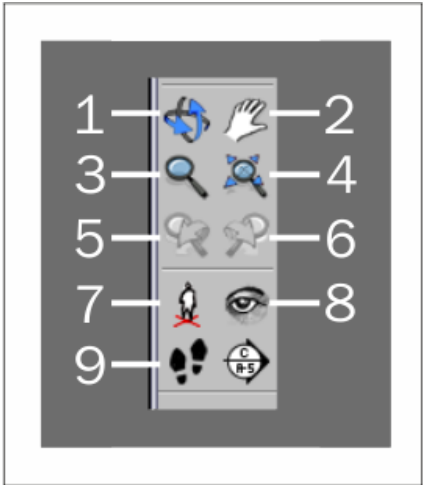
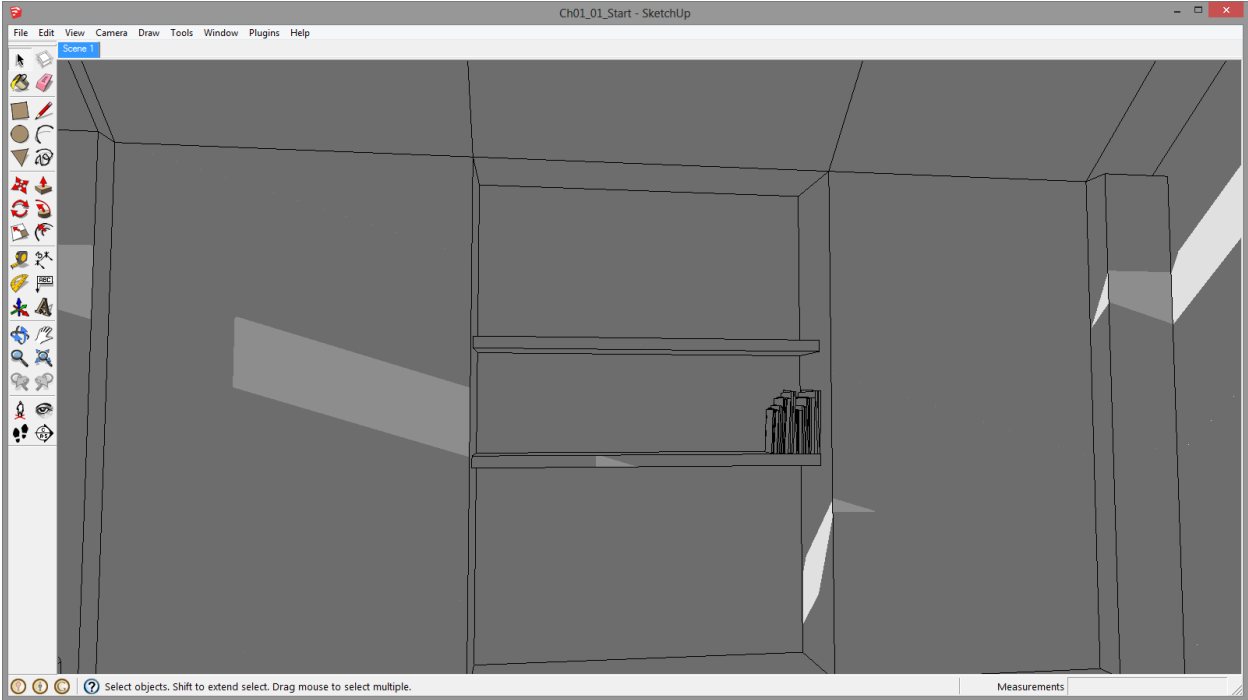
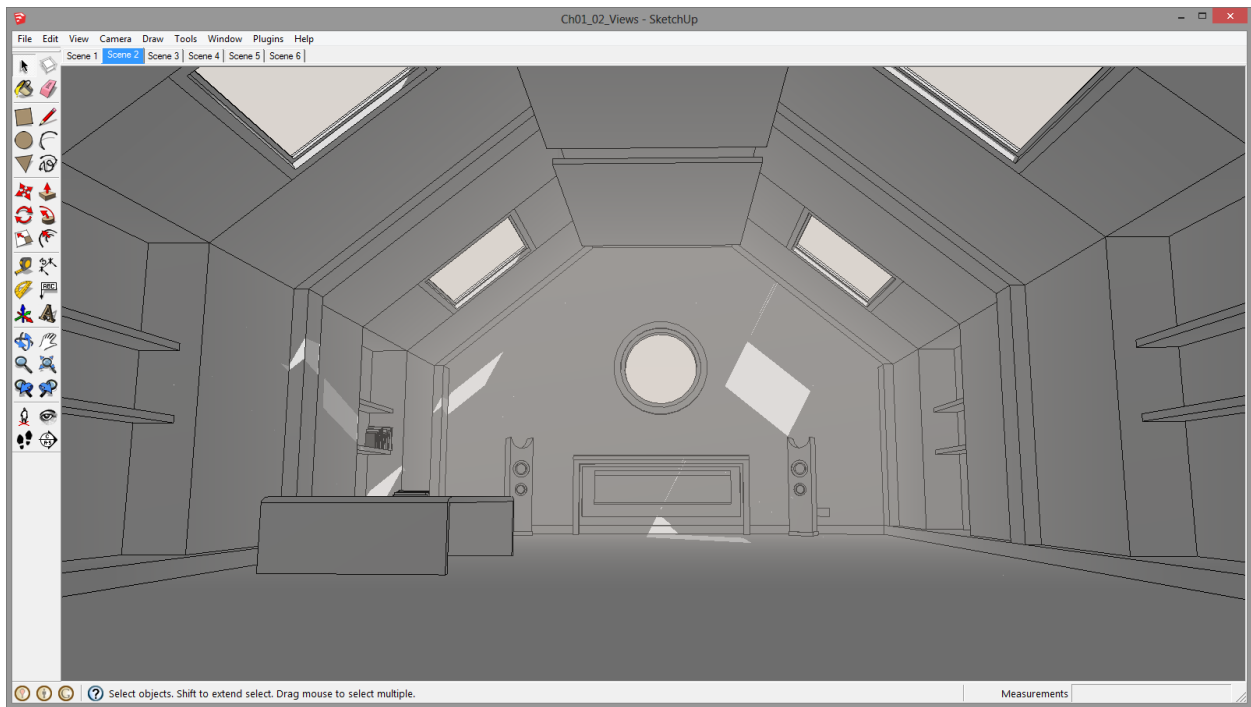
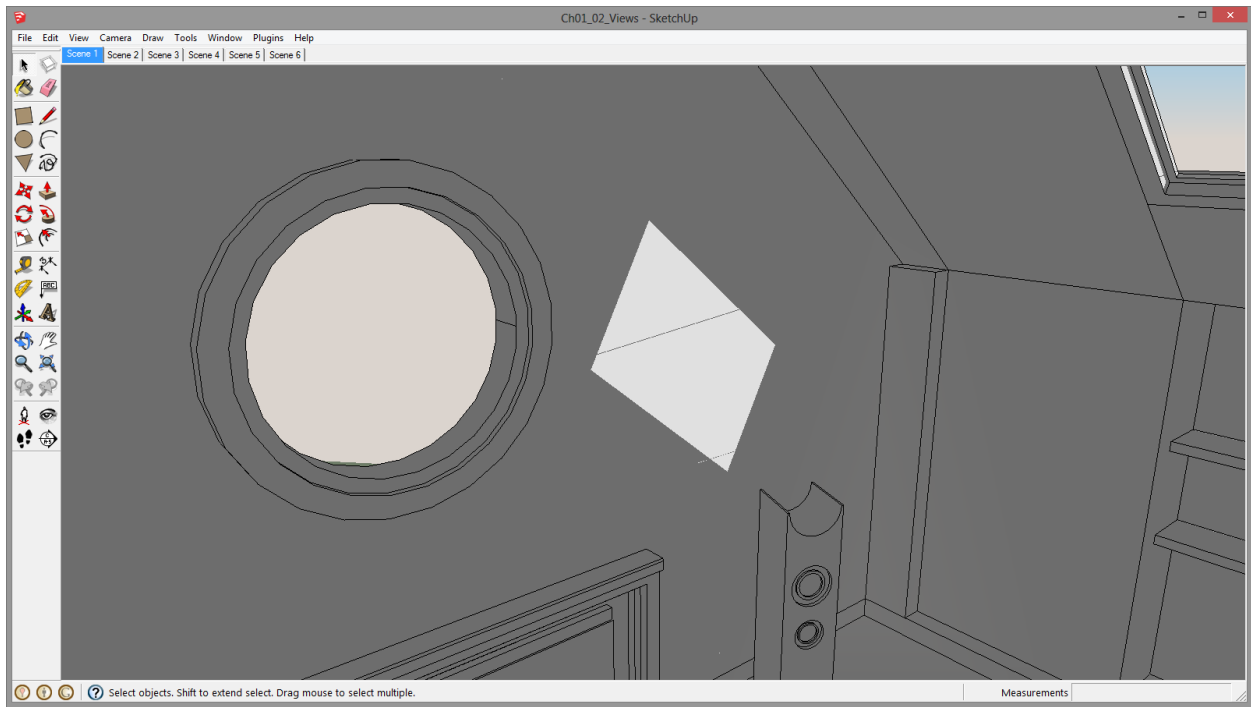
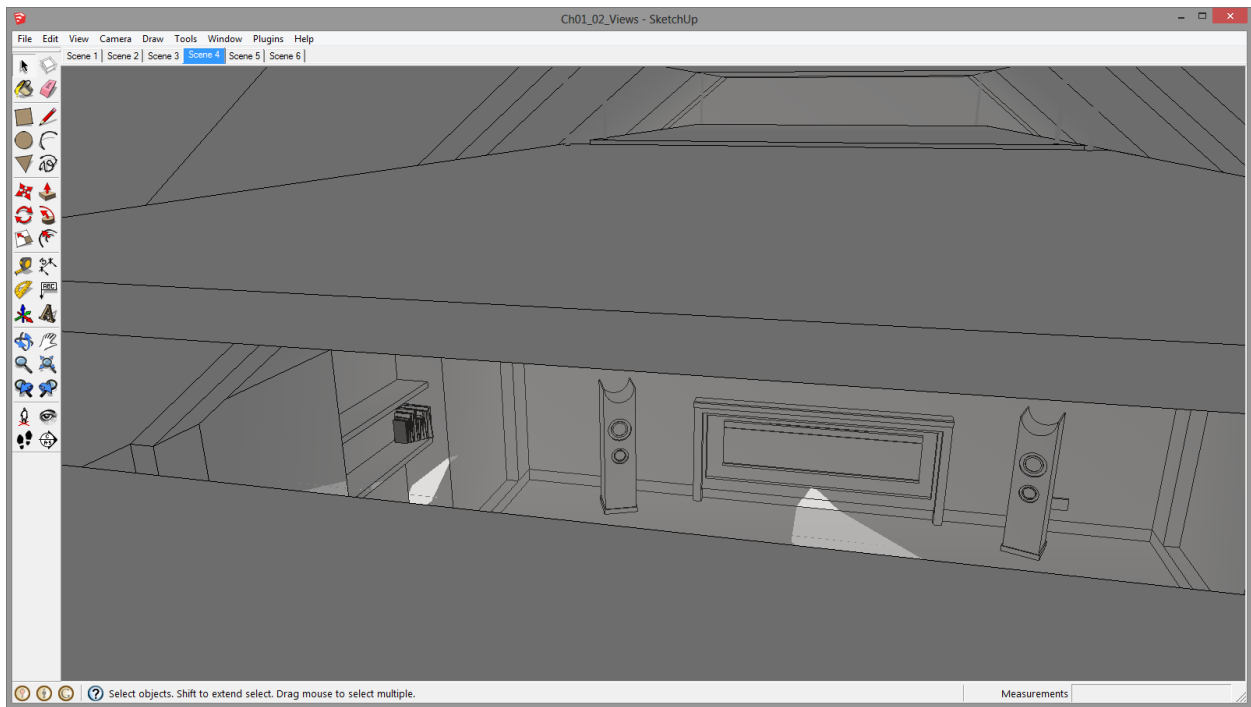
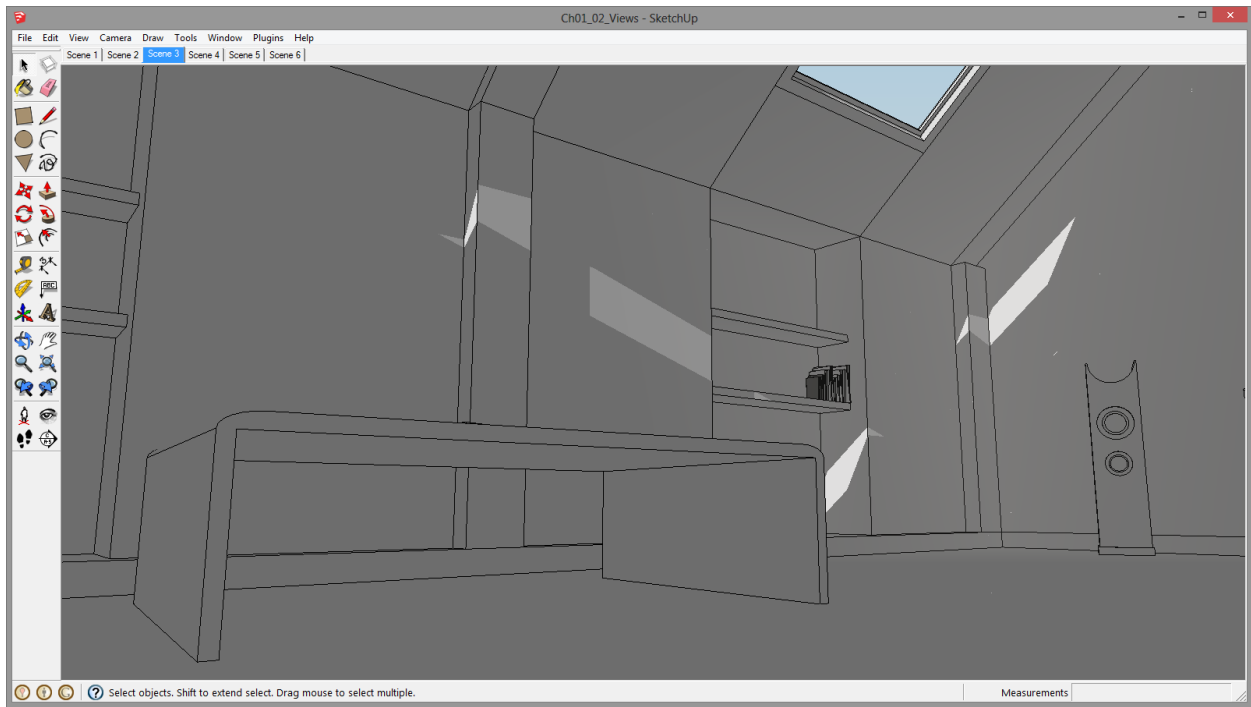
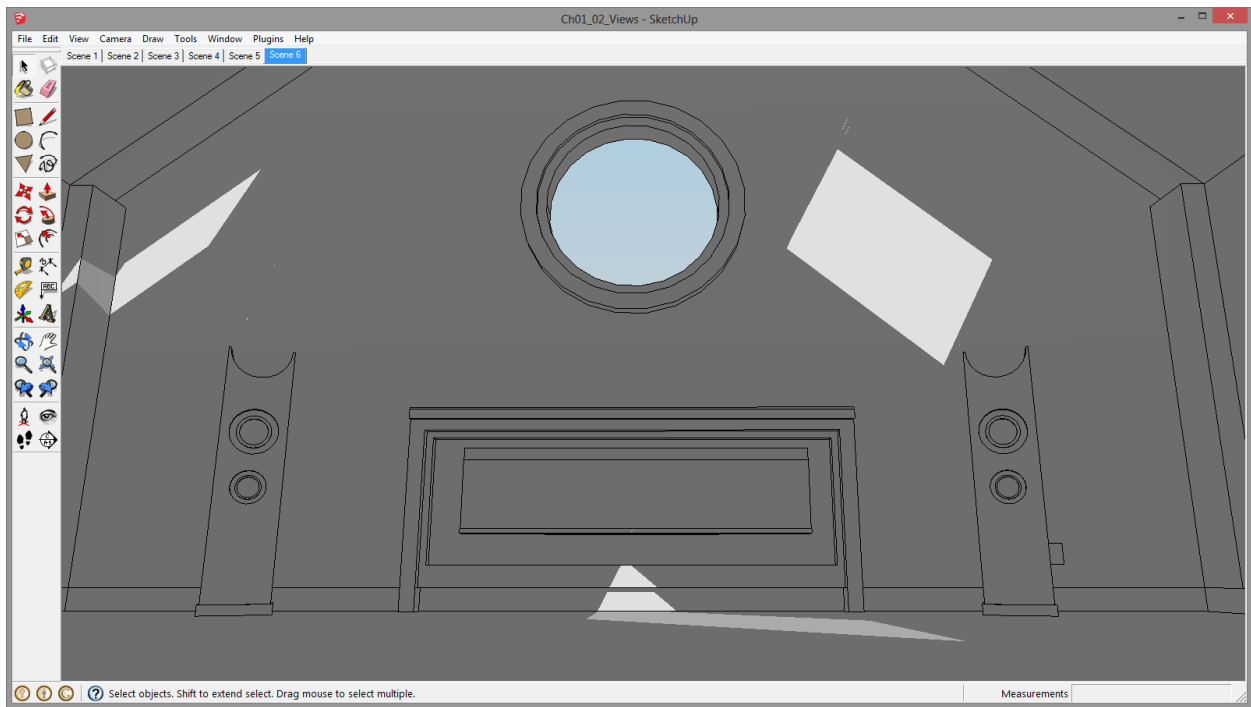
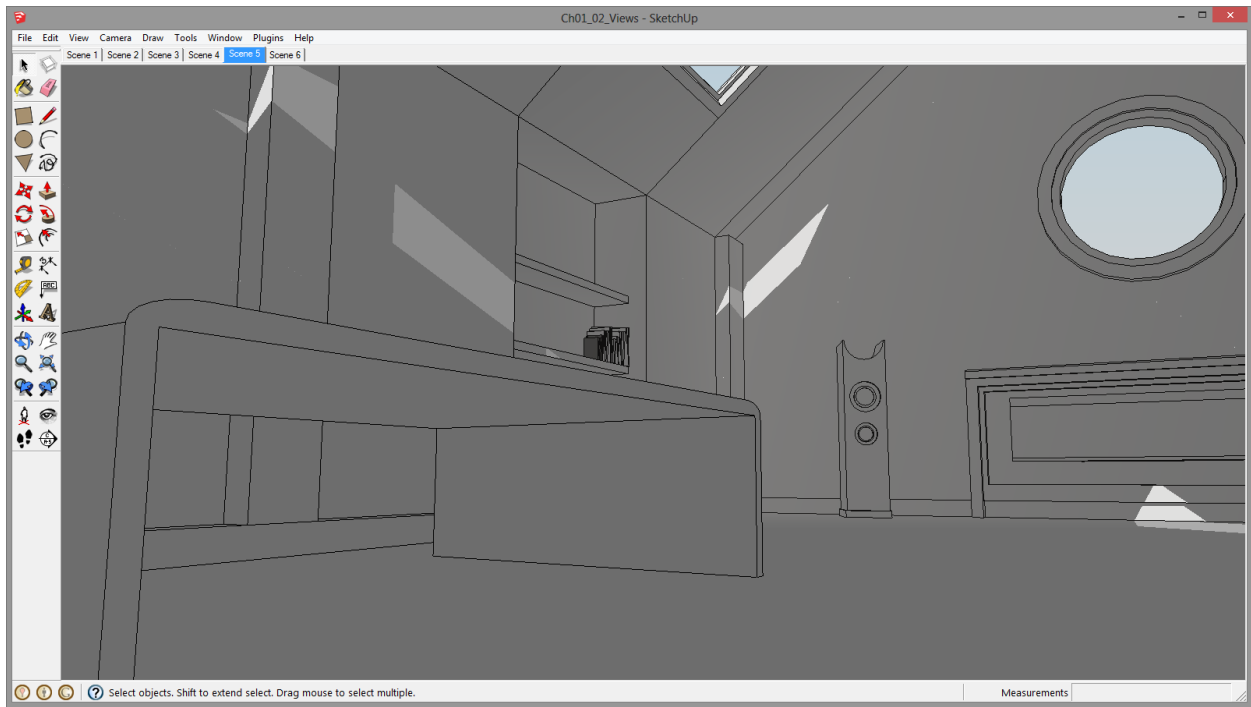


# Chapter 1, Diving Straight into Photographic Rendering

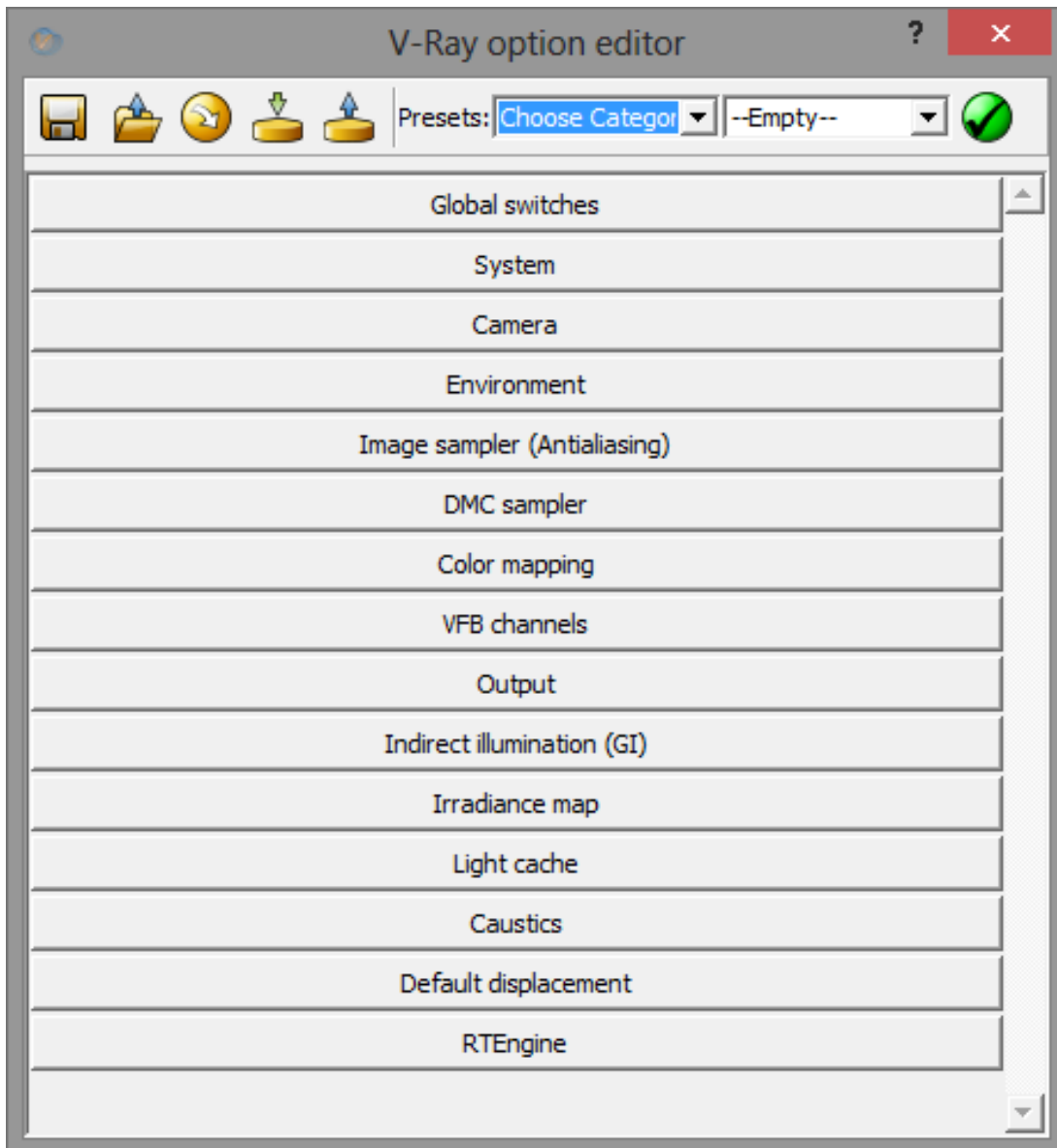
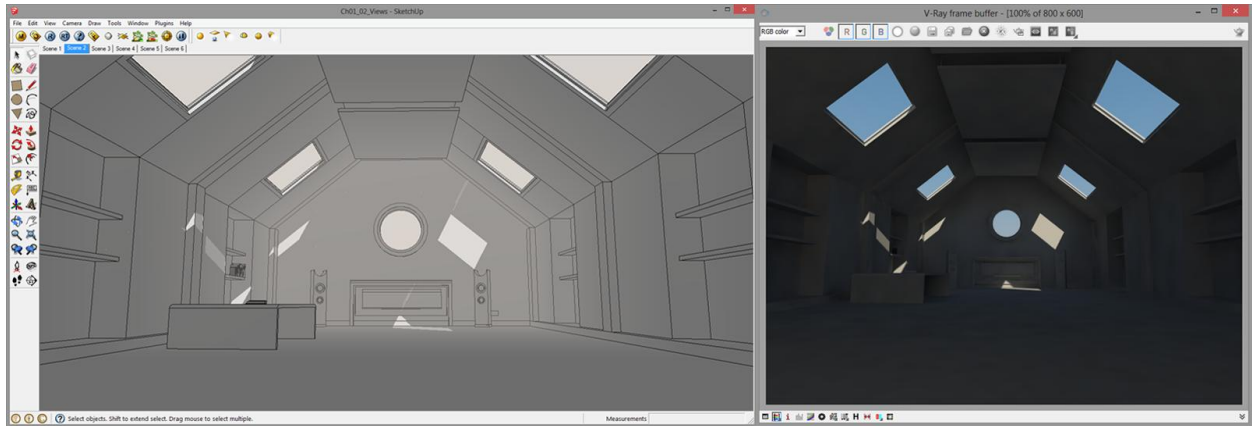












## Shadow Settings



UTC-08:00



Time

06:28 AM Noon 03:54 PM

10:10



Date

F M A M J J A S O N D

1/14



Light



80



Dark



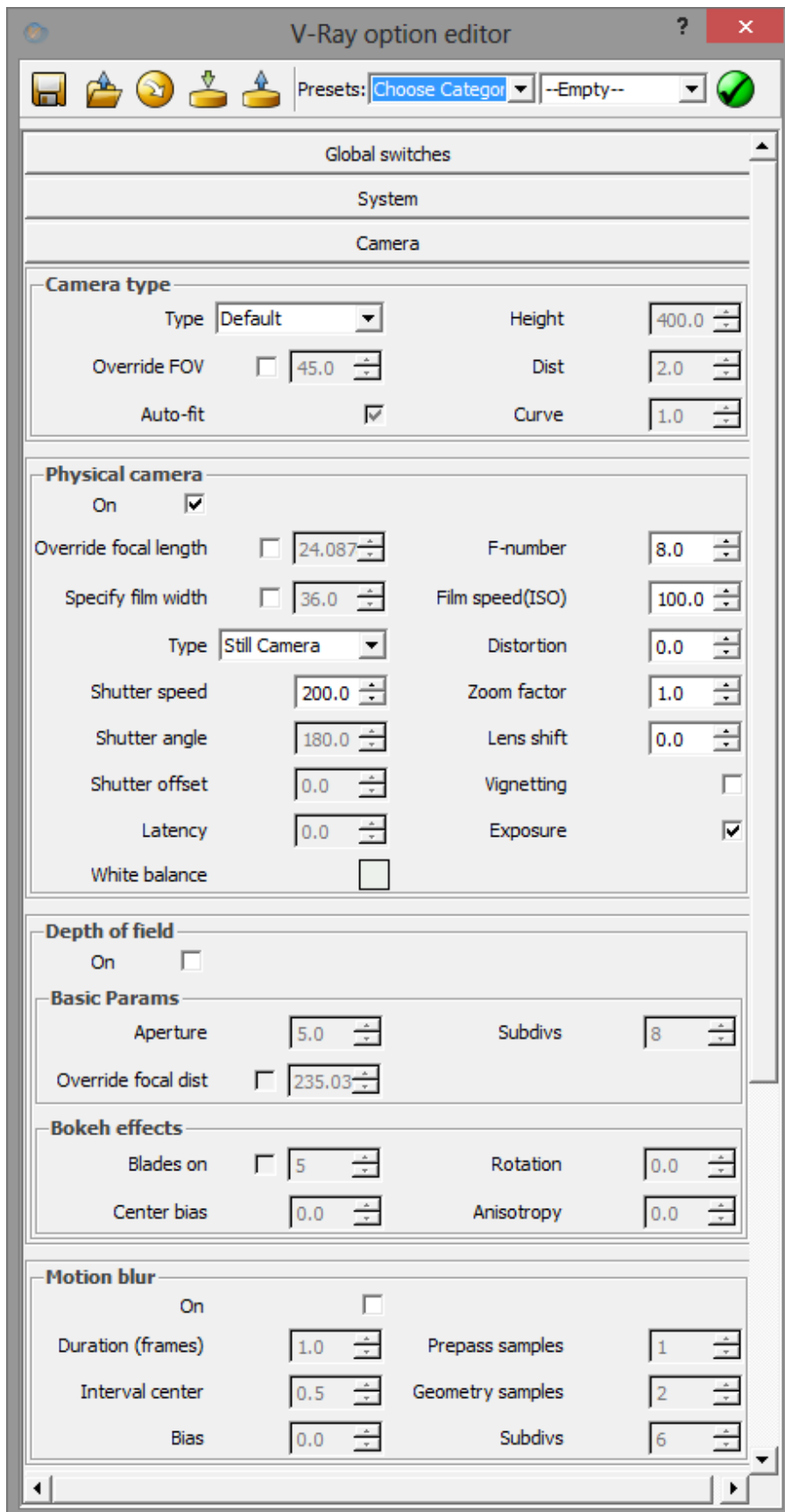
45

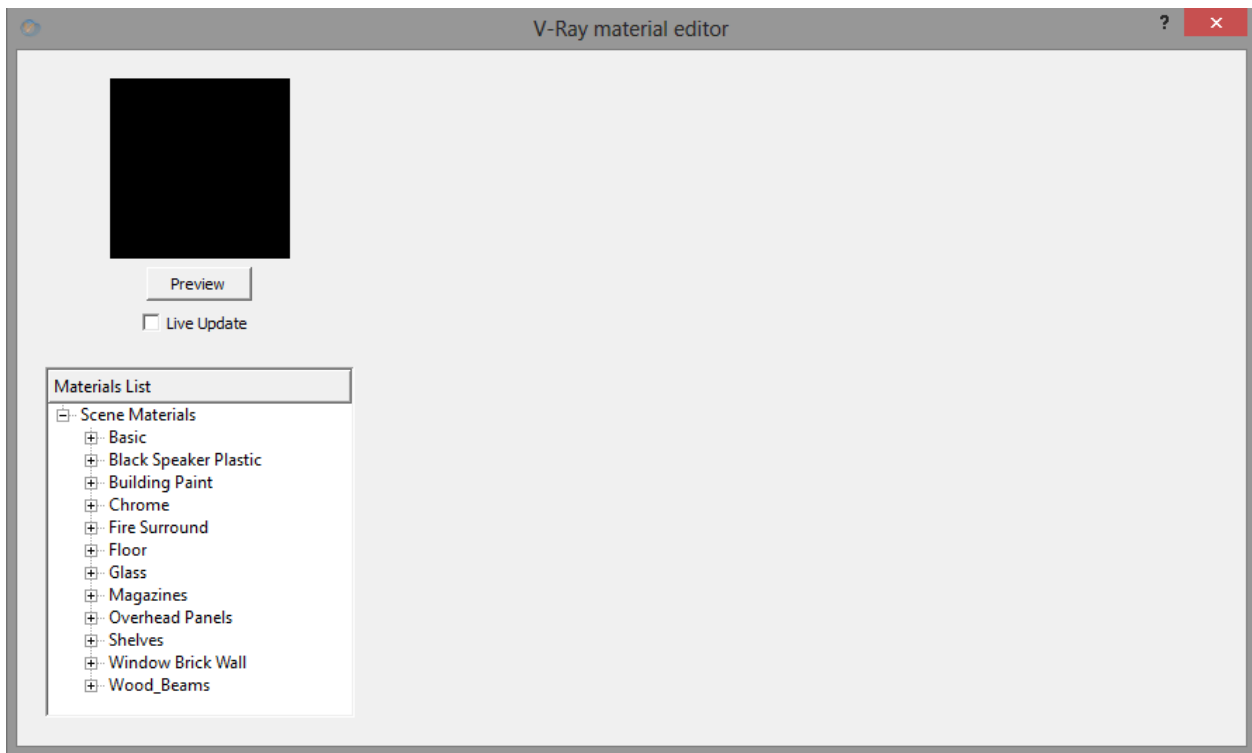
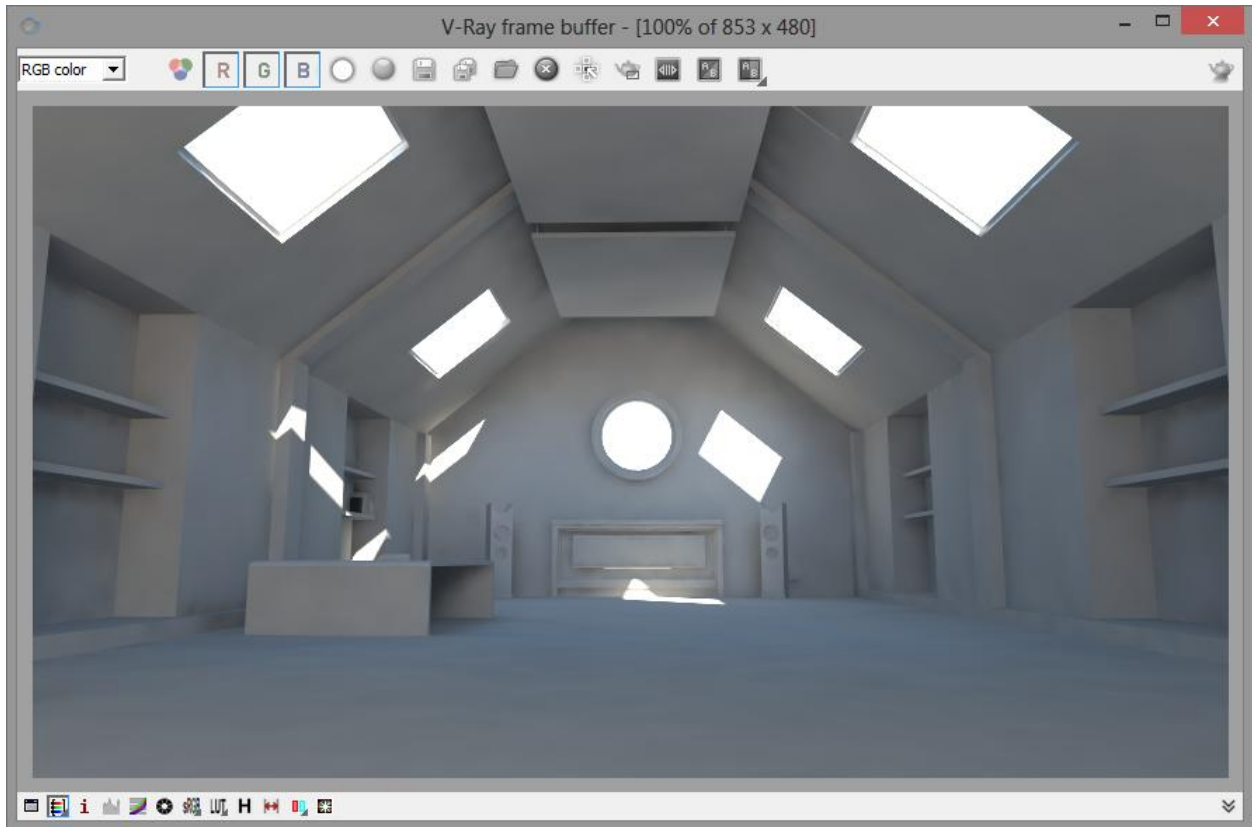


