

Test Report: 1004257

Applicant: Instantel Inc.
309 Legget Drive
Kanata, Ontario
K2K 3A3

**Equipment Under Test:
(EUT)** VHF Receiver

FCC ID: ISEDLR

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

Tested By: Nemko Canada Inc.
3325 River Road, R.R. 5
Ottawa, Ontario K1V 1H2

Authorized By:

G. Westwell, Wireless Technologist

Date:

Total Number of Pages: 15

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EQUIPMENT: VHF Receiver
FCC ID: ISEDLR

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. 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".



NVLAP LAB CODE: 100351-0

TESTED BY: _____ DATE: _____
Russell Grant, Wireless Group Manager

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This report applies only to the items tested.

*EQUIPMENT: VHF Receiver**FCC ID: ISEDLR*

Summary Of Test Data

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

Test Conditions:**Indoor**

Temperature: 20 °C

Humidity: 52 %

Outdoor

Temperature: 15 °C

Humidity: 51 %

EQUIPMENT: VHF Receiver

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Section 2. General Equipment Specification

Manufacturer: Instantel Inc.

Model No.: None

Serial No.: 301128 0012

Date Received In Laboratory: July 26, 2001

Nemko Identification No.: Item #6

EQUIPMENT: VHF Receiver

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Section 3. Receiver Antenna Conducted Emissions

