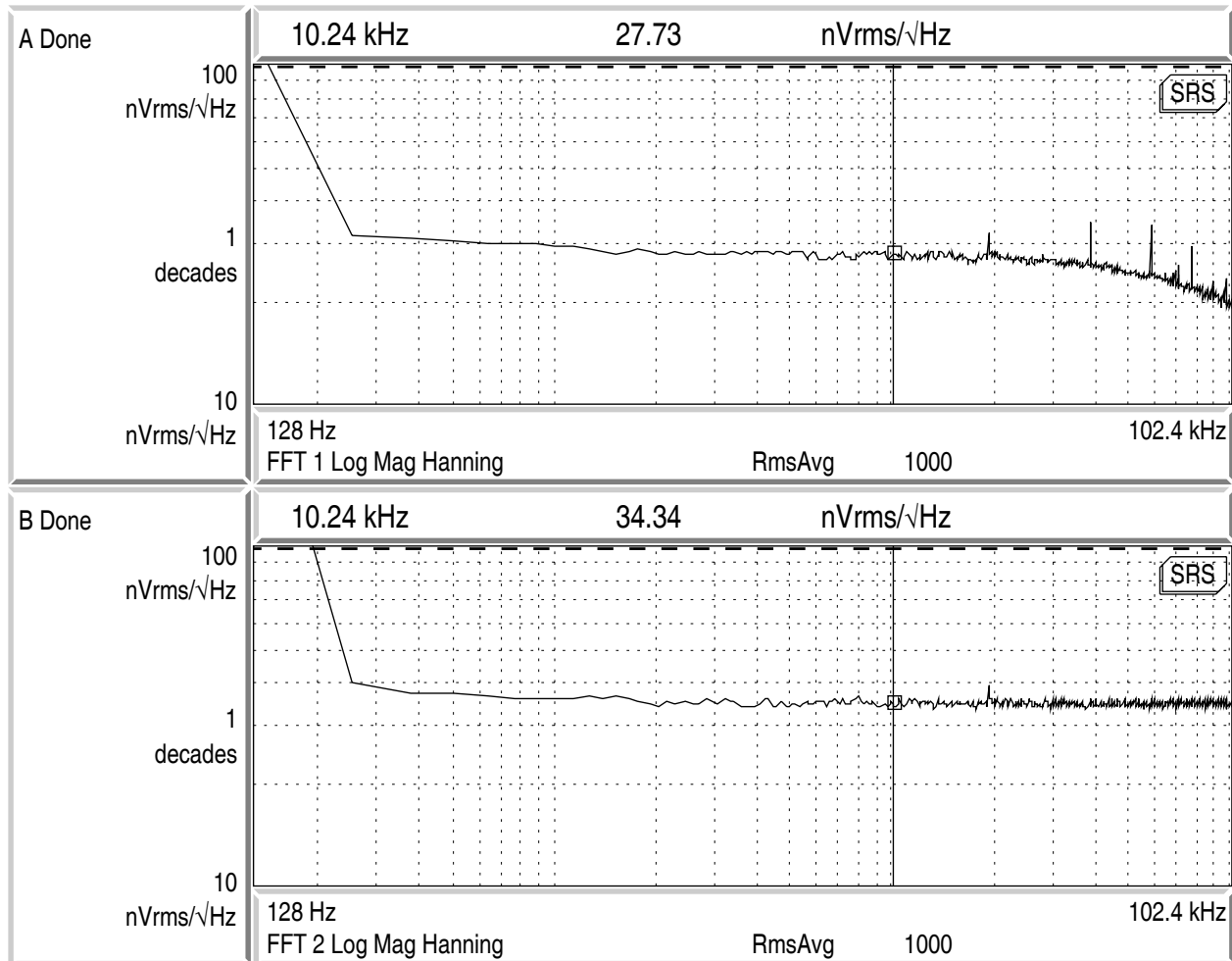
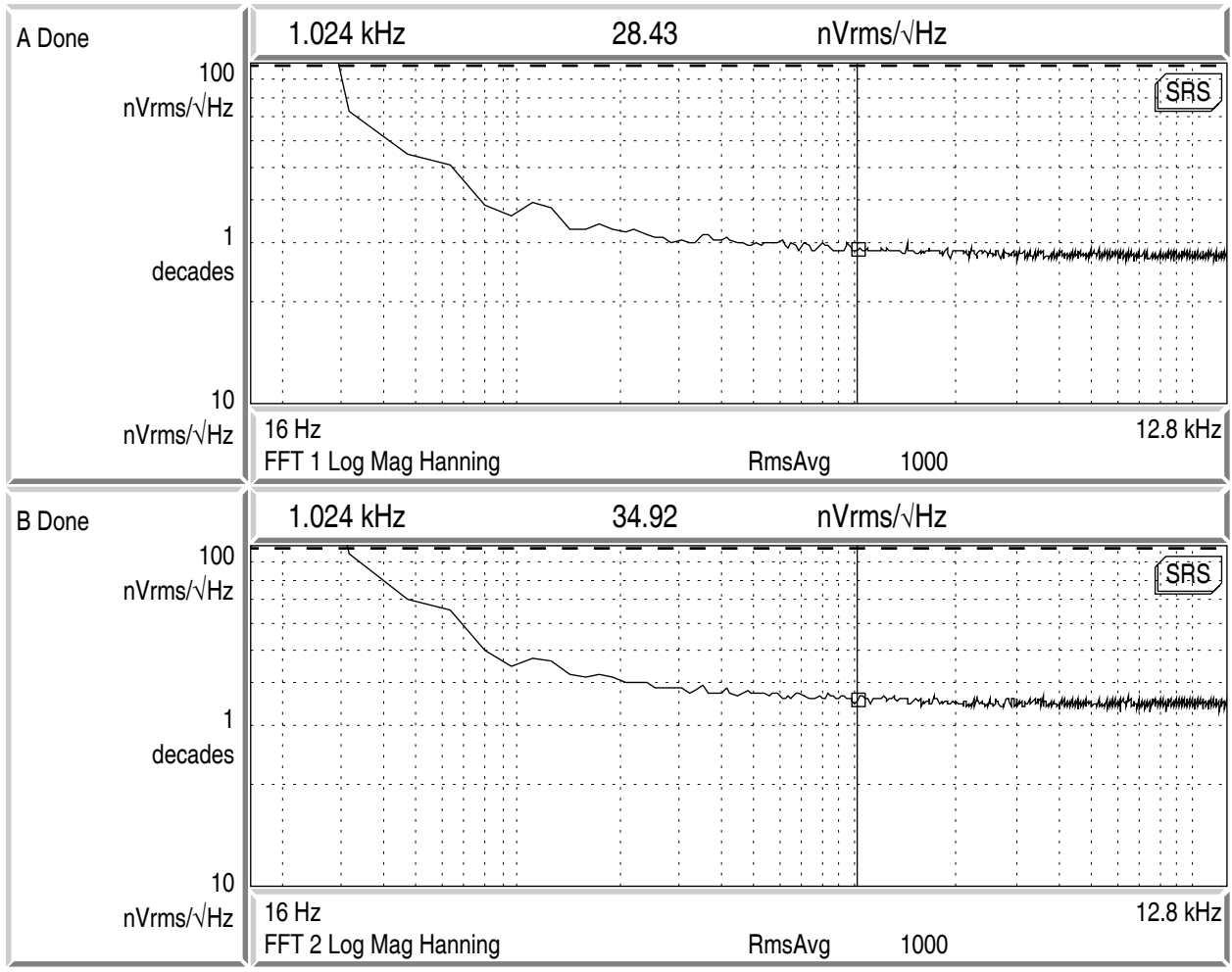


## Appendix A1: Noise spectra



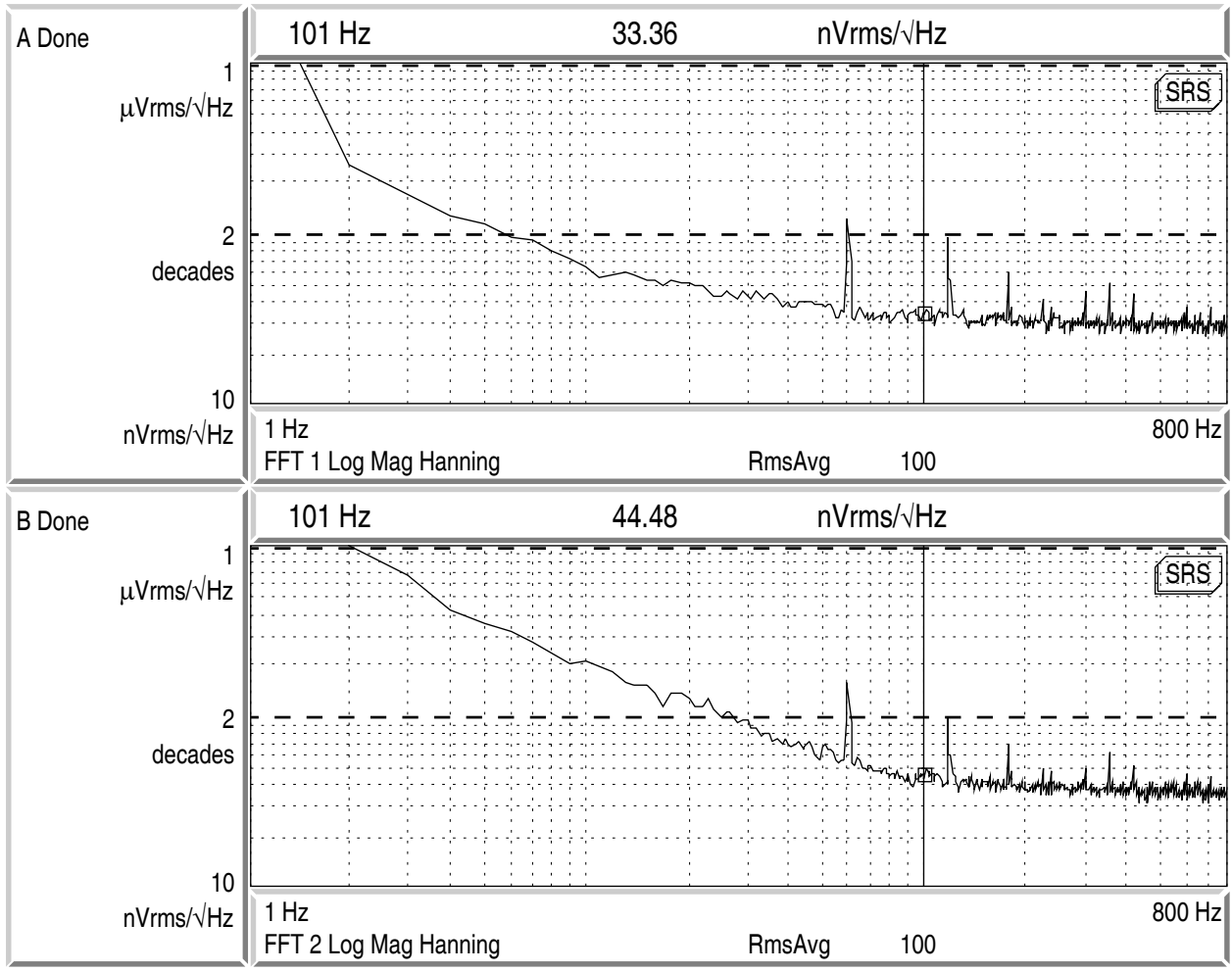
9/21/04 19:12:23

Noise spectra for IN1 (top) and SERVO (bottom).



