



Test Report:

2W04824

Applicant:

Spotwave Wireless Inc.
3701 Carling Avenue
Ottawa, Ontario
K2H 8S2

Equipment Under Test:
(EUT)

SpotCell 100 "B"
Low Power Cellular Band Repeater

In Accordance With:

FCC Part 22, Subpart H

Tested By:

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

A handwritten signature in blue ink that reads "J. Harrington".

Authorized By:

J. Harrington, RF Group Manager

Date:

15 March 2002

Total Number of Pages:

47

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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 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.

See "Summary of Test Data".

TESTED BY: Glen Westwell, Wireless Technologist

DATE: 11 March 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	Complies
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	Complies
Spurious Emissions at Antenna Terminals	2.1051	Complies
Field Strength of Spurious Emissions	2.1053	Complies
Frequency Stability	2.1055	Complies
Transient Frequency Behavior	—	N/A

Note:

This device is certified by FCC for band “A” under FCC I.D # P3YSPOTCELL0001.

Indoor Temperature: 22 °C
 Humidity: 31 %

Outdoor Temperature: 10 °C
 Humidity: 38 %

Section 2. General Equipment Specification**Manufacturer:** Spotwave Wireless Inc.**Model No.:** SpotCell 100 "B"**Serial No.:** DDU S/N A10051
SCU S/N B00062**Date Received In Laboratory:** Feb. 25, 2002**Nemko Identification No.:** DDU #1
SDU #2**Supply Input Voltage:** 120 VAC**Frequency Range:** Downlink: 880 – 890 MHz
891.5 – 894 MHz

Uplink: 835 – 845 MHz
846.5 – 849 MHz**RF Output (Rated):** Downlink: 0dBm

Uplink: 20 dBm**Antenna Gain (Integral):** DDU (Uplink) = 10dBi
SCU (Downlink) = 3dBi**Emission Designator:** CDMA DXW
TDMA F9W
AMPS F8W

Section 3. RF Power Output**Para. No.: 2.1046**

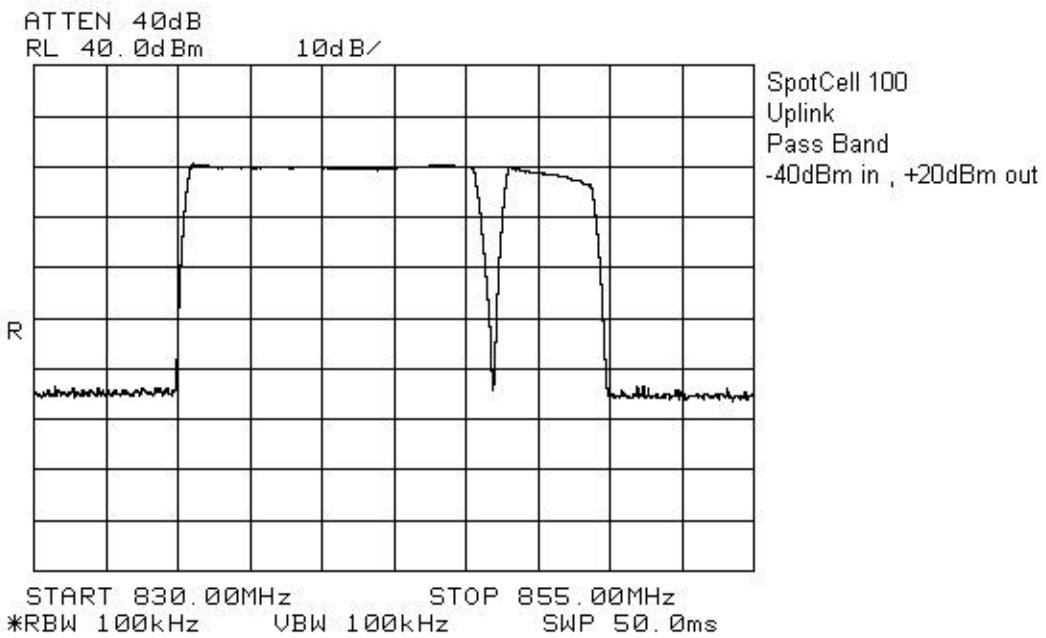
Test Performed By: Glen Westwell	Date of Test: 12 Mar. 2002
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Minimum Standard: 22.913(a)**Test Results:** Complies.

