

## **FCC 47 CFR PART 15 SUBPART C**

### **CERTIFICATION TEST REPORT**

*For*

**Safety Inter lock**

**MODEL NUMBER: TBL1-D0MP0-SE, TBLa-bcdefg-SE (“a” can be 1-2, “b” can be D or H, “c” can be 0-1, “d” can be M or U, “e” can be P or N, “f” can be 0-9 or A-H, “g” can be None or E, “SE” can be None or SE)**

**REPORT NUMBER: 4792116485-1-RF-1**

**FCC ID: 2A82Y-TBL**

**ISSUE DATE: May 9, 2026**

*Prepared for*

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## Revision History

| Rev. | Issue Date  | Revisions     | Revised By |
|------|-------------|---------------|------------|
| V0   | May 9, 2026 | Initial Issue |            |

| Summary of Test Results                                                                                                                                            |                 |         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------|
| Description of Test Item                                                                                                                                           | Standard        | Results |
| Radiated Emission Test                                                                                                                                             | FCC 15.209      | PASS    |
| 20dB Bandwidth                                                                                                                                                     | FCC 15.215      | PASS    |
| AC Power Line Conducted Emission                                                                                                                                   | FCC Part 15.207 | PASS    |
| Note 1: This test report is only published to and used by the applicant, and it is not for evidence purpose in China.                                              |                 |         |
| Note 2: The measurement result for the sample received is <Pass> according to < CFR 47 FCC PART 15 SUBPART C > when < Simple Acceptance > decision rule is applied |                 |         |

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## 1. ATTESTATION OF TEST RESULTS

### Applicant Information

Company Name: Shenzhen Tongchuang Mechatronics Co.,Ltd.  
Address: No.501, Building 8, Nangang Second Industrial Zone, 1026#  
SongBai Road, Xili Town, Nanshan District, 518055 Shenzhen,  
PEOPLE'S REPUBLIC OF CHINA

### Manufacturer Information

Company Name: Shenzhen Tongchuang Mechatronics Co.,Ltd.  
Address: No.501, Building 8, Nangang Second Industrial Zone, 1026#  
SongBai Road, Xili Town, Nanshan District, 518055 Shenzhen,  
PEOPLE'S REPUBLIC OF CHINA

### EUT Information

EUT Name: Safety Inter lock  
Model: TBL1-D0MP0-SE  
Serial Model: TBLa-bcdefg-SE ("a" can be 1-2, "b" can be D or H, "c" can be 0-1, "d" can be M or U, "e" can be P or N, "f" can be 0-9 or A-H, "g" can be None or E, "SE" can be None or SE)  
Brand:   
Sample Received Date: March 3, 2026  
Sample Status: Normal  
Sample ID: 9488933  
Date of Tested: March 23, 2026 to May 9, 2026

| APPLICABLE STANDARDS         |              |
|------------------------------|--------------|
| STANDARD                     | TEST RESULTS |
| CFR 47 FCC PART 15 SUBPART C | PASS         |

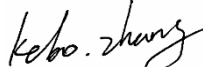
Prepared By:



Johnson Liu

Laboratory Engineer

Checked By:



Kebo Zhang

Operations Leader

Approved By:



Stephen Guo

Laboratory Manager

## 2. TEST METHODOLOGY

All tests were performed in accordance with the standard FCC CFR 47 Part 2, KDB 414788 D01 Radiated Test Site v01r01, CFR 47 FCC Part 15, ANSI C63.10-2020, C63.10-2020 + Cor.1-2023.

## 3. FACILITIES AND ACCREDITATION

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Accreditation Certificate | <p><b>A2LA (Certificate No.: 4102.01)</b><br/>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.</p> <p><b>FCC (FCC Designation No.: CN1187)</b><br/>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules.</p> <p><b>ISED (Company No.: 21320)</b><br/>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046.</p> <p><b>VCCI (Registration No.: C-20202, G-20240, R-20248 and T-20202)</b><br/>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793.<br/>Facility Name:<br/>Chamber E, the VCCI registration No. is G-20240 and R-20248<br/>Shielding Room F, the VCCI registration No. is C-20202 and T-20202</p> |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Note 1:

All tests measurement facilities use to collect the measurement data are located at Room 101, Building 2, No.4, Information Road, Songshan Lake, Dongguan, Guangdong, China.

Note 2:

The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

Note 3:

For below 30 MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30 MHz had been correlated to measurements performed on an OFS.

## 4. CALIBRATION AND UNCERTAINTY

### 4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

### 4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

| Test Item                                                                                                                                     | Uncertainty |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Conduction emission                                                                                                                           | 3.62 dB     |
| Radiated Emission<br>(Included Fundamental Emission) (9 kHz ~ 30 MHz)                                                                         | 4.36 dB     |
| Radiated Emission<br>(Included Fundamental Emission) (30 MHz ~ 1 GHz)                                                                         | 4.47 dB     |
| DTS and 99% Occupied Bandwidth                                                                                                                | ±0.0196%    |
| Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2. |             |

Remark: For Radiated Emission measurements (200 MHz - 18 GHz), the EUT support table is made of Expanded Polystyrene (EPS). This material is characterized by a low dielectric constant, as recognized in CISPR 16-1-4, to minimize its influence on field strength measurements. This influence has been considered in the uncertainty budget.

## 5. EQUIPMENT UNDER TEST

### 5.1. DESCRIPTION OF EUT

|                     |                                                                                                                                                                               |                    |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| EUT Name            | Safety Inter lock                                                                                                                                                             |                    |
| Model               | TBL1-D0MP0-SE                                                                                                                                                                 |                    |
| Serial Model        | TBLa-bcdefg-SE (“a” can be 1-2, “b” can be D or H, “c” can be 0-1, “d” can be M or U, “e” can be P or N, “f” can be 0-9 or A-H, “g” can be None or E, “SE” can be None or SE) |                    |
| Model Difference    | The difference lies only the model number                                                                                                                                     |                    |
| Product Description | Operation Frequency                                                                                                                                                           | 125 kHz to 135 kHz |
| Antenna type        | Loop Antenna                                                                                                                                                                  |                    |
| Ratings             | DC 24V                                                                                                                                                                        |                    |

### 5.2. TEST MODE

| Test Mode | Description         |
|-----------|---------------------|
| Mode 1    | Signal Transmission |

### 5.3. ACCESSORY

#### SUPPORT EQUIPMENT

| Item | Equipment       | Brand Name | Model Name | Remark                                          |
|------|-----------------|------------|------------|-------------------------------------------------|
| 1    | DC power supply | ZHAOXIN    | RXN-605D   | Input: AC 100-240V 50/60Hz<br>Output: DC 60V 5A |

#### I/O CABLES

| Cable No | Port             | Connector Type | Cable Type | Cable Length(m) | Remarks |
|----------|------------------|----------------|------------|-----------------|---------|
| 1        | Connecting Cable | N/A            | N/A        | 2.95 m          | /       |

