

## RF Exposure Report

**Report No.:** SA160215C07B

**FCC ID:** 2ABUYEMW-TX801

**Test Model:** EMW-TX801

**Received Date:** Jun. 20, 2016

**Test Date:** Jun. 22, 2016

**Issued Date:** Jun. 24, 2016

**Applicant:** EMW Co., Ltd.

**Address:** 80B-4L, 680-3, Gojan-Dong, Namdong-Gu, Incheon South Korea

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

**Lab Address:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan  
(R.O.C.)



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## Table of Contents

<b>Release Control Record.....</b>	<b>3</b>
<b>1      Certificate of Conformity.....</b>	<b>4</b>
<b>2      RF Exposure .....</b>	<b>5</b>
2.1    Test Setup.....	5
2.2    Test Instruments.....	5
2.3    Limits For Maximum Permissible Exposure (MPE).....	6
2.4    Test Point Description.....	6
<b>3      Calculation Result Of Maximum Conducted Power .....</b>	<b>7</b>
<b>4      Photographs of the Test Configuration .....</b>	<b>8</b>

### Release Control Record

Issue No.	Description	Date Issued
SA160215C07B	Original release.	Jun. 24, 2016

## 1 Certificate of Conformity

**Product:** Wireless Charger Products

**Brand:** EMW

**Test Model:** EMW-TX801

**Sample Status:** Production Unit

**Applicant:** EMW Co., Ltd.

**Test Date:** Jun. 22, 2016

**Standards:** FCC Part 1 (Section 1.1307(b), 1.1310)

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

**Prepared by :**



, **Date:** Jun. 24, 2016

Celia Chen / Supervisor

**Approved by :**

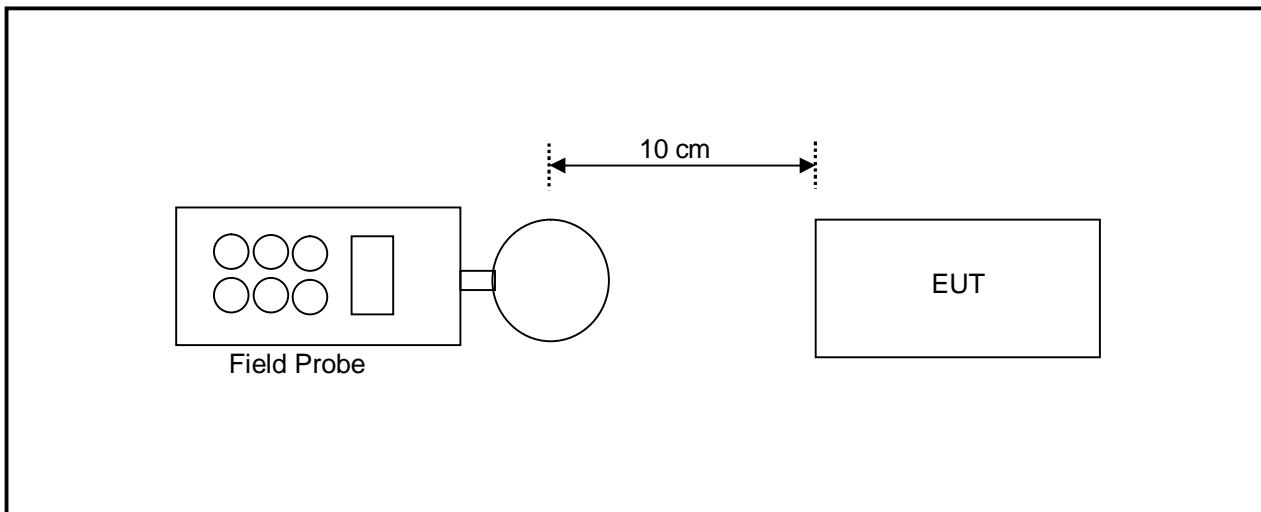


, **Date:** Jun. 24, 2016

Rex Lai / Assistant Manager

## 2 RF Exposure

### 2.1 Test Setup



Note: Measurements should be made from all sides and the top of the primary/client pair, with the 10 cm measured from the center of the probe(s) to the edge of the device.

