

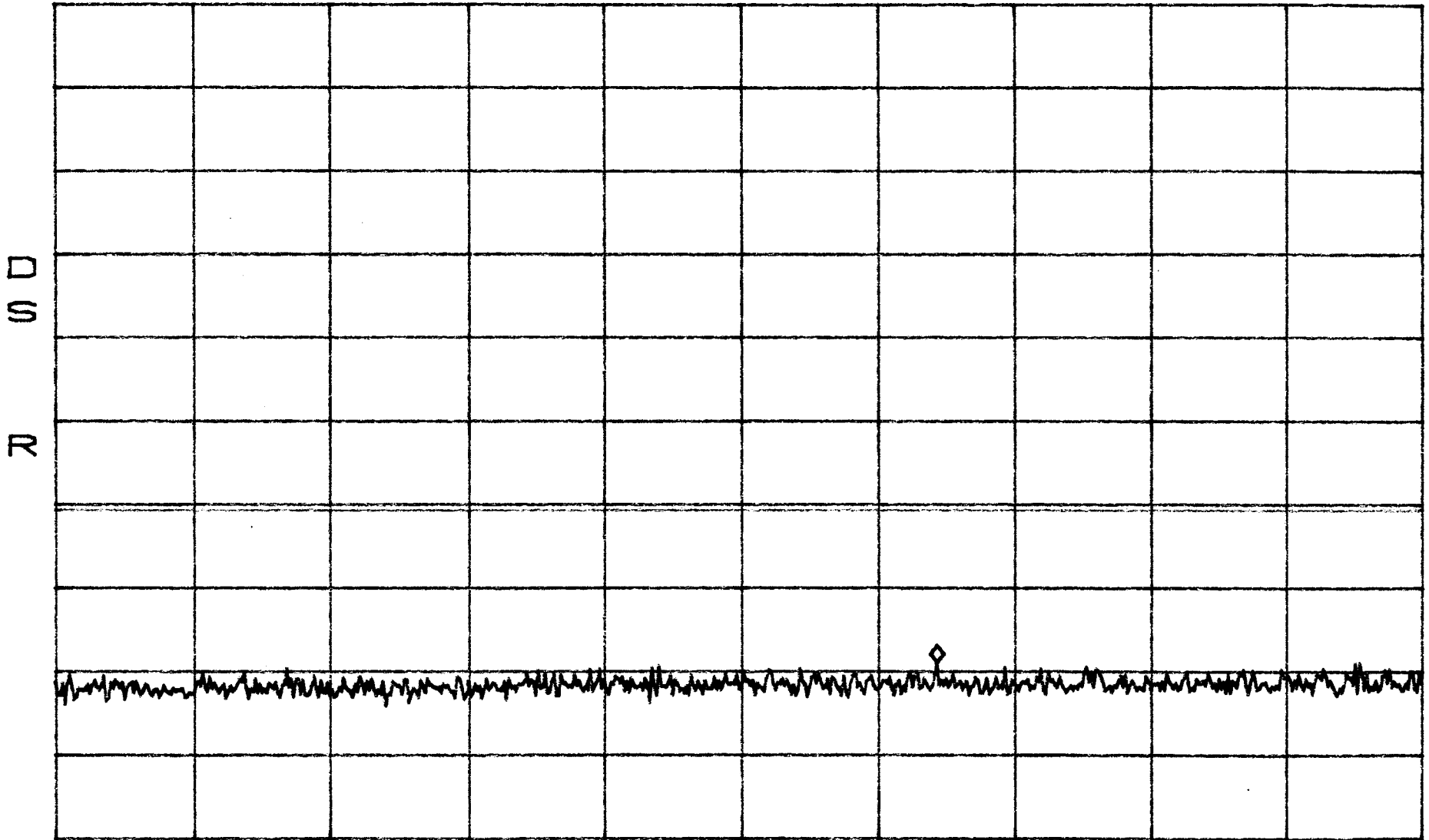
Intermodulation  
Close  
FM

BAND D,B,E

\*ATTEN 20dB  
RL 47.8dBm

MKR -31.03dBm  
654.0MHz

10dB/



START 30.0MHz STOP 1.0000GHz  
\*RBW 30kHz VBW 30kHz SWP 2.7sec

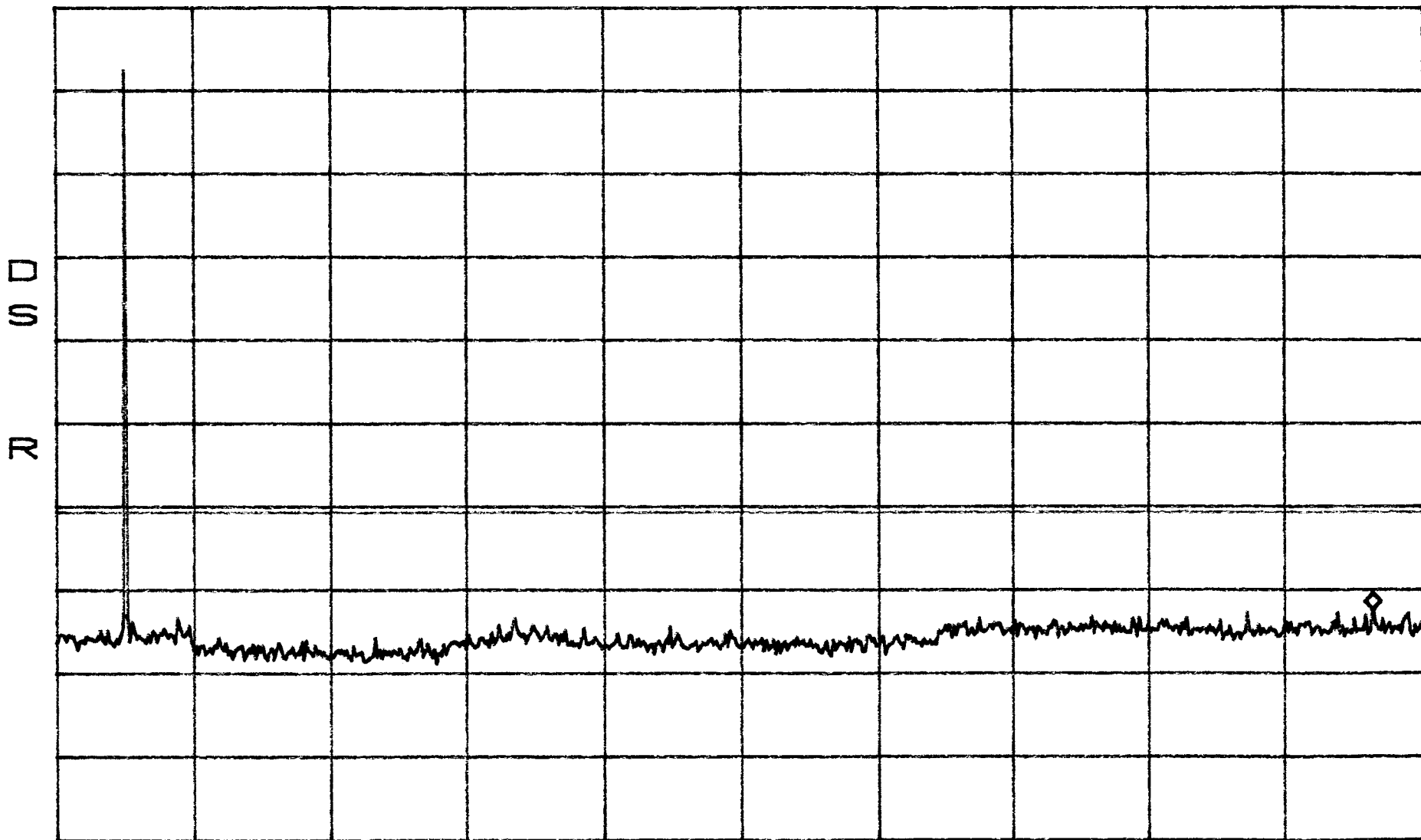
Intermodulation  
Close  
FM

Band D,B,E

\*ATTEN 20dB  
RL 47.8dBm

MKR -24.53dBm  
19.30GHz

10dB/



START 1.00GHz STOP 20.00GHz  
\*RBW 100kHz VBW 100kHz SWP 4.8sec

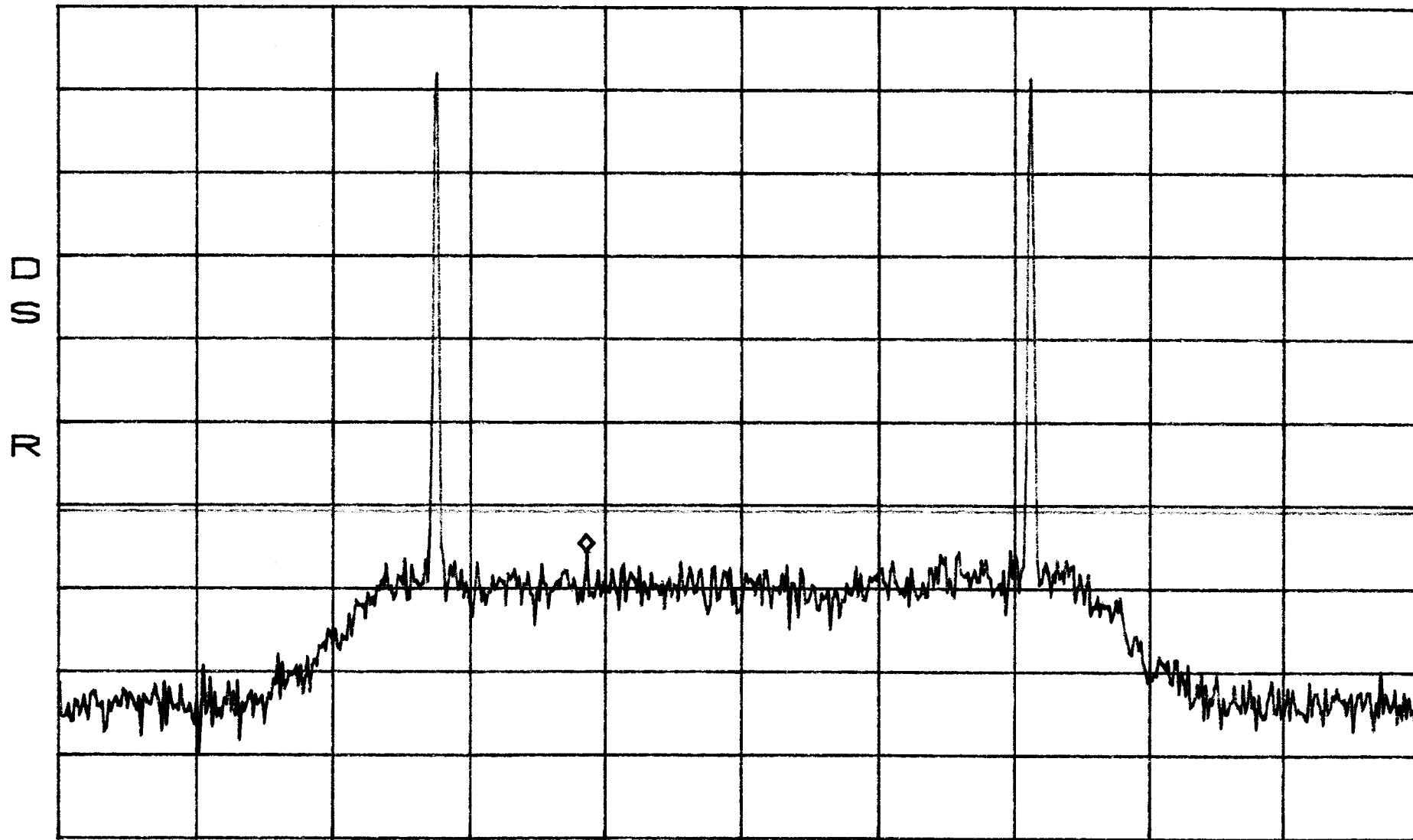
Intermodulation  
Apart  
FM

BAND D,B,E

\*ATTEN 20dB  
RL 47.8dBm

MKR -17.70dBm  
1.95183GHz

10dB/



CENTER 1.95750GHz  
\*RBW 30kHz

VBW 30kHz

SPAN 50.00MHz  
SWP 140ms

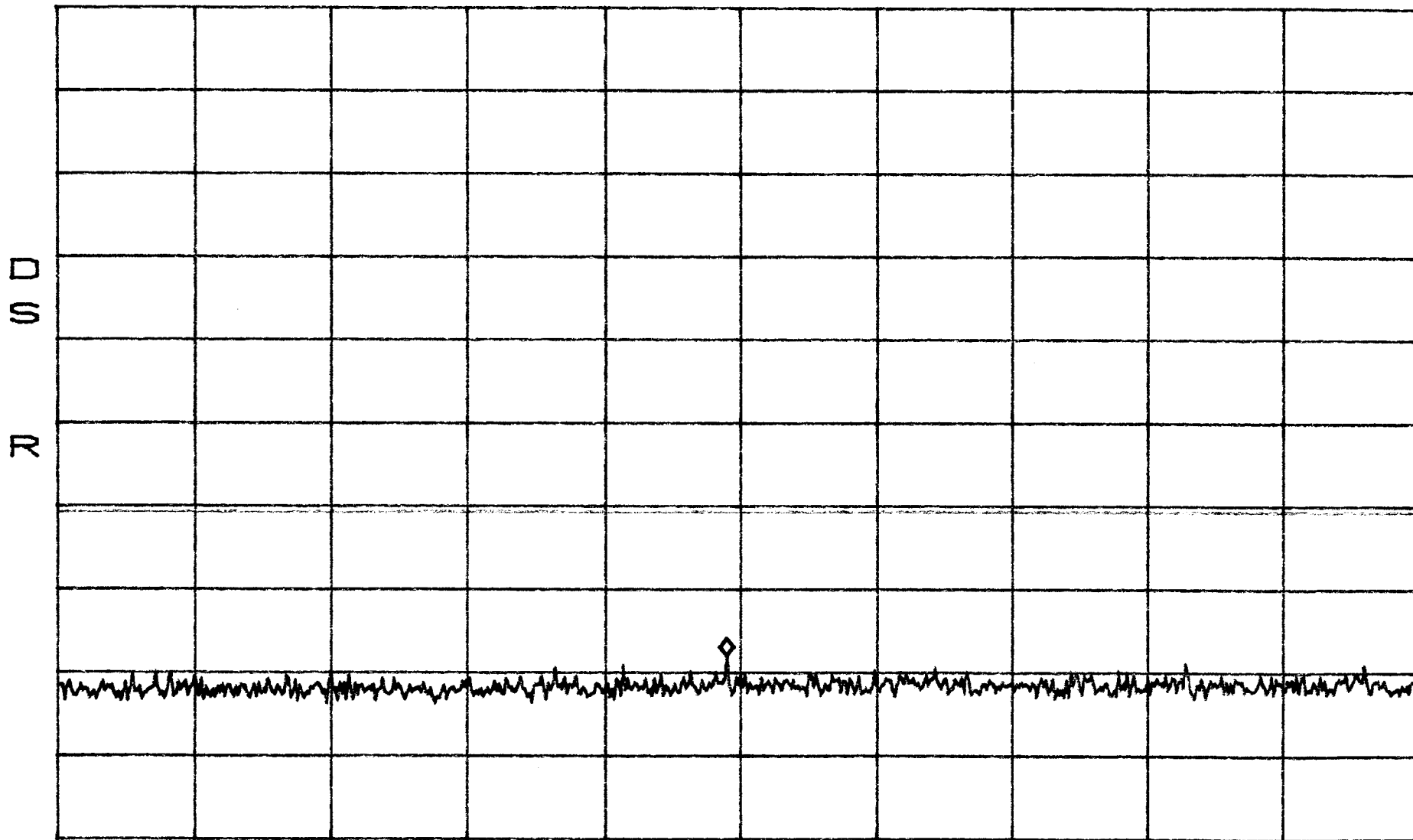
Intermodulation  
Apert  
FM

BAND D, B, E

\*ATTEN 20dB  
RL 47.8dBm

10dB/

MKR -30.03dBm  
505.3MHz



START 30.0MHz

STOP 1.0000GHz

\*RBW 30kHz

VBW 30kHz

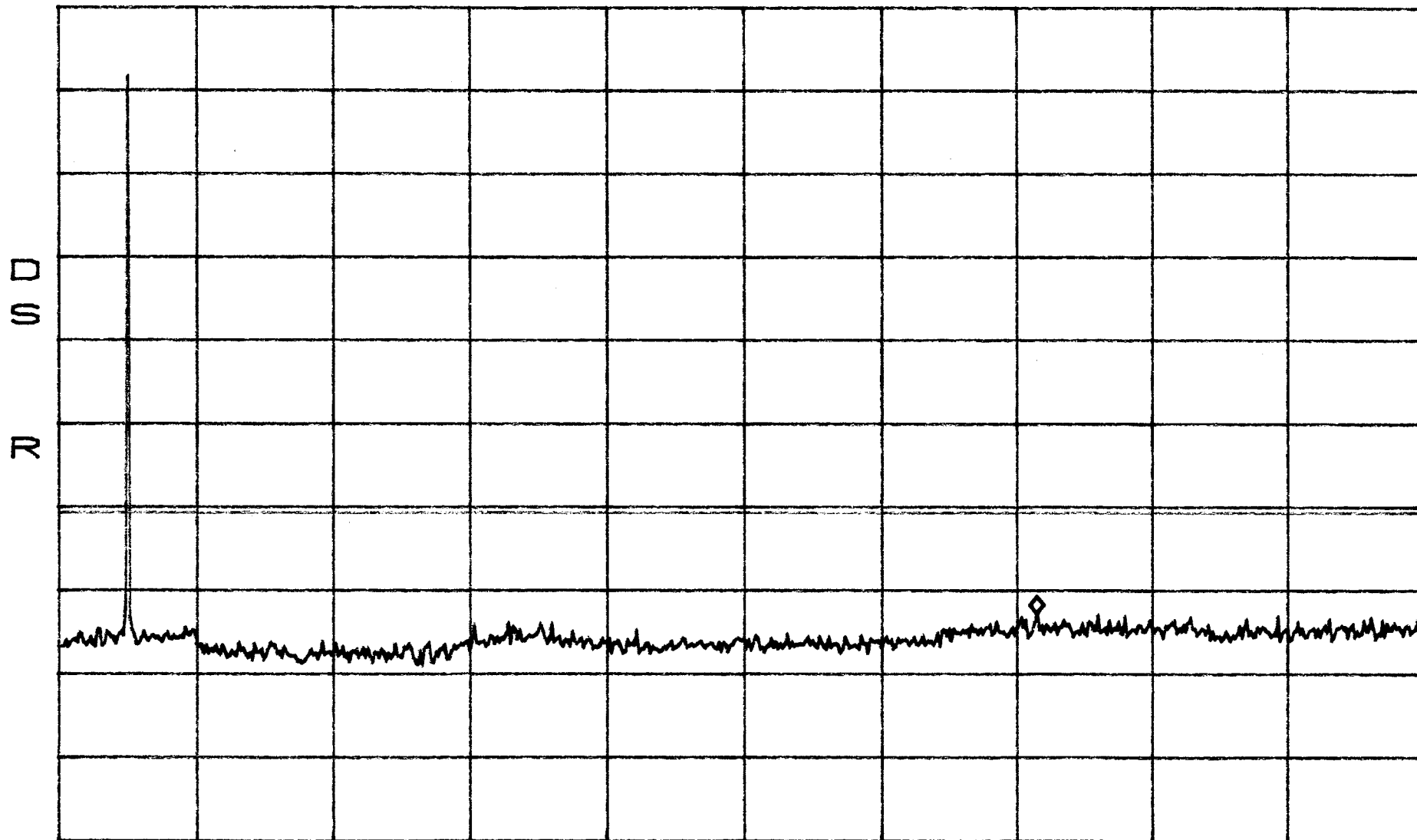
SWP 2.7sec

Intermodulation BAND D,B,E  
Apart  
FM

\*ATTEN 20dB  
RL 47.8dBm

MKR -24.87dBm  
14.59GHz

10dB/



START 1.00GHz STOP 20.00GHz  
\*RBW 100kHz VBW 100kHz SWP 4.8sec

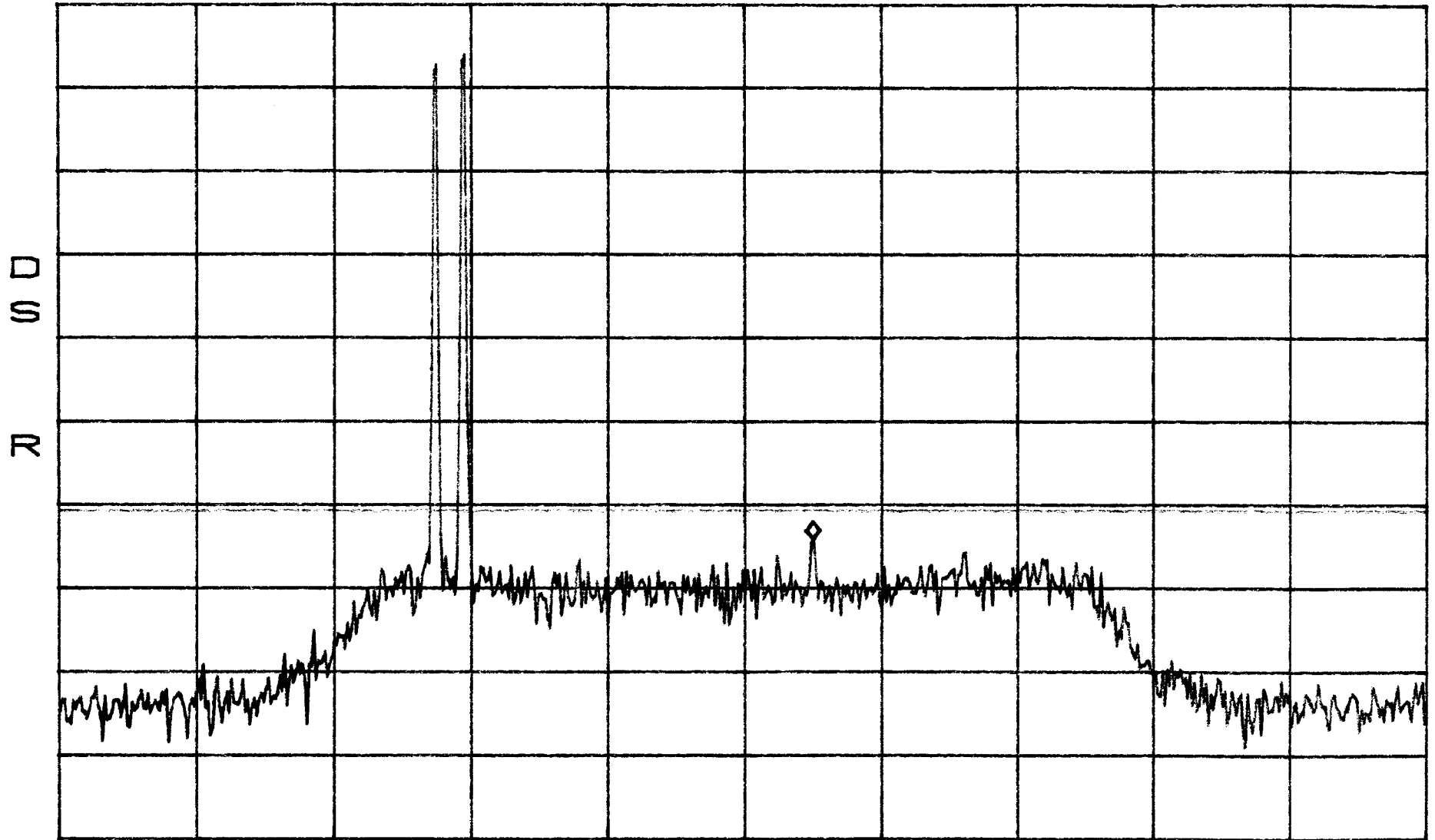
Intermodulation  
Close  
TDMA

BAND D,B,E

\*ATTEN 20dB  
RL 47.8dBm

MKR -16.20dBm  
1.96000GHz

10dB/



CENTER 1.95750GHz

SPAN 50.00MHz

\*RBW 30kHz

VBW 30kHz

SWP 140ms

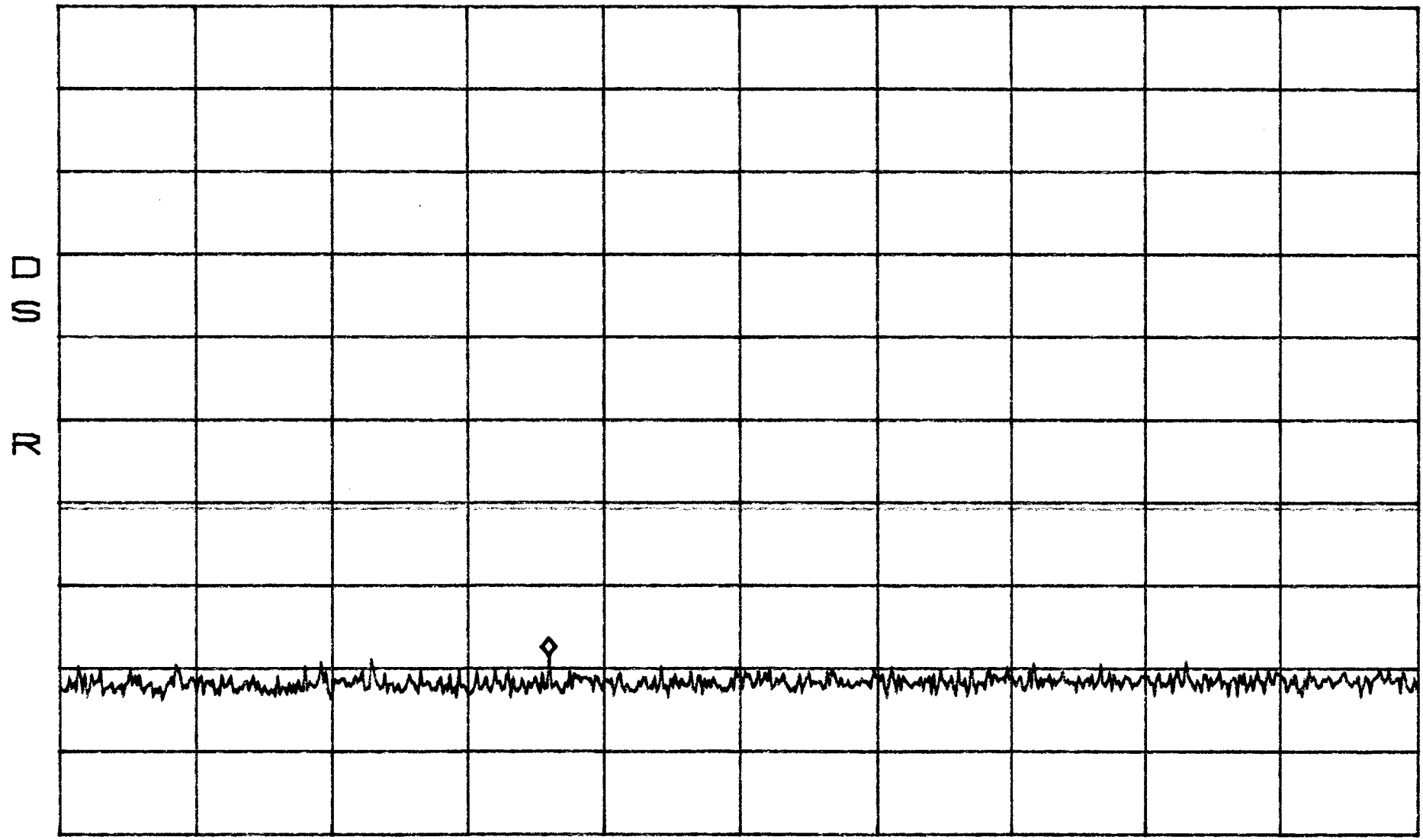
Intermodulation  
close  
TDMA

BAND D, B, E

\*ATTEN 20dB  
RL 47.8dBm

MKR -30.53dBm  
379.2MHz

10dB/



START 30.0MHz                      STOP 1.0000GHz  
\*RBW 30kHz                      VBW 30kHz                      SWP 2.7sec

