

A.8 CONDUCTED EMISSION DATA

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

S/N: FCC Unit

Test Date: 8/3/98

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)
725	1886.25	29.77
800	1890.00	29.82
875	1893.75	29.81

DOWNLINK:

Channel	Frequency (MHz)	Output Power (dBm)
725	1966.25	38.35
800	1970.00	38.35
875	1973.75	38.60

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

CDC 104.X7.1W
S/N: FCC UNIT

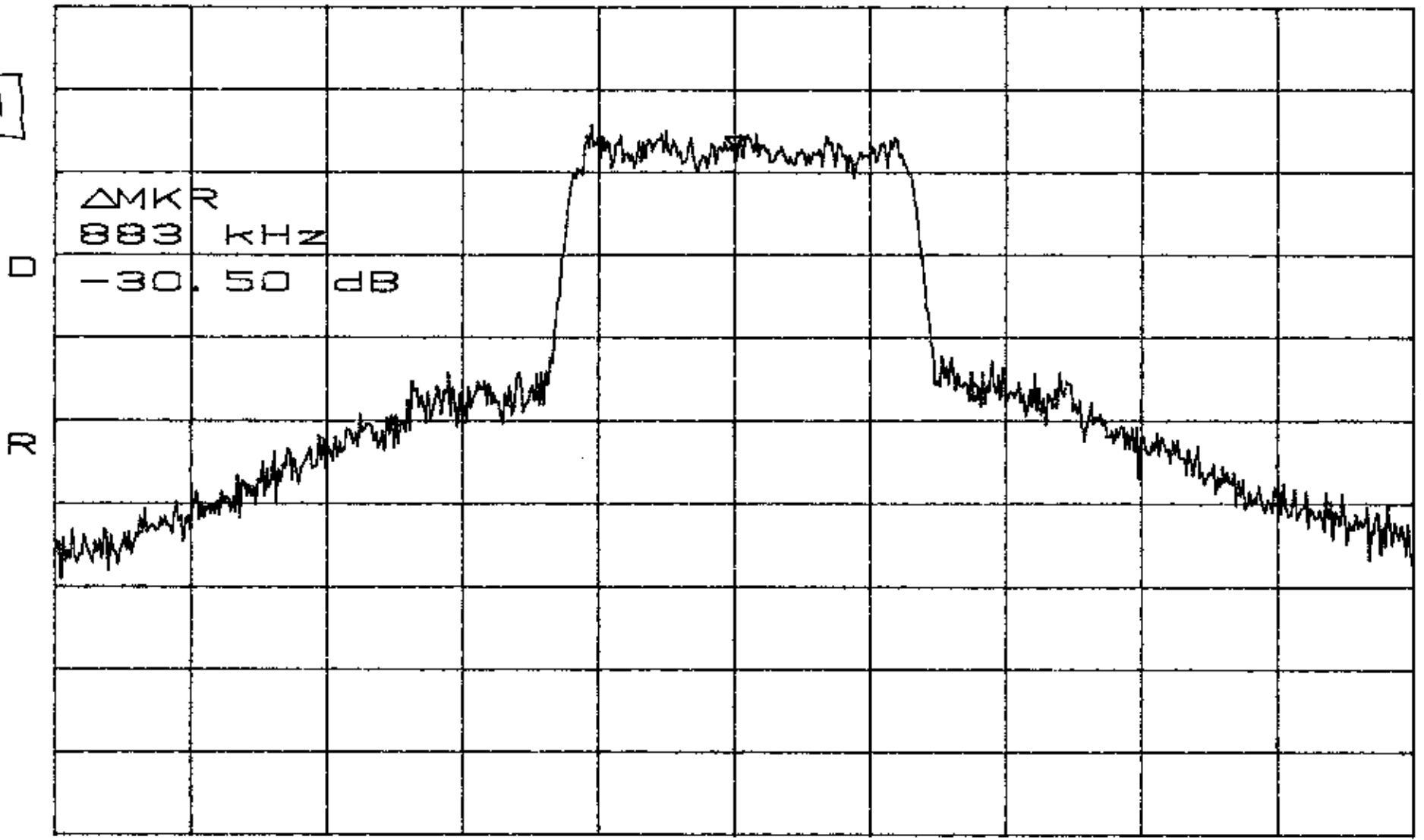
DL
CH. 725 (LOW)

E(F-BAND)

8/3/98

*ATTEN 10dB VAVG 10 ΔMKR -30.50dB
BPO1 /BPO1 888KHZ
RL 30.00dB

2.989



CENTER 1.966250GHZ SPAN 5.000MHZ
*RBW 30KHZ *VBW 30KHZ *SWP 50.0ms

CDR 10th X 7.1W
S/N: FCC UNIT

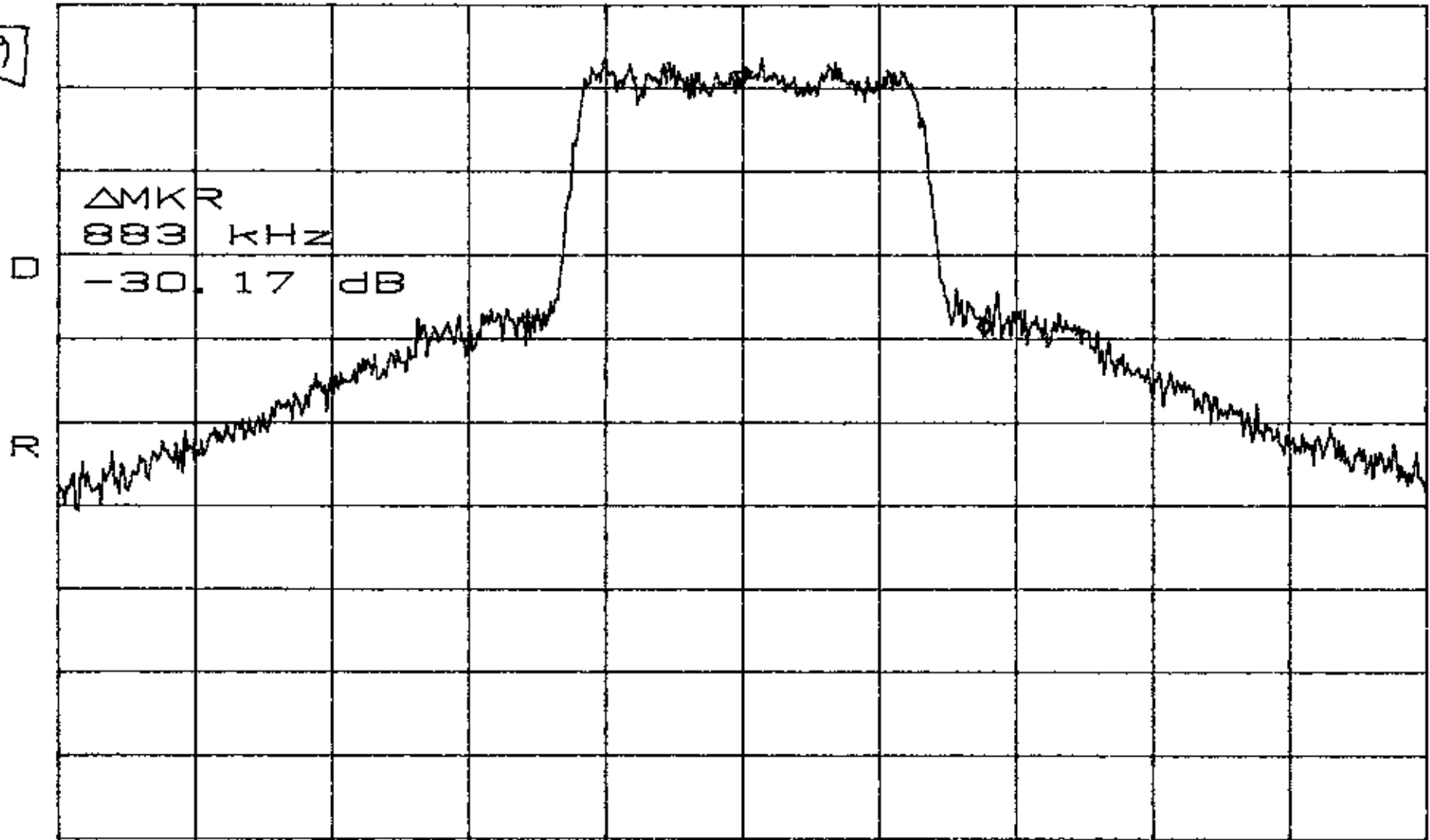
DL
CH. 875 (HIGH)

E(F-BAND)

8/3/98

*ATTEN 10dB VAVG 10 ΔMKR -30.17dB
RL 30.0dBm 10dB/ 883kHz

2.989



CENTER 1.973750GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

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

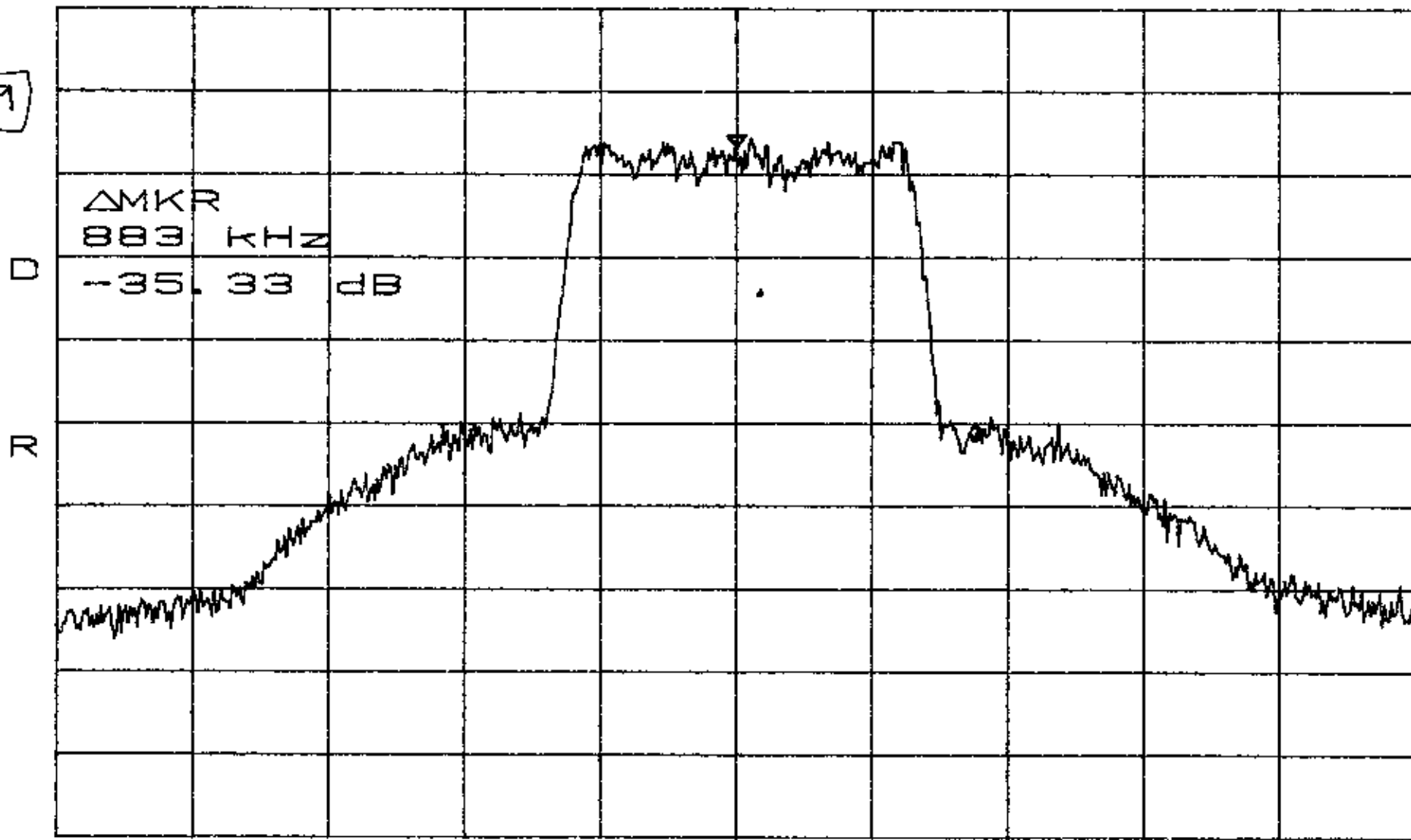
UL
CH. 725 (LOW)

E/F-BAND

8/3/98

*ATTEN 10dB VAVG 10 ΔMKR -35.33dB
RL 30.00dBm 10dB/ 883kHz

2.989



CENTER 1.886250GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

CDC ICA.X7.1W
SN: FCC UNIT

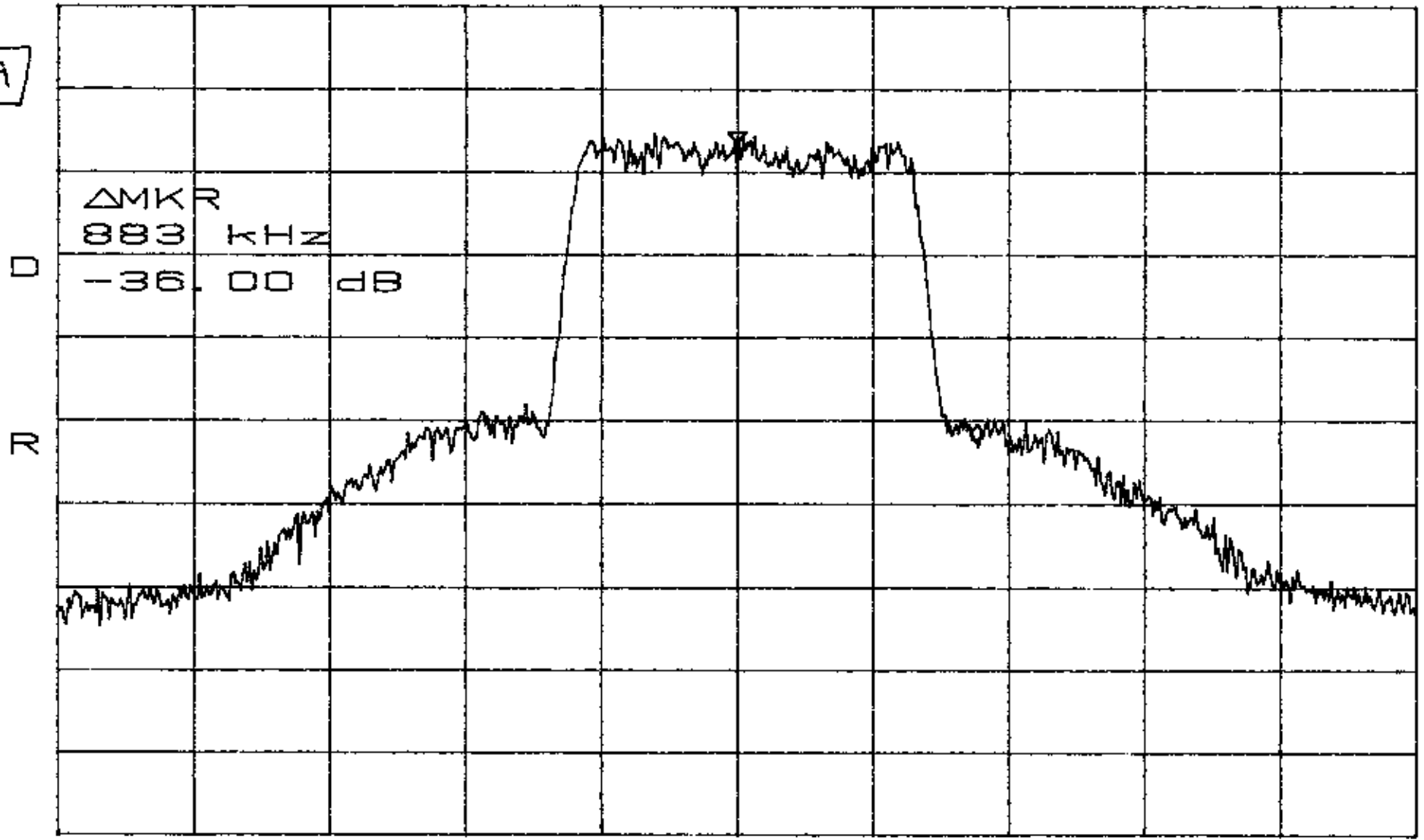
UL
CH. 875 (HIGH)

E(F-BAND)

8/3/98

*ATTEN 10dB VAVG 10 ΔMKR -36.00dB
RL 30.0dBm 10dB/ 883KHZ

2.989



CENTER 1.893750GHz SPAN 5.000MHz
*RBW 30KHZ *VBW 30KHZ *SWP 50.0ms

CDR 1CH. X 7.1W
SIN: FCC UNIT

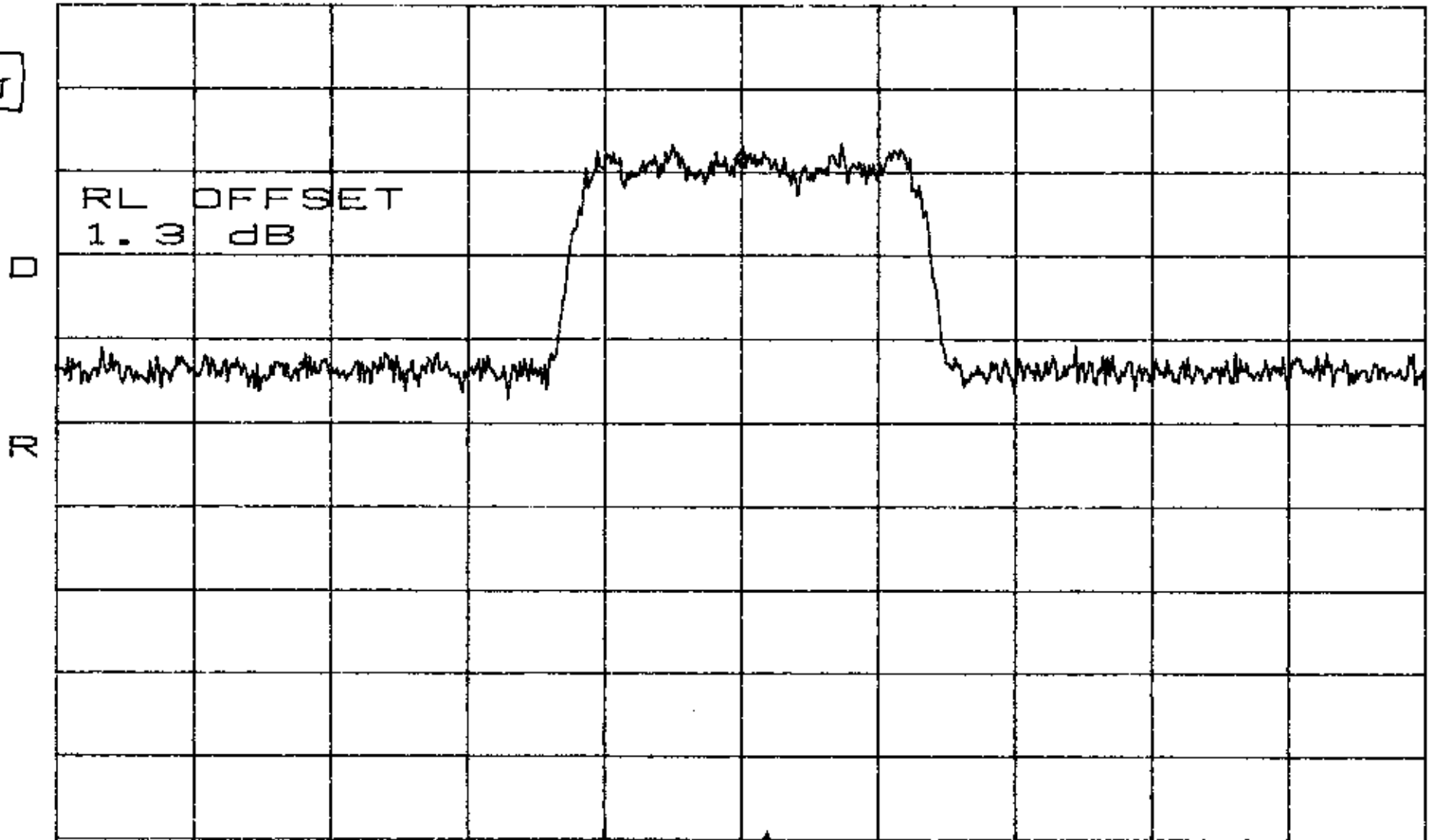
DL
CH. 725 (LOW)

