# **RF EXPOSURE REPORT**

# METHOD OF MEASUREMENT

## 1.Applicable Standard

According to §1.1307(b)(1), 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. According to §1.1310 and §2.1093 RF exposure is calculated. According KDB680106 D01v03: RF Exposure Wireless Charging Apps v03.

## 2.TEST RESULT

## 2.1. Conducted Emission at the Mains Terminals Test

### Test Setup



#### **Test Procedure:**

a) The RF exposure test was performed on 360 degree turn table in anechoic chamber.

b) The measurement probe was placed at test distance (15cm) which is between the edge of the charger and the geometric centre of probe.

c) The turn table was rotated 360d degree to search of highest strength.

d) The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E) were completed.

e) The EUT were measured according to the dictates of KDB 680106D01v03.

## 2.2. Equipment Approval Considerations:

The EUT does comply with item 5.2 of KDB 680106 D01v03

a) Power transfer frequency is less than 1MHz

Yes; the device operate in the frequency range from 111 KHz to 147 KHz

b)Output power from each primary coil is less than or equal to 15 watts

Yes; the maximum output power of the primary coil <15W.

c) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that able to detect and allow coupling only between individual pair of coils.

Yes; the transfer system includes only single primary and secondary coils.

d) Client device is inserted in or placed directly in contact with the transmitter.

Yes; Client device is placed directly in contact with the transmitter.

e) The maximum coupling surface area of the transmit (charging) device:

Yes; The EUT coupling surface area was 97.92 cm<sup>2</sup>(Dimensions: 13.6\*7.2)L x W

f) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

Yes; The EUT field strength levels are 50% x MPE limit.

For EMF emission test system

| Equipment             | Manufacturer | Model No. | Serial No.    | Last Cal.        | Next Cal.        |
|-----------------------|--------------|-----------|---------------|------------------|------------------|
| Exposure Level Tester | Narda        | ELT-400   | N-0545/M-0987 | Dec. 07,<br>2021 | Dec. 06,<br>2022 |

# E and H field Strength

| Frequency   | Test     | Test     | Test     | Test     | Test     | Test     | Limits | Margin |
|-------------|----------|----------|----------|----------|----------|----------|--------|--------|
| Range       | Position | Position | Position | Position | Position | Position | Test   | Limit  |
| (MHz)       | А        | В        | С        | D        | E        | F        | (V/m)  |        |
| 0.111-0.147 | 0.56     | 0.67     | 0.41     | 0.53     | 0.86     | 1.27     | 614    | 1.06%  |
|             |          |          |          |          |          |          |        |        |

#### E-Filed Strength at 15 cm from the edges surrounding the EUT (V/m)

H-Filed Strength at 15 cm from the edges surrounding the EUT (A/m)

| Frequency   | Test     | Test     | Test     | Test     | Test     | Test     | Limits | Margin |
|-------------|----------|----------|----------|----------|----------|----------|--------|--------|
| Range       | Position | Position | Position | Position | Position | Position | Test   | Limit  |
| (MHz)       | A        | В        | С        | D        | E        | F        | (V/m)  |        |
| 0.111-0.147 | 0.12     | 0.21     | 0.15     | 0.27     | 0.22     | 0.23     | 1.63   | 50%    |
|             |          |          |          |          |          |          |        |        |

# PHOTOGRAPHS OF TEST SET-UP

