



**MAXLAB Testing Co.,Ltd.**

Report No.: MAX250310110P02-R01

# FCC PART 15 SUBPART C

Battery Case

MODEL No.: N2009

FCC ID: 2A4MT-N2009

REPORT NO.:MAX250310110P02-R01

ISSUE DATE: Mar. 25, 2025

*Prepared for*

Shenzhen Zhenghaixin Technology Co., Ltd.

Building 1, Room 201, 101, No. 28, Langfeng Road, Tangxia Yong Community,  
Yanluo Street, Bao'an District, Shenzhen City

*Prepared by*

MAXLAB Testing Co, Ltd.

1/F, Building B, Xinshidai GR Park, Shiyan Street, Bao'an District,  
Shenzhen, Guangdong, 518052, People's Republic of China



## TABLE OF CONTENT

| Test Report Description                             | Page      |
|-----------------------------------------------------|-----------|
| <b>1. SUMMARY OF TEST RESULTS</b>                   | <b>5</b>  |
| <b>2. GENERAL INFORMATION</b>                       | <b>6</b>  |
| 2.1. Description of Device (EUT)                    | 6         |
| 2.2. Description of Support Units                   | 6         |
| 2.3. Independent Operation Modes                    | 7         |
| 2.4. Test Mode                                      | 7         |
| 2.5. Description of Test Facility                   | 7         |
| 2.6. Measurement Uncertainty                        | 9         |
| <b>3. MEASURING DEVICE AND TEST EQUIPMENT</b>       | <b>10</b> |
| <b>4. 20DB BANDWIDTH</b>                            | <b>12</b> |
| 4.1. Test Procedure                                 | 12        |
| 4.2. Test Setup                                     | 12        |
| 4.3. Test Results                                   | 12        |
| <b>5. POWER LINE CONDUCTED EMISSION MEASUREMENT</b> | <b>14</b> |
| 5.1. Block Diagram of Test Setup                    | 14        |
| 5.2. Limits                                         | 14        |
| 5.3. Test Procedure                                 | 14        |
| 5.4. Measuring Results                              | 15        |
| <b>6. RADIATED EMISSION TEST</b>                    | <b>18</b> |
| 6.1. Measurement Procedure                          | 18        |
| 6.2. Test SET-UP (Block Diagram of Configuration)   | 18        |
| 6.3. Radiated Emission Limit                        | 19        |
| 6.4. Measurement Result                             | 21        |
| <b>7. TEST PHOTOGRAPHS AND EUT PHOTOGRAPHS</b>      | <b>25</b> |



**MAXLAB Testing Co.,Ltd.**

Report No.: MAX250310110P02-R01

## TEST REPORT DESCRIPTION

Applicant : Shenzhen Zhenghaixin Technology Co., Ltd.

Address : Building 1, Room 201, 101, No. 28, Langfeng Road, Tangxia Yong Community,  
Yanluo Street, Bao'an District, Shenzhen City

Manufacturer : Shenzhen Zhenghaixin Technology Co., Ltd.

Address : Building 1, Room 201, 101, No. 28, Langfeng Road, Tangxia Yong Community,  
Yanluo Street, Bao'an District, Shenzhen City

EUT : Battery Case

Model Name : N2009

Trademark : /

Measurement Procedure Used:

| APPLICABLE STANDARDS          |             |
|-------------------------------|-------------|
| STANDARD                      | TEST RESULT |
| FCC 47 CFR Part 15, Subpart C | PASS        |

The above equipment was tested by MAXLAB Testing Co, Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits of FCC Rules Part 15C

The test results of this report relate only to the tested sample identified in this report.

Test Engineer:

Engineer / Cindy Zheng

Technical Manager:

RF Manager / Vivian Jiang



MAXLAB Testing Co.,Ltd.

Report No.: MAX250310110P02-R01

Modified Information

| Version | Report No.          | Revision Data | Summary          |
|---------|---------------------|---------------|------------------|
| Ver.1.0 | MAX250310110P02-R01 | Mar. 25, 2025 | Original Version |
|         |                     |               |                  |

## 1. SUMMARY OF TEST RESULTS

| Test Item                        | Section in CFR 47 | Result |
|----------------------------------|-------------------|--------|
| Antenna requirement              | 15.203            | Pass   |
| AC Power Line Conducted Emission | 15.207            | Pass   |
| Spurious Emission                | 15.209(a)(f)      | Pass   |
| 20dB Bandwidth                   | 15.215            | Pass   |

## 2. GENERAL INFORMATION

### 2.1. Description of Device (EUT)

EUT : Battery Case

Model Number : N2009

Different : /

Model different : /

Power Rating : Input:  
Type-C: 5V/3A, 9V/2A Max  
Wireless: 5W/10W  
Output:  
Type-C: 5V/3A, 9V/2.22A Max  
Wireless: 5W/7.5W/10W  
Battery Capacity: 10000mAh/3.85V/38.5Wh

Operation : 111-205 KHz  
Frequency for WPT

Modulation : MSK

Antenna Type: : Coil Antenna

Date of Received : Mar. 11, 2025

Date of Test : Mar. 12, 2025 to Mar. 25, 2025

### 2.2. Description of Support Units

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

| Item | Equipment    | Mfr/Brand      | Model/Type No. | Series No. | Note      |
|------|--------------|----------------|----------------|------------|-----------|
| E-1  | Battery Case | N/A            | N2010          | N/A        | EUT       |
| E-2  | Phone        | <b>SAMSUNG</b> | S24            | N/A        | Auxiliary |
| E-3  | Adapter      | N/A            | HW-090200CH0   | N/A        | Auxiliary |
| E-4  | Power Bank   | N/A            | KR-007         | N/A        | Auxiliary |

Note: (1)The support equipment was authorized by Declaration of Confirmation.  
(2)For detachable type I/O cable should be specified the length in cm in 『Length』 column.

