KTL Test Report:	0R02169
Applicant:	Internet Security Lifeguard Inc. 2005, 3rd Avenue Lachine, Quebec H8T 1X1
Equipment Under Test: (E.U.T.)	EMU 1000
FCC ID:	OQNEMU1000
In Accordance With:	**FCC Part 15, Subpart B** Radio Receivers
Tested By:	KTL Ottawa Inc. 3325 River Road, R.R. 5 Ottawa, Ontario K1V 1H2
Authorized By:	
	R. Grant, Wireless Group Manager
Date:	
Total Number of Pages:	15

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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 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	R	R	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: _____
Kevin Carr, Technologist

Summary Of Test Data

Name Of Test	Para. No.	Results
Antenna Conducted Emissions	15.111	Not Applicable
Radiated Emissions	15.109	Complies
Powerline Conducted Emissions	15.107	Complies

Footnotes For N/A's:

Test Conditions:

Indoor	Temperature:	24 °C
	Humidity:	40 %
Outdoor	Temperature:	24 °C
	Humidity:	40 %

Section 2. General Equipment Specification

Manufacturer:	Internet Security Lifeguard
Model No.:	EMU 1000
Serial No.:	3
Date Received In Laboratory:	June 6, 2000
KTL Identification No.:	Item #2
Frequency Range:	303 MHz Fixed
Number of Channels:	1
Operating Frequency(ies) of Sample:	303 MHz
Primary Power Requirement:	120 VAC, 60 Hz to 12 Vdc Power Cube In addition the E.U.T. contains a non-rechargeable 12 Vdc Battery

Section 3. Radiated Emissions

Para. No.: 15.109(a)

Test Performed By: Kevin Carr	**Date of Test:** June 7, 2000

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 35.0 dBμV/m @ 3m at 290.6 MHz. This is 11.0 dB below the specification limit.

Measurement Data: See attached table.

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

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

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 (dBµV/m)	Ant. Factor (dB)**	Amp. Gain (dB)***	Dist. Corr. (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
291.9	B/C1	V	4.8	22.1			26.9	46.0	19.1
291.9	B/C1	H	8.9	22.1			31.0	46.0	15.0
295.1	B/C1	V	6.0	22.4			28.4	46.0	17.6
295.1	B/C1	H	4.0	22.4			26.4	46.0	19.6
290.6	B/C1	V	13.0	22.0			35.0	46.0	11.0
290.6	B/C1	H	7.2	22.0			29.2	46.0	16.8
297.3	B/C1	V	10.0	22.6			32.6	46.0	13.4
297.3	B/C1	H	10.8	22.6			33.4	46.0	12.6
298.2	B/C1	V	1.2	22.7			23.9	46.0	22.1
298.2	B/C1	H	1.5	22.7			24.2	46.0	21.8
301.2	L/P	V	2.0	18.5			20.5	46.0	25.5
301.2	L/P	H	-3.8	18.5			14.7	46.0	31.3
303.846	L/P	V	6.0	18.5			24.5	46.0	21.5
303.846	L/P	H	10.4	18.5			28.9	46.0	17.1
308.232	L/P	V	-1.0	18.5			17.5	46.0	28.5
308.1	L/P	H	12.0	18.5			30.5	46.0	15.5
314.0	L/P	V	2.8	18.5			21.3	46.0	24.7
314.0	L/P	H	8.6	18.5			27.1	46.0	18.9
607.692	L/P	V	-3.3	24.4			21.1	46.0	24.9
607.692	L/P	H	-3.4	24.4			21.0	46.0	25.0
607.7	L/P	V	-3.0	24.4			21.4	46.0	24.6
607.7	L/P	H	-3.4	24.4			21.0	46.0	25.0
911.538	L/P	V	-3.3	29.6			26.3	46.0	19.7
911.538	L/P	H	-3.4	29.6			26.2	46.0	19.8
983.7	L/P	V	-1.0	31.3			30.3	54.0	23.7
983.7	L/P	H	-2.5	31.3			28.8	54.0	25.2
998.8	L/P	V	-1.0	31.5			30.5	54.0	23.5
998.8	L/P	H	-1.1	31.5			30.4	54.0	23.6

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

The spectrum was searched up to 2000 MHz and all emissions within 20 dB of the specification limit were measured and reported.

