

15.209 Class B peripheral  
FCC ID : IMKRL26330M

EMI TEST REPORT

On

RangeLAN2 6330  
Mini ISA Design-in Card

Prepared for

Proxim, Inc.  
295 N. Bernardo Ave  
Mountain View, CA 94043  
Tel : (650)960-1630  
Fax: (650)960-1984

Prepared by

Electronic Compliance Laboratories Inc.  
1249 Birchwood Dr.  
Sunnyvale, CA 94089  
Tel : (408) 747-1490  
Fax: (408) 747-1495

Test Report Number: A812005add  
Date of Test: March 19, 1999

If this document is reproduced, it must be reproduced  
in its entirety.



## Table of Contents

<b>1.0 Test Facility .....</b>	<b>3</b>
<b>2.0 Test Equipment.....</b>	<b>3</b>
<b>3.0 EUT .....</b>	<b>3</b>
<b>4.0 Support Equipment.....</b>	<b>3</b>
<b>5.0 Equipment Configuration .....</b>	<b>4</b>
<b>6.0 Summary Of Tests .....</b>	<b>5</b>
<b>APPENDIX A 15.209 Radiated Emissions .....</b>	<b>6</b>
<b>APPENDIX B Set Up Photos .....</b>	<b>9</b>

## 1.0 TEST FACILITY

Name: Electronic Compliance Laboratories  
Location: 1249 Birchwood Dr.  
Sunnyvale, CA 94089  
Site Filing: A site description is on file at the Federal Communications  
Commission  
P.O. Box 429  
Columbia, MD 21045  
NVLAP LAB CODE: 200089  
Types of Sites: Open Field Radiated and Indoor Screen Room (Line  
Conducted). All sites are constructed and calibrated to  
meet ANSI C63.4-1994 requirements.

## 2.0 TEST EQUIPMENT

Description	Manufacturer	Model	SN
EMI Receiver	HP	8546A	3325A00137
Preamp	HP	8447F	3113A05849
Biconical Antenna	EM	EM 6912	414
Log Periodic Ant	EM	EM 6950	311

## 3.0 EUT

RangeLAN2 6307-05  
Model Number - 6330  
Serial Number - 0005  
FCC ID: - IMKRL26330M

## 4.0 SUPPORT EQUIPMENT

Dell Computer	- M/N 466LN	S/N 5Q8D4
Logitech Mouse	- M/N M-S34-6MD	S/N LZA54637080
Packard Bell Keyboard	- M/N 7939	S/N 841180007
KFC Monitor	- M/N CA1511	S/N A4KKU4931207
Printer	- M/N BJ-200ex	S/N BAA44391

## **EQUIPMENT CONFIGURATION**

The RangeLAN2 6307-05 Mini ISA Design-in card was designed to be a drop-in spread spectrum device that has already been FCC certified so that customers purchasing the product would not have to apply for an intentional radiator certification.

In order to prove the module will pass all requirements in a stand alone configuration a desktop PC was used to provide DC power and to allow test commands to be sent and data received. The card was placed outside of the PC shell.

All of the equipment and cables were placed in worst case positions to maximize emissions.

Interconnecting cables were of the type and length specified in the individual equipment requirements.

Grounding was in accordance with the manufacturer requirements and conditions for intended use.

## 6.0 SUMMARY OF TESTS

### 6.1 15.209 RADIATED EMISSIONS

with The attached table shows that the Class B radiated limits from 30 - 1000 MHz are not exceeded by the EUT. The EUT was operating normally a combination of transmission and reception and hopping one of the fifteen pseudorandom sequences during this test. The EUT was placed near one edge of a wooden table resting on a turntable. The wooden table was approximately 1 meter above the groundplane of the 3 meter test site. The search antennas were located at 3 meters. Measurements were made in accordance with ANSI C63.4-1994. **Test Data is in Appendix A.**

Electronic Compliance Laboratories

\_\_\_\_\_  
Chris Byleckie  
Technical Director

\_\_\_\_\_  
Date

**APPENDIX A**  
**15.209 RADIATED EMISSIONS**



Date: 03-23-1999  
 E.U.T.: 6330 design in module  
 Serial Number: 0005  
 Antenna Type: LOG PERIODIC

TEST FREQ	TEST dBuV	ACTUAL dBuV/m	CLASS B LIMIT	VERSUS B LIMIT	TABLE DEGREES	ANTENNA HEIGHT	POLAR- IZATION	DETECTOR Type
=====	=====	=====	=====	=====	=====	=====	=====	=====
144.000	44.5	34.9	43.5	-8.6	270	1.5	H	PK
128.000	45.0	34.8	43.5	-8.7	250	1.5	H	PK
112.000	39.6	27.7	43.5	-15.8	250	2.0	H	PK
64.000	47.8	30.9	40.0	-9.1	320	2.0	H	PK

CHANGED ANTENNA TO LOG PERIODIC

304.000	34.5	25.7	46.0	-20.3	0	1.5	V	PK
320.000	38.5	29.3	46.0	-16.7	0	1.5	V	PK
336.000	41.1	32.1	46.0	-13.9	250	1.5	V	PK
352.000	32.5	23.8	46.0	-22.2	270	1.5	V	PK
384.000	41.5	33.6	46.0	-12.4	270	1.5	V	PK
400.000	41.5	34.0	46.0	-12.0	270	2.0	V	PK
416.000	31.0	23.7	46.0	-22.3	270	1.5	V	PK
480.000	30.8	25.1	46.0	-20.9	250	2.0	H	PK
416.000	30.2	22.9	46.0	-23.1	270	2.0	H	PK
400.000	32.1	24.6	46.0	-21.4	250	1.5	H	PK
384.000	42.0	34.1	46.0	-11.9	270	2.0	H	PK
368.000	43.5	35.2	46.0	-10.8	300	1.5	H	PK
352.000	43.9	35.2	46.0	-10.8	300	1.5	H	PK
336.000	41.5	32.5	46.0	-13.5	300	1.5	H	PK
320.000	43.6	34.4	46.0	-11.6	300	2.0	H	PK
304.000	41.0	32.2	46.0	-13.8	300	1.5	H	PK



**APPENDIX B**  
**SET-UP PHOTOS**



**15.209 Class B Radiated Emissions**