TCT 通测检测 TESTING CENTRE TECHNOLOGY

TEST REPORT

FCC ID. ..... :	2A8CV-INV00783
Test Report No..... :	TCT220815E035
Date of issue..... :	Sep. 21, 2022
Testing laboratory ..... :	SHENZHEN TONGCE TESTING LAB
Testing location/ address:	2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China
Applicant's name..... :	IDEA SOURCE MARKETING INC.
Address..... :	152 Madison Ave, Suite 901, New York, New York 10016, United States
Manufacturer's name ... :	KINGSUN ENTERPRISES Co., Ltd.
Address..... :	25F, CEC information Building, Xinwen Road, Futian District, Shenzhen, Guangdong, P.R.China
Standard(s) ..... :	FCC CFR Title 47 Part 1.1310 KDB 680106 D01 RF Exposure Wireless Charging App v03r01
Product Name..... :	WIRELESS CHARGING DUAL ALARM CLOCK
Trade Mark ..... :	N/A
Model/Type reference..... :	INV00783
Rating(s)..... :	DC 5V
Date of receipt of test item ..... :	Aug. 15, 2022
Date (s) of performance of test..... :	Aug. 15, 2022 - Sep. 21, 2022
Tested by (+signature) ... :	Aaron MO
Check by (+signature).... :	Beryl ZHAO
Approved by (+signature):	Tomsin

General disclaimer:

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Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

1. General Product Information

1.1. EUT description

Product Name.....:	WIRELESS CHARGING DUAL ALARM CLOCK
Model/Type reference.....:	INV00783
Sample Number.....:	TCT220815E020-0101
Operation Frequency.....:	112.18kHz - 145.19kHz
Modulation Technology.....:	Load modulation
Max. Wireless Output Power:	15W
Antenna Type.....:	Inductive loop coil Antenna
Rating(s).....:	DC 5V

1.2. Model(s) list

None.

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2. Facilities and Accreditations

2.1. Facilities

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

- FCC - Registration No.: 645098

  SHENZHEN TONGCE TESTING LAB

  Designation Number: CN1205

  The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC - Registration No.: 10668A-1

  SHENZHEN TONGCE TESTING LAB

  CAB identifier: CN0031

  The testing lab has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing.

2.2. Location

SHENZHEN TONGCE TESTING LAB

Address: 2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China

TEL: +86-755-27673339

3. Technical Requirements Specification

3.1. Requirements

According to the item 5.b of KDB 680106 D01v03:

Inductive wireless power transfer applications with supporting field strength results and meeting all of the following requirements are not required to submit a KDB inquiry for devices approved using SDoC or a PAG for equipment approved using certification to address RF exposure compliance. However, the responsible party is required to keep a copy of the test report in accordance with KDB 865664 D02. A copy of the test report is to be submitted with the application if the device is approved using certification.

(1) Power transfer frequency is less than 1 MHz.

(2) Output power from each primary coil is less than or equal to 15 watts.

(3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils.

(4) Client device is placed directly in contact with the transmitter.

(5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).

(6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

Limits For Maximum Permissible Exposure (MPE)

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).				

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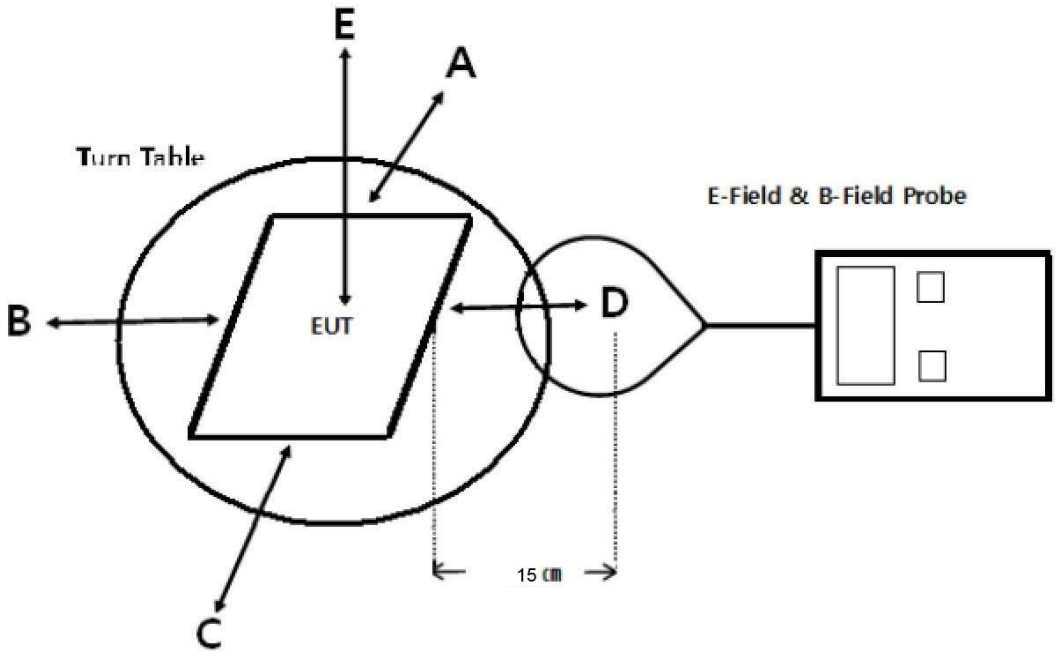
3.2. Test Setup



