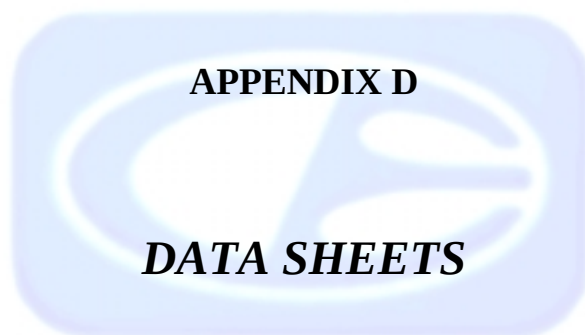




***RADIATED EMISSIONS FOR THE TRANSMITTER
DATA SHEETS***



RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.247)

COMPANY	Xircom, Inc.	DATE	6/25/01
EUT	16 BIT PCMCIA TYPE II BLUETOOTH ADAPTER	DUTY CYCLE	N/A
MODEL	CBT	PEAK TO AVG	N/A
S/N	N/A	TEST DIST.	3 METERS
TEST ENGINEER	KYLE FUJIMOTO	LAB	D

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi- Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
2402.0000	66.0	A	H	1.0	90	X	LOW	30.5	3.6	0.0	100.1			
2402.0000	64.1	A	V	1.0	180	X	LOW	30.5	3.6	0.0	98.2			
2442.0000	66.9	A	H	1.0	90	X	MID	30.6	3.5	0.0	101.0			
2442.0000	63.3	A	V	1.0	270	X	MID	30.6	3.5	0.0	97.4			
2480.0000	64.2	A	H	1.5	90	X	HIGH	30.7	3.5	0.0	98.4			
2480.0000	64.1	A	V	3.0	270	X	HIGH	30.7	3.5	0.0	98.3			

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN
 ** DELTA = SPEC LIMIT - CORRECTED READING

PAGE 1

RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.247)

COMPANY	Xircom, Inc.	DATE	6/25/01
EUT	16 BIT PCMCIA TYPE II BLUETOOTH ADAPTER	DUTY CYCLE	N/A
MODEL	CBT	PEAK TO AVG	N/A
S/N	N/A	TEST DIST.	3 METERS
TEST ENGINEER	KYLE FUJIMOTO	LAB	D

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi- Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
4804.0000	49.9	36.1 A	H	1.0	90	X	LOW	34.2	5.4	32.0	43.6	-10.4	54.0	
4804.0000	51.2	36.5 A	V	2.0	270	X	LOW	34.2	5.4	32.0	44.1	-9.9	54.0	
4884.0000	49.8	35.7 A	H	1.5	180	X	MID	34.4	5.6	32.1	43.6	-10.4	54.0	
4884.0000	52.9	35.7 A	V	2.0	180	X	MID	34.4	5.6	32.1	43.6	-10.4	54.0	
4960.0000	49.9	35.8 A	H	2.0	180	X	HIGH	34.7	5.7	32.2	44.0	-10.0	54.0	
4960.0000	54.8	36.9 A	V	2.0	90	X	HIGH	34.7	5.7	32.2	45.0	-9.0	54.0	

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

** DELTA = SPEC LIMIT - CORRECTED READING

PAGE 2

RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.247)

COMPANY	Xircom, Inc.	DATE	6/25/01
EUT	16 BIT PCMCIA TYPE II BLUETOOTH ADAPTER	DUTY CYCLE	N/A
MODEL	CBT	PEAK TO AVG	N/A
S/N	N/A	TEST DIST.	3 METERS
TEST ENGINEER	KYLE FUJIMOTO	LAB	D

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi- Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
7206.0000	46.7	35.8 A	H	1.5	90	X	LOW	38.7	8.1	32.5	50.1	-4.0	54.0	
7206.0000	43.9	32.6 A	V	1.5	180	X	LOW	38.7	8.1	32.5	46.9	-7.2	54.0	
7326.0000	47.7	34.9 A	H	1.5	180	X	MID	38.6	8.1	32.7	49.0	-5.0	54.0	
7326.0000	49.8	36.2 A	V	2.0	90	X	MID	38.6	8.1	32.7	50.2	-3.8	54.0	
7440.0000	53.0	36.8 A	H	2.0	180	X	HIGH	38.6	7.9	32.9	50.5	-3.5	54.0	
7440.0000	53.2	36.7 A	V	2.0	90	X	HIGH	38.6	7.9	32.9	50.3	-3.7	54.0	

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

** DELTA = SPEC LIMIT - CORRECTED READING

PAGE 3

RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.247)

COMPANY	Xircom, Inc.	DATE	6/25/01
EUT	16 BIT PCMCIA TYPE II BLUETOOTH ADAPTER	DUTY CYCLE	N/A
MODEL	CBT	PEAK TO AVG	N/A
S/N	N/A	TEST DIST.	3 METERS
TEST ENGINEER	KYLE FUJIMOTO	LAB	D

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi- Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
9608.0000	49.6	A	H	1.5	90	X	LOW	39.6	9.2	30.9	67.5	-12.6	80.1	NOTE: NO HARMONICS
														NOR EMISSIONS FOUND
														AFTER THE 4TH
9608.0000	45.9	A	V	1.5	180	X	LOW	39.6	9.2	30.9	63.8	-16.3	80.1	HARMONIC
9768.0000	48.7	A	H	1.5	270	X	MID	39.7	9.4	31.2	66.5	-24.5	91.0	
9768.0000	50.6	35.7 A	V	1.5	180	X	MID	39.7	9.4	31.2	53.5	-37.5	91.0	
9920.0000	53.5	37.9 A	H	1.5	90	X	HIGH	39.7	9.8	31.5	56.0	-22.4	78.4	
9920.0000	50.9	35.9 A	V	1.5	0	X	HIGH	39.7	9.8	31.5	54.0	-24.4	78.4	

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

** DELTA = SPEC LIMIT - CORRECTED READING

PAGE 4

7-5-01

2ND HARMONIC SPECTRAL PLOT

MKR 4.960 44 GHz

56.30 dB μ V

hp

REF 97.0 dB μ V ATTN 0 dB

10 dB/

DL
57.0
dB μ V

MARKER

4.960 44 GHz

56.30 dB μ V

CORR'D

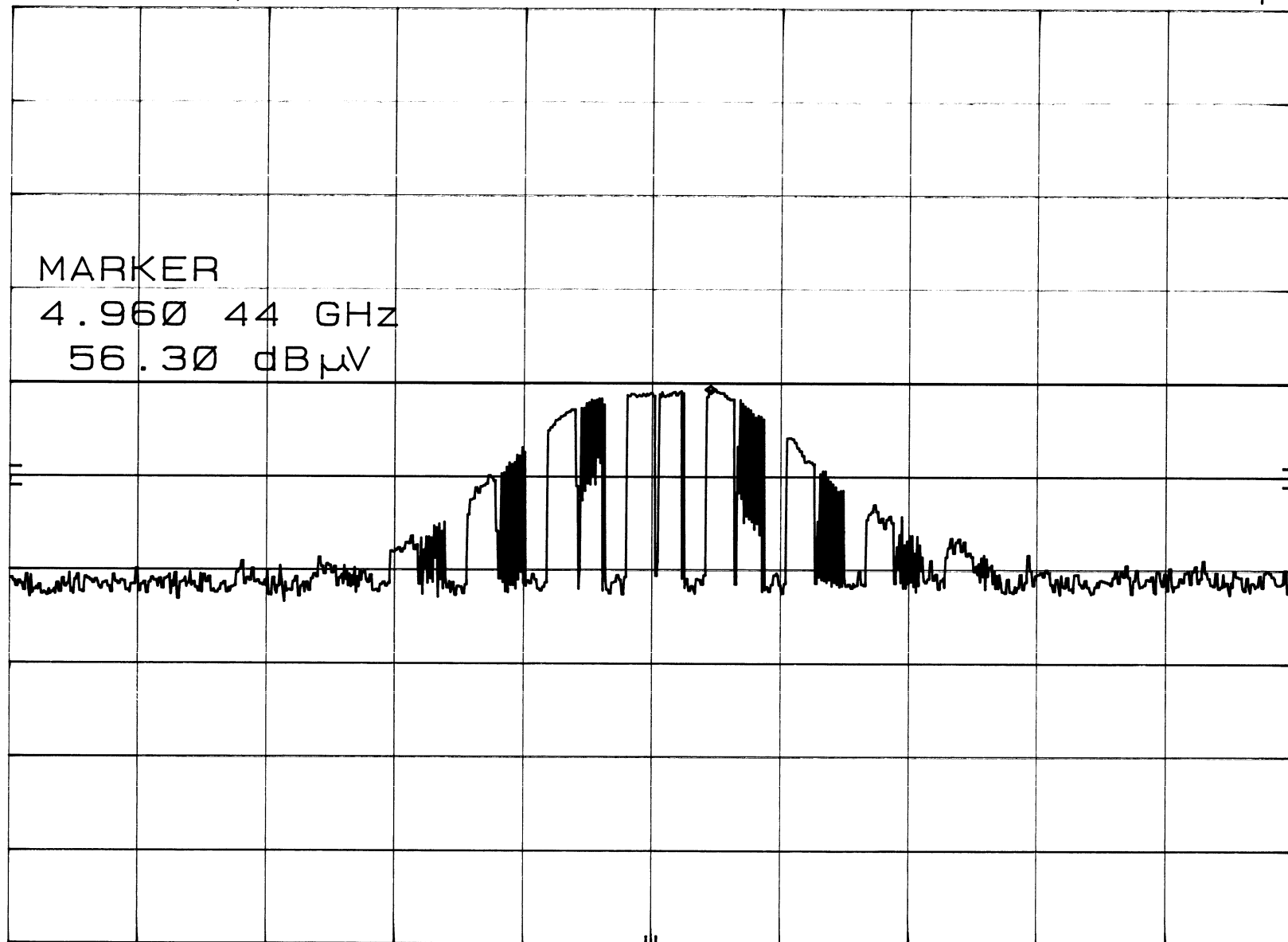
CENTER 4.960 0 GHz

RES BW 1 MHz

VBW 1 MHz

SPAN 10.0 MHz

SWP 20.0 msec



7-5-01

2ND HARMONIC AVERAGE READING

MKR 4.960 300 0 GHz

hp

REF 38.0 dB μ V ATTN 0 dB

36.28 dB μ V

LINEAR

DL
33.5
dB μ V

MARKER

4.960 300 0 GHz

36.28 dB μ V

CORR'D

CENTER 4.960 400 GHz

RES BW 1 MHz

VBW 10 Hz

SPAN 200 kHz

SWP 50.0 sec

7-5-01

3RD HARMONIC OF SPECTRAL PLOT

MKR 7.440 18 GHz

hp

REF 97.0 dB μ V ATTN 0 dB

53.60 dB μ V

10 dB/

MARKER

7.440 18 GHz

53.60 dB μ V

DL
53.8
dB μ V

CORR'D

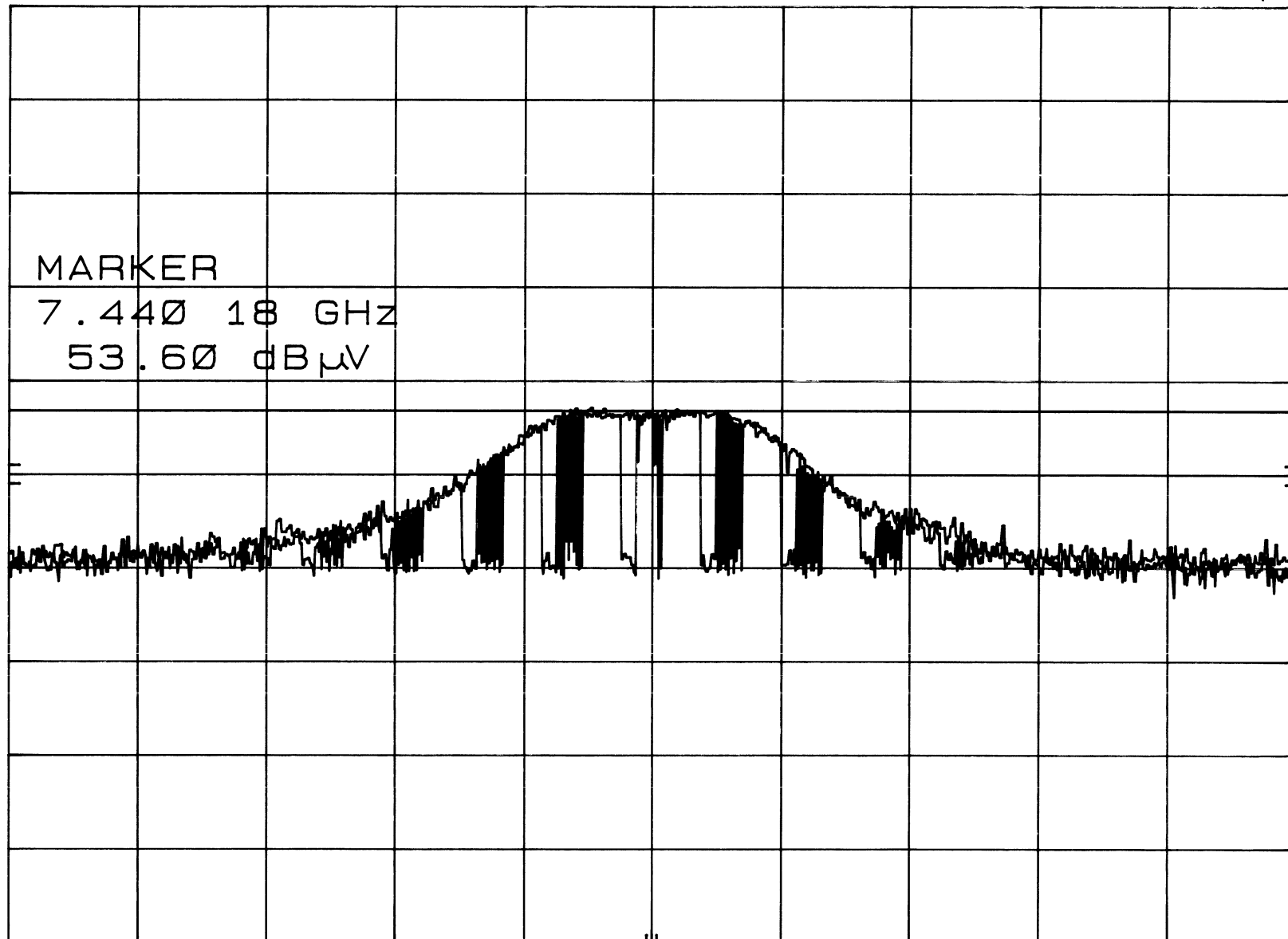
CENTER 7.440 0 GHz

RES BW 1 MHz

VBW 1 MHz

SPAN 10.0 MHz

SWP 20.0 msec



7-5-01

3RD HARMONIC AVERAGE READING

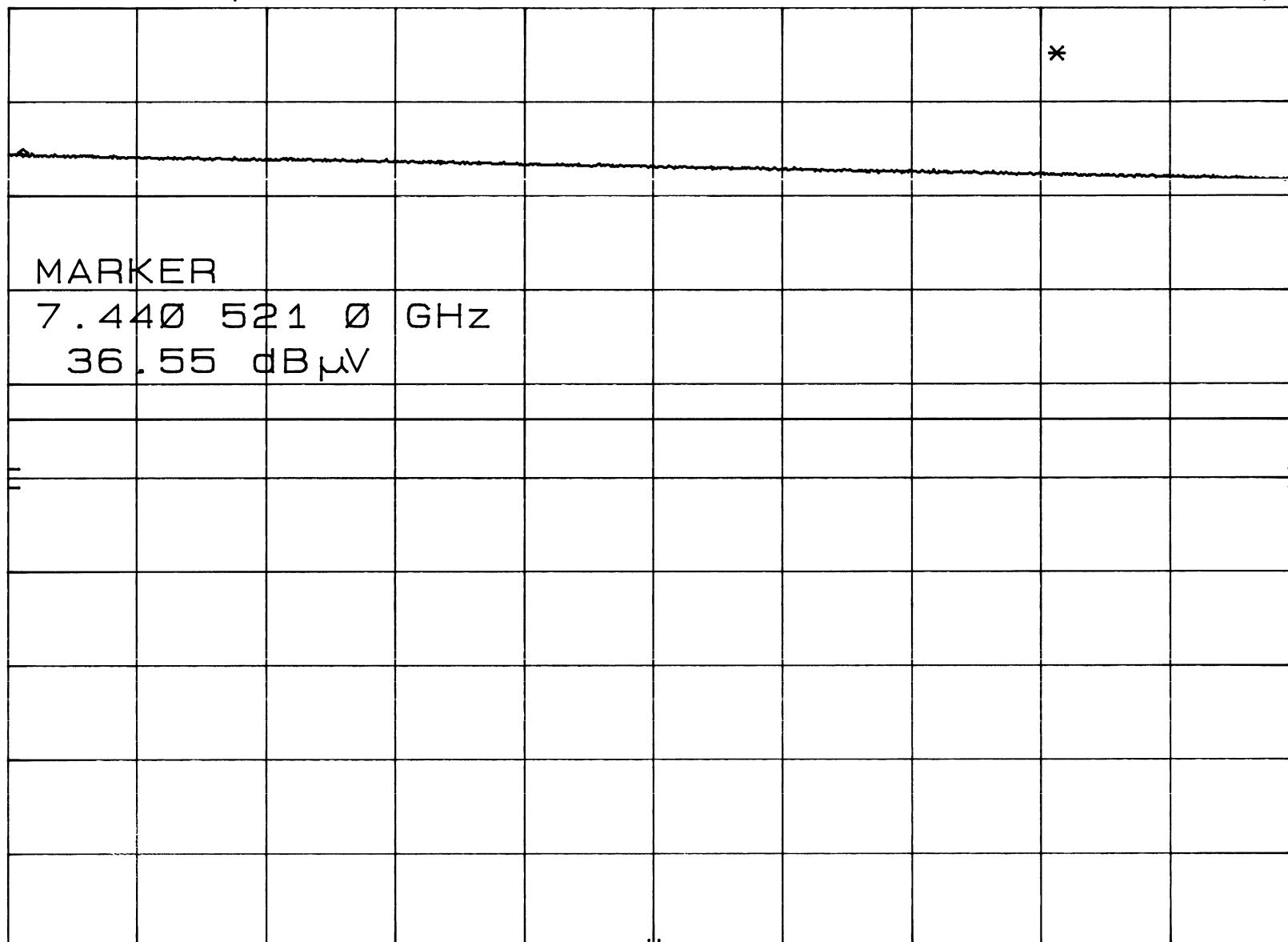
MKR 7.440 521 0 GHz

hp

REF 38.0 dB μ V ATTN 0 dB

36.55 dB μ V

LINEAR



DL
32.9
dB μ V

CORR'D

CENTER 7.440 574 GHz

RES BW 1 MHz

VBW 10 Hz

SPAN 110 kHz

SWP 50.0 sec

Test location: Compatible Electronics

Customer : XIRCOM, INC.