### 2.3. Independent Operation Modes

| Mode                                                                        | Description                                 | Remark |
|-----------------------------------------------------------------------------|---------------------------------------------|--------|
| 1                                                                           | EUT + Phone(Wireless Output:10W)            | 5%     |
| 2                                                                           |                                             | 50%    |
| 3                                                                           |                                             | 95%    |
| 4                                                                           | EUT + Phone(Wireless Output:7.5W)           | 5%     |
| 5                                                                           |                                             | 50%    |
| 6                                                                           |                                             | 95%    |
| 7                                                                           | EUT + Phone(Wireless Output:5W)             | 5%     |
| 8                                                                           |                                             | 50%    |
| 9                                                                           |                                             | 95%    |
| 10                                                                          | Adapter+Type-C Input + Wireless Output (5W) | 5%     |
| 11                                                                          |                                             | 50%    |
| 12                                                                          |                                             | 95%    |
| 13                                                                          | Power Bank+EUT(5W)                          | 5%     |
| 14                                                                          |                                             | 50%    |
| 15                                                                          |                                             | 95%    |
| 16                                                                          | Power Bank+EUT(10W)                         | 5%     |
| 17                                                                          |                                             | 50%    |
| 18                                                                          |                                             | 95%    |
| 19                                                                          | EUT + Type-C Output(5V/3A)                  | 5%     |
| 20                                                                          |                                             | 50%    |
| 21                                                                          |                                             | 95%    |
| 22                                                                          | EUT + Type-C Output(9V/2.22A)               | 5%     |
| 23                                                                          |                                             | 50%    |
| 24                                                                          |                                             | 95%    |
| Remark: All the modes have tested and recorded the worst mode in the report |                                             |        |

### 2.4. Test Mode

| Test Items                                                                  | Test Voltage | Operation Modes |
|-----------------------------------------------------------------------------|--------------|-----------------|
| CE                                                                          | AC 120V/60Hz | Mode 10         |
| RE                                                                          | DC 3.85V     | Mode 1          |
| Remark: All the modes have tested and recorded the worst mode in the report |              |                 |



**MAXLAB Testing Co.,Ltd.**

**Report No.: MAX250310110P02-R01**

## 2.5. Description of Test Facility

### Site Description

EMC Lab.:

FCC-Registration No:562200 Designation Number: CN1338

MAXLAB Testing Co., Ltd.has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

A2LA-Lab Cert.No:4707.01

MAXLAB Testing Co, Ltd.has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

Industry Canada Registration Number.Is:11093A

CAB identifier: CN0019

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing.

Name of Firm:

MAXLAB Testing Co, Ltd.

Site Location:

1/F, Building B, Xinshidai GR Park, Shiyan Street, Bao'an District, Shenzhen, Guangdong, 518052, People's Republic of China

## 2.6. Measurement Uncertainty

| Parameter                          | Uncertainty              |
|------------------------------------|--------------------------|
| RF output power, conducted         | ±1.0dB                   |
| Power Spectral Density, conducted  | ±2.2dB                   |
| Radio Frequency                    | ± 1 x 10 <sup>-6</sup>   |
| Bandwidth                          | ± 1.5 x 10 <sup>-6</sup> |
| Time                               | ±2%                      |
| Duty Cycle                         | ±2%                      |
| Temperature                        | ±1°C                     |
| Humidity                           | ±5%                      |
| DC and low frequency voltages      | ±3%                      |
| Conducted Emissions (150kHz~30MHz) | ±3.64dB                  |
| Radiated Emission(9kHz~30MHz)      | ±4.51dB                  |
| Radiated Emission(30MHz~1GHz)      | ±5.03dB                  |
| Radiated Emission(1GHz~25GHz)      | ±4.74dB                  |

### 3. MEASURING DEVICE AND TEST EQUIPMENT

| Conducted Emission               |                         |                      |            |              |            |
|----------------------------------|-------------------------|----------------------|------------|--------------|------------|
| Test Equipment                   | Manufacturer            | Model                | Serial No. | Date of Cal. | Due Date   |
| Shielding Room                   | ZhongYu Electron        | 7.3(L)x3.1(W)x2.9(H) | MAX252     | 2024-10-27   | 2025-10-26 |
| EMI Test Receiver                | R&S                     | ESCI 7               | MAX552     | 2024-10-27   | 2025-10-26 |
| Coaxial Switch                   | ANRITSU CORP            | MP59B                | MAX225     | 2024-10-27   | 2025-10-26 |
| ENV216<br>2-L-V-NETZNACH<br>B.DE | ROHDE&SCHWARZ           | ENV216               | MAX226     | 2024-10-27   | 2025-10-26 |
| Coaxial Cable                    | MAX                     | N/A                  | MAX227     | N/A          | N/A        |
| Thermo meter                     | KTJ                     | TA328                | MAX233     | 2024-10-27   | 2025-10-26 |
| Absorbing clamp                  | Elektronik-Feinmechanik | MDS21                | MAX229     | 2024-10-27   | 2025-10-26 |
| LISN                             | R&S                     | ENV216               | 308        | 2024-10-27   | 2025-10-26 |
| LISN                             | R&S                     | ENV216               | 314        | 2024-10-27   | 2025-10-26 |

| Radiation Test equipment            |                                |                             |            |              |            |
|-------------------------------------|--------------------------------|-----------------------------|------------|--------------|------------|
| Test Equipment                      | Manufacturer                   | Model                       | Serial No. | Date of Cal. | Due Date   |
| 3m Semi- Anechoic Chamber           | ZhongYu Electron               | 9.2(L)*6.2(W)*6.4(H)        | MAX250     | 2024-10-27   | 2025-10-26 |
| Control Room                        | ZhongYu Electron               | 6.2(L)*2.5(W)*2.4(H)        | MAX251     | N/A          | N/A        |
| EMI Test Receiver                   | Rohde & Schwarz                | ESU26                       | MAX203     | 2024-10-27   | 2025-10-26 |
| BiConiLog Antenna                   | SCHWARZBECK<br>MESS-ELEKTRONIK | VULB9163                    | MAX214     | 2024-10-27   | 2025-10-26 |
| Double -ridged waveguide horn       | SCHWARZBECK<br>MESS-ELEKTRONIK | BBHA 9120 D                 | MAX208     | 2024-10-27   | 2025-10-26 |
| Horn Antenna                        | ETS-LINDGREN                   | 3160                        | MAX217     | 2024-10-27   | 2025-10-26 |
| Coaxial Cable                       | MAX                            | N/A                         | MAX213     | 2024-10-27   | 2025-10-26 |
| Coaxial Cable                       | MAX                            | N/A                         | MAX211     | 2024-10-27   | 2025-10-26 |
| Coaxial cable                       | MAX                            | N/A                         | MAX210     | 2024-10-27   | 2025-10-26 |
| Coaxial Cable                       | MAX                            | N/A                         | MAX212     | 2024-10-27   | 2025-10-26 |
| Amplifier(100kHz-3 GHz)             | HP                             | 8347A                       | MAX204     | 2024-10-27   | 2025-10-26 |
| Amplifier(2GHz-20 GHz)              | HP                             | 84722A                      | MAX206     | 2024-10-27   | 2025-10-26 |
| Amplifier (18-26GHz)                | Rohde & Schwarz                | AFS33-18002<br>650-30-8P-44 | MAX218     | 2024-10-27   | 2025-10-26 |
| Band filter                         | Amindeon                       | 82346                       | MAX219     | 2024-10-27   | 2025-10-26 |
| Power Meter                         | Anritsu                        | ML2495A                     | MAX540     | 2024-10-27   | 2025-10-26 |
| Power Sensor                        | Anritsu                        | MA2411B                     | MAX541     | 2024-10-27   | 2025-10-26 |
| Wideband Radio Communication Tester | Rohde & Schwarz                | CMW500                      | MAX575     | 2024-10-27   | 2025-10-26 |
| Splitter                            | Agilent                        | 11636B                      | MAX237     | 2024-10-27   | 2025-10-26 |
| Loop Antenna                        | ZHINAN                         | ZN30900A                    | MAX534     | 2024-10-27   | 2025-10-26 |

