



## Maximum Permissible Exposure (MPE) Requirement

Applicant: Tagsmyth  
Model Name.: RangeTAG GPS (TS1-RTGP101)

This document was prepared by VPI Laboratories on behalf of the applicant using data collected during testing and information provided by the applicant. The maximum power density requirements for the General Public (Uncontrolled Environment) listed in FCC Part 1.1310 & 2.1091 was used. The power density is calculated using the following equation.

$$P_d = \frac{P_t G^*}{4\pi r^2}$$

$P_d$  = power density in watts

$P_t$  = transmit power in milliwatts

$G$  = numeric antenna gain

$r$  = distance between body and transmitter in centimeters

\*  $P_t G$  = EIRP

The calculated power density of the equipment listed in this application is shown below.

Max Transmit Power EIRP (mW):	49.9		
Operating Frequency (MHz):	914.5		
Min Operating Distance (cm):	20	Duty Cycle (%):	100
Power Density (mW/cm <sup>2</sup> ):		9.93E-03	
Limit (mW/cm <sup>2</sup> ):		6.10E-01	