# TEST REPORT

| | | |
|---|---|---|
| **Reference No.** | : | WTX22X01007636W-2 |
| **FCC ID** | : | 2AMRO-MGSFIO101 |
| **Applicant** | : | iOttie, Inc. |
| **Address** | : | 20W 37th 6th floor 10018 New York |
| **Manufacturer** | | Shenzhen Elecjar Technology Co., Ltd |
| **Address** | | 5/F East, Building 1,Jinyuda Industrial Park Shajing Street,Baoan District, Shenzhen |
| **Product Name** | : | Velox Magnetic Wireless Air Vent Car Mount, Velox Magnetic Wireless Dashboard Car Mount |
| **Model No.** | : | MGSFIO101 |
| **Standards** | : | KDB 680106 D01 V03 |
| **Date of Receipt sample** | : | 2022-01-14 |
| **Date of Test** | : | 2022-01-14 to 2022-03-02 |
| **Date of Issue** | : | 2022-03-02 |
| **Test Report Form No.** | | WTX_KDB 680106_D01_V03W |
| **Test Result** | : | **Pass** |

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.


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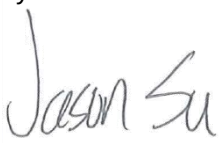

Jason Su

Approved by:

Silin Chen

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## Report version

| Version No. | Date of issue | Description |
|---|---|---|
| Rev.00 | 2022-03-02 | Original report |
| / | / | / |

# 1. GENERAL INFORMATION

## 1.1 Product Description for Equipment Under Test (EUT)

| **General Description of EUT** | |
|---|---|
| Product Name: | Velox Magnetic Wireless Air Vent Car Mount, Velox Magnetic Wireless Dashboard Car Mount |
| Trade Name: | / |
| Model No.: | MGSFIO101 |
| Adding Model(s): | MGSFIO103 |
| Battery Capacity | / |
| | |
| *Note: The test data is gathered from a production sample, provided by the manufacturer. The appearance of others models listed in the report is different from main-test model MGSFIO101, but the circuit and the electronic construction do not change, declared by the manufacturer.* | |

| **Technical Characteristics of EUT** | |
|---|---|
| Frequency Range: | 112~205kHz |
| Power adapter | / |
| Antenna Type: | Coil Antenna |
| Antenna Gain: | 0 dBi |
| Modulation Type: | FSK |
| Rated Voltage: | Input: DC5V/9V |
| Rated Current: | Input:2A/1.67A |
| Rated Power: | Output: 5W/7.5W |

## 1.2 Auxiliary Equipment List and Details

| **EUT Cable List and Details** | | | |
|---|---|---|---|
| Cable Description | Length (m) | Shielded/Unshielded | With / Without Ferrite |
| USB-C Cable | 1.22 | Unshielded | Without Ferrite |

| **Special Cable List and Details** | | | |
|---|---|---|---|
| Cable Description | Length (m) | Shielded/Unshielded | With / Without Ferrite |
| / | / | / | / |

| **Auxiliary Equipment List and Details** | | | |
|---|---|---|---|
| Description | Manufacturer | Model | Serial Number |
| Wireless charging load | / | YBZ | / |
| Battery | JIADE | DC12-A | / |

## 1.3 Test Equipment List and Details

| Description | Manufacturer | Model | Serial No. | Cal Date | Due Date |
|---|---|---|---|---|---|
| ELECTRIC AND MAGNETIC FIELD ANALYZER | Narda | EHP-200AC | 180ZX10226 | 2021-05-20 | 2024-05-19 |
| Note: The deviation response is 0.8dB. | | | | | |

# 2. RF Exposure Test Report

## 2.1 Standard Applicable

According to §1.1310 system operating under the provisions of this section shall be operating in a manner that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure.

