

RETLIF TESTING LABORATORIES

TABULAR DATA SHEET

Test Method:

RF Power Output

Customer:

Cellular Specialties, Inc.

Job No:

R-4067N1

Test Sample:

Bidirectional Amplifier

Model No:

565AMPS

Serial No:

AMPS2

Test Specification:

FCC Part 2

Paragraph: 2.1046

Operating Mode:

Amplifying input signal

Technician:

T. Firkowski

Date:

12/5/02

Notes:

Uplink Frequency: 836.5 MHz

Downlink Frequency: 881.5 MHz

[illegible]

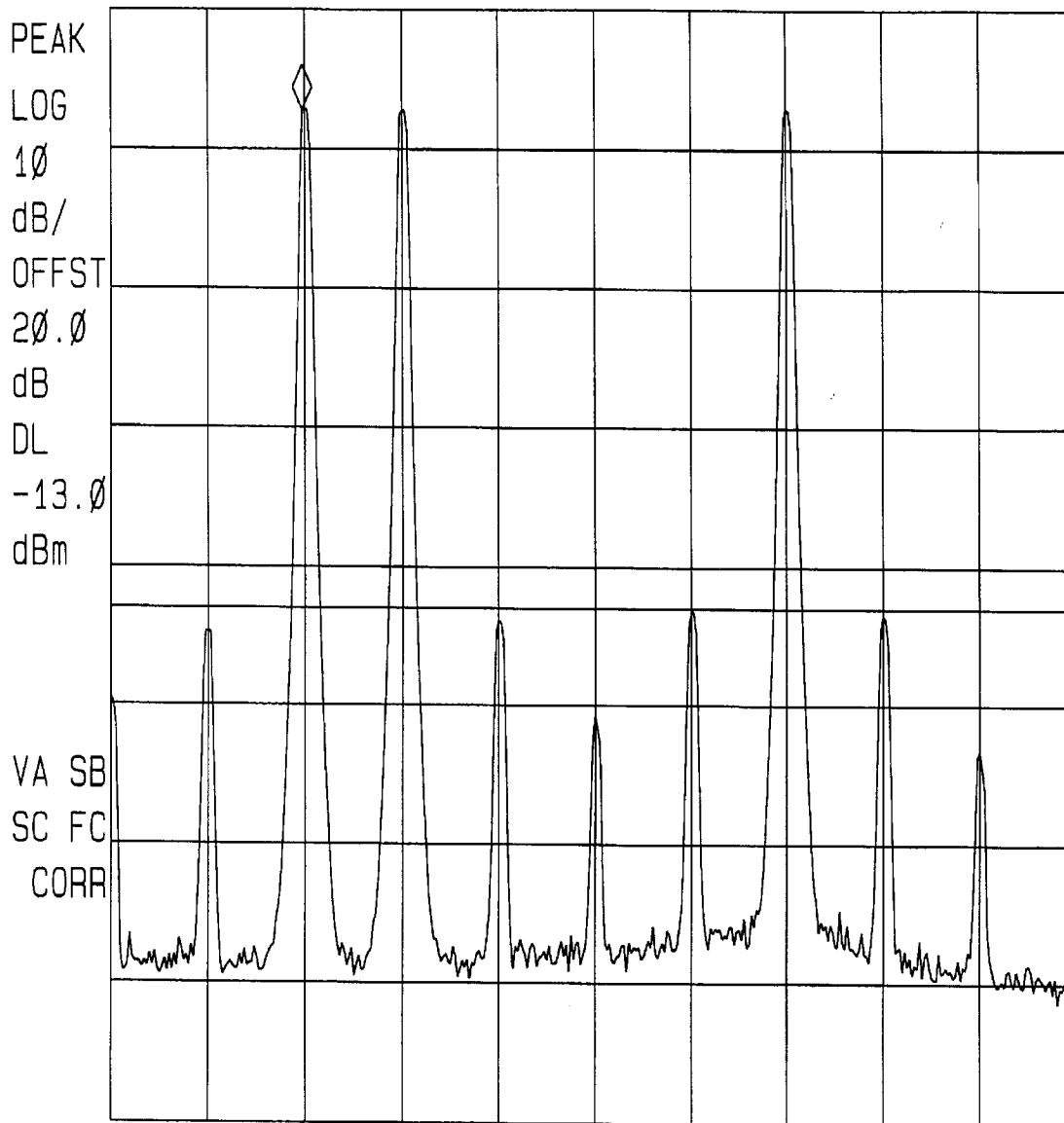
15:23:58 DEC 05, 2002
hp

MKR 828.94 MHz

REF 30.0 dBm

AT 20 dB

22.78 dBm



START 824.00 MHz

STOP 849.00 MHz

#RES BW 100 kHz

VBW 300 kHz

SWP 20.0 msec

Customer: Cellular Specialties, Inc.
Test Sample: Bidirectional Amplifier
Model No: 565AMPS
Test Method: Intermodulation Characteristics, FCC Part 2, para 2.1047
Notes: Uplink Frequency Range: 824-849 MHz