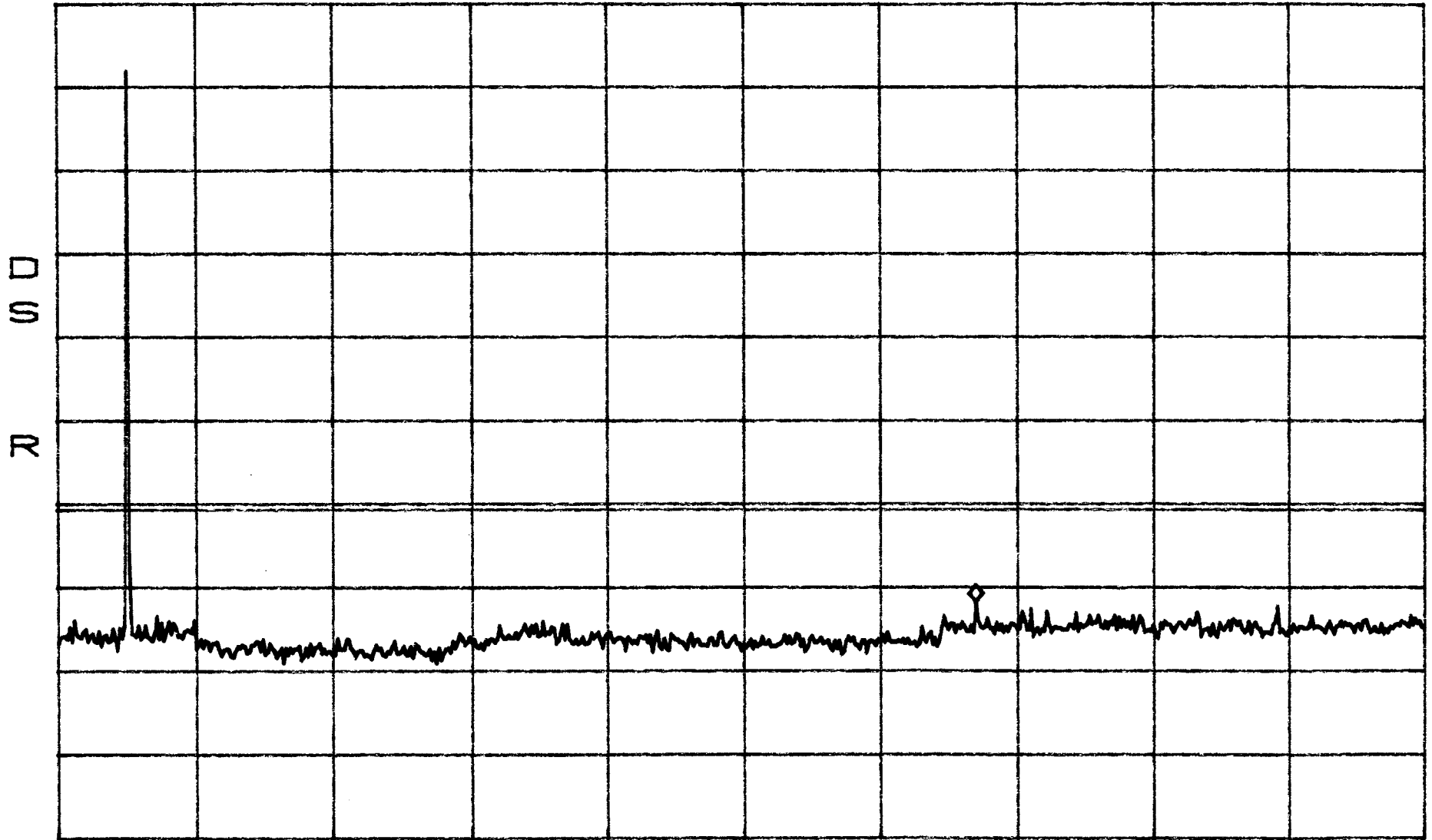
Intermodulation  
Close  
TDMA

BAND D<sub>1</sub>B<sub>1</sub>F

\*ATTEN 20dB  
RL 47.8dBm

10dB/

MKR -23.87dBm  
13.73GHz



START 1.00GHz STOP 20.00GHz  
\*RBW 100kHz VBW 100kHz SWP 4.8sec

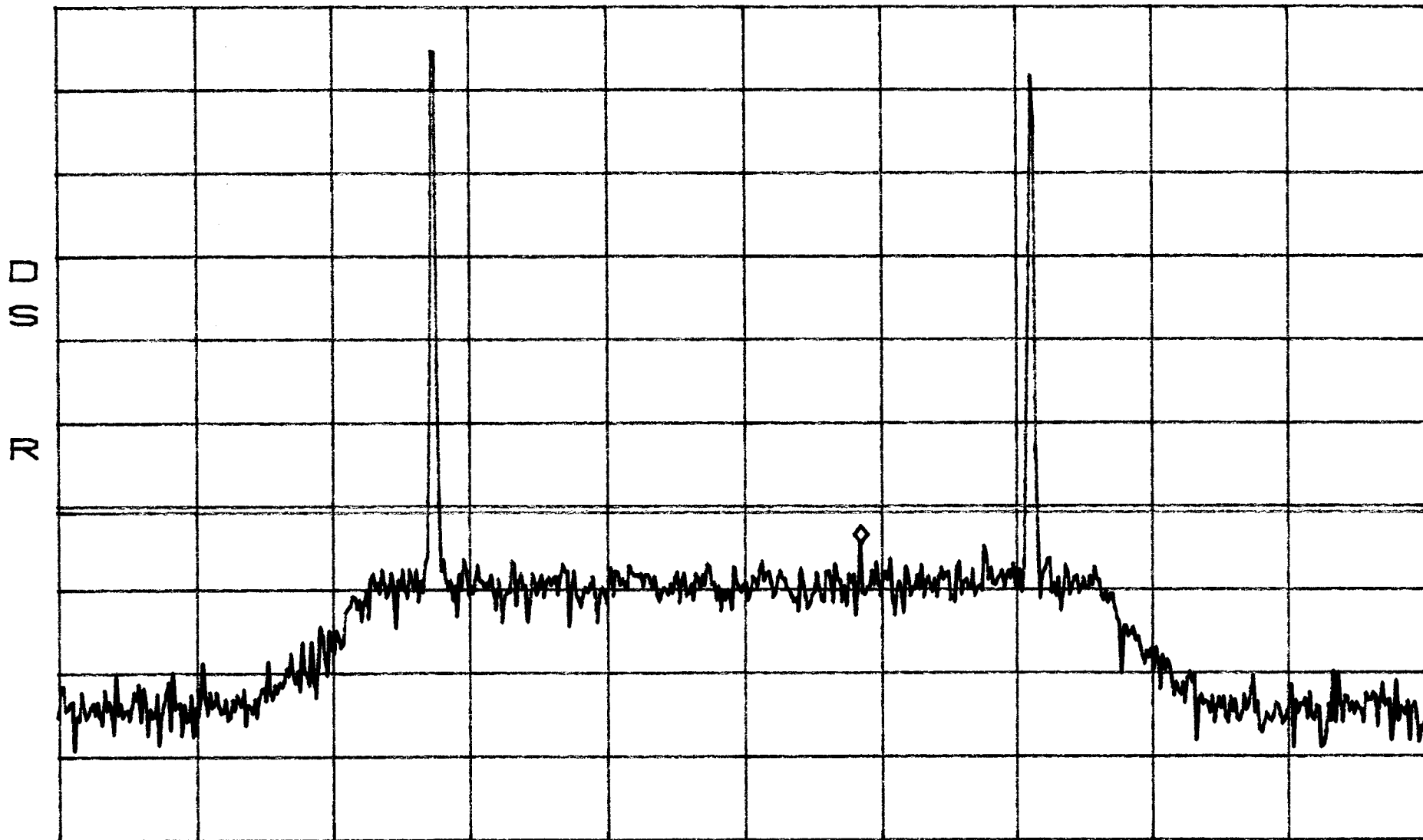


Intermodulation BAND D,B,E  
Apart  
TDMA

\*ATTN 20dB  
RL 47.8dBm

MKR -16.53dBm  
1.96175GHz

10dB/



CENTER 1.95750GHz  
\*RBW 30kHz VBW 30kHz

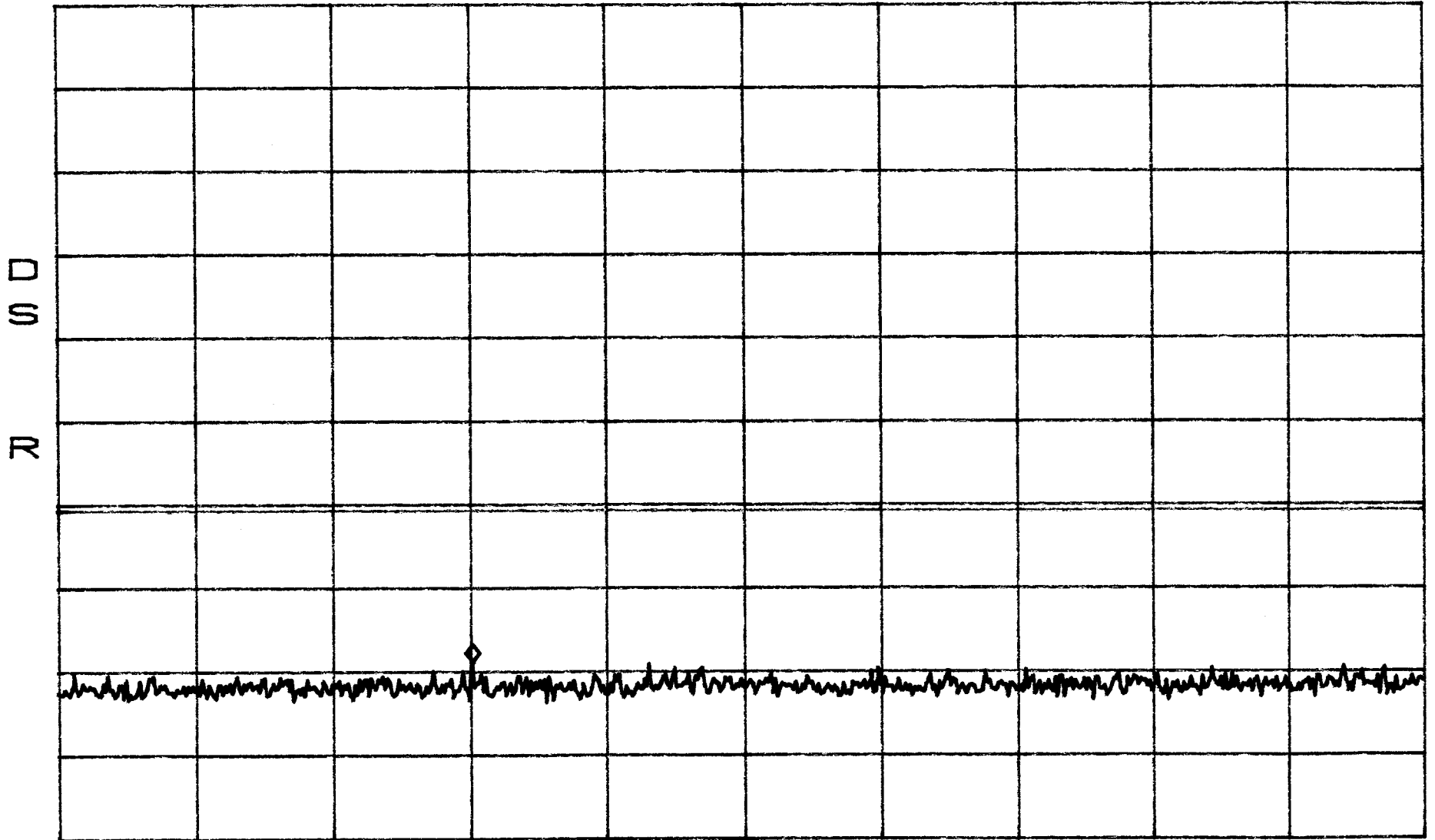
SPAN 50.00MHz  
SWP 140ms

Intermodulation BAND D,B,E  
Apart  
TDMA

\*ATTEN 20dB  
RL 47.8dBm

MKR -30.87dBm  
322.6MHz

10dB/



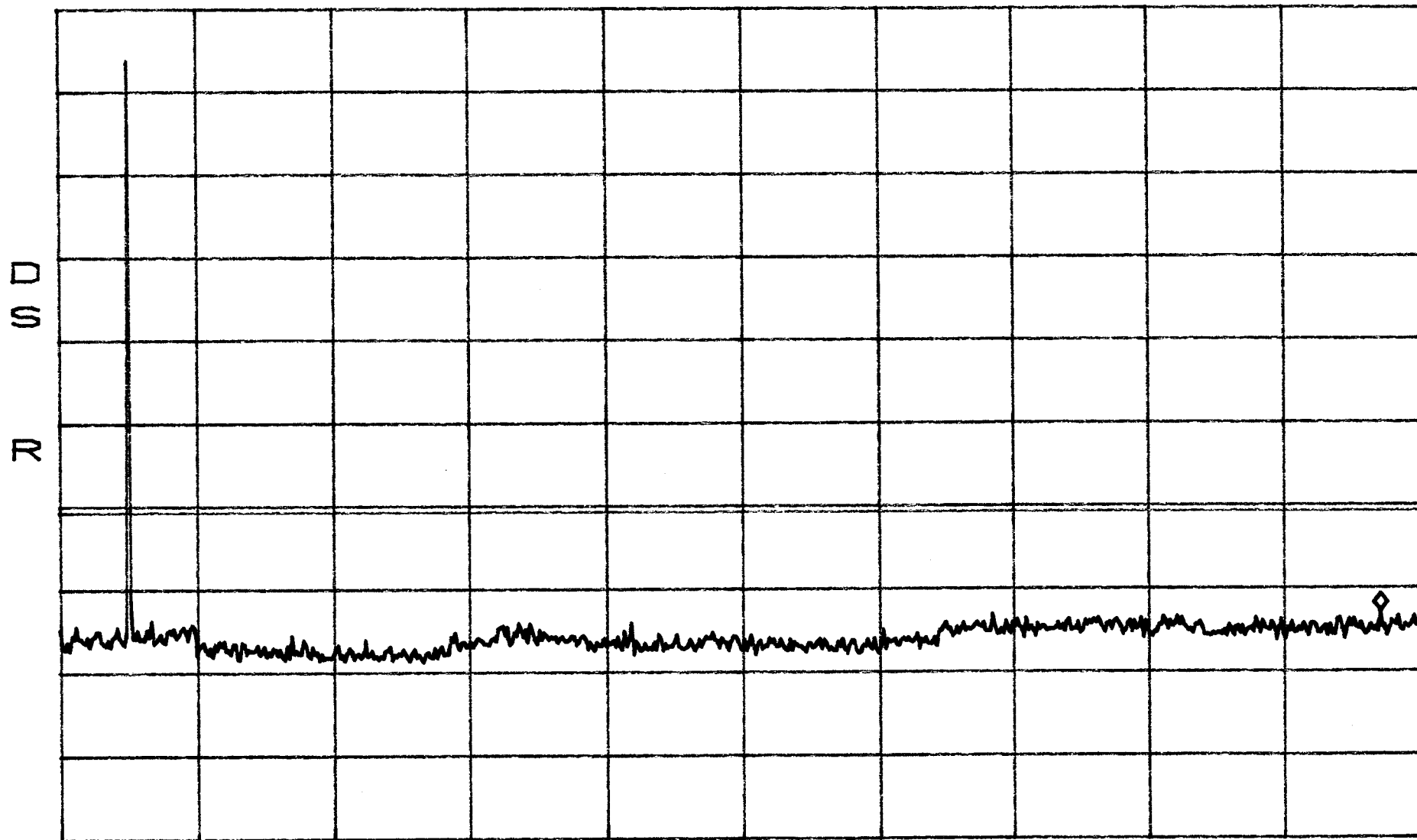
START 30.0MHz                      STOP 1.0000GHz  
\*RBW 30kHz                      VBW 30kHz                      SWP 2.7sec