|                                 |                 |           |        |            |            |
|---------------------------------|-----------------|-----------|--------|------------|------------|
| Breitband<br>hornantenne        | SCHWARZBECK     | BBHA 9170 | MAX579 | 2024-10-27 | 2025-10-26 |
| Amplifier                       | TDK             | PA-02-02  | MAX574 | 2024-10-27 | 2025-10-26 |
| Amplifier                       | TDK             | PA-02-03  | MAX576 | 2024-10-27 | 2025-10-26 |
| PSA Series<br>Spectrum Analyzer | Rohde & Schwarz | FSP       | MAX578 | 2024-10-27 | 2025-10-26 |

| RF Conducted Test:                                      |              |                      |            |              |            |
|---------------------------------------------------------|--------------|----------------------|------------|--------------|------------|
| Test Equipment                                          | Manufacturer | Model                | Serial No. | Date of Cal. | Due Date   |
| MXA Signal<br>Analyzer                                  | Agilent      | N9020A               | MAX566     | 2024-10-27   | 2025-10-26 |
| EMI Test Receiver                                       | R&S          | ESCI 7               | MAX552     | 2024-10-27   | 2025-10-26 |
| Spectrum Analyzer                                       | Agilent      | E4440A               | MAX533     | 2024-10-27   | 2025-10-26 |
| MXG vector Signal<br>Generator                          | Agilent      | N5182A               | MAX567     | 2024-10-27   | 2025-10-26 |
| ESG Analog Signal<br>Generator                          | Agilent      | E4428C               | MAX568     | 2024-10-27   | 2025-10-26 |
| USB RF Power<br>Sensor                                  | DARE         | RPR3006W             | MAX569     | 2024-10-27   | 2025-10-26 |
| RF Switch Box                                           | Shongyi      | RFSW3003328          | MAX571     | 2024-10-27   | 2025-10-26 |
| Programmable<br>Constant Temp &<br>Humi Test<br>Chamber | WEWON        | WHTH-150L-40-88<br>0 | MAX572     | 2024-10-27   | 2025-10-26 |

Other

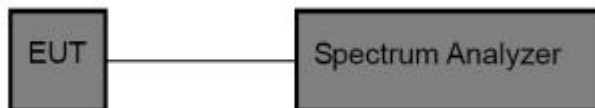
| Item | Name                         | Manufacturer | Model  | Software version |
|------|------------------------------|--------------|--------|------------------|
| 1    | EMC Conduction Test System   | EZ           | EZ-EMC | EMC-CON 3A1.1+   |
| 2    | EMC radiation test system    | EZ           | EZ-EMC | FA-03A2 RE+      |
| 3    | RF test system               | TACHOY       | RFTest | V1.0.0           |
| 4    | RF communication test system | TACHOY       | RFTest | V1.0.0           |

## 4. 20DB BANDWIDTH

### 4.1. Test Procedure

Set to the maximum power setting and enable the EUT transmit continuously  
 Set RBW = 1-5%OBW.  
 Set the video bandwidth (VBW) =3RBW.  
 Set Span= 1kHz  
 Set Detector = Peak.  
 Set Trace mode = Max hold.  
 Set Sweep = auto couple.  
 Measure and record the results in the test report.

### 4.2. Test Setup



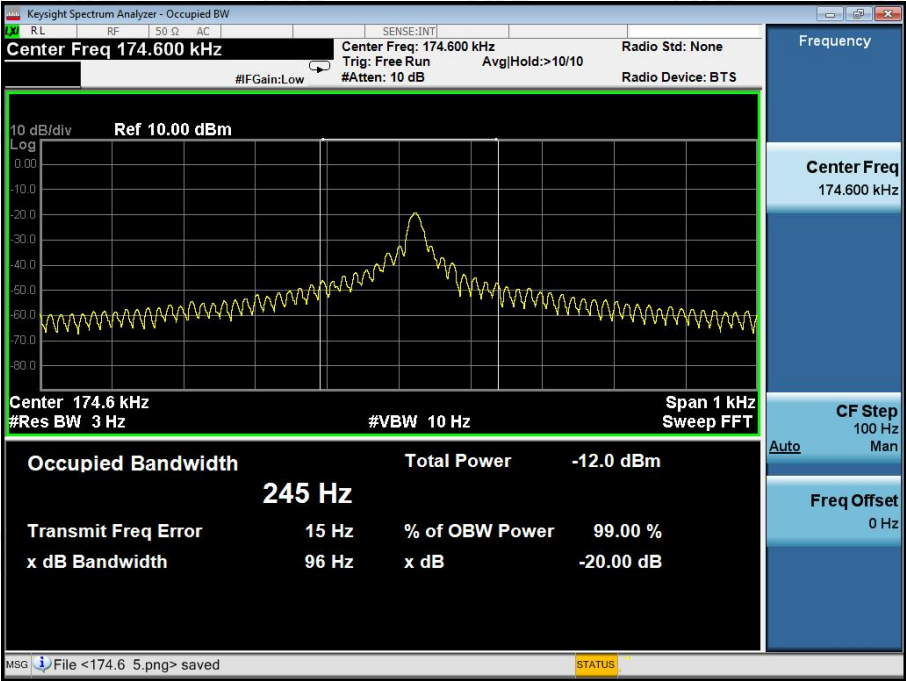
### 4.3. Test Results

| Frequency (KHz) | 20dB bandwidth (Hz) | 99% bandwidth (Hz) | Result |
|-----------------|---------------------|--------------------|--------|
| 174.6           | 96                  | 245                | Pass   |



