

Report No.: SZCR210502087202

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## **Human Exposure Report**

Application No.: SZCR2105020872AT

Applicant: SHENZHEN DBK ELECTRONICS CO., LTD

Address of Applicant: No.8 Qinghua Road, Zhu Village, Fucheng New Community, Guanlan Street,

Longhua District, Shenzhen City, Guangdong Province, China

Manufacturer: SHENZHEN DBK ELECTRONICS CO., LTD

Address of Manufacturer: No.8 Qinghua Road, Zhu Village, Fucheng New Community, Guanlan Street,

Longhua District, Shenzhen City, Guangdong Province, China

**Equipment Under Test (EUT):** 

**EUT Name:** Wireless Charging Pad

Item No.: WC067BLK

Trade Mark: DBK

FCC ID: 2ARVRWC067BLK

Standards: 47 CFR PART 1, Subpart I, Section 1.1310

47 CFR PART 2, Subpart J, Section 2.1091

**Date of Receipt:** 2021-05-07

**Date of Test:** 2021-05-09 to 2021-05-21

**Date of Issue:** 2021-05-27

Test Result : Pass\*

Keny Xu EMC Laboratory Manager

Ceny. Ku



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<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above



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### 2 General Information

Input:5V/2A Power supply:

Output: 5W(MAX)

Operation frequency: 120.19kHz to 149.84kHz

Modulation type: Load modulation
Antenna type: Loop Antenna

### 2.1 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Adapter	Apple	A2167	REF. No.SEA05B04D
E-Loader	SGS	N/A	REF. No.SEA06A00
Mobile Phone	SAMSUNG	SM-G9500	REF. No.SEA16J00



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#### 2.2 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.

#### 2.3 Test Facility

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

#### 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.

### 2.4 Deviation from Standards

None.

#### 2.5 Abnormalities from Standard Conditions

None.



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## 3 Equipments Used during Test

Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Due date
1	Electric and Magnetic Field Analyzer	Narda	EHP-50F	EMC092	2021-11-27
2	Shielding Room	SAEMC	MSR733	SEM001-09	2022-06-12



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### 4 Test Results

### 4.1 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/cm²)	Averaging time (minutes)				
	(A) Limits for Occupational/Controlled Exposures							
0.3-3.0	614	1.63	*(100)	6				
3.0-30	1842/f	4.89/f	*(900/f²)	6				
30-300	61.4	0.163	1.0	6				
300-1500	/	/	f/300	6				
1500-100,000	/	/	5	6				
	(B) Limits for General Population/Uncontrolled Exposure							
0.3-1.34	614	1.63	*(100)	30				
1.34-30	824/f	2.19/f	*(180/f²)	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

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: 24.8 °C Humidity: 48.5 % RH Atmospheric Pressure: 1010 mbar



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<sup>\*=</sup>Plane-wave equivalent power density



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### **Test Mode Description**

Pre-scan / Final test	Mode Code	Description
Final test	00	Charge mode_Keep the EUT charging(5W)

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.



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#### 4.1.2 Measurement Data

# Output Voltage=DC 5V; The max output power =5W; Calculation of resistor value=5 $\Omega$ Magnetic Field Emissions

Operation frequency	Test Distance (cm)	Test Position	Probe Measure Result (A/m)	50% Limit (A/m)
	Side 1 0.0477	0.0477	0.815	
		Side 2	0.0458 0.8	0.815
135.24 kHz	15	Side 3	0.0487	0.815
		Side 4	0.0436	0.815
		Тор	0.0525	0.815

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

### **Magnetic Field Emissions**

Operation	Test Test		Probe Measure Result(A/m)			50%Limit
frequency	Distance (cm)	Position	zero charge	intermediate charge	full charge	(A/m)
		Side 1	0.0473	0.0428	0.0353	0.815
135.24 kHz		Side 2	0.0509	0.0417	0.0372	0.815
	15	Side 3	0.0467	0.0404	0.0366	0.815
		Side 4	0.0461	0.0398	0.0334	0.815
		Тор	0.0569	0.0496	0.0449	0.815

- End of the Report -



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