Intermodulation BAND D, B, E  
Apart  
TDMA

\*ATTEN 20dB  
RL 47.8dBm

MKR -24.87dBm  
19.40GHz

10dB/



START 1.00GHz STOP 20.00GHz  
\*RBW 100kHz VBW 100kHz SWP 4.8sec

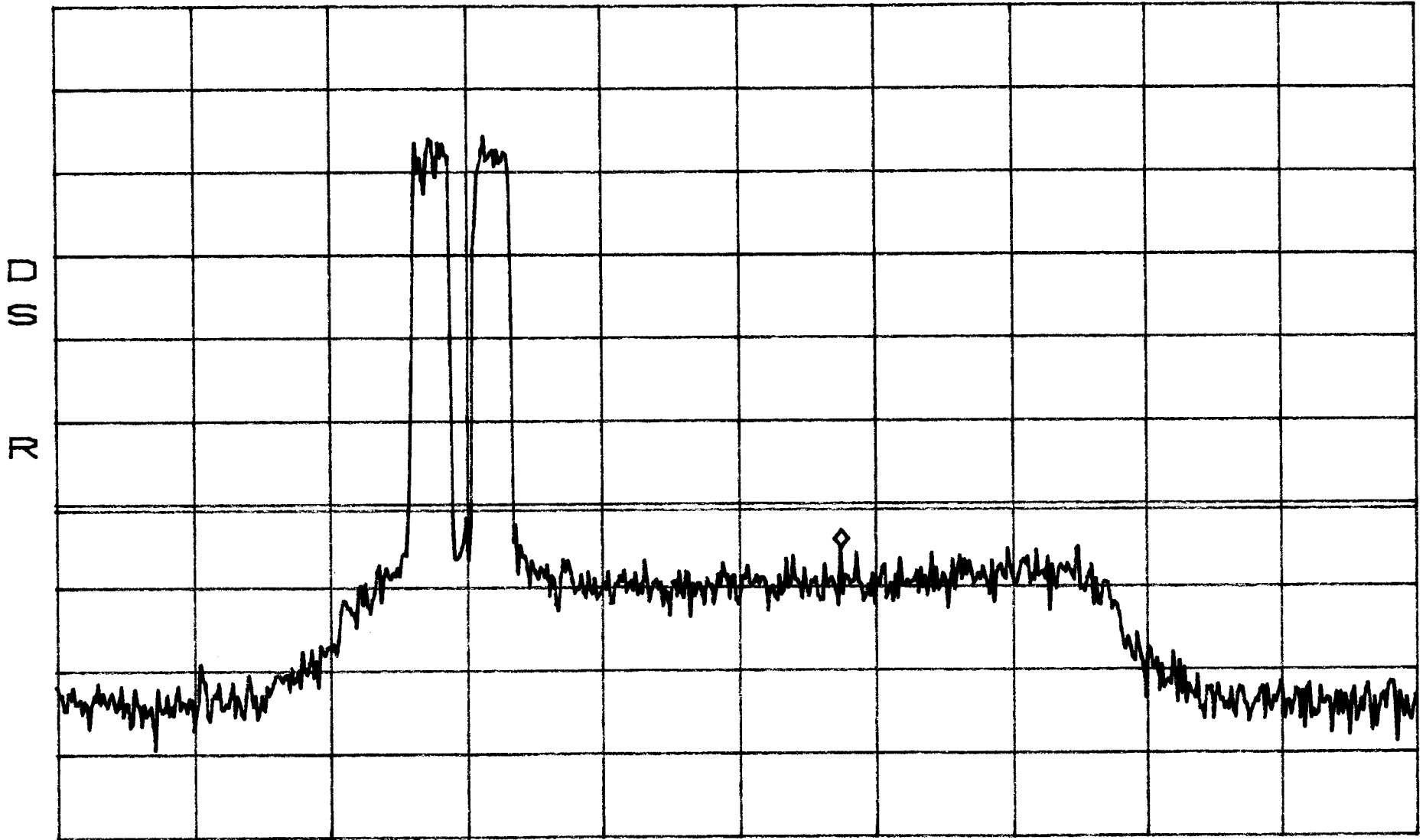
Intermodulation  
Close  
CDMA

BAND D,B,E

\*ATTN 20dB  
RL 47.8dBm

10dB/BPO

MKR -17.37dBm  
1.96125GHz



CENTER 1.95750GHz  
\*RBW 30kHz VBW 30kHz

SPAN 50.00MHz  
SWP 140ms

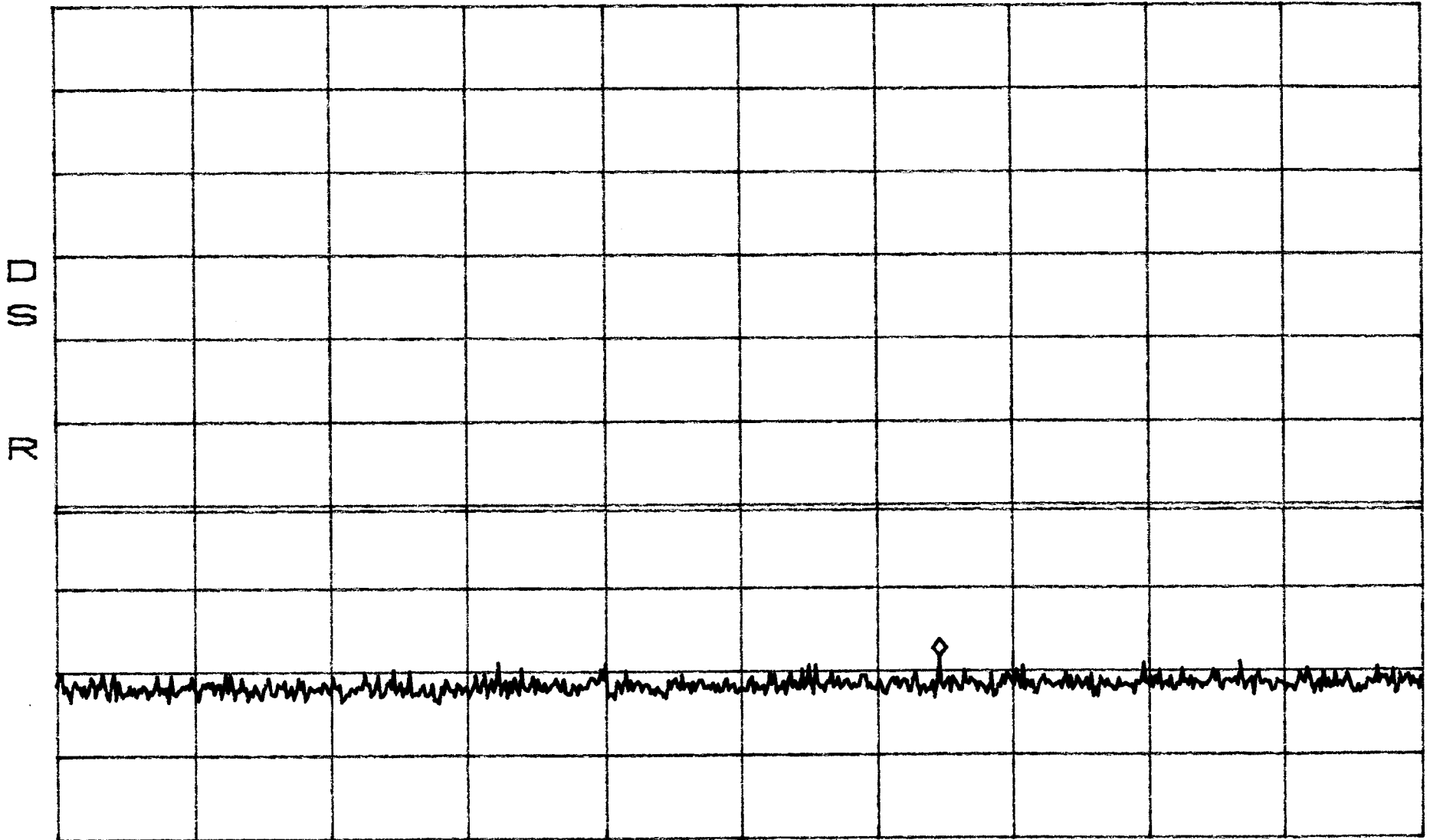
Intermodulation  
Close  
CDMA

BAND D,B,E

\*ATTEN 20dB  
RL 47.8dBm

10dB/

MKR -30.37dBm  
657.3MHz



START 30.0MHz  
\*RBW 30kHz

VBW 30kHz

STOP 1.0000GHz

SWP 2.7sec

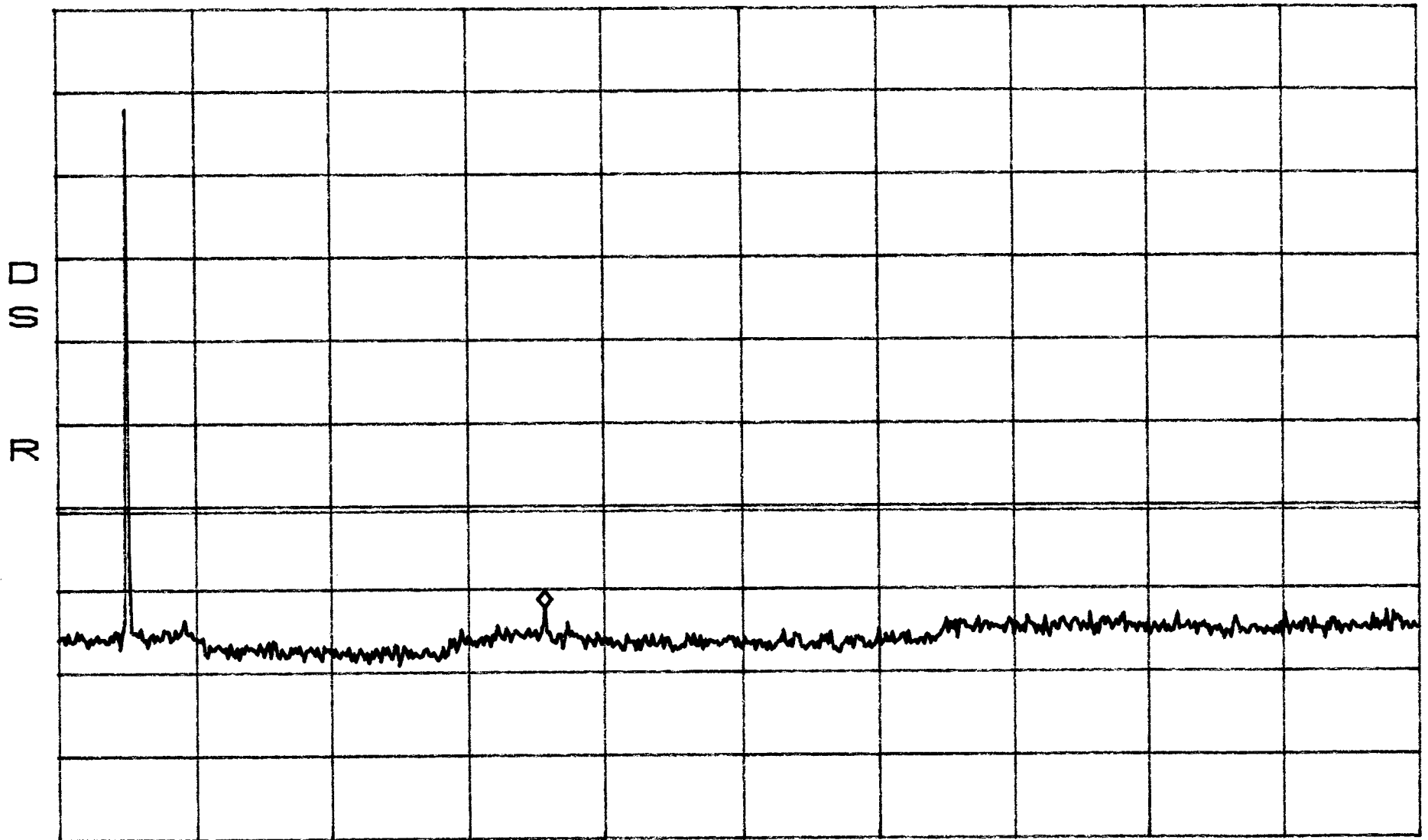
Intermodulation  
Close  
CDMA

BAND D,B,E

\*ATTEN 20dB  
RL 47.8dBm

10dB/

MKR -24.37dBm  
7.78GHz



START 1.00GHz STOP 20.00GHz  
\*RBW 100kHz VBW 100kHz SWP 4.8sec

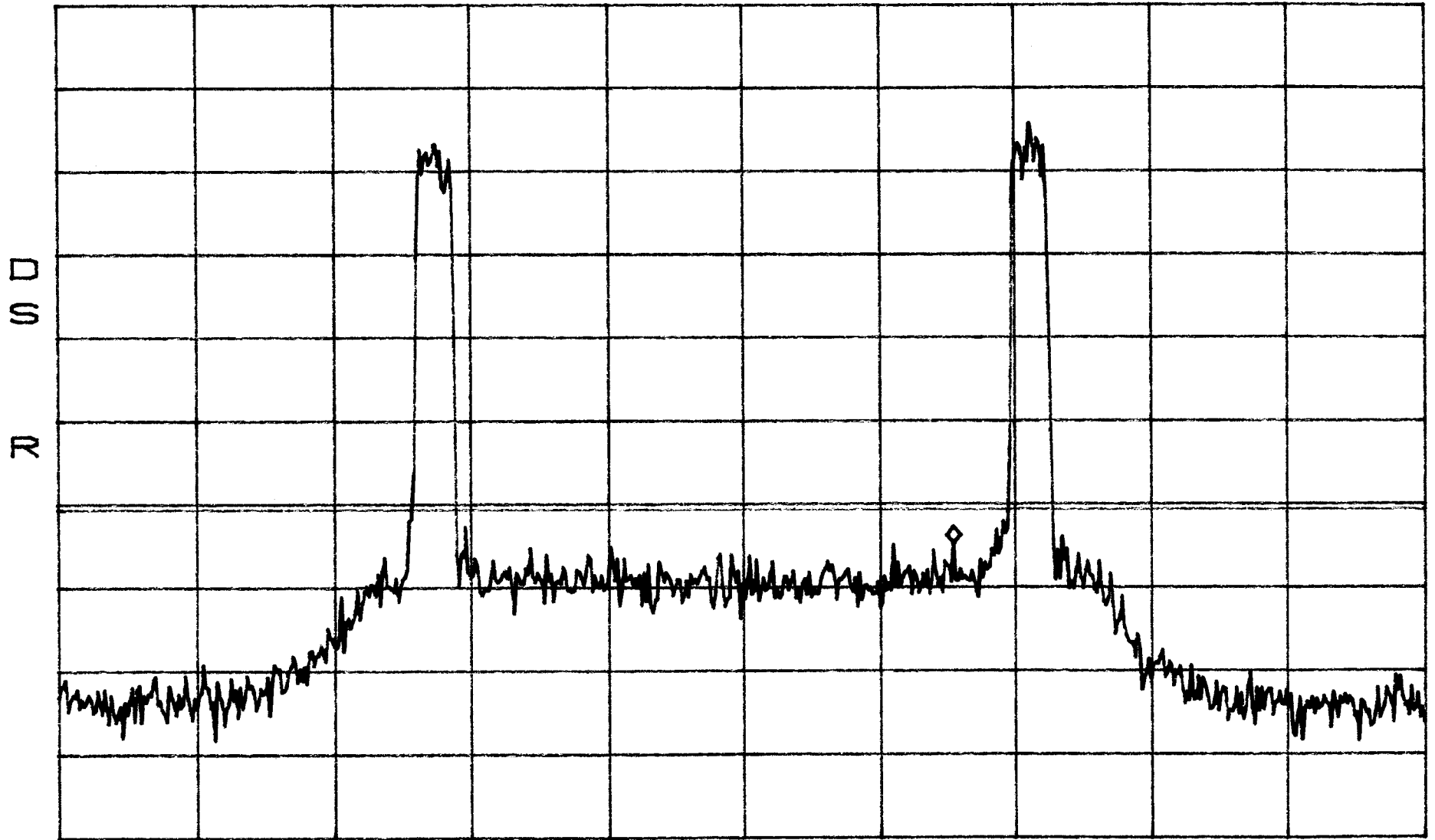
Intermodulation  
Apart  
CDMA

BAND D,B,E

\*ATTEN 20dB  
RL 47.8dBm

10dB/

MKR -16.87dBm  
1.96525GHz



CENTER 1.95750GHz SPAN 50.00MHz  
\*RBW 30kHz VBW 30kHz SWP 140ms

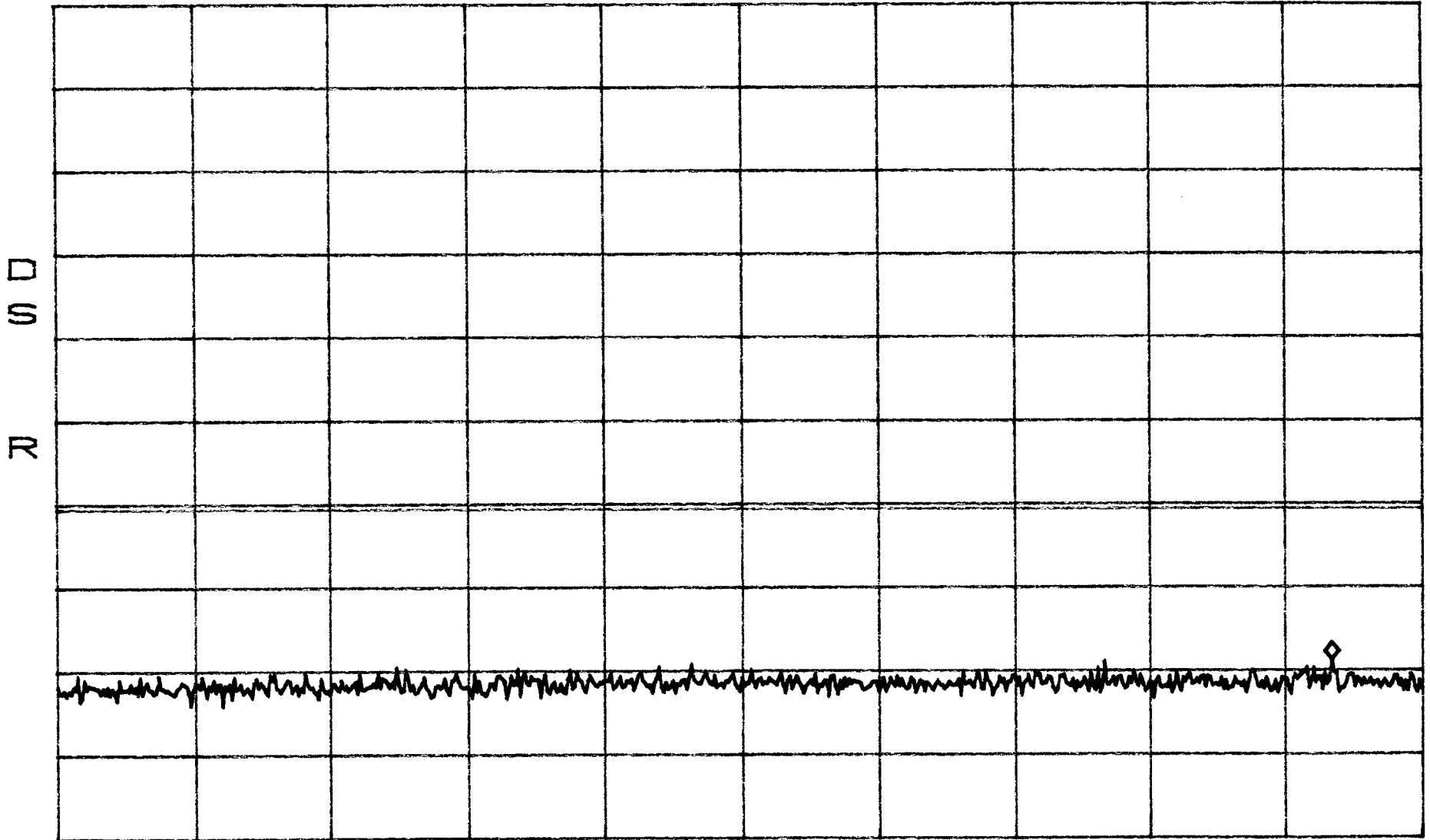
Intermodulation  
Apart  
CDMA

BAND D.B.E

\*ATTEN 20dB  
RL 47.8dBm

1dB/

MKR -30.87dBm  
937.0MHz



START 30.0MHz  
\*RBW 30kHz

VBW 30kHz

STOP 1.0000GHz

SWP 2.7sec



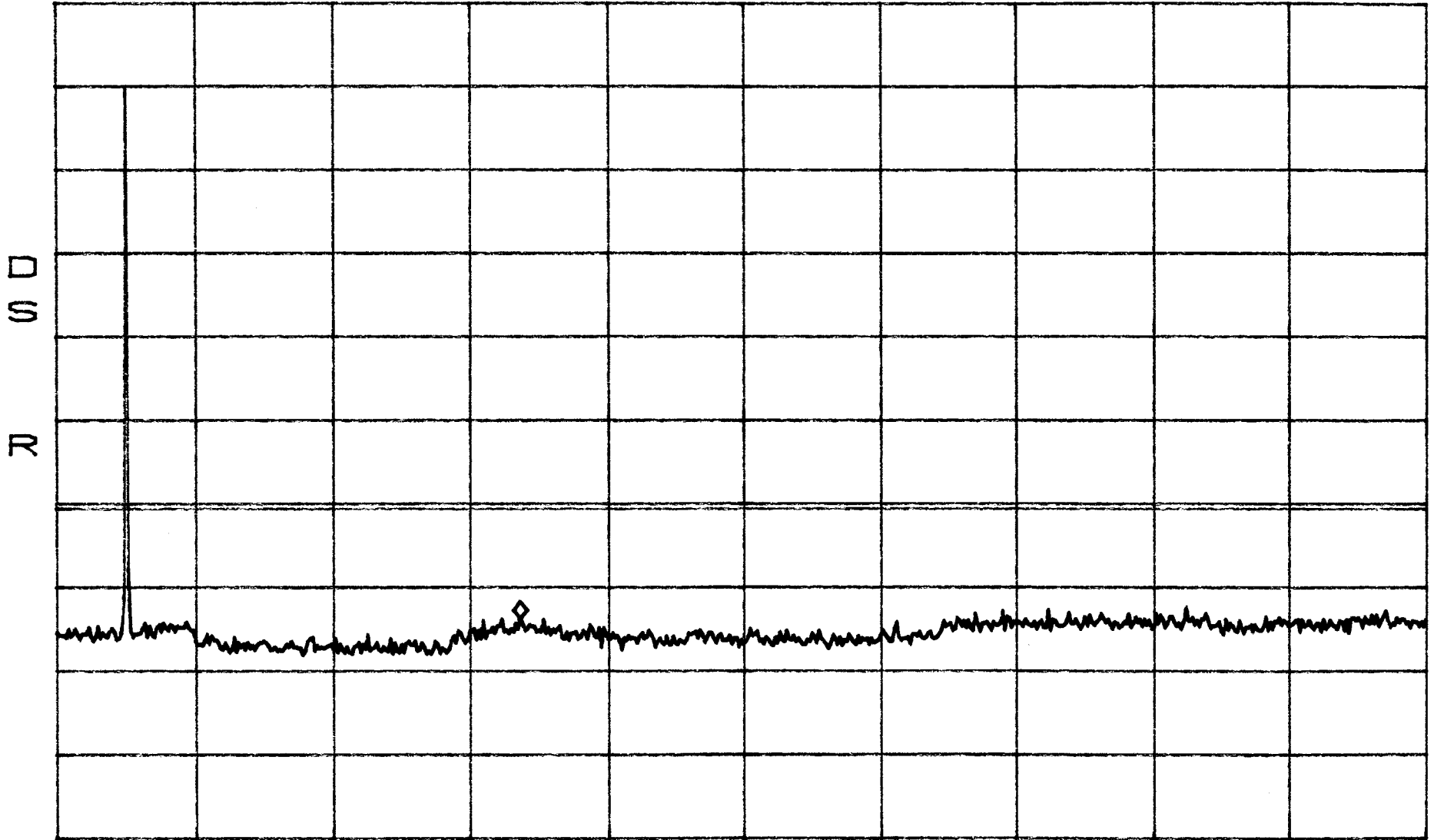
Intermodulation  
Apart  
CDMA

BAND D,B,E

\*ATTEN 20dB  
RL 47.8dBm

10dB/

MKR -25.87dBm  
7.40GHz



START 1.00GHz STOP 20.00GHz  
\*RBW 100kHz VBW 100kHz SWP 4.8sec

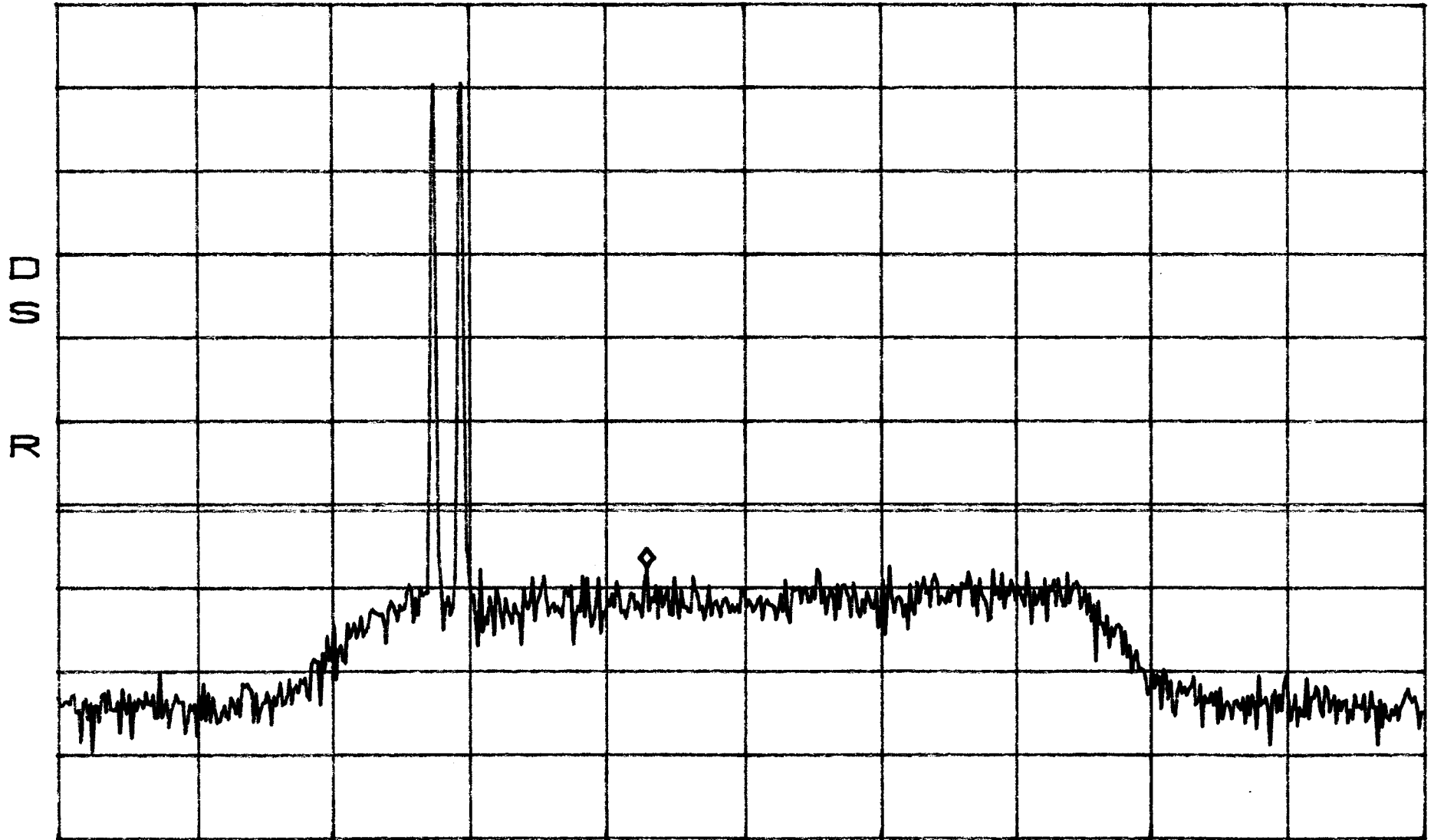
Intermodulation  
Close  
FM

BAND B,E,F

\*ATTEN 20dB  
RL 47.8dBm

10dB/

MKR -19.53dBm  
1.95900GHz



CENTER 1.96250GHz  
\*RBW 30kHz VBW 30kHz

SPAN 50.00MHz  
SWP 140ms

Intermodulation

BAND B,E,F

Close

FM

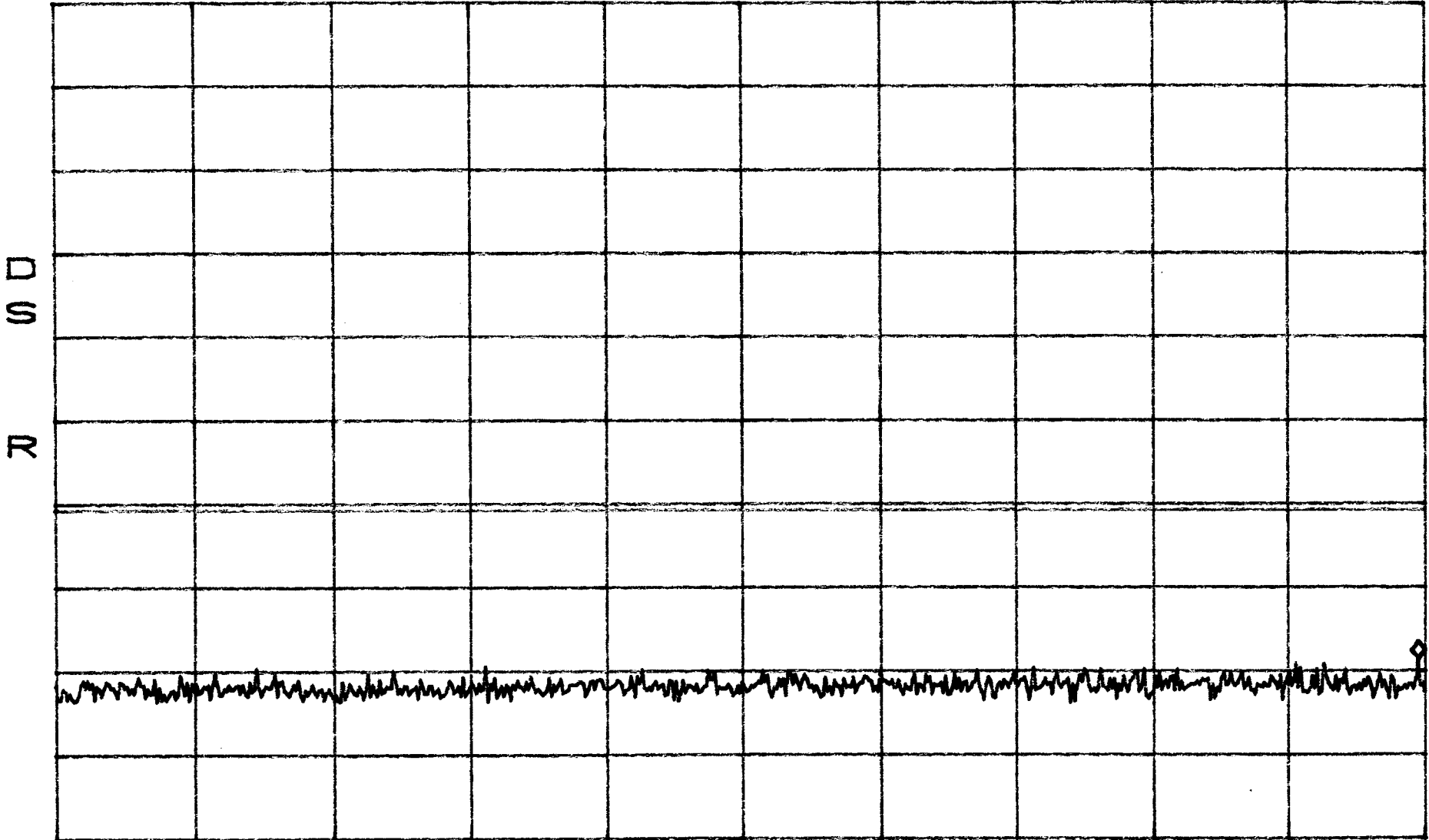
\*ATTEN 20dB

MKR -30.70dBm

RL 47.8dBm

10dB/

995.2MHz



START 30.0MHz

STOP 1.0000GHz

\*RBW 30kHz

VBW 30kHz

SWP 2.7sec

Intermodulation

BAND B,E,F

Close

FM

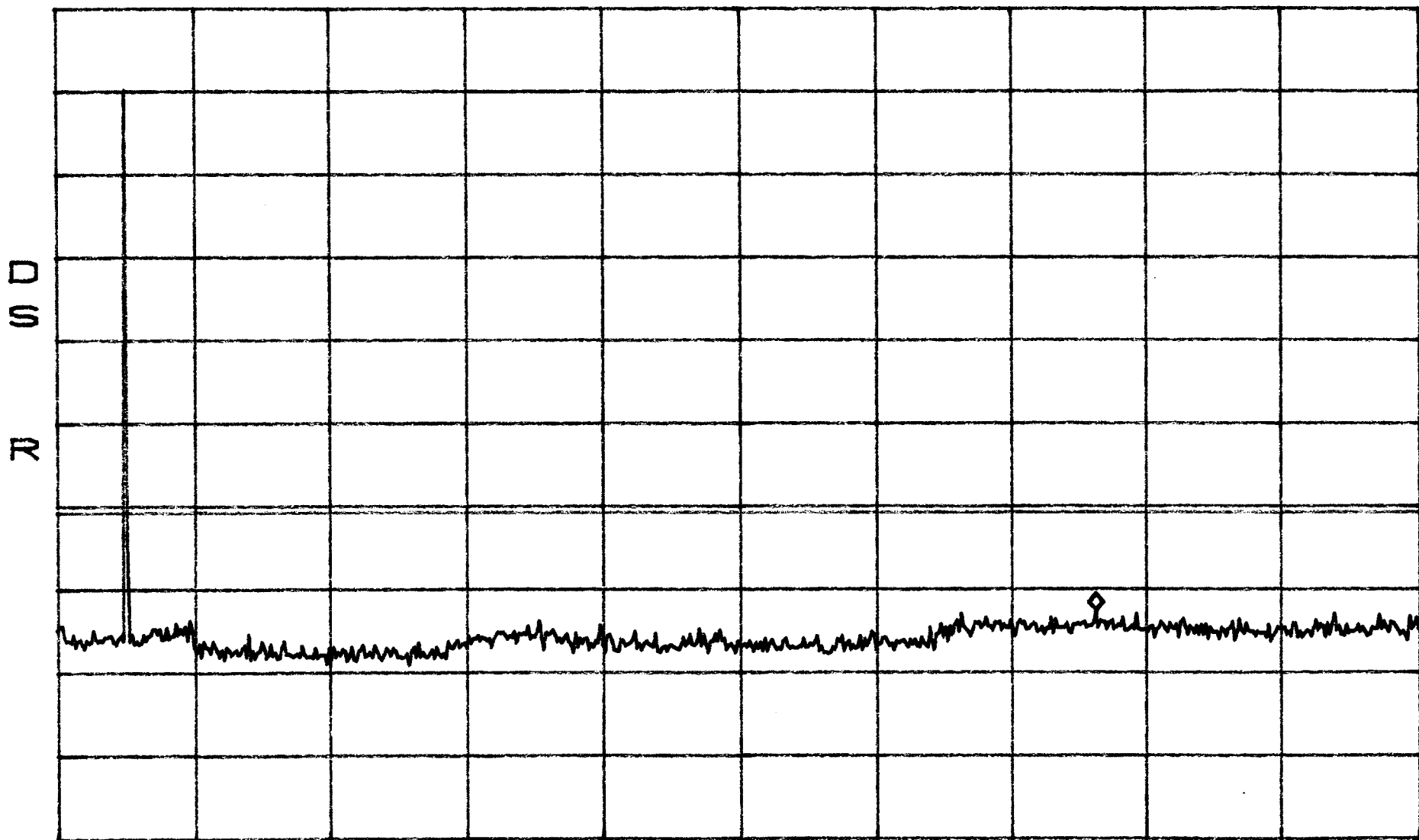
\*ATTEN 20dB

MKR -24.70dBm

RL 47.8dBm

10dB/

15.50GHz



START 1.00GHz

STOP 20.00GHz

\*RBW 100kHz

VBW 100kHz

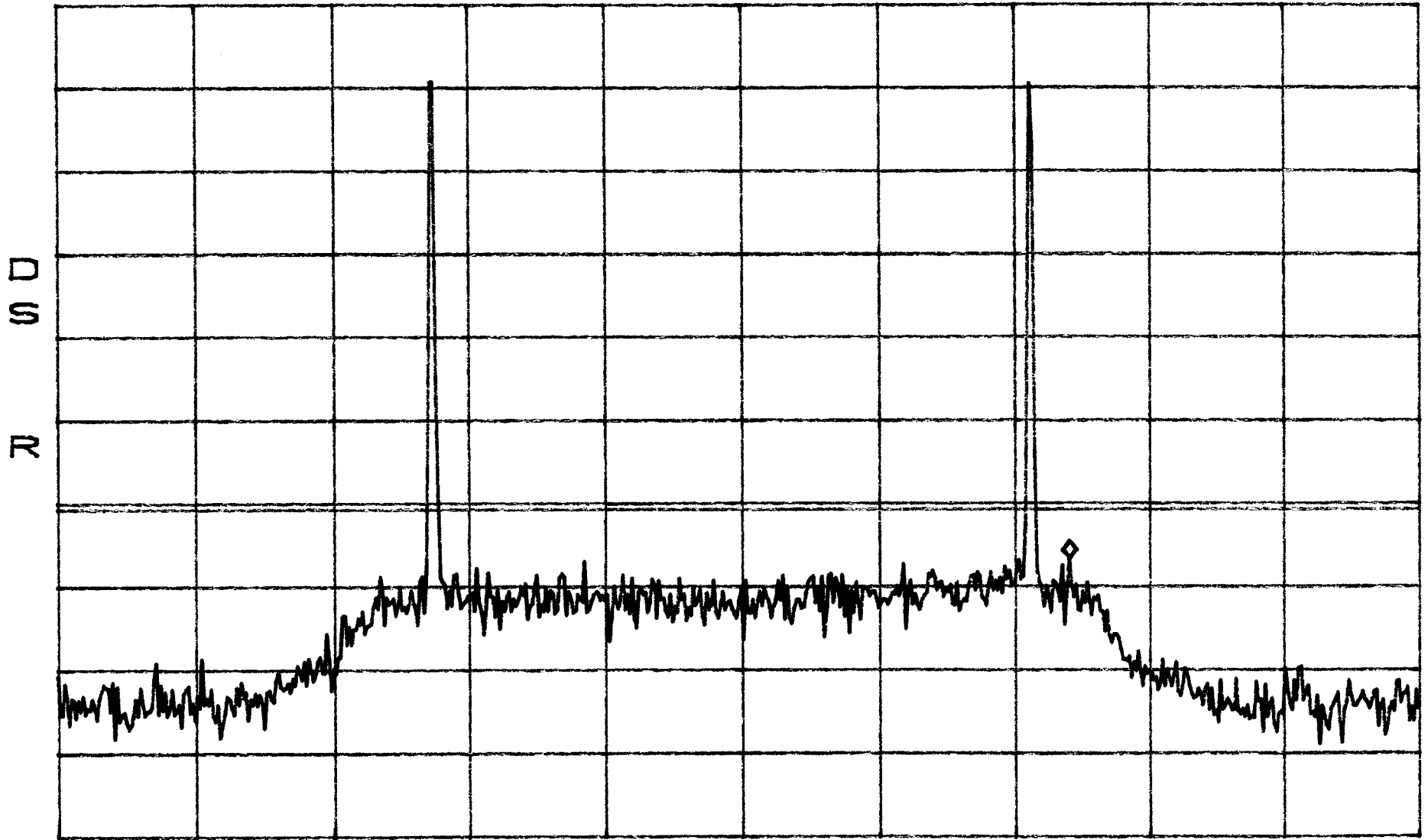
SWP 4.8sec

Intermodulation BAND B,E,F  
Apart  
FM

\*ATTEN 20dB  
RL 47.8dBm

MKR -18.70dBm  
1.97450GHz

10dB/



CENTER 1.96250GHz SPAN 50.00MHz  
\*RBW 30kHz VBW 30kHz SWP 140ms

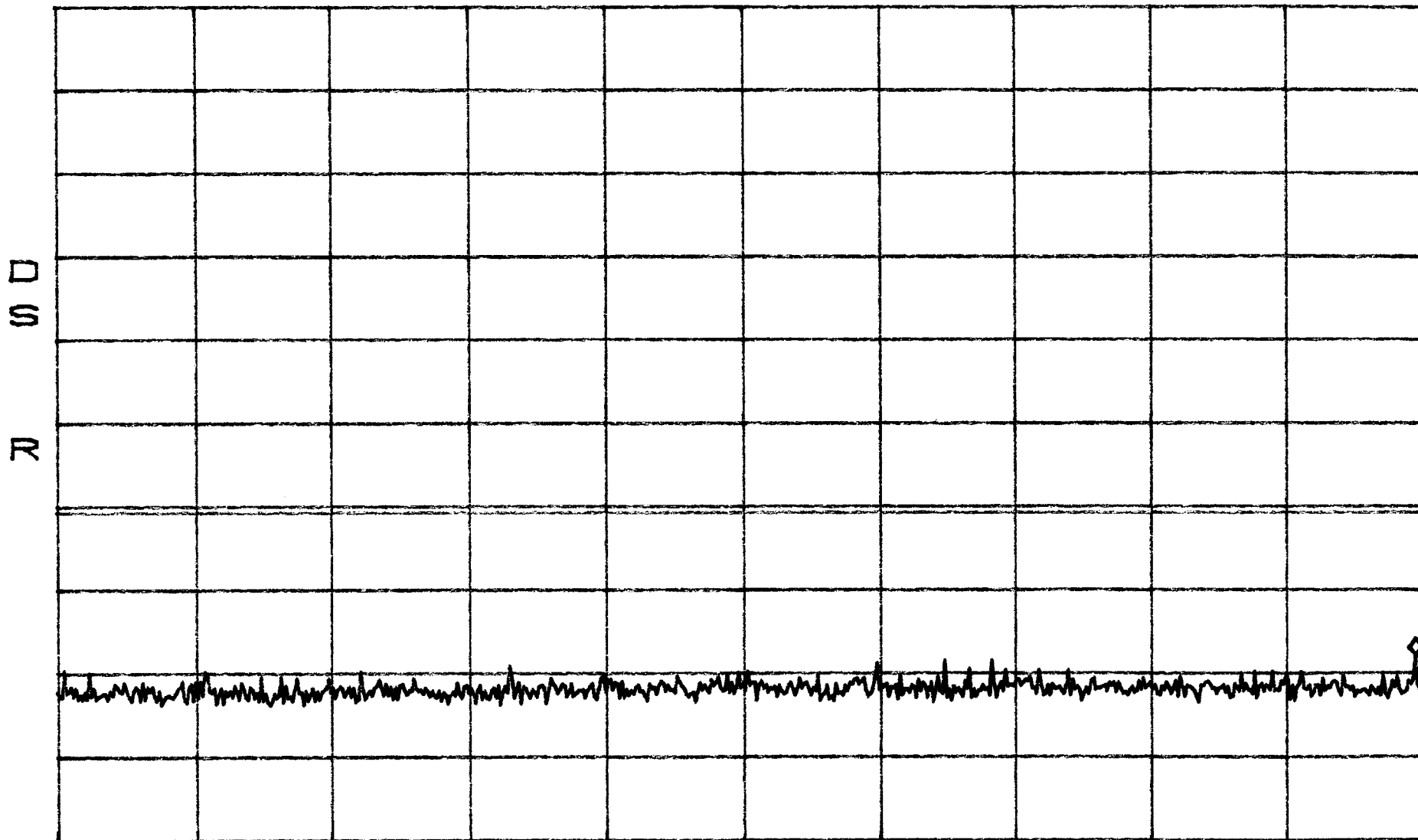
Intermodulation  
Apert  
FM

BAND B,E,F

\*ATTEN 20dB  
RL 47.8dBm

10dB/

MKR -30.03dBm  
993.5MHz



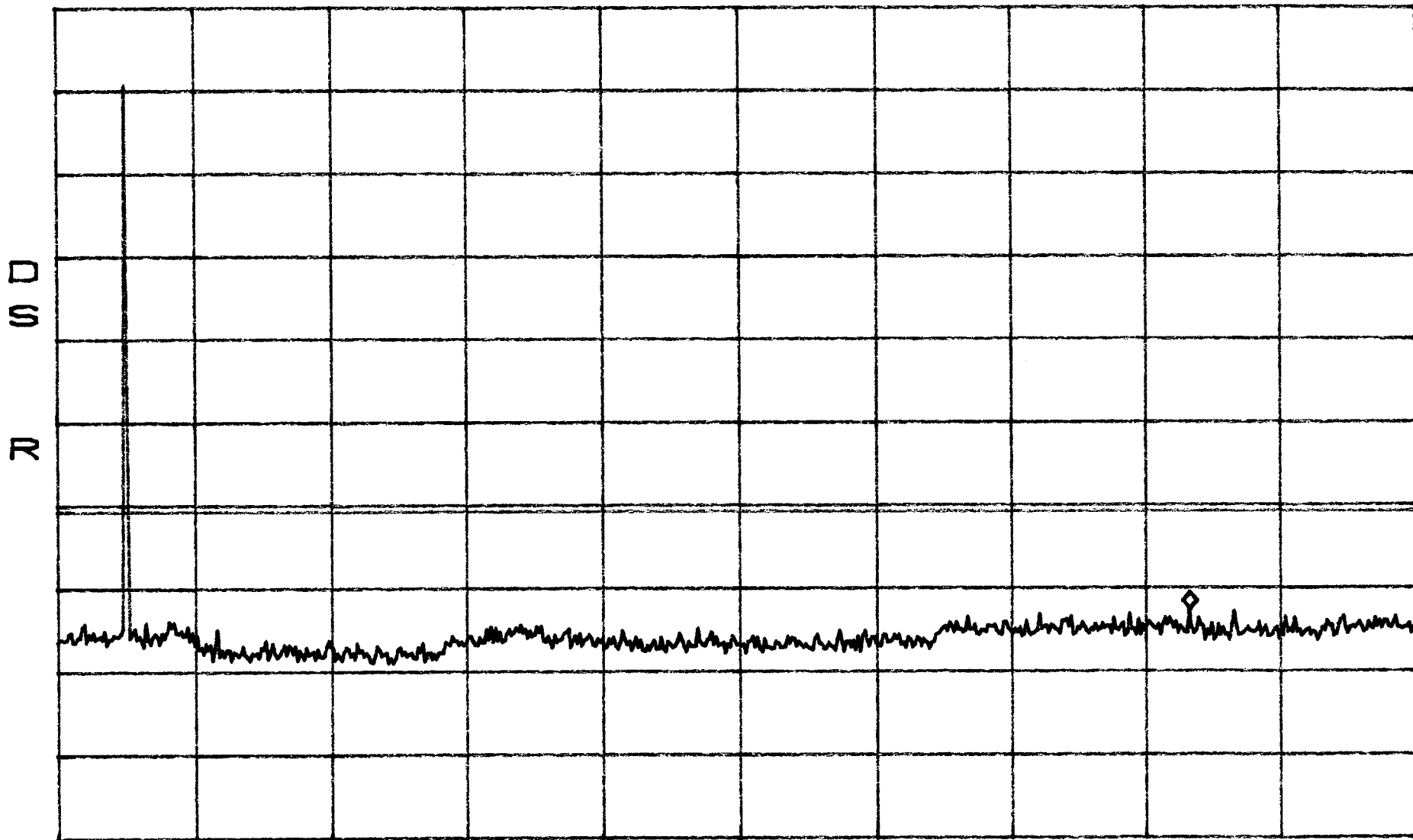
START 30.0MHz                      STOP 1.0000GHz  
\*RBW 30kHz                      VBW 30kHz                      SWP 2.7sec