E/F-BAND
(INPUT)

8/3/98

*ATTEN 10dB VAVG 10 MKR -69.33dBm
RL -50.0dBm 10dB/ 1.966250GHz

IN/OUT



CENTER 1.966250GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

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

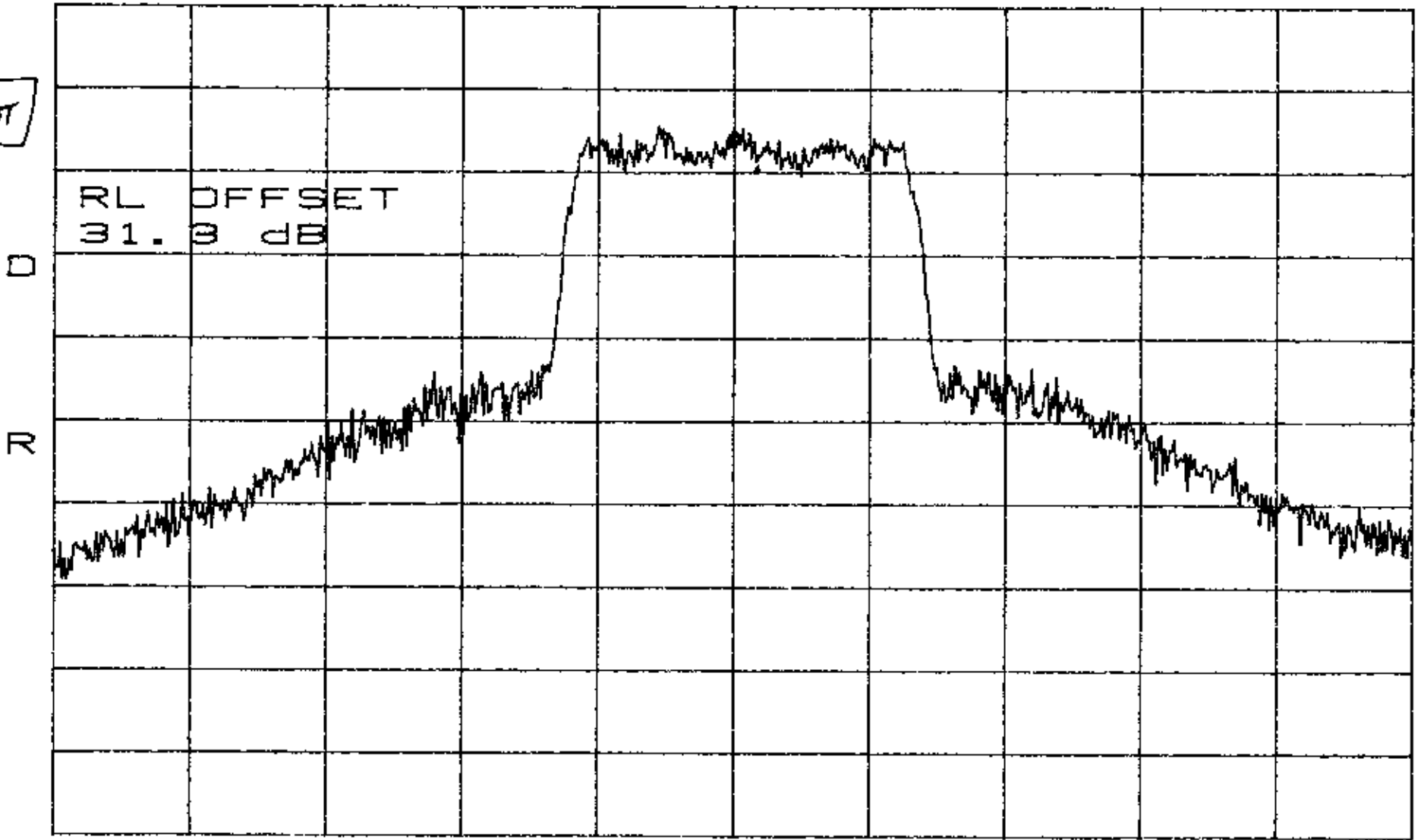
DL
CH. (75) LOW

E/F-BAND
~~6000000~~
(OUTPUT)

8/3/98

*ATTEN 10dB VAVG 10 MKR 13.00dBm
RL 30.00dBm 10dB/ 1.966250GHz

IN/OUT



CENTER 1.966250GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

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

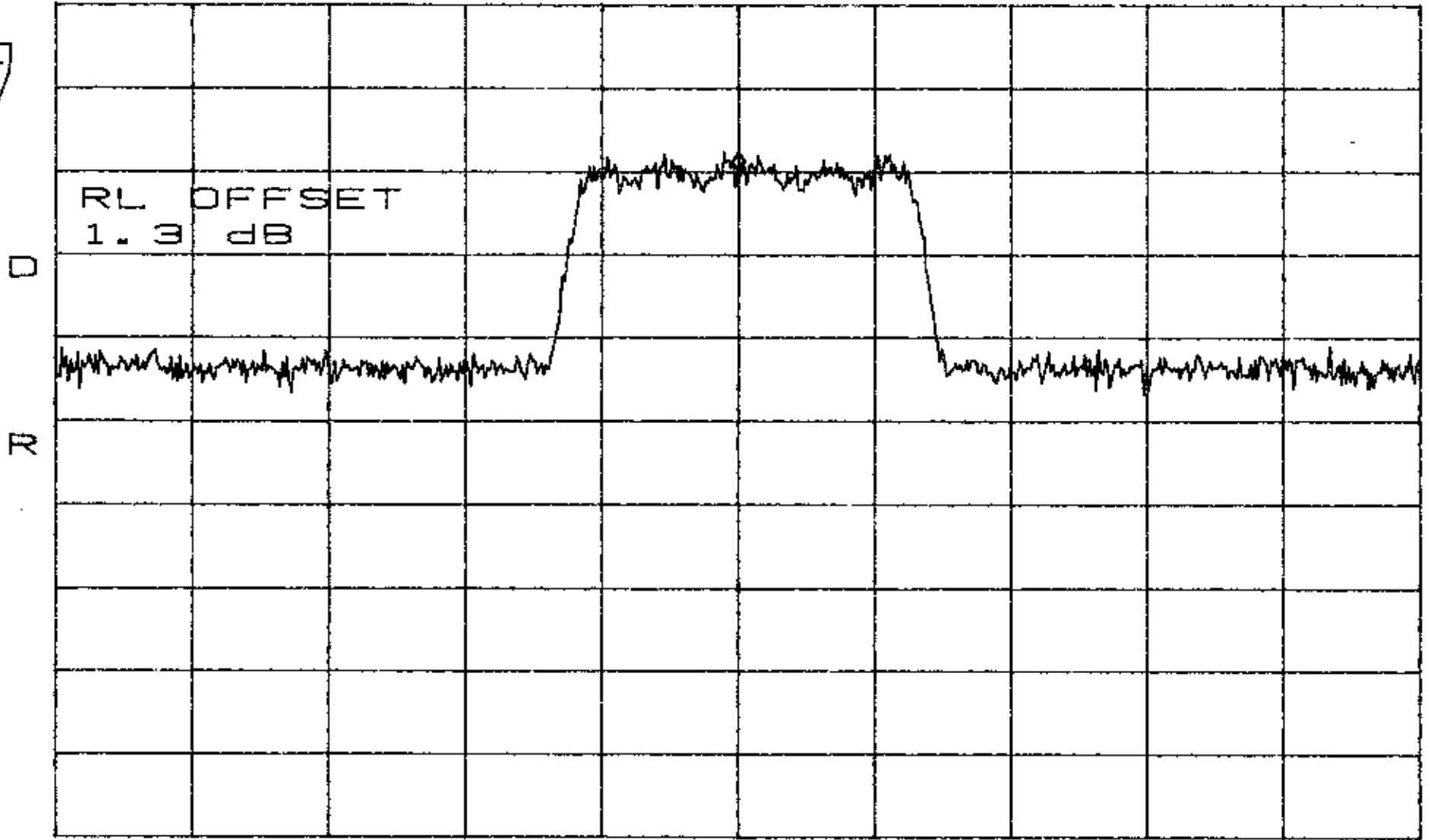
DL
CH. 875 (HIGH)

E/F-BAND
(INPUT)

8/3/98

*ATTEN 10dB VAVG 10 MKR -69.67dBm
RL -50.0dBm 10dB/ BPO1 1.973750GHz

IN/CUT



CENTER 1.973750GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

CDR ICH-X7.1W
S/N: FCC UMT

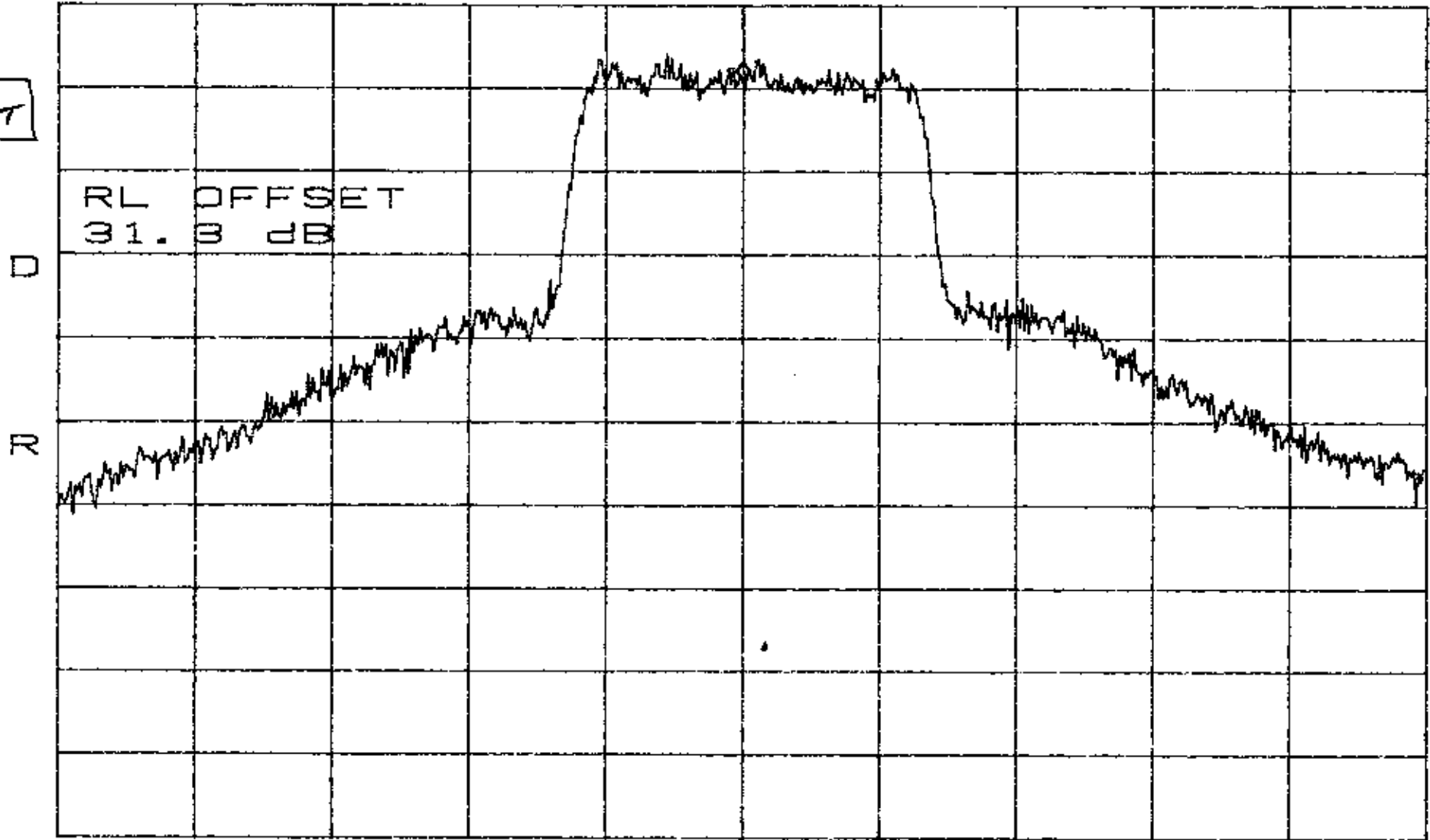
DL
CA.875 (HIGH)

E/F-BAND
(OUTPUT)

8/3/98

*ATTEN 10dB VAVG 10 MKR 21.17dBm
RL 30.0dBm 10dB/ 1.973750GHz

IN/OUT



CENTER 1.973750GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

CDR ICH. X7.1W

UL

E/F-BAND

8/3/98

S/N: FCC UNIT

CH. 725(Low)

(INPUT)

*ATTN 10dB

VAVG 10

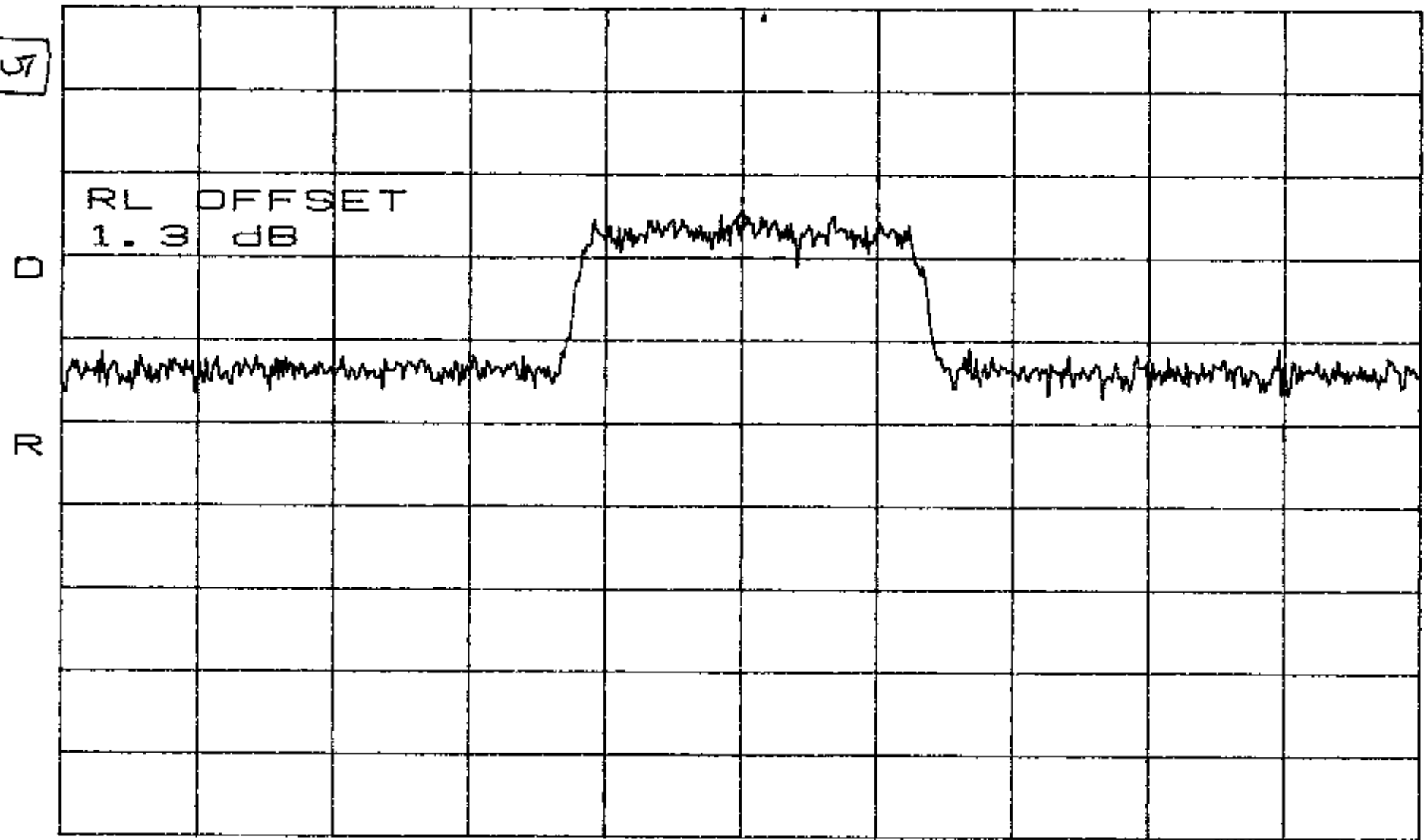
MKR -76.50dBm

RL -50.00dBm

10dB/

1.886250GHz

IN/OUT



CENTER 1.886250GHz

SPAN 5.000MHz

*RBW 30kHz

*VBW 30kHz

*SWP 50.0ms

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

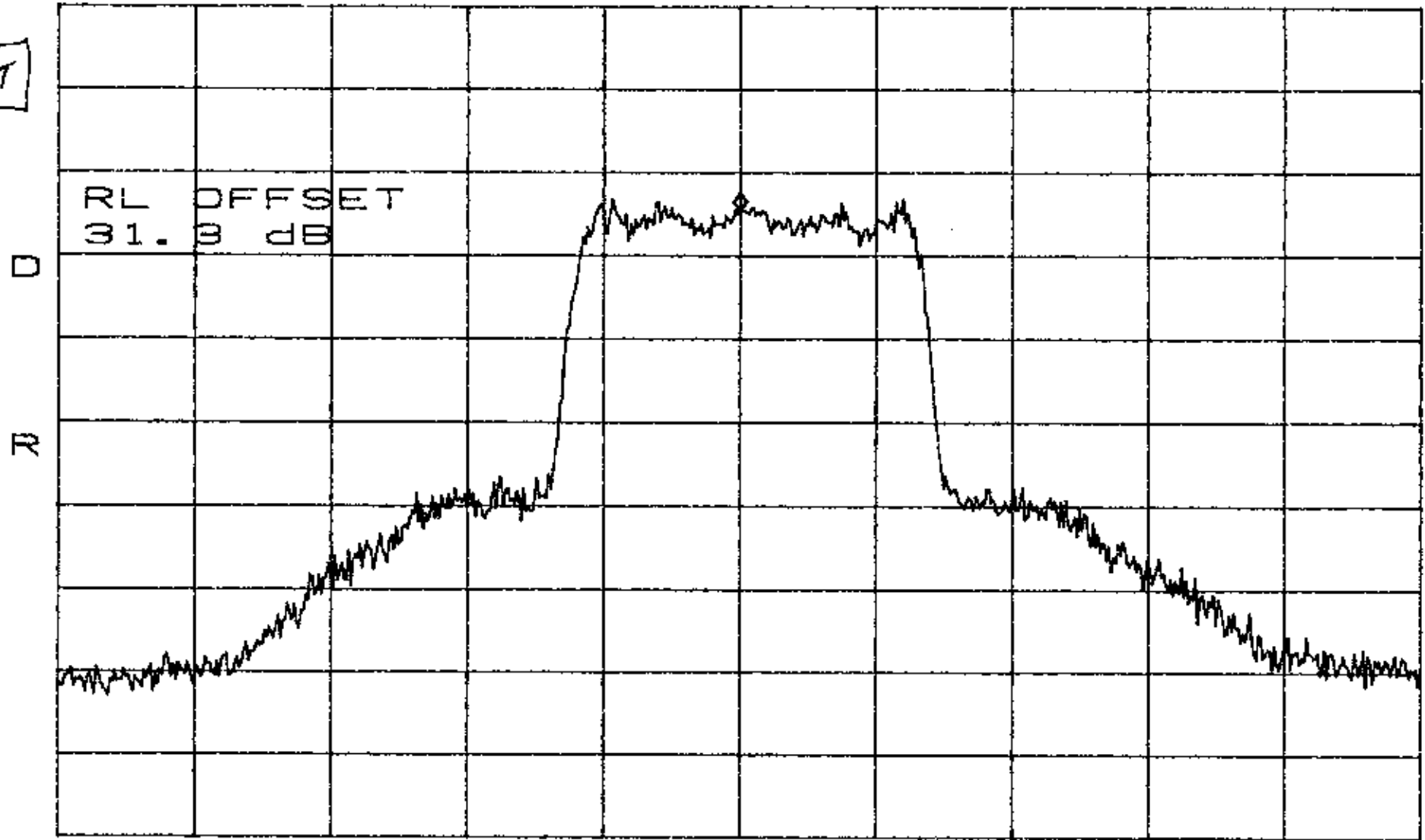
UL
CH. 725 (LOW)

EIF-BAND
(OUTPUT)

