

WiBear-SF2 MPE calculation.

Model: AN00K73535

According to FCC §15.247(b)(4) and §1.1307(b)(1), systems operation under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

MPE Prediction

Equation for calculation

$$S=PG/4\pi R^2$$

Where: S – Power density

P – Power input to antenna

G – Antenna gain relative to isotropic radiator

R – Distance to antenna

Maximum peak output power at antenna terminal: +18dBm (63mW)

Antenna gain: 2.1dBi (numeric 1.62)

Prediction distance: 20cm

Frequency: 2450MHz

MPE limit for General Population/Uncontrolled Exposure: $1\text{mW}/\text{cm}^2$

Results:

MPE safe distance (where is power density less than $1.0\text{mW}/\text{cm}^2$): **2.85cm**

Power density at 20cm distance: **$0.020\text{mW}/\text{cm}^2$**