

Question #252

Shown in the photograph below is a radio transmitter attached to a dipole antenna - two copper rods that stick out horizontally from the coil in the transmitter. A second antenna picks up the radio waves from the transmitter, causing the light bulb mounted between the two parts of the antenna to light up.



Now suppose that the light bulb is removed from the receiving antenna and it is moved so that it is horizontal but perpendicular to the transmitting antenna and positioned at the end of the transmitting antenna, as seen in the photograph at the right.

When the light bulb is left connected in the receiving antenna and it is moved as shown above, the intensity of the light bulb will be:

- (a) brighter.
- (b) dimmer.
- (c) the same.

Click here for [Answer #252](#) after May 8, 2006.

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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](#).