Note: Measurements should be made from all sides and the top of the primary/client pair, with the 15cm measured from the center of the probe(s) to the edge of the device.

3.3. Test Procedure

1) The RF exposure test was performed in anechoic chamber.
2) The measurement probe was placed at 15 cm surrounding the device and 20 cm above the top surface of the charger and the geometric center of probe.
3) The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E) were completed.
4) The EUT was measured according to the dictates of KDB 680106 D01 v03. Remark;
The EUT's test position A, B, C, D and E is valid for the E and H field measurements.

3.4. Test Instruments List

Equipment	Manufacturer	Model No.	Serial No.	Calibration Due
Magnetic field meter	NARDA	ELT-400	N-0925	Feb. 24, 2023
Field Probe	NARDA	ELT-400	C-0371	Feb. 24, 2023
Mobile Phone	SAMSUNG	SM-G9350	R28HA2ER3GT	/
Adapter	JD	JD-050200	2012010907576735	/

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3.5. Test Result

E-Filed Strength 15 cm surrounding the device and 20 cm above the top surface of the EUT (V/m)

Frequency Range (KHz)	Operation condition	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Limits Test (V/m)
112.18 - 145.19	Full load	1.23	1.27	1.27	1.24	1.35	614
112.18 - 145.19	Half load	1.24	1.26	1.26	1.19	1.36	614
112.18 - 145.19	No load	1.20	1.25	1.28	1.21	1.34	614

H-Filed Strength 15 cm surrounding the device and 20 cm above the top surface of the EUT (uT)

Frequency Range (KHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E
112.18 - 145.19	0.242	0.238	0.246	0.248	0.230
112.18 - 145.19	0.244	0.240	0.255	0.246	0.242
112.18 - 145.19	0.252	0.243	0.267	0.252	0.243

H-Filed Strength 15 cm surrounding the device and 20 cm above the top surface of the EUT (A/m)

Frequency Range (KHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Reference Limits Test (A/m)	Limits Test ((A/m)
112.18 - 145.19	0.194	0.190	0.197	0.198	0.184	0.815	1.63
112.18 - 145.19	0.195	0.192	0.204	0.197	0.194	0.815	1.63
112.18 - 145.19	0.202	0.194	0.214	0.202	0.194	0.815	1.63

Note: uT=1.25*(A/m), 1mT=1000uT

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According to KDB 680106 D01 v03 section 5, b, satisfy the following conditions.

Requirement of KDB 680106 D01	Yes/No	Description
Power transfer frequency is less than 1MHz	Yes	The device operate in the frequency range 112.18kHz - 145.19kHz
Output power from each primary coil is less than or equal to 15 watts	Yes	The maximum output power of the primary coil is 15W.
The transfer system includes only single primary and secondary coils. This includes charging system that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils.	Yes	The transfer system includes only single coil that is able to detect receiver device.
Client device is placed directly in contact with the transmitter.	Yes	Client device is placed directly in contact with the transmitter.
Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).	Yes	Mobile exposure conditions only
The aggregate H-field strengths at 15 cm surrounding the device and 20cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.	Yes	The EUT H-filed strengths at 15 cm surrounding the device and 20cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

