

# *CINEMA 4D XL 7*

## *Lighting Manual*

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## *Lighting*

3D

가

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가

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가

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8.0

7.0

8.0

가

가

.




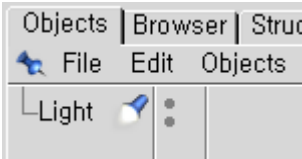
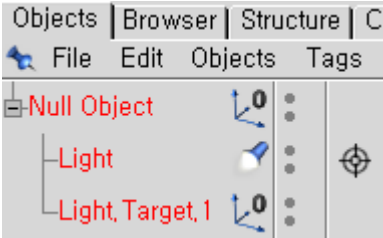
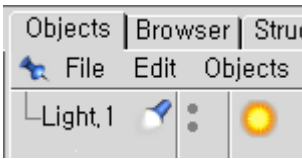




(SUN)

Cinema4d

3

 Add Light Object	 Add Light With Taget	 Add Sun Light
	가	, , ,
		

## Light - 1. Genaral

Color Table

RGB 0%, 100%
HSV 0%, 100%
RGB 0, 255
HSV 0, 255
RGB 0, 65535
HSV 0, 65535

Color Table  
칼라종류별 옵션

Light

General | Details | Visibility | Shadow | Caustics | Noise

Color

R 100 %

G 100 %

B 100 %

Brightness 100 %

Type Omni

Shadow None

Visible Light None

Noise None

☒ Show Illumination

☒ Show Visible Light

☒ Show Clipping

Memory Requirement: Low

Render Time: Low

OK Cancel

Light Type  
라이트의 종류

- Omni
- Spot (Round)
- Spot (Square)
- Distant
- Parallel
- Parallel Spot (Round)
- Parallel Spot (Square)
- Tube
- Area

Shadow Type  
그림자의 종류

- None
- Soft
- Hard
- Area

Visible Type  
볼륨라이트의 종류

- None
- Visible
- Volumetric
- Inverse Volumetric

Noise Type  
볼륨라이트의 옵션 조절

- None
- Illumination
- Visibility
- Both

No Light Radiation : 실제로 라이트가 생성되고 눈에 보이지만 물체엔 영향을 주지않는다(체크시)

Show Illumination : 정확한 기능은 잘 모르겠습니다..다중에 다시 올리죠 /(-.-;)

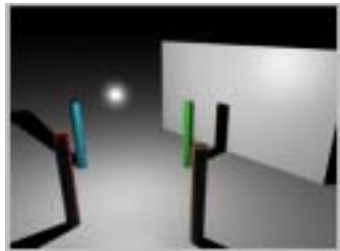
Show Visible Light : 화면상에서 볼륨라이트의 영역이 나타난다.

Show Clipping : 화면상에서 라이트의 detail한 영역이 나타난다(뒤에서 다시설명)

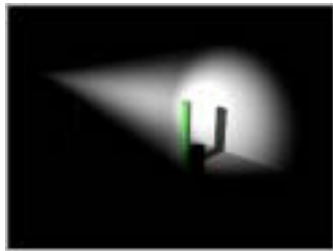
## General – Type(light )

Omni  
Spot (Round)  
Spot (Square)  
Distant  
Parallel  
Parallel Spot (Round)  
Parallel Spot (Square)  
Tube  
Area

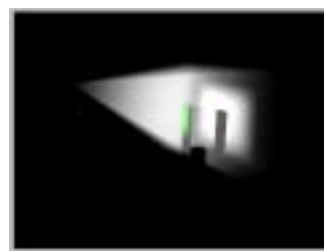
Omni  
Spot (Round) . ( 360° ) 가 . ( )  
Spot (Square) Spot (Round)  
Distant  
Parallel  
Distant 가  
Parallel Spot (Round) 가  
Parallel Spot (Square) Parallel Spot (Round)  
Tube  
Area



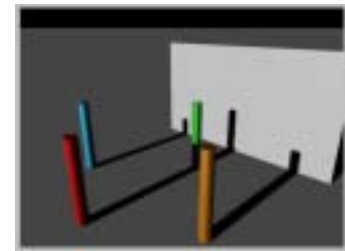
Omni



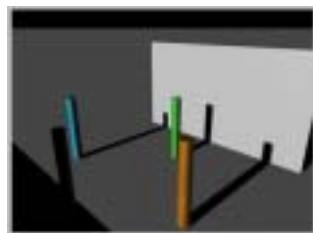
Spot (Round)



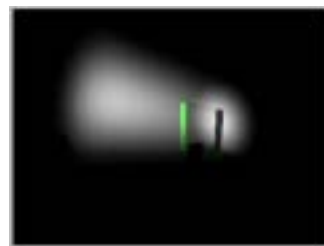
Spot (Square)



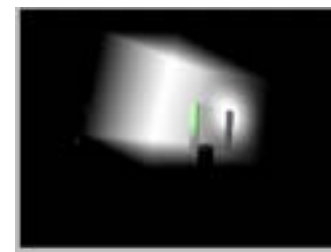
Distant



Parallel



Parallel Spot (Round)

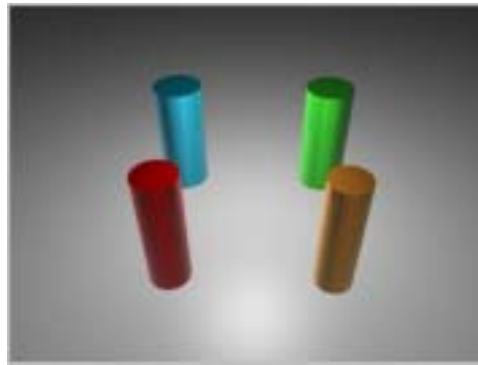


Parallel Spot (Square)

