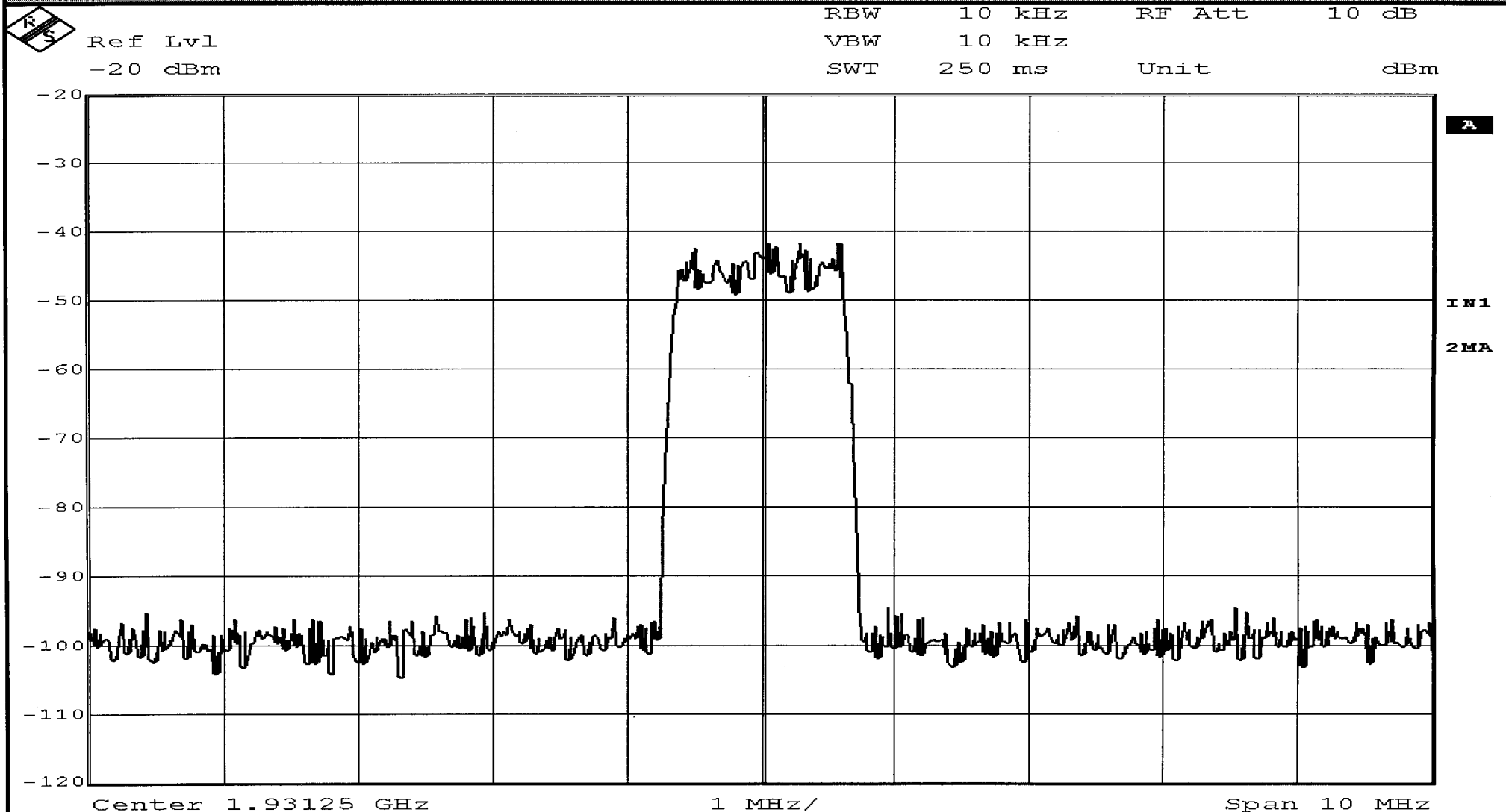


RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block A, 1930-1945 MHz Frequency: 1930.2 MHz Modulation: GSM Input Signal		
		Job No:	R-4132N
		Technician:	T. Firkowski
		Date:	6/24/03

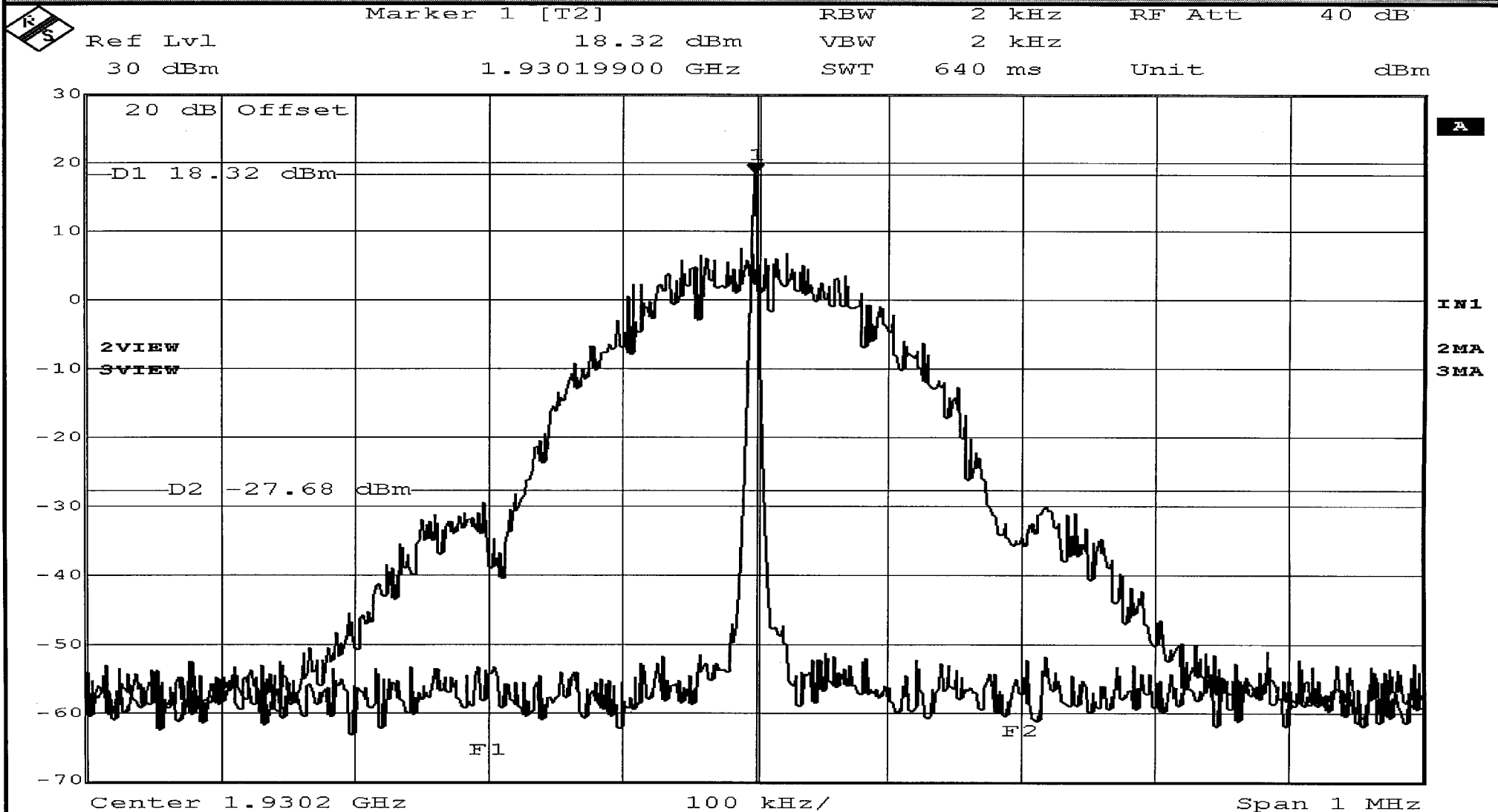


Date: 24.JUN.2003 06:40:09

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block A, 1930-1945 MHz Frequency: 1930.2 MHz Modulation: GSM Output Signal		
Job No:	R-4132N		Technician:
		T. Firkowski	Date:
		6/24/03	



Date: 23.JUN.2003 13:33:15

RETLIF TESTING LABORATORIES

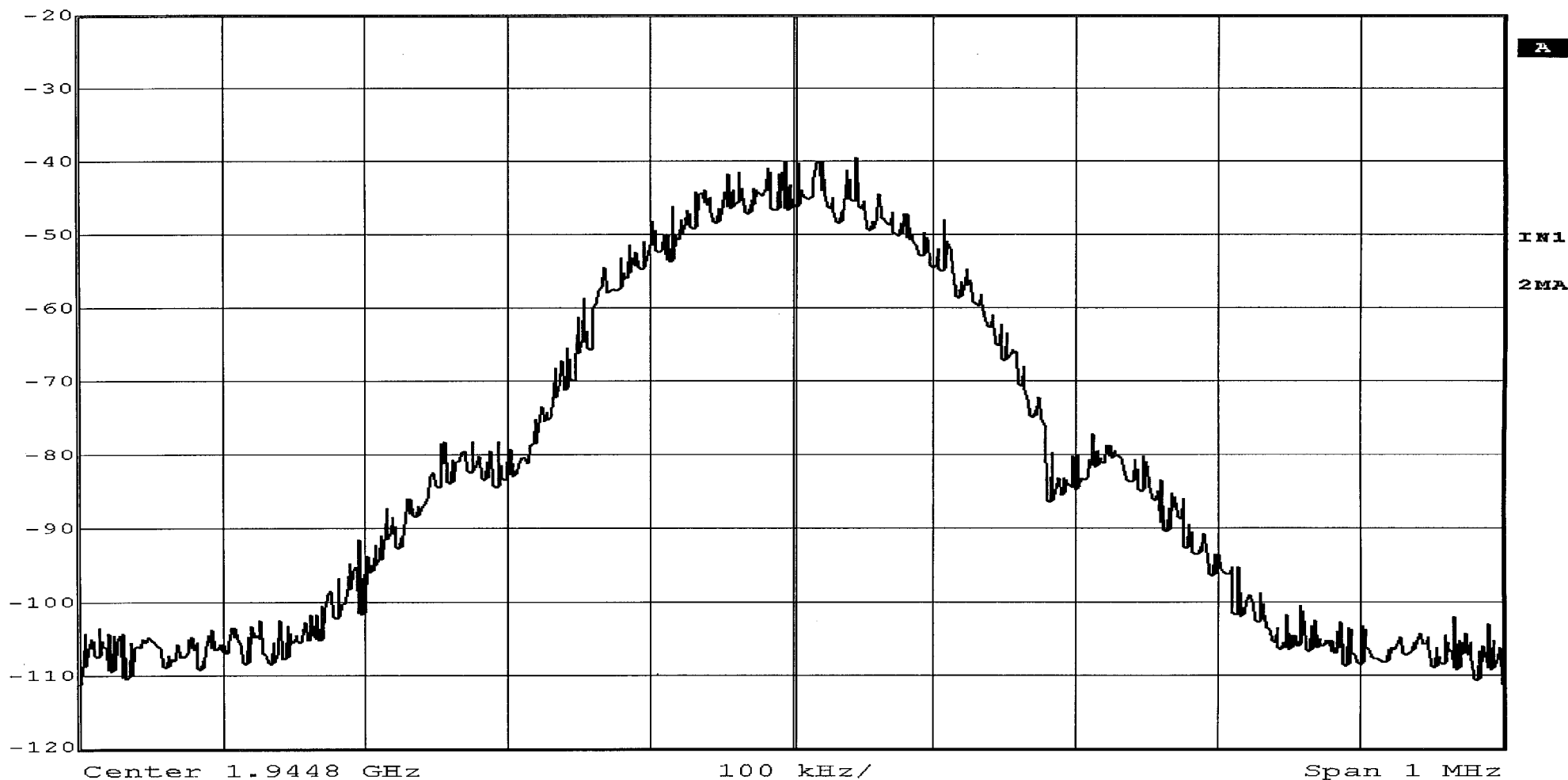
EMISSIONS DATA SHEET

Test Method:	Occupied Bandwidth					
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier		Job No:	R-4132N
Model No:	150PCS	Serial No:	n/a		Technician:	T. Firkowski
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229		Date:	6/24/03
Operating Mode:	Amplifying downlink input signal					
Notes:	PCS Band: Block A, 1930-1945 MHz Frequency: 1944.8 MHz Modulation: GSM Input Signal					