Date: 12/5/02

Tech: T. Firkowski

Sheet 1 of 6



Retlif Testing Laboratories

Report No R-4067N1

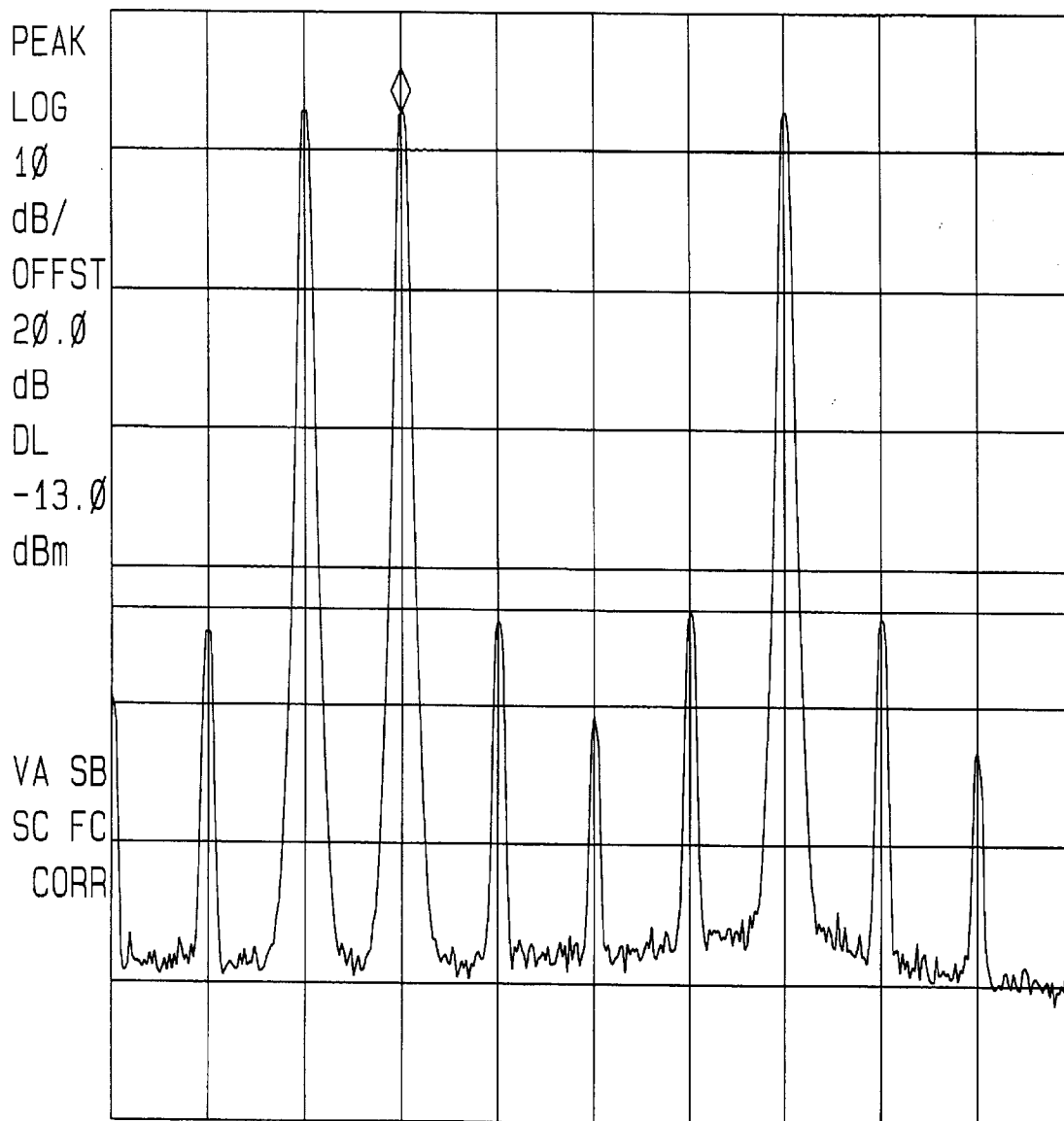
15:23:58 DEC 05, 2002

MKR 831.50 MHz

REF 30.0 dBm

AT 20 dB

22.71 dBm



START 824.00 MHz

STOP 849.00 MHz

#RES BW 100 kHz

VBW 300 kHz

SWP 20.0 msec

Customer: Cellular Specialties, Inc.
Test Sample: Bidirectional Amplifier
Model No: 565AMPS
Test Method: Intermodulation Characteristics, FCC Part 2, para 2.1047
Notes: Uplink Frequency Range: 824-849 MHz

Date: 12/5/02

Tech: T. Firkowski

Sheet 2 of 6



Retlif Testing Laboratories

Report No R-4067N1

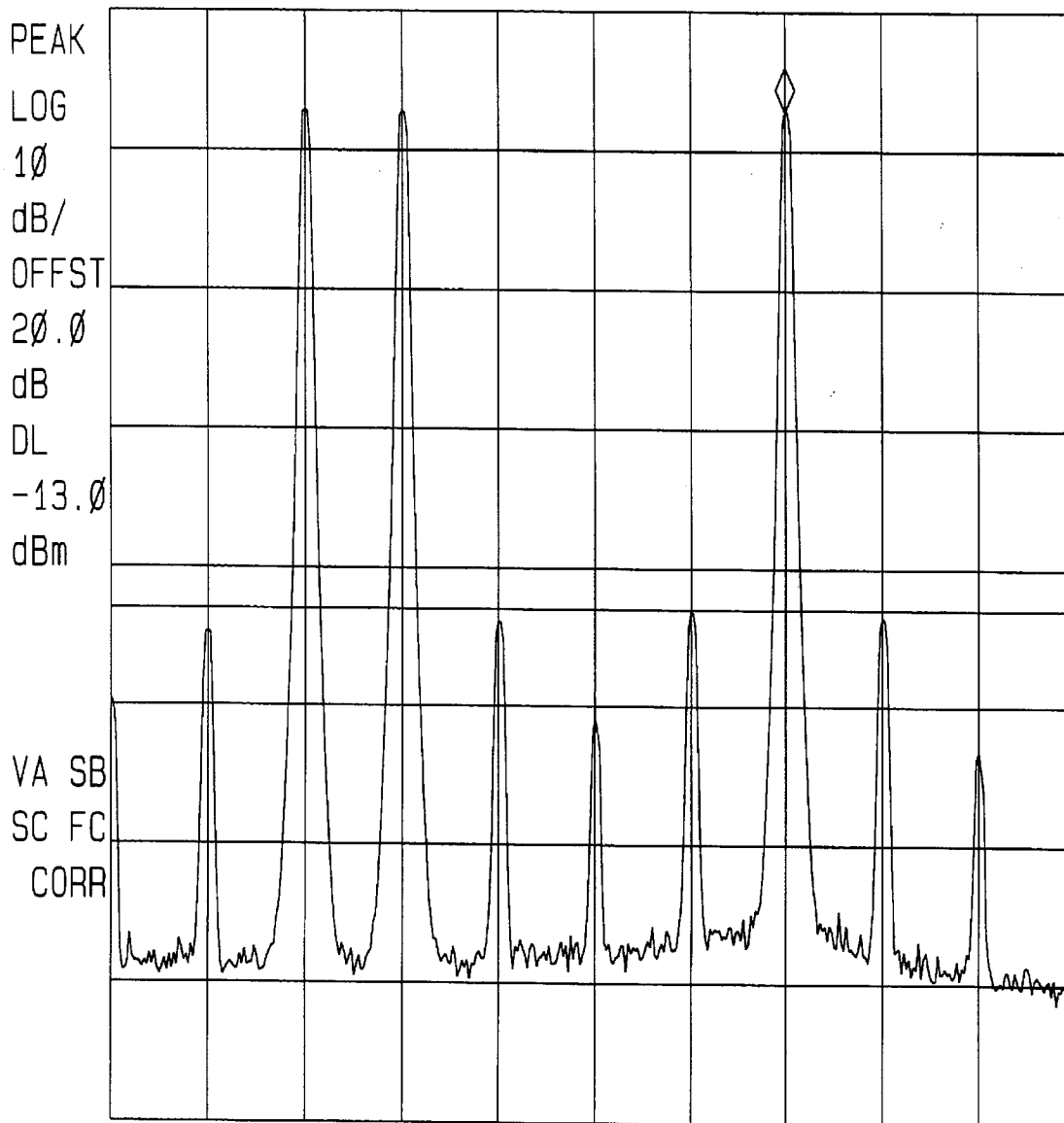
15:26:06 DEC 05, 2002
hp

MKR 841.50 MHz

REF 30.0 dBm

AT 20 dB

22.79 dBm



START 824.00 MHz

STOP 849.00 MHz

#RES BW 100 kHz

VBW 300 kHz

SWP 20.0 msec

Customer: Cellular Specialties, Inc.
Test Sample: Bidirectional Amplifier
Model No: 565AMPS
Test Method: Intermodulation Characteristics, FCC Part 2, para 2.1047
Notes: Uplink Frequency Range: 824-849 MHz

