

Submission to IEEE 802.4L

Microwave Oven Frequency Content Measurements

Submitted by

Paul Pirillo
NCR E&M Atlanta
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The following pages show frequency plots taken of nine microwave ovens from six different manufacturers.

The test equipment was an HP 8562B spectrum analyzer, with a half-wave dipole antenna approximately 12 meters distant from the ovens under test. The traces were acquired by operating each oven on its highest power setting for 30 seconds, with the spectrum analyzer recording peak received levels.

During testing it was noted that the frequency content at any particular instant appeared narrow compared to the total bandwidth collected over the 30 second period.

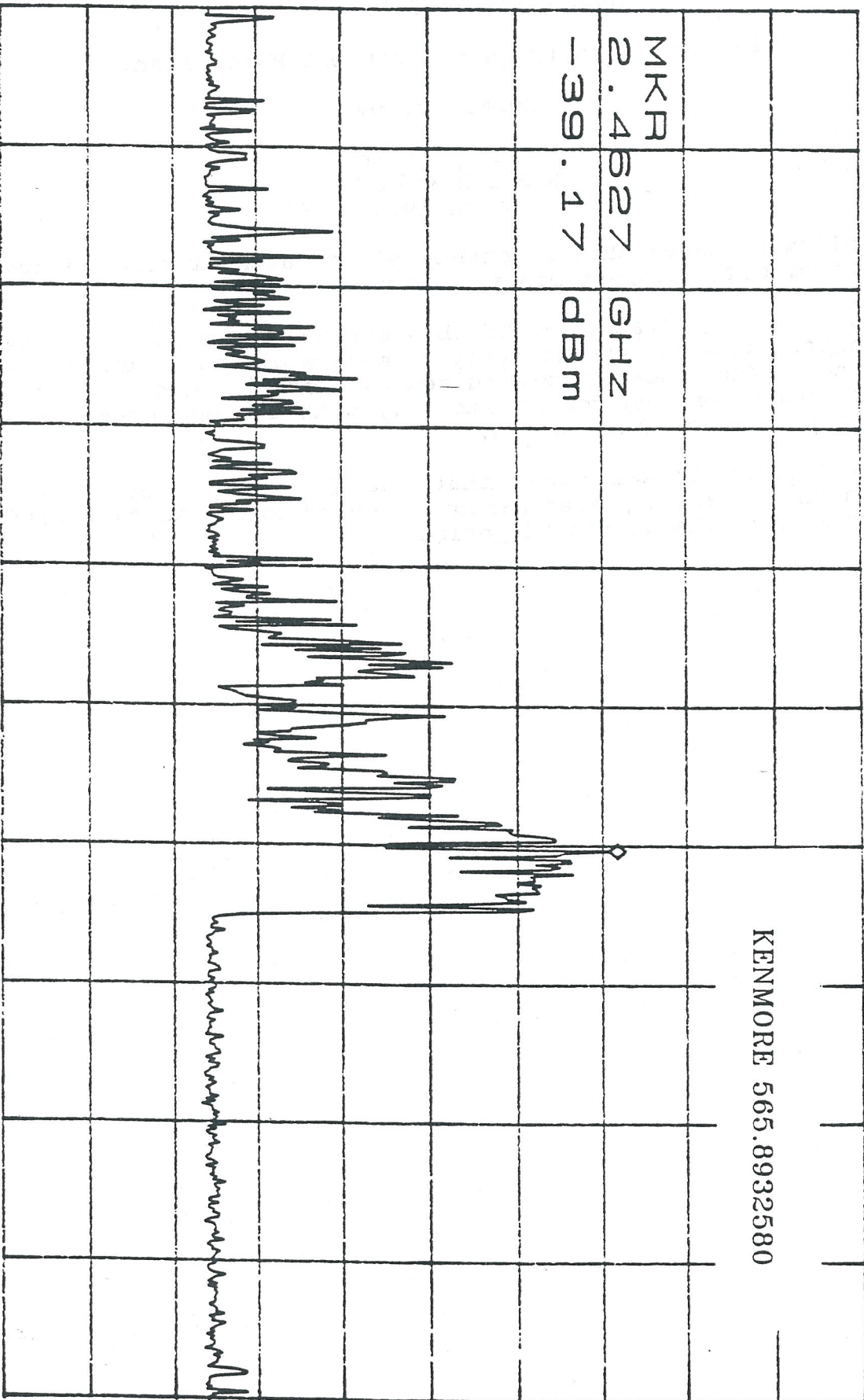
*ATTEN 0dB

MKR -39.17dBm

RL -10.0dBm

10dB/

2.4627GHz



CENTER 2.4420GHz

*RBW 100KHz

VBW 100KHz

SPAN 200.0MHz

SWP 50ms

*ATTEN ODB

