Maximum Permissible Exposure (MPE) Evaluation

Applicant	: Kenwood Corporation
Equipment	: VHF FM TRANSCEIVER
Model No.	: TK-690H-2
FCC ID	: K44229201

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=	35 to 43	(MHz)	
Maximum peak power=	50.41	(dBm)	(=110W)
Antenna gain=	2.15	(dBi)	
S=	0.20	(mW/cm^2)	
P=	66000.00	(mW)	(=Maximum peak power x 120% x Dutycycle 50%)
G=	1.64	(numeric)	
R=	207.56	(cm)	

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

Calculated minimum separation distance from antenna : 207.56 (cm)