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Evaluation of Compliance with FCC-Specified Guidelines for

Human Exposure to Radio Frequency Electromagnetic Fields

on the

Radio Packet Modem
Model: CNI-903M
FCC ID: N79CNI-903M-1

for
Communication Network Interface Inc.

Date of Test: April 14, 2001
Job # J20045919

Date of Report: April 23, 2001
Report # 20459192

Total No of Pages Contained in this Report: 9 + Data Sheets

FCC 2.1091 & ANSI 95.1-1992

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VERIFICATION OF COMPLIANCE
Report No. 20459192

Verification is hereby issued to the named APPLICANT and is VALID ONLY for the equipment identified hereon for use under the rules and regulations listed below.

Equipment Under Test:	Radio Packet Modem
Trade Name:	CNI
FCC ID:	N79CNI-903M-1
Model No.:	CNI-903M
Serial No.:	Not Labeled
Applicant:	Communication Network Interface Inc.
Contact:	Mr. Won S. Lee
Address:	165-5, Dongkyo-Dong, Mapo-Ku Seoul 121-200, Korea
Tel. number:	82-2-330-5626
Fax number:	82-2-330-5733
Applicable Regulation:	FCC 2.1091 & ANSI C95.1: 1992
Equipment Class:	Uncontrolled Environments
Date of Test:	April 14, 2001

We attest to the accuracy of this report:

Xi-Ming Yang
Xi-Ming Yang
Test Engineer

David Chernomordik 4/30/01
David Chernomordik
EMC Site Manager

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Table of Contents

1.0 Introduction

This report is designed to show compliance with the FCC Part 2.1091 Radio Frequency Radiation Exposure Evaluation for mobile and unlicensed devices. The test procedures and limits, as described in American National Standards Institute C95.1-1992, were employed. A description of the product and operating configuration, the various provisions of the rules, the methods for determining compliance and a detailed summary of the results are included within this test report.

2.0 Description of Equipment

The CNI-903M, RPM (Radio Packet Modem) is a digital data communication equipment in acordance with Mobitex specification. The frequency it uses ranges from 896 MHz to 902 MHz for transmission and from 935 MHz to 941 MHz for reception.

A production version of the sample was received on April 14, 2001 in good condition.

3.0 Test Summary

The CNI-903M Radio Packet Modem was tested by Intertek Testing Services as documented herein, and the energy emitted by the EUT was found to be below the recommended levels of Maximum Permissible Exposure for Uncontrolled Environments in FCC 1.1310 (ANSI C95.1: 1992).

Therefore, in reference to the limits set forth in FCC 1.1310 use of the equipment is deemed to be safe with respect to human exposure to Radio Frequency Electromagnetic Fields, when used in a normal fashion.

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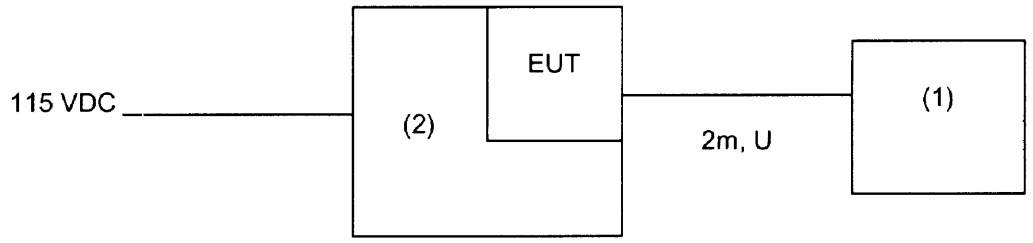
4.0 System Test Configuration

4.1 Support Equipment

Item #	Description	Model No.	Serial No.	FCC ID
1	Samsung Computer	SFM-1400LW	400391AK700238	DOC B
2	CNC RPM Interface Test Board Module	RPM	N/A	N/A
3	Whip Antenna	N/A	N/A	N/A

4.2 Block Diagram of Test Setup



* = EUT	**S** = Shielded;	**F** = With Ferrite
** = No ferrites on video cable	**U** = Unshielded	

4.3 Justification

The system was configured for testing in a typical fashion (as a customer would normally use it).

4.4 Software Exercise Program

The CNI software was used during the test.

4.5 Mode of Operation During Test

Transmitting full power (2 W).

4.6 Modifications Required for Compliance

The following modifications were installed during compliance testing in order to bring the product into compliance (Please note that this list does not include changes made specifically by Communication Network Interface Inc. prior to compliance testing):

No modifications were installed by Intertek Testing Services.

5.0 Radiated Emissions

5.1 Radiated Emission Limits, FCC 1.1310

The following exposure limits apply to equipment use in Uncontrolled Environments:

Maximum Permissible Exposure for Uncontrolled Environments

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) E-field, H-field (mW/cm^2)	Averaging Time (Minutes)
0.3 - 1.34	614	1.63	*100	30
1.34 - 30	824/f	2.19/f	$*180/f^2$	30
30 - 300	27.5	0.073	0.2	30
300 - 1500	-	-	f/1500	30
1500 - 100,000	-	-	1.0	30

* = Plane-wave equivalent power density.
Dashes "-" are used to indicate that there is no limit under the guideline.

5.2 Site Description and List of Test Equipment.

All tests were performed on Open Area Test Site.

