

ACTIVATOR
26 dB OBW

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

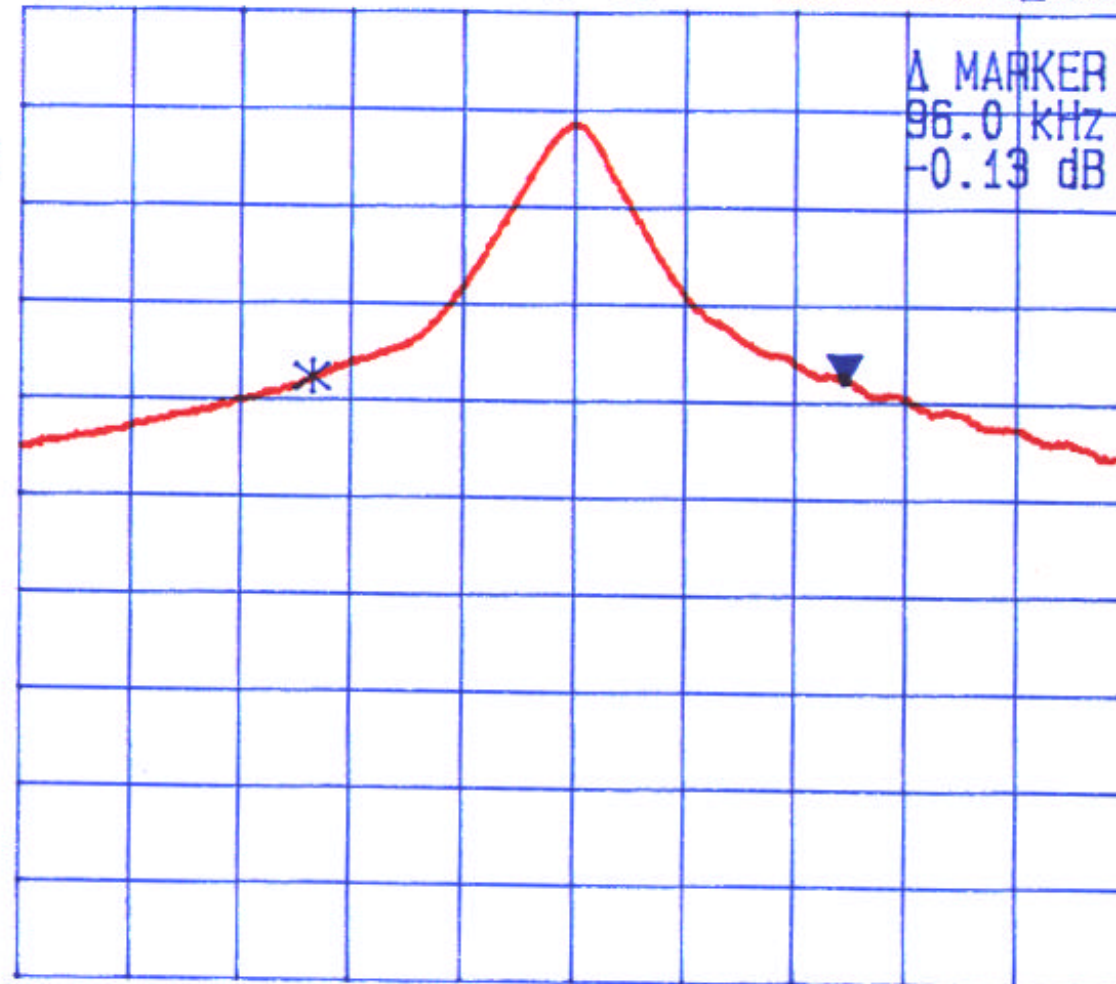
ATT 0 dB

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



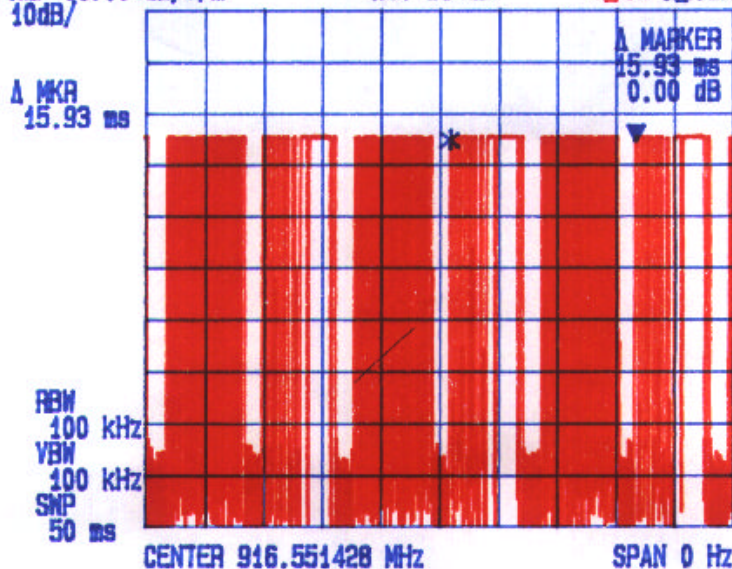
CENTER 916.5437 MHz

SPAN 200.0 kHz

GENSTAR (27 APR. 2000)

ACTIVATOR
DUTY CYCLE MEASUREMENT