Para. No.: 15.111

Test Performed By: Russell Grant

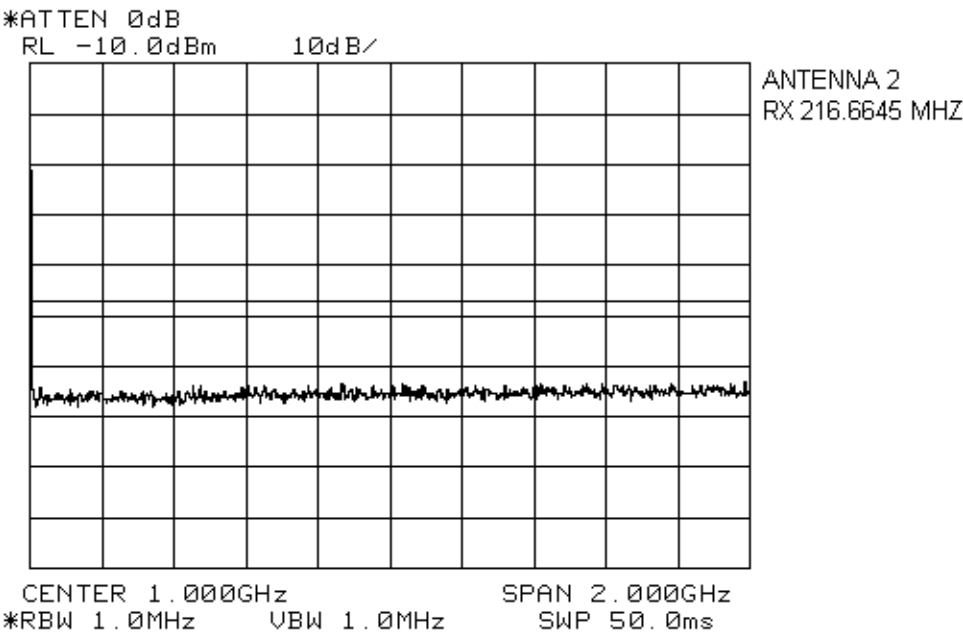
Date of Test: July 26, 2001

Minimum Standard: 2 nW

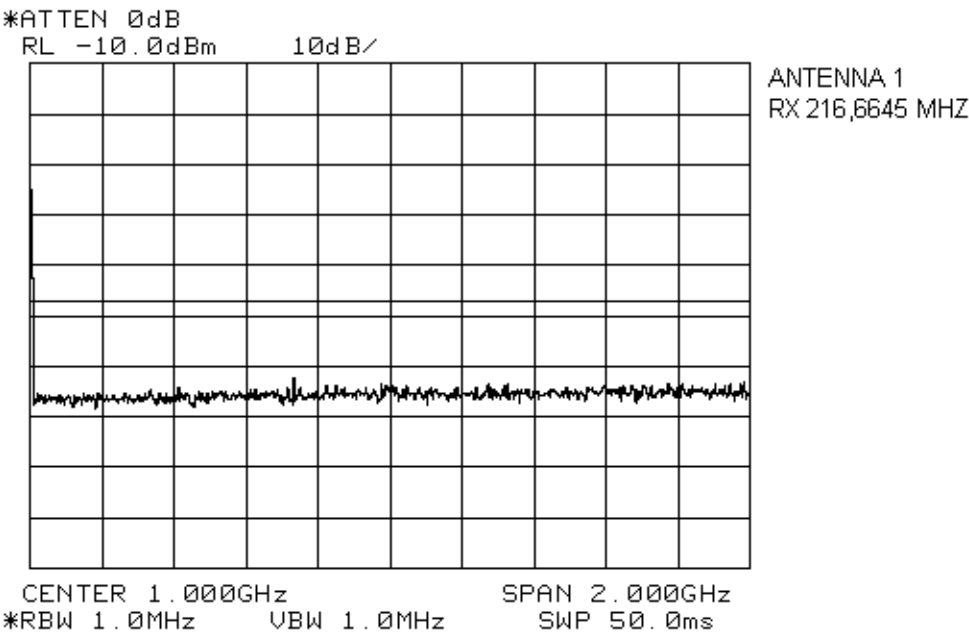
Test Results: Complies.

Measurement Data: See attached graphs.

