



Test Report:

Applicant:

2W04608

Casi-Rusco

791 Park of Commerce Blvd., Suite 100
Boca Raton, FL

33487
USA

Equipment Under Test:
(EUT)

950, 960
Proximity Reader

In Accordance With:

FCC Part 15, Subpart C, 15.209

Tested By:

Nemko Canada Inc.
3325 River Road, R.R. 5
Ottawa, Ontario K1V 1H2

Authorized By:

A handwritten signature in blue ink, appearing to read 'G. Westwell'.

G. Westwell, Wireless Technologist

Date:

January 15, 2002

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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 FCC Part 15, Subpart C for low power devices. All tests were conducted using measurement procedure ANSI C63.4-1992. Radiated Emissions were made on an open area test site. A description of the test facility is on file with the FCC.

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:

Russell Grant, Wireless Group Manager

DATE: January 15, 2002

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. The results apply only to the samples tested.

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This report applies only to the items tested.

Summary Of Test Data

Name Of Test	Para. No.	Result
Powerline Conducted Emissions	15.207	N/A
Radiated Emissions	15.209	Complies

Footnotes For N/A's: 12 VDC external power supply.**Test Conditions:****Indoor** Temperature: 24 °C
Humidity: 53 %**Outdoor** Temperature: 24 °C
Humidity: 53 %

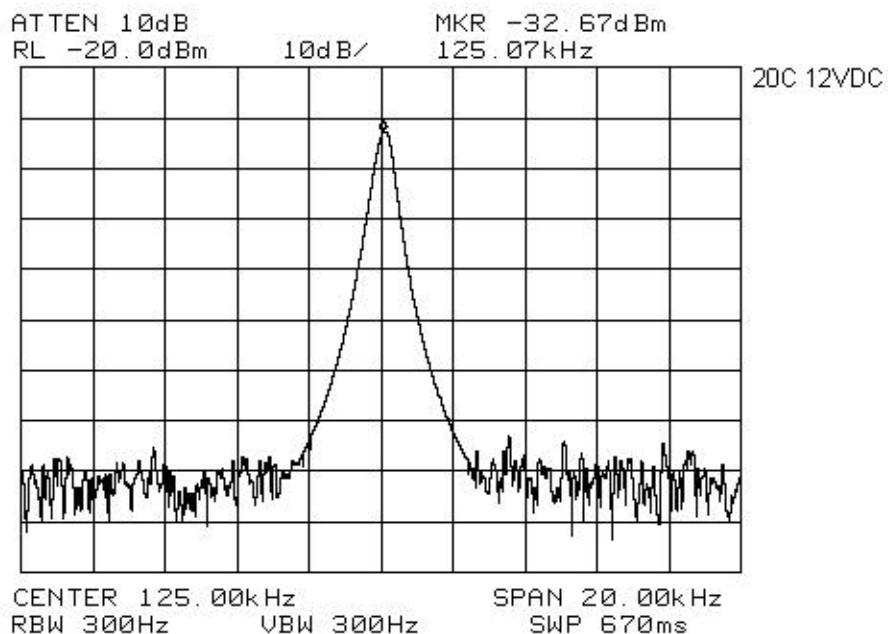
Section 2. General Equipment Specification**Manufacturer:** Casi Rusco**Model No.:** 950**Serial No.:** None**Date Received In Laboratory:** July 17, 2001**Nemko Identification No.:** Item #8**Tx:** 125 kHz**Emission Designator:** NON

Nemko Canada Inc.

FCC PART 15, SUBPART C, 15.209

PROJECT NO.: 2W04608

EQUIPMENT: 950, 960 - Proximity Reader



Section 3. Radiated Emissions**Para. No.: 15.209****Test Performed By:** Russell Grant**Date of Test:** August 20, 2001**Minimum Standard:**

Fundamental (MHz)	Field Strength (μV/m)	Field Strength (dBμV)
0.009 - 0.490	2400/F(kHz) @ 300m	—
0.490 - 1.705	24000/F(kHz) @ 30m	—
1.705 - 30	30 @ 30m	—
30 - 88	100	40.0
88 - 216	150	43.5
216 - 960	200	46.0
Above 960	500	54.0

Test Results: Complies.**Measurement Data:** See attached table.

Test Data - Radiated Emissions

Frequency of Emission (MHz)	Received Signal (dBuV/m@2m)	Received Signal (dBuV/m@4m)	Extrapolated Signal (dBuV/m)	Limit (dBuV/m)	Margin (dB)
0.125	98.3	81.1	-26.0	25.7	51.7
0.375	64.8	46.8	-65.3	16.1	81.4
0.625	57.1	40.0	-9.7	31.7	41.4
0.875	54.5	37.5	-11.9	28.8	40.7
1.125	48.7	32.0	-16.5	26.6	43.1
1.375	46.0	30.0	-16.5	24.8	41.3
1.625	44.4	28.5	-17.7	23.4	41.1
1.875	39.2	23.7	-21.4	29.5	50.9
2.125	39.9	24.5	-20.3	29.5	49.8
2.375	37.0	22.0	-21.6	29.5	51.1
2.625	36.2	24.0	-11.5	29.5	41.0
2.875	36.2	24.6	-9.1	29.5	38.7
3.125	33.0	22.3	-8.8	29.5	38.3
3.375	32.9	24.0	-1.9	29.5	31.4
3.625	32.8	26.3	7.4	29.5	22.1
3.875	33.8	26.2	4.1	29.5	25.4
4.125	35.5	28.1	6.6	29.5	23.0
4.625	25.3	15.5	-13.0	29.5	42.5
4.875	25.5	17.9	-4.2	29.5	33.7
5.125	22.9	10.6	-25.2	29.5	54.7

