

RETLIF TESTING LABORATORIES

TABULAR DATA SHEET

Test Method:

RF Power Output

Customer:

Cellular Specialties, Inc.

Job No:

R-4021N

Test Sample:

Bidirectional Amplifier

Model No:

610amps

Serial No:

n/a

Test Specification:

FCC Part 2

Paragraph: 2.1046

Operating Mode:

Amplifying input signal

Technician:

T. Hannemann

Date:

9/5/02

Notes:

Uplink Frequency: 835.0 MHz

Downlink Frequency: 882.0 MHz

[illegible]

15:43:16 SEP 05, 2002

hp

REF 30.0 dBm

AT 20 dB

PEAK

LOG

10

dB/

OFFST

20.0

dB

DL

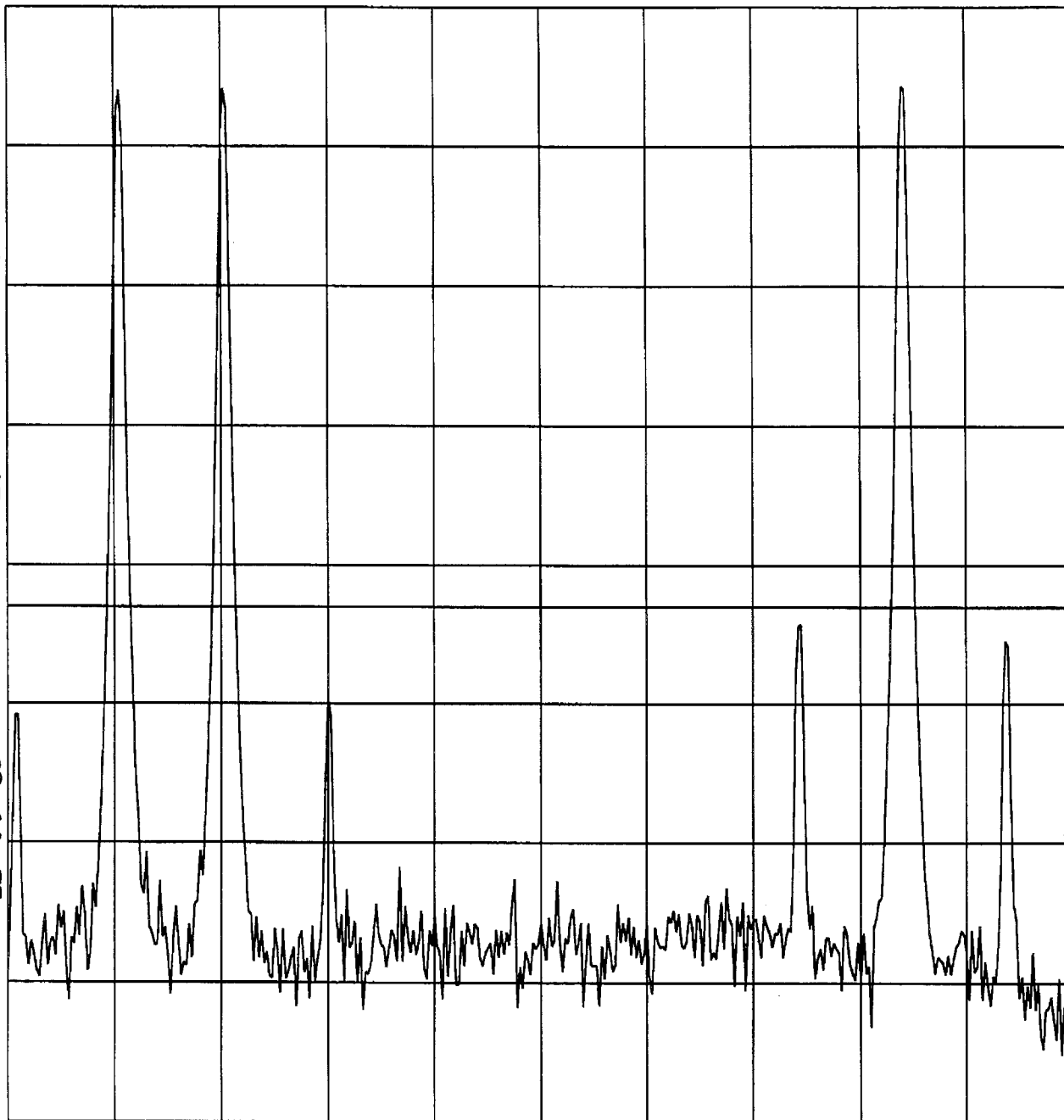
-13.0

dBm

WA SB

SC FC

CORR



START 824.00 MHz

STOP 849.00 MHz

#RES BW 120 kHz

VBW 300 kHz

SWP 20.0 msec

Customer: Cellular Specialties, Inc.
Test Sample: Bidirectional Amplifier
Model No: 610amps
Test Method: Intermodulation Characteristics, FCC Part 2, para 2.1047
Notes: Uplink Frequency Range: 824-849 MHz



