



## RF REPORT

**FCC ID: 2AP2N-FARER**

On Behalf of

**Shenzhen Esorun Technology Co.,LTD**

**3in1 Wireless charging station**

**Model No.: Farer 3in1**

Prepared for : Shenzhen Esorun Technology Co.,LTD  
Address : Room 226, Building A, B, C, Zone B, Yuanfen Industrial Zone, Taoyuan  
Community, Dalang Street, Longhua District, Shenzhen

Prepared By : Shenzhen Alpha Product Testing Co., Ltd  
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Version Number : V0

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**TABLE OF CONTENTS**

<b>1</b>	<b>Test Result Summary .....</b>	<b>5</b>
<b>2</b>	<b>EUT Description .....</b>	<b>6</b>
	<b>2.1 DESCRIPTION OF DEVICE (EUT).....</b>	<b>6</b>
	<b>2.2 ANCILLARY EQUIPMENT DETAILS.....</b>	<b>6</b>
	<b>2.3 TEST LAB INFORMATION .....</b>	<b>6</b>
	<b>2.4 BLOCK DIAGRAM OF CONNECTION BETWEEN EUT AND SIMULATORS .....</b>	<b>8</b>
	<b>2.5 DESCRIPTION OF TEST MODES.....</b>	<b>8</b>
	<b>2.6 TEST CONDITIONS .....</b>	<b>8</b>
	<b>2.7 MEASUREMENT UNCERTAINTY .....</b>	<b>9</b>
<b>3</b>	<b>Test Results and Measurement Data .....</b>	<b>10</b>
	<b>3.1 RF EXPOSURE TEST.....</b>	<b>10</b>
<b>4</b>	<b>Photos of test setup .....</b>	<b>12</b>
<b>5</b>	<b>Photographs of EUT .....</b>	<b>14</b>

### TEST REPORT DECLARATION

Applicant : Shenzhen Esorun Technology Co.,LTD  
 Address : Room 226, Building A, B, C, Zone B, Yuanfen Industrial Zone, Taoyuan Community,  
 Dalang Street, Longhua District, Shenzhen  
 Manufacturer : Shenzhen Esorun Technology Co.,LTD  
 Address : Room 226, Building A, B, C, Zone B, Yuanfen Industrial Zone, Taoyuan Community,  
 Dalang Street, Longhua District, Shenzhen  
 EUT Description : 3in1 Wireless charging station  
 (A) Model No. : Farer 3in1  
 (B) Trademark : ESORUN

Measurement Standard Used:

**FCC CFR Title 47 Part 15 Subpart C**  
**FCC KDB 680106 D01 RF Exposure Wireless Charging Apps v03r01**

The device described above is tested by Shenzhen Alpha Product Testing Co., Ltd. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The test results are contained in this test report and Shenzhen Alpha Product Testing Co., Ltd. is assumed full responsibility for the accuracy and completeness of test. Also, this report shows that the EUT is technically compliant with above listed standard(s) requirements.


This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen Alpha Product Testing Co., Ltd.

Tested by (name + signature) ..... : Yannis Wen  
 Project Engineer



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Approved by (name + signature) ..... : Reak Yang  
 Project Manager



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Date of issue ..... : March 22, 2023

**Revision History**

Revision	Issue Date	Revisions	Revised By
V0	March 22, 2023	Initial released Issue	Yannis Wen

## 1 Test Result Summary

Requirement	CFR 47 Section	Result
RF EXPOSURE	§1.1307(b)(1) & KDB680106	PASS

**Note:**

1. *PASS: Test item meets the requirement.*
2. *Fail: Test item does not meet the requirement.*
3. *N/A: Test case does not apply to the test object.*
4. *The test result judgment is decided by the limit of test standard.*

## 2 EUT Description

### 2.1 Description of Device (EUT)

Product Name	:	3in1 Wireless charging station
Trademark	:	ESORUN
Model Number	:	Farer 3in1
Power Supply	:	Input : 5V=2A, 9V=2A,12V=2A Wireless Output1(for mobile): 5W, 7.5W, 10W, 15W(Max) Wireless Output2(for Airpods): 5W(Max) Wireless Output3(for iWatch): 3W(Max) Simultaneous Output: 10W(Max)+3W(Max)+3W(Max)
Operation Frequency	:	115k-205kHz and 325kHz
Number of Channels	:	2
Modulation Type	:	MSK
Antenna Type	:	Coil Antenna
Antenna Gain	:	0dBi
Hardware Version	:	V1.1
Software Version	:	V1.0

