



Compliance Testing, LLC

Previously Flom Test Lab

EMI, EMC, RF Testing Experts Since 1963

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Test Report

Prepared for: Freewave Technologies

Model: WP201

Description: Access Point

Serial Number: 163235777

FCC ID: KNYPRW5000AB

To

FCC Part 1.1310

Date of Issue: January 25, 2017

On the behalf of the applicant:

**Freewave Technologies
5395 Pearl Parkway
Boulder, CO 80301**

Attention of:

**Patrick Lazar
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**Prepared By
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Project No: p1660014**

**Poona Saber
Project Test Engineer**

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Test Report Revision History

Revision	Date	Revised By	Reason for Revision
1.0	November 21, 2016	Poona Saber	Original Document
2.0	January 12, 2017	Poona Saber	Revised power levels and MPE calculation based on old rules and FCC ID: KNYPRW5000AB
3.0	January 23, 2017	Poona Saber	Changed portable to fixed location on page 5 and 6

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: WP201

Description: Access Point

Firmware: V2.1.3

Software: N/A

S/N: 163235777

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)
5785	990.6	96.2	952.9

MPE Evaluation

This is a fixed location 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	5785
Power, Conducted, mW (P)	952.9
Antenna Gain Isotropic	34 dBi
Antenna Gain Numeric (G)	2511.88
Antenna Type	Dish
Distance (R)	20 cm

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

Power Density (S) = 476.18
Limit =(from above table) = 1

Minimum Safe Distance Evaluation

This is a Fixed location 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	5785
Power, Conducted, mW (P)	952.9
Antenna Gain Isotropic	34 dBi
Antenna Gain Numeric (G)	2511.88
Antenna Type	Dish
Limit (L)	1

$R = \sqrt{(PG/4\pi L)}$			
Distance (R) cm	Power mW (P)	Numeric Gain (G)	Limit (L)
436.5442656	952.9	2511.88	1

END OF TEST REPORT