

Maximum Permissible Exposure (MPE) Evaluation

Applicant : JVC KENWOOD Corporation
Equipment : 800MHz DIGITAL TRANSCEIVER
Model No. : NX-3920G-K
FCC ID : K44502600

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= 806 to 824 , 851 to 869 (MHz) : FCC

Maximum peak power= 41.90 (dBm) (=15.5W)

Antenna gain= 2.15 (dBi)

S= 0.54 (mW/cm²)

(Uncontrolled Environment)

P= 7750.00 (mW)

(=Maximum peak power x Dutycycle50%)

G= 1.64 (numeric)

R= 43.39 (cm)

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

Calculated minimum separation distance from antenna :

43.39 (cm)