



# Maximum Permissible Exposure

**FCC ID** : 2AA7Y-MOSHIQI003  
**Equipment** : porto Q 5K  
**Brand Name** : moshi  
**Model Name** : 99MO022213 & 99MO022212  
**Applicant** : Aevoe Inc.  
27F., NO.68, Sec. 5, Zhongxiao E. Rd., Xinyi Dist.,  
Taipei City 11065, Taiwan  
**Manufacturer** : Powergene Technology Co., Ltd. Taiwan Branch  
1F-5, No.1, Wuquan 1st Rd., Xinzhuang Dist.,  
New Taipei City, Taiwan  
**Standard** : 47 CFR Part 2.1091

The product was received on Sep. 18, 2018, and testing was started from Sep. 20, 2018 and completed on Sep. 20, 2018. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in KDB680106 D01 RF Exposure Wireless Charging Apps v03 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of United States government.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Allen Lin

**SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory**

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



## Table of Contents

<b>HISTORY OF THIS TEST REPORT .....</b>	<b>3</b>
<b>1 HUMAN EXPOSURE ASSESSMENT .....</b>	<b>4</b>
1.1 Maximum Permissible Exposure .....	4
1.2 Testing Applied Standards .....	4
1.3 Testing Location Information .....	5
1.4 Accessories .....	5
1.5 Support Equipment .....	5
1.6 The Worst Condition .....	6
<b>2 TEST EQUIPMENT AND CALIBRATION DATA .....</b>	<b>9</b>

### **Appendix A. Test Photos**

#### **Photographs of EUT V02**



## History of this test report

Reviewed by: Jackson Tsai

**Report Producer: Michelle Tsai**

## 1 Human Exposure Assessment

### 1.1 Maximum Permissible Exposure

#### 1.1.1 Limit of Maximum Permissible Exposure

Limits for Occupational / Controlled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> , H  <sup>2</sup> or S (minutes)
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
300-1500	-	-	F/300	6
1500-100,000	-	-	5	6

Limits for General Population / Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> , H  <sup>2</sup> or S (minutes)
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
300-1500	-	-	F/1500	30
1500-100,000	-	-	1.0	30

Note 1: f = frequency in MHz ; \*Plane-wave equivalent power density  
Note 2: For the applicable limit, see FCC 1.1310

#### 1.1.2 Table for Multiple Listing

The model names in the following table are all refer to the identical product.

Model Name	Description
99MO022213	
99MO022212	All the models are identical, the difference model as marketing strategy.

## 1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ◆ 47 CFR Part 2.1091
- ◆ KDB680106 D01 RF Exposure Wireless Charging Apps v03



### 1.3 Testing Location Information

Testing Location				
<input checked="" type="checkbox"/>	HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.		
		TEL : 886-3-327-3456	FAX : 886-3-327-0973	
Test site Designation No. TW1190 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-HY	Andy	24.5°C / 64%	20/Sep/2018

### 1.4 Accessories

Accessories Information				
USB Cable	Brand Name	moshi	Model Name	1700000239
	Signal Line	0.5 meter, Shielded cable, without ferrite core		

Note: Regarding to more detail and other information, please refer to user manual.

### 1.5 Support Equipment

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	iPhone	Apple	A1905	BCG-E3172A



