



Test Report: 5W46138

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

Apparatus: Skyroute (A) and Skyroute Max (A)

FCC ID: F5305SKY

In Accordance With: FCC Part 1.1310 Radiofrequency radiation exposure limits

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

Authorized By:

A handwritten signature in blue ink, appearing to be 'Jin Xu', written in a cursive style.

Jin Xu, Wireless Specialist

Date: 22 September 2005

Total Number of Pages: 11

Report Summary

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 1.1310 Radiofrequency radiation exposure limits.

The assessment summary is as follows:

Apparatus Assessed:	Skyroute (A) and Skyroute Max (A)
Specification:	FCC Part 1.1310
Compliance Status:	Complies
Exclusions:	None
Non-compliances:	None
Report Release History:	Original Release

Author: Jason Nixon, Telecom Specialist

Note that the results contained in this report relate only to the items tested and were obtained in the period between the date of initial receipt of samples and the date of issue of the report.

This test report has been completed in accordance with the requirements of ISO/IEC 17025.

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Section 1 : Equipment Under Test

1.1 Product Identification

The Equipment Under Test was identified as follows:

Skyroute (A) and Skyroute Max (A)

1.2 Samples Submitted for Assessment

The following samples of the apparatus have been submitted for type assessment:

Sample No.	Description	Serial No.
1	Security System	_____

The first samples were received on: June 22, 2005

1.3 Theory of Operation

The apparatus is a Cellular attachment for a security system. If an alarm occurs the security system uses a cellular call to report the alarm to a monitoring station.

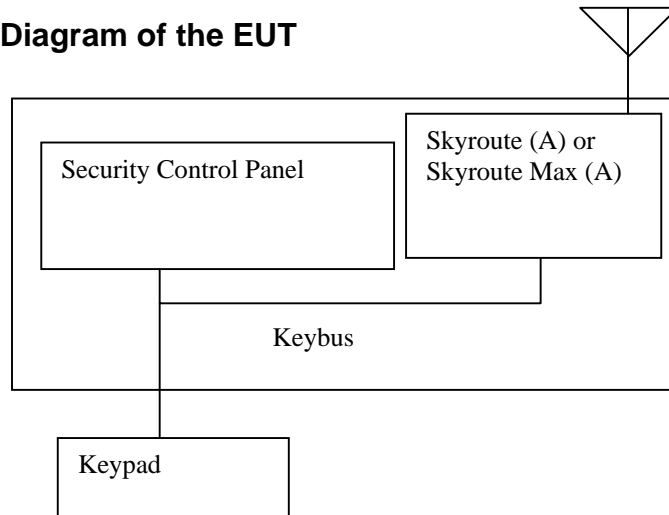
1.4 Technical Specifications of the EUT

Manufacturer: Digital Security Controls Ltd.

Transmitter Frequency: 824.95 – 848.00MHz

Antenna Data: 3dBi

1.5 Block Diagram of the EUT



Section 2 : Test Conditions

2.1 Specifications

The apparatus was assessed against the following specifications:

FCC Part 1.1310 Radiofrequency radiation exposure limits

2.2 Deviations From Laboratory Test Procedures

No deviations were made from laboratory test procedures.

2.3 Test Environment

All tests were performed under the following environmental conditions:

Temperature range : 15 – 30 °C
Humidity range : 20 - 75 %
Pressure range : 86 - 106 kPa
Power supply range : +/- 5% of rated voltages

2.4 Test Equipment

Equipment	Manufacturer	Model No.	Asset/Serial No.	Last Cal.	Next Cal.
Electromagnetic Monitor	NARDA	8716	714398	3-2-05	5-2-07
Isotropic Probe	NARDA	8761	716394	9-13-05	11-13-07

Section 3 : Observations

3.1 Modifications Performed During Assessment

No modifications were performed during assessment.

3.2 Record Of Technical Judgements

No technical judgements were made during the assessment.

3.3 EUT Parameters Affecting Compliance

The user of the apparatus could not alter parameters that would affect compliance.

