

# EMC TEST REPORT

**FCC ID: 2AVMZ-UE168**

Test Report No.....: EMC250317012-01-001

Product(s) Name.....: Alarm Clock Radio

Model(s).....: UE168

Trade Mark.....: uscce

Applicant.....: Dongguan Shunlang Electronics Co., Ltd

Address.....: Floor 5, Building 2, Shenxiang Industrial Park, Dabandi Cuntou  
Community, Humen town, Dongguan city, China

Receipt Date.....: 2025.03.17

Test Date.....: 2025.03.17~2025.03.18

Issued Date.....: 2025.03.18

Standards.....: FCC CFR47 Part 15 Subpart B;  
ANSI C63.4:2014

Testing Laboratory.....: Shenzhen Haiyun Standard Technical Co., Ltd.

| Prepared By:       | Checked By:       | Approved By:     |  |
|--------------------|-------------------|------------------|---------------------------------------------------------------------------------------|
| Jason Huang        | Black Ding        | Tim Zhang        |                                                                                       |
| <i>Jason Huang</i> | <i>Black Ding</i> | <i>Tim Zhang</i> |                                                                                       |

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## History of the test report

Original Report Issue Date: 2025.03.18

- No additional attachment
- Additional attachments were issued following record

| Attachment No. | Issue Date | Description |
|----------------|------------|-------------|
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## 1. Certification

|                     |                                                                                                                                                                   |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sample no.          | POC250317012-S001                                                                                                                                                 |
| Product name        | Alarm Clock Radio                                                                                                                                                 |
| Model name          | UE168                                                                                                                                                             |
| Trade mark          | uscce                                                                                                                                                             |
| Power supply        | DC 5V from adapter or DC 4.5V from battery                                                                                                                        |
| Adapter information | Model:K12E050200U<br>Input: 100-240V~, 50/60Hz 0.35A<br>Output: 5V $\overline{\text{---}}$ 2.0A<br>Manufacturer: Dongguan Guanjin Electronics Technology Co., Ltd |
| Applicant           | Dongguan Shunlang Electronics Co., Ltd<br>Floor 5, Building 2, Shenxiang Industrial Park, Dabandi Cuntou<br>Community, Humen town, Dongguan city, China           |
| Manufacturer        | Dongguan Shunlang Electronics Co., Ltd<br>Floor 5, Building 2, Shenxiang Industrial Park, Dabandi Cuntou<br>Community, Humen town, Dongguan city, China           |

**Note:**

For more detailed features description, please refer to the manufacturer's or the User's manual of the EUT.

## 2. Test Result Summary

### 2.1. Test Procedures According to The Technical Standard(s):

| Emission                                   |                       |        |         |               |
|--------------------------------------------|-----------------------|--------|---------|---------------|
| Standard                                   | Item                  | Result | Remarks | Tested in Lab |
| FCC CFR 47 Part 15 Subpart B<br>ANSI C63.4 | Conducted (Main Port) | PASS   | Class B | Haiyun        |
|                                            | Radiated              | PASS   | Class B | Haiyun        |

**Note:**

- (1) "N/A" denotes test is not applicable in this test report.  
 (2) Haiyun: Shenzhen Haiyun Standard Technical Co., Ltd.

### 2.2. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

| Measurement uncertainty levels of Haiyun Lab |                             |             |
|----------------------------------------------|-----------------------------|-------------|
| Measurement                                  | Measurement Frequency Range | Uncertainty |
| Radiated Emission                            | 30MHz~1GHz                  | ±4.22dB     |
| Radiated Emission                            | 1GHz ~ 18GHz                | ±5.06dB     |
| Radiated Emission                            | 18GHz ~ 40GHz               | ±4.98dB     |
| Conduction Emissions                         | 150kHz~30MHz                | ±2.68dB     |

### 2.3. Test Sites

|                           |                                                                                             |
|---------------------------|---------------------------------------------------------------------------------------------|
| Company:                  | Shenzhen Haiyun Standard Technical CO., Ltd.                                                |
| Address:                  | No. 110-113, 115, 116, Block B, Jinyuan Business Building, Bao'an District, Shenzhen, China |
| CNAS Registration Number: | CNAS L18252                                                                                 |
| CAB identifier            | CN0145                                                                                      |
| A2LA Certificate Number   | 6823.01                                                                                     |
| Telephone:                | 0755-26024411                                                                               |

## 2.4. Test Instruments List

| Name of Equipment        | Manufacturer              | Model Number       | Serial Number | Inventory No. | Last Calibration | Due Calibration |
|--------------------------|---------------------------|--------------------|---------------|---------------|------------------|-----------------|
| Radiated Emission        |                           |                    |               |               |                  |                 |
| Test receiver            | Rohde&Schwarz             | ESU                | 100184        | JLE011        | 2024/4/24        | 2025/4/23       |
| Log periodic antenna     | Schwarzbeck               | VULB 9168          | 1151          | JLE012        | 2024/4/20        | 2025/4/19       |
| Low frequency amplifier  | /                         | LNA 0920N          | 2014          | JLE023        | 2024/4/24        | 2025/4/23       |
| High frequency amplifier | Schwarzbeck               | BBV 9718           | 284           | JLE024        | 2024/4/24        | 2025/4/23       |
| Horn Antenna             | SCHWARZBECK               | BBHA 9120 D        | 02670         | JLE028        | 2024/4/20        | 2025/4/19       |
| Horn Antenna             | SCHWARZBECK               | BBHA 9170          | 9170#685      | JLE029        | 2024/7/15        | 2025/7/14       |
| Loop Antenna             | SCHWARZBECK               | FMZB1519B          | 00029         | JLE030        | 2024/7/15        | 2025/7/14       |
| Broadband preamplifier   | Schwarzbeck               | BBV9721            | 9721-019      | JLE025        | 2024/4/24        | 2025/4/23       |
| Temp&Humidity Recorder   | Meideshi                  | JR900              | /             | JLE021        | 2024/4/24        | 2025/4/23       |
| Test software            | Farad Technology Co., Ltd | EZ-EMC Ver.TW-03A2 |               |               |                  |                 |
| Conduction Emission      |                           |                    |               |               |                  |                 |
| LISN                     | Rohde&Schwarz             | ENV216             | 100075        | JLE002        | 2024/4/24        | 2025/4/23       |
| ISN                      | Schwarzbeck               | CATE 5 8158        | #171          | JLE003        | 2024/4/24        | 2025/4/23       |
| Test receiver            | Rohde&Schwarz             | ESCI               | 100718        | JLE010        | 2024/4/24        | 2025/4/23       |
| Pulse limiter            | Rohde&Schwarz             | ESH3-Z2            | 102299        | JLE047        | 2024/4/24        | 2025/4/23       |
| Temp&Humidity Recorder   | Meideshi                  | JR900              | /             | JLE020        | 2024/4/24        | 2025/4/23       |
| Test software            | Farad Technology Co., Ltd | EZ-EMC Ver.TW-03A2 |               |               |                  |                 |

### 3. General Information

#### 3.1. Description of Test Modes

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level.

Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively. The test data reflect the worst model.

| Test Mode  | Description                               |
|------------|-------------------------------------------|
| Test mode1 | Alarm clock(by adapter)+discharging       |
| Test mode2 | Alarm clock(by battery)+discharging       |
| Test mode3 | FM 98MHz(by adapter)+discharging          |
| Test mode4 | FM 98MHz(by battery)+discharging          |
| Test mode5 | FM 98MHz(by adapter)+discharging+earphone |
| Test mode6 | FM 98MHz(by battery)+discharging+earphone |

#### 3.2. Description of Support Units

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

| No. | Equipment   | Model           | Manufacturer | Series No |
|-----|-------------|-----------------|--------------|-----------|
| 1   | Dry battery | R03 1.5V        | Penonsing    | /         |
| 2   | Cement load | 5 $\Omega$ 100W | /            | /         |
| 3   | Cement load | 5 $\Omega$ 100W | /            | /         |
| 4   | Earphone    | E1              | XIAOMI       | /         |

## 4. Emission Test

### 4.1. Conduction Emission Test

#### 4.1.1. Limits

| FREQUENCY (MHz) | Class A (dBuV) |         | Class B (dBuV) |         |
|-----------------|----------------|---------|----------------|---------|
|                 | Quasi-peak     | Average | Quasi-peak     | Average |
| 0.15 - 0.5      | 79             | 66      | 66 - 56        | 56 - 46 |
| 0.50 - 5.0      | 73             | 60      | 56             | 46      |
| 5.0 - 30.0      | 73             | 60      | 60             | 50      |

**Note:**

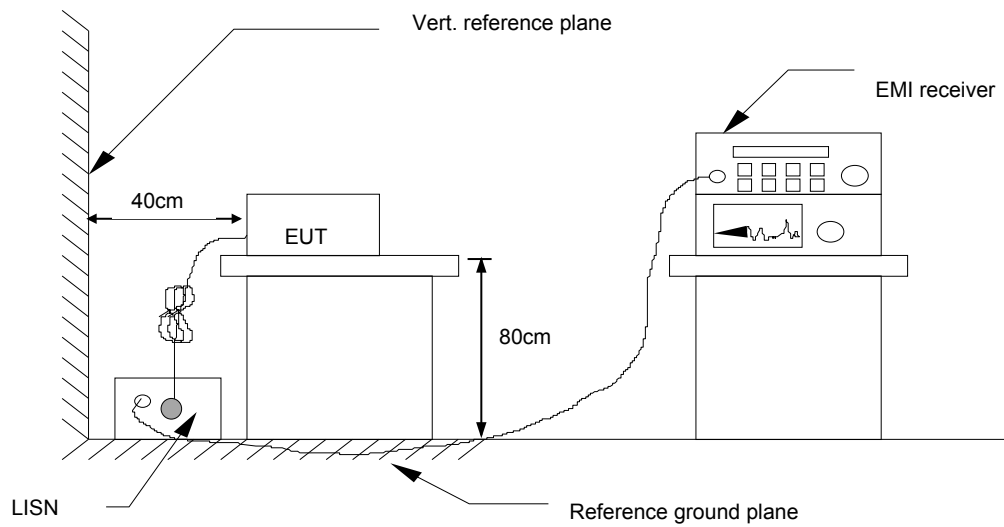
1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.
3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

#### 4.1.2. Test Procedures

1. Test methods reference ANSI C63.4:2014.
2. The EUT was placed 0.8 m from the horizontal ground plane and 0.4 m from the vertical ground plane with EUT being connected to the power mains through a line impedance stabilization network (AMN). All other support equipment powered from additional AMN. The AMN provide 50 Ohm/ 50 uH of coupling impedance for the measuring instrument.
3. Interconnecting cables that hang closer than 0.4 m to the ground plane shall be folded back and forth in the center forming a bundle 0.3 m to 0.4 m long.
4. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance.
5. The frequency range from 150 kHz to 30 MHz was searched.
6. Actual test configuration, please refer to the related Item – EUT Test Photos.



