



## RF Exposure Evaluation Declaration

Report No.: S202304215278E11

Issue Date: 11-02-2023

**Applicant:** Suzhou Performance Information Technology Co., Ltd.

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

**FCC ID:** 2BB6ATEKHOME

**Application Type:** Certification

**Product:** Multifunctional Clock Bluetooth Speaker Charger

**Model No.:** TEKHOME ONXYZ

**FCC Classification:** Digital Transmission System (DTS)  
Spread Spectrum Transmitter (DSS)

**FCC Rule Part(s):** CFR 47, FCC Part 2.1091 Radio frequency radiation  
exposure evaluation: mobile devices.

**Item Receipt date:** Apr 20, 2023

**Test Date:** Nov 23~ Dec 19, 2022

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The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in KDB 558074 D01. Test results reported herein relate only to the item(s) tested.

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The test report must not be used by the client to claim product certifications, approval, or endorsement by NVLAP, NIST or any agency of U.S. Government.

## Revision History

| Report No.       | Version | Description | Issue Date |
|------------------|---------|-------------|------------|
| S202304215278E11 | Rev. 01 | /           | 11-02-2023 |
|                  |         |             |            |

## 1. PRODUCT INFORMATION

### 1.1. Equipment Description

|                      |                                                                                                                                                                                                                                                                                                                                                            |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name:        | Multifunctional Clock Bluetooth Speaker Charger                                                                                                                                                                                                                                                                                                            |
| Model Name:          | TEKHOME ONXYZ                                                                                                                                                                                                                                                                                                                                              |
| Additional Model:    | TEKHOME ONXYZ Pro, TEKHOME ONXYZ Plus, TEKHOME ONXYZ1, TEKHOME ONXYZ1 Pro                                                                                                                                                                                                                                                                                  |
| Trade Mark:          |   Tekism Dynamics<br>  |
| Power Supply Rating: | Input: 20V==3.25A<br>Adapter1:<br>Model: A869-200325C-US1<br>Input: 100-240V~ 50/60Hz 1.7A<br>Output: DC 5V 3A 15.0W/9V 3A 27.0W/12V 3A 36.0W/15V 3A 45.0W/20V 3.25A 65.0W 3.3-21V 3.25A 65.0W Max<br>Adapter2:<br>Model: PSD67-C<br>Input: 100-240V~ 50/60Hz 1.6A<br>Output: DC 5V 3A/9V 3A/12V 3A/15V 3A/20V 3.35A<br>Pps:3.3-21.0V 3.0A<br>67.0W Max    |
| Bluetooth Version:   | 4.0                                                                                                                                                                                                                                                                                                                                                        |

### 1.2. Product Specification Subjective to this Report

|                     |                                                    |
|---------------------|----------------------------------------------------|
| Bluetooth Frequency | 2402~2480MHz                                       |
| Bluetooth Version   | 4.0                                                |
| Type of modulation  | BLE:GFSK<br>BT: GFSK, $\pi/4$ DQPSK                |
| Data Rate           | BLE:1Mbps<br>BT:1Mbps(GFSK), 2Mbps( $\pi/4$ DQPSK) |
| Antenna Type:       | PCB Antenna                                        |
| Antenna Gain:       | -0.05dBi                                           |

## 2. RF Exposure Evaluation

### 2.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

#### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

| Frequency Range<br>(MHz)                                  | Electric Field<br>Strength (V/m) | Magnetic Field<br>Strength (A/m) | Power Density<br>(mW/cm <sup>2</sup> ) | Average Time<br>(Minutes) |
|-----------------------------------------------------------|----------------------------------|----------------------------------|----------------------------------------|---------------------------|
| (A) Limits for Occupational/ Control Exposures            |                                  |                                  |                                        |                           |
| 300-1500                                                  | --                               | --                               | f/300                                  | 6                         |
| 1500-100,000                                              | --                               | --                               | 5                                      | 6                         |
| (B) Limits for General Population/ Uncontrolled Exposures |                                  |                                  |                                        |                           |
| 300-1500                                                  | --                               | --                               | f/1500                                 | 6                         |
| 1500-100,000                                              | --                               | --                               | 1                                      | 30                        |

f= Frequency in MHz

Calculation Formula:  $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$

Where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

$G$  = gain of antenna in linear scale

$\pi$  = 3.1416

$r$  = distance between observation point and center of the radiator in cm

$P_d$  is the limit of MPE, 1mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance  $r$  where the MPE limit is reached.

## 2.2. Test Result of RF Exposure Evaluation

|               |                                                 |
|---------------|-------------------------------------------------|
| Product Name: | Multifunctional Clock Bluetooth Speaker Charger |
| Test Item:    | RF Exposure Evaluation                          |

| Mode | Frequency<br>(MHz) | Maximum<br>Conducted<br>OutputPower<br>(dBm) | Antenna<br>Gain<br>(dBi) | PG    |       | MPE<br>(mW/cm <sup>2</sup> ) | MPE<br>Limits<br>(mW/cm <sup>2</sup> ) |
|------|--------------------|----------------------------------------------|--------------------------|-------|-------|------------------------------|----------------------------------------|
|      |                    |                                              |                          | (dBm) | (mW)  |                              |                                        |
| BT   | 2402 - 2480        | 0.59                                         | -0.05                    | 0.54  | 1.132 | 0.00022                      | 1.00                                   |
| BLE  | 2402 - 2480        | -0.32                                        | -0.05                    | -0.37 | 0.918 | 0.00018                      | 1.00                                   |

Remark: MPE use distance is 20cm from manufacturer declaration of user manual.

### CONCULISON:

The Max Power Density at R (20 cm) =  $0.00022\text{mW/cm}^2 < 1\text{mW/cm}^2$ .

So the EUT complies with the requirement.

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