

## Compliance Testing, LLC

Previously Flom Test Lab EMI, EMC, RF Testing Experts Since 1963 toll-free: (866)311-3268 fax: (480)926-3598

http://www.ComplianceTesting.com info@ComplianceTesting.com

#### **Test Report**

Prepared for: Ubiquiti Networks, Inc

Model: R5AC-Lite

**Description: Rocket 5 AC Lite** 

FCC ID: SWX-R5ACL

To

FCC Part 1.1310

Date of Issue: April 7, 2015

On the behalf of the applicant: Ubiquiti Networks, Inc

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Attention of: Michael Taylor, Compliance Manager

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Project No: p14a0018

**Alex Macon** 

**Project Test Engineer** 



# **Test Report Revision History**

Revision	Date	Revised By	Reason for Revision
1.0	December 18, 2014	Alex Macon	Original Document



#### ILAC / A2LA

Compliance Testing, LLC, has been accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer joint ISO-ILAC-IAF Communiqué dated January 2009)

The tests results contained within this test report all fall within our scope of accreditation, unless below

Please refer to http://www.compliancetesting.com/labscope.html for current scope of accreditation.

Testing Certificate Number: 2152.01



FCC Site Reg. #349717

IC Site Reg. #2044A-2

Non-accredited tests contained in this report:

N/A

EUT Description
Model: R5AC-Lite

Description: Rocket 5 AC Lite

Firmware: N/A Software: N/A S/N: N/A

Additional Information: None



## **Source Based Time Averaged Power Calculation**

### **Average Power Calculations**

Average Power = Peak Power \* duty-cycle%

Tuned Frequency (MHz)	Conducted Peak Output Power (mW)	Duty Cycle %	Average Power (mW)
5800	338 mW	100	338 mW

### **MPE Evaluation**

This is a fixed/mobile device used in uncontrolled /general population exposure environment.

Limits Controlled Exposure 47 CFR 1.1310 Table 1, (A)

0.3-3.0 MHz	Limit [mW/cm <sup>2</sup> ] = 100
3.0-30 MHz	Limit $[mW/cm^2] = (900/f^2)$
30-300 MHz	Limit $[mW/cm^2] = 1.0$
300-1500 MHz	Limit [mW/cm <sup>2</sup> ] = f/300
1500-100,000 MHz	Limit [mW/cm <sup>2</sup> ] = 5

Limits Uncontrolled Exposure 47 CFR 1.1310 Table 1, (B)

0.3-1.234 MHz	Limit [mW/cm <sup>2</sup> ] = 100
1.34-30 MHz	Limit $[mW/cm^2] = (180/f^2)$
30-300 MHz	Limit $[mW/cm^2] = 0.2$
300-1500 MHz	Limit [mW/cm <sup>2</sup> ] = f/1500
1500-100,000 MHz	Limit [mW/cm <sup>2</sup> ] = 1.0

### **Test Data**

Test Frequency, MHz	5800
Power, Conducted, mW (P)	338
Antenna Gain Isotropic	10dBi
Antenna Gain Numeric (G)	10
Antenna Type	Omni
Distance (R)	20 cm

$S = \frac{P * G}{4\pi r^2}$			
Power Density (S) mw/cm <sup>2</sup>	Power mW (P)	Numeric Gain (G)	Distance (r <sup>2</sup> ) cm
	338	10	20

Power Density (S) =	0.672
Limit =(from above table) =	1.0

END OF TEST REPORT