

ACTIVATOR
26 dB OBW

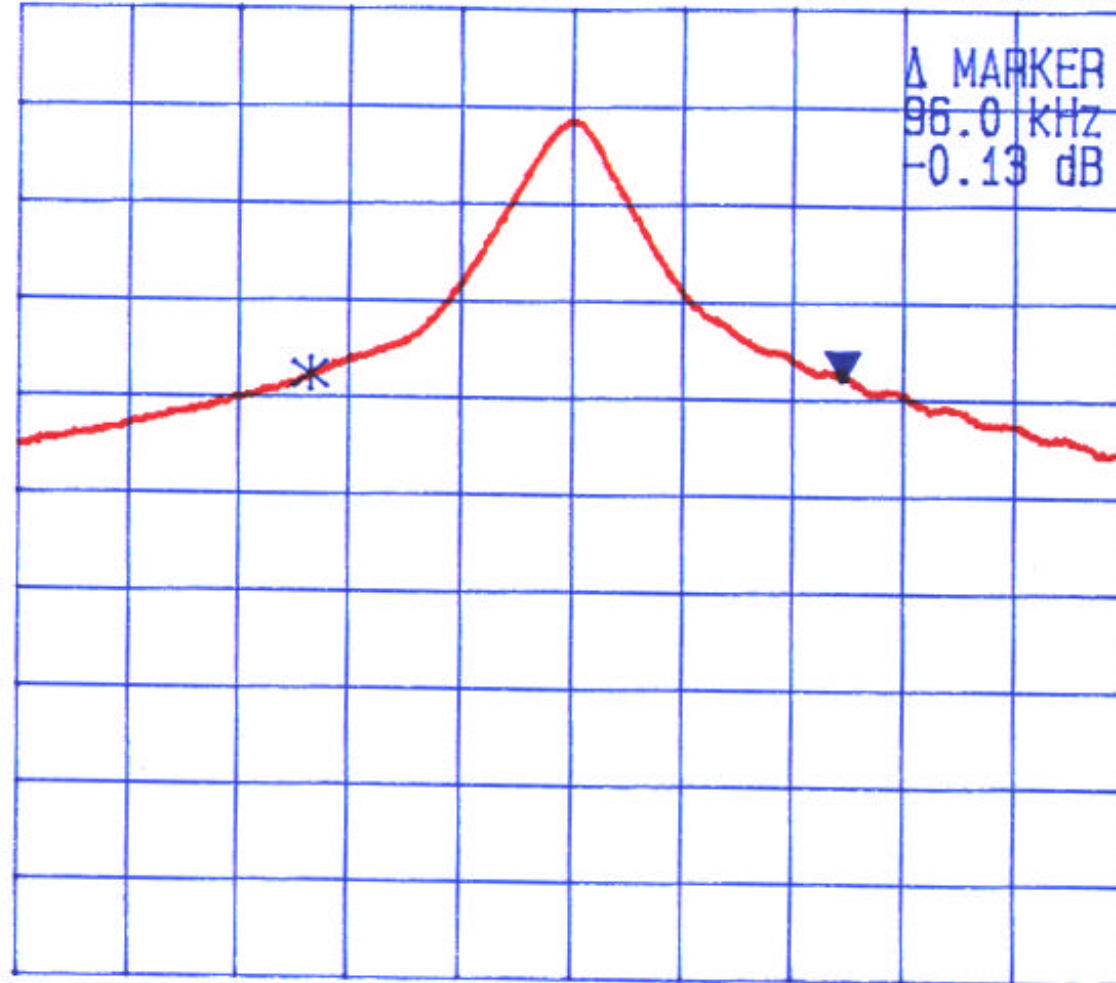
200-1000MHz PA102+E3146/SN2524
REF 77.0 dB μ V/m
10dB/

