

# TEST REPORT

**Application No.:** KSCR2603000688AT  
**FCC ID:** 2BA5V-TA1406U  
**Applicant:** NanJing CukTech Electronics Technology Co., Ltd.  
**Address of Applicant:** 16F Building A1,Huizhi Technology Park,No.8,Hengtai Road, Nanjing Economic and Technological Development Zone, Nanjing, Jiangsu, P.R. China  
**Manufacturer:** NanJing CukTech Electronics Technology Co., Ltd.  
**Address of Manufacturer:** 16F Building A1,Huizhi Technology Park,No.8,Hengtai Road, Nanjing Economic and Technological Development Zone, Nanjing, Jiangsu, P.R. China  
**Equipment Under Test (EUT):**  
**EUT Name:** CUKTECH 15 Charging Station  
**Model No.:** TA1406U  
**Trade Mark:** CUKTECH  
**Standard(s) :** 47 CFR Part 15, Subpart C  
**Date of Receipt:** 2026-03-31  
**Date of Test:** 2026-04-15 to 2026-04-21  
**Date of Issue:** 2026-04-28

|                     |              |
|---------------------|--------------|
| <b>Test Result:</b> | <b>Pass*</b> |
|---------------------|--------------|

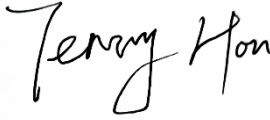
\* In the configuration tested, the EUT complied with the standards specified above.

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Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

| Revision Record |             |            |        |
|-----------------|-------------|------------|--------|
| Version         | Description | Date       | Remark |
| 00              | Original    | 2026-04-28 | /      |
|                 |             |            |        |
|                 |             |            |        |

|                          |  |                                                                                     |  |
|--------------------------|--|-------------------------------------------------------------------------------------|--|
| Authorized for issue by: |  |                                                                                     |  |
| Tested By                |  |    |  |
|                          |  | <hr/> Eric_Liu/Project Engineer                                                     |  |
| Approved By              |  |  |  |
|                          |  | <hr/> Terry Hou /Reviewer                                                           |  |

## 2 Test Summary

| Radio Spectrum Technical Requirement |                           |        |                                  |        |
|--------------------------------------|---------------------------|--------|----------------------------------|--------|
| Item                                 | Standard                  | Method | Requirement                      | Result |
| Antenna Requirement                  | 47 CFR Part 15, Subpart C | N/A    | 47 CFR Part 15, Subpart C 15.203 | Pass   |

| Radio Spectrum Matter Part                                |                           |                                   |                                           |        |
|-----------------------------------------------------------|---------------------------|-----------------------------------|-------------------------------------------|--------|
| Item                                                      | Standard                  | Method                            | Requirement                               | Result |
| 20dB Bandwidth                                            | 47 CFR Part 15, Subpart C | ANSI C63.10 (2020) Section 6.9.2  | 47 CFR Part 15, Subpart C 15.215          | Pass   |
| Conducted Emissions at AC Mains Power Port (150kHz-30MHz) |                           | ANSI C63.10 (2020) Section 6.2    | 47 CFR Part 15, Subpart C 15.207          | Pass   |
| Restricted Bands                                          |                           | ANSI C63.10 (2020) Section 6.10.5 | 47 CFR Part 15, Subpart C 15.205          | Pass   |
| Radiated Emissions (9kHz-30MHz)                           |                           | ANSI C63.10 (2020) Section 6.4    | 47 CFR Part 15, Subpart C 15.205 & 15.209 | Pass   |
| Radiated Emissions (30MHz-1GHz)                           |                           | ANSI C63.10 (2020) Section 6.5    | 47 CFR Part 15, Subpart C 15.205 & 15.209 | Pass   |

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## 4 General Information

### 4.1 Details of E.U.T.

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Voltage         | Pre-test AC 120V/50-60Hz&AC 240V/50-60Hz then choose the AC 120V/60Hz as worst case                                                                                                                                                                                                                                                                                                                                                            |
| Power supply:        | Input: 100-240V~ 50/60Hz 2A<br>Single Port Output:<br>C1: 9.0V, 3.0A; 12.0V, 3.0A; 15.0V, 3.0A; 20.0V, 5.0A, 20.0V, 6.0A 120.0W Max<br>C2: 9.0V, 3.0A; 12.0V, 3.0A; 15.0V, 3.0A; 20.0V, 5.0A; 20.0V, 6.0A; 28.0V, 5.0A 140.0W Max<br>C3: 5.0V, 3.0A; 9.0V, 3.0A; 12.0V, 2.5A; 5.0-11.0V, 3.0A 33.0W Max<br>A: 5.0V, 2.4A; 9.0V, 2.0A; 12.0V, 1.5A; 10.0V, 2.25A 22.5W Max<br>Wireless Charging W1: 5.0W Max<br>Wireless Charging M1: 25.0W Max |
| Operation frequency: | WPT M1: 360kHz                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Modulation type:     | Load modulation                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Antenna type:        | Loop Antenna                                                                                                                                                                                                                                                                                                                                                                                                                                   |

### 4.2 Description of Support Units

| Description | Manufacturer | Model No. | Serial No. |
|-------------|--------------|-----------|------------|
| WPC Load    | YBZ          | /         | /          |

### 4.3 Measurement Uncertainty

| No. | Item                            | Measurement Uncertainty                                                                |
|-----|---------------------------------|----------------------------------------------------------------------------------------|
| 1   | Radio Frequency                 | $8.4 \times 10^{-8}$                                                                   |
| 2   | Timeout                         | 2s                                                                                     |
| 3   | Duty Cycle                      | 0.37%                                                                                  |
| 4   | Occupied Bandwidth              | 3%                                                                                     |
| 5   | RF Conducted Power              | 0.6dB                                                                                  |
| 6   | RF Power Density                | 2.9dB                                                                                  |
| 7   | Conducted Spurious Emissions    | 0.75dB                                                                                 |
| 8   | RF Radiated Power               | 5.2dB (Below 1GHz)<br>5.9dB (Above 1GHz)                                               |
| 9   | Radiated Spurious Emission Test | 4.2dB (Below 30MHz)<br>4.5dB (30MHz-1GHz)<br>5.1dB (1GHz-18GHz)<br>5.4dB (Above 18GHz) |
| 10  | Temperature Test                | 1°C                                                                                    |
| 11  | Humidity Test                   | 3%                                                                                     |
| 12  | Supply Voltages                 | 1.5%                                                                                   |
| 13  | Time                            | 3%                                                                                     |

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

#### 4.4 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

Note:

1. SGS is not responsible for wrong test results due to incorrect information (e.g., max. internal working frequency, antenna gain, cable loss, etc) is provided by the applicant. (If applicable).
2. SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (If applicable).
3. Sample source: sent by customer.

#### 4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **A2LA (Certificate No. 2541.01)**

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA).

- **FCC (Designation Number: CN1172)**

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory.

- **ISED (CAB Identifier: CN0072)**

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory.

