RF Exposure Report

Report No.: SABDUI-WTW-P20110878

FCC ID: KA2M32A1

Test Model: M32

Series Model: DIR-LX3260, M32-SP, M32-TR

Received Date: Mar. 27, 2021

Test Date: Mar. 31 ~ Jun. 22, 2021

Issued Date: Aug. 26, 2021

Applicant: D-Link Corporation

Address: 14420 Myford Road Suite 100 Irvine California United States 92606

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

Lin Kou Laboratories

Lab Address: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

Test Location: No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, Taiwan

FCC Registration / Designation Number: 788550 / TW0003

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Release Control Record

Issue No.	Description	Date Issued
SABDUI-WTW-P20110878	Original release	Aug. 26, 2021

1 Certificate of Conformity

Product:	X3200 WI-FI 6 AI MESH SYSTEM, AX3200 WI-FI 6 AI MESH ROUTER, AX3200 MESH ROUTER, AX3200 MESH SYSTEM, AX3200 MESH WI-FI 6 ROUTER (refer to note for more details)
Brand:	D-Link
Test Model:	M32
Series Model:	DIR-LX3260, M32-SP, M32-TR (refer to note for more details)
Sample Status:	Engineering sample
Applicant:	D-Link Corporation
Test Date:	Mar. 31 ~ Jun. 22, 2021
Standards:	FCC Part 2 (Section 2.1091)
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:** _____ Aug. 26, 2021 _____
Polly Chien / Specialist

Approved by : _____ , **Date:** _____ Aug. 26, 2021 _____
Bruce Chen / Senior Engineer

Note: All models are listed as below. Model M32 is the representative for final test.

Brand	Product name	Model	Difference
D-Link	AX3200 WI-FI 6 AI MESH SYSTEM	M32	For marketing purpose
	AX3200 WI-FI 6 AI MESH ROUTER		
	AX3200 MESH ROUTER		
	AX3200 MESH SYSTEM		
	AX3200 MESH WI-FI 6 ROUTER	DIR-LX3260	
	AX3200 WI-FI 6 AI MESH SYSTEM	M32-SP	
	AX3200 WI-FI 6 AI MESH ROUTER		
	AX3200 MESH WI-FI 6 ROUTER		
	AX3200 WI-FI 6 AI MESH SYSTEM	M32-TR	
	AX3200 WI-FI 6 AI MESH ROUTER		
	AX3200 MESH WI-FI 6 ROUTER		

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 39cm 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 AV Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
CDD Mode					
2412-2462	29.69	10.91	39	0.601	1
5180-5240	27.40	10.18	39	0.300	1
5745-5825	27.03	11.25	39	0.352	1
Beamforming Mode					
2412-2462	23.66	10.91	39	0.150	1
5180-5240	21.38	10.18	39	0.075	1
5745-5825	21.01	11.25	39	0.088	1
BT EDR					
2402-2480	14.16	4.9	39	0.004	1
BT LE					
2402-2480	14.58	4.9	39	0.005	1

Note:
1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.
3. Directional gain:
    2.4GHz Band: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/4]$ = 10.91dBi
    5180-5240MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2]$ = 10.18dBi
    5745-5825MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2]$ = 11.25dBi

Conclusion:

The formula of calculated the MPE is:

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

CPD = Calculation power density

LPD = Limit of power density

WLAN 2.4G+ 5GHz+BT =0.601/1+0.352/1 + 0.005/1=0.958

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