

# Vince Yamamoto

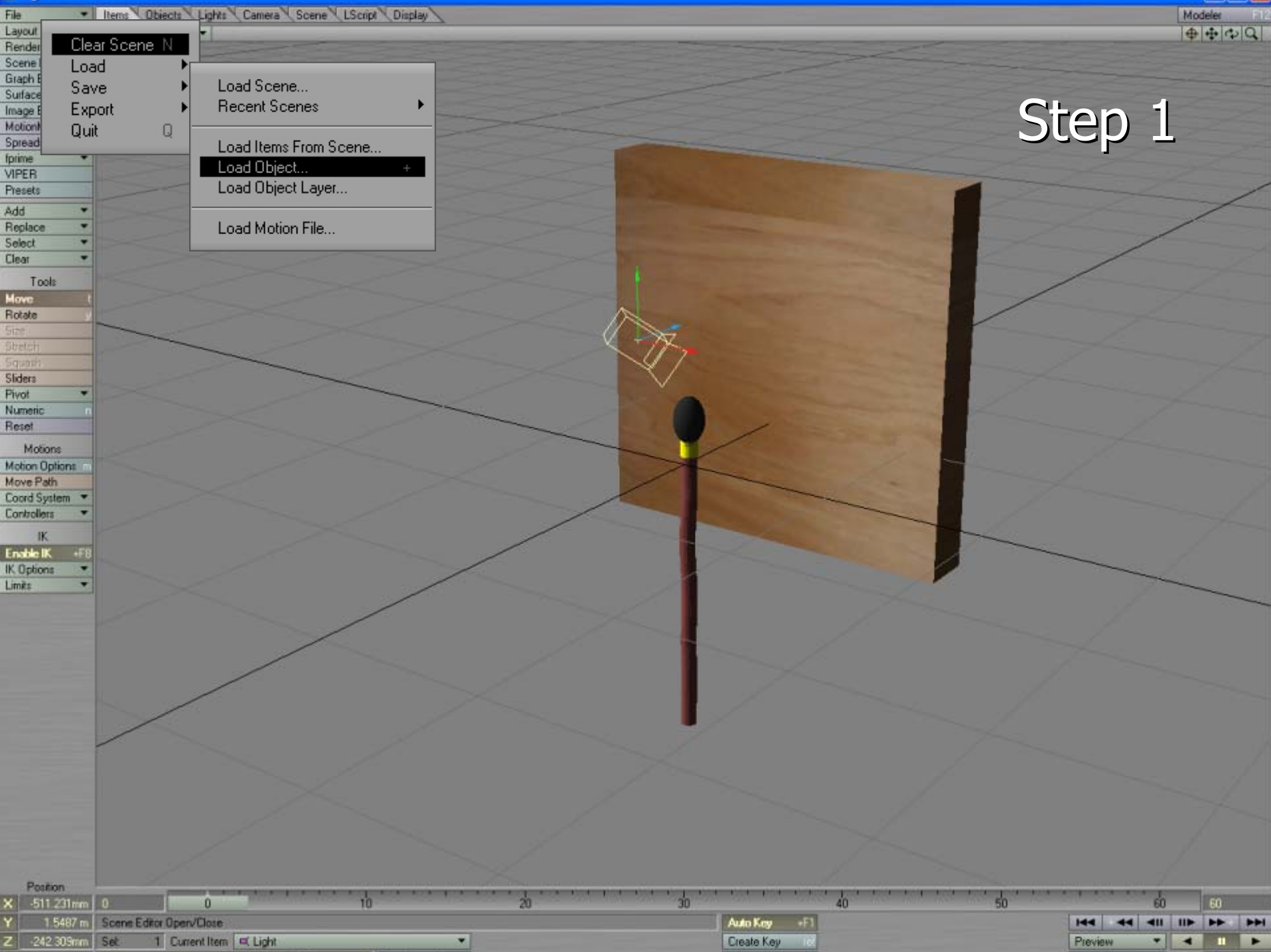
How to create torch lighting



# Goals

- ▶ Learn how to create the lighting for a torch.
- ▶ Learn how to create an image plane with a fire graphic.

# Step 1



# Step 2

### Light Properties

Clear All Lights      Lights in Scene: 1

Global Illumination

Current Light: Light

Light Color: 255 255 255

Light Intensity: 100.0 %

Intensity Falloff: Off

Range/Nominal Distance: 1 m

Light Type: Distant Light

Basic    Shadows    Objects

Affect Diffuse       Affect Specular

Affect OpenGL       Affect Caustics

Lens Flare      Lens Flare Options

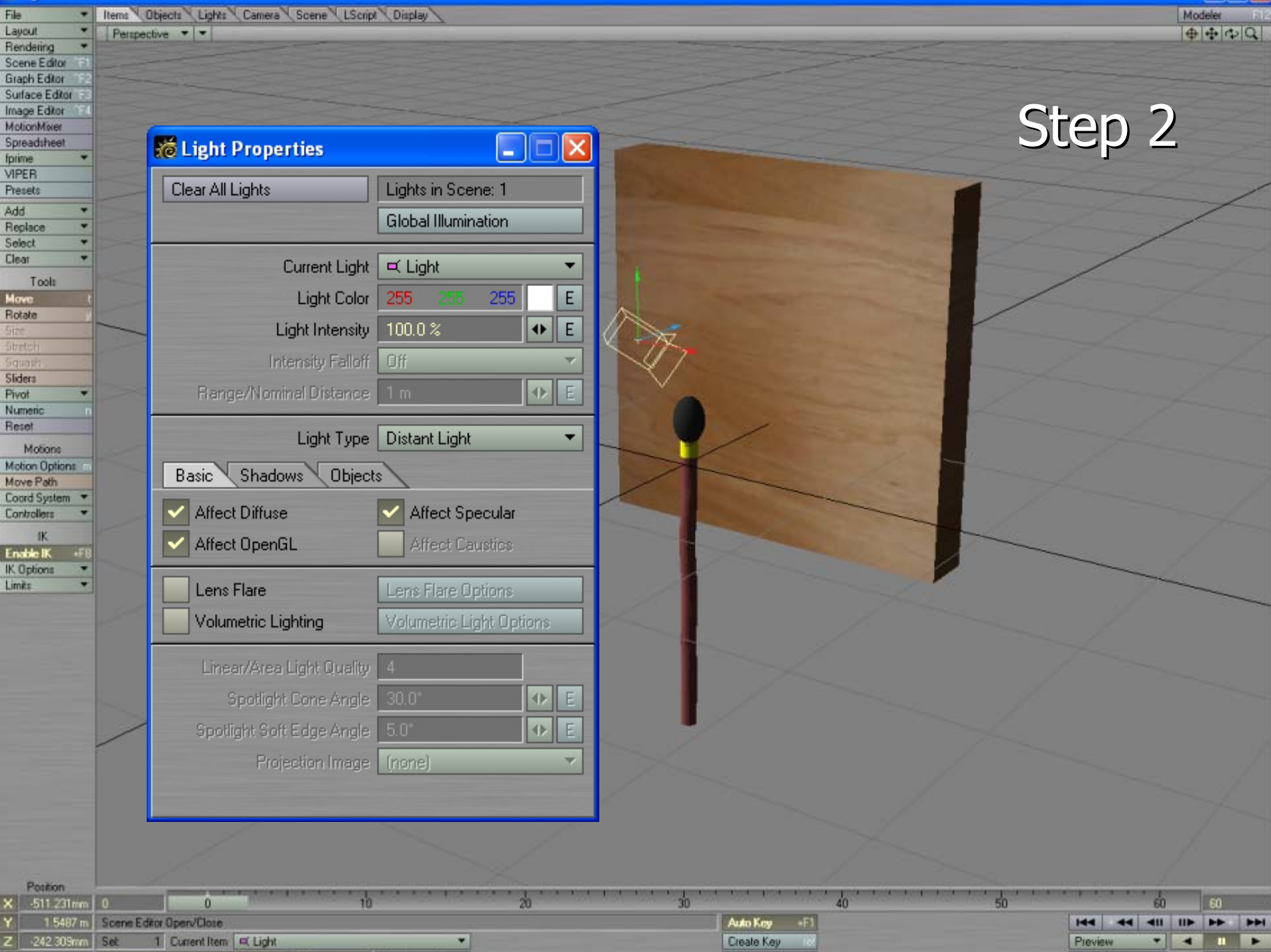
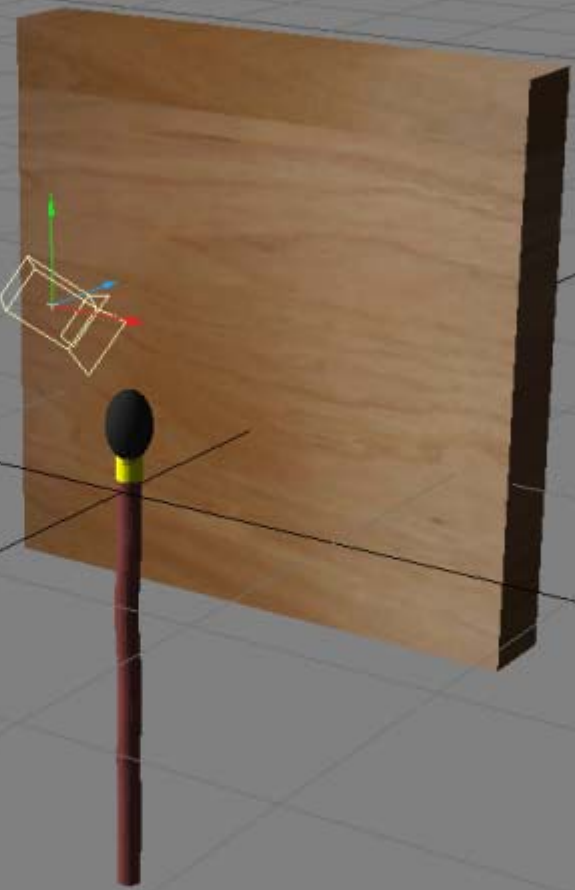
Volumetric Lighting      Volumetric Light Options

