

Test Report:

1W03898

Applicant:

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

**Equipment Under Test:
(EUT)**

NT9005 UA262, Rev. 01

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:



R. Grant, Wireless Group Manager

Date:

May 22 2001

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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

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: Glen Westwell, Wireless Technologist

DATE: May 22 2001

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This report applies only to the items tested.

EQUIPMENT: NT9005 UA262, Rev. 01

Summary Of Test Data

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

Footnotes For N/A's:

Test Conditions:

Indoor Temperature: 22 °C
 Humidity: 33 %

Outdoor Temperature: 23 °C
 Humidity: 36 %

EQUIPMENT: NT9005 UA262, Rev. 01

Section 2. General Equipment Specification

Manufacturer: Digital Security Controls Ltd.

Model No.: NT9005 UA262, Rev. 01

Serial No.: None

Date Received In Laboratory: May 9, 2001

Nemko Identification No.: Item #4

Frequency Range: 433MHz

Primary Power Requirement: 9.0 VAC

EQUIPMENT: NT9005 UA262, Rev. 01

Section 3. Radiated Emissions

Para. No.: 15.109(a)

Test Performed By: Glen Westwell	Date of Test: May 9, 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 38.1 dBμV/m @ 3m at 423.18MHz. This is 7.9 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 EUT is tested in three orthogonal axis to obtain worst case results.

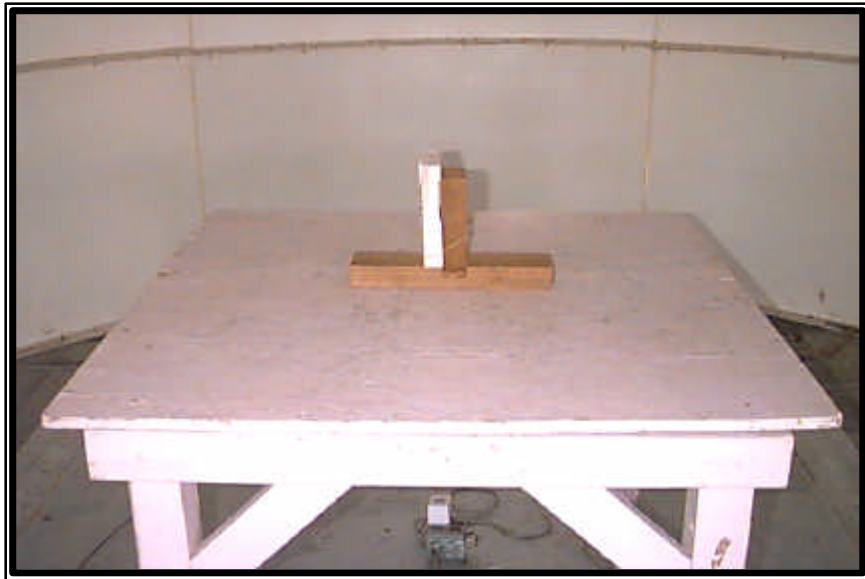
*EQUIPMENT: NT9005 UA262, Rev. 01***Test Data - Radiated Emissions**

Test Distance (meters) : 3		Range: A Tower		Receiver: ESVP		RBW(kHz): 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)
423.18	E/D4	V	12.7	24.7			37.4	46.0	8.6
423.18	E/D4	H	13.4	24.7			38.1	46.0	7.9
846.36	E/D4	V	-2.9	31.3			28.4	46.0	17.6
846.36	E/D4	H	-2.6	31.3			28.7	46.0	17.3
1269.54	Hrn2	V	12.5	30.5			43.0	54.0	11.0
1269.54	Hrn2	H	7.3	30.5			37.8	54.0	16.2
1692.73	Hrn2	V	53.5	32.0	-48.0		37.5	54.0	16.5
1692.73	Hrn2	H	48.0	32.0	-48.0		32.0	54.0	22.0
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: NT9005 UA262, Rev. 01