Date: 12/5/02

Tech: T. Firkowski

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Retlif Testing Laboratories

Report No R-4067N1

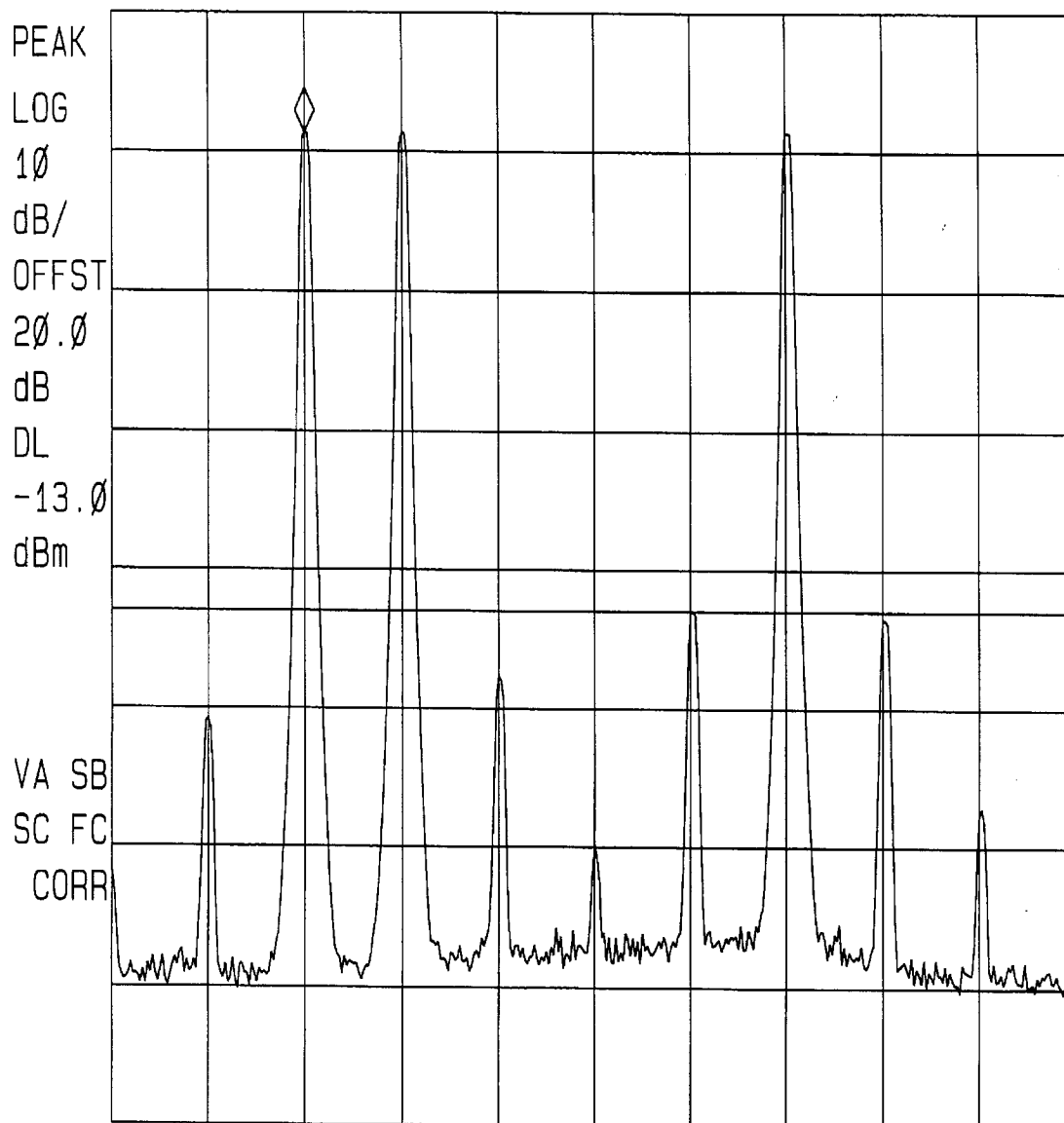
15:05:24 DEC 05, 2002
hp

MKR 874.00 MHz

REF 30.0 dBm

AT 20 dB

21.36 dBm



START 869.00 MHz

STOP 894.00 MHz

#RES BW 100 kHz

VBW 300 kHz

SWP 20.0 msec

Customer: Cellular Specialties, Inc.
Test Sample: Bidirectional Amplifier
Model No: 565AMPS
Test Method: Intermodulation Characteristics, FCC Part 2, para 2.1047
Notes: Downlink Frequency Range: 869-894 MHz

Date: 12/5/02

Tech: T. Firkowski

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Retliff Testing Laboratories

Report No R-4067N1

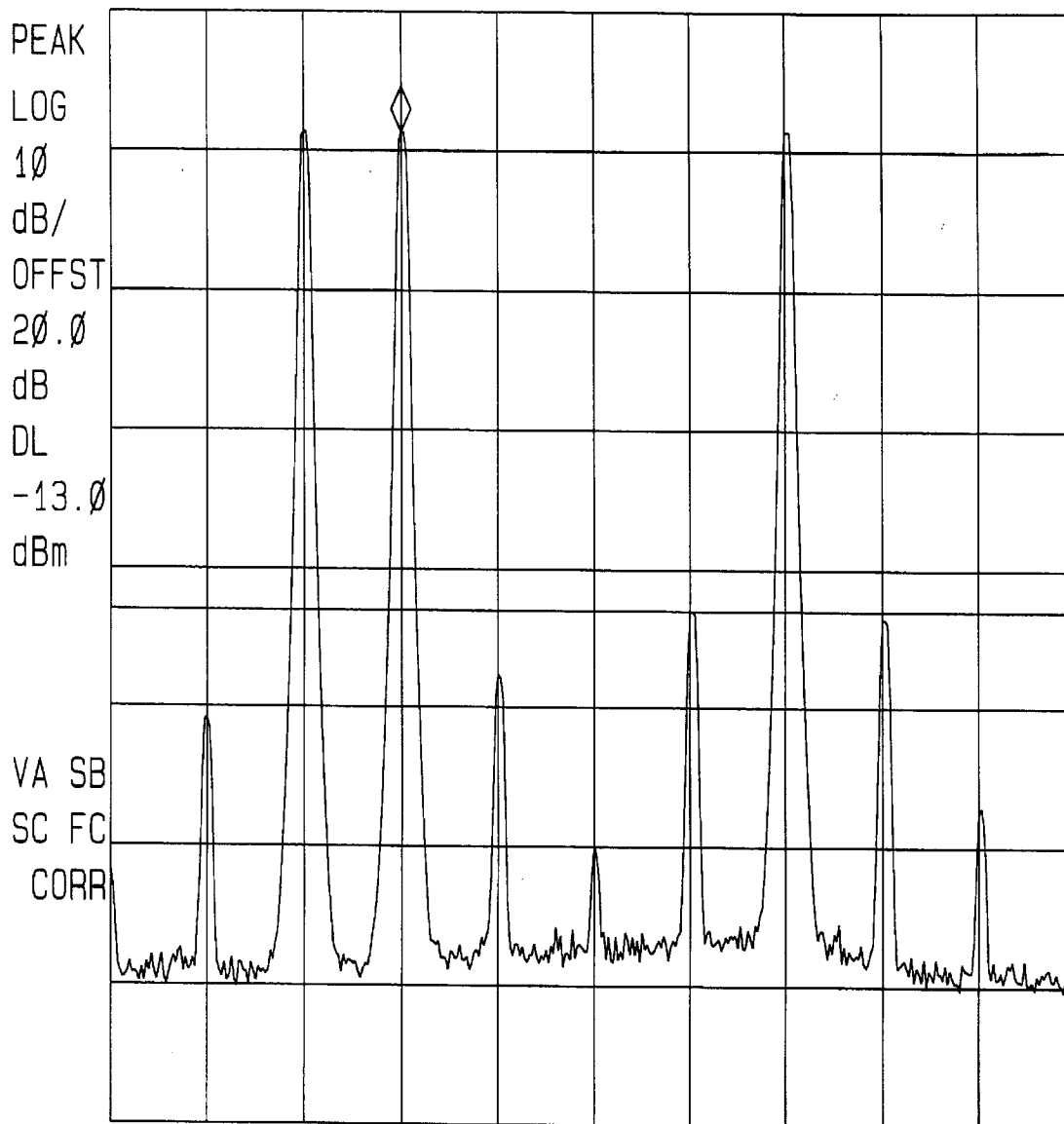
15:05:32 DEC 05, 2002

MKR 876.50 MHz

REF 30.0 dBm

AT 20 dB

21.34 dBm



START 869.00 MHz

STOP 894.00 MHz

#RES BW 100 kHz

VBW 300 kHz

SWP 20.0 msec

Customer: Cellular Specialties, Inc.
Test Sample: Bidirectional Amplifier
Model No: 565AMPS
Test Method: Intermodulation Characteristics, FCC Part 2, para 2.1047
Notes: Downlink Frequency Range: 869-894 MHz

