

## RF Exposure Report

**Applicant:**

THE INTERESTING LAB

**Address of Applicant:**

Room 411, Building R, 163 Ban Xue Gang Da Dao, Longgang,  
Shenzhen, Guangdong, China

**Manufacturer/Factory:**

THE INTERESTING LAB

**Address of**

Room 411, Building R, 163 Ban Xue Gang Da Dao, Longgang,  
Shenzhen, Guangdong, China

**Manufacturer/Factory:**

Shenzhen, Guangdong, China

**Equipment Under Test (EUT)**

**Product Name:**

The Boring Lamp

**Model No.:**

BZ0001

**FCC ID:**

2BDMN-BZ0001

**Applicable standards :**

FCC CFR Title 47 Part 1 §1.1307

FCC CFR Title 47 Part 1 §1.1310

FCC CFR Title 47 Part 2 §2.1091

KDB 680106 D01 RF Exposure Wireless Charging App v04

**Date of sample receipt:**

2023-11-16

**Date of Test:**

2023-11-19 to 2023-12-21

**Date of report issued:**

2024-01-24

**Test Result :**

PASS \*

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

Authorized Signature:

Robinson Luo  
Laboratory Manager

This results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

## 2 Version

Version No.	Date	Description
00	2024-01-24	Original

Prepared By:

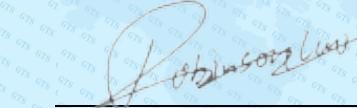


Date:

2024-01-24

Project Engineer

Check By:



Date:

2024-01-24

Reviewer

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## 4 General Information

### 4.1 General Description of EUT

Product Name:	The Boring Lamp
Model No.:	BZ0001
Serial No.:	N/A
Test sample(s) ID:	GTSL2024010006-1
Sample(s) Status	Engineer sample
Operation Frequency:	110.5kHz ~ 205KHz
Modulation type:	ASK
Antenna Type:	Inductive loop coil Antenna
Antenna gain:	0dBi
Power supply:	Input: DC 12V/2.5A Wireless charging: 7.5W-15W

#### Remark:

1. Antenna gain information provided by the customer
2. The relevant information of the sample is provided by the entrusting company, and the laboratory is not responsible for its authenticity.

## 4.2 Test Facility

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

- **FCC—Registration No.: 381383**

Designation Number: CN5029

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files.

- **ISED—Registration No.: 9079A**

CAB identifier: CN0091

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of ISED for radio equipment testing

- **NVLAP (LAB CODE:600179-0)**

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).

## 4.3 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.

Address: No. 123- 128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102

Tel: 0755-27798480

Fax: 0755-27798960

## 4.4 Description of Support Units

Manufacturer	Description	Model	S/N
Shenzhen Andsmps ElectronicTechnolo gy Co., Ltd	AC/DC ADAPTER	AS024M1-1202500Z	N/A
YBZ	Intelligent wireless charging full function test module	001	N/A

## 4.5 Deviation from Standards

None.

## 4.6 Abnormalities from Standard Conditions

None.

## 4.7 Other Information Requested by the Customer

None.

## 4.8 Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes
H-field	Level Accuracy: 1KHz~400KHz	1.0	(1)
E-field	Level Accuracy: 1KHz~400KHz	1.0	(1)

The reported uncertainty of measurement  $y \pm U$ , where expended uncertainty  $U$  is based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95 %.

## 5 Requirements

### Test Methodology:

The tests documented in this report were performed in accordance with FCC CFR Title 47 Part 1 §1.1307, FCC CFR Title 47 Part 1 §1.1310, FCC CFR Title 47 Part 2 §2.1091 and KDB 680106 D01 RF Exposure Wireless Charging App v04

### Limit:

Table 1 to § 1.1310(e)(1) - Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
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#### (i) Limits for Occupational/Controlled Exposure

0.3-3.0	614	1.63	*(100)	≤6
3.0-30	1842/f	4.89/f	*(900/f <sup>2</sup> )	<6
30-300	61.4	0.163	1.0	<6
300-1,500			f/300	<6
1,500-100,000			5	<6

#### (ii) Limits for General Population/Uncontrolled Exposure

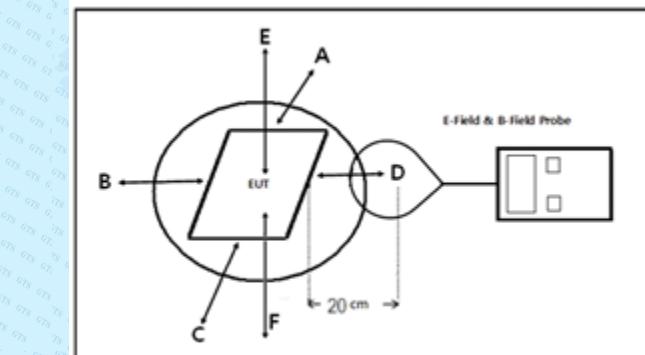
0.3-1.34	614	1.63	*(100)	<30
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	<30
30-300	27.5	0.073	0.2	<30
300-1,500			f/1500	<30
1,500-100,000			1.0	<30

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

### Method Of Measurement:

- The RF exposure test was performed in shielded chamber.
- The geometric centre of probe was placed at 20 cm test distance surrounding the device and 20 cm above the top surface.
- The measurement probe used to search of highest strength.
- The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E) were completed.
- The EUT were measured according to the dictates of KDB 680106 D01 RF Exposure Wireless Charging App v04.

## Test Setup:



Note: As bottom point is not required to test for desktop devices

## Equipment Approval Considerations:

The EUT comply with 680106 D01 RF Exposure Wireless Charging App v04.

## Measuring Instrument Used:

Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
Magnetic field meter	NARDA	ELT-400	EE030	Sep.09, 2023	Sep.08, 2024
Magnetic field probe	NARDA	EP 601	811ZX01000	Jun.04, 2023	Jun.03, 2024

## E Field And H Field Strength Test Result:

Test Mode	Description
Mode 1	Keep the EUT charging with wireless charging load (99% load).
Mode 2	Keep the EUT charging with wireless charging load (50% load).
Mode 3	Keep the EUT charging with wireless charging load (1% load).

Note: All the modes had been tested, but only the worst data was recorded in the report (99% load).

### H-Filed Strength at 20 cm from the edges surrounding the EUT and 20 cm above the top surface of the EUT (A/m)

20cm					Limits(A/m)	50% Limits(A/m)
Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
0.115	0.133	0.153	0.116	0.124	1.63	0.815
0.134	0.116	0.133	0.124	0.123	1.63	0.815
0.163	0.135	0.118	0.098	0.108	1.63	0.815

### E-Filed Strength at 20 cm from the edges surrounding the EUT and 20 cm above the top surface of the EUT (V/m)

20cm					Limits(V/m)	50% Limits(V/m)
Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
43.226	50.766	58.306	42.849	47.879	614	307
48.127	42.849	47.750	46.619	42.978	614	307
58.683	51.143	43.226	44.357	45.617	614	307

## 6 Test Setup Photo

Reference to the **appendix I** for details.

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