

TEST RESULT SUMMARY

FCC PART 90

MANUFACTURER'S NAME	ADC, Incorporated
NAME OF EQUIPMENT	Digivance Indoor Coverage Solution - SMR System
TYPE OF EQUIPMENT	Digivance ICS is a digitally distributed antenna system that provides in-building coverage for wireless phone systems.
MODEL NUMBER	DGVI-2XXXXXDHU DGVI-2XXXXXDRU
MANUFACTURER'S ADDRESS	P. O. Box 1101 Minneapolis MN 55440-1101
TEST REPORT NUMBER	NC205189
TEST DATE	08 October 2002

According to testing performed at TÜV Product Service Inc, the above-mentioned unit is in compliance with the electromagnetic compatibility requirements defined in FCC Part 90.

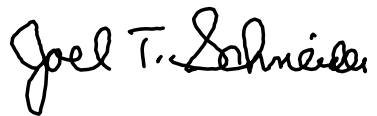
It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical characteristics. Any modifications necessary for compliance made during testing on the above mentioned date(s) must be implemented in all production units for compliance to be maintained.

TÜV Product Service Inc, as an independent testing laboratory, declares that the equipment tested as specified above conforms to the requirements of FCC Part 90.

Date: 21 October 2002

Location: Taylors Falls MN
USA


G. S. Jakubowski
Test Engineer


J. T. Schneider
Chief Engineer

TÜV Product Service Inc is a subcontractor to TÜV Product Service, GmbH according to the principles outlined in ISO/IEC Guide 25 and EN 45001.

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Not Transferable

EMC EMISSION - TEST REPORT

Test Report File Number: NC205189

Date of Issue: 21 October 2002

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Effective Isotropic Radiated Power Limit Test for ADC Inc

Digivance Indoor Coverage Solution

Model Numbers DGVl-2XXXXXDHU and DGVl-2XXXXXDRU

***Note:** The EUT is a fixed repeater and not a base station.

This measurement was made as a direct conducted emission measurement. The output from the EUT antenna connector was connected to the spectrum analyzer. The Carrier Output, below, was conducted using a single CW signal generator. The spectrum analyzer level was offset to compensate for attenuators and cable loss between the EUT and the analyzer.

A CW signal was used at the low, mid and high parts of the selected band. The spectrum analyzer level was offset by 21.3dB to compensate for attenuators and cable loss between the EUT and the analyzer.

Band SMR

Carrier Frequency	Carrier Output
851.0 MHz	+ 13.30dBm
860.0 MHz	+ 15.13dBm
869.0 MHz	+ 14.13dBm

**Occupied Bandwidth Modulation Test for ADC Inc
Digivance Indoor Coverage Solution
Model Numbers DGVl-2XXXXXDHU and
DGVl-2XXXXXDRU**

An input/output Occupied Bandwidth test was done with three different modulation types: FM (1 kHz @ 8 kHz deviation) TDMA, and CDMA. The purpose was to determine the amount of distortion added to different types of modulation schemes by the EUT. The following plots show input signals vs. output signals.

Results:

Pass (see plots)

Occupied Band Width
FM IN

BAND SMR

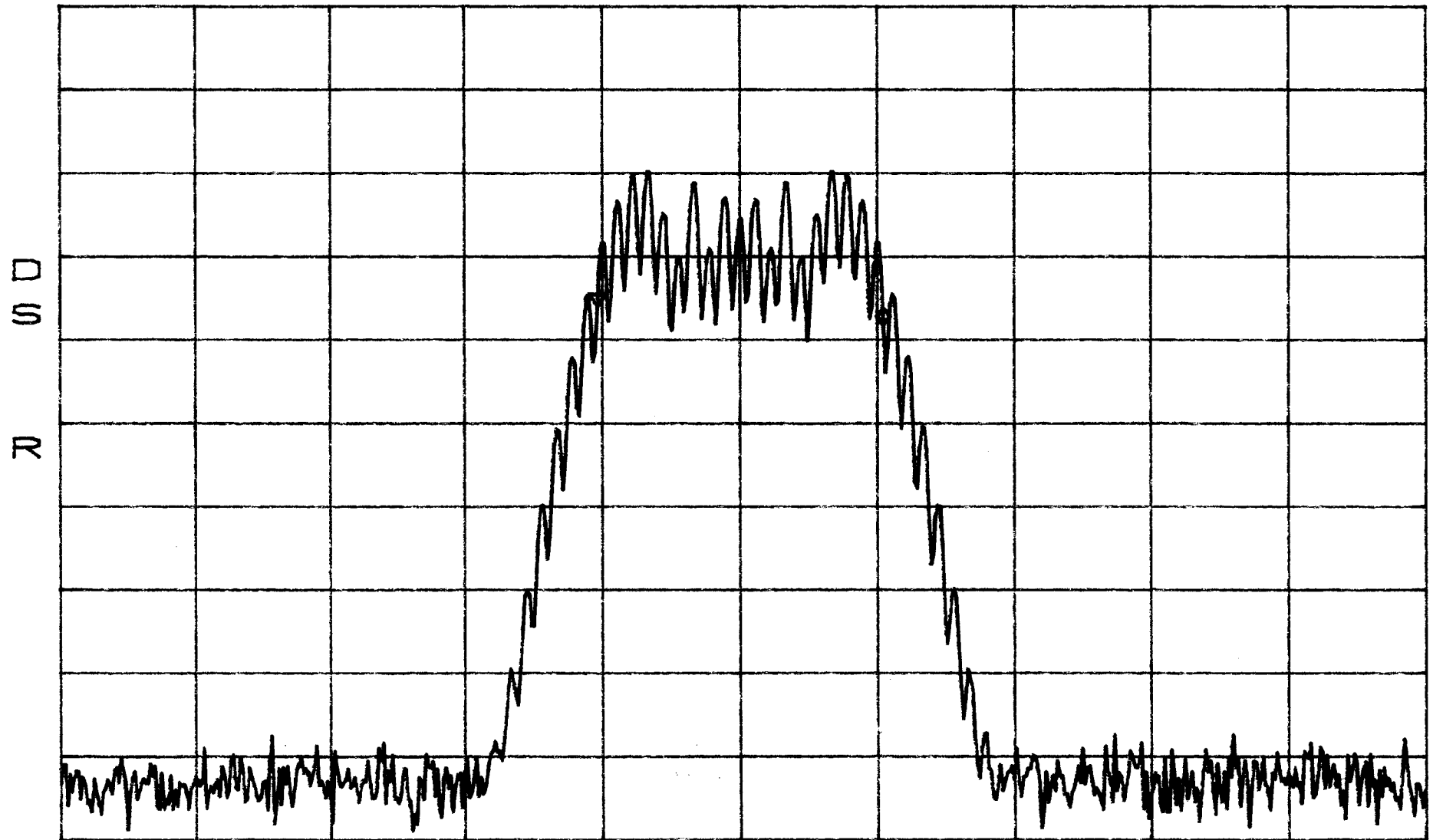
ATTEN 10dB

ΔMKR -2.34dB

RL 21.3dBm

10dB/

18.75kHz



CENTER 860.00000MHz

SPAN 90.00kHz

*RBW 300Hz

*VBW 3.0kHz

SWP 2.5sec

Occupied Band Width
FM OUT

BAND SMR

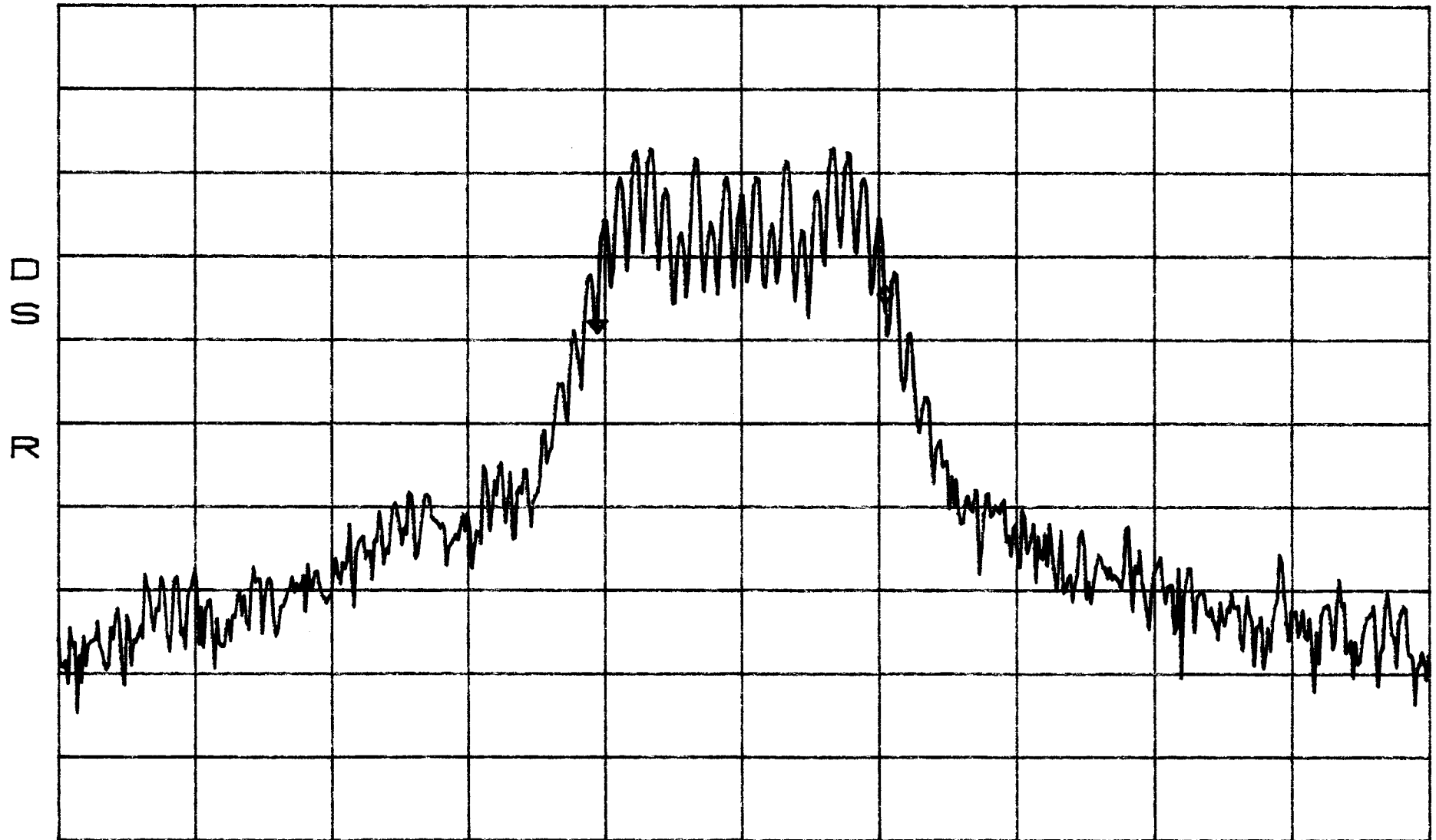
ATTEN 10dB

Δ MKR 3.50dB

RL 21.3dBm

10dB/

18.90kHz



CENTER 860.00000MHz

SPAN 90.00kHz

*RBW 300Hz

*VBW 3.0kHz

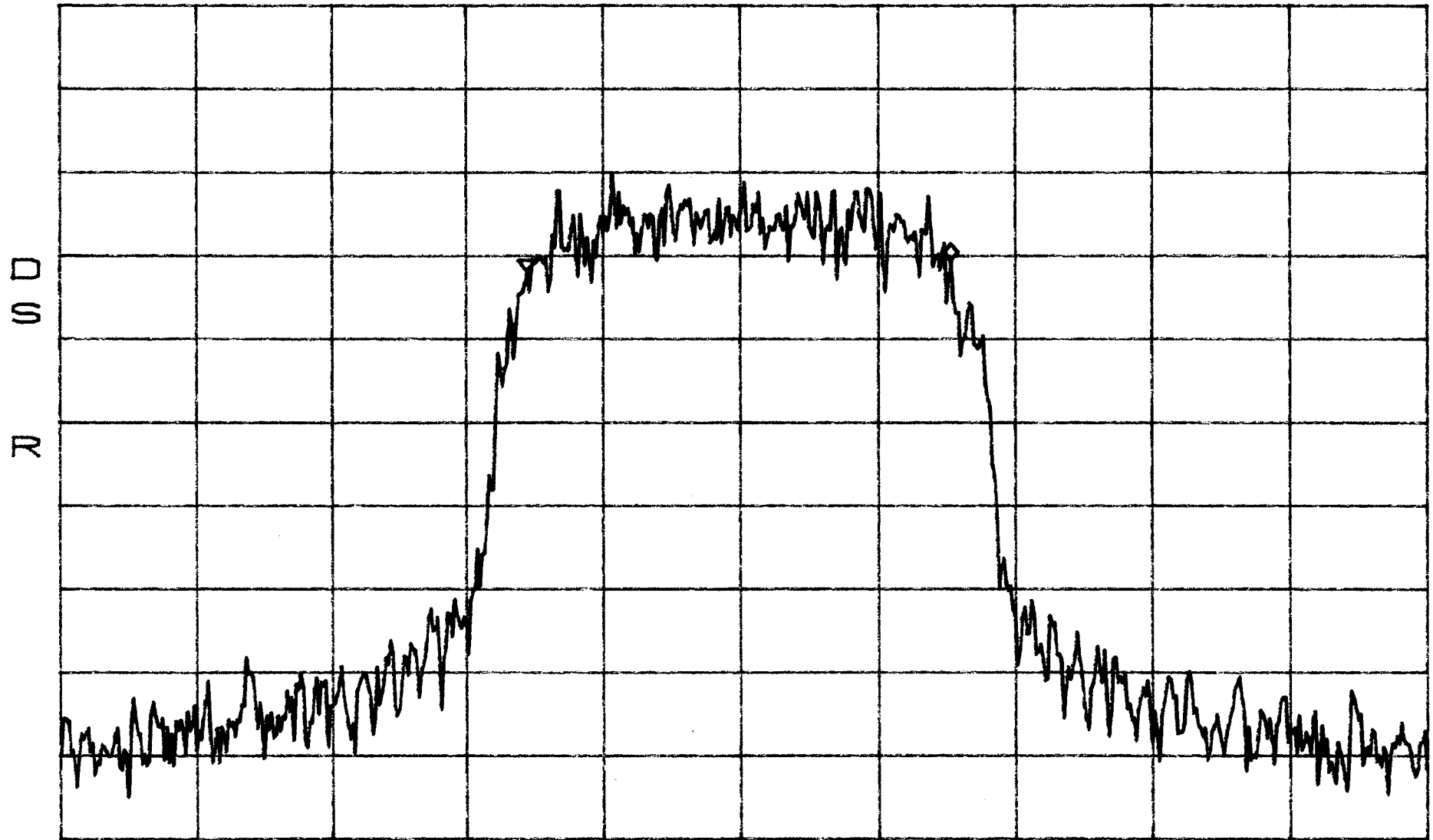
SWP 2.5sec

Occupied Band width BAND SMR
TDMA IN

ATTEN 10dB
RL 21.3dBm

10dB/

Δ MKR 1.33dB
27.75kHz



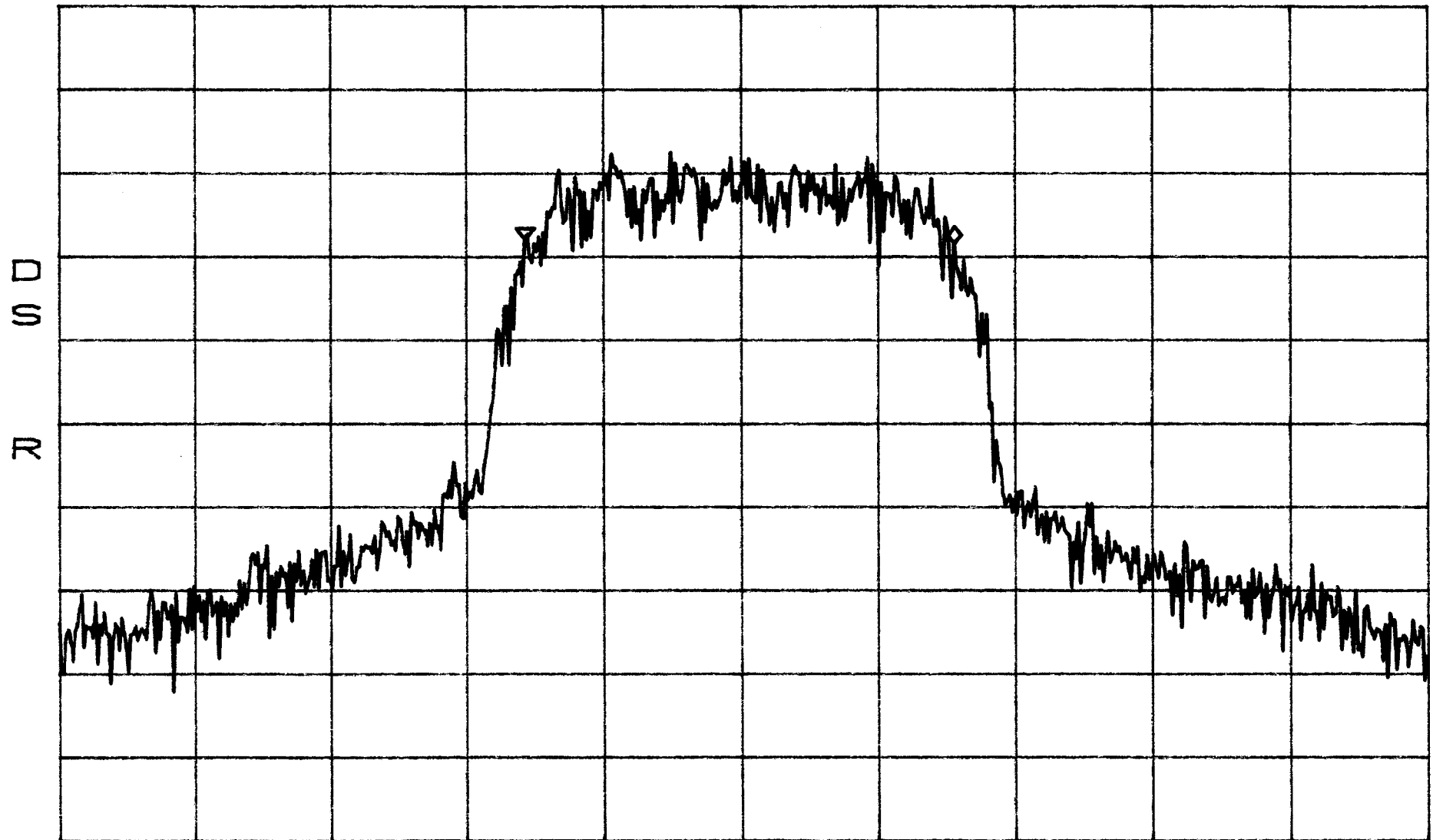
CENTER 860.00000MHz SPAN 90.00kHz
*RBW 300Hz *VBW 3.0kHz SWP 2.5sec

Occupied Band width BAND SMR
TDMA OUT

ATTEN 10dB
RL 21.3dBm

10dB/

Δ MKR -.50dB
28.20kHz



CENTER 860.00000MHz SPAN 90.00kHz
*RBW 300Hz *VBW 3.0kHz SWP 2.5sec

Occupied Band width BAND SMR
CDMA IN

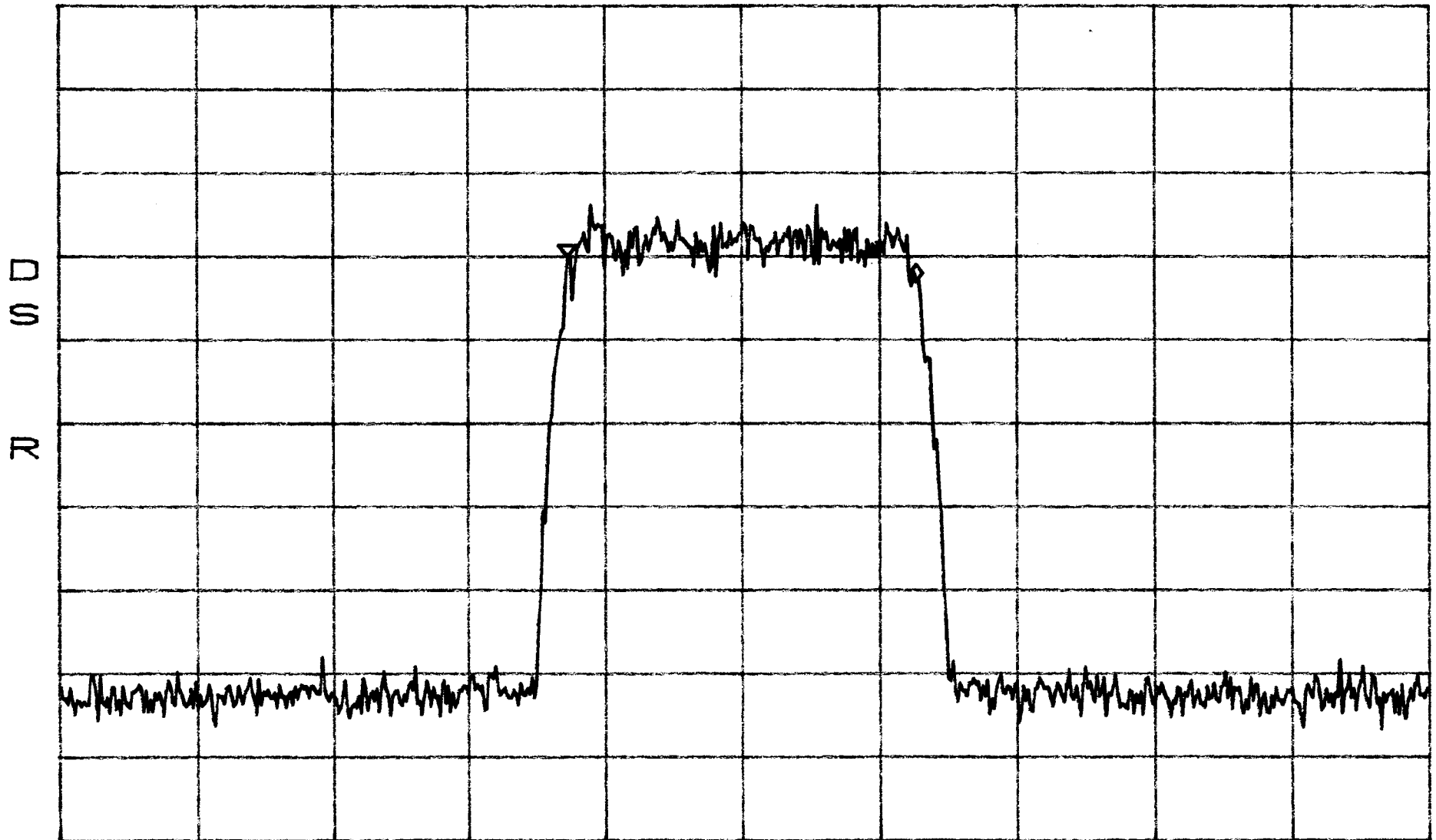
ATTEN 10dB

Δ MKR -3.00dB

RL 21.3dBm

10dB/

1.267MHz



CENTER 860.000MHz

SPAN 5.000MHz

*RBW 10kHz

*VBW 3.0kHz

SWP 420ms

Occupied Band width BAND SMR
CDMA OUT

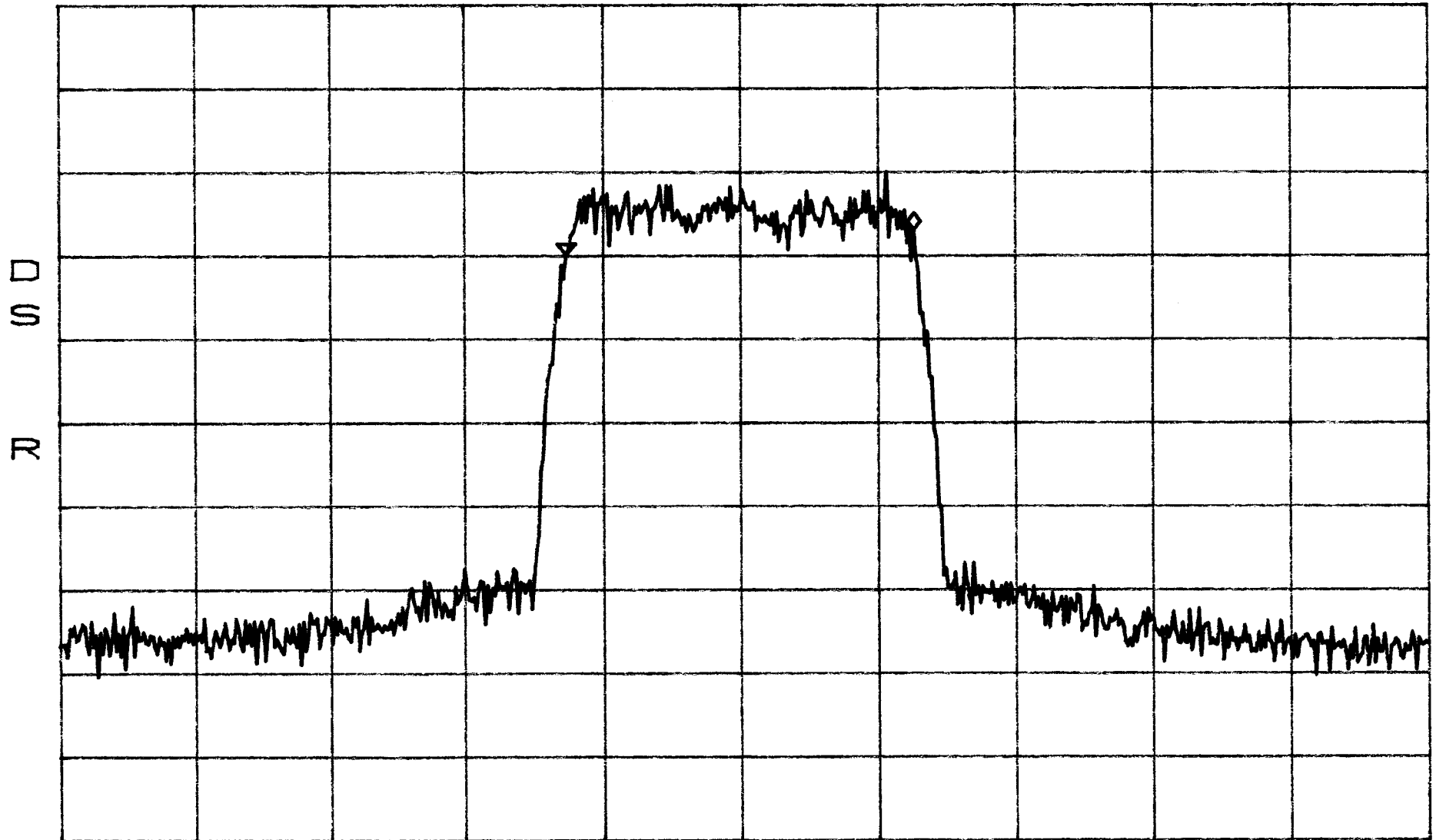
ATTEN 10dB

Δ MKR 3.00dB

RL 21.3dBm

10dB/

1.267MHz



CENTER 860.000MHz

SPAN 5.000MHz

*RBW 10kHz

*VBW 3.0kHz

SWP 420ms

Conducted Emission Limits Test for ADC Inc
Digivance Indoor Coverage Solution
Model Numbers DGVl-2XXXXXDHU and
DGVl-2XXXXXDRU

The out of band emissions were measured directly from the EUT antenna output with a spectrum analyzer from 30 MHz to the 10th harmonic of the highest carrier frequency. Test signals used: CW, FM (1 kHz @ 8 kHz deviation), TDMA, and CDMA. The different signals were input one at a time to the EUT. In all cases, the out of band emissions were less than -13dBm from the equation
$$(19\text{dBm} - [43 + 10\log(0.08\text{W})])$$

Band edge compliance is also demonstrated using a FM signal at the upper and lower limits of the band and a resolution bandwidth of 300 Hz.

