

RF Exposure Evaluation Report

Product : Digital Blood Pressure Monitor
Trade mark : **microlife**
Model/Type reference : BP3GY1-2N
Serial Number : N/A
Report Number : EED32K00328902
FCC ID : U7I-BP3GY1-2N
Date of Issue : Jan. 08, 2019
47 CFR Part 1.1307
Test Standards : 47 CFR Part 2.1093
KDB 447498 D01v06
Test result : PASS

Prepared for:

Microlife Corporation

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Prepared by:

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Jan. 08, 2019

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2 Version

Version No.	Date	Description
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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):	BP3GY1-2N
Trade Mark:	
EUT Supports Radios application:	BT: 4.2 BT Single mode: 2402MHz to 2480MHz

4.3 Product Specification subjective to this standard

Frequency Range:	2402MHz to 2480MHz	
Modulation Type:	GFSK	
Number of Channels:	40	
Sample Type:	Portable production	
Test Power Grade:	N/A	
Test Software of EUT:	N/A	
Antenna Type:	Chip Antenna	
Antenna Gain:	3dBi	
Power Supply:	Adapter:	Model: DSA-6E-05 US 060060 Input: 100-240V~50/60Hz, 0.3A Output: +6V---0.6A
	Battery:	4*1.5V(AAA)= 6V
Conducted Peak Output Power:	0.23dBm	
	The Conducted Peak Output Power data refer to the report EED32K00328901	
Firmware version:	RA1-20170811(manufacturer declare)	
Hardware version:	V00(manufacturer declare)	
Sample Received Date:	Dec. 10, 2018	
Sample tested Date:	Dec. 12, 2018 to Jan. 08, 2019	
The tested sample(s) and the sample information are provided by the client.		

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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 Max Conducted Peak Output Power is 0.23dBm in highest channel(2.440GHz);

The best case gain of the antenna is 3dBi.

$\text{EIRP} = 0.23\text{dBm} + 3\text{dBi} = 3.23\text{dBm}$

3.23dBm logarithmic terms convert to numeric result is nearly 2.104mW

According to the formula. calculate the EIRP test result:

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

$[\sqrt{f(\text{GHz})}]$

General RF Exposure = $(2.104\text{mW} / 5 \text{ mm}) \times \sqrt{2.440\text{GHz}} = 0.6573$ ①

SAR requirement:

$S = 3.0$

② ;

① < ②.

So the SAR report is not required.

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32K00328901 for EUT external and internal photos.

*** End of Report ***

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