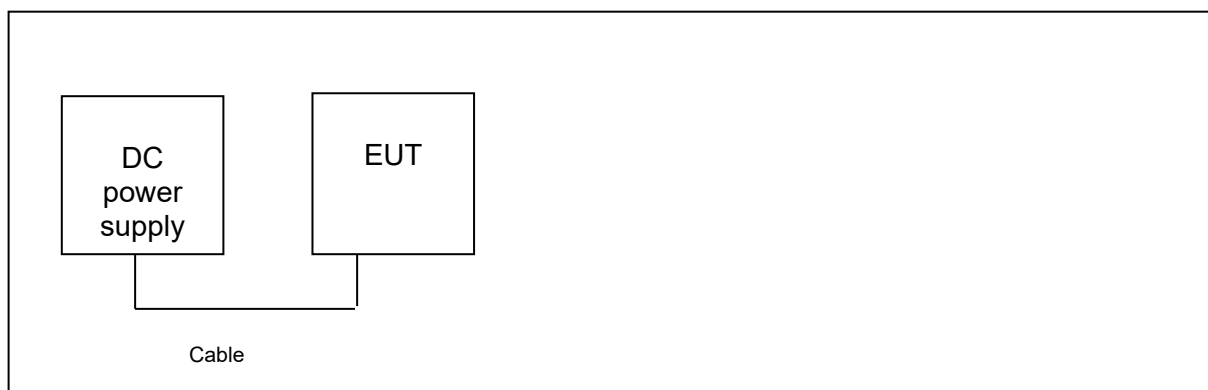
#### ACCESSORY

| Item | Accessory | Brand Name | Model Name | Description |
|------|-----------|------------|------------|-------------|
| 1    | /         | /          | /          | /           |

#### TEST SETUP

This EUT can work independently in engineering mode.

#### SETUP DIAGRAM FOR TEST



#### 5.4. MEASURING INSTRUMENT LIST

| Radiated Emissions                   |              |           |              |               |              |
|--------------------------------------|--------------|-----------|--------------|---------------|--------------|
| Equipment                            | Manufacturer | Model No. | Serial No.   | Last Cal.     | Due Date     |
| MXE EMI Receiver                     | KESIGHT      | N9038A    | MY56400036   | Sep.12, 2025  | Sep.11, 2026 |
| Hybrid Log Periodic Antenna          | TDK          | HLP-3003C | 130959       | June 28, 2024 | June.27 2027 |
| Preamplifier                         | HP           | 8447D     | 2944A09099   | Sep.12, 2025  | Sep.11, 2026 |
| Loop antenna                         | Schwarzbeck  | 1519B     | 00008        | Dec.09, 2024  | Dec.08, 2027 |
| Software                             |              |           |              |               |              |
| Description                          |              |           | Manufacturer | Name          | Version      |
| Test Software for Radiated Emissions |              |           | Farad        | EZ-EMC        | Ver. UL-3A1  |

## 6. 20dB BANDWIDTH TEST

### LIMITS

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in § 15.215, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

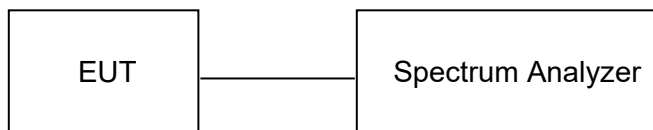
### TEST PROCEDURE

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

|                  |                                                |
|------------------|------------------------------------------------|
| Center Frequency | The centre frequency of the channel under test |
| Detector         | Peak                                           |
| RBW              | 1% to 5% of the bandwidth                      |
| VBW              | approximately 3×RBW                            |
| Trace            | Max hold                                       |
| Sweep            | Auto couple                                    |

Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 99%/20 dB relative to the maximum level measured in the fundamental emission.