200-1000MHz PA102+E3146/SN2524 Thu Apr 27 08:58:22 2000
REF 117.0 dBμV/m ATT 20 dB A:gen B:blank
10dB/



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

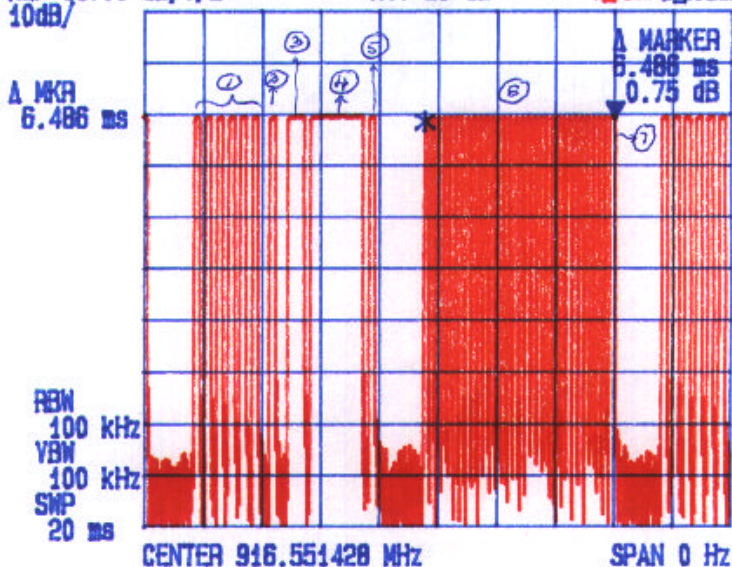
$$T_{ON} = (6 \times 171.4 \mu\text{s}) + 200 \mu\text{s} + 5 \times 2.9 \mu\text{s} + 1.771 \text{ ms} + 200 \mu\text{s} + 31 \times 68.57 \mu\text{s} + 171.4 \mu\text{s}$$