Company Number: 2324E

- **VCCI (Member No:1938)**

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.

#### 4.6 Deviation from Standards

None

#### 4.7 Abnormalities from Standard Conditions

None

## 5 Equipment List

| Item                                         | Equipment                            | Manufacturer  | Model             | Inventory No      | Cal Date   | Cal. Due Date |
|----------------------------------------------|--------------------------------------|---------------|-------------------|-------------------|------------|---------------|
| <b>Conducted Emission at Mains Terminals</b> |                                      |               |                   |                   |            |               |
| 1                                            | EMI Test Receive                     | R&S           | ESCI              | KS301196          | 07/09/2025 | 07/08/2026    |
| 2                                            | LISN                                 | R&S           | ENV216            | KS301197          | 01/08/2026 | 01/07/2027    |
| 3                                            | LISN                                 | Schwarzbeck   | NNLK 8129         | KS301091          | 01/08/2026 | 01/07/2027    |
| 4                                            | Pulse Limiter                        | R&S           | ESH3-Z2           | KUS1902E001       | 12/18/2025 | 12/17/2026    |
| 5                                            | CE test Cable                        | Thermax       | /                 | CZ301102          | 12/18/2025 | 12/17/2026    |
| 6                                            | Software                             | Faratronic    | E3                | /                 | N.C.R      | N.C.R         |
| <b>RF Conducted Test</b>                     |                                      |               |                   |                   |            |               |
| 1                                            | Spectrum Analyzer                    | Keysight      | N9020A            | KUS1911E004-2     | 07/09/2025 | 07/08/2026    |
| 2                                            | Spectrum Analyzer                    | Keysight      | N9020A            | KUS2001M001-2     | 07/09/2025 | 07/08/2026    |
| 3                                            | Spectrum Analyzer                    | Keysight      | N9030B            | KSEM021-1         | 12/17/2025 | 12/16/2026    |
| 4                                            | Signal Generator                     | R&S           | SMBV100B          | KSEM032           | 12/17/2025 | 12/16/2026    |
| 5                                            | Signal Generator                     | R&S           | SMW200A           | KSEM020-1         | 07/09/2025 | 07/08/2026    |
| 6                                            | Signal Generator                     | Agilent       | N5182A            | KUS2001M001-1     | 07/08/2025 | 07/07/2026    |
| 7                                            | Signal Generator                     | Agilent       | E8257C            | KS301066          | 07/22/2025 | 07/21/2026    |
| 8                                            | Radio Communication Test Station     | Anritsu       | MT8000A           | KSEM001-1         | 07/09/2025 | 07/08/2026    |
| 9                                            | Radio Communication Analyzer         | Anritsu       | MT8821C           | KSEM002-1         | 12/17/2025 | 12/16/2026    |
| 10                                           | Universal Radio Communication Tester | R&S           | CMW500            | KUS1911E004-1     | 07/08/2025 | 07/07/2026    |
| 11                                           | Switcher                             | TST           | FY562             | KUS2001M001-4     | 12/17/2025 | 12/16/2026    |
| 12                                           | Conducted Test Cable                 | Thermax       | RF01-RF04         | CZ301111-CZ301120 | 12/17/2025 | 12/16/2026    |
| 13                                           | Temp. / Humidity Chamber             | TERCHY        | MHK-120AK         | KS301190          | 07/15/2025 | 07/14/2026    |
| 14                                           | Temperature & Humidity Recorder      | Renke Control | RS-WS-N01-6J      | KSEM024-5         | 12/30/2025 | 12/29/2026    |
| 15                                           | Software                             | BST           | TST-PASS          | /                 | NCR        | NCR           |
| <b>RF Radiated Test</b>                      |                                      |               |                   |                   |            |               |
| 1                                            | Spectrum Analyzer                    | R&S           | FSV40             | KUS1806E003       | 07/09/2025 | 07/08/2026    |
| 2                                            | Universal Radio Communication Tester | R&S           | CMW500            | KSEM009-1         | 12/17/2025 | 12/16/2026    |
| 3                                            | Signal Generator                     | Agilent       | E8257C            | KS301066          | 07/22/2025 | 07/21/2026    |
| 4                                            | Loop Antenna (9KHz-30MHz)            | COM-POWER     | AL-130R           | KUS1806E001       | 07/11/2025 | 07/10/2026    |
| 5                                            | Bilog Antenna (30MHz-1GHz)           | TESEQ         | CBL 6112D         | KUS1806E005       | 07/12/2025 | 07/11/2026    |
| 6                                            | Horn-antenna(1-18GHz)                | Schwarzbeck   | BBHA9120D         | KS301079          | 01/11/2026 | 01/10/2028    |
| 7                                            | Horn Antenna(18-40GHz)               | Schwarzbeck   | BBHA9170          | CZ301058          | 01/11/2026 | 01/10/2028    |
| 8                                            | Amplifier(30MHz~1GHz)                | TST           | LNA009100G30      | KSEM061           | 12/18/2025 | 12/17/2026    |
| 9                                            | Amplifier(400MHz~8GHz)               | TST           | LNA004080G30      | KSEM062           | 12/18/2025 | 12/17/2026    |
| 10                                           | Amplifier(1GHz~18GHz)                | TST           | LNA010180G45      | KSEM039           | 07/09/2025 | 07/08/2026    |
| 11                                           | Amplifier(18~40GHz)                  | TST           | LNA180400G40      | KSEM038           | 07/09/2025 | 07/08/2026    |
| 12                                           | Temperature & Humidity Recorder      | Renke Control | RS-WS-N01-6J      | KSEM024-4         | 12/30/2025 | 12/29/2026    |
| 13                                           | Software                             | ESE           | E3_V 6.111221a    | /                 | NCR        | NCR           |
| 14                                           | Measurement Software                 | Tonscend      | JS32-RE V5.0.0.1  | /                 | NCR        | NCR           |
| 15                                           | Measurement Software                 | Tonscend      | JS32-RSE V5.0.0.0 | /                 | NCR        | NCR           |

## 6 Radio Spectrum Technical Requirement

### 6.1 Antenna Requirement

#### 6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203

#### 6.1.2 Conclusion

Standard Requirement:

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

EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement.

