

EXHIBIT F

Paragraph 2.983(e)

Test Data and Measurement Procedures



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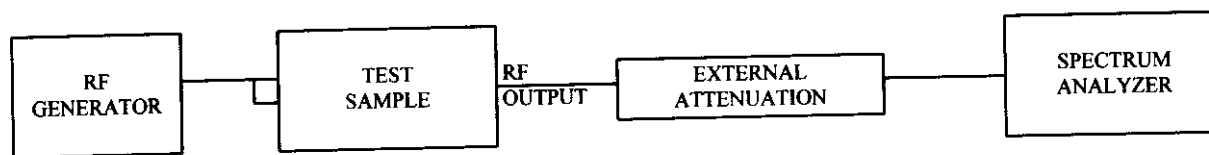
Test Report Number No. R-3244N1
FCC ID: NVRC SI310-01

POWER OUTPUT (Para. 2.985(a))

Measurement Procedure:

The uplink and downlink of the test sample were alternately connected through external attenuators to a spectrum analyzer. The power output was measured for the cellular range of unmodulated frequencies.

BASIC TEST SETUP



RF Power Output:

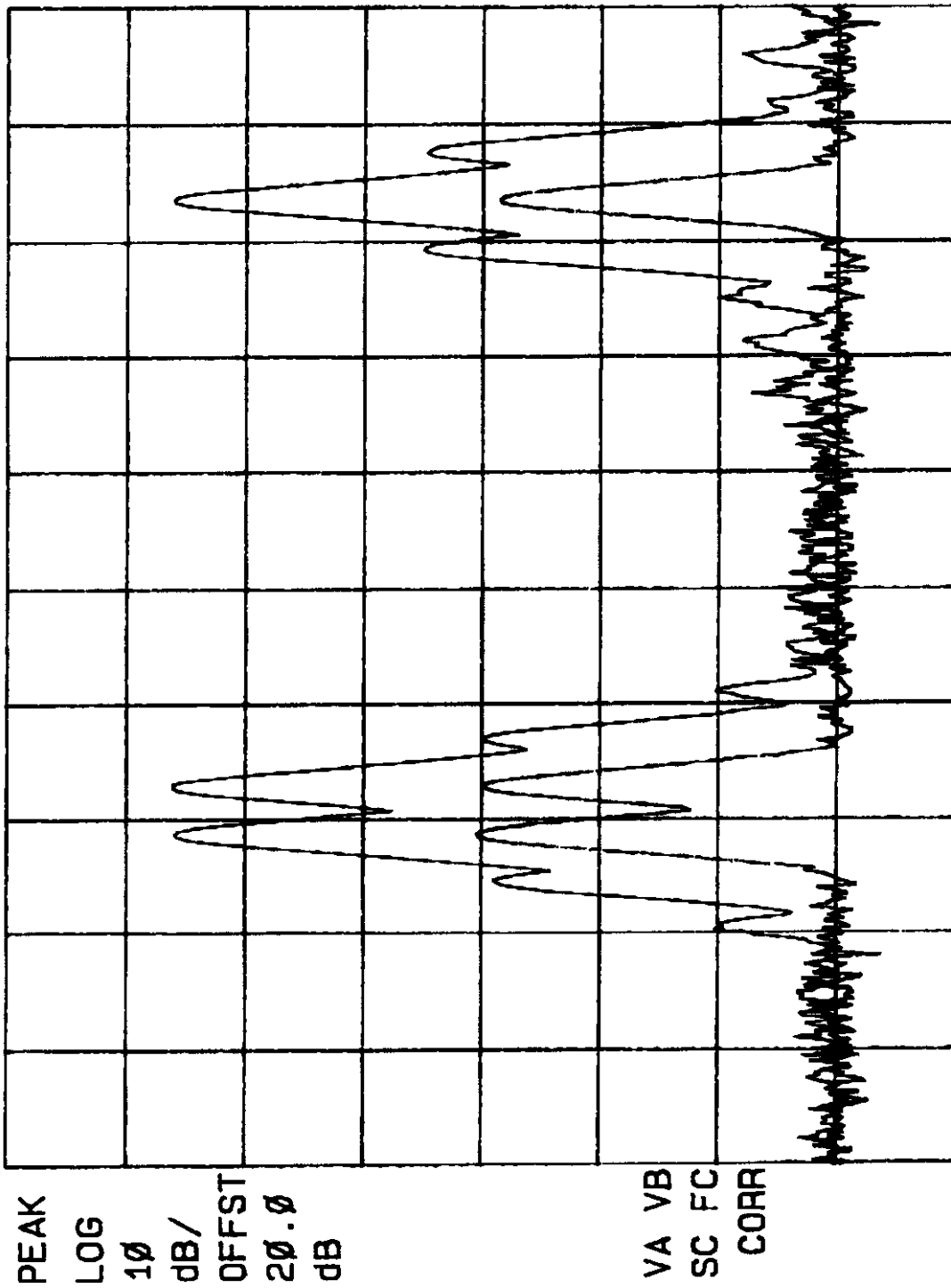
- 1.1 Set up spectrum analyzer:
 - 1.1.1 RES BW @ 10kHz.
 - 1.1.2 Video BW @ 30kHz.
 - 1.1.3 Center frequency to desired carrier frequency.
 - 1.1.4 Span 1.0MHz.
- 1.2 Connect signal generator to EUT uplink input.
- 1.3 Connect EUT uplink output to spectrum analyzer.
- 1.4 Manually turn the gain control of the EUT to maximum.
- 1.5 Input the low uplink frequency (806MHz) into the EUT.
- 1.6 Increase the input power until the maximum output power is achieved (the output power will no longer increase).
- 1.7 Plot this display. This is the max power output.
- 1.8 Remove the input cable from the EUT and connect it to the to the spectrum analyzer. Plot this display. This is the max power in.



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Test Report Number No. R-3244N1
FCC ID: NVRCSI310-01

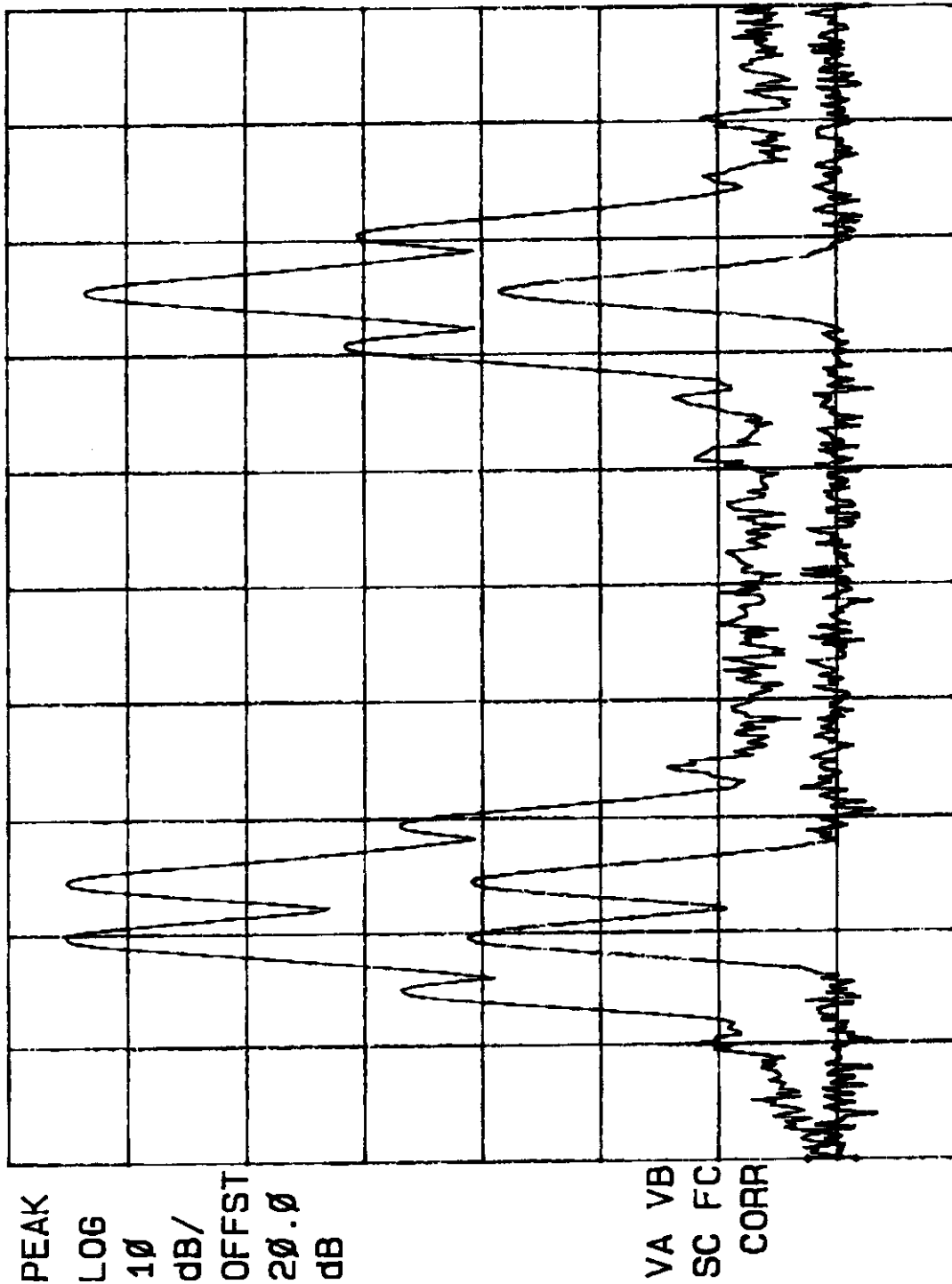
10:57:18 SEP 04, 1998
 R-3244N1 CELLULAR INTERMODULATION DOWNLINK WITH AGC
 REF 20.0 dBm #AT 20 dB



START 845.00 MHz #RES BW 300 KHZ
 STOP 870.00 MHz #VBW 100 KHZ SWP 20.0 msec

10: 47: 15 SEP 04, 1998
R-3244N1 CELLULAR INTERMODULATION UPLINK WITH AGC

REF 20.0 dBm #AT 20 dB



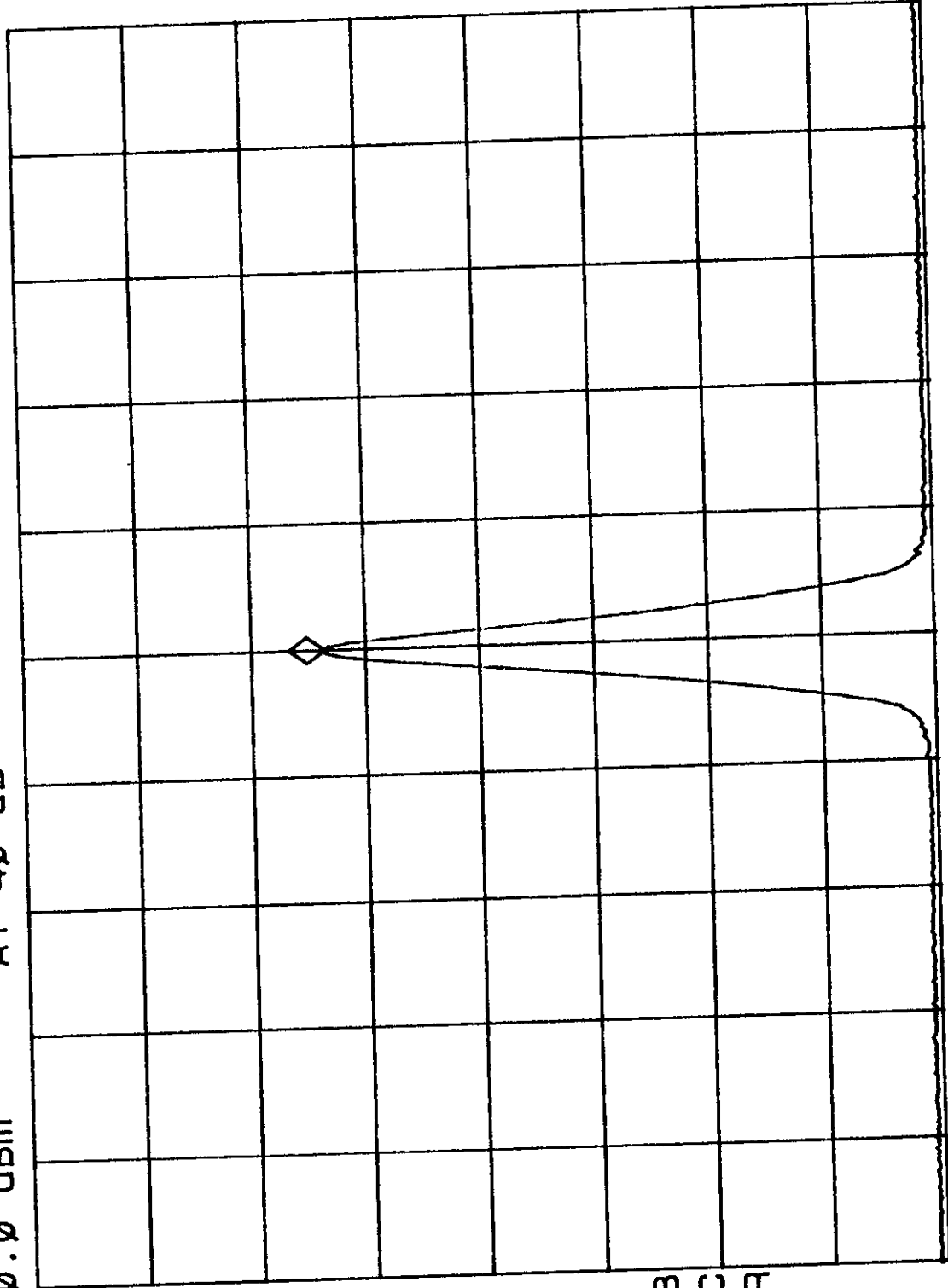
START 800.00 MHz STOP 825.00 MHz

#RES BW 300 KHZ

#VBW 100 KHZ

SWP 20.0 msec

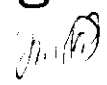
R-3244N1 MAX POWER OUT (UPLINK) MKR 806.000 MHz
REF 50.0 dBm AT 40 dB 23.53 dBm