8/3/98

*ATTEN 10dB VAVG 10 MKR 5.50dBm
RL 30.0dBm /BPO1 1.886250GHz

IN | OUT



CENTER 1.886250GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

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

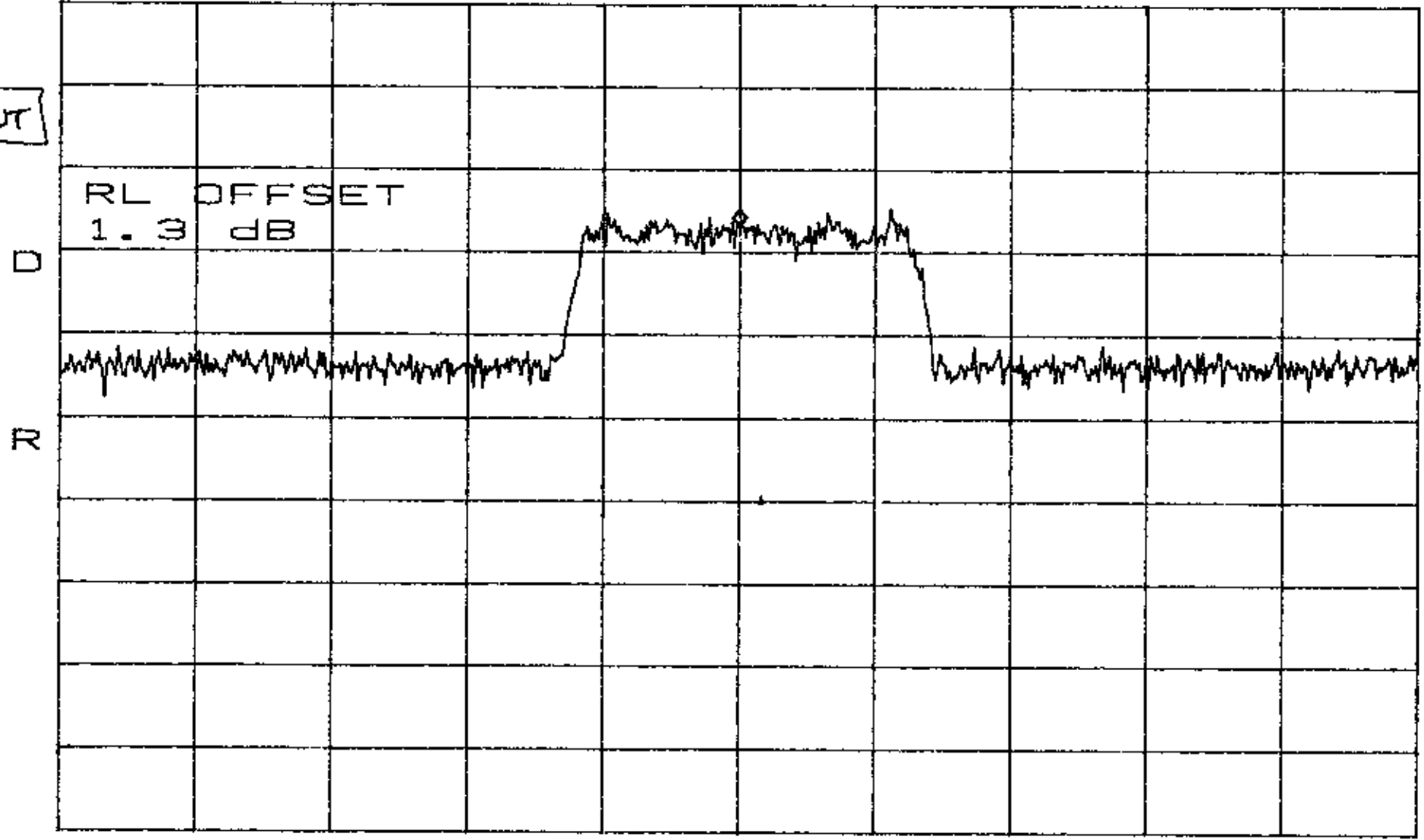
UL
CH 87 (HIGH)

E/F-BAND
(INPUT)

8/3/98

*ATTN 10dB VAVG 10 MKR -76.83dBm
RL -50.0dBm 10dB/ 1.893750GHz

IN/OUT



CENTER 1.893750GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

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

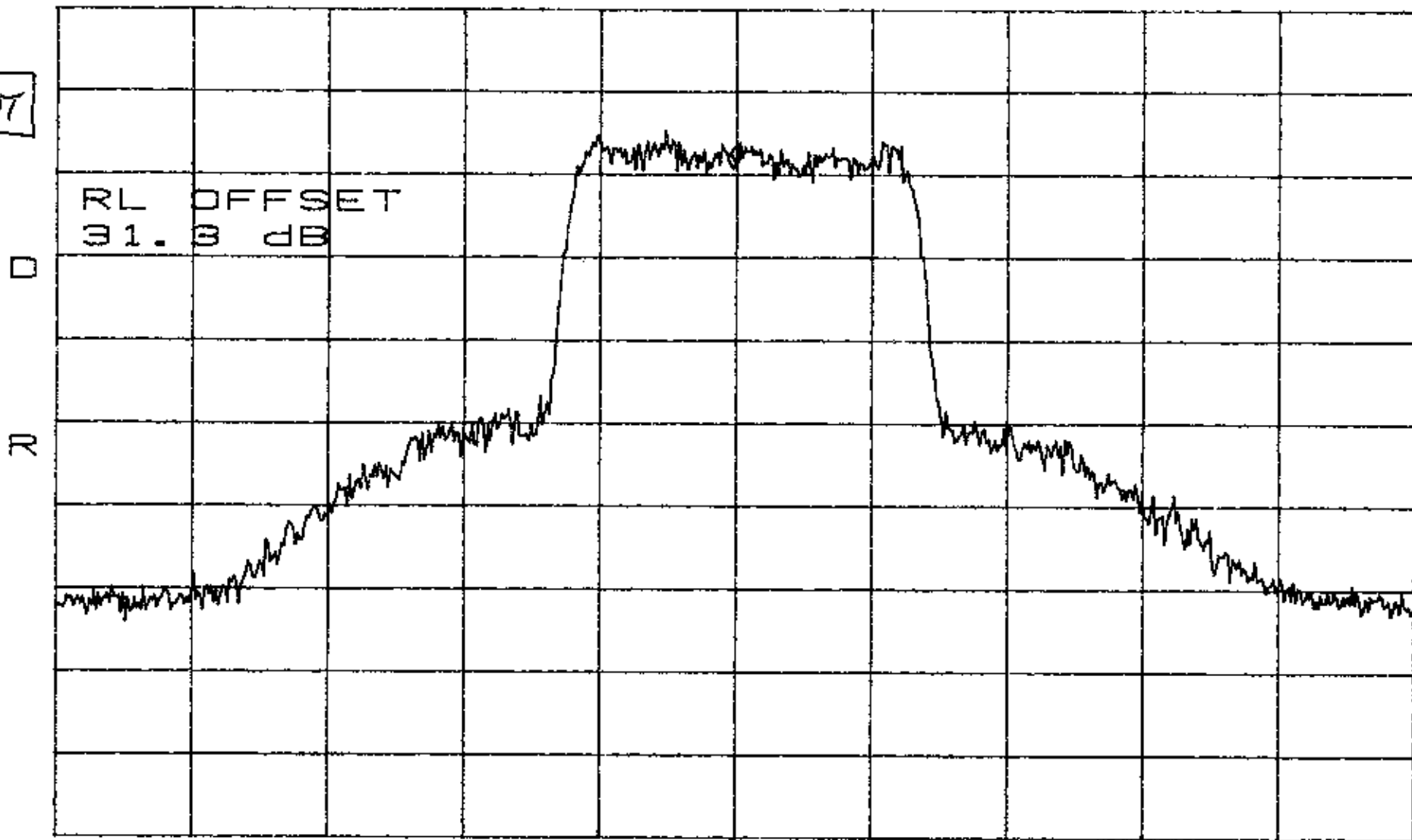
UL
CH. 875 (HIGH)

E/F-BAND
(OUTPUT)

8/3/98

*ATTEN 10dB VAVG 10 MKR 11.50dBm
RL 30.0dBm 10dB/ 1.893750GHz

IN/OUT



CENTER 1.893750GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

CDR: CA. X 7.1W
SIN: FCC UNIT

DL
CH. 725 (LOW)

E/F-BAND
CDMA SOURCE

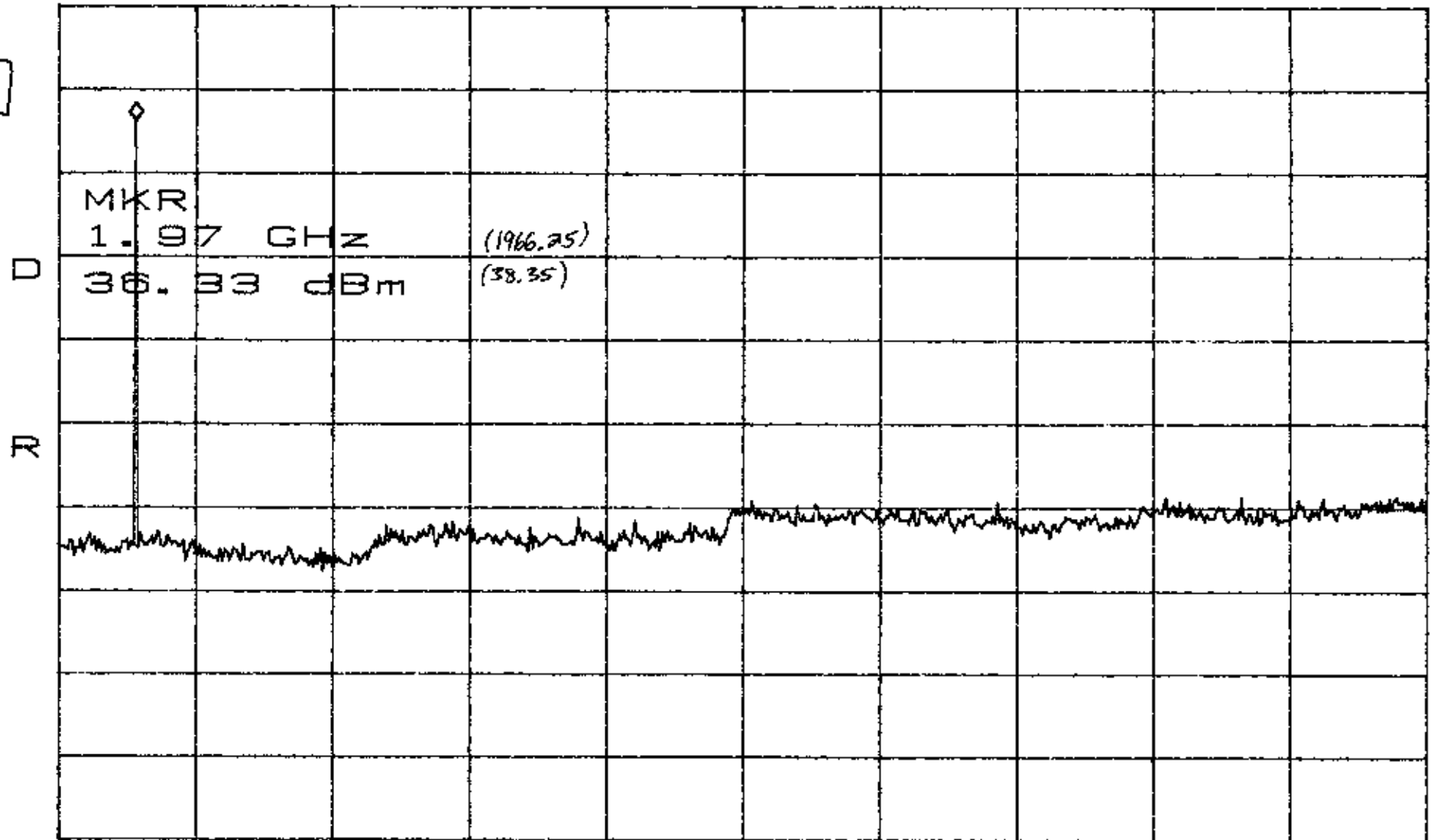
8/3/98

*ATTEN 30dB
RL 50.0dBm

10dB/

MKR 36.33dBm
1.97GHz

2.991



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

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

DL
CH. 875 (HIGH)

EIF-BAND
CDMA SOURCE

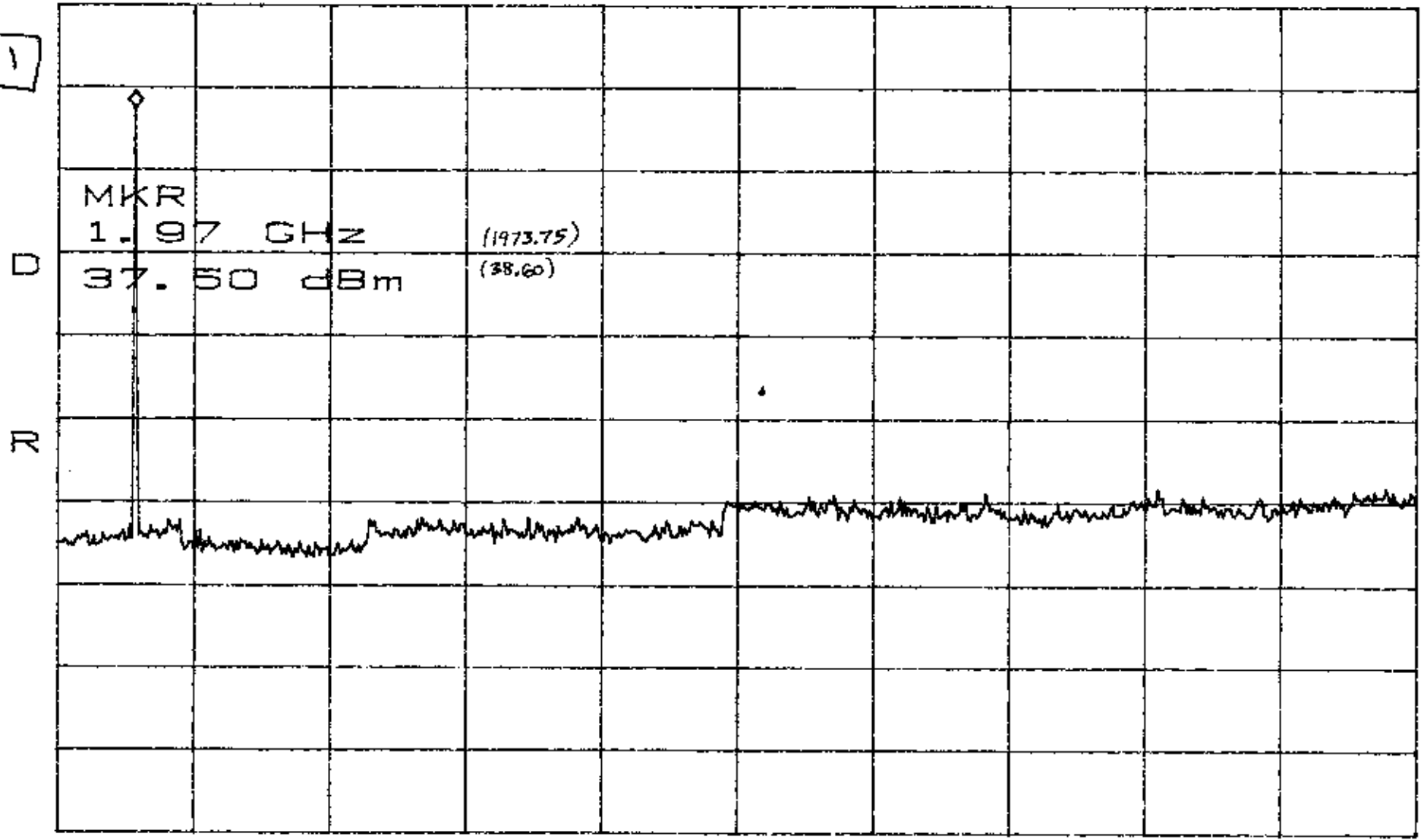
8/3/98

*ATTEN 30dB
RL 50.0dBm

10dB/

MKR 37.50dBm
1.97GHz

2.991



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

CDR ICX7.1W

UL

E/F-BAND

8/3/98

S/N: FCC UNIT

Ch. 875 (HIGH)

CDMA SOURCE

*ATTEN 30dB

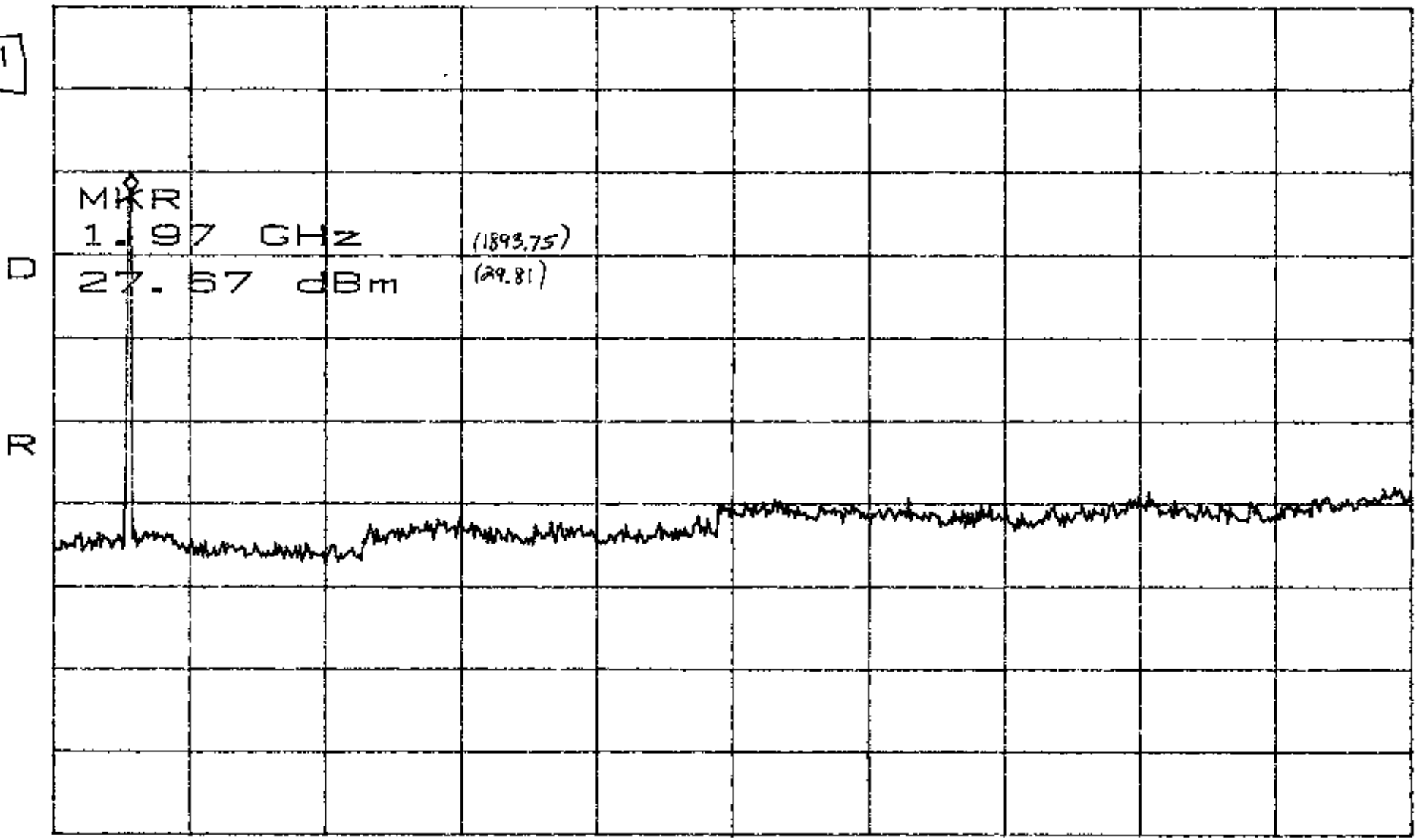
MKR 27.67dBm

RL 50.0dBm

10dB/

1.97GHz

2.991



START 500MHz

STOP 26.50GHz

*RBW 1.0MHz

*VBW 1.0MHz

*SWP 520ms

CDR ICA. x7.1W
SIN: FCC UNIT

UL
CA. 725 (LOW)

E/F-BAND
CDMA SOURCE

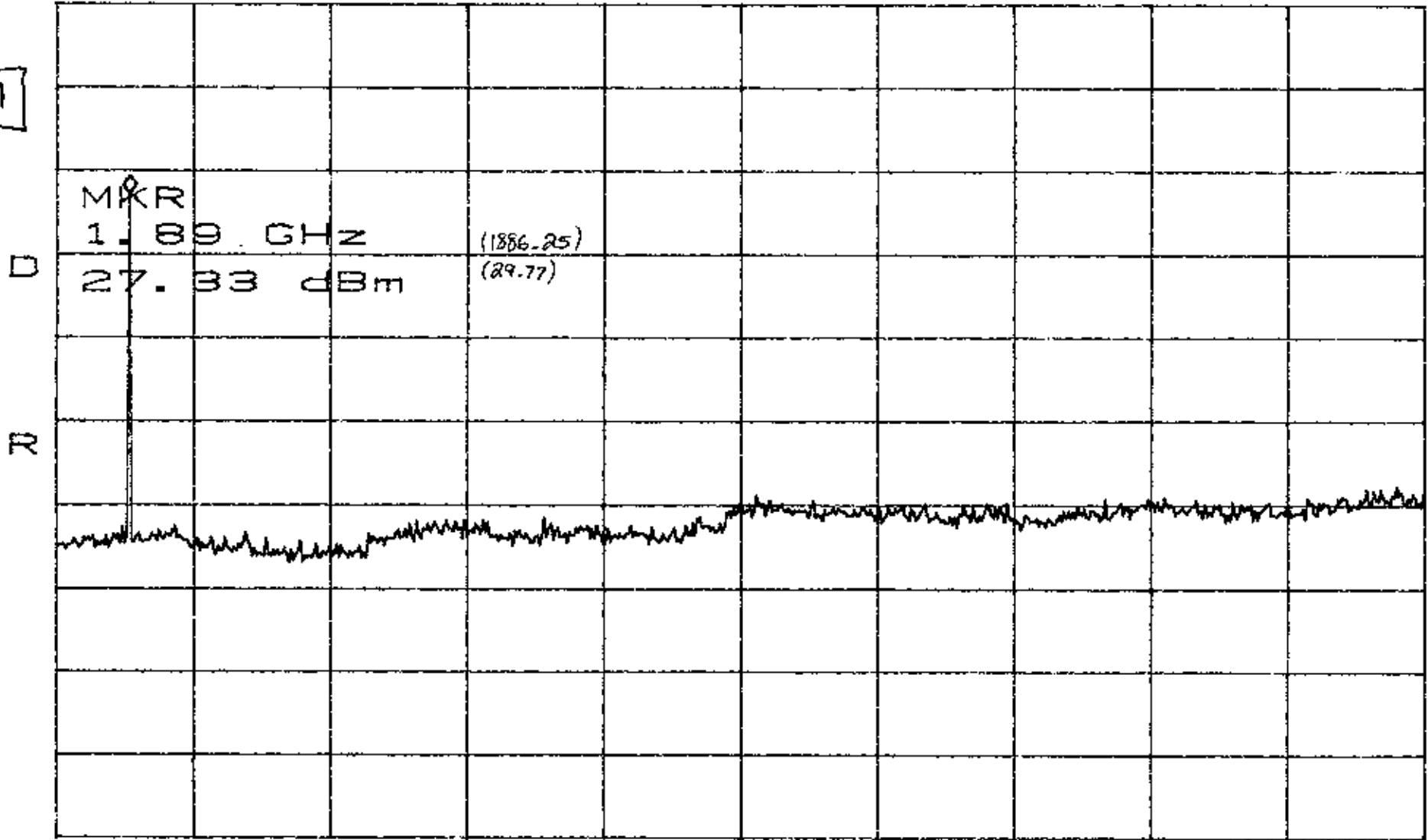
8/13/98

*ATTEN 30dB
RL 50.0dBm

10dB/

MKR 27.33dBm
1.89GHz

2.991



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

CDR 1CH.X7.1W DL
S/N: FCC UNCT

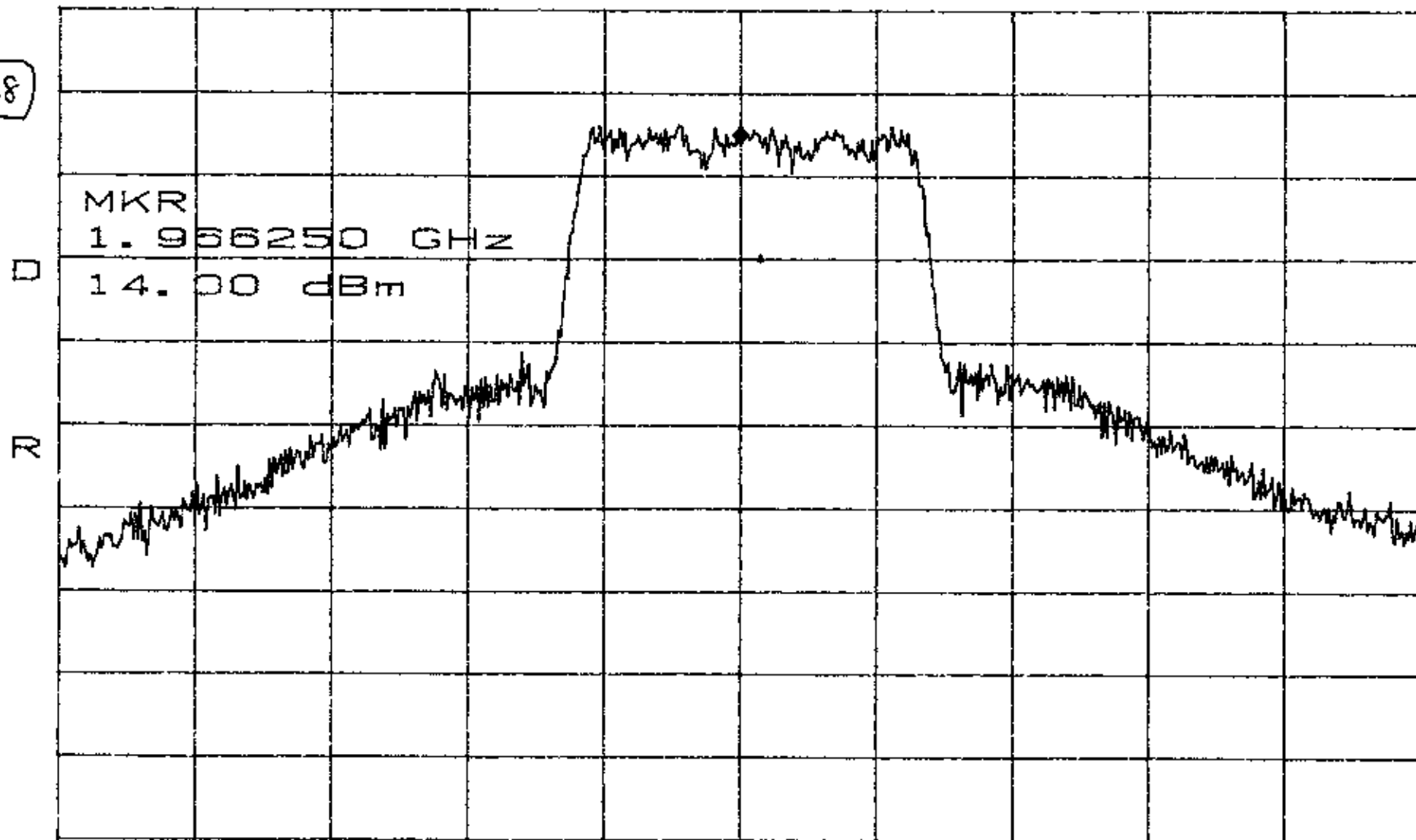
CH. 725 (LOW)

FUNDAMENTAL
E/F-BAND

8/3/98

*ATTEN 10dB VAVG 10 MKR 14.00dBm
RL 30.00dBm 10dB/ 1.966250GHz

24.238



CENTER 1.966250GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

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

DL
CH. 725 (LOW)

BELOW FUNDAMENTAL
E/F-BAND

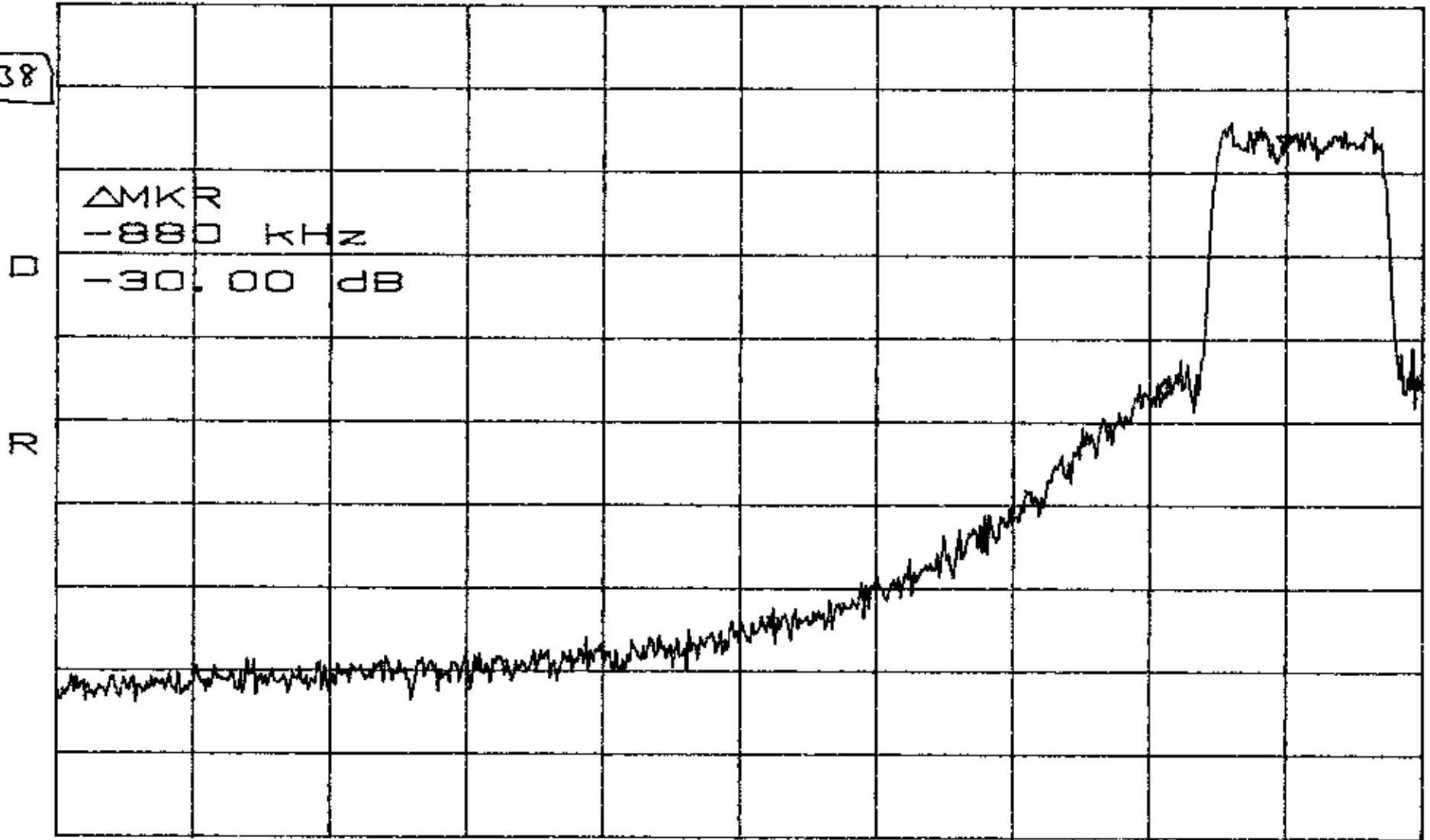
8/3/98

*ATTEN 10dB
RL 30.00dBm

VAVG 10
10dB/BPO1

ΔMKR -30.00dB
-880kHz

24.238



CENTER 1.96225GHz SPAN 10.00MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

CDR 104 X7.1W
SIN: FCC UNIT

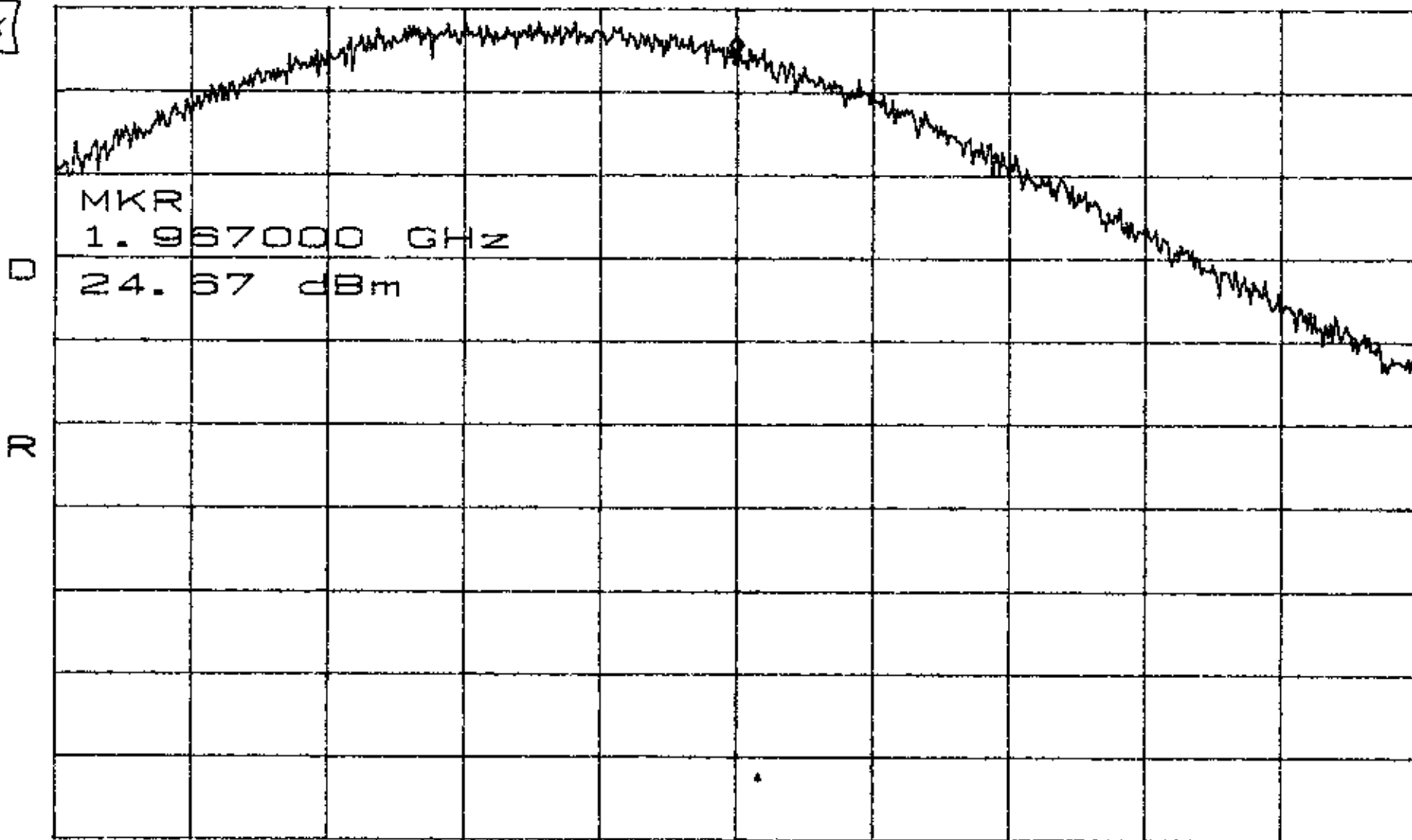
DL
CH. 725 (LOW)

ABOVE FUNDAMENTAL
ETF-BAND

8/3/98

*ATTEN 10dB VAVG 10 MKR 24.67dBm
RL 30.0dBm 10dB/ 1.967000GHz

24.238



CENTER 1.967000GHz SPAN 5.000MHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 50.0ms

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

DL
CH. 725 (LOW)

ABOVE FUNDAMENTAL
E/F-BAND

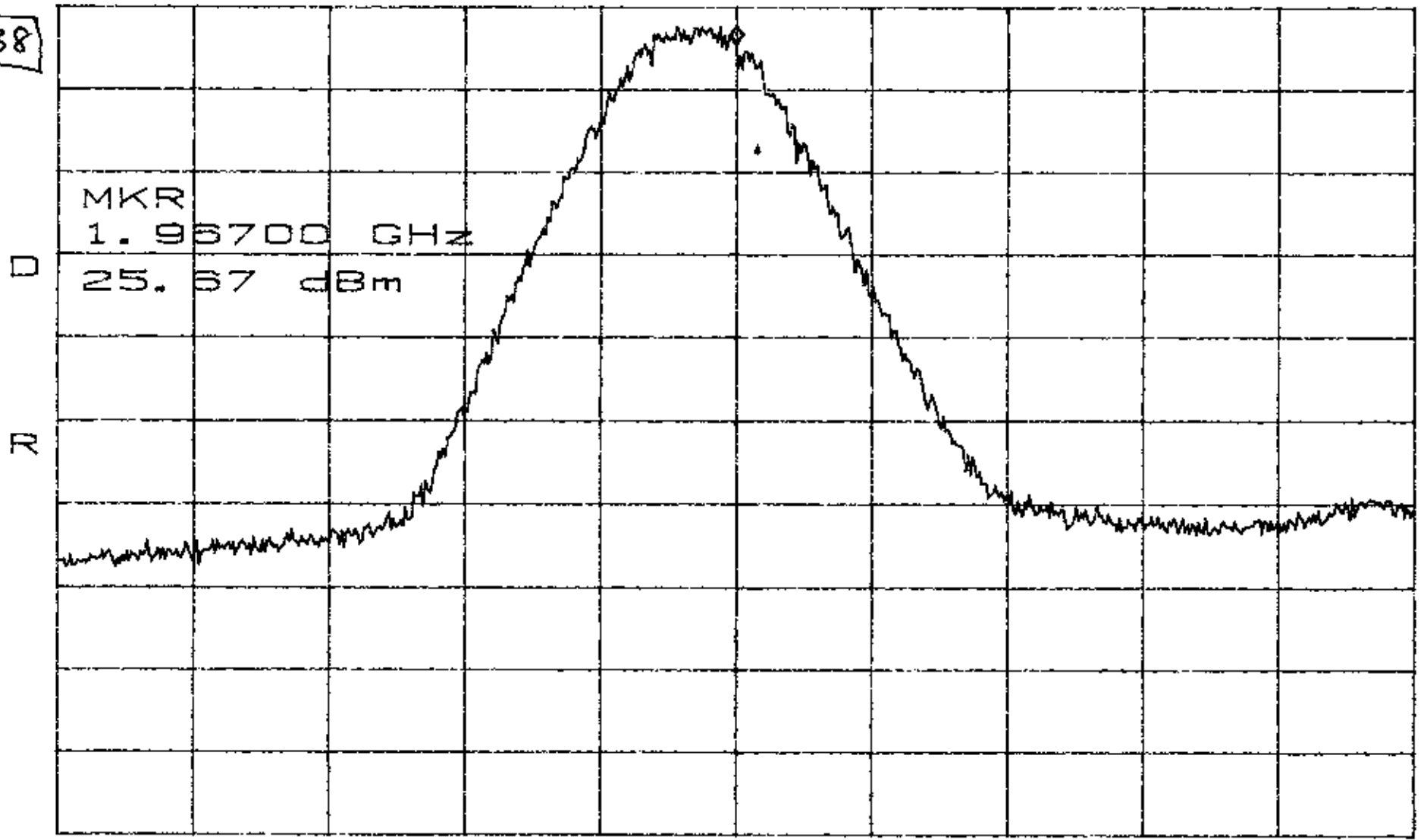
8/3/98

*ATTEN 10dB
BPO 30.00dBm

VAVG 10
10dB/

MKR 25.67dBm
1.96700GHz

24.238



CENTER 1.96700GHz SPAN 20.00MHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 50.0ms

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

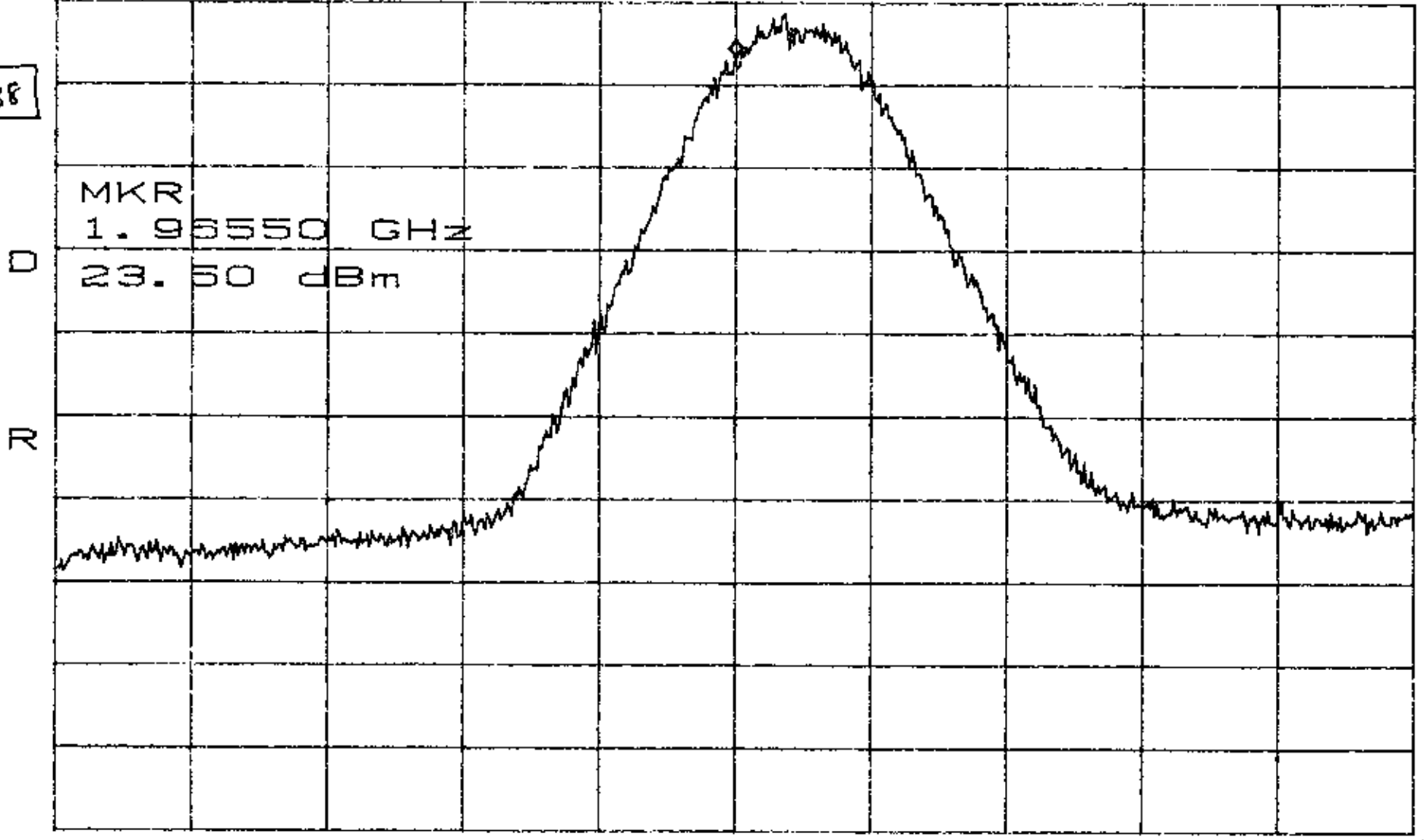
DL
CH. 725 (LOW)

BELOW FUNDAMENTAL
E/F - BAND

8/3/98

*ATTEN 10dB VAVG 10 MKR 23.50dBm
RL 30.0dBm 10dB/ 1.96550GHz

24.238



CENTER 1.96550GHz SPAN 20.00MHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 50.0ms

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

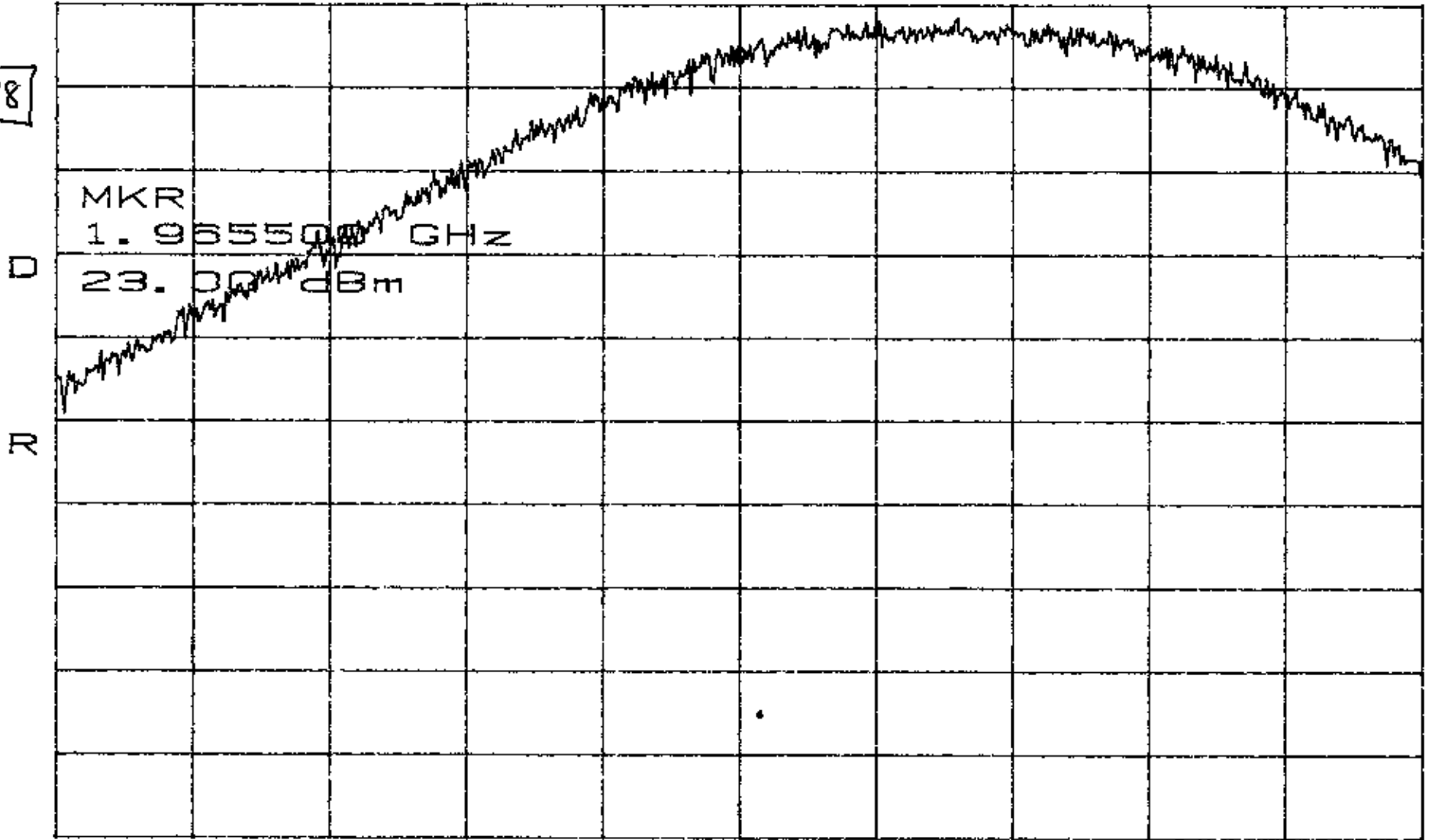
DL
CH. 725 (LOW)

BELOW FUNDAMENTAL
ETF-BAND

8/3/98

*ATTEN 10dB VAVG 10 MKR 23.00dBm
RL 30.00dBm 10dB/ 1.965500GHz

24.238



CENTER 1.965500GHz SPAN 5.000MHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 50.0ms

CDR ICH. X7.0W
S/N: FCC UNIT

DL
CH. 875 (HIGH)

FUNDAMENTAL
E(F-BAND)

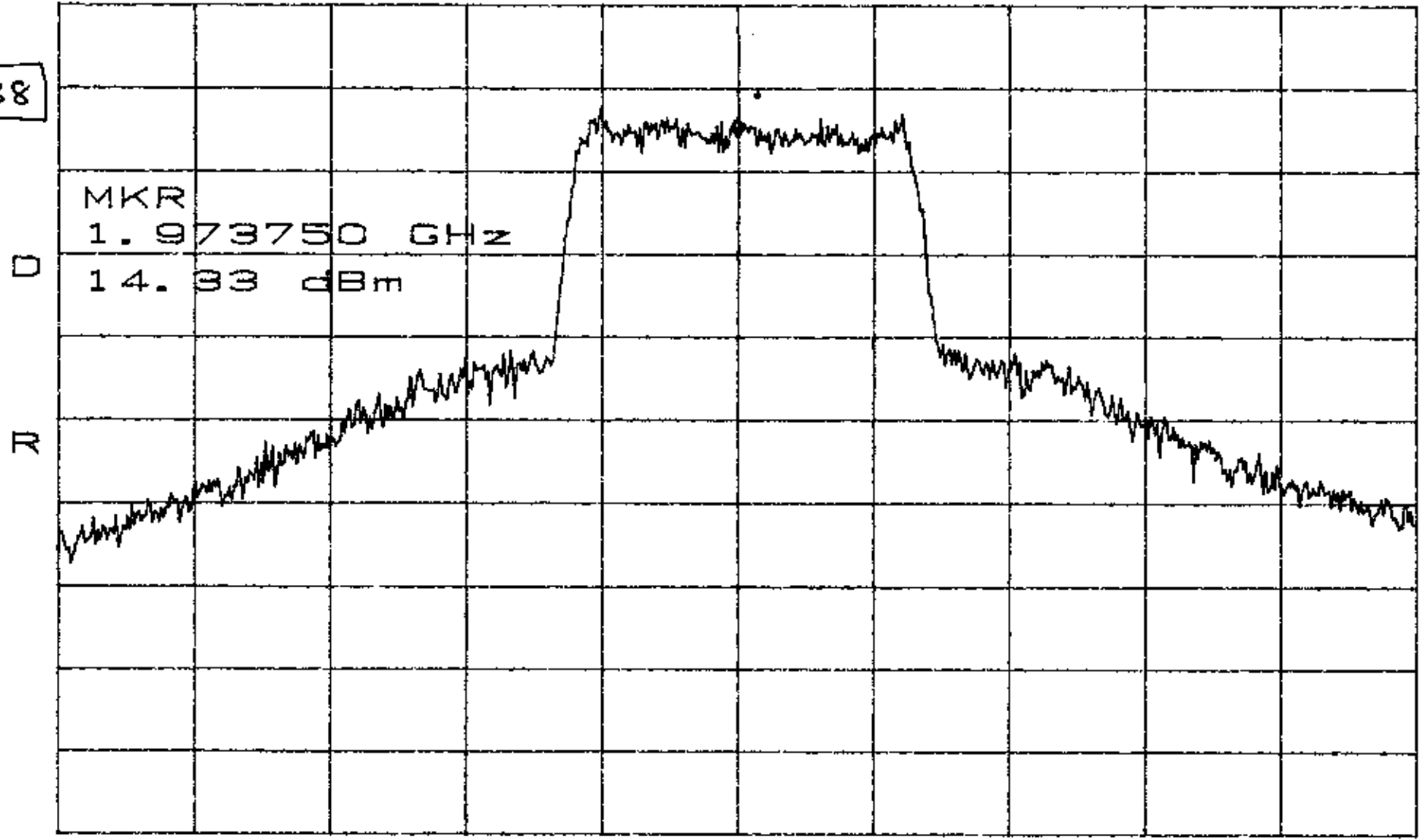
8/3/98

*ATTEN 10dB
RL 30.0dBm

VAVG 10
10dB/

MKR 14.33dBm
1.973750GHz

24.238



CENTER 1.973750GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

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

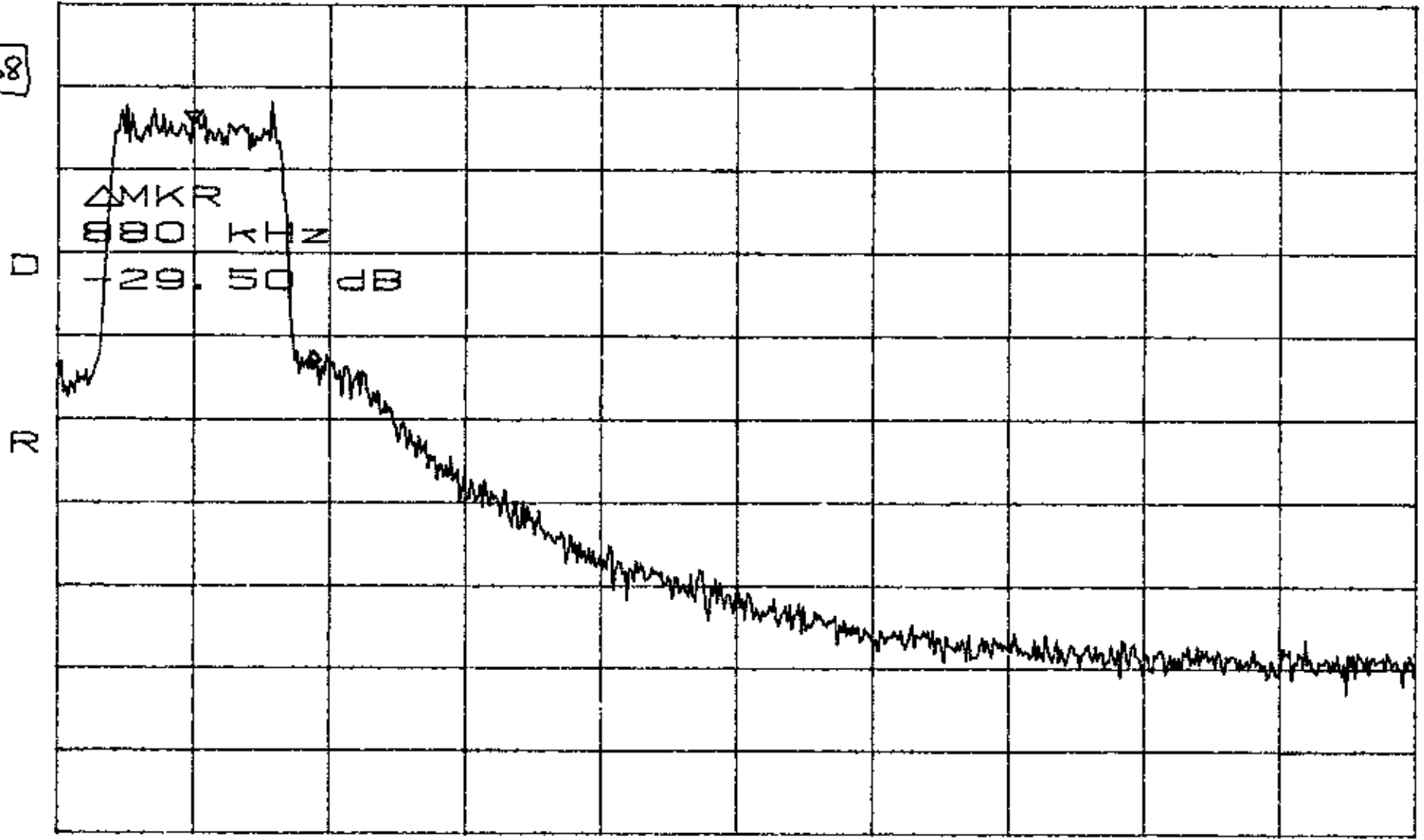
DL
CH. 875 (HIGH)

ABOVE FUNDAMENTAL
E/F-BAND

8/3/98

*ATTN 10dB VAVG 10 ΔMKR -29.50dB
RL 30.0dBm 10dB/ 880kHz

24.238



CENTER 1.97775GHz SPAN 10.00MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

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

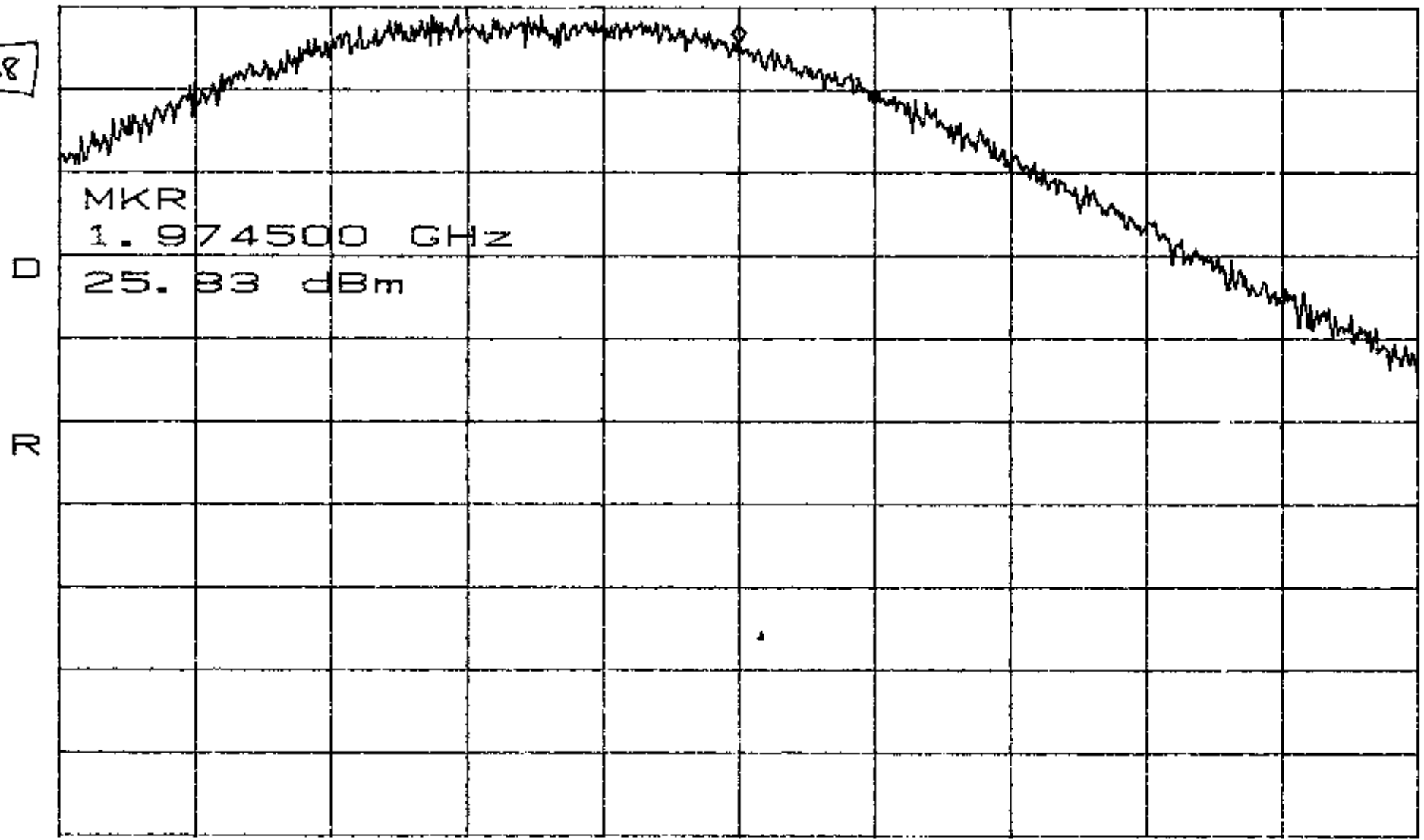
DL
CH 875 (HIGH)

ABOVE FUNDAMENTAL
E/F-BAND

8/3/98

*ATTEN 10dB VAVG 10 MKR 25.83dBm
RL 30.0dBm 10dB/ 1.974500GHz

24.238



CENTER 1.974500GHz SPAN 5.000MHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 50.0ms

