



Test Report:

2W06066

Applicant:

Dekolink Wireless LTD.
16 Bazel St. Qiryat-Arieh
Petah-Tikva, 49510
Israel

**Equipment Under Test:
(EUT)**

MW FBDA-800AB-50W-DIV
Fiber Optic Repeater System

FCC ID:

OIWFBDA800AB50WD

In Accordance With:

FCC Part 22, Subpart H

Tested By:

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

A handwritten signature in blue ink, appearing to read 'Glen Westwell', is positioned above the 'Authorized By' field.

Authorized By:

Glen Westwell, Wireless Technologist

Date:

12 June 2002

Total Number of Pages:

23

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EQUIPMENT: MW FBDA-800AB-50W-DIV

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 22, Subpart H.

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.

The EUT is a repeater which connects to a base station, therefore only the Downlink direction was tested.



TESTED BY: _____
Kevin Carr, EMC/EMI Specialist

DATE: 12 June 2002

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.

Summary Of Test Data

Name Of Test	Para. No.	Result
RF Power Output	2.1046	Complied
Audio Frequency Response	2.1047	N/A
Audio Low-Pass Filter Response	2.1047	N/A
Modulation Limiting	2.1047	N/A
Occupied Bandwidth	2.1049	Complied
Spurious Emissions at Antenna Terminals	2.1051	Complied
Field Strength of Spurious Emissions	2.1053	Complied
Frequency Stability	2.1055	Complied
Transient Frequency Behavior	—	N/A

Note: The EUT is a repeater which connects to a base station therefore only the Downlink direction was tested.

Indoor Temperature: 23°C
 Humidity: 37%

Outdoor Temperature: 19.7°C
 Humidity: 85%

Section 2. General Equipment Specification

Manufacturer:	Dekolink Wireless LTD.
Model No.:	MW FBDA-800AB-50W-DIV
Serial No.:	02051001
Date Received In Laboratory:	5 June 2002
Nemko Identification No.:	1
Supply Input Voltage:	120 VAC, 50 Hz
Frequency Range:	Downlink: 869-894 MHz
RF Output (Rated):	Downlink, CDMA: 10Watts, 40dBm Downlink, TDMA: 8.5Watts, 39.3dBm Downlink, AMPS: 8.5Watts, 39.3dBm
Emission Designator	CDMA, DXW TDMA, F9W AMPS, F8W

Note: The EUT is a repeater which connects to a base station therefore only the Downlink direction was tested.

Section 3. RF Power Output

Para. No.: 2.1046

Test Performed By: Kevin Carr	Date of Test: 10 June 2002
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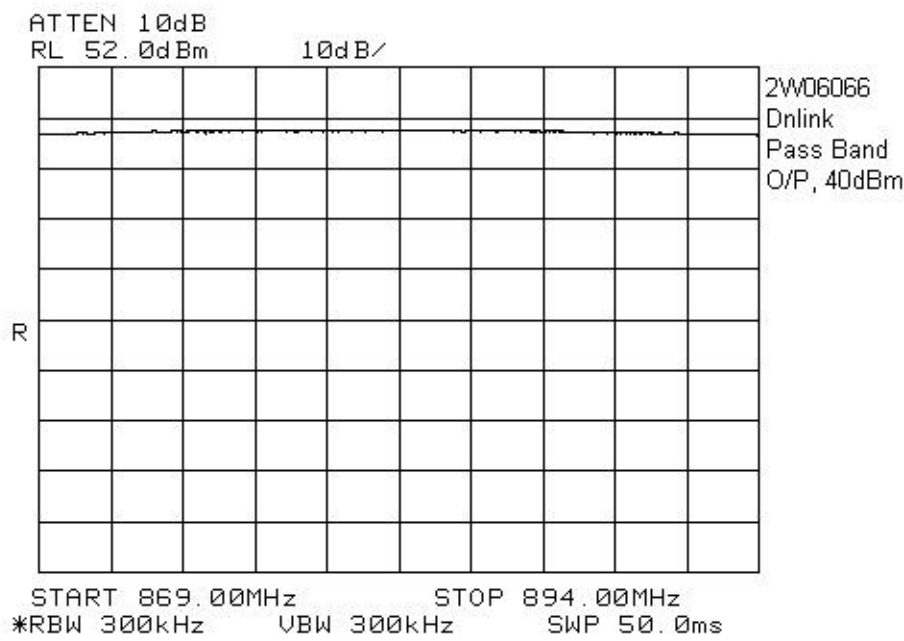
Minimum Standard: 22.913(a)

Test Results: Complied.

Measurement Data: See Attached Graphs. 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} = Maximum RF Output Power
N = Number Of Channels

