



Nemko USA, Inc.
Phone (858) 755-5525 Fax (858) 452-1810
11696 Sorrento Valley Rd., Suite F
San Diego, CA 92121-1024

Test Report: **2004 090071 FCC24**

Applicant: **Kyocera Wireless**
10300 Campus Point Drive
San Diego, CA 92121
858 449-9835
619 330-4977- fax

Equipment Under Test: **AT Road Internet Location Mobile Device**
Model iLM2720

FCC ID: **OVFKWC-M200**

In Accordance With: **FCC Part 24, Subpart E**
And Industry Canada RSS-133

Tested By: **Nemko USA, Inc.**
11696 Sorrento Valley Rd., Suite F
San Diego, CA 92121-1024

Date: **October 5, 2004**

Total Number of Pages: **20**

EQUIPMENT: AT ROAD INTERNET LOCATION MOBILE DEVICE

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EQUIPMENT: AT ROAD INTERNET LOCATION MOBILE DEVICE

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 24, Subpart E.

DOCUMENT HISTORY

REVISION	DATE	COMMENTS
-	October 5, 2004	Prepared By: Alan Laudani
-	October 5, 2004	Initial Release: R. L. Hill
	February 14, 2005	Revised Ant. Model #'s Alan Laudani

NOTE: Nemko USA, Inc. hereby makes the following statements so as to conform to Chapter 10 (Test Reports) Requirements of ANSI C63.4 (1992) "Methods and Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz":

- The unit described in this report was received at Nemko USA, Inc.'s facilities on **September 10, 2004**. Testing was performed on the unit described in this report on **September 10, 2004 to September 14, 2004**.
- The Test Results reported herein apply only to the Unit actually tested, and to substantially identical Units.
- This report does not imply the endorsement of the Federal Communications Commission (FCC), NVLAP or any other government agency.

This Report is the property of Nemko USA, Inc., and shall not be reproduced, except in full, without prior written approval of Nemko USA, Inc. However, all ownership rights are hereby returned unconditionally to **Kyocera Wireless**, and approval is hereby granted to **Kyocera Wireless** and its employees and agents to reproduce all or part of this report for any legitimate business purpose without further reference to Nemko USA, Inc.

EQUIPMENT: AT ROAD INTERNET LOCATION MOBILE DEVICE

CERTIFICATION

Nemko USA, Inc., an independent Electromagnetic Compatibility (EMC) Test Laboratory, produced this Test Report and performed the Radio Frequency Interference (RFI) testing and data evaluation contained herein.

Nemko USA, Inc.'s measurement facility is currently registered with the United States Federal Communications Commission (FCC) in accordance with the provisions of 47 United States Code (CFR) Part 2, Subpart I, Section 2.948(a). A current description of Nemko USA, Inc.'s measurement facility is on file with the FCC. Nemko USA Inc. has additionally satisfied the FCC that it complies with the requirements set forth in 47 CFR Part 2, Subpart I, Section 2.948(d) regarding the accreditation of EMC laboratories. As a result, the FCC has placed Nemko USA Inc. on its list of EMC laboratories approved to perform Declaration of Conformity (DOC) procedure testing.

The RFI testing, test data collection and test data evaluation were accomplished in accordance with the ANSI C63.4-1992 Standard, and in accordance with the applicable sections of the FCC rules (47 CFR Parts 2 and 18)." digital devices. The testing was also accomplished in accordance with Industry Canada's ICES-003 standard for unintentional radiating device per EMCAB-3, Issue 3 (May 1998). The administrative summary of this test report provides a description of the test sample

I hereby certify that the test data, test data evaluation, and equipment configurations used to compile this test report are a true and accurate representation of the test sample's radio frequency interference characteristics as of the test date(s), and, for the design of the test sample.

Chip Fleury for Rick Hill
Ricky L. Hill, EMC Supervisor

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Summary Of Test Data

The intent of this report is to present representative data to conform to a previously tested module and antenna(s). The Center frequency of one Cellular Test Mode is presented as evident of no pronounced changes in emissions.

Name Of Test	Para. No.	Result
RF Power Output	2.1046	PASS
Occupied Bandwidth	2.1049	NOT TESTED
Spurious Emissions at Antenna Terminals	2.1051	NOT TESTED
Field Strength of Spurious Emissions	2.1053	PASS
Frequency Stability	2.1055	NOT TESTED

Test Conditions:

Indoor N/A Temperature: °C
 Humidity: %

Outdoor Temperature: 16-20 °C
 Humidity: 80-98 %

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Section 2. General Equipment Specification

Manufacturer: Kyocera Wireless

Model No.: AT Road Internet Location Mobile Device
iLM2720

Serial No.: N/A

Date Received In Laboratory: September 10, 2004

Nemko Identification No.: 24-071-kyo-r1

Frequency Range: 1851.25—1908.75 MHz

RF Output (Limit): 2.0 W

RF Output (Measured): 0.45 W

Emission Designator: 1M25F9W

FCC Identifier: OVFKWC-M200

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Section 3. RF Power Output

Para. No.: 2.1046

Test Performed By: A. Laudani	Date of Test: Sept 13, 2004
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Minimum Standard: Para. No.: 24.232.