Ref Lvl
-20 dBm

RBW 2 kHz RF Att 10 dB
VBW 2 kHz
SWT 640 ms Unit dBm



Date: 23.JUN.2003 13:35:29

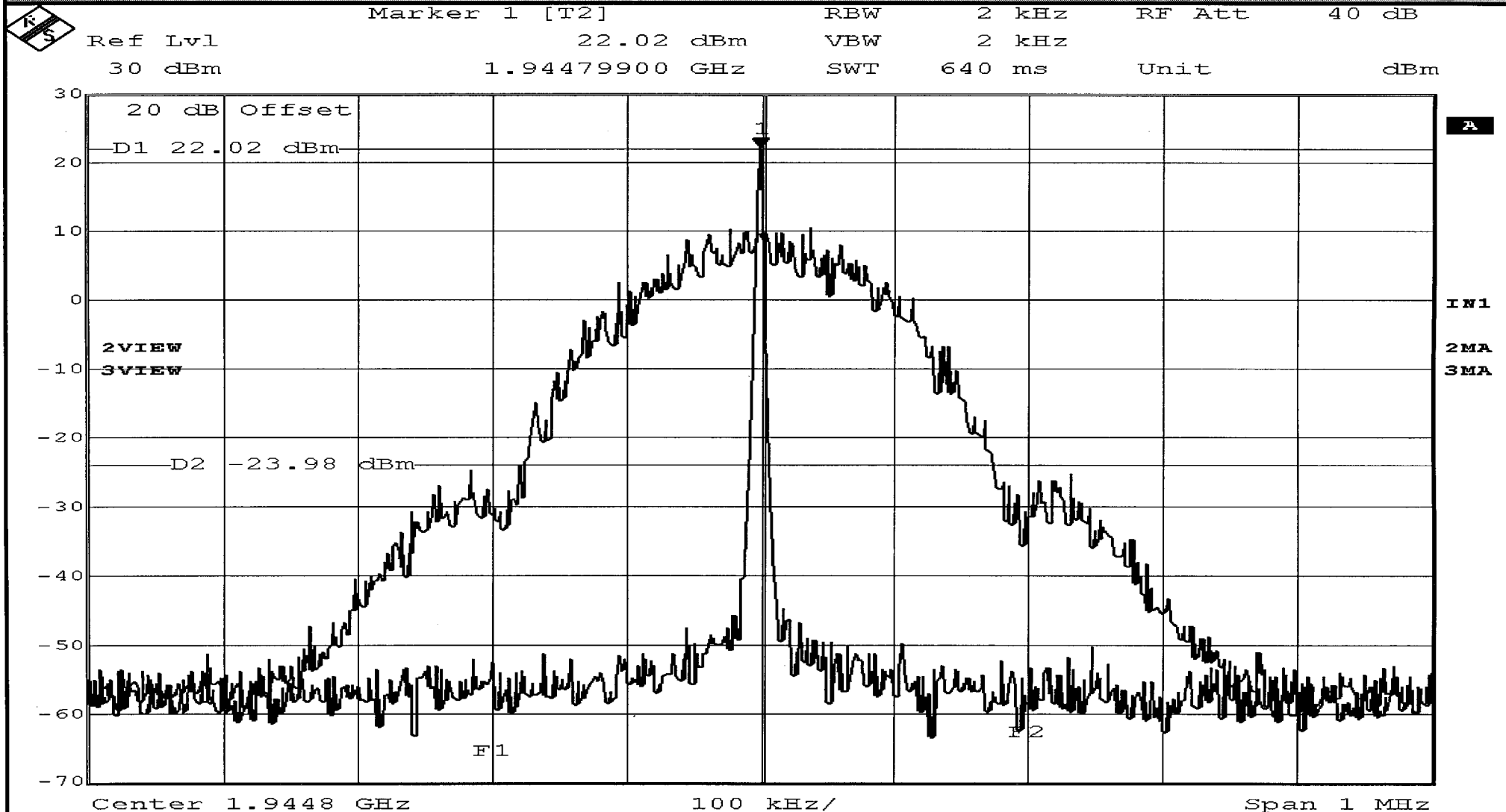
Data Sheet 99 of 144

R-4132N

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block A, 1930-1945 MHz Frequency: 1944.8 MHz Modulation: GSM Output Signal		
Job No:	R-4132N		Technician:
		T. Firkowski	Date:
		6/24/03	



Date: 23.JUN.2003 13:37:32

RETLIF TESTING LABORATORIES

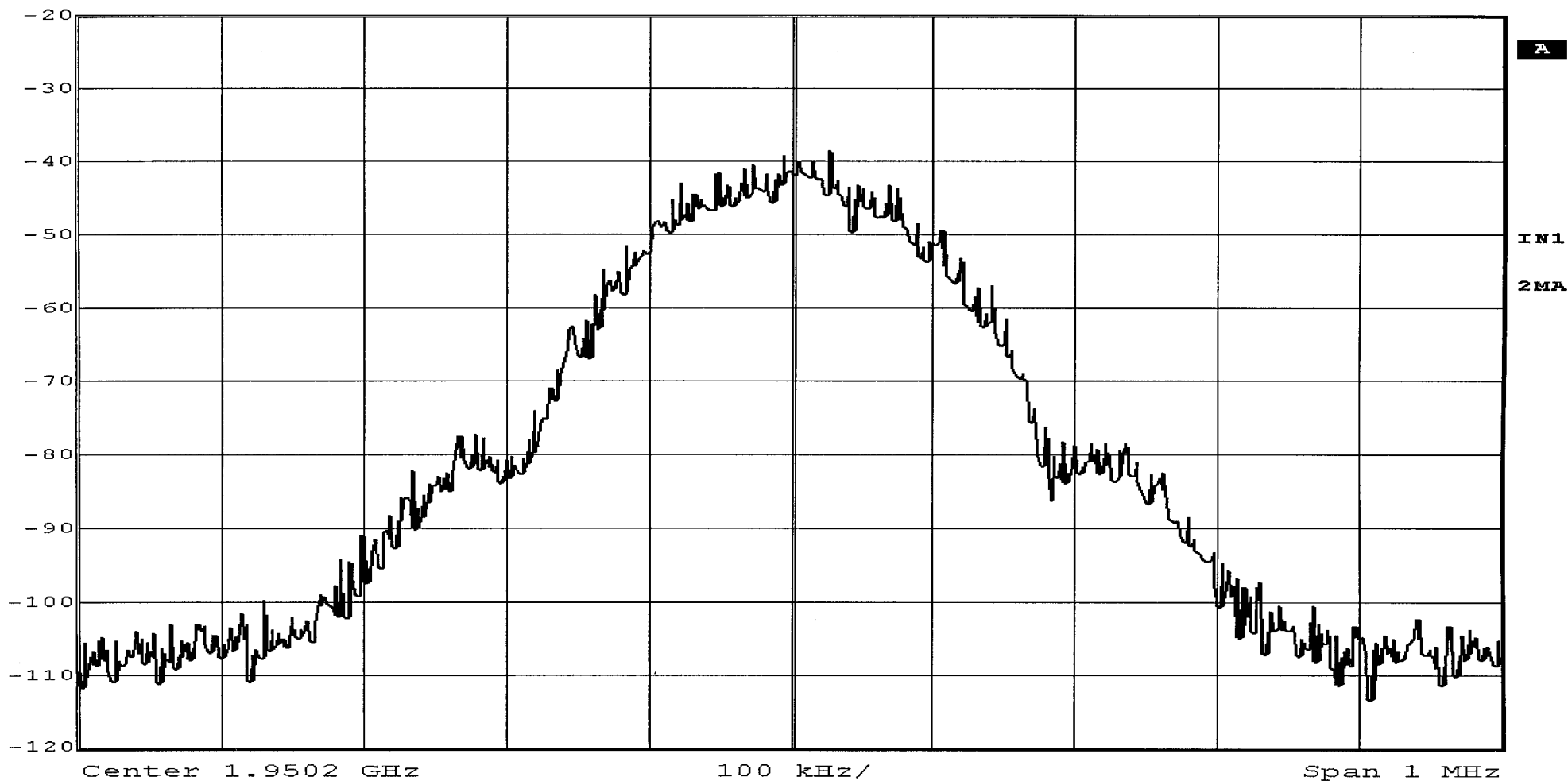
EMISSIONS DATA SHEET

Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block B, 1950-1965 MHz Frequency: 1950.2 MHz Modulation: GSM Input Signal		
		Job No:	R-4132N
		Technician:	T. Firkowski
		Date:	6/24/03



Ref Lvl
-20 dBm

RBW 2 kHz RF Att 10 dB
VBW 2 kHz
SWT 640 ms Unit dBm



Date: 23.JUN.2003 13:48:09

EMISSIONS DATA SHEET

Marker 1 [T2] RBW 2 kHz RF Att 40 dB

Ref Lvl 30 dBm 22.49 dBm VBW 2 kHz

1.95019900 GHz SWT 640 ms Unit dBm

20 dB Offset

D1 22.49 dBm

2VIEW

3VIEW

D2 -23.51 dBm

F1 F2

Center 1.9502 GHz 100 kHz/ Span 1 MHz

A

IN1

2MA

3MA

R-4132N

RETLIF TESTING LABORATORIES

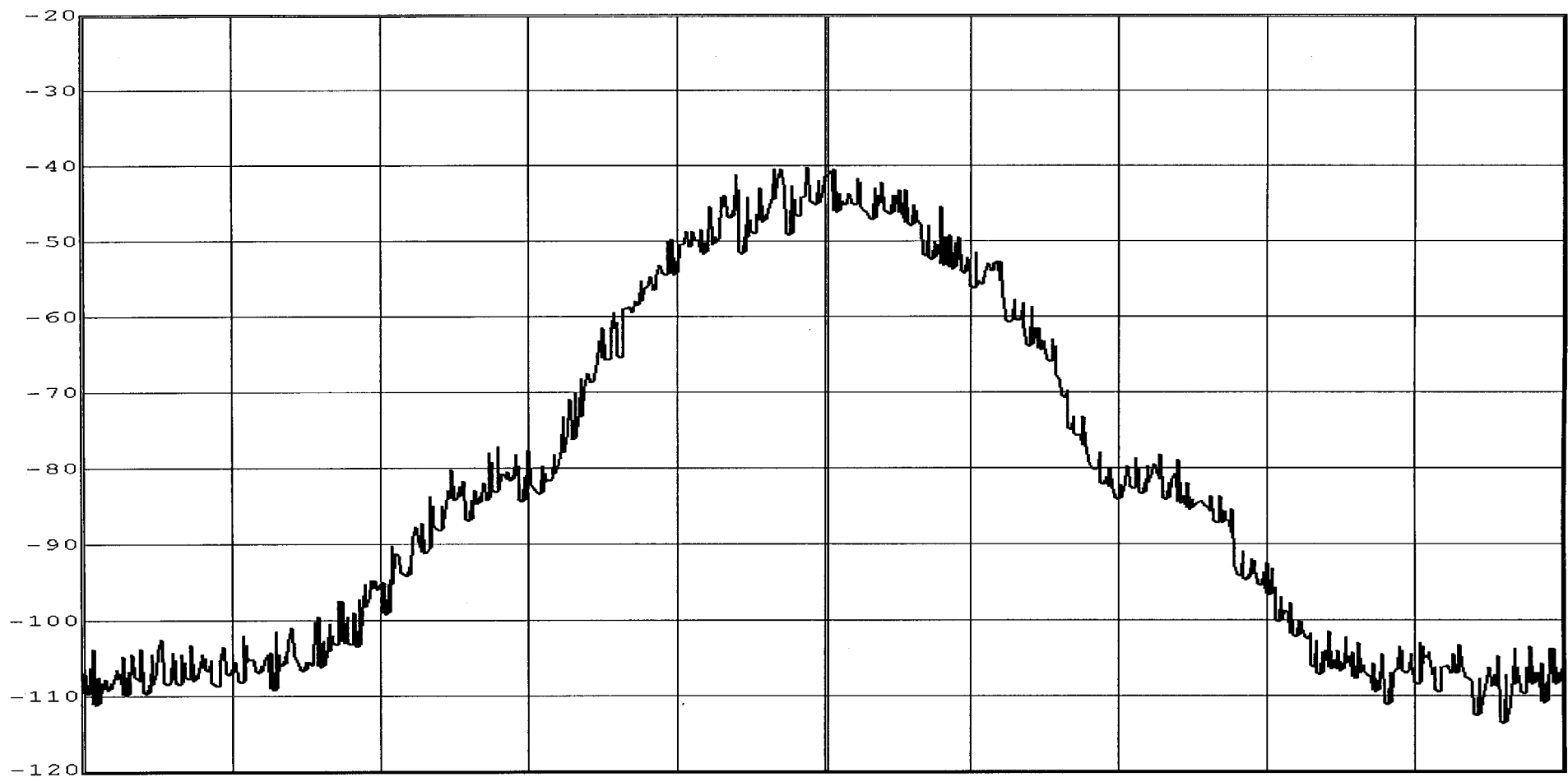
EMISSIONS DATA SHEET

Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block B, 1950-1965 MHz	Frequency: 1964.8 MHz	Modulation: GSM
		Input Signal	