Date: 12/5/02

Tech: T. Firkowski

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Retlif Testing Laboratories

Report No R-4067N1

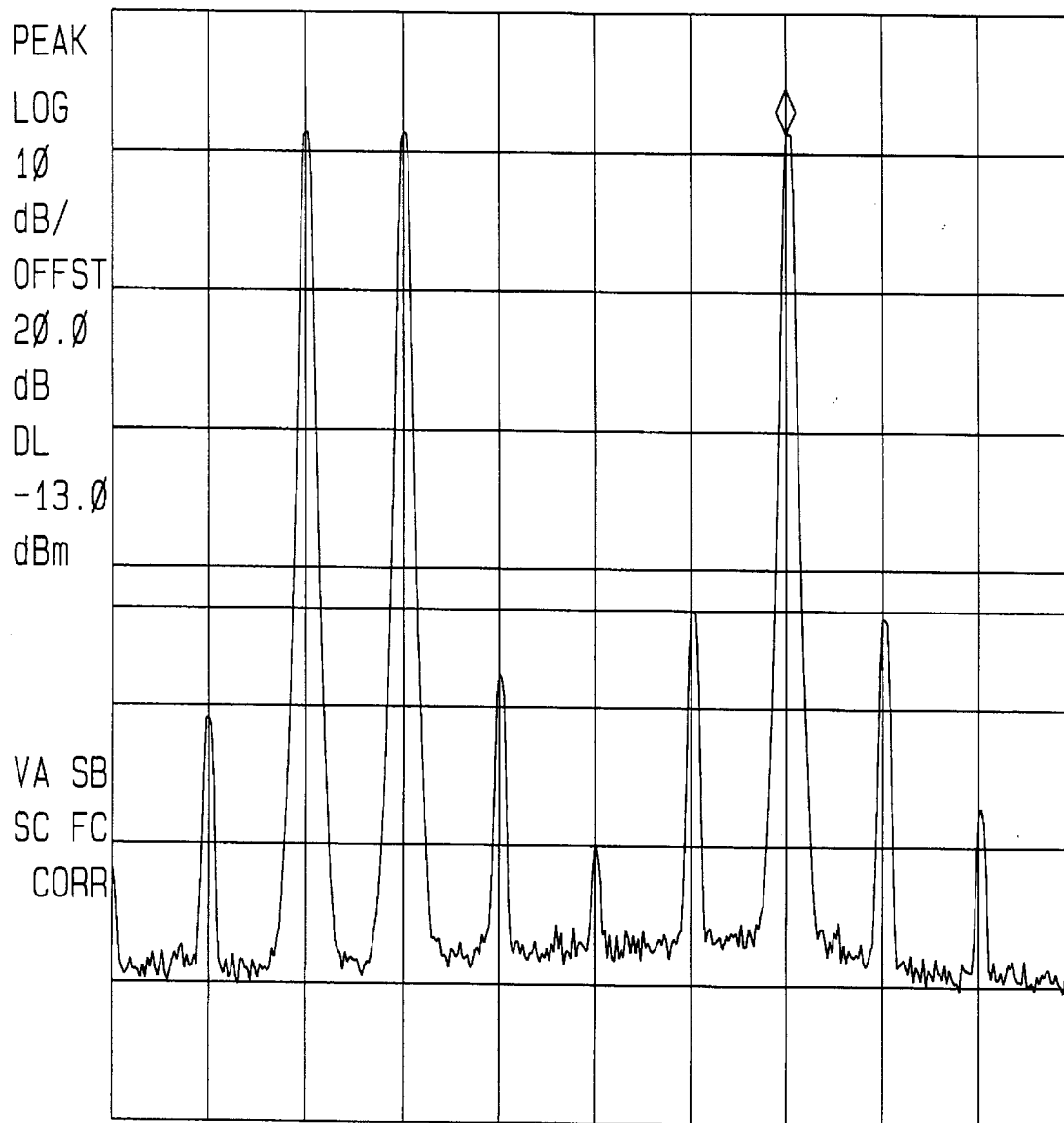
15:05:32 DEC 05, 2002
hp

MKR 886.50 MHz

REF 30.0 dBm

AT 20 dB

21.39 dBm



START 869.00 MHz

STOP 894.00 MHz

#RES BW 100 kHz

VBW 300 kHz

SWP 20.0 msec

Customer: Cellular Specialties, Inc.
Test Sample: Bidirectional Amplifier
Model No: 565AMPS
Test Method: Intermodulation Characteristics, FCC Part 2, para 2.1047
Notes: Downlink Frequency Range: 869-894 MHz

Date: 12/5/02

Tech: T. Firkowski

Sheet 6 of 6

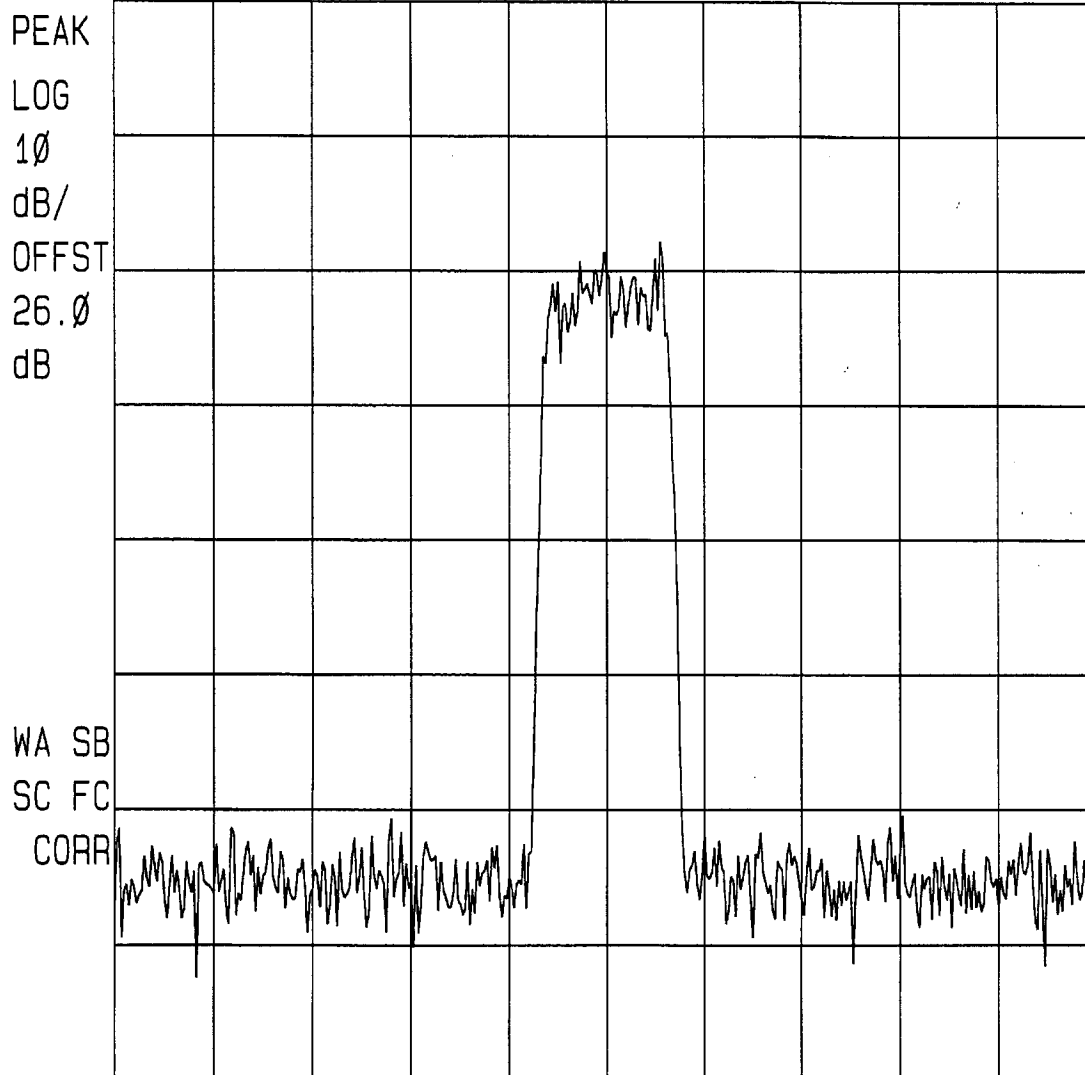


Retlif Testing Laboratories

Report No R-4067N1

10:50:37 DEC 19, 2002
hp

REF -9.0 dBm #AT 0 dB



CENTER 836.500 MHz

SPAN 9.950 MHz

#RES BW 30 kHz

VBW 100 kHz

SWP 33.2 msec

Customer: Cellular Specialties, Inc.
Test Sample: Bidirectional Amplifier
Model No: 565AMPS
Test Method: Occupied Bandwidth, FCC Part 2, para 2.1049
Notes: Uplink Frequency 836.5 MHz
Modulation: CDMA input