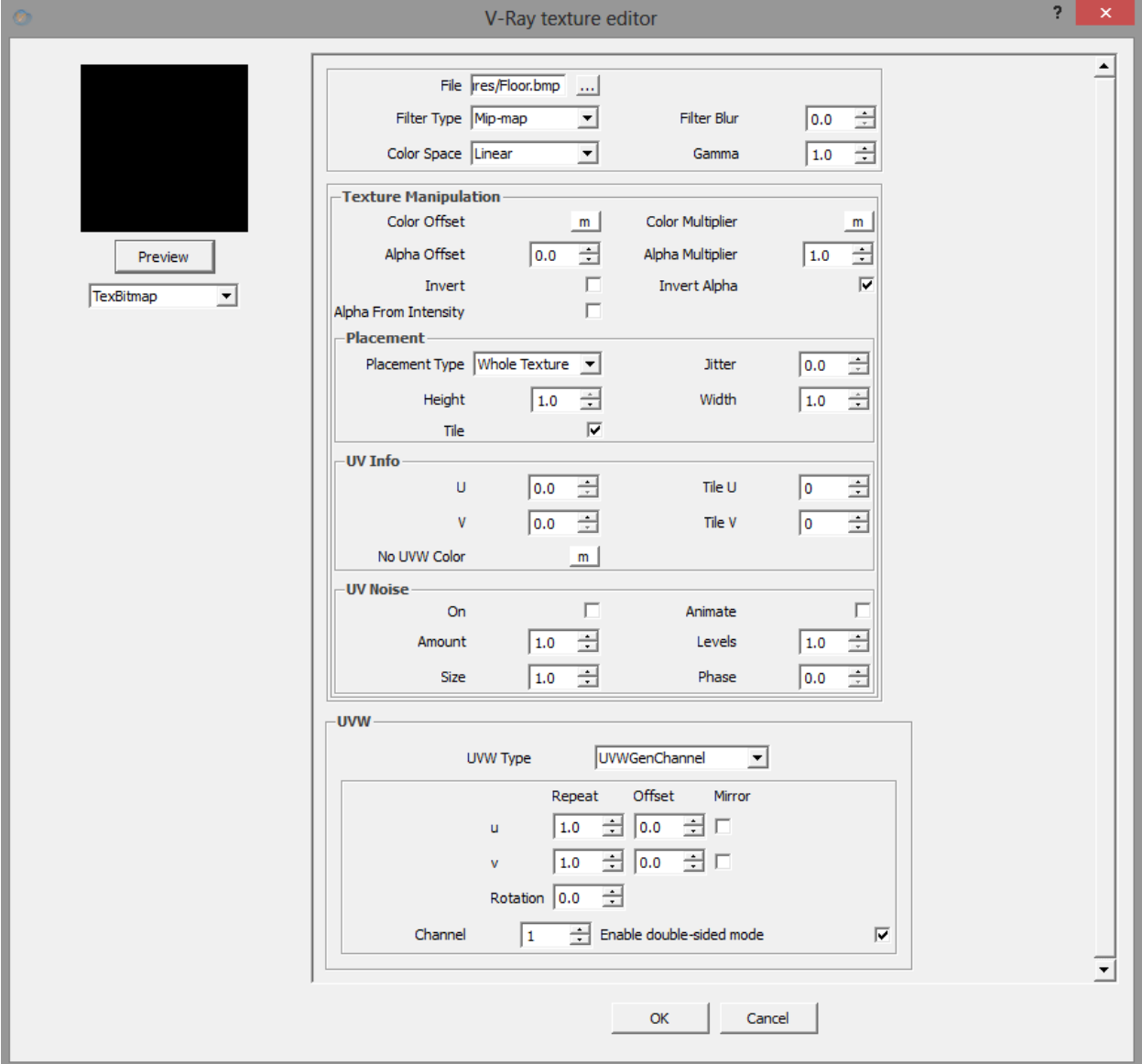
Use sun for shading

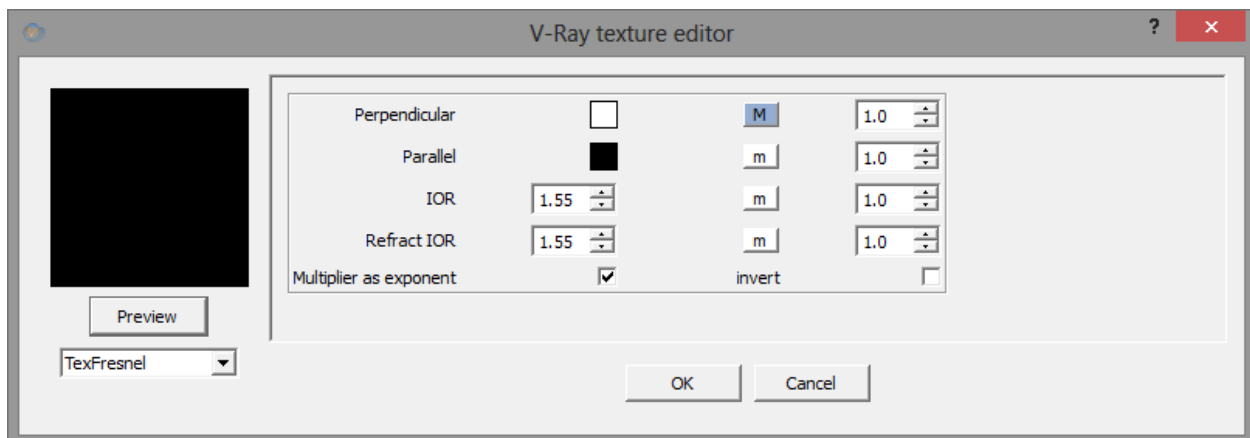
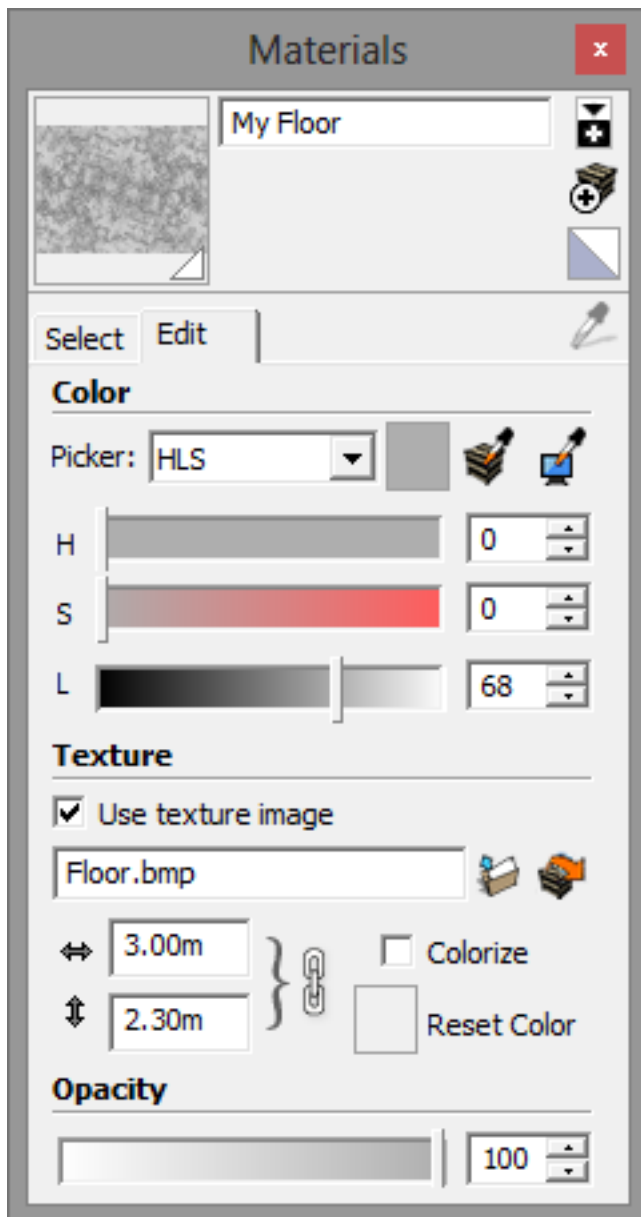
Display:

On faces  On ground  From edges



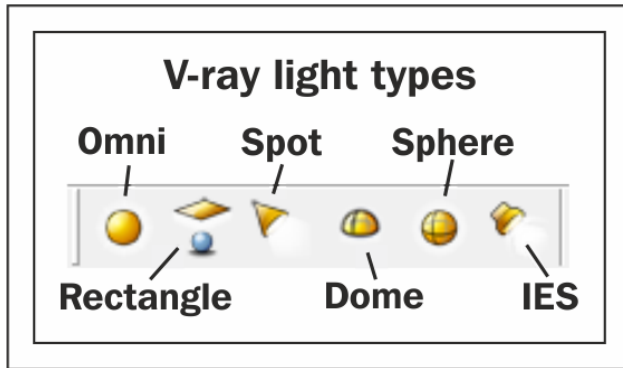
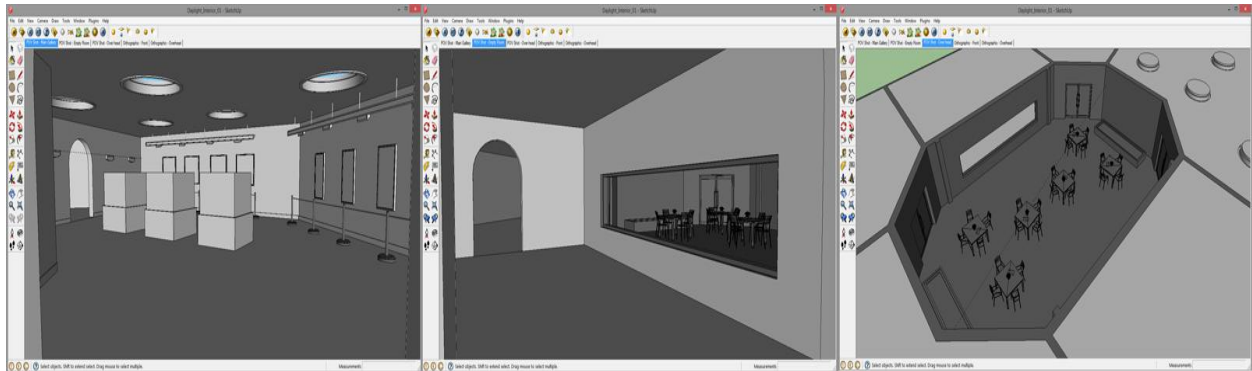




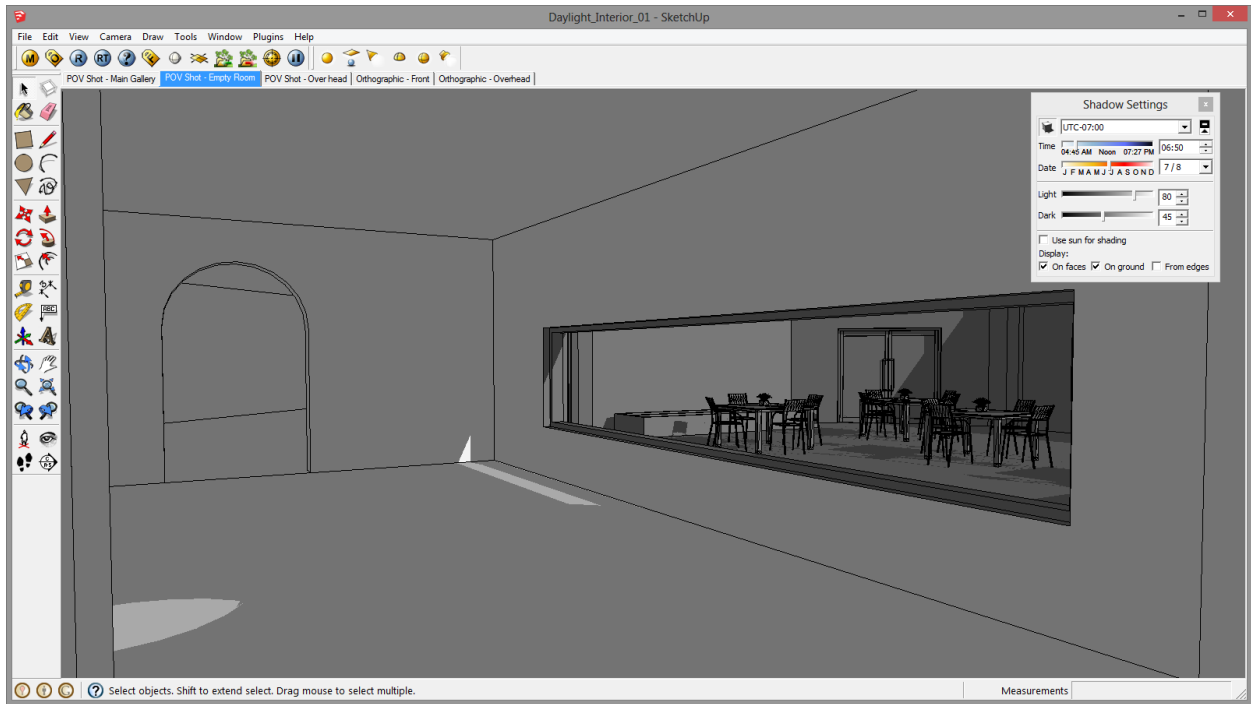
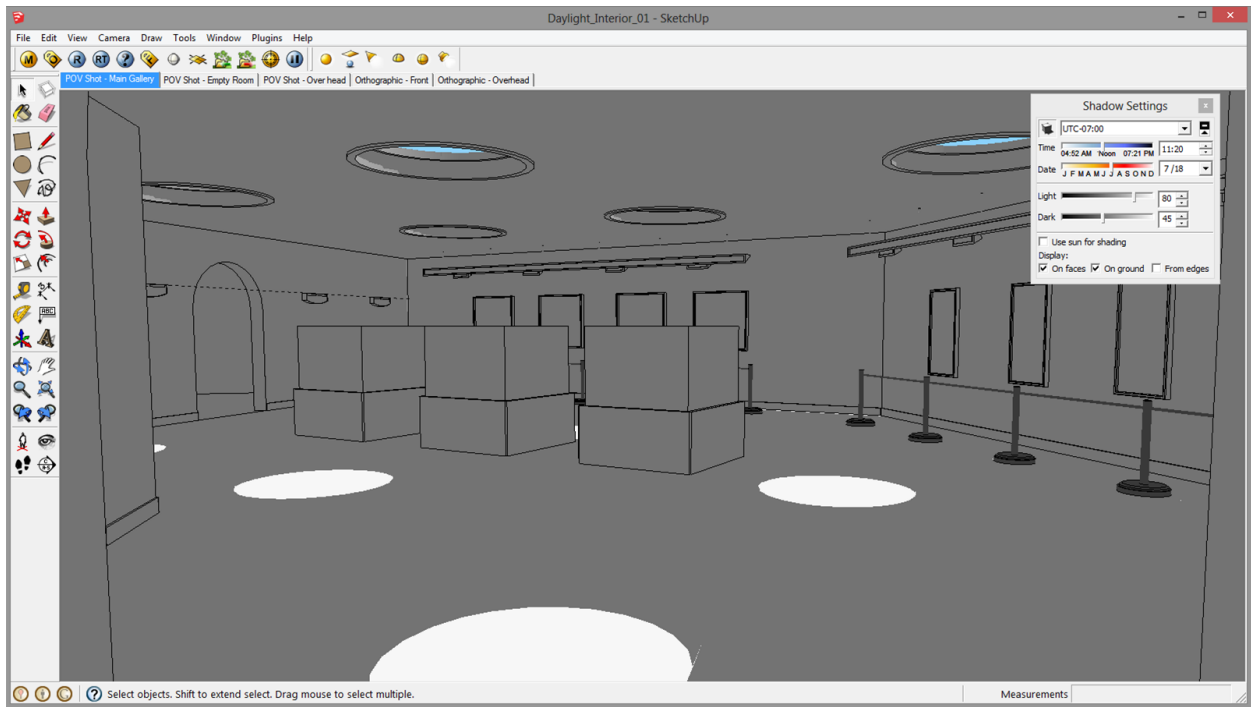


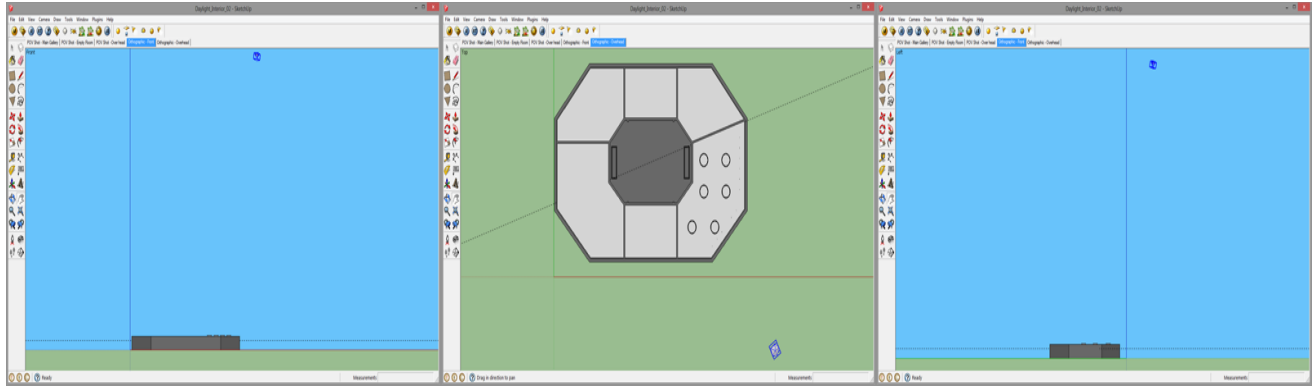


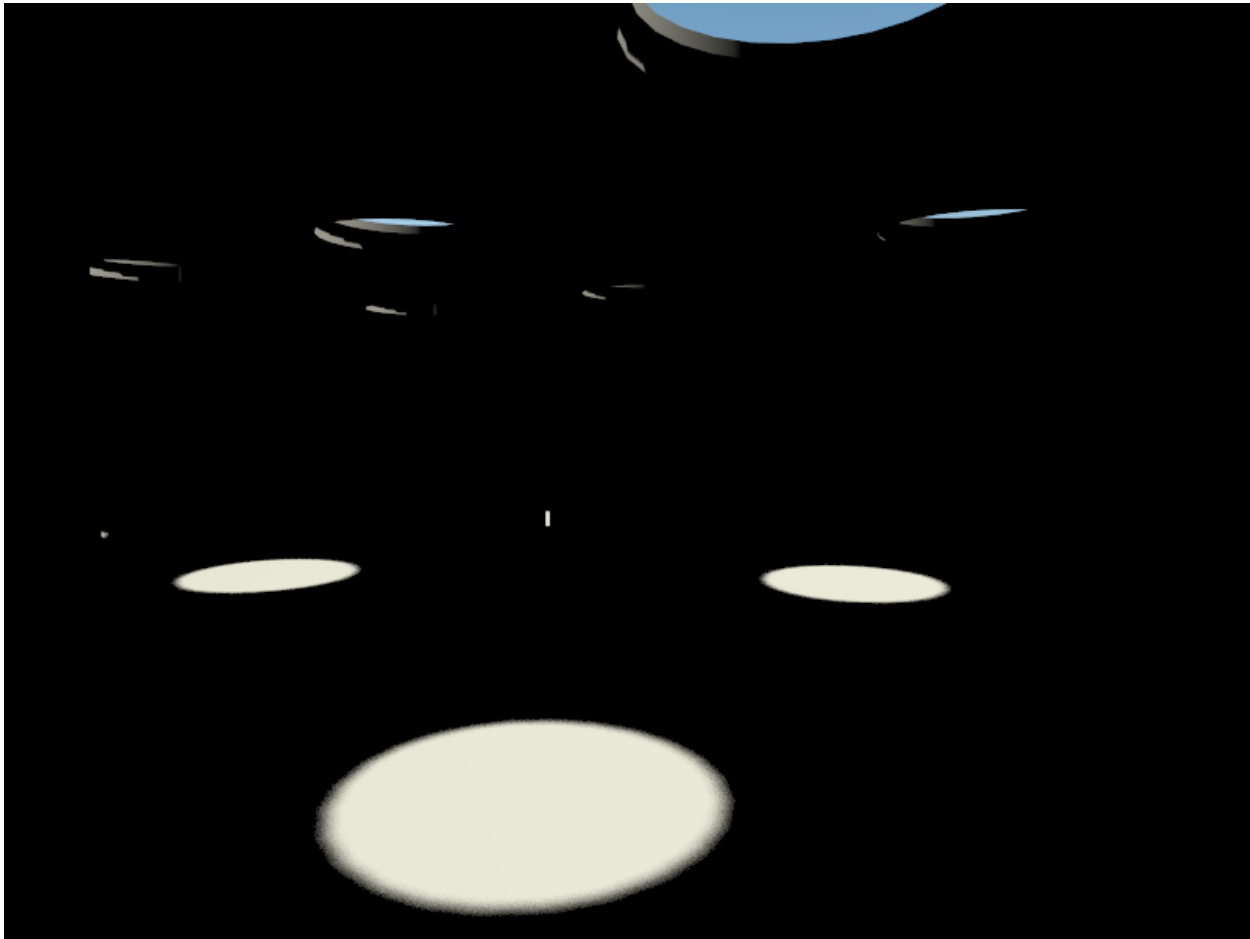
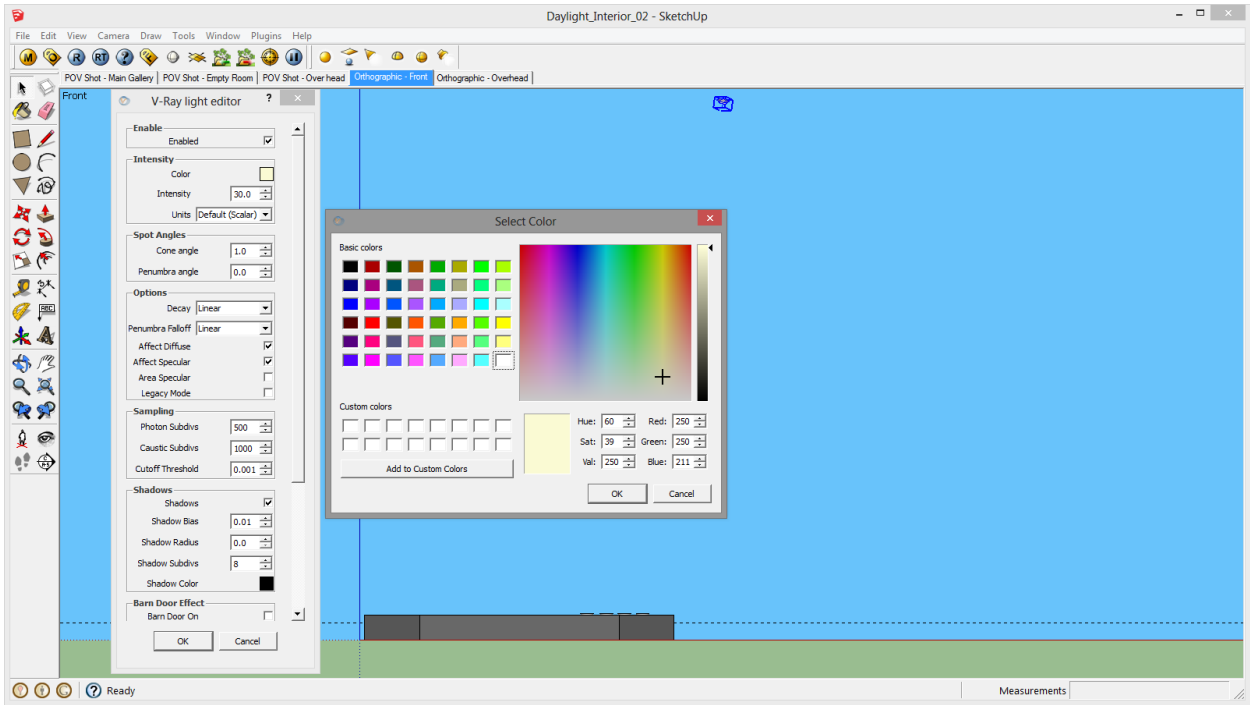
## Chapter 2, Lighting an Interior Daytime Scene

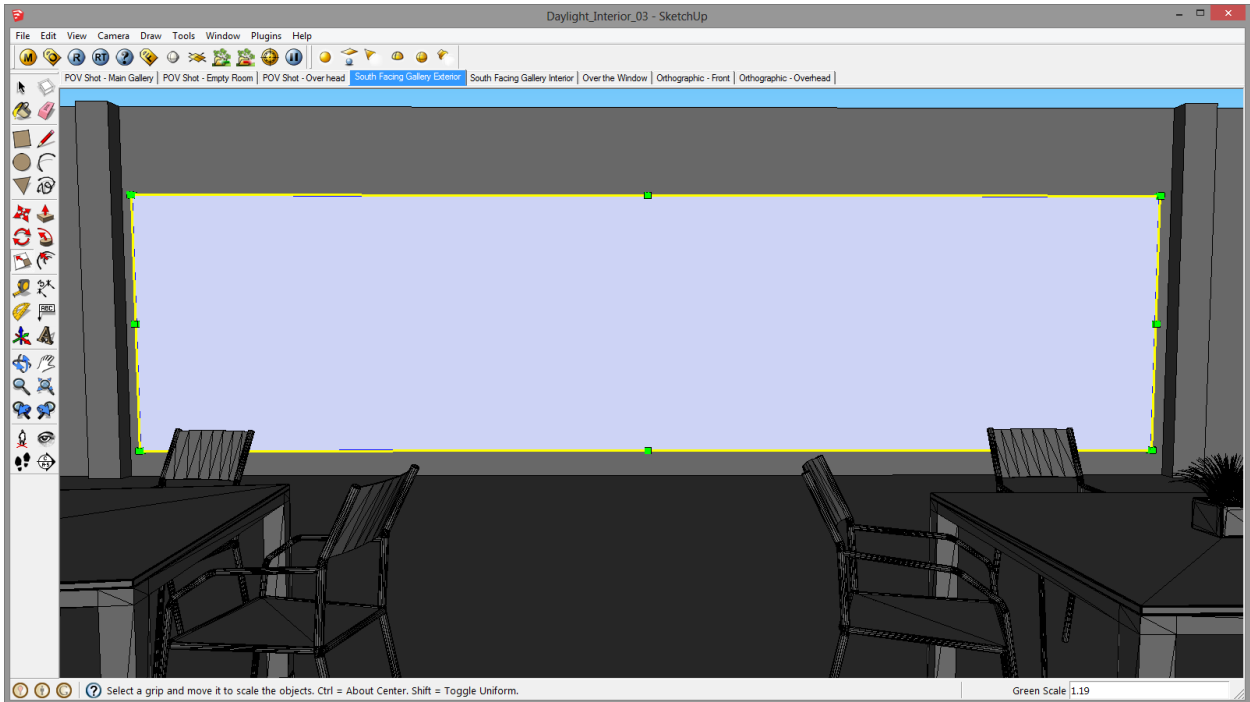
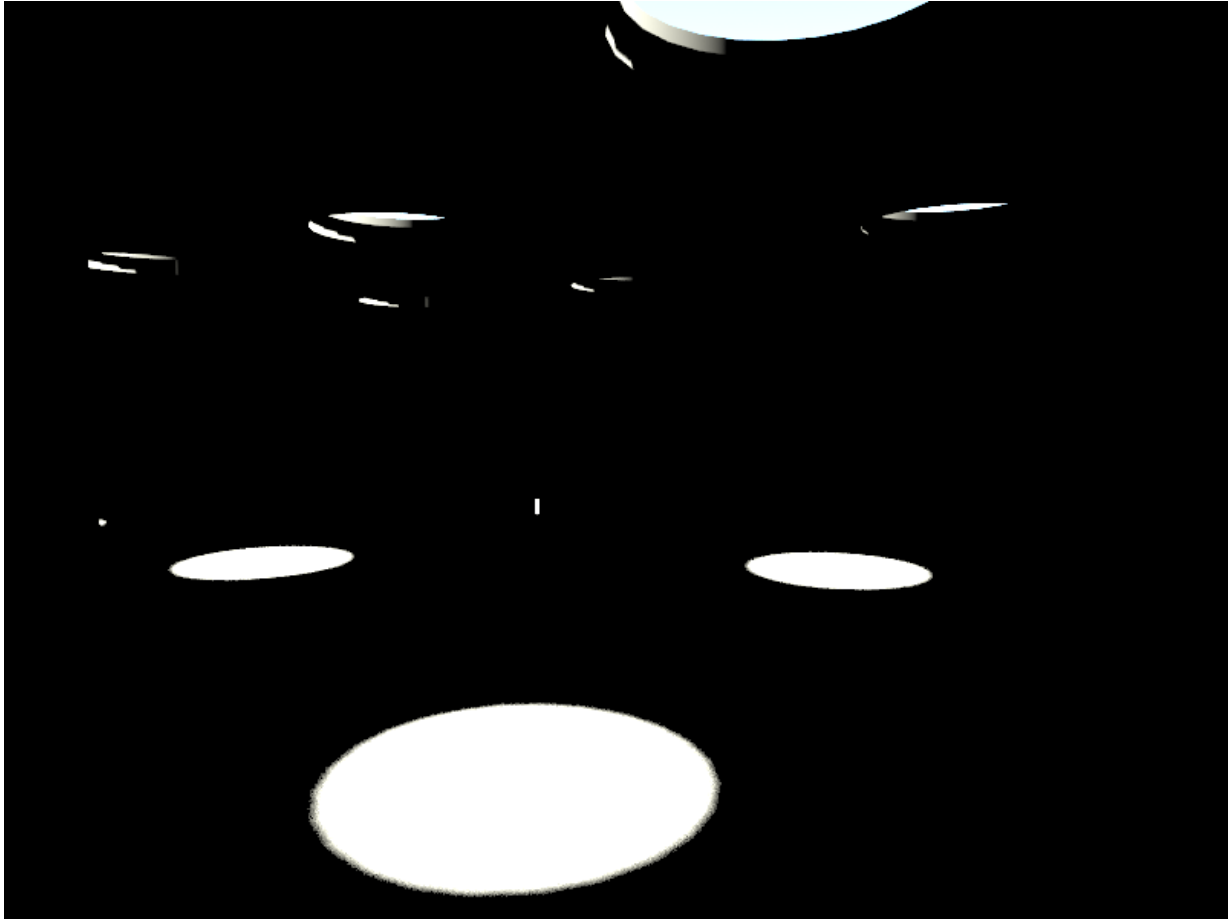


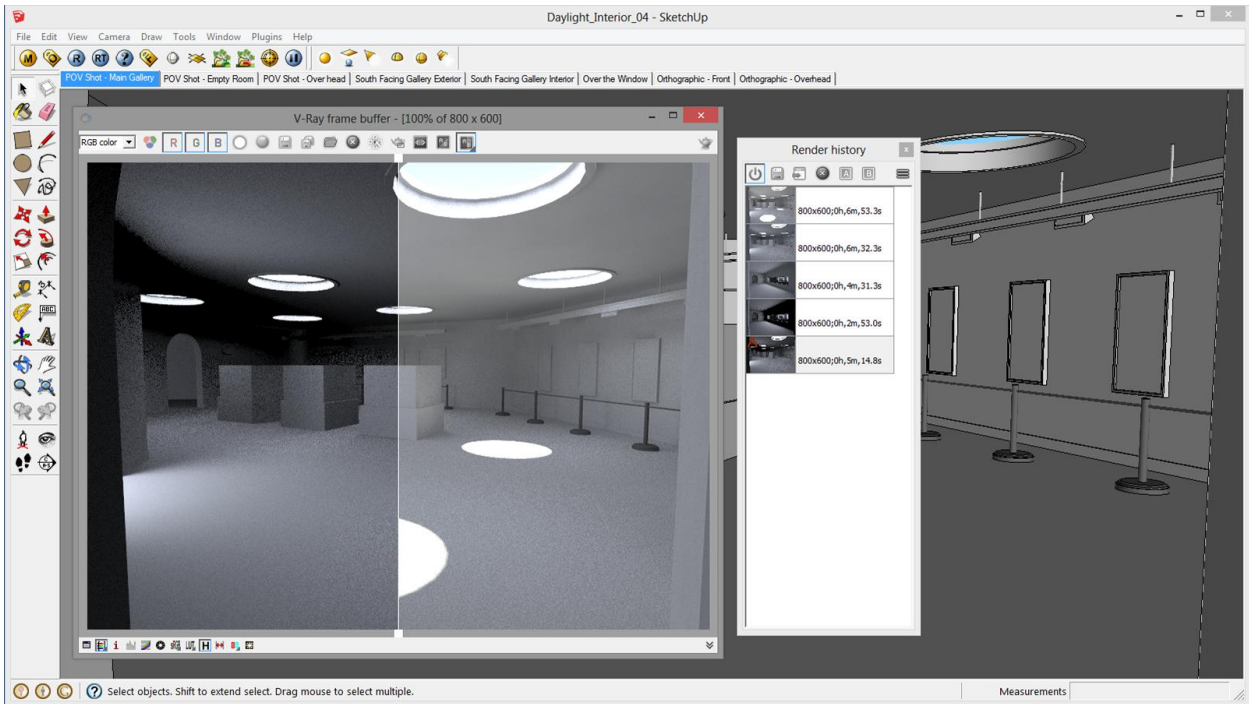
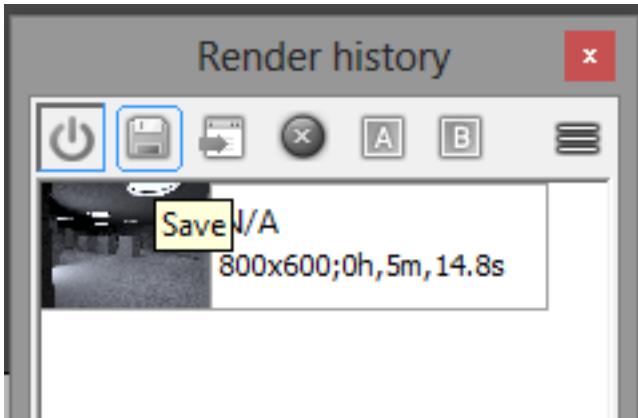






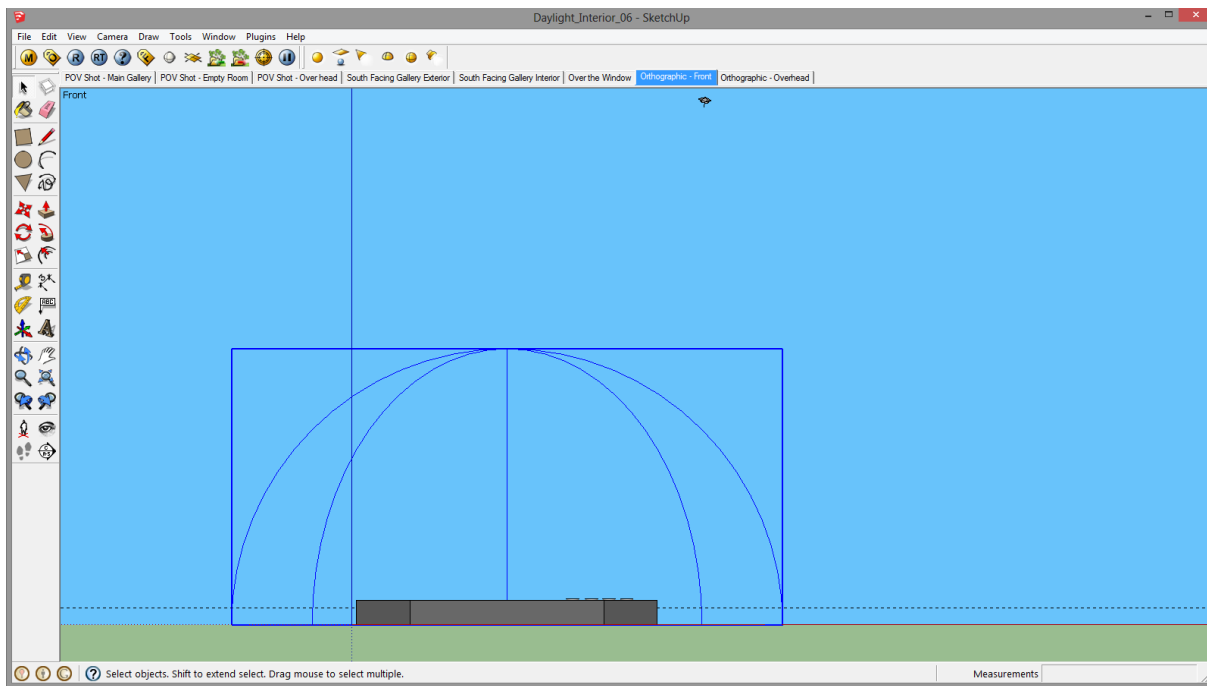
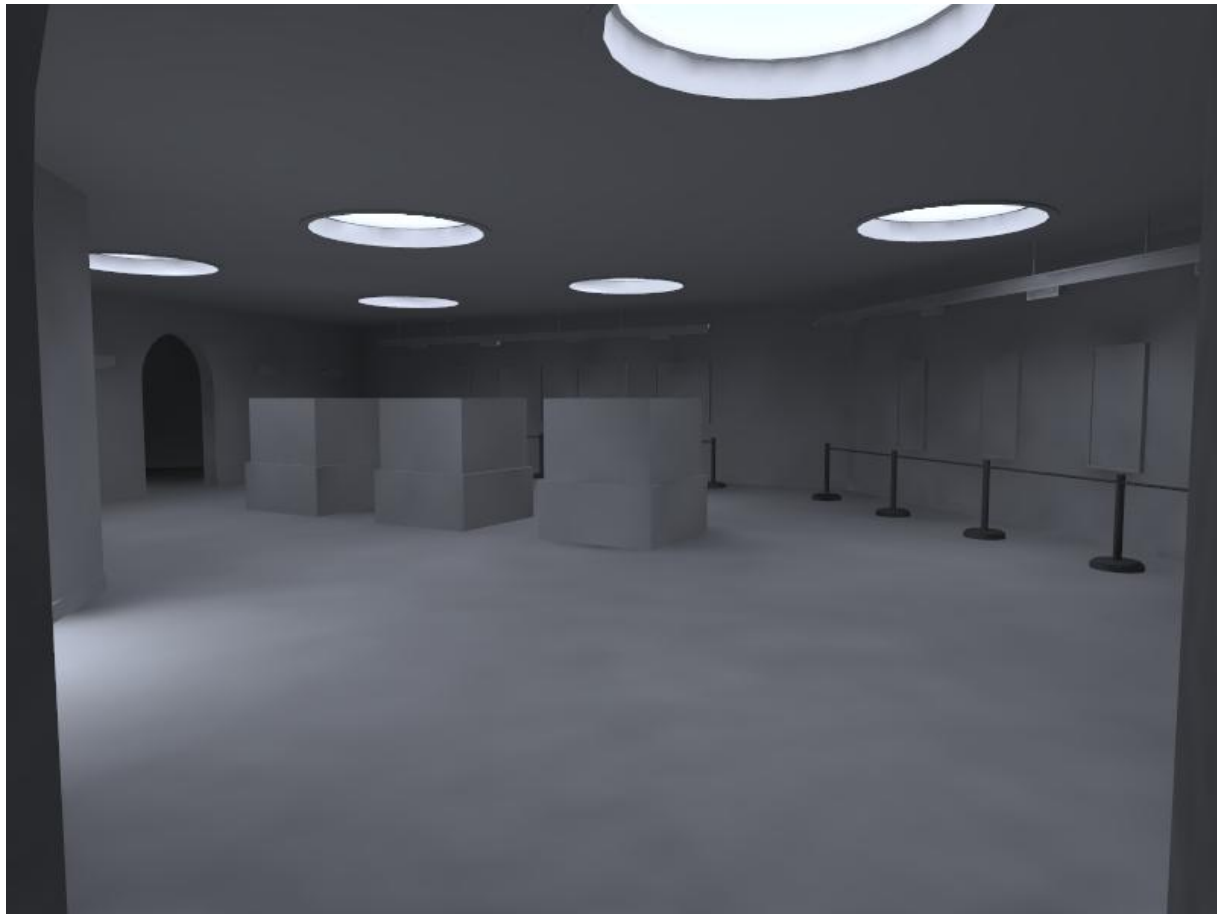