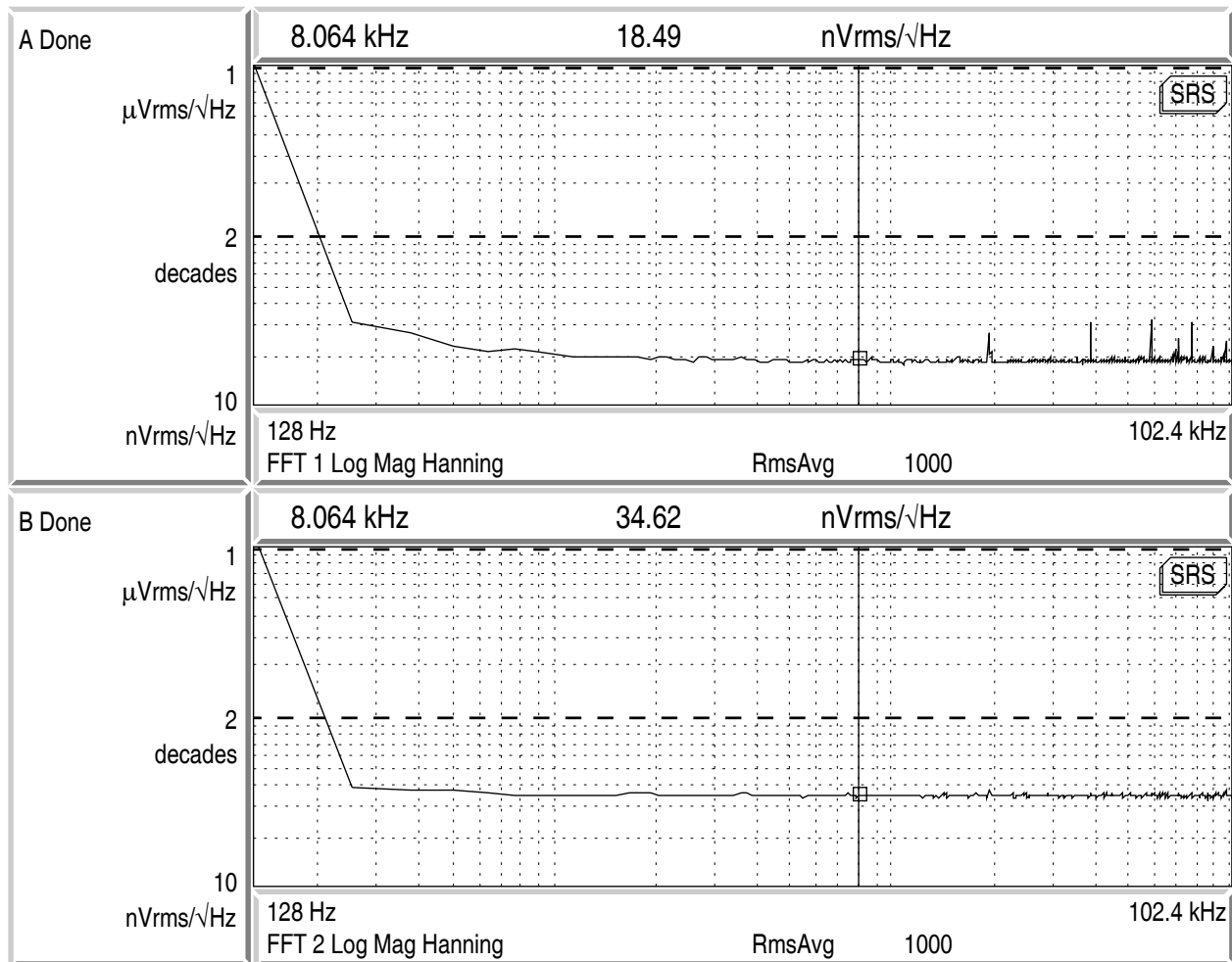
9/21/04 19:17:12

Noise spectra for IN1 (top) and SERVO (bottom).



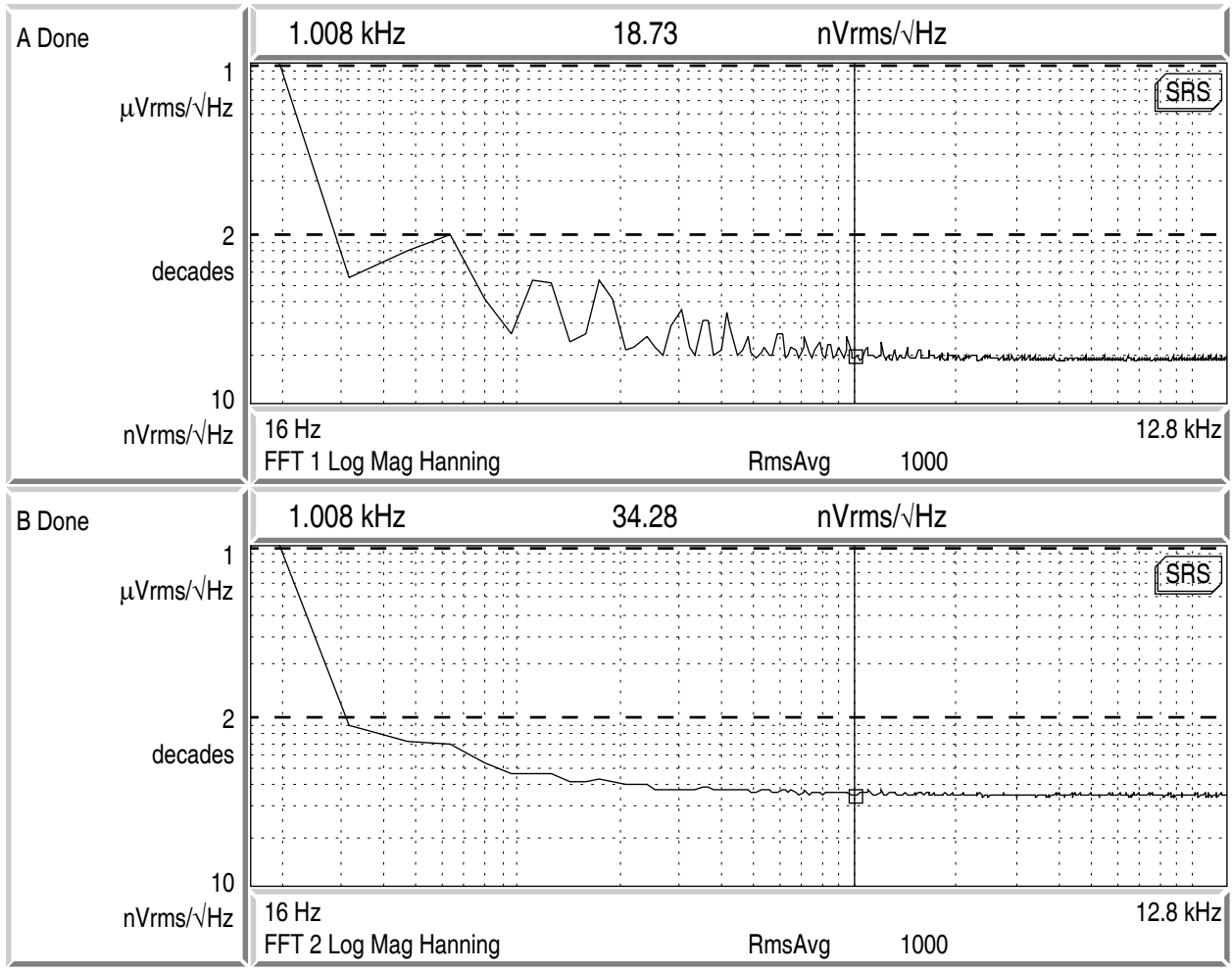
9/21/04 19:20:06

Noise spectra for IN1 (top) and SERVO (bottom).



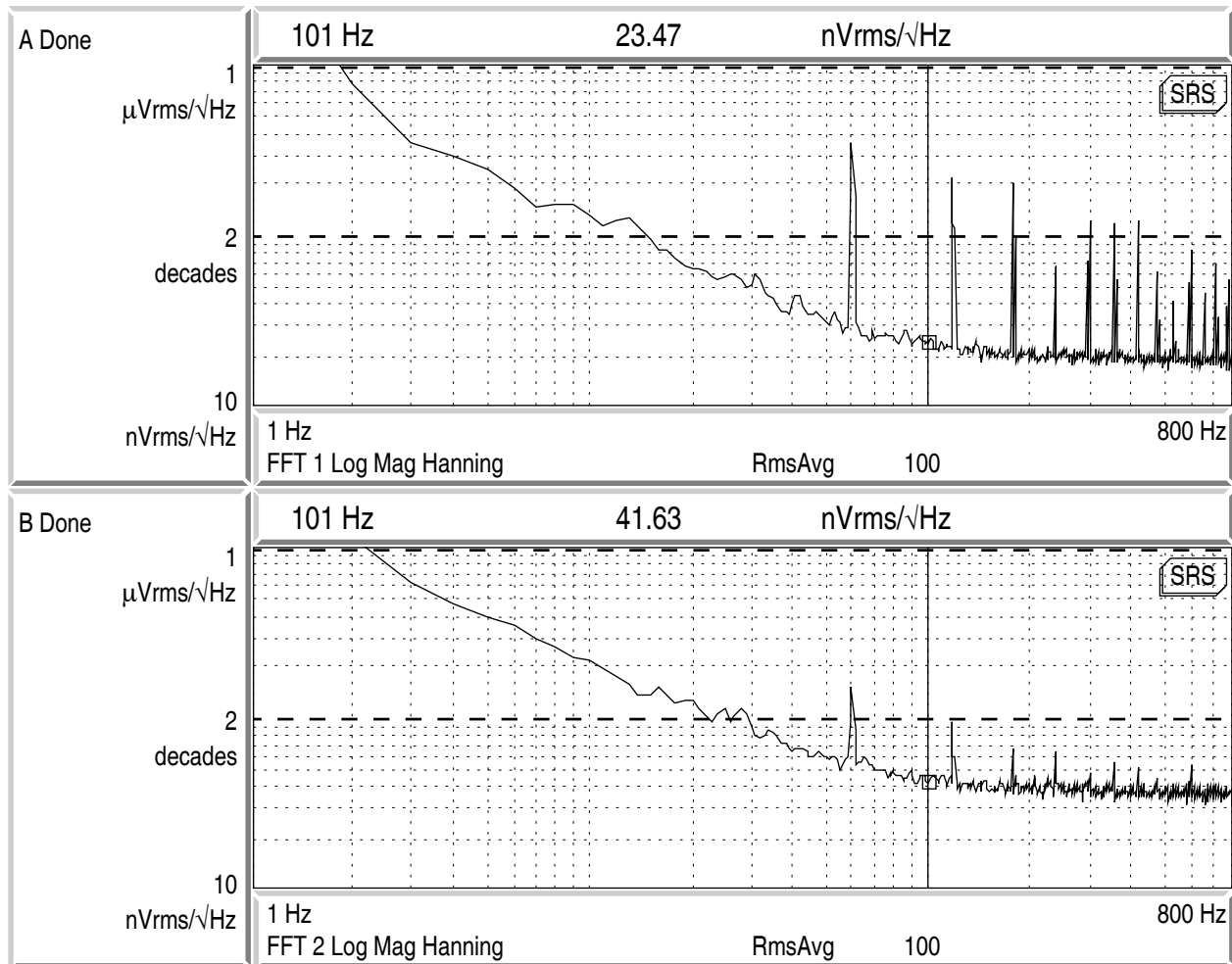
9/21/04 19:25:29

Noise spectra for IN2 (top) and SERVO (bottom).



