

# TEST REPORT

Applicant Name : LEADER ELECTRONICS CORP  
Address : No.8 Yuanshan Rd., Yushan Town, Kunshan City, Jiangsu  
Province, China 215300  
Report Number : KS2211222-66481E-00A  
FCC ID: 2AR5U-DOCK152229W

## Test Standard (s)

FCC Part 15C

## Sample Description

Product Type: DOCK1500 Series  
Model No.: DOCK152226W  
Date Received: 2021-12-22  
Report Date: 2022-06-13

|              |       |
|--------------|-------|
| Test Result: | Pass* |
|--------------|-------|

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

## Prepared and Checked By:



Ting Lü  
EMC Engineer

## Approved By:



Candy Li  
EMC Engineer

Note: This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk "★".

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## GENERAL INFORMATION

### Product Description for Equipment under Test (EUT)

|                                |                        |
|--------------------------------|------------------------|
| Frequency Range                | 110.5-205kHz           |
| Antenna Type                   | Coil                   |
| Input Voltage                  | AC 120V/60Hz           |
| Wireless Charging Output Power | 10W*2                  |
| Sample serial number           | KS2211222-66481E-RF-S1 |
| Sample/EUT Status              | Good condition         |

### Objective

This test report is in accordance with Part 2, Subpart J, and Part 15, Subparts A and C of the Federal Communications Commission's rules.

The objective is to determine the compliance of EUT with FCC rules, section 15.203, 15.205, 15.207 and 15.209.

### Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

All emissions measurement was performed at Shenzhen Accurate Technology Co., Ltd. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

### Measurement Uncertainty

| Parameter                          |              | Uncertainty |
|------------------------------------|--------------|-------------|
| AC Power Lines Conducted Emissions |              | 2.72dB      |
| Emissions,<br>Radiated             | 9kHz – 30MHz | 2.66dB      |
|                                    | 30MHz - 1GHz | 4.28dB      |
| Temperature                        |              | 1°C         |
| Humidity                           |              | 6%          |
| Supply voltages                    |              | 0.4%        |

*Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.*

## **Test Facility**

The test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China.

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No.: 708358, the FCC Designation No.: CN1189.

Accredited by American Association for Laboratory Accreditation (A2LA). The Certificate Number is 4297.01

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0016. The Registration Number is 5077A.

## SYSTEM TEST CONFIGURATION

### Justification

The system was configured for testing in a test mode

### EUT Exercise Software

No software used in test.

### Local Support Equipment

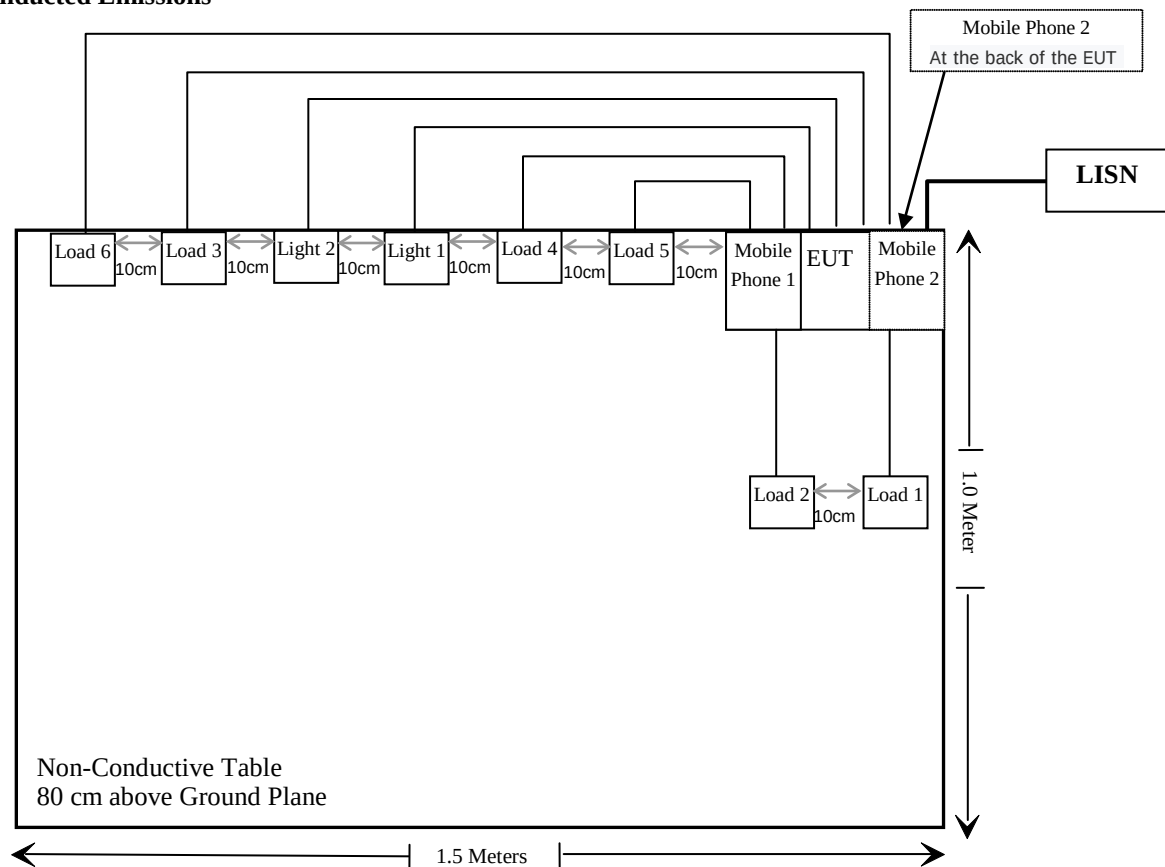
| Manufacturer | Description    | Model       | Serial Number    |
|--------------|----------------|-------------|------------------|
| HUAWEI       | Mobile phone*2 | Mate30      | FEC0220617000901 |
| Unknown      | Load 5         | 50W100RJ*7  | Unknown          |
| Unknown      | Load 6         | 50W100RJ*16 | Unknown          |
| Unknown      | Load *4        | /           | Unknown          |
| Unknown      | Light*2        | /           | Unknown          |

