RF EXPOSURE REPORT

REPORT NO.:	SA120302C15E
MODEL NO.:	DIR-836L
FCC ID:	KA2IR636LA1
RECEIVED:	Sep. 08, 2012
TESTED:	Oct. 08 ~ Oct. 10, 2012
ISSUED:	Oct. 11, 2012

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, 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.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA120302C15E	Original release	Oct. 11, 2012

1. CERTIFICATION

PRODUCT:	Wireless N750 Dual Band Gigabit Cloud Router, Cloud Router 2500
MODEL NO.:	DIR-836L
BRAND:	D-Link
APPLICANT:	D-Link Corporation
TESTED:	Oct. 08 ~ Oct. 10, 2012
TEST SAMPLE:	ENGINEERING SAMPLE
STANDARDS:	**FCC Part 2 (Section 2.1091)**
	FCC OET Bulletin 65, Supplement C (01-01)
	IEEE C95.1

The above equipment (Model: DIR-836L) 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 :** Oct. 11, 2012
Pettie Chen / Senior Specialist

APPROVED BY : _____ , **DATE :** Oct. 11, 2012
Ken Liu / 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

MPE for the product (FCC ID: KA2IR636LA1)

FREQUENCY BAND (MHz)	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm^2)	LIMIT (mW/cm^2)
2412~2462	20.91	0	20	0.025	1

MPE for a certified 5G module (FCC ID: KA2IR836LMO1)

FREQUENCY BAND (MHz)	MODULATION MODE	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm^2)	LIMIT (mW/cm^2)
5180-5240	802.11a	13.48	0	20	0.0044	1
	802.11n (20MHz)	13.39	4.77	20	0.0130	1
	802.11n (40MHz)	16.30	4.77	20	0.0255	1
5745-5825	802.11a	19.48	0	20	0.0176	1
	802.11n (20MHz)	25.10	4.77	20	0.1931	1
	802.11n (40MHz)	25.00	4.77	20	0.1888	1

5.0GHz:

802.11n(20MHz) / (40MHz) : Directional gain = 0dBi + 10log(3) = 4.77dBi

The product will install a certified 5G module (FCC ID: KA2IR836LMO1) and support co-transmission.

Co-located MPE is

0.025 / 1 + 0.1931 / 1 = 0.2181 < 1