RF Exposure Report

Report No.:	SA160311D14
FCC ID:	KA2DAP1860A1
Test Model:	DAP-1860
Received Date:	Mar. 14, 2016
Test Date:	Mar. 21 ~ Apr. 19, 2016
Issued Date:	May 13, 2016
Applicant:	D-Link Corporation
Address:	17595 Mt. Hermann, Fountain Valley, CA 92708, U.S.A.
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.)

Testing Laboratory
2021

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Release Control Record

Issue No.	Description	Date Issued
SA160311D14	Original release.	May 13, 2016

1 Certificate of Conformity

Product:	AC2600 Wi-Fi Range Extender
Brand:	D-Link
Test Model:	DAP-1860
Sample Status:	Engineering sample
Applicant:	D-Link Corporation
Test Date:	Mar. 21 ~ Apr. 19, 2016
Standards:	FCC Part 2 (Section 2.1091) KDB 447498 D03 KDB 447498 D01 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 : Annie Chang , **Date:** May 13, 2016

Annie Chang / Senior Specialist

Approved by : Rex. Lai , **Date:** May 13, 2016

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/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 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	28.18	8.02	30	0.3686	1
5180 ~ 5240	26.61	9.02	30	0.3233	1
5745 ~ 5825	26.42	9.02	30	0.3094	1

NOTE:
2.4GHz: Directional gain = 2dBi + 10log(4) = 8.02dBi
5.0GHz: Directional gain = 3dBi + 10log(4) = 9.02dBi

CONCULSION:

Both of the modules 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 2.4GHz + WLAN 5GHz (Band 1) = 0.3686 + 0.3233 = 0.6919
WLAN 2.4GHz + WLAN 5GHz (Band 4) = 0.3686 + 0.3094 = 0.6780

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

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