 |                         |       |

## 1.6. ENVIRONMENTAL CONDITIONS

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

|                    |             |
|--------------------|-------------|
| Temperature:       | 15~35°C     |
| Relative Humidity: | 30~60 %     |
| Air Pressure:      | 950~1050mba |

## 2. GENERAL INFORMATION

### 2.1. GENERAL DESCRIPTION OF EUT

|                        |                                                                                                                                                                                                                                                                      |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Sample Number:    | AIT23112801001                                                                                                                                                                                                                                                       |
| Product Name:          | 2.4G Wireless Remote Controller                                                                                                                                                                                                                                      |
| Trade Mark:            | N/A                                                                                                                                                                                                                                                                  |
| Model/Type reference:  | 2.4G WXYKQ                                                                                                                                                                                                                                                           |
| Serial model(s):       | M3FJD, M7FZD, X3FJD, SM003CGSBD, SM003CXSD, SM004TJSBD, SM0005, SM0006, SM0007, SM0008, SM0009, SM0010, SM0011, SM0012, SM0013, SM0014, SM0015, SM0016, SM0017, SM0018, SM0019, SM0020                                                                               |
| Difference Description | All transmitters are the same, there is no difference, only the receiver part is different.<br>Receiver part: The circuit design and PCB design of the product are the same as the internal structure, only the Color, LED chip Qty, battery capacity are different. |
| Power supply           | DC 3V                                                                                                                                                                                                                                                                |
| Hardware version:      | N/A                                                                                                                                                                                                                                                                  |
| Software version:      | N/A                                                                                                                                                                                                                                                                  |
| <b>Specification</b>   |                                                                                                                                                                                                                                                                      |
| Modulation:            | GFSK                                                                                                                                                                                                                                                                 |
| Operation frequency:   | 2475 MHz                                                                                                                                                                                                                                                             |
| Channel number:        | 1                                                                                                                                                                                                                                                                    |
| Antenna type:          | PCB Antenna                                                                                                                                                                                                                                                          |
| Antenna gain:          | Max. 0.59dBi                                                                                                                                                                                                                                                         |

## 2.2. MEASUREMENT INSTRUMENTS LIST

| No                                                                                                                                                                           | Test Equipment                      | Manufacturer | Model No        | Serial No    | Cal. Date  | Cal. Due Date |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------|-----------------|--------------|------------|---------------|
| 1                                                                                                                                                                            | Spectrum Analyzer                   | R&S          | FSV40           | 101470       | 2023.09.08 | 2024.09.07    |
| 2                                                                                                                                                                            | Spectrum Analyzer                   | Keysight     | N9020A          | MY51280643   | 2023.09.08 | 2024.09.07    |
| 3                                                                                                                                                                            | EMI Measuring Receiver              | R&S          | ESR             | 101660       | 2023.09.08 | 2024.09.07    |
| 4                                                                                                                                                                            | Low Noise Pre-Amplifier             | HP           | HP8447E         | 1937A01855   | 2023.09.08 | 2024.09.07    |
| 5                                                                                                                                                                            | Low Noise Pre-Amplifier             | Tsj          | MLA-0120-A02-34 | 2648A04738   | 2023.09.08 | 2024.09.07    |
| 6                                                                                                                                                                            | Passive Loop                        | ETS          | 6512            | 00165355     | 2022.09.04 | 2024.09.03    |
| 7                                                                                                                                                                            | TRILOG Super Broadband test Antenna | SCHWARZBECK  | VULB9160        | 9160-3206    | 2021.08.29 | 2024.08.28    |
| 8                                                                                                                                                                            | Broadband Horn Antenna              | SCHWARZBECK  | BBHA9120D       | 452          | 2021.08.29 | 2024.08.28    |
| 9                                                                                                                                                                            | SHF-EHF Horn Antenna 15-40GHz       | SCHWARZBECK  | BBHA9170        | BBHA9170367d | 2021.08.29 | 2024.08.28    |
| 10                                                                                                                                                                           | EMI Measuring Receiver              | R&S          | ESR             | 101160       | 2023-09-13 | 2024-09-12    |
| 11                                                                                                                                                                           | LISN                                | SCHWARZBECK  | NNLK 8129       | 8130179      | 2023-10-29 | 2024-10-28    |
| 12                                                                                                                                                                           | Pulse Limiter                       | R&S          | ESH3-Z2         | 102789       | 2023-09-13 | 2024-09-12    |
| 13                                                                                                                                                                           | Pro.Temp&Humi.chamber               | MENTEK       | MHP-150-1C      | MAA08112501  | 2023.09.08 | 2024.09.07    |
| 14                                                                                                                                                                           | RF Automatic Test system            | MW           | MW100-RFCB      | 21033016     | 2023.09.08 | 2024.09.07    |
| 15                                                                                                                                                                           | Signal Generator                    | Agilent      | N5182A          | MY50143009   | 2023.09.08 | 2024.09.07    |
| 16                                                                                                                                                                           | Wideband Radio communication tester | R&S          | CMW500          | 1201.0002K50 | 2023.09.08 | 2024.09.07    |
| 17                                                                                                                                                                           | RF Automatic Test system            | MW           | MW100-RFCB      | 21033016     | 2023.09.08 | 2024.09.07    |
| 18                                                                                                                                                                           | DC power supply                     | ZHAOXIN      | RXN-305D-2      | 28070002559  | N/A        | N/A           |
| 19                                                                                                                                                                           | RE Software                         | EZ           | EZ-EMC_RE       | Ver.AIT-03A  | N/A        | N/A           |
| 20                                                                                                                                                                           | CE Software                         | EZ           | EZ-EMC_CE       | Ver.AIT-03A  | N/A        | N/A           |
| 21                                                                                                                                                                           | RF Software                         | MW           | MTS 8310        | 2.0.0.0      | N/A        | N/A           |
| 22                                                                                                                                                                           | temporary antenna connector(Note)   | NTS          | R001            | N/A          | N/A        | N/A           |
| Note: The temporary antenna connector is soldered on the PCB board in order to perform conducted tests and this temporary antenna connector is listed in the equipment list. |                                     |              |                 |              |            |               |

## 2.3. DESCRIPTION OF TEST MODES

Operation Frequency List: The EUT has been tested under typical operating condition. The Applicant provides communication tools software to control the EUT for staying in continuous transmitting and receiving mode for testing.

