MPE CALCULATION

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:	902.75-927.25 MHz, 2402-2480 MHz, 2412 - 2462 MHz
Limits for General Population/Uncontrolled Exposure in the band of:	300-1500 MHz, 1500 - 100,000 MHz
Power Density Limit:	0.62 mW / cm^2 (300-1500 MHz), 1 mW / cm^2 (2412 - 2462 MHz)

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

Prediction distance 20cm

UHF RFID (902.75-927.25 MHz): Power = 29.67dBm, Antenna gain= -28.1dBi, Power density=0.000286 mW/cm^2

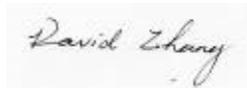WLAN(2412-2462MHz): Power = 9.9 dBm , antenna gain = 1.3 dBi , Power density = 0.0026 mW/cm2

Total Ratio= (P_{RFID}/0.62)+(P_{WLAN}/1)= 0.000461+0.0026= 0.003061 < 1

Total Ratio is 0.003061, which is less than 1;

The Above Result had shown that Device complied with MPE requirement.

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