EQUIPMENT: MW FBDA-800AB-50W-DIV



Section 4. Occupied Bandwidth

Para. No.: 2.1049

Test Performed By: Kevin Carr	Date of Test: 10 June 2002
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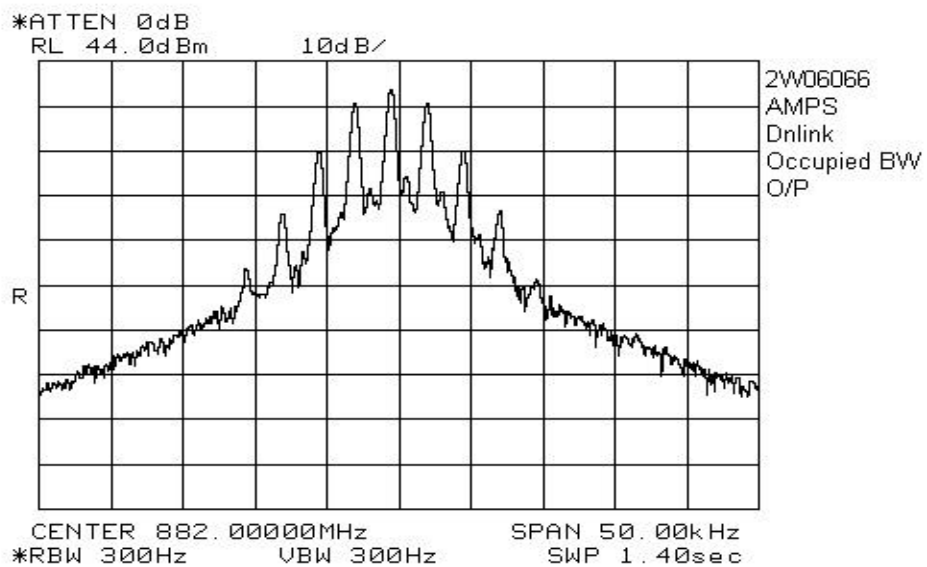
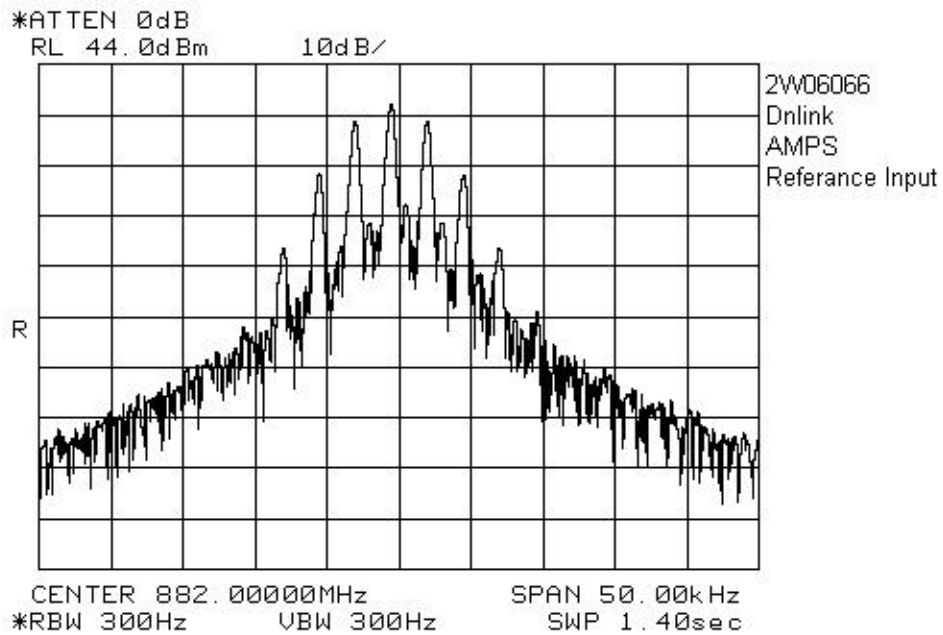
Minimum Standard: 22.917, Input vs Output

Test Results: Complied.

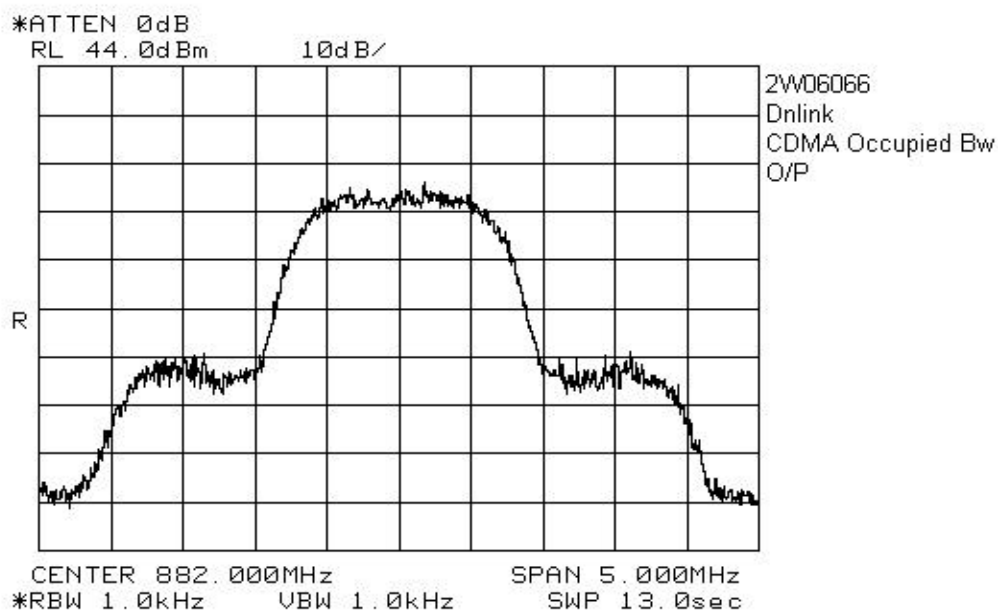
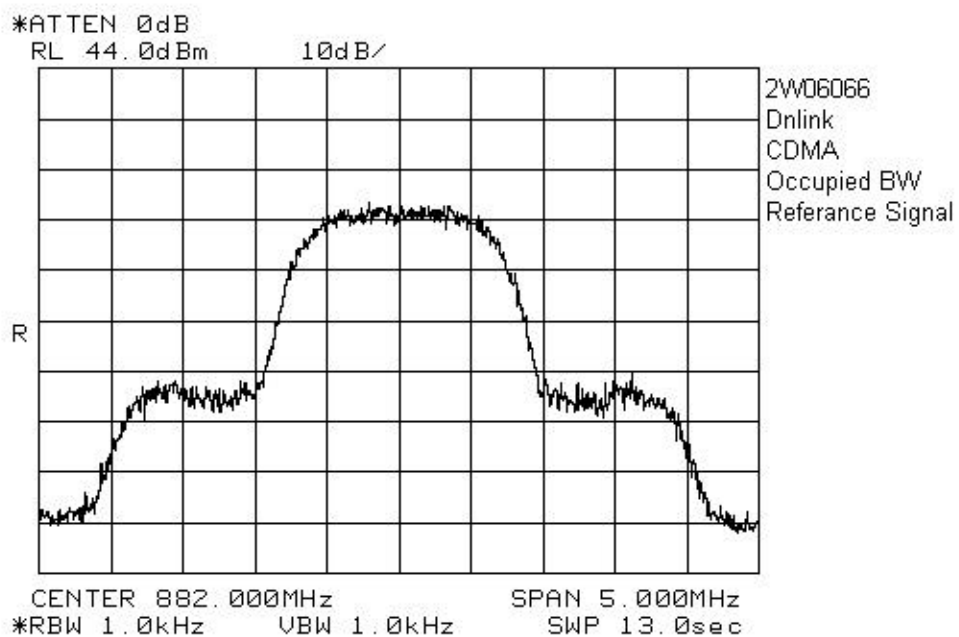
Measurement Data: See attached graphs.