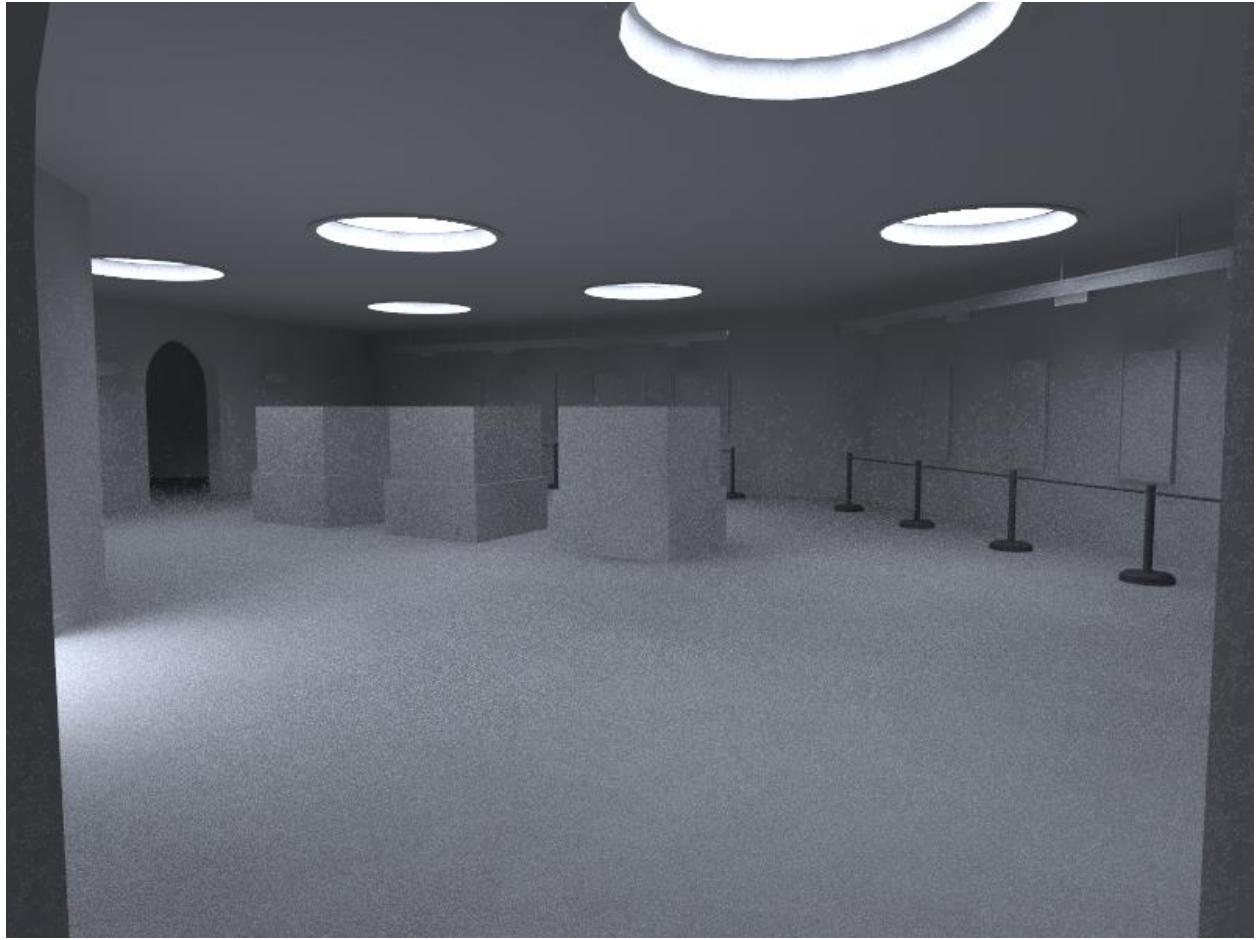










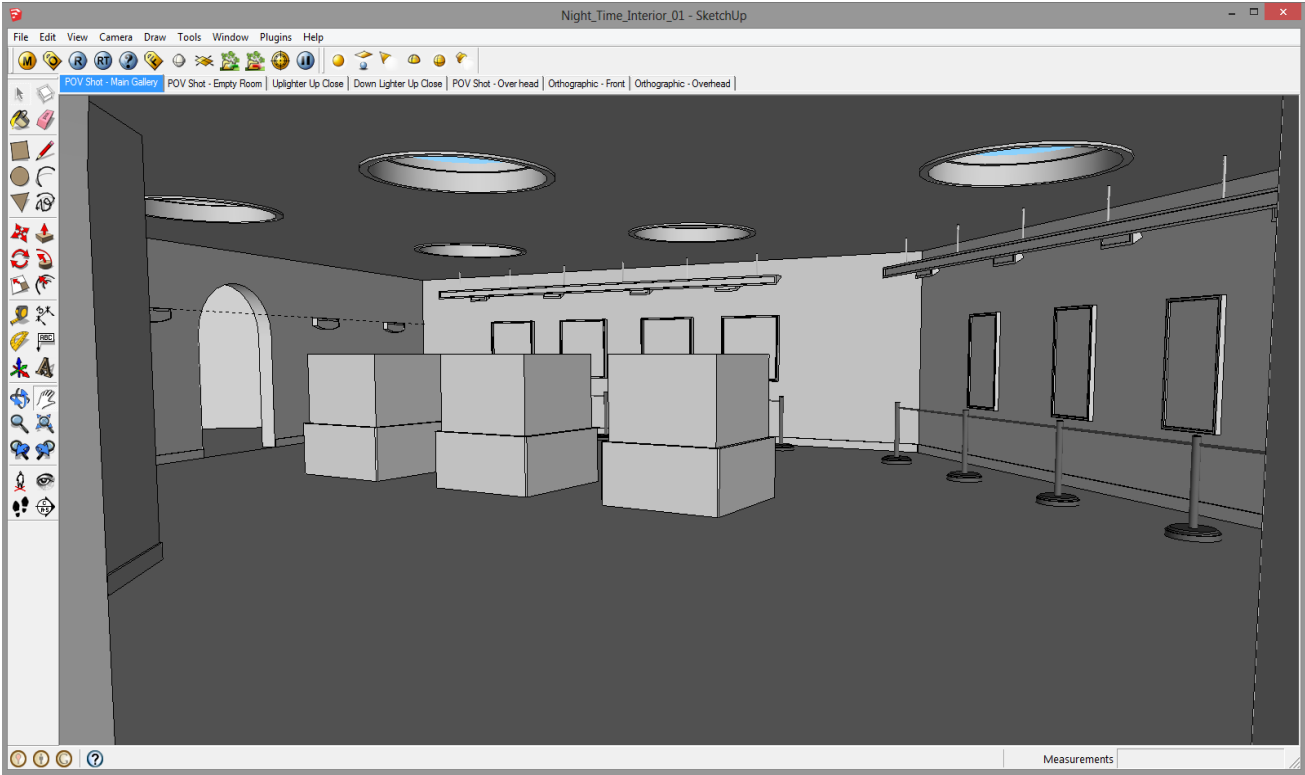








# Chapter 3, Lighting an Interior Nighttime Scene Using IES Lights



ERCO Light Scout

Products Projects Guide Light Factory Contact Service Download Features search

back Search English

### Anna Marra Contemporanea Private Gallery

Anna Marra Contemporanea Private Gallery

The gallery at this private residence excels in lining contemporary art with modern architecture. Located in the heart of Rome, its diverse collection is illuminated by lighting tools including Light Board spotlights.

Lighting designer: Luciano Siggrani Illuminazione  
Photographer:

Anna Marra Contempr... Bookmark this page Send this page 4,103 people like ERCO

Visual Photometric Tool

Design Tools: Area, Economic, Flood, Interior, Roadway, Template, Wash

Open Compare Settings Print

#### FLOOD PHOTOMETRIC REPORT

CATALOG: 474-61/6-240V

TEST #: AE3259JES  
ISSUE DATE: 1/31/2008  
CATALOG #: 474-61/6-240V  
LUMINAIRE: TYPE 1 VERY SHORT CUTOFF  
LAMP: ONE 1500 WATT QUARTZ  
LAMP OUTPUT: 1 LAMP, RATED LUMENS/LAMP: 33000  
INPUT WATTAGE: 1500  
LUMINOUS OPENING-RECTANGLE W/LUMINOUS SIDES (L: 0.3M, W: 0.3M, H: 0.3M)

NEMA TYPE: 6 X 5  
MAX CD: 19,829.0 AT HORIZONTAL: 0°, VERTICAL: 0°  
EFFICIENCY: 69.6%

AcuityBrands  
American Electric Lighting

PRODUCT LINKS

**Candela Distribution**

Y-axis: Cd: 0, 2,222, 4,444, 6,667, 8,889, 11,111, 13,333, 15,556, 17,778, 20,000  
X-axis: -70°, -60°, -50°, -40°, -30°, -20°, -10°, 0°, 10°, 20°, 30°, 40°, 50°, 60°, 70°

Legend: Vertical Axis (blue), Horizontal Axis (red)

**IsoCandela Plot**

Y-axis: 80°, 60°, 40°, 20°, 0°, -20°, -40°, -60°, -80°  
X-axis: -80°, -60°, -40°, -20°, 0°, 20°, 40°, 60°, 80°

Legend:

- Cd: 17,846, 90%
- Cd: 14,872, 75%
- Cd: 11,897, 60%
- Cd: 9,915, 50%
- Cd: 7,932, 40%
- Cd: 5,949, 30%
- Cd: 3,966, 20%
- Cd: 1,983, 10%
- Point of Max Cd: 19,829.0

ERCO\_65043000\_1xT16\_28W.IES

Indoor Report: ERCO\_65043000\_1xT16\_28W.IES

Summary Candela Array Zonal Lumens CU Table Polar Curves

Polar Curve Display

Vertical Plane Through Horizontal Angles:

Angles:  0 180 (Through Max. Cd.)

0 180

0 180

0 180

Horizontal Cone Through Vertical Angle:

Angle:  20 (Through Max. Cd.)

0

0

0

Scaling

Use Maximum Candela 1286.73 Horizontal Angle 0 Vertical Angle 20

Set Plot Extents

Save Settings As Defaults

IES Indoor Report

Tool\_View ERCO\_65043000\_1xT16\_28W.IES

Keywords Candela 2D 3D

Tumble  Fixture  HUD  Maximum Candela

View

IES View

ERCO\_65043000\_1xT16\_28W  
 Tilt=NONE  
 Lamps=1  
 Lumens=2600  
 Mult=1  
 Photo\_Type=Type C  
 Units\_Type=Meters  
 Width=1.16  
 Length=0.75  
 Height=1  
 Watts=30  
 #Vert\_Angles=37  
 #Hor\_Angles=73

Flood Report: ERCO\_65043000\_1xT16\_28W.IES

Summary Candela Array Lumen Array Axial Display Isocandela

Candela Array

Vertical Angles

Horizontal Angles	-90.0	-85.0	-75.0	-65.0	-55.0	-47.5	-42.5	-37.5	-33.0
-3.0	1.856	14.142	61.024	101.545	141.762	167.932	184.228	198.332	210.320
-5.0	1.856	13.670	48.108	72.859	101.786	120.186	130.434	141.580	143.204
-7.0	1.856	13.200	34.766	53.685	63.345	78.790	84.328	91.798	96.923
-9.0	1.856	12.732	21.890	36.944	44.074	48.372	52.063	57.316	60.258
-11.0	1.856	12.266	17.919	22.144	28.369	33.341	36.990	39.696	41.570
-13.0	1.856	11.502	16.046	18.978	23.470	26.690	28.728	30.532	31.845
-15.0	1.856	10.972	14.254	16.215	19.296	22.046	23.504	24.925	25.977
-17.0	1.856	10.446	12.567	14.113	17.039	18.672	20.080	21.218	21.936
-19.5	1.856	9.802	10.896	12.996	14.799	16.326	17.071	17.883	18.297
-22.5	1.856	9.055	10.451	11.851	13.127	14.151	14.670	15.146	15.470
-25.5	1.854	8.345	10.053	11.228	12.131	12.721	13.097	13.405	13.539
-29.0	1.854	7.576	9.698	10.671	11.291	11.671	11.876	12.018	12.096

Road Report: ERCO\_65043000\_1xT16\_28W.IES

Summary Candela Array CU Graph Polar Curves Isolines

Plot Display

1/2 Max. Candela

Max. Candela Pt.

Iso-Values (fc)

0.1

0.2

0.5

1

2

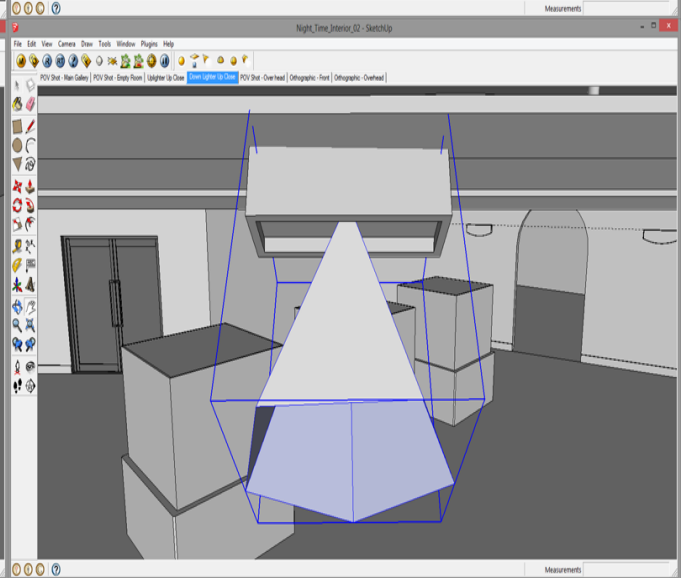
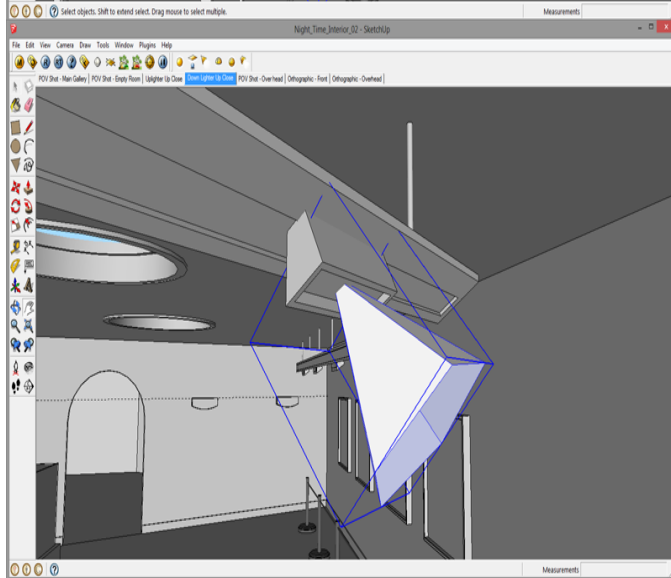
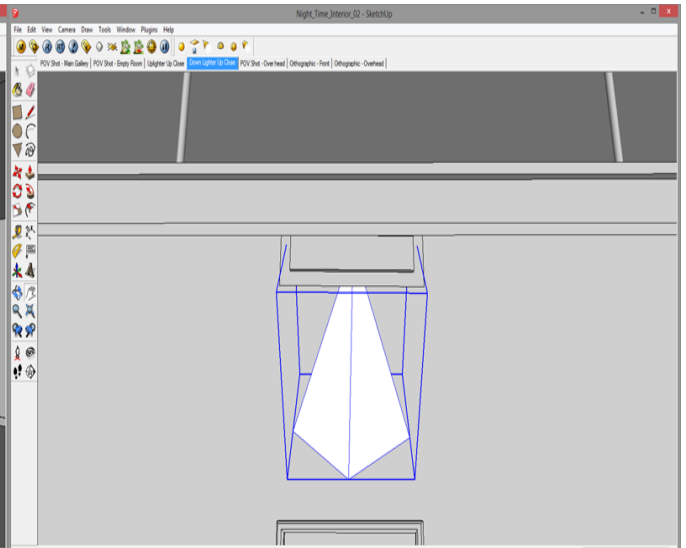
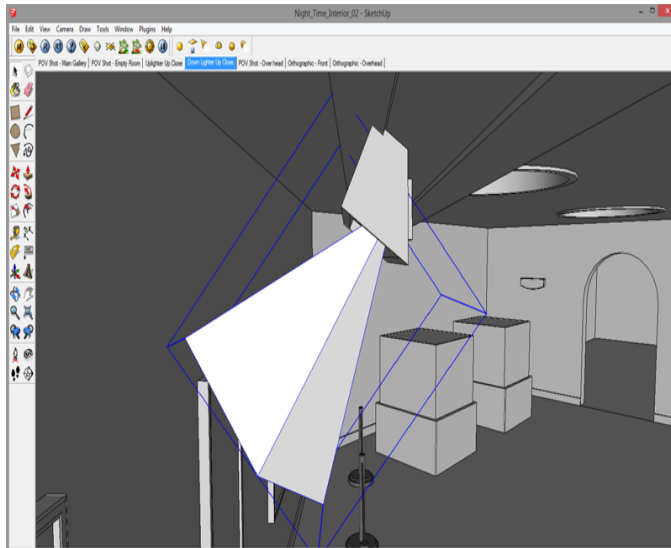
IES

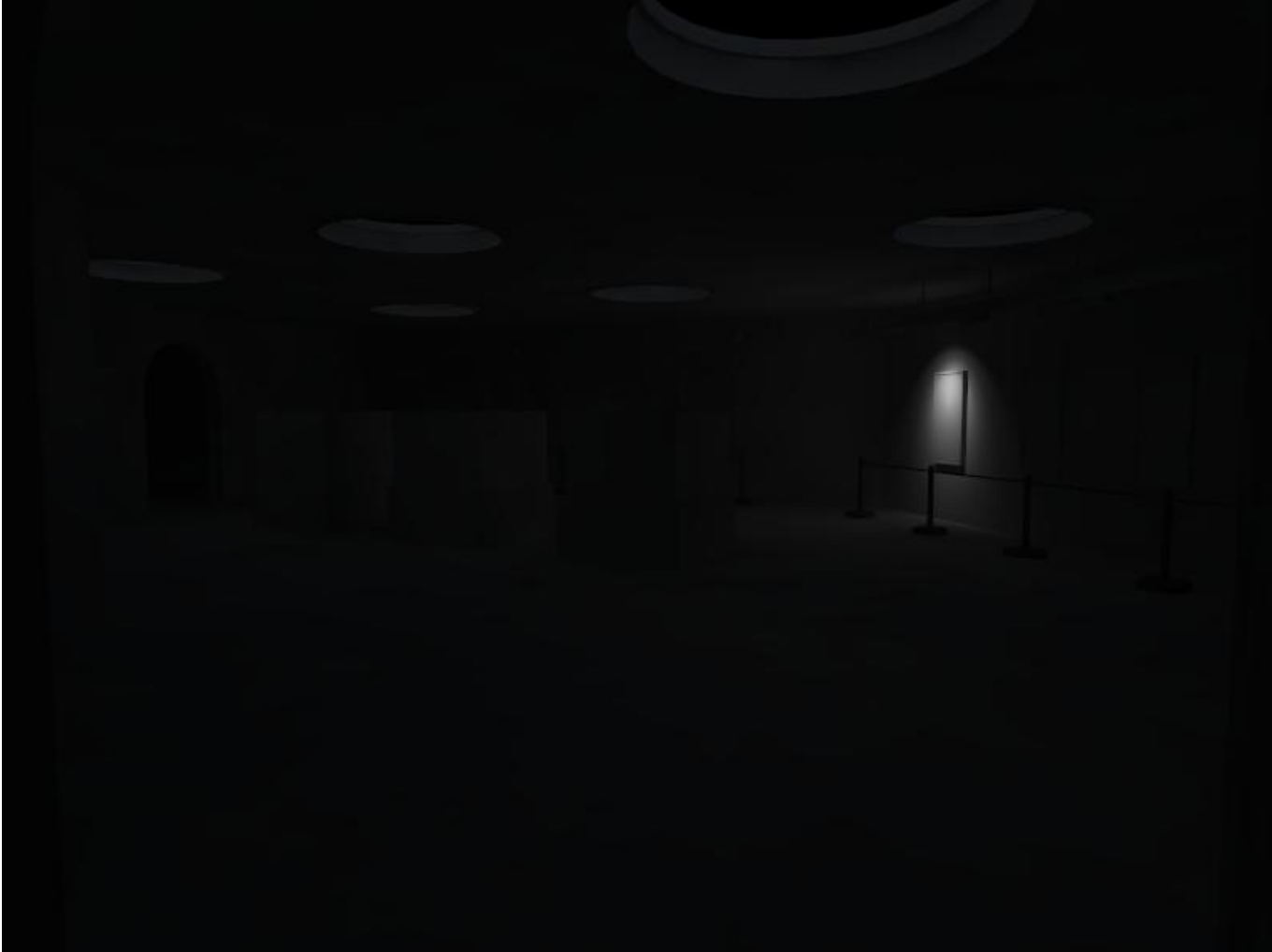
IES



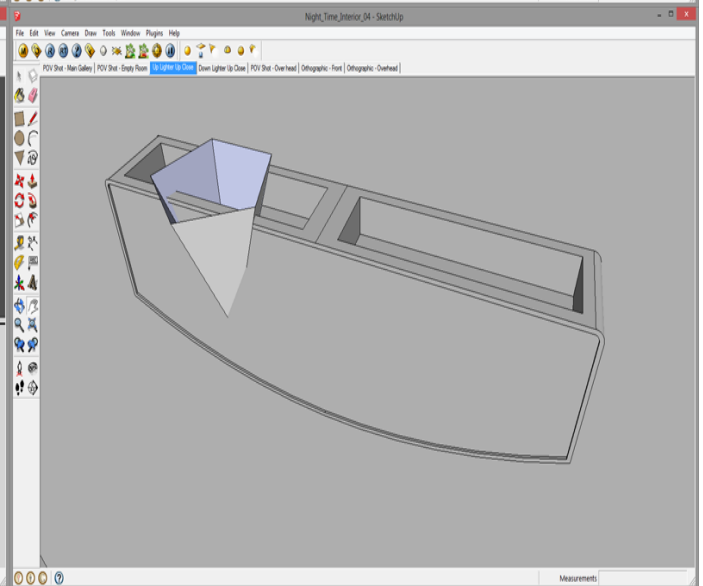
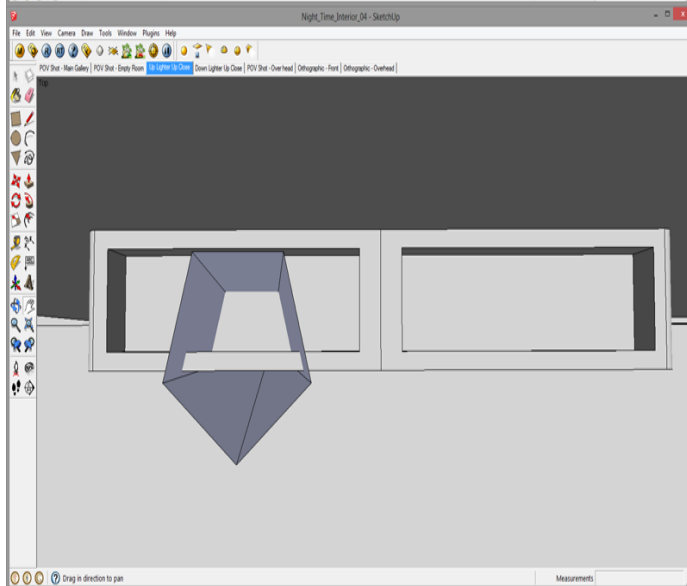
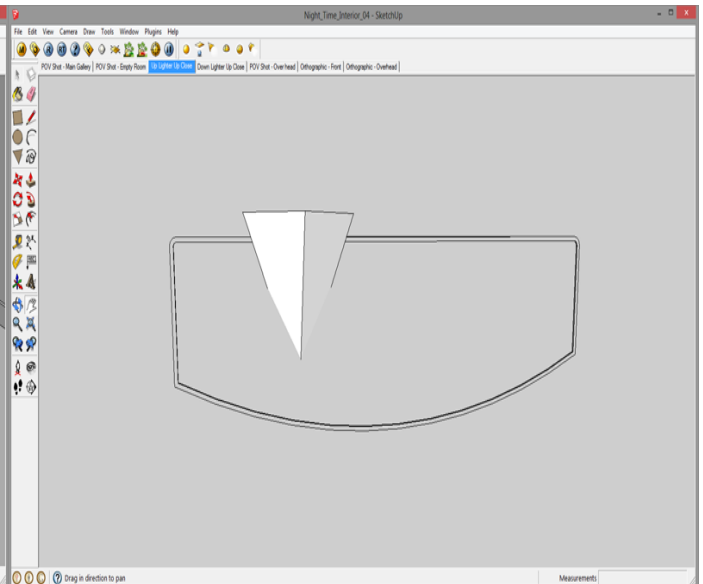
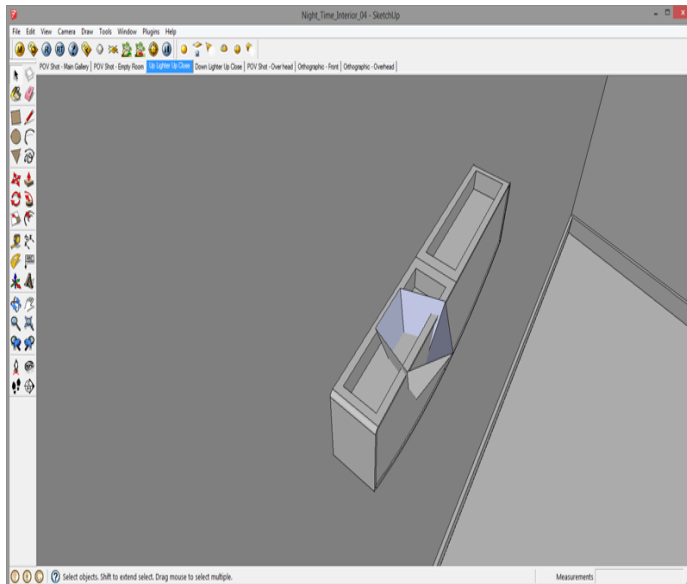










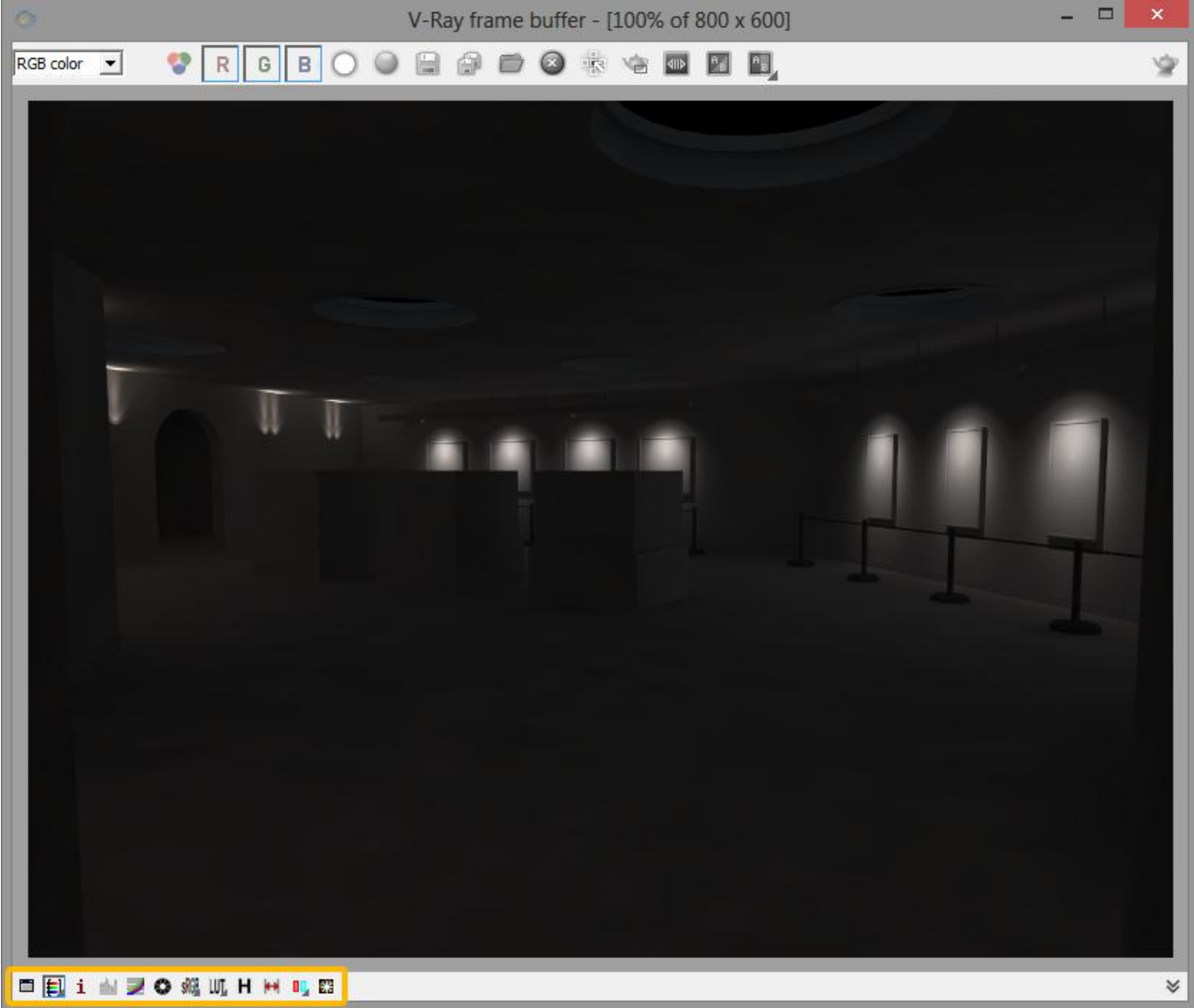


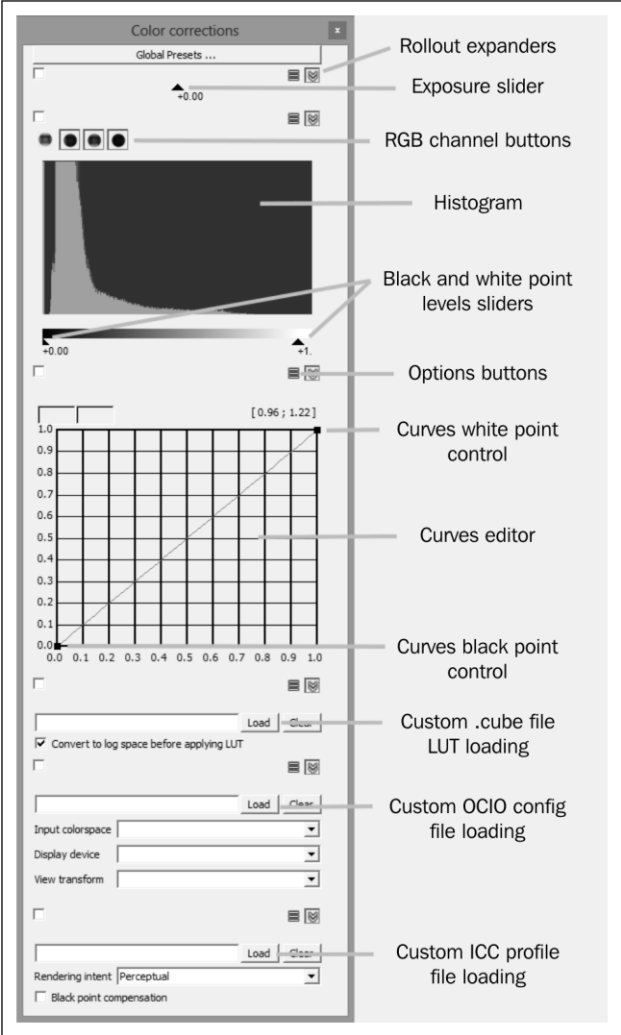












Color corrections

Global Presets ...

-0.00

0.00 0.00 [ 1.01; 0.32 ]

1.0

0.9

0.8

0.7

0.6

0.5

0.4

0.3

0.2

0.1

0.00

0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0

Load Clear

Convert to log space before applying LUT

Load Clear

Input colorspace

Display device

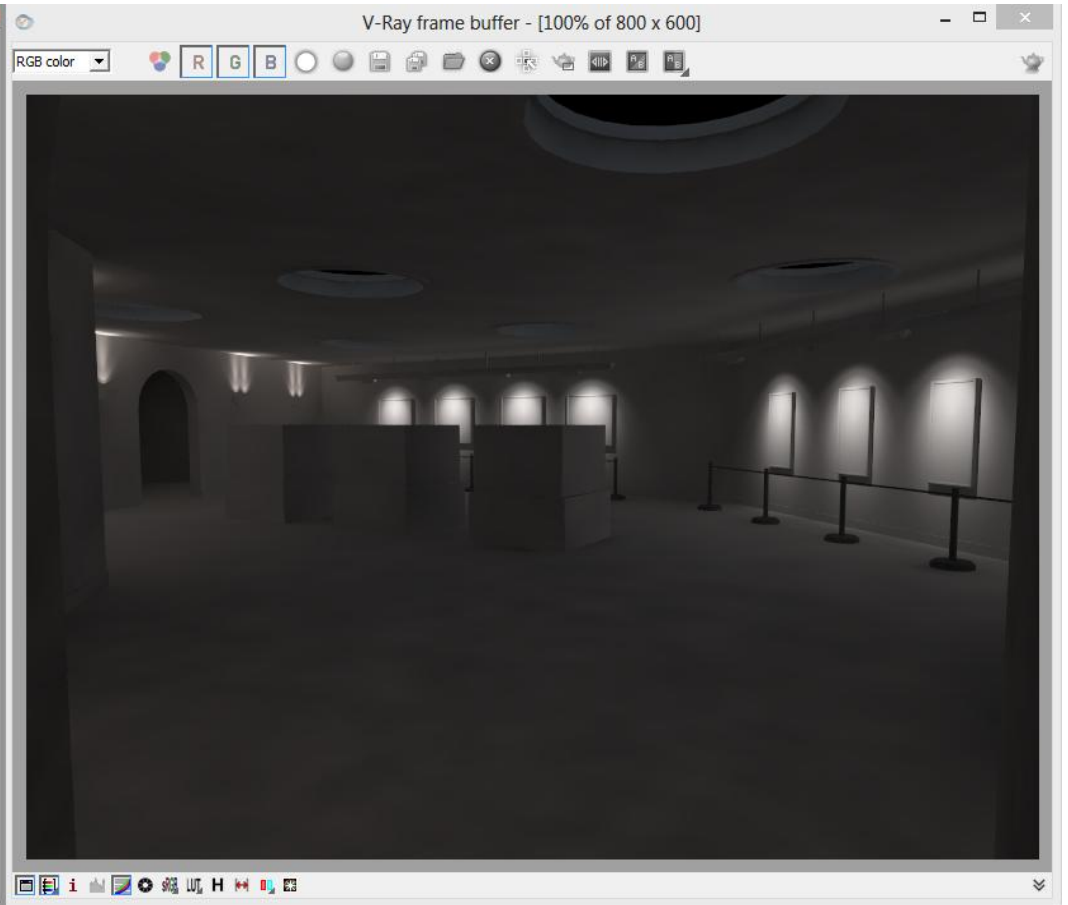
View transform

Load Clear

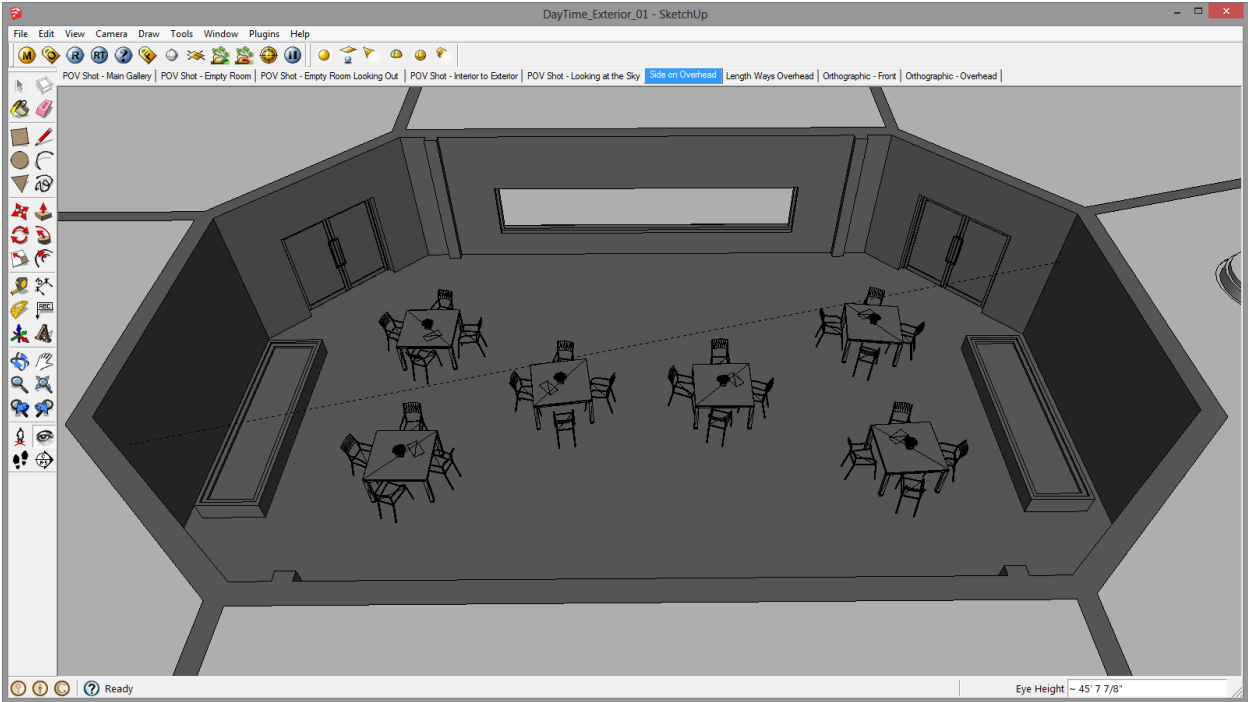
Rendering intent Perceptual

Black point compensation

Detailed description: This panel contains a color correction interface. At the top, there are three color selection buttons (red, green, blue) and a value of -0.00. Below this is a small graph showing a curve. Further down is a larger grid graph with axes from 0.00 to 1.0. The grid has a diagonal line and a red curve. Below the grid are several control sections: a 'Load' and 'Clear' button pair; a checked checkbox 'Convert to log space before applying LUT'; another 'Load' and 'Clear' button pair; three dropdown menus for 'Input colorspace', 'Display device', and 'View transform'; a third 'Load' and 'Clear' button pair; a dropdown menu for 'Rendering intent' set to 'Perceptual'; and a checkbox for 'Black point compensation'.



