



## RF Exposure Information

Model: 2.4GZ  
FCC ID: EO924GZA  
IC ID: 864D-24GZA

## General Information

Applicant: Itron, Inc.  
Device Category: Fixed  
Environment: General / Uncontrolled Exposure

## Technical Information

Antenna Type: Omni  
Antenna Gain: 0 dBi  
Transmitter Power (conducted): 30mW  
Frequency: 2.405 GHz  
Exposure Conditions: 20 centimeters (0.2m)  
FCC Limit:  $f > 1500$  MHz:  $1\text{mW}/\text{cm}^2$ ; IC Limit:  $f = 1500$  to  $15000$  MHz =  $10\text{ W}/\text{m}^2$

## MPE Calculation

$$\text{Power Density: } P_d = (\text{mW} / \text{cm}^2) = \frac{P \times G}{4 \times \pi \times R^2}$$

Where:  $P = 36.98$  mW,  $G = 0$  dBi = 1,  $R = 20$  cm

$$P_d = \frac{36.98 \times 1}{4 \times \pi \times 20^2} = \frac{36.98}{5026.55} = 0.00736 \frac{\text{mW}}{\text{cm}^2} = 0.0736 \frac{\text{W}}{\text{m}^2}$$

$$\text{Min Safe distance} = R_{\min} = \sqrt{\frac{P \times G}{4 \times \pi \times P_d}} = \sqrt{\frac{36.98\text{mW}}{4\pi \left(1 \frac{\text{mW}}{\text{cm}^2}\right)}} = 1.7 \text{ cm}$$

## Use Guidelines

The installation manual contains the following text about compliance with the RF exposure requirements:

*This device must be permanently mounted such that it retains a distance of 20 centimeters (7.9 inches) from all persons in order to comply with FCC and Industry Canada RF exposure levels.*

## Conclusion

When installed and operated per the manufacturer's instructions, this device complies with MPE requirements by providing adequate separation between the radiating structure of the device and the general / uncontrolled population.

**Dan Bomsta**  
**Design/2.4GZ Regulatory Engineer**  
**Itron, Inc.**  
**507-837-4480**