



Nemko


Test Report: 3W06855.2

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

**Equipment Under Test:
(EUT)** RF5108 433MHz Wireless Receiver

In Accordance With: **FCC Part 15, Subpart B, 15.109**

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



Authorized By: Kevin Carr, EMC Specialist

Date: 28 February 2003

Total Number of Pages: 10

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EQUIPMENT: RF5108 Wireless 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 FCC Part 15, Subpart B. Measurement procedure ANSI C63.4-2000 was used for all tests. Radiated Emissions were measured 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: _____
Glen Westwell, Wireless Technologist

DATE: 12 February 2003

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This report applies only to the items tested.

EQUIPMENT: RF5108 Wireless Receiver

Summary Of Test Data

Name Of Test	Para. No.	Results
Radiated Emissions	15.109	Complies
Powerline Conducted Emissions	15.107	N/A

Test Conditions:**Indoor**

Temperature: 21°C

Humidity: 38%

Outdoor

Temperature: -15°C

Humidity: 15%

EQUIPMENT: RF5108 Wireless Receiver

Section 2. General Equipment Specification

Manufacturer: Digital Security Controls Ltd.

Equipment: 433MHz Wireless Receiver

Model No.: RF5108

Serial No.: None

Date Received In Laboratory: Feb 6, 2003

Nemko Identification No.: 6

Receive Frequency: 433.92MHz

Receive L.O.: 423.22MHz

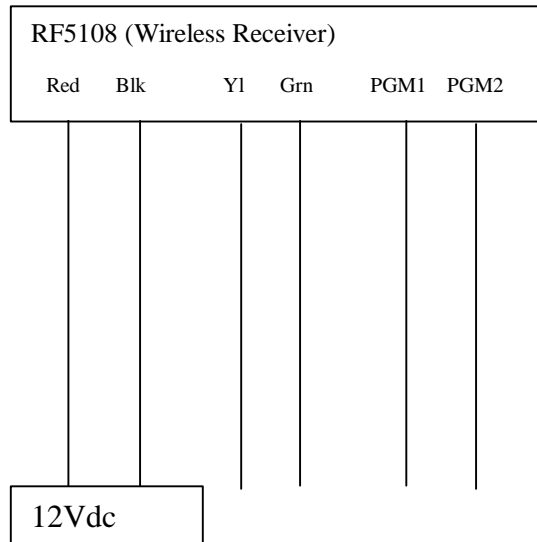
EQUIPMENT: RF5108 Wireless Receiver

Test Arrangement

Client supplied Test Set-up.

Please give a diagram of your proposed test arrangement detailing where appropriate earthing, cable types and lengths, drive equipment and any test software necessary. Software Version used during testing was Version 1.0

Test Arrangement Diagram :



EUT Ports:	Cable Details:	Support Equipment Details:
1. Red	AWG22	12Vdc
2. Blk	AWG22	Gnd
3.	AWG22	1 meter each.
4.		
5.		

EQUIPMENT: RF5108 Wireless Receiver

Section 3. Radiated Emissions**Para. No.: 15.109(a)****Test Performed By:** Glen Westwell**Date of Test:** Feb 28, 2003**Minimum Standard:**

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

Test Results: Complies**Measurement Data:** No emissions detected.

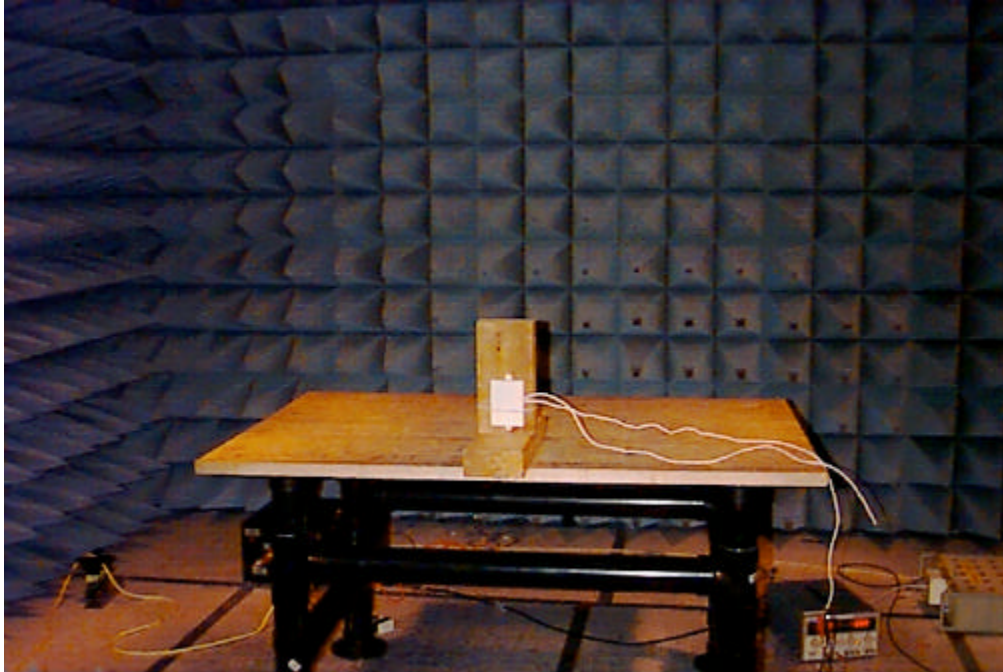
All emissions were searched on three orthogonal axis. No emissions within 20dB of the limit were detected.

