

## RF Exposure Report

**Report No.:** SA170103D01 R1

**FCC ID:** VZ9160001

**Test Model:** EAP737

**Received Date:** Jan. 3, 2017

**Test Date:** Jan. 4 ~ Feb. 15, 2017

**Issued Date:** Aug. 3, 2017

**Applicant:** 4IPNET, INC.

**Address:** 5F., No.367, Fuxing N. Rd., Songshan Dist., Taipei City 105, Taiwan  
(R.O.C.)

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

**Lab Address:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan  
(R.O.C.)



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## Table of Contents

<b>Release Control Record.....</b>	<b>3</b>
<b>1     Certificate of Conformity.....</b>	<b>4</b>
<b>2     RF Exposure .....</b>	<b>5</b>
2.1   Limits For Maximum Permissible Exposure (MPE).....	5
2.2   MPE Calculation Formula.....	5
2.3   Classification.....	5
2.4   Calculation Result Of Maximum Conducted Power .....	6

### Release Control Record

Issue No.	Description	Date Issued
SA170103D01	Original release.	Feb. 17, 2017
SA170103D01 R1	Modify address of applicant.	Aug. 3, 2017

## 1 Certificate of Conformity

**Product:** Enterprise Access Point

**Brand:** 4ipnet

**Test Model:** EAP737

**Sample Status:** Engineering sample

**Applicant:** 4IPNET, INC.

**Test Date:** Jan. 4 ~ Feb. 15, 2017

**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:** Aug. 3, 2017

Celia Chen / Supervisor

**Approved by :**



, **Date:** Aug. 3, 2017

Rex Lai / Assistant 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

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

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

### 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**.

## 2.4 Calculation Result Of Maximum Conducted Power

Function	Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
WLAN	2412-2462	28.60	4.51	20	0.4071	1
WLAN	5180-5240	28.40	4.39	20	0.3782	1
WLAN	5745-5825	27.44	4.39	20	0.3032	1
BT LE	2402-2480	1.85	3.25	20	0.0006	1

NOTE:

2.4GHz: Directional gain = 1.5dBi + 10log(2) = 4.51dBi

5.0GHz: Directional gain = 1.38dBi + 10log(2) = 4.39dBi

### Conclusion:

The formula of calculated the MPE is:

CPD1 / LPD1 + CPD2 / LPD2 + .....etc. < 1

CPD = Calculation power density

LPD = Limit of power density

WLAN 2.4GHz + WLAN 5GHz + BT LE = 0.4071 + 0.3782 + 0.0006 = 0.7859

Therefore the maximum calculations of above situations are less than the "1" limit.

FREQUENCY BAND (MHz)	MAX POWER (dBm)			TOTAL POWER (dBm)	POWER LIMIT (dBm)
	WLAN (5.0G)	WLAN (2.4G)	BT LE		
2400 ~ 2483.5	-	28.60	1.85	28.61	30
5180 ~ 5240	28.40	-	-	28.40	30
5745 ~ 5825	27.44	-	-	27.44	30

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