

## RF Exposure Evaluation TEST REPORT

for

Flextronics R&amp;D (Shenzhen) Co., Ltd.

Charger

Model No.: WM-01

Brand Name: NIKE or The Nike logo, a black silhouette of a winged foot.

FCC ID: 2AQ5X-WM-01

Prepared for : Flextronics R&D (Shenzhen) Co., Ltd.  
2F, 8 Blk Vision SZ Bus. Park, Gaoxin 9th S Rd.,  
Hi-tech Ind. Park, NanShan 518057 Shenzhen China

Prepared By : Audix Technology (Shenzhen) Co., Ltd.  
No. 6, Kefeng Road, Science & Technology Park,  
Nanshan District , Shenzhen, Guangdong, China

Tel: (0755) 26639496  
Fax: (0755) 26632877


Report Number : ACS-F18202  
Date of Test : Sep.12, 2018  
Date of Report : Sep.12, 2018

## TABLE OF CONTENTS

| Description   | Page |
|---|------|
| REPORT VERIFICATION .....                                       | 3    |
| 1. GENERAL INFORMATION .....                                    | 4    |
| 1.1. Description of Device (EUT) .....                          | 4    |
| 1.2. Test Facility .....  | 5    |
| 1.3. Measurement Uncertainty (95% confidence levels, k=2) ..... | 5    |
| 2. RF EXPOSURE REQUIREMENT .....                                | 6    |
| 2.1. GENERAL INFORMATION .....                                  | 6    |
| 2.2. LIMIT .....  | 6    |
| 3. ASSESS RESULTS .....   | 7    |
| 4. PHOTOGRAPHS .....  | 8    |
| 5. PHOTOS OF THE EUT .....                                      | 9    |

**REPORT VERIFICATION**

Applicant : Flextronics R&D (Shenzhen) Co., Ltd.  
 Manufacturer : Flextronics R&D (Shenzhen) Co., Ltd.  
 Product : Charger  
 FCC ID : 2AQ5X-WM-01

(A) Model No. : WM-01  
 (B) Brand Name : NIKE or   
 (C) Test Voltage : AC 120V/60Hz  
 (USB: DC 5V)

Testing Based on:  
 KDB 680106 D01 RF Exposure Wireless Charging Apps v03

The device described above is tested by Audix Technology (Shenzhen) Co., Ltd.. The measurement results were contained in this test report and Audix Technology (Shenzhen) Co., Ltd. was assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliance with the FCC RF Exposure requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Audix Technology (Shenzhen) Co., Ltd..

Date of Test : Sep.12, 2018 Report of date: Sep.12, 2018


Prepared by : Monica Liu Reviewed by : Sunny Lu  
 Monica Liu /Assistant Sunny Lu / Deputy Manager

Approved & Authorized Signer :



## 1. GENERAL INFORMATION

### 1.1. Description of Device (EUT)

|                 |   |
|-----------------|---|
| Product         | : Charger   |
| Model No.       | : WM-01   |
| Brand Name      | : NIKE or    |
| FCC ID          | : 2AQ5X-WM-01   |
| Radio Frequency | : Typical 220kHz<br>(Min. 180kHz, Max. 280kHz)  |
| Applicant       | : Flextronics R&D (Shenzhen) Co., Ltd.<br>2F, 8 Blk Vision SZ Bus. Park, Gaoxin 9th S Rd., Hi-tech Ind. Park,<br>NanShan 518057 Shenzhen China  |
| Manufacturer    | : Flextronics R&D (Shenzhen) Co., Ltd.<br>2F, 8 Blk Vision SZ Bus. Park, Gaoxin 9th S Rd., Hi-tech Ind. Park,<br>NanShan 518057 Shenzhen China  |
| Factory#1       | : Flextronics Manufacturing(Zhuhai) Co., Ltd.<br>Xin Qing Science & Technology Industrial Park<br>Jing AN, Doumen, Zhuhai, P.R. China 519180  |
| Factory #2      | : Flextronics Power Systems (Dongguan) Co., Ltd.<br>Mechanical Industrial Zone, Shida Road, Daling Shan, Dongguan,<br>Guangdong 523817, P.R. China  |
| Factory #3      | : FLEXTRONICS TECHNOLOGIES (INDIA) PRIVATE LIMITED<br>Plot 3, Phase II, SEZ-SIPCOT Industrial Park, Sandavelur C<br>Village, Sriperumpudur Taluk, Kanchipuram District, Tamil Nadu,<br>602106 India |
| Date of Test    | : Sep.12, 2018  |
| Date of Receipt | : Aug.10, 2018  |
| Sample Type     | : Prototype production  |

## 1.2. Test Facility

### Site Description

Name of Firm : Audix Technology (Shenzhen) Co., Ltd.  
No. 6, Kefeng Road, Science & Technology  
Park, Nanshan District , Shenzhen, Guangdong,  
China

