

PROCEDURE

The data we gather will be taken from measurements of light as it travels in a system of two mirrors that are separated by a known length. Our system contains a rotating mirror which, when stationary, will cause our image to appear normally, but when rotating, our image will appear to be deflected. We will record the amount of deflection ($\Delta s'$) with the mirror rotating in both the clockwise and counter clockwise directions to double our measurement and decrease our uncertainty. We will attempt to decrease our uncertainty further by increasing the distance, as the environment allows, between the rotating mirror and our spherical mirror. Using the rotational velocity of the rotating mirror, the known distances in our setup, and our measurement for the deflection in the image ($\Delta s'$), we can calculate the speed of light.