

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

FCC Part 15.231/ RSS-210  
August 20, 2013  
13-0239  
Radio Systems Corporation  
PTA00-14295 Transmitter  
KE3-PTA14295

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### **Maximum Public Exposure to RF (MPE) CFR 15.247 (i)**

The maximum exposure level to the public from the RF power of the EUT shall not exceed a power density, **S**, of 0.28 mW/cm<sup>2</sup> at a distance, d, of 20 cm from the EUT.

Therefore, for:

#### **Highest Gain Antenna= -20 dBi**

Peak Power (Watts) = 0.0117  
Gain of Transmit Antenna = -20 dBi = 0.01, numeric  
d = Distance = 20 cm = 0.2 m

$$\begin{aligned} \mathbf{S} &= (PG/ 4\pi d^2) = \text{EIRP}/4A = 0.0117 (0.01)/4*\pi*0.2*0.2 \\ &= 0.000117/0.503 = 0.00023 \text{ W/m}^2 \\ &= (\text{W/m}^2) (1\text{m}^2/\text{W}) (0.1 \text{ mW/cm}^2) \\ &= 0.000023 \text{ mW/cm}^2 \end{aligned}$$

which is << less than 0.28 mW/cm<sup>2</sup>