



Test Report: 3W07344

Applicant: Dekolink Wireless Ltd.
16 Bazel St. Qiryat-Arieh
Petah-Tikva, 49510
Israel

Equipment Under Test: MW-CBDA-800A-1W60-PG2
(EUT) Bi-Directional Amplifier

FCC ID: OIWCBDA-PG21W60

In Accordance With: FCC Part 90

Tested By: Nemko Canada Inc.
303 River Road, R.R. 5
Ottawa, Ontario K1V 1H2

Authorized By: 
Kevin Carr, EMC Specialist

Date: 27 October 2003

Total Number of Pages: 18

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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 90, Subpart I & S.

<input checked="" type="checkbox"/>	New Submission	<input checked="" type="checkbox"/>	Production Unit			
<input type="checkbox"/>	Class II Permissive Change	<input type="checkbox"/>	Pre-Production Unit			
<table><tbody><tr><td>A</td><td>M</td><td>P</td></tr></tbody></table>	A	M	P	Equipment Code		
A	M	P				

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: _____ DATE: 24 October 2003
Glen Westwell, Wireless Technologist

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This report applies only to the items tested.

Summary Of Test Data

Name Of Test	Para. No.	Result
RF Power Output	2.1046	Complies
Occupied Bandwidth	2.1049	Complies
Spurious Emissions at Antenna Terminals	2.1051	Complies
Field Strength of Spurious Emissions	2.1053	Complies
Frequency Stability	2.1055	N/A

Footnotes For N/A's:

All Tests were conducted with the AGC circuitry enabled, and verified with AGC disabled. The EUT is an f1-f1 amplifier, as such frequency stability was not performed.

Deviation

A QAM signal was substituted for IDen Modulation

Indoor Temperature: 23°C
 Humidity: 15%

Outdoor Temperature: 7°C
 Humidity: 80%

Section 2. General Equipment Specification

Manufacturer: Dekolink Wireless Ltd.

Model No. MW-CBDA-800A-1W60-PG2

Serial No: 03063977

Date Received In Laboratory: 15 Oct 2003

Nemko Identification No.: #1

Supply Voltage: 120VAC, 60Hz

Frequency Range: Downlink: 929-942MHz
Uplink: 898-904 MHz

RF Output Power (Rated): Downlink: 27.0dBm
Uplink: 27.0dBm

Modulation: iDen

Emission Designator: G7W

Section 3. RF Power Output**Para. No.: 2.1046****Test Performed By: Glen Westwell****Date of Test: 17 Oct 2003****Minimum Standard:** Para. No. 90.205(a).**Test Results:** Complied.

The maximum RF output power is within ± 1 dB of the manufacturer's rating. The RF output power is de-rated according to the number of channels via AGC and is equal to $P_{max} - 10\log N$.

