

Certification Test Report

Frequency Hopping Spread Spectrum Transmitter

FCC ID: P2SNTGPRFV3 IC: 4171B-NTGRFV3

FCC Rule Part: 15.247 IC Radio Standards Specification: RSS-210

ACS Report Number: 07-0360 - 15C

Manufacturer: Neptune Technology Group, Inc. Model: R900v3

RF Exposure

General Information:

Applicant: Neptune Technology Group, Inc.

ACS Project: 07-0360 FCDevice Category: Mobile

Environment: General Population/Uncontrolled Exposure

Technical Information:

Antenna Type(s): Dipole, Patch, PCB

Antenna Gain: 0dBi all types

Transmitter Conducted Power: 22.31dBm Maximum System EIRP: 22.31dBm

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 Frequency (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)
911.0815	22.31	0.61	170.22	0	1.000	20	0.034

Installation Guidelines

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

RF Exposure

In accordance with FCC requirements of human exposure to radio frequency fields, the radiating element shall be installed such that a minimum separation distance of 20 centimeters will be maintained.

Conclusion

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