Results:

Pass (see plots)

Conducted Emissions
Low

Band SMR

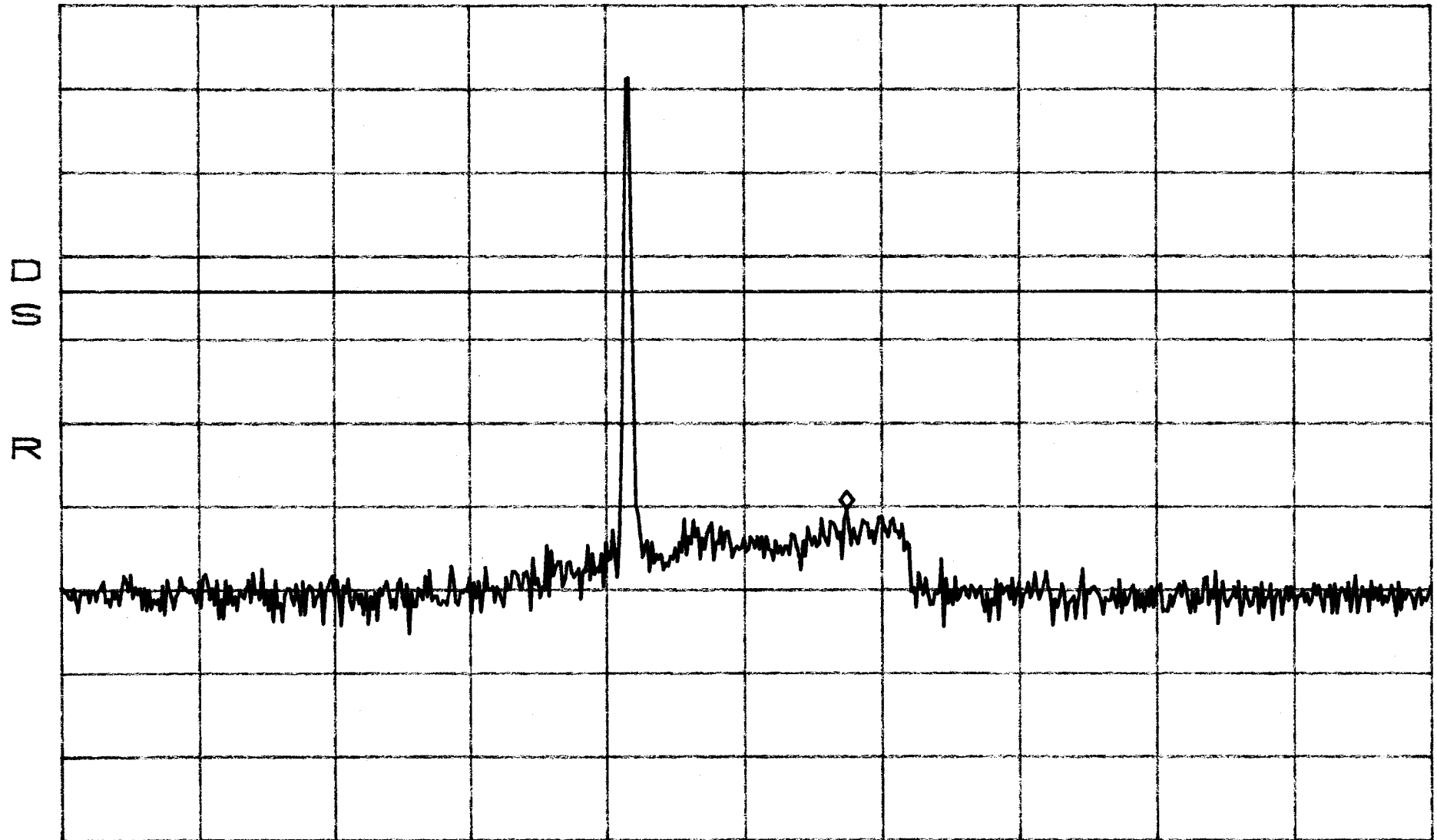
ATTEN 10dB

MKR -38.87dBm

RL 21.3dBm

10dB/

867.5MHz



CENTER 860.0MHz

SPAN 100.0MHz

*RBW 100kHz

VBW 100kHz

SWP 50ms

Conducted Emissions
Low

Band SMR

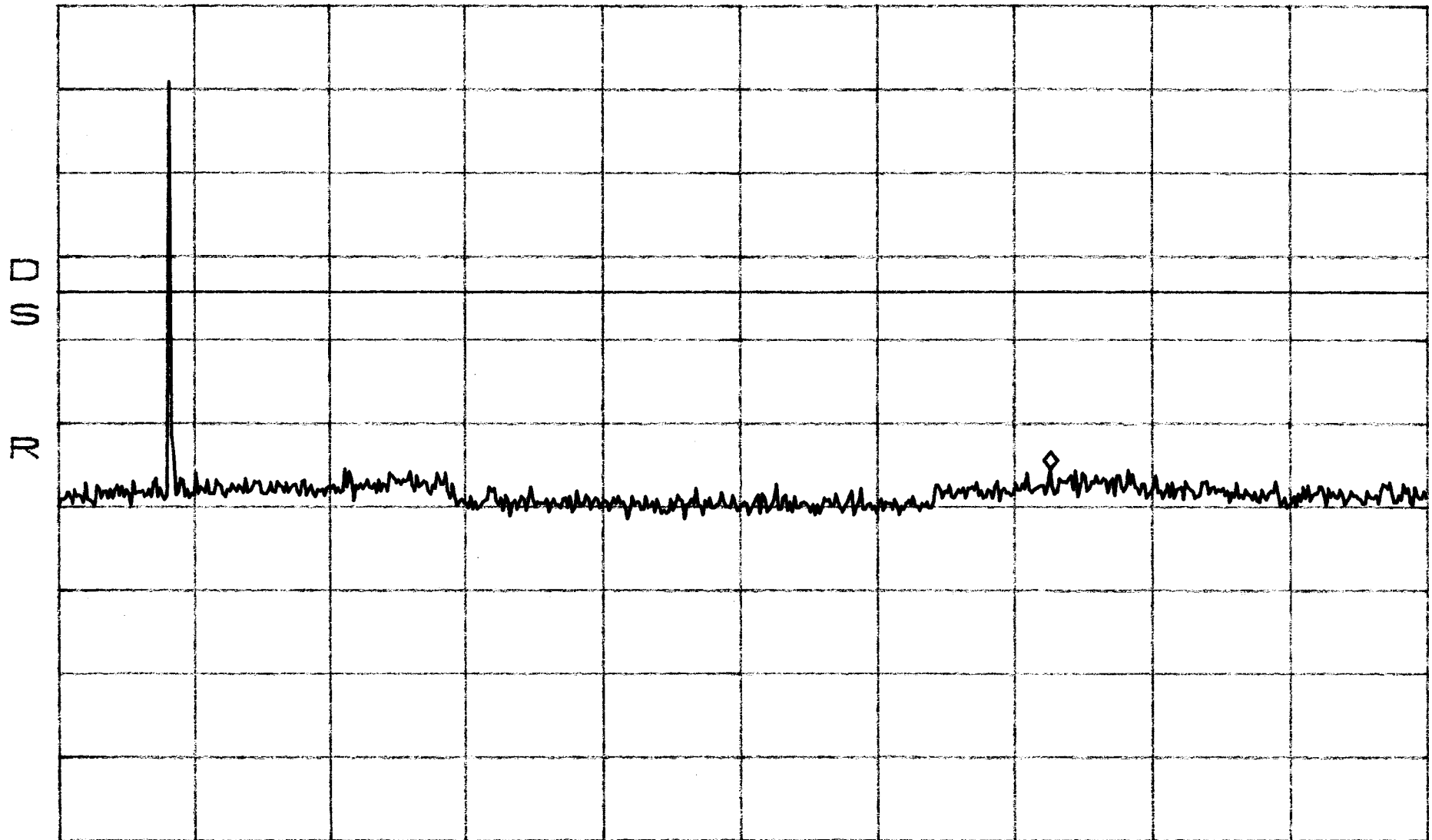
ATTEN 10dB

MKR -34.03dBm

RL 21.3dBm

10dB/

7.275GHz



START 30MHz

STOP 10.000GHz

*RBW 1.0MHz

VBW 1.0MHz

SWP 200ms

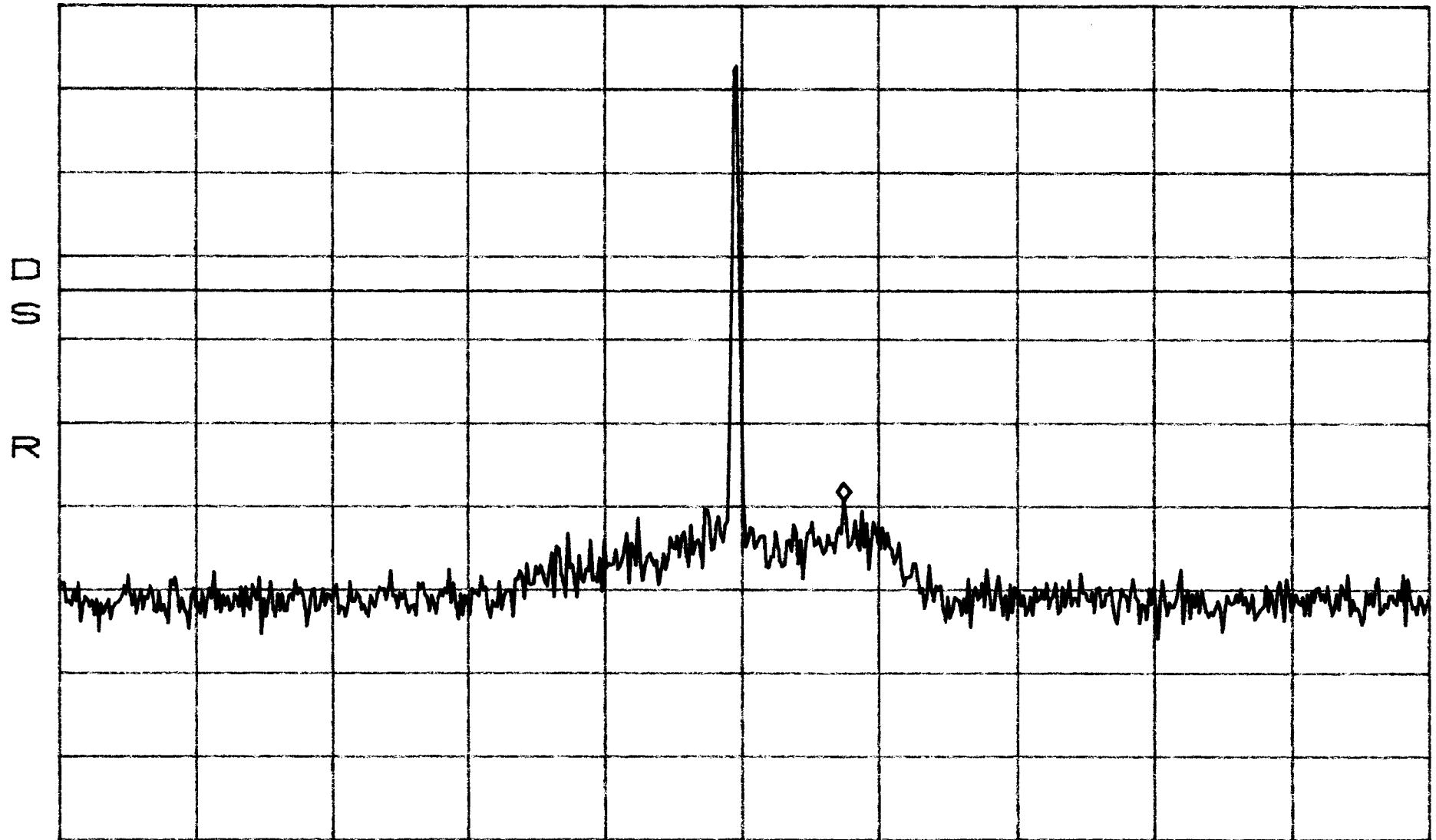
Conducted Emissions
Mid

Band 5MR

ATTEN 10dB
RL 21.3dBm

10dB/

MKR -37.87dBm
867.5MHz



CENTER 860.0MHz
*RBW 100kHz VBW 100kHz

SPAN 100.0MHz
SWP 50ms

Conducted Emissions
Mid

Band 5MR

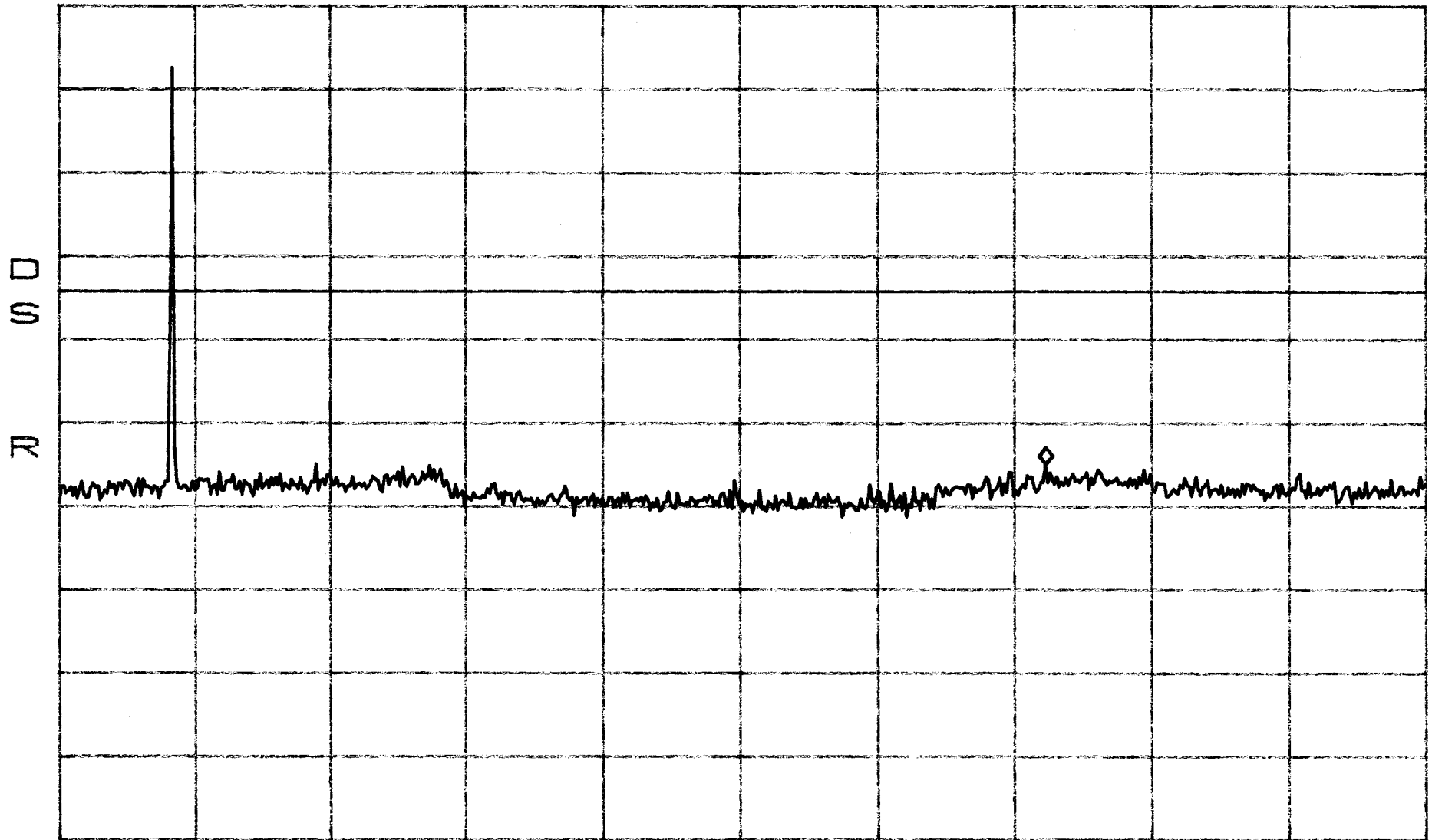
ATTEN 10dB

MKR -33.53dBm

RL 21.3dBm

10dB/

7.242GHz



START 30MHz

STOP 10.000GHz

*RBW 1.0MHz

VBW 1.0MHz

SWP 200ms

Conducted Emissions
High

Band SMR

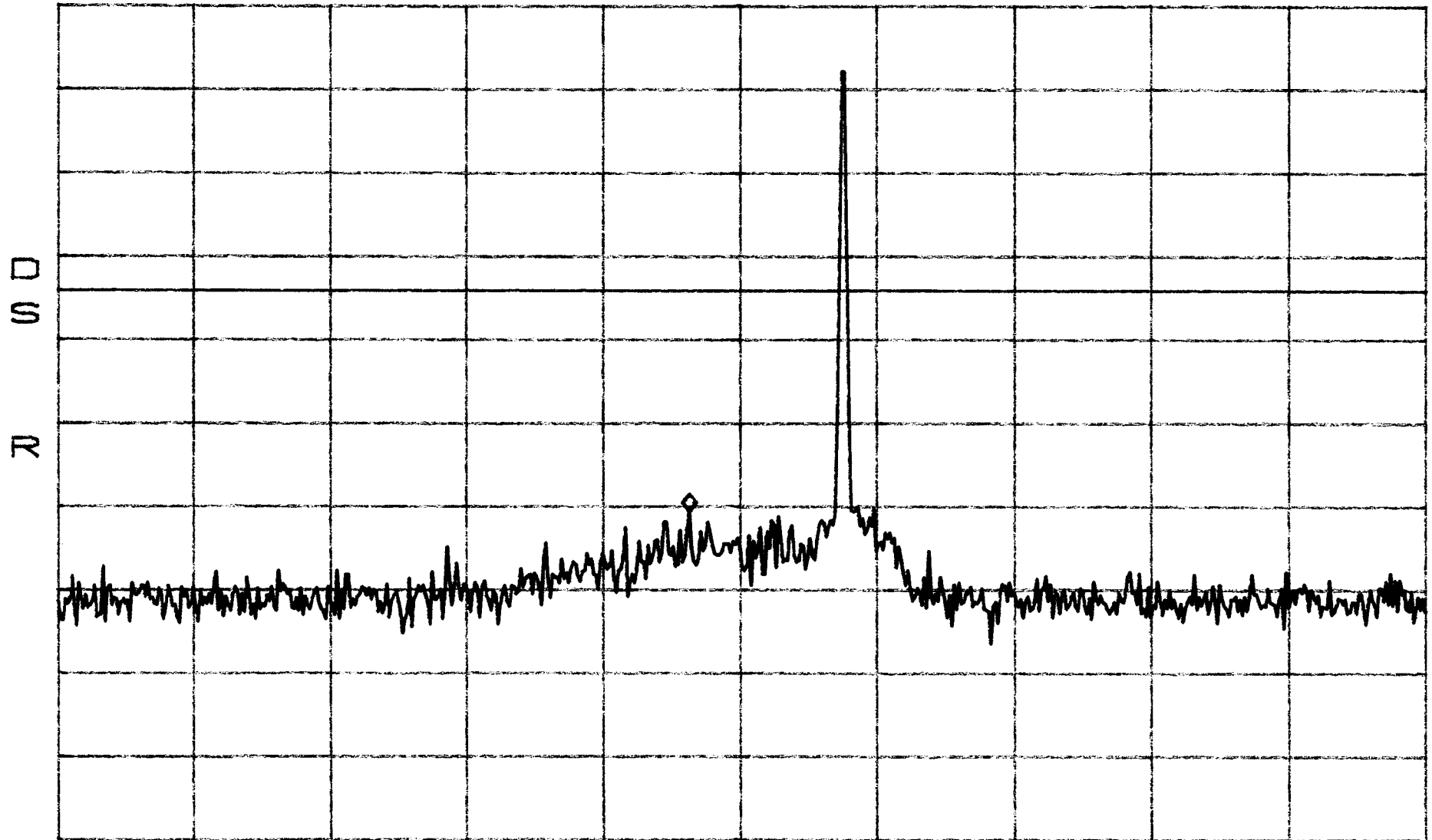
ATTEN 10dB

MKR -39.20dBm

RL 21.3dBm

10dB/

856.3MHz



CENTER 860.0MHz

SPAN 100.0MHz

*RBW 100kHz

VBW 100kHz

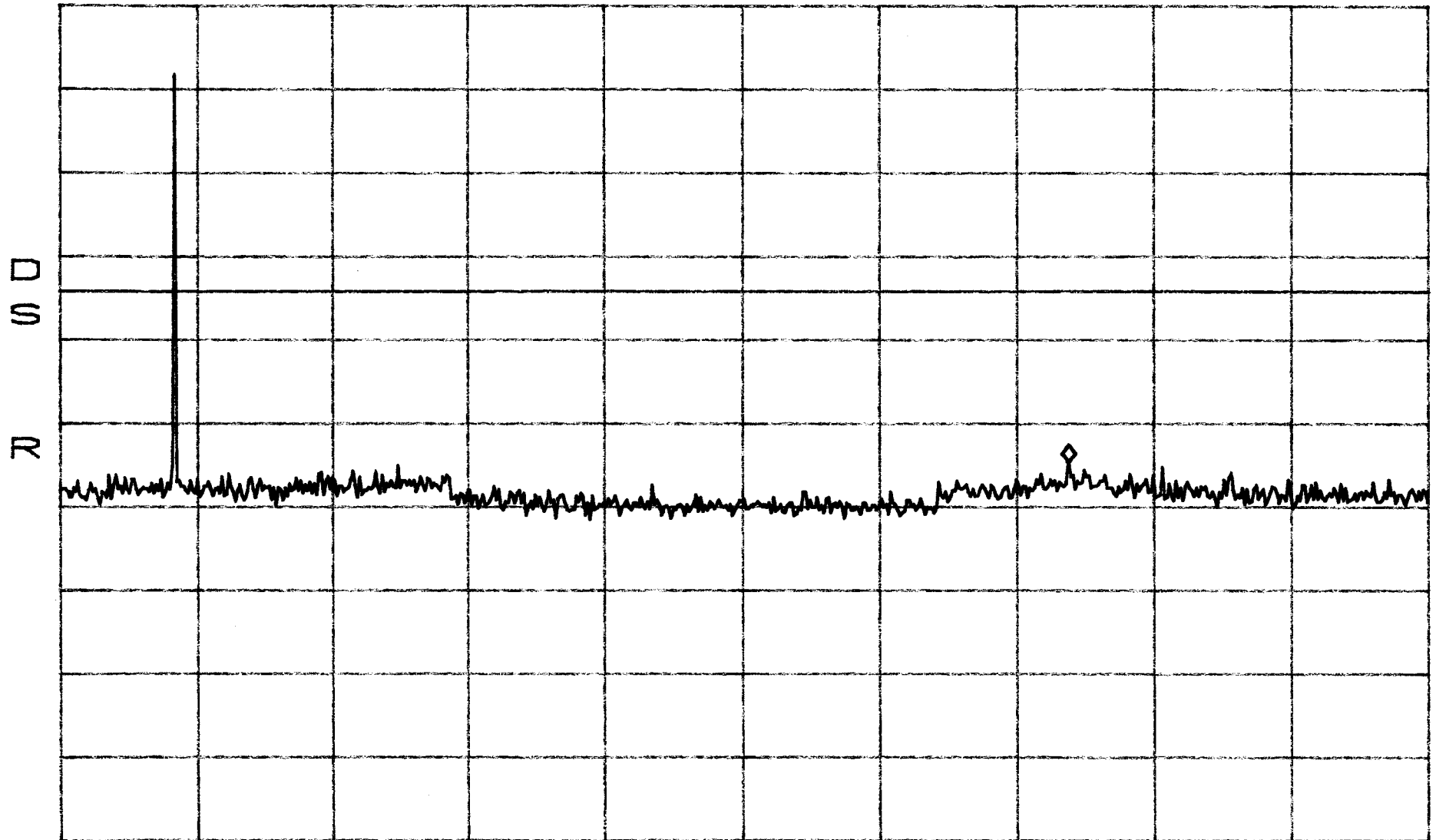
SWP 50ms

Conducted Emissions Band 5MR
High

ATTEN 10dB
RL 21.3dBm

10dB/

MKR -33.20dBm
7.391GHz



START 30MHz STOP 10.000GHz
*RBW 1.0MHz VBW 1.0MHz SWP 200ms

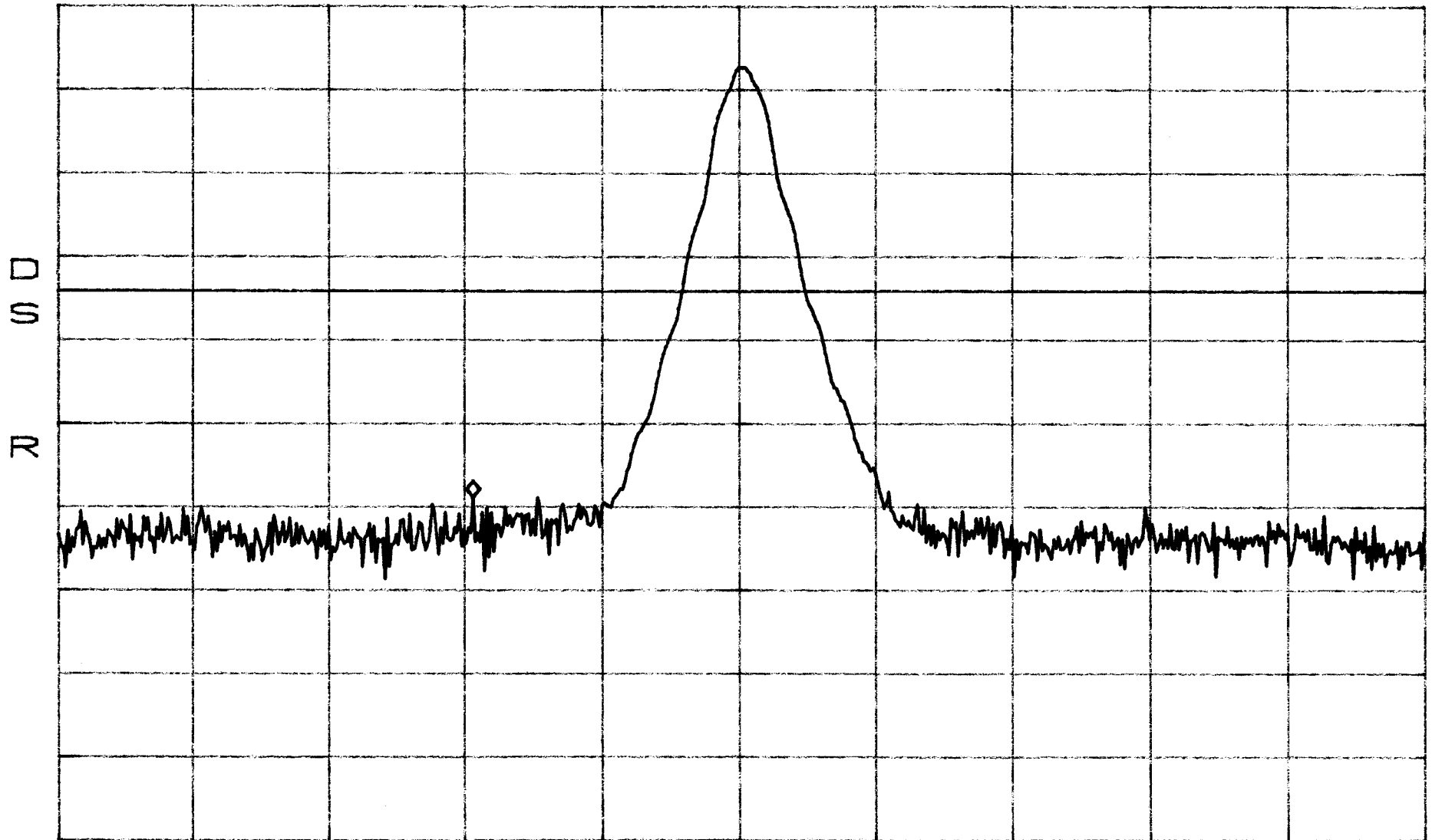
Conducted Emissions
FM

Band SMR

ATTEN 10dB
RL 21.3dBm

10dB/

MKR -37.53dBm
859.033MHz



CENTER 860.000MHz SPAN 5.000MHz
*RBW 100kHz VBW 100kHz SWP 50ms

