RF Exposure Report

Report No.:	SA180328E06
FCC ID:	KA2AP2662A1
Test Model:	DAP-2662
Received Date:	Mar. 28, 2018
Test Date:	May 03, 2018
Issued Date:	July 30, 2018
Applicant:	D-Link Corporation
Address:	17595 Mt. Herrmann Street Fountain Valley, CA92708 USA
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
Lab Address:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.
Test Location:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.
FCC Registration / Designation Number:	723255 / TW2022

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Release Control Record

Issue No.	Description	Date Issued
SA180328E06	Original release.	July 30, 2018

1 Certificate of Conformity

Product:	Wireless AC1200 Wave 2 Dual-Band PoE Access Point
Brand:	D-Link
Test Model:	DAP-2662
Sample Status:	ENGINEERING SAMPLE
Applicant:	D-Link Corporation
Test Date:	May 03, 2018
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 : Mary Ko , **Date:** July 30, 2018

Mary Ko / Specialist

Approved by : , **Date:** July 30, 2018

May Chen / 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				
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	($180/f^2$)*	30
30-300	27.5	0.073	0.2	30
300-1500	…	…	f/1500	30
1500-100,000	…	…	1.0	30

f = Frequency in MHz ; *Plane-wave equivalent power density

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 26cm away from the body of the user. So, this device is classified as **Mobile Device**.

2.4 Antenna Gain

Ant No.	Transmitter Circuit	Antenna Gain (dBi)	Frequency rang (GHz)	Antenna type	Connector type
1	Chain (1)	3.7	2.4~2.4835	PIFA	i-pex(MHF)
2	Chain (0)	3.8	2.4~2.4835	PIFA	i-pex(MHF)
3	Chain (1)	3.8	5.15~5.85	PIFA	i-pex(MHF)
4	Chain (0)	3.9	5.15~5.85	PIFA	i-pex(MHF)

2.5 Calculation Result

Frequency Band (MHz)	Max. Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
2412-2462	990.758	6.76	26	0.55311	1
5180-5240	690.612	6.86	26	0.39453	1
5745-5825	660.014	6.86	26	0.37705	1

Note:
2.4GHz: Directional gain = $10 \log[(10^{G0/20} + 10^{G1/20})^2 / 2] = 6.76dBi$
5GHz: Directional gain = $10 \log[(10^{G0/20} + 10^{G1/20})^2 / 2] = 6.86dBi$

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 = 0.55311 / 1 + 0.39453 / 1 = 0.94764

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

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