The receiver was coerced using a 433.92MHz signal source.

The DC source was varied +/- 15% of the nominal input voltage to verify worst case emissions.

EQUIPMENT: RF5108 Wireless Receiver

Pre-Scan Set Up Photo

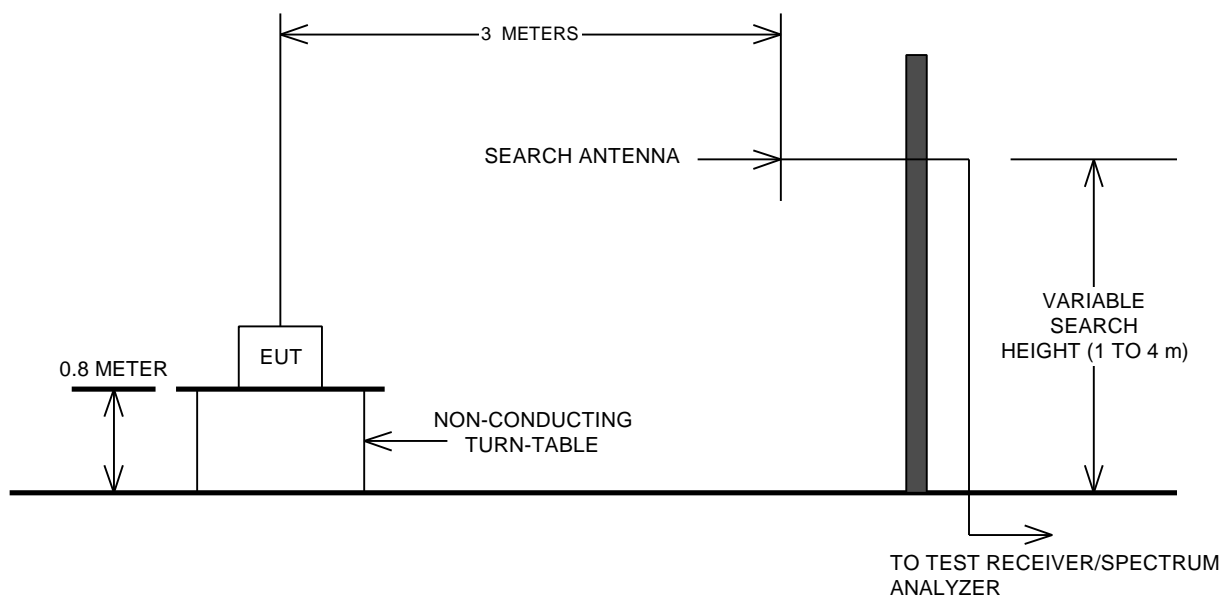


Open Area Test Site Radiated Emissions Photo

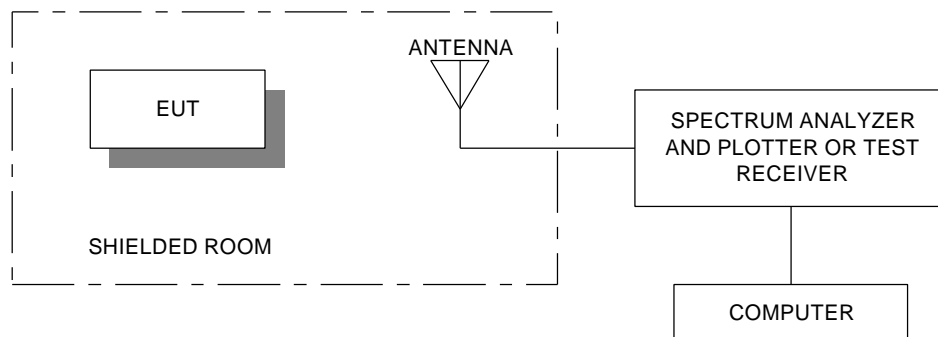


Section 4. Block Diagrams

Outdoor Test Site For Radiated Emissions



Radiated Prescan



EQUIPMENT: RF5108 Wireless Receiver

Section 5. Test Equipment List

CAL CYCLE	EQUIPMENT	MANUFACTURER	MODEL	SERIAL	Last Cal.	Next Cal.
1 Year	Spectrum Analyzer	Hewlett Packard	8565E	FA000981	15 Jul 02	15 Jul 03
1 Year	Spectrum Analyzer-1	Hewlett Packard	8566B	2311A02238	27 Nov 01	07 Mar 03
1 Year	Spectrum Analyzer Display-1	Hewlett Packard	8566B	2314A04759	27 Nov 01	07 Mar 02
1 Year	Receiver	Rohde & Schwarz	ESVS 30	DE35516	04 Jul 02	04 Jul 03
1 Year	Horn Antenna	EMCO #2	3115	4336	09 Dec 02	09 Dec 03
1 Year	Dipole Antenna Set	EMCO #2	3121C	FA001349	06 May 02	06May 03
1 Year	Signal Generator	Hewlett Packard	8660C	2044A03304	13 Jan 02	13 Mar 03