Maximum Permissible Exposure (MPE) Evaluation

Applicant   : Kenwood Corporation
Equipment   : UHF DIGITAL BASE-REPEATER
Model No.   : NXR-800-K6
FCC ID   : K44371405
IC CN and UPN   : 282F-371405

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= 406.1 to 430 (MHz)   : FCC / IC

Maximum peak power=   36.99 (dBm)   (=5W)
Antenna gain=   2.15 (dBi)

S=   0.27 (mW/cm^2)
P=   3000.00 (mW)   (=Maximum peak power x 120% x Dutycycle 50%)
G=   1.64 (numeric)
R=   38.04 (cm)

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

Calculated minimum separation distance from antenna :   38.04 (cm)