Report No.:	SA181022E01
FCC ID:	KA2IRX6060A1
Test Model:	DIR-X6060
Received Date:	Oct. 22, 2018
Test Date:	Mar. 05 to 16, 2019
Issued Date:	May 08, 2019
Applicant:	D-Link Corporation
Address:	No.289, Xinhu 3rd Rd., Neihu District, Tapei City 11494, Taiwan
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
SA181022E01	Original release.	May 08, 2019

1 Certificate of Conformity

Product:	AX6000 Wi-Fi 6 Router
Brand:	D-Link
Test Model:	DIR-X6060
Sample Status:	ENGINEERING SAMPLE
Applicant:	D-Link Corporation
Test Date:	Mar. 05 to 16, 2019
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 : Phoenix Huang , **Date:** May 08, 2019

Phoenix Huang / Specialist

Approved by : , **Date:** May 08, 2019

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 30cm away from the body of the user. So, this device is classified as **Mobile Device**.

2.4 Antenna Gain

WLAN			
Frequency Range (GHz)	Directional Antenna Gain (dBi)	Antenna Type	Connector Type
2.4~2.4835	6.628229	Dipole	R-SMA
5.15~5.85	7.698165		
Bluetooth			
Frequency Range (GHz)	Antenna Net Gain (dBi)	Antenna Type	Connector Type
2.4~2.4835	2.97	Printed	NA
Note: More detailed information, please refer to operating description.			

2.5 Calculation Result of Maximum Conducted Power

Operation Mode	Evaluation Frequency (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
WLAN 2.4GHz	2462	941.67	6.63	30	0.38322	1
WLAN (U-NII-1)	5240	653.582	7.70	30	0.34029	1
WLAN (U-NII-2A)	5270	240.802	7.70	30	0.12537	1
WLAN (U-NII-2C)	5610	248.712	7.70	30	0.12949	1
WLAN (U-NII-3)	5755	965.86	7.70	30	0.50288	1
BT-EDR	2441	7.096	2.97	30	0.00124	1
BT-LE	2440	2.825	2.97	30	0.00049	1

Note:
1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. The Max. Power = Max. tune up power including tolerance.

Conclusion:

The formula of calculated the MPE is:

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

CPD = Calculation power density

LPD = Limit of power density

Maximum power per technology was chosen for simultaneous transmission mode, detailed mode as below:

WLAN 2.4GHz (802.11b / CH11) + WLAN 5GHz (802.11ax (HE40) / CH151) + Bluetooth (BT-EDR_GHSK / CH39) = 0.38322 / 1 + 0.50288 / 1 + 0.00124 / 1 = 0.88734

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

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