



EXHIBIT 2

Test Report Summary

Applicant: Nortel Networks

**For Original Equipment
Certification on:**

**FCC Tx ID: AB6NT3030VBTS
IC: 332D-3030VBTS**



Test Report Summary for Original Equipment Authorization

FCC Tx ID : AB6NT3030VTBS 800MHz Village BTS

Document: TRS_AB6NT3030VBTS

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1. Introduction

This test report is submitted in accordance with the FCC Rules and Regulations, Part 2, Subpart J, Sections 2.1046 through 2.1057 for equipment authorization of Nortel Networks' CDMA 800 MHz Village Basestation 3030 Radio Module (vBTS 3030 RM). The 800 MHz vBTS 13030 RM is intended for use in the Domestic Public Cellular Radio Telecommunications Service and is designed in accordance with the following standards:

- *CFR 47, Part 22, Subpart H, Subpart H, Cellular Radiotelephone Service[1]*
- *CFR 47, Part 2, Subpart J, Equipment Authorization Procedures - Equipment Authorization[2]*

2. Test Result Summary

Table 1 summarizes the measurement results for the CDMA 800 MHz vBTS 3030 RM.

Table 1: Test Results Summary

FCC Measurement Specification	FCC Limit Specification	Description	Results	Test(s) Conducted by	Remarks
2.1033(c)(8)		Measurement of DC Power	Provided		
2.1046		RF Output Power	Provided	Nortel Networks	See Exhibit 2A
2.1047		Modulation Characteristics	Not Applicable		
2.1049		Occupied Bandwidth	Provided	Nortel Networks	See Exhibit 2A
2.1051, 2.1057	22.917	Spurious Emission at Antenna Terminals	Compliant	Nortel Networks	See Exhibit 2A
2.1053, 2.1057	22.917	Field Strength of Spurious Radiation	Compliant	NTS Calgary	See Exhibit 2B
2.1055	22.355	Frequency Stability	Compliant	Nortel Networks	See Exhibit 2A

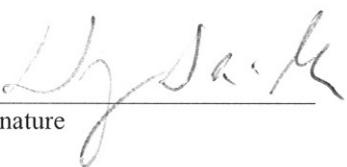


2. Engineering Declaration

The CDMA 800 MHz vBTS 3030 RM has been tested in accordance with the requirements contained in the Federal Communication Rules and Regulations Part 2 and 22.

To the best of my knowledge, these tests were performed in accordance with good engineering practices using measurement procedures consistent with industry or commission standards or previous Commission correspondence or guidance and demonstrate that this equipment complies with the appropriate standards. All tests (including tests performed by NTS Calgary) were conducted on a representative sample of the equipment for which type acceptance/certification is sought.

Report Prepared by



Signature

Thomas Wong
Regulatory Prime
Nortel Networks
Calgary, Alberta

May 02, 2006



3. Type Acceptance Application Requirements

3.1 Name of Applicant

The applicant is Nortel Networks Inc.

3.2 Identification of Equipment

The equipment in this application for type acceptance is the Nortel's CDMA 800 MHz vBTS 3030 RM. The 800MHz CDMA Village BTS 3030 RM is marketed under the model vBTS 3030 RM. The FCC ID number sought is AB6NT3030VBTS. The IC ID number sought is 332D-3030VBTS.

3.3 Quantity Production

The 800 MHz vBTS 3030 RM will be produced in quantity.

3.4 Technical Description

See Exhibit 3.

3.5 Type of Emissions

The 800MHz vBTS 3030 RM Assembly is designed to operate in digital mode to support up to 3 carrier and 3 sectors. The emission designator for one IS97 carrier is 1M25F9W, for two IS97 carriers is 2M50F9W, and for three IS97 carriers is 3M73F9W. The emission designator for one IS864 carrier is 1M25D9W, for two IS864 carriers is 2M50D9W, and for three IS97 carriers is 3M73D9W. Tests were conducted with 1, 2, or 3 carrier(s) in all sectors. The emission designators were calculated based on requirements of FCC Rule Part 2, Subpart C - Emissions, section 2.201 and Section 2.202.

3.6 Frequency Range

The 800 MHz vBTS 3030 RM operates in the 800 MHz cellular band where the operating frequency ranges are 824 – 849 MHz for the receiver and 869 - 894 MHz for the transmitter. The following table shows the CDMA channels within this band meeting FCC requirements.



