

RF Exposure Report

Report No.: SA160422D13

FCC ID: Q87-LAPAC2600

Test Model: LAPAC2600

Received Date: Apr. 22, 2016

Test Date: May 4 ~ 16, 2016

Issued Date: May 27, 2016

Applicant: Linksys LLC

Address: 121 Theory Drive, Irvine, CA 92617, USA

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

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Release Control Record

Issue No.	Description	Date Issued
SA160422D13	Original release.	May 27, 2016

1 Certificate of Conformity

Product: LAPAC2600 Dual Band Access Point

Brand: Linksys

Test Model: LAPAC2600

Sample Status: Engineering sample

Applicant: Linksys LLC

Test Date: May 4 ~ 16, 2016

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D03

KDB 447498 D01

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 :  , **Date:** May 27, 2016
(Celia Chen / Supervisor)

Approved by :  , **Date:** May 27, 2016
(Rex Lai / Assistant 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/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

2.3 Classification

The antenna of this product, under normal use condition, is at least 32cm away from the body of the user.

So, this device is classified as **Mobile Device**.

3 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	29.90	8.1	32	0.4903	1
5180 ~ 5240	26.81	8.47	32	0.2621	1
5745 ~ 5825	27.32	8.47	32	0.2948	1

NOTE:

- 2.4GHz: Directional gain = 2.08dBi + 10log(4) = 8.1dBi
5.0GHz: Directional gain = 2.45dBi + 10log(4) = 8.47dBi
- Driver Version: V1.0.00.003

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

$$\text{WLAN 2.4GHz} + \text{WLAN 5GHz (Band 1)} = 0.4903 + 0.2621 = 0.7524$$

$$\text{WLAN 2.4GHz} + \text{WLAN 5GHz (Band 4)} = 0.4903 + 0.2948 = 0.7851$$

Therefore the maximum calculations of above situations are less than the "1" limit.

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