Maximum Permissive Exposure

Performance Criterion: The human RF exposure limit is 1 mW/cm^2.

Evaluation Results: Complies

Details: The maximum permissible exposure (MPE) is predicted by using Equation (3) of Section 2 of FCC OET Bulletin 65, Edition 97-01:

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

where: S = power density (in appropriate units, e.g. mW/cm^2)
        P = power input to the antenna (in appropriate units, e.g., mW)
        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 (appropriate units, e.g., cm)

P = 3.7239 mW, G = 1.5849 (2 dBi), R = 20 cm

$$S = 0.0012 \text{ mW/cm}^2 = 0.012 \text{ W/m}^2$$

MPE limit for uncontrolled exposure at prediction frequency: 1 mW/cm^2
Maximum allowable antenna gain: 31.3 dBi

Margin of Compliance at 20 cm = **29.3 dB**

Minimal antenna-to-user separation distance:

P = 3.7239 mW, G = 1.5849 (2 dBi), S = 1 mW/cm^2

$$R = 0.4697 \text{ cm}$$