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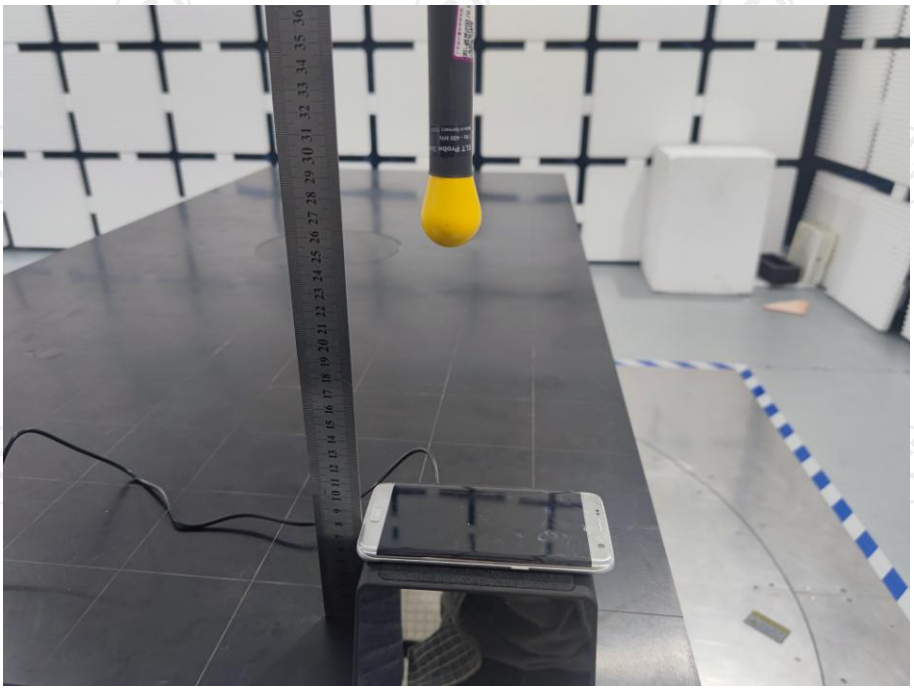
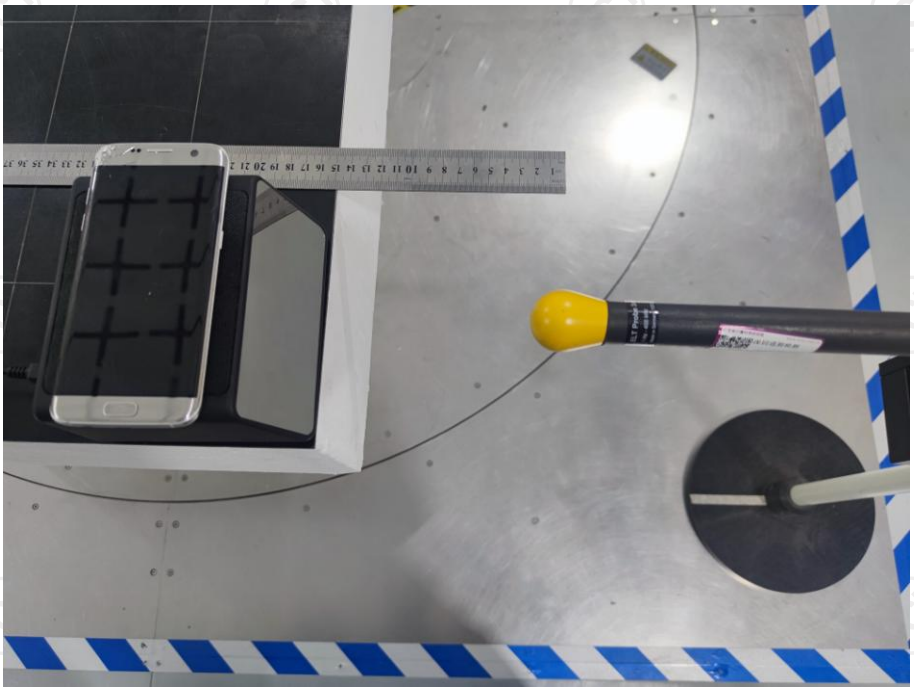
3.6. Test Set-up Photo

AC in mode





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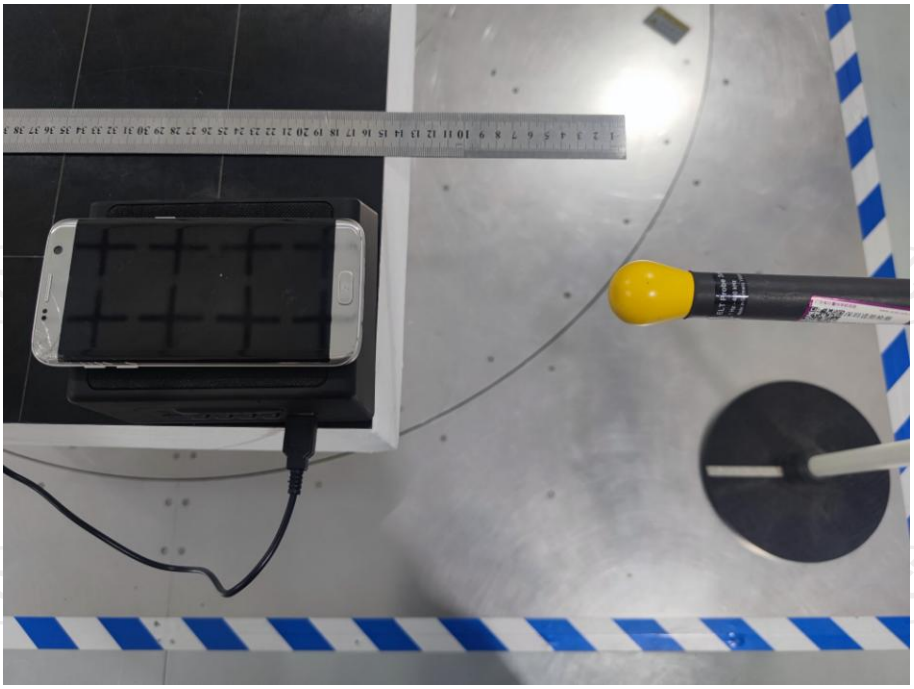

