

# Test Report

Verified code: 770468

Report No.: E202304201893-4

Customer: Suzhou Performance Information Technology Co., Ltd.

Address: 2F, Building 4th No.99 Gangtian Road, Suzhou Industrial Park Jiangsu Province,  
P.R.China

Sample Name: Multifunctional Clock Bluetooth Speaker Charger

Sample Model: TEKHOM ONXYZ

Receive Sample Date: Jun.07.2023

Test Date: Jul.19.2023 ~ Jul.19.2023

Reference Document: CFR47 FCC Part 1: Subpart I Section 1.1310  
CFR47 FCC Part 1: Subpart I Section 1.1307

Test Result: Pass

Prepared by: Wen Wenwen  
Wen Wenwen

Reviewed by: Jiang Tao  
Jiang Tao

Approved by: Xiao Liang  
Xiao Liang

GRG METROLOGY &amp; TEST GROUP CO., LTD.

Issued Date: 2023-09-14

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4. If there is any objection concerning the report, please inform us within 15 days from the date of receiving the report.
5. Without the agreement of the laboratory, the client is not authorized to use the test results for unapproved propaganda.

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**REPORT ISSUED HISTORY**

Report Version	Report No.	Description	Compile Date
1.0	E202304201893-4	Original Issue	2023-09-12

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## 1. GENERAL DESCRIPTION OF EUT

### 1.1 APPLICANT

Name: Suzhou Performance Information Technology Co., Ltd.  
Address: 2F, Building 4th No.99 Gangtian Road, Suzhou Industrial Park Jiangsu Province, P.R.China

### 1.2 MANUFACTURER

Name: Suzhou Performance Information Technology Co., Ltd.  
Address: 2F, Building 4th No.99 Gangtian Road, Suzhou Industrial Park Jiangsu Province, P.R.China

### 1.3 FACTORY

Factory : Suzhou Performance Information Technology Co., Ltd.  
Address: 2F, Building 4th No.99 Gangtian Road, Suzhou Industrial Park Jiangsu Province, P.R.China

### 1.4 BASIC DESCRIPTION OF EQUIPMENT UNDER TEST

Product Name: Multifunctional Clock Bluetooth Speaker Charger  
Product Model: TEKHOM E ONXYZ  
Adding Model: TEKHOM E ONXYZ Pro, TEKHOM E ONXYZ Plus, TEKHOM E ONXYZ1, TEKHOM E ONXYZ1 Pro  
Models Difference: Please refer to section 1.5

Trade Name:



Power Supply: Input: DC 20V 3.25A  
Model: A869-200325C-CN1  
Adapter 1: Input: 100-240V~ 50/60Hz 1.7A  
Output: DC 5V 3A/9V 3A/12V 3A/15V 3A/20V 3.25A 3.3-21V 3.25A 65W Max  
Model: PSD67-C  
Adapter 2: Input: 100-240V~ 50/60Hz 1.6A  
Output: DC 5V 3A/9V 3A/12V 3A/15V 3A/20V 3.35A  
PPS: 3.3-21V 3.0A  
Frequency Band: 117kHz-207kHz  
FCC ID: 2BB6ATEKHOM E



Antenna Type: Coil Antenna

Modulation type: FSK

Sample submitting way: ☒ Provided by customer ☐ Sampling

Sample No: E202304201893-0001

Temperature Range: -10℃ ~ +35℃

Hardware version: TEKHOM ONXYZ HW V0.5

Software version: TEKHOM ONXYZ SF V1.0

Note 1: According to model difference model TEKHOM ONXYZ is the test sample. All test results were performed on model TEKHOM ONXYZ.

Note 2: The basic description of the EUT is provided by the applicant. This report is made solely on the basis of such data and/or information. We accept no responsibility for the authenticity and completeness of the above data and information and the validity of the results and/or conclusions.

## 1.5 MODEL DIFFERENCE DESCRIPTIONS

The applicant declared that this EUT (Multifunctional clock Bluetooth speaker charger) the main model no. TEKHOM ONXYZ and the family models no. TEKHOM ONXYZ1, TEKHOM ONXYZ Pro, TEKHOM ONXYZ Plus, TEKHOM ONXYZ1 Pro have the same technical construction including circuit diagram, PCB LAYOUT, hardware version and software version identical. the difference refer the below table.

