MPE CALCULATION for ARCi CPE TX ANTENNA WITH OUTPUT POWER: 13.1 dBm GAIN 11 dBi

Formula used in the MPE Calculations:

 $E^{2/3770} = S, mW/cm2$ Pwatts*Ggain = 10^(PdBm-30+GdBi)/10) E, V/m = (Pwatts*Ggain*30)^.5/d, meters d = ((Pwatts*G*30)/3770*S))^0.5 ------ (A)

Since S (mW/cm2) = 1.00 from 1.1310 Table 1 P (dBm) = 13.1 EUT output power G (dBi) = 11.0 EUT antenna gain

Substitute these parameters into the A above, we have MPE safe distance d (cm) = 4.5

NOTE: For mobile or fixed location transmitters, minimum separation distance is 20 cm, even if calculations indicate MPE distance is less

MPE CALCULATION for ARCi HUB TX ANTENNA OUTPUT POWER: 16 dBm GAIN 13 dBi

Formular used in the MPE Calculations:

 $E^{2/3770} = S, mW/cm2$ Pwatts*Ggain = 10^(PdBm-30+GdBi)/10) E, V/m = (Pwatts*Ggain*30)^.5/d, meters d = ((Pwatts*G*30)/3770*S))^0.5 ------ (A)

Since S (mW/cm2) = 1.00 from 1.1310 Table 1 P (dBm) = 16.0 EUT output power G (dBi) = 13.0 EUT antenna gain

Substitute these parameters into the A above, we have MPE safe distance d(cm) = 8.0

NOTE: For mobile or fixed location transmitters, minimum separation distance is 20 cm, even if calculations indicate MPE distance is less