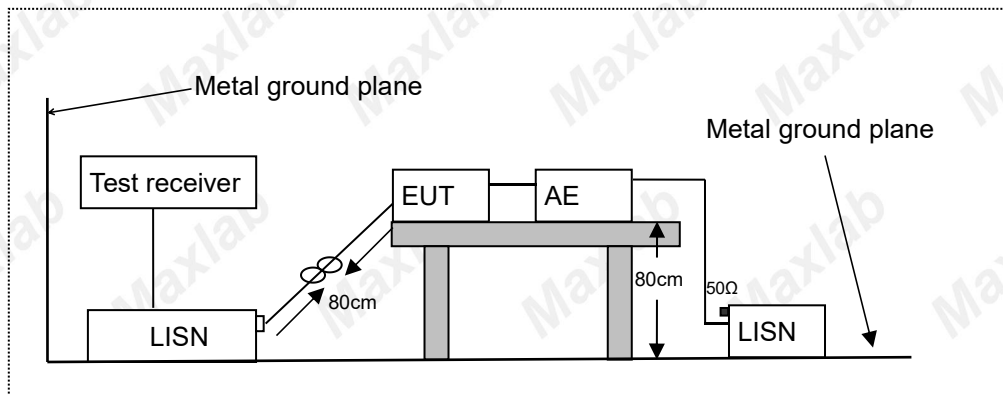
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Report No.: MAX250310110P02-R01



## 5. POWER LINE CONDUCTED EMISSION MEASUREMENT

### 5.1. Block Diagram of Test Setup



LISN: Line Impedance Stabilization Network

AE: Associated equipment

EUT: Equipment under test

### 5.2. Limits

FCC Part 15.207

| Frequency<br>(MHz) | Limit (dB $\mu$ V) |               |
|--------------------|--------------------|---------------|
|                    | Quasi-peak Level   | Average Level |
| 0.15 ~ 0.50        | 66.0 ~ 56.0 *      | 56.0 ~ 46.0 * |
| 0.50 ~ 5.00        | 56.0               | 46.0          |
| 5.00 ~ 30.00       | 60.0               | 50.0          |

NOTE1-The lower limit shall apply at the transition frequencies.  
NOTE2-The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.

### 5.3. Test Procedure

The EUT was placed on a desk 0.8 m height from the metal ground plane and 0.4 m from the conducting wall of the shielding room and it was kept at least 0.8 m from any other grounded conducting surface. The size of the table will nominally be 1.5 m x1.0 m.

The rear of the arrangement shall be flush with the back of the supporting tabletop unless that would not be possible or typical of normal use.

All units of equipment forming the system under test (includes the EUT as well as connected peripherals and associated equipment or devices) shall be arranged such that a nominal 0.1 m separation is achieved between the neighboring units.

Connect EUT to the power mains through a line impedance stabilization network (LISN). Where the mains cable supplied by the manufacturer is longer than 1 m, the excess should be folded at the

centre into a bundle no longer than 0.4 m, so that its length is shortened to 1 m.

All the support units are connecting to the other LISN.

The LISN provides 50 ohm coupling impedance for the measuring instrument.

Both sides of AC line were checked for maximum conducted interference.

The frequency range from 150 kHz to 30 MHz was sweep.

Set the test-receiver system to quasi peak detect function and average detect function, and to measure the conducted emissions values.

Test results were obtained from the following equation:

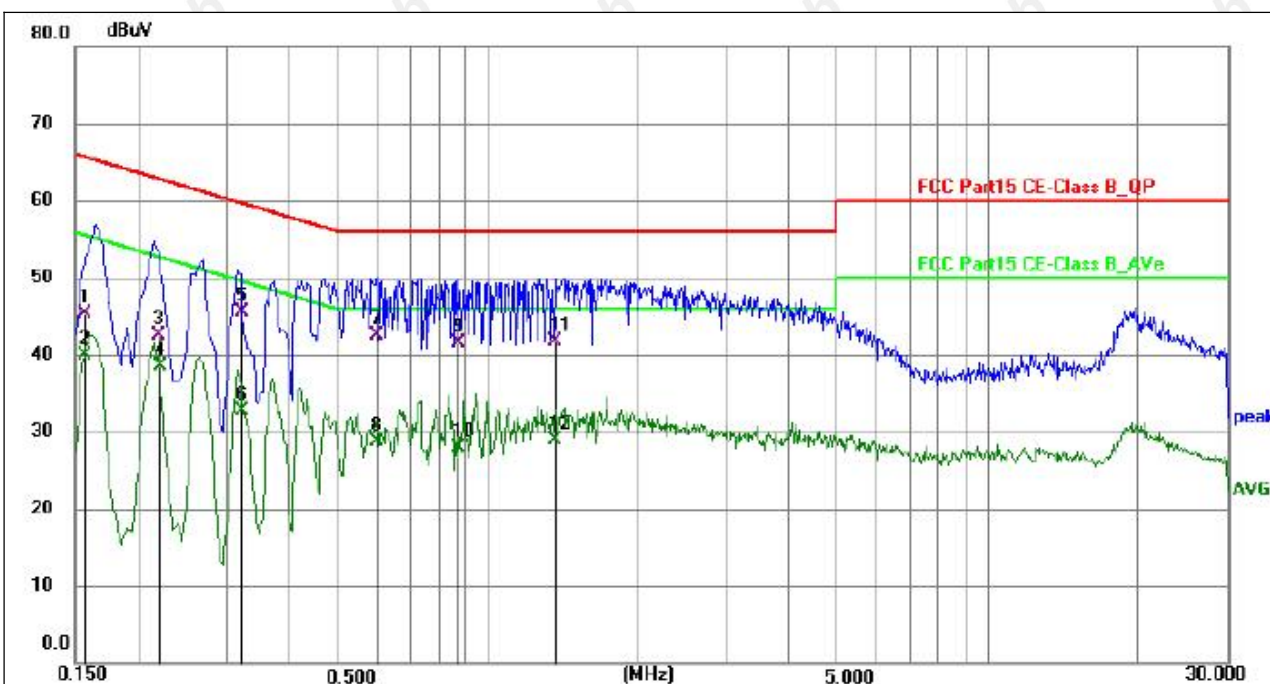
Emission Level (dB $\mu$ V) = LISN Factor (dB) + Cable Loss (dB) + Reading (dB $\mu$ V)

Margin (dB) = Emission Level (dB $\mu$ V) - Limit (dB $\mu$ V)

#### 5.4. Measuring Results

**PASS.**

|                |              |                    |          |
|----------------|--------------|--------------------|----------|
| Temperature:   | 26°C         | Relative Humidity: | 54%      |
| Pressure:      | 101kPa       | Phase :            | L        |
| Test Voltage : | AC 120V/60Hz | Mode:              | Model 10 |