Test Results: Pass

Measurement Data:

M200 module with antenna model:	Modulation	Frequency (MHz)	Measured / Rated (dBm)
SMM-UCE-3ASC	PCS	1851.25	23.7
SMM-UCE-3ASC		1880.00	25.3
SMM-UCE-3ASC		1908.75	25.1
MM3-900/1900	PCS	1851.25	22.1
MM3-900/1900		1880.00	26.5
MM3-900/1900		1908.75	22.1
MM3-U15-1A-2C	PCS	1851.25	17.8
MM3-U15-1A-2C		1880.00	16.4
MM3-U15-1A-2C		1908.75	14.6

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Section 4. Occupied Bandwidth

Para. No.: 2.1049

Test Performed By:	Date of Test:
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Minimum Standard: Para. No.: 24.238.

Test Results: NOT TESTED

Test Data:

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Section 5. Spurious Emissions at Antenna Terminals

Para. No.: 2.1051

Test Performed By:	Date of Test:
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Minimum Standard: Para. No.: 24.238.

Test Results: NOT TESTED

Test Data:

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DATE	DOCUMENT NAME	DOCUMENT #	PAGE
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Section 6. Field Strength of Spurious

Para. No.: 2.1053

Test Performed By: Alan Laudani	Date of Test: Sept. 13, 2004
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Minimum Standard: Para. No.: 24.238.

Test Results: Pass

Test Data: As per attached tabulated data.

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Substitution Method For Radiated Emissions

Complete	<u>Yes</u>	Job # :	<u>24-071-KYO-R1</u>	Test # :	<u>6</u>
Preliminary			Page <u>1</u>	of	<u>1</u>
Client Name :	<u>KYOCERA WIRELESS Corp.</u>				
EUT Name :	<u>1 M200 with SMM-UCE-3A2C</u>				
	<u>2 M200 with MM3-900/1900</u>				
	<u>3 M200 with MM3-U15-1A-2C</u>				
Specification :	<u>FCC Part 24</u>				
Rod. Ant. #:	<u>NA</u>	Temp. (deg. C) :	<u>22</u>	Date :	<u>9/14/2004</u>
Bicon Ant. #:	<u>NA</u>	Humidity (%) :	<u>60</u>	Staff :	<u>A. Laudani</u>
Log Ant. #:	<u>NA</u>	EUT Voltage :			
DRG Ant. #	<u>529</u>	EUT Frequency :			
Dipole Ant. #:	<u>NA</u>	Phase:		Peak Bandwidth:	<u>RBW-1MHz, VBW-1MHz</u>
Cable#:	<u>60ft</u>	Location:	<u>SOATS</u>		
Preamplifier#:	<u>317</u>	Distance:	<u>3m</u>		
Spec An. #:	<u>537</u>				

	EUT	target		Horn Gain dBi	cable loss dB	Signal Generator dBm	Total (EIRP) dBm	Spec dBm	Margin dBm
		Frequency mHz	level dBuV/m						
PCS Low Freq.	1	1851.31	82.0	9.5	0.8	15.0	23.7	33	-9.3
PCS Mid Freq.	1	1880.00	83.6	9.5	0.8	16.6	25.3	33	-7.7
PCS High Freq.	1	1908.70	83.8	9.5	0.8	16.4	25.1	33	-7.9
PCS Low Freq.	2	1851.31	80.4	9.5	0.8	13.4	22.1	33	-10.9
PCS Mid Freq.	2	1880.00	84.8	9.5	0.8	17.8	26.5	33	-6.5
PCS High Freq.	2	1908.70	80.8	9.5	0.8	13.4	22.1	33	-10.9
PCS Low Freq.	3	1851.31	76.1	9.5	0.8	9.1	17.8	33	-15.2
PCS Mid Freq.	3	1880.00	74.7	9.5	0.8	7.7	16.4	33	-16.6
PCS High Freq.	3	1908.70	73.3	9.5	0.8	5.9	14.6	33	-18.4
PCS 2ND Harm.	1	3702.5	52.7	9.7	1.3	-47.3	-38.9	-13	-25.9
PCS 2ND Harm.	1	3760.0	52.9	9.7	1.3	-47.1	-38.7	-13	-25.7
PCS 2ND Harm.	1	3817.0	52.6	9.7	1.3	-46.8	-38.4	-13	-25.4
PCS 2ND Harm.	2	3702.5	52	9.7	1.3	-48.0	-39.6	-13	-26.6
PCS 2ND Harm.	2	3760.0	55.6	9.7	1.3	-44.4	-36.0	-13	-23.0
PCS 2ND Harm.	2	3817.0	56	9.7	1.3	-43.4	-35.0	-13	-22.0
PCS 2ND Harm.	3	3702.5	50.1	9.7	1.3	-49.9	-41.5	-13	-28.5
PCS 2ND Harm.	3	3760.0	52.3	9.7	1.3	-47.7	-39.3	-13	-26.3
PCS 2ND Harm.	3	3817.0	53.4	9.7	1.3	-46.0	-37.6	-13	-24.6

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Radiated Disturbance Test Data:



