

# Compliance Testing, LLC

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

### **Test Report**

Prepared for: Ubiquiti Networks, Inc

Model: NBE-AC5-19

**Description: NanoBeam 5AC-19** 

Serial Number: N/A

FCC ID: SWX-NBE5AC19

To

FCC Part 1.1310

Date of Issue: August 7, 2015

On the behalf of the applicant: Ubiquiti Networks, Inc

91 E. Tasman Drive San Jose, CA 95134

Attention of: Michael Taylor, Compliance Manager

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Project No: p14a0020

**Alex Macon** 

**Project Test Engineer** 

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# **Test Report Revision History**

Revision	Date	Revised By	Reason for Revision
1.0	August 6, 2015	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: NBE-AC5-19

**Description:** NanoBeam 5AC-19

Firmware: N/A Software: N/A Serial Number: N/A

Additional Information: The EUT is powered by POE (Power Over Ethernet).

## **Average Power calculations**

Average Power = Peak Power \* duty-cycle%

Tuned Frequency (MHz)	Conducted Peak Output Power (mW)	Duty Cycle (%)	Average Power (mW)
5280	11.7 mW	100	11.7 mW
5708	11.7 mW	100	11.7 mW

#### **MPE Evaluation**

This is a fixed device used in Uncontrolled Exposure environment.

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 $[mW/cm^2] = 1.0$

## **Test Data UNII-2A**

Test Frequency, MHz	5280
Power, Conducted, mW (P)	11.7
Antenna Gain Isotropic	19
Antenna Gain Numeric (G)	79.43
Antenna Type	Dish
Distance (R)	20

$S = \frac{P * G}{4\pi r^2}$				
Power Density (S) mw/cm <sup>2</sup>		Power mW (P)	Numeric Gain (G)	Distance (r <sup>2</sup> ) cm
	0.1848899809	11.7	79.43	20

Power Density (S) =	0.18
Limit =(from above table) =	1.0

## **Test Data UNII-2C**

Test Frequency, MHz	5708
Power, Conducted, mW (P)	11.7
Antenna Gain Isotropic	19
Antenna Gain Numeric (G)	79.43
Antenna Type	Dish
Distance (R)	20

$S = \frac{P * G}{4\pi r^2}$				
Power Density (S) mw/cm <sup>2</sup>		Power mW (P)	Numeric Gain (G)	Distance (r <sup>2</sup> ) cm
	0.1848899809	11.7	79.43	20

Power Density (S) =	0.18
Limit =(from above table) =	1.0

## END OF TEST REPORT