Refer to internal photos

## 7 Radio Spectrum Matter Test Results

### 7.1 20dB Bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.215

Test Method: ANSI C63.10 (2020) Section 6.9.2

Limit:

For report reference only

#### 7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C

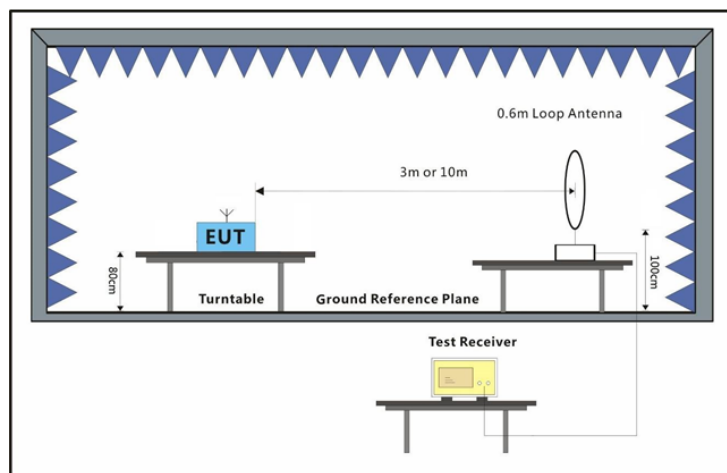
Humidity: 45.6 % RH

Atmospheric Pressure: 1010 mbar

#### 7.1.2 Test Mode Description

| Pre-scan /<br>Final test | Mode<br>Code | Description                                                                    |
|--------------------------|--------------|--------------------------------------------------------------------------------|
| Final test               | 00           | Charge mode_ Keep Wireless Charging M1 charging (25W), frequency range 360kHz. |

#### 7.1.3 Test Setup Diagram



#### 7.1.4 Measurement Procedure and Data

Please Refer to Appendix for Details

## 7.2 Conducted Emissions at AC Mains Power Port (150kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.207

Test Method: ANSI C63.10 (2020) Section 6.2

Limit:

| Frequency of emission(MHz) | Conducted limit(dBμV) |           |
|----------------------------|-----------------------|-----------|
|                            | Quasi-peak            | Average   |
| 0.15-0.5                   | 66 to 56*             | 56 to 46* |
| 0.5-5                      | 56                    | 46        |
| 5-30                       | 60                    | 50        |

\*Decreases with the logarithm of the frequency.

### 7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C

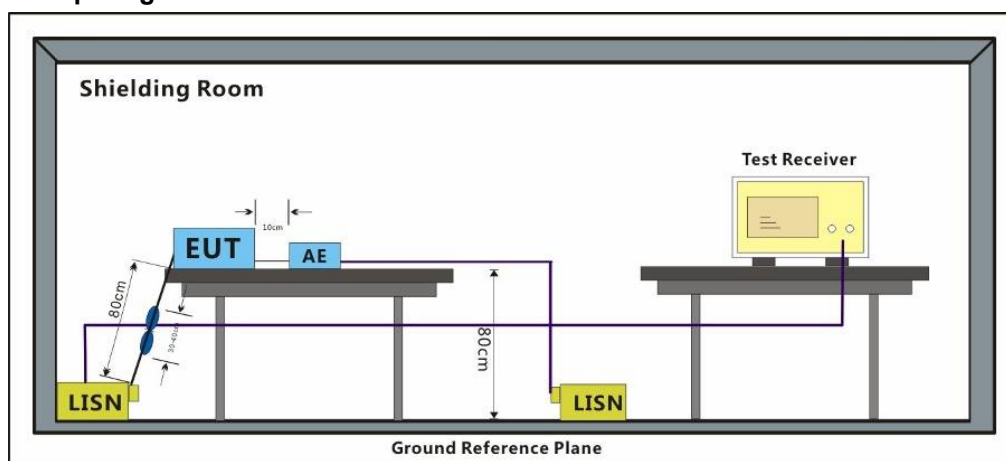
Humidity: 45.2 % RH

Atmospheric Pressure: 1010 mbar

### 7.2.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description                                                                    |
|-----------------------|-----------|--------------------------------------------------------------------------------|
| Final test            | 00        | Charge mode_ Keep Wireless Charging M1 charging (25W), frequency range 360kHz. |

### 7.2.3 Test Setup Diagram

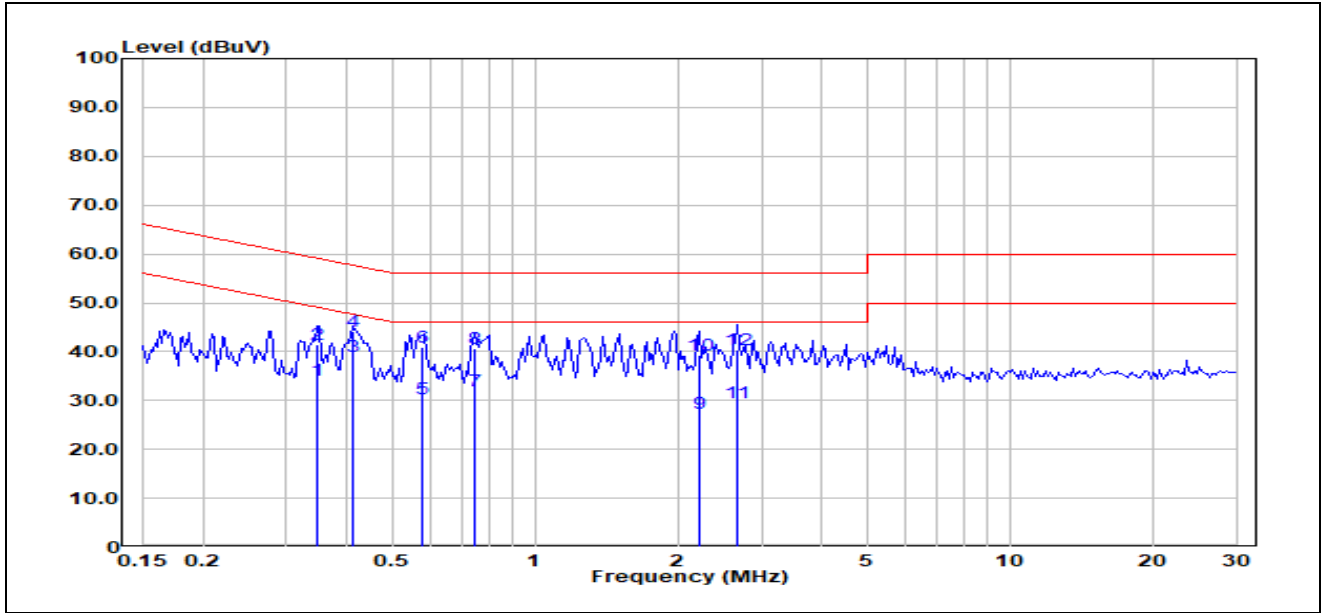


#### 7.2.4 Measurement Procedure and Data

- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50μH + 5ohm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
- 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
- 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
- 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