Notes:

Measured: Active Loop Antenna, Test Receiver

10 kHz RBW, Peak Detector

Test Data - Radiated Emissions

Test Distance (meters) : 3		Range: A Tower		Receiver: ESVP		RBW(kHz): 120		Detector: Q-Peak	
Freq. (MHz)	Ant. *	Pol. (V/H)	RCVD Signal (dB μ V/m)	Ant. Factor (dB)**	Amp. Gain (dB)***	Dist. Corr. (dB)	Field Strength (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
58.1	B/C1	V	22.2	10.4			32.6	40.0	7.4
58.1	B/C1	H	24.0	10.4			34.4	40.0	5.6
60.0	B/C1	V	27.5	10.1			37.6	40.0	2.4
60.0	B/C1	H	26.1	10.1			36.2	40.0	3.8
224.0	B/C1	V	24.0	16.9			40.9	46.0	5.1
224.0	B/C1	H	24.0	16.9			40.9	46.0	5.1

Notes:

B/C = Biconical, B/L = Biconilog, L/P = Log-Periodic, H = Horn, D/P = Dipole

* Re-measured using dipole antenna.

** Includes cable loss when amplifier is not used.

*** Includes cable loss.

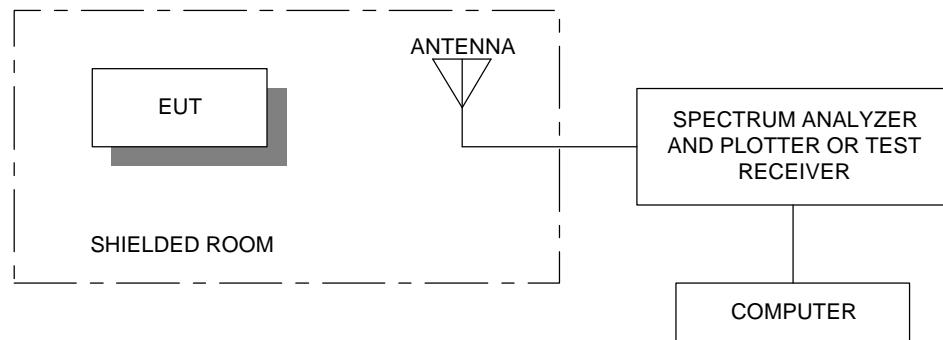
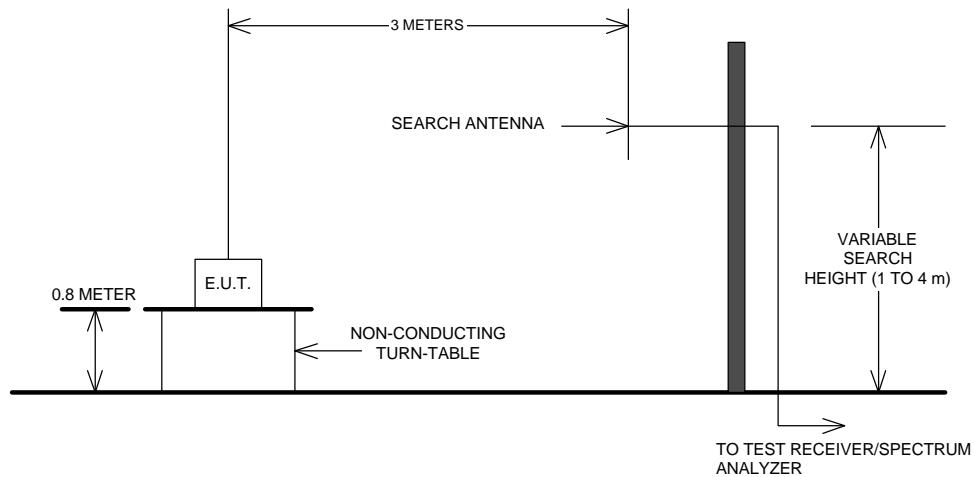
() Denotes failing emission level.

N.D. = Not Detected

Radiated Emissions Photographs

Front View



Section 4. Block Diagrams**Radiated Prescan****Test Site For Radiated Emissions**

Section 5. Test Equipment List

CAL CYCLE	EQUIPMENT	MANUFACTURER	MODEL	SERIAL	LAST CAL.	NEXT CAL.
1 Year	Spectrum Analyzer	Hewlett Packard	8565E	FA000981	June 08/01	June 08/02
1 Year	Receiver	Rohde & Schwarz	ESH3	892473/002	Jan. 3/01	Jan. 3/02
1 Year	Receiver	Rohde & Schwarz	ESVP	892661/014	Apr. 3/01	Apr. 3/02
1 Year	Log Periodic Antenna 1	EMCO	LPA-25	1141	Aug. 28/01	Aug. 28/02
1 Year	Biconical (1) Antenna	EMCO	3109	9204-2708	Aug. 22/01	Aug. 22/02
1 Year	Active Loop Antenna	Rohde & Schwarz	HFH2-Z2	FA000631	March 20/01	March 20/02

NA: Not Applicable

NCR: No Cal Required

COU: CAL On Use