Mon May 8 10:48:48 2000
A_write&max B_blank

X dB DOWN
26.0 dB

Δ MARKER
96.0 kHz
-0.13 dB

RBW
10 kHz
VBW
10 kHz
SWP
60 ms

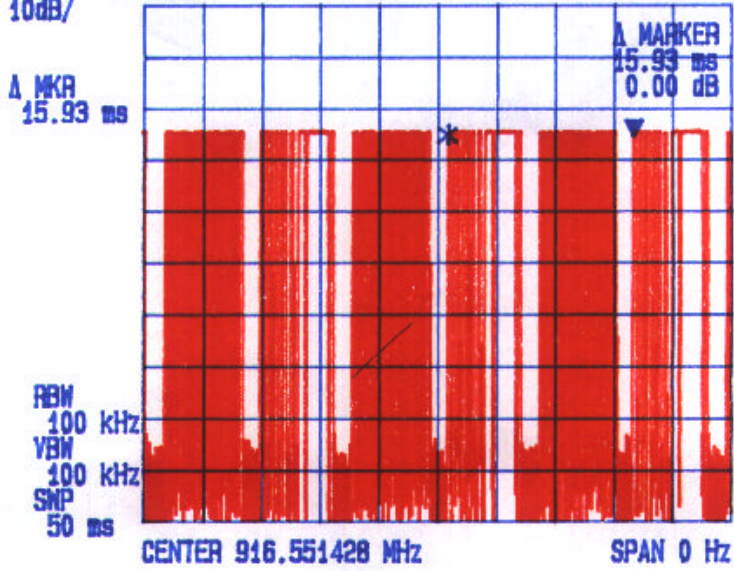


CENTER 916.5437 MHz

SPAN 200.0 kHz

GEMSTAR (27 APR. 2000)
 ACTIVATOR
 DUTY CYCLE MEASUREMENT.

200-1000MHz PA102+E3146/SN2524 Thu Apr 27 09:58:22 2000
 REF 117.0 dB μ V/m ATT 20 dB A.yien B.blank
 10dB/



$$T_{ON+OFF} = 15.93 \text{ ms}$$

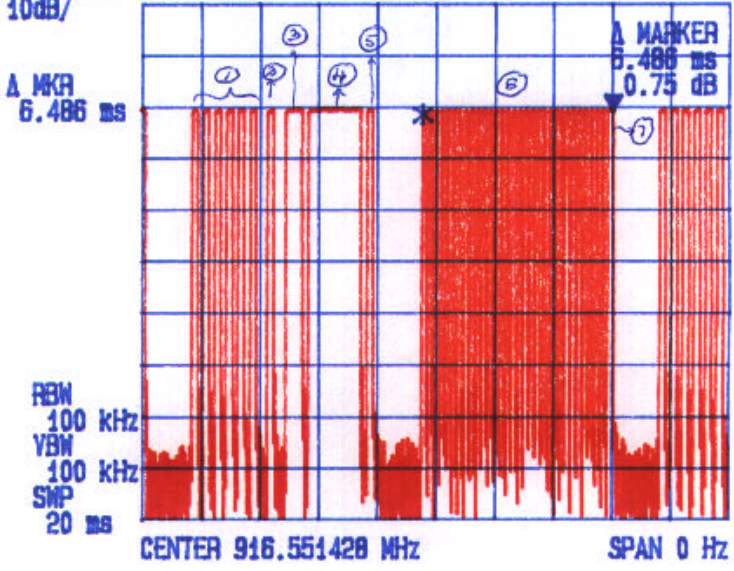
$$T_{ON} = (6 \times 171.4 \mu\text{s}) + 200 \mu\text{s} + 5 \times 2.9 \mu\text{s} + 1.771 \text{ ms} + 200 \mu\text{s} + 31 \times 68.57 \mu\text{s} + 171.4 \mu\text{s}$$

$$T_{ON} = 0.0394 \text{ ms}$$

$$\text{Duty cycle} = \frac{T_{ON}}{T_{ON+OFF}} \times 100\% = \frac{0.0394 \text{ ms}}{15.93 \text{ ms}} \times 100\% = 37.91\%$$

$$= 20 \log(0.3791) = -8.42 \text{ dB}$$

200-1000MHz PA102+E3146/SN2524 Thu Apr 27 09:02:55 2000
 REF 117.0 dB μ V/m ATT 20 dB A.yien B.blank
 10dB/