9/21/04 19:24:59

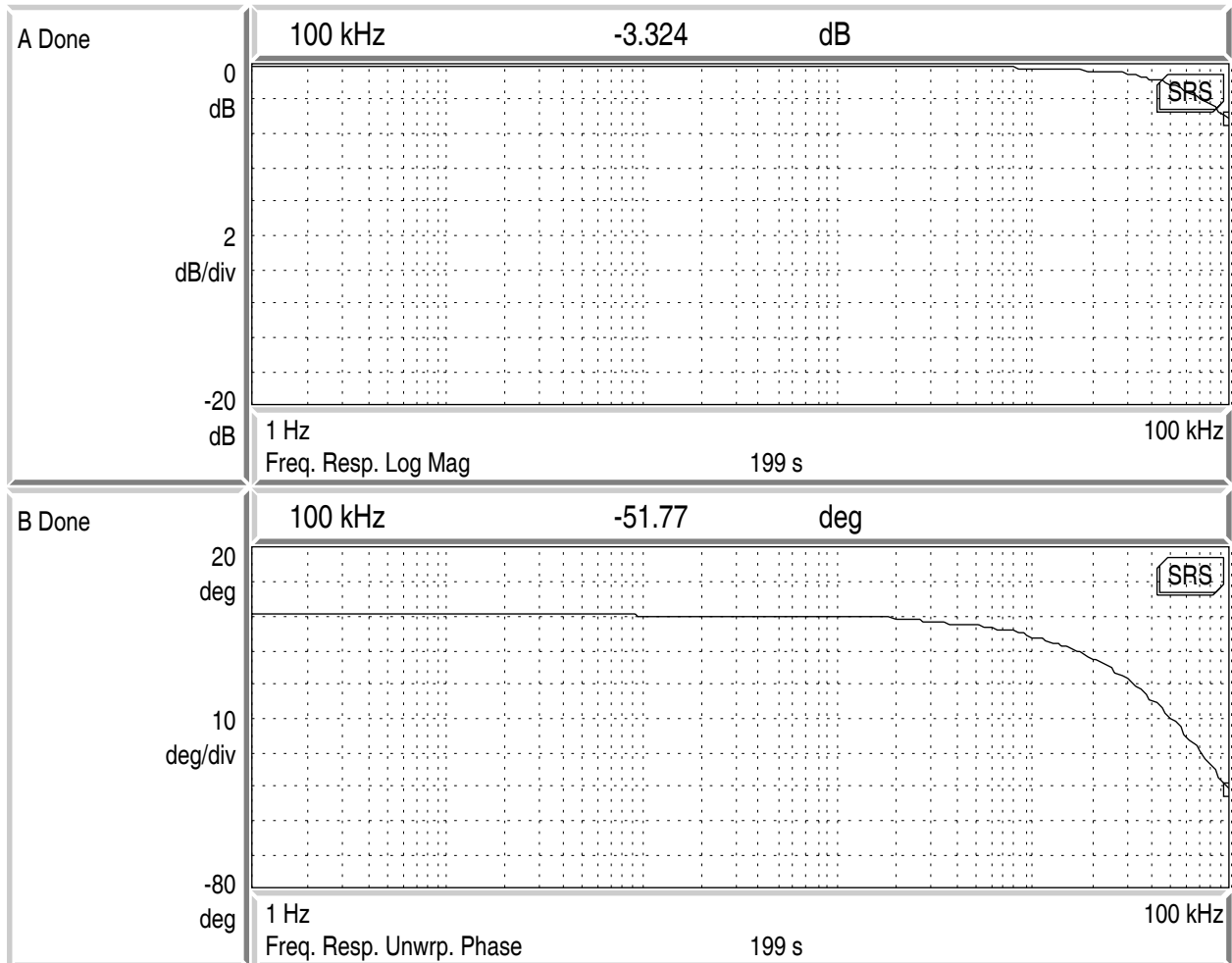
Noise spectra for IN2 (top) and SERVO (bottom).



9/21/04 19:23:36

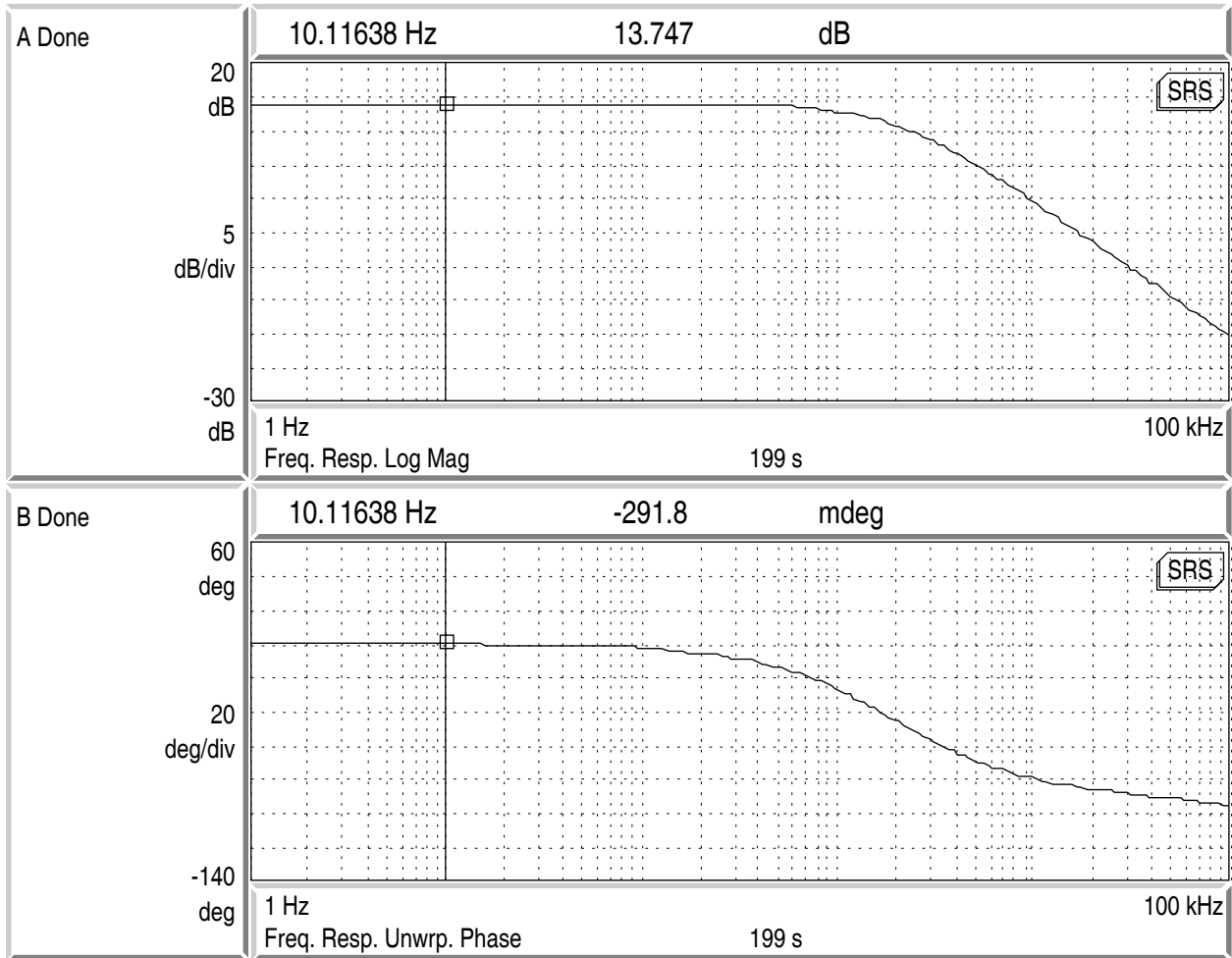
Noise spectra for IN2 (top) and SERVO (bottom).

## Appendix A2: Basic transfer functions



9/21/04 19:49:40

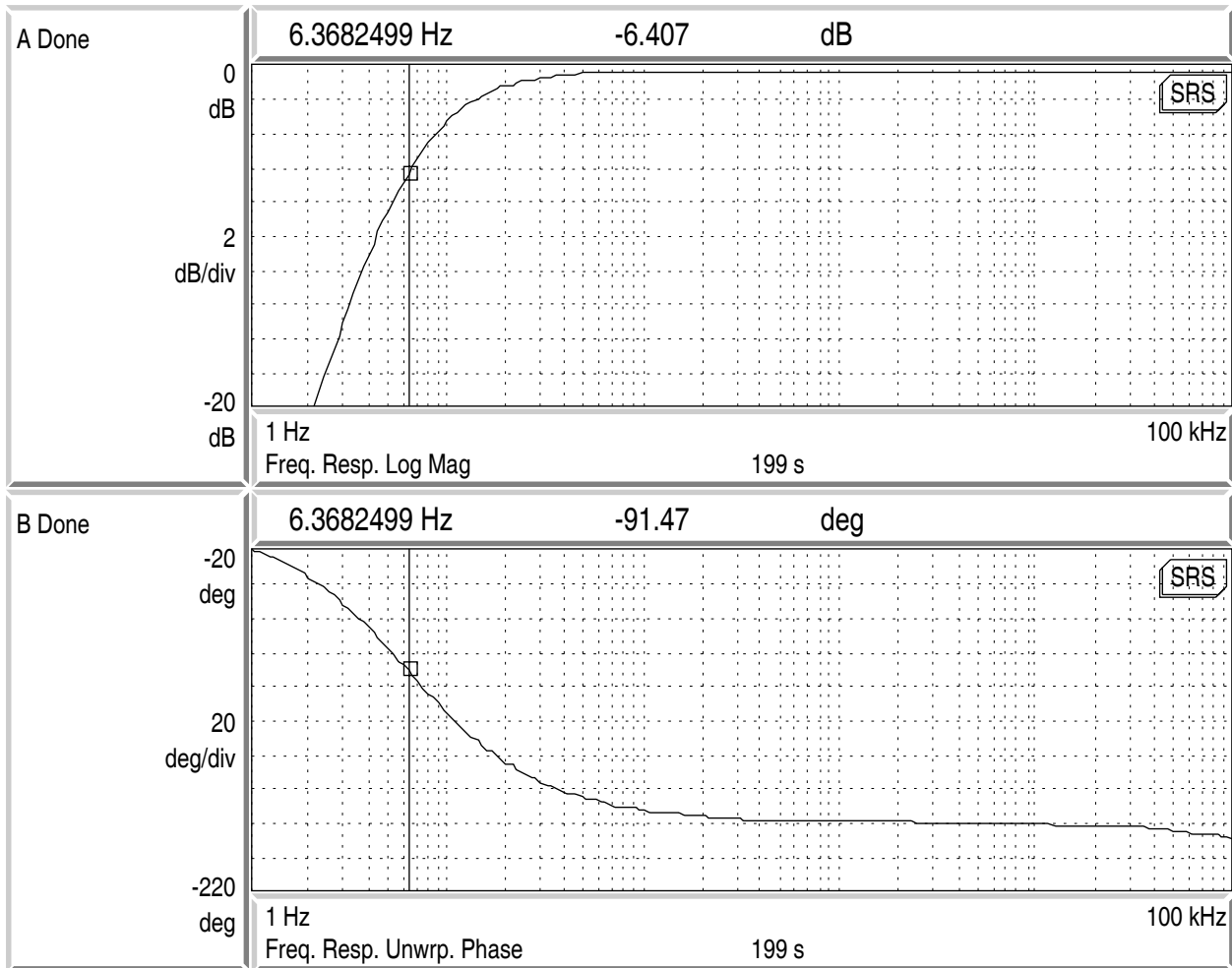
Transfer function from IN1 to OUT1 (LSC common mode).