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Radiated Emissions Data											
Complete	<u>YES</u>		Job # : <u>24-071-KYO-R</u>		Test # : <u>1</u>						
Preliminary			Page <u>1</u>		of <u>1</u>						
Client Name :	<u>KYOCERA WIRELESS Corp.</u>										
EUT Name :	<u>M200 MODULE</u>										
EUT Model # :	<u>M200 with SMM-UCE-3A2C</u>										
EUT Serial # :											
EUT Config. :	<u>Transmit PCS</u>										
Specification :	<u>FCC Part 24</u>										
Rod. Ant. #:	<u>NA</u>	Temp. (C) :	<u>25</u>		Reference :		Date : <u>9/13/2004</u>				
Bicon Ant.#:	<u>NA</u>	Humidity (%) :	<u>65</u>				Time : <u></u>				
Log Ant.#:	<u>112</u>	EUT Voltage :	<u>4.2 V</u>				Staff : <u>A. LAUDANI</u>				
DRG Ant. #	<u>752</u>	EUT Frequency :	<u>dc</u>				Photo ID: <u></u>				
Dipole Ant.#:	<u>NA</u>	Phase:	<u>-</u>				Peak Bandwidth: <u>1 MHz</u>				
Cable#:	<u>NOATS</u>	Location:	<u>NOATS</u>				Video Bandwidth: <u>1 MHz</u>				
Preamp#:	<u>317</u>	Distance (meters):	<u>3</u>				Fund. RBW <u>30 kHz(Video Ave +17 dB)</u>				
Spec An.#:	<u>537</u>	2000 MHz high pass filter						NF = Noise Floor			
Meas. Freq. (MHz)	Vertical (dBuV) pk	Horizontal (dBuV) pk	CF (db)	Max Level (dBm) pk	Spec. Limit (dBm) pk	Margin dB pk	EUT Rotation	Ant. Height	Pass Fail Unc.	Comment	
1851.25	82.0	75.0	34.0	22.74	33.0	-10.3	90.0	1.2	Pass		
3702.50	52.7	49.3	11.2	-29.36	-13.0	-16.4	90.0	1.0	Pass		
5553.75	43.8	41.7	14.0	-35.46	-13.0	-22.5			Pass	NF	
7405.00	46.3	45.3	18.5	-28.46	-13.0	-15.5			Pass	NF	
9256.25	47.7	46.4	23.9	-21.66	-13.0	-8.7			Pass	NF	
11107.50	48.0	47.2	21.0	-24.26	-13.0	-11.3			Pass	NF	
12958.75	51.9	52.6	20.6	-20.06	-13.0	-7.1			Pass	NF	
14810.00	48.2	48.3	24.2	-20.76	-13.0	-7.8			Pass	NF	
16661.25	50.7	50.6	23.0	-19.56	-13.0	-6.6			Pass	NF	
18512.50	42.1	42.2	31.3	-19.8	-13.0	-6.8			Pass	NF 100 kHz RBW	
1880.00	83.6	76.3	34.0	24.3	33.0	-8.7	120.0	1.8	Pass		
3760.00	52.9	50.4	11.2	-29.2	-13.0	-16.2	110.0	1.0	Pass		
5640.00	44.7	42.4	14.0	-34.6	-13.0	-21.6	110.0	1.0	Pass		
7520.00	42.1	42.0	18.7	-32.5	-13.0	-19.5			Pass	NF	
9400.00	40.7	41.1	23.9	-28.3	-13.0	-15.3			Pass	NF	
11280.00	40.3	41.5	21.0	-30.8	-13.0	-17.8			Pass	NF	
13160.00	43.1	43.2	22.8	-27.3	-13.0	-14.3			Pass	NF	
15040.00	43.7	43.7	23.5	-26.1	-13.0	-13.1			Pass	NF	
16920.00	41.9	42.8	23.0	-27.5	-13.0	-14.5			Pass	NF	
18800.00	42.1	42.2	31.3	-19.8	-13.0	-6.8			Pass	NF 100 kHz RBW	
1908.75	83.8	78.8	34.0	24.5	33.0	-8.5	120.0	1.8	Pass		
3817.50	52.6	51.1	11.2	-29.5	-13.0	-16.5			Pass		
5726.25	43.3	41.1	14.0	-36.0	-13.0	-23.0			Pass	NF	
7635.00	41.0	40.2	18.7	-33.6	-13.0	-20.6			Pass	NF	
9543.75	39.7	40.3	23.8	-29.2	-13.0	-16.2			Pass	NF	
11452.50	41.0	41.7	21.0	-30.6	-13.0	-17.6			Pass	NF	
13361.25	44.0	44.1	22.8	-26.4	-13.0	-13.4			Pass	NF	
15270.00	43.6	43.7	23.5	-26.1	-13.0	-13.1			Pass	NF	
17178.75	41.9	43.2	25.8	-24.3	-13.0	-11.3			Pass	NF	
19087.50	42.1	42.2	31.3	-19.8	-13.0	-6.8			Pass	NF 100 kHz RBW	