 $P_{max} = \text{Maximum RF Output Power}$ $N = \text{Number Of Channels}$

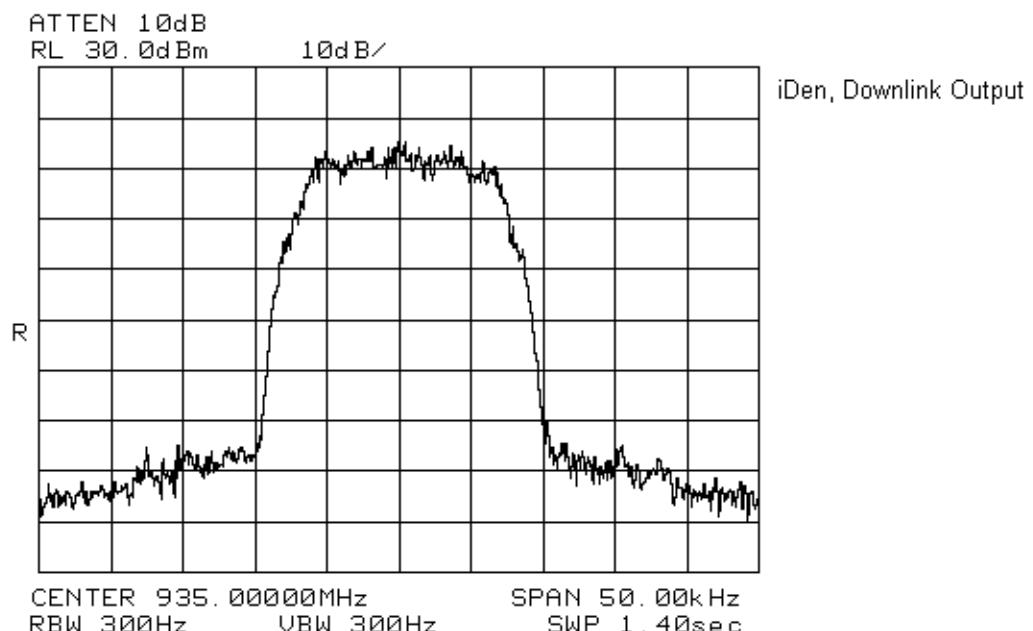
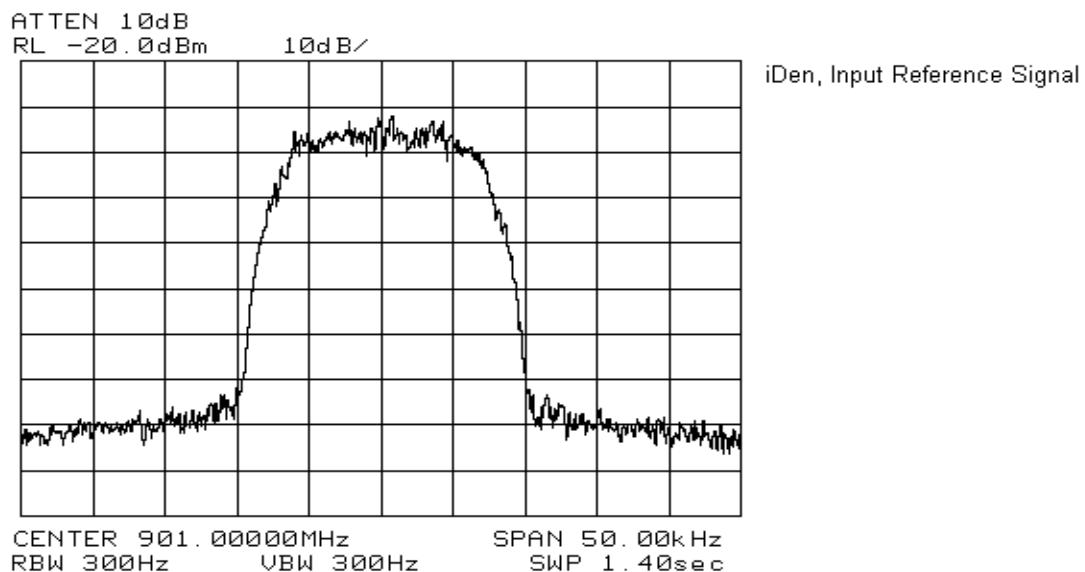
Frequency (MHz)	Measured Power (dBm)	Rated Power (dBm)
898	26.6	27.0
901	27.4	27.0
904	27.1	27.0
929	26.5	27.0
935	27.3	27.0
942	27.1	27.0

Section 4. Occupied Bandwidth**Para. No.: 2.1049**

Test Performed By: Glen Westwell	Date of Test: 17 Oct 2003
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Minimum Standard: Para. No. 90.210**Test Results:** Complied.**Measurement Data:** See attached graphs.