Test Frequency: 2475 MHz

### Test mode

|                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| For RF test items:                                                                                                                                                                                                       |
| The engineering test program was provided and enabled to make EUT continuous transmit.                                                                                                                                   |
| For Radiated spurious emissions test item:                                                                                                                                                                               |
| The engineering test program was provided and enabled to make EUT continuous transmit. The EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report. |

## 2.4. TEST SOFTWARE

| Software name                           | Model    | Version       |
|-----------------------------------------|----------|---------------|
| Conducted emission Measurement Software | EZ-EMC   | EMC-Con 3A1.1 |
| Radiated emission Measurement Software  | EZ-EMC   | FA-03A.2.RE   |
| Bluetooth and WIFI Test System          | JS1120-3 | 2.5.77.0418   |

### 3. TEST ITEM AND RESULTS

#### 3.1. ANTENNA REQUIREMENT

##### Requirement

##### **FCC CFR Title 47 Part 15 Subpart C Section 15.203:**

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

##### Test Result

The antenna is PCB Antenna. The maximum gain of the antenna is 0 dBi.

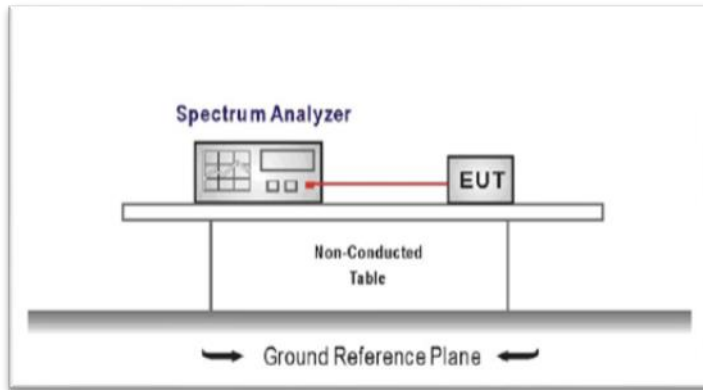
**The unit does meet the FCC requirements.**

## 3.2. 20dB BANDWIDTH

### Limit

Operation Frequency range 2400 ~ 2483.5 MHz.

### Test Configuration



### Test Procedure

1. The transmitter output was connected to the spectrum analyzer through an attenuator, the path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously
3. Use the following spectrum analyzer settings:  
 Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel  
 RBW  $\geq$  1% of the 20 dB bandwidth, VBW  $\geq$  RBW  
 Sweep = auto, Detector function = peak, Trace = max hold
4. Measure and record the results in the test report.

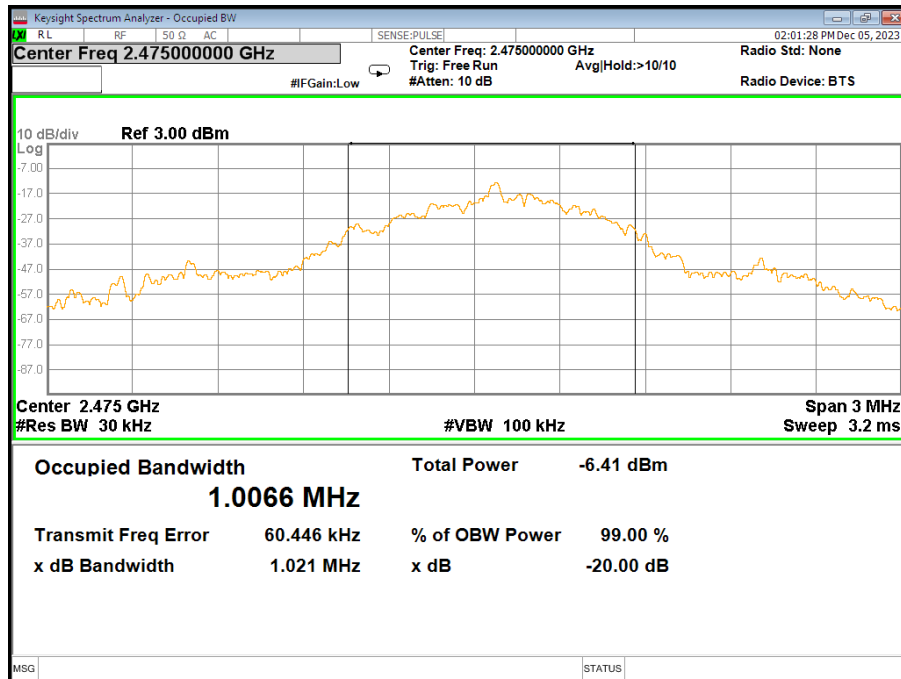
### Test Mode

Please refer to the clause 2.2.

### Test Results

| Channel frequency (MHz) | 20dB Bandwidth [MHz] | Verdict |
|-------------------------|----------------------|---------|
| 2475                    | 1.021                | PASS    |