Ref Lvl
-20 dBm

RBW 2 kHz RF Att 10 dB
VBW 2 kHz
SWT 640 ms Unit dBm



A

IN1

2MA

Center 1.9648 GHz

100 kHz/

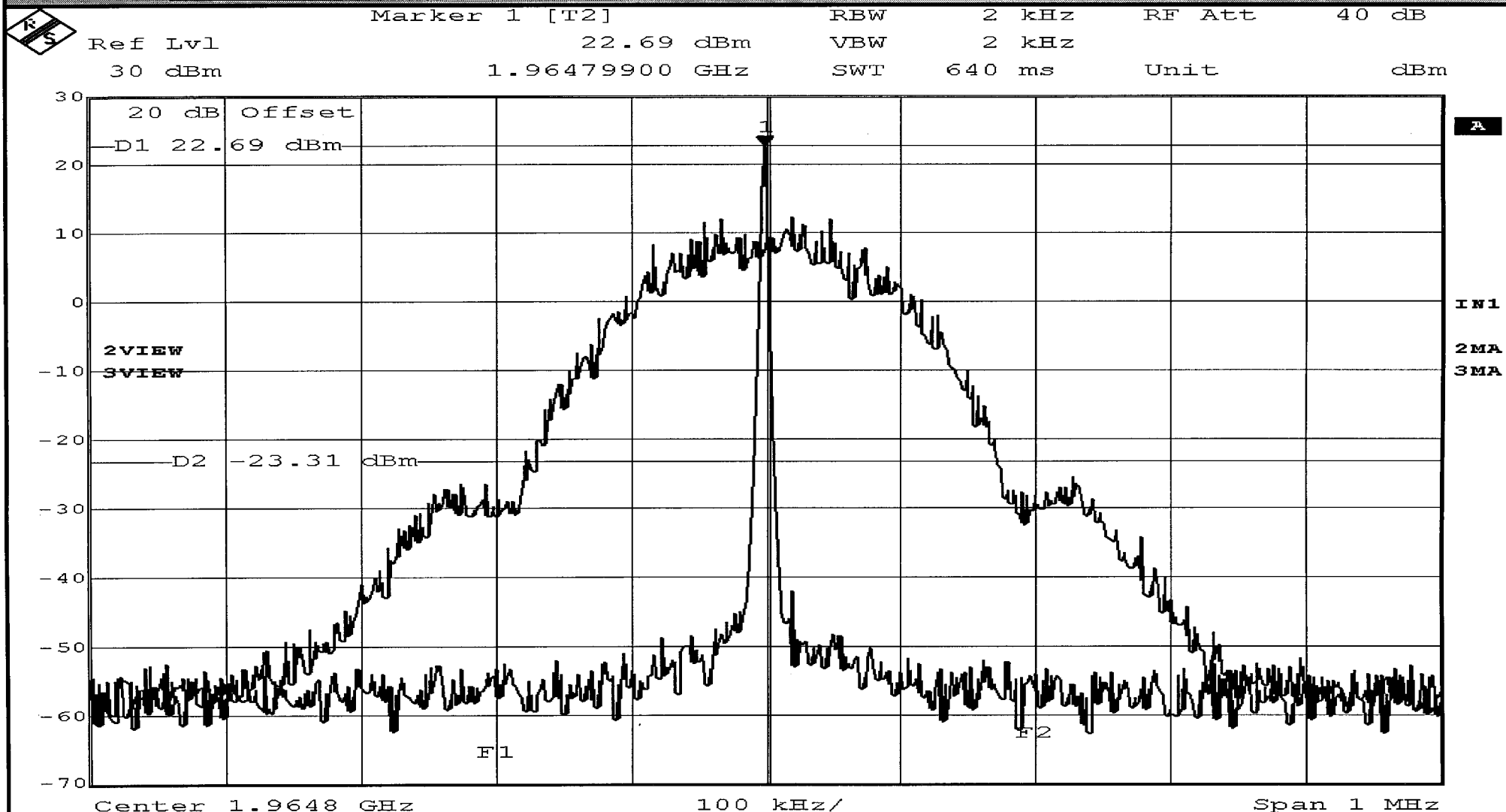
Span 1 MHz

Date: 23.JUN.2003 13:49:03

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block B, 1950-1965 MHz	Frequency: 1964.8 MHz	Modulation: GSM
			Output Signal

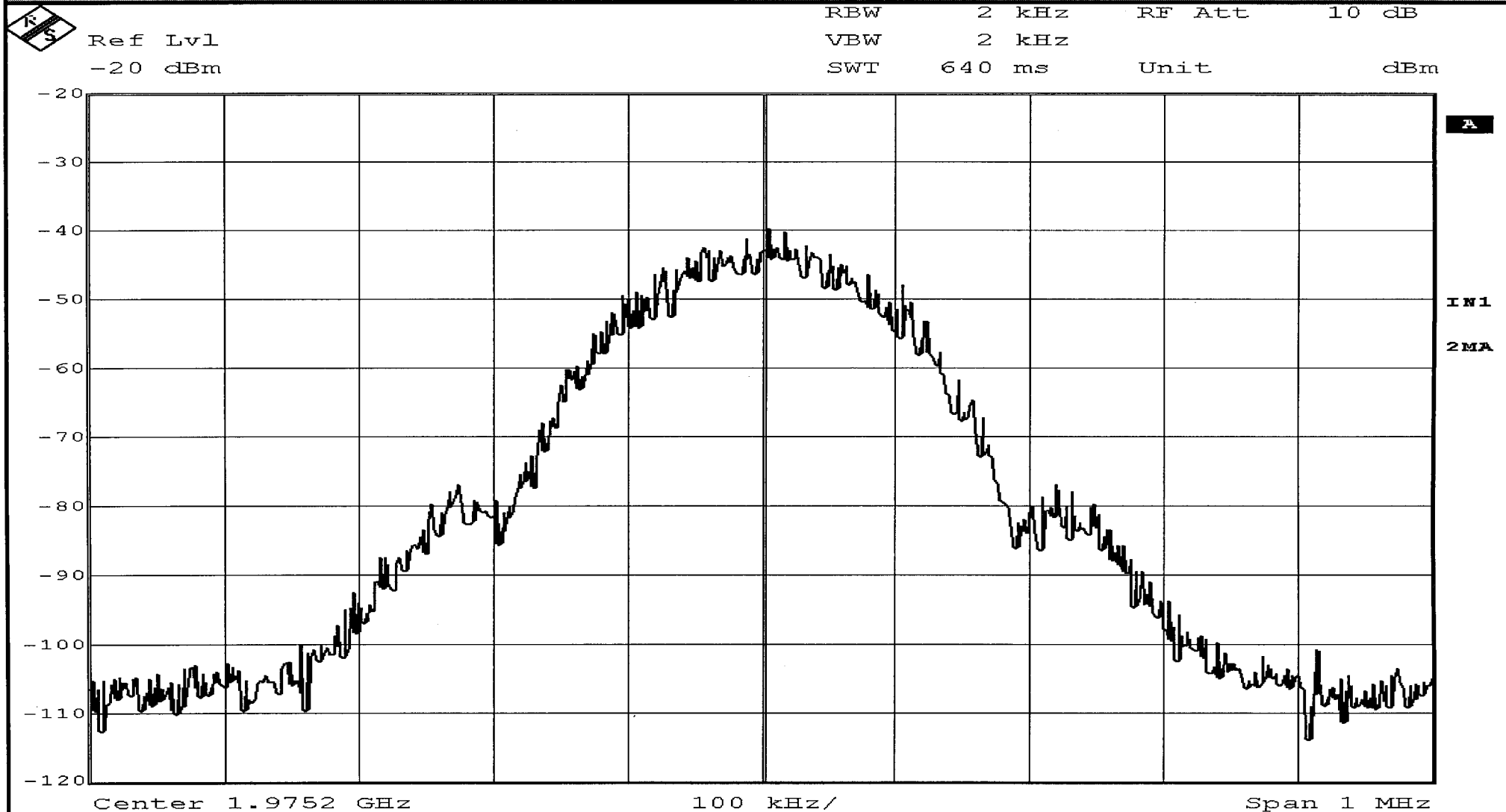


Date: 23.JUN.2003 13:50:52

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block C, 1975-1990 MHz	Frequency: 1975.2 MHz	Modulation: GSM
		Input Signal	