Date : 7/ 5/2001

Manufacturer : XIRCOM, INC.

Time : 13.11

EUT name : 16 BIT PCMCIA TYPE II

BLUETOOTH ADAPTER

Model: CBT

Specification: Fcc_B Test distance: 3.0 mtrs

Lab: D

Distance correction factor($20 \cdot \log(\text{test}/\text{spec})$) : 0.00

Test Mode :

HORIZONTAL POLARIZATION 30 MHz TO 1000 MHz

TEMPERATURE 78 DEGREES F., RELATIVE HUMIDITY 35%

TESTED BY: KYLE FUJIMOTO

Pol	Freq MHz	Rdng dBuV	Cable loss dB	Ant factor dB	Amp gain dB	Cor'd rdg = R dBuV	limit = L dBuV/m	Delta R-L dB
1H	42.99	46.70	1.03	12.28	39.20	20.81	40.00	-19.19
2H	66.10	49.00	1.26	8.78	38.96	20.08	40.00	-19.92
3H	72.86	55.80	1.30	8.72	38.74	27.08	40.00	-12.92
4H	116.91	45.20	1.64	10.07	39.04	17.87	43.50	-25.63
5H	209.03	41.60	2.20	15.09	38.93	19.96	43.50	-23.54
6H	307.29	48.20	2.83	13.25	38.90	25.38	46.00	-20.62
7H	319.61	48.10	2.88	13.73	38.90	25.81	46.00	-20.19
8H	325.76	47.50	2.90	13.98	38.90	25.48	46.00	-20.52
9H	332.65	53.70	2.93	14.25	38.90	31.98	46.00	-14.02
10H	339.85	41.30	2.96	14.53	38.90	19.89	46.00	-26.11
11H	344.17	51.50	2.98	14.70	38.90	30.28	46.00	-15.72
12H	360.97	40.50	3.07	15.37	38.83	20.10	46.00	-25.90
13H	368.74	47.60	3.11	15.68	38.79	27.60	46.00	-18.40
14H	373.46	47.50	3.14	15.86	38.76	27.74	46.00	-18.26
15H	381.05	47.80	3.19	16.16	38.71	28.43	46.00	-17.57
16H	393.29	50.10	3.26	16.64	38.64	31.36	46.00	-14.64
17H	417.88	51.70	3.26	16.88	38.56	33.28	46.00	-12.72
18H	417.91	52.40	3.26	16.88	38.56	33.98	46.00	-12.02
19H	462.99	53.50	3.28	16.80	38.55	35.02	46.00	-10.98
20H	509.70	50.00	3.58	16.69	38.64	31.63	46.00	-14.37
21H	531.30	41.40	3.75	16.60	38.51	23.24	46.00	-22.76
22H	543.30	45.90	3.85	16.55	38.44	27.86	46.00	-18.14
23H	597.83	50.00	3.80	16.33	38.78	31.35	46.00	-14.65
24H	614.51	39.10	3.92	16.74	38.71	21.05	46.00	-24.95
25H	639.06	42.30	4.11	17.46	38.57	25.31	46.00	-20.69
26H	675.80	39.20	4.30	18.53	38.55	23.48	46.00	-22.52
27H	854.45	42.30	4.73	21.78	37.98	30.83	46.00	-15.17
28H	897.82	44.40	4.99	22.11	37.81	33.69	46.00	-12.31

Test location: Compatible Electronics

Customer : XIRCOM, INC.

Date : 7/ 5/2001

Manufacturer : XIRCOM, INC.

Time : 13.52

EUT name : 16 BIT PCMCIA TYPE II

BLUETOOTH ADAPTER

Model: CBT

Specification: Fcc_B Test distance: 3.0 mtrs

Lab: D

Distance correction factor($20 \cdot \log(\text{test}/\text{spec})$) : 0.00

Test Mode :

VERTICAL POLARIZATION 30 MHz TO 1000 MHz

TEMPERATURE 78 DEGREES F., RELATIVE HUMIDITY 34%

TESTED BY: KYLE FUJIMOTO

Pol	Freq MHz	Rdng dBuV	Cable loss dB	Ant factor dB	Amp gain dB	Cor'd rdg = R dBuV	limit = L dBuV/m	Delta R-L dB
1V	48.32	49.40	1.08	11.23	39.20	22.51	40.00	-17.49
2V	49.23	59.30	1.09	11.12	39.20	32.31	40.00	-7.69
3V	75.63	54.40	1.30	8.51	38.69	25.52	40.00	-14.48
4V	130.56	45.80	1.77	12.01	39.11	20.47	43.50	-23.03
5V	144.10	47.90	1.93	12.80	38.89	23.74	43.50	-19.76
6V	152.07	56.70	2.00	13.08	38.80	32.98	43.50	-10.52
7V	164.91	53.00	2.00	13.99	38.80	30.19	43.50	-13.31
8V	172.89	51.60	2.00	14.65	38.80	29.45	43.50	-14.05
9V	184.45	46.00	2.08	14.83	38.88	24.03	43.50	-19.47
10V	195.72	50.40	2.17	14.81	38.97	28.41	43.50	-15.09
11V	261.00	51.40	2.63	17.27	38.89	32.41	46.00	-13.59
12V	319.61	51.90	2.88	13.73	38.90	29.61	46.00	-16.39
13V	331.92	51.00	2.93	14.22	38.90	29.25	46.00	-16.75
14V	344.18	55.10	2.98	14.71	38.90	33.88	46.00	-12.12
15V	356.46	46.40	3.04	15.19	38.86	25.77	46.00	-20.23
16V	368.71	50.50	3.11	15.67	38.79	30.50	46.00	-15.50
17V	373.48	52.80	3.14	15.86	38.76	33.04	46.00	-12.96
18V	391.44	59.40	3.25	16.57	38.65	40.57	46.00	-5.43
19V	393.33	50.90	3.26	16.65	38.64	32.17	46.00	-13.83
20V	399.19	52.40	3.30	16.88	38.60	33.97	46.00	-12.03
21V	417.90	44.70	3.26	16.88	38.56	26.28	46.00	-19.72
22V	456.67	60.10	3.24	16.81	38.53	41.62	46.00	-4.38
23V	498.90	48.60	3.49	16.73	38.70	30.13	46.00	-15.87
24V	596.07	49.40	3.81	16.34	38.77	30.78	46.00	-15.22

Test location: Compatible Electronics

Customer : XIRCOM, INC.

Date : 6/25/2001

Manufacturer : XIRCOM, INC.

Time : 14.46

EUT name : 16 BIT PCMCIA TYPE II

BLUETOOTH ADAPTER

Model: CBT

Specification: Fcc_B Test distance: 3.0 mtrs

Lab: D

Distance correction factor($20 \cdot \log(\text{test}/\text{spec})$) : 0.00

Test Mode :

