Product Name:	Router
Model Number:	AP300
Applicant:	Amped Wireless 13089 Peyton Dr. #C307 Chino Hills, CA91709
Date of Receipt:	Feb. 13, 2012
Finished date of Test:	Mar. 01, 2012
Applicable Standards:	RSS-GEN RSS-210 RSS-102

We, **Spectrum Research & Testing Laboratory Inc.**, hereby certify that one sample of the above was tested in our laboratory with positive results according to the above-mentioned standards. The records in the report are an accurate account of the results. Details of the results are given in the subsequent pages of this report.

Tested By: Jeff , Date: 2012/03/07
(Jeff Lo)

Approved By: , Date: 3/7/2017
(Johnson Ho, Director)

RF POWER EXPOSURE EVALUATION TEST

1 LIMIT

According to the requirement of IC Safety Code 6, Section 2.2.1 (a) Table 5.

Table 5
Exposure Limits for Persons Not Classed As RF and Microwave Exposed Workers (Including the General Public)

1 Frequency (MHz)	2 Electric Field Strength; rms (V/m)	3 Magnetic Field Strength; rms (A/m)	4 Power Density (W/m^2)	5 Averaging Time (min)
0.003–1	280	2.19		6
1–10	$280/f$	$2.19/f$		6
10–30	28	$2.19/f$		6
30–300	28	0.073	2*	6
300–1 500	$1.585f^{0.5}$	$0.0042f^{0.5}$	$f/150$	6
1 500–15 000	61.4	0.163	10	6
15 000–150 000	61.4	0.163	10	$616\,000/f^{1.2}$
150 000–300 000	$0.158f^{0.5}$	$4.21 \times 10^{-4}f^{0.5}$	$6.67 \times 10^{-5}f$	$616\,000/f^{1.2}$

* Power density limit is applicable at frequencies greater than 100 MHz.

Notes: 1. Frequency, f, is in MHz.
2. A power density of 10 W/m^2 is equivalent to 1 mW/cm^2.
3. A magnetic field strength of 1 A/m corresponds to 1.257 microtesla (μT) or 12.57 milligauss (mG).

1.2 TEST PROCEDURE

1. The EUT was operating in transmitter mode and could be controlled its channel. The power instrument read power value.
2. The EUT uses a chip antenna and the antenna gain is 0dBi declared by manufacturer.
3. As discussed in FCC OET Bulletin 65, calculations can be made to predict RF field strength and power density levels around typical RF sources. For example, in the case of a non-directional antenna, a prediction for power density in the far-field of the antenna can be made by use of the general Equations (1) or (2) below [for conversion to electric or magnetic field strength see Equation (3) above]. These equations are generally accurate in the far-field of an antenna but will over-predict power density in the near field, where it could be used for making a" worst case" or conservative prediction.

$$S=PG/4\pi R^2 \quad \text{(Eq.1)}$$

$$S=\text{connect power}/4\pi R^2 \quad \text{(Eq. 2)}$$

$$S=E^2/3770=37.7H^2 \quad \text{(Eq. 3)}$$

where: S = power density (mW/cm^2)

E = electric field strength (V/m)

H = magnetic field strength (A/m)

S = power density (in appropriate units, e.g. mW/cm^2)

P = power input to the antenna (in appropriate units, e.g., mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator (dBi)

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

where: connect power = equivalent (or effective) isotropically radiated power.

1.3 CONNECT POWER AT THE ANTENNA CONNECTOR RESULT

Temperature:	24°C	Humidity:	52%RH
Spectrum Detector:	PK.	Tested Mode:	802.11b/g/n
Tested By:	Jeff Lo	Modulation Type:	QPSK
Tested Date:	Feb. 06, 2012		

CHANNEL NUMBER 802.11b	CHANNEL FREQUENCY (MHz)	MPE Distance (cm)	Antenna Gain (dBi)	PEAK POWER OUTPUT		Calculated RF Exposure (W/m²)	LIMIT (W/m²)
				dBm	W		
1	2412	20	2	22.24	0.265	0.527	10
6	2437	20	2	23.33	0.341	0.678	10
11	2462	20	2	21.17	0.207	0.412	10

CHANNEL NUMBER 802.11g	CHANNEL FREQUENCY (MHz)	MPE Distance (cm)	Antenna Gain (dBi)	PEAK POWER OUTPUT		Calculated RF Exposure (W/m²)	LIMIT (W/m²)
				dBm	W		
1	2412	20	2	22.18	0.261	0.519	10
6	2437	20	2	22.30	0.269	0.535	10
11	2462	20	2	23.17	0.328	0.653	10

CHANNEL NUMBER 802.11n	CHANNEL FREQUENCY (MHz)	MPE Distance (cm)	Antenna Gain (dBi)	PEAK POWER OUTPUT		Calculated RF Exposure (W/m²)	LIMIT (W/m²)
				dBm	W		
5	2422	20	2	23.42	0.348	0.692	10
8	2437	20	2	23.46	0.351	0.698	10
11	2452	20	2	23.89	0.388	0.772	10

NOTE 1: The values of PEAK POWER OUT same as 4.4 test results.