Human Exposure Report

Application No.:	SHCR2401000036HS
FCC ID:	2AVJ8-JLDK-56
Applicant:	DewertOkin Technology Group Co., Ltd.
Address of Applicant:	No.1507, Taoyuan Road, Gaozhao Street, Xiuzhou District, Jiaxing, City, Zhejiang, Province, China.
Manufacturer:	DewertOkin Technology Group Co., Ltd.
Address of Manufacturer:	No.1507, Taoyuan Road, Gaozhao Street, Xiuzhou District, Jiaxing, City, Zhejiang, Province, China.
Factory:	DewertOkin Technology Group Co., Ltd.
Address of Factory:	No.1507, Taoyuan Road, Gaozhao Street, Xiuzhou District, Jiaxing, City, Zhejiang, Province, China.
Equipment Under Test (EUT):	
EUT Name:	Wireless Charger
Model No.:	JLDK-56
Trade Mark:	DEWERT OKIN
	47 CFR PART 1, Subpart I, Section 1.1310
Standards:	FCC Rules 47 CFR §2.1091 KDB 680106 D01 RF Exposure Wireless Charging Apps v04
Date of Receipt:	2024-01-03
Date of Test:	2024-01-04 to 2024-01-12
Date of Issue:	2024-01-25
Test Result :	**Pass***

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

Revision Record			
Version	**Description**	***Date***	***Remark***
00	Original	2024-01-25	/

Authorized for issue by:				
Tested By		Bill Wu **Bill Wu/Project Engineer**		
Approved By		Parlam Zhan **Parlam Zhan/Reviewer**		

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3 General Information

3.1 Details of E.U.T.

Power supply: DC 29V
Wired Output: 15W Max.
Antenna Type: Inductive Loop Coil Antenna
Modulation Type: Load Modulation
Operation Frequency: 110KHz-148KHz

3.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Load	N/A	N/A	N/A
Mobilephone	Apple	Iphone 12	/
AC Adapter	/	DOT-Z-290018A	/

3.3 Test Location

All tests were performed at:
SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. E&E Lab
588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China
Tel: +86 21 6191 5666 Fax: +86 21 6191 5678
No tests were sub-contracted.
Note:
1. SGS is not responsible for wrong test results due to incorrect information (e.g. max. clock frequency, highest internal frequency, antenna gain, cable loss, etc) is provided by the applicant. (if applicable).
2. SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (if applicable).
3. Sample source: sent by customer.

3.4 Test Facility

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

- **A2LA (Certificate No. 6332.01)**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. is accredited by the American Association for Laboratory Accreditation(A2LA).

- **FCC (Designation Number: CN1301)**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been recognized as an accredited testing laboratory.

- **ISED (CAB Identifier: CN0020)**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. EMC Laboratory has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory.
Company Number: 8617A

- **VCCI (Member No.: 3061)**

The 3m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-13868, C-14336, T-12221, G-10830 respectively.

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 date	Cal. Due date
1	Semi/Fully Anechoic	ST	11*6*6M	SHEM078-2	2021-05-25	2024-05-24
2	Electromagnetic Field Probe	Narda	EHP-200AC	SHEM0907	2023-04-10	2024-04-09
3	Software	Narda	EHP-200-TS	/	/	/

5 Test Results

5.1 RF Exposure test

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

Measurement Distance: 10 cm for surrounding the device and 10 cm for above the top surface.

Limit:

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	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	*($900/f^2$)	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	*($180/f^2$)	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).

5.2 E.U.T. Operation

5.2.1 Operating Environment

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

5.2.2 EUT Operation:

5.2.3 Simulation Load Mode

Test mode 00: Wireless Output(The load shall be set at full, half, empty load (15W/7.5W/0W)
01: Wireless Output(The mobile phone shall be set at 85% charge state, 50% charge state, 15% charge state.