VERTICAL AND HORIZONTAL POLARIZATION 10 kHz TO 30 MHz

TEMPERATURE 78 DEGREES F., RELATIVE HUMIDITY 34%

TESTED BY: KYLE FUJIMOTO

NO EMISSIONS FOUND FROM 10 kHz TO 30 MHz IN EITHER POLARIZATION
FOR THE EUT

***20 dB BANDWIDTH
DATA SHEETS***



7-5-01

-20 dB BANDWIDTH OF LOW CHANNEL

MKR Δ 848 KHz

hp

REF 0.0 dBm

ATTEN 10 dB

-0.50 dB

10 dB/

DL
-40.0
dBm

MARKER Δ
848 KHz
-0.50 dB

CORR'D

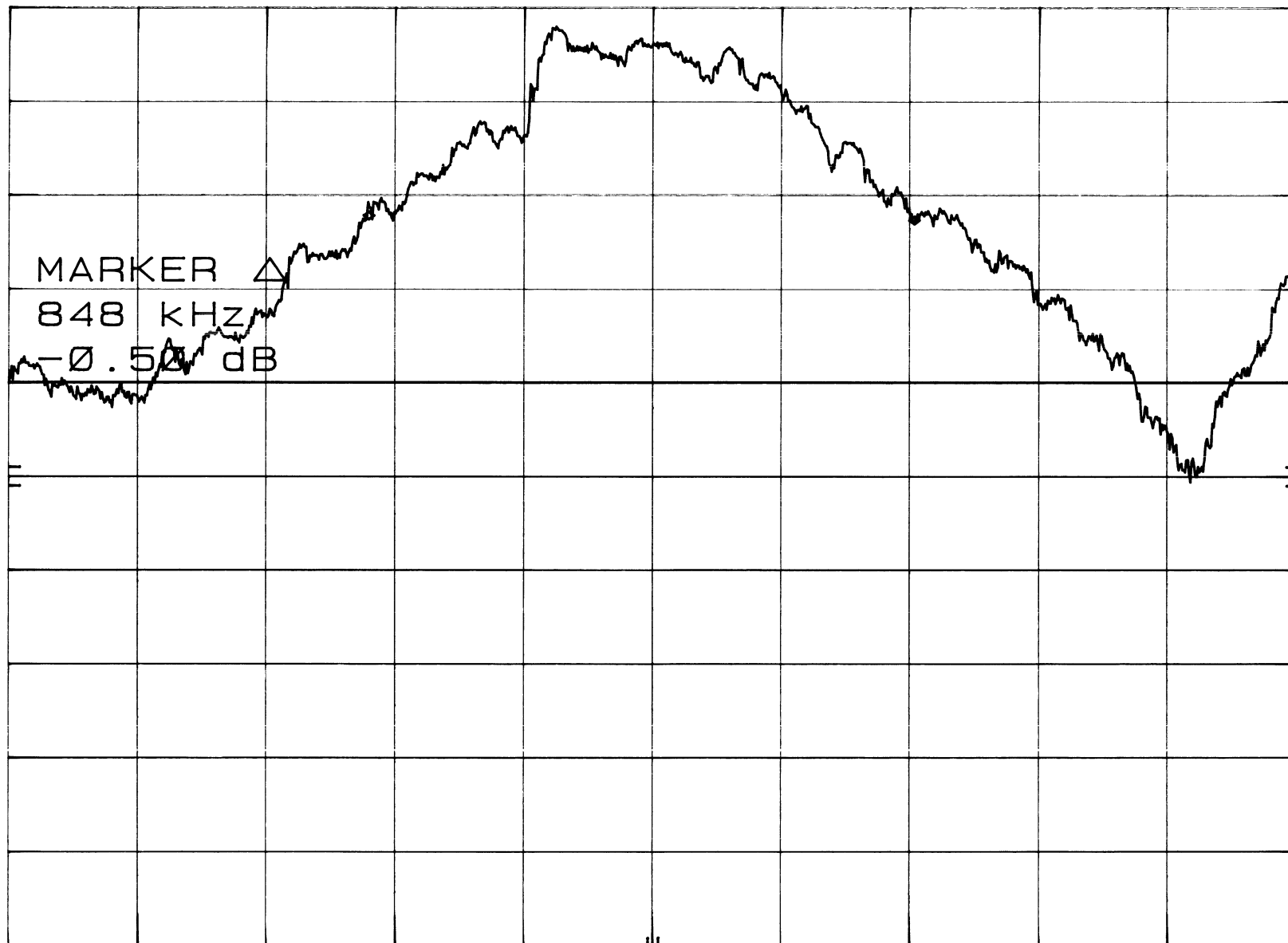
CENTER 2.402 00 GHz

RES BW 30 KHz

VBW 30 KHz

SPAN 2.00 MHz

SWP 20.0 msec



7-5-01

-20 dB BANDWIDTH OF MIDDLE CHANNEL

MKR Δ 856 kHz

hp

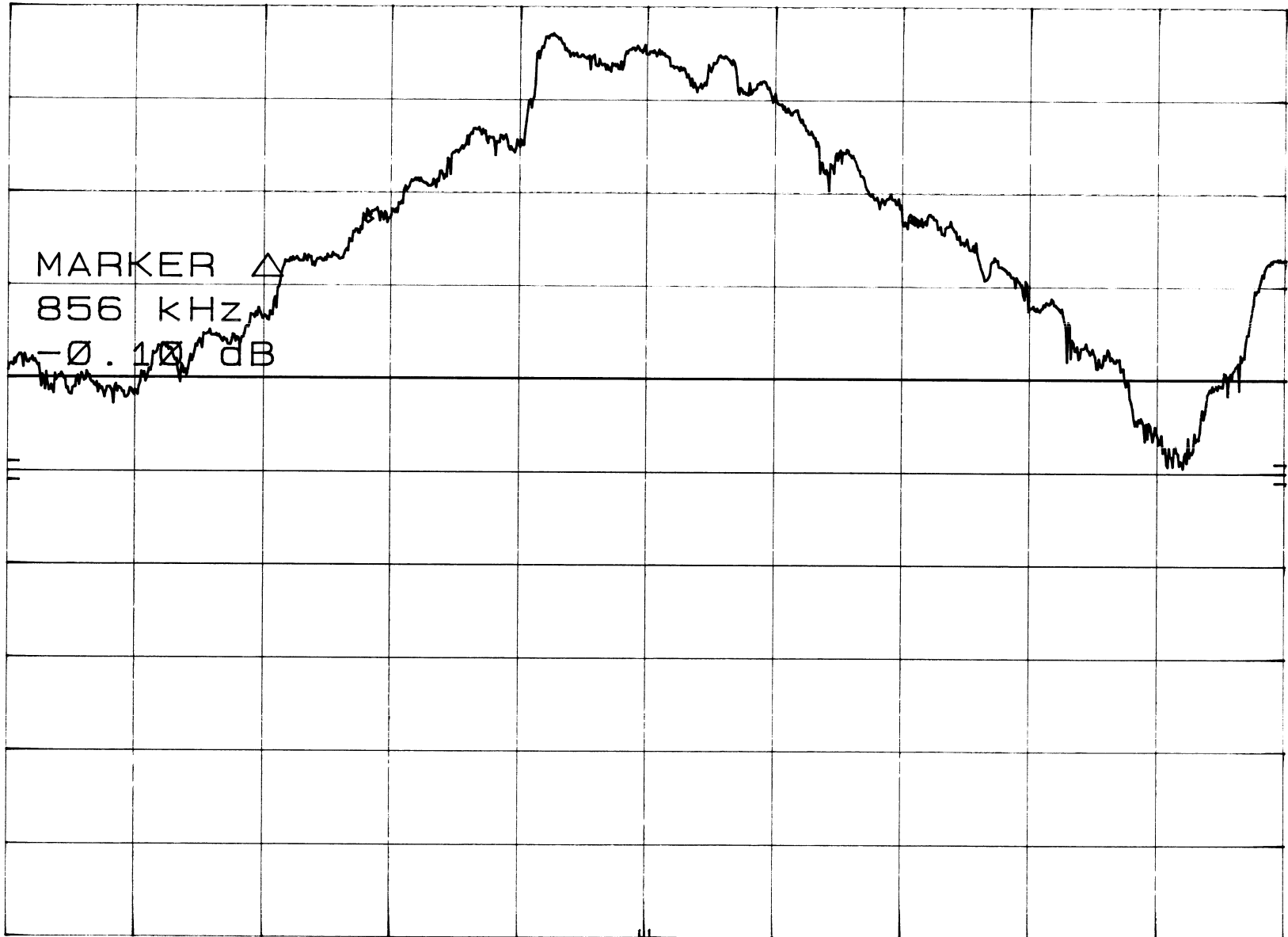
REF 0.0 dBm

ATTEN 10 dB

-0.10 dB

10 dB/

DL
-40.0
dBm



CENTER 2.442 00 GHz

RES BW 30 kHz

VBW 30 kHz

SPAN 2.000 MHz
SWP 20.0 msec

7-5-01

-20 dB BANDWIDTH OF HIGH CHANNEL

MKR Δ 874 kHz

hp

REF 0.0 dBm

ATTEN 10 dB

-0.10 dB

10 dB/

DL
-40.0
dBm

MARKER Δ
874 kHz
-0.10 dB

CORR'D

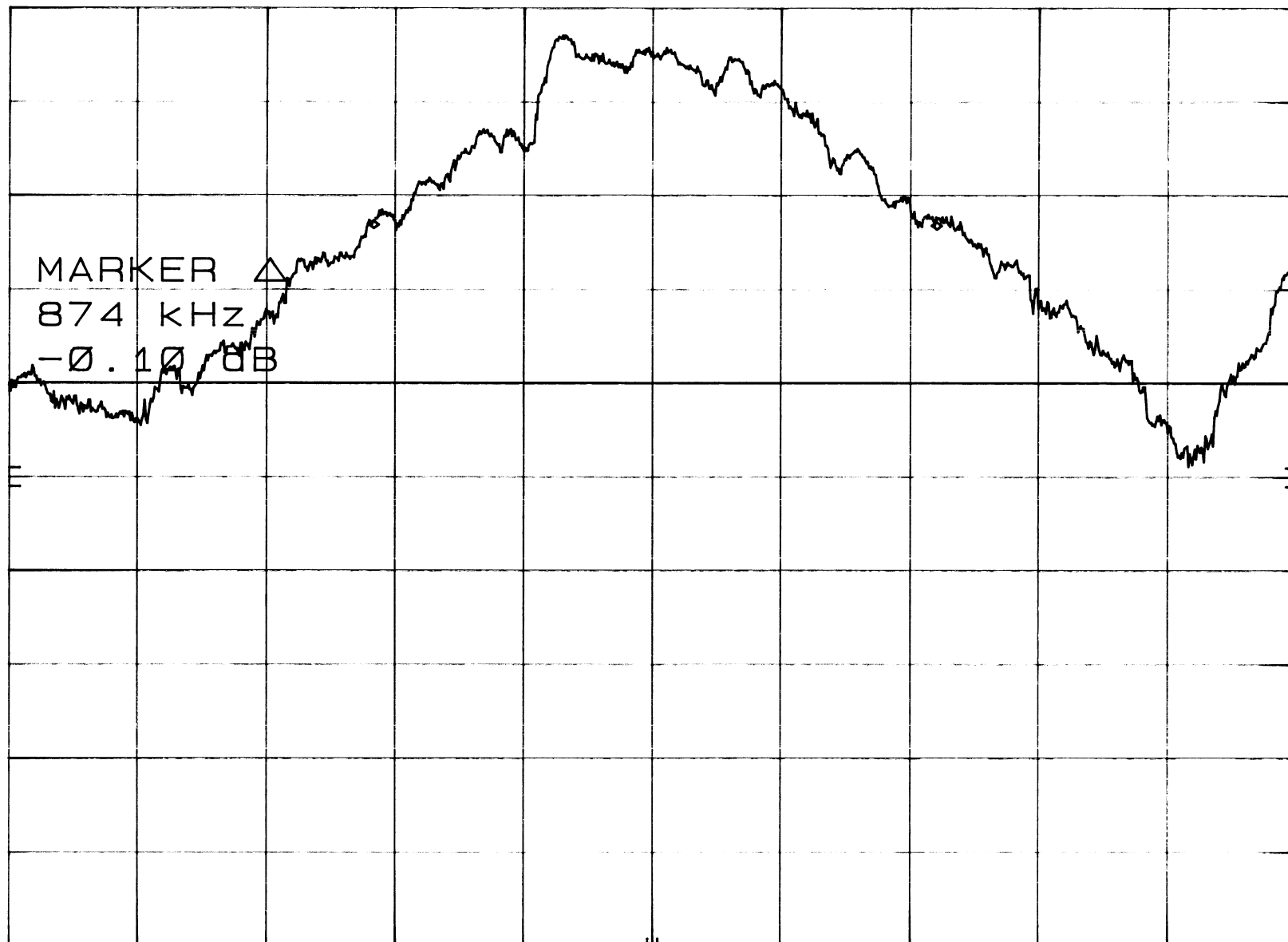
CENTER 2.480 00 GHz

RES BW 30 kHz

VBW 30 kHz

SPAN 2.00 MHz

SWP 20.0 msec



***PEAK OUTPUT POWER
DATA SHEETS***



7-6-01

POWER OUTPUT OF CHANNEL 1

MKR 2.401 96 GHz

hp

REF 10.0 dBm

ATTEN 30 dB

3.80 dBm

10 dB/

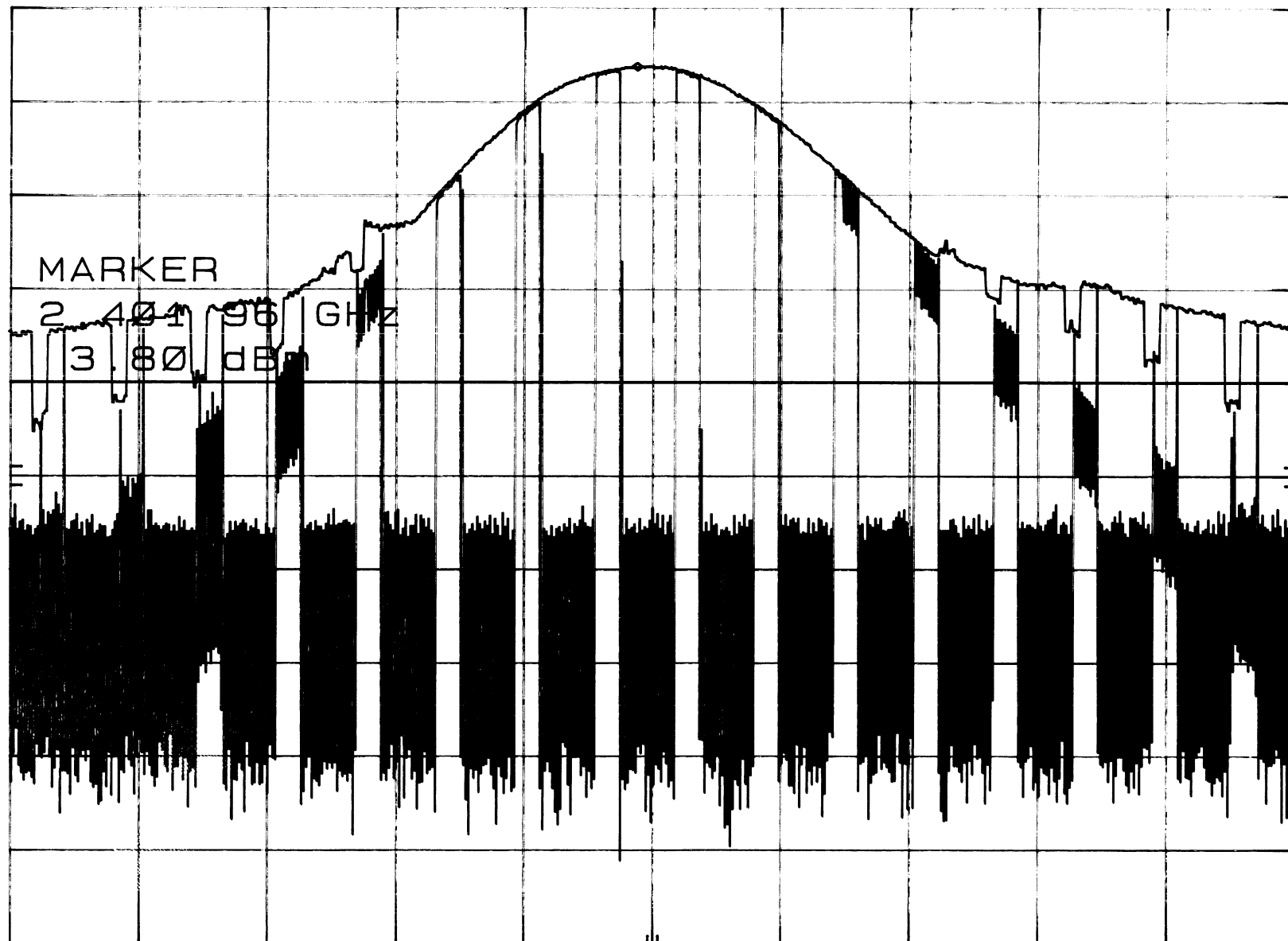
DL
-30.0
dBm

MARKER

2.401 96 GHz

3.80 dBm

CORR'D



CENTER 2.402 2 GHz

RES BW 3 MHz

VBW 3 MHz

SPAN 20.0 MHz

SWP 20.0 msec

7-6-01

POWER OUTPUT OF MID CHANNEL

MKR 2.442 12 GHz

hp

REF 10.0 dBm

ATTEN 30 dB

2.70 dBm

10 dB/

DL
-30.0
dBm

MARKER

2.442 12 GHz

2.70 dBm

CORR'D

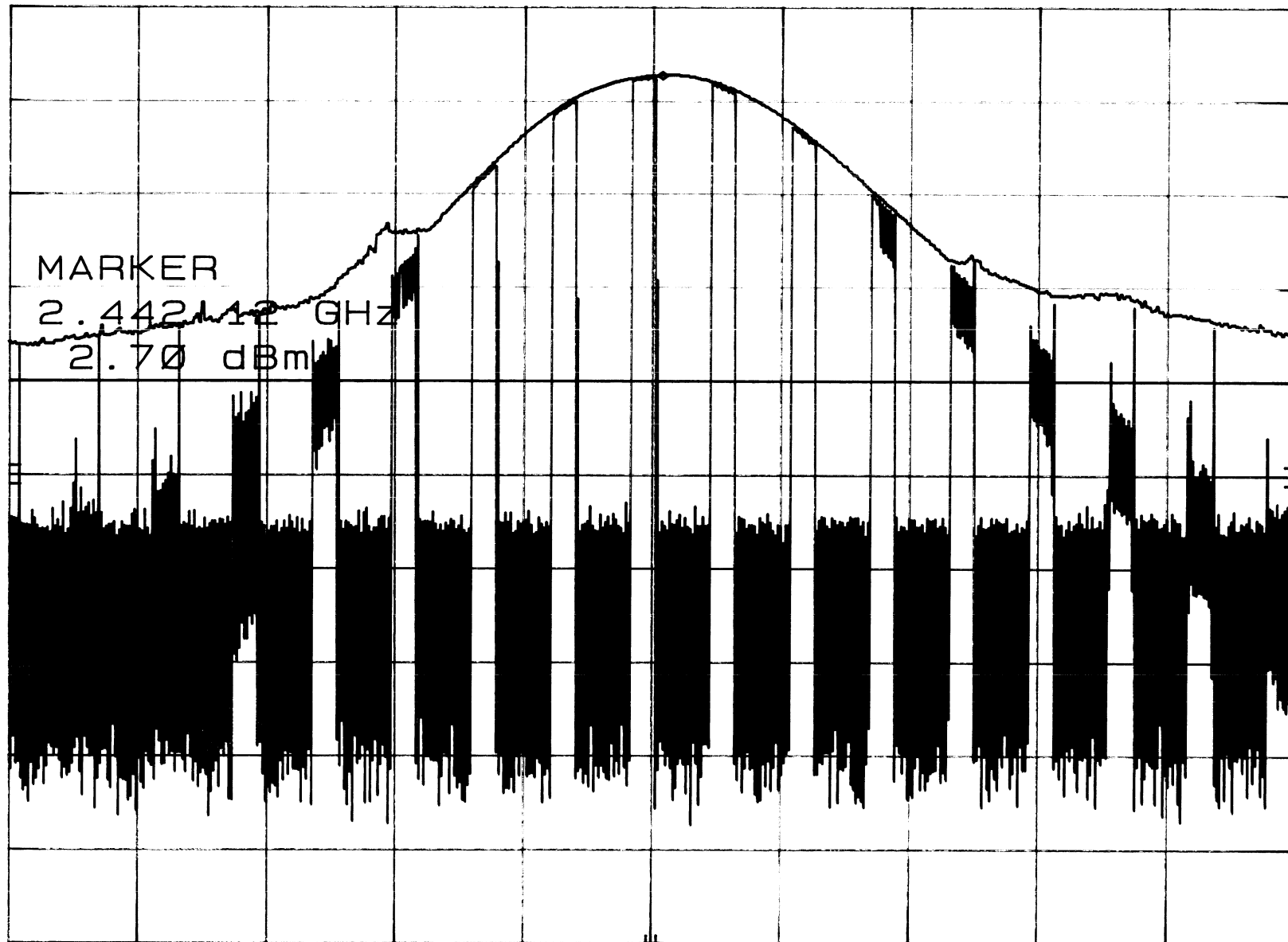
CENTER 2.442 0 GHz

RES BW 3 MHz

VBW 3 MHz

SPAN 20.0 MHz

SWP 20.0 msec



7-6-01

POWER OUTPUT OF HIGH CHANNEL

MKR 2.480 40 GHz

hp

REF 10.0 dBm ATTEN 30 dB

2.30 dBm

10 dB/

DL
-30.0
dBm