### 4.1.3. Test set-up



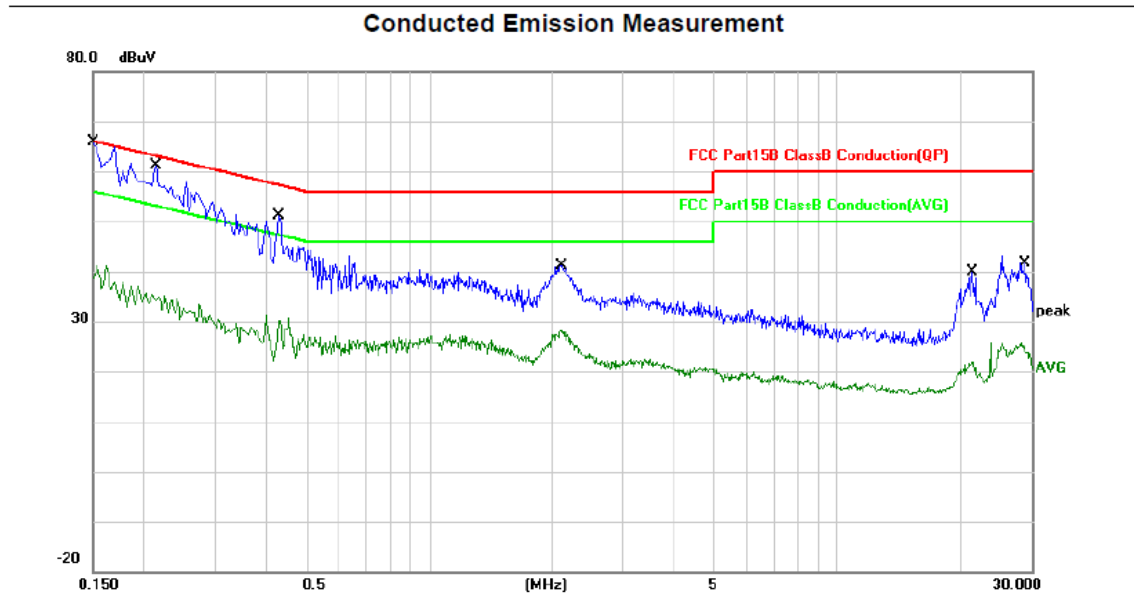
For the actual test configuration, please refer to the related item – Photographs of the test configuration

#### 4.1.4. Test Results

|                          |               |              |              |
|--------------------------|---------------|--------------|--------------|
| Product Model            | UE168         | Test Mode    | Mode 1       |
| Environmental Conditions | 23.4℃, 50% RH | Test voltage | AC 120V 60Hz |
| Tested by                | Freedom Zhuo  | Test Results | Pass         |
| Test Date                | 2025-03-18    |              |              |

Note:

#### Line



| No. | Mk. | Freq.   | Reading Level | Correct Factor | Measurement | Limit | Over   |          |         |
|-----|-----|---------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz     | dBuV          | dB             | dBuV        | dBuV  | dB     | Detector | Comment |
| 1   | *   | 0.1500  | 35.71         | 20.08          | 55.79       | 66.00 | -10.21 | QP       |         |
| 2   |     | 0.1500  | 16.04         | 20.08          | 36.12       | 56.00 | -19.88 | AVG      |         |
| 3   |     | 0.2140  | 29.38         | 20.03          | 49.41       | 63.05 | -13.64 | QP       |         |
| 4   |     | 0.2140  | 9.56          | 20.03          | 29.59       | 53.05 | -23.46 | AVG      |         |
| 5   |     | 0.4300  | 21.45         | 20.33          | 41.78       | 57.25 | -15.47 | QP       |         |
| 6   |     | 0.4300  | 6.07          | 20.33          | 26.40       | 47.25 | -20.85 | AVG      |         |
| 7   |     | 2.1140  | 15.87         | 20.20          | 36.07       | 56.00 | -19.93 | QP       |         |
| 8   |     | 2.1140  | 6.05          | 20.20          | 26.25       | 46.00 | -19.75 | AVG      |         |
| 9   |     | 21.4300 | 8.76          | 20.14          | 28.90       | 60.00 | -31.10 | QP       |         |
| 10  |     | 21.4300 | -1.10         | 20.14          | 19.04       | 50.00 | -30.96 | AVG      |         |
| 11  |     | 29.0060 | 11.92         | 20.28          | 32.20       | 60.00 | -27.80 | QP       |         |
| 12  |     | 29.0060 | 2.55          | 20.28          | 22.83       | 50.00 | -27.17 | AVG      |         |

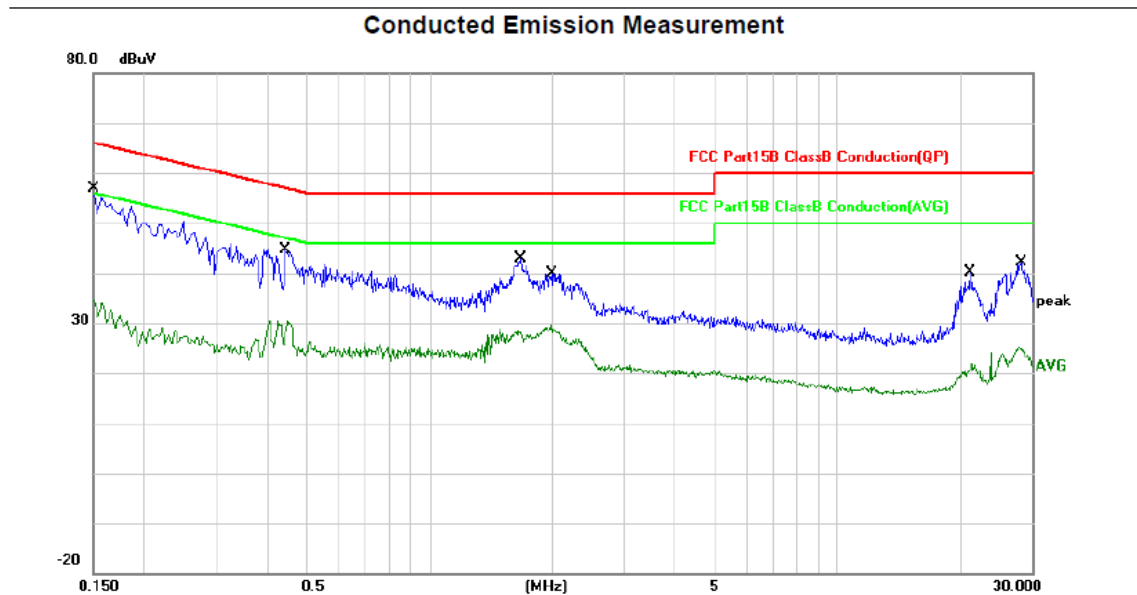
Note:

1. Correct Factor = LISN Factor + Cable Loss + Pulse Limiter Factor
2. Measurement= Reading + Correct Factor.
3. Over = Result – Limit

|                          |               |              |              |
|--------------------------|---------------|--------------|--------------|
| Product Model            | UE168         | Test Mode    | Mode 1       |
| Environmental Conditions | 23.4℃, 50% RH | Test voltage | AC 120V 60Hz |
| Tested by                | Freedom Zhuo  | Test Results | Pass         |
| Test Date                | 2025-03-18    |              |              |

Note:

## Neutral



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV | Limit<br>dB | Over<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|-------------|------------|----------|---------|
| 1   |     | 0.1500       | 27.31                    | 20.35                   | 47.66                    | 66.00       | -18.34     | QP       |         |
| 2   |     | 0.1500       | 10.78                    | 20.35                   | 31.13                    | 56.00       | -24.87     | AVG      |         |
| 3   |     | 0.4460       | 18.47                    | 20.13                   | 38.60                    | 56.95       | -18.35     | QP       |         |
| 4   |     | 0.4460       | 7.62                     | 20.13                   | 27.75                    | 46.95       | -19.20     | AVG      |         |
| 5   |     | 1.6780       | 16.18                    | 20.35                   | 36.53                    | 56.00       | -19.47     | QP       |         |
| 6   |     | 1.6780       | 6.79                     | 20.35                   | 27.14                    | 46.00       | -18.86     | AVG      |         |
| 7   |     | 2.0020       | 13.65                    | 20.37                   | 34.02                    | 56.00       | -21.98     | QP       |         |
| 8 * |     | 2.0020       | 7.86                     | 20.37                   | 28.23                    | 46.00       | -17.77     | AVG      |         |
| 9   |     | 21.2220      | 8.43                     | 20.18                   | 28.61                    | 60.00       | -31.39     | QP       |         |
| 10  |     | 21.2220      | -1.75                    | 20.18                   | 18.43                    | 50.00       | -31.57     | AVG      |         |
| 11  |     | 28.2820      | 11.89                    | 20.35                   | 32.24                    | 60.00       | -27.76     | QP       |         |
| 12  |     | 28.2820      | 3.00                     | 20.35                   | 23.35                    | 50.00       | -26.65     | AVG      |         |

Note:

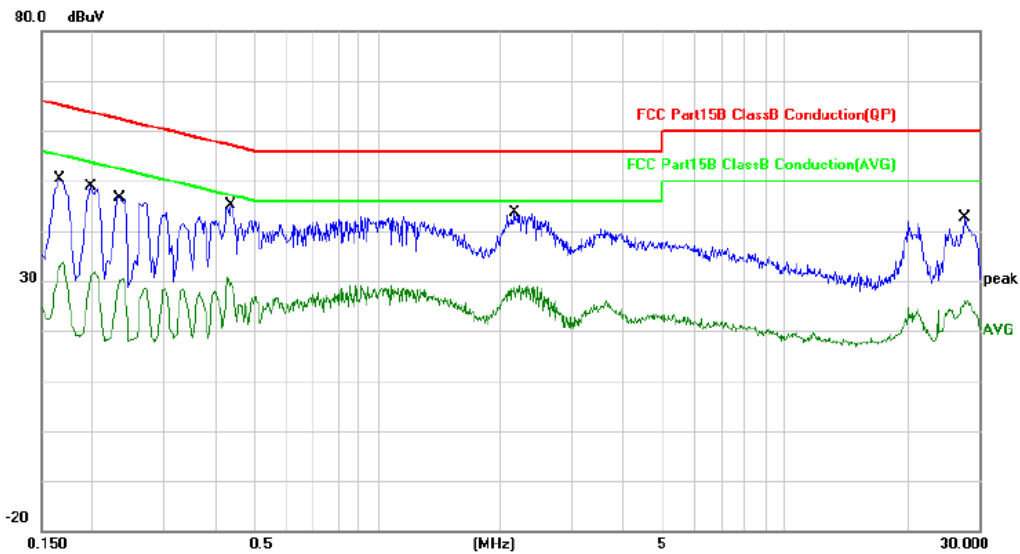
1. Correct Factor = LISN Factor + Cable Loss + Pulse Limiter Factor,
2. Measurement = Reading + Correct Factor.
3. Over = Result - Limit

|                          |               |              |              |
|--------------------------|---------------|--------------|--------------|
| Product Model            | UE168         | Test Mode    | Mode 3       |
| Environmental Conditions | 23.4℃, 50% RH | Test voltage | AC 120V 60Hz |
| Tested by                | Freedom Zhuo  | Test Results | Pass         |
| Test Date                | 2025-03-18    |              |              |

Note:

