

FCC MPE TEST REPORT

Project Number : EA1802C-065

Test Report Number : TR-W1803-015

Type of Equipment : Bluetooth Low Energy Module

Model Name : RMBLE-M5

FCC ID : 2AISERMBLEM5

ISED Cert. Number : 21613-RMBLEM5

Multiple Model Name : N/A

Applicant : Honeywell Analytics Asia Pacific Co., Ltd.

Address : 7F SangAm IT Tower, 434 Worldcup Buk-ro, Mapo-gu, Seoul

03922, South Korea

Manufacturer : Honeywell Analytics Asia Pacific Co., Ltd.

Address : 7F SangAm IT Tower, 434 Worldcup Buk-ro, Mapo-gu, Seoul

03922, South Korea

Regulation : FCC Part 15 Subpart C Section 15.247

Total page of Report : 5 Pages

Date of Receipt : 2018-02-19

Date of Issue : 2018-03-30

Test Result : PASS

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.

Prepared by Song, In-young / Senior Engineer 2018-03-30

Signature Date

Reviewed by Choi, Yeong-min / Technical Manager 2018-03-30
Signature Date

Signature Date

Report No.: TR-W1803-015 Page 1 of 5

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CONTENTS

	rage
1. EUT (EQUIPMENT UNDER TEST)	4
2. TEST RESULT	5

Report No.: TR-W1803-015 Page 2 of 5

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Release Control Record

Issue Report No.	Issued Date	Revisions	Effect Section
TR-W1803-015	2018-03-30	Initial Release	All

Report No.: TR-W1803-015 Page 3 of 5

ENG Co., Ltd. 135-60 Gyeongchung-daero, Gonjiam-eup, Gwangju-si, Gyeonggi-do, Korea 464-942

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1. EUT (Equipment Under Test)

1.1 General Description

The Honeywell Analytics Asia Pacific Co., Ltd., Model RMBLE-M5 (referred to as the EUT in this report) is a . The EUT is a device for detect gas. For wireless communication, the EUT has Bluetooth module has function for Bluetooth Low Energy, and measure RF output power is as following table.

1.2 RF Output Power

Operating Mode	Channel	Frequency (MHz)	Output Power (EIRP) (dBm)
Bluetooth LE	Low	2 480	-15.50

Report No.: TR-W1803-015 Page 4 of 5

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2. TEST RESULT

According to FCC KDB 447498 D01 General RF Exposure Guidance v06

4.3.1. Standalone SAR test exclusion considerations

1) 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)] $x [\sqrt{f(GHz)}] \le 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,

where,

f(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 ≤ 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.

For the present device, the declared output power(EIRP) is -15.50 dBm. at High Channel

So, max. power of channel, including tune-up tolerance = 0.03 mW min. test separation distance = 5 mm

f(GHz) = 2.480

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

= $(0.03 / 5) \times (\sqrt{2.480}) = 0.01 \le 3.0$

Hence the SAR Exclusion Threshold condition is satisfied and the SAR evaluation for general population exposure conditions is not required.

Report No.: TR-W1803-015 Page 5 of 5

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Report Form_01 (Rev.0)