

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

Test Report No. : OT-187-RWD-013
AGR No. : A186A-133
Applicant : Hironic Co., Ltd
Address : 19F, 767, Sinsu-ro, Suji-gu, Yongin-si, Gyeonggi-do, Korea
Manufacturer : Hironic Co., Ltd
Address : 19F, 767, Sinsu-ro, Suji-gu, Yongin-si, Gyeonggi-do, Korea
Type of Equipment : Mid-Frequency Obesity Care device
FCC ID. : 2AQIV-THINBE
Model Name : ThinBe
Multiple Model Name : N/A
Serial number : N/A
Total page of Report : 7 pages (including this page)
Date of Incoming : June 05, 2018
Date of issue : July 05, 2018

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: 
Ki-Hong, Nam / Chief Engineer
ONETECH Corp.

Approved by: 
Keun-Young, Choi / Vice President
ONETECH Corp.

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Revision History

| Rev. No. | Issue Report No. | Issued Date | Revisions | Section Affected |
|----------|------------------|-------------|-----------------|------------------|
| 0 | OT-187-RWD-013 | 2018.07.05 | Initial Release | All |
| | | | | |
| | | | | |

1. VERIFICATION OF COMPLIANCE

Applicant : Hironic Co., Ltd
 Address : 19F, 767, Sinsu-ro, Suji-gu, Yongin-si, Gyeonggi-do, Korea
 Contact Person : Jaehan Park / RA Manager
 Telephone No. : +82-10-8514-0741
 FCC ID : 2AQIV-THINBE
 Model Name : ThinBe
 Brand Name : -
 Serial Number : N/A
 Date : July 05, 2018

| | |
|--|--------------------------------------|
| EQUIPMENT CLASS | DTS – DIGITAL TRNSMISSION SYSTEM |
| E.U.T. DESCRIPTION | Mid-Frequency Obesity Care device |
| THIS REPORT CONCERNS | Original Grant |
| MEASUREMENT PROCEDURES | ANSI C63.10: 2013 |
| TYPE OF EQUIPMENT TESTED | Pre-Production |
| KIND OF EQUIPMENT AUTHORIZATION REQUESTED | Certification |
| 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 Hironic Co., Ltd, Model ThinBe (referred to as the EUT in this report) is a Mid-Frequency Obesity Care device. The product specification described herein was obtained from product data sheet or user's manual.

| | |
|--|-----------------------------------|
| Device Type | Mid-Frequency Obesity Care device |
| Temperature Range | 10 °C ~ + 40 °C |
| Operating Frequency | 2 402 MHz ~ 2 480 MHz |
| RF Output Power | -12.52 dBm |
| Modulation Type | DSSS Modulation(GFSK) |
| Antenna Type | Chip Antenna |
| Antenna Gain | 1.30 dBi |
| Electrical Rating | DC 3.70 V |
| List of each Osc. or crystal Freq.(Freq. >= 1 MHz) | 32.768 kHz, 32 MHz |

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

-. None

3. EUT MODIFICATIONS

-. None

4. MAXIMUM PERMISSIBLE EXPOSURE

4.1 RF Exposure Limit

According to the FCC rule §1.1310, the limit for General Population/Uncontrolled exposure is 1 mW/cm² for the device operating 1 500 ~ 100 000 MHz.

4.2 EUT Description

| | |
|-----------------------------|--|
| Kind of EUT | Mid-Frequency Obesity Care device |
| Operating Frequency Band | <input checked="" type="checkbox"/> Bluetooth LE: 2 402 MHz ~ 2 480 MHz <input type="checkbox"/> Bluetooth: 2 402 MHz ~ 2 480 MHz <input type="checkbox"/> WLAN: 2 412 MHz ~ 2 462 MHz <input type="checkbox"/> WLAN: 2 422 MHz ~ 2 452 MHz |
| Device Category | <input checked="" type="checkbox"/> Portable (< 20 cm separation) <input type="checkbox"/> Mobile (> 20 cm separation) <input type="checkbox"/> Others |
| RF Output Power | -12.52 dBm |
| Antenna Gain | 1.30 dBi |
| Exposure Evaluation Applied | <input type="checkbox"/> MPE <input type="checkbox"/> SAR <input checked="" type="checkbox"/> N/A |

4.3 Test Result Calculated MPE Safe Distance

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

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

$$= (0.06/5) \times \sqrt{2.480} = 0.02$$

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 |
|-----------------|--------------------------------|-------------------------|------------------------|--------------------------|-------------|
| 2 480 | -12.5 ± 0.5 | -12.00 | 0.06 | 5 | 0.02 |



Tested by: Hyung-Kwon, Oh / Assistant Manager