

RADIO FREQUENCY INFORMATION

The wireless transmitters used for the City of Waukegan AMR Project use radio frequencies (RF) to transmit data. The exposures to RF from a wireless meter are much lower than many common household devices, including cell phones, laptop computers, and microwave ovens. The meters use a fraction of the power of a cell phone, and total daily transmission is less than 15 seconds per day.

COMPARISON OF TYPICAL RADIO FREQUENCY (RF) EXPOSURES

Relative Power Density in microwatts per square centimeter (mW/cm²)

| | |
|---|--------------|
| FM Radio or TV Broadcast Station Signal | 0.005 |
| AMR Transmitter | 0.32 |
| Cordless Phones and Baby Monitors | 0.60 |
| Wi-Fi | 10 – 20 |
| Laptop Computer | 10 – 20 |
| Cell Phone – Held up to head | 30 – 10,000 |
| Walkie-Talkie – At head | 500 – 42,000 |

Source: Richard Tell Associates, Inc.

RF OUTPUT INFORMATION FOR THE WATER METER COMMUNICATION MODULE

- Operating frequency of the meter communication module is in the Industrial, Scientific, and Medical (ISM) band at frequencies from 902 to 928 MHz.
- The transmission time is extremely short, less than 10 milliseconds.
- The module transmits a message every minute. Total transmission time is less than 15 seconds per day.
- When not transmitting data, the module remains off.
- The module's power output is 0.516W (the average light bulb is 60W)
- The FCC guideline for Maximum Permissible Exposure (MPE) is 6.10 mW/cm² at 20 cm.
- The meter communication module power density is 0.215 mW/cm² at 20 cm.
- FCC ID: EWQ100WC
- IC: 864D-100WC