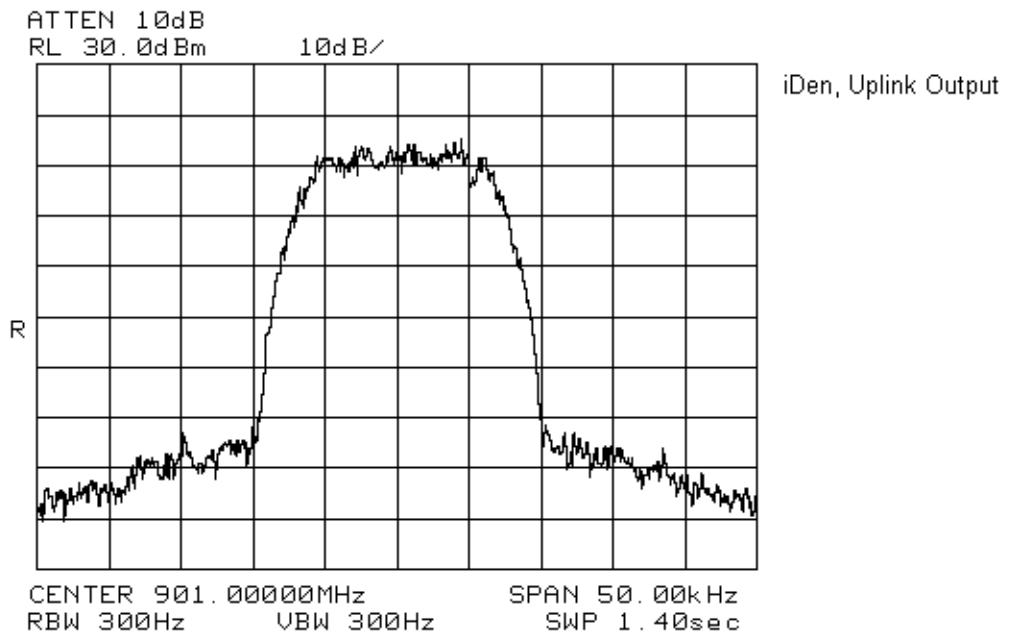
The occupied bandwidth was measured by comparison of input to the output signal. This was done in order to determine if there was any degradation to the output signal due to the amplification through the repeater.

EQUIPMENT: MW-CBDA-800A-1W60-PG2

Nemko Canada Inc.

FCC PART 90, SUBPART S
SMR Bi-Directional Amplifier
PROJECT NO.:3W07344

EQUIPMENT: MW-CBDA-800A-1W60-PG2



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FCC PART 90, SUBPART S
SMR Bi-Directional Amplifier
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EQUIPMENT: MW-CBDA-800A-1W60-PG2

Section 5. Spurious Emissions at Antenna Terminals

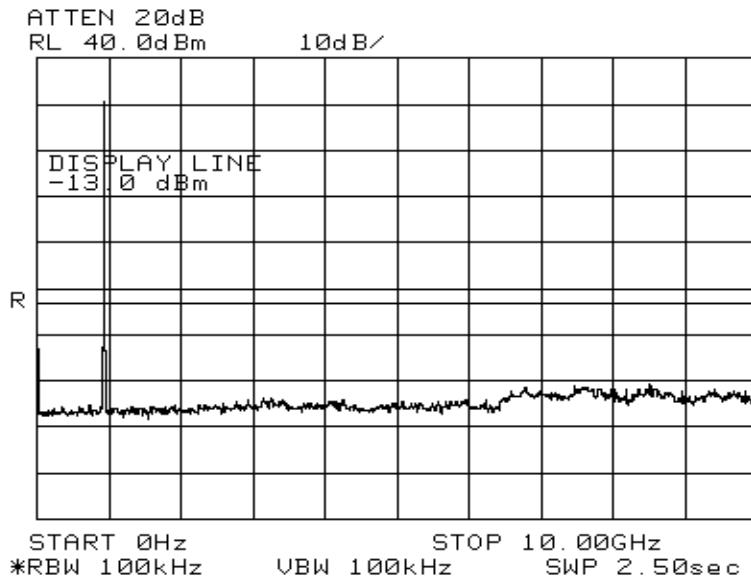
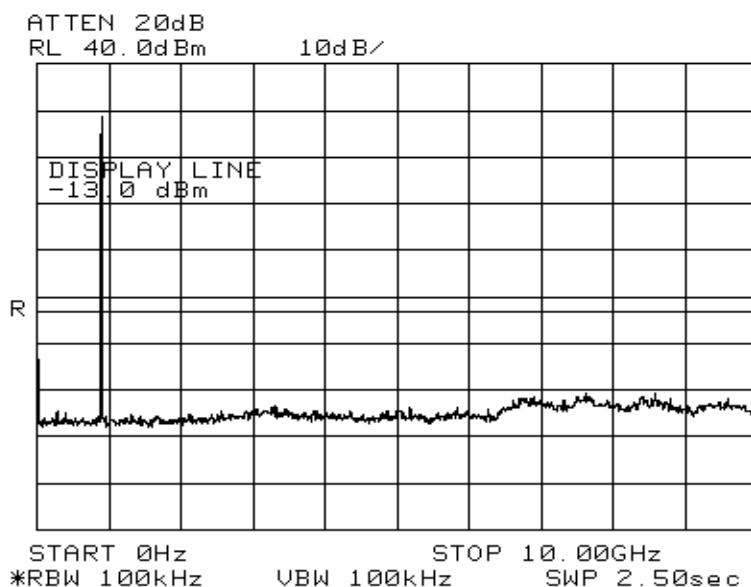
Para. No.: 2.1051