# Chapter 4, Lighting an Exterior Daylight Scene



**Camera**

**Camera type**

Type:  Height:   
Override FOV:   Dist:   
Auto-fit:  Curve:

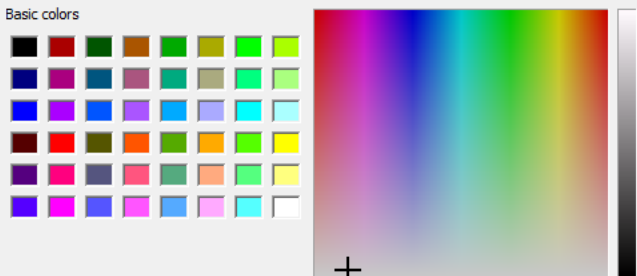
**Physical camera**

On:

Override focal length:   F-number:   
Specify film width:   Film speed(ISO):   
Type:  Distortion:   
Shutter speed:  Zoom factor:   
Shutter angle:  Lens shift:   
Shutter offset:  Vignetting:   
Latency:  Focus:   
White balance:

**Select Color**

Basic colors



Custom colors

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hue: <input type="text" value="320"/>	Red: <input type="text" value="255"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sat: <input type="text" value="6"/>	Green: <input type="text" value="249"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Val: <input type="text" value="255"/>	Blue: <input type="text" value="253"/>

Add to Custom Colors

OK Cancel

**Click to edit the cameras white balance**

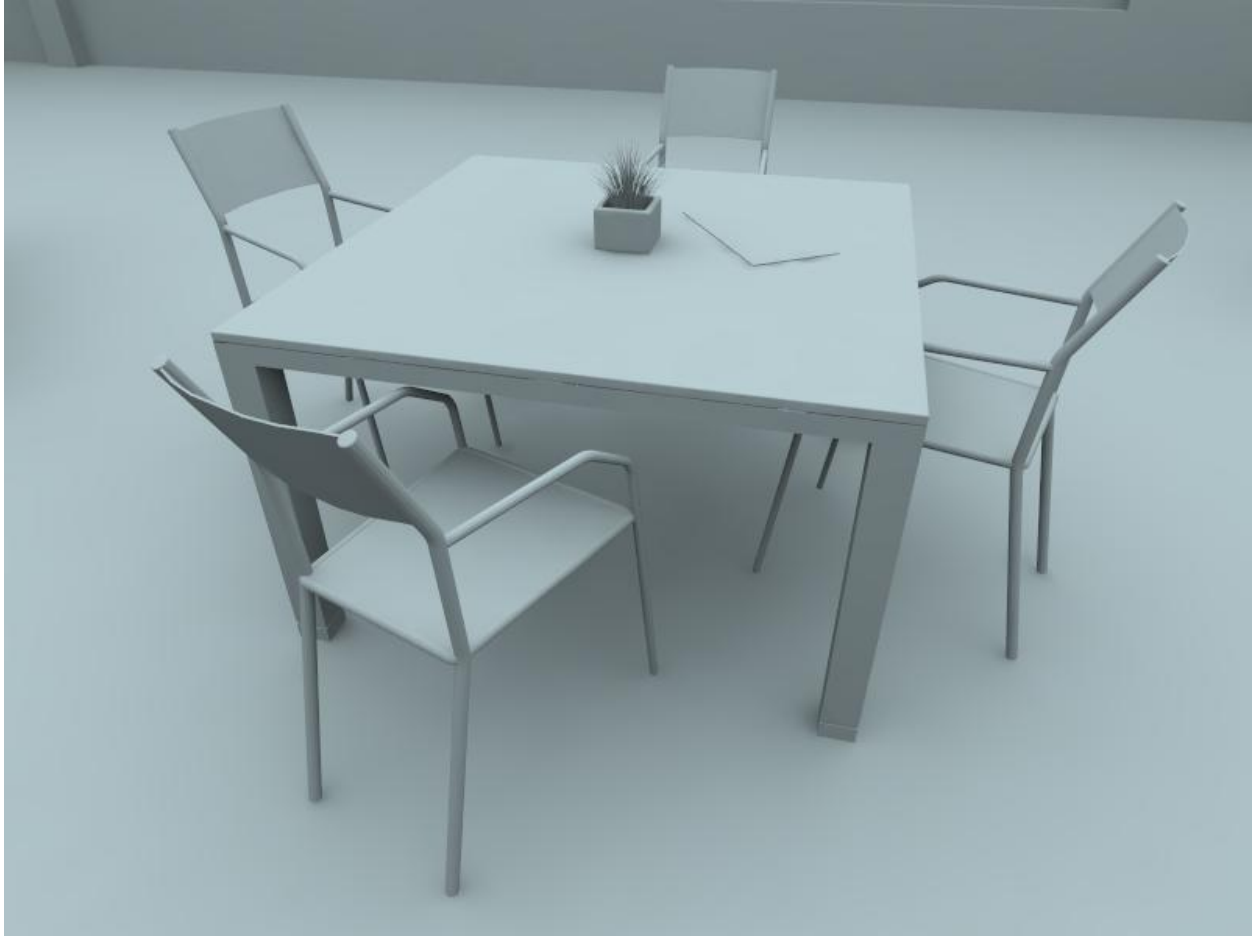




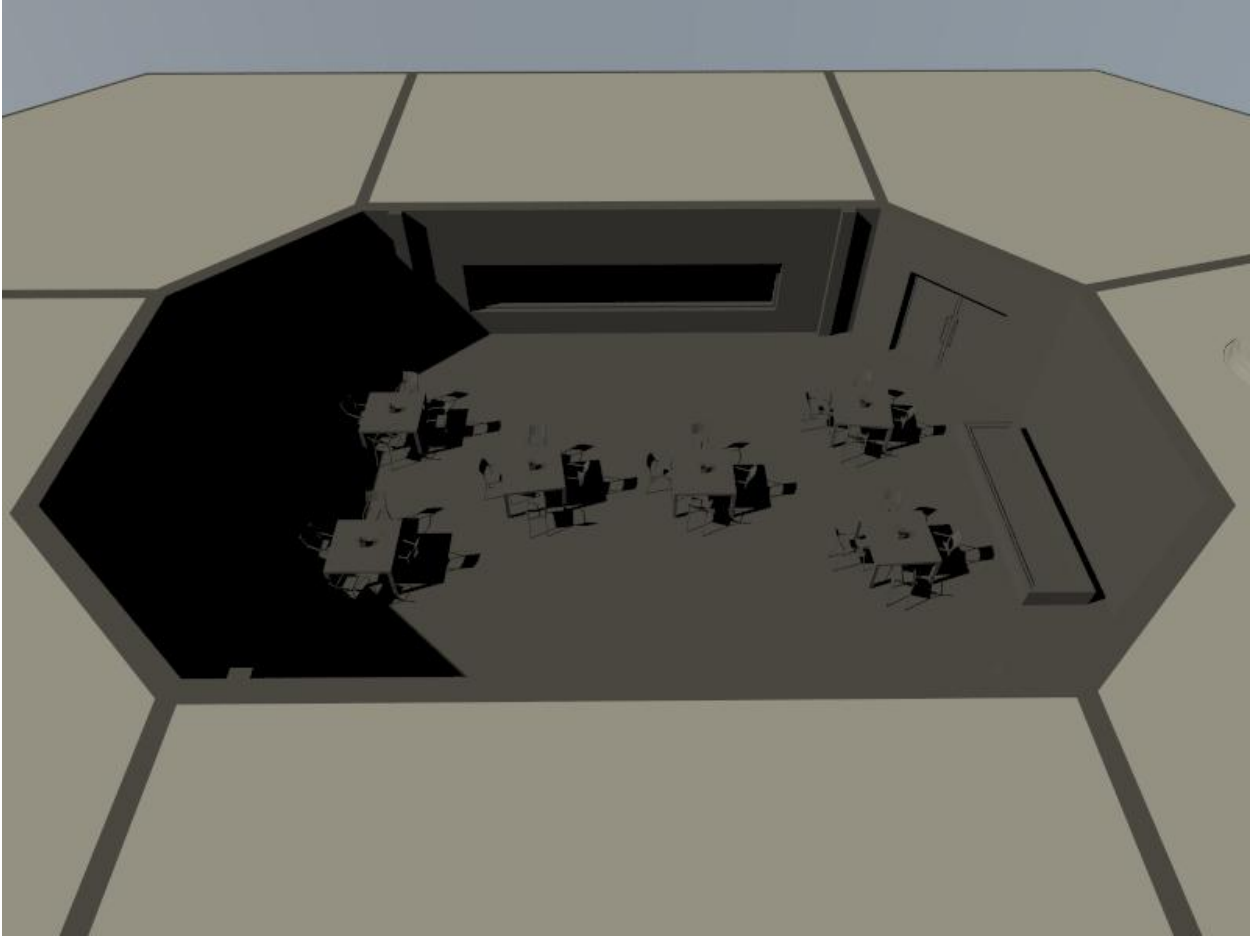


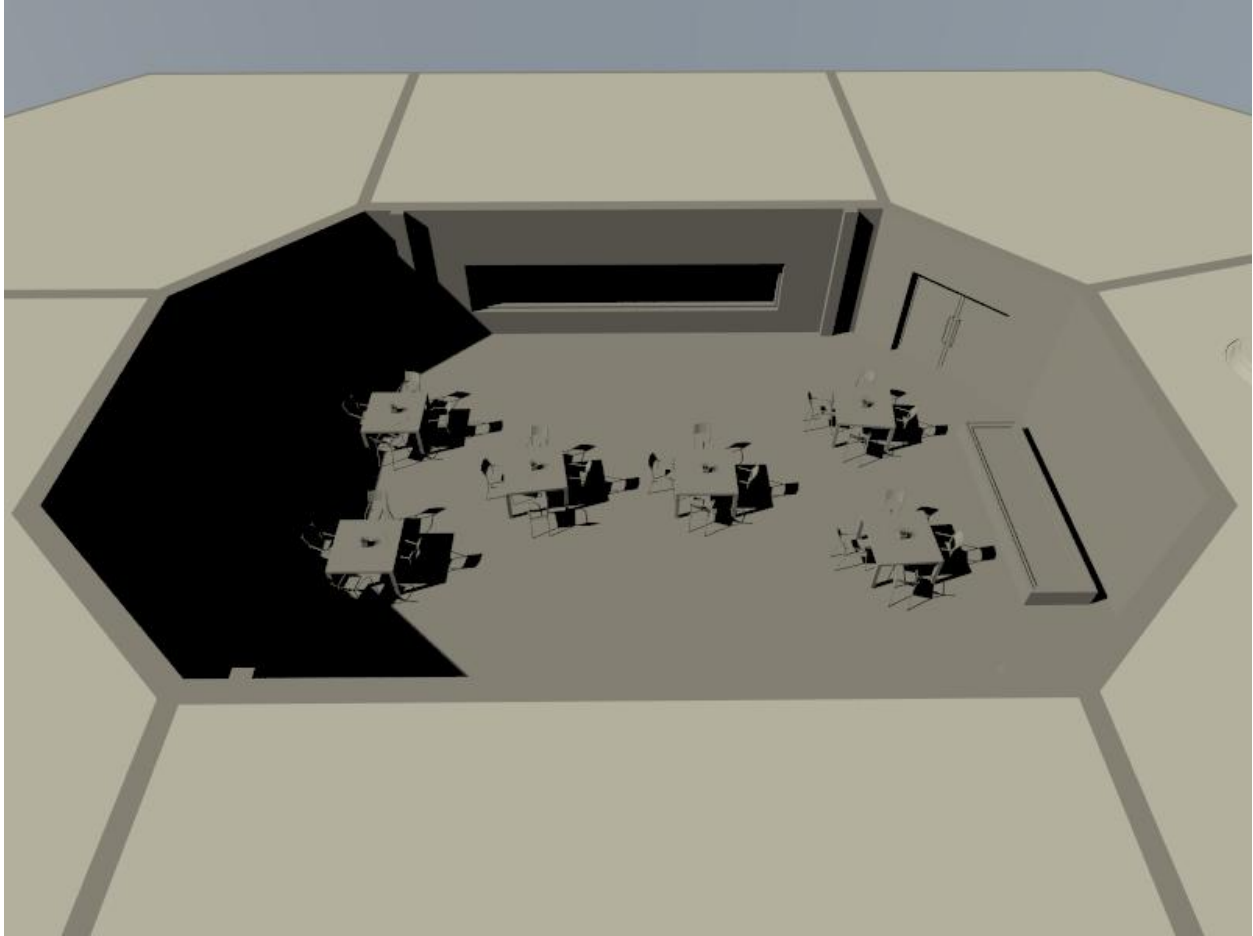




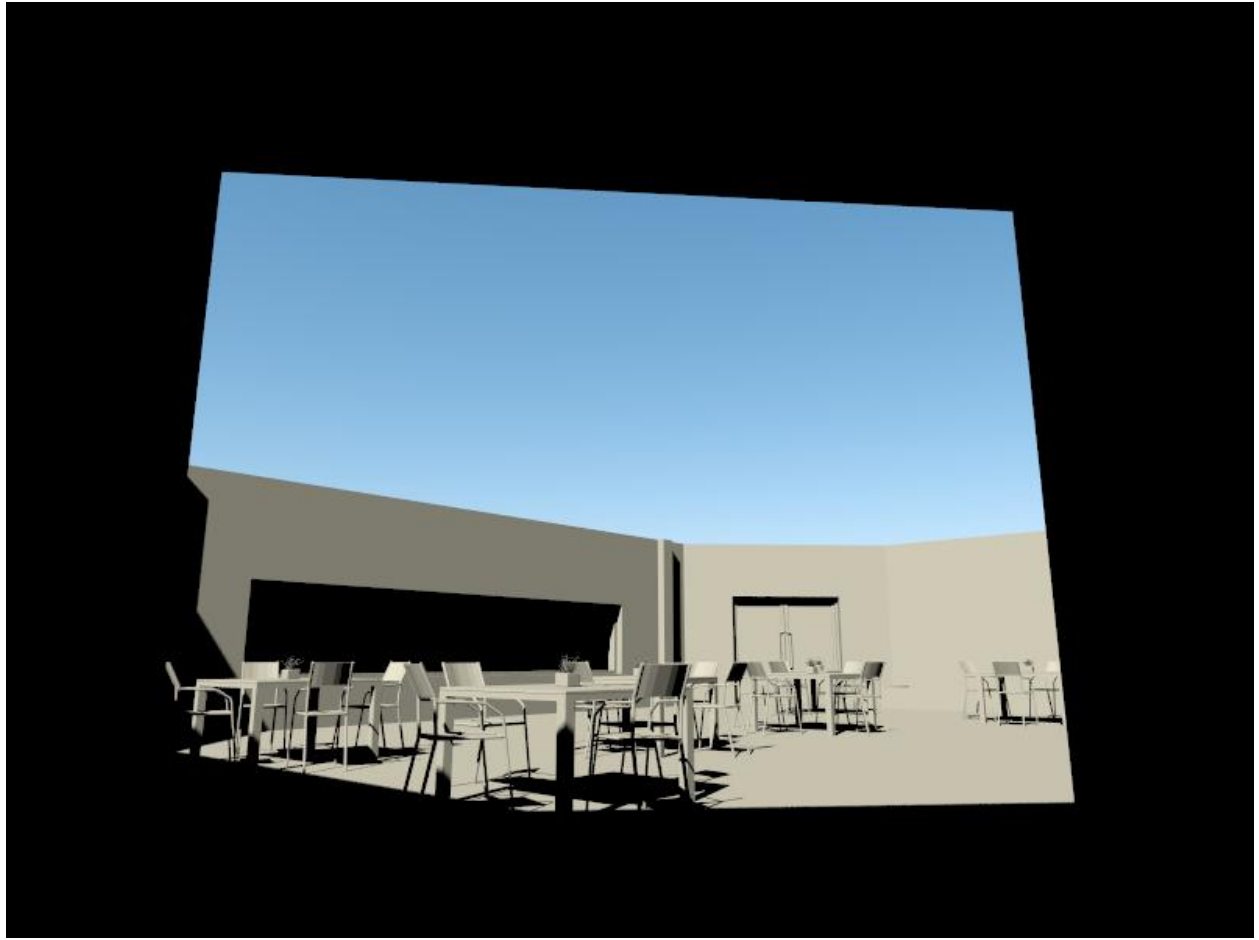


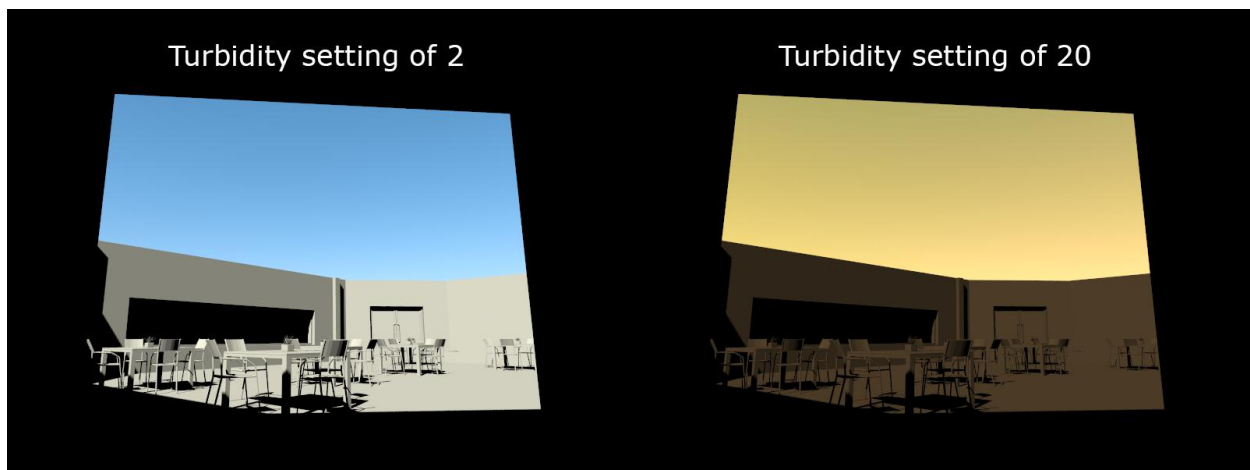
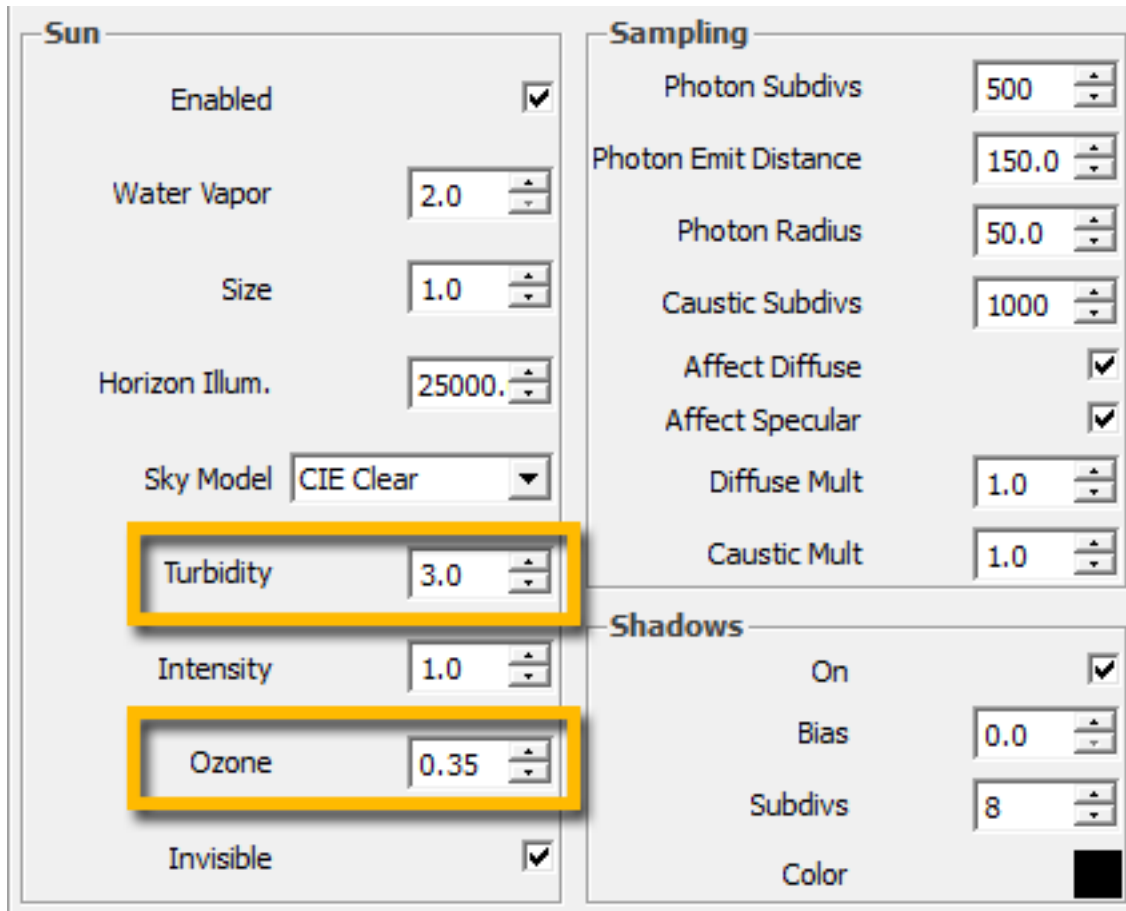




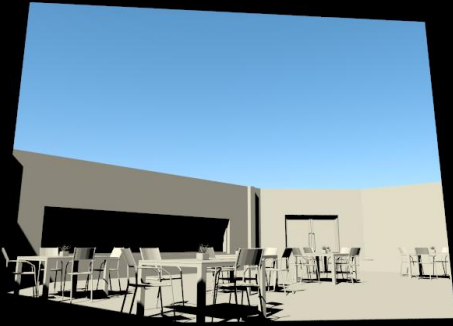


Color mapping			
Type	Linear Multiply		Sub-pixel mapping <input type="checkbox"/>
Dark multiplier	1.0		Affect background <input checked="" type="checkbox"/>
Bright multiplier	1.0	Don't affect colors (adaptation only)	<input type="checkbox"/>
Gamma	2.2		Linear workflow <input checked="" type="checkbox"/>
Input gamma	2.2		Correct LDR textures <input type="checkbox"/>
Clamp output	<input type="checkbox"/>		Correct RGB colors <input type="checkbox"/>
Clamp level	1.0		

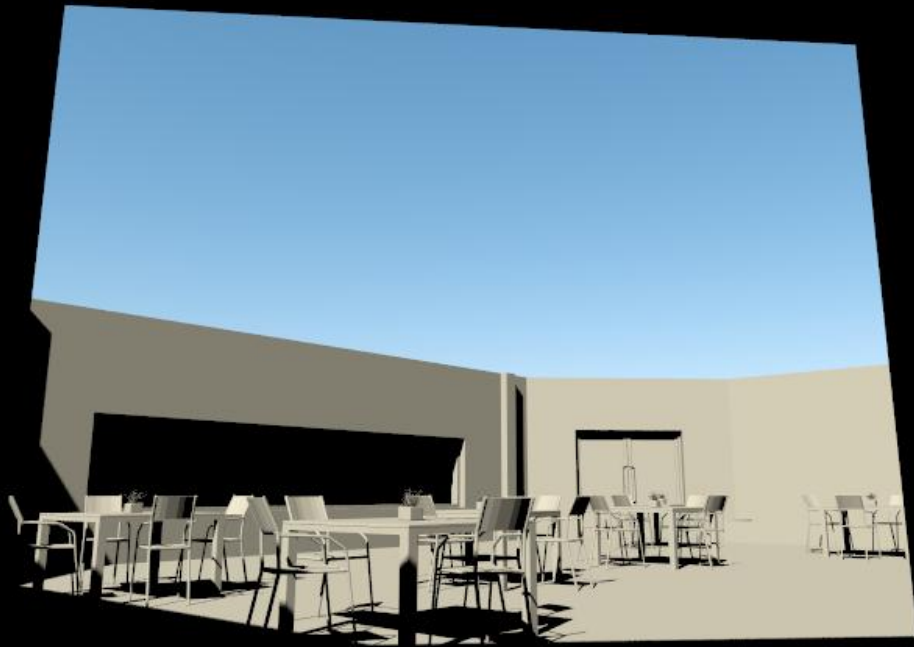
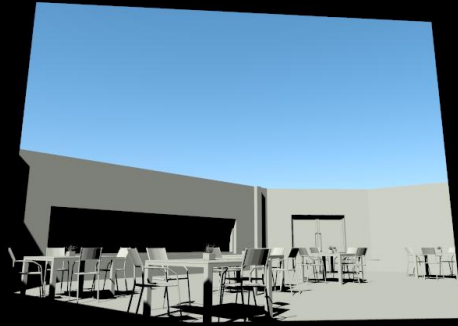


