

Company: Mimosa Networks

Test of: A5 Wireless Access Point

To: FCC CFR 47 Part 15 Subpart E 15.407

Report No.: MIMO05-U6c MPE Rev A

## MPE TEST REPORT



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Test of: Mimosa Networks A5 Wireless Access Point

to

To: FCC CFR 47 Part 15 Subpart E 15.407

Test Report Serial No.: MIMO05-U6c MPE Rev A

This report supersedes: NONE

Applicant: Mimosa Networks  
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Santa Clara, California 95050  
USA

Product Function: Wireless Access Point

Issue Date: 4<sup>th</sup> November 2015

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## 1. MAXIMUM PERMISSABLE EXPOSURE

### Calculations for Maximum Permissible Exposure Levels

Power Density =  $P_d$  (mW/cm<sup>2</sup>) =  $EIRP / (4 * \pi * d^2)$

$EIRP = P * G$

$P$  = Peak output power (mW)

$G$  = Antenna numeric gain (numeric)

$d$  = Separation distance (cm)

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

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) |
|------------------|----------------|------------------------|-------------------------|------------------------|--|---------------------------------|----------------------------------|
| 5150.0 - 5250.0  | 5.00           | 3.16                   | 27.44                   | 554.6                  | 11.8   | 0.35                            | 20.00                            |
| 5250.0 - 5350.0  | 5.00           | 3.16                   | 23.77                   | 238.4                  | 7.7  | 0.15                            | 20.00                            |
| 5470.0 - 5725.0  | 5.00           | 3.16                   | 23.83                   | 241.5                  | 7.8  | 0.15                            | 20.00                            |
| 5725.0 - 5850.0  | 5.00           | 3.16                   | 24.01                   | 251.9                  | 8.0  | 0.16                            | 20.00                            |
|                  |                |                        |                         |                        |  |                                 |                                  |
| 5150.0 - 5250.0  | 8.00           | 6.31                   | 27.44                   | 554.6                  | 16.69  | 0.70                            | 20.00                            |
| 5250.0 - 5350.0  | 8.00           | 6.31                   | 23.77                   | 238.4                  | 10.94  | 0.30                            | 20.00                            |
| 5470.0 - 5725.0  | 8.00           | 6.31                   | 23.83                   | 241.5                  | 11.01  | 0.30                            | 20.00                            |
| 5725.0 - 5850.0  | 8.00           | 6.31                   | 24.01                   | 251.9                  | 11.25  | 0.32                            | 20.00                            |

**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

**RSS-Gen §3.2** In addition to RSS-Gen, the requirements in Radio Standards Specification RSS-102 shall be met.

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