TEST REPORT

Report No.: SHATBL2503004W02

Applicant	:	Suzhou Promax Communication Technology CO.,LTD
Product Name	:	Lower Back Heating Pad
Brand Name	:	/
Model Name	:	L1
FCC ID	:	2BN4Y-INFRAWAYL1
Test Standard	:	KDB 447498D01V06 47 CFR Part 2.1093
Date of Test	:	2025.03.17-2025.03.18

Report Prepared by : Emily

(Emily)

Report Approved by : Guozheng Li

(Guozheng Li)

Authorized Signatory : Terry Yang

(Terry Yang)

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REVISION HISTORY

Rev.	Issue Date	Revisions	Revised by
00	2025.03.19	Initial Release	Guozheng Li

DECLARATION OF REPORT

1. The device has been tested by ATBL, and the test results show that the equipment under test (EUT) is in compliance with the requirements of 47 CFR Part 2.1093. And it is applicable only to the tested sample identified in the report.

2. This report shall not be reproduced except in full, without the written approval of ATBL, this document only be altered or revised by ATBL, personal only, and shall be noted in the revision of the document.

3. The general information of EUT in this report is provided by the customer or manufacture, ATBL is only responsible for the test data but not for the information provided by the customer or manufacture.

4. The results in this report is only apply to the sample as tested under conditions. The customer or manufacturer is responsible for ensuring that the additional production units of this model have the same electrical and mechanical components.

1. GENERAL DESCRIPTION

1.1. Applicant

Name : Suzhou Promax Communication Technology CO.,LTD

Address : NO.20.Weixi Road,Suzhou Industrial Park, Jiangsu, PR China

1.2. Manufacturer

Name : Suzhou Promax Communication Technology CO.,LTD

Address : NO.20.Weixi Road,Suzhou Industrial Park, Jiangsu, PR China

1.3. Factory

Name : Suzhou Promax Communication Technology CO.,LTD

Address : NO.20.Weixi Road,Suzhou Industrial Park, Jiangsu, PR China

1.4. General Information of EUT

General Information	
Equipment Name	Lower Back Heating Pad
Brand Name	/
Model Name	L1
Series Model	/
Model Difference	/
Sample No.	202502250021002
Adapter	Model: GQ15-050300-ZU Brand: / Input: 100-240V~ 50/60Hz 0.5A Max Output: 5.0V⎓3.0A
Battery	Model: 805080-4000 mAh add plate and wire Brand: / Rated Voltage: 3.7 V Charge Limit Voltage: 4.2 V Capacity: 4 Ah
Hardware version	0.1.2
Software version	L1 300-32
Operating Temperature Range	-10℃ ~ +45℃
Connecting I/O Port(s)	Refer to the remark below.

Remark:

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

1.5. Equipment Specification

Equipment Specification		
Frequency Range	2402 MHz - 2480 MHz	
Number of Channels	40	
Carrier Frequency of Each Channel	2402 + n*2 MHz; n = 0 ~ 39	
Maximum Output Power To Antenna	☑Bluetooth LE(1Mbps):	-5.47dBm (0.000284W)
Type of Modulation	Bluetooth LE:	GFSK
Antenna Type	Integral (Chip)	
Antenna Gain	2.5 dBi	

1.6. Modification of EUT

No modifications are made to the EUT during all test items.

1.7. Laboratory Information

Company Name	:	Shanghai ATBL Technology Co., Ltd.
Address	:	5F., Unit 1, No.8, Free Trade One Life Science and Sci-Tech Industrial Park, No.160, Basheng Road, Pudong New District, Shanghai, China
Telephone	:	+86(0)21-51298625

1.8. Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

Standard	Description
47 CFR Part 15.247	Operation within the bands 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz.
47 CFR Part 2.1093	Radio frequency radiation exposure evaluation: mobile devices.
KDB 447498 D01 V06	Rf Exposure Procedures And Equipment Authorization Policies For Mobile And Portable Devices

Remark:

All test items were verified and recorded according to the standards and without any deviation during the test.

2. FCC 47CFR §2.1091 Requirement

2.1 Test Standards

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

According to §1.1310 and §2.1093 RF exposure requirement

KDB447498 v06: Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies.

2.2 Requirement

According to KDB447498 D01 General RF Exposure Guidance v06 Section 4.3.1 Standalone SAR test exclusion considerations: "Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition, listed below, is satisfied. These test exclusion conditions are based on source-based time-averaged maximum conducted output power of the RF channel requiring evaluation, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.22 The minimum test separation distance is determined by the smallest distance from the antenna and radiating structures or outer surface of the device, according to the host form factor, exposure conditions and platform requirements, to any part of the body or extremity of a user or bystander (see 5) of section 4.1). To qualify for SAR test exclusion, the test separation distances applied must be fully explained and justified by the operating configurations and exposure conditions of the transmitter and applicable host platform requirements, typically in the SAR measurement or SAR analysis report, according to the required published RF exposure KDB procedures. When no other RF exposure testing or reporting is required, a statement of justification and compliance must be included in the equipment approval, in lieu of the SAR report, to qualify for the SAR test exclusion. When required, the device specific conditions described in the other published RF exposure KDB procedures must be satisfied before applying these SAR test exclusion provisions; for example, handheld PTT two-way radios, handsets, laptops & tablets etc.23 "

[(max. power of channel, including tune-up tolerance, mW)/ (min. test separation distance, mm)] · [√f (GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where:

- f (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 in the step 2 below

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 according to 5) in section 4.1 is applied to determine SAR test exclusion.

2.3 MPE Calculation Method

Predication of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$S=PG/4\pi R^2$

Where: S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna

2.4 Antenna Information

EUT can only use antennas certificated as follows provided by manufacturer;

Antenna	Model No. of antenna:	Type of antenna:	Gain of the antenna (Max.)	Frequency range:
BLE	/	Integral (Chip)	2.5 dBi	2402-2480

2.5 Manufacturing Tolerance

Frequency (MHz)	ANT0_BLE 1M(Peak)		
	2402	2441	2480
Peak Conducted Output Power (dBm)	-5.47	-9.64	-7.91
Tolerance ± (dB)	1.0	1.0	1.0

2.6 Test Result

Mode	f (GHz)	Antenna Distance (mm)	Max.RF output power (including tune-up tolerance)		SAR Test Exclusion Threshold	SAR Test Exclusion
			dBm	mW		
BLE	2.5	5	-4.47	0.357	0.113<3	Yes

Note:

1.The Maxinum power is less than the limit, complies with the exemption requirements.

2.Output power (Peak) including turn-up tolerance;

3.The calculated distance is 5mm.

※※※※※END OF THE REPORT※※※※※