200-1000MHz PA102+E3146/SN2524

Thu Apr 27 09:17:19 2000

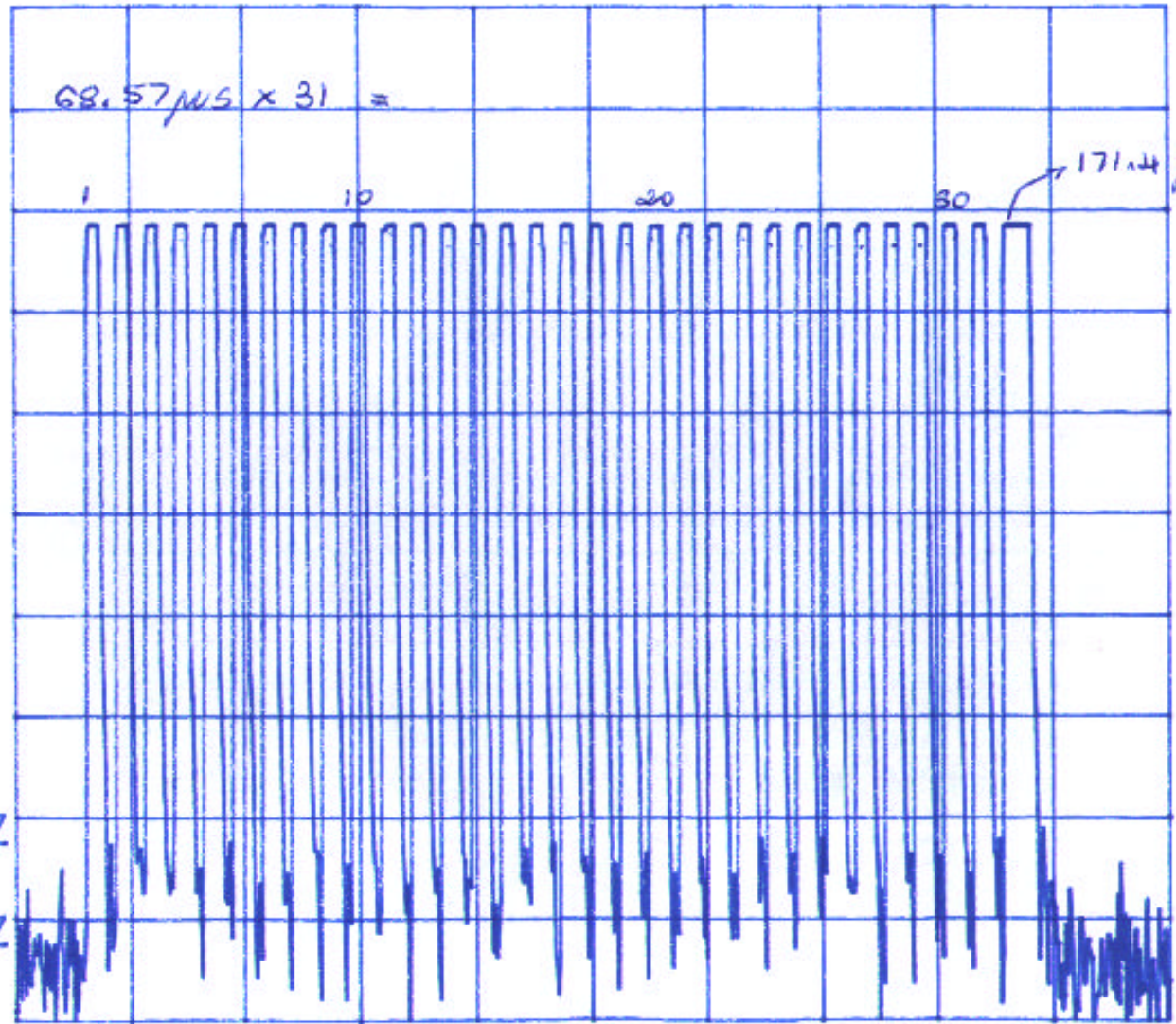
REF 117.0 dB μ V/m

ATT 20 dB

A_blank B_view

10dB/

SWP
8.0 ms



RBW
100 kHz

VBW
100 kHz

SWP
8.0 ms

CENTER 916.551428 MHz

SPAN 0 Hz

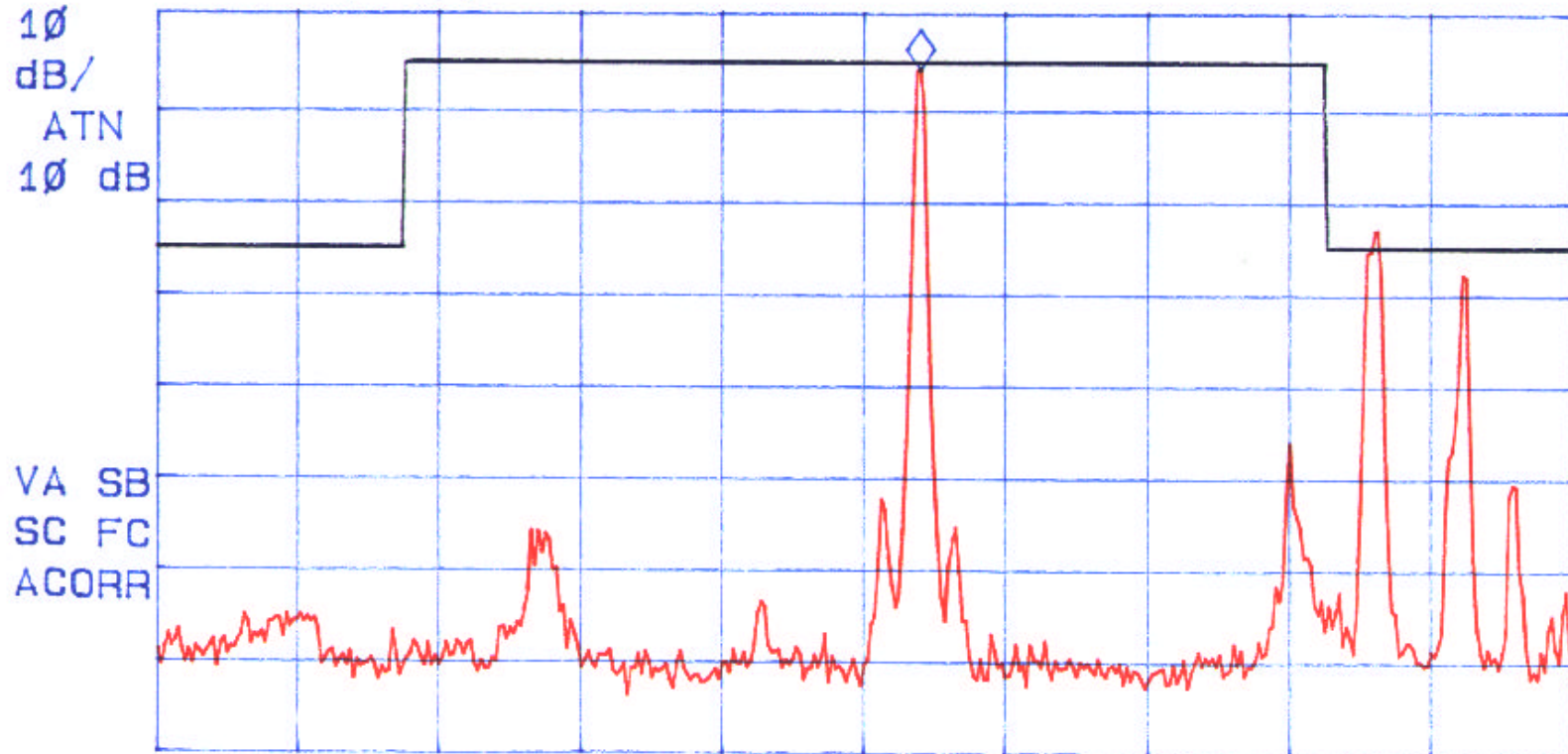
GEMSTAR
ACTIVATOR
(VERTICAL) (05 MAY 2000)

13: 36: 49 JAN 31, 1997 16: 16: 43 JAN 31, 1997

SPAN
40.00 MHz

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 916.60 MHz
90.96 dB μ V

LOG REF 97.0 dB μ V



CENTER 915.00 MHz

IF BW 120 kHz

AVG BW 300 kHz

SPAN 40.00 MHz

SWP 20.0 msec

GEMSTAR
ACTIVATOR
(HORIZONTAL) (05 MAY 2000)

