


# RF Exposure Evaluation Report

**Application No.:** BTEK240111002AE  
**Applicant:** SHENZHEN ECARE ELECTRONICS CO., LTD  
**Address of Applicant:** B201/B401/B501/B601, Hua Li Industrial Building, 404 Yu An Road, Bao An, Shenzhen, Guang Dong, China  
**Manufacturer:** SHENZHEN ECARE ELECTRONICS CO., LTD  
**Address of Manufacturer:** B201/B401/B501/B601, Hua Li Industrial Building, 404 Yu An Road, Bao An, Shenzhen, Guang Dong, China  
**Factory:** SHENZHEN ECARE ELECTRONICS CO., LTD  
**Address of Factory:** B201/B401/B501/B601, Hua Li Industrial Building, 404 Yu An Road, Bao An, Shenzhen, Guang Dong, China  
**Equipment Under Test (EUT):**  
**EUT Name:** Bluetooth Thermometer/Hygrometer  
**Model No.:** TP350, TP350W, C50  
Please refer to section 3 of this report which indicates which model was actually tested and which were electrically identical.  
**Trade Mark:** N/A  
**Standard(s) :** 47 CFR Part 2 Subpart J Section 2.1093  
**Date of Receipt:** 2024-01-11  
**Date of Test:** 2024-01-11 to 2024-01-27  
**Date of Issue:** 2024-01-31

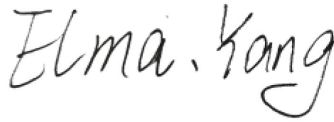

|                     |              |
|---------------------|--------------|
| <b>Test Result:</b> | <b>Pass*</b> |
|---------------------|--------------|

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

  
Damon Su  
EMC Laboratory Manager



| Revision Record |         |            |          |          |
|-----------------|---------|------------|----------|----------|
| Version         | Chapter | Date       | Modifier | Remark   |
| 01              |         | 2024-01-31 |          | Original |
|                 |         |            |          |          |
|                 |         |            |          |          |

| Authorized for issue by: |  |  |  |  |
|--------------------------|--|--|--|--|
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|                          |  | Elma Yang /Project Engineer  |  |  |
|                          |  |  |  |  |
|                          |  | <hr/>  |  |  |
|                          |  | Carl Yang /Reviewer  |  |  |



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### 3 General Information

#### 3.1 Details of E.U.T.

|   |                            |
|---|----------------------------|
| Power supply:   | DC 3V from 2 AAA Batteries |
| <b>For BLE</b>  |                            |
| Operation Frequency:  | 2402MHz to 2480MHz         |
| Modulation Type:  | GFSK                       |
| Channel Spacing:  | 2MHz                       |
| Date Rate:  | 1Mbps, 2Mbps               |
| Number of Channels:   | 40                         |
| Antenna Type:   | PCB Antenna                |
| Antenna Gain:   | 5 dBi                      |
| Sample No.:   | BTEK240111002AE-01         |
| Remark: The information in this section is provided by the applicant or manufacturer, BANTEK is not liable to the accuracy, suitability, reliability or/and integrity of the information. |                            |

Model No.: TP350, TP350W, C50

Only the model TP350 was tested. According to the declaration from the applicant, the electrical circuit design, layout, components used, internal wiring and functions of other models are identical for the above models, with only difference on model No.

#### 3.2 Description of Support Units

The EUT has been tested as an independent unit.



### 3.3 Test Location

All tests were performed at:

Shenzhen BANTEK Testing Co., Ltd.

A5&A6, Building B1&B2, No.45 Gangtuo Road, Bogang Community, Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

Tel:0755-2334 4200 Fax: 0755-2334 4200

FCC Registration Number: 264293

Designation Number: CN1356

No tests were sub-contracted.

### 3.4 Deviation from Standards

None

### 3.5 Abnormalities from Standard Conditions

None





## 4 Test Requirement

KDB447498 D01 General RF Exposure Guidance v06, Clause 4.3.1(a)

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot \sqrt{f(\text{GHz})} \leq 3.0$

Where

-f(GHz) is the RF channel transmit frequency in GHz

-Power and distance are rounded to the nearest mW and mm before calculation

-The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

### 4.1 Test Data and Test Result

| Type | Frequency (MHz) | Conducted Power (dBm) | Maximum Tune-up (dBm) | Calculating data | Limit | Result |
|------|-----------------|-----------------------|-----------------------|------------------|-------|--------|
| BLE  | 2402            | -0.71                 | 0                     | 0.310            | 3.0   | Pass   |

Note: The exposure evaluation safety distance is 5mm.

## 5 EUT Constructional Details

Refer to Appendix - External and Internal Appendix EUT Photos.