## General – Shadow ( )

None
Soft
Hard
Area

None

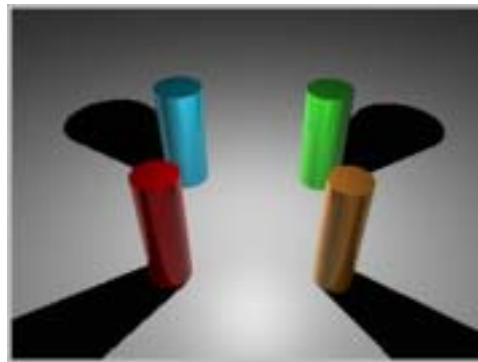


가

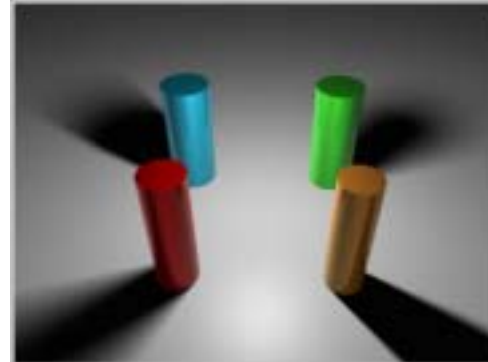
Soft



Hard



Area



가

Soft

**TIP!** Soft Area : 3D

Area . Area

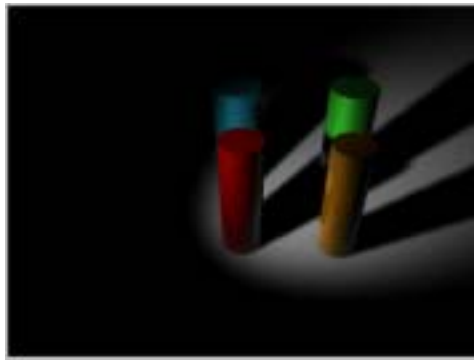
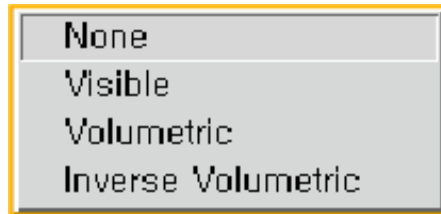
Hard

가

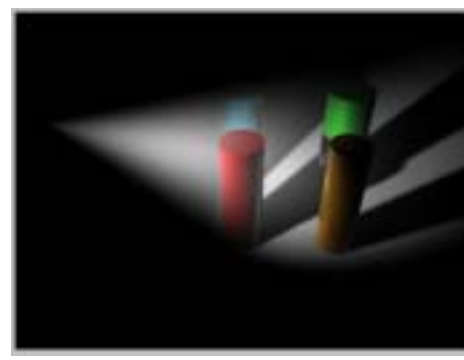
Soft

가

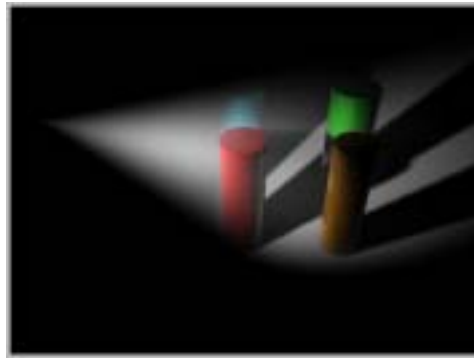
# General – Visible Light ( – )



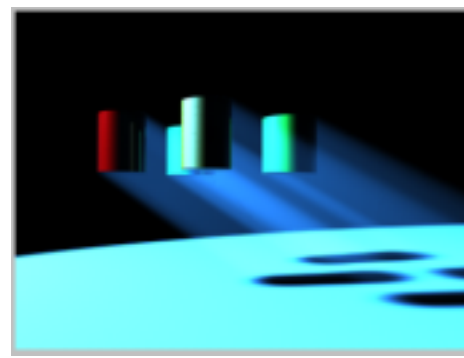
**None** : Visible Light가



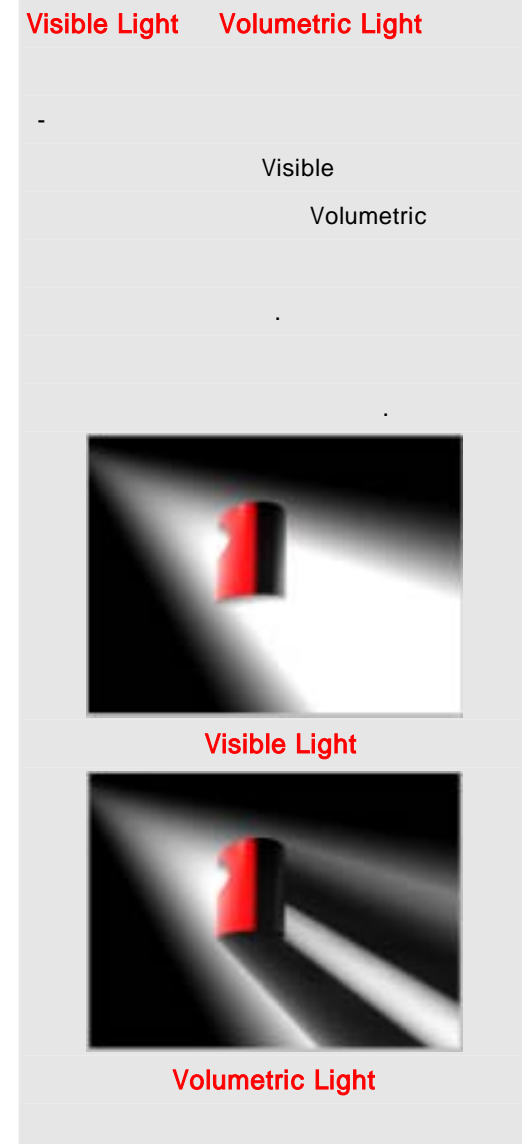
**Visible** : Visible Light가



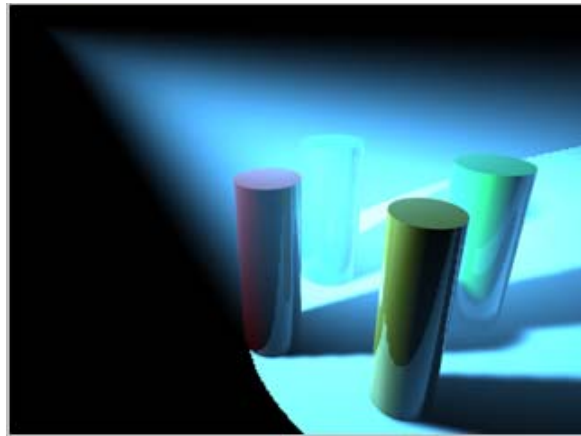
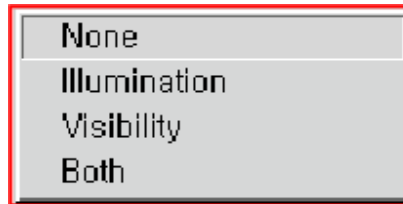
**Volumetric** : Volumetric Light가