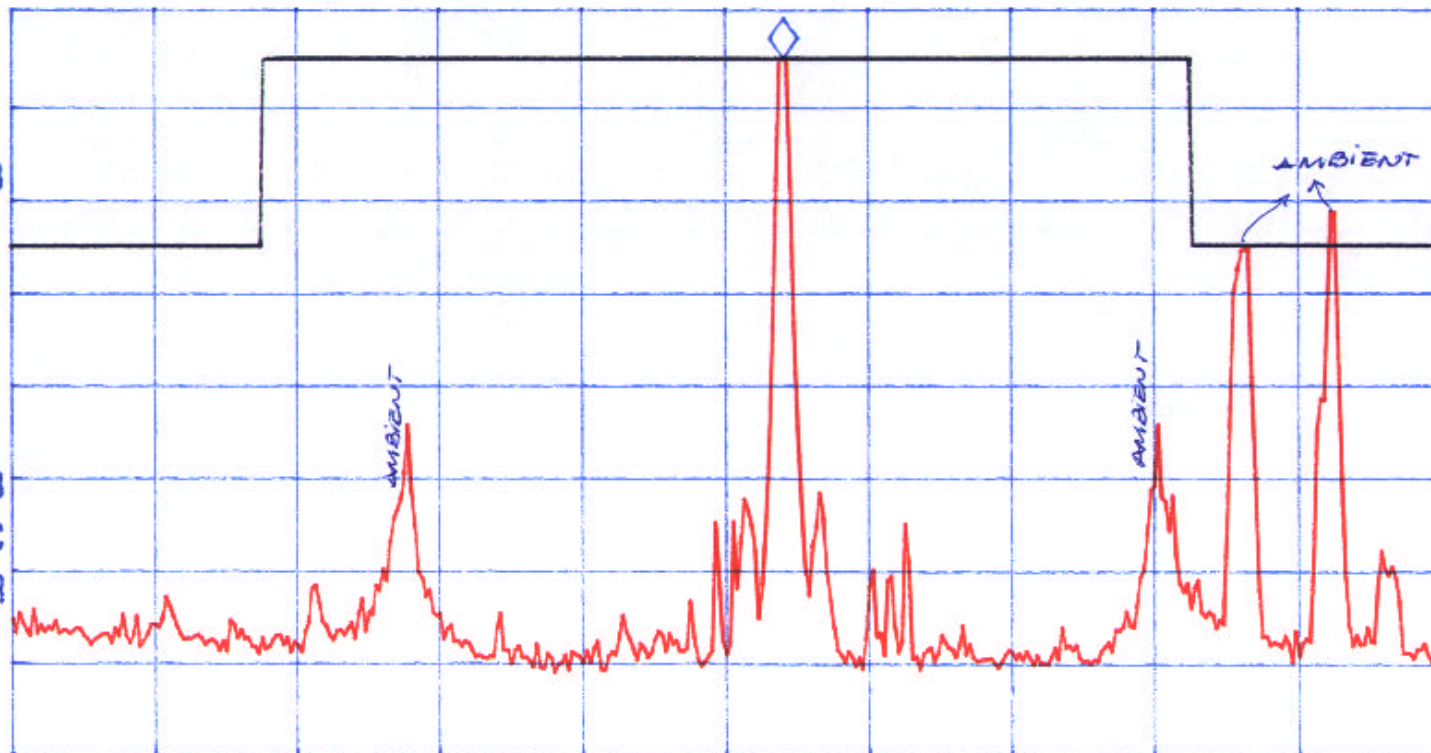
13: 36: 49 JAN 31, 1997 16: 16: 43 JAN 31, 1997

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 916.60 MHz
91.74 dB μ V

LOG REF 97.0 dB μ V

10
dB/
ATN
10 dB

VA SB
SC FC
ACORR



CENTER 915.00 MHz

IF BW 120 kHz

AVG BW 300 kHz

SPAN 40.00 MHz

SWP 20.0 msec



UltraTech
Engineering Labs Inc.