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

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

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

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



200-1000MHz PA102+E3146/SN2524

Thu Apr 27 09:17:19 2000

REF 117.0 dB μ V/m

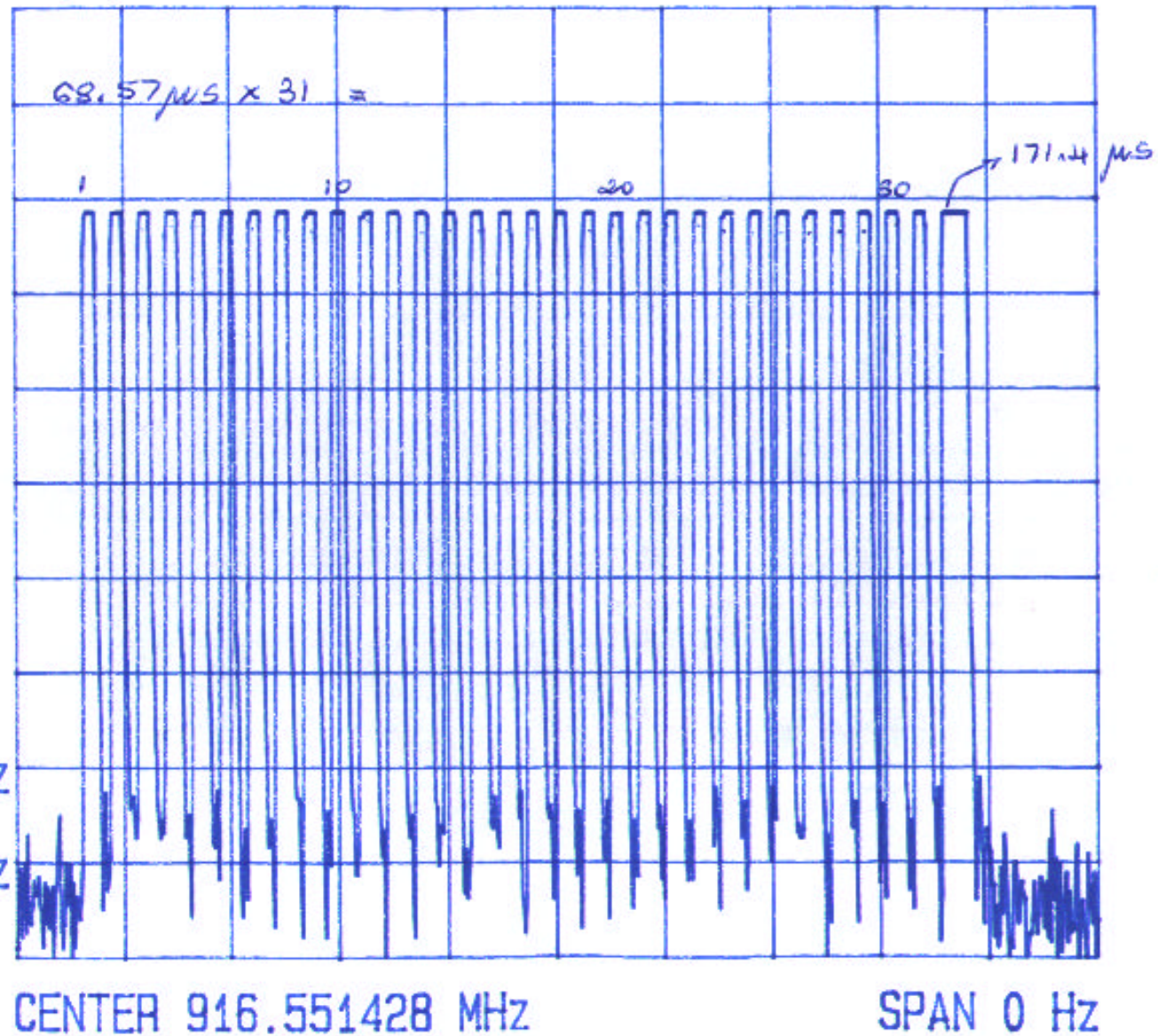
ATT 20 dB

A_blank B_view

10dB/

SWP
8.0 ms

RBW
100 kHz
VBW
100 kHz
SWP
8.0 ms



GEMSTAR
ACTIVATOR
(VERTICAL) (05 MAY 2000)