**Inverse Volumetric** :  
Visible Light가

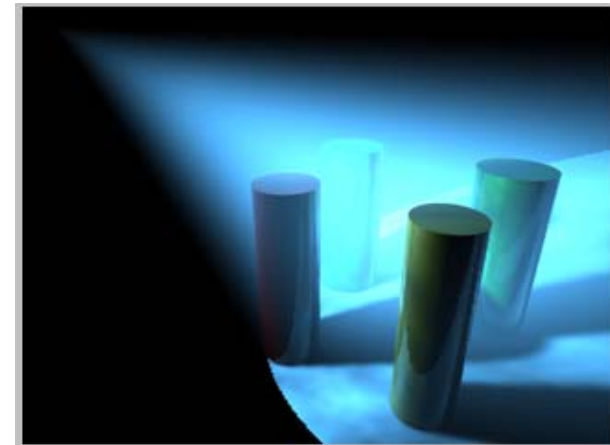


## Noise - Visible Light



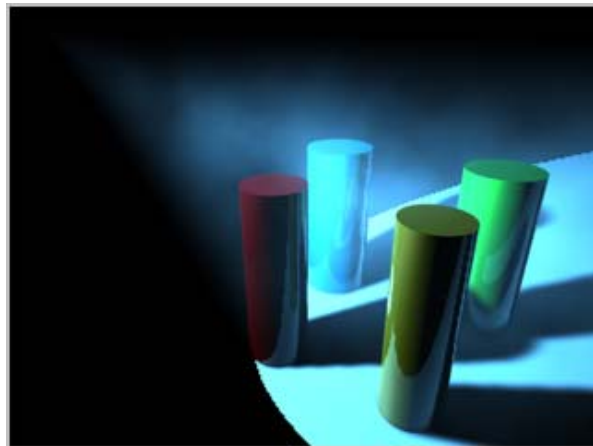
None : Visible Light

가



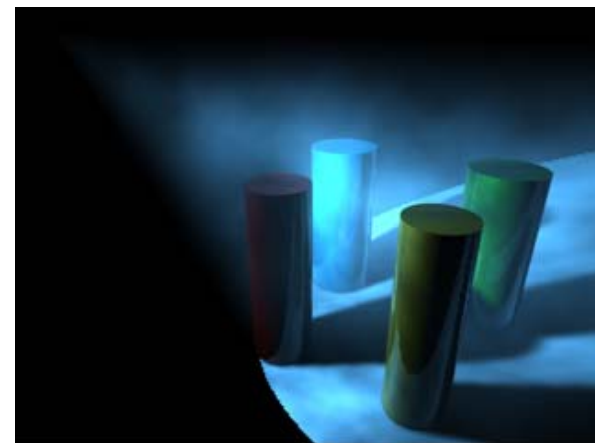
Illumination :

가



Visibility :

..



Both :

가



## Light – 2. Detail

Tool . ( ^ ) 가 가

**Inner Angle, Outer Angle**

: Inner

Angle Outer Angle

**Aspect Ratio :** Y

**Brightness :**

**Contrast :**

**Falloff :**

**Inner Distance, Outer Distance**

: Falloff

**Light**

General Details Visibility Shadow Caustics Noise

☒ Inner Angle 0 m ☐ Inner Color

Outer Angle 100 m ☐ Colored Edge Falloff

Aspect Ratio 1 ☐ Near Clipping

Brightness 100 % From 0 m

Contrast 0 % To 10 m

Falloff **None**

Inner Distance 0 m ☐ Far Clipping

Outer Distance 500 m From 90 m

To 100 m

☐ Ambient Illumination

☐ No Diffuse

☐ No Specular

☐ Separate Pass

OK Cancel

**Inner Color :**

**Colored Edge Falloff :**

Inner Color

2가

**Near Clipping :** 가

-From, To : Near Clipping

**Far Clipping :** Near Clipping

가

-From, To : Far Clipping

**Falloff Options:**

- None
- Linear
- Inv.
- Inv. Square
- Inv. Cubic
- Step

**Ambient Illumination :**

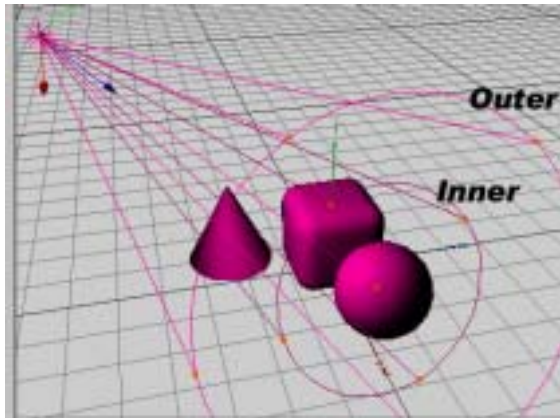
**No Diffuse :** 가 ( )

