

Maximum Permissible Exposure (MPE) Evaluation

Applicant : JVC KENWOOD Corporation
Equipment : 900MHz DIGITAL BASE-REPEATER
Model No. : NXR-5901-K
FCC ID : K44474701

MPE Calculations

FCC 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/cm²)

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=	935 to 941	(MHz)	: FCC
Maximum peak power=	25.56	(dBm)	(=0.36W)
Antenna gain=	2.15	(dBi)	
S=	3.12	(mW/cm ²)	
P=	360.00	(mW)	(=Maximum peak power x Dutycycle100%)
G=	1.64	(numeric)	
R=	3.88	(cm)	

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

Calculated minimum separation distance from antenna : 3.88 (cm)