EQUIPMENT: VHF Receiver
FCC ID: ISEDLR

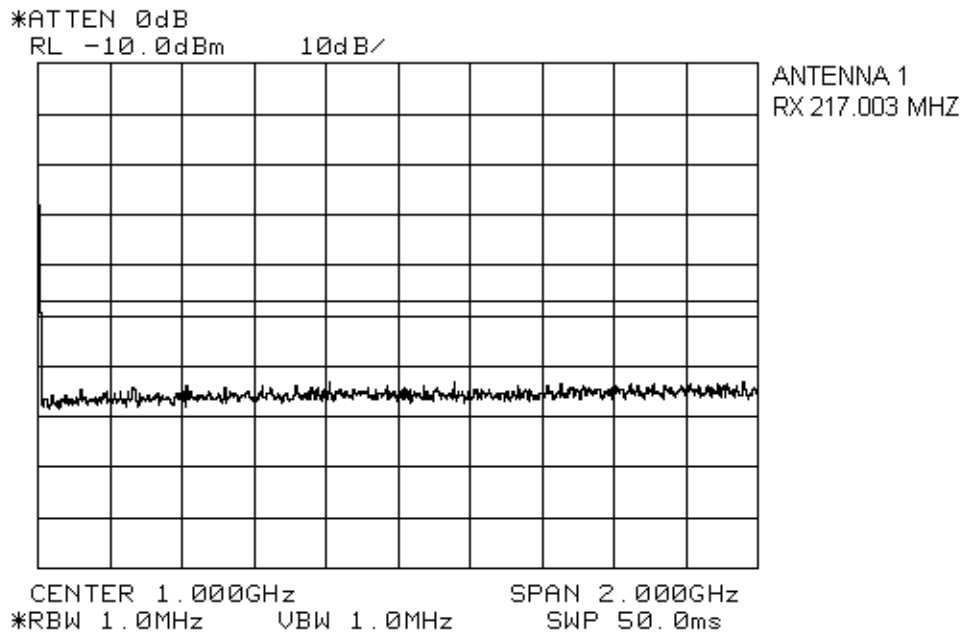


EQUIPMENT: VHF Receiver
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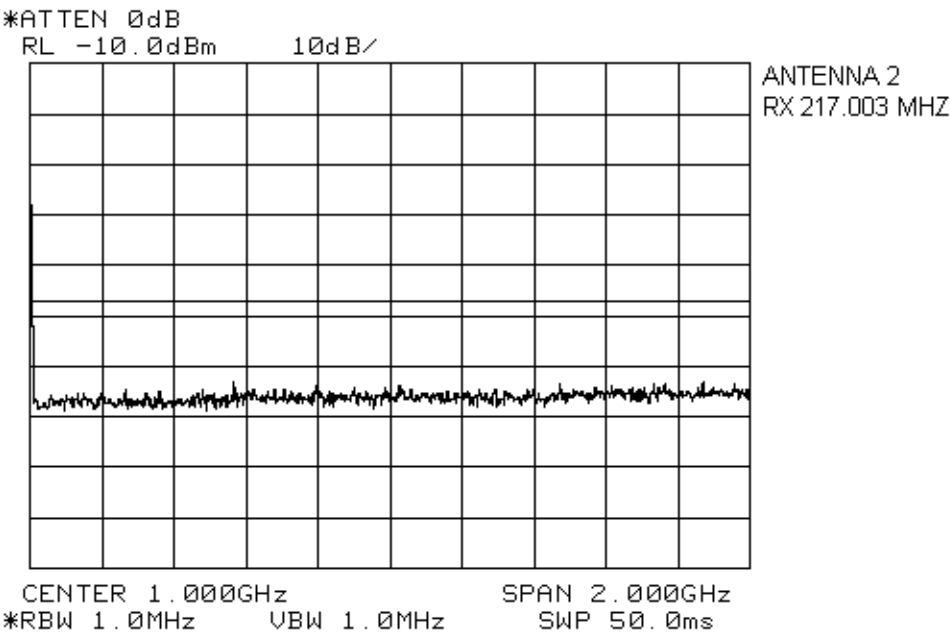


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Section 4. Radiated Emissions

Para. No.: 15.109(a)

Test Performed By: Russell Grant	Date of Test: July 26, 2001
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Minimum Standard:

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

Test Results: Complies.

Measurement Data: See attached table.

EQUIPMENT: VHF Receiver

FCC ID: ISEDLR

Test Data - Radiated Emissions

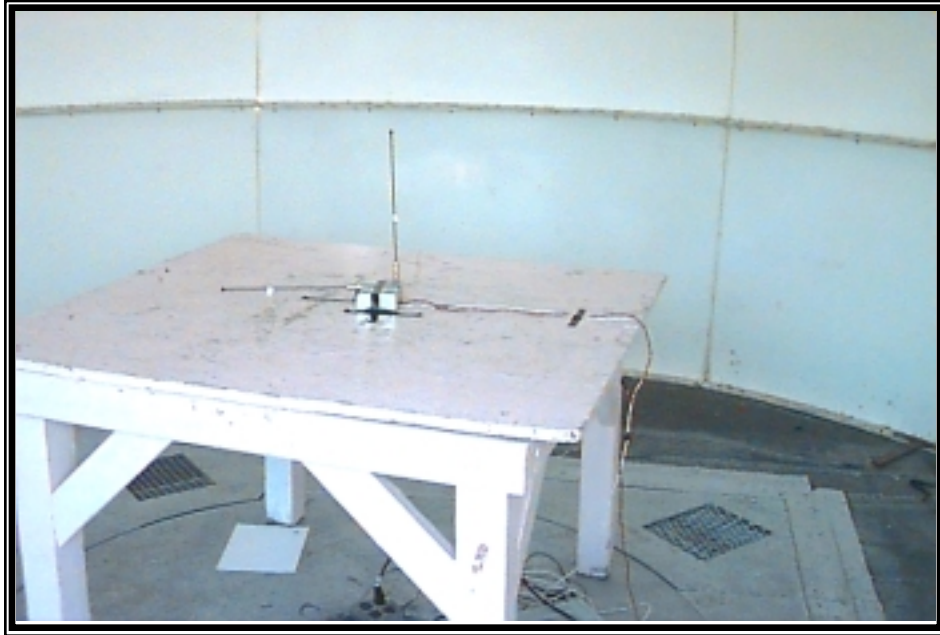
Test Distance (meters) : 3		Range: A Tower		Receiver: ESVP		RBW(kHz): 120		Detector: Q-Peak	
Freq. (MHz)	Ant. *	Pol. (V/H)	RCVD Signal (dB μ V/m)	Ant. Factor (dB)**	Amp. Gain (dB)***	Dist. Corr. (dB)	Field Strength (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
Rx 217.003MHz									
262.003	B/C1	V	1.2	19.2			20.4	46.0	25.6
262.003	B/C1	H	6.4	19.2			25.6	46.0	20.4
Rx 216.6645MHz									
261.664	B/C1	V	3.0	19.1			22.1	46.0	23.9
261.664	B/C1	H	8.0	19.1			27.1	46.0	18.9
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 <i>The spectrum was searched up to 2GHz. All emissions within 20dB of the limit were measured and reported.</i>									