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.

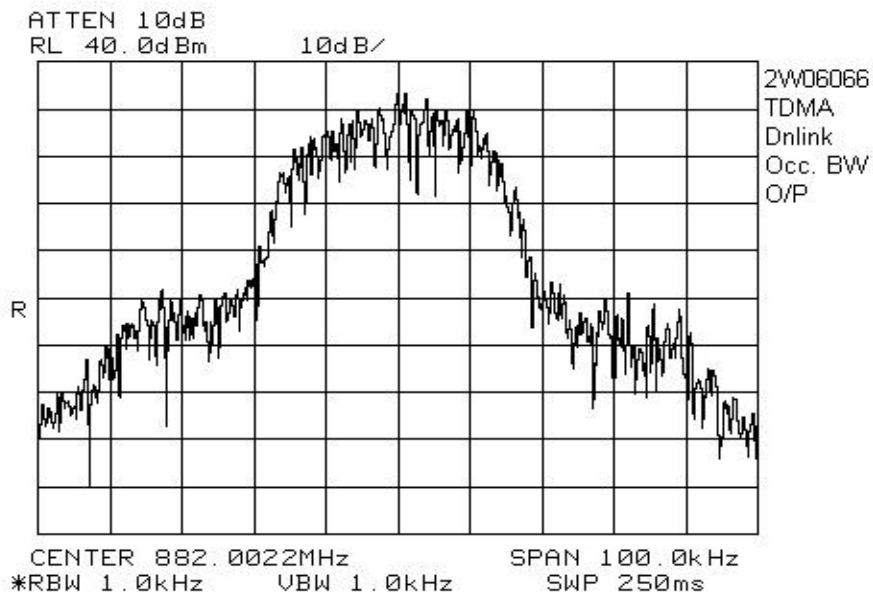
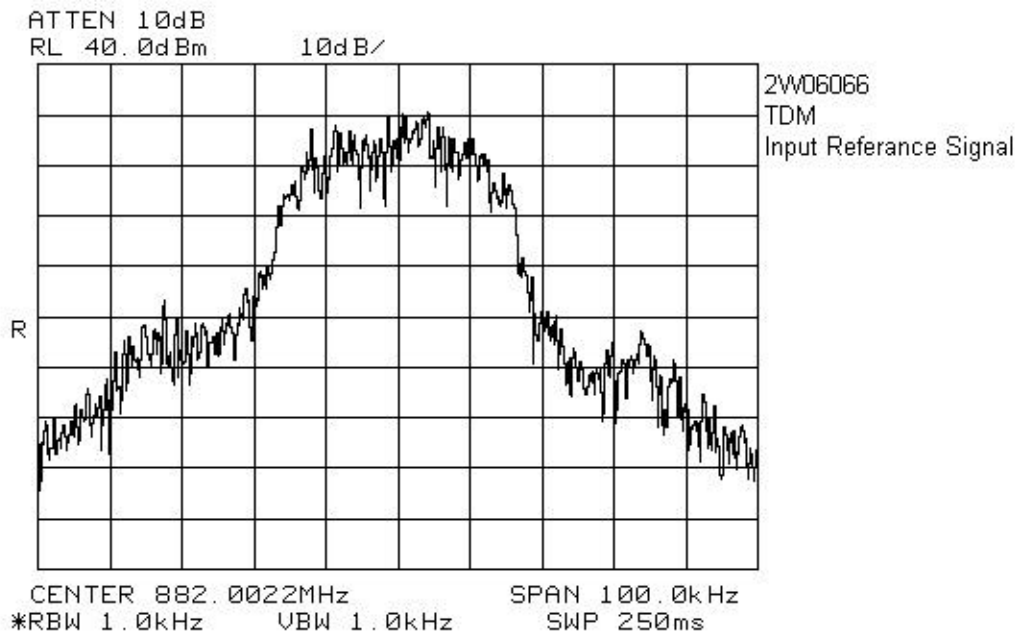
EQUIPMENT: MW FBDA-800AB-50W-DIV



