Maximum Permissible Exposure (MPE) Evaluation

Applicant	:	JVC KENWOOD Corporation
Equipment	:	UHF DIGITAL BASE-REPEATER
Model No.	:	NXR-5800-K3
FCC ID	:	K44474601

MPE Calculations
Part 1.1310

$$S = \frac{PG}{4\pi R^2}$$

$$R = \sqrt{\frac{PG}{4\pi S}}$$

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 to 470	(MHz)	
Maximum peak power=	43.98	(dBm)	(=25W)
Antenna gain=	2.15	(dBi)	
S=	0.27	(mW/cm^2)	
P=	30000.00	(mW)	(=Maximum peak power x 120% x Dutycycle100%
G=	1.64	(numeric)	
R=	120.28	(cm)	

Calculated minimum separation distance from antenna : 120.28 (cm)