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

Pmax = Maximum RF Output Power

N = Number Of Channels

EQUIPMENT: SpotCell 100, Low Power Cellular Band Repeater

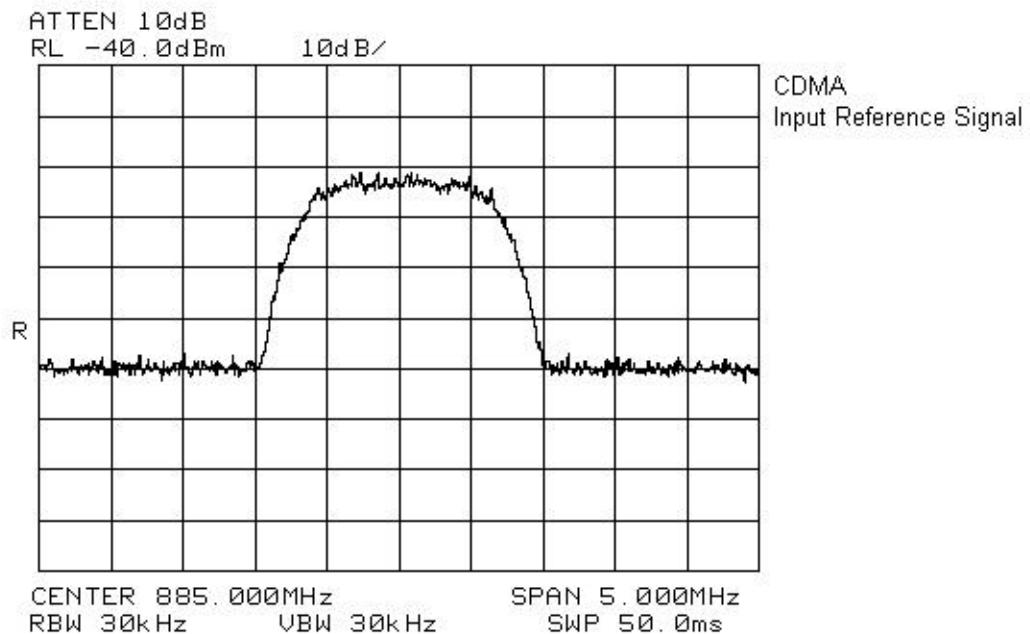
EQUIPMENT: SpotCell 100, Low Power Cellular Band Repeater

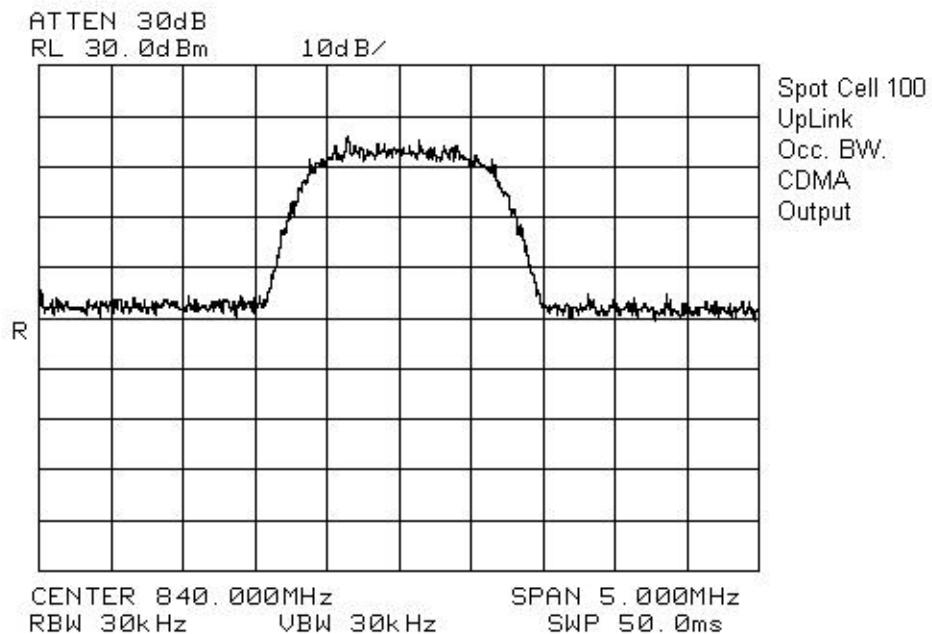
Section 4. Occupied Bandwidth**Para. No.: 2.1049**

