

MPE CALCULATION
FCC ID: I28MD-ZBRBLE, I28MD-FXLAN11AC

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: 2.4 GHz

2402- 2480MHz, 2412-2462MHz

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 / cm²

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: ZT510 Label Printer

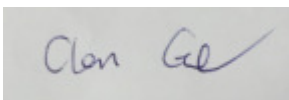
Type	CH Freq (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Apparent Gain (dBi)	Tune-Up Tolerance	Tolerance Max Power (dBm)	Measurement distance (cm)	Calculated MPE (W/m2)	MPE Limit (W/m2)
BT LE	2402	-1.85	1	1	±1dB	-0.85	20	0.002	10
2.4GHz WLAN	2412	16.77	3	3	±1dB	17.77	20	0.23	10
5GHz WLAN	5500	14.76	5	5	±1dB	19.76	20	0.59	10

If all radios working simultaneously,

Total Ratio= 0.002 W/ m² + 0.23 W/ m²+ 0.59 W/ m²= 0.822 W/ m²

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

Completed By: Chen Ge



SIEMIC, Inc.

775 Montague Expressway, Milpitas, CA 95035

Date: 11/30/2016