

Test Report: 1W03826

Applicant: Digital Security Controls Ltd.
3301 Langstaff Road
Vaughan, Ontario
L4K 4L2

**Equipment Under Test:
(EUT)** PC5102, UA269

In Accordance With: **FCC Part 15, Subpart B**
Radio Receivers

Tested By: Nemko Canada Inc.
(Formerly KTL Ottawa Inc.)
3325 River Road, R.R. 5
Ottawa, Ontario K1V 1H2

Authorized By:

G. Westwell, Technologist

Date:

Total Number of Pages: 10

EQUIPMENT: PC5102, UA269

Table Of Contents

Section 1. Summary of Test Results.....	3
Section 2. General Equipment Specification	5
Section 3. Radiated Emissions.....	6
Section 4. Block Diagrams.....	9
Section 5. Test Equipment List	10

EQUIPMENT: PC5102, UA269

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 B. Measurement procedure ANSI C63.4-1992 was used for all tests. Radiated Emissions were measured on an open area test site.

New Submission

Production Unit

Class II Permissive Change

Pre-Production Unit

C	Y	Y
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Equipment Code

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".



NVLAP LAB CODE: 100351-0

TESTED BY: _____ DATE: _____
Russell Grant, Wireless Group Manager

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This report applies only to the items tested.

EQUIPMENT: PC5102, UA269

Section 2. General Equipment Specification

Date Received In Laboratory: April 16, 2001

Nemko Identification No.: Item #1

Frequency Range: 433 MHz

Number of Channels: 1

EQUIPMENT: PC5102, UA269

Section 3. Radiated Emissions

Para. No.: 15.109(a)

Test Performed By: Russell Grant	Date of Test: April 16, 2001
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Minimum Standard:

Frequency(MHz)	Field Strength (dBµV/m @ 3m)
30 - 88	40.0
88 - 216	43.5
216 - 960	46.0
Above 960	54.0

Test Results: Complies. The worst-case emission level is 40.0 dBµV/m @ 3m at 1692.88 MHz. This is 14.0 dB below the specification limit.

Measurement Data: See attached table.

For super-regenerative receivers the receiver is coerhered using a signal generator and dipole antenna.

Handheld equipment and equipment not designed to be mounted in any fixed orientation, the EUT is tested in three orthogonal axis to obtain worst case results.

EQUIPMENT: PC5102, UA269

Test Data - Radiated Emissions

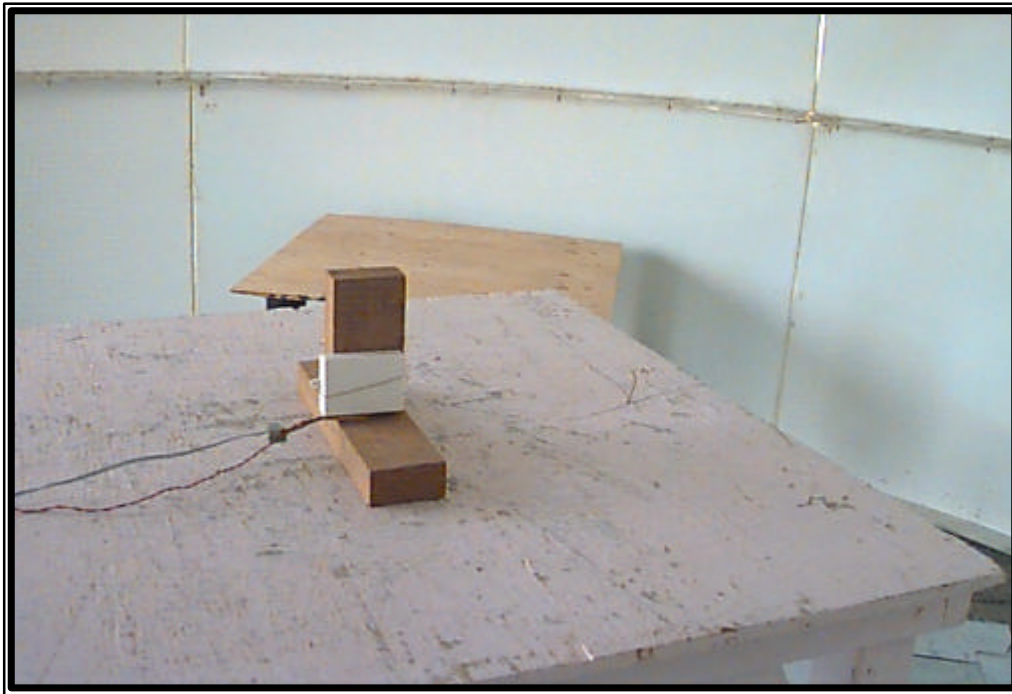
Test Distance (meters) : 3		Range: A Tower		Receiver: ESVP		RBW(kHz): 120/1000		Detector: Peak	
Freq. (MHz)	Ant. *	Pol. (V/H)	RCVD Signal (dBµV/m)	Ant. Factor (dB)**	Amp. Gain (dB)***	Dist. Corr. (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
423.22	E/D4	V	4.0	24.7			28.7	46.0	17.3
423.22	E/D4	H	1.2	24.7			25.9	46.0	20.1
846.44	E/D4	V	-9.5	31.3			21.8	46.0	24.2
846.44	E/D4	H	-7.7	31.3			23.6	46.0	22.4
1269.66	Hrn2	V	53.0	30.5	-48.0		35.5	54.0	18.5
1269.66	Hrn2	H	54.0	30.5	-48.0		36.5	54.0	17.5
1692.88	Hrn2	V	56.0	32.0	-48.0		40.0	54.0	14.0
1692.88	Hrn2	H	53.0	32.0	-48.0		37.0	54.0	17.0