### TEST SETUP

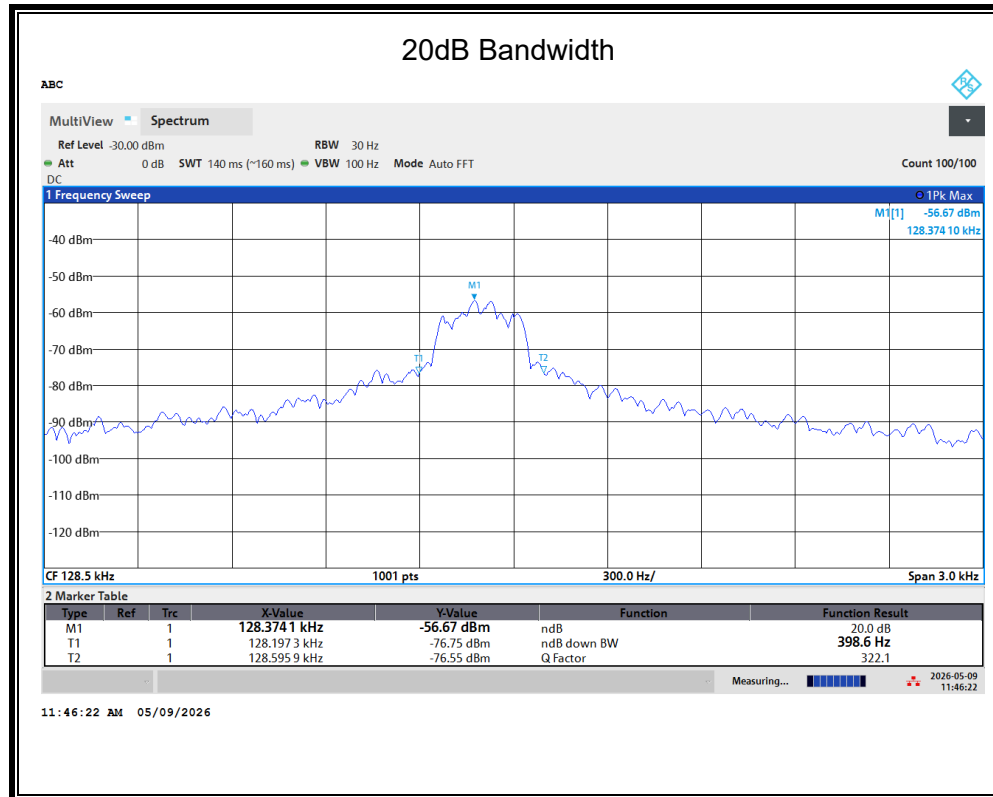


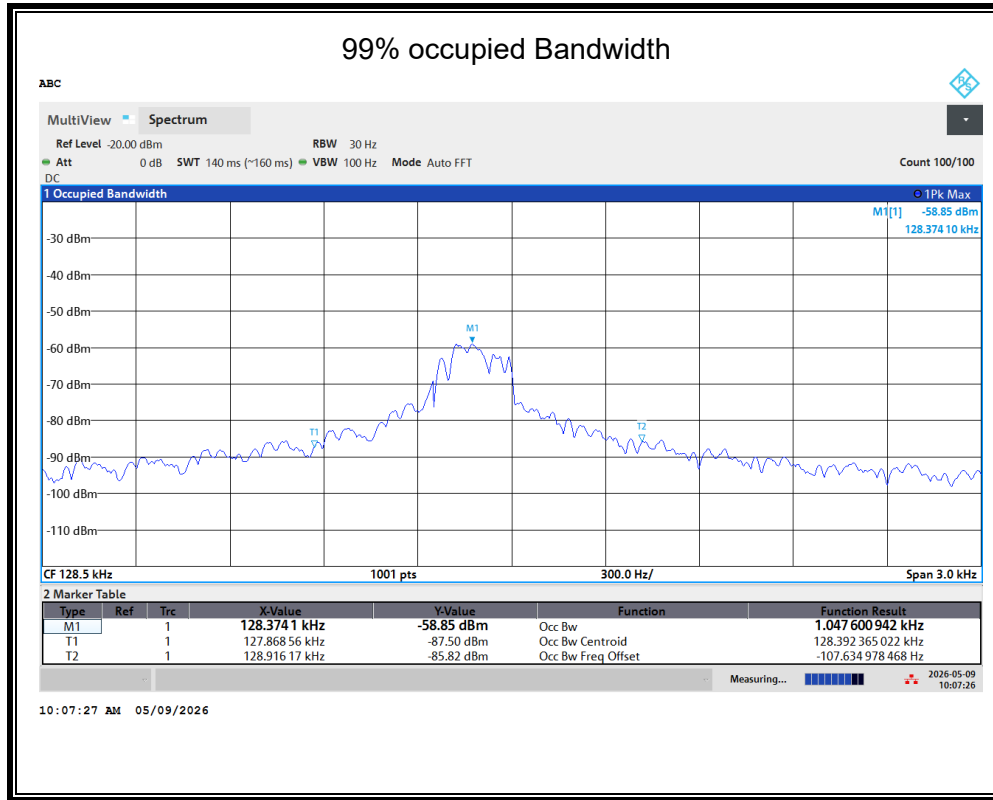
### TEST ENVIRONMENT

|                     |         |                   |        |
|---------------------|---------|-------------------|--------|
| Temperature         | 23.7 °C | Relative Humidity | 62 %   |
| Atmosphere Pressure | 101 kPa | Test Voltage      | DC 24V |

### RESULTS

| Test Mode | 99% occupied Bandwidth (Hz) | 20dB Bandwidth (Hz) |
|-----------|-----------------------------|---------------------|
| TX        | 1048                        | 398.6               |





## 7. RADIATED EMISSION TEST

### LIMITS

Please refer to CFR 47 FCC §15.205 and §15.209.

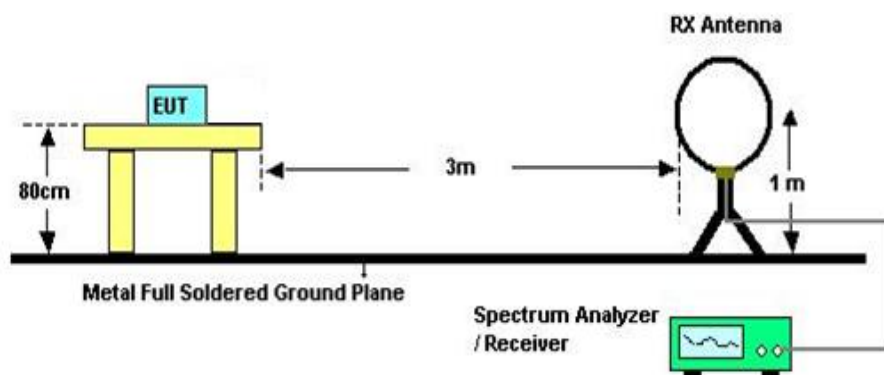
Radiated emissions limits for FCC (Class B) (9 kHz ~ 1 GHz)

| Emissions radiated outside of the specified frequency bands above 30 MHz |                                                    |                                                             |         |
|--------------------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------------------|---------|
| Frequency Range<br>(MHz)                                                 | Field Strength Limit<br>( $\mu\text{V/m}$ ) at 3 m | Field Strength Limit<br>( $\text{dB}\mu\text{V/m}$ ) at 3 m |         |
|                                                                          |                                                    | Quasi-Peak                                                  |         |
| 30 - 88                                                                  | 100                                                | 40                                                          |         |
| 88 - 216                                                                 | 150                                                | 43.5                                                        |         |
| 216 - 960                                                                | 200                                                | 46                                                          |         |
| Above 960                                                                | 500                                                | 54                                                          |         |
| Above 1000                                                               | 500                                                | Peak                                                        | Average |
|                                                                          |                                                    | 74                                                          | 54      |

| Emissions radiated outside of the specified frequency bands below 30 MHz |                                   |                               |
|--------------------------------------------------------------------------|-----------------------------------|-------------------------------|
| Frequency (MHz)                                                          | Field strength (microvolts/meter) | Measurement distance (meters) |
| 0.009-0.490                                                              | $2400/F(\text{kHz})$              | 300                           |
| 0.490-1.705                                                              | $24000/F(\text{kHz})$             | 30                            |
| 1.705-30.0                                                               | 30                                | 30                            |

