

A.6 CONDUCTED EMISSION DATA

MODEL CDR-1902-1-C (C-Band CDMA Repeater) with option 7.1 W DL/1.0W UL

See following page(s).

FCC Part 2.985: RF Output Power

DUT: Model CDR-1902-1-C (C-Band CDMA Repeater),
with option 7.1W DL / 1.0W UL

S/N: FCC Unit

Test Date: 7/31/98

FCC ID: LB41900CDMA

Company: Ortel Corporation

****RF Output Power Measured with Power Meter
(HP Model: 438A Ortel Asset Number: 8L034349)**

UPLINK:

Channel	Frequency (MHz)	Output Power (dBm)
925	1896.25	30.35
1050	1902.50	30.13
1175	1908.75	29.88

DOWNLINK:

Channel	Frequency (MHz)	Output Power (dBm)
925	1976.25	38.47
1050	1982.50	38.40
1175	1988.75	38.24

****Per FCC request to use power meter.**

CDR 1CH X 7.1W
S/N: FCC UNIT

DL
CH. 925 (LOW)

(-RAND)

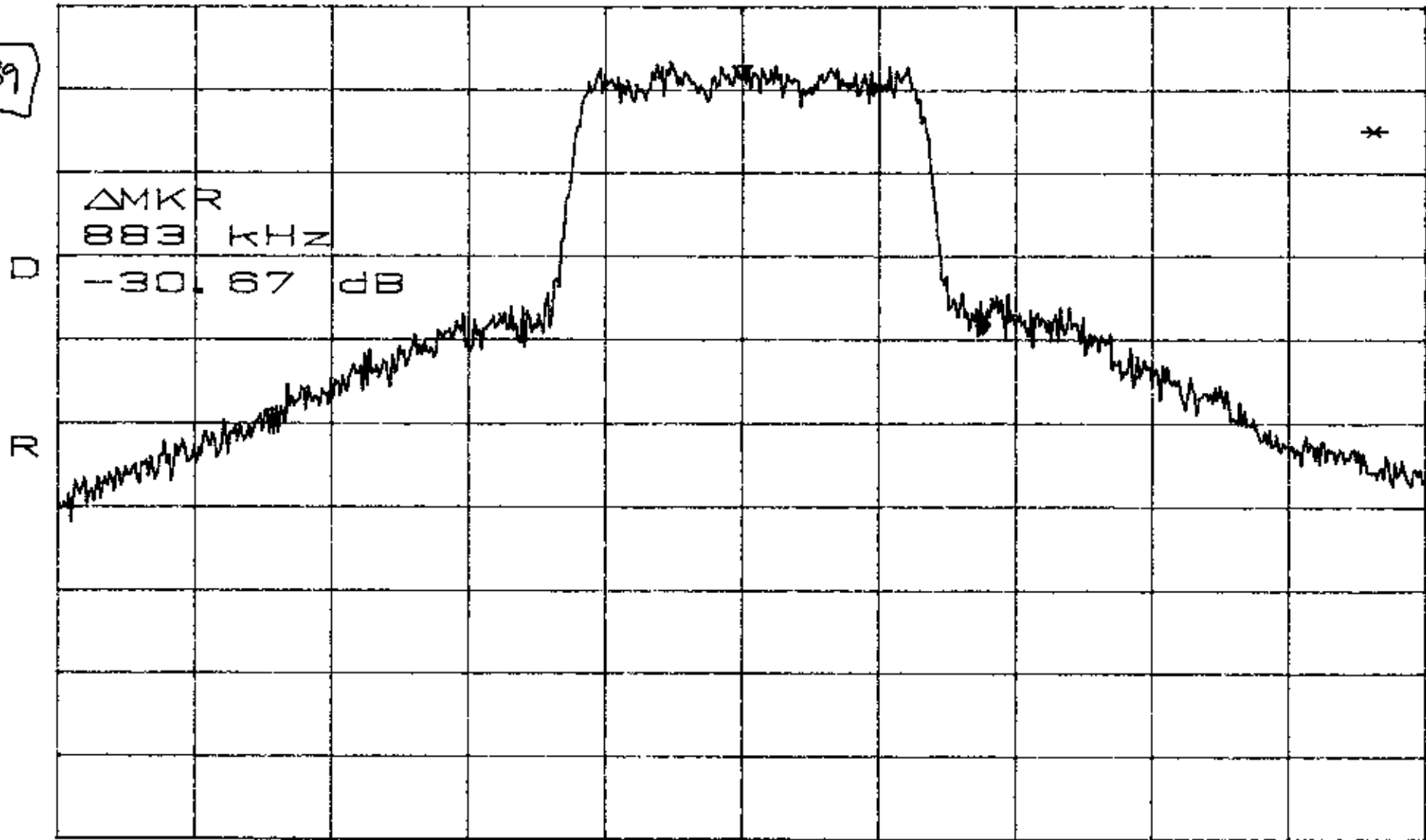
7/31/98

ATTN 10dB
RL 30.0dBm

VAVG 10
10dB/BPOI

ΔMKR -30.67dB
883KHZ

2.989



CENTER 1.976250GHZ

SPAN 5.000MHZ

*RBW 30KHZ

*VBW 30KHZ

SWP 50.0ms

CDR 1CH. X 7.1W
S/N: FCC UNIT

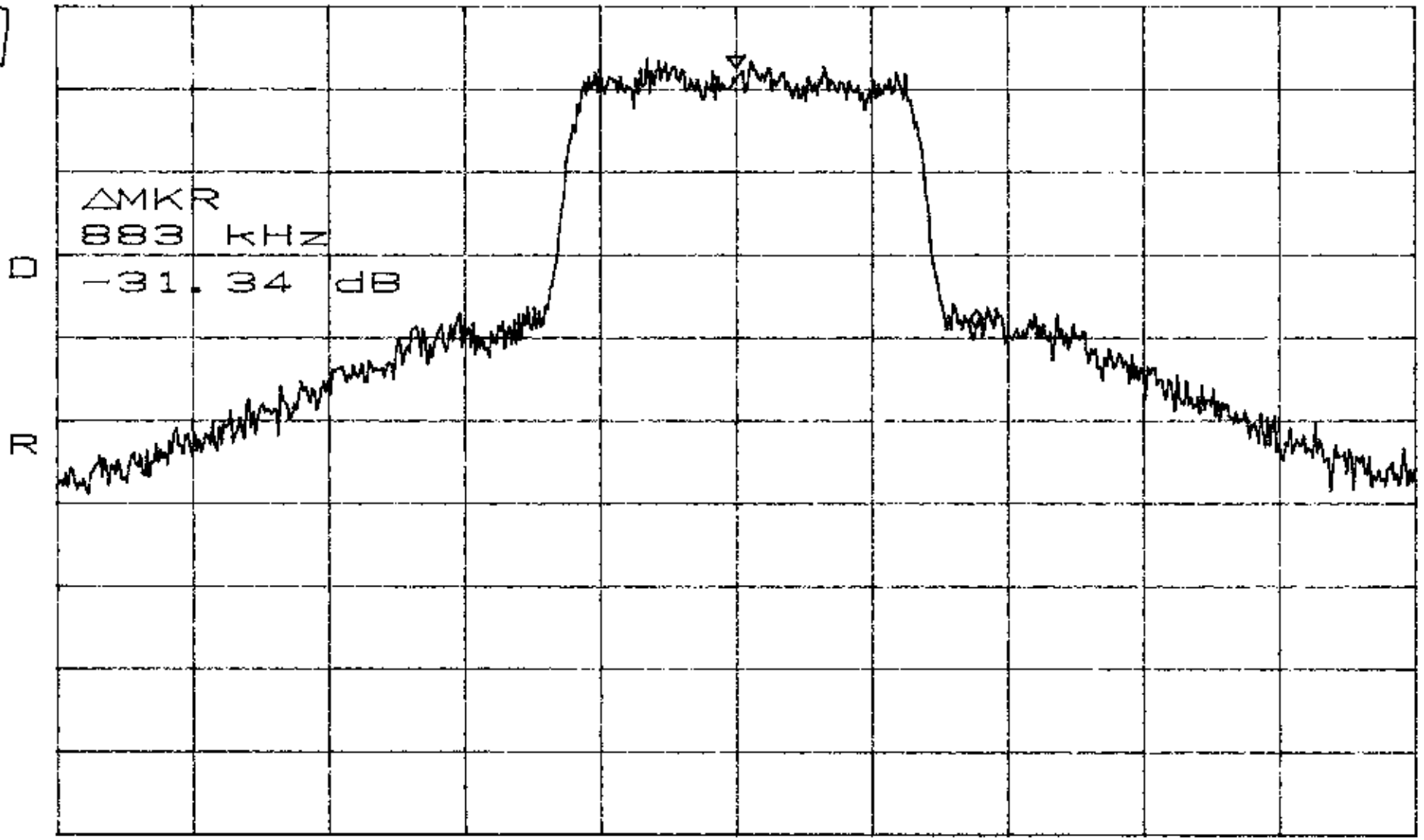
DL
CH. 1175 (1176M)

C-BAND

7/31/98

ATTN 10dB VAVG 10 ΔMKR -31.34dB
RL 30.0dBm 10dB/BPO1 883KHZ

2.989



CENTER 1.988750GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz SWP 50.0ms

CDR KIT. X 7.1W
S/N: FCC UNIT

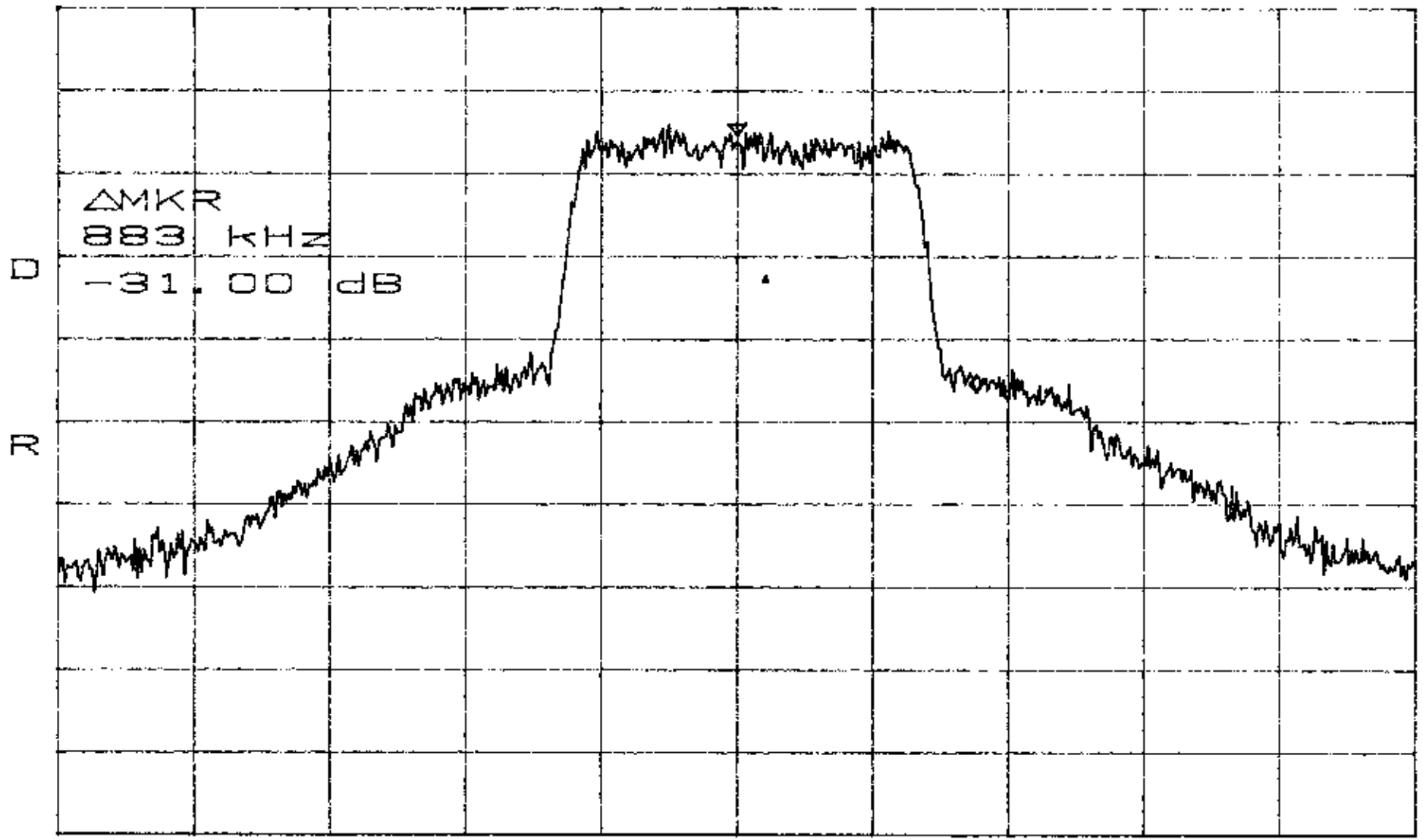
UL
CH. 925 (LOW)

C-BAND

7/31/98

ATTEN 10dB VAVG 10 ΔMKR -31.00dB
RL 30.0dBm 10dB/BPO1 883kHz

2.989



CENTER 1.896250GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz SWP 50.0ms

CDR 1CH. X 7.1 W

UL

C-BAND

7/31/98

S/N: FCC UNIT

CH. 1175 (HGH)

ATTEN 10dB

VAVG 10

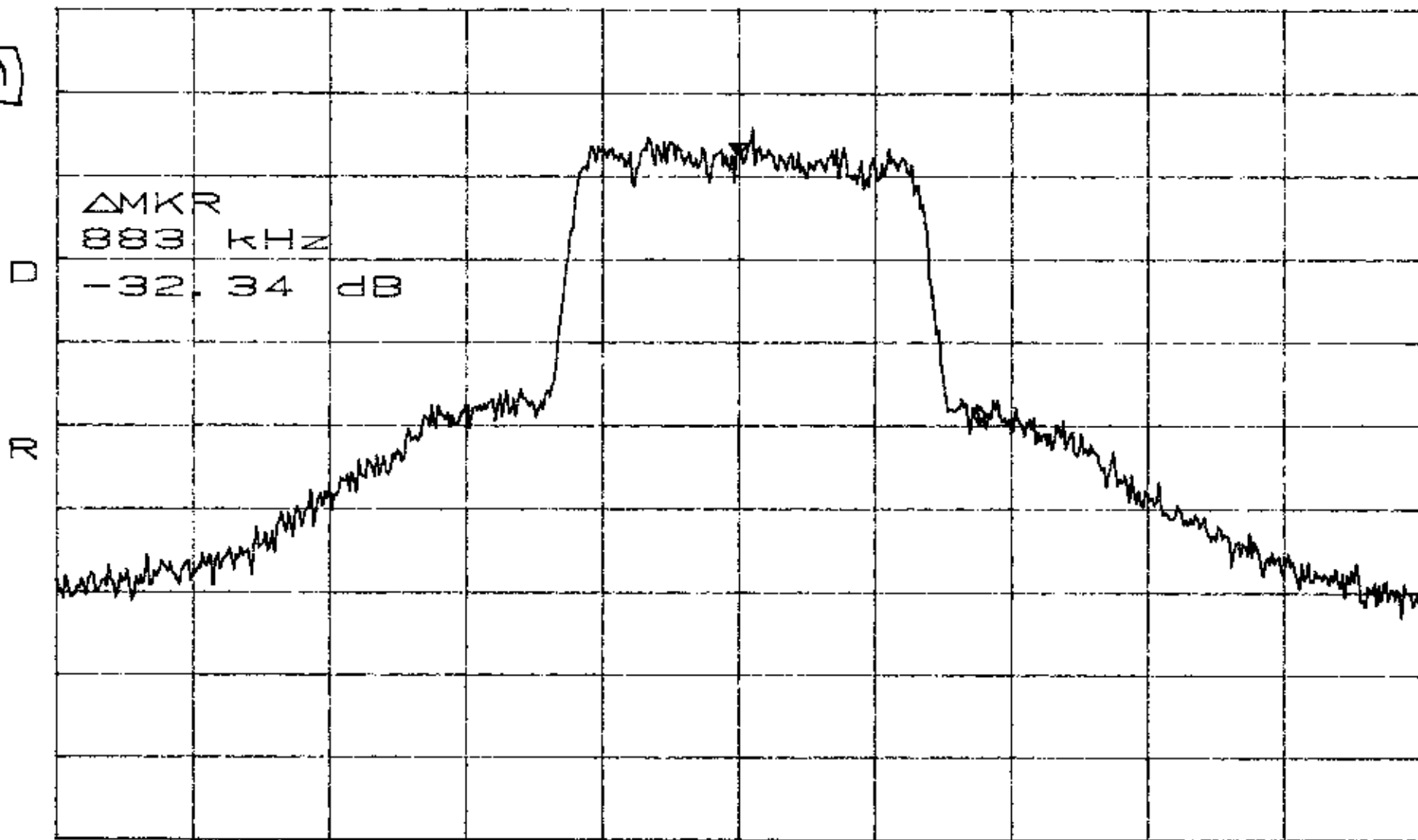
ΔMKR -32.34dB

RL 30.0dBm

10dB/BP01

883kHz

2.989



CENTER 1.908750GHz

SPAN 5.000MHz

*RBW 30kHz

*VBW 30kHz

SWP 50.0ms

CDR 1CH. Y 7.1W
S/N: FCC UNIT

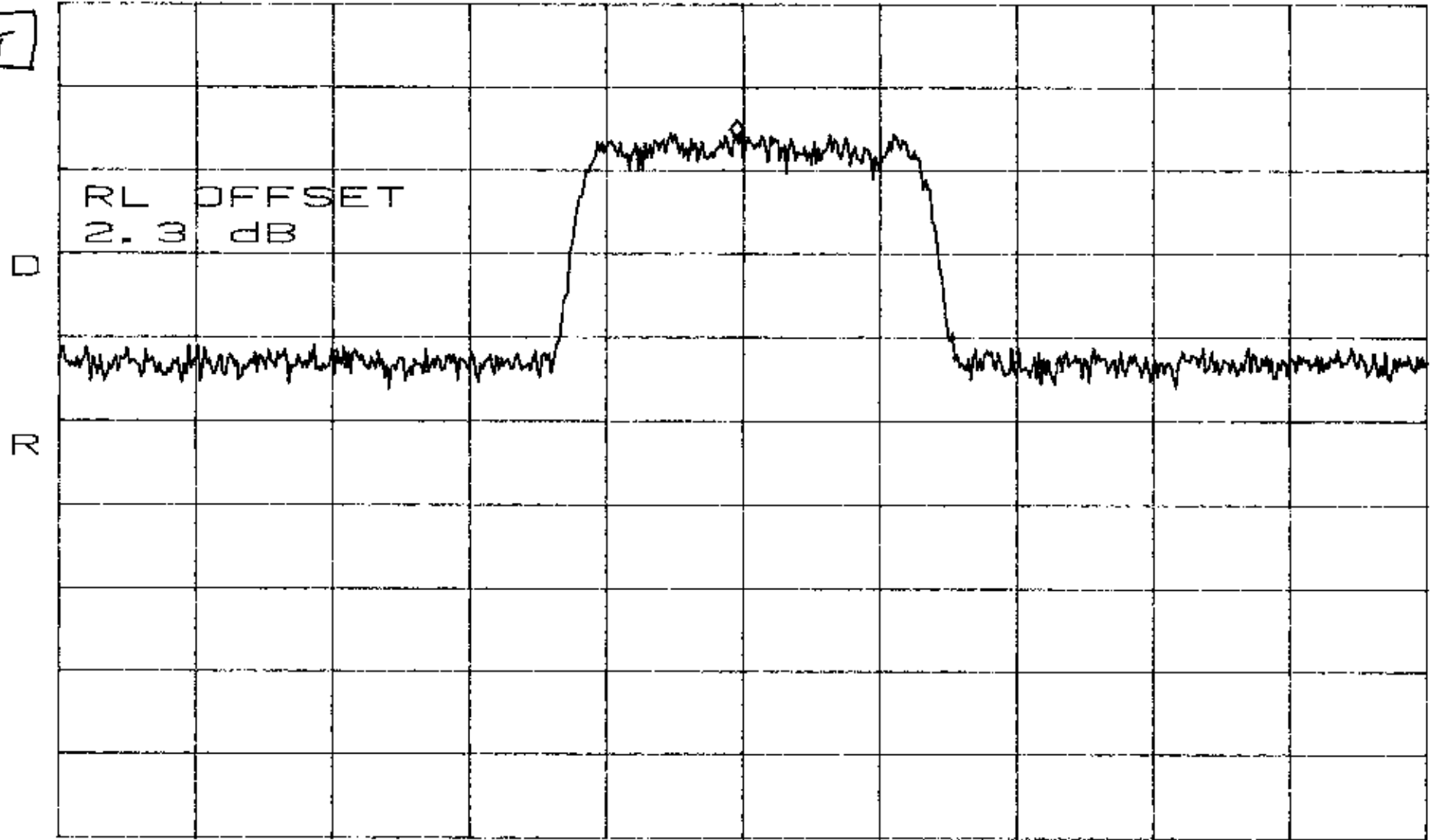
DL
CH. 975 (LOW)