Retlif Testing Laboratories

Report No R-4021N

Date: 9/5/02

Tech: T. Hannemann

Sheet 1 of 2

15:48:13 SEP 05, 2002

hp

REF 30.0 dBm

AT 20 dB

PEAK

LOG

10

dB/

OFFST

20.0

dB

DL

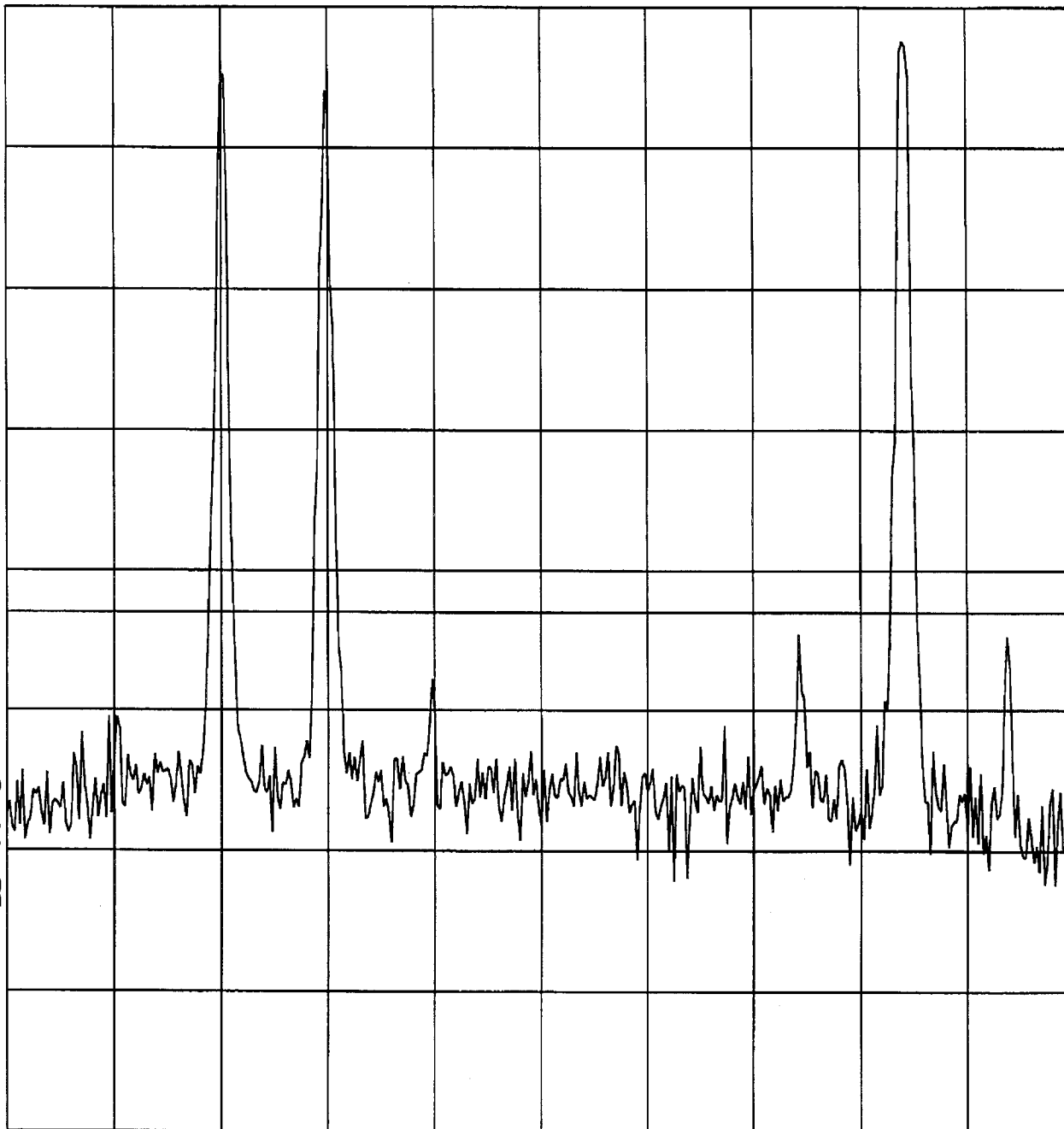
-13.0

dBm

WA SB

SC FC

CORR



START 869.00 MHz

STOP 894.00 MHz

#RES BW 120 kHz

VBW 300 kHz

SWP 20.0 msec

Customer:

