

RF EXPOSURE REPORT

Product Name: wireless charger

FCC ID: 2AS8F- R1

Trademark: N/A

Model Number: R1, R2, X1, X2

Prepared For: Arzin Motocam Intelligent Co., Ltd

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Sample Received Date: Mar. 10, 2020

Sample tested Date: Mar. 10, 2020 to Mar. 18, 2020

Issue Date: Mar. 18, 2020

Report No.: CTB200303002RFX

Test Standards FCC CFR 47 part1, 1.1307(b), 1.1310

47 CFR§2.1091; 47 CFR§2.1093

Test Results PASS

1/12/00

Remark: This is wireless charger EMF report.

Compiled by: Reviewed by: Approved by:

Notiving

<u>Victory</u> <u>Rita Xiao</u> <u>Sherwin Qian/ Director</u>

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1. GENERAL INFORMATION

1.1. Independent Operation Mode

The basic operation mode is:

1.1.1. wireless charger power: 15W

1.2. Test Supporting System

Adapter

Description : Adapter

Model No.: HKA03612030-7B

Power Input: AC100-240V~ 1.0A 50/60Hz

Output: 12V=== 3A

DC Line: Unshielded, Detachable 0.2m

Mobile phone

Model No. : IPHONE 11



2.LIST OF TEST AND MEASUREMENT INSTRUMENTS

2.1. For conducted emission at the mains terminals test

| Item | Equipment | Brand | Model No. | Frequency Range | Last calibration | Calibrated until |
|------|--------------------------|---------------|-----------|--------------------|------------------|------------------|
| 10.5 | Broadband Field Meter | NARDA | NBM-550 | C. C. C. | Nov. 02, 2019 | Nov. 01, 2020 |
| 2 | Magnetic Field Meter | NARDA | ELT-400 | 1 – 400kHz | Nov. 02, 2019 | Nov. 01, 2020 |
| 3 | Magnetic Probe | NARDA | HF-3061 | 300kHz – 30MHz | Nov. 02, 2019 | Nov. 01, 2020 |
| 4 | Magnetic Probe | NARDA | HF-0191 | 27 – 1000MHz | Nov. 02, 2019 | Nov. 01, 2020 |
| 5 | Broadband Field Meter | NARDA | NBM-550 | P CEP CEP | Nov. 02, 2019 | Nov. 01, 2020 |
| 6 | Electric Field Meter | COMBINOV A | EFM 200 | 5Hz – 400kHz | Nov. 02, 2019 | Nov. 01, 2020 |
| 7 | E-Field Probe | NARDA | EF-0391 | 100kHz – 3GHz | Nov. 02, 2019 | Nov. 01, 2020 |
| 8 | E-Field Probe | NARDA | EF-6091 | 100MHz – 60GHz | Nov. 02, 2019 | Nov. 01, 2020 |



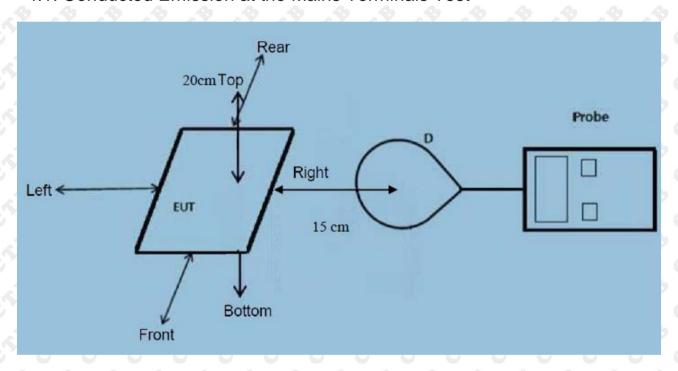
3. METHOD OF MEASUREMENT

3. 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 v02.

4. TEST RESULT

4.1. Conducted Emission at the Mains Terminals Test



Note: 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

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

4.2. Equipment Approval Considerations:

The EUT does comply with item 5(b) of KDB 680106 D01v03

1) Power transfer frequency is less than 1MHz

Yes, the device operate in the frequency range from 111.5 KHz to 205 KHz

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

Yes, the maximum output power of the primary coil is 15W.

3) 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 onlybetween individual pair of coils.

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

4) Client device is inserted in or 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, the EUT is a Mobile Wireless Charger

6) 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.

4.3. E and H field Strength





E-Field Strength at 15 cm surrounding the EUT and for above the top surface of the EUT, 15cm and 20cm all have been tested, only worse case 15cm is reported.

| battery | Frequency | Test | Test | Test | Test | Test | Limits |
|---------|-----------|----------|----------|----------|----------|----------|--------|
| level | Range | Position | Position | Position | Position | Position | Test |
| 6 B | (kHz) | Right | Front | Rear | Left | Тор | (V/m) |
| 1% | 125 | 8.03 | 7.62 | 7.59 | 8.12 | 7.99 | 614 |
| 50% | 125 | 7.74 | 7.40 | 7.34 | 7.99 | 7.71 | 614 |
| 99% | 125 | 7.59 | 7.28 | 7.24 | 7.97 | 7.44 | 614 |

H-Field Strength at 15 cm surrounding the EUT and for above the top surface of the EUT, 15cm and 20cm all have been tested, only worse case 15cm is reported.

| 623 | | | 470 47 | 479 | | 479 | |
|---------|-----------|----------|----------|----------|----------|----------|--------|
| battery | Frequency | Test | Test | Test | Test | Test | Limits |
| level | Range | Position | Position | Position | Position | Position | Test |
| 5 | (kHz) | Right | Front | Rear | Left | Тор | (A/m) |
| 1% | 125 | 0.19 | 0.18 | 0.21 | 0.27 | 0.28 | 1.63 |
| 50% | 125 | 0.17 | 0.15 | 0.13 | 0.22 | 0.22 | 1.63 |
| 99% | 125 | 0.08 | 0.13 | 0.07 | 0.15 | 0.20 | 1.63 |



5. Photographs of test set-up