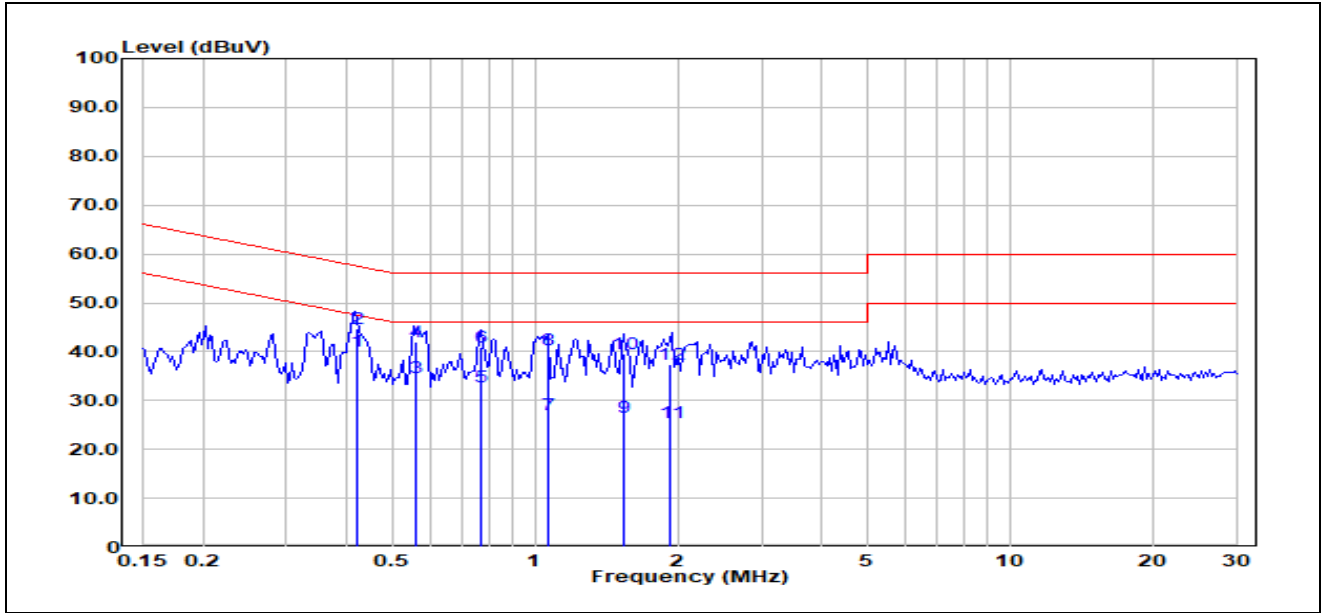
Remark: Level=Read Level+ Cable Loss+ LISN Factor

Test Mode: 00; Line: Live line



| No. | Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor(dB) | Result<br>(dBuV) | Limit<br>(dBuV) | Margin<br>(dB) | Remark  |
|-----|--------------------|-------------------|-----------------------|------------------|-----------------|----------------|---------|
| 1   | 0.3491             | 14.03             | 20.14                 | 34.17            | 48.98           | -14.81         | Average |
| 2   | 0.3491             | 21.39             | 20.14                 | 41.53            | 58.98           | -17.45         | QP      |
| 3   | 0.4158             | 18.91             | 20.21                 | 39.12            | 47.53           | -8.41          | Average |
| 4   | 0.4158             | 24.02             | 20.21                 | 44.23            | 57.53           | -13.30         | QP      |
| 5   | 0.5814             | 10.08             | 20.20                 | 30.28            | 46.00           | -15.72         | Average |
| 6   | 0.5814             | 20.60             | 20.20                 | 40.80            | 56.00           | -15.20         | QP      |
| 7   | 0.7499             | 11.78             | 20.17                 | 31.95            | 46.00           | -14.05         | Average |
| 8   | 0.7499             | 20.56             | 20.17                 | 40.73            | 56.00           | -15.27         | QP      |
| 9   | 2.2150             | 7.33              | 20.10                 | 27.43            | 46.00           | -18.57         | Average |
| 10  | 2.2150             | 19.20             | 20.10                 | 39.30            | 56.00           | -16.70         | QP      |
| 11  | 2.6710             | 9.30              | 20.14                 | 29.44            | 46.00           | -16.56         | Average |
| 12  | 2.6710             | 20.28             | 20.14                 | 40.42            | 56.00           | -15.58         | QP      |

Test Mode: 00; Line: Neutral Line



| No. | Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor(dB) | Result<br>(dBuV) | Limit<br>(dBuV) | Margin<br>(dB) | Remark  |
|-----|--------------------|-------------------|-----------------------|------------------|-----------------|----------------|---------|
| 1   | 0.4216             | 19.98             | 20.17                 | 40.15            | 47.42           | -7.27          | Average |
| 2   | 0.4216             | 24.55             | 20.17                 | 44.72            | 57.42           | -12.70         | QP      |
| 3   | 0.5592             | 14.54             | 20.19                 | 34.73            | 46.00           | -11.27         | Average |
| 4   | 0.5592             | 21.82             | 20.19                 | 42.01            | 56.00           | -13.99         | QP      |
| 5   | 0.7707             | 12.57             | 20.22                 | 32.79            | 46.00           | -13.21         | Average |
| 6   | 0.7707             | 20.79             | 20.22                 | 41.01            | 56.00           | -14.99         | QP      |
| 7   | 1.0680             | 7.24              | 19.99                 | 27.23            | 46.00           | -18.77         | Average |
| 8   | 1.0680             | 20.37             | 19.99                 | 40.36            | 56.00           | -15.64         | QP      |
| 9   | 1.5340             | 6.61              | 20.05                 | 26.66            | 46.00           | -19.34         | Average |
| 10  | 1.5340             | 19.59             | 20.05                 | 39.64            | 56.00           | -16.36         | QP      |
| 11  | 1.9330             | 5.50              | 20.06                 | 25.56            | 46.00           | -20.44         | Average |
| 12  | 1.9330             | 17.46             | 20.06                 | 37.52            | 56.00           | -18.48         | QP      |

### 7.3 Restricted Bands

Test Requirement 47 CFR Part 15, Subpart C 15.205  
Test Method: ANSI C63.10 (2020) Section 6.10.5

Limit:

The fundamental wave could not fall in the restricted band 90KHz-110KHz

#### 7.3.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C

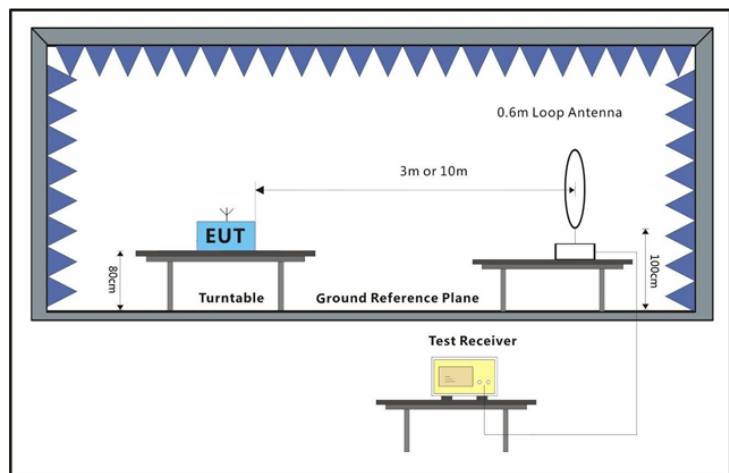
Humidity: 45.7 % RH

Atmospheric Pressure: 1010 mbar

#### 7.3.2 Test Mode Description

| Pre-scan /<br>Final test | Mode<br>Code | Description                                                                    |
|--------------------------|--------------|--------------------------------------------------------------------------------|
| Final test               | 00           | Charge mode_ Keep Wireless Charging M1 charging (25W), frequency range 360kHz. |

