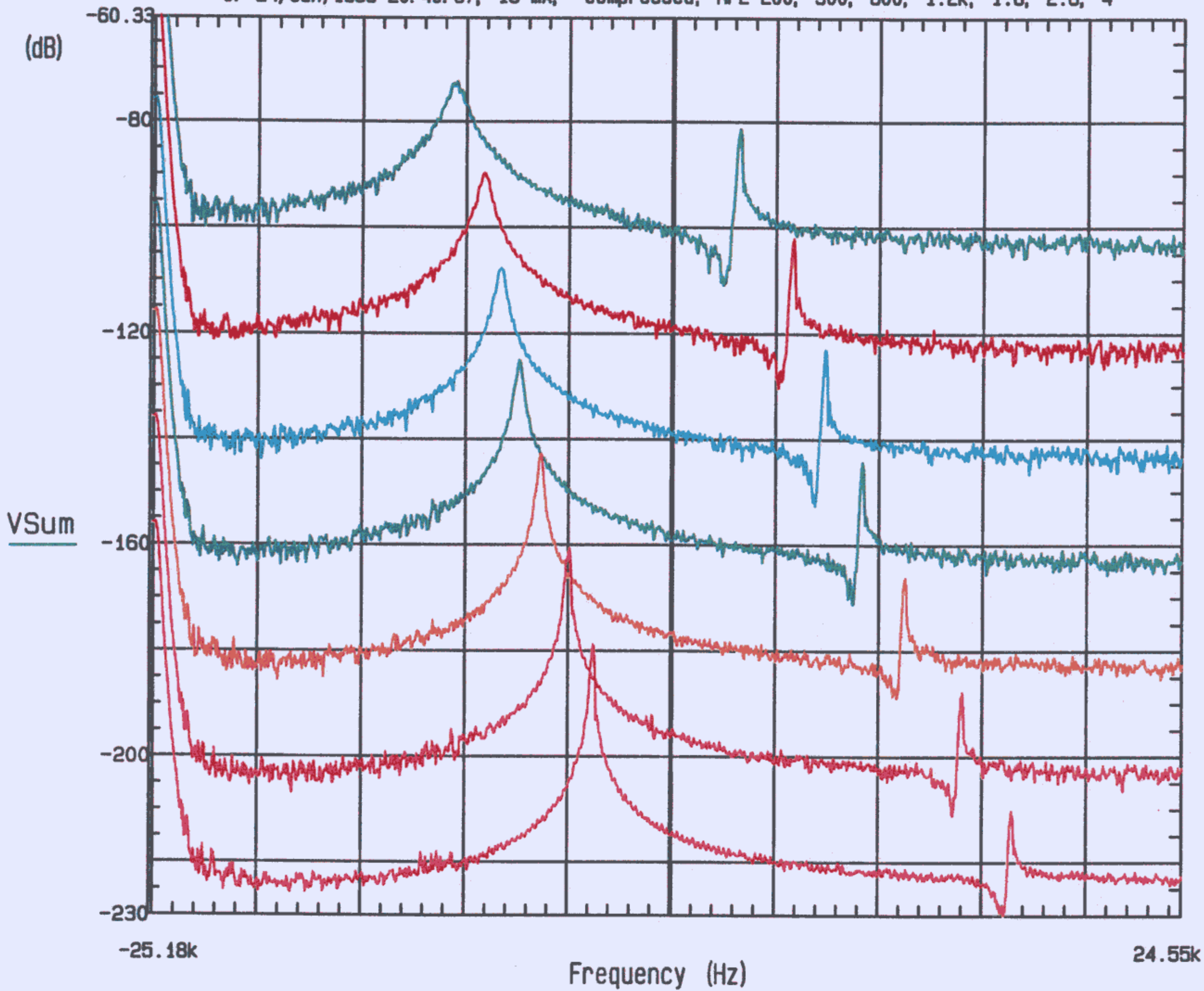
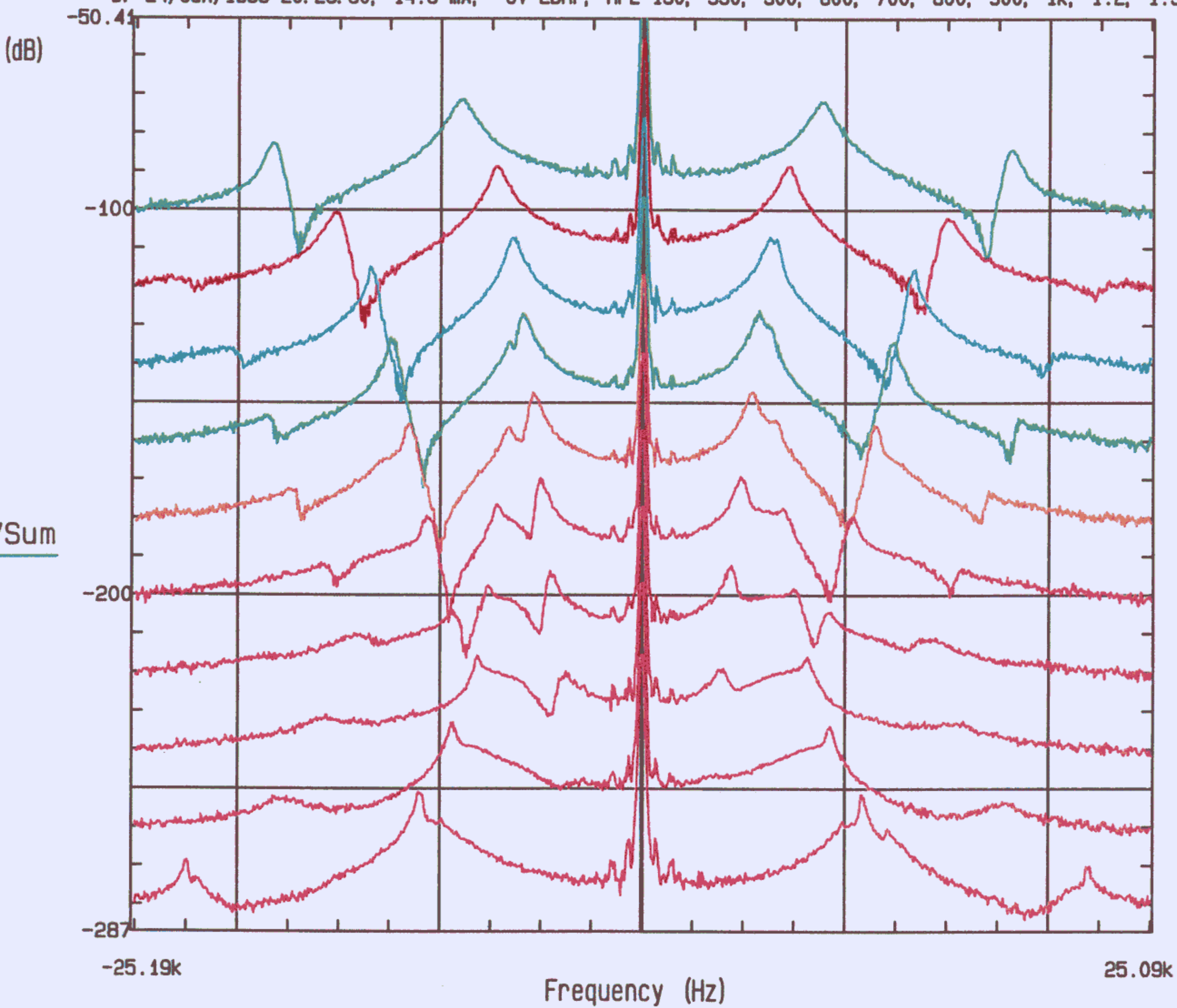


c: 24/Jun/1999 20:40:57, 13 mA, compressed, RF2 200, 500, 800, 1.2k, 1.8, 2.8, 4



b: 24/Jun/1999 20:25:30, 14.8 mA, UV LBRF, RF2 150, 350, 500, 600, 700, 800, 900, 1k, 1.2, 1.5 kW