**No Specular :**

**Separate Pass :**

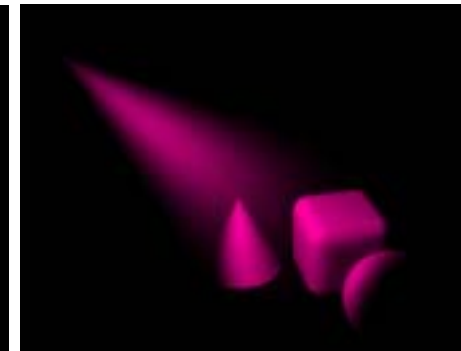
## Inner Angle, Outer Angle

Inner Angle  
Outer Angle



Use Inner : OFF

\*Tip : Use Inner Omni

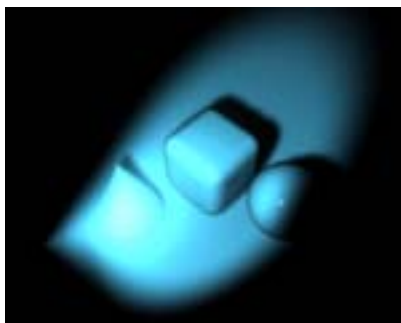


Use Inner : On

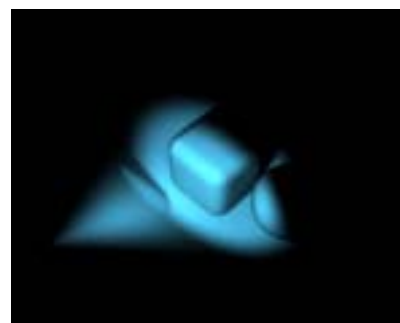
## Aspect Ratio

Y

가 1- 가  
1+가 가

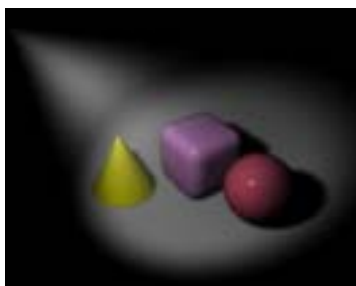


Aspect Ratio : 1.55

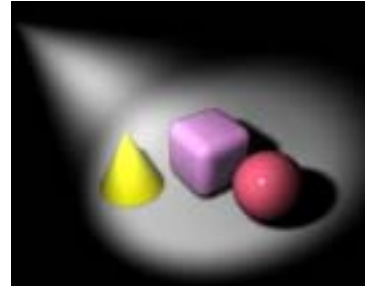


Aspect Ratio : 0.55

## Brightness



Brightness : 57 %



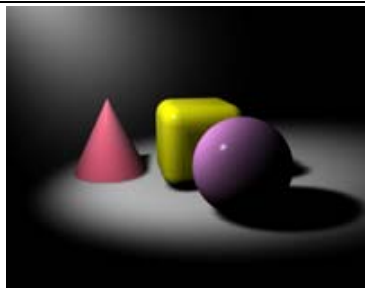
Brightness : 100 %



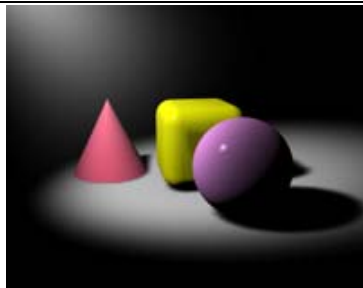
Brightness : 207 %

# Contrast

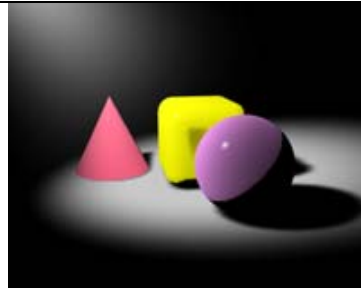
가



Contrast : 0 %



Contrast : 50 %



Contrast : 200 %

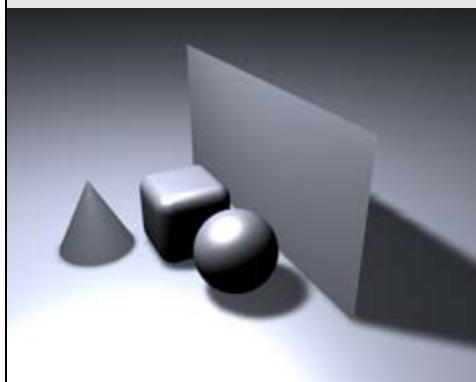
## Falloff :

(

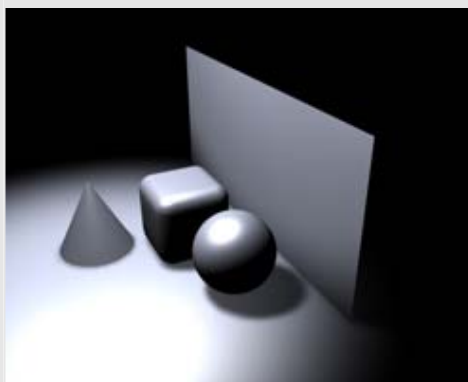
.)