2475 MHz



### 3.3. CONDUCTED EMISSION

#### Limit

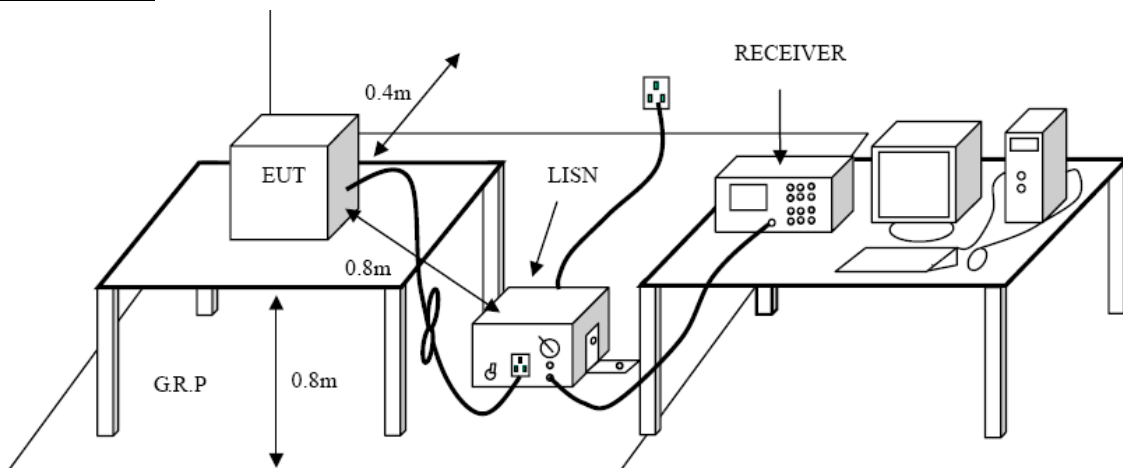
Conducted Emission Test Limit

| Frequency     | Maximum RF Line Voltage (dB $\mu$ V) |               |
|---------------|--------------------------------------|---------------|
|               | Quasi-peak Level                     | Average Level |
| 150kHz~500kHz | 66 ~ 56 *                            | 56 ~ 46 *     |
| 500kHz~5MHz   | 56                                   | 46            |
| 5MHz~30MHz    | 60                                   | 50            |

Notes:

- (1) \*Decreasing linearly with logarithm of the frequency.
- (2) The lower limit shall apply at the transition frequencies.
- (3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

#### Test Configuration



#### Test Procedure

1. The EUT was setup according to ANSI C63.10:2013 requirements.
2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface.
3. The EUT and simulators are connected to the main power through a line impedances stabilization network (LISN). The LISN provides a 50ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
4. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
5. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
6. Conducted Emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
7. During the above scans, the emissions were maximized by cable manipulation.

#### Test Results

N/A

The EUT is powered by DC power.

### 3.4. RADIATED SPURIOUS EMISSIONS

#### LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.209(a) and 15.205(a)

#### Standard FCC15.249

| Fundamental Frequency | Field Strength of Fundamental<br>(millivolts/meter) | Field Strength of Harmonics<br>(microvolts/meter) |
|-----------------------|-----------------------------------------------------|---------------------------------------------------|
| 900-928MHz            | 50 (94dBuV/m @3m)                                   | 500 (54dBuV/m @3m)                                |
| 2400-2483.5MHz        | 50 (94dBuV/m @3m)                                   | 500 (54dBuV/m @3m)                                |
| 5725-5875MHz          | 50 (94dBuV/m @3m)                                   | 500 (54dBuV/m @3m)                                |
| 24.0-24.25GHz         | 250 (108dBuV/m @3m)                                 | 2500 (68dBuV/m @3m)                               |

#### Standard FCC 15.209

| Frequency<br>(MHz)                                                                                                                                                                                                                                                                                          | Distance<br>Meters | Field Strengths Limit                                       |                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------------------------------------------------------|----------------|
|                                                                                                                                                                                                                                                                                                             |                    | $\mu$ V/m                                                   | dB( $\mu$ V)/m |
| 0.009 ~ 0.490                                                                                                                                                                                                                                                                                               | 300                | 2400/F(kHz)                                                 | ---            |
| 0.490 ~ 1.705                                                                                                                                                                                                                                                                                               | 30                 | 24000/F(kHz)                                                | ---            |
| 1.705 ~ 30                                                                                                                                                                                                                                                                                                  | 30                 | 30                                                          | ---            |
| 30 ~ 88                                                                                                                                                                                                                                                                                                     | 3                  | 100                                                         | 40.0           |
| 88 ~ 216                                                                                                                                                                                                                                                                                                    | 3                  | 150                                                         | 43.5           |
| 216 ~ 960                                                                                                                                                                                                                                                                                                   | 3                  | 200                                                         | 46.0           |
| 960 ~ 1000                                                                                                                                                                                                                                                                                                  | 3                  | 500                                                         | 54.0           |
| Above 1000                                                                                                                                                                                                                                                                                                  | 3                  | Other:74.0dB( $\mu$ V)/m(Peak) 54.0dB( $\mu$ V)/m (Average) |                |
| Remark: (1) Emission level dB $\mu$ V = 20 log Emission level $\mu$ V/m<br>(2) The smaller limit shall apply at the cross point between two frequency bands.<br>(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system. |                    |                                                             |                |

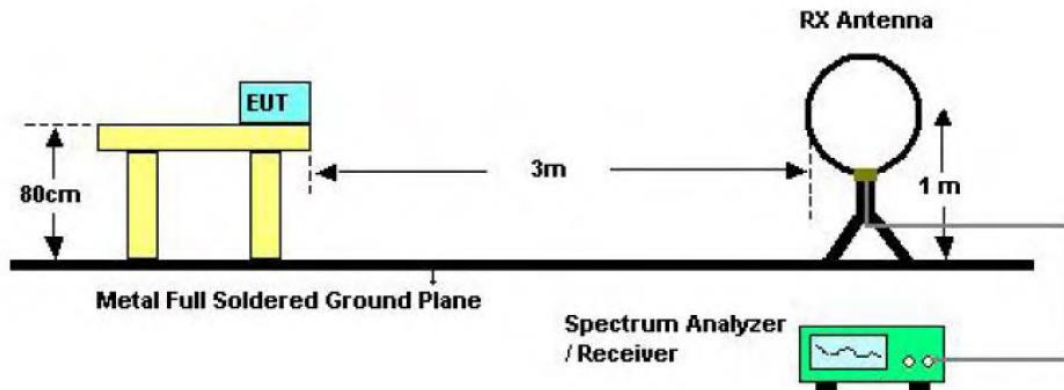
#### FREQUENCY RANGE OF RADIATED MEASUREMENT

| Spectrum Parameter    | Setting                                                                        |
|-----------------------|--------------------------------------------------------------------------------|
| Start ~Stop Frequency | 9KHz~150KHz/RB 200Hz for QP                                                    |
| Start ~Stop Frequency | 150KHz~30MHz/RB 9KHz for QP                                                    |
| Start ~Stop Frequency | 30MHz~1000MHz/RB 120KHz for QP                                                 |
| Start ~Stop Frequency | 1GHz~26.5GHz<br>RBW 1MHz/ VBW 1MHz for Peak,<br>RBW 1MHz/ VBW 10Hz for Average |

