

# RF Exposure Evaluation Report

**Product** : Dynamic ECG recorder  
**Trade mark** : N/A  
**Model/Type reference** : ER1-LW, ER1-LB  
**Serial Number** : N/A  
**Report Number** : EED32N81031102  
**FCC ID** : 2AD XK-3614  
**Date of Issue** : Feb. 22, 2022  
**Test Standards** : 47 CFR Part 1.1307  
47 CFR Part 2.1093  
KDB447498D01 General RF  
Exposure Guidance v06  
**Test result** : PASS

Prepared for:

**Shenzhen Viatom Technology Co., Ltd.**  
**4E, 3#, Tingwei Industrial Park, Honglang North 2nd Road,**  
**Baoan District, Shenzhen, China**

Prepared by:

**Centre Testing International Group Co., Ltd.**  
**Hongwei Industrial Zone, Bao'an 70 District,**  
**Shenzhen, Guangdong, China**

**TEL: +86-755-3368 3668****FAX: +86-755-3368 3385**

Compiled by:

*Tom Chen*

Tom Chen

Reviewed by:

*Aaron Ma*

Aaron Ma

Approved by:

*David Wang*

David Wang

Date:

Feb. 22, 2022

Check No.: 1053181021



## 1 Version

| Version No. | Date          | Description |
|-------------|---------------|-------------|
| 00          | Feb. 22, 2022 | Original    |
|             |               |             |
|             |               |             |

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### 3 General Information

#### 3.1 Client Information

|                          |                                                                                           |
|--------------------------|-------------------------------------------------------------------------------------------|
| Applicant:               | Shenzhen Viatom Technology Co., Ltd.                                                      |
| Address of Applicant:    | 4E, 3#, Tingwei Industrial Park, Honglang North 2nd Road, Baoan District, Shenzhen, China |
| Manufacturer:            | Shenzhen Viatom Technology Co., Ltd.                                                      |
| Address of Manufacturer: | 4E, 3#, Tingwei Industrial Park, Honglang North 2nd Road, Baoan District, Shenzhen, China |
| Factory:                 | Shenzhen Viatom Technology Co., Ltd.                                                      |
| Address of Factory:      | 4E, 3#, Tingwei Industrial Park, Honglang North 2nd Road, Baoan District, Shenzhen, China |

#### 3.2 General Description of EUT

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                    |                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------|
| Product Name:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Dynamic ECG recorder                                                                                               |                                |
| Mode No.:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ER1-LW, ER1-LB                                                                                                     |                                |
| Test Mode No.:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ER1-LW                                                                                                             |                                |
| Trade mark:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | N/A                                                                                                                |                                |
| Bluetooth Version:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | V4.0                                                                                                               |                                |
| Operation Frequency:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2402MHz~2480MHz                                                                                                    |                                |
| Modulation Type:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | GFSK                                                                                                               |                                |
| Number of Channel:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 40                                                                                                                 |                                |
| Product Type:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <input type="checkbox"/> Mobile <input checked="" type="checkbox"/> Portable <input type="checkbox"/> Fix Location |                                |
| Antenna Type:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Chip Antenna                                                                                                       |                                |
| Antenna Gain:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0dBi                                                                                                               |                                |
| Power Supply:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Lithium Battery                                                                                                    | JNY551924 240mAh<br>3.8V 912wh |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Charge by DC 5.0V                                                                                                  |                                |
| Test Voltage:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | DC 3.8V                                                                                                            |                                |
| Sample Received Date:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Oct. 18, 2021                                                                                                      |                                |
| Sample tested Date:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Oct. 18, 2021 to Oct. 26, 2021                                                                                     |                                |
| Company Name and Address shown on Report, the sample(s) and sample Information was/ were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.<br>Note: Since the RF parameters of the left and right earplugs are the same, only the left ear was tested in this report.<br>Model No.: ER1-LW, ER1-LB<br>Only the model ER1-LW was tested, since the electrical circuit design, layout, components used and internal wiring were identical for the above models, with difference being model and color of appearance. |                                                                                                                    |                                |

### 3.3 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax: +86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

### 3.4 Deviation from Standards

None.

### 3.5 Abnormalities from Standard Conditions

None.

### 3.6 Other Information Requested by the Customer

None.

## 4 SAR Evaluation

### 4.1 RF Exposure Compliance Requirement

#### 4.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06  
Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

##### Limits

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$$\left[ \frac{(\text{max. power of channel, including tune-up tolerance, mW})}{(\text{min. test separation distance, mm})} \right] \cdot \sqrt{f(\text{GHz})} \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$$
$$f(\text{GHz}) \text{ is the RF channel transmit frequency in GHz}$$

Power and distance are rounded to the nearest mW and mm before calculation<sup>17</sup>

The result is rounded to one decimal place for comparison

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 is applied to determine SAR test exclusion



#### 4.1.2 EUT RF Exposure

##### 1) For BLE

##### Measurement Data

| GFSK mode        |                            |                            |                       |      |
|------------------|----------------------------|----------------------------|-----------------------|------|
| Test channel     | Peak Output Power<br>(dBm) | Tune up tolerance<br>(dBm) | Maximum tune-up Power |      |
|                  |                            |                            | (dBm)                 | (mW) |
| Lowest(2402MHz)  | -1.31                      | -1.0±1                     | 0.0                   | 1.0  |
| Middle(2441MHz)  | -1.28                      | -1.0±1                     | 0.0                   | 1.0  |
| Highest(2480MHz) | -1.07                      | -1.0±1                     | 0.0                   | 1.0  |

| Worst case:                                             |                                                    |                               |                           |      |                     |                        |
|---------------------------------------------------------|----------------------------------------------------|-------------------------------|---------------------------|------|---------------------|------------------------|
| Channel                                                 | Maximum Peak<br>Conducted<br>Output Power<br>(dBm) | Tune up<br>tolerance<br>(dBm) | Maximum tune-<br>up Power |      | Calculated<br>value | Exclusion<br>threshold |
|                                                         |                                                    |                               | (dBm)                     | (mW) |                     |                        |
| Lowest<br>(2402MHz)                                     | -1.31                                              | -1.0±1                        | 0.0                       | 1.0  | 0.3                 | 3.0                    |
| Middle<br>(2441MHz)                                     | -1.28                                              | -1.0±1                        | 0.0                       | 1.0  | 0.3                 |                        |
| Highest<br>(2480MHz)                                    | -1.07                                              | -1.0±1                        | 0.0                       | 1.0  | 0.3                 |                        |
| Conclusion: the calculated value ≤3.0, SAR is exempted. |                                                    |                               |                           |      |                     |                        |

Remark: The Max Conducted Peak Output Power data refer to report Report No.: EED32N81031101.

## PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32N81031101 for EUT external and internal photos.

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.

\*\*\* End of Report \*\*\*