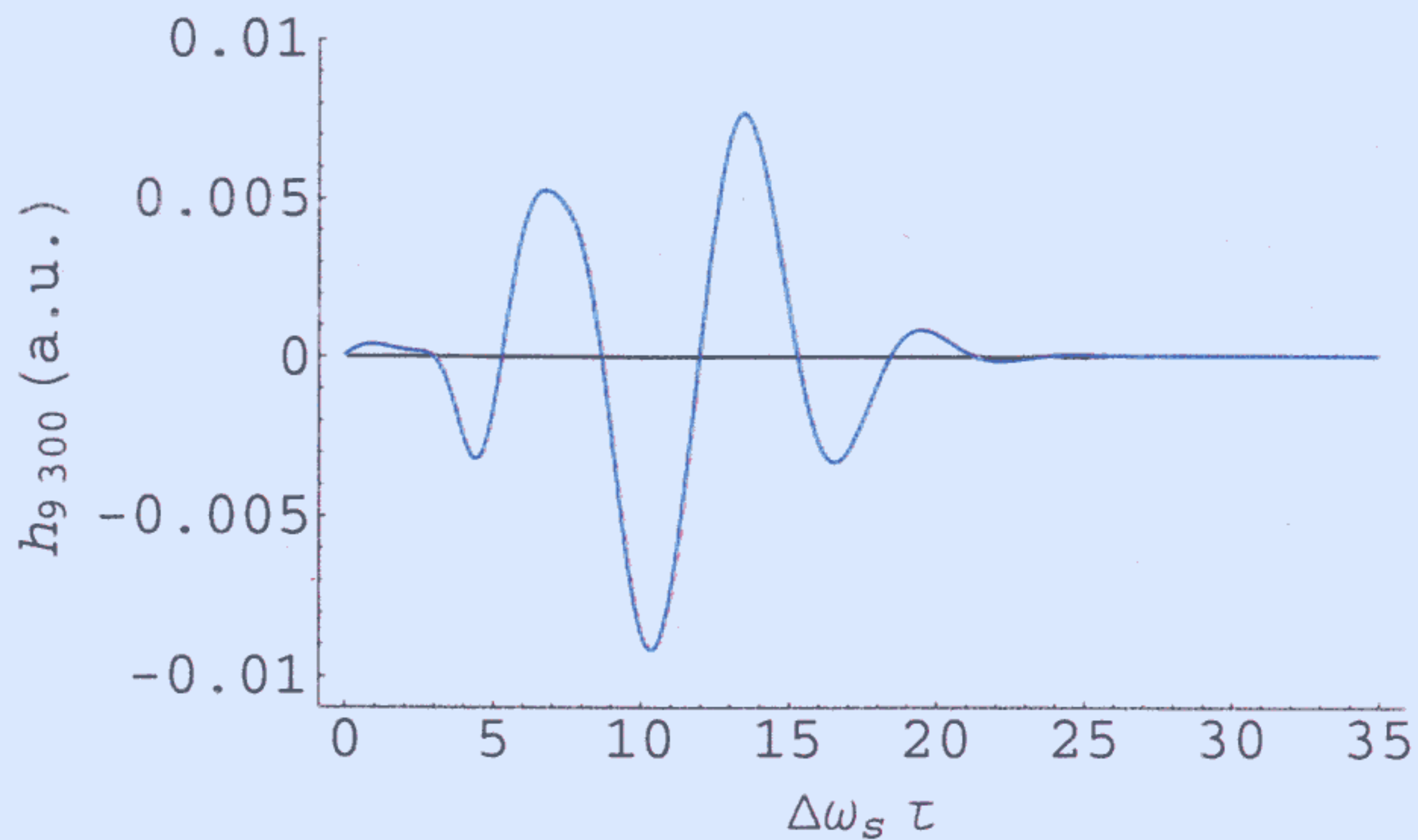


FIG. 1: Example of the  $h_{mn}$  function  $h_{9\ 300}(\Delta\omega_s\tau)$  for the  $\phi^4$ -potential case. NSLS VUV-ring parameters are used.

