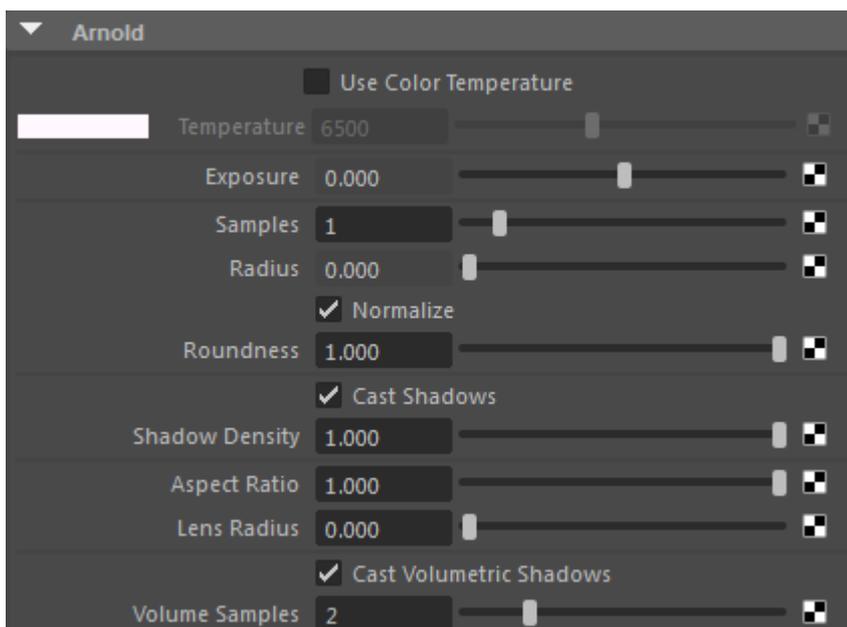# Spot Light


Simulates light from a spot light, as a cone of light from the position of the light toward the point it is pointed at.

The Lights page has more detail about the controls. In addition to honoring the standard Maya light attributes, the *Attribute Editor* will also show the following attributes under the Arnold group:
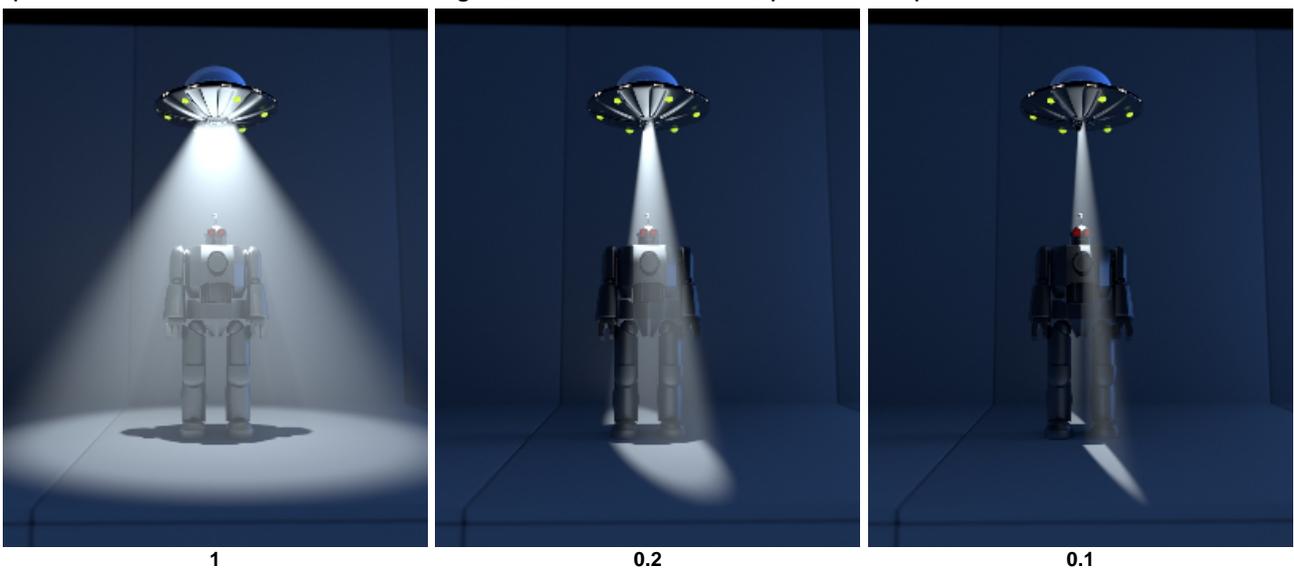
Radius

If Radius is set to zero, then the cone of light from the spot will emanate from a notional point source. With a non-zero value for radius, then the light source will behave more like a spherical source with the radius specified (although again with the light emitted being constrained to a cone). The larger the radius, the softer the lighting from this light source (zero radius will give hard shadows). See also the Radius parameter in the point light.