가

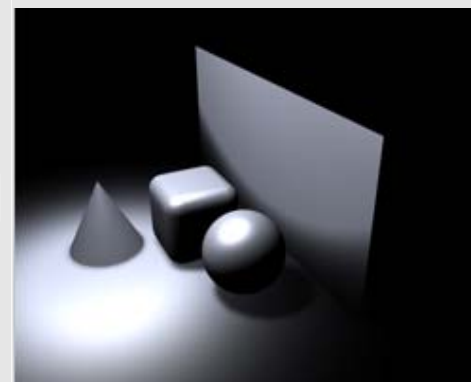
가



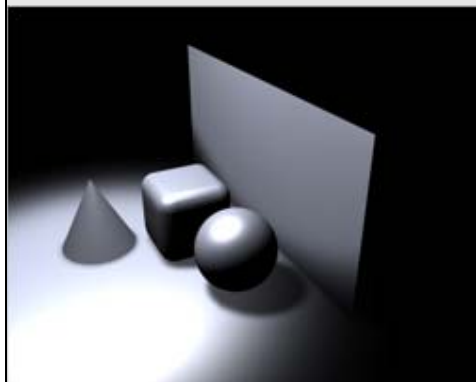
None



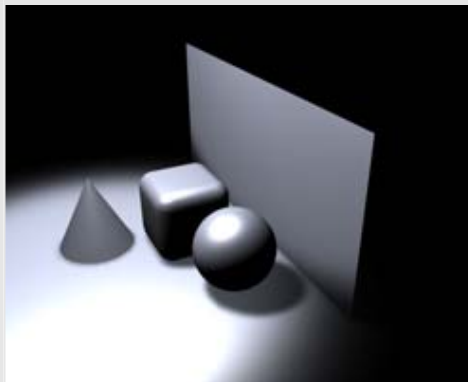
Linear



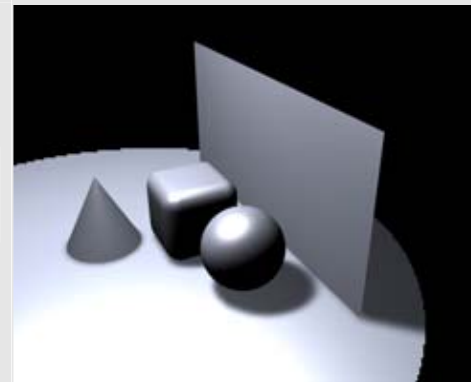
Inverse



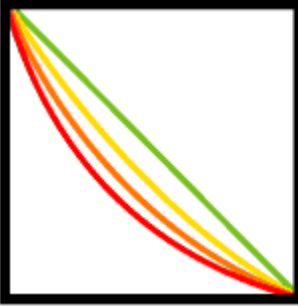
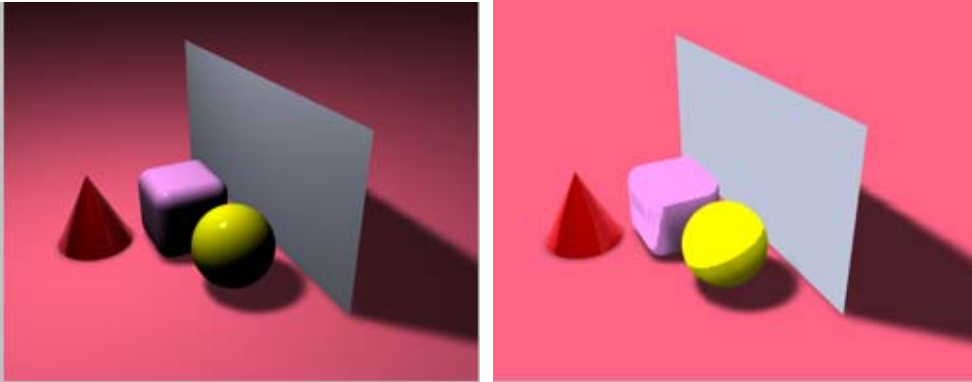
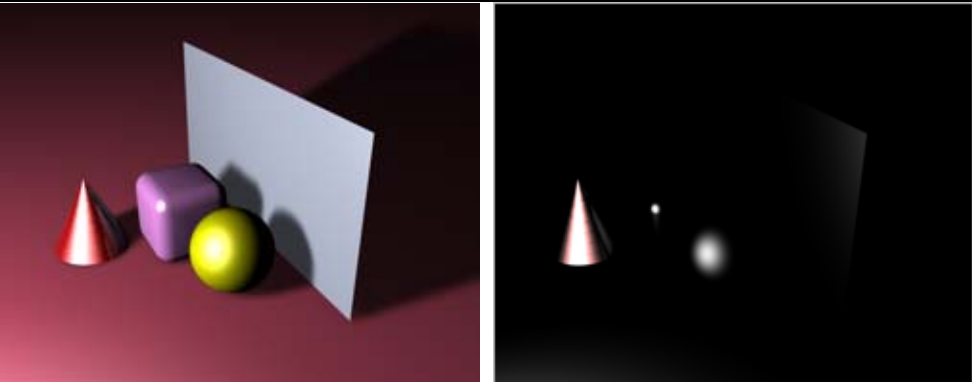
Inverse  
Square



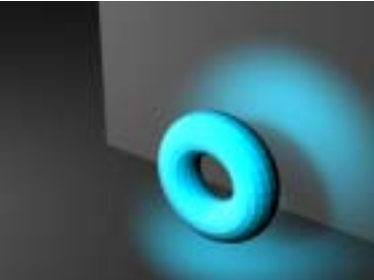
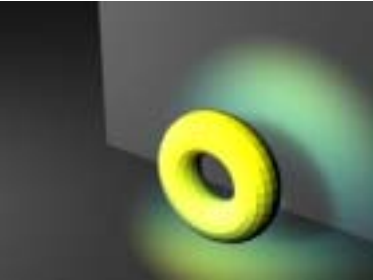
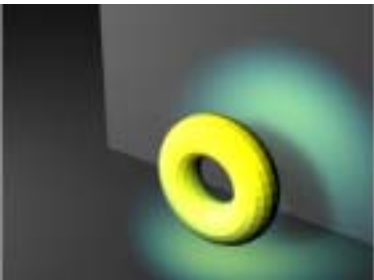
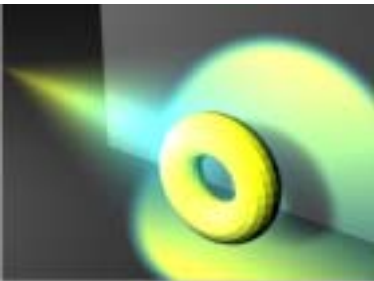
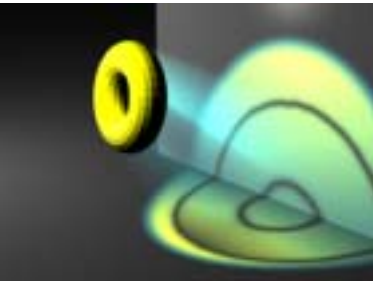


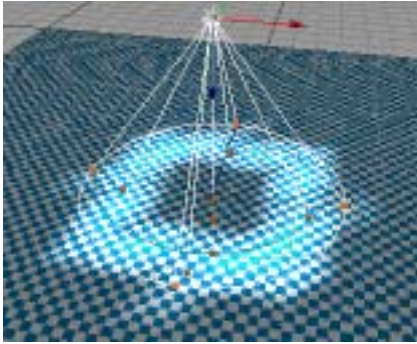
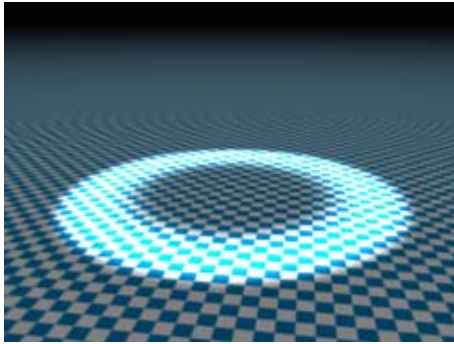
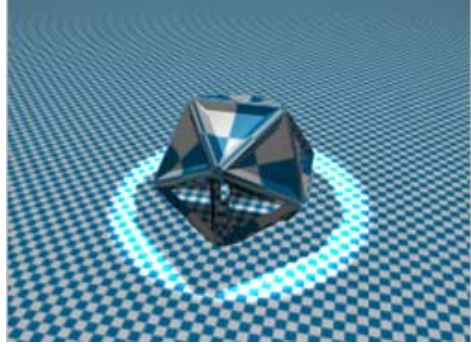
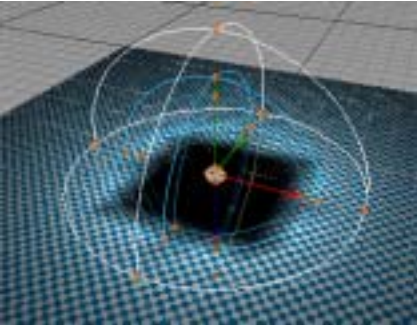
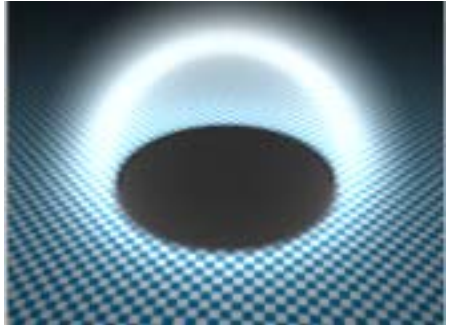