Linear/Area Light Quality: 4

Spotlight Cone Angle: 30.0°

Spotlight Soft Edge Angle: 5.0°

Projection Image: (none)



# Step 2

### Light Properties

Clear All Lights      Lights in Scene: 1

Global Illumination

Current Light: Light

Light Color: 233 255 108

Light Intensity: 50.0 %

Intensity Falloff: Off

Range/Nominal Distance: 1 m

Light Type: Point Light

Basic    Shadows    Objects

Affect Diffuse       Affect Specular

Affect OpenGL       Affect Caustics

Lens Flare      Lens Flare Options

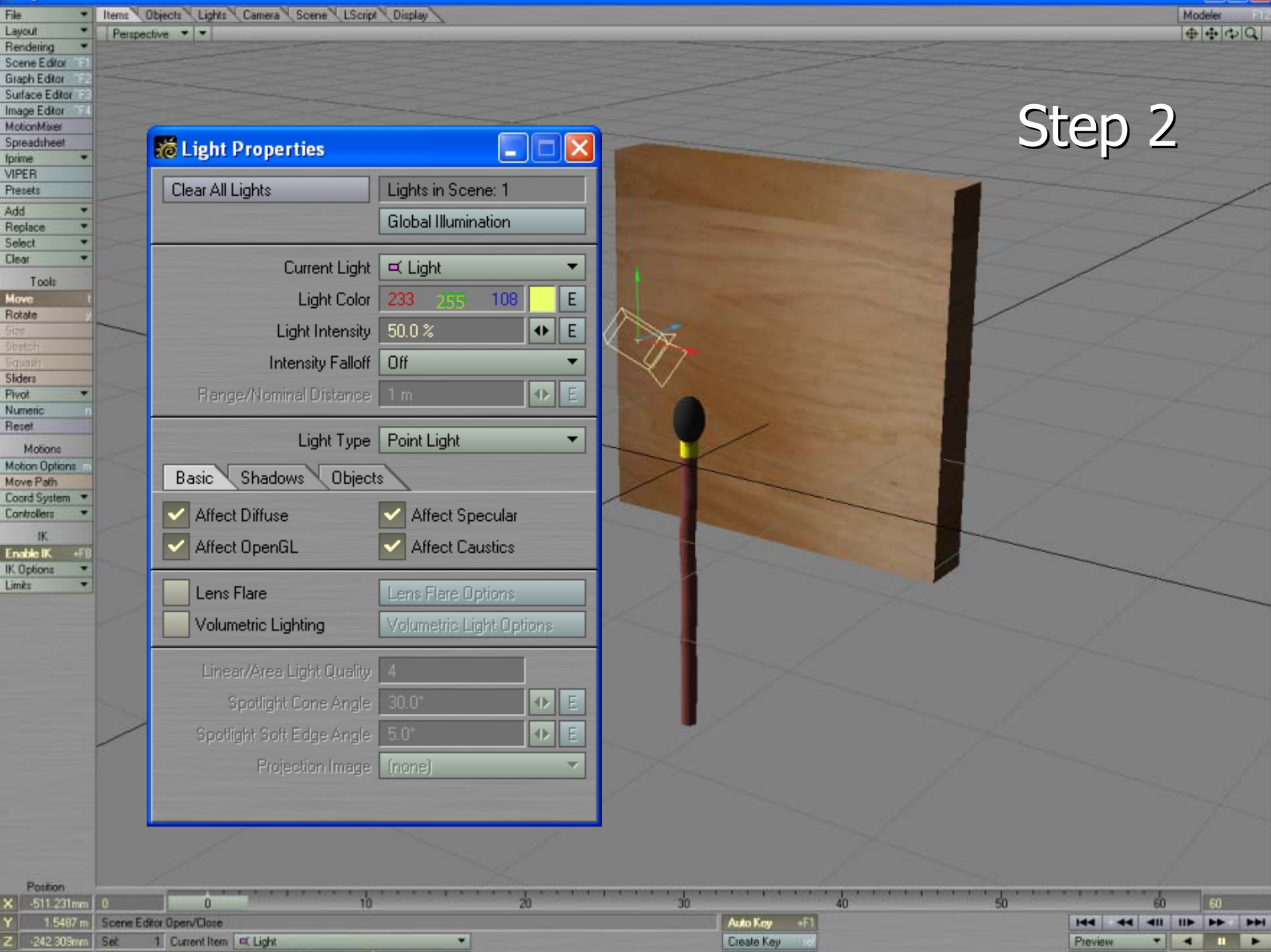
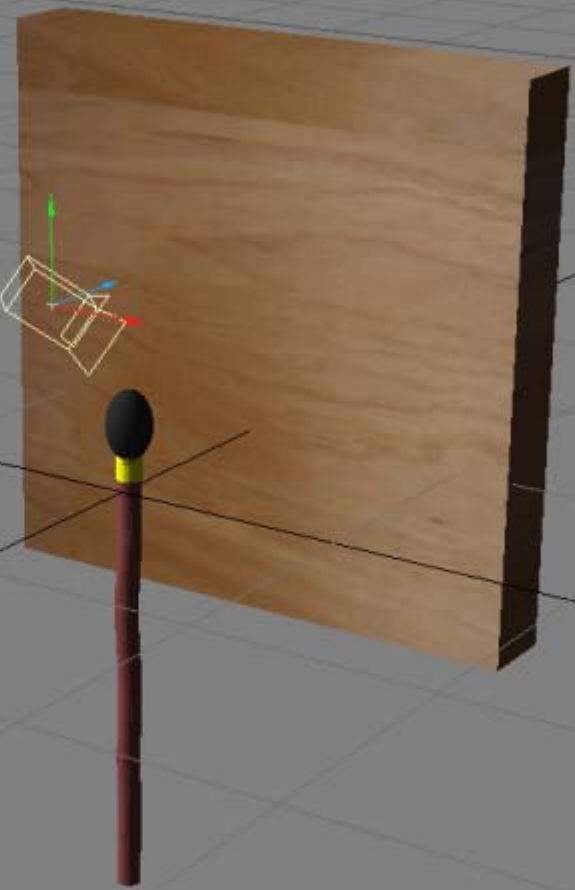
Volumetric Lighting      Volumetric Light Options

