

<b>Test Report:</b>	1W03826
<b>Applicant:</b>	Digital Security Controls Ltd. 3301 Langstaff Road Vaughan, Ontario L4K 4L2
<b>Equipment Under Test: (EUT)</b>	PC5102, UA269
<b>In Accordance With:</b>	<b>FCC Part 15, Subpart B</b> Radio Receivers
<b>Tested By:</b>	Nemko Canada Inc. (Formerly KTL Ottawa Inc.) 3325 River Road, R.R. 5 Ottawa, Ontario K1V 1H2
<b>Authorized By:</b>	G. Westwell, Technologist
<b>Date:</b>	
<b>Total Number of Pages:</b>	10

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



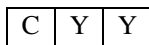
Production Unit



Class II Permissive Change



Pre-Production Unit



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

Nemko Canada Inc. authorizes the above named company to reproduce this report provided it is reproduced in its entirety and for use by the company's employees only.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Nemko Canada Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

This report applies only to the items tested.

*EQUIPMENT: PC5102, UA269*

---

**Summary Of Test Data**

<b>Name Of Test</b>	<b>Para. No.</b>	<b>Results</b>
Antenna Conducted Emissions	15.111	N/A
Radiated Emissions	15.109	Complies
Powerline Conducted Emissions	15.107	N/A

**Footnotes For N/A's:**                      Integral Antenna  
   Batteries

*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)**

<b>Test Performed By:</b> Russell Grant	<b>Date of Test:</b> April 16, 2001
---	-------------------------------------

**Minimum Standard:**

<b>Frequency(MHz)</b>	<b>Field Strength (dB<math>\mu</math>V/m @ 3m)</b>
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 dB $\mu$ V/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

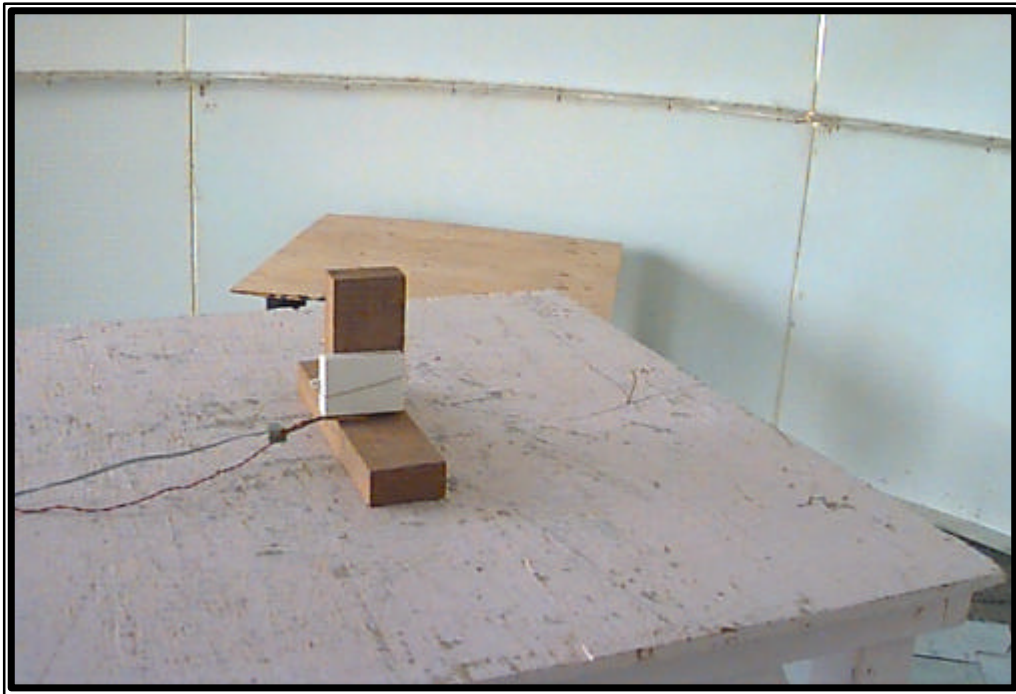
Test Distance (meters) : 3		Range: A Tower		Receiver: ESVP		RBW(kHz): 120/1000		Detector: Peak	
Freq. (MHz)	Ant. *	Pol. (V/H)	RCVD Signal (dBµV/m)	Ant. Factor (dB)**	Amp. Gain (dB)***	Dist. Corr. (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
423.22	E/D4	V	4.0	24.7			28.7	46.0	17.3
423.22	E/D4	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
<b>Notes:</b> 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**

