FCC RF EXPOSURE REPORT

FCC ID: KA2CHS162A1

Project No.	:	2009H044
Equipment	:	DCH-S162 A1
Brand Name	:	D-Link
Test Model	:	DCH-S162 A1
Series Model	:	N/A
Applicant	:	D-Link Corporation
Address	:	17595 Mt. Herrmann，Fountain Valley,California United State 92708
Manufacturer	:	D-Link Corporation
Address	:	17595 Mt. Herrmann，Fountain Valley,California United State 92708
Factory Address		LEEDARSON LIGHTING CO., LTD. Xingtai Industrial Zone,Economic Development Zone, Changtai County,Zhangzhou City, Fujian Province, P.R.China
Date of Receipt	:	Oct. 23, 2020
Date of Test	:	Oct. 23, 2020~Dec. 02, 2020
Issued Date	:	Dec. 18, 2020
Report Version	:	R00
Test Sample	:	Engineering Sample No.: SH2020111669/SH2020111670
Standard(s)	:	FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

Maker Qi

Prepared by : Maker Qi

Ryan. Wang

Approved by : Ryan Wang

Certificate # 5123. 03

Add: No. 29, Jintang Road, Tangzhen Industry Park, Pudong New Area, Shanghai 201210,China
TEL: +86-021-61765666
Web: www.newbtl.com

REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	Dec. 14, 2020
R01	Revised report to address TCB's comments.	Dec. 18, 2020

1. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi r^2} = \frac{EIRP}{4\pi r^2}$$

where:
S = power density
P = power input to the antenna
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna

Table for Filed Antenna
For 2.4GHz and BLE:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	LOOP	N/A	1.86

For 915MHz:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	IFA	N/A	-1.06

Note:
The antenna gain is provided by the manufacturer.

2. TEST RESULTS

For 2.4GHz:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
1.86	1.5346	24	251.1886	0.076688	1	Complies

For BLE:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
1.86	1.5346	5	3.1623	0.000965	1	Complies

For 915MHz:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
-1.06	0.7834	18	63.0957	0.009834	0.61	Complies

For the max simultaneous transmission MPE:

2.4G+915MHz

Power Density (S) (mW/cm2)	Power Density (S) (mW/cm2)	Total	Limit of Power Density (S) (mW/cm2)	Test Result
2.4GHz	915MHz			
0.076688	0.009834	0.0061	1	Complies

Note: The calculated distance is 20 cm.
Output power including tune up tolerance.
Limit of Power Density=f/1500.
f= frequency in MHz. * = Plane-wave equivalent power density.
Total= $(0.076688 / 1)^2 + (0.009834/ 0.61)^2 = 0.0061$

End of Test Report