Section 10. Maximum Permissible Exposure

MPE estimate is given per 2.1091 of FCC Rules:

Calculation Equation:

$$d = 0.282 \times \frac{10^{\frac{P+G}{20}}}{\sqrt{S}}$$

Where, P--max. Output Power, G—Antenna Gain and S—Power Density Factor from §1.1310.

From §1.1310 Table 1 (B), for Public $S = 1.0\,\text{mW/cm}^2$, for Professional, $S = 5.0\,\text{mW/cm}^2$

Max. power tolerance , 1dB, shall be taken in to account for MEP calculation, which makes maximum total power for 2 ports as high as 46.5+1+3=50.5dBm.

Plug all three items into the equation, and yields,

Power Density MPE Limit (mW/ cm^2)	Max. Output Power with (dBm)	Max. Antenna Gain (dBi)	MPE Distance (cm)
1.0	50.5	17.5	708.3

NOTE:

For mobile or fixed location transmitters, the minimum separation distance is 20 cm, even if calculations indicate that the MPE distance would be less.