Report No.:	SA190403E09
FCC ID:	KA2CS8330LHA1
Test Model:	DCS-8330LH
Received Date:	Apr. 03, 2019
Test Date:	June 15, 2019
Issued Date:	Sep. 05, 2019
Applicant:	D-Link Corporation
Address:	No.289, Xinhu 3rd Rd., Neihu District, Tapei City 11494, Taiwan
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
Lab Address:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.
Test Location:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.
FCC Registration / Designation Number:	723255 / TW2022

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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 : , **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^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 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 TELECOMMUNICATION TECHNOLOGY CO.,LTD.	290-20427	2.68	2.4~2.5	FPCB	i-pex(MHF)	57
2 (Zigbee)		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^2)	Limit (mW/cm^2)
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 + ……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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