10/01/04 19:26:15

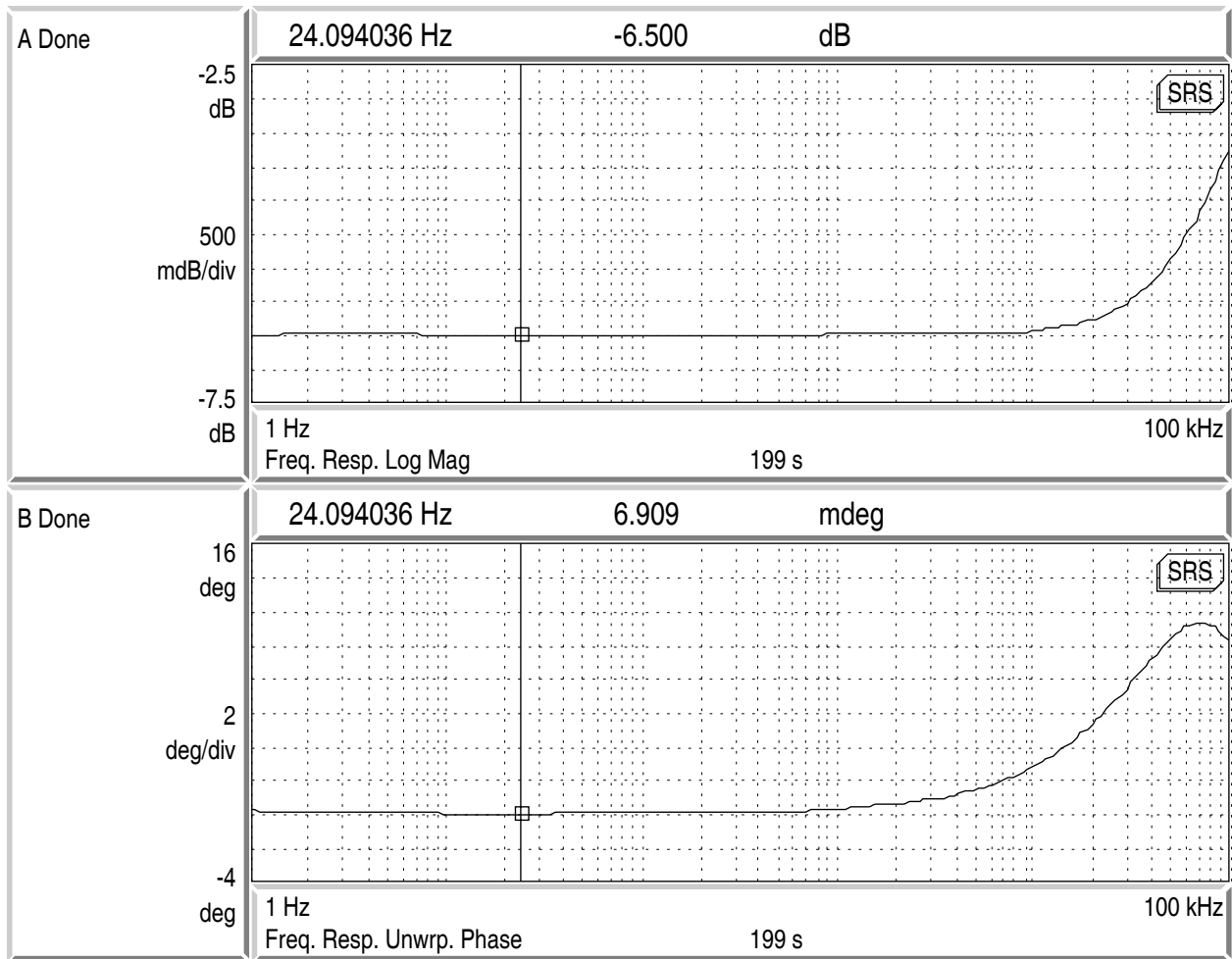
Transfer function from IN1 to OUT1 (mode cleaner).





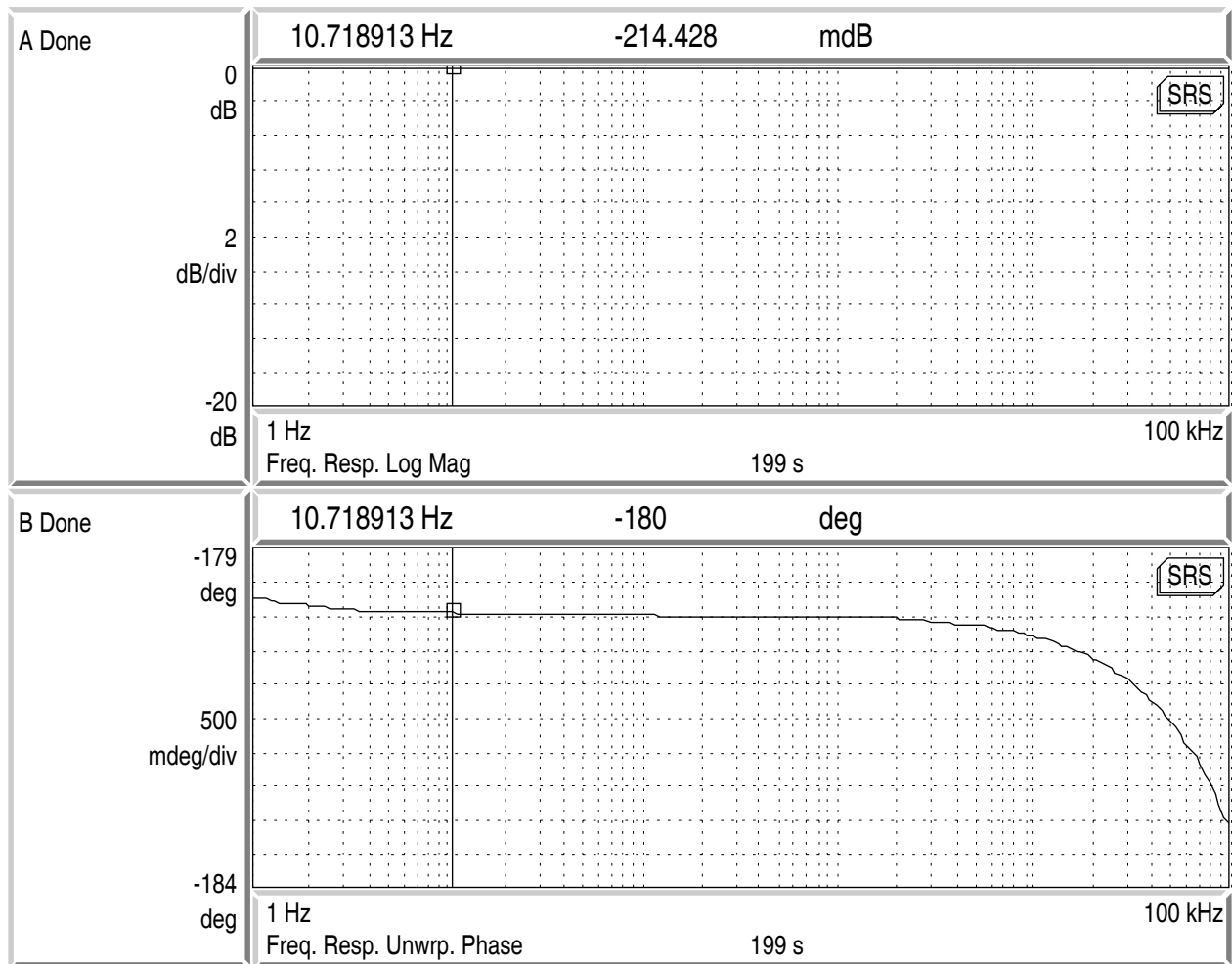
9/21/04 19:43:34

Transfer function from IN1 to SERVO (LSC common mode).



10/01/04 19:32:58

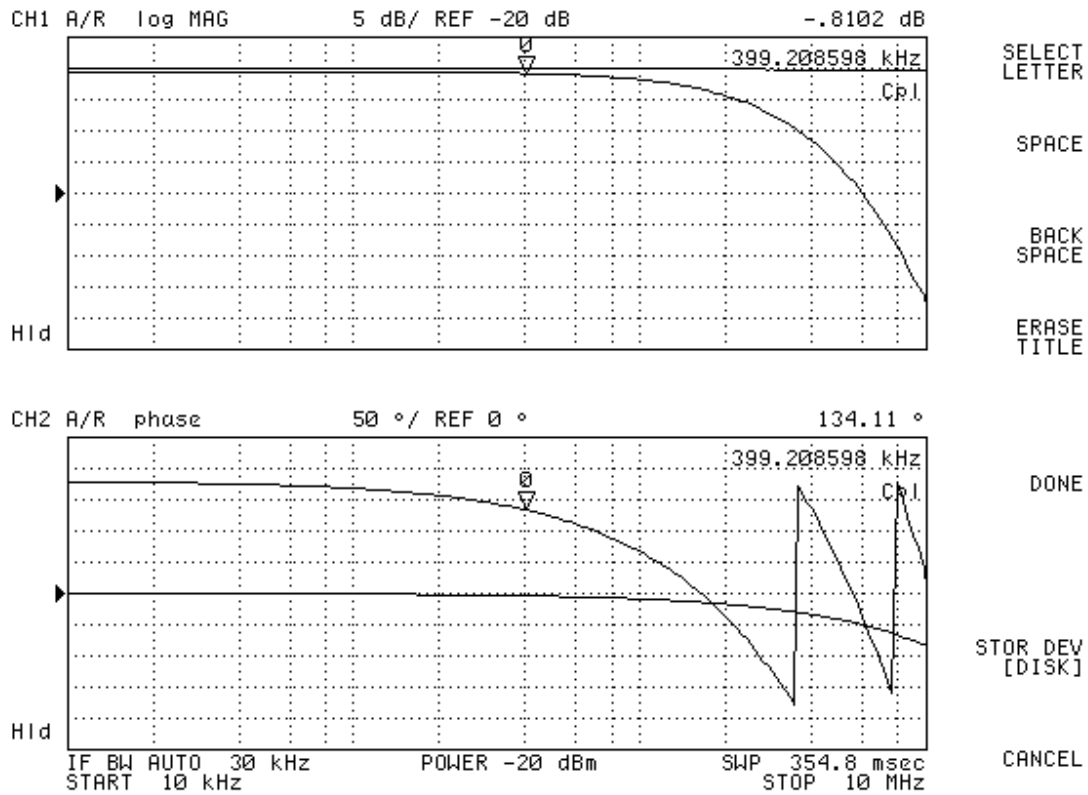
Transfer function from IN1 to SERVO (mode cleaner).



