# **PxrBlockerLightFilter**

PxrBlockerLightFilter uses a "rod" like object to block light. The blocker can be shaped into an irregular shape. This blocker is then placed next to the object where we want to block the light. In this way it can float freely around your scene even if the light is static. In this example the blocker is placed on the statue on the pedestal.

PxrBlockerLightFilter is a simple version of PxrRodLightFilter.

## **Parameters**

# **Rod Shape**

## Width

Width of the inner region of the rod (X axis).

width = 0width = 1width = 3

## Height

Height of the inner region of the rod (Y axis).

 $\begin{array}{l} \text{height} = 0.5\\ \text{height} = 2\\ \text{height} = 3 \end{array}$ 

## Depth

Depth of the inner region of the rod (Z axis).

depth = 2 depth = 4depth = 10

# Radius

Radius of the corners of the inner rod box.

radius = 1.8 radius = 3 radius = 4.4

# Edge

Thickness of the edge region.

edge = 1edge = 1.6edge = 2.5

# Multiplier

## Density

How much effect the filter has (0-1 is the recommended range).

```
density = 0
density = 0.5
density = 1
```

## Invert

Invert the multipliers.

```
invert = 0
invert = 1
```

## Intensity

Global Multiplier for both the diffuse and specular contribution below.

```
intensity = 0
intensity = 1
intensity = 5
```

## Diffuse

Controls how diffuse direct light is affected.

```
diffuse = 0

diffuse = 0.5

diffuse = 1
```

# Specular

Controls how specular and glossy direct light is affected.

```
specular = 0
specular = 0.5
specular = 1
```

# Saturation

Saturation of the light before hitting the surface (0 = greyscale, 1 = normal, higher than 1= boosted colors).

```
saturation = 0
saturation = 1
saturation = 5
```

## **Falloff**

Controls the transition from the core to the edge(s)

#### Falloff

Define the number of knots. This is a float ramp that controls the transition from the core to the edge.

## Falloff Knots

An array of knot values.

## **Falloff Floats**

An array of float values.

## **Falloff Interpolation**

Type of ramp interpolation: linear, catmull-rom, bspline, and constant

Optional color gradient for the transition:

## **Color Ramp**

Define the number of color knots.

## **Color Ramp Knots**

An array of knot values. (For different color knots)

## **Ramp Colors**

An array of color values.

## **Color Ramp Interpolation**

Type of color ramp interpolation: linear, catmull-rom, bspline, and constant

## **Combine Mode**

Combine Mode

mult: The results of all the filters are multiplied together

max: The maximum result from all filters is used. This works best for grey scale light filters.

min: The minimum result from all filters is used. This works best for grey scale light filters.

**screen**: Similar to the max operation, but it combines gradients in a smoother way. This works best for grey scale light.

Light filters on a light are grouped by their combine mode. Light filters in the same group are executed together and combined by the combine mode. The groups are executed in this order (max, min, screen, and then mult) and are multiplied together, which means a filter that turns things black in the mult group will zero out all other filters.