Cellular Specialties, Inc.

Test Sample:

Bidirectional Amplifier

Model No:

610amps

Test Method:

Intermodulation Characteristics, FCC Part 2, para 2.1047

Notes:

Downlink Frequency Range: 869-894 MHz

Date: 9/5/02

Tech: T. Hannemann

Sheet 2 of 2



Retlif Testing Laboratories

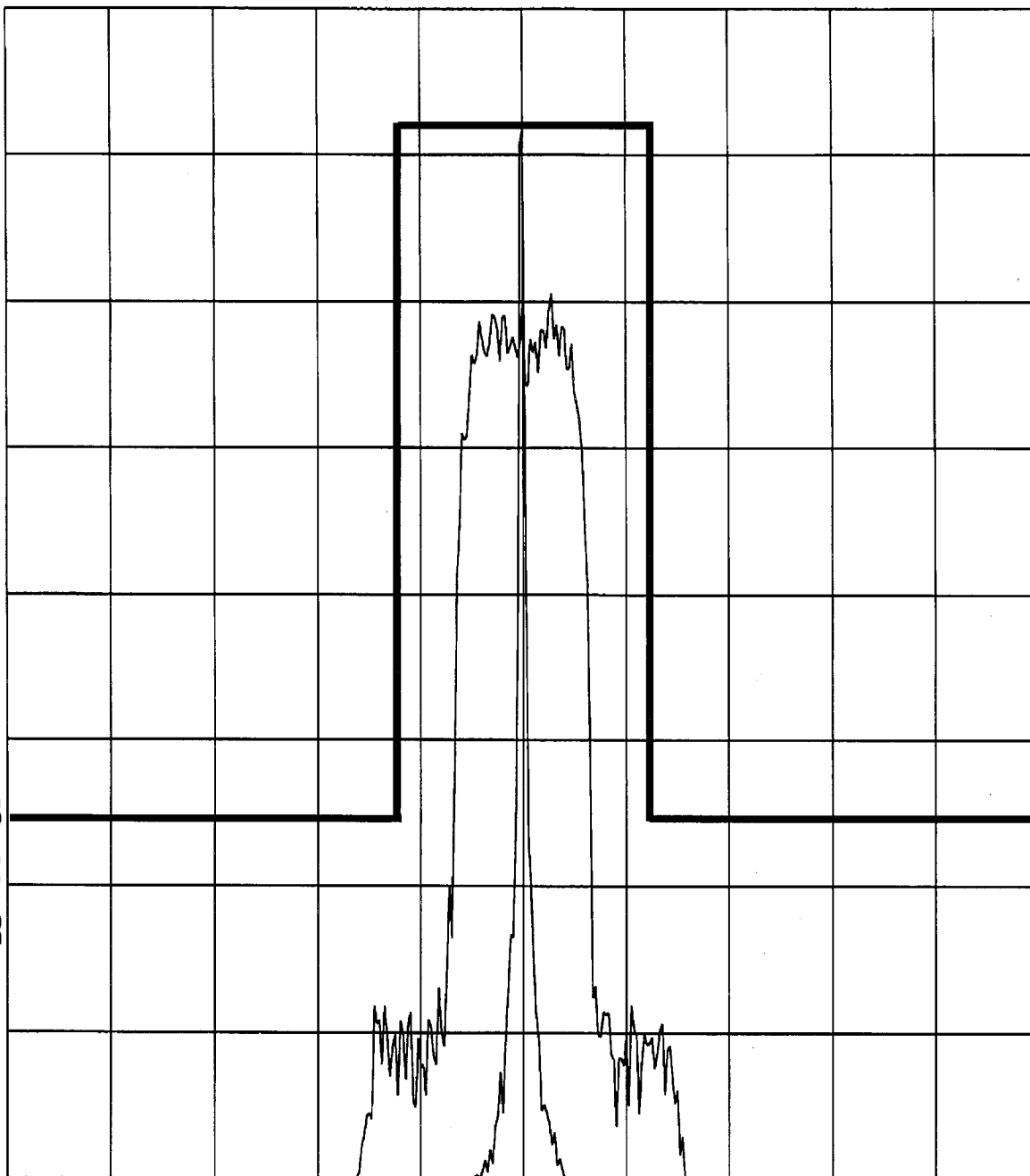
Report No R-4021N

09:54:18 SEP 06, 2002

REF 35.0 dBm #AT 30 dB

PEAK
LOG
10
dB/
OFFST
20.0
dB

VA VB
SC FC
CORR



CENTER 835.0000 MHz

SPAN 250.0 kHz

#RES BW 300 Hz

VBW 1 kHz

SWP 8.33 sec

Customer: Cellular Specialties, Inc.
Test Sample: Bidirectional Amplifier
Model No: 610amps
Test Method: Occupied Bandwidth, FCC Part 2, para 2.1049
Notes: Uplink Frequency 813.5 MHz
Modulation: TDMA