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

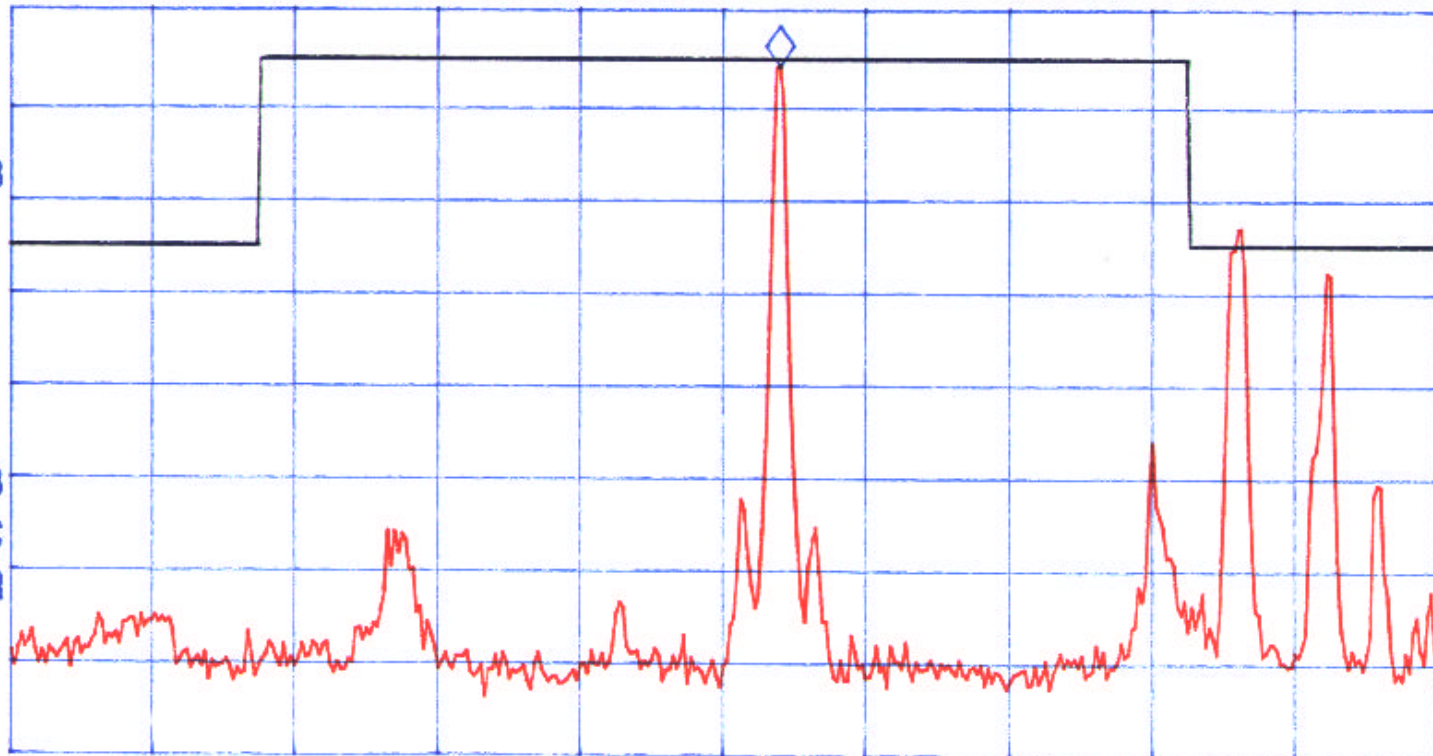
SPAN
40.00 MHz

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

LOG REF 97.0 dB μ V

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

