



Test Report: 4W07862.2

Applicant: Gecko Electronics Inc
450 Des Canetons
Quebec, G2E 5W6

**Equipment Under Test:
(EUT)** IRFMT-1, RF RECEIVER

In Accordance With: FCC PART 15, SUBPART B

Tested By: Nemko Canada Inc.
303 River Road, R.R. 5
Ottawa, Ontario K1V 1H2

Authorized By:

A handwritten signature in blue ink that reads 'Kevin Carr'.

Kevin Carr, EMC/EMI/Wireless Specialist

Date: 18 August 2004

Total Number of Pages: 11

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EQUIPMENT: IRFMT-1, RF RECEIVER

Section 1. Summary of Test Results

General

All measurements are traceable to national standards.

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15, Subpart B. All tests were conducted using measurement procedure ANSI C63.4-2001. Radiated emissions are made on an open area test site.

THIS TEST REPORT RELATES ONLY TO THE ITEM (S) TESTED.

THE FOLLOWING DEVIATIONS FROM, ADDITIONS TO, OR EXCLUSIONS FROM THE TEST SPECIFICATIONS HAVE BEEN MADE.

See "Summary of Test Data".

TESTED BY: _____
Daxesh Thakker, Wireless Test Engineer

DATE: July 21, 2004

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Nemko Canada Inc., a testing laboratory, is accredited by the Standards Council of Canada.
The tests included in this report are within the scope of this accreditation.

EQUIPMENT: IRFMT-1, RF RECEIVER

Summary Of Test Data

Name of Test	Paragraph Number	Results
Radiated Emissions	15.109 (a)	Complied

Test Conditions:

Indoor Temperature: 22° C
 Humidity: 30 %

Outdoor Temperature: 18° C
 Humidity: 39 %

EQUIPMENT: IRFMT-1, RF RECEIVER

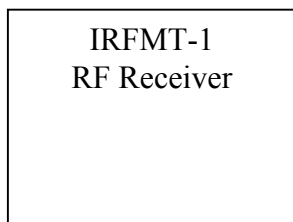
Section 2. Equipment Under Test

General Equipment Information

Manufacturer:	Gecko Electronics Inc
Model No.:	IRFMT-1 RF RECEIVER
Serial No.:	None
Date Received In Laboratory:	May 26 2004
Nemko Identification No.:	Item no. 9
Tested To Radio Standard Specification No.:	FCC Part 15, Subpart B
Open Area Test Site Industry Canada No.:	IC 2040-1
Test Voltage	4.5 Volts – 3 batteries of 1.5 volts each
Frequency Range (<i>or fixed frequency</i>):	915.85 MHz & 916.59 MHz
Receiver Spurious (worst case):	41.9 dBuV/m @ 3m @ 1831.422 MHz

EQUIPMENT: IRFMT-1, RF RECEIVER

Test Set-up



EQUIPMENT: IRFMT-1, RF RECEIVER

Section 3. Radiated Emissions

Para. No.: 15.109 (a)

Test Performed By: Daxesh Thakker	Date of Test: June 22, 2004
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Minimum Standard:

FREQUENCY (MHz)	FIELD STRENGTH microvolts/m at 3 metres	
	Transmitter	Receivers
30 - 88	100 (3 nW)	100 (3 nW),
88-216	150 (6.8 nW)	150 (6.8 nW)
216-960	200 (12 nW)	200 (12 nW)
Above 960	500 (75 nW)	500 (75 nW)

Test Results: Complied

Test Data: As per attached tabulated data

*EQUIPMENT: IRFMT-1, RF RECEIVER***Receiver Radiated Emissions' data**

Test Date: June 22, 2004											
Engineer's Name: Daxesh Thakker											
Temperature (C°): 22								Humidity : 39 %			
Tested as per Table Top											
Test Distance (meters): 3								Range: A			
Freq. (MHz)	Ant.	Pol. V/H	RCVD Signal (dBμV)	Ant. Factor (dB)	Amp. Gain (dB)	Cable Loss (dB)	Field Strength (dBμV/ m)	Limit (dBμV/ m)	Margin (dB)	Detector	Amp.
915.7110	ED4	V	10.2	28.5	N/A	4.0	42.7	46.0	3.3	Q-Peak	-
915.7110	ED4	H	10.5	28.5	N/A	4.0	43.0	46.0	3.0	Q-Peak	-
1831.4220	Horn1	V	56.3	28.2	46.6	3.9	41.9	54.0	12.1	Peak	1-2GHz
1831.4220	Horn1	H	51.0	28.1	46.6	3.9	36.4	54.0	17.6	Peak	1-2GHz
2747.1300	Horn1	V	N.D.	30.3	56.6	5.7	N.D	54.0	N.D	Peak	2-4GHz
2747.1300	Horn1	H	N.D.	30.3	56.6	5.7	N.D	54.0	N.D	Peak	2-4GHz
Note 1: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipole Note 2: Detector Legend: Q-Peak = 120 kHz RBW, Peak = 1.0 MHz RBW Note 3: The EUT was searched up to 10th harmonic of the fundamental.											
Notes:		Measurement Receiver = H.P.8565E, RBW/VBW = 1/3MHz, using a peak detector Measurement Receiver = ESVS30, 120kHz RBW using a Q-Peak detector									