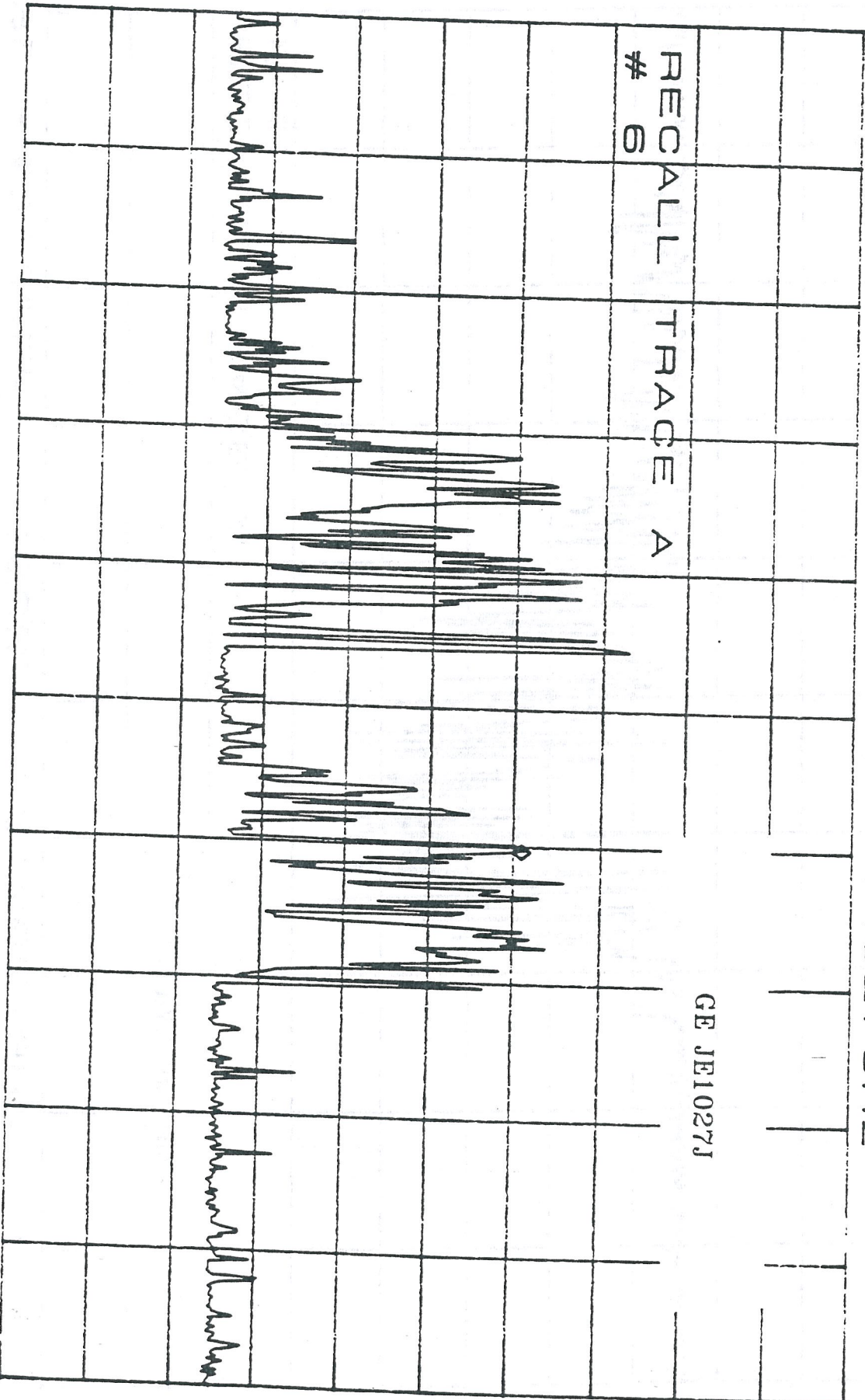
RL -10.00dBm

10dB/

MKR -50.00dBm
2.4627GHz

RECALL TRACE A
6

GE JE1027J



CENTER 2.4420GHz
*RBW 100KHz VBW 100KHz

SPAN 200.0MHz
SWP 50ms

*ATTEN ODB

MKR -53.67dBm

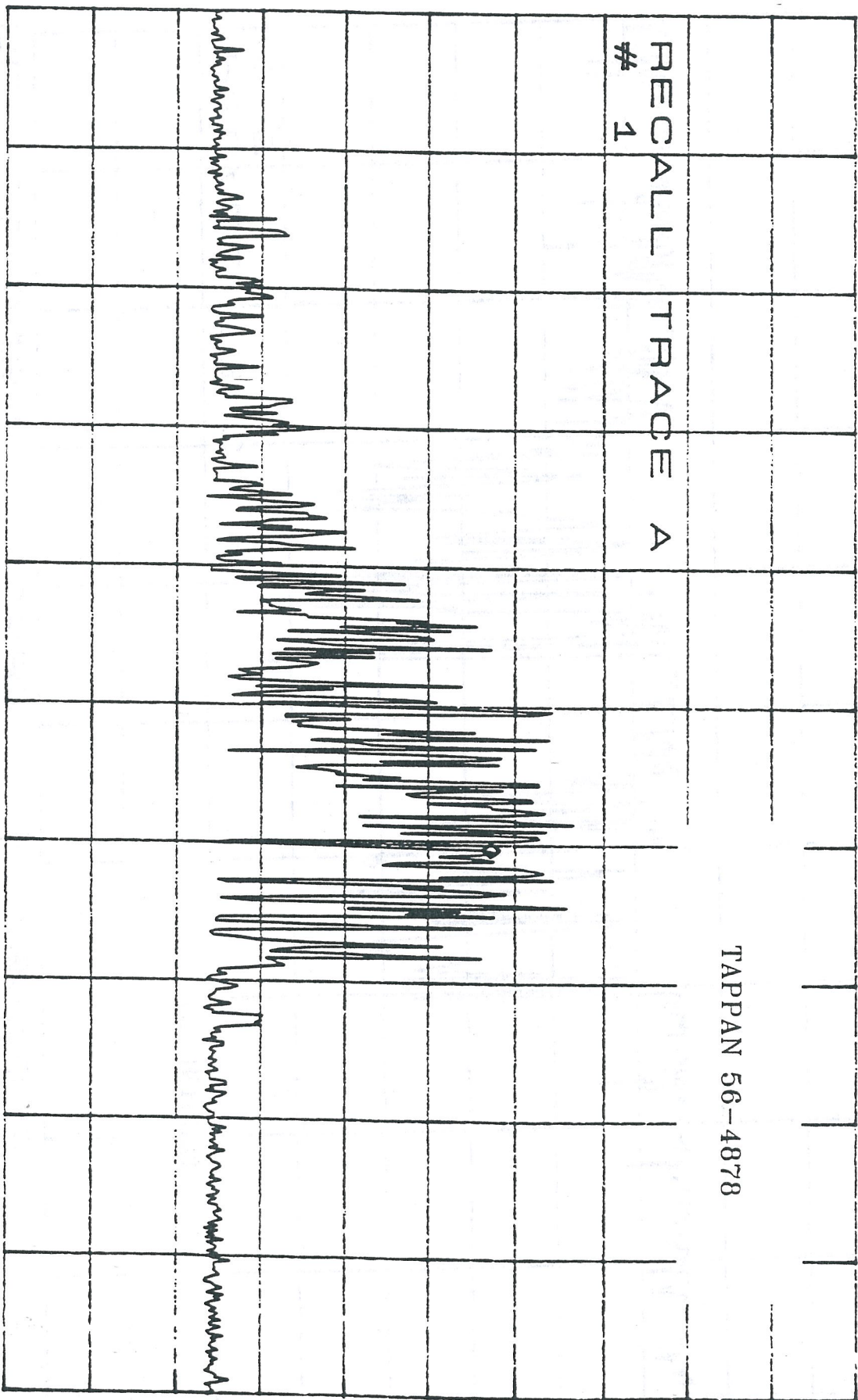
RL -10.0dBm

10dB/

2.4627GHz

TAPPAN 56-4878