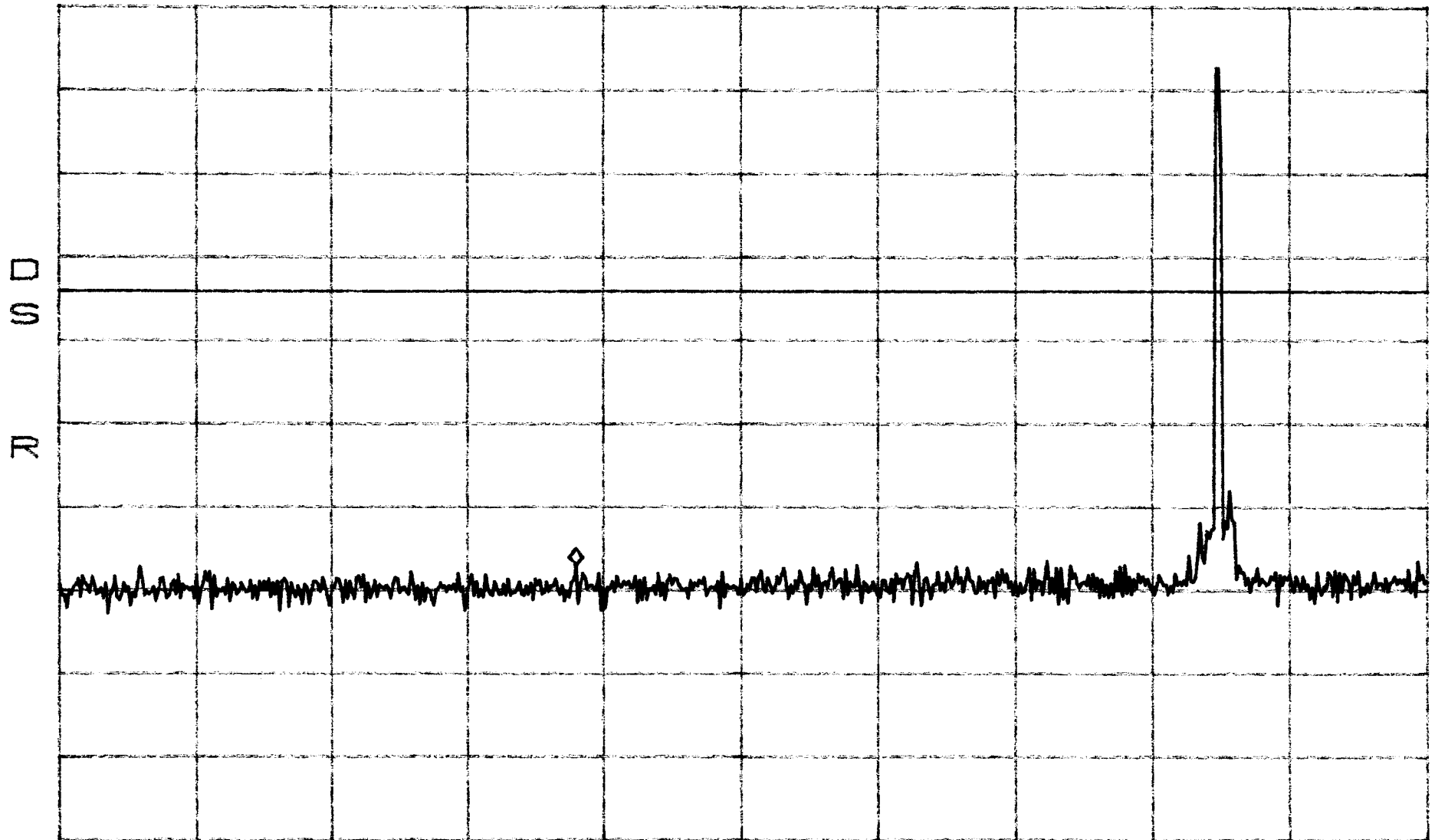
Conducted Emissions
FM

Band SMR

ATTEN 10dB
RL 21.3dBm

10dB/

MKR -45.70dBm
398.6MHz



START 30.0MHz STOP 1.0000GHz
*RBW 100kHz VBW 100kHz SWP 250ms

Conducted Emissions
FM

Band SMR

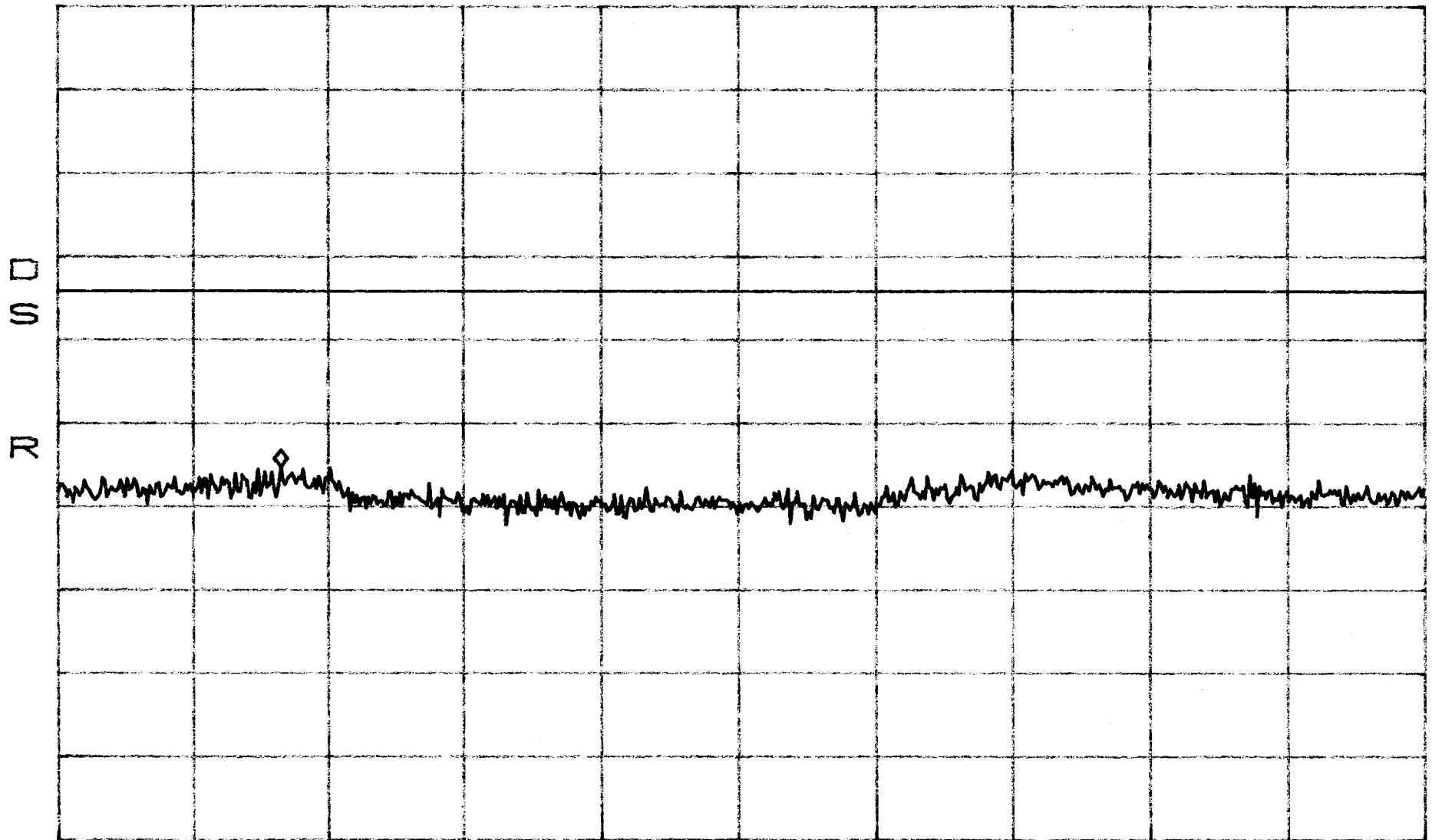
ATTEN 10dB

MKR -33.87dBm

RL 21.3dBm

10dB/

2.485GHz



START 1.000GHz

STOP 10.000GHz

*RBW 1.0MHz

VBW 1.0MHz

SWP 180ms

Conducted Emissions Band SMK
TDMA

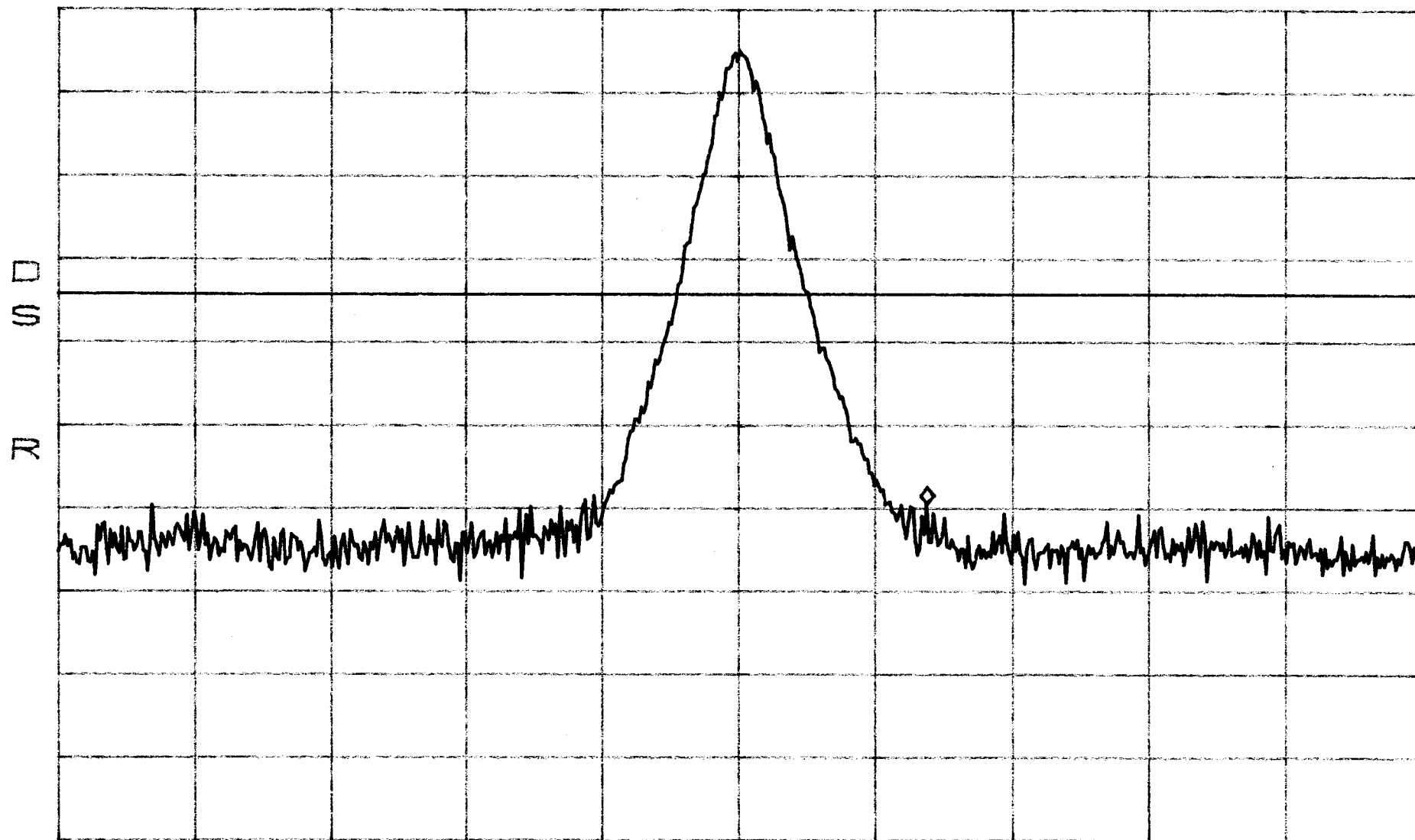
ATTEN 10dB

MKR -38.03dBm

RL 21.3dBm

10dB/

860.692MHz



CENTER 860.000MHz

SPAN 5.000MHz

*RBW 100kHz

VBW 100kHz

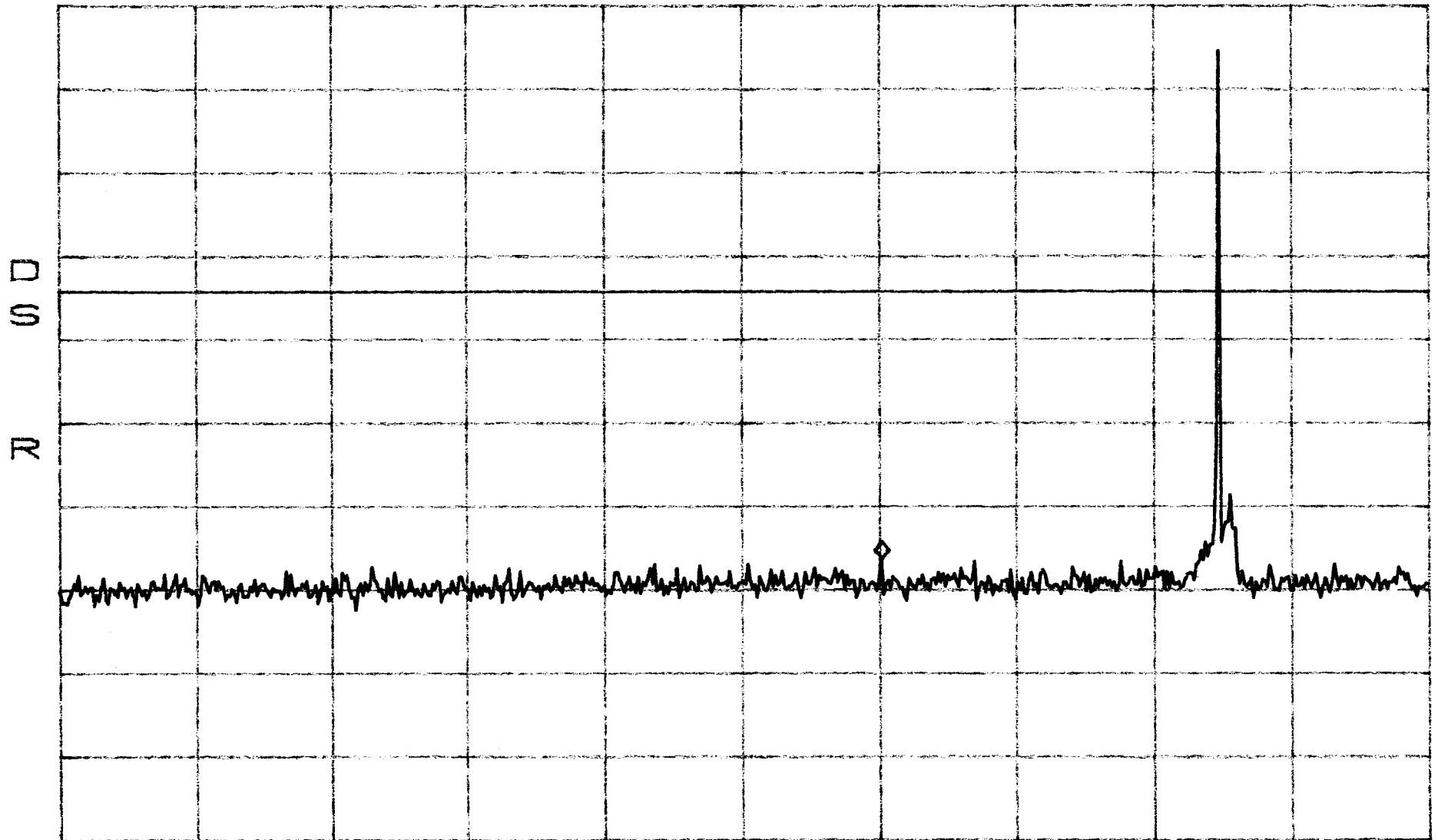
SWP 50ms

Conducted Emissions Band 8MR
TDMA

ATTEN 10dB
RL 21.3dBm

10dB/

MKR -44.87dBm
613.6MHz



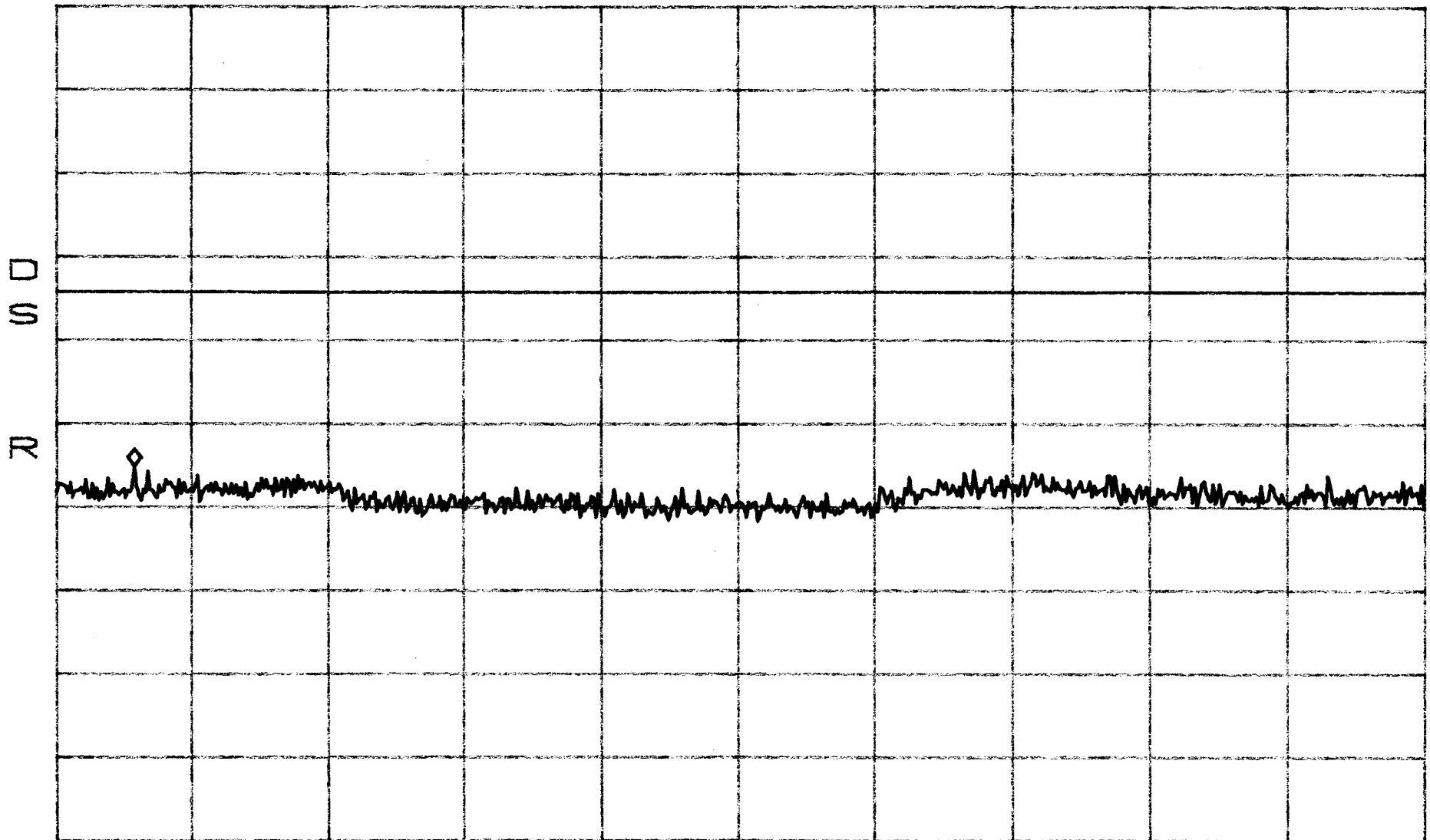
START 30.0MHz STOP 1.0000GHz
*RBW 100kHz VBW 100kHz SWP 250ms

Conducted Emissions Band SMR
TDMA

ATTEN 10dB
RL 21.3dBm

10dB/

MKR -33.70dBm
1.525GHz



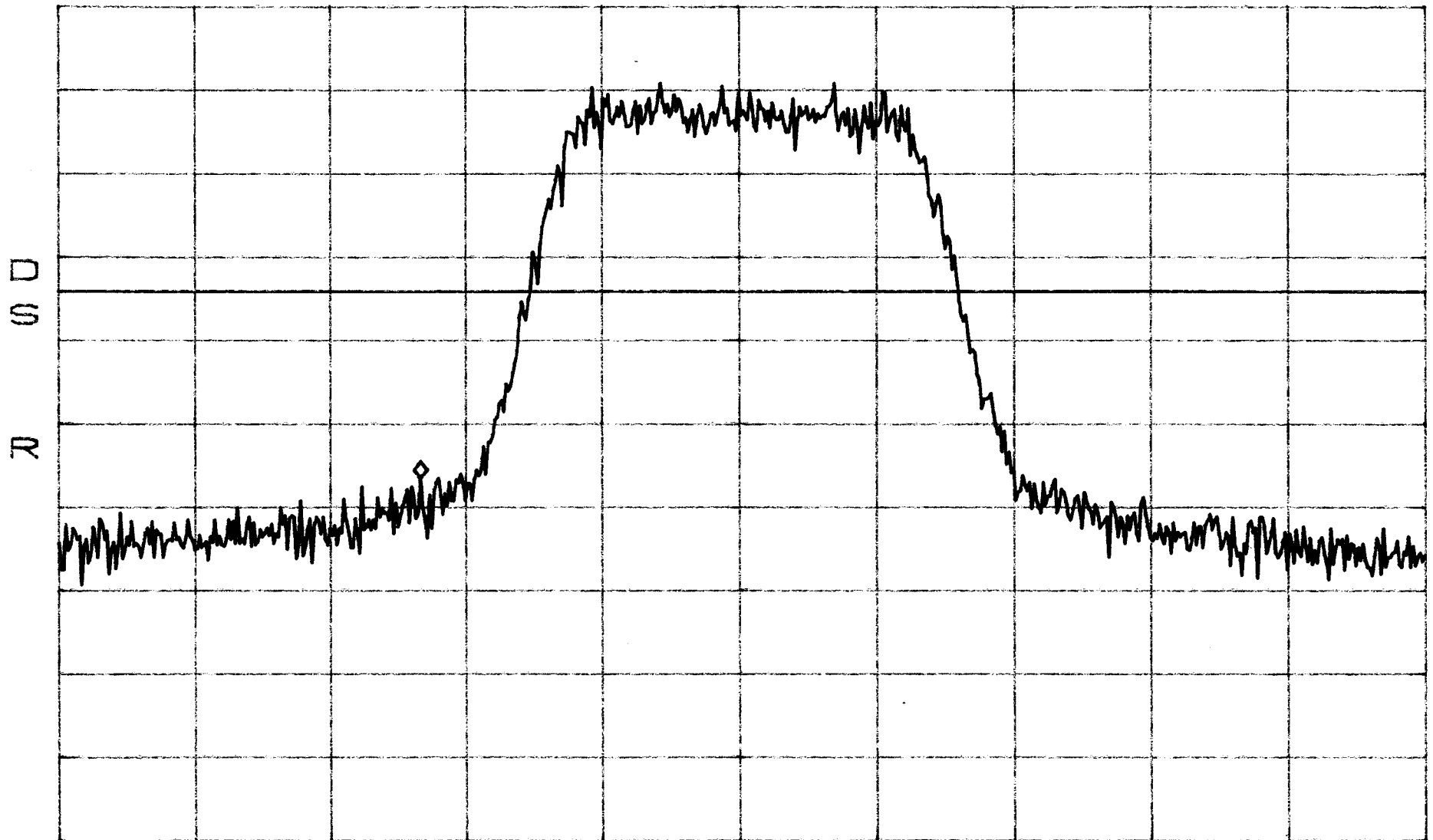
START 1.000GHz STOP 10.000GHz
*RBW 1.0MHz VBW 1.0MHz SWP 180ms

Conducted Emissions Band SMR
CDMA

ATTEN 10dB
RL 21.3dBm

MKR -35.20dBm
858.833MHz

10dB/



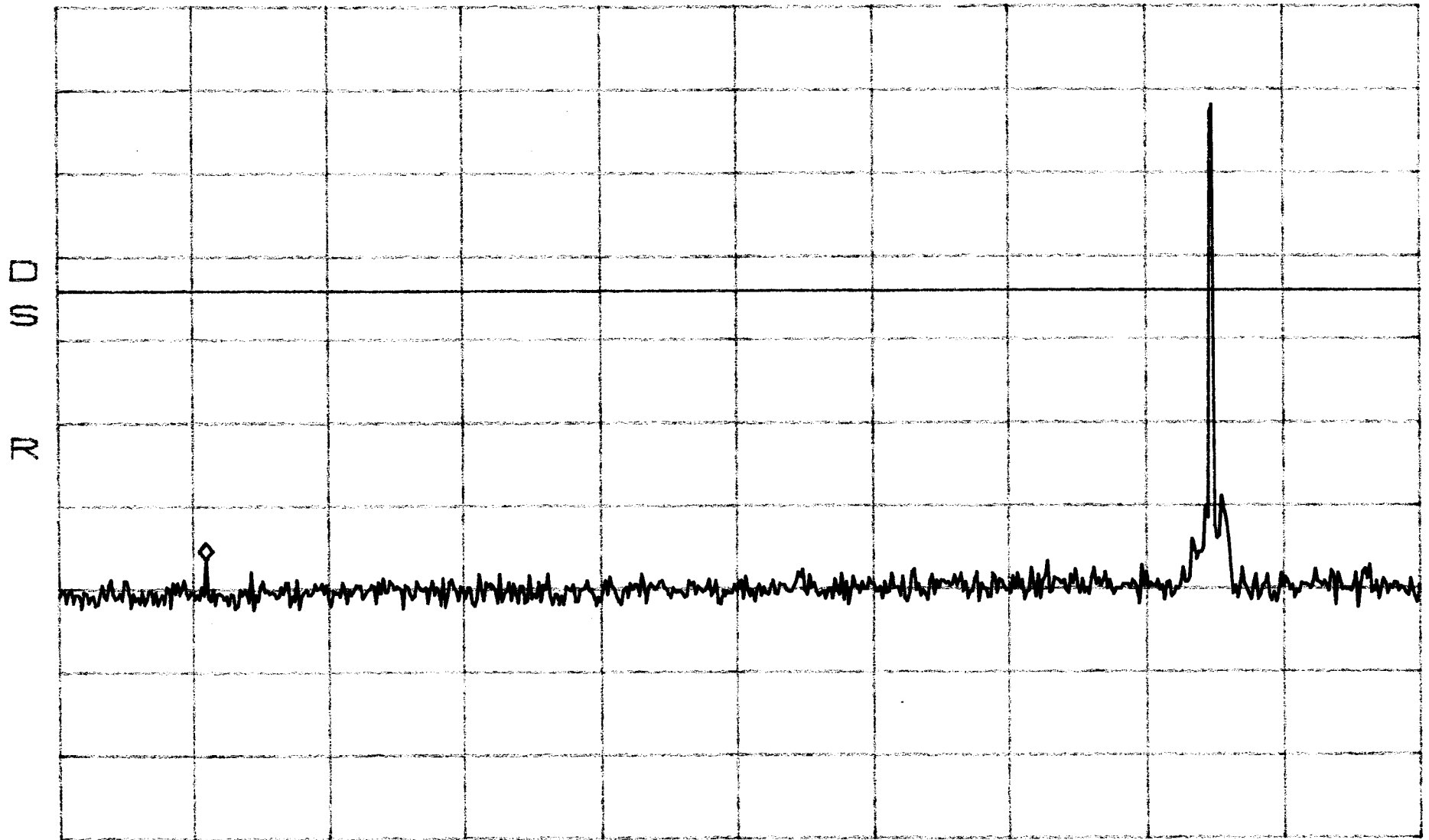
CENTER 860.000MHz SPAN 5.000MHz
*RBW 100kHz VBW 100kHz SWP 50ms

Conducted Emissions Band SMR
CDMA

ATTEN 10dB
RL 21.3dBm

MKR -45.03dBm
136.7MHz

10dB/



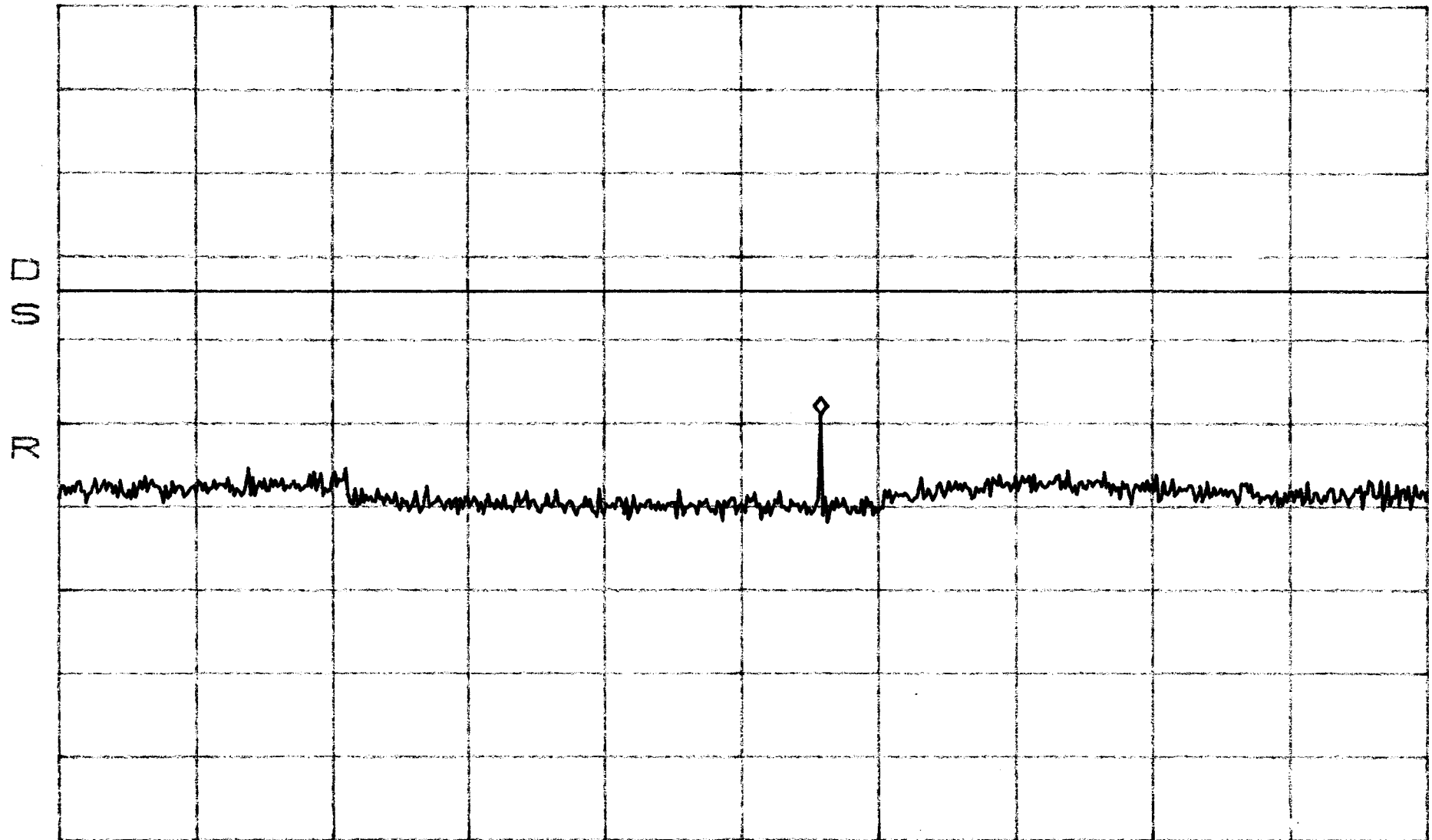
START 30.0MHz STOP 1.0000GHz
*RBW 100kHz VBW 100kHz SWP 250ms