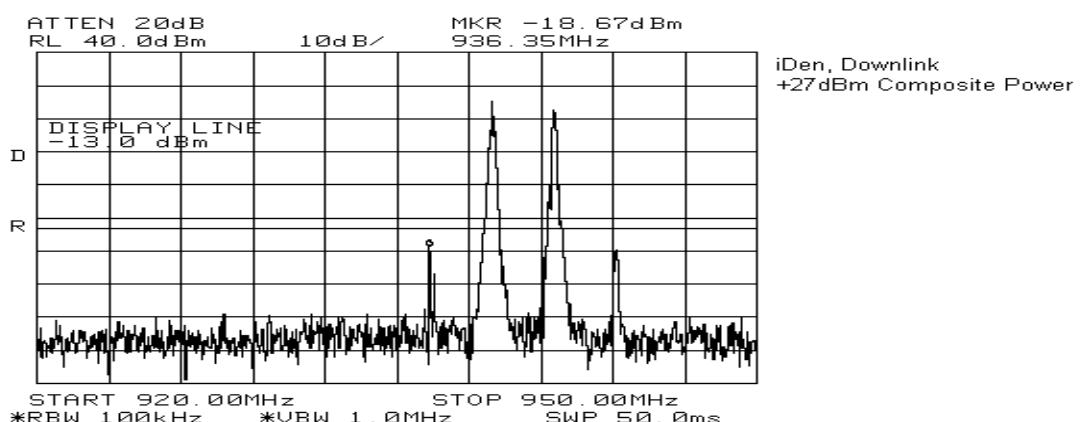
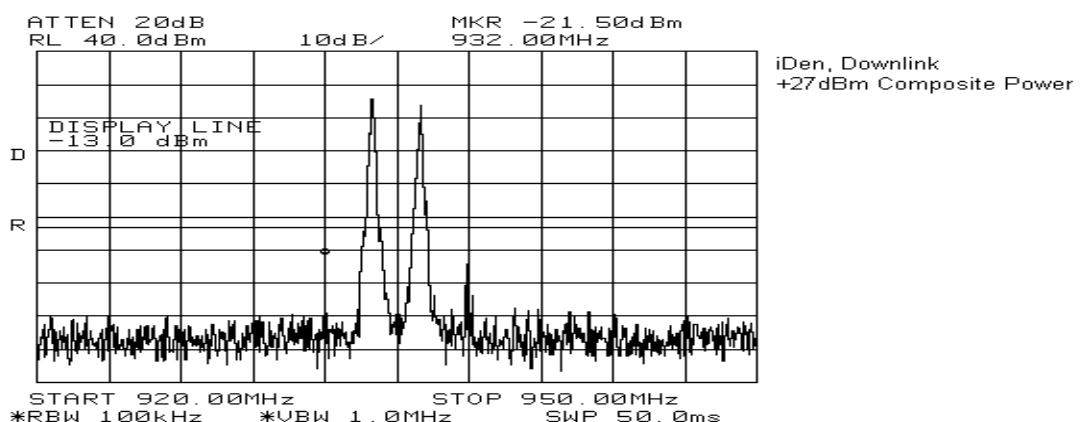
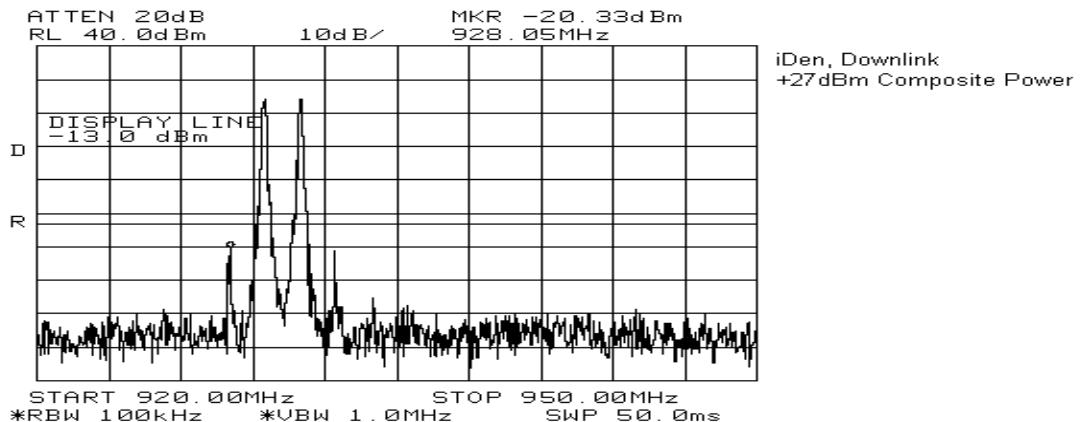
Test Performed By: Glen Westwell	Date of Test: 17 Oct 2003
