

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

Test Report No. : OT-185-RWD-020
AGR No. : A184A-182
Applicant : AIRSOUND INC.
Address : 208, 75, Techno 1-ro, Yuseong-gu, Daejeon, 34014, Korea
Manufacturer : AIRSOUND INC.
Address : 208, 75, Techno 1-ro, Yuseong-gu, Daejeon, 34014, Korea
Type of Equipment : NEW-MYPIN
FCC ID. : 2AOL5-AMP-N180
Model Name : AMP-N180
Serial number : N/A
Total page of Report : 6 pages (including this page)
Date of Incoming : May 01, 2018
Date of issue : May 10, 2018

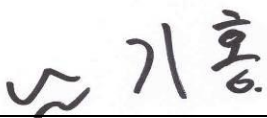
SUMMARY

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

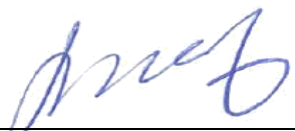
This test report only contains the result of a single test of the sample supplied for the examination.

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-185-RWD-020	2018.05.10	Initial Release	All

1. VERIFICATION OF COMPLIANCE

Applicant : AIRSOUND INC.
Address : 208, 75, Techno 1-ro, Yuseong-gu, Daejeon, 34014, Korea
Contact Person : Yukyeom, Kim / Principal Research Engineer
Telephone No. : +82-42-826-8400
FCC ID : 2AOL5-AMP-N180
Model Name : AMP-N180
Serial Number : N/A
Date : May 10, 2018

EQUIPMENT CLASS	DSS – PART 15 SPREAD SPECTRUM TRANSMITTER
E.U.T. DESCRIPTION	NEW-MYPIN
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 AIRSOUND INC., Model AMP-N180 (referred to as the EUT in this report) is a NEW-MYPIN. Product specification information described herein was obtained from product data sheet or user's manual.

Device Type	NEW-MYPIN	
Operating Frequency	2 402 MHz ~ 2 480 MHz	
RF Output Power	1 Mbps	3.30 dBm
	2 Mbps	2.94 dBm
	3 Mbps	3.02 dBm
Number of Channel	79 Channel	
Modulation Type	1 Mbps	GFSK
	2 Mbps	$\pi/4$ -QPSK
	3 Mbps	8-DPSK
Antenna Type	Chip Antenna	
Antenna Gain	0.5 dBi	
List of each Osc. or crystal Freq.(Freq. $\geq$ 1 MHz)	26 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	NEW-MYPIN
Operating Frequency Band	☐ Wireless Microphone: 494.000 MHz ~ 501.000 MHz and 498.200 MHz ~ 505.200 MHz ☐ WLAN: 2 412 MHz ~ 2 462 MHz ☐ WLAN: 5 180 MHz ~ 5 320 MHz / 5 500 MHz ~ 5 700 MHz ☐ WLAN: 5 745 MHz ~ 5 825 MHz ☒ Bluetooth: 2 402 MHz ~ 2 480 MHz ☐ Zigbee: 2 405 MHz ~ 2 480 MHz
Device Category	☒ Portable (< 20 cm separation) ☐ Mobile (> 20 cm separation) ☐ Others
Max. Output Power	1 Mbps: 3.30 dBm 2 Mbps: 2.94 dBm 3 Mbps: 3.02 dBm
Used Antenna	Chip Antenna
Used Antenna Gain	0.5 dBi
Exposure Evaluation Applied	☐ MPE ☐ SAR ☒ N/A

4.3 Test Result

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

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

$$= [1.31/5] \times \sqrt{2.480} = 0.413$$

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



Tested by: Tae-Ho, Kim / Senior Manager