Date: 9/6/02

Tech: T. Firkowski

Sheet 1 of 4



Retlif Testing Laboratories

Report No R-4021N

09:49:50 SEP 06, 2002
hp

REF 35.0 dBm #AT 30 dB

PEAK

LOG

10

dB/

OFFST

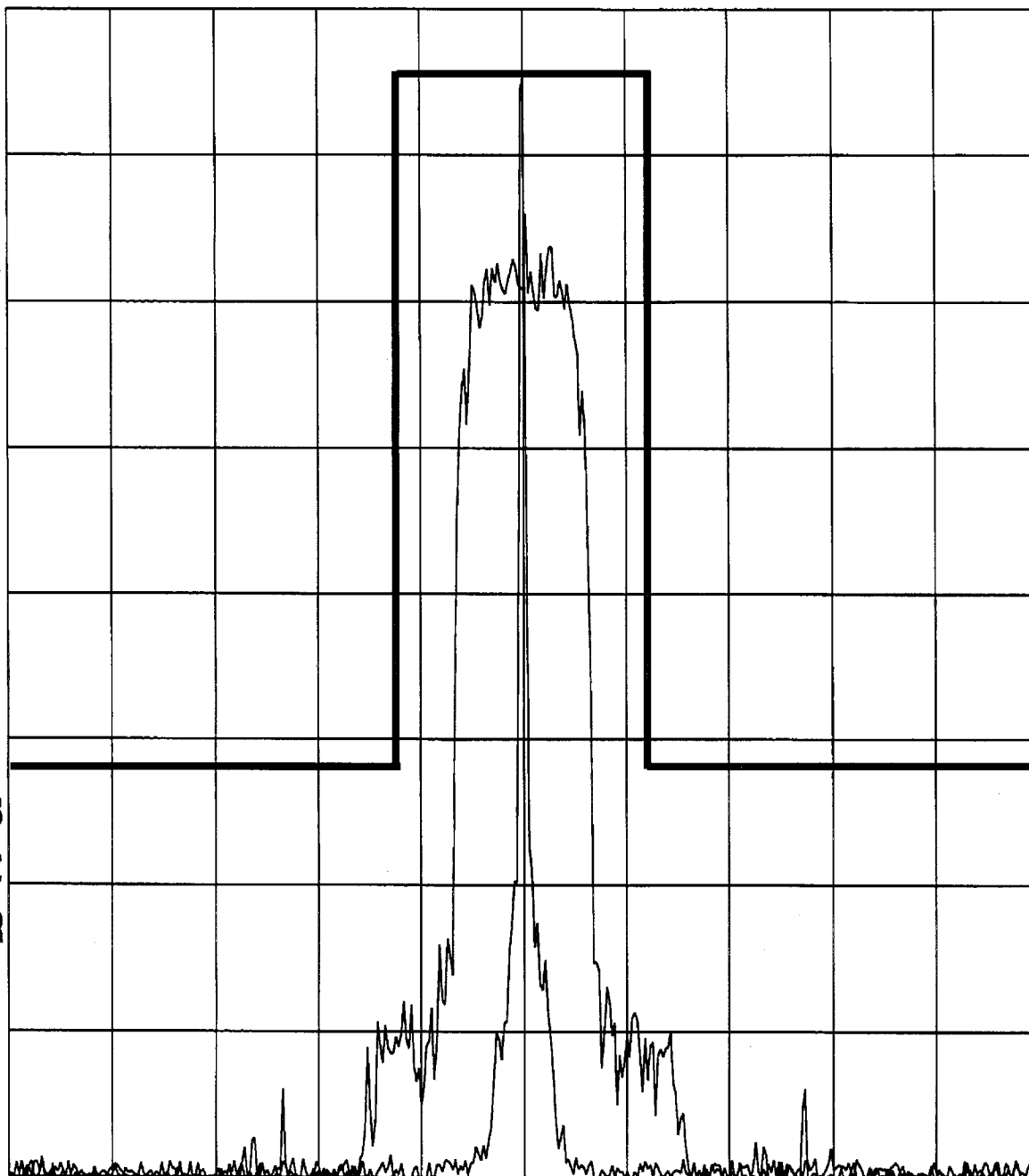
20.0

dB

VA VB

SC FC

CORR



CENTER 882.0000 MHz

SPAN 250.0 kHz

#RES BW 300 Hz

VBW 1 kHz

SWP 8.33 sec

Customer: Cellular Specialties, Inc.
Test Sample: Bidirectional Amplifier
Model No: 610amps
Test Method: Occupied Bandwidth, FCC Part 2, para 2.1049
Notes: Downlink Frequency 858.5 MHz
Modulation: TDMA

