EE 130L Lab Report Guidelines

One week after the completion of each lab projects, you will be expected to hand in a lab report which shows your understanding of the lab as well as the relevant optical principles. The lab report should include verbal description, relevant graphs, figures and calculations.

Begin your report with a title page, with your name and your partner's name (please make it clear which is which), the date and time you did the lab, and the date of submission.

The document should be proofread for grammatical errors.

The following is a possible outline of the document. You do not have to follow this outline exactly, but you should include all of the elements from this outline in your own lab report.

1) Background/Intro
   • Purpose of the lab
   • How it works, in a few short sentences
   • Use pictures to explain the optical principle if necessary

2) Lab Process
   • Describe in brief the important procedure when doing the lab.
   • What problems did you encounter during the lab?
   • How did you fix the problem?

3) Engineering Notes

4) Results
   • Necessary calculations
   • Compare your result with the expected value
   • Possible improvements if you were to redo it

5) Conclusions
   • Lessons learned
   • Summary

Your lab report grade will be based on:
1) Content – have you included important elements, e.g. measurement descriptions, data (in an organized fashion), analysis and appropriate calculations, interpretation of data and discussion of results?
2) Quality – do your experiment descriptions make sense, was the data the right data, are your calculations the appropriate ones and did you do them correctly?
3) Evidence of understanding – do your explanations make sense, can you tell the difference between reliable data and unreliable data, can you interpret your results in a meaningful way?
4) Communication skills – is the report neat, is it well organized and succinct, is English usage satisfactory?