POWER-LINE CONDUCTED EMISSIONS MEASUREMENTS

APPLICANT: GEMSTAR
PRODUCT: ACTIVATOR
MODEL: _____

EMI Detector: [] Peak [] Quasi Peak [] Average Temp.: 24 °C, Humidity: 24 %
Line Tested: I, Input Voltage: 120 VAC, Tested by: HT Test Date: 26/4/00
Comments: FCL 15A

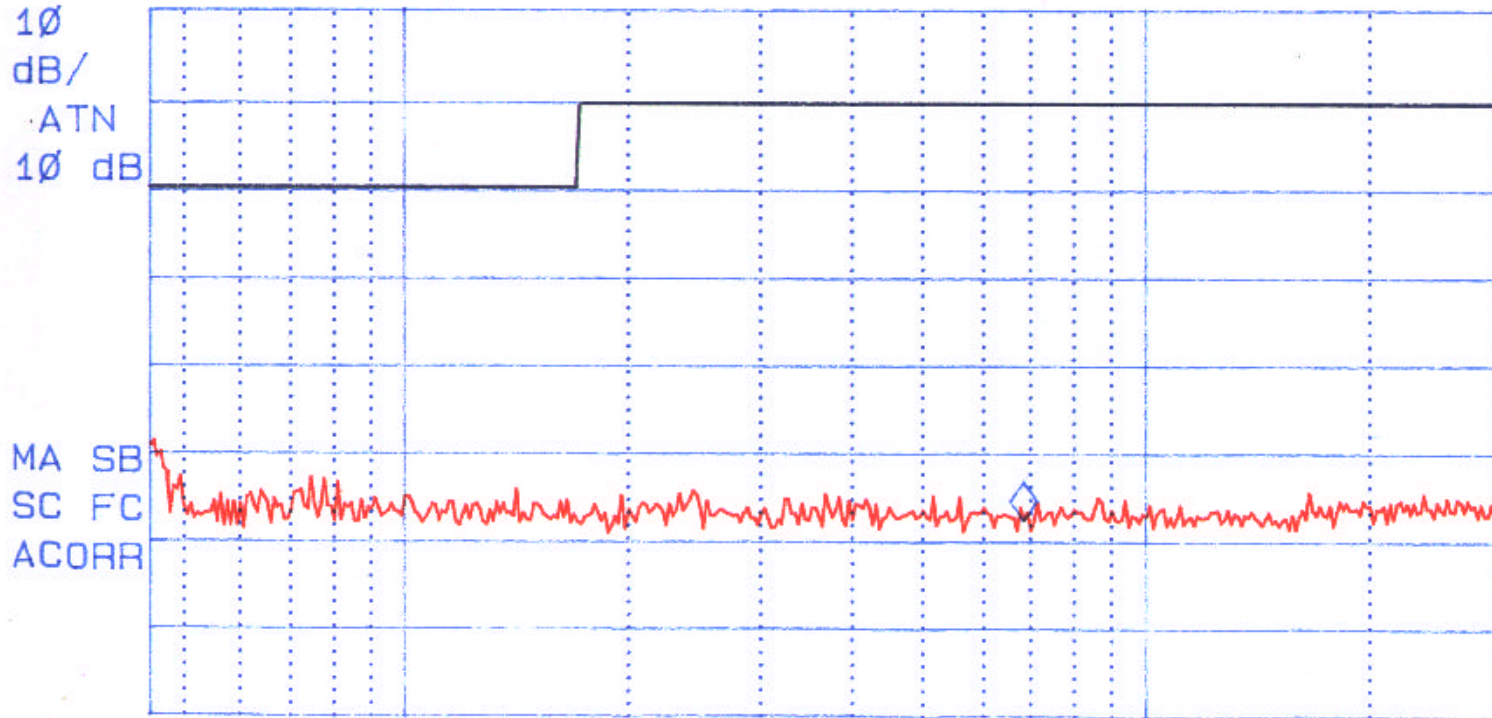
14: 04: 55 FEB 28, 1997

11: 04: 43 MAY 20, 1997

STOP
30.00 MHz

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 6.84 MHz
22.27 dBµV

LOG REF 80.0 dBµV



START 450 kHz IF BW 9.0 kHz AVG BW 30 kHz STOP 30.00 MHz
SWP 1.33 sec



UltraTech
Engineering Labs Inc.

