

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

Test Report No. : W17DR-D003
AGR No. : A17NA-400
Applicant : RoboLink Inc
Address : 439, Dogok-ro, Gangnam-gu, Seoul, South Korea
Manufacturer : RoboLink Inc
Address : 439, Dogok-ro, Gangnam-gu, Seoul, South Korea
Type of Equipment : Robolink Bluetooth module
FCC ID. : 2AJDE-ROBOLINKBLE
Model Name : Robolink BLE
Serial number : N/A
Total page of Report : 6 pages (including this page)
Date of Incoming : November 27, 2017
Date of issue : December 05, 2017

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 / Asst, Chief Engineer
ONETECH Corp.

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

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Revision History

Issued Report No.	Issued Date	Revisions	Effect Section
W17DR-D003	December 05, 2017	Initial Issue	All

1. VERIFICATION OF COMPLIANCE

Applicant : RoboLink Inc
 Address : 439, Dogok-ro, Gangnam-gu, Seoul, South Korea
 Contact Person : Do-Ryeul Lee / Robot Engineer
 Telephone No. : +82-2-554-8862
 FCC ID : 2AJDE-ROBOLINKBLE
 Model Name : Robolink BLE
 Brand Name : -
 Serial Number : N/A
 Date : December 05, 2017

EQUIPMENT CLASS	DTS – DIGITAL TRNSMISSION SYSTEM
E.U.T. DESCRIPTION	Robolink Bluetooth module
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 RoboLink Inc, Model Robolink BLE (referred to as the EUT in this report) is a Robolink Bluetooth module. The product specification described herein was obtained from product data sheet or user's manual.

Device Type	Robolink Bluetooth module
Temperature Range	-30 °C ~ 85 °C
Operating Frequency	2 402 MHz ~ 2 480 MHz
RF Output Power	8.09 dBm
Number of Channel	40 Channel
Modulation Type	GFSK (Bluetooth LE)
Antenna Type	Chip Antenna
Antenna Gain	1.90 dBi
List of each Osc. or crystal Freq.(Freq. >= 1 MHz)	20 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	Robolink Bluetooth module
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 checked="" type="checkbox"/> Bluetooth LE: 2 402 MHz ~ 2 480 MHz
Device Category	<input type="checkbox"/> Portable (< 20 cm separation) <input type="checkbox"/> Mobile (> 20 cm separation) <input checked="" type="checkbox"/> Others
MAX. RF OUTPUT POWER	8.09 dBm
Antenna Gain	1.90 dBi
Exposure Evaluation Applied	<input checked="" type="checkbox"/> MPE <input type="checkbox"/> SAR <input type="checkbox"/> N/A

4.3 Test Result

According to above equation, the following result was obtained.

Operating Mode	Target Power	Max tune up power		Antenna Gain		Power Density (mW/cm ²) @ 20 cm Separation	Limit (mW/cm ²)
	W/tolerance (dBm)	(dBm)	(mW)	Log	Linear		
BLE (GFSK)	8.0 ± 0.5	8.50	7.08	1.90	1.55	0.002 2	1.00



Tested by: Hyung-Kwon, Oh / Assistant Manager