Radiated Photographs

Front View

Rear View

Section 4. Powerline Conducted Emissions

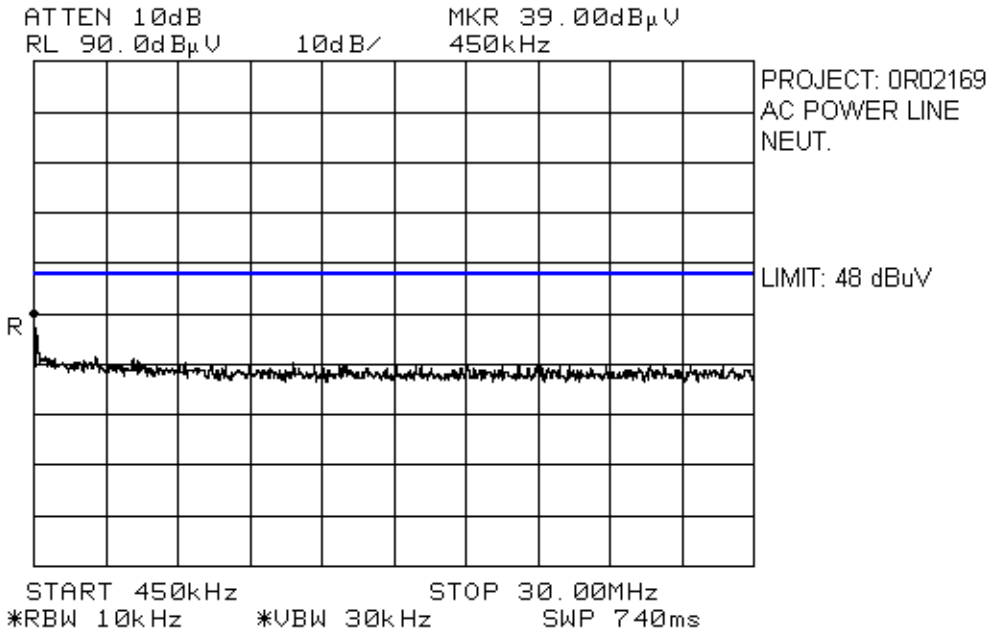
Para. No.: 15.107

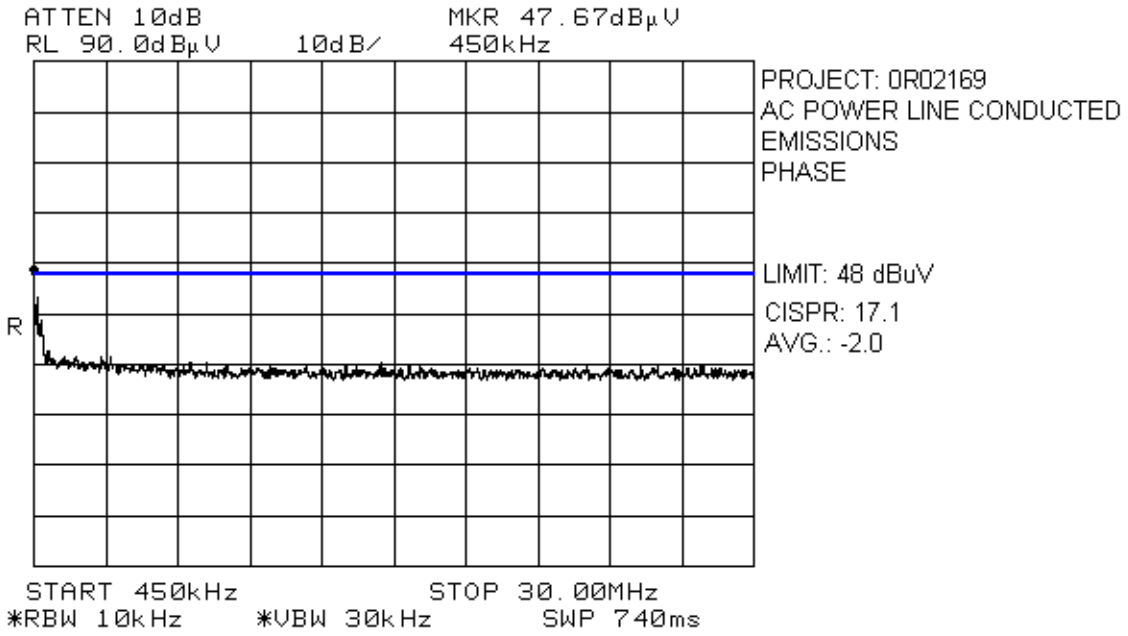
Test Performed By: Kevin Carr	**Date of Test:** June 7, 2000

