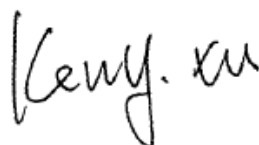


# Human Exposure Report

**Application No.:** SZEM1811010113CR  
**Applicant:** Shenzhen Esorun Technology Co., LTD  
**Address of Applicant:** 10F, Mingzhuo Building, Mingzhuoxing Industrial Park, Guangming Street, Guangming District, Shenzhen, China  
**Manufacturer:** Shenzhen Esorun Technology Co., LTD  
**Address of Manufacturer:** 10F, Mingzhuo Building, Mingzhuoxing Industrial Park, Guangming Street, Guangming District  
**Factory:** Shenzhen Esorun Technology Co., LTD  
**Address of Factory:** 10F, Mingzhuo Building, Mingzhuoxing Industrial Park, Guangming Street, Guangming District  
**Equipment Under Test (EUT):**  
**EUT Name:** Qi Wireless Car Mount with Auto-Operation  
**Model No.:** Line, Roo, Smart, Bridge, Pandona ♣  
 ♣ Please refer to section 2.1 of this report which indicates which model was actually tested and which were electrically identical.  
**Trade Mark:** ESORUN  
**FCC ID:** 2AP2N-LINE  
**Standards:** 47 CFR PART 1, Subpart I, Section 1.1310  
**Date of Receipt:** 2018-11-23  
**Date of Test:** 2018-11-30 to 2018-12-04  
**Date of Issue:** 2019-01-11

<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>				
<b>Version</b>	<b>Chapter</b>	<b>Date</b>	<b>Modifier</b>	<b>Remark</b>
01		2019-01-11		Original

<b>Authorized for issue by:</b>			
			
		<hr/>	
		<b>Peter Geng /Project Engineer</b>	
			
		<hr/>	
		<b>Eric Fu /Reviewer</b>	



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## 2 General Information

### 2.1 Details of E.U.T.

Power supply:	Input: DC 9V/2A, DC 5V/2A Output: Output: 10W/7.5W/5W
Cable:	USB to type C charging line: 100cm, unshielded
Antenna Type:	Inductive Loop Coil Antenna
Modulation Type:	Load Modulation
Operation Frequency:	110.19kHz to 201.54kHz
Remark:	Tests were conducted in all loading modes and the worst case (10W) is reported only.

#### Declaration of EUT Family Grouping:

Model No.: Line, Roo, Smart, Bridge, Pandona

Only the model Line was tested, since the electrical circuit design, layout, components used, internal wiring and functions were identical for the above models, with only difference on shell shape.

### 2.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Car Charger	provided by SGS	N/A	N/A
E-charging load	provided by SGS	N/A	5W
iPhone 8	Apple	A1863	F4GVQ656JC6D
Mobile Phone	SAMSUNG	SM-G9500	R28J9140LPB



## 2.3 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.

## 2.4 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.







## 2.5 Deviation from Standards

None.

## 2.6 Abnormalities from Standard Conditions

None.



### 3 Equipments Used during Test

Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Due date
1	Shielding Room	SAEMC	MSR733	SEM001-09	2020-05-09
2	Electric and Magnetic Field Analyzer	Narda	EHP-50F	EMC092	2019-02-06



## 4 Test Results

### 4.1 RF Exposure test

Test Requirement: 47 CFR PART 1, Subpart I, Section 1.1310  
 Measurement Distance: 0cm/6cm/10cm/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).

#### 4.1.1 E.U.T. Operation

Operating Environment:  
 Temperature: 25.0 °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 load at zero charge, intermediate charge, and full charge.





**4.1.2 Measurement Data**

**1: Output Voltage=DC 9V; The max output current =1.12A;Calculation of resistor value=8.1Ω**

**Magnetic Field Emissions**

Test frequency	Test Distance (cm)	Test Position	Probe Measure Result (A/m)	50%Limit (A/m)	Result
165.8kHz	0	Side 1	0.0076	0.815	Pass
		Side 2	0.0112	0.815	Pass
		Side 3	0.0218	0.815	Pass
		Side 4	0.0216	0.815	Pass
		Top	0.1132	0.815	Pass
	6	Side 1	0.0076	0.815	Pass
		Side 2	0.0104	0.815	Pass
		Side 3	0.0203	0.815	Pass
		Side 4	0.0208	0.815	Pass
		Top	0.1073	0.815	Pass
	10	Side 1	0.0062	0.815	Pass
		Side 2	0.0095	0.815	Pass
		Side 3	0.0181	0.815	Pass
		Side 4	0.0178	0.815	Pass
		Top	0.0766	0.815	Pass
	15	Side 1	0.0063	0.815	Pass
		Side 2	0.0096	0.815	Pass
		Side 3	0.0178	0.815	Pass
		Side 4	0.0169	0.815	Pass
		Top	0.0526	0.815	Pass



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

**Magnetic Field Emissions**

Test frequency	Test Distance (cm)	Test Position	Probe Measure Result (A/m)			50%Limit (A/m)	Result
			zero charge	intermediate charge	full charge		
165.8kHz	0	Side 1	0.0083	0.0077	0.0072	0.815	Pass
		Side 2	0.0122	0.0113	0.0106	0.815	Pass
		Side 3	0.0238	0.0220	0.0207	0.815	Pass
		Side 4	0.0235	0.0218	0.0205	0.815	Pass
		Top	0.1234	0.1143	0.1075	0.815	Pass
	6	Side 1	0.0083	0.0077	0.0072	0.815	Pass
		Side 2	0.0113	0.0105	0.0099	0.815	Pass
		Side 3	0.0221	0.0205	0.0193	0.815	Pass
		Side 4	0.0227	0.0210	0.0198	0.815	Pass
		Top	0.1170	0.1084	0.1019	0.815	Pass
	10	Side 1	0.0068	0.0063	0.0059	0.815	Pass
		Side 2	0.0104	0.0096	0.0090	0.815	Pass
		Side 3	0.0197	0.0183	0.0172	0.815	Pass
		Side 4	0.0194	0.0180	0.0169	0.815	Pass
		Top	0.0835	0.0774	0.0728	0.815	Pass
	15	Side 1	0.0069	0.0064	0.0060	0.815	Pass
		Side 2	0.0105	0.0097	0.0091	0.815	Pass
		Side 3	0.0194	0.0180	0.0169	0.815	Pass
		Side 4	0.0184	0.0171	0.0161	0.815	Pass
		Top	0.0573	0.0531	0.0500	0.815	Pass





## 5 Photographs- RF exposure Setup photos

Please refer to Setup Photos.

- End of the Report -

