RF Exposure Evaluation Report

Product	:	Digital Thermometer
Trade mark	:	N/A
Model/Type reference	:	DMT-4770b
Serial Number	:	N/A
Report Number	:	EED32P81943402
FCC ID	:	2AQVU0045
Date of Issue	:	Feb. 04, 2024
Test Standards	:	47 CFR Part 1.1307 47 CFR Part 1.1310 47 CFR Part 2.1093 447498 D04 Interim General RF Exposure Guidance v01
Test result	:	PASS

Prepared for:

JOYTECH Healthcare Co., Ltd.
No. 365, Wuzhou Road, 311100 Hangzhou, Zhejiang Province, P.R. of 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: mark.chen. Mark Chen

Reviewed by: Tom Chen Tom Chen

Approved by: Aaron Ma Aaron Ma

Date: Feb. 04, 2024

Check No.: 1831281123

2 Version

Version No.	Date	Description
00	Feb. 04, 2024	Original

3 Contents

4 General Information

4.1 Client Information

Applicant:	JOYTECH Healthcare Co., Ltd.
Address of Applicant:	No. 365, Wuzhou Road, 311100 Hangzhou, Zhejiang Province, P.R. of China
Manufacturer:	JOYTECH Healthcare Co., Ltd.
Address of Manufacturer:	No. 365, Wuzhou Road, 311100 Hangzhou, Zhejiang Province, P.R. of China
Factory:	JOYTECH Healthcare Co., Ltd.
Address of Factory:	NO.502, Shunda Road, 311100 Hangzhou, Zhejiang Province, PEOPLE's REPUBLIC OF CHINA

4.2 General Description of EUT

Product Name:	Digital Thermometer
Model No.(EUT):	DMT-4770b
Trade Mark:	N/A
Device type:	Portable

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 3.0V
Sample Received Date:	Nov. 29, 2023
Sample tested Date:	Nov. 29, 2023 to Dec. 01, 2023
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 Pth (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). Pth is given by Formula

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

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 ERP20cm is per Formula (B.1).

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

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 BLE

Frequency (MHz)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	ERP (dBm)	Max. Conducted Output power (mW)	Limit (mW)	Result
2402	0.7	-1.37612	-0.67612	-2.83	1.175	2.788	PASS

Note：

①EIRP=conducted power+antenna gain；

②ERP=EIRP-2.15

③The test data refer to the report of EED32P81943401, and only the worst case data was recorded in the report.

*** End of Report ***