### External I/O Cable

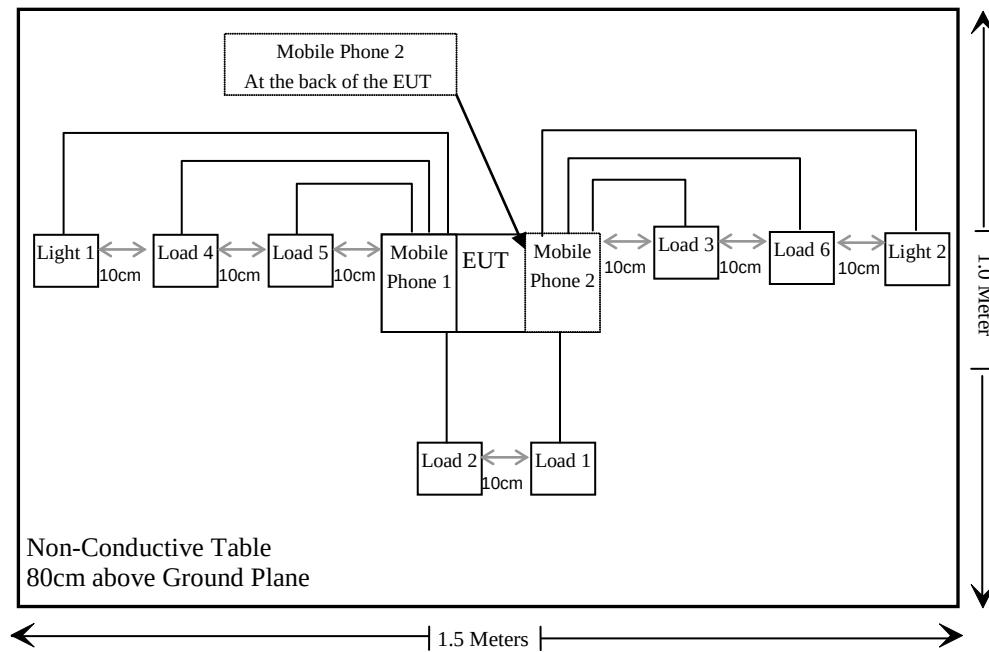
| Cable Description                                             | Length (m) | From Port  | To  |
|---------------------------------------------------------------|------------|------------|-----|
| Un-shielded Un-Detachable AC Power Cable                      | 2.6        | LISN       | EUT |
| Un-shielded Detachable USB Cable (Load 1)                     | 0.6        | Load       | EUT |
| Un-shielded Detachable USB Cable (Load 2)                     | 0.94       | Load       | EUT |
| Un-shielded Detachable Type C Cable (Load 5)                  | 0.56       | Load       | EUT |
| Un-shielded Detachable Type C Cable (Load 6)                  | 1.2        | Load       | EUT |
| Un-shielded Detachable USB Cable (Load 3 & 4)                 | 1.4        | Load       | EUT |
| Un-shielded Un-Detachable Lampholder AC Power Cable (Light 1) | 2.2        | Lampholder | EUT |
| Un-shielded Un-Detachable Lampholder AC Power Cable (Light 2) | 2.2        | Lampholder | EUT |

## Block Diagram of Test Setup

### For Conducted Emissions



For Radiate emission:



## SUMMARY OF TEST RESULTS

| FCC Rules               | Description of Test               | Result    |
|-------------------------|-----------------------------------|-----------|
| FCC§1.1310 &<br>§2.1091 | Maximum Permissible Exposure(MPE) | Compliant |
| FCC§15.203              | Antenna Requirement               | Compliant |
| FCC§15.207              | AC Line Conducted Emission        | Compliant |
| §15.209 §15.205         | Radiated Emission Test            | Compliant |

## TEST EQUIPMENT LIST

| Manufacturer                                     | Description                          | Model     | Serial Number | Calibration Date | Calibration Due Date |
|--------------------------------------------------|--------------------------------------|-----------|---------------|------------------|----------------------|
| <b>MPE</b>                                       |                                      |           |               |                  |                      |
| Narda                                            | Electric and Magnetic Field Analyzer | EHP-200AC | 180ZX10204    | 2021/06/07       | 2024/06/06           |
| Narda                                            | USB-RS232 Converter                  | Unknown   | 20042558      | /                | /                    |
| Narda                                            | Software                             | EHP200-TS | Unknown       | /                | /                    |
| <b>Conducted Emissions Test</b>                  |                                      |           |               |                  |                      |
| Rohde& Schwarz                                   | EMI Test Receiver                    | ESCI      | 100784        | 2021/12/13       | 2022/12/12           |
| R & S                                            | L.I.S.N.                             | ENV216    | 101314        | 2021/12/13       | 2022/12/12           |
| Unknown                                          | RF Coaxial Cable                     | No.17     | N0350         | 2021/12/14       | 2022/12/13           |
| Conducted Emission Test Software: e3 19821b (V9) |                                      |           |               |                  |                      |
| <b>RF Radiated test</b>                          |                                      |           |               |                  |                      |
| Rohde& Schwarz                                   | Test Receiver                        | ESR       | 102725        | 2021/12/13       | 2022/12/12           |
| SONOMA INSTRUMENT                                | Amplifier                            | 310 N     | 186131        | 2021/11/09       | 2022/11/08           |
| SCHWARZBECK                                      | LOOP ANTENNA                         | FMZB1516  | 1516131       | 2021/12/22       | 2024/12/21           |
| Schwarzbeck                                      | Bilog Antenna                        | VULB9163  | 9163-323      | 2021/07/06       | 2024/07/05           |
| Unknown                                          | RF Coaxial Cable                     | No.12     | N040          | 2021/12/14       | 2022/12/13           |
| Unknown                                          | RF Coaxial Cable                     | No.13     | N300          | 2021/12/14       | 2022/12/13           |
| Unknown                                          | RF Coaxial Cable                     | No.14     | N800          | 2021/12/14       | 2022/12/13           |
| Radiated Emission Test Software: e3 19821b (V9)  |                                      |           |               |                  |                      |

**\* Statement of Traceability:** Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

## FCC §1.1310, §2.1091- MAXIMUM PERMISSIBLE EXPOSURE (MPE)

### Applicable Standard

According to subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

| (B) Limits for General Population/Uncontrolled Exposure |                               |                               |                                     |                          |
|---------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| Frequency Range (MHz)                                   | Electric Field Strength (V/m) | Magnetic Field Strength (A/m) | Power Density (mW/cm <sup>2</sup> ) | Averaging Time (minutes) |
| 0.3–1.34                                                | 614                           | 1.63                          | *(100)                              | 30                       |
| 1.34–30                                                 | 824/f                         | 2.19/f                        | *(180/f <sup>2</sup> )              | 30                       |
| 30–300                                                  | 27.5                          | 0.073                         | 0.2                                 | 30                       |
| 300–1500                                                | /                             | /                             | f/1500                              | 30                       |
| 1500–100,000                                            | /                             | /                             | 1.0                                 | 30                       |

f = frequency in MHz; \* = Plane-wave equivalent power density;

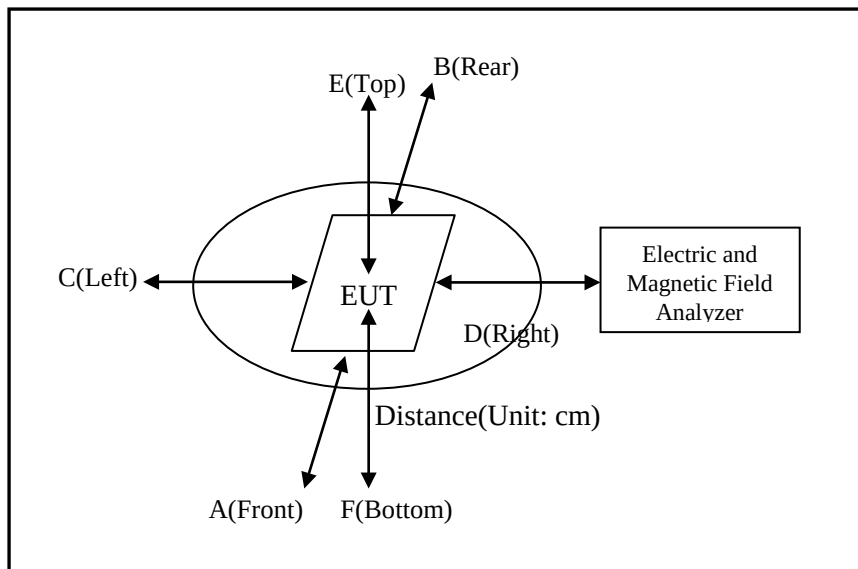
According with KDB 680106 D01 RF Exposure Wireless Charging Apps v03r01 clause 3 c)

- c) For devices designed for typical desktop applications, such as wireless charging pads, RF exposure evaluation should be conducted assuming a user separation distance of 15 cm. E and H field strength measurements or numerical modeling may be used to demonstrate compliance. Measurements should be made from all sides and the top of the primary/client pair, with the 15 cm measured from the center of the probe(s) to the edge of the device. Emissions between 100 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 614 V/m and 1.63 A/m. A KDB inquiry is required to determine the applicable exposure limits below 100 kHz.

