

RF Exposure Evaluation Report

Product : Infrared Forehead Thermometer
Trade mark : Microlife
Model/Type reference : FR1DQ1-B
Serial Number : N/A
Report Number : EED32081190402
FCC ID : U7I-FR1DQ1-B
Date of Issue : Sep. 23, 2022
Test Standards : 47 CFR Part 1.1307
47 CFR Part 1.1310
47 CFR Part 2.1093(portable devices)
447498 D04 Interim General RF
Exposure Guidance v01
Test result : PASS

Prepared for:

Microlife Corporation
9F,NO.431,RuiGuang Road,Nei-Hu,Taipei,11492,Taiwan, China

Prepared by:

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2 Version

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4 General Information

4.1 Client Information

Applicant:	Microlife Corporation
Address of Applicant:	9F,NO.431,RuiGuang Road,Nei-Hu,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:	Infrared Forehead Thermometer
Model No.:	FR1DQ1-B
Test Model No.:	FR1DQ1-B
Trade Mark:	Microlife

4.3 Product Specification subjective to this standard

Frequency Range:	2402MHz~2480MHz	
Modulation Type:	GFSK	
Test Power Grade:	Default (Power level is built-in set parameters and cannot be changed and selected)	
Test Software of EUT:	nRF_DTM.exe(manufacturer declare)	
Antenna Type:	Internal antenna	
Antenna Gain:	0dBi	
Power Supply:	Battery:	DC 3.0V
Test Voltage:	DC 3.0V	
Sample Received Date:	Aug.05,2022	
Sample tested Date:	Sep.09,2022 to Sep.19,2022	
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_{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)	Evaluation distance(cm)	Max. Conducted Output power (dBm)	Tune up tolerance(dBm)	Max. Tune up power(dBm)	Antenna Gain (dBi)	EIRP(dBm)	ERP (dBm)	ERP (mW)	Limit (mW)	Result
2402	0.50	1.18	0.50±1	1.50	0	1.50	-0.65	0.861	≤2.788	PASS

Note:

- ①EIRP=conducted power+antenna gain;
- ②ERP=EIRP-2.15;
- ③The test data please refer to the report of EED32081190401.

Result:compliant

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 ***