

Two fundamental characteristics define a uniform beam:

- **Visual comfort: the beam is not brighter at the center**

This central bright spot is often uncomfortable as it can be blinding and obliges the user to turn his/her head to point this spot at what needs to be seen.

A completely uniform beam, with even luminosity, is much more comfortable, as it is not blinding. The luminosity is therefore equal and does not oblige the user to point the beam for precise vision.



PIXA's uniform beam



Irregular beam
(brighter spot at center)

- **"Clean" beam, without distractions**

It has the same shape and look over its entire form: no spots, rings or shadows. These irregularities are very distracting to the eye, as they impede precise vision.

In particular, dark or bright spots moving around the beam of light may be confused with objects. The bright rings tend to distract the user.



PIXA's uniform beam



Irregular LED beam (contains rings and spots)



Irregular incandescent beam (contains rings and spots)

The degree of uniformity of a beam also reveals the quality of the headlamp's lens. Irregularities are in fact caused by imprecise, poor quality, or incorrectly installed reflectors.