

MPE CALCULATION

For TagSense – Nano-UHF Reader; Model: Nano-UHF FCC ID: XQ7TAGSENSE-NANO

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
Limits for General Population/Uncontrolled Exposure in the band of:	300 – 1500 GHz
Power Density Limit:	0.602 mW/ cm 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

Near Field Antenna (Gain 0 dBi)

Low Channel (902.780 MHz): Power = 12.53 dBm, Antenna Gain = 0 dBi, Prediction distance 20cm

S = 0.0035 mW/cm²

Flat Patch Antenna (Gain 8 dBi)

Low Channel (902.780 MHz): Power = 12.53 dBm, Antenna Gain = 8 dBi, Prediction distance 20cm

S = 0.022 mW/cm²

The Above Results had shown that Device complied with 0.602 mW/cm² Power density requirement for distance of 20cm.

Completed By: Dan Corona

Date: March 3, 2010