

# RF EXPOSURE REPORT

The device described below is tested by Dongguan Nore Testing Center Co., Ltd. to determine the maximum emission levels emanating from the device, the severe levels which the device can endure and E.U.T.'s performance criterion. The test results, data evaluation, test procedures, and equipment of configurations shown in this report were made in accordance with the procedures in ANSI C63.10(2013).

Applicant : Spigen Korea Co., Ltd.

Address : No. 1709 STX-V Tower, 128, Gasan digital 1-ro, Geumcheon-gu, Seoul, 08507, Republic of Korea, South Korea

Manufacturer/Factory : Shenzhen Huagon Technology Co.,LTD

Address : 6th floor number two , North fourth ring road phoenix first industrial zone , Fuyong town Bao'an District, Shenzhen (518000)

E.U.T. : Fast Wireless Charger

Brand Name : N/A

Model No. : F306W

FCC ID : 2AFKNF306W

Measurement Standard : FCC PART 15 Subpart C

Date of Receiver : November 24, 2017

Date of Test : November 24, 2017 to December 26, 2017

Date of Report : December 26, 2017

In the configuration tested, the EUT complied with the standards specified above.

This test report is for the customer shown above and their specific product only. This report applies to above tested sample only and shall not be reproduced in part without written approval of Dongguan Nore Testing Center Co., Ltd.

## 1. GENERAL INFORMATION

### 1.1 Product Description for Equipment under Test

Product name	: Fast Wireless Charger
Main model	: F306W
Additional model	: N/A
Model difference	: N/A
Power Supply	: DC 5V 2A, DC 9V 1.67A, DC 12V 1.5A
Test voltage	: AC 120V 60Hz Adapter input
Adapter	: N/A
Cable	: N/A
Software version	: V1.0
Hardware version	: V1.0
Note	: N/A
Remark	: N/A
Frequency Range	: 105.5-204.5KHz

## 1.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: **2AFKNF306W** filing to comply with FCC Part 15 (2016), Subpart C Rule.

## 1.3 Test Facility and Location

### Site Description

EMC Lab : Listed by CNAS, August 14, 2015  
The certificate is valid until August 13, 2018  
The Laboratory has been assessed and proved to be in compliance with CNAS/CL01  
The Certificate Registration Number is L5795.

Listed by A2LA, November 01, 2017  
The certificate is valid until December 31, 2019  
The Laboratory has been assessed and proved to be in compliance with ISO17025  
The Certificate Registration Number is 4429.01

Listed by FCC, November 06, 2017  
The Designation Number is CN1214  
Test Firm Registration Number: 907417

Listed by Industry Canada, June 08, 2017  
The Certificate Registration Number. Is 46405-9743

Name of Firm : Dongguan Nore Testing Center Co., Ltd.  
(Dongguan NTC Co., Ltd.)

Site Location : Building D, Gaosheng Science & Technology Park,  
Zhouxi Longxi Road, Nancheng District, Dongguan  
City, Guangdong Province, China

## 2. Method of measurement

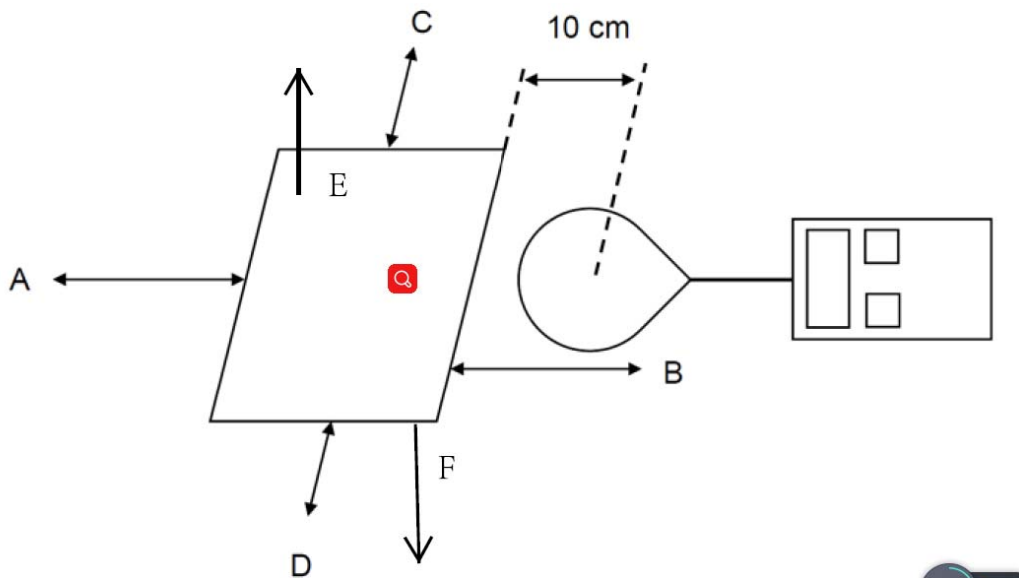
### 2.1 Applicable standard

According to 1.1307(b)(1), system operating under the provisions of this section shall be operated in amanner 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 to KDB680106 D01V02: RF exposure wireless charging apps v02.