## Line

### Conducted Emission Measurement



| No. | Mk. | Freq.   | Reading Level | Correct Factor | Measurement | Limit | Over   |          |         |
|-----|-----|---------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz     | dBuV          | dB             | dBuV        | dBuV  | dB     | Detector | Comment |
| 1   |     | 0.1660  | 25.98         | 20.29          | 46.27       | 65.16 | -18.89 | QP       |         |
| 2   |     | 0.1660  | 11.69         | 20.29          | 31.98       | 55.16 | -23.18 | AVG      |         |
| 3   |     | 0.1980  | 24.10         | 20.36          | 44.46       | 63.69 | -19.23 | QP       |         |
| 4   |     | 0.1980  | 9.25          | 20.36          | 29.61       | 53.69 | -24.08 | AVG      |         |
| 5   |     | 0.2340  | 21.11         | 20.18          | 41.29       | 62.31 | -21.02 | QP       |         |
| 6   |     | 0.2340  | 8.44          | 20.18          | 28.62       | 52.31 | -23.69 | AVG      |         |
| 7   | *   | 0.4380  | 20.97         | 20.15          | 41.12       | 57.10 | -15.98 | QP       |         |
| 8   |     | 0.4380  | 8.88          | 20.15          | 29.03       | 47.10 | -18.07 | AVG      |         |
| 9   |     | 2.1700  | 17.90         | 20.33          | 38.23       | 56.00 | -17.77 | QP       |         |
| 10  |     | 2.1700  | 7.15          | 20.33          | 27.48       | 46.00 | -18.52 | AVG      |         |
| 11  |     | 27.9340 | 12.60         | 20.34          | 32.94       | 60.00 | -27.06 | QP       |         |
| 12  |     | 27.9340 | 3.57          | 20.34          | 23.91       | 50.00 | -26.09 | AVG      |         |

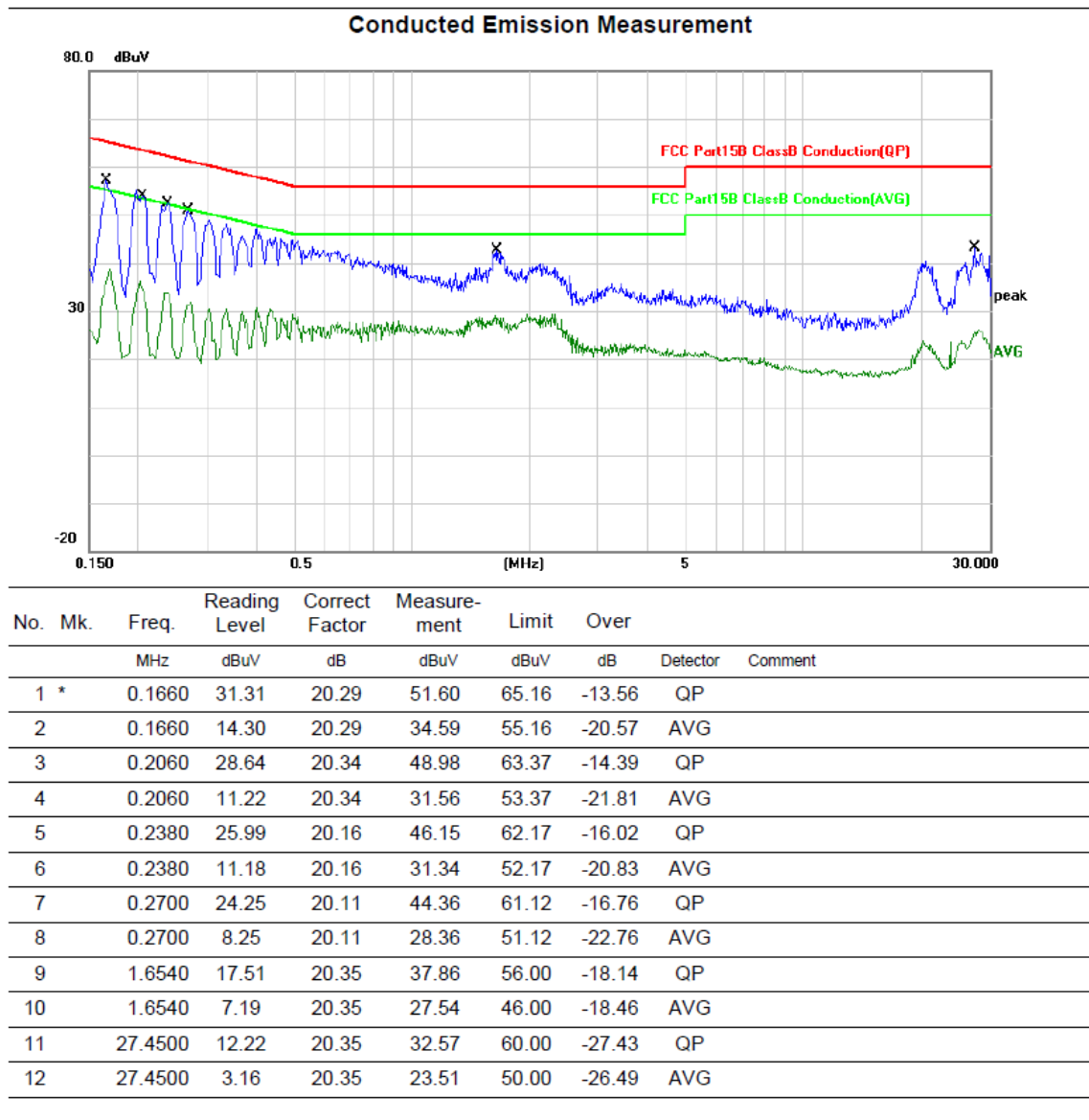
Note:

1. Correct Factor = LISN Factor + Cable Loss + Pulse Limiter Factor
2. Measurement = Reading + Correct Factor.
3. Over = Result - Limit

|                          |               |              |              |
|--------------------------|---------------|--------------|--------------|
| Product Model            | UE168         | Test Mode    | Mode 3       |
| Environmental Conditions | 23.4℃, 50% RH | Test voltage | AC 120V 60Hz |
| Tested by                | Freedom Zhuo  | Test Results | Pass         |
| Test Date                | 2025-03-18    |              |              |

Note:

## Neutral



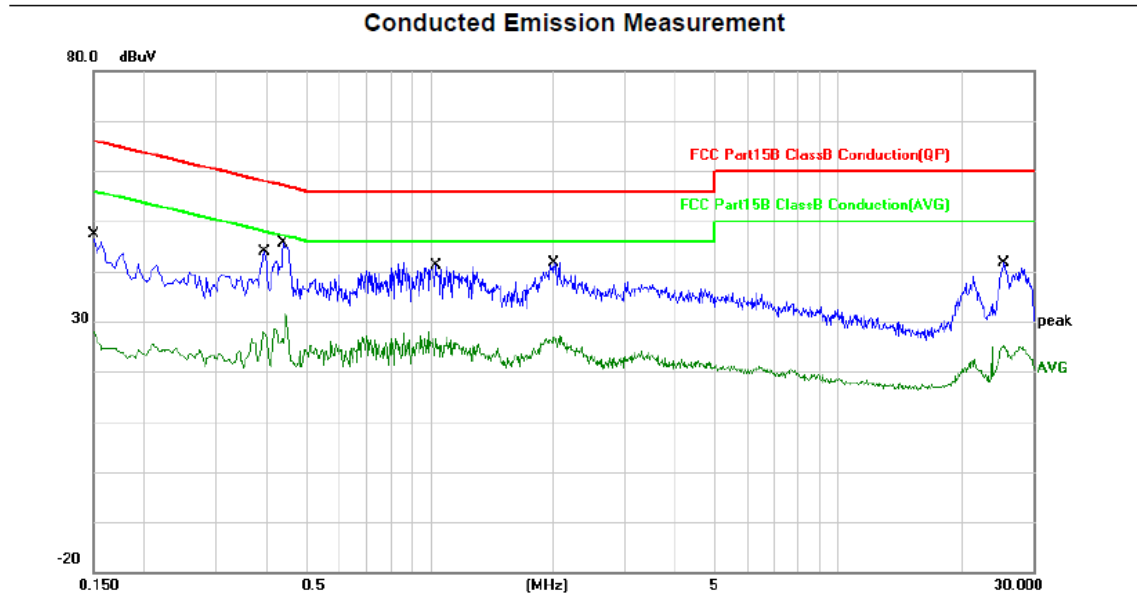
**Note:**

1. Correct Factor = LISN Factor + Cable Loss + Pulse Limiter Factor,
2. Measurement = Reading + Correct Factor.
3. Over = Result - Limit

|                          |               |              |              |
|--------------------------|---------------|--------------|--------------|
| Product Model            | UE168         | Test Mode    | Mode 5       |
| Environmental Conditions | 23.4℃, 50% RH | Test voltage | AC 120V 60Hz |
| Tested by                | Freedom Zhuo  | Test Results | Pass         |
| Test Date                | 2025-03-18    |              |              |

Note:

## Line



| No. | Mk. | Freq.   | Reading Level | Correct Factor | Measurement | Limit | Over   |          |         |
|-----|-----|---------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz     | dBuV          | dB             | dBuV        | dBuV  | dB     | Detector | Comment |
| 1   |     | 0.1500  | 20.26         | 20.35          | 40.61       | 66.00 | -25.39 | QP       |         |
| 2   |     | 0.1500  | 7.41          | 20.35          | 27.76       | 56.00 | -28.24 | AVG      |         |
| 3   |     | 0.3940  | 21.50         | 20.22          | 41.72       | 57.98 | -16.26 | QP       |         |
| 4   |     | 0.3940  | 7.85          | 20.22          | 28.07       | 47.98 | -19.91 | AVG      |         |
| 5 * |     | 0.4380  | 20.84         | 20.15          | 40.99       | 57.10 | -16.11 | QP       |         |
| 6   |     | 0.4380  | 5.54          | 20.15          | 25.69       | 47.10 | -21.41 | AVG      |         |
| 7   |     | 1.0380  | 14.79         | 20.06          | 34.85       | 56.00 | -21.15 | QP       |         |
| 8   |     | 1.0380  | 4.62          | 20.06          | 24.68       | 46.00 | -21.32 | AVG      |         |
| 9   |     | 2.0220  | 16.16         | 20.36          | 36.52       | 56.00 | -19.48 | QP       |         |
| 10  |     | 2.0220  | 5.63          | 20.36          | 25.99       | 46.00 | -20.01 | AVG      |         |
| 11  |     | 25.4740 | 12.00         | 20.29          | 32.29       | 60.00 | -27.71 | QP       |         |
| 12  |     | 25.4740 | 2.32          | 20.29          | 22.61       | 50.00 | -27.39 | AVG      |         |