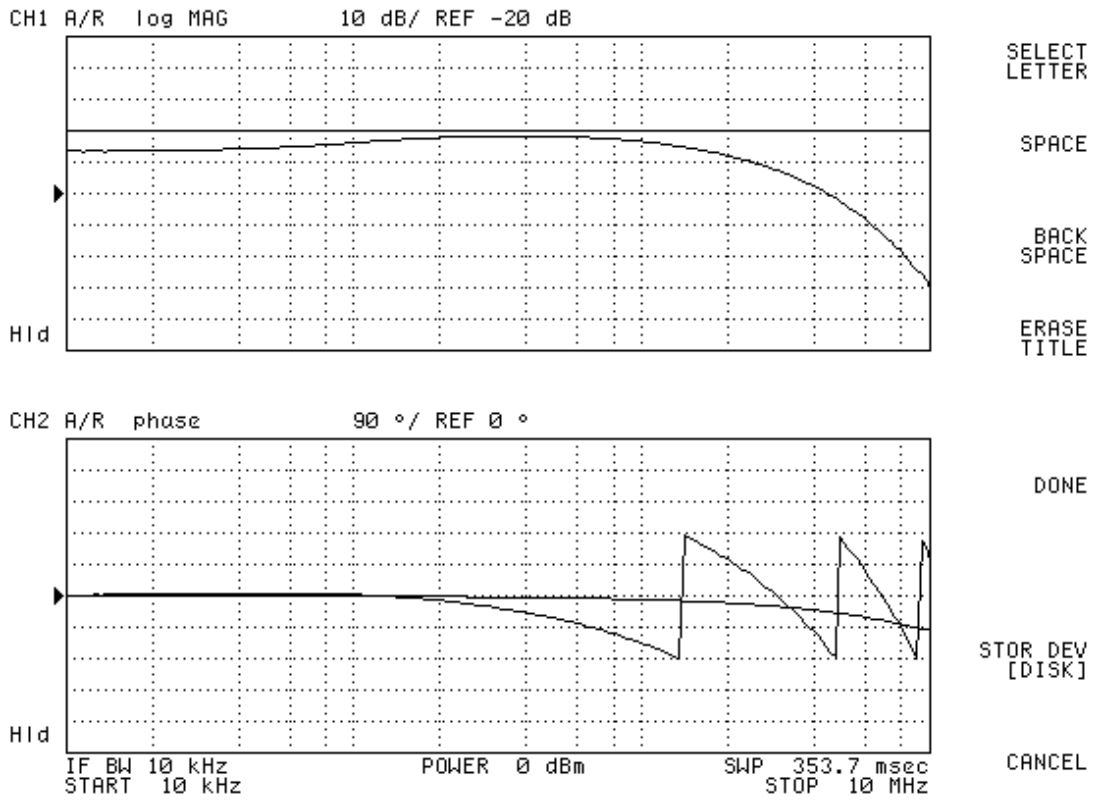
9/21/04 19:53:35

Transfer function from IN2 to OUT2 (LSC common mode and mode cleaner).

### Appendix A3: High frequency transfer function

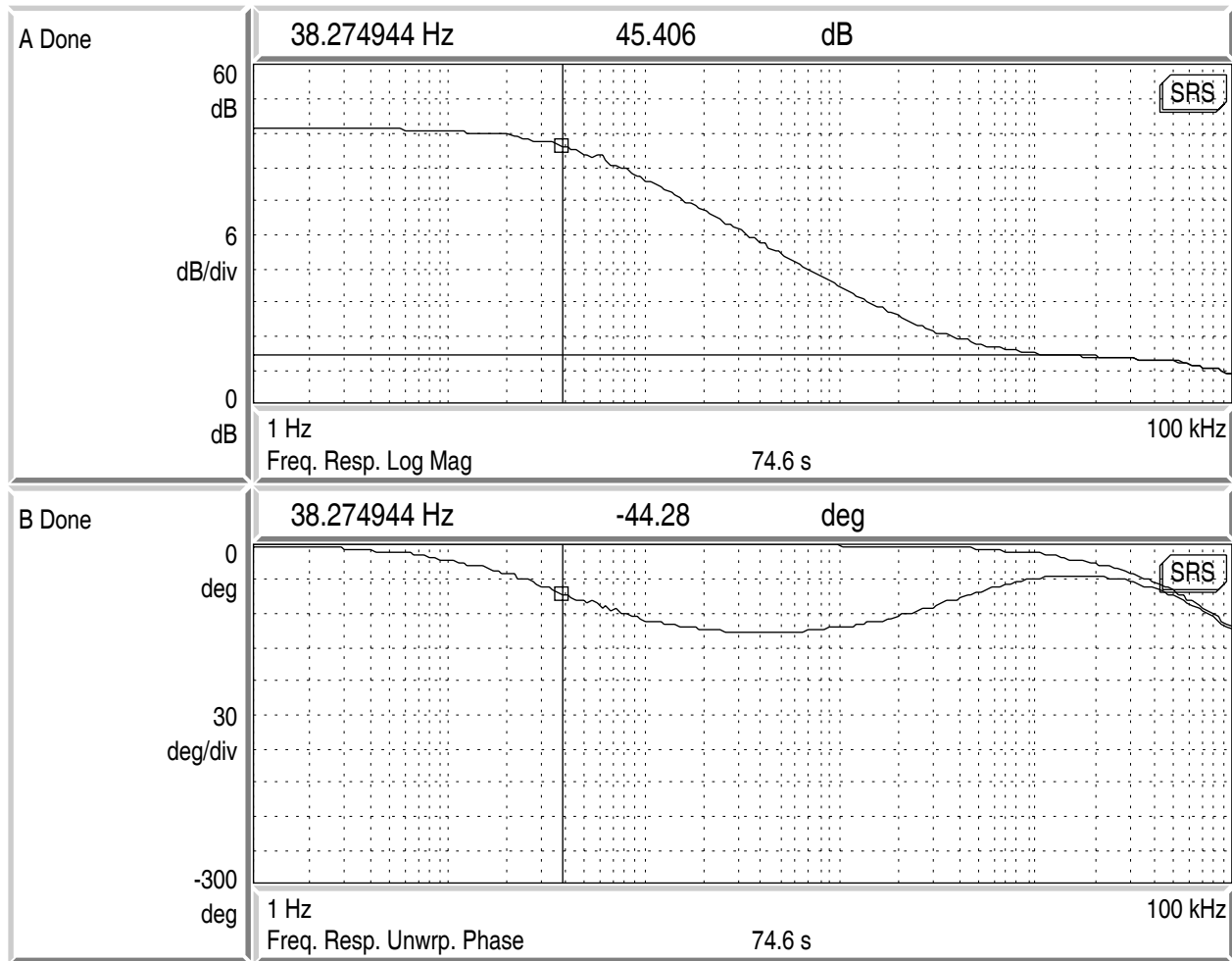


Transfer function from IN1 to SERVO (LSC common mode). Flat(er) trace is reference against a BNC barrel.



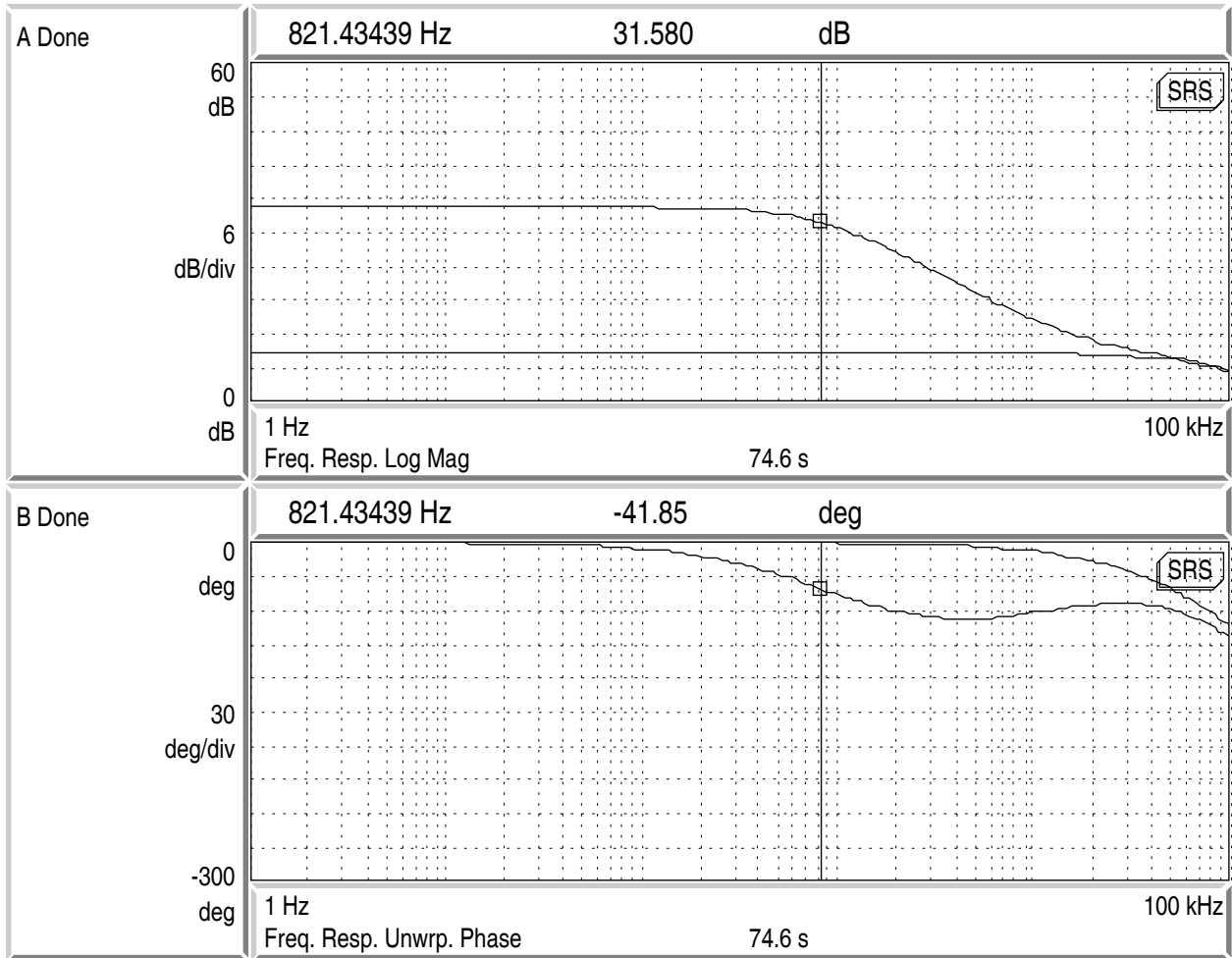
Transfer function from IN1 to SERVO (mode cleaner).