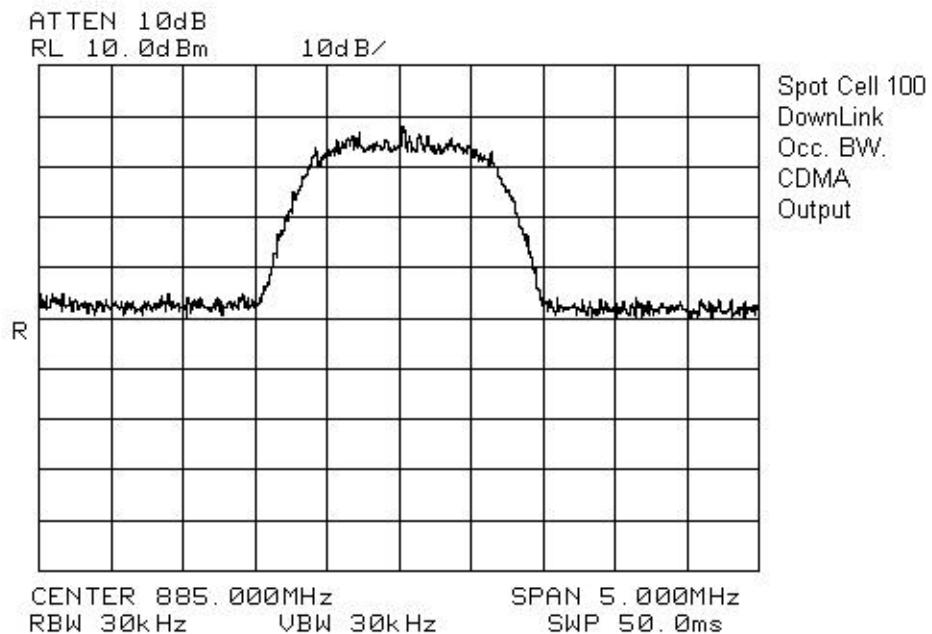
Test Performed By: Glen Westwell	Date of Test: 12 Mar. 2002
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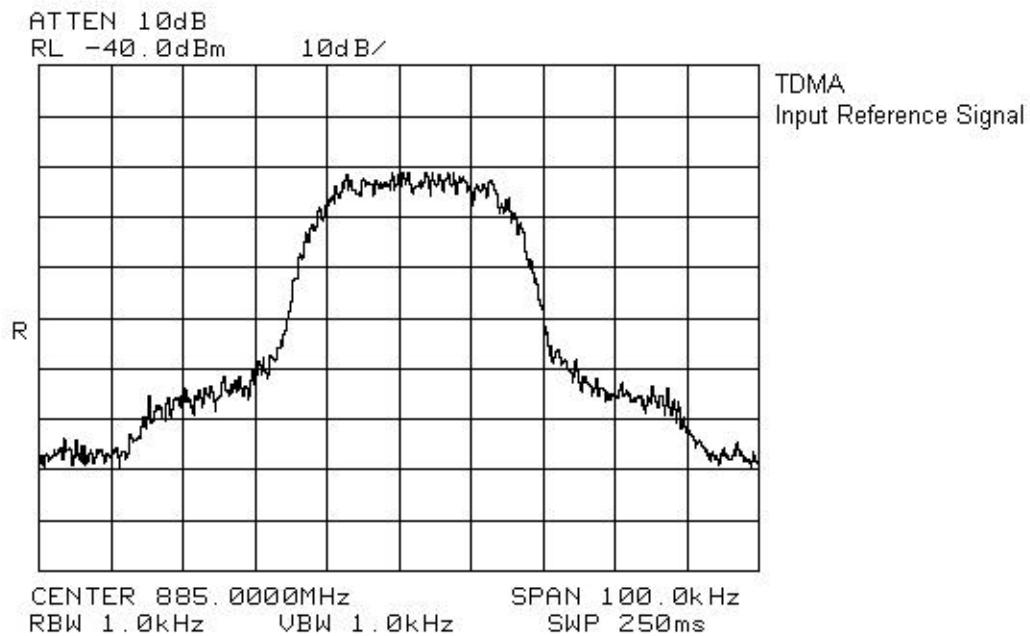
Minimum Standard: 22.917**Test Results:** Complies.**Measurement Data:** See attached graphs.