RF Anechoic Chamber : Dimensions are:  
[L]10m × [W]5.5m × [H]5m

EMC Lab. : Certificated by DAkkS, Germany  
Registration No: D-PL-12151-01-00  
Valid Date: Dec.07, 2021

: Accredited by NVLAP, USA  
NVLAP Code: 200372-0  
Valid Date: Mar.31, 2019

Certificated by FCC, USA  
Designation No: CN5022  
Valid Date: Mar.31, 2019

## 1.3. Measurement Uncertainty (95% confidence levels, k=2)

| Test Item   | Uncertainty |
|---|-------------|
| Uncertainty for Radiated Spurious Emission test in RF chamber | 3.6dB       |
| Uncertainty for test site temperature and humidity            | 0.6°C       |
|   | 3%          |

## 2. RF EXPOSURE REQUIREMENT

### 2.1.GENERAL INFORMATION

For devices designed for typical desktop applications, such a 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.

This device meeting all of the following requirements, so the PGA is not required.

- (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 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.
- (4) Client device is placed directly in contact with the transmitter.
- (5) 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.

### 2.2.LIMIT

#### Basic Restrictions Reference levels

Basic restrictions for electric, magnetic and electromagnetic fields (0Hz to 300GHz)

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 <sup>2</sup> ) | Averaging time (minutes) |
|--|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| <b>(A) Limits for Occupational/Controlled Exposure</b>         |                               |                               |                                     |                          |
| 0.3-3.0  | 614                           | 1.63                          | *100                                | 6                        |
| 3.0-30   | 1842/f                        | 4.89/f                        | *900/f <sup>2</sup>                 | 6                        |
| 30-300   | 61.4                          | 0.163                         | 1.0                                 | 6                        |
| 300-1,500  |                               |                               | f/300                               | 6                        |
| 1,500-100,000  |                               |                               | 5                                   | 6                        |
| <b>(B) Limits for General Population/Uncontrolled Exposure</b> |                               |                               |                                     |                          |
| 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                       |
| 300-1,500  |                               |                               | f/1500                              | 30                       |
| 1,500-100,000  |                               |                               | 1.0                                 | 30                       |

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

### 3. ASSESS RESULTS

| EUT: Charger                     |          |                         |                        |                         |        |
|----------------------------------|----------|-------------------------|------------------------|-------------------------|--------|
| M/N: WM-01                       |          |                         |                        |                         |        |
| Test date: 2018-09-12            |          | Pressure: 101.8±1.0 kpa |                        | Humidity: 53.7±3.0%     |        |
| Tested by: Lynn                  |          | Test site: RF Site      |                        | Temperature: 22.6±0.6°C |        |
| Normal Operation (Charging mode) |          |                         |                        |                         |        |
| Frequency (MHz)                  | Position | Distance (CM)           | E-Field Strength (V/m) | Limit (V/m)             | Result |
| 0.22                             | Front    | 15                      | 1.256                  | 614                     | PASS   |
|                                  | Back     | 15                      | 1.204                  | 614                     | PASS   |
|                                  | Left     | 15                      | 1.213                  | 614                     | PASS   |
|                                  | Right    | 15                      | 1.215                  | 614                     | PASS   |
|                                  | Top      | 15                      | 1.305                  | 614                     | PASS   |
|                                  | Bottom   | 15                      | 1.243                  | 614                     | PASS   |
| Normal Operation (Charging mode) |          |                         |                        |                         |        |
|                                  | Position | Distance (CM)           | H-Field Strength (A/m) | Limit (A/m)             | Result |
| 0.22                             | Front    | 15                      | 0.624                  | 1.63                    | PASS   |
|                                  | Back     | 15                      | 0.627                  | 1.63                    | PASS   |
|                                  | Left     | 15                      | 0.638                  | 1.63                    | PASS   |
|                                  | Right    | 15                      | 0.629                  | 1.63                    | PASS   |
|                                  | Top      | 15                      | 0.705                  | 1.63                    | PASS   |
|                                  | Bottom   | 15                      | 0.698                  | 1.63                    | PASS   |

