

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

FCC Part 95  
19-0401  
November 25, 2019  
Radio Systems Corporation  
RAC00-16949 and RAC00-16992  
KE3-3003643

### 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<sup>2</sup> at a distance, d, of 20 cm from the EUT.

Therefore, for:

#### Highest Gain Antenna= -15 dBi

Peak Power (Watts) = 2.8 dBm = 0.002 W  
Gain of Transmit Antenna = -15 dBi = 0.03, numeric (EUT uses an external Loop antenna)  
d = Distance = 20 cm = 0.2 m

$$\begin{aligned} \mathbf{S} &= (PG/ 4\pi d^2) = \text{EIRP}/4A = 0.002*(0.03)/4*\pi*0.2*0.2 \\ &= 0.00006/0.5030 = 0.00012 \text{ W/m}^2 \\ &= (\text{W/m}^2) (1\text{m}^2/\text{W}) (0.1 \text{ mW/cm}^2) \\ &= 0.0000012 \text{ mW/cm}^2 \end{aligned}$$

which is << less than 1.0 mW/cm<sup>2</sup>