C-BAND
(INPUT)

7/31/98

ATTEN 10dB VAVG 10 MKR -66.00dBm
RL -50.00dBm 10dB/BPO1 /BPO1 1.976225GHz

IN/OUT



CENTER 1.976225GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz SWP 50.0ms

CDR 1CH. X 7.1W
S/N: FCC UNIT

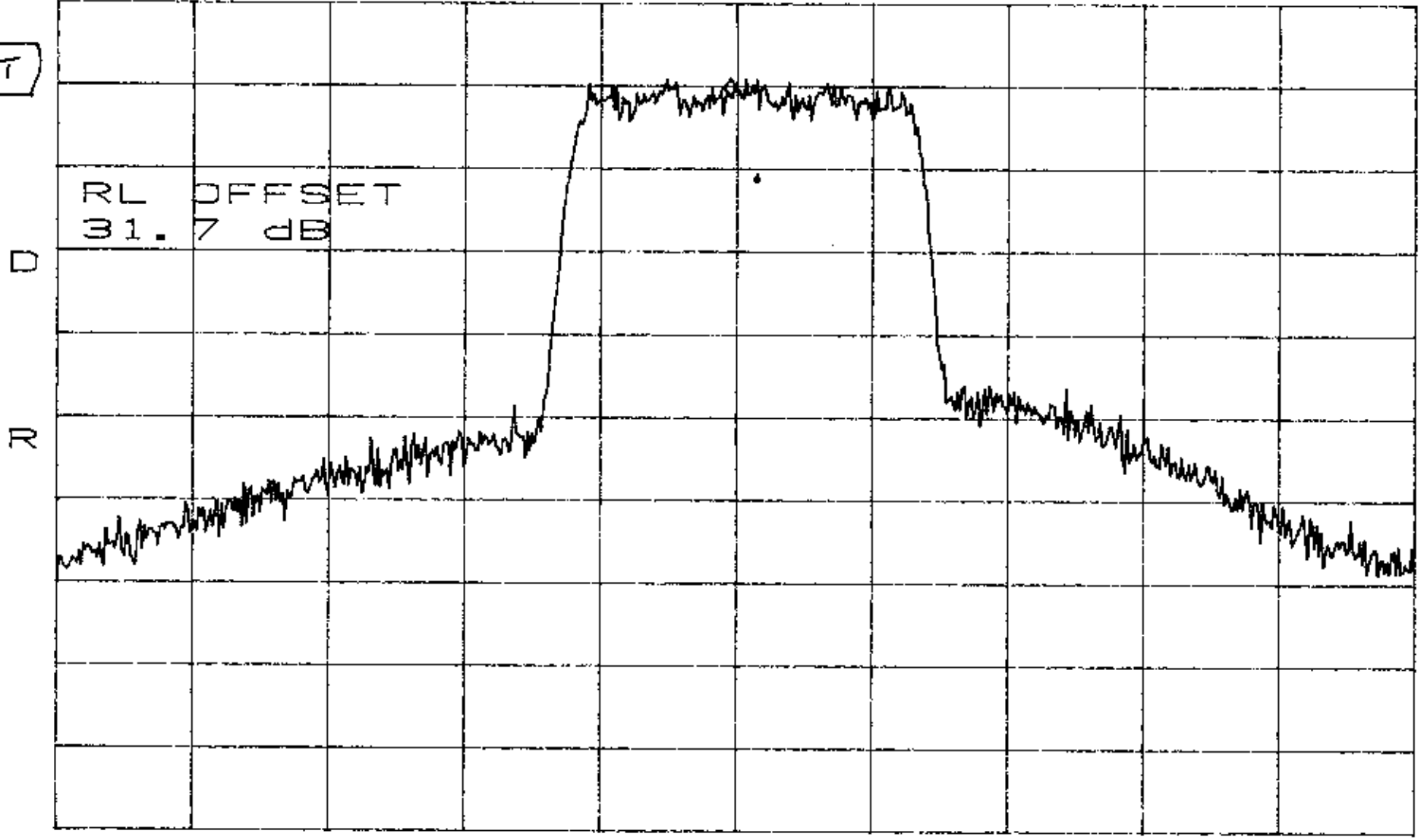
DL
CH. 925 (LOW)

C-BAND
(OUTPUT)

7/31/98

ATTN 10dB VAVG 10 MKR 18.83dBm
RL 30.0dBm 10dB/ 1.976225GHz

IN/OUT



RL OFFSET
31.7 dB

CENTER 1.976225GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz SWP 50.0ms

CDR 1CH. x 7.1W
S/N: FCC UNIT

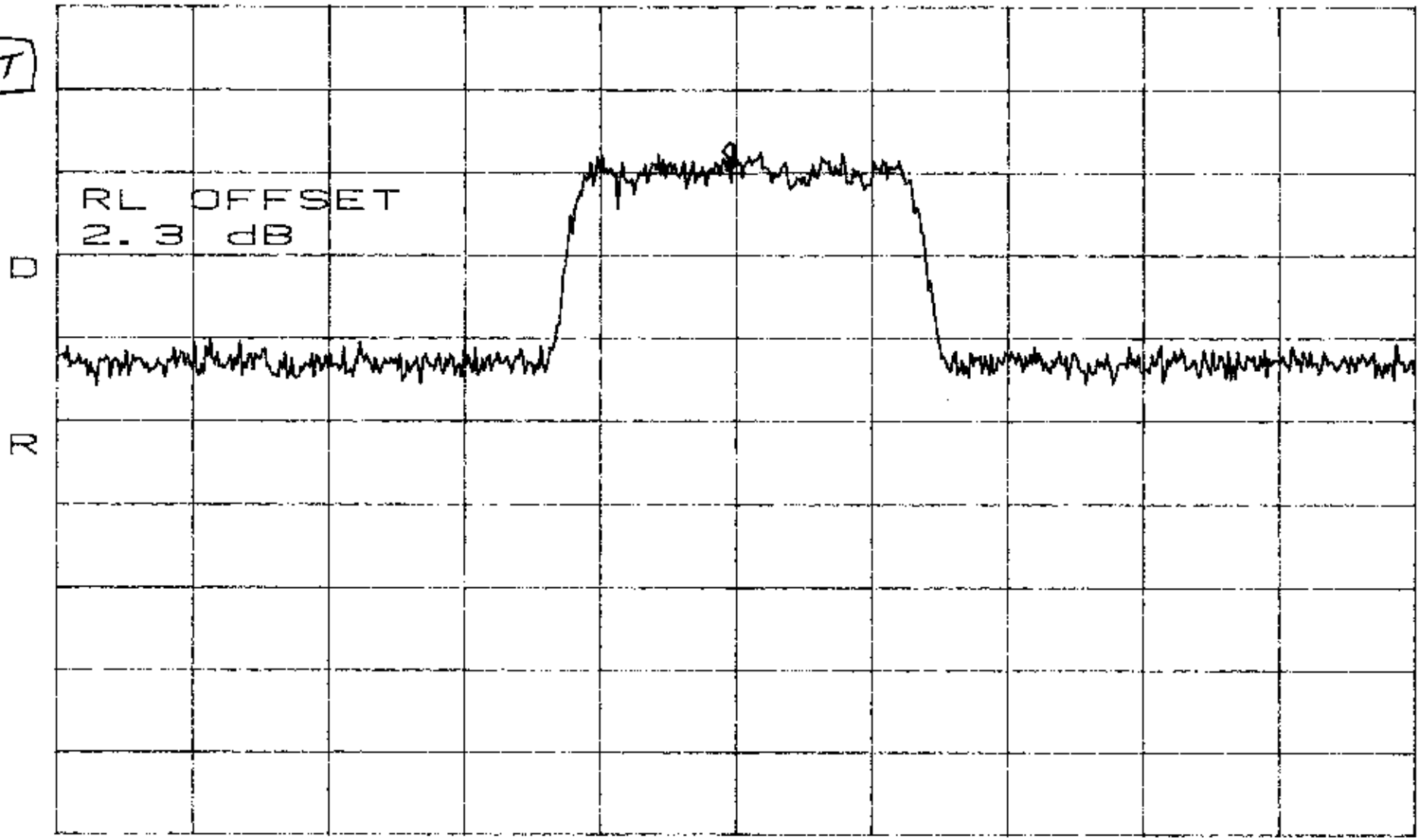
DL
CH. 175(HIGH)

C-BAND)
(INPUT)

7/31/98

ATTEN 10dB VAVG 10 MKR -68.33dBm
RL -50.00dBm 10dB/BPO 1.988725GHz

IN/OUT



CENTER 1.988750GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz SWP 50.0ms

CDR 1CH. X 7.1W

DL

C-BAND

7/31/98

SIN: FCC UNIT

CH. 1175 (HIGH)

(OUTPUT)

ATTEN 10dB

VAVG 10

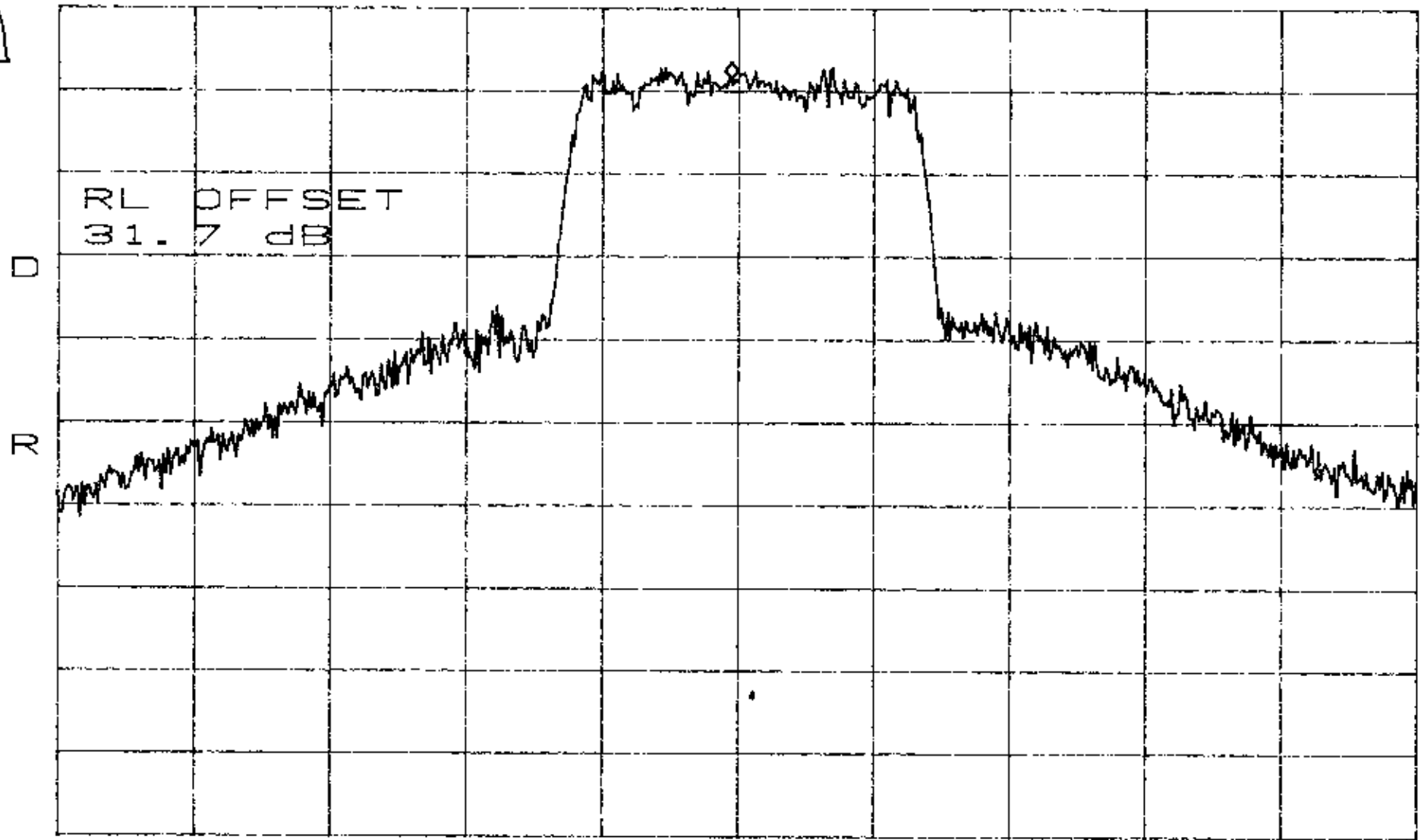
MKR 21.50dBm

RL 30.1dBm

10dB/
/BP01

1.988725GHz

in/out



CENTER 1.988750GHz

SPAN 5.000MHz

*RBW 30kHz

*VBW 30kHz

SWP 50.0ms

CDR 1CH. 7.1W
S/N: FCC UNIT

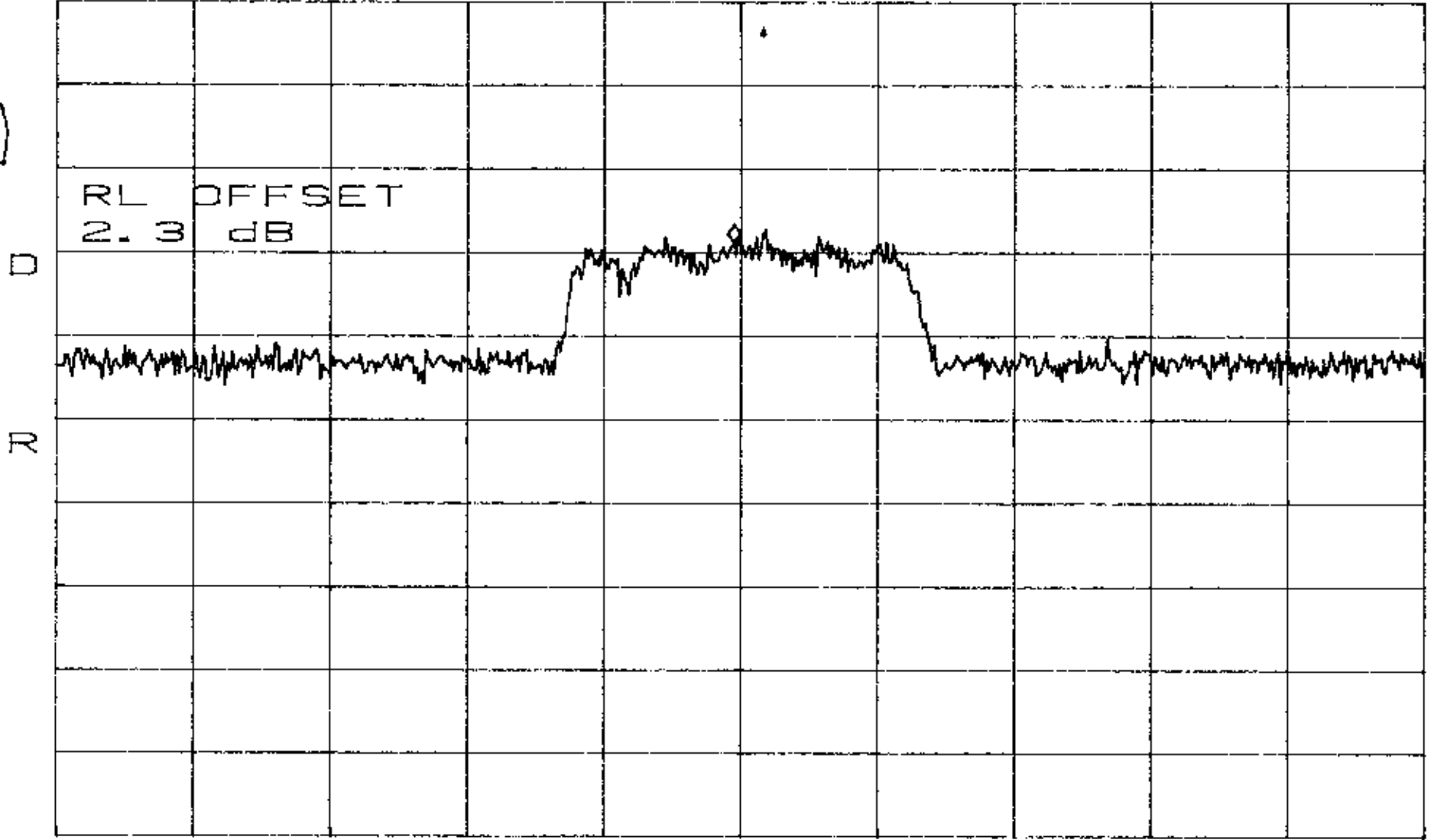
UL
CH. 925 (LOW)

C-BAND
(INPUT)

7/31/98

ATTN 10dB VAVG 10 MKR -78.67dBm
RL -50.0dBm 10dB/BPO1 1.896250GHz

IN/OUT



RL OFFSET
2.3 dB

D
R

CENTER 1.896275GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz SWP 50.0ms

CDR 1CH.X 7.1W
S/N: FCC UNIT

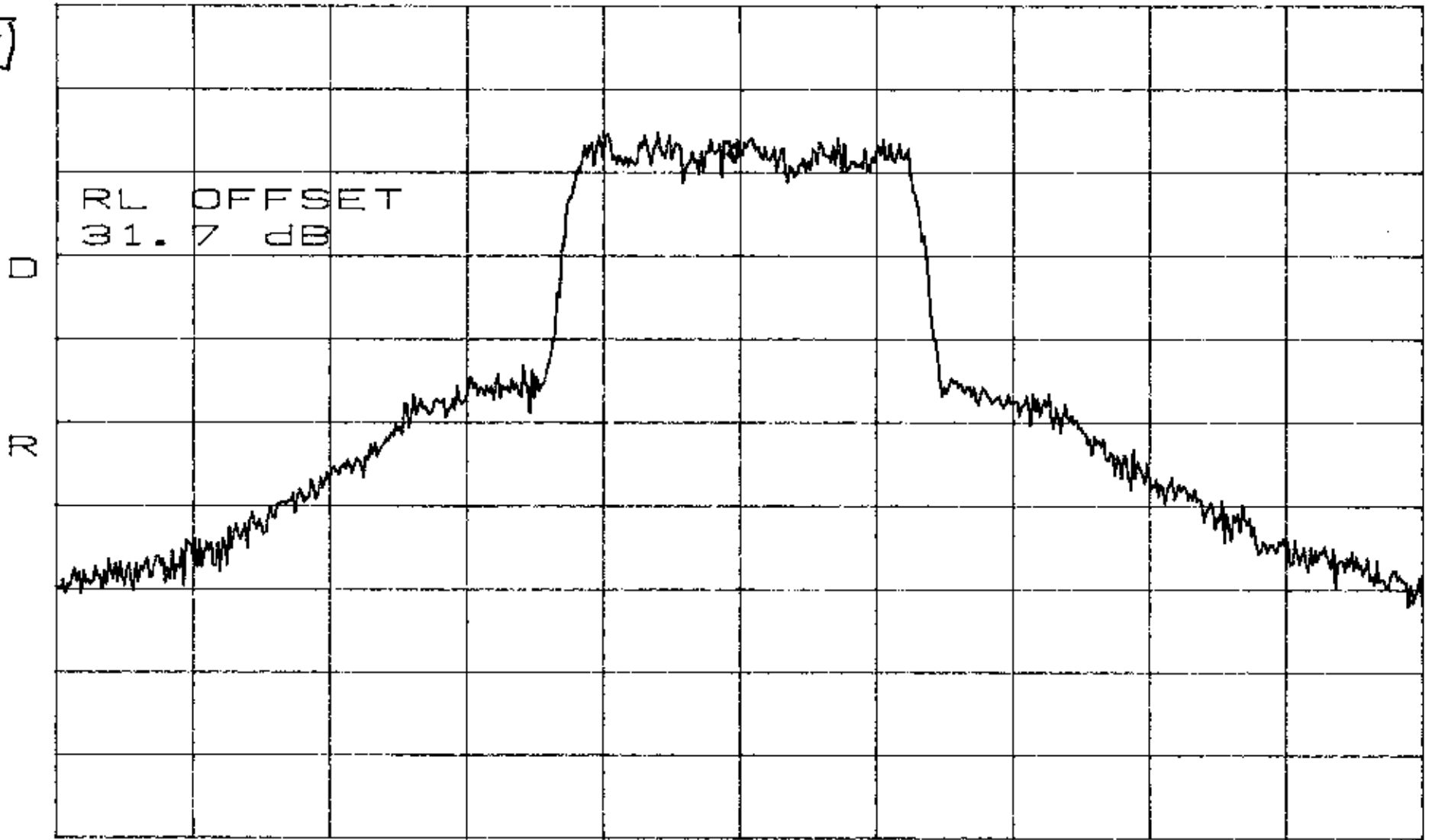
UL
~~CH. 175 (HIGH)~~
CH. 925 (LOW)