#### 7.3.3 Test Setup Diagram



#### 7.3.4 Measurement Procedure and Data

Please Refer to Appendix for Details

## 7.4 Radiated Emissions (9kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209

Test Method: ANSI C63.10 (2020) Section 6.4

Limit:

| Frequency(MHz) | Field strength(microvolts/meter) | Measurement distance(meters) |
|----------------|----------------------------------|------------------------------|
| 0.009-0.490    | 2400/F(kHz)                      | 300                          |
| 0.490-1.705    | 24000/F(kHz)                     | 30                           |
| 1.705-30.0     | 30                               | 30                           |

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

If field strength is measured at only a single point, then that point shall be at the radial from the EUT that produces the maximum emission at the frequency being measured, as described in 5.4. If that point is closer to the EUT than  $\lambda/2\pi$  and the limit distance is greater than  $\lambda/2\pi$ , the measurement shall be extrapolated to the limit distance by conservatively presuming that the field strength decreases at a 40 dB/decade of distance rate to the  $\lambda/2\pi$  distance, and at a 20 dB/decade of distance rate beyond  $\lambda/2\pi$ . This shall be accomplished using Equation (2):

$$FS_{(10m)} = FS_{(30/300m)} + 40\log\{d_{(near\ field)}/d_{(10m)}\} + 20\log\{d_{(30/300m)}/d_{(near\ field)}\} \quad (2)$$

If the single point measured is at a distance greater than  $\lambda/2\pi$ , then extrapolation to the limit distance shall be calculated using Equation (3):

$$FS_{(10m)} = FS_{(30/300m)} + 20\log\{d_{(30/300m)}/d_{(10m)}\} \quad (3)$$

If both the single point and the limit distance are equal to or closer to the EUT than  $\lambda/2\pi$ , then extrapolation to the limit distance shall be calculated using Equation (4):

$$FS_{(10m)} = FS_{(30/300m)} + 40\log\{d_{(30/300m)}/d_{(10m)}\} \quad (4)$$

Remark:

$$d_{near\ field} = 47.77 / f_{MHz}$$

where  $f_{MHz}$  is the frequency of the emission being measured in MHz.

### 7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C

Humidity: 45.6 % RH

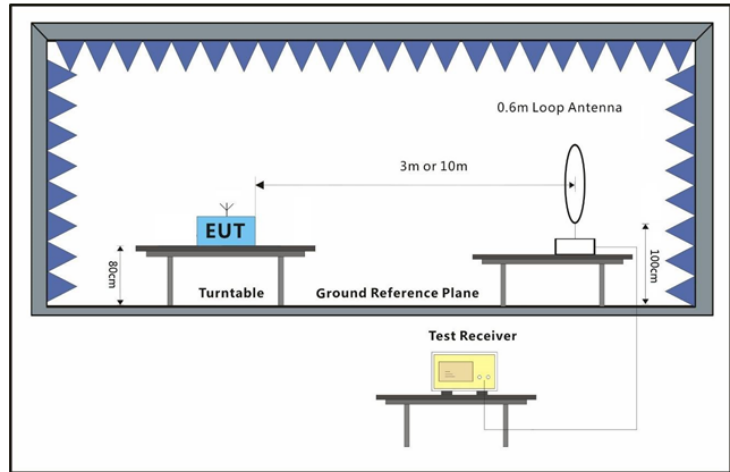
Atmospheric Pressure: 1010 mbar

### 7.4.2 Test Mode Description

| Pre-scan / | Mode | Description |
|------------|------|-------------|
|------------|------|-------------|

| Final test | Code |                                                                                |
|------------|------|--------------------------------------------------------------------------------|
| Final test | 00   | Charge mode_ Keep Wireless Charging M1 charging (25W), frequency range 360kHz. |

### 7.4.3 Test Setup Diagram



### 7.4.4 Measurement Procedure and Data

- All radiated emission measurements in terms of magnetic field strength shall be performed with a shielded loop antenna.
- For all radiated emission measurements in terms of magnetic field strength, the loop antenna were placed such that:
  - its centre shall be at 1.3 m height above the ground plane;
  - the projection of its centre onto the ground plane shall be at the specified measurement distance from the projection on the ground plane of the closest point on the boundary of the equipment under test (EUT); and
  - measurements shall be performed with the loop antenna placed vertically, in turn, in two polarizations (the measurement axis specified below is the line segment connecting the projections on the ground plane of the centre of the loop antenna and the centre of the EUT arrangement):
    - coaxial (loop plane perpendicular to the ground plane and to the measurement axis); and
    - coplanar (loop plane perpendicular to the ground plane and coplanar with the measurement axis).

Please Refer to Appendix for Details

## 7.5 Radiated Emissions (30MHz-1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209

Test Method: ANSI C63.10 (2020) Section 6.5

Limit:

| Frequency(MHz) | Field strength(microvolts/meter) | Measurement distance(meters) |
|----------------|----------------------------------|------------------------------|
| 30-88          | 100                              | 3                            |
| 88-216         | 150                              | 3                            |
| 216-960        | 200                              | 3                            |
| Above 960      | 500                              | 3                            |

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector.

### 7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C

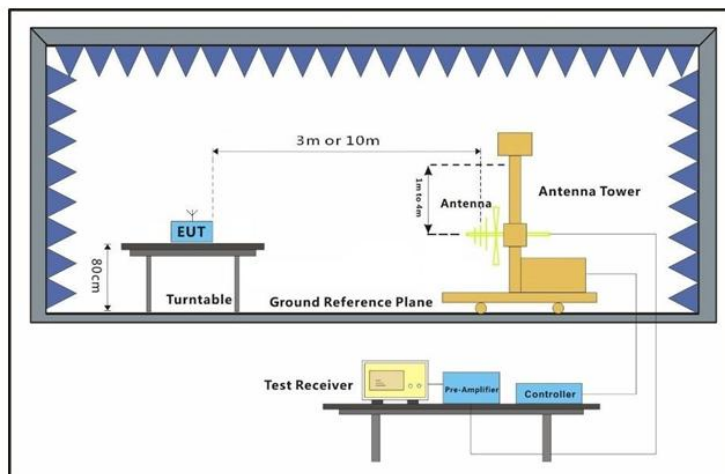
Humidity: 45.6 % RH

Atmospheric Pressure: 1010 mbar

### 7.5.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description                                                                    |
|-----------------------|-----------|--------------------------------------------------------------------------------|
| Final test            | 00        | Charge mode_ Keep Wireless Charging M1 charging (25W), frequency range 360kHz. |

### 7.5.3 Test Setup Diagram



#### 7.5.4 Measurement Procedure and Data

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground for below 1GHz at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case.
- i. Repeat above procedures until all frequencies measured was complete.

Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Please Refer to Appendix for Details



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## **8 Test Setup Photo**

Refer to Appendix - Test Setup Photo for KSCR2603000688AT

## **9 EUT Constructional Details (EUT Photos)**

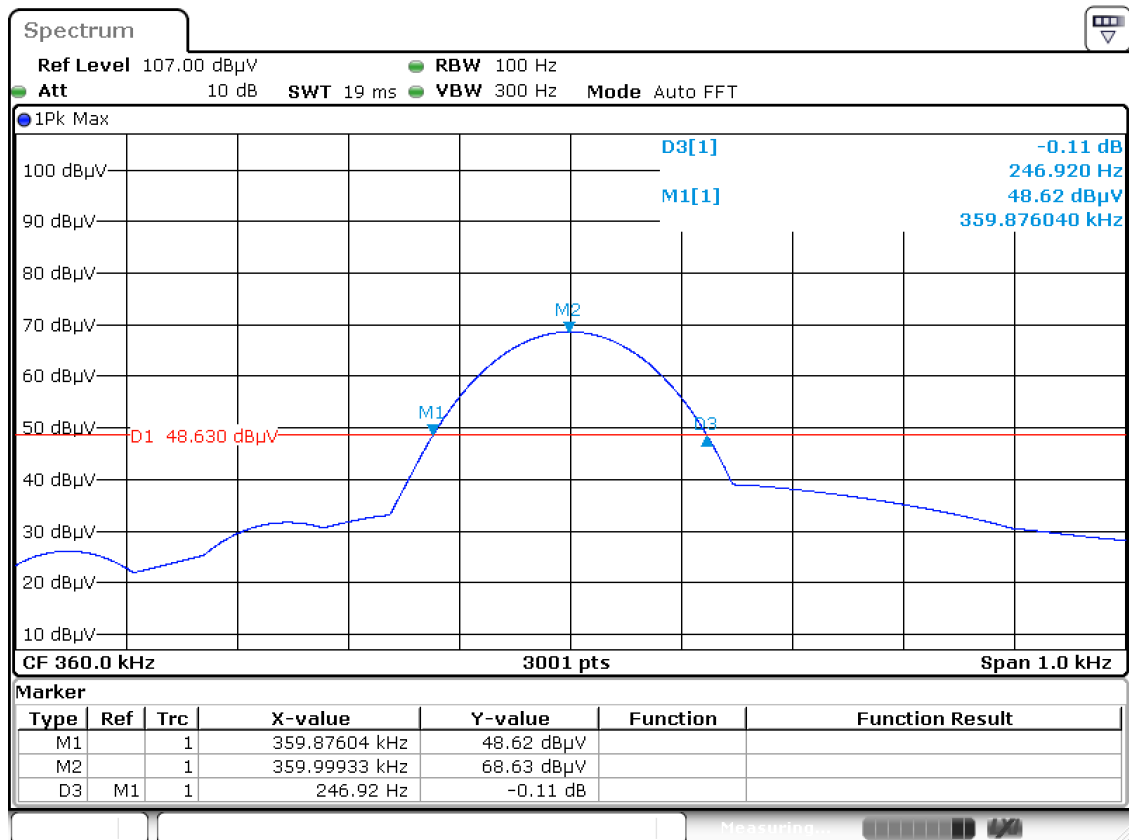
Refer to Appendix\_Photographs of EUT Constructional Details for KSCR2603000688AT

## 10 Appendix

### 10.1 20dB Bandwidth

| 20dB bandwidth (Hz) | Result |
|---------------------|--------|
| 246.92              | Pass   |

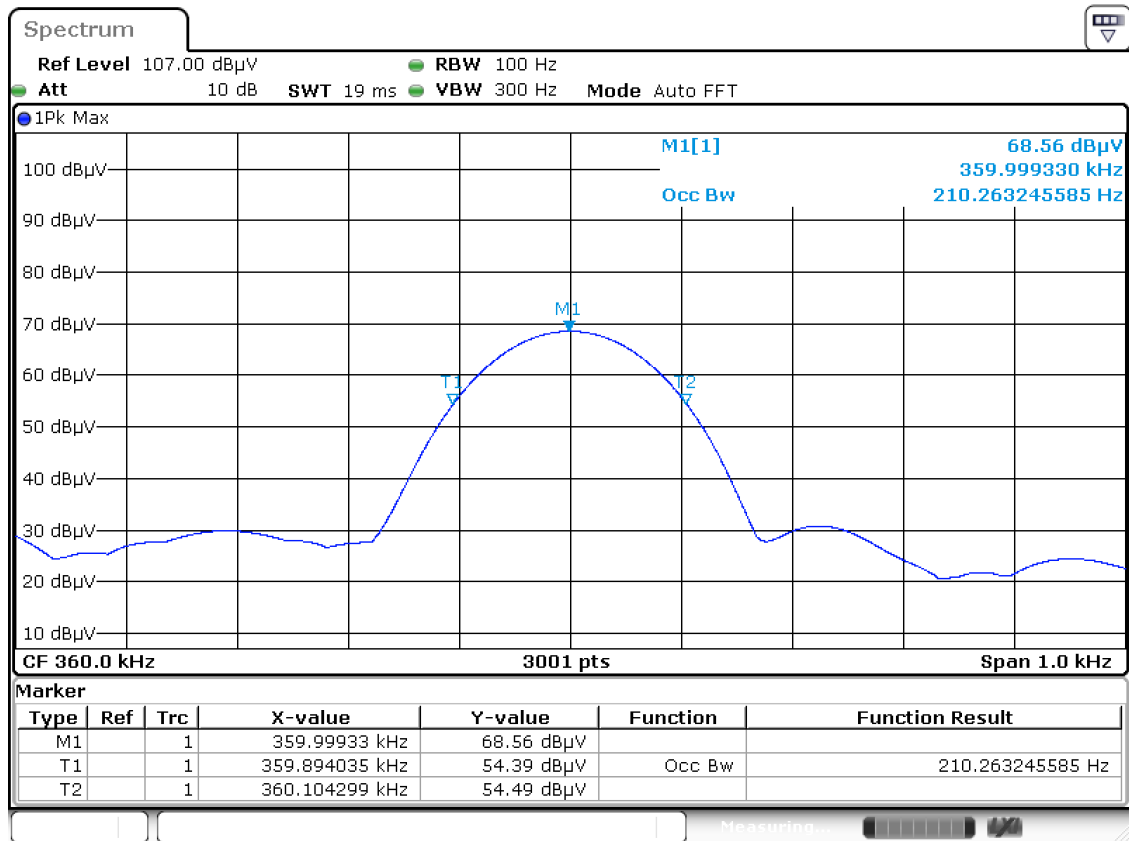
Test plot as follows:



## 10.2 99% Bandwidth

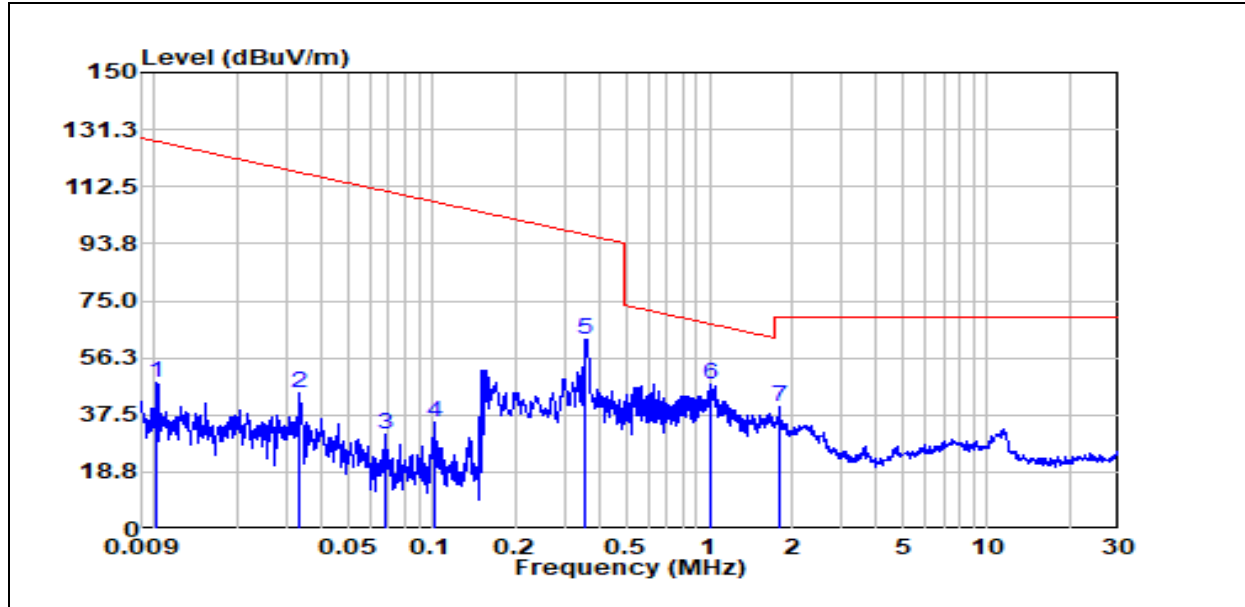
| Frequency (kHz) | 99% bandwidth (kHz) |
|-----------------|---------------------|
| 360             | 0.2103              |

Test plot as follows:



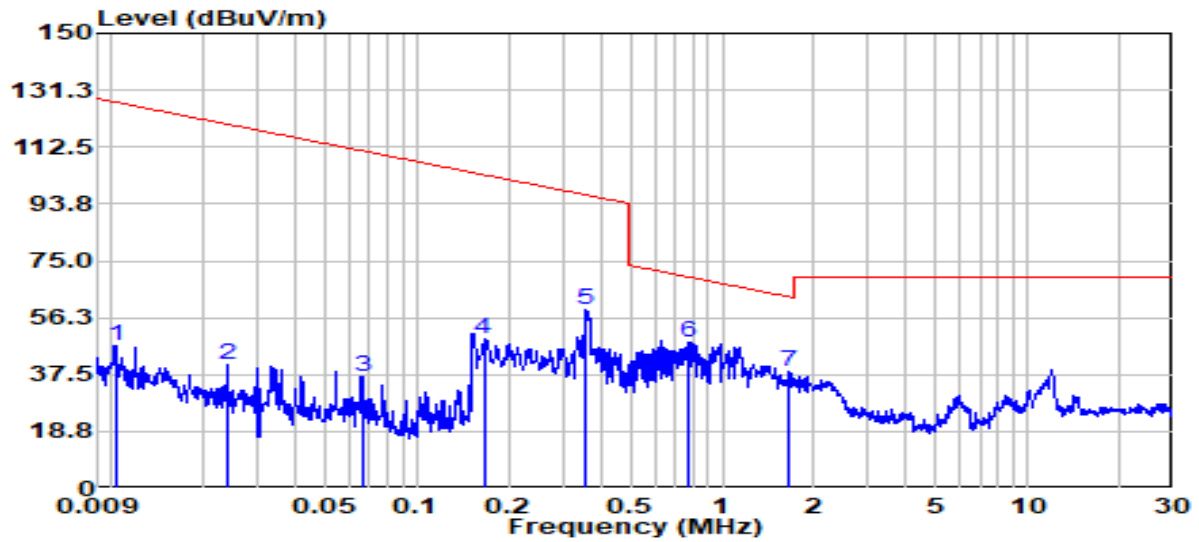
### 10.3 Radiated Emissions(9kHz-30MHz)

Coplanar:



| Item   | Freq. | Read Level | Correct Factor | Result Level@3m | Result Level@SP EC | Limit Line@SPE C | Over Limit | Detector |
|--------|-------|------------|----------------|-----------------|--------------------|------------------|------------|----------|
| (Mark) | (MHz) | (dBuV)     | (dB/m)         | (dBuV/m)        | (dBuV/m)           | (dBuV/m)         | (dB)       |          |
| 1      | 0.010 | 27.57      | 20.32          | 47.89           | -32.11             | 47.37            | -79.48     | AV       |
| 2      | 0.033 | 24.15      | 20.43          | 44.57           | -35.43             | 37.2             | -72.63     | AV       |
| 3      | 0.068 | 10.99      | 20.28          | 31.27           | -48.73             | 30.93            | -79.66     | AV       |
| 4      | 0.102 | 14.45      | 20.49          | 34.94           | -45.06             | 27.41            | -72.47     | QP       |
| 5      | 0.359 | 41.97      | 20.48          | 62.46           | -17.54             | 16.49            | -34.03     | Peak     |
| 6      | 1.015 | 27.27      | 20.42          | 47.70           | 7.70               | 27.50            | -19.80     | QP       |
| 7      | 1.798 | 19.39      | 20.53          | 39.92           | -0.08              | 29.50            | -29.58     | QP       |

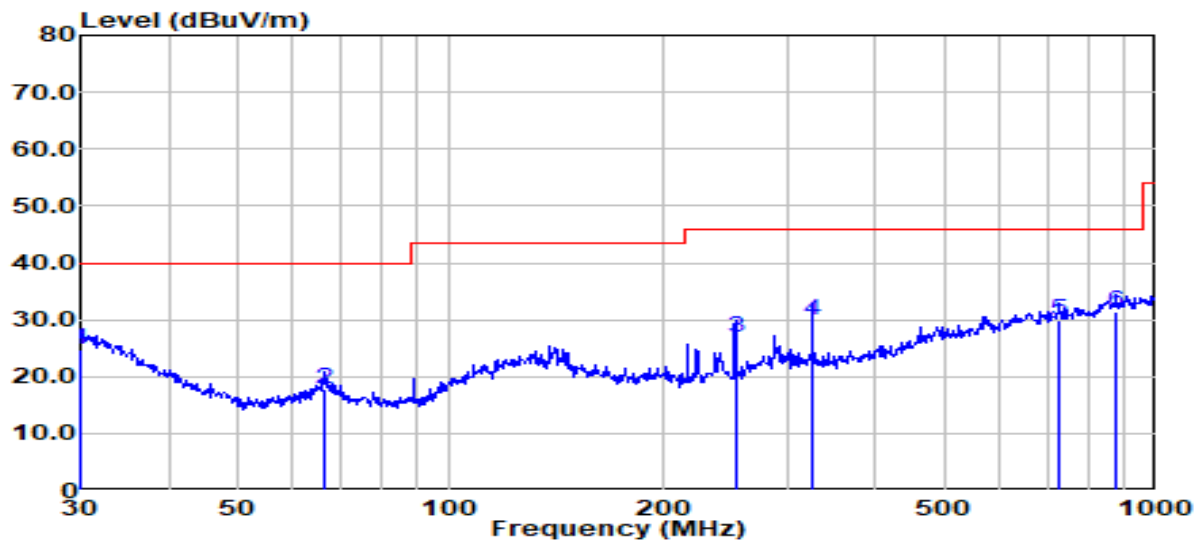
## Coaxial:



