RF Exposure Evaluation Report

Application No.:	DNT2512100307R14496-16946
Applicant:	Shenzhen Huanqi Technology Co.,LTD
Address of Applicant:	2112,main building,Tian'an digtal era building, NO.6, Tairan 4th Road, Tian'an community, Shatou street, Futian District, Shenzhen
EUT Description:	Smart Security Safe
Model No.:	i6 PRO
Additional Model(s):	/
FCC ID:	2BTKL-I6PRO
Power supply:	Input:DC 24V
Trade Mark:	/
Standards:	FCC CFR 47 Part 1.1307(b)&1.1310 KDB 680106 D01 Wireless Power Transfer v04
Date of Receipt:	2025/12/10
Date of Test:	2025/12/10 to 2025/12/19
Date of Issue:	2026/01/05
Test Result:	**PASS ***

Prepared By: Gale . Lin (Testing Engineer)

Reviewed By: Wayne . Lin (Project Engineer)

Approved By: Yeise Chen (Manager)

Note: If there is any objection to the results in this report, please submit a written inquiry to the company within 15 days from the date of receiving the report. The test report is effective only with both signature and specialized stamp, and is issued by the company in accordance with the requirements of the "Conditions of Issuance of Test Reports" printed in the attached page. Unless otherwise stated, the results presented in this report only apply to the samples tested this time. Partial reproduction of this report is not allowed unless approved by the company in writing.

Dongguan DN Testing Co., Ltd.

Add: No. 1, West Fourth Street, Xingfa South Road, Wusha Community, Chang 'an Town, Dongguan City, Guangdong P.R.China

Web: www.dn-testing.com Tel:+86-769-88087383 E-mail: service@dn-testing.com

Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Jan.5, 2026	Valid	Original Report

Test Summary

No.	Description of Test Item	FCC Standard Section	Results
1	Maximum Permissible Exposure	Part 1.1307(b)&1.1310	PASS

Contents

TEST SUMMARY 3

1 GENERAL INFORMATION 5

1.1 TEST LOCATION 5
1.2 GENERAL DESCRIPTION OF EUT 5
1.3 TEST FACILITY 6
1.4 TEST MODE 6
1.5 TEST EQUIPMENT LIST 7
1.6 ASSISTANT EQUIPMENT USED FOR TEST 7
1.7 MEASUREMENT UNCERTAINTY (95% CONFIDENCE LEVELS, K=2) 7

2 MAXIMUM PERMISSIBLE EXPOSURE 8

2.1 LIMIT 8
2.2 TEST SETUP A 9
2.3 TEST PROCEDURE 9
2.4 EQUIPMENT APPROVAL CONSIDERATIONS 10
2.5 TEST RESULT FOR TEST SETUP A: 11

1 General Information

1.1 Test Location

Company:	Dongguan DN Testing Co., Ltd
Address:	No. 1, West Fourth Street, South Xinfa Road, Wusha Liwu, Chang ' an Town, Dongguan City, Guangdong P.R.China
Test engineer:	Gali Lin

1.2 General Description of EUT

Manufacturer:	Shenzhen Huanqi Technology Co.,LTD
Address of Manufacturer:	2112,main building,Tian'an digtal era building, NO.6, Tairan 4th Road, Tian'an community, Shatou street, Futian District, Shenzhen
Factory:	Shenzhen Huanqi Technology Co.,LTD
Address of Factory:	2112,main building,Tian'an digtal era building, NO.6, Tairan 4th Road, Tian'an community, Shatou street, Futian District, Shenzhen
Test EUT Description:	Smart Security Safe
Model No.:	i6 PRO
Additional Model(s):	/
Chip Type:	SC5004A
Serial number:	PR2512100307R14496
Power Supply:	Input: DC 24V
Output Max Wireless Charge Power:	Coil 1: 9W; Coli 2: 9W; Coil 1 + Coli 2:18W
Trade Mark:	/
Hardware Version:	V1.0
Software Version:	V1.0
Operation Frequency:	110.5-205kHz;
Modulation Technique:	ASK
Sample Type:	☐ Portable Device, ☐ Module,☒ Mobile Device
Antenna Type:	Copper inducted coil
Remark: *Since the above data and/or information is provided by the applicant relevant results or conclusions of this report are only made for these data and/or information , DNT is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.	

1.3 Test Facility

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

Lab A:

• FCC, USA

Designation Number: CN1348

• A2LA (Certificate No. 7050.01)

DONGGUAN DN TESTING CO., LTD. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 7050.01.

