

RF Exposure Evaluation Report

Product : Arm-type Fully Automatic Digital Blood Pressure Monitor
Trade mark : N/A
Model/Type reference : DBP-62D0L, DBP-62D0B
Serial Number : N/A
Report Number : EED32P82069602
FCC ID : 2AQVU0046
Date of Issue : Jan. 11, 2024
Test Standards : 47 CFR Part 1.1307
47 CFR Part 1.1310
47 CFR Part 2.1093
KDB 447498 D04 Interim General RF Exposure Guidance v01
Test result : PASS

Prepared for:

JOYTECH HEALTHCARE CO., LTD.

No.365, Wuzhou Road, Hangzhou City, 311100 Zhejiang, 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.

Approved by:

Mark Chen

Aaron Ma

Aaron Ma

Reviewed by:

Frazer. Li

Frazer Li

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2 Version

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4 General Information

4.1 Client Information

Applicant:	JOYTECH HEALTHCARE CO., LTD.
Address of Applicant:	No.365, Wuzhou Road, Hangzhou City, 311100 Zhejiang, China
Manufacturer:	JOYTECH HEALTHCARE CO., LTD.
Address of Manufacturer:	No.365, Wuzhou Road, Hangzhou City, 311100 Zhejiang, China
Factory:	JOYTECH HEALTHCARE CO., LTD.
Address of Factory:	No.365, Wuzhou Road, 311100 Hangzhou City, Zhejiang, China. NO.502, Shunda Road, 311100 Hangzhou, Zhejiang Province, PEOPLE's REPUBLIC OF CHINA

4.2 General Description of EUT

Product Name:	Arm-type Fully Automatic Digital Blood Pressure Monitor
Model No.(EUT):	DBP-62D0L, DBP-62D0B
Test Model No.:	DBP-62D0L
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:	Adapter	Model:UE05LU4-050100SPA Input:AC100-240V, 50/60Hz, 0.2A Output:5.0V --- 1.0A 5.0W
	Battery DC 3.7V	
Sample Received Date:	Dec. 20, 2023	
Sample tested Date:	Dec. 20, 2023 to Dec. 26, 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. Model No.: DBP-62D0L, DBP-62D0B Only the model DBP-62D0L was tested. Their electrical circuit design, layout, components used and internal wiring are identical, Only the battery is different. The DBP-62D0L is powered by lithium batteries, and the DBP-62D0B is powered by Alkaline dry batteries.		

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 BLE**

Frequency (MHz)	Available maximum time- averaged power (dBm)	Antenna gain (dBi)	ERP (dBm)	Available maximum time-averaged power (mW)	Limit (mW)	Result
2402	-3.08	-1.37612	-6.60612	0.492	≤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 test data refer to the report No. EED32P82069601. Only the worst case data was recorded in the report.
- ⑤ The separate distance is 0.5cm.

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 ***