MPE CALCULATION

For Applied Wireless ID – RFID Reader; Model MPR 3014WF-QB; FCCID: OGSR32EA032; IC: 6449A-R32EA032

RF Exposure Requirements: 47 CFR §1.1307(b)

RF Radiation Exposure Limits: 47 CFR §1.1310

RF Radiation Exposure Guidelines: FCC OST/OET Bulletin Number 65

EUT Frequency Band: 902 – 928 MHz

EUT Maximum Measured Conducted Power: 29.83 dBm (0.9616 watt)

EUT Antenna Gain with cable loss subtracted: 5 dBi (3.16 numeric)

Limits for General Population/Uncontrolled Exposure: f/1500; f (frequency) in MHz

   Power Density Limit: $902 / 1500 = 0.601$ mW/cm^2 or 6.01 W/m^2

Equation: $S = PG / 4\pi R^2$ or $R = \sqrt{PG / 4\pi S}$

   Where, S = Power Density

   P = Power Input to Antenna

   G = Antenna Gain

   R = distance to the center of radiated antenna

$R = \sqrt{0.9616W*3.16 / 4*3.14*(6.01 \text{ W/m}^2)} = \sqrt{3.041 / 75.5239} = 0.2$ meter

The distance between the human and the RF antenna should not be less than 0.2 meter or 20 centimeter.