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**Test Model:** DCS-8330LH

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**Test Date:** June 15, 2019

**Issued Date:** Sep. 05, 2019

**Applicant:** D-Link Corporation

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**FCC Registration /  
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### Release Control Record

Issue No.	Description	Date Issued
SA190403E09	Original release.	Sep. 05, 2019

## 1 Certificate of Conformity

**Product:** Smart Full HD Wi-Fi Camera

**Brand:** D-Link

**Test Model:** DCS-8330LH

**Sample Status:** ENGINEERING SAMPLE

**Applicant:** D-Link Corporation

**Test Date:** June 15, 2019

**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:** Sep. 05, 2019  
Wendy Wu / Specialist

**Approved by :** May Chen , **Date:** Sep. 05, 2019  
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

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

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

Antenna No.	Brand	Model No.	Antenna Net Gain (dBi)	Frequency range (GHz)	Antenna Type	Connector Type	Cable Length (mm)
1 (WLAN+BT)	CHANGSHU HONGBO	290-20427	2.68	2.4~2.5	FPCB	i-pex(MHF)	57
2 (Zigbee)	TELECOMMUNICATION TECHNOLOGY CO.,LTD.	290-20392	2.33	2.4~2.5	FPCB	i-pex(MHF)	75.5

## 2.5 Calculation Result of Maximum Conducted Power

Operation Mode	Evaluation Frequency (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
WLAN 2.4GHz	2437	351.56	2.68	20	0.12964	1
Bluetooth	2440	14.421	2.68	20	0.00532	1
Zigbee	2440	96.161	2.33	20	0.03271	1

### Conclusion:

The formula of calculated the MPE is:

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

CPD = Calculation power density

LPD = Limit of power density

Simultaneously transmission condition.

Condition	Technology	
1	WLAN 2.4GHz	Zigbee
2	Bluetooth	Zigbee

$WLAN\ 2.4GHz + Zigbee = 0.12964 / 1 + 0.03271 / 1 = 0.16235$

$Bluetooth + Zigbee = 0.00532 / 1 + 0.03271 / 1 = 0.03803$

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

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