Date: 9/6/02

Tech: T. Firkowski

Sheet 2 of 4



Retlif Testing Laboratories

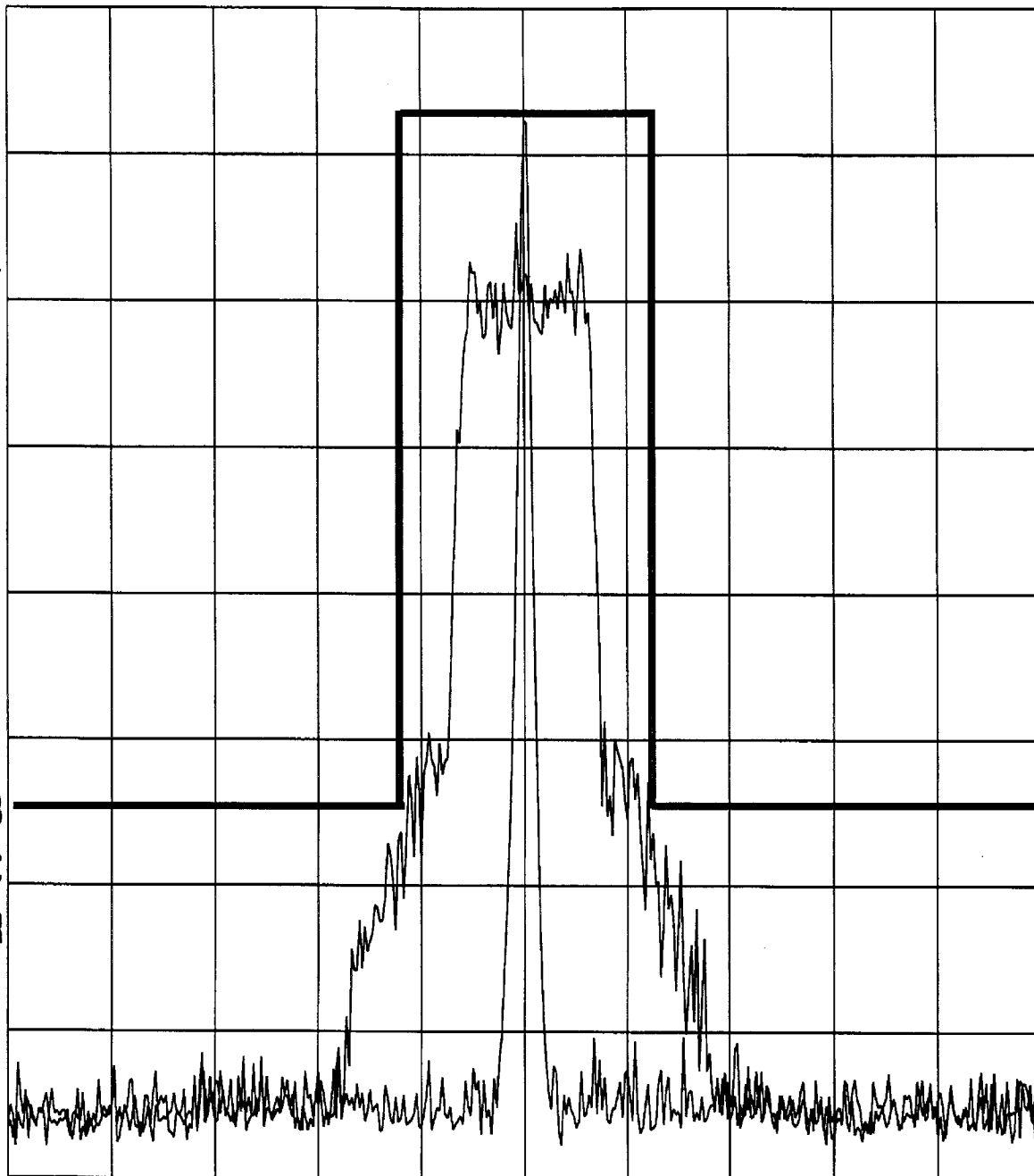
Report No R-4021N

09:37:20 SEP 06, 2002
hp

REF 35.0 dBm #AT 30 dB

PEAK
LOG
10
dB/
OFFST
20.0
dB

VA VB
SC FC
CORR



CENTER 835.00 MHz

SPAN 10.00 MHz

#RES BW 30 kHz

VBW 100 kHz

SWP 33.3 msec

Customer: Cellular Specialties, Inc.
Test Sample: Bidirectional Amplifier
Model No: 610amps
Test Method: Occupied Bandwidth, FCC Part 2, para 2.1049
Notes: Uplink Frequency 813.5 MHz
Modulation: CDMA