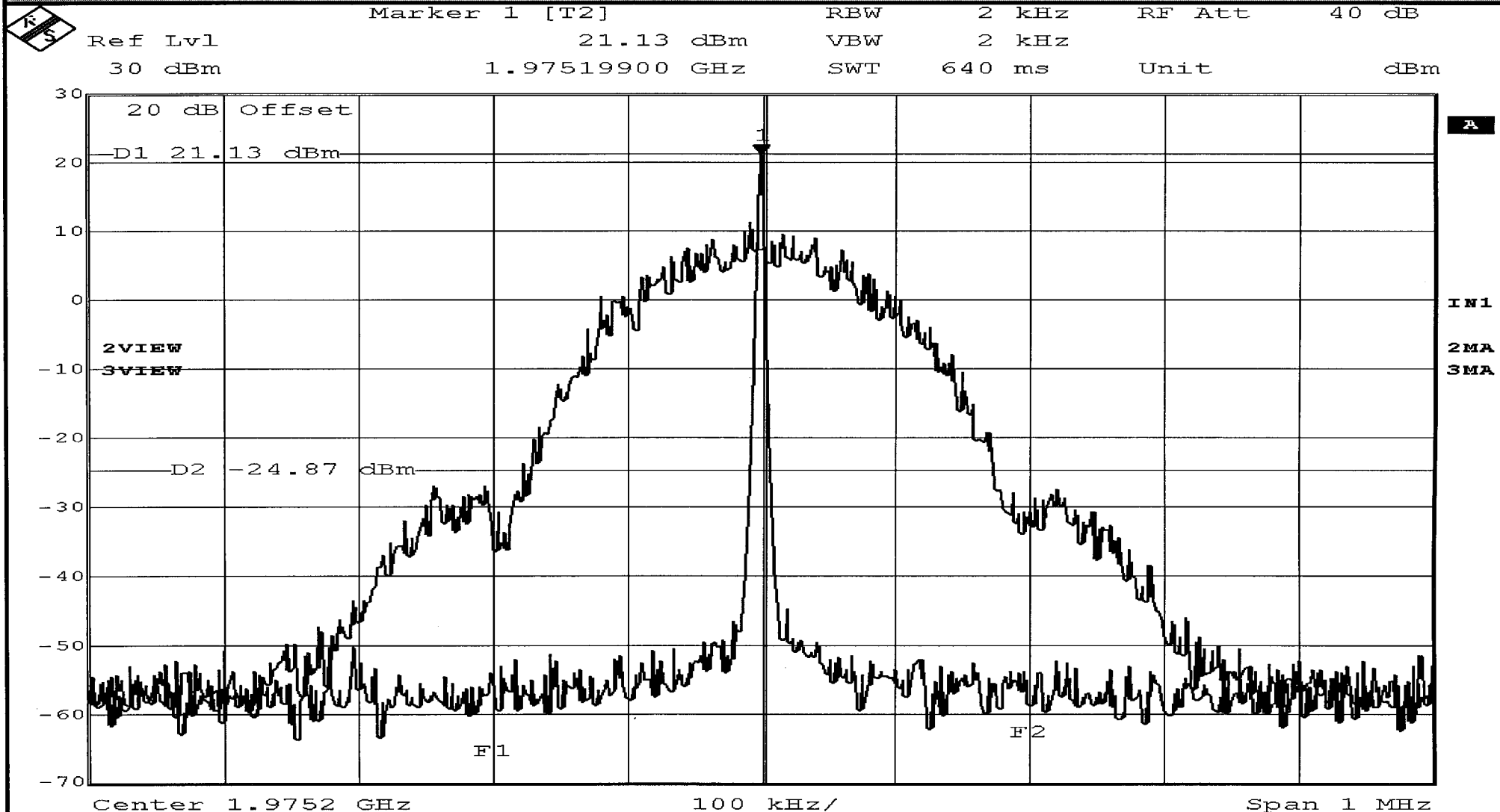


Date: 23.JUN.2003 14:16:33

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block C, 1975-1990 MHz	Frequency: 1975.2 MHz	Modulation: GSM
			Output Signal



Date: 23.JUN.2003 14:15:28

RETLIF TESTING LABORATORIES

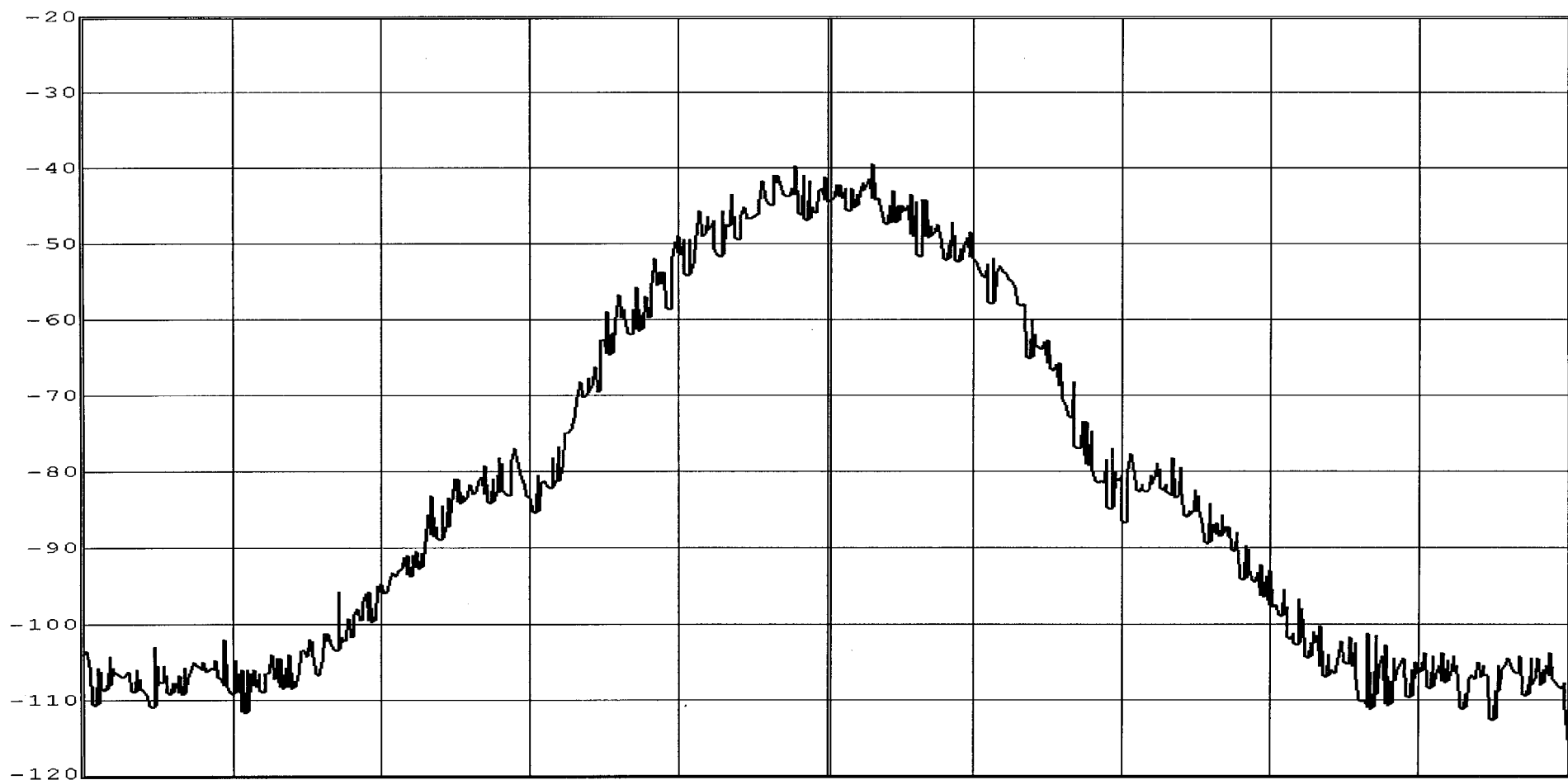
EMISSIONS DATA SHEET

Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block C, 1975-1990 MHz	Frequency: 1989.8 MHz	Modulation: GSM
		Input Signal	



Ref Lvl
-20 dBm

RBW 2 kHz RF Att 10 dB
VBW 2 kHz
SWT 640 ms Unit dBm



Center 1.9898 GHz

100 kHz/

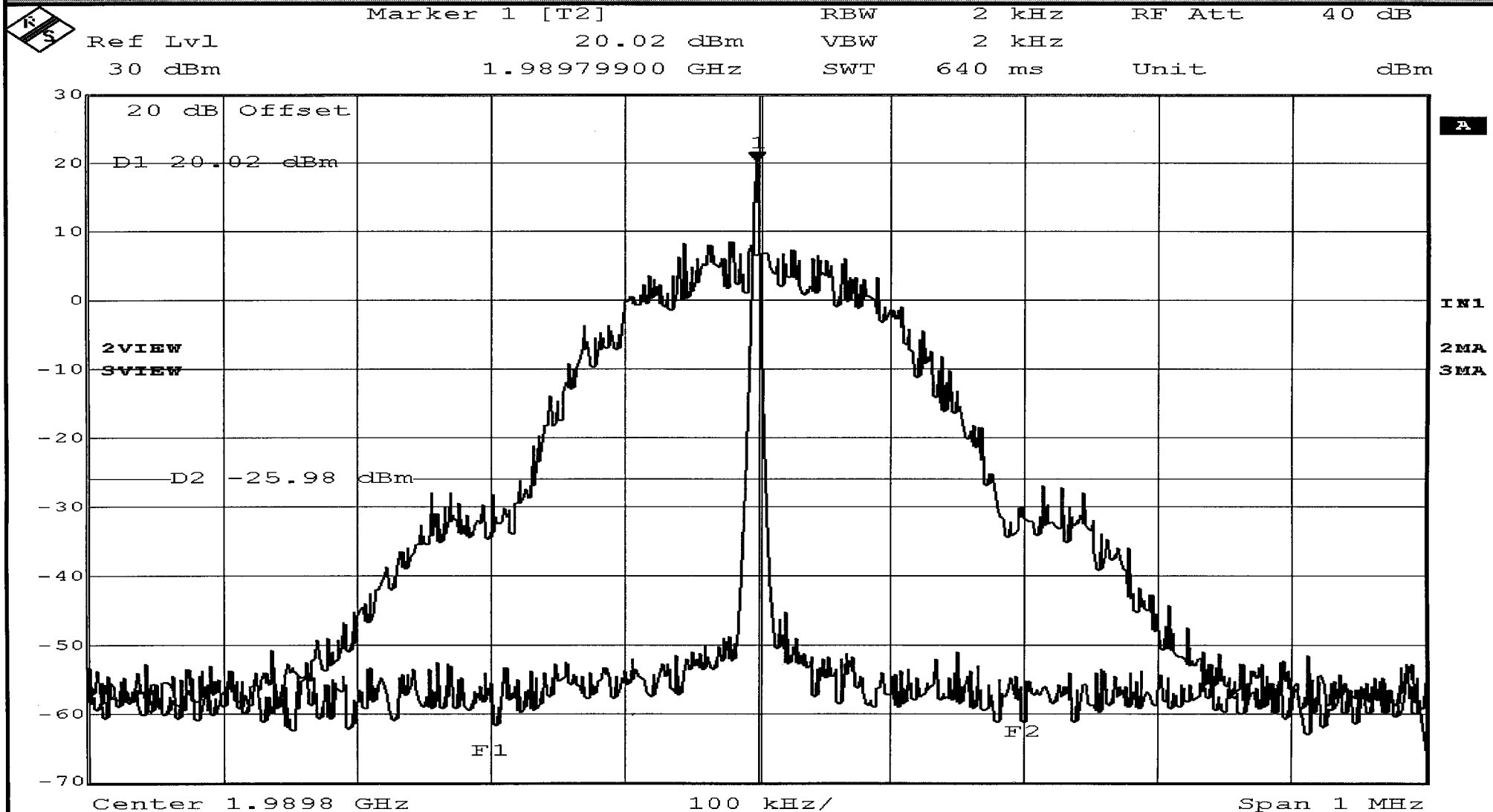
Span 1 MHz

Date: 23.JUN.2003 14:17:22

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block C, 1975-1990 MHz Frequency: 1989.8 MHz Modulation: GSM Output Signal		
Job No:	R-4132N		Technician:
		T. Firkowski	
		Date:	6/24/03



