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RF EXPOSURE REPORT

REPORT NO.: SA131112D04

MODEL NO.: LAPN600

FCC ID: Q87-LAPN600

RECEIVED: Nov. 12, 2013

TESTED: Nov. 28 ~ Dec. 7, 2013

ISSUED: Dec. 16, 2013

APPLICANT: Linksys LLC

ADDRESS: 131 Theory Drive Irvine California 92617 United States

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

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA131112D04	Original release	Dec. 16, 2013



1. CERTIFICATION

PRODUCT: Wireless-N600 Dual Band Access Point with PoE

MODEL NO.: LAPN600

BRAND: Linksys

APPLICANT: Linksys LLC

TESTED: Nov. 28 ~ Dec. 7, 2013

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.

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(Annie Chang / Supervisor)

APPROVED BY : Rex. Lai , **DATE:** Dec. 16, 2013
(Rex Lai / Assistant Manager)



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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

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

where

Pd = power density in mW/cm²

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

4. 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**.



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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	28.82	1.8	20	0.2295	1.00
5180 ~ 5240	16.27	3.5	20	0.0189	1.00
5745 ~ 5825	25.98	3.9	20	0.1935	1.00

CONCLUSION:

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

$$CPD1 / LPD1 + CPD2 / LPD2 + \dots \text{etc.} < 1$$

CPD = Calculation power density

LPD = Limit of power density

$$1. \text{ WLAN (2.4G)} + \text{ WLAN (5.0G BAND 1)} = 0.2295/1 + 0.0189/1 = 0.2484$$

$$2. \text{ WLAN (2.4G)} + \text{ WLAN (5.0G BAND 4)} = 0.2295/1 + 0.1935/1 = 0.4225$$

Therefore, the maximum calculation of this situation is 0.4225, which is less than the "1" limit.

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