

Abstract Submitted
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Transmission of Non-Perpendicularly Incident Light JACOB MAIBACH, George Washington University — I conducted two experiments to quantify optical effects of a linearly polarizing film. Particularly, two polarizing films were placed at a fixed distance apart and aligned with a light beam perpendicularly incident to both films. The first polarizer (closer to the light source) was held fixed while the other was rotated, and the intensity of the transmitted light was measured. In the first experiment, the second film was rotated around the light beam, and the transmission decayed with $\cos^2(\theta)$, verifying Malus' Law. In the second experiment, the second film was rotated towards the light beam, so that incidence was non-perpendicular. Contrary to expectation, the transmission was higher when incidence was non-perpendicular.

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