Radiated Photographs

Side View



Front View



EQUIPMENT: NT9005 UA262, Rev. 01

Section 4. Powerline Conducted Emissions

Para. No.: 15.107

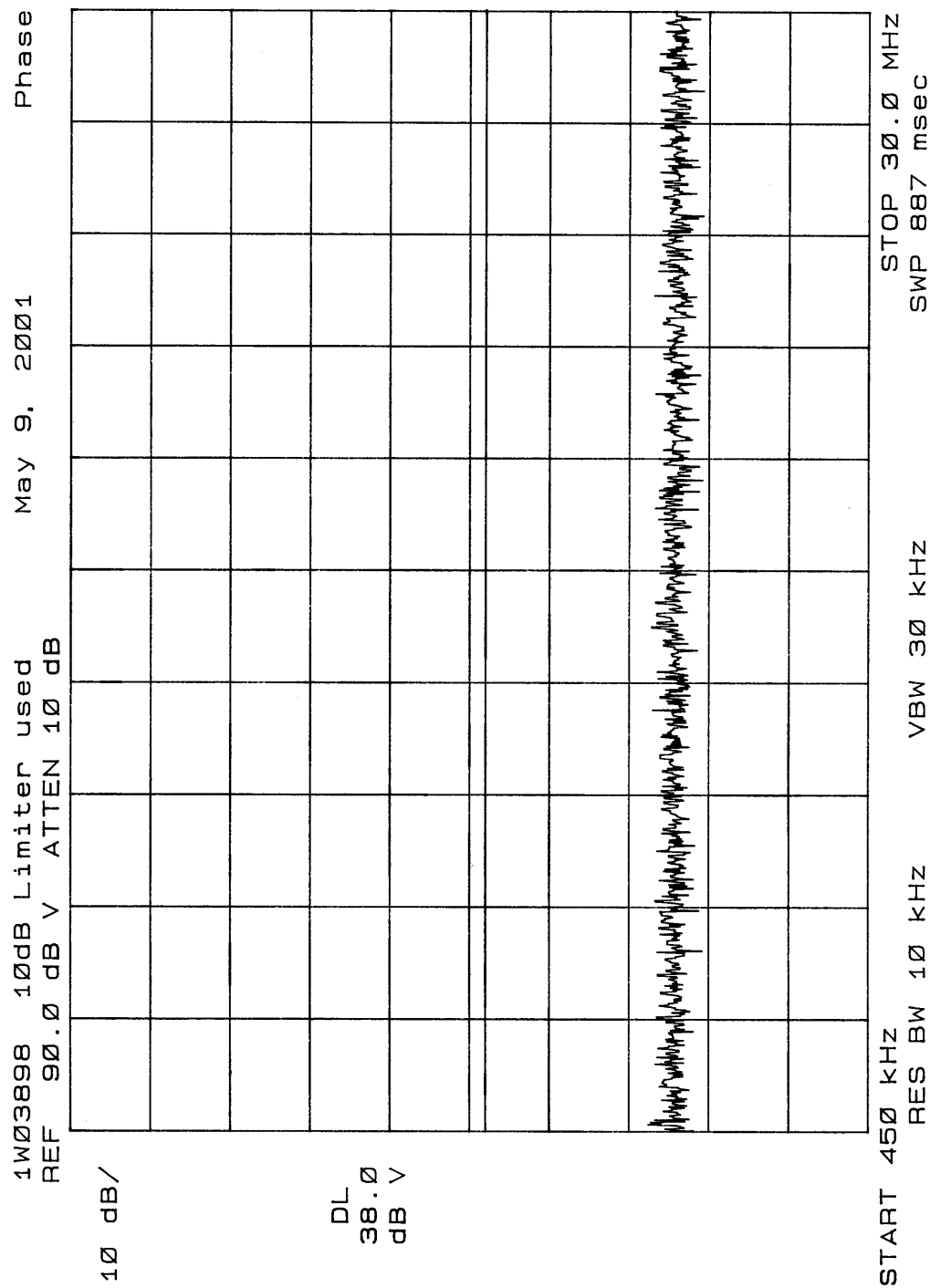
Test Performed By: Glen Westwell	Date of Test: May 9, 2001
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Minimum Standard: The RF energy feed back into the power lines shall not exceed 48 dB μ V on any frequency between 0.45 MHz and 30 MHz inclusive.