**Note:**

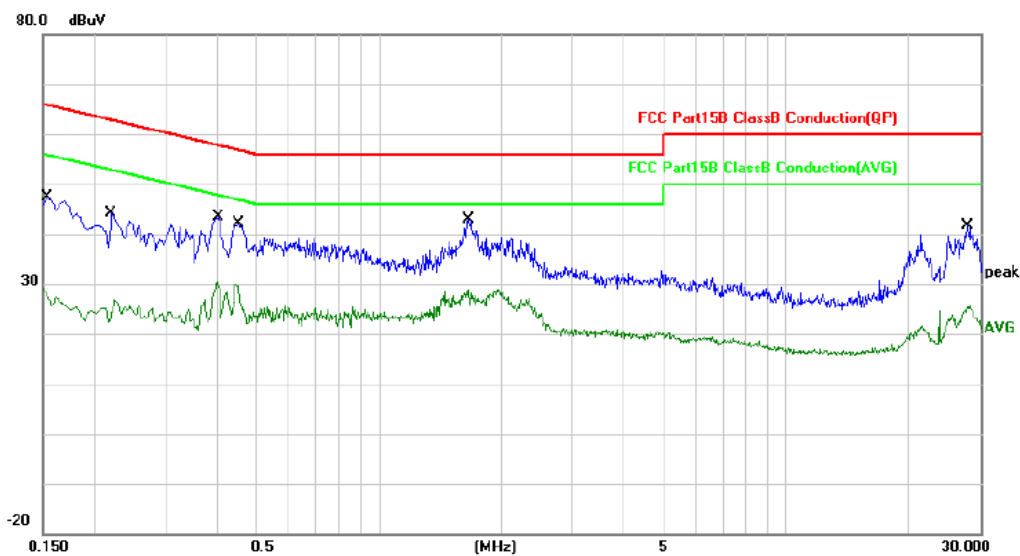
1. Correct Factor = LISN Factor + Cable Loss + Pulse Limiter Factor
2. Measurement = Reading + Correct Factor.
3. Over = Result - Limit

|                          |               |              |              |
|--------------------------|---------------|--------------|--------------|
| Product Model            | UE168         | Test Mode    | Mode 5       |
| Environmental Conditions | 23.4℃, 50% RH | Test voltage | AC 120V 60Hz |
| Tested by                | Freedom Zhuo  | Test Results | Pass         |
| Test Date                | 2025-03-18    |              |              |

Note:

## Neutral

### Conducted Emission Measurement



| No. | Mk. | Freq.   | Reading Level | Correct Factor | Measurement | Limit | Over   |          |         |
|-----|-----|---------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz     | dBuV          | dB             | dBuV        | dBuV  | dB     | Detector | Comment |
| 1   |     | 0.1540  | 20.93         | 20.33          | 41.26       | 65.78 | -24.52 | QP       |         |
| 2   |     | 0.1540  | 6.49          | 20.33          | 26.82       | 55.78 | -28.96 | AVG      |         |
| 3   |     | 0.2220  | 16.40         | 20.25          | 36.65       | 62.74 | -26.09 | QP       |         |
| 4   |     | 0.2220  | 4.09          | 20.25          | 24.34       | 52.74 | -28.40 | AVG      |         |
| 5 * |     | 0.4060  | 20.56         | 20.23          | 40.79       | 57.73 | -16.94 | QP       |         |
| 6   |     | 0.4060  | 6.43          | 20.23          | 26.66       | 47.73 | -21.07 | AVG      |         |
| 7   |     | 0.4540  | 18.52         | 20.12          | 38.64       | 56.80 | -18.16 | QP       |         |
| 8   |     | 0.4540  | 8.15          | 20.12          | 28.27       | 46.80 | -18.53 | AVG      |         |
| 9   |     | 1.6700  | 17.88         | 20.35          | 38.23       | 56.00 | -17.77 | QP       |         |
| 10  |     | 1.6700  | 6.98          | 20.35          | 27.33       | 46.00 | -18.67 | AVG      |         |
| 11  |     | 27.9220 | 12.20         | 20.34          | 32.54       | 60.00 | -27.46 | QP       |         |
| 12  |     | 27.9220 | 3.28          | 20.34          | 23.62       | 50.00 | -26.38 | AVG      |         |

Note:

1. Correct Factor = LISN Factor + Cable Loss + Pulse Limiter Factor,
2. Measurement = Reading + Correct Factor.
3. Over = Result - Limit

## 4.2. Radiated Emission Test

### 4.2.1. Limit

FCC Part15B

| Frequency (MHz) | limits at 3m (dBμV/m) |             |             |
|-----------------|-----------------------|-------------|-------------|
|                 | QP Detector           | PK Detector | AV Detector |
| 30 – 88         | 40.0                  | --          | --          |
| 88 – 216        | 43.5                  | --          | --          |
| 216 – 960       | 46.0                  |             |             |
| 960 – 1000      | 54.0                  | --          | --          |
| Above 1000      | --                    | 74.0        | 54.0        |

| Highest frequency generated or used in the device or on which the device operates or tunes (MHz) | Upper frequency of measurement range (MHz)                           |
|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| Below 1.705                                                                                      | 30.                                                                  |
| 1.705-108                                                                                        | 1000.                                                                |
| 108-500                                                                                          | 2000.                                                                |
| 500-1000                                                                                         | 5000.                                                                |
| Above 1000                                                                                       | 5th harmonic of the highest frequency or 40 GHz, whichever is lower. |

### 4.2.2. Test Procedures

Test methods reference ANSI C63.4:2014.

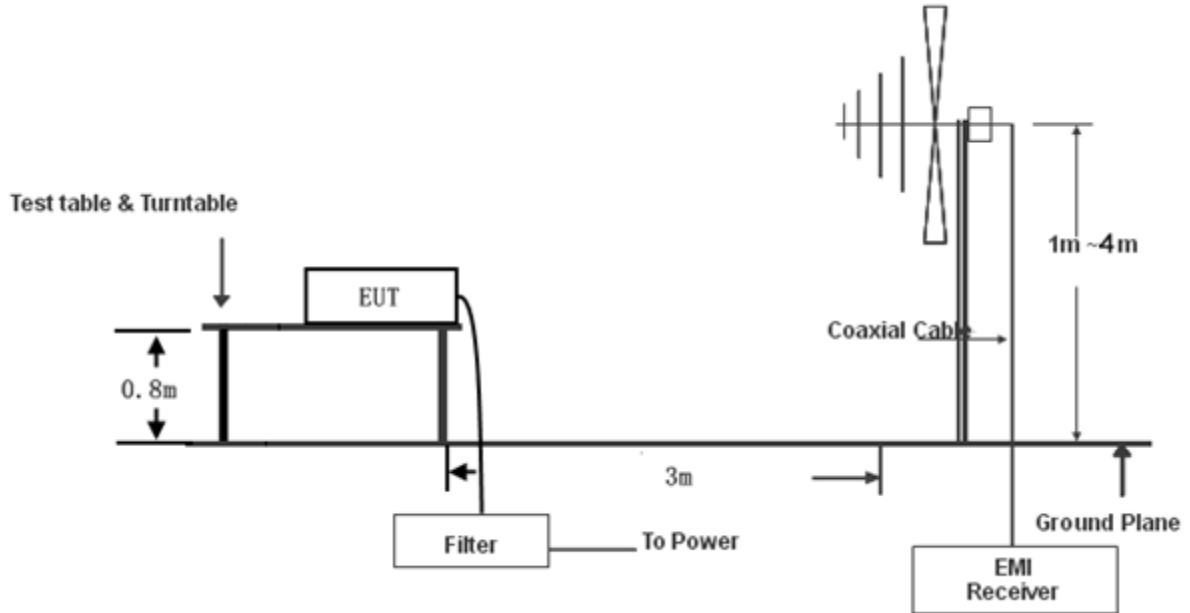
- Below 1GHz, the measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 m above the ground at a 3 m semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- Above 1GHz, the measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 m above the ground at a 3 m semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.



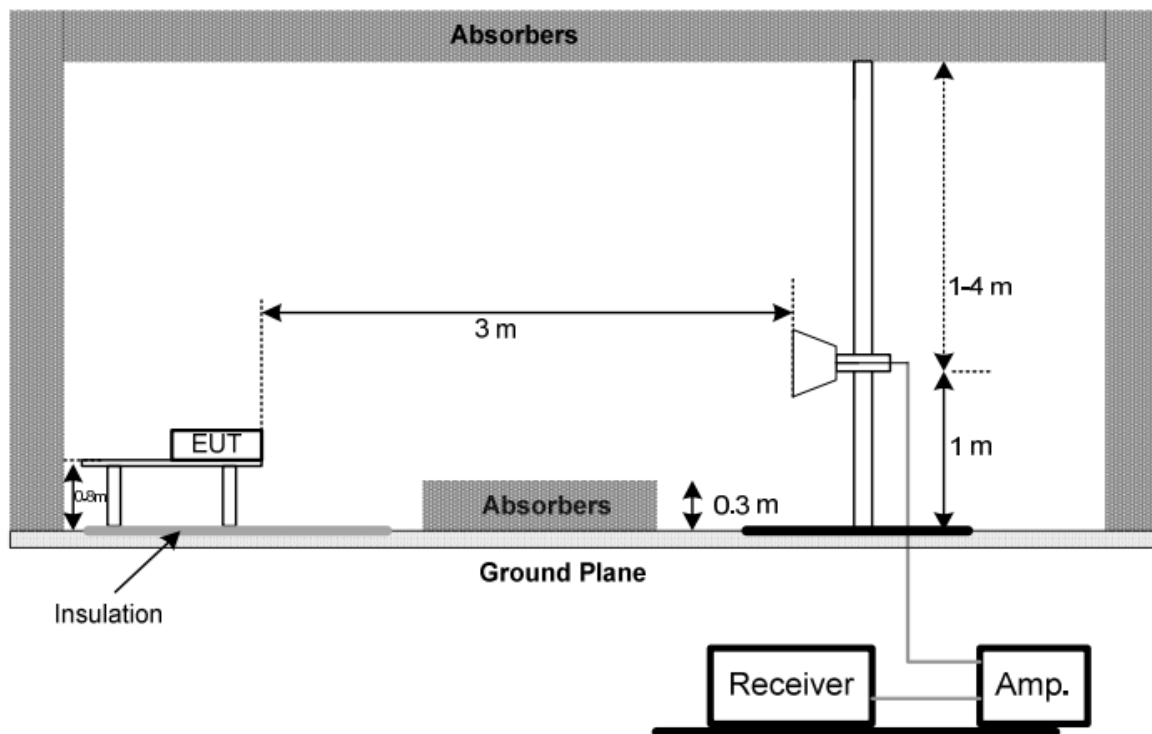
3. The height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. The initial step in collecting radiated emission data is a receiver peak detector mode.
5. Pre - scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
6. For above 1GHz, If the emission level of the EUT In “Peak Detection” mode is 20 dB lower than the “Average” limit (means that the emission level in “Peak Detection” mode also complies with the limit in “Average Mode”), testing will be stopped and “Peak” values of the EUT will be reported, otherwise, the emissions of the EUT will be measured in “Average Mode” again and then reported.
7. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1GHz).
8. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform.(above 1GHz).

