RF EXPOSURE REPORT

REPORT NO.:	SA131227C19E
MODEL NO.:	DIR-862L, DIR-866L
FCC ID:	KA2IR862LA1
RECEIVED:	Dec. 10, 2013
TESTED:	Jan. 10 ~ Aug. 08, 2014
ISSUED:	Aug. 26, 2014

APPLICANT:	D-Link Corporation
ADDRESS:	17595 Mt. Hermann, Fountain Valley, CA 92708, U.S.A.

ISSUED BY:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
LAB ADDRESS:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan, R.O.C.
TEST LOCATION:	No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

TABLE OF CONTENTS

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA131227C19E	Original release.	Aug. 26, 2014

1. CERTIFICATION

PRODUCT:	Wireless AC1600 Dual Band Gigabit Cloud Router, AC1750 Wi-Fi Router
MODEL:	DIR-862L, DIR-866L
BRAND:	D-Link
APPLICANT:	D-Link Corporation
TESTED:	Jan. 10 ~ Aug. 08, 2014
TEST SAMPLE:	ENGINEERING SAMPLE
STANDARDS:	**FCC Part 2 (Section 2.1091)**
	KDB 447498 D03
	IEEE C95.1

The above equipment (model: DIR-862L) 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 : _____ , **DATE :** Aug. 26, 2014
Suntee Liu / Specialist

APPROVED BY : _____ , **DATE :** Aug. 26, 2014
Ken Liu / Senior 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

$Pd = (Pout*G) / (4*pi*r^2)$

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 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

FREQUENCY BAND (MHz)	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm^2)	LIMIT (mW/cm^2)
2412-2462	27.05	4.77	20	0.303	1
5180-5240	25.33	4.77	20	0.204	1
5745-5825	25.09	4.77	20	0.193	1

Note: Directional gain = 0dBi + 10log(3) = 4.77dBi

CONCLUSION:
The formula of calculated the MPE is:
CPD1 / LPD1 + CPD2 / LPD2 + ……etc. < 1
CPD = Calculation power density
LPD = Limit of power density

WLAN 2.4GHz + WLAN 5GHz = 0.303 + 0.204 = 0.507
Therefore all the maximum calculations of above situations are less than the “1” limit.

---END---