## TEST SETUP AND PROCEDURE

Below 30 MHz

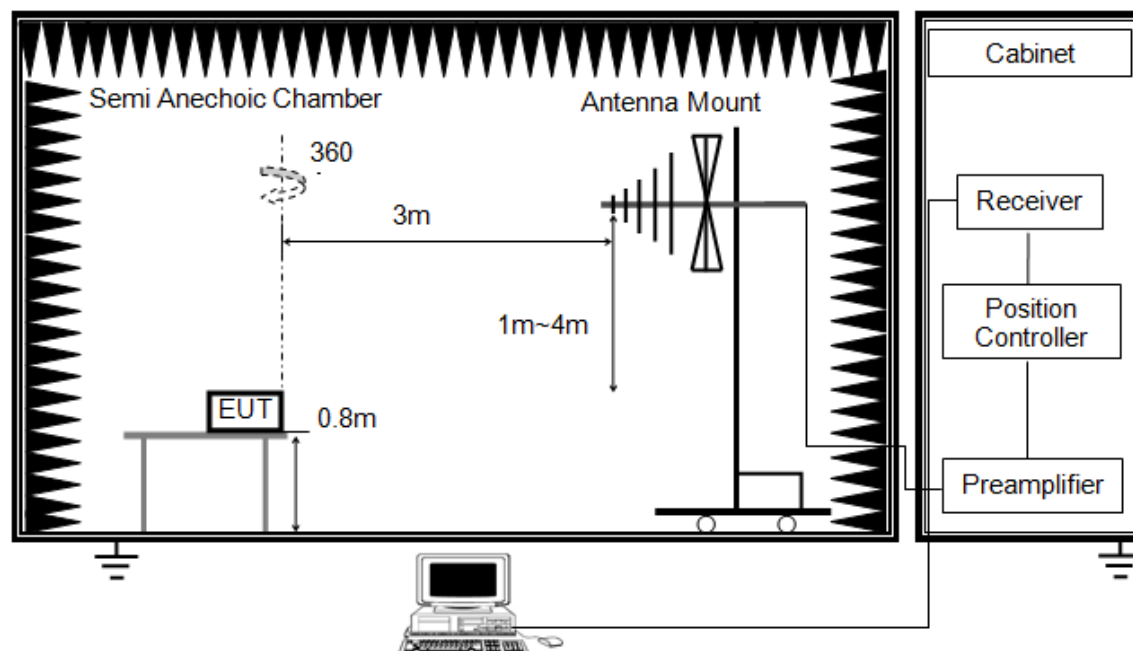


The setting of the spectrum analyser

|       |                                                                   |
|-------|-------------------------------------------------------------------|
| RBW   | 200 Hz (From 9 kHz to 0.15 MHz) / 9 kHz (From 0.15 MHz to 30 MHz) |
| VBW   | 200 Hz (From 9 kHz to 0.15 MHz) / 9 kHz (From 0.15 MHz to 30 MHz) |
| Sweep | Auto                                                              |
| Trace | Max hold                                                          |

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.4.
2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 80cm above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1.3 m height antenna tower.
5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.
6. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak and average detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak and average detector and reported.
7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30 m open field site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.

Below 1 GHz and above 30 MHz



The setting of the spectrum analyser

|          |          |
|----------|----------|
| RBW      | 120 kHz  |
| VBW      | 300 kHz  |
| Sweep    | Auto     |
| Detector | Peak/QP  |
| Trace    | Max hold |

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.5.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 80 cm above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

**TEST ENVIRONMENT**

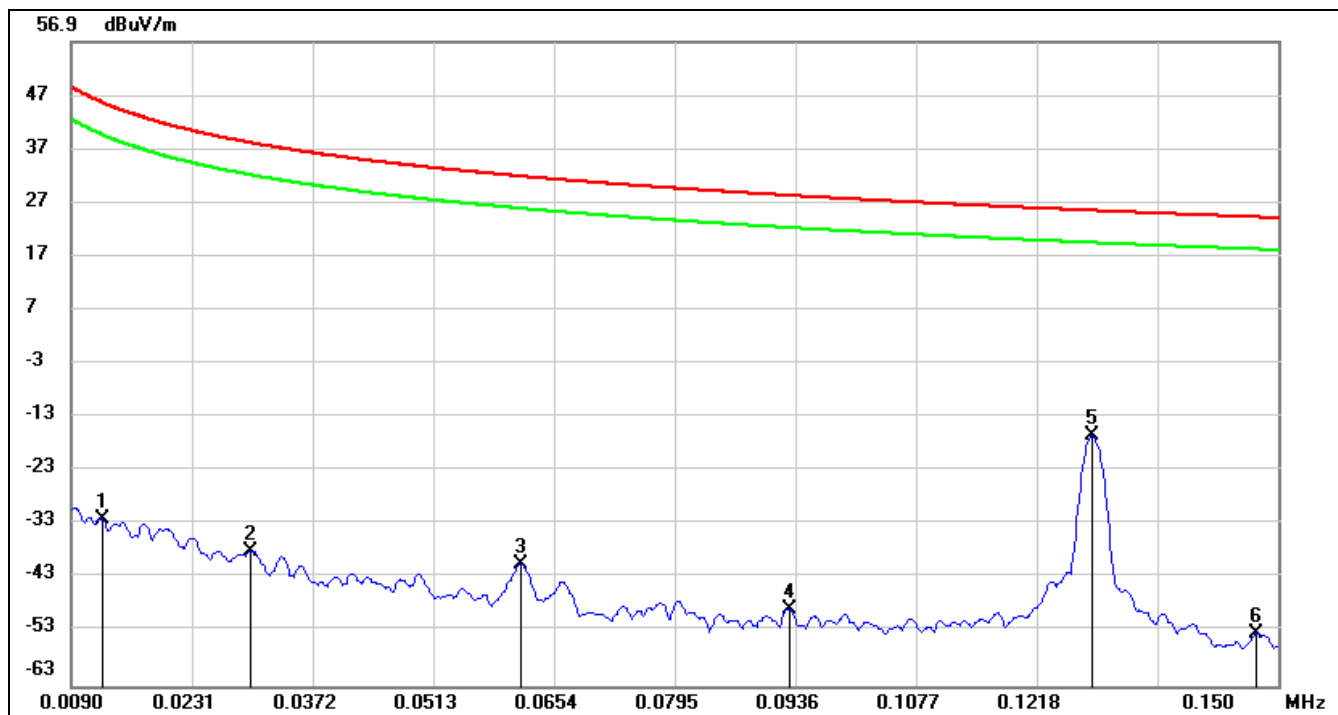
|                     |         |                   |        |
|---------------------|---------|-------------------|--------|
| Temperature         | 22.3 °C | Relative Humidity | 59 %   |
| Atmosphere Pressure | 101 kPa | Test Voltage      | DC 24V |

**RESULTS**

## 7.1. SPURIOUS EMISSIONS BELOW 30 MHz

### FCC PART 15C BELOW 30MHz SPURIOUS EMISSIONS FOR PLAN A (LOOP ANTENNA FACE ON TO THE EUT)

9 kHz ~ 150 kHz



| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|----------------|----------------|-----------------|----------------|-------------|--------|
| 1   | 0.0126          | 58.12          | -90.16         | -32.04          | 45.59          | -77.63      | peak   |
| 2   | 0.0300          | 53.27          | -91.20         | -37.93          | 38.06          | -75.99      | peak   |
| 3   | 0.0615          | 51.94          | -92.33         | -40.39          | 31.83          | -72.22      | peak   |
| 4   | 0.0928          | 44.03          | -92.73         | -48.70          | 28.25          | -76.95      | peak   |
| 5   | 0.1283          | 75.92          | -92.51         | -16.59          | 25.44          | -42.03      | peak   |
| 6   | 0.1474          | 39.17          | -92.39         | -53.22          | 24.23          | -77.45      | peak   |