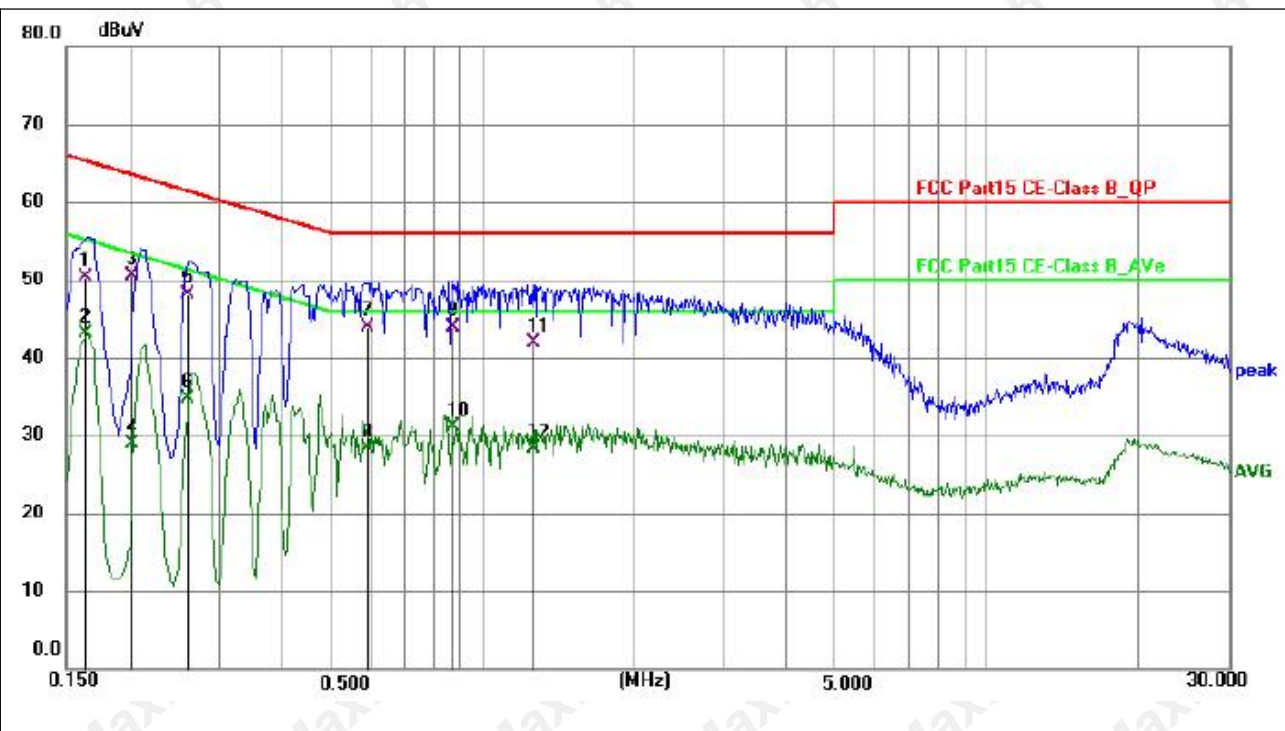


| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Detector |
|-----|-----------------|----------------|-------------|--------------|--------------|-------------|----------|
| 1   | 0.1575          | 25.87          | 19.49       | 45.36        | 65.59        | -20.23      | QP       |
| 2   | 0.1575          | 20.51          | 19.49       | 40.00        | 55.59        | -15.59      | AVG      |
| 3   | 0.2205          | 23.06          | 19.49       | 42.55        | 62.80        | -20.25      | QP       |
| 4   | 0.2224          | 19.04          | 19.49       | 38.53        | 52.73        | -14.20      | AVG      |
| 5   | 0.3215          | 26.09          | 19.49       | 45.58        | 59.67        | -14.09      | QP       |
| 6   | 0.3215          | 13.14          | 19.49       | 32.63        | 49.67        | -17.04      | AVG      |
| 7 * | 0.6038          | 23.06          | 19.49       | 42.55        | 56.00        | -13.45      | QP       |
| 8   | 0.6038          | 9.14           | 19.49       | 28.63        | 46.00        | -17.37      | AVG      |
| 9   | 0.8768          | 22.03          | 19.49       | 41.52        | 56.00        | -14.48      | QP       |
| 10  | 0.8768          | 8.48           | 19.49       | 27.97        | 46.00        | -18.03      | AVG      |
| 11  | 1.3605          | 22.13          | 19.51       | 41.64        | 56.00        | -14.36      | QP       |
| 12  | 1.3605          | 9.37           | 19.51       | 28.88        | 46.00        | -17.12      | AVG      |

**Notes:**

- 1.An initial pre-scan was performed on the line and neutral lines with peak detector.
- 2.Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3.Measurement Level = Reading level + Correct Factor

|                |              |                    |          |
|----------------|--------------|--------------------|----------|
| Temperature:   | 26°C         | Relative Humidity: | 54%      |
| Pressure:      | 101kPa       | Phase :            | N        |
| Test Voltage : | AC 120V/60Hz | Mode:              | Model 10 |



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Detector |
|-----|-----------------|----------------|-------------|--------------|--------------|-------------|----------|
| 1   | 0.1643          | 30.83          | 19.49       | 50.32        | 65.24        | -14.92      | QP       |
| 2   | 0.1643          | 23.61          | 19.49       | 43.10        | 55.24        | -12.14      | AVG      |
| 3   | 0.2031          | 30.99          | 19.49       | 50.48        | 63.48        | -13.00      | QP       |
| 4   | 0.2031          | 9.37           | 19.49       | 28.86        | 53.48        | -24.62      | AVG      |
| 5   | 0.2625          | 28.63          | 19.48       | 48.11        | 61.35        | -13.24      | QP       |
| 6   | 0.2625          | 15.29          | 19.48       | 34.77        | 51.35        | -16.58      | AVG      |
| 7 * | 0.5909          | 24.49          | 19.49       | 43.98        | 56.00        | -12.02      | QP       |
| 8   | 0.5909          | 8.82           | 19.49       | 28.31        | 46.00        | -17.69      | AVG      |
| 9   | 0.8759          | 24.45          | 19.50       | 43.95        | 56.00        | -12.05      | QP       |
| 10  | 0.8759          | 11.69          | 19.50       | 31.19        | 46.00        | -14.81      | AVG      |
| 11  | 1.2696          | 22.48          | 19.52       | 42.00        | 56.00        | -14.00      | QP       |
| 12  | 1.2696          | 8.70           | 19.52       | 28.22        | 46.00        | -17.78      | AVG      |

