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## RF Exposure Report

**Report No.:** SA150528E05C

**FCC ID:** TLZ-CU300

**Test Model:** AW-CU300

**Series Model:** AW-CU300A

**Received Date:** May 28, 2015

**Test Date:** July 03, 2015

**Issued Date:** Apr. 29, 2016

**Applicant:** AzureWave Technologies, Inc.

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**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
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**Test Location (1):** No. 81-1, Lu Liao Keng, 9th Ling,Wu Lung Tsuen, Chiung Lin Hsiang, Hsin  
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**Test Location (2):** No. 49, Ln. 206, Wende Rd., Shangshan Tsuen, Chiung Lin Hsiang, Hsin  
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### Release Control Record

Issue No.	Description	Date Issued
SA150528E05C	Original release.	Apr. 29, 2016

## 1 Certificate of Conformity

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

**Brand:** AzureWave

**Test Model:** AW-CU300

**Series Model:** AW-CU300A

**Sample Status:** ENGINEERING SAMPLE

**Applicant:** AzureWave Technologies, Inc.

**Test Date:** July 03, 2015

**Standards:** RSS-102 Issue 5 (2015-03)

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 :** Midoli Peng, **Date:** Apr. 29, 2016  
Midoli Peng / Specialist

**Approved by :** May Chen, **Date:** Apr. 29, 2016  
May Chen / Manager

## 2 RF Exposure

### 2.1 Limits For Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field 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

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$$

where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = 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

Antenna 1 was chosen for final calculation.

#### 4 Calculation Result Of Maximum Conducted Power

The data was copied from the original test report (Report No.: SA150528E05)

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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