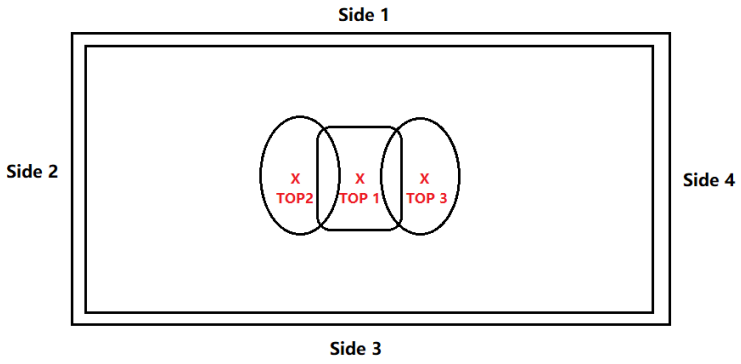
Measurement Data:

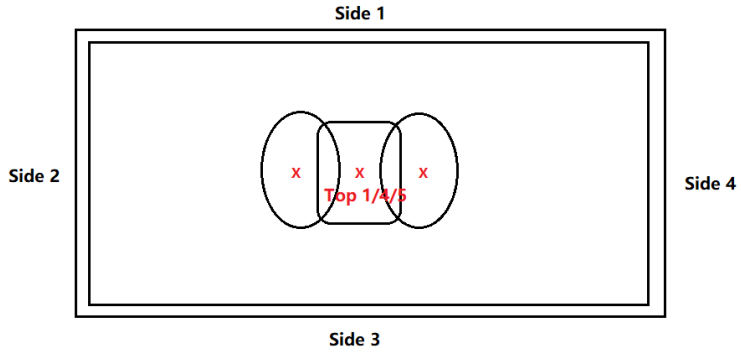
Average 1**:** Test 3 times at the same location, taking the average value = (Top1+Top4+Top5)/3

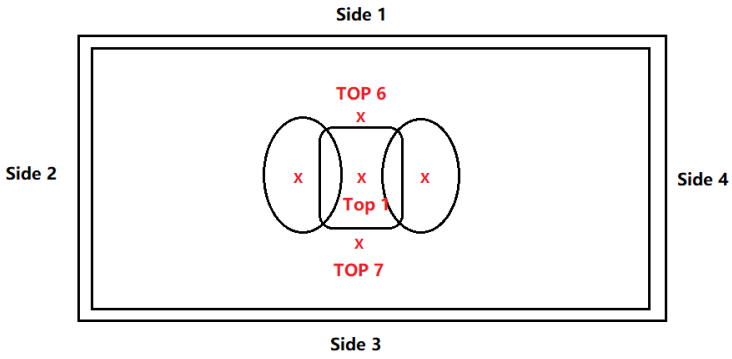
Average 2: Average different points on the same surface = (Top1+Top6+Top7)/3

Note 1:The charging pad has three loop antenna but can not charging same time,Only the loop antenna nearest with the charging client was working.

Note 2:Compare Top 1 Top 2 and Top 3 test data,Top 1 test data is worst case,So we select middle antenna to test Average data.






Side 1
Side 2
Side 4
Side 3
TOP 6
X
X
X
X
Top 1
X
TOP 7

Test mode 00: Load:

Electric Field

Test Distance (cm)	Test Position		Test Data (V/m)			Limit (V/m)	Result
			Full Load	Half Load	Empty Load		
10	Side	1	1.9754	1.8524	1.3218	614 50% Limit	Pass
		2	1.8794	1.7968	1.3124		Pass
		3	1.6798	1.6024	1.1289		Pass
		4	1.6864	1.6128	1.1308		Pass
	Top	1	2.8149	2.7206	2.1628		Pass
		2	2.6978	2.6654	2.0797		Pass
		3	2.6896	2.6748	2.0296		Pass
		4	2.7124	2.6896	2.1072		Pass
		5	2.7098	2.6726	2.1014		Pass
		6	2.7216	2.6804	2.1253		Pass
		7	2.7107	2.6638	2.1178		Pass
	Top Average	1+4+5	2.7457	2.6942	2.1238		Pass
		1+6+7	2.7607	2.6883	2.1353		Pass
	Back		2.2178	2.2056	1.7864		Pass

Magnetic Field

Test Distance (cm)	Test Position		Test Data (A/m)			Limit (A/m)	Result
			Full Load	Half Load	Empty Load		
10	Side	1	0.2247	0.1434	0.0576	1.63	Pass
		2	0.2196	0.1426	0.0559		Pass
		3	0.1958	0.1126	0.0521		Pass
		4	0.1964	0.1137	0.0517		Pass
	Top	1	0.2816	0.1738	0.0697		Pass
		2	0.2706	0.1654	0.0602		Pass
		3	0.2698	0.1638	0.0598		Pass
		4	0.2736	0.1634	0.0676		Pass
		5	0.2765	0.1659	0.0658		Pass
		6	0.2792	0.1612	0.0624		Pass
		7	0.2718	0.1654	0.0633		Pass
	Top Average	1+4+5	0.2772	0.1677	0.0677		Pass
		1+6+7	0.2775	0.1668	0.0651		Pass
	Back		0.2264	0.1216	0.0542		Pass
20	Top1	1	0.1957	0.1712	0.0401	50% Limit	Pass

Test mode 01: Mobile Phone:

Electric Field Emissions

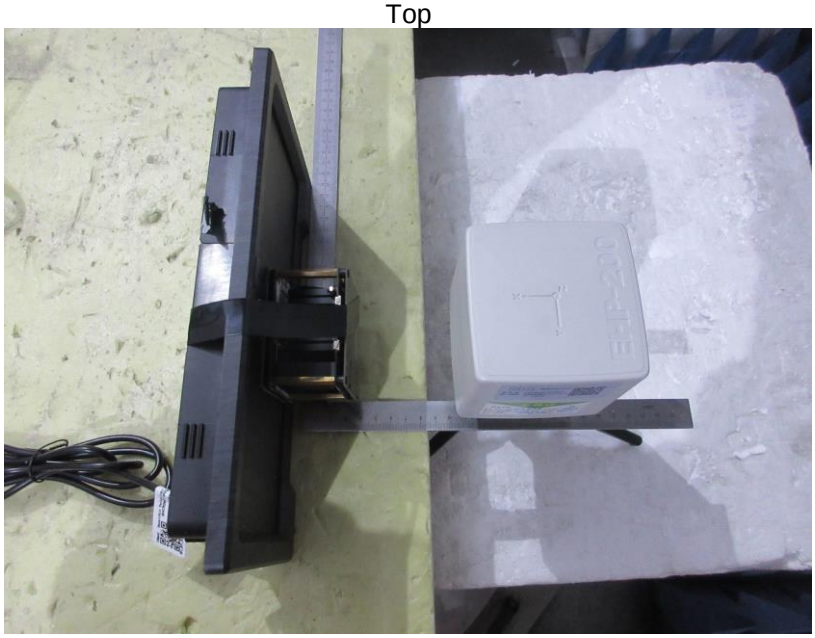
Test Distance (cm)	Test Position		Test Data (V/m)			Limit (V/m)	Result
			85%	50%	15%		
10	Side	1	1.8624	1.8319	1.8026	614 50% Limit	Pass
		2	1.8165	1.7764	1.8012		Pass
		3	1.6024	1.587	1.6056		Pass
		4	1.6131	1.5712	1.6095		Pass
	Top	1	2.7197	2.6545	2.7132		Pass
		2	2.6547	2.5873	2.6306		Pass
		3	2.6602	2.5769	2.6198		Pass
		4	2.7026	2.6199	2.7954		Pass
		5	2.6878	2.6002	2.6916		Pass
		6	2.7014	2.6251	2.7757		Pass
		7	2.6879	2.6328	2.7006		Pass
	Top Average	1+4+5	2.7034	2.6249	2.7334		Pass
		1+6+7	2.7930	2.6375	2.7298		Pass
	Back		2.1395	2.1789	2.1066		Pass