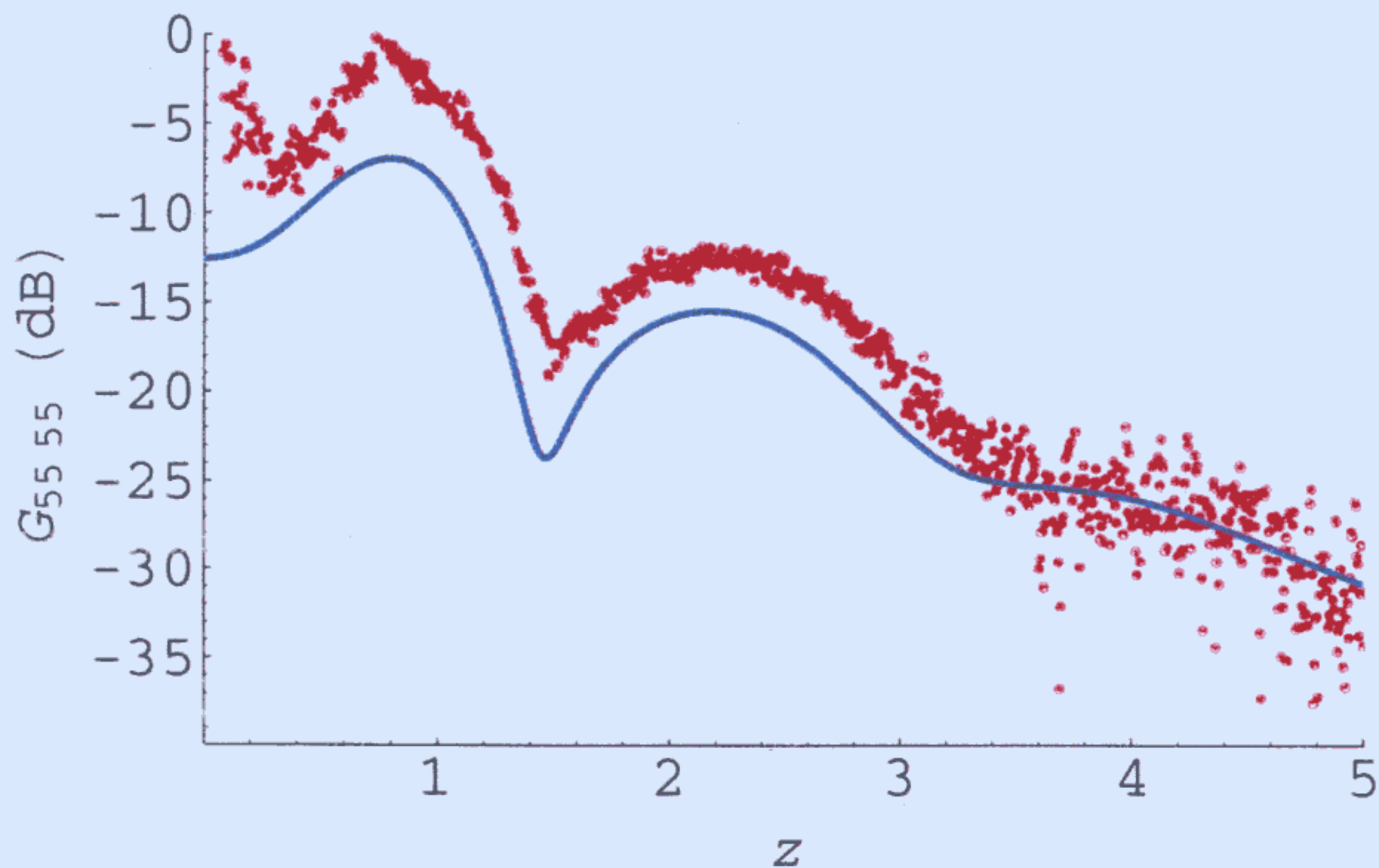
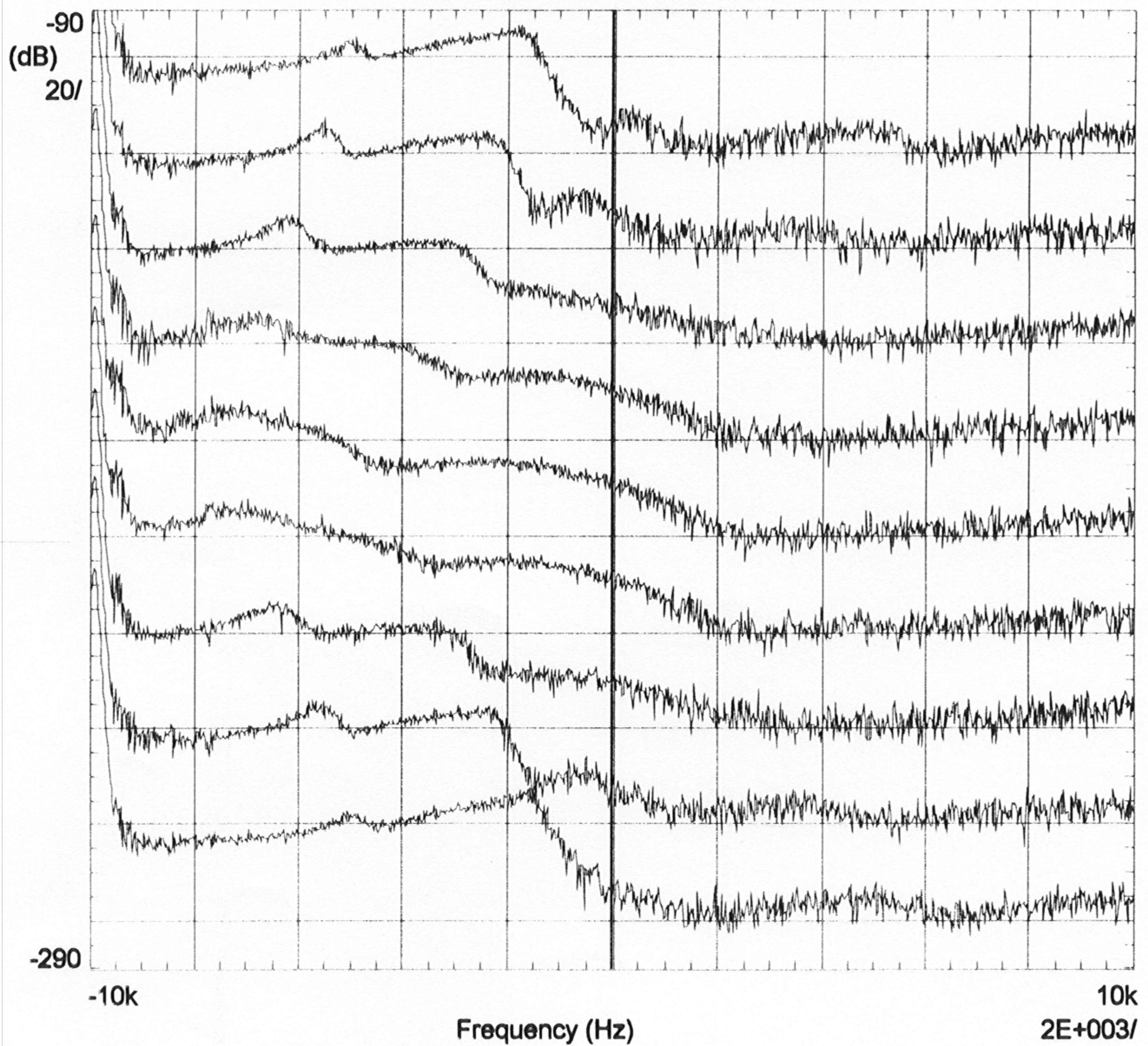
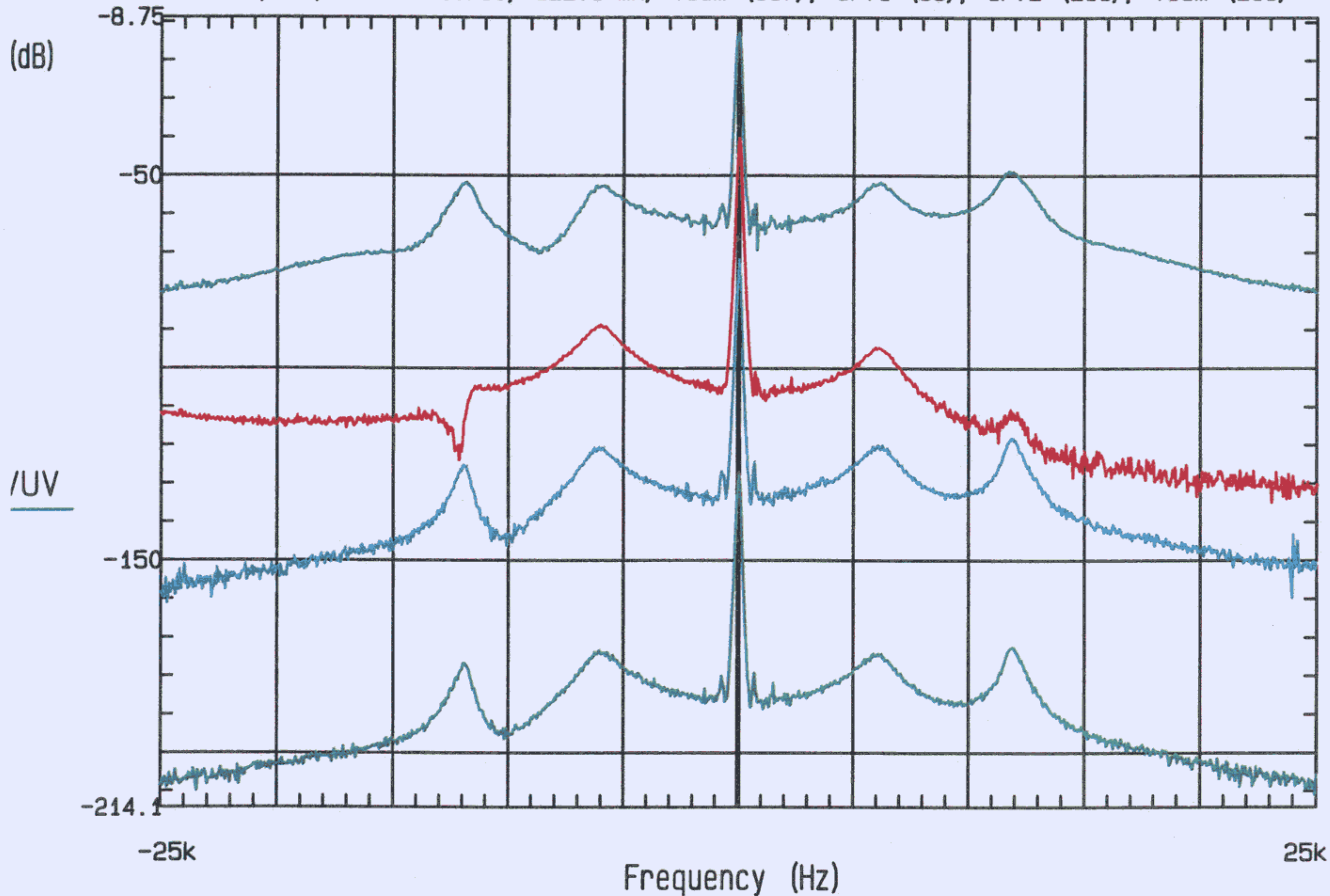


FIG. 2: Example of the beam transfer function  $G_{55\ 55}$  as a function of  $z = \Omega/\Delta\omega_s$  for the  $\phi^4$ -potential case (solid line) and in the NSLS VUV ring at 13 mA and stretched bunches (data points). The scaling factor  $\Delta\omega_s$  is adjusted 20% from expected to match the data. The vertical scale is arbitrary.