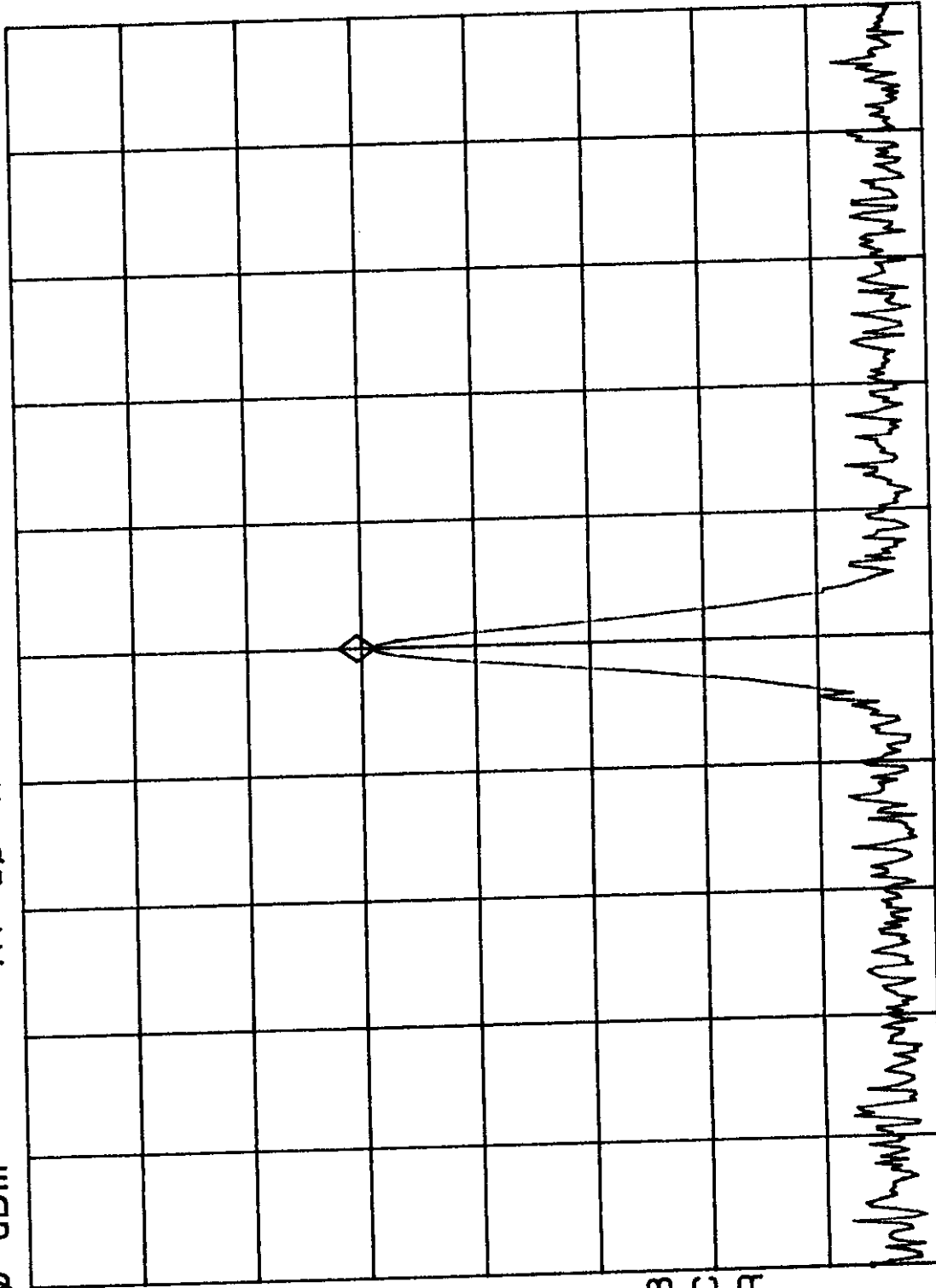
PEAK
LOG
10
dB/
OFFST
20.0
dB

TWA SB
ASC FC
CORR

CENTER 806.000 MHz
#RES BW 10 KHZ
SPAN 1.000 MHz
SWP 30.0 msec
VBW 30 KHZ



R-3244N1 MAX POWER IN (UPLINK) MKR 806.000 MHz
 REF .0 dBm AT 10 dB -31.20 dBm



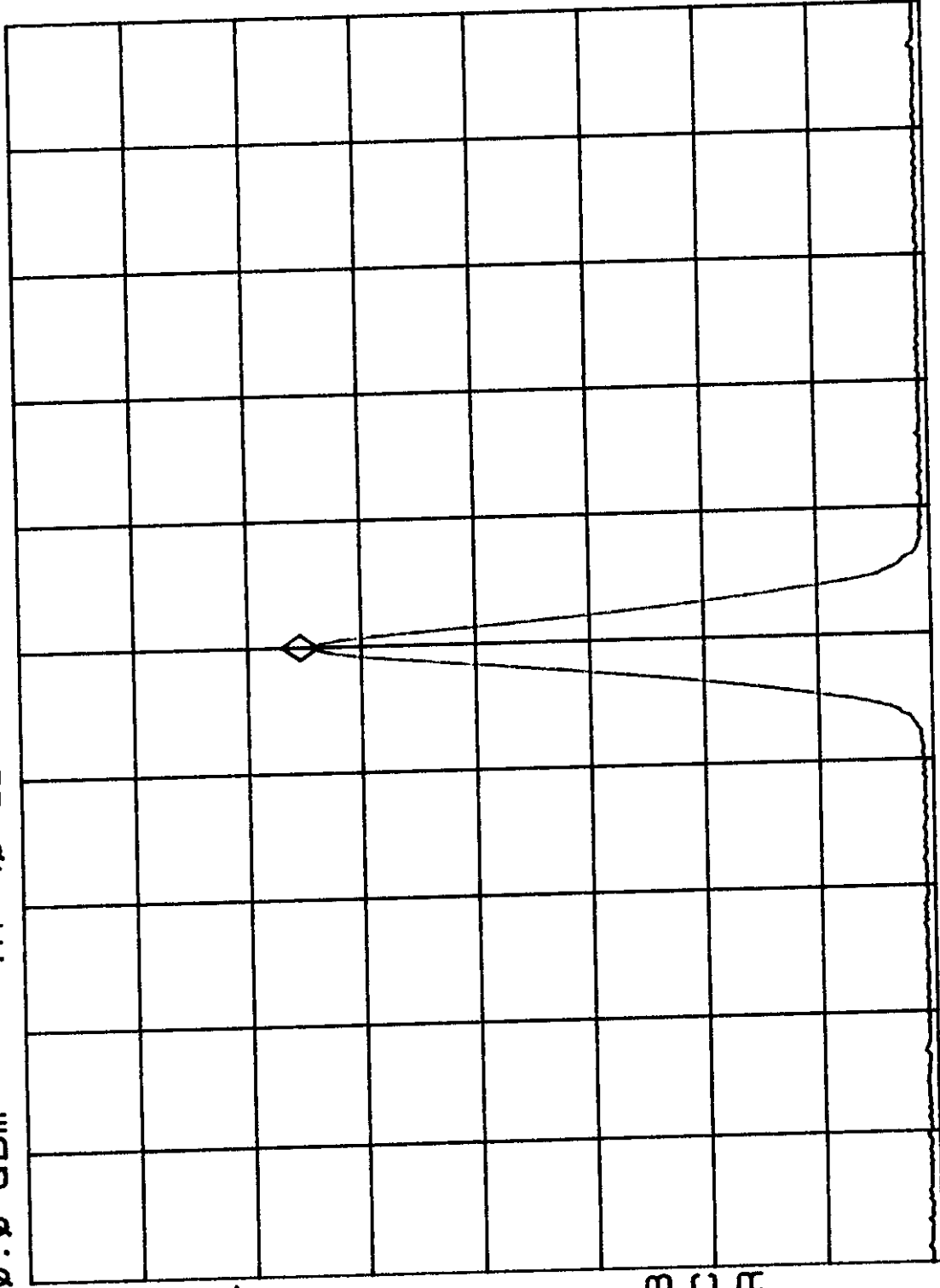
PEAK
 LOG
 10
 dB/
 OFFST
 20.0
 dB

WA SB
 SC FC
 CORR

Test Report No. R-3244N1
 FCC ID: NVRC51310-01

CENTER 806.000 MHz SPAN 1.000 MHz
 #RES BW 10 KHZ VBW 30 KHZ SWP 30.0 msec

R-3244NI MAX POWER OUT (UPLINK) MKR 815.000 MHz
REF 50.0 dBm AT 40 dB 23.76 dBm



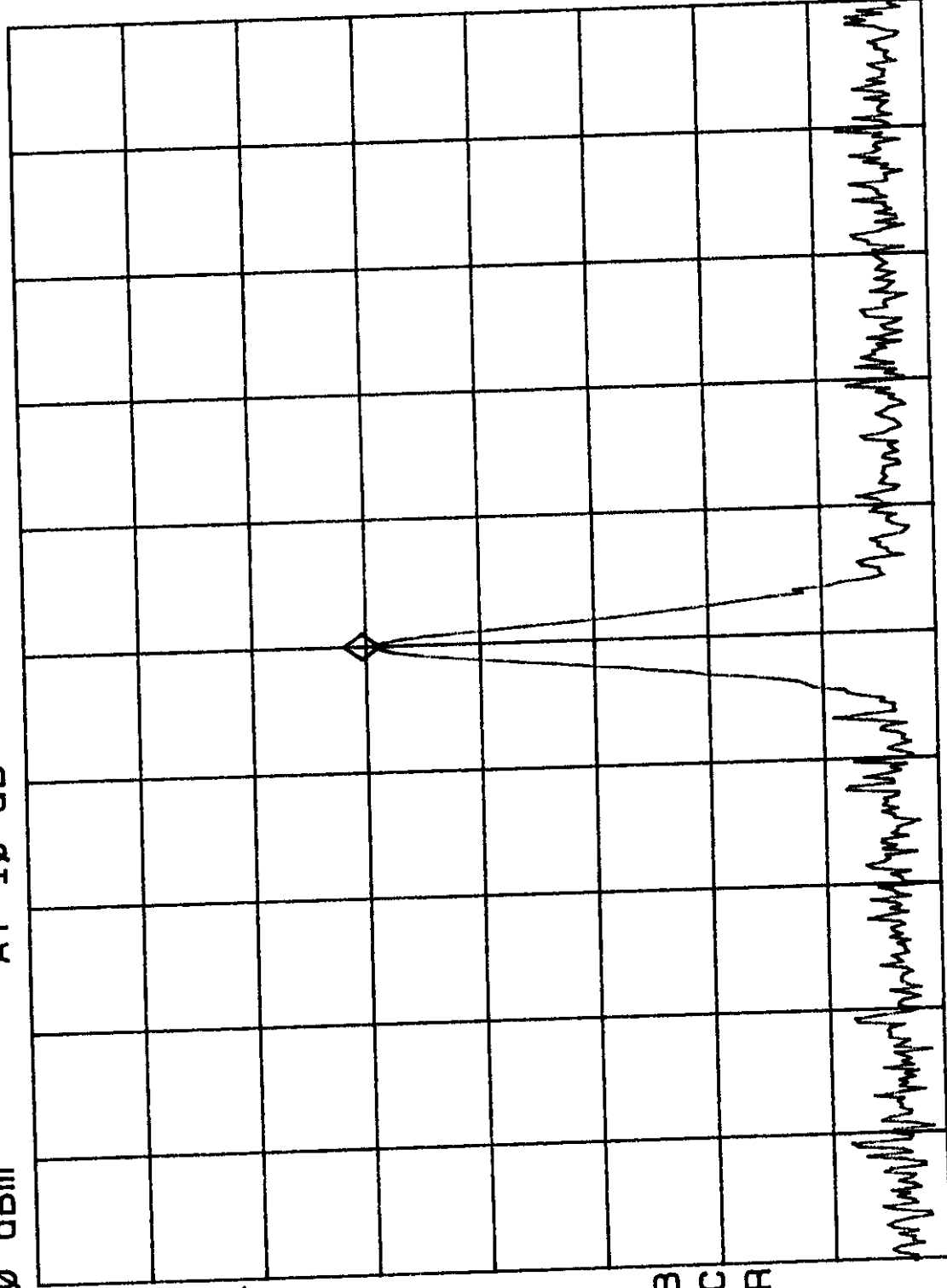
PEAK
LOG
10
dB/
OFFST
20.0
dB

WA SB
SC FC
CORR

CENTER 815.000 MHz
#RES BW 10 KHZ
SPAN 1.000 MHz
SWP 30.0 msec
VBW 30 KHZ

MKR 815.000 MHz
-31.25 dBm

R-3244NI MAX POWER IN (UPLINK)
AT 10 dB



CENTER 815.000 MHz
#RES BW 10 KHZ
SPAN 1.000 MHz
SWP 30.0 msec
VBW 30 KHZ

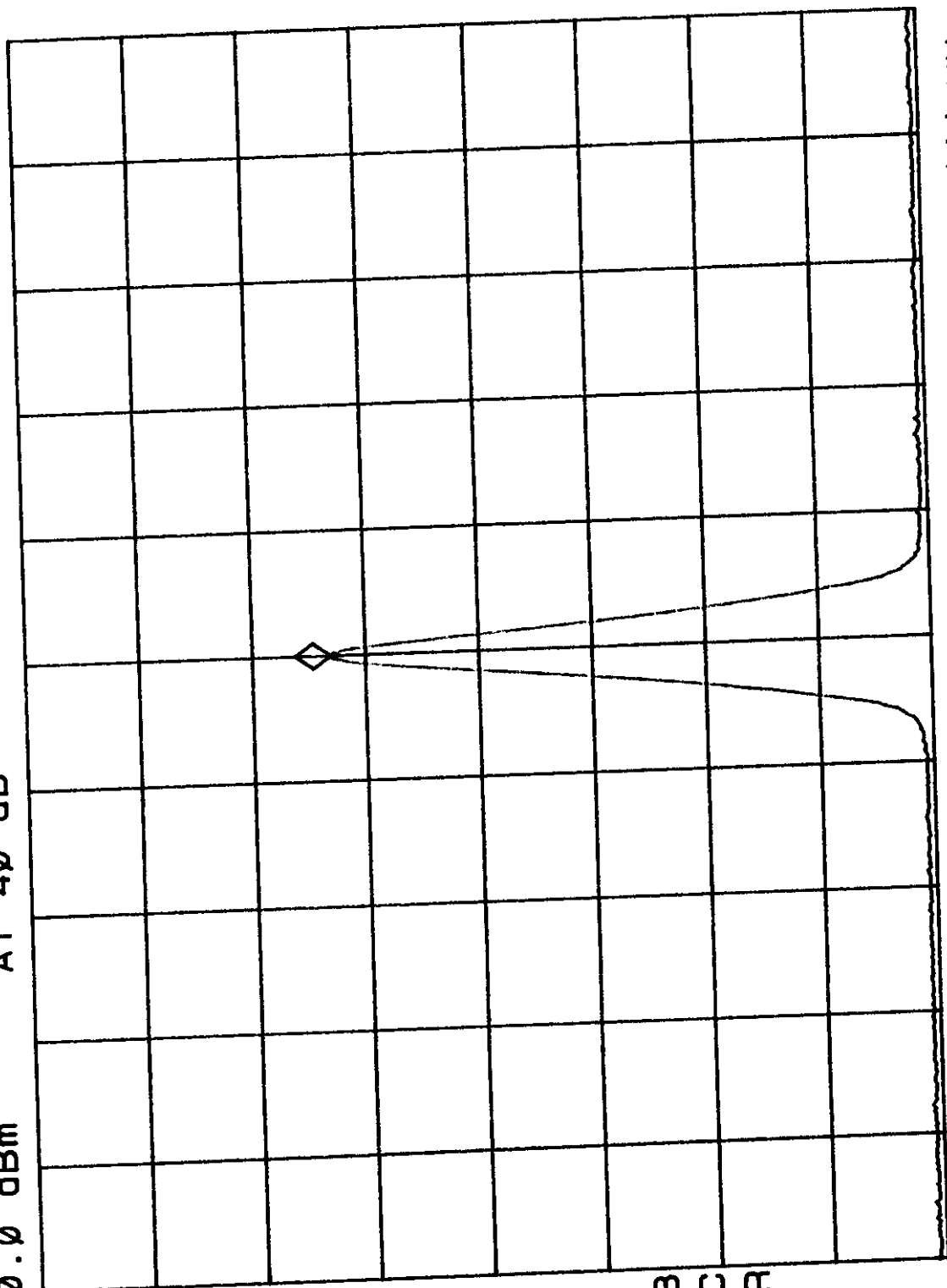
WA SB
SC FC
CORR

MKR 824.000 MHz
23.03 dBm

R-3244NI MAX POWER OUT (UPLINK)
AT 40 dB

REF 50.0 dBm

PEAK
LOG
10
dB/
OFFST
20.0
dB



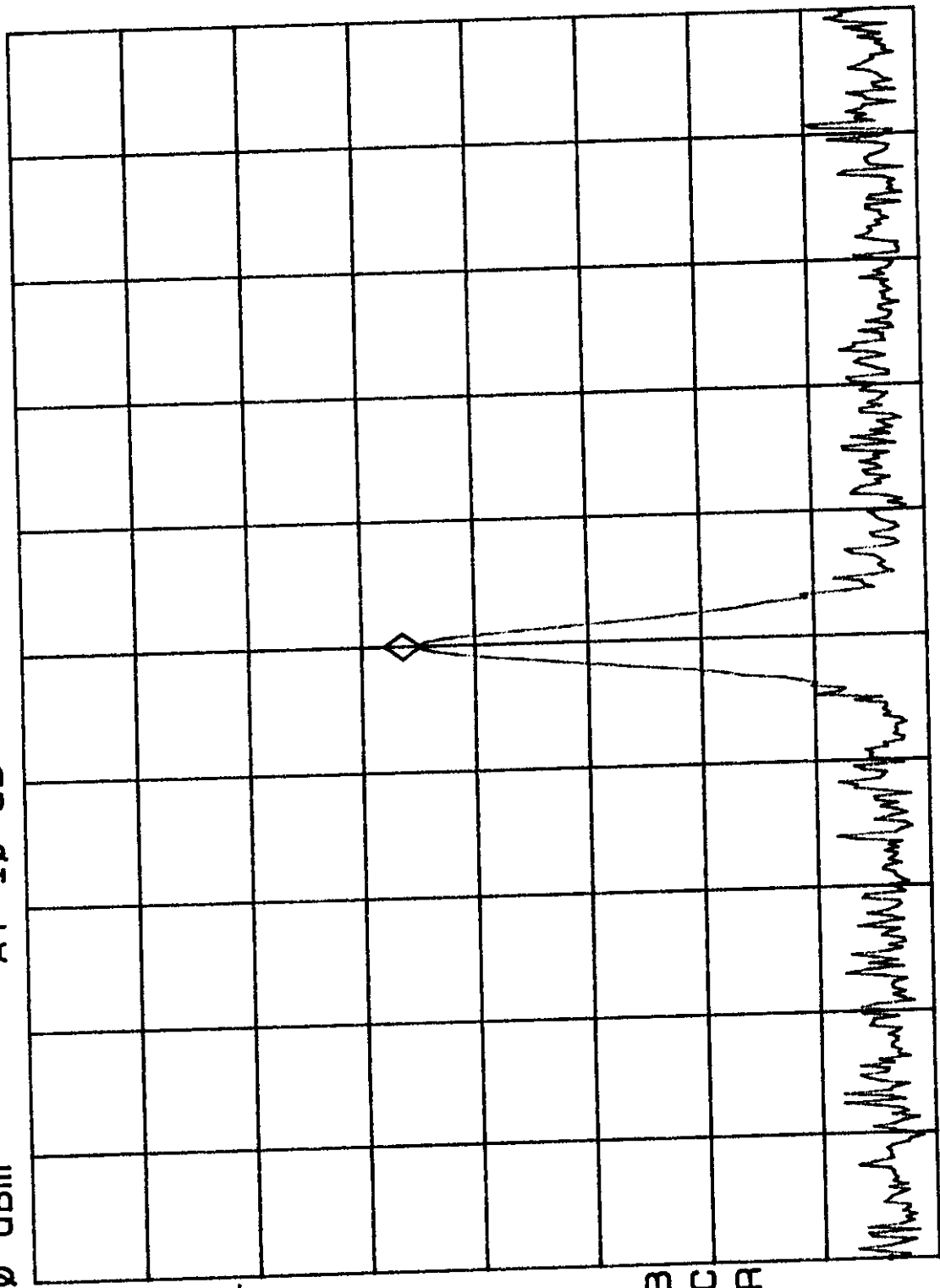
WA SB
SC FC
CORR

SPAN 1.000 MHz
SWP 30.0 msec

VBW 30 KHZ

CENTER 824.000 MHz
#RES BW 10 KHZ

~~17~~ R-3244NI MAX POWER IN (UPLINK) MKR 824.000 MHz
 REF .0 dBm AT 10 dB -35.23 dBm

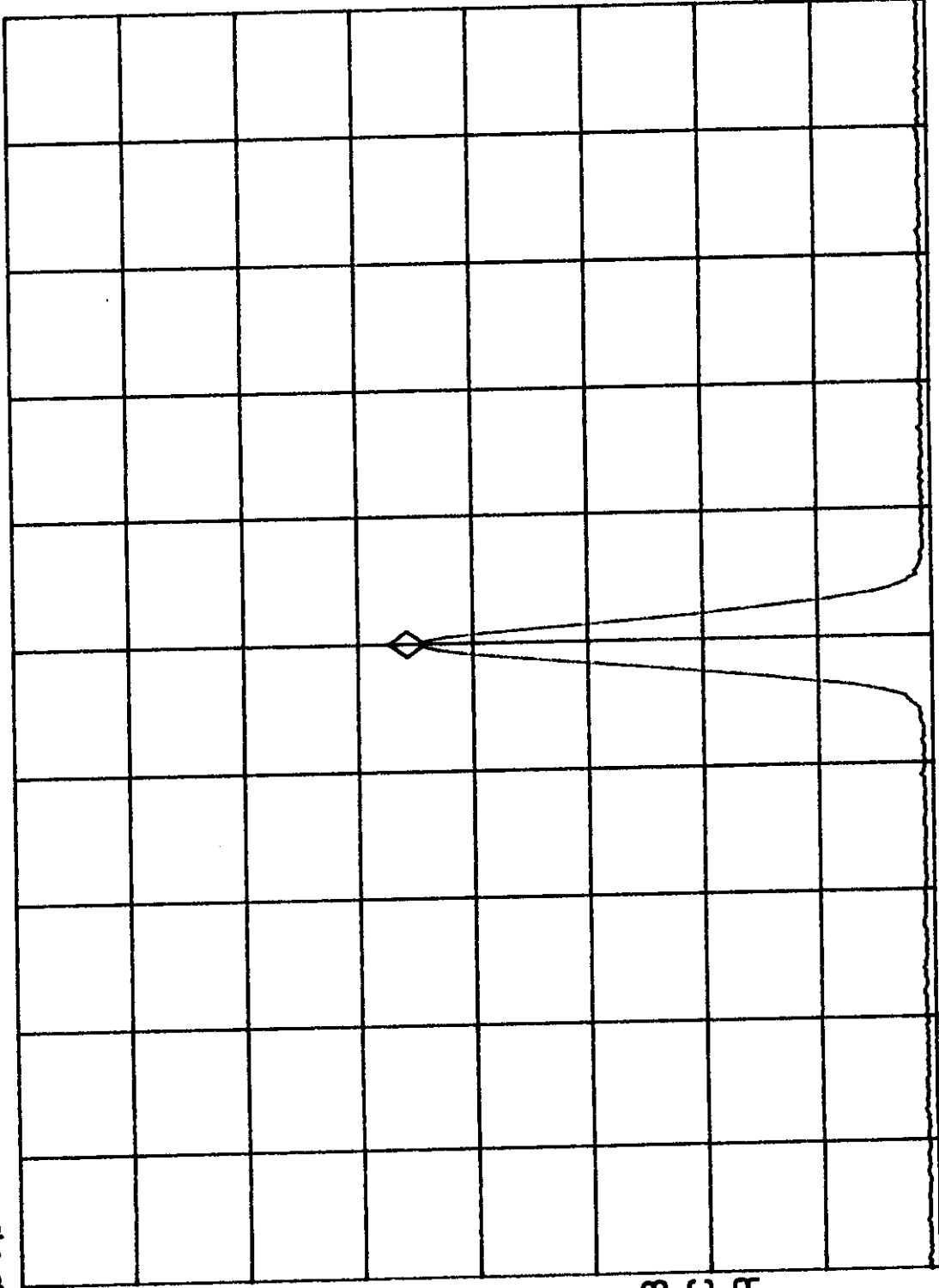


PEAK
 LOG
 10
 dB/
 OFFST
 20.0
 dB

WA SB
 SC FC
 CORR

CENTER 824.000 MHz SPAN 1.000 MHz
 #RES BW 10 KHZ SWP 30.0 msec
 VBW 30 KHZ

R-3244N1 MAX POWER OUT (DNLINK) MKR 849.000 MHz
REF 50.0 dBm AT 40 dB 14.13 dBm



PEAK
LOG
10
dB/
OFFST
20.0
dB

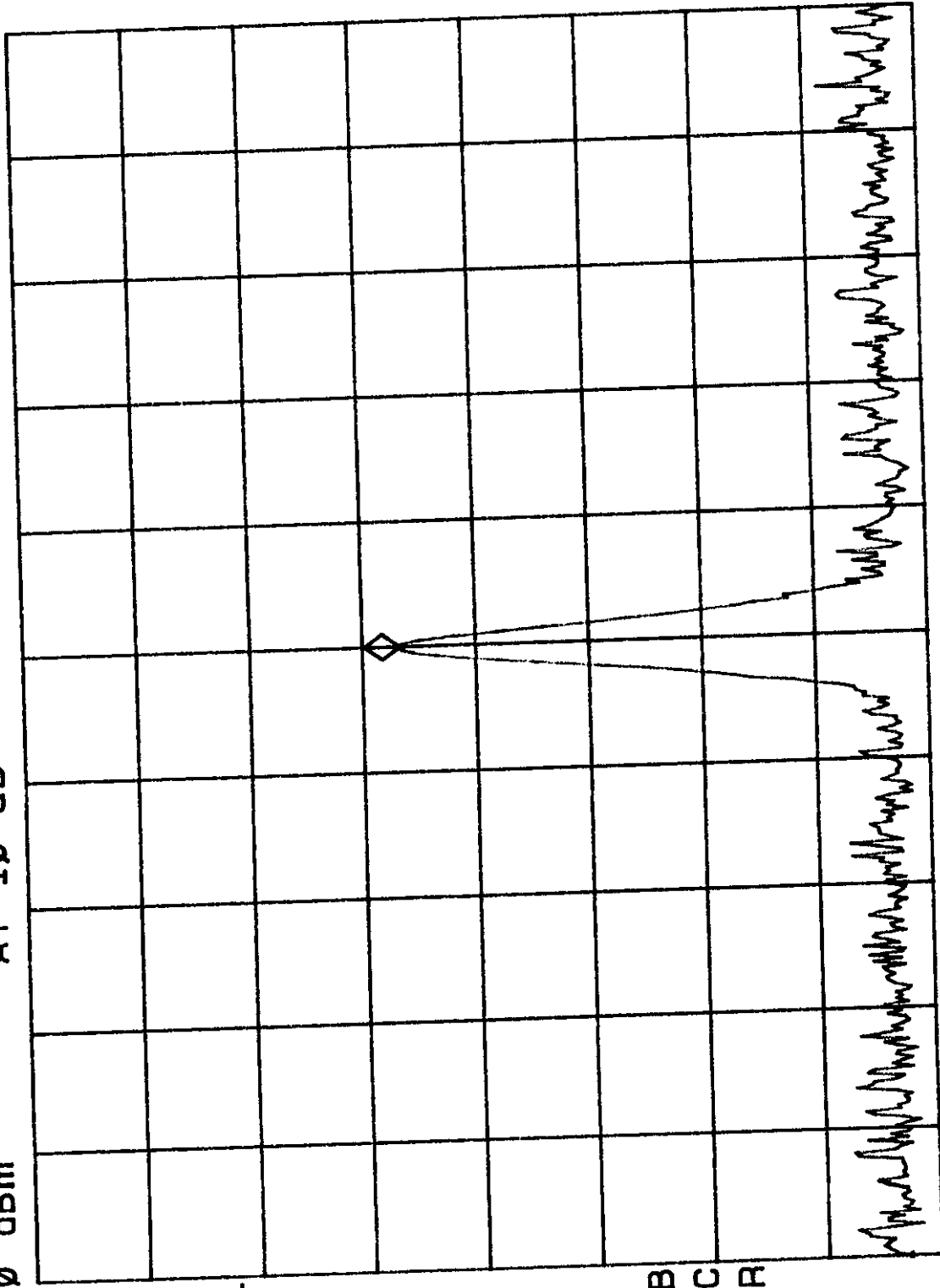
WA SB
SC FC
CORR

CENTER 849.000 MHz
#RES BW 10 KHZ
SPAN 1.000 MHz
SWP 30.0 msec
VBW 30 KHZ

R-3244N1 MAX POWER IN (DNLINK)

MKR 849.000 MHz
-33.36 dBm

REF .0 dBm AT 10 dB

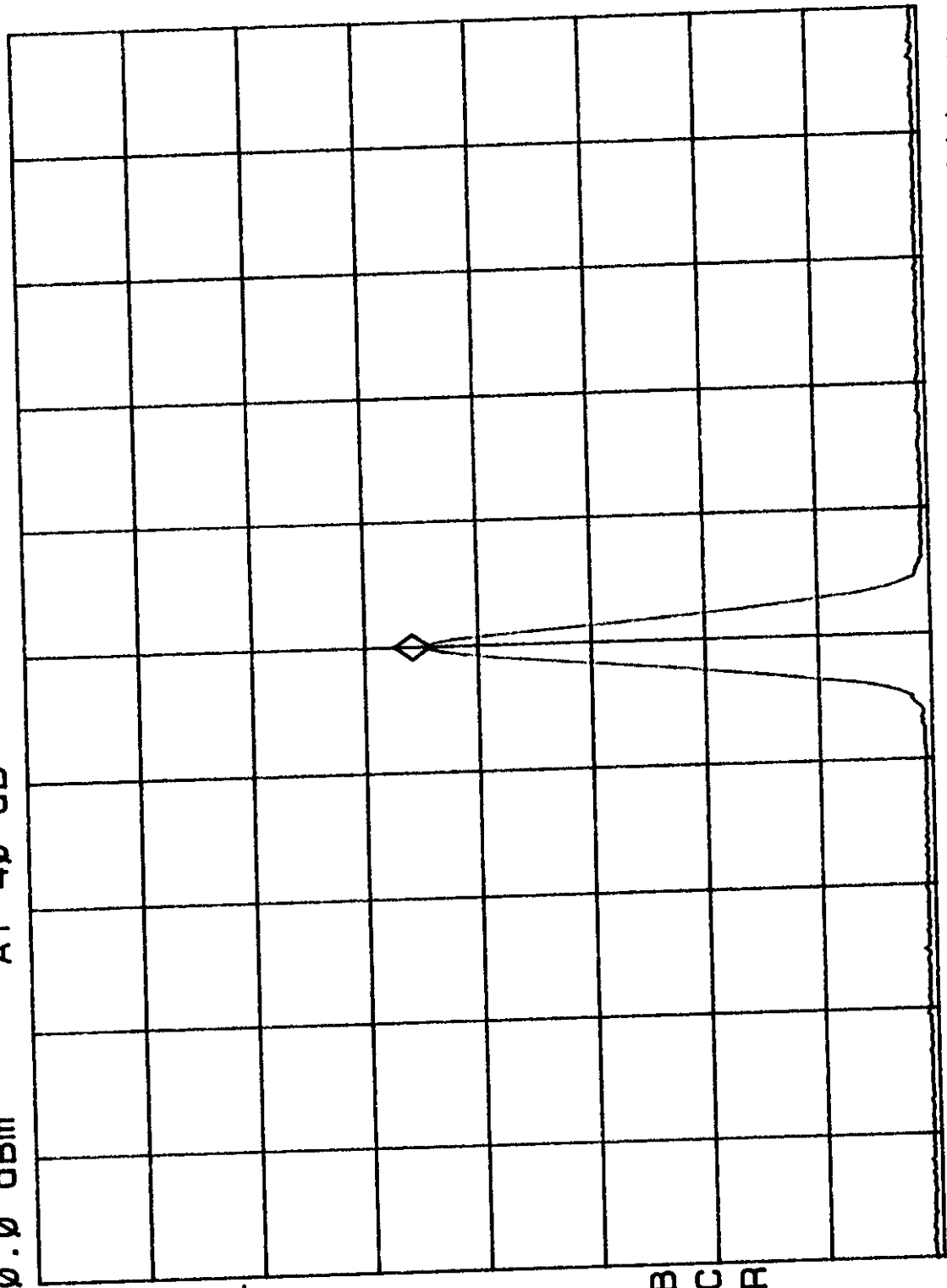


PEAK
LOG
10
dB/
OFFST
20.0
dB

WA SB
SC FC
CORR

CENTER 849.000 MHz
#RES BW 10 KHZ
SPAN 1.000 MHz
SWP 30.0 msec
VBW 30 KHZ

R-3244N1 MAX POWER OUT (DNLINK) MKR 858.000 MHZ
REF 50.0 dBm AT 40 dB 14.18 dBm

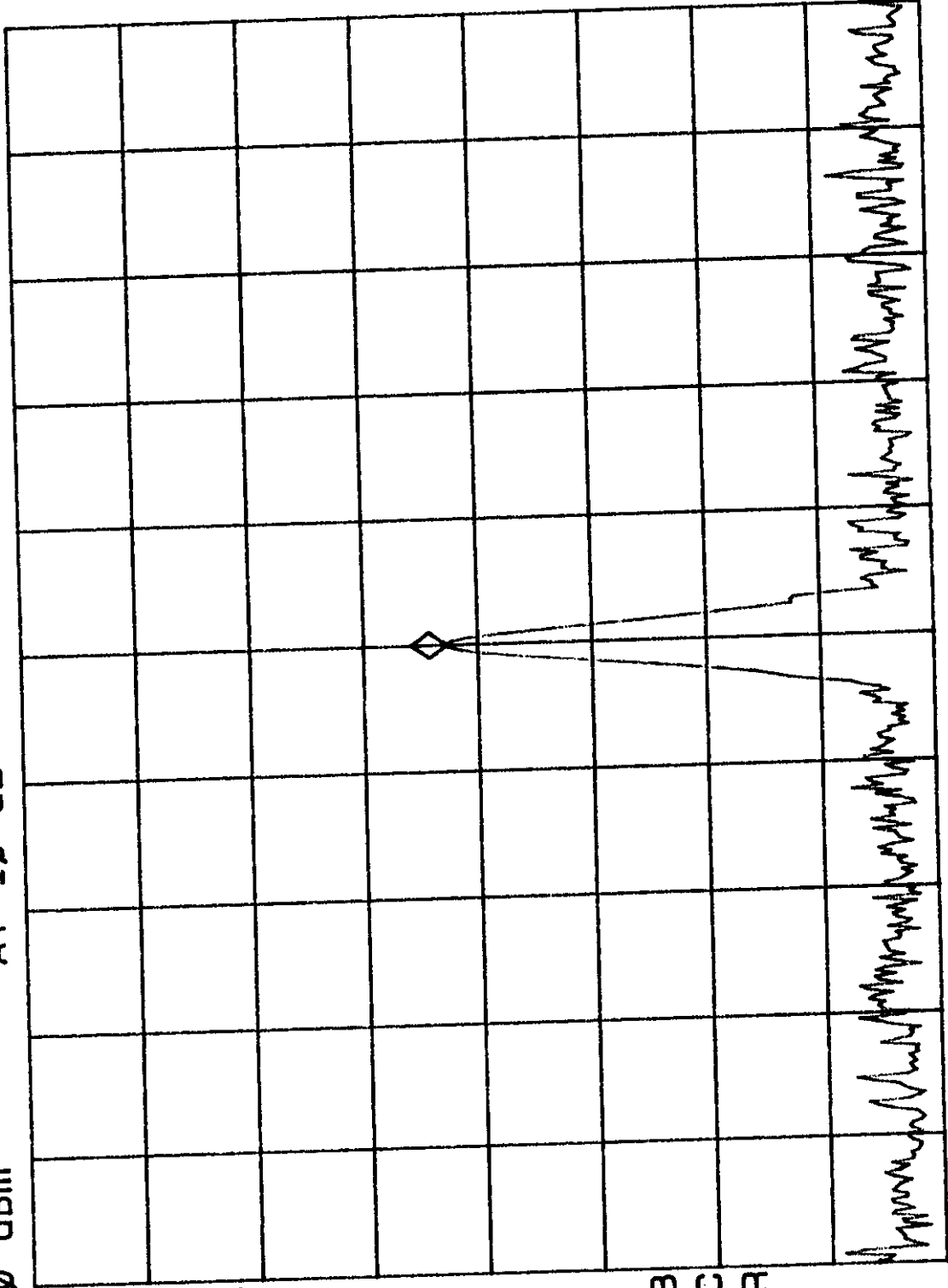


PEAK
LOG
10
dB/
OFFST
20.0
dB

WA SB
SC FC
CORR

CENTER 858.000 MHZ
#RES BW 10 KHZ
SPAN 1.000 MHZ
SWP 30.0 msec
VBW 30 KHZ

~~17~~ R-3244N1 MAX POWER IN (DNLINK) MKR 858.000 MHz
 REF .0 dBm AT 10 dB -37.34 dBm



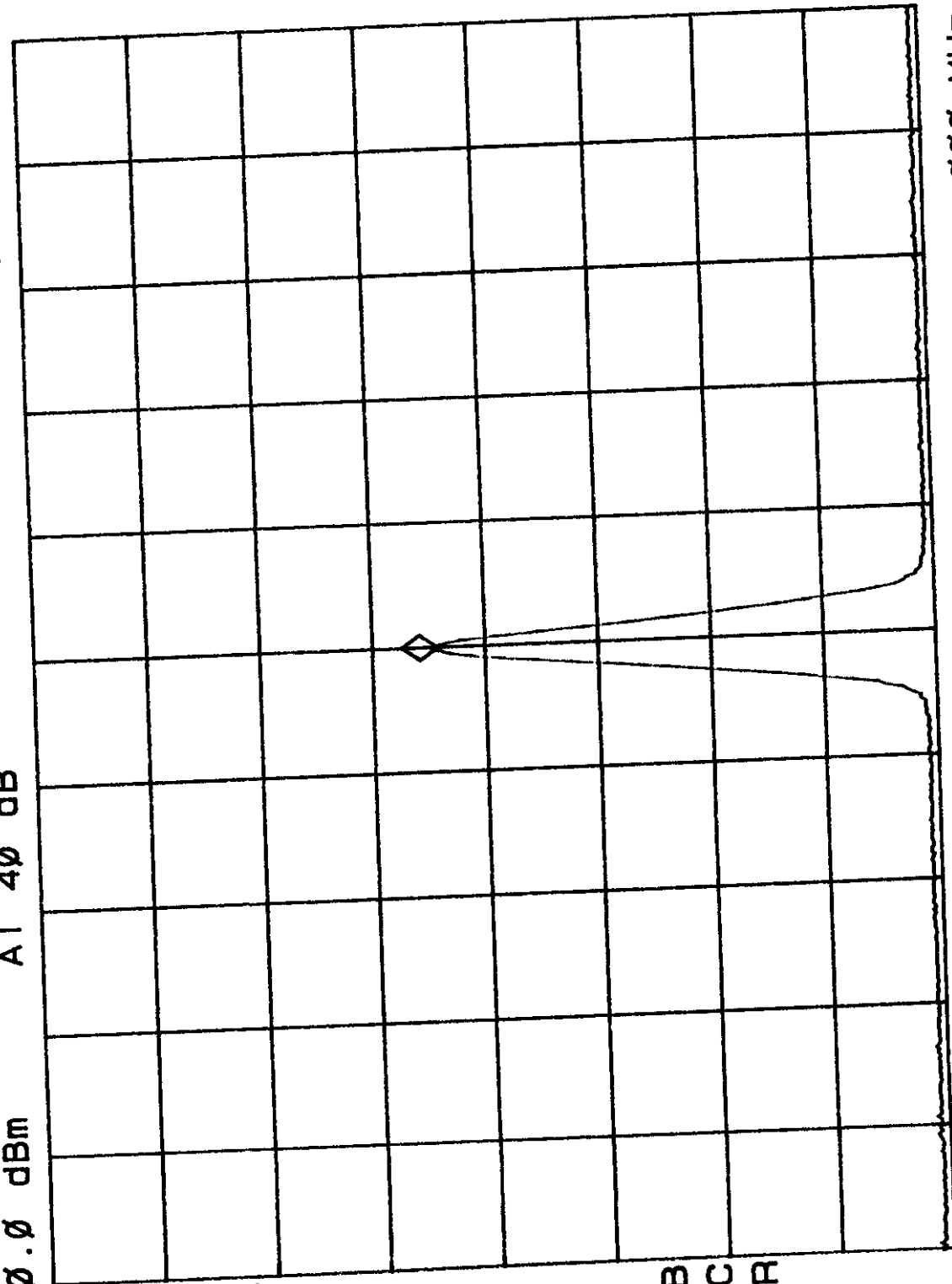
PEAK
 LOG
 10
 dB/
 OFFST
 20.0
 dB

WA SB
 SC FC
 CORR

CENTER 858.000 MHz SPAN 1.000 MHz
 #RES BW 10 KHZ SWP 30.0 msec
 VBW 30 KHZ

MKR 867.000 MHz
14.18 dBm

R-3244N1 MAX POWER OUT (DNLINK)
AT 40 dB



REF 50.0 dBm

PEAK
LOG
10
dB/
OFFST
20.0
dB

WA SB
SC FC
CORR

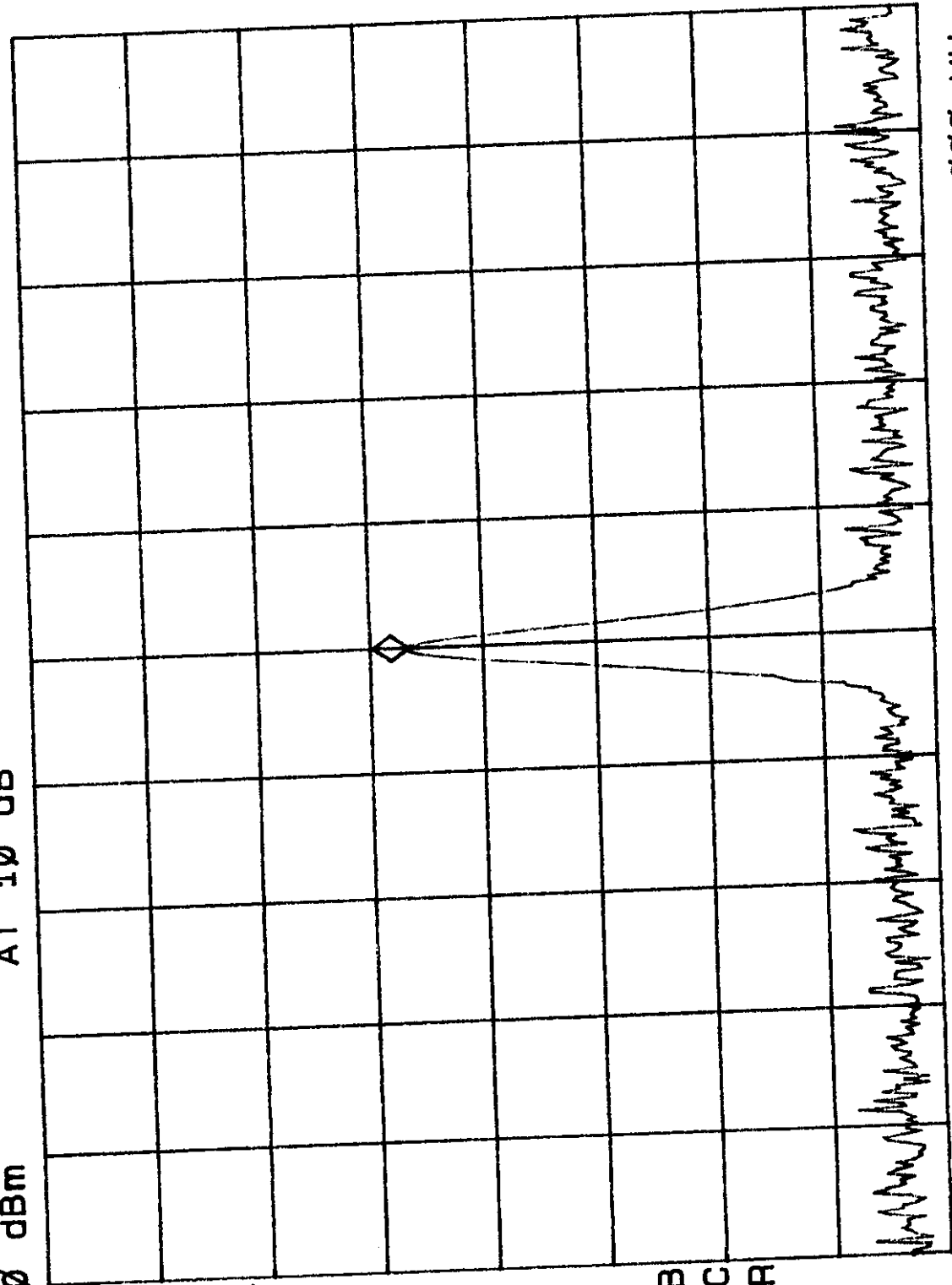
SPAN 1.000 MHz
SWP 30.0 msec

VBW 30 KHZ

CENTER 867.000 MHz
#RES BW 10 KHZ

MKR 867.000 MHz
-33.45 dBm

R-3244N1 MAX POWER IN (DNLINK)
AT 10 dB



PEAK
LOG
10
dB/
OFFST
20.0
dB

WA SB
SC FC
CORR

SPAN 1.000 MHz
SWP 30.0 msec

VBW 30 KHZ

CENTER 867.000 MHz
#RES BW 10 KHZ

EXHIBIT F

Paragraph 2.989

Occupied Bandwidth



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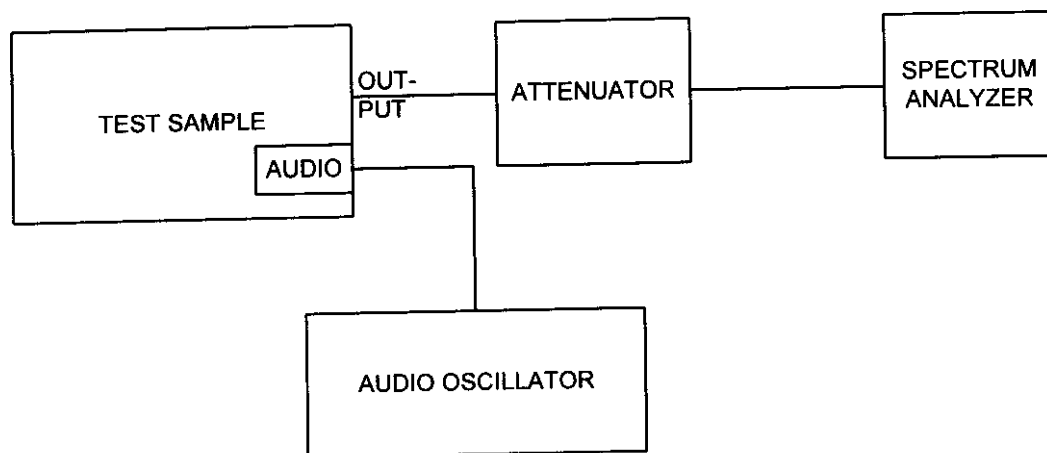
Test Report Number No. R-3244N1
FCC ID: NVRCSI310-01

OCCUPIED BANDWIDTH (PARA.2.989)

Measurement Procedure:

An audio signal was coupled to the input terminal of the EUT. The output was monitored. The audio input level was increased to produce 50% modulation. The output was then coupled through external attenuators to a spectrum analyzer and the audio level was increased by 16 dB. The occupied bandwidth of the carrier, modulated at 50% plus 16 dB, was then measured at the low, mid, and high frequencies.

BASIC TEST SETUP



Occupied Bandwidth:

- 2.1 Set up spectrum analyzer:
 - 2.1.1 RES BW @ 300Hz.
 - 2.1.2 Video BW @ 1kHz.
 - 2.1.3 Center frequency to desired carrier frequency.
 - 2.1.4 Span @ 250kHz.
 - 2.1.5 Trace on Channel "A".
 - 2.1.6 Reference level set to the maximum power input/output of the desired frequency.



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Test Report Number No. R-3244N1
FCC ID: NVRCSI310-01

OCCUPIED BANDWIDTH (PARA.2.989) (continued)

- 2.2 Connect the output of the signal generator to the spectrum analyzer.
- 2.3 From the information attained from Step 1.8, set the signal generator to the maximum input power for the desired carrier frequency.
- 2.4 Allow the spectrum analyzer to show the display of the carrier frequency; set the reference level so that the maximum carrier signal is at the top of the analyzer display; then use the "VIEW A" function to freeze the image.
- 2.5 Set trace to Channel "B".
- 2.6 Apply a 16kHz Sine Wave FM modulation to the carrier signal. Allow the spectrum analyzer to show the display of the modulated signal, then use the "VIEW B" function to freeze the image.
- 2.7 Plot this information.
- 2.8 Connect the output of the signal generator to the EUT. Connect the EUT to the spectrum analyzer.
- 2.9 Repeat Steps 2.4 through 2.7.
- 2.10 Repeat Steps 2.2 through 2.9 for the 5 remaining carrier frequencies.
- 2.11 Repeat Steps 2.2 through 2.10 except apply a 16kHz Square Wave FM modulation signal to the carrier frequencies.

Measurement Results:

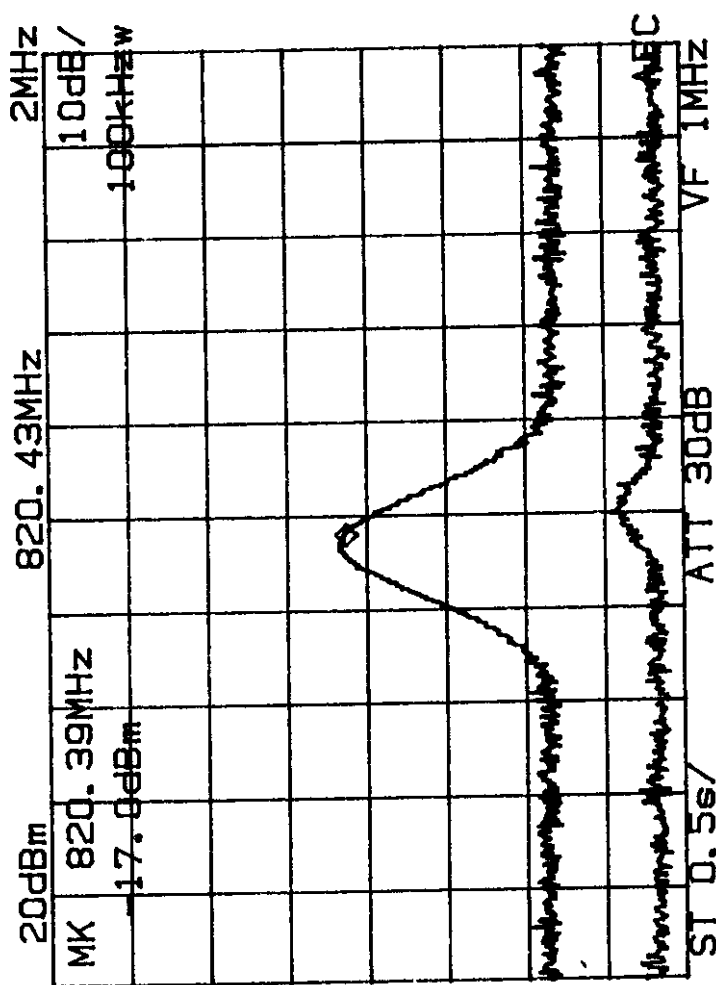
Examination of the test data indicates that the operation of the EUT caused no unacceptable deviations.