Date: 9/6/02

Tech: T. Firkowski

Sheet 3 of 4



Retlif Testing Laboratories

Report No R-4021N

09:46:13 SEP 06, 2002

REF 35.0 dBm #AT 30 dB

PEAK

LOG

10

dB/

OFFST

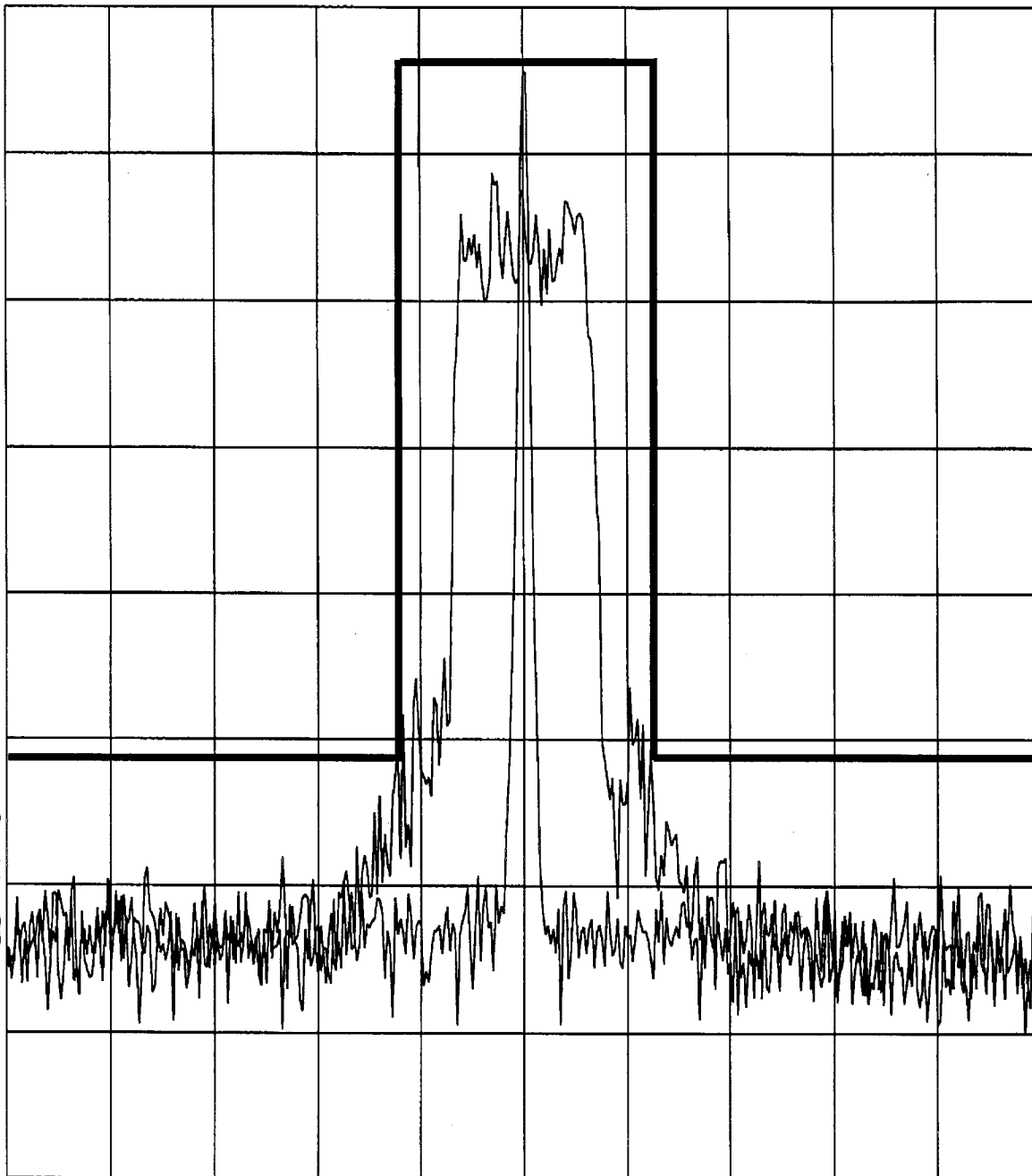
20.0

dB

VA VB

SC FC

CORR



CENTER 882.00 MHz

SPAN 10.00 MHz

#RES BW 30 kHz

VBW 100 kHz

SWP 33.3 msec

Customer: Cellular Specialties, Inc.
Test Sample: Bidirectional Amplifier
Model No: 610amps
Test Method: Occupied Bandwidth, FCC Part 2, para 2.1049
Notes: Downlink Frequency 858.5 MHz
Modulation: CDMA

Date: 9/6/02

Tech: T. Firkowski

Sheet 4 of 4



Retlif Testing Laboratories

Report No R-4021N

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

Test Method:	Spurious Emissions at the Antenna Terminals 30 MHz to 9.0 GHz		
Customer:	Cellular Specialties, Inc.	Job No:	R-4021N
Test Sample:	Bidirectional Amplifier		
Model No:	610amps	Serial No:	n/a
Test Specification:	FCC Part 2/22.917 Paragraph: 2.1051		
Operating Mode:	Amplifying input signal		
Technician:	T. Hannemann	Date:	9/5/02
Notes:	Uplink Frequency 835.0 MHz Downlink Frequency 882.0 MHz		

[illegible]

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

Test Method:	Spurious Radiated Emissions (ERP) 30 MHz to 9.0 GHz		
Customer:	Cellular Specialties, Inc.	Job No:	R-4021N
