

TEST REPORT

FCC ID. :	2AIEA-CE01	
Test Report No..... :	TCT220726E027	
Date of issue..... :	Aug. 08, 2022	
Testing laboratory	SHENZHEN TONGCE TESTING LAB	
Testing location/ address:	TCT Testing Industrial Park Fuqiao 5th Industrial Zone, Fuhai Street, Bao'an District Shenzhen, Guangdong, 518103, People's Republic of China	
Applicant's name..... :	Shenzhen EEGSmart Technology CO., Ltd	
Address..... :	1401, Building 7A, Guoji Chuangxin Gu, 3rd Phase Wanke Yuncheng, Xili, Nanshan district, Shenzhen, China	
Manufacturer's name ... :	Shenzhen EEGSmart Technology CO., Ltd	
Address..... :	1401, Building 7A, Guoji Chuangxin Gu, 3rd Phase Wanke Yuncheng, Xili, Nanshan district, Shenzhen, China	
Standard(s)	FCC CFR Title 47 Part 1.1307 KDB 447498 D04 Interim General RF Exposure Guidance v01	
Test item description	Micro EEG Sleep Monitor	
Trade Mark	UMindSleep	
Model/Type reference..... :	CE01	
Rating(s)	Rechargeable Li-ion Battery DC 3.7V	
Date of receipt of test item	Jul. 26, 2022	
Date (s) of performance of test..... :	Jul. 26, 2022 - Aug. 08, 2022	
Tested by (+signature) ... :	Brews XU	
Check by (+signature).... :	Beryl ZHAO	
Approved by (+signature):	Tomsin	

General disclaimer:

This report shall not be reproduced except in full, without the written approval of SHENZHEN TONGCE TESTING LAB. This document may be altered or revised by SHENZHEN TONGCE TESTING LAB personnel only, and shall be noted in the revision section of the document. The test results in the report only apply to the tested sample.

Table of Contents

1. General Product Information	3
1.1. EUT description	3
1.2. Model(s) list.....	3
2. General Information.....	4
2.1. Test environment and mode.....	4
2.2. Description of Support Units.....	4
3. Facilities and Accreditations	5
3.1. Facilities	5
3.2. Location	5
4. Test Results and Measurement Data	6

1. General Product Information

1.1. EUT description

Test item description	Micro EEG Sleep Monitor
Model/Type reference.....	CE01
Sample Number.....	TCT220726E026-0101
Operation Frequency	2402MHz~2480MHz
Modulation Type	GFSK
Antenna Type.....	PCB Antenna
Antenna Gain.....	3dBi
Rating(s)	Rechargeable Li-ion Battery DC 3.7V

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

1.2. Model(s) list

None.

2. General Information

2.1. Test environment and mode

Item	Normal condition
Temperature	+25°C
Voltage	DC 3.7V
Humidity	56%
Atmospheric Pressure:	1008 mbar
Test Mode:	
Engineering mode:	Keep the EUT in continuous transmitting by select channel

2.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
/	/	/	/	/

3. Facilities and Accreditations

3.1. Facilities

The test facility is recognized, certified, or accredited by the following organizations:

- FCC - Registration No.: 645098

SHENZHEN TONGCE TESTING LAB

Designation Number: CN1205

The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC - Registration No.: 10668A-1

SHENZHEN TONGCE TESTING LAB

CAB identifier: CN0031

The testing lab has been recognized by Innovation, Science and Economic Development Canada for radio equipment testing.

3.2. Location

SHENZHEN TONGCE TESTING LAB

Address: 2101 & 2201, Zhenchang Factory Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China

TEL: +86-755-27673339

4. Test Results and Measurement Data

According to KDB 447498 D04 Interim General RF Exposure Guidance:

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 (B.2).

$$P_{th} (mW) = ERP_{20\text{ cm}} (d/20\text{ cm})^x \quad d \leq 20\text{ cm}$$

or

$$P_{th} (mW) = ERP_{20\text{ cm}} \quad 20\text{ cm} < d \leq 40\text{ cm}$$

(B.2)

where

$$x = -\log_{10}(60/ERP_{20\text{ cm}} \sqrt{f})$$

and f is in GHz, d is the separation distance (cm), and $ERP_{20\text{ cm}}$ is per Formula (B.1).

The example values shown in Table B.2 are for illustration only.

Table B.2—Example Power Thresholds (mW)

Frequency (MHz)	Distance (mm)									
	5	10	15	20	25	30	35	40	45	50
300	39	65	88	110	129	148	166	184	201	217
450	22	44	67	89	112	135	158	180	203	226
835	9	25	44	66	90	116	145	175	207	240
1900	3	12	26	44	66	92	122	157	195	236
2450	3	10	22	38	59	83	111	143	179	219
3600	2	8	18	32	49	71	96	125	158	195
5800	1	6	14	25	40	58	80	106	136	169

Maximum Conducted Output Power and Max. ERP of product is as follow

For BLE:

Modulation	Operate Frequency (MHz)	Maximum Conducted Output Power (dBm)	Antenna gain (dBi)	Max. ERP (dBm)	Tune up Power (dBm)	Max. Tune up Power (dBm)	Max. Tune up Power (mW)	Limit (mW)
GFSK	2402	1.5	3	4.5	3.5±1	4.5	2.82	3

Result:

Because the max tune up power is less than the exemption limit, so No SAR measurement is required.

*******END OF REPORT*******