

US Tech Test Report:
Report Number:
Issue Date:
Customer:
Model:
FCC ID:

FCC Part 95
13-0261
October 19, 2013
Radio Systems Corporation
300-2789
KE3-3002789

Maximum Public Exposure to RF (MPE) CFR 1.1310

The maximum exposure level to the public from the RF power of the EUT shall not exceed a power density, S , of 1 mW/cm^2 at a distance, d , of 20 cm from the EUT.

Therefore, for:

Highest Gain Dipole Antenna = -15 dBi

Peak Power (Watts) = 0.001 (from Table 3 of Test Report)

Gain of Transmit Antenna = -15 dBi = 0.03, numeric (EUT uses trace Loop antenna)

d = Distance = 20 cm = 0.2 m

$$\begin{aligned} S &= (PG / 4\pi d^2) = \text{EIRP} / 4A = 0.001(0.03) / 4\pi * 0.2^2 \\ &= 0.0333 / 0.5030 = 0.0662 \text{ W/m}^2 \\ &= (\text{W/m}^2) (1\text{m}^2/\text{W}) (0.1 \text{ mW/cm}^2) \\ &= 0.00662 \text{ mW/cm}^2 \end{aligned}$$

which is \ll less than 1.0 mW/cm^2