C-BAND
(OUTPUT)

7/31/98

ATTEN 10dB VAVG 10 MKR 11.33dBm
BPO1 BPO1
RL 30.0dBm 10dB/ BPO1 1.896250GHz

IN/OUT



CENTER 1.896275GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz SWP 50.0ms

CDR 1CH. x7.1W

UL

C-BAND

7/31/98

S/N: FCC UNIT

CH: 1175 (HIGH)

(INPUT)

ATTEN 10dB

VAVG 10

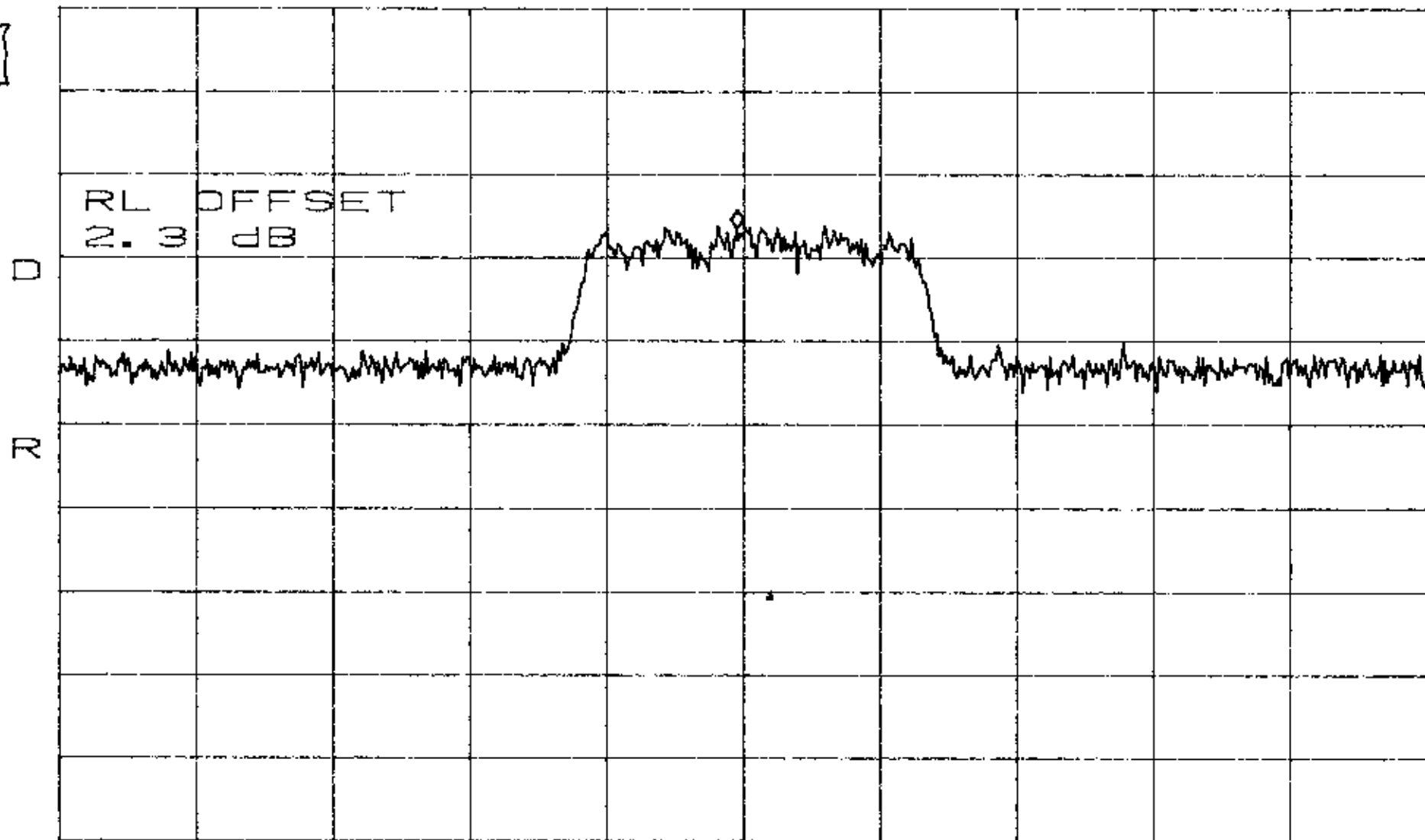
MKR -76.33dBm

RL -50.0dBm

10dB/

1.908725GHz

IN/OUT



CENTER 1.908750GHz

SPAN 5.000MHz

*RBW 30kHz

*VBW 30kHz

SWP 50.0ms

CDR 1CH. X7.1W
S/N: FCC UNIT

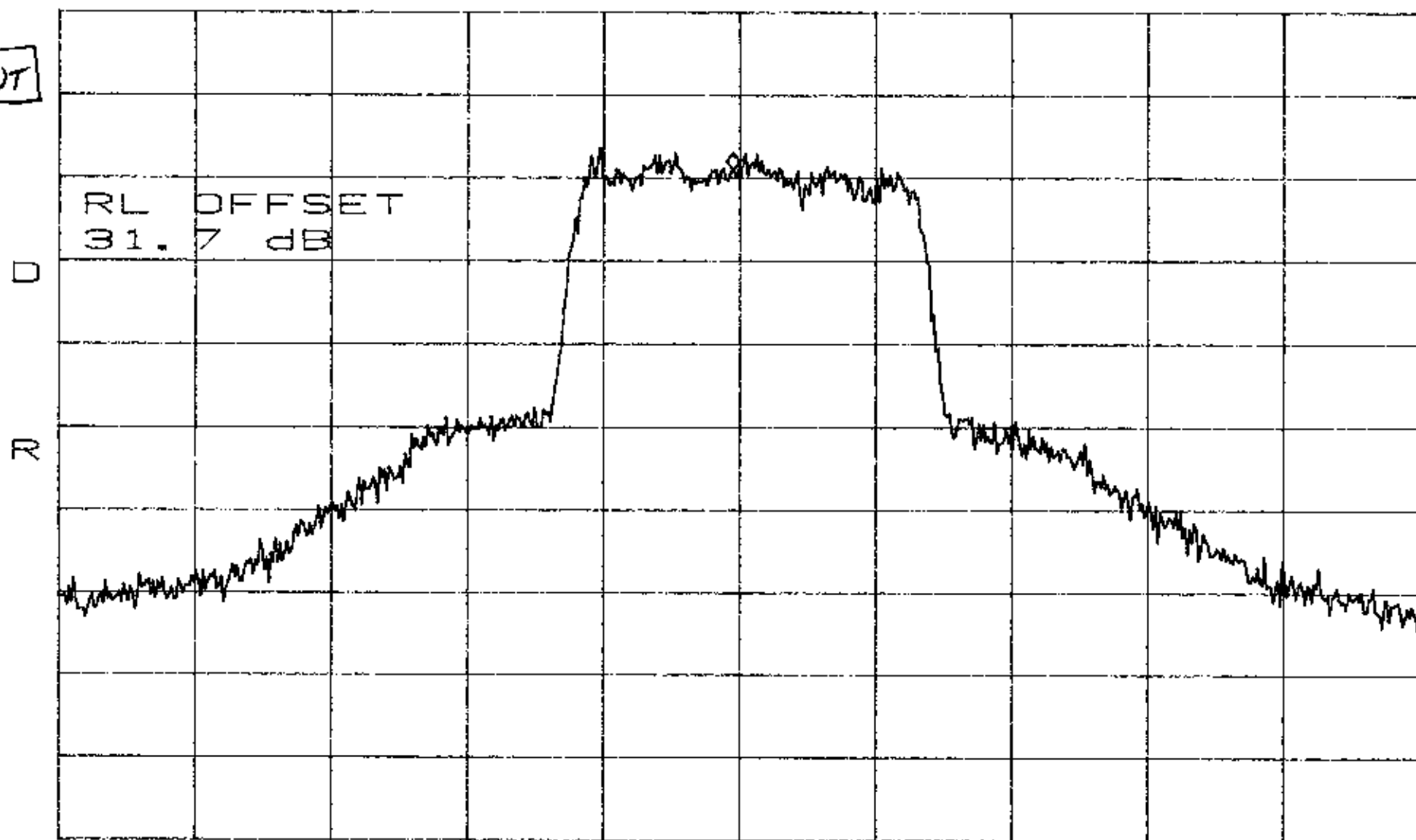
UL
CH. 1175 (HIG#)

C-BAND
(OUTPUT)

7/31/98

ATTN 10dB VAVG 10 MKR 11.00dBm
RL 30.0dBm 10dB/. 1.908725GHz

IN/OUT



CENTER 1.908750GHz

SPAN 5.000MHz

*RBW 30kHz

*VBW 30kHz

SWP 50.0ms

CDR 10k x 7.1 W
S/N: FCC UNIT

DL
CH 925 (Low)

C-BAND
CDMA SOURCE

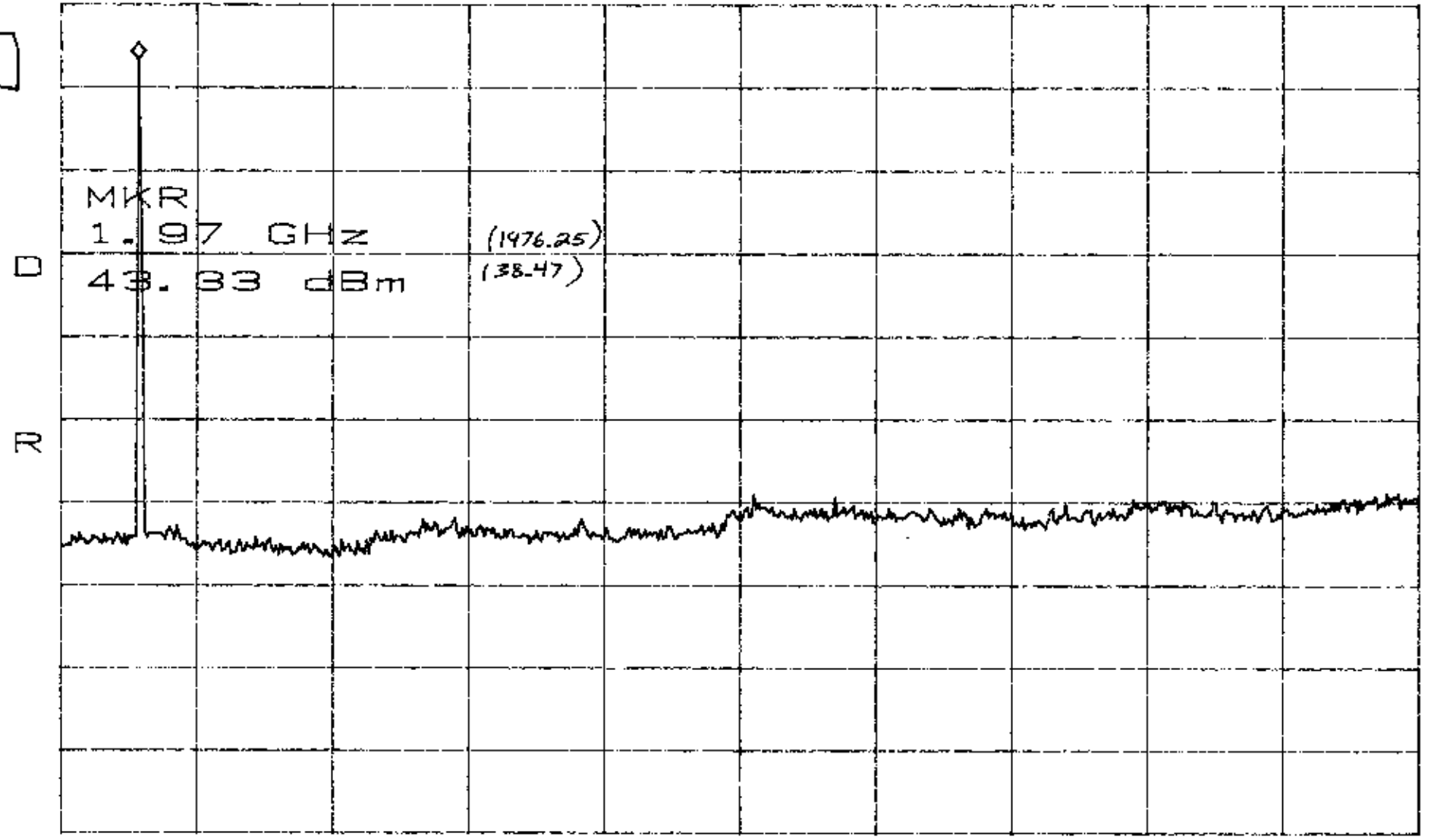
7/31/98

*ATTEN 30dB
RL 50.0dBm

10dB/

MKR 43.33dBm
1.97GHz

2.991



START 500MHz STOP 26.50GHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 520ms

CDR 1CH. X 7.1W
SIN: FCC UNIT

DL
CH. 1175 (HIGH)

C-BAND
CDMA SOURCE

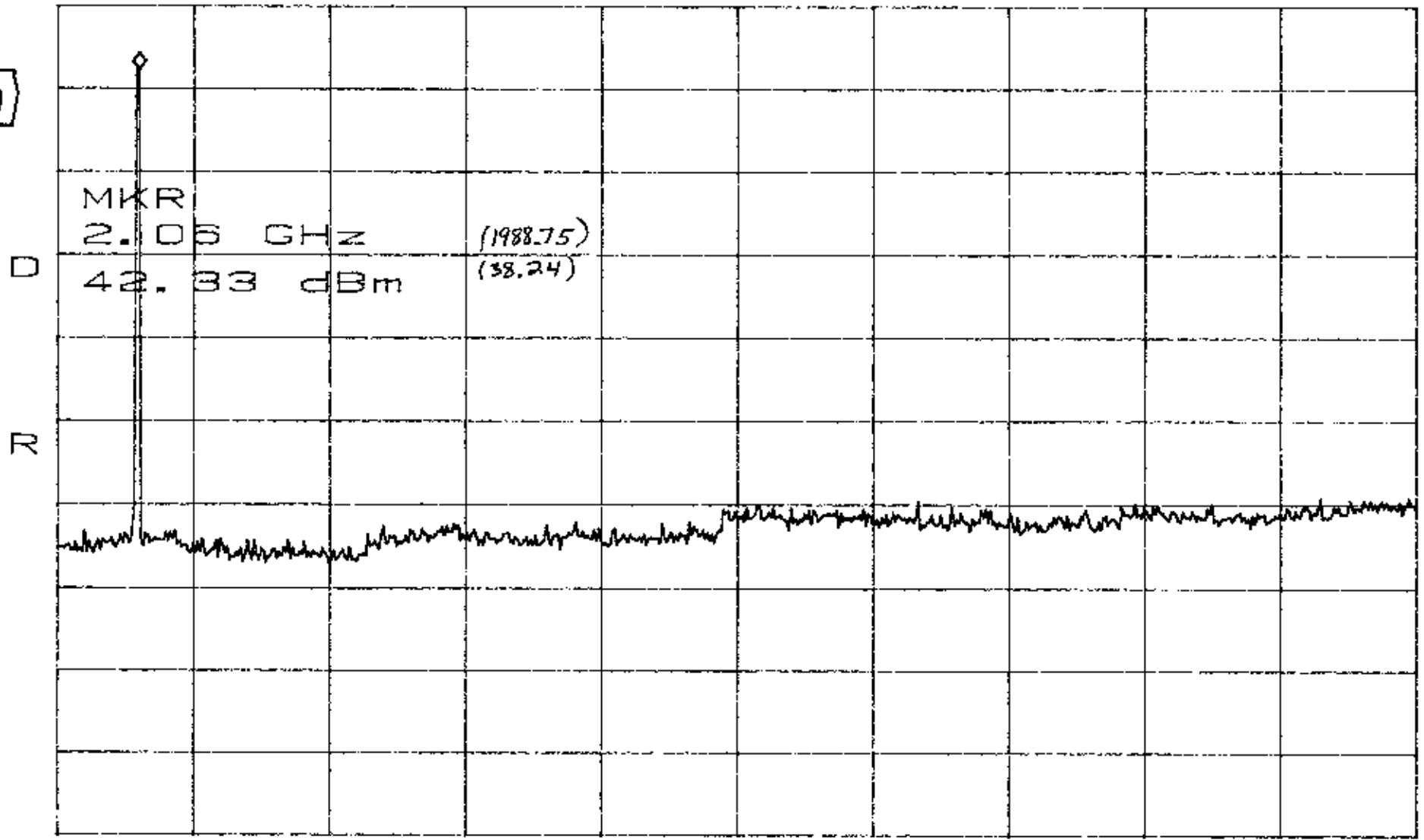
7/31/98

*ATTEN 30dB
RL 50.0dBm

10dB/

MKR 42.33dBm
2.06GHz

2.991



START 500MHz STOP 26.50GHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 520ms

CDR 1CH X7.1W
S/N: FEE UNIT

UL
CH: 925(Low)

C-BAND
CDMA SOURCE

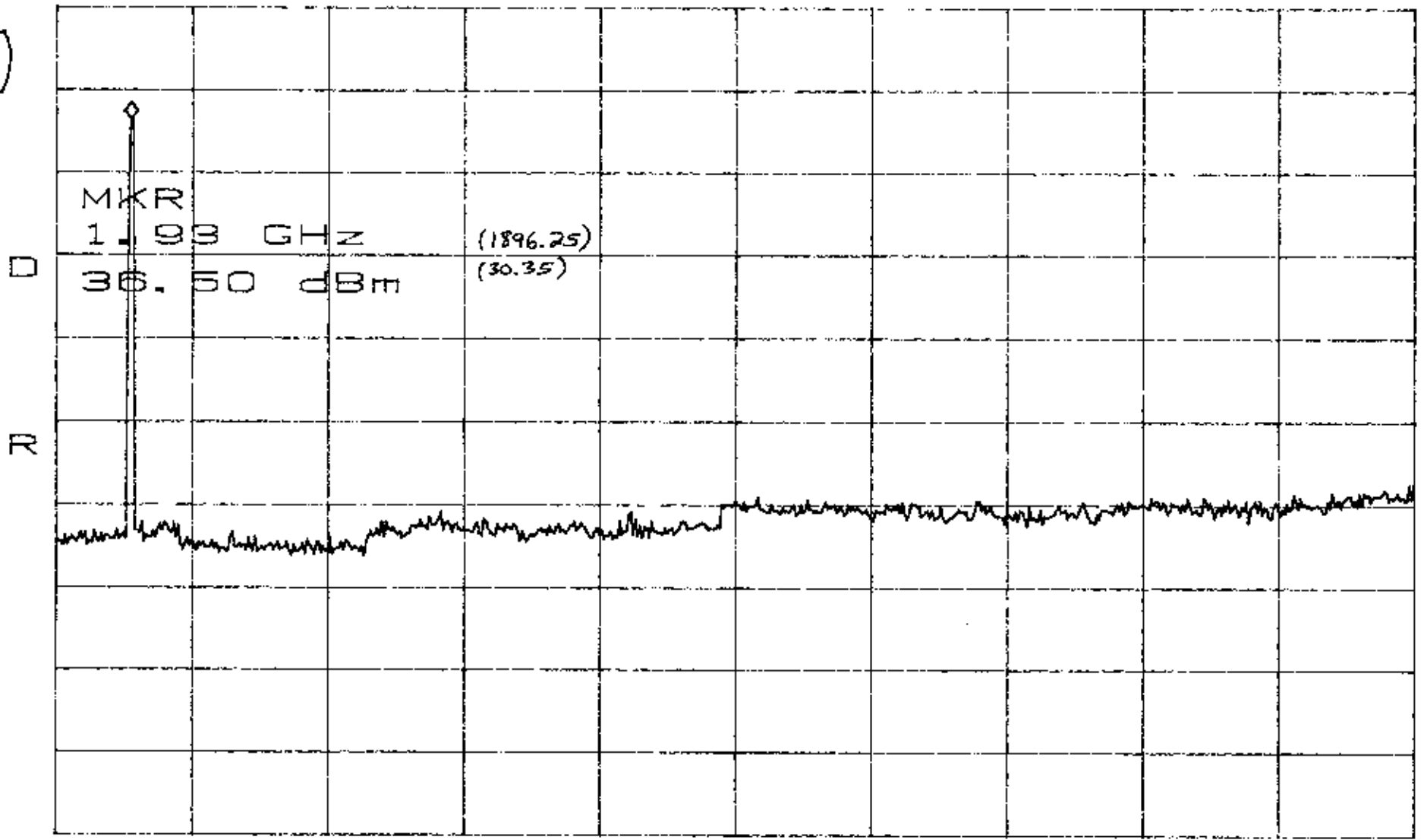
7/31/98

*ATTEN 30dB
RL 50.0dBm

10dB/

MKR 36.50dBm
1.93GHz

2.991



START 500MHz STOP 26.50GHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 520ms