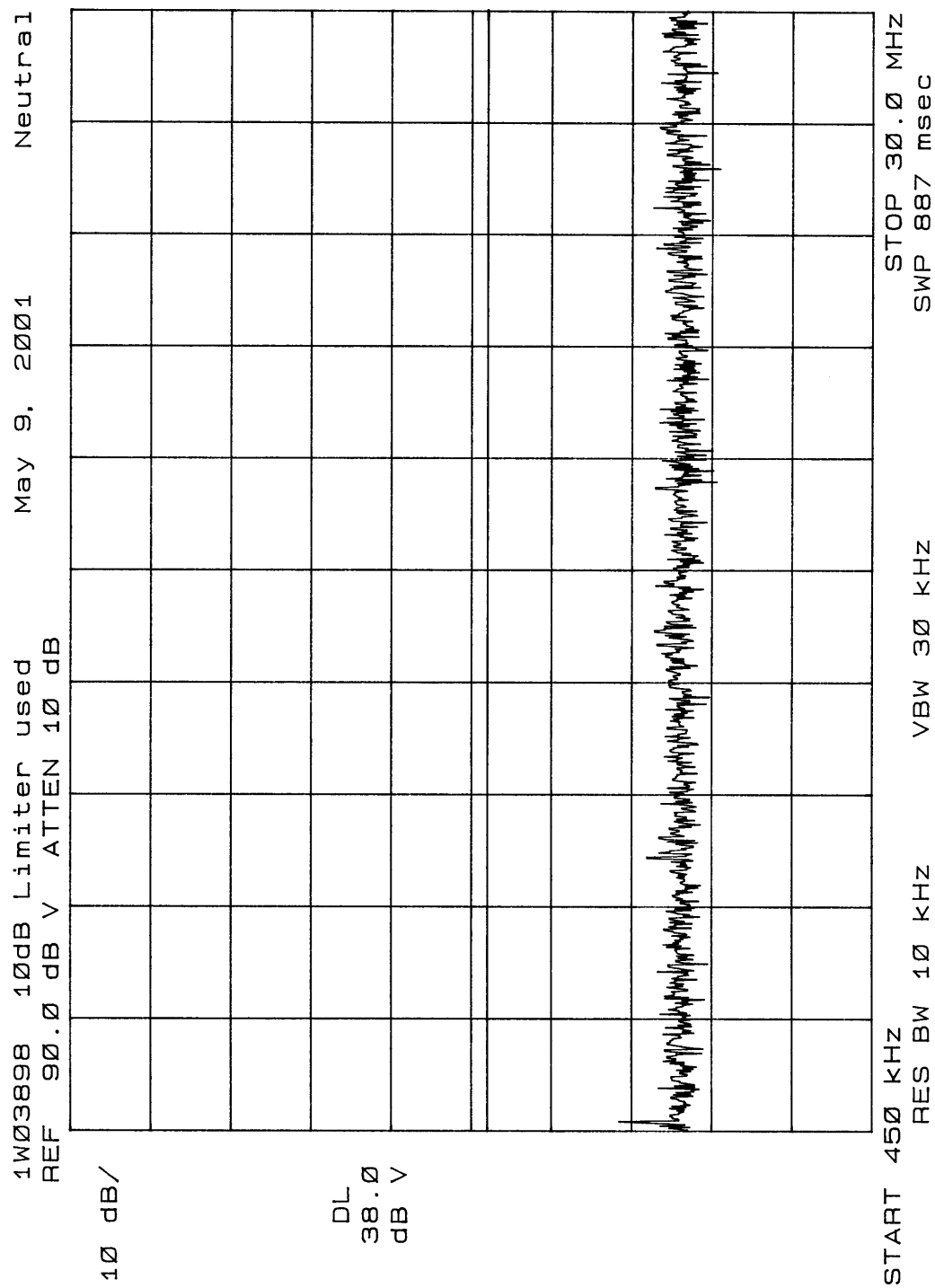
Test Results: Complies. See attached graphs.

Measurement Data: See attached graphs.