• Innovation, Science and Economic Development Canada

DONGGUAN DN TESTING CO., LTD. EMC Laboratory has been recognized by ISED as an accredited testing laboratory. CAB identifier is CN0149.

IC#: 30755.

1.4 Test Mode

Operating Environment:	
Temperature:	20~25.0 ˚C
Humidity:	45~56 % RH
Atmospheric Pressure:	101.0~101.30 KPa
Test mode:	
Transmitting mode:	Keep the EUT in transmitting mode with all kind of modulation and all kind of data rate.

Test Item	Test Mode
Maximum Permissible Exposure	Wireless Charging
Note： The worst Full Load status is recorded in the report	

Note: The Load 99% Charging is worst case, only the worst case will be recorded in the report.

1.5 Test Equipment List

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Electric and Magnetic Field Probe-Analyzer	Nearda	NBM550	B-0264	2025-10-21	2026-10-20
Electric and Magnetic Field Probe-Analyzer	Nearda	EF0391	A-1131	2025-10-21	2026-10-20

1.6 Assistant equipment used for test

Code	Equipment	Manufacturer	Model No.	Equipment No.
1	AC/DC Adapter	Huanqi	J131-24004000D	NA
2	iPhone	Apple	MYLQ3CH/A MU2Q3CH/A	NA

1.7 Measurement Uncertainty (95% confidence levels, k=2)

Magnetic field

When the confidence level is 95%, the coverage factor k = 2, and the expanded uncertainty U = k u(B) = 2 × u(B) = 66.796 nT.

Points	average value x, nT	Class A standard uncertainty u_a (B), nT	Class B standard uncertainty u_b (B), nT	Synthetic uncertainty u(B), nT
Test point 1	630.15	0.559	33.393	33.398
Expansion of uncertainty：66.796				

Electric field

When the confidence level is set at 95%, with the inclusion factor k = 2, the expanded uncertainty U = k u(E) = 2 × u(E) = 25.63 V/m.

Points	average value x, V/m	Class A standard uncertainty u_a (E)，V/m	Class B standard uncertainty u_b (E), V/m	Synthetic uncertainty u (E), V/m
Test point 1	220.31	0.023	12.815	12.815
Expansion of uncertainty：25.63				

2 Maximum Permissible Exposure

2.1 Limit

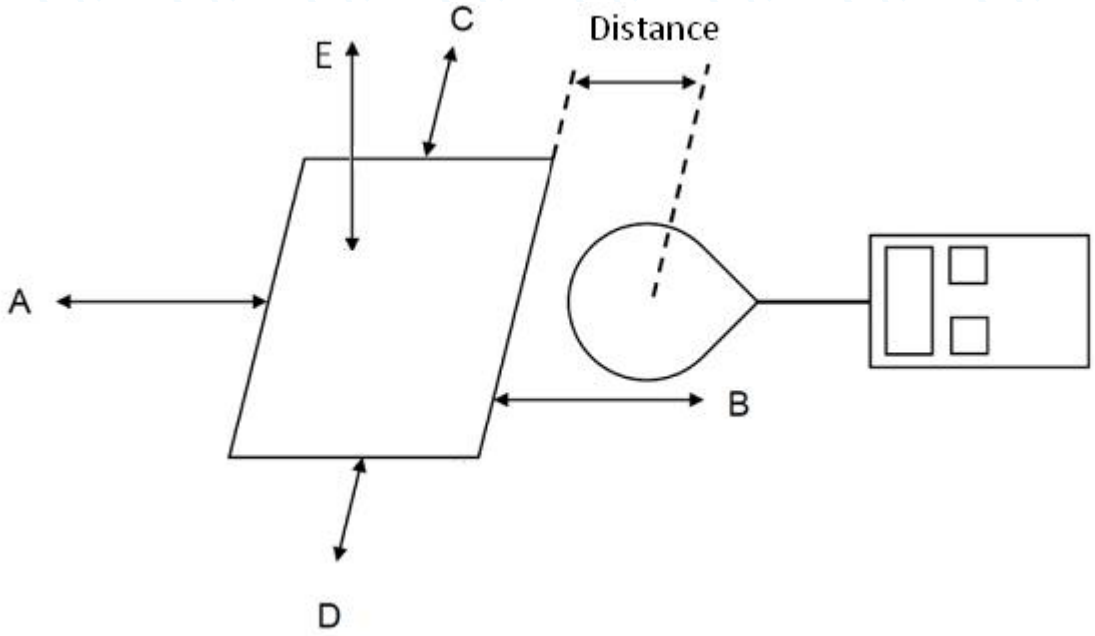
Limits for Maximum Permissible Exposure (MPE)