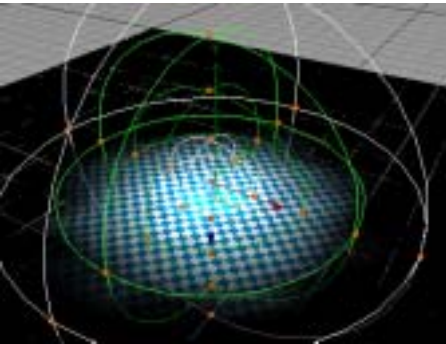
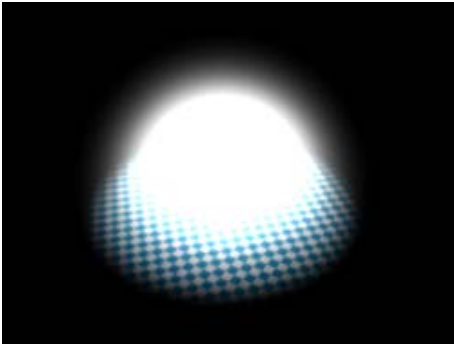
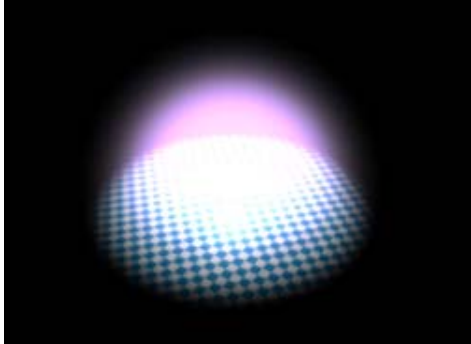
Inverse  
Cubic



Step

<p>* Falloff</p> <p>가 가 .</p> <p>가 ( ^)</p>	<p>Falloff의 커브값</p>  <ul style="list-style-type: none"> <li>Linear</li> <li>Inverse</li> <li>Inverse Square</li> <li>Inverse Cubic</li> </ul>
<p>Ambient Illumination</p> <p>가 가</p> <p>( Illumination .)</p>	 <p>Ambient Illumination : OFF</p> <p>Ambient Illumination : ON</p>
<p>No Diffuse</p> <p>가 (Diffuse )</p>	 <p>No Diffuse : OFF</p> <p>No Diffuse : ON</p>

<p>No Specular</p> <p>가</p> <p>가</p>	<div>   </div> <div> No Specular : OFF No Specular : ON </div>
<p>Inner Color</p> <p>Colored Edge Falloff</p> <p>Inner Color</p> <p>가</p> <p>( )</p>	<div>    </div> <div> Light Color : Sky Blue Light Color : Sky Blue Light Color : Sky Blue </div> <div> Innner Color : OFF Innner Color : ON Innner Color : ON + Colored Edge Falloff </div> <div>   </div> <div> Innner Color + Colored Edge Falloff </div> <p>가</p>

<p><b>Near Clipping</b></p> <p>가</p> <p>가</p> <p>-From, To</p> <p>Near Clipping</p> <p>(       )</p>	<div>    </div> <p>Sport light    * Near Clipping : From 434.864 m - To 616.864 m</p>
<p></p>	<div>    </div> <p>Omni light    *Near Clipping : From 277.54 m - To 333.973 m (    *    )</p>
<p><b>Far Clipping</b></p> <p>Near Clipping        가</p> <p>-From, To</p> <p>Far Clipping</p>	<div>    </div>



## Visibility

### Fallof

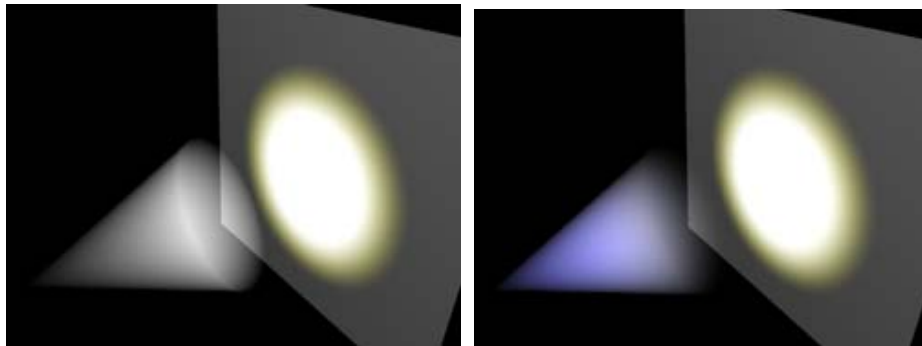
Detail    Falloff

### Custom Color

Visibility(Visible, Volumetric, Inverse Volumetric)

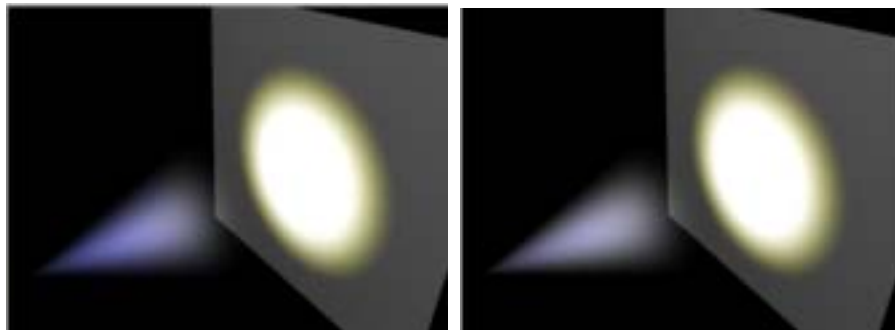
(Detail    Inner Color    .)