Conducted Emissions Band 3MR
CDMA

ATTEN 10dB
RL 21.3dBm

10dB/

MKR -27.53dBm
6.025GHz



START 1.000GHz STOP 10.000GHz
*RBW 1.0MHz VBW 1.0MHz SWP 180ms

Conducted Emissions
Band Edge
FM

Band SMR

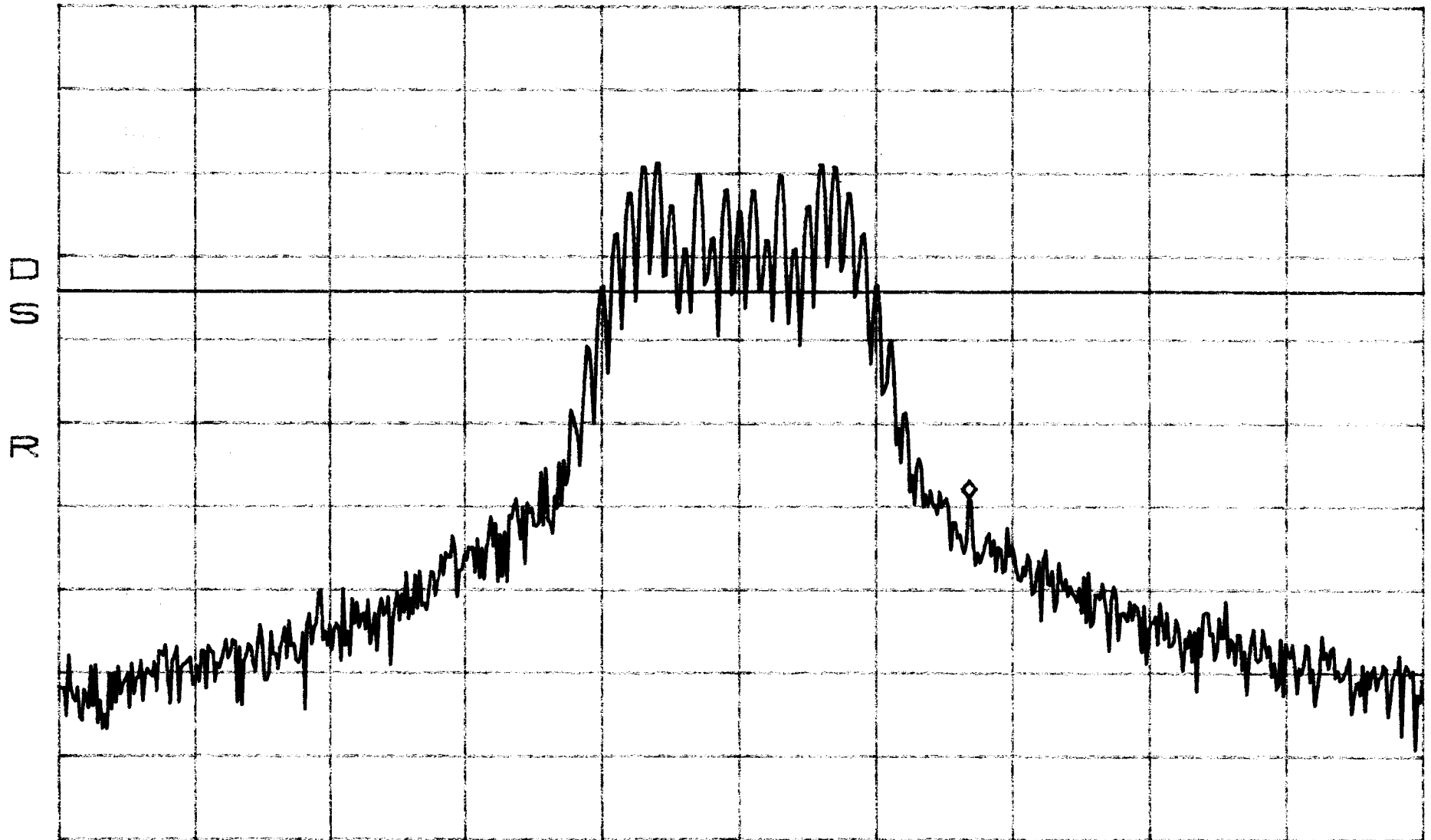
ATTEN 10dB

RL 21.3dBm

10dB/

MKR -37.53dBm

851.2168MHz



CENTER 851.2000MHz

SPAN 100.0kHz

*RBW 300Hz

VBW 300Hz

SWP 2.8sec

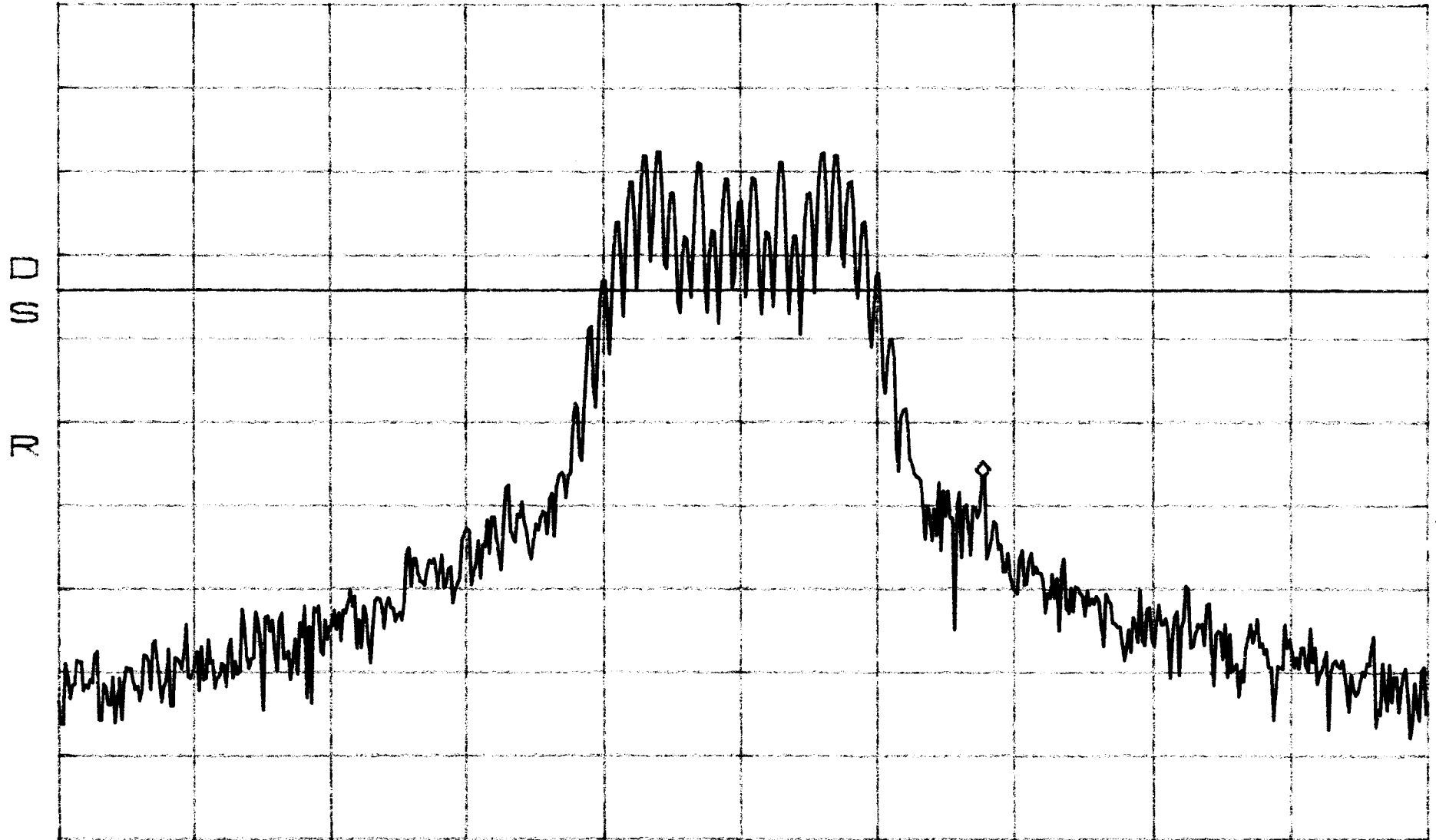
Conducted Emissions
Band Edge
FM

Band SMR

ATTEN 10dB
RL 21.3dBm

10dB/

MKR -35.37dBm
868.8178MHz



CENTER 868.8000MHz SPAN 100.0kHz
*RBW 300Hz VBW 300Hz SWP 2.8sec

Radiated Electromagnetic Emissions



Test Report #:	5189 Run 01	Test Area:	LTS 3m	
Test Method:	N/A	Test Date:	08-Oct-2002	
EUT Model #:	DGVI-2XXXXXDHU / DGVI-2XXXXXDRU	EUT Power:	60HZ/110VAC	
EUT Serial #:		Temperature:	20	°C
Manufacturer:	ADC TELECOMM	Relative Humidity:	55	%
EUT Description:	INDOOR RF REPEATER (SMR)	Air Pressure:	99	kPa
Notes:	SPURIOUS CASE RADIATION SCAN (3 CHANNELS INVESTIGATED - LOW / MED / HIGH)			Page: 1 of 11

FREQ (MHz)	LEVEL (dBuV)	CABLE / ANT / PREAMP (dB) (dB/m) (dB)	FINAL (dBuV)	POL / HGT / AZ (m) (DEG)	DELTA1 N/A	DELTA2 N/A
MIDDLE CHANNEL 860MHZ (MID)						
38.71	38.5 Qp	0.5 / 17.4 / 27.8	28.6	V / 1.0 / 0.0	N/A	N/A
50.65	38.6 Qp	0.6 / 14.0 / 27.7	25.5	V / 1.0 / 0.0	N/A	N/A
86.59	45.0 Qp	0.8 / 7.4 / 27.9	25.2	V / 1.0 / 0.0	N/A	N/A
109.00	47.1 Qp	0.9 / 9.5 / 27.9	29.6	V / 1.0 / 0.0	N/A	N/A
115.96	42.0 Qp	0.9 / 9.3 / 28.0	24.2	V / 1.0 / 0.0	N/A	N/A
140.26	46.2 Qp	1.0 / 8.9 / 28.0	28.1	V / 1.0 / 0.0	N/A	N/A
212.97	73.5 Qp	1.4 / 10.8 / 27.7	57.9	V / 1.0 / 0.0	N/A	N/A
230.73	47.1 Qp	1.4 / 11.0 / 27.7	31.9	V / 1.0 / 0.0	N/A	N/A
233.98	44.1 Qp	1.4 / 11.2 / 27.7	28.9	V / 1.0 / 0.0	N/A	N/A
266.22	43.9 Qp	1.3 / 12.6 / 27.8	30.0	V / 1.0 / 0.0	N/A	N/A
283.97	41.4 Qp	1.4 / 12.6 / 27.8	27.6	V / 1.0 / 0.0	N/A	N/A
304.98	43.6 Qp	1.5 / 13.5 / 27.7	31.0	V / 1.0 / 0.0	N/A	N/A
312.97	42.1 Qp	1.6 / 13.7 / 27.7	29.6	V / 1.0 / 0.0	N/A	N/A
317.99	38.5 Qp	1.6 / 13.9 / 27.7	26.2	V / 1.0 / 0.0	N/A	N/A
333.97	40.9 Qp	1.6 / 14.3 / 27.7	29.1	V / 1.0 / 0.0	N/A	N/A
337.23	39.2 Qp	1.6 / 14.3 / 27.6	27.5	V / 1.0 / 0.0	N/A	N/A
354.97	66.0 Qp	1.6 / 14.9 / 27.6	54.8	V / 1.0 / 0.0	N/A	N/A
372.73	37.9 Qp	1.7 / 15.2 / 27.7	27.1	V / 1.0 / 0.0	N/A	N/A
404.97	41.6 Qp	1.7 / 15.9 / 27.7	31.5	V / 1.0 / 0.0	N/A	N/A
425.97	83.6 Qp	1.8 / 16.6 / 27.7	74.2	V / 1.0 / 0.0	N/A	N/A
496.98	61.1 Qp	2.1 / 17.5 / 27.6	53.1	V / 1.0 / 0.0	N/A	N/A
567.98	56.5 Qp	2.1 / 18.5 / 27.5	49.7	V / 1.0 / 0.0	N/A	N/A
638.97	59.1 Qp	2.3 / 19.9 / 27.6	53.7	V / 1.0 / 0.0	N/A	N/A
680.99	36.9 Qp	2.4 / 20.2 / 27.4	32.0	V / 1.0 / 0.0	N/A	N/A

Tested by: RMJ

Printed

Signature

Reviewed by: TKS

Printed

Signature

Radiated Electromagnetic Emissions



Test Report #:	5189 Run 01	Test Area:	LTS 3m		
Test Method:	N/A	Test Date:	08-Oct-2002		
EUT Model #:	DGVI-2XXXXXDHU / DGVI-2XXXXXDRU	EUT Power:	60HZ/110VAC		
EUT Serial #:				Temperature:	20 °C
Manufacturer:	ADC TELECOMM			Relative Humidity:	55 %
EUT Description:	INDOOR RF REPEATER (SMR)			Air Pressure:	99 kPa
Notes:	SPURIOUS CASE RADIATION SCAN (3 CHANNELS INVESTIGATED - LOW / MED / HIGH)			Page:	2 of 11

FREQ (MHz)	LEVEL (dBuV)	CABLE / ANT / PREAMP (dB) (dB/m) (dB)	FINAL (dBuV)	POL / HGT / AZ (m) (DEG)	DELTA1 N/A	DELTA2 N/A
709.98	61.8 Qp	2.4 / 20.5 / 27.4	57.2	V / 1.0 / 0.0	N/A	N/A
763.22	37.8 Qp	2.5 / 21.2 / 27.4	34.0	V / 1.0 / 0.0	N/A	N/A
780.98	60.6 Qp	2.5 / 21.5 / 27.4	57.2	V / 1.0 / 0.0	N/A	N/A
798.73	44.7 Qp	2.5 / 21.5 / 27.3	41.4	V / 1.0 / 0.0	N/A	N/A
834.22	50.4 Qp	2.6 / 21.9 / 27.3	47.7	V / 1.0 / 0.0	N/A	N/A
851.98	47.1 Qp	2.6 / 22.1 / 27.2	44.6	V / 1.0 / 0.0	N/A	N/A
859.98	58.7 Qp	2.7 / 22.0 / 27.2	56.1	V / 1.0 / 0.0	N/A	N/A
869.73	47.2 Qp	2.7 / 22.1 / 27.2	44.8	V / 1.0 / 0.0	N/A	N/A
905.22	41.8 Qp	2.9 / 22.5 / 27.2	40.0	V / 1.0 / 0.0	N/A	N/A
922.98	43.8 Qp	2.9 / 22.8 / 27.2	42.3	V / 1.0 / 0.0	N/A	N/A
940.73	37.0 Qp	2.9 / 22.7 / 27.2	35.4	V / 1.0 / 0.0	N/A	N/A
976.22	49.6 Qp	2.9 / 23.1 / 27.2	48.3	V / 1.0 / 0.0	N/A	N/A
993.97	48.6 Qp	2.9 / 23.1 / 27.2	47.3	V / 1.0 / 0.0	N/A	N/A
1064.97	59.0 Pk	2.9 / 22.7 / 27.2	57.3	V / 1.0 / 0.0	N/A	N/A
1093.97	34.8 Pk	3.0 / 23.4 / 27.2	33.9	V / 1.0 / 0.0	N/A	N/A
1106.99	32.0 Pk	3.1 / 23.3 / 27.2	31.2	V / 1.0 / 0.0	N/A	N/A
1135.97	52.1 Pk	3.1 / 23.3 / 27.2	51.3	V / 1.0 / 0.0	N/A	N/A
1206.97	47.4 Pk	3.2 / 24.1 / 27.2	47.5	V / 1.0 / 0.0	N/A	N/A
1260.23	35.6 Pk	3.4 / 24.2 / 27.4	35.8	V / 1.0 / 0.0	N/A	N/A
1277.97	40.6 Pk	3.4 / 24.7 / 27.5	41.1	V / 1.0 / 0.0	N/A	N/A
1295.72	34.3 Pk	3.4 / 25.3 / 27.5	35.5	V / 1.0 / 0.0	N/A	N/A
1348.97	34.4 Pk	3.4 / 25.4 / 27.5	35.6	V / 1.0 / 0.0	N/A	N/A
1419.98	37.1 Pk	3.4 / 26.4 / 27.4	39.6	V / 1.0 / 0.0	N/A	N/A
1490.98	35.0 Pk	3.4 / 26.1 / 27.3	37.2	V / 1.0 / 0.0	N/A	N/A
1561.98	37.9 Pk	3.5 / 26.5 / 27.4	40.4	V / 1.0 / 0.0	N/A	N/A

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Radiated Electromagnetic Emissions



Test Report #:	5189 Run 01	Test Area:	LTS 3m		
Test Method:	N/A	Test Date:	08-Oct-2002		
EUT Model #:	DGVI-2XXXXXDHU / DGVI-2XXXXXDRU	EUT Power:	60HZ/110VAC		
EUT Serial #:				Temperature:	20 °C
Manufacturer:	ADC TELECOMM			Relative Humidity:	55 %
EUT Description:	INDOOR RF REPEATER (SMR)			Air Pressure:	99 kPa
Notes:	SPURIOUS CASE RADIATION SCAN (3 CHANNELS INVESTIGATED - LOW / MED / HIGH)			Page:	3 of 11

FREQ (MHz)	LEVEL (dBuV)	CABLE / ANT / PREAMP (dB) (dB/m) (dB)	FINAL (dBuV)	POL / HGT / AZ (m) (DEG)	DELTA1 N/A	DELTA2 N/A
1632.97	37.6 Pk	3.6 / 27.2 / 27.2	41.2	V / 1.0 / 0.0	N/A	N/A
1703.97	38.4 Pk	3.7 / 27.6 / 27.0	42.7	V / 1.0 / 0.0	N/A	N/A
1774.97	35.2 Pk	3.8 / 28.0 / 27.2	39.9	V / 1.0 / 0.0	N/A	N/A
1845.97	35.0 Pk	3.9 / 28.0 / 27.1	39.8	V / 1.0 / 0.0	N/A	N/A
1987.97	36.2 Pk	4.2 / 29.0 / 27.0	42.4	V / 1.0 / 0.0	N/A	N/A
140.26	53.3 Qp	1.0 / 8.9 / 28.0	35.2	V / 1.0 / 90.0	N/A	N/A
266.22	44.6 Qp	1.3 / 12.6 / 27.8	30.7	V / 1.0 / 90.0	N/A	N/A
283.97	61.0 Qp	1.4 / 12.6 / 27.8	47.2	V / 1.0 / 90.0	N/A	N/A
304.98	52.3 Qp	1.5 / 13.5 / 27.7	39.7	V / 1.0 / 90.0	N/A	N/A
303.85	55.1 Qp	1.5 / 13.5 / 27.7	42.4	V / 1.0 / 90.0	N/A	N/A
312.97	46.1 Qp	1.6 / 13.7 / 27.7	33.6	V / 1.0 / 90.0	N/A	N/A
317.99	43.1 Qp	1.6 / 13.9 / 27.7	30.9	V / 1.0 / 90.0	N/A	N/A
333.97	44.5 Qp	1.6 / 14.3 / 27.7	32.7	V / 1.0 / 90.0	N/A	N/A
337.23	43.2 Qp	1.6 / 14.3 / 27.6	31.5	V / 1.0 / 90.0	N/A	N/A
922.98	49.6 Qp	2.9 / 22.8 / 27.2	48.1	V / 1.0 / 90.0	N/A	N/A
1277.97	46.5 Pk	3.4 / 24.7 / 27.5	47.0	V / 1.0 / 90.0	N/A	N/A
1348.97	44.1 Pk	3.4 / 25.4 / 27.5	45.3	V / 1.0 / 90.0	N/A	N/A
1419.98	44.2 Pk	3.4 / 26.4 / 27.4	46.6	V / 1.0 / 90.0	N/A	N/A
1490.98	44.4 Pk	3.4 / 26.1 / 27.3	46.6	V / 1.0 / 90.0	N/A	N/A
1561.98	49.7 Pk	3.5 / 26.5 / 27.4	52.2	V / 1.0 / 90.0	N/A	N/A
1632.97	41.0 Pk	3.6 / 27.2 / 27.2	44.6	V / 1.0 / 90.0	N/A	N/A
1845.97	40.0 Pk	3.9 / 28.0 / 27.1	44.8	V / 1.0 / 90.0	N/A	N/A
50.65	39.4 Qp	0.6 / 14.0 / 27.7	26.3	V / 1.0 / 180.0	N/A	N/A

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Radiated Electromagnetic Emissions



Test Report #:	5189 Run 01	Test Area:	LTS 3m		
Test Method:	N/A	Test Date:	08-Oct-2002		
EUT Model #:	DGVI-2XXXXXDHU / DGVI-2XXXXXDRU	EUT Power:	60HZ/110VAC		
EUT Serial #:				Temperature:	20 °C
Manufacturer:	ADC TELECOMM			Relative Humidity:	55 %
EUT Description:	INDOOR RF REPEATER (SMR)			Air Pressure:	99 kPa
Notes:	SPURIOUS CASE RADIATION SCAN (3 CHANNELS INVESTIGATED - LOW / MED / HIGH)			Page:	4 of 11

FREQ (MHz)	LEVEL (dBuV)	CABLE / ANT / PREAMP (dB) (dB/m) (dB)	FINAL (dBuV)	POL / HGT / AZ (m) (DEG)	DELTA1 N/A	DELTA2 N/A
140.26	58.2 Qp	1.0 / 8.9 / 28.0	40.2	V / 1.0 / 180.0	N/A	N/A
212.97	78.6 Qp	1.4 / 10.8 / 27.7	63.0	V / 1.0 / 180.0	N/A	N/A
266.22	49.5 Qp	1.3 / 12.6 / 27.8	35.5	V / 1.0 / 180.0	N/A	N/A
283.97	65.2 Qp	1.4 / 12.6 / 27.8	51.4	V / 1.0 / 180.0	N/A	N/A
312.97	48.0 Qp	1.6 / 13.7 / 27.7	35.5	V / 1.0 / 180.0	N/A	N/A
337.23	44.4 Qp	1.6 / 14.3 / 27.6	32.6	V / 1.0 / 180.0	N/A	N/A
638.97	61.2 Qp	2.3 / 19.9 / 27.6	55.8	V / 1.0 / 180.0	N/A	N/A
851.98	48.6 Qp	2.6 / 22.1 / 27.2	46.1	V / 1.0 / 180.0	N/A	N/A
1419.98	47.0 Pk	3.4 / 26.4 / 27.4	49.4	V / 1.0 / 180.0	N/A	N/A
109.00	49.6 Qp	0.9 / 9.5 / 27.9	32.1	V / 1.0 / 270.0	N/A	N/A
115.96	45.9 Qp	0.9 / 9.3 / 28.0	28.1	V / 1.0 / 270.0	N/A	N/A
212.97	81.0 Qp	1.4 / 10.8 / 27.7	65.4	V / 1.0 / 270.0	N/A	N/A
233.98	46.6 Qp	1.4 / 11.2 / 27.7	31.4	V / 1.0 / 270.0	N/A	N/A
333.97	46.4 Qp	1.6 / 14.3 / 27.7	34.6	V / 1.0 / 270.0	N/A	N/A
567.98	60.9 Qp	2.1 / 18.5 / 27.5	54.1	V / 1.0 / 270.0	N/A	N/A
780.98	63.0 Qp	2.5 / 21.5 / 27.4	59.6	V / 1.0 / 270.0	N/A	N/A
976.22	50.1 Qp	2.9 / 23.1 / 27.2	48.9	V / 1.0 / 270.0	N/A	N/A
993.97	51.1 Qp	2.9 / 23.1 / 27.2	49.8	V / 1.0 / 270.0	N/A	N/A
MAXIMIZED.						
425.97	89.9 Qp	1.8 / 16.6 / 27.7	80.5	V / 1.5 / 20.0	N/A	N/A
MAXED ANTENNA AND ROTATED EUT 360 DEGREES.						

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Radiated Electromagnetic Emissions



Test Report #:	5189 Run 01	Test Area:	LTS 3m		
Test Method:	N/A	Test Date:	08-Oct-2002		
EUT Model #:	DGVI-2XXXXXDHU / DGVI-2XXXXXDRU	EUT Power:	60HZ/110VAC		
EUT Serial #:				Temperature:	20 °C
Manufacturer:	ADC TELECOMM			Relative Humidity:	55 %
EUT Description:	INDOOR RF REPEATER (SMR)			Air Pressure:	99 kPa
Notes:	SPURIOUS CASE RADIATION SCAN (3 CHANNELS INVESTIGATED - LOW / MED / HIGH)			Page:	5 of 11

FREQ (MHz)	LEVEL (dBuV)	CABLE / ANT / PREAMP (dB) (dB/m) (dB)	FINAL (dBuV)	POL / HGT / AZ (m) (DEG)	DELTA1 N/A	DELTA2 N/A
212.97	82.1 Qp	1.4 / 10.8 / 27.7	66.5	H / 1.0 / 0.0	N/A	N/A
266.22	54.6 Qp	1.3 / 12.6 / 27.8	40.6	H / 1.0 / 0.0	N/A	N/A
283.97	68.9 Qp	1.4 / 12.6 / 27.8	55.0	H / 1.0 / 0.0	N/A	N/A
304.98	54.6 Qp	1.5 / 13.5 / 27.7	42.0	H / 1.0 / 0.0	N/A	N/A
312.97	51.5 Qp	1.6 / 13.7 / 27.7	39.0	H / 1.0 / 0.0	N/A	N/A
317.99	52.4 Qp	1.6 / 13.9 / 27.7	40.1	H / 1.0 / 0.0	N/A	N/A
333.97	54.3 Qp	1.6 / 14.3 / 27.7	42.5	H / 1.0 / 0.0	N/A	N/A
337.23	53.5 Qp	1.6 / 14.3 / 27.6	41.8	H / 1.0 / 0.0	N/A	N/A
404.97	45.6 Qp	1.7 / 15.9 / 27.7	35.5	H / 1.0 / 0.0	N/A	N/A
112.45	48.8 Qp	0.9 / 9.5 / 28.0	31.2	H / 1.0 / 0.0	N/A	N/A
139.15	50.2 Qp	1.0 / 8.7 / 28.0	32.0	H / 1.0 / 0.0	N/A	N/A
320.97	52.8 Qp	1.6 / 14.0 / 27.7	40.7	H / 1.0 / 0.0	N/A	N/A
383.96	48.2 Qp	1.7 / 15.7 / 27.7	38.0	H / 1.0 / 0.0	N/A	N/A
112.45	49.2 Qp	0.9 / 9.5 / 28.0	31.6	H / 1.0 / 0.0	N/A	N/A
372.73	45.4 Qp	1.7 / 15.2 / 27.7	34.6	H / 1.0 / 0.0	N/A	N/A
1206.97	47.6 Pk	3.2 / 24.1 / 27.2	47.8	H / 1.0 / 0.0	N/A	N/A
266.22	57.1 Qp	1.3 / 12.6 / 27.8	43.2	H / 1.0 / 90.0	N/A	N/A
283.97	72.0 Qp	1.4 / 12.6 / 27.8	58.2	H / 1.0 / 90.0	N/A	N/A
230.73	51.0 Qp	1.4 / 11.0 / 27.7	35.7	H / 1.0 / 180.0	N/A	N/A
312.97	53.0 Qp	1.6 / 13.7 / 27.7	40.5	H / 1.0 / 180.0	N/A	N/A
317.99	53.0 Qp	1.6 / 13.9 / 27.7	40.8	H / 1.0 / 180.0	N/A	N/A
333.97	55.2 Qp	1.6 / 14.3 / 27.7	43.4	H / 1.0 / 180.0	N/A	N/A

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Radiated Electromagnetic Emissions



Test Report #:	5189 Run 01	Test Area:	LTS 3m		
Test Method:	N/A	Test Date:	08-Oct-2002		
EUT Model #:	DGVI-2XXXXXDHU / DGVI-2XXXXXDRU	EUT Power:	60HZ/110VAC		
EUT Serial #:				Temperature:	20 °C
Manufacturer:	ADC TELECOMM			Relative Humidity:	55 %
EUT Description:	INDOOR RF REPEATER (SMR)			Air Pressure:	99 kPa
Notes:	SPURIOUS CASE RADIATION SCAN (3 CHANNELS INVESTIGATED - LOW / MED / HIGH)			Page:	6 of 11

FREQ (MHz)	LEVEL (dBuV)	CABLE / ANT / PREAMP (dB) (dB/m) (dB)	FINAL (dBuV)	POL / HGT / AZ (m) (DEG)	DELTA1 N/A	DELTA2 N/A
212.97	86.8 Qp	1.4 / 10.8 / 27.7	71.2	H / 1.0 / 270.0	N/A	N/A
496.98	62.6 Qp	2.1 / 17.5 / 27.6	54.6	H / 1.0 / 270.0	N/A	N/A
1277.97	49.7 Pk	3.4 / 24.7 / 27.5	50.3	H / 1.0 / 270.0	N/A	N/A
1348.97	47.0 Pk	3.4 / 25.4 / 27.5	48.2	H / 1.0 / 270.0	N/A	N/A
MAXIMIZED.						
212.97	88.5 Qp	1.4 / 10.8 / 27.7	73.0	H / 1.5 / 254.0	N/A	N/A
MAXED ANTENNA AND ROTATED EUT 360 DEGREES.						
CHANGED TO 851MHZ CHANNEL (LOW)						
CHANGED TO 869MHZ CHANNEL (HIGH)						
425.97	91.3 Qp	1.8 / 16.6 / 27.7	81.9	V / 1.0 / 0.0	N/A	N/A
MAXIMIZED.						
425.97	91.6 Qp	1.8 / 16.6 / 27.7	82.2	V / 1.7 / 0.0	N/A	N/A
RE-CHECKING 860MHZ (MIDDLE CHANNEL) ON 425.97MHZ.						
425.97	91.7 Qp	1.8 / 16.6 / 27.7	82.3	V / 1.7 / 0.0	N/A	N/A
MIDDLE CHANNEL 860MHZ.						
2058.97	36.6 Pk	4.1 / 29.7 / 27.3	43.2	V / 1.0 / 0.0	N/A	N/A
2129.97	41.8 Pk	4.1 / 29.9 / 27.3	48.6	V / 1.0 / 0.0	N/A	N/A
2200.97	38.2 Pk	4.2 / 30.0 / 27.0	45.5	V / 1.0 / 0.0	N/A	N/A

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Radiated Electromagnetic Emissions



Test Report #:	5189 Run 01	Test Area:	LTS 3m	
Test Method:	N/A	Test Date:	08-Oct-2002	
EUT Model #:	DGVI-2XXXXXDHU / DGVI-2XXXXXDRU	EUT Power:	60HZ/110VAC	
EUT Serial #:		Temperature:	20	°C
Manufacturer:	ADC TELECOMM	Relative Humidity:	55	%
EUT Description:	INDOOR RF REPEATER (SMR)	Air Pressure:	99	kPa
Notes:	SPURIOUS CASE RADIATION SCAN (3 CHANNELS INVESTIGATED - LOW / MED / HIGH)			Page: 7 of 11

FREQ (MHz)	LEVEL (dBuV)	CABLE / ANT / PREAMP (dB) (dB/m) (dB)	FINAL (dBuV)	POL / HGT / AZ (m) (DEG)	DELTA1 N/A	DELTA2 N/A
2271.97	37.2 Pk	4.3 / 30.2 / 26.9	44.9	V / 1.0 / 0.0	N/A	N/A
2413.96	37.8 Pk	4.4 / 30.5 / 26.8	46.0	V / 1.0 / 0.0	N/A	N/A
MAXIMIZED.						
2129.97	41.9 Pk	4.1 / 29.9 / 27.3	48.7	V / 1.0 / 0.0	N/A	N/A
NO NEW OR HIGHER EMISSIONS FOUND WITH HORIZONTAL POLARIZATION AT ALL AZIMUTHS.						
CHANGED TO 851MHZ (LOW)						
CHANGED TO 869MHZ CHANNEL (HIGH)						
SCANNING 4.5 - 9 GHZ RANGE.						
CHANGED TO 860MHZ (MIDDLE CHANNEL)						
CHANGED TO 869MHZ (HIGH CHANNEL)						
CHANGED TO 851MHZ (LOW CHANNEL)						
NO EMISSIONS DETECTED ABOVE 2.413.96GHZ V OR H POLARIZATIONS AT ALL AZIMUTHS.						
END OF SCAN 30 MHZ - 9 GHZ.						