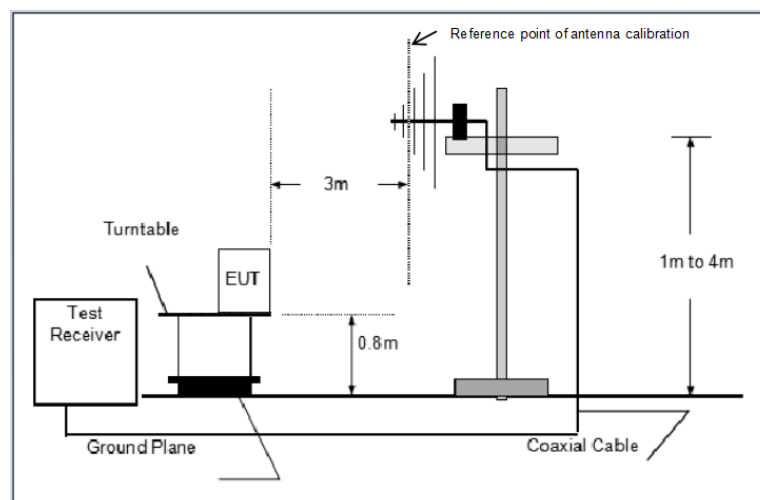
| Receiver Parameter    | Setting                     |
|-----------------------|-----------------------------|
| Start ~Stop Frequency | 9KHz~150KHz/RB 200Hz for QP |

|                       |                                |
|-----------------------|--------------------------------|
| Start ~Stop Frequency | 150KHz~30MHz/RB 9KHz for QP    |
| Start ~Stop Frequency | 30MHz~1000MHz/RB 120KHz for QP |

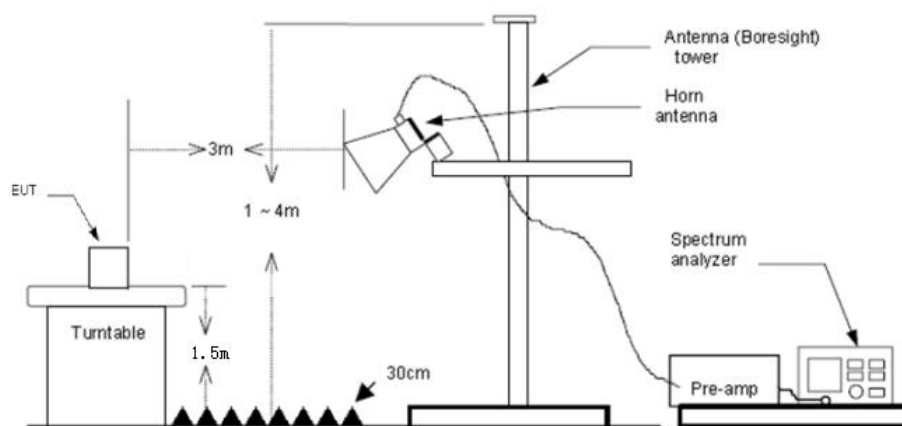
### Test Configuration



Below 30MHz Test Setup



Below 1000MHz Test Setup



Above 1GHz Test Setup

**Test Procedure**

1. The EUT was setup and tested according to ANSI C63.10:2013
2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.
4. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
5. Set to the maximum power setting and enable the EUT transmit continuously.
6. Use the following spectrum analyzer settings
  - (1) Span shall wide enough to fully capture the emission being measured;
  - (2) Below 1 GHz:  
RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold;  
If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
  - (3) From 1 GHz to 10<sup>th</sup> harmonic:  
RBW=1MHz, VBW=3MHz Peak detector for Peak value.  
RBW=1MHz, VBW=10Hz Peak detector for Average value.

**TEST MODE:**

Please refer to the clause 2.2.

**TEST RESULTS**

☒ **Passed**                      ☐ **Not Applicable**

**9 KHz~30 MHz and 18GHz~25GHz**

From 9 KHz~30 MHz and 18GHz~25GHz: Conclusion: PASS

Note:

- 1) Final level = Reading level + Correct Factor  
Correct Factor=Antenna Factor + Cable Loss -Preamplifier Factor
- 2) The emission levels of other frequencies are very lower than the limit and not show in test report.
- 3) The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
- 4) 18GHz ~ 25GHz  
The EUT was pre-scanned the frequency band (18GHz~25GHz), found the radiated level(Background noise) lower than the limit, so don't show on the report. 3

**Radiated field strength of the fundamental signal**

| Frequency (MHz) | Read Level (dBuV) | Correct Factor (dB/m) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dBuV/m) | Polarization | Test value |
|-----------------|-------------------|-----------------------|----------------|---------------------|---------------------|--------------|------------|
| 2475            | 91.16             | -5.04                 | 86.12          | 94.00               | -7.88               | Horizontal   | Peak       |
| 2475            | 78.60             | -5.05                 | 73.55          | 94.00               | -20.45              | Vertical     | Peak       |