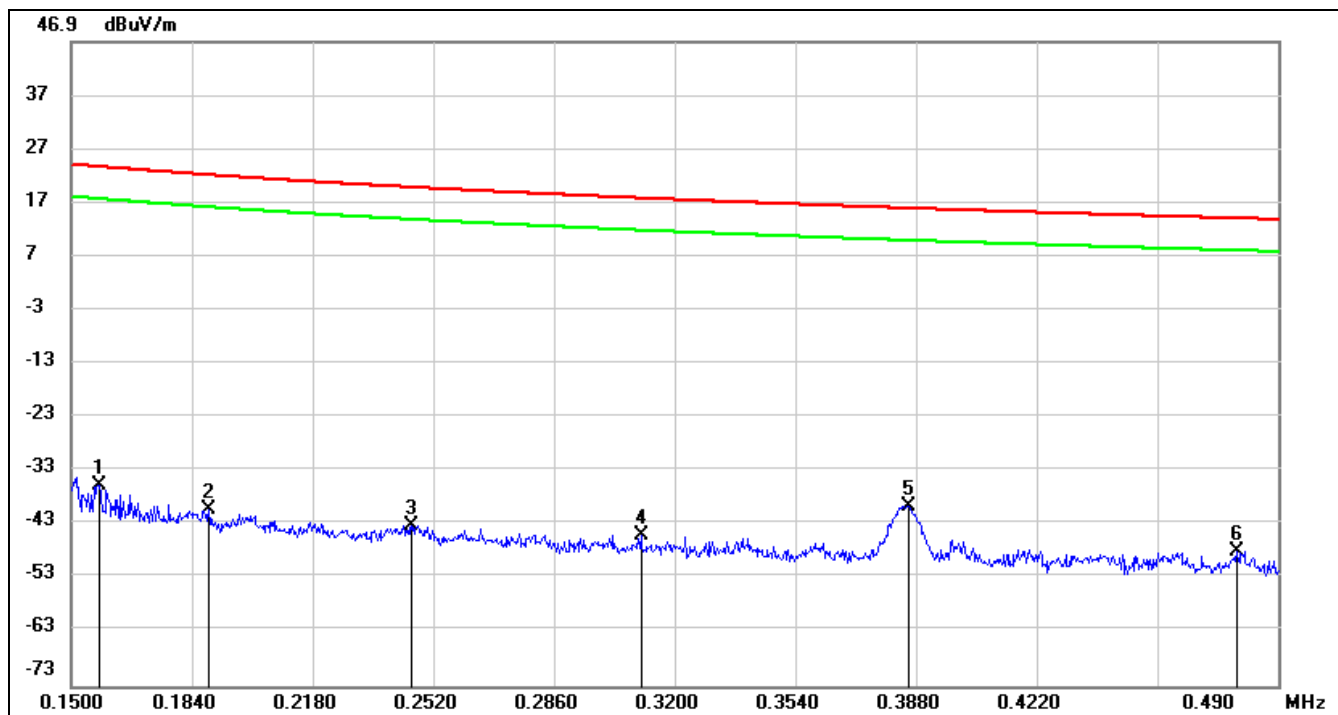
Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result are deemed to comply with AV limit.

3. All 3 polarizations(Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.

4. The test was performed at 3 m test site, but we added the corresponding factor to extrapolated the result to the specified distance according to FCC 15.31(f)(2).

### 150 kHz ~ 490 kHz



| No. | Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|-----|--------------------|-------------------|-------------------|--------------------|-------------------|----------------|--------|
| 1   | 0.1575             | 56.52             | -92.33            | -35.81             | 23.66             | -59.47         | peak   |
| 2   | 0.1888             | 51.84             | -92.12            | -40.28             | 22.09             | -62.37         | peak   |
| 3   | 0.2459             | 49.15             | -92.25            | -43.10             | 19.79             | -62.89         | peak   |
| 4   | 0.3105             | 47.56             | -92.52            | -44.96             | 17.76             | -62.72         | peak   |
| 5   | 0.3860             | 53.09             | -92.69            | -39.60             | 15.87             | -55.47         | peak   |
| 6   | 0.4784             | 44.83             | -92.90            | -48.07             | 14.01             | -62.08         | peak   |

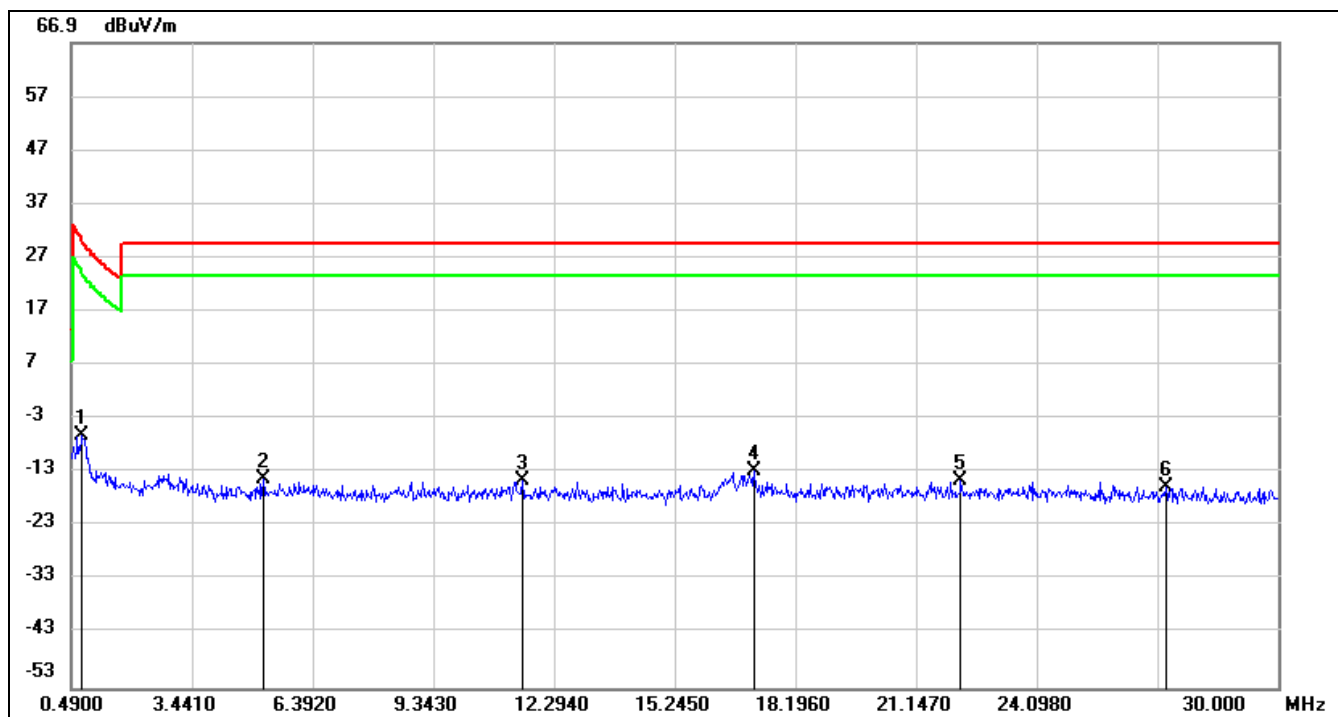
Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result are deemed to comply with AV limit.

3. All 3 polarizations(Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.

4. The test was performed at 3 m test site, but we added the corresponding factor to extrapolated the result to the specified distance according to FCC 15.31(f)(2).

