RF Exposure Calculation

The following calculation is based on guidelines published in OET Bulletin 65, Supplement C, Edition 01-01, August 1997: Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.

The power density is given as:

Power Density = PG / π•r^2

where

P = Maximum Transmitter Output Power, P = 25.25 dBm (peak), P = 335 mW

G = Antenna Gain, G = 2.62 dBi, G = 1.8 (linear)

r = distance from antenna

Using the general population - uncontrolled Maximum Power Density limit of 1mW / cm^2 at a distance of 20 cm as given in OET Bulletin 65

Power Density = 335 • 1.8 / π•(20^2)

Power Density = 0.48 mW / cm^2 which is under the limit of 1 mW / cm^2.

The User Manual contains the following statement:

This device should be operated with a minimum separation of at least 20 cm between the Airport Extreme Card antennas and a person's body and must not be co-located or operated with any other antenna or transmitter.