UNIVERSITY OF CALIFORNIA AT BERKELEY
College of Engineering
Department of Electrical Engineering and Computer Sciences
EE 105 Fall 2025 Lab Experiments

Experiment 2: Non-Ideal Op-Amps, Lab Report

Student 1 name:
Student 2 name:
Lab group:

3. Lab

3.1. DC Open Loop Transfer Characteristic

Measured values of attenuator resistors:
Open loop gain A0:
Voltage offset Voffset ≡ −Vshift:
Plot of the DC Open Loop Transfer Characteristic:

3.2. Slew Rate in Unity Gain Configuration

Rising Slew Rate:
Falling Slew Rate:
Is it reasonable based on the datasheet?
Oscilloscope trace(s) of the slew rate measurements:

3.3. Gain and Bandwidth in Unity Gain Configuration

Based on your slew rate measurements, for 100KHz input at what amplitude the amplifier will start slewing?

Oscilloscope trace of the slewing output sine signal when doubling this amplitude:

Gain A0:

Bandwidth f3dB:

3.4. Gain and Bandwidth in Non-Inverting Amplifier Configuration

R=10kΩ	Gain A0:
	Bandwidth f3dB:
R=100kΩ	Gain A0:
	Bandwidth f3dB:

Plot of magnitude response of the voltage gain in dB for the two non-inverting amplifier circuits and the circuit from Problem 3.5 on the same plot: