

# FCC RF EXPOSURE REPORT

# FCC ID: KA2IRX1560A1

Project No.	:	1910H003
Equipment	:	AX1500 Wi-Fi 6 Router
Brand Name	:	D-Link
Test Model	:	DIR-X1560
Series Model	:	N/A
Applicant	:	D-Link Corporation
Address	:	17595 Mt. Herrmann Fountain Valley,CA92708 USA
Manufacturer	:	D-Link Corporation
Address	:	17595 Mt. Herrmann Fountain Valley,CA92708 USA
Date of Receipt	:	Oct. 10, 2019
Date of Test	:	Oct. 10, 2019~Nov. 10, 2019
Issued Date	:	Nov. 19, 2019
<b>Report Version</b>	:	R00
Test Sample	:	Engineering Sample No.: SH201910112
Standard(s)	:	FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091 FCC Title 47 Part 2.1091, OET Bulletin 65 Supplement C

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

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### **REPORT ISSUED HISTORY**

Report Version	Description	Issued Date
R00	Original Issue	Nov. 19, 2019

#### **1. MPE CALCULATION METHOD**

Calculation Method of RF Safety Distance:

 $S = \frac{PG}{4\pi r^2} = \frac{EIRP}{4\pi r^2}$ 

where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Table for Filed Antenna

For 2.4G

Ant.	Brand	Brand Model Name Antenna		Connector	Gain(dBi)	Note
1	N/A	N/A	Dipole	N/A	2	N/A
2	N/A	N/A	Dipole	N/A	2	N/A

Note:

 The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and receivers (2T2R), all transmit signals are completely uncorrelated, then, Direction gain = GAN T, that is Directional gain for UNII-1=2; for UNII-3=2.

For 5G

Ar	nt.	Brand Model Name Anter		Antenna Type	Connector	Gain(dBi)	Note
1	1	N/A	N/A N/A		N/A	2	N/A
2	2	N/A	N/A	Dipole	N/A	2	N/A

Note:

(2) The EUT incorporates a MIMO function. Physically, the EUT provides two completed

transmitters and receivers (2T2R), all transmit signals are completely uncorrelated, then, Direction gain = GAN T, that is Directional gain for UNII-1=2; for UNII-3=2.

(3) The EUT incorporates beamforming Function, so Directional gain = GANT + 10 log(NANT) dBi, that is Directional gain for UNII-1=2+10 log(2)dBi =5 dBi; for UNII-3=2+10 log(2)dBi =5 dBi.



## 2. TEST RESULTS

#### For 2.4GHz:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. tune up Power (dBm)	Max. tune up Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
2	1.5849	30.00	1000	0.31546	1	Complies

#### For 5GHz UNII-1:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. tune up Power (dBm)	Max. tune up Power Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
5	3.1623	27.00	501.1872	0.31546	1	Complies

#### For 5GHz UNII-3:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. tune up Power (dBm)	Max. tune up Power Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
5	3.1623	29.00	794.3282	0.49998	1	Complies

#### For the max simultaneous transmission MPE:

#### 2.4G+5G

Power Density (S) (mW/cm <sup>2</sup> ) 2.4GHz	Power Density (S) (mW/cm <sup>2</sup> ) 5GHz	Total	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
0.31546	0.49998	0.81544	1	Complies

#### Note: The calculated distance is 20 cm.

Output power including tune up tolerance.