RECALL TRACE A
1



CENTER 2.4420GHz

SPAN 200.0MHz

*RBW 100kHz

VBW 100kHz

SMP 50ms

*ATTEN ODB

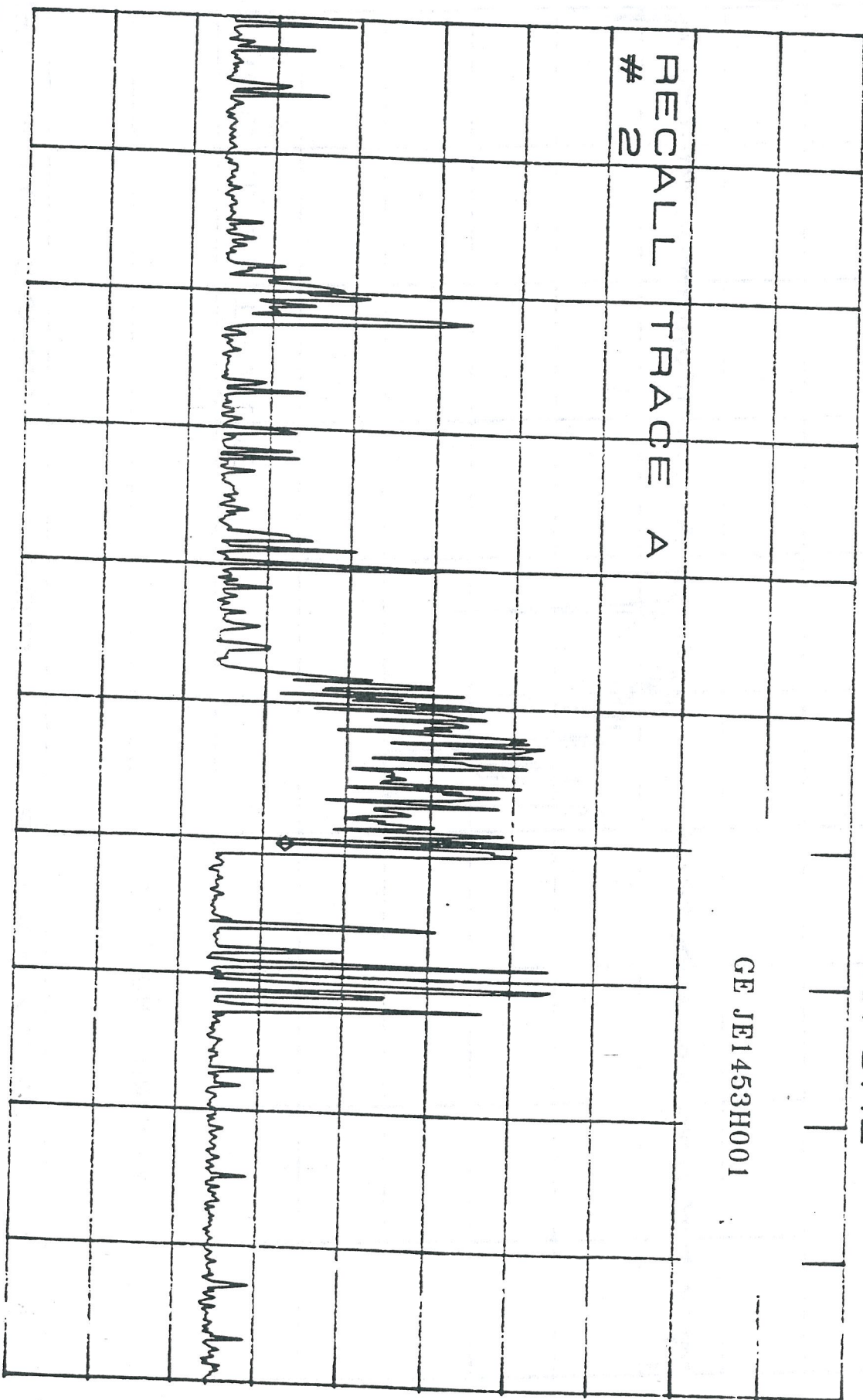
RL -10.0dBm

10dB/

MKR -78.17dBm
2.4627GHz

GE JE1453H001

RECALL TRACE A
2



CENTER 2.4420GHz

SPAN 200.0MHz

*RBW 100kHz

VBW 100kHz

SWP 50ms

*ATTEN 0dB

MKR -85.83dBm

