

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

FCC Part 95  
20-0073  
April 15, 2020  
Radio Systems Corporation  
RAC00-16949, RAC00-16992, RAC00-16952  
KE3-3003643  
2721A-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) = 3.83 dBm = 0.0024 W

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

d = Distance = 20 cm = 0.2 m

$$\begin{aligned} \mathbf{S} &= (PG/ 4\pi d^2) = \text{EIRP}/4A = 0.0024*(0.03)/4*\pi*0.2*0.2 \\ &= 0.00007/0.5030 = 0.00014 \text{ W/m}^2 \\ &= (\text{W/m}^2) (1\text{m}^2/\text{W}) (0.1 \text{ mW/cm}^2) \\ &= 0.000014 \text{ mW/cm}^2 \end{aligned}$$

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

(\*) Peak Power = 3.83 dBm from Table 4 of the Part 95 Test report.