### 490 kHz ~ 30 MHz



| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|----------------|----------------|-----------------|----------------|-------------|--------|
| 1   | 0.7556          | 46.65          | -52.73         | -6.08           | 30.04          | -36.12      | peak   |
| 2   | 5.1821          | 37.19          | -51.43         | -14.24          | 29.54          | -43.78      | peak   |
| 3   | 11.5267         | 36.84          | -51.28         | -14.44          | 29.54          | -43.98      | peak   |
| 4   | 17.1927         | 38.14          | -50.78         | -12.64          | 29.54          | -42.18      | peak   |
| 5   | 22.2389         | 35.65          | -50.11         | -14.46          | 29.54          | -44.00      | peak   |
| 6   | 27.2556         | 34.15          | -50.01         | -15.86          | 29.54          | -45.40      | peak   |

Note: 1. Measurement = Reading Level + Correct Factor.

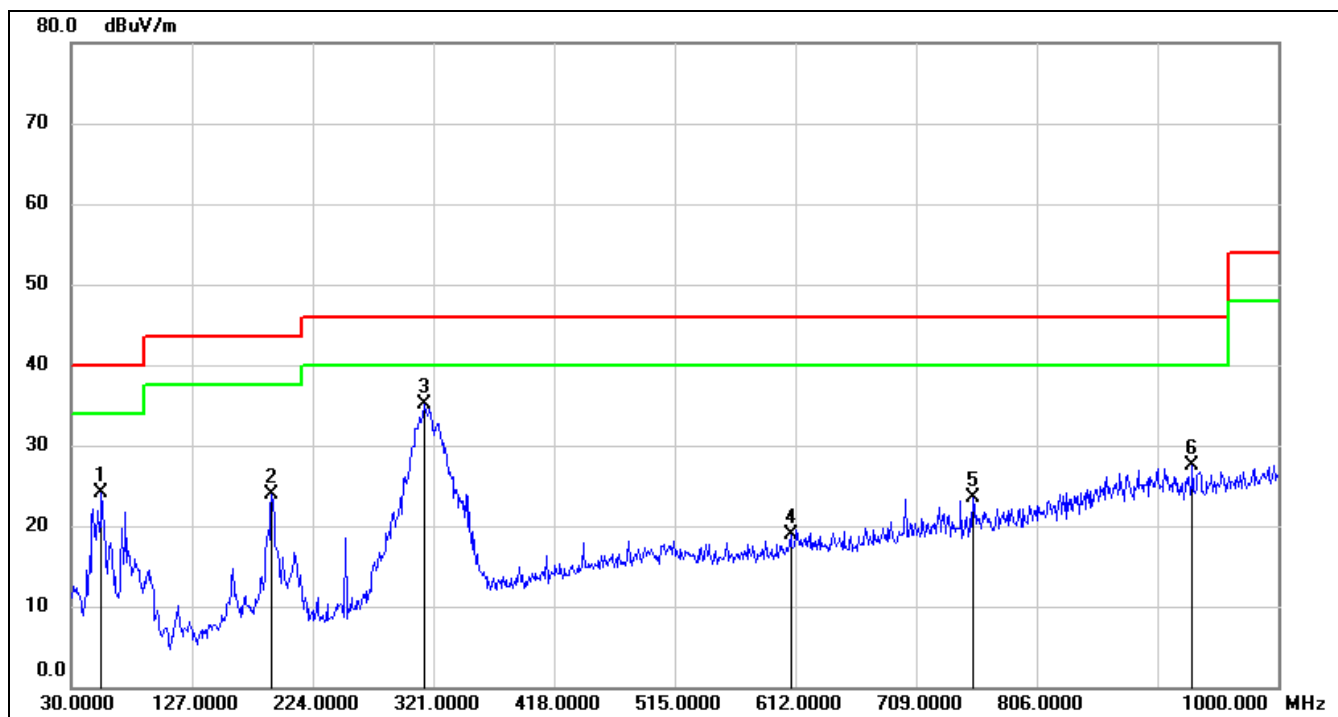
2. If Peak Result complies with AV limit, AV Result are deemed to comply with AV limit.

3. All 3 polarizations(Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.

4. The test was performed at 3 m test site, but we added the corresponding factor to extrapolated the result to the specified distance according to FCC 15.31(f)(2).

## 7.2. SPURIOUS EMISSIONS 30 MHz ~ 1 GHz

### FCC PART15C SPURIOUS EMISSIONS FOR PLAN A (HORIZONTAL)



| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|----------------|----------------|-----------------|----------------|-------------|--------|
| 1   | 54.2500         | 39.40          | -15.20         | 24.20           | 40.00          | -15.80      | peak   |
| 2   | 191.0200        | 35.92          | -12.10         | 23.82           | 43.50          | -19.68      | peak   |
| 3   | 314.2100        | 45.94          | -10.76         | 35.18           | 46.00          | -10.82      | peak   |
| 4   | 608.1200        | 24.44          | -5.46          | 18.98           | 46.00          | -27.02      | peak   |
| 5   | 754.5900        | 26.91          | -3.32          | 23.59           | 46.00          | -22.41      | peak   |
| 6   | 931.1300        | 28.11          | -0.56          | 27.55           | 46.00          | -18.45      | peak   |

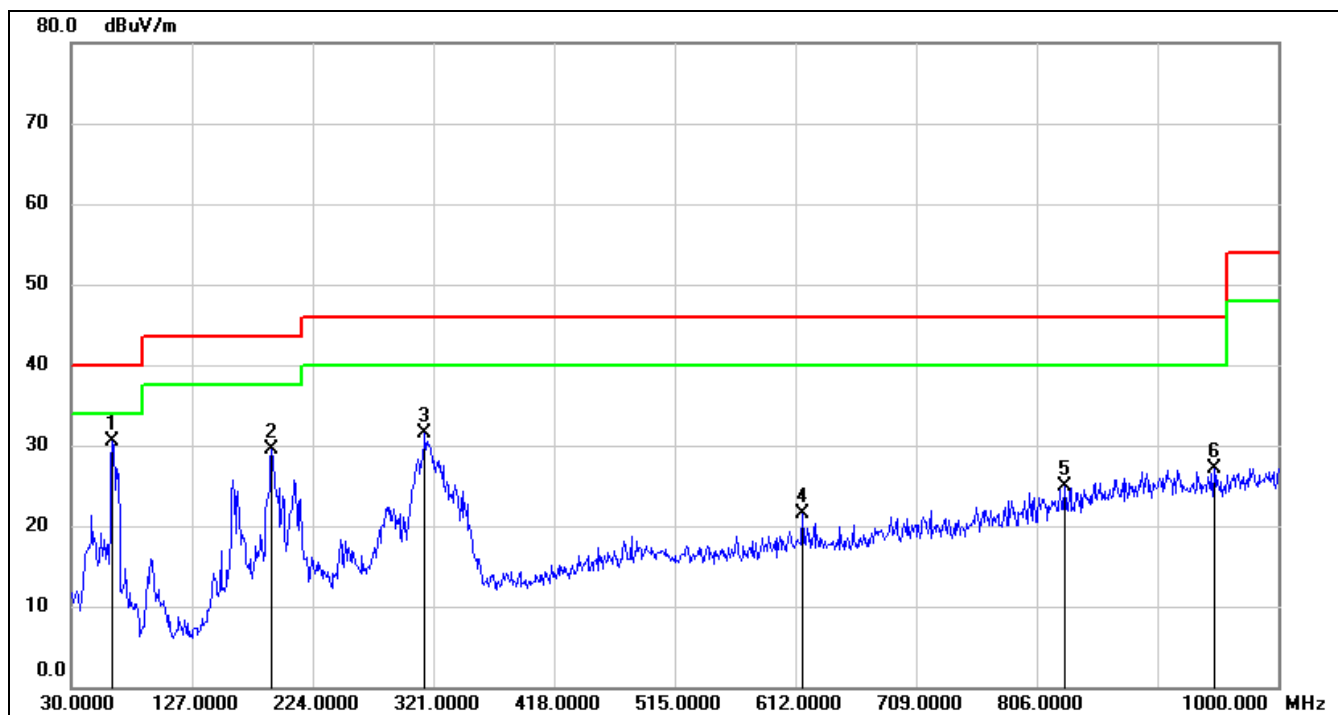
Note: 1. Result Level = Read Level + Correct Factor.