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Test Report Number No. R-3244N1
FCC ID: NVRCSI310-01

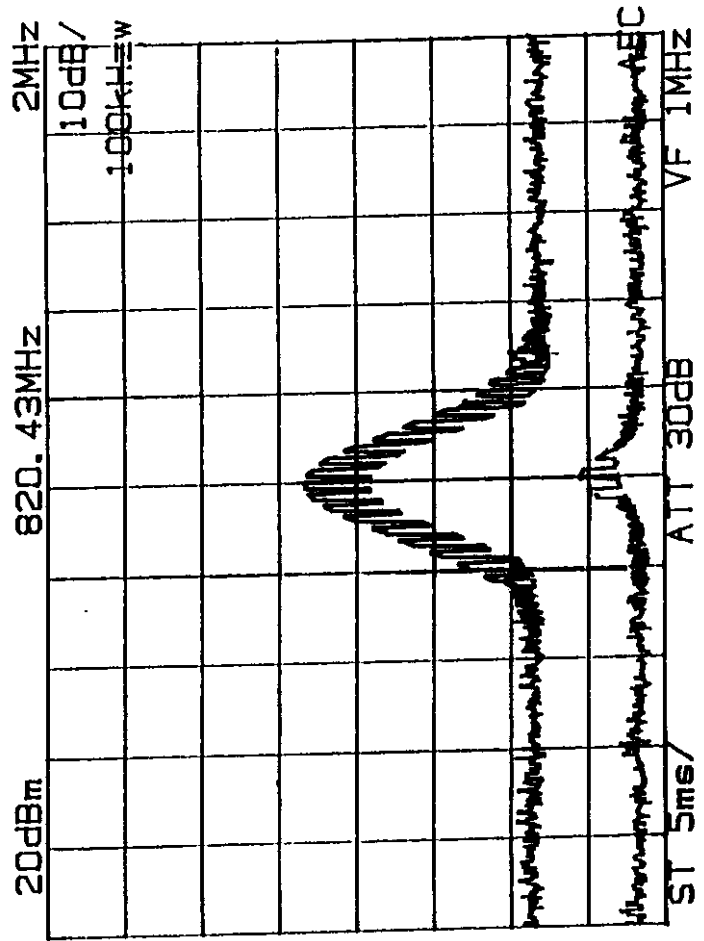
OCCUPIED BANDWIDTH COMPARISON
 USING ANALOG SIGNAL
 INTO UPLINK PORT ONLY




Retlif Testing Laboratories

Test Report Number No. R-3244N1
 FCC ID: NVRCSI310-01

OCCUPIED BANDWIDTH COMPARISON
USING DIGITAL SIGNAL
INTO UPLINK PORT ONLY



	Retlif Testing Laboratories
	Test Report Number No. R-3244N1 FCC ID: NVRCSI310-01

OCCUPIED BANDWIDTH DATA

WITH

16kHz SINE WAVE FM MODULATION

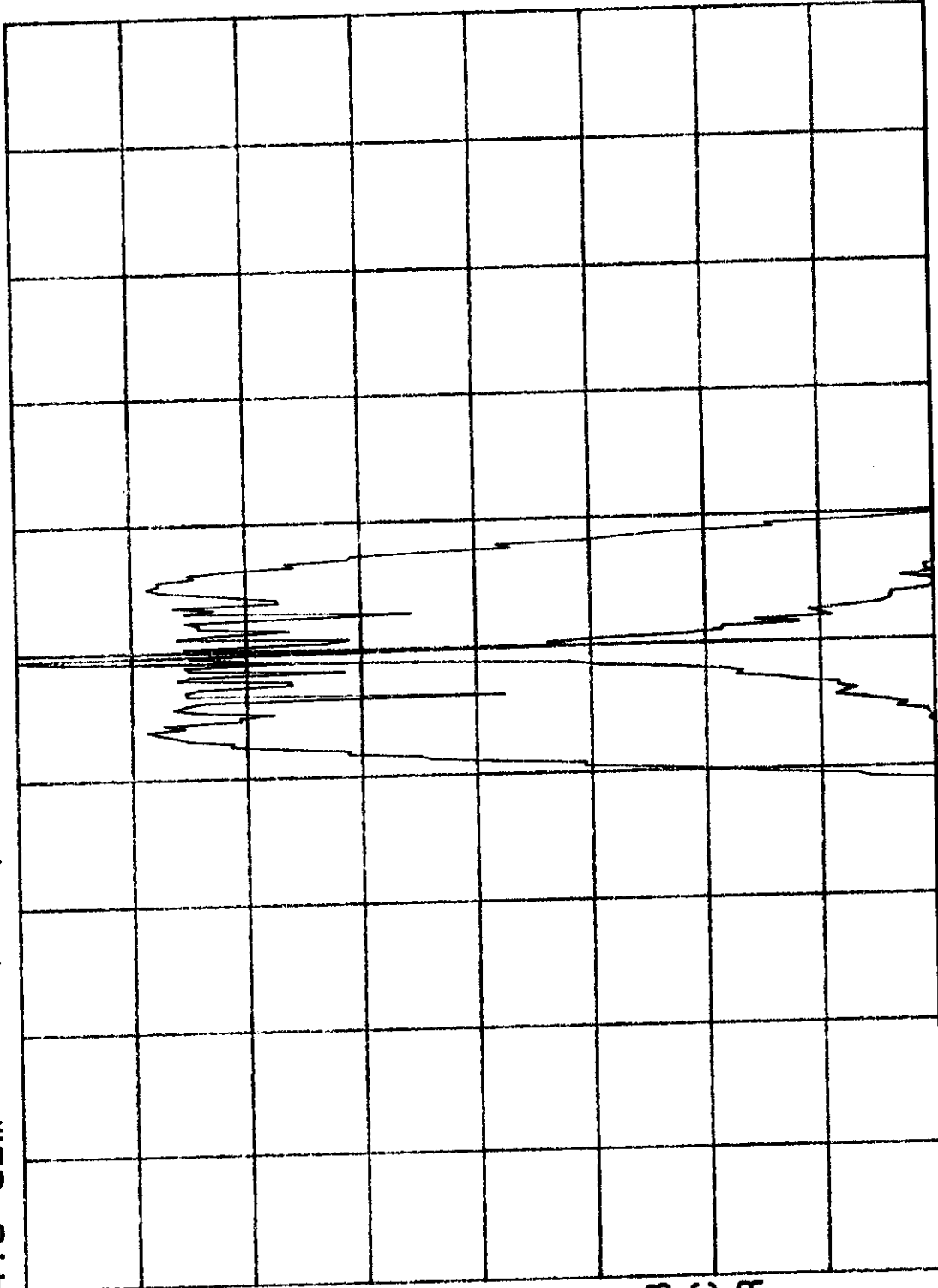


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Test Report Number No. R-3244N1
FCC ID: NVRCSI310-01

R-3244N1 OCC BW-16KHZ SINE-OUTPUT (UPLINK)

REF 24.3 dBm AT 20 dB



PEAK
LOG
10
dB/
OFFST
20.0
dB

VA WB
SC FC
CORR

SPAN 250.0 KHZ
SWP 8.33 SEC

VBW 1 KHZ

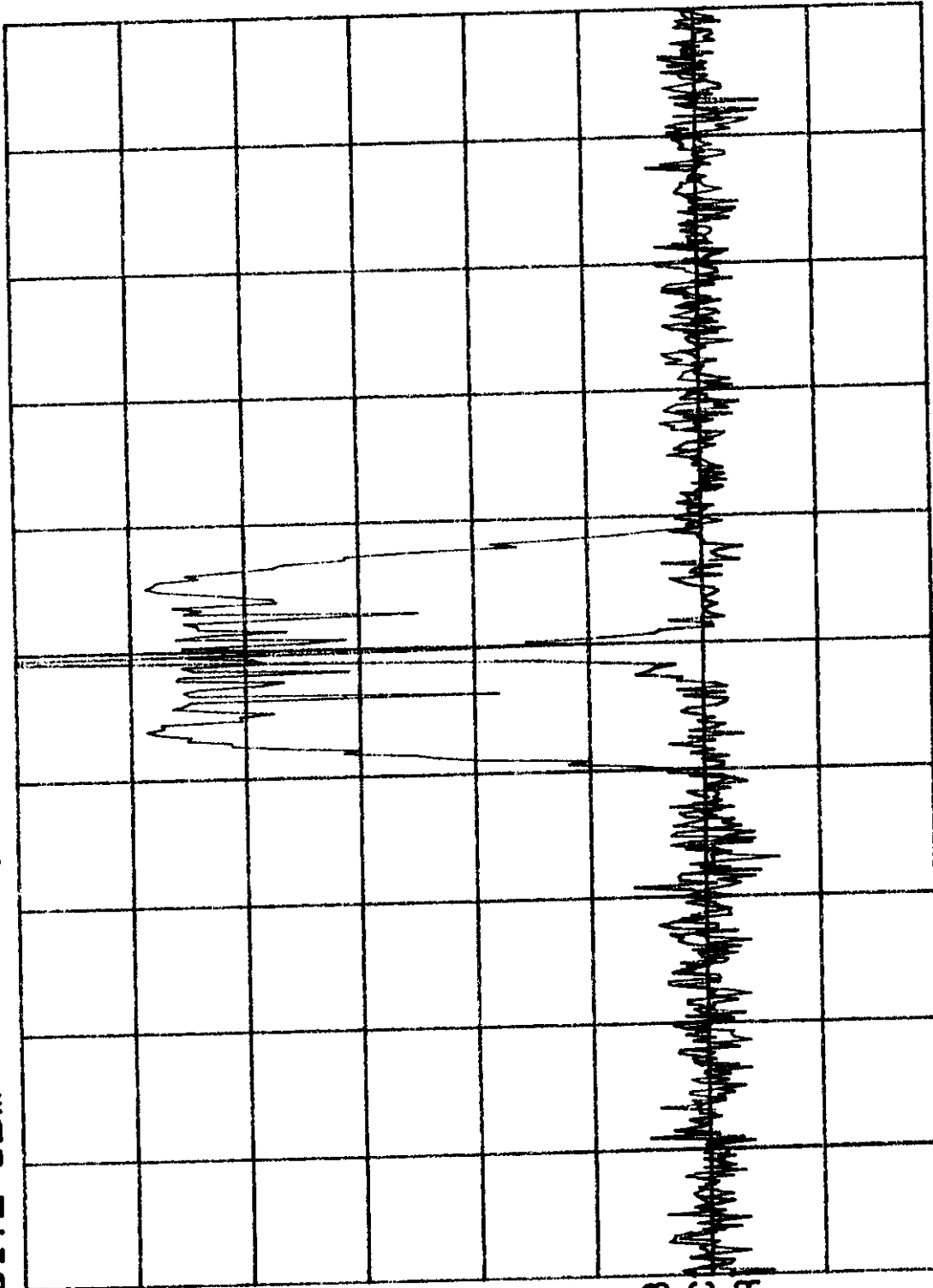
CENTER 806.0000 MHZ
#RES BW 300 HZ

2/2

R-3244N1 OCC BW-16KHZ SINE-INPUT (UPLINK)

REF -31.2 dBm AT 10 dB

PEAK
LOG
10
dB/
OFFST
20.0
dB



VA WB
SC FC
CORR

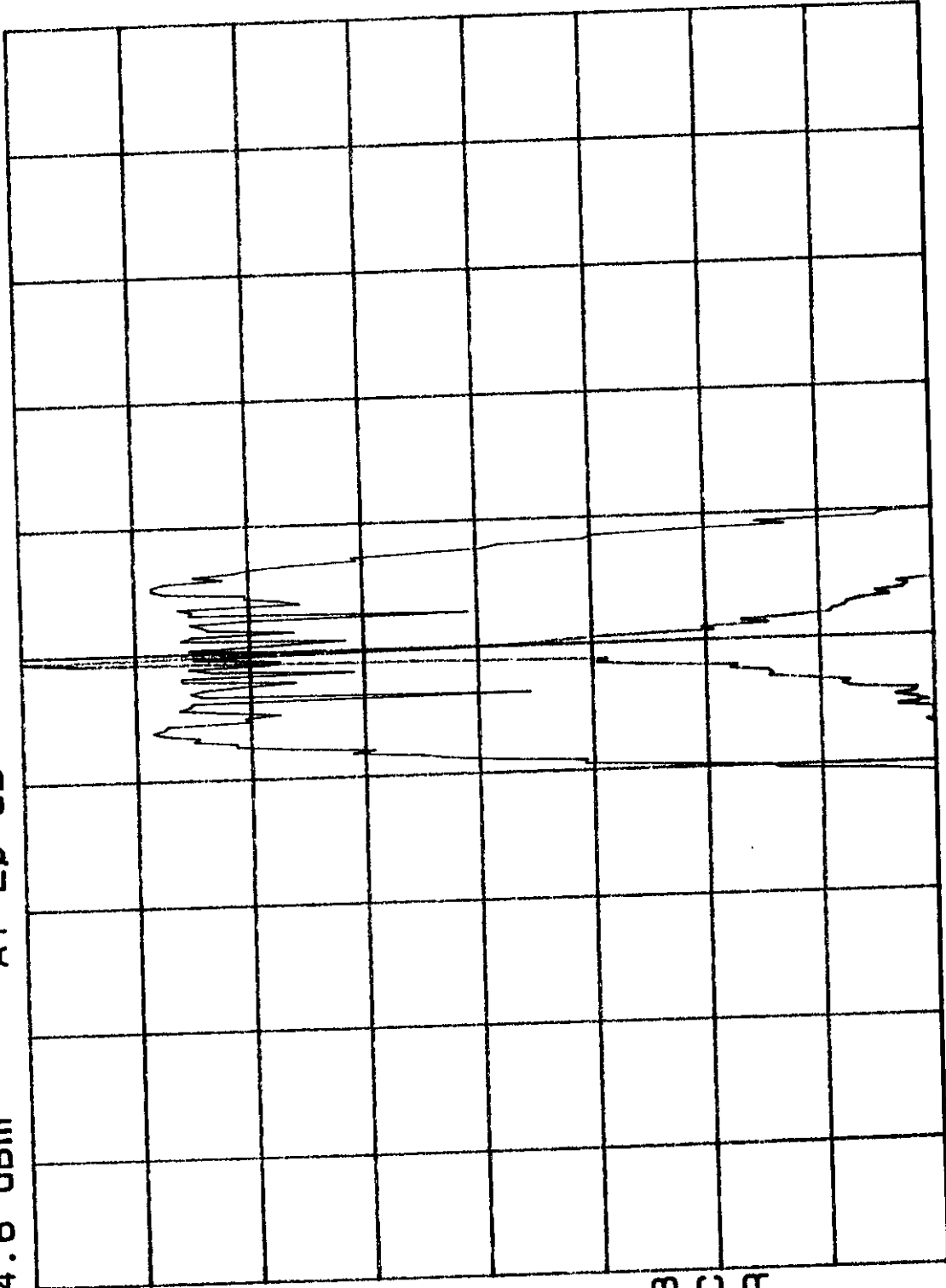
SPAN 250.0 KHZ
SWP 8.33 sec

VBW 1 KHZ

CENTER 806.0000 MHZ
#RES BW 300 HZ

R-3244N1 OCC BW-16KHZ FM SINE-OUTPUT (UPLINK)

REF 24.6 dBm AT 20 dB



PEAK
LOG
10
dB/
OFFST
20.0
dB

VA WB
SC FC
CORR

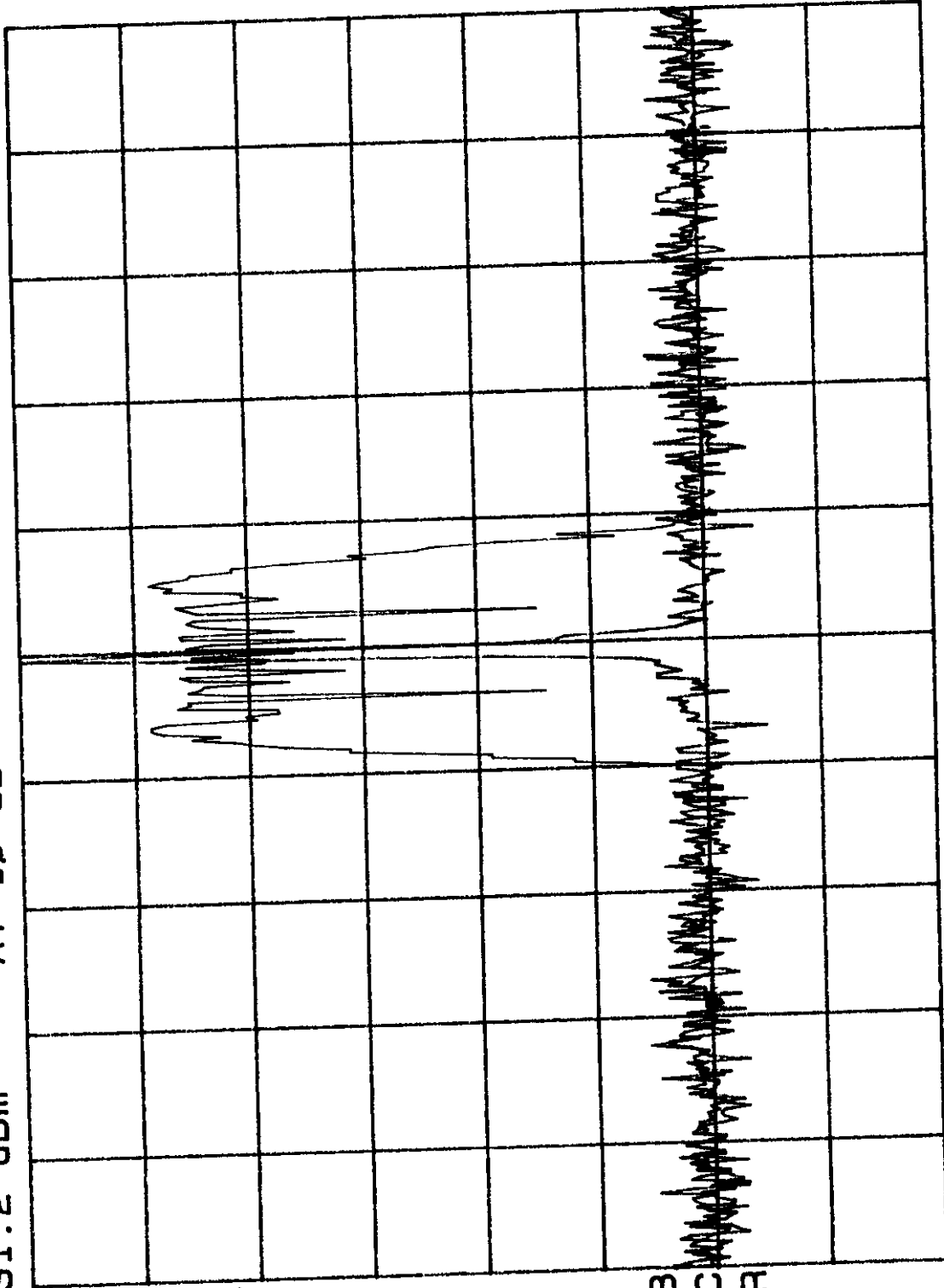
SPAN 250.0 KHZ
SWP 8.33 sec

VBW 1 KHZ

CENTER 815.0000 MHZ
#RES BW 300 Hz

R-3244N1 OCC BW-16KHZ FM SINE-INPUT (UPLINK)

REF -31.2 dBm AT 10 dB



PEAK
LOG
10
dB/
OFFST
20.0
dB

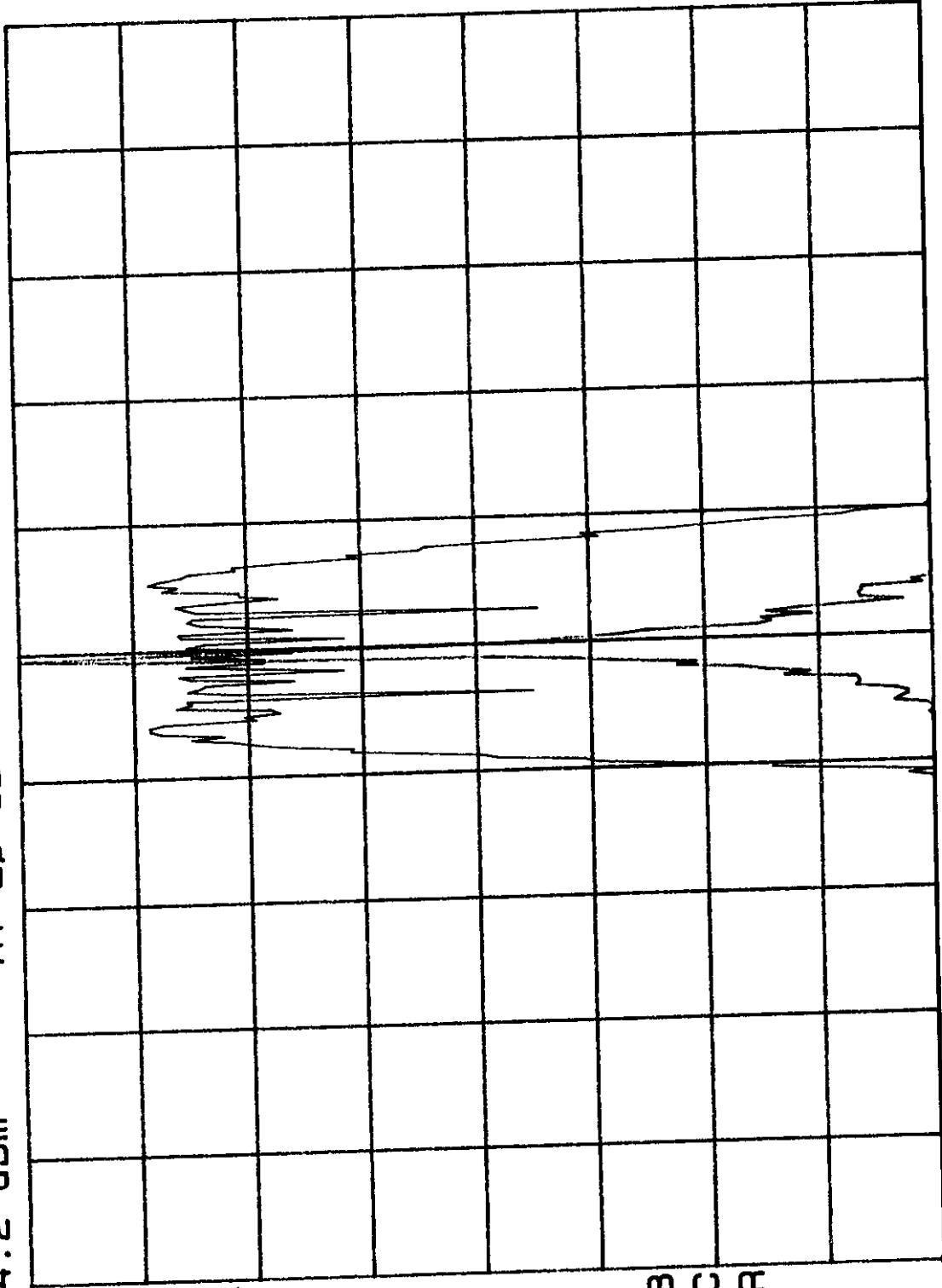
VA WB
SC FC
CORR

SPAN 250.0 KHZ
SWP 8.33 sec

VBW 1 KHZ

CENTER 815.0000 MHZ
#RES BW 3000 HZ

R-3244N1 OCC BW-16KHZ FM SINE-OUTPUT (UPLINK)
REF 24.2 dBm AT 20 dB



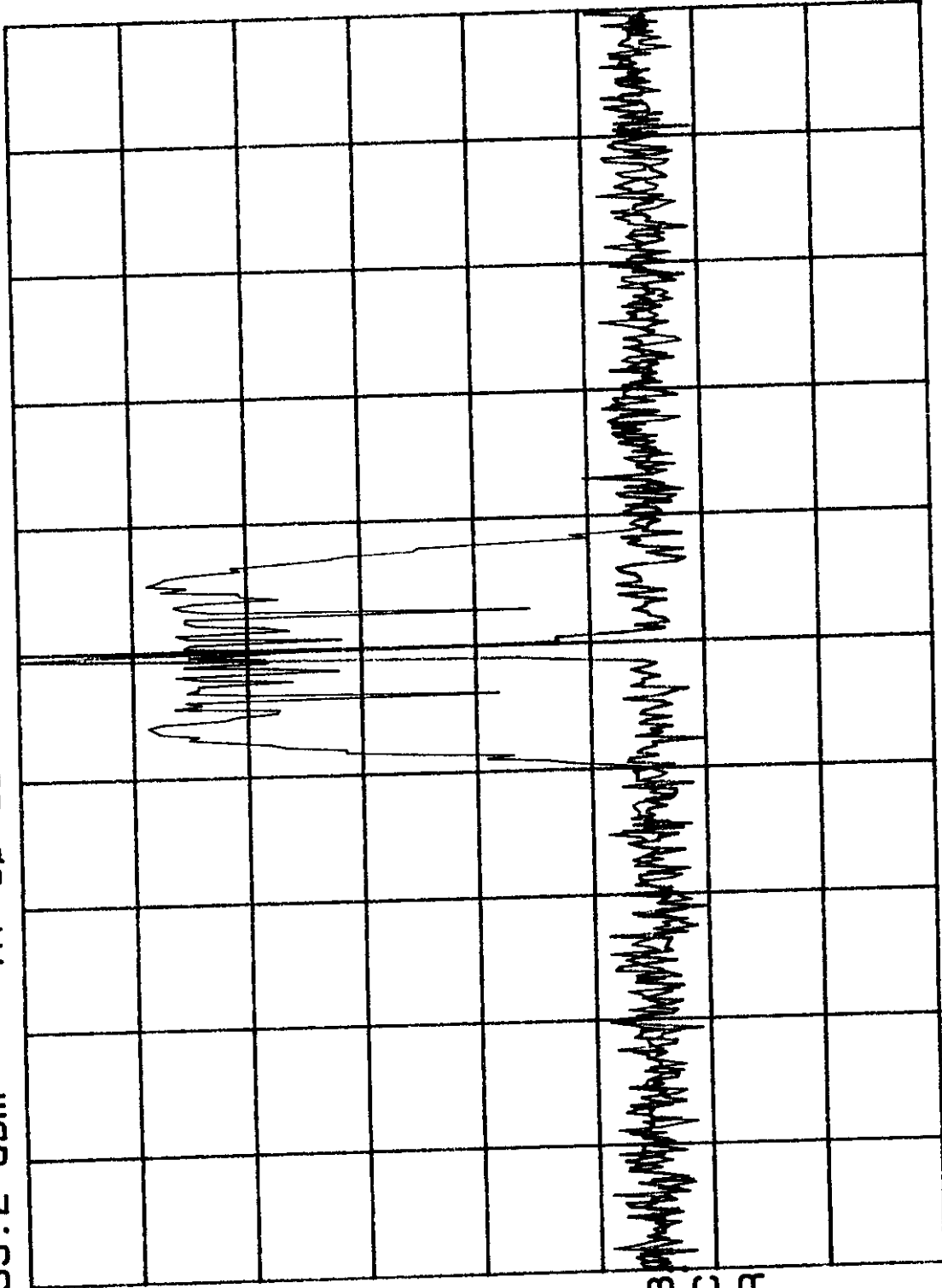
PEAK
LOG
10
dB/
OFFST
20.0
dB

VA WB
SC FC
CORR

CENTER 824.0000 MHZ
#RES BW 3000 HZ
SPAN 250.0 KHZ
SWP 8.33 sec
VBW 1 KHZ

R-3244N1 OCC BW-16KHZ FM SINE-INPUT (UPLINK)

REF -35.2 dBm AT 10 dB



PEAK
LOG
10
dB/
OFFST
20.0
dB

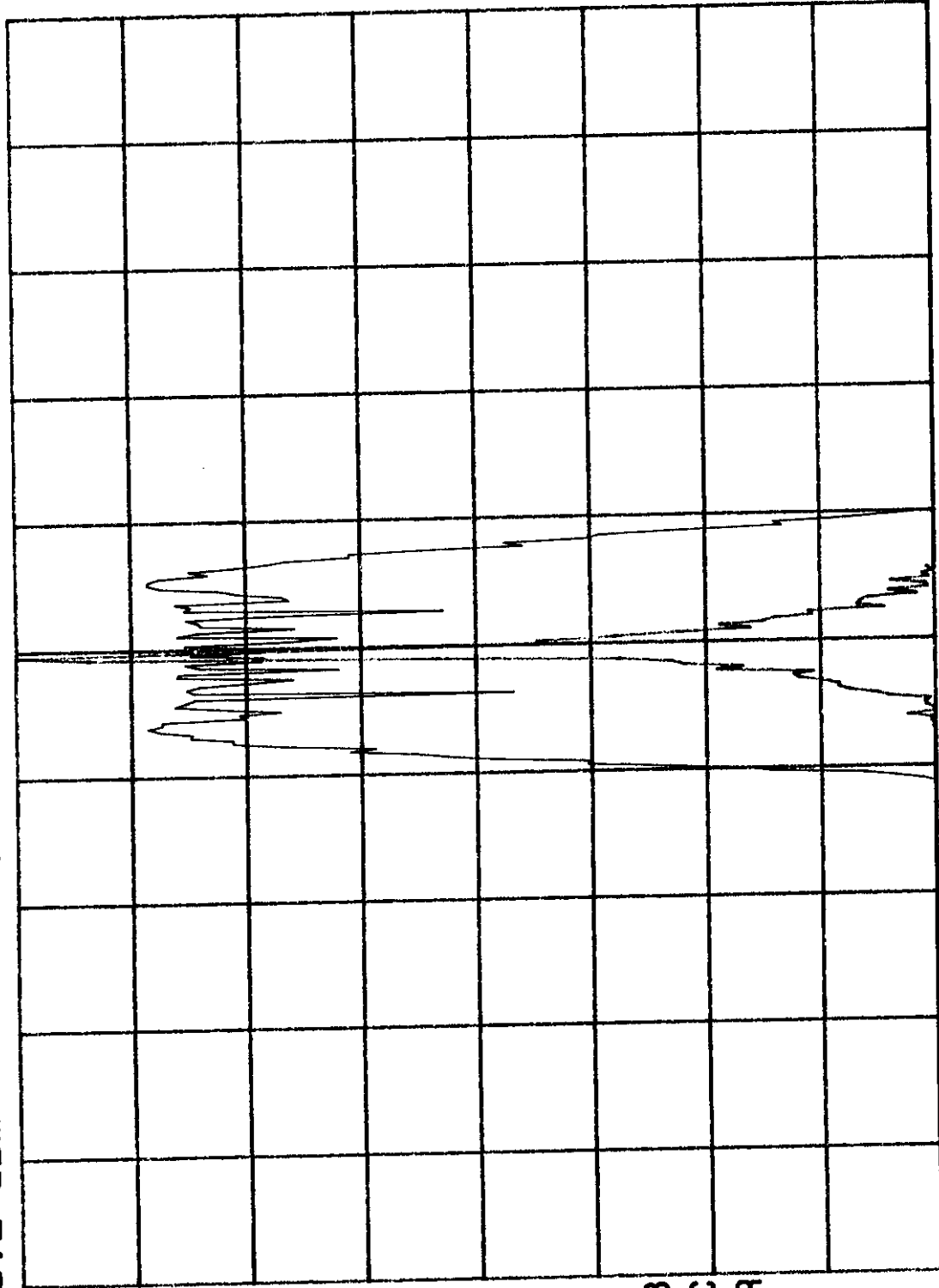
VA WB
SC FC
CORR

Test Report No. R-3244N1
FCC ID: NVRCSI310-01

CENTER 824.0000 MHZ
#RES BW 300 HZ
SPAN 250.0 KHZ
SWP 8.33 sec
VBW 1 KHZ

R-3244N1 OCC BW-16KHZ FM SINE-OUTPUT (DNLINK)