Date: 12/19/02

Tech: T. Firkowski

Sheet 1 of 8

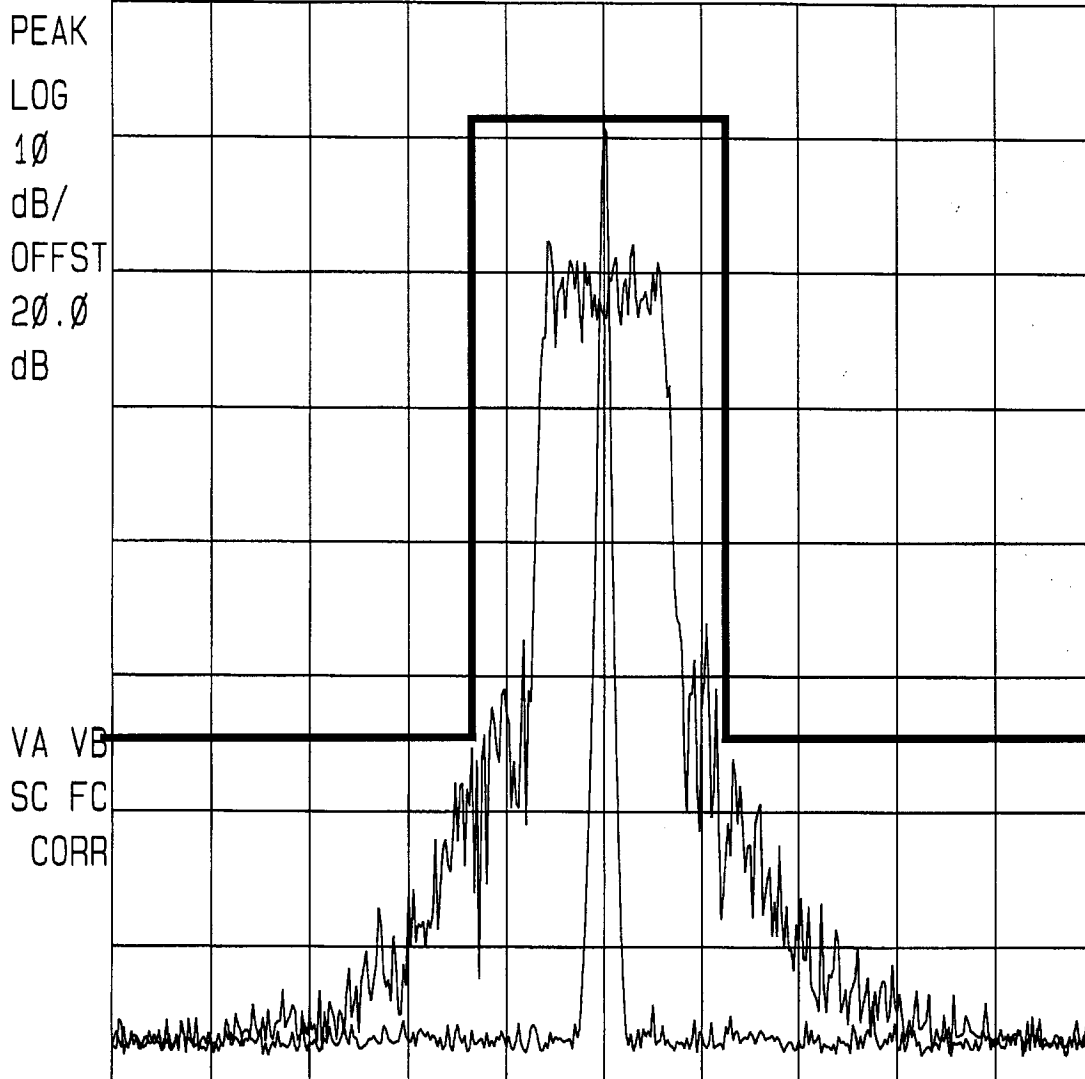


Retlif Testing Laboratories

Report No. R-4067N1

10:47:13 DEC 19, 2002
hp

REF 35.0 dBm AT 30 dB



CENTER 836.500 MHz

SPAN 9.950 MHz

#RES BW 30 kHz

VBW 100 kHz

SWP 33.2 msec

Customer: Cellular Specialties, Inc.
Test Sample: Bidirectional Amplifier
Model No: 565AMPS
Test Method: Occupied Bandwidth, FCC Part 2, para 2.1049
Notes: Uplink Frequency 836.5 MHz
Modulation: CDMA output

Date: 12/19/02

Tech: T. Firkowski

Sheet 2 of 8

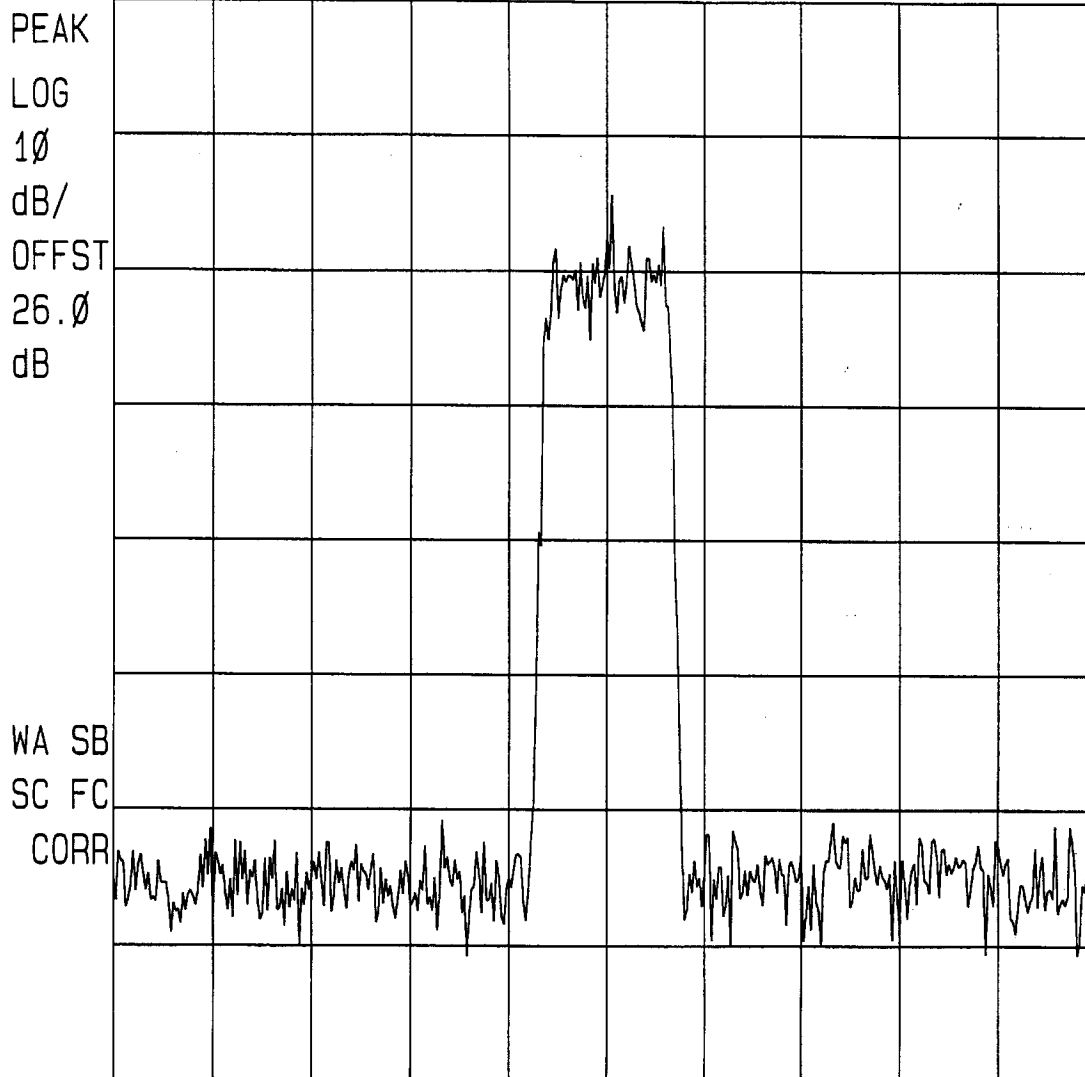


Retlif Testing Laboratories

Report No. R-4067N1

12:04:00 DEC 19, 2002
hp

REF -9.0 dBm #AT 0 dB



CENTER 881.50 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: 565AMPS
Test Method: Occupied Bandwidth, FCC Part 2, para 2.1049
Notes: Downlink Frequency: 881.5 MHz
Modulation: CDMA input