c: 13/Apr/1999 15:08:44, 4 mA, LBRF, vs i/c phase



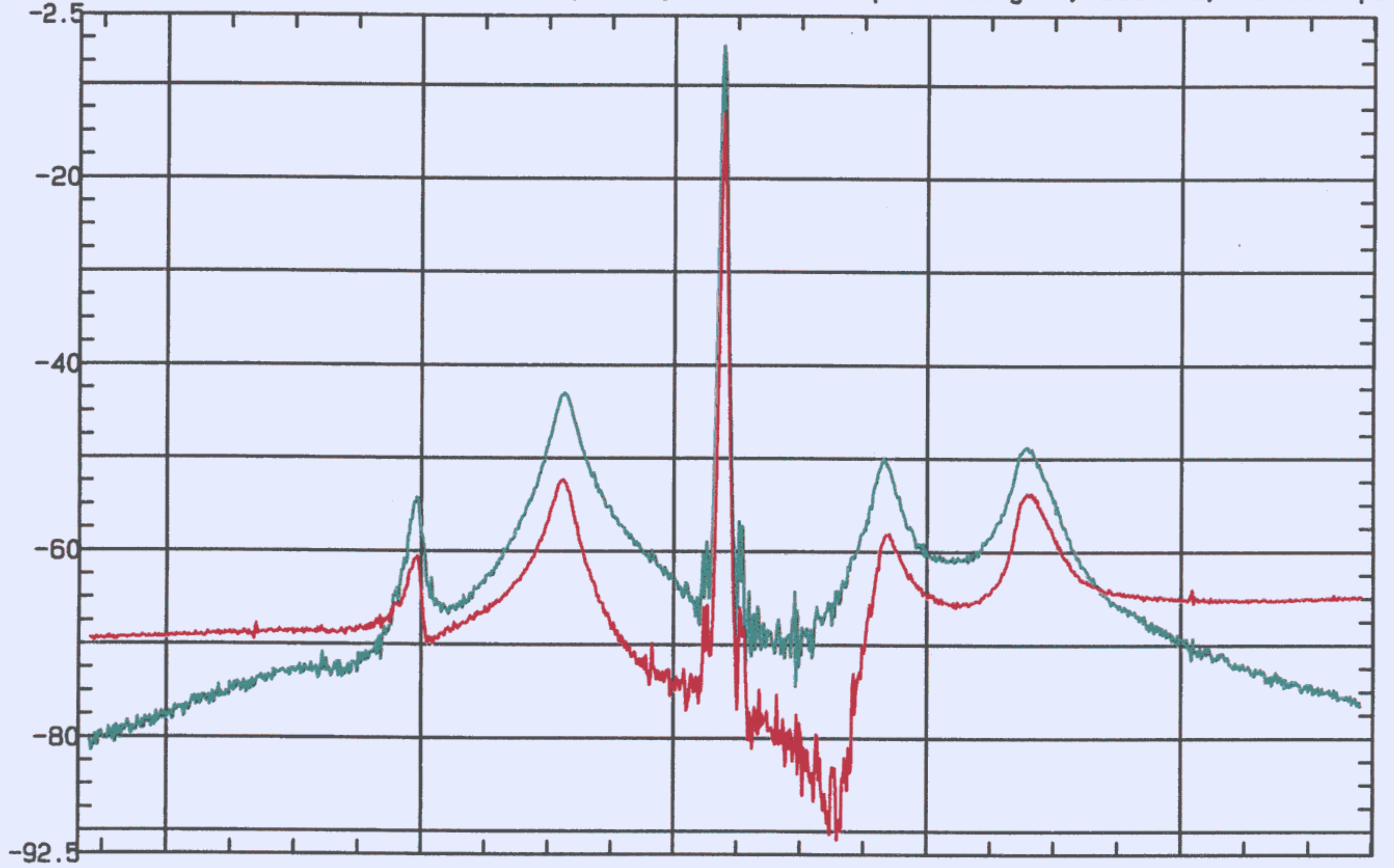
b: 18/Feb/2000 18: 10: 50, 322.1 mA, VSum (317), urf1 (53), urf2 (211), VSum (211)



*Distortion*

h: 03/Mar/2000 19:47:11, 373.7 mA, VSum, URF2 cav response to genr, 211 MHz, normal ops

(dB)



/UV

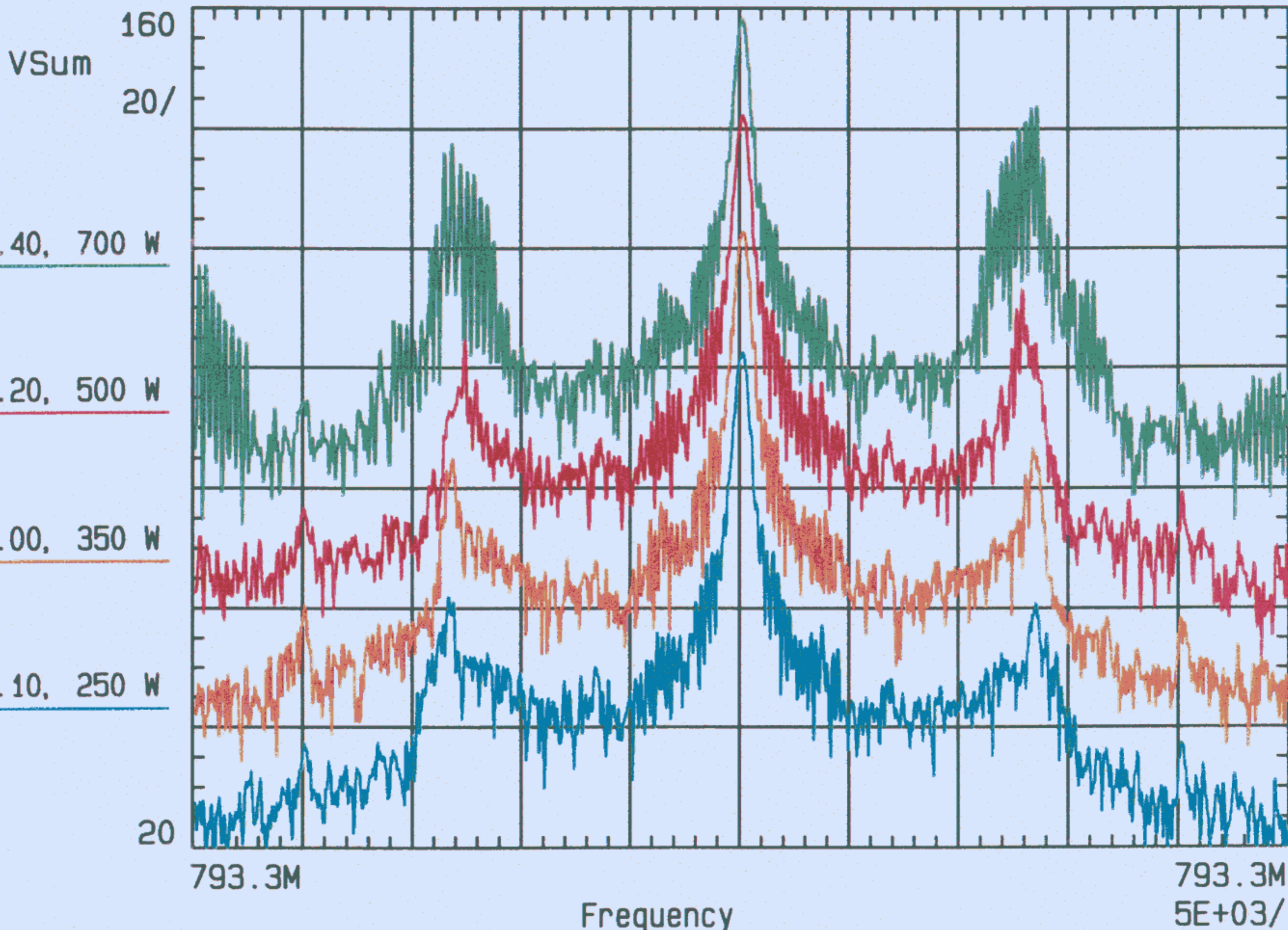
211.5M

Frequency (Hz)

211.6M

# RF & Beam fb.

10/Jun/1998 21:15:06, Stretched, varying RF2



50 kHz span

d: 02/Mar/1999 08:17:11 overstretched

350 mA

-40  
(dB)  
10/

7-Bu.