- Falloff    Edge Falloff    Color Edge Falloff



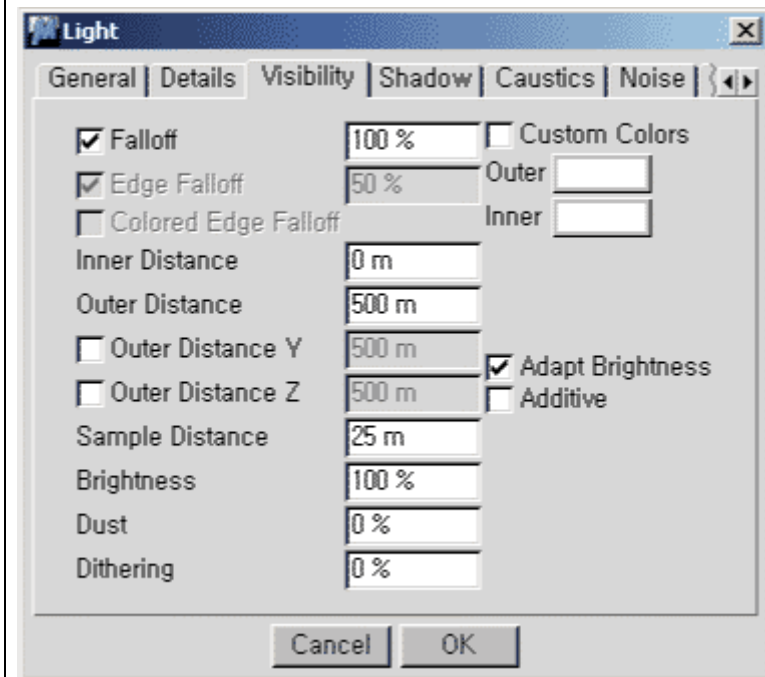
Custom Color

Custom Color + Falloff



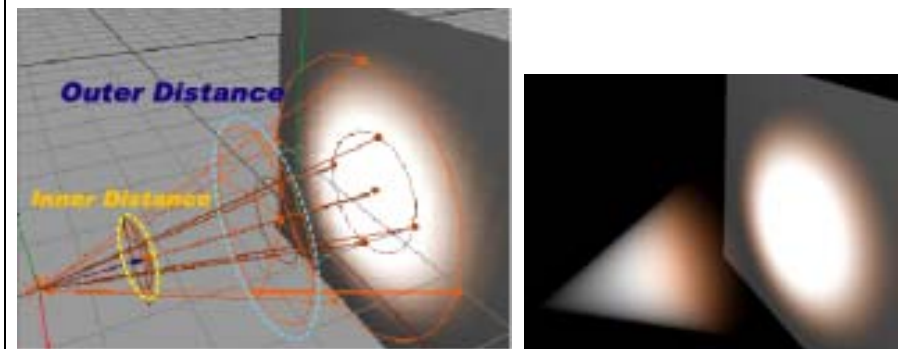
Custom Color + Falloff+ Edge Falloff

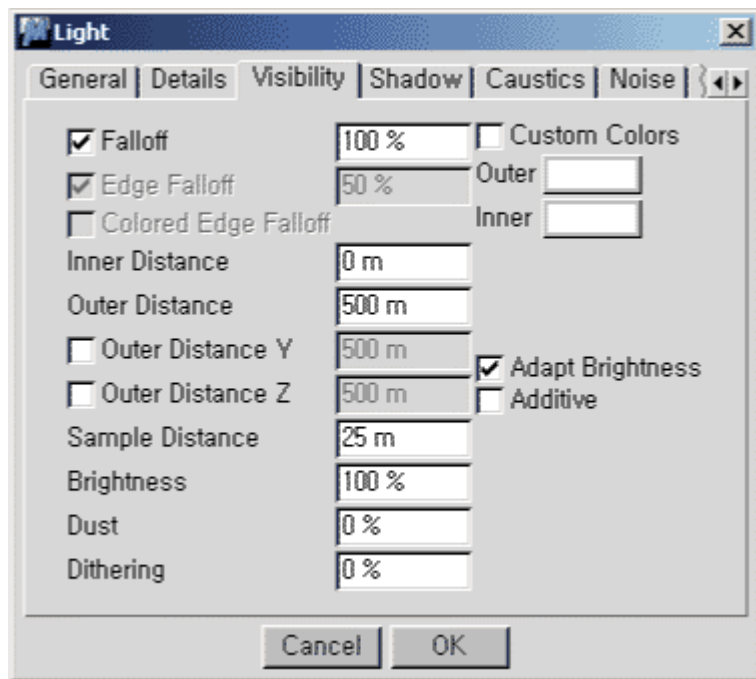
Custom Color + Falloff+ Edge Falloff + Colored Edge Falloff



### Inner Distance, Outer Distance

Color (Custom Color )





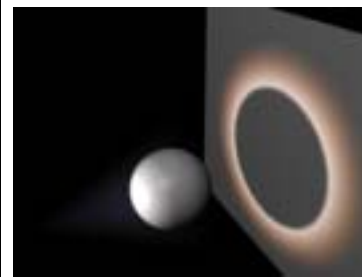
### Sample Distance

1 ~ 100

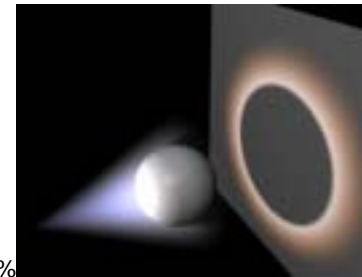
### Brightness

가

( .)