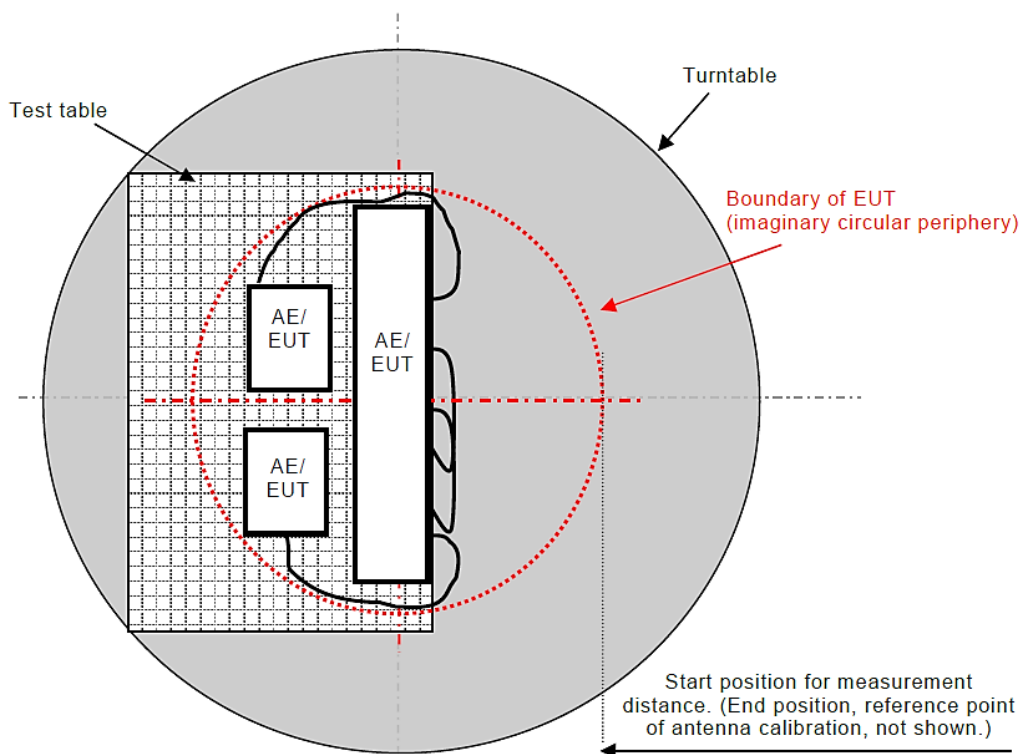
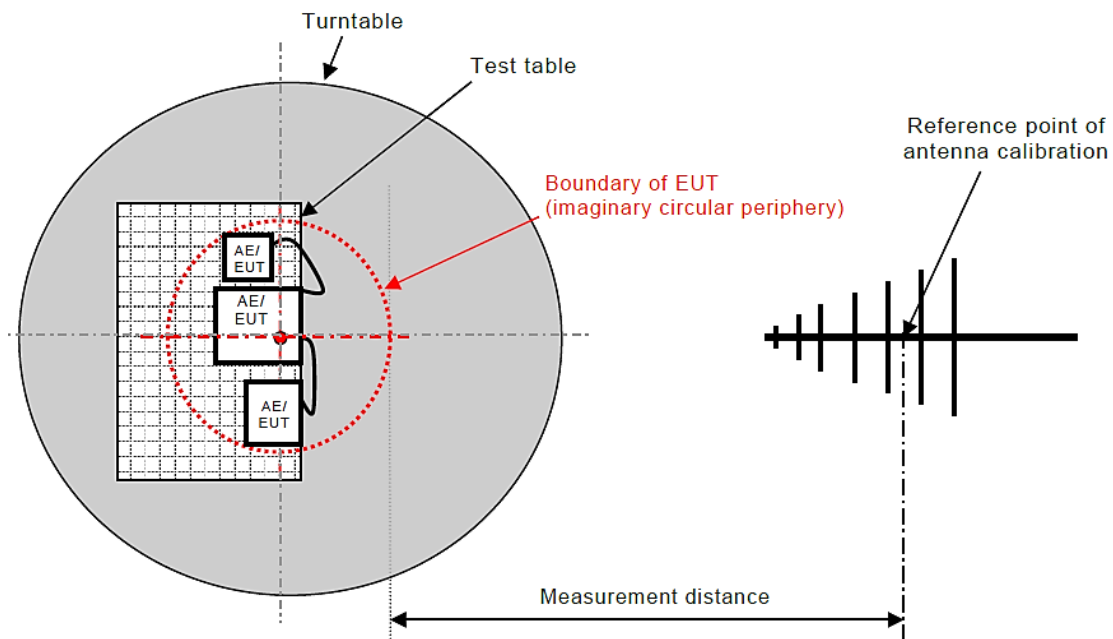
### 4.2.3. Test Set-up

Radiated measurement test set-up frequency below 1 GHz



Radiated measurement test set-up frequency above 1 GHz





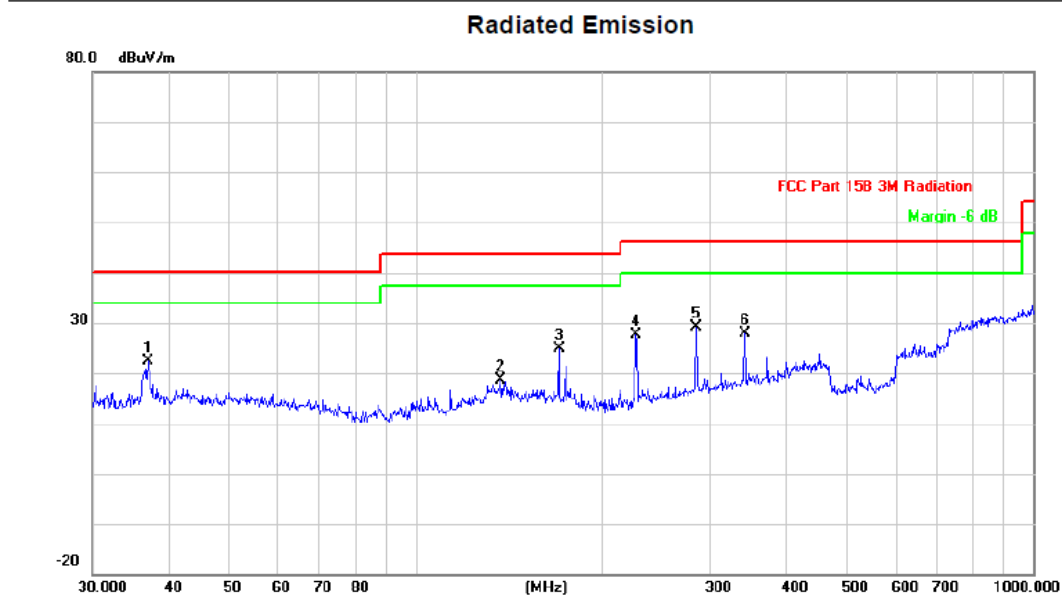
For the actual test configuration, please refer to the related item – Photographs of the Test Configuration

## 4.2.4. Test Results

Below 1GHz

|                          |                |              |              |
|--------------------------|----------------|--------------|--------------|
| Product Model            | UE168          | Location     | 3m chamber   |
| Environmental Conditions | 22.6°C, 49% RH | Test Mode    | Mode 1       |
| Antenna Pole             | Horizontal     | Test voltage | AC 120V/60Hz |
| Tested by                | Lemon He       | Test Results | PASS         |
| Test Date                | 2025-03-17     |              |              |

Note:



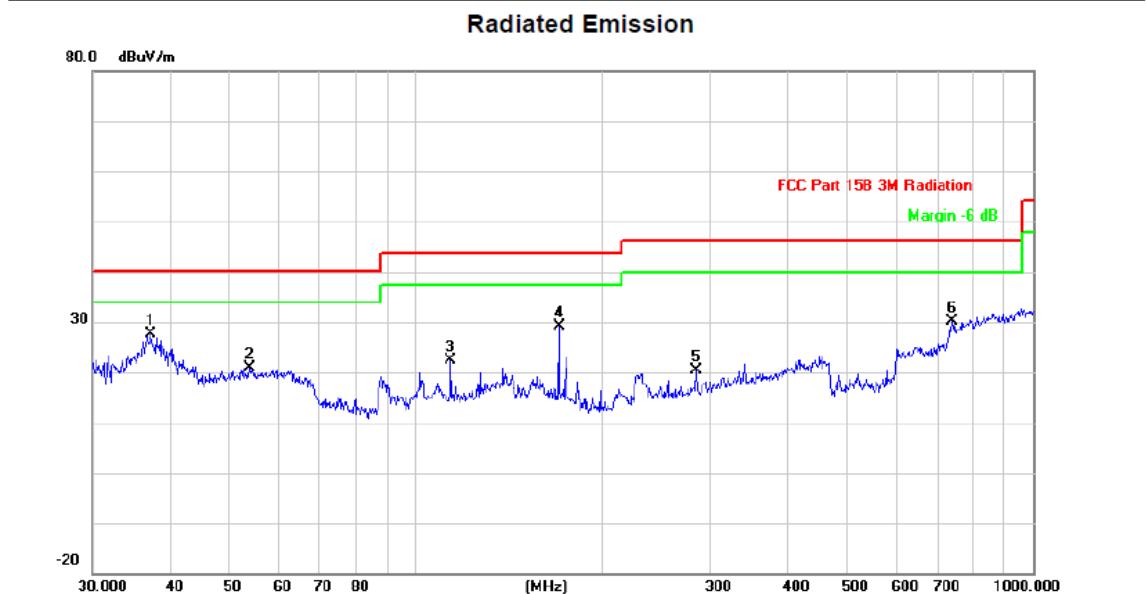
| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 36.8953  | 32.82         | -10.43         | 22.39       | 40.00  | -17.61 |                |              | peak    |
| 2   |     | 137.4202 | 28.65         | -10.04         | 18.61       | 43.50  | -24.89 |                |              | peak    |
| 3   |     | 170.7926 | 34.92         | -10.06         | 24.86       | 43.50  | -18.64 |                |              | peak    |
| 4   |     | 227.6906 | 39.25         | -11.53         | 27.72       | 46.00  | -18.28 |                |              | peak    |
| 5   | *   | 284.9767 | 37.93         | -8.91          | 29.02       | 46.00  | -16.98 |                |              | peak    |
| 6   |     | 341.9786 | 35.48         | -7.63          | 27.85       | 46.00  | -18.15 |                |              | peak    |

Note:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain
2. Measurement= Reading + Correct Factor.
3. Over = Result - Limit

|                          |                |              |              |
|--------------------------|----------------|--------------|--------------|
| Product Model            | UE168          | Location     | 3m chamber   |
| Environmental Conditions | 22.6°C, 49% RH | Test Mode    | Mode 1       |
| Antenna Pole             | Vertical       | Test voltage | AC 120V/60Hz |
| Tested by                | Lemon He       | Test Results | PASS         |
| Test Date                | 2025-03-17     |              |              |

Note:



