RF EXPOSURE REPORT

Report No.: 16070868-FCC-H

Supersede Report No.: N/A

Applicant	Shenzhen Glamour Bedding Supplies Co.,Ltd.
Product Name	FitSleep
Model No.	α 1
Serial No.	FitSleep
Test Standard	FCC 2.1093:2015
Test Date	August 16 to 31, 2016
Issue Date	September 01, 2016
Test Result	☑ Pass ☐ Fail
Equipment complied with the specification	☑
Equipment did not comply with the specification	☐

Loren Luo	David Huang	
Loren Luo Test Engineer	David Huang Checked By	

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Test result presented in this test report is applicable to the tested sample only

Issued by:

SIEMIC (SHENZHEN-CHINA) LABORATORIES

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Laboratories Introduction

SIEMIC, headquartered in the heart of Silicon Valley, with superior facilities in US and Asia, is one of the leading independent testing and certification facilities providing customers with one-stop shop services for Compliance Testing and Global Certifications.

In addition to testing and certification, SIEMIC provides initial design reviews and compliance management throughout a project. Our extensive experience with China, Asia Pacific, North America, European, and International compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the global markets.

Accreditations for Conformity Assessment

Country/Region	Scope
USA	EMC, RF/Wireless, SAR, Telecom
Canada	EMC, RF/Wireless, SAR, Telecom
Taiwan	EMC, RF, Telecom, SAR, Safety
Hong Kong	RF/Wireless, SAR, Telecom
Australia	EMC, RF, Telecom, SAR, Safety
Korea	EMI, EMS, RF, SAR, Telecom, Safety
Japan	EMI, RF/Wireless, SAR, Telecom
Singapore	EMC, RF, SAR, Telecom
Europe	EMC, RF, SAR, Telecom, Safety

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1. Report Revision History

Report No.	Report Version	Description	Issue Date
16070868-FCC-H	NONE	Original	September 01, 2016

2. Customer information

Applicant Name	Shenzhen Glamour Bedding Supplies Co.,Ltd.
Applicant Add	Floor 1,Building 1,Zhuguang Innovation Science and Technology Park,Zhuguang Road,Nanshan District,Shenzhen
Manufacturer	Shenzhen Glamour Bedding Supplies Co.,Ltd.
Manufacturer Add	Floor 1,Building 1,Zhuguang Innovation Science and Technology Park,Zhuguang Road,Nanshan District,Shenzhen

3. Test site information

Lab performing tests	SIEMIC (Shenzhen-China) LABORATORIES
Lab Address	Zone A, Floor 1, Building 2 Wan Ye Long Technology Park South Side of Zhoushi Road, Bao' an District, Shenzhen, Guangdong China 518108
FCC Test Site No.	718246
IC Test Site No.	4842E-1
Test Software	Radiated Emission Program-To Shenzhen v2.0

4. Equipment under Test (EUT) Information

Description of EUT:	FitSleep
Main Model:	α 1
Serial Model:	FitSleep
Date EUT received:	August 15, 2016
Test Date(s):	August 16 to 31, 2016
Antenna Gain:	0.8dBi
Antenna Type:	PCB antenna
Type of Modulation:	GFSK
RF Operating Frequency (ies):	2402-2480 MHz(TX/RX)
Number of Channels:	40CH
Port:	USB Port

Input Power:	Adapter 1: Model: LPL-A005050100Z Input: 100-240V~50/60Hz,200mA MAX Output: DC5V,1000mA Adapter 2: Model: LPL-A005050100A Input: 100-240V~50/60Hz,200mA MAX Output: DC5V,1000mA Battery: Model: α 1(554858G) Rated Capacity: 2000mAh/7.6Wh Typical Capacity:2000mAh/7.6Wh Norminal Voltage: 3.8v Limited Charge Voltage: 4.35v
Trade Name :	FitSleep
FCC ID:	2AHH2-FSA1

5. FCC §2.1093 - Radiofrequency radiation exposure evaluation: portable devices.

5.1 RF Exposure

Standard Requirement:

According to §15.247 (i) and §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.

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:

[(*max. power of channel, including tune-up tolerance, mW*)/(*min. test separation distance, mm*)] · [$\sqrt{f_{(GHz)}}$] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,[16] where

- $f_{(GHz)}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation[17]
- The result is rounded to one decimal place for comparison

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.

Routine SAR evaluation refers to that specifically required by § 2.1093, using measurements or computer simulation. When routine SAR evaluation is not required, portable transmitters with output power greater than the applicable low threshold require SAR evaluation to qualify for TCB approval.

result = $P\sqrt{F}/D$

P= Maximum turn-up power in mW

F= Channel frequency in GHz

D= Minimum test separation distance in mm

5.2 Test Result

BLE Mode:

Modulation	CH	Freq (MHz)	Conducted Power (dBm)	Tune Up Power (dBm)	Max Tune Up Power (dBm)	Max Tune Up Power (mW)	Result	Limit
GFSK	Low	2402	-2.396	-2.5±1	-1.5	0.708	0.22	3
	Mid	2440	**-2.389**	-2.5±1	-1.5	0.708	0.22	3
	High	2480	-2.751	-2.5±1	-1.5	0.708	0.22	3

Result: Compliance

No SAR measurement is required.