

Company: Aruba Networks, Inc.

Test of: APIN0334 & APIN0335  
To: FCC CFR 47 Part 15 Subpart E 15.407

Report No.: ARUB196-MPE Rev A

**MPE REPORT**



# MPE TEST REPORT

FROM



Test of: Aruba Networks, Inc. APIN0334 & APIN0335

to

To: FCC CFR 47 Part 15 Subpart E 15.407

Test Report Serial No.: ARUB196-MPE Rev A

This report supersedes: NONE

Applicant: Aruba Networks, Inc.  
1344 Crossman Ave.  
Sunnyvale, California 94089  
USA

Product Function: Wireless Access Point

Issue Date: 7<sup>th</sup> May 2016

## This Test Report is Issued Under the Authority of:

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MiCOM Labs is an ISO 17025 Accredited Testing Laboratory

## **1. MAXIMUM PERMISSABLE EXPOSURE**

### **Calculations for Maximum Permissible Exposure Levels**

$$\text{Power Density} = P_d \text{ (mW/cm}^2\text{)} = \text{EIRP}/(4\pi d^2)$$

$$\text{EIRP} = P * G$$

P = Peak output power (mW)

G = Antenna numeric gain (numeric)

d = Separation distance (cm)

$$\text{Numeric Gain} = 10^{\text{G (dBi)/10}}$$

Because the EUT belongs to the General Population/Uncontrolled Exposure the limit of power density is 1.0 mW/cm<sup>2</sup>

The calculations in the table below use the highest conducted power values together with the lowest antenna gain specified for the EUT. These calculations represent worst case in terms of the exposure levels.

Freq. Band (MHz)	Ant Gain (dBi)	Numeric Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Calculated Safe Distance @ 1mW/cm <sup>2</sup>	Calculated Power Density @ 20cm	Minimum Separation Distance (cm)
2400.0 - 2483.5	2.00	1.58	25.22	332.99	6.48	0.10	20.00
5150.0 - 5250.0	2.10	1.62	27.27	533.12	8.29	0.17	20.00
5725.0 - 5850.0	2.10	1.62	23.93	247.26	5.65	0.08	20.00

Assessment for simultaneous operation:

Freq. Band (MHz)	Ant Gain (dBi)	Numeric Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Calculated Safe Distance @ 1mW/cm <sup>2</sup>	Calculated Power Density @ 20cm	Minimum Separation Distance (cm)
2400.0 - 2483.5	2.00	1.58	25.22	332.99	6.48	0.10	20.00
5150.0 - 5250.0	2.10	1.62	27.27	533.12	8.29	0.17	20.00
<b>EIRP TOTAL (mW/EIRP) : 1389.8</b>					<b>10.51</b>	<b>0.28</b>	<b>20.00</b>

**Note:** for mobile or fixed location transmitters the minimum separation distance is 20cm, even if calculations indicate the MPE distance to be less.

### **Specification**

#### **Maximum Permissible Exposure Limits**

FCC §1.1310 Limit = 1mW / cm<sup>2</sup> from 1.310 Table 1



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