Model No.	Trade mark
TEKHOM ONXYZ	 
TEKHOM ONXYZ1	
TEKHOM ONXYZ Pro	
TEKHOM ONXYZ Plus	
TEKHOM ONXYZ1 Pro	

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Product Difference	Model name				
	TEKHOME ONXYZ	TEKHOME ONXYZ1	TEKHOME ONXYZ Pro	TEKHOME ONXYZ Plus	TEKHOME ONXYZ1 Pro
Wireless charging	√	√	√	√	√
radio	√	√	√	√	√
Bluetooth speaker	√	√	√	√	√
USB play music	√	√	×	×	√
Clock,date, alarm clock	√	√	√	√	√
USB-C1 charging port	√	√	√	√	√
USB-C2 charging port	√	√	√	√	√
USB-C3 charging port	×	×	√	×	√
USB-C4 charging port	×	×	√	√	×
USB-A1 charging port	√	√	×	√	×
USB-A2	√	√	×	×	√
WeChat applet	√	×	√	√	×
APP software	√	√	√	√	√
Other items (Key components, hardware, appearance, accessories)	√	√	√	√	√
Note: 1."√" indicates that this function is applicable to this model, and "×" indicates that this function is not applicable to this model. 2. The product has a total of 4 external charging ports. The position of A1 and C3 corresponds to the position of A2 and C4, and the internal circuit of the product is the same, only the interface shape is different.					

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## 2. LABORATORY AND MEASUREMENT UNCERTAINTY

### 2.1 LABORATORY

The tests & measurements refer to this report were performed by Shenzhen EMC Laboratory of GRG METROLOGY & TEST GROUP CO., LTD.

Add : Address: No.1301 Guanguang Road Xinlan Community, Guanlan Street, Longhua  
District Shenzhen, 518110, People's Republic of China

P.C. : 518110

Tel : 0755-61180008

Fax : 0755-61180008

### 2.2 MEASUREMENT UNCERTAINTY

Parameter	Worst Case Uncertainty	Max. Uncertainty
E/H-Field Level Tester	12.6%	<30%

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95%.  
This uncertainty represents an expanded uncertainty factor of  $k=2$ .

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### 3. TEST MODE AND SUPPORTIVE INSTRUMENTS

#### 3.1 TEST MODE

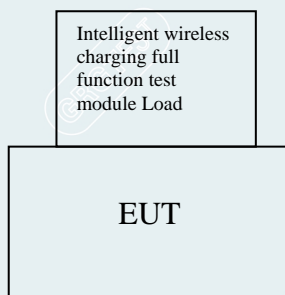
Mode No.	Description of the modes
Mode 1	EUT Standby Mode
Mode 2	EUT charging mode + RX load(5W)
Mode 3	EUT charging mode + RX load(7.5W)
Mode 4	EUT charging mode + RX load(10W)
Mode 5	EUT charging mode + RX load(15W)

#### 3.2 BLOCK DIAGRAM

For mode 1



For mode 2 to mode 5



#### 3.3 LOCAL SUPPORTIVE INSTRUMENTS

No.	Name of Equipment	Manufacturer	Model	Serial Number
A	Intelligent wireless charging full function test module Load	/	/	/

**4. LIST OF USED TEST EQUIPMENT AT GRGT****4.1 LIST OF USED TEST EQUIPMENT**

Name of equipment	Manufacturer	Model	Serial number	Calibration due
Long, medium and short wave electromagnetic field frequency selective analyzer	narda	EHP-200A	180ZX00611	2023-09-04

Note: The calibration interval of the test instruments is 12 months.

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## 5. TECHNICAL REQUIREMENTS SPECIFICATION

### 5.1 TEST LIMIT

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

The EUT does comply with requirements of KDB 680106 D01.

1) Power transfer frequency is less than 1MHz

Yes, the operating frequency of the device is 117kHz to 207kHz.

2) 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.

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 pair of coils.

Yes, the transfer system includes only single primary and secondary coils.

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

Yes, client device is placed directly in contact with the transmitter.