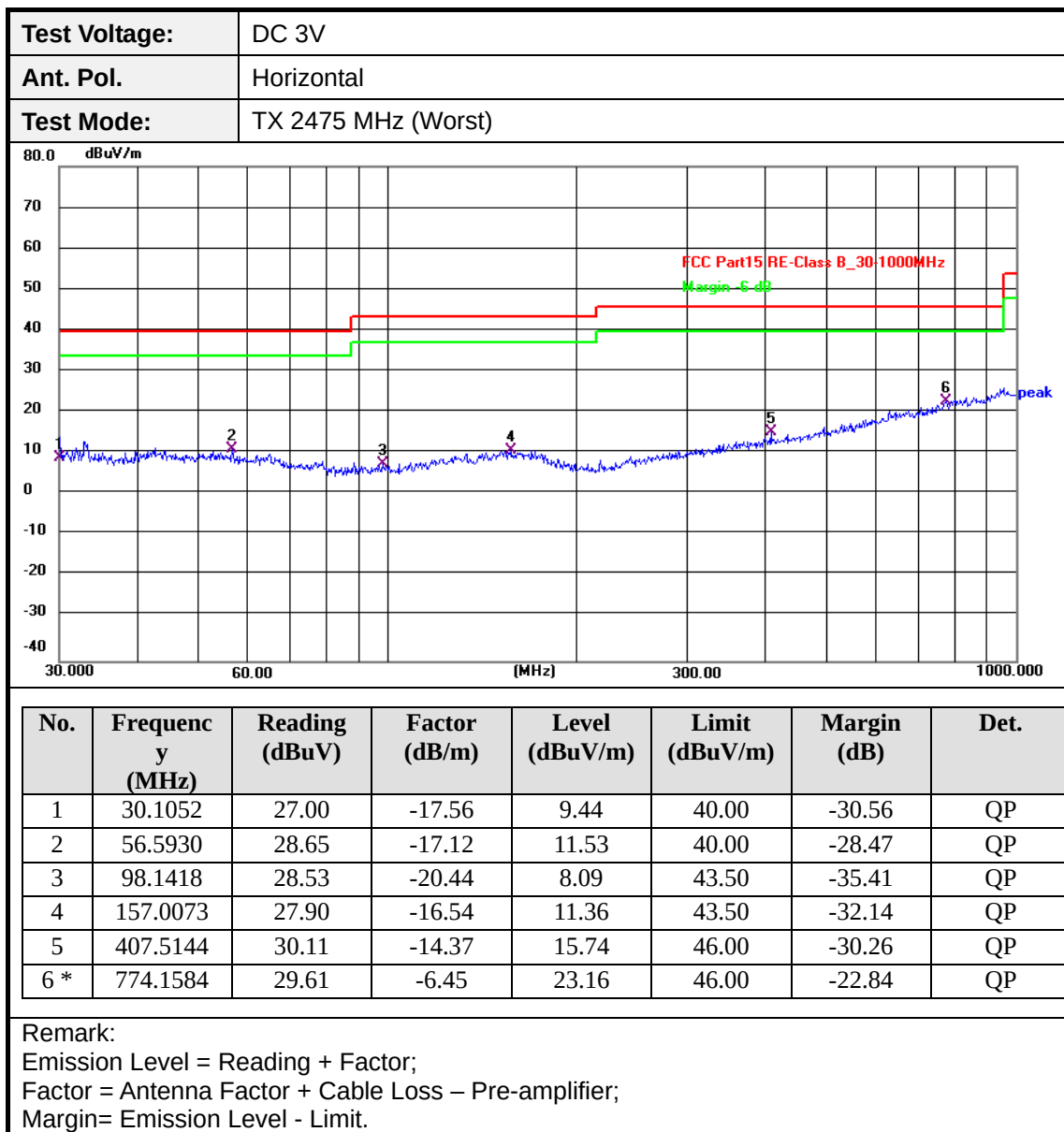
Note:

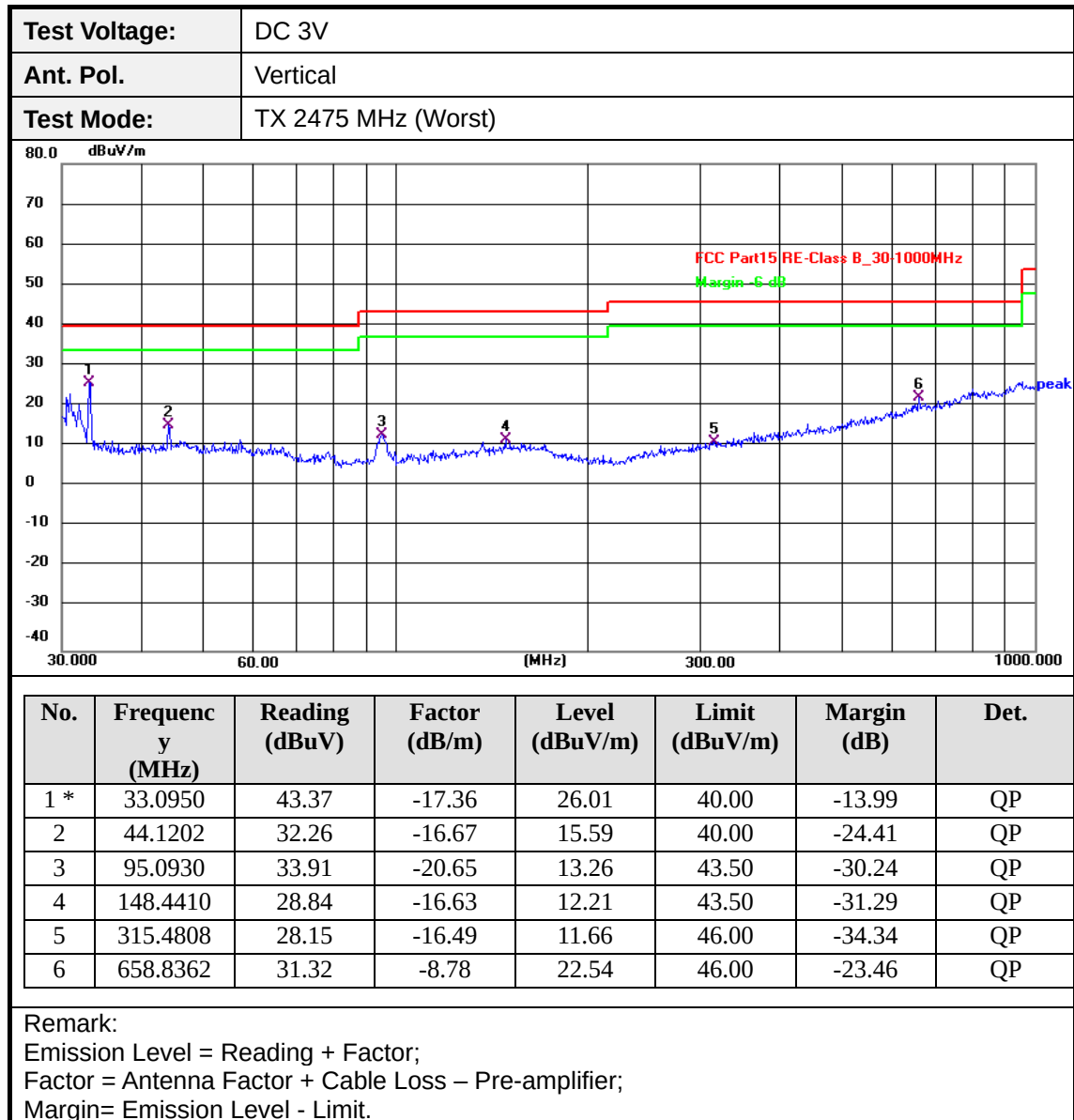
1. Correct Factor=Antenna Factor + Cable Loss -Preamplifier Factor
2. Level = Read Level +Correct Factor
3. The PEAK value is less than the AVG limit, the AVG result no need be show in this report.

