



Compliance Testing, LLC

Previously Flom Test Lab

EMI, EMC, RF Testing Experts Since 1963

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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
Ph: (408) 942-3085
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**Prepared By
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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 ²] = 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 ²] = 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 ²	Power mW (P)	Numeric Gain (G)	Distance (r ²) 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 ²	Power mW (P)	Numeric Gain (G)	Distance (r ²) cm
0.1848899809	11.7	79.43	20

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

END OF TEST REPORT