Maximum Permissible Exposure (MPE) Evaluation

Applicant   : Kenwood Corporation
Equipment   : 800MHz DIGITAL BASE-REPEATER
Model No.   : NXR-900-K
FCC ID   : K44417100
IC CN and UPN   : 282F-417100

MPE Calculations
According to the OET Bulletin 65 (Edition 97-01)

$$S = \frac{PG}{4\pi R^2}$$

$$R = \sqrt{\frac{PG}{4\pi S}}$$

Where:

S=Power density (in appropriate units, e.g. mW/cm^2)

P=Power input to antenna (in appropriate units, e.g., mW)

G=Power gain of the antenna in the direction of interest relative to an isotropic radiator

R=Distance to the center of radiation of the antenna (appropriate units, e.g., cm)

         Tx Frequency=   851   to   869   (MHz)   : FCC/IC

   Maximum peak power=   25.56 (dBm)   (=0.36W)
            Antenna gain=   2.15 (dBi)

              S=   0.57 (mW/cm^2)
              P=   432.00 (mW)   (=Maximum peak power x 120% x Dutycycle 100%)
              G=   1.64 (numeric)
              R=   9.97 (cm)

P = Value calculated according to CFR Part 90.205(s)

Calculated minimum separation distance from antenna :   9.97 (cm)