Pre-Lab Exercises

Lab #1: CD Spectrometer

MIT Nanomaker_Spring 2013

T)	Read the photonics.com article on celiphone spectrometry.

2)	How might a spectrometer be useful in day-to-day activity?

3) List a few qualities that are desirable in a spectrometer. How might a spectrometer's slit and collimating tube, grating, and detector affect those qualities?

4) In this lab, we will be using a delaminated recordable CD as a diffraction grating. How might the CD diffraction grating differ in performance from a linear grating that could be purchased from an optics supply company? How would the diffraction change by replacing a CD diffraction grating with a DVD?

Weekly Challenge: Measure the data track spacing on CDs.

MIT OpenCourseWare http://ocw.mit.edu

6.S079 Nanomaker Spring 2013

For information about citing these materials or our Terms of Use, visit: http://ocw.mit.edu/terms.