Excellence in Compliance Testing

Certification Exhibit

FCC ID: 2ACQD-COMMOD01
IC: 12381A-COMMOD01

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

ACS Project Number: 14-2071

Manufacturer: Infrax Systems, Inc.
Model: COMMOD01

RF Exposure

General Information:

Applicant: Infrax Systems, Inc.
ACS Project: 14-2071
Device Category: Mobile
Environment: General Population/Uncontrolled Exposure

Technical Information:

Antenna Type: Printed Dipole Antenna
Antenna Gain: 2.5 dBi
Maximum Transmitter Conducted Power: 12.52 dBm, 17.8649 mW
Maximum System EIRP: 15.02 dBm, 31.7687 mW
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)**
2440	12.52	1.00	17.86	2.5	1.778	20	0.006

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.