**Notes:**

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Measurement Level = Reading level + Correct Factor

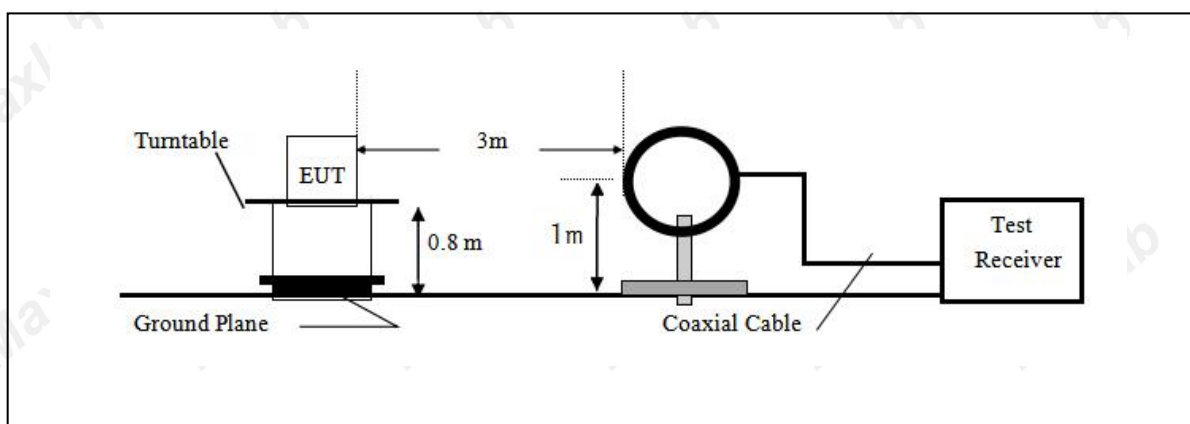
## 6. RADIATED EMISSION TEST

### 6.1.Measurement Procedure

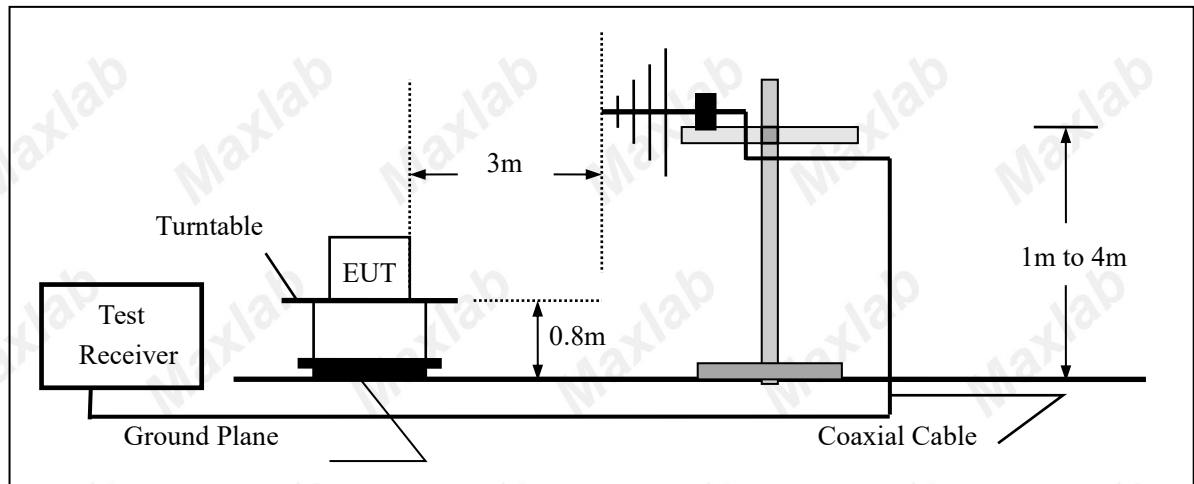
1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
4. Repeat above procedures until all frequency measured were complete.
5. Use the following receiver/spectrum analyzer settings:  
Span = wide enough to fully capture the emission being measured  
RBW=200Hz for 9KHz to 150KHz,  
RBW=9kHz for 150KHz to 30MHz,  
RBW=120KHz for 30MHz to 1GHz  
VBW  $\geq 3 \times$  RBW  
Sweep = auto  
Detector function = QP  
Trace = max hold

### 6.2.Test SET-UP (Block Diagram of Configuration)

(A) Radiated Emission Test Set-Up, Frequency Below 30MHz



(B) Radiated Emission Test Set-Up, Frequency Below 1000MHz



### 6.3. Radiated Emission Limit

The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table 15.209(a):

| FCC Part 15.209    |                              |      |                                                                    |                                   |
|--------------------|------------------------------|------|--------------------------------------------------------------------|-----------------------------------|
| Frequency<br>(MHz) | Field Strength<br>Limitation |      | Field Strength Limitation Frequency tion at 3m<br>Measurement Dist |                                   |
|                    | (uV/m)                       | Dist | (uV/m)                                                             | (dBuV/m)                          |
| 0.009 – 0.490      | $2400 / F(\text{KHz})$       | 300m | $10000 * 2400/F(\text{KHz})$                                       | $20\log 2400/F(\text{KHz}) + 80$  |
| 0.490 – 1.705      | $24000 / F(\text{KHz})$      | 30m  | $100 * 24000/F(\text{KHz})$                                        | $20\log 24000/F(\text{KHz}) + 40$ |
| 1.705 – 30.00      | 30                           | 30m  | $100 * 30$                                                         | $20\log 30 + 40$                  |
| 30.0 – 88.0        | 100                          | 3m   | 100                                                                | $20\log 100$                      |
| 88.0 – 216.0       | 150                          | 3m   | 150                                                                | $20\log 150$                      |
| 216.0 – 960.0      | 200                          | 3m   | 200                                                                | $20\log 200$                      |
| Above 960.0        | 500                          | 3m   | 500                                                                | $20\log 500$                      |