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

4. All the noise are created from the digital circuit. It is not created by wireless charging circuit.

### FCC PART15C SPURIOUS EMISSIONS FOR PLAN B (VERTICAL)



| No. | Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|-----|--------------------|-------------------|-------------------|--------------------|-------------------|----------------|--------|
| 1   | 62.9800            | 45.70             | -15.20            | 30.50              | 40.00             | -9.50          | peak   |
| 2   | 191.0200           | 41.66             | -12.10            | 29.56              | 43.50             | -13.94         | peak   |
| 3   | 314.2100           | 42.25             | -10.76            | 31.49              | 46.00             | -14.51         | peak   |
| 4   | 617.8200           | 27.03             | -5.47             | 21.56              | 46.00             | -24.44         | peak   |
| 5   | 828.3100           | 26.77             | -1.91             | 24.86              | 46.00             | -21.14         | peak   |
| 6   | 948.5900           | 27.76             | -0.63             | 27.13              | 46.00             | -18.87         | peak   |

Note: 1. Result Level = Read Level + Correct Factor.

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto

4. All the noise are created from the digital circuit. It is not created by wireless charging circuit.

## 8. AC POWER LINE CONDUCTED EMISSION

### LIMITS

Please refer to CFR 47 FCC §15.207 (a).

| FREQUENCY (MHz) | Quasi-peak | Average   |
|-----------------|------------|-----------|
| 0.15 -0.5       | 66 - 56 *  | 56 - 46 * |
| 0.50 -5.0       | 56.00      | 46.00     |
| 5.0 -30.0       | 60.00      | 50.00     |

### TEST PROCEDURE

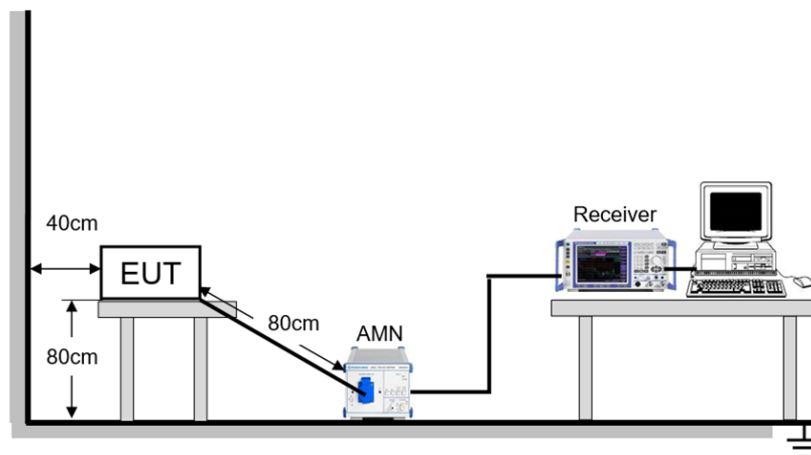
#### TEST SETUP AND PROCEDURE

Refer to ANSI C63.10-2013 clause 6.2.

The EUT is put on a table of non-conducting material that is 80 cm high. The vertical conducting wall of shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2013. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9 kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

### TEST SETUP

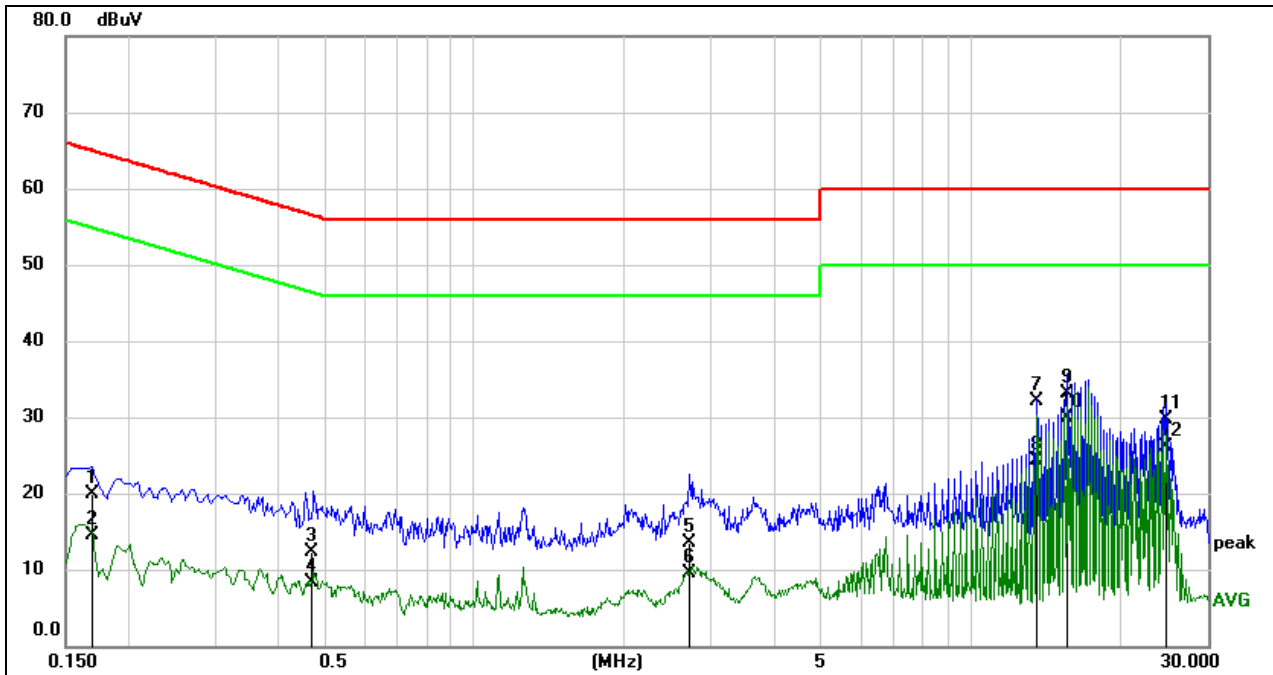


### TEST ENVIRONMENT

|                     |         |                   |                 |
|---------------------|---------|-------------------|-----------------|
| Temperature         | 21.4 °C | Relative Humidity | 62%             |
| Atmosphere Pressure | 101 kPa | Test Voltage      | AC 120 V, 60 Hz |