Linear/Area Light Quality: 4

Spotlight Cone Angle: 30.0°

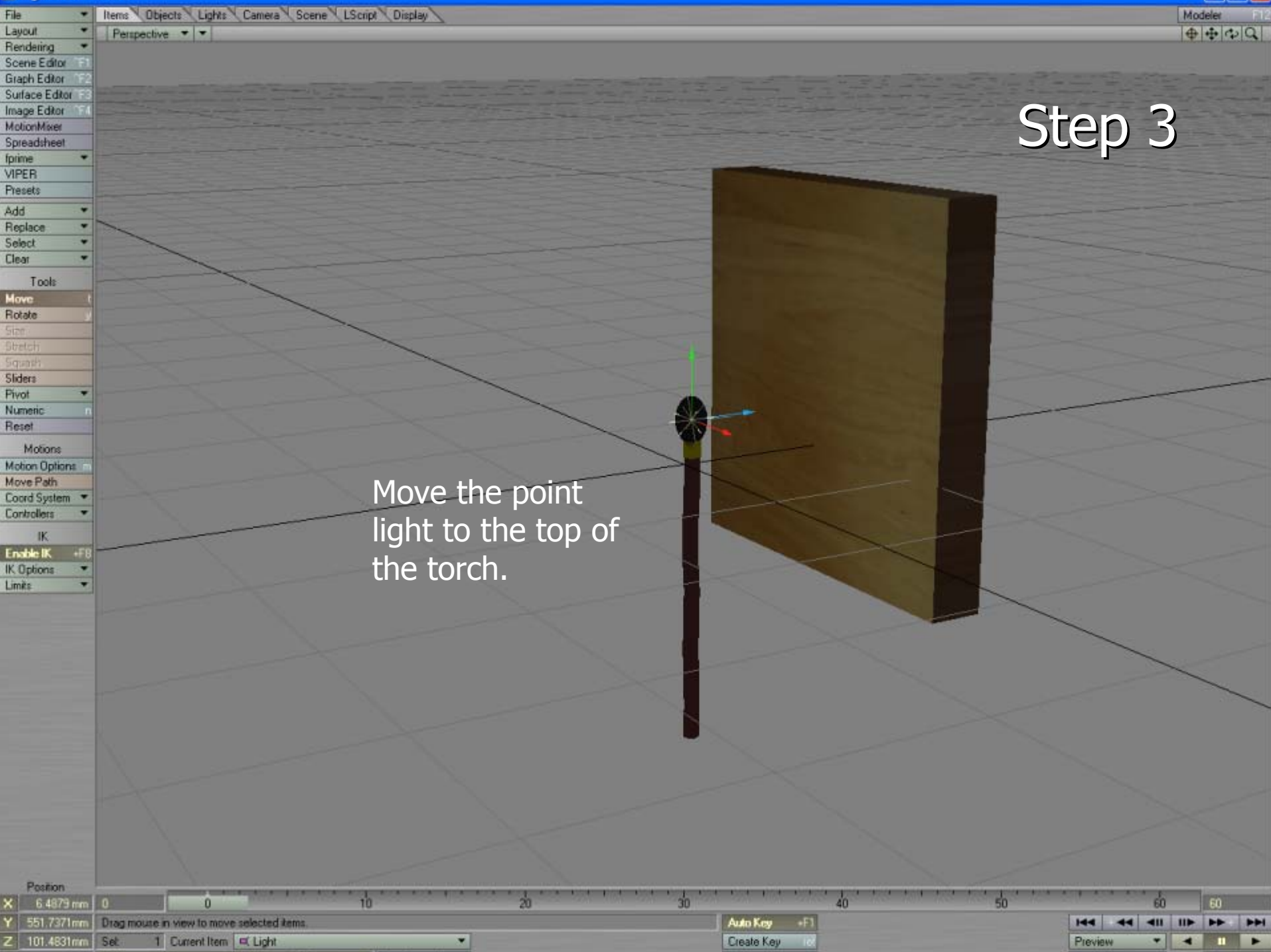
Spotlight Soft Edge Angle: 5.0°

Projection Image: (none)



# Step 3

Move the point light to the top of the torch.



# Step 3

**Light Properties**

Clear All Lights    Lights in Scene: 1

Global Illumination

Current Light: Light

Light Color: 233 255 108

Light Intensity: 50.0 %

Intensity Falloff: Off

Range/Nominal Distance: 1 m

Light Type: Point Light

Basic    Shadows    **Objects**

Exclude	Object
	torch
<input checked="" type="checkbox"/>	torch:Layer2

Press p and click the Objects tab

# Step 4

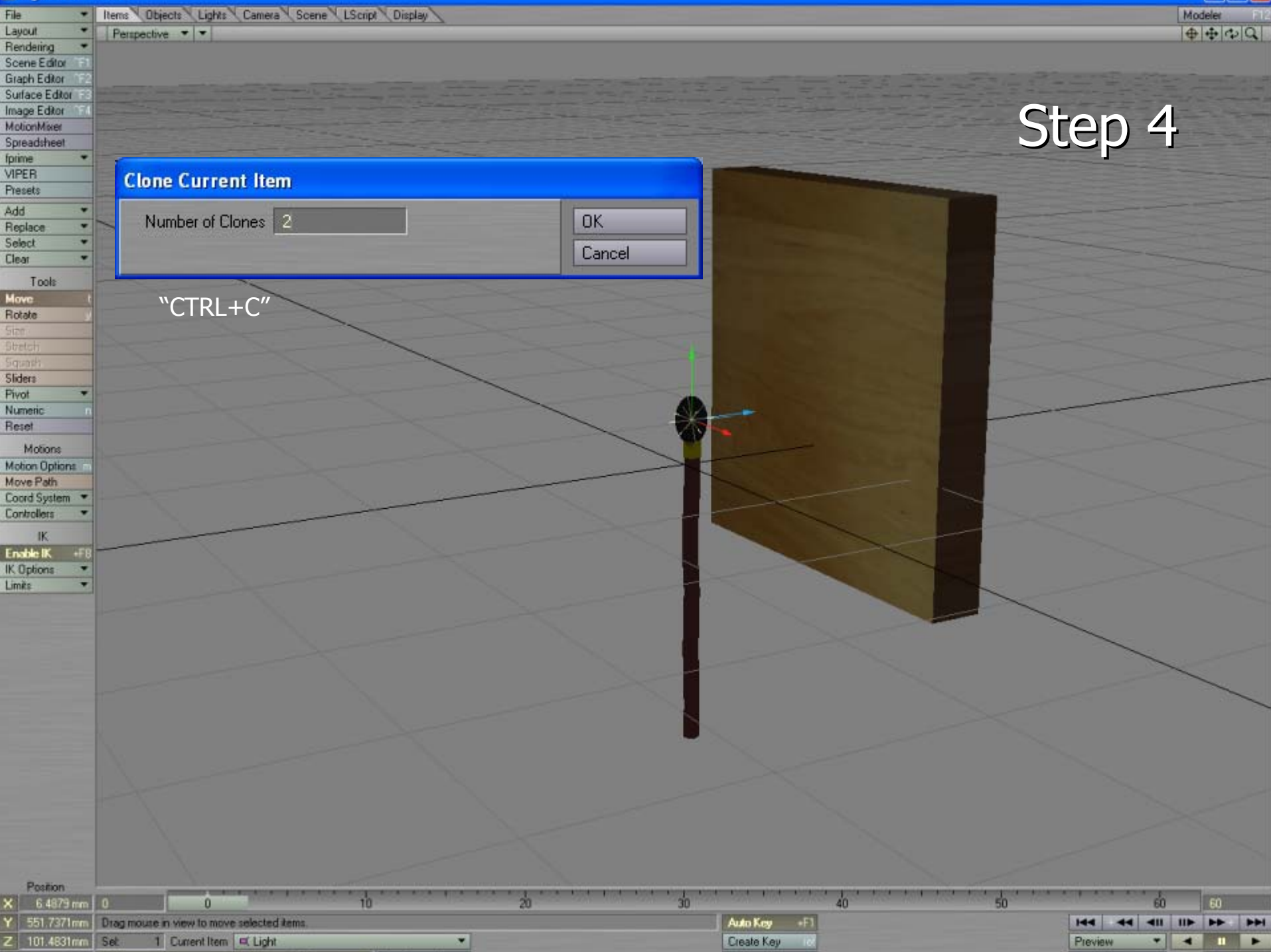
**Clone Current Item**

Number of Clones:

OK

Cancel

"CTRL+C"



