

separation distance, so that even if the 20 cm point is directly in front of one of the antennas, the contributions from the other antennas are less.

Antenna 1 distance to d1: $(3^2 + 20^2)^{0.5} = 20.2\text{cm} = 0.202\text{m}$

Antenna 2 distance to d1: $(3^2 + 20^2)^{0.5} = 20.2\text{ cm} = 0.202\text{m}$

The field strength contribution from each antenna is calculated using the equation

$E, \text{V/m} = (30 * \text{EIRP, watts})^{0.5} / \text{separation distance}$

Maximum EIRP from each 2.4 GHz transmit antenna is 27.9 dBm EIRP = 0.617 watt EIRP

Maximum EIRP from each 5 GHz transmit antenna is 29.1 dBm EIRP = 0.813 watt EIRP

$S, \text{mW/cm}^2 = E/3770$, E in V/m

Total exposure at d1:

Worst case, 2.4 GHz operation: 0.241 mW.cm2

Worst case, 5 GHz operation: 0.290 mW/cm2

FCC Limit: 1.0 mW/cm2