CDR 1CH. x 7.1W
S/N : FCC UNIT

UL
CH. 1175 (1+1GB)

C-BAND
CDMA SOURCE

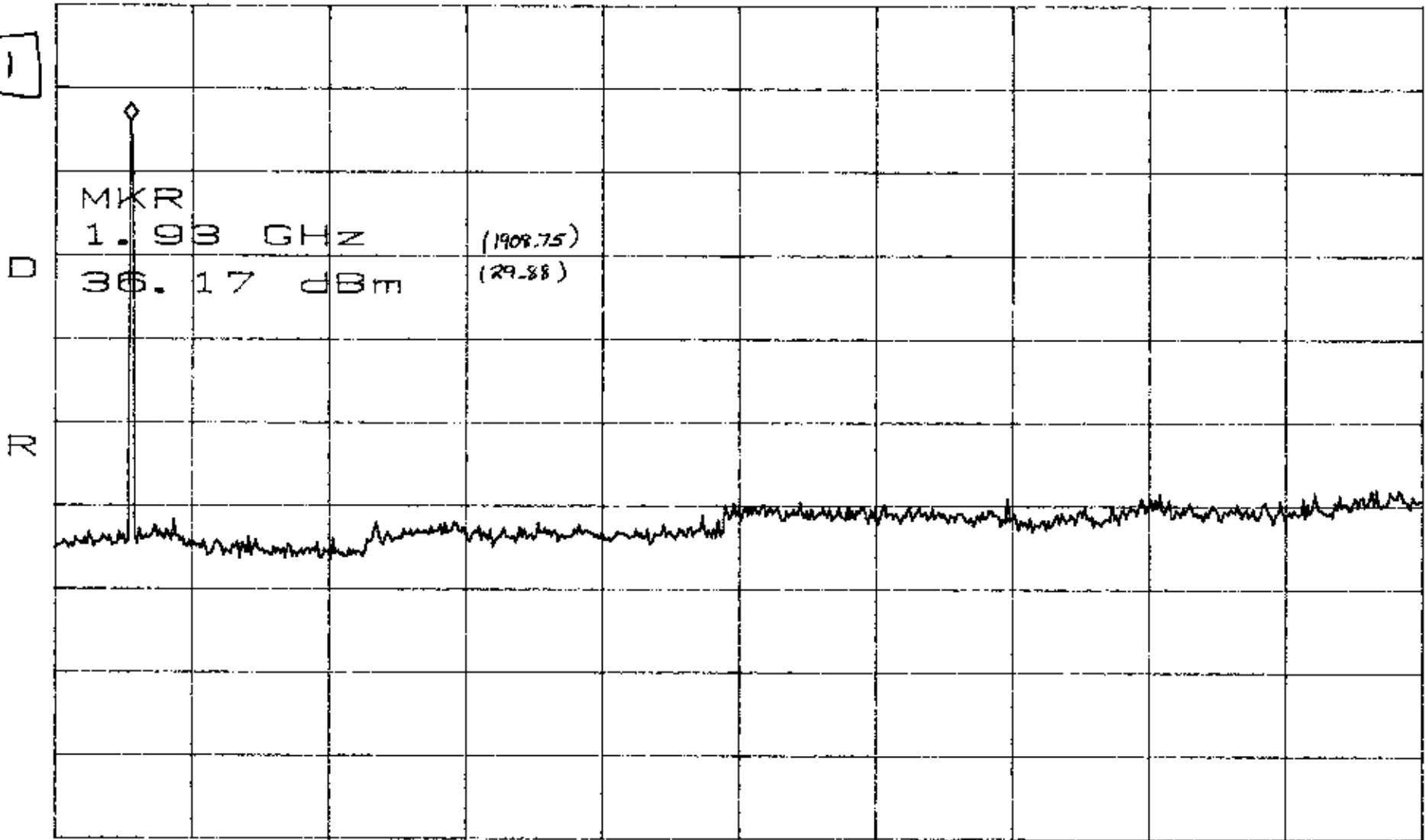
7/31/98

*ATTEN 30dB
RL 50.0dBm

10dB/

MKR 36.17dBm
1.93GHz

2.991



START 500MHz STOP 26.50GHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 520ms

CDR ICH X7.1W
S/N: FEC UNIT

UL
CH. 925(Low)

FUNDAMENTAL
C-BAND

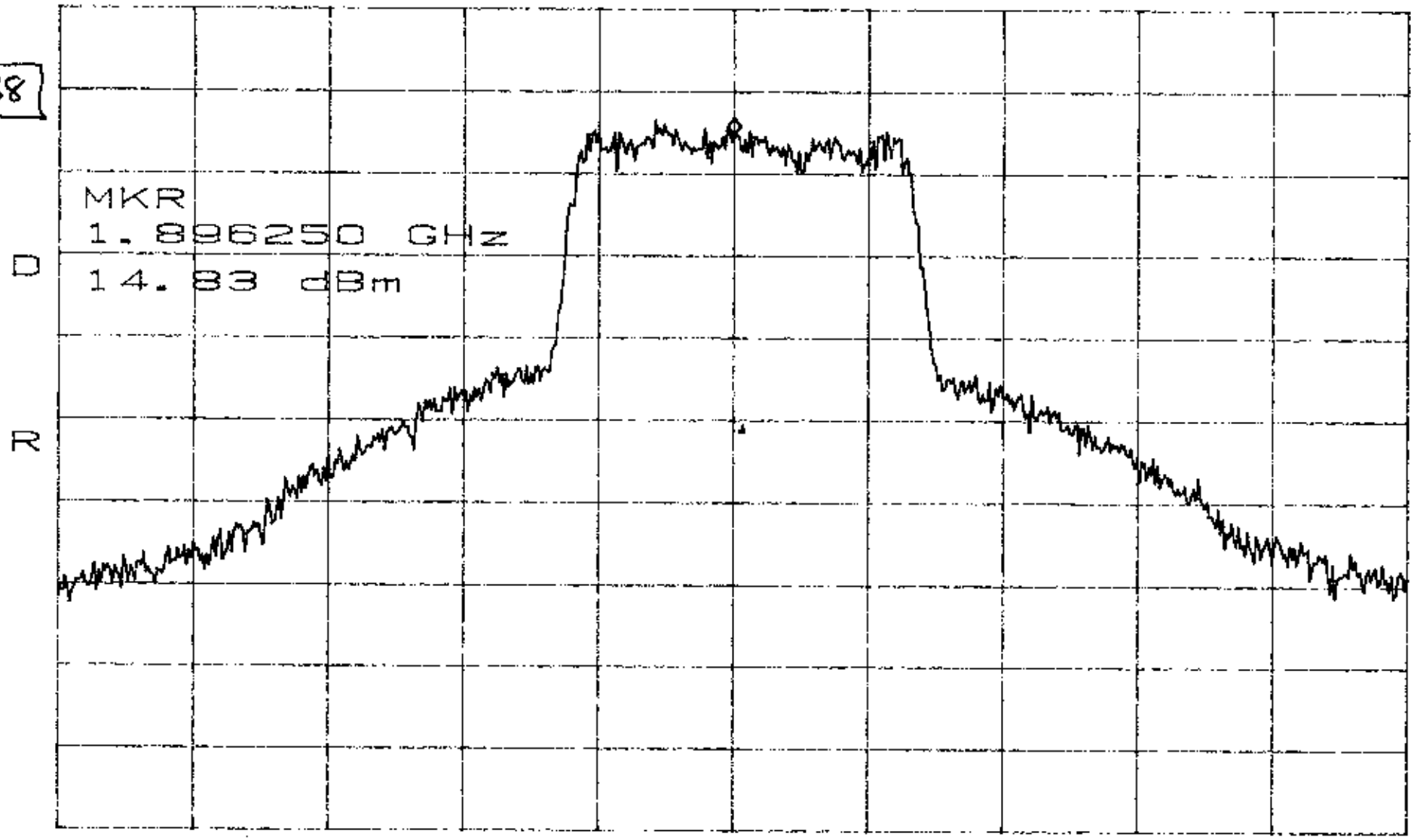
7/31/98

*ATTEN 10dB
RL 30.0dBm

VAVG 10
10dB/

MKR 14.83dBm
1.896250GHz

24.238



CENTER 1.896250GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

COR 1CH.X 7.1W
S/N: FCC UNIT

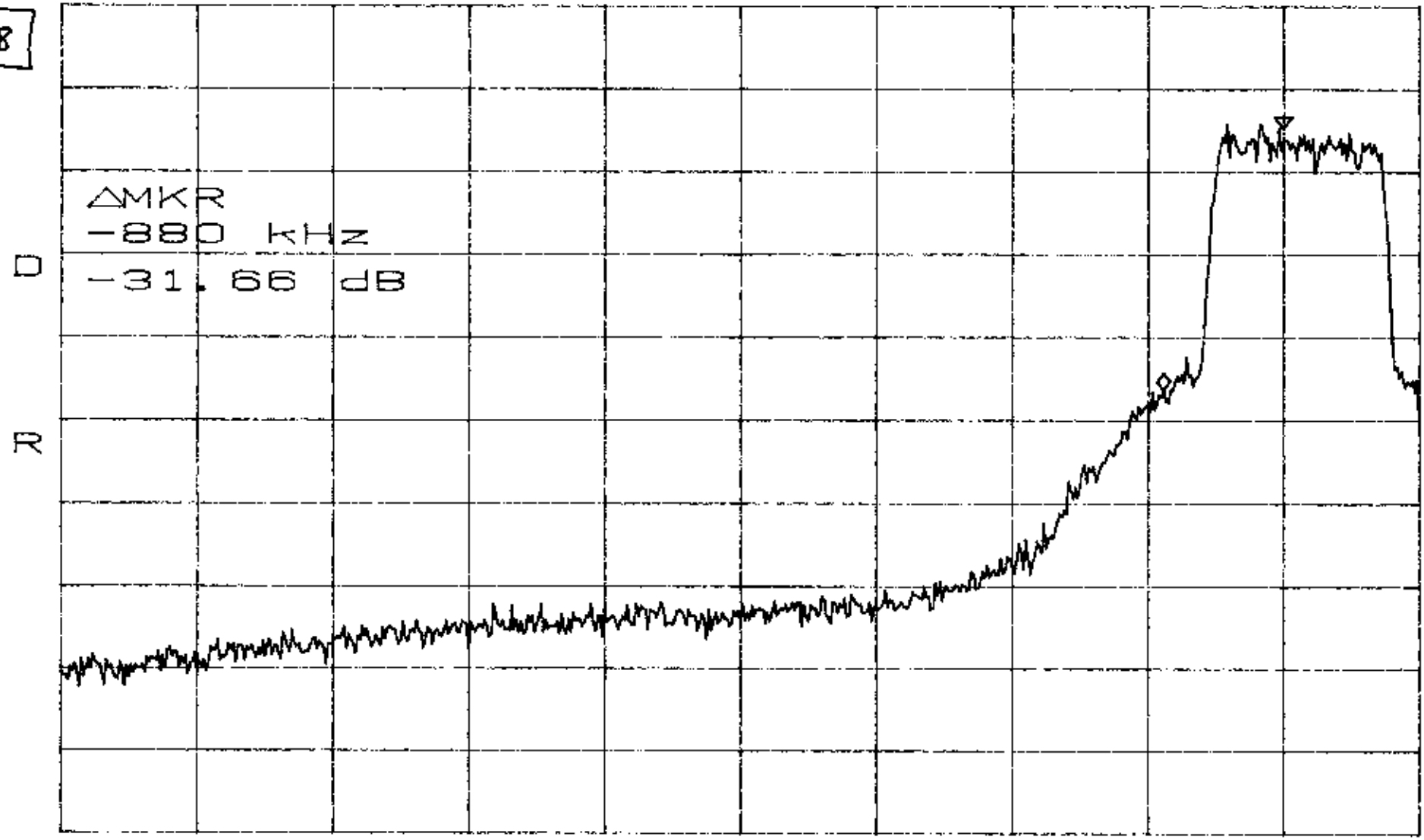
UL
CH. 925(Low)

BELOW FUNDAMENTAL
C-BAND

7/31/98

*ATTEN 10dB VAVG 10 ΔMKR -31.99dB
RL 30.0dBm 10dB/ -880kHz

24.238



CENTER 1.89225GHz SPAN 10.00MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

CDR 1CH. X 7.1W
SIN: FCC UNIT

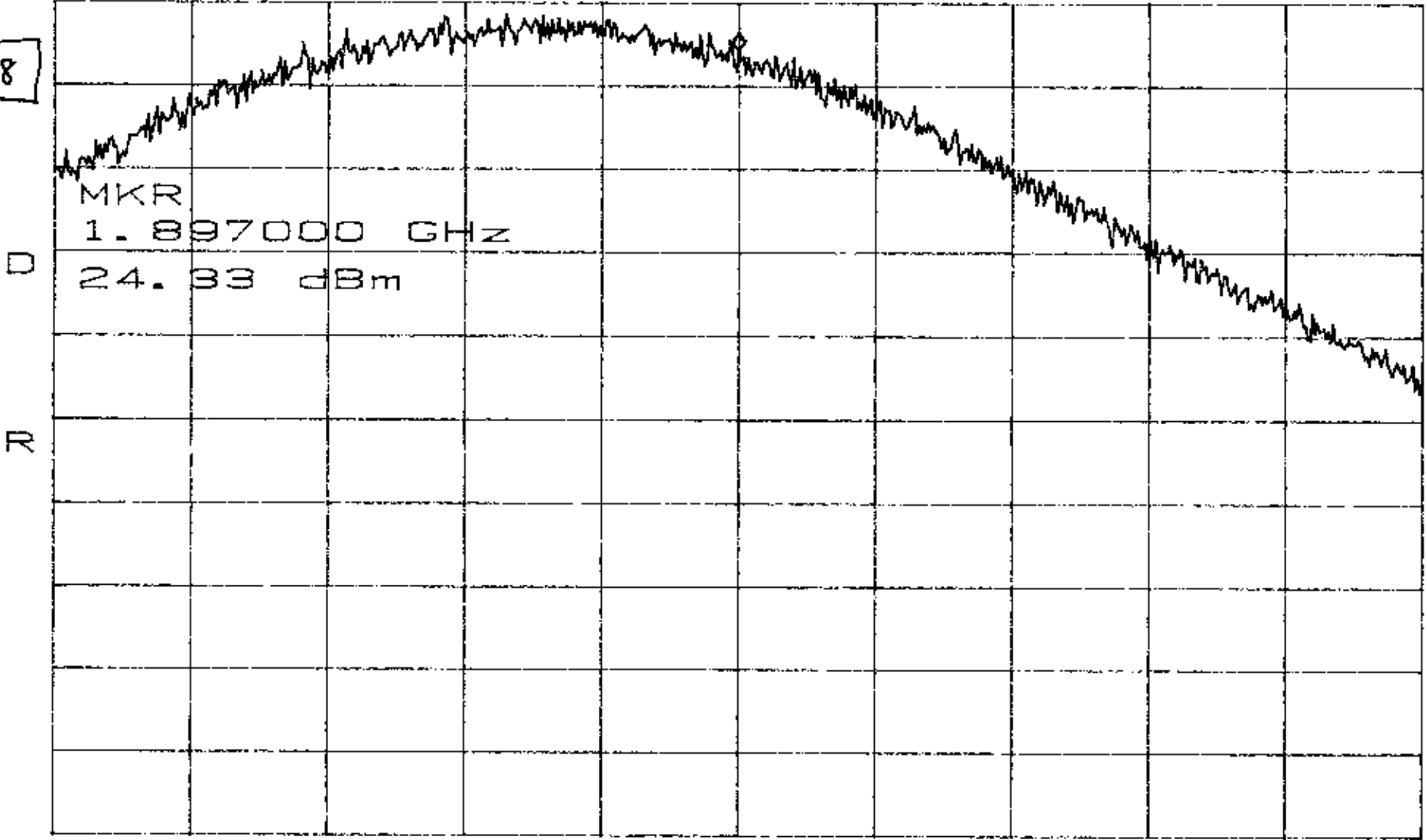
UL
CH 925 (LOW)

ABOVE FUNDAMENTAL
C-BAND

7/31/98

*ATTEN 10dB VAVG 10 MKR 24.33dBm
RL 30.0dBm 10dB/ 1.897000GHZ

24.238



CENTER 1.897000GHZ SPAN 5.000MHZ
*RBW 1.0MHZ *VBW 1.0MHZ *SWP 50.0ms

CDR 1CH. X 7.1W
S/N: FCC UNIT

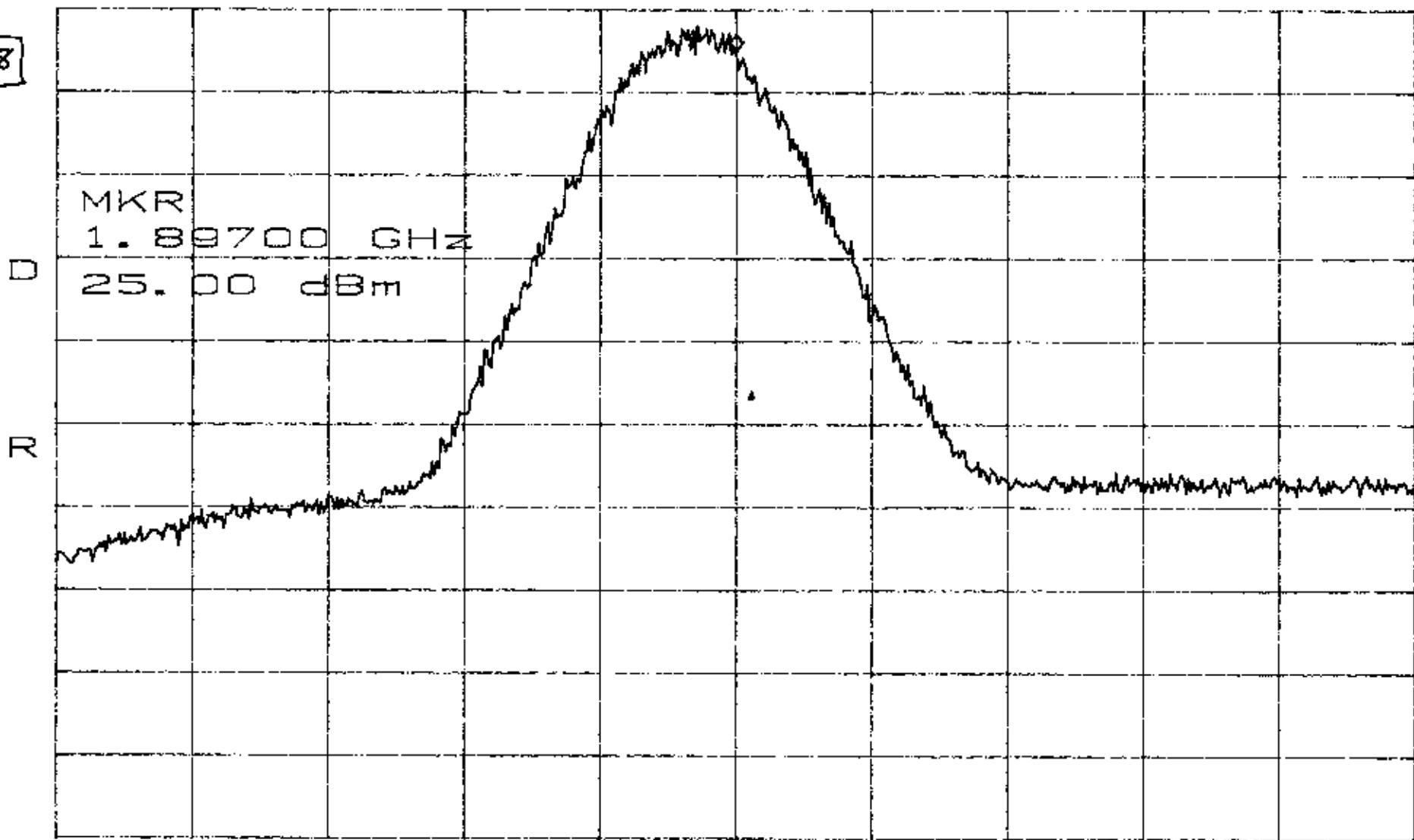
UL
CH 925 (LOW)