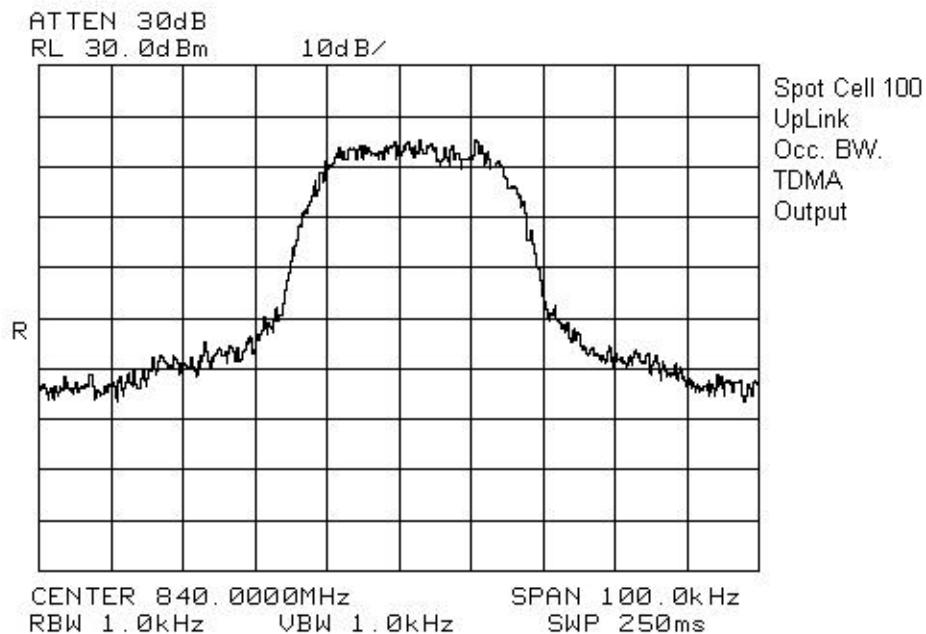
The occupied bandwidth was measured by comparison of input to the output signal. This was done in order to determine if there was any degradation to the output signal due to the amplification through the repeater.

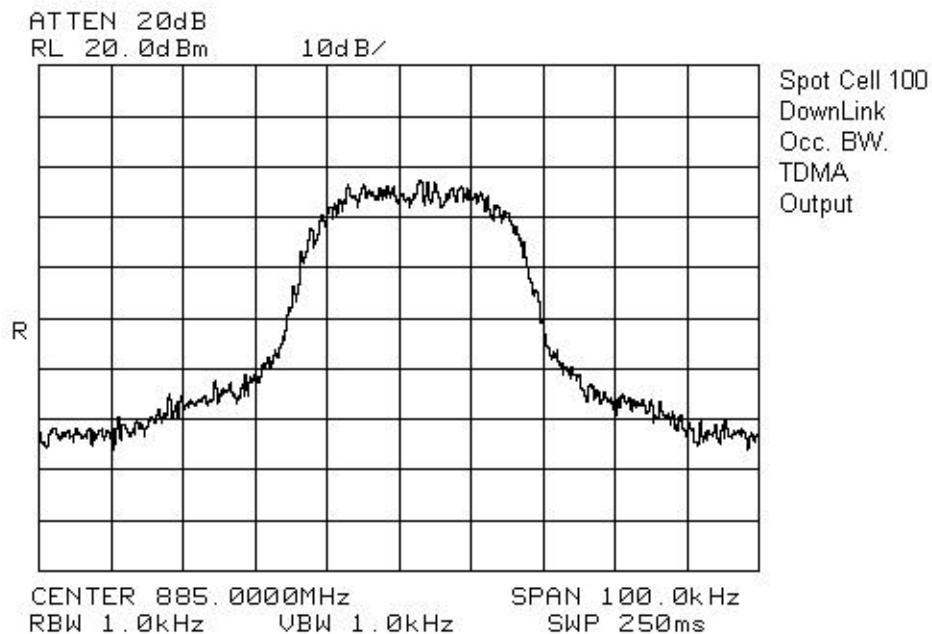
EQUIPMENT: SpotCell 100, Low Power Cellular Band Repeater