According to KDB 680106 D01 RF Exposure Wireless Charging App v03r01 clause 5 b)

- b) Inductive wireless power transfer applications with supporting field strength results and meeting all of the following requirements are not required to submit a KDB inquiry for devices approved using SDoC<sup>2</sup> or a PAG<sup>3</sup> for equipment approved using certification to address RF exposure compliance. However, the responsible party is required to keep a copy of the test report in accordance with KDB 865664 D02. A copy of the test report is to be submitted with the application if the device is approved using certification.
- (1) Power transfer frequency is less than 1 MHz
  - (2) Output power from each primary coil is less than or equal to 15 watts.
  - (3) The system may consist of more than one source primary coils, charging one or more clients. If more than one primary coil is present, the coil pairs may be powered on at the same time.
  - (4) Client device is placed directly in contact with the transmitter.
  - (5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).
  - (6) The aggregate H-field strengths anywhere at or beyond 15 cm surrounding the device, and 20 cm away from the surface from all coils that by design can simultaneously transmit, and while those coils are simultaneously energized, are demonstrated to be less than 50% of the applicable MPE limit.

## Block Diagram of Test Setup



Note:

For mobile condition distance: A/B/C/D is 15cm; E is 20cm;

## Test Data

### Environmental Conditions

|                    |           |
|--------------------|-----------|
| Temperature:       | 26°C      |
| Relative Humidity: | 51 %      |
| ATM Pressure:      | 100.0 kPa |

*The testing was performed by Ting Lü on 2022-06-09.*

*Test Mode: Wireless Charging (Worst case for maximum power full load)*

**H-Field Strength**

| Frequency Range (kHz) | Position A (A/m) | Position B (A/m) | Position C (A/m) | Position D (A/m) | Position E (A/m) | 50% Limit (A/m) | Limit |
|-----------------------|------------------|------------------|------------------|------------------|------------------|-----------------|-------|
| 110.5kHz-205kHz       | 0.146            | 0.121            | 0.142            | 0.122            | 0.112            | 0.815           | 1.63  |

**E-Field Strength**

| Frequency Range (kHz) | Position A (V/m) | Position B (V/m) | Position C (V/m) | Position D (V/m) | Position E (V/m) | 50% Limit (V/m) | Limit |
|-----------------------|------------------|------------------|------------------|------------------|------------------|-----------------|-------|
| 110.5kHz-205kHz       | 0.628            | 0.421            | 0.611            | 0.425            | 0.282            | 307             | 614   |

Note: Test with 15cm distance from the center of the probe(s) to the edge of the device, 20cm from the center of the probe(s) to the top of the device.

**Result: Pass****Considerations of compliance 680106 D01 RF Exposure Wireless Charging App v03r01 clause 5 b:**

(1) Power transfer frequency is less than 1 MHz.

Yes, the operation frequency is 110.5-205kHz.

(2) Output power from each primary coil is less than or equal to 15 watts.

Yes, the maximum output power of primary coil is 10Watts.

(3) The system may consist of more than one source primary coils, charging one or more clients. If more than one primary coil is present, the coil pairs may be powered on at the same time.

The transfer system includes two primary coils to detect and allow coupling only between individual pairs of coils.

(4) Client device is placed directly in contact with the transmitter.

Yes, client device is placed directly in contact with the transmitter

(5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).

Yes, mobile exposure conditions only

(6) The aggregate H-field strengths anywhere at or beyond 15 cm surrounding the device, and 20 cm away from the surface from all coils that by design can simultaneously transmit, and while those coils are simultaneously energized, are demonstrated to be less than 50% of the applicable MPE limit.

Yes, the test result for H and E-Field strength less than 50% of the MPE limit.

## **FCC§15.203 – ANTENNA REQUIREMENT**

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### **Applicable Standard**

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

### **Antenna Connected Construction**

The EUT has two internal coils arrangement which was permanently attached, fulfill the requirement of this section. Please refer to the EUT photos.

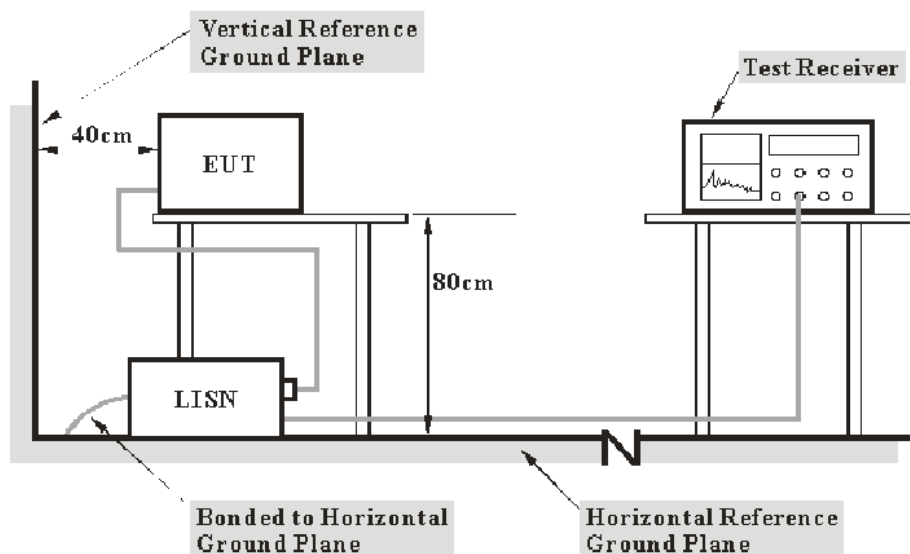
**Result: Compliant.**

## FCC §15.207 – AC LINE CONDUCTED EMISSION

### Applicable Standard

FCC§15.207

### EUT Setup



Note: 1. Support units were connected to second LISN.  
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

### EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

| Frequency Range  | IF B/W |
|------------------|--------|
| 150 kHz – 30 MHz | 9 kHz  |

### Test Procedure

During the conducted emission test, the adapter was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All final data was recorded in the Quasi-peak and average detection mode.

