

Section 11. 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(DL)= 33.3 dBm, G=9 dBi (max. Indoor Server Antenna)/16dBi (max. Outdoor Server Antenna), GP(UL)= 30.0dBm, G=16 dBi (Donor Antenna), and from §1.1310 Table 1 (B), S = 0.55 mW/cm²

Plug all three items into the equation, and yields,

Power Density MPE Limit (mW/ cm ²)	Output Power (dBm) DL/UL	Server Antenna Gain (dBi) In/Out	Donor Antenna Gain (dBi)	Server MPE Distance (cm) In/Out	Donor MPE Distance (cm)
0.55	33.3/30.0	9/16	16	49/110	75

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.