25%



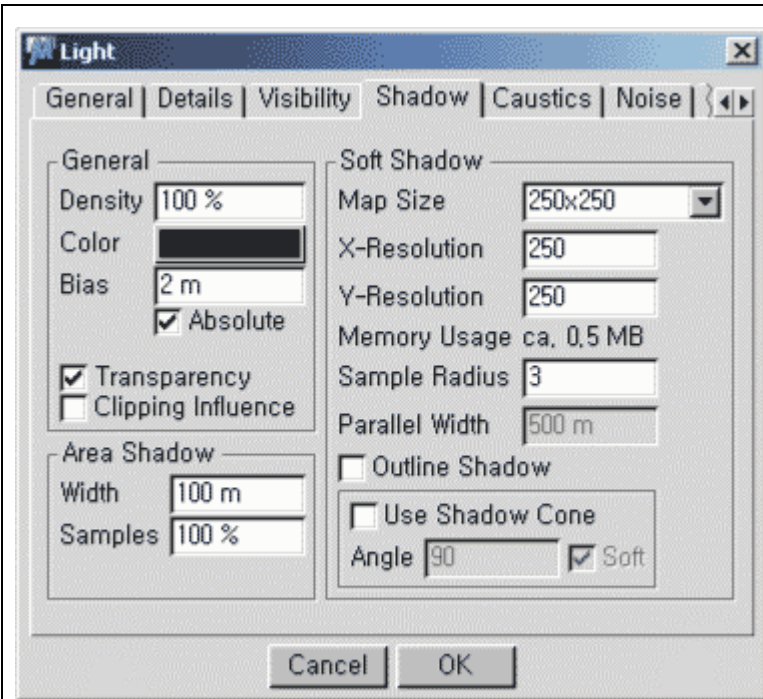
150%

### Dust





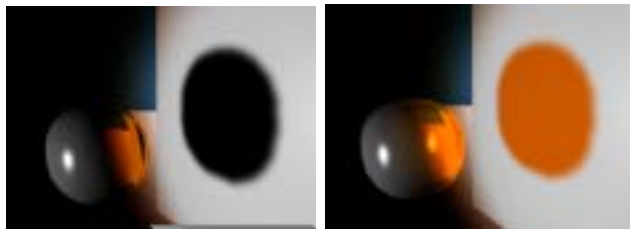
## Shadow



### Transparency

가

가



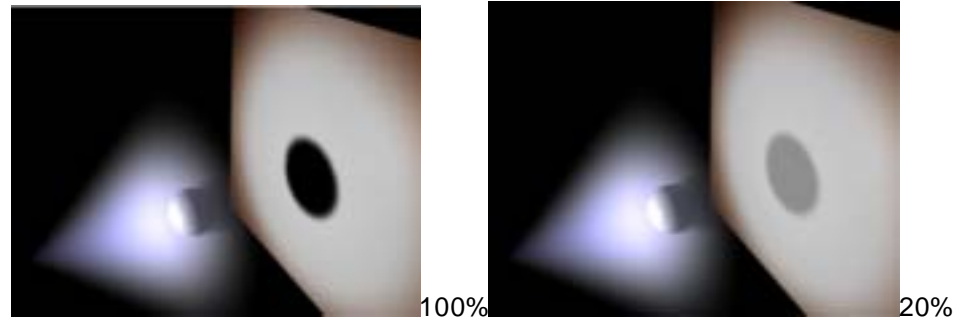
OFF

ON

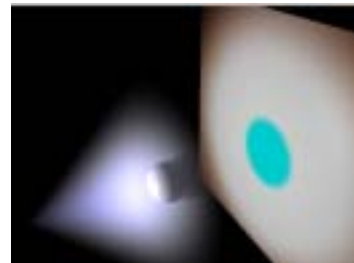
### Density

가

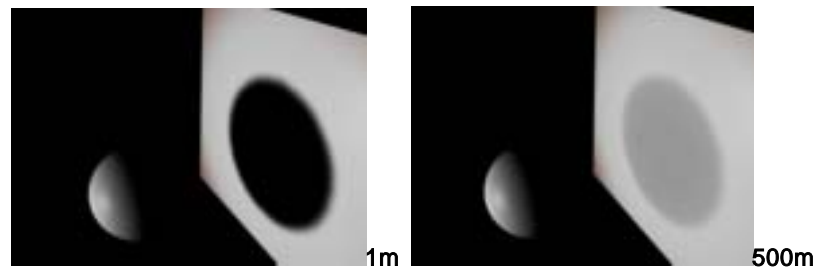
가



### Color



### Bias :



## Soft Shadow

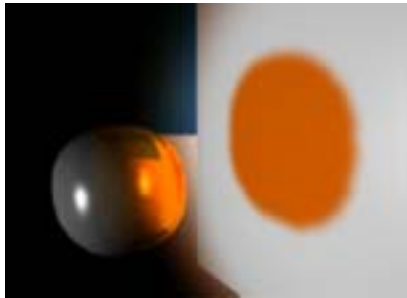
Map Size : Soft Shadow

.( 가

Hard Shaow 가

.), X,Y-Resolution

.



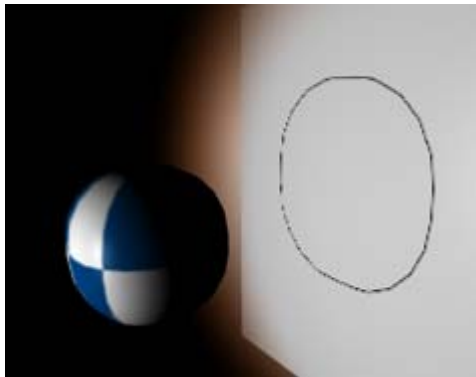
250X 250



2000 X 2000

## OutLine Shadow

.



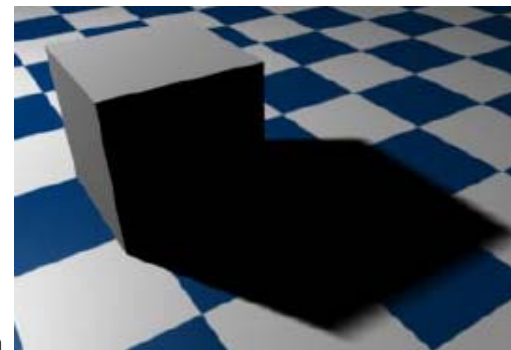
## Area Shadow

Area Shadow

.



300m



50m

8.0

. 98%

가

.^^(  
..

^^)

.^^)

**Attributes** [Icons]

Mode Edit User Data

Light Object [Light] [Lock] [Icon]

Basic	Coord.	General	Details	Visibility	Shadow
Caustics	Noise	Lens	Scene		

**Basic Properties**

×Name: Light

Visible in Editor: Default [Dropdown]

Visible in Renderer: Default [Dropdown]

**Attributes** [Icons]

Mode Edit User Data

Light Object [Light] [Lock] [Icon]

Basic	Coord.	General	Details	Visibility	Shadow
Caustics	Noise	Lens	Scene		

**Coordinates**

P. X: 2.055 m [Up/Down] S. X: 1.174 [Up/Down] R. H: 0 [Up/Down]

P. Y: 0.942 m [Up/Down] S. Y: 1.174 [Up/Down] R. P: 0 [Up/Down]

P. Z: -513.325 [Up/Down] S. Z: 1.174 [Up/Down] R. B: 0 [Up/Down]