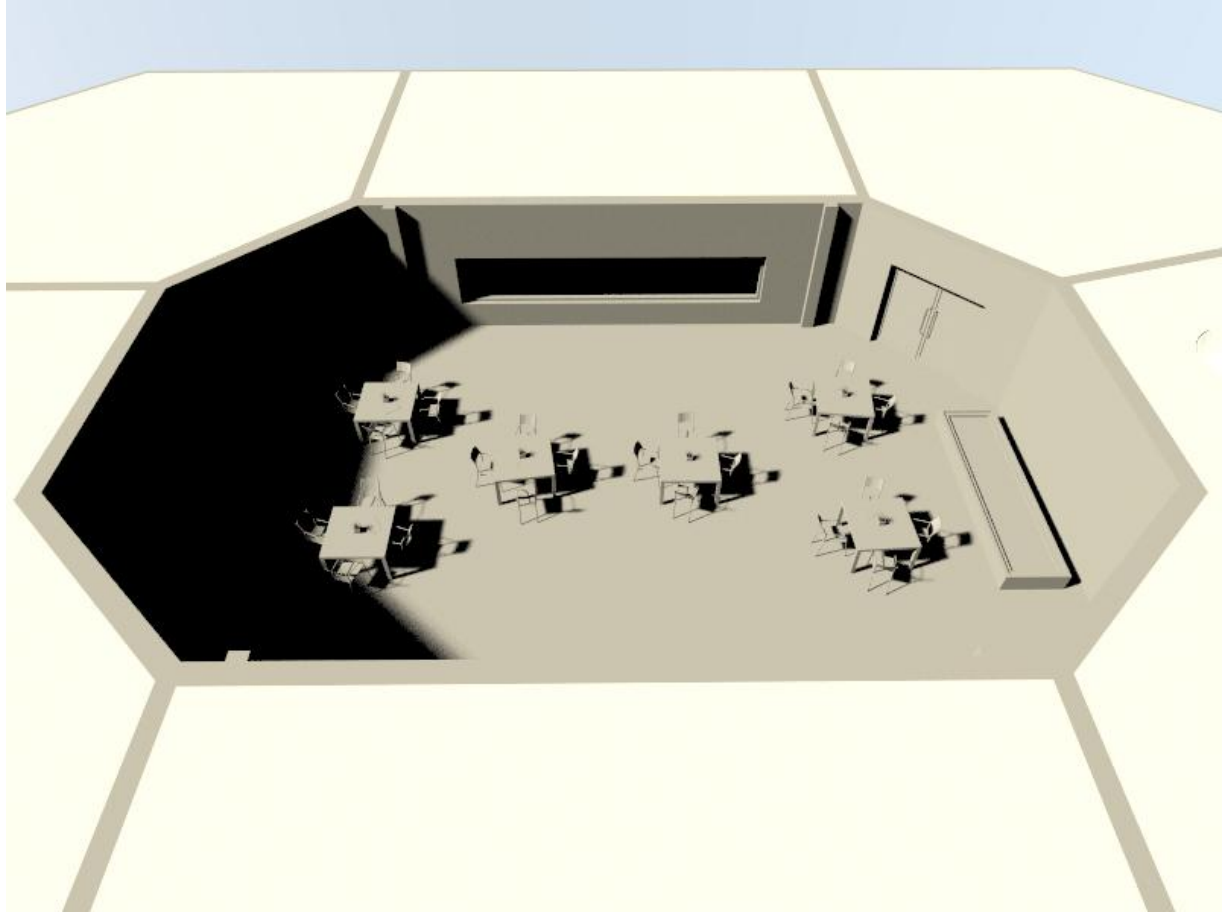


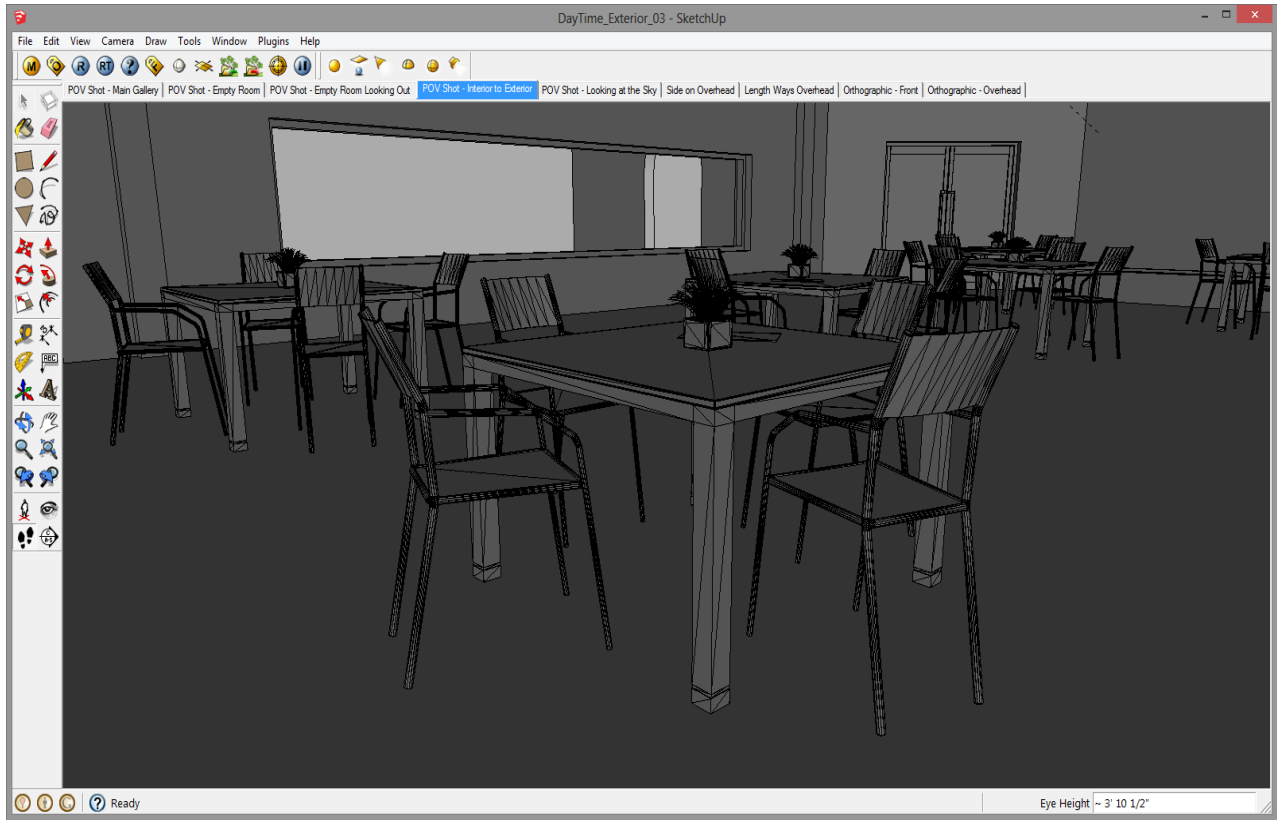
Ozone setting of 0



Ozone setting of 1

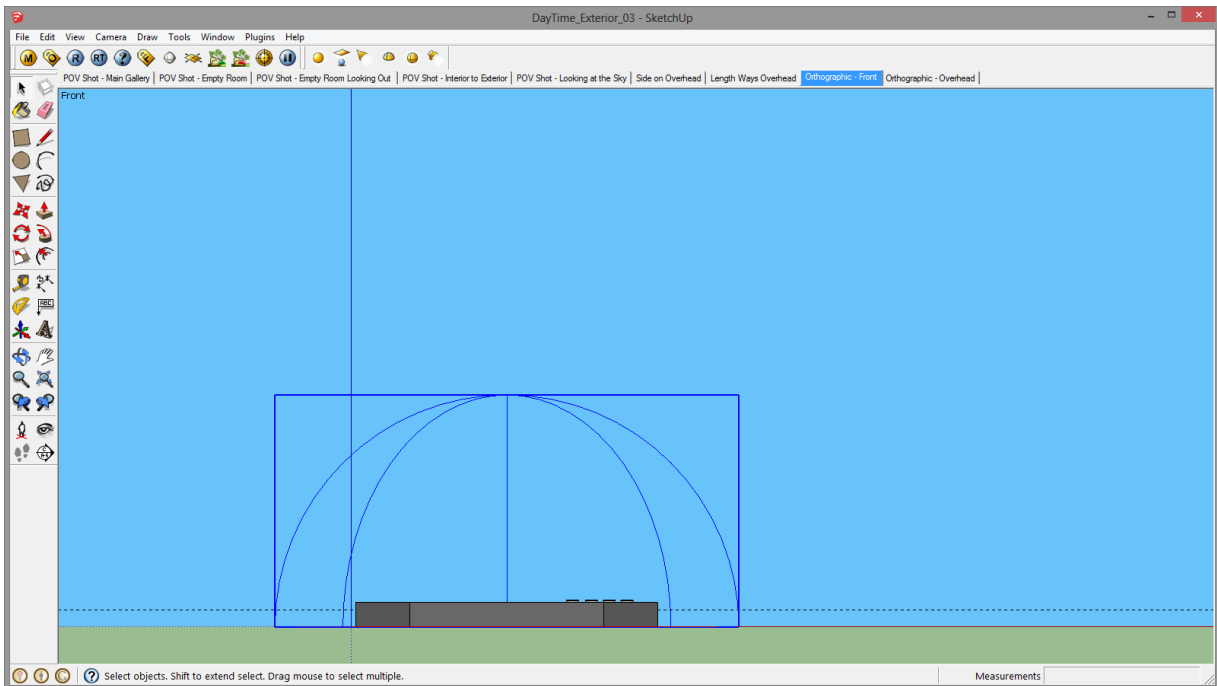


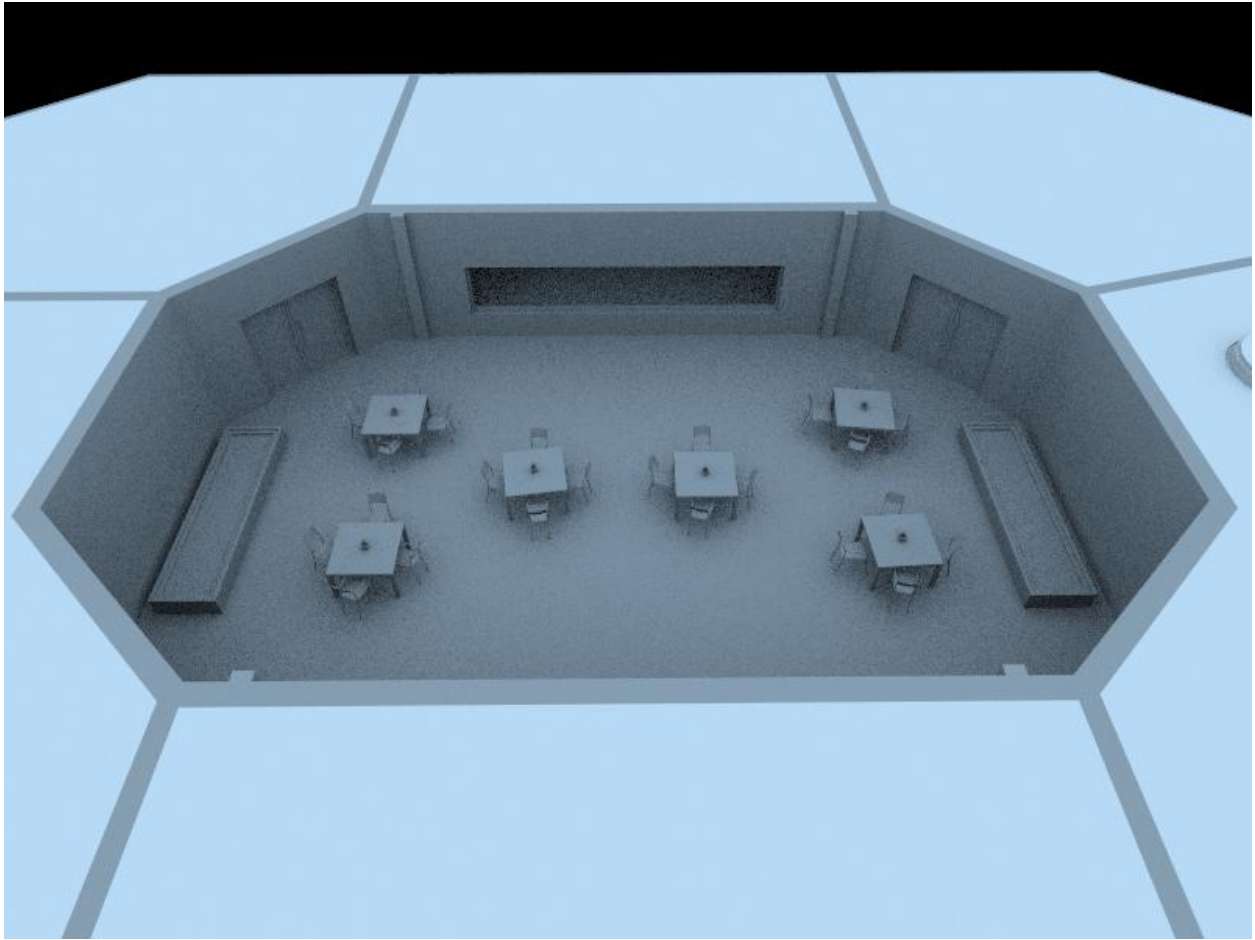


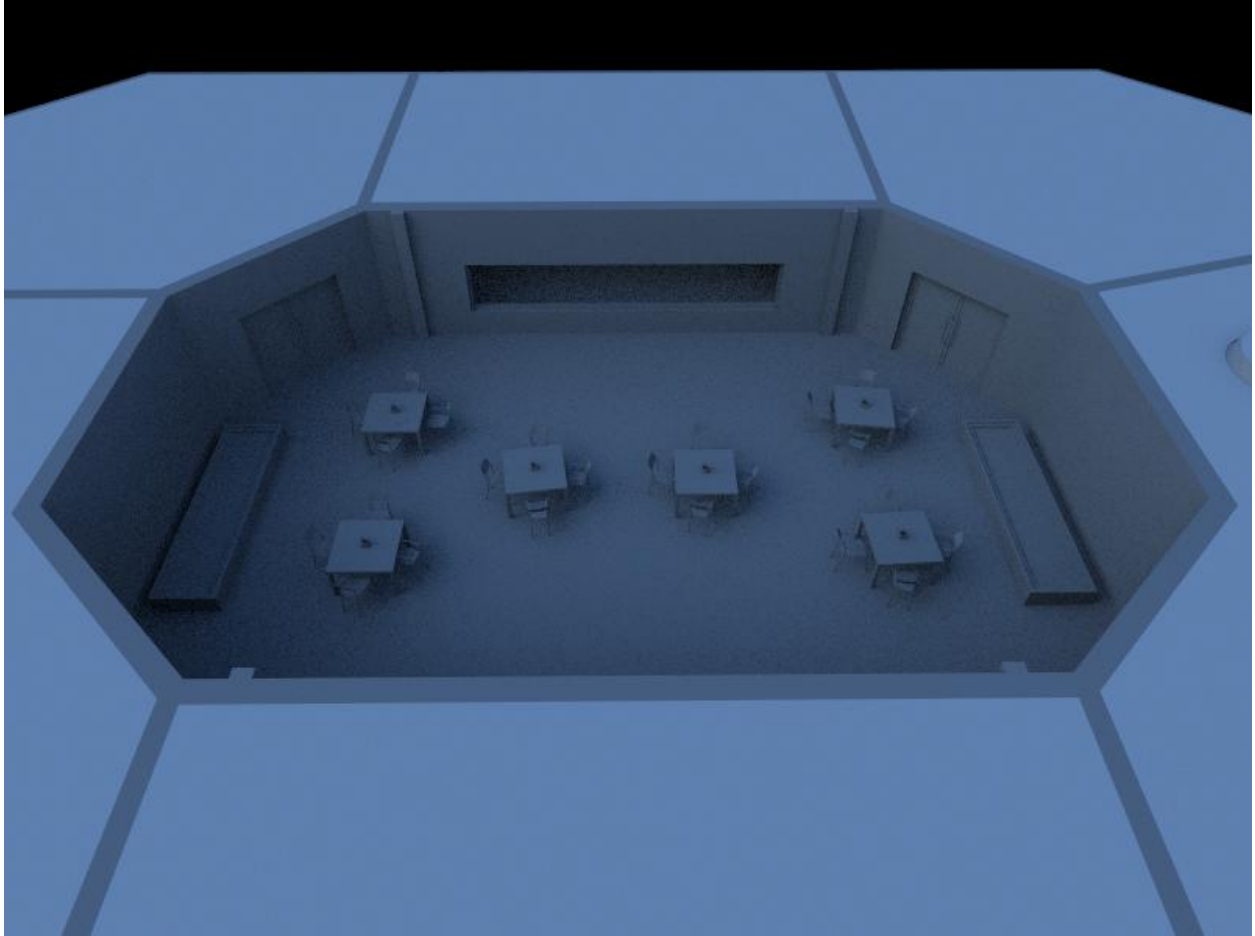


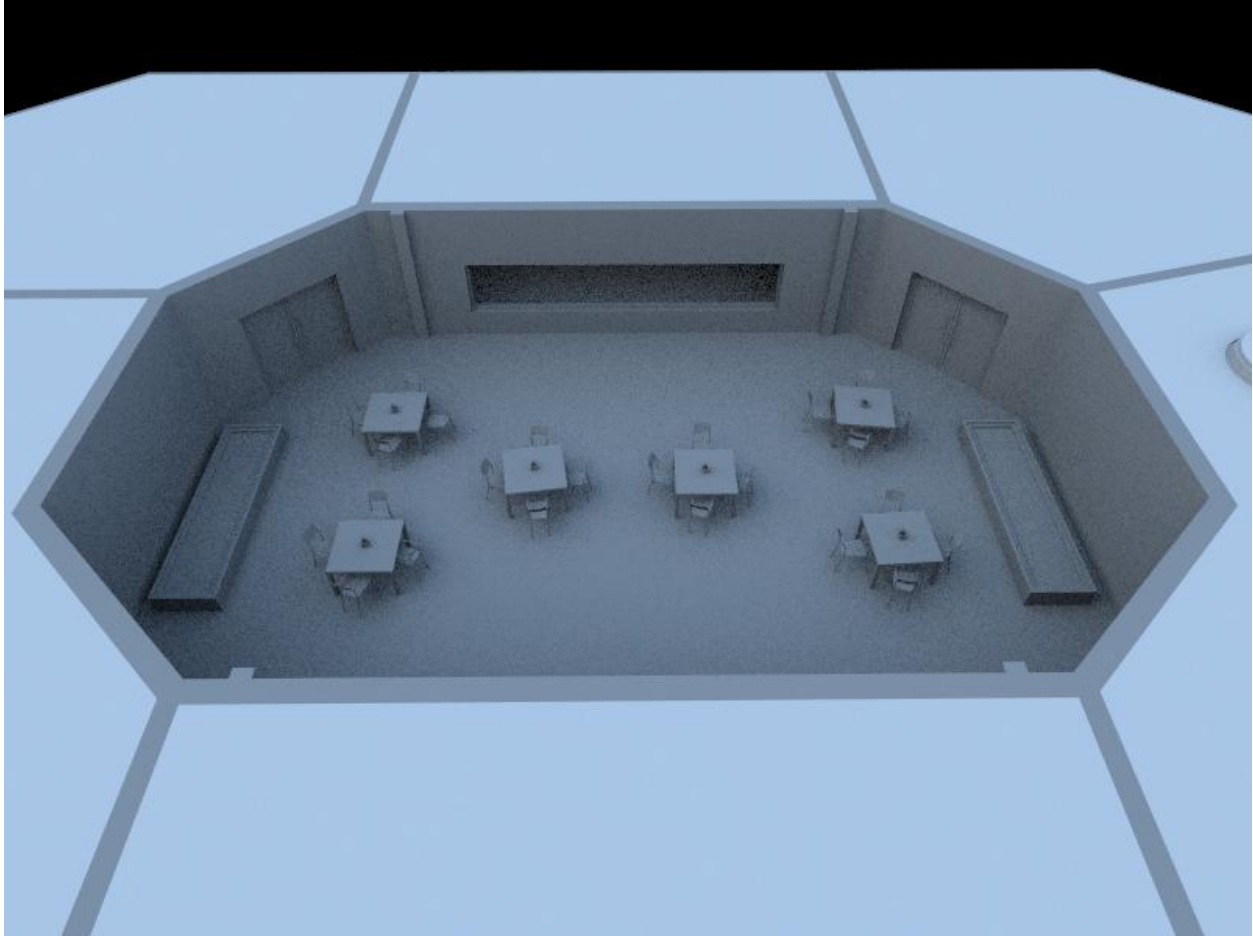






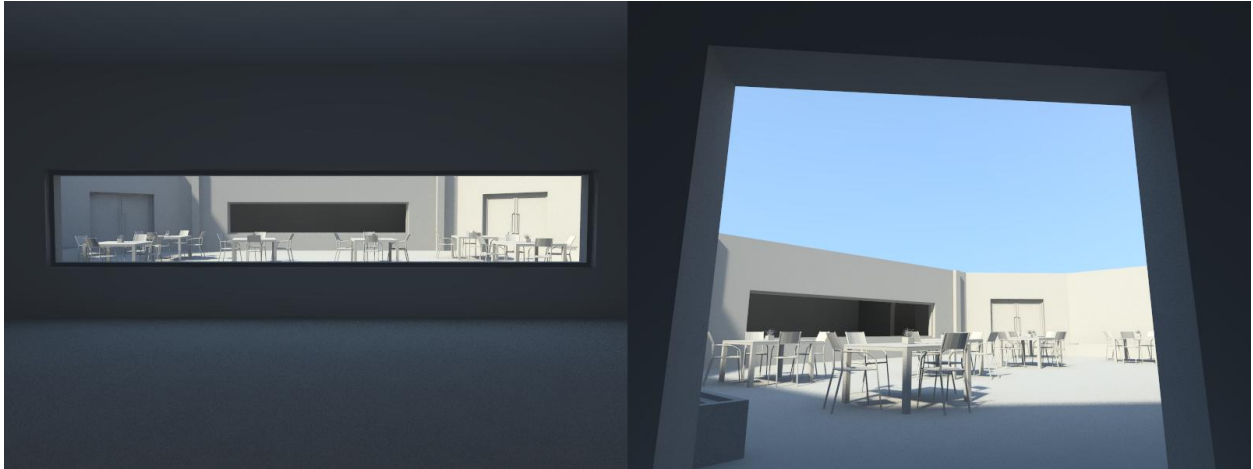


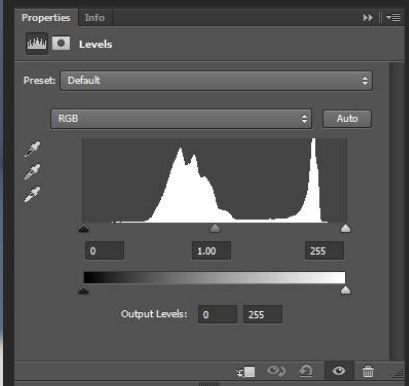




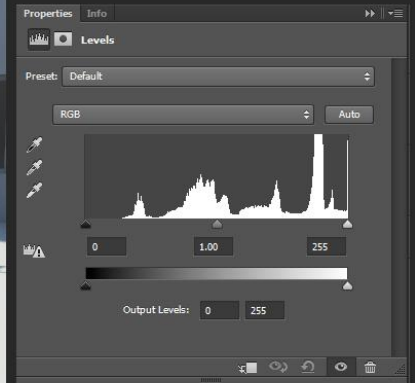
Global switches

Geometry	Materials
Displacement <input checked="" type="checkbox"/>	Reflection/refraction <input checked="" type="checkbox"/>
Force back face culling <input type="checkbox"/>	Max depth <input type="checkbox"/> 5
<b>Lighting</b>	Max transp levels 50
Lights <input checked="" type="checkbox"/>	Transp cutoff 0.001
Hidden lights <input type="checkbox"/>	Maps <input checked="" type="checkbox"/>
<b>Default lights</b> <input checked="" type="checkbox"/>	Filter maps <input checked="" type="checkbox"/>
Shadows <input checked="" type="checkbox"/>	Filter maps for GI <input type="checkbox"/>
Show GI only <input type="checkbox"/>	

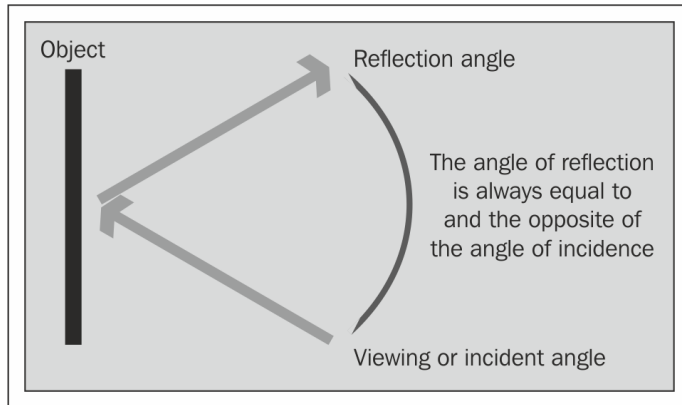




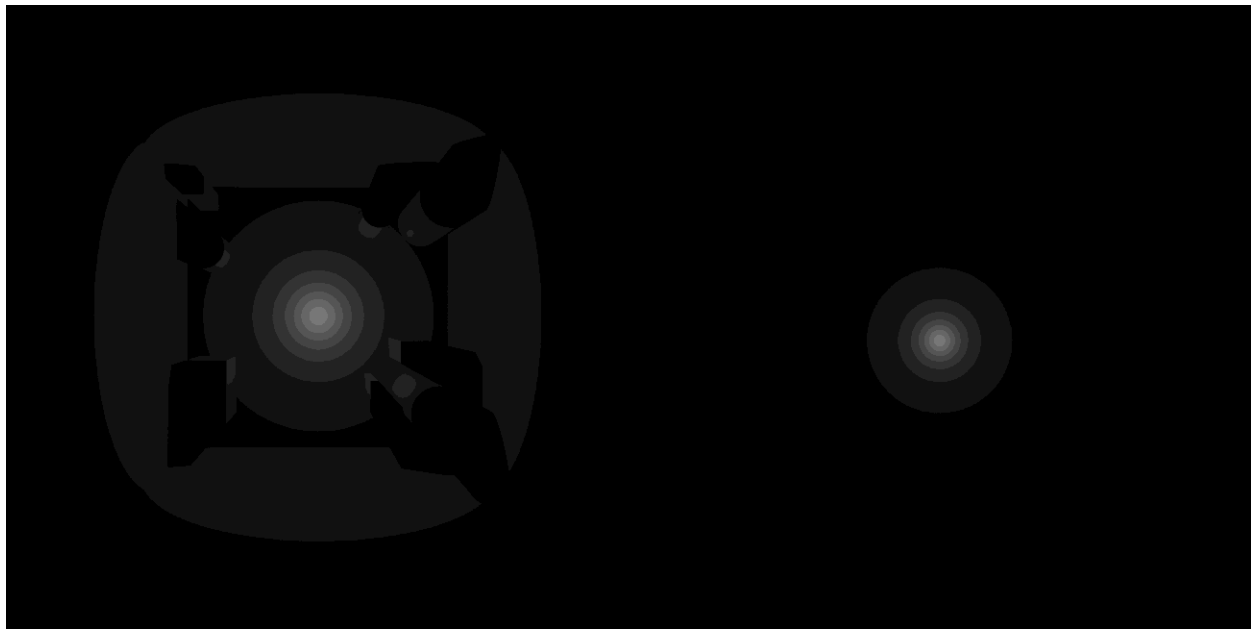
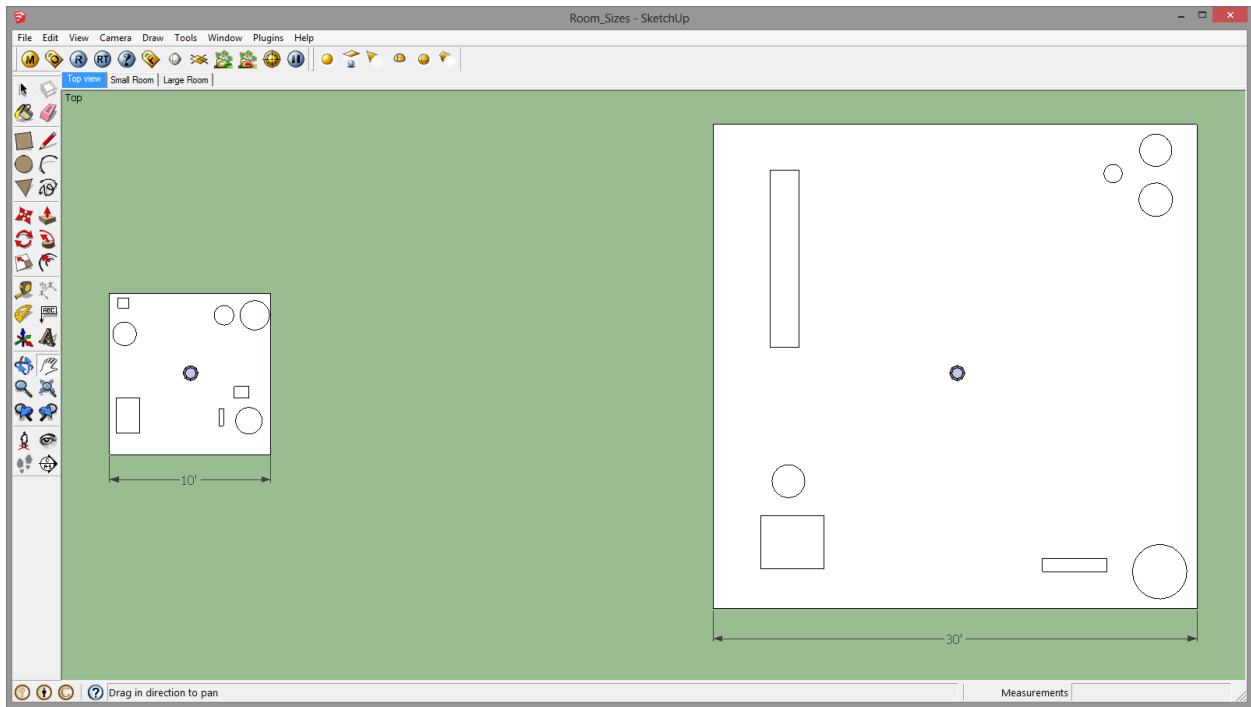


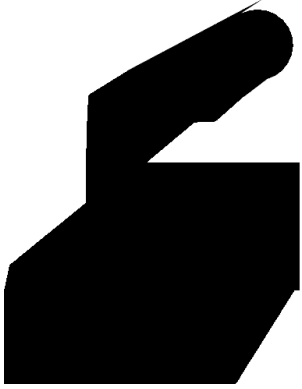
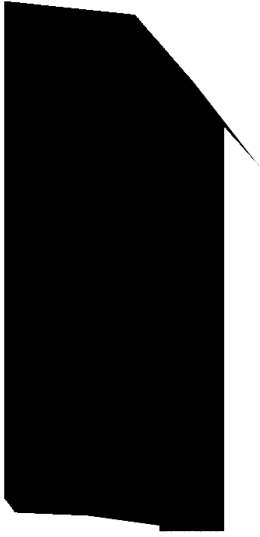


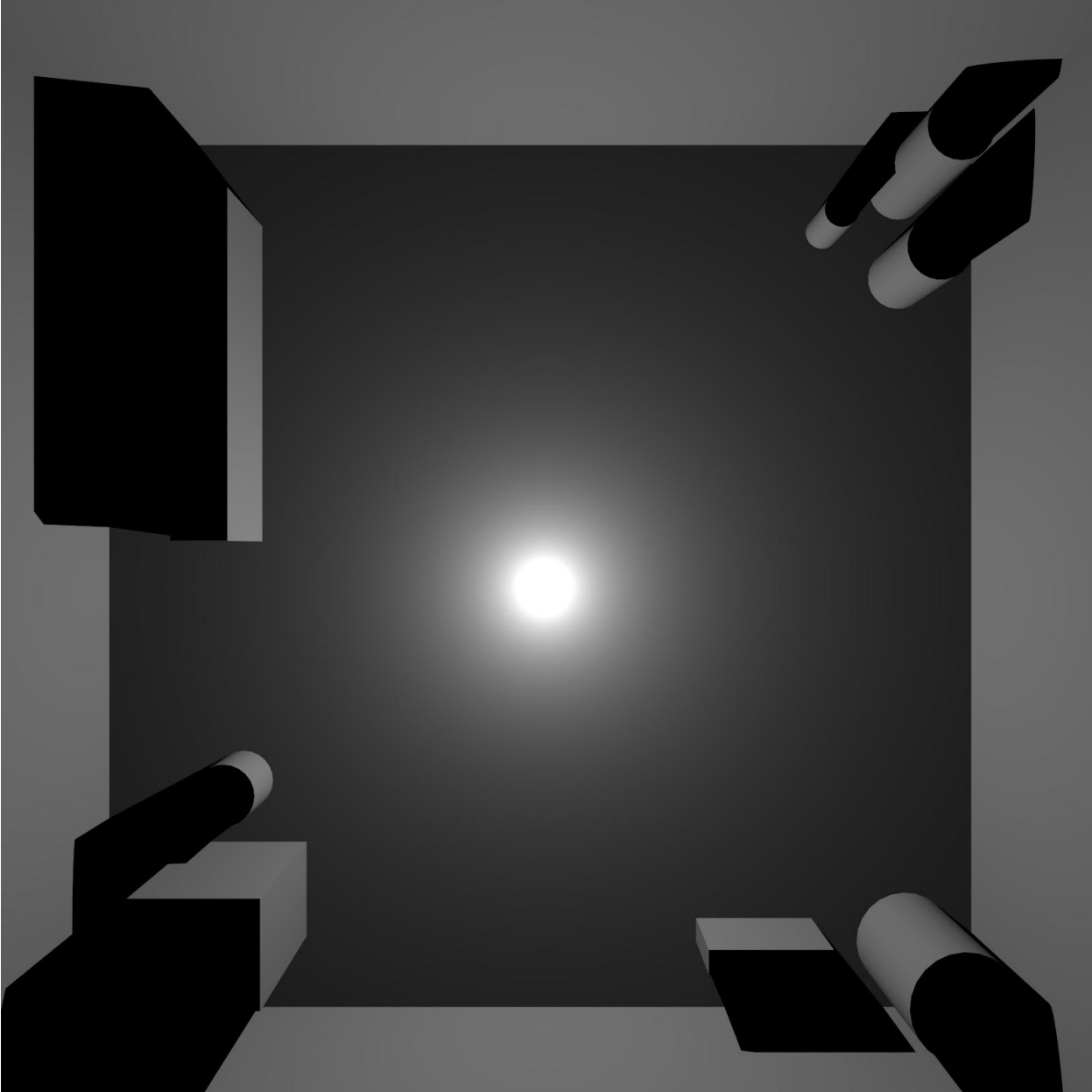
## Chapter 5, Understanding the Principles of Light Behavior

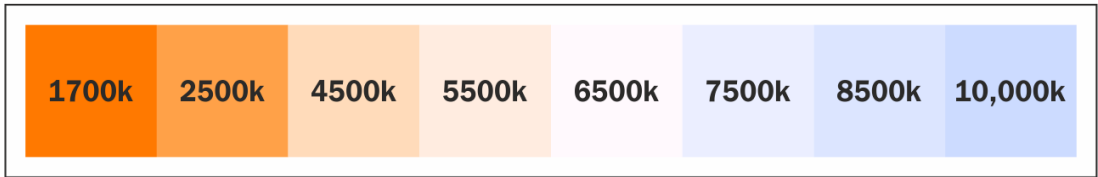
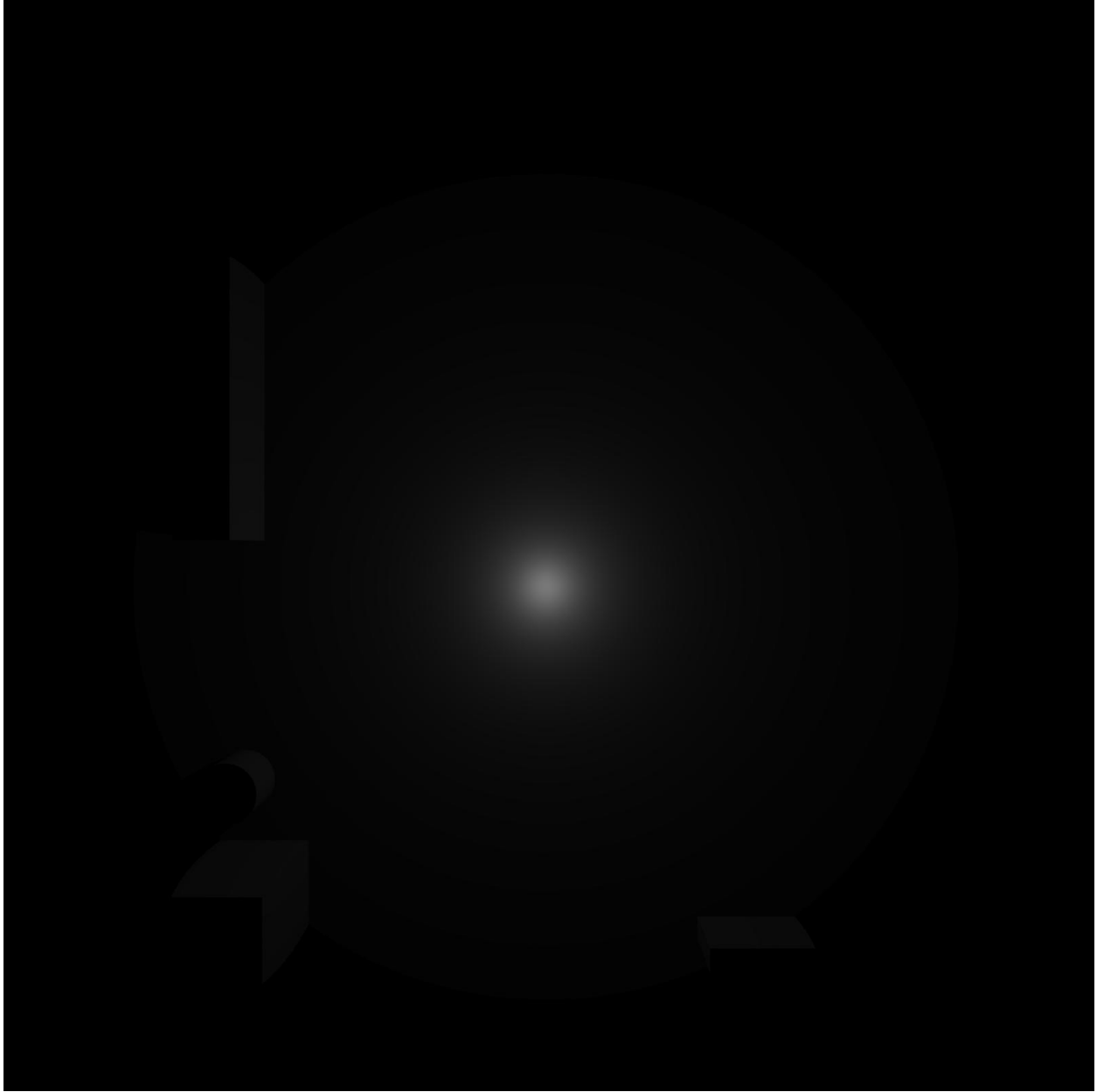


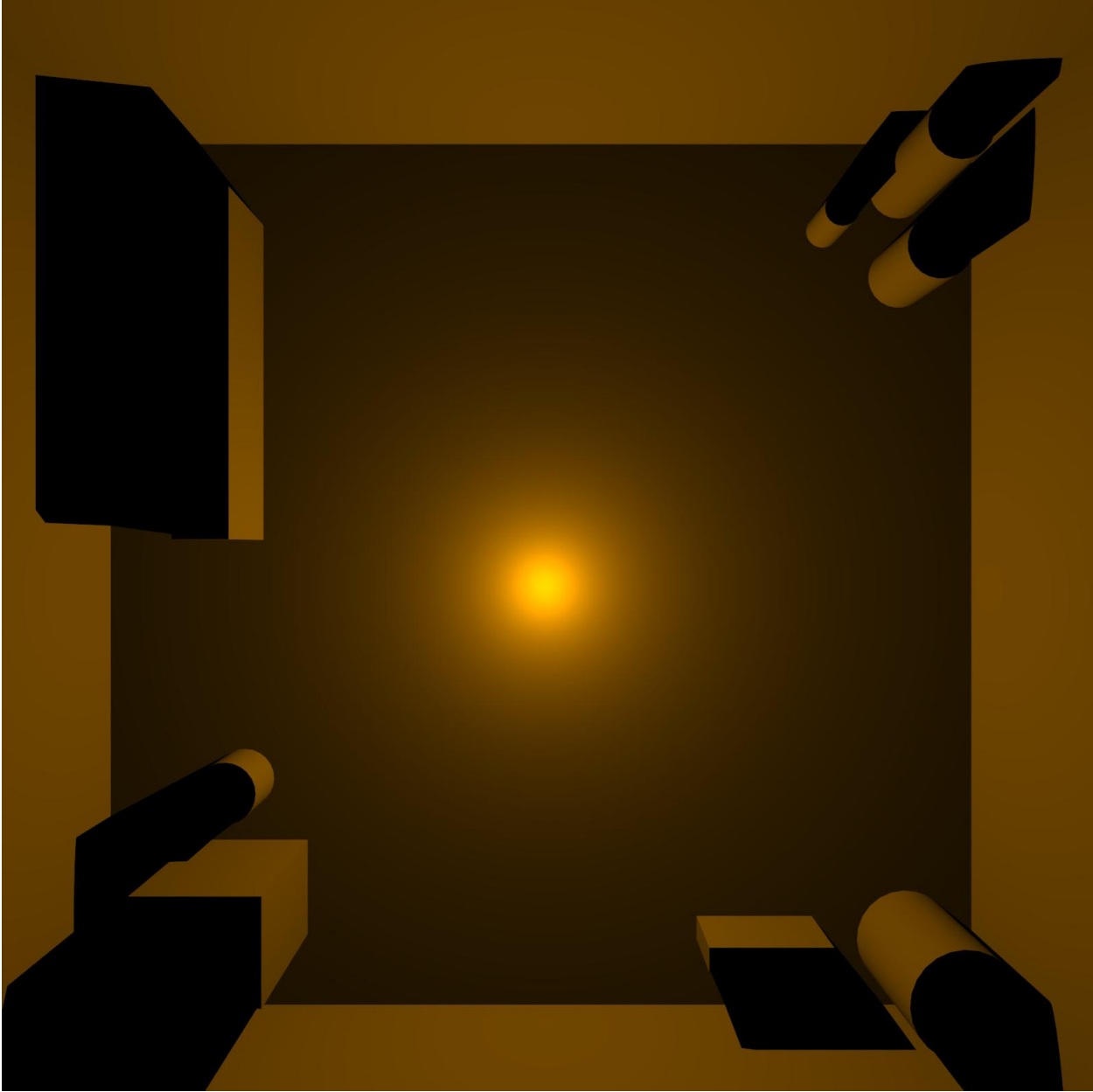


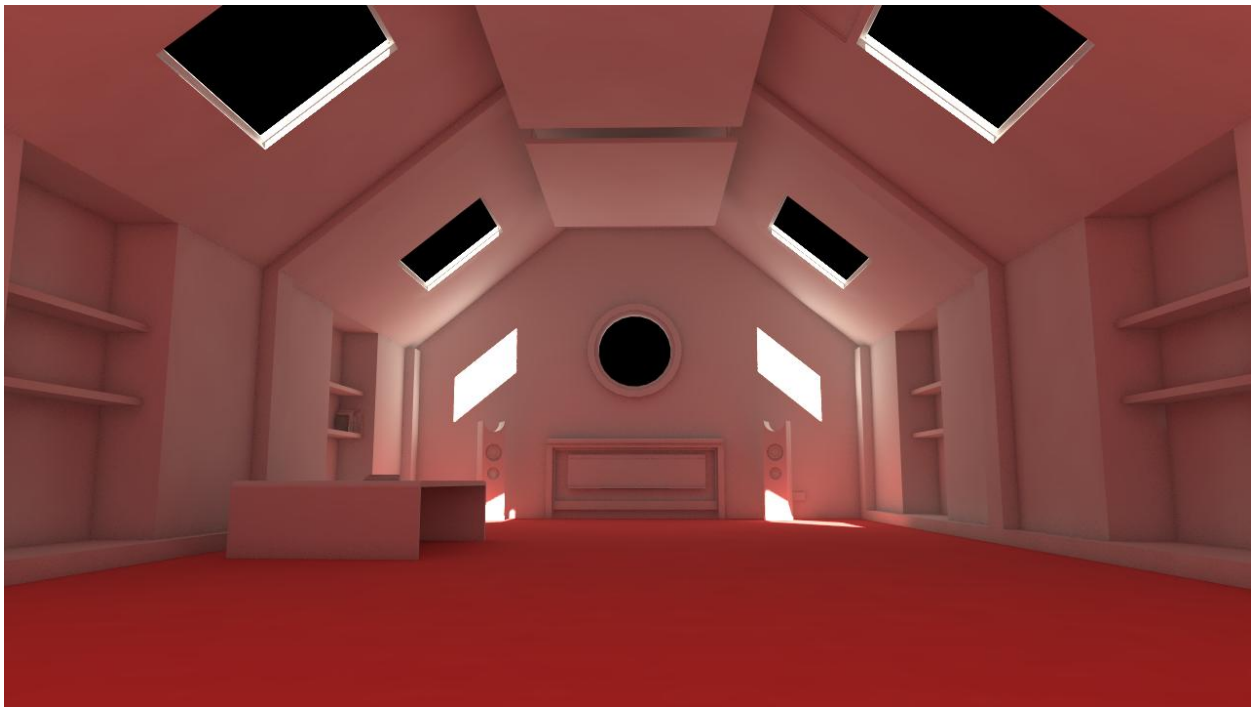
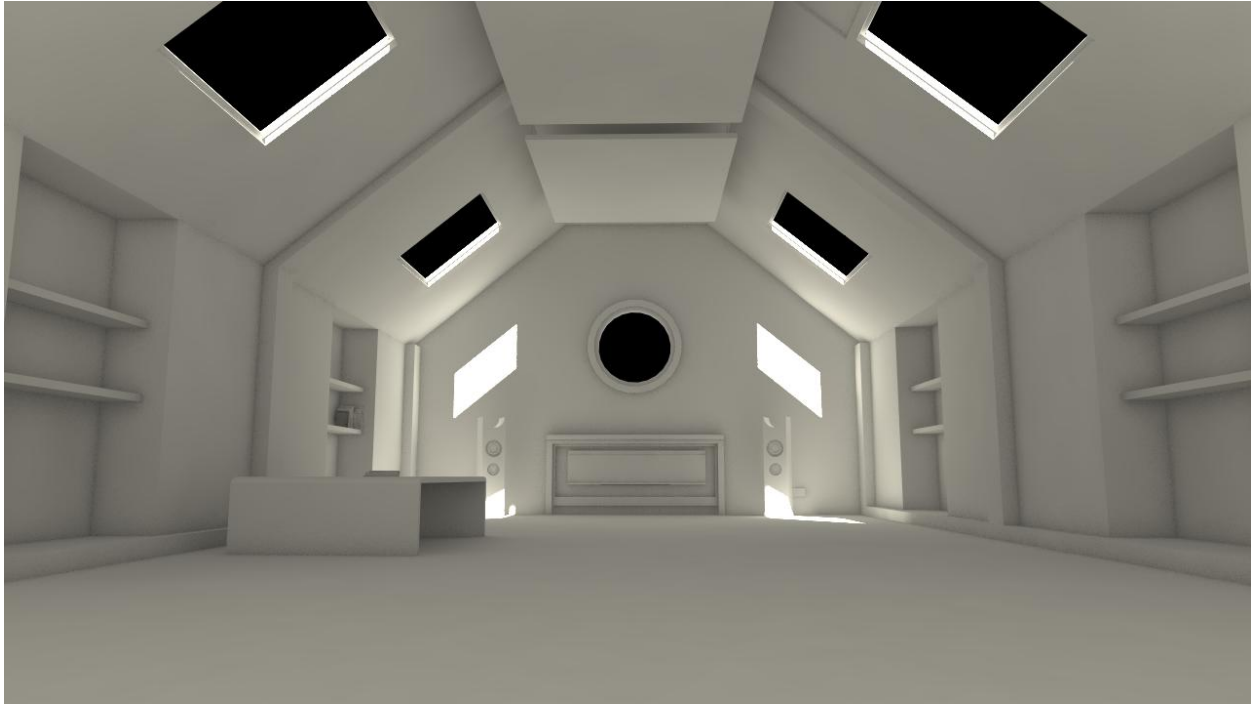


