

# MPE CALCULATION

FCC ID: S9GT610

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:  $S = PG / 4\pi R^2$  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: ZoneFlex T610 Access Point, model: T610

Prediction distance = 25cm

(2.4GHz Band): Power = 26.67 dBm, Array Gain =5.5 dBi, Power density =0.210 mW/ cm<sup>2</sup>

(5 GHz Band): Power = 26.60 dBm, Array Gain = 6.5 dBi, Power density = 0.260 mW/ cm<sup>2</sup>

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 <sup>2</sup> )	MPE Limit (mW/cm <sup>2</sup> )	Pass/ Fail
2.4 GHz WLAN	2437	26.67	2.5	5.5	±1dB	27.67	25	0.210	1	Pass
5 GHz WLAN	5230	26.60	3.5	6.5	±1dB	27.60	25	0.260	1	Pass

If 2.4GHz and 5GHz transmit simultaneously.

Total MPE=0.210 + 0.260 = 0.470 mW/cm<sup>2</sup>

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



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Date: October 21, 2015