### TEST RESULTS

|            |        |              |                |
|------------|--------|--------------|----------------|
| Test Mode: | Mode 1 | Test Voltage | AC 120 V/60 Hz |
| Line       | L      |              |                |

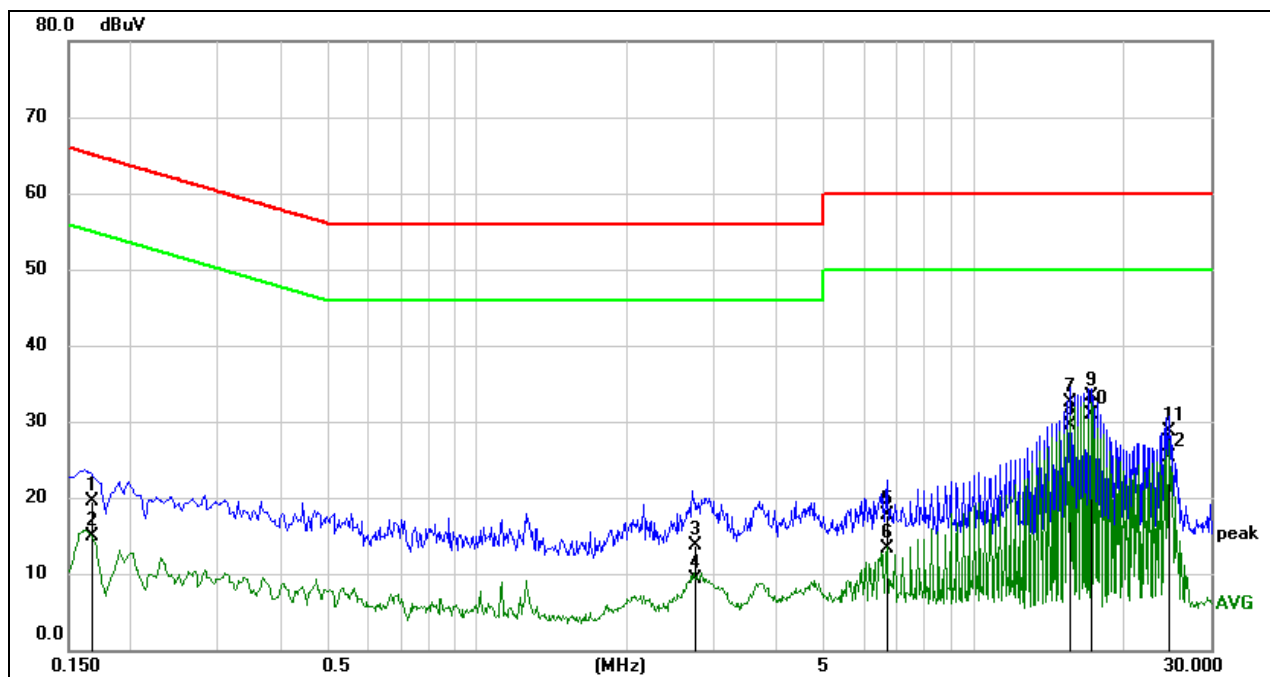


| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB) | Result (dBuV) | Limit (dBuV) | Margin (dB) | Remark |
|-----|-----------------|----------------|--------------|---------------|--------------|-------------|--------|
| 1   | 0.1688          | 10.09          | 9.76         | 19.85         | 65.02        | -45.17      | QP     |
| 2   | 0.1688          | 4.83           | 9.76         | 14.59         | 55.02        | -40.43      | AVG    |
| 3   | 0.4696          | 2.67           | 9.73         | 12.40         | 56.52        | -44.12      | QP     |
| 4   | 0.4696          | -1.33          | 9.73         | 8.40          | 46.52        | -38.12      | AVG    |
| 5   | 2.7182          | 3.73           | 9.77         | 13.50         | 56.00        | -42.50      | QP     |
| 6   | 2.7182          | -0.28          | 9.77         | 9.49          | 46.00        | -36.51      | AVG    |
| 7   | 13.5599         | 22.40          | 9.78         | 32.18         | 60.00        | -27.82      | QP     |
| 8   | 13.5599         | 14.61          | 9.78         | 24.39         | 50.00        | -25.61      | AVG    |
| 9   | 15.6783         | 23.34          | 9.84         | 33.18         | 60.00        | -26.82      | QP     |
| 10  | 15.6783         | 20.02          | 9.84         | 29.86         | 50.00        | -20.14      | AVG    |
| 11  | 24.6732         | 19.98          | 9.76         | 29.74         | 60.00        | -30.26      | QP     |
| 12  | 24.6732         | 16.34          | 9.76         | 26.10         | 50.00        | -23.90      | AVG    |

Note:

1. Result = Reading + Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

|            |        |              |                |
|------------|--------|--------------|----------------|
| Test Mode: | Mode 1 | Test Voltage | AC 120 V/60 Hz |
| Line       | N      |              |                |



| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB) | Result (dBuV) | Limit (dBuV) | Margin (dB) | Remark |
|-----|-----------------|----------------|--------------|---------------|--------------|-------------|--------|
| 1   | 0.1669          | 10.04          | 9.54         | 19.58         | 65.11        | -45.53      | QP     |
| 2   | 0.1669          | 5.34           | 9.54         | 14.88         | 55.11        | -40.23      | AVG    |
| 3   | 2.7415          | 4.11           | 9.60         | 13.71         | 56.00        | -42.29      | QP     |
| 4   | 2.7415          | -0.23          | 9.60         | 9.37          | 46.00        | -36.63      | AVG    |
| 5   | 6.6781          | 8.11           | 9.64         | 17.75         | 60.00        | -42.25      | QP     |
| 6   | 6.6781          | 3.65           | 9.64         | 13.29         | 50.00        | -36.71      | AVG    |
| 7   | 15.6729         | 22.76          | 9.75         | 32.51         | 60.00        | -27.49      | QP     |
| 8   | 15.6729         | 19.72          | 9.75         | 29.47         | 50.00        | -20.53      | AVG    |
| 9   | 17.2142         | 23.53          | 9.78         | 33.31         | 60.00        | -26.69      | QP     |
| 10  | 17.2142         | 21.17          | 9.78         | 30.95         | 50.00        | -19.05      | AVG    |
| 11  | 24.6647         | 18.91          | 9.71         | 28.62         | 60.00        | -31.38      | QP     |
| 12  | 24.6647         | 15.67          | 9.71         | 25.38         | 50.00        | -24.62      | AVG    |

Note:

1. Result = Reading + Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

Note: All the modes have been tested, only the worst data was recorded in the report.

**END OF REPORT**