

RF Exposure Evaluation Report

Product : Wrist-type Fully Automatic Digital
Blood Pressure Monitor
Trade mark : N/A
Model/Type reference : SBC45
Serial Number : N/A
Report Number : EED32Q80075802
FCC ID : 2AQVU0047
Date of Issue : Feb. 06, 2024
Test Standards : 47 CFR Part 1.1307
47 CFR Part 1.1310
47 CFR Part 2.1091
47 CFR Part 2.1093
KDB 447498 D04 Interim General RF
Exposure Guidance v01
Test result : PASS

Prepared for:

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Prepared by:

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2 Version

| Version No. | Date | Description |
|-------------|---------------|-------------|
| 00 | Feb. 06, 2024 | Original |
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4 General Information

4.1 Client Information

| | |
|--------------------------|--|
| Applicant: | JOYTECH HEALTHCARE CO., LTD. |
| Address of Applicant: | No.365, Wuzhou Road, Yuhang Economic Development Zone, Hangzhou City, 311100 Zhejiang, China |
| Manufacturer: | JOYTECH HEALTHCARE CO., LTD. |
| Address of Manufacturer: | No.365, Wuzhou Road, Yuhang Economic Development Zone, Hangzhou City, 311100 Zhejiang, China |
| Factory: | JOYTECH HEALTHCARE CO., LTD. |
| Address of Factory: | No.365, Wuzhou Road, Yuhang Economic Development Zone, Hangzhou City, 311100 Zhejiang, China |

4.2 General Description of EUT

| | |
|-----------------|---|
| Product Name: | Wrist-type Fully Automatic Digital Blood Pressure Monitor |
| Model No.(EUT): | SBC45 |
| Trade Mark: | N/A |

4.3 Product Specification subjective to this standard

| | |
|-----------------------|--|
| Frequency Range: | 2402MHz~2480MHz |
| Modulation Type: | GFSK |
| Test Power Grade: | Default |
| Test Software of EUT: | PhyPlusKit |
| Antenna Type: | PCB Antenna |
| Antenna Gain: | -1.37612dBi |
| Power Supply: | Battery DC 3V |
| Sample Received Date: | Jan. 17, 2024 |
| Sample tested Date: | Jan. 17, 2024 to Jan. 29, 2024 |
| Remark: | 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. |

4.4 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

4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 Other Information Requested by the Customer

None.

5 SAR Evaluation

5.1 RF Exposure Compliance Requirement

5.1.1 Limits

The SAR-based exemption formula of § 1.1307(b)(3)(i)(B), repeated here as Formula (B.2), applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold P_{th} (mW).

This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by Formula

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

and f is in GHz, d is the separation distance (cm), and $ERP_{20 \text{ cm}}$ is per Formula (B.1).

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases} \quad (\text{B.1})$$

The 1 mW Blanket Exemption of § 1.1307(b)(3)(i)(A) applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power of no more than 1 mW, regardless of separation distance.

5.1.2 Test Procedure

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

5.1.3 EUT RF Exposure Evaluation**For Stand alone:****For Bluetooth LE:**

| Frequency (MHz) | Available maximum time- averaged power (dBm) | Antenna gain (dBi) | ERP (dBm) | Available maximum tim e-averaged power (mW) | Limit (mW) | Result |
|--------------------|--|--------------------------|--------------|---|---------------|--------|
| 2402 | -0.34 | -1.37612 | -3.86612 | 0.925 | ≤2.7880 | PASS |

Note:

- ① EIRP=Available maximum time-averaged power+Antenna gain;
- ② ERP=EIRP-2.15;
- ③ According to § 1.1307(b)(3)(i)(B), RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold Pth (mW).
- ④ The estimation distance is 0.5cm.
- ⑤ The test data please refer to the report of EED32Q80075801 and only the worst case data was recorded in the report.

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 ***