

# **RF Exposure Report**

Report No.: SA121015E01C

FCC ID: Q87-WAP300N

Test Model: WAP300N

Received Date: Mar. 01, 2016

Test Date: Mar. 16, 2016

Issued Date: May 09, 2016

Applicant: LINKSYS LLC

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- **Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
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- **Test Location (1):** E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.
- Test Location (2): No. 49, Ln. 206, Wende Rd., Shangshan Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan R.O.C.

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Report Issue History Record				
ssue No.	Reason for Change	Date Issued		
SA121015E01	Original	Aug. 09, 2013		
SA121015E01C	Upgrade the standard to section 15.407 under new rule for U-NII-1, U-NII-3 band.	May 09, 2016		
	Release Control Record			
ssue No.	Date Issued			
SA121015E01C	Original release.	May 09, 2016		



#### 1 Certificate of Conformity

Product:	Selectable Dual-Band Wireless-N Access Point		
Brand:	Linksys		
Test Model:	WAP300N		
Sample Status:	MASS-PRODUCTION		
Applicant:	LINKSYS LLC		
Test Date:	Mar. 16, 2016		
Standards:	FCC Part 2 (Section 2.1091)		
	KDB 447498 D01 General RF Exposure Guidance v06		
	IEEE C95.1-1992		

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 :	Claire Kuan / Specialist	, Date:	May 09, 2016	
Approved by :	May Chen / Manager	, Date:	May 09, 2016	



## 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 <sup>2</sup> )	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 Antenna Gain

Antenna Type	Gain (dBi) (Include cable loss )	Connector type	Frequency range (MHz to MHz)
Dipole	3.5	R-SMA	2400-2500 5150-5850



#### 3 Calculation Result of Maximum Conducted Power

The data (Except WLAN: 5180-5240MHz & 5745-5825MHz) was copied from the original test report (Report No.: SA121015E01)

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
2412-2462	420.632	6.51	20	0.18734	1
5180-5240	97.008	6.51	20	0.08640	1
5745-5825	72.165	6.51	20	0.06428	1

NOTE:

2.4GHz: Directional gain = 3.5dBi +  $10\log(2) = 6.51$ dBi 5GHz: Directional gain = 3.5dBi +  $10\log(2) = 6.51$ dBi

2.4GHz and 5GHz technology cannot transmit at same time.

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