

Report No.: SA160822E04N

FCC ID: KA2AP2610A1

Test Model: DAP-2610

Received Date: Oct. 24, 2017

Test Date: Nov. 15, 2017

Issued Date: Dec. 01, 2017

Applicant: D-Link Corporation

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

| Attachment No. | Issue Date | Description |
|----------------|---------------|--|
| SA160822E04 | Oct. 28, 2016 | Original release. |
| SA160822E04N | Dec. 01, 2017 | Add DFS band <5.26~ 5.32GHz, 5.50 ~ 5.58GHz & 5.66 ~ 5.70GHz > |

Release Control Record

| Issue No. | Description | Date Issued |
|--------------|-------------------|---------------|
| SA160822E04N | Original release. | Dec. 01, 2017 |

1 Certificate of Conformity

Product: Wireless AC1300 Concurrent Dual Band PoE Access Point

Brand: D-Link

Test Model: DAP-2610

Sample Status: ENGINEERING SAMPLE

Applicant: D-Link Corporation

Test Date: Nov. 15, 2017

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 :

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Date:

Dec. 01, 2017

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Date:

Dec. 01, 2017

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 | | | | |
| 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 22cm away from the body of the user.

So, this device is classified as **Mobile Device**.

2.4 Antenna Gain

| Antenna No | Brand | Model | Antenna Gain (dBi) <Including cable loss> | Frequency range (GHz ~ GHz) | Antenna Type | Connector Type | Cable Length (mm) |
|------------|-------|-----------|--|--------------------------------|--------------|----------------|-------------------|
| Chain (1) | NA | 290-20302 | 3.07 | 2.4~2.4835 | PIFA | i-pex(MHF) | 47 |
| | | | 3.46 | 5.15~5.85 | | | |
| Chain (2) | NA | 290-20301 | 2.85 | 2.4~2.4835 | PIFA | i-pex(MHF) | 81 |
| | | | 3.75 | 5.15~5.85 | | | |

2.5 Calculation Result of Maximum Conducted Power

For 2.4GHz, 5GHz (U-NII-1 & UNII-3 band) data was copied from the original test report (Report No.: SA160822E04)

| Frequency Band (MHz) | Max. Power (mW) | Antenna Gain (dBi) | Distance (cm) | Power Density (mW/cm ²) | Limit (mW/cm ²) |
|------------------------|-----------------|--------------------|---------------|-------------------------------------|-----------------------------|
| 2412-2462 | 861.713 | 5.97 | 22 | 0.56015 | 1 |
| 5180-5240 | 426.809 | 6.62 | 22 | 0.32224 | 1 |
| 5260-5320 | 210.368 | 6.62 | 22 | 0.15883 | 1 |
| 5500-5580 5660-5700 | 198.556 | 6.62 | 22 | 0.14991 | 1 |
| 5745-5825 | 459.267 | 6.62 | 22 | 0.34674 | 1 |

NOTE:

2.4GHz: Directional gain = $10 \log[(10^{G0/20} + 10^{G1/20})^2 / 2] = 5.97\text{dBi}$

5GHz: Directional gain = $10 \log[(10^{G0/20} + 10^{G1/20})^2 / 2] = 6.62\text{dBi}$

Conclusion:

The formula of calculated the MPE is:

$\text{CPD1} / \text{LPD1} + \text{CPD2} / \text{LPD2} + \dots \text{etc.} < 1$

CPD = Calculation power density

LPD = Limit of power density

WLAN 2.4GHz + WLAN 5GHz = $0.56015 / 1 + 0.34674 / 1 = 0.90689$

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

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