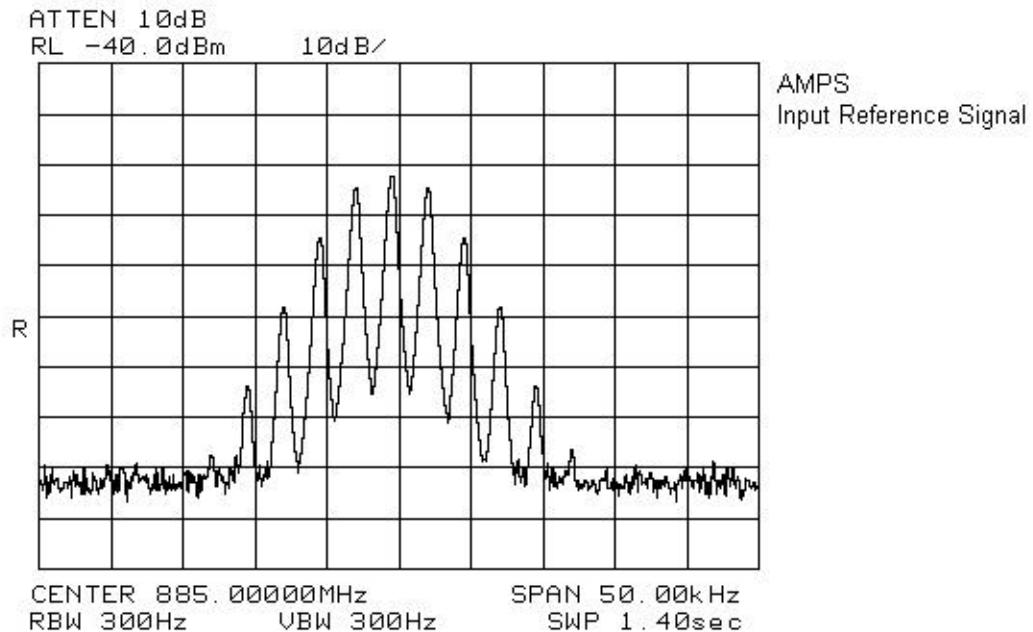
EQUIPMENT: SpotCell 100, Low Power Cellular Band Repeater

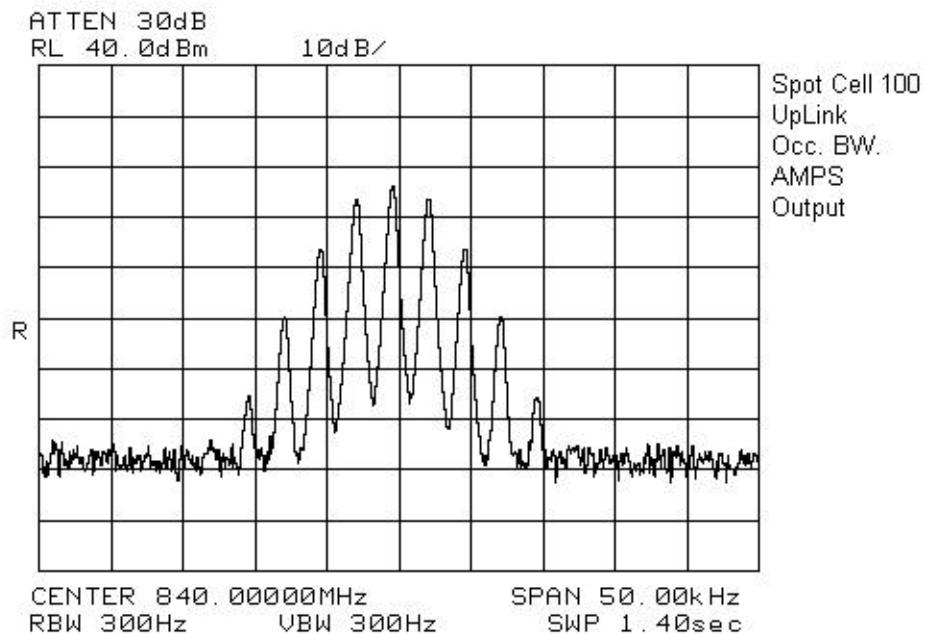
EQUIPMENT: SpotCell 100, Low Power Cellular Band Repeater

