



## **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: LBE5AC-16-120**

**Description: LiteBeam 5AC-16-120**

**Serial Number: N/A**

**FCC ID: SWX-LBE5AC120-U**

**To**

**FCC Part 1.1310**

**Date of Issue: June 21, 2016**

**On the behalf of the applicant:**

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

**Attention of:**

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Project No: p1630006**

**Paul Hay  
Project Test Engineer**

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All results contained herein relate only to the sample tested



### Test Report Revision History

Revision	Date	Revised By	Reason for Revision
1.0	June 20, 2016	Paul Hay	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:** LBE5AC-16-120

**Description:** LiteBeam 5AC-16-120

**Serial Number:** N/A

**Firmware:** N/A

**Software:** N/A

**Additional Information:** None



## 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-2A	5275	25.1	100	25.1
UNII-2C	5505	24.0	100	24.0

### 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 <sup>2</sup> ] = 100
1.34-30 MHz	Limit [mW/cm <sup>2</sup> ] = (180/f <sup>2</sup> )
30-300 MHz	Limit [mW/cm <sup>2</sup> ] = 0.2
300-1500 MHz	Limit [mW/cm <sup>2</sup> ] = f/1500
1500-100,000 MHz	Limit [mW/cm <sup>2</sup> ] = 1.0

### UNII-2A Test Data

Test Frequency, MHz	5275
Power, Conducted, mW (P)	25.1
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 <sup>2</sup>	Power mW (P)	Numeric Gain (G)	Distance (r <sup>2</sup> ) cm
0.19879	25.1	39.81	20

Power Density (S) = 0.19879 mw/cm <sup>2</sup>
Limit =(from above table) = 1.0 mw/cm <sup>2</sup>



### UNII-2C Test Data

Test Frequency, MHz	5505
Power, Conducted, mW (P)	24.0
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 <sup>2</sup>	Power mW (P)	Numeric Gain (G)	Distance (r <sup>2</sup> ) cm
0.181	24.0	39.81	20

Power Density (S) = 0.19008 mw/cm <sup>2</sup>
Limit =(from above table) = 1.0 mw/cm <sup>2</sup>

END OF TEST REPORT