



KTL Ottawa

Safety - EMI - Telecom - ISO Guide 25

ENGINEERING TEST REPORT

**ON:
CROSSPOINT MICROPROXS XM-2;
NORTHERN COMPUTERS PART NO. N-300**

FCC ID: N2CN-300

**IN ACCORDANCE WITH:
FCC PART 15, SUBPART C
PARAGRAPH 15.209 FOR LOW FREQUENCY TRANSMITTERS**

PROJECT NO.: 8R00584.1

TESTED FOR:

**NORTHERN COMPUTERS INC.
5007 S. HOWELL AVENUE
MILWAUKEE, WI
53207**

TESTED BY:

**KTL OTTAWA INC.
3325 RIVER ROAD, R.R. 5
OTTAWA, ONTARIO K1V 1H2**

JUNE 1998

This document contains 7 pages including this one.

KTL Ottawa Inc. authorizes the above named company to reproduce this report provided it is reproduced in its entirety and for use by the company's employees only.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. KTL Ottawa Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

This report applies only to the items tested.

KTL Ottawa

FCC PART 15, SUBPART C
PROJECT NO.: 8R00584.1

*EQUIPMENT: CrossPoint Microproxs XM-2,
Northern Computers Part No. N-300*
FCC ID: N2CN-300

EQUIPMENT: CrossPoint Microproxs XM-2;
Northern Computers; N-300

MODEL NO.: Micropoproxs XM-2: N-300

SERIAL NO.: None

GENERAL:

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with FCC Part 15, Subpart C for low frequency, low power devices.

ABSTRACT:

NAME OF TEST	PARA. NO.	RESULTS
Radiated Emissions	15.209	Complies

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. - None

TESTED BY: _____
Wayne Clarke, Technologist

DATE: _____

APPROVED BY: _____
W. Waterhouse, RF Engineering Lab Manager

DATE: _____

KTL Ottawa

FCC PART 15, SUBPART C
PROJECT NO.: 8R00584.1

*EQUIPMENT: CrossPoint Microproxs XM-2,
Northern Computers Part No. N-300*
FCC ID: N2CN-300

GENERAL EQUIPMENT INFORMATION

TRANSMITTER

Frequency Range: 117.1 kHz
Frequency of Sample Tested: 117.1 kHz
Tunable Bands: One
Number of Channels: One
Channel Spacing: Not Applicable
Emission Designator: 3K2N0N
Crystal Frequencies: Not Applicable
User Frequency Adjustment: None

KTL Ottawa

FCC PART 15, SUBPART C
PROJECT NO.: 8R00584.1

*EQUIPMENT: CrossPoint Microproxs XM-2,
Northern Computers Part No. N-300*
FCC ID: N2CN-300

NAME OF TEST: Radiated Emissions	PARA. NO.: 15.209
TESTED BY: Wayne Clarke	DATE: June 18, 1998

TEST CONDITIONS: Outdoor Range
Standard Test Voltage

MINIMUM STANDARD: The field strength of emissions from the device shall not exceed the following limits:

Frequency (MHz)	Field Strength (μ V/m)	Field Strength (dB μ V/m @ 3m)
0.009 - 0.490	2400/F(kHz) @ 300m	-----
0.490 - 1.705	24000/F(kHz) @ 30m	-----
1.705 - 30	30 @ 30m	-----
30 - 88	100	40.0
88 - 216	150	43.5
216 - 960	200	46.0
Above 960	500	54.0

TEST RESULTS: Complies. The worst-case emission level is 50.7 dB μ V/m @ 10m at 0.1171 MHz. This is 34.9 dB below the specification limit.

MEASUREMENT DATA: See attached table.

KTL Ottawa

FCC PART 15, SUBPART C
PROJECT NO.: 8R00584.1

*EQUIPMENT: CrossPoint Microproxs XM-2,
Northern Computers Part No. N-300
FCC ID: N2CN-300*

* Includes cable loss when amplifier is not used.

** Includes cable loss

() Denotes failing emission level.

- E.U.T. searched to 10th harmonic.

KTL Ottawa

FCC PART 15, SUBPART C
PROJECT NO.: 8R00584.1

*EQUIPMENT: CrossPoint Microproxs XM-2,
Northern Computers Part No. N-300*
FCC ID: N2CN-300

*EQUIPMENT: CrossPoint Microproxs XM-2,
Northern Computers Part No. N-300*
FCC ID: N2CN-300

TEST EQUIPMENT LIST**Equipment List - Radiated Emissions**

CAL Cycle	Equipment	Manufacturer	Model #	Serial/Asset #	Last Cal.	Next Cal.
1 Year	Receiver	Rohde & Schwarz	ESH3	892473/002	July 25/97	July 25/98
1 Year	Spectrum Analyzer	Hewlett-Packard	8566B	2311A02238	Sept. 30/97	Sept. 30/98
1 Year	Spectrum Analyzer Display	Hewlett-Packard	8566B	2314A04759	Sept. 30/97	Sept. 30/98
1 Year	Quasi-Peak Adapter	Hewlett Packard	85650A	2043A00302	Sept. 30/97	Sept.30/98
	Plotter	Hewlett Packard	7470A	2210A08836	N/A	N/A
2 Year	Active Loop Antenna	Rohde & Schwarz	HFH2-Z2	FA000631	Feb. 7/96	Feb. 6/00

Note: N/A = Not Applicable
NCR = No Cal Required