



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: NSM5

Description: NanoStation M5

Serial Number: N/A

FCC ID: SWX-M5N

To

FCC Part 1.1310

Date of Issue: August 23, 2016

On the behalf of the applicant:

Ubiquiti Networks, Inc
2580 Orchard Parkway
San Jose, CA 95131

Attention of:

Kevin Forbey, Regulatory Manager
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Project No: p1630038

Paul Hay
Project Test Engineer

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Test Report Revision History

Revision	Date	Revised By	Reason for Revision
1.0	May 17, 2016	Paul Hay	Original Document
2.0	August 18, 2016	Amanda Reed	Updated phone number on cover page
3.0	August 22, 2016	Amanda Reed	Corrected output power
4.0	August 23, 2016	Amanda Reed	Updated minimum safe distance



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: NSM5

Description: NanoStation M5

Firmware: N/A

Software: N/A

Serial Number: N/A

Additional Information:

The EUT is a 2x2 MIMO 802.11a/n radio.



Source Based Time Averaged Power Calculation

Average Power Calculations

Average Power = Peak Power * duty-cycle%

Band	Tuned Frequency (MHz)	Conducted Peak Output Power (mW)	Duty Cycle (%)	Average Power (mW)
UNII-3	5825	191	100	191

MPE Evaluation

This is a fixed mobile 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

Test Frequency, MHz	5825
Power, Conducted, mW (P)	191
Antenna Gain Isotropic	16
Antenna Gain Numeric (G)	39.81
Antenna Type	Sector
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
	191	39.81	20

Power Density (S) = 1.5 mw/ cm ²
Limit =(from above table) = 1.0 mw/cm ²

Safe distance is greater than 20cm therefore the new separation distance is 24.6cm.

END OF TEST REPORT