Date: 12/19/02

Tech: T. Firkowski

Sheet 3 of 8

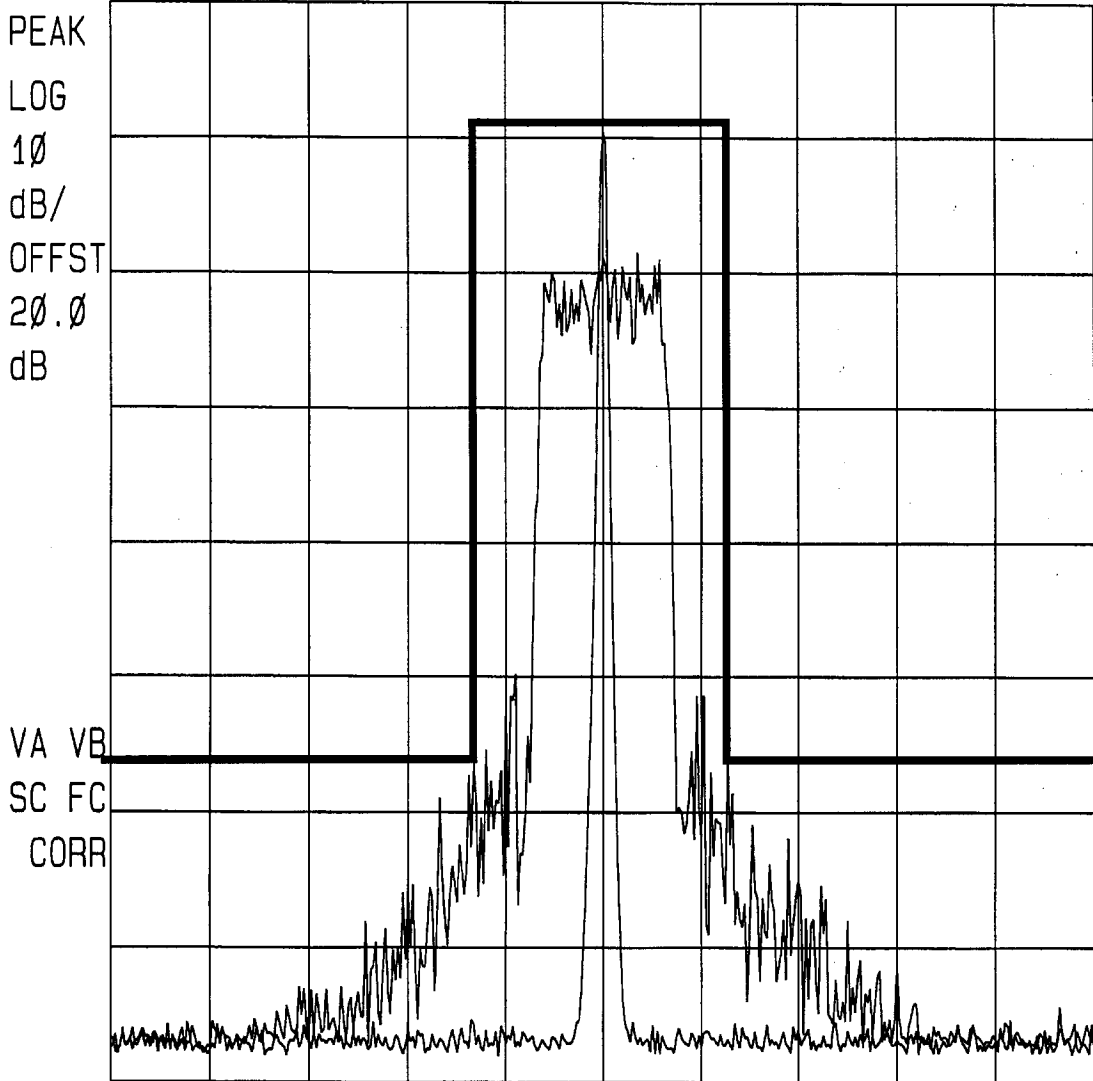


Retlif Testing Laboratories

Report No. R-4067N1

12:02:28 DEC 19, 2002
HP

REF 35.0 dBm AT 30 dB



CENTER 881.50 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: 565AMPS
Test Method: Occupied Bandwidth, FCC Part 2, para 2.1049
Notes: Downlink Frequency: 881.5 MHz
Modulation: CDMA output

Date: 12/19/02

Tech: T. Firkowski

Sheet 4 of 8



Retlif Testing Laboratories

Report No. R-4067N1

11:08:02 DEC 19, 2002
hp

REF -9.0 dBm #AT 0 dB

PEAK

LOG

10

dB/

OFFST

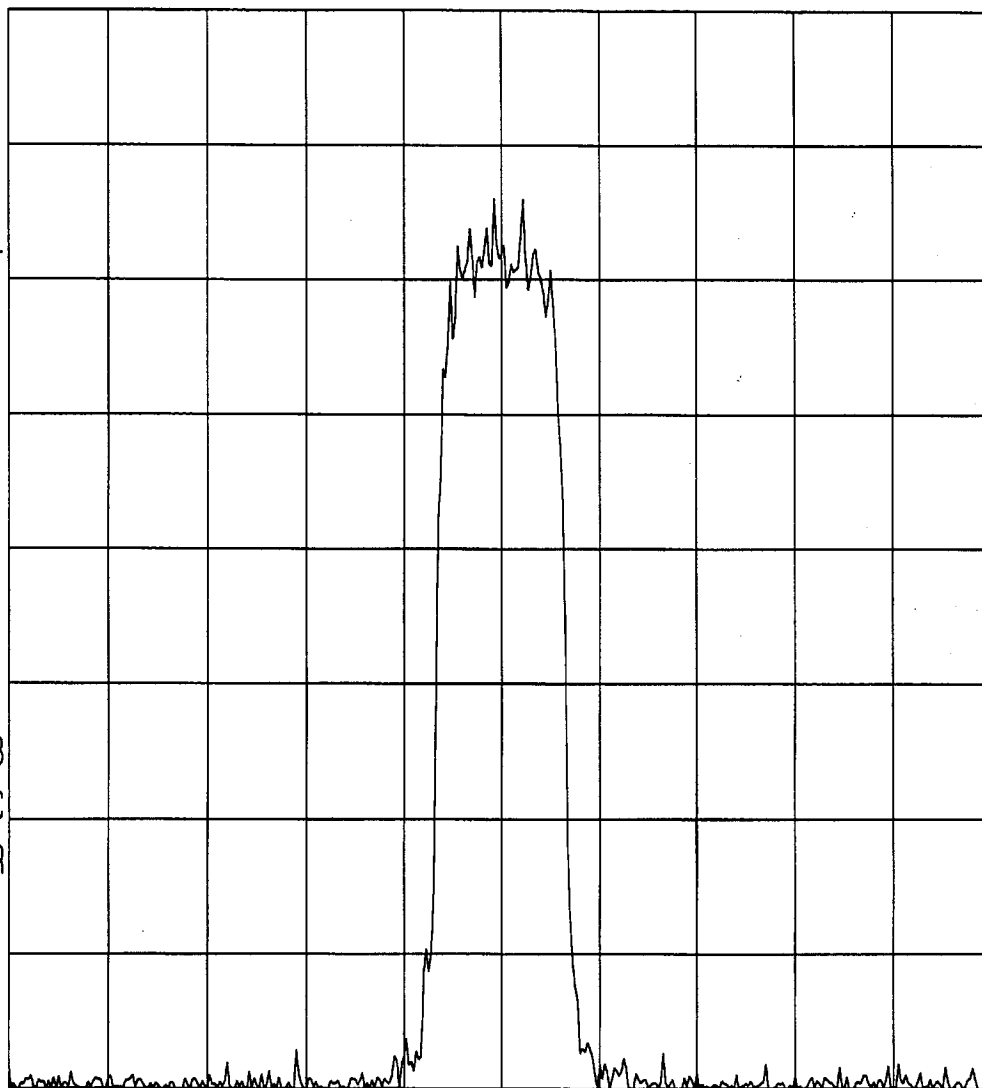
26.0

dB

WA SB

SC FC

CORR



CENTER 836.5000 MHz

SPAN 250.0 kHz

#RES BW 300 Hz

VBW 1 kHz

SWP 8.33 sec

Customer:
Test Sample:

Cellular Specialties, Inc.
Bidirectional Amplifier
565AMPS
Occupied Bandwidth, FCC Part 2, para 2.1049
Uplink Frequency: 836.5 MHz
Modulation: TDMA input



Date: 12/19/02

Tech: T. Firkowski

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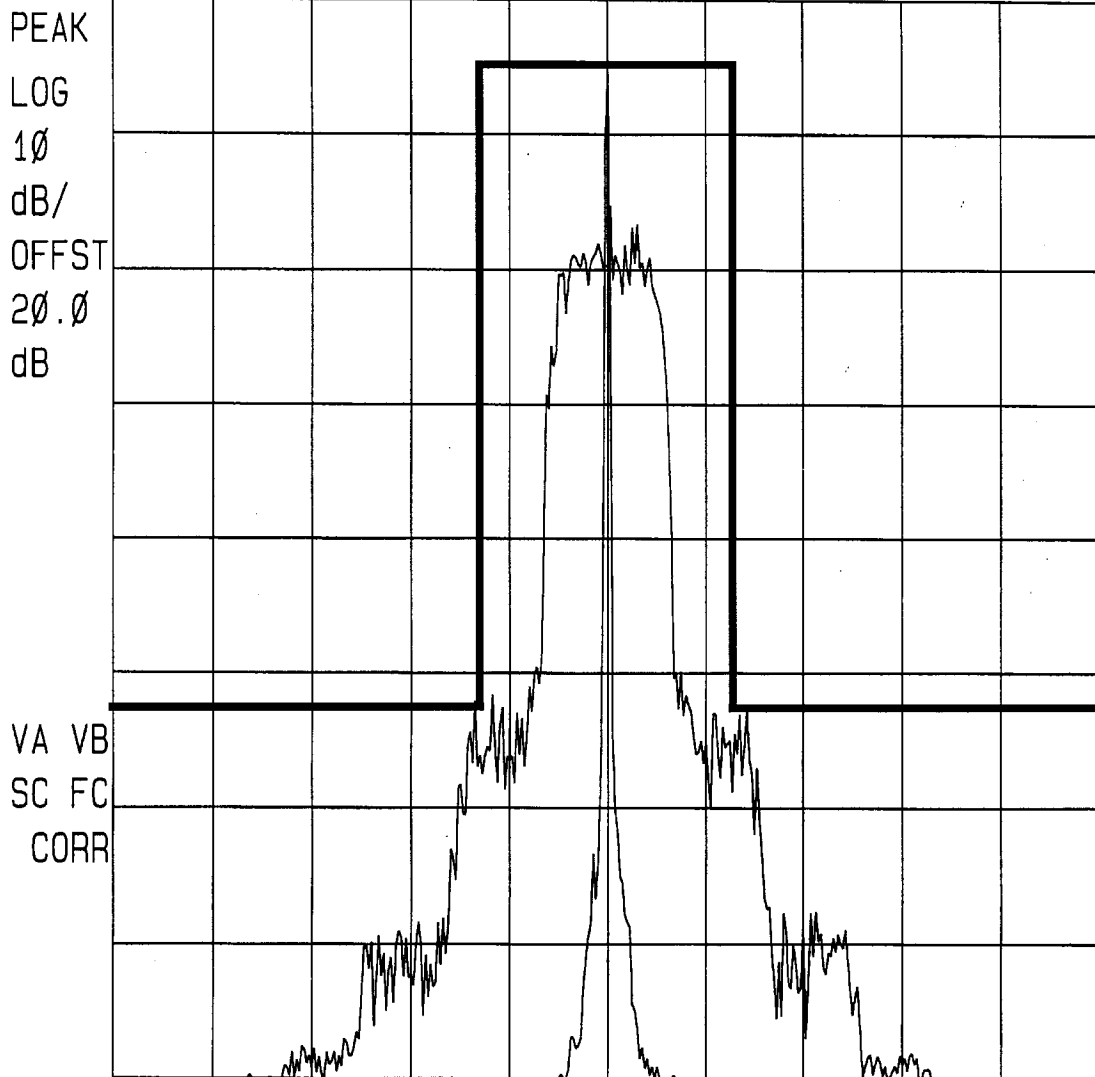


Retlif Testing Laboratories

Report No. R-4067N1

11:04:55 DEC 19, 2002
hp

REF 35.0 dBm AT 30 dB



CENTER 836.5000 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: 565AMPS
Test Method: Occupied Bandwidth, FCC Part 2, para 2.1049
Notes: Uplink Frequency: 836.5 MHz
Modulation: TDMA output

Date: 12/19/02

Tech: T. Firkowski

Sheet 6 of 8



Retlif Testing Laboratories

Report No. R-4067N1

11:51:15 DEC 19, 2002

REF -9.0 dBm

#AT 0 dB

PEAK

LOG

10

dB/

OFFST

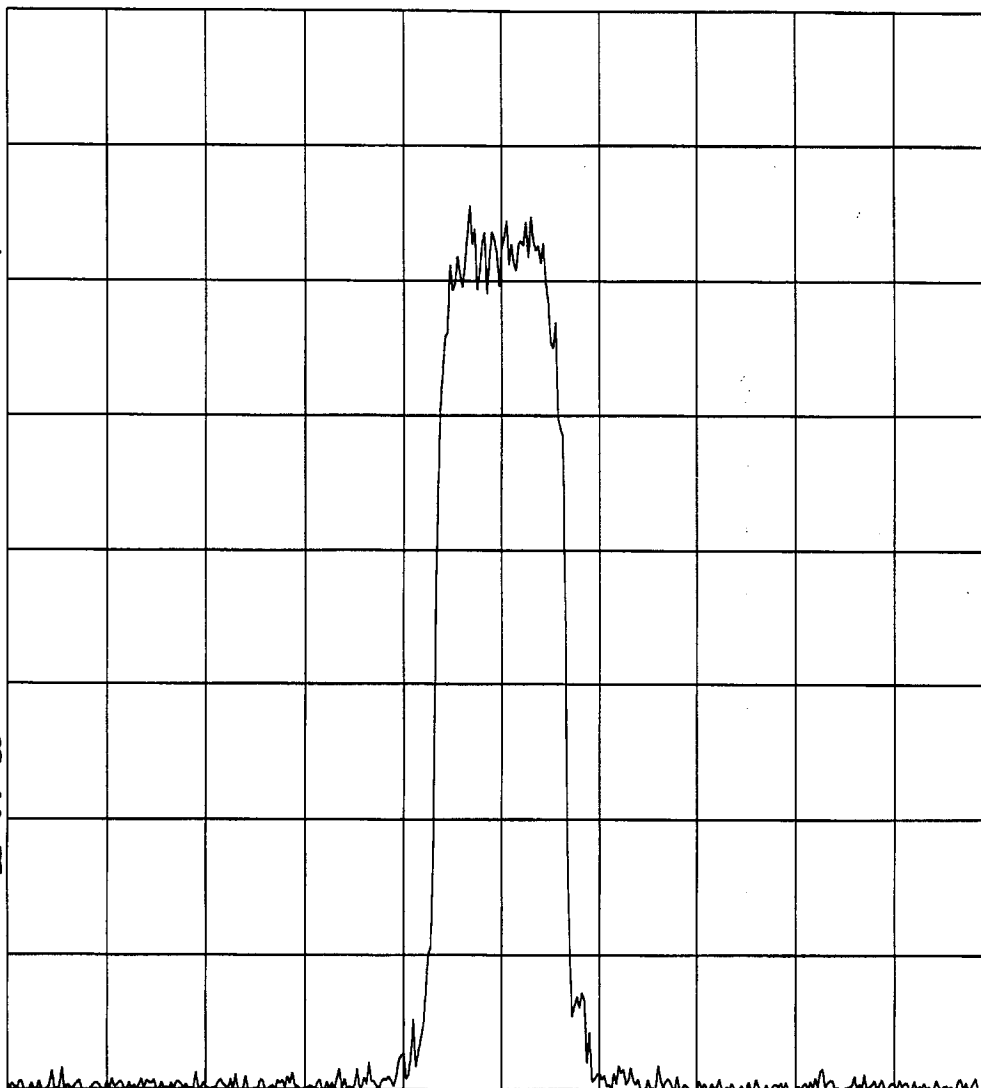
26.0

dB

WA SB

SC FC

CORR



CENTER 881.5000 MHz

SPAN 250.0 kHz

#RES BW 300 Hz

VBW 1 kHz

SWP 8.33 sec

Customer:
Test Sample:
Model No:
Test Method:
Notes:

