Loopcomm Technology, Ltd.
6F., No. 236, Bo'ai St., Shulin Dist., New Taipei City 23845 Taiwan

Federal Communications Commission
Authorization and Evaluation Division
Equipment Authorization Branch
7435 Oakland Mills Road
Columbia, MD 21046

Applicant's declaration concerning RF Radiation Exposure

We hereby indicate that the product
Product description: High Power AC WiFi Adapter PCI-E Card
Model No: LP-9094

The equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The integral antennas used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter within the host device.

A safety statement concerning minimum separation distances from enclosure of the
Product : High Power AC WiFi Adapter PCI-E Card
will be integrated in the user's manual to provide end-users with transmitter operating conditions for satisfying RF exposure compliance.

The appropriate information can be drawn from the test report no: W6D21403-13994-C-1 and the accompanying calculations.

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Date: 2014/03/10

Signature

3.2 Equivalent isotropic radiated power

FCC Rule: 15.247(b)(3)
EIRP = max. conducted output power + antenna gain

5.8GHz:802.11a
EIRP = 21.02 dBm + 7.01 dBi
= 28.03 dBm
5.8GHz:802.11n(20MHz), 802.11n(40MHz)
EIRP = 24.12 dBm + 7.01 dBi
= 31.13 dBm
5.8GHz:802.11ac
EIRP = 23.26 dBm + 7.01 dBi
= 30.27 dBm
2.4GHz:802.11b/g
EIRP = 23.28 dBm + 5.01 dBi
= 28.29 dBm
2.4GHz: 802.11n(20MHz), 802.11n(40MHz)
EIRP = 24.13 dBm + 5.01 dBi
= 29.14 dBm

Limit: EIRP = +36 dBm for Antenna gain <6dBi

Test equipment used: ETSTW-RE 055

3.3 RF Exposure Compliance Requirements

FCC OET Bulletin 65 Edition 97.01 determines the equations for predicting RF fields and applicable limits.
The prediction for power density in the far-field but will over-predict power density in the near field, where it could be used for walking a “worst case” or conservative prediction.

$$S = \frac{PG}{4\pi R^2}$$

S – Power Density
P – Output power ERP
R – Distance
D – Cable Loss
AG – Antenna Gain

5.8GHz:802.11a

Item	Unit	Value	**Remarks**
P	mW	126.4736	Peak value
D	dB		
AG	dBi	7.01	
G		5.0234	Calculated Value
R	cm	20	Assumed value
S	mW/cm2	0.1264	Calculated value

5.8GHz:802.11n(20MHz), 802.11n(40MHz)

Item	Unit	Value	**Remarks**
P	mW	258.2260	Peak value
D	dB		
AG	dBi	7.01	
G		5.0234	Calculated Value
R	cm	20	Assumed value
S	mW/cm2	0.2581	Calculated value

5.8GHz:802.11ac

Item	Unit	Value	**Remarks**
P	mW	211.8361	Peak value
D	dB		
AG	dBi	7.01	
G		5.0234	Calculated Value
R	cm	20	Assumed value
S	mW/cm2	0.2117	Calculated value

802.11b/g

Item	Unit	Value	**Remarks**
P	mW	212.8139	Peak value
D	dB		
AG	dBi	5.01	
G		3.1696	Calculated Value
R	cm	20	Assumed value
S	mW/cm2	0.1342	Calculated value

2.4G:802.11n(20MHz), 802.11n(40MHz)

Item	Unit	Value	**Remarks**
P	mW	258.8213	Peak value
D	dB		
AG	dBi	5.01	
G		3.1696	Calculated Value
R	cm	20	Assumed value
S	mW/cm2	0.1632	Calculated value

Limits:

Limit for General Population / Uncontrolled Exposure	
Frequency (MHz)	Power Density (mW/cm^2)
1500 – 100.000	1.0