RF Exposure Report

Report No.: SA150825C34

FCC ID: KA2WL8710APA1

Test Model: DWL-8710AP

Received Date: Aug. 25, 2015

Test Date: Sep. 25 ~ Oct. 29, 2015

Issued Date: Nov. 05, 2015

Applicant: D-Link Corporation

Address: No.289, Xinhu 3rd Rd., Neihu District, Taipei City 11494, Taiwan, R.O.C.

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

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Release Control Record

Issue No.	Description	Date Issued
SA150825C34	Original release	Nov. 05, 2015

1 Certificate of Conformity

Product:	802.11n/ac Unified Wireless Outdoor Access Point
Brand:	D-Link
Test Model:	DWL-8710AP
Sample Status:	Engineering sample
Applicant:	D-Link Corporation
Test Date:	Sep. 25 ~ Oct. 29, 2015
Standards:	FCC Part 2 (Section 2.1091) KDB 447498 D01 General RF Exposure Guidance v06 IEEE C95.1:2005

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:** Nov. 05, 2015

Suntee Liu / Specialist

Approved by : _____ , **Date:** Nov. 05, 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 24cm 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	28.73	7.93	24	0.640	1
5180-5240	20.77	9.93	24	0.162	1
5745-5825	23.77	9.93	24	0.324	1

Note:
2412-2462MHz Directional gain = 4.92dBi + 10log(2) = 7.93dBi
5180-5240MHz Directional gain = 6.92dBi + 10log(2) = 9.93dBi
5745-5825MHz Directional gain = 6.92dBi + 10log(2) = 9.93dBi

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 = 0.640 + 0.324 = 0.964
Therefore all the maximum calculations of above situations are less than the “1” limit.

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