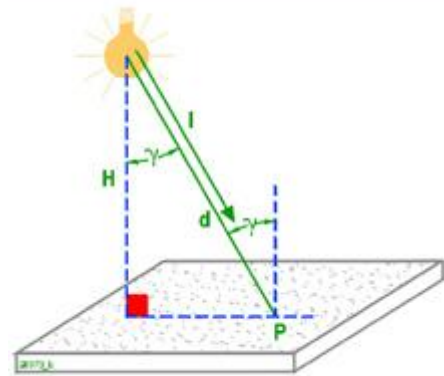


Horizontal Illuminance

For horizontal surfaces, the illuminance is calculated by describing the distance (d) between the light source and the calculation point by means of the vertical height (h) of the light source above the surface.

In the diagram (right), $h = d \cos \gamma$ or $d = h / \cos \gamma$



$$\text{So } E_p = \frac{I \cos \gamma}{d^2} \text{ becomes } E_{hor} = \frac{I \cos^3 \gamma}{h^2}$$

This is called the horizontal illuminance at the point.