

FCC Part 15.247 Certification **Test Report**

FCC ID: P2SNTGECDR900Z

FCC Rule Part: 15.247

ACS Report Number: 05-0048-15C

Manufacturer: Neptune Technology Group, Inc.
Equipment Type: Utility Meter Data Transmitter
Model: E-Coder R900

RF Exposure Information

General Information:

Applicant: Neptune Technology Group, Inc.
 ACS Project: 05-0048
 FCC ID: P2SNTGECDR900Z
 Device Category: Mobile
 Environment: General Population/Uncontrolled Exposure

Technical Information:

Antenna Type: Monopole
 Antenna Gain: 2.0 dB
 Maximum Transmitter Conducted Power: 21.38 dBm
 Maximum System EIRP: 23.38 dBm
 Operating Configuration: Fix mounted in Basement
 Exposure Conditions: 20 centimeters

MPE Calculation

The minimum separation distance is calculated as follows:

$$E(V/m) = \frac{\sqrt{30 \times P \times G}}{d} \quad \text{Power Density: } P_d = (mW/cm^2) = \frac{E^2}{3770}$$

MPE Distance

MPE Calculator for Mobile Equipment Limits for General Population/Uncontrolled Exposure*					
Transmit Freq. (MHz)	Radio Power (dBm)	Radio Power (W)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	MPE Distance (cm)
911.0815	21.38	0.137	2.0	1.58	5.33

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)"

In accordance with FCC requirements of human exposure to radiofrequency fields, the radiating element shall be installed such that a minimum separation distance of (20cm) is maintained between the radiating element and 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.