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Radiated Photographs

Front View

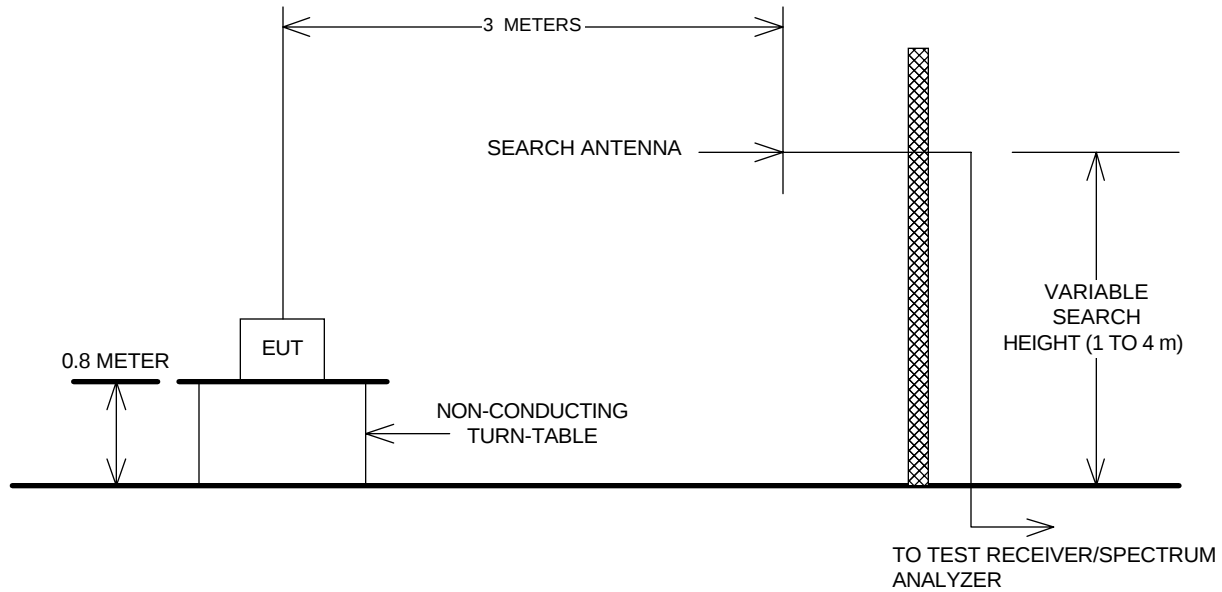


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Section 5. Block Diagrams

Outdoor Test Site For Radiated Emissions



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Section 6. Test Equipment List

CAL CYCLE	EQUIPMENT	MANUFACTURER	MODEL	SERIAL	LAST CAL.	NEXT CAL.
1 Year	Spectrum Analyzer	Hewlett Packard	8565E	FA000981	June 08/01	June 08/02
1 Year	Horn Antenna	EMCO #1	3115	3132	Dec. 11/00	Dec. 11/01
1 Year	Log Periodic Antenna 1	EMCO	LPA-25	1141	Aug. 3/00	Aug. 3/01
1 Year	Biconical (1) Antenna	EMCO	3109	9204-2708	Aug. 10/00	Aug. 10/01
1 Year	RF AMP	JCA	1-2 GHz	FA001498	May 31/01	May 31/02

NA: Not Applicable

NCR: No Cal Required

COU: CAL On Use