Intermodulation BAND B,E,F  
Apart  
FM

\*ATTEN 20dB  
RL 47.8dBm

MKR -24.70dBm  
16.83GHz

10dB/



START 1.00GHz STOP 20.00GHz  
\*RBW 100kHz VBW 100kHz SWP 4.8sec

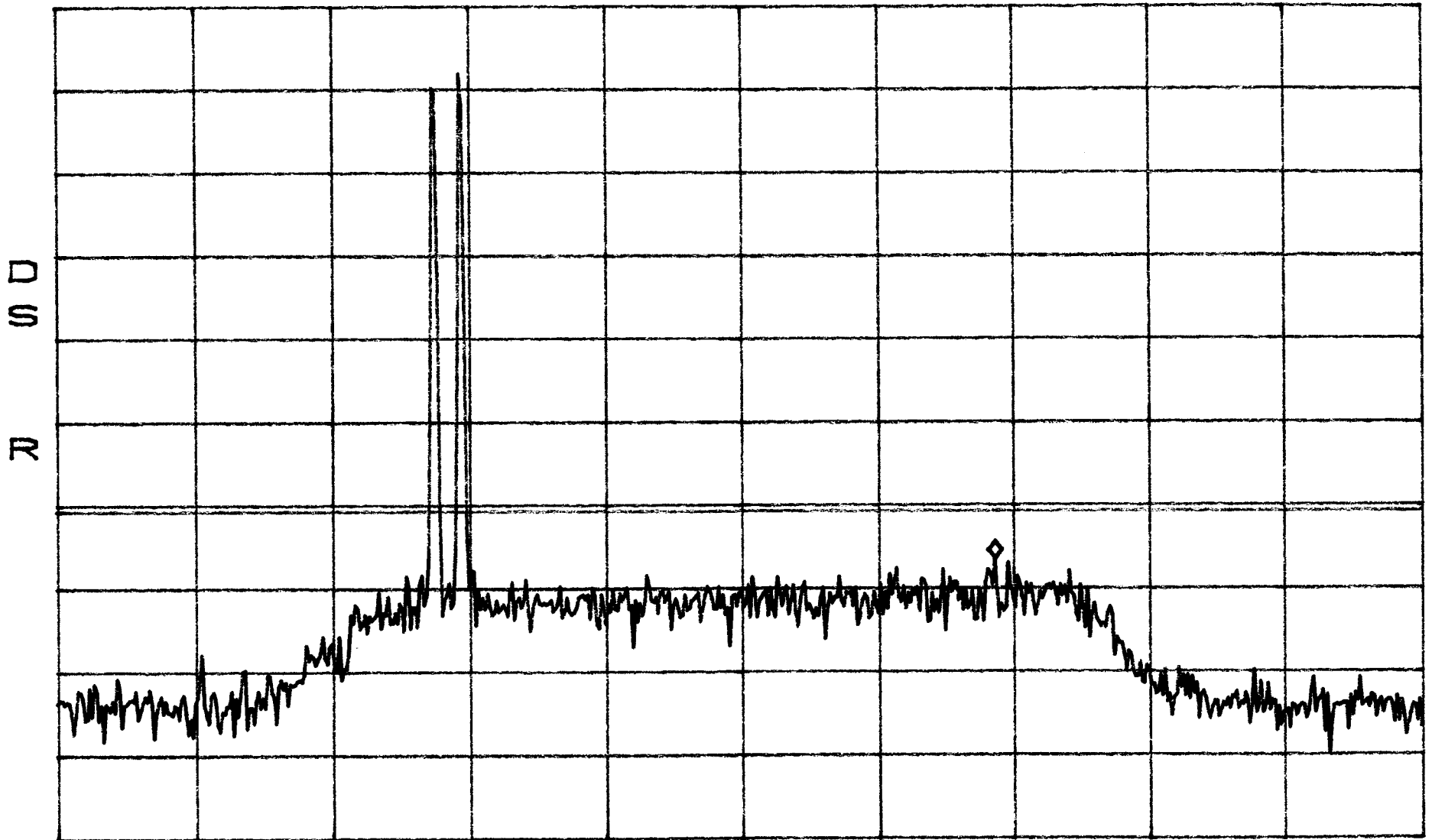
Intermodulation  
Close  
TDMA

BAND B,E,F

\*ATTEN 20dB  
RL 47.8dBm

10dB/

MKR -18.53dBm  
1.97183GHz



CENTER 1.96250GHz SPAN 50.00MHz  
\*RBW 30kHz VBW 30kHz SWP 140ms



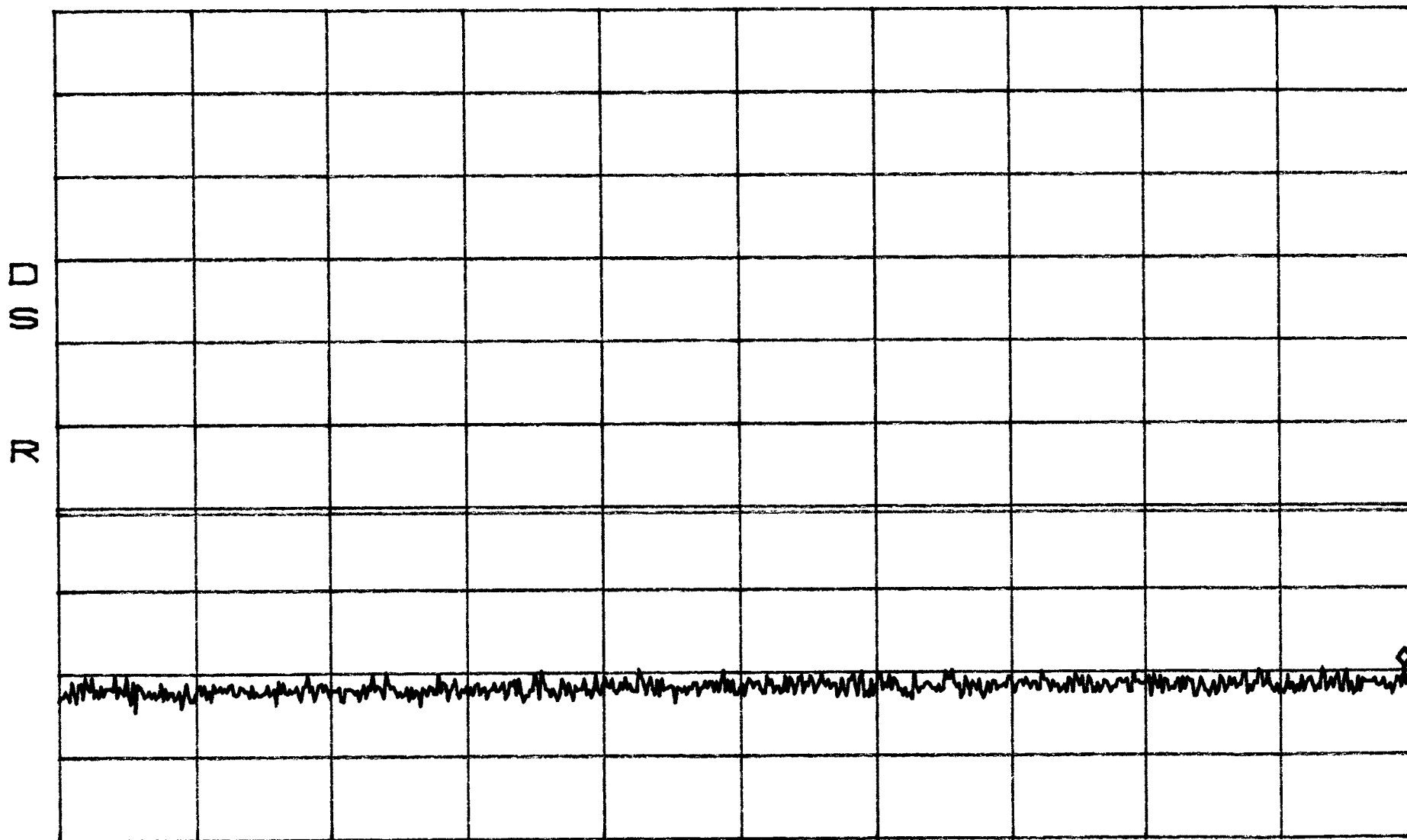
Intermodulation  
Close  
TDMA

BAND B,E,F

\*ATTEN 20dB  
RL 47.8dBm

10dB/

MKR -31.53dBm  
991.9MHz



START 30.0MHz  
\*RBW 30kHz

VBW 30kHz

STOP 1.0000GHz

SWP 2.7sec

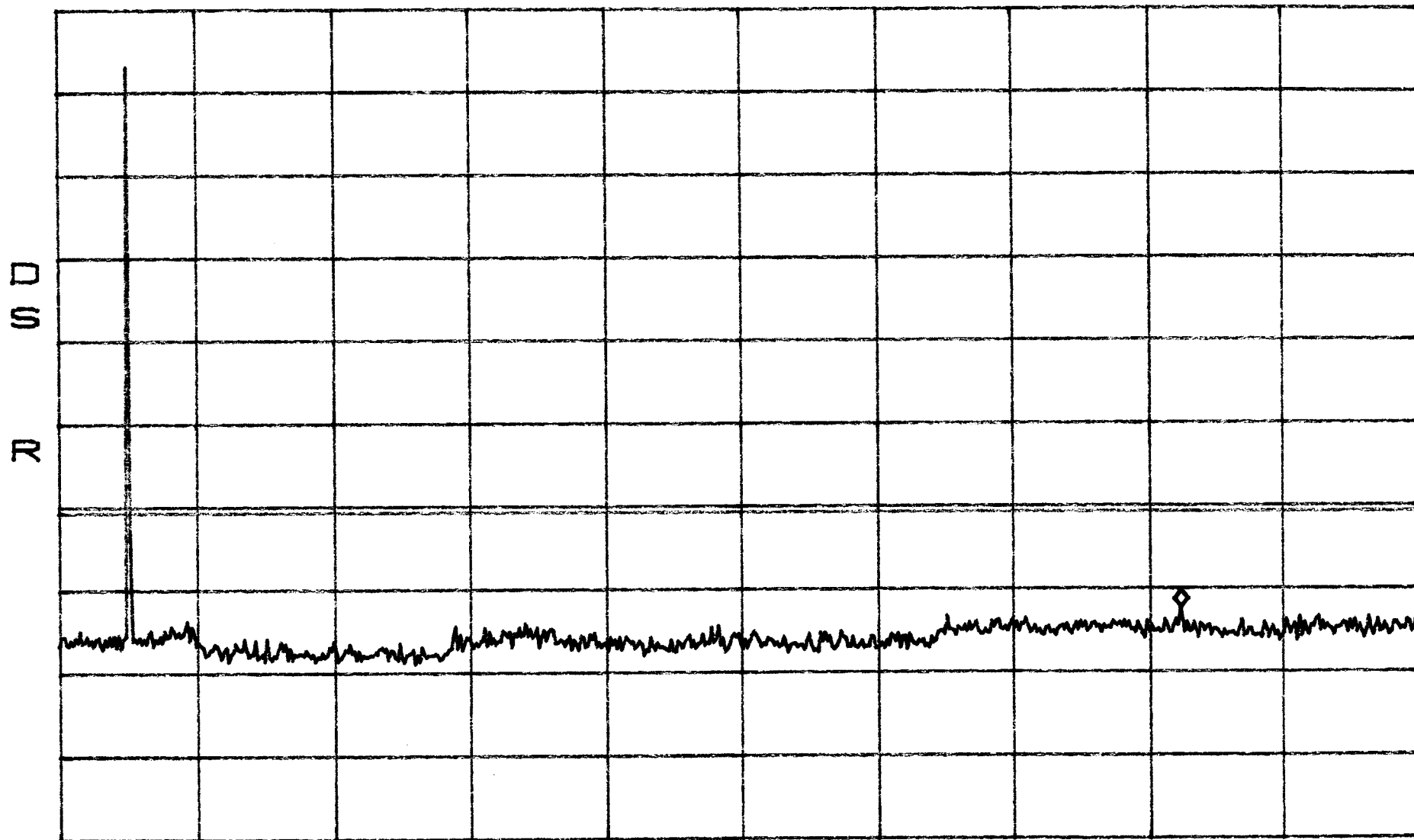
Intermodulation  
Close  
TDMA

BAND B,E,F

\*ATTEN 20dB  
RL 47.8dBm

MKR -24.37dBm  
16.64GHz

10dB/



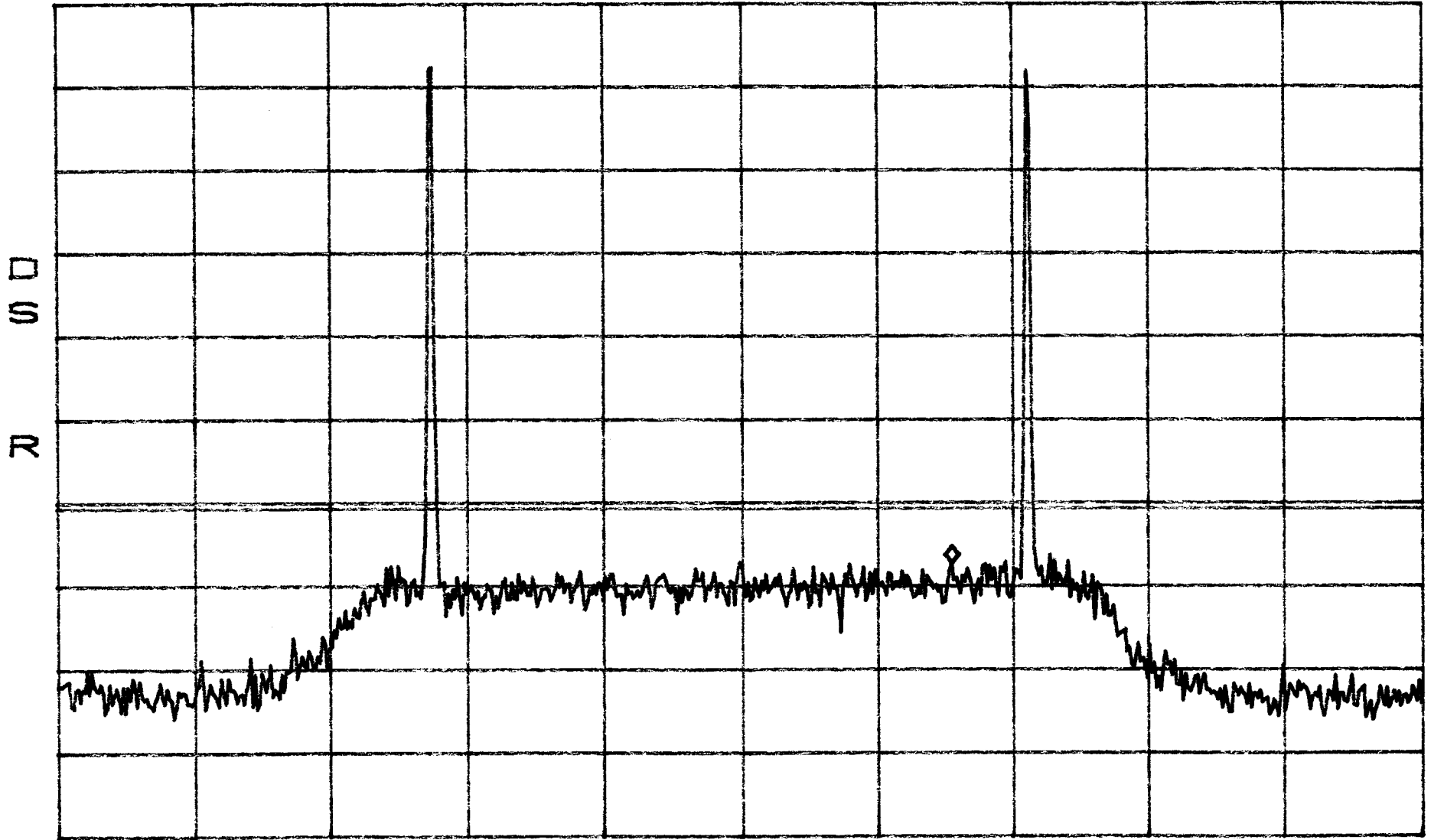
START 1.00GHz                      STOP 20.00GHz  
\*RBW 100kHz                      VBW 100kHz                      SWP 4.8sec