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

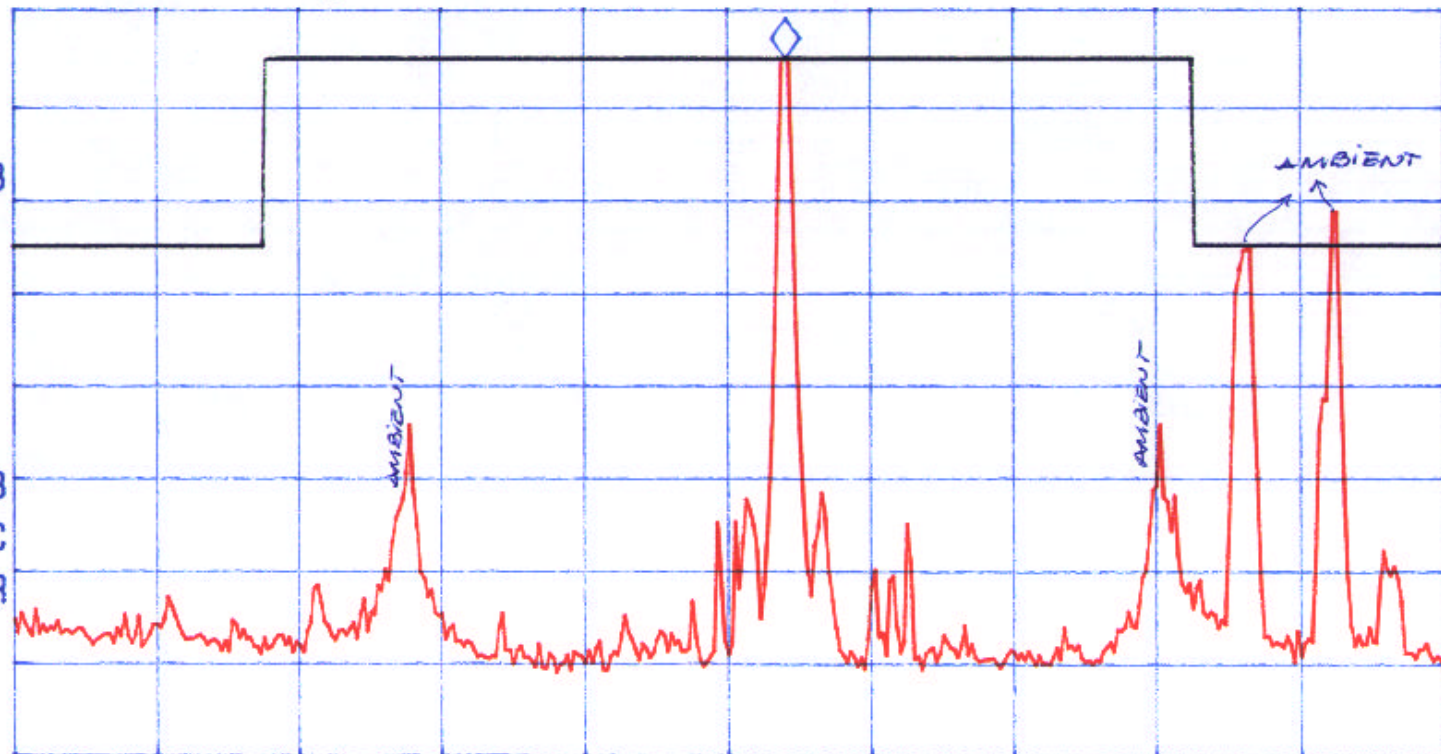
MKR 916.60 MHz

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: L, 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