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Radiated Electromagnetic Emissions



Test Report #:	5189 Run 01	Test Area:	LTS 3m		
Test Method:	N/A	Test Date:	08-Oct-2002		
EUT Model #:	DGVI-2XXXXXDHU / DGVI-2XXXXXDRU	EUT Power:	60HZ/110VAC		
EUT Serial #:				Temperature:	20 °C
Manufacturer:	ADC TELECOMM			Relative Humidity:	55 %
EUT Description:	INDOOR RF REPEATER (SMR)			Air Pressure:	99 kPa
Notes:	SPURIOUS CASE RADIATION SCAN (3 CHANNELS INVESTIGATED - LOW / MED / HIGH)			Page:	8 of 11

FREQ (MHz)	LEVEL (dBuV)	CABLE / ANT / PREAMP (dB) (dB/m) (dB)	FINAL (dBuV)	POL / HGT / AZ (m) (DEG)	DELTA1 N/A	DELTA2 N/A
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Substitution done on highest (worst case) emission (425.97MHz)

Level measured is -4.5dBm

Final level with cable loss and antenna factor = -14.5dBm

Cable loss = 2dB , Antenna Factor = 8dB

Level - cable loss - Antenna Factor = Power out
-4.5dB - 2dB - 8dB = -14.5dBm = 355uW

***** MEASUREMENT SUMMARY *****						
38.71	38.5 Qp	0.5 / 17.4 / 27.8	28.6	V / 1.0 / 0.0	N/A	N/A
50.65	39.4 Qp	0.6 / 14.0 / 27.7	26.3	V / 1.0 / 180.0	N/A	N/A
86.59	45.0 Qp	0.8 / 7.4 / 27.9	25.2	V / 1.0 / 0.0	N/A	N/A
109.00	49.6 Qp	0.9 / 9.5 / 27.9	32.1	V / 1.0 / 270.0	N/A	N/A
112.45	49.2 Qp	0.9 / 9.5 / 28.0	31.6	H / 1.0 / 0.0	N/A	N/A
115.96	45.9 Qp	0.9 / 9.3 / 28.0	28.1	V / 1.0 / 270.0	N/A	N/A
139.15	50.2 Qp	1.0 / 8.7 / 28.0	32.0	H / 1.0 / 0.0	N/A	N/A
140.26	58.2 Qp	1.0 / 8.9 / 28.0	40.2	V / 1.0 / 180.0	N/A	N/A
212.97	88.5 Qp	1.4 / 10.8 / 27.7	73.0	H / 1.5 / 254.0	N/A	N/A
230.73	51.0 Qp	1.4 / 11.0 / 27.7	35.7	H / 1.0 / 180.0	N/A	N/A
233.98	46.6 Qp	1.4 / 11.2 / 27.7	31.4	V / 1.0 / 270.0	N/A	N/A
266.22	57.1 Qp	1.3 / 12.6 / 27.8	43.2	H / 1.0 / 90.0	N/A	N/A
283.97	72.0 Qp	1.4 / 12.6 / 27.8	58.2	H / 1.0 / 90.0	N/A	N/A
303.85	55.1 Qp	1.5 / 13.5 / 27.7	42.4	V / 1.0 / 90.0	N/A	N/A
304.98	54.6 Qp	1.5 / 13.5 / 27.7	42.0	H / 1.0 / 0.0	N/A	N/A

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Radiated Electromagnetic Emissions



Test Report #:	5189 Run 01	Test Area:	LTS 3m		
Test Method:	N/A	Test Date:	08-Oct-2002		
EUT Model #:	DGVI-2XXXXXDHU / DGVI-2XXXXXDRU	EUT Power:	60HZ/110VAC		
EUT Serial #:				Temperature:	20 °C
Manufacturer:	ADC TELECOMM			Relative Humidity:	55 %
EUT Description:	INDOOR RF REPEATER (SMR)			Air Pressure:	99 kPa
Notes:	SPURIOUS CASE RADIATION SCAN (3 CHANNELS INVESTIGATED - LOW / MED / HIGH)			Page:	9 of 11

FREQ (MHz)	LEVEL (dBuV)	CABLE / ANT / PREAMP (dB) (dB/m) (dB)	FINAL (dBuV)	POL / HGT / AZ (m) (DEG)	DELTA1 N/A	DELTA2 N/A
***** MEASUREMENT SUMMARY *****						
312.97	53.0 Qp	1.6 / 13.7 / 27.7	40.5	H / 1.0 / 180.0	N/A	N/A
317.99	53.0 Qp	1.6 / 13.9 / 27.7	40.8	H / 1.0 / 180.0	N/A	N/A
320.97	52.8 Qp	1.6 / 14.0 / 27.7	40.7	H / 1.0 / 0.0	N/A	N/A
333.97	55.2 Qp	1.6 / 14.3 / 27.7	43.4	H / 1.0 / 180.0	N/A	N/A
337.23	53.5 Qp	1.6 / 14.3 / 27.6	41.8	H / 1.0 / 0.0	N/A	N/A
354.97	66.0 Qp	1.6 / 14.9 / 27.6	54.8	V / 1.0 / 0.0	N/A	N/A
372.73	45.4 Qp	1.7 / 15.2 / 27.7	34.6	H / 1.0 / 0.0	N/A	N/A
383.96	48.2 Qp	1.7 / 15.7 / 27.7	38.0	H / 1.0 / 0.0	N/A	N/A
404.97	45.6 Qp	1.7 / 15.9 / 27.7	35.5	H / 1.0 / 0.0	N/A	N/A
425.97	91.7 Qp	1.8 / 16.6 / 27.7	82.3	V / 1.7 / 0.0	N/A	N/A
496.98	62.6 Qp	2.1 / 17.5 / 27.6	54.6	H / 1.0 / 270.0	N/A	N/A
567.98	60.9 Qp	2.1 / 18.5 / 27.5	54.1	V / 1.0 / 270.0	N/A	N/A
638.97	61.2 Qp	2.3 / 19.9 / 27.6	55.8	V / 1.0 / 180.0	N/A	N/A
680.99	36.9 Qp	2.4 / 20.2 / 27.4	32.0	V / 1.0 / 0.0	N/A	N/A
709.98	61.8 Qp	2.4 / 20.5 / 27.4	57.2	V / 1.0 / 0.0	N/A	N/A
763.22	37.8 Qp	2.5 / 21.2 / 27.4	34.0	V / 1.0 / 0.0	N/A	N/A
780.98	63.0 Qp	2.5 / 21.5 / 27.4	59.6	V / 1.0 / 270.0	N/A	N/A
798.73	44.7 Qp	2.5 / 21.5 / 27.3	41.4	V / 1.0 / 0.0	N/A	N/A
834.22	50.4 Qp	2.6 / 21.9 / 27.3	47.7	V / 1.0 / 0.0	N/A	N/A
851.98	48.6 Qp	2.6 / 22.1 / 27.2	46.1	V / 1.0 / 180.0	N/A	N/A
859.98	58.7 Qp	2.7 / 22.0 / 27.2	56.1	V / 1.0 / 0.0	N/A	N/A
869.73	47.2 Qp	2.7 / 22.1 / 27.2	44.8	V / 1.0 / 0.0	N/A	N/A
905.22	41.8 Qp	2.9 / 22.5 / 27.2	40.0	V / 1.0 / 0.0	N/A	N/A
922.98	49.6 Qp	2.9 / 22.8 / 27.2	48.1	V / 1.0 / 90.0	N/A	N/A

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Radiated Electromagnetic Emissions



Test Report #:	5189 Run 01	Test Area:	LTS 3m		
Test Method:	N/A	Test Date:	08-Oct-2002		
EUT Model #:	DGVI-2XXXXXDHU / DGVI-2XXXXXDRU	EUT Power:	60HZ/110VAC		
EUT Serial #:				Temperature:	20 °C
Manufacturer:	ADC TELECOMM			Relative Humidity:	55 %
EUT Description:	INDOOR RF REPEATER (SMR)			Air Pressure:	99 kPa
Notes:	SPURIOUS CASE RADIATION SCAN (3 CHANNELS INVESTIGATED - LOW / MED / HIGH)			Page:	10 of 11

FREQ (MHz)	LEVEL (dBuV)	CABLE / ANT / PREAMP (dB) (dB/m) (dB)	FINAL (dBuV)	POL / HGT / AZ (m) (DEG)	DELTA1 N/A	DELTA2 N/A
***** MEASUREMENT SUMMARY *****						
940.73	37.0 Qp	2.9 / 22.7 / 27.2	35.4	V / 1.0 / 0.0	N/A	N/A
976.22	50.1 Qp	2.9 / 23.1 / 27.2	48.9	V / 1.0 / 270.0	N/A	N/A
993.97	51.1 Qp	2.9 / 23.1 / 27.2	49.8	V / 1.0 / 270.0	N/A	N/A
1064.97	59.0 Pk	2.9 / 22.7 / 27.2	57.3	V / 1.0 / 0.0	N/A	N/A
1093.97	34.8 Pk	3.0 / 23.4 / 27.2	33.9	V / 1.0 / 0.0	N/A	N/A
1106.99	32.0 Pk	3.1 / 23.3 / 27.2	31.2	V / 1.0 / 0.0	N/A	N/A
1135.97	52.1 Pk	3.1 / 23.3 / 27.2	51.3	V / 1.0 / 0.0	N/A	N/A
1206.97	47.6 Pk	3.2 / 24.1 / 27.2	47.8	H / 1.0 / 0.0	N/A	N/A
1260.23	35.6 Pk	3.4 / 24.2 / 27.4	35.8	V / 1.0 / 0.0	N/A	N/A
1277.97	49.7 Pk	3.4 / 24.7 / 27.5	50.3	H / 1.0 / 270.0	N/A	N/A
1295.72	34.3 Pk	3.4 / 25.3 / 27.5	35.5	V / 1.0 / 0.0	N/A	N/A
1348.97	47.0 Pk	3.4 / 25.4 / 27.5	48.2	H / 1.0 / 270.0	N/A	N/A
1419.98	47.0 Pk	3.4 / 26.4 / 27.4	49.4	V / 1.0 / 180.0	N/A	N/A
1490.98	44.4 Pk	3.4 / 26.1 / 27.3	46.6	V / 1.0 / 90.0	N/A	N/A
1561.98	49.7 Pk	3.5 / 26.5 / 27.4	52.2	V / 1.0 / 90.0	N/A	N/A
1632.97	41.0 Pk	3.6 / 27.2 / 27.2	44.6	V / 1.0 / 90.0	N/A	N/A
1703.97	38.4 Pk	3.7 / 27.6 / 27.0	42.7	V / 1.0 / 0.0	N/A	N/A
1774.97	35.2 Pk	3.8 / 28.0 / 27.2	39.9	V / 1.0 / 0.0	N/A	N/A
1845.97	40.0 Pk	3.9 / 28.0 / 27.1	44.8	V / 1.0 / 90.0	N/A	N/A
1987.97	36.2 Pk	4.2 / 29.0 / 27.0	42.4	V / 1.0 / 0.0	N/A	N/A
2058.97	36.6 Pk	4.1 / 29.7 / 27.3	43.2	V / 1.7 / 0.0	N/A	N/A
2129.97	41.9 Pk	4.1 / 29.9 / 27.3	48.7	V / 1.0 / 0.0	N/A	N/A
2200.97	38.2 Pk	4.2 / 30.0 / 27.0	45.5	V / 1.7 / 0.0	N/A	N/A
2271.97	37.2 Pk	4.3 / 30.2 / 26.9	44.9	V / 1.7 / 0.0	N/A	N/A

Tested by: RMJ

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Reviewed by: TKS

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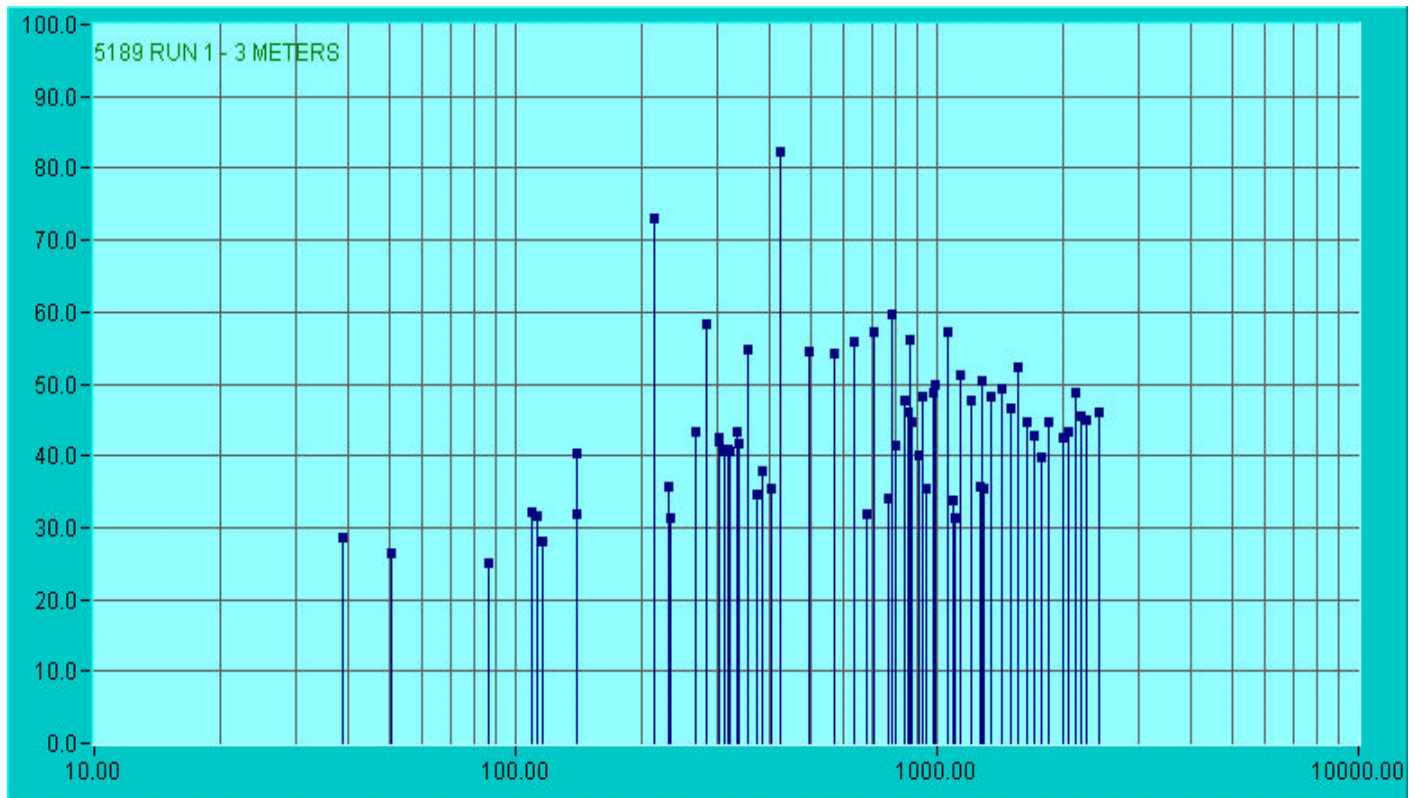
Signature

Radiated Electromagnetic Emissions



Test Report #:	5189 Run 01	Test Area:	LTS 3m	
Test Method:	N/A	Test Date:	08-Oct-2002	
EUT Model #:	DGVI-2XXXXXDHU / DGVI-2XXXXXDRU	EUT Power:	60HZ/110VAC	
EUT Serial #:		Temperature:	20	°C
Manufacturer:	ADC TELECOMM	Relative Humidity:	55	%
EUT Description:	INDOOR RF REPEATER (SMR)	Air Pressure:	99	kPa
Notes:	SPURIOUS CASE RADIATION SCAN (3 CHANNELS INVESTIGATED - LOW / MED / HIGH)			Page: 11 of 11

FREQ (MHz)	LEVEL (dBuV)	CABLE / ANT / PREAMP (dB) (dB/m) (dB)	FINAL (dBuV)	POL / HGT / AZ (m) (DEG)	DELTA1 N/A	DELTA2 N/A
***** MEASUREMENT SUMMARY *****						
2413.96	37.8 Pk	4.4 / 30.5 / 26.8	46.0	V / 1.7 / 0.0	N/A	N/A



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Conducted Electromagnetic Emissions



Test Report #:	5189 Run 1	Test Area:	SCREEN ROOM		
Test Method:	EN55022	Test Date:	08-Oct-2002		
EUT Model #:	DGVI-2XXXXXDHU / DGVI-2XXXXXDRU	EUT Power:	60HZ/110VAC (48VDC)		
EUT Serial #:				Temperature:	20 °C
Manufacturer:	ADC TELECOMM			Relative Humidity:	50 %
EUT Description:	INDOOR RF REPEATER (SMR)			Air Pressure:	99 kPa
Notes:				Page:	1 of 3

FREQ (MHz)	LEVEL (dBuV)	CABLE / LISN / ATTEN (dB)	FINAL (dBuV)	TEST POINT	DELTA1 EN55022 A QP	DELTA2 EN55022 A Avg
0.150	43.0 Qp	0.0 / 0.1 / 0.0	43.1	Neutral	-35.9	N/A
0.195	40.0 Qp	0.1 / 0.1 / 0.0	40.2	Neutral	-38.8	N/A
0.205	42.5 Qp	0.1 / 0.1 / 0.0	42.7	Neutral	-36.3	N/A
1.02	44.2 Qp	0.1 / 0.0 / 0.0	44.3	Neutral	-28.7	N/A
15.89	41.9 Qp	0.4 / 0.2 / 0.0	42.5	Neutral	-30.5	N/A
26.60	28.7 Qp	0.5 / 0.6 / 0.0	29.7	Neutral	-43.3	N/A
0.150	42.5 Qp	0.0 / 0.1 / 0.0	42.6	Line 1	-36.4	N/A
0.195	41.9 Qp	0.1 / 0.1 / 0.0	42.1	Line 1	-36.9	N/A
0.205	42.7 Qp	0.1 / 0.1 / 0.0	42.9	Line 1	-36.1	N/A
1.02	45.3 Qp	0.1 / 0.0 / 0.0	45.4	Line 1	-27.6	N/A
15.89	32.0 Qp	0.4 / 0.2 / 0.0	32.6	Line 1	-40.4	N/A
26.60	28.0 Qp	0.5 / 0.6 / 0.0	29.0	Line 1	-44.0	N/A
0.150	37.2 Av	0.0 / 0.1 / 0.0	37.3	Neutral	N/A	-28.7
0.195	33.2 Av	0.1 / 0.1 / 0.0	33.4	Neutral	N/A	-32.6
0.205	33.6 Av	0.1 / 0.1 / 0.0	33.8	Neutral	N/A	-32.2
1.02	41.0 Av	0.1 / 0.0 / 0.0	41.1	Neutral	N/A	-18.9
15.89	26.4 Av	0.4 / 0.2 / 0.0	27.0	Neutral	N/A	-33.0
26.60	21.0 Av	0.5 / 0.6 / 0.0	22.0	Neutral	N/A	-38.0
0.150	36.1 Av	0.0 / 0.1 / 0.0	36.2	Line 1	N/A	-29.8
0.195	35.7 Av	0.1 / 0.1 / 0.0	35.9	Line 1	N/A	-30.1
0.205	34.5 Av	0.1 / 0.1 / 0.0	34.7	Line 1	N/A	-31.3

Tested by: RMJ

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Conducted Electromagnetic Emissions



Test Report #: 5189 Run 1 Test Area: SCREEN ROOM

Test Method: EN55022 Test Date: 08-Oct-2002

EUT Model #: DGVI-2XXXXXDHU / EUT Power: 60HZ/110VAC (48VDC)
DGVI-2XXXXXDRU

EUT Serial #: _____ Temperature: 20 °C

Manufacturer: ADC TELECOMM Relative Humidity: 50 %

EUT Description: INDOOR RF REPEATER (SMR) Air Pressure: 99 kPa

Notes: _____ Page: 2 of 3

FREQ (MHz)	LEVEL (dBuV)	CABLE / LISN / ATTEN (dB)	FINAL (dBuV)	TEST POINT	DELTA1 EN55022 A QP	DELTA2 EN55022 A Avg
1.02	39.9 Av	0.1 / 0.0 / 0.0	40.0	Line 1	N/A	-20.0
15.89	35.0 Av	0.4 / 0.2 / 0.0	35.6	Line 1	N/A	-24.4
26.60	19.6 Av	0.5 / 0.6 / 0.0	20.6	Line 1	N/A	-39.4
END OF SCAN.						

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Conducted Electromagnetic Emissions



Test Report #: **5189 Run 1** Test Area: **SCREEN ROOM**
Test Method: **EN55022** Test Date: **08-Oct-2002**
EUT Model #: **DGVI-2XXXXXDHU / DGVI-2XXXXXDRU** EUT Power: **60HZ/110VAC (48VDC)**
EUT Serial #: _____ Temperature: **20** °C
Manufacturer: **ADC TELECOMM** Relative Humidity: **50** %
EUT Description: **INDOOR RF REPEATER (SMR)** Air Pressure: **99** kPa
Notes: _____ Page: **3** of **3**

FREQ (MHz)	LEVEL (dBuV)	CABLE / LISN / ATTEN (dB)	FINAL (dBuV)	TEST POINT	DELTA1 EN55022 A QP	DELTA2 EN55022 A Avg
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***** MEASUREMENT SUMMARY *****						
1.02	41.0 Av	0.1 / 0.0 / 0.0	41.1	Neutral	N/A	-18.9
15.89	35.0 Av	0.4 / 0.2 / 0.0	35.6	Line 1	N/A	-24.4
0.150	37.2 Av	0.0 / 0.1 / 0.0	37.3	Neutral	N/A	-28.7
0.195	35.7 Av	0.1 / 0.1 / 0.0	35.9	Line 1	N/A	-30.1
0.205	34.5 Av	0.1 / 0.1 / 0.0	34.7	Line 1	N/A	-31.3
26.60	21.0 Av	0.5 / 0.6 / 0.0	22.0	Neutral	N/A	-38.0

Tested by: **RMJ**

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Reviewed by: **TKS**

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**Frequency Tolerance Test for ADC Inc.
Digivance Indoor Coverage Solution
Model Numbers DGV1-2XXXXXDHU and
DGV1-2XXXXXDRU**

EUT Band SMR

Input Voltage	Carrier Frequency	Measured Frequency	Meets requirement?
102 VAC	851.000000 MHz	851.000000 MHz	YES
120 VAC	851.000000 MHz	851.000000 MHz	YES
138 VAC	851.000000 MHz	851.000000 MHz	YES
102 VAC	860.000000 MHz	860.000000 MHz	YES
120 VAC	860.000000 MHz	860.000000 MHz	YES
138 VAC	860.000000 MHz	860.000000 MHz	YES
102 VAC	869.000000 MHz	869.000000 MHz	YES
120 VAC	869.000000 MHz	869.000000 MHz	YES
138 VAC	869.000000 MHz	869.000000 MHz	YES
Temperature	Carrier Frequency	Measured Frequency	Meets requirement?
0 Deg. C	851.000000 MHz	851.000000 MHz	YES
10 Deg C	851.000000 MHz	851.000000 MHz	YES
20 Deg C	851.000000 MHz	851.000000 MHz	YES
30 Deg C	851.000000 MHz	851.000000 MHz	YES
40 Deg C	851.000000 MHz	851.000000 MHz	YES
50 Deg C	851.000000 MHz	851.000000 MHz	YES
0 Deg. C	860.000000 MHz	860.000000 MHz	YES
10 Deg C	860.000000 MHz	860.000000 MHz	YES
20 Deg C	860.000000 MHz	860.000000 MHz	YES
30 Deg C	860.000000 MHz	860.000000 MHz	YES
40 Deg C	860.000000 MHz	860.000000 MHz	YES
50 Deg C	860.000000 MHz	860.000000 MHz	YES
0 Deg. C	869.000000 MHz	869.000000 MHz	YES
10 Deg C	869.000000 MHz	869.000000 MHz	YES
20 Deg C	869.000000 MHz	869.000000 MHz	YES
30 Deg C	869.000000 MHz	869.000000 MHz	YES
40 Deg C	869.000000 MHz	869.000000 MHz	YES
50 Deg C	869.000000 MHz	869.000000 MHz	YES

Note: EUT Host and Remote are specified for indoor use only with temperature range of 0 to +50° C and were tested within their range.

CDMA Mask Test for ADC Inc
Digivance Indoor Coverage Solution
Model Numbers DGVl-2XXXXXDHU and
DGVl-2XXXXXDRU

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 25dB below the peak power. On any frequency removed from the carrier frequency by more than 1.98 MHz the emissions are below 35dB below the peak power. The test was performed at the low, middle, and high parts of the SMR band.

