

## Answer #252

The answer is (b): the intensity of the light bulb will be less. In fact, the bulb will nearly go out, as seen in the photograph at the right below.



The waves from the transmitting antenna form a "dipole antenna pattern" in the horizontal plane with the maximum energy flowing away from the center of the antenna in a plane perpendicular to the antenna. There is a minimum of energy flow along the line of the antenna. This means that the "antenna pattern" of radio or TV stations may affect the direction in which the signal is larger or smaller, or may even result in the signal being so small that a station cannot be received.

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