RF Exposure Report

1. Introduction

Model	:	**KDWLC1015A**
Product Type	:	Wireless charger
Applicant	:	Changzhou Kaidi Electrical Inc
Address	:	Jiangcun, Henglin Town Changzhou China
Manufacturer	:	Changzhou Kaidi Electrical Inc
Address	:	Jiangcun, Henglin Town Changzhou China
Test Result	:	■ **Positive** ☐ **Negative**
Total pages including Appendices	:	**8**

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2. Product information

Product name:	Wireless charger
Model no.:	KDWLC1015A
FCC ID:	2AOTUKDWLC1015A
Rating:	Input: DC 9V; Output: DC 9V/1A or DC 5V/1A
RF Transmission Frequency:	111KHz -205KHz
Antenna Type:	Coil antenna
Description of the EUT:	The Equipment Under Test (EUT) is a wireless charger which operated at 111-205kHz.

Sample Received Date:	February 7, 2024
Test Date:	February 7, 2024
Issue Date:	February 7, 2024

Reviewed by:	Prepared by:	Tested by:
Alan Xiong	Henry Chen	Carry Cai
Project Manager	Project Engineer	Test Engineer

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3. Summary of Test Standard

Test Standards
§1.1310 Radiofrequency radiation exposure limits.
KDB 680106 D01 Wireless Power Transfer v04 EQUIPMENT AUTHORIZATION OF WIRELESS POWER TRANSFER DEVICES

4. Test Laboratory and test Equipment List

Details about the Test Laboratory:

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch

Building 12&13, Zhiheng Wisdomland Business Park,
Nantou Checkpoint Road 2, Nanshan District,
Shenzhen City, 518052,
P. R. China

FCC Registration No.: 514049

FCC Designation Number: CN5009

Telephone: 86 755 8828 6998

Fax: 86 755 8828 5299

5. Equipment list

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL INTERVAL (YEAR)	CAL. DUE DATE
Electric and magnetic field probe Analyzer	NARDA	EHP-200A	68-4-27-21-001	180ZX10218	1	2024-2-26
Test software	NARDA	EHP200-TS	68-4-27-21-001-A01	02.05	N/A	N/A
Shielding Room #2	TDK	BTC	68-4-90-19-002	----	3	2025-10-15

6. Measurement Uncertainty

System Measurement Uncertainty	
Test Items	Extended Uncertainty
Uncertainty Evaluation for RF Exposure	1.45dB (Magnetic field) 1.45dB (Electric)

7. Limit and Guidelines on Exposure to Electromagnetic Fields

According to §1.1310 system operating under the provisions of this section shall be operating in a manner that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure.

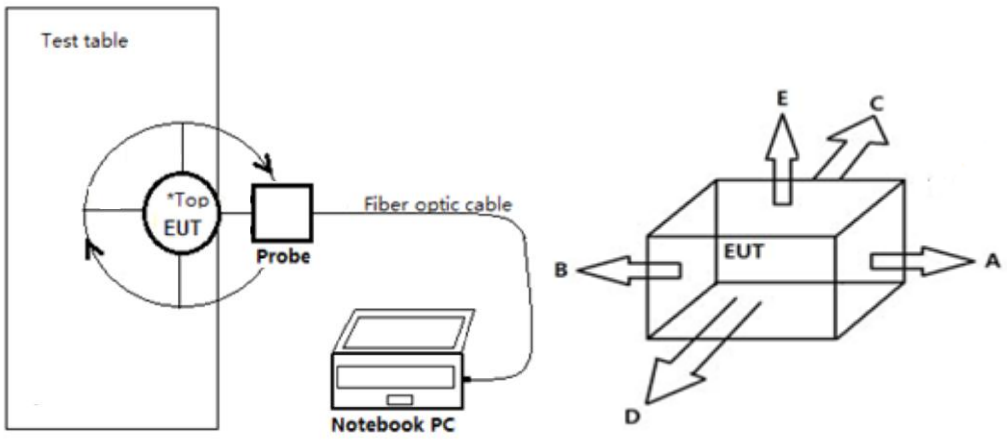
TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