Test Sample:	Bidirectional Amplifier		
Model No:	610amps	Serial No:	n/a
Test Specification:	FCC Part 2.1053/22.917 Paragraph: n/a		
Operating Mode:	Amplifying input signal		
Technician:	T. Hannemann	Date:	9/19/02
Notes:	Uplink Frequency Range: 824 - 849 MHz Peak Detector		
	Tested at 835.0 MHz		

[illegible]

EUT emissions observed throughout the given frequency spectrum were recorded & evaluated, Emission levels closest to the limit are listed on this data sheet.

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

Test Method:	Spurious Radiated Emissions (ERP) 30 MHz to 9.0 GHz		
Customer:	Cellular Specialties, Inc.	Job No:	R-4021N
Test Sample:	Bidirectional Amplifier		
Model No:	610amps	Serial No:	n/a
Test Specification:	FCC Part 2.1053/22.917 Paragraph: n/a		
Operating Mode:	Amplifying input signal		
Technician:	T. Hannemann	Date:	9/19/02
Notes:	Downlink Frequency Range: 869 - 894 MHz Tested at 882.0 MHz Peak Detector		

[illegible]

EMISSIONS DATA SHEET

Frequency Stability

Cellular Specialties, Inc.

R-4021N

Bidirectional Amplifier

610amps

Serial No:

n/a

FCC Part 2

Paragraph: 2.1055

Amplifying input signal

T. Hannemann

Date: _____

9/4/02

Uplink Frequency 835.0 MHz

Nominal Voltage = 115 VAC

Downlink Frequency 882.0 MHz

[illegible]