# Step 5

**Light Properties**

Clear All Lights      Lights in Scene: 1

Global Illumination

Current Light: Light

Light Color: 233 255

Light Intensity: 50.0 %

Intensity Falloff: Off

Range/Nominal Distance: 1 m

Light Type: Point Light

Basic    Shadows    Objects

Affect Diffuse       Affect Specular

Affect OpenGL       Affect Caustics

Lens Flare      Lens Flare Options

Volumetric Lighting      Volumetric Light Options

Linear/Area Light Quality: 4

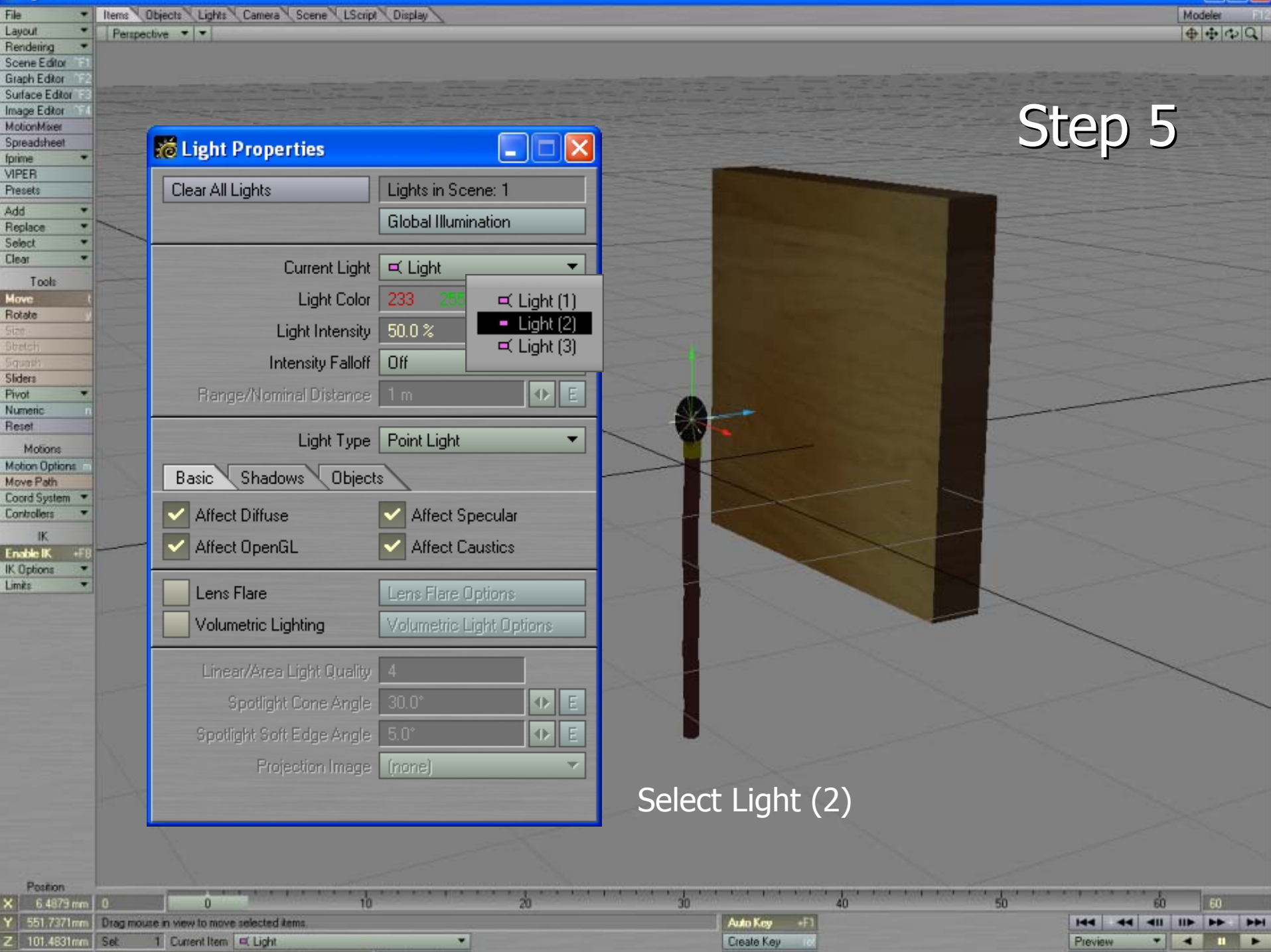
Spotlight Cone Angle: 30.0°

Spotlight Soft Edge Angle: 5.0°

Projection Image: (none)

- Light (1)
- Light (2)**
- Light (3)

Select Light (2)



# Step 5

### Light Properties

Clear All Lights      Lights in Scene: 3

Global Illumination

Current Light: Light (2)

Light Color: 255 149 149

Light Intensity: 30.0 %

Intensity Falloff: Off

Range/Nominal Distance: 1 m

Light Type: Point Light

Basic    Shadows    Objects

Affect Diffuse       Affect Specular

Affect OpenGL       Affect Caustics

Lens Flare      Lens Flare Options

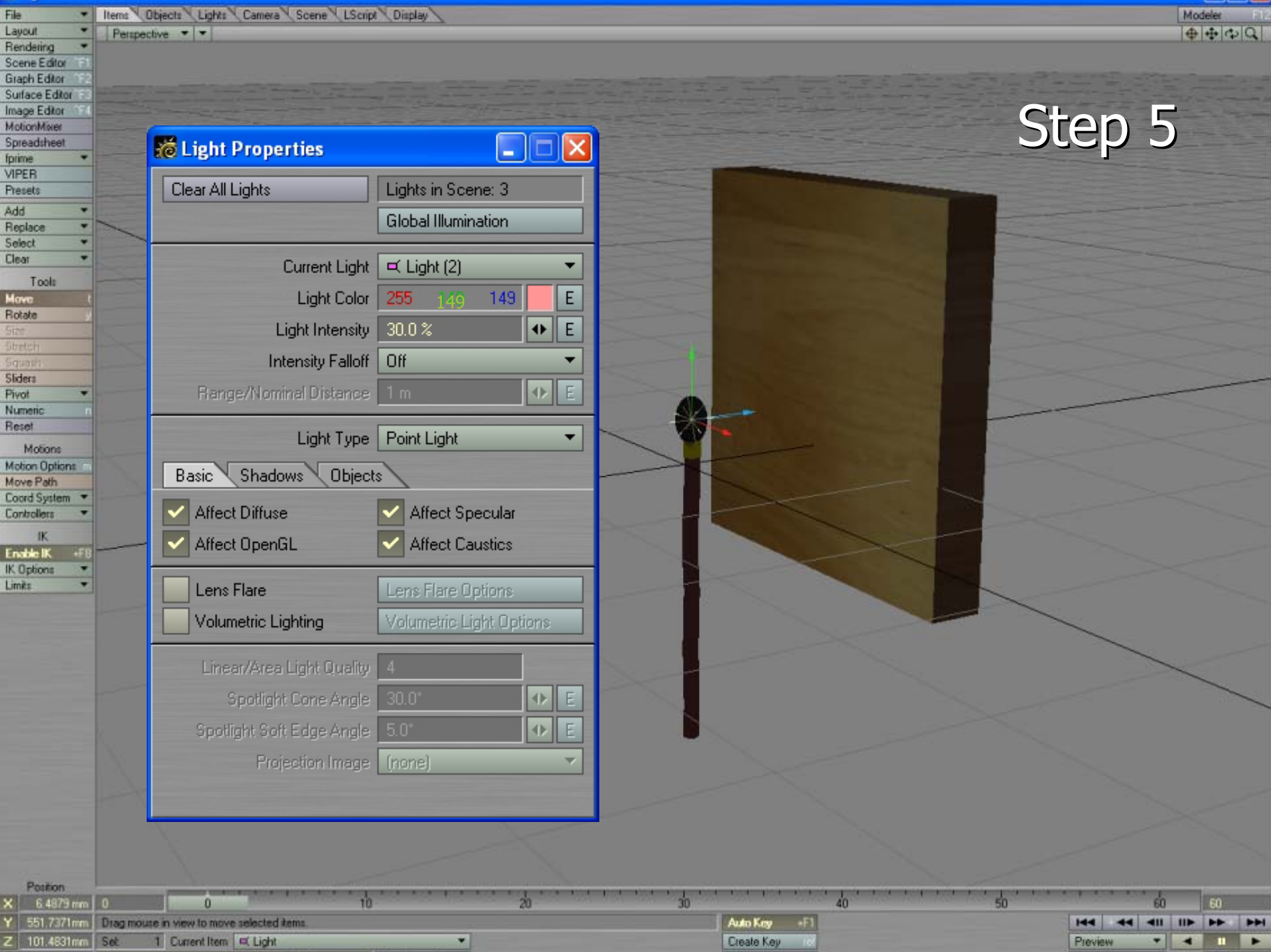
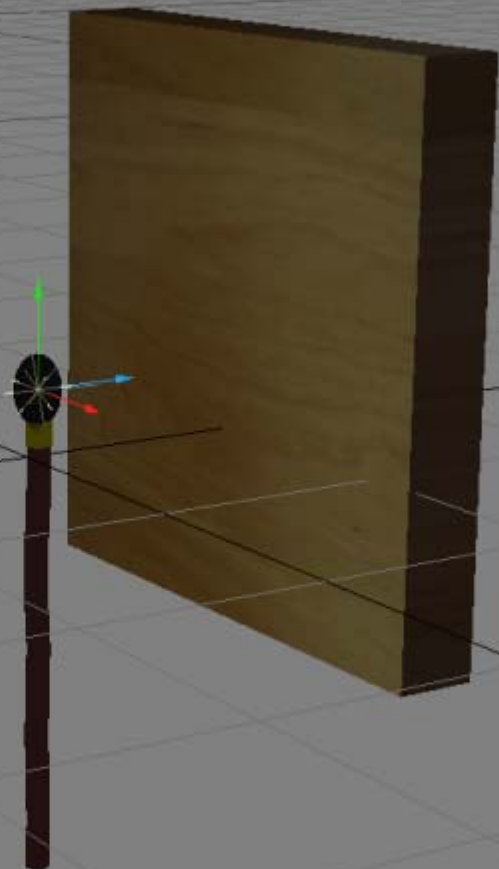
Volumetric Lighting      Volumetric Light Options

