

# **RF Exposure Report**

Report No.: SA150528E05D

FCC ID: 2AH3X-M001

Test Model: M001

Received Date: May 28, 2015

Test Date: July 03, 2015

Issued Date: May 24, 2016

**Applicant:** Aigale Corporation

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

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### **Release Control Record**

Issue No.	Description	Date Issued
SA150528E05D	Original release.	May 24, 2016

Page No. 3 / 6 Report Format Version: 6.1.1

Report No.: SA150528E05D Reference No.: 160413E15



### 1 Certificate of Conformity

**Product:** IEEE 802.11 b/g/n WLAN Microcontroller Module

Brand: Aigale

Test Model: M001

Sample Status: ENGINEERING SAMPLE

**Applicant:** Aigale Corporation

**Test Date:** July 03, 2015

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-1992

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by :		_ , Date:	May 24, 2016	
	Claire Kuan / Specialist			
	m /			
Approved by :		. Date:	May 24, 2016	

May Chen / Manager



### 2 RF Exposure

# 2.1 Limits For Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	nge Electric Field Magnetic Field Strength (V/m) Strength (A/m)				Power Density (mW/cm <sup>2</sup> )	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure						
300-1500 F/1500 30						
1500-100,000			1.0	30		

F = Frequency in MHz

### 2.2 MPE Calculation Formula

 $Pd = (Pout*G) / (4*pi*r^2)$ 

where

Pd = power density in mW/cm<sup>2</sup>

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

#### 2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

#### 3 Antenna Gain

The antennas provided to the EUT, please refer to the following table:

Antenna No	Brand	Model	Gain (dBi) (Including cable loss)	Antenna Type	Connector Type	Frequency range (GHz to GHz)	Cable Length (mm)
1(Internal)	AzureWave	AW-CU300 ANT	5.12	PCB	NA	2.4~2.4835	NA
2(External)	TAOGLAS	FXP73.07.0100A	3	Monopole	I-PEX	2.4~2.4835	100
3(External)	TAOGLAS	PC11.07.0100A	3	Dipole	I-PEX	2.4~2.4835	100
4(External)	TAOGLAS	FXP74.07.0100A	4	PIFA	I-PEX	2.4~2.4835	100
5(External)	TAOGLAS	GW.17.07.0250E	2.7	Dipole	I-PEX	2.4~2.4835	250
6(External)	TAOGLAS	PC17.07.0070A	0.9	PIFA	I-PEX	2.4~2.4835	70
7(External)	LAIRD	NanoBlue-IP04_MAF94045	2	Monopole	I-PEX	2.4~2.4835	100
8(External)	MAG.LAYERS	EDA_1313_2G4C1-A16	2.39	Dipole	I-PEX	2.4~2.4835	150
9(External)	LAIRD	EBL2400A1-23UFL	2.45	Dipole	I-PEX	2.4~2.4835	230



### 4 Calculation Result Of Maximum Conducted Power

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
2412-2462	204.644	5.12	20	0.13235	1

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