Magnetic Field

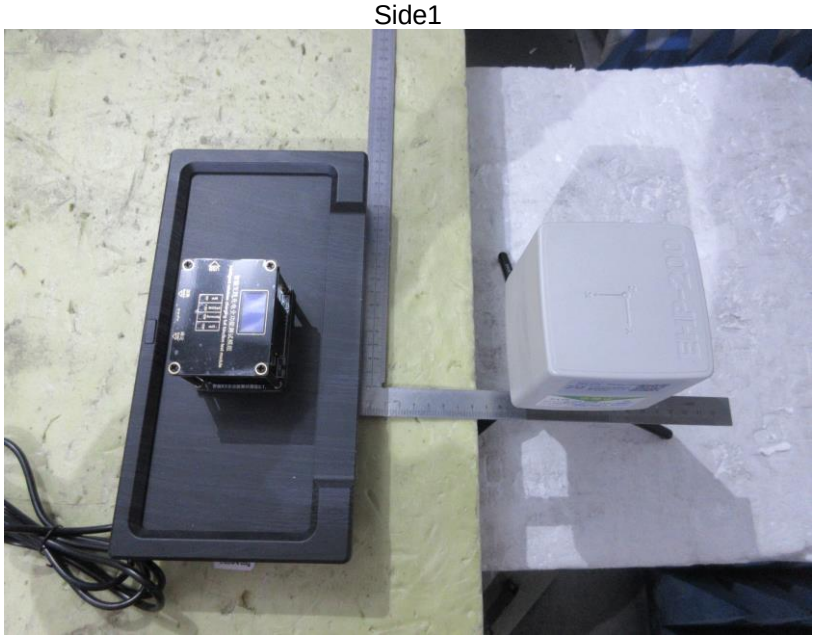
Test Distance (cm)	Test Position		Test Data (A/m)			Limit (A/m)	Result
			85%	50%	15%		
10	Side	1	0.2122	0.1396	0.1383	1.63	Pass
		2	0.2115	0.1418	0.1326		Pass
		3	0.1944	0.1175	0.1189		Pass
		4	0.1952	0.1097	0.1168		Pass
	Top	1	0.2768	0.1716	0.2702		Pass
		2	0.2604	0.1614	0.2622		Pass
		3	0.2612	0.1658	0.2617		Pass
		4	0.2706	0.1705	0.2754		Pass
		5	0.2724	0.1644	0.2798		Pass
		6	0.2718	0.1638	0.2842		Pass
		7	0.2695	0.1662	0.2737		Pass
	Top Average	1+4+5	0.2733	0.1688	0.2751		Pass
		1+6+7	0.2727	0.1672	0.2760		Pass
	Back		0.2193	0.1213	0.2242		Pass
20	Top1	1	0.1931	0.1679	0.1987	50% Limit	Pass

