

Federal Communication Commission  
Authorization and Evaluation Division  
7435 Oakland Mills Road  
Columbia, MD 21046

**Attention: Reviewing Engineer**

The Trimble Navigation Trimtrac 1.5 is a GPS/GSM Locator.

Due to the construction and the position of the antenna a distance under normal operating conditions of more than 25 cm is guaranteed.

The user manual information includes the following: ***The TrimTrac 1.5 is not intended for handheld use or to be worn on the body. A minimum separation of ten (10") inches (25 cm) be maintained between the TrimTrac 1.5 and any persons' body.***

The maximum output power of the Burst is 4270W (36.30 dBm) EIRP.

Regarding MPE limits, GPUC environment limits maximum exposure to

**LIMIT < 1 mW/cm<sup>2</sup> for 1900MHz and f/1500 for 850MHz = 0.57 mW/cm<sup>2</sup>**

The power density is:

$$S = E^2/3770 = 13 \text{ H}^2 < \text{limit}$$

Where: S = Power density [mW/cm<sup>2</sup>]  
E = electrical field strength [V/m]

This formula converted using the EIRP is

$$P_{\text{out}} * G / 4\pi * r^2 = \text{mW/cm}^2$$

Where: EIRP [W] = P<sub>out</sub> \* G

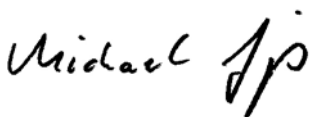
For **25cm** Distance :

$$4270 / (4\pi * 25 * 25) = \mathbf{0.54 \text{ mW/cm}^2}$$

Calculations are based on standard formula for calculating field strength at a distance and converting power density using free space impedance.

If you should have any questions regarding this submission, please feel free to contact the undersigned.

Yours truly,



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