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

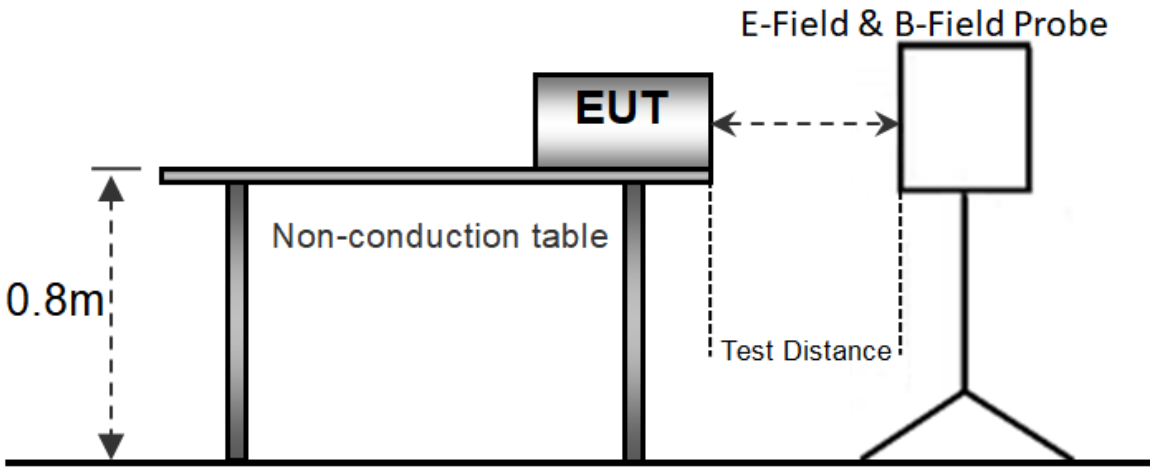
| Frequency range (MHz) | Electric field strength (V/m) | Magnetic field strength (A/m) | Power density ($mW/cm^2$) | Averaging time (minutes) |
|---|---|---|---|---|
| (A) Limits for Occupational/Controlled Exposure | | | | |
| 0.3-3.0 | 614 | 1.63 | *100 | 6 |
| 3.0-30 | 1842/f | 4.89/f | $*900/f^2$ | 6 |
| 30-300 | 61.4 | 0.163 | 1.0 | 6 |
| 300-1,500 | | | f/300 | 6 |
| 1,500-100,000 | | | 5 | 6 |
| (B) Limits for General Population/Uncontrolled Exposure | | | | |
| 0.3-1.34 | 614 | 1.63 | *100 | 30 |
| 1.34-30 | 824/f | 2.19/f | $*180/f^2$ | 30 |
| 30-300 | 27.5 | 0.073 | 0.2 | 30 |
| 300-1,500 | | | f/1500 | 30 |
| 1,500-100,000 | | | 1.0 | 30 |

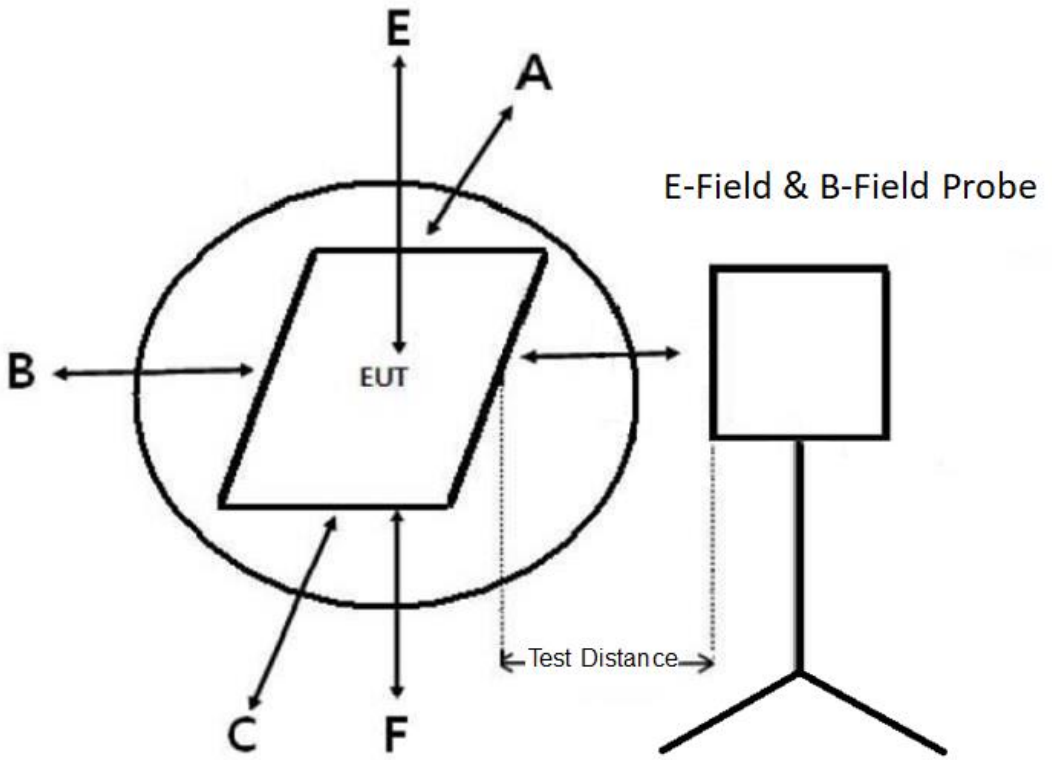
f = frequency in MHz * = Plane-wave equivalent power density