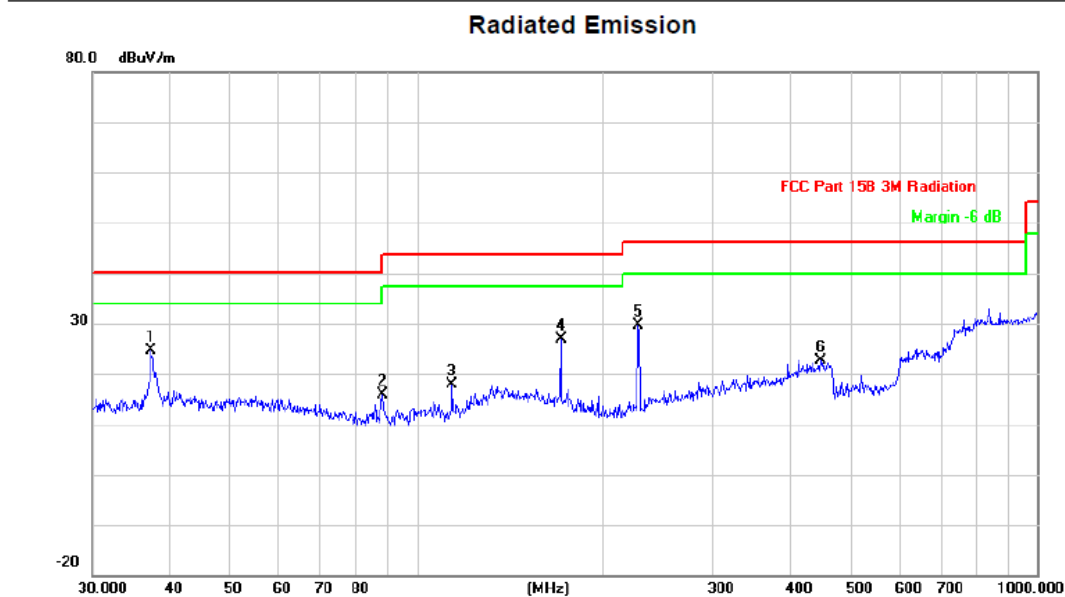
| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 37.2855  | 37.95         | -10.36         | 27.59       | 40.00  | -12.41 | peak           |              |         |
| 2   |     | 53.8818  | 31.65         | -10.66         | 20.99       | 40.00  | -19.01 | peak           |              |         |
| 3   |     | 114.1138 | 35.02         | -12.68         | 22.34       | 43.50  | -21.16 | peak           |              |         |
| 4   |     | 170.7926 | 39.21         | -10.06         | 29.15       | 43.50  | -14.35 | peak           |              |         |
| 5   |     | 284.9767 | 29.30         | -8.91          | 20.39       | 46.00  | -25.61 | peak           |              |         |
| 6   |     | 739.6604 | 28.85         | 1.27           | 30.12       | 46.00  | -15.88 | peak           |              |         |

Note:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain
2. Measurement = Reading + Correct Factor
3. Over = Result - Limit

|                          |                |              |            |
|--------------------------|----------------|--------------|------------|
| Product Model            | UE168          | Location     | 3m chamber |
| Environmental Conditions | 22.6°C, 49% RH | Test Mode    | Mode 2     |
| Antenna Pole             | Horizontal     | Test voltage | DC 4.5V    |
| Tested by                | Lemon He       | Test Results | PASS       |
| Test Date                | 2025-03-17     |              |            |

Note:



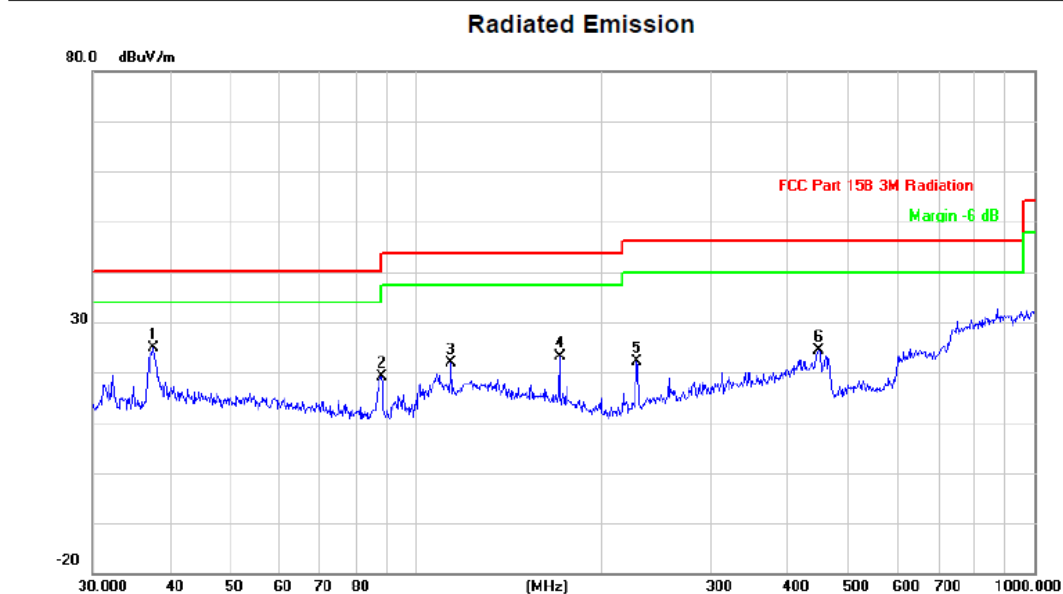
| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 37.2855  | 34.97         | -10.36         | 24.61       | 40.00  | -15.39 | peak           |              |         |
| 2   |     | 88.0330  | 30.23         | -14.43         | 15.80       | 43.50  | -27.70 | peak           |              |         |
| 3   |     | 114.1138 | 30.59         | -12.68         | 17.91       | 43.50  | -25.59 | peak           |              |         |
| 4   |     | 170.7926 | 36.95         | -10.06         | 26.89       | 43.50  | -16.61 | peak           |              |         |
| 5   |     | 227.6906 | 41.08         | -11.53         | 29.55       | 46.00  | -16.45 | peak           |              |         |
| 6   |     | 447.9821 | 27.56         | -4.85          | 22.71       | 46.00  | -23.29 | peak           |              |         |

Note:

4. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain
5. Measurement= Reading + Correct Factor.
6. Over = Result - Limit

|                          |                |              |            |
|--------------------------|----------------|--------------|------------|
| Product Model            | UE168          | Location     | 3m chamber |
| Environmental Conditions | 22.6°C, 49% RH | Test Mode    | Mode 2     |
| Antenna Pole             | Vertical       | Test voltage | DC 4.5V    |
| Tested by                | Lemon He       | Test Results | PASS       |
| Test Date                | 2025-03-17     |              |            |

Note:



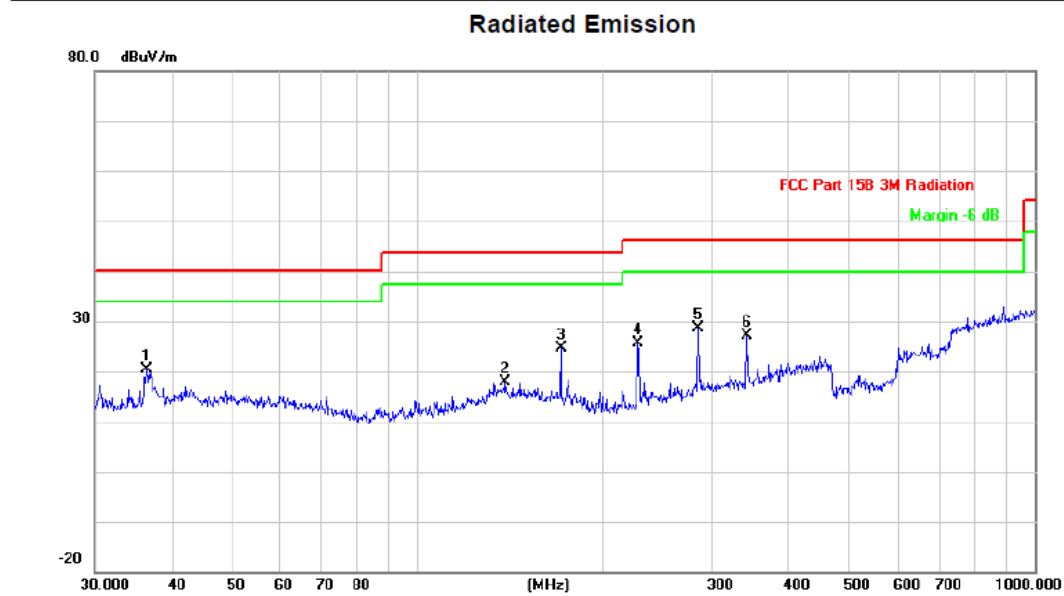
| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 37.6798  | 35.15         | -10.32         | 24.83       | 40.00  | -15.17 | peak           |              |         |
| 2   |     | 88.0330  | 33.60         | -14.43         | 19.17       | 43.50  | -24.33 | peak           |              |         |
| 3   |     | 114.1138 | 34.51         | -12.68         | 21.83       | 43.50  | -21.67 | peak           |              |         |
| 4   |     | 170.7926 | 33.16         | -10.06         | 23.10       | 43.50  | -20.40 | peak           |              |         |
| 5   |     | 227.6906 | 33.56         | -11.53         | 22.03       | 46.00  | -23.97 | peak           |              |         |
| 6   |     | 447.9822 | 29.15         | -4.85          | 24.30       | 46.00  | -21.70 | peak           |              |         |

**Note:**

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain
2. Measurement = Reading + Correct Factor
3. Over = Result - Limit

|                          |                |              |              |
|--------------------------|----------------|--------------|--------------|
| Product Model            | UE168          | Location     | 3m chamber   |
| Environmental Conditions | 22.6°C, 49% RH | Test Mode    | Mode 3       |
| Antenna Pole             | Horizontal     | Test voltage | AC 120V/60Hz |
| Tested by                | Lemon He       | Test Results | PASS         |
| Test Date                | 2025-03-17     |              |              |

Note:



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 36.3814  | 30.86         | -10.53         | 20.33       | 40.00  | -19.67 | peak           |              |         |
| 2   |     | 138.8735 | 27.78         | -9.94          | 17.84       | 43.50  | -25.66 | peak           |              |         |
| 3   |     | 170.7926 | 34.75         | -10.06         | 24.69       | 43.50  | -18.81 | peak           |              |         |
| 4   |     | 227.6906 | 37.23         | -11.53         | 25.70       | 46.00  | -20.30 | peak           |              |         |
| 5   | *   | 284.9767 | 37.64         | -8.91          | 28.73       | 46.00  | -17.27 | peak           |              |         |
| 6   |     | 341.9786 | 34.64         | -7.63          | 27.01       | 46.00  | -18.99 | peak           |              |         |

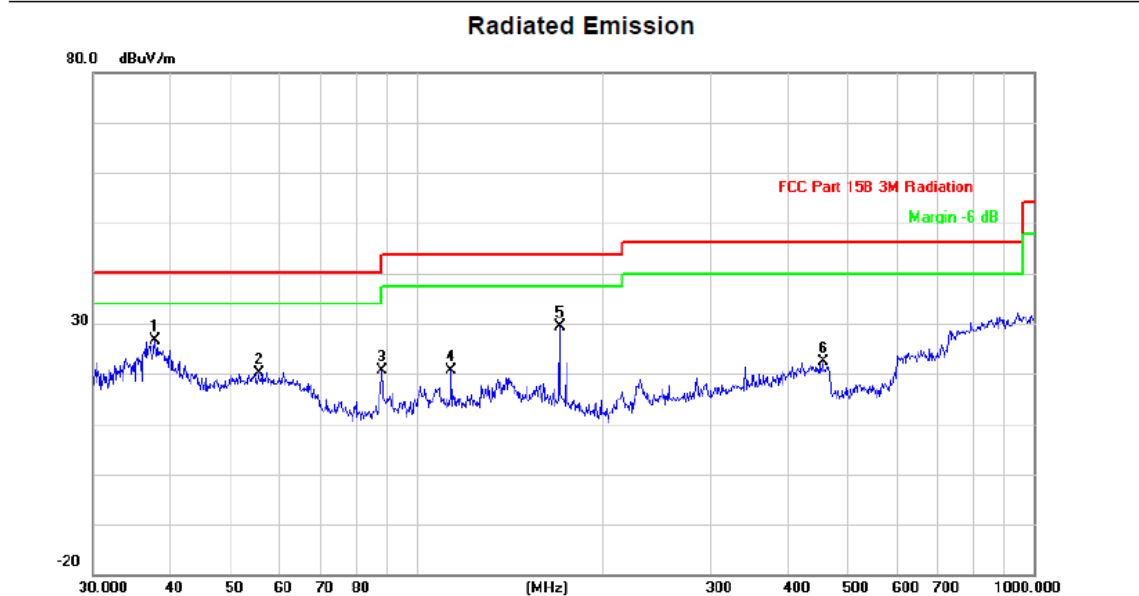
**Note:**

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain
2. Measurement = Reading + Correct Factor.
3. Over = Result - Limit



|                          |                |              |              |
|--------------------------|----------------|--------------|--------------|
| Product Model            | UE168          | Location     | 3m chamber   |
| Environmental Conditions | 22.6°C, 49% RH | Test Mode    | Mode 3       |
| Antenna Pole             | Vertical       | Test voltage | AC 120V/60Hz |
| Tested by                | Lemon He       | Test Results | PASS         |
| Test Date                | 2025-03-17     |              |              |