| Item   | Freq. | Read Level | Correct Factor | Result Level@3m | Result Level@SPEC | Limit Line@SPEC | Over Limit | Detector |
|--------|-------|------------|----------------|-----------------|-------------------|-----------------|------------|----------|
| (Mark) | (MHz) | (dBμV)     | (dB/m)         | (dBuV/m)        | (dBuV/m)          | (dBuV/m)        | (dB)       |          |
| 1      | 0.010 | 26.94      | 20.32          | 47.26           | -32.74            | 47.34           | -80.08     | AV       |
| 2      | 0.024 | 20.30      | 20.42          | 40.72           | -39.28            | 39.98           | -79.26     | AV       |
| 3      | 0.066 | 16.30      | 20.29          | 36.59           | -43.41            | 31.18           | -74.59     | AV       |
| 4      | 0.166 | 28.87      | 20.59          | 49.46           | -30.54            | 23.22           | -53.76     | AV       |
| 5      | 0.359 | 38.29      | 20.48          | 58.77           | -21.23            | 16.49           | -37.72     | Peak     |
| 6      | 0.780 | 27.45      | 20.43          | 47.88           | 7.88              | 29.78           | -21.9      | QP       |
| 7      | 1.664 | 18.11      | 20.52          | 38.63           | -1.37             | 23.21           | -24.58     | QP       |

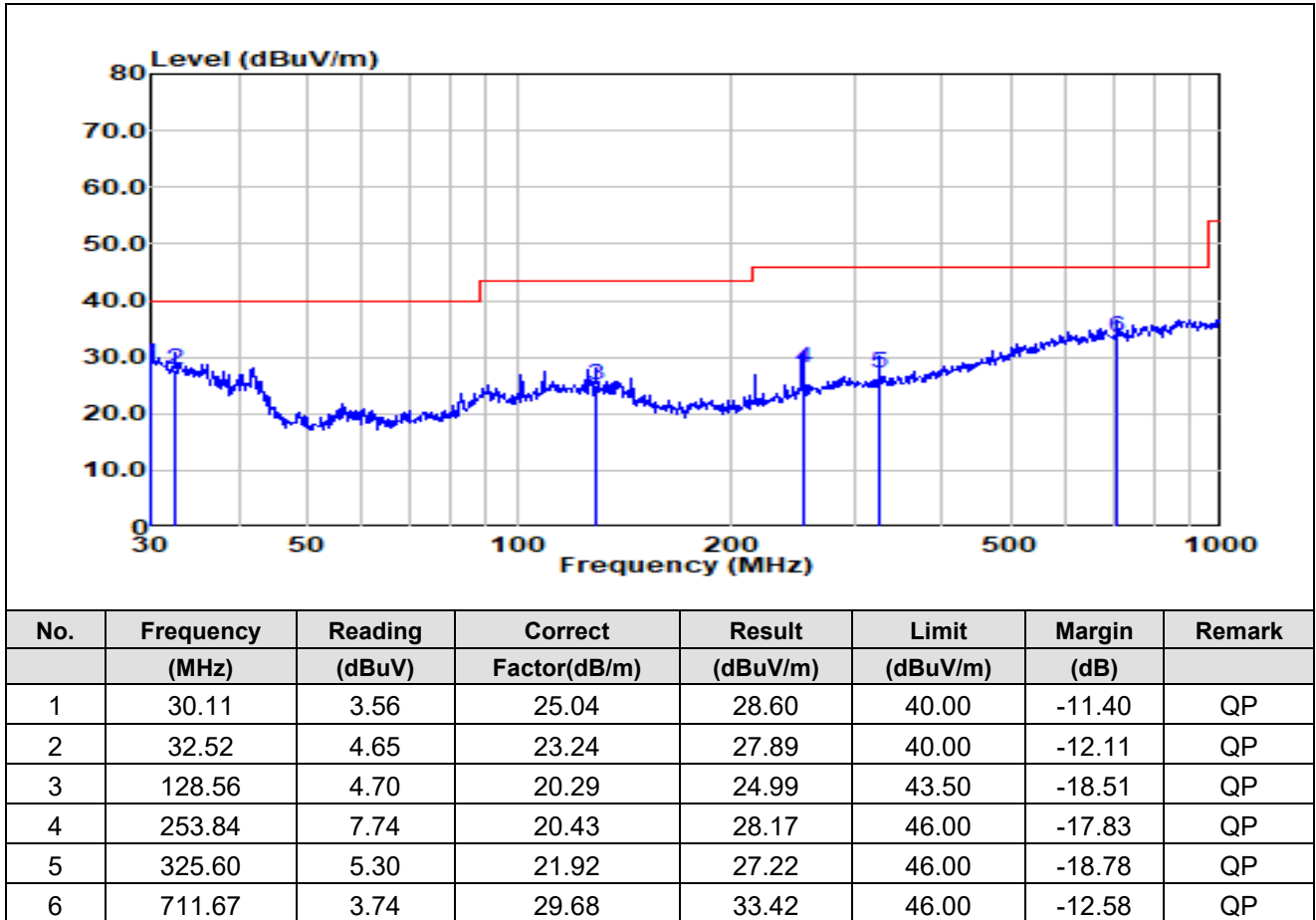
## 10.4 Below 1GHz

### Horizontal



| No. | Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|-----|--------------------|-------------------|-------------------------|--------------------|-------------------|----------------|--------|
| 1   | 30.11              | 1.29              | 23.52                   | 24.81              | 40.00             | -15.19         | QP     |
| 2   | 66.27              | 6.21              | 11.53                   | 17.74              | 40.00             | -22.26         | QP     |
| 3   | 253.84             | 10.83             | 16.04                   | 26.87              | 46.00             | -19.13         | QP     |
| 4   | 325.60             | 11.44             | 18.46                   | 29.90              | 46.00             | -16.10         | QP     |
| 5   | 729.36             | 3.21              | 26.77                   | 29.98              | 46.00             | -16.02         | QP     |
| 6   | 878.32             | 3.16              | 28.34                   | 31.50              | 46.00             | -14.50         | QP     |

## Vertical



- End of the Report -