REF 15.2 dBm AT 10 dB

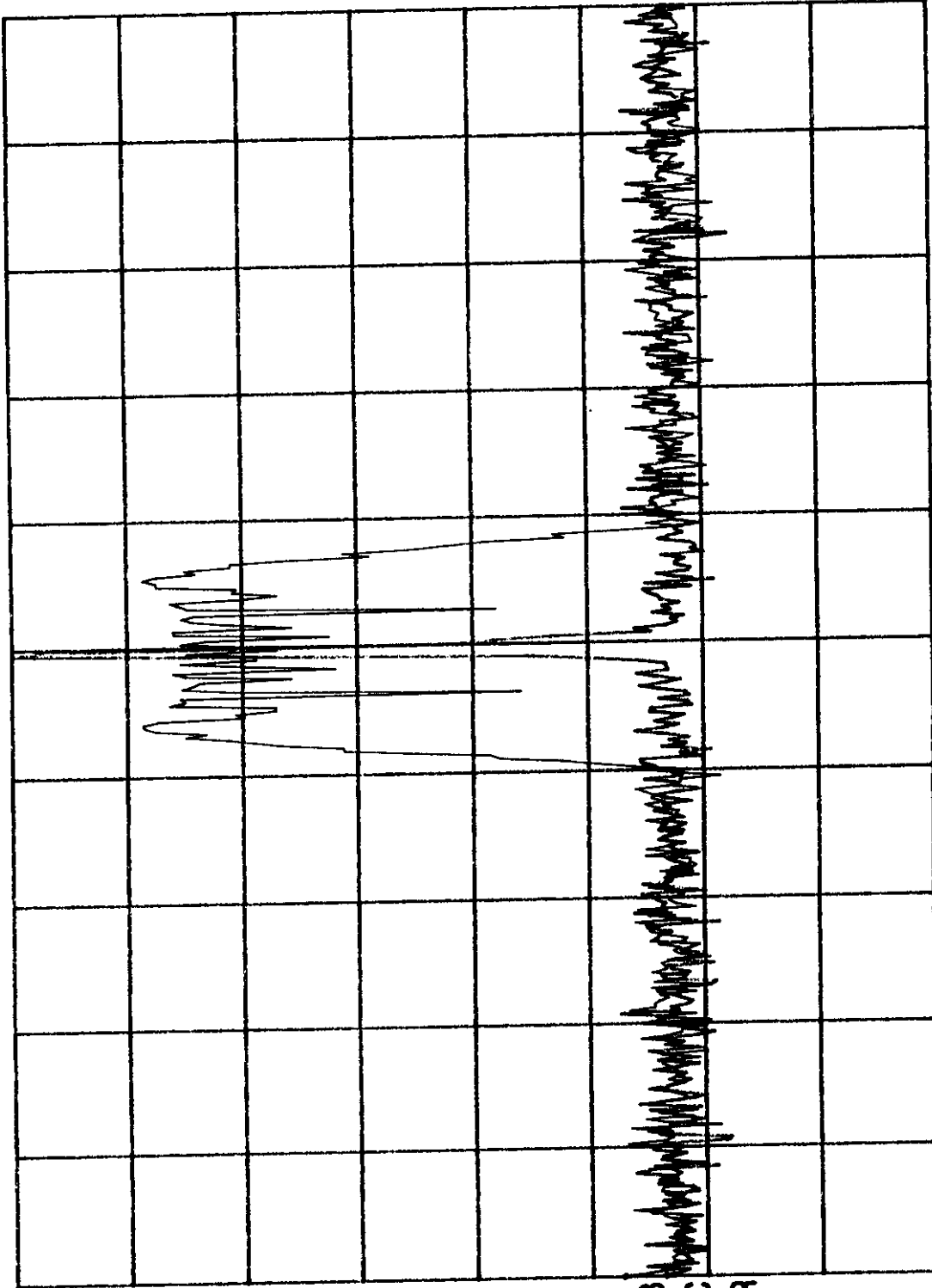


PEAK
LOG
10
dB/
OFFST
20.0
dB

VA WB
SC FC
CORR

CENTER 849.0000 MHZ
#RES BW 3000 HZ
SPAN 250.0 KHZ
SWP 8.33 sec
VBW 1 KHZ

R-3244N1 OCC BW-16KHZ FM SINE-INPUT (DNLINK)
 REF -33.3 dBm AT 10 dB



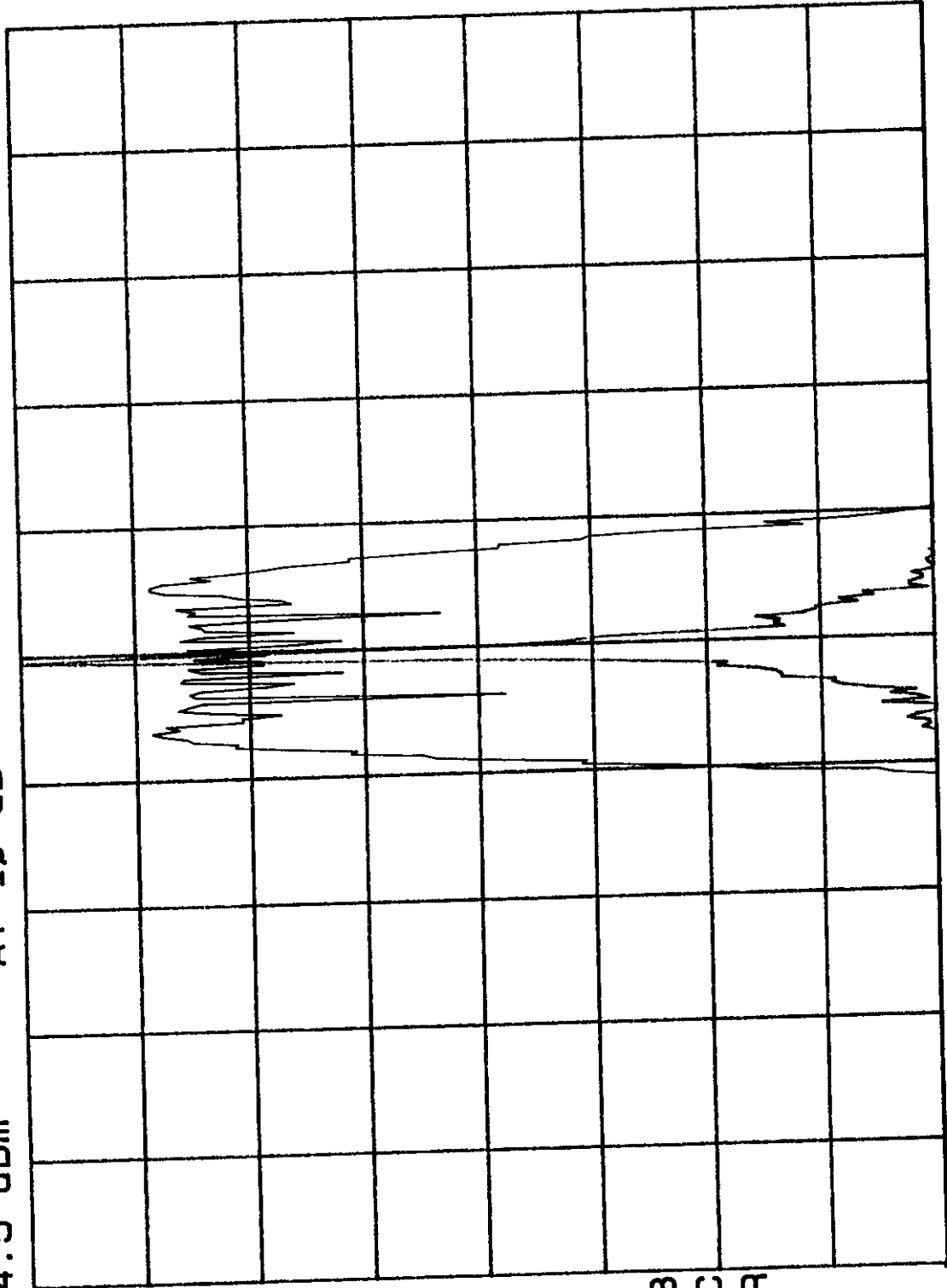
PEAK
 LOG
 10
 dB/
 OFFST
 20.0
 dB

VA WB
 SC FC
 CORR

CENTER 849.0000 MHZ
 #RES BW 300 HZ
 SPAN 250.0 KHZ
 VBW 1 KHZ
 SWP 8.33 sec

R-3244N1 OCC BW-16KHZ FM SINE-OUTPUT (DNLINK)

REF 14.5 dBm AT 10 dB



PEAK
LOG
10
dB/
OFFST
20.0
dB

VA WB
SC FC
CORR

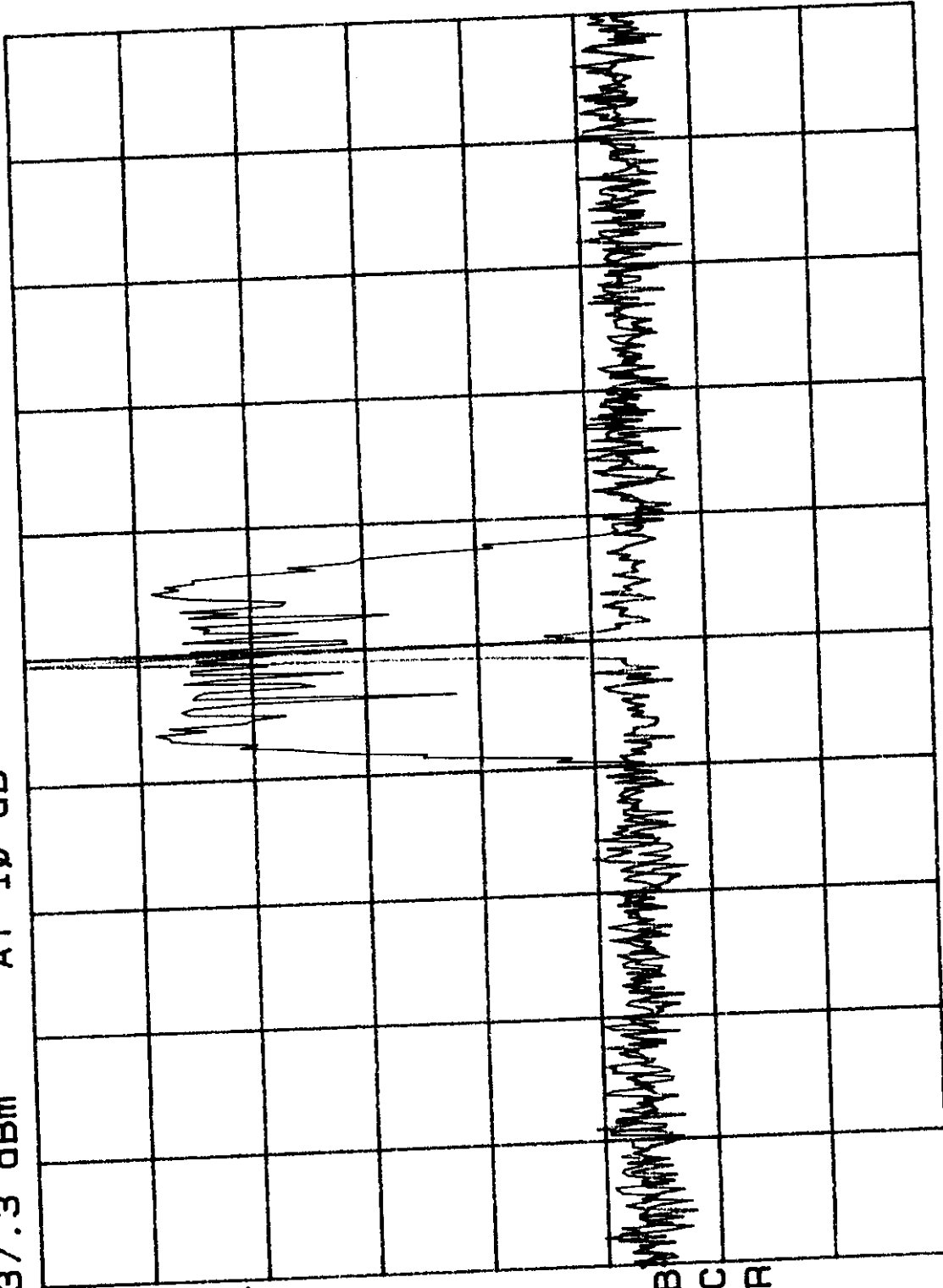
SPAN 250.0 KHZ
SWP 8.33 sec

VBW 1 KHZ

CENTER 858.0000 MHZ
#RES BW 3000 HZ

R-3244N1 OCC BW-16KHZ FM SINE-INPUT (DNLINK)

REF -37.3 dBm AT 10 dB



PEAK
LOG
10
dB/
OFFST
20.0
dB

VA WB
SC FC
CORR

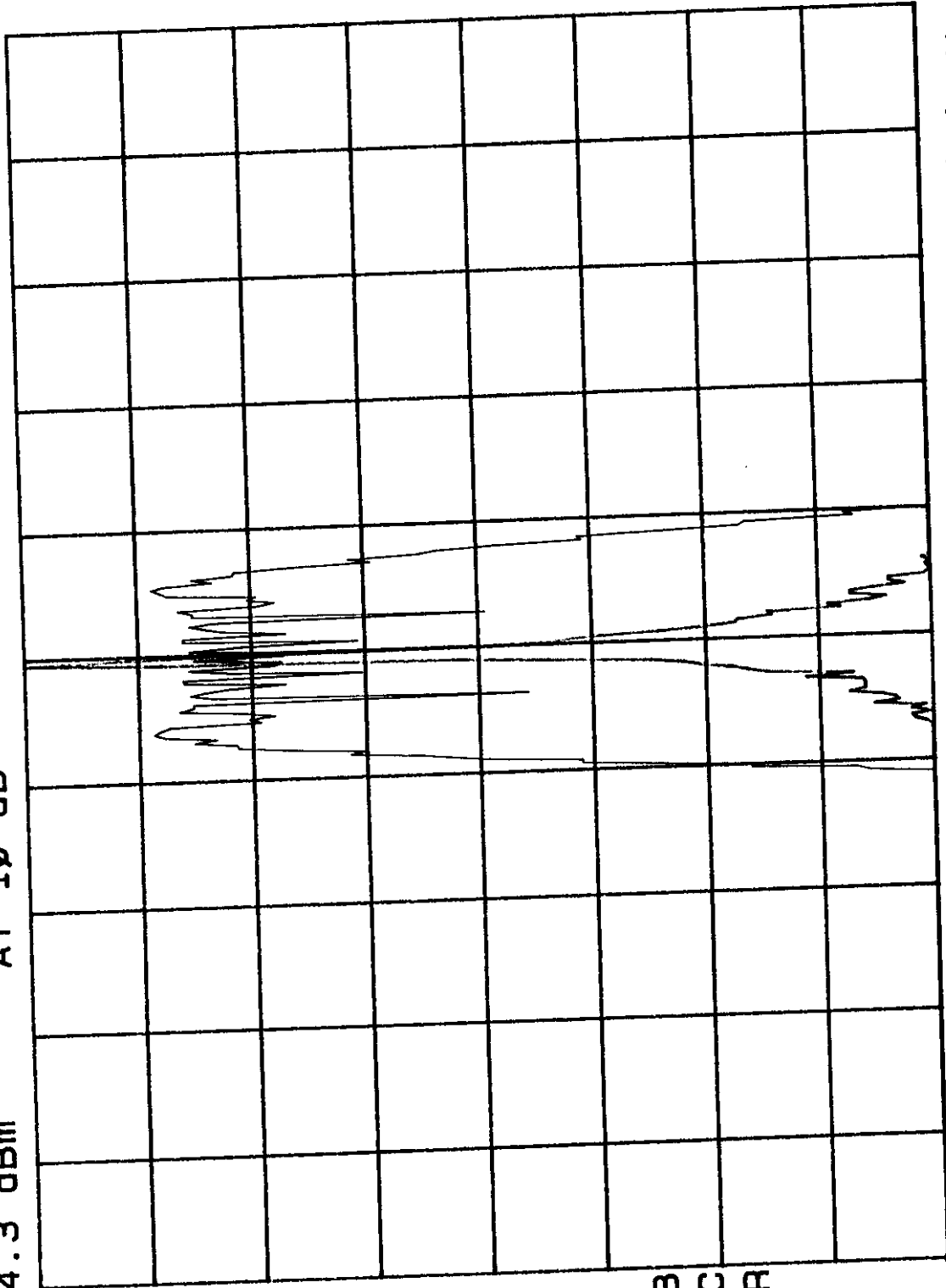
SPAN 250.0 KHZ
SWP 8.33 SEC

VBW 1 KHZ

CENTER 858.0000 MHZ
#RES BW 300 HZ

R-3244N1 OCC BW-16KHZ FM SINE-OUTPUT (DNLINK)

REF 14.3 dBm AT 10 dB



PEAK
LOG
10
dB/
OFFST
20.0
dB

VA WB
SC FC
CORR

SPAN 250.0 KHZ
SWP 8.33 sec

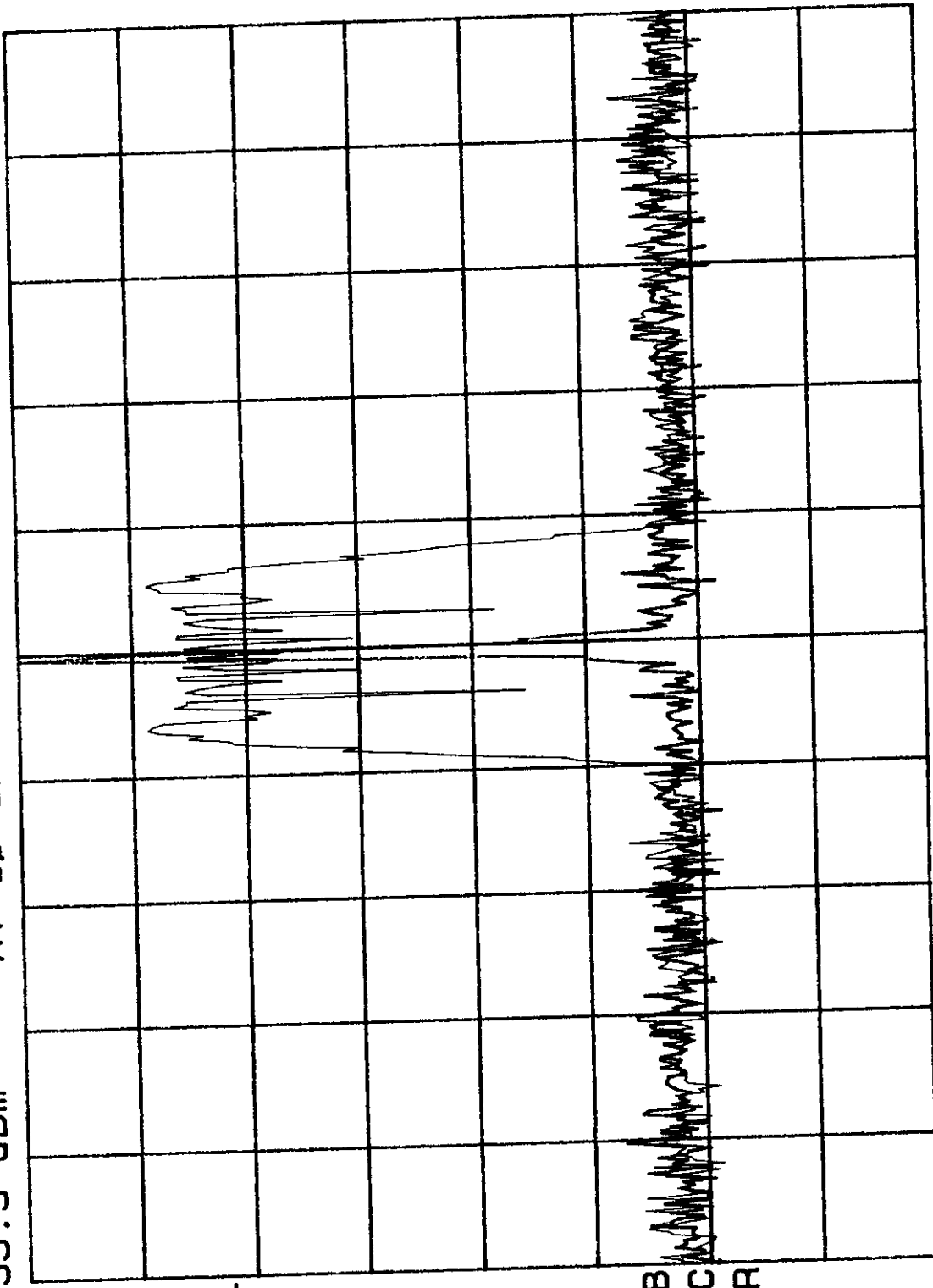
VBW 1 KHZ

CENTER 867.0000 MHZ
#RES BW 300 HZ

R-3244N1 OCC BW-16KHZ FM SINE-INPUT (DNLINK)

REF -33.3 dBm AT 10 dB

PEAK
LOG
10
dB/
OFFST
20.0
dB



VA VB
SC FC
CORR

Test Report No. R-3244N1
FCC ID: NVRCSI310-01

CENTER 867.0000 MHZ
#RES BW 3000 HZ
VBW 1 KHZ
SPAN 250.0 KHZ
SWP 8.33 sec

OCCUPIED BANDWIDTH DATA

WITH

16kHz SQUARE WAVE FM MODULATION



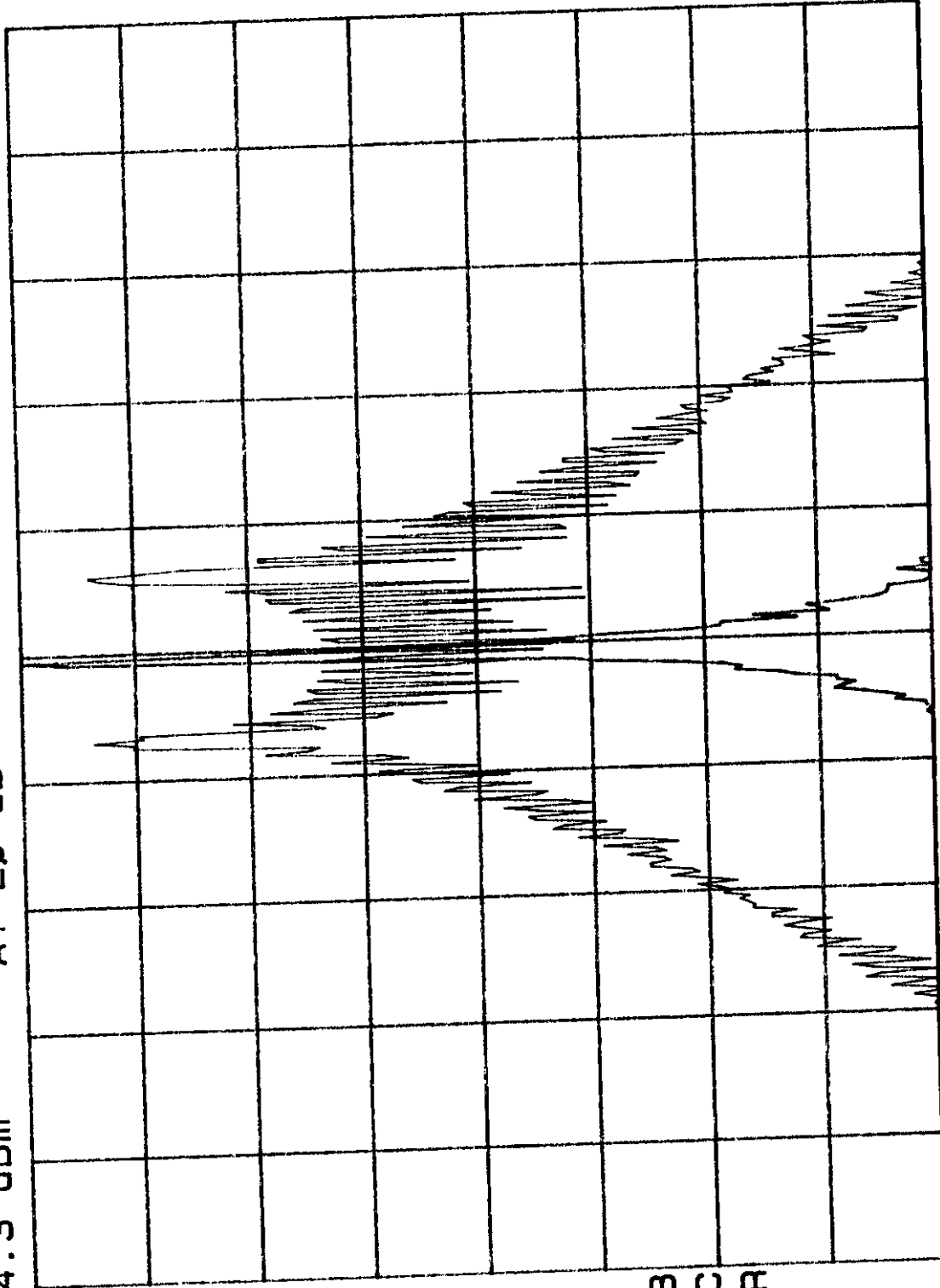
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Test Report Number No. R-3244N1
FCC ID: NVRCSI310-01

R-3244N1 OCC BW-16KHZ SQ-OUTPUT (UPLINK)

REF 24.3 dBm AT 20 dB

PEAK
LOG
10
dB/
OFFST
20.0
dB



VA WB
SC FC
CORR

Test Report No. R-3244N1
FCC ID: NVRCSI310-01

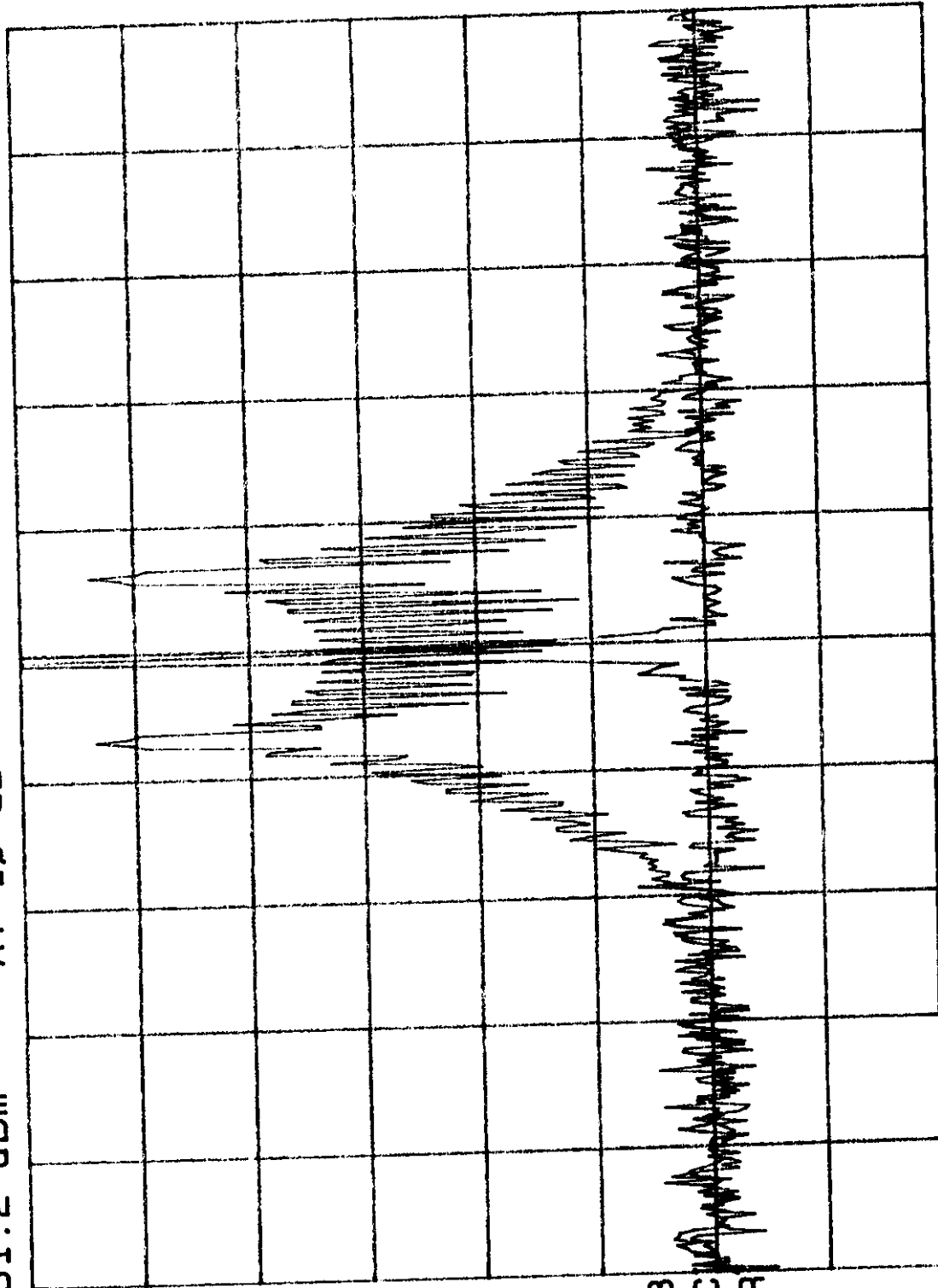
SPAN 250.0 KHZ
SWP 8.33 sec

VBW 1 KHZ

CENTER 806.0000 MHz
#RES BW 300 Hz

R-3244N1 OCC BW-16KHZ SQ-INPUT (UPLINK)

REF -31.2 dBm AT 10 dB



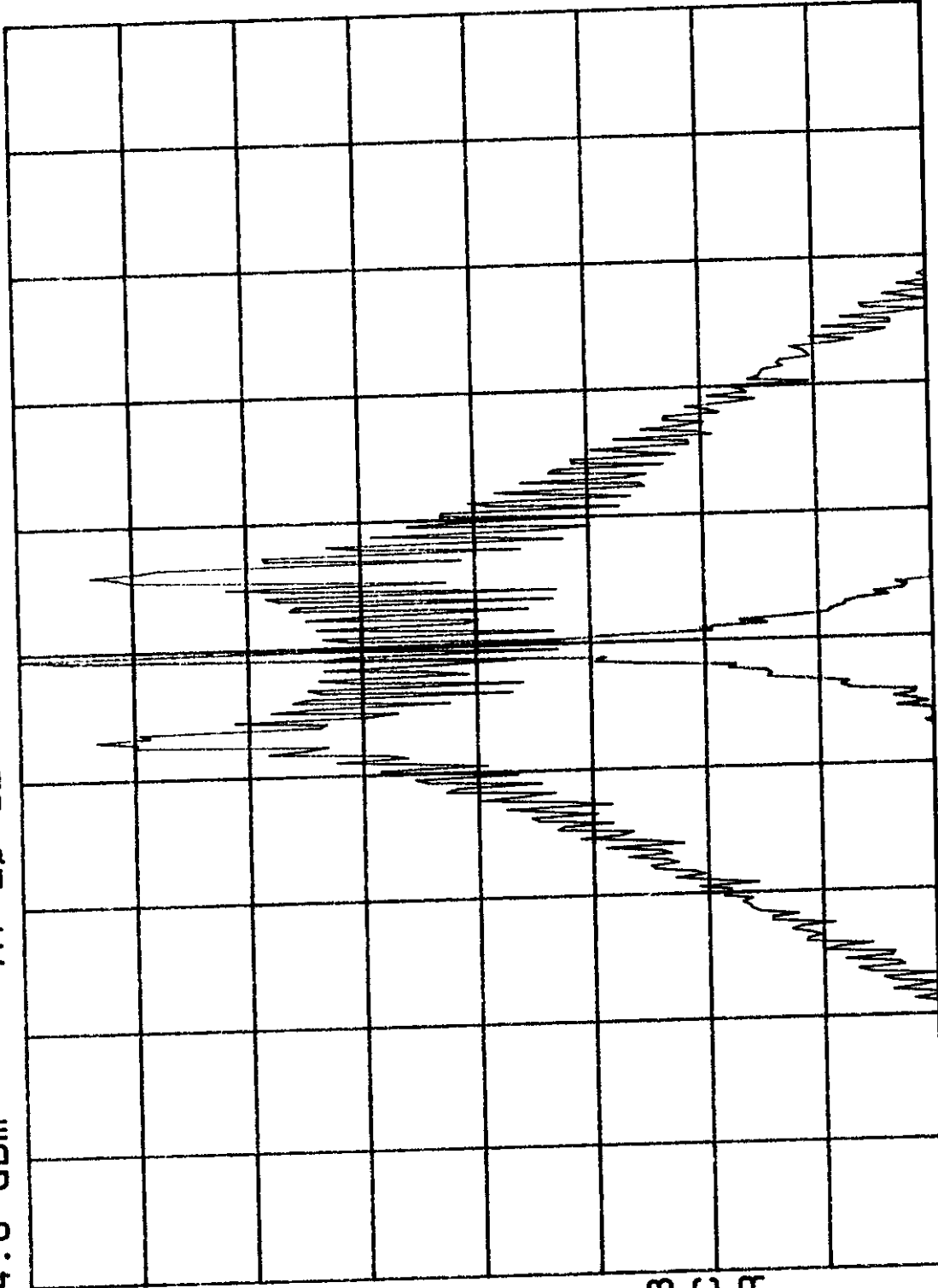
PEAK
LOG
10
dB/
OFFST
20.0
dB

VA WB
SC FC
CORR

CENTER 806.0000 MHz
#RES BW 300 Hz
SPAN 250.0 KHz
SWP 8.33 sec
VBW 1 KHz

R-3244N1 OCC BW-16KHZ FM SQ-OUTPUT (UPLINK)