MARKER

2.480 40 GHz

2.30 dBm

CORR'D

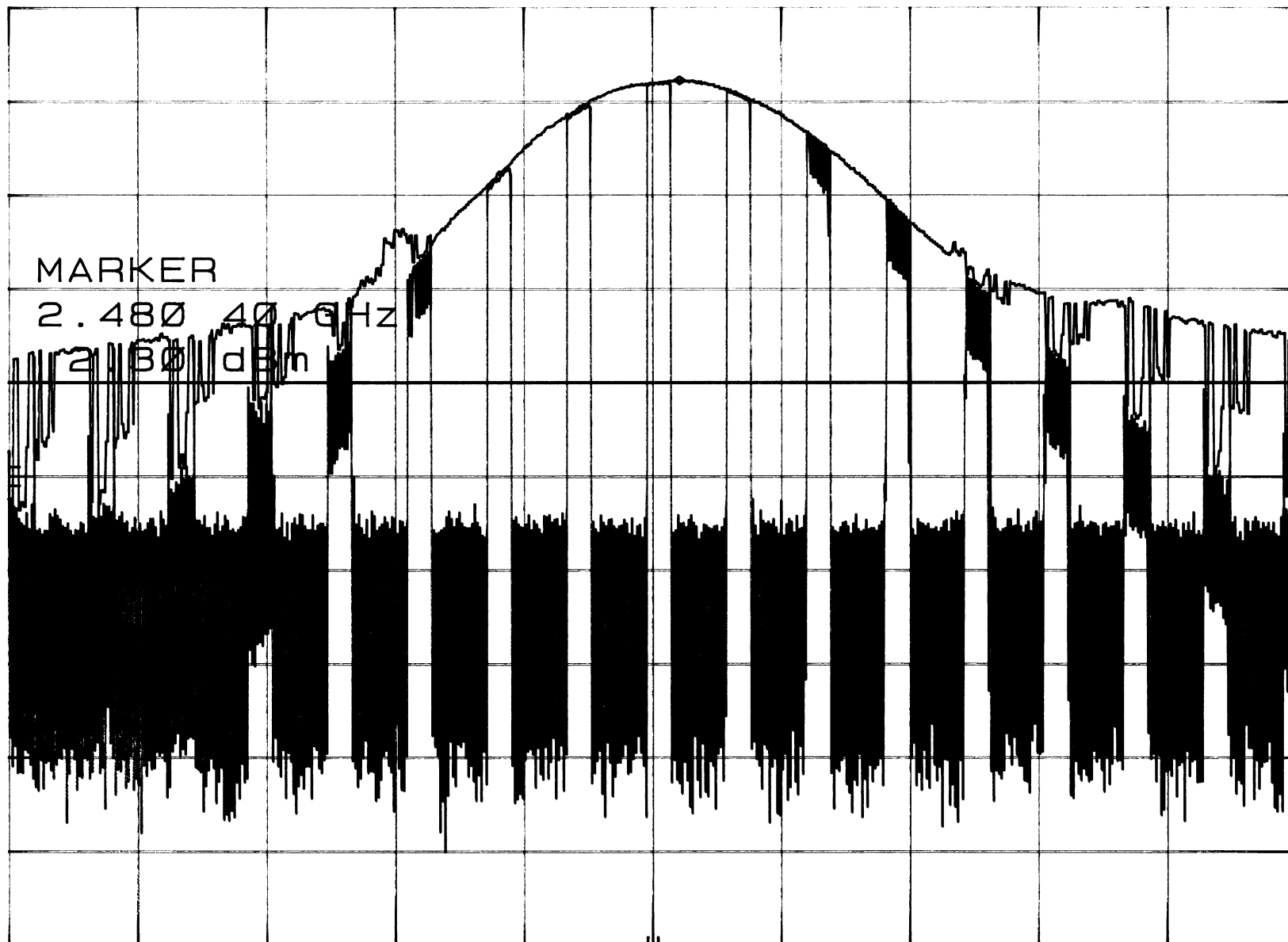
CENTER 2.480 0 GHz

RES BW 3 MHz

VBW 3 MHz

SPAN 20.0 MHz

SWP 20.0 msec



***RF ANTENNA CONDUCTED
DATA SHEETS***



7-5-01

RF ANT. COND. TEST OF LOW CHANNEL 2MHZ-2GHZ MKR 1.800 GHz

hp

REF 0.0 dBm

ATTEN 20 dB

-55.60 dBm

10 dB/

MARKER

1.800 GHz

-55.60 dBm

DL
-21.8
dBm

CORR'D

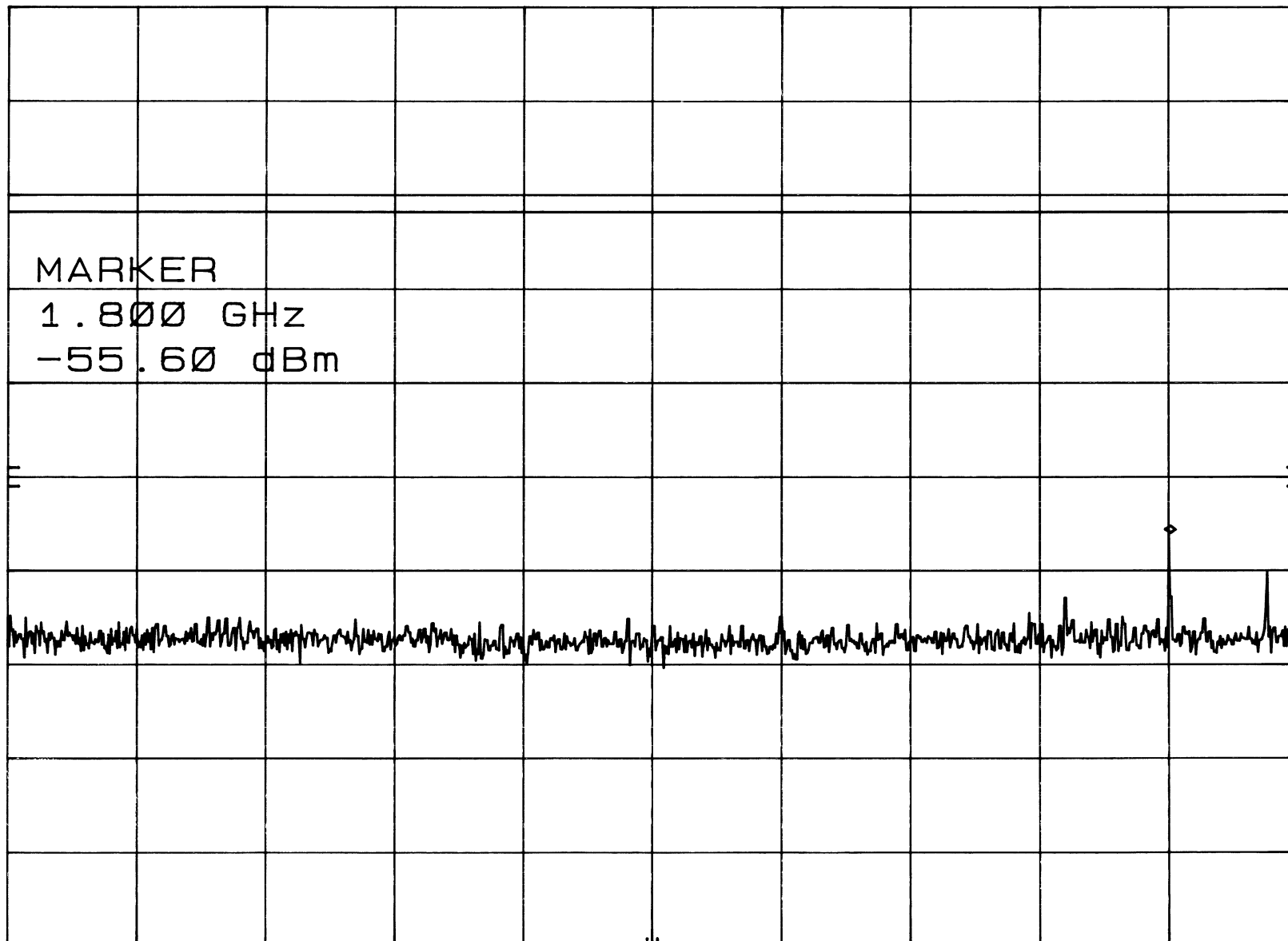
START 2 MHz

RES BW 100 kHz

VBW 300 kHz

STOP 2.00 GHz

SWP 599 msec



7-5-01

RF ANT. COND. TEST OF LOW CHANNEL 2GHZ-5GHZ MKR 2.402 GHz
REF 0.0 dBm ATTEN 20 dB -1.80 dBm

hp

10 dB/

DL
-21.8
dBm

CORR'D

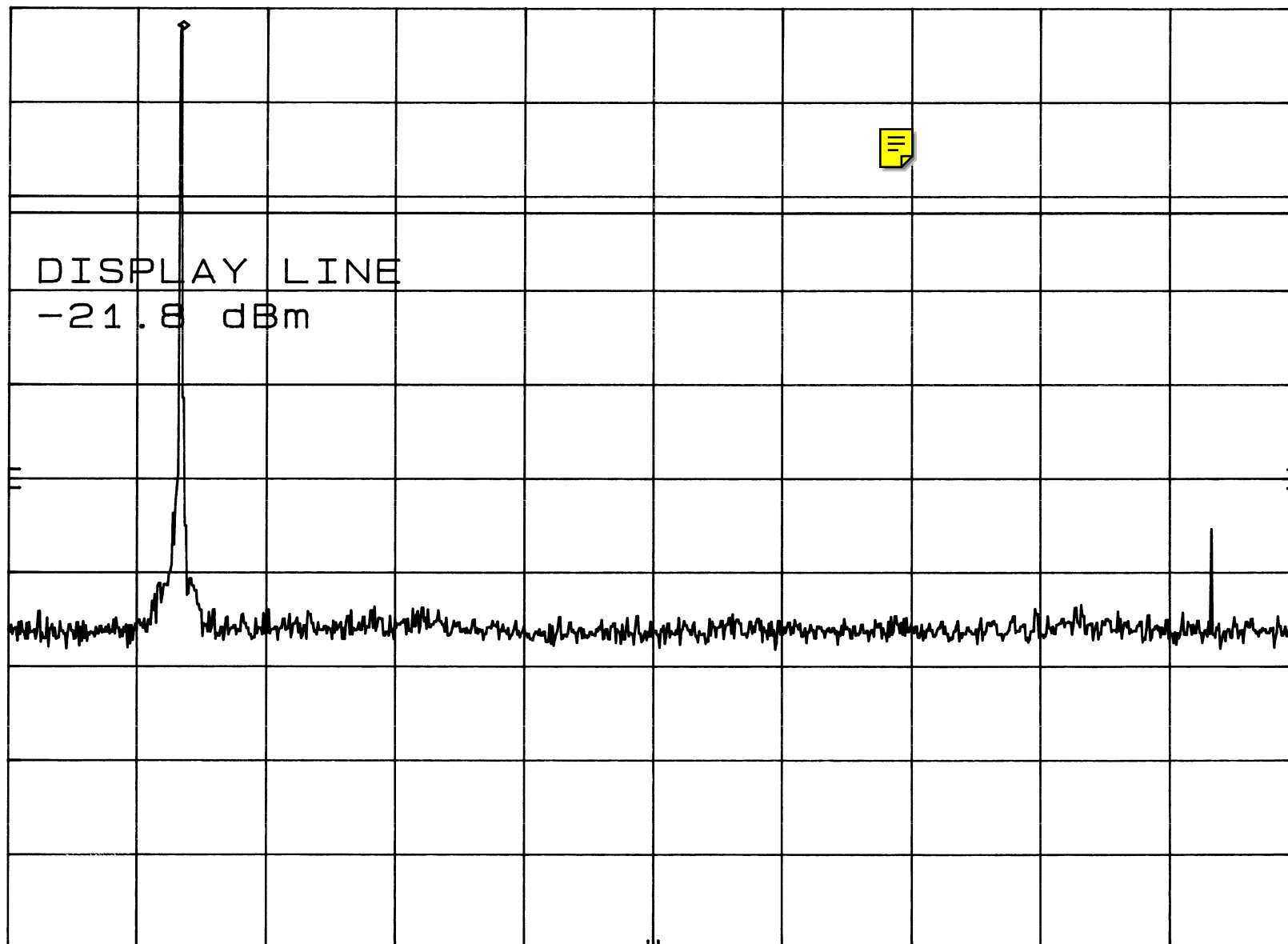
START 2.00 GHz

RES BW 100 kHz

VBW 300 kHz

STOP 5.00 GHz

SWP 900 msec



7-5-01

RF ANT. COND. TEST OF LOW CHANNEL 5GHZ-10GHZ MKR 7.635 GHz
REF 10.0 dBm ATTEN 30 dB -45.80 dBm

hp

10 dB/

MARKER

DL
-20.8
dBm

7.635 GHz
-45.80 dBm

CORR'D

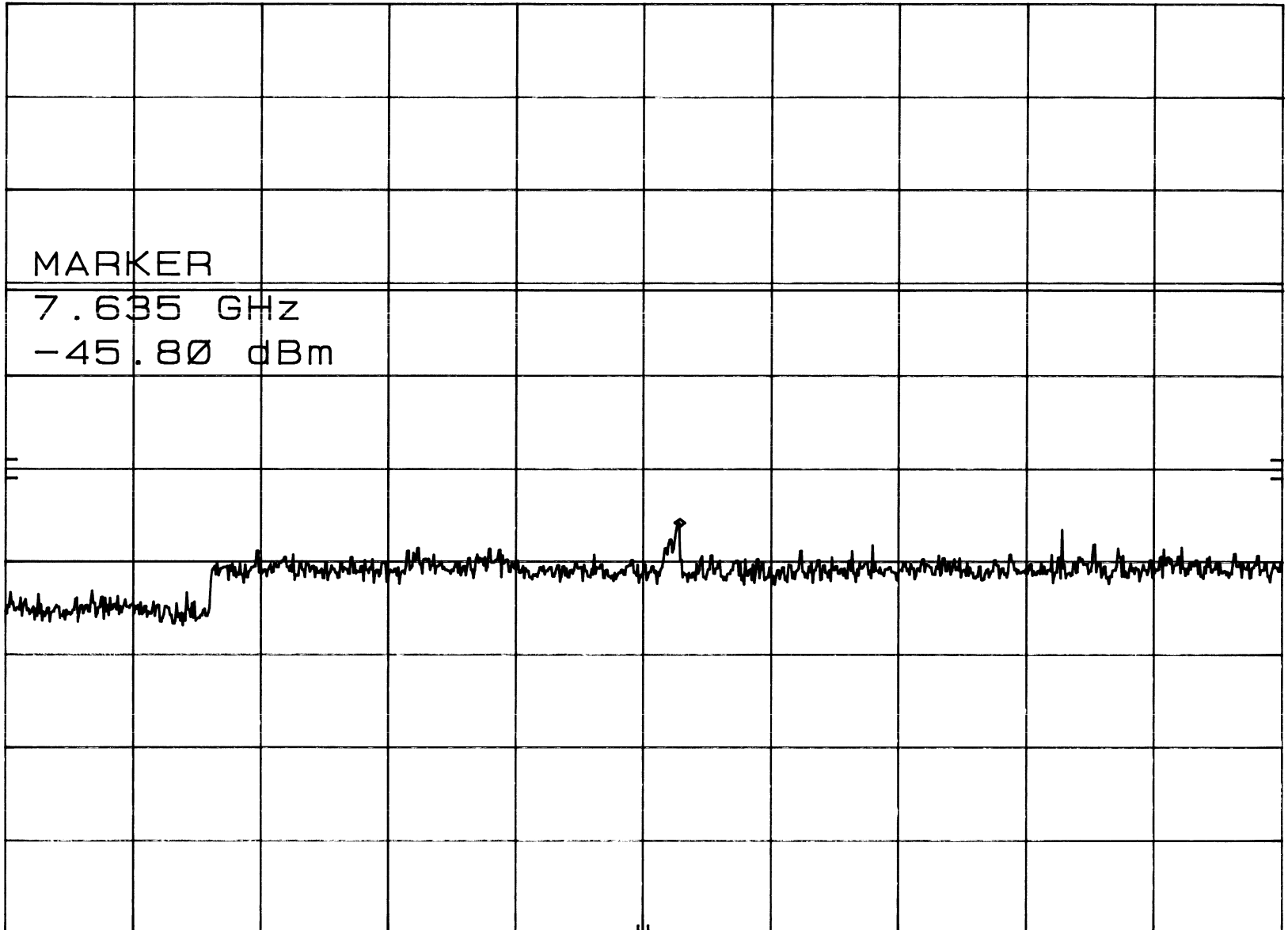
START 5.00 GHz

RES BW 100 kHz

VBW 300 kHz

STOP 10.00 GHz

SWP 1.50 sec



7-5-01

RF ANT. COND. TEST OF LOW CHANNEL 10-20GHz

MKR 19.65 GHz

hp

REF 10.0 dBm

ATTEN 30 dB

-41.10 dBm

10 dB/

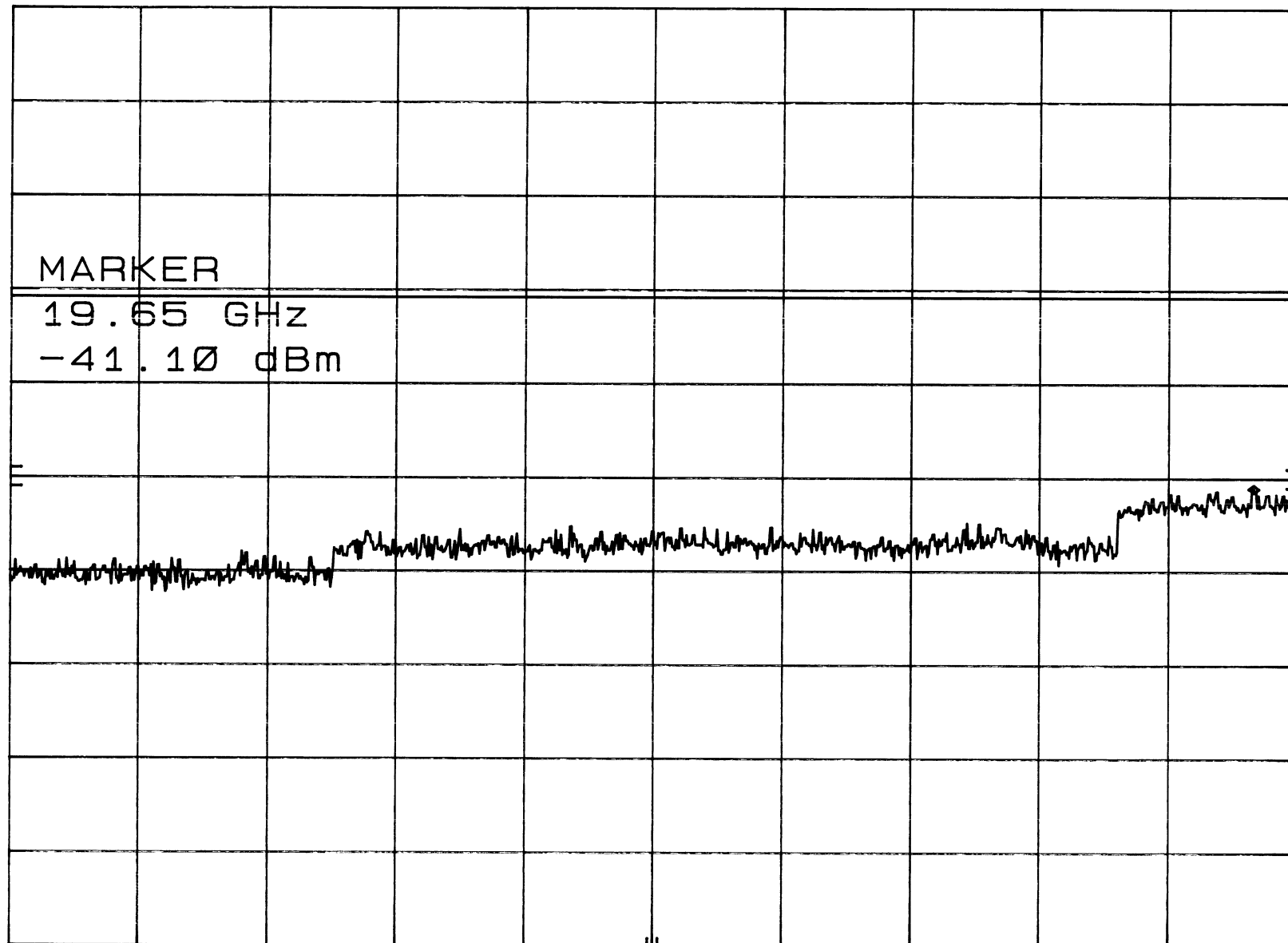
MARKER

DL

-20.8
dBm

19.65 GHz

-41.10 dBm



START 10.0 GHz

RES BW 100 kHz

VBW 300 kHz

STOP 20.0 GHz

SWP 3.00 sec

7-5-01

RF ANT. COND. TEST OF LOW CHANNEL 20-26GHz MKR 22.250 GHz
REF 0.0 dBm HARMONIC 6L -64.40 dBm

hp

10 dB/

CNVLOSS

22.0

dB

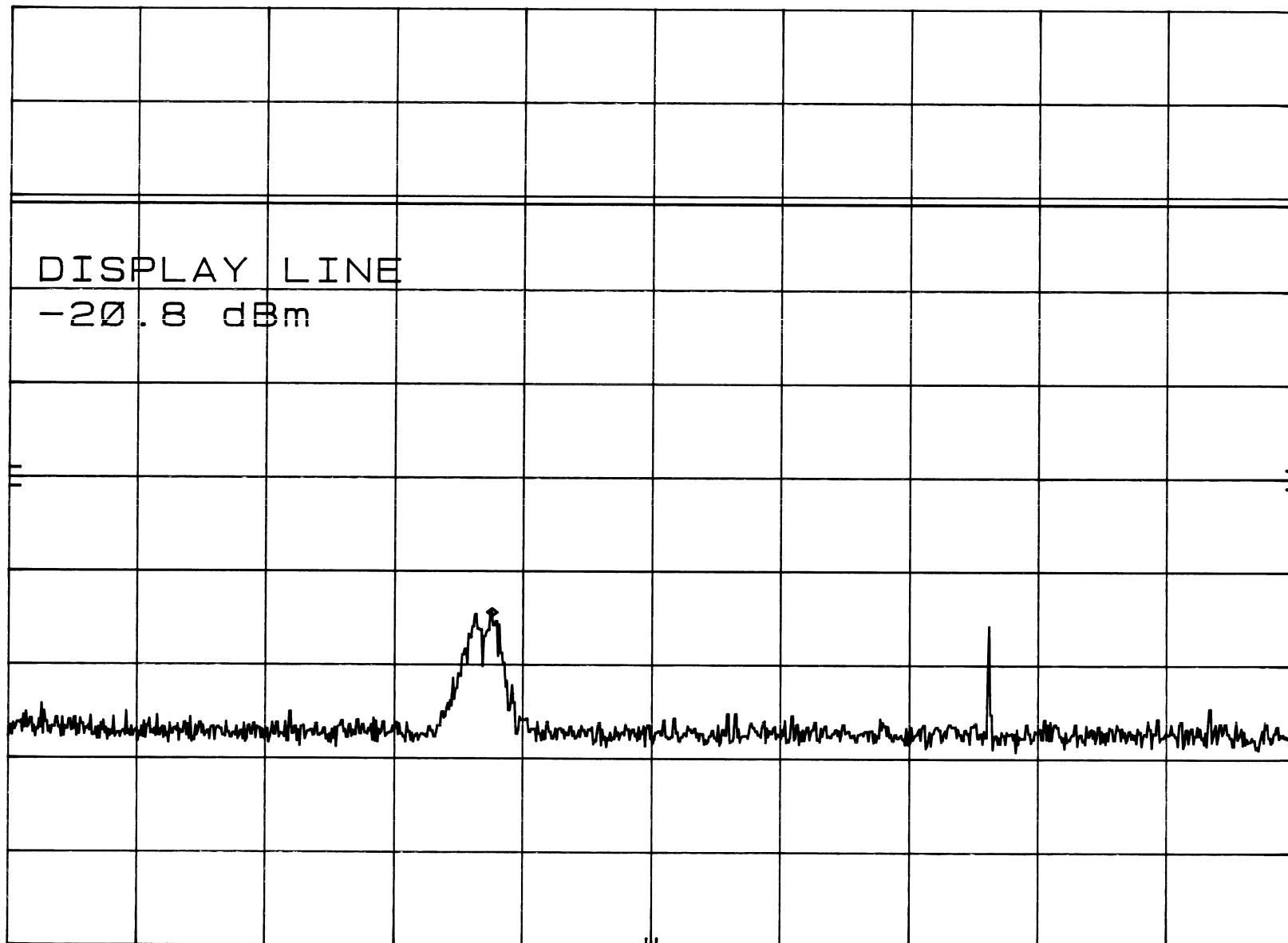
DL

-20.8

dBm

DISPLAY LINE

-20.8 dBm



START 20.00 GHz

RES BW 100 kHz

VBW 300 kHz

STOP 26.00 GHz

SWP 1.80 sec

7-5-01

RF ANT. COND. TEST OF MID CHANNEL 2MHZ-2GHZ

MKR 1.405 GHz

hp

REF 10.0 dBm

ATTEN 30 dB

-54.60 dBm

10 dB/

MARKER

1.405 GHz

DL
-23.9
dBm

