

Company: MikroTik

Test of: RBLHG-5nD Wireless Module

To: FCC CFR 47 Part 1.1310

Report No.: MIK061-U2_MPE Rev B

MPE/RF EXPOSURE TEST REPORT



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FROM



Test of: MikroTik RBLDF-5nD Wireless Module

To: FCC CFR 47 Part 1.1310

Test Report Serial No.: MIKO61-U2_MPE Rev B

This report supersedes: NONE

Applicant: MikroTik
Pernavas 46
Riga LV1009
Latvia

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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)

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

The calculations in the table below use the highest conducted power values together with the lowest antenna gain specified for the EUT. These calculations represent worst case in terms of the exposure levels.

The transmitters cannot operate simultaneously

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	21.95	156.68	0.248	1.00	9.95	1.00
5150.0 - 5250.0	9.00	7.94	21.68	147.23	0.233	1.00	9.65	1.00
5725.0 - 5850.0	27.00	501.19	8.68	7.38	0.74	1.00	17.16	1.00
5150.0 - 5250.0	27.00	501.19	8.95	7.85	0.78	1.00	17.70	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.

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



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