EXHIBIT 6 TEST REPORT



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Test Report for Emissions Testing of the TRM-2000 [1900 MHz]

In accordance with FCC Part 2 Frequency Allocations and Radio Treaty Matters; General Rules and Regulations, Subpart J

Test Personnel: Erin Hails

Prepared for: Nortel Networks 8 Manning Close NE Calgary, AB T2E 7L4

Client Acceptance Authorized Signatory

David Raynes Laboratory Supervisor Electronics Test Centre (Airdrie) Authorized Signatory

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1.0 INTRODUCTION

1.1 **S**COPE

The purpose of this report is to present the results of compliance testing performed in accordance with CFR 47 FCC Part 2, Subpart J, Equipment Authorization Procedures.

1.2 APPLICANT

This test report has been prepared for Nortel Networks, located in Calgary, Alberta, Canada.

1.3 **APPLICABILITY**

All test procedures, limits, and results defined in this document apply to the Nortel Networks TRM-2000 [1900 MHz] unit, referred to as the Equipment Under Test (EUT).

The results contained in this report relate only to the item tested.

This report does not imply product endorsement by NVLAP, or the Canadian or US governments.

1.4 TEST SAMPLE DESCRIPTION

The test sample provided for testing was a TRM-2000 [1900 MHz].

Product Type:	Telecommunications
Model Number:	NPGS58CA P1
Serial Number:	NNTM537TG7E9
Power Requirements:	-48 VDC
Peripheral Equipment:	Laptop, Cell site tester
Cables:	DC interconnect, RF cables, fibre optic cables

More detailed information is supplied by Nortel Networks in Appendix A.

1.5 GENERAL TEST CONDITIONS AND ASSUMPTIONS

The EUT was set up and exercised using the configurations, modes of operation and arrangements defined in this report only. All inputs and outputs to and from other equipment associated with the EUT were adequately simulated.

Where relevant, the EUT was only tested using the monitoring methods and test criteria defined in this report.

All testing, unless otherwise noted, was performed under the following environmental conditions:

Temperature:	17 to 23 °C
Humidity:	45 to 75 %
Barometric Pressure:	68 to 106 kPa

Test Sample: TRM-2000 [1900 MHz]

1.6 SCOPE OF TESTING

Tests were performed in accordance with FCC Part 2 Subpart J (2000).

1.6.1 VARIATIONS IN TEST METHODS

There were no variations from the test procedures outlined above.

1.6.2 MARGINAL EMISSIONS MEASUREMENTS

As noted in Section 4, some emissions were measured to be within -6 dB of the specified limit.

1.6.3 TEST SAMPLE MODIFICATIONS

There were no equipment modifications during test performance.

2.0 ABBREVIATIONS

- CE -Conducted Emissions
- E -Field Electric Field
- H -Field Magnetic Field
- N/T -Not Tested
- N/A -Not Applicable
- RE -Radiated Emissions

3.0 MEASUREMENT UNCERTAINTY

For these tests, the uncertainties in the measurements were calculated using the methods outlined in the NAMAS document, NIS81: May 1984.

Frequency $= \pm 1 \text{ kHz}$ Amplitude (RE) $= \pm 4.01 \text{ dB}$ Amplitude (CE) $= \pm 3.25 \text{ dB}$

4.0 TEST CONCLUSION

The EUT was subjected to the following tests. Compliance status is indicated as **PASS**, **Marginal Pass**, or **FAIL**.

The following table summarizes the test results in terms of the specification and class or level applied, the unique test sample identification, and the EUT modification state, the mode of operation, configuration and cable arrangement as applicable.

TEST CASE	TEST TYPE	SPECIFI- CATION	TEST SAMPLE	MOD. STATE	CONFIGURATION	RESULT
§4.1	RF Output Power	FCC Part 2.1046	TRM-2000 [1900 MHz]	nil	Simulated Installation	PASS
§4.2	Occupied Bandwidth	FCC Part 2.1049	TRM-2000 [1900 MHz]	nil	Simulated Installation	PASS
§4.3	Spurious Emissions at Antenna Terminals	FCC Parts 2.1051 and 2.1057	TRM-2000 [1900 MHz]	nil	Simulated Installation	PASS
§4.4	Radiated Emissions	FCC Parts 2.1053 and 2.1057	TRM-2000 [1900 MHz]	nil	Simulated Installation	PASS

STATEMENT OF COMPLIANCE

The client equipment referred to in this report was found to comply with the requirements as stated above.

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4.1 **RF POWER OUTPUT**

Test Lab: MPB Technologies Inc. Airdrie		Product:		
Test Personnel: Erin Hails		TRM-2000 [1900 MHz]		
Test Date: 29 March 20	01			
Test Result: TRM-2000 [1900 MHz]: PASS				
Objectives/Criteria		Specifications		
The effective radiated p	ower emitted by a	FCC Part 24.232		
device at its carrier frequency, measured at the antenna terminal, shall not exceed the limits as specified.		ERP <= 100 W or 50.0 dBm		
		$ERP_{meas} = ERP_{rated} \pm 1dB$		
Channel	Frequency [MHz]	ERP _{rated} [dBm]	ERP _{meas} [dBm]	
0025	1931.25	41.50	41.38	
0275	1943.75	41.50	41.03	
0325	1946.25	41.50	41.33	
0375	1948.75	41.50	41.14	
0425	1951.25	41.50	41.20	
0675	1963.75	41.50	41.25	
0725	1966.25	41.50	41.28	
0775	1968.75	41.50	41.24	
0825	1971.25	41.50	41.18	
0875	1973.75	41.50	41.29	
0925	1976.25	41.50	41.29	
1175 1988.75		41.50	41.30	