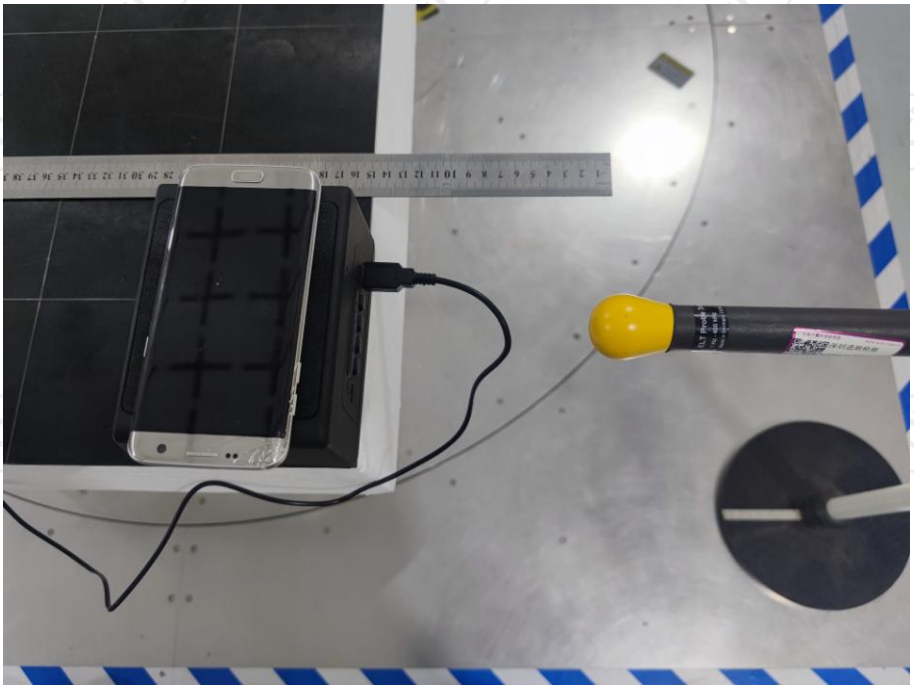

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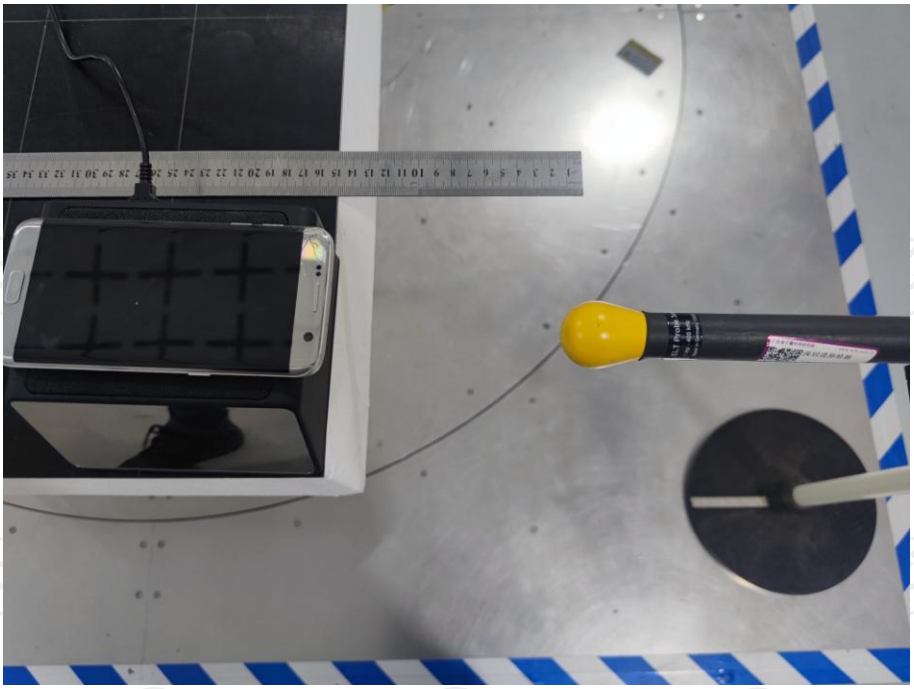

*****END OF REPORT*****

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