-54.60 dBm

CORR'D

START 2 MHz

RES BW 100 kHz

VBW 300 kHz

STOP 2.00 GHz

SWP 599 msec

7-5-01

RF ANT. COND. TEST OF MID CHANNEL 2-10GHZ

MKR 2.440 GHz

hp

REF 10.0 dBm

ATTEN 30 dB

-3.90 dBm

10 dB/

DISPLAY LINE

-23.9 dBm

DL
-23.9
dBm

CORR'D

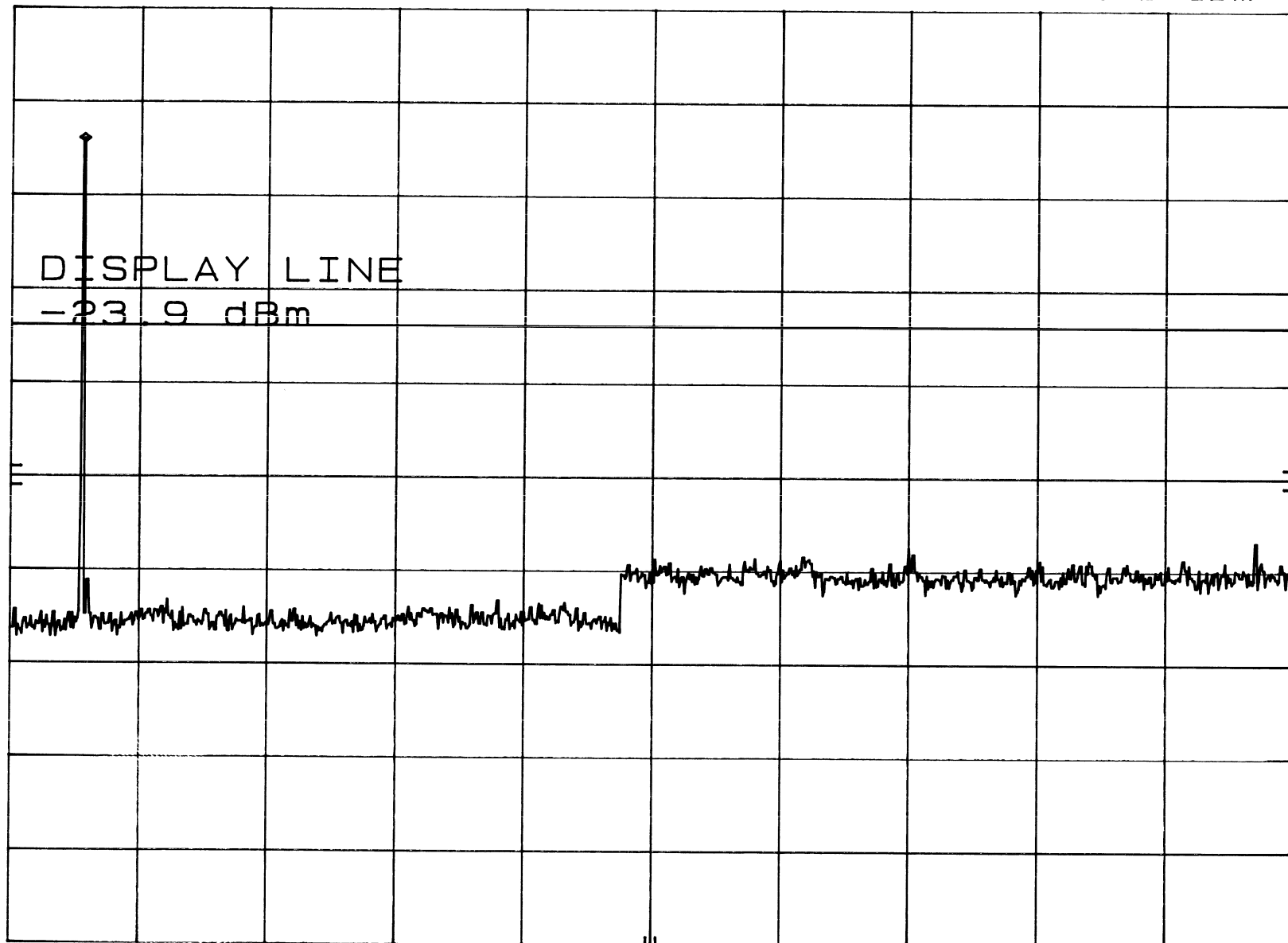
START 2.00 GHz

RES BW 100 kHz

VBW 300 kHz

STOP 10.00 GHz

SWP 2.40 sec



7-5-01

RF ANT. COND. TEST OF MID CHANNEL 10-20GHz

MKR 19.32 GHz

hp

REF 10.0 dBm

ATTEN 30 dB

-41.00 dBm

10 dB/

MARKER

19.32 GHz

DL
-23.9
dBm

-41.00 dBm

CORR'D

START 10.0 GHz

RES BW 100 kHz

VBW 300 kHz

STOP 20.0 GHz

SWP 3.00 sec

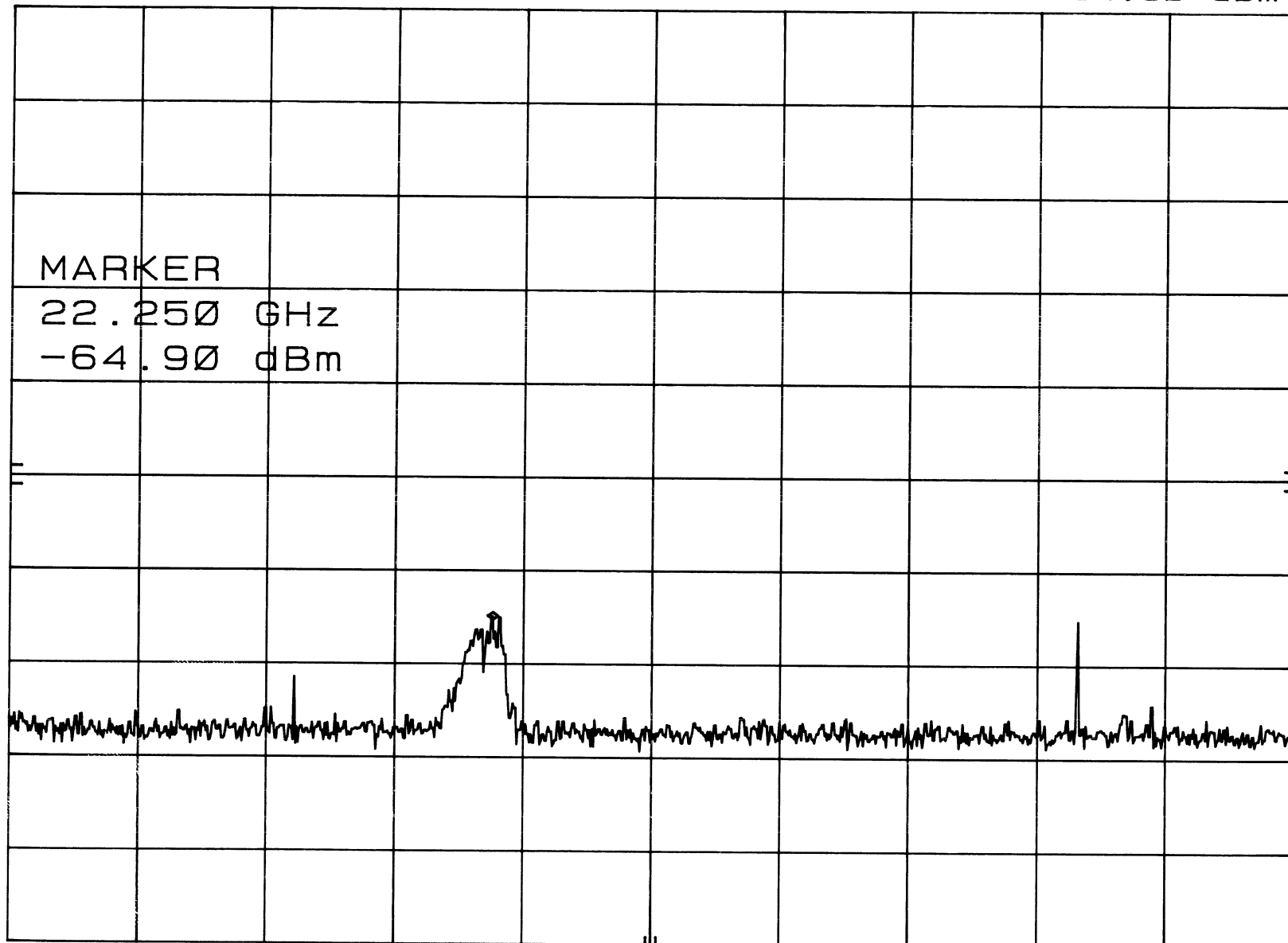
7-5-01

RF ANT. CORD. TEST OF MID CHANNEL 20-26GHz MKR 22.250 GHz
REF 0.0 dBm HARMONIC 6L -64.90 dBm

hp

10 dB/

CNVLOSS
22.0
dB



START 20.00 GHz

RES BW 100 kHz

VBW 300 kHz

STOP 26.00 GHz
SWP 1.80 sec

7-5-01

RF ANT. COND. TEST OF HIGH CHANNEL 2MHZ-2GHZ

MKR 140 MHz

hp

REF 0.0 dBm

ATTEN 30 dB

-53.80 dBm

10 dB/

MARKER

DL

-27.6

dBm

140 MHz

-53.80 dBm

CORR'D

START 2 MHz

RES BW 100 kHz

VBW 300 kHz

STOP 2.00 GHz

SWP 599 msec

7-5-01

RF ANT. COND. TEST OF HIGH CHANNEL 2-10GHz

MKR 2.480 GHz

hp

REF 0.0 dBm

ATTEN 30 dB

-7.60 dBm

10 dB/

DL
-27.6
dBm

MARKER

2.480 GHz

-7.60 dBm

CORR'D

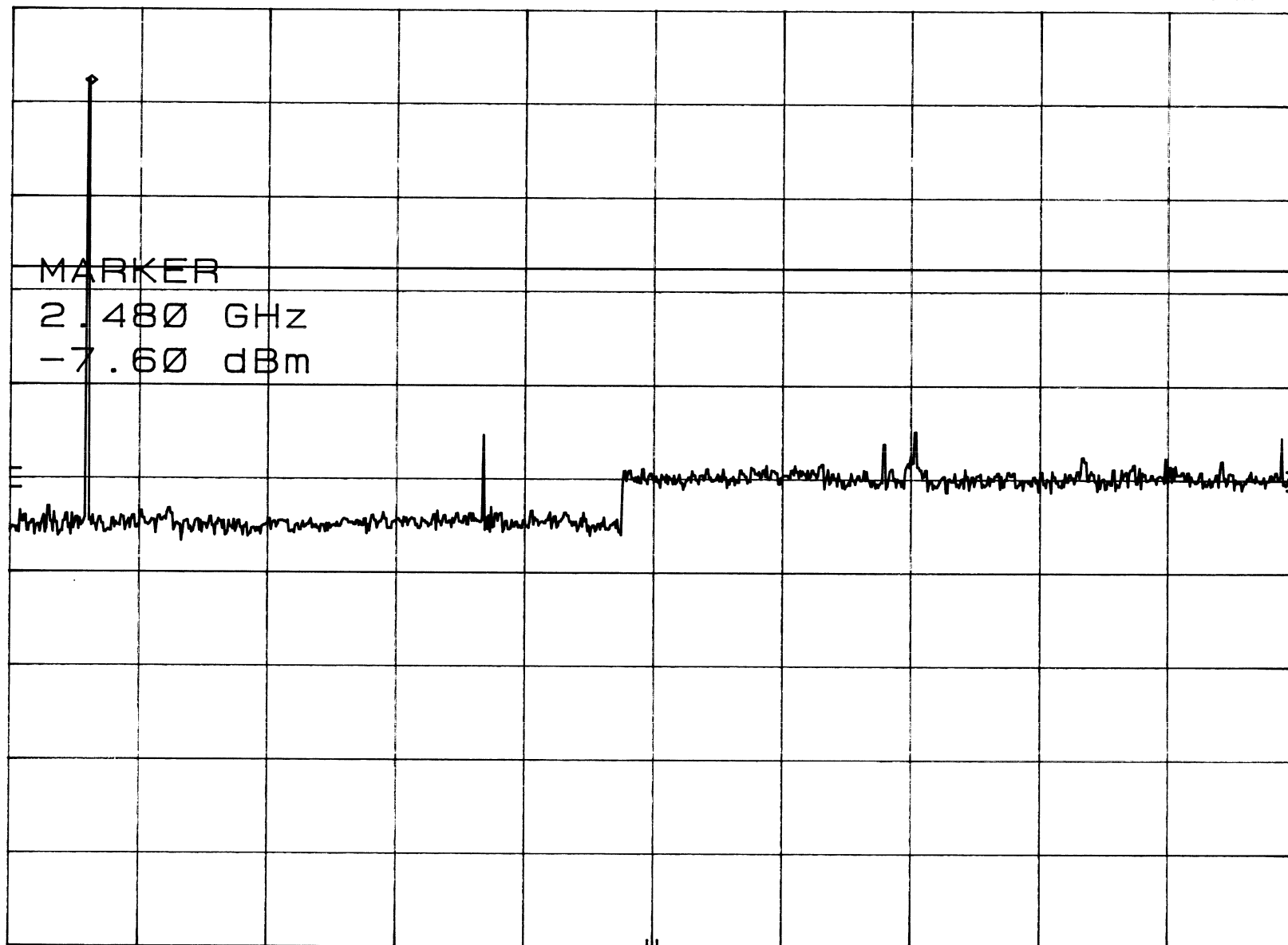
START 2.00 GHz

RES BW 100 kHz

VBW 300 kHz

STOP 10.00 GHz

SWP 2.40 sec



7-5-01

RF ANT. COND. TEST OF HIGH CHANNEL 10-20GHz MKR 19.68 GHz
hp REF 0.0 dBm ATTEN 20 dB -50.50 dBm

10 dB/

DL
-27.6
dBm

MARKER
19.68 GHz
-50.50 dBm

CORR'D

START 10.0 GHz

RES BW 100 kHz

VBW 300 kHz

STOP 20.0 GHz
SWP 3.00 sec

7-5-01

RF ANT. COND. TEST OF HIGH CHANNEL 20GHz-26GHz

MKR 22.184 GHz
-64.30 dBm

hp

REF 0.0 dBm HARMONIC 6L

