



EXHIBIT 2

Test Report Summary

Applicant: Nortel Networks

**For Original Equipment
Certification on:**

**FCC Tx ID: AB6NT3011VBTS
IC: 332D-3011VBTS**



Test Report Summary for Original Equipment Authorization

FCC Tx ID : AB6NT3011VBTS VBTS 3011
IC ID: 332D-3011VBTS

Document:	TRS_AB6NT3011VBTS
Stream:	00
Issue:	01
Issue Date:	May 28, 2007
Security Status:	Nortel Networks Confidential
Author:	Thomas Wong

© 2007 Nortel Networks Limited

Disclaimer

The master of this document is stored on an electronic database and “write protected”. The protection can be altered by authorized persons only. Viewing of the master document electronically ensures access to the current issue. Any hardcopies must be regarded as uncontrolled copies.

Security Warning

The information disclosed herein is proprietary to Nortel Networks and not to be used by or disclosed by unauthorized persons without the written consent of Nortel Networks. The recipient of this document shall respect the security status of the information.

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 1900 MHz Village Basestation 3011. The 1900 MHz vBTS 3011 is intended for use in the Domestic Public Cellular Radio Telecommunications Service and is designed in accordance with the following standards:

- *CFR 47, Part 24, Subpart E, Broadband Personal Communications 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 1900 MHz vBTS 3011.

Table 1: Test Results Summary

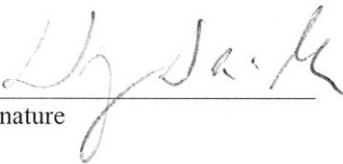
FCC Measurement Specification	FCC Limit Specification	Description	Results	Test(s) Conducted by	Remarks
2.1033(c)(8)		Measurement of DC Power	Provided		
2.1046	24.232	RF Output Power	Provided	NTS	See Exhibit 2A
2.1047		Modulation Characteristics	Not Applicable		
2.1049		Occupied Bandwidth	Provided	NTS	See Exhibit 2A
2.1051, 2.1057	24.238	Spurious Emission at Antenna Terminals	Compliant	NTS	See Exhibit 2A
2.1053, 2.1057	24.238	Field Strength of Spurious Radiation	Compliant	NTS	See Exhibit 2A
2.1055	24.235	Frequency Stability	Compliant	NTS	See Exhibit 2A

2. Engineering Declaration

The CDMA 1900 MHz vBTS 3011 has been tested in accordance with the requirements contained in the Federal Communication Rules and Regulations Part 2 and 24.

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 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 28, 2007



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 1900 MHz VBTS3011. The 1900MHz VBTS3011 is marketed under the model 1900MHz vBTS3011. The FCC ID number sought is AB6NT3011VBTS. The IC ID number sought is 332D-3011VBTS.

3.3 Quantity Production

The 1900 MHz vBTS3011 will be produced in quantity.

3.4 Technical Description

See Exhibit 3.

3.5 Type of Emissions

The 1900MHz vBTS3011 assembly is designed to operate in digital mode to support up to 3 carrier. The emission designator for IS97 carrier is 1M25F9W. The emission designator for IS864 carrier is 1M25D9W. Tests were conducted with 1, 2, or 3 carrier(s). 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 1900 MHz vBTS 3011 operates in the 1900 MHz cellular band where the operating frequency ranges are 1850 – 1910 MHz for the receiver and 1930 – 1990 MHz for the transmitter. The following table shows the valid CDMA channels within this band. The 1900MHz vBTS 3011 meets all FCC requirements within the valid (and conditional valid if A/D, B/E, or C/F are under the same operator) channels.

Band	CDMA Channel Number	Transmitter Frequency Assignment for Base Station (MHz)	Valid IS97 CDMA Frequency Assignment
A	0-24	1930.00-1931.20	In-Valid
	25-275	1931.25-1943.75	Valid
	276-299	1943.80-1944.95	Cond. Valid
D	300-324	1945.00-1946.20	In-Valid
	325-375	1946.25-1948.75	Valid
	376-399	1948.80-1949.95	Cond. Valid
B	400-424	1950.00-1951.20	In-Valid
	425-675	1951.25-1963.75	Valid
	676-699	1963.80-1964.95	Cond. Valid
E	700-724	1965.00-1966.20	In-Valid
	725-775	1966.25-1968.75	Valid
	776-799	1968.80-1969.95	Cond. Valid
F	800-824	1970.00-1971.20	In-Valid
	825-875	1971.25-1973.75	Valid
	876-899	1973.80-1974.95	Cond. Valid
C	900-924	1975.00-1976.20	In-Valid
	925-1175	1976.25-1988.75	Valid
	1176-1199	1988.80-1989.95	Cond. Valid

3.7 Range of Operating Power

The 1900 MHz VBTS 3011 range of operating RF power is 0 dBm to 42.6 dBm . The maximum RF power output is 42.6 dBm..

3.8 Complete Circuit Diagrams

The Tx chain of the 1900 MHz vBTS 3011 for certification is made up of the radio, PA and DPM (Duplexer and filter, an OEM equipment). Exhibit 8 contains the schematics of circuit cards inside the 1900MHz vBTS3011 and Exhibit 9 contains the parts lists of the circuit cards inside 1900MHz vBTS3011.

3.9 Tune-up Procedure

The tune-up tests will be performed as part of the factory testing on the 1900MHz vBTS3011. 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) in the vBTS 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 GPSTM distributes the primary clock signals directly to control board which in-turn distribute the clock signals to the radio via the high speed serial link.

The GPSTM 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 1900MHz vBTS3011.

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 main transistor is drawing 2.75A.

The auxiliary transistor is drawing 0.25A

4.2 RF Power Output

The maximum measured RF output power for one carrier was 42.1 dBm.

The maximum measured RF output power for two carriers was 41.9 dBm.

The maximum measured RF output power for three carriers was 42.2 dBm.

4.3 Occupied Bandwidth

The maximum measured occupied bandwidth for one carrier was 1283 KHz.

The maximum measured occupied bandwidth for two carriers was 2505 KHz.

The maximum measured occupied bandwidth for three carriers was 3732 KHz.

4.4 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 6.97 dB

50 MHz to 10 GHz measurements was 7.28 dB.

4.5 Frequency Stability

The frequency stability over temperature -5 deg to 50 deg C and 85% to 115% of the nominal voltages was 1.52 ppm. Since the 1900MHz vBTS 3011 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 1900MHz vBTS 3011.



4.6 Radiated Emission Test Results from 30MHz to 20 GHz

The minimum pass margin after the substitution method:

No Part 24 emission detected.

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