EQUIPMENT: MW FBDA-800AB-50W-DIV



EQUIPMENT: MW FBDA-800AB-50W-DIV



Section 5. Spurious Emissions at Antenna Terminals

Para. No.: 2.1051

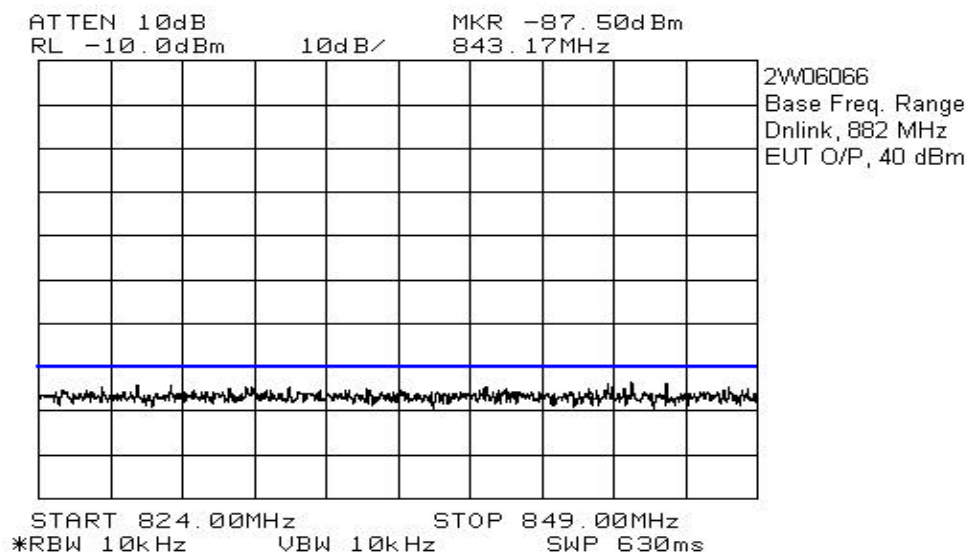
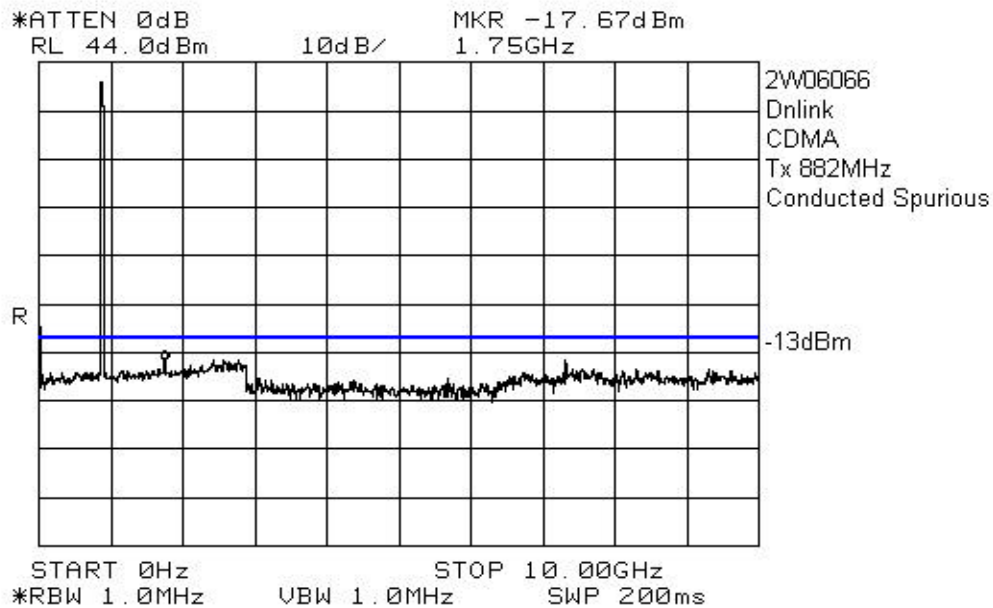
Test Performed By: Kevin Carr	Date of Test: 10 June 2002
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Minimum Standard: 22.917(e); -13 dBm
 (f); -80dbm, Conducted