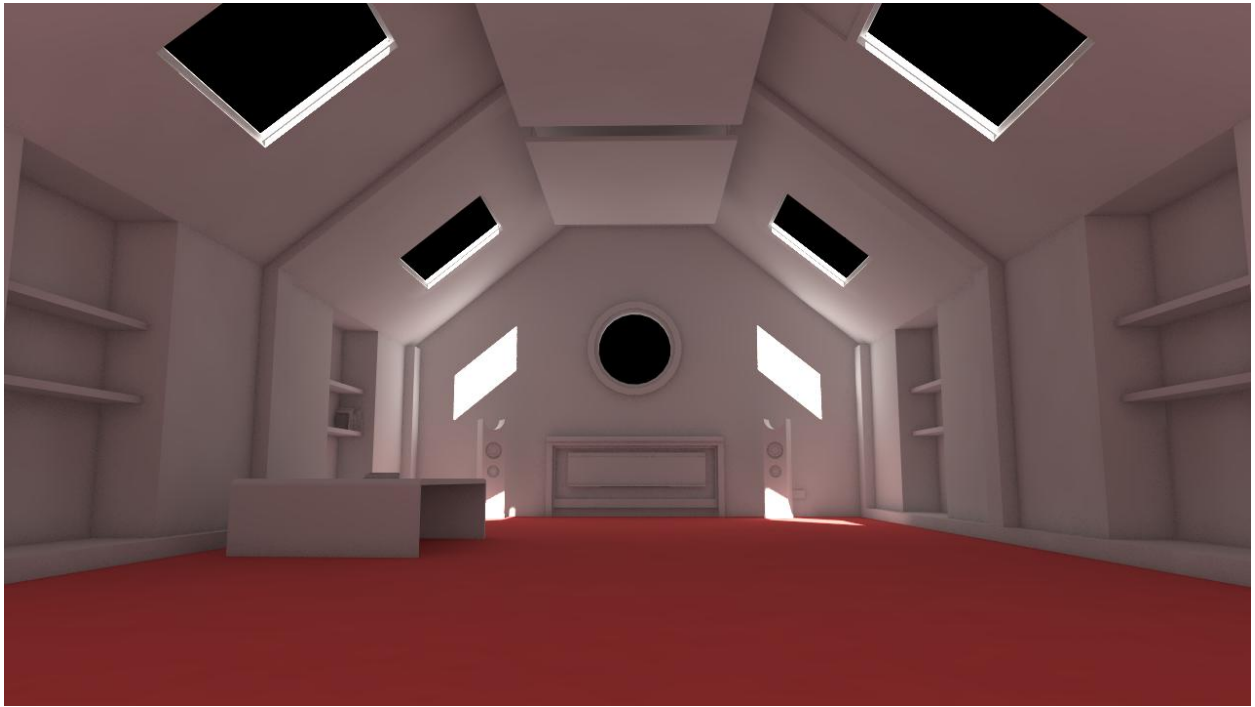
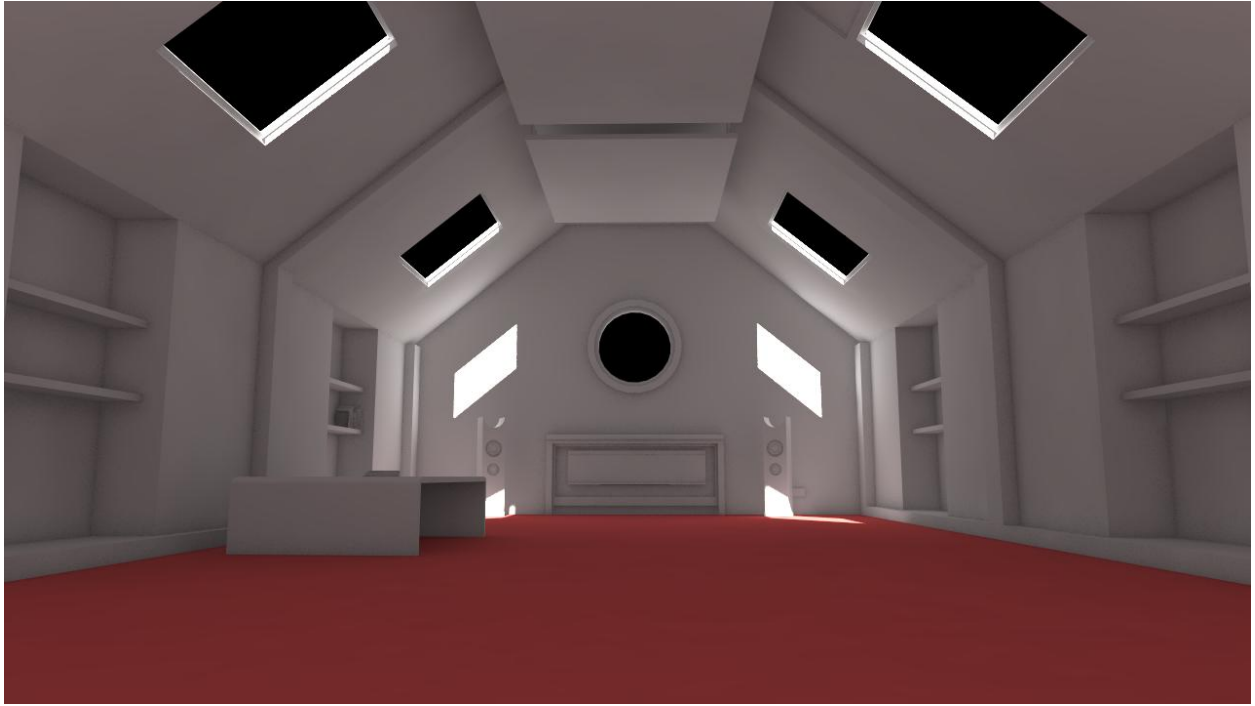


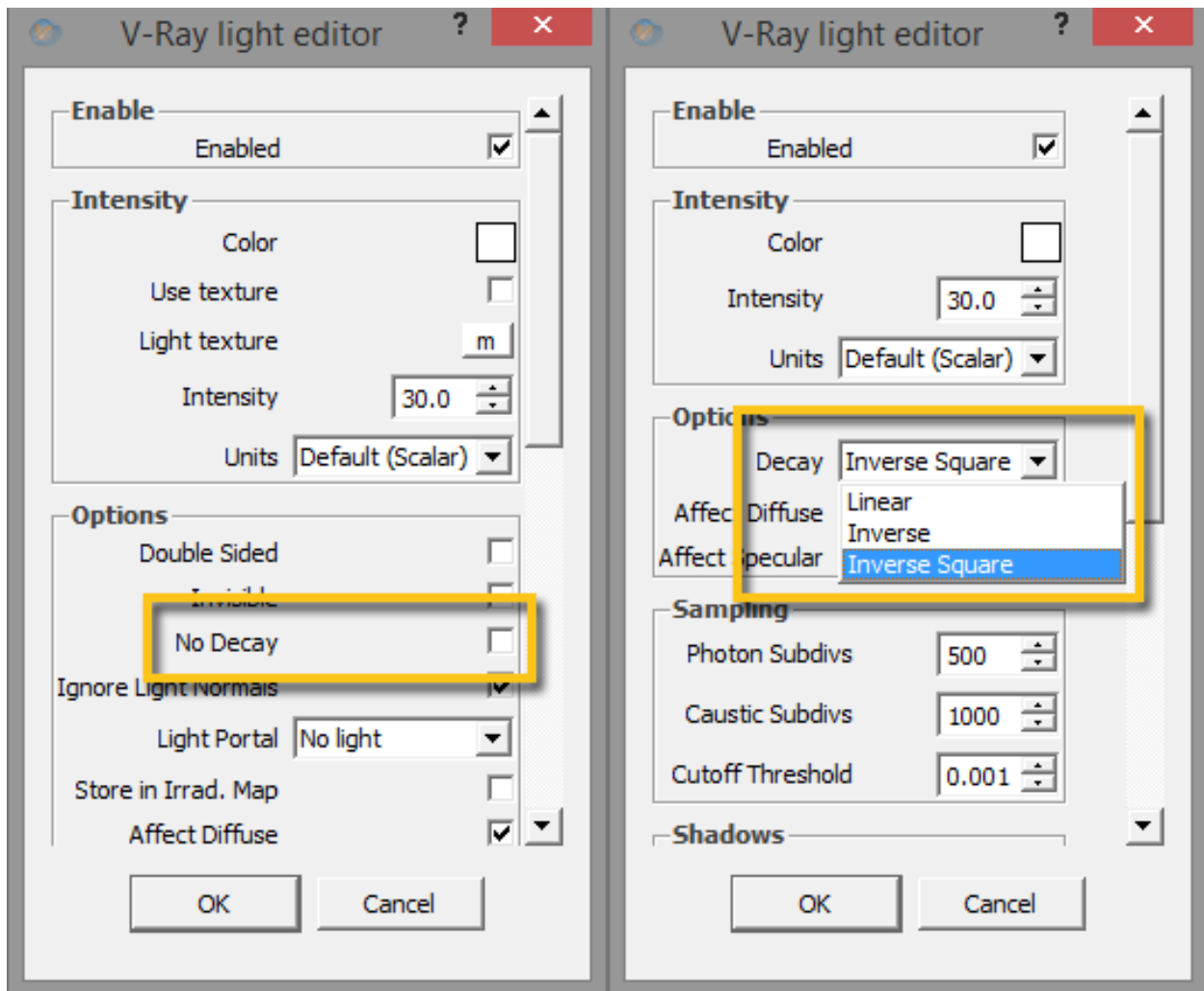






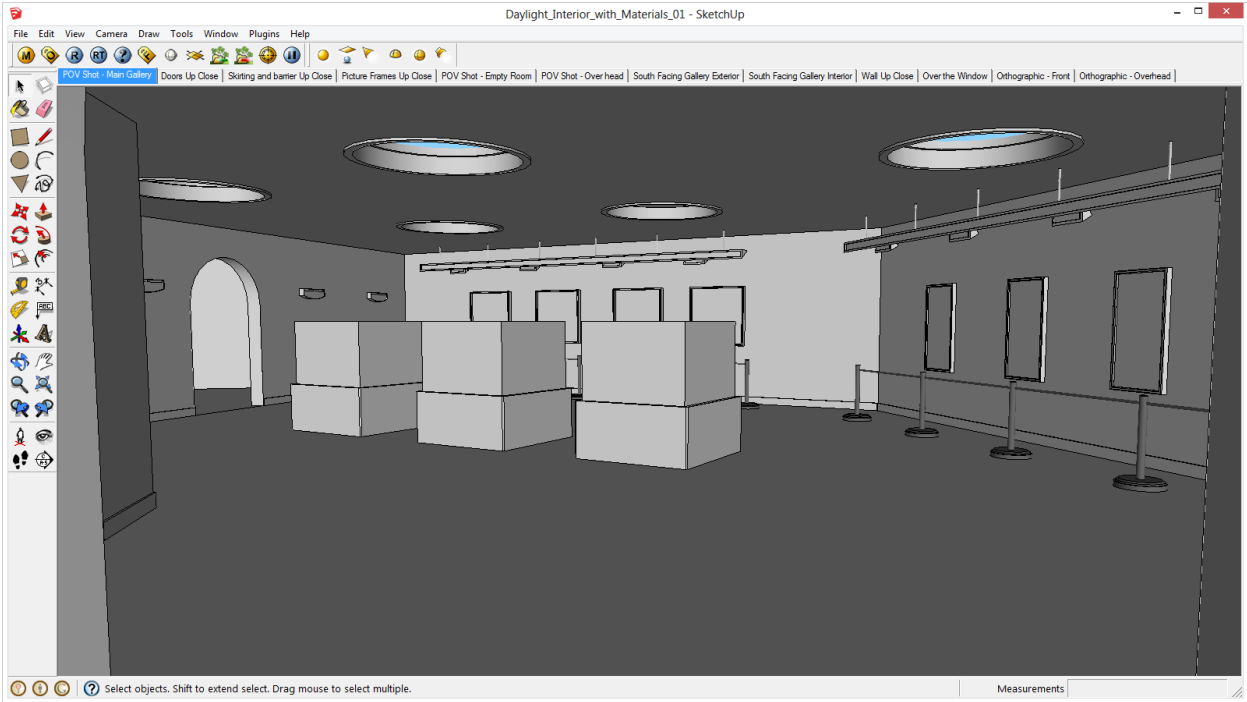


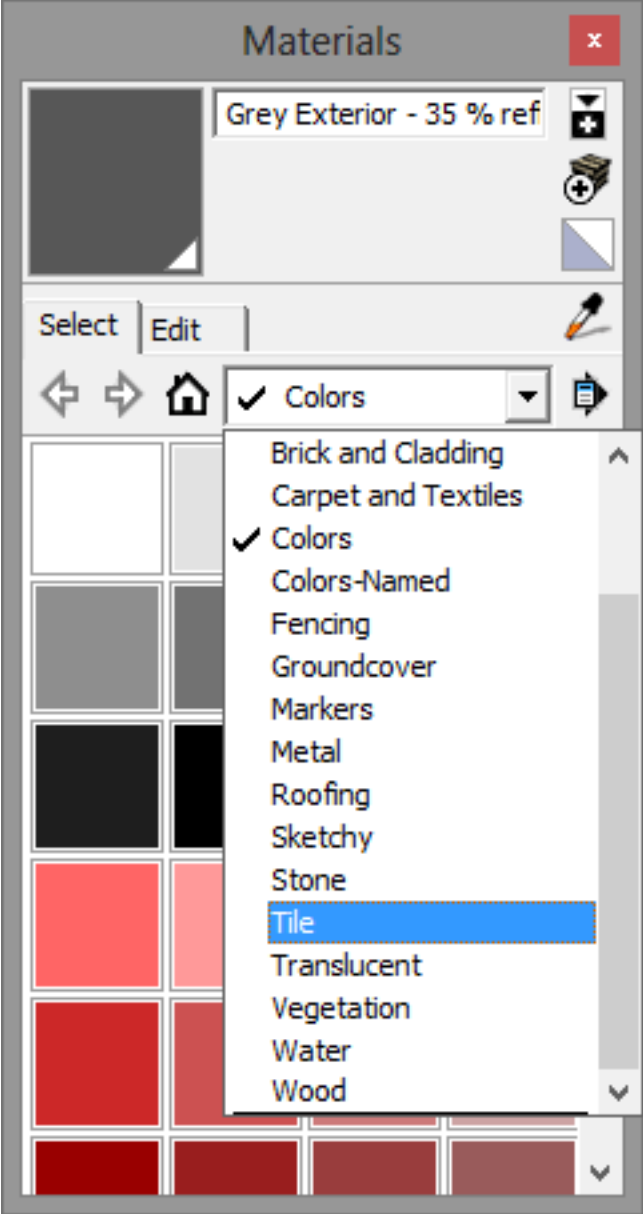







# Chapter 6, Creating Believable Materials





**Materials** [x]

 Tile\_Hexagon\_White [Add] [Stack] [Close]

Select Edit [Pencil]

**Color**

Picker: HLS [Color] [Dropper] [Monitor]

H [Slider] 13 [Spin]

S [Slider] 9 [Spin]

L [Slider] 81 [Spin]

**Texture**

Use texture image

Tile\_Hexagon\_White\_extracted [Add] [Stack]

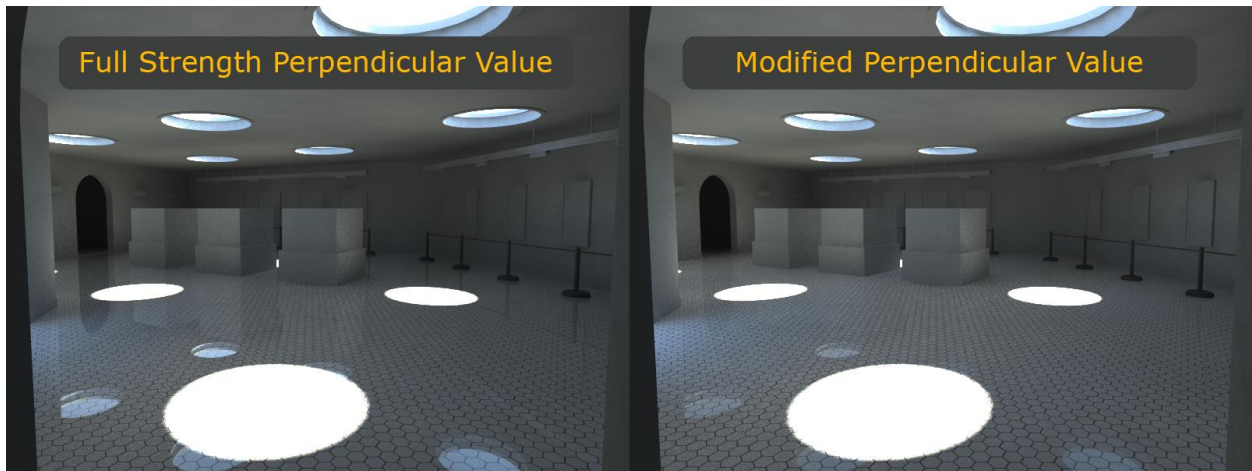
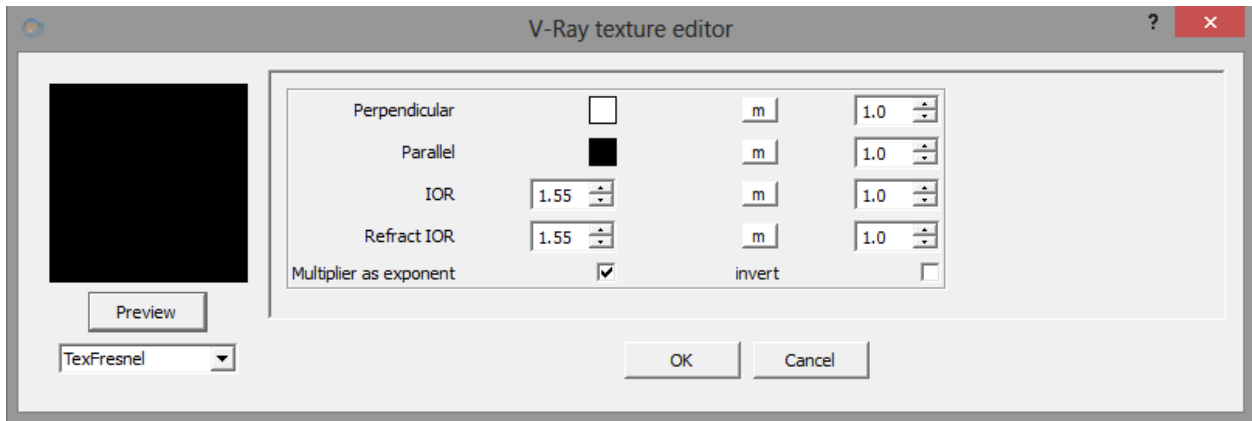
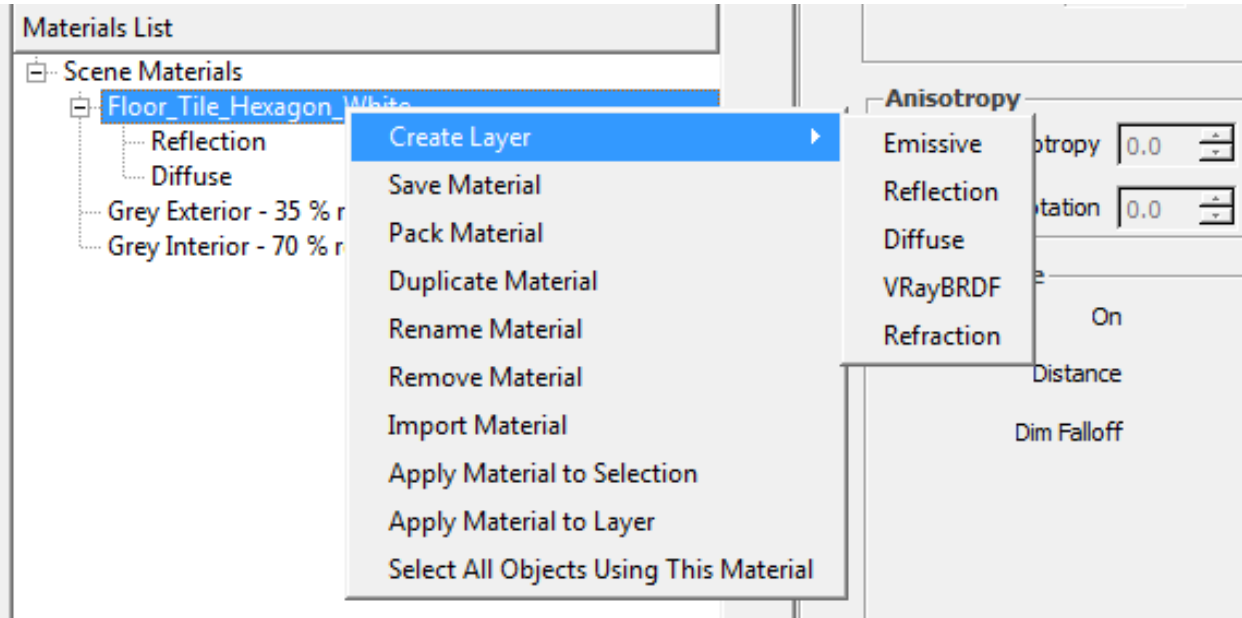
[Width: 1'] [Colorize]

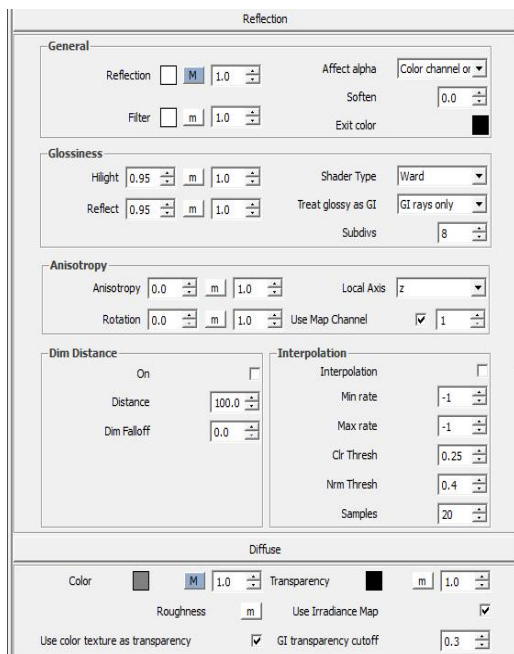
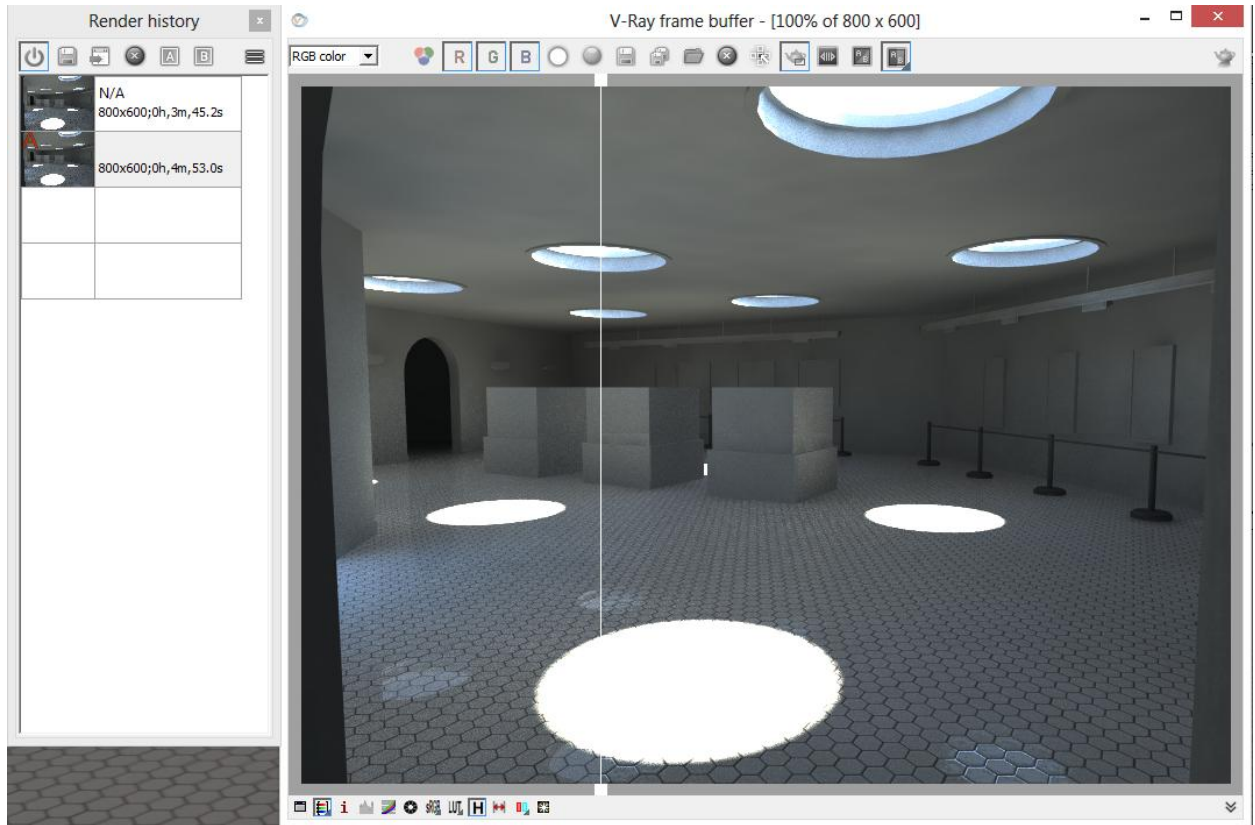
[Height: ~ 10 11/16"] [Reset Color]

**Opacity**

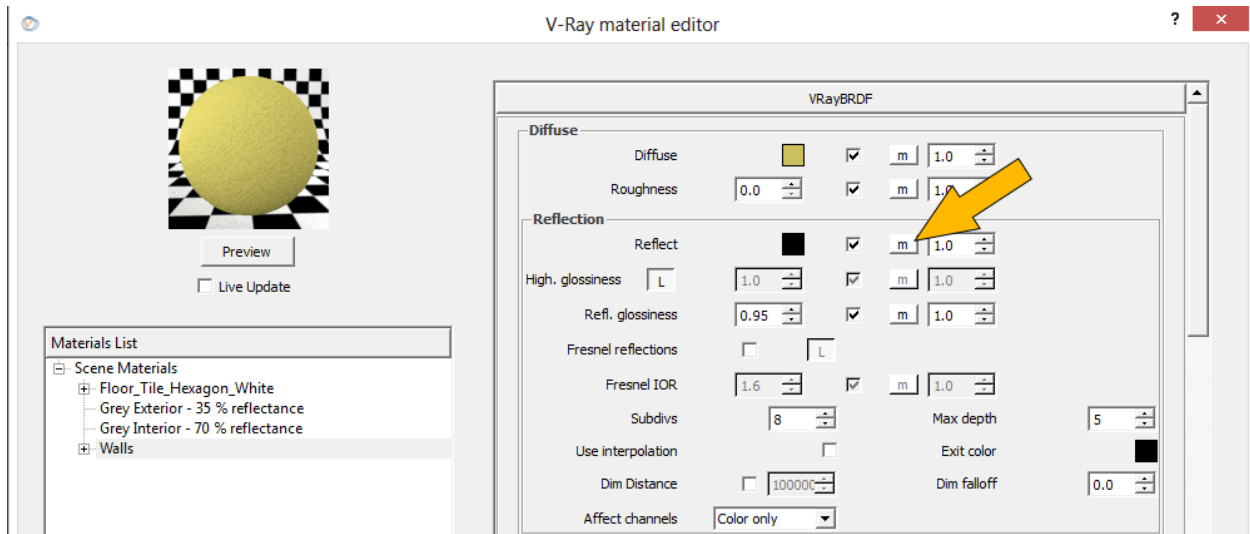
[Slider] 100 [Spin]





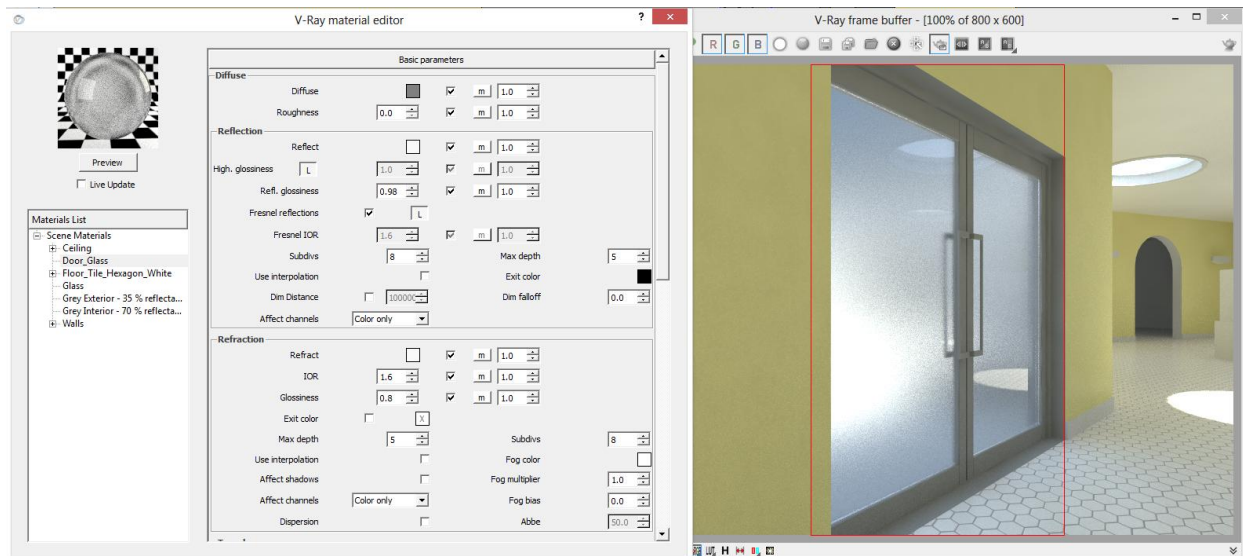
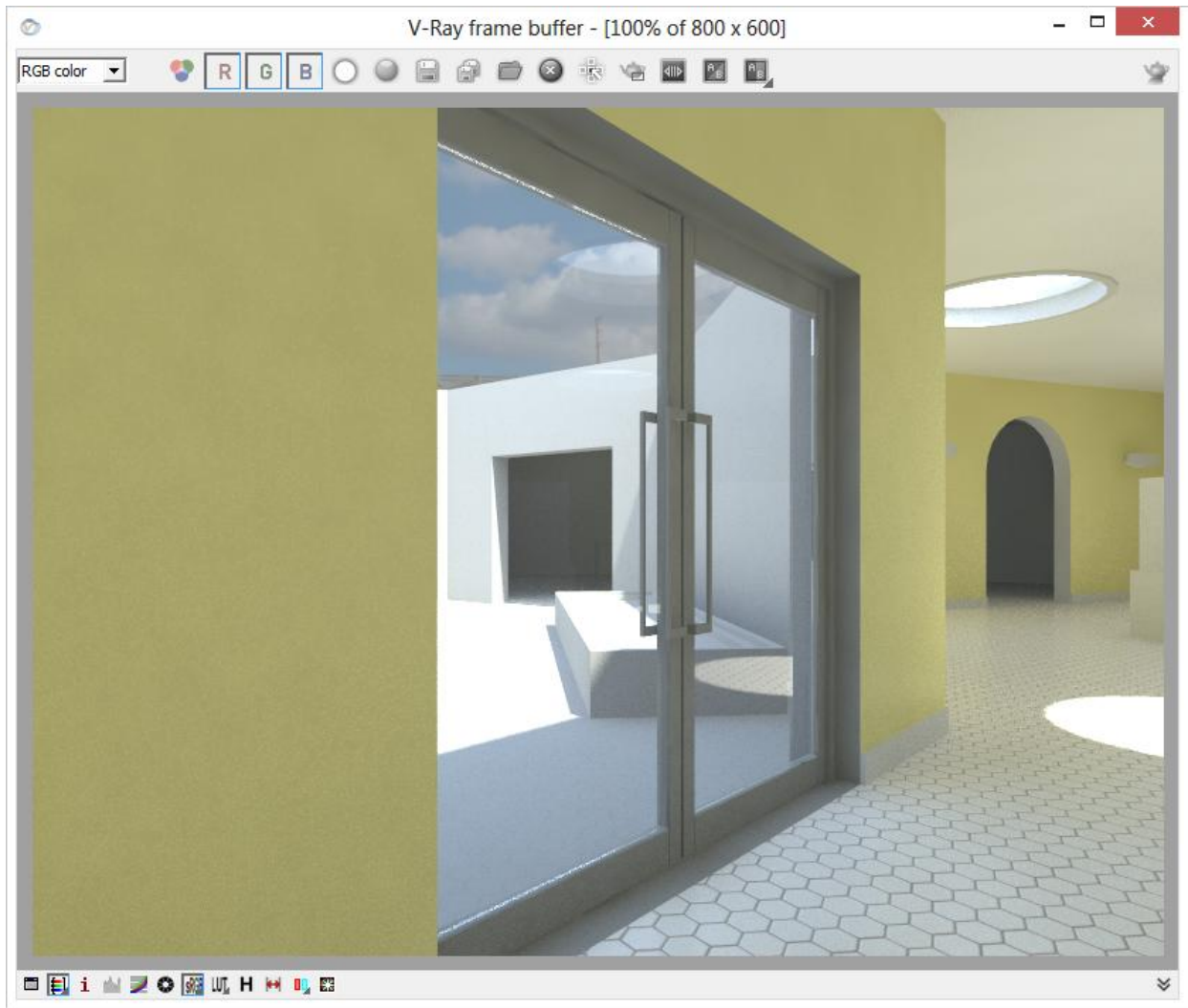