## 15.205 Restricted bands of operation

| MHz                        | MHz                   | MHz             | GHz              |
|----------------------------|-----------------------|-----------------|------------------|
| 0.090 - 0.110              | 16.42 - 16.423        | 399.9 - 410     | 4.5 - 5.15       |
| <sup>1</sup> 0.495 - 0.505 | 16.69475 - 16.69525   | 608 - 614       | 5.35 - 5.46      |
| 2.1735 - 2.1905            | 16.80425 - 16.80475   | 960 - 1240      | 7.25 - 7.75      |
| 4.125 - 4.128              | 25.5 - 25.67          | 1300 - 1427     | 8.025 - 8.5      |
| 4.17725 - 4.17775          | 37.5 - 38.25          | 1435 - 1626.5   | 9.0 - 9.2        |
| 4.20725 - 4.20775          | 73 - 74.6             | 1645.5 - 1646.5 | 9.3 - 9.5        |
| 6.215 - 6.218              | 74.8 - 75.2           | 1660 - 1710     | 10.6 - 12.7      |
| 6.26775 - 6.26825          | 108 - 121.94          | 1718.8 - 1722.2 | 13.25 - 13.4     |
| 6.31175 - 6.31225          | 123 - 138             | 2200 - 2300     | 14.47 - 14.5     |
| 8.291 - 8.294              | 149.9 - 150.05        | 2310 - 2390     | 15.35 - 16.2     |
| 8.362 - 8.366              | 156.52475 - 156.52525 | 2483.5 - 2500   | 17.7 - 21.4      |
| 8.37625 - 8.38675          | 156.7 - 156.9         | 2690 - 2900     | 22.01 - 23.12    |
| 8.41425 - 8.41475          | 162.0125 - 167.17     | 3260 - 3267     | 23.6 - 24.0      |
| 12.29 - 12.293             | 167.72 - 173.2        | 3332 - 3339     | 31.2 - 31.8      |
| 12.51975 - 12.52025        | 240 - 285             | 3345.8 - 3358   | 36.43 - 36.5     |
| 12.57675 - 12.57725        | 322 - 335.4           | 3600 - 4400     | ( <sup>2</sup> ) |

- Remark:
1. Emission level in dBuV/m=20 log (uV/m)
  2. Measurement was performed at an antenna to the closed point of EUT distance of meters.
  3. Only spurious frequency is permitted to locate within the Restricted Bands specified in provision of  $\xi$  15.205, and the emissions located in restricted bands also comply with 15.209 limit.

## 6.4.Measurement Result

Measurement data:

Note: Limit dBuV/m @3m = Limit dBuV/m @300m+ 80

Limit dBuV/m @3m = Limit dBuV/m @30m + 40

9 kHz~30 MHz

|                |          |                    |          |
|----------------|----------|--------------------|----------|
| Temperature:   | 26℃      | Relative Humidity: | 54%      |
| Pressure:      | 101kPa   | Pol.               | Coplanar |
| Test Voltage : | DC 3.85V | Mode:              | Mode 1   |

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|-----------|---------------|--------|----------------|----------|--------|---------------|
| (kHz)     | (dBμV/m)      | (dB/m) | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 174.6     | 71.95         | 20.3   | 92.25          | 122.76   | -30.51 | peak          |
| 174.6     | 56.59         | 20.3   | 76.89          | 102.76   | -25.87 | AV            |
| 257.56    | 67.34         | 20.24  | 87.58          | 119.39   | -31.81 | peak          |
| 257.56    | 52.14         | 20.24  | 72.38          | 99.39    | -27.01 | AV            |
| 439.98    | 65.11         | 20.02  | 85.13          | 114.74   | -29.61 | peak          |
| 439.98    | 48.25         | 20.02  | 68.27          | 94.74    | -26.47 | AV            |
| 1570.92   | 26.98         | 20.59  | 47.57          | 63.68    | -16.11 | QP            |
| 3317.88   | 24.57         | 21.41  | 45.98          | 69.54    | -23.56 | QP            |
| 6234.03   | 20.69         | 22.14  | 42.83          | 69.54    | -26.71 | QP            |

Note:

Pre-scan in the all of mode, the worst case in of was recorded.

Factor = antenna factor + cable loss – pre-amplifier.

Margin = Emission Level- Limit.

|                |          |                    |         |
|----------------|----------|--------------------|---------|
| Temperature:   | 26°C     | Relative Humidity: | 54%     |
| Pressure:      | 101kPa   | Pol.               | Coaxial |
| Test Voltage : | DC 3.85V | Mode:              | Mode 1  |

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|-----------|---------------|--------|----------------|----------|--------|---------------|
| (kHz)     | (dBμV/m)      | (dB/m) | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 174.6     | 76.95         | 20.3   | 97.25          | 122.76   | -25.51 | peak          |
| 174.6     | 58.89         | 20.3   | 79.19          | 102.76   | -23.57 | AV            |
| 300.23    | 65.36         | 20.24  | 85.6           | 118.06   | -32.46 | peak          |
| 300.23    | 51.23         | 20.24  | 71.47          | 98.06    | -26.59 | AV            |
| 455.36    | 62.36         | 20.02  | 82.38          | 114.44   | -32.06 | peak          |
| 455.36    | 46.36         | 20.02  | 66.38          | 94.44    | -28.06 | AV            |
| 1578.96   | 23.69         | 20.59  | 44.28          | 63.64    | -19.36 | QP            |
| 3326.36   | 25.63         | 21.41  | 47.04          | 69.54    | -22.5  | QP            |
| 6123.36   | 20.78         | 22.14  | 42.92          | 69.54    | -26.62 | QP            |