Linear/Area Light Quality: 4

Spotlight Cone Angle: 30.0°

Spotlight Soft Edge Angle: 5.0°

Projection Image: (none)



# Step 6

### Light Properties

Clear All Lights      Lights in Scene: 3

Global Illumination

Current Light: Light (2)

Light Color: 255 149

Light Intensity: 30.0 %

Intensity Falloff: Off

Range/Nominal Distance: 1 m

Light Type: Point Light

Basic    Shadows    Objects

Affect Diffuse       Affect Specular

Affect OpenGL       Affect Caustics

Lens Flare      Lens Flare Options

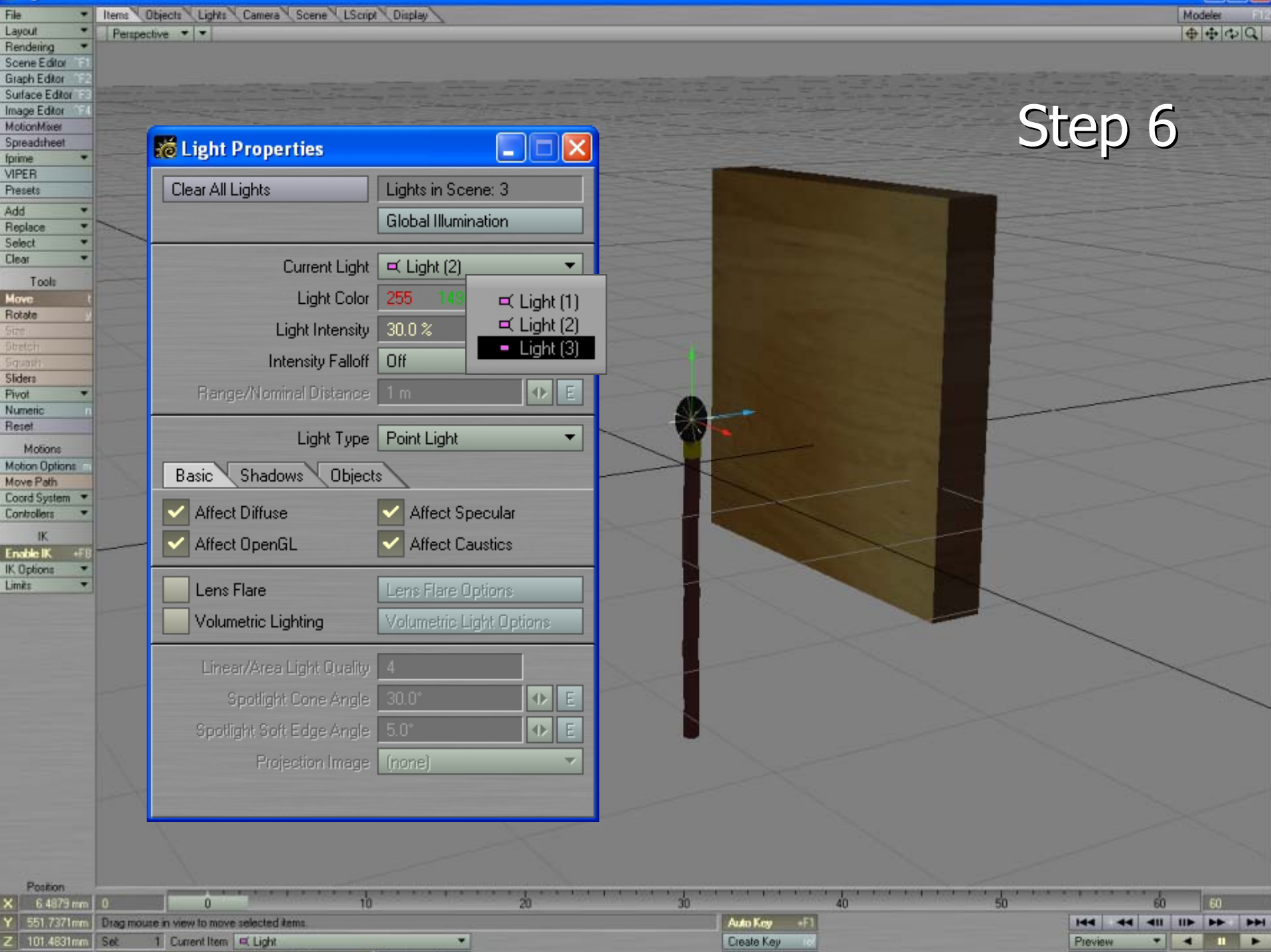
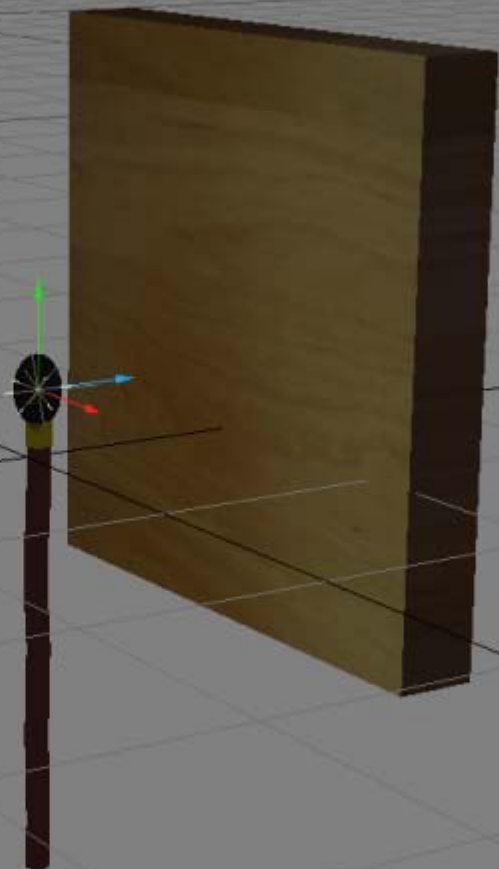
Volumetric Lighting      Volumetric Light Options

Linear/Area Light Quality: 4

Spotlight Cone Angle: 30.0°

Spotlight Soft Edge Angle: 5.0°

Projection Image: (none)



# Step 6

**Light Properties**

Clear All Lights      Lights in Scene: 3

Global Illumination

Current Light: Light (3)

Light Color: 255 157 088

Light Intensity: 30.0 %

Intensity Falloff: Off

Range/Nominal Distance: 1 m

Light Type: Point Light

Basic    Shadows    Objects

Affect Diffuse       Affect Specular

Affect OpenGL       Affect Caustics

Lens Flare      Lens Flare Options

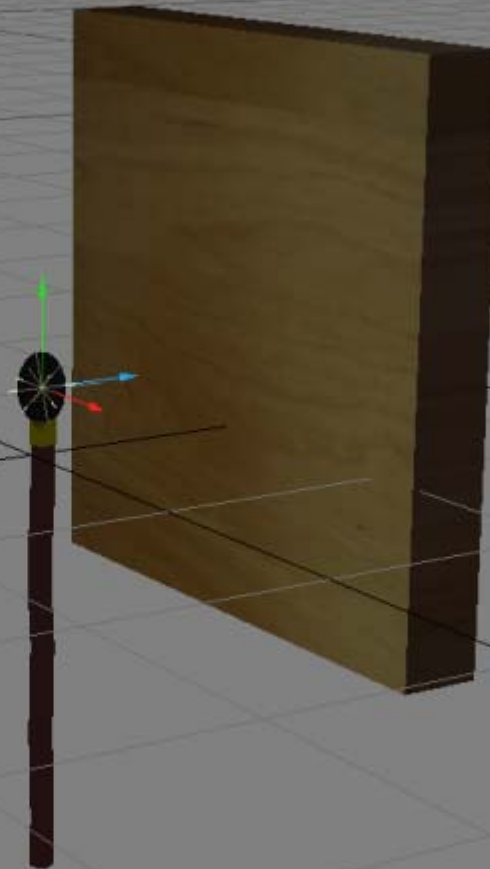
Volumetric Lighting      Volumetric Light Options

