

Test Report: 1W04518.1

Applicant: VTECH Engineering Canada Ltd.

200-7671 Alderbridge Way

Richmond, B.C.

V6X 1Z9

Equipment Under Test: VTECH 9118

(EUT) 900 MHz Cordless Telephone

FCC ID: EW79108

In Accordance With: FCC Part 15, Subpart C, 15.249

Tested By: Nemko Canada Inc.

3325 River Road, R.R. 5 Ottawa, Ontario K1V 1H2

Authorized By:

G. Westwell, Wireless Technologist

Date: January 10, 2002

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Master: PT15-SubC-15249 Date: October 17, 2001

FCC PART 15, SUBPART C, 15.249 PROJECT NO.: 1W04518.1

EQUIPMENT: VTECH 9118, 900 MHz Cordless Telephone

FCC ID: EW79108

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DATE: January 9, 2002

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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 15.249. All tests were conducted using measurement procedure ANSI C63.4-1992. Radiated Emissions were made 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".

TESTED BY:

Russell Grant, Wireless Group Manager

Russell Grant

Nemko Canada Inc., a testing laboratory, is accredited by the Standards Council of Canada. The tests included in this report are within the scope of this accreditation. The results apply only to the samples tested.

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This report applies only to the items tested.

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Summary Of Test Data

Name Of Test	Para. No.	Result
Conducted Emissions	15.207	N/A *
Radiated Emissions	15.249	Complies

* Note: Class II Permissive Change

New RF IC

Test Conditions:

Indoor Temperature: 22 °C

Humidity: 50 %

Outdoor Temperature: 25 °C

Humidity: 52 %

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Section 2. General Equipment Specification

Manufacturer: VTECH Dougguan Electronics Comm. Ltd.

Model No.: VTECH 9118

Serial No.: Base: GA1001050

Handset: GA1001049

Date Received In Laboratory: November 21, 2001

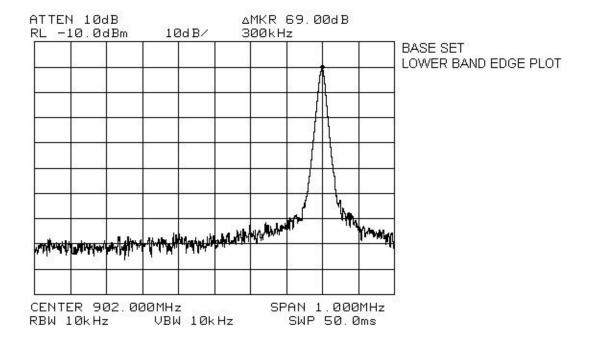
Nemko Identification No.: Base: Item #6

Handset: Item #11

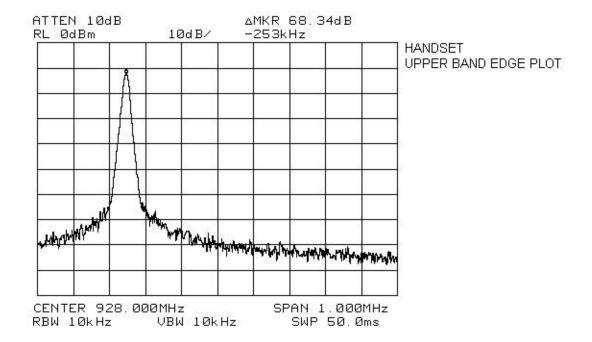
This equipment has been modified by changing the RF IC on the handset and base to a newer version – UAA3515B.

Base Set Tx 902.3 to 906.65 MHz Handset Tx 923.1 to 927.75 MHz

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Section 3. Radiated Emissions

Para. No.: 15.249

Test Performed By: Russell Grant **Date of Test:** January 8, 2002

Minimum Standard:

Fundamental (MHz)	Field Strength (mV/m)	Field Strength (dBµV)	Harmonic (mV/m)	Harmonic (dBµV)
902-928	50	94	0.5	54

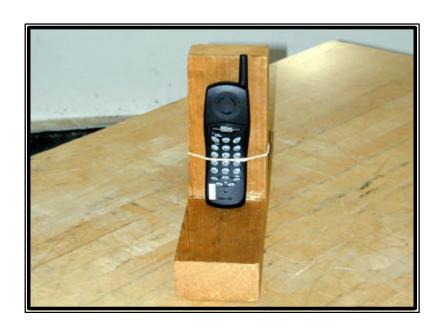
Test Results: Complies.

Measurement Data: See attached tabulated data.