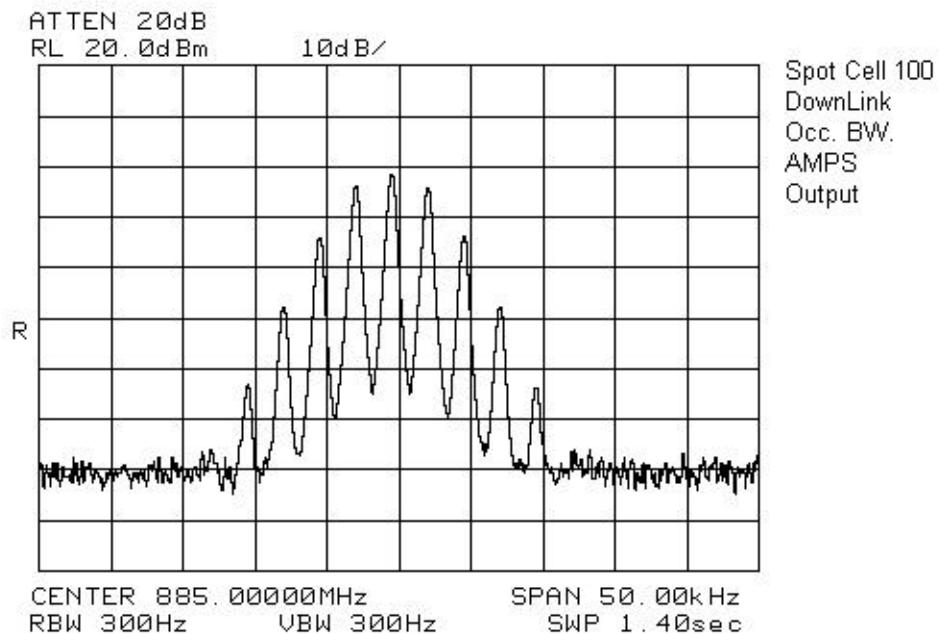
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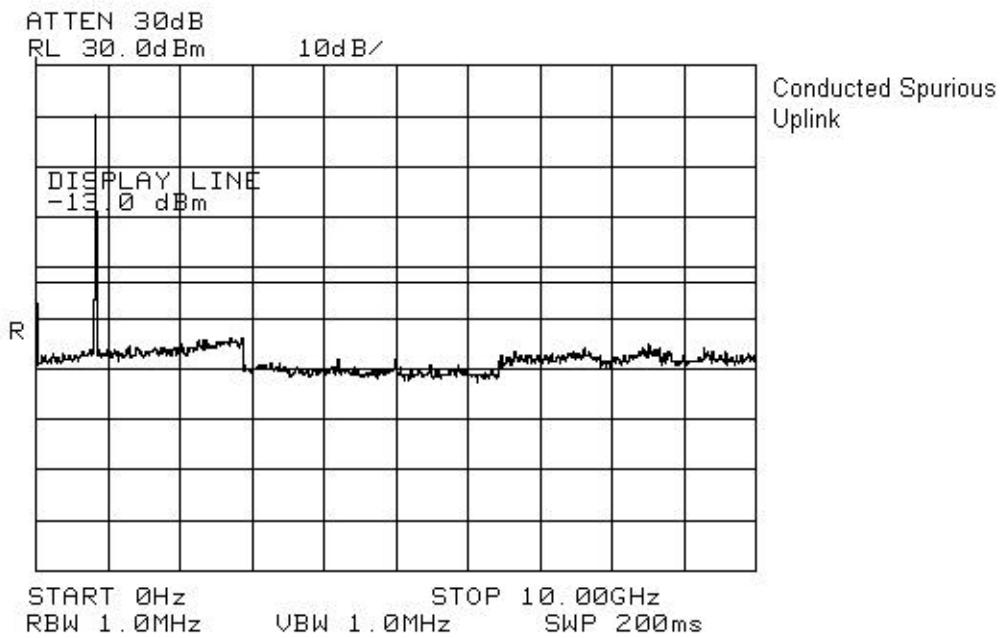
EQUIPMENT: SpotCell 100, Low Power Cellular Band Repeater