Intermodulation BAND B,E,F  
Apart  
TDMA

\*ATTEN 20dB  
RL 47.8dBm

MKR -19.37dBm  
1.97025GHz

10dB/



CENTER 1.96250GHz  
\*RBW 30kHz VBW 30kHz

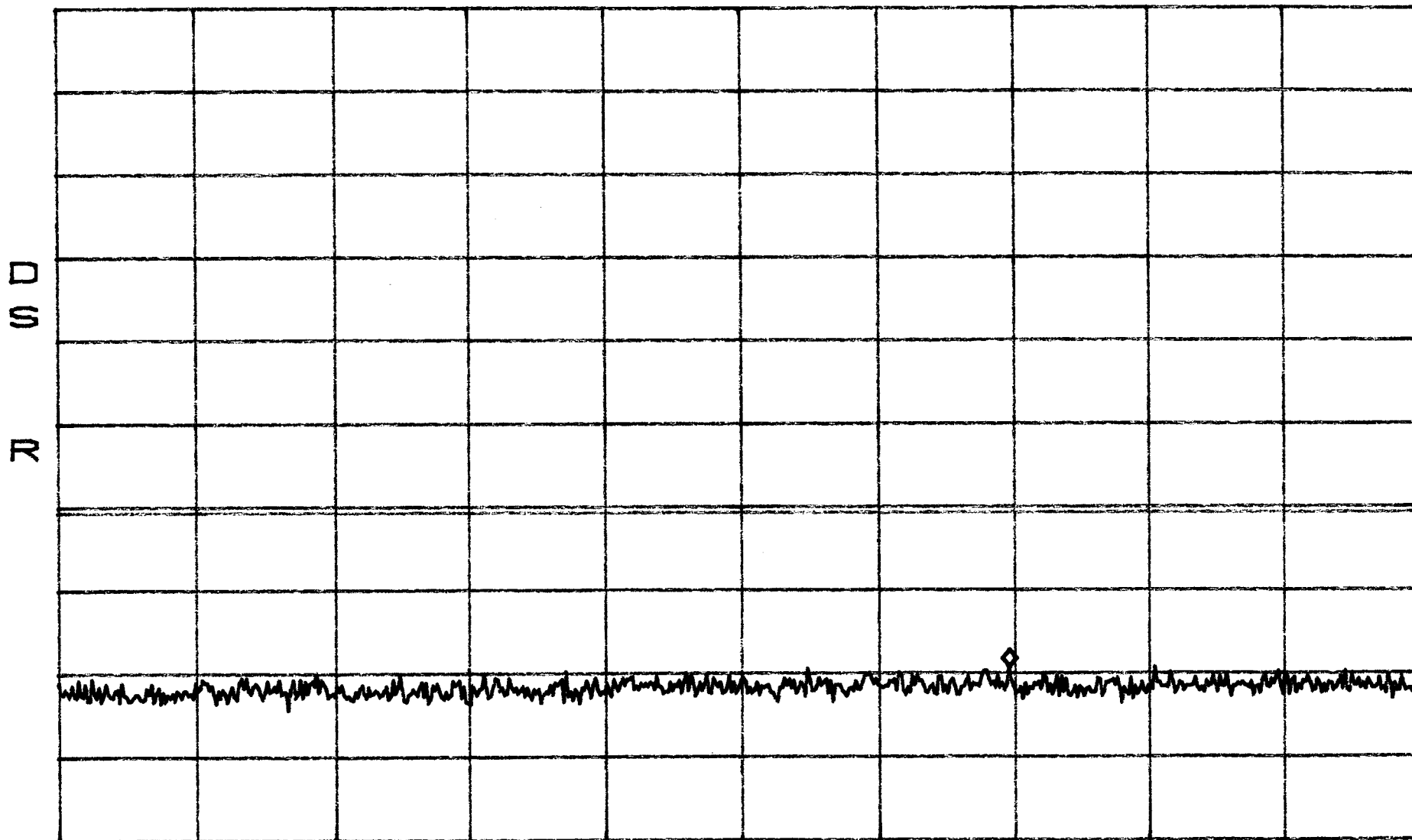
SPAN 50.00MHz  
SWP 140ms

Intermodulation BAND B,E,F  
Apart  
TDMA

\*ATTEN 20dB  
RL 47.8dBm

MKR -31.37dBm  
705.8MHz

10dB/



START 30.0MHz  
\*RBW 30kHz

VBW 30kHz

STOP 1.0000GHz

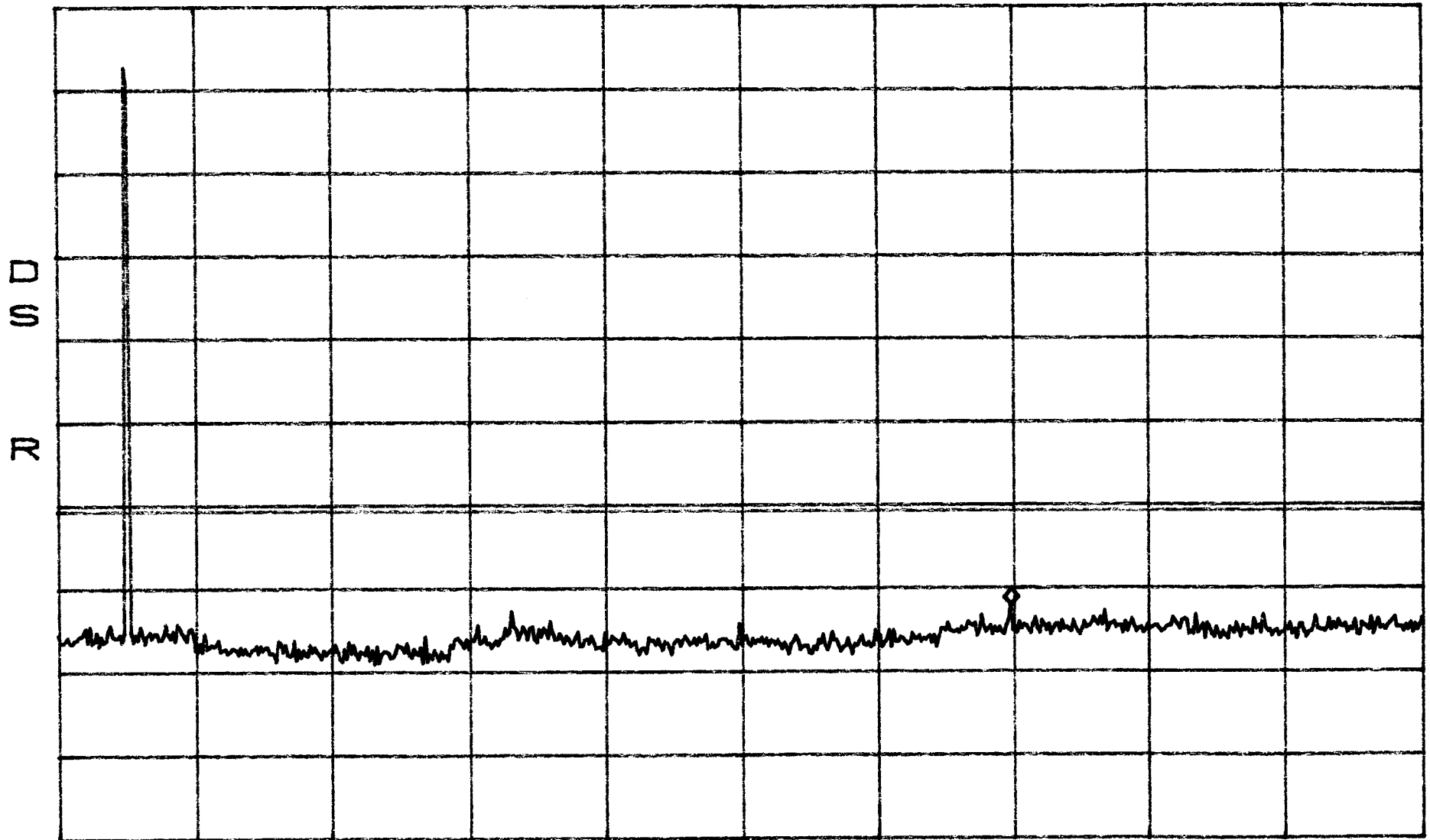
SWP 2.7sec

Intermodulation BAND B,E,F  
Apart  
TDMA

\*ATTEN 20dB  
RL 47.8dBm

MKR -24.20dBm  
14.27GHz

10dB/



START 1.00GHz STOP 20.00GHz  
\*RBW 100kHz VBW 100kHz SWP 4.8sec

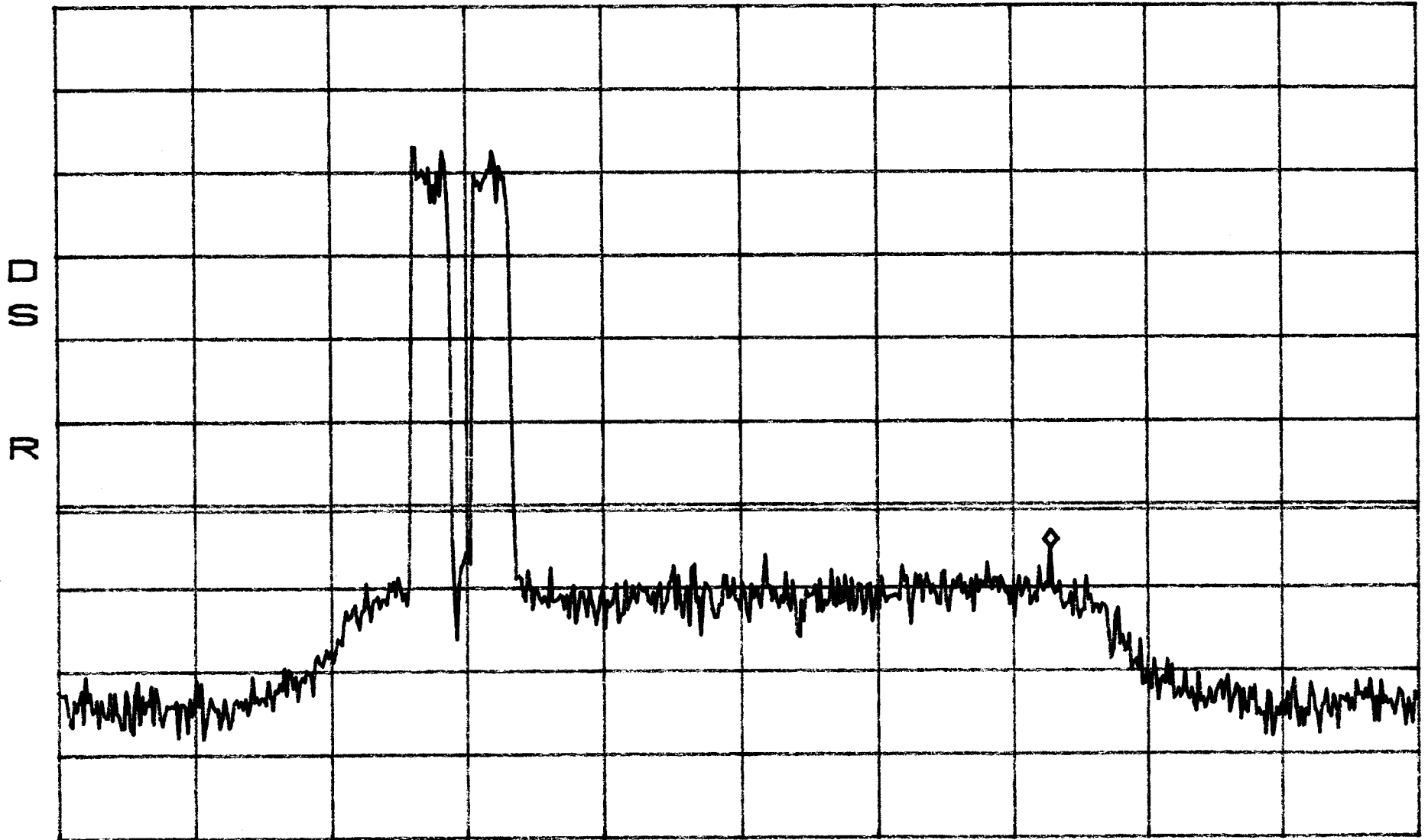
Intermodulation  
Close  
CDMA

BAND B,E,F

\*ATTEN 20dB  
RL 47.8dBm

10dB/

MKR -17.37dBm  
1.97392GHz



CENTER 1.96250GHz  
\*RBW 30kHz VBW 30kHz

SPAN 50.00MHz  
SWP 140ms

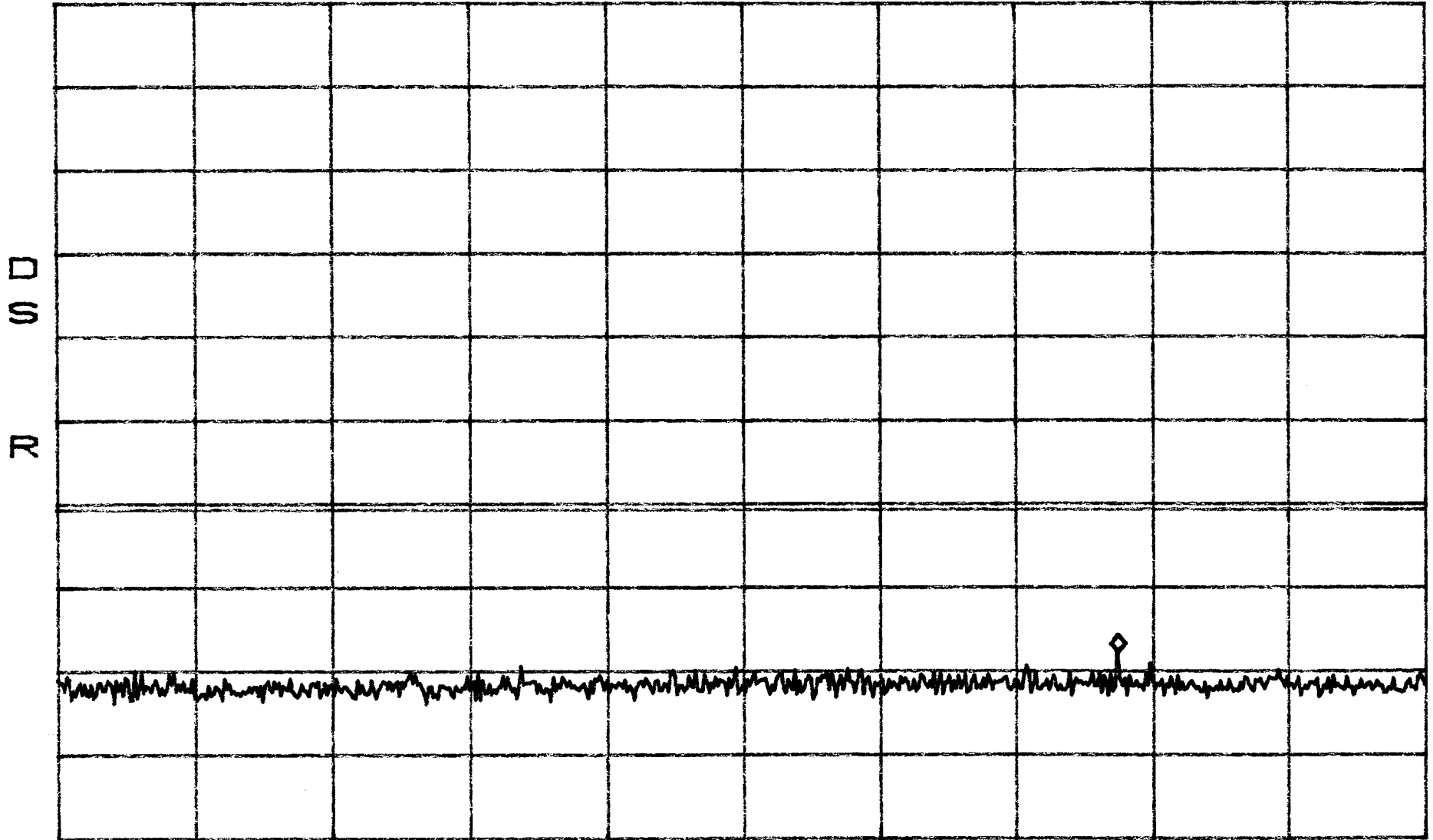
Intermodulation  
Close  
CDMA

BAND B,E,F

\*ATTEN 20dB  
RL 47.8dBm

10dB/

MKR -29.87dBm  
781.8MHz



START 30.0MHz  
\*RBW 30kHz

VBW 30kHz

STOP 1.0000GHz

SWP 2.7sec

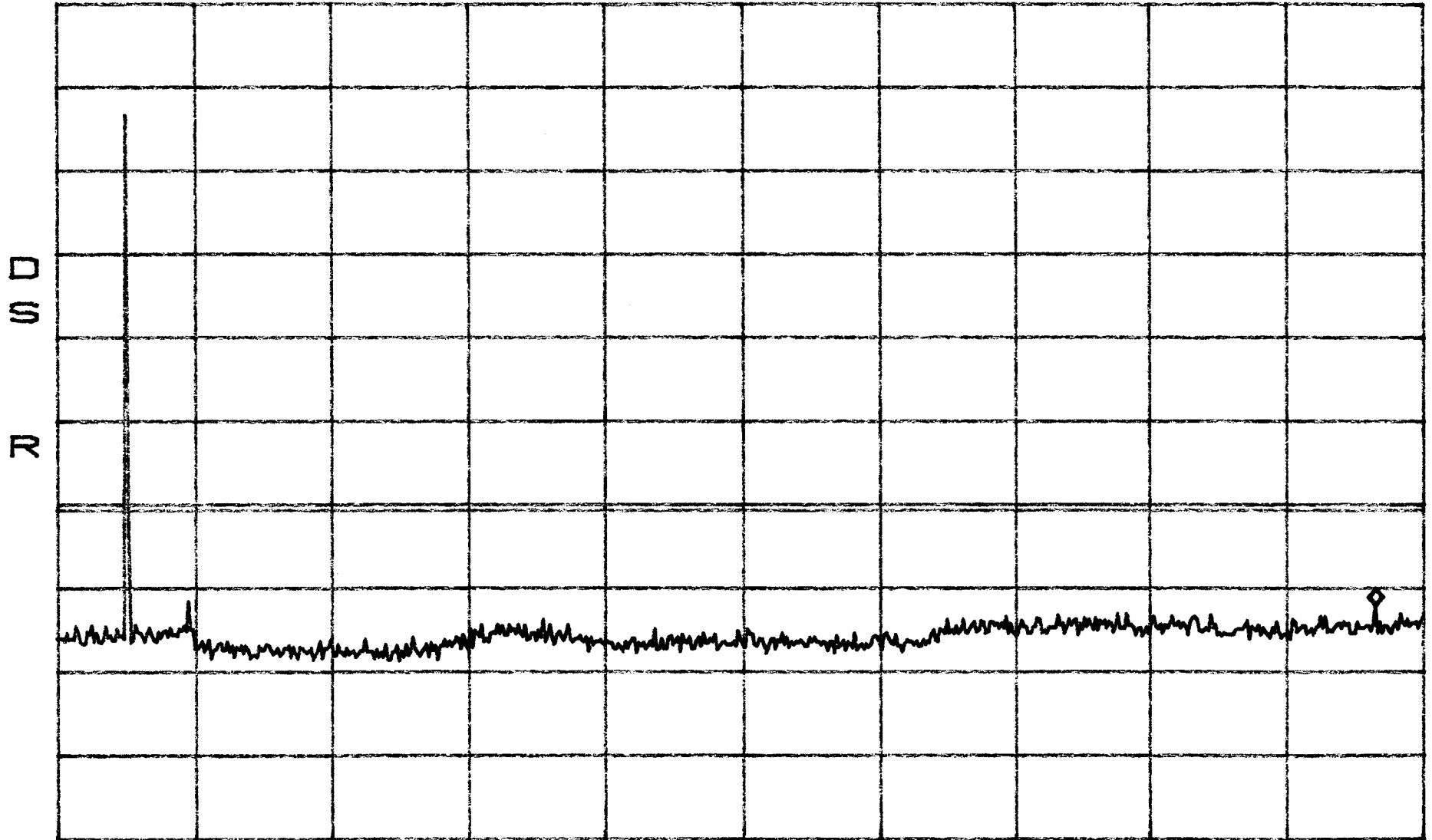
Intermodulation  
Close  
CDMA

BAND B,E,F

\*ATTEN 20dB  
RL 47.8dBm

10dB/

MKR -24.20dBm  
19.34GHz



START 1.00GHz STOP 20.00GHz  
\*RBW 100kHz VBW 100kHz SWP 4.8sec



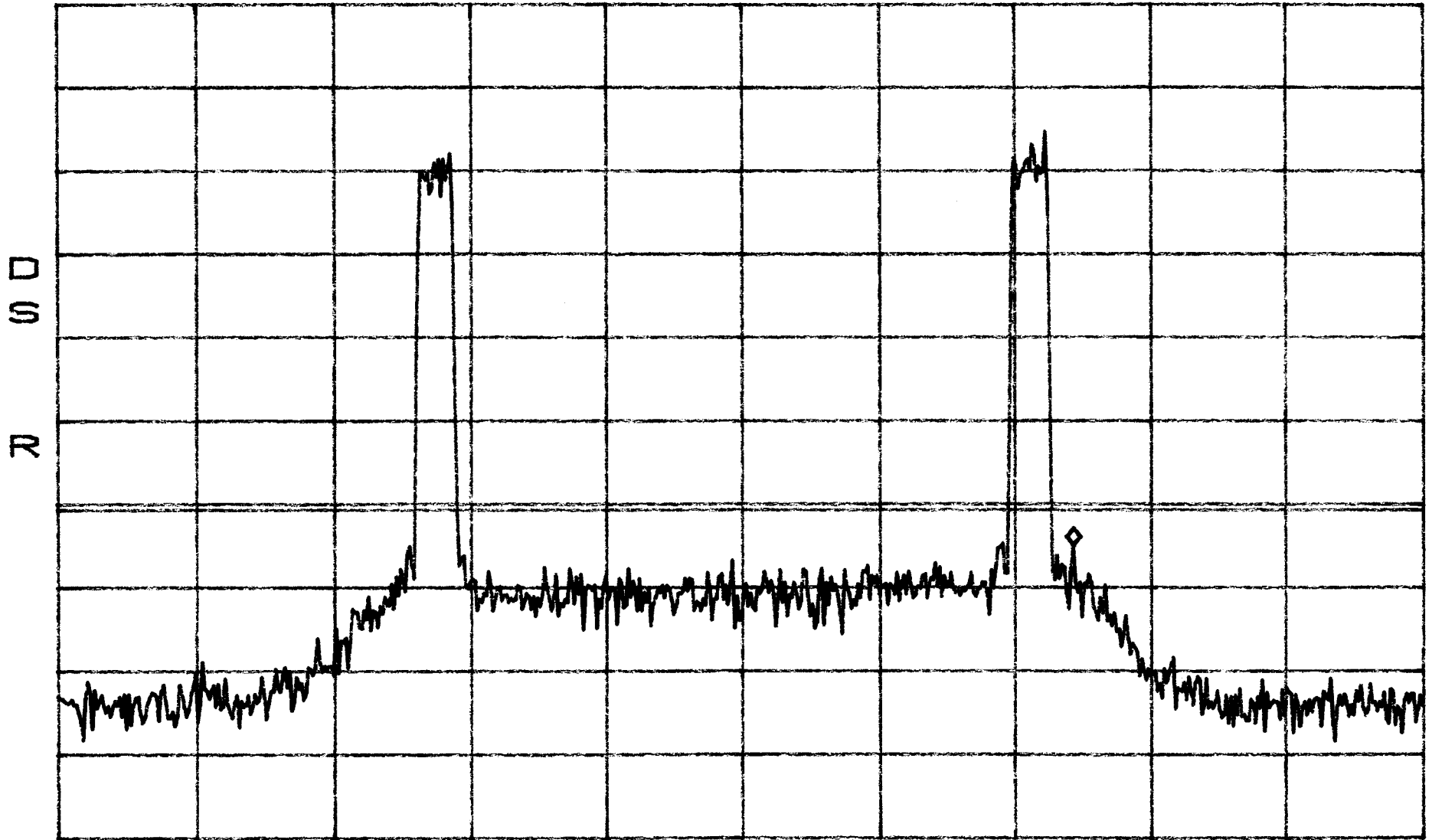
Intermodulation  
Apert  
CDMA

BAND B,E,F

\*ATTEN 20dB  
RL 47.8dBm

10dB/

MKR -17.03dBm  
1.97467GHz



CENTER 1.96250GHz  
\*RBW 30kHz VBW 30kHz

SPAN 50.00MHz  
SWP 140ms

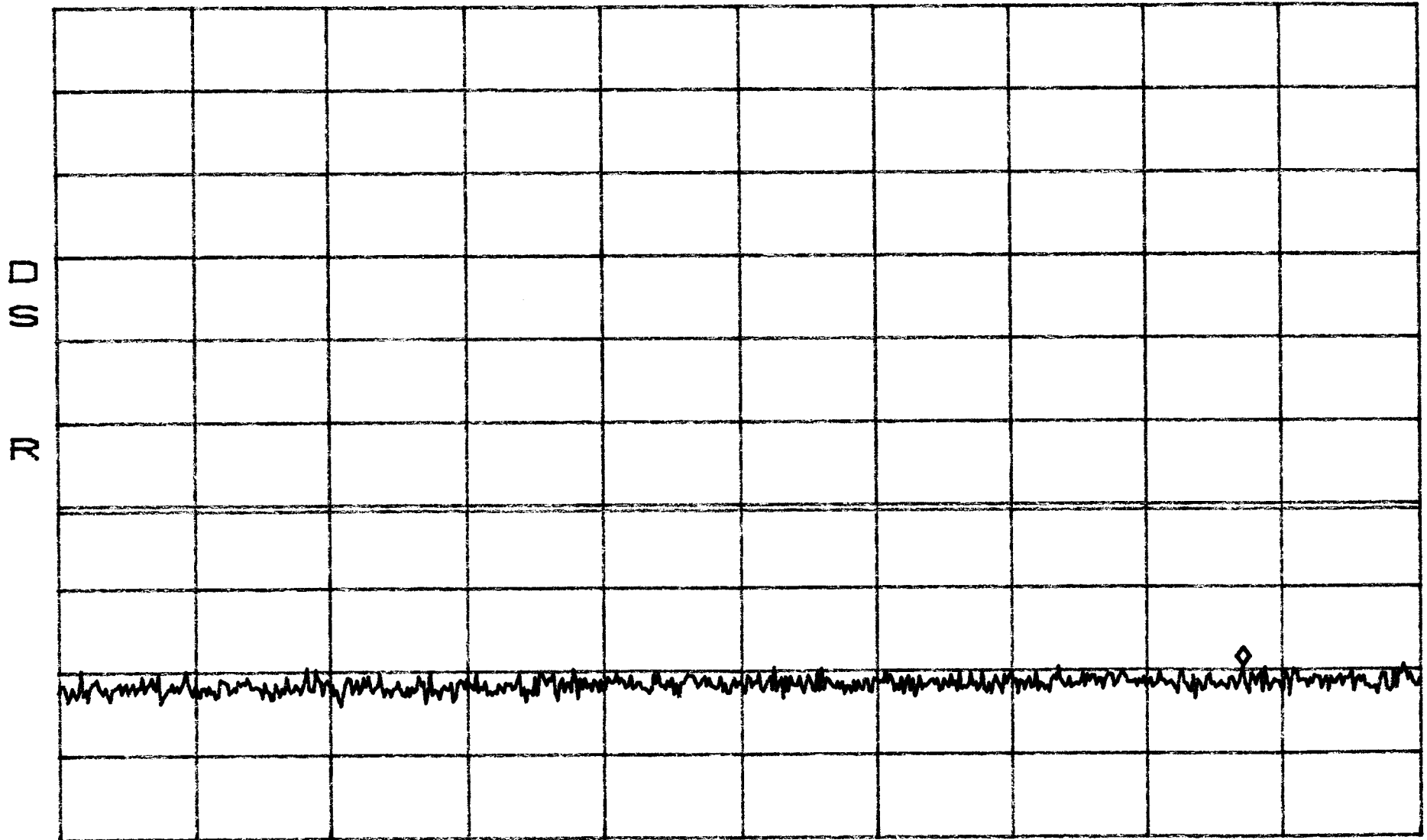
Intermodulation  
Apart  
CDMA

BAND BE,F

\*ATTEN 20dB  
RL 47.8dBm

10dB/

MKR -31.53dBm  
875.5MHz



START 30.0MHz  
\*RBW 30kHz

VBW 30kHz

STOP 1.0000GHz

SWP 2.7sec

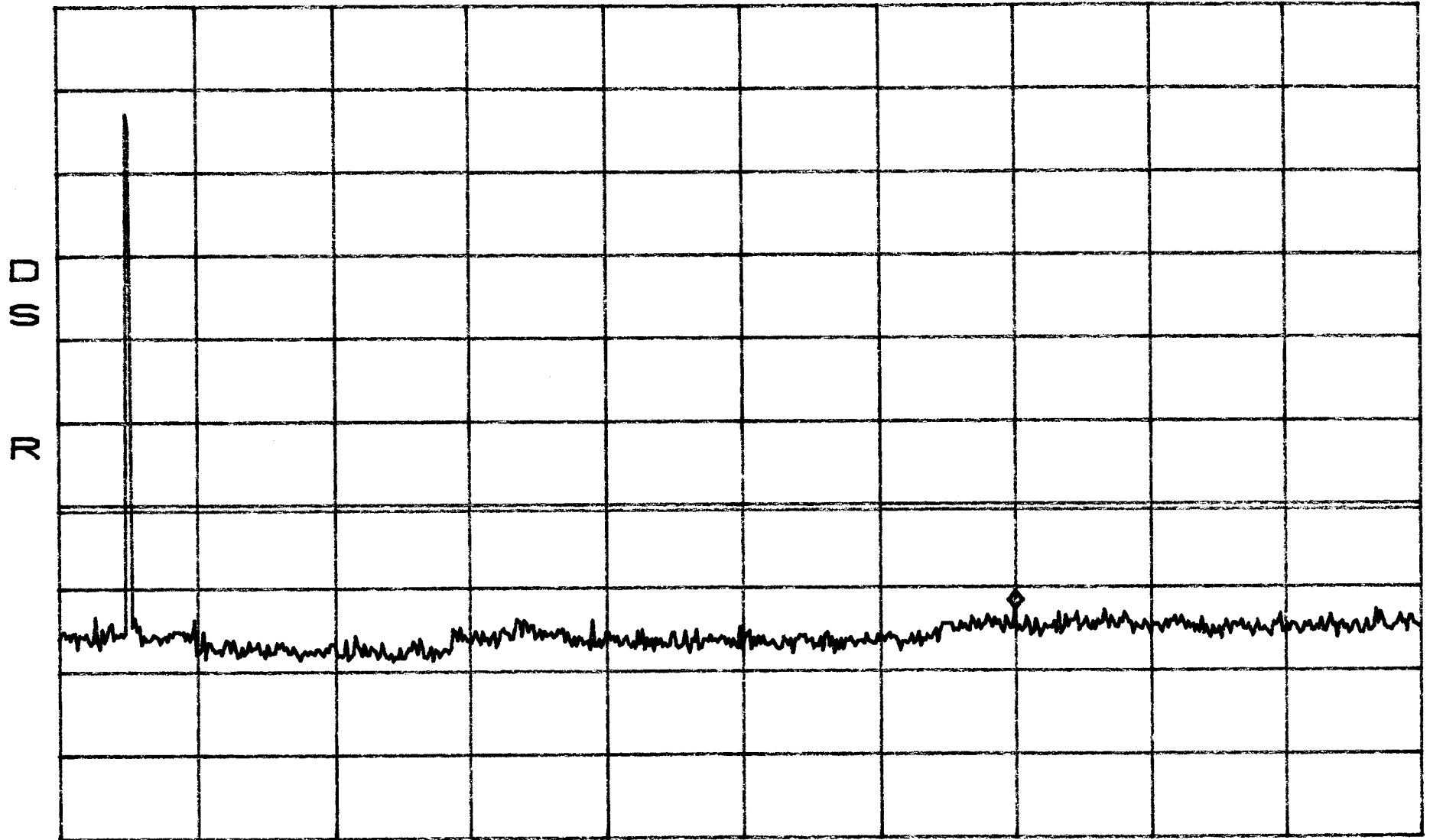
Intermodulation  
Apart  
CDMA

BAND B,E,F

\*ATTEN 20dB  
RL 47.8dBm

MKR -24.70dBm  
14.30GHz

10dB/



START 1.00GHz STOP 20.00GHz  
\*RBW 100kHz VBW 100kHz SWP 4.8sec

Intermodulation

