

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.

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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
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 ²)	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/cm²

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**.

2.4 Calculation Result Of Maximum Conducted Power

Function	Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
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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