10 dB/

CNVLOSS

22.0
dB

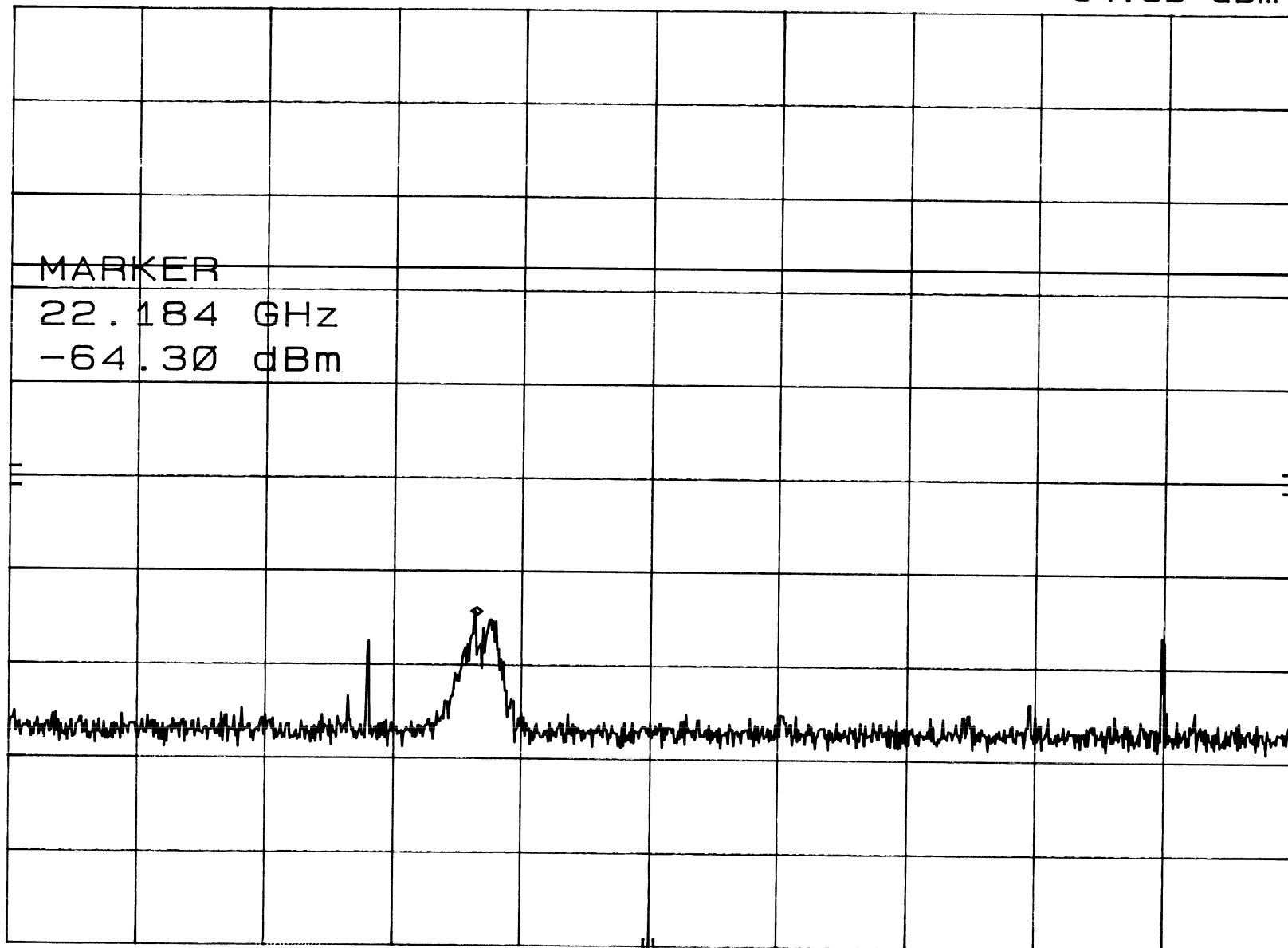
DL

-27.6
dBm

MARKER

22.184 GHz

-64.30 dBm



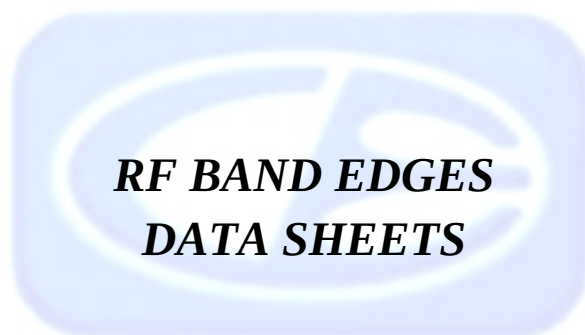
START 20.00 GHz

RES BW 100 kHz

VBW 300 kHz

STOP 26.00 GHz

SWP 1.80 sec



7-6-01

BAND EDGE OF LOW CHANNEL
REF 110.0 dB μ V ATTN 20 dB

MKR 2.390 01 GHz
57.30 dB μ V

hp

10 dB/

DL
100.6
dB μ V

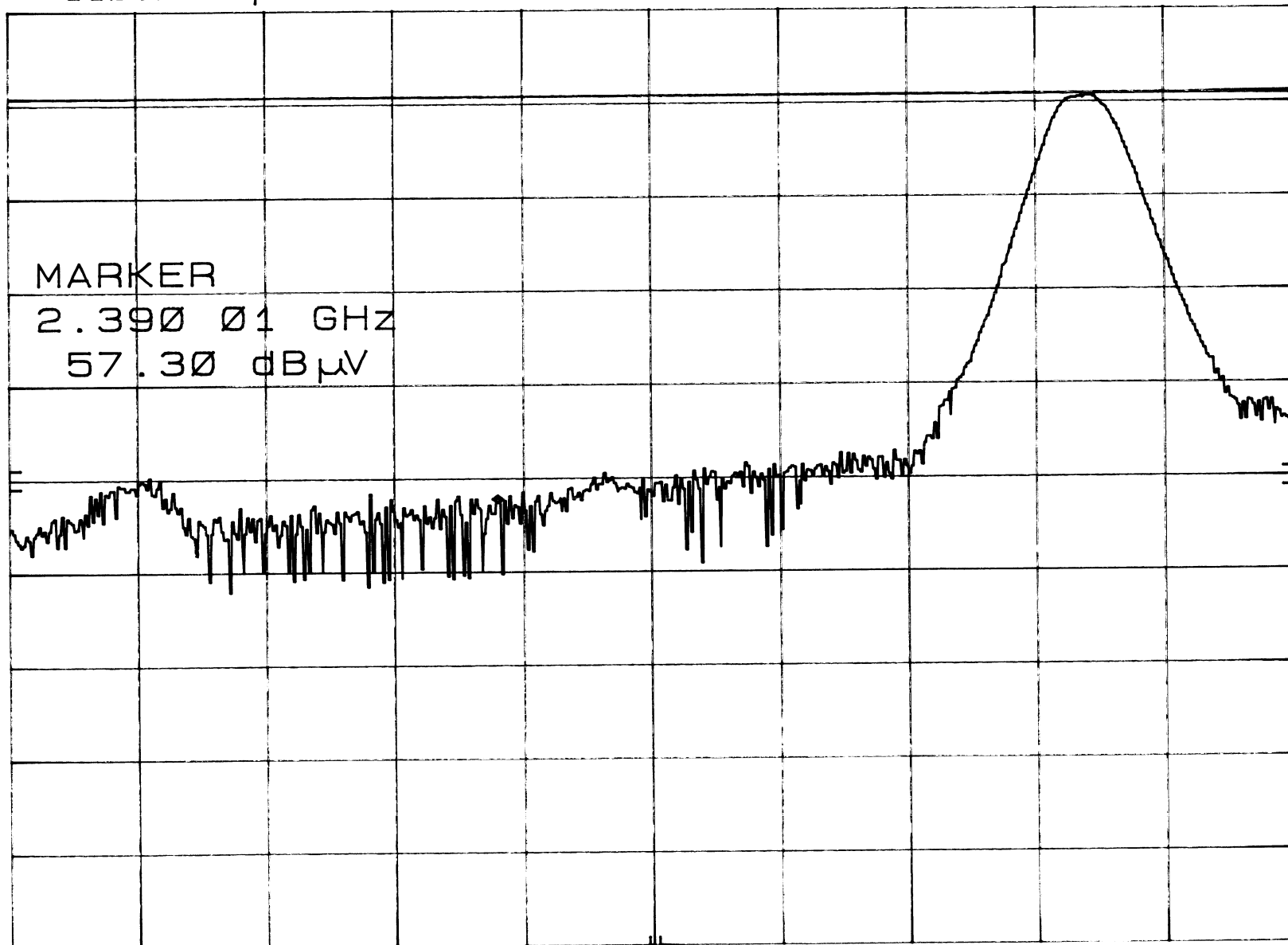
MARKER
2.390 01 GHz
57.30 dB μ V

CORR'D

START 2.380 0 GHz
RES BW 1 MHz

VBW 1 MHz

STOP 2.406 4 GHz
SWP 20.0 msec



7-6-01

AVERAGE READING OF BAND EDGE - LOW CH.

MKR 2.391 004 GHz

hp

REF 40.0 dB μ V ATTN 20 dB

39.82 dB μ V

LINEAR

DL
39.1
dB μ V

MARKER

2.391 004 GHz

39.82 dB μ V

CORR'D

START 2.390 00 GHz

RES BW 1 MHz

VBW 10 Hz

STOP 2.391 03 GHz

SWP 50.0 sec

7-6-01

BAND EDGE OF HIGH CHANNEL

MKR 2.483 92 GHz

hp

REF 100.0 dB μ V ATTN 10 dB

64.10 dB μ V

10 dB/

DL
97.1
dB μ V

MARKER
2.483 92 GHz
64.10 dB μ V

CORR'D

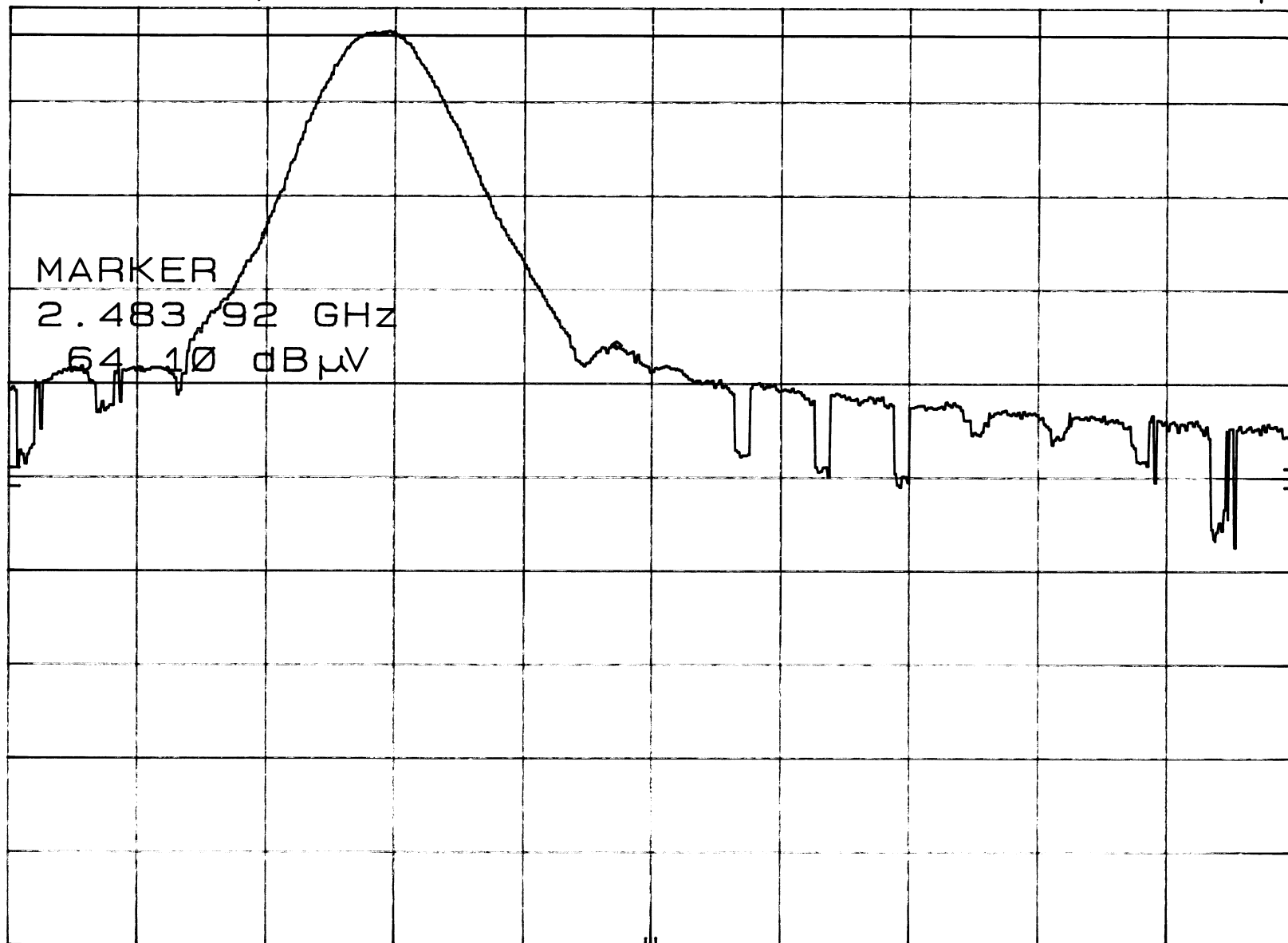
CENTER 2.484 5 GHz

RES BW 1 MHz

VBW 1 MHz

SPAN 20.0 MHz

SWP 20.0 msec



7-6-01

BAND EDGE AVERAGE READING - HIGH CH.

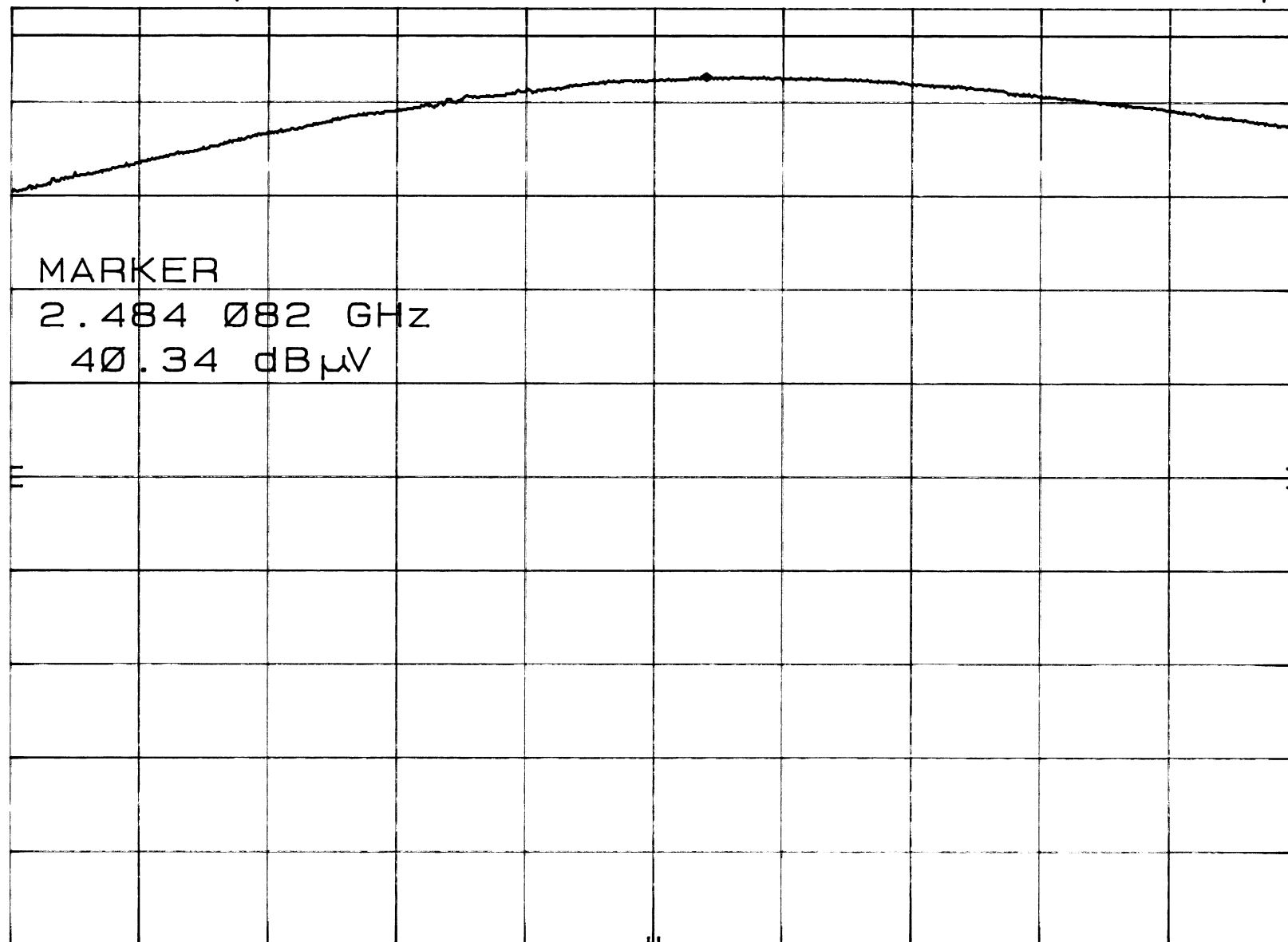
MKR 2.484 082 GHz

hp

REF 41.0 dB μ V ATTEN 10 dB

40.34 dB μ V

LINEAR



RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.247)

COMPANY	XIRCOM, INC.	DATE	7/6/01
EUT	16 BIT PCMCIA TYPE II BLUETOOTH ADAPTER	DUTY CYCLE	N/A
MODEL	CBT	PEAK TO AVG	N/A
S/N	N/A	TEST DIST.	3 METERS
TEST ENGINEER	KYLE FUJIMOTO	LAB	D

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi- Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
2390.0000	57.3	39.8 A	V	1.5	90	X	LOW	30.5	3.6	32.0	41.9	-12.1	54.0	BAND EDGE LOW CH.
2483.9200	64.1	40.3 A	H	1.5	90	X	HIGH	30.7	3.5	31.9	42.6	-11.4	54.0	BAND EDGE HIGH CH.

