

RF EXPOSURE EVALUATION

Equipment under test: **TYNESS-FACTORY**

FCC ID: **2BBDC-TYNESS-V3-01**

Test report reference: **RRA-EMIESS23G488EWA-03A v0**

MPE calculation

These equations are generally accurate in the far field of an antenna but will over predict power density in the near field, where they could be used for making a "worst case" prediction.

$$S = PG/4\pi R^2$$

Where: S = power density (in appropriate units, e.g. mW/cm²)
P = power input to the antenna (in appropriate units e.g. mW)
G = power gain of the antenna in the direction of interest relative to the isotropic radiator
R = distance to the centre of radiation of the antenna (appropriate units e.g. cm)

Or

$$S = EIRP/4\pi R^2$$

Where EIRP = equivalent isotropically radiated power

Calculation:

(Calculated with power input to the antenna)

Conducted power: P= 11.3 dBm (13.5 mW) for f=902.3 MHz

Antenna gain : +3dBi

Calculated at distance of >20 cm:

Power density = 0.005 mW/cm²

Limit:

0.6058 mW/cm² is the reference level for G Exposure according to Rule part 1.1310(e)

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