BAND E,F,C

Close

FM

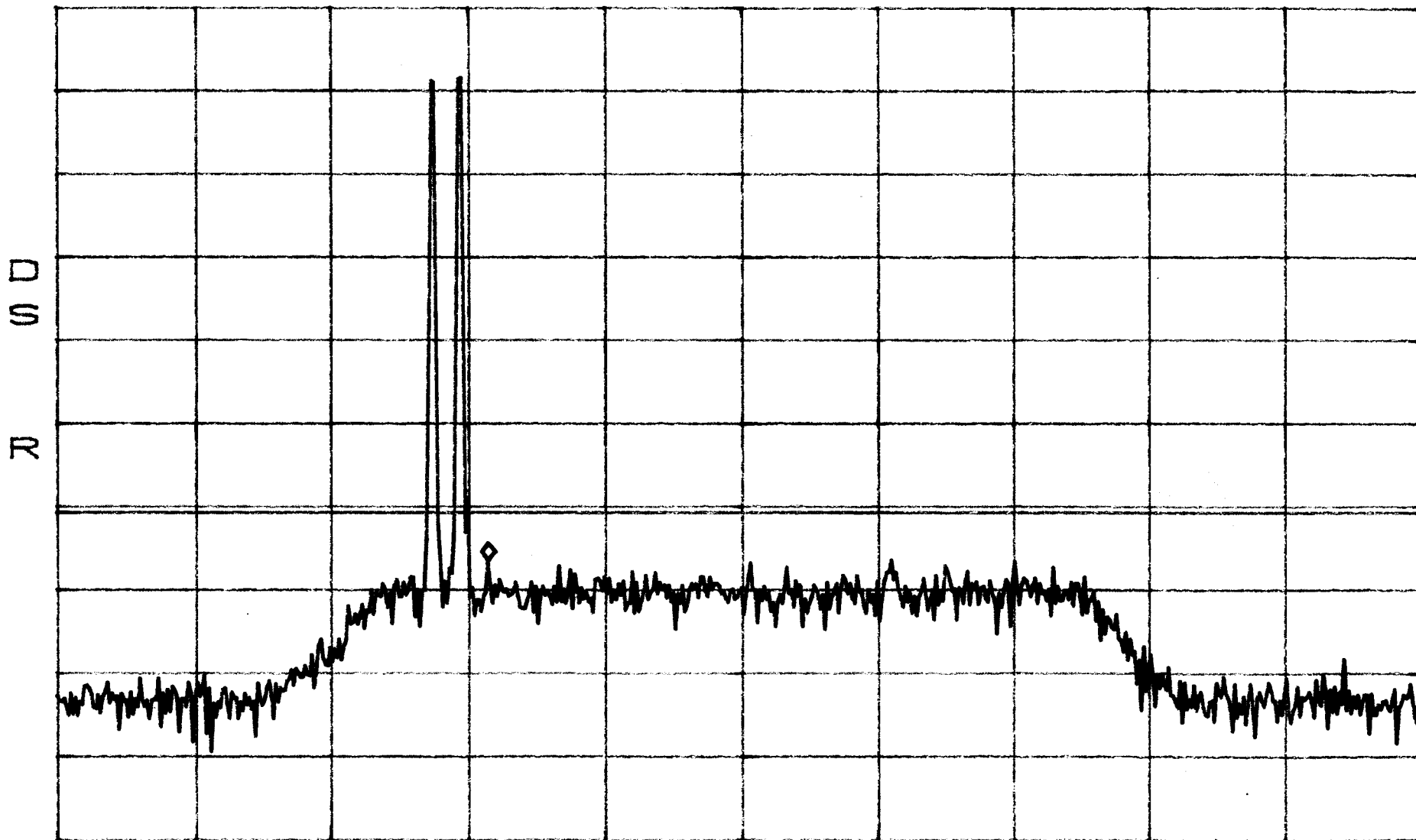
\*ATTEN 20dB

MKR -18.53dBm

RL 47.8dBm

10dB/

1.96825GHz



CENTER 1.97750GHz

SPAN 50.00MHz

\*RBW 30kHz

VBW 30kHz

SWP 140ms

Intermodulation

BAND E,F,C

Close

FM

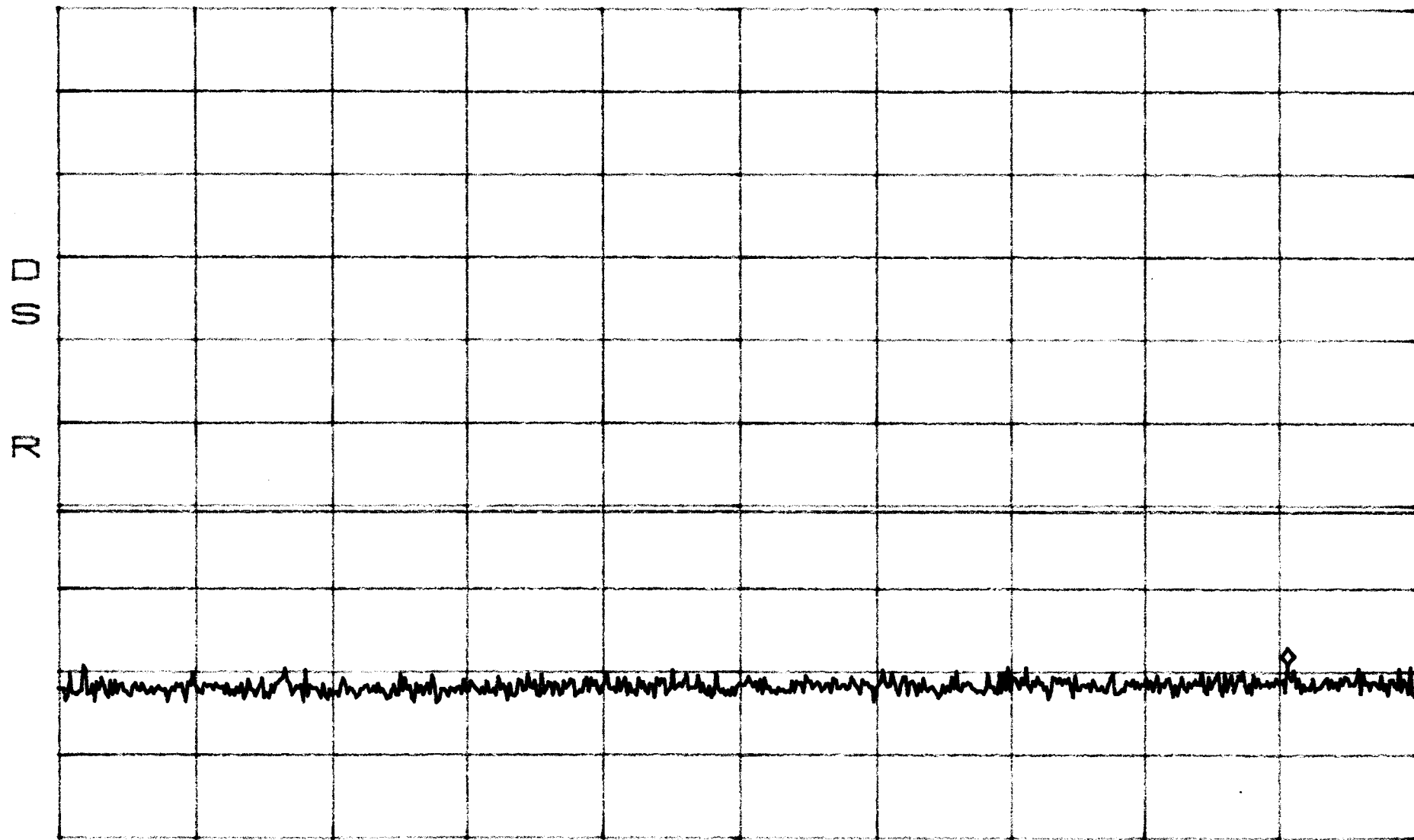
\*ATTEN 20dB

MKR -31.20dBm

RL 47.8dBm

10dB/

909.5MHz



START 30.0MHz

STOP 1.0000GHz

\*RBW 30kHz

VBW 30kHz

SWP 2.7sec

Intermodulation

BAND E,F,C

Close

FM

\*ATTEN 20dB

MKR -24.70dBm

RL 47.8dBm

10dB/

18.73GHz



START 1.00GHz

STOP 20.00GHz

\*RBW 100kHz

VBW 100kHz

SWP 4.8sec

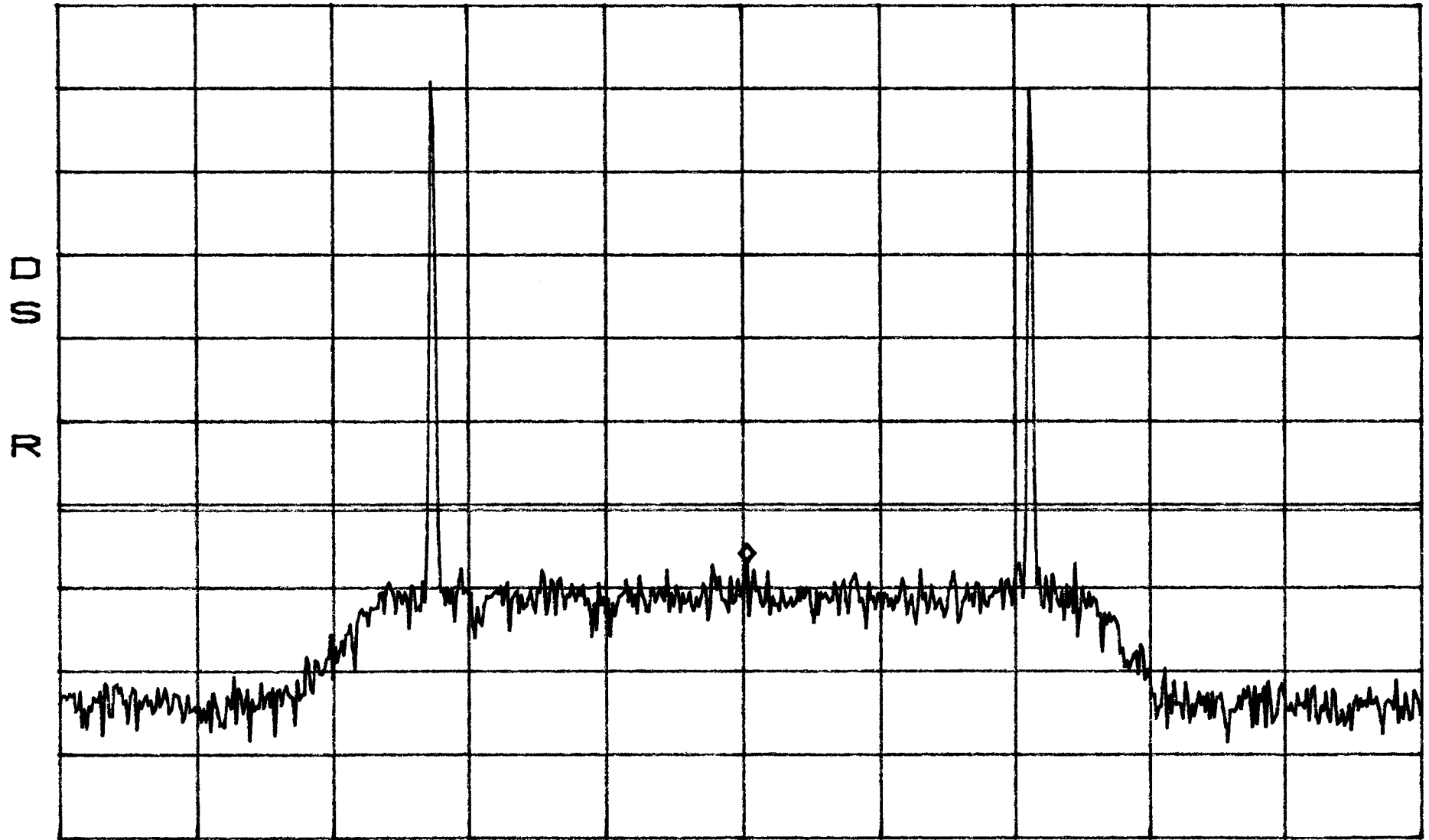
Intermodulation  
Apart  
FM

BAND E,F,K

\*ATTEN 20dB  
RL 47.8dBm

10dB/

MKR -19.03dBm  
1.97767GHz



CENTER 1.97750GHz SPAN 50.00MHz  
\*RBW 30kHz VBW 30kHz SWP 140ms

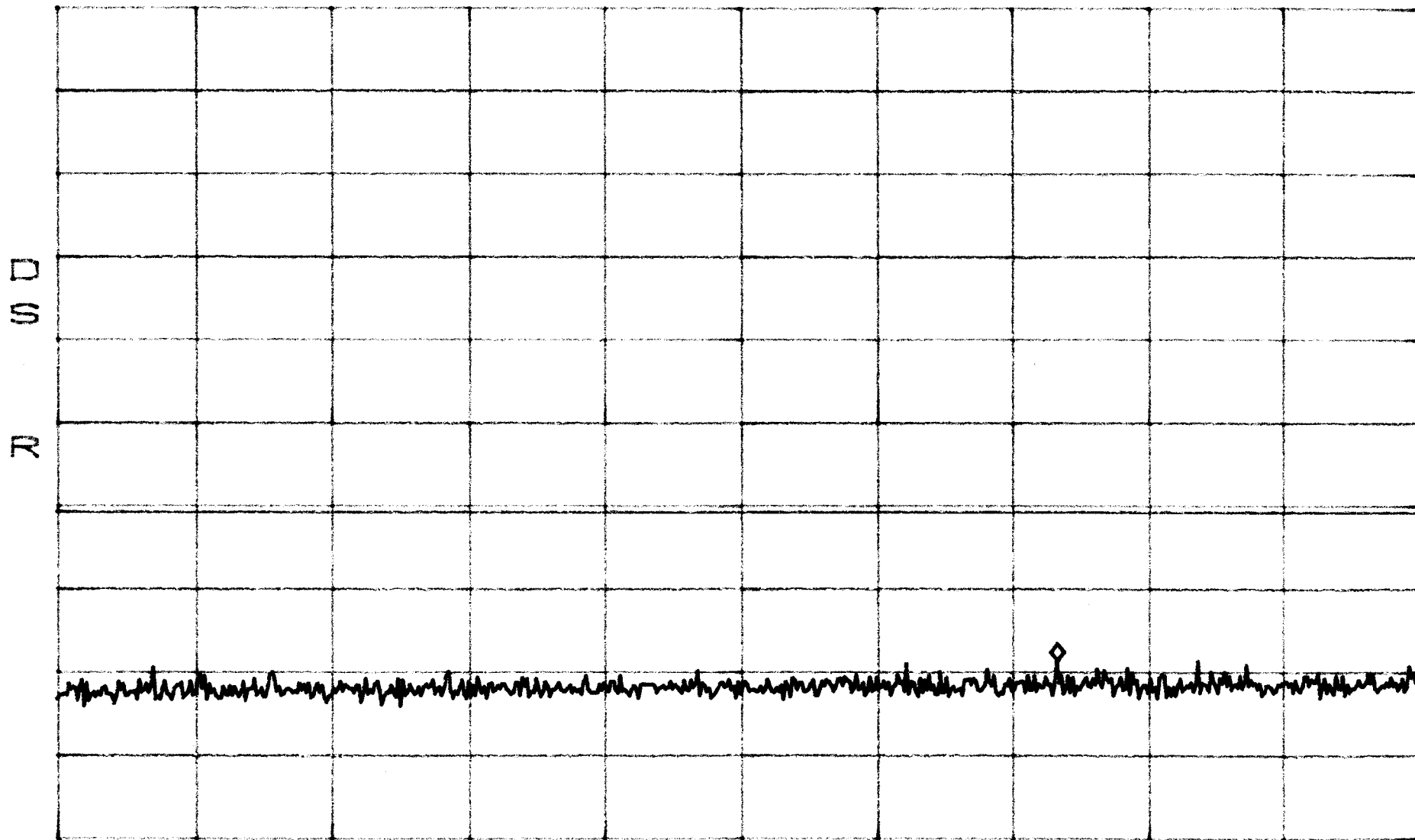
Intermodulation  
Apart  
FM

BAND E,F,C

\*ATTEN 20dB  
RL 47.8dBm

10dB/

MKR -30.70dBm  
741.3MHz



START 30.0MHz  
\*RBW 30kHz

VBW 30kHz

STOP 1.0000GHz

SWP 2.7sec



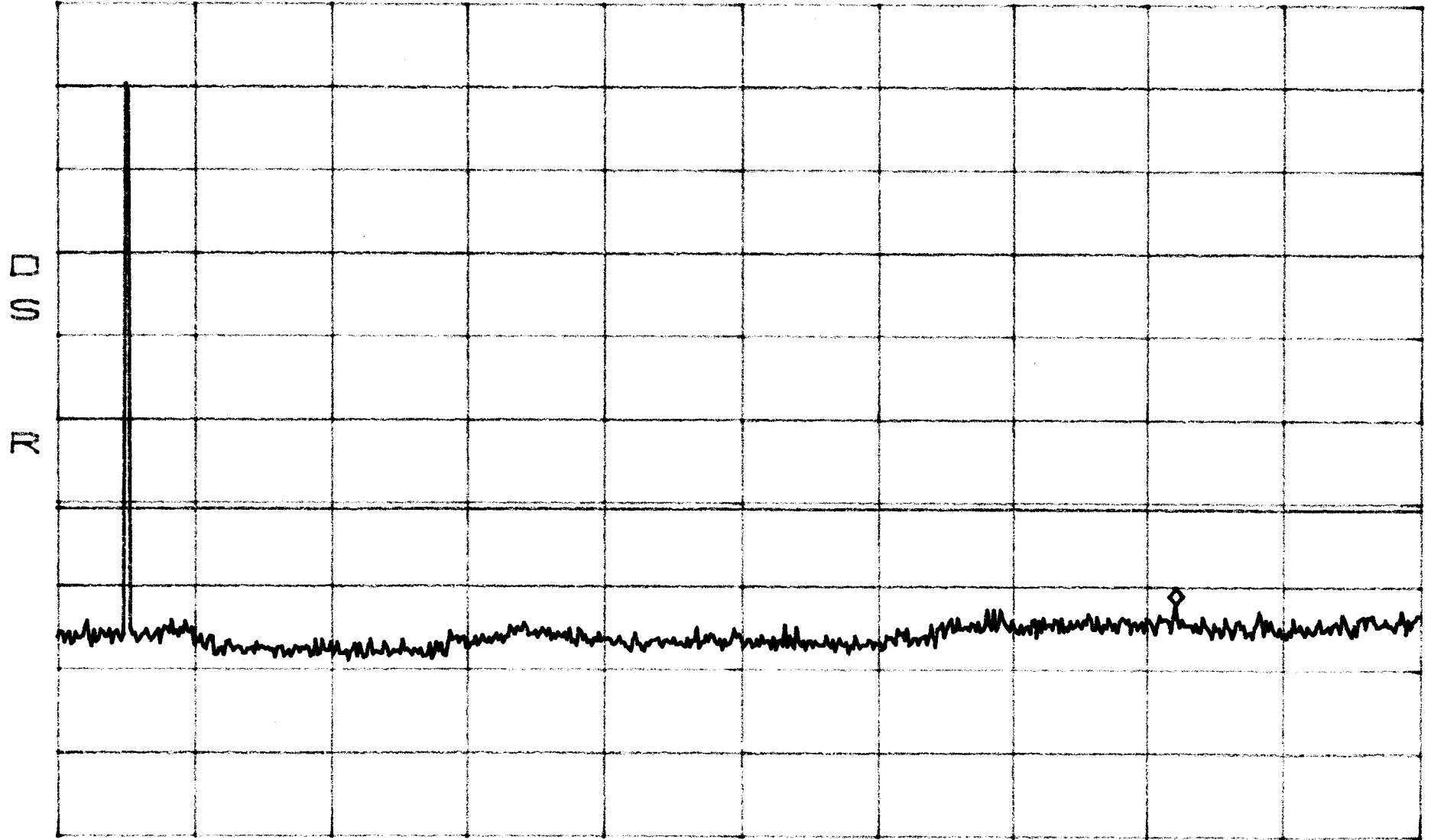
Intermodulation  
Apart  
FM

BAND E,F,C

\*ATTEN 20dB  
BPO2  
RL 47.8dBm

MKR -24.20dBm  
16.61GHz

10dB/BPO1



START 1.00GHz

STOP 20.00GHz

\*RBW 100kHz

VBW 100kHz

SWP 4.8sec

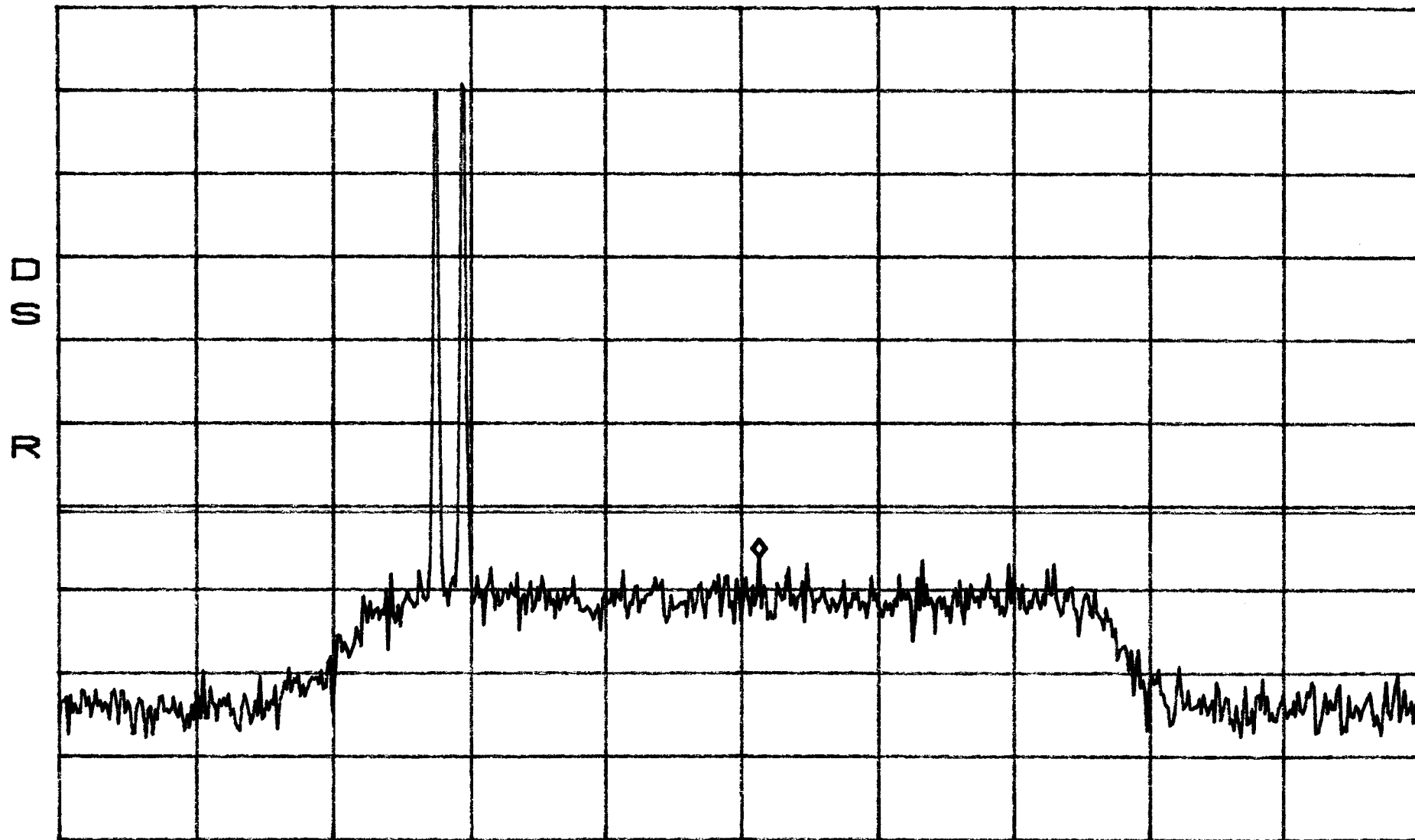
Intermodulation  
Close  
TDMA

BAND E,F,C

\*ATTEN 20dB  
RL 47.8dBm

MKR -18.20dBm  
1.97817GHz

10dB/



CENTER 1.97750GHz

SPAN 50.00MHz

\*RBW 30kHz

VBW 30kHz

SWP 140ms

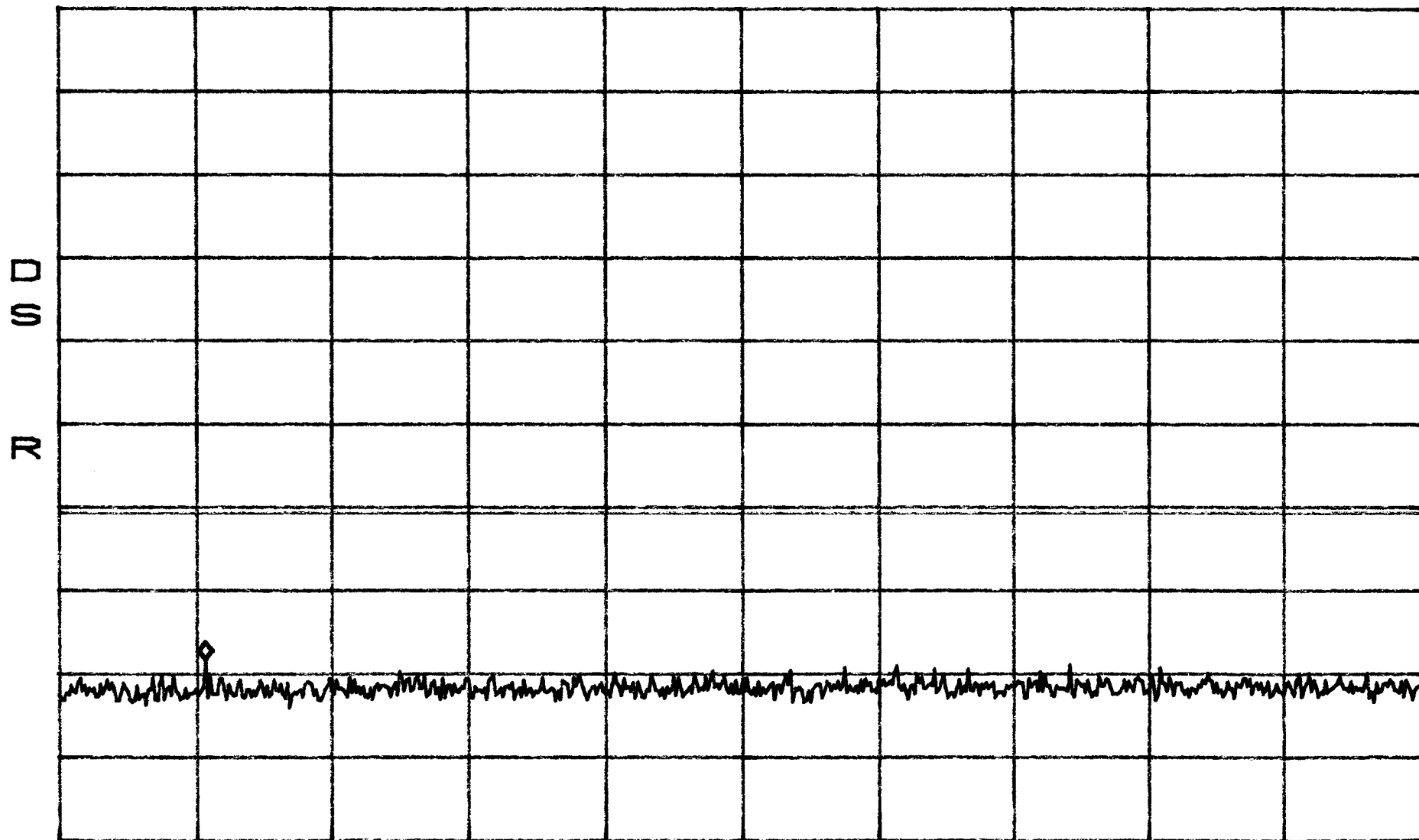
Intermodulation  
Close  
TDMA

BAND E,F,C

\*ATTEN 20dB  
RL 47.8dBm

10dB/

MKR -30.37dBm  
133.5MHz



START 30.0MHz  
\*RBW 30kHz

VBW 30kHz

STOP 1.0000GHz

SWP 2.7sec

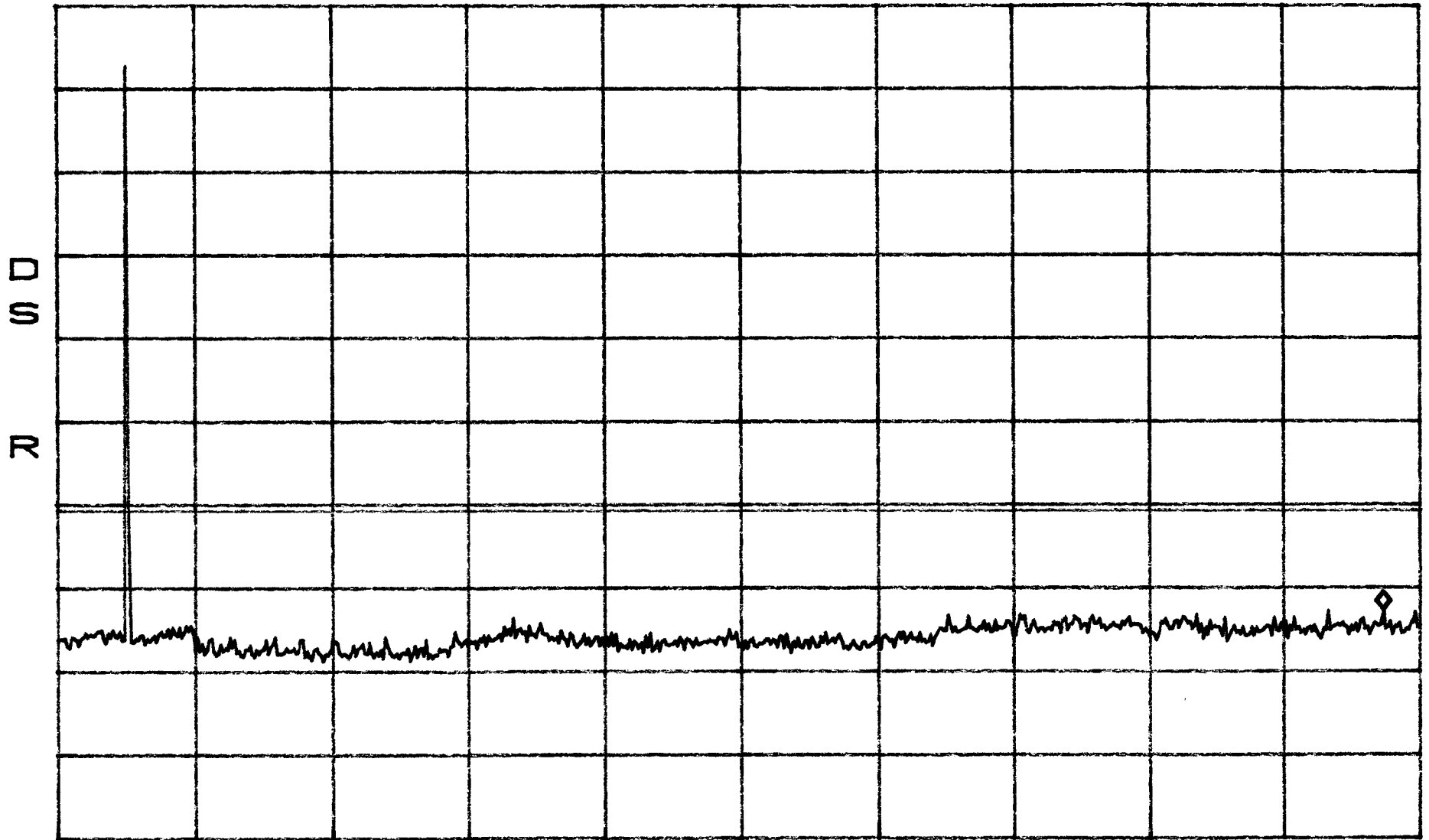
Intermodulation  
close  
TDMA

BAND E,F,C

\*ATTEN 20dB  
RL 47.8dBm

MKR -24.70dBm  
19.49GHz

10dB/



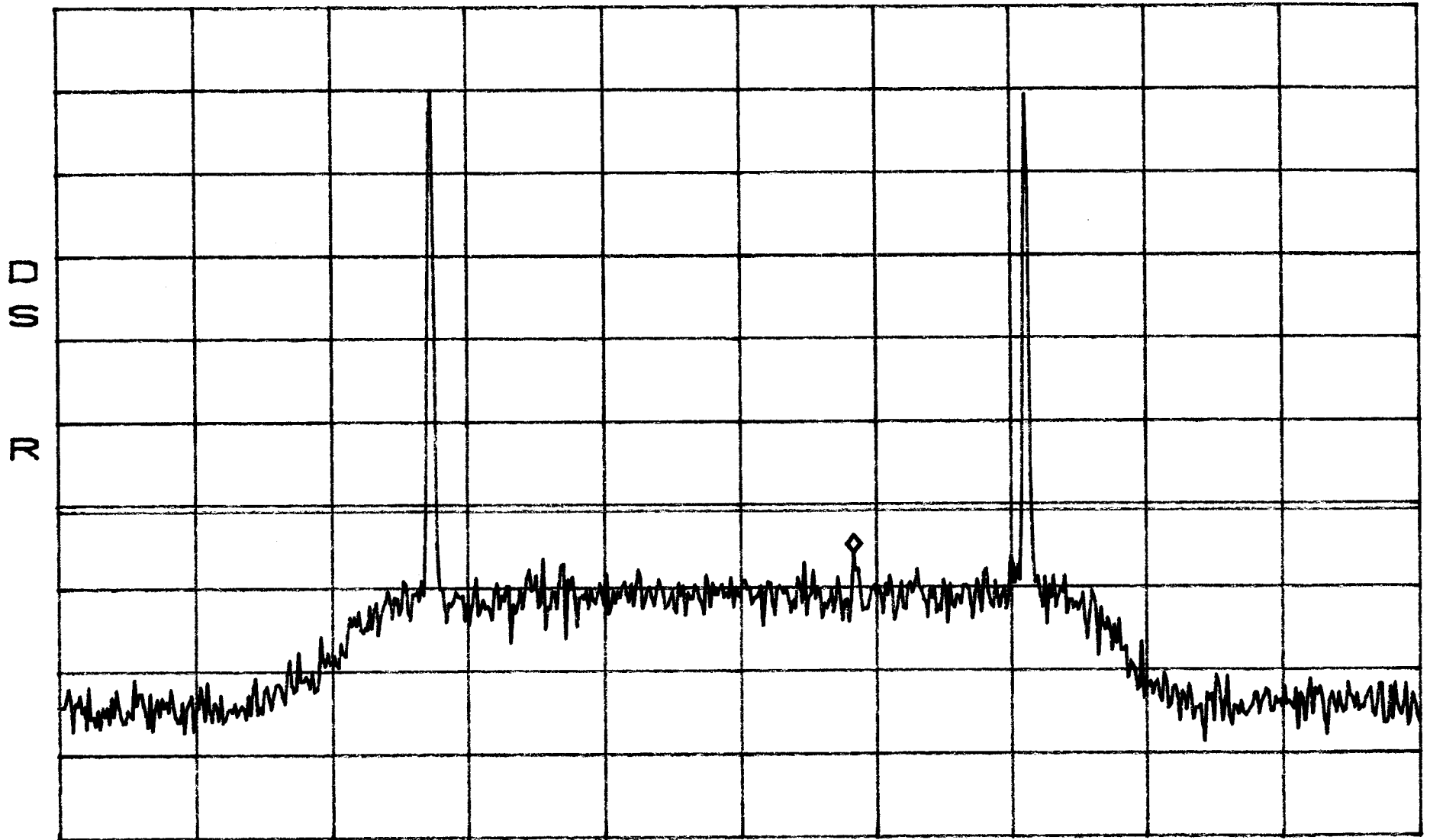
START 1.00GHz STOP 20.00GHz  
\*RBW 100kHz VBW 100kHz SWP 4.8sec