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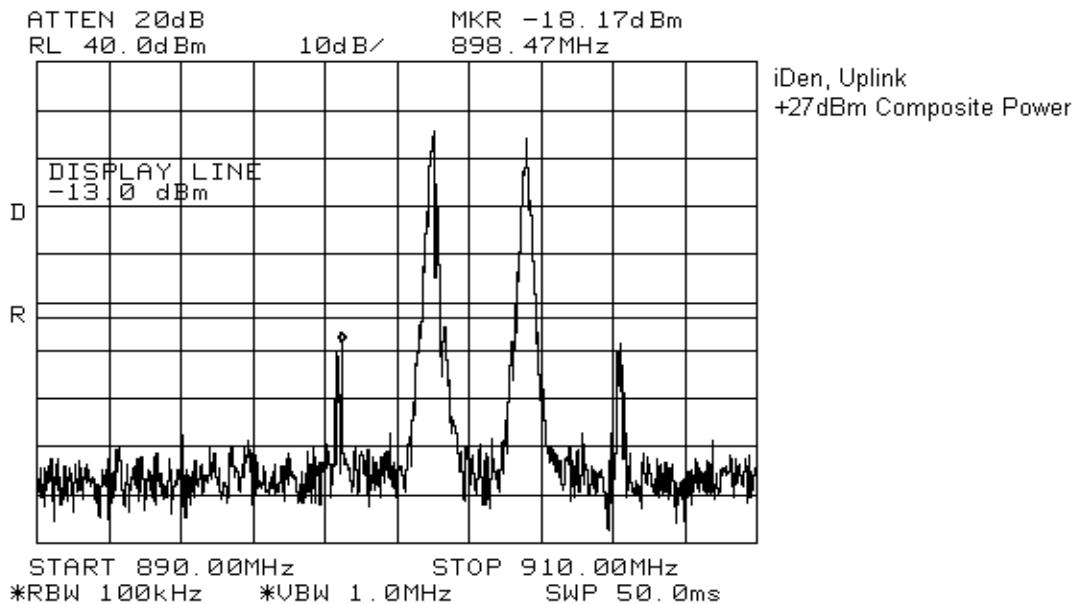
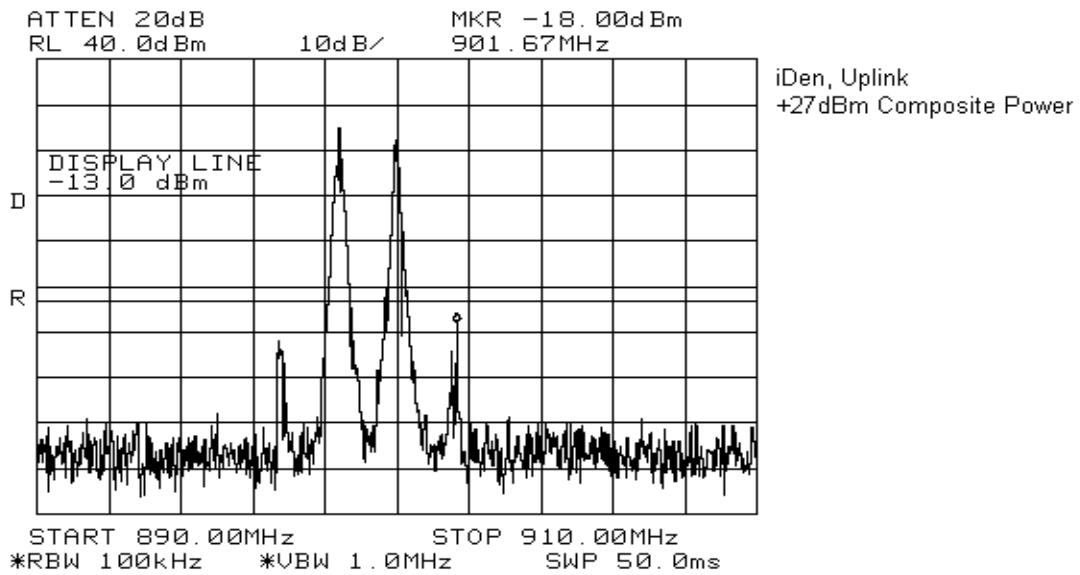
Minimum Standard: -13 dBm