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN
 ** DELTA = SPEC LIMIT - CORRECTED READING

***CARRIER FREQUENCY SEPARATION
DATA SHEETS***



7-5-01

CARRIER FREQUENCY SEPARATION

MKR Δ 999 kHz

hp

REF 10.0 dBm ATTEN 20 dB

-0.10 dB

10 dB/

DL
-30.0
dBm

MARKER Δ
999 kHz
-0.10 dB

CORR'D

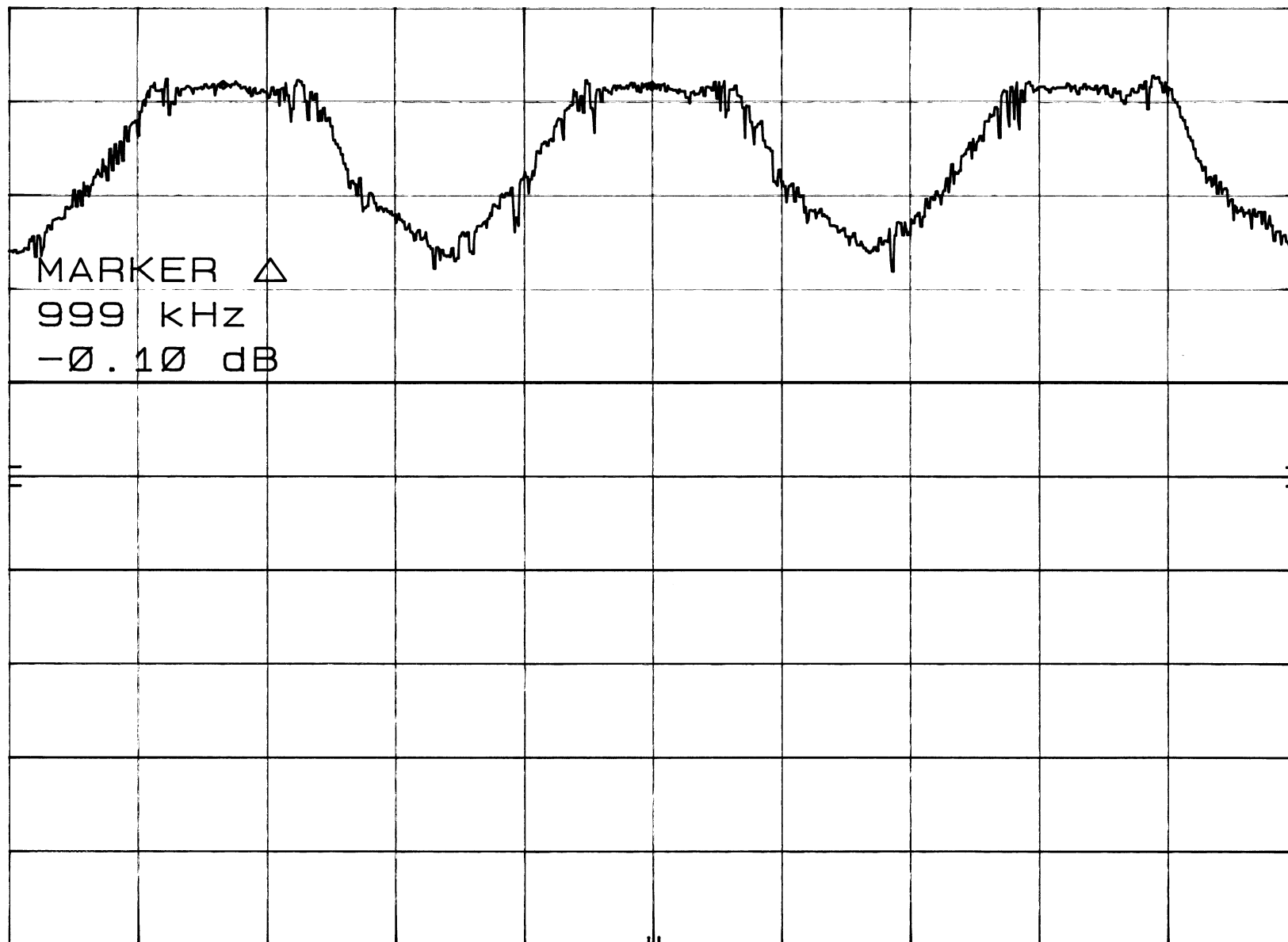
CENTER 2.442 00 GHz

RES BW 100 kHz

VBW 100 kHz

SPAN 3.00 MHz

SWP 20.0 msec



***NUMBER OF HOPPING FREQUENCIES
DATA SHEETS***



7-5-01

NUMBER OF HOPPING FREQUENCIES

MKR 2.402 00 GHz

hp

REF 10.0 dBm ATTN 20 dB

3.40 dBm

10 dB/

MARKER

2.402 00 GHz

DL
-30.0
dBm

3.40 dBm

CORR'D

START 2.400 0 GHz

RES BW 1 MHz

VBW 1 MHz

STOP 2.483 5 GHz

SWP 20.0 msec

***AVERAGE TIME OF OCCUPANCY
DATA SHEETS***



7-6-01

TIME OF ONE TRANSMISSION

MKR Δ 2.800 msec

hp

REF 97.0 dB μ V ATTN 0 dB

-0.10 dB

10 dB/

DL
57.0
dB μ V

MARKER Δ
2.800 msec
-0.10 dB

CORR'D

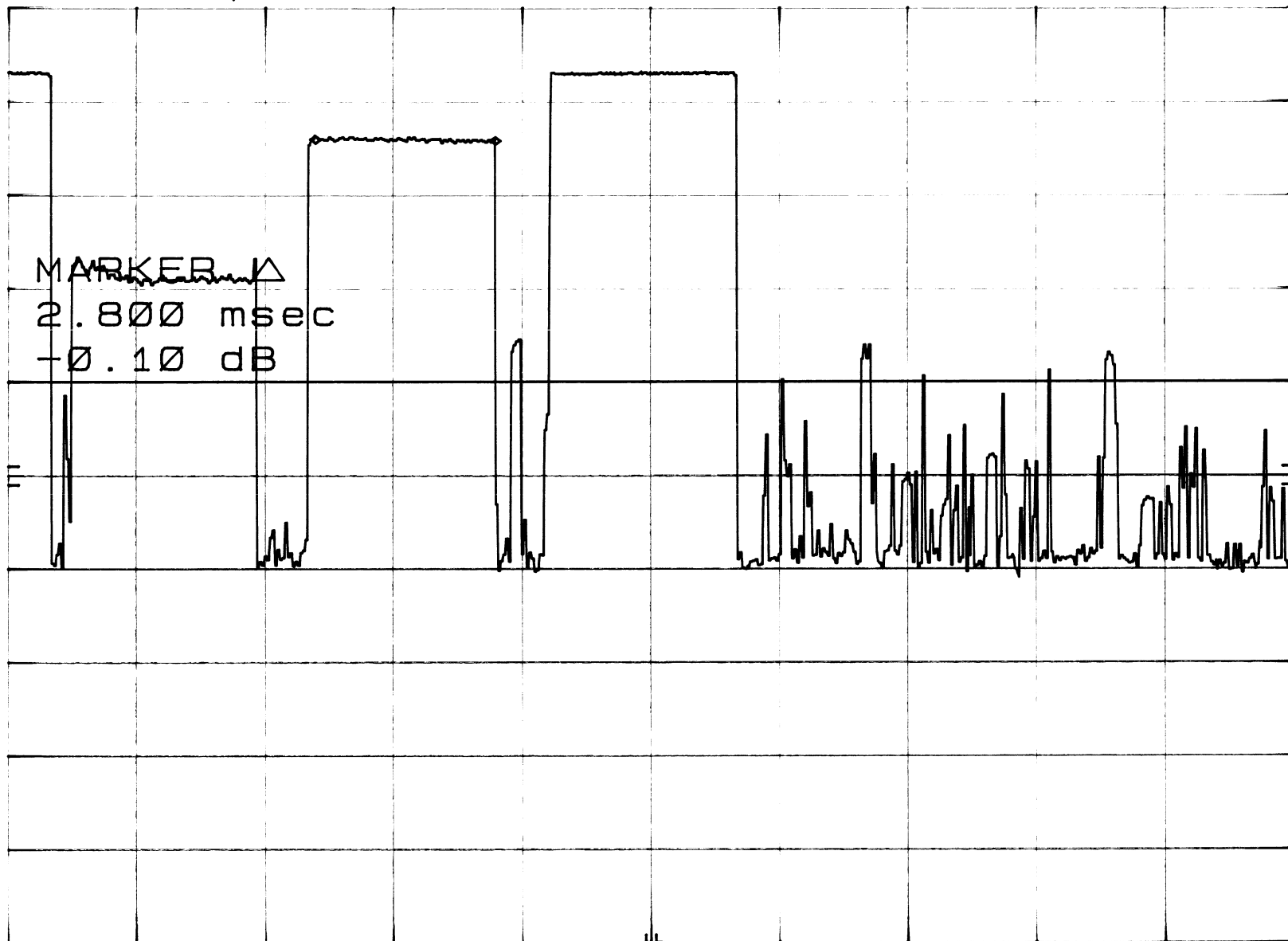
CENTER 2.442 000 000 GHz

RES BW 1 MHz

VBW 1 MHz

SPAN 0 Hz

SWP 20.0 msec



7-6-01

DURATION OF TRANSMISSIONS IN 30 SECONDS

MKR 244.8 msec

hp

REF 97.0 dB μ V ATTN 0 dB

95.00 dB μ V

10 dB/

MARKER

244.8 msec

95.00 dB μ V

DL

57.0
dB μ V

CORR'D

CENTER 2.442 000 000 GHz

RES BW 1 MHz

VBW 1 MHz

SPAN 0 Hz

SWP 400 msec

***SPECTRAL DENSITY OUTPUT
DATA SHEETS***



7-5-01

SPECTRAL DENSITY OUTPUT OF LOW CHANNEL

MKR 2.402 024 GHz

hp

REF 10.0 dBm

ATTEN 20 dB

-9.90 dBm

10 dB/

DL
-30.0
dBm

MARKER

2.402 024 GHz

-9.90 dBm

CORR'D

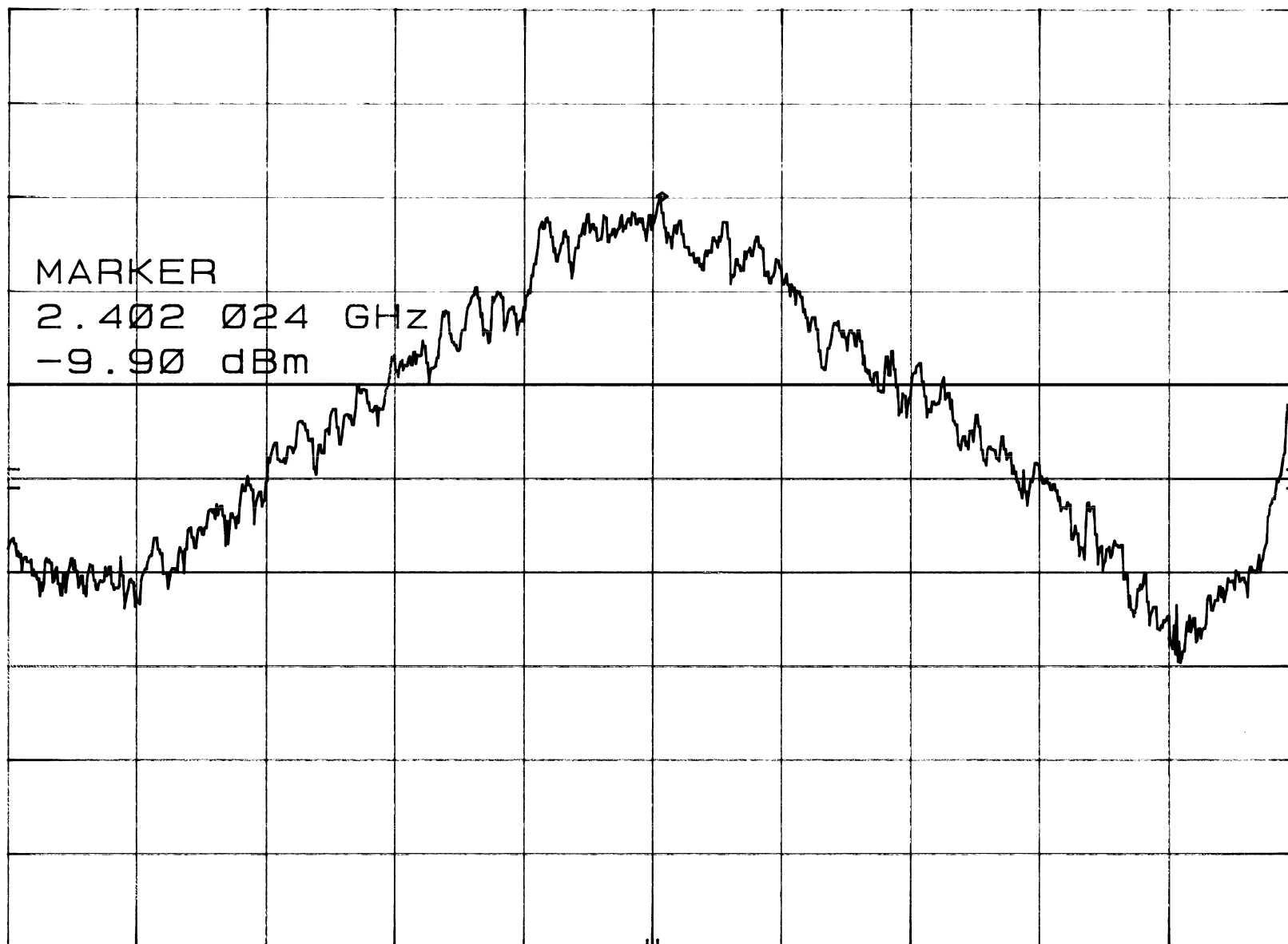
CENTER 2.402 01 GHz

RES BW 3 kHz

VBW 10 kHz

SPAN 2.00 MHz

SWP 667 sec



7-5-01

SPECTRAL DENSITY OUTPUT OF MID CHANNEL

MKR 2.442 024 GHz

hp

REF 10.0 dBm

ATTEN 20 dB

-10.90 dBm

10 dB/

MARKER

DL

2.442 024 GHz

-30.0
dBm

-10.90 dBm

CORR'D

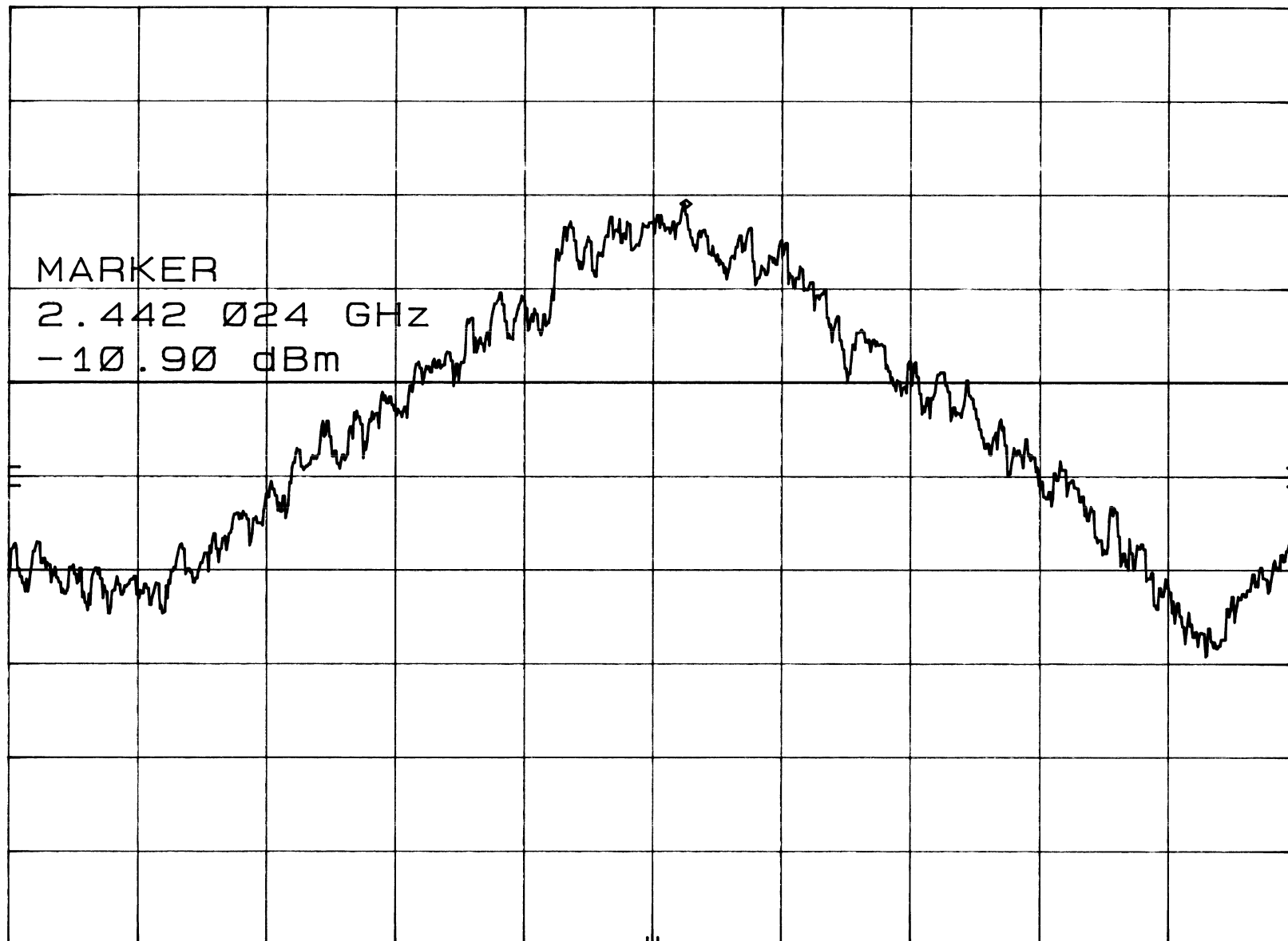
CENTER 2.441 97 GHz

RES BW 3 kHz

VBW 10 kHz

SPAN 2.00 MHz

SWP 667 sec



7-5-01

SPECTRAL DENSITY OUTPUT OF HIGH CHANNEL MKR 2.480 020 GHz
REF 10.0 dBm ATTN 20 dB -11.60 dBm

hp
10 dB/

DL
8.0
dBm

MARKER

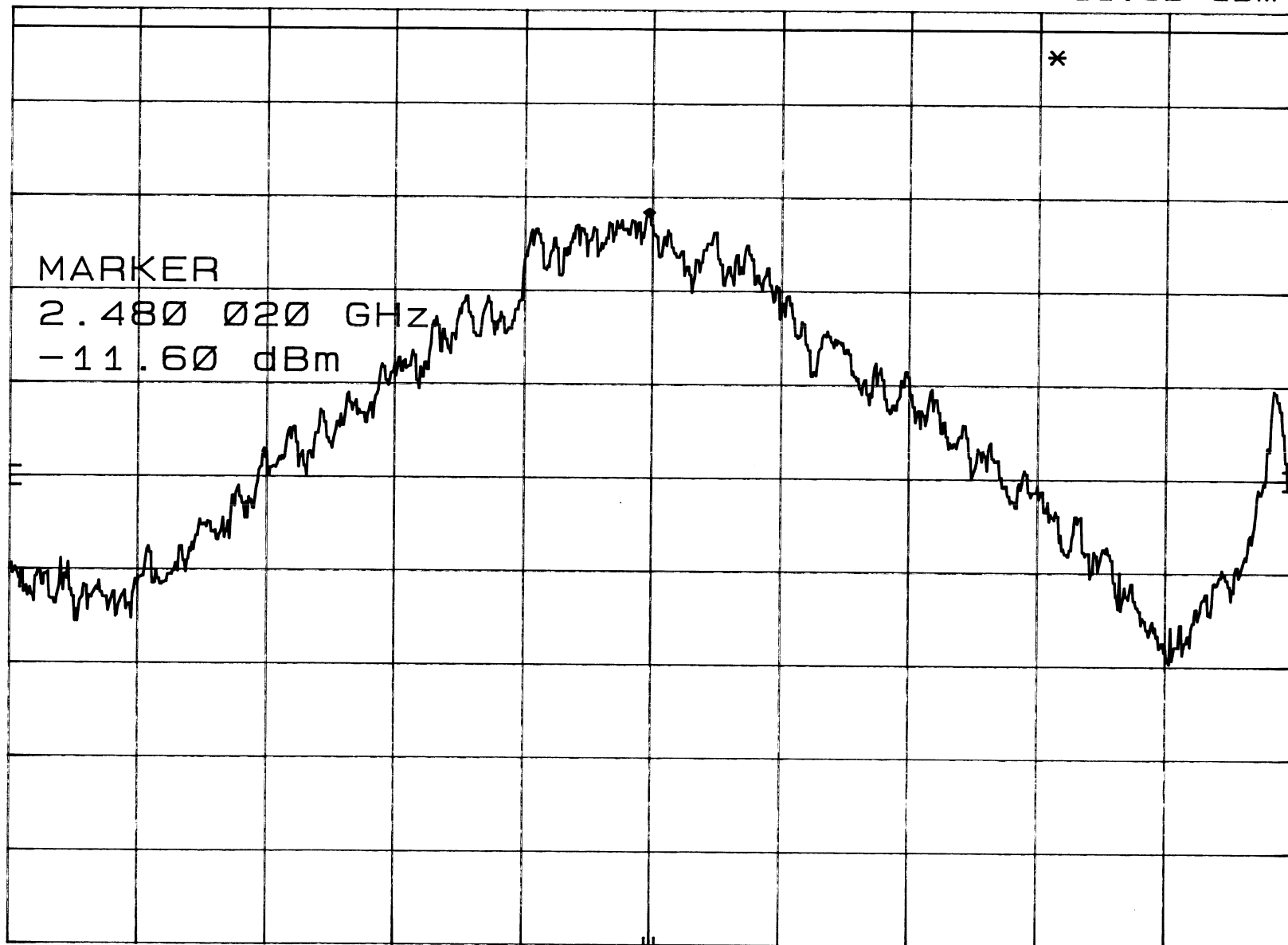
2.480 020 GHz
-11.60 dBm

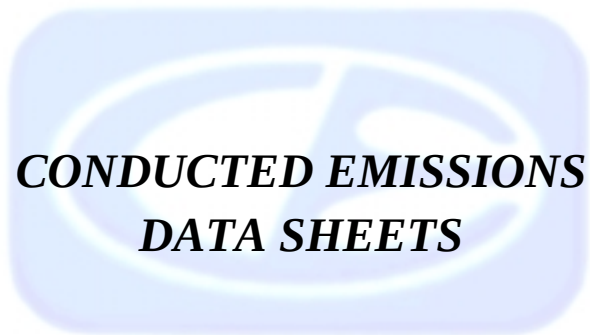
CORR'D

CENTER 2.480 02 GHz
RES BW 3 kHz

VBW 10 kHz

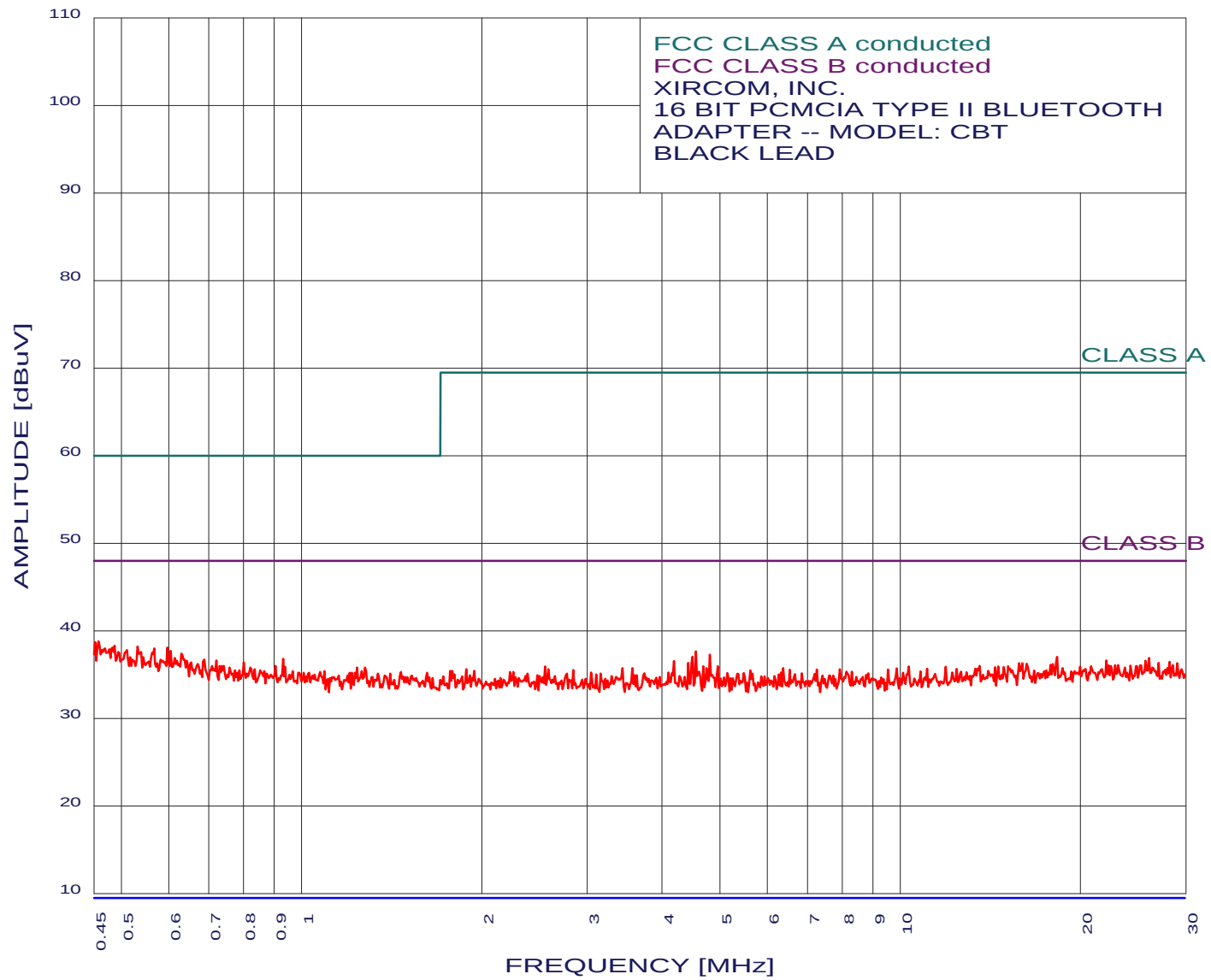
SPAN 2.00 MHz
SWP 667 sec





EMISSION LEVEL [dBuV] PEAK
Graph for Peak & Quasi-Peak

7/05/2001 10:59:02





**COMPATIBLE
ELECTRONICS**

