

# Human Exposure Report

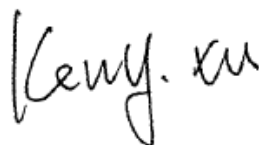
**Application No.:** SZEM1903011701CR  
**Applicant:** IN WIN DEVELOPMENT INC.  
**Address of Applicant:** No.57, Ln. 350, Nanshang Rd., Guishan Dist., Taoyuan City 333, Taiwan  
**Manufacturer:** IN WIN DEVELOPMENT INC  
**Address of Manufacturer:** No.57, Lane 350 Nanshang Rd., Gueishan Dist., Taoyuan city 333Taiwan  
**Factory:** SHENZHEN DBK ELECTRONICS CO., LTD.  
**Address of Factory:** Room No .208-1,308, 404-408 in Building Five, 2-4 Floor in Building Three, No.8 Qinghua Road, Zhu Village, Fucheng New Community, Guanlan Street, Longhua District, Shenzhen City, Guangdong Province, P.R.China

**Equipment Under Test (EUT):**

**EUT Name:** Wireless charger  
**Model No.:** IWC000A2  
**FCC ID:** 2AJSP-IWC000A2  
**Standards:** 47 CFR PART 1, Subpart I, Section 1.1310  
**Date of Receipt:** 2019-03-14  
**Date of Test:** 2019-03-15 to 2019-03-18  
**Date of Issue:** 2019-03-19

<b>Test Result :</b>	<b>Pass*</b>
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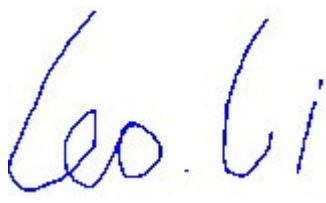

\* In the configuration tested, the EUT complied with the standards specified above



Keny Xu  
 EMC Laboratory Manager



<i>Revision Record</i>				
<i>Version</i>	<i>Chapter</i>	<i>Date</i>	<i>Modifier</i>	<i>Remark</i>
01		2019-03-19		Original

<b>Authorized for issue by:</b>			
			
		<hr/> <b>Leo Li /Project Engineer</b>	
			
		<hr/> <b>Eric Fu /Reviewer</b>	



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### 3 General Information

#### 3.1 Details of E.U.T.

Power supply: DC 5V; DC 12V  
 Input: DC 5V/2A, DC 12V/1.8A  
 Output:  
 WPC: 5W(DC 5V/1A), 7.5W(DC 5V1.5A), 10W(DC 9V/1.1A)

Antenna Type: Loop Antenna  
 Antenna Gain: 0dBi  
 Modulation Type: Load Modulation  
 Operation Frequency: 113.60kHz to 178.10kHz  
 Remark: Tests were conducted in all three load modes and the worst case 10W(DC 9V/1.1A) is reported only.

#### 3.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
DC Power Supply	ZhaoXin	RXN-305D	SEM011-02
Load Resistor	SGS	N/A	REF. No.SEA0600
Mobile Phone	SAMSUNG	SM-G9500	R28J9140LPB



### 3.3 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch E&E Lab,

No. 1 Workshop, M-10, Middle section, Science & Technology Park, Shenzhen, Guangdong, China 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

### 3.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **CNAS (No. CNAS L2929)**

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

- **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 3816.01.

- **VCCI**

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

- **FCC –Designation Number: CN1178**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

- **Innovation, Science and Economic Development Canada**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

### 3.5 Deviation from Standards

None.

### 3.6 Abnormalities from Standard Conditions

None.



## 4 Equipments Used during Test

Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Due date (yyyy-mm-dd)
1	Electric and Magnetic Field Analyzer	Narda	EHP-50F	EMC092	2020-02-05



## 5 Test Results

### 5.1 RF Exposure test

Test Requirement: 47 CFR PART 1, Subpart I, Section 1.1310

Measurement Distance: 15cm

Limit:

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

RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).

#### 5.1.1 E.U.T. Operation

##### Operating Environment:

Temperature: 24.0 °C      Humidity: 52% RH      Atmospheric Pressure: 1015 mbar

##### EUT Operation:

This device has been tested the worst status of full load and the device has been tested with mobile phone at zero charge, intermediate charge, and full charge.



**5.1.2 Measurement Data**

**Output Voltage=DC 9V; The max output power =10W;Calculation of resistor value=8.1Ω**

**Electric Field Emissions**

Operation frequency	Test Distance (cm)	Test Position	Probe Measure Result (V/m)	50% Limit (V/m)
147.2 kHz	15	Side 1	1.46	307
		Side 2	1.35	307
		Side 3	1.59	307
		Side 4	1.23	307
		Top	1.48	307

**Magnetic Field Emissions**

Operation frequency	Test Distance (cm)	Test Position	Probe Measure Result (A/m)	50% Limit (A/m)
147.2 kHz	15	Side 1	0.0038	0.815
		Side 2	0.0031	0.815
		Side 3	0.0045	0.815
		Side 4	0.0023	0.815
		Top	0.0042	0.815





**Mobile phone has been charge at zero charge, intermediate charge, and full charge.**

**Electric Field Emissions**

Operation frequency	Test Distance (cm)	Test Position	Probe Measure Result(V/m)			50%Limit (V/m)
			zero charge	intermediate charge	full charge	
147.2 kHz	15	Side 1	1.53	1.37	1.21	307
		Side 2	1.47	1.33	1.18	307
		Side 3	1.66	1.49	1.32	307
		Side 4	1.29	1.16	1.05	307
		Top	1.52	1.38	1.24	307

**Magnetic Field Emissions**

Operation frequency	Test Distance (cm)	Test Position	Probe Measure Result(A/m)			50%Limit (A/m)
			zero charge	intermediate charge	full charge	
147.2 kHz	15	Side 1	0.0045	0.0037	0.0024	0.815
		Side 2	0.0037	0.0029	0.0016	0.815
		Side 3	0.0048	0.0034	0.0023	0.815
		Side 4	0.0031	0.0021	0.0014	0.815
		Top	0.0049	0.0033	0.0022	0.815





## 6 Photographs

Please refer to RF Exposure setup photo.

- End of the Report -



SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch (CMA, CNAS) Lab. Laboratory

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No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012063 f (86-755) 26710694 www.sgs.com.cn  
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012063 f (86-755) 26710694 sgs.china@sgs.com