Test Results: Complied.

Measurement Data: See attached graph(s).

EQUIPMENT: MW-CBDA-800A-1W60-PG2Conducted Spurious
DownlinkConducted Spurious
Uplink

EQUIPMENT: MW-CBDA-800A-1W60-PG2

EQUIPMENT: MW-CBDA-800A-1W60-PG2

Nemko Canada Inc.

FCC PART 90, SUBPART S
SMR Bi-Directional Amplifier
PROJECT NO.:3W07344

EQUIPMENT: MW-CBDA-800A-1W60-PG2

Section 6. Field Strength of Spurious Emissions

Para. No.: 2.1053

Test Performed By: Glen Westwell	Date of Test: 20 Oct 2003
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Minimum Standard: Para. No. 90.210

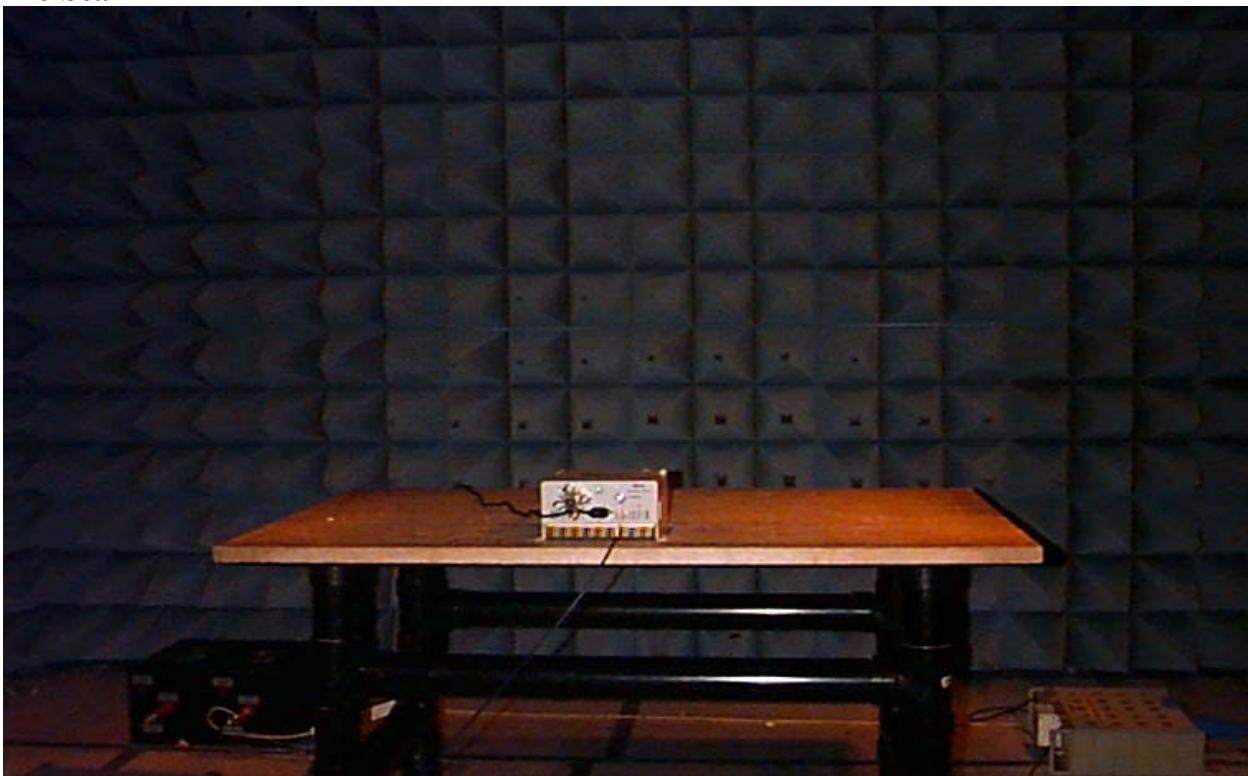
Test Results: Complied.
No emissions detected.

Measurement Data: All emissions were searched to the 10th harmonic.

EQUIPMENT: MW-CBDA-800A-1W60-PG2

Photographs of Test Setup

Pre-Scan

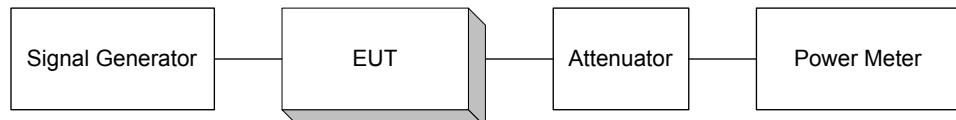
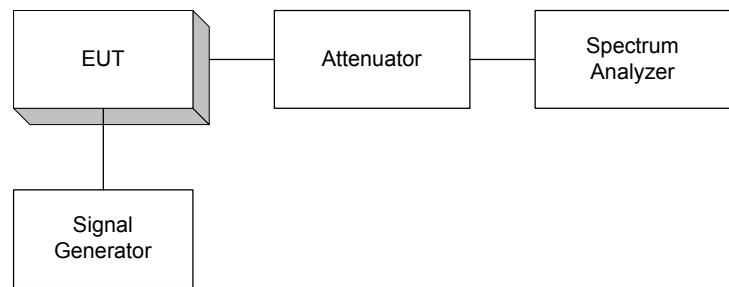
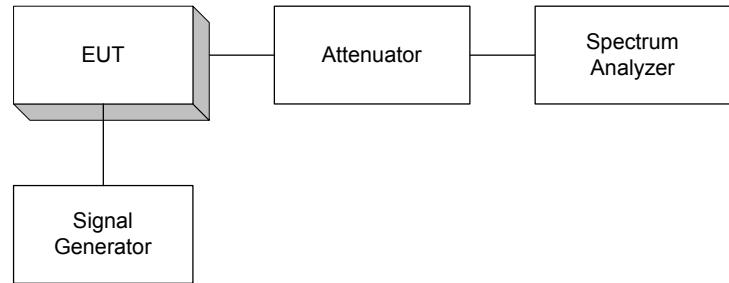


