Maximum Permissible Exposure (MPE) Evaluation

Applicant	:Kenwood Corporation
Equipment	:UHF DIGITAL TRANSCEIVER
Model No.	:NX-800-K
FCC ID	:K44378700

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=	450 to 520	(MHz)		
Maximum peak power=	44.77	(dBm)	(=30W)	
Antenna gain=	2.15	(dBi)		
S=	0.30	(mW/cm^2)		
P=	18000.00	(mW)	(=Maximum peak power x 120% x Dutycycle 50%)	
G=	1.64	(numeric)		
R=	88.51	(cm)		

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

Calculated minimum separation distance from antenna : 88.51 (cm)