Excellence in Compliance Testing

Certification Test Report

Frequency Hopping Spread Spectrum Transmitter

FCC ID: R7PEC1R2S4
IC: 5294A-EC1R2S4

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

ACS Report Number: 07-0269

Manufacturer: Cellnet Technology, Inc.
Model: L+G S4e 2G Utilinet Endpoint

RF Exposure Information

General Information:

Applicant: Cellnet
ACS Project: 07-0269
FCC ID: R7PEC1R2S4
IC Certification #: 5294A-EC1R2S4
Device Category: Mobile
Environment: General Population/Uncontrolled Exposure

Technical Information:

Antenna Type: flex dipole
Antenna Gain: 2dBi
Transmitter Conducted Power: 22.63dBm
Maximum System EIRP: 24.63dBm
Operating Configuration: Fixed mounted
Exposure Conditions: Greater than 20 centimeters

MPE Calculation

The Power Density (mW/cm^2) 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)**
927.9	22.63	0.62	183.23	2	1.585	20	0.058

Installation Guidelines
The installation manual shall 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.