Results:

Pass (see plots)

CDMA MASK

BAND SMR

Low

ATTEN 10dB

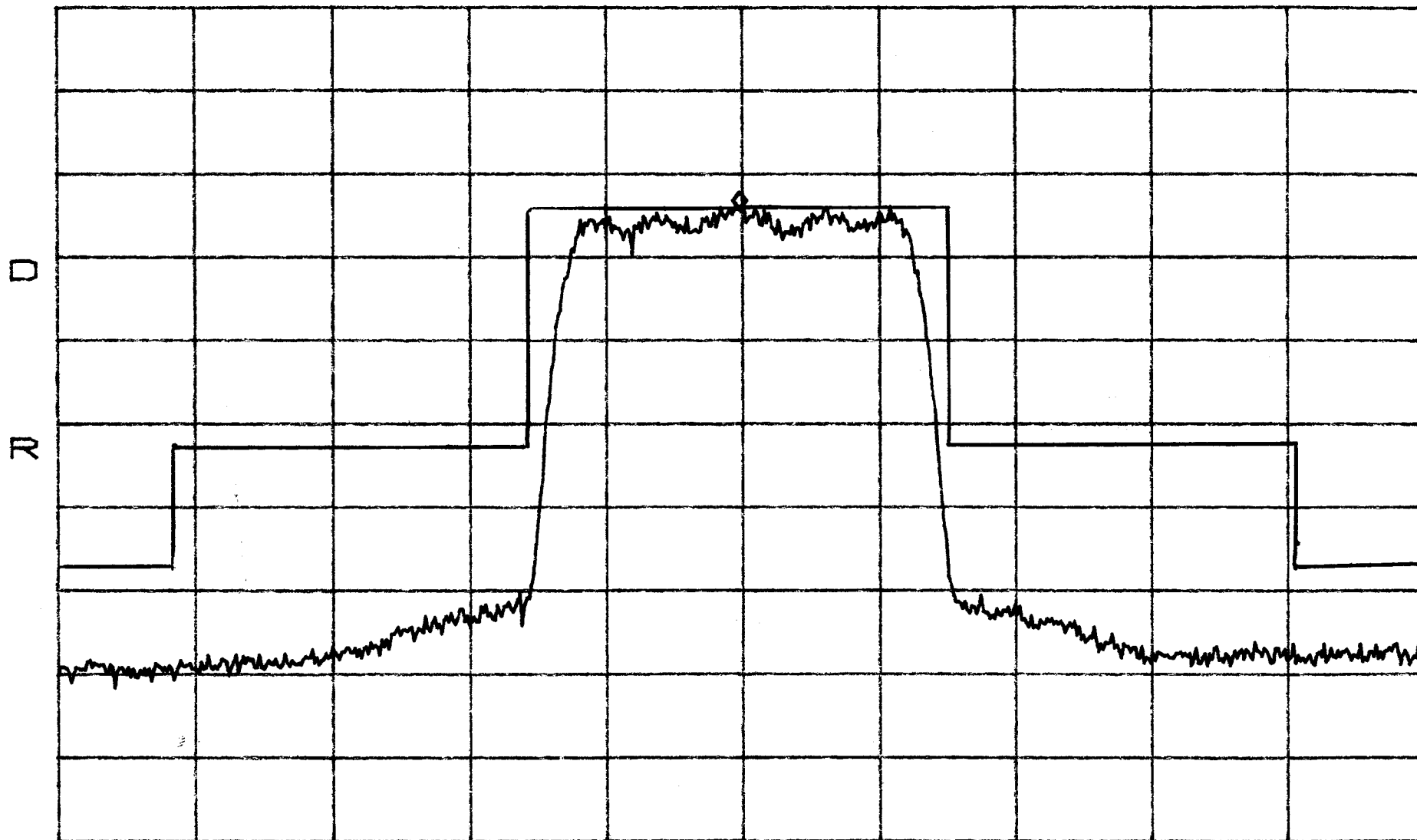
VAVG 100

MKR -2.87dBm

RL 21.3dBm

10dB/

852.008MHz



CENTER 852.017MHz

SPAN 5.000MHz

*RBW 30kHz

VBW 30kHz

SWP 50ms

CDMA MASK

BAND 3MR

Mid

ATTEN 10dB

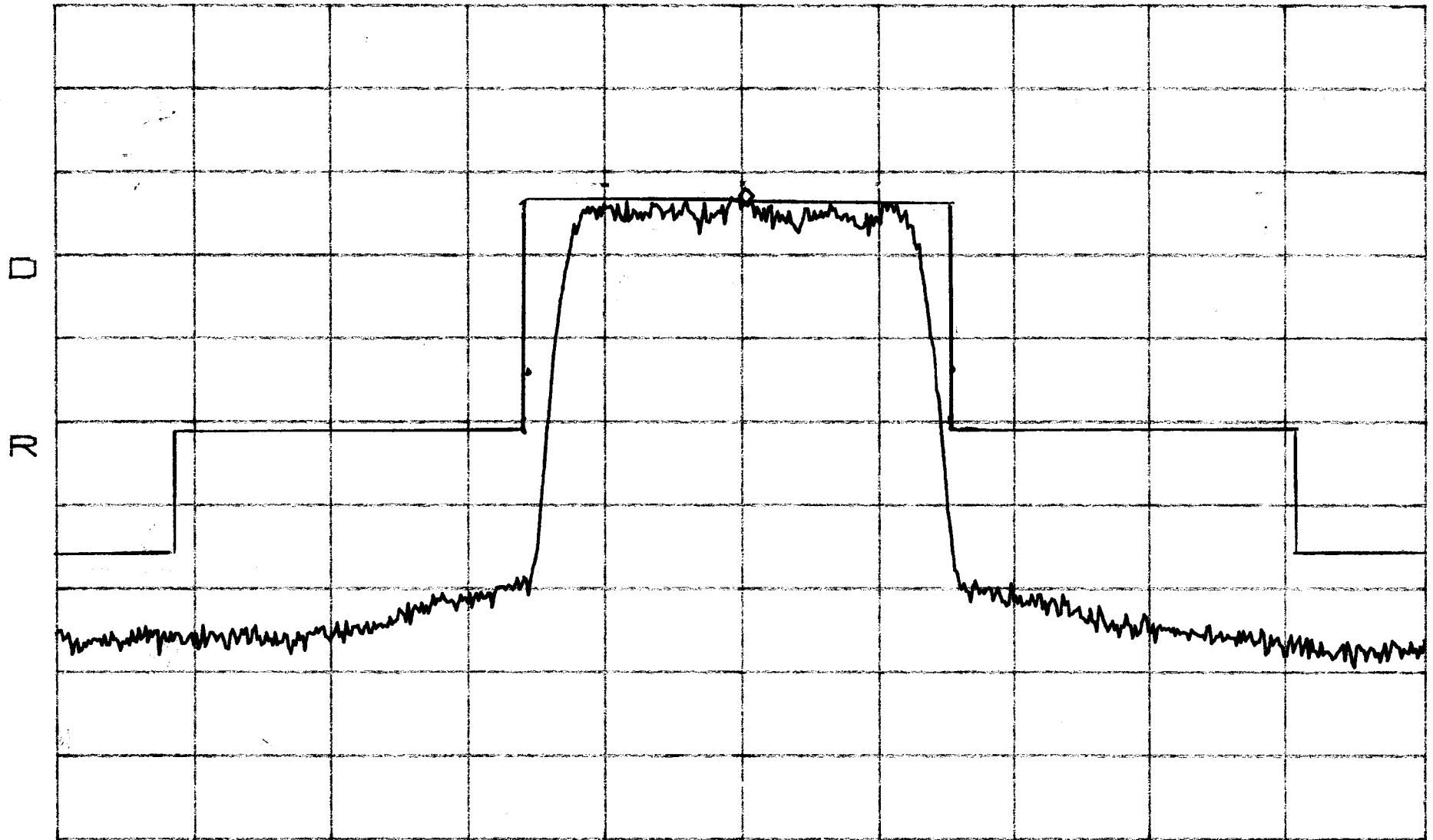
VAVG 80

MKR -2.53dBm

RL 21.3dBm

10dB/

860.017MHz



CENTER 860.000MHz

SPAN 5.000MHz

*RBW 30kHz

VBW 30kHz

SWP 50ms

CDMA MASK BAND SMR
High

ATTEN 10dB VAVG 100 MKR -1.87dBm
RL 21.3dBm 10dB/ 867.992MHz



CENTER 868.000MHz SPAN 5.000MHz
*RBW 30kHz VBW 30kHz SWP 50ms

Inter-Modulation Test for ADC Inc
Digivance Indoor Coverage Solution
Model Numbers DGVl-2XXXXXDHU and
DGVl-2XXXXXDRU

The intermodulation product test was performed for each bandwidth setting of the EUT. Two tests were performed with each modulation type. Test 1 was with two signals input into the EUT at lower end channels. Test 2 was with two signals, one at a lower end channel and one at a higher end channel. The modulation types tested were CDMA, TDMA, and FM (1 kHz @ 8 kHz deviation). An investigation was made from 30 MHz to the 10th harmonic of the highest fundamental frequency (~10 GHz).

Results:

Pass (see plots)