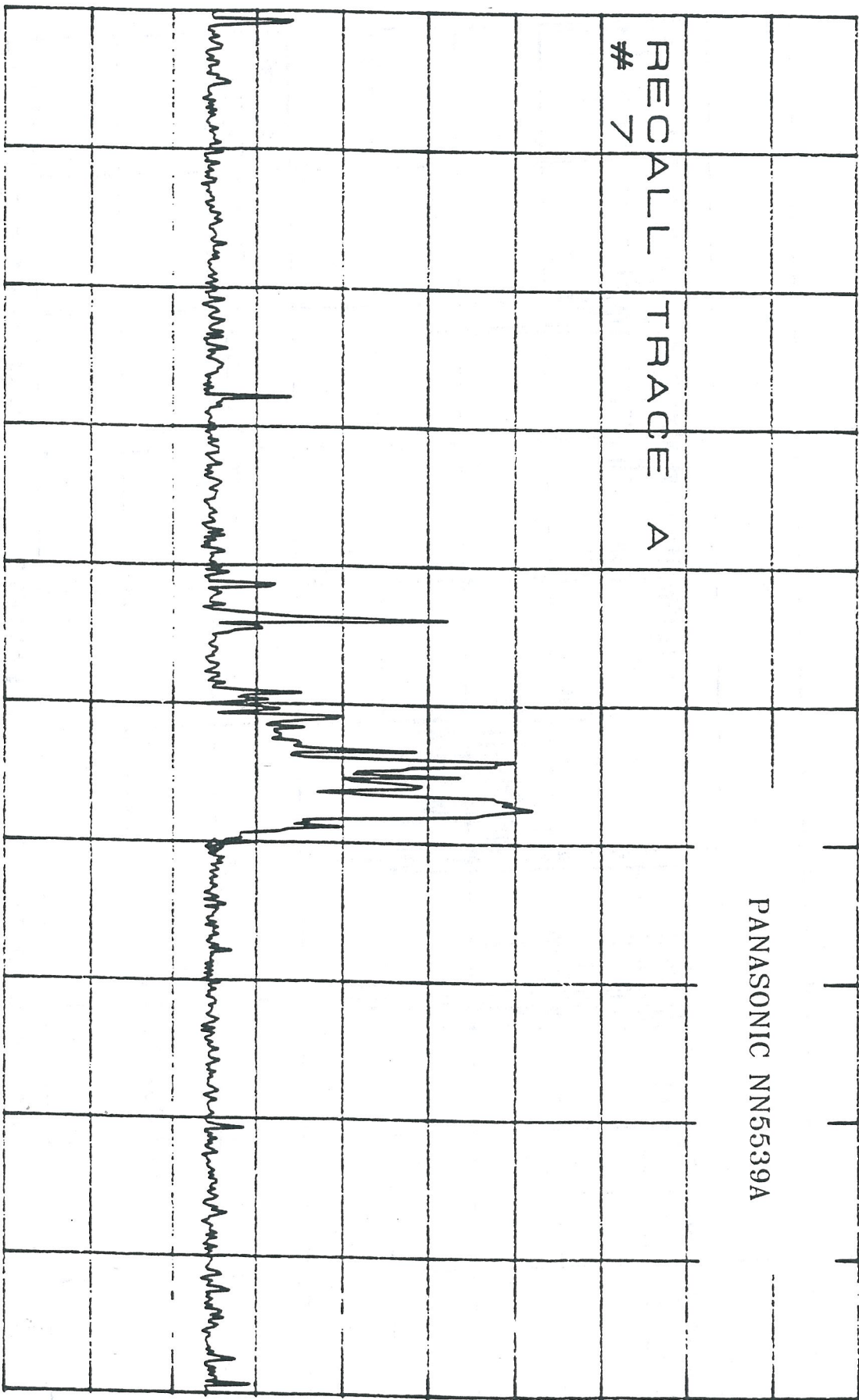
RL -10.0dBm

10dB/

2.4627GHz

PANASONIC NN5539A

RECALL TRACE A
7



CENTER 2.4420GHz

SPAN 200.0MHz

*RBW 100kHz

VBW

100kHz

SMP

50ms

*ATTEN 0dB

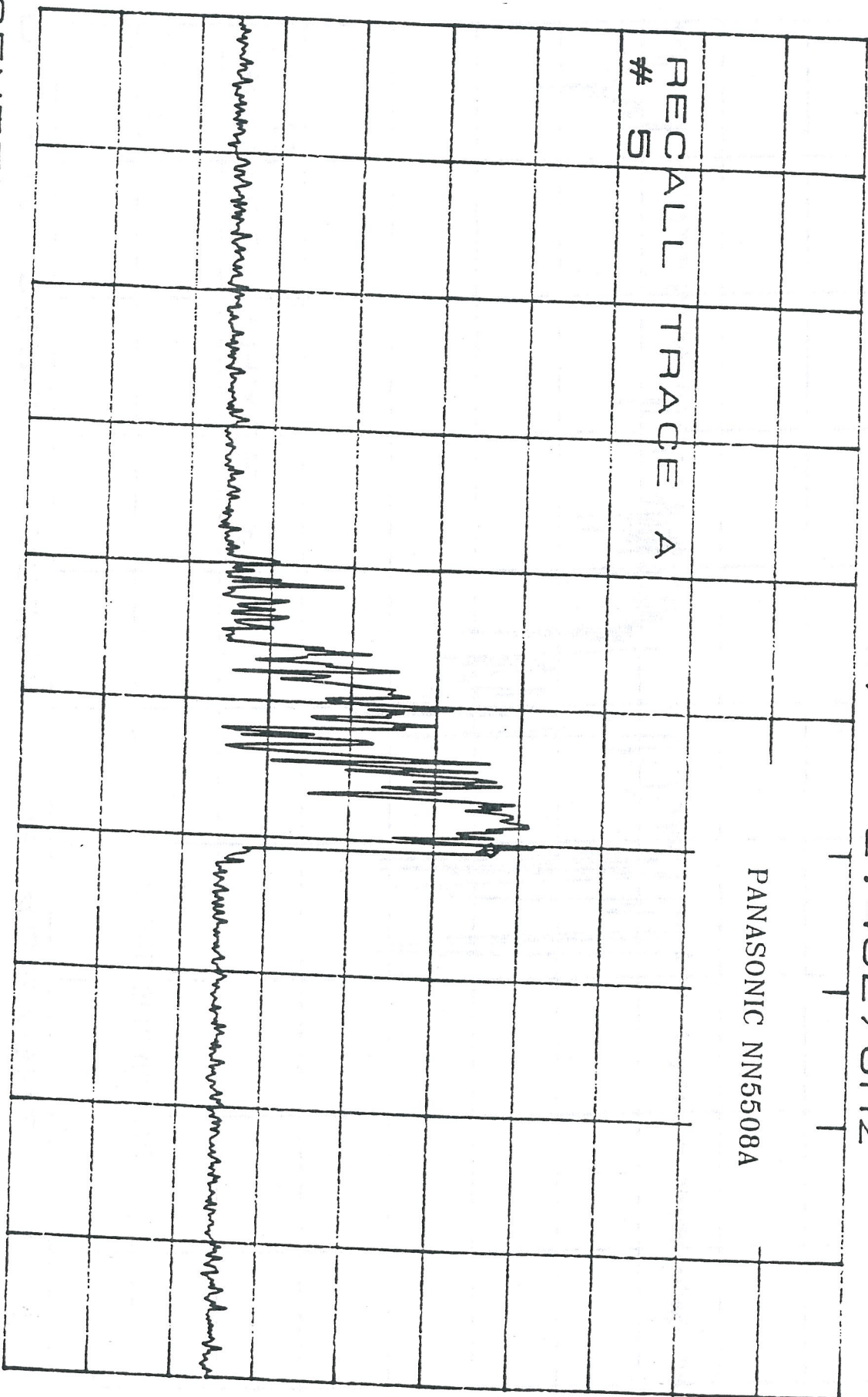
RL -10.0dBm

10dB/

MKR -54.17dBm
2.4627GHz

PANASONIC NN5508A

