MPE CALCULATION

For Applied Wireless ID – RFID Reader Module; Model MPR-1510AR2.6H

FCC ID:OGSM26H; IC ID: 6449A-M26H

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: 18.5 dBm (0.0708 watt)

EUT Antenna Gain: -8 dBi (0.16 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

$S = 0.0708W*0.16 / 4*3.14*(0.2m)^2 = 0.01133W / 0.5026m^2 = 0.0225\ W/m^2$

EUT complies with 20cm distance exposure.