

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

FCC Part 95
14-0126
June 21, 2013
Radio Systems Corporation
300-2946
KE3-3002946

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= -19 dBi

Peak Power (Watts) = 0.001 (from Figure 1 of Test Report)

Gain of Transmit Antenna = -19 dBi = 0.013, numeric (EUT uses trace Loop antenna)

d = Distance = 20 cm = 0.2 m

$$\begin{aligned} S &= (PG / 4\pi d^2) = \text{EIRP} / 4A = 0.001(0.013) / 4 * \pi * 0.2 * 0.2 \\ &= 0.000013 / 0.5030 = 0.0662 \text{ W/m}^2 \\ &= (\text{W/m}^2) (1\text{m}^2/\text{W}) (0.1 \text{ mW/cm}^2) \\ &= 0.000196 \text{ mW/cm}^2 \end{aligned}$$

which is << less than 1.0 mW/cm^2