Minimum Standard: The RF energy feed back into the power lines shall not exceed 48 dBμV on any frequency between 0.45 MHz and 30 MHz inclusive.

Test Results: Complies. See attached graphs.

Measurement Data: See attached graphs.

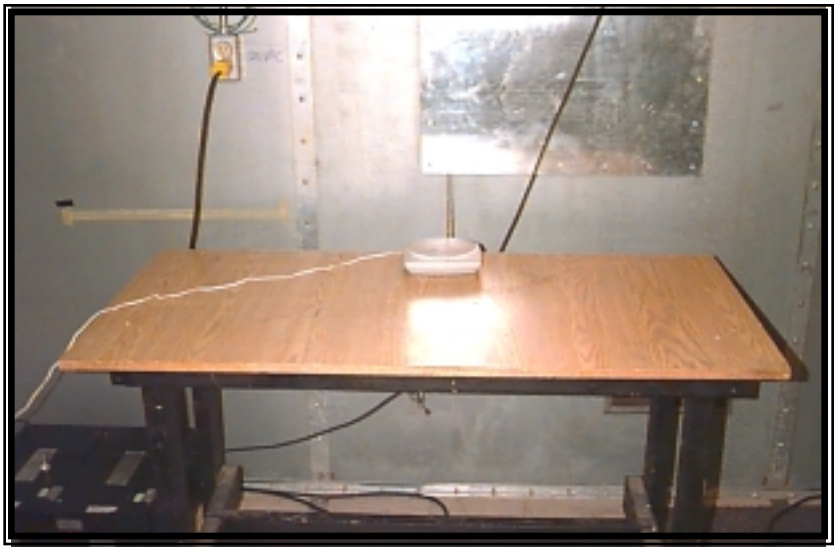

ATTEN 10dB
RL 90.0dBµV
10dB/
MKR 39.00dBµV
450kHz
PROJECT: 0R02169
AC POWER LINE
NEUT.
LIMIT: 48 dBuV
R
START 450kHz
STOP 30.00MHz
*RBW 10kHz
*VBW 30kHz
SWP 740ms


ATTEN 10dB
RL 90.0dBµV
10dB/
MKR 47.67dBµV
450kHz
PROJECT: 0R02169
AC POWER LINE CONDUCTED
EMISSIONS
PHASE
LIMIT: 48 dBuV
CISPR: 17.1
AVG.: -2.0
R
START 450kHz
STOP 30.00MHz
*RBW 10kHz
*VBW 30kHz
SWP 740ms

