

RF Exposure Evaluation Report

Product : Digital Blood Pressure Monitor
Trade mark : **microlife**
Model/Type reference : BP3MX1-3C,WhatchBP Home A BT
Serial Number : N/A
Report Number : EED32L00271802
FCC ID : U7I-BP3MX1-3C
Date of Issue : Nov. 14, 2019
Test Standards : 47 CFR Part 1.1307
47 CFR Part 2.1093
KDB447498D01 General RF Exposure Guidance v06
Test result : PASS

Prepared for:

Microlife Corporation

9F, 431, RuiGuang Road, NeiHu Taipei 11492, Taiwan

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:

Sunlight Sun

Reviewed by:

Ware Xin

Sunlight Sun

Ware Xin

Approved by:

Kevin Yang

Date:

Nov. 14, 2019

Kevin Yang

Check No.:3970320087



2 Version

Version No.	Date	Description
00	Nov. 14, 2019	Original

3 Contents

	Page
1 COVER PAGE.....	1
2 VERSION.....	2
3 CONTENTS.....	3
4 GENERAL INFORMATION.....	4
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
5 SAR EVALUATION.....	6
5.1 RF EXPOSURE COMPLIANCE REQUIREMENT.....	6
5.1.1 Standard Requirement.....	6
5.1.2 Limits.....	6
5.1.3 EUT RF Exposure.....	7
PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS.....	8

4 General Information

4.1 Client Information

Applicant:	Microlife Corporation
Address of Applicant:	9F, 431, RuiGuang Road, NeiHu Taipei 11492, Taiwan
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):	BP3MX1-3C,WhatchBP Home A BT
Trade Mark:	
EUT Supports Radios application:	4.2 BT Single mode

4.3 Product Specification subjective to this standard

Frequency Range:	2402MHz~2480MHz	
Modulation Type:	GFSK	
Test Power Grade:	Default	
Test Software of EUT:	Default	
Antenna Type:	Chip ANT antenna	
Antenna Gain:	-1 dBi	
Power Supply:	Battery	DC1.5V*4 SIZE AAA
	:Adapter:	MODEL:DSA-6E-05 US 060060 INPUT:100-240V~50/60Hz 0.3A OUTPUT:+6V  0.6A
Max Conducted Peak Output Power:	-5.31 dBm	
	The Max Conducted Peak Output Power data refer to the report EED32L00271801	
Sample Received Date:	Sep. 24, 2019	
Sample tested Date:	Sep. 24, 2019 to Nov. 13, 2019	
The tested sample(s) and the sample information are provided by the client.		

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 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.

5.1.2 Limits

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

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot$

$[\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

$f(\text{GHz})$ is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation¹⁷

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 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

5.1.3 EUT RF Exposure

The tune-up power is -6 dBm +/- 1dB, therefore the highest tune-up power is

-5.3 dBm (0.29 mW) @ 2480 MHz

When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

So,

$$\left(\frac{0.29}{5\text{mm}} \right) * \left(2.480\text{GHz}^{0.5} \right) = 0.1$$

$$\left[\frac{\text{(max. power of channel, including tune-up tolerance, mW)}}{\text{(min. test separation distance, mm)}} \right] * \left[\sqrt{f(\text{GHz})} \right] = 0.1 < 3.0$$

Therefore, standalone SAR measurements are not required for both head and body

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32L00271801 for EUT external and internal photos.

*** End of 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.