**Note:**

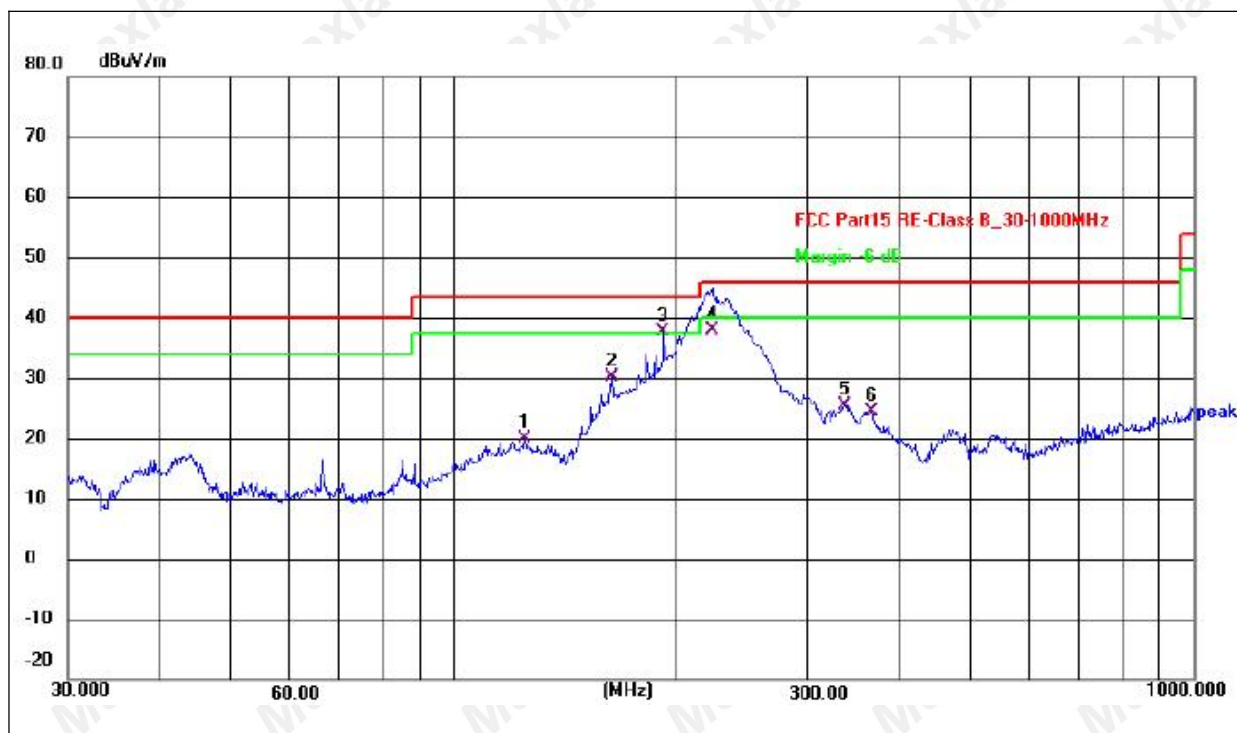
Pre-scan in the all of mode, the worst case in of was recorded.

Factor = antenna factor + cable loss – pre-amplifier.

Margin = Emission Level- Limit.

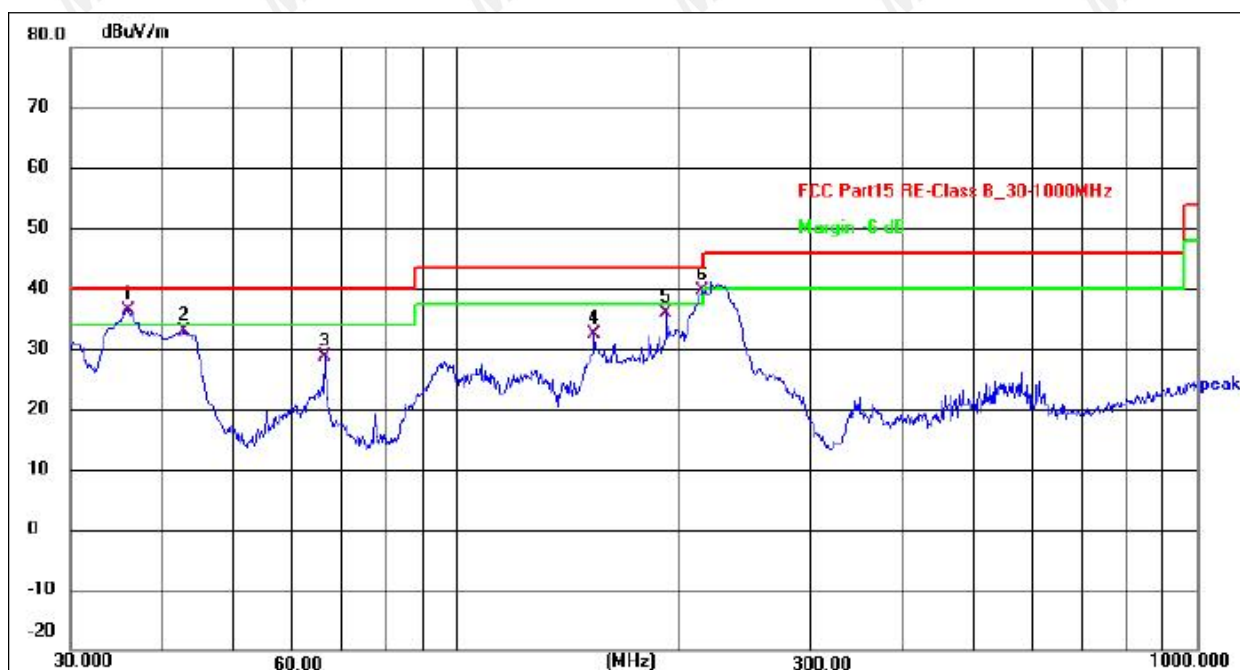
30MHz-1GHz:

|               |          |                    |            |
|---------------|----------|--------------------|------------|
| Temperature:  | 26°C     | Relative Humidity: | 54%        |
| Pressure:     | 101 kPa  | Polarization:      | Horizontal |
| Test Voltage: | DC 3.85V | Mode:              | Model 1    |



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 124.5690        | 38.00          | -18.09        | 19.91          | 43.50          | -23.59      | QP       |
| 2   | 163.1817        | 48.66          | -18.63        | 30.03          | 43.50          | -13.47      | QP       |
| 3   | 191.7450        | 54.33          | -16.79        | 37.54          | 43.50          | -5.96       | QP       |
| 4   | 222.9502        | 53.54          | -15.54        | 38.00          | 46.00          | -8.00       | QP       |
| 5   | 337.2155        | 38.42          | -13.01        | 25.41          | 46.00          | -20.59      | QP       |
| 6   | 366.8231        | 36.58          | -12.20        | 24.38          | 46.00          | -21.62      | QP       |

|               |          |                    |          |
|---------------|----------|--------------------|----------|
| Temperature:  | 26℃      | Relative Humidity: | 54%      |
| Pressure:     | 101 kPa  | Polarization:      | Vertical |
| Test Voltage: | DC 3.85V | Mode:              | Model 1  |



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 35.8746         | 52.58          | -16.08        | 36.50          | 40.00          | -3.50       | QP       |
| 2   | 42.7495         | 47.53          | -14.64        | 32.89          | 40.00          | -7.11       | QP       |
| 3   | 66.2661         | 45.69          | -16.95        | 28.74          | 40.00          | -11.26      | QP       |
| 4   | 153.2003        | 51.37          | -19.09        | 32.28          | 43.50          | -11.22      | QP       |
| 5   | 191.7450        | 52.57          | -16.79        | 35.78          | 43.50          | -7.72       | QP       |
| 6   | 214.5143        | 55.47          | -15.85        | 39.62          | 43.50          | -3.88       | QP       |

**Remarks:**

- 1.Final Level =Receiver Read level + 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.

## **7. TEST PHOTOGRAPHS AND EUT PHOTOGRAPHS**

Please the attachment for details.

-----The end-----