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Radiated Emissions Photograph

Front View:





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Test Data - Radiated Emissions

Base Set Transmitter TX 902.6 MHz

Frequency of Emission (MHz)	Polarization	Received Signal Level (dBuV)	Antenna Factor (dB)	Amplifier Gain (dB)	Field Strength (dBuV/m@3m)	Limit (dBuV/m@3m)	Margin (dB)
902.6	V	53.4	33.2		86.6	94.0	7.4
902.6	Н	51.3	33.2		84.5	94.0	9.5
1805.2	V	46.2	31.9	48.5	29.6	54.0	24.4
1805.2	Н	44.3	31.9	48.5	27.7	54.0	26.3
2707.8	V	56.5	35.6	59.7	32.4	54.0	21.6
2707.8	Н	55.3	35.6	59.7	31.2	54.0	22.8
3610.4	V	59.8	39.1	59.8	39.1	54.0	14.9
3610.4	Н	55.2	39.1	59.8	34.5	54.0	19.5

Base Set Transmitter TX 906.35 MHz

Frequency of Emission (MHz)	Polarization	Received Signal Level (dBuV)	Antenna Factor (dB)	Amplifier Gain (dB)	Field Strength (dBuV/m@3m)	Limit (dBuV/m@3m)	Margin (dB)
906.35	V	56.4	33.2		89.6	94.0	4.4
906.35	Н	54.3	33.2		87.5	94.0	6.5
1812.7	V	49.8	32.0	48.5	33.3	54.0	20.7
1812.7	Н	47.0	32.0	48.5	30.5	54.0	23.5
2719.05	V	60.8	35.6	59.7	36.7	54.0	17.3
2719.05	Н	59.0	35.6	59.7	34.9	54.0	19.1
3625.4	V	59.3	39.2	59.7	38.8	54.0	15.2
3625.4	Н	54.8	39.2	59.7	34.3	54.0	19.7

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Test Data - Radiated Emissions

Handset Transmitter TX 923.4 MHz

Frequency of Emission (MHz)	Polarization	Received Signal Level (dBuV)	Antenna Factor (dB)	Amplifier Gain (dB)	Field Strength (dBuV/m@3m)	Limit (dBuV/m@3m)	Margin (dB)
923.4	V	57.0	33.4		90.4	94.0	3.6
923.4	Н	57.1	33.4		90.5	94.0	3.5
1846.8	V	60.7	32.3	48.6	44.4	54.0	9.6
1846.8	Н	60.2	32.3	48.6	43.9	54.0	10.1
2770.2	V	77.5	35.8	59.8	53.5	54.0	0.5
2770.2	Н	73.8	35.8	59.8	49.8	54.0	4.2
3693.6	V	63.3	39.4	59.4	43.3	54.0	10.7
3693.6	Н	58.8	39.4	59.4	38.8	54.0	15.2

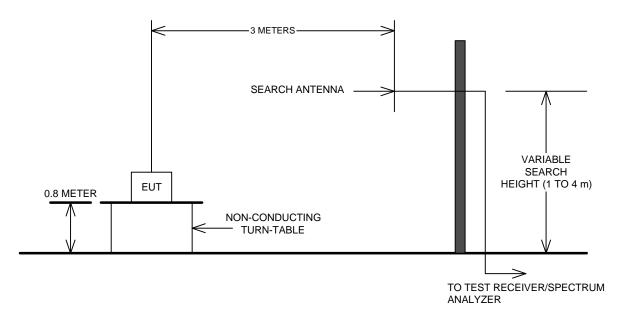
Handset Transmitter TX 927.75 MHz

Frequency of Emission (MHz)	Polarization	Received Signal Level (dBuV)	Antenna Factor (dB)	Amplifier Gain (dB)	Field Strength (dBuV/m@3m)	Limit (dBuV/m@3m)	Margin (dB)
927.75	V	58.8	33.6		92.4	94.0	1.6
927.75	Н	59.7	33.6		93.3	94.0	0.7
1855.5	V	56.0	32.3	48.6	39.7	54.0	14.3
1855.5	Н	53.2	32.3	48.6	36.9	54.0	17.1
2783.25	V	74.5	36.0	59.8	50.7	54.0	3.3
2783.25	Н	70.3	36.0	59.8	46.5	54.0	7.5
3711.00	V	58.2	39.6	59.3	38.5	54.0	15.5
3711.00	Н	57.80	39.60	59.30	38.1	54.0	15.9

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Section 4. Block Diagrams

Test Site For Radiated Emissions



The spectrum was search up to the 10th harmonic of the fundamental frequency of operation.

The equipment was configured on 3 axis in order to determine worst case emissions.

Peak Detector > 1 GHz, RBW = VBW = 1 MHz CISPR QUASI PEAK < 1 GHz

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Section 5. Test Equipment List

CAL	EQUIPMENT	MANUFACTURER	MODEL	SERIAL	LAST CAL.	NEXT CAL.
CYCLE						
1 Year	Spectrum Analyzer	Hewlett Packard	8565E	FA000981	June 08/01	June 08/02
1 Year	Receiver	Rohde & Schwarz	ESVP	892661/014	Apr. 3/01	Apr. 3/02
1 Year	Horn Antenna	EMCO #2	3115	4336	Dec. 1/01	Dec. 1/02
1 Year	Dipole Antenna Set	EMCO #2	3121C	FA001349	Apr. 3/01	Apr. 3/02
1 Year	RF AMP	JCA	2-4 GHz	FA001496	COU	COU
1 Year	RF AMP	JCA	1-2 GHz	FA001498	COU	COU
1 Year	RF AMP	JCA	4-8 GHz	FA001497	COU	COU

NA: Not Applicable NCR: No Cal Required COU: CAL On Use