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 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

Note:

1. f = frequency in MHz * = Plane-wave equivalent power density.
2. For devices designed for typical desktop applications, such a wireless charging pads, RF exposure evaluation should be conducted assuming a user separation distance of 20 cm. E and H field strength measurements or numerical modeling may be used to demonstrate compliance. Measurements should be made from all sides and the top of the primary/client pair, with the 20 cm measured from the center of the probe(s) to the edge of the device. Emissions between 100 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 614 V/m and 1.63 A/m. A KDB inquiry is required to determine the applicable exposure limits below 100 kHz.

2.2 Test Setup A



2.3 Test Procedure

a. The test was performed on 360 degree turn table in anechoic chamber.

b. The probe was placed at 20 cm surrounding the device and 20 cm above the top of the charger and the geometric centre of the probe, for test setup A.

d. The highest emission level was recorded and compared with limit as soon as measurement of each point; A, B, C, D, E were completed.

2.4 Equipment Approval Considerations

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.

1	Power transfer frequency is less that 1 MHz
	YES; the device operated in the frequency range from 110.5-205KHz.
2	Output power from each primary coil is less than or equal to 15 watts.
	YES; the each primary coil maximum output power of the primary coil is 9W.
3	A client device providing the maximum permitted load is placed in physical contact with the transmitter (i.e., the surfaces of the transmitter and client device enclosures need to be in physical contact)
	YES; Client device is placed directly in contact with the transmitter.
4	Only § 2.1091-Mobile exposure conditions apply (i.e., this provision does not cover § 2.1093-Portable exposure conditions).
	YES
5	The E-field and H-field strengths, at and beyond 20 cm surrounding the device surface, are demonstrated to be less than 50% of the applicable MPE limit, per KDB 447498, Table 1. These measurements shall be taken along the principal axes of the device, with one axis oriented along the direction of the estimated maximum field strength, and for three points per axis or until a 1/d (inverse distance from the emitter structure) field strength decay is observed. Symmetry considerations may be used for test reduction purposes. The device shall be operated in documented worst-case compliance scenarios (i.e., the ones that lead to the maximum field components), and while all the radiating structures (e.g., coils or antennas) that by design can simultaneously transmit are energized at their nominal maximum power.
	YES; The EUT field strength levels are 50% x MPE limts.
6	For systems with more than one radiating structure, the conditions specified in (5) must be met when the system is fully loaded (i.e., clients absorbing maximum power available), and with all the radiating structures operating at maximum power at the same time, as per design conditions. If the design allows one or more radiating structures to be powered at a higher level while other radiating structures are not powered, then those cases must be tested as well. For instance, a device may use three RF coils powered at 5 W, or one coil powered at 15 W: in this case, both scenarios shall be tested.
	YES; the transfer system includes only single primary and secondary coils.

2.5 Test Result for Test setup A:

Coil 1

E-field strength	
Frequency range (KHz)	128.24KHz
Test Mode	9W Charging
Position A(V/m)	0.954
Position B(V/m)	0.958
Position C(V/m)	1.256
Position D(V/m)	1.210
Position E(V/m)	3.455
Limits (V/m)	614
50% Limits(V/m)	307

H-field strength	
Frequency range (KHz)	128.24KHz
Test Mode	9W Charging
Position A(A/m)	0.021
Position B(A/m)	0.019
Position C(A/m)	0.020
Position D(A/m)	0.022
Position E(A/m)	0.029
Limits (A/m)	1.630
50% Limits (A/m)	0.815

Coil 2

E-field strength	
Frequency range (KHz)	128.24KHz
Test Mode	9W Charging
Position A(V/m)	0.925
Position B(V/m)	0.877
Position C(V/m)	1.326
Position D(V/m)	1.334
Position E(V/m)	3.752
Limits (V/m)	614
50% Limits(V/m)	307

H-field strength	
Frequency range (KHz)	128.24KHz
Test Mode	9W Charging
Position A(A/m)	0.017
Position B(A/m)	0.017
Position C(A/m)	0.016
Position D(A/m)	0.024
Position E(A/m)	0.035
Limits (A/m)	1.630
50% Limits (A/m)	0.815

---END REPORT---