## Corrected Factor & Margin Calculation

The factor is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss. The basic equation is as follows:

$$\text{Factor} = \text{LISN VDF} + \text{Cable Loss}$$

The “**Over limit**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over limit of -7 dB means the emission is 7 dB below the limit. The equation for calculation is as follows:

$$\begin{aligned}\text{Over Limit} &= \text{Level} - \text{Limit} \\ \text{Level} &= \text{Read Level} + \text{Factor}\end{aligned}$$

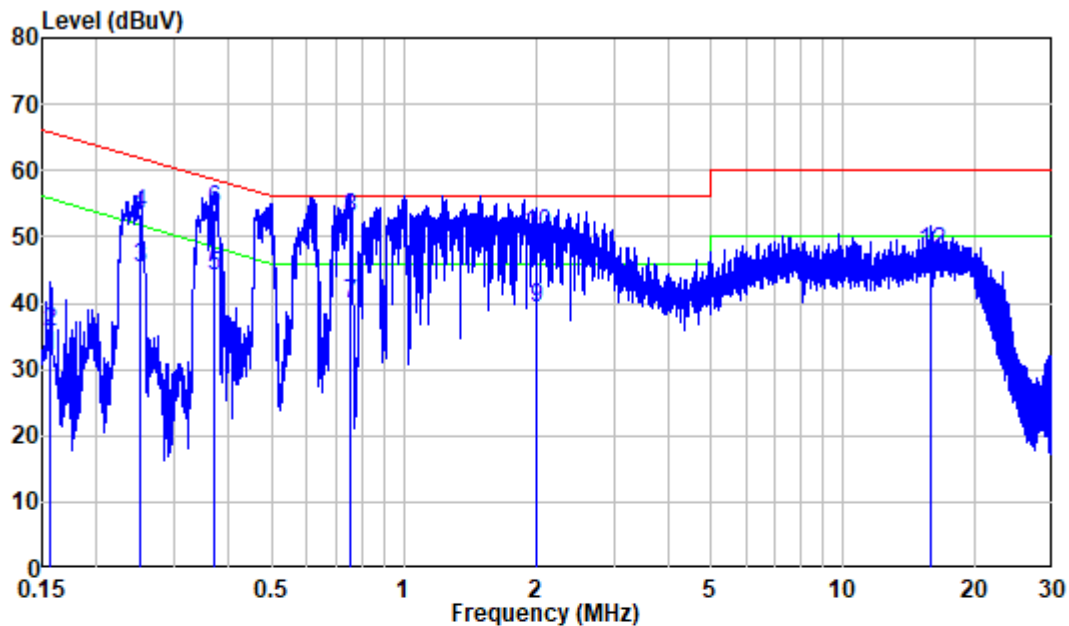
## Test Data

### Environmental Conditions

|                    |           |
|--------------------|-----------|
| Temperature:       | 25 °C     |
| Relative Humidity: | 64 %      |
| ATM Pressure:      | 101.0 kPa |

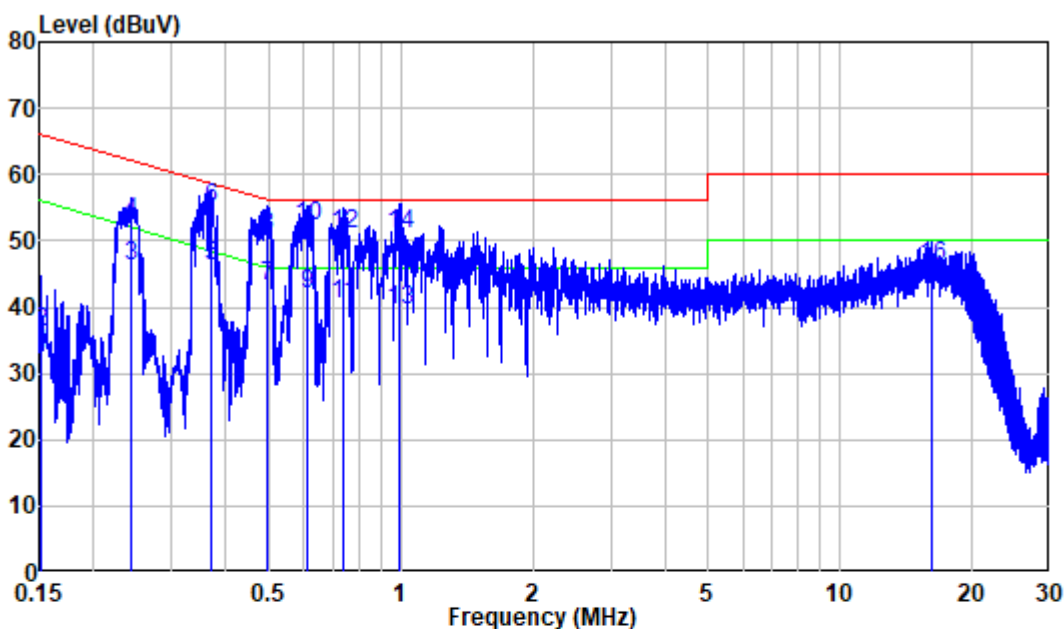
*The testing was performed by Bin Deng on 2021-12-30.*

*Test Mode: Wireless charging (Worst case for maximum power full load)*

**AC 120 V/60 Hz, Line:**

Site : Shielding Room  
 Condition: Line  
 Mode : FULL LOAD  
 Power : AC 120V 60Hz

|    | Freq   | Factor | Read<br>Level | Level | Limit<br>Line | Over<br>Limit | Remark  |
|----|--------|--------|---------------|-------|---------------|---------------|---------|
|    | MHz    | dB     | dBuV          | dBuV  | dBuV          | dB            |         |
| 1  | 0.157  | 9.88   | 22.12         | 32.00 | 55.61         | -23.61        | Average |
| 2  | 0.157  | 9.88   | 25.61         | 35.49 | 65.61         | -30.12        | QP      |
| 3  | 0.251  | 9.80   | 35.34         | 45.14 | 51.72         | -6.58         | Average |
| 4  | 0.251  | 9.80   | 43.67         | 53.47 | 61.72         | -8.25         | QP      |
| 5  | 0.368  | 9.80   | 34.19         | 43.99 | 48.54         | -4.55         | Average |
| 6  | 0.368  | 9.80   | 44.30         | 54.10 | 58.54         | -4.44         | QP      |
| 7  | 0.753  | 9.81   | 30.09         | 39.90 | 46.00         | -6.10         | Average |
| 8  | 0.753  | 9.81   | 43.14         | 52.95 | 56.00         | -3.05         | QP      |
| 9  | 2.001  | 9.92   | 29.39         | 39.31 | 46.00         | -6.69         | Average |
| 10 | 2.001  | 9.92   | 40.53         | 50.45 | 56.00         | -5.55         | QP      |
| 11 | 15.896 | 10.08  | 34.59         | 44.67 | 50.00         | -5.33         | Average |
| 12 | 15.896 | 10.08  | 37.59         | 47.67 | 60.00         | -12.33        | QP      |