RECALL TRACE A
5



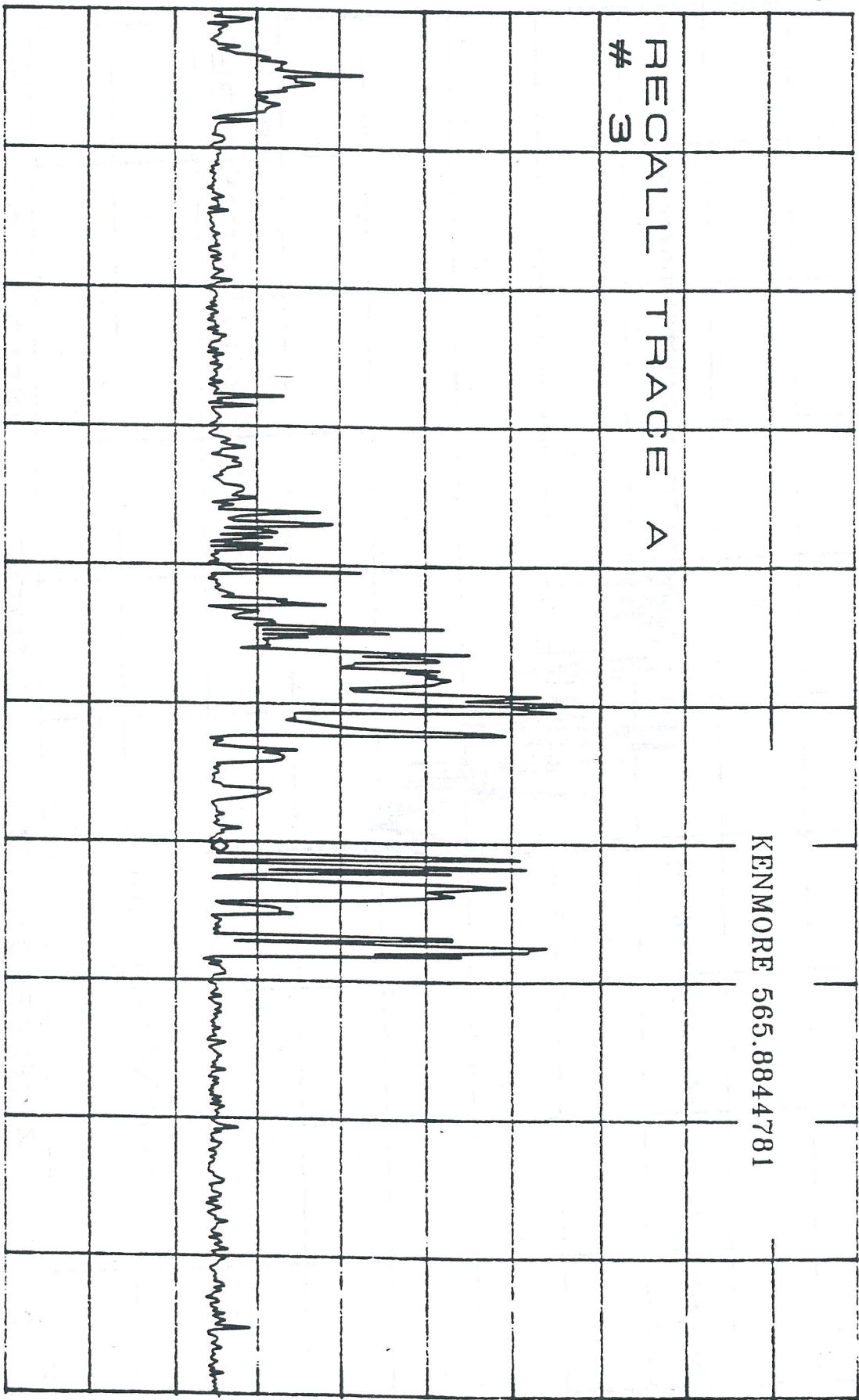
CENTER 2.4420GHz

*RBW 100KHz

VBW 100KHz

SPAN 200.0MHz
SWP 50ms

*ATTEN 0dB
RL -10.0dBm 10dB/
MKR -85.50dBm
2.4627GHz



CENTER 2.4420GHz
*RBW 100KHz VBW 100KHz SPAN 200.0MHz
SWP 50ms

*ATTEN 0dB

MKR -85.17dBm

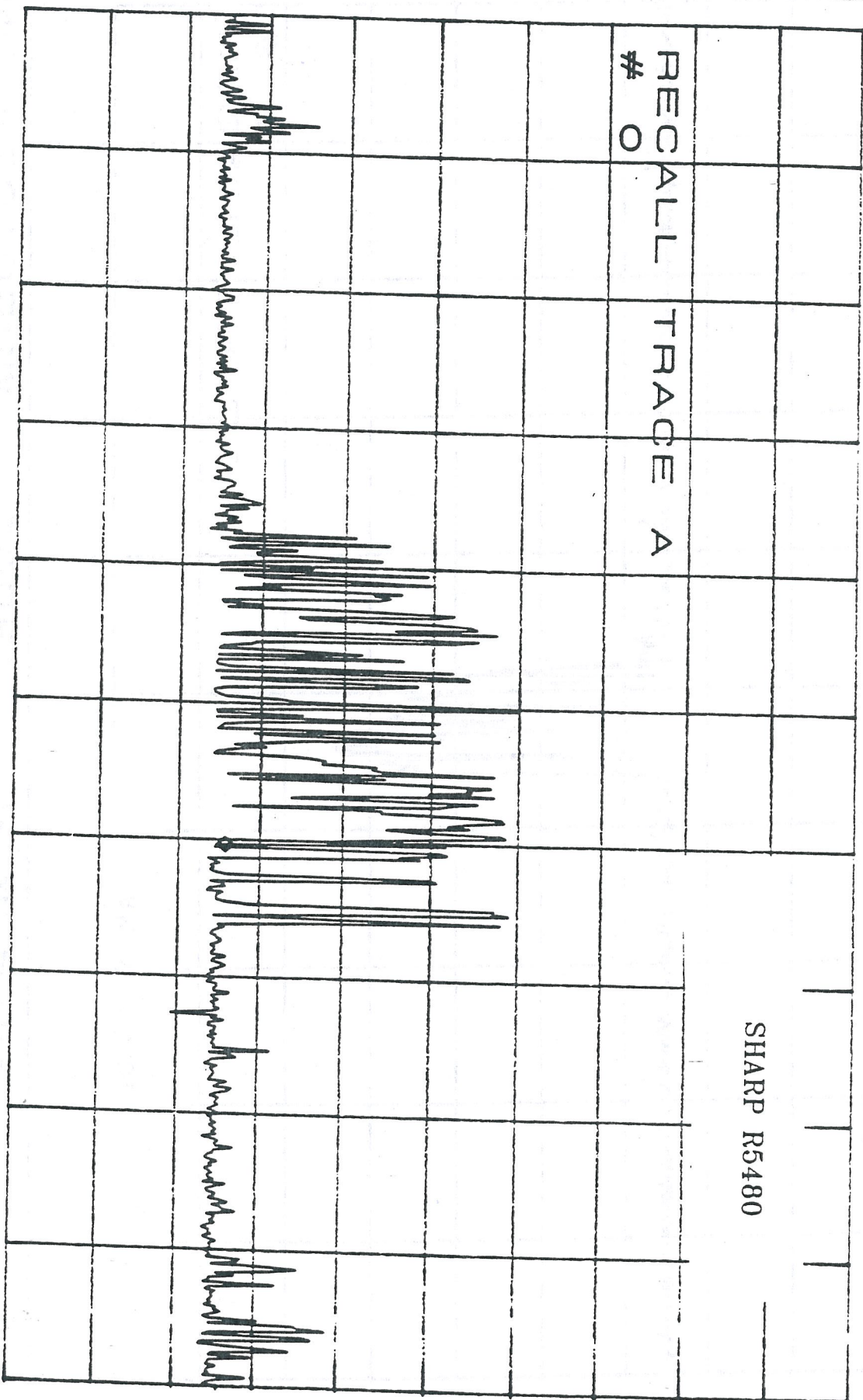