**RADIATED EMISSION BELOW 30MHZ**

No emission found between lowest internal used/generated frequencies to 30MHz.

### 30MHz-1GHz





Note:

All test modes had been tested. The TX 2475 MHz is the worst case and recorded in the report.

**Adobe 1GHz****Antenna polarization: Horizontal:**

| Frequency (MHz) | Reading Level (dBuV) | Correct Factor (dB/m) | Measure Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector Type |
|-----------------|----------------------|-----------------------|------------------------|----------------|-------------|---------------|
| 4950            | 47.11                | 5.22                  | 52.33                  | 74             | -21.67      | PEAK          |
| 4950            | 36.72                | 5.22                  | 41.94                  | 54             | -12.06      | AVG           |
| 7425            | 46.34                | 8.06                  | 54.40                  | 74             | -19.60      | PEAK          |
| 7425            | 30.31                | 8.06                  | 38.37                  | 54             | -15.63      | AVG           |

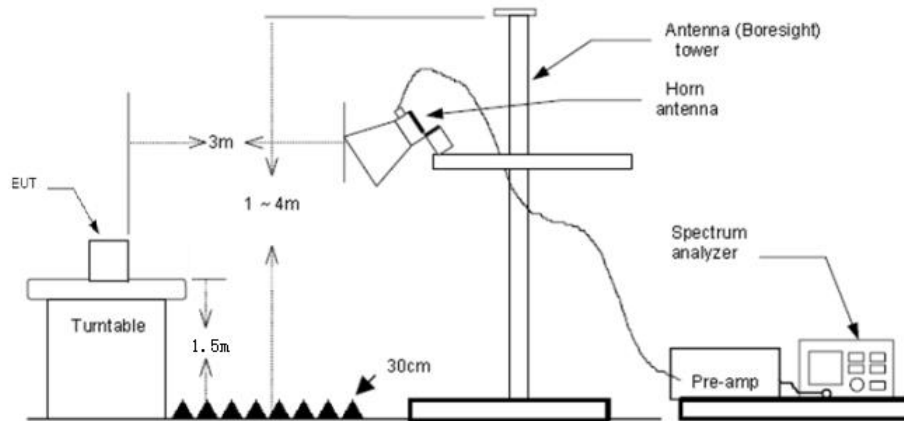
**Antenna polarization: Vertical:**

| Frequency (MHz) | Reading Level (dBuV) | Correct Factor (dB/m) | Measure Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector Type |
|-----------------|----------------------|-----------------------|------------------------|----------------|-------------|---------------|
| 4950            | 47.07                | 5.22                  | 52.29                  | 74             | -21.71      | PEAK          |
| 4950            | 36.24                | 5.22                  | 41.46                  | 54             | -12.54      | AVG           |
| 7425            | 44.07                | 8.06                  | 52.13                  | 74             | -21.87      | PEAK          |
| 7425            | 31.30                | 8.06                  | 39.36                  | 54             | -14.64      | AVG           |

Remark: Other emissions of harmonics are attenuated 20dB below the limits, so it does not recorded in report.

### 3.5. BAND EDGE AND RESTRICTED BAND EMISSIONS(RADIATED)

#### Test Configuration



#### Test Procedure

1. The EUT was setup and tested according to ANSI C63.10:2013
2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.
4. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
5. Set to the maximum power setting and enable the EUT transmit continuously.
6. Use the following spectrum analyzer settings
  - (1) Span shall wide enough to fully capture the emission being measured;  
RBW=1MHz, VBW=3MHz PEAK detector for Peak value.  
RBW=1MHz, VBW=10Hz with PEAK Detector for Average Value.