Linear/Area Light Quality: 4

Spotlight Cone Angle: 30.0°

Spotlight Soft Edge Angle: 5.0°

Projection Image: (none)



# Step 7

"CTRL+F1"

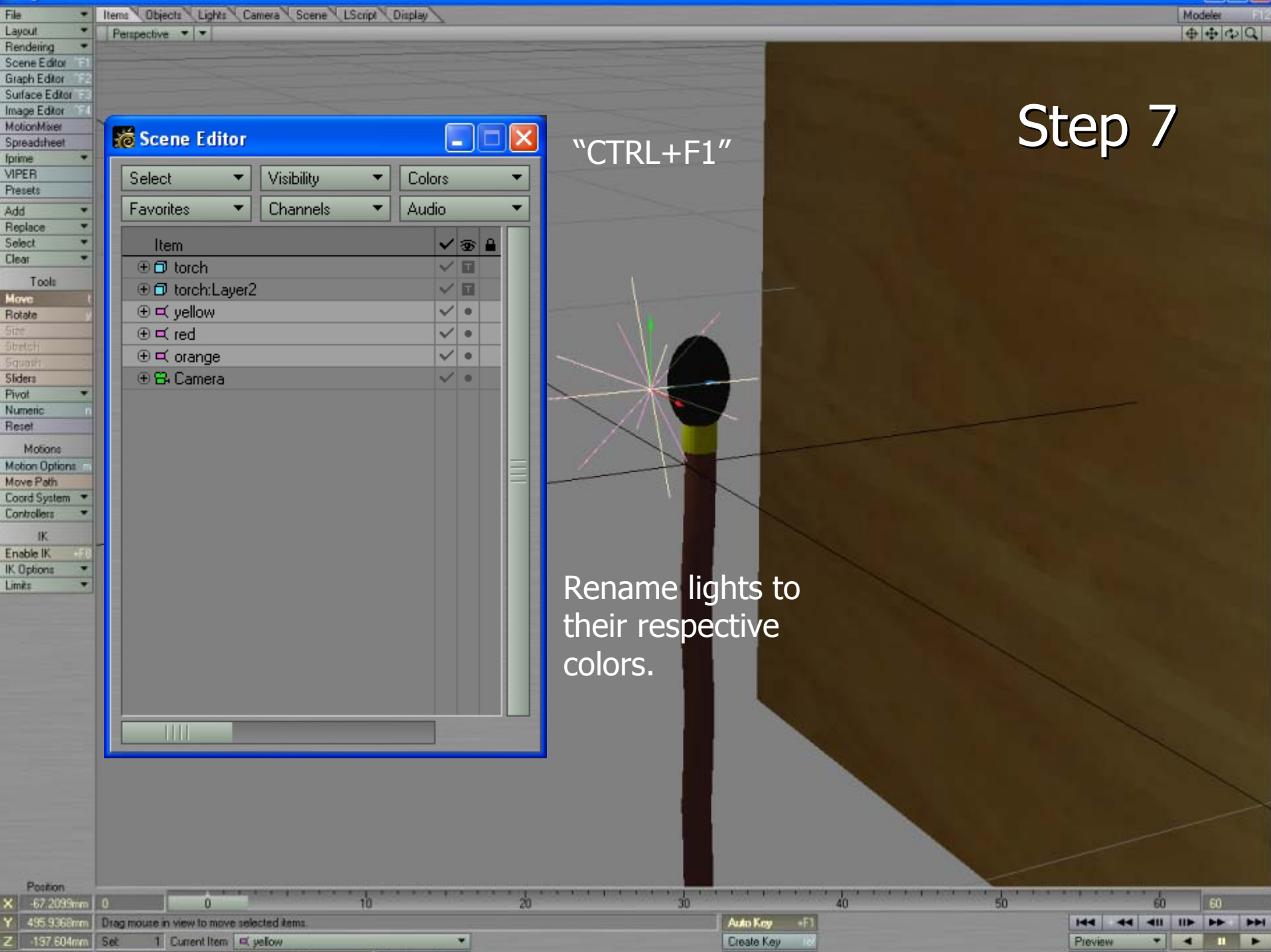
Rename lights to their respective colors.

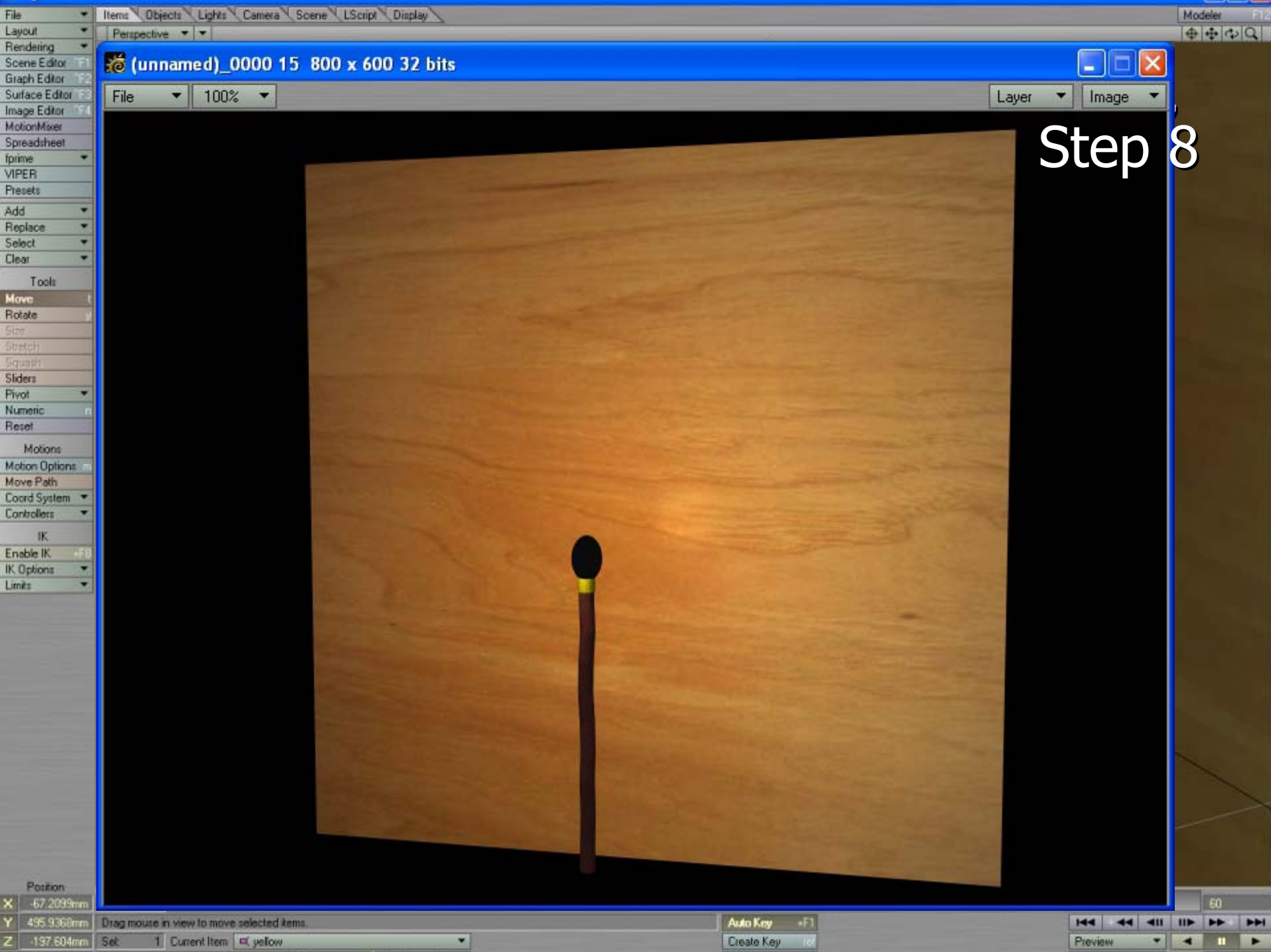
Scene Editor

Select Visibility Colors

Favorites Channels Audio

Item	✓	👁	🔒
+ torch	✓	👁	🔒
+ torch:Layer2	✓	👁	🔒
+ yellow	✓	👁	🔒
+ red	✓	👁	🔒
+ orange	✓	👁	🔒
+ Camera	✓	👁	🔒