Note:



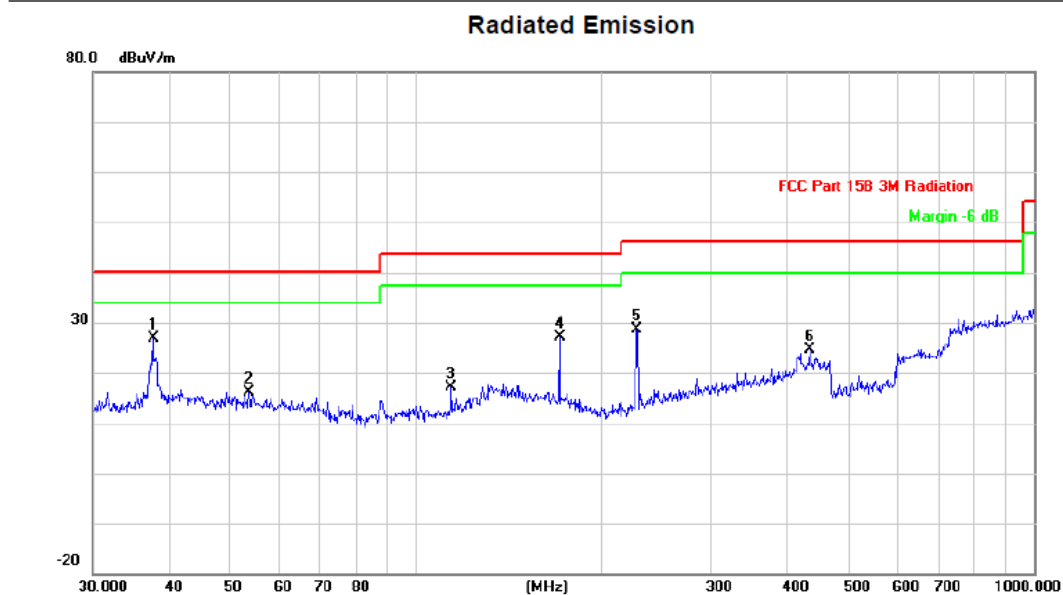
| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 37.8121  | 37.04         | -10.31         | 26.73       | 40.00  | -13.27 | peak           |              |         |
| 2   |     | 55.6093  | 30.95         | -10.76         | 20.19       | 40.00  | -19.81 | peak           |              |         |
| 3   |     | 88.0330  | 35.09         | -14.43         | 20.66       | 43.50  | -22.84 | peak           |              |         |
| 4   |     | 114.1137 | 33.33         | -12.68         | 20.65       | 43.50  | -22.85 | peak           |              |         |
| 5   |     | 170.7926 | 39.44         | -10.06         | 29.38       | 43.50  | -14.12 | peak           |              |         |
| 6   |     | 455.9058 | 27.03         | -4.70          | 22.33       | 46.00  | -23.67 | peak           |              |         |

Note:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain
2. Measurement = Reading + Correct Factor
3. Over = Result - Limit

|                          |                |              |            |
|--------------------------|----------------|--------------|------------|
| Product Model            | UE168          | Location     | 3m chamber |
| Environmental Conditions | 22.6°C, 49% RH | Test Mode    | Mode 4     |
| Antenna Pole             | Horizontal     | Test voltage | DC 4.5V    |
| Tested by                | Lemon He       | Test Results | PASS       |
| Test Date                | 2025-03-17     |              |            |

Note:



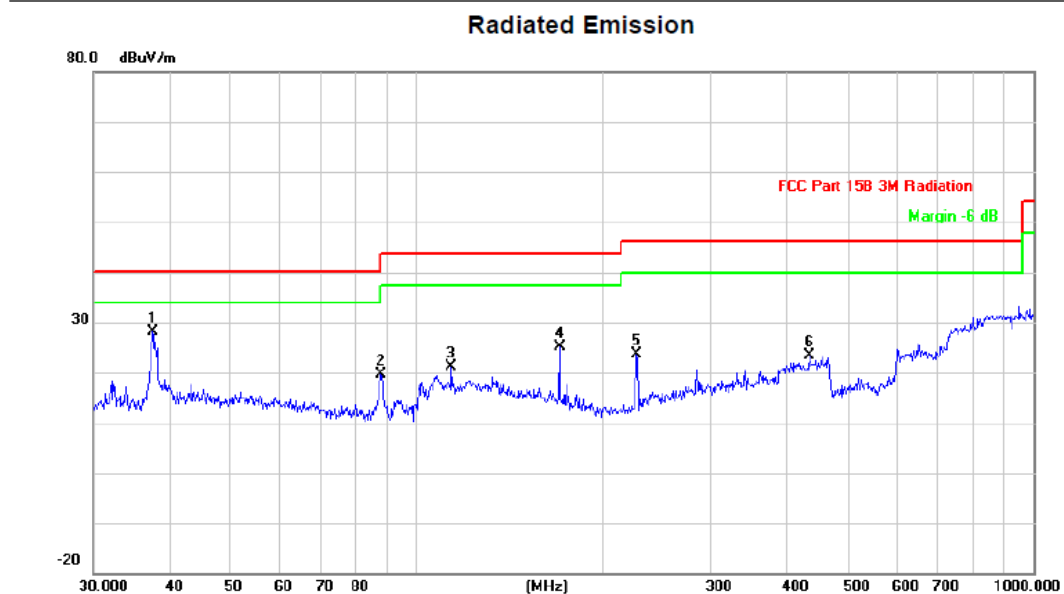
| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 37.5480  | 37.13         | -10.34         | 26.79       | 40.00  | -13.21 | peak           |              |         |
| 2   |     | 53.6931  | 26.89         | -10.64         | 16.25       | 40.00  | -23.75 | peak           |              |         |
| 3   |     | 114.1138 | 29.87         | -12.68         | 17.19       | 43.50  | -26.31 | peak           |              |         |
| 4   |     | 170.7926 | 37.15         | -10.06         | 27.09       | 43.50  | -16.41 | peak           |              |         |
| 5   |     | 227.6906 | 40.26         | -11.53         | 28.73       | 46.00  | -17.27 | peak           |              |         |
| 6   |     | 434.0651 | 29.75         | -5.13          | 24.62       | 46.00  | -21.38 | peak           |              |         |

**Note:**

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain
2. Measurement = Reading + Correct Factor.
3. Over = Result - Limit

|                          |                |              |            |
|--------------------------|----------------|--------------|------------|
| Product Model            | UE168          | Location     | 3m chamber |
| Environmental Conditions | 22.6°C, 49% RH | Test Mode    | Mode 4     |
| Antenna Pole             | Vertical       | Test voltage | DC 4.5V    |
| Tested by                | Lemon He       | Test Results | PASS       |
| Test Date                | 2025-03-17     |              |            |

Note:



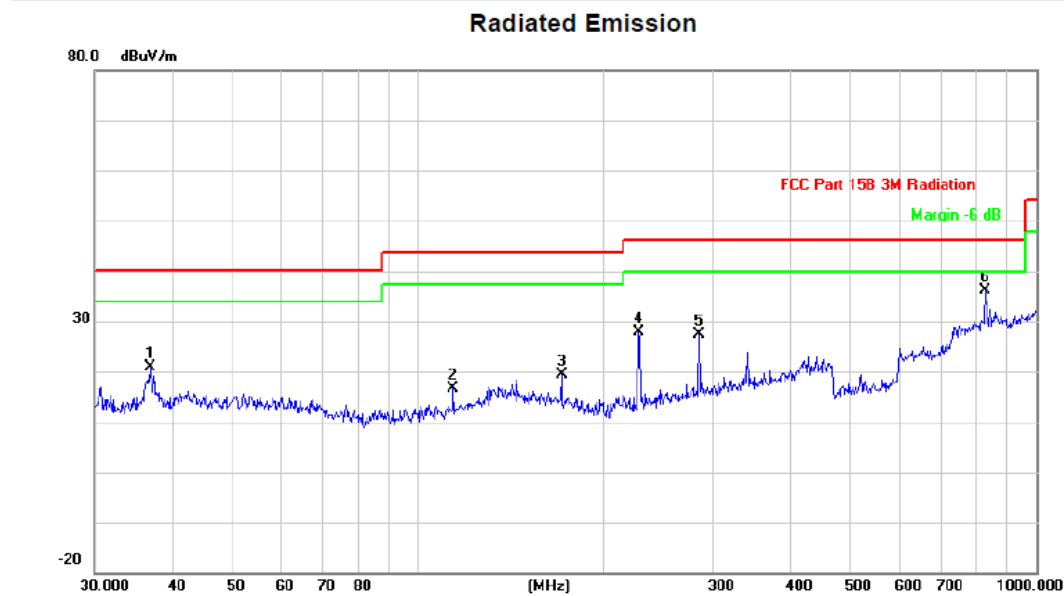
| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 37.4165  | 38.41         | -10.35         | 28.06       | 40.00  | -11.94 | peak           |              |         |
| 2   |     | 87.7246  | 33.98         | -14.40         | 19.58       | 40.00  | -20.42 | peak           |              |         |
| 3   |     | 114.1138 | 33.77         | -12.68         | 21.09       | 43.50  | -22.41 | peak           |              |         |
| 4   |     | 170.7926 | 35.10         | -10.06         | 25.04       | 43.50  | -18.46 | peak           |              |         |
| 5   |     | 227.6906 | 35.28         | -11.53         | 23.75       | 46.00  | -22.25 | peak           |              |         |
| 6   |     | 434.0651 | 28.62         | -5.13          | 23.49       | 46.00  | -22.51 | peak           |              |         |

Note:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain
2. Measurement = Reading + Correct Factor
3. Over = Result - Limit

|                          |                |              |              |
|--------------------------|----------------|--------------|--------------|
| Product Model            | UE168          | Location     | 3m chamber   |
| Environmental Conditions | 22.6°C, 49% RH | Test Mode    | Mode 5       |
| Antenna Pole             | Horizontal     | Test voltage | AC 120V/60Hz |
| Tested by                | Lemon He       | Test Results | PASS         |
| Test Date                | 2025-03-17     |              |              |

Note:



