Compliance Testing, LLC
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Test Report

Prepared for: Ubiquiti Networks, Inc

Models: PBE-5AC-Omni, PBE-5AC620, PBE-5AC500, PBE-5AC400, PBE-5AC300

Description: PowerBeam 5AC

Serial Number: N/A

FCC ID: SWX-PBE5AC

To

FCC Part 1.1310

Date of Issue: January 27, 2015

On the behalf of the applicant:	**Ubiquiti Networks, Inc** **2580 Orchard Parkway** **San Jose, CA 95131**
Attention of:	**Michael Taylor, Compliance Manager** **Ph: (408) 942-3085** **Email: compliance@ubnt.com**

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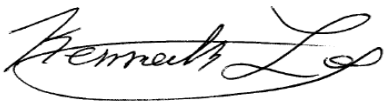

Kenneth Lee
Project Test Engineer

Test Report Revision History

Revision	Date	Revised By	Reason for Revision
1.0	November 9, 2015	Kenneth Lee	Original Document
2.0	January 27, 2015	Kenneth Lee	Updated Antenna Gain

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: PowerBeam 5AC
Description: PBE-5AC
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)
5200	195	100	195

MPE Evaluation

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

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

0.3-1.234 MHz:	Limit [mW/cm²] = 100
1.34-30 MHz:	Limit [mW/cm²] = (180/f²)
30-300 MHz:	Limit [mW/cm²] = 0.2
300-1500 MHz:	Limit [mW/cm²] = f/1500
1500-100,000 MHz	Limit [mW/cm²] = 1.0

Test Data

Test Frequency, MHz	5200
Power, Conducted, mW (P)	195
Antenna Gain Isotropic	29 dBi
Antenna Gain Numeric (G)	794.33
Antenna Type	Dish
Distance (R)	20 cm

$$S = \frac{P * G}{4\pi r^2}$$

Power Density (S) mw/cm²	Power mW (P)	Numeric Gain (G)	Distance (r²) cm
	195	794.33	20

Power Density (S) =	30.8
Limit =(from above table) =	1.0

The Power Density of 30.8 mw/cm² is over the limit of 1.0 mw/cm² for the uncontrolled /general population exposure environment so Minimum Safe Distance was calculated.

$R=\sqrt{(PG/4\pi L)}$

Distance (R) cm	Power mW (P)	Numeric Gain (G)	Limit (L)
111	195	794.33	1

The minimum safe distance is 111 cm.

END OF TEST REPORT