

FCC RF Exposure Report

Report Number	: 68.950.22.1051.01	Date of Issue: <u>October 25, 2022</u>
Model / HVIN	: MBMMSC	
Product Type	: MOTHER Bracelet	
Applicant	: MEDIROM Healthcare Technologies Inc,	
Address	: Daiba 2-3-1, Minato-ku , Tokyo , Japan	
Manufacturer	: MEDIROM Healthcare Technologies Inc,	
Address	: Daiba 2-3-1, Minato-ku , Tokyo , Japan	
Test Result	: <input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative	
Total pages including Appendices	: <u>8</u>	

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2 Details about the Test Laboratory

Details about the Test Laboratory

Test Site 1

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
Building 12 & 13, Zhiheng Wisdomland Business Park, Nantou Checkpoint Road 2,
Nanshan District
Shenzhen 518052
P.R. China

Telephone: 86 755 8828 6998

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FCC Registration No.: 514049

FCC Designation Number: CA5009

IC Registration No.: 10320A

3 Description of the Equipment Under Test

Product:	MOTHER Bracelet
Model no.:	MBMMSC
Brand name:	MOTHER Bracelet
Hardware Version Identification No. (HVIN)	MBMMSC
FCC ID:	2A8ZF-MBMMSC
IC:	29535-MBMMSC
Options and accessories:	Charger
Rating:	Supplied by 3.85VDC 82mAh Li-ion Rechargeable Battery
RF Transmission Frequency:	2402MHz-2480MHz
No. of Operated Channel:	40
Modulation:	GFSK
Antenna Type:	Ceramic chip antenna
Antenna	Gain: -2.0dBi
Description of the EUT:	The Equipment Under Test (EUT) is a health monitoring bracelet which support Bluetooth function.

NOTE: The above EUT's information is declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

4 Test Specifications

Test Standards	
ANSI Std C95.1-1992	Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz – 300 GHz.(IEEE Std C95.1-1991)
KDB 447498 D01	General RF Exposure Guidance v06

5 General Information

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Prepared By
Project Engineer

2022-10-25

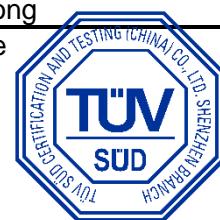
Date

Alan Xiong

Name



Signature



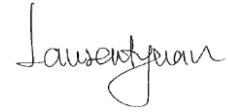
Approved by
Section Manager

2022-10-25

Date

Laurent Yuan

Name


Signature

6 RF Exposure Requirements

According to §15.247(e)(i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB 447498 D01 General RF Exposure Guidance v06, no SAR required if power is lower than the flowing threshold:

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:

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

$[\sqrt{f_{(\text{GHz})}}] \leq 3.0$ 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 calculation
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds

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.

7 RF Exposure Evaluation

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f_{(\text{GHz})}}] \leq 3.0$

Conducted Power + tune up tolerance = -0.64dBm = 0.86mW

Distance = 5 mm

f = 2.402 GHz

$[0.86/5] * \text{SQRT}(2.402) = 0.27$

$0.27 \leq 3.0$

Therefore, excluded from SAR testing.