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 Exposure				
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
300-1,500			f/300	<6
1,500-100,000			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
300-1,500			f/1500	<30
1,500-100,000			1.0	<30

f = frequency in MHz * = Plane-wave equivalent power density

Per the guidance of KDB 680106, the E-field and H-field limits between 100 kHz to 300 kHz are to be considered the same as those at 300 kHz in Table 1 of § 1.1310 shown in the table above, any device (both portable and mobile) operating at frequencies below 100 kHz is considered compliant for the purpose of equipment authorization when the external (unperturbed) temporal peak field strengths do not exceed the 83 V/m for the electric field strength (E) and 90 A/m for the magnetic field strength (H).

8. Test setup



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9. Measurement procedure

a) The RF exposure test was performed on the table in anechoic chamber.

b) The measurement was investigated between the edge of the charger and center of the field probe in the closest state.

c) Maximum E-field and H-field measurements were made on each of five sides of the EUT that could come in contact with a user. Five sides are defined as follows: Right (D), Top (E), Left (C), Rear (B) and Front (A). Refer to the test position diagram above.

d) According to the guidance of KDB 680106 D01 v04 test distance was 20 cm on the surrounding sides from the EUT.

10. Test Result

Quickly charging test mode:

Electric Field Emissions				
Test Position	Test Distance (cm)	Measure Value (V/m)	Limit (V/m)	Result
Front	20	**6.9431**	614	PASS
Rear	20	5.3908	614	PASS
Right	20	5.5376	614	PASS
Left	20	5.6056	614	PASS
Top	20	5.5240	614	PASS
Magnetic Field Emissions				
Test Position	Test Distance (cm)	Measure Value (A/m)	Limit (A/m)	Result
Front	20	0.1326	1.63	PASS
Rear	20	0.1326	1.63	PASS
Right	20	0.1319	1.63	PASS
Left	20	0.1443	1.63	PASS
Top	20	**0.1535**	1.63	PASS

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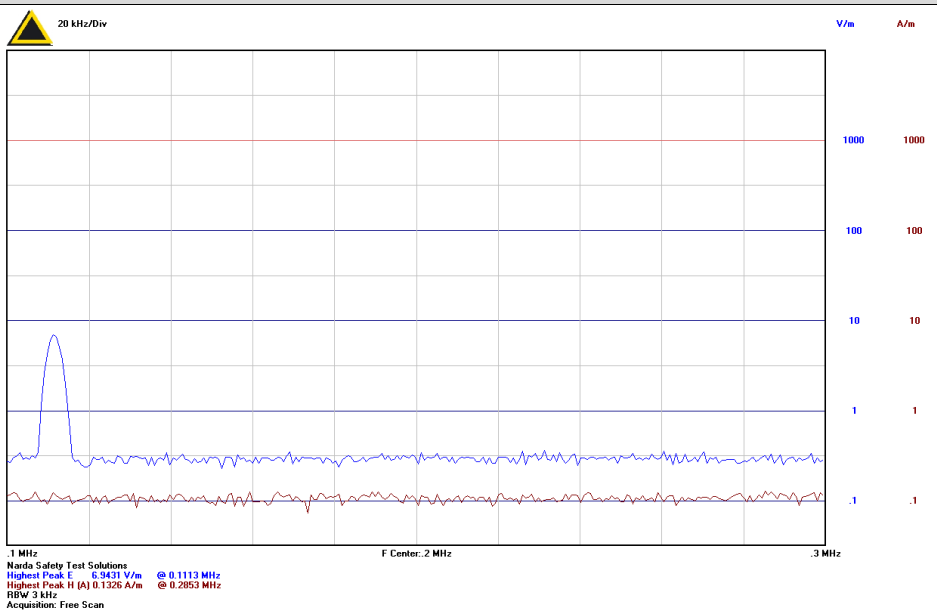
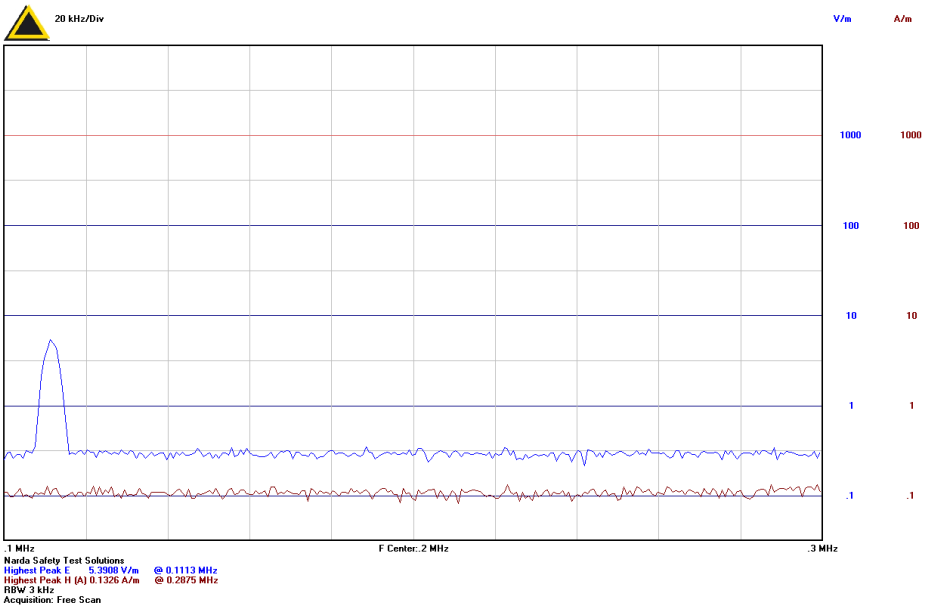
Electric Field Emissions & Magnetic Field Emissions
Front