### 2.2 Ancillary equipment Details

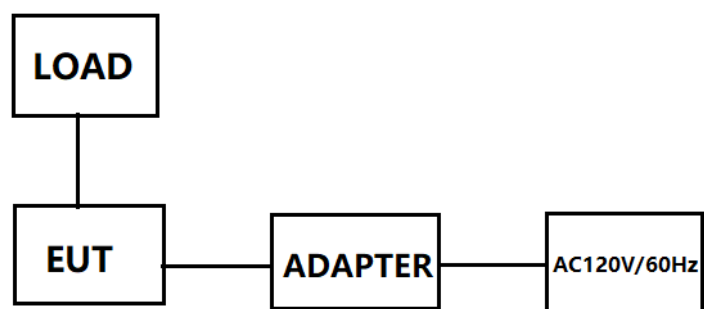
Title	Manufacturer	Model No.	Serial No.
Load	YBZ	N/A	N/A
Load	N/A		
Adapter	Shenzhen HUONIU Technology Co., Ltd.	HNFCQC3024UU	N/A

### 2.3 Test Lab information

Shenzhen Alpha Product Testing Co., Ltd Building i, No.2, Lixin Road, Fuyong Street, Bao'an District, 518103, Shenzhen, Guangdong, China
June 21, 2018 File on Federal Communication Commission Registration Number: 293961 Designation Number: CN1236
July 15, 2019 Certificated by IC Registration Number: CN0085

<b>Conditions requirement</b>	<b>Answers</b>
Power transfer frequency is less than 1 MHz.	After measuring the product the transfer frequency is 0.115-0.205kHz and 325kHz
Output power from each primary coil is less than or equal to 15 watts.	After measuring the product the each primary coil power is 15 watts
The system may consist of more than one source primary coils, charging one or more clients. If more than one primary coils present, the coil pairs may be powered on at the same time.	The transfer system includes three primaries and the coil pairs can powered on at the same time.
Client device is placed directly in contact with the transmitter.	Client device is placed directly in contact with the transmitter.
Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).	Mobile exposure conditions only.
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.	After measuring the product the Max H-field Strength is 0.806A/m Far less than 50% of the MPE limit.

## 2.4 Block Diagram of Connection between EUT and Simulators



## 2.5 Description of Test Modes

Channel	Frequency (KHz)
1	125
2	148
3	325

## 2.6 Test Conditions

Items	Required	Actual
Temperature range:	15-35°C	24°C
Humidity range:	25-75%	56%
Pressure range:	86-106kPa	98kPa



## 2.7 Measurement Uncertainty

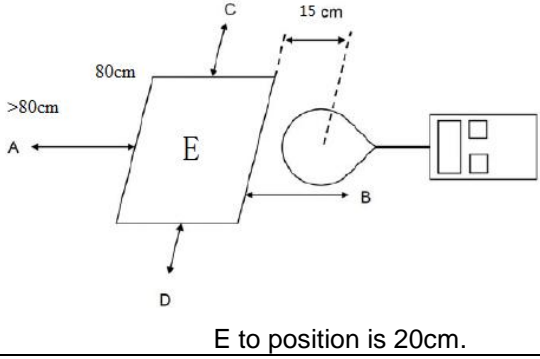
(95% confidence levels, k=2)

Item	Uncertainty
Uncertainty for H-Field	2.39dB
Uncertainty for E-Field	2.45dB
Uncertainty for conducted RF Power	0.65dB
Uncertainty for temperature	0.2°C
Uncertainty for humidity	1%
Uncertainty for DC and low frequency voltages	0.06%

### 3 Test Results and Measurement Data

#### 3.1 RF Exposure Test

##### 3.1.1 Test Specification

<b>Test Requirement:</b>	<b>FCC Rules and Regulations KDB680106</b>
<b>Test Method:</b>	§1.1307(b)(1) & KDB680106
<b>Limits:</b>	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 D01v03r01: RF Exposure Wireless Charging.
<b>Test Setup:</b>	 <p>E to position is 20cm.</p>
<b>Test Mode:</b>	Charging + Transmitting Mode
<b>Test Procedure:</b>	<ol style="list-style-type: none"> <li>1. The RF exposure test was performed on 80cm insulated table in anechoic chamber.</li> <li>2. The measurement probe was placed at test distance (15cm) which is between the edge of the charger and the geometric centre of probe.</li> <li>3. The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E) were completed.</li> <li>4. The EUT were measured according to the dictates of KDB 680106D01v03r01.</li> </ol>
<b>Test Result:</b>	PASS