ABOVE FUNDAMENTAL
C-BAND

7/31/98

*ATTEN 10dB VAVG 10 MKR 25.00dBm
RL 30.00dBm 10dB/ 1.89700GHz

24.238



CENTER 1.89700GHz SPAN 20.00MHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 50.0ms

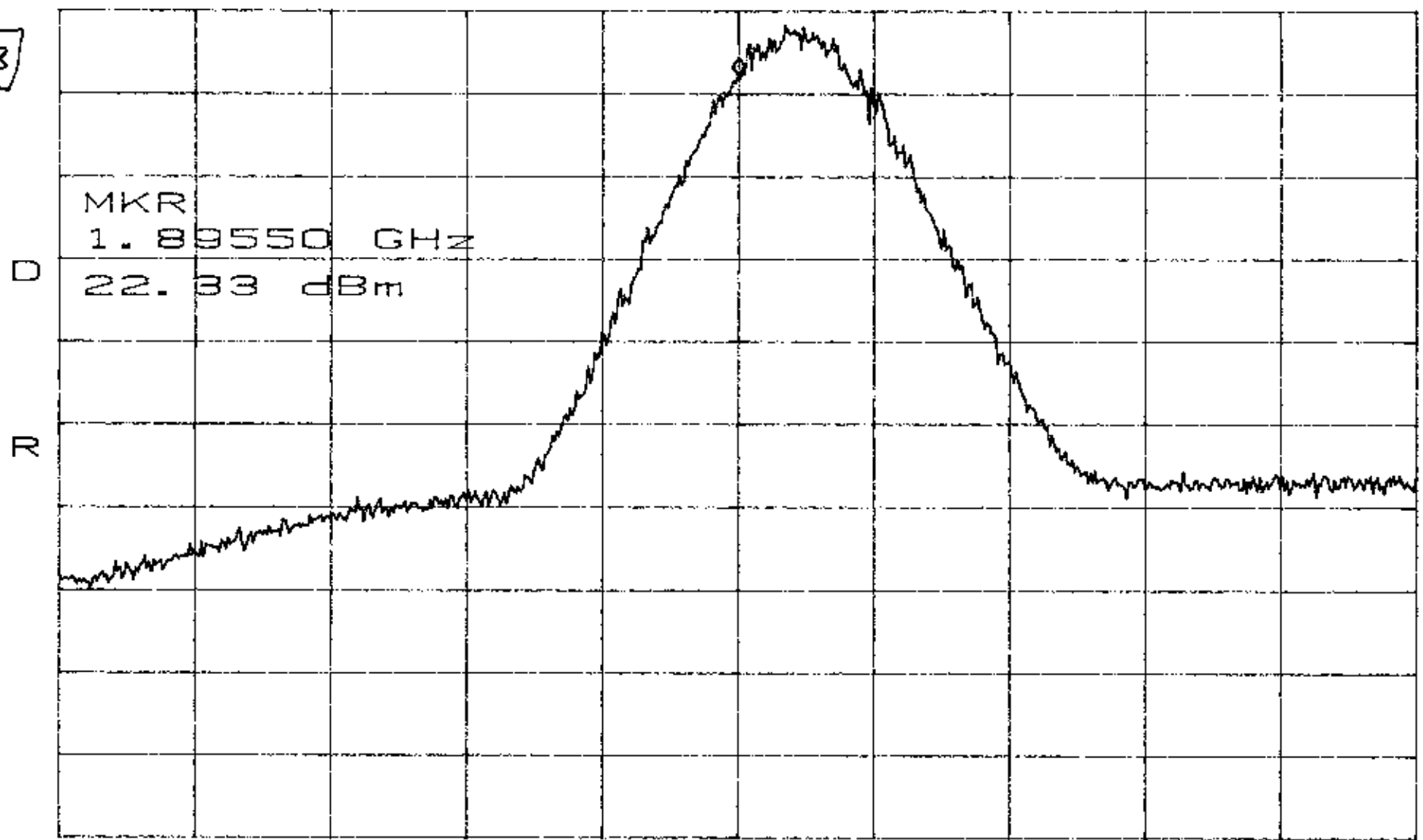
CDR 1CH.X 7.1W UL
SIN: FCC UNIT CH 925(Low)

BELOW FUNDAMENTAL
C-BAND

7/31/98

*ATTEN 10dB BPO 10 MKR 22.33dBm
RL 30.0dBm 10dB/BPO 1.89550GHz

24.238



CENTER 1.89550GHz SPAN 20.00MHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 50.0ms

CDR ICIT. X 7.1W
S/N: FCC UNIT

UL
CH. 925 (LOW)

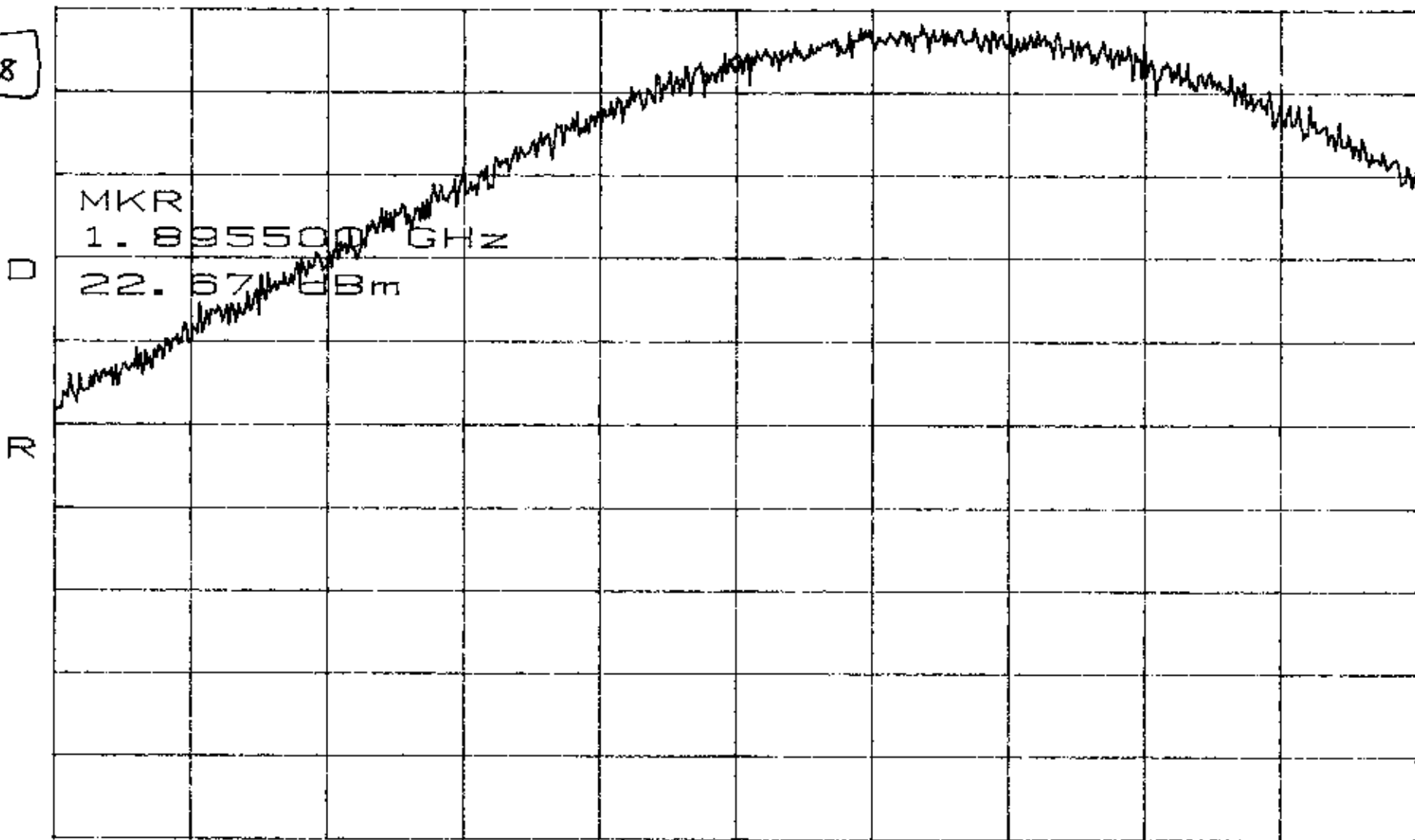
BELOW FUNDAMENTAL 7/31/98
C-BAND

*ATTEN 10dB
RL 30.0dBm

VAVG 10
10dB/

MKR 22.67dBm
1.895500GHZ

24.238



CENTER 1.895500GHZ SPAN 5.000MHZ
*RBW 1.0MHZ *VBW 1.0MHZ *SWP 50.0ms

CDR 1CH. X7.1W
S/N: FCC UNIT

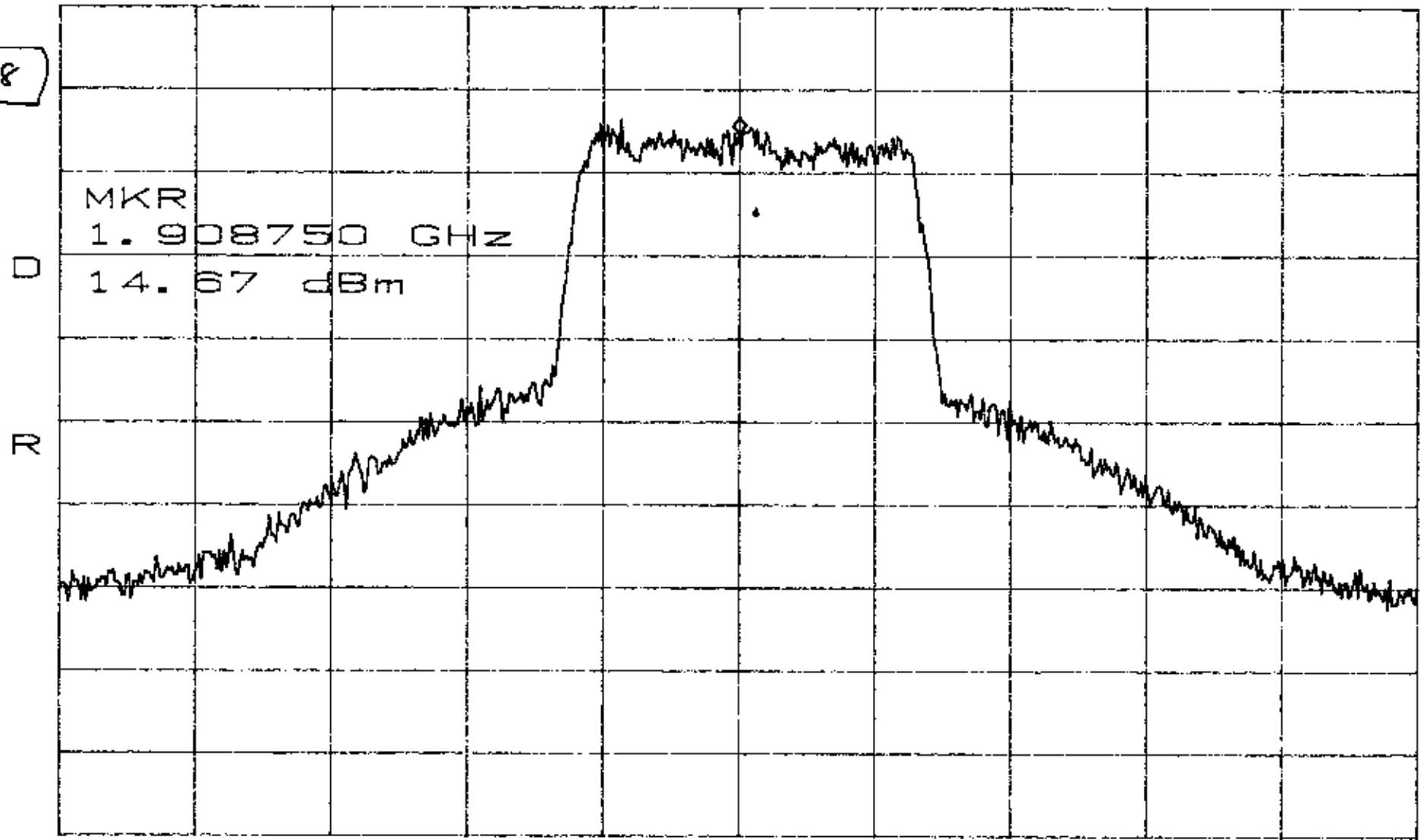
UL
CH. 175 (HIGH)

FUNDAMENTAL
C-BAND

7/31/98

*ATTEN 10dB VAVG 10 MKR 14.67dBm
RL 30.0dBm 10dB/ 1.908750GHz

24.238



CENTER 1.908750GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

CDR 1CH X 7.1 W
SN: FCC UNIT

UL
CH 1175 (HIGH)

ABOVE FUNDAMENTAL
C-BAND

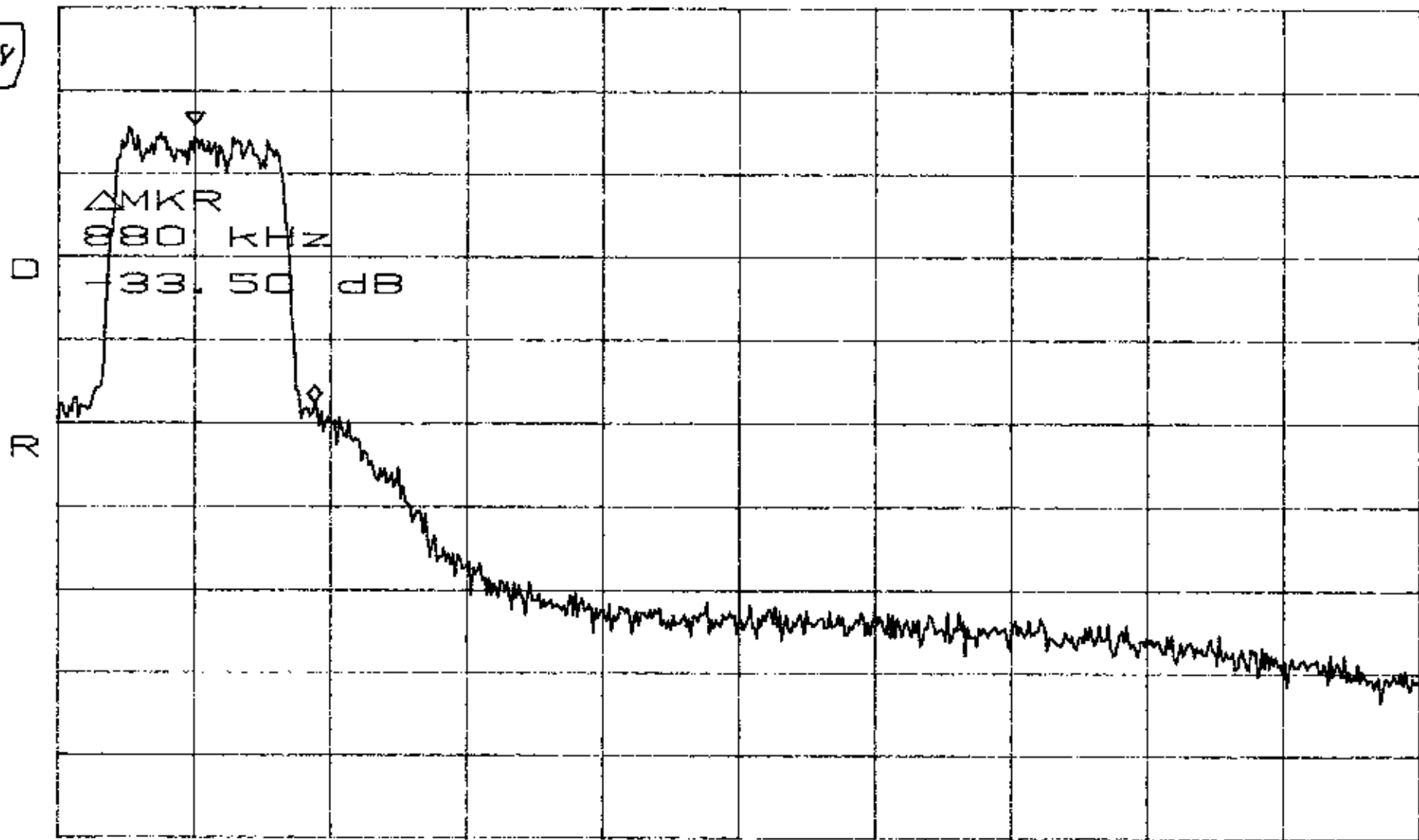
7/31/98

*ATTEN 10dB
RL 30.0dBm

VAVG 10
10dB/

Δ MKR -33.50dB
880kHz

24.23V



CENTER 1.91275GHz

SPAN 10.00MHz

*RBW 30kHz

*VBW 30kHz

*SWP 50.0ms

CDR 1CH. X 7.1W
S/N: FCC UNIT

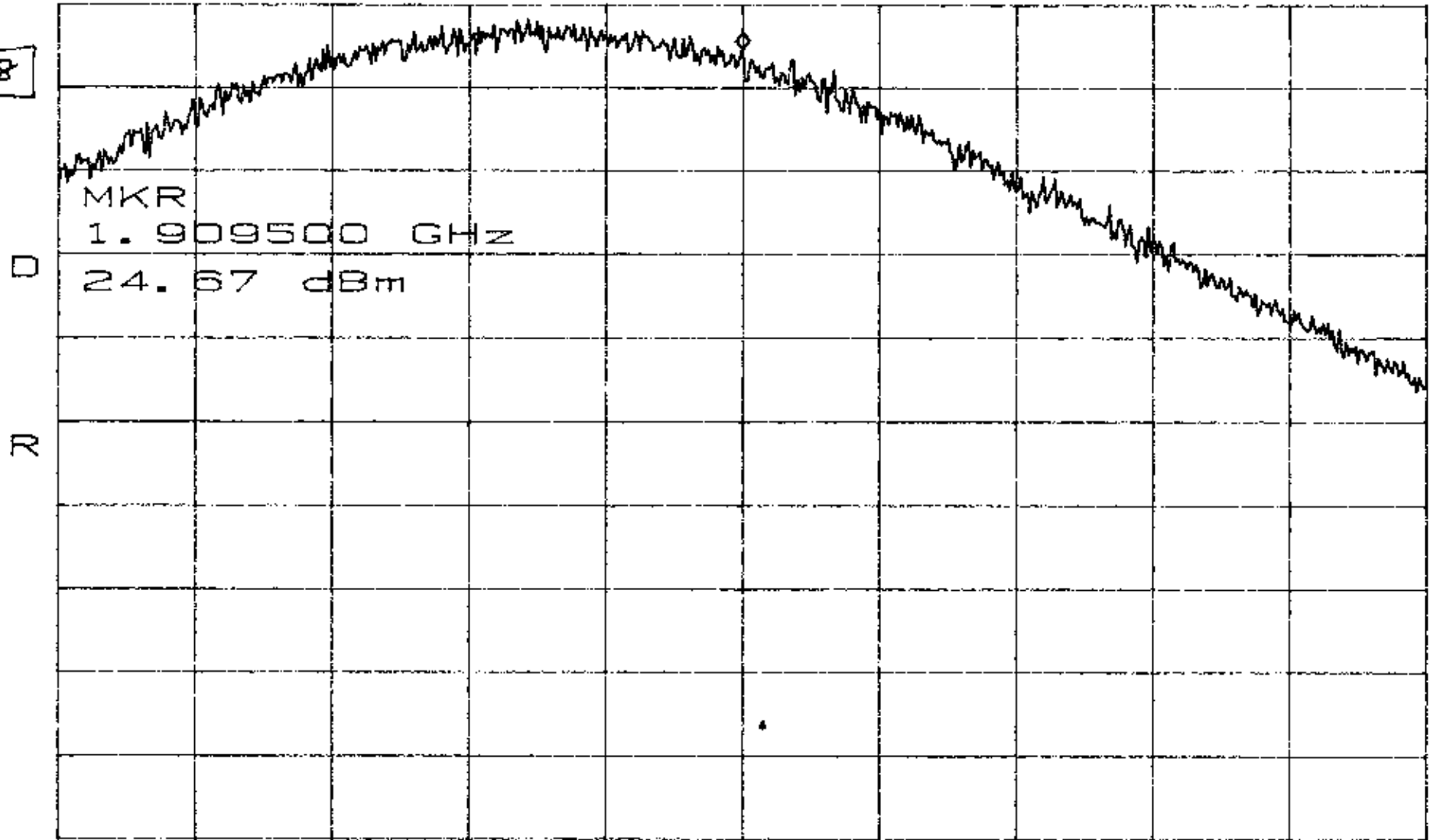
UL
CH. 1175 (H1A#)