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Radiated Emissions Data

Complete YES Job #: 24-071-KYO-R1 Test #: 1
Preliminary Page 1 of 1
Client Name: KYOCERA WIRELESS Corp.
EUT Name: M200 MODULE
EUT Model #: M200 with MM3-900/1900
EUT Serial #:
EUT Config.: Transmit PCS
Specification: FCC Part 24 Reference:
Rod. Ant. #: NA Temp. (C): 22 Date: 9/13/2004
Bicon Ant. #: NA Humidity (%): 68 Time:
Log Ant. #: 112 EUT Voltage: 4.2 V Staff: A. LAUDANI
DRG Ant. #: 752 EUT Frequency: dc Photo ID:
Dipole Ant. #: NA Phase: - Peak Bandwidth: 1 MHz
Cable #: NOATS Location: NOATS Video Bandwidth: 1 MHz
Preamp #: 317 Distance (meters): 3 Fund. RBW: 30 kHz (Video Ave +17 dB)
Spec An. #: 537 2000 MHz high pass filter NF = Noise Floor

Meas. Freq. (MHz)	Vertical (dBuV) pk	Horizontal (dBuV) pk	CF (db)	Max Level (dBm) pk	Spec. Limit (dBm) pk	Margin dB pk	EUT Rotation	Ant. Height	Pass Fail Unc.	Comment
1851.25	80.4	72.1	34.0	19.17	33.0	-13.8	90.0	1.2	Pass	
3702.50	52	48.5	11.2	-32.03	-13.0	-19.0	100.0	1.0	Pass	
5553.75	43.6	42.4	14.0	-37.63	-13.0	-24.6			Pass	NF
7405.00	39.6	40.0	18.5	-36.73	-13.0	-23.7			Pass	NF
9256.25	40.2	40.7	23.9	-30.63	-13.0	-17.6			Pass	NF
11107.50	40.5	40.2	21.0	-33.73	-13.0	-20.7			Pass	NF
12958.75	44.4	45.8	20.6	-28.83	-13.0	-15.8			Pass	NF
14810.00	42.4	43.6	24.2	-27.43	-13.0	-14.4			Pass	NF
16661.25	43.0	43.2	23.0	-29.03	-13.0	-16.0			Pass	NF
18512.50	44.1	42.8	31.3	-19.8	-13.0	-6.8			Pass	NF
1880.00	84.8	76.0	34.0	23.6	33.0	-9.4	120.0	1.8	Pass	
3760.00	53.5	55.6	11.2	-28.4	-13.0	-15.4	110.0	1.0	Pass	
5640.00	40.1	40.1	14.0	-41.1	-13.0	-28.1	110.0	1.0	Pass	
7520.00	41.9	42.2	18.7	-34.3	-13.0	-21.3			Pass	NF
9400.00	39.6	40.0	23.9	-31.3	-13.0	-18.3			Pass	NF
11280.00	40.7	40.4	21.0	-33.5	-13.0	-20.5			Pass	NF
13160.00	43.5	43.8	22.8	-28.6	-13.0	-15.6			Pass	NF
15040.00	42.7	41.8	23.5	-29.0	-13.0	-16.0			Pass	NF
16920.00	43.7	43.1	23.0	-28.5	-13.0	-15.5			Pass	NF
18800.00	47.1	47.5	31.3	-16.4	-13.0	-3.4			Pass	NF
1908.75	80.8	72.1	34.0	19.6	33.0	-13.4	120.0	1.8	Pass	
3817.50	55.2	47.3	11.2	-28.8	-13.0	-15.8	10.0	1.0	Pass	
5726.25	41.3	41.8	14.0	-39.4	-13.0	-26.4			Pass	NF
7635.00	41.8	40.4	18.7	-34.7	-13.0	-21.7			Pass	NF
9543.75	40.6	40.9	23.8	-30.5	-13.0	-17.5			Pass	NF
11452.50	40.8	40.8	21.0	-33.4	-13.0	-20.4			Pass	NF
13361.25	43.9	44.1	22.8	-28.3	-13.0	-15.3			Pass	NF
15270.00	43.2	43.2	23.5	-28.5	-13.0	-15.5			Pass	NF
17178.75	42.7	42.8	25.8	-26.6	-13.0	-13.6			Pass	NF
19087.50	48.8	46.6	31.3	-15.1	-13.0	-2.1			Pass	NF

