## 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, $P(D L)=18.61 \mathrm{dBm}, G=7 \mathrm{dBi}$ (Server Antenna) and from §1.1310 Table $1(B), S=0.55$ $\mathrm{mW} / \mathrm{cm}^{2}$

Plug all three items into the equation, and yields,

| Power Density <br> MPE Limit <br> $\left(\mathrm{mW} / \mathrm{cm}^{2}\right)$ | Output <br> Power <br> $(\mathrm{dBm})$ | Server <br> Antenna <br> Gain $(\mathrm{dBi})$ | Donor <br> Antenna <br> Gain $(\mathrm{dBi})$ | Server MPE <br> Distance <br> $(\mathrm{cm})$ | Donor MPE <br> Distance <br> $(\mathrm{cm})$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0.55 | 18.61 | 7 |  | 7.5 |  |

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.

