RF Exposure Evaluation

hField Technologies
FCC ID: UILHFWFG10

Operating Frequency: 2400 to 2483.5 MHz

The expected RF exposure at 20 cm is calculated as follows:

$$S = \frac{P\,G}{4\,\pi\,D^2}$$

Where:
S = Power density in mW/cm^2
P = Power to antenna in mW
G = Numeric gain of antenna
D = separation distance in cm (20 cm)

Power to Antenna:
$P_{measured\,(dBm)}$ = 16.1 dBm
Converting to mw:
$P_{measured\,(mW)} = 10^{(Pmeasured(dBm))/10}$
$P_{measured\,(mW)} = 10^{(16.1/10)} = 10^{(1.61)} = 40.73$ mW

Antenna Gain:
G = 10.4 dBi
Converting to numeric gain:
$G_{numeric} = 10^{(G\,(dBi)/10)}$
$G_{numeric} = 10^{(10.4/10)} = 10^{(1.04)} = 10.96$

$$S = \frac{40.73 * 10.96}{4\,\pi\,20^2}$$

$$S = \frac{446.4}{5026.554}$$

$$S = 0.0888 \text{ mW/cm}^2$$

The expected RF exposure complies with Table B (limits for General Population / Uncontrolled Environments) of OET Bulletin 65, Supplement C, Appendix A where:

$$S_{max} = 1.0 \text{ mW/cm}^2$$