



MPE/RF EXPOSURE EVALUATION REPORT

FCC Part 15 RF Exposure Requirements

Report No.: MIKO92_MPE FCC Rev A

Company: Mikrotiks SIA

Model: RBLHGG-5acD Wireless Module

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Model: RBLHGG-5acD Wireless Module

To: FCC CFR 47 Part 1.1310

Test Report Serial No.: MIKO92_MPE FCC Rev A

This report supersedes: NONE

Applicant: Mikrotikls SIA
Brivibas gatve 214i
Riga, LV-1039
Latvia

Product Function: 802.11ac WLAN access point

Issue Date: 9th September 2019

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



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1. MAXIMUM PERMISSABLE EXPOSURE

Calculations for Maximum Permissible Exposure Levels

Power Density = P_d (mW/cm²) = $EIRP / (4 * \pi * d^2)$

$EIRP = P * G$

P = Peak output power (mW)

G = Antenna numeric gain (numeric)

d = Separation distance (cm)

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

The calculations in the table below use the highest conducted power values together with the lowest antenna gain specified for the EUT. The RBLHGG-5acD Wireless Module can only transmit on a single frequency at any given time therefore the following calculations represent worst case exposure levels.

| Freq. Band (MHz) | Ant Gain (dBi) | Numeric Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Calculated Power Density (mW/cm ²) @ 20cm | Power Density Limit (mW/cm ²) | Min Calculated safe distance for Limit (cm) | Calculated Power Density (mW/cm ²) @ Safe Distance |
|------------------|----------------|------------------------|-------------------------|------------------------|---|---|---|--|
| 5250.0 - 5350.0 | 9.00 | 7.94 | 18.95 | 78.50 | 0.12 | 1.00 | 8.00 | 1.00 |
| 5470.0 - 5725.0 | 9.00 | 7.94 | 16.87 | 48.68 | 0.08 | 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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