

# **RF Exposure Report**

Report No.: SA190412C02B

FCC ID: KA2BA2620PA1

Original FCC ID: KA2WL6620APSA1

Test Model: DBA-2620P

Received Date: Nov. 11, 2019

**Test Date:** Dec. 03, 2019 ~ Jan. 07, 2020

**Issued Date:** Feb. 21, 2020

**Applicant:** D-Link Corporation

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

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33383, Taiwan

FCC Registration / 788550 / TW0003

**Designation Number:** 





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The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any government agencies.

Report No.: SA190412C02B Page No. 1 / 6 Report Format Version: 6.1.1 Reference No.: 191111C03



## **Table of Contents**

Rele	ase Control Record	3
1	Certificate of Conformity	4
2	RF Exposure	5
2.2	Limits for Maximum Permissible Exposure (MPE)  MPE Calculation Formula	5
3	Calculation Result of Maximum Conducted Power	6



## **Release Control Record**

Issue No.	Description	Date Issued
SA190412C02B	Original release	Feb. 21, 2020

Report No.: SA190412C02B Page No. 3 / 6 Report Format Version: 6.1.1 Reference No.: 191111C03



#### 1 Certificate of Conformity

Product: Business Cloud Access Point

/ Nuclias Cloud-Managed AC1300 Wave 2 Access Point

**Brand:** D-Link Corporation

Model: DBA-2620P

Sample Status: Identical Prototype

Applicant: D-Link Corporation

**Test Date:** Dec. 03, 2019 ~ Jan. 07, 2020

Standards: FCC Part 2 (Section 2.1091)

IEEE C95.3 -2002

References Test Guidance: KDB 447498 D01 General RF Exposure Guidance v06

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 RF characteristics under the conditions specified in this report.

Prepared by: , Date: Feb. 21, 2020

Pettie Chen / Senior Specialist

Approved by : , Date: Feb. 21, 2020

Bruce Chen / Senior Project Engineer



## 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 <sup>2</sup> )	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 <sup>2</sup> )*	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<sup>2</sup>

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 28cm 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/cm²)	Limit (mW/cm²)
2412-2462	27.57	7.91	28	0.358	1
5180-5240	27.39	9.11	28	0.453	1
5260-5320	22.53	9.11	28	0.148	1
5500-5720	23.42	9.11	28	0.182	1
5745-5825	28.66	9.11	28	0.607	1

<sup>\*</sup>Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

#### Note:

2.4GHz Directional gain = 4.9dBi + 10log(2) = 7.91dBi 5.0GHz Directional gain = 6.1dBi + 10log(2) = 9.11dBi

### **Conclusion:**

2.4GHz & 5GHz technology can transmit at same time.

The formula of calculated the MPE is:

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

CPD = Calculation power density

LPD = Limit of power density

WALN 2.4GHz + WALN 5GHz = 0.358 + 0.607 = 0.965

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

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