## MPE CALCULATION

## For Zebra Technologies – RFID ENCODER; Model: M5e FCC ID: 128-URFIDM5E

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 or 47 CFR 2.1091

EUT Frequency Band: 902.750 – 927.250 MHz

Limits for General Population/Uncontrolled Exposure in the band of: 300 – 1500 GHz

Power Density Limit: 0.610 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

Low Channel (927.250 MHz): Power = 29.67dBm, Antenna Gain = -20dBi, Prediction distance 20cm S =  $0.00184 \, mW/cm^2$ 

## Result

The Above Result had shown that Device complied with 0.610 mW/cm<sup>2</sup> Power density requirement for distance of 20cm.

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