RL -10.0dBm

10dB/

2.4627GHz

SHARP R5480

RECALL TRACE A
0



CENTER 2.4420GHz

SPAN 200.0MHz

*RBW 100kHz

VBW 100kHz

SWP 50ms

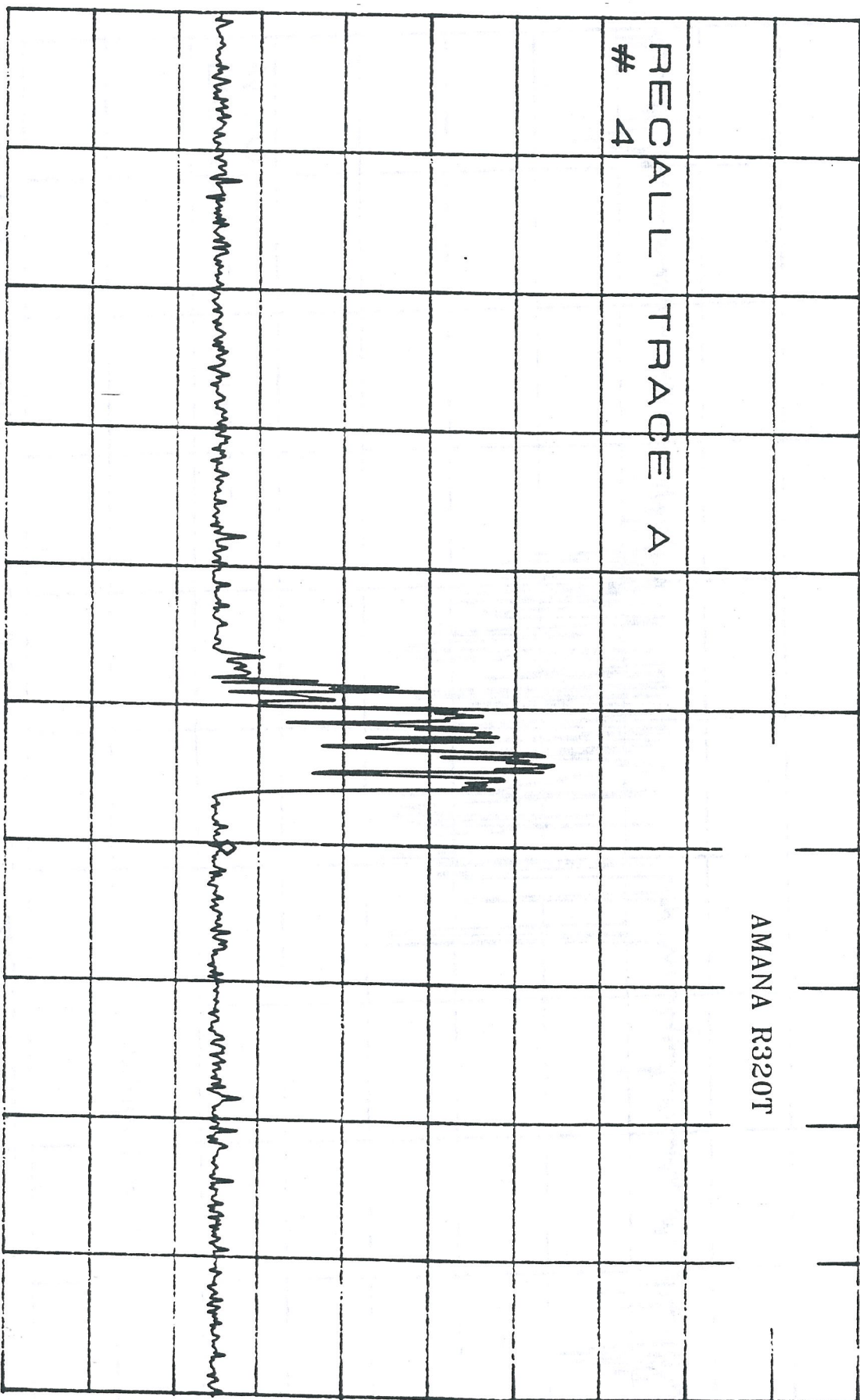
*ATTEN 0dB

MKR -84.67dBm

RL -10.0dBm

10dB/

2.4627GHz



CENTER 2.4420GHz

*RBW 100KHz VBW 100KHz

SPAN 200.0MHz

SMP 50ms