**AC 120V/ 60 Hz, Neutral:**

Site : Shielding Room  
 Condition: Neutral  
 Mode : FULL LOAD  
 Power : AC 120V 60Hz

|    | Freq   | Factor | Read Level | Level | Limit Line | Over Limit | Remark  |
|----|--------|--------|------------|-------|------------|------------|---------|
|    | MHz    | dB     | dBuV       | dBuV  | dBuV       | dB         |         |
| 1  | 0.151  | 9.90   | 22.90      | 32.80 | 55.92      | -23.12     | Average |
| 2  | 0.151  | 9.90   | 26.27      | 36.17 | 65.92      | -29.75     | QP      |
| 3  | 0.242  | 9.98   | 36.24      | 46.22 | 52.02      | -5.80      | Average |
| 4  | 0.242  | 9.98   | 42.75      | 52.73 | 62.02      | -9.29      | QP      |
| 5  | 0.371  | 9.93   | 36.16      | 46.09 | 48.49      | -2.40      | Average |
| 6  | 0.371  | 9.93   | 45.02      | 54.95 | 58.49      | -3.54      | QP      |
| 7  | 0.498  | 9.90   | 33.25      | 43.15 | 46.04      | -2.89      | Average |
| 8  | 0.498  | 9.90   | 40.82      | 50.72 | 56.04      | -5.32      | QP      |
| 9  | 0.614  | 9.91   | 31.97      | 41.88 | 46.00      | -4.12      | Average |
| 10 | 0.614  | 9.91   | 42.18      | 52.09 | 56.00      | -3.91      | QP      |
| 11 | 0.740  | 9.91   | 30.40      | 40.31 | 46.00      | -5.69      | Average |
| 12 | 0.740  | 9.91   | 41.20      | 51.11 | 56.00      | -4.89      | QP      |
| 13 | 0.996  | 9.91   | 29.63      | 39.54 | 46.00      | -6.46      | Average |
| 14 | 0.996  | 9.91   | 41.22      | 51.13 | 56.00      | -4.87      | QP      |
| 15 | 16.119 | 10.08  | 33.35      | 43.43 | 50.00      | -6.57      | Average |
| 16 | 16.119 | 10.08  | 35.97      | 46.05 | 60.00      | -13.95     | QP      |

## FCC §15.205 & §15.209 - RADIATED EMISSIONS TEST

### Applicable Standard

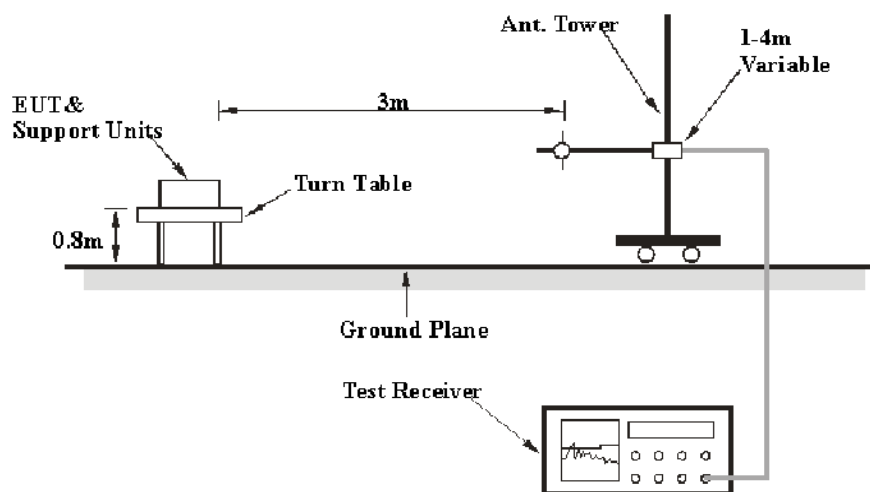
As per FCC Part 15.209

(a) Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

| 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                            |
| 30-88           | 100**                             | 3                             |
| 88-216          | 150**                             | 3                             |
| 216-960         | 200**                             | 3                             |
| Above 960       | 500                               | 3                             |

\*\*Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§15.231 and 15.241.

### EUT Setup



The radiated emission tests were performed in the 3-meter chamber test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC Part Subpart C limits.

The spacing between the peripherals was 10 cm.

## EMI Test Receiver Setup

During the radiated emission test, the EMI test Receiver was set with the following configurations:

| Frequency Range   | RBW     | Video B/W | Measurement |
|-------------------|---------|-----------|-------------|
| 9 kHz – 150 kHz   | 300 Hz  | 1 kHz     | PK          |
| 150 kHz – 30 MHz  | 10 kHz  | 30 kHz    | PK          |
| 30 MHz – 1000 MHz | 120 kHz | 300 kHz   | QP          |

The emission limits shown in the above table 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.

If the maximized peak measured value complies with the limit, then it is unnecessary to perform an QP/Average measurement

## Corrected Amplitude & Margin Calculation

The Factor is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain. The basic equation is as follows:

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “**Over Limit/Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over Limit/margin of -7dB means the emission is 7dB below the limit. The equation for calculation is as follows:

$$\begin{aligned}\text{Over Limit/Margin} &= \text{Level} / \text{Corrected Amplitude} - \text{Limit} \\ \text{Level} / \text{Corrected Amplitude} &= \text{Read Level} + \text{Factor}\end{aligned}$$

## Test Data

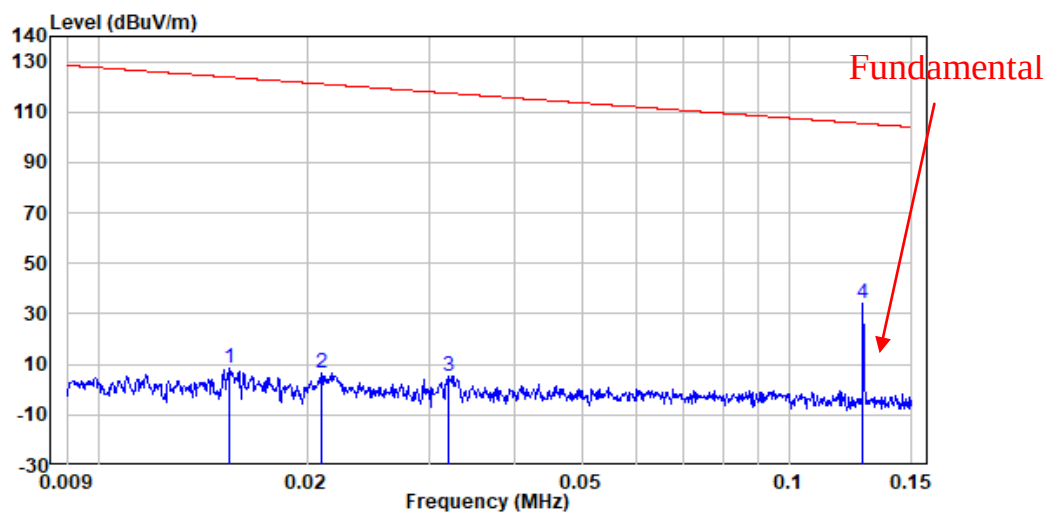
### Environmental Conditions

|                    |         |
|--------------------|---------|
| Temperature:       | 22 °C   |
| Relative Humidity: | 62 %    |
| ATM Pressure:      | 101 kPa |