Rear


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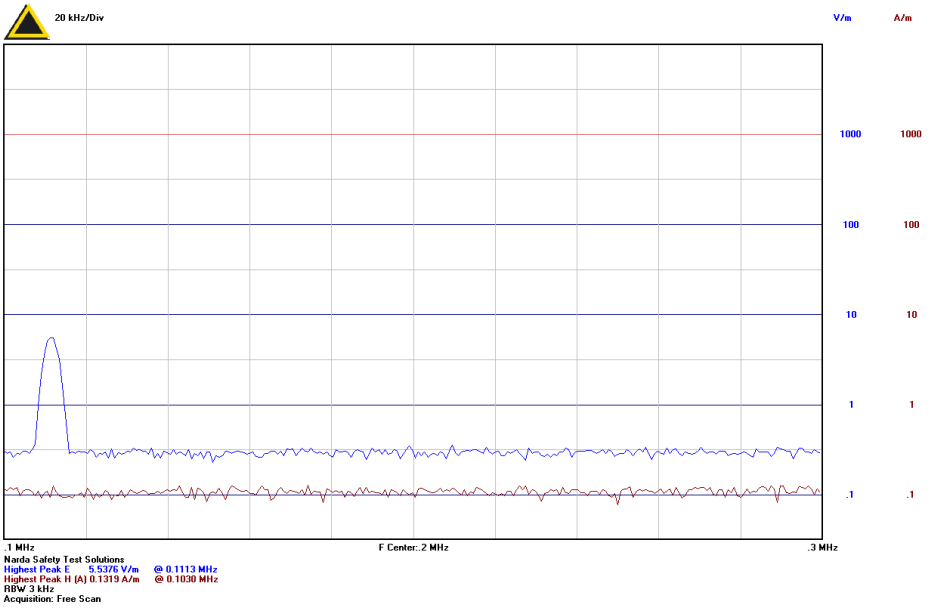
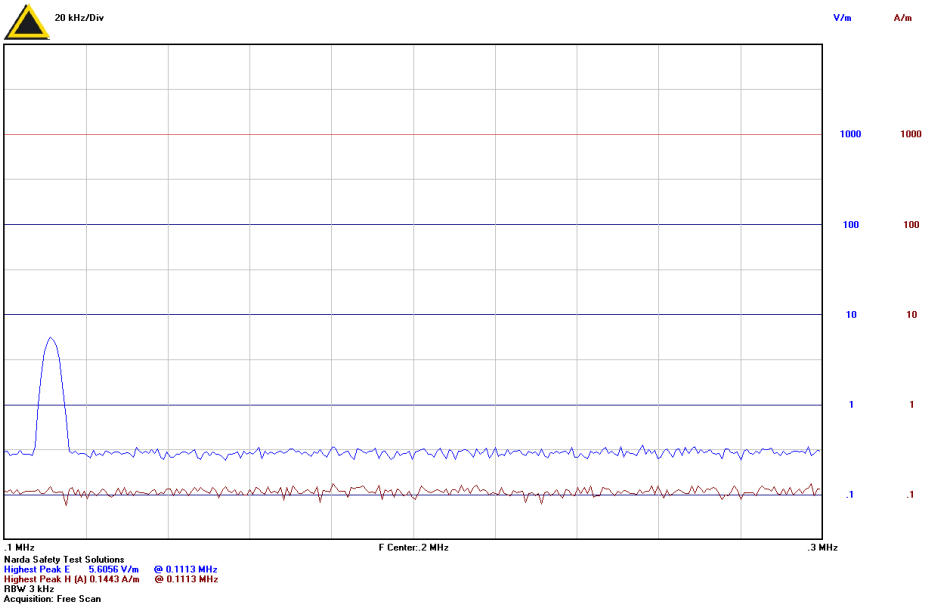
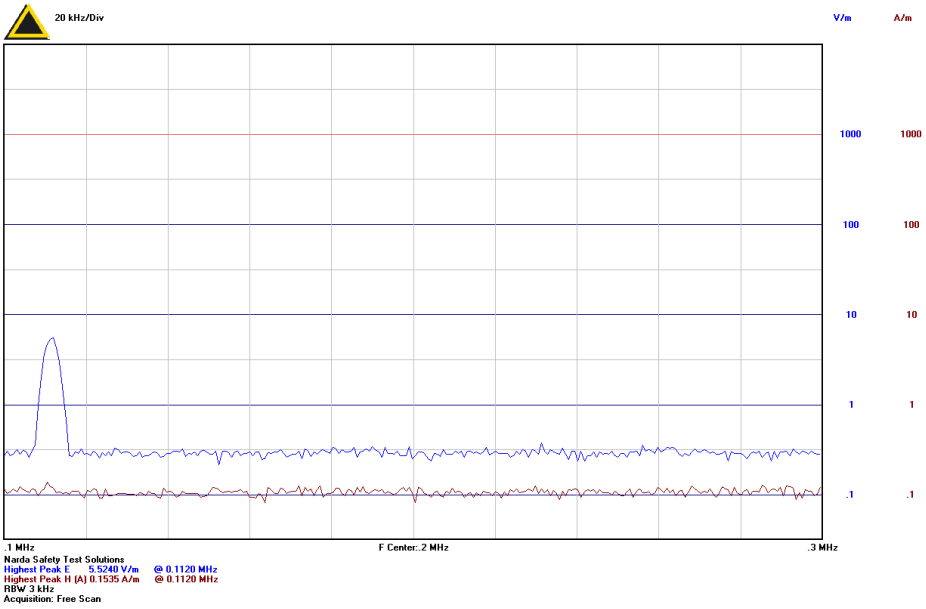
Right


20 kHz/Div
V/m
A/m
1000
1000
100
100
10
10
1
1
.1
.1
.1 MHz
F Center: .2 MHz
.3 MHz
Narda Safety Test Solutions
Highest Peak E 5.5376 V/m @ 0.1113 MHz
Highest Peak H (A) 0.1319 A/m @ 0.1030 MHz
RBW 3 kHz
Acquisition: Free Scan

Left


20 kHz/Div
V/m
A/m
1000
1000
100
100
10
10
1
1
.1
.1
.1 MHz
F Center: .2 MHz
.3 MHz
Narda Safety Test Solutions
Highest Peak E 5.6056 V/m @ 0.1113 MHz
Highest Peak H (A) 0.1443 A/m @ 0.1113 MHz
RBW 3 kHz
Acquisition: Free Scan

Top


The test result compliance with §1.1310 and KDB 680106 D01 v04 requirement.

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