-120

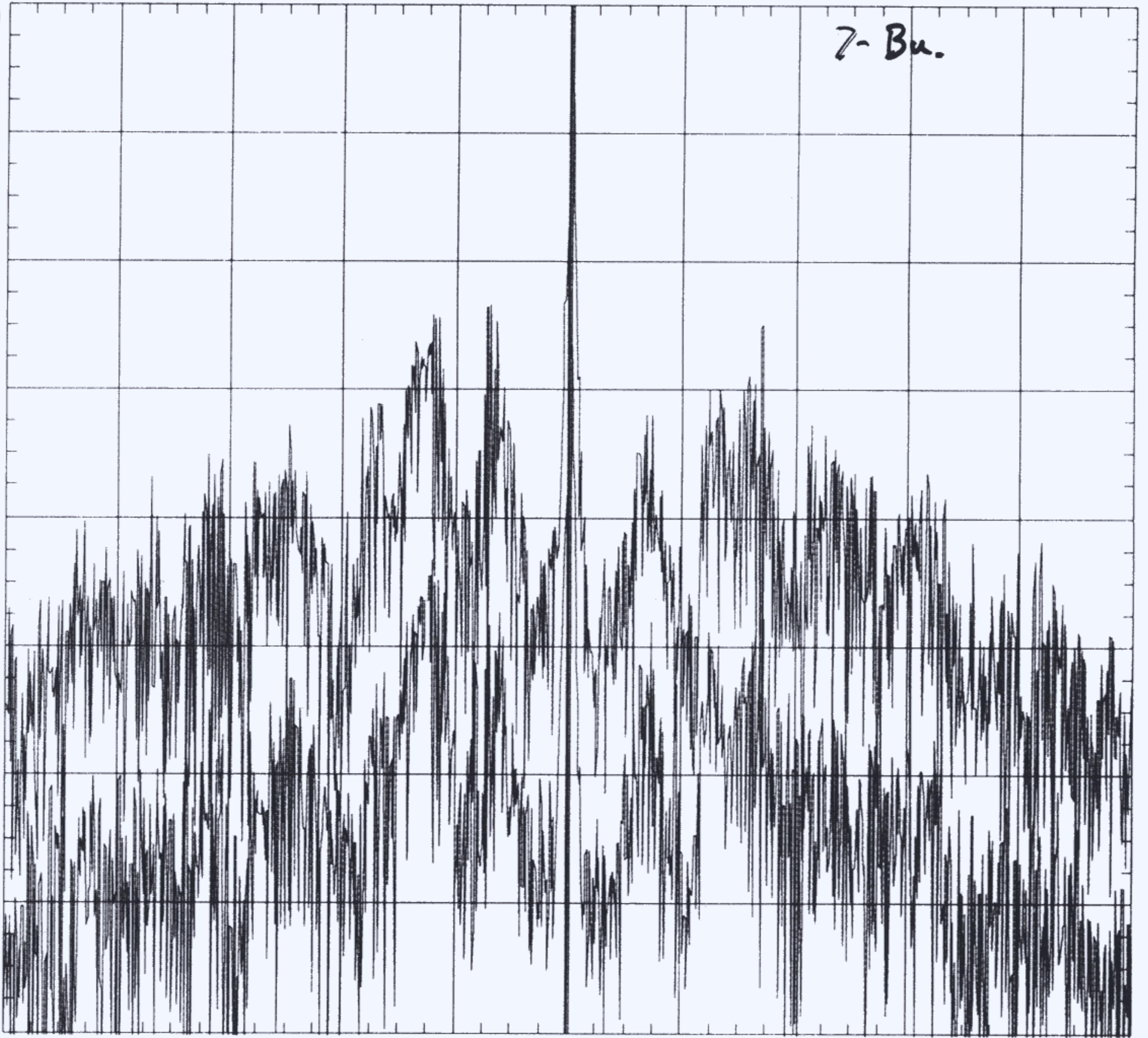
-50k

Frequency (Hz)