Notes:
 B/C = Biconical, B/L = Biconilog, L/P = Log-Periodic, H = Horn, D/P = Dipole
 * Re-Measured Using Dipole Antenna. () Denotes Failing Emission Level.
 (1) 120 kHz, Q-Peak,
 (2) 10 kHz, Peak,
 (3) 100 kHz RGW, 300 kHz VBW, Peak,
 (4) 300 kHz RBW, 1 MHz VBW, Peak,
 (5) 1 MHz RBW, 3 MHz VBW, Peak,
 (6) 1 MHz RBW, 10 Hz VBW, Peak
 N.D. = Not Detected

EQUIPMENT: PC5102, UA269

Radiated Photographs

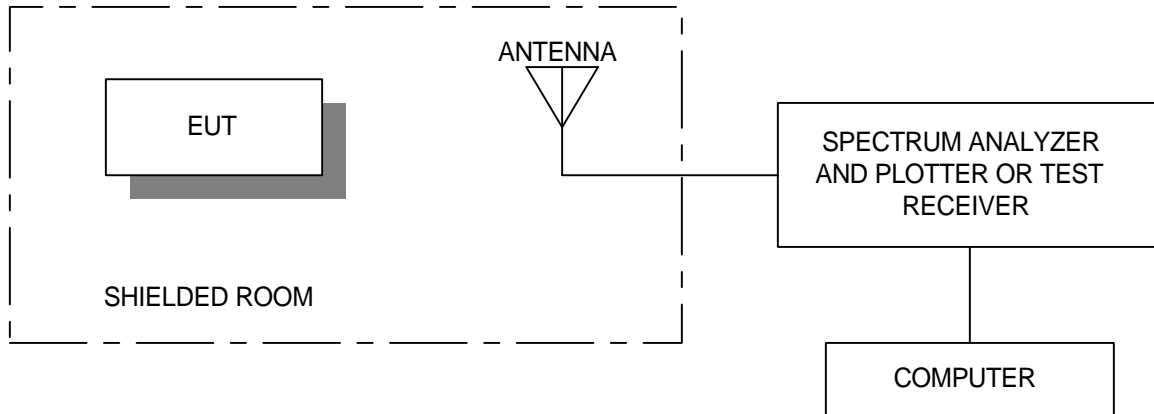
Front View



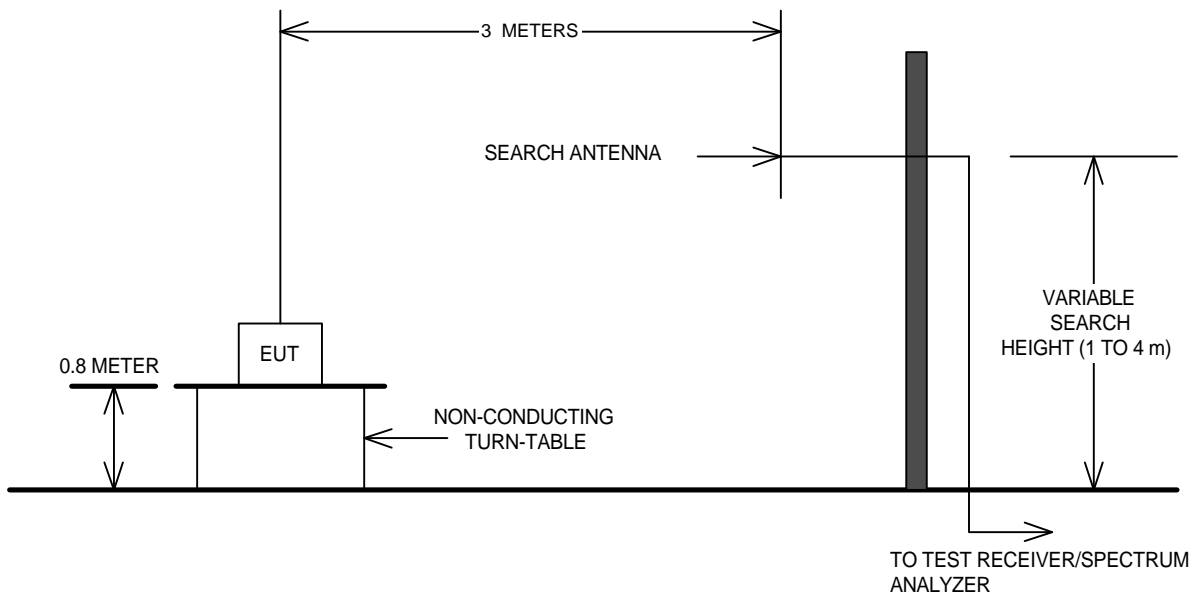
EQUIPMENT: PC5102, UA269

Section 4. Block Diagrams

Radiated Prescan



Outdoor Test Site For Radiated Emissions



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

EQUIPMENT: PC5102, UA269

Section 5. Test Equipment List

CAL CYCLE	EQUIPMENT	MANUFACTURER	MODEL	SERIAL	LAST CAL.	NEXT CAL.
1 Year	Spectrum Analyzer	Hewlett Packard	8565E	FA000981	June 16/00	June 16/01
EX	Receiver	Rohde & Schwarz	ESVP	892661/014	April 5/00	July 5/5401
1 Year	Horn Antenna	EMCO #2	3115	4336	Dec. 1/00	Dec. 1/01
1 Year	Biconical (1) Antenna	EMCO	3109	9204-2708	Aug. 10/00	Aug. 10/01

NA: Not Applicable
NCR: No Cal Required
COU: CAL On Use