Intermodulation

BAND 5MR

Close

FM

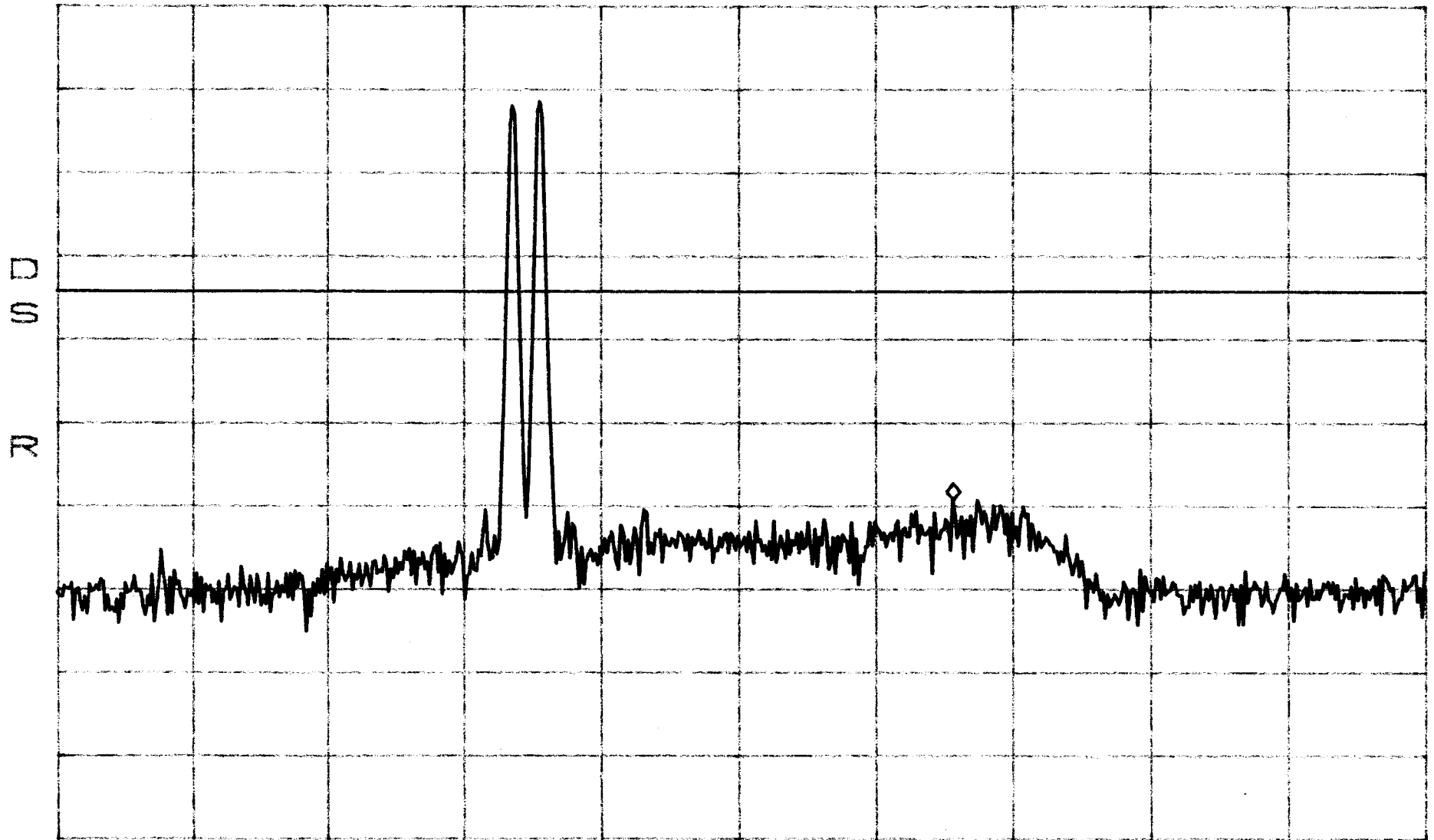
ATTEN 10dB

MKR -37.87dBm

RL 21.3dBm

10dB/

867.83MHz



CENTER 860.00MHz

SPAN 50.00MHz

*RBW 100kHz

VBW 100kHz

SWP 50ms

Intermodulation

BAND SMR

Close

FM

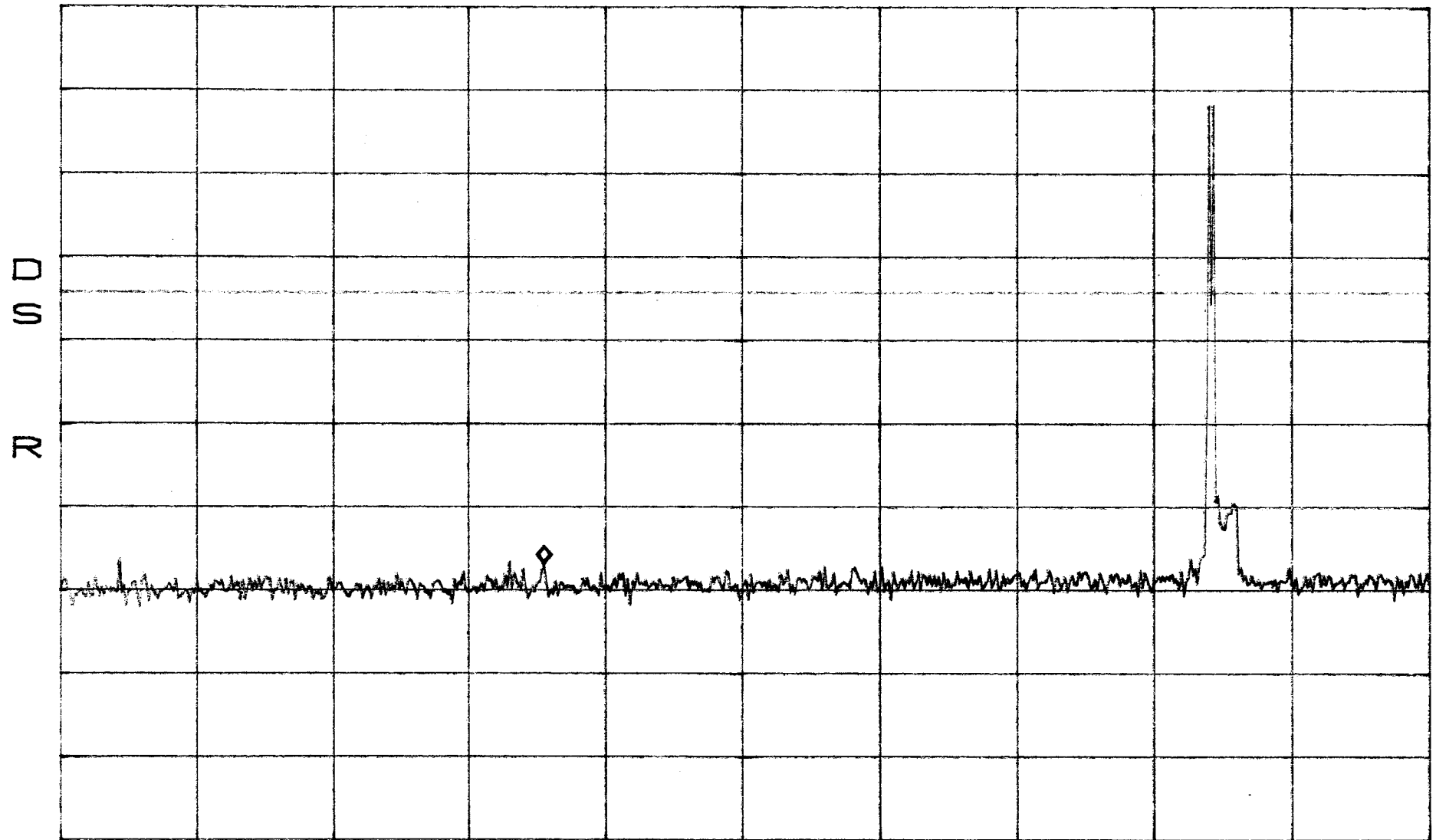
ATTEN 10dB

MKR -45.37dBm

RL 21.3dBm

10dB/

374.4MHz



START 30.0MHz

STOP 1.0000GHz

*RBW 100kHz

VBW 100kHz

SWP 250ms

Intermodulation

BAND 5MR

Close

FM

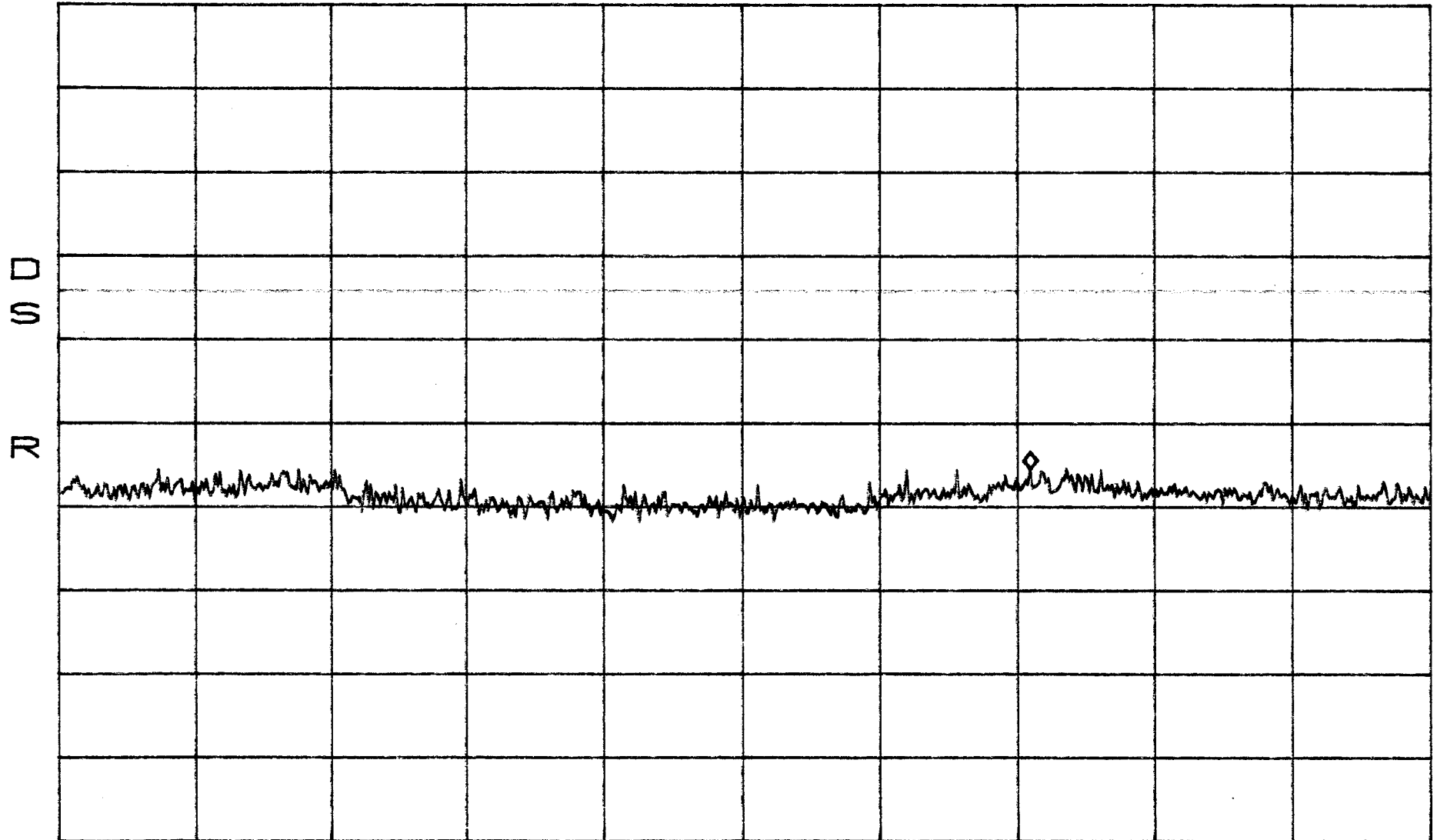
ATTEN 10dB

MKR -34.03dBm

RL 21.3dBm

10dB/

7.390GHz



START 1.000GHz

STOP 10.000GHz

*RBW 1.0MHz

VBW 1.0MHz

SWP 180ms

Intermodulation BAND 3MR
Apert
FM

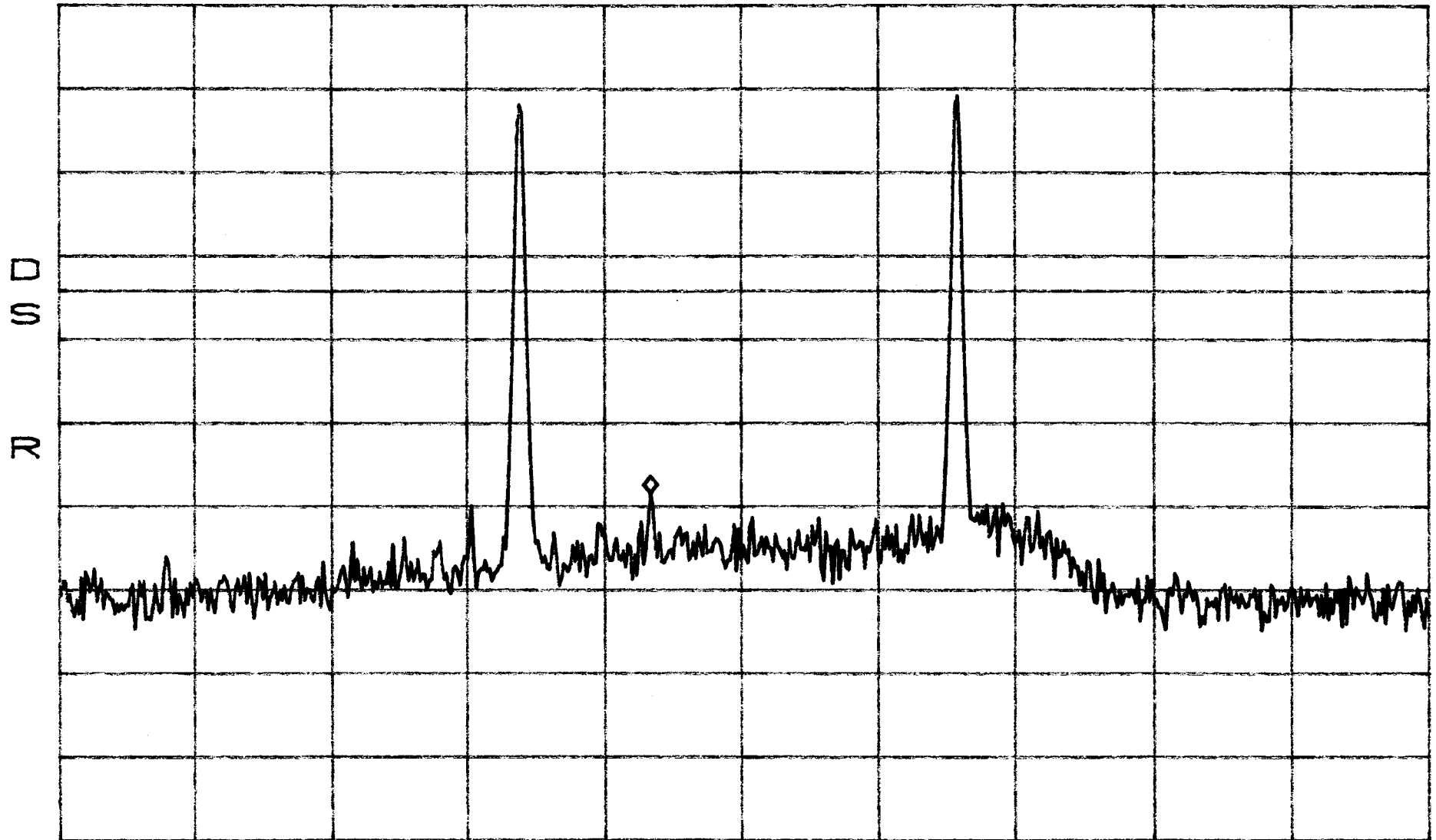
ATTEN 10dB

MKR -37.03dBm

RL 21.3dBm

10dB/

856.67MHz



CENTER 860.00MHz

SPAN 50.00MHz

*RBW 100kHz

VBW 100kHz

SWP 50ms

Intermodulation
Apert
FM

BAND 5MR

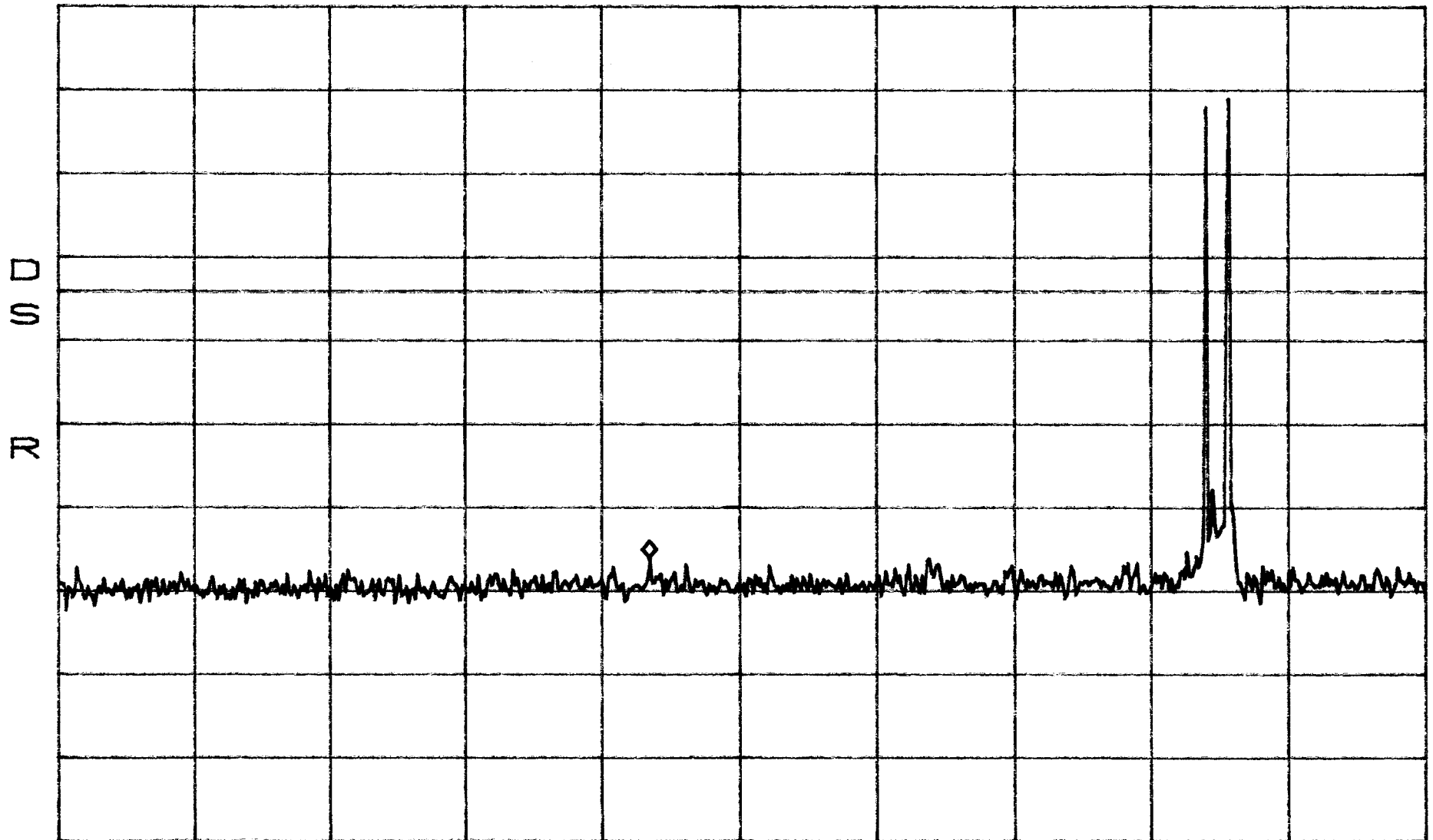
ATTEN 10dB

MKR -44.70dBm

RL 21.3dBm

10dB/

452.0MHz



START 30.0MHz

STOP 1.0000GHz

*RBW 100kHz

VBW 100kHz

SWP 250ms

Intermodulation BAND 3MR
Apart
FM

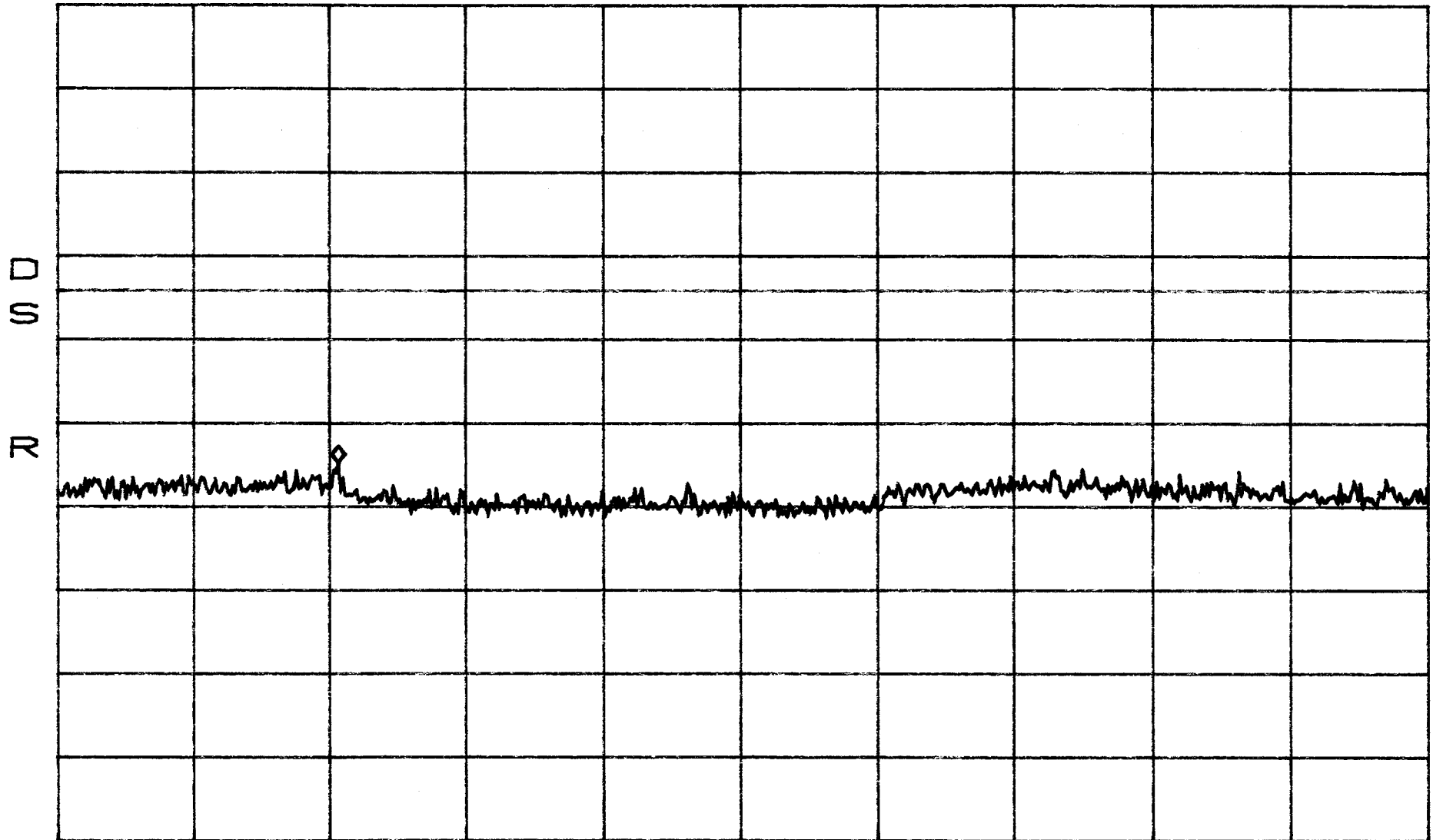
ATTEN 10dB

MKR -33.37dBm

RL 21.3dBm

10dB/

2.860GHz



START 1.000GHz

STOP 10.000GHz

*RBW 1.0MHz

VBW 1.0MHz

SWP 180ms

Intermodulation
Close
TDMA

BAND 5MR

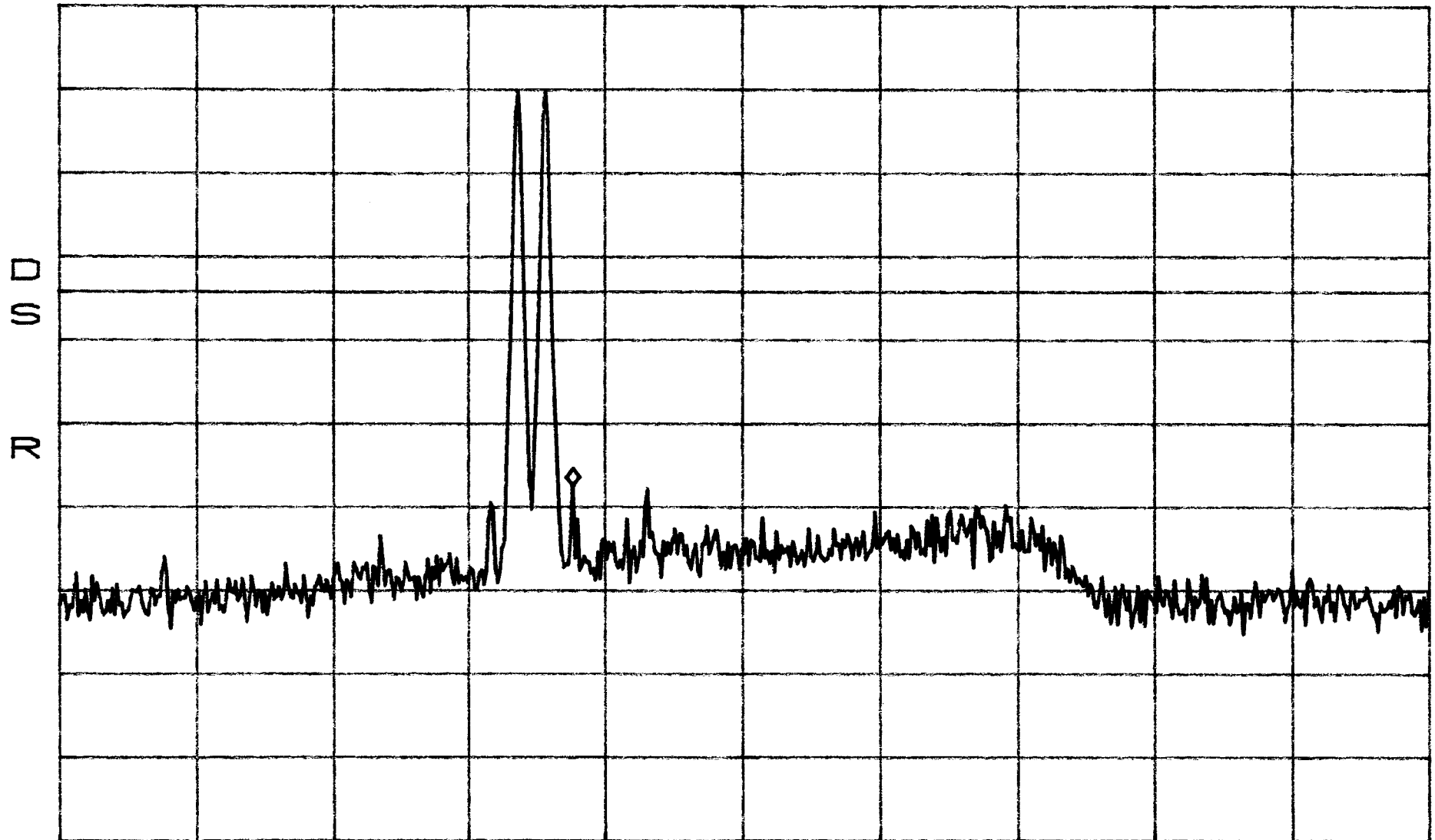
ATTEN 10dB

MKR -36.03dBm

RL 21.3dBm

10dB/

853.83MHz



CENTER 860.00MHz

SPAN 50.00MHz

*RBW 100kHz

VBW 100kHz

SWP 50ms

Intermodulation
Close
TDMA

BAND SMR

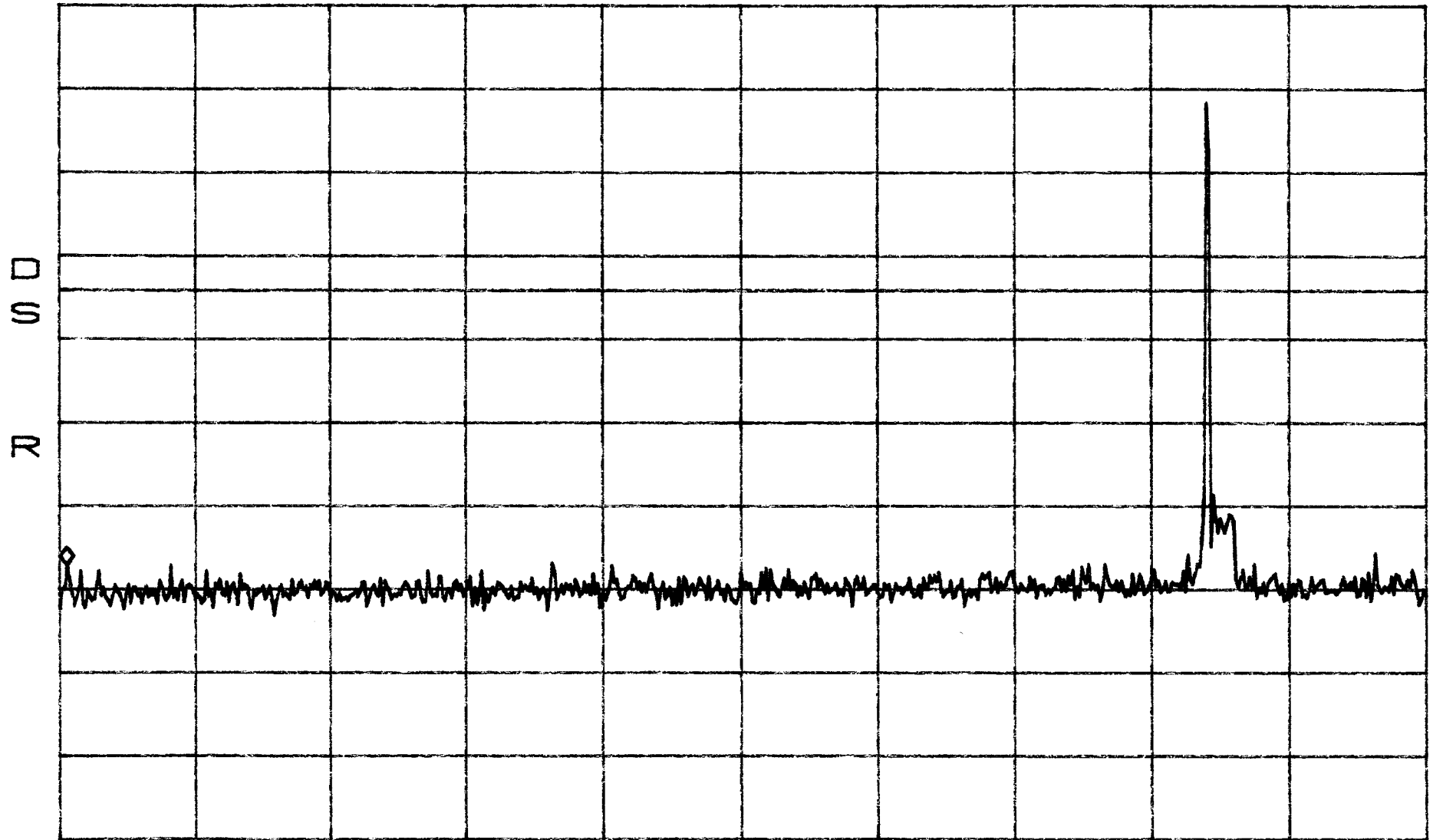
ATTEN 10dB

MKR -45.70dBm

RL 21.3dBm

10dB/

34.9MHz



START 30.0MHz

STOP 1.0000GHz

*RBW 100kHz

VBW 100kHz

SWP 250ms

Intermodulation

BAND 5MR

Close

TDMA

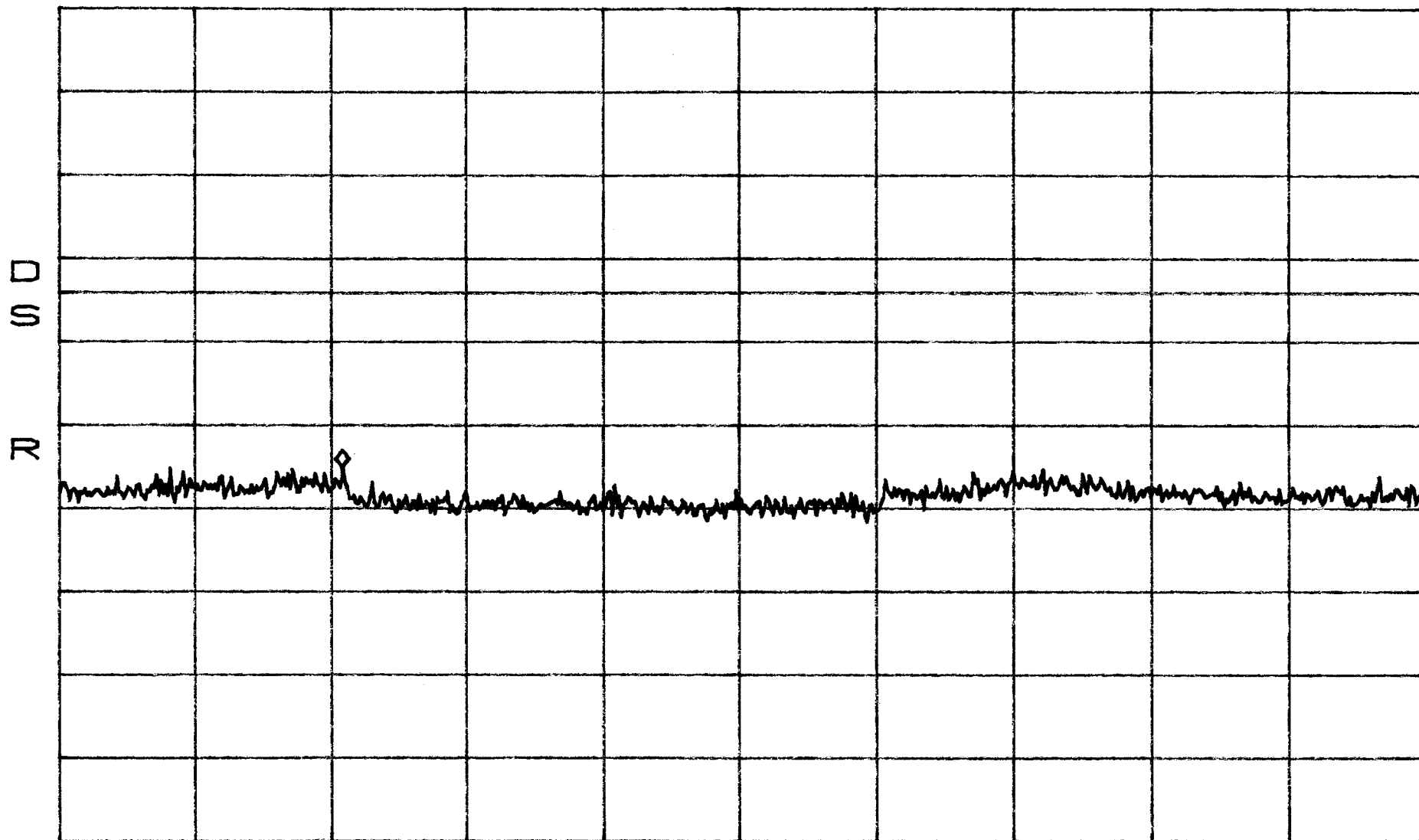
ATTEN 10dB

MKR -33.70dBm

RL 21.3dBm

10dB/

2.875GHz



START 1.000GHz

STOP 10.000GHz

*RBW 1.0MHz

VBW 1.0MHz

SWP 180ms

Intermodulation BAND SMR
Apert
TDMA

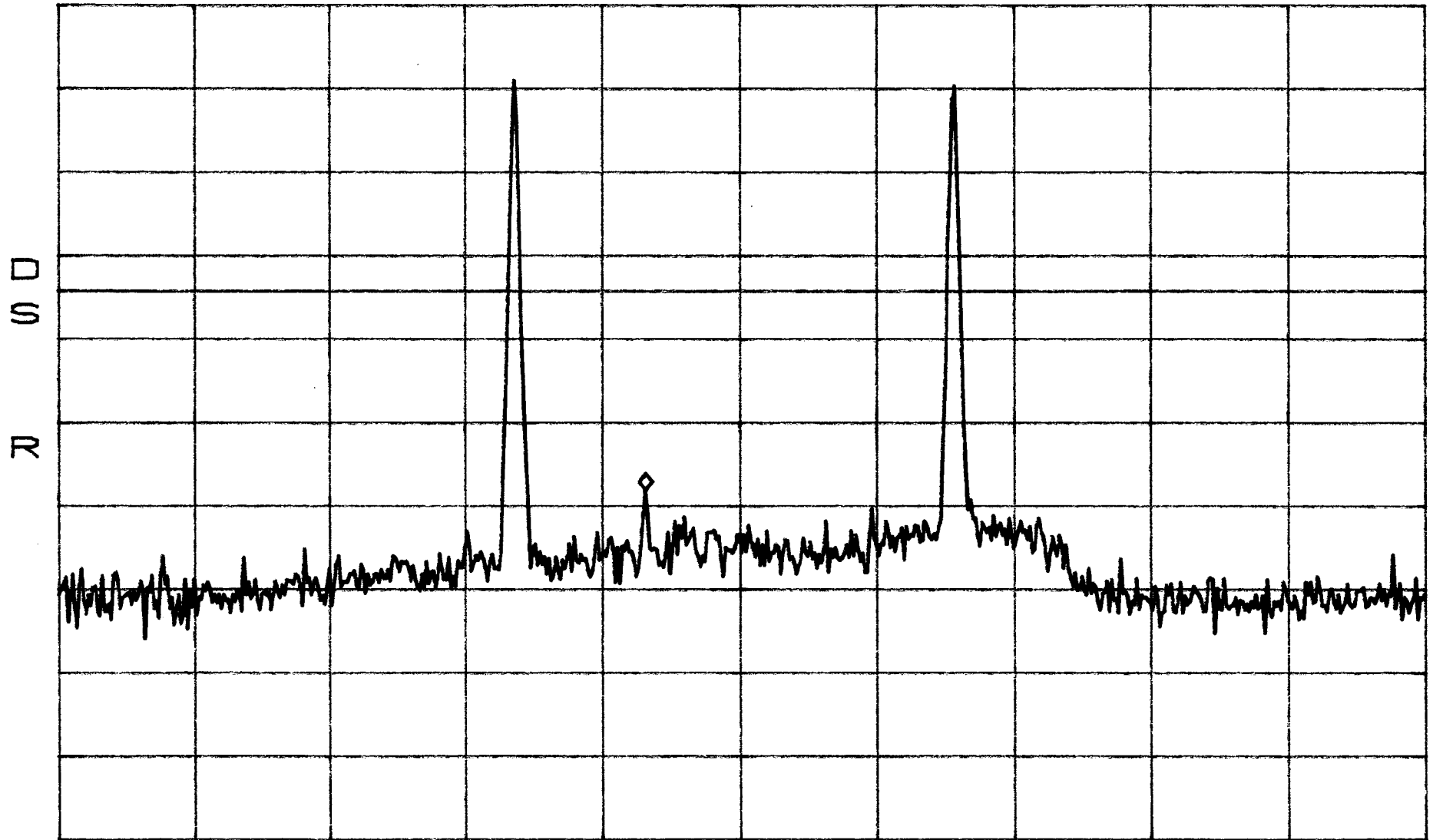
ATTEN 10dB

MKR -36.70dBm

RL 21.3dBm

10dB/

856.58MHz



CENTER 860.00MHz

SPAN 50.00MHz

*RBW 100kHz

VBW 100kHz

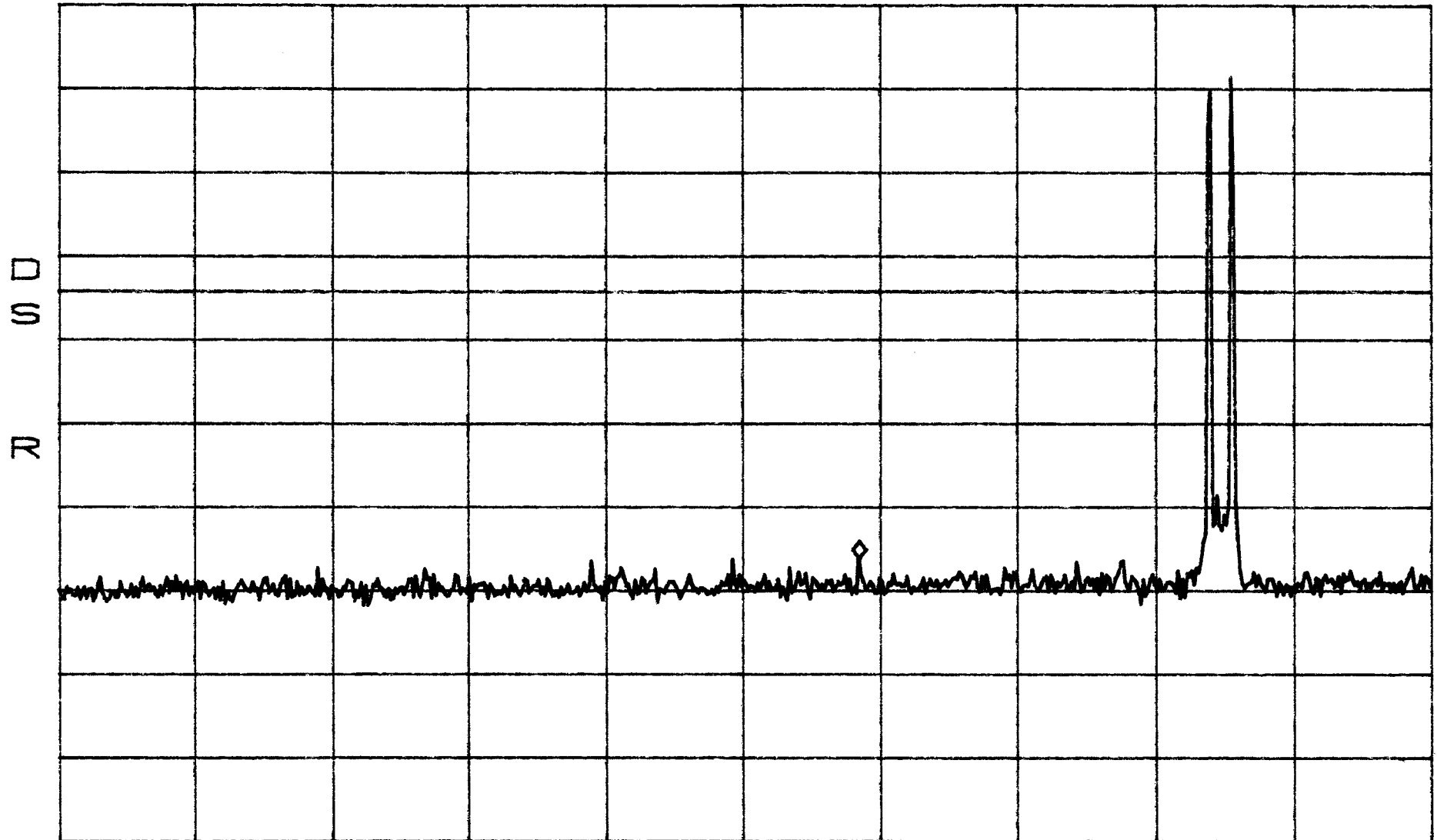
SWP 50ms

Intermodulation BAND 5MR
Apart
TDMA

ATTEN 10dB
RL 21.3dBm

10dB/

MKR -44.70dBm
597.5MHz



START 30.0MHz STOP 1.0000GHz
*RBW 100kHz VBW 100kHz SWP 250ms

Intermodulation BAND 3MR
Apert
TDMA

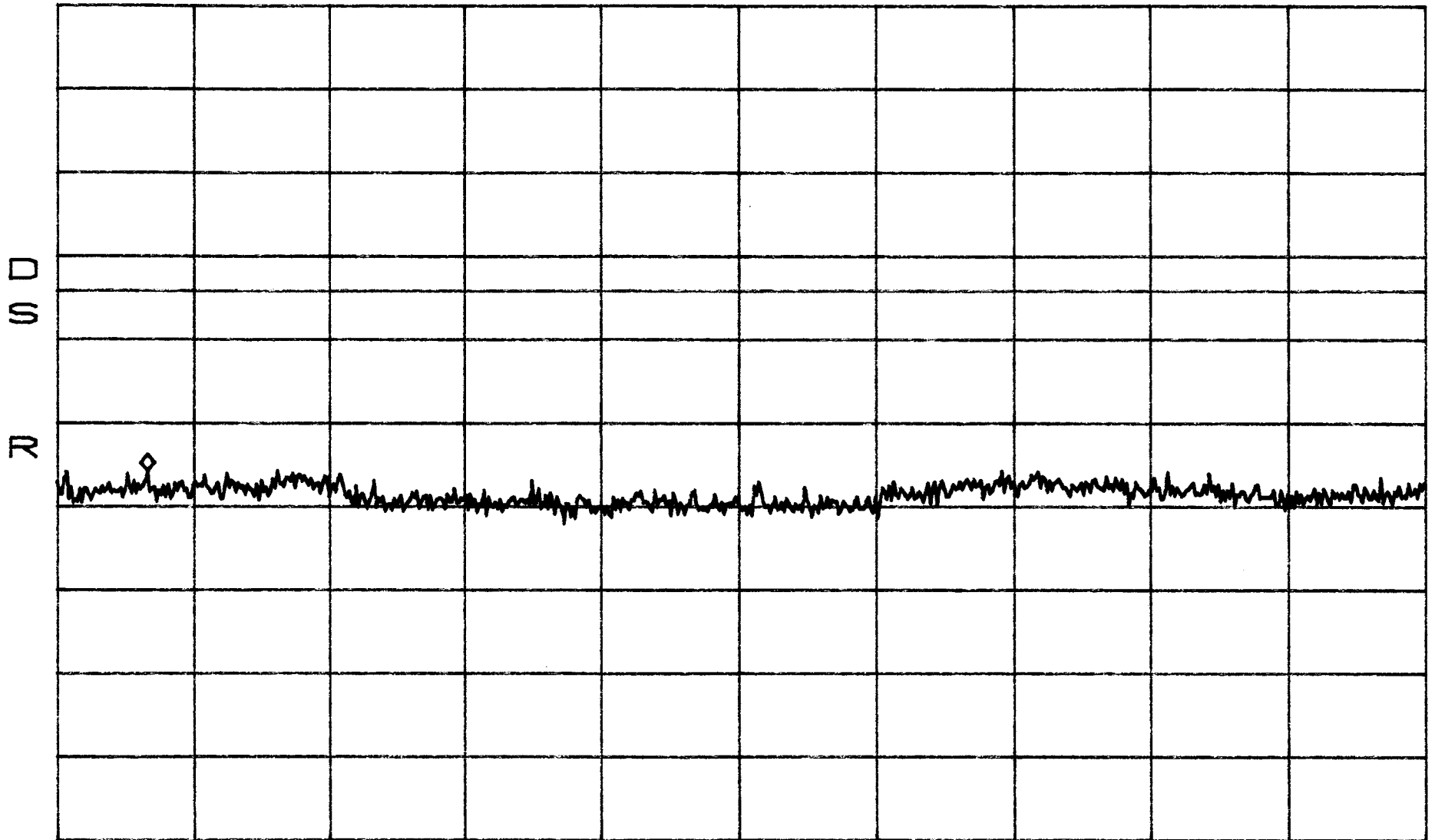
ATTEN 10dB

MKR -34.37dBm

RL 21.3dBm

10dB/

1.600GHz



START 1.000GHz

STOP 10.000GHz

*RBW 1.0MHz

VBW 1.0MHz

SWP 180ms

Intermodulation
Close
CDMA

BAND 3MR

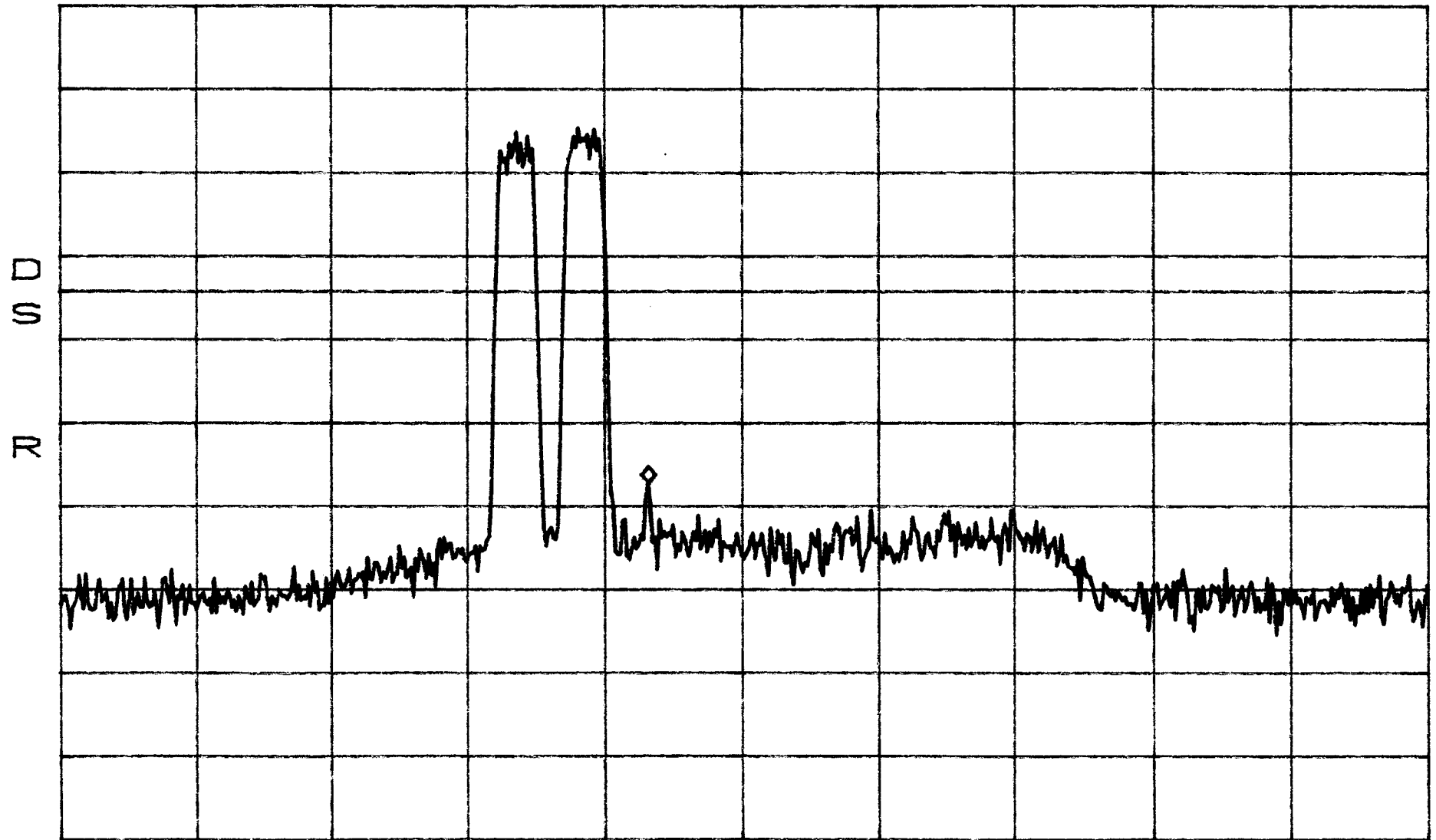
ATTEN 10dB

MKR -35.87dBm

RL 21.3dBm

10dB/

856.58MHz



CENTER 860.00MHz

SPAN 50.00MHz

*RBW 100kHz

VBW 100kHz

SWP 50ms

Intermodulation
Close
CDMA

BAND SMR

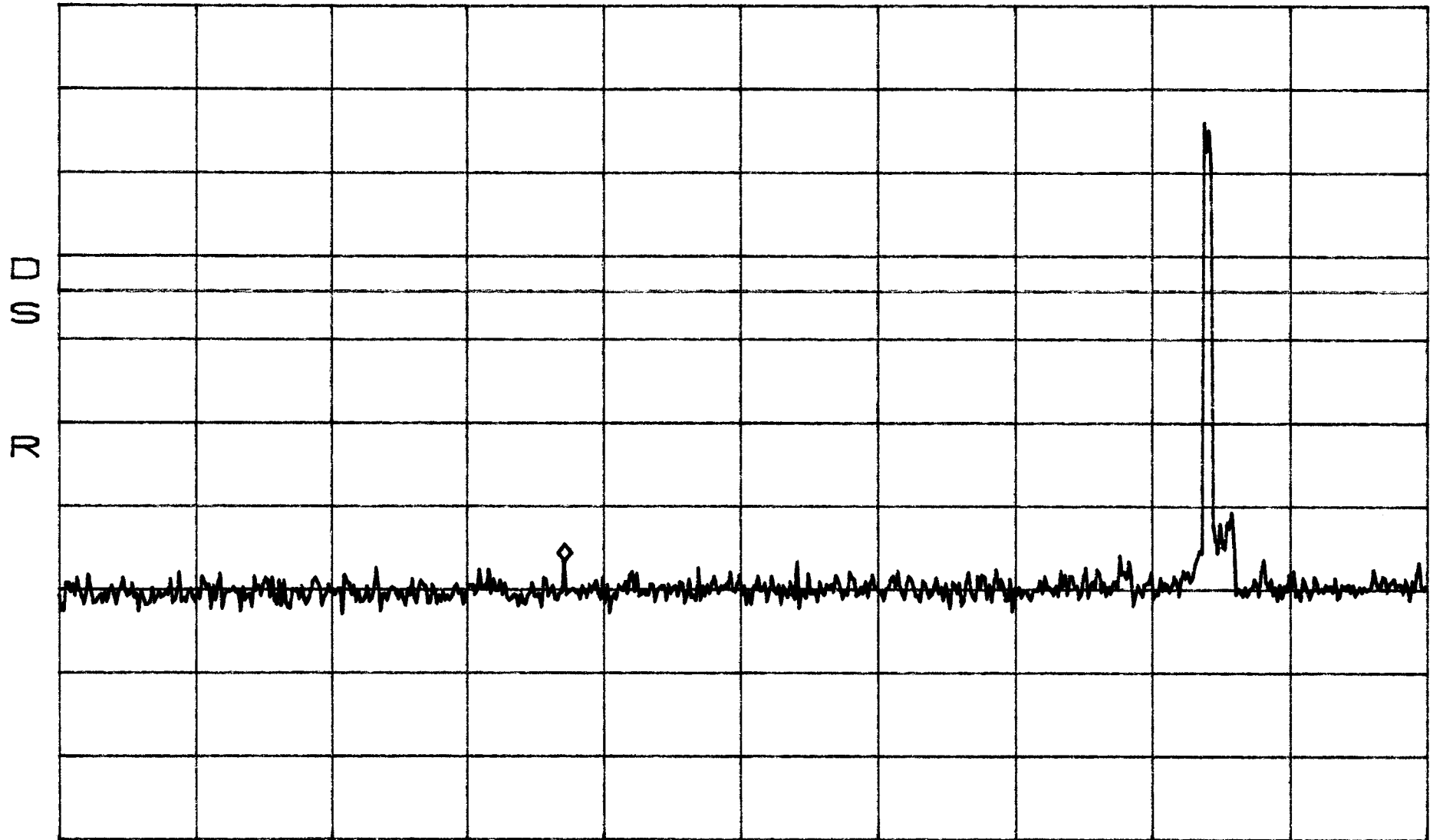
ATTEN 10dB

MKR -45.20dBm

RL 21.3dBm

10dB/

390.5MHz



START 30.0MHz

STOP 1.0000GHz

*RBW 100kHz

VBW 100kHz

SWP 250ms

Intermodulation
Close
CDMA

BAND SMR

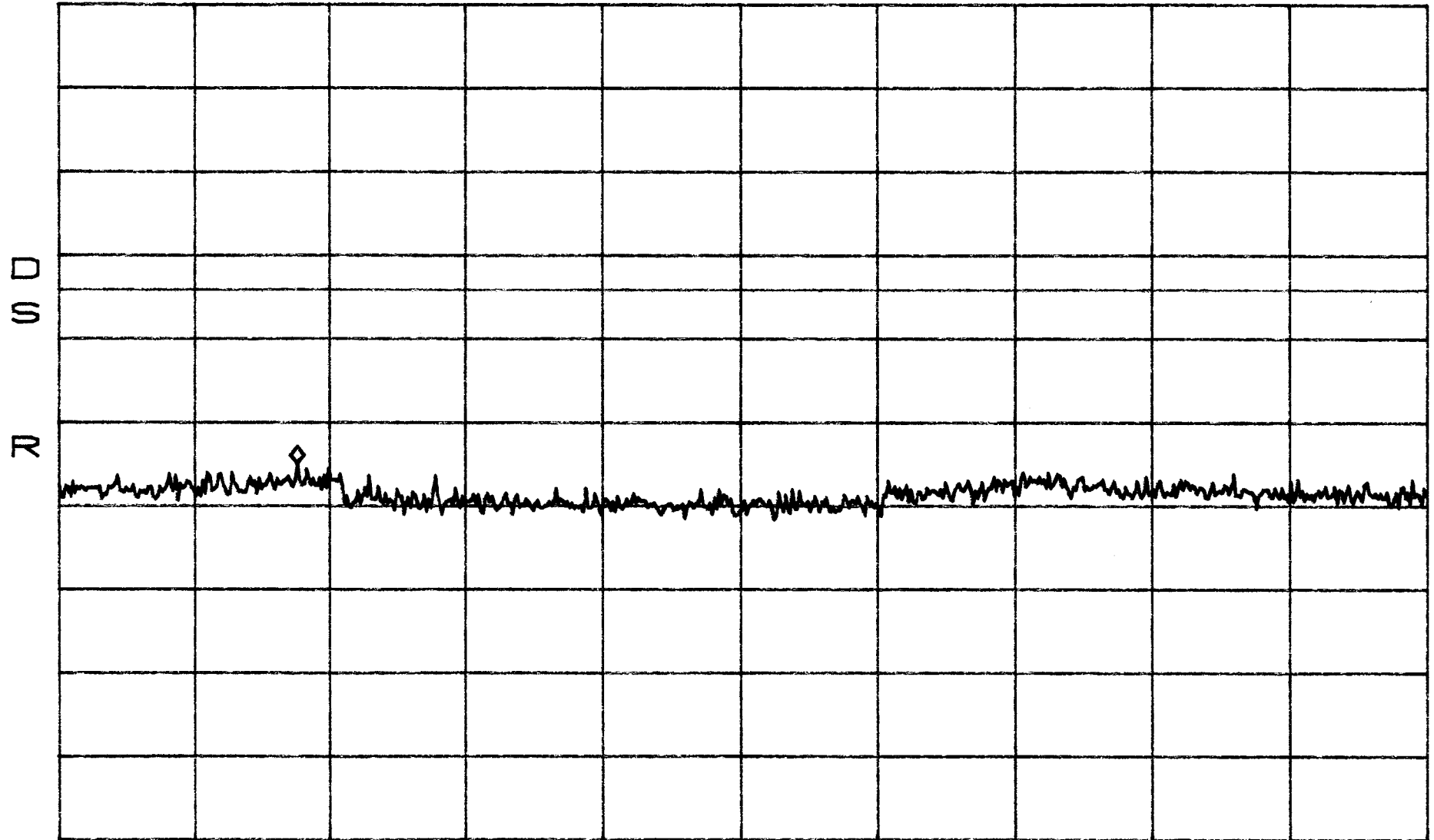
ATTEN 10dB

MKR -33.53dBm

RL 21.3dBm

10dB/

2.590GHz



START 1.000GHz

STOP 10.000GHz

*RBW 1.0MHz

VBW 1.0MHz

SWP 180ms

Intermodulation BAND SMR
Apert
CDMA

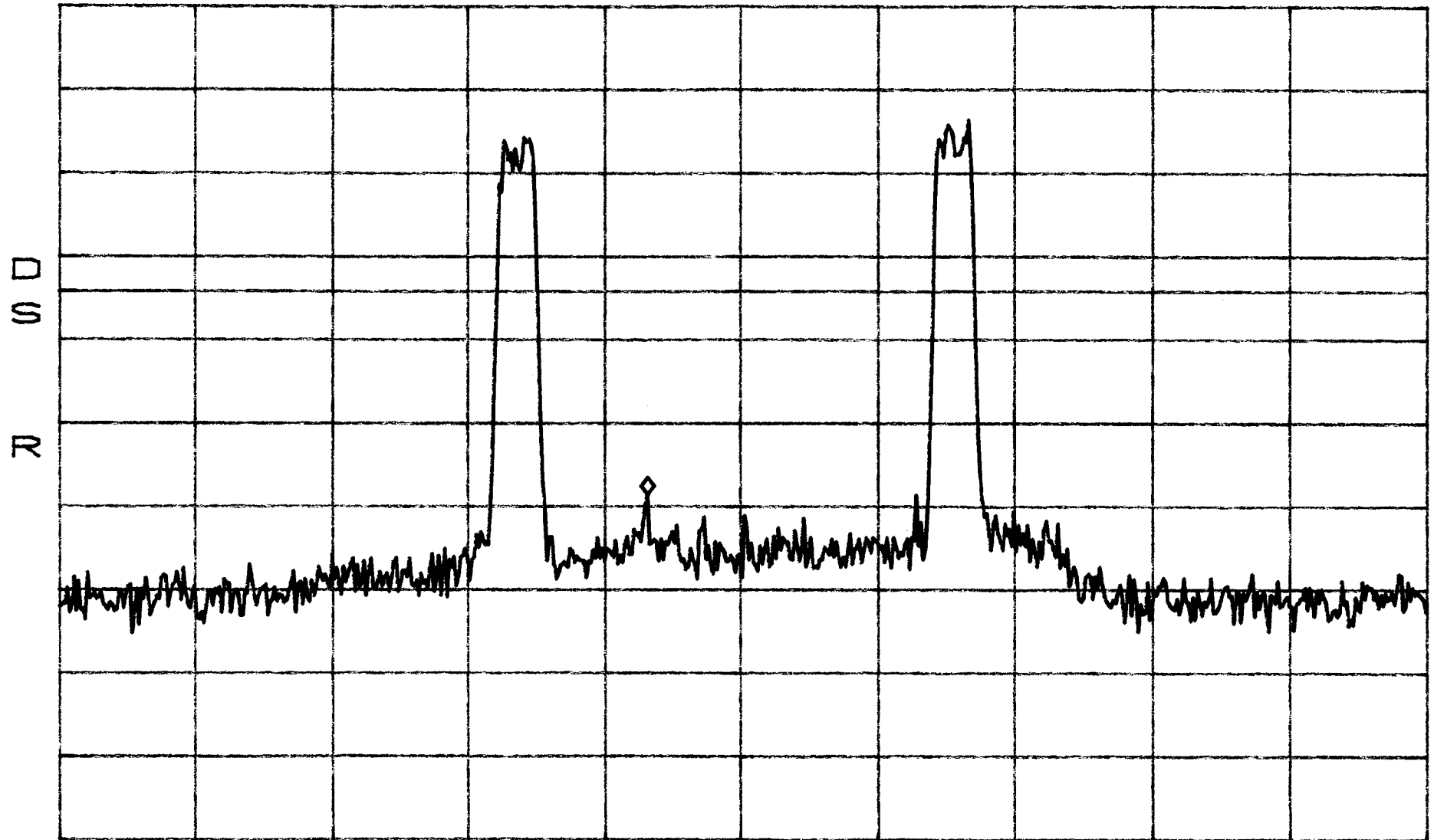
ATTEN 10dB

MKR -37.20dBm

RL 21.3dBm

10dB/

856.58MHz



CENTER 860.00MHz

SPAN 50.00MHz

*RBW 100kHz

VBW 100kHz

SWP 50ms

Intermodulation BAND 3MR
Apart
CDMA

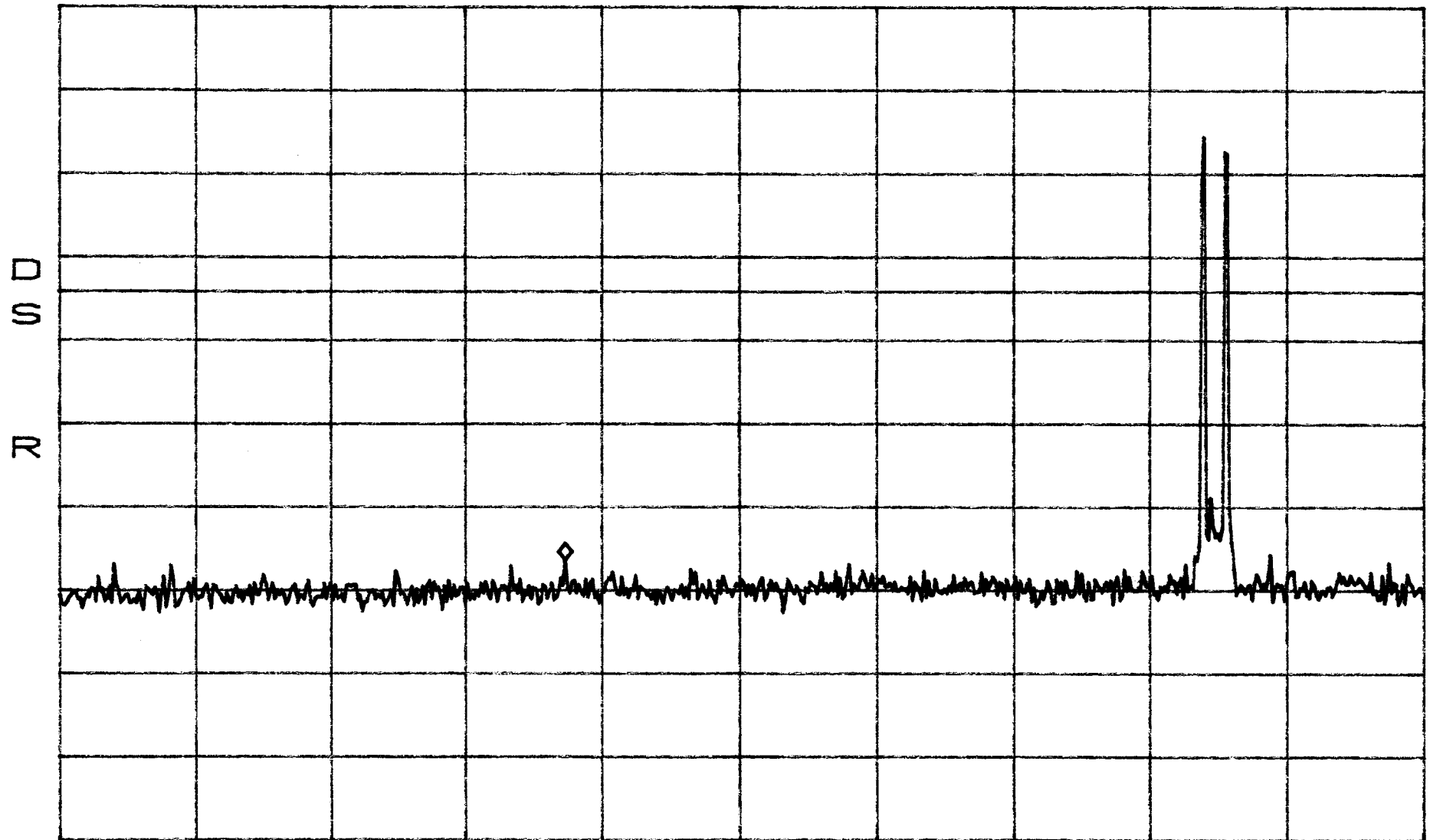
ATTEN 10dB

MKR -45.03dBm

RL 21.3dBm

10dB/

392.1MHz



START 30.0MHz

STOP 1.0000GHz

*RBW 100kHz

VBW 100kHz

SWP 250ms

Intermodulation BAND smr
Apert
CDMA

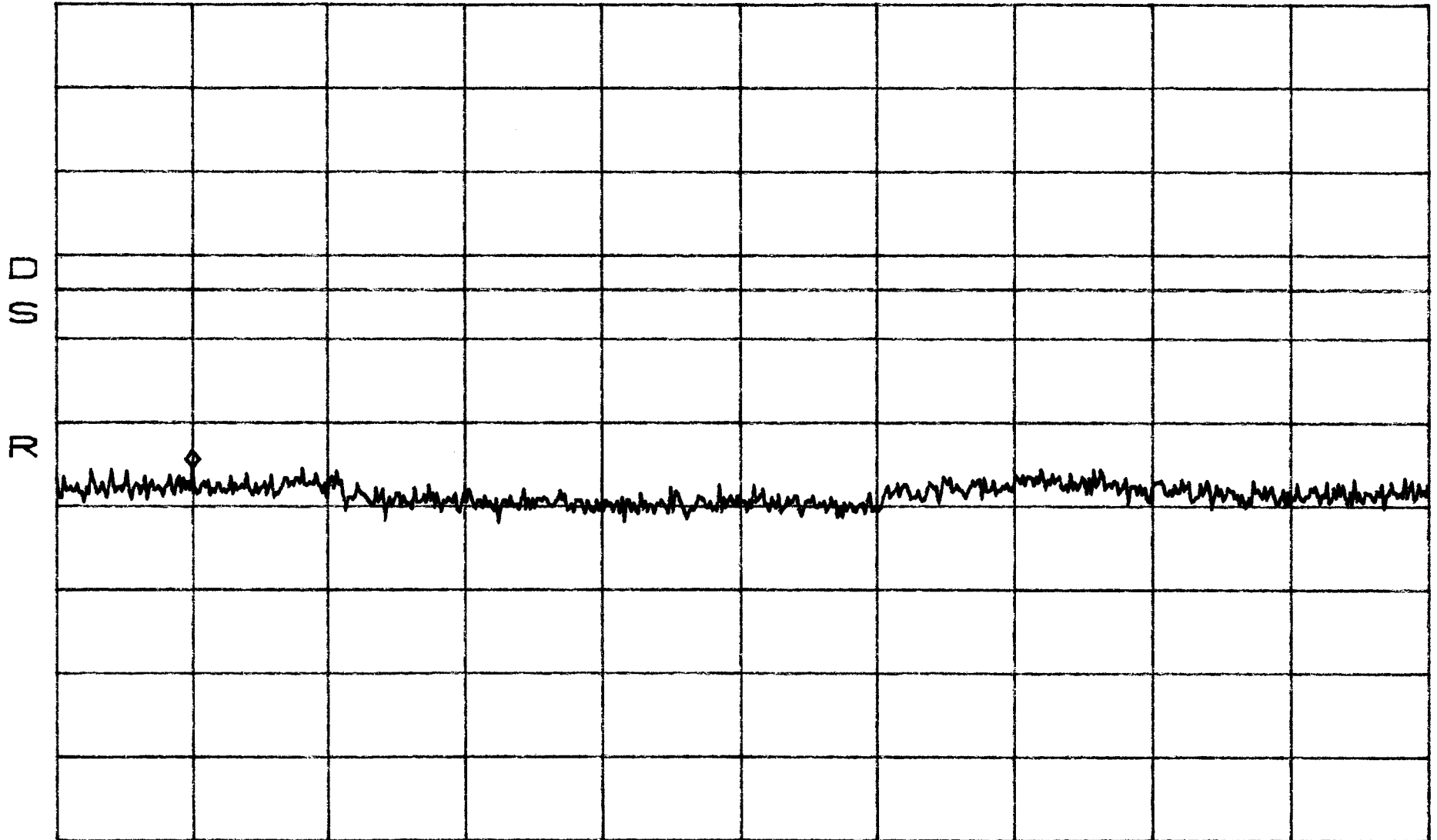
ATTEN 10dB

MKR -34.03dBm

RL 21.3dBm

10dB/

1.900GHz



START 1.000GHz

STOP 10.000GHz

*RBW 1.0MHz

VBW 1.0MHz

SWP 180ms

Test Equipment List

Table 1 Test Equipment

Equipment	MFG/Model	ADC Serial Number	Calibration Due. (NIST)
Signal Generator	HP/E4432B	MC27657	October 02
Signal Generator	HP/E4436B	693743	October 02
Combiner	Mini-Circuits/ZAPD-21	N/A	CNR
Isolator	ADC	N/A	CNR
Variable Attenuator	Trilithic/BMA-580	N/A	CNR
Spectrum Analyzer	HP/HP8563E	MC27690	May 03
			March 03
Power Meter	Rohde & Schwarz NRVS	MC21671	January 03
Variable Auto Transformer	Staco/1520CT	MC/44655	May 02
Multimeter	Fluke 79	MC19952	July 03
Freq. Counter	HP/5347A	MC27569	May 02
Temperature Chamber	Despatch/Ecosphere	MC21679	August 02

Note: Any equipment used in testing that has a Calibration Not Required (CNR) listing is verified and compensated for with NIST traceable calibrated equipment.

Test Equipment List

	TUV ID	Model Number	Manufacturer	Description	Serial Number	Cal Due
■-	2665	ZHL-1042J	Mini-Circuits	Preamplifier	32296	10-15-02
■ -	3202	EM-6917B	Electro-Metrics	Biconicalog Periodic	102	10-04-02
■ -	2075	3115	Electro-Mechanics (EMCO)	Ridge Guide Ant. 1-18 GHz	9001-3275	10-20-02
■-	2690	8566B	Hewlett-Packard	Spectrum Analyzer (Unit F)	2430A00930	11-19-02
■ -	2678	85662A	Hewlett-Packard	Analyzer Display (Unit F)	2403A08134	11-19-02
■ -	2684	85650A	Hewlett-Packard	Quasi-Peak Adapter (Unit F)	2521A01006	11-19-02
■ -	2478	AWT-18037	Avantek	Preamplifier 8-18 GHz	1001-9226	3-18-03
