

MPE CALCULATION

For Zebra Technologies – Wristband Printer; Model: HC100

FCC ID: I28MD-ZLAN11G

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 / 47 CFR §2.1091
EUT Frequency Band:	2412 – 2462 MHz
Limits for General Population/Uncontrolled Exposure in the band of:	1500 – 100,000 MHz
Power Density Limit:	1.0mW/ 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

802.11b

Low Channel (2412 MHz): Power = 18.8dBm, Antenna Gain = -9.49dBi, Prediction distance 20cm

S = 0.0017 mW/cm²

802.11g

Low Channel (2412 MHz): Power = 15.0dBm, Antenna Gain = -9.49dBi, Prediction distance 20cm

S = 0.00069 mW/cm²

Result

The Above Result had shown that Device complied with 1.0 mW/cm² Power density requirement for distance of 20cm.

Completed By : Dan Coronia

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