6 Test Photo

Top



Side1



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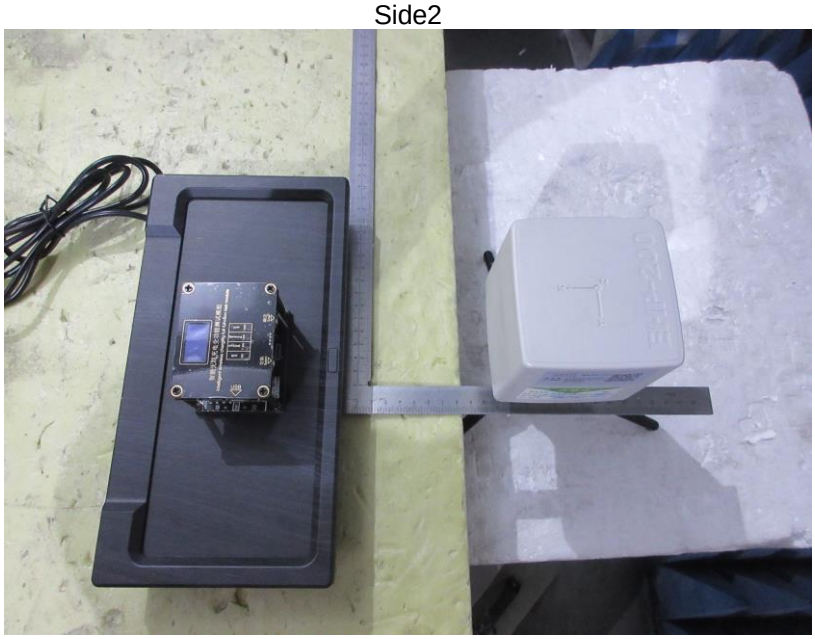
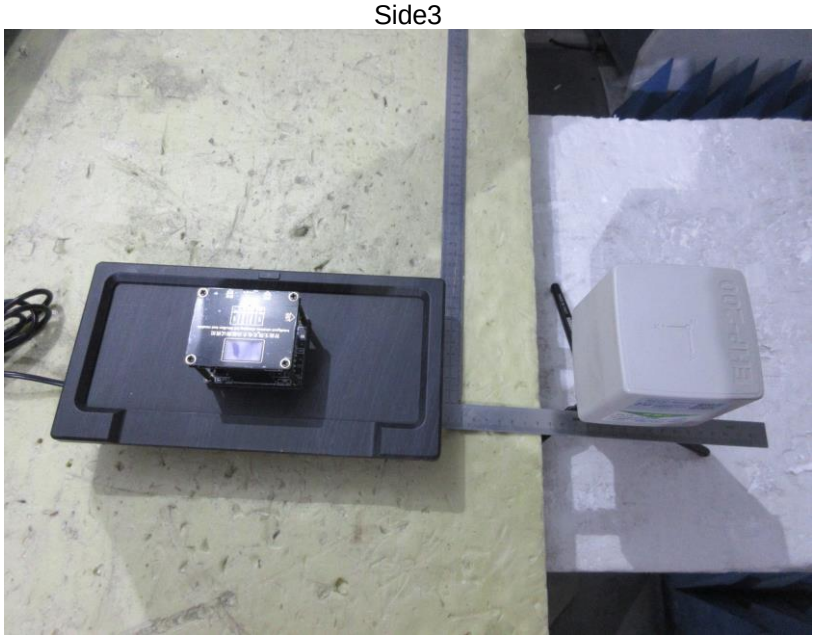
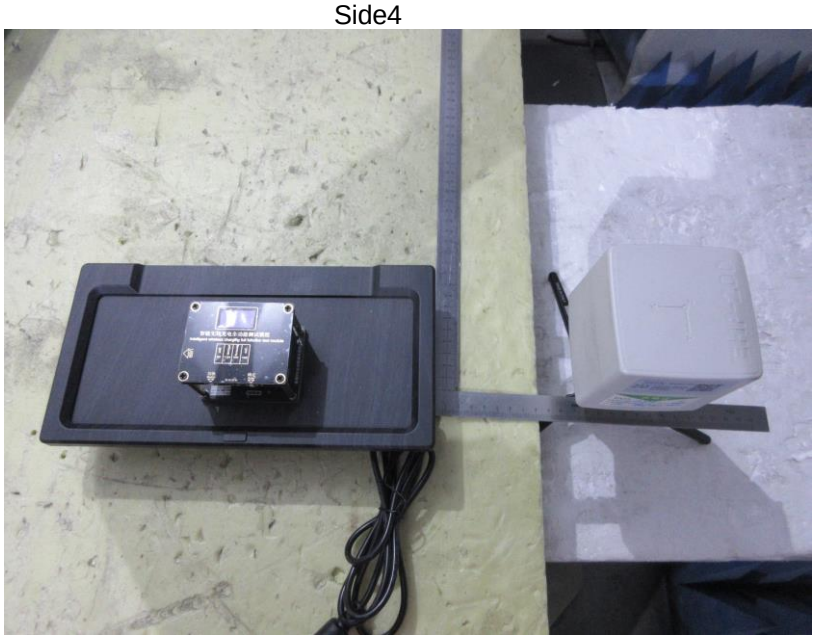


Side3



Side4



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