7/05/2001 10:59:02

XIRCOM, INC.

16 BIT PCMCIA TYPE II BLUETOOTH ADAPTER

MODEL: CBT

FCC B - BLACK LEAD

TEST ENGINEER : KYLE FUJIMOTO

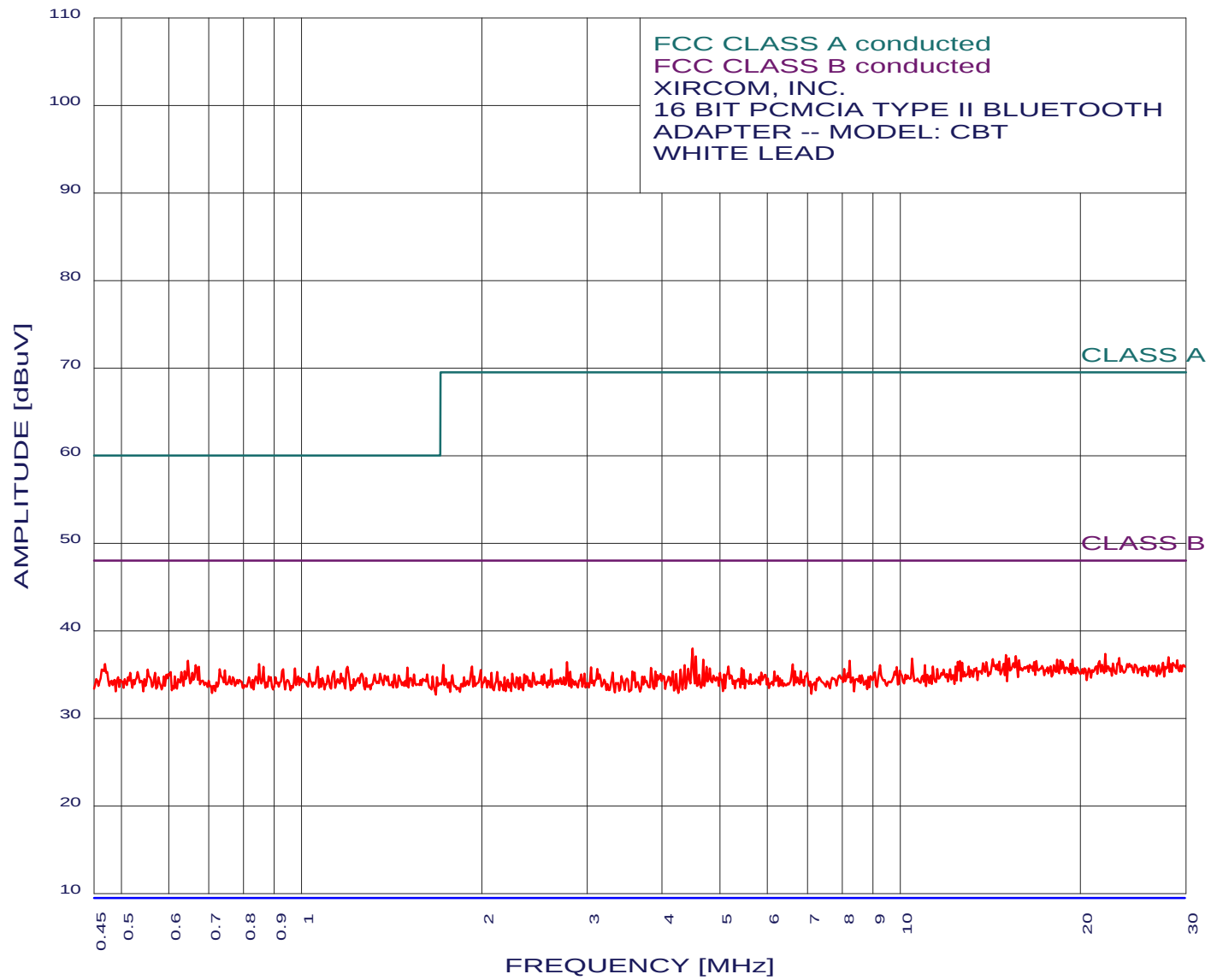
30 highest peaks above -50.00 dB of CLASS B limit line

Peak criteria : 1.00 dB, Curve : Peak

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.458	38.79	48.00	-9.21
2	0.452	38.69	48.00	-9.31
3	0.487	38.29	48.00	-9.71
4	0.532	38.19	48.00	-9.81
5	0.597	38.09	48.00	-9.91
6	0.567	37.99	48.00	-10.01
7	0.511	37.79	48.00	-10.21
8	0.604	37.69	48.00	-10.31
9	4.556	37.64	48.00	-10.36
10	0.494	37.59	48.00	-10.41
11	0.630	37.39	48.00	-10.61
12	4.810	37.25	48.00	-10.75
13	4.499	37.04	48.00	-10.96
14	18.283	37.02	48.00	-10.98
15	0.544	36.99	48.00	-11.01
16	26.028	36.88	48.00	-11.12
17	0.931	36.80	48.00	-11.20
18	0.688	36.69	48.00	-11.31
19	22.097	36.61	48.00	-11.39
20	0.721	36.59	48.00	-11.41
21	25.694	36.57	48.00	-11.43
22	4.189	36.54	48.00	-11.46
23	28.187	36.46	48.00	-11.54
24	0.800	36.40	48.00	-11.60
25	0.655	36.39	48.00	-11.61
26	4.423	36.34	48.00	-11.66
27	27.028	36.32	48.00	-11.68
28	15.993	36.31	48.00	-11.69
29	29.033	36.29	48.00	-11.71
30	16.261	36.22	48.00	-11.78

EMISSION LEVEL [dBuV] PEAK
Graph for Peak & Quasi-Peak

7/05/2001 11:07:16





7/05/2001 11:07:16

XIRCOM, INC.
 16 BIT PCMCIA TYPE II BLUETOOTH ADAPTER
 MODEL: CBT
 FCC B - WHITE LEAD
 TEST ENGINEER : KYLE FUJIMOTO

 30 highest peaks above -50.00 dB of CLASS B limit line

Peak criteria : 1.00 dB, Curve : Peak

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	4.499	37.99	48.00	-10.01
2	22.003	37.37	48.00	-10.63
3	15.013	37.24	48.00	-10.76
4	15.590	37.10	48.00	-10.90
5	4.556	37.09	48.00	-10.91
6	28.066	36.99	48.00	-11.01
7	23.224	36.88	48.00	-11.12
8	15.198	36.86	48.00	-11.14
9	10.464	36.82	48.00	-11.18
10	14.272	36.75	48.00	-11.25
11	18.283	36.71	48.00	-11.29
12	19.394	36.70	48.00	-11.30
13	4.689	36.70	48.00	-11.30
14	18.521	36.64	48.00	-11.36
15	29.033	36.63	48.00	-11.37
16	15.791	36.63	48.00	-11.37
17	0.646	36.59	48.00	-11.41
18	8.236	36.56	48.00	-11.44
19	12.587	36.56	48.00	-11.44
20	16.883	36.55	48.00	-11.45
21	21.533	36.55	48.00	-11.45
22	14.642	36.49	48.00	-11.51
23	16.737	36.43	48.00	-11.57
24	2.775	36.42	48.00	-11.58
25	13.917	36.41	48.00	-11.59
26	12.691	36.37	48.00	-11.63
27	27.472	36.37	48.00	-11.63
28	22.660	36.26	48.00	-11.74
29	19.236	36.23	48.00	-11.77
30	24.135	36.22	48.00	-11.78
