PxrRodLightFilter

PxrRodLightFilter uses a "rod" like object to block light. The rod can be shaped into an irregular shape. This rod is then placed next to the object where we want to block the light.

This light filter is a more extensive version of PxrBlockerLightFilter.

Parameters

Rod Shape

Width

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

width = 0
width = 1
width = 3

Height

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

height = 0.5
height = 2
height = 3

Depth

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

depth = 2
depth = 4
depth = 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 = 1
edge = 1.6
edge = 2.5

Scale

Scale Width

Scale the width of the inner rod shape (X axis).

scale width = 1.2

scale width = 1.9
scale width = 2.3

Scale Height

Scale the height of the inner rod shape (Y axis).

scale height = 1
scale height = 1.5
scale height = 2.9

Scale Depth

Scale the depth of the inner rod shape (Z axis).

scale depth = 1.4
scale depth = 1.0
scale depth = 2.1

Refine Shape

Left

Additional size of the left region (-X axis)

left = 0
left = 0.7
left = 1.5

Right

Additional size of the right region (+X axis)

right = 0
right = 0.7
right = 1.5

Bottom

Additional size of the bottom region (-Y axis)

bottom = 0
bottom = 0.4
bottom = 1.7

Top

Additional size of the top region (+Y axis)

top = 0
top = 0.4
top = 0.8

Back

Additional size of the back region (-Z axis)

back = 0
back = 0.3
back = 1.4

Front

Additional size of the front region (+Z axis)

front = 0.1
front = 1
front = 1.9

Scale Edges

Left Edge

Scale left edge up or down (-X axis).

leftEdge = 1
leftEdge = 6.6
leftEdge = 16.9

Right Edge

Scale right edge up or down (+X axis).

rightEdge = 1
scaleRight = 6.6
rightEdge = 16.9

Bottom Edge

Scale bottom edge up or down (-Y axis).

bottomEdge = 1
bottomEdge = 3
bottomEdge = 9.4

Top Edge

Scale top edge up or down (+Y axis).

topEdge = 1
topEdge = 7
topEdge = 10.4

Back Edge

Scale back edge up or down (-Z axis)

backEdge = 1
backEdge = 4.4
backEdge = 19.1

Front Edge

Scale frontal edge up or down (+Z axis).

frontEdge = 1
frontEdge = 5.8
frontEdge = 11.8

Multiplier

Multiplies various aspects of intensity in the filter.

Density

Global control on how much effect this light filter has.

density = 0
density = 0.5
density = 1

Intensity

Multiplier for the light intensity.

intensity = 0
intensity = 1
intensity = 5

Invert

Invert the multipliers.

invert = 0
invert = 1

Diffuse Contribution

Controls the diffuse contribution.

diffuse = 0
diffuse = 0.5
diffuse = 1

Specular Contribution

Controls the specular contribution.

specular = 0
specular = 0.5
specular = 1.0

Saturation

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

saturation = 0
saturation = 1
saturation = 5

Falloff

Controls the transition from the core to the edge:

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:linearcatmull-rombsplineconstant

Optional color gradient for the transition:

Color Ramp

Define the number of knots.

Color Ramp Knots

An array of knot values.

Ramp Colors

An array of color values.

Color Ramp Interpolation

Type of color ramp interpolation:linearcatmull-rombsplineconstant

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.