3.4 Test Deleted

No Tests were deleted from this assessment.

3.5 Additional Observations

There were no additional observations made during this assessment.

Section 4 : Results Summary

This section contains the following:

FCC Part 1 : Test Results

The column headed 'Required' indicates whether the associated clauses were invoked for the apparatus under test. The following abbreviations are used:

- N No : not applicable / not relevant.
- Y Yes : Mandatory i.e. the apparatus shall conform to these tests.
- N/T Not Tested, mandatory but not assessed. (See section 3.4 Test deleted)

The results contained in this section are representative of the operation of the apparatus as originally submitted.

4.1 FCC Part 1 : Test Results

Part 1	Test Description	Required	Result
1.1310	Radiofrequency radiation exposure limits	Y	PASS

Notes:

Appendix A : Test Results

Clause 1.1310 Radiofrequency radiation exposure limits

Table 1. - Limits for Maximum Permissible Exposure (MPE)				
(A) Limits for Occupational/Controlled Exposures				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minutes)
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f ²)	6
30-300	61.4	0.163	1.0	6
300-1500	---	---	f/300	6
1500-100,000	---	---	5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500	---	---	f/1500	30
1500-100,000	---	---	1.0	30

Test Conditions:

Sample Number:	1	Temperature:	22°C
Date:	September 21, 2005	Humidity:	48%
Modification State:	0	Tester:	Jason Nixon
		Laboratory:	Shielded Room

Test Results: The worst case Power Density measured was 0.51mW/cm². The Power Density limit for the EUT at its lowest operating frequency of 824.95MHz is 0.55mW/cm².

