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RF EXPOSURE REPORT

REPORT NO.: SA140220D04

MODEL NO.: LAPAC1750

FCC ID: Q87-LAPAC1750

RECEIVED: Feb. 20, 2014

TESTED: Feb. 20 ~ Mar. 24, 2014

ISSUED: Apr. 14, 2014

APPLICANT: Linksys LLC

ADDRESS: 131 Theory Drive Irvine California 92617 United States

ISSUED BY: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA140220D04	Original release	Apr. 14, 2014



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1. CERTIFICATION

PRODUCT: AC1750 Dual Band Access Point

MODEL NO.: LAPAC1750

BRAND: Linksys

APPLICANT: Linksys LLC

TESTED: Feb. 20 ~ Mar. 24, 2014

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 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 : Celia Chen , **DATE:** Apr. 14, 2014
(Celia Chen / Senior Specialist)

APPROVED BY : Rex Lai , **DATE:** Apr. 14, 2014
(Rex Lai / Assistant Manager)

2. RF EXPOSURE LIMIT

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

3. MPE CALCULATION FORMULA

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

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = distance between observation point and center of the radiator in cm

4. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 25cm away from the body of the user. So, this device is classified as **Mobile Device**.

5. 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	28.91	6.77	25	0.4709	1.00
5180 ~ 5240	15.96	6.77	25	0.0239	1.00
5745 ~ 5825	28.93	6.77	25	0.4731	1.00

NOTE: Directional gain = 2dBi + 10log(3) = 6.77dBi

CONCULSION:

Both of the modules can transmit simultaneously, the formula of calculated the MPE is:

CPD1 / LPD1 + CPD2 / LPD2 +etc. < 1

CPD = Calculation power density

LPD = Limit of power density

1. WLAN (2.4G) + WLAN (5.0G BAND 1) = 0.4709/1 + 0.0239/1 = 0.4948

2. WLAN (2.4G) + WLAN (5.0G BAND 4) = 0.4709/1 + 0.4731/1 = 0.9440

Therefore, the maximum calculation of this situation is 0.9440, which is less than the “1” limit.

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