RF Exposure Report

Report No.:	SA151109C01
FCC ID:	SLY-WX1O33
Test Model:	WX-1-O
Received Date:	Nov. 09, 2015
Test Date:	Nov. 16 ~ Dec. 07, 2015
Issued Date:	Dec. 09, 2015
Applicant:	Pakedge Device and Software Inc.
Address:	3847 Breakwater Ave., Hayward, California, United States, 94545
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
Test Location:	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)

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Release Control Record

Issue No.	Description	Date Issued
SA151109C01	Original release.	Dec. 09, 2015

1 Certificate of Conformity

Product: 802.11ac Dual Band Access Point

Brand: PAKEDGE

Test Model: WX-1-O

Sample Status: Engineering sample

Applicant: Pakedge Device and Software Inc.

Test Date: Nov. 16 ~ Dec. 07, 2015

Standards: FCC Part 2 (Section 2.1091)
KDB 447498 D01 (October 23, 2015)
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:** Dec. 09, 2015
Polly Chien / Specialist

Approved by : _____ , **Date:** Dec. 09, 2015
Ken Liu / Senior 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/cm^2

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 22cm away from the body of the user. So, this device is classified as **Mobile Device**.

3 Calculation Result Of Maximum Conducted Power

Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
2412-2462	27.46	8.532	22	0.653	1
5180-5240	15.00	10.418	22	0.057	1
5745-5825	22.01	10.970	22	0.327	1

Note:
2.4GHz: Directional gain =3.762dBi + 10log(3) = 8.532
5GHz:
5180 ~ 5240MHz: Directional gain =5.648dBi + 10log(3) = 10.418dBi
5745 ~ 5825MHz: Directional gain =6.200dBi + 10log(3) = 10.970dBi

CONCULSION:

Both of the WLAN 2.4G & WLAN 5G can transmit simultaneously, the formula of calculated the MPE is:

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

CPD = Calculation power density

LPD = Limit of power density

WLAN 2.4G + WLAN 5.0G = 0.653 + 0.327 = 0.980

Therefore, the maximum calculation of this situation is 0.980, which is less than the “1” limit.

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