REF 24.6 dBm AT 20 dB



PEAK
LOG
10
dB/
OFFST
20.0
dB

VA WB
SC FC
CORR

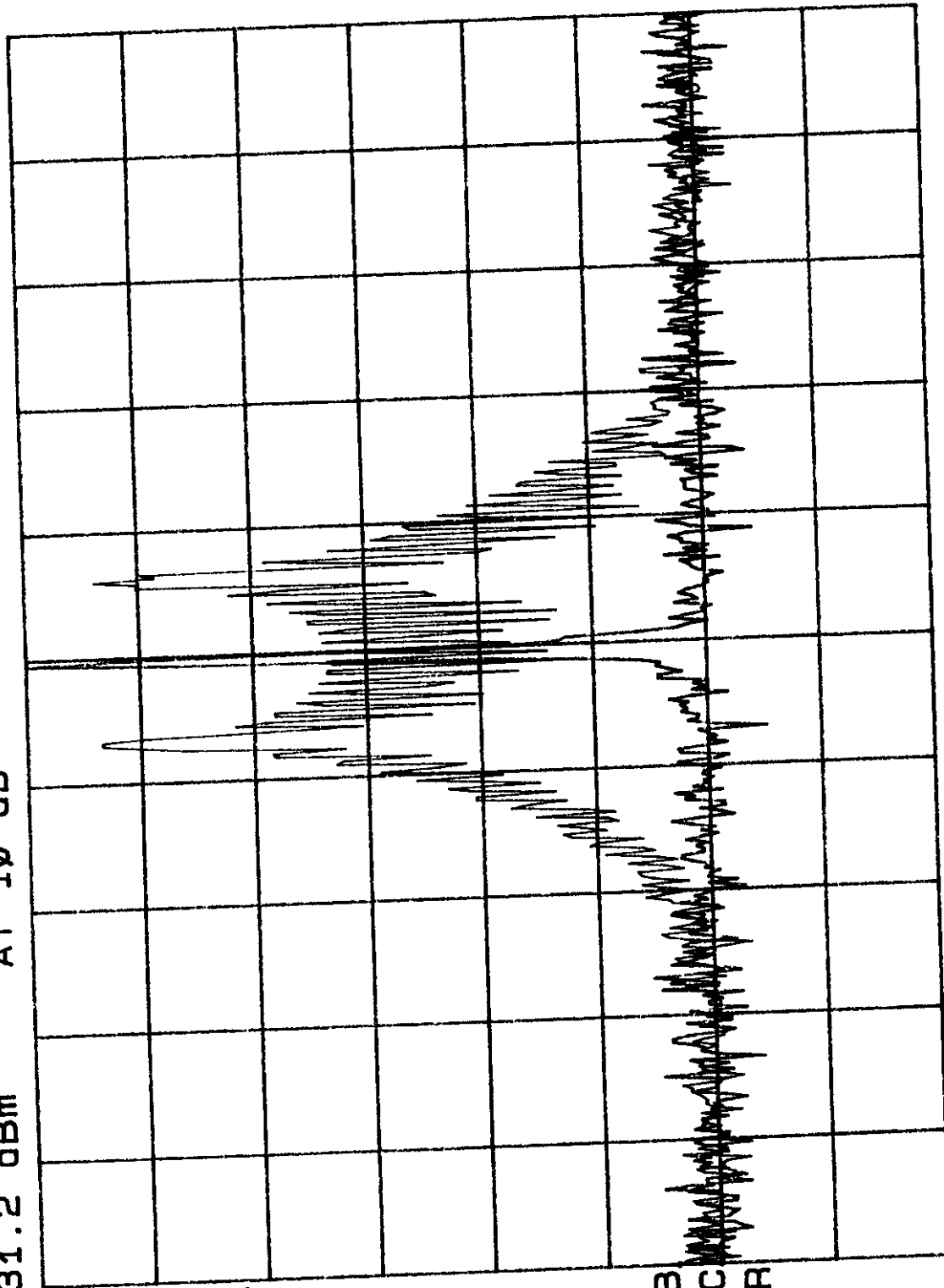
SPAN 250.0 KHZ
SWP 8.33 sec

VBW 1 KHZ

CENTER 815.0000 MHZ
#RES BW 3000 HZ

R-3244N1 OCC BW-16KHZ FM SQ-INPUT (UPLINK)

REF -31.2 dBm AT 10 dB



PEAK

LOG

10

dB/

OFFST

20.0

dB

VA WB
SC FC
CORR

SPAN 250.0 KHZ
SWP 8.33 sec

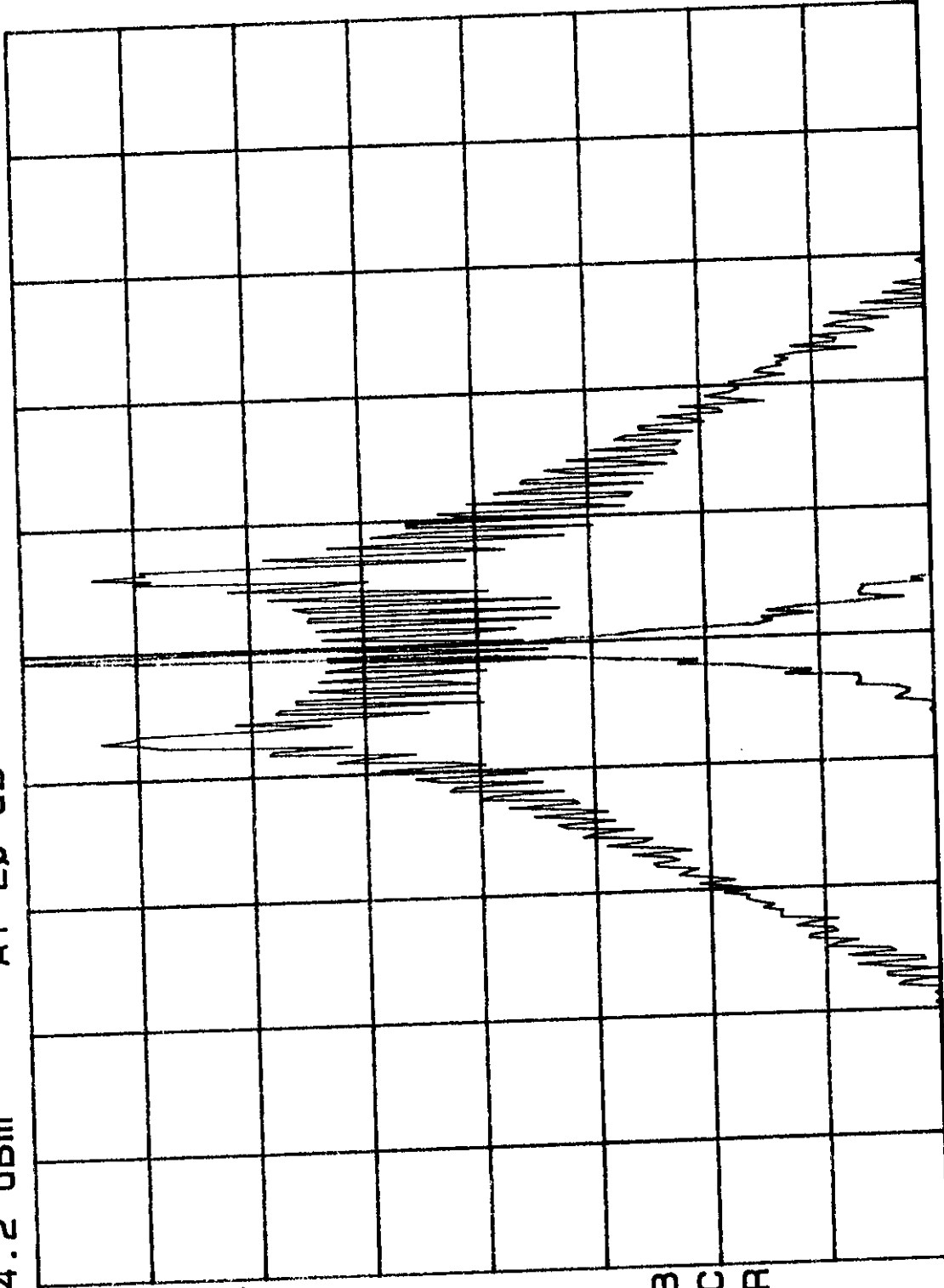
VBW 1 KHZ

CENTER 815.0000 MHZ
#RES BW 300 HZ

R-3244N1 OCC BW-16KHZ FM SQ-OUTPUT (UPLINK)

REF 24.2 dBm AT 20 dB

PEAK
LOG
10
dB/
OFFST
20.0
dB



VA WB
SC FC
CORR

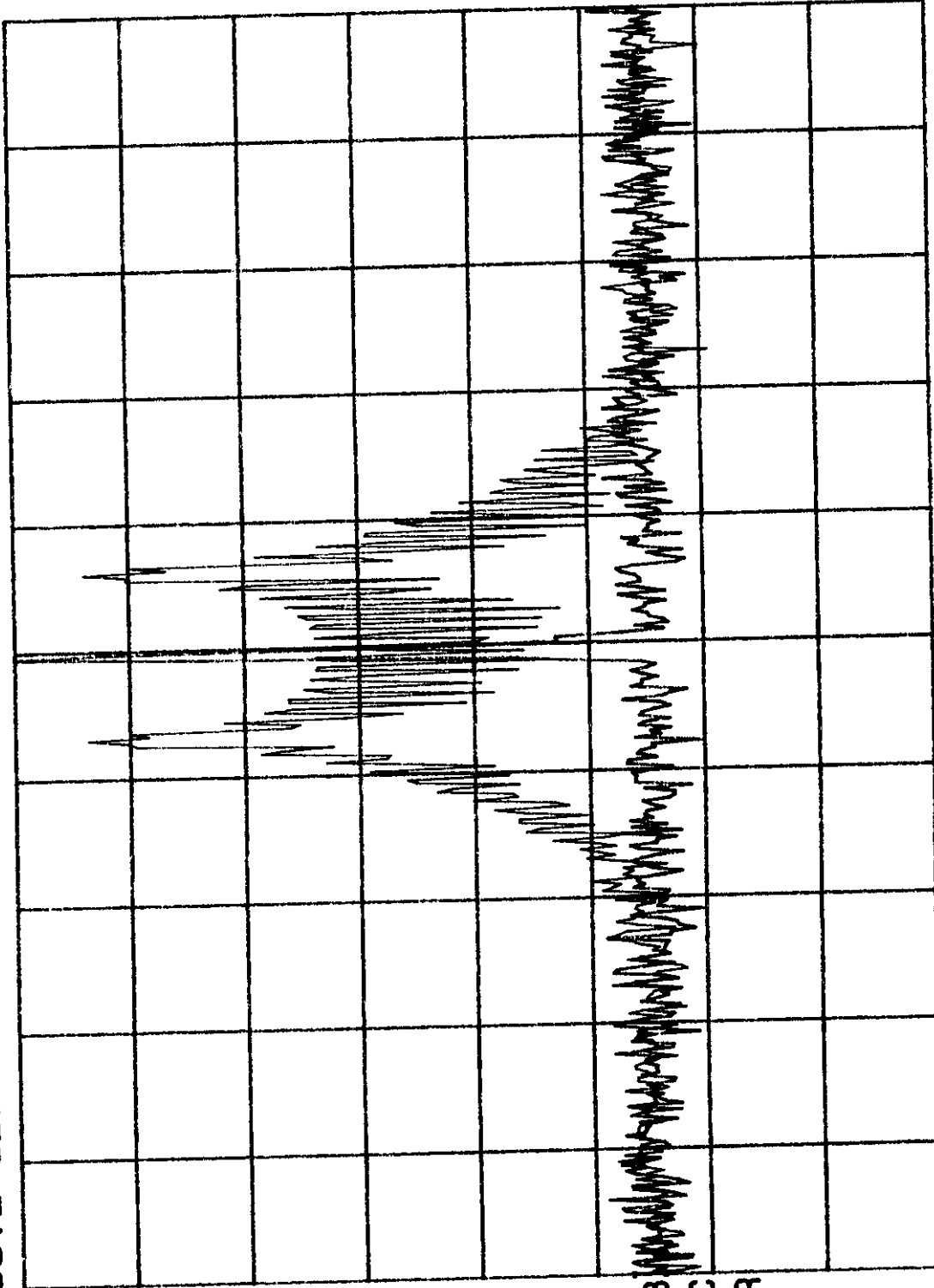
SPAN 250.0 KHZ
SWP 8.33 sec

VBW 1 KHZ

CENTER 824.0000 MHZ
#RES BW 3000 HZ

R-3244N1 OCC BW-16KHZ FM SQ-INPUT (UPLINK)

REF -35.2 dBm AT 10 dB



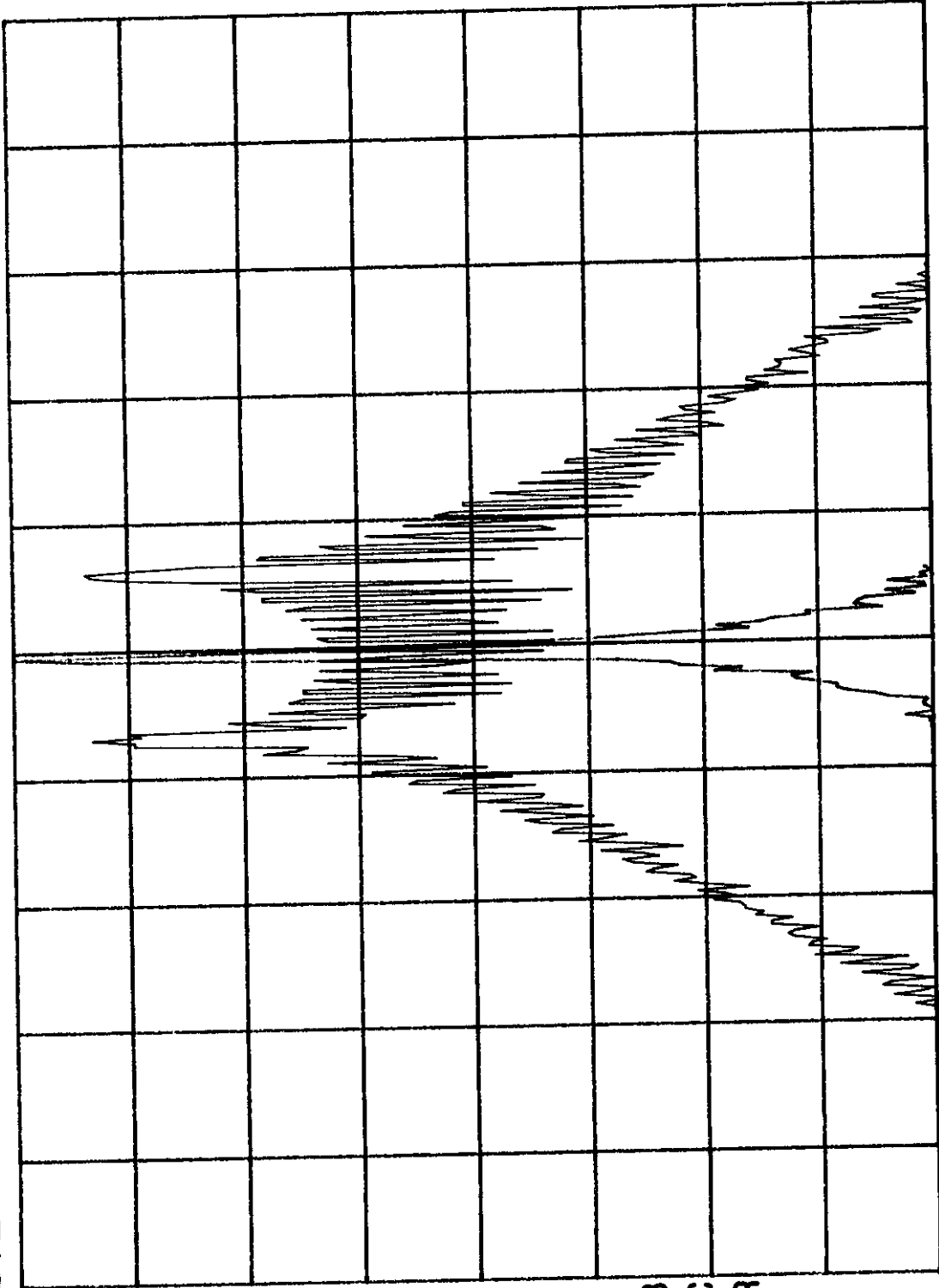
PEAK
LOG
10
dB/
OFFST
20.0
dB

VA WB
SC FC
CORR

CENTER 824.0000 MHZ
#RES BW 300 HZ
SPAN 250.0 KHZ
SWP 8.33 sec
VBW 1 KHZ

R-3244N1 OCC BW-16KHZ FM SQ-OUTPUT (DNLINK)

REF 15.2 dBm AT 10 dB



PEAK
LOG
10
dB/
OFFST
20.0
dB

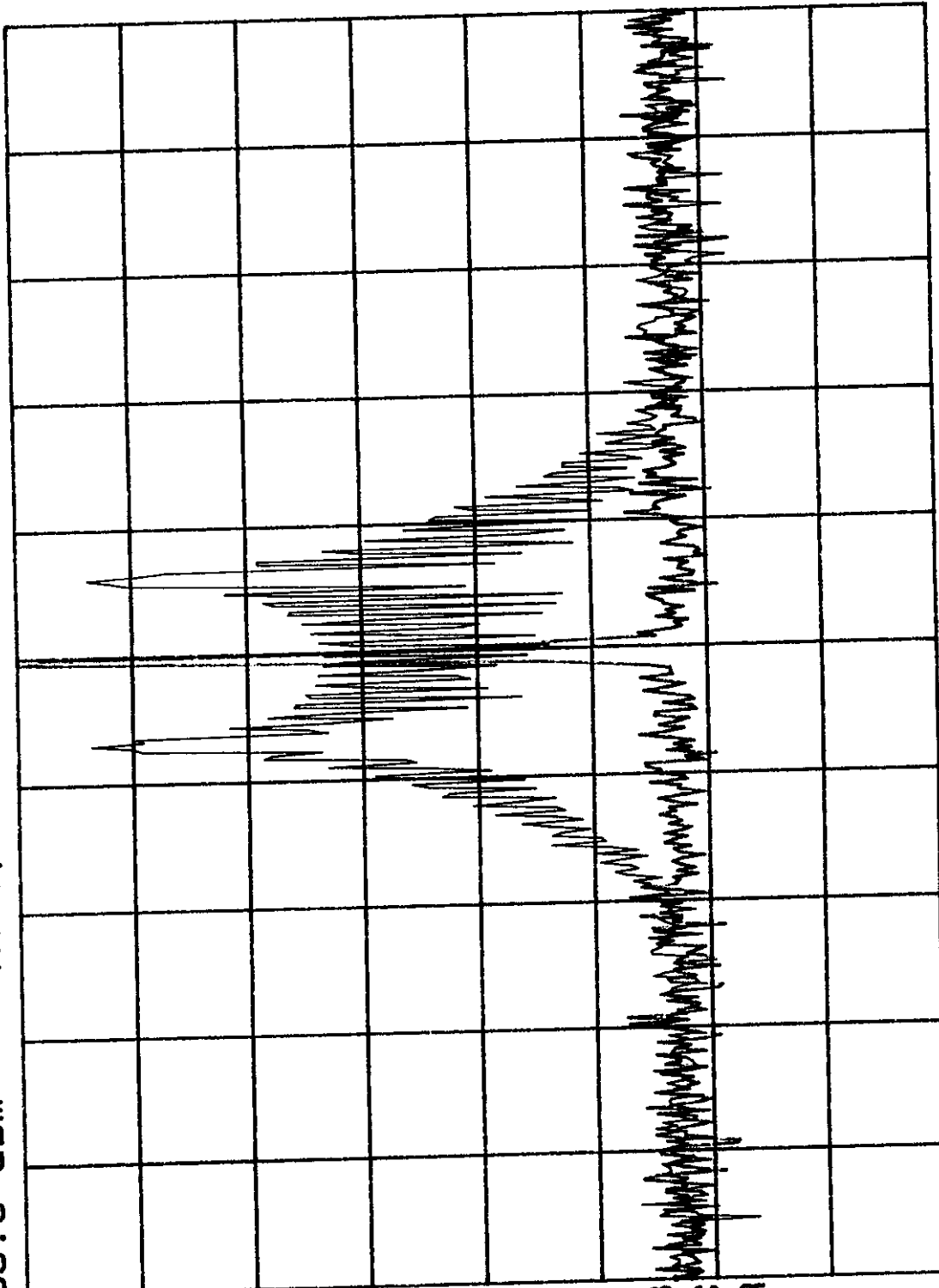
VA WB
SC FC
CORR

CENTER 849.0000 MHZ
#RES BW 300 HZ
SPAN 250.0 KHZ
SWP 8.33 sec
VBW 1 KHZ

R-3244N1 OCC BW-16KHZ FM SQ-INPUT (DNLINK)

REF -33.3 dBm AT 10 dB

PEAK
LOG
10
dB/
OFFST
20.0
dB



VA WB
SC FC
CORR

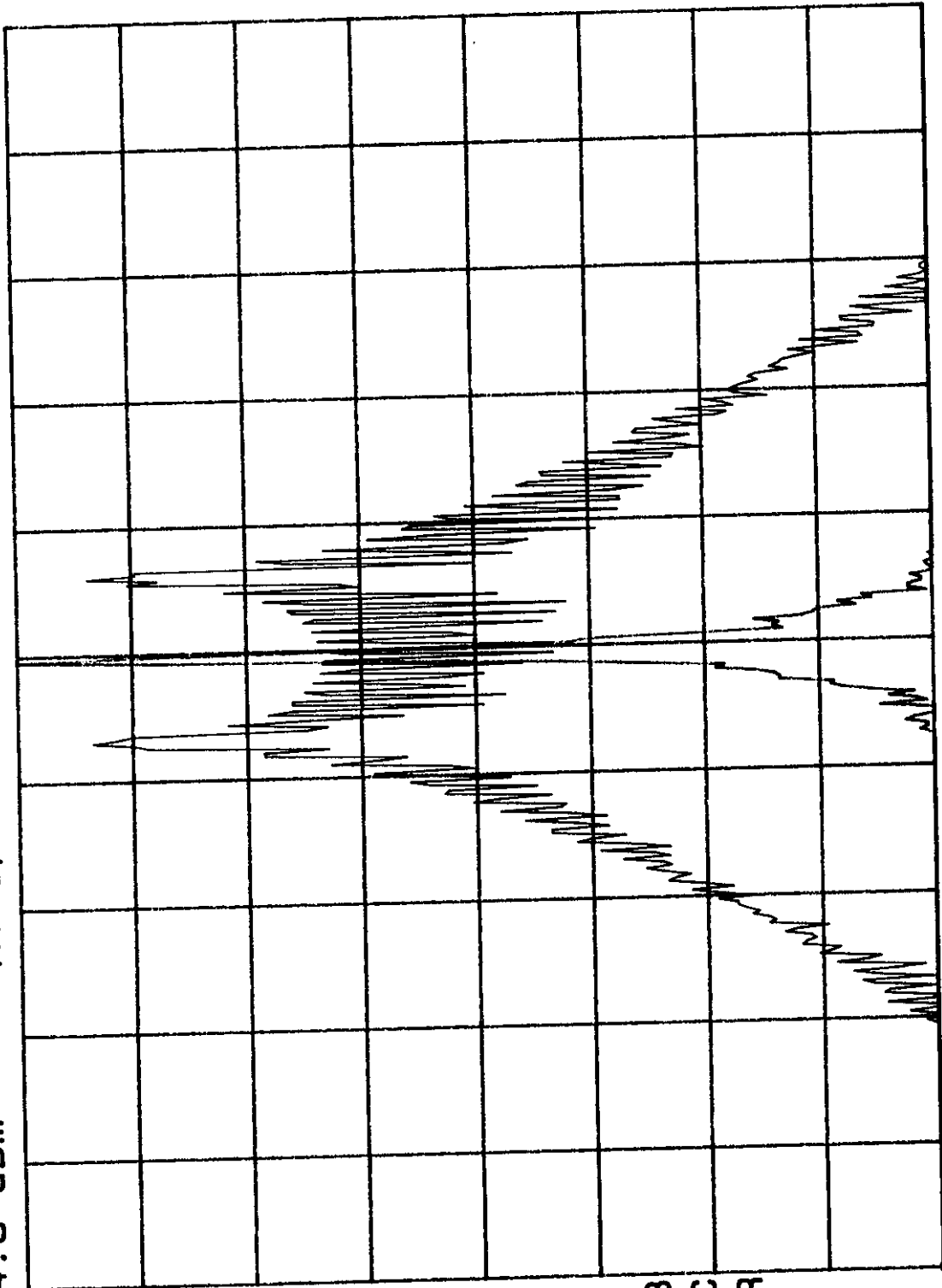
Test Report No. R-3244N1
FCC ID: NVRCSI310-01

CENTER 849.0000 MHZ
#RES BW 300 HZ
SPAN 250.0 KHZ
SWP 8.33 sec
VBW 1 KHZ

R-3244N1 OCC BW-16KHZ FM SQ-OUTPUT (DNLINK)

REF 14.5 dBm AT 10 dB

PEAK
LOG
10
dB/
OFFST
20.0
dB



VA WB
SC FC
CORR

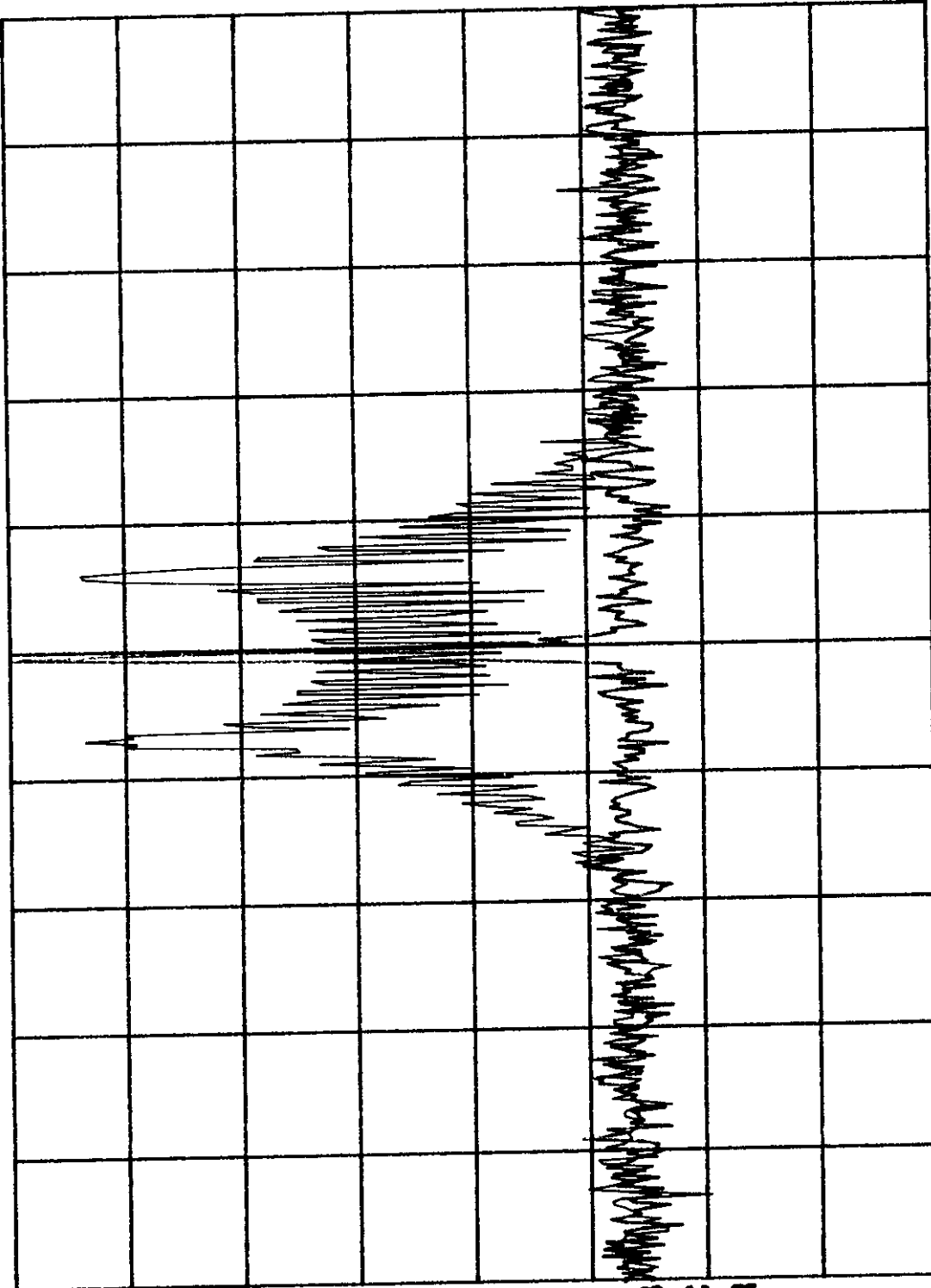
SPAN 250.0 KHZ
SWP 8.33 sec

VBW 1 KHZ

CENTER 858.0000 MHZ
#RES BW 300 HZ

R-3244N1 OCC BW-16KHZ FM SQ-INPUT (DNLINK)

REF -37.3 dBm AT 10 dB



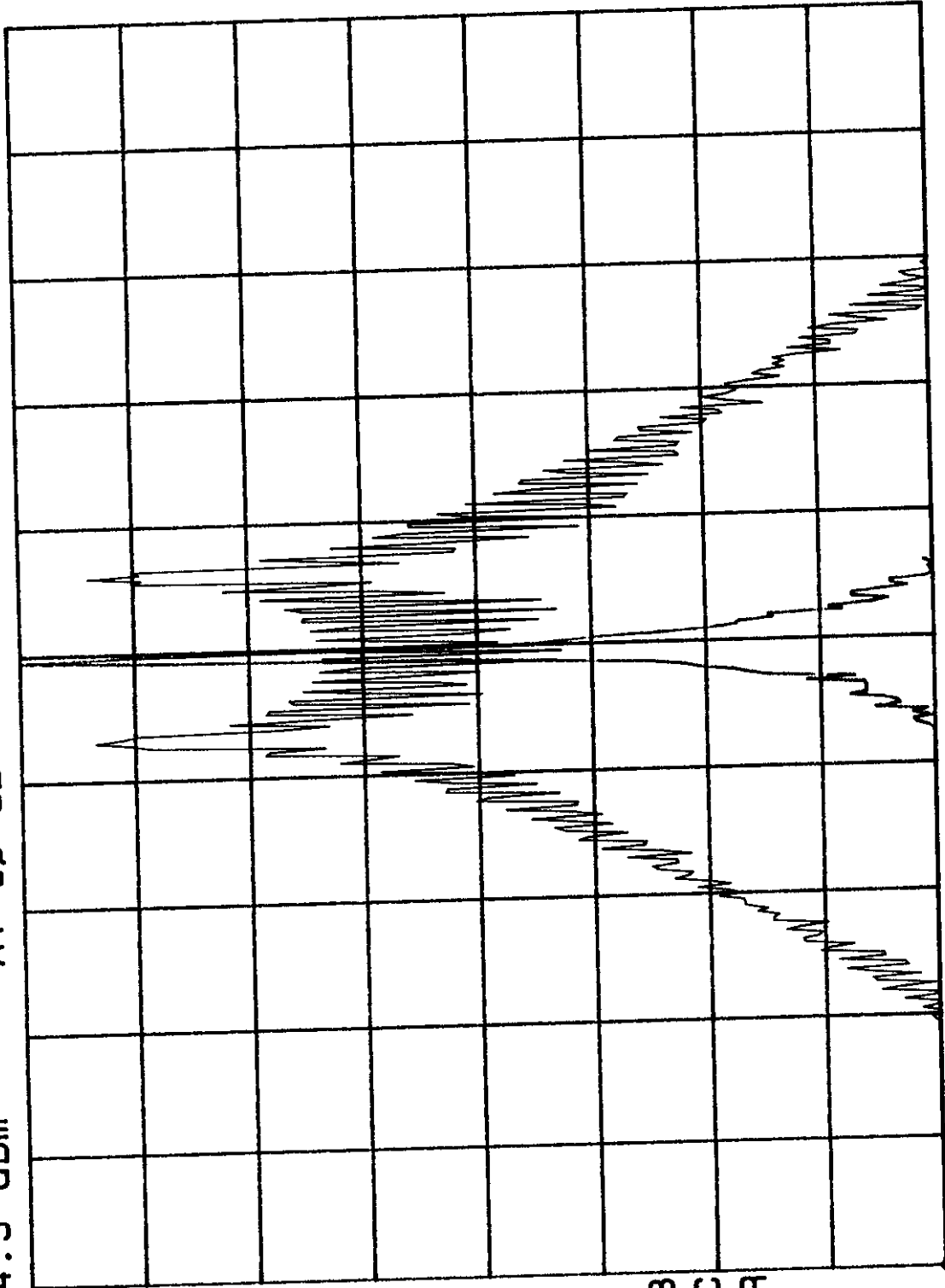
PEAK
LOG
10
dB/
OFFST
20.0
dB

VA WB
SC FC
CORR

CENTER 858.0000 MHZ
#RES BW 300 HZ
SPAN 250.0 KHZ
SWP 8.33 sec
VBW 1 KHZ

R-3244N1 OCC BW-16KHZ FM SQ-OUTPUT (DNLINK)

REF 14.3 dBm AT 10 dB



PEAK

LOG

10

dB/

OFFST

20.0

dB

VA WB

SC FC

CORR

SPAN 250.0 KHZ

SWP 8.33 SEC

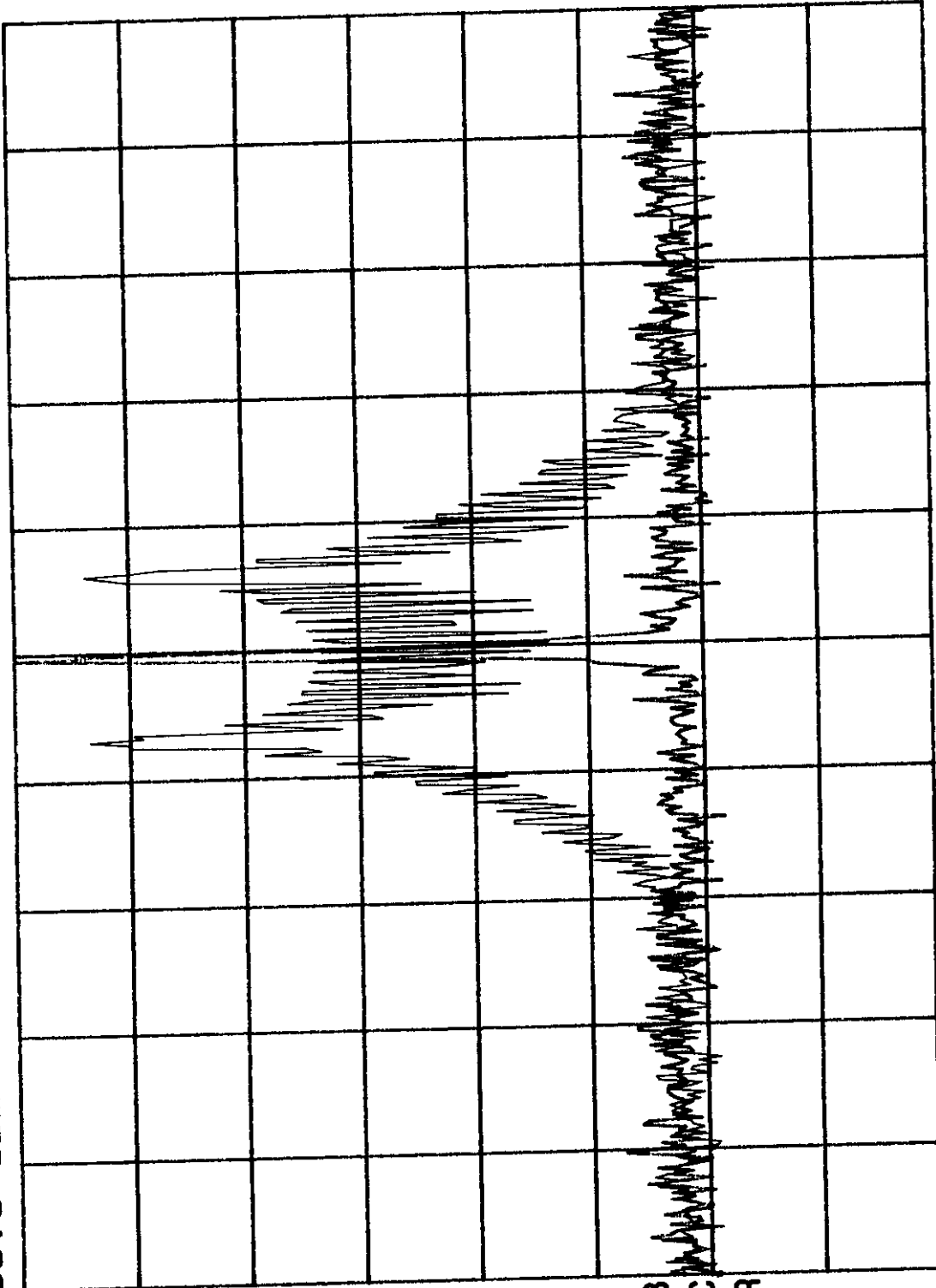
VBW 1 KHZ

CENTER 867.0000 MHZ

#RES BW 3000 HZ

R-3244N1 OCC BW-16KHZ FM SQ-INPUT (DNLINK)

REF -33.3 dBm AT 10 dB



PEAK

LOG

10

dB/

OFFST

20.0

dB

VA WB

SC FC

CORR

SPAN 250.0 KHZ

SWP 8.33 sec

CENTER 867.0000 MHz

#RES BW 300 Hz

VBW 1 KHZ

EXHIBIT F

Paragraph 2.991

Modulation Characteristics
and Spurious Emissions



Retlif Testing Laboratories

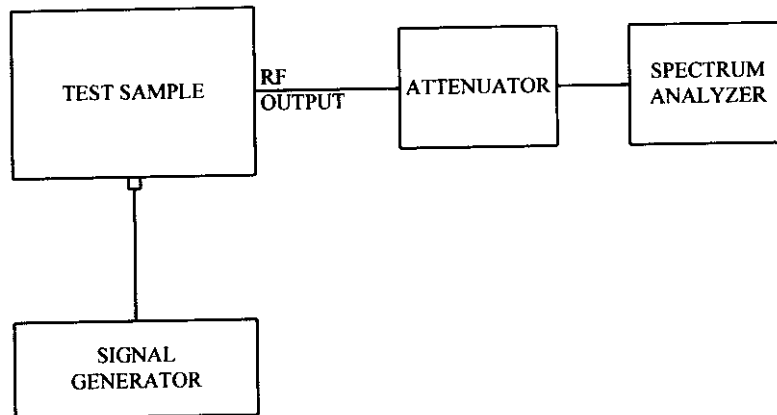
Test Report Number No. R-3244N1
FCC ID: NVRCSI310-01

MODULATION CHARACTERISTICS AND SPURIOUS EMISSIONS (PARA.2.991)

Measurement Procedure:

The signal generator output was connected, in turn, to the uplink and downlink ports of the EUT. The output of the generator was examined with and without the EUT connected. The results were recorded for comparison to determine if the IBA influenced the modulation characteristics of the generated signal or if any spurious emissions were created when using the IBA.