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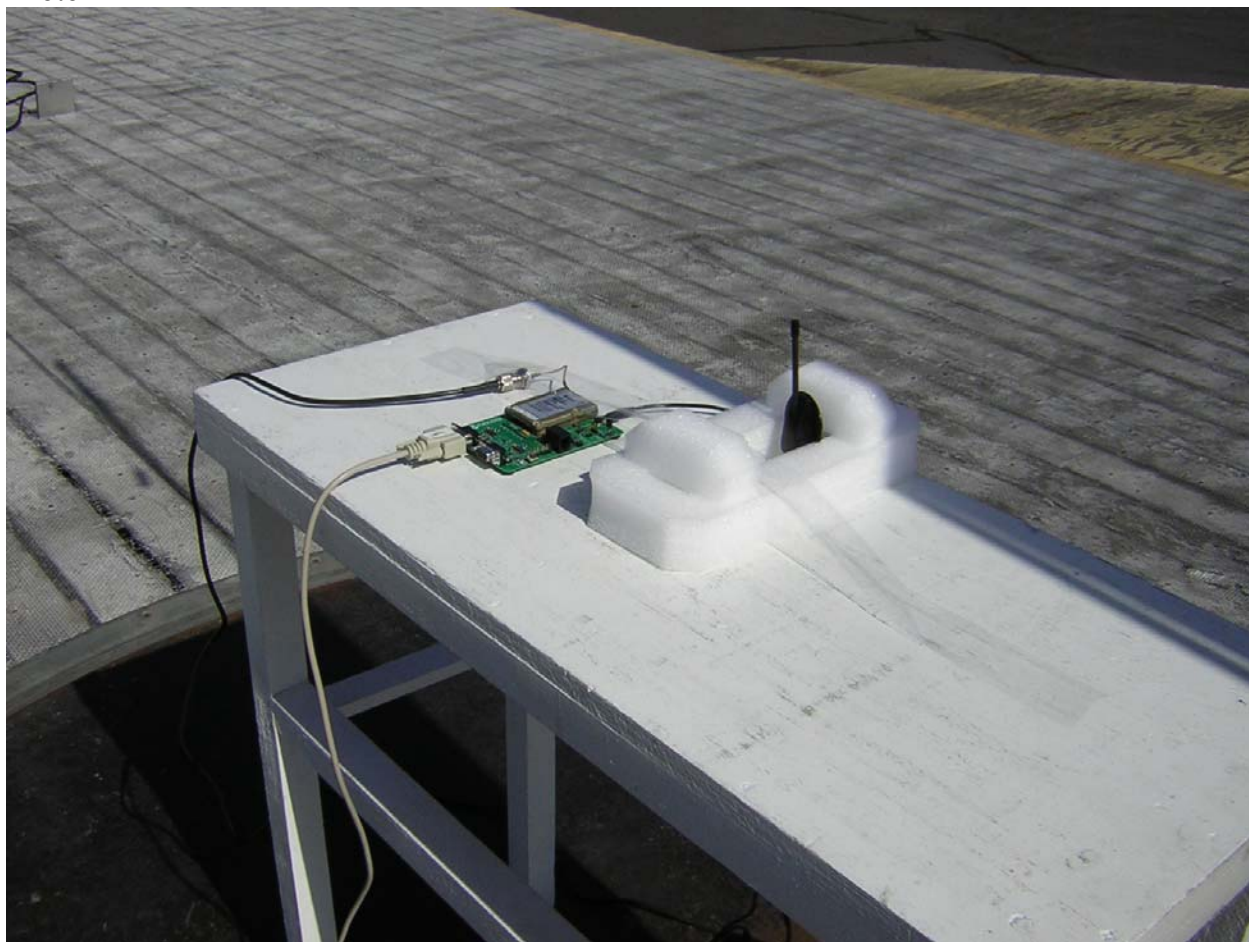
Radiated Emissions Data

Complete YES Job #: 24-071-KYO-R1 Test #: 1
Preliminary Page 1 of 1
Client Name: KYOCERA WIRELESS Corp.
EUT Name: M200 MODULE
EUT Model #: M200 with MM3-U15-1A-2C
EUT Serial #: _____
EUT Config.: Transmit PCS
Specification: FCC Part 24 Reference: _____
Rod. Ant. #: NA Temp. (C): 22 Date: 9/13/2004
Bicon Ant. #: NA Humidity (%): 68 Time: _____
Log Ant. #: 112 EUT Voltage: 4.2 V Staff: A. LAUDANI
DRG Ant. #: 752 EUT Frequency: dc Photo ID: _____
Dipole Ant. #: NA Phase: - Peak Bandwidth: 1 MHz
Cable#: NOATS Location: NOATS Video Bandwidth: 1 MHz
Preamp#: 317 Distance (meters): 3 Fund. RBW: 30 kHz (Video Ave +17 dB)
Spec An. #: 537 2000 MHz high pass filter NF = Noise Floor

