

Company: MikroTik

Test of: RBLHGG-5acD Wireless Module

To: FCC CFR 47 Part 1.1310

Report No.: MIKO60-MPE Rev B

MPE/RF EXPOSURE TEST REPORT



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Test of: MikroTik RBLHGG-5acD Wireless Module

to

To: FCC CFR 47 Part 1.1310

Test Report Serial No.: MIK060-MPE Rev B

This report supersedes: NONE

Applicant: MikroTik
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Issue Date: 23rd October 2017

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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)

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

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 ²) @ 20cm	Power Density Limit (mW/cm ²)	Min Calculated safe distance for Limit (cm)	Calculated Power Density (mW/cm ²) @ Safe Distance
5725.0 - 5850.0	9.00	7.94	18.27	67.14	0.11	1.00	6.54	1.00
5150.0 - 5250.0	9.00	7.94	17.02	50.35	0.08	1.00	5.64	1.00
5725.0 - 5850.0	27.00	501.19	8.27	6.71	0.67	1.00	16.36	1.00
5150.0 - 5250.0	27.00	501.19	8.01	6.32	0.63	1.00	15.88	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.



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