

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

Test Report No. : OT-18O-RWD-008

AGR No. : A188A-406

Applicant : BLUECOM Co., Ltd.

Address : 116, Venture-ro, Yeonsu-gu, Incheon, Korea

Manufacturer : BLUECOM Co., Ltd.

Address : 116, Venture-ro, Yeonsu-gu, Incheon, Korea

Type of Equipment : Bluetooth Headset

FCC ID. : U3WBCS200

Model Name : BCS-200

Multiple Model Name : BCS-100

Serial number : N/A

Total page of Report : 7 pages (including this page)

Date of Incoming : August 28, 2018

Date of issue : October 04, 2018


SUMMARY

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

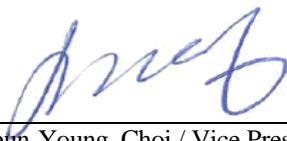
This test report only contains the result of a single test of the sample supplied for the examination.

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

Reviewed by:


Jae-Ho Lee / 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-18O-RWD-008 | October 04, 2018 | Initial Issue | All |
| | | | | |
| | | | | |

1. VERIFICATION OF COMPLIANCE

Applicant : BLUECOM Co., Ltd.
 Address : 116, Venture-ro, Yeonsu-gu, Incheon, Korea
 Contact Person : Ki-eok Park / Principal Engineer
 Telephone No. : 82-32-8100-582
 FCC ID : U3WBCS200
 Model Name : BCS-200
 Brand Name : -
 Serial Number : N/A
 Date : October 04, 2018

| | |
|---|---|
| EQUIPMENT CLASS | <i>DSS – PART 15 SPREAD SPECTRUM TRANSMITTER</i> |
| E.U.T. DESCRIPTION | Bluetooth Headset |
| KIND OF EQUIPMENT | Modular Transmitter |
| 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 BLUECOM Co., Ltd., Model BCS-200 (referred to as the EUT in this report) is a Bluetooth Headset. The product specification described herein was obtained from product data sheet or user's manual.

| | | |
|---|--|----------|
| Device Type | Bluetooth Headset | |
| Operating Frequency | 2 402 MHz ~ 2 480 MHz | |
| RF Output Power | 1 Mbps | 5.84 dBm |
| | 2 Mbps | 5.66 dBm |
| | 3 Mbps | 5.85 dBm |
| Number of Channel | 79 Channels | |
| Modulation Type | GFSK for 1 Mbps, $\pi/4$ -DQPSK for 2 Mbps, 8-DPSK for 3Mbps | |
| Antenna Type | FPCB Antenna | |
| Antenna Gain | 5.07 dBi | |
| List of each Osc. or crystal Freq.(Freq. \geq 1 MHz) | 16 MHz | |
| Rated Supply Voltage | DC 3.7 V | |

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

-. None

3. EUT MODIFICATIONS

-. None

4. MAXIMUM PERMISSIBLE EXPOSURE

4.1 EUT Description

| | | |
|--------------------------------|---|----------|
| Kind of EUT | Bluetooth Headset | |
| Operating Frequency Band | <input type="checkbox"/> Wireless Microphone: 494.000 MHz ~ 501.000 MHz and 498.200 MHz ~ 505.200 MHz <input type="checkbox"/> WLAN: 2 412 MHz ~ 2 462 MHz <input type="checkbox"/> WLAN: 5 180 MHz ~ 5 240 MHz <input type="checkbox"/> WLAN: 5 745 MHz ~ 5 825 MHz <input checked="" type="checkbox"/> Bluetooth: 2 402 MHz ~ 2 480 MHz <input type="checkbox"/> Bluetooth BLE: 2 402 MHz ~ 2 480 MHz | |
| MAX. RF OUTPUT POWER | 1 Mbps | 5.84 dBm |
| | 2 Mbps | 5.66 dBm |
| | 3 Mbps | 5.85 dBm |
| Antenna Gain | 5.07 dBi | |
| Exposure Evaluation Applied | <input type="checkbox"/> MPE <input type="checkbox"/> SAR <input checked="" type="checkbox"/> N/A | |

4.3 Calculated MPE Safe Distance

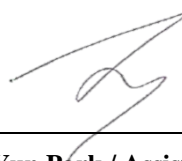
According to the procedure, KDB 447498 D01, the standalone SAR test exclusion threshold is

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

$$= (3.85/5) \times \sqrt{2.441} = 1.20$$

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

| | Frequency (MHz) | Target Power W/tolerance (dBm) | Max tune up power (dBm) | Max tune up power (mW) | Separation distance (mm) | RF exposure |
|--------|--------------------|--------------------------------------|-------------------------------|------------------------------|--------------------------------|-------------|
| 1 Mbps | 2 441 | 5.34 ± 0.5 | 5.84 | 3.84 | 5 | 1.20 |
| 2 Mbps | 2 441 | 5.16 ± 0.5 | 5.66 | 3.68 | 5 | 1.15 |
| 3 Mbps | 2 441 | 5.35 ± 0.5 | 5.85 | 3.85 | 5 | 1.20 |



Tested by: Ju Yun Park / Assistant Manager