### 2.2 Test Setup



### 2.3 Test procedure

1. The RF exposure test was performed on 360 degree turn table in anechoic chamber;
2. The measurement probe was placed at test distance 10cm which is between the edge of the charger and the geometric centre of probe.
3. The turn table was rotated 360d degree to search of highest strength.
4. The highest emission level was recorded and compared with limit as soon as measurement of each points (A,B,C,D,E) were completed.
5. The EUT were measured according to the dictates of KDB 680106D01V02

## 2.4 Equipment approval considerations

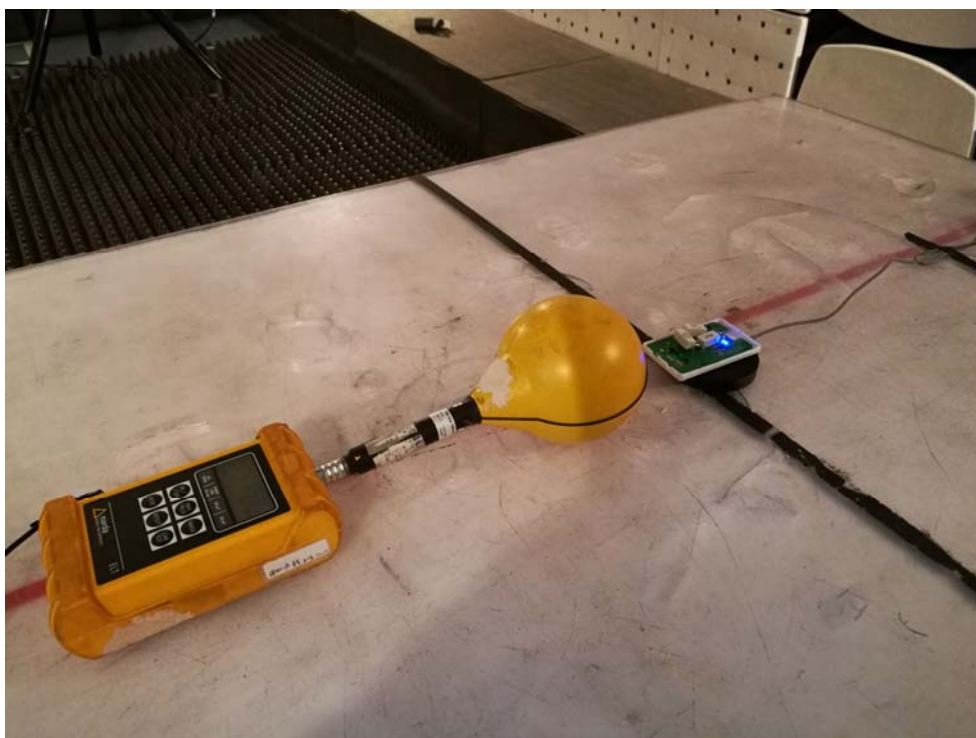
1. The EUT dose comply with item 5.2 of KDB 680106D01V02
  - a, Power transfer frequency is less than 1MHz.  
YES; the device operated in the frequency range from 105.5-204.5KHz.
  - b, Output power from each primary coil is less than 5 watts  
YES; the maximum output power of the primary coil is 4W<5W.
  - 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 82.6cm<sup>2</sup>>60cm<sup>2</sup>.
  - f, Aggregate leakage fields at 10cm surrounding the device from all simultaneous transmitting coils are demonstrated to be less than 30% of the MPE limit.  
YES; The EUT field strength levels are 30% x MPE limits.

## 2.5 E and H field strength

Frequency range MHz	E-Filed strength at 10cm from the edges surrounding the EUT(V/m)						Limits (V/m)
	Test position A	Test position B	Test position C	Test position D	Test position E	Test position F	
0.1055-0.2045	1.33	2.08	0.65	0.26	1.63	1.99	614

Frequency range MHz	H-Filed strength at 10cm from the edges surrounding the EUT(A/m)						Limits (A/m)
	Test position A	Test position B	Test position C	Test position D	Test position E	Test position F	
0.1055-0.2045	0.86	0.75	0.68	0.86	0.66	0.91	1.68

## 2.6 Test Photo



## 2.7 Test equipment list

Description	Manufacturer	Model Number	Serial Number	Calibration Date	Calibration Due Date
3m semi-anechoic chamber	Zhongyu electron	9.2*6.2*63.4	N/A	July 03,2015	July 02, 2020
Exposure lever tester	Narda	ELT-400	N-0231	June 29,2017	June 28, 2018
Magnetic field probe 100cm <sup>2</sup>	Narda	ELT Probe 100cm <sup>2</sup>	M0675	June 29,2017	June 28, 2018

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