#### 4. PHOTOGRAPHS





### 5. PHOTOS OF THE EUT

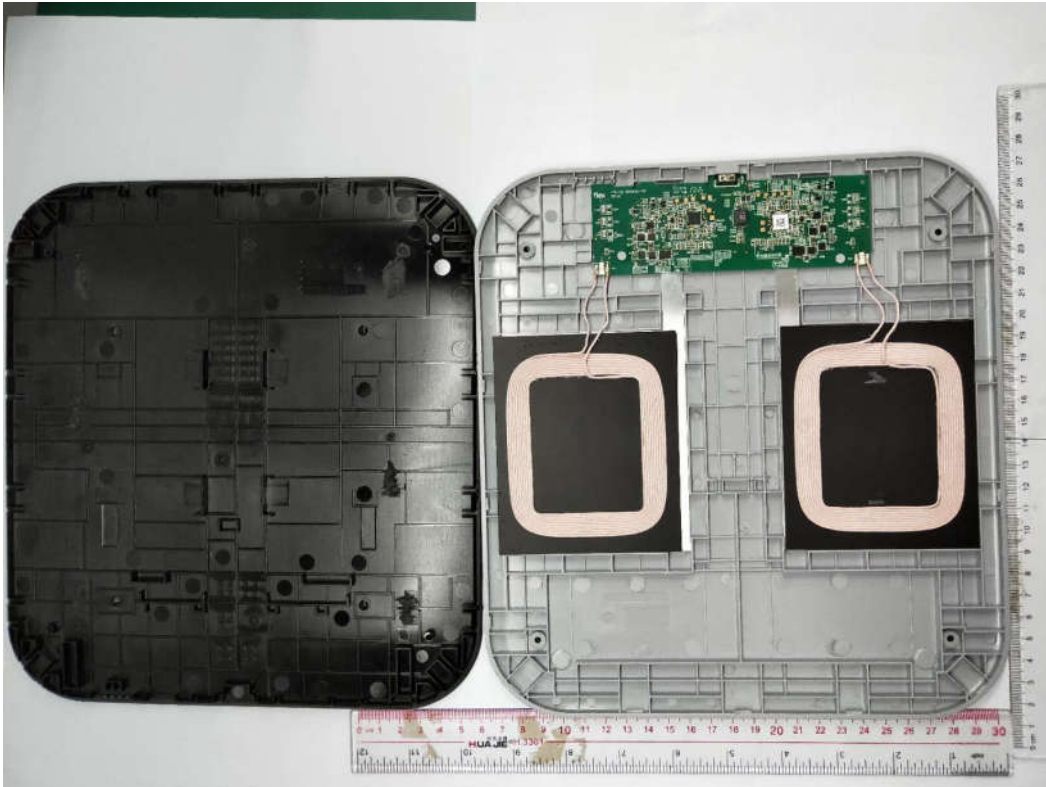
**Figure 1**  
General Appearance of the EUT



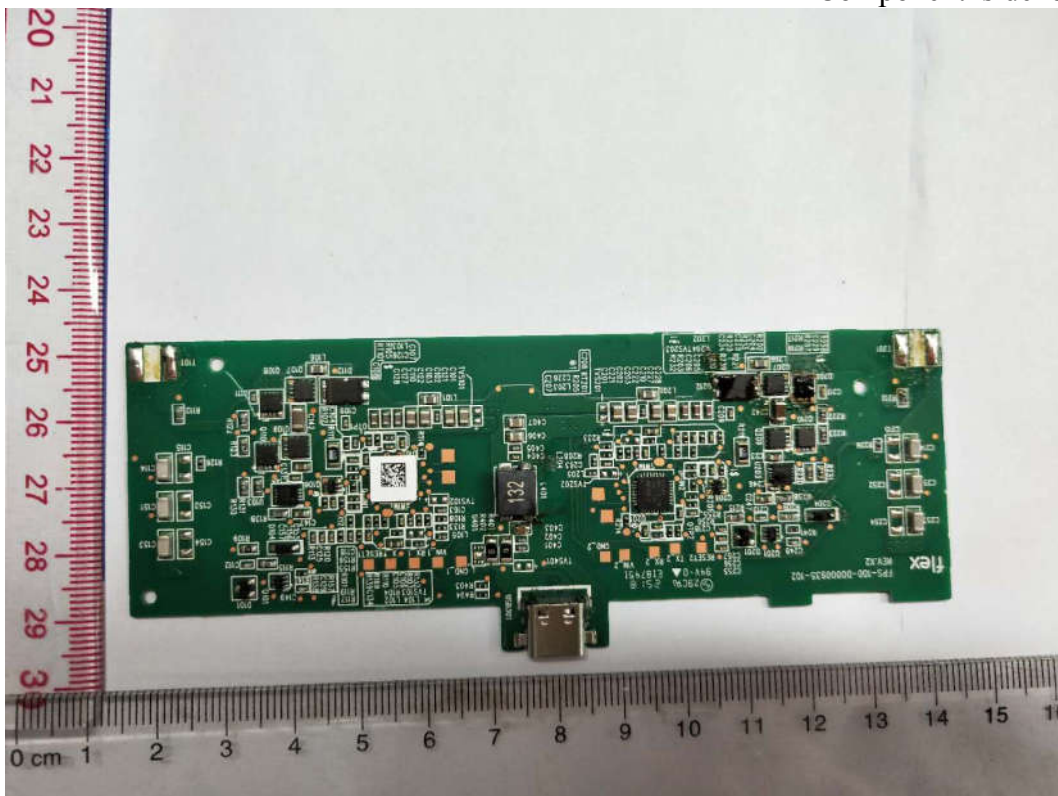
**Figure 2**  
General Appearance of the EUT



**Figure 3**  
Inside of the EUT



**Figure 4**  
Component side of the PCB



**Figure 5**  
Component side of the PCB

