Maximum Permissible Exposure (MPE) Evaluation

Applicant   : JVC KENWOOD Corporation
Equipment   : UHF DIGITAL BASE-REPEATER
Model No.   : NX-700H-K, NX-700-K, TK5720-K
FCC ID   : K44378602
IC CN and UPN : 282F-378602

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=	150 to 174		(MHz)	: FCC
Maximum peak power=	47.08	(dBm)	(=51W)	
Antenna gain=	2.15	(dBi)		
S=	0.20	(mW/cm^2)		
P=	25500.00	(mW)	(=Maximum peak power x Dutycycle50%)	
G=	1.64	(numeric)		
R=	129.02	(cm)		

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

Calculated minimum separation distance from antenna :   <u>129.02</u> (cm)