CDR 1CH X 7.1W
SIN. FCC UNIT

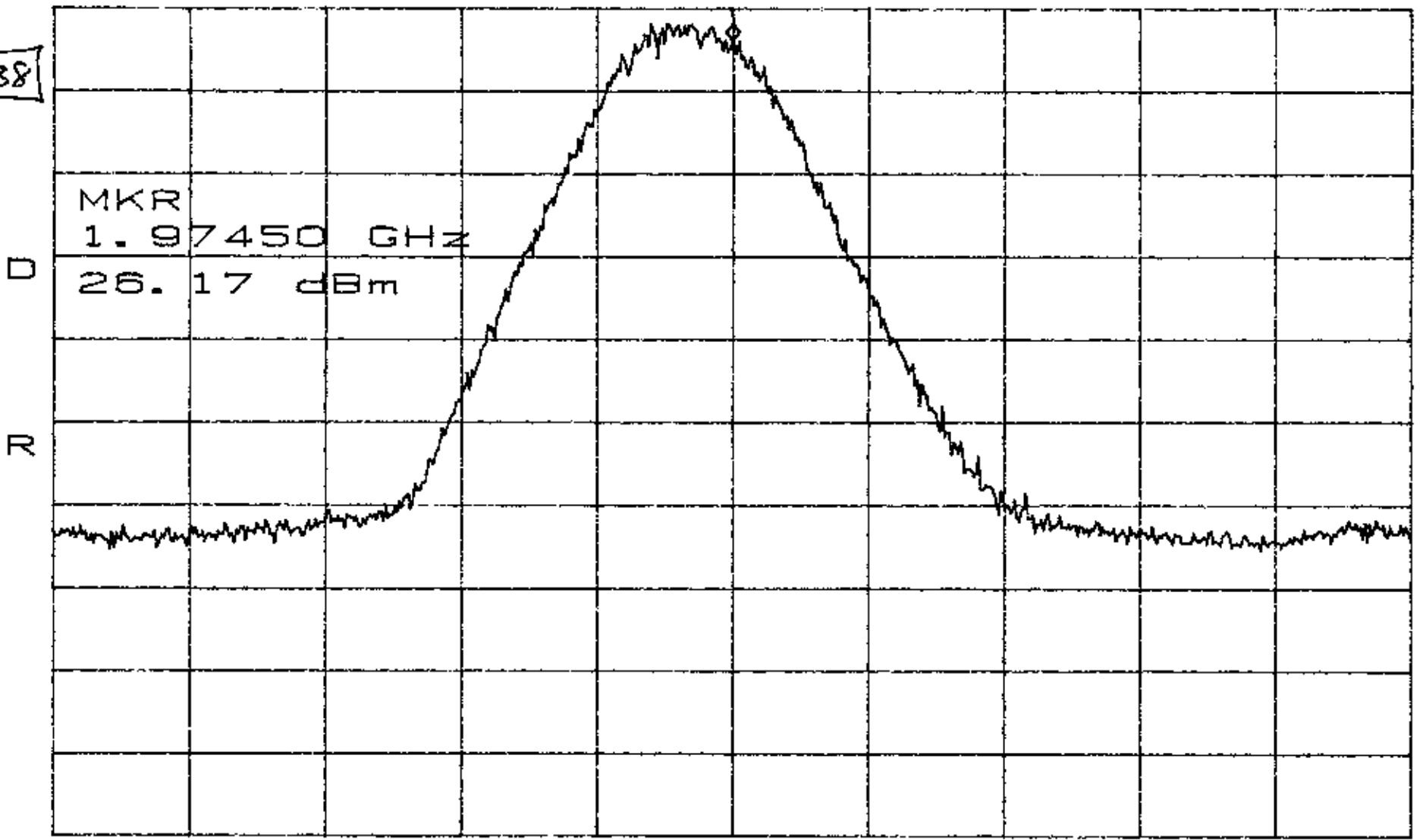
DL
CH 875 (HIGH)

ABOVE FUNDAMENTAL
E/F-BAND

8/3/98

*ATTEN 10dB VAVG 10 MKR 26.17dBm
RL 30.0dBm 10dB/ 1.97450GHz

24.238



CENTER 1.97450GHz SPAN 20.00MHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 50.0ms

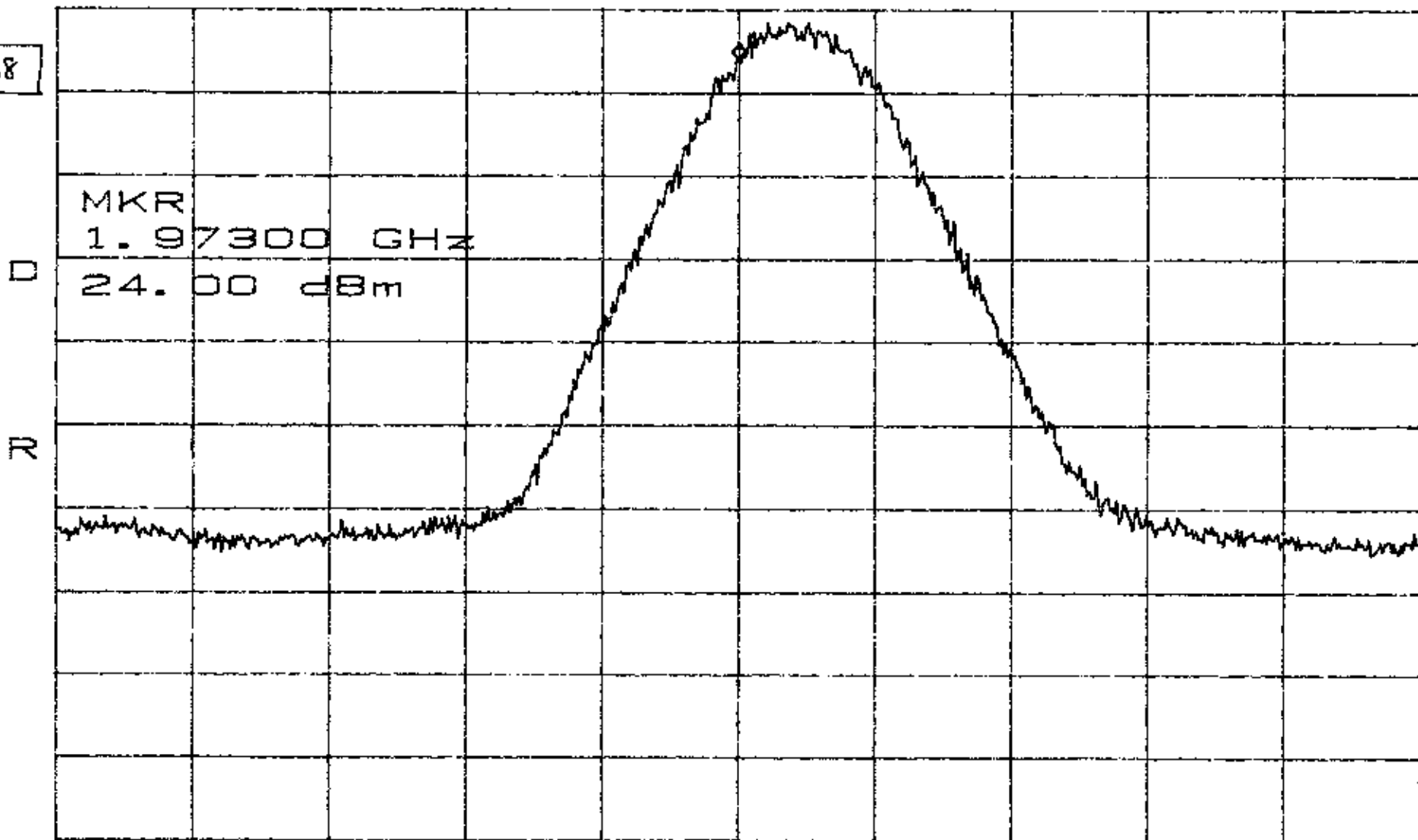
CDR ICA X 7.1W
S/N: FCC UNIT

DL
CH. 875 (HIGH)

BELOW FUNDAMENTAL 8/13/98
ETF-BAND

*ATTEN 10dB VAVG 10 MKR 24.00dBm
RL 30.00dBm 10dB/ 1.97300GHz

24.238



CENTER 1.97300GHz SPAN 20.00MHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 50.0ms

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

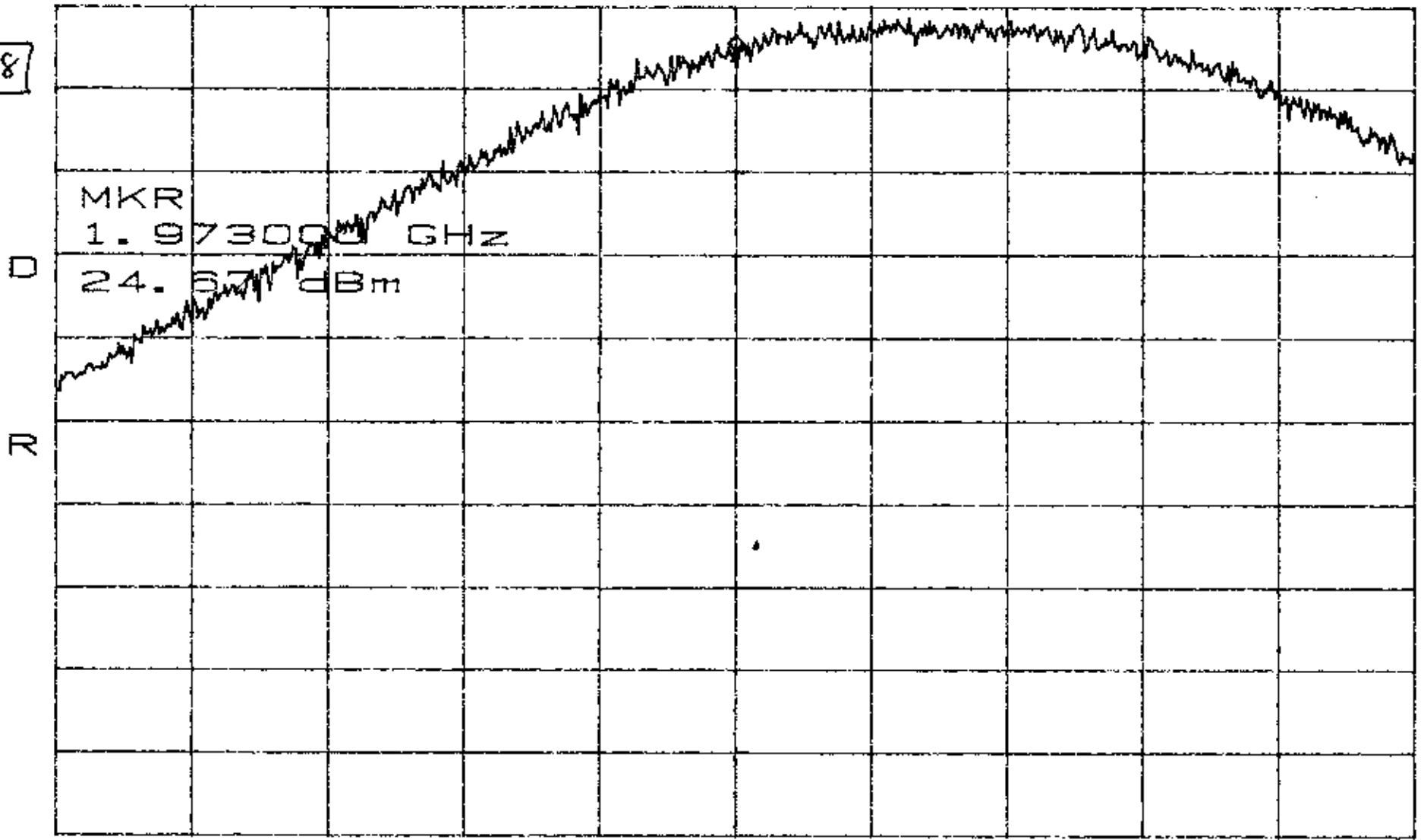
DL
CH 875(HIGH)

BELOW FUNDAMENTAL
E/F-BAND

8/3/98

*ATTEN 10dB VAVG 10 MKR 24.67dBm
RL 30.00dBm 10dB/ 1.973000GHz

24.238



CENTER 1.973000GHz SPAN 5.000MHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 50.0ms

CDR 1CH X7.1W
SIN: FCC UNIT

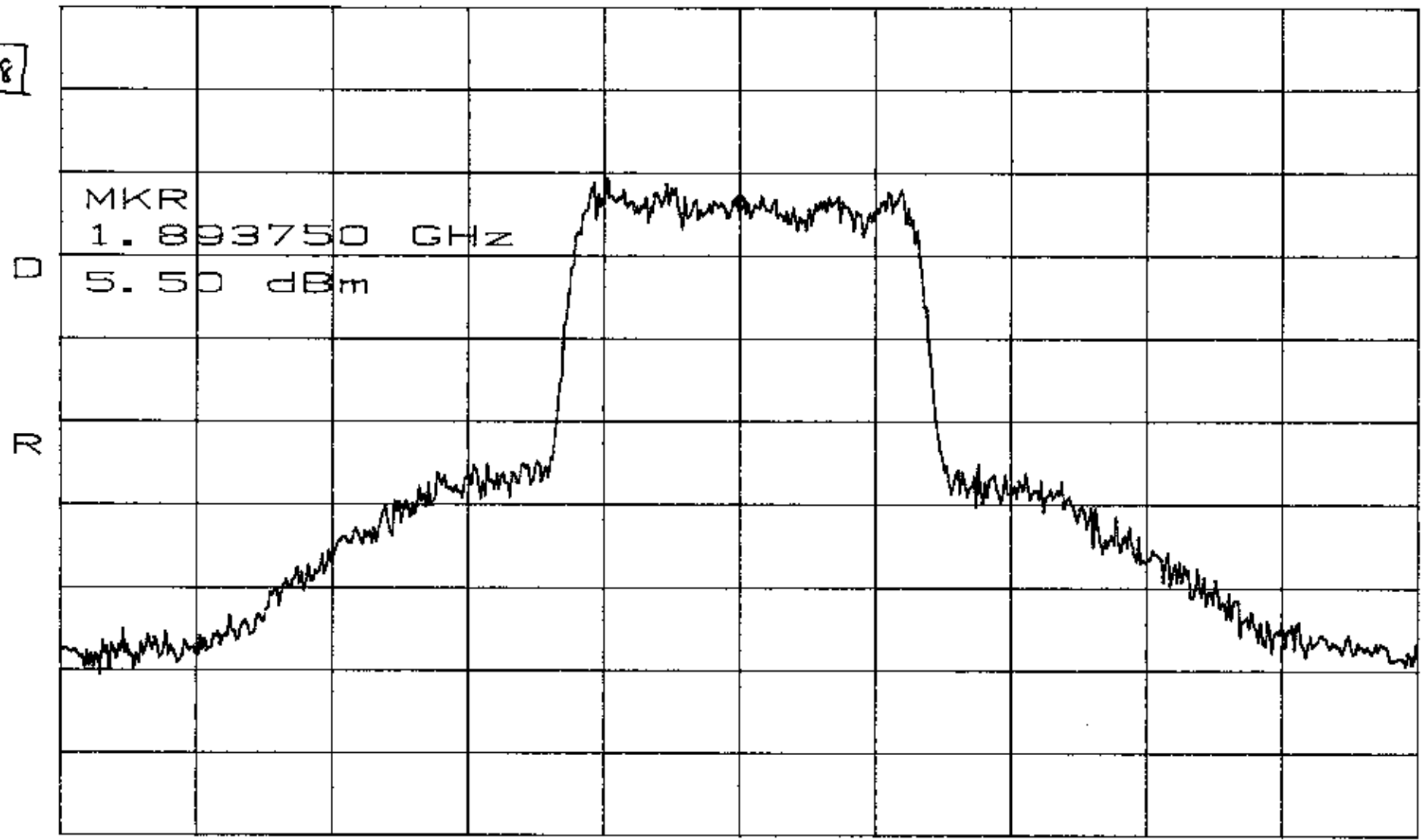
UL
CH 875 (HIGH)

FUNDAMENTAL
E/F BAND

9/13/98

*ATTEN 10dB VAVG 10 MKR 5.50dBm
RL 30.0dBm 10dB/ 1.893750GHz

24.238



CENTER 1.893750GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

CDE ICH. X7.1W
S/N: FCC UNIT

UL
CH. 875(HIGH)

ABOVE FUNDAMENTAL
E/F-BAND

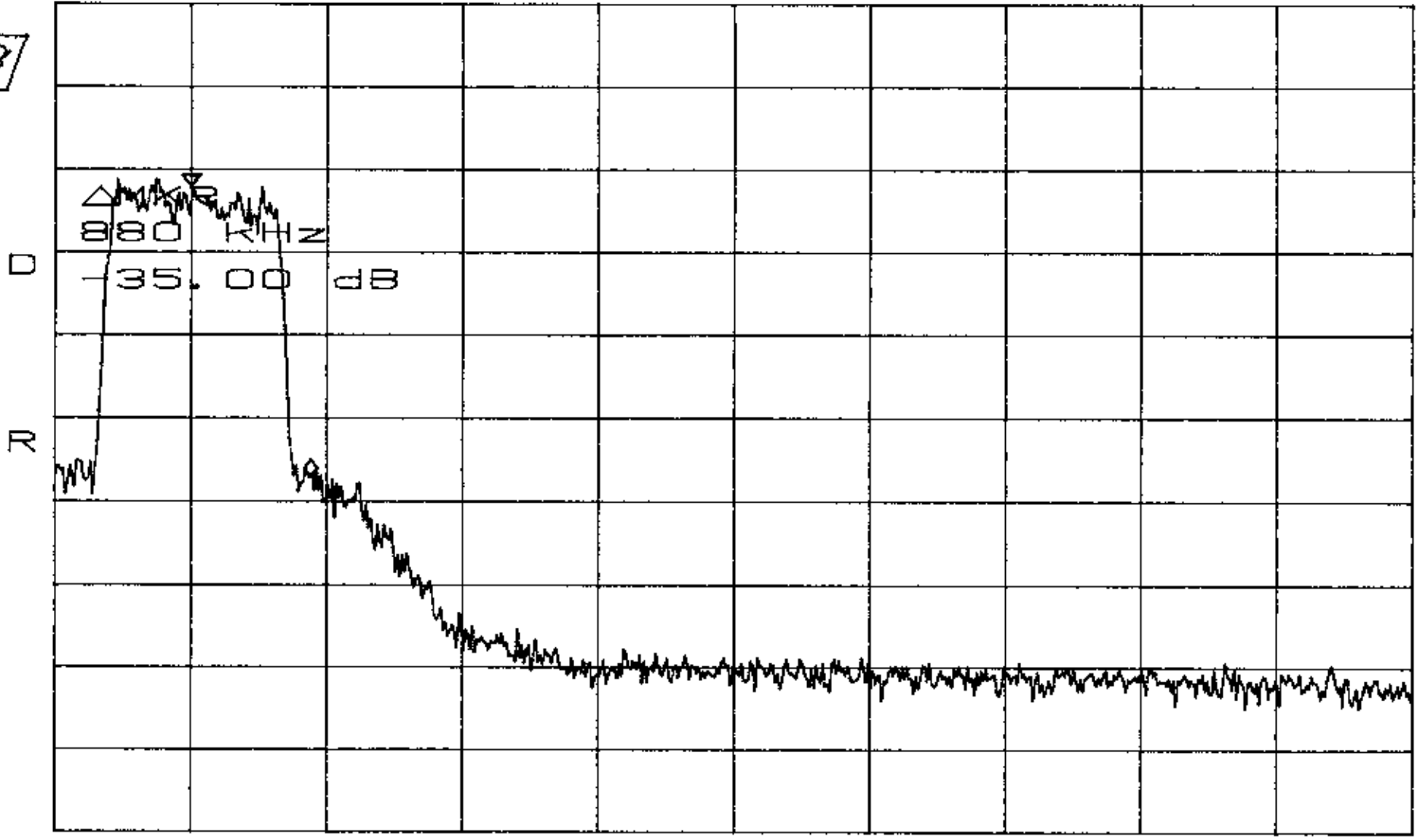
8/3/98

*ATTEN 10dB
RL 30.0dBm

VAVG 10
10dB/

ΔMKR -35.00dB
880kHz

24.238



CENTER 1.89775GHz

SPAN 10.00MHz

*RBW 30kHz

*VBW 30kHz

*SWP 50.0ms

CDR 14. x 7.1w

UL

ABOVE FUNDAMENTAL

8/3/98

S/N: FCC UNIT

CH. 275 (HIGH)

