MPE CALCULATION

For QI Systems – RFID Module; Model: M210-3G-F
    FCC ID: U4BM210-3G

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: 13.56 MHz

EUT Maximum Measured Power (EIRP): Field Strength @ 3 meter = 26.1 dBμV/m or 0.000000000123 watt

EUT Antenna Gain: assume 0 dBi (1 numeric)

Limits for General Population/Uncontrolled Exposure: $(180/f^2)$; f (frequency) in MHz

    Power Density Limit: $180 / (13.56)^2 = 0.9789$ mW/cm^2 or 9.789 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

$S = 0.000000000123W*1 / 4*3.14*(0.2m)^2 = 0.000000000123W / 0.5026m^2 = 0.0000000002447$ W/m^2

EUT complies with 20cm distance exposure.

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