

V-Ray Light Spot

This page provides information about the V-Ray Spot Light in Grasshopper.

Overview

V-Ray Spot Light component creates a focused light, which is targeted towards an object in the scene. It can be connected to the V-Ray Render which automatically adds it to the rendered scene. If a list of input Positions is connected to this component multiple lights are generated. Multiple Target values can also be used.

The number of input positions determines the lights count.

V-Ray Light Spot

On

Position

Target

Color

Intensity



• Light

Units

Cone

Penumbra

Shadow Softness

Input Parameters

On (*Boolean*) – Enables or disables the light source.

Position (*Point*) – Determines the light source location (point position). If a list of input Positions is connected multiple lights are generated. **Note:** The number of input positions determines the lights count.

Target (Point) – The light Position and Target combined determine the targeted light orientation vector.

Color (Colour) – Sets the light source color.

Intensity (Number) – Specifies the light source intensity. Calculated in the specified units.

Units (Integer) - Specifies the light unit of measurement. Using correct units is essential when working with physical camera exposure. The light automatically takes the scene units scale into consideration to produce correct result for the scale being worked in.

Default (Scalar) – The color and multiplier directly determine the visible color of the light without any conversion. The light surface appears with the given color in the final image when seen directly by the camera.

Luminous Power (Lumens) – Total emitted visible light power measured in lumens. The intensity of the light does not depend on its size. A typical 100W incandescent light bulb emits about 1500 lumens of light.

Luminance (lm/m²/sr) – Visible light surface power measured in lumens per square meter per steradian. The intensity of the light depends on its size.

Radiant Power (W) – Total emitted visible light power measured in watts. The intensity of the light does not depend on its size. This is not the same as the electric power consumed by a light bulb. A typical 100W light bulb only emits between 2 and 3 watts as visible light.

Radiance (W/m²/sr) – Visible light surface power measured in watts per square meter per steradian. The intensity of the light depends on its size.

Cone (Number) – Specifies the angle of the light cone formed by the light. The value is specified in degrees.

Penumbra (Number) - Specifies the angle within the light cone at which the light begins to transform from full strength to no lighting. When set to 0, there is no transition and the light produces a harsh edge. The value is specified in degrees.

Shadow Softness (Number) - Sets the shadow softness. Zero (0.0) makes the shadows perfectly sharp, larger values produce blurrier shadows.

Output Parameters

Light (Generic Data) – Light output that can be connected to Renderer component.

Example

Light Spot component connection. Note that an Environment component with a black color plugged in the GI input parameter is used as an override to turn off the default Environment lighting. If there is no Environment input in the Render component V-Ray always creates one internally.