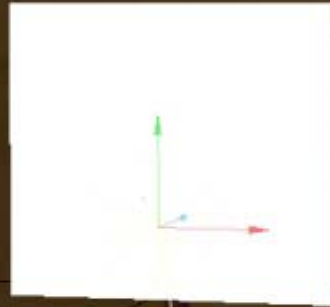
Step 8

# Lighting for Fire Complete

- ▶ Following steps are for an image plane with a fire graphic applied to it.
- ▶ Fire effects can also be created using volumetrics.
- ▶ The tutorial for volumetric fire can be found on the Newtek website.  
([www.newtek.com](http://www.newtek.com))

# Step 9

Load an image plane and size accordingly.



# Step 10

**Surface Editor**

Edit by: Object  
Filter by: Name  
Pattern:

Surface Name

- torch
  - collar
  - flameplane**
  - handle
  - head
  - wood

Objects: 1 Surfaces: 5

Load Save Rename

Surfaces Selected: 1  
flameplane  
Polygons: 1  
Textures: 2  
Shaders: 0

Display Options

Basic Advanced Environment Shaders

Color: 255 255 255 E T  
Luminosity: 100.0 % E T  
Diffuse: 100.0 % E T

Specularity: 0.0 % E T  
Glossiness: 40.0 % E T  
Reflection: 0.0 % E T

Transparency: 0.0 % E T  
Refraction Index: 1.0 E T  
Translucency: 100.0 % E T

Bump: 100.0 % E T

Smoothing   
Smooth Threshold: 89.53 °  
Double Sided

Comment:

Luminosity and  
Translucency  
must be at 100%

# Step 11

### Surface Editor

Edit by: Object  
Filter by: Name  
Objects: 1 Surfaces: 5  
Load Save Rename

Surface Name

- torch
  - collar
  - flameplane**
  - handle
  - head
  - wood

Basic Advanced

Comment

### Texture Editor - flameplane - Color

Add Layer Remove Layer  
Copy Paste

Layer Name	Opac	B
l: fire.psd	100%	N

Layer Type: Image Map  
Blending Mode: Normal  
Layer Opacity: 100.0 %  
 Invert Layer

Projection: Planar  
Image: fire.psd

Width Tile: Repeat  
Height Tile: Repeat

Pixel Blending  
 Texture Antialiasing Strength: 1.0

Texture Axis: X Y **Z**  
Reference Object: (none)  
 World Coordinates Automatic Sizing

Scale Position Rotation Falloff

Axis	Value
X	1.7 m
Y	1.5 m
Z	1 m

Use Texture Remove Texture

### Surface Editor

Objects: 1 Surfaces: 5

Load Save Rename



Surfaces Selected: 1  
flameplane  
Polygons: 1  
Textures: 2  
Shaders: 0

Display Options

Basic Advanced Environment Shaders

Color 255 255 255 E T

Luminosity 100.0 % E T

Diffuse 100.0 % E T

Specularity 0.0 % E T

Glossiness 40.0 % E T

Reflection 0.0 % E T

Transparency 0.0 % E T

Refraction Index 1.0 E T

Translucency 100.0 % E T

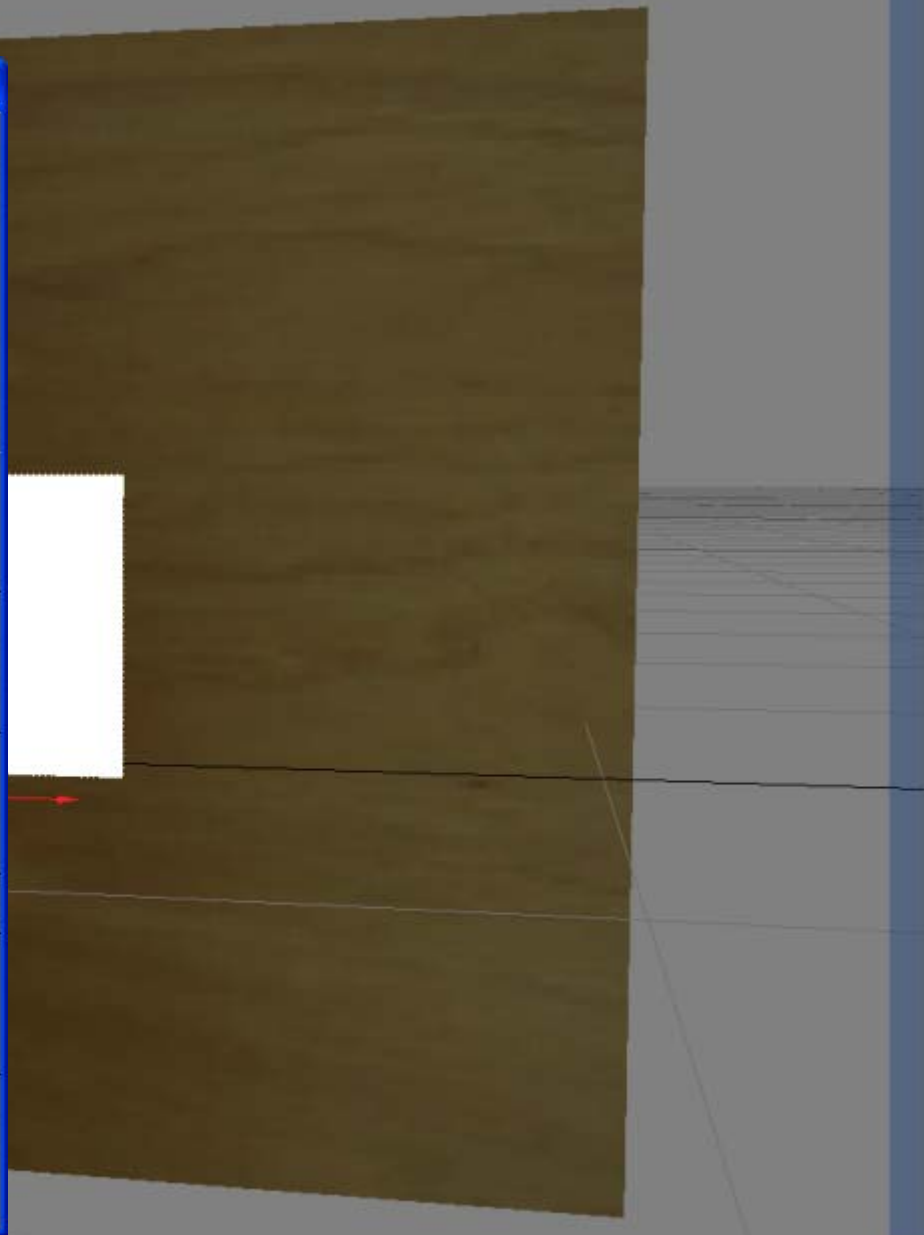
Bump 100.0 % E T

Smoothing

Smooth Threshold 89.53 °

Double Sided

Comment



# Step 12

### Surface Editor

Edit by: Object  
Filter by: Name  
Pattern:   
Surface Name:   
▼ torch  
collar  
flameplane  
handle  
head  
wood

Tools: Move, Rotate, Size, Stretch, Squash, Sliders, Pivot, Numeric, Reset, Motions, Motion Optic, Move Path, Coord System, Controllers, IK, Enable IK, IK Options, Limits


Objects: 1 Surfaces: 5  
Load  
Basic Advanced  
Comment

### Texture Editor - flameplane - Transparency

Add Layer Remove Layer  
Copy Paste

Layer Name	Opac	B
✓ l: fire.psd	100%	N

Layer Type: Image Map  
Blending Mode: Normal  
Layer Opacity: 100.0 %  
 Invert Layer