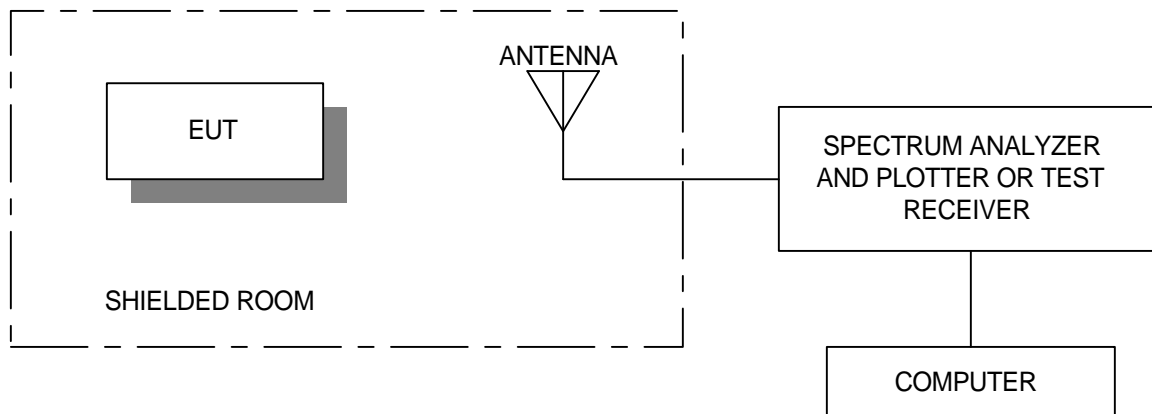
### **Front View**



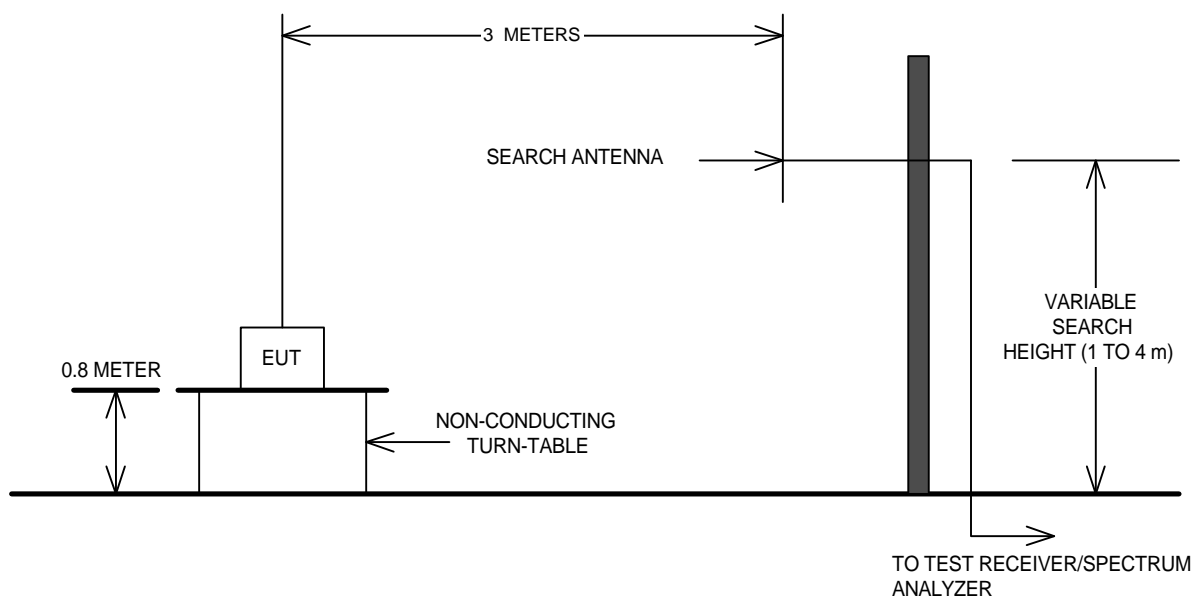


## Section 4. Block Diagrams

### 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**

<b>CAL CYCLE</b>	<b>EQUIPMENT</b>	<b>MANUFACTURER</b>	<b>MODEL</b>	<b>SERIAL</b>	<b>LAST CAL.</b>	<b>NEXT CAL.</b>
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