#### Test Mode

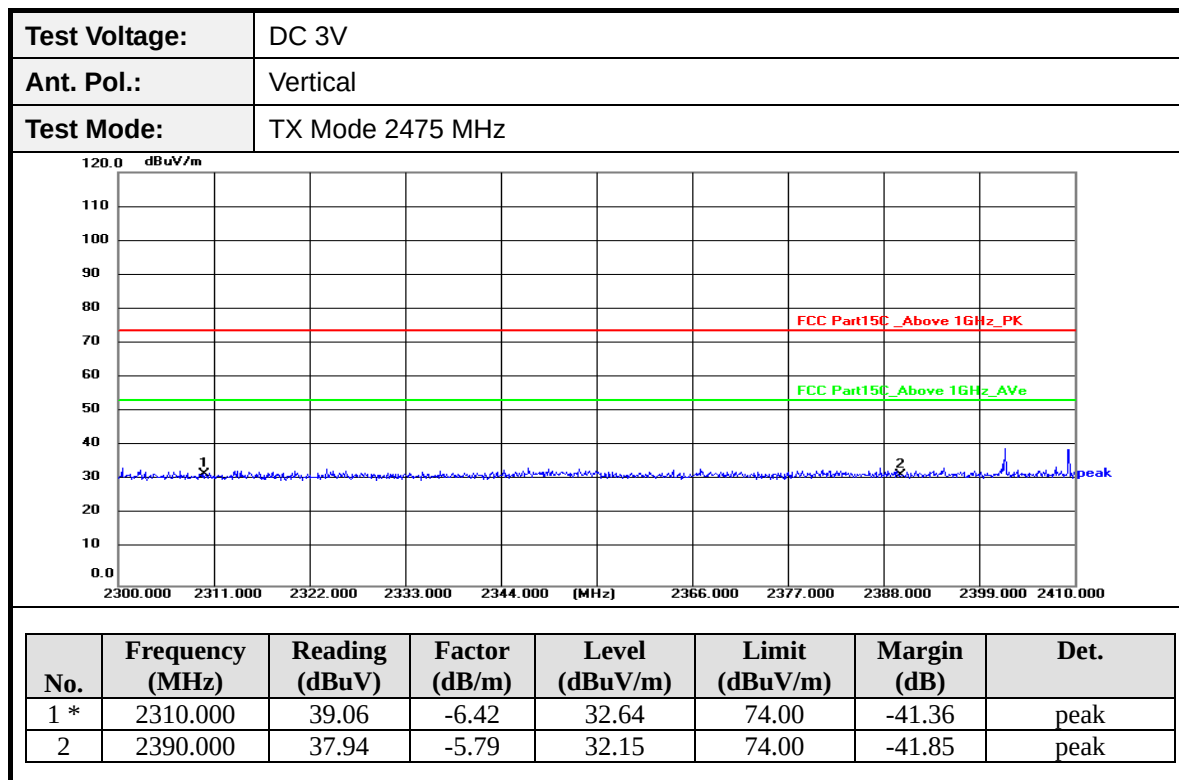
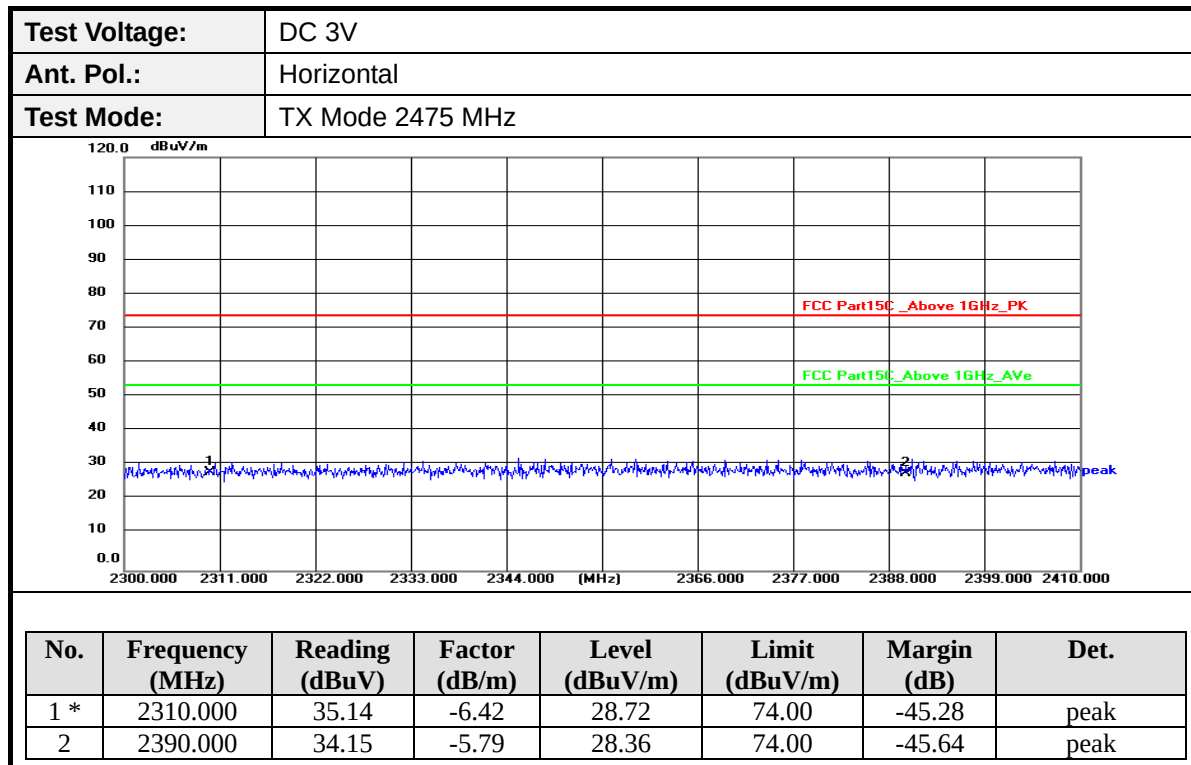
Please refer to the clause 2.2.