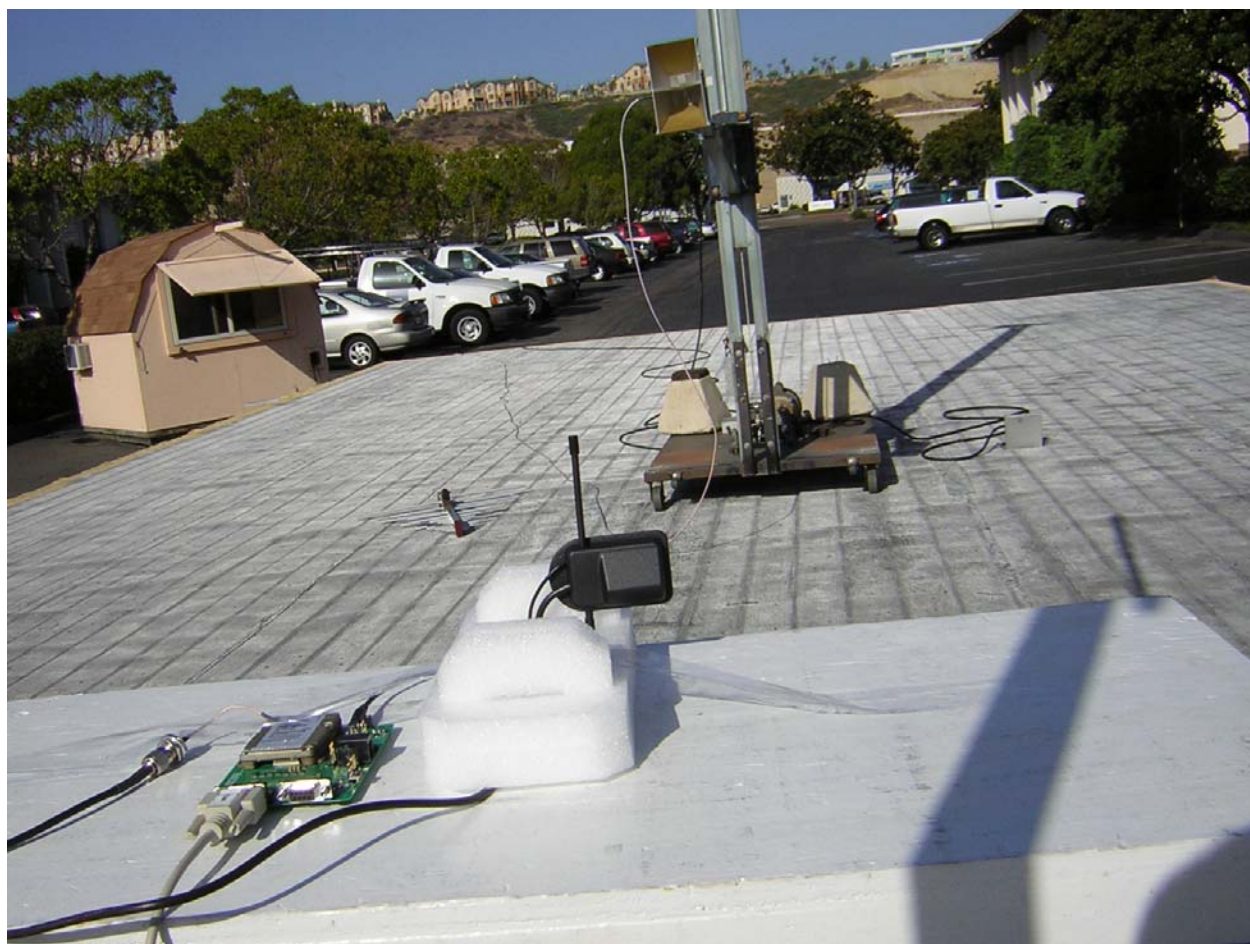
Meas. Freq. (MHz)	Vertical (dBuV) pk	Horizontal (dBuV) pk	CF (db)	Max Level (dBm) pk	Spec. Limit (dBm) pk	Margin dB pk	EUT Rotation	Ant. Height	Pass Fail Unc.	Comment
1851.25	76.1	76.1	34.0	14.87	33.0	-18.1	90.0	1.2	Pass	
3702.50	50.1	48.4	11.2	-33.93	-13.0	-20.9	100.0	1.0	Pass	
5553.75	49.3	43.4	14.0	-31.93	-13.0	-18.9	100.0	1.0	Pass	
7405.00	40.0	41.6	18.5	-35.13	-13.0	-22.1			Pass	NF
9256.25	39.3	41	23.9	-30.33	-13.0	-17.3			Pass	NF
11107.50	41.4	40.7	21.0	-32.83	-13.0	-19.8			Pass	NF
12958.75	45.0	44.1	20.6	-29.63	-13.0	-16.6			Pass	NF
14810.00	42.3	43.2	24.2	-27.83	-13.0	-14.8			Pass	NF
16661.25	43.1	44.1	23.0	-28.13	-13.0	-15.1			Pass	NF
18512.50	43.0	43.1	31.3	-20.8	-13.0	-7.8			Pass	NF
1880.00	74.7	69.4	34.0	13.5	33.0	-19.5	120.0	1.8	Pass	
3760.00	52.3	50.8	11.2	-31.7	-13.0	-18.7	110.0	1.0	Pass	
5640.00	41.2	42.4	14.0	-38.8	-13.0	-25.8	110.0	1.0	Pass	
7520.00	40.4	42.1	18.7	-34.4	-13.0	-21.4			Pass	NF
9400.00	40.1	40.7	23.9	-30.6	-13.0	-17.6			Pass	NF
11280.00	40.7	41.8	21.0	-32.4	-13.0	-19.4			Pass	NF
13160.00	40.3	42.7	22.8	-29.7	-13.0	-16.7			Pass	NF
15040.00	43.7	47	23.5	-24.7	-13.0	-11.7			Pass	NF
16920.00	43.3	46.8	23.0	-25.4	-13.0	-12.4			Pass	NF
18800.00	47.1	46.2	31.3	-16.8	-13.0	-3.8			Pass	NF
1908.75	73.3	69.9	34.0	12.1	33.0	-20.9	120.0	1.8	Pass	
3817.50	50.5	51.2	11.2	-32.8	-13.0	-19.8	10.0	1.0	Pass	
5726.25	42.8	42.2	14.0	-38.4	-13.0	-25.4			Pass	NF
7635.00	41.4	41.7	18.7	-34.8	-13.0	-21.8			Pass	NF
9543.75	40.2	40.4	23.8	-31.0	-13.0	-18.0			Pass	NF
11452.50	42.9	42.5	21.0	-31.3	-13.0	-18.3			Pass	NF
13361.25	43.2	43.5	22.8	-28.9	-13.0	-15.9			Pass	NF
15270.00	43.0	44.2	23.5	-27.5	-13.0	-14.5			Pass	NF
17178.75	43.2	43.6	25.8	-25.8	-13.0	-12.8			Pass	NF
19087.50	47.4	47.1	31.3	-16.5	-13.0	-3.5			Pass	NF