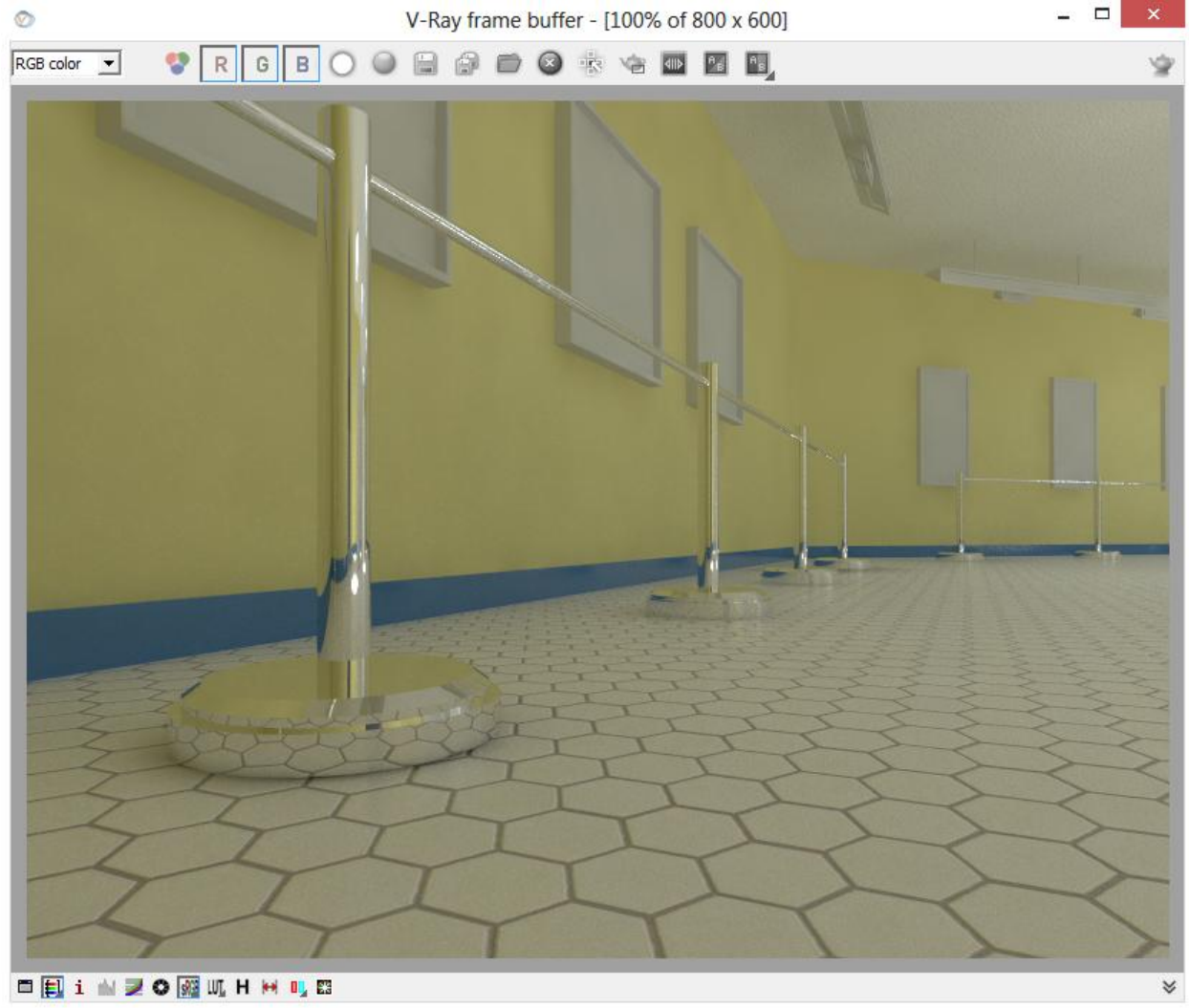


alpha_from_intensity	<input type="checkbox"/>	use_3d_mapping	<input checked="" type="checkbox"/>
invert	<input type="checkbox"/>	invert_alpha	<input checked="" type="checkbox"/>
color_offset	<input type="text" value="m"/>	color1	<input type="text" value="m"/>
color_mult	<input type="text" value="m"/>	color2	<input type="text" value="m"/>
nouvuv_color	<input type="text" value="m"/>	uv_noise_on	<input type="text" value="0"/>
compatibility_with	<input type="text" value="0"/>	placement_type	<input type="text" value="0"/>
tile_v	<input type="text" value="0"/>	tile_u	<input type="text" value="0"/>
uv_noise_animate	<input type="text" value="0"/>	uv_noise_amount	<input type="text" value="1.0"/>
jitter	<input type="text" value="0.0"/>	size	<input type="text" value="4.0"/>
uv_noise_size	<input type="text" value="1.0"/>	alpha_offset	<input type="text" value="0.0"/>
uv_noise_phase	<input type="text" value="0.0"/>	uv_noise_levels	<input type="text" value="1.0"/>
alpha_mult	<input type="text" value="1.0"/>	h	<input type="text" value="1.0"/>
u	<input type="text" value="0.0"/>	w	<input type="text" value="1.0"/>
v	<input type="text" value="0.0"/>		

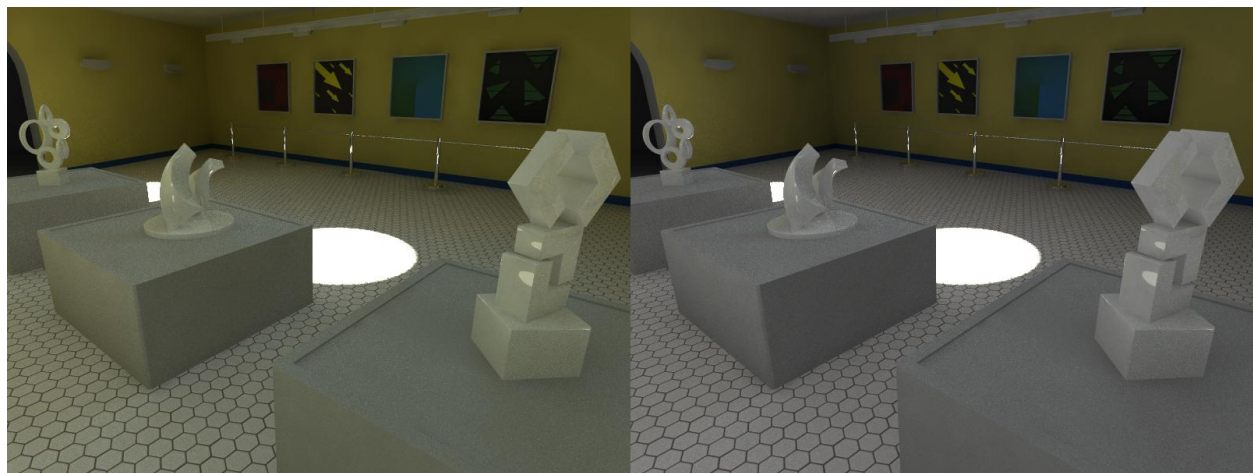
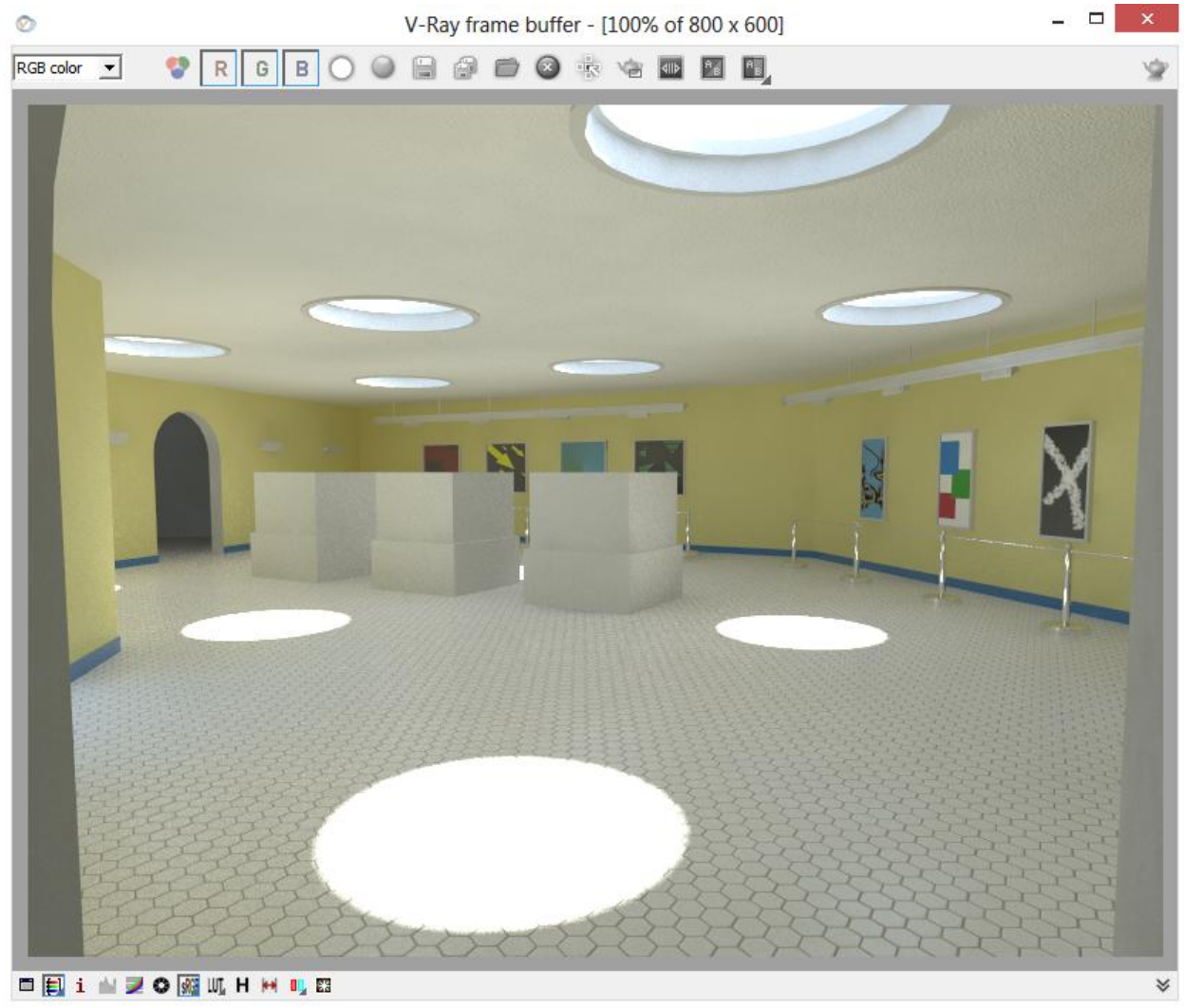




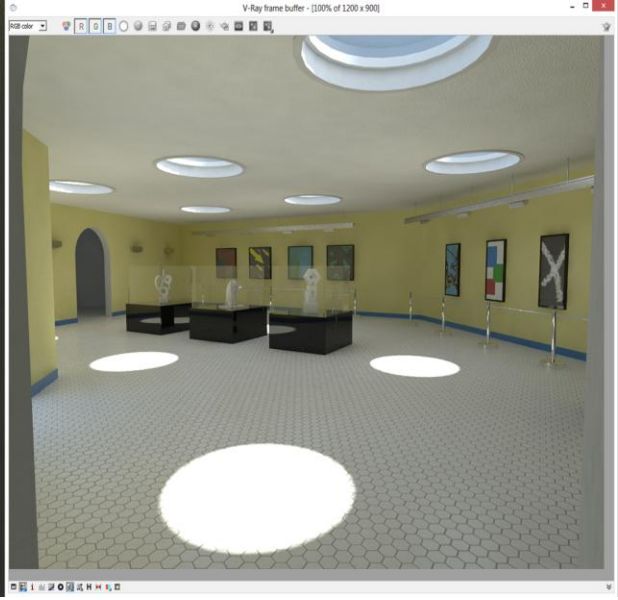




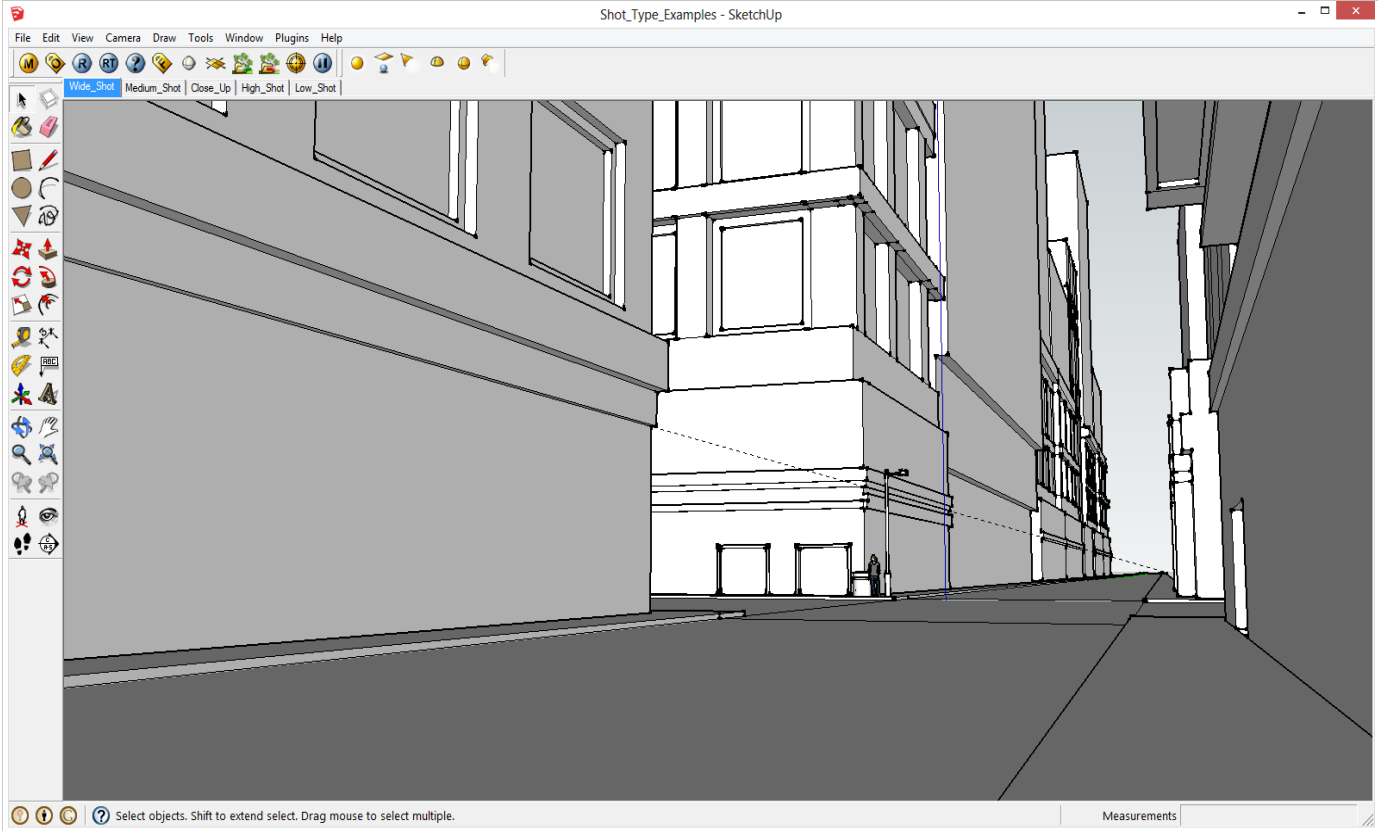
File	<input type="text" value="inting_01.png"/>	...		
Filter Type	<input type="text" value="Mip-map"/>	▼	Filter Blur	<input type="text" value="0.15"/>
Color Space	<input type="text" value="Gamma Correct"/>	▼	Gamma	<input type="text" value="1.0"/>

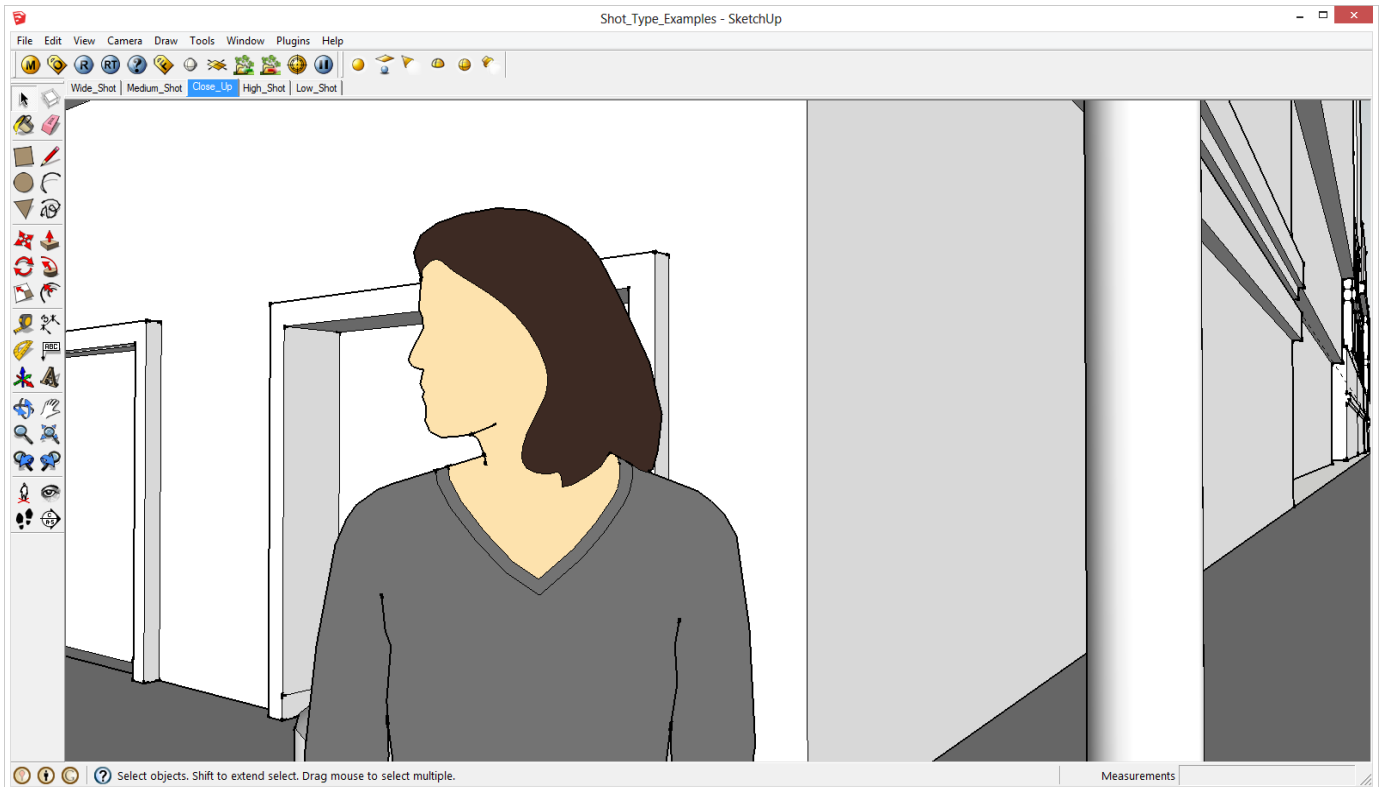
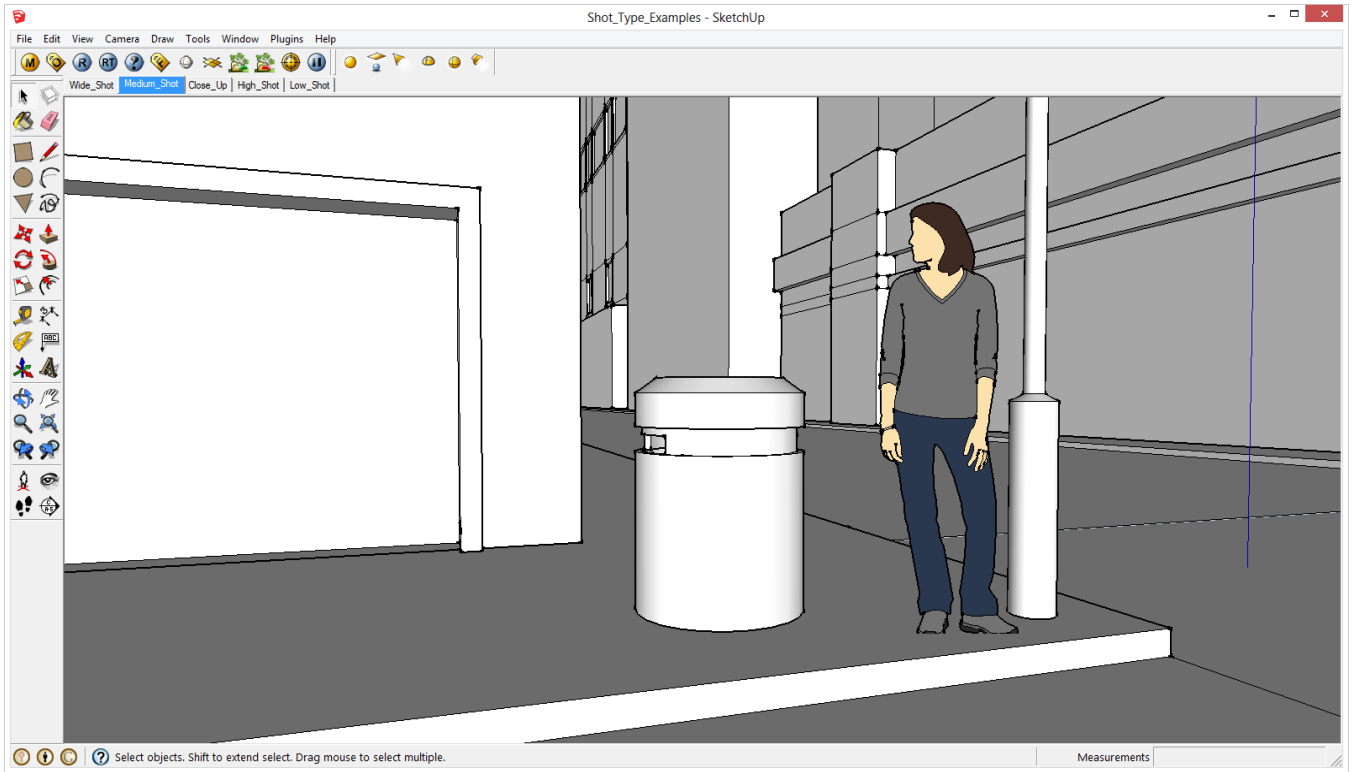


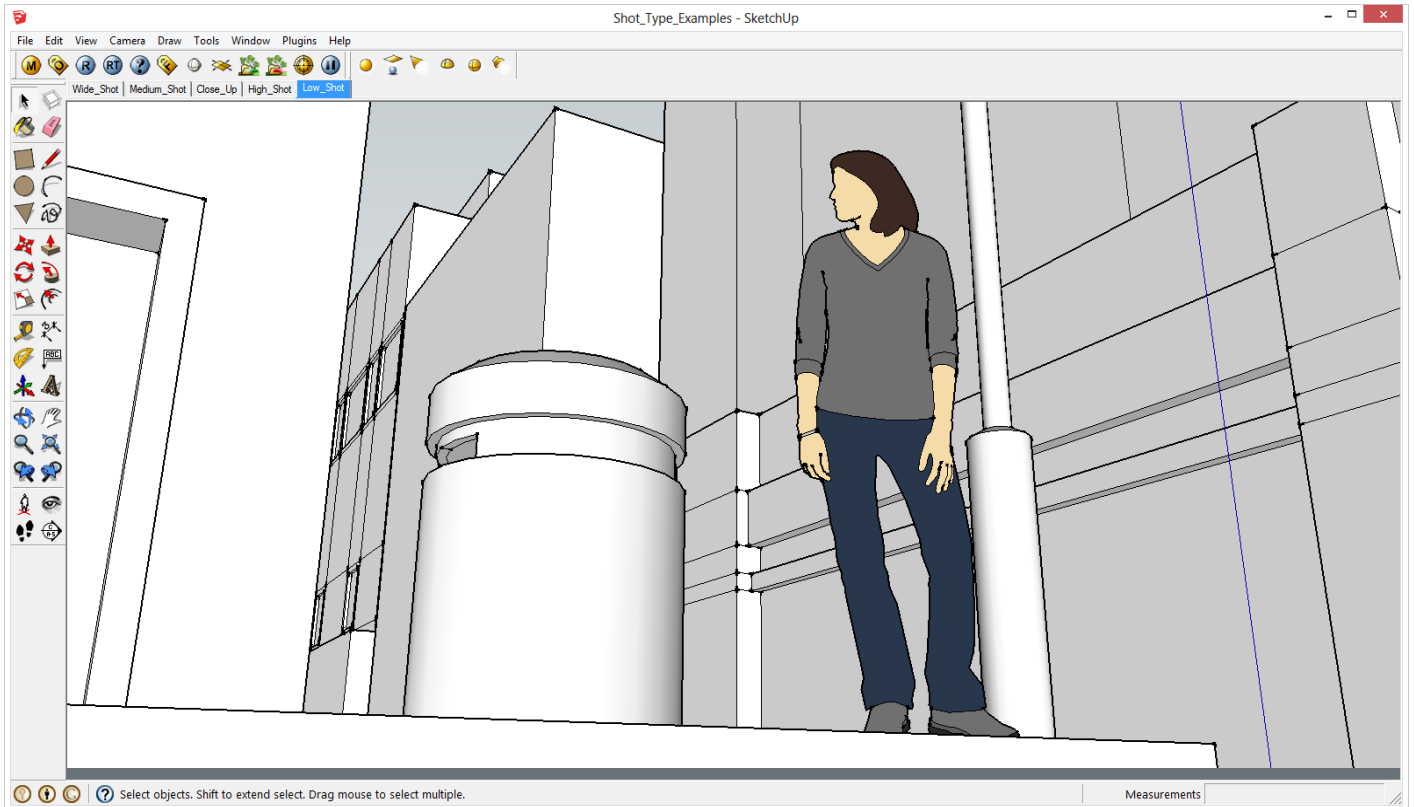
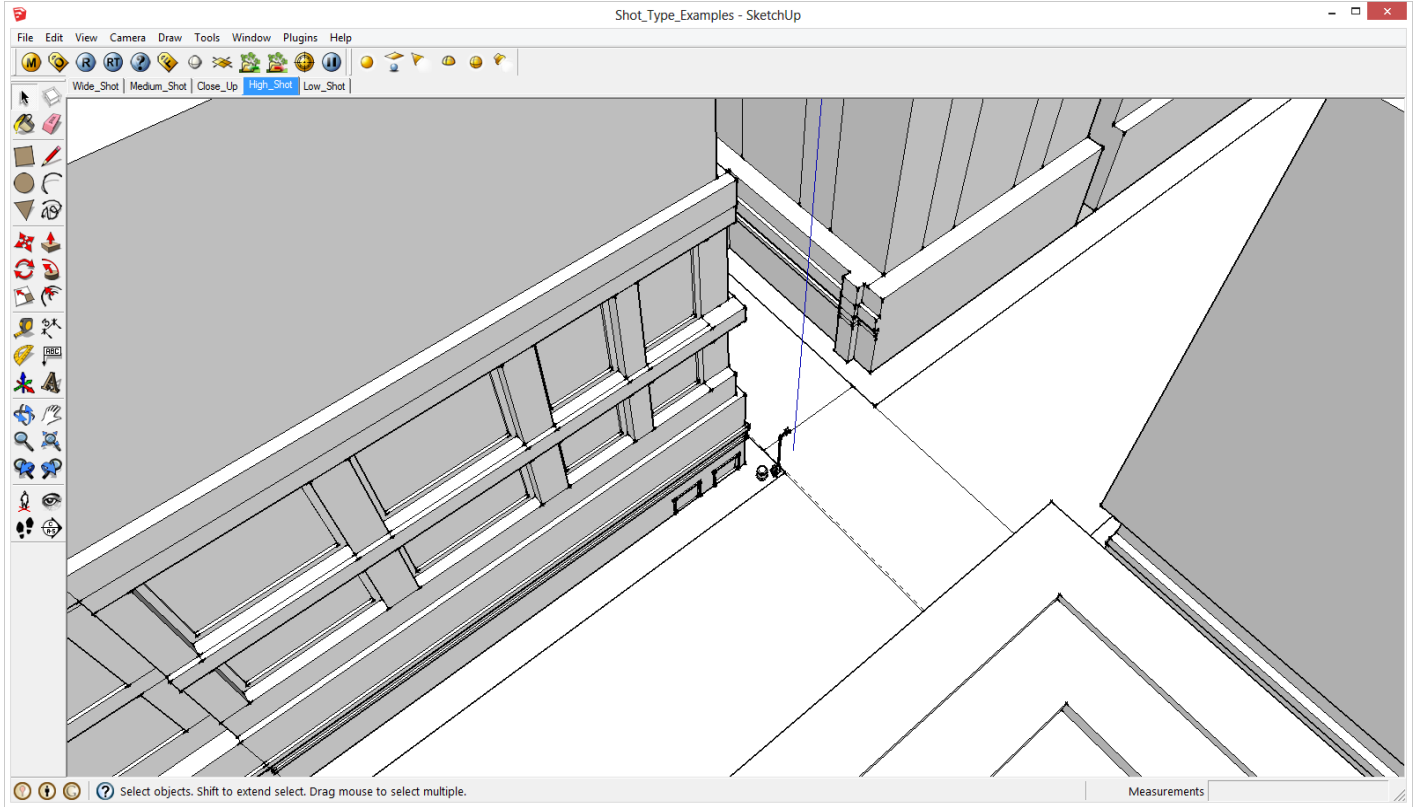




# Chapter 8, Composition and Cameras









1.333:1

Used in the past for Broadcast and Video but now more readily associated with still image photography and print.

1.500:1

This is the aspect ratio of 35mm film and is also a typical ratio used in photographic printing.

1.777:1

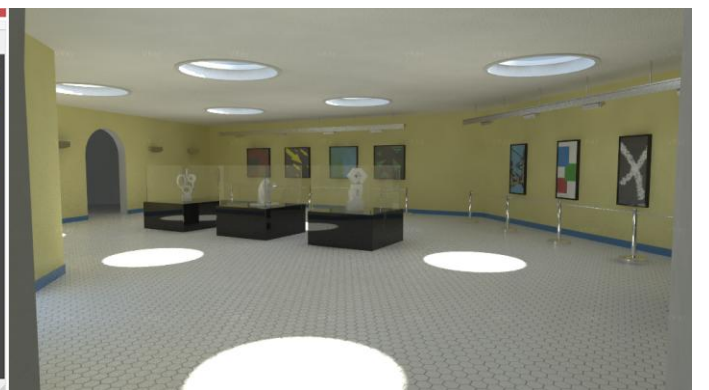
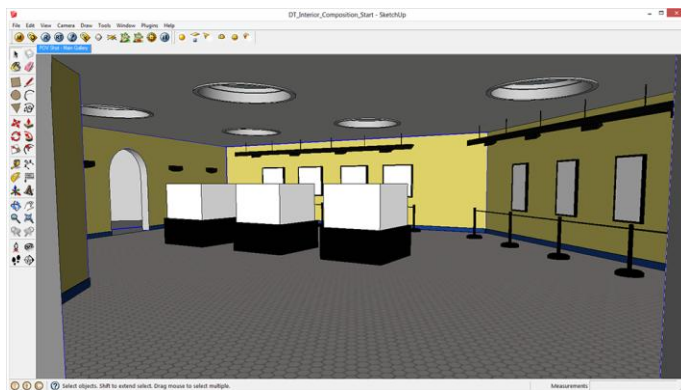
The current standard for High Definition video playback and broadcast TV.

1.85:1

Typical widescreen ratio used in the production and presentation of big screen movies.

2.35:1

Another widescreen ratio used in the production and presentation of big screen movies.



**Output**

---

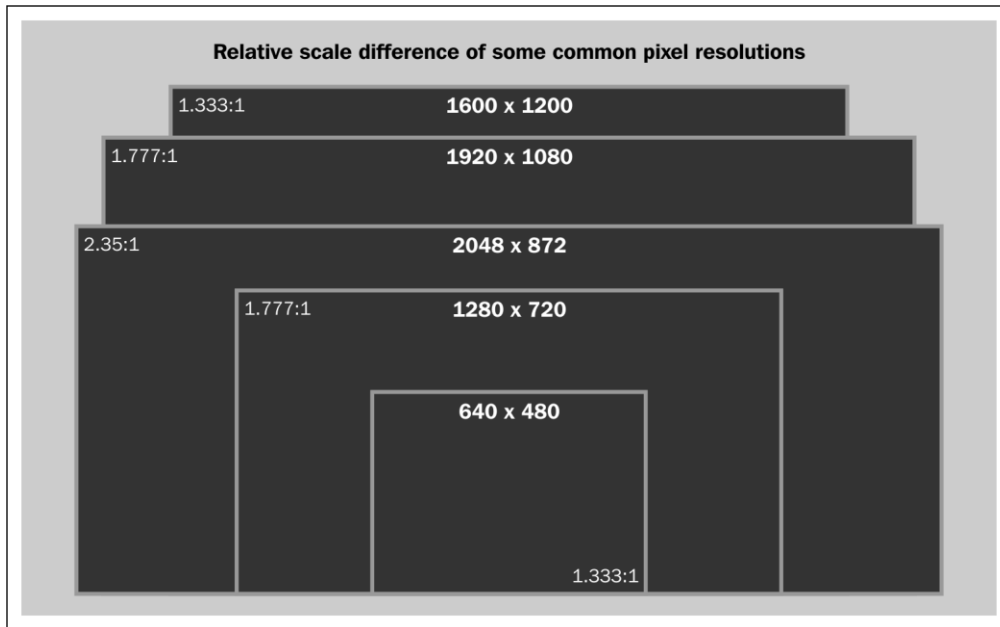
**Output size**

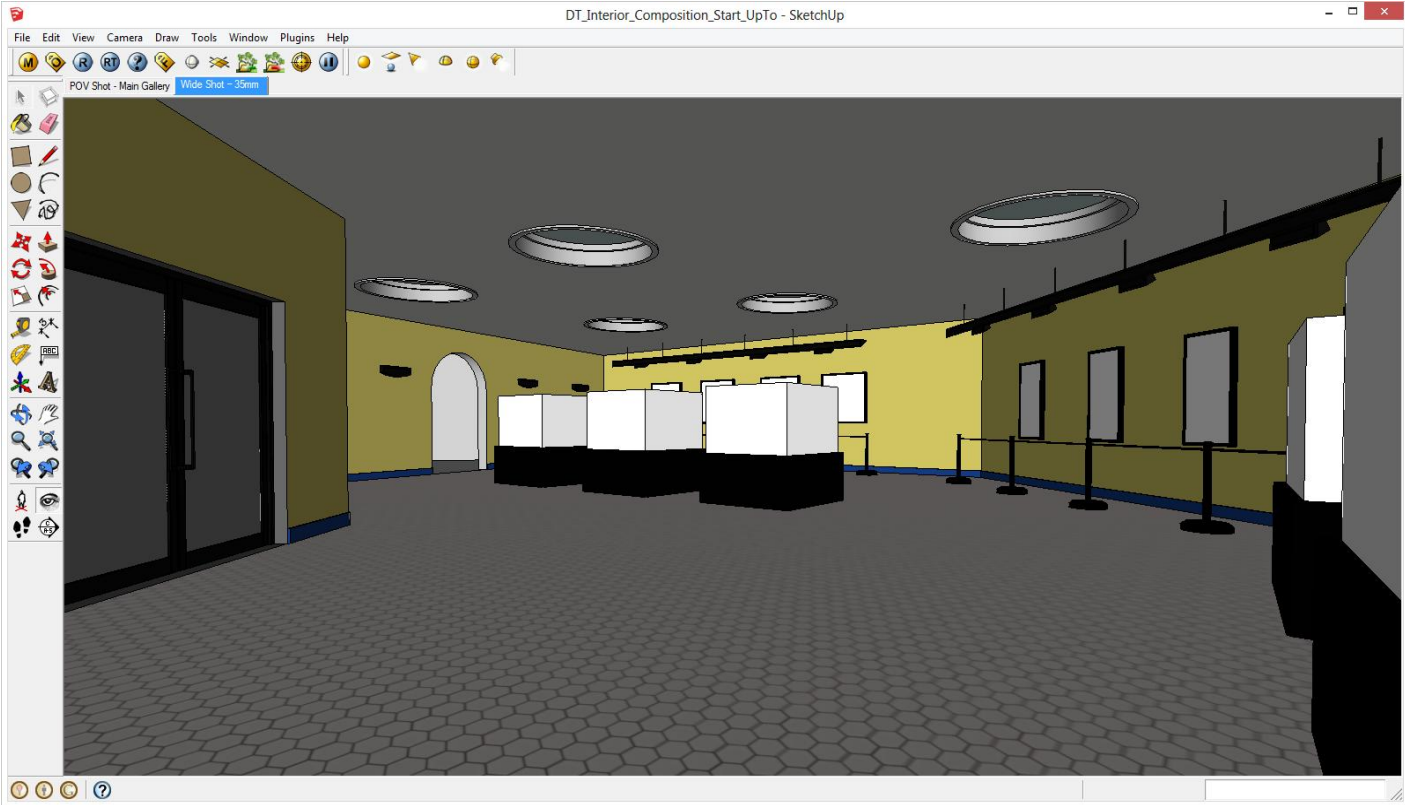
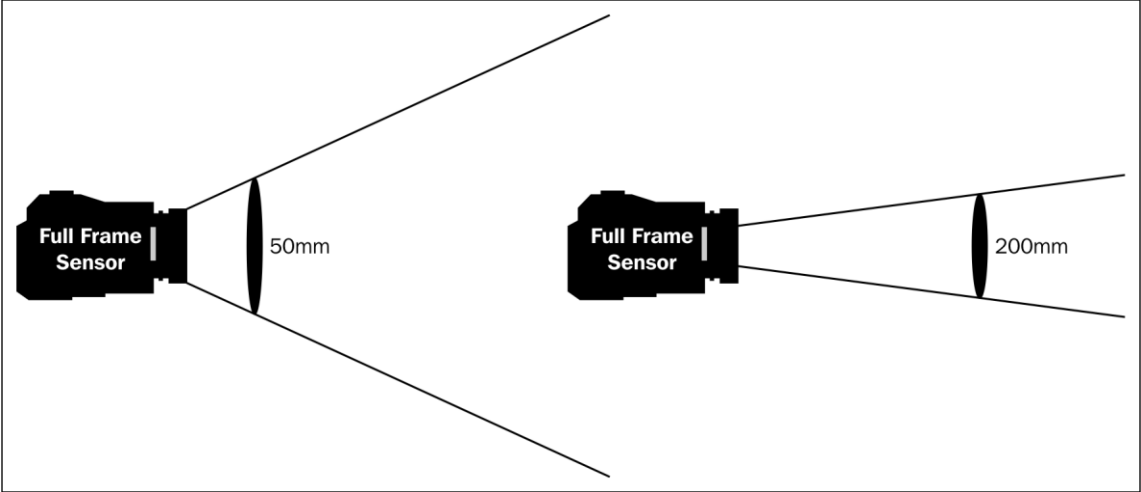
Override viewport