Intermodulation BAND E,F,C  
Apart  
TDMA

\*ATTEN 20dB  
RL 47.8dBm

MKR -17.87dBm  
1.98167GHz

10dB/



CENTER 1.97750GHz

SPAN 50.00MHz

\*RBW 30kHz

VBW 30kHz

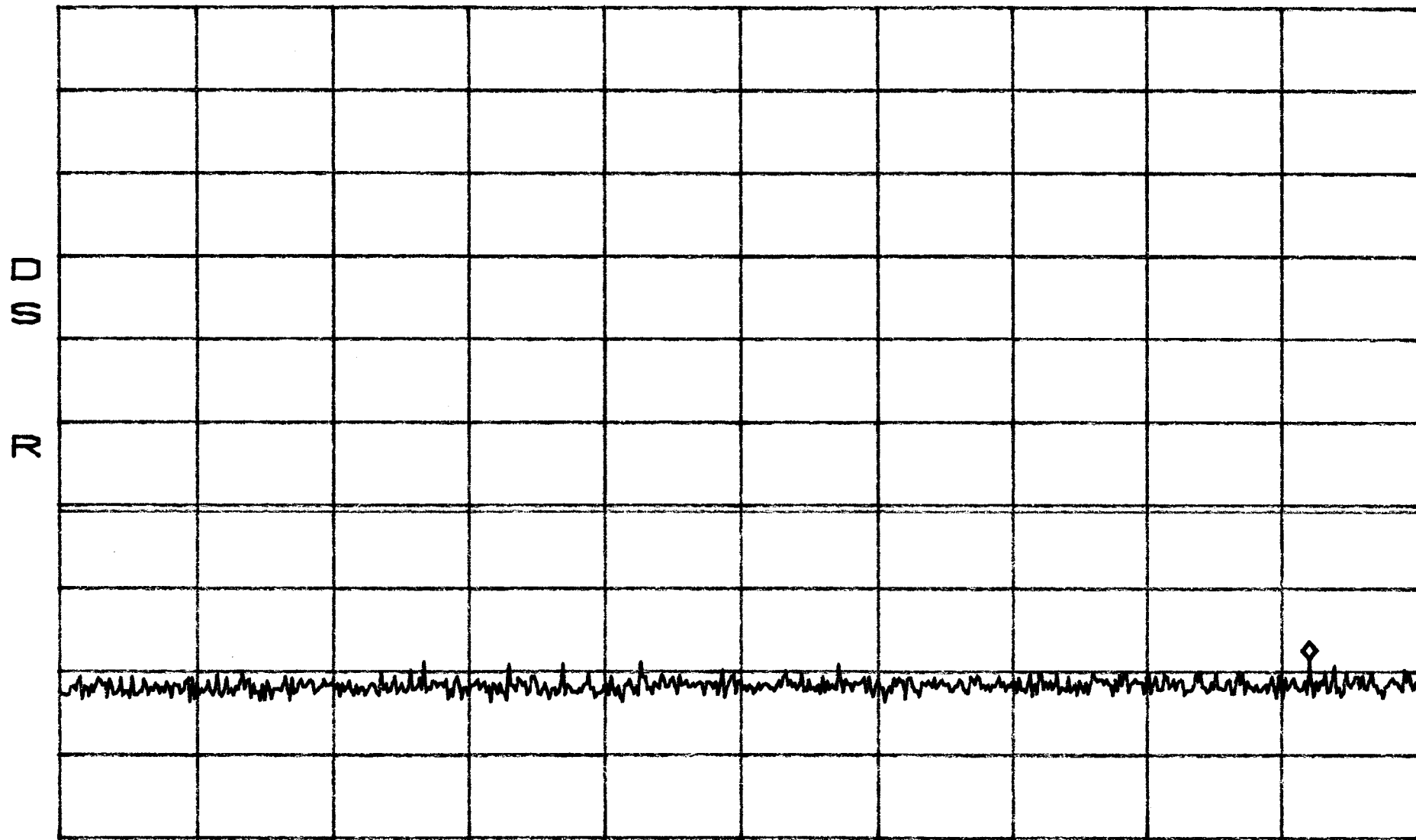
SWP 140ms

Intermodulation BAND E,F,C  
Apart  
TDMA

\*ATTEN 20dB  
RL 47.8dBm

MKR -30.53dBm  
924.0MHz

10dB/



START 30.0MHz  
\*RBW 30kHz

VBW 30kHz

STOP 1.0000GHz

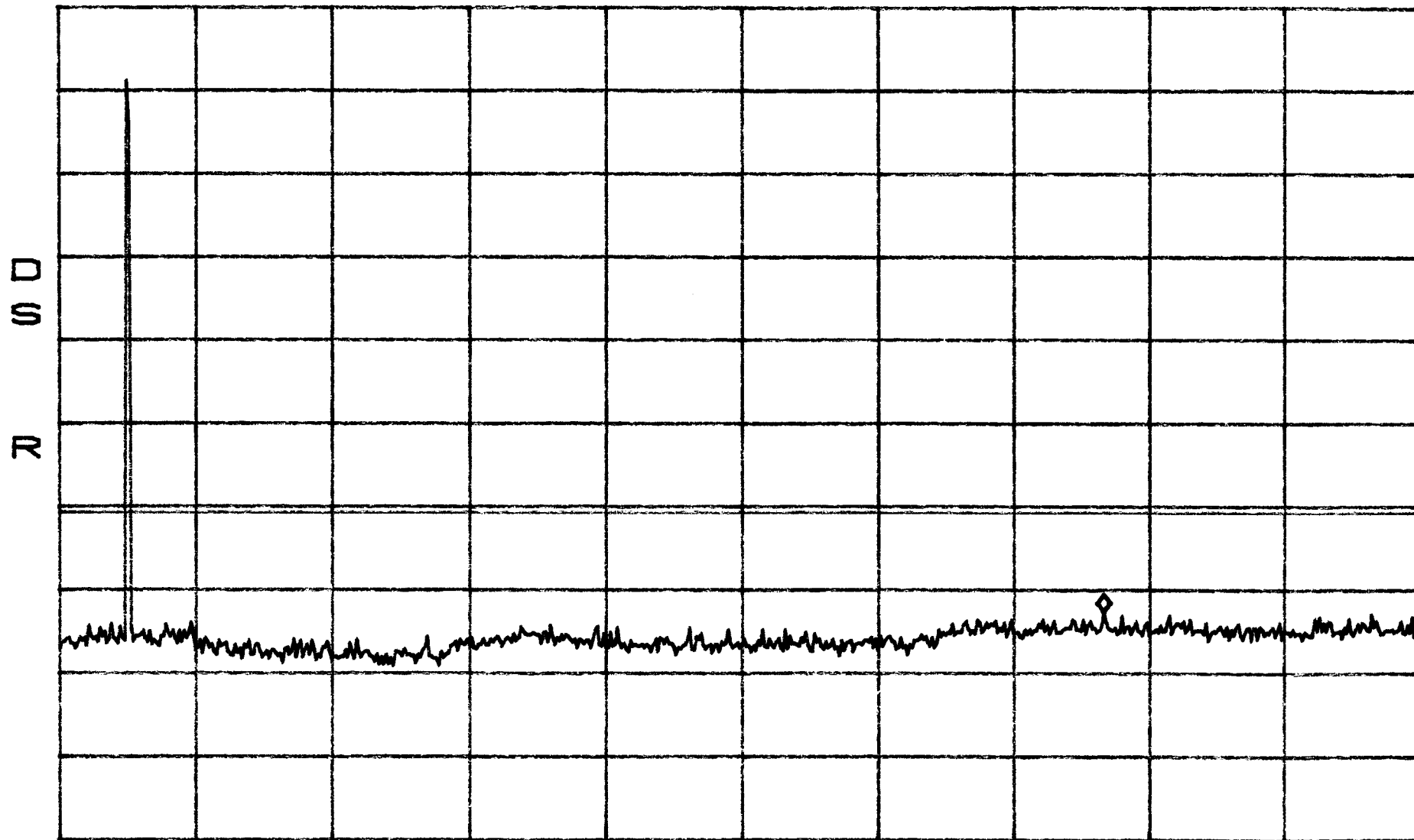
SWP 2.7sec

Intermodulation BAND EFC  
Apart  
TDMA

\*ATTEN 20dB  
RL 47.8dBm

MKR -24.70dBm  
15.57GHz

10dB/



START 1.00GHz STOP 20.00GHz  
\*RBW 100kHz VBW 100kHz SWP 4.8sec

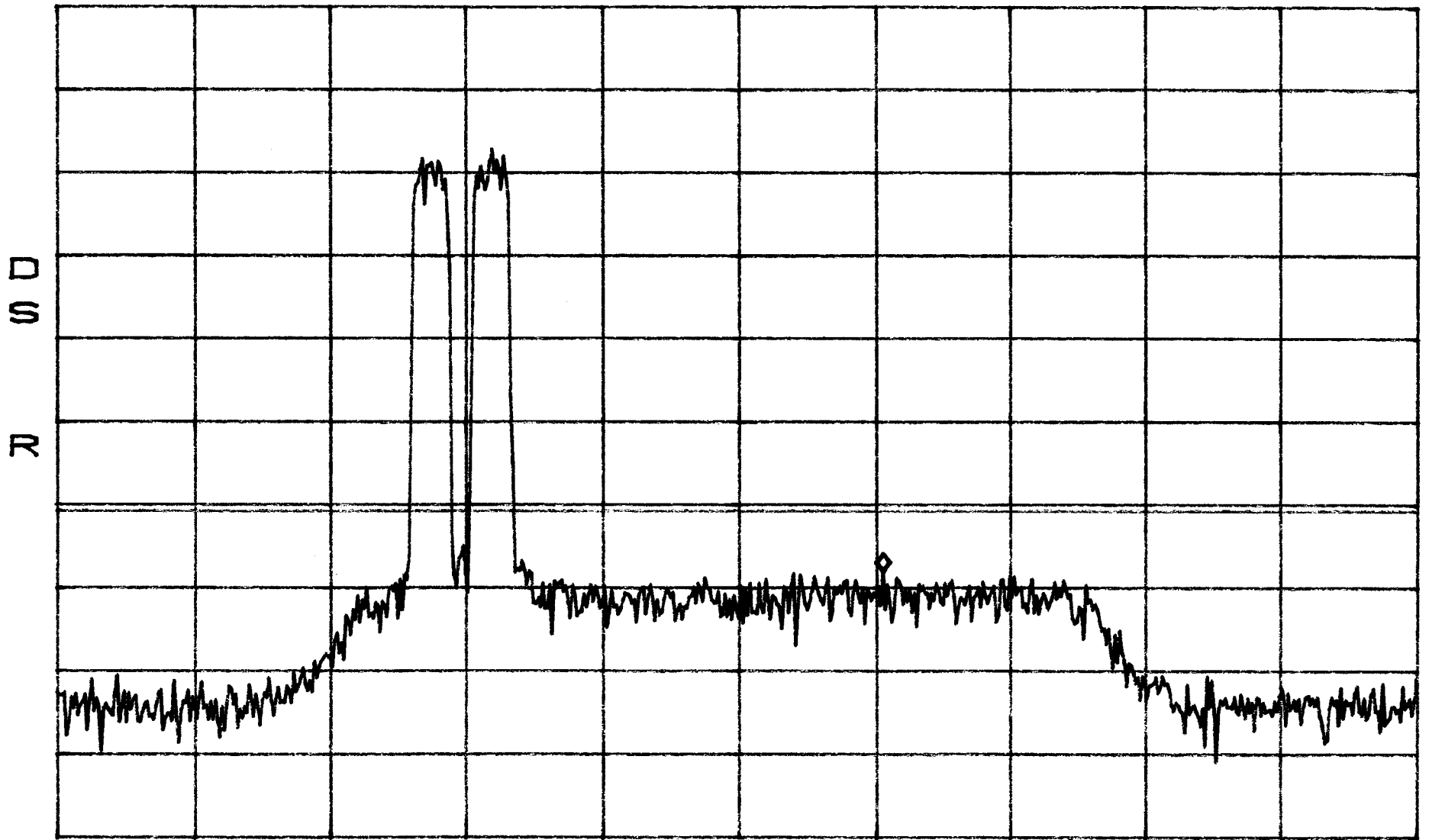
Intermodulation  
Close  
CDMA

BAND E,F,C

\*ATTEN 20dB  
RL 47.8dBm

MKR -20.03dBm  
1.98275GHz

10dB/



CENTER 1.97750GHz SPAN 50.00MHz  
\*RBW 30kHz VBW 30kHz SWP 140ms



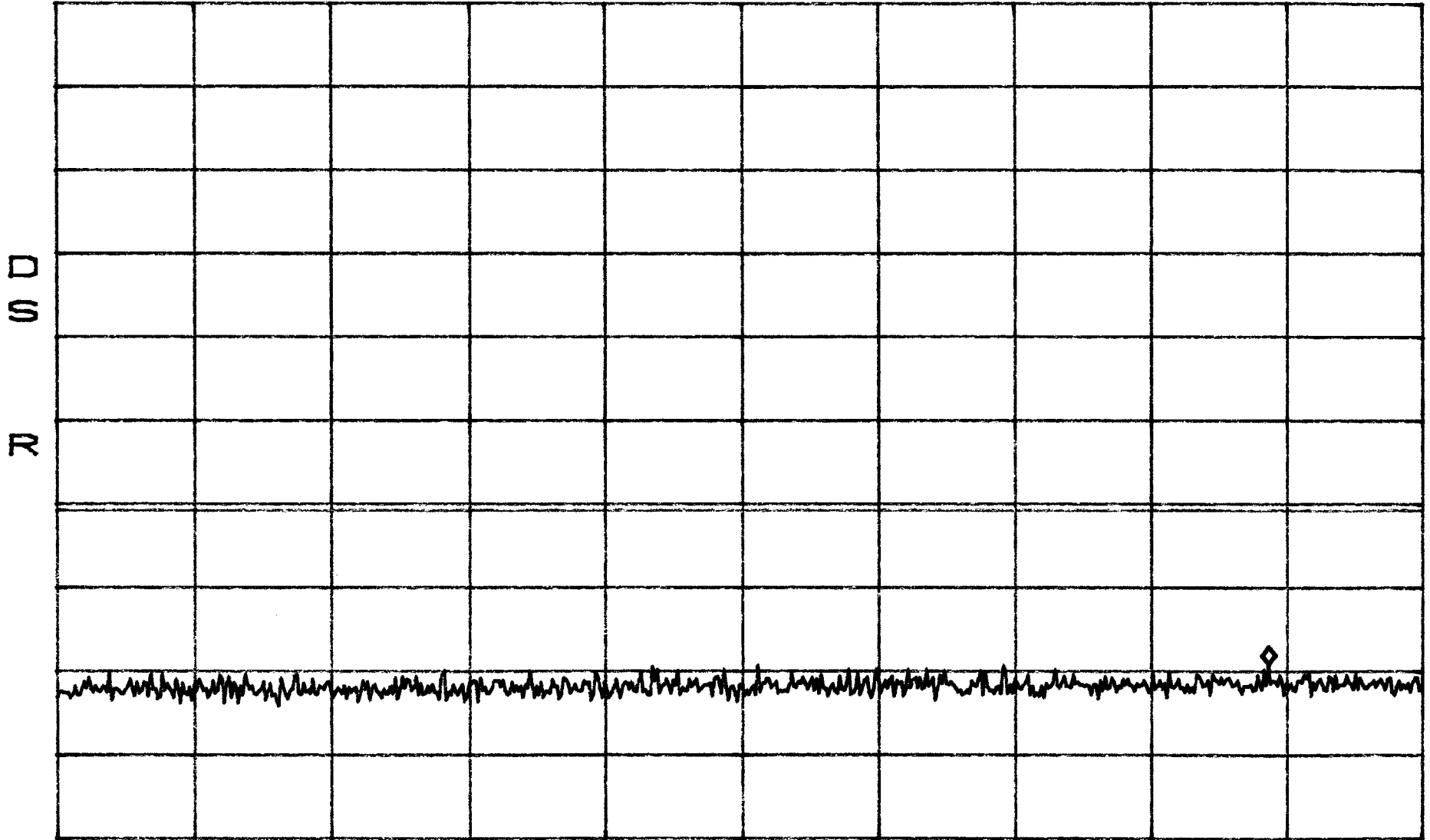
Intermodulation  
Close  
CDMA

BAND E,F,C

\*ATTEN 20dB  
RL 47.8dBm

10dB/

MKR -31.20dBm  
890.1MHz



START 30.0MHz  
\*RBW 30kHz

VBW 30kHz

STOP 1.0000GHz

SWP 2.7sec

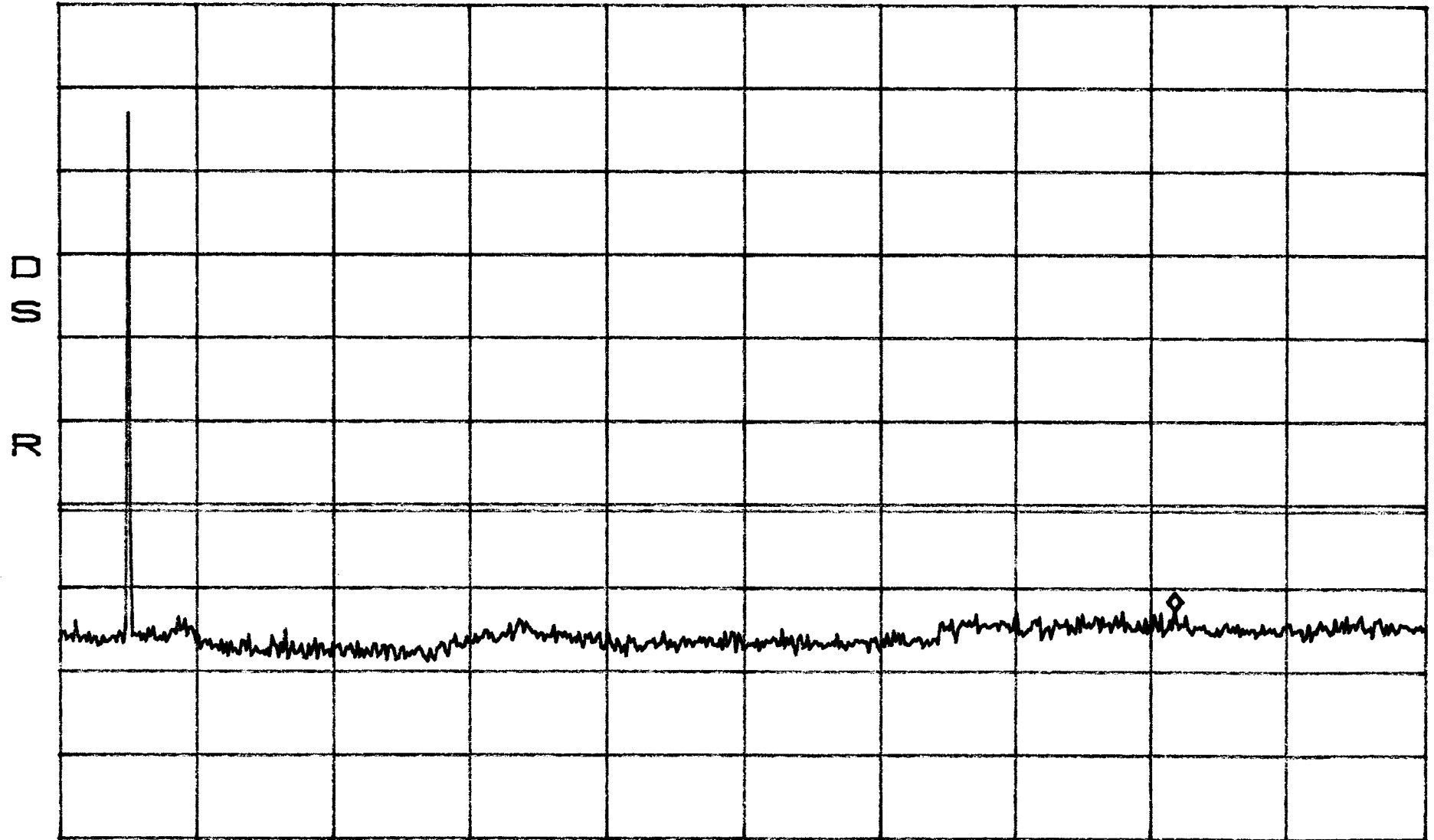
Intermodulation  
Close  
CDMA

BAND E,F,C

\*ATTEN 20dB  
RL 47.8dBm

MKR -24.70dBm  
16.55GHz

10dB/



START 1.00GHz

STOP 20.00GHz

\*RBW 100kHz

VBW 100kHz

SWP 4.8sec

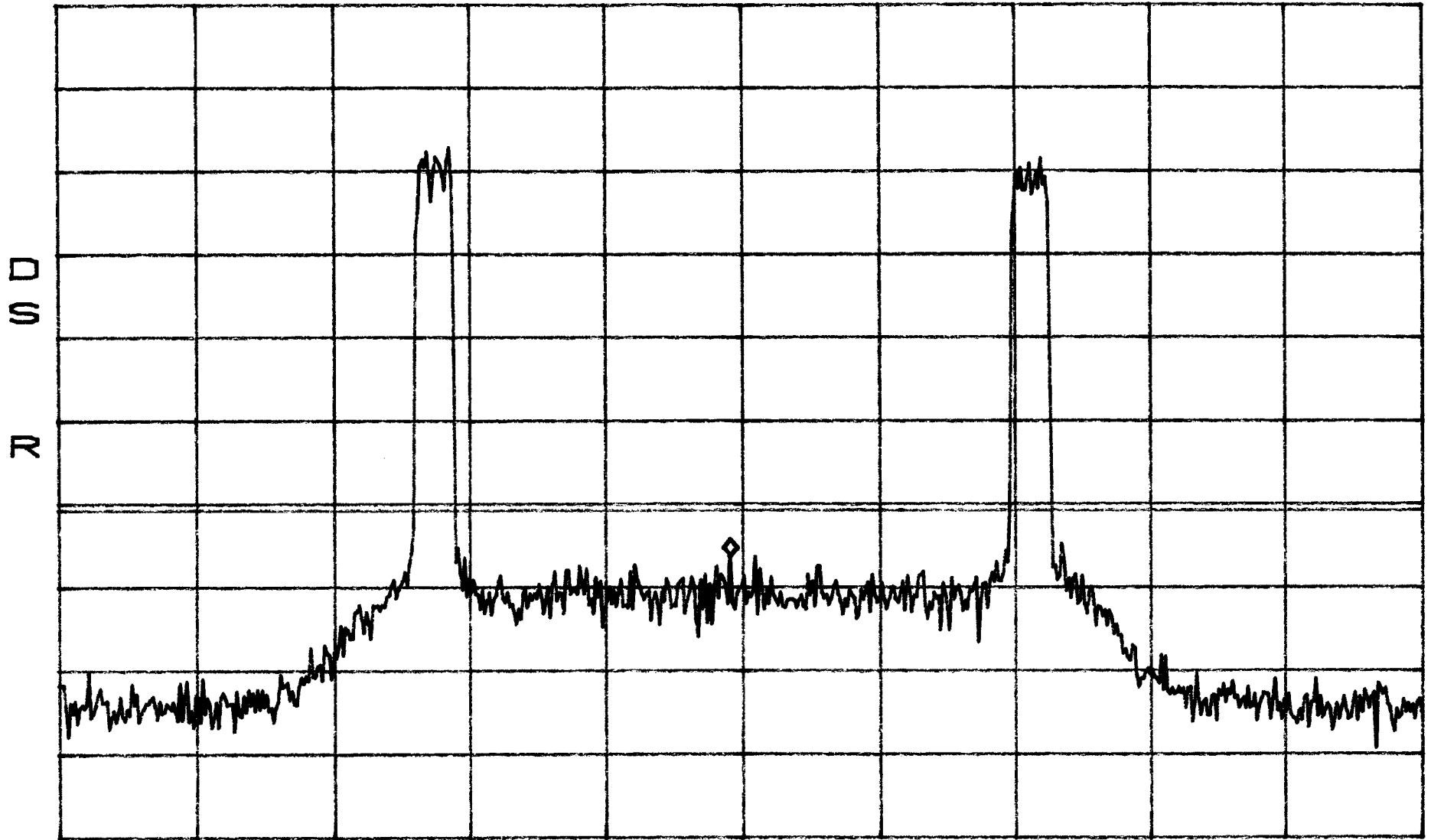
Intermodulation  
Apart  
CDMA

BAND E,F,C

\*ATTEN 20dB  
RL 47.8dBm

MKR -18.37dBm  
1.97708GHz

10dB/



CENTER 1.97750GHz SPAN 50.00MHz  
\*RBW 30kHz VBW 30kHz SWP 140ms

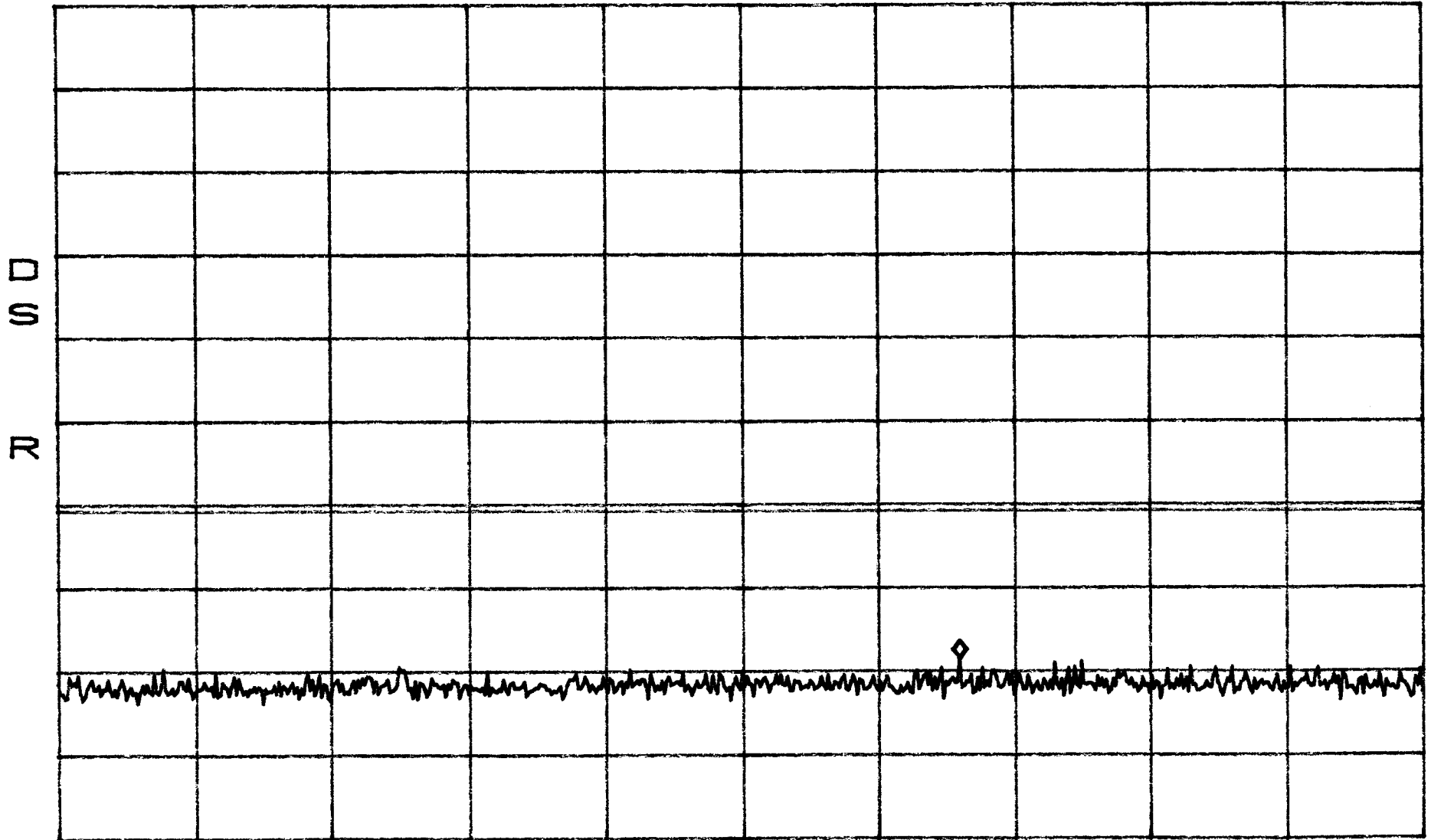
Intermodulation  
Apart  
CDMA

BAND E,F,C

\*ATTEN 20dB  
RL 47.8dBm

10dB/

MKR -30.53dBm  
670.2MHz



START 30.0MHz                      STOP 1.0000GHz  
\*RBW 30kHz                      VBW 30kHz                      SWP 2.7sec

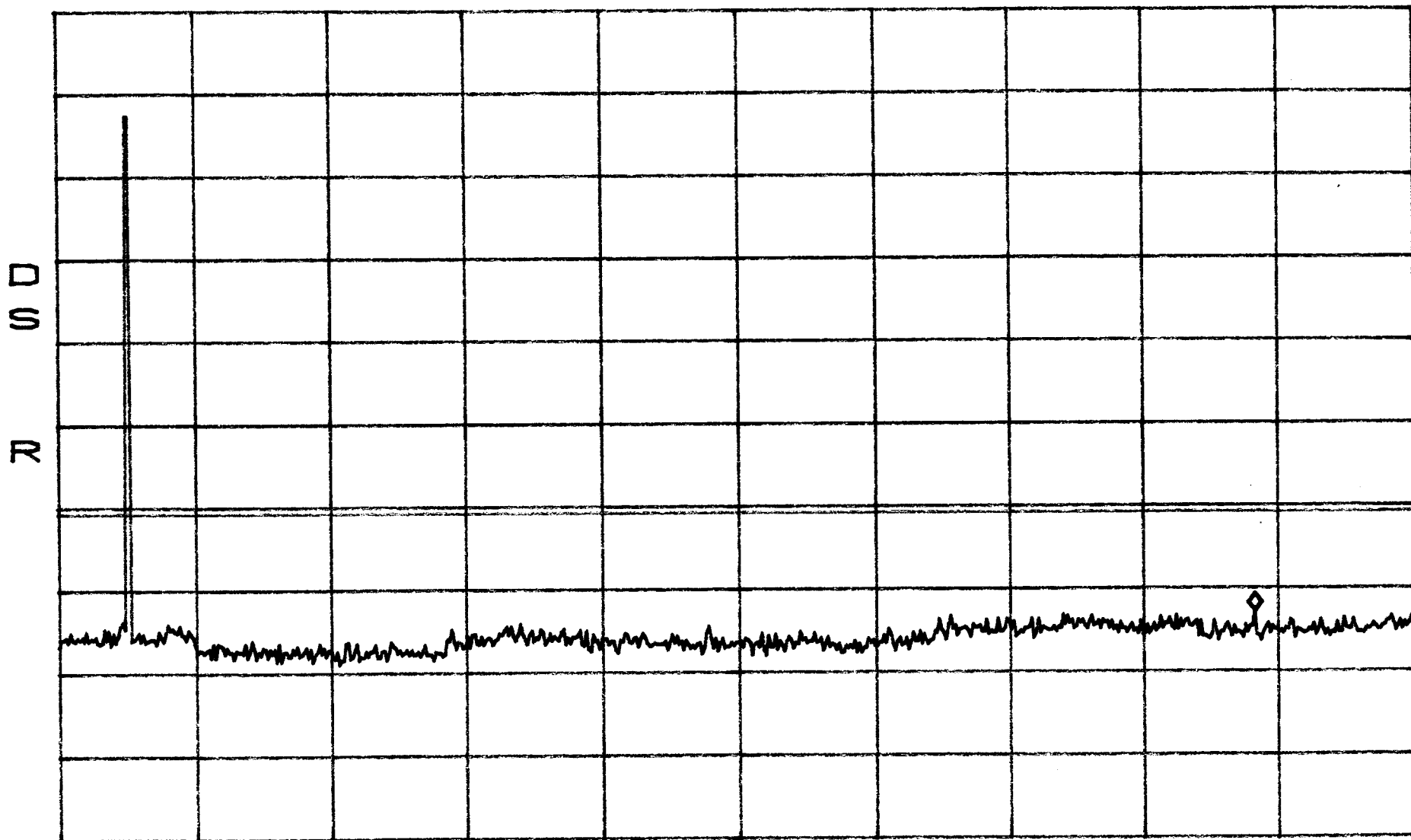
Intermodulation  
Apert  
CDMA

BAND E,F,C

\*ATTEN 20dB  
RL 47.8dBm

10dB/

MKR -24.87dBm  
17.78GHz



START 1.00GHz STOP 20.00GHz  
\*RBW 100kHz VBW 100kHz SWP 4.8sec

**CDMA Mask Test for ADC Inc.**  
**Digivance Long Range Coverage System**  
**Model Numbers DGVL-431110SYS, DGVL-441110SYS,**  
**DGVL-451110SYS, and DGVL-461110SYS.**

For the CDMA modulation type emission mask test, the average value of the center frequency will be 16.23dB down from the CW peak power. On any frequency removed from the center carrier frequency by up to 750 kHz the emissions are at or below 16.23dB below the peak power. On any frequency between 750 kHz and 1.98 MHz the emissions are below 45dB below the peak power. On any frequency removed from the carrier frequency by more than 1.98 MHz the emissions are below 60dB below the peak power. The test was performed at the middle part of the respective A, B, C, D, E, and F PCS bands.

**Results:**

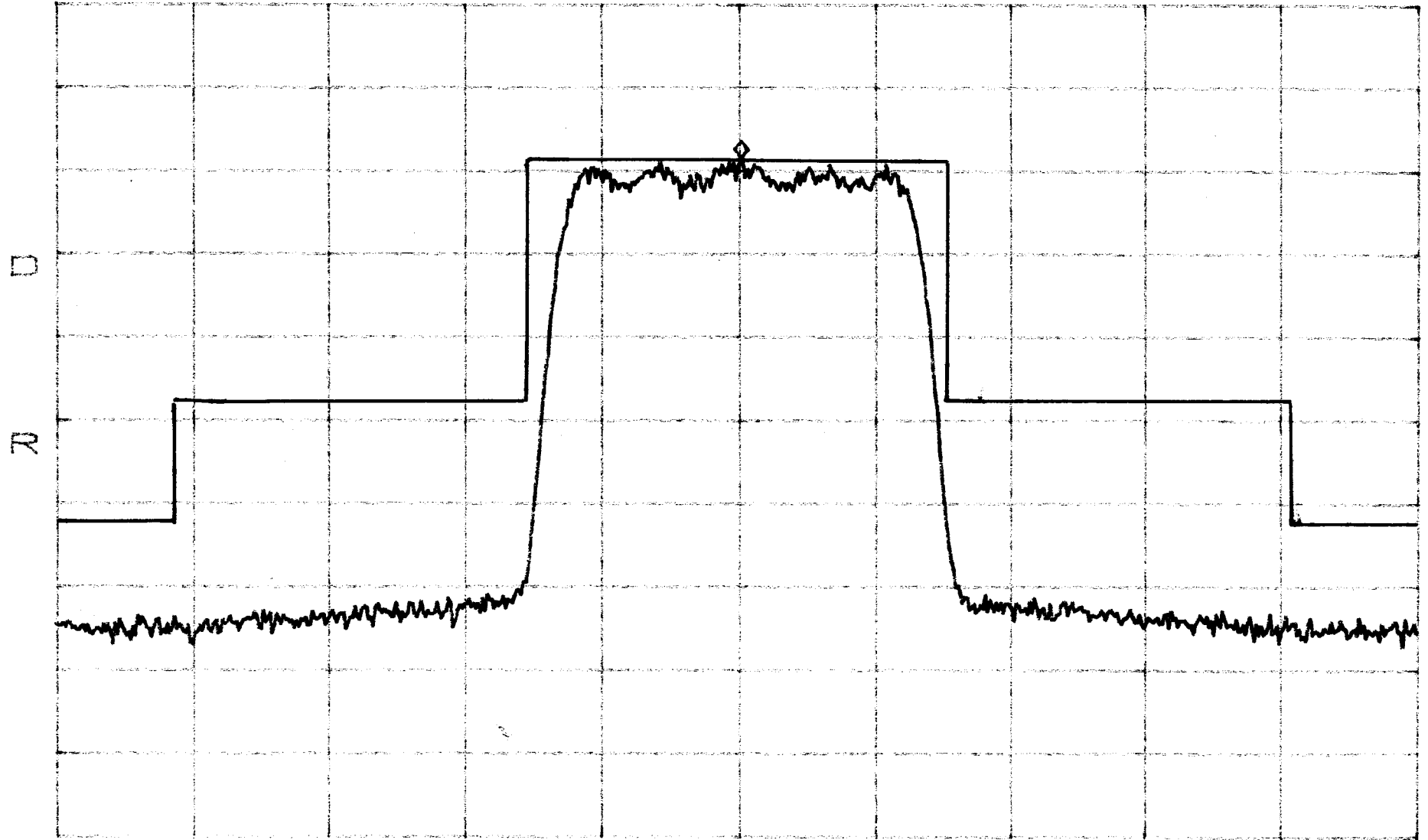
Pass (see plots)