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Range Set up:
Photo



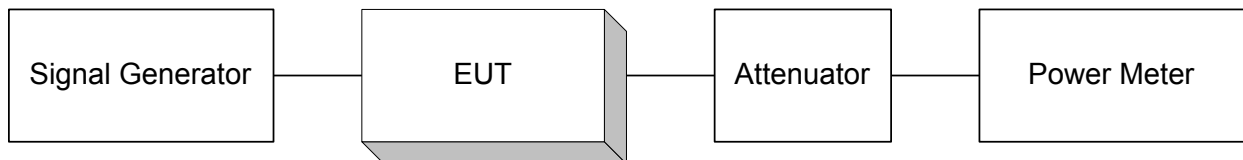
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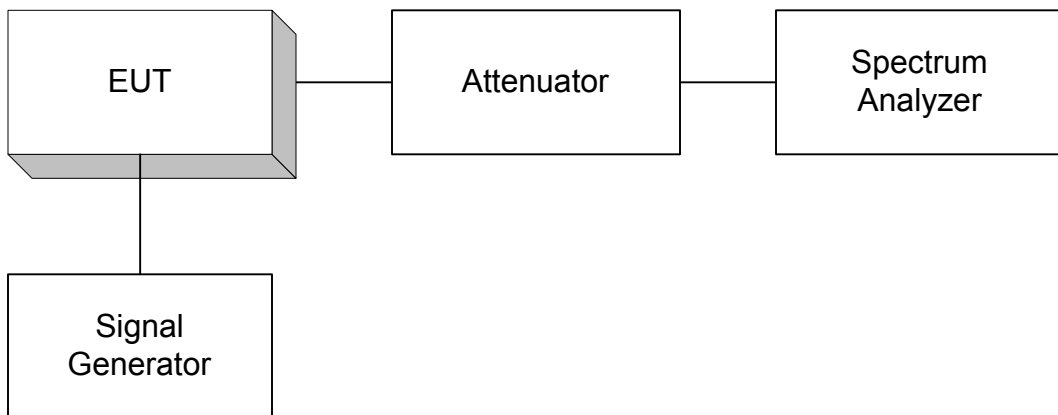
Nemko USA, Inc.		11696 Sorrento Valley Road, Suite F, San Diego, CA 92121 Phone (858) 755-5525 Fax (858) 452-1810	
DATE	DOCUMENT NAME	DOCUMENT #	PAGE
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Section 7. Block Diagrams

Para. No. 1046 - R.F. Power Output

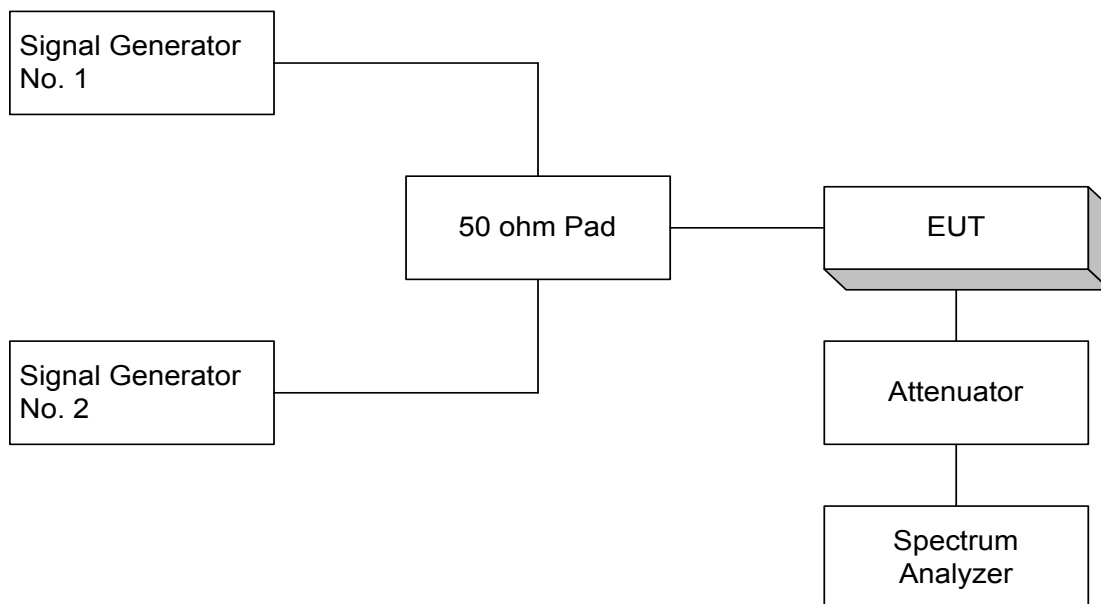
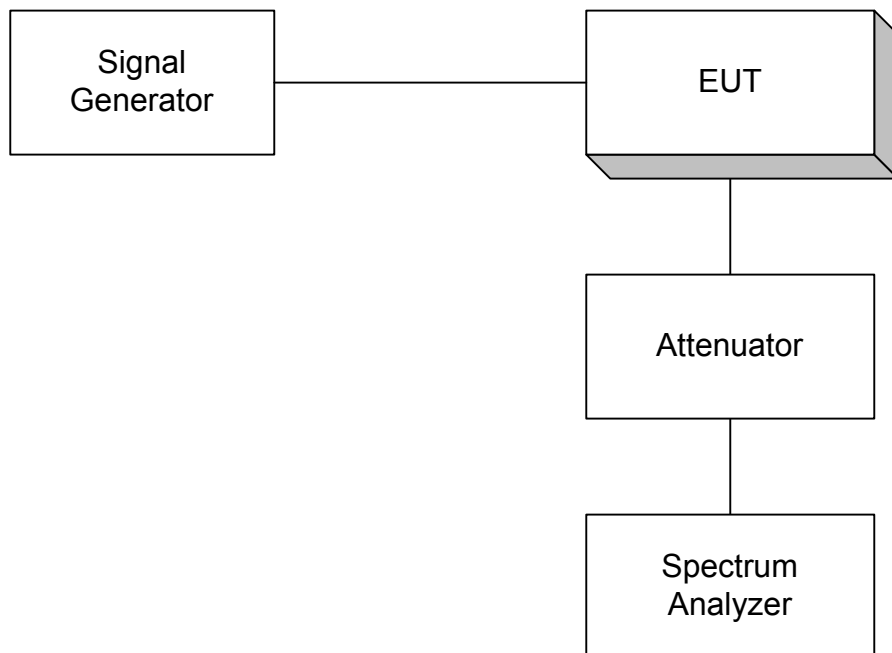