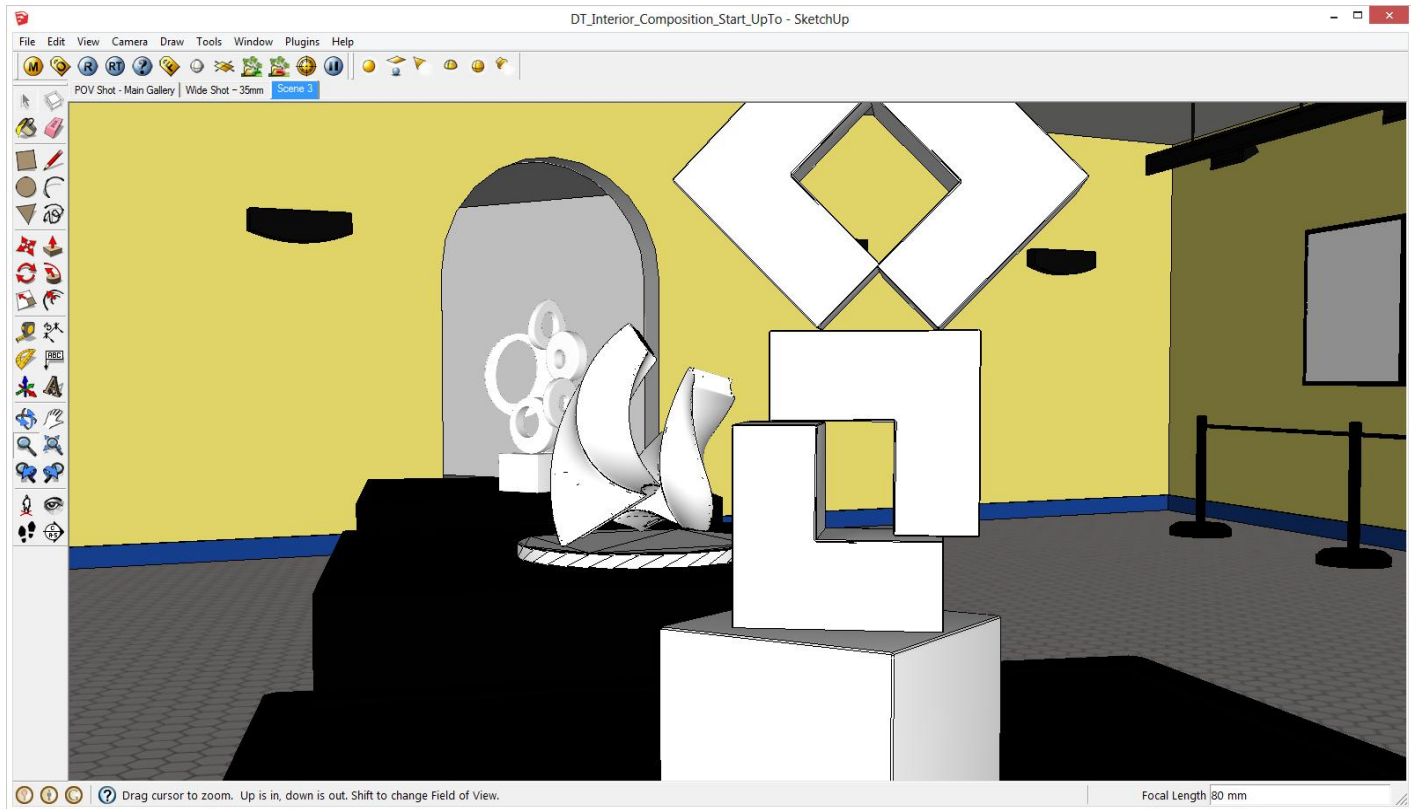
Width

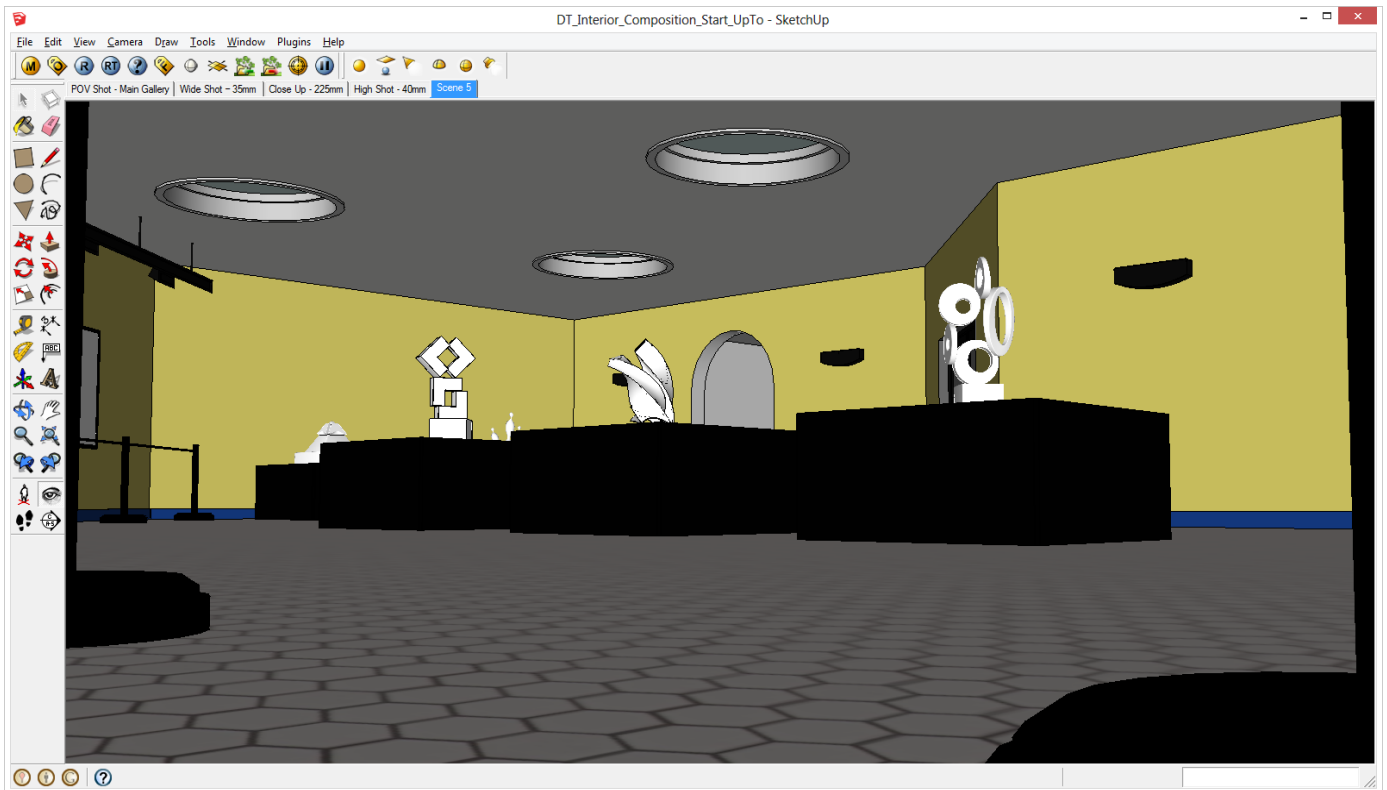
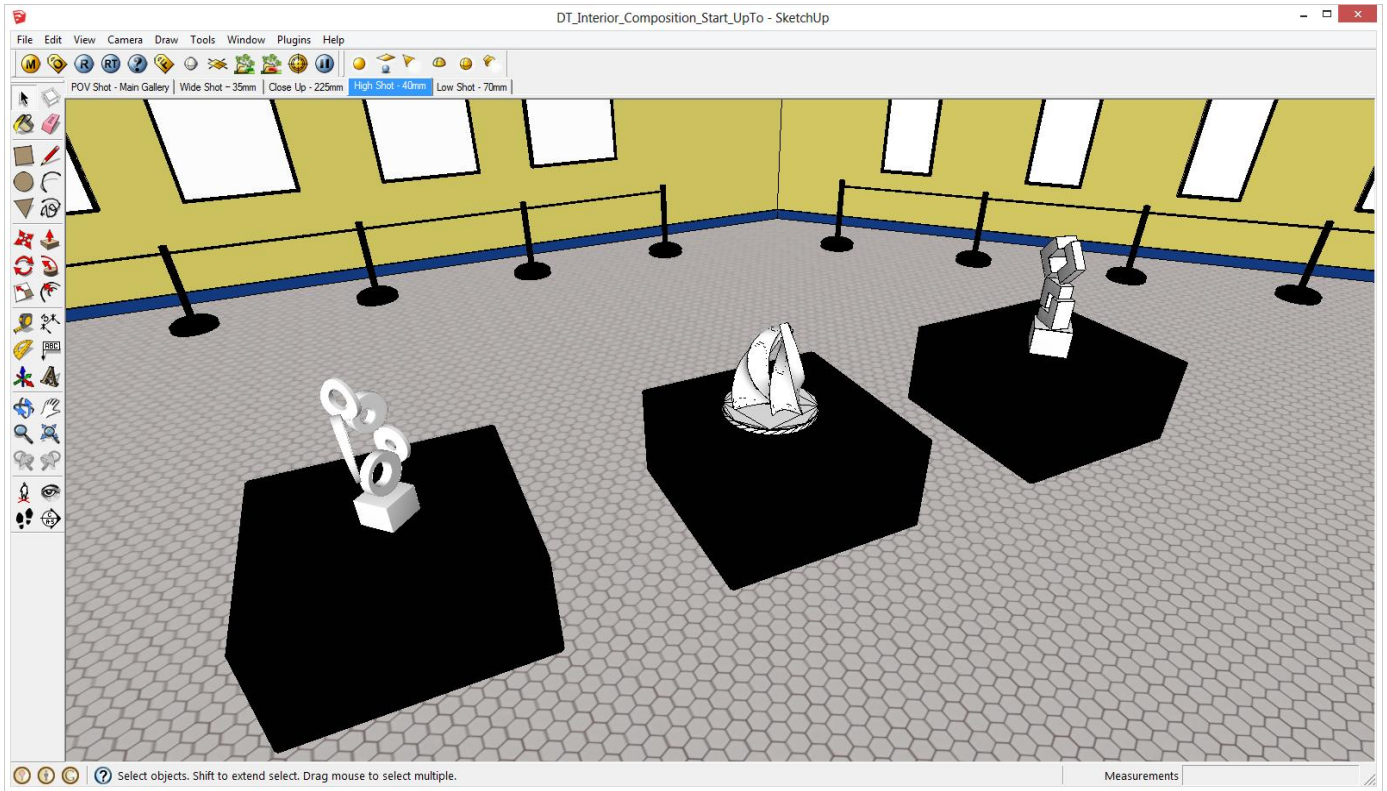
Height

Image aspect ratio   Pixel aspect ratio



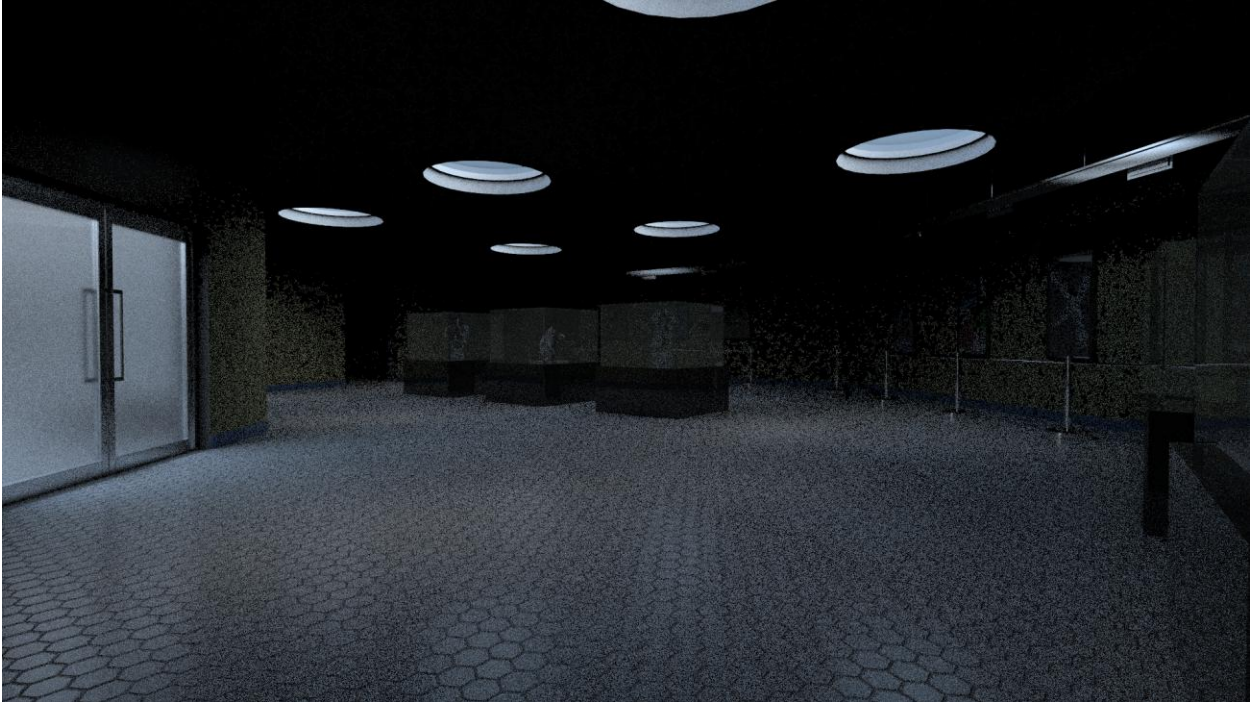
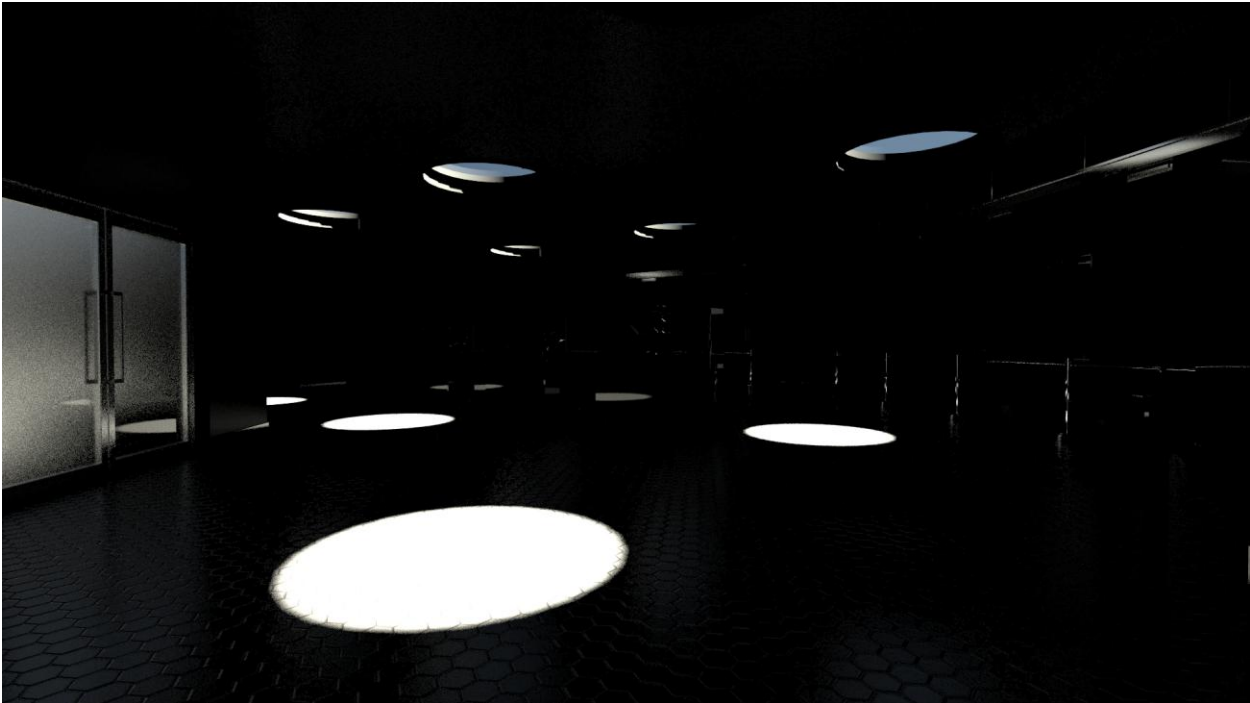


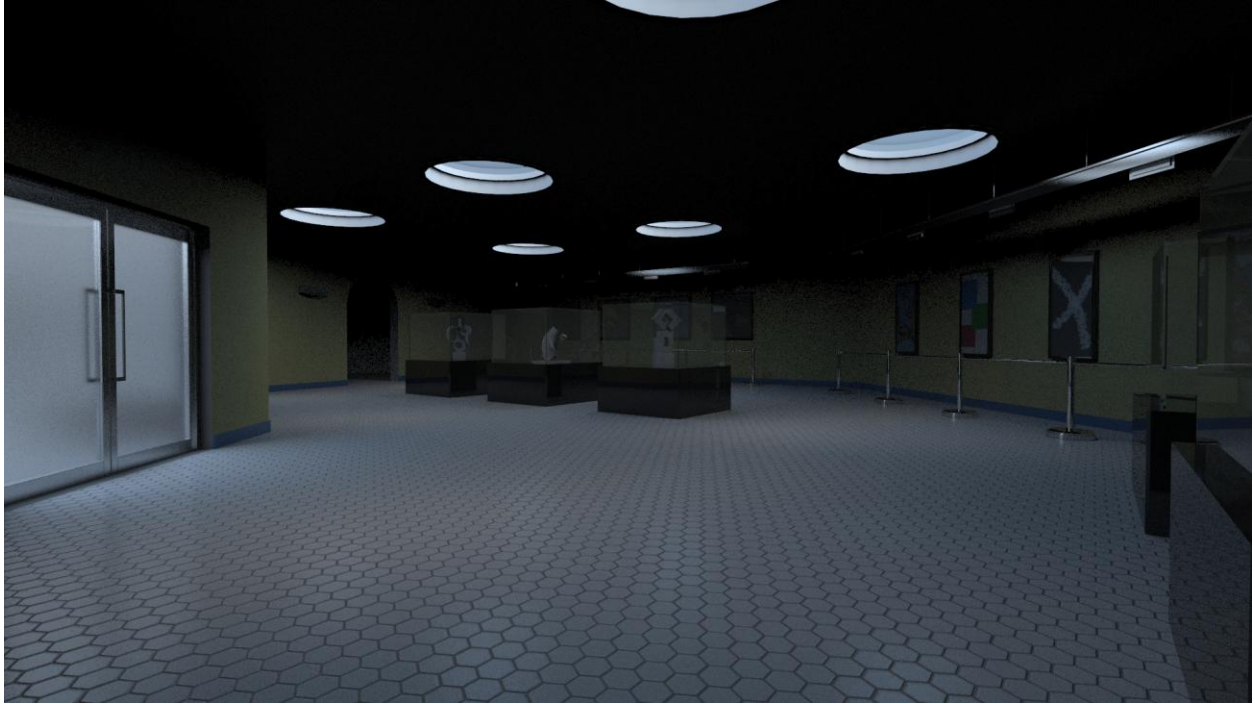






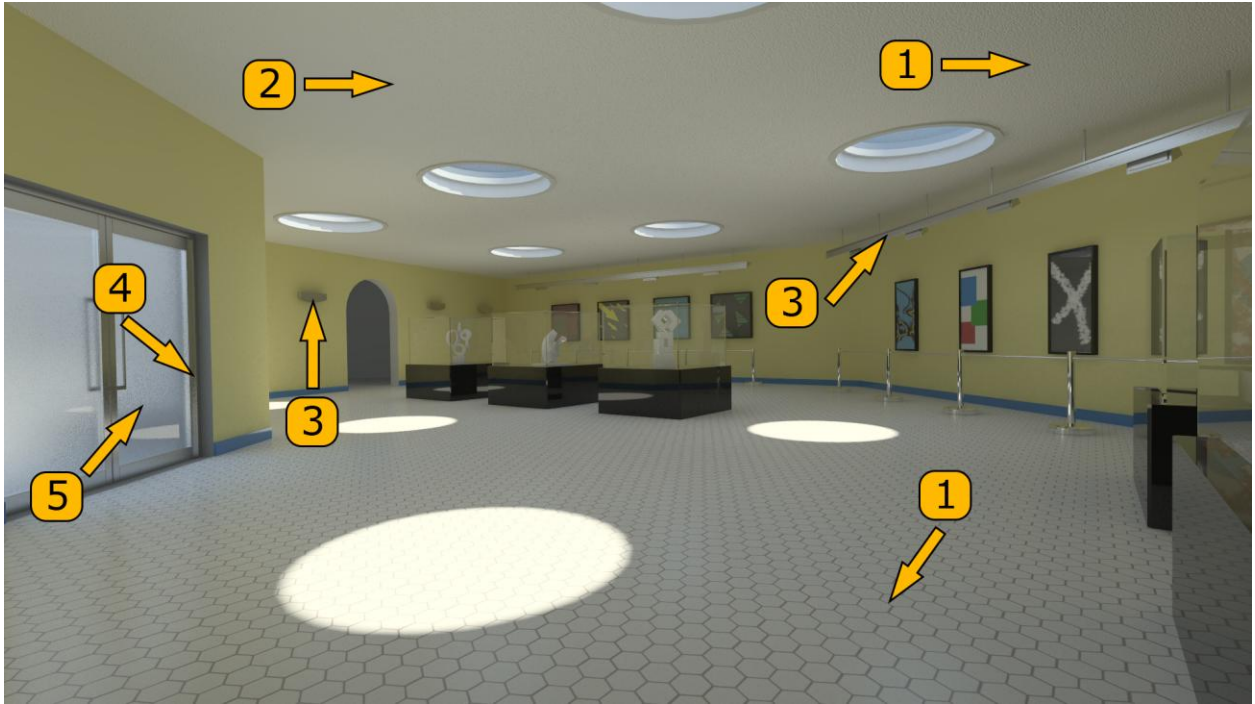
**Chapter 9, Quality Control**

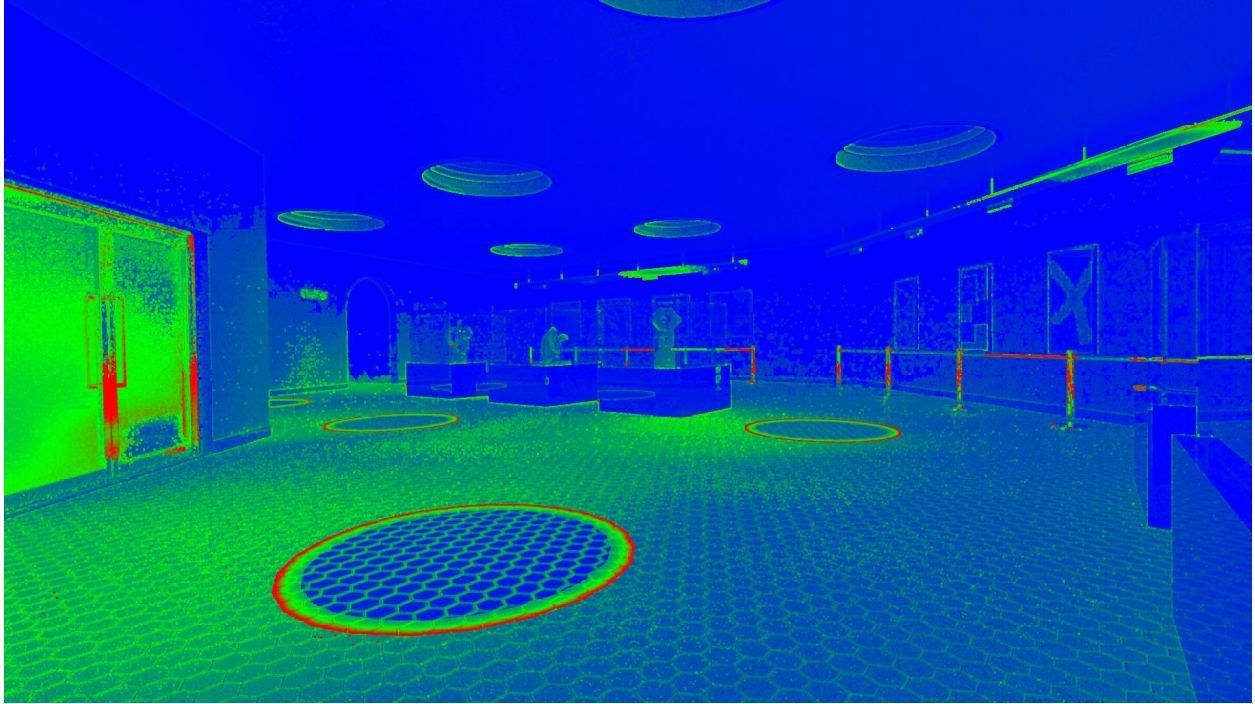




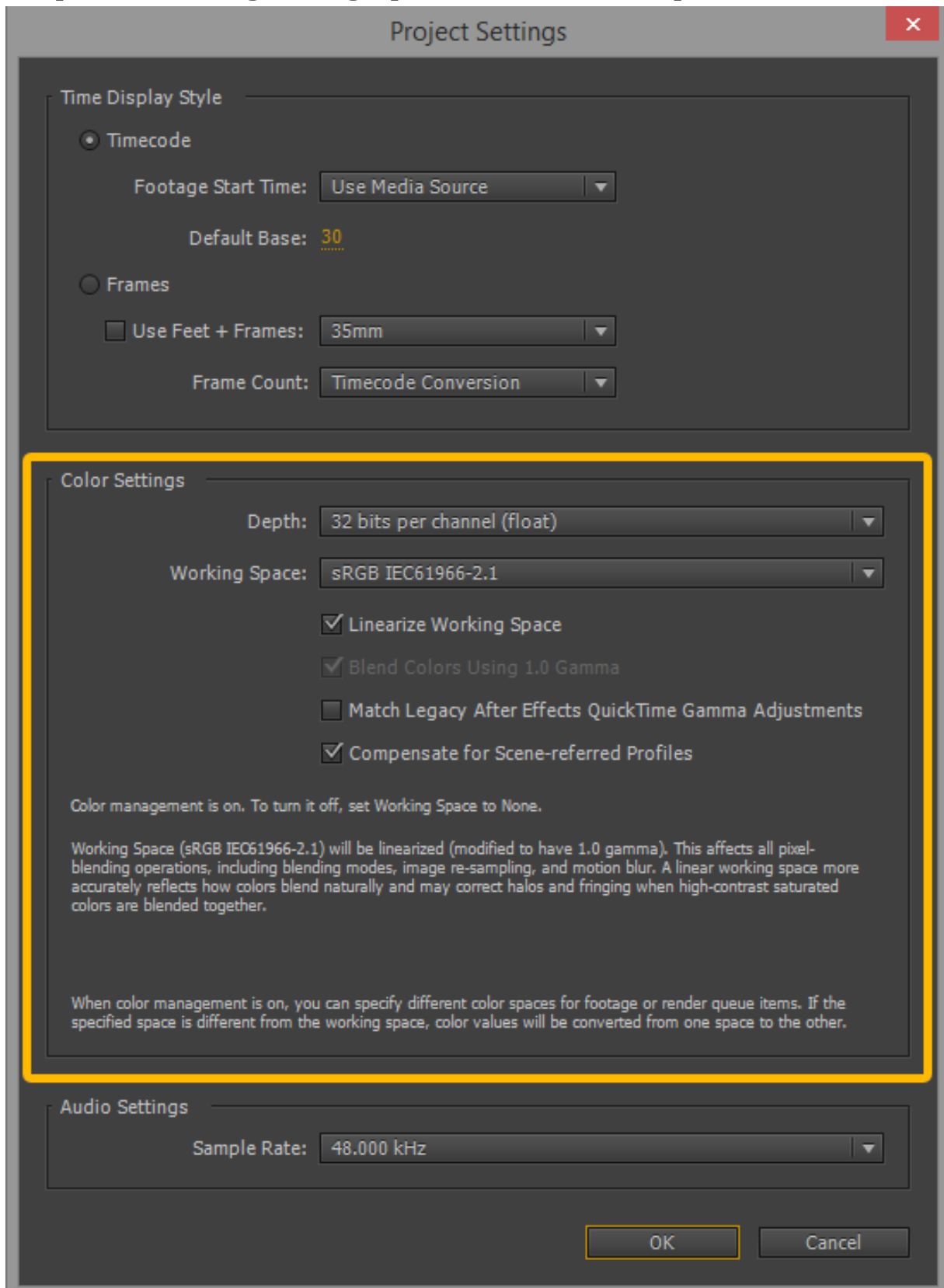




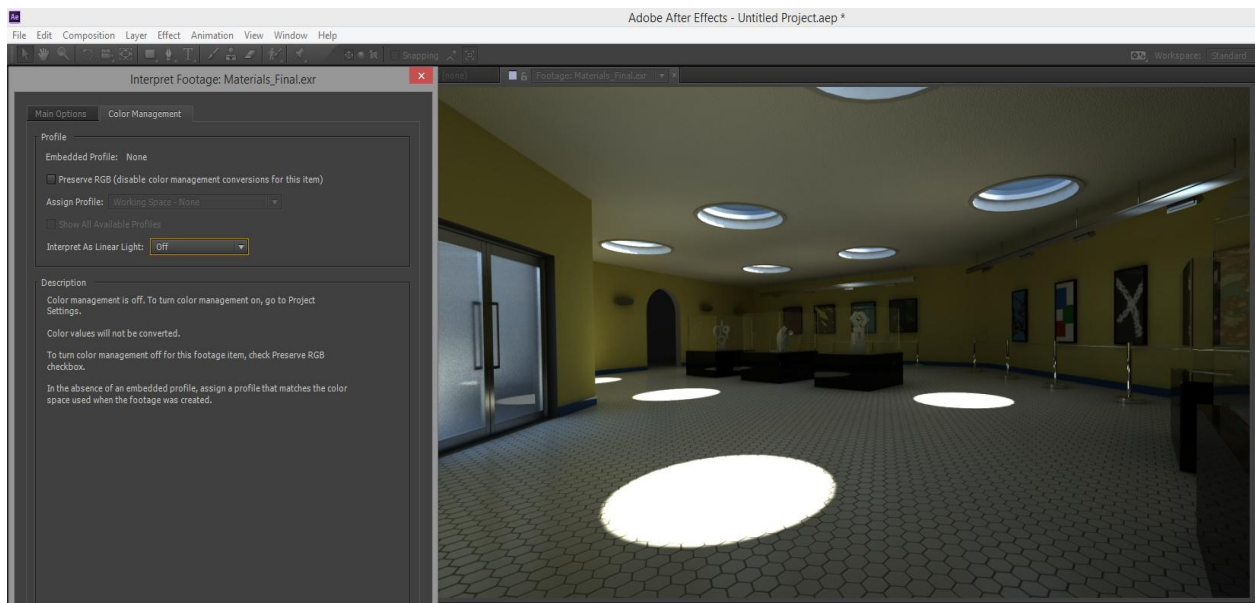
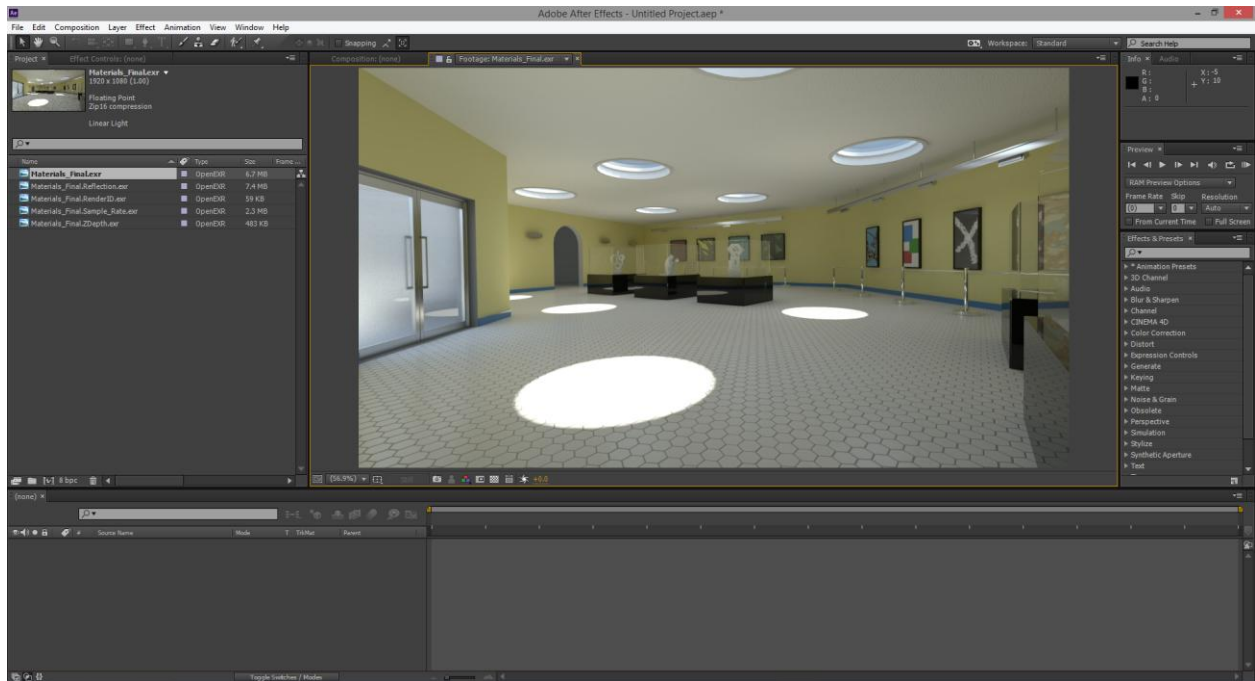


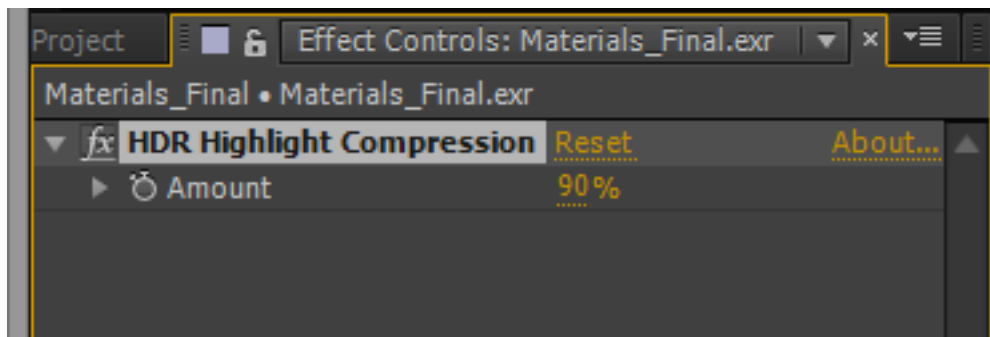
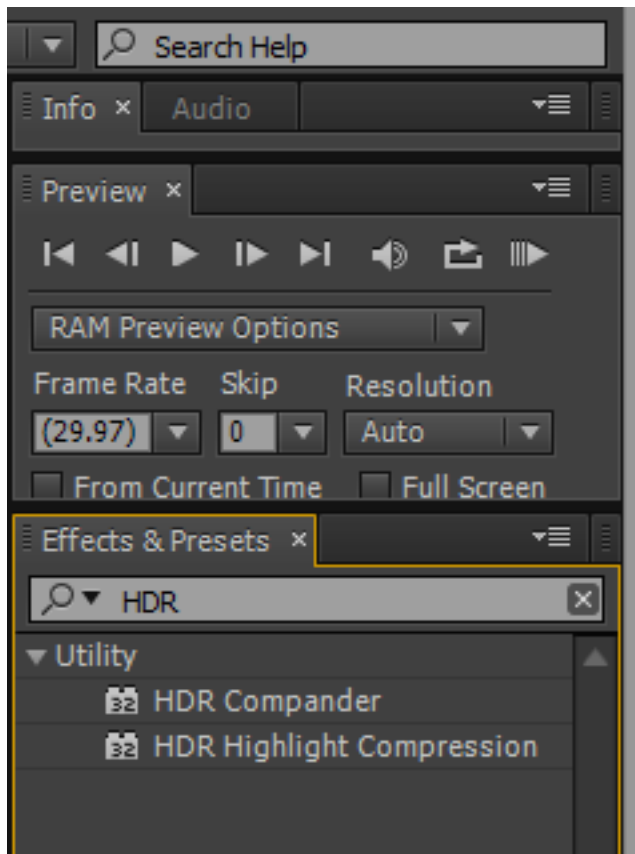


## Chapter 10, Adding Photographic Touches in Post-production











Materials\_Final x