E/F-BAND

*ATTEN 10dB

VAVG 10

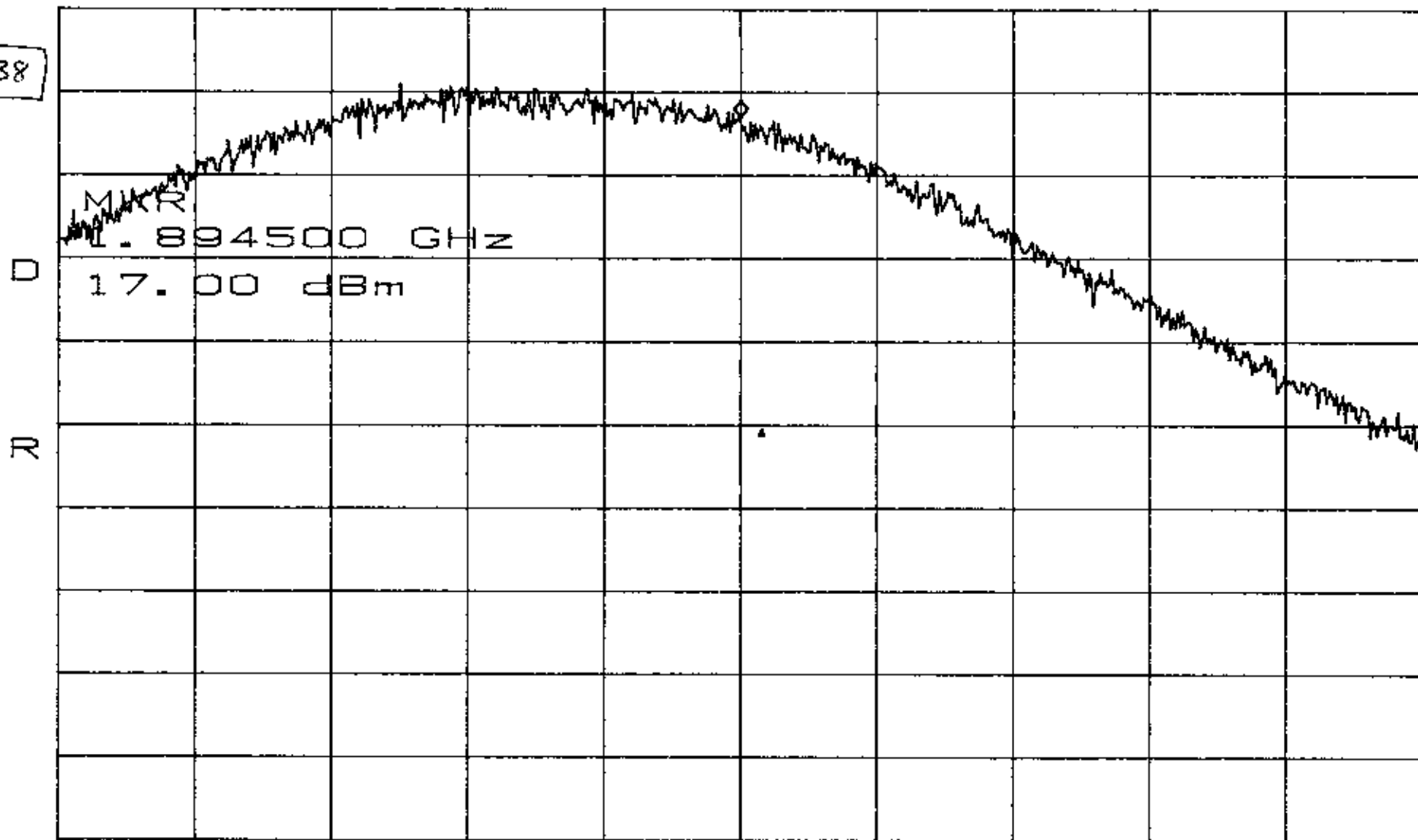
MKR 17.00dBm

RL 30.0dBm

10dB/

1.894500GHz

24.238



CENTER 1.894500GHz

SPAN 5.000MHz

*RBW 1.0MHz

*VBW 1.0MHz

*SWP 50.0ms

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

UL
CH. 875 (HIGH)

ABOUT FUNDAMENTAL
E/F-BAND

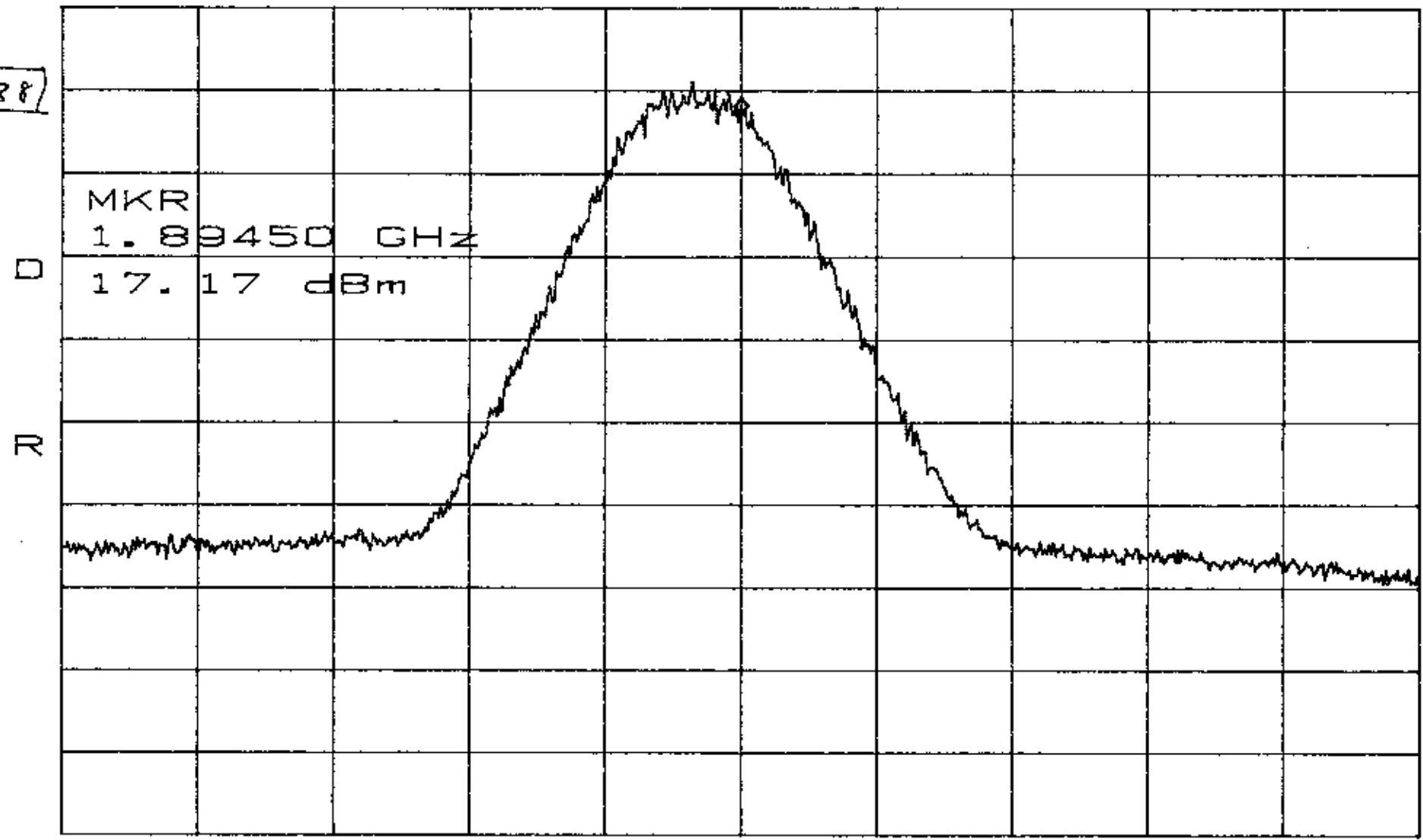
8/3/98

*ATTEN 10dB
RL 30.0dBm

VAVG 10
10dB/

MKR 17.17dBm
1.89450GHZ

24.238



CENTER 1.89450GHZ SPAN 20.00MHZ
*RBW 1.0MHZ *VBW 1.0MHZ *SWP 50.0ms

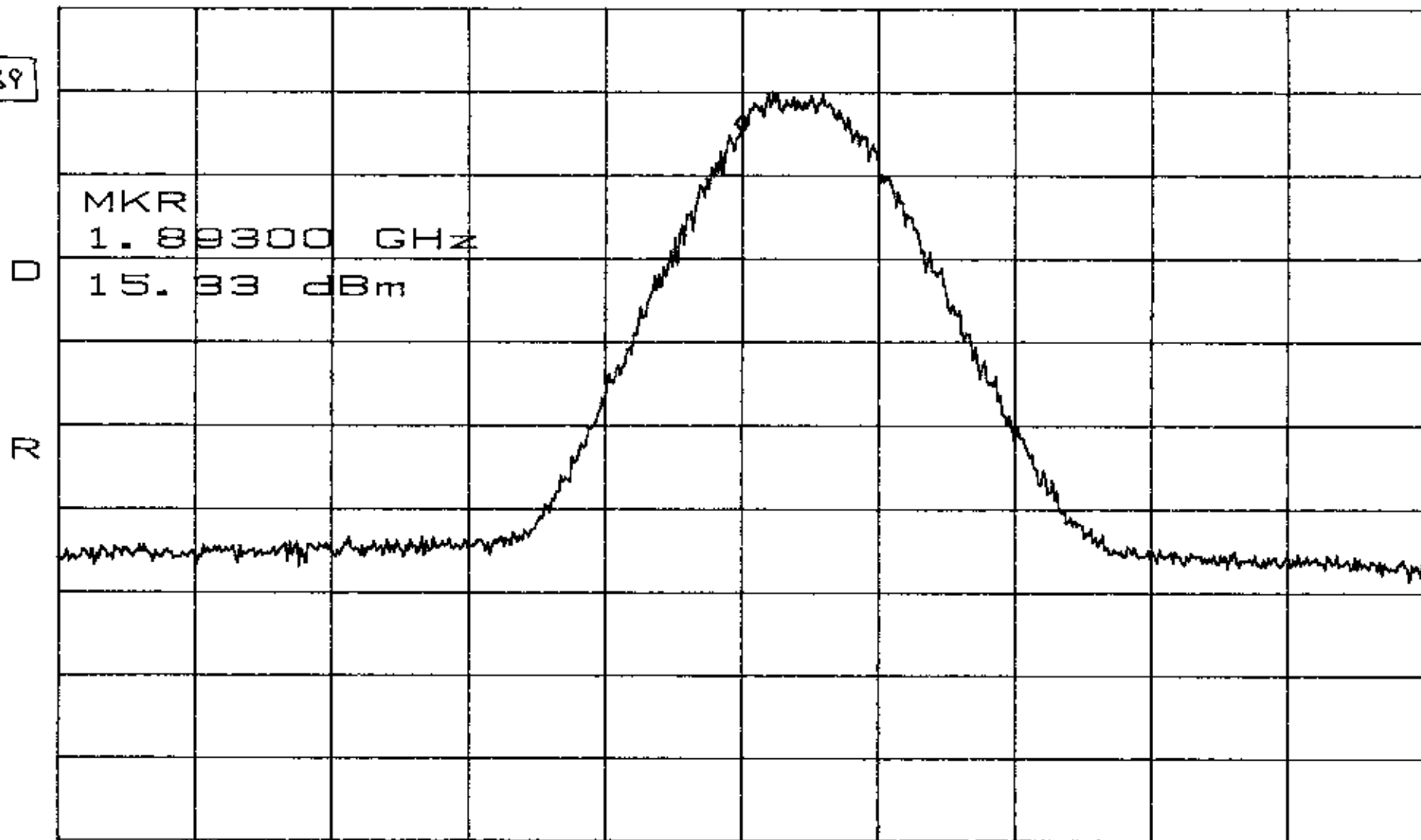
COR 1CH. X71W UL
SIN: FCC UNIT CH. 875 (HIGH)

BELOW FUNDAMENTAL
B/F-BAND

8/3/98

*ATTEN 10dB VAVG 10 MKR 15.33dBm
RL 30.0dBm 10dB/BPO1 1.89300GHz

24.239



CENTER 1.89300GHz SPAN 20.00MHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 50.0ms

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

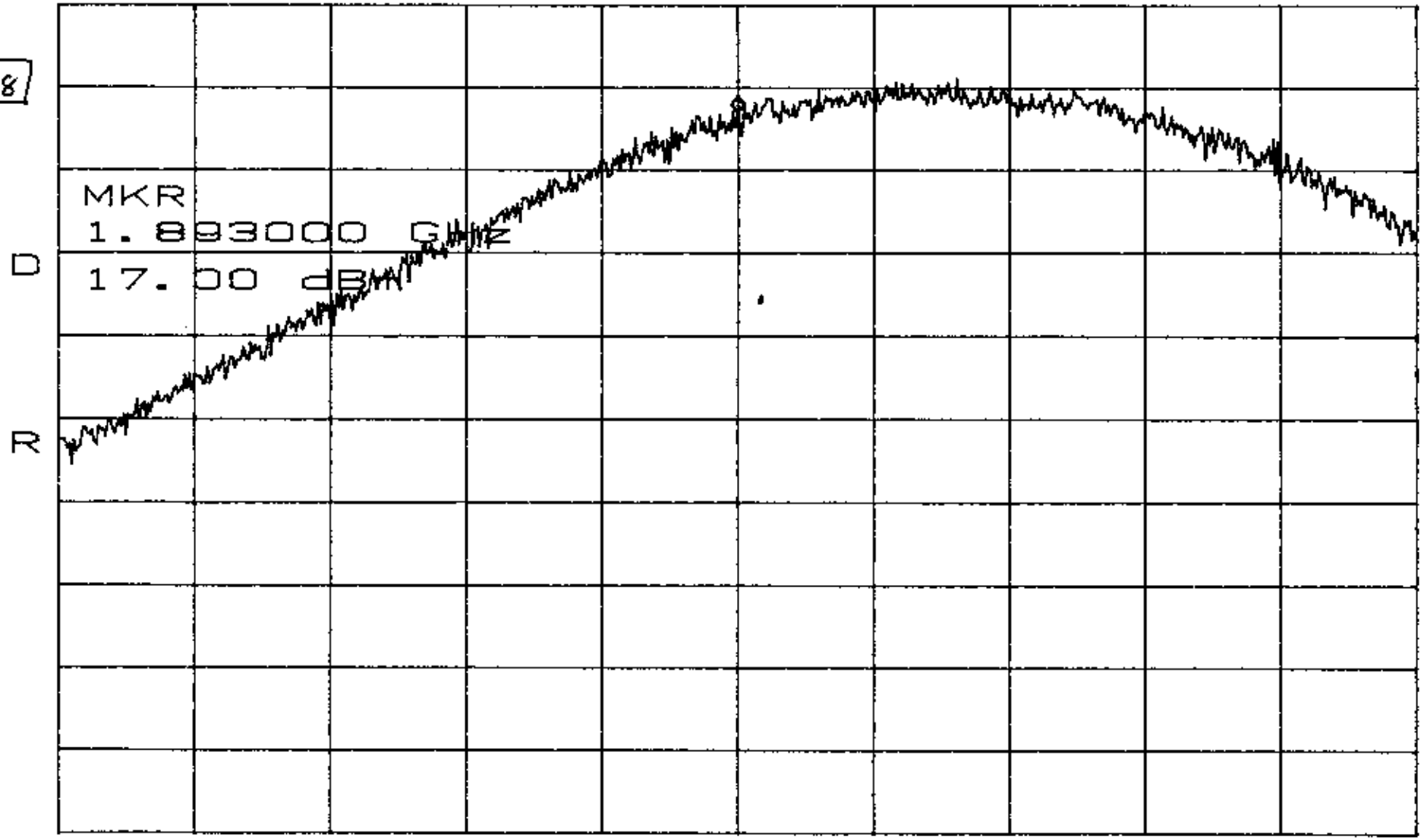
UL
CH.875(HIGH)

BELOW FUNDAMENTAL
E/F-BAND

8/3AP

*ATTEN 10dB VAVG 10 MKR 17.00dBm
RL 30.00dBm 10dB/ 1.893000GHZ

24.238



CENTER 1.893000GHZ SPAN 5.000MHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 50.0ms

COR 104 X7.1W
S/N: FCC UNIT

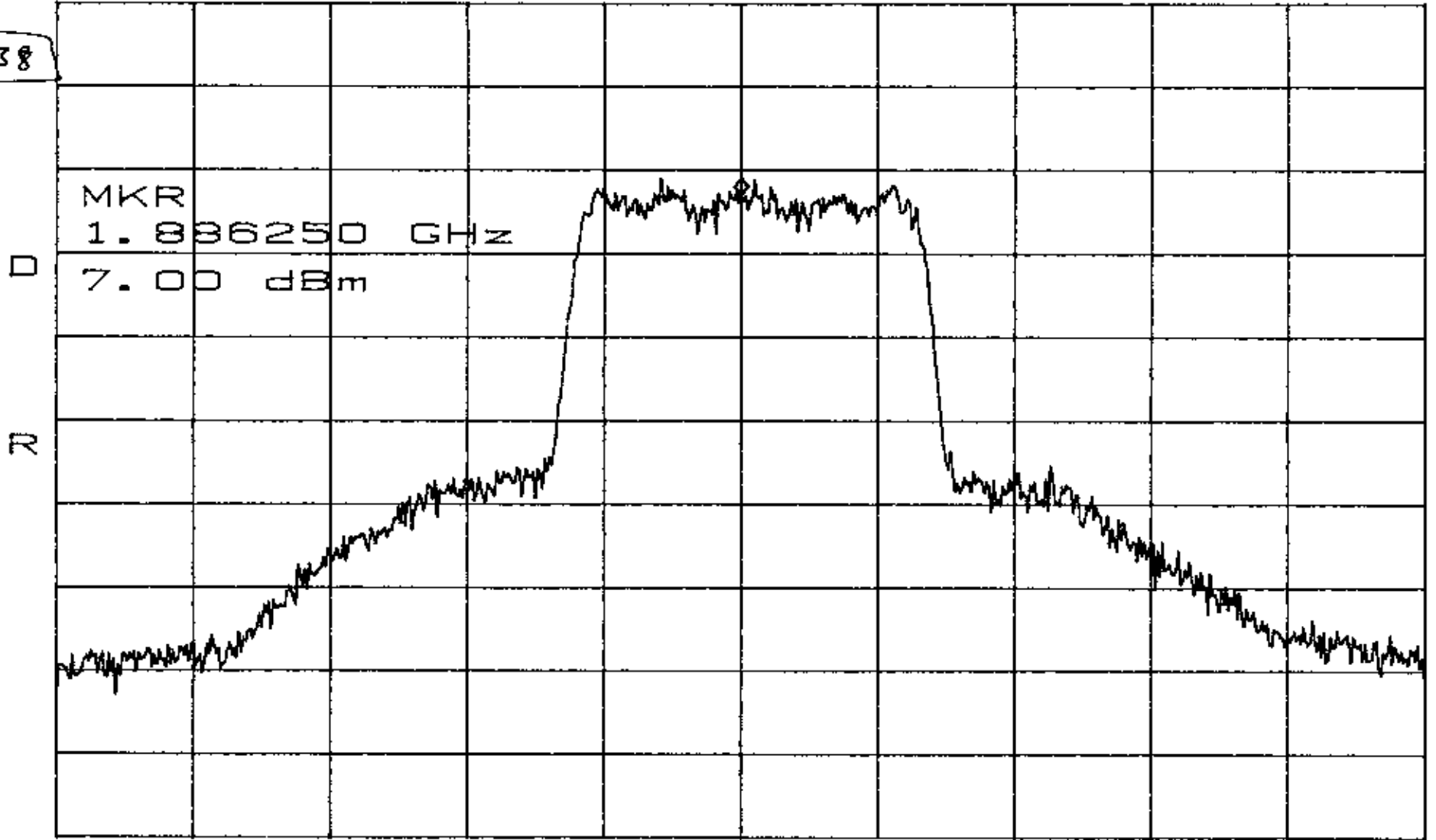
UL
CH 725 (LOW)

FUNDAMENTAL
E/F-BAND

8/3/98

*ATTEN 10dB VAVG 10 MKR 7.00dBm
RL 30.00dBm 10dB/ 1.886250GHz

24.238



CENTER 1.886250GHz SPAN 5.000MHz
*RBW 30kHz *VBW 30kHz *SWP 50.0ms

CDR ICH. X71W
S/N: FCC UNIT

UL
CH. 725(Low)

