

## **Maximum Permissible Exposure (MPE) Evaluation**

Applicant : JVCKENWOOD Corporation

Equipment : UHF TRANSCEIVER

Model No. : NX-1800H-K2 FCC ID : K44517100

## **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/cm<sup>2</sup>)

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) : FCC
Maximum peak power=	46.63	(dBm) (=46W)
Antenna gain=	2.15	(dBi)
S=	0.27	(mW/cm²) (Uncontrolled Environment)
P=	23000.00	(mW) (=Maximum peak power x Dutycycle50%)
G=	1.64	(numeric)
R=	105.31	(cm)

Calculated minimum separation distance from antenna: 105.31 (cm)