

RF Exposure Report

Report No.: SA140224C17G

FCC ID: A8J-EAP1750H

Test Model: EAP1750H

Series Model: EWS360AP

Received Date: Feb. 24, 2014

Test Date: Jul. 14 ~ Jul. 22, 2015

Issued Date: Aug. 12, 2015

Applicant: EnGenius Technologies

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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
SA140224C17G	Original release.	Aug. 12, 2015

1 Certificate of Conformity

Product: Dual Band AC1750 Access Point

Brand: EnGenius

Test Model: EAP1750H

Series Model: EWS360AP

Sample Status: Engineering sample

Applicant: EnGenius Technologies

Test Date: Jul. 14 ~ Jul. 22, 2015

Standard: 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:** Aug. 12, 2015
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Approved by :  , **Date:** Aug. 12, 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

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

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 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 30cm 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	28.69	8.77	30	0.493	1
5180-5240	27.68	9.77	30	0.492	1
5745-5825	26.22	9.77	30	0.351	1

NOTE:

2.4GHz Band: Directional gain = 4dBi + 10log(3) = 8.77dBi

5.0GHz Band: Directional gain = 5dBi + 10log(3) = 9.77dBi

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 = 0.493 + 0.492 = 0.985

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

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