BELOW FUNDAMENTAL
E/F-BAND

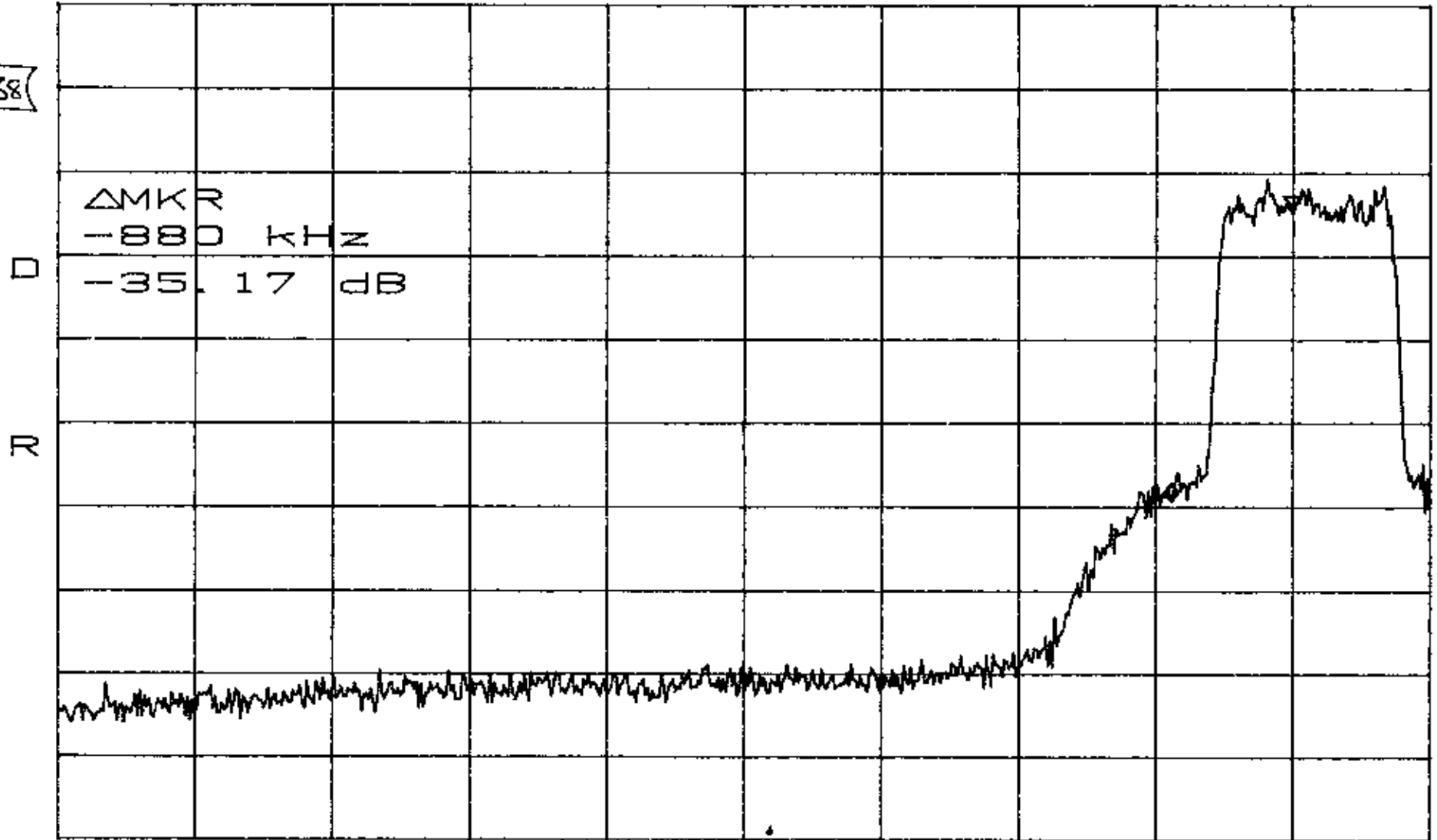
8/3/98

*ATTEN 10dB
RL 30.0dBm

VAVG 10
10dB/

Δ MKR -35.17dB
-880kHz

24.238



CENTER 1.88225GHz

SPAN 10.00MHz

*RBW 30kHz

*VBW 30kHz

*SWP 50.0ms

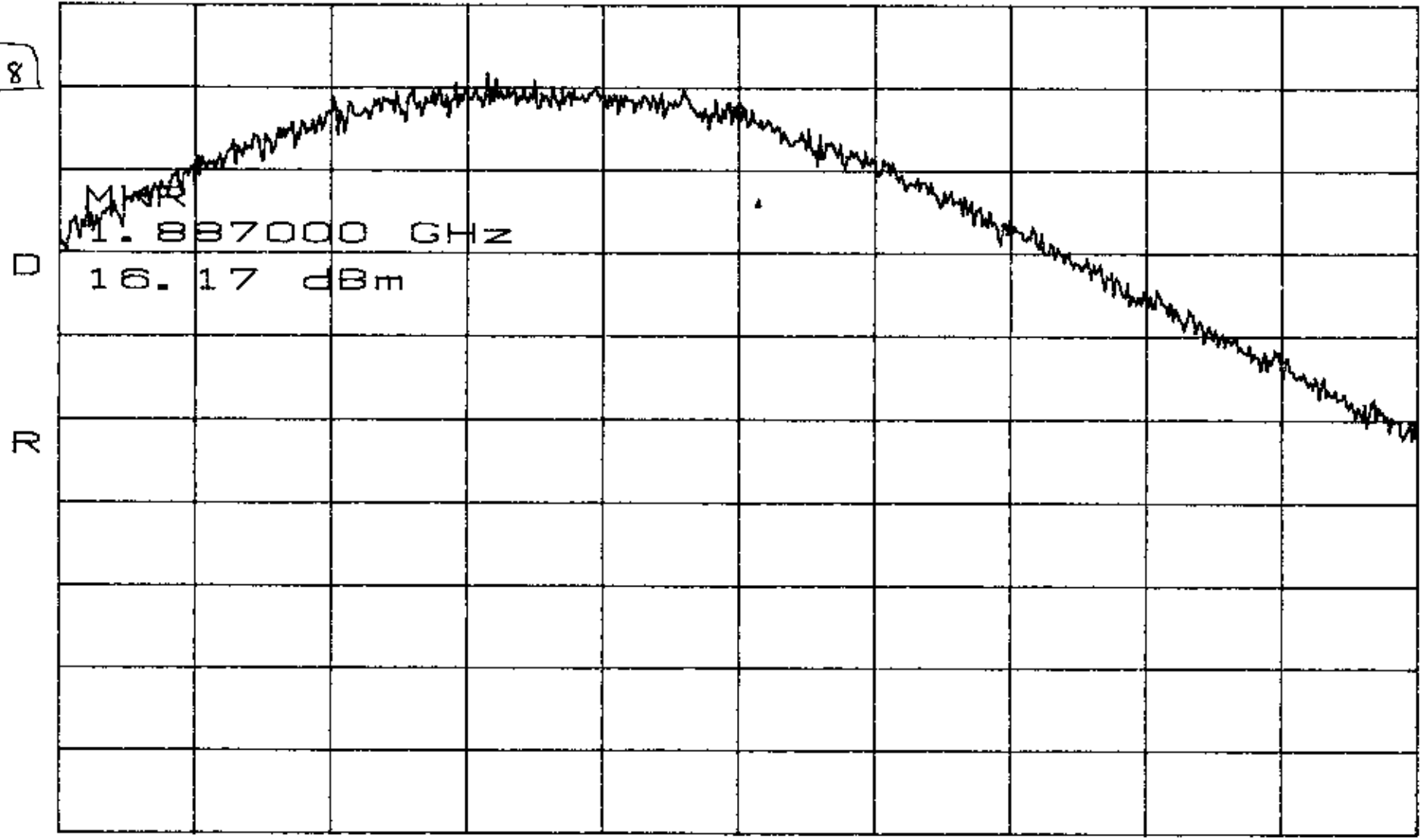
CDR 1CH. X7.1W U
S/N: FCC UNIT CH. 725 (LOW)

ABOVE FUNDAMENTAL
E/F-BAND

8/3/98

*ATTEN 10dB VAVG 10 MKR 16.17dBm
RL 30.0dBm /BP01 1.887000GHZ

24.238



CENTER 1.887000GHZ SPAN 5.000MHZ
*RBW 1.0MHZ *VBW 1.0MHZ *SWP 50.0ms

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

UL
CH. 725 (LOW)

ABOVE FUNDAMENTAL
L/F - BAND

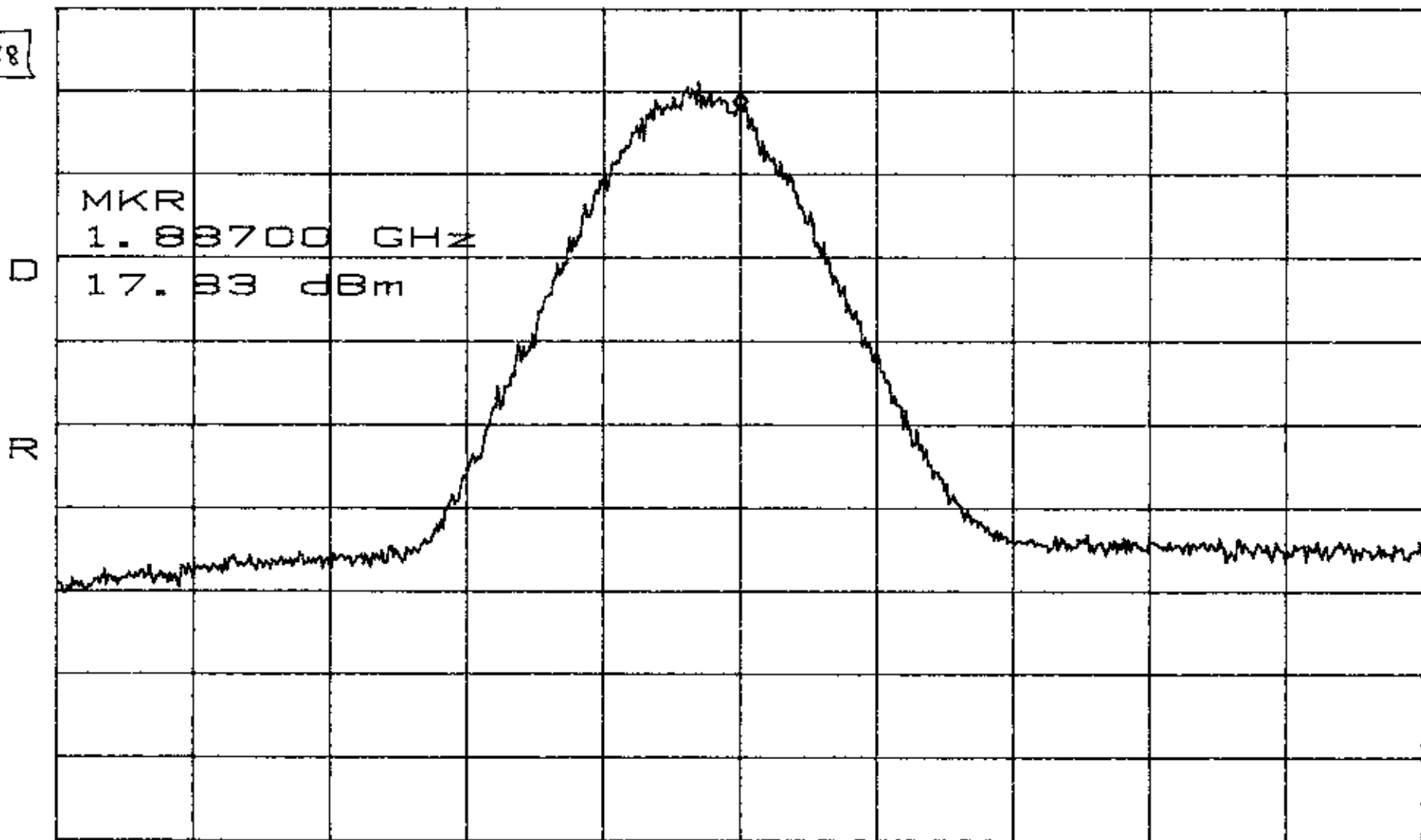
8/3/98

*ATTEN 10dB
RL 30.0dBm

VAVG 10
10dB/

MKR 17.83dBm
1.88700GHz

24.238



CENTER 1.88700GHz SPAN 20.00MHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 50.0ms

CPR 10A, x 7.1 W
S/N: FCC UNIT

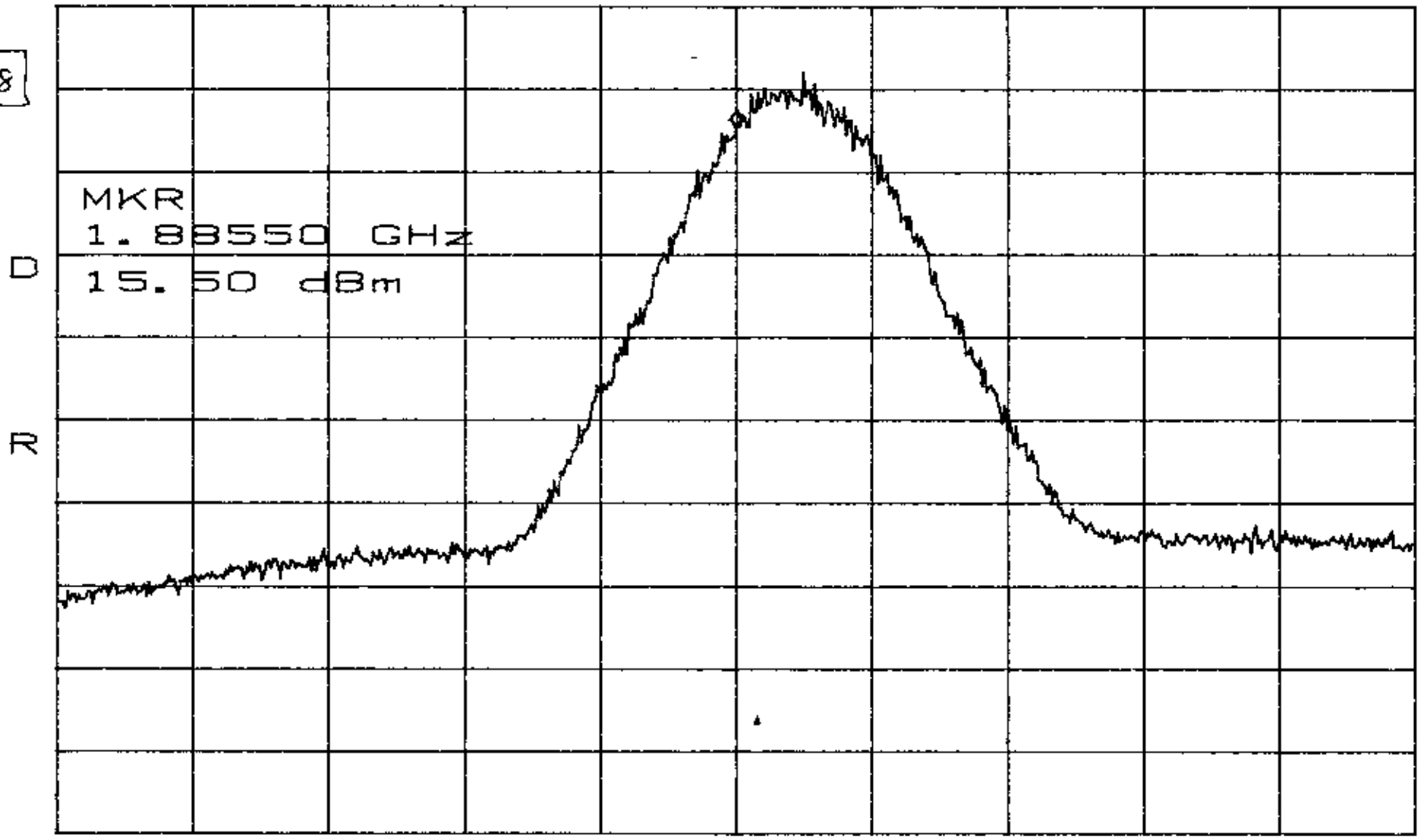
UL
CH. 725 (LOW)

BELOW FUNDAMENTAL
E/F - BAND

8/13/98

*ATTN 10dB VAVG 10 MKR 15.50dBm
RL 30.0dBm 10dB/ 1.88550GHz

24.238



CENTER 1.88550GHz SPAN 20.00MHz
*RBW 1.0MHz *VBW 1.0MHz *SWP 50.0ms

CDR 10A X 7.1 W
S/N: FCC UNIT

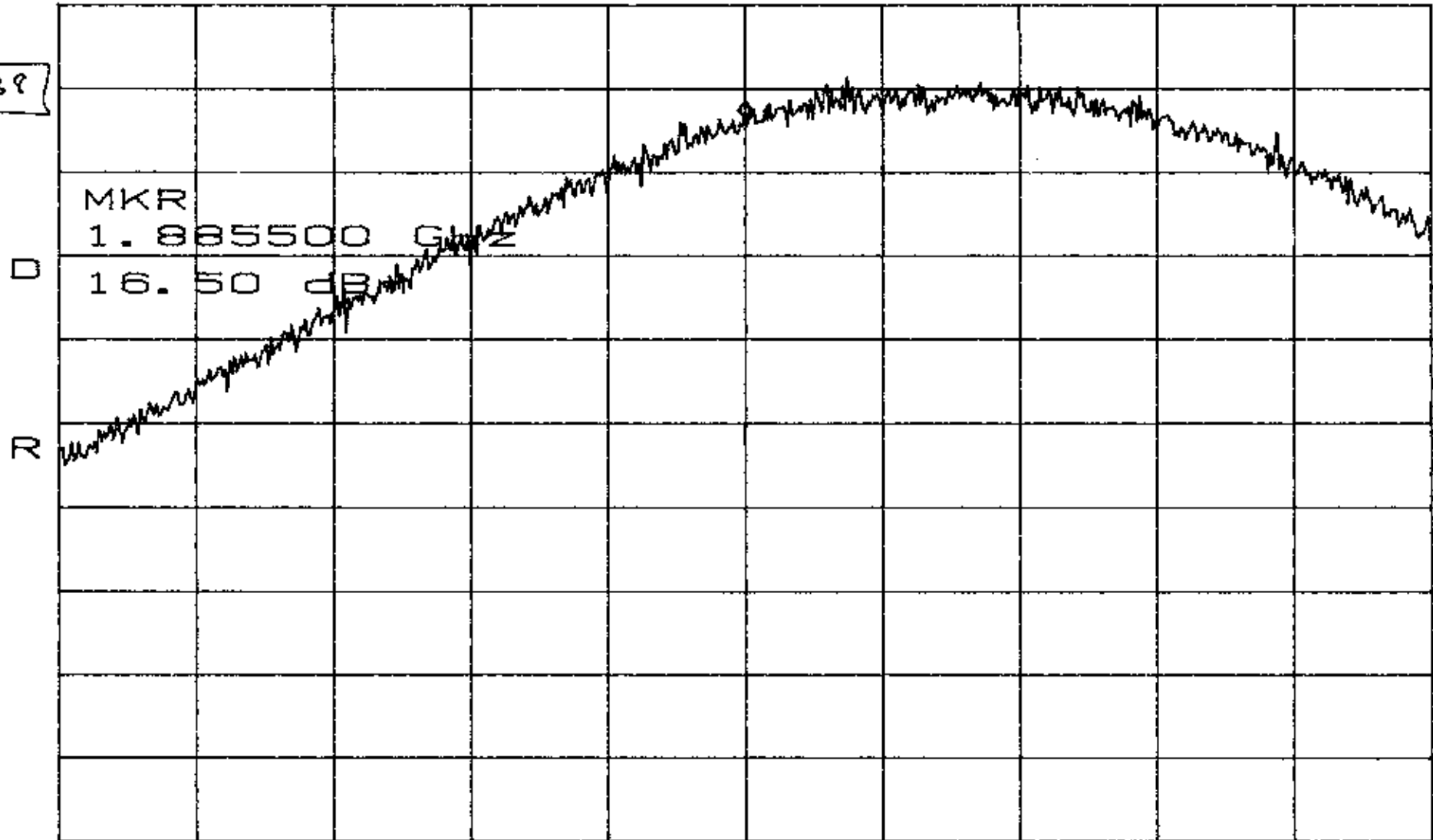
UL
(H. 725 (Low))

BELOW FUNDAMENTAL
E/F-BAND

8/3/98

*ATTEN 10dB VAVG 10 MKR 16.50dBm
RL 30.0dBm 10dB/ 1.885500GHZ

24.239



CENTER 1.885500GHZ SPAN 5.000MHZ
*RBW 1.0MHZ *VBW 1.0MHZ *SWP 50.0ms