## 2.2 Test Conditions

| Test Mode | Description | Remark | Power Supply Mode |
|---|---|---|---|
| TM1 | Wireless Charging | Worst case maximum output power 7.5W | Input: DC5V/9V |
| | | | |
| **Measurement Distance:** | 15 cm | | |

## 2.3 Test Procedure




a. The measurement probe was placed at test distance(15 cm for A,B,C,D,F and 20 cm for E) which is between the edge of the charger and the geometric center of probe.
b. The highest emission level was recorded at the measurement points(A, B, C, D, E, F).
c. The EUT was measured according to the distance of KDB 680106 D01 V03.

## 2.4 Test Result

The EUT dose comply with item 5.2 of KDB 680106 D01V03

1. Power transfer frequency is less that 1 MHz
   Yes, the device operate in the frequency range from 112kHz to 205kHz.

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 less than 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 are able to detect and allow coupling only between individual pairs of coils
   Yes, the client device includes only single primary 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, It is mobile exposure conditions only.

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 less than 50% of the MPE limit, refer to test TM1, TM2 list, and the coils can’t transmitted simultaneous.

*Test Mode: TM1*

| Electric Field Emissions | | | |
|---|---|---|---|
| **Test Position** | **Measure Value (V/m)** | **Limit(V/m)** | **50% Limit (V/m)** |
| Top | 2.682 | 614 | 307 |
| Bottom | 2.531 | 614 | 307 |
| Side 1 | 2.697 | 614 | 307 |
| Side 2 | 2.542 | 614 | 307 |
| Side 3 | 2.541 | 614 | 307 |
| Side 4 | 2.698 | 614 | 307 |
| | | | |
| **Magnetic Field Emissions** | | | |
| **Test Position** | **Measure Value (A/m)** | **Limit(A/m)** | **50% Limit (A/m)** |
| Top | 0.284 | 1.63 | 0.815 |
| Bottom | 0.281 | 1.63 | 0.815 |
| Side 1 | 0.276 | 1.63 | 0.815 |
| Side 2 | 0.278 | 1.63 | 0.815 |
| Side 3 | 0.279 | 1.63 | 0.815 |
| Side 4 | 0.275 | 1.63 | 0.815 |

*Note: this EUT was tested in 3 orthogonal positions and the worst case position (D point) data was reported.*

## 2.5 Measurement Uncertainty

| **Measurement uncertainty** | | |
|---|---|---|
| Parameter | Conditions | Uncertainty |
| Electric Field Emissions | Radiated | ±1.56 (V/m) |
| Magnetic Field Emissions | Radiated | ±0.08(A/m) |

## 2.6 Test Photos

# APPENDIX PHOTOGRAPHS

**Please refer to "ANNEX"**

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