CDMA MASK

BANDA

Mid

\*ATTEN 20dB VAVG 100 MKR 29.47dBm  
RL 47.8dBm 10dB/BPO1 1.937508GHz



CENTER 1.937500GHz

SPAN 5.000MHz

RBW 30kHz

VBW 30kHz

SWP 50ms

CDMA MASK

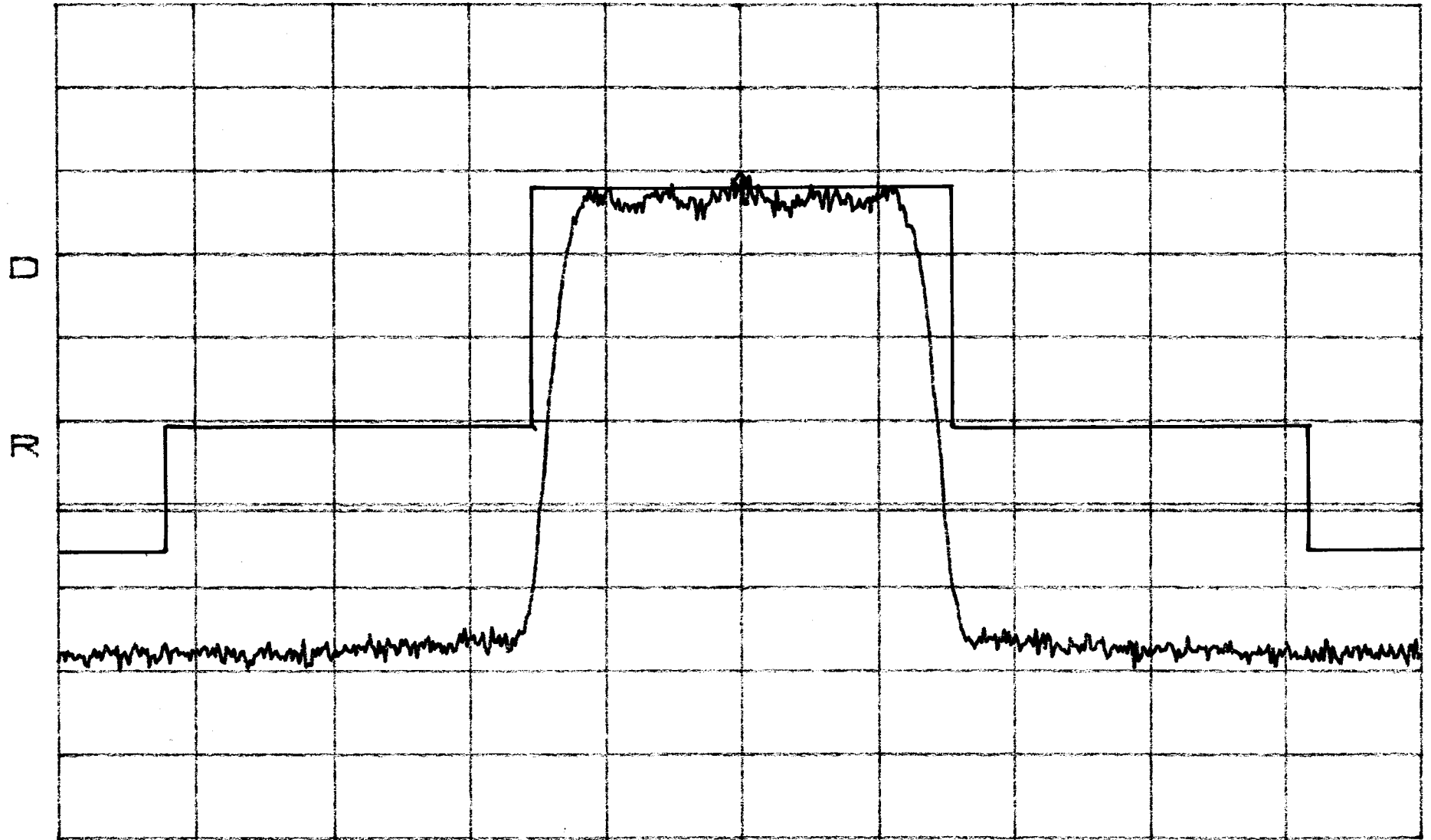
BAND B

Mid

\*ATTEN 20dB  
RL 47.8dBm

VAVG 100  
10dB/

MKR 25.63dBm  
1.957500GHz



CENTER 1.957500GHz

SPAN 5.000MHz

\*RBW 30kHz

VBW 30kHz

SWP 50ms



CDMA MASK BAND C  
Mid

\*ATTEN 20dB VAVG 100 MKR 24.30dBm  
RL 47.8dBm 10dB/ 1.982500GHz



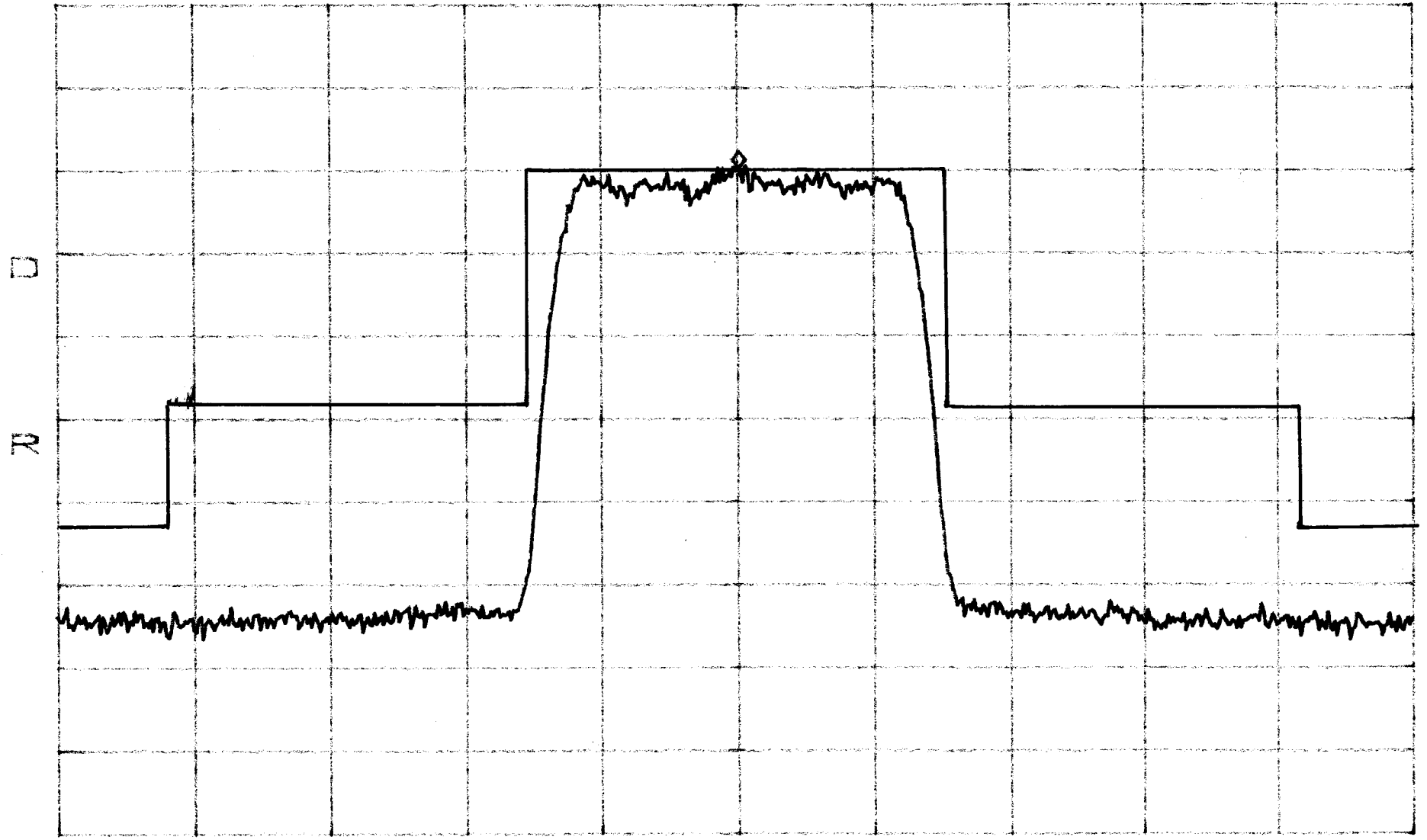
CENTER 1.982500GHz SPAN 5.000MHz  
\*RBW 30kHz VBW 30kHz SWP 50ms

CDMA MASK

BAND D

Mid

\*ATTN 20dB      VAVG 100      MKR 28.13dBm  
RL 47.8dBm      10dB/      1.947508GHz

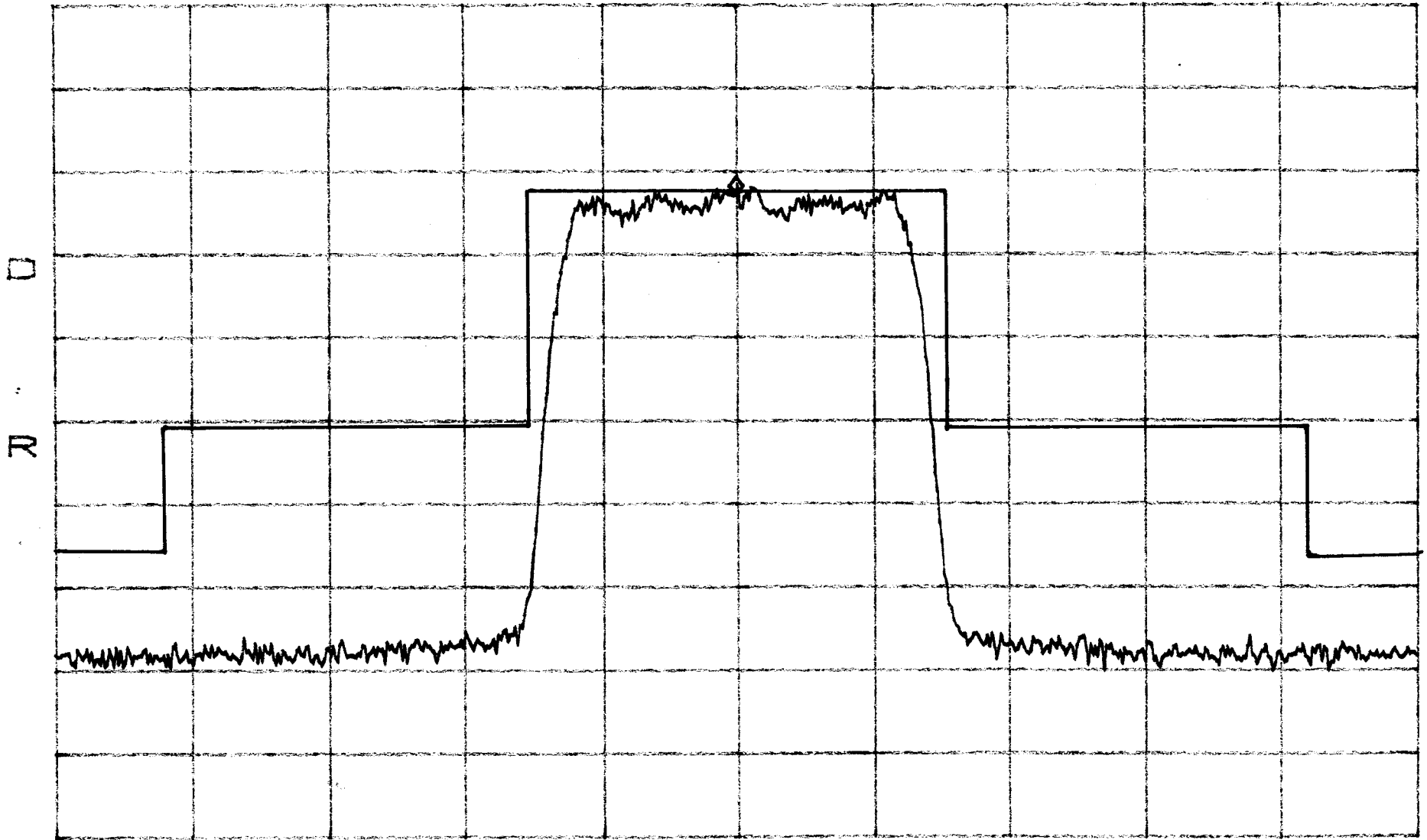


CENTER 1.947500GHz      SPAN 5.000MHz  
RBW 30kHz      VBW 30kHz      SWP 50ms

CDMA MASK  
Mid

BAND E

\*ATTEN 20dB VAVG 100 MKR 25.13dBm  
RL 47.8dBm 10dB/ 1.967500GHz

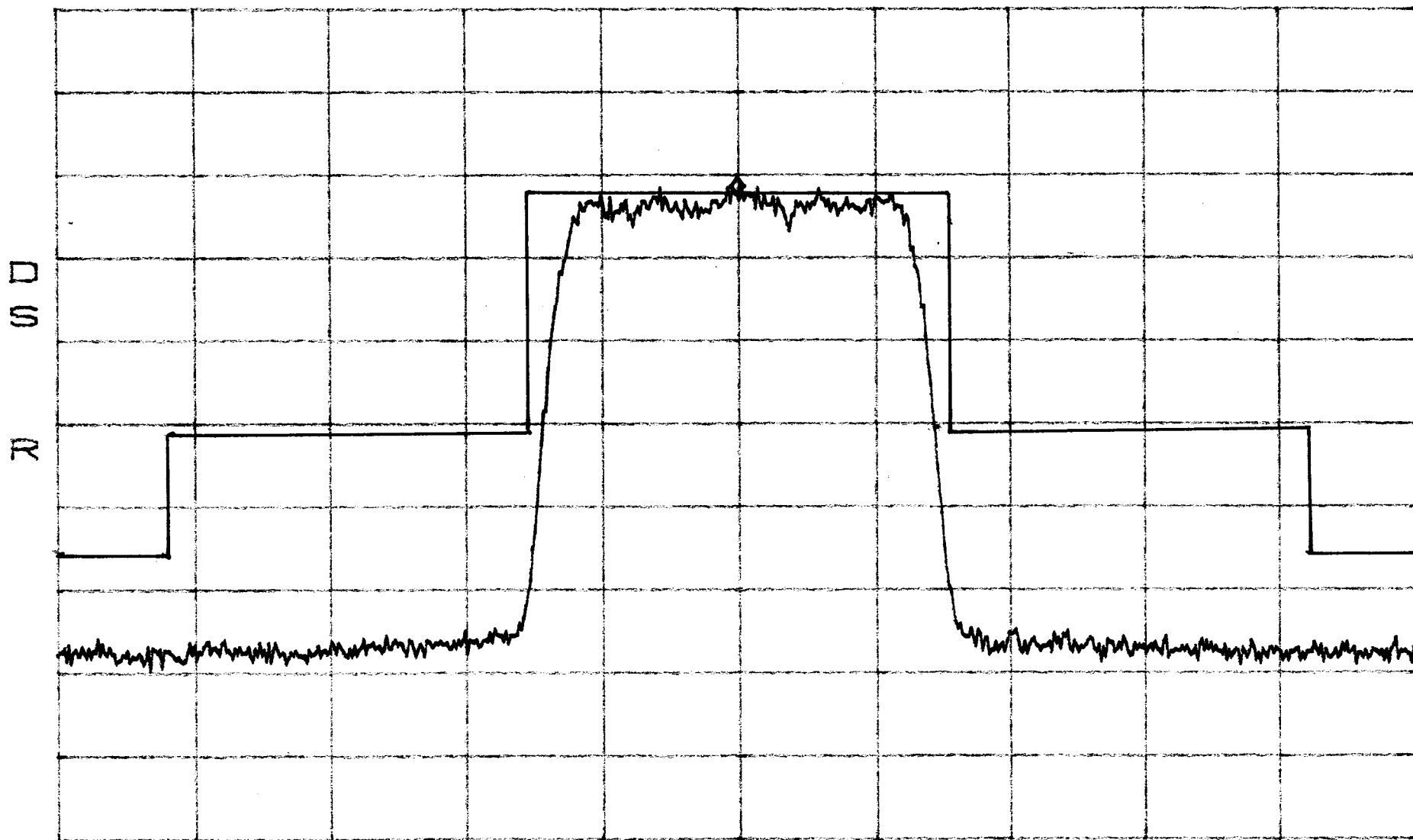


CENTER 1.967500GHz SPAN 5.000MHz  
\*RBW 30kHz VBW 30kHz SWP 50ms

CDMA MASK  
Mid

BAND F

\*ATTEN 20dB    VAVG 100    MKR 25.47dBm  
RL 47.8dBm    10dB/    1.972500GHz



CENTER 1.972500GHz    SPAN 5.000MHz  
\*RBW 30kHz    VBW 30kHz    SWP 50ms

**Equipment Under Test (EUT) Test Operation Mode - Emission tests :**

The device under test was operated under the following conditions during emissions testing:

- Standby
- Test program (H - Pattern)
- Test program (color bar)
- Test program (customer specific)
- Practice operation
- Normal Operating Mode
- \_\_\_\_\_

**Configuration of the device under test:**

The following peripheral devices and interface cables were connected during the measurement:

- |                                  |              |
|----------------------------------|--------------|
| <input type="checkbox"/> - _____ | Type : _____ |
| <input type="checkbox"/> - _____ | Type : _____ |
| <input type="checkbox"/> - _____ | Type : _____ |
| <input type="checkbox"/> - _____ | Type : _____ |
| <input type="checkbox"/> - _____ | Type : _____ |
| <input type="checkbox"/> - _____ | Type : _____ |
| <input type="checkbox"/> - _____ | Type : _____ |
| <input type="checkbox"/> - _____ | Type : _____ |

- unshielded power cable
- unshielded cables
- shielded cables                      MPS.No.: \_\_\_\_\_
- customer specific cables
- \_\_\_\_\_
- \_\_\_\_\_

**DEVIATIONS FROM STANDARD:**

None

**GENERAL REMARKS:**

**SUMMARY:**

The requirements according to the technical regulations are

- met

- **not** met.

The device under test does

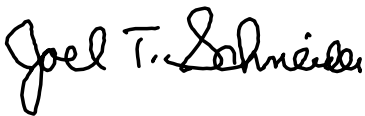
- fulfill the general approval requirements mentioned on page 3.

- **not** fulfill the general approval requirements mentioned on page 3.

Testing Start Date: 10 April 2002

Testing End Date: 10 April 2002

- TÜV PRODUCT SERVICE INC -



Reviewed By:  
J. T. Schneider



Tested By:  
G. S. Jakubowski

## TEST SETUP FOR EMISSIONS TESTING

See Test Setup Exhibit



Radiated emission (case radiation) test setup photos

See Test Setup Exhibit



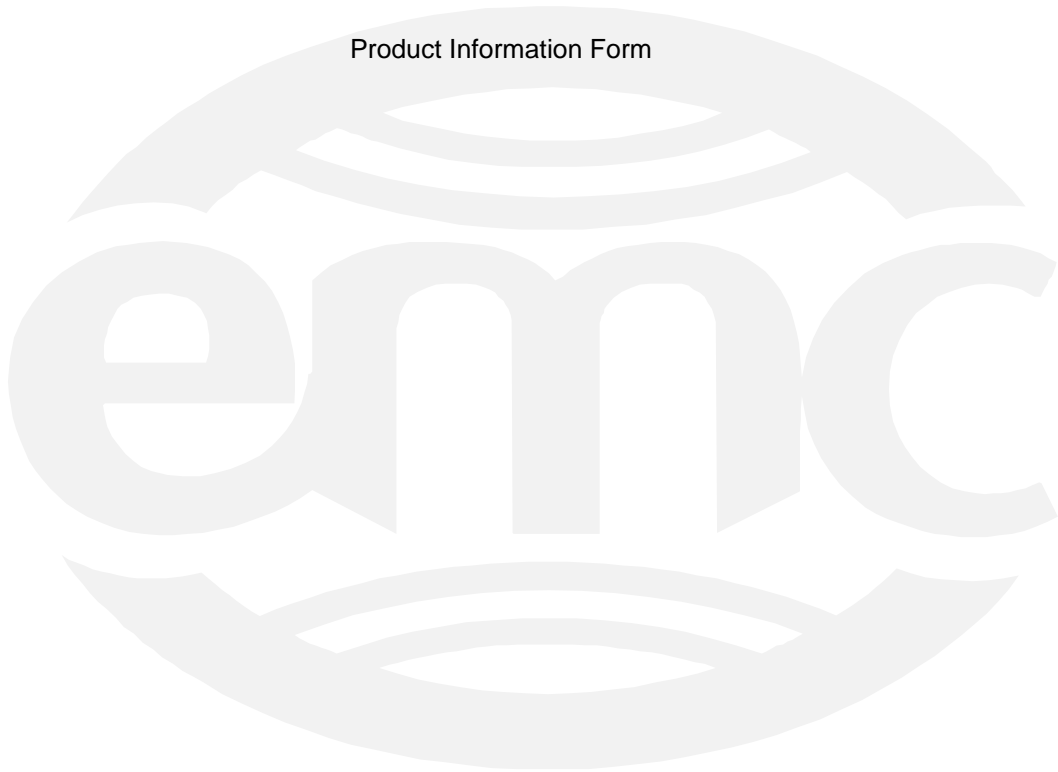


**Appendix A**

Constructional Data Form

And/or

Product Information Form



# EMC Test Plan and Constructional Data Form

PLEASE COMPLETE THIS DOCUMENT IN FULL, ENTERING N/A IF THE FIELD IS NOT APPLICABLE.

**Applicant** -- NOTE: This information will be input into your test report as shown below.  
 Press the F1 key at any time to get HELP for the current field selected.

Company: ADC Inc.  
 Address: P.O. Box 1101  
Minneapolis, MN 55440-1101  
 Contact: Mark F. Miska Position: Compliance Engineer  
 Phone: 952-233-6479 Fax: 952-233-6388  
 E-mail Address: mark\_miska@adc.com

**General Equipment Description** -- NOTE: This information will be input into your test report as shown below.

EUT Description: Transports RF between a remote antenna and a customer provided base station.  
 EUT Name: Digivance Long Range Coverage Solution 1900 MHz System (A,D / D,B,E / B,E,F / E,F,C Band)  
 Model No.: DGVL-431110SYS, DGVL-441110SYS, DGVL-451110SYS, and DGVL-461110SYS Serial No.: None  
 Product Options: Receive Diversity  
 Configurations to be tested: 1900 MHz System: A,D / D,B,E / B,E,F / E,F,C Band Version with Diversity option

**Test Objective**

- |  |   |
|--|---|
| <input type="checkbox"/> EMC Directive 89/336/EEC (EMC)<br>Std: _____                        | <input checked="" type="checkbox"/> FCC: Class <input type="checkbox"/> A <input type="checkbox"/> B Part <u>24</u> |
| <input type="checkbox"/> Machinery Directive 89/392/EEC (EMC)<br>Std: _____                  | <input type="checkbox"/> VCCI: Class <input type="checkbox"/> A <input type="checkbox"/> B                          |
| <input type="checkbox"/> Medical Device Directive 93/42/EEC (EMC)<br>Std: _____              | <input type="checkbox"/> BCIQ: Class <input type="checkbox"/> A <input type="checkbox"/> B                          |
| <input type="checkbox"/> Vehicle Directive 72/245/EEC (EMC)<br>Std: _____                    | <input type="checkbox"/> Canada: Class <input type="checkbox"/> A <input type="checkbox"/> B                        |
| <input type="checkbox"/> FDA Reviewers Guidance for Premarket Notification Submissions (EMC) | <input type="checkbox"/> Australia: Class <input type="checkbox"/> A <input type="checkbox"/> B                     |
|  | <input type="checkbox"/> Other: _____   |

**TÜV Product Service Certification Requested**

- |  |   |
|--|---|
| <input type="checkbox"/> Attestation of Conformity (AoC) | <input type="checkbox"/> International EMC Mark (IEM)   |
| <input type="checkbox"/> Certificate of Conformity (CoC) | <input type="checkbox"/> Compliance Document  |
| Protection Class (N/A for vehicles)                      | <input type="checkbox"/> Class I <input type="checkbox"/> Class II <input type="checkbox"/> Class III |
- (Press F1 when field is selected to show additional information on Protection Class.)

**EMC Test Plan and Constructional Data Form**

**Attendance**

Test will be:  Attended by the customer  Unattended by the customer

**Failure - Complete this section if testing will not be attended by the customer.**

If a failure occurs, TÜV Product Service should:

- Call contact listed above, if not available then stop testing. (After hrs phone): \_\_\_\_\_
- Continue testing to complete test series.
- Continue testing to define corrective action.
- Stop testing.

**EUT Specifications and Requirements**

Length: 19 Width: 51" Height: 27 Weight: 62 LB

**Power Requirements**

*Regulations require testing to be performed at typical power ratings in the countries of intended use. (i.e., European power is typically 230 VAC 50 Hz or 400 VAC 50 Hz, single and three phase, respectively)*

Voltage: 115 VAC (If battery powered, make sure battery life is sufficient to complete testing.)

# of Phases: 1

Current (Amps/phase(max)): 15 Current (Amps/phase(nominal)): 10

Other \_\_\_\_\_

**Other Special Requirements**

none

**Typical Installation and/or Operating Environment**

(ie. Hospital, Small Business, Industrial/Factory, etc.)

Host indoor only with STM and LPA indoor or outdoor. System is typically employed as a Microcell.

**EUT Power Cable**

- Permanent OR  Removable Length (in meters): 1
- Shielded OR  Unshielded
- Not Applicable

EMC Test Plan and Constructional Data Form



EUT Interface Ports and Cables												
Interface			Shielding									
Type	Analog	Digital	Qty	Yes	No	Type	Termination	Connector Type	Port Termination	Length (in meters)	Removable	Permanent
<b>EXAMPLE:</b> RS232	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Foil over braid	Coaxial	Metallized 9-pin D-Sub	Characteristic Impedance	6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
RF "N" type	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Braid	Coaxial	N	50 Ohms	>3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Alarm	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not Specified	N/A	6 Pin Standoff		>3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Alarm	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not Specified	N/A	4 Pin Standoff		>3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fiber	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	N/A	SC	N/A	>3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9 Pin Din	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not Specified	AC Coupled	Din		>3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Net in	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not Specified	N/A	Cat 5		>3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Net out	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not Specified	N/A	Cat 5		3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
DC power block	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None		Terminal		>3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
AC power	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None				<3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
STM to Amp Interconnect	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Varied	Chassis	Special		.3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Battery Connection	<input type="checkbox"/>	<input type="checkbox"/>	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	N/A	2 Pin Standoff		<1	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>

## EMC Test Plan and Constructional Data Form

### EUT Software.

Revision Level: Version 0.00.00.12

Description: Digivance Element Management System (DEMS). System Management and Interface Matching Software.

**EUT Operating Modes to be Tested** -- list the operating modes to be used during test. It is recommended the equipment be tested while operating in a typical operation mode. FCC testing of personal computers and/or peripherals requires that a simple program generate a complete line of upper case H's. Provide a general description of all software, firmware, and PLD algorithms used in the equipment. List all code modules as described above, with the revision level used during testing. Consult with your TÜV Product Service Representative if additional assistance is required.

1. Max composite in and out
  
- 2.
  
- 3.

**EUT System Components** -- List and describe all components which are part of the EUT. For FCC testing a minimum configuration is required. (ie. Mouse, Printer, Monitor, External Disk Drive, Motherboard, etc.)

Description	Model #	Serial #	FCC ID #
Host Unit	DGVL-401010HU	None	
STM A,D Band	DGVL-431010STM	None	
STM D,B,E Band	DGVL-441010STM	None	
STM B,E,F Band	DGVL-451010STM	None	
STM E,F,C Band	DGVL-461010STM	None	
Amp	DGVL-1216384LPA	None	
Amp	DGVL-1216387LPA	None	
Digivance LRCS 1900 MHz System Model DGVL-431110SYS, DGVL-441110SYS, DGVL- 451110SYS and DGVL- 461110SYS consist of the HU, STM, and LPA.			

## EMC Test Plan and Constructional Data Form

<b>Support Equipment</b> -- List and describe all support equipment which is not part of the EUT. (i.e. peripherals, simulators, etc)			
<i>Description</i>	<i>Model #</i>	<i>Serial #</i>	<i>FCC ID #</i>
Signal Generator	HP E4432B	MC22109	
DC Power Supply	HP 6633A	MC21690	

<b>Oscillator Frequencies</b>			
<i>Frequency</i>	<i>Derived Frequency</i>	<i>Component # / Location</i>	<i>Description of Use</i>

<b>Power Supply</b>			
<i>Manufacturer</i>	<i>Model #</i>	<i>Serial #</i>	<i>Type</i>
ADC			<input type="checkbox"/> Switched-mode: (Frequency) _____ <input type="checkbox"/> Linear <input type="checkbox"/> Other: _____
			<input type="checkbox"/> Switched-mode: (Frequency) _____ <input type="checkbox"/> Linear <input type="checkbox"/> Other: _____

<b>Power Line Filters</b>		
<i>Manufacturer</i>	<i>Model #</i>	<i>Location in EUT</i>
None		

Form

# EMC Test Plan and Constructional Data Form



Critical EMI Components (Capacitors, ferrites, etc.)				
Description	Manufacturer	Part # or Value	Qty	Component # / Location
None				

**EMC Critical Detail** -- Describe other EMC Design details used to reduce high frequency noise.

none

(PLEASE INSERT "ELECTRONIC SIGNATURE" BELOW IF POSSIBLE)

**Authorization Signatures**

Mark F. Misha  
Customer authorization to perform tests according to this test plan.

4/16/2002  
Date

\_\_\_\_\_  
Test Plan/CDF Prepared By (please print)

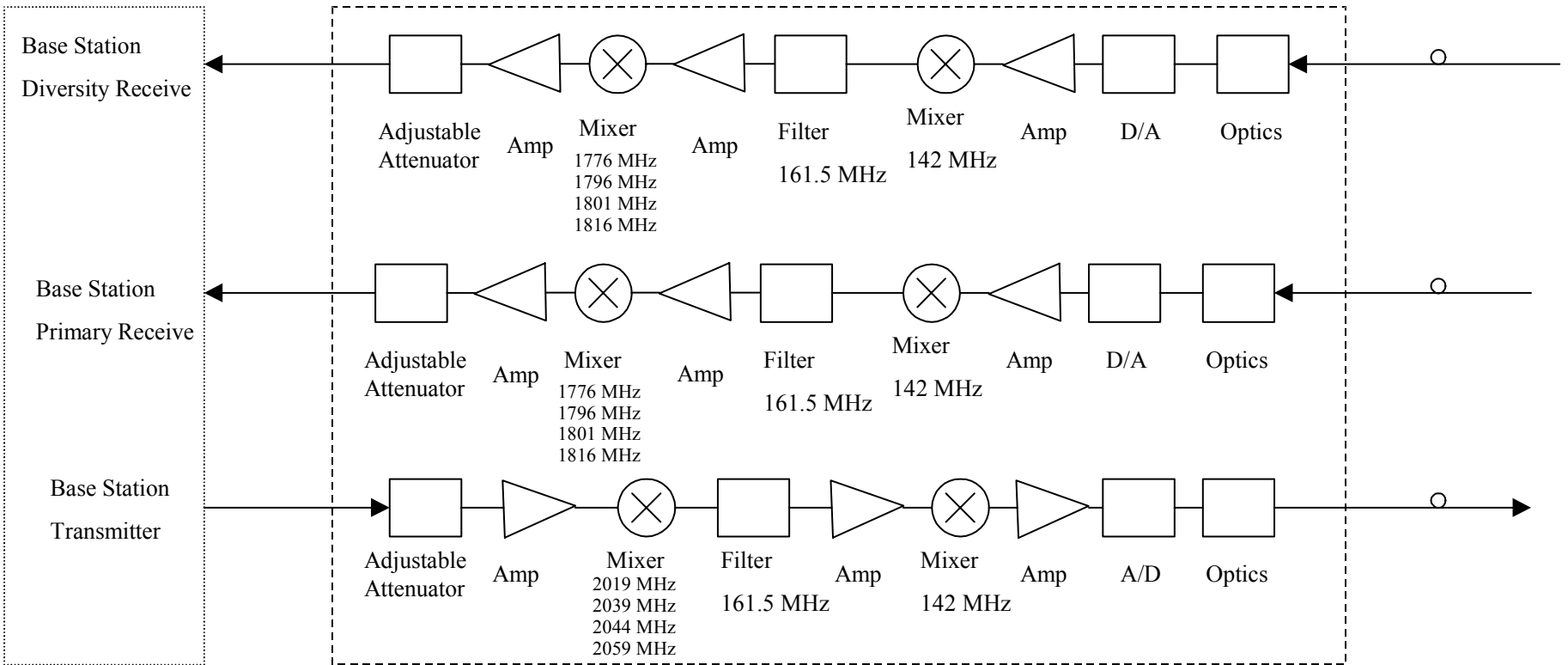
\_\_\_\_\_  
Date

\_\_\_\_\_  
Reviewed by TÜV Product Service Associate

\_\_\_\_\_  
Date

# Digivance 1900 MHz LRCS

## Host Unit





# Digivance LRCS