Powerline Conducted Photographs

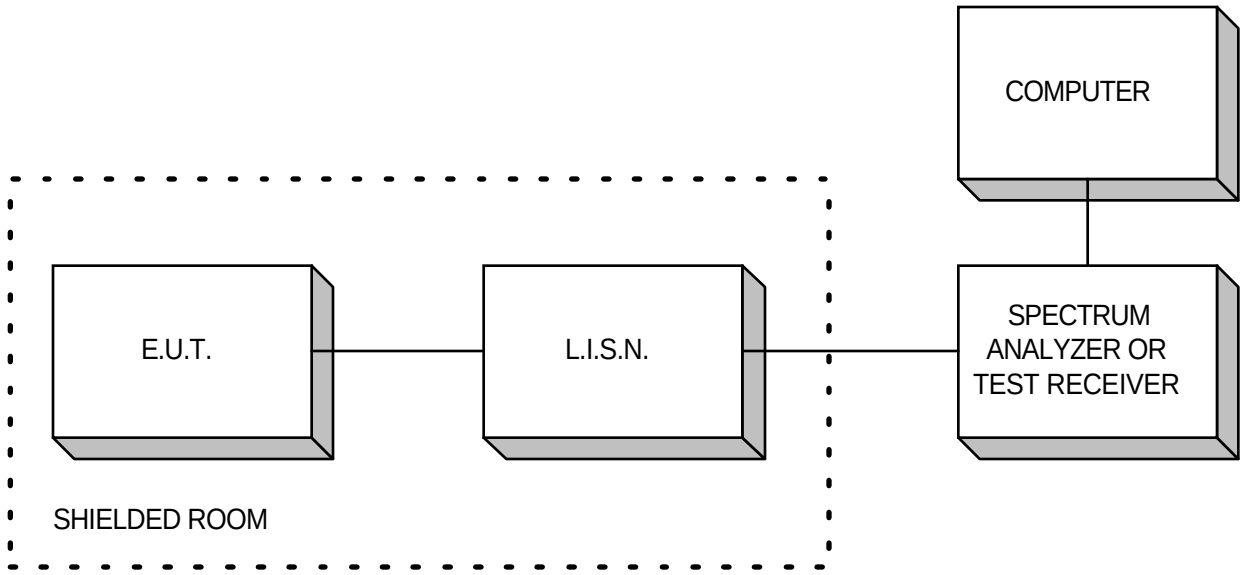
Side View

Front View

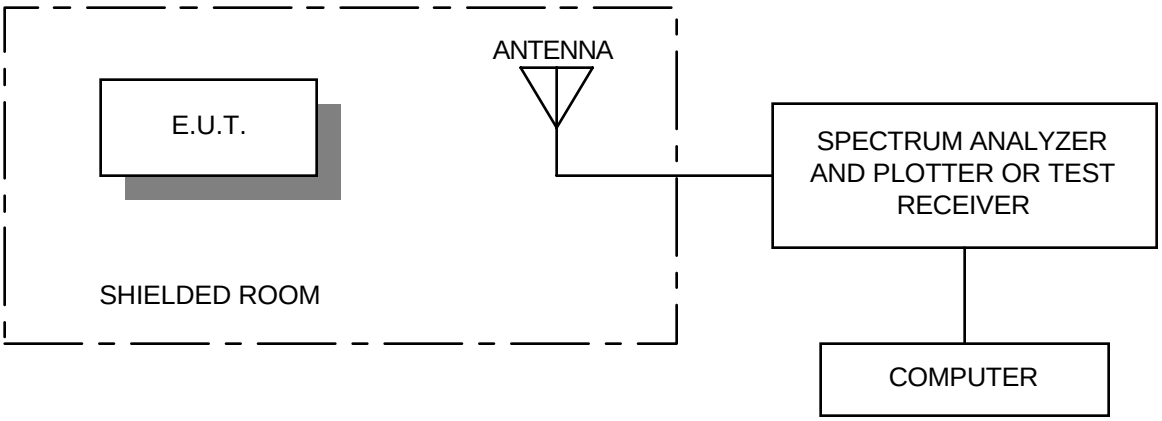


Section 5. Block Diagrams

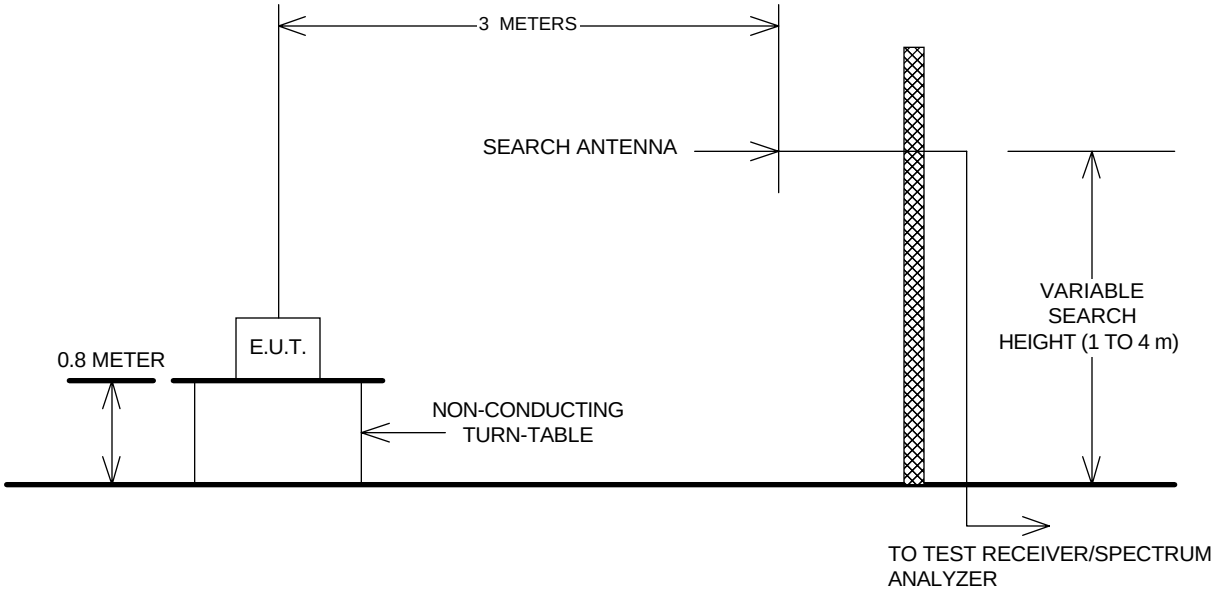
Conducted Emissions



Radiated Prescan



Outdoor Test Site For Radiated Emissions



Section 6. Test Equipment List

CAL CYCLE	EQUIPMENT	MANUFACTURER	MODEL	SERIAL	LAST CAL.	NEXT CAL.
1 Year	Spectrum Analyzer	Hewlett Packard	8564E	3846A01407	May 31/99	May 31/00
1 Year	LISN	Rohde & Schwarz	ESH2-Z5	890485/017	Aug. 24/99	Aug. 24/00
1 Year	Receiver	Rohde & Schwarz	ESH3	892473/002	Nov. 23/99	Nov. 23/00
1 Year	Receiver	Rohde & Schwarz	ESVP	892661/014	April 5/00	April 5/01
1 Year	Horn Antenna	EMCO #2	3115	4336	Nov. 11/99	Nov. 11/00
1 Year	Dipole Antenna Set	EMCO #2	3121C	FA001349	June 5/00	June 5/01
1 Year	Biconical (1) Antenna	EMCO	3109	9204-2708	Aug. 4/99	Aug. 4/00
1 Year	Biconical (2) Antenna	EMCO	3109	9503-2894	June 11/99	June 11/00
3 Year	Signal Generator	Rohde & Schwarz	SM1Q03	1084-8004-03	Sept. 17/97	Sept. 17/00

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