ABOVE FUNDAMENTAL
C-BAND

7/31/98

*ATTEN 10dB VAVG 10 MKR 24.67dBm
RL 30.0dBm 10dB/ 1.909500GHz

24.238



CENTER 1.909500GHz SPAN 5.000MHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 50.0ms

CDR10A, X7.1W
S/N: FCC UNIT

UL
CH. 1175 (HIGH)

ABOUT FUNDAMENTAL
C-BAND

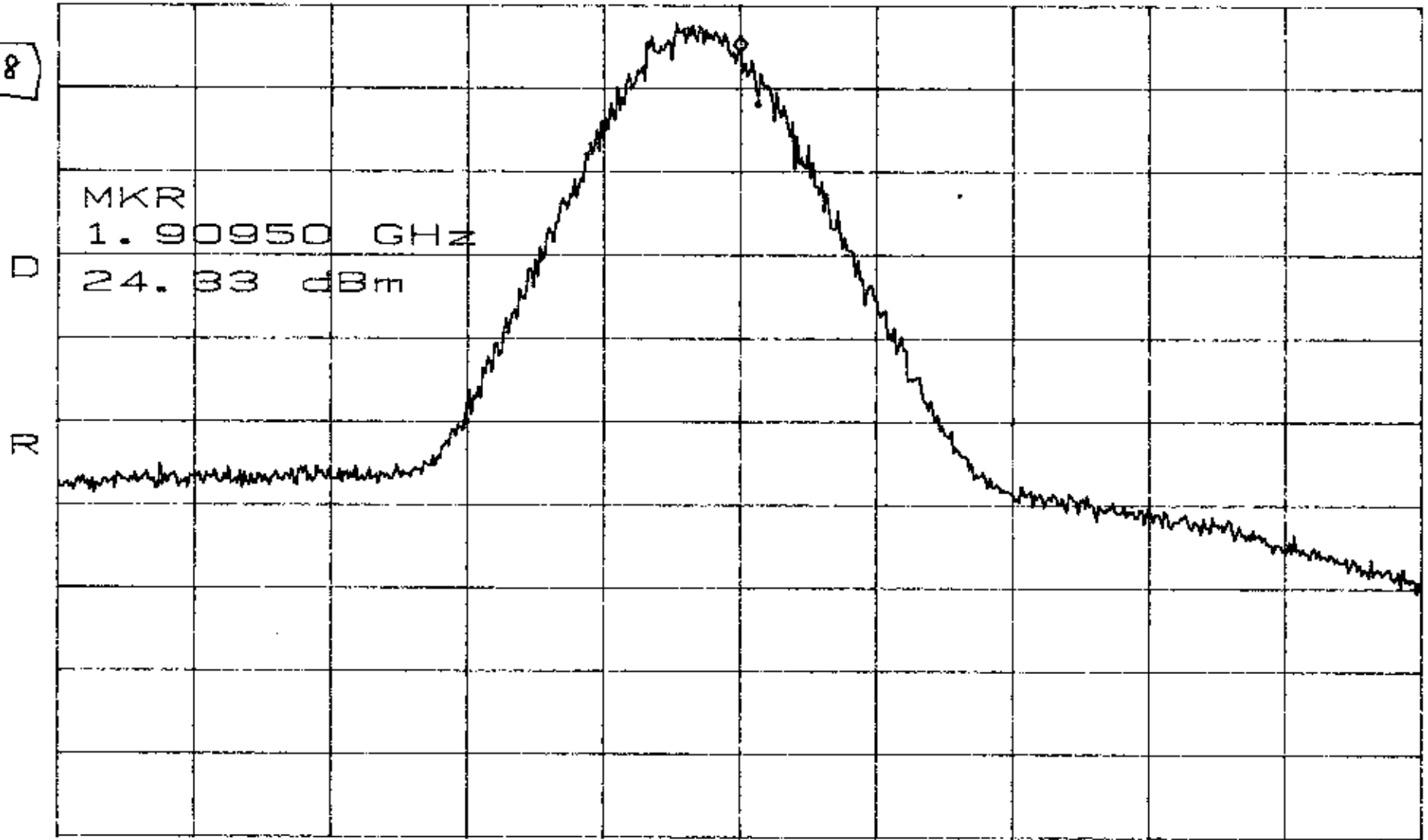
7/31/98

*ATTN 10dB
RL 30.0dBm

VAVG 10
10dB/

MKR 24.33dBm
1.90950GHz

24.238



CENTER 1.90950GHz

SPAN 20.00MHz

*RBW 1.0MHz

*VBW 1.0MHz

*SWP 50.0ms

CDR 1CH. X 7.1W
S/N: FCC UNIT

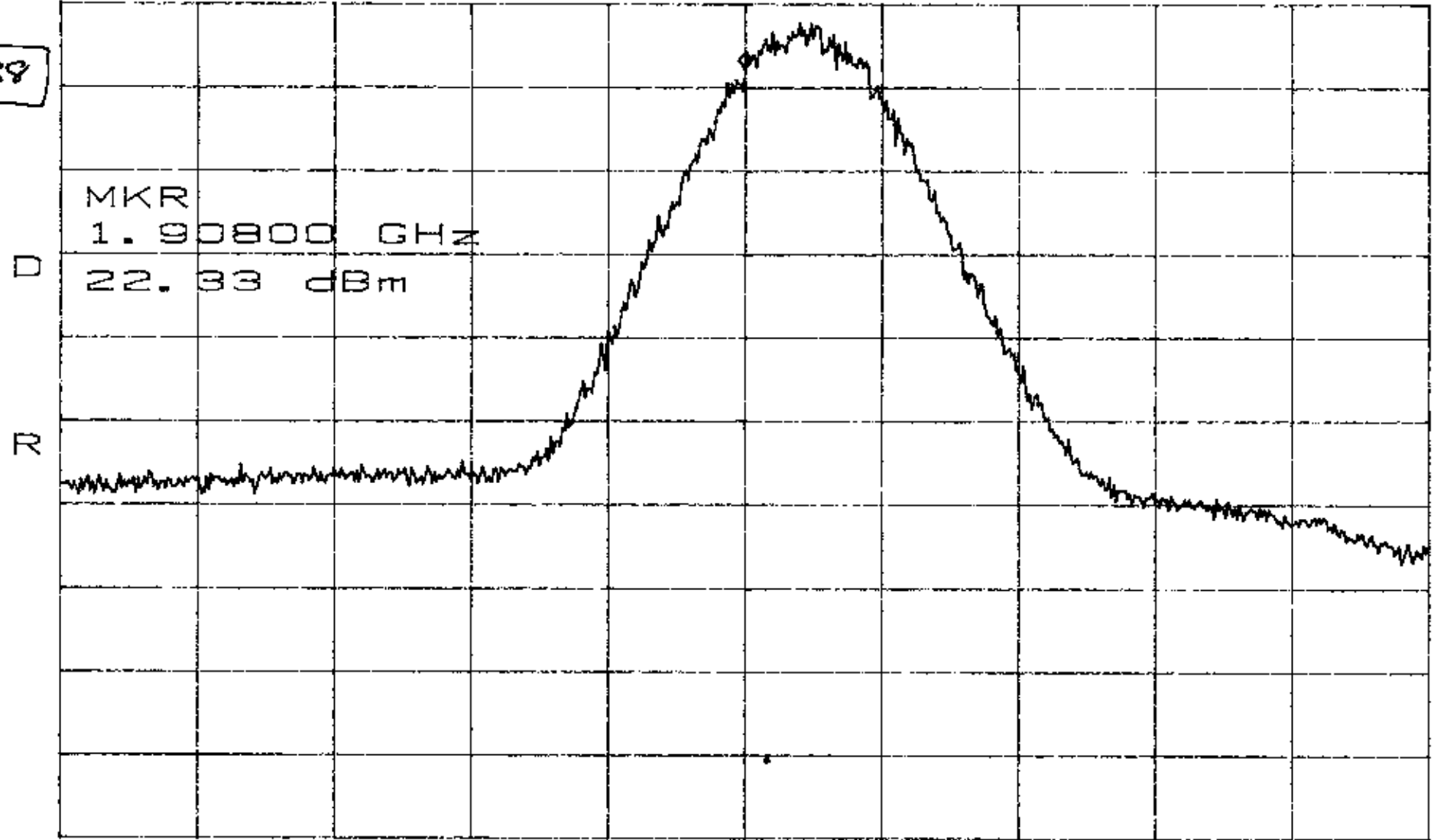
UL
CH. 1175 (HIGH)

Below FUNDAMENTAL
C-BAND

7/31/98

*ATTEN 10dB VAVG 10 MKR 22.33dBm
RL 30.0dBm 10dB/ /BP01 1.90800GHz

24.238



CENTER 1.90800GHz SPAN 20.00MHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 50.0ms

CDR ICIT. X 7.1W
S/N: FCC UNIT

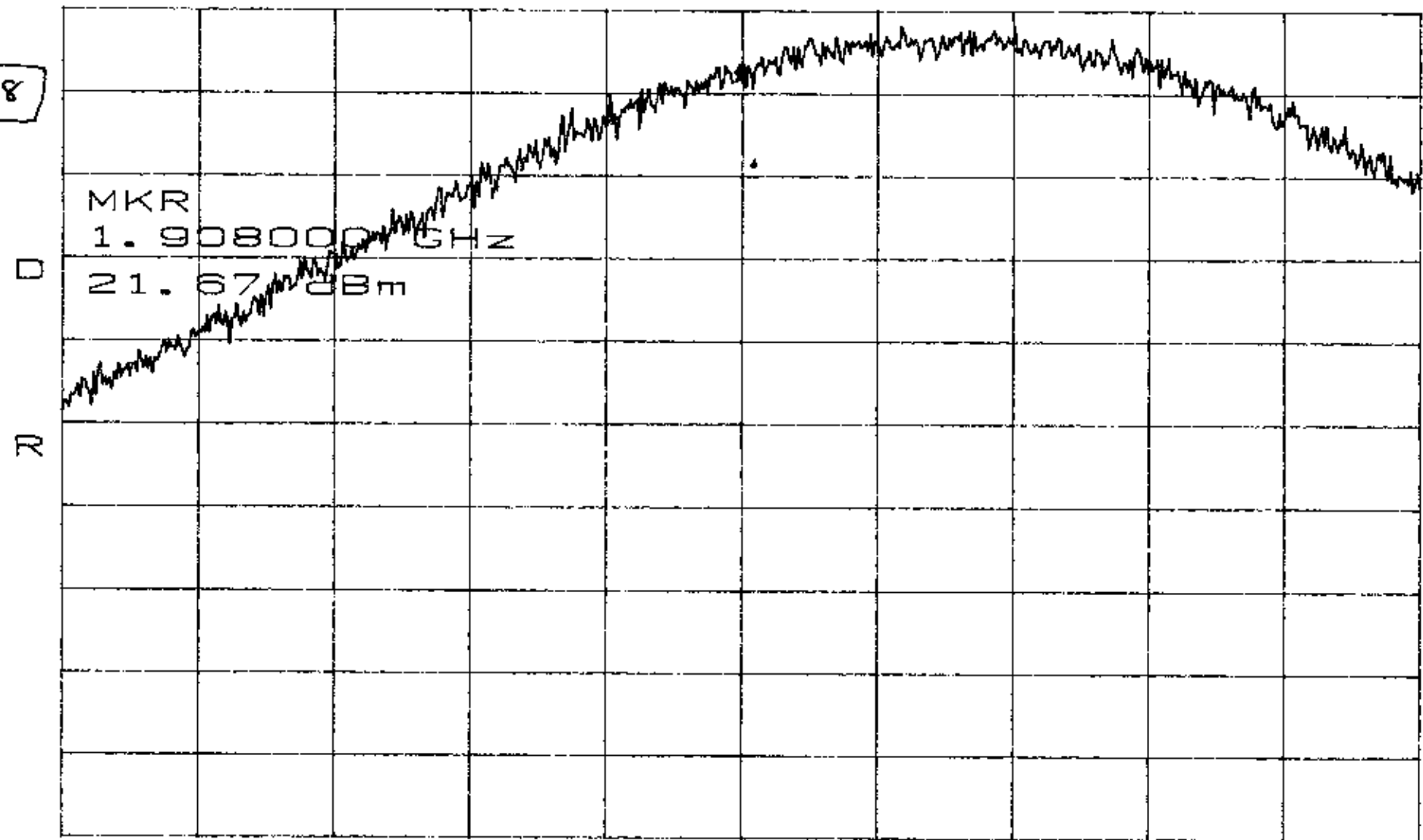
UL
CH. 1775 (HIGH)

BELOW FUNDAMENTAL
C-BAND

7/31/98

*ATTEN 10dB VAVG 10 MKR 21.67dBm
RL 30.0dBm 10dB/ BPO1 1.908000GHZ

24.238



CENTER 1.908000GHZ SPAN 5.000MHZ
*RBW 1.0MHZ *VBW 1.0MHZ *SWP 50.0ms

CDR 1CH.X7.1W
S/N: FCC UNIF

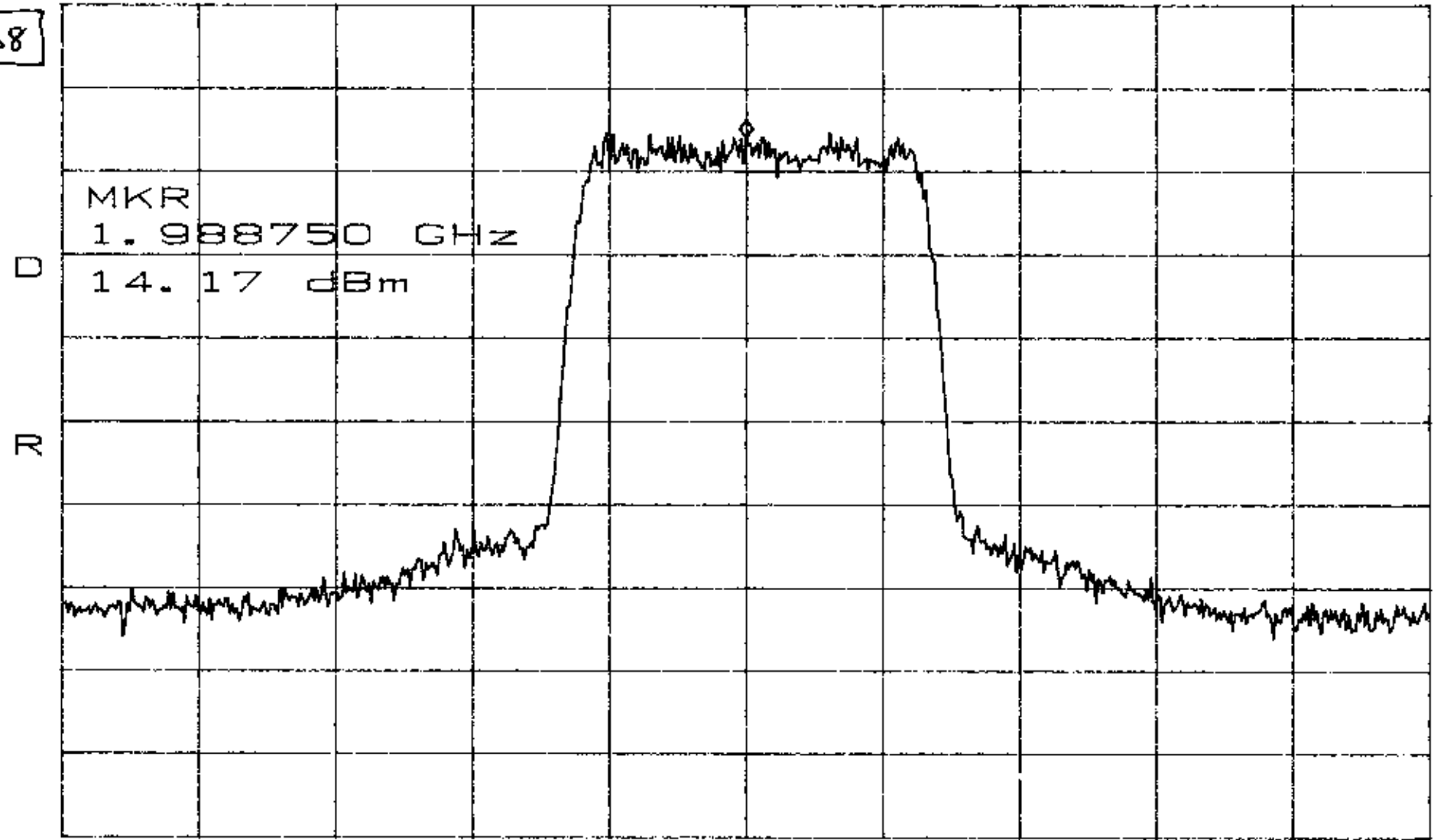
DL
CH.175 (M1A#)

FUNDAMENTAL
C-BAND

7/31/98

*ATTEN 10dB VAVG 10 MKR 14.17dBm
RL 30.0dBm 10dB/ 1.988750GHz

24.238



CENTER 1.988750GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

CDR 1CH x 7.1 W
S/N: FCC UNIT

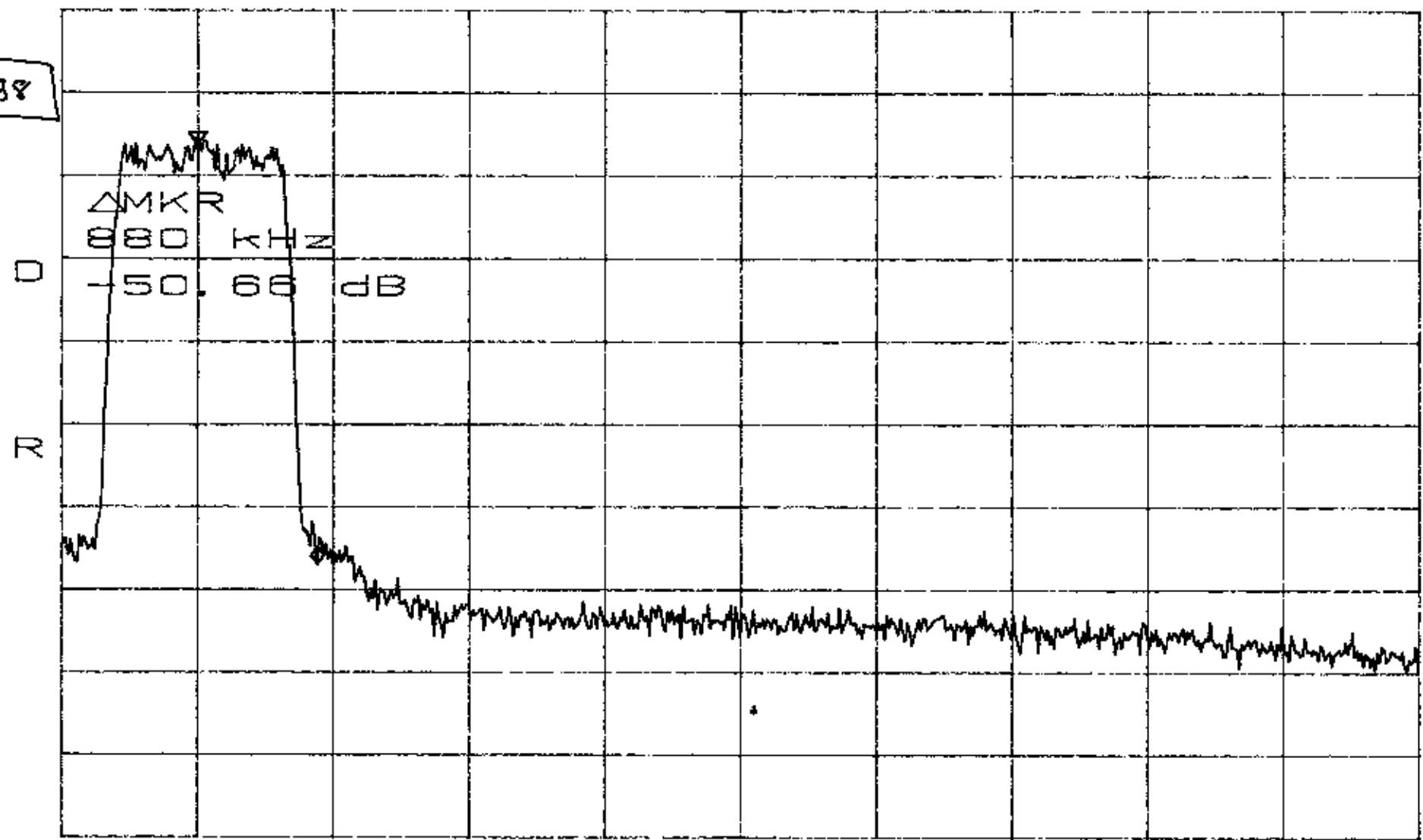
DL
CH 1175 (MHz)

