



# RF EXPOSURE REPORT

**REPORT NO.:** SA140620E01

**MODEL NO.:** AW-CU288

**FCC ID:** TLZ-CU288

**RECEIVED:** June 20, 2014

**TESTED:** July 10, 2014

**ISSUED:** Aug. 07, 2014

**APPLICANT:** AzureWave Technologies, Inc.

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**ISSUED BY:** Bureau Veritas Consumer Products Services (H.K.)  
Ltd., Taoyuan Branch Hsin Chu Laboratory

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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA140620E01	Original release	Aug. 07, 2014



## 1. CERTIFICATION

**PRODUCT:** IEEE 802.11b/g/n Smart Energy Module  
**BRAND NAME:** AzureWave  
**MODEL NO.:** AW-CU288  
**TEST SAMPLE:** ENGINEERING SAMPLE  
**APPLICANT:** AzureWave Technologies, Inc.  
**TESTED DATE:** July 10, 2014  
**STANDARDS:** FCC Part 2 (Section 2.1091)  
FCC OET Bulletin 65, Supplement C (01-01)  
IEEE C95.1

The above equipment (Model: AW-CU288 ) 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:** Aug. 07, 2014  
( Elsie Hsu, Specialist )

**APPROVED BY** :  , **DATE:** Aug. 07, 2014  
( May Chen, Manager )

## 2. RF EXPOSURE LIMIT

### 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)
<b>LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE</b>				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

### 3. MPE CALCULATION FORMULA

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

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

### 4. 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**.

### 5. ANTENNA GAIN

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

No.	Antenna	Brand	Model	Gain (dBi) include cable loss	Frequency range (MHz to MHz)	Antenna Type	Connector Type	Cable Length (mm)
1	Internal	AzureWave	ANT3216LL00 R2400A	3.17	2400-2500	CHIP	NA	NA
2	External	NanoBlue	NanoBlue-IP04	2	2400-2500	Monopole	I-PEX	100
3	External	MAG.LAYERS	MS-A4008-25G C1-A1	2.98	2400-2500	PIFA	I-PEX	150
4	External	MAG.LAYERS	EDA_1313_2G 4C1-A16	2.03	2400-2500	Dipole	I-PEX	150

## 6. 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> )
2412-2472	176.604	3.17	20	0.07290	1.00

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