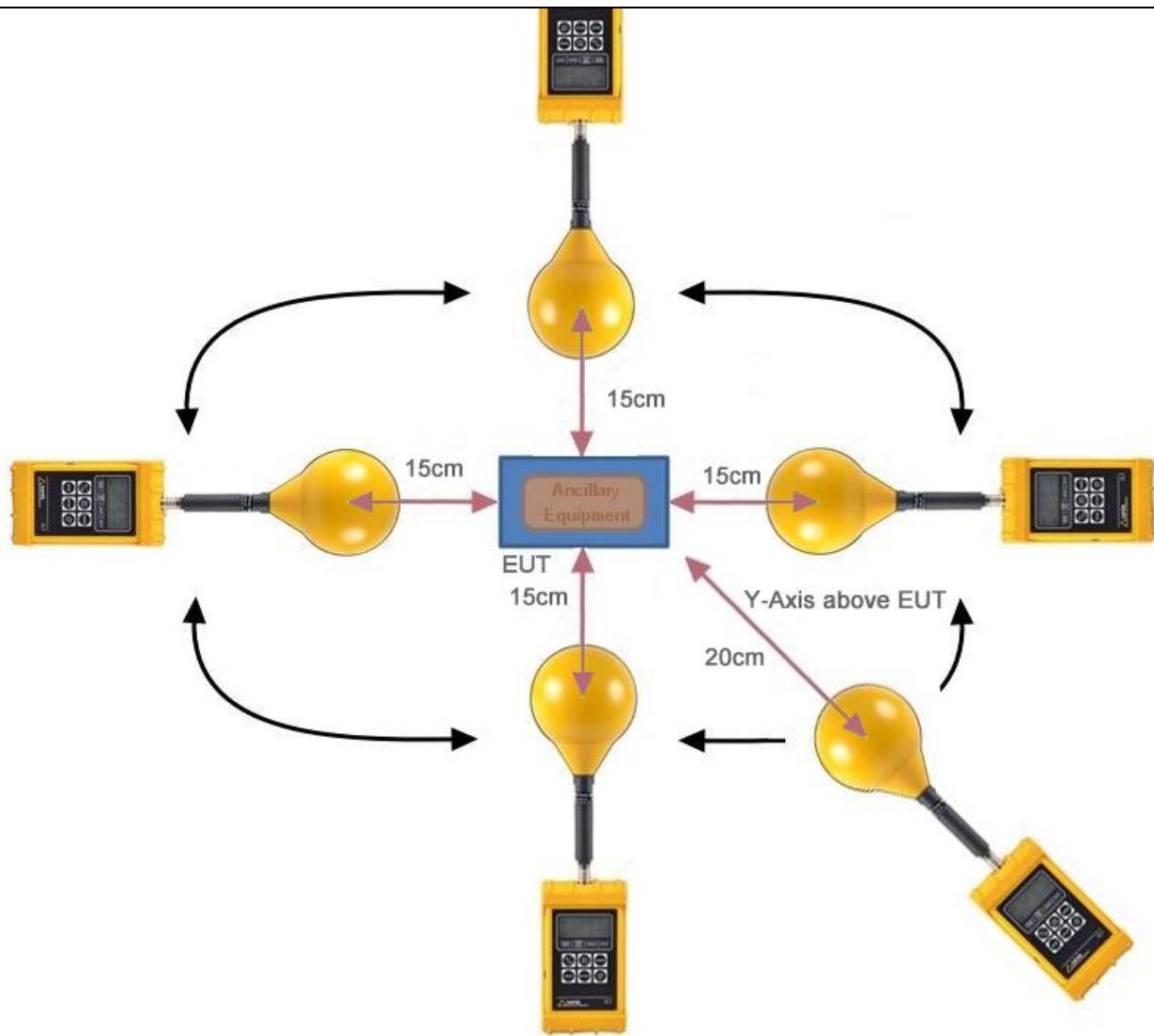
## 1.6 The Worst Condition

Ancillary Equipment	Charging Condition	Worst Charging Condition
The Phone	Charging Mode	Charging Mode

### 1.6.1 Test Method

Test Method	
<input checked="" type="checkbox"/>	Performed aggregate both leakage E-field and H-field at surrounding the device from all simultaneous transmitting coils.
<input checked="" type="checkbox"/>	During testing, the EUT was placed on a non-conductive table top and the ancillary equipment (e.g., mobile phone) was placed on the EUT for charging. Maximum E-field and H-field measurements were tested 10cm from each side of the EUT. Along the side of the EUT to center of E-field probe and H-field probe were positioned at the location to search maximum field strength.
<input checked="" type="checkbox"/>	E-field transfer to H-field
-	$E\text{-field} = Z_0 \times H\text{-field}$ $H\text{-field} = E\text{-field} \div Z_0$ Where $Z_0$ = Free Space Impedance = $377\Omega$

### 1.6.2 Test Setup

**E-field and H-field Measurement**

Note1 : find worst position for each axis.

Note2 : This shall be measured as the distance from the edge of the device to the center of the measurement probe.

**1.6.3 Result of Maximum Permissible Exposure**

<b>Maximum Permissible Exposure</b>				
<b>Charging Condition</b>	<b>Separation</b>	<b>Probe from EUT Side</b>	<b>E-field (V/m)</b>	<b>H-field (A/m)</b>
Operating	15cm	Left	0.45	0.001
Operating	15cm	Right	0.63	0.002
Operating	15cm	Top	0.54	0.001
Operating	15cm	Bottom	0.53	0.001
Operating	20cm	Y-axis above EUT	0.44	0.001
<b>Limit</b>			614	1.63
<b>Margin Limit (%)</b>			0.10%	0.10%



## 2 Test Equipment and Calibration Data

**Instrument for Conducted Test**

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Probe	ETS-LINDGREN	HI-6005	00052473	0.1 MHz - 6 GHz	23/Apr/2018	22/Apr/2019