ABOVE FUNDAMENTAL
C-BAND

7/31/98

*ATTEN 10dB VAVG 10 ΔMKR -50.66dB
RL 30.0dBm 10dB/ 880kHz

24.238



CENTER 1.99275GHz SPAN 10.00MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

CDR 1CH X 7.1W
S/N: FCC UNIT

DL
CH. 1175 (HIGH)

ABOVE FUNDAMENTAL
L-BAND

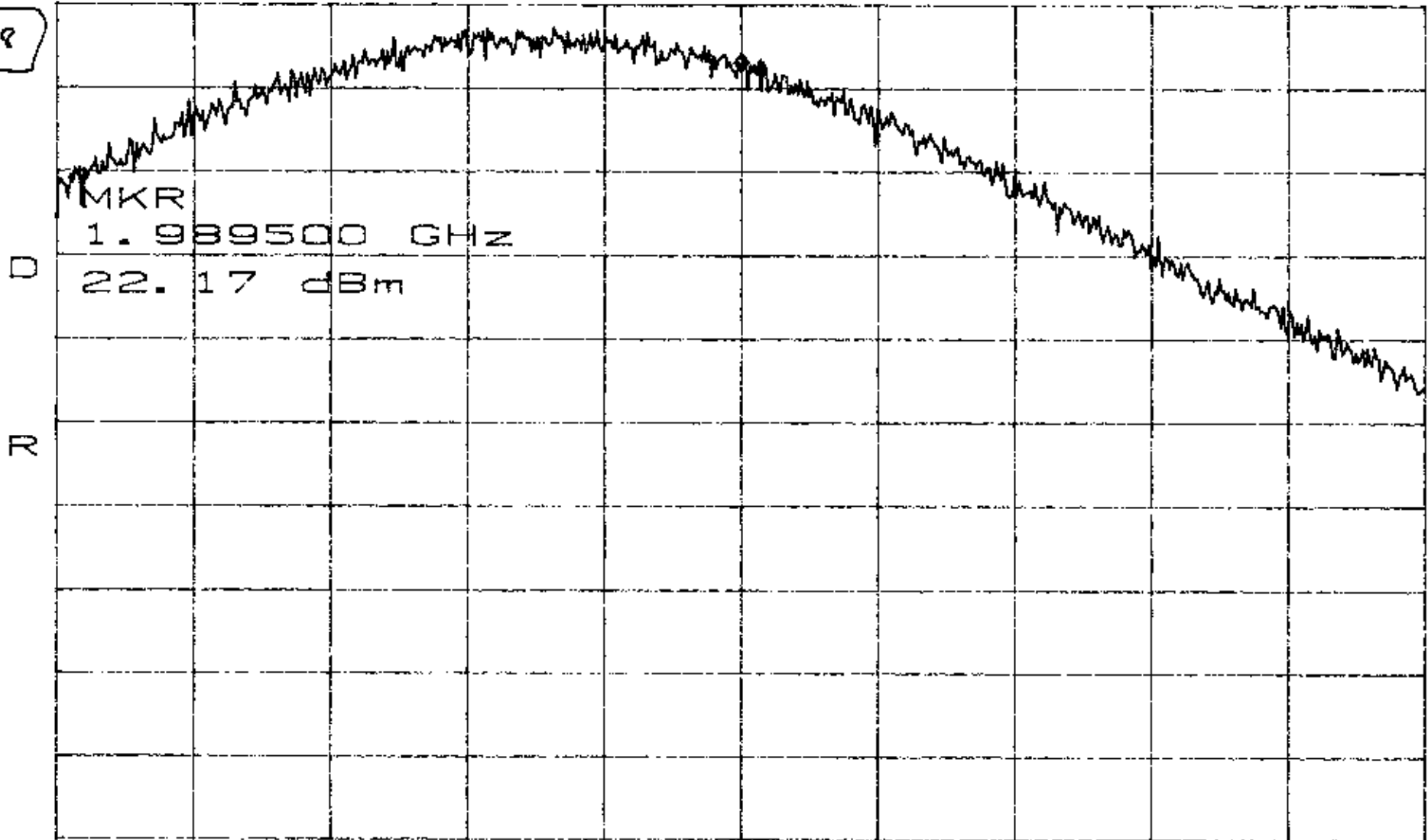
7/31/98

*ATTEN 10dB
RL 30.0dBm

VAVG 10
10dB/

MKR 22.17dBm
1.989500GHz

24.238



CENTER 1.989500GHz

SPAN 5.000MHz

*RBW 1.0MHz

*VBW 1.0MHz

*SWP 50.0ms

CDR 1CA. X 7.1W
S/N: FCC UNIT

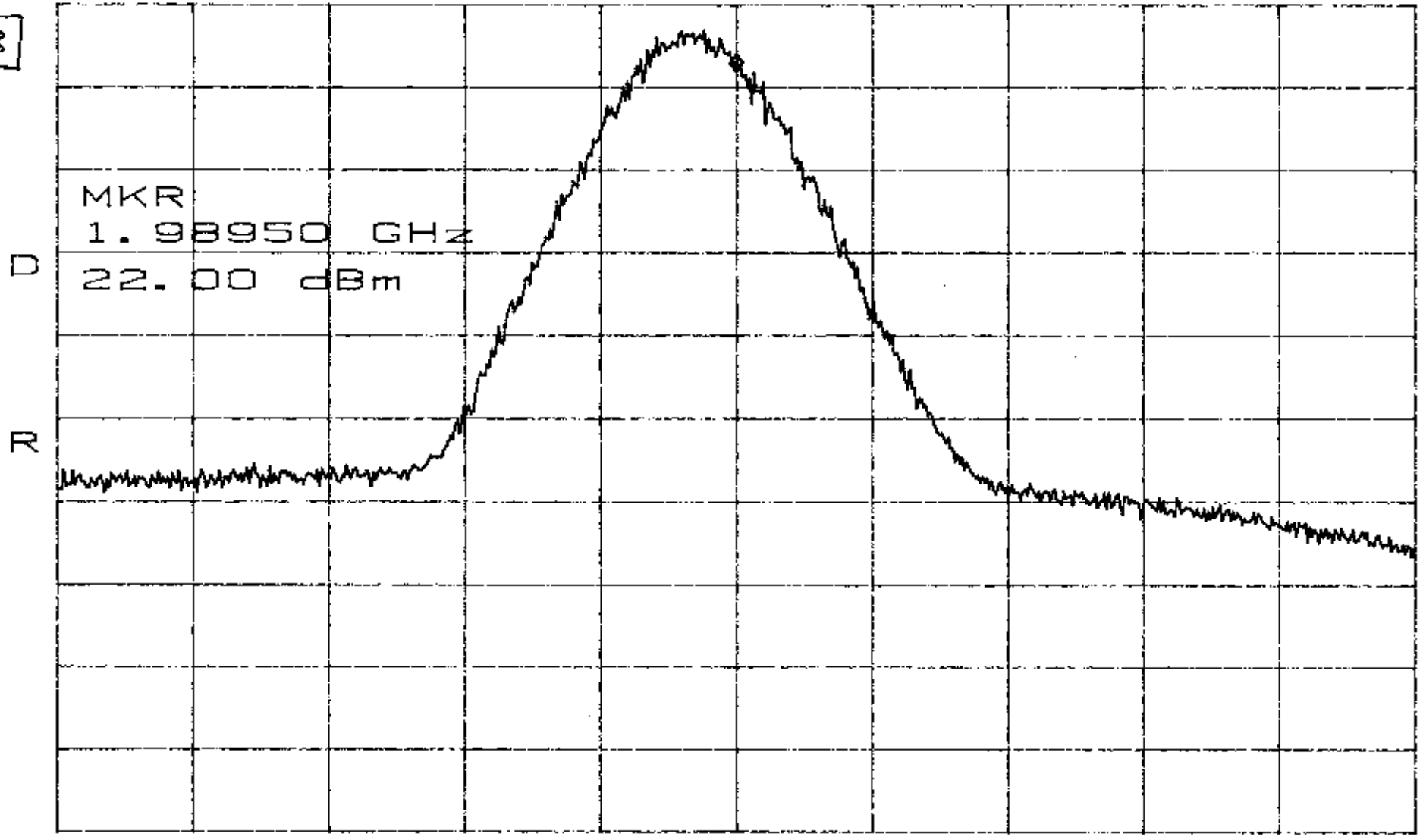
DL
CA. 1175 (HIGH)

ABOVE FUNDAMENTAL
C-BAND

7/31/98

*ATTEN 10dB VAVG 10 MKR 22.00dBm
RL 30.0dBm 1dB/BP01 1.9895686 GHz

24.238



CENTER 1.98950GHz SPAN 20.00MHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 50.0ms

CDR 10A.Y 7.1W
S/N: FCC UNIT

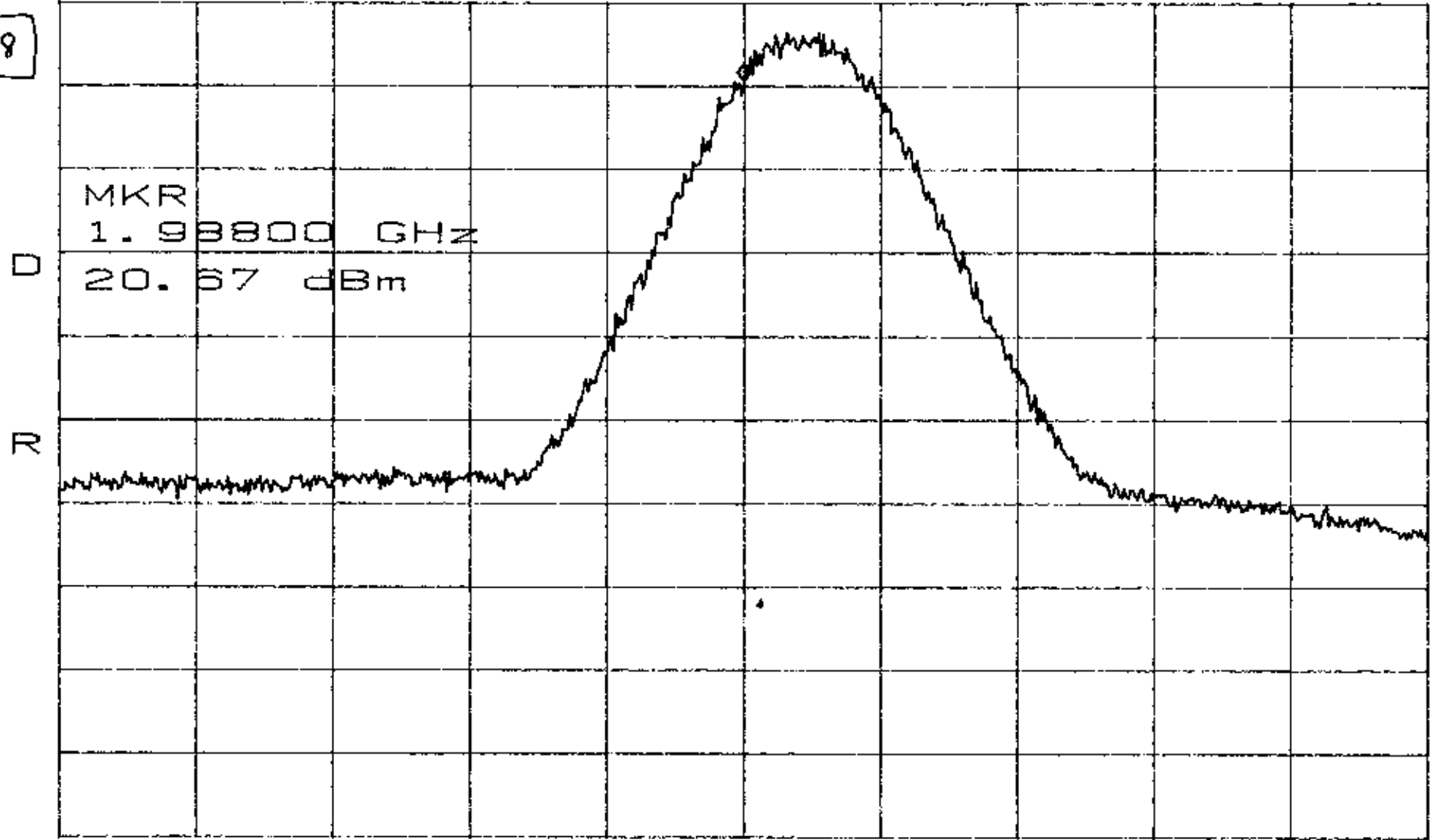
DL
CH. 1175 (14CH)

Below FUNDAMENTAL
C-BAND

7/31/98

*ATTEN 10dB VAVG 10 MKR 20.67dBm
RL 30.0dBm 10dB/ 1.98800GHz

24.238



CENTER 1.98800GHz SPAN 20.00MHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 50.0ms

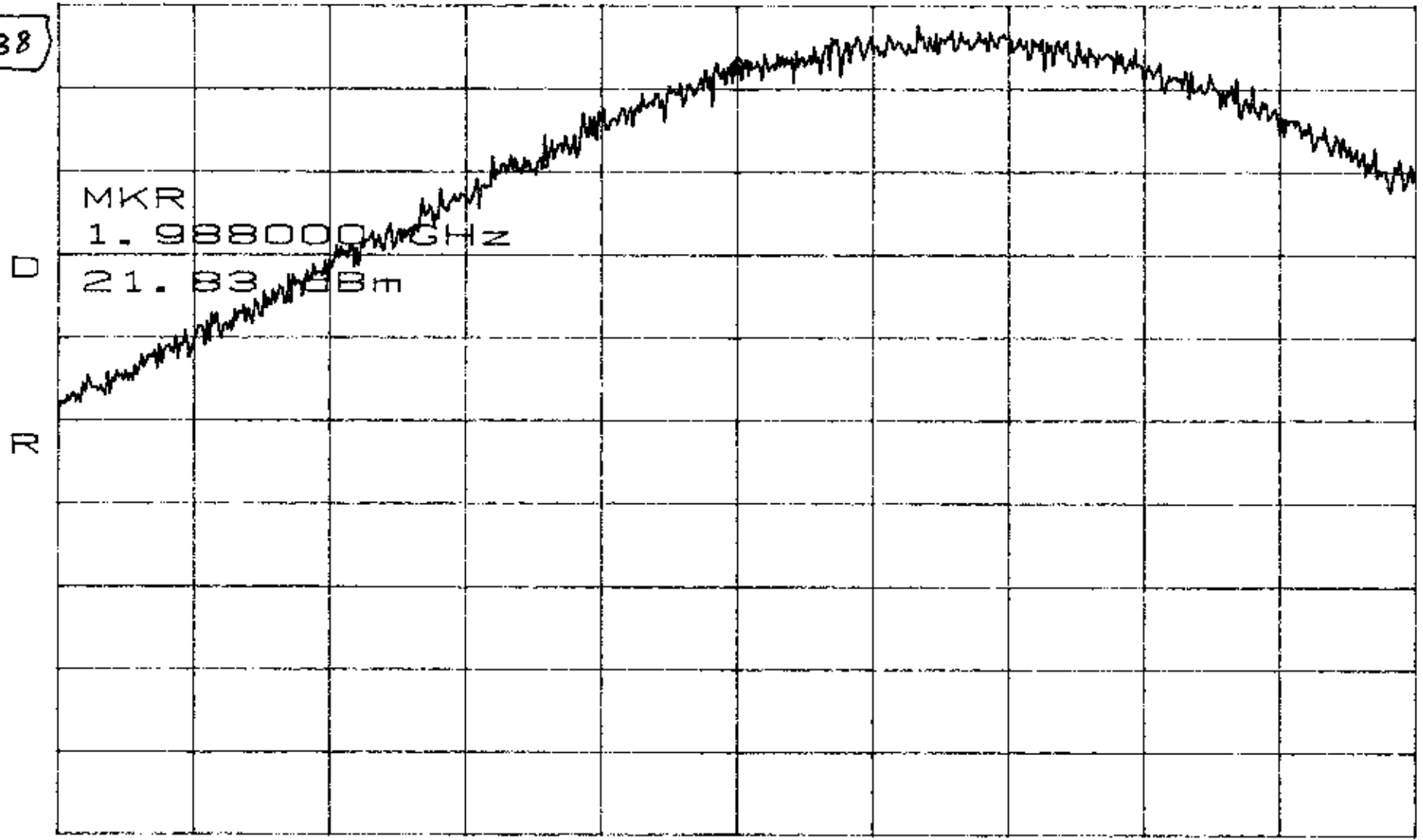
CDR 1CH. X 7.1W
S/N: FCC UNIT

DL
CH: 1175 (HIGH)

Below FUNDAMENTAL 7/31/98
C-BAND

*ATTEN 10dB VAVG 10 MKR 21.83dBm
RL 30.0dBm 10dB/BP0 1.988000GHz

24.238



CENTER 1.988000GHz SPAN 5.000MHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 50.0ms

CDR ICIF.X 7.1W
S/N: FCC UNIT

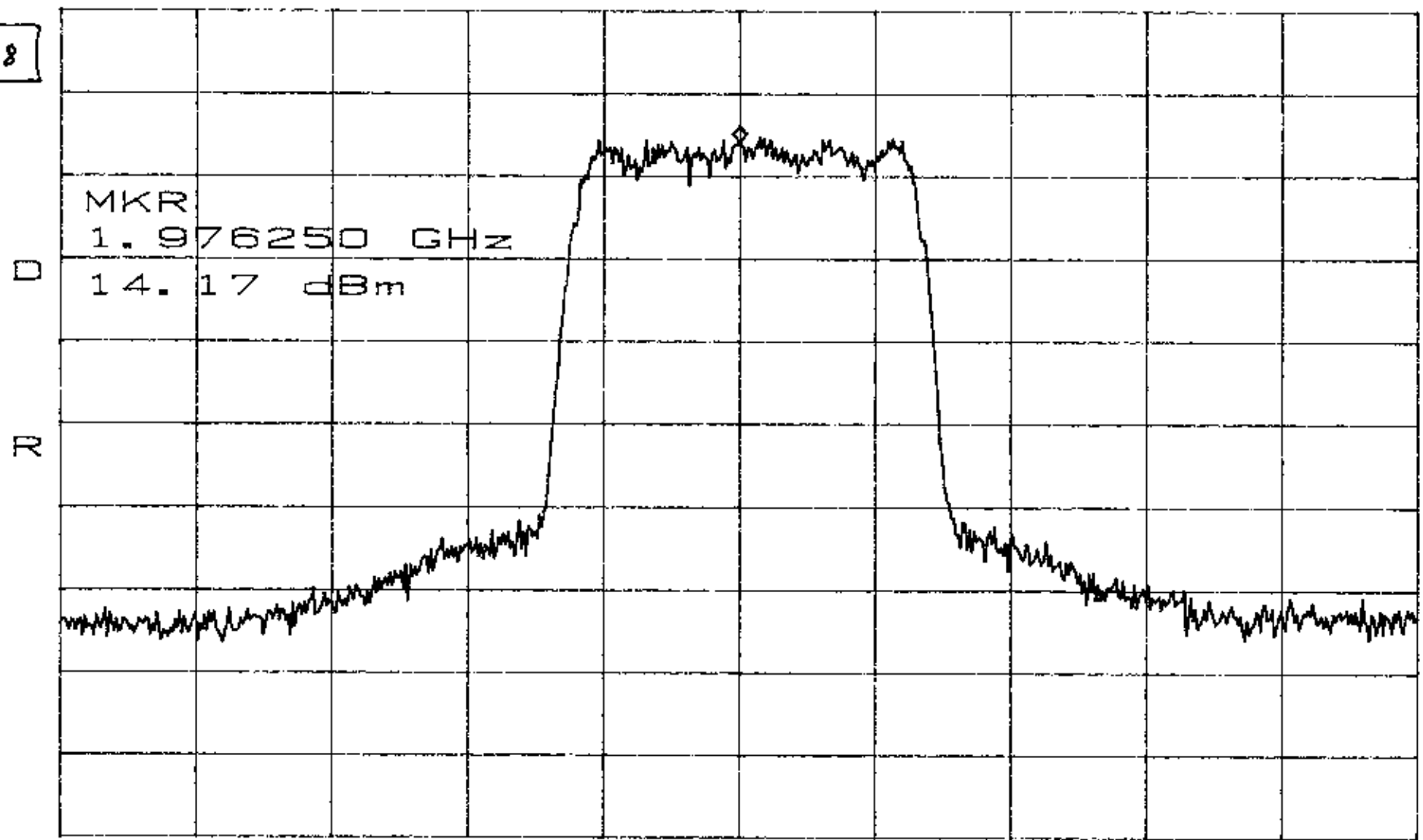
DL
CH. 925 (Low)