### 2.2 Test Instruments

Description	Brand	Model No.	Frequency Range	Calibrated Date	Calibrated Until
Broadband Field Meter	NARDA	NBM-550	-	Feb. 9, 2016	Feb. 8, 2018
Magnetic Field Meter	NARDA	ELT-400	1 – 400kHz	Feb. 11, 2016	Feb. 10, 2018
Magnetic Probe	NARDA	HF-3061	300kHz – 30MHz	Feb. 9, 2016	Feb. 8, 2018
Magnetic Probe	NARDA	HF-0191	27 – 1000MHz	Feb. 9, 2016	Feb. 8, 2018
Broadband Field Meter	NARDA	NBM-550	-	Feb. 9, 2016	Feb. 8, 2018
Electric Field Meter	COMBINNOVA	EFM 200	5Hz – 400kHz	Oct. 16, 2015	Oct. 15, 2016
E-Field Probe	NARDA	EF-0391	100kHz – 3GHz	Feb. 9, 2016	Feb. 8, 2018
E-Field Probe	NARDA	EF-6091	100MHz – 60GHz	Feb. 9, 2016	Feb. 8, 2018

**NOTE:** 1. The calibration interval of the above test instruments is 12/24 months and the calibrations are traceable to NML/ROC and NIST/USA.  
 2. The test was performed in Chia Pau RF Chamber

## 2.3 Limits For Maximum Permissible Exposure (MPE)

§ 1.1310 The criteria listed in table 1 shall be used to evaluate the environmental impact of human exposure to radiofrequency(RF) radiation as specified in § 1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of § 2.1093 of this chapter.

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 Exposures</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
300–1500 .....	.....	.....	f/300	6
1500–100,000 .....	.....	.....	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
300–1500 .....	.....	.....	f/1500	30
1500–100,000 .....	.....	.....	1.0	30

f = frequency in MHz

\* = Plane-wave equivalent power density

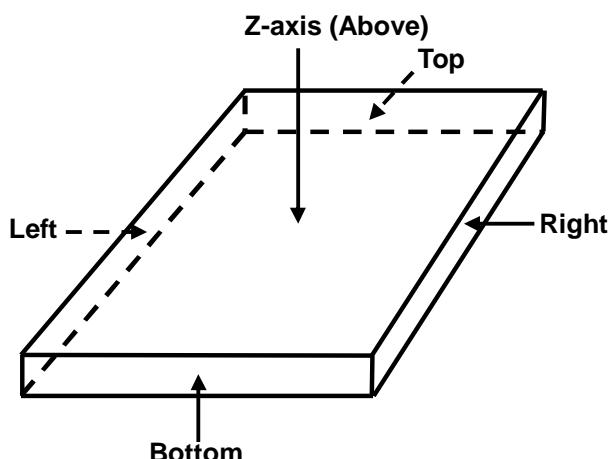
NOTE 1 TO TABLE 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2 TO TABLE 1: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

## 680106 D01 RF Exposure Wireless Charging Apps v02

Aggregate leakage fields at 10 cm surrounding the device from all simultaneous transmitting coils are demonstrated to be less than 30% of the MPE limit.

## 2.4 Test Point Description



### 3 Calculation Result Of Maximum Conducted Power

E-Field Measurement (10cm)					
EUT Side	Left	Right	Top	Bottom	Z-axis (Above)
Max E-field (V/m)	1.92	1.48	1.52	2.12	1.84
Limit 614 (V/m)	614	614	614	614	614
70% of the limit	429.8	429.8	429.8	429.8	429.8
Margin (V/m)	-612.08	-612.52	-612.48	-611.88	-612.16

H-Field Measurement (10cm)					
EUT Side	Left	Right	Top	Bottom	Z-axis (Above)
Max H-field (A/m)	0.114	0.123	0.061	0.061	0.304
Limit 1.63 (A/m)	1.63	1.63	1.63	1.63	1.63
70% of the limit	1.141	1.141	1.141	1.141	1.141
Margin (A/m)	-1.516	-1.507	-1.569	-1.569	-1.326

Measurements was made from all sides and the top of the primary/client pair, with the 10 cm measured from the center of the probe(s) to the edge of the device. The highest emission level was recorded.