

# RF Exposure Evaluation Report

**Product** : Digital Blood Pressure Monitor  
**Trade mark** : Mircrolife  
**Model/Type reference** : BP3KT1-4B  
**Serial Number** : N/A  
**Report Number** : EED32P80686102  
**FCC ID** : U7I-BP3KT1-4B  
**Date of Issue** : Jun. 13, 2023  
**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:

**Microlife Corporation**  
9F, 431, RuiGuang Road, NeiHu Taipei 11492, Taiwan, 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

Approved by:

*Aaron Ma*

Aaron Ma

Reviewed by:

*Tom Chen*

Tom Chen

Date:

Jun. 13, 2023

Check No.: 1223110523



## 2 Version

Version No.	Date	Description
00	Jun. 13, 2023	Original

## 3 Contents

	Page
<b>1 COVER PAGE</b> .....	<b>1</b>
<b>2 VERSION</b> .....	<b>2</b>
<b>3 CONTENTS</b> .....	<b>3</b>
<b>4 GENERAL INFORMATION</b> .....	<b>4</b>
4.1 CLIENT INFORMATION .....	4
4.2 GENERAL DESCRIPTION OF EUT .....	4
4.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD .....	4
4.4 TEST LOCATION .....	5
4.5 DEVIATION FROM STANDARDS .....	5
4.6 ABNORMALITIES FROM STANDARD CONDITIONS .....	5
4.7 OTHER INFORMATION REQUESTED BY THE CUSTOMER .....	5
<b>5 SAR EVALUATION</b> .....	<b>6</b>
5.1 RF EXPOSURE COMPLIANCE REQUIREMENT .....	6
5.1.1 Limits .....	6
5.1.2 Test Procedure .....	6
5.1.3 EUT RF Exposure Evaluation .....	7

## 4 General Information

### 4.1 Client Information

Applicant:	Microlife Corporation
Address of Applicant:	9F, 431, RuiGuang Road, NeiHu Taipei 11492, Taiwan, China
Manufacturer:	ONBO Electronic (Shenzhen) Co., Ltd.
Address of Manufacturer:	No.138, Huasheng Road, Langkou Community, Dalang Street, Longhua District, Shenzhen, China
Factory:	ONBO Electronic (Shenzhen) Co., Ltd.
Address of Factory:	No.138, Huasheng Road, Langkou Community, Dalang Street, Longhua District, Shenzhen, China

### 4.2 General Description of EUT

Product Name:	Digital Blood Pressure Monitor
Model No.(EUT):	BP3KT1-4B
Trade Mark:	Mircrolife
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:	nRF_DTM	
Antenna Type:	Chip antenna	
Antenna Gain:	3dBi	
Power Supply:	Adapter	Model:DSA-6E-05 US 060060 Input:AC100-240V, 50/60Hz, 0.3A Output:6.0V --- 600mA
	Battery 6.0V	
Sample Received Date:	May 11, 2023	
Sample tested Date:	May 11, 2023 to Jun. 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 P<sub>th</sub> (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<sub>th</sub> 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<sub>20cm</sub> 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)	Separation distance (cm)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	ERP (dBm)	ERP (mW)	Limit (mW)	Result
2402	0.50	0.82	3	3.82	1.67	1.469	2.788	PASS

**Note:**

- ① EIRP=conducted power+antenna gain;
- ② ERP=EIRP-2.15
- ③ 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 \*\*\*