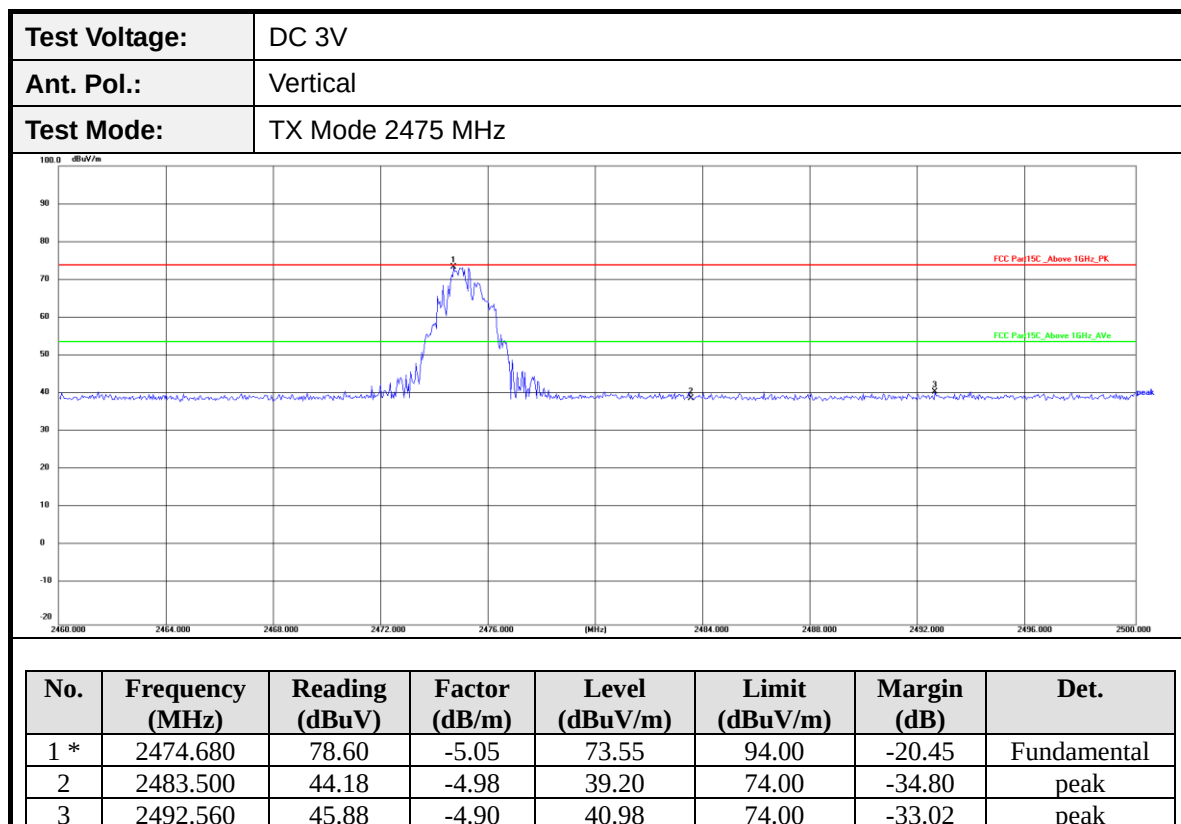
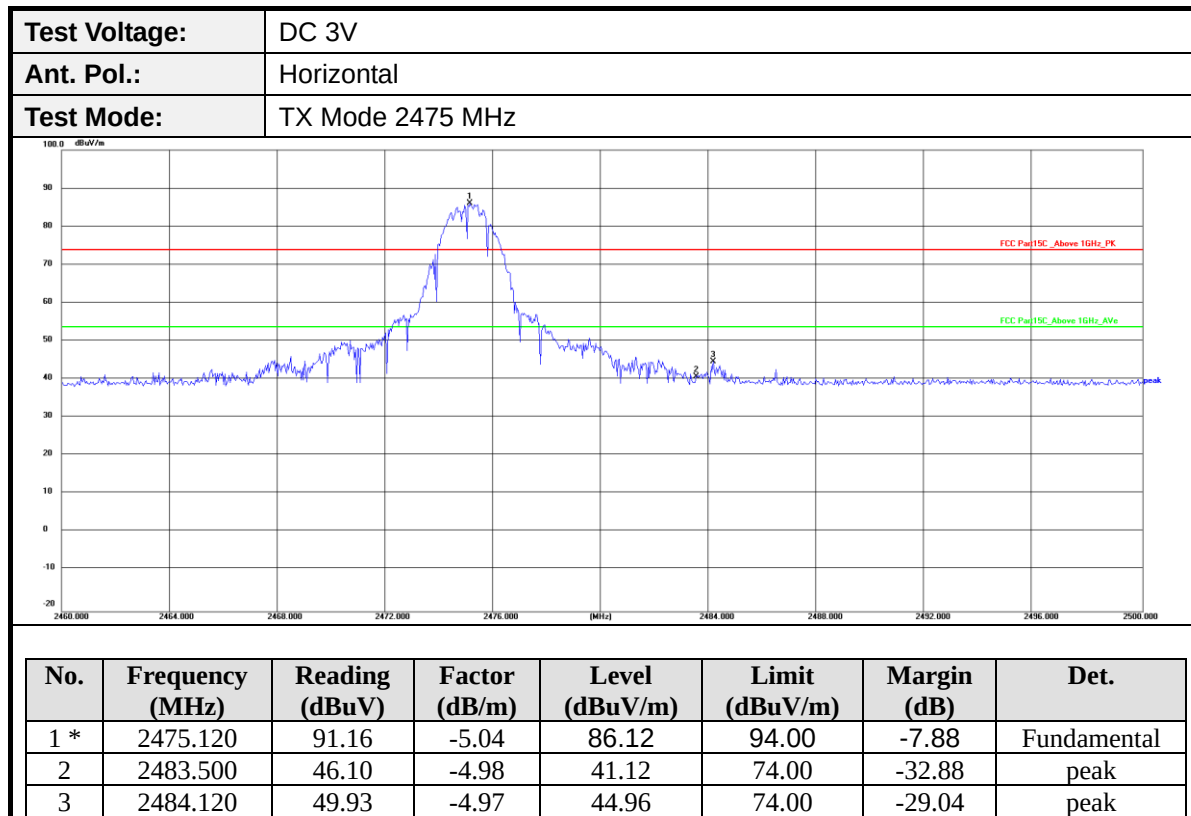
#### Test Results

☒ **Passed** ☐ **Not Applicable**

Note:

- 1) Final level= Read level + Antenna Factor + Cable Loss - Preamp Factor
- 2) Correction Factor = Antenna factor + cable loss
- 3) The peak level is lower than average limit(54dBuV/m), this data is the too weak instrument of signal is unable to test.
- 4) The emission levels of other frequencies are very lower than the limit and not show in test report.





Remarks:

1). Margin= Emission Level – Limit

- 2). *Emission Level = Reading + Factor*
- 3). *Factor = Antenna Factor + Cable Loss – Pre-amplifie*
- 4). *The PEAK value is less than the AVG limit, the AVG result no need be show in this report.*

## 4.EUT TEST PHOTOS

Reference attachment Test Setup Photos

\*\*\*\*\*THE END\*\*\*\*\*