BASIC TEST SETUP



Modulation Characteristics and Spurious Emissions:

- 3.1 Set up spectrum analyzer:
 - 3.1.1 RES BW @ 100kHz.
 - 3.1.2 Video BW @ 300kHz.
 - 3.1.3 Center Frequency to band center of uplink frequency range or downlink frequency range.
 - 3.1.4 Trace on Channel "A".
- 3.2 From the information attained from Step 1.8, set the signal generator to the maximum input signal for the uplink center frequency.



Retlif Testing Laboratories

Test Report Number No. R-3244N1
FCC ID: NVRCSI310-01

MODULATION CHARACTERISTICS AND SPURIOUS EMISSIONS (PARA.2.991) (continued)

- 3.3 Adjust signal generator to sweep the range of the center frequency + and - 23MHz.
- 3.4 Set span of the analyzer to 45MHz.
- 3.5 Connect output of signal generator to EUT. Connect EUT to spectrum analyzer.
- 3.6 Set trace to "MAX HOLD A" and sweep the range per Step 3.3.
- 3.7 Once sweep is complete, set trace to "VIEW A".
- 3.8 Set trace to Channel "B".
- 3.9 Connect the output of the signal generator to the spectrum analyzer.
- 3.10 Set trace to "MAX HOLD B" and sweep the range per Step 3.3.
- 3.11 Once sweep is complete, set trace to "VIEW B".
- 3.12 Plot display. This is a comparison of the swept input signal vs the output signal over the entire frequency range, showing the characteristics of the internal band pass filter.
- 3.13 Adjust signal generator to sweep the range of the center frequency + and - 230MHz.
- 3.14 Set span of analyzer to 450MHz.
- 3.15 Repeat Steps 3.5 through 3.12, except sweep the range per 3.13.
- 3.16 From the information attained from Step 1.8, set the signal generator to the maximum input signal for the downlink center frequency.
- 3.17 Repeat Steps 3.3 through 3.16.

Measurement Results:

Examination of the test data indicates that the operation of the EUT caused no unacceptable deviations.

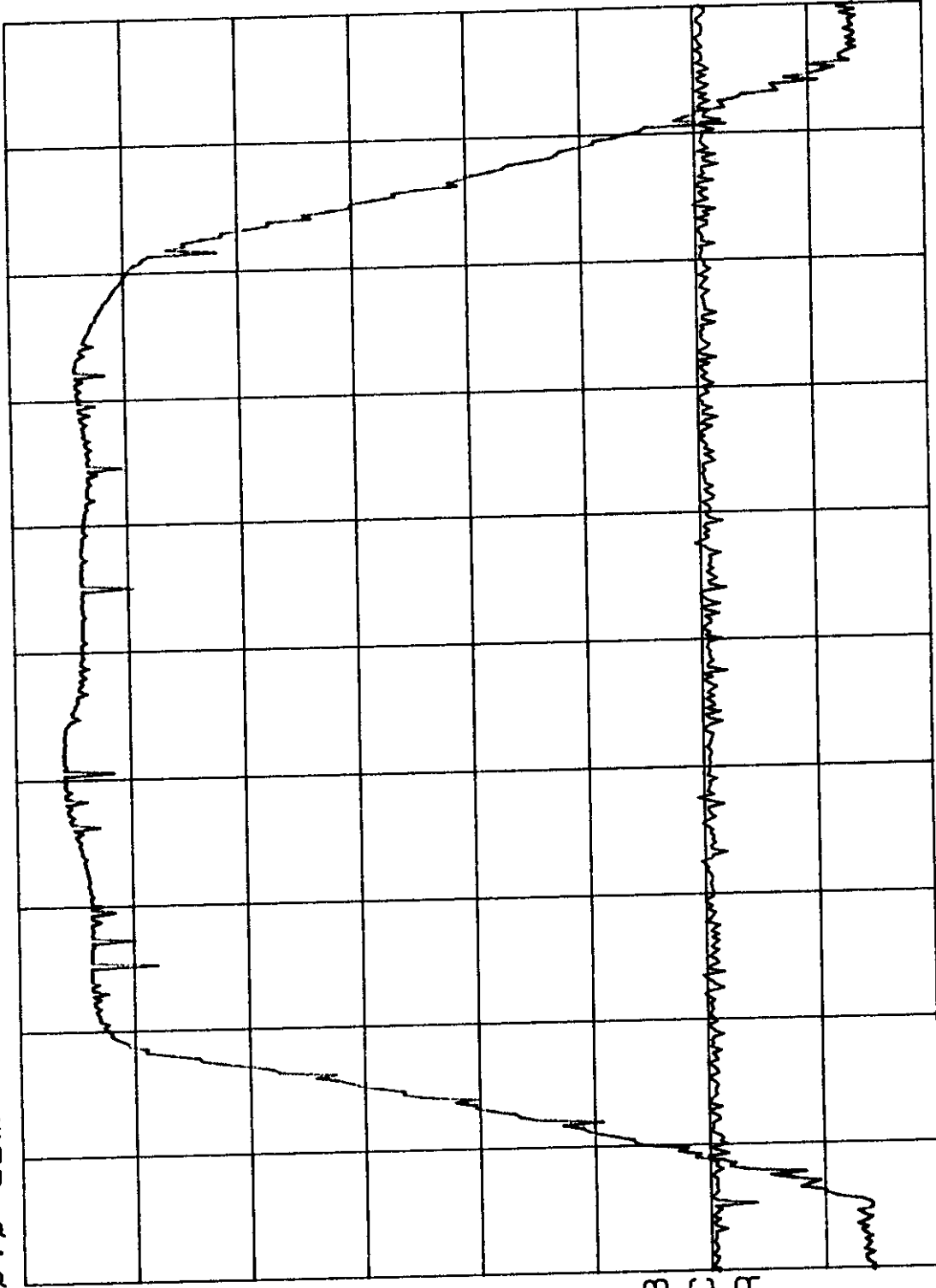


Retlif Testing Laboratories

Test Report Number No. R-3244N1
FCC ID: NVRCSI310-01

R-3244N1 ANTENNA CONDUCTED (UPLINK)

REF 30.0 dBm AT 20 dB



PEAK
LOG
10
dB/
OFFST
20.0
dB

MA VB
SC FC
CORR

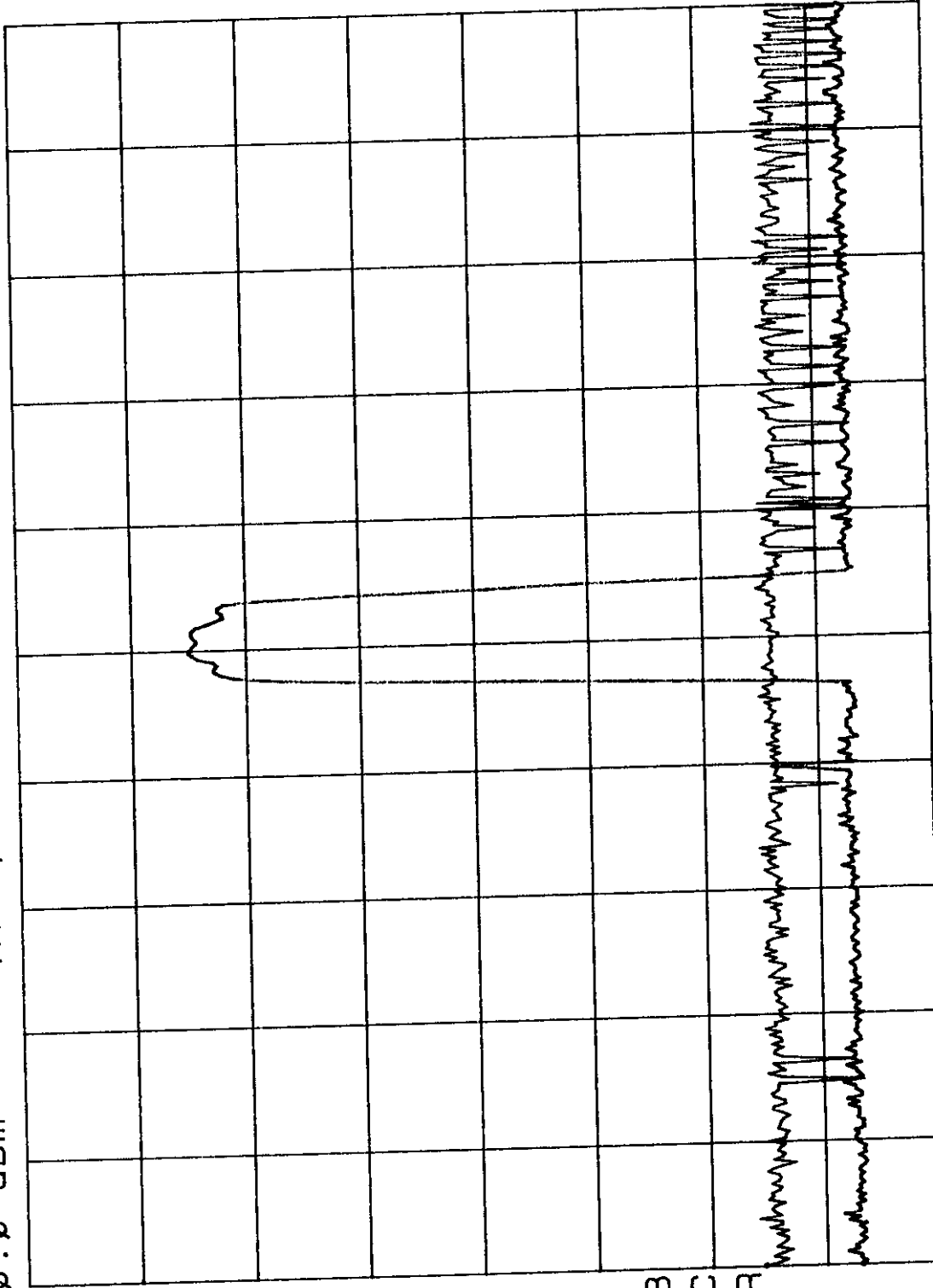
SPAN 45.00 MHz
SWP 20.0 msec

VBW 300 KHZ

CENTER 815.00 MHz
#RES BW 100 KHZ

R-3244N1 ANTENNA CONDUCTED (DNLINK)

REF 30.0 dBm AT 20 dB



PEAK
LOG
10
dB/
OFFST
20.0
dB

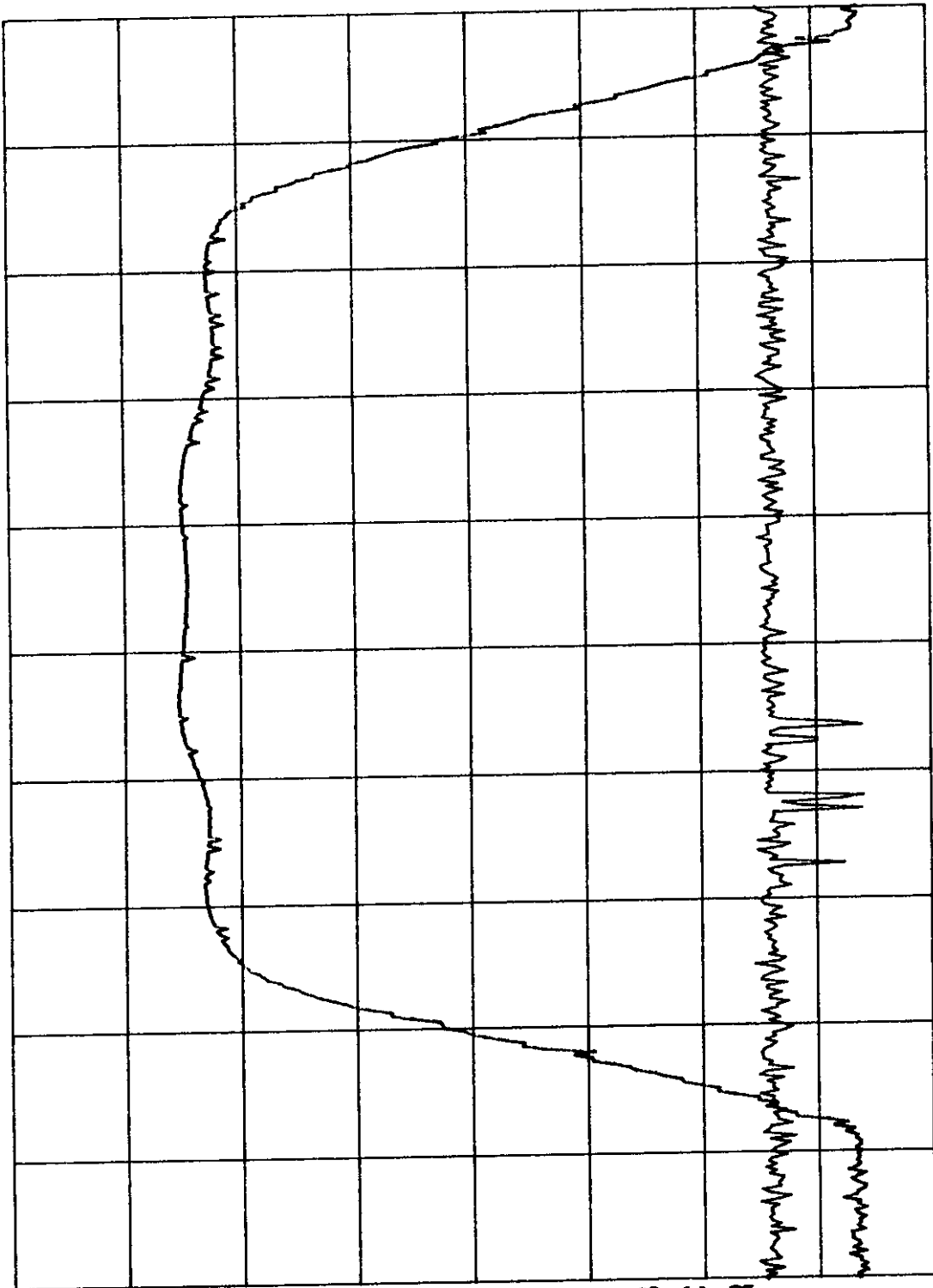
VA MB
SC FC
CORR

SPAN 450.0 MHz
SWP 135 msec

VBW 300 KHZ

CENTER 858.0 MHz
#RES BW 100 KHZ

R-3244N1 ANTENNA CONDUCTED (DNLINK)
REF 30.0 dBm AT 20 dB



PEAK
LOG
10
dB/
OFFST
20.0
dB

MA VB
SC FC
CORR

CENTER 858.00 MHz
#RES BW 100 KHZ
SPAN 45.00 MHz
SWP 20.0 msec
VBW 300 KHZ

EXHIBIT F

Para. 2.995

Frequency Stability



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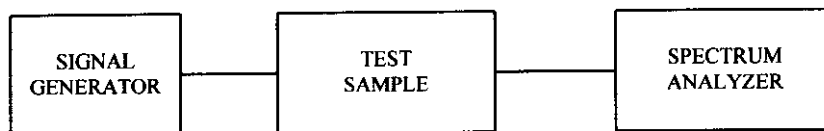
Test Report Number No. R-3244N1
FCC ID: NVRCSI310-01

FREQUENCY STABILITY MEASUREMENTS (PARA 2.995)

Measurement Procedure (Frequency vs. Voltage):

The RF output of the signal generator was connected to the input (uplink or downlink) of the EUT, and the output was connected to a spectrum analyzer. The input signal level was varied. Measurements were taken with the EUT supplied with signals at levels -15, -30, and -60dB from the maximum input power.

BASIC TEST SETUP



Frequency Stability:

- 4.1 With the know max power in for uplink or downlink:
 - 4.1.1 Inject signal minus 15, 30, and 60dB for low, mid, and high frequencies.
 - 4.1.2 Monitor the frequency drift, if any, and plot results.

Measurement Results:

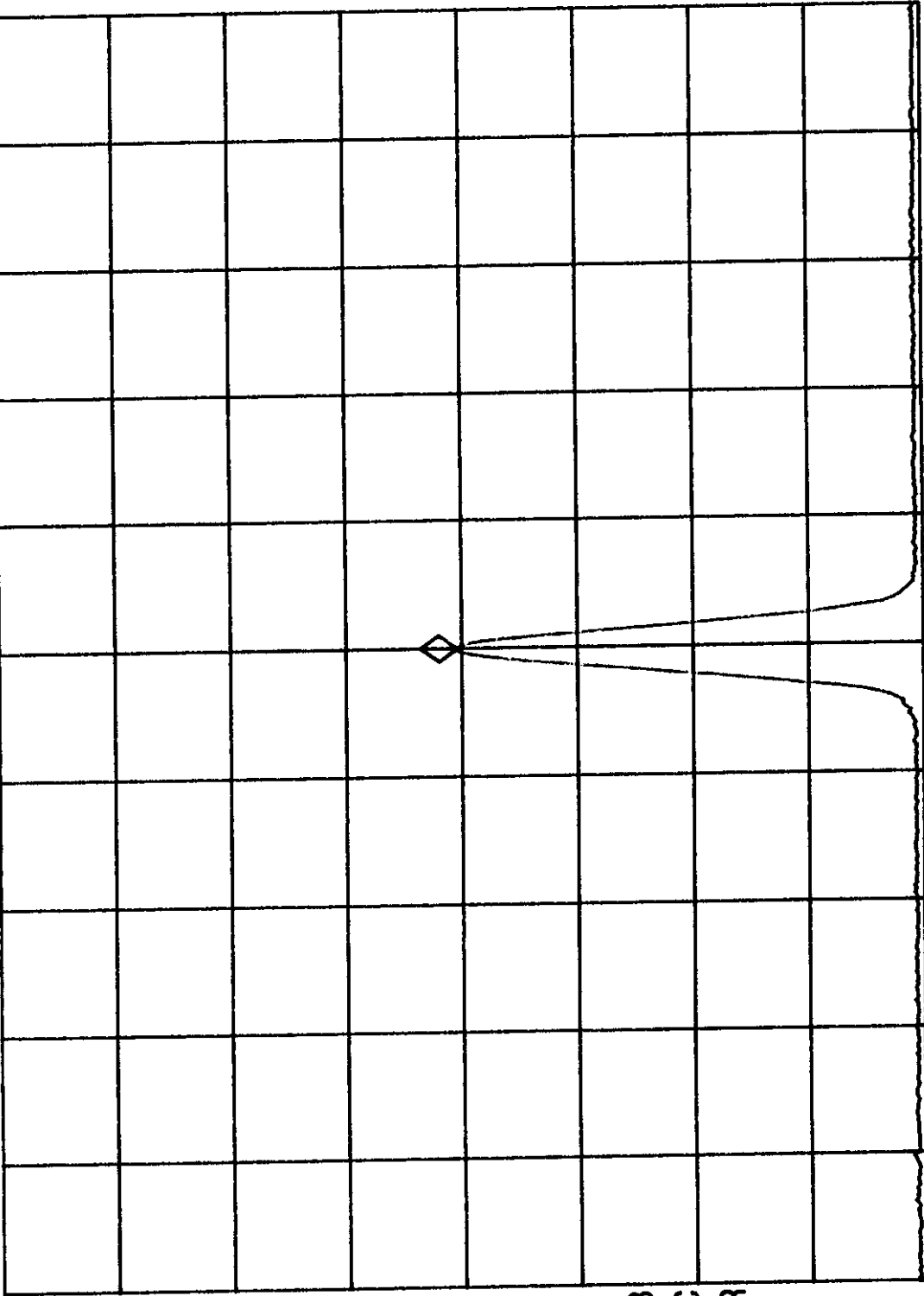
Examination of the test data indicates that the operation of the EUT caused no unacceptable deviations.