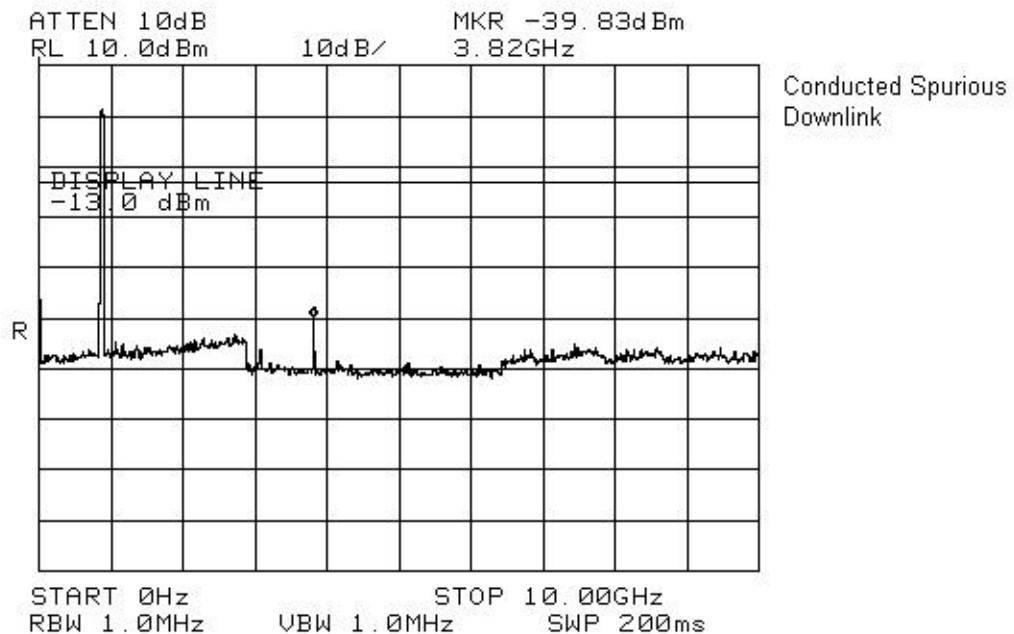
EQUIPMENT: SpotCell 100, Low Power Cellular Band Repeater

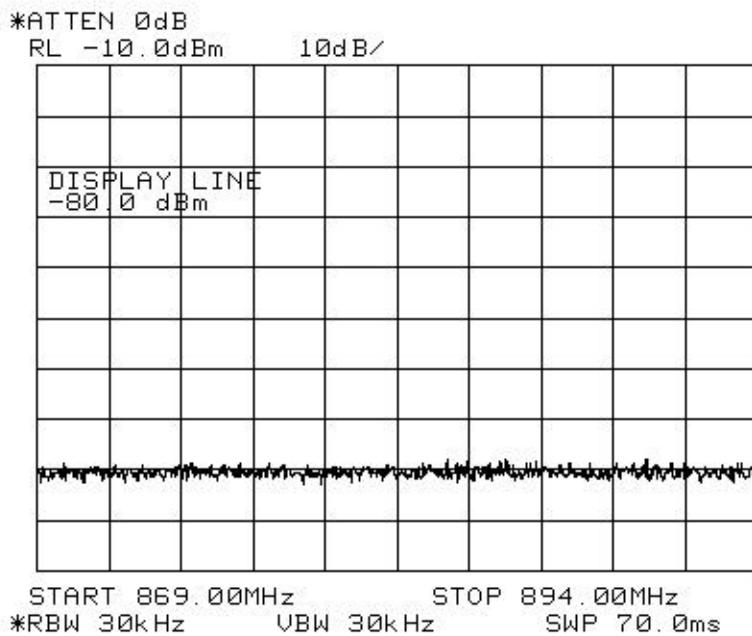
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Section 5. Spurious Emissions At Antenna Terminals**Para. No.: 2.1051****Test Performed By:** Glen Westwell**Date of Test:** 14 Mar. 2002**Minimum Standard:** 22.917 (e); -13 dBm
(f); -80 dBm Conducted**Test Results:** Complies.**Measurement Data:** See attached graphs (worst case).

EQUIPMENT: SpotCell 100, Low Power Cellular Band Repeater

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Mobile Emissions in the
Base Freq. Range
Uplink TX= 840MHz
-30dBm in, +20dBm out

EQUIPMENT: SpotCell 100, Low Power Cellular Band Repeater