50k

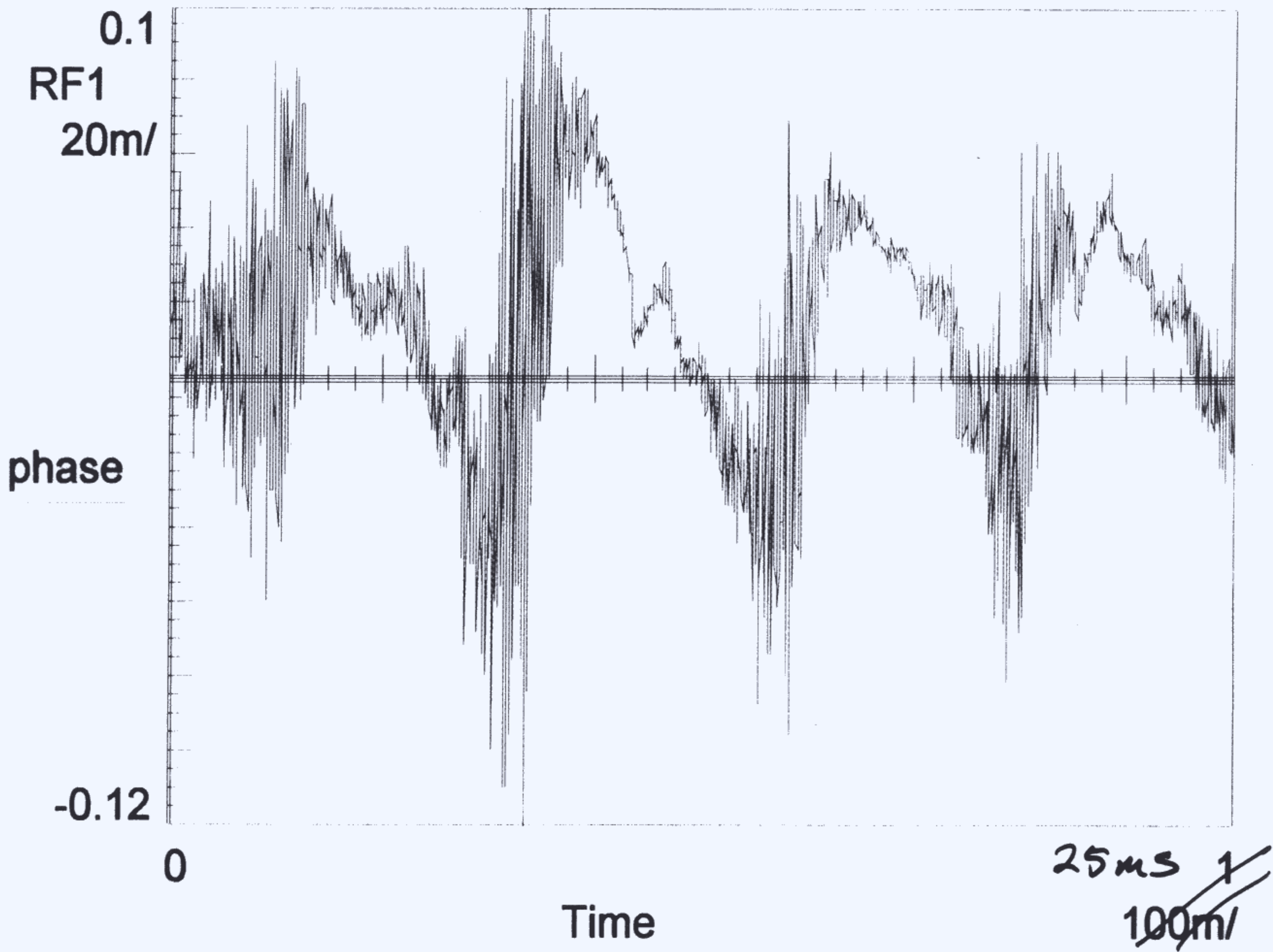
10k/

100-kHz span

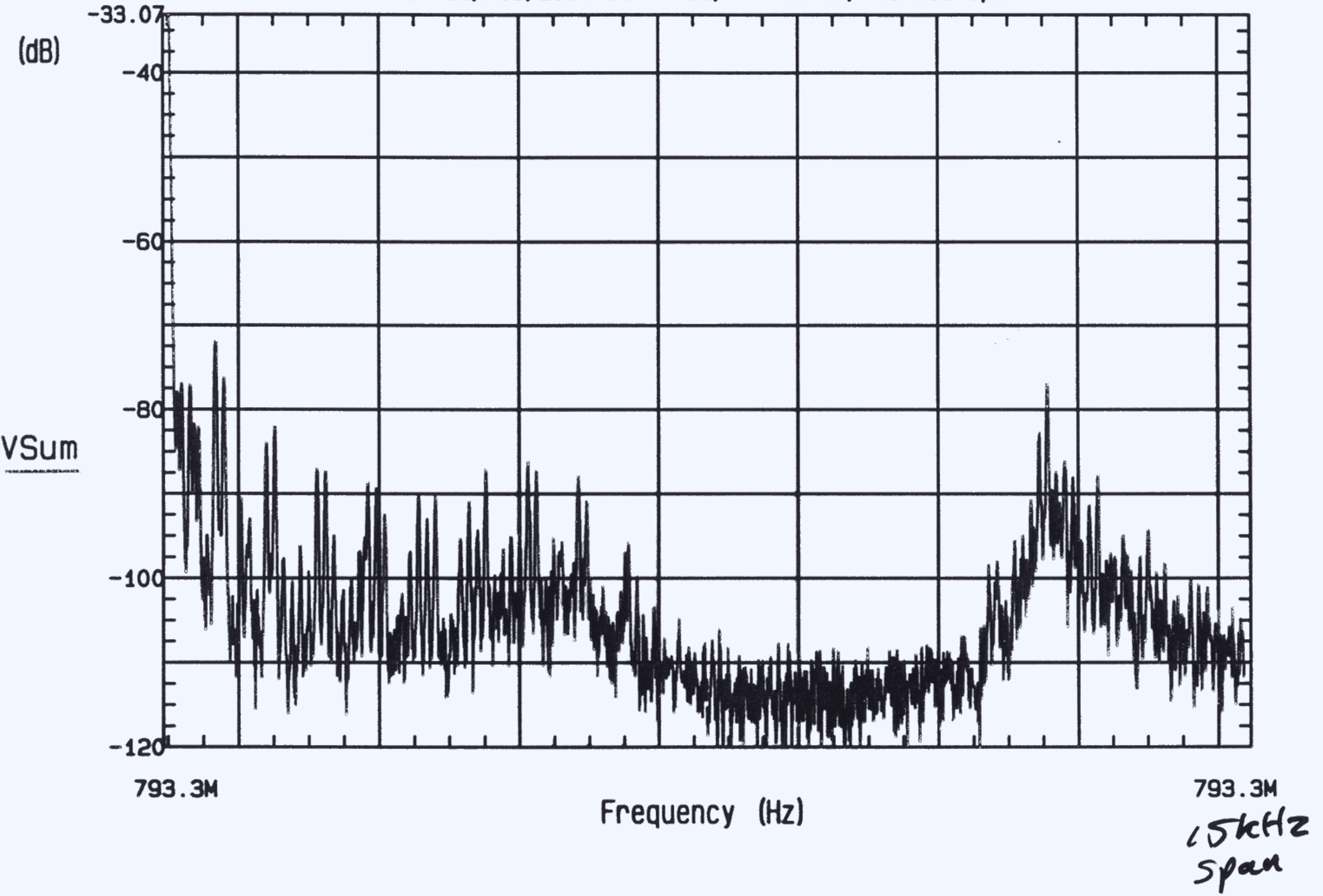


UV overstretched ~350 mA  
RF2 862W

