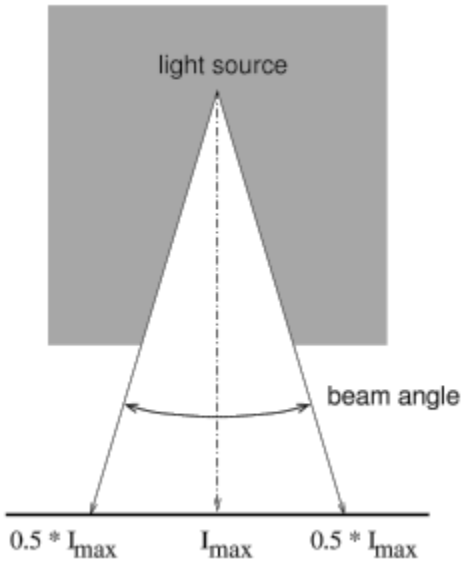
Lighting Design Glossary

Beam Angle
Field Angle
Beam Lumens
Beam Spread

(Term of *photometry*)

The **Beam Angle** is the angle between the two directions opposed to each other over the *beam axis* for which the *luminous intensity* is half that of the maximum luminous intensity.



The luminous intensities are measured in a plane normal to the nominal beam centerline. If the beam is not rotationally symmetric, then the beam angle is usually given in two planes at 90° of each other, possibly the maximum and minimum angles. Other angles (eg. at 45°) may also be given.

The **Field Angle** is the angle between the two directions opposed to each other over the beam axis for which the luminous intensity is 10% that of the maximum luminous intensity. Note that in certain fields of applications the field angle was formerly called beam angle.

The **Beam Lumens** are the total *luminous flux* that is emitted within the region of space, where the luminous intensity is more than half the maximum luminous intensity. With most light source, this region can be described as a cone shaped by all beam angles.

The **Beam Spread** is a general term, describing the angle between the two directions opposed to each other over the beam axis for which the luminous intensity is a certain fraction of that of the maximum luminous intensity. The amount of that fraction needs to be given in each specific case.

References: beam axis
luminous intensity
luminous flux
photometry

English	German
beam angle	Der Strahlwinkel
field angle	Der Feldwinkel
beam spread	Die Strahlbreite Die Spreizung