Measurement equipment used for radiated emission compliance testing utilized some of the equipment on the following list:

Manufacturer	Equipment	Model Number	Calibration Due
Holaday	Field Strength Meter	HI-3004EX	5/17/01

5.3 Test Procedure

The test was performed at 896 MHz. The antenna was placed on a 0.8m wooden table on open site. The antenna was connected to the EUT. EUT output power was measured at RF output connector. EUT has 2.0W ERP power output.

The sensor of the field strength meter was moved around the antenna to obtain the maximum reading of the field strength meter. The measurements were performed at the distance 0.1m to 1m from the antenna.

5.4 Field Strength Calculation

The field strength was measured directly from the meter. The power density (Pd in W/m^2) was calculated using the following formula:

$$Pd = E^2/120\pi$$

Where E is Field Strength in V/m

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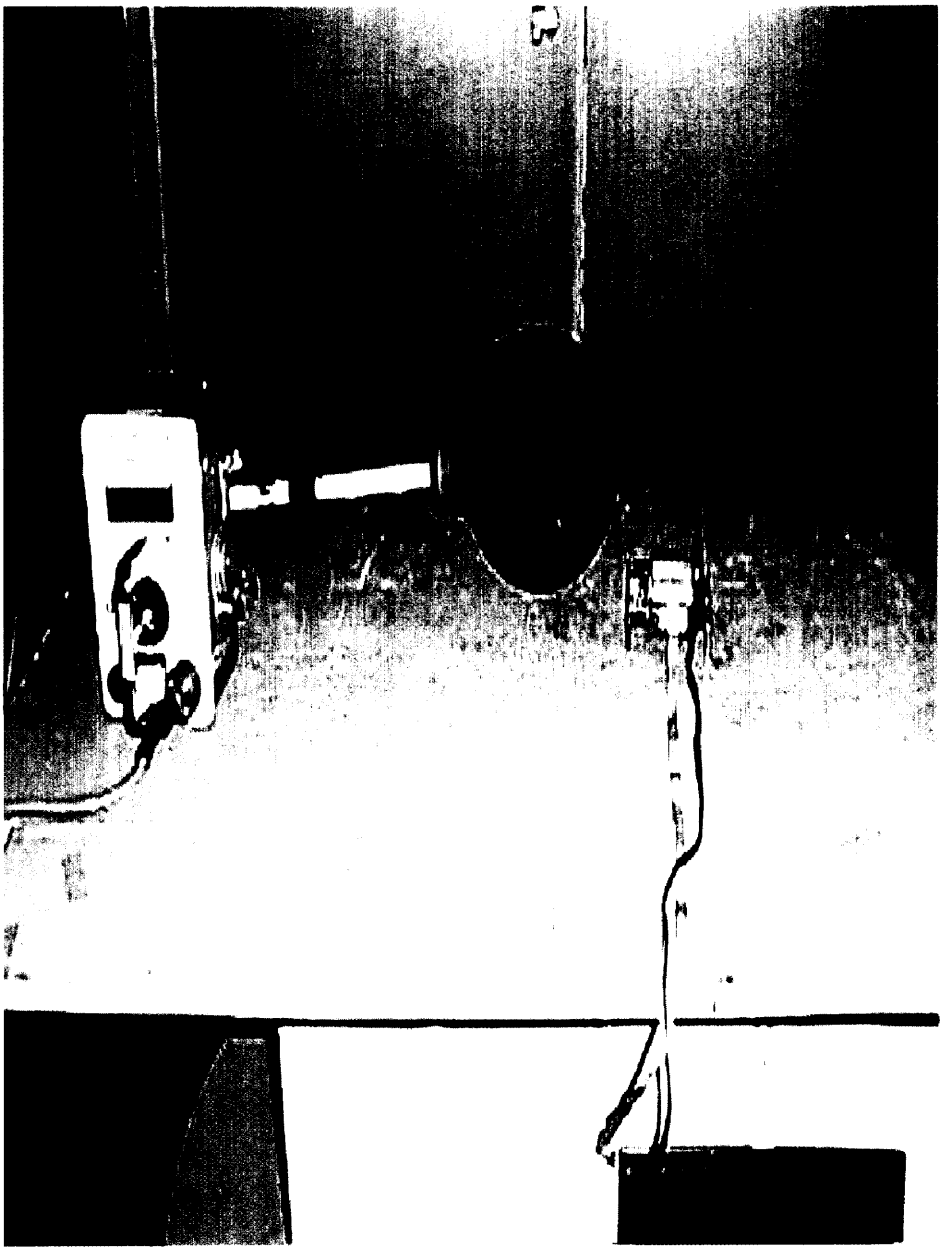
5.5 Configuration Photographs

Radiated Emission Test Setup



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5.6 Test Data

The results on the following page(s) were obtained when the device was tested in the condition described in section 4.

Test Distance m	Maximum Field Strength Reading V/m	Calculated Power Density mW/cm^2	FCC Limit for Time-Averaging Interval of 30 min. mW/cm^2
0.1	45	0.54	0.60
0.2	21	0.12	0.60
0.3	17	0.077	0.60
0.5	11	0.032	0.60
1.0	5	0.0066	0.60
1.5	3.5	0.0032	0.60

Judgment: Passed

6.0 Miscellaneous Information or Other Comments

None.