Cellular Specialties, Inc.
Bidirectional Amplifier
565AMPS
Occupied Bandwidth, FCC Part 2, para 2.1049
Downlink Frequency: 881.5 MHz
Modulation: TDMA input

Date: 12/19/02

Tech: T. Firkowski

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Retlif Testing Laboratories

Report No. R-4067N1

11:45:55 DEC 19, 2002

REF 35.0 dBm

AT 30 dB

PEAK

LOG

10

dB/

OFFST

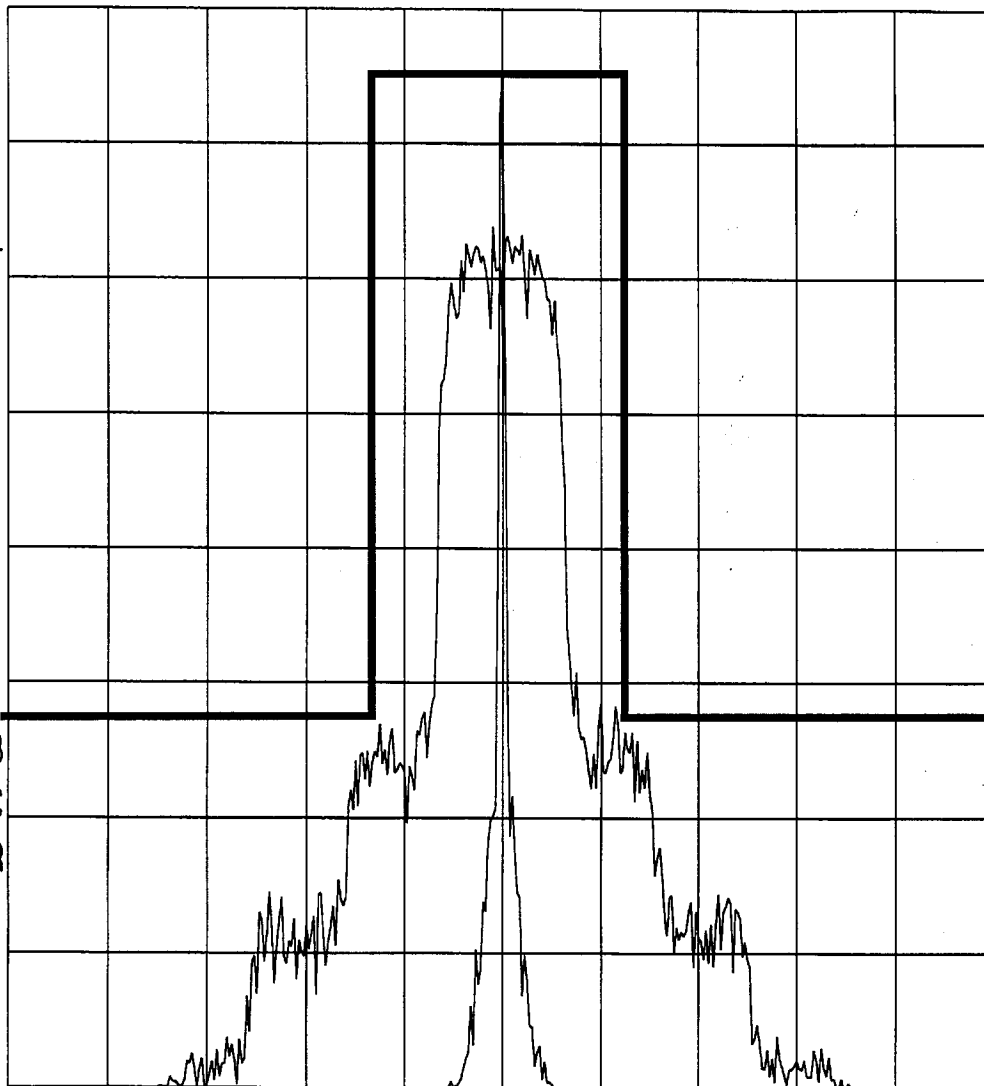
20.0

dB

VA VB

SC FC

CORR



CENTER 881.5000 MHz

SPAN 250.0 kHz

#RES BW 300 Hz

VBW 1 kHz

SWP 8.33 sec

Customer:
Test Sample:
Model No:
Test Method:
Notes:

Cellular Specialties, Inc.
Bidirectional Amplifier
565AMPS
Occupied Bandwidth, FCC Part 2, para 2.1049
Downlink Frequency: 881.5 MHz
Modulation: TDMA output

Date: 12/19/02

Tech: T. Firkowski

Sheet 8 of 8



Retlif Testing Laboratories

Report No. R-4067N1

EMISSIONS DATA SHEET

Spurious Emissions at the Antenna Terminals 30 MHz to 8.94 GHz

Cellular Specialties, Inc.

R-4067N1

Bidirectional Amplifier

565AMPS

Serial No:

AMPS2

FCC Part 2

Paragraph: 2.1051

Amplifying input signal

T. Firkowski

Date:

12/5/02

Uplink Frequency: 836.5 MHz

Downlink Frequency: 881.5 MHz

[illegible]

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

Test Method:

Spurious Radiated Emissions (ERP) 30 MHz to 8.94 GHz

Customer:

Cellular Specialties, Inc.

Job No:

R-4067N1

Test Sample:

Bidirectional Amplifier

Model No:

565AMPS

Serial No:

AMPS2

Test Specification:

FCC Part 2.1053\Part 22

Paragraph: n/a

Operating Mode:

Amplifying input signal

Technician:

T. Firkowski

Date:

12/12/02

Notes:

Uplink Frequency Range:824-849 MHz

Tested at 836.5 MHz

Peak Detector

[illegible]

No emissions observed within 20 dB of the limit.

RETLIF TESTING LABORATORIES

EMISSIONS DATA SHEET

Test Method:

Spurious Radiated Emissions (ERP) 30 MHz to 8.94 GHz

Customer:

Cellular Specialties, Inc.

Job No:

R-4067N1

Test Sample:

Bidirectional Amplifier

Model No:

565AMPS

Serial No:

AMPS2

Test Specification:

FCC Part 2.1053\Part 22

Paragraph: n/a

Operating Mode:

Amplifying input signal

Technician:

T. Firkowski

Date:

12/12/02

Notes:

Uplink Frequency Range:869-894 MHz

Tested at 881.5 MHz

Peak Detector

[illegible]

No emissions observed within 20 dB of the limit.

EMISSIONS DATA SHEET

Frequency Stability

Cellular Specialties, Inc.

Job No:

R-4067N1

Bidirectional Amplifier

565AMPS

Serial No:

AMPS2

Fcc Part 2

Paragraph: 2.1055

Amplifying input signal

T. Firkowski

Date:

12/10/02

Uplink Frequency: 836.5 MHz

Nominal Input Voltage: 115 VAC

Downlink Frequency: 881.5 MHz

[illegible]