RF Exposure Report

Report No.: SA131112D04E

FCC ID: Q87-LAPN600

Test Model: LAPN600

Received Date: Jul. 20, 2016

Test Date: Jul. 20, 2016

Issued Date: Jul. 21, 2016

Applicant: Linksys LLC

Address: 121 Theory Drive Irvine California 92617 United States

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.)

Testing Laboratory
2021

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Report Issue History Record

Issue No.	Description	Date Issued
SA131112D04	Original	Dec. 16, 2013
SA131112D04B	Upgraded the standard to section 15.407 under new rule for U-NII-1 and U-NII-3 band.	Apr. 7, 2016
SA131112D04E	Upgraded the standard to section 15.407 under new rule (16-24) for U-NII-3 band.	Jul. 21, 2016

Release Control Record

Issue No.	Description	Date Issued
SA131112D04E	Original release.	Jul. 21, 2016

1 Certificate of Conformity

Product:	Wireless-N600 Dual Band Access Point with PoE
Brand:	Linksys
Test Model:	LAPN600
Sample Status:	Engineering sample
Applicant:	Linksys LLC
Test Date:	Jul. 20, 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 : Annie Chang , **Date:** Jul. 21, 2016

Annie Chang / Senior Specialist

Approved by : Rex. Lai , **Date:** Jul. 21, 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/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 25cm 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 (Original Approved)	28.82	4.81	25	0.2937	1
5180 ~ 5240 (Original Approved)	27.61	6.51	25	0.3288	1
5745 ~ 5825	29.52	6.91	25	0.5596	1

NOTE: 1. Directional gain =1.8dBi + 10log(2) = 4.81dBi
Directional gain =3.5dBi + 10log(2) = 6.51dBi
Directional gain =3.9dBi + 10log(2) = 6.91dBi
2. Driver Version: v1.0.14.001

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

WLAN (2.4G) + WLAN (5.0G BAND 4) = 0.2937/1 + 0.5596/1 = 0.8533

Therefore, the maximum calculation of this situation is 0.8533, which is less than the "1" limit.

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