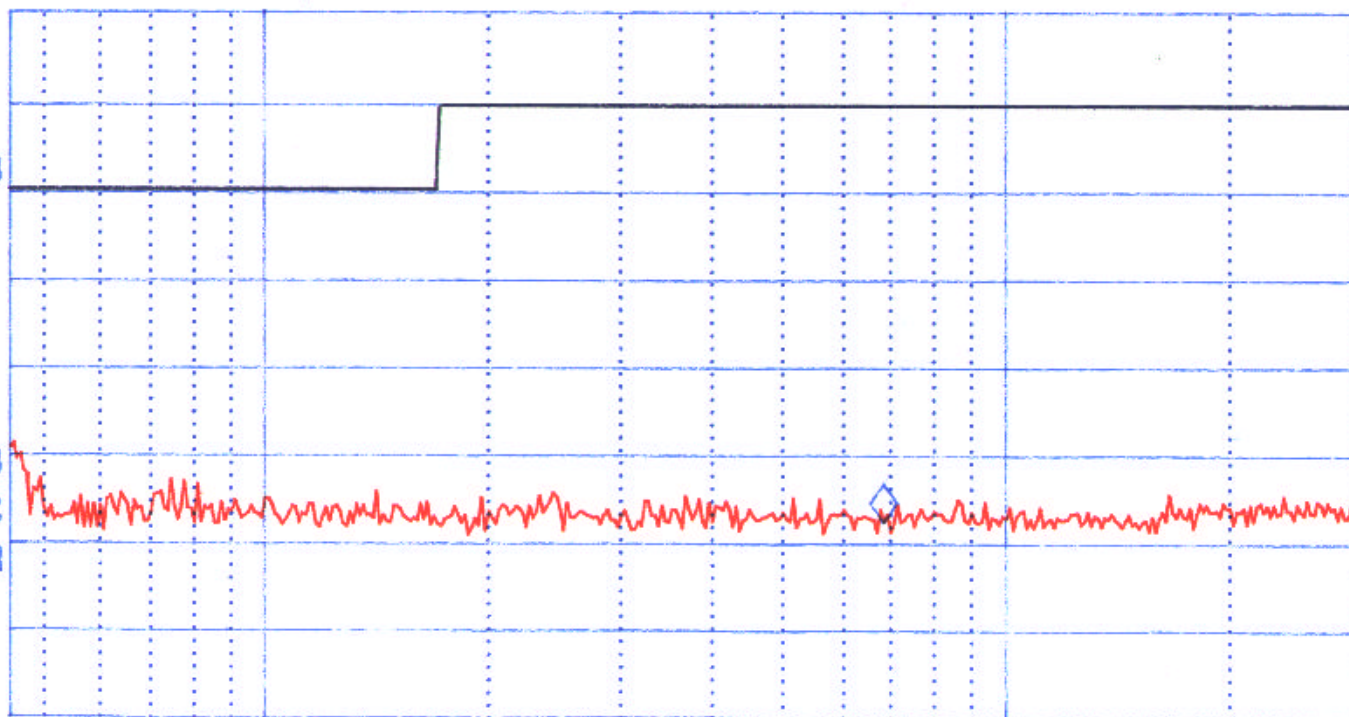
STOP
30.00 MHz

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 6.84 MHz
22.27 dB μ V

LOG REF 80.0 dB μ V

10
dB/
ATN
10 dB

MA SB
SC FC
ACORR



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: 26/4/00
Comments: FCL 15A

14:04:55 FEB 28, 1997

11:04:43 MAY 20, 1997

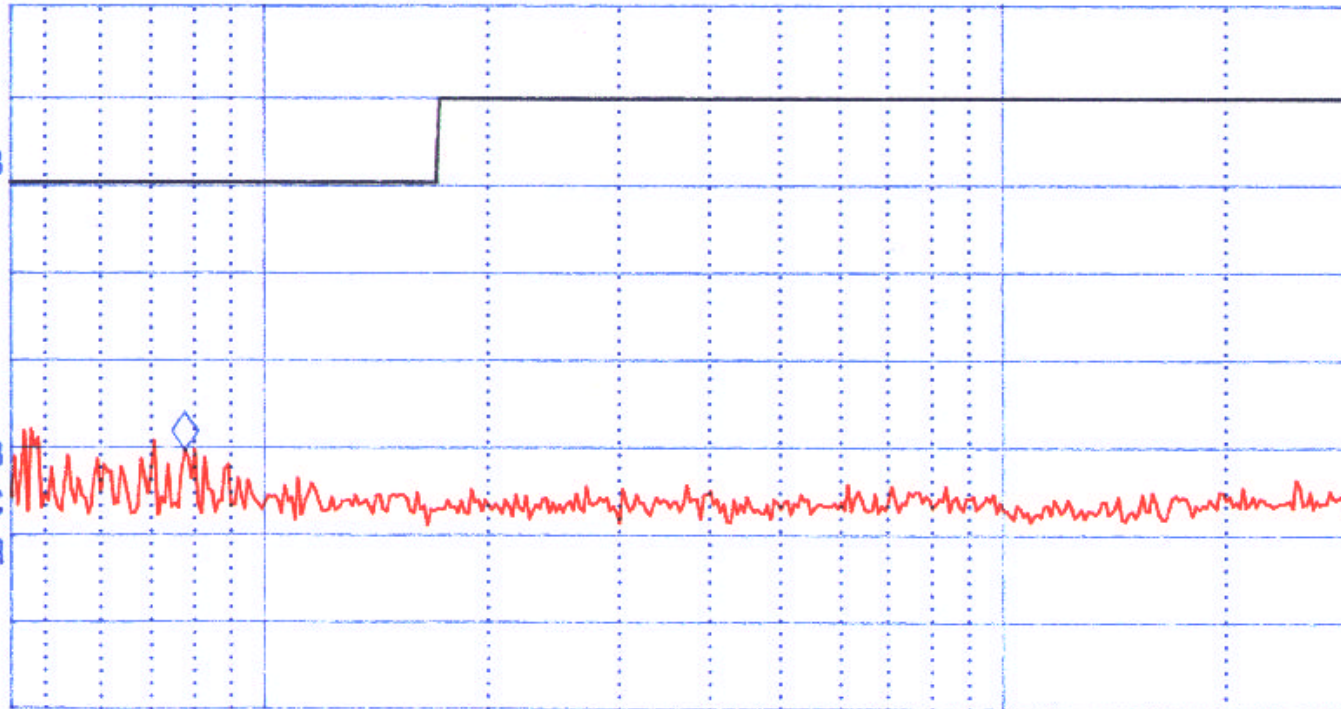
MARKER
780 kHz
29.38 dBμV

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 780 kHz
29.38 dBμV

LOG REF 80.0 dBμV

10
dB/
ATN
10 dB

MA SB
SC FC
ACORR



START 450 kHz

IF BW 9.0 kHz

AVG BW 30 kHz

STOP 30.00 MHz

SWP 1.33 sec