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 = 4.8306 mW, G = 1.7783 (2.5 dBi), R = 20 cm

$$S = 0.0017 \text{ mW/cm}^2 = 0.017 \text{ W/m}^2$$

MPE limit for uncontrolled exposure at prediction frequency: 1 mW/cm^2
Maximum allowable antenna gain: 30.2 dBi

Margin of Compliance at 20 cm = **27.7 dB**