

Amped Wireless
13089 Peyton Dr. #C307 Chino Hills California 91709 United States

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 Compact AC Wi-Fi Range Extender
Model No: REC15A

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 Compact AC Wi-Fi Range Extender 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: W6M21401-13774-C-1 and the accompanying calculations.

Company: Amped Wireless
Address: 13089 Peyton Dr. #C307 Chino Hills California 91709 United States

Date: 2014/02/06

Signature



Jason Owen
CEO
Amped Wireless



Registration number: W6M21401-13774-C-1

FCC ID: ZTT-REC15A

3.2 Equivalent isotropic radiated power

FCC Rule: 15.247(b)(3)

EIRP = max. conducted output power + antenna gain

5.8GHz:802.11a

EIRP = 22.78 dBm + 2 dBi

= 24.78 dBm

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

EIRP = 22.71 dBm + 2 dBi

= 24.71 dBm

5.8GHz:802.11ac

EIRP = 23.23 dBm + 2 dBi

= 25.23 dBm

2.4GHz:802.11b/g

EIRP = 25.62 dBm + 2 dBi

= 27.62 dBm

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

EIRP = 21.41 dBm + 2 dBi

= 23.41 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

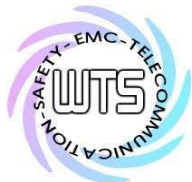
R – Distance

D – Cable Loss

AG – Antenna Gain

5.8GHz:802.11a

Item	Unit	Value	Remarks
P	mW	189.6706	Peak value
D	dB		
AG	dBi	2	
G		1.5849	Calculated Value
R	cm	20	Assumed value
S	mW/cm2	0.0598	Calculated value



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21401-13774-C-1

FCC ID: ZTT-REC15A

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

Item	Unit	Value	Remarks
P	mW	186.6380	Peak value
D	dB		
AG	dB	2	
G		1.5849	Calculated Value
R	cm	20	Assumed value
S	mW/cm ²	0.0588	Calculated value

5.8GHz:802.11ac

Item	Unit	Value	Remarks
P	mW	210.3778	Peak value
D	dB		
AG	dB	2	
G		1.5849	Calculated Value
R	cm	20	Assumed value
S	mW/cm ²	0.0663	Calculated value

802.11b/g

Item	Unit	Value	Remarks
P	mW	364.7539	Peak value
D	dB		
AG	dB	2	
G		1.5849	Calculated Value
R	cm	20	Assumed value
S	mW/cm ²	0.1150	Calculated value

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

Item	Unit	Value	Remarks
P	mW	138.3566	Peak value
D	dB		
AG	dB	2	
G		1.5849	Calculated Value
R	cm	20	Assumed value
S	mW/cm ²	0.0436	Calculated value

Limits:

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