| 0 | 0.1 | 1 |
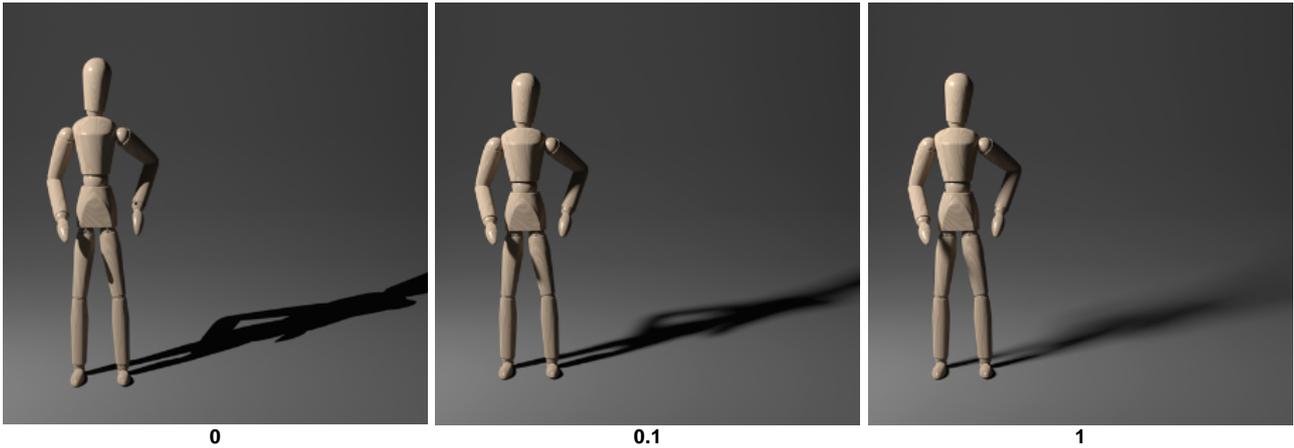
Aspect Ratio

Set this to 1.0 (range is 0.0 to 1.0) for a cone with a circular cross section, or to another value for an elliptical cross section. Some theater lights, such as PAR cans, produce elliptical cross sections.

| 1 | 0.2 | 0.1 |

Lens Radius

When set to zero, the vertex of the spot light cone coincides with the light's specified position. If non-zero, the cone becomes truncated, and the light is assumed to come from a virtual position that falls behind the light's specified position. This simulates the effect of real-world luminaires that bundle together a light bulb and a parabolic reflector inside a small, closed fixture. For example, a Hollywood-style searchlight has a big lens radius and a very small cone angle, producing an almost parallel beam of light whose intensity decreases with distance only very slowly, reaching all the way to the clouds. The effect of this parameter is more clearly seen with volumetrics.

| 0 | 1 | 2 |
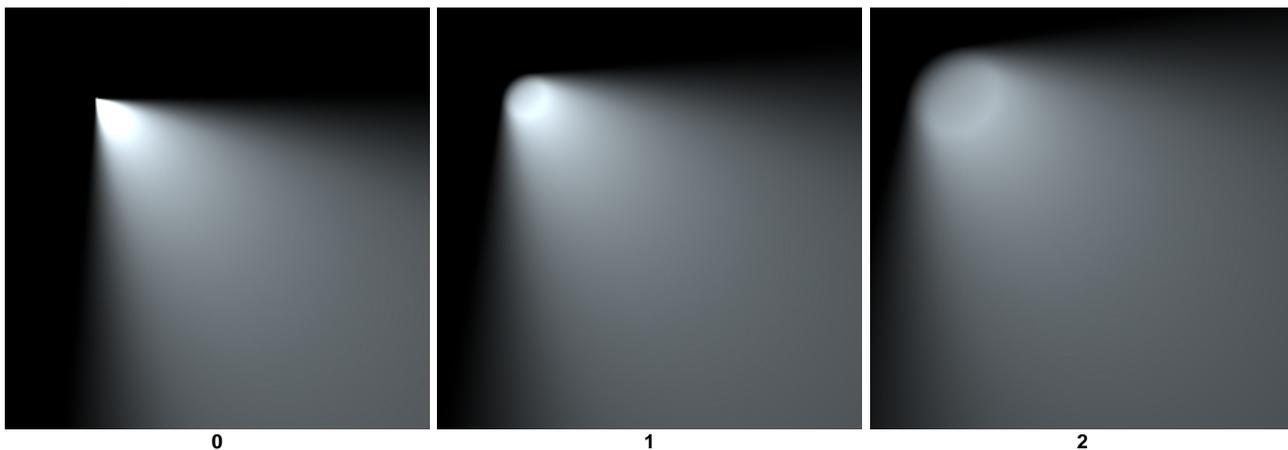
A laser sword effect can be achieved by using a high 'lens radius' and a low cone angle (atmosphere volume enabled).

Roundness

A roundness parameter, going from a square shape at 0, to rounded corners, to a disk shape at 1.

| 1 (default) | 0.5 | 0 |