■ -	2477	AFT-8434	Avantek	Preamplifier 4-8 GHz	2613A92801	3-18-03
■ -	2396	2520	Wavetek	Signal Generator	6271013	6-05-03
■ -		UHAP-10dB	Schwarzbeck	Dipole Antenna 300-1000	164	N/A

All measurement instrumentation is traceable to the National Institute of Standards and Technology (NIST) and is calibrated annually.

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: 952-917-0326 Fax: 952-917-3244

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 Digivance ICS is a digitally distributed antenna system that provides in-building coverage for wireless phone systems.

EUT Name Digivance Indoor Coverage Solution - SMR System

Model No.: DGVI-2XXXXXDHU Serial No.: None
DGVI-2XXXXXDRU

Product Options: Single Mode or Multi Mode Transceivers

Configurations to be tested: Host and Remote System - SMR Band

Test Objective

- | | |
|--|---|
| ☐ EMC Directive 89/336/EEC (EMC) | ☒ FCC: Class ☐ A ☐ B Part <u>90</u> |
| Std: _____ | ☐ VCCI: Class ☐ A ☐ B |
| ☐ Machinery Directive 89/392/EEC (EMC) | ☐ BCIQ: Class ☐ A ☐ B |
| Std: _____ | ☐ Canada: Class ☐ A ☐ B |
| ☐ Medical Device Directive 93/42/EEC (EMC) | ☐ Australia: Class ☐ A ☐ B |
| Std: _____ | ☐ Other: _____ |
| ☐ Vehicle Directive 72/245/EEC (EMC) | |
| Std: _____ | |
| ☐ FDA Reviewers Guidance for Premarket Notification Submissions (EMC) | |

TÜV Product Service Certification Requested

- | | |
|--|---|
| ☐ Attestation of Conformity (AoC) | ☐ International EMC Mark (IEM) |
| ☐ Certificate of Conformity (CoC) | ☐ Compliance Document |
| Protection Class (N/A for vehicles) | ☐ Class I ☐ Class II ☐ 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, TUV 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 RequirementsLength: 16" Width: 19" Height: 4" Weight: 15 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: 1Current (Amps/phase(max)): 3 Current (Amps/phase(nominal)): 1.5

Other _____

Other Special Requirements

None

Typical Installation and/or Operating Environment

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

Host and Remote are indoor only. System is used to enhance coverage within buildings.

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
EXAMPLE: RS232	☐	☒	2	☒	☐	Foil over braid	Coaxial	Metallized 9-pin D-Sub	Characteristic Impedance	6	☒	☐
RF "N" type	☒	☐	2	☒	☐	Braid	Coaxial	N	50 Ohms	>3	☒	☐
Alarm	☒	☐	1	☐	☒	Not Specified	N/A	6 Pin	N/A	>3	☒	☐
Fiber	☐	☒	7	☐	☒	N/A	N/A	LC	N/A	>3	☒	☐
RF "SMA" type	☒	☐	1	☒	☐	Braid	Coaxial	SMA	50 Ohms	>3	☒	☐
AC Power	☒	☐	1	☐	☒	None	N/A	3 Pin	N/A	>3	☒	☐
DC Power	☒	☐	7	☐	☒	Cat 5	N/A	RJ-45	N/A	>3	☒	☐
	☐	☐		☐	☐						☐	☐
	☐	☐		☐	☐						☐	☐
	☐	☐		☐	☐						☐	☐
	☐	☐		☐	☐						☐	☐
	☐	☐		☐	☐						☐	☐
	☐	☐		☐	☐						☐	☐

EMC Test Plan and Constructional Data Form

EUT Software.

Revision Level: None

Description:

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	DGVI-2XXXXXDHU	None	#101
Remote Unit	DGVI-2XXXXXD RU	None	#106

EMC Test Plan and Constructional Data Form



Support Equipment -- 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 E4436B	963743	

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

Power Supply			
<i>Manufacturer</i>	<i>Model #</i>	<i>Serial #</i>	<i>Type</i>
ADC			☐ Switched-mode: (Frequency) _____ ☐ Linear ☐ Other: _____
			☐ Switched-mode: (Frequency) _____ ☐ Linear ☐ Other: _____

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

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 SignaturesMark Z. MishaCustomer authorization to perform tests
according to this test plan.10-2-02

Date

Test Plan/CDF Prepared By (please print)_____
Date_____
Reviewed by TÜV Product Service Associate_____
Date

RADIATED EMISSIONS

The final level, expressed in dB μ V/m, is arrived at by taking the reading from the spectrum analyzer (Level dB μ V) and adding the antenna correction factor and cable loss factor (Factor dB) to it. This result then has the FCC limit subtracted from it to provide the Delta which gives the tabular data as shown in the data sheets in Attachment B. The amplifier gain is automatically accounted for by using an analyzer offset.

Example:

FREQ (MHz)	LEVEL (dB μ V)	CABLE/ANT/PREAMP (dB) (dB/m) (dB)			FINAL (dB μ V/m)	POL/HGT/AZ (m) (deg)			DELTA1 FCC
60.80	42.5Qp	+	1.2	+ 10.9 - 25.5 =	29.1	V	1.0	0.0	-10.9

SUBSTITUTION ANTENNA

The substitution antenna is used to replace the EUT for tests in which a transmitting parameter(i.e. frequency error, effective radiated power, spurious emissions and adjacent channel power) is being measured. The substitution antenna is connected to a calibrated signal generator. The frequency of the calibrated signal generator is set to the frequency of the emission component detected. The test antenna is raised and lowered through the specified range of height to ensure the maximum signal is received. The input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the emission component was measured, corrected for any change of input attenuator setting of the measuring receiver. The input level to the substitution antenna is recorded as power level, corrected for any change of input attenuator setting of the measuring receiver.