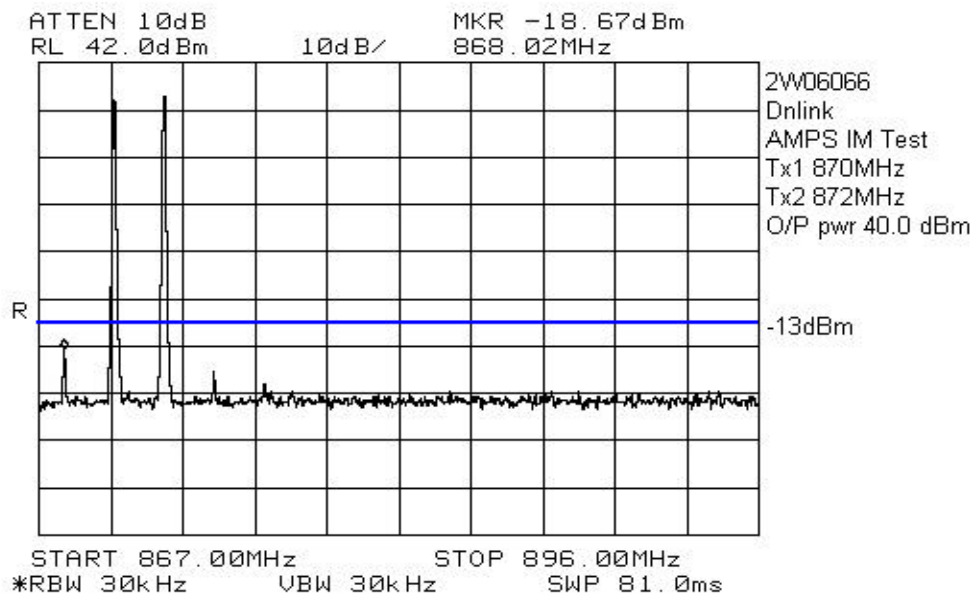
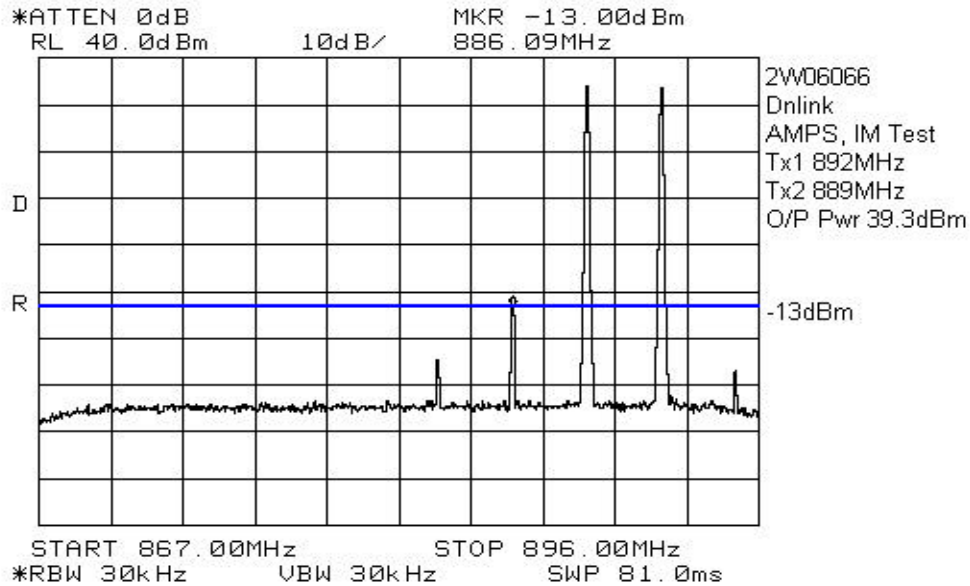
Test Results: Complied.

Measurement Data: See Attached Graphs. Only worst case has been reported.

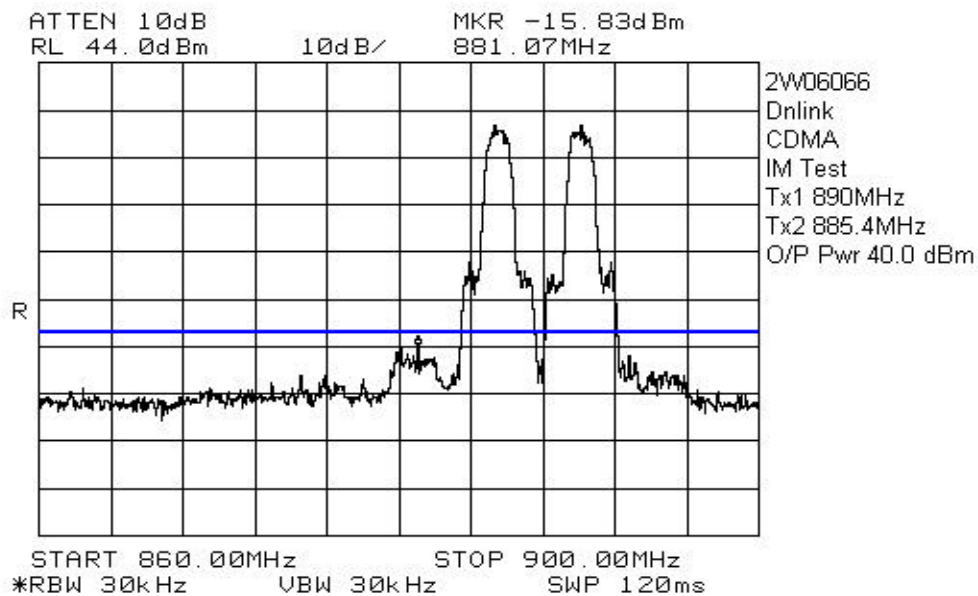
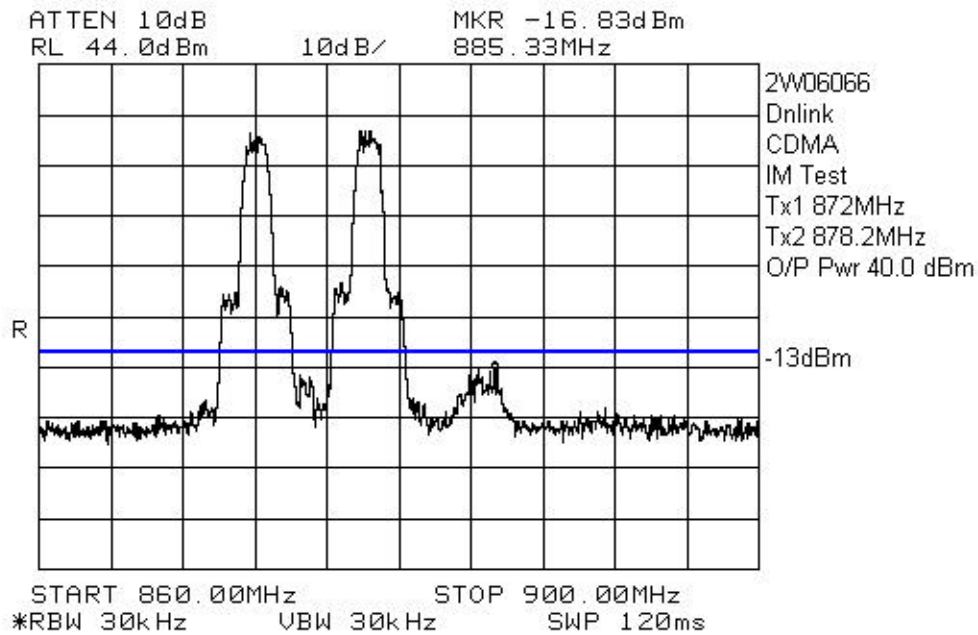
Spurious Emissions-Conducted