EQUIPMENT: NT9005 UA262, Rev. 01



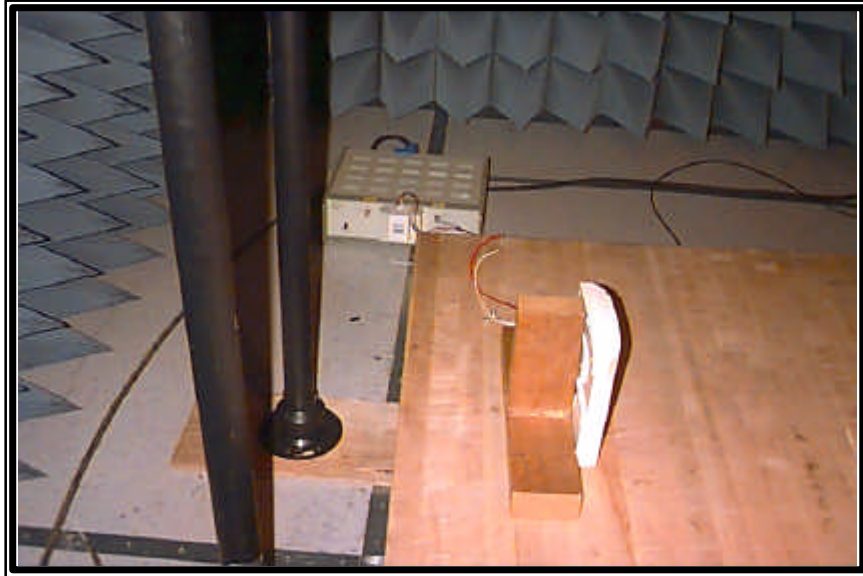
EQUIPMENT: NT9005 UA262, Rev. 01



EQUIPMENT: NT9005 UA262, Rev. 01

Powerline Conducted Photographs

Side View

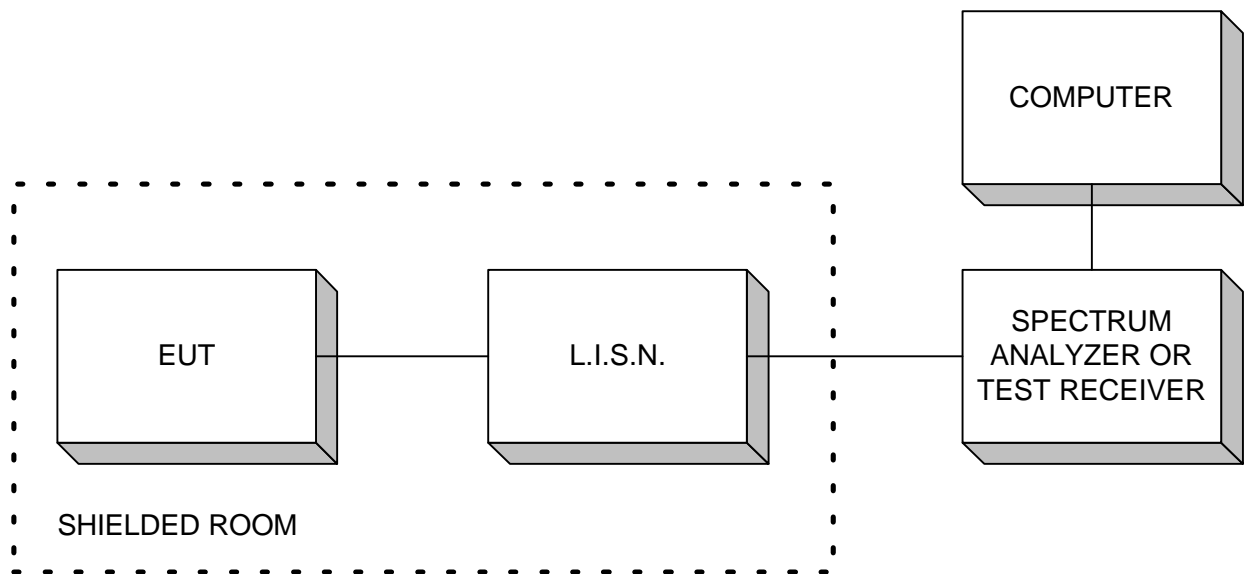


Front View

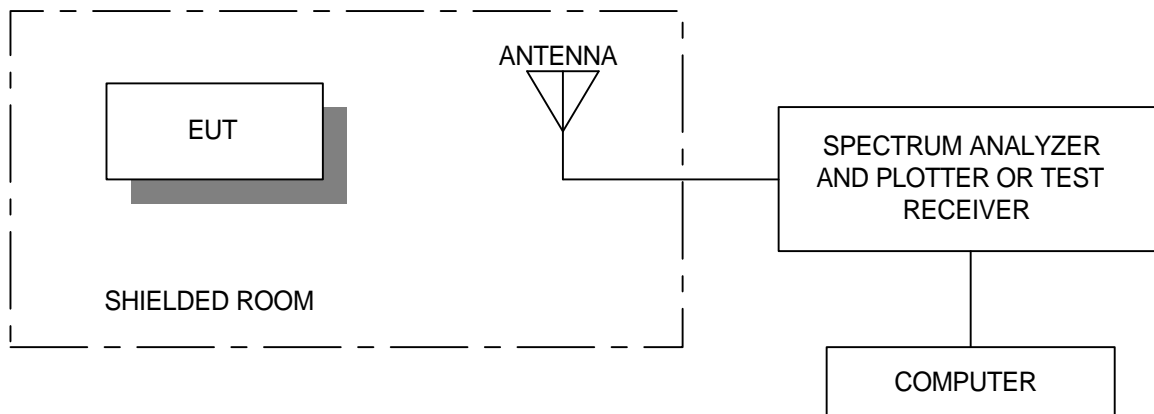


Section 5. Block Diagrams

Conducted Emissions

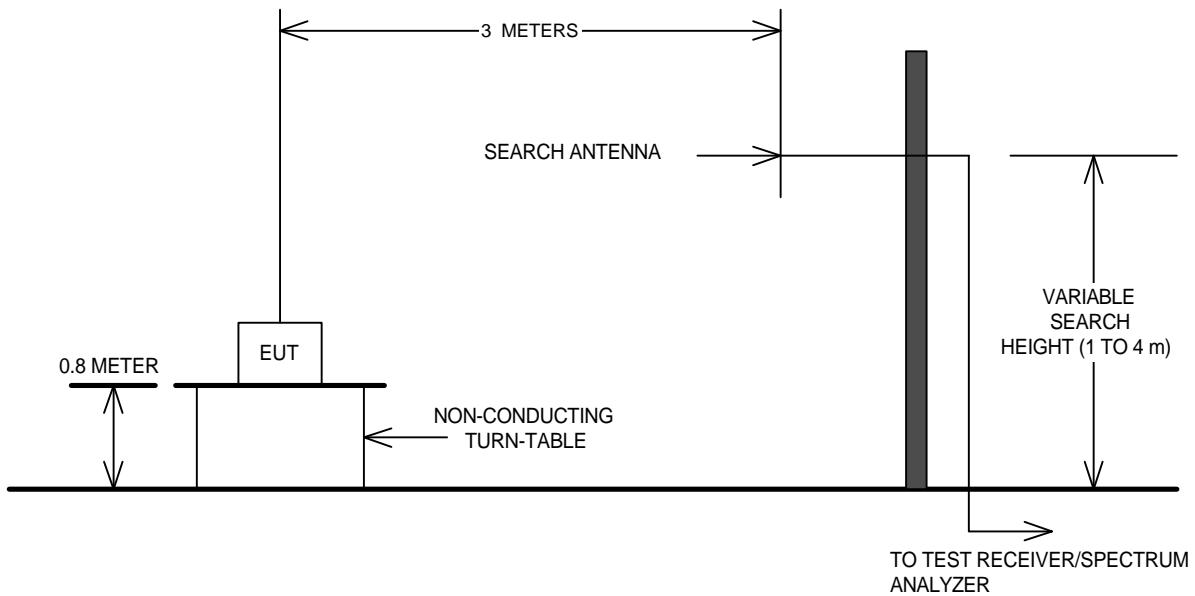


Radiated Prescan



EQUIPMENT: NT9005 UA262, Rev. 01

Outdoor Test Site For Radiated Emissions



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

EQUIPMENT: NT9005 UA262, Rev. 01

Section 6. 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
1 Year	Spectrum Analyzer-1	Hewlett Packard	8566B	2311A02238	Dec. 10/00	Dec. 10/01
1 Year	Spectrum Analyzer Display-1	Hewlett Packard	8566B	2314A04759	Dec. 10/00	Dec. 10/01
1 Year	Quasi-peak adapter-1	Hewlett-Packard	85650A	2043A00302	Dec. 14/00	Dec. 14/01
1 Year	LISN	EMCO	4825/2	0002-1/47	Feb. 14/00	Feb. 14/01
1 Year	Receiver	Rohde & Schwarz	ESVP	892661/014	April 5/00	April 5/01
1 Year	Horn Antenna	EMCO #2	3115	4336	Dec. 1/00	Dec. 1/01
1 Year	Dipole Antenna Set	EMCO #2	3121C	FA001349	June 27/00	June 27/01
1 Year	Plotter	Hewlett Packard	7550A	FA001129	NCR	NCR

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