Date: 23.JUN.2003 14:19:35

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

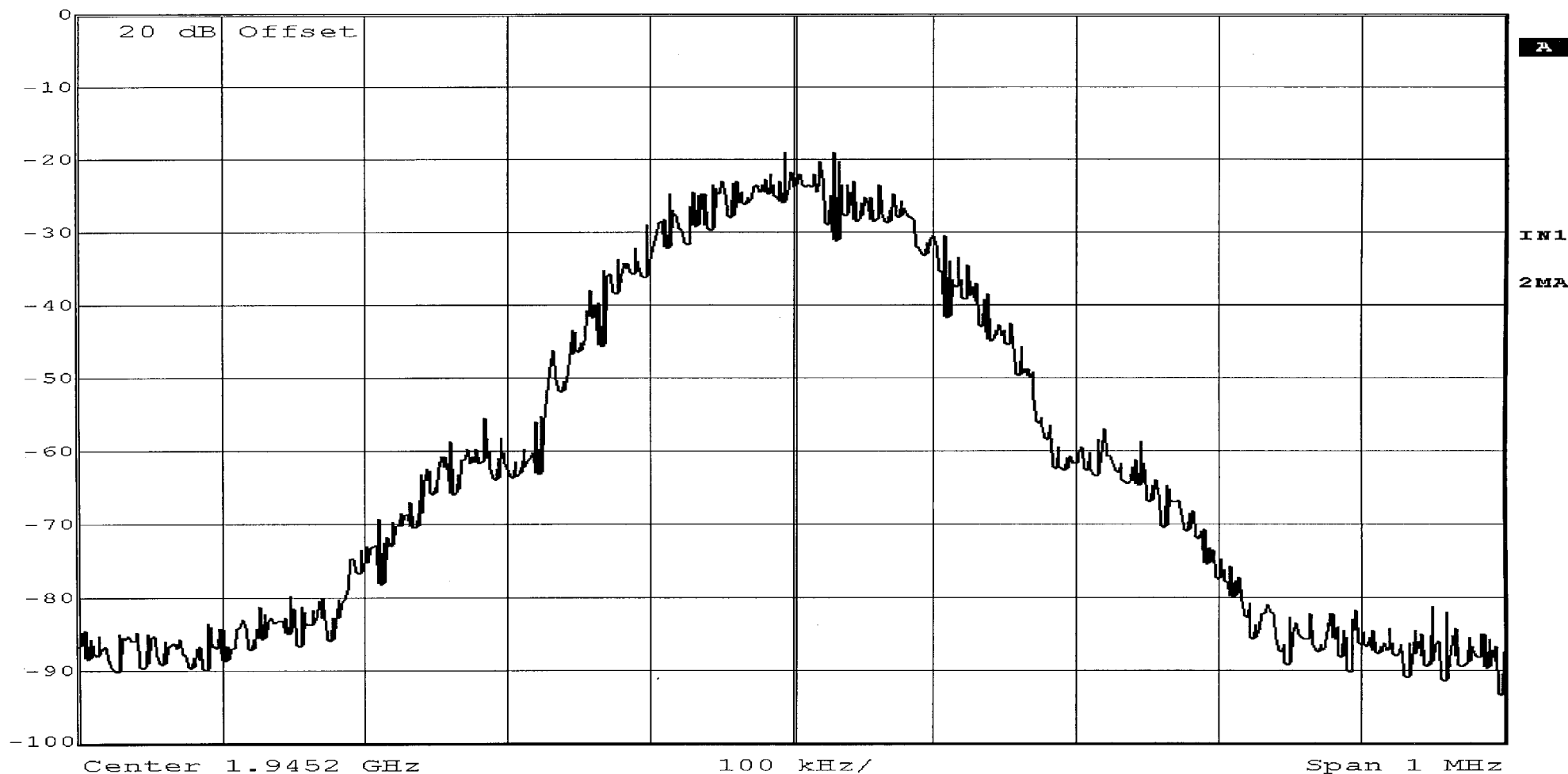
Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block D, 1945-1950 MHz	Frequency: 1945.2 MHz	Modulation: GSM
		Input Signal	



Ref Lvl

0 dBm

RBW 2 kHz RF Att 10 dB
 VBW 2 kHz
 SWT 640 ms Unit dBm

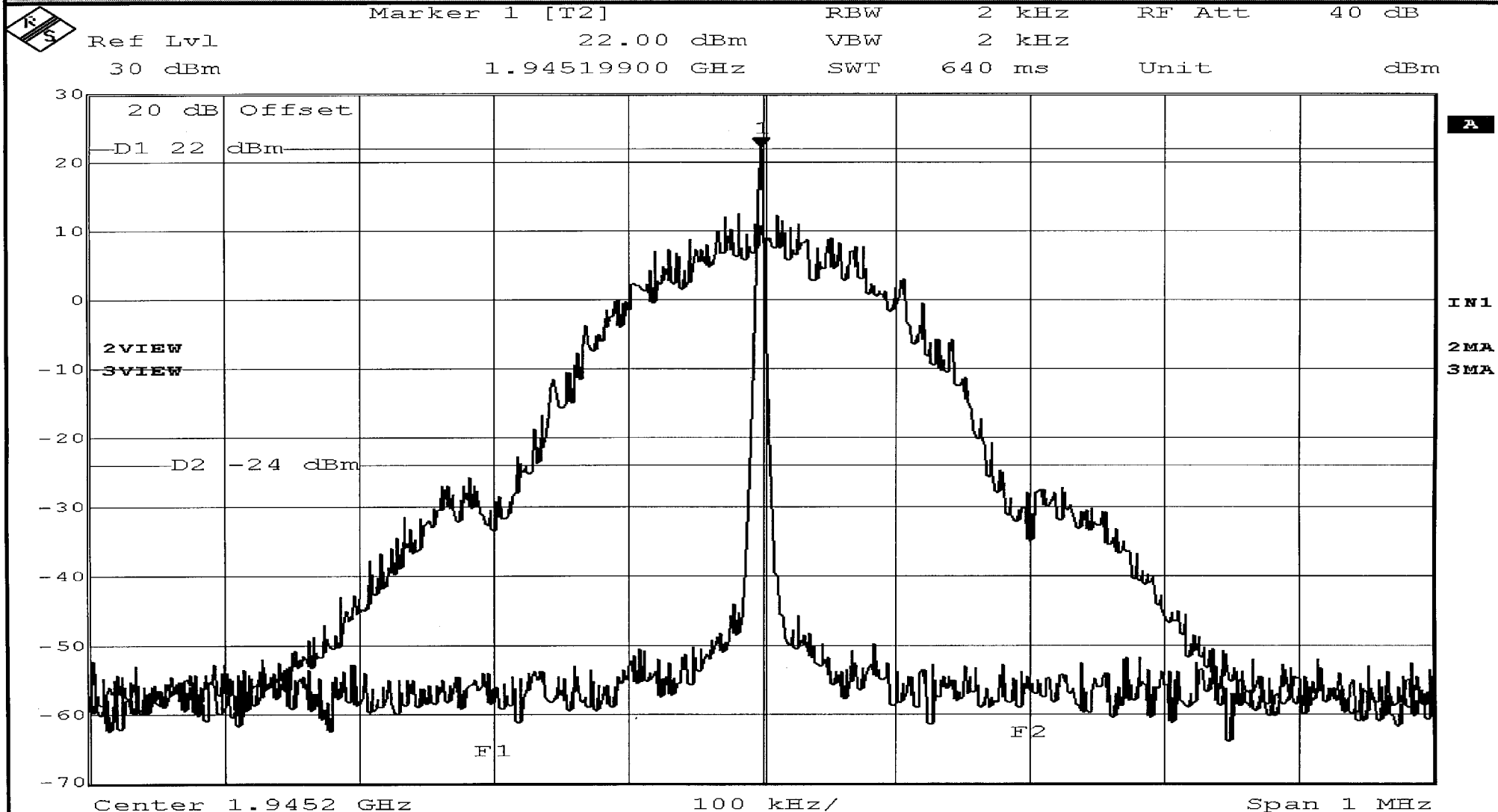


Date: 23.JUN.2003 13:41:26

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block D, 1945-1950 MHz	Frequency: 1945.2 MHz	Modulation: GSM
			Output Signal
			Date: 6/24/03



Date: 23.JUN.2003 13:39:36

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

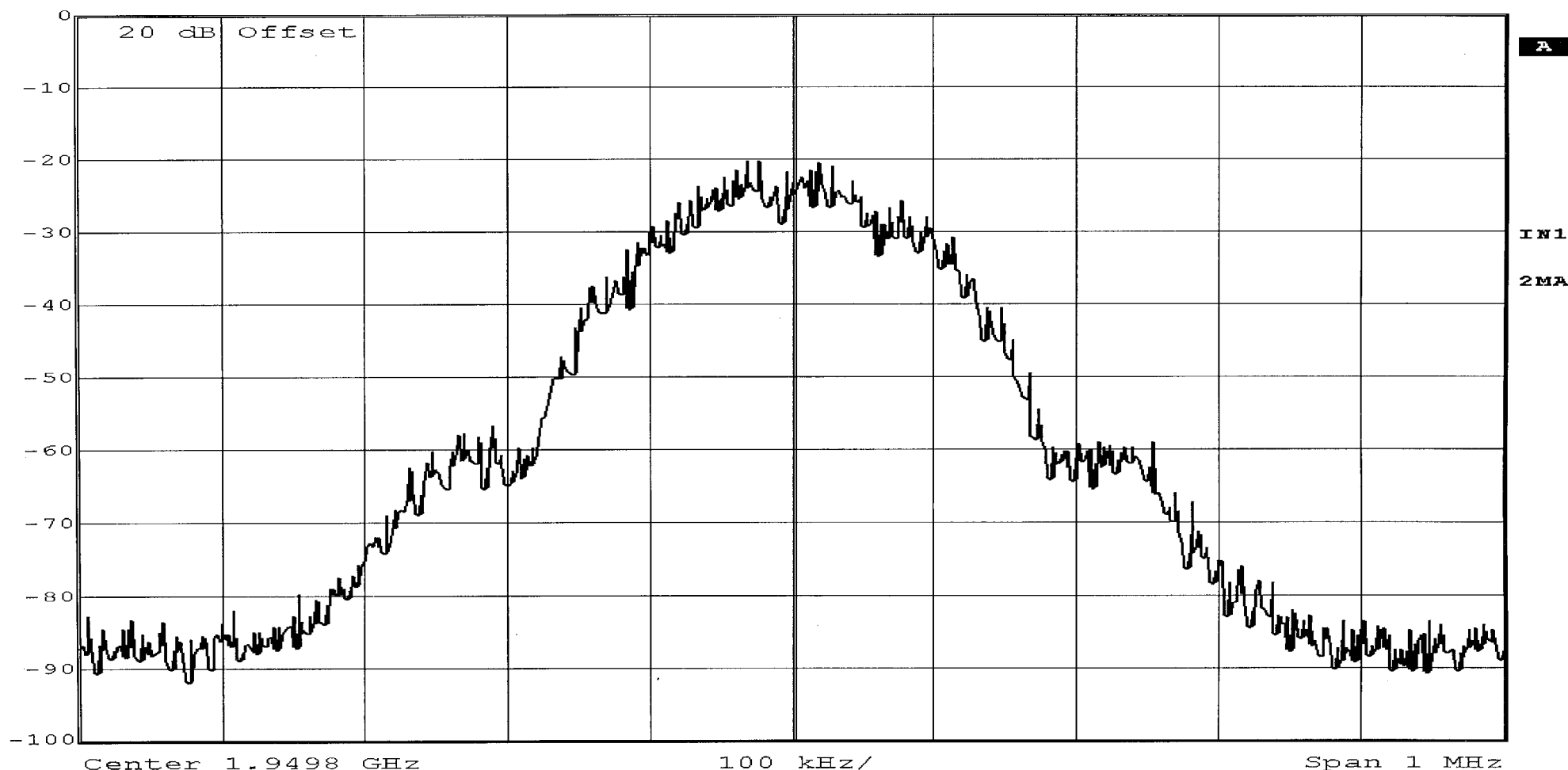
Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block D, 1945-1950 MHz	Frequency: 1949.8 MHz	Modulation: GSM
		Input Signal	