FUNDAMENTAL
C-BAND

7/31/98

*ATTEN 10dB VAVG 10 MKR 14.17dBm
RL 30.0dBm 10dB/ 1.976250GHz

24.238



CENTER 1.976250GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

CDR ICH X 7.1W
S/N: FCC UNIT

DL
CH. 925(Low)

BELOW FUNDAMENTAL
C-BAND

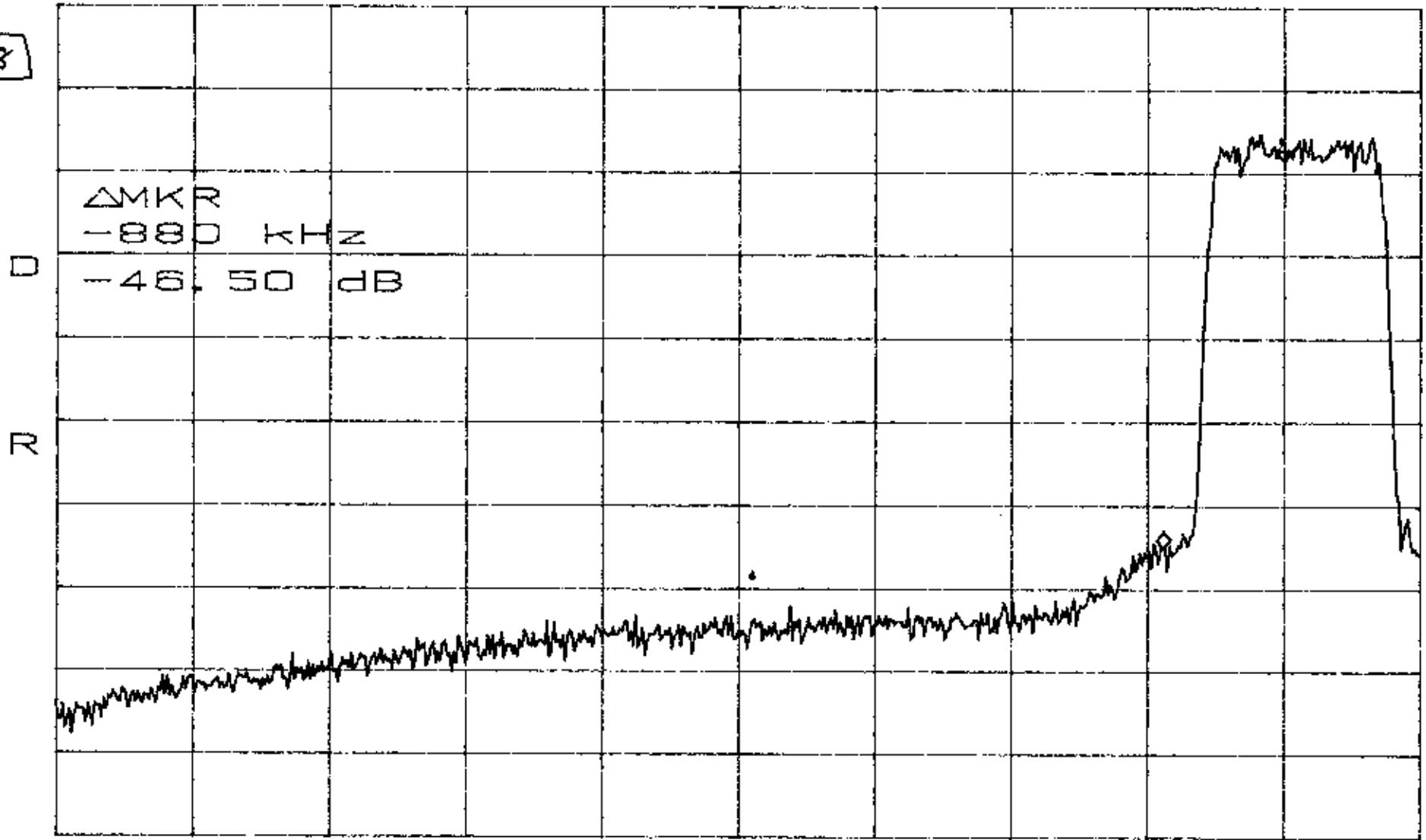
7/31/98

*ATTN 10dB
RL 30.0dBm

VAVG 10
/BPO1

ΔMKR -46.50dB
-880kHz

24.238



CENTER 1.97225GHz SPAN 10.00MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

CD2 ICH.X 7.1W
S/N: FCC UNIT

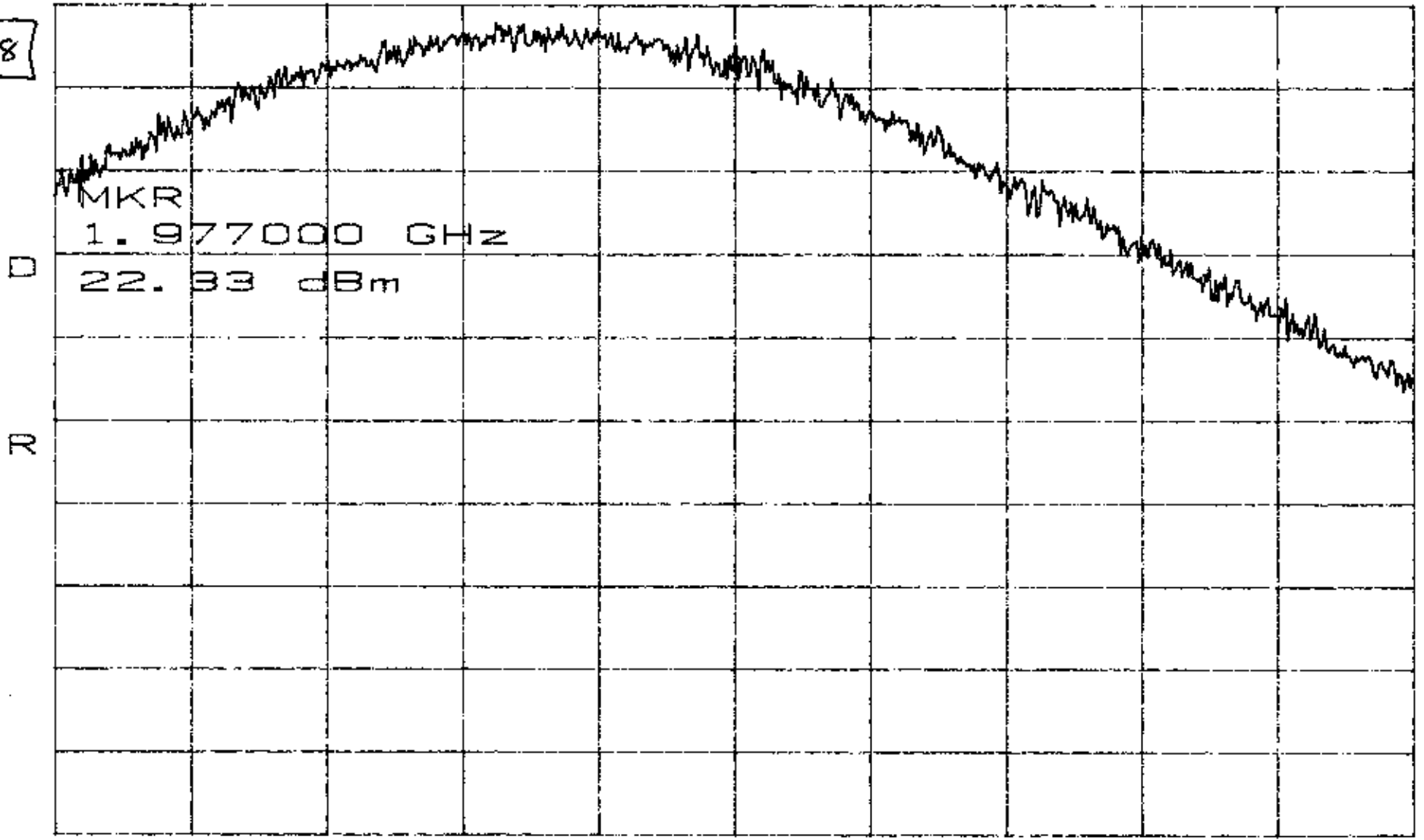
DL
CH. 925 (Low)

ABOUT FUNDAMENTAL
C-BAND

7/31/98

*ATTN 10dB VAVG 10' MKR 22.33dBm
RL 30.0dBm 10dB/ 1.977000GHz

24.238



CENTER 1.977000GHz SPAN 5.000MHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 50.0ms

COR 1CH, X 7.1W
STN: FCC UPT

DL
CH. 925 (LOW)

ABOVE FUNDAMENTAL
C-BAND

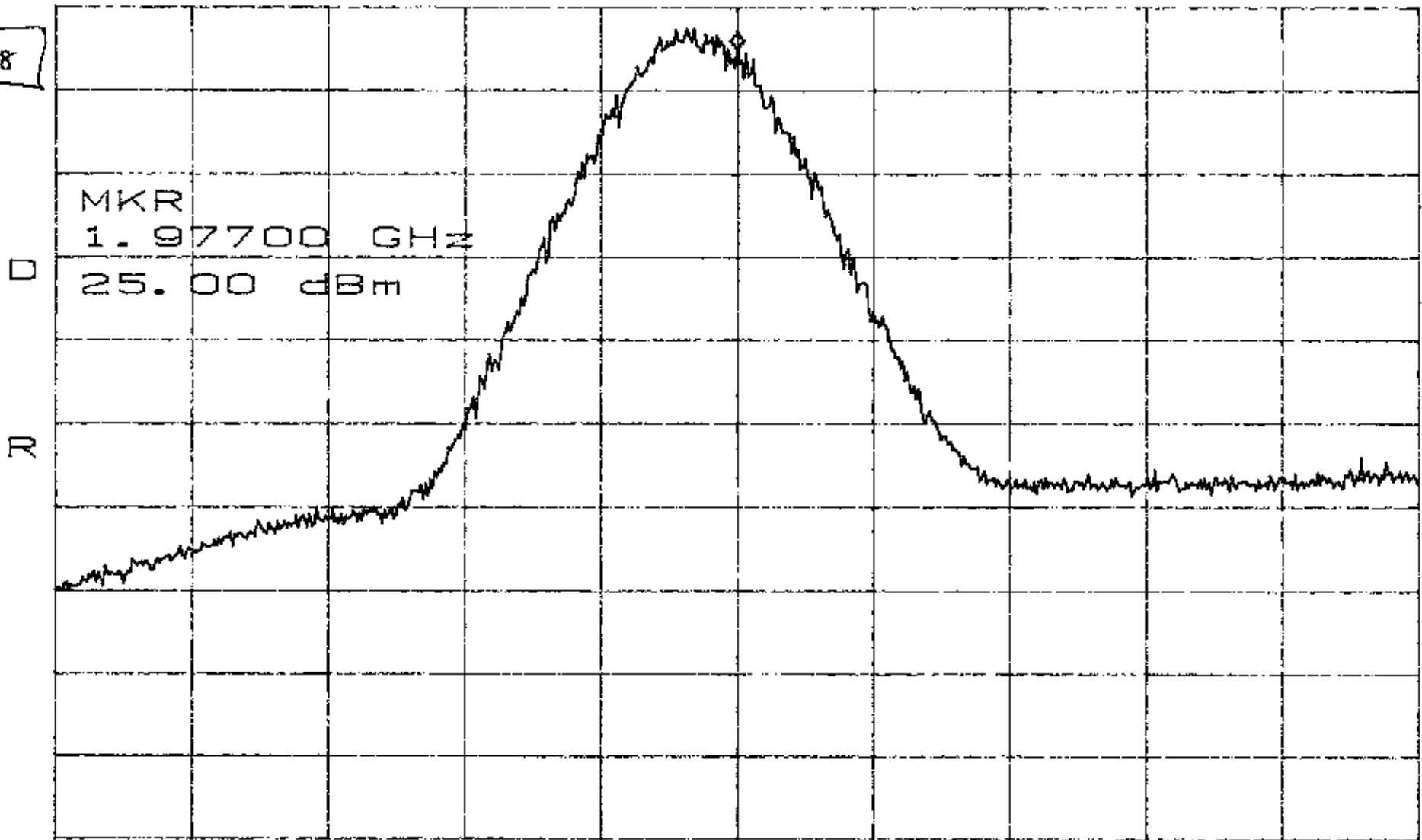
7/31/98

*ATTEN 10dB
RL 30.0dBm

VAVG 10
10dB/

MKR 25.00dBm
1.97700GHz

24.238



CENTER 1.97700GHz

SPAN 20.00MHz

*RBW 1.0MHz

*VBW 1.0MHz

*SWP 50.0ms

CDR 1CH. X 7.1W
S/N: FCC UNIT

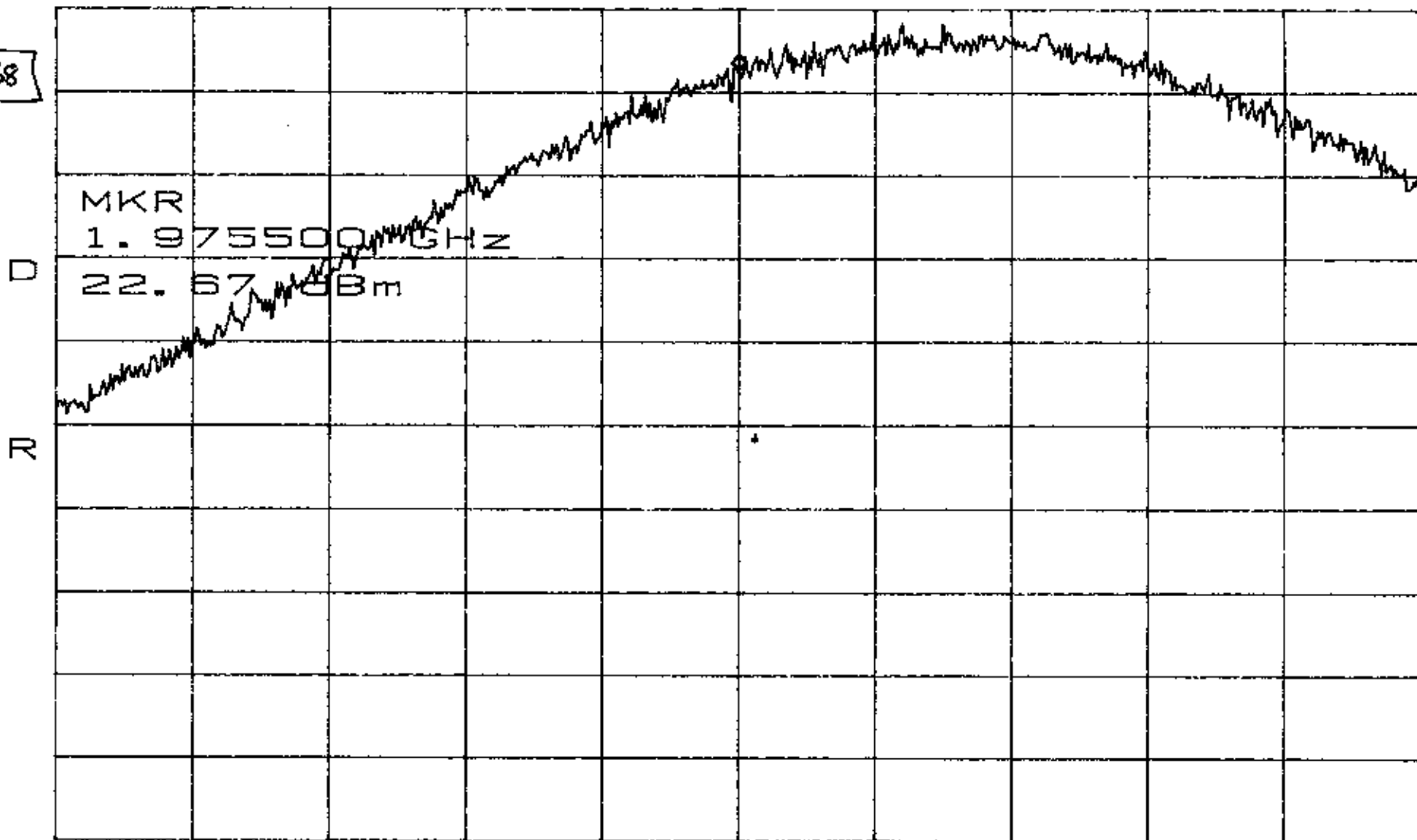
DL
CH. 925 (Low)

BELOW FUNDAMENTAL
C-BAND

7/31/98

*ATTEN 10dB VAVG 10 MKR 22.67dBm
RL 30.0dBm 10dB/ 1.975500GHz

24.238



CENTER 1.975500GHz

SPAN 5.000MHz

*RBW 1.0MHz

*VBW 1.0MHz

*SWP 50.0ms

CON: 1CH. X7.1W
SIN: FCC UNIT

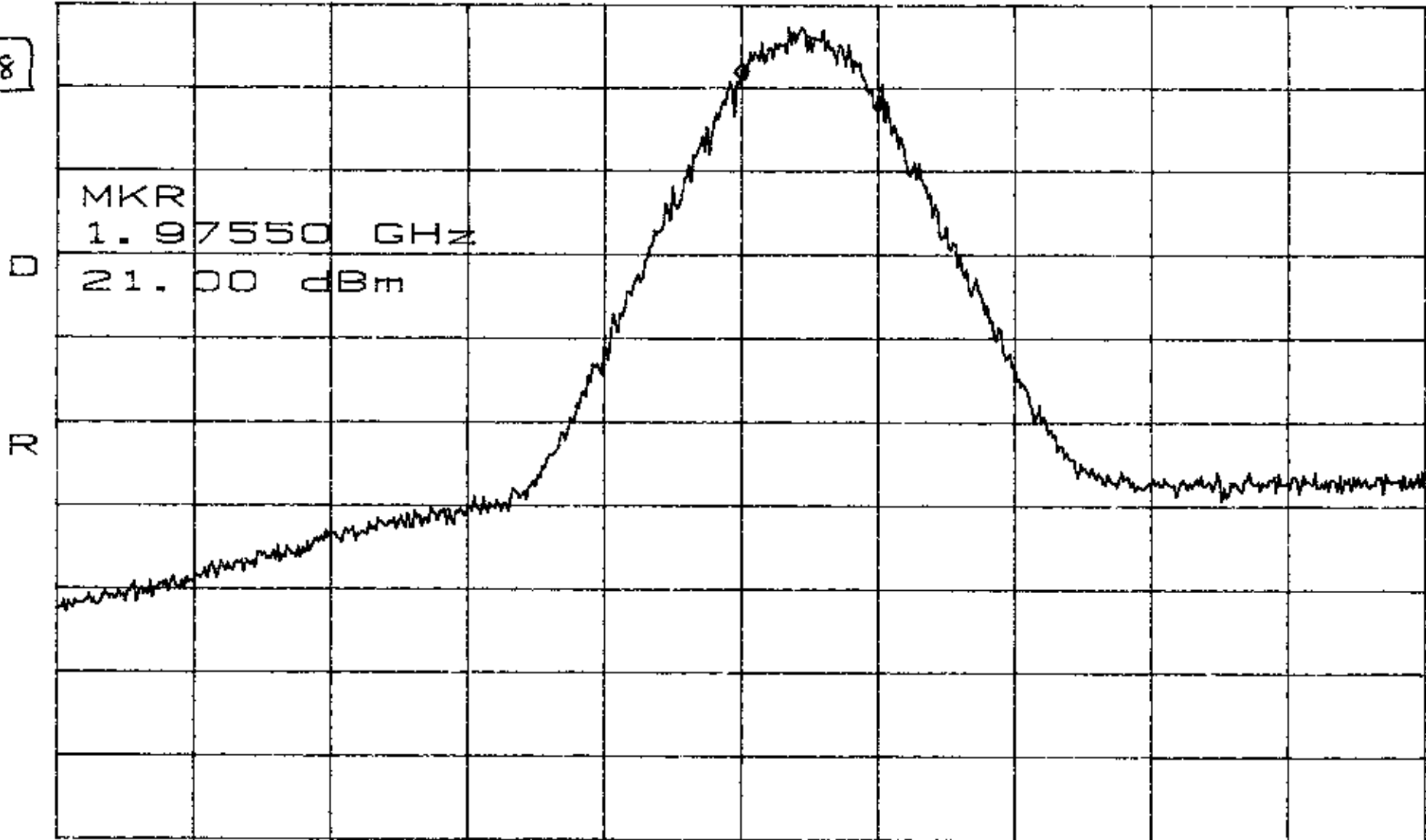
DL
CH 925 (LOW)

BELOW FUNDAMENTAL
C-BAND

7/31/98

*ATTEN 10dB VAVG 10 MKR 21.00dBm
RL 30.0dBm 10dB/ 1.97550GHz

24.238



CENTER 1.97550GHz SPAN 20.00MHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 50.0ms