

Company: Mimosa Networks

Test of: B11 Microwave Fixed Link

To: FCC CFR 47 Part 101

Report No.: MIMO04-U3 MPE Rev A

MPE TEST REPORT



MPE TEST REPORT

FROM



Test of: Mimosa Networks B11 Microwave Fixed Link

to

To: FCC CFR 47 Part 101

Test Report Serial No.: MIMO04-U3 MPE Rev A

This report supersedes: NONE

Applicant: Mimosa Networks
469 El Camino Real, Suite 100
Santa Clara, California 95050
USA

Product Function: Microwave Fixed Link

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1. MAXIMUM PERMISSABLE EXPOSURE

Maximum Permissible Exposure
 FCC, Part 101

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)

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

The Mimosa B11 Microwave Fixed Link calculations are based on a worst case scenario. The Mimosa B11 is a professionally installed device.

Maximum Antenna Gain = 50.0 dBi (Numeric 100,000)

Maximum Conducted Power Measured (40 MHz, Channel 11,225 MHz) = +27.56 dBm

The EUT belongs to the Controlled Exposure the limit of power density is 5.0 mW/cm²

Freq. Band (MHz)	Antenna Gain (dBi)	Effective Numeric Gain (numeric)	Max Peak Output Power (dBm)	Max Peak Output Power (mW)	Peak Output Power (mW/EIRP)	Distance (cm)	
						Calculated Safe Distance @ 5mW/cm ² Limit(cm)	Minimum Separation Distance (cm)
11225.0	50.0	100,000	27.56	570.2	57,020,000	952.6	952.6

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

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency levels in excess of the Commission's guidelines. See §1.1310 of this chapter.

Limit = 5 mW / cm² from 1.310 Table 1, (A) Limits for Occupational/Controlled Exposure

Laboratory Measurement Uncertainty for Power Measurements

Measurement uncertainty	±1.33dB
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