*The testing was performed by Chao Mo on 2021-12-30.*

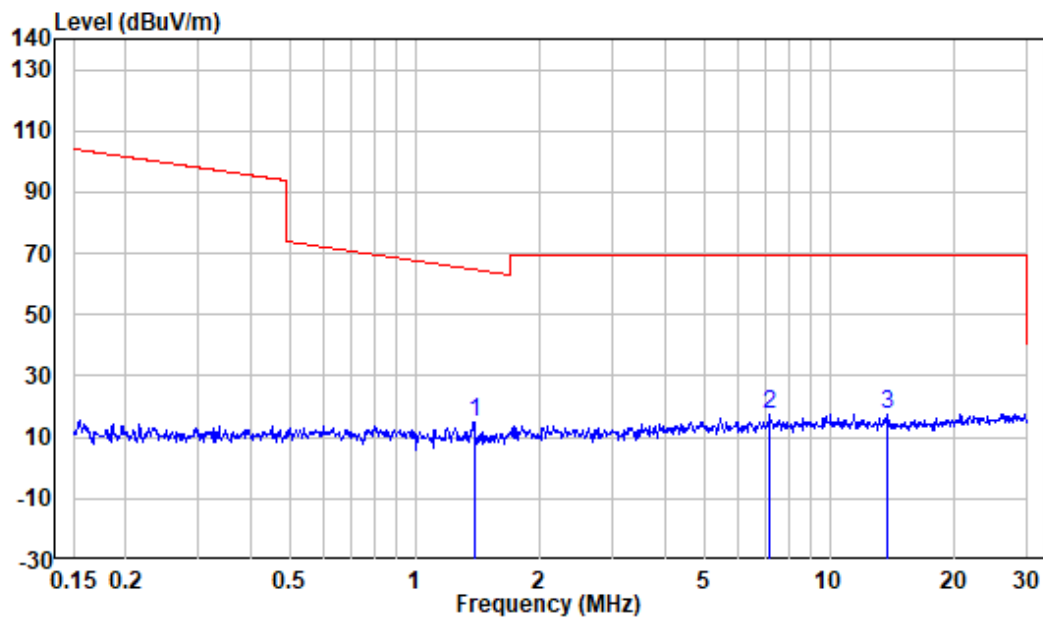
*Test Mode: Wireless charging (Worst case for maximum power full load)*

9 kHz~30MHz:



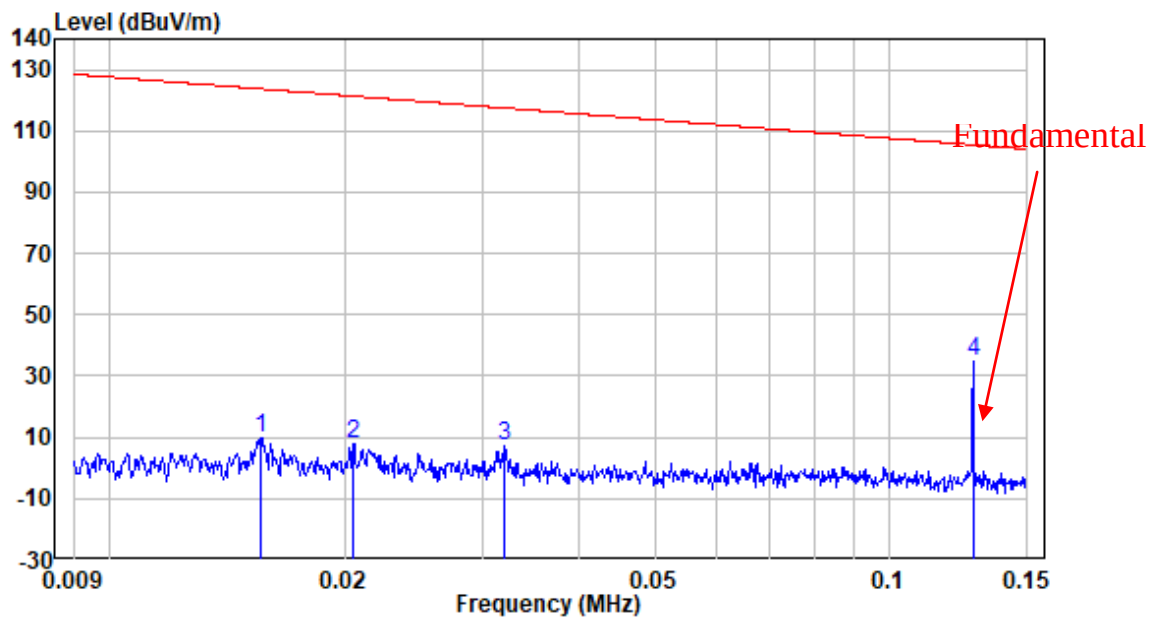
Site : chamber  
Condition: 3m  
Job No. : KS2211222-66481E-RF  
Test Mode: Full Load  
Note : Ground-parallel

|   | Freq  | Factor | Read<br>Level | Level  | Limit<br>Line | Over<br>Limit | Remark |
|---|-------|--------|---------------|--------|---------------|---------------|--------|
|   | MHz   | dB/m   | dBuV          | dBuV/m | dBuV/m        | dB            |        |
| 1 | 0.015 | -11.53 | 19.86         | 8.33   | 123.80        | -115.47       | Peak   |
| 2 | 0.021 | -11.69 | 18.09         | 6.40   | 121.16        | -114.76       | Peak   |
| 3 | 0.032 | -11.63 | 16.81         | 5.18   | 117.47        | -112.29       | Peak   |
| 4 | 0.127 | -11.86 | 46.20         | 34.34  | 105.50        | -71.16        | Peak   |



Site : chamber  
Condition: 3m  
Job No. : KS2211222-66481E-RF  
Test Mode: Full Load  
Note : Ground-parallel

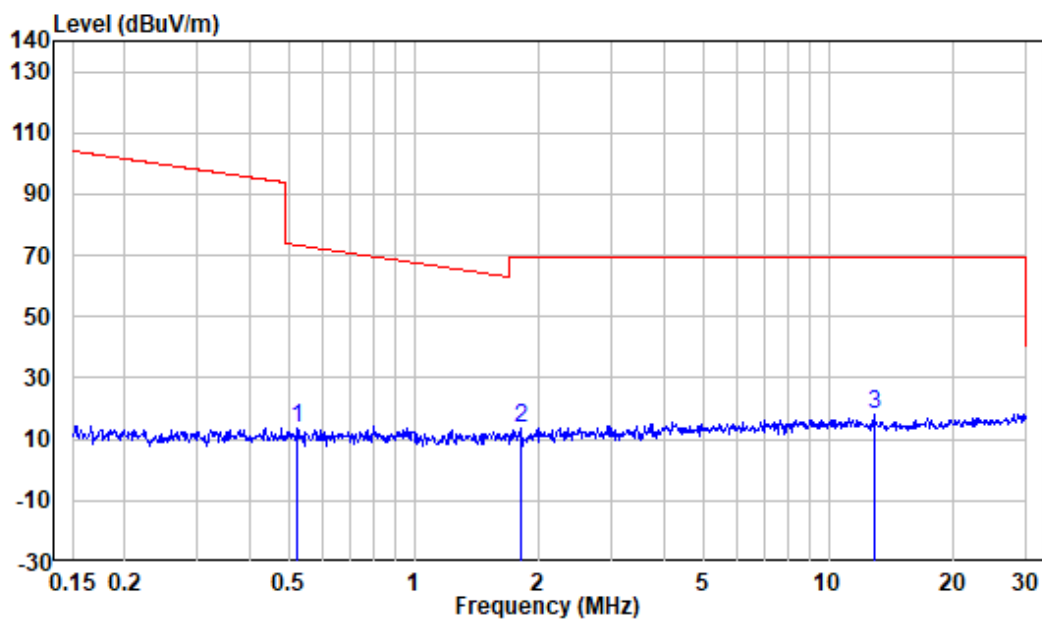
|   | Freq   | Factor | Read<br>Level | Level  | Limit<br>Line | Over<br>Limit | Remark |
|---|--------|--------|---------------|--------|---------------|---------------|--------|
|   | MHz    | dB/m   | dBuV          | dBuV/m | dBuV/m        | dB            |        |
| 1 | 1.388  | -11.48 | 26.24         | 14.76  | 64.56         | -49.80        | Peak   |
| 2 | 7.175  | -11.45 | 29.17         | 17.72  | 69.54         | -51.82        | Peak   |
| 3 | 13.768 | -10.92 | 28.26         | 17.34  | 69.54         | -52.20        | Peak   |