POWER-LINE CONDUCTED EMISSIONS MEASUREMENTS

APPLICANT: GEMSTAR
PRODUCT: ACTIVATOR
MODEL: _____

EMI Detector: Peak Quasi Peak Average Temp.: 24 °C, Humidity: 24 %
Line Tested: II, Input Voltage: 120VAC, Tested by: HT Test Date: 2/14/00
Comments: FCL 15A

14:04:55 FEB 28, 1997

11:04:43 MAY 20, 1997

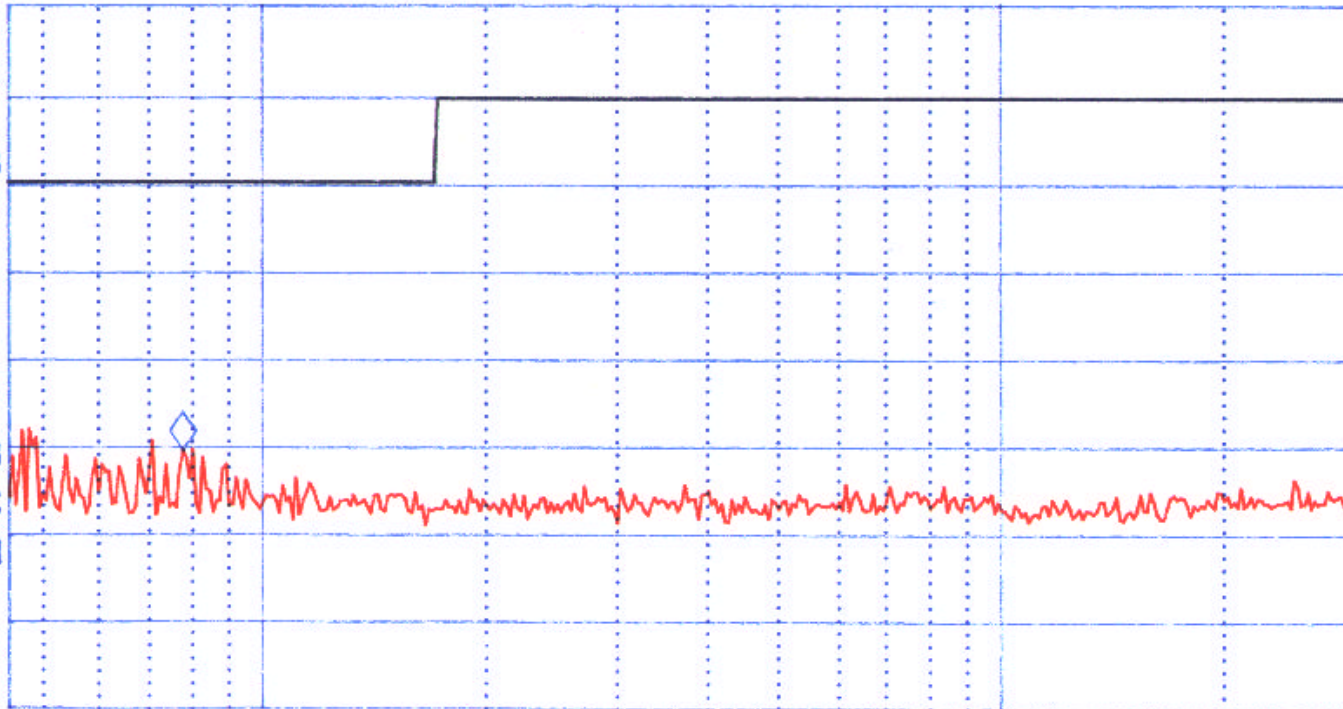
MARKER
780 kHz
29.38 dB μ V

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 780 kHz
29.38 dB μ V

LOG REF 80.0 dB μ V

10
dB/
.ATN
10 dB

MA SB
SC FC
ACORR



START 450 kHz

STOP 30.00 MHz

IF BW 9.0 kHz

AVG BW 30 kHz

SWP 1.33 sec