



## RF Exposure Report

**Report No.:** SA150415E06

**FCC ID:** HEDSPAC750

**Test Model:** SP-AC750

**Series Model:** SP-N300

**Received Date:** Apr. 15, 2015

**Test Date:** Apr. 20, 2015

**Issued Date:** Apr. 29, 2015

**Applicant:** Accton Technology 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
SA150415E06	Original release.	Apr. 29, 2015



## 1 Certificate of Conformity

**Product:** Cloud-Enabled Enterprise Access Point

**Brand:** IgniteNet

**Test Model:** SP-AC750

**Series Model:** SP-N300

**Sample Status:** ENGINEERING SAMPLE

**Applicant:** Accton Technology Corporation

**Test Date:** Apr. 20, 2015


**Standards:** FCC Part 2 (Section 2.1091)

KDB 447498 D03

IEEE C95.1

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:** Apr. 29, 2015  
Lori Chung / Specialist

**Approved by :**  , **Date:** Apr. 29, 2015  
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

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

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

2.4GHz Band						
Antenna No.	PCB Chain No.	Ant. Gain(dBi)	Frequency Range (GHz to GHz)	Ant. Type	Connector Type	Cable Length (mm)
1 (White)	Chain (0)	4.3	2.4~2.4835	PCB	i-pex(MHF)	130
2 (Gray)	Chain (1)	4.01	2.4~2.4835	PCB	i-pex(MHF)	90
**For 802.11bg mode will fix transmission on Chain (0).						
5GHz Band						
Antenna No.	Ant. Gain(dBi)	Frequency Range (GHz to GHz)	Ant. Type	Connector Type	Cable Length (mm)	
3 (Black)	5	5.15~5.85	PCB	MMCX-plug	115	

#### 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	929.584	4.3	20	0.49776	1
5180-5240, 5745-5825	411.15	5	20	0.25866	1

#### Conclusion:

Both of the 2.4GHz and 5GHz can transmit simultaneously, the formula of calculated the MPE is:

$$CPD_1 / LPD_1 + CPD_2 / LPD_2 + \dots \text{etc.} < 1$$

CPD = Calculation power density

LPD = Limit of power density

Therefore, the worst-case situation is  $0.49776 / 1 + 0.25866 / 1 = 0.756$ , which is less than "1".

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