Ref Lvl

0 dBm

RBW 2 kHz RF Att 10 dB
 VBW 2 kHz
 SWT 640 ms Unit dBm

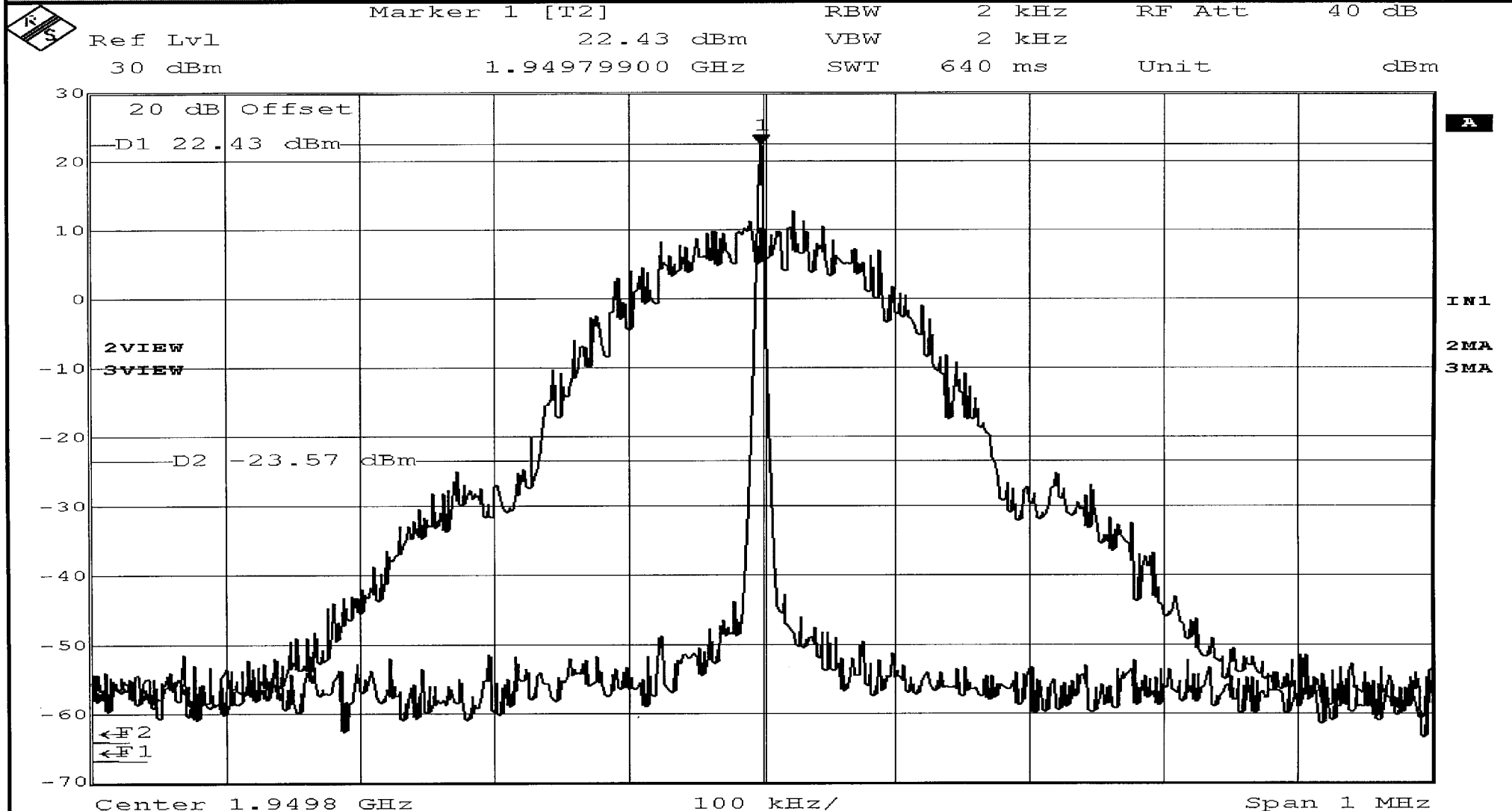


Date: 23.JUN.2003 13:42:15

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block D, 1945-1950 MHz	Frequency: 1949.8 MHz	Modulation: GSM
			Output Signal

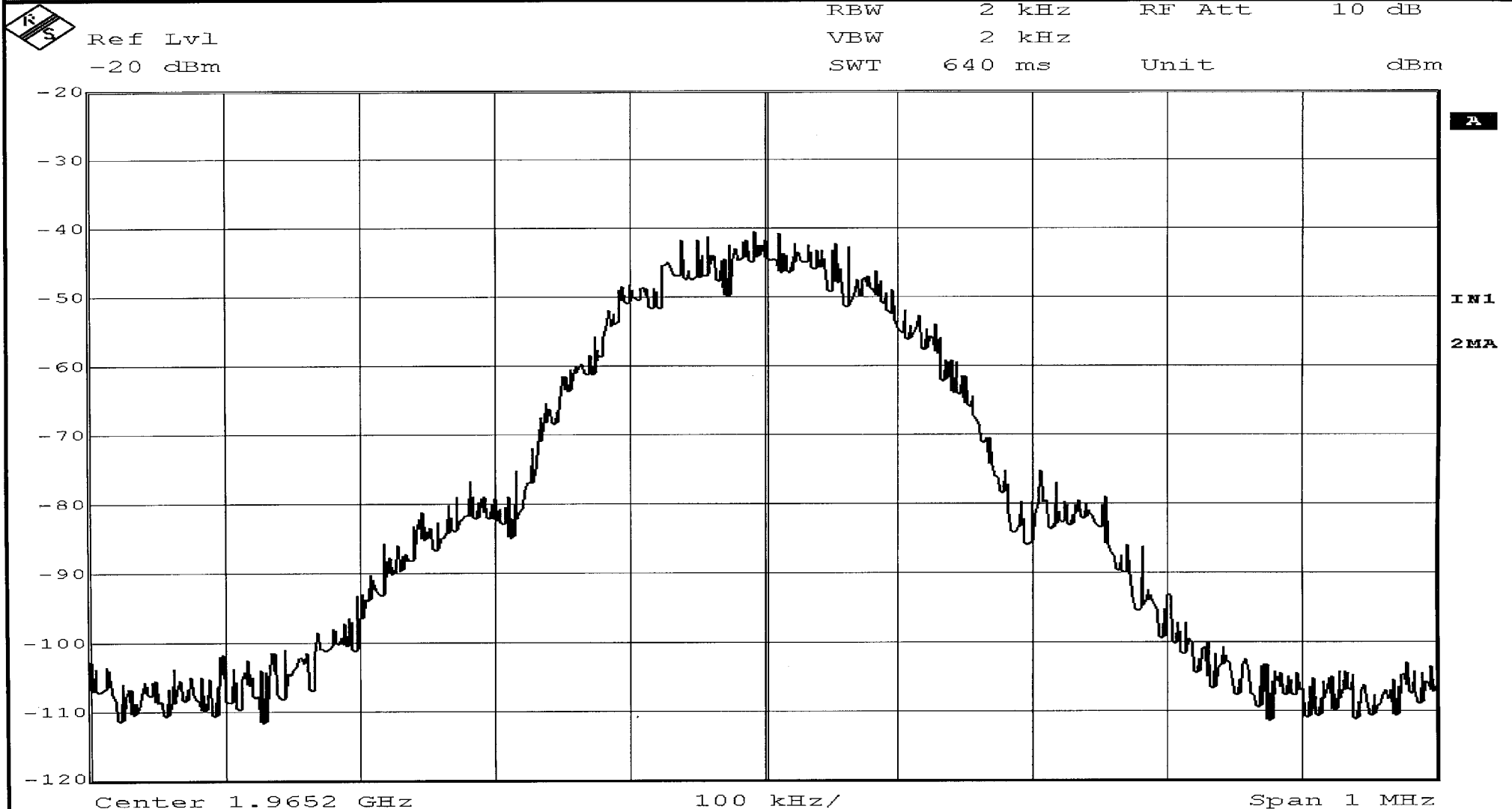


Date: 23.JUN.2003 13:44:05

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block E, 1965-1970 MHz Frequency: 1965.2 MHz Modulation: GSM Input Signal		
		Job No:	R-4132N
		Technician:	T. Firkowski
		Date:	6/24/03

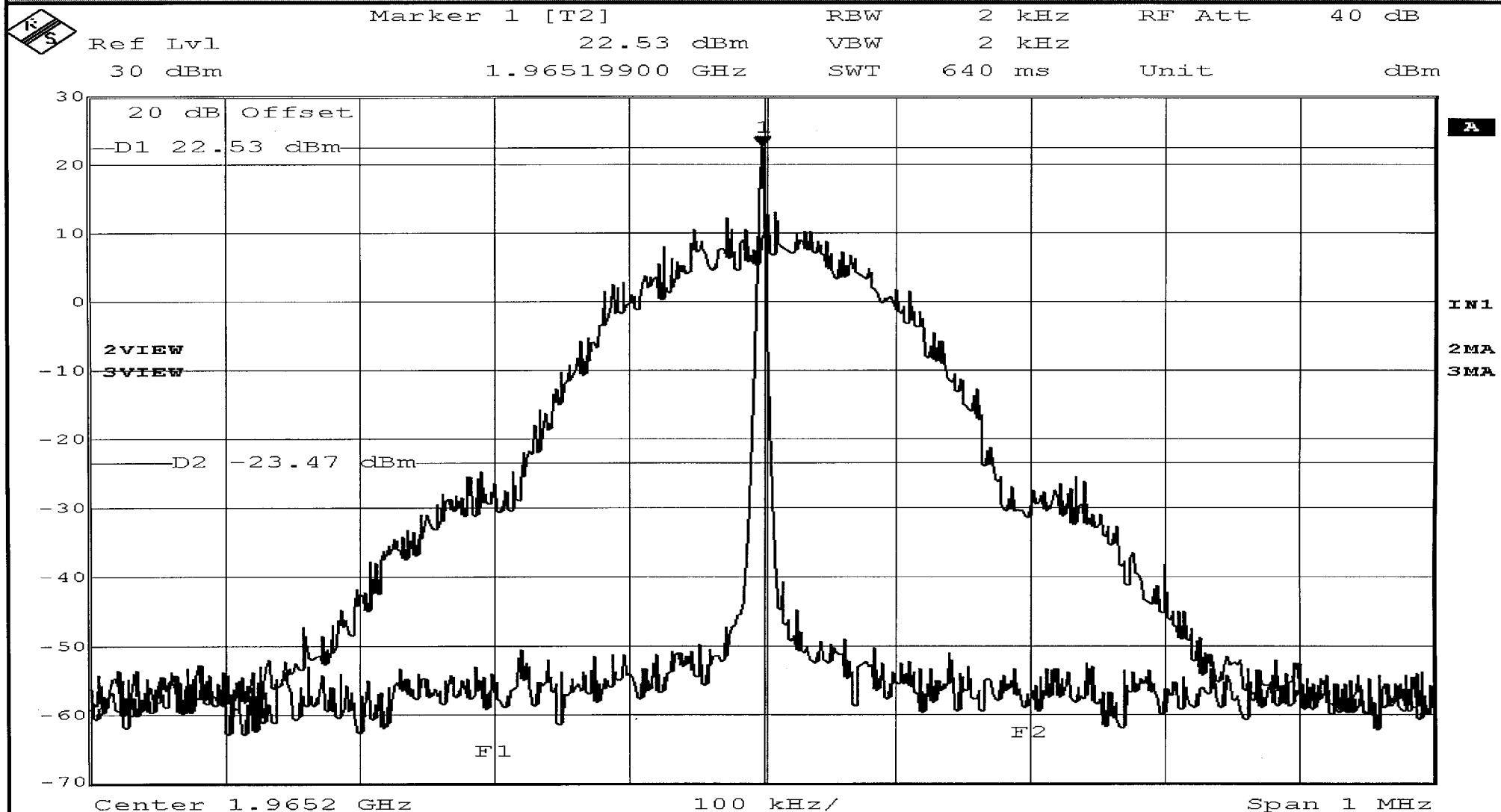


Date: 23.JUN.2003 14:01:13

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block E, 1965-1970 MHz	Frequency: 1965.2 MHz	Modulation: GSM
			Output Signal

