

Company: Radwin

Assessment of: AP0158770

To: FCC CFR 47 Part 15 RF Exposure requirements  
Industry Canada RSS-102

Report No.: RDWN39-U9 MPE DFS Bands

**MPE REPORT**



# MPE TEST REPORT

FROM



Assessment of: Radwin AP0158770

To: FCC CFR 47 Part 15 RF Exposure requirements  
Industry Canada RSS-102

Test Report Serial No.: RDWN34–U9 MPE DFS Bands

This report supersedes: NONE

Applicant: Radwin  
27 Habarzel Street  
Tel Aviv, 69710  
Israel

Product Function: 5 GHz Wireless Module

Issue Date: 3<sup>rd</sup> December 2015

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

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**Title:** Radwin AP0158770  
**To:** FCC CFR 47 Part 15 Subpart E 15.407  
**Serial #:** RDWN34-U9 MPE  
**Issue Date:** 2<sup>nd</sup> December 2015  
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## 1. MAXIMUM PERMISSABLE EXPOSURE

### Calculations for Maximum Permissible Exposure Levels

Power Density =  $P_d$  (mW/cm<sup>2</sup>) =  $EIRP / (4 * \pi * d^2)$

$EIRP = P * G$

$P$  = Peak output power (mW)

$G$  = Antenna numeric gain (numeric)

$d$  = Separation distance (cm)

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

Because the EUT belongs to the General Population/Uncontrolled Exposure the limit of power density is 1.0 mW/cm<sup>2</sup>

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 Safe Distance @ 1mW/cm <sup>2</sup> | Calculated Power Density @ 20cm | Minimum Separation Distance (cm) |
|------------------|----------------|------------------------|-------------------------|------------------------|------------------------------------------------|---------------------------------|----------------------------------|
| 5470.0 - 5725.0  | 11.00          | 12.59                  | 18.96                   | 78.65                  | 8.88                                           | 0.20                            | 20.00                            |
| 5250.0 - 5350.0  | 11.00          | 12.59                  | 18.87                   | 77.04                  | 8.79                                           | 0.19                            | 20.00                            |

**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

**FCC §1.1310** Limit = 1mW / cm<sup>2</sup> from 1.310 Table 1

**RSS-Gen §3.2** In addition to RSS-Gen, the requirements in Radio Standards Specification RSS-102 shall be met.



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