



Ver 2.0

1(7)

Test & Certification Center (TCC) - Dallas

FCC ID: QMNRH-77 Test Report WR 575.002 March 18, 2005

# Test Report FCC part 2.1053 Call Mode Spurious Radiated Emissions

# Test Report Number: WR 575.002

**Terminal device:** 

Type Nokia RH-77, HW: 4.501, SW: v 0100v0800.nep

Originator:Bob AlexanderFunction:TCC - Dallas - EMCVersion/Status:2.0Location:QA TraxDate:March 18, 2005

## Change History:

 Version
 Date

 0.1
 4 JAN 05

 1.0
 6 Jan 05

 1.1
 18 Mar 05

 2.0
 18 Mar 05

StatusHandled ByDraftBob AlexanderApprovedMark SeversonRevisedMark SeversonApprovedNerina Walton

Comments Draft for review

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Date and signatures:

For the contents:

**Technical Review** 

Manager Review

TCC

Test & Certification Center (TCC) - Dallas

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Accredited Laboratory Certificate Number: 1819-01

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# 1. GENERAL

# 1.1 Objective

Testing was performed to determine whether the selected handset was in compliance to the spurious radiated emission limits, as specified in FCC part 2.1053.

#### 1.2 Test Summary

Test Results: The test result relates only to those tested devices mentioned in Section 5 of this test report.

Sample #	Test Performed	Reference	Complies / Does not comply
1	Call Mode Spurious Radiated Emissions	FCC Part 2.1053	Complies

## 2. TEST EQUIPMENT LIST

The listing below indicates the test equipment utilized for the test (s). Calibration interval on all items listed can be obtained from the Engineering Services Group within NMP, Product Creation - Dallas. Where relevant, measuring equipment is subjected to in-service checks between testing. TCC - Dallas shall notify clients promptly, in writing, of identification of defective measuring equipment that casts doubt on the validity of results given in this report.

Test Equipment	NMP #	Test Performed
Turntable and Tower Controller	Nmp02846	Call Mode Spurious Radiated Emissions
Horn Antenna	Nmp00065	Call Mode Spurious Radiated Emissions
EMI Receiver	Nmp02664	Call Mode Spurious Radiated Emissions
Base Station Simulator	03461	Call Mode Spurious Radiated Emissions





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# 3. EQUIPMENT-UNDER-TEST (EUT)

The results in this report relate only to the items listed below:

## 3.1 Description of Tested Device(s):

Sample #	Mode of Operation	Date of Receipt	Condition of Sample	ltem	Identifying Information
1	CDMA 800	4 Jan 05	ok	Phone	Type: RH-77
					Build: F5.0
					ESN: 044/01208885
					Code:0517533HL06CP
					HW ID: 4.501
2	CDMA 800	4 Jan 05	ok	Battery	Type: BL-5C
					Other: 3.8v

# 3.2 Photograph of Tested Device(s):







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#### 4. PASS/FAIL CRITERIA

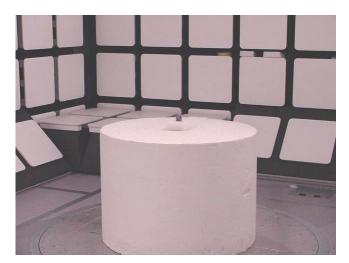
Band	Frequency Range (MHz)	FCC Limit (dBm)	
Cellular / PCS	30 – 18000*	-13	

\* Frequency to be investigated up to the 10<sup>th</sup> harmonic of the highest clock or frequency used.

#### 5. DETAILED TEST RESULTS

Test Technician / Engineer	Bob Alexander	
Date of Measurement	4 JAN 05	
Temperature / Humidity	22°C	32%RH
Test Result	Complies	

# 5.1Test setup







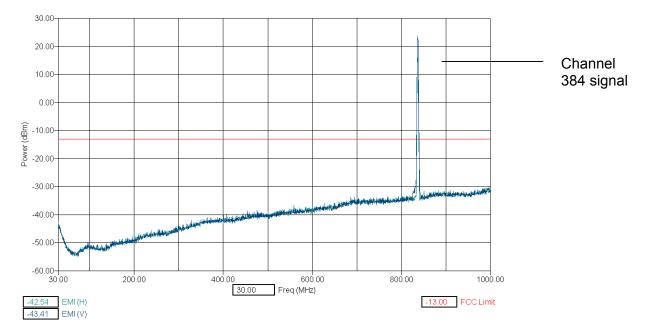
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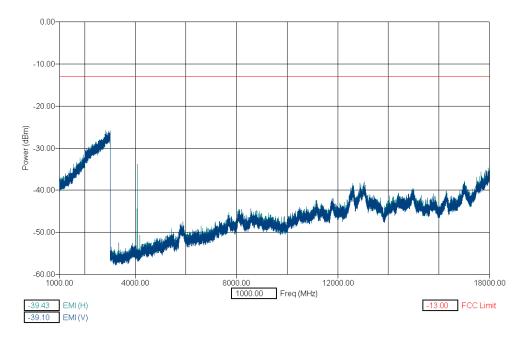
## 5.2 Test Results

RBW / VBW 1MHz

## RH-77 phone, esn 8885, CDMA800 ch 384, FCC 2.1053, 30 MHz to 1 GHz



RH-77 phone, esn 8885, CDMA800 ch 384, FCC 2.1053, 1 to 18 GHz







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Test Technician / Engineer	Mark Severson	
Date of Measurement	March 18, 2005	
Temperature / Humidity	23°C	36%RH
Test Result	Complies	

EDRP for Channel 384:

22.02 dBm

Freq Max (MHz)	(PK) EMI (dBm)	dBc	FCC Limit (dBm)	Pol.
1673	-35.4	57.4	-13	Н
1673	-35.2	57.2	-13	V
2509.6	-29.4	51.4	-13	Н
2509.6	-29.7	51.7	-13	V
3346.1	-55.7	77.7	-13	Н
3346.1	-53.2	75.3	-13	V
4182.6	-51.8	73.8	-13	Н
4182.6	-54.7	76.7	-13	V
5019.1	-51.7	73.7	-13	Н
5019.1	-54.4	76.4	-13	V
5855.6	-49.0	71.1	-13	Н
5855.6	-50.3	72.3	-13	V
6692.2	-51.7	73.7	-13	Н
6692.2	-51.2	73.2	-13	V
7528.7	-49.0	71.0	-13	Н
7528.7	-48.9	70.9	-13	V
8365.2	-48.7	70.7	-13	Н
8365.2	-47.9	69.9	-13	V

## 6. MEASUREMENT UNCERTAINTY

The measurement uncertainty for this test is +/- 5.2dB for 30-1000MHz, +/- 5.6dB for 1-6GHz and +/-6.8dB for 6 to 18GHz.

Please refer to document DTY01001-EN, FCC Call Mode Spurious Radiated Emissions Test Procedure, located on Lotus Notes, for further measurement uncertainty information.

Please also reference document DTQ00775-EN, Test & Certification Center (TCC) Quality Manual, section 5.4.6, "Estimation of Uncertainty" for more information.