



# RF EXPOSURE EVALUATION

## FCC ID:2BSMA-BS3000-004

**Report Number..... : ZKT-260724L1714E-2**

**Date of Test..... : Jan. 19, 2026 to Sep. 11, 2026**

**Date of issue..... : Sep. 11, 2026**

**Total number of pages..... : 8**

**Test Result ..... : PASS**

**Testing Laboratory..... : Shenzhen ZKT Technology Co., Ltd.**

**Address ..... : 1/F, No. 101, Building B, No. 6, Tangwei Community Industrial Avenue, Fuhai Street, Bao'an District, Shenzhen, China**

**Applicant's name ..... : VOXAURA GmbH**

**Address ..... : Eschentalweg 5, Friesenheim, Germany**

**Manufacturer's name ..... : Shenzhen STEP Electronic and Lighting Co., Ltd**

**Address ..... : 14/F, Huide Building, Mintang Road 385, Longhua District, Shenzhen, China**

**Test specification:**

**Standard..... : FCC 47CFR §2.1091  
KDB 447498 D01 General RF Exposure Guidance v06**

**Test procedure..... : /**

**Non-standard test method ..... : N/A**

**Test Report Form No..... : /**

**Test Report Form(s) Originator..... : ZKT Testing**

**Master TRF ..... : Dated: 2026-02-07**

This device described above has been tested by ZKT, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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**Product name..... : Smart Sensor**

**Trademark ..... : N/A**

**Model/Type reference..... : 122.00.02.004**

**Ratings..... : Input: DC 3V (1\*CR2450 battery)**



Testing procedure and testing location:

Testing Laboratory.....: Shenzhen ZKT Technology Co., Ltd.

Address.....: 1/F, No. 101, Building B, No. 6, Tangwei Community  
Industrial Avenue, Fuhai Street, Bao'an District,  
Shenzhen, China

Tested by (name + signature).....: Jim Liu

Reviewer (name + signature).....: Jackson Fang

Approved (name + signature).....: Lake Xie





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1. VERSION

| Report No.         | Version | Description             | Approved      |
|--------------------|---------|-------------------------|---------------|
| ZKT-260724L1714E-2 | Rev.01  | Initial issue of report | Sep. 11, 2026 |
|                    |         |                         |               |



## 2. TEST FACILITY

Shenzhen ZKT Technology Co., Ltd.

Add. : 1/F, No. 101, Building B, No. 6, Tangwei Community Industrial Avenue, Fuhai Street, Bao'an District, Shenzhen, China

FCC Test Firm Registration Number: 927491

Designation Number: CN1431

IC Registered No.: 27033

CAB identifier: CN0110

Designation Number: CN0110



### 3. GENERAL DESCRIPTION OF EUT

|                        |                                 |
|------------------------|---------------------------------|
| Product Name:          | Smart Sensor                    |
| Trade Mark:            | N/A                             |
| Model No.:             | 122.00.02.004                   |
| Serial No.:            | N/A                             |
| Model Different.:      | N/A                             |
| Hardware Version:      | K533                            |
| Software Version:      | V0.23                           |
| Sample(s) Status:      | Engineer sample                 |
| Operation Frequency:   | 2402MHz~2480MHz                 |
| Channel Numbers:       | 40 Channels                     |
| Channel Spacing:       | 2MHz                            |
| Modulation Technology: | GFSK                            |
| Antenna Type:          | PCB Antenna                     |
| Antenna Gain:          | -5.34dBi                        |
| Power Supply:          | Input: DC 3V (1*CR2450 battery) |
| Battery Capacity:      | N/A                             |

Note1: For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

Note2: The EUT's all information provided by client.



## RF Exposure Evaluation

### Limits

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 (MHz)                                   | Electric field strength (V/m) | Magnetic field strength (A/m) | Power density (mW/cm <sup>2</sup> ) | Averaging time (minutes) |
|---------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| (A) Limits for Occupational/Controlled Exposures        |                               |                               |                                     |                          |
| 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                        |
| 300–1500                                                |                               |                               | f/300                               | 6                        |
| 1500–100,000                                            |                               |                               | 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 <sup>2</sup> )              | 30                       |
| 30–300                                                  | 27.5                          | 0.073                         | 0.2                                 | 30                       |
| 300–1500                                                |                               |                               | f/1500                              | 30                       |
| 1500–100,000                                            |                               |                               | 1.0                                 | 30                       |

f = frequency in MHz

Friis transmission formula:  $Pd = (Pout \cdot G) / (4 \cdot \pi \cdot r^2)$

Where

**Pd** = power density in mW/cm<sup>2</sup>, **Pout** = 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

Pd is the limit of MPE, 1 mW/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.

### Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.



For BLE

| RF Function | Separation distance (cm) | Max AVG Power (dBm) | Tune Up Power (dBm) | Max Tune Up Power (dBm) | ANT Gain (dBi) | Max EIRP (dBm) | Max EIRP (mW) | Power Density (mW/cm <sup>2</sup> ) | Limit (mW/cm <sup>2</sup> ) | Result |
|-------------|--------------------------|---------------------|---------------------|-------------------------|----------------|----------------|---------------|-------------------------------------|-----------------------------|--------|
| BLE         | 20                       | 3.31                | 3±1                 | 4.00                    | -5.34          | -1.34          | 0.735         | 0.0001                              | 1                           | Pass   |

Remark:

1. Output power (Peak) including turn-up tolerance;
2. MPE evaluate distance is 20cm from user manual provide by manufacturer.