

RF Exposure Evaluation Report

Product : Dynamic ECG recorder
Trade mark : N/A
Model/Type reference : EPatch-B, EPatch-A,
EHL-1B, EHL-1A
Serial Number : N/A
Report Number : EED32P80730402
FCC ID : A49EPATCH-B
Date of Issue : Aug. 16, 2023
Test Standards : 47 CFR Part 1.1307
47 CFR Part 1.1310
47 CFR Part 2.1091
47 CFR Part 2.1093
447498 D04 Interim General RF
Exposure Guidance v01
Test result : PASS

Prepared for:

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Songbai Road, Xili Street, Nanshan District,
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Aug. 16, 2023

Check No.: 1355180523



1 Version

Version No.	Date	Description
00	Aug. 16, 2023	Original

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3 General Information

3.1 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

3.2 General Description of EUT

Product Name:	Dynamic ECG recorder		
Model No.:	EPatch-B, EPatch-A, EHL-1B, EHL-1A		
Test Model No.:	EPatch-B		
Hardware Version:	V3		
Software Version:	V1.0		
Trade mark:	N/A		
Device type:	Portable		
Operation Frequency:	2402MHz~2480MHz		
Modulation Type:	GFSK		
Transfer Rate:	<input checked="" type="checkbox"/> 1Mbps <input checked="" type="checkbox"/> 2Mbps		
Number of Channel:	40		
Antenna Type:	Chip Antenna		
Antenna Gain:	3.19dBi		
Max Conducted Peak Output Power:	-0.12dBm		
	The Max Conducted Peak Output Power data refer to the report EED32P80730401		
Power Supply:	USB port:	DC 5V	
	Battery:	DC 3.8V	
Test Voltage:	DC 3.8V		
Sample Received Date:	May. 26, 2023		
Sample tested Date:	May. 26, 2023 to Jun. 17, 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.		

3.3 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

3.4 Deviation from Standards

None.

3.5 Abnormalities from Standard Conditions

None.

3.6 Other Information Requested by the Customer

None.

4 SAR Evaluation

4.1 RF Exposure Compliance Requirement

4.1.1 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.

4.1.2 Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

4.1.3 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
2480	0.5	-0.12	3.19	3.07	0.92	1.236	2.717	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 ***