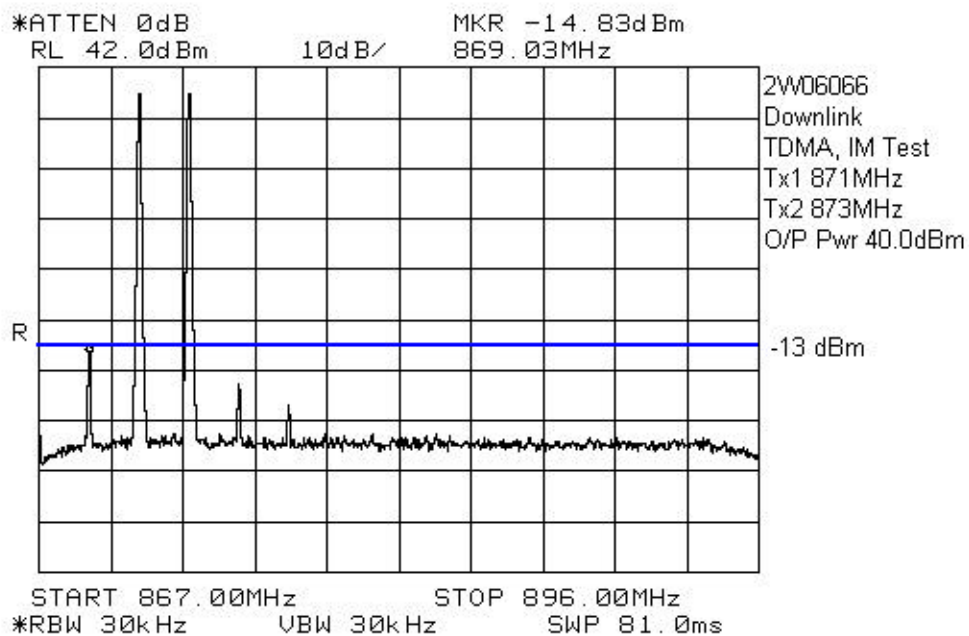
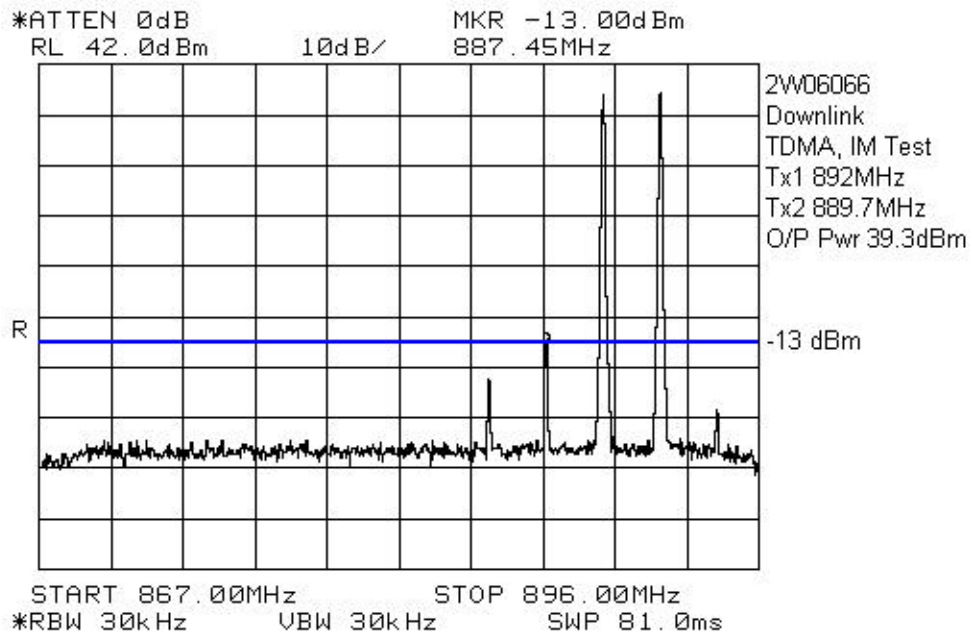
3rd Order Intermodulation Plots



EQUIPMENT: MW FBDA-800AB-50W-DIV



EQUIPMENT: MW FBDA-800AB-50W-DIV



Section 6. Field Strength of Spurious Emissions

Para. No.: 2.1053

Test Performed By: Kevin Carr	Date of Test: 11 June 2002
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Minimum Standard: 22.917(e), -13dBm

Test Results: Complied.

Measurement Data: See attached data.

EQUIPMENT: MW FBDA-800AB-50W-DIV

Test Data-Field Strength of Spurious Emissions

Test Distance (meters) : 3		Range: A		Receiver: HP8564E			RBW(kHz): 1000		Detector: Peak	
No.	Freq. (MHz)	Ant. *	Pol (V/H)	RCVD Signal (dBμV)	Conv. Factor (dB)**	Amp. Gain (dB)** *	Dist. Corr (dB)	Signal Strength (dBm)	Limit (dBm)	Margin (dB)
1	1764	SSV	V	92.8	-116.1			-23.3	-13	10.3
2	1764	SSH	H	78.3	-116.7			-38.4	-13	25.4
3	2646	SSV	V	73.3	-123			-49.7	-13	36.7
4	2646	SSH	H	63.5	-123.8			-60.3	-13	47.3
5	3528	SSV	V	63	-119.9			-56.9	-13	43.9
6	3528	SSH	H	62	-121.9			-59.9	-13	46.9

Notes:

B/C = Biconical, B/L = Biconilog, L/P = Log-Periodic, H = Horn, D/P = Dipole

* Re-measured using dipole antenna.