Band	CDMA Channel Number	Transmitter Center Frequency Assignment for Base Station (MHz)	Channel Meeting FCC Requirements
A'' + A	991-1014	869.040-869.730	Non-compliance
	1015-308	869.760-879.240	Compliance
	309-333	879.270-879.990	Non-compliance
B	334-357	880.020-880.710	Non-compliance
	358-642	880.740-889.260	Compliance
	643-666	889.290-889.980	Non-compliance
A'	667-691	890.010-890.730	Non-compliance
	692	890.760	Compliance
	693-716	890.790-891.480	Non-compliance
B'	717-741	891.510-892.230	Non-compliance
	742-775	892.260-893.250	Compliance
	776-799	893.280-893.970	Non-compliance

3.7 Range of Operating Power

The 800 MHz vBTS 3030 RM range of operating RF power is 0 dBm to 47.8 dBm. The maximum RF power output is 47.8 dBm..

3.8 Complete Circuit Diagrams

The Tx chain of the 800 MHz vBTS 3030 radio system for certification is made up of the 800MHz vBTS 3030 RM (radio, and PA) and DPM (Duplexer and filter, an OEM equipment). Exhibit 8 contains the schematics of circuit cards inside the 800MHz vBTS 3030 and Exhibit 9 contains the parts lists of the circuit cards inside 800MHz vBTS 3030.

3.9 Tune-up Procedure

The tune-up tests will be performed as part of the factory testing on the 800MHz vBTS 3030 RM. This procedure includes power output levels, spurious emissions, and occupied bandwidth. There are no end-user adjustments that will have any effect on these settings. No tune-up testing is required in the field.

3.10 Circuit Description for Frequency Determining and Stabilizing

The Global Positioning Satellite Timing Card (GPSTC, NTDV27AA) in the vBTS 3030 DM (Digital Module, NTDV25BA) is the primary clock source in the system. It consists of two outputs:

EVEN_SEC Clock and,
SYS_CLK (at 8fc or 9.8304 MHz)



In addition, the GPSTC has a 10 MHz reference output that can be used to synchronize external measurement equipment during system testing.

The GPSTC distributes the primary clock signals directly inside the vBTS 3030 DM which in-turn distribute the clock signals to the 800MHz vBTS 3030 RM via the high speed serial link.

The GPSTC has a frequency stability of better than 1.0 part per billion.

3.11 Circuit Description for Suppression of Spurious Radiation

The Tx band pass filter in the DPM provides out of band emission rejection and permits only signals in the Tx band to the antenna for emission. The close inband spurs are being taken care of by the BBPD (Band Band Pre-Distortion) circuitry in the vBTS 3030 RM.

3.12 Circuit Description for Limiting Modulation

This system employs digital modulation techniques producing CDMA forward and reverse channel air interfaces which are compatible with IS 97, and IS864 technical standards.



4. Test Methods and Test Results

4.1 Measurement of DC Power

Section 2.1033(C)(8)

The DC voltages applied to and DC currents into the several elements of the final radio frequency amplifying device for normal operation over the power range.

Response:

Final Output Transistor: It has two final stage power transistors in parallel. The final state output power transistors each draw average about 4A @ 21Vdc.

4.2 Tests performed by Nortel Networks

RF Power Output

The maximum measured RF output power for one carrier was 47.73 dBm.

The maximum measured RF output power for two carriers was 47.65 dBm.

The maximum measured RF output power for three carriers was 47.68 dBm.

Occupied Bandwidth

The maximum measured occupied bandwidth for one carrier was 1270.5 KHz.

The maximum measured occupied bandwidth for two carriers was 2476.9 KHz.

The maximum measured occupied bandwidth for three carriers was 3687.3 KHz.

Spurious Emissions at Antenna Terminals

The minimum pass margin for one, two and three carrier(s) is:

1 MHz upper and lower band edge measurements was 3.8 dB

50 MHz to 10 GHz measurements was 8.68 dB.

Frequency Stability

The frequency stability over temperature -5 deg to 50 deg C and 85% to 115% of the nominal voltages was 0.00658 ppm. Since the 800MHz vBTS 3030 is an indoor product, the operating temperature range is from -5 to 50 deg C stated in Nortel's design documents. This test was performed within the operator temperature range of the vBTS 3030.

Please refer to the Exhibit 2A for all test setups and results in details provided by Nortel Networks.



4.2 Tests performed by NTS – Calgary

The tests were performed in the 10M chamber with a vBTS 3030 800MHz basestation.

Radiated Emission Test Results from 30MHz to 10 GHz

The minimum pass margin after the substitution method: 33.22 dB for H-Pol
21.05 dB for V-Pol

Please refer to the Exhibit 2B for all test setups and results in details provided by NTS.