4.2 OCCUPIED BANDWIDTH

Test Lab: MPB Technologies Inc. Airdrie			Product:		
Test Personnel: Erin Hails			TRM-2000 [1900 MHz]		
Test Date: 29 March 2001					
Test Result: TRM-2000 [1900 MHz]: PASS					
Objectives/Criteria		Specifications			
The occupied bandwidth shall be measured at its antenna terminal at the carrier frequency such that:		The occupied bandwidth and channel spacing for CDMA is 1.25 MHz.			
99.0% of the total mean power (area under the curve of spectral density vs. frequency) emitted by the device is within the occupied bandwidth;					
0.5% of the total mean power lies below the lower frequency limit of the occupied bandwidth; and					
0.5% of the total mean power lies above the higher frequency limit of the occupied bandwidth					
Channel	Frequency [MHz]		y [MHz]	Occupied Bandwidth [MHz]	
0025	1931.25		.25	1.266	
0275	1943.75		3.75	1.247	
0325	1946.25		6.25	1.266	
0375	1948.75		3.75	1.266	
0425	1951.2		.25	1.266	
0675	196		3.75	1.266	
0725	19		3.25	1.266	
0775	19		3.75	1.266	
0825	1971.		.25	1.266	
0875	1973.75		3.75	1.266	
0925	1976.2		6.25	1.266	
1175	198		3.75	1.266	
Comments: The occupied bandwidth was measured using the occupied bandwidth softkey on the spectrum analyzer.					

4.3 SPURIOUS EMISSIONS AT ANTENNA TERMINALS

Test Lab: MPB Technologies Inc. Airdrie			Product:		
Test Personnel: Erin Hails			TRM-2000 [1900 MH	lz]	
Test Date: 29 March & 5 April 2001					
Test Result, TRM-2000 [1900 MHz]: PASS					
Objectives/Criteria Specifications					
The spurious emissions at the antenna terminals shall not exceed the limits for the specifications as stated		FCC Part 2.1051 and 2.1057			
		FCC Part 24.238			
Emission levels should meet the requirements with a margin of 6dB.		Frequency		Emission Level	
(NB. f_c denotes carrier frequency)		9 kHz to lower edge of $\rm f_{\rm c}$		-13 dBm or 94 dB μ V	
		upper edge of f_c to the -13 dBm or 94 tenth harmonic of f_c		-13 dBm or 94 dBμV	
Comments: All the peaks that appeared to be within -20 dB of the limit were investigated to determine their average peak, and in every case, this value was more than -20 dB from the limit.					
Channel	Frequency [MHz]		Emission Level [dBµ	/] Delta [dB from limit]	
There were no emissions measured to be within -20 dB of the specified limit. Refer to the test data plots for more details. Note that the limit specified in the plots is from Part 22; however, the applicable limit (from Part 24) is identical in value to the one shown in the plots, and so this does not alter the results.					

Test Sample: TRM-2000 [1900 MHz]

CFR 47 FCC Part 2

Report No.: n01e2262 rev. 1

EQUIPMENT TEST SETUP



Spurious Emissions at Antenna Terminals Channel 0025 18 to 30 MHz



Frequency [MHz]

Spurious Emissions at Antenna Terminals Channel 0025 30 MHz to 1 GHz



Spurious Emissions at Antenna Terminals Channel 0025

1 to 2 GHz



Spurious Emissions at Antenna Terminals Channel 0025 2 to 5 GHz



Spurious Emissions at Antenna Terminals Channel 0025 5 to 10 GHz



Spurious Emissions at Antenna Terminals Channel 0025 10 to 20 GHz



Spurious Emissions at Antenna Terminals Channel 0275 18 to 30 MHz



Frequency [MHz]

Spurious Emissions at Antenna Terminals Channel 0275 30 MHz to 1 GHz



Spurious Emissions at Antenna Terminals Channel 0275 1 to 2 GHz

5 Apr 2001 19:27:22 UL - NORTHBROOK EMC GROUP 110 Conducted RFI Power TRM-2000 1900 MHz Part 22.917(e) Channel 275 90 gBCuVolts] 0 والمربية المالي بطرواعي وألون والمترابط ومعرور وللعار المرب مع مطافعة الجم عن عام مطافعة عامل 30 1000 2000 Frequency [MHz]

Spurious Emissions at Antenna Terminals Channel 0275 2 to 5 GHz



Spurious Emissions at Antenna Terminals Channel 0275 5 to 10 GHz



Spurious Emissions at Antenna Terminals Channel 0275 10 to 20 GHz



Spurious Emissions at Antenna Terminals Channel 0325 18 to 30 MHz



Frequency [MHz]

Spurious Emissions at Antenna Terminals

Channel 0325



Spurious Emissions at Antenna Terminals Channel 0325



Spurious Emissions at Antenna Terminals Channel 0325 2 to 5 GHz

