Compliance Testing, LLC
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Test Report

Prepared for: Ubiquiti Networks, Inc

Model: LBE-5AC

Description: LightBeam AC 5

FCC ID: SWX-LBE5AC

Serial Number: N/A

To

FCC Part 1.1310

Date of Issue: September 9, 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** **E-mail: compliance@ubnt.com**

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Project No: p14a0031

Alex Macon
Project Test Engineer

Test Report Revision History

Revision	Date	Revised By	Reason for Revision
1.0	August 17, 2015	Alex Macon	Original Document
2.0	September 9, 2015	Amanda Reed	Updated FCC ID

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

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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: LBE-5AC
Description: Lightbeam AC 5
Firmware: N/A
Software: N/A
Serial Number: N/A

Average Power calculations

Average Power = Peak Power * duty-cycle%

Tuned Frequency (MHz)	Conducted Peak Output Power (mW)	Duty Cycle (%)	Average Power (mW)
5235	158	100	158

MPE Evaluation

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

Limits Uncontrolled Exposure	0.3-1.234 MHz	Limit [mW/cm²] = 100
47 CFR 1.1310	1.34-30 MHz	Limit [mW/cm²] = (180/f²)
Table 1, (B)	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	5235
Power, Conducted, mW (P)	158
Antenna Gain Isotropic	23
Antenna Gain Numeric (G)	199.53
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
6.2720316728	158	199.53	20

Power Density (S) =	6.27
Limit =(from above table) =	1.0

The Power Density of 6.27 mw/cm^2 is over the limit of 1.0 mw/cm^2 for the uncontrolled /general population exposure environment so Minimum Safe Distance was calculated.

R=√(PG/4πL)

Distance (R) cm	Power mW (P)	Numeric Gain (G)	Limit (L)
50.10001144	158	199.53	1.0

The minimum safe distance is 50.1 cm.

END OF TEST REPORT