EQUIPMENT: IRFMT-1, RF RECEIVER

Set-up Photo:

Front view



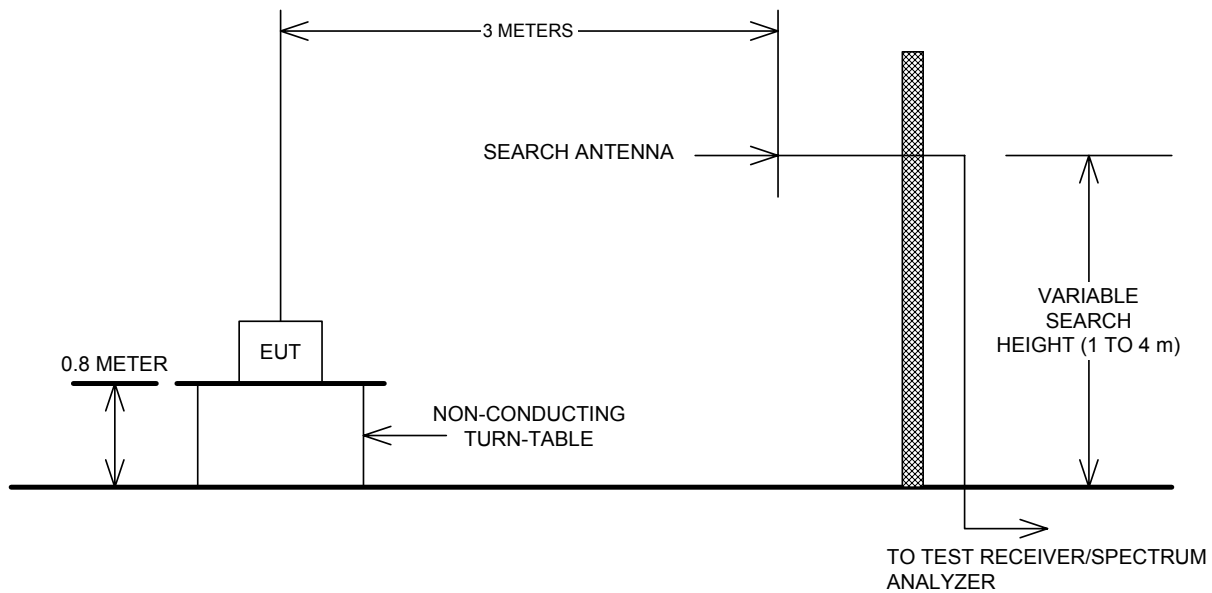
Rear view



EQUIPMENT: IRFMT-1, RF RECEIVER

Section 4. Block Diagram

Outdoor Test Site For Radiated Emissions



The spectrum was searched up to the 10th harmonic of the fundamental frequency of operation.

*EQUIPMENT: IRFMT-1, RF RECEIVER***Section 5. Test Equipment List**

Equipment List - Radiated Emissions

CAL Cycle	Equipment	Manufacturer	Model No.	Asset/Serial No.	Last Cal.	Next Cal.
1 Year	Spectrum Analyzer	Hewlett-Packard	8565E	FA000981	May 31/04	May 31/05
1 Year	Dipole Antenna Set	EMCO #1	3121C	FA000814	May. 09/04	May. 09/05
1 Year	Receiver	Rohde & Schwarz	ESVS-30	FA001437	July. 24/03	July. 24/04
1 Year	Horn Antenna #1	EMCO	3115	FA000649	Dec. 18/03	Dec. 18/04
1 Year	1.0 – 2.0 GHz Amplifier	JCA	12-400	FA001498	June. 18/04	June. 18/05
1 Year	2.0 – 4.0 GHz Amplifier	JCA	24-600	FA001496	June. 18/04	June. 18/05
1 Year	4.0 – 8.0 GHz Amplifier	JCA	48-600	FA001497	June. 18/04	June. 18/05
Note: N/A = Not Applicable, NCR = No Cal Required, COU = CAL On Use, OUT = Out For CAL/Repair						