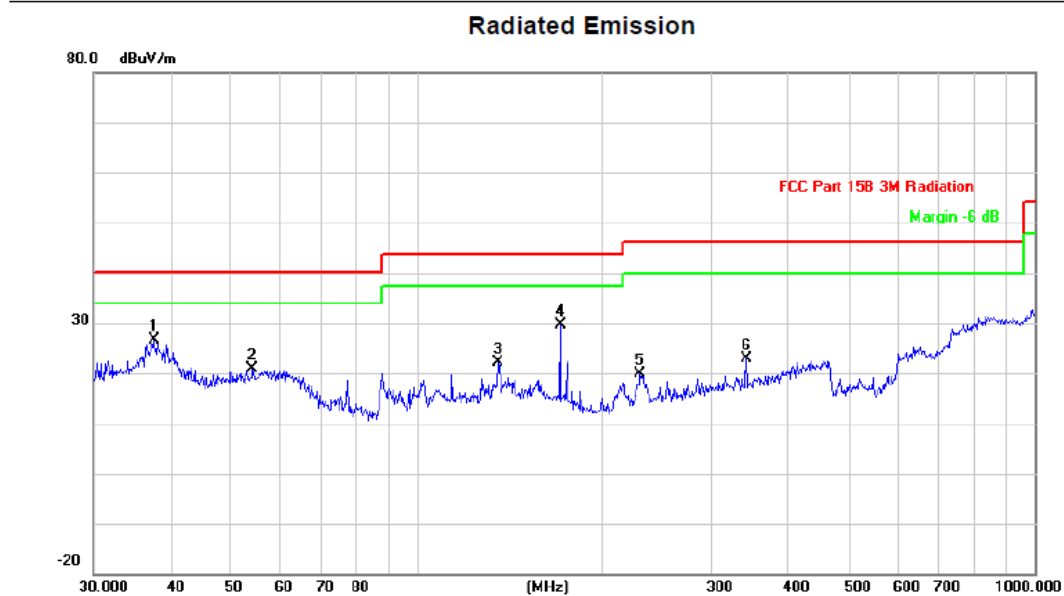
| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 36.8953  | 31.41         | -10.43         | 20.98       | 40.00  | -19.02 | peak           |              |         |
| 2   |     | 114.1138 | 29.30         | -12.68         | 16.62       | 43.50  | -26.88 | peak           |              |         |
| 3   |     | 170.7926 | 29.38         | -10.06         | 19.32       | 43.50  | -24.18 | peak           |              |         |
| 4   |     | 227.6906 | 39.49         | -11.53         | 27.96       | 46.00  | -18.04 | peak           |              |         |
| 5   |     | 284.9767 | 36.23         | -8.91          | 27.32       | 46.00  | -18.68 | peak           |              |         |
| 6 * |     | 827.4934 | 33.14         | 2.94           | 36.08       | 46.00  | -9.92  | peak           |              |         |

Note:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain
2. Measurement = Reading + Correct Factor.
3. Over = Result - Limit

|                          |               |              |              |
|--------------------------|---------------|--------------|--------------|
| Product Model            | UE168         | Location     | 3m chamber   |
| Environmental Conditions | 22.6℃, 49% RH | Test Mode    | Mode 5       |
| Antenna Pole             | Vertical      | Test voltage | AC 120V/60Hz |
| Tested by                | Lemon He      | Test Results | PASS         |
| Test Date                | 2025-03-17    |              |              |

Note:



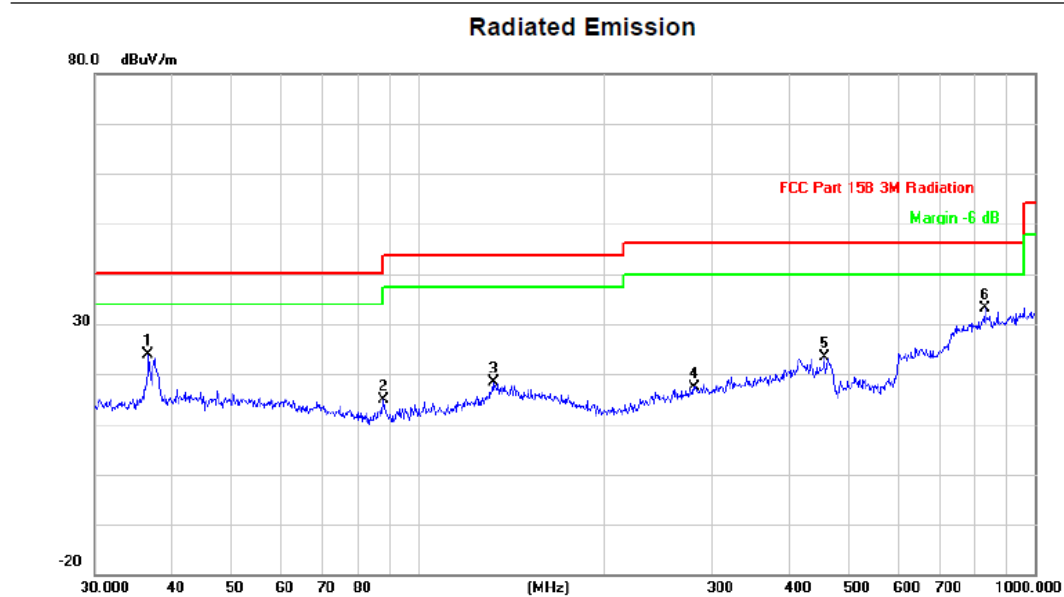
| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 37.5480  | 36.93         | -10.34         | 26.59       | 40.00  | -13.41 | peak           |              |         |
| 2   |     | 54.2610  | 31.42         | -10.65         | 20.77       | 40.00  | -19.23 | peak           |              |         |
| 3   |     | 135.5062 | 32.17         | -10.01         | 22.16       | 43.50  | -21.34 | peak           |              |         |
| 4   |     | 170.7926 | 39.68         | -10.06         | 29.62       | 43.50  | -13.88 | peak           |              |         |
| 5   |     | 230.0985 | 31.09         | -11.22         | 19.87       | 46.00  | -26.13 | peak           |              |         |
| 6   |     | 341.9786 | 30.48         | -7.63          | 22.85       | 46.00  | -23.15 | peak           |              |         |

Note:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain
2. Measurement = Reading + Correct Factor
3. Over = Result - Limit

|                          |                |              |            |
|--------------------------|----------------|--------------|------------|
| Product Model            | UE168          | Location     | 3m chamber |
| Environmental Conditions | 22.6°C, 49% RH | Test Mode    | Mode 6     |
| Antenna Pole             | Horizontal     | Test voltage | DC 4.5V    |
| Tested by                | Lemon He       | Test Results | PASS       |
| Test Date                | 2025-03-17     |              |            |

Note:



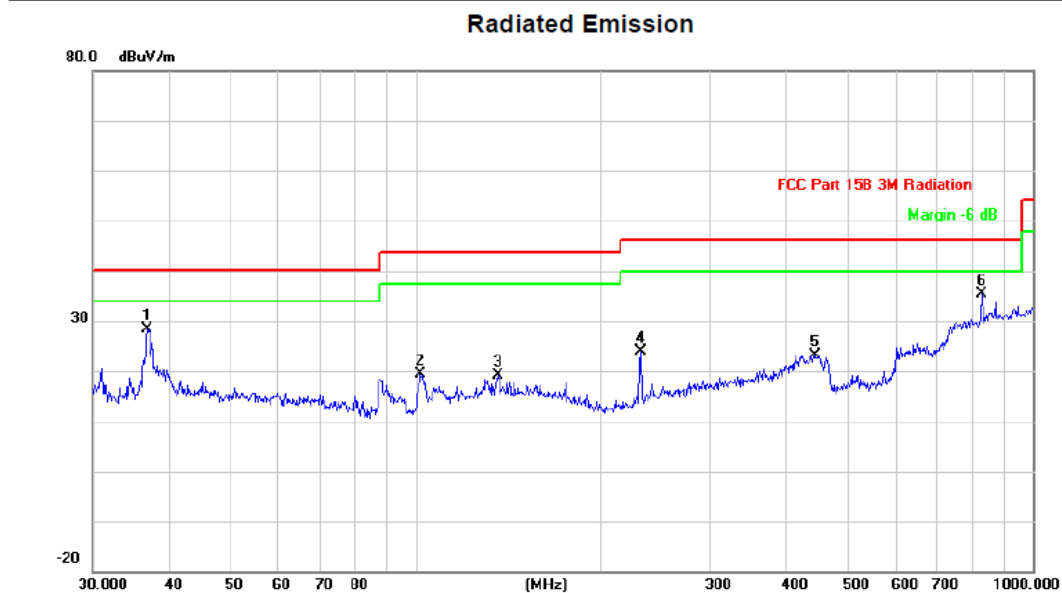
| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 36.6374  | 34.34         | -10.48         | 23.86       | 40.00  | -16.14 | peak           |              |         |
| 2   |     | 88.0330  | 29.26         | -14.43         | 14.83       | 43.50  | -28.67 | peak           |              |         |
| 3   |     | 132.6850 | 28.69         | -10.21         | 18.48       | 43.50  | -25.02 | peak           |              |         |
| 4   |     | 281.0074 | 26.58         | -9.17          | 17.41       | 46.00  | -28.59 | peak           |              |         |
| 5   |     | 455.9058 | 28.04         | -4.70          | 23.34       | 46.00  | -22.66 | peak           |              |         |
| 6 * |     | 830.4001 | 30.17         | 3.01           | 33.18       | 46.00  | -12.82 | peak           |              |         |

Note:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain
2. Measurement = Reading + Correct Factor.
3. Over = Result - Limit

|                          |                |              |            |
|--------------------------|----------------|--------------|------------|
| Product Model            | UE168          | Location     | 3m chamber |
| Environmental Conditions | 22.6°C, 49% RH | Test Mode    | Mode 6     |
| Antenna Pole             | Vertical       | Test voltage | DC 4.5V    |
| Tested by                | Lemon He       | Test Results | PASS       |
| Test Date                | 2025-03-17     |              |            |

Note:



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 36.7661  | 38.94         | -10.46         | 28.48       | 40.00  | -11.52 | peak           |              |         |
| 2   |     | 102.0013 | 33.01         | -13.58         | 19.43       | 43.50  | -24.07 | peak           |              |         |
| 3   |     | 135.9821 | 29.00         | -9.95          | 19.05       | 43.50  | -24.45 | peak           |              |         |
| 4   |     | 231.7178 | 34.94         | -11.12         | 23.82       | 46.00  | -22.18 | peak           |              |         |
| 5   |     | 444.8514 | 28.06         | -4.87          | 23.19       | 46.00  | -22.81 | peak           |              |         |
| 6 * |     | 827.4934 | 32.40         | 2.94           | 35.34       | 46.00  | -10.66 | peak           |              |         |

**Note:**

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain
2. Measurement = Reading + Correct Factor
3. Over = Result - Limit

## Statement

1. The report is invalid without the official seal or special seal of Shenzhen Haiyun Standard Technology Co., Ltd. (hereinafter referred to as the unit).
2. The report is invalid without the signature of the approver.
3. The report is invalid if altered arbitrarily.
4. The report shall not be partially copied without the written approval of the unit.
5. The reported test results are only valid for the tested samples.
6. If there is any objection to the test report, it shall be submitted to the test unit within 15 days from the date of receiving the report, and the overdue shall not be accepted.

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**(END OF REPORT)**