

# Compliance Testing, LLC

Previously Flom Test Lab EMI, EMC, RF Testing Experts Since 1963 toll-free: (866) 311-3268 fax: (480) 926-3598

http://www.ComplanceTesting.com info@ComplanceTesting.com

# Test Report

Prepared for: Ubiquiti Networks, Inc

#### Model: B-DB-AC, Bullet

#### **Description: Dual Band Networking Device**

Serial Number: N/A

## FCC ID: SWX-BDBAC

То

## FCC Part 1.1310

Date of Issue: February 1, 2018

On the behalf of the applicant:

Attention of:

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

Mark Feil Ph: (408)942-3085 Email: mark.feil@ubnt.com

Prepared By Compliance Testing, LLC 1724 S. Nevada Way Mesa, AZ 85204 (480) 926-3100 phone / (480) 926-3598 fax www.compliancetesting.com Project No: p1790008

Dama

Poona Saber Project Test Engineer

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## **Test Report Revision History**

Revision	Date	Revised By	Reason for Revision
1.0	January 23, 2018	Poona Saber	Original Document
2.0	January 31, 2018	Poona Saber	Added a note on page 3



## 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: B-DB-AC, Bullet Description: Dual Band Networking Device Firmware: N/A Software: N/A Serial Number: N/A

Additional Information: The Bullet AC (Model: B-DB-AC) is a dual band networking device that is powered over ethernet (passive POE, 24V) and provides an N-type antenna connection. It features dualband AC mode operation in 5GHz and 2.4GHz bands, and a dedicated 2.4 GHz WiFi management radio for convenient device setup.

#### **EUT Operation during Tests**

Radio testing has been done conducted and radiated with controlling the device for continuous modulation transmission on low, middle and high channels with client's provided commands through telnet.

Note: Power is brought down one by one for other antennas mathematically so the highest EIRP for 4dBi antenna would be the same for other antennas as well.



## Source Based Time Averaged Power Calculation

## **Average Power calculations**

Average Power = Peak Power \* duty-cycle%

Tuned Frequency	Conducted Peak Output Power	Duty Cycle	Average Power
(MHz)	(dBm)	(%)	(mW)
5740	22.9	100	195



## **MPE Evaluation**

This is a portable device used in Uncontrolled Exposure environment.

Limits Uncontrolled Exposure	0.3-1.234 MHz:	Limit [mW/cm <sup>2</sup> ] = 100
47 CFR 1.1310	1.34-30 MHz:	Limit $[mW/cm^{2}] = (180/f^{2})$
Table 1, (B)	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	5740
Power, Conducted, mW (P)	195
Antenna Gain Isotropic	4 dBi
Antenna Gain Numeric (G)	2.5
Antenna Type	Omni
Distance (R)	20 cm

$S = \frac{P * G}{4\pi r^2}$
Power Density (S) mw/cm <sup>2</sup>

Power Density (S) =0.096	
Limit = (from above table) = 1	

END OF TEST REPORT