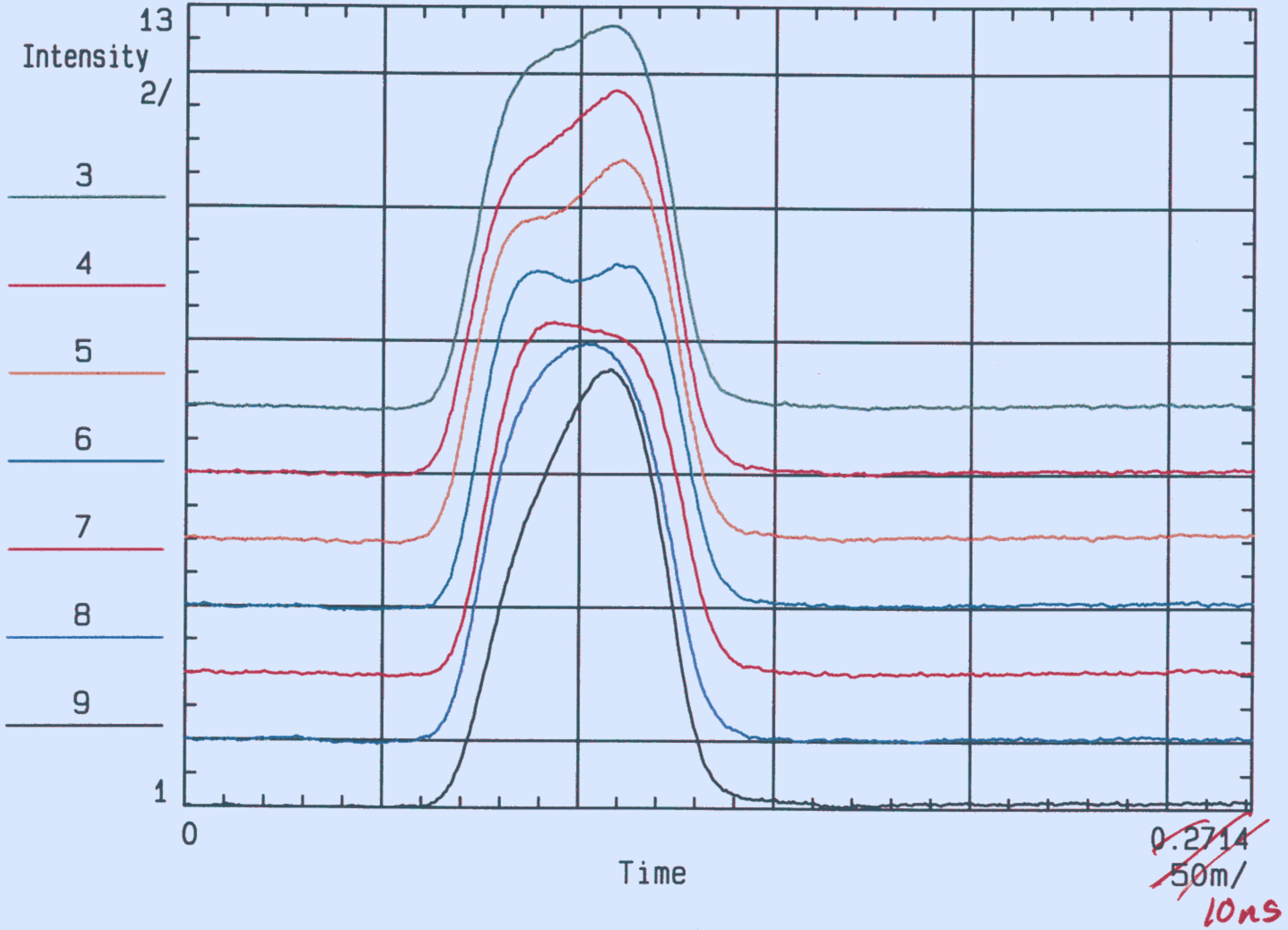
Tue 02/Mar/1999 08:21:51



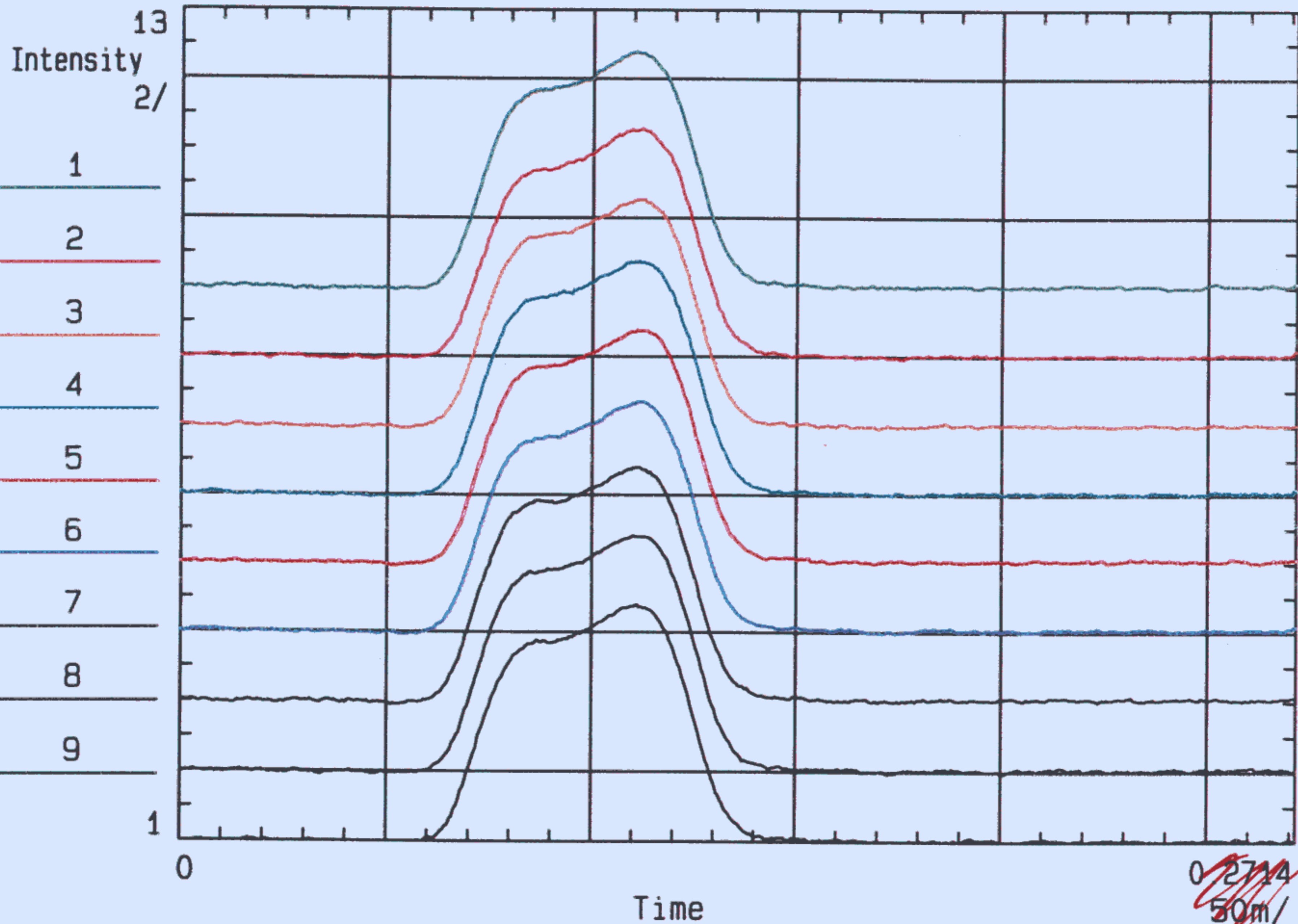
a: 16/Feb/2000 11:44:58, 447.5 mA, normal ops