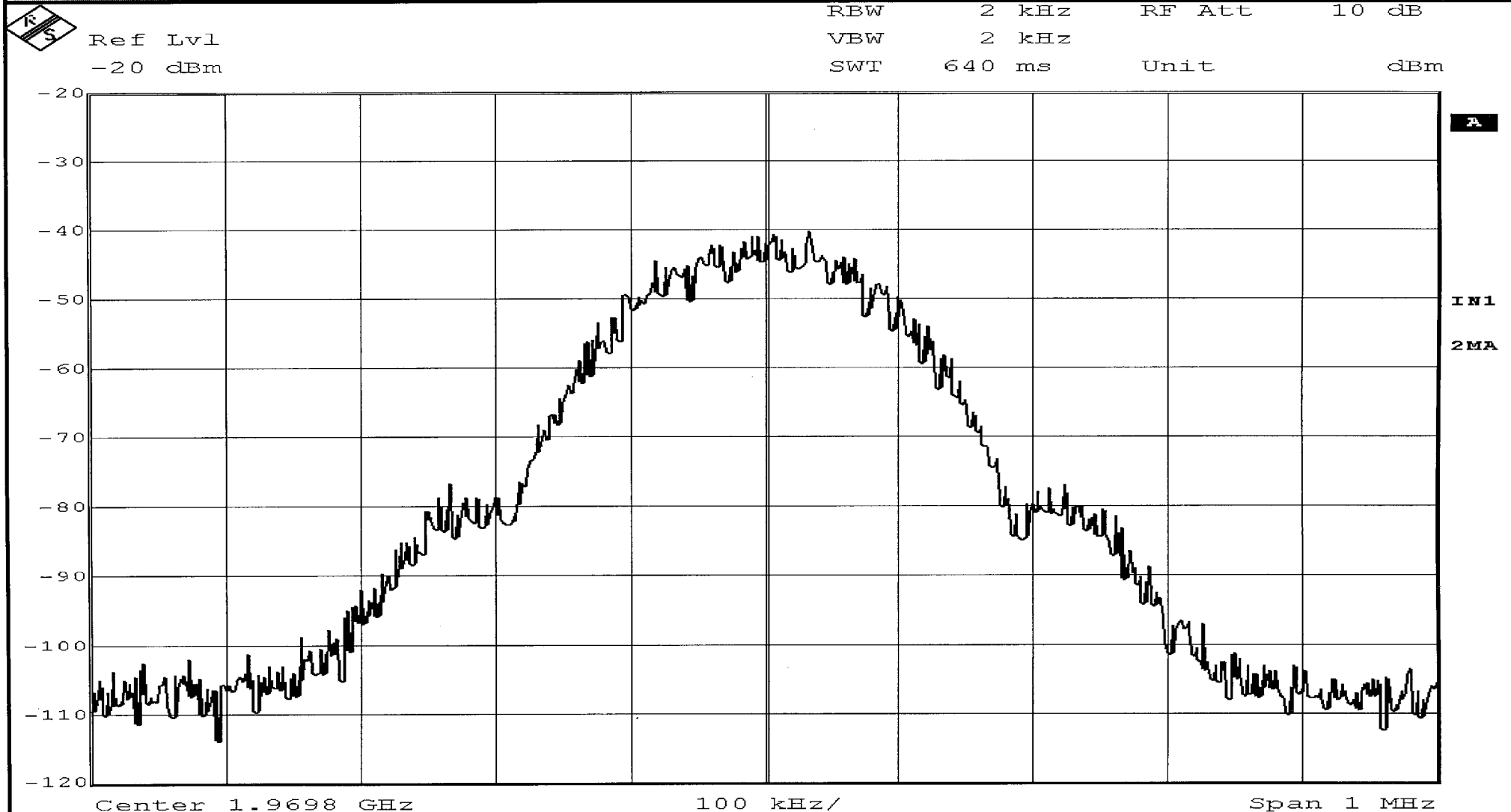


Date: 23.JUN.2003 14:00:23

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block E, 1965-1970 MHz	Frequency: 1969.8 MHz	Modulation: GSM
		Input Signal	

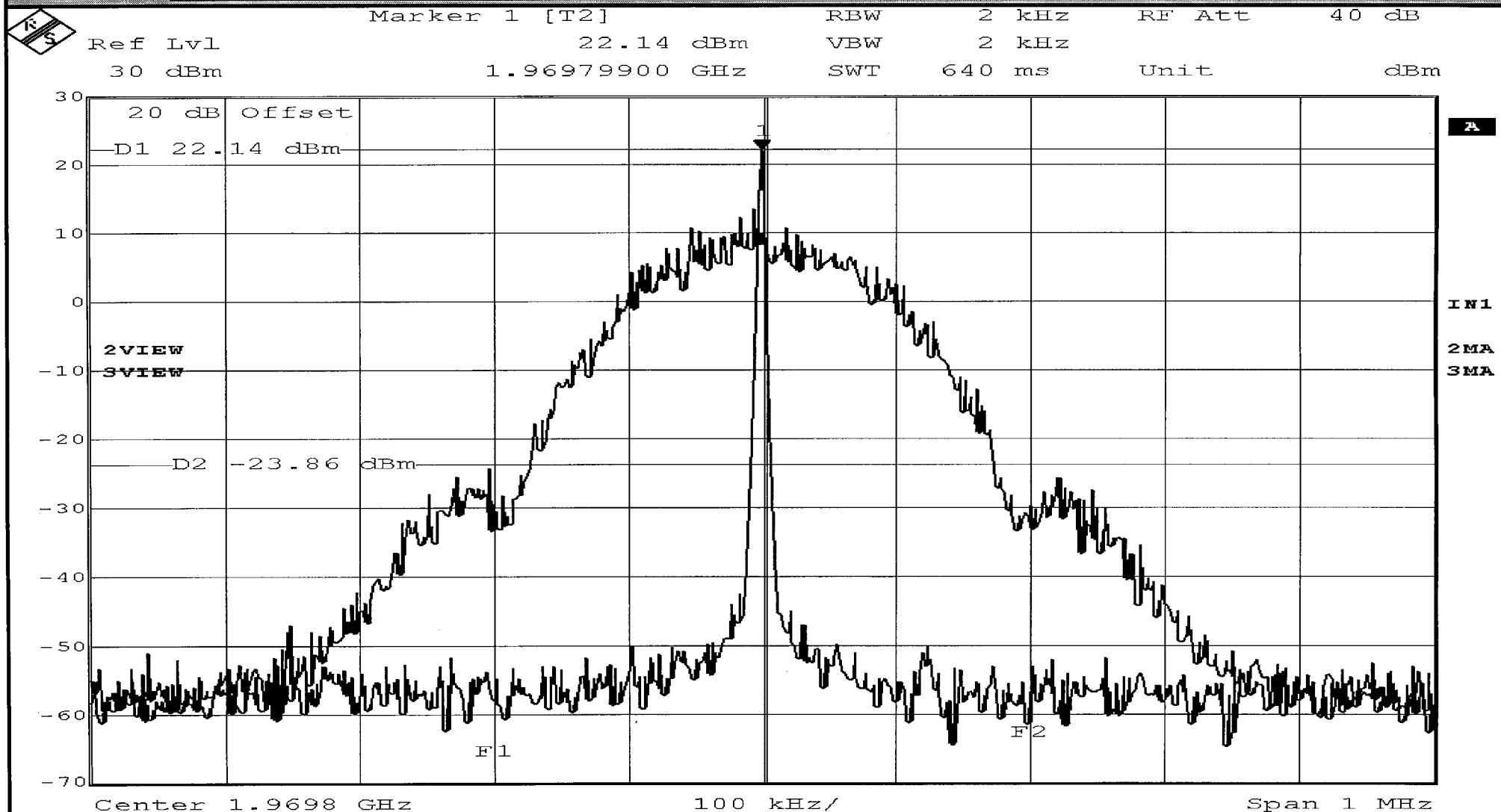


Date: 23.JUN.2003 14:02:20

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block E, 1965-1970 MHz	Frequency: 1969.8 MHz	Modulation: GSM
			Output Signal
			Date: 6/24/03
			Technician: T. Firkowski
			Job No: R-4132N



Date: 23.JUN.2003 14:04:10

RETLIF TESTING LABORATORIES

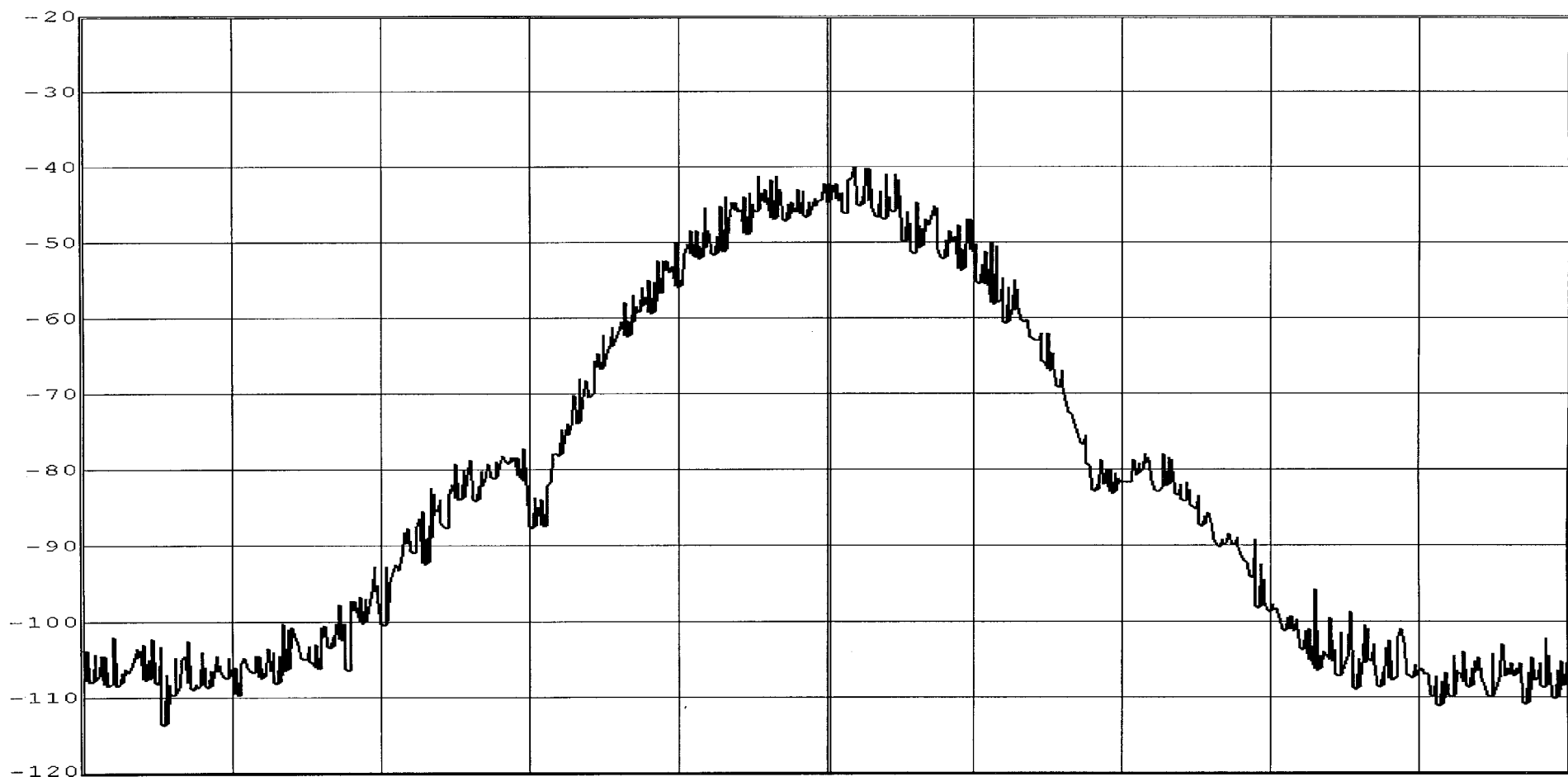
EMISSIONS DATA SHEET

Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block F, 1970-1975 MHz	Frequency: 1970.2 MHz	Modulation: GSM
		Input Signal	



Ref Lvl
-20 dBm

RBW 2 kHz RF Att 10 dB
VBW 2 kHz
SWT 640 ms Unit dBm



A

IN1

2MA

Center 1.9702 GHz

100 kHz/

Span 1 MHz

Date: 23.JUN.2003 14:07:40

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block F, 1970-1975 MHz	Frequency: 1970.2 MHz	Modulation: GSM
			Output Signal
			Date: 6/24/03
			Technician: T. Firkowski
			Job No: R-4132N



Marker 1 [T2]

