

FCC Part 15.247 Certification **Test Report**

FCC ID: SK9C1A-3

FCC Rule Part: 15.247

ACS Report Number: 05-0122-15C

Manufacturer: Itron Electricity Metering, Inc.
Equipment Type: Electricity Meter With FHSS Transmitter
Trade Name: CENTRONTM ICARe
Model: C1A-3

RF Exposure Information

General Information:

Applicant: Itron Electricity Metering, Inc.
 ACS Project: 05-0122
 FCC ID: SK9C1A-3
 Device Category: Fixed Mount
 Environment: General Population/Uncontrolled Exposure

Technical Information:

Antenna Type: Patch
 Antenna Gain: 0dBi
 Transmitter Conducted Power: 21.67 dBm
 Maximum System EIRP: 21.67dBm
 Operating Configuration: Mounted on side of residential or commercial structure
 Exposure Conditions: Greater than 20 centimeters

MPE Calculation

The Power Density (mW/cm²) is calculated as follows:

$$S = \frac{PG}{4\pi R^2}$$

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 an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

MPE Calculator for Mobile Equipment Limits for General Population/Uncontrolled Exposure*							
Transmit Freq. (MHz)	Radio Power (dBm)	Power Density Limit (mW/Cm2)	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm^2)
909.5861	21.67	0.61	146.893	0	1.00	20.00	0.0292

Installation Guidelines

The installation manual contains the following text advising how to install the equipment to maintain compliance with the FCC RF exposure requirements:

"RF Exposure (Intentional Radiators Only)"

This equipment complies with the FCC RF radiation requirements for uncontrolled environments. To maintain compliance with these requirements, the antenna and any radiating elements should be installed to ensure that a minimum separation distance of 20 cm is maintained from the general population.

Conclusion

This device complies with the MPE requirements by providing adequate separation between the device, any radiating structure and the general population.