## MPE CALCULATION

**FCC ID: S9GT310** 

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: 2.4GHz 2412-2462 MHz

EUT Frequency Band: 5 GHz 5180- 5320MHz, 5500-5720MHz, 5745-5825MHz

5210-5290MHz, 5530-5610MHz, 5690-5775MHz

Limits for General Population/Uncontrolled Exposure in the band of: 1500 - 100,000 MHz

Power Density Limit: 1 mW / cm<sup>2</sup>

Equation:  $S = PG / 4\pi R^2 \text{ or } R = \sqrt{PG / 4\pi S}$ 

Where, S = Power Density

P = Power Input to Antenna

G = Antenna Gain

R = distance to the center of radiated antenna

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EUT: T310 (C/D) Access Point, Model No.: T310

(2.4GHz Band): Power = 24.84 dBm, Antenna Gain = 2.5 dBi, Power density = 0.108 mW/ cm<sup>2</sup> (5 GHz Band): Power = 24.75 dBm, Antenna Gain = 3.5 dBi, Power density = 0.133 mW/ cm<sup>2</sup>

Туре	CH Freq (MHz)	Conduc ted Power (dBm)	Antenna Gain (dBi)	Directio nal Gain (dBi)	Tune- Up Toler ance	Tolerance Max Power (dBm)	Measurement Distance (cm)	Calculated MPE (mW/cm²)	MPE Limit (mW/cm²)	Pass/F ail
2.4 GHz WLAN	2412	24.84	2.5	2.5	±1dB	25.84	20	0.108	1	Pass
5 GHz WLAN	5755	24.75	3.5	3.5	±1dB	25.75	20	0.133	1	Pass

If 2.4GHz and 5GHz transmit simultaneously.

Total MPE= $0.108 + 0.133 = 0.241 \text{ mW/cm}^2$ 

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

Completed By: Cipher

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