Site : chamber  
Condition: 3m  
Job No. : KS2211222-66481E-RF  
Test Mode: Full Load  
Note : Perpendicular

|   | Freq  | Factor | Read  | Limit  | Over          | Remark |
|---|-------|--------|-------|--------|---------------|--------|
|   |       |        | Level | Level  | Limit         |        |
|   | MHz   | dB/m   | dBuV  | dBuV/m | dBuV/m        | dB     |
| 1 | 0.016 | -11.54 | 21.37 | 9.83   | 123.71-113.88 | Peak   |
| 2 | 0.021 | -11.69 | 19.85 | 8.16   | 121.34-113.18 | Peak   |
| 3 | 0.032 | -11.63 | 18.92 | 7.29   | 117.47-110.18 | Peak   |
| 4 | 0.128 | -11.87 | 46.69 | 34.82  | 105.48 -70.66 | Peak   |

v



Site : chamber

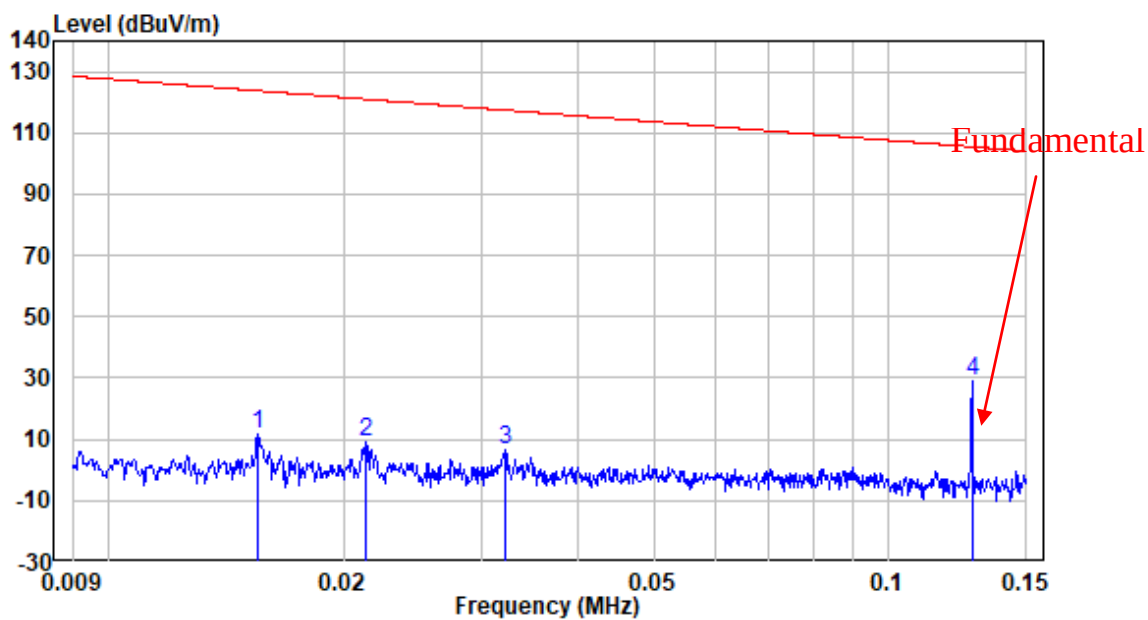
Condition: 3m

Job No. : KS2211222-66481E-RF

Test Mode: Full Load

Note : Perpendicular

|   | Freq   | Factor | Read<br>Level | Level  | Limit<br>Line | Over<br>Limit | Remark |
|---|--------|--------|---------------|--------|---------------|---------------|--------|
|   | MHz    | dB/m   | dBuV          | dBuV/m | dBuV/m        | dB            |        |
| 1 | 0.524  | -11.61 | 25.21         | 13.60  | 73.21         | -59.61        | Peak   |
| 2 | 1.819  | -11.38 | 24.86         | 13.48  | 69.54         | -56.06        | Peak   |
| 3 | 12.852 | -10.89 | 28.92         | 18.03  | 69.54         | -51.51        | Peak   |



Site : chamber

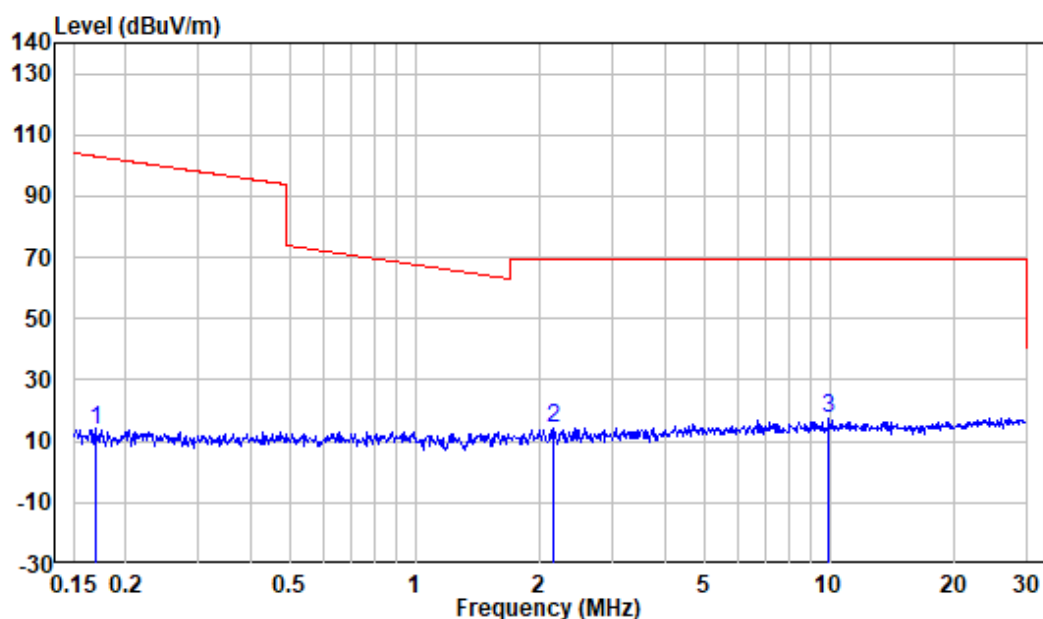
Condition: 3m

Job No. : KS2211222-66481E-RF

Test Mode: Full Load

Note : Parallel

|   | Freq  | Factor | Read<br>Level | Level  | Limit<br>Line | Over<br>Limit | Remark |
|---|-------|--------|---------------|--------|---------------|---------------|--------|
|   | MHz   | dB/m   | dBuV          | dBuV/m | dBuV/m        | dB            |        |
| 1 | 0.016 | -11.54 | 23.02         | 11.48  | 123.78-112.30 |               | Peak   |
| 2 | 0.021 | -11.69 | 21.02         | 9.33   | 120.99-111.66 |               | Peak   |
| 3 | 0.032 | -11.63 | 17.95         | 6.32   | 117.43-111.11 |               | Peak   |
| 4 | 0.128 | -11.87 | 40.93         | 29.06  | 105.48        | -76.42        | Peak   |