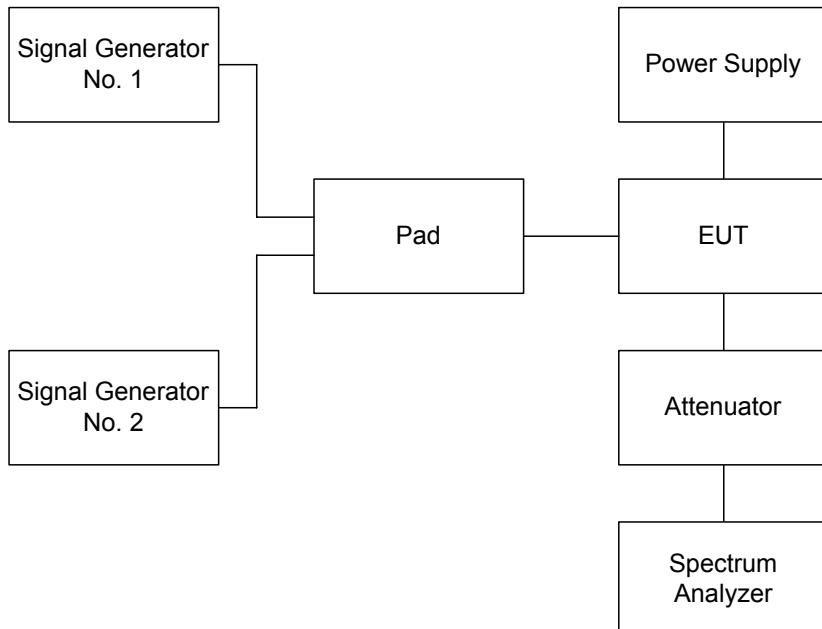
OATS



*EQUIPMENT: MW-CBDA-800A-1W60-PG2***Section 7. Test Equipment List**

CAL CYCLE	EQUIPMENT	MANUFACTURER	MODEL	SERIAL	LAST CAL.	NEXT CAL.
1 Year	Spectrum Analyzer	Hewlett Packard	8564E	FA001367	13 May 03	13 May 04
1 Year	Signal Generator	Rhode & Schwarz	SM1Q03E	FA001269	06 Dec 02	06 Dec 03
1 Year	Signal Generator	Rohde & Schwarz	SM1Q03	FA001091	25 Sep 03	25 Sep 04
1 Year	RF Millivoltmeter	Rohde & Schwarz	URV5	FA000420	20 May 03	20 May 04
1 Year	Insertion Unit	Rohde & Schwarz	URV5-Z4	FA000905	10 Apr 03	10 Apr 04
1 Year	Power Sensor	Hewlett Packard	8487A	FA001741	28 Mar 03	28 Mar 04
1 Year	Power Meter	Hewlett Packard	E4418B	FA001413	08 May 03	08 May 04
1 Year	RF AMP	JCA	4-8 GHz	FA001497	18 June 03	18 June 04
1 Year	RF AMP	JCA	2-4 GHz	FA001496	18 June 03	18 June 04
1 Year	RF AMP	JCA	1-2 GHz	FA001498	18 June 03	18 June 04
1 Year	Spectrum Analyzer	Hewlett-Packard	8566B	FA001309	June. 05/03	June. 05/04
1 Year	Spectrum Analyzer Display	Hewlett-Packard	85662A	FA001309	June. 05/03	June. 05/04
NCR	Bilog	Schaffner	CBL6112B	FA001504	NCR	NCR
1 Year	Horn Antenna #2	EMCO	3115	FA000825	Dec. 09/02	Dec. 09/03

Section 8. Block Diagrams**Para. No. 2.1046 - R.F. Power Output****Para. No. 2.1049 - Occupied Bandwidth****Para. No. 2.1051 - Spurious Emissions at Antenna Terminals**

*EQUIPMENT: MW-CBDA-800A-1W60-PG2***Para. No. 2.1051 - Spurious Emissions at Antenna Terminals****Para. No. 2.1053 - Field Strength of Spurious Radiation****TIA/EIA 603**

Effective Radiated Power
Spurious Emissions