** Includes cable loss when amplifier is not used.

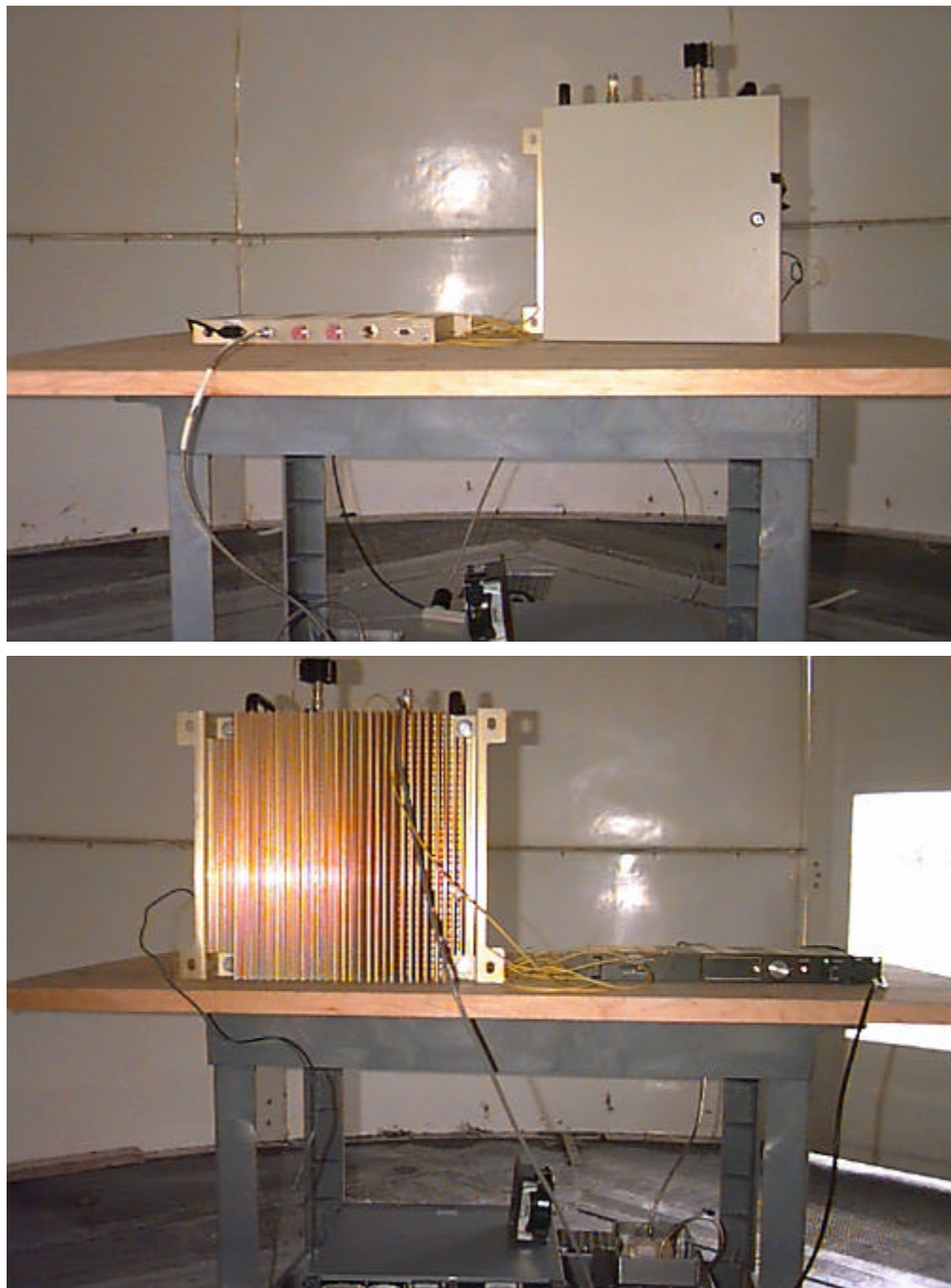
*** Includes cable loss.

() Denotes failing emission level.

N.D. = Not Detected

All spurious and harmonic emissions to the 10th harmonic for the downlink were searched.

Radiated Spurious Emissions-Photograph



Section 7. Frequency Stability

Para. No.: 2.1055

Test Performed By: Kevin Carr	Date of Test: 11 June 2002
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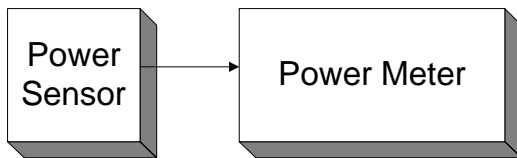
Minimum Standard: 22.355, 1.5ppm

Test Results: Complied. The maximum frequency drift was 0Hz.