Site : chamber

Condition: 3m

Job No. : KS2211222-66481E-RF

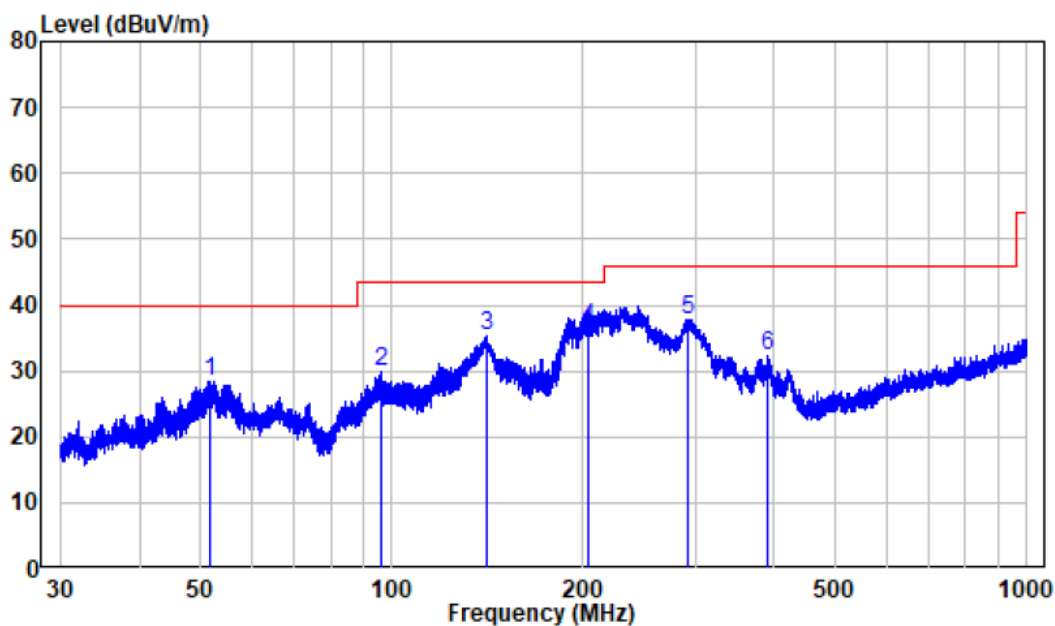
Test Mode: Full Load

Note : Parallel

|   | Freq  | Factor | Read<br>Level | Level  | Limit<br>Line | Over<br>Limit | Remark |
|---|-------|--------|---------------|--------|---------------|---------------|--------|
|   | MHz   | dB/m   | dBuV          | dBuV/m | dBuV/m        | dB            |        |
| 1 | 0.170 | -12.07 | 25.92         | 13.85  | 102.98        | -89.13        | Peak   |
| 2 | 2.155 | -11.41 | 25.83         | 14.42  | 69.54         | -55.12        | Peak   |
| 3 | 9.966 | -10.96 | 28.31         | 17.35  | 69.54         | -52.19        | Peak   |

30MHz~1GHz:

## Horizontal



Site : chamber

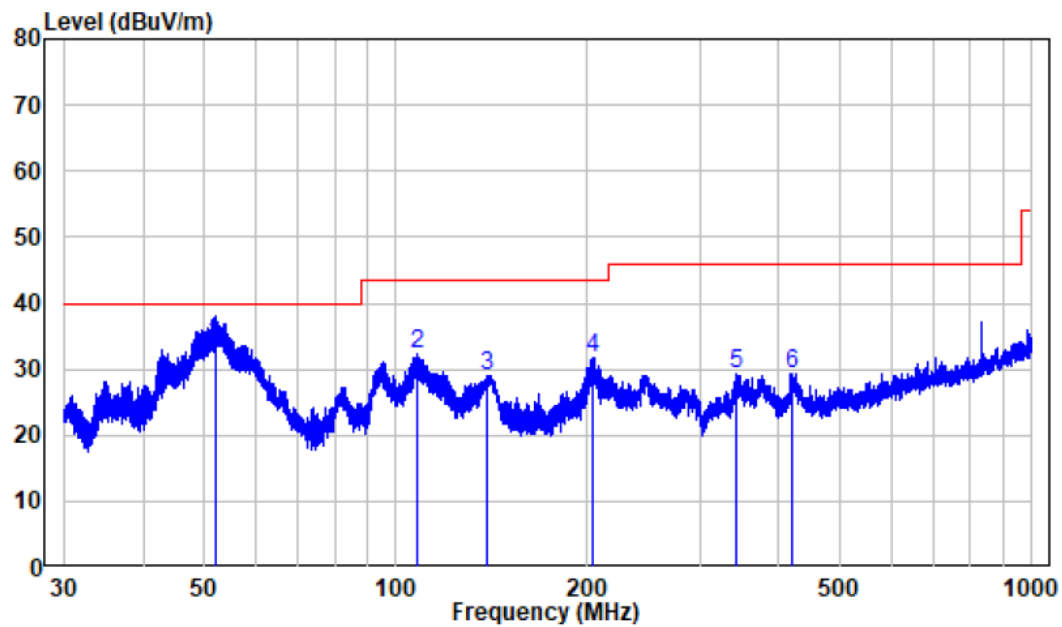
Condition: 3m Horizontal

Job No. : KS2211222-66481E-RF

Test Mode: Full Load

|   | Freq    | Factor | Read<br>Level | Level  | Limit<br>Line | Over<br>Limit | Remark |
|---|---------|--------|---------------|--------|---------------|---------------|--------|
|   | MHz     | dB/m   | dBuV          | dBuV/m | dBuV/m        | dB            |        |
| 1 | 51.820  | -9.97  | 38.36         | 28.39  | 40.00         | -11.61        | Peak   |
| 2 | 95.972  | -12.31 | 42.08         | 29.77  | 43.50         | -13.73        | Peak   |
| 3 | 140.835 | -15.48 | 50.69         | 35.21  | 43.50         | -8.29         | Peak   |
| 4 | 203.701 | -11.72 | 48.31         | 36.59  | 43.50         | -6.91         | QP     |
| 5 | 291.930 | -9.29  | 47.06         | 37.77  | 46.00         | -8.23         | Peak   |
| 6 | 390.209 | -6.89  | 39.25         | 32.36  | 46.00         | -13.64        | Peak   |

## Vertical



Site : chamber  
Condition: 3m VERTICAL  
Job No. : KS2211222-66481E-RF  
Test Mode: Full Load

|   | Freq    | Factor | Read<br>Level | Level  | Limit<br>Line | Over<br>Limit | Remark |
|---|---------|--------|---------------|--------|---------------|---------------|--------|
|   | MHz     | dB/m   | dBuV          | dBuV/m | dBuV/m        | dB            |        |
| 1 | 51.866  | -9.97  | 43.88         | 33.91  | 40.00         | -6.09         | QP     |
| 2 | 107.699 | -11.98 | 44.14         | 32.16  | 43.50         | -11.34        | Peak   |
| 3 | 139.300 | -15.42 | 44.34         | 28.92  | 43.50         | -14.58        | Peak   |
| 4 | 203.969 | -11.74 | 43.51         | 31.77  | 43.50         | -11.73        | Peak   |
| 5 | 343.180 | -7.29  | 36.56         | 29.27  | 46.00         | -16.73        | Peak   |
| 6 | 420.580 | -6.10  | 35.51         | 29.41  | 46.00         | -16.59        | Peak   |

\*\*\*\*\* END OF REPORT \*\*\*\*\*