RF Exposure Evaluation Report

Product	:	Microlife Bluetooth® Patch Thermometer
Trade mark	:	microlife
Model/Type reference	:	MT0PC1, PT200
Serial Number	:	N/A
Report Number	:	EED32L00008302
FCC ID	:	U7I-MT0PC1
Date of Issue	:	Jan. 28, 2019
Test Standards	:	47 CFR Part 1.1307 47 CFR Part 2.1093 KDB 447498D01 v06
Test result	:	PASS

Prepared for:

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

Prepared by:

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Date:	Jan. 28, 2019		Check No.: 3570141998

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2 Version

Version No.	Date	Description
00	Jan. 28, 2019	Original

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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:	Microlife Bluetooth® Patch Thermometer
Model No.:	MT0PC1, PT200
Test Model No.:	MT0PC1
Trade mark:	microlife
EUT Supports Radios application:	BT 4.0 Single mode, 2402-2480MHz

4.3 Product Specification subjective to this standard

Operation Frequency:	2402MHz~2480MHz
Bluetooth Version:	4.0
Modulation Technique:	DSSS
Modulation Type:	GFSK
Number of Channel:	40
Power Supply:	Button battery (CR 2032) 3V
EIRP:	-3.515dBm
	The EIRP data refer to the report EED32L00008301
Test Power Grade:	N/A
Test Software of EUT:	N/A
Antenna Type:	PCB Printed Antenna
Antenna Gain:	-6.2853dBi
Sample Received Date:	Jan. 10, 2019
Sample tested Date:	Jan. 16, 2019 to Jan. 23, 2019
The tested sample(s) and the sample information are provided by the client. Model No.: MT0PC1, PT200 Only the model MT0PC1 was tested, since the electrical circuit design, layout, components used, internal wiring, software and outer decoration were identical for the above models, with difference being model name.	

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:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

f(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation[17]

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 -3.515dBm in highest channel(2.402GHz);

The best case gain of the antenna is -6.2853dBi.

EIRP= -3.515dBm + -6.2853dBi = -9.8003dBm

-9.8003dBm logarithmic terms convert to numeric result is nearly 0.105mW

According to the formula. calculate the EIRP test result:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)]

General RF Exposure = (0.105mW / 5 mm) x √2.402GHz = 0.032 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. EED32L00008301 for EUT external and internal photos.

*** End of Report ***