

RF Exposure Evaluation Report

Product : ECG recorder
Trade mark : N/A
Model/Type reference : EMobile-C, EM-1A, EM-1B, EM-1C,
EMobile-A, EMobile-B
Serial Number : N/A
Report Number : EED32P81106702
FCC ID : A49EMOBILE-C
Date of Issue : Aug. 14, 2023
Test Standards : 47 CFR Part 1.1307
47 CFR Part 1.1310
47 CFR Part 2.1093
447498 D04 Interim General RF
Exposure Guidance v01
Test result : PASS

Prepared for:

Shenzhen Creative Industry Co., Ltd.
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Xili Street, Nanshan District, 518110 Shenzhen,
PEOPLE'S REPUBLIC OF CHINA

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2 Version

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4 General Information

4.1 Client Information

Applicant:	Shenzhen Creative Industry Co., Ltd.
Address of Applicant:	Floor 5, BLD 9, Baiwangxin High-Tech Industrial Park, Songbai Road, Xili Street, Nanshan District, 518110 Shenzhen, PEOPLE'S REPUBLIC OF CHINA
Manufacturer:	Shenzhen Creative Industry Co., Ltd.
Address of Manufacturer:	Floor 5, BLD 9, Baiwangxin High-Tech Industrial Park, Songbai Road, Xili Street, Nanshan District, 518110 Shenzhen, PEOPLE'S REPUBLIC OF CHINA
Factory:	Shenzhen Creative Industry Co., Ltd.
Address of Factory:	Floor 5, BLD 9, Baiwangxin High-Tech Industrial Park, Songbai Road, Xili Street, Nanshan District, 518110 Shenzhen, PEOPLE'S REPUBLIC OF CHINA

4.2 General Description of EUT

Product Name:	ECG recorder
Model No.:	EMobile-C, EM-1A, EM-1B, EM-1C, EMobile-A, EMobile-B
Test Model No.:	EMobile-C
Trade mark:	N/A
Device type:	Portable

4.3 Product Specification subjective to this standard

Frequency Range:	2402MHz~2480MHz
Modulation Type:	GFSK
Test Power Grade:	Default
Test Software of EUT:	662x_FCC_Rev1.7R
Antenna Type:	Chip antenna
Antenna Gain:	3.49dBi
Power Supply:	Battery DC 3.7V
Sample Received Date:	Jul. 20, 2023
Sample tested Date:	Jul. 20, 2023 to Jul. 27, 2023
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. Model No.: EMobile-C, EM-1A, EM-1B, EM-1C, EMobile-A, EMobile-B Only the model EMobile-C was tested. The principle, structure and composition, intended use, key components, and electrical structure of the products are the same, and only the functional Configuration is different. Therefore, the model with the most complete functions [EMobile-C] was selected as the main inspection model to cover the other models.	

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)	Separation distance (cm)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	ERP (dBm)	ERP (mW)	Limit (mW)	Result
2402	0.50	-9.4	3.49	-5.91	-8.06	0.156	2.788	PASS

Note:

- ① EIRP=conducted power+antenna gain;
- ② ERP=EIRP-2.15
- ③ Only the worst case data was recorded in the 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.

*** End of Report ***