



## **MPE/RF EXPOSURE EVALUATION**

**FCC CFR47 Part §1.1310**

**Report No.: MIKO93-U2\_MPE Rev A**

**Company:** Mikrotiks SIA (MikroTik)

**Model Name:** RB4011iGS+5HacQ2HnD-IN-US

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**To:** FCC CFR47 Part §1.1310

**Test Report Serial No.:** MIKO93-U2\_MPE

**This report supersedes:** NONE

**Applicant:** Mikrotikls SIA (MikroTik)  
Brivibas gatve 214i  
Riga, LV-1039  
Latvia

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

**MiCOM Labs, Inc.**  
575 Boulder Court  
Pleasanton California 94566  
USA  
Phone: +1 (925) 462-0304  
Fax: +1 (925) 462-0306  
[www.micomlabs.com](http://www.micomlabs.com)



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## 1. MAXIMUM PERMISSIBLE 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)

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

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 Power Density (mW/cm <sup>2</sup> ) @ 20cm	Power Density Limit (mW/cm <sup>2</sup> )	Min Calculated safe distance for Limit (cm)	Calculated Power Density (mW/cm <sup>2</sup> ) @ Safe Distance
5250.0 - 5350.0	4.00	2.51	21.86	153.62	0.08	1.00	6.00	1.00
5470.0 - 5725.0	4.00	2.51	21.60	144.69	0.07	1.00	6.00	1.00

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

The Limit is defined in Table 1 of FCC §1.1310.



575 Boulder Court  
Pleasanton, California 94566, USA  
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Fax: +1 (925) 462 0306  
[www.micomlabs.com](http://www.micomlabs.com)