Projection: Planar  
Image: fire.psd  
  
Edit Image

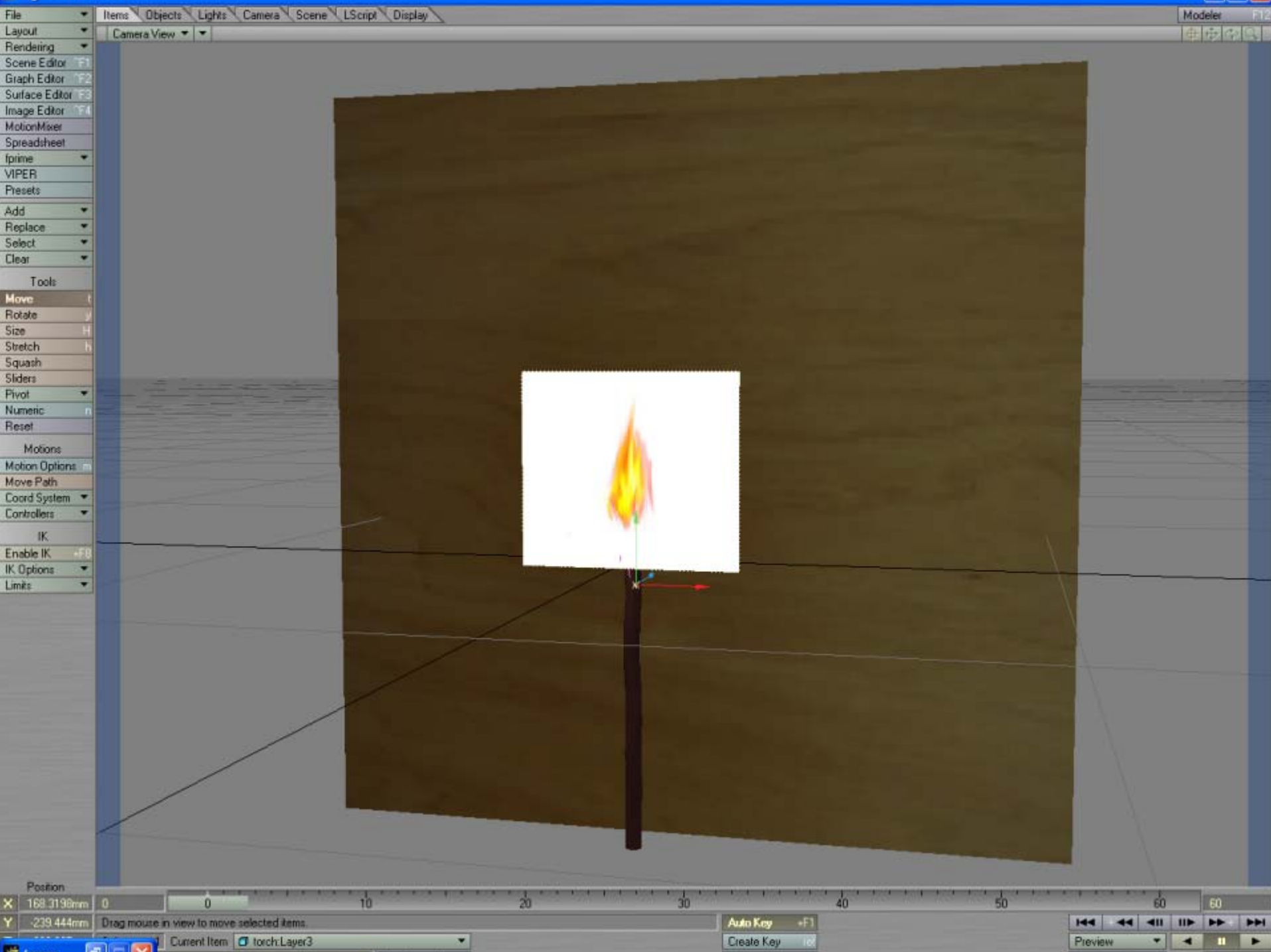
Width Tile: Repeat  
Height Tile: Repeat  
 Pixel Blending  
 Texture Antialiasing Strength: 1.0

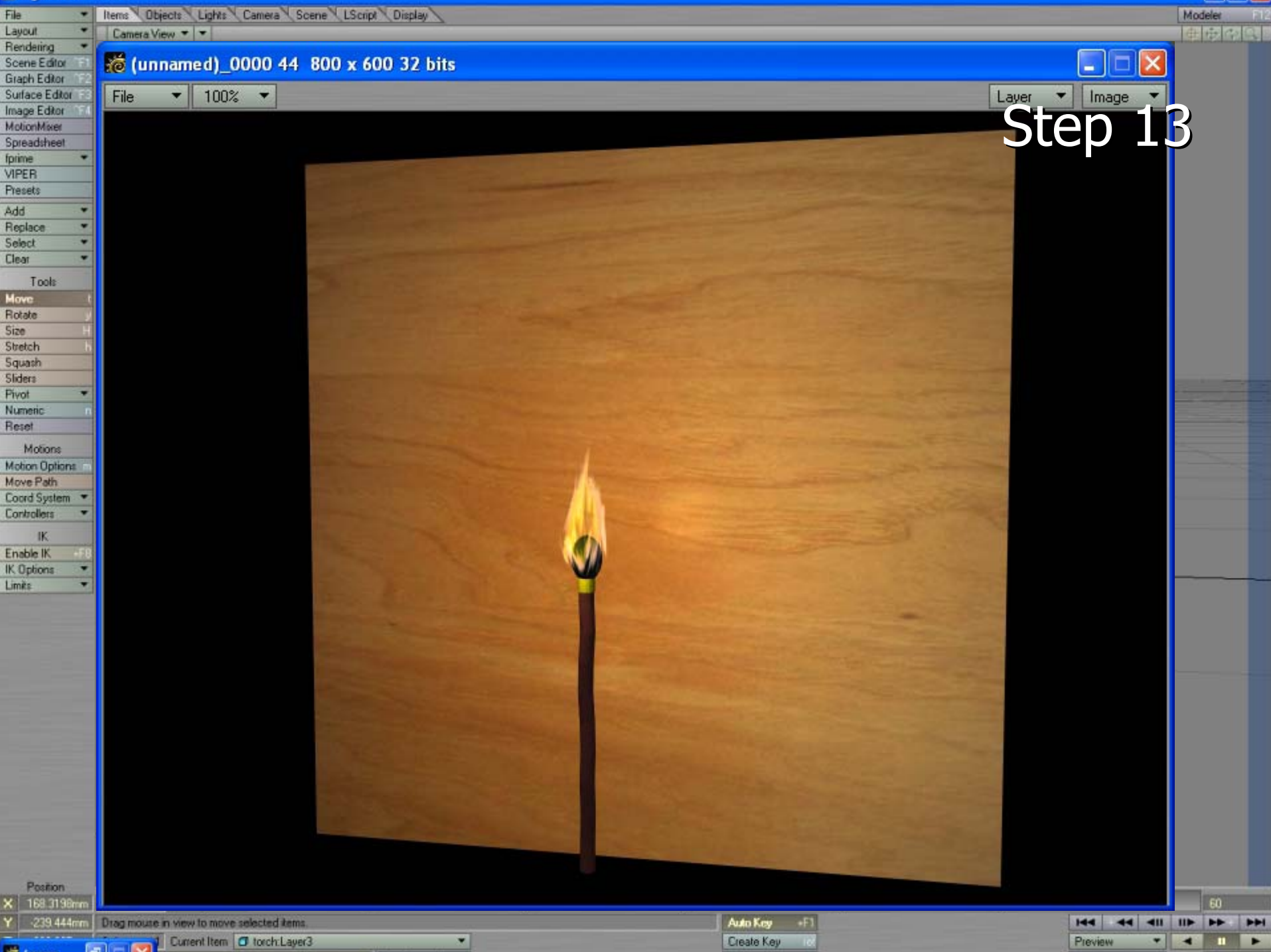
Texture Axis: X Y Z  
Reference Object: (none)  
 World Coordinates Automatic Sizing

Scale Position Rotation Falloff

Axis	Value
X	1.7 m
Y	1.5 m
Z	1 m

Use Texture Remove Texture





Step 13

Position  
X 168.3196mm  
Y -239.444mm

Drag mouse in view to move selected items.  
Current Item torch.Layer3

Auto Key +F1  
Create Key lol

60  
Preview  
Navigation icons

# Conclusion

- ▶ Created the lighting effect for fire by using 3 point lights.
- ▶ Created an image plane with a fire graphic.
- ▶ Set up the proper alpha transparency for the fire graphic in the surface editor.

Thank You