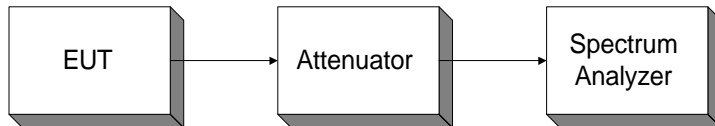
Measurement Data: Temperature Range : -20Deg. C to 50 Deg. C, Ref. Client
Documentation
Downlink, Test Frequency: 882MHz

Section 8. Block Diagrams

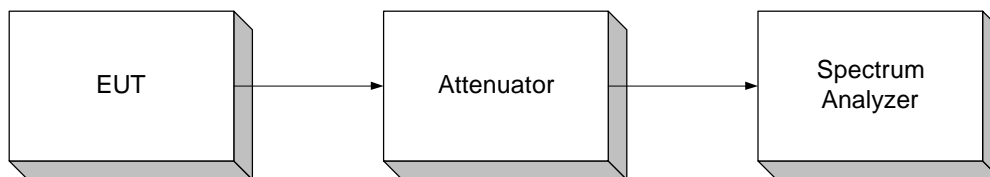
Para. No. 2.1046 - R.F. Power Output



Para. No. 2.1049 - Occupied Bandwidth

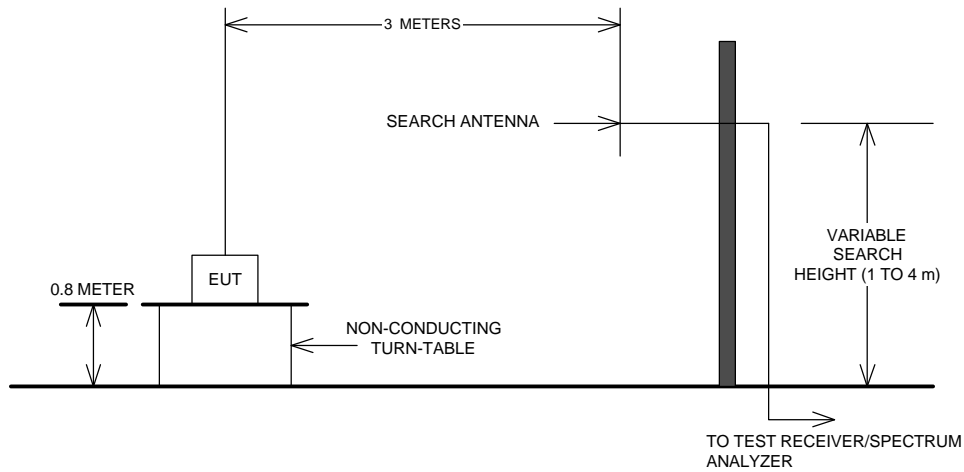


Para. No. 2.1051 - Spurious Emissions at Antenna Terminals

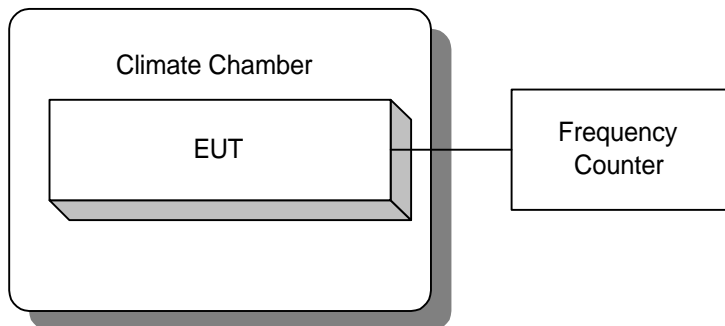


EQUIPMENT: MW FBDA-800AB-50W-DIV

Para. No. 2.1053 - Field Strength of Spurious Radiation



Para. No. 2.1055 - Frequency Stability



EQUIPMENT: MW FBDA-800AB-50W-DIV

Section 9. Test Equipment List

CAL CYCLE	EQUIPMENT	MANUFACTURER	MODEL	SERIAL	LAST CAL.	NEXT CAL.
1 Year	Spectrum Analyzer	Hewlett Packard	8564E	3846A01407	Mar. 6/02	Mar. 6/03
1 Year	Climate Chamber	Thermotron	SM-16C	15649-S	COU	COU
1 Year	Attenuator	Narda	768-20	9507	Oct. 12/00	Oct. 12/01
1 Year	Attenuator	Narda	768-10	9709	COU	COU
1 Year	Attenuator	Narda	769-20	4153	COU	COU
1 Year	Horn Antenna	EMCO #2	3115	4336	Dec. 1/01	Dec. 1/02
1 Year	50 ohm Combiner Pad	Mini Circuits	ZA3PD-2	9746	Oct. 7/99	Oct. 7/00
3 Year	Signal Generator	Rohde & Schwarz	SM1Q03	DE22004	Sept. 18/00	Sept. 18/03
3 Year	Signal Generator	Rhode & Schwarz	SM1Q03E	FA001269	Oct. 4/99	Oct. 4/02
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
1 Year	Frequency Counter	Hewlett Packard	HP5350A	2444A00135	11 Jan 2002	11 Jan 2003
	Power Supply	Hewlett Packard	6274B	2552A-08243	NCR	NCR
1 Year	Notch Filter	K&L	3TNF-500/1000	137	Aug. 23/99	Aug. 23/00
	High Pass Filter (1.7GHz)	K&L	3DH1-2000	FA001434	COU	COU
1 Year	Power Meter	Hewlett Packard	E4418B	FA001413	Sept. 27/01	Sept. 27/02
COU	Pre-Amp	H.D. Communications	12594	1002	COU	COU
COU	Pre-Amp	H.D. Communications	12594	1001	COU	COU
COU	Isolator	Narda	CIC01A8010-02	FA001580	COU	COU
COU	Isolator	Narda	CIC01A8010-02	FA001579	COU	COU
1 Year	Power Sensor	Hewlett Packard	8487A	FA001419	Sept. 27/01	Sept. 27/02

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