## Appendix A4: Transfer functions of boost gain stages



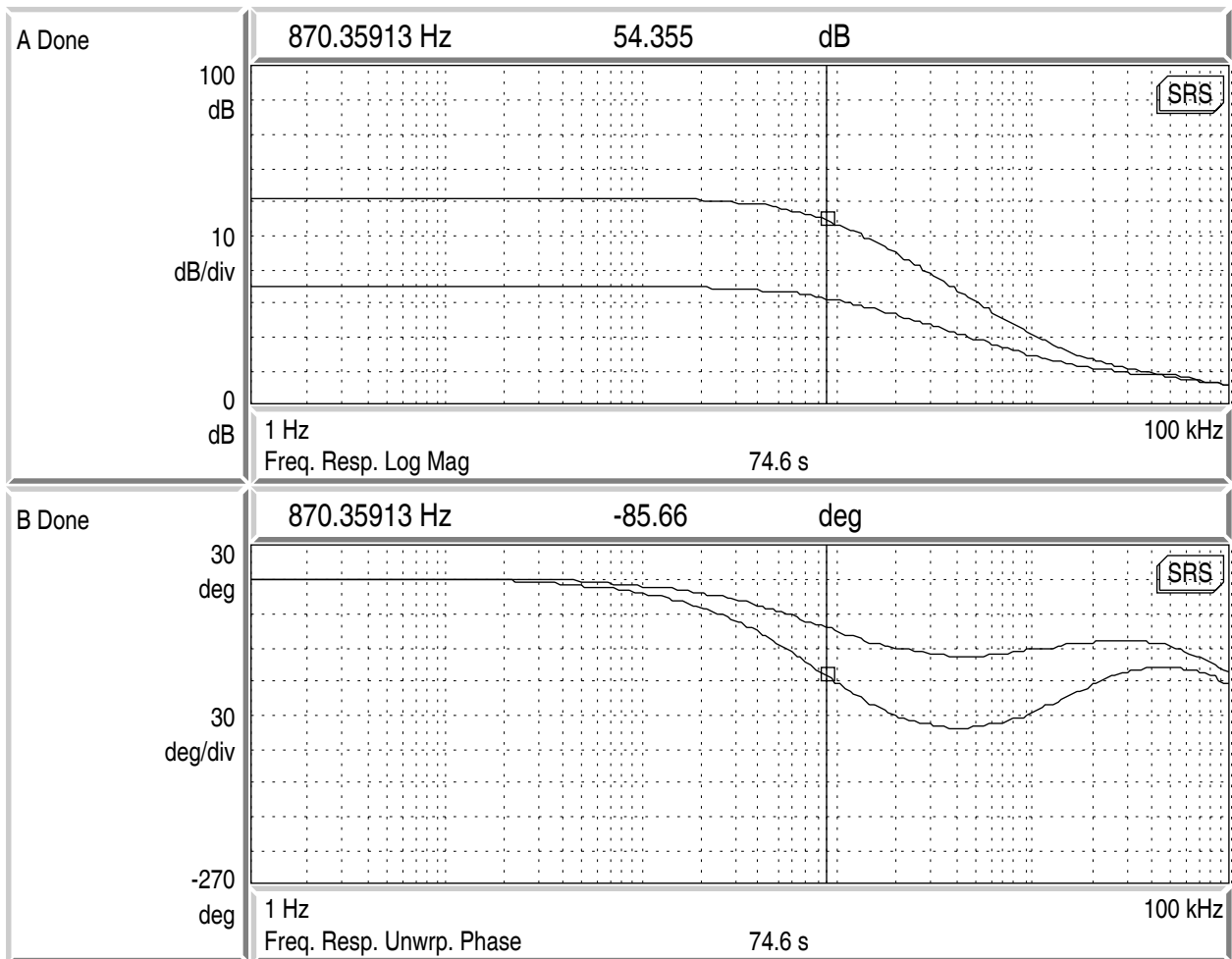
10/07/04 11:09:21

First boost gain stage (D23).



10/07/04 11:10:58

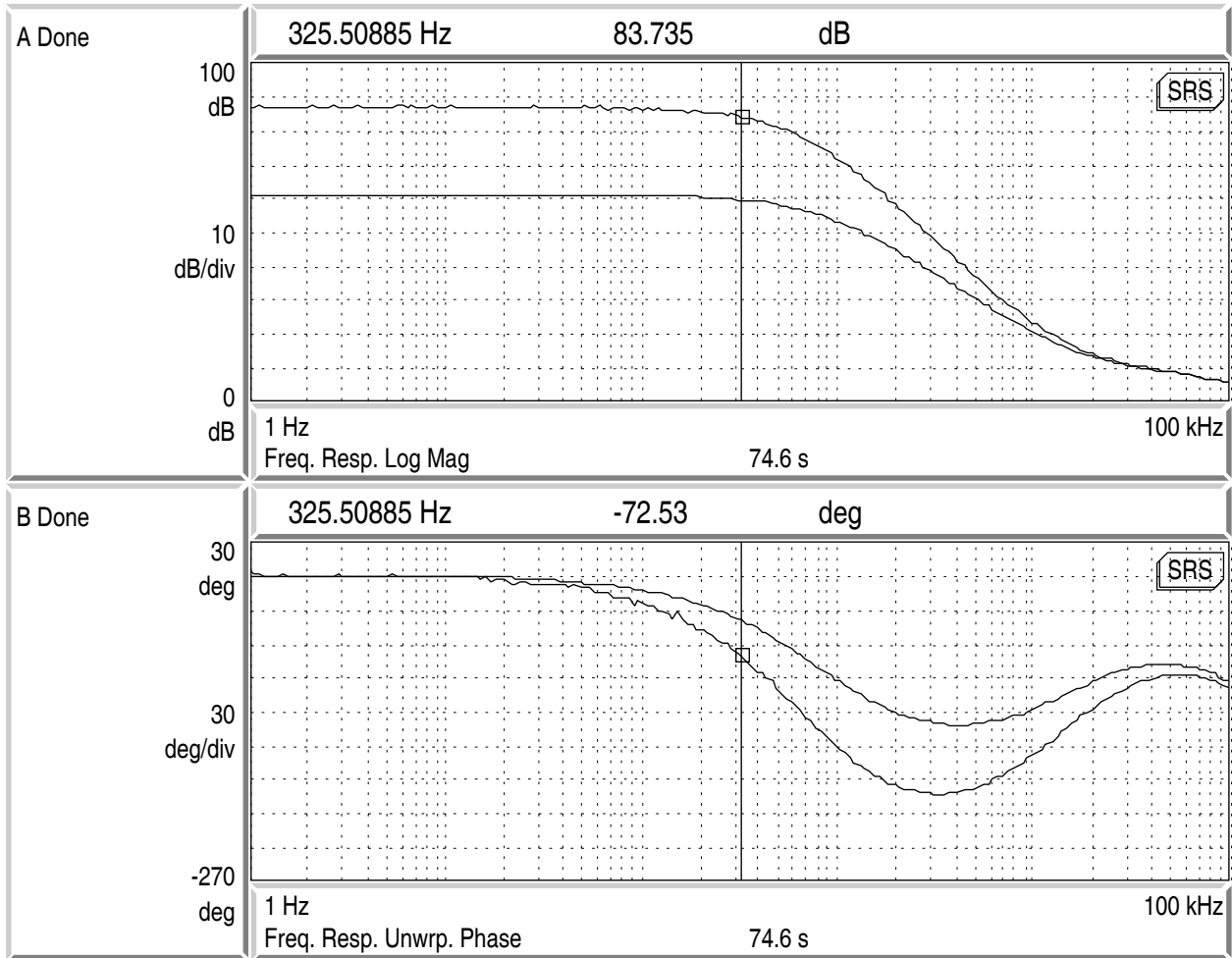
Second boost gain stage (D21).



10/07/04 11:14:50

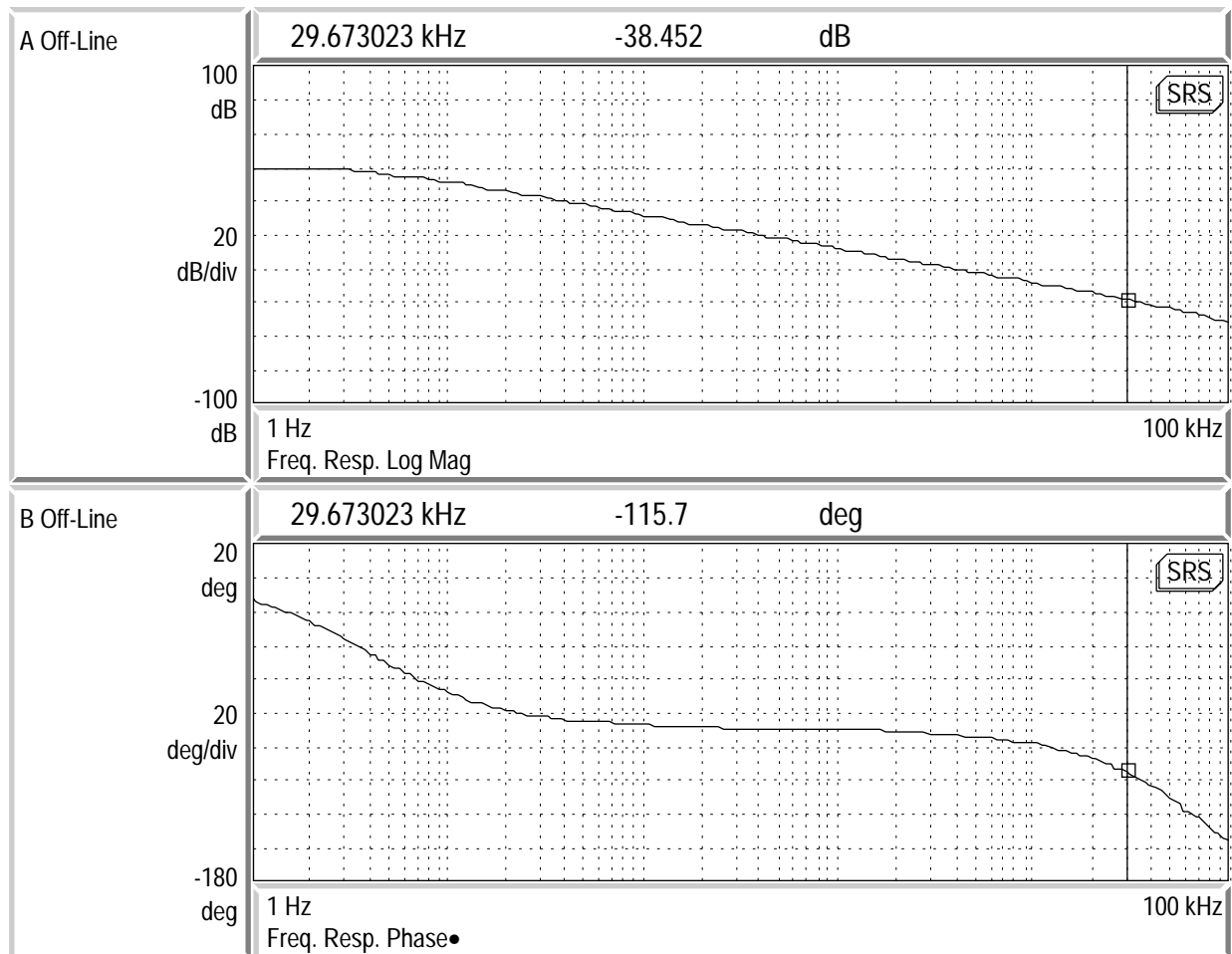
Second and third boost gain stage (D22).





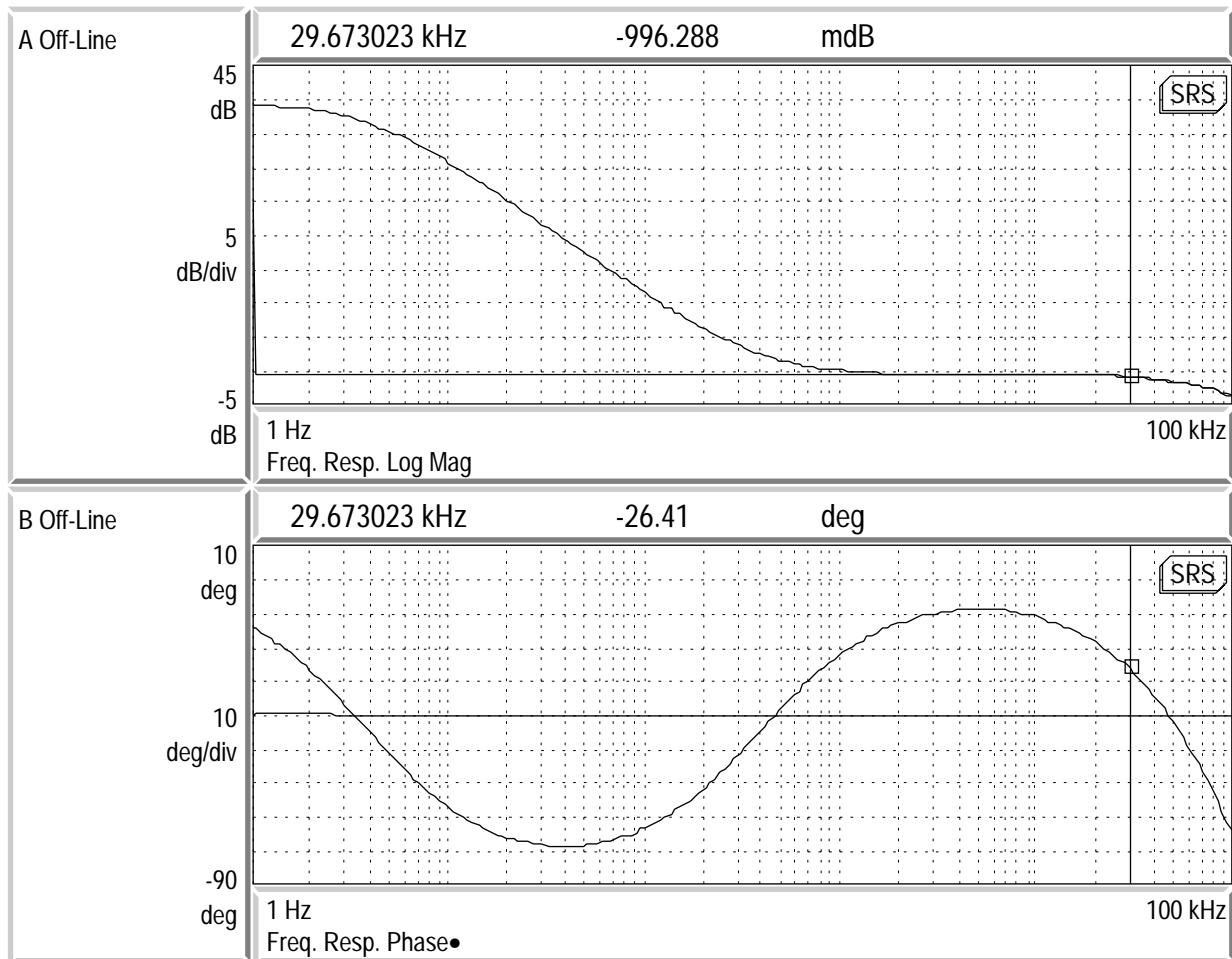
10/07/04 11:40:43

Second, third and fourth boost gain stage (D21 & D22).



3/01/10 15:11:36

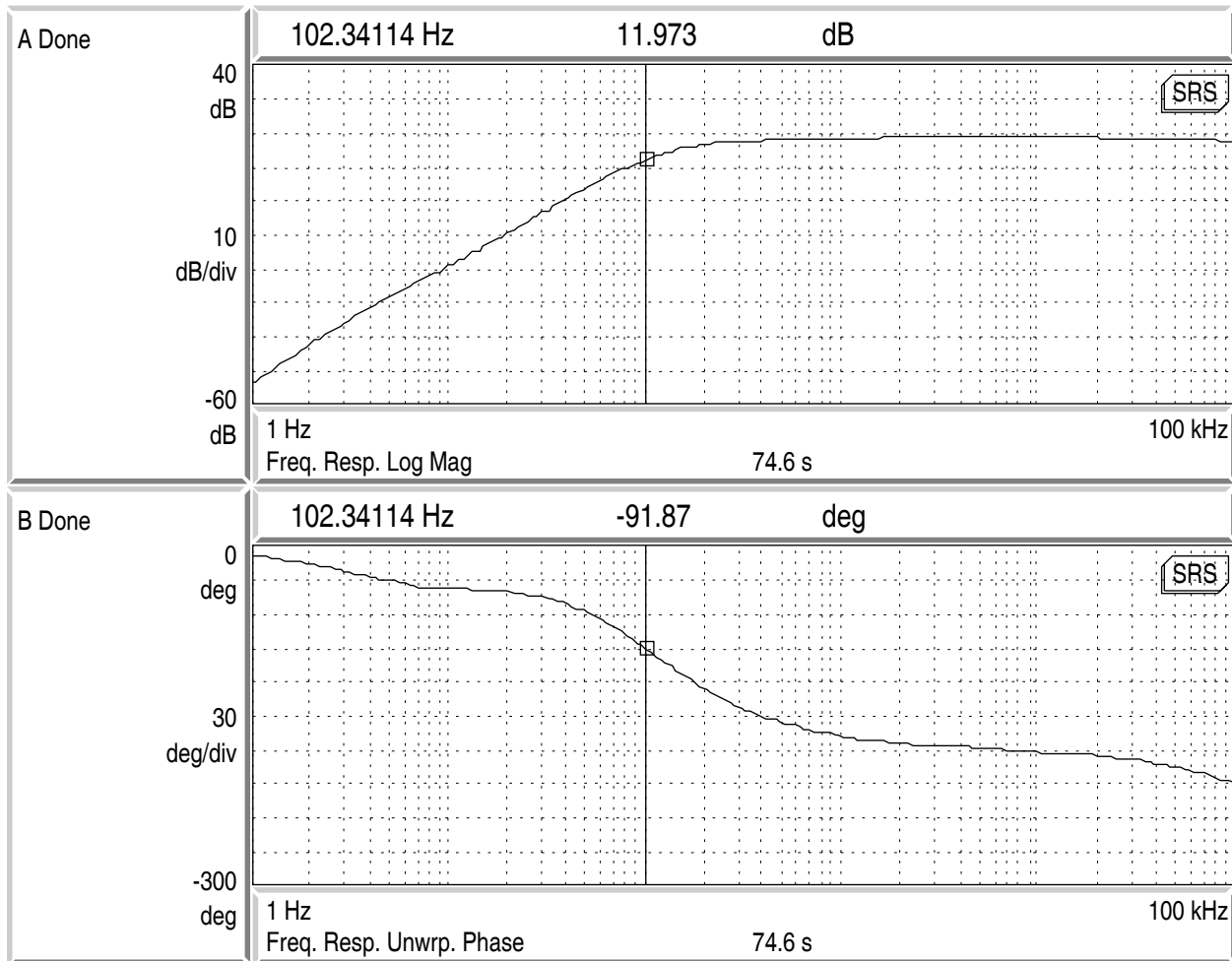
Slow compensation gain stage (D28).



3/01/10 15:12:43

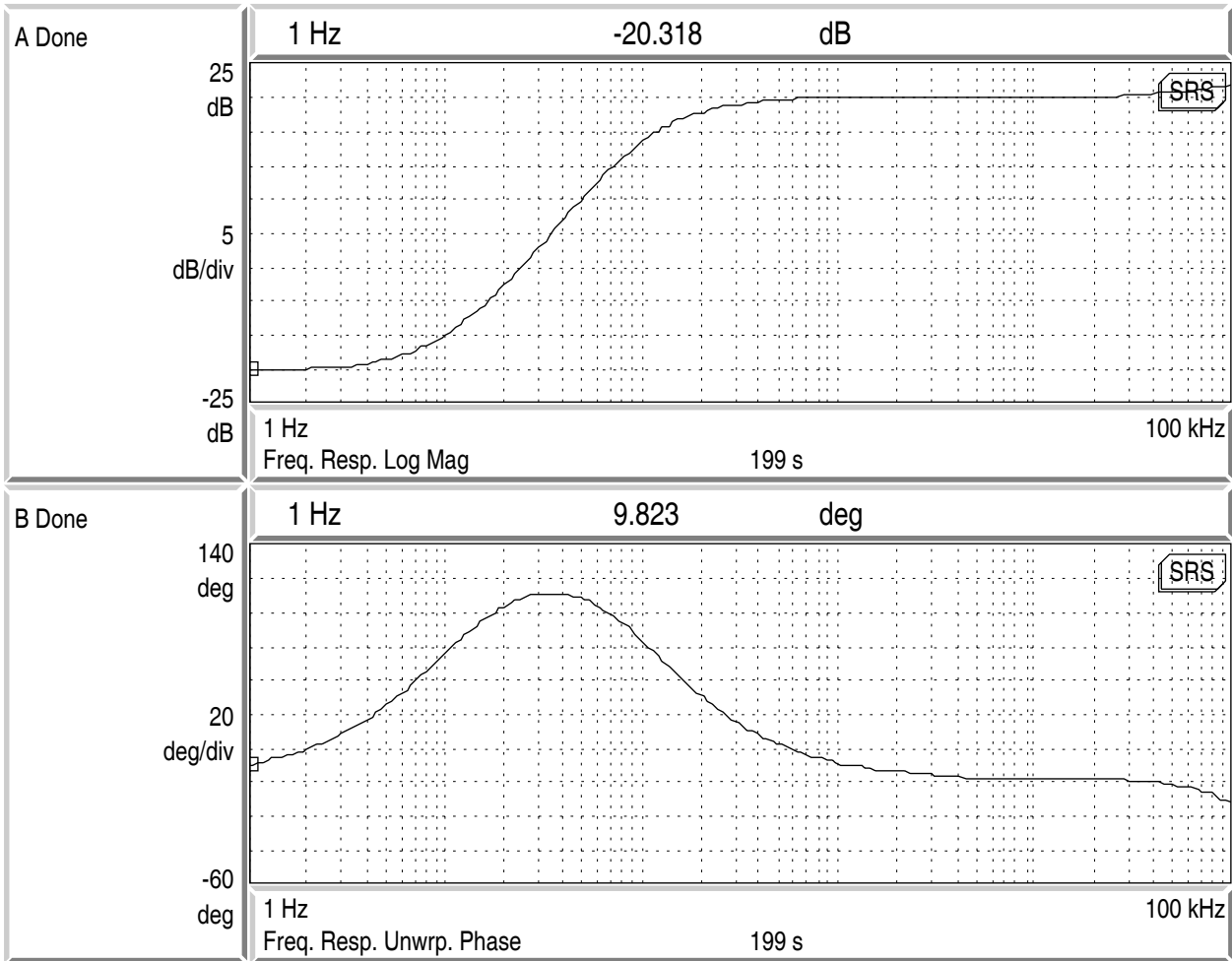
Slow boost gain stage (D29).

## Appendix A5: Transfer functions of DAQ channels



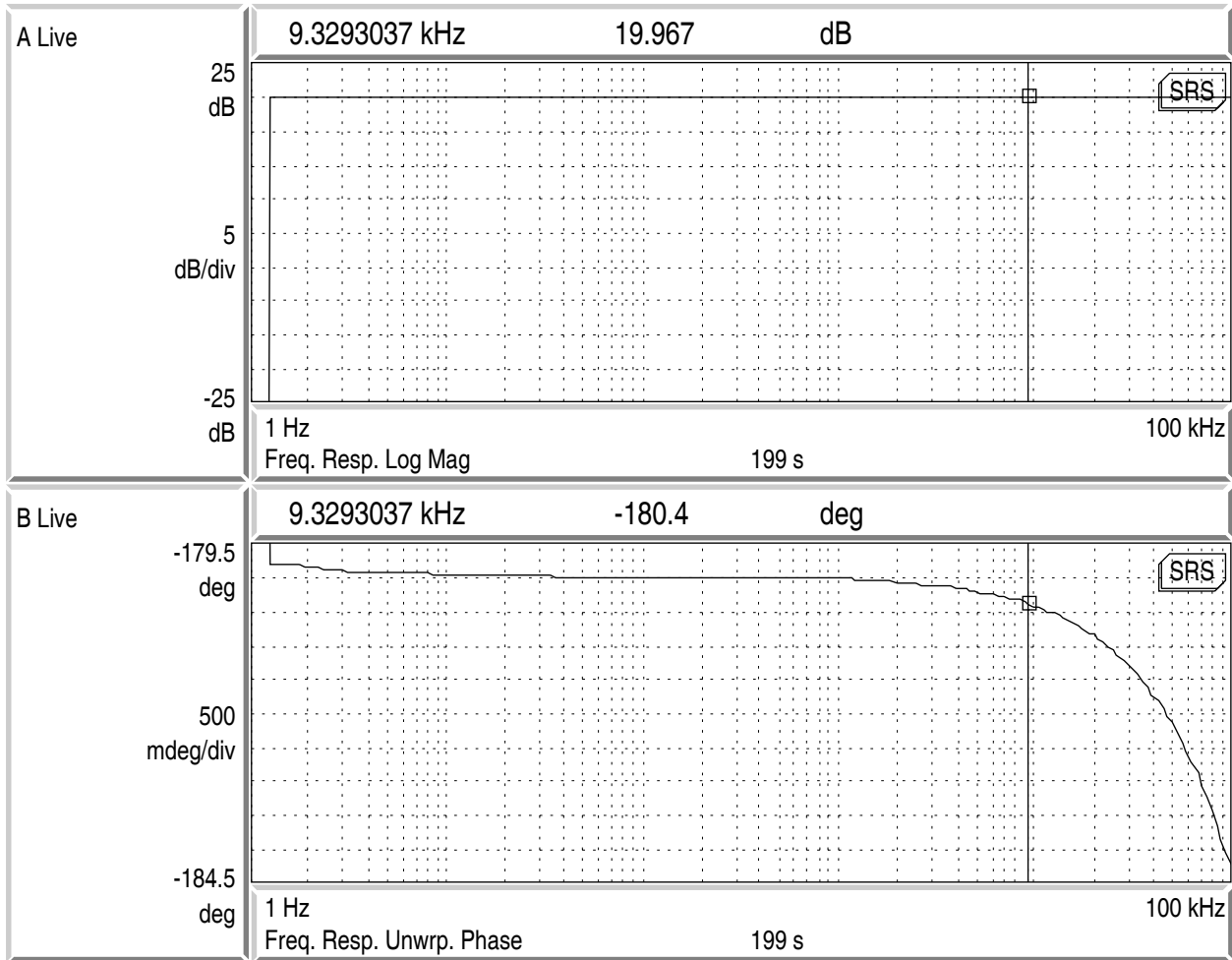
10/07/04 10:51:17

Transfer function to first DAQ channel (LSC common mode).



10/01/04 19:40:32

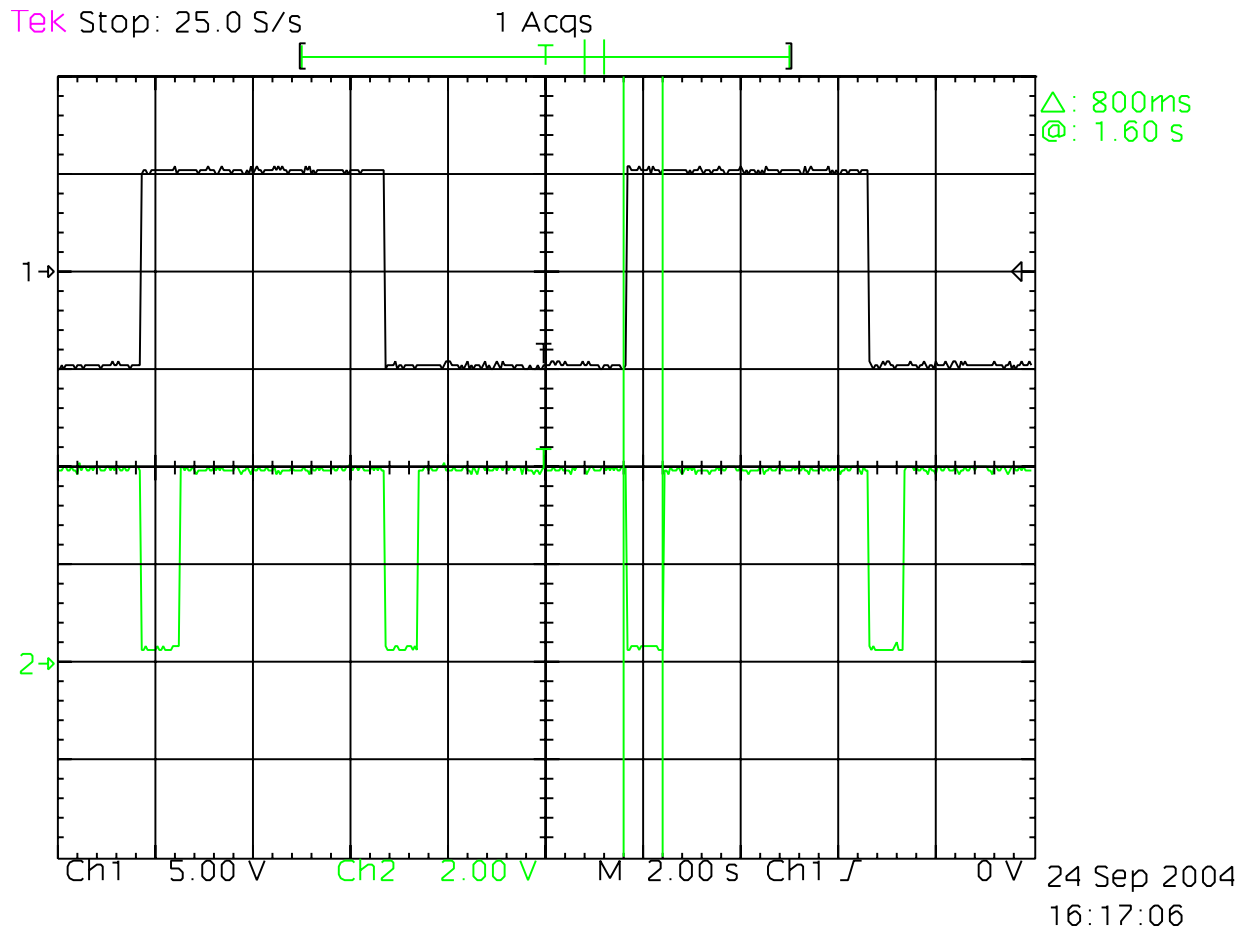
Transfer function to first DAQ channel (mode cleaner).



10/01/04 19:42:53

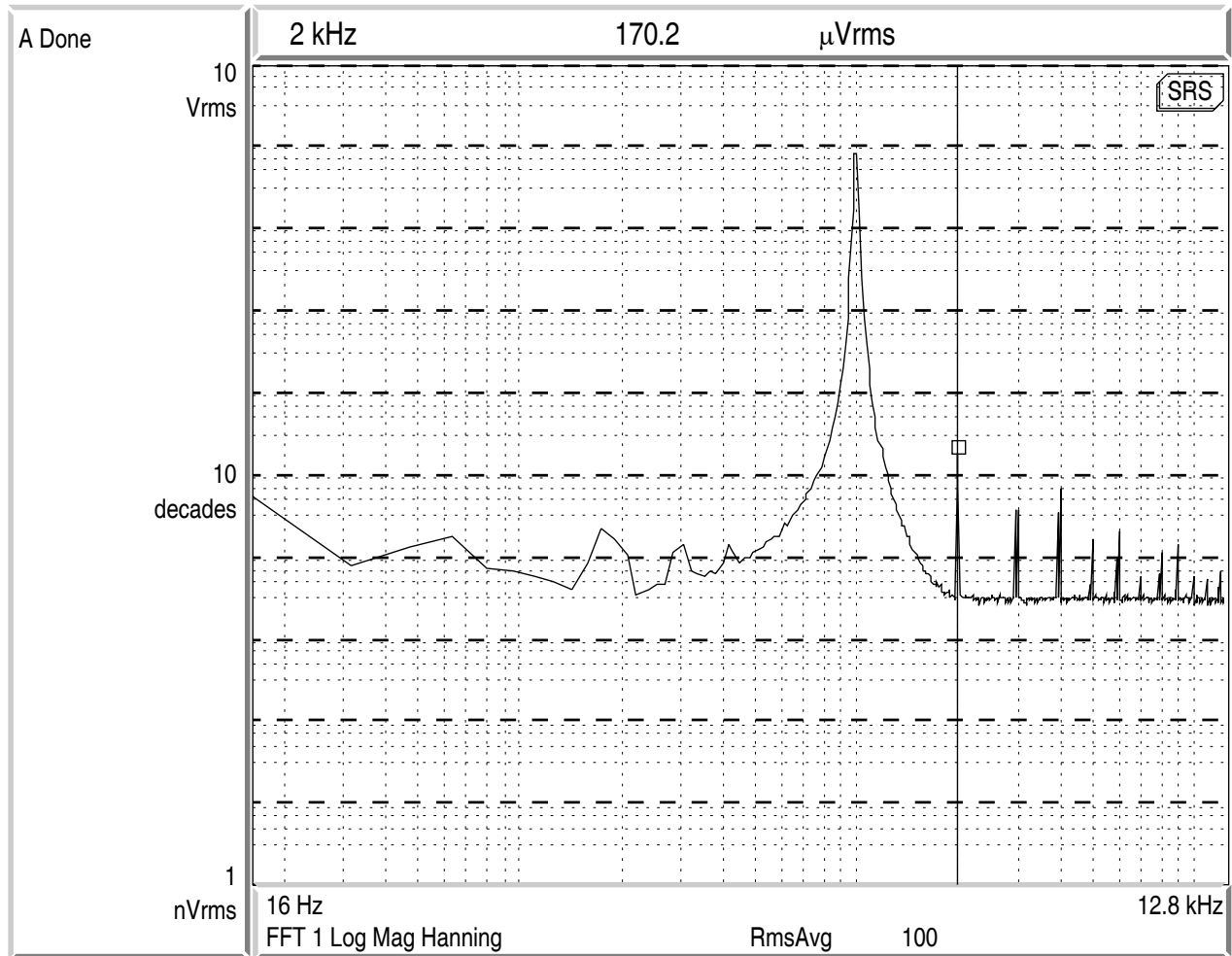
Transfer function to second DAQ channel.

## Appendix A6: Limit indicator



Limiter output.

## Appendix A7: Distortion measurement



10/07/04 15:20:12

Typical distortion spectrum.