18/Mar/1998 16: 18: 59, 714.5999 mA, Seven bunches

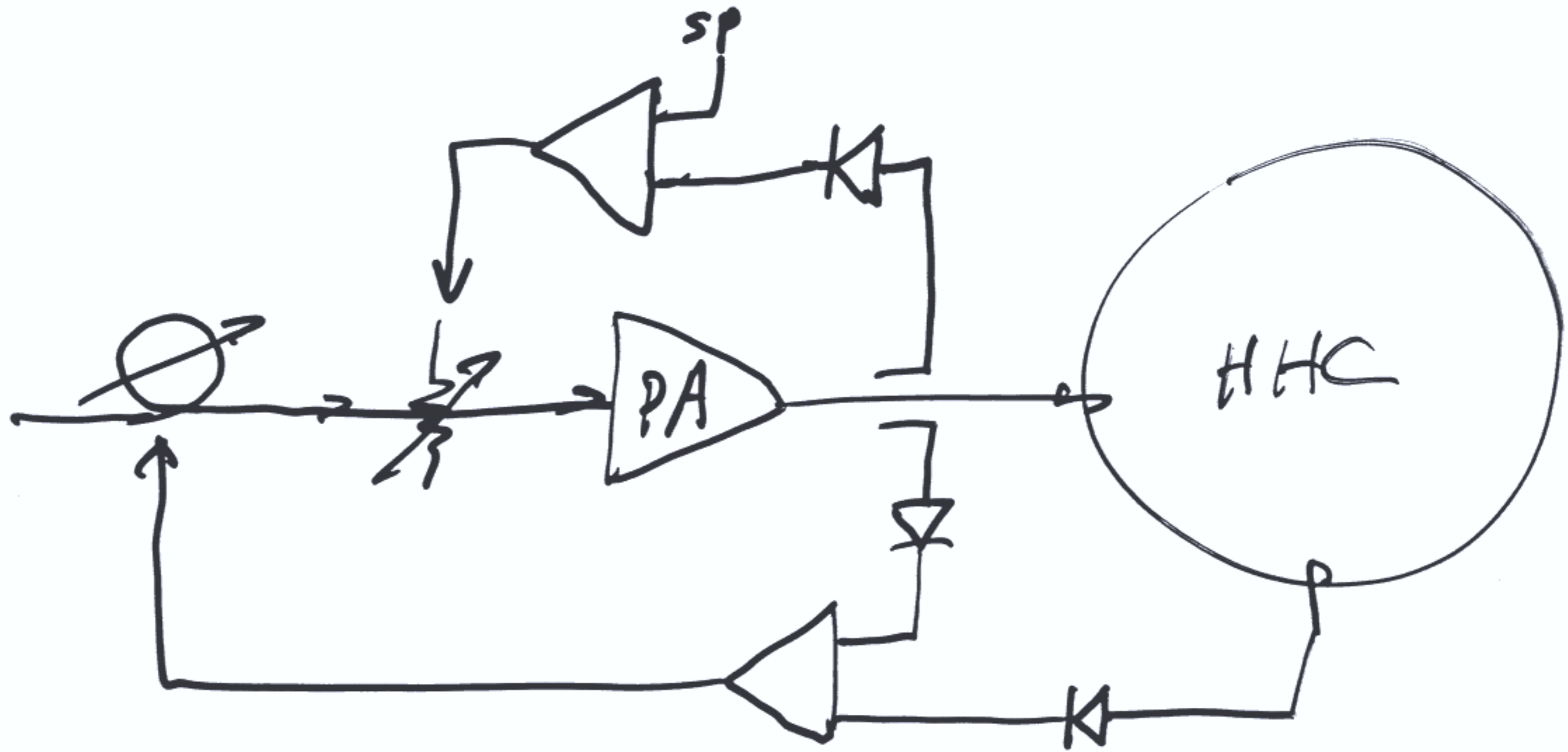


21/Jan/1998 19:32:23, 790.2999 mA, Nine bunches

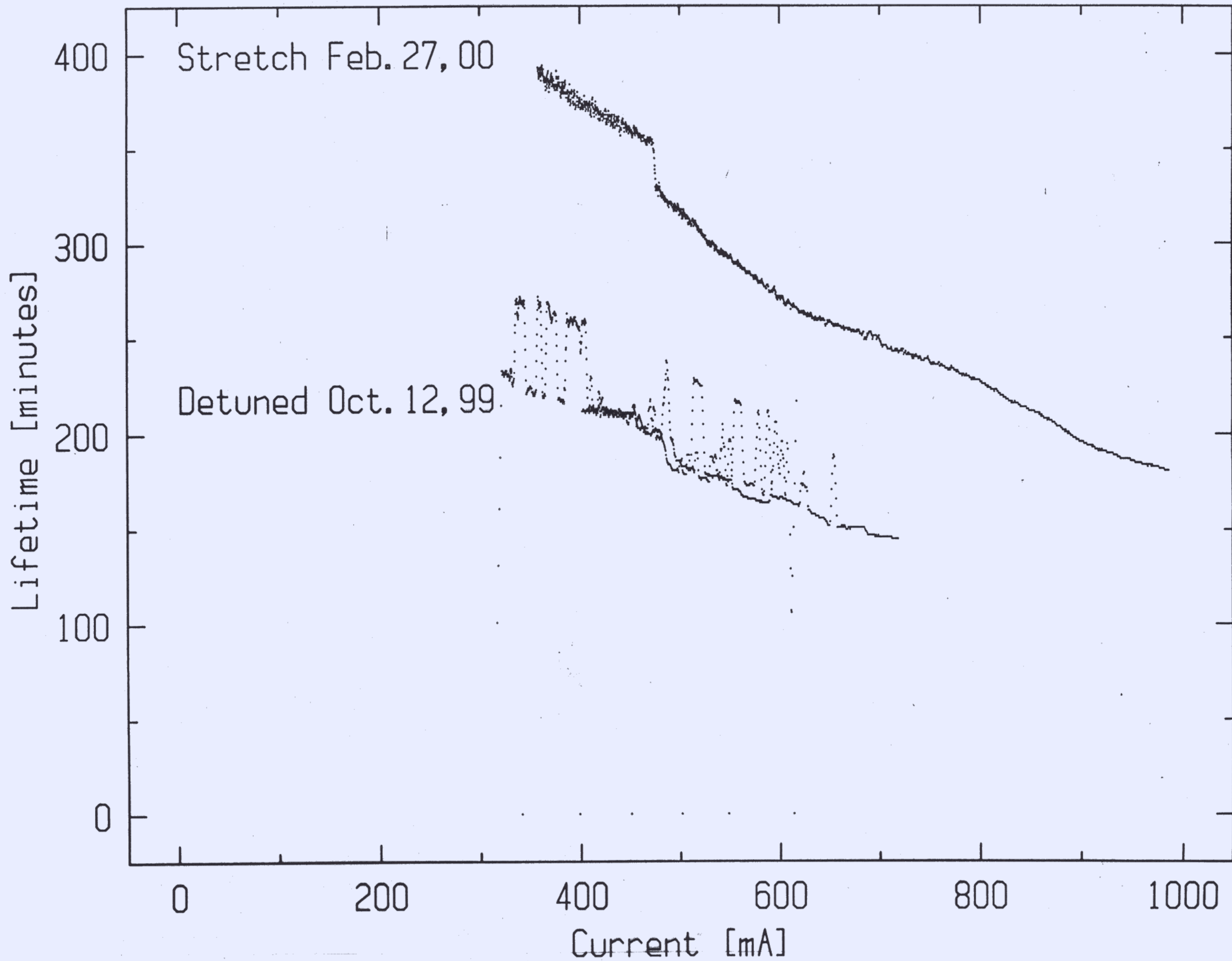


~~0 2714~~  
50m/  
10.19

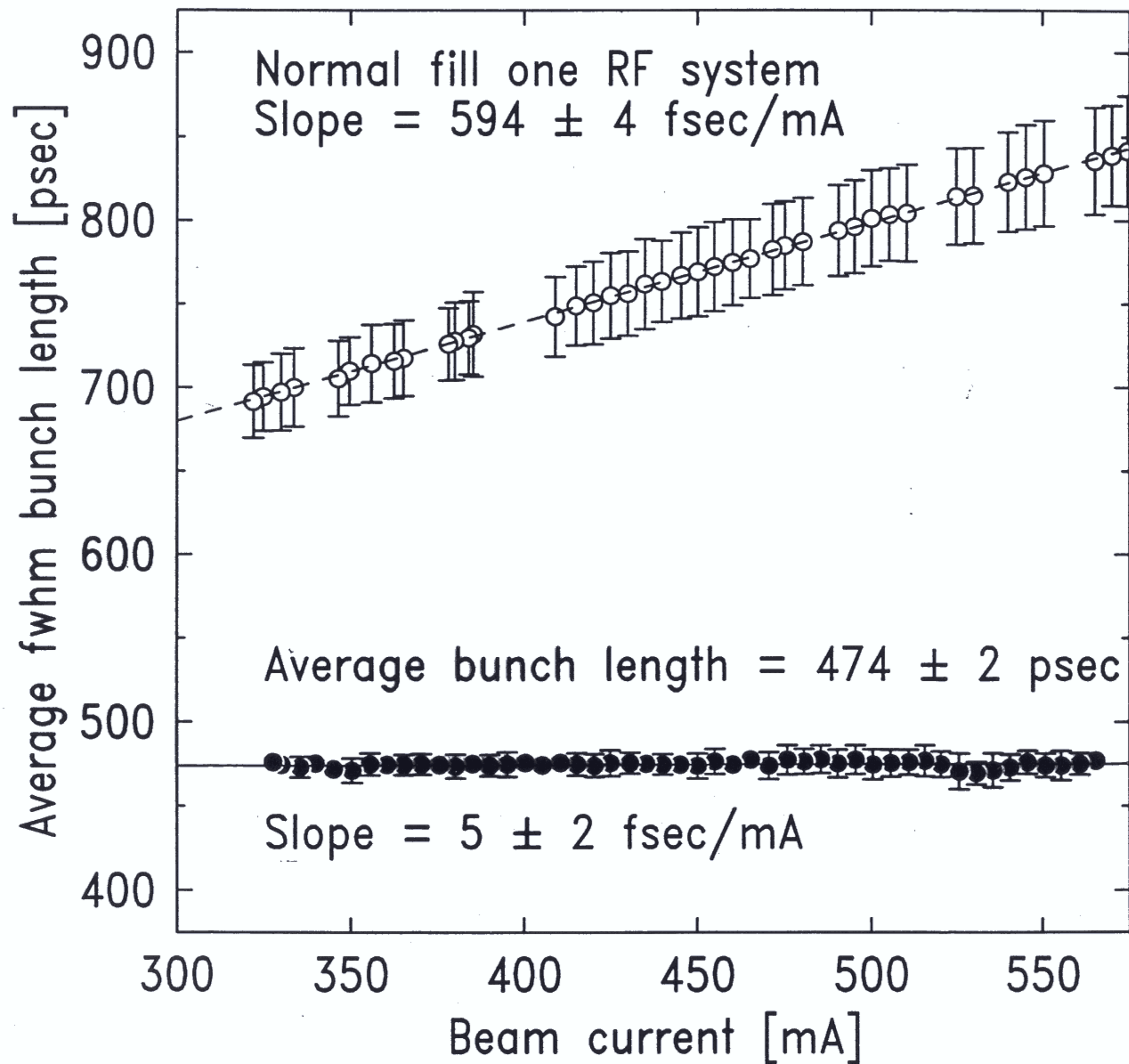
HHC LLRF.



# VUV Current vs lifetime 7 Bunch Ops.



# VUV Constant Bunch Length Run, 16 July 1999



Stretched = 1.7 - 2.0 ns.