### 3.1.2 Test Instruments

Item	Equipment	Manufacturer	Model No.	Firmware version	Serial No.	Last Cal.	Cal. Due day
1	Exposure Level Tester	narda	ELT-400	/	N-0231	2022.08.30	2023.08.29
2	Magnetic field probe 100cm <sup>2</sup>	narda	ELT probe 100cm <sup>2</sup>	/	M0675	2022.08.30	2023.08.29
3	Isotropic Electric Field Probe	narda	EP-601	/	511WX60706	2022.08.30	2023.08.29

### 3.1.3 Test data

For Full load mode:

E-Field Strength at 15 cm for position A,B,C,D 20cm for position E from the edges surrounding the EUT (V/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Limit (50%) (V/m)	Limits Test (V/m)
0.115-0.205, 325	1.869	1.565	1.660	1.736	1.752	307	614

H-Filed Strength at 15 cm for position A,B,C,D 20cm for position E from the edges surrounding the EUT (A/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Limit (50%) (A/m)	Limits Test (A/m)
0.115-0.205, 325	0.806	0.714	0.715	0.774	0.651	0.815	1.63

For Null load mode:

E-Field Strength at 15 cm for position A,B,C,D 20cm for position E from the edges surrounding the EUT (V/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Limit (50%) (V/m)	Limits Test (V/m)
0.115-0.205, 325	1.733	1.703	1.663	1.697	1.731	307	614

H-Filed Strength at 15 cm for position A,B,C,D 20cm for position E from the edges surrounding the EUT (A/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Limit (50%) (A/m)	Limits Test (A/m)
0.115-0.205, 325	0.724	0.670	0.761	0.786	0.708	0.815	1.63

## 4 Photos of test setup

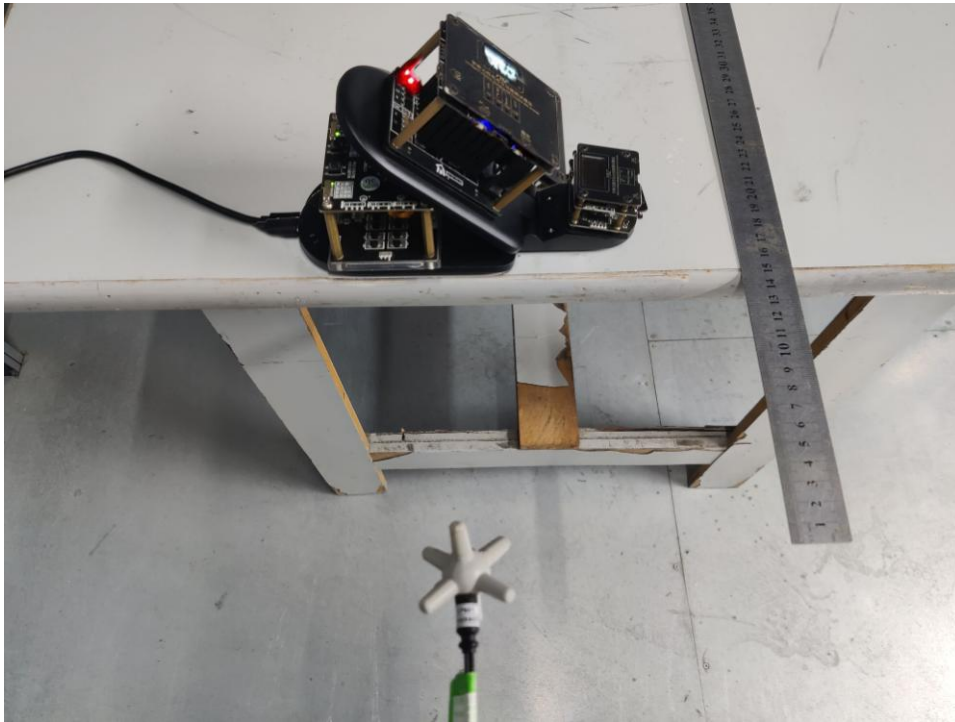
For Full load mode



For No load mode



For Full load mode



For No load mode



## **5 Photographs of EUT**

Refer to test report A2212031-C01-R08.

----- END OF REPORT-----