WiBear11n-SF2 MPE calculation

Model number: AN00J93174
FCC ID PV7-WIBEAR11N-SF2
IC: 7738A-WB11NSF2

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

Frequency range (MHz)	Power density (mW/cm²)
400 – 1500	f/2000
1500 - 100000	1 mW/cm²

Equation for calculation

$$S = P*G / (4\pi R^2)$$

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: +23.0 dBm (199.5 mW)
Antenna gain: 3.0 dBi
Prediction distance: 20cm
MPE limit for General Population/Uncontrolled Exposure: 1 mW/cm²

Intermediate results:

MPE safe distance: **5.63 cm**
Power density at 20cm distance at 2.5GHz**: 0.0792 mW/cm²**

Best Regards