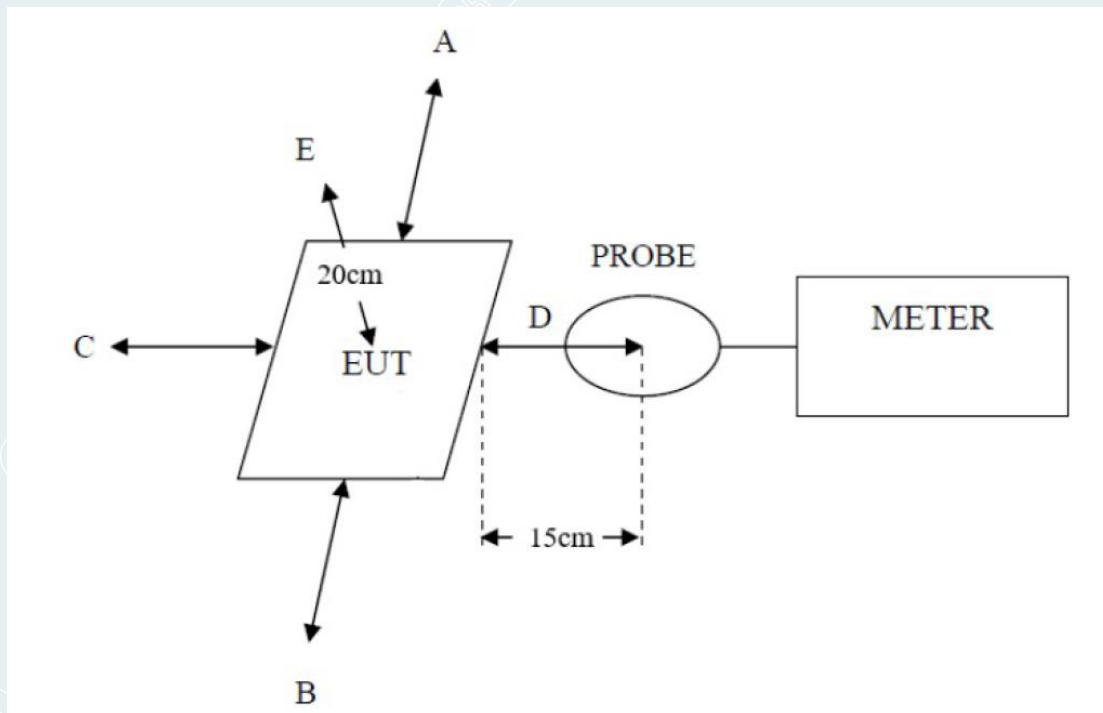
5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).

Yes, the EUT is a mobile Wireless Charger.

6) The aggregate H-field strengths at 15cm 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 field strength levels are 50% x MPE limit.

## 5.2 TEST PROCEDURES



Note: Measurements should be made from all sides and the top of EUT, with the 15cm measured from the center of the probe(s) to the edge of the device and the 20cm measured from the center of the probe(s) to the top of the device. Position A is the front of the EUT, position B is the rear of the EUT, position C is the left of the EUT, position D is the right of the EUT, position E is the top of the EUT.

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### 5.3 TEST RESULT

Date of testing:	2023-07-19
Ambient temperature:	24.8 °C
Relative humidity:	55%RH
Ambient Pressure	101kPa
Test by:	Zhang Zishan

H-Field Strength at 15 cm from the edges surrounding the EUT and 20cm from the top surface of the EUT.

EUT Test Mode	Measured H-Field Strength Values(A/m)					50% Limit(A/m)	Limit (A/m)	Result
	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E			
Mode 1	0.0473	0.0287	0.0170	0.0249	0.0181	0.815	1.63	Pass
Mode 2	0.0291	0.0627	0.0448	0.1325	0.0353	0.815	1.63	Pass
Mode 3	0.0380	0.1179	0.1616	0.0251	0.0541	0.815	1.63	Pass
Mode 4	0.0201	0.0932	0.0927	0.0223	0.0291	0.815	1.63	Pass
Mode 5	0.0893	0.0328	0.0272	0.1039	0.0433	0.815	1.63	Pass

E-Field Strength at 15 cm from the edges surrounding the EUT and 20cm from the top surface of the EUT.

EUT Test Mode	Measured E-Field Strength Values(V/m)					50% Limit(V/m)	Limit (V/m)	Result
	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E			
Mode 1	0.1563	0.1203	0.1019	0.1035	0.0997	307	614	Pass
Mode 2	0.4863	0.6503	0.2183	0.6378	0.3432	307	614	Pass
Mode 3	0.5286	0.5737	0.4294	0.2282	0.4311	307	614	Pass
Mode 4	0.5592	0.6566	0.6932	0.2300	0.4138	307	614	Pass
Mode 5	0.7814	0.5144	0.3315	0.8702	0.6094	307	614	Pass

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## **6. PHOTOGRAPHS OF TEST SET-UP**

Please refer to the attached document E202304201893-7 test setup photo-FCC.

## **7. PHOTOGRAPHS OF THE EUT**

Please refer to the attached document E202304201893-9 EUT photo-FCC.

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