Maximum Permissible Exposure (MPE) Evaluation

Applicant	:Kenwood Corporation
Equipment	:UHF P25 TRANSCEIVER
Model No.	:TK-5810H-K2
FCCID	:K4439923220

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	470	(MHz)	
Maximum peak power=		50.00	(dBm)	(=100W)
Antenna gain=		2.15	(dBi)	
S=		0.27	(mW/cm^2)	
P=		60000.00	(mW)	(=Maximum peak power x 120% x Dutycycle 50%)
G=		1.64	(numeric)	
R=		170.10	(cm)	

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

Calculated minimum separation distance from antenna : 170.10 (cm)