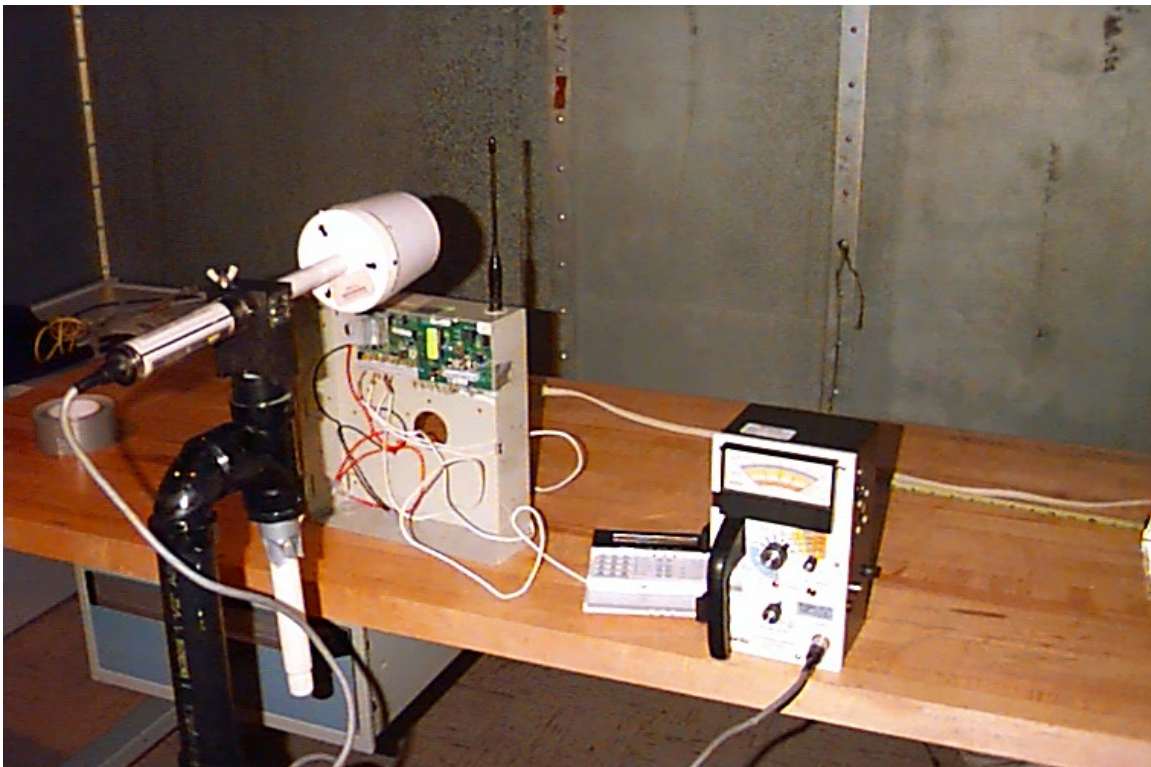
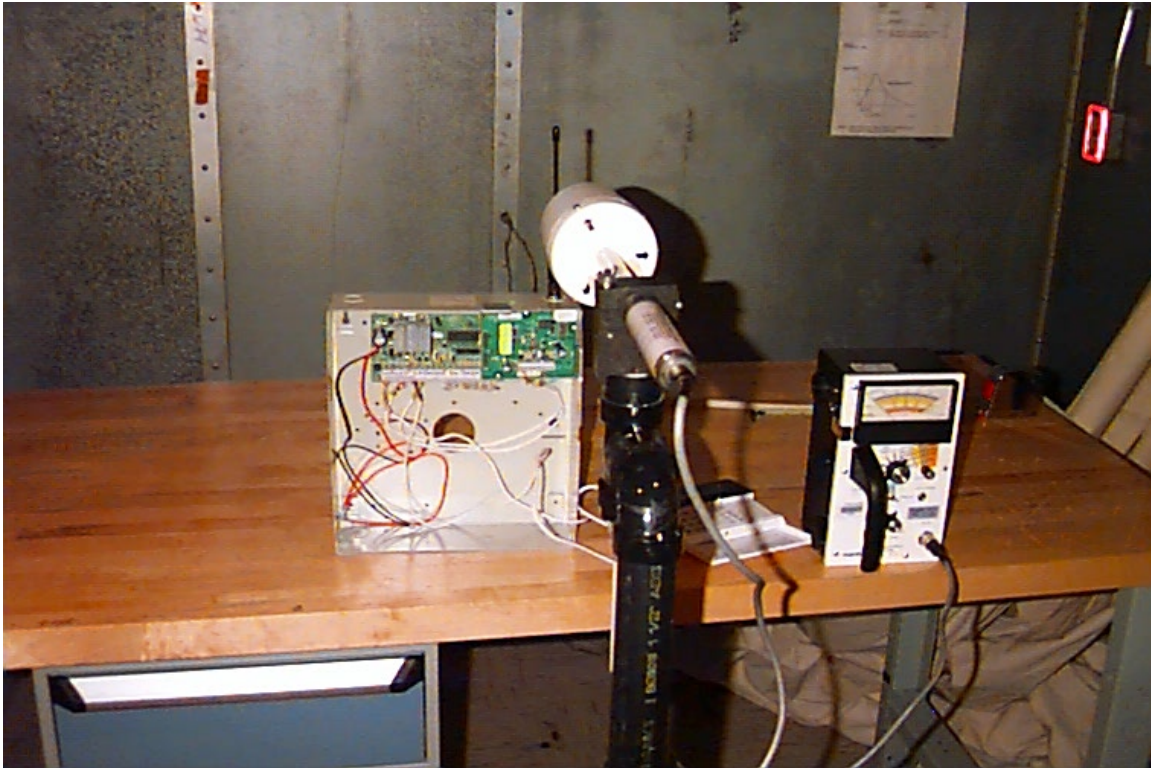
Additional Observations:

The measurement was performed on 8 radial axis at 20cm from the antenna.

The measurement was investigated on a low, middle and high channel and the worst case results are included.

The apparatus was assessed as a General Population/Uncontrolled Exposure device since it is intended to be installed in residential areas.

Appendix B : Setup Photographs



Appendix C : Block Diagram of Test Setups

RF Exposure Measurement

