

## RF Exposure Report

**Report No.:** SA161018E04C

**FCC ID:** KA2SHC310A1

**Test Model:** DSH-C310

**Received Date:** Feb. 15, 2017

**Test Date:** Feb. 23, 2017

**Issued Date:** Mar. 15, 2017

**Applicant:** D-Link Corporation

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

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### Report Issue History Record of EUT

Attachment No.	Issue Date	Description
SA161018E04	Dec. 16, 2016	Original
SA161018E04C	Mar. 15, 2017	Add DFS band <5.26 ~ 5.32GHz, 5.50 ~ 5.70GHz>

### Release Control Record

Issue No.	Description	Date Issued
SA161018E04C	Original release.	Mar. 15, 2017

## 1 Certificate of Conformity

**Product:** Omna 180Cam HD

**Brand:** D-Link

**Test Model:** DSH-C310

**Sample Status:** ENGINEERING SAMPLE

**Applicant:** D-Link Corporation

**Test Date:** Feb. 23, 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 :** Wendy Wu , **Date:** Mar. 15, 2017  
Wendy Wu / Specialist

**Approved by :** May Chen , **Date:** Mar. 15, 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 <sup>2</sup> )	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 <sup>2</sup> )*	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<sup>2</sup>

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 20cm away from the body of the user.

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

### 2.4 Antenna Gain

Brand	Model	Antenna Net Gain(dBi)	Frequency range (GHz ~ GHz)	Antenna Type	Connector Type	Cable Length (mm)
Mgear	C037-511444-A	2.4	2.4~2.4835	PCB	MHF	56.5
		4.8	5.15~5.85			

## 2.5 Calculation Result of Maximum Conducted Power

For 2.4GHz and 5GHz (U-NII-1 and UNII-3 band) data was copied from the original test report (Report No.: SA161018E04)

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
2412-2462	349.14	2.4	20	0.12071	1
5180-5240	221.82	4.8	20	0.13327	1
5260-5320	159.221	4.8	20	0.09566	1
5500-5700	140.605	4.8	20	0.08448	1
5745-5825	224.905	4.8	20	0.13512	1

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