

RF Exposure Report

Report No.: SABEBW-WTW-P21010678

FCC ID: KA2IS3650APA1

Test Model: DIS-3650AP

Received Date: Jan. 22, 2021

Test Date: Apr. 16~ Jun. 24, 2021

Issued Date: Sep. 03, 2021

Applicant: D-Link Corporation

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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FCC Registration / 788550 / TW0003
Designation Number:



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Release Control Record

Issue No.	Description	Date Issued
SABEBW-WTW-P21010678	Original release	Sep. 03, 2021

1 Certificate of Conformity

Product: Wireless AC1200 Wave 2 Industrial Outdoor Access Point

Brand: D-Link

Test Model: DIS-3650AP

Sample Status: Engineering sample

Applicant: D-Link Corporation

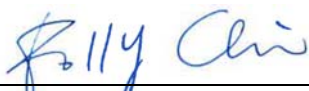
Test Date: Apr. 16~ Jun. 24, 2021

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 :


Polly Chien / Specialist

Date:

Sep. 03, 2021

Approved by :



Bruce Chen / Senior Engineer

Date:

Sep. 03, 2021

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				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

2.2 MPE Calculation Formula

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 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 AV Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
WLAN, CDD Mode					
2412-2462	28.07	6.21	28	0.272	1.00
5180-5240	15.47	9.51	28	0.032	1.00
5745-5825	28.94	9.51	28	0.710	1.00
WLAN, Beamforming Mode					
2412-2462	19.31	6.21	28	0.036	1.00
5180-5240	12.46	9.51	28	0.016	1.00
5745-5825	25.93	9.51	28	0.355	1.00

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.

2.4GHz: Directional gain = 3.2dBi + 10log(2) = 6.21dBi

5GHz: Directional gain = 6.5dBi + 10log(2) = 9.51dBi

Conclusion:

The WLAN 2.4G & WLAN 5G & BT LE can transmit simultaneously, 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 + 5G = 0.272 / 1 + 0.710 / 1 = 0.982

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

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