Para. No. 2.1049 - Occupied Bandwidth



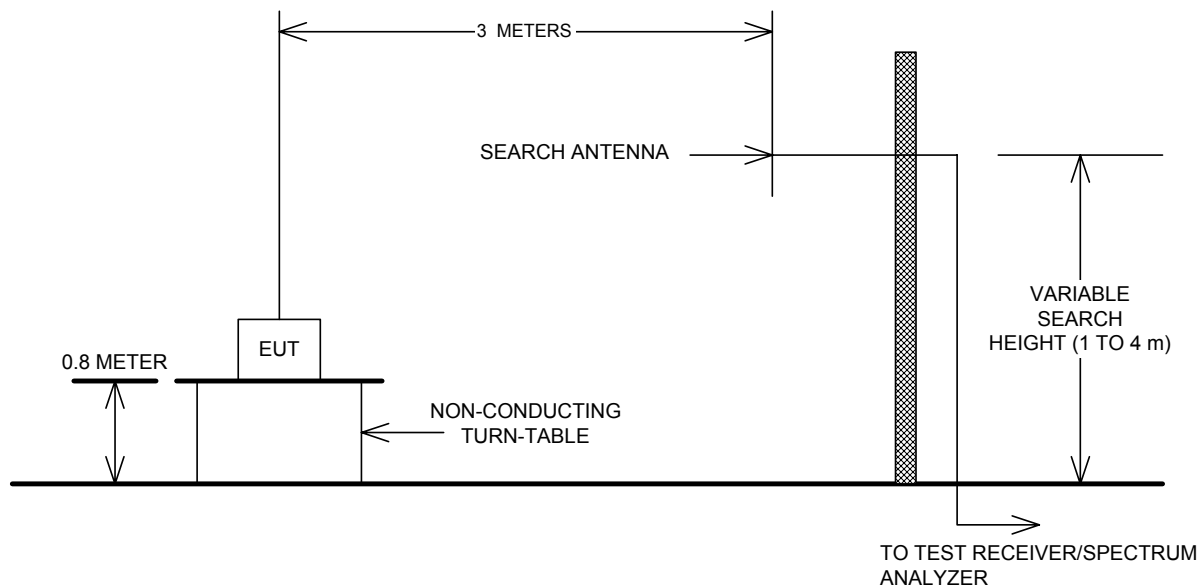
Nemko USA, Inc.		11696 Sorrento Valley Road, Suite F, San Diego, CA 92121 Phone (858) 755-5525 Fax (858) 452-1810	
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Para. No. 2.1051 - Spurious Emissions at Antenna Terminals



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Para. No. 2.1053 - Field Strength of Spurious Radiation



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Section 8. Test Equipment List

Radiated Emissions Test Equipment					
Client	Kyocera Wireless		EUT Name	AT Road Internet Location Mobile Device	
PAN #	24-071-KYO-R1		EUT Model	iLM2720	
<i>Device Type</i>	<i>Model #</i>	<i>MFG</i>	<i>Asset #</i>	<i>SN</i>	<i>Cal Due</i>
OATS #1 (North)					
Spectrum Analyzer	8566B	HP	357	2517A01757	10/26/04
Antenna, Ridged Guide	3115	EMCO	529	2505	3/30/04
Antenna, Ridged Guide	3116	EMCO	625	9611-2325	1/12/05
Preamplifier	8449A	HP	317	2749A00167	10/16/04
Dipole Set	3121C	EMCO	756	1215	8/27/04
Antenna, LPA	3146	EMCO	112	9101-2988	9/19/04
Antenna, Ridged Guide	3115	EMCO	752	9609-4943	12/19/04
Signal Generator	E8254A	Agilent	836	US41140229	11/6/04