

MPE CALCULATION

FCC ID: S9GT811CM

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 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

EUT: T811-CM Access Point, Model No. : T811-CM

(2.4GHz Band): Power = 28.14 dBm, Array Gain + Antenna Gain = 6 dBi, Power density = 0.416 mW/ cm²

(5 GHz Band): Power = 27.78 dBm, Array Gain + Antenna Gain = 7.5 dBi, Power density = 0.541 mW/ cm²

Type	CH Freq (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Directional Gain (dBi)	Tune-Up Tolerance	Tolerance Max Power (dBm)	Measurement Distance (cm)	Calculated MPE (mW/cm ²)	MPE Limit (mW/cm ²)	Pass/Fail
2.4 GHz WLAN	2462	28.14	3	6	±1dB	29.14	25	0.416	1	Pass
5 GHz WLAN	5785	27.78	4.5	7.5	±1dB	28.78	25	0.541	1	Pass

If 2.4GHz and 5GHz transmit simultaneously.

Total MPE=0.416 + 0.541 = 0.957 mW/cm²

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

Completed By: Rachana Khanduri



SIEMIC, Inc

775 Montague Expressway, Milpitas, CA 95035

Phone: (408) 526-1188

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