RBW

2 kHz

RF Att

40 dB

Ref Lvl

22.04 dBm

VBW

2 kHz

30 dBm

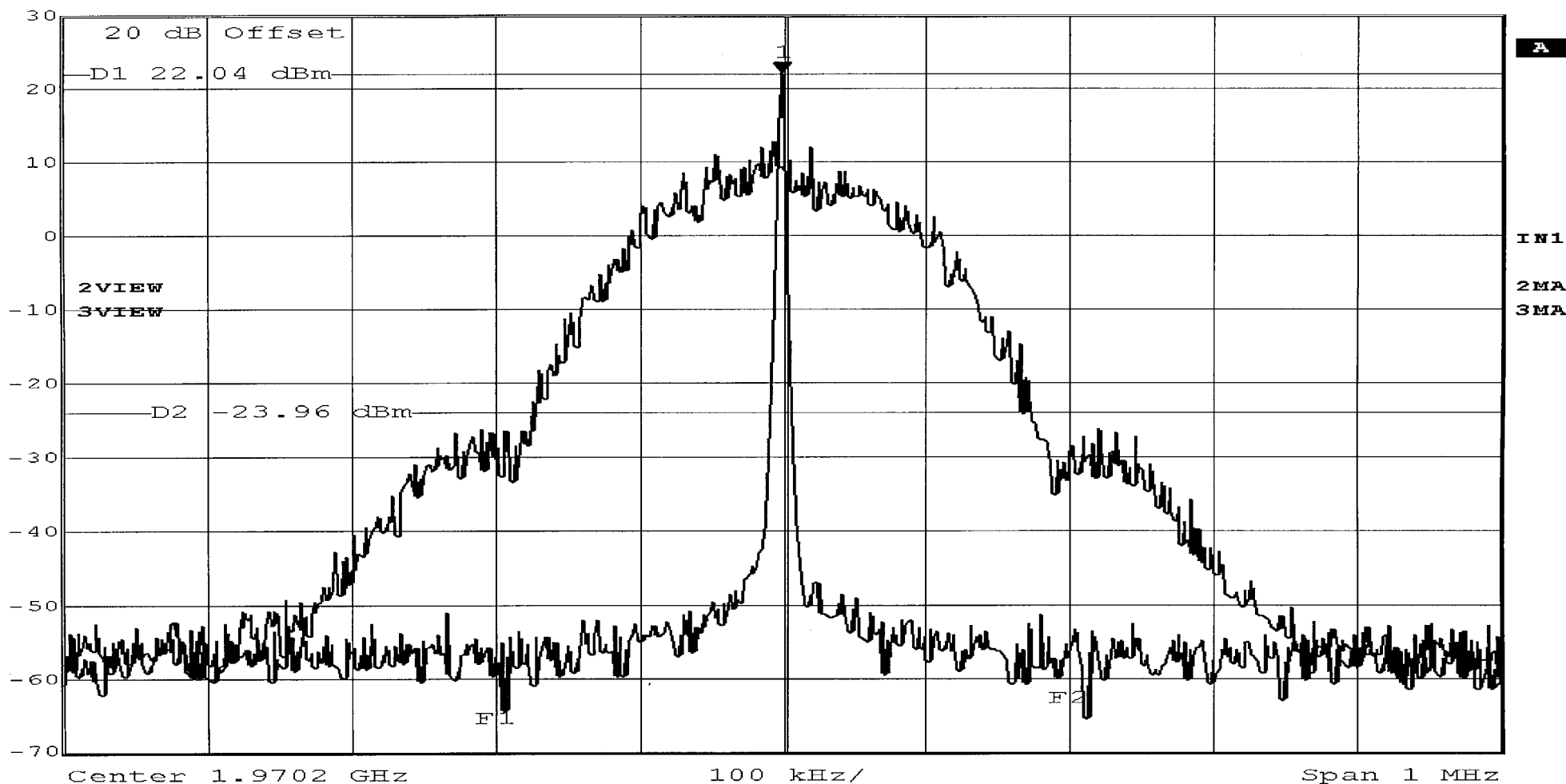
1.97019900 GHz

SWT

640 ms

Unit

dBm

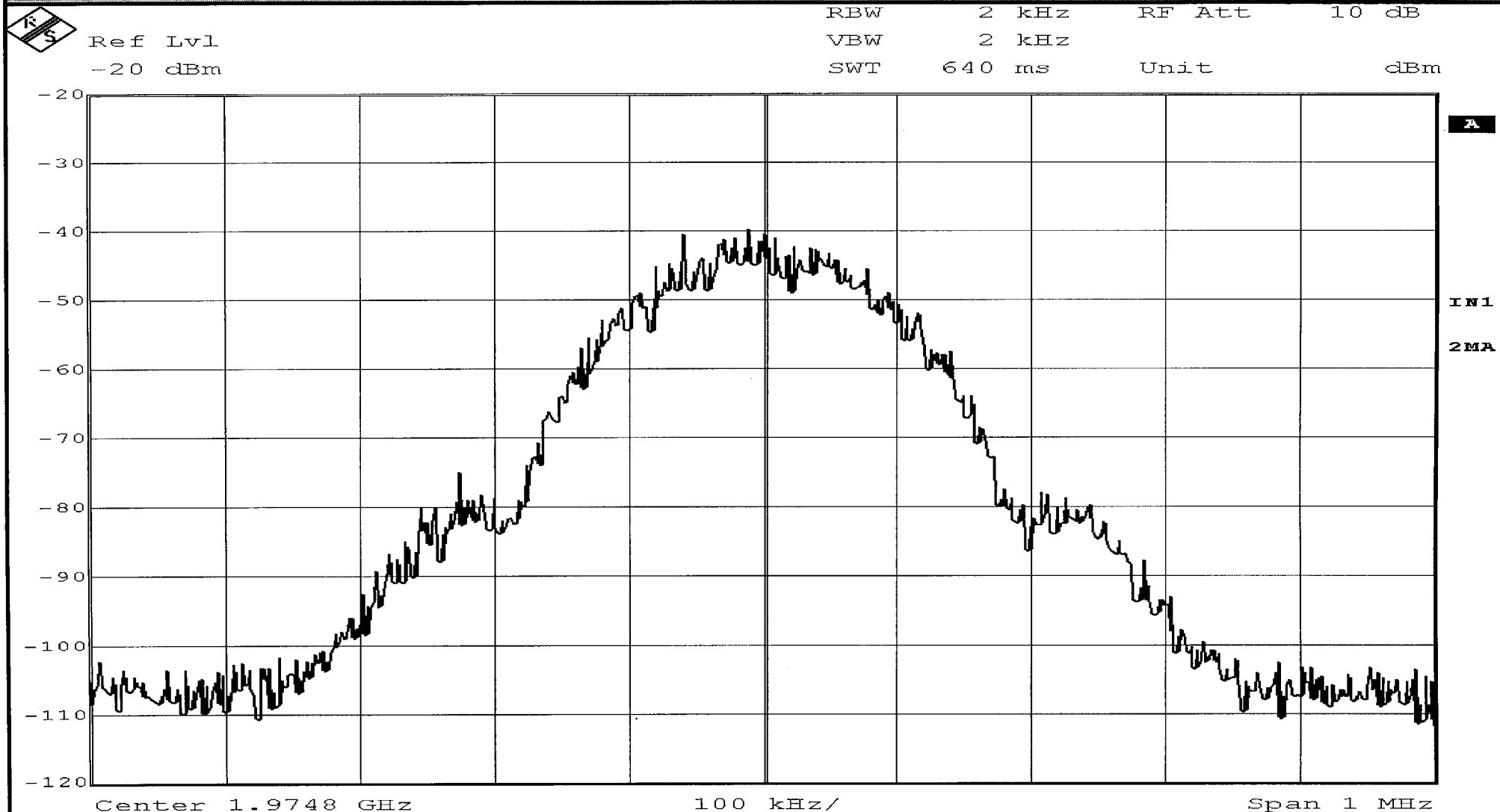


Date: 23.JUN.2003 14:13:24

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block F, 1970-1975 MHz Frequency: 1974.8 MHz Modulation: GSM Input Signal		
		RBW	2 kHz
		VBW	2 kHz
		SWT	640 ms
		RF Att	10 dB
		Unit	dBm

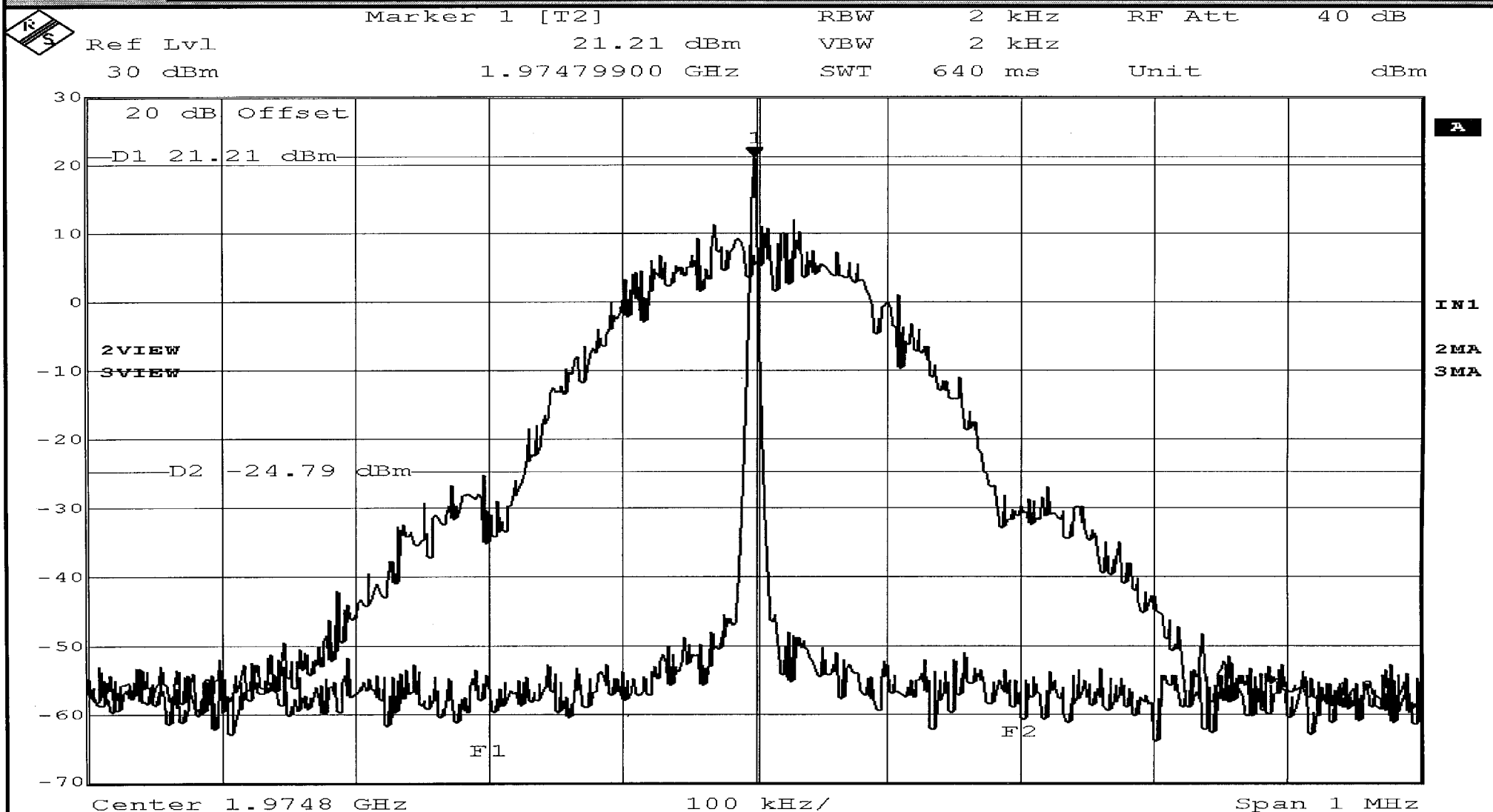


Date: 23.JUN.2003 14:08:23

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

Test Method:	Occupied Bandwidth		
Customer:	Cellular Specialties	Test Sample:	Bidirectional Amplifier
Model No:	150PCS	Serial No:	n/a
Test Specification:	FCC Part 2 & 24	Paragraph:	2.1049 & 24.229
Operating Mode:	Amplifying downlink input signal		
Notes:	PCS Band: Block F, 1970-1975 MHz	Frequency: 1974.8 MHz	Modulation: GSM
			Output Signal
			Date: 6/24/03
			Technician: T. Firkowski
			Job No: R-4132N



Date: 23.JUN.2003 14:10:35

Data Sheet 120 of 144

R-4132N