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:	2412 - 2462 MHz; 5180 - 5825MHz
Limits for General Population/Uncontrolled Exposure in the band of:	1500 - 100,000 MHz
Power Density Limit:	1 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

Prediction distance 20cm

EUT: AP 370

(UNII band 2 and band 3): Power = 23.68dBm, Antenna Gain = 4.54 dBi, Power density = 0.132mW/ cm^2

(2.4GHz): Power = 28.35dBm, Antenna Gain = 4.42dBi , Power density =0.377mW/ cm^2

Total Ratio= ($P_{2.4GHz}$/1) + (P_{5GHz}/1) = 0.132mW/ cm^2 + 0.377mW/ cm^2 = 0.509mW/ cm^2

EUT: AP 390

(UNII band 2 and band 3): Power = 23.89dBm, Antenna Gain = 3.3 dBi, Power density = 0.104mW/ cm^2

(2.4GHz): Power = 26.25dBm, Antenna Gain = 3.6dBi , Power density =0.192mW/ cm^2

Total Ratio= ($P_{2.4GHz}$/1) + (P_{5GHz}/1) = 0.104mW/ cm^2 + 0.192mW/ cm^2 = 0.296mW/ cm^2

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

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