

ELECTROMAGNETIC EMISSION COMPLIANCE REPORT FOR LOW-POWER, NON-LICENSED TRANSMITTER

Test Report No. : W162R-D006
AGR No. : A161A-183
Applicant : Na eui ga neun gil Co., LTD
Address : 1002, DongNam B/D. 279 Gamasanro, Gurogu, Seoul, Republic of Korea, 08301
Manufacturer : Na eui ga neun gil Co., LTD
Address : 1002, DongNam B/D. 279 Gamasanro, Gurogu, Seoul, Republic of Korea, 08301
Type of Equipment : Blissbuds Baby's fetal Heartbeat Smart Monitor
FCC ID. : 2AHB6-BBSMT01
Model Name : BBSMT01
Multiple Model Name : N/A
Serial number : N/A
Total page of Report : 7 pages (including this page)
Date of Incoming : January 22, 2016
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SUMMARY

The equipment complies with the regulation; **FCC PART 15 SUBPART C Section 15.247**

This test report only contains the result of a single test of the sample supplied for the examination.

It is not a generally valid assessment of the features of the respective products of the mass-production.

Reviewed by:



Jae-Ho, Lee / Chief Engineer
ONETECH Corp.

Approved by:



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ONETECH Corp.

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Revision History

Issued Report No.	Issued Date	Revisions	Effect Section
W162R-D006	February 11, 2016	Initial Issue	All

1. VERIFICATION OF COMPLIANCE

Applicant : Na eui ga neun gil Co., LTD
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Contact Person : Chang kun Lee / CEO
Telephone No. : +82-70-7626-6709
FCC ID : 2AHB6-BBSMT01
Model Name : BBSMT01
Serial Number : N/A
Date : February 11, 2016

EQUIPMENT CLASS	DTS -Digital Transmission System
E.U.T. DESCRIPTION	Blissbuds Baby's fetal Heartbeat Smart Monitor
THIS REPORT CONCERNS	Original Grant
MEASUREMENT PROCEDURES	ANSI C63.10: 2013
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT	Certification
AUTHORIZATION REQUESTED	
EQUIPMENT WILL BE OPERATED UNDER FCC RULES PART(S)	FCC PART 15 SUBPART C Section 15.247
Modifications on the Equipment to Achieve Compliance	None
Final Test was Conducted On	3 m, Semi Anechoic Chamber

- The above equipment was tested by ONETECH Corp. for compliance with the requirement set forth in the FCC Rules and Regulations. This said equipment in the configuration described in this report, shows the maximum emission levels emanating from equipment are within the compliance requirements.

2. GENERAL INFORMATION

2.1 Product Description

The Na eui ga neun gil Co., LTD, Model BBSMT01 (referred to as the EUT in this report) is a Blissbuds Baby's fetal Heartbeat Smart Monitor. Product specification information described herein was obtained from product data sheet or user's manual.

Device Type	Blissbuds Baby's fetal Heartbeat Smart Monitor
Temperature Range	-10 °C ~ +50 °C
Operating Frequency	2 402 MHz ~ 2 480 MHz
RF Output Power	-1.46 dBm
Number of Channel	40 Channel
Modulation Type	GFSK
Antenna Type	PCB antenna
USED RF CHIP	Maker: TEXAS INSTRUMENTS Model Name: CC2541
Antenna Gain	5.3 dBi
List of each Osc. or crystal Freq.(Freq. >= 1 MHz)	32 MHz

2.2 Alternative type(s)/model(s); also covered by this test report.

- . None

3. EUT MODIFICATIONS

- . None

4. RADIO FREQUENCY EXPOSURE

4.1 SAR Test Exclusion Thrsholds

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances \leq 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$

for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

- $f(\text{GHz})$ 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

The test exclusions are applicable only when the minimum test separation distance is \leq 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.

4.2 EUT Description

Kind of EUT	Blissbuds Baby's fetal Heartbeat Smart Monitor
Operating Frequency Band	<input type="checkbox"/> Wireless Microphone: 494.000 MHz ~ 501.000 MHz <input type="checkbox"/> and 498.200 MHz ~ 505.200 MHz <input type="checkbox"/> WLAN: 2 412 MHz ~ 2 462 MHz <input type="checkbox"/> WLAN: 5 180 MHz ~ 5 320 MHz / 5 500 MHz ~ 5 700 MHz <input type="checkbox"/> WLAN: 5 745 MHz ~ 5 825 MHz <input type="checkbox"/> Bluetooth: 2 402 MHz ~ 2 480 MHz <input checked="" type="checkbox"/> Bluetooth BLE: 2 402 MHz ~ 2 480 MHz
Device Category	<input checked="" type="checkbox"/> Portable (< 20 cm separation) <input type="checkbox"/> Mobile (> 20 cm separation) <input type="checkbox"/> Others
Max. Output Power	-1.46 dBm
Used Antenna	PCB Antenna
Used Antenna Gain	5.3 dBi
Exposure	<input type="checkbox"/> MPE <input type="checkbox"/> SAR
Evaluation Applied	<input checked="" type="checkbox"/> N/A

4.3 Test Result

According to the procedure, KDB 447498 D01, the standalone SAR test exclusion threshold is

$$[(\text{Max. Power of channel, including tune-up tolerance, mW}) / (\text{Min. test separation distance, mm})] \times [\sqrt{f(\text{GHz})}] < 3$$
$$= (0.794/5) \times \sqrt{2.402} = 0.246$$

Conclusion: The SAR test exclusion threshold is less than 3, so the device meets the RF Exposure Requirement and excluded SAR Test.

	Frequency (MHz)	Target Power W/tolerance (dBm)	Max tune up power (dBm)	Max tune up power (mW)	Separation distance (mm)	RF exposure
BLE (GFSK)	2 402	-1.5 ± 0.5	-1.00	0.794	5	0.246
BLE (GFSK)	2 440	-2.5 ± 0.5	-2.00	0.631	5	0.197
BLE (GFSK)	2 480	-3.0 ± 0.5	-2.50	0.562	5	0.177