

According to 15.247(b)(4), RF exposure is calculated.

MPE Prediction

Predication of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

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

Where: S = power density

P = power input to antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal: 9.8 (dBm)

Maximum peak output power at antenna input terminal: 9.5 (mW)

Antenna Gain (typical): 2 (dBi)

Maximum antenna gain: 1.58 (numeric)

Prediction distance: 3 (cm)

Predication frequency: 2400 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 1 (mW/cm²)

Power density at predication frequency: 0.13 (mW/cm²)

Maximum allowable antenna gain: 11.9 (dBi)

Test Result

The predicted power density level at 3 cm is 0.13mW/cm². This is below the uncontrolled exposure limit of 1mW/cm² at 2400 MHz.

This radio is intended to be installed in laptop PC only and is thus classed as mobile equipment.