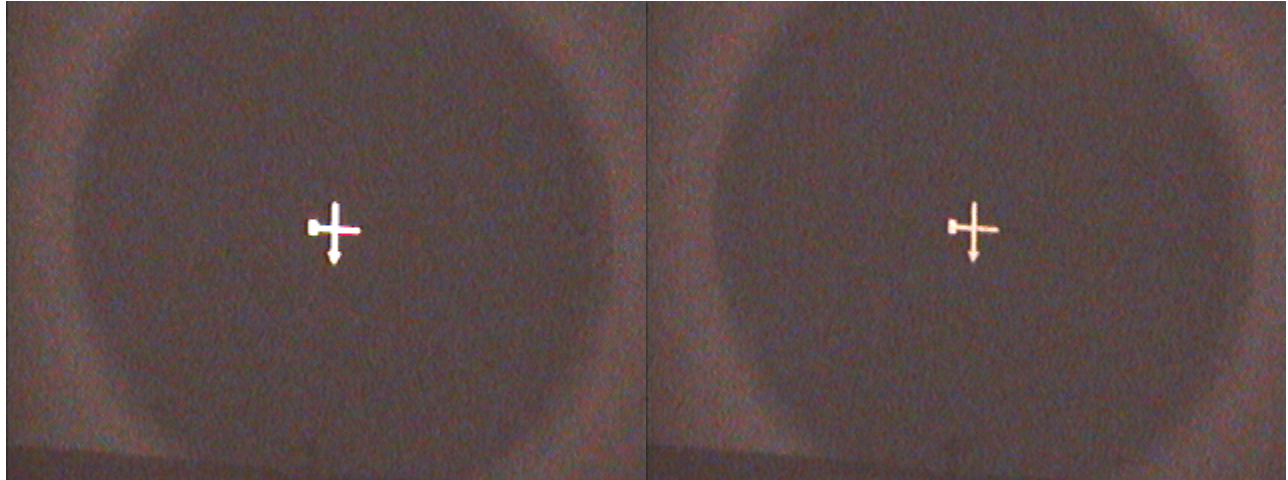


Answer #111

The answer is (b): the image will be dimmer, as seen by comparing the photographs below. The photograph at the left was taken with the entire lens open; the photograph at the right was taken with the baffle covering the right side of the lens as shown in the lower photograph on the question page.



All rays emanating from any point on the object and passing through any area of the lens are recombined at the corresponding image point. If the light is approximately uniform over the entire lens (or at least the same on both sides because the object is small compared to the size of the lens), covering up half of the lens will remove half of the light.

[Archive 6](#)

[Question of the Week](#)

[Outreach Index Page](#)

[Lecture-Demonstration Home Page](#)



For questions and comments regarding the *Question of the Week* contact [Dr. Richard E. Berg](#) by e-mail or using phone number or regular mail address given on the [Lecture-Demonstration Home Page](#).