Question #234

This question is a follow-up to Question #233.

A collimated beam of light originates in the black box, and reflects off an aluminum surface onto the white screen as seen in the photograph below. In the photograph a polarizing sheet has been inserted in the light beam between the source and the reflecting aluminum surface. The polarization of light passing through the polarizing sheet is indicated by the arrows. The angle at which the light strikes the reflecting surface remains the same as in Question 233.

Now suppose that the polarizing sheet is rotated 90^{o}, from horizontal to vertical. What will happen to the intensity of the light on the screen?

When the polaroid is rotated by 90^{o} the intensity of the light will:

- (a) increase.
- (b) decrease noticeably.
- (c) decrease to zero.
- (d) remain nearly the same.

Click here for Answer #234 after December 12, 2005.

Question of the Week

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For questions and comments regarding the *Question of the Week* contact

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