Retlif Testing Laboratories

Test Report Number No. R-3244N1
FCC ID: NVRC SI310-01

R-3244NI MAX POWER OUT -15dB (UPLINK) MKR 806.000 MHz
REF 50.0 dBm AT 40 dB 10.34 dBm

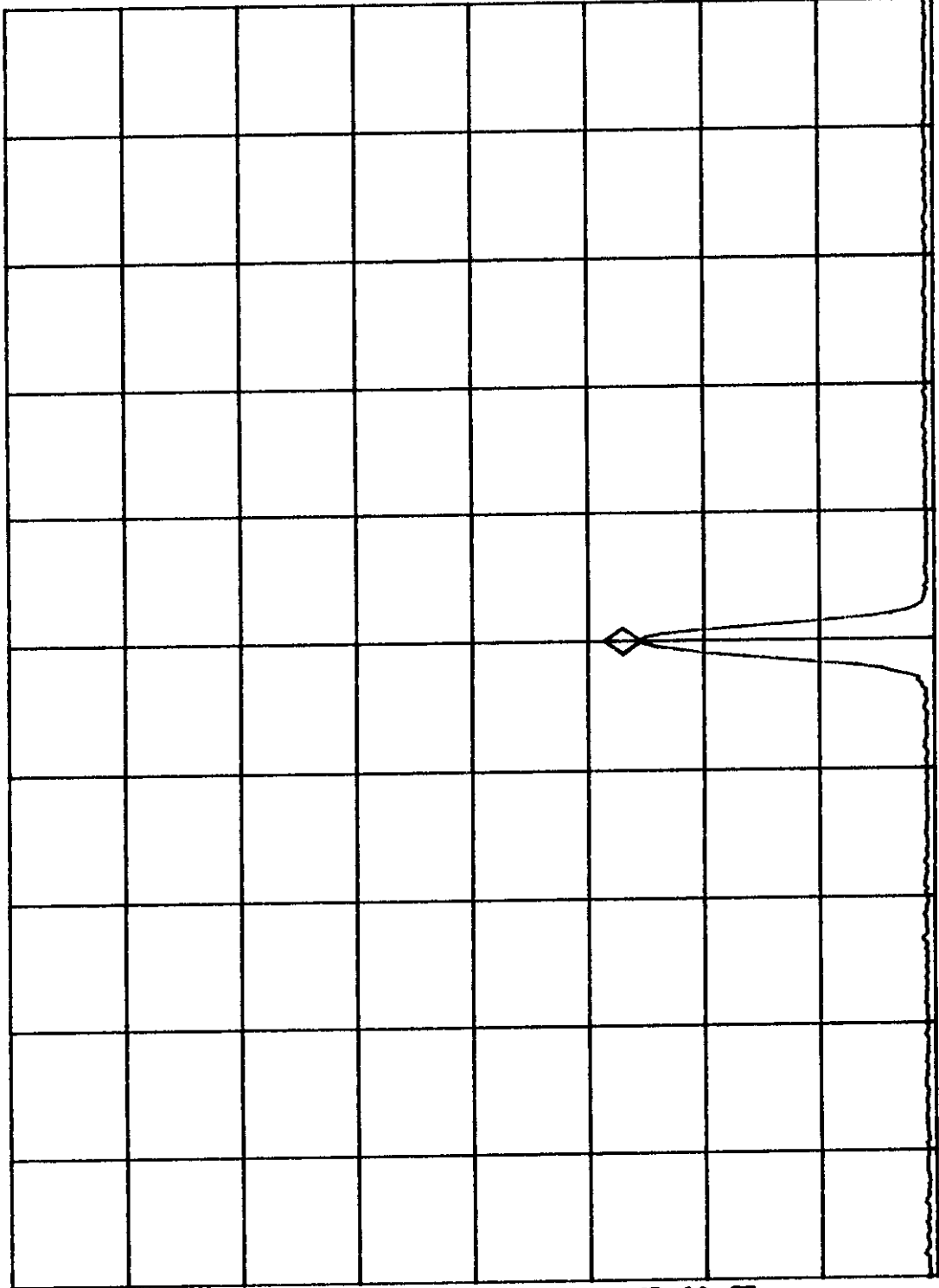


PEAK
LOG
10
dB/
OFFST
20.0
dB

WA SB
SC FC
CORR

CENTER 806.000 MHz
#RES BW 10 KHZ
SPAN 1.000 MHz
SWP 30.0 msec
VBW 30 KHZ

R-3244NI MAX POWER OUT -30dB (UPLINK) MKR 806.000 MHz
REF 50.0 dBm AT 40 dB -4.59 dBm

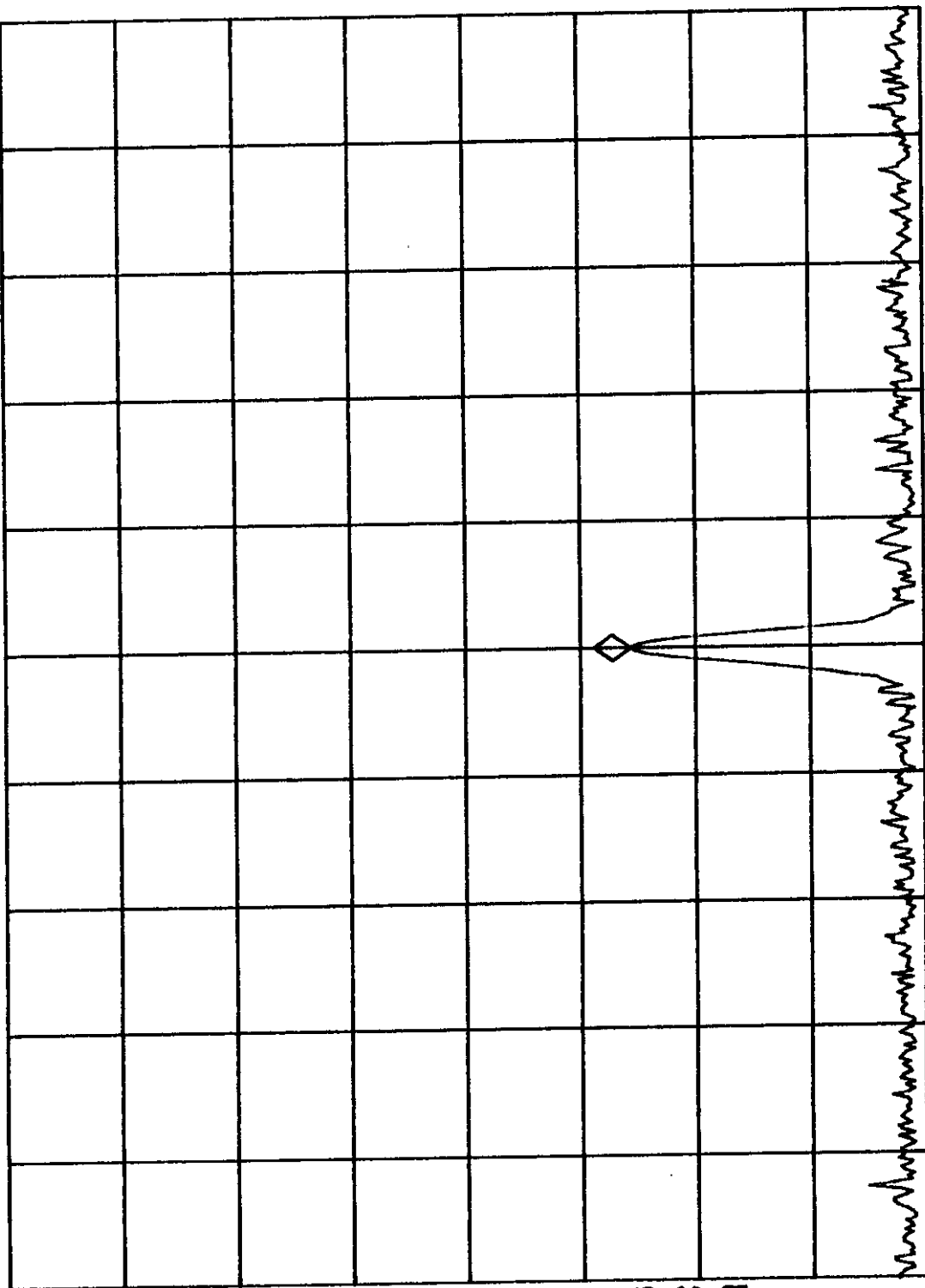


PEAK
LOG
10
dB/
OFFST
20.0
dB

WA SB
SC FC
CORR

CENTER 806.000 MHz SPAN 1.000 MHz
#RES BW 10 KHZ SWP 30.0 msec
VBW 30 KHZ

~~/~~ R-3244NI MAX POWER OUT-60dB (UPLINK) MKR 806.000 MHz
 REF 20.0 dBm AT 10 dB -34.38 dBm

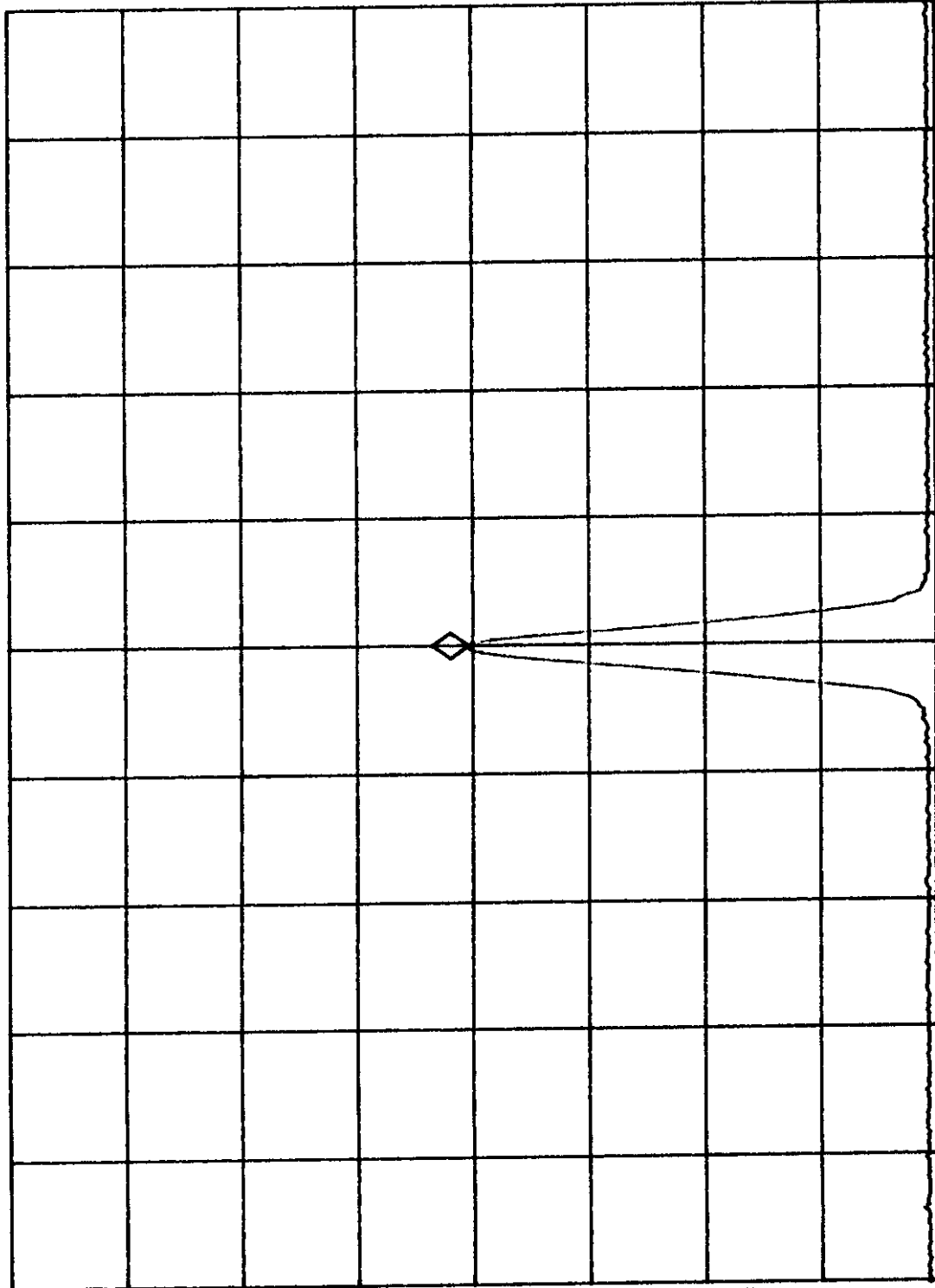


PEAK
 LOG
 10
 dB/
 OFFST
 20.0
 dB

WA SB
 SC FC
 CORR

CENTER 806.000 MHz SPAN 1.000 MHz
 #RES BW 10 KHZ SWP 30.0 msec
 VBW 30 KHZ

R-3244N1 MAX POWER OUT-15dB (UPLINK) MKR 815.000 MHz
REF 50.0 dBm AT 40 dB 10.34 dBm

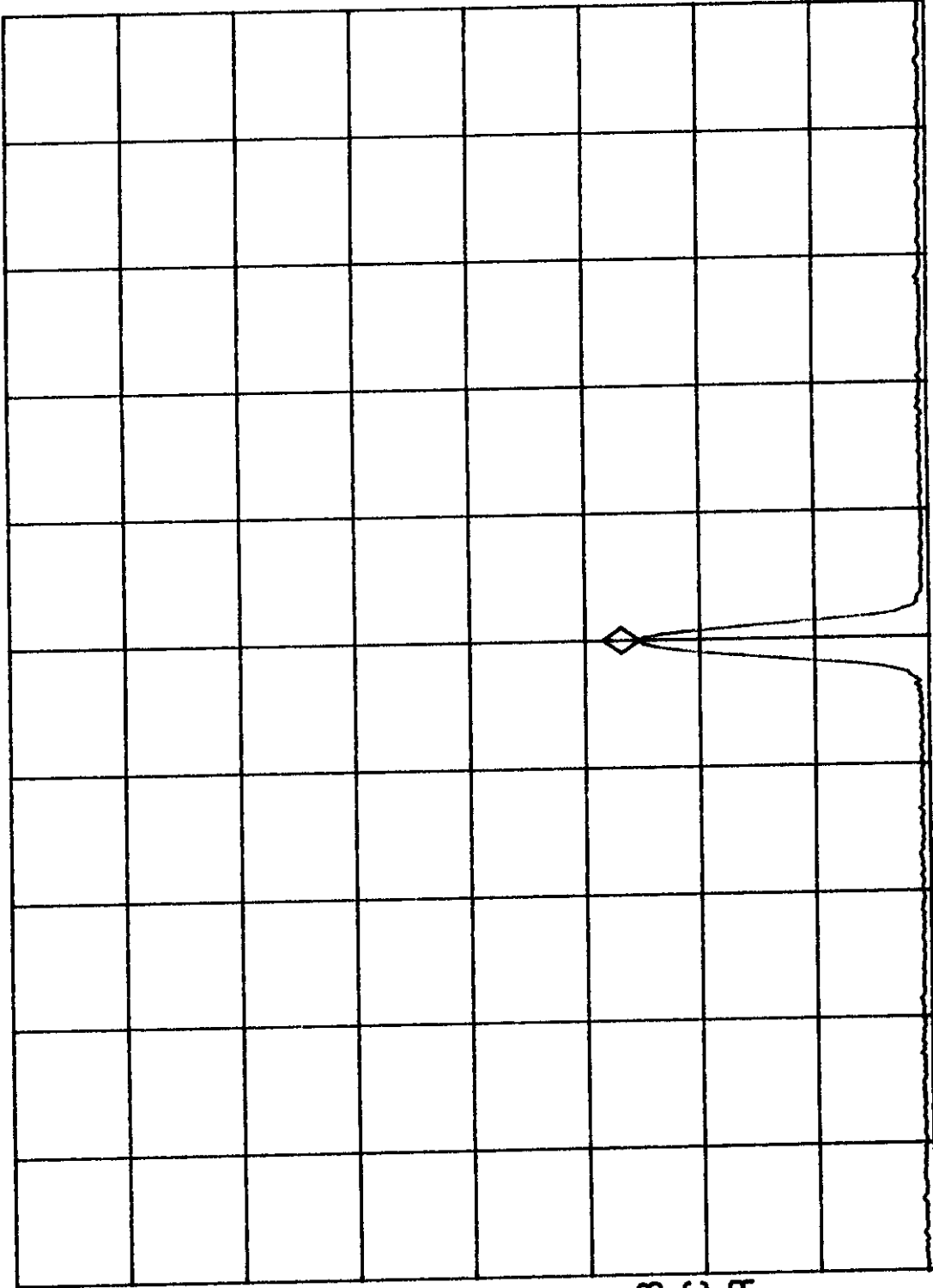


PEAK
LOG
10
dB/
OFFST
20.0
dB

WA SB
SC FC
CORR

CENTER 815.000 MHz
#RES BW 10 KHZ
SPAN 1.000 MHz
SWP 30.0 msec
VBW 30 KHZ

R-3244NI MAX POWER OUT-30dB (UPLINK) MKR 815.000 MHZ
REF 50.0 dBm AT 40 dB -4.77 dBm



PEAK
LOG
10
dB/
OFFST
20.0
dB

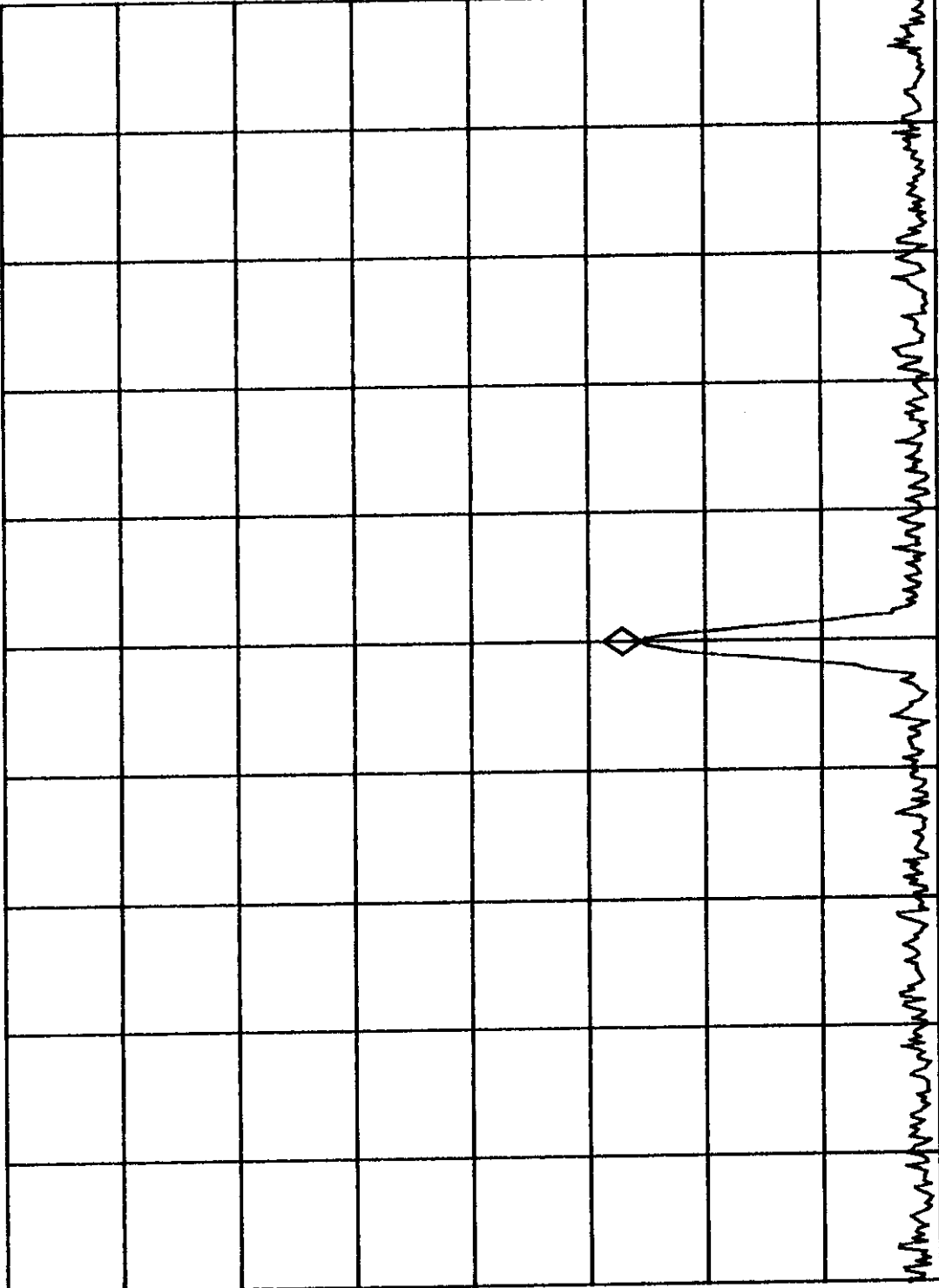
WA SB
SC FC
CORR

SPAN 1.000 MHZ
SWP 30.0 msec

VBW 30 KHZ

CENTER 815.000 MHZ
#RES BW 10 KHZ

R-3244N1 MAX POWER OUT -60dB (UPLINK) MKR 815.000 MHZ
 REF 20.0 dBm AT 10 dB -34.50 dBm

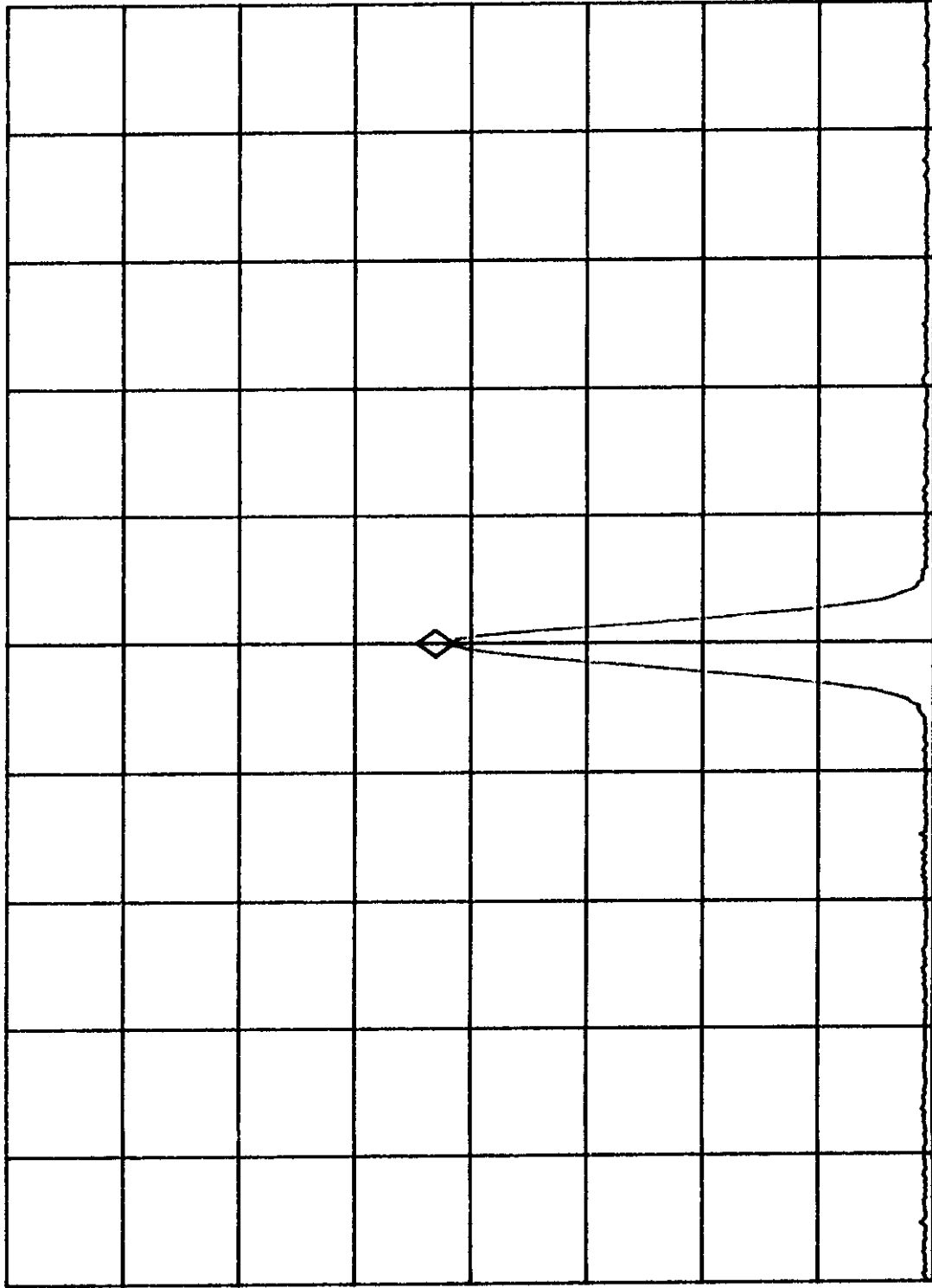


PEAK
 LOG
 10
 dB/
 OFFST
 20.0
 dB

WA SB
 SC FC
 CORR

CENTER 815.000 MHZ SPAN 1.000 MHZ
 #RES BW 10 KHZ VBW 30 KHZ SWP 30.0 msec

R-3244N1 MAX POWER OUT -15dB (UPLINK) MKR 824.000 MHz
REF 50.0 dBm AT 40 dB 11.45 dBm



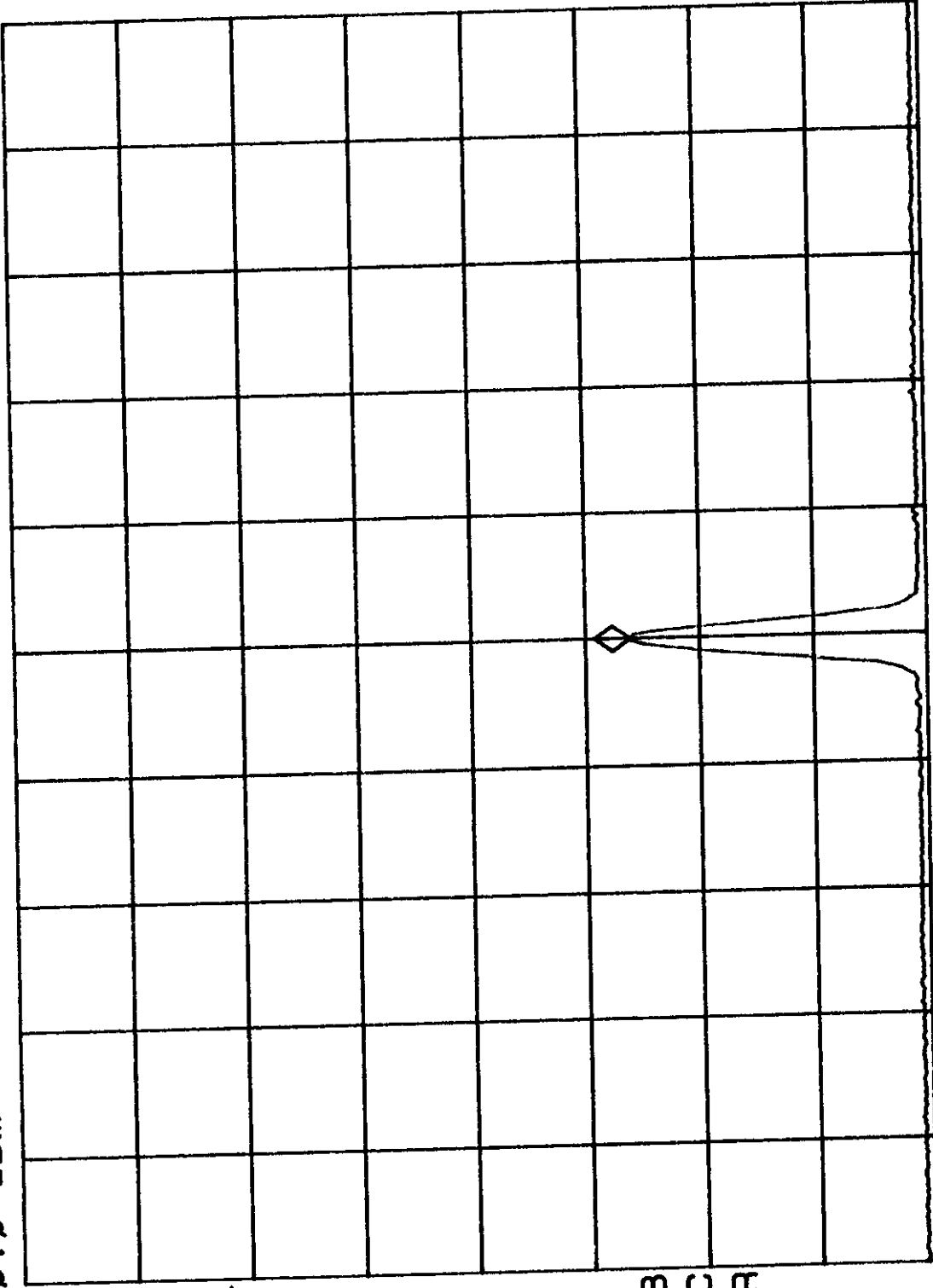
PEAK
LOG
10
dB/
OFFST
20.0
dB

WA SB
SC FC
CORR

CENTER 824.000 MHz SPAN 1.000 MHz
#RES BW 10 KHZ VBW 30 KHZ SWP 30.0 msec

R-3244N1 MAX POWER OUT-30dB (UPLINK) MKR 824.000 MHZ
REF 50.0 dBm AT 40 dB -3.96 dBm

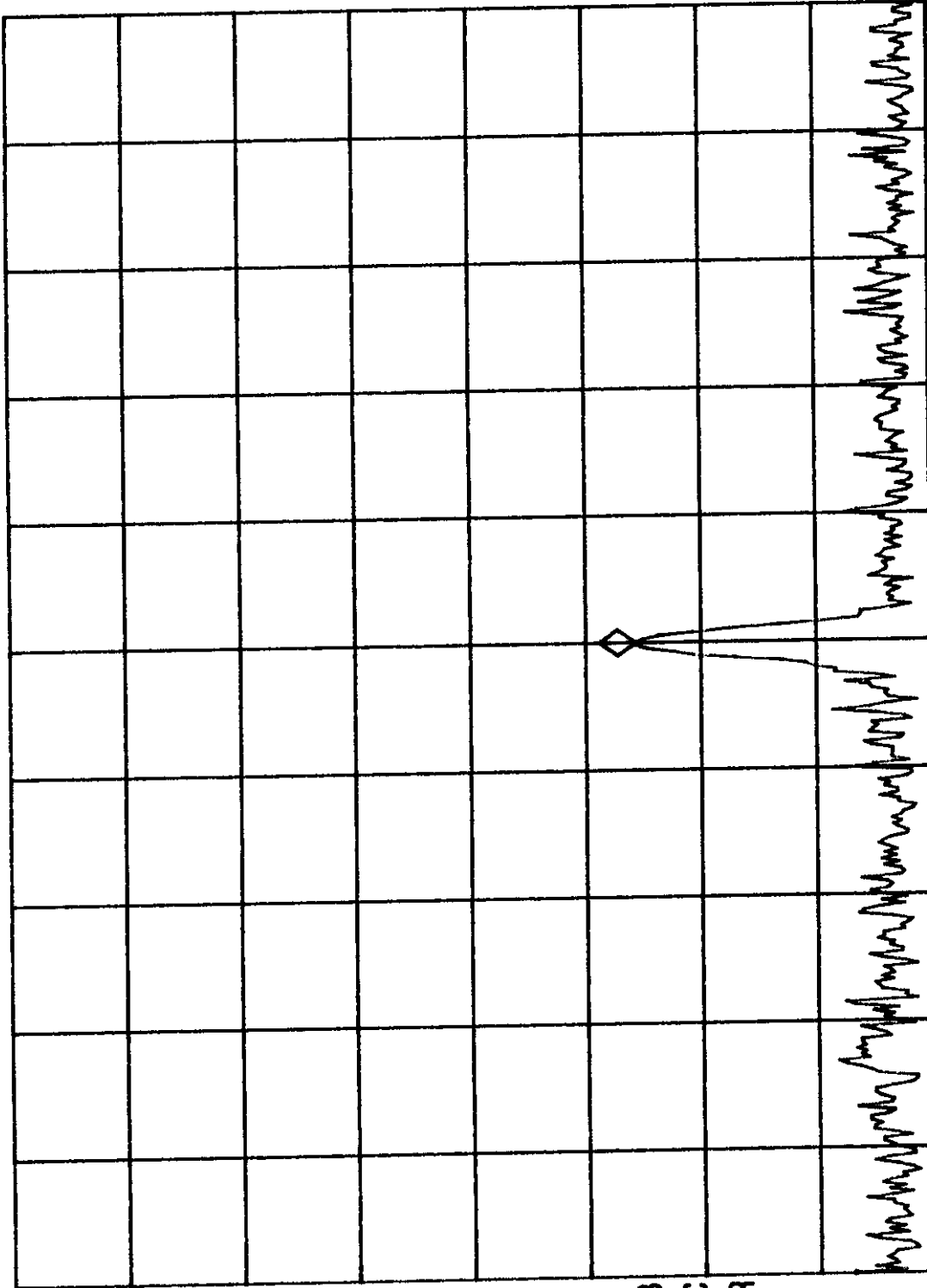
PEAK
LOG
10
dB/
OFFST
20.0
dB



WA SB
SC FC
CORR

CENTER 824.000 MHZ
#RES BW 10 KHZ
SPAN 1.000 MHZ
SWP 30.0 msec
VBW 30 KHZ

R-3244N1 MAX POWER OUT-60dB (UPLINK) MKR 824.000 MHz
 REF 20.0 dBm AT 10 dB -34.38 dBm

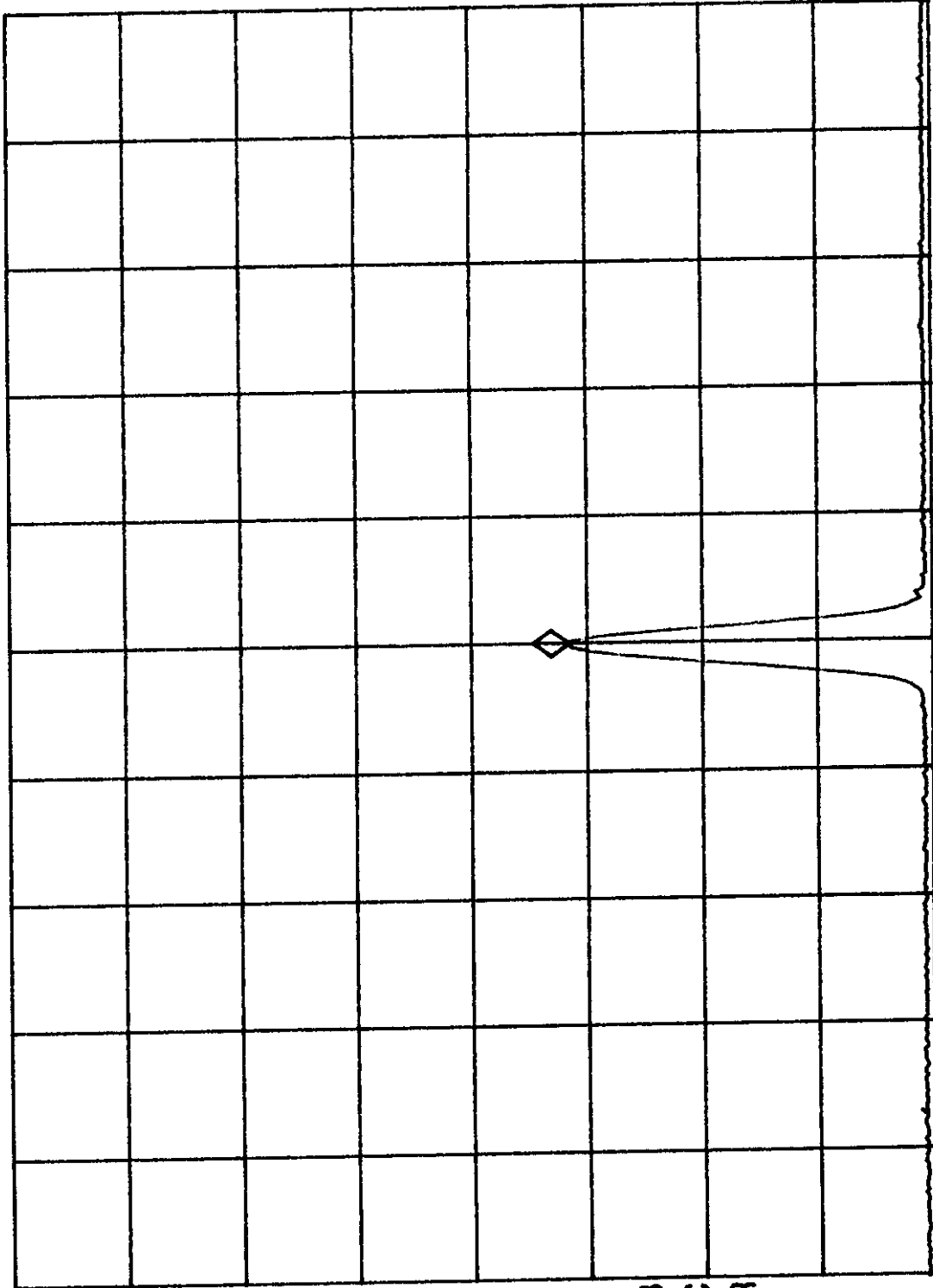


PEAK
 LOG
 10
 dB/
 OFFST
 20.0
 dB

WA SB
 SC FC
 CORR

CENTER 824.000 MHz SPAN 1.000 MHz
 #RES BW 10 KHZ VBW 30 KHZ SWP 30.0 msec

R-3244N1 MAX POWER OUT -15dB (DNLINK) MKR 849.000 MHZ
REF 50.0 dBm AT 40 dB



PEAK
LOG
10
dB/
OFFST
20.0
dB

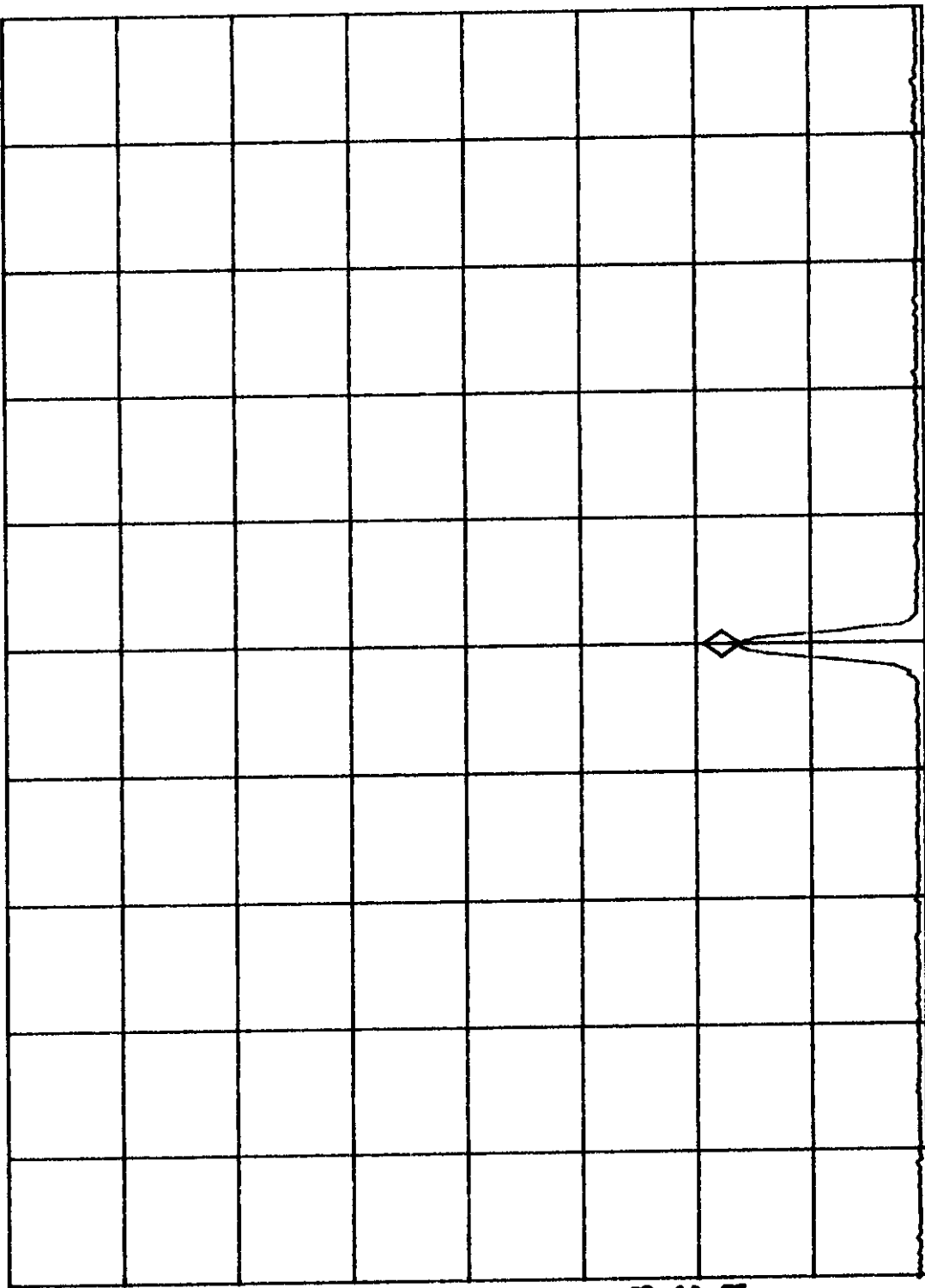
WA SB
SC FC
CORR

SPAN 1.000 MHZ
SWP 30.0 msec

VBW 30 KHZ

CENTER 849.000 MHZ
#RES BW 10 KHZ

R-3244N1 MAX POWER OUT-30dB (DNLINK) MKR 849.000 MHZ
REF 50.0 dBm AT 40 dB -13.87 dBm

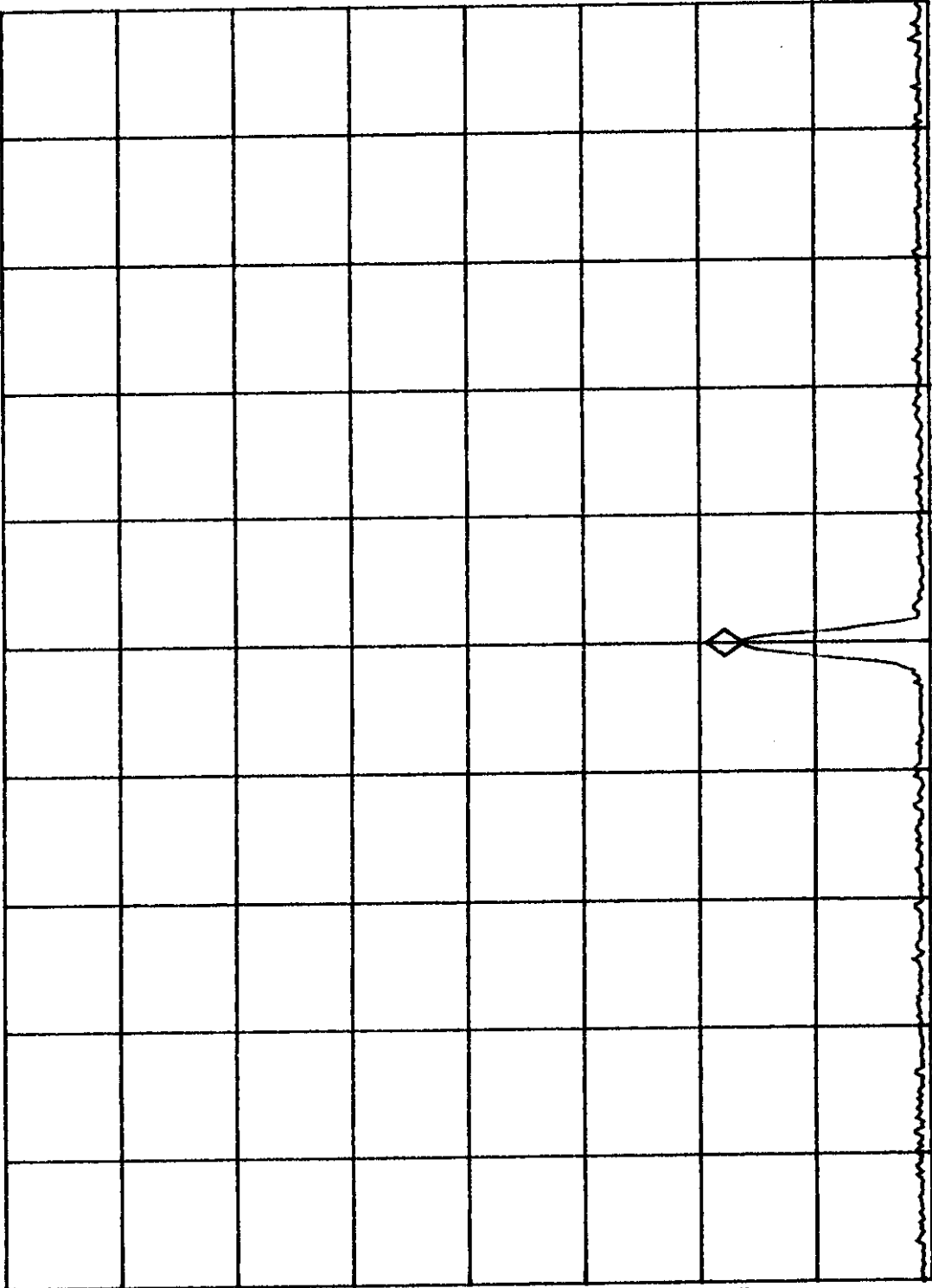


PEAK
LOG
10
dB/
OFFST
20.0
dB

WA SB
SC FC
CORR

CENTER 849.000 MHZ
#RES BW 10 KHZ
SPAN 1.000 MHZ
SMP 30.0 msec
VBW 30 KHZ

R-3244N1 MAX POWER OUT-60dB (DNLINK) MKR 849.000 MHZ
REF 20.0 dBm AT 10 dB -43.78 dBm

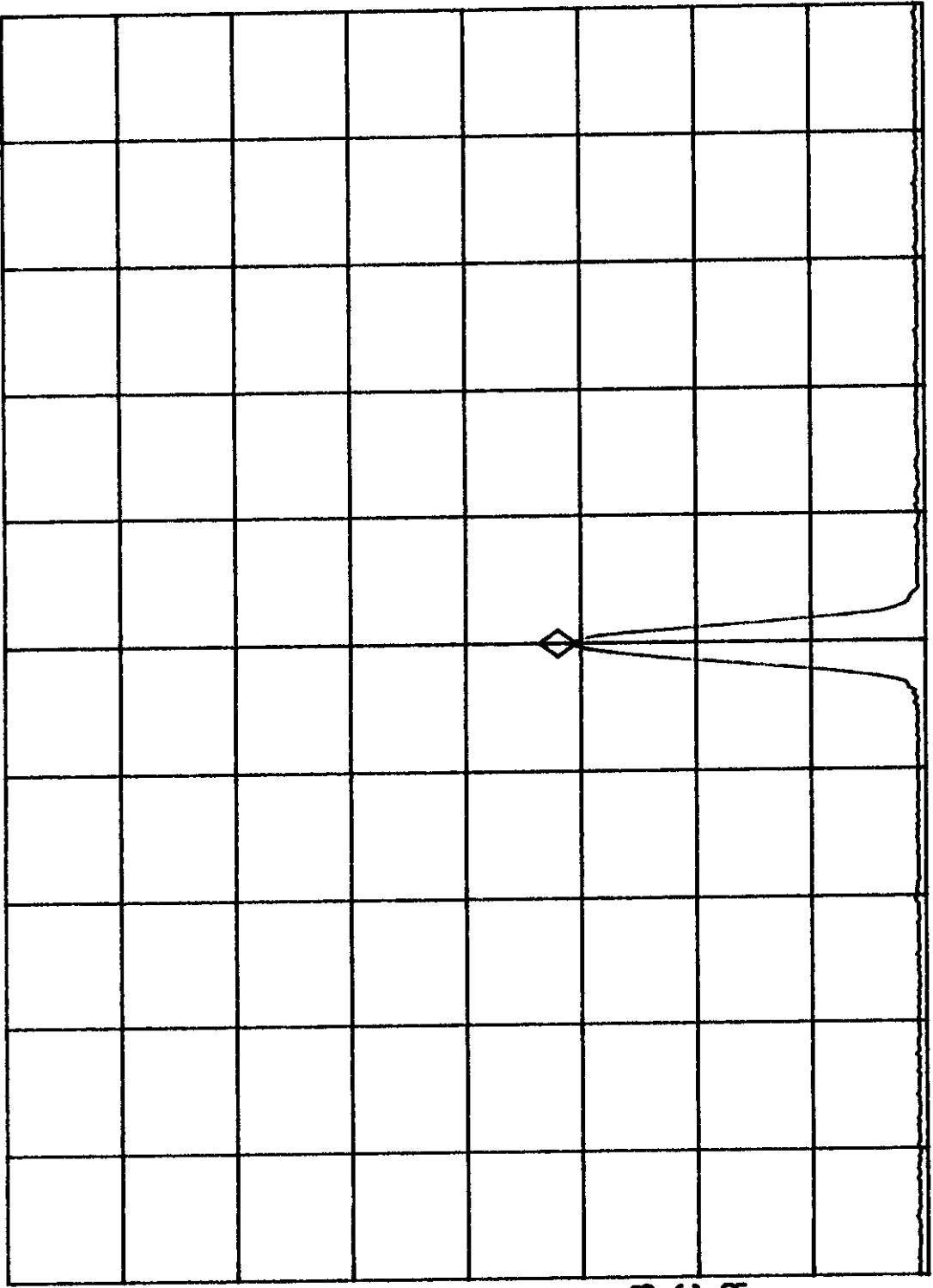


PEAK
LOG
10
dB/
OFFST
20.0
dB

WA SB
SC FC
CORR

CENTER 849.000 MHZ
#RES BW 10 KHZ
SPAN 1.000 MHZ
SWP 30.0 msec
VBW 30 KHZ

R-3244N1 MAX POWER OUT-15dB (DNLINK) MKR 858.000 MHZ
REF 50.0 dBm AT 40 dB .42 dBm

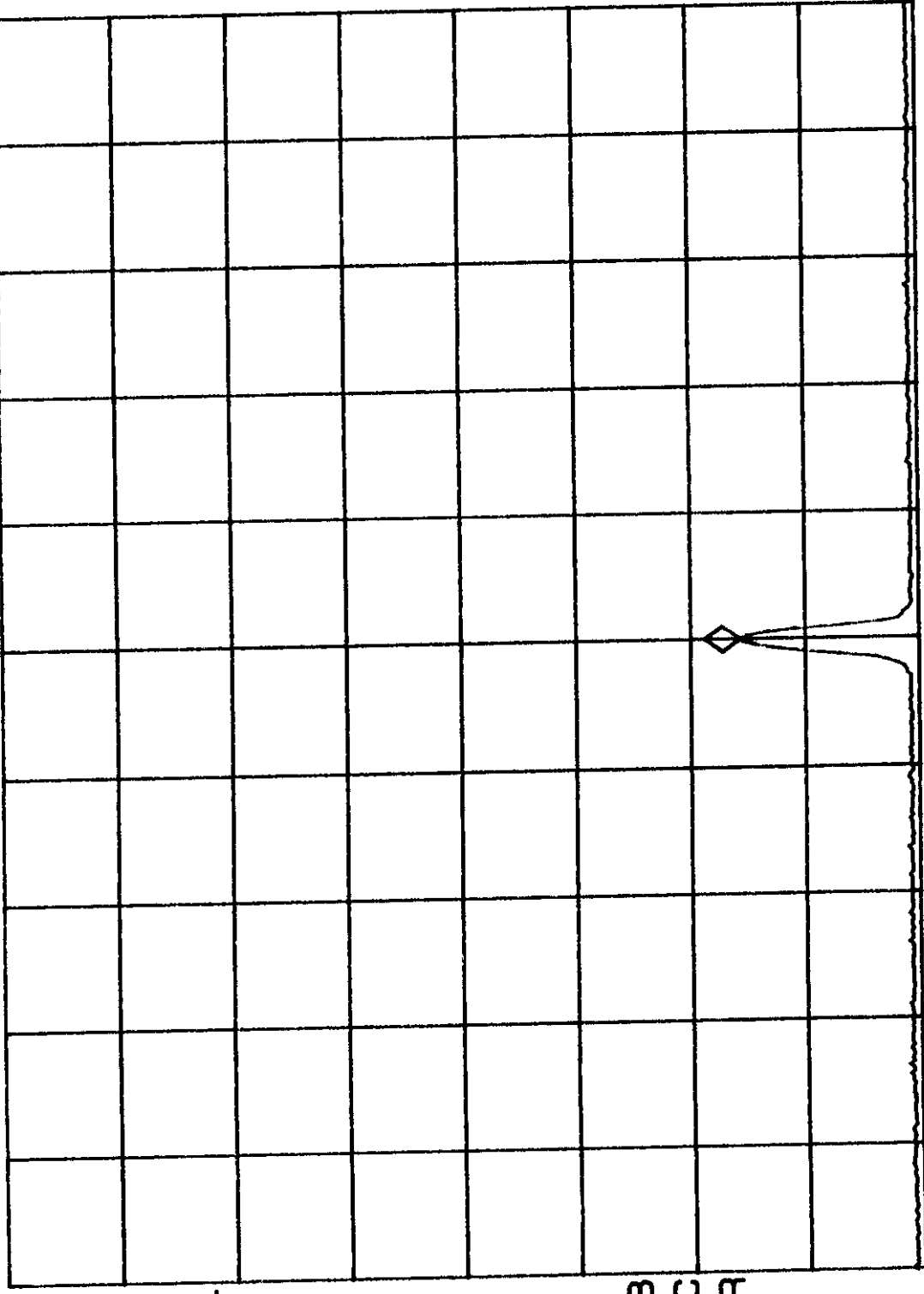


PEAK
LOG
10
dB/
OFFST
20.0
dB

WA SB
SC FC
CORR

CENTER 858.000 MHZ
#RES BW 10 KHZ
SPAN 1.000 MHZ
SWP 30.0 msec
VBW 30 KHZ

R-3244N1 MAX POWER OUT-30dB (DNLINK) MKR 858.000 MHZ
REF 50.0 dBm AT 40 dB -14.37 dBm

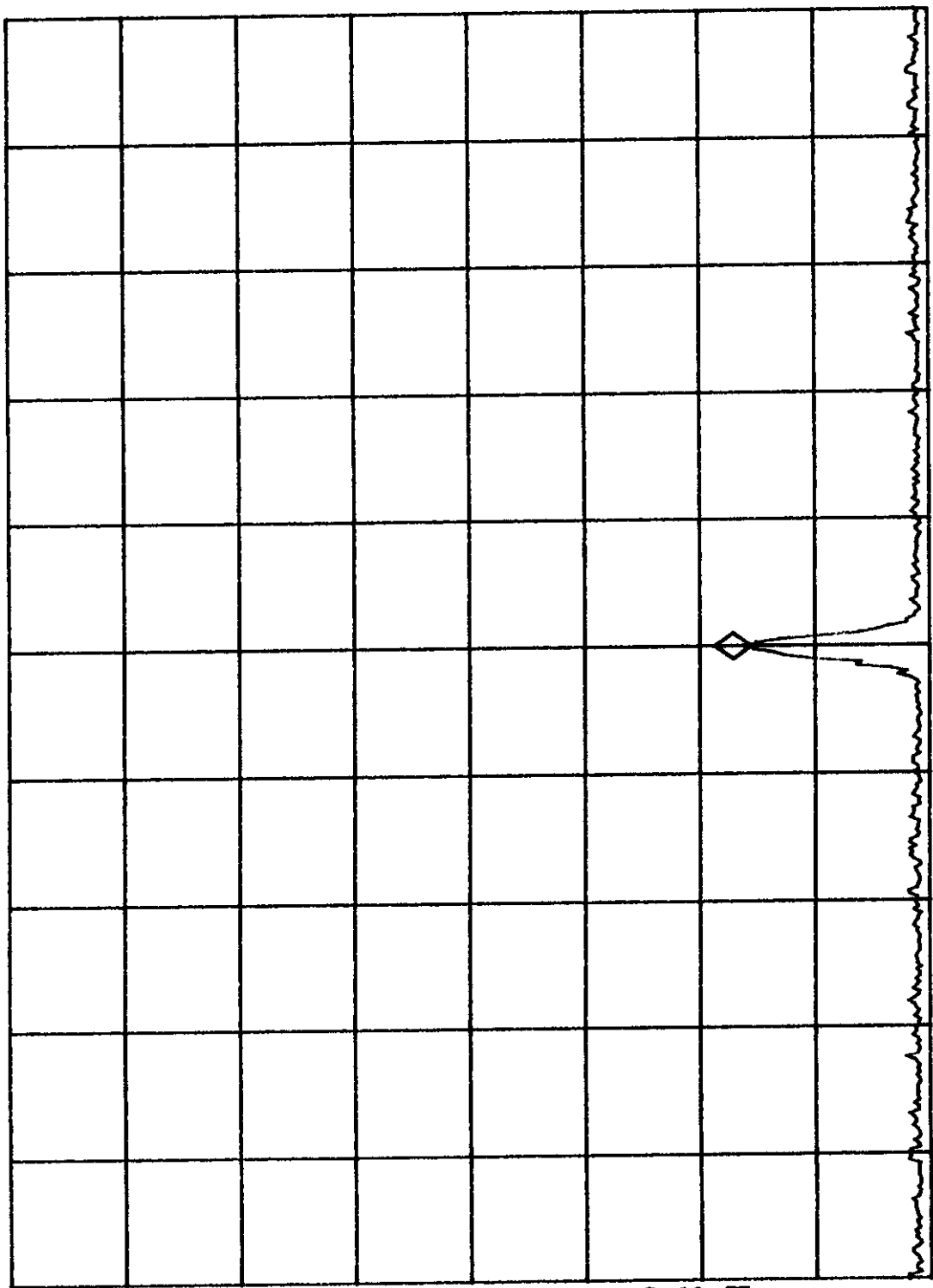


PEAK
LOG
10
dB/
OFFST
20.0
dB

WA SB
SC FC
CORR

CENTER 858.000 MHZ
#RES BW 10 KHZ
SPAN 1.000 MHZ
SWP 30.0 msec
VBW 30 KHZ

R-3244N1 MAX POWER OUT -60dB (DNLINK) MKR 858.000 MHz
REF 20.0 dBm AT 10 dB -44.49 dBm

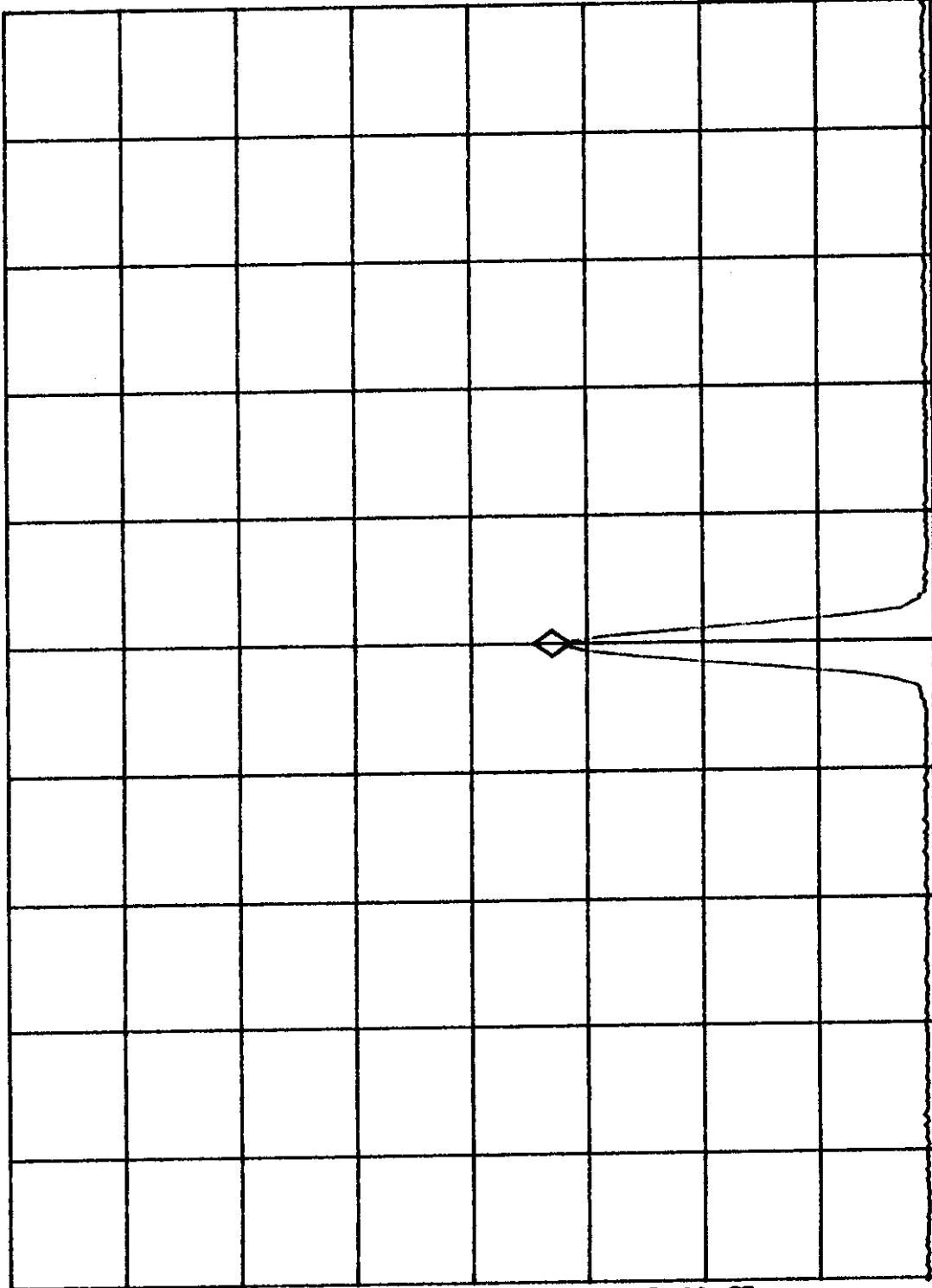


PEAK
LOG
10
dB/
OFFST
20.0
dB

WA SB
SC FC
CORR

CENTER 858.000 MHz
#RES BW 10 KHZ
SPAN 1.000 MHz
SWP 30.0 msec
VBW 30 KHZ

R-3244N1 MAX POWER OUT -15dB (DNLINK) MKR 867.000 MHZ
REF 50.0 dBm AT 40 dB

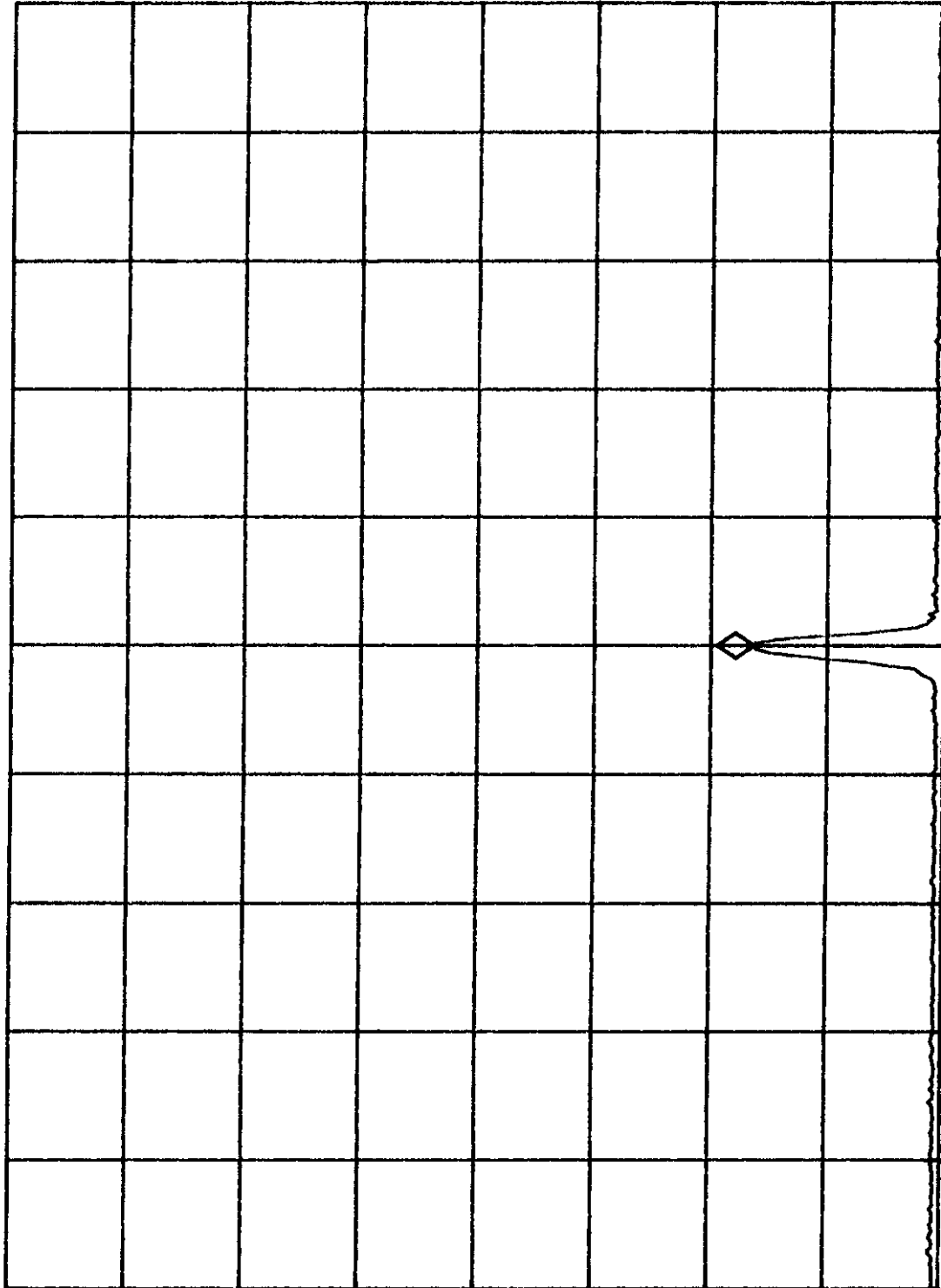


PEAK
LOG
10
dB/
OFFST
20.0
dB

WA SB
SC FC
CORR

CENTER 867.000 MHZ
#RES BW 10 KHZ
SPAN 1.000 MHZ
SWP 30.0 msec
VBW 30 KHZ

R-3244N1 MAX POWER OUT-30dB (DNLINK) MKR 867.000 MHZ
REF 50.0 dBm AT 40 dB -13.73 dBm

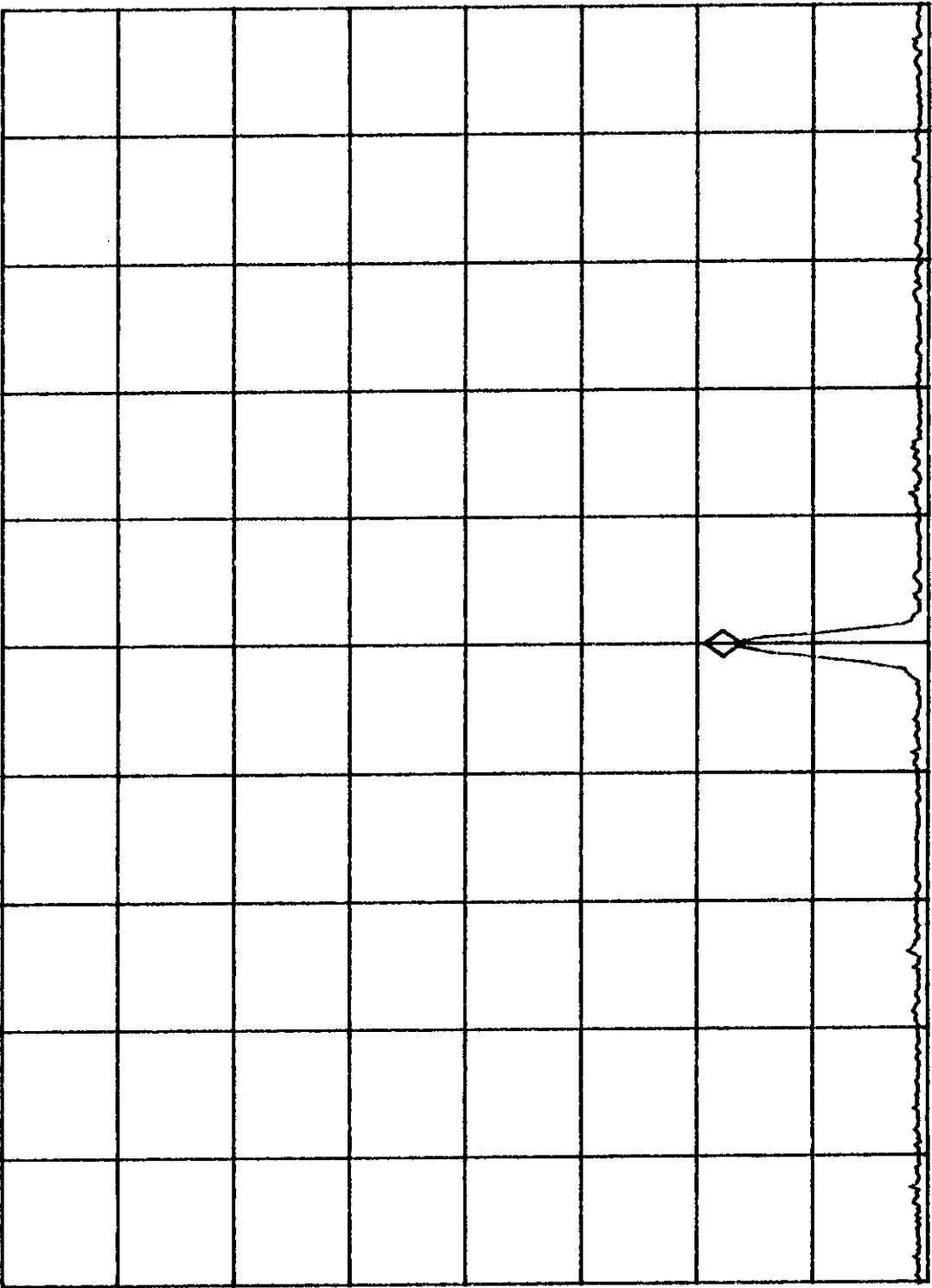


PEAK
LOG
10
dB/
OFFST
20.0
dB

WA SB
SC FC
CORR

CENTER 867.000 MHZ
#RES BW 10 KHZ
SPAN 1.000 MHZ
SWP 30.0 msec
VBW 30 KHZ

R-3244N1 MAX POWER OUT-60dB (DNLINK) MKR 867.000 MHZ
REF 20.0 dBm AT 10 dB -43.82 dBm



PEAK
LOG
10
dB/
OFFST
20.0
dB

WA SB
SC FC
CORR

CENTER 867.000 MHZ
#RES BW 10 KHZ
SPAN 1.000 MHZ
SWP 30.0 msec
VBW 30 KHZ

EXHIBIT F

Intermodulation Characteristics



Retlif Testing Laboratories

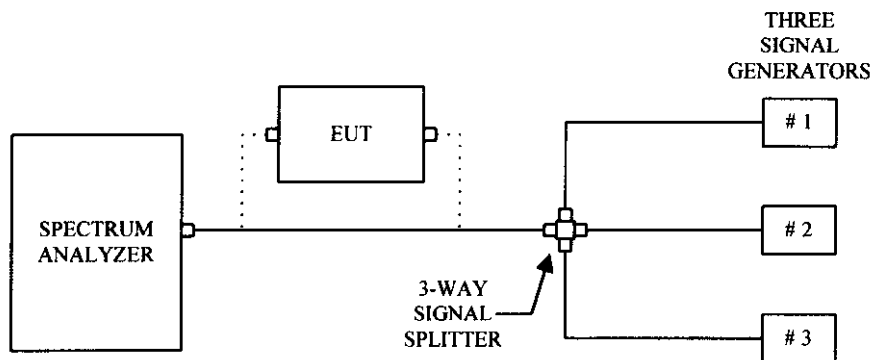
Test Report Number No. R-3244N1
FCC ID: NVRCSI310-01

INTERMODULATION CHARACTERISTICS

Measurement Procedure:

Three separate signal generators and a three-way splitter were employed for this testing. Each generator was tuned to a different frequency, two frequencies close together at the low end of the frequency range, and one at the upper end of the frequency range. All generators were set for the same amplitude. The three output signals were recorded on the analyzer. The three signals were then sent into the EUT through the uplink port, and the EUT output was recorded. The results were examined for any signs of intermodulation.

BASIC TEST SETUP



Measurement Results:

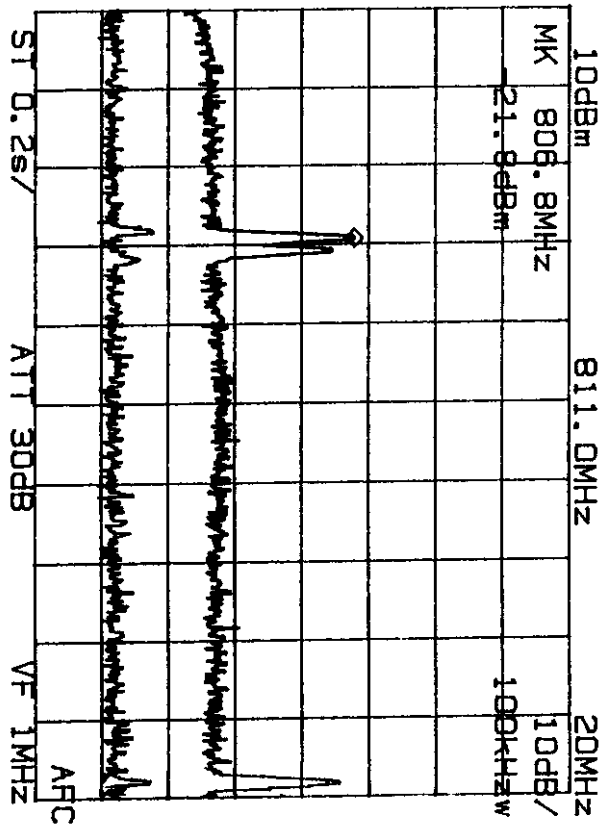
Examination of the test data indicates that the operation of the EUT caused no unacceptable deviations.



Retlif Testing Laboratories

Test Report Number No. R-3244N1
FCC ID: NVRCSI310-01

INTERMODULATION CHARACTERISTICS
WITH THREE INPUT SIGNALS



Retlif Testing Laboratories

Test Report Number No. R-3244N1
FCC ID: NVRCSI310-01

TEST EQUIPMENT LIST



Retlif Testing Laboratories

Test Report Number No. R-3244N1
FCC ID: NVRC310-01

TEST EQUIPMENT LIST

	Model No.	Type	Manufacturer	Frequency Range	Serial No.	Cal Date	Due Date
38	768-10	Power Attenuator	Narda	DC - 5GHz	9803	04/03/98	04/03/99
39	768-10	Power Attenuator	Narda	DC - 5GHz	8865	04/03/98	04/03/99
95	8593EM	Spectrum Analyzer	Hewlett Packard	9 kHz - 22 GHz	3624A00162	08/07/97	08/07/98
21	7550A	Graphics Plotter	Hewlett Packard	n/a	244A 09691	04/17/98	04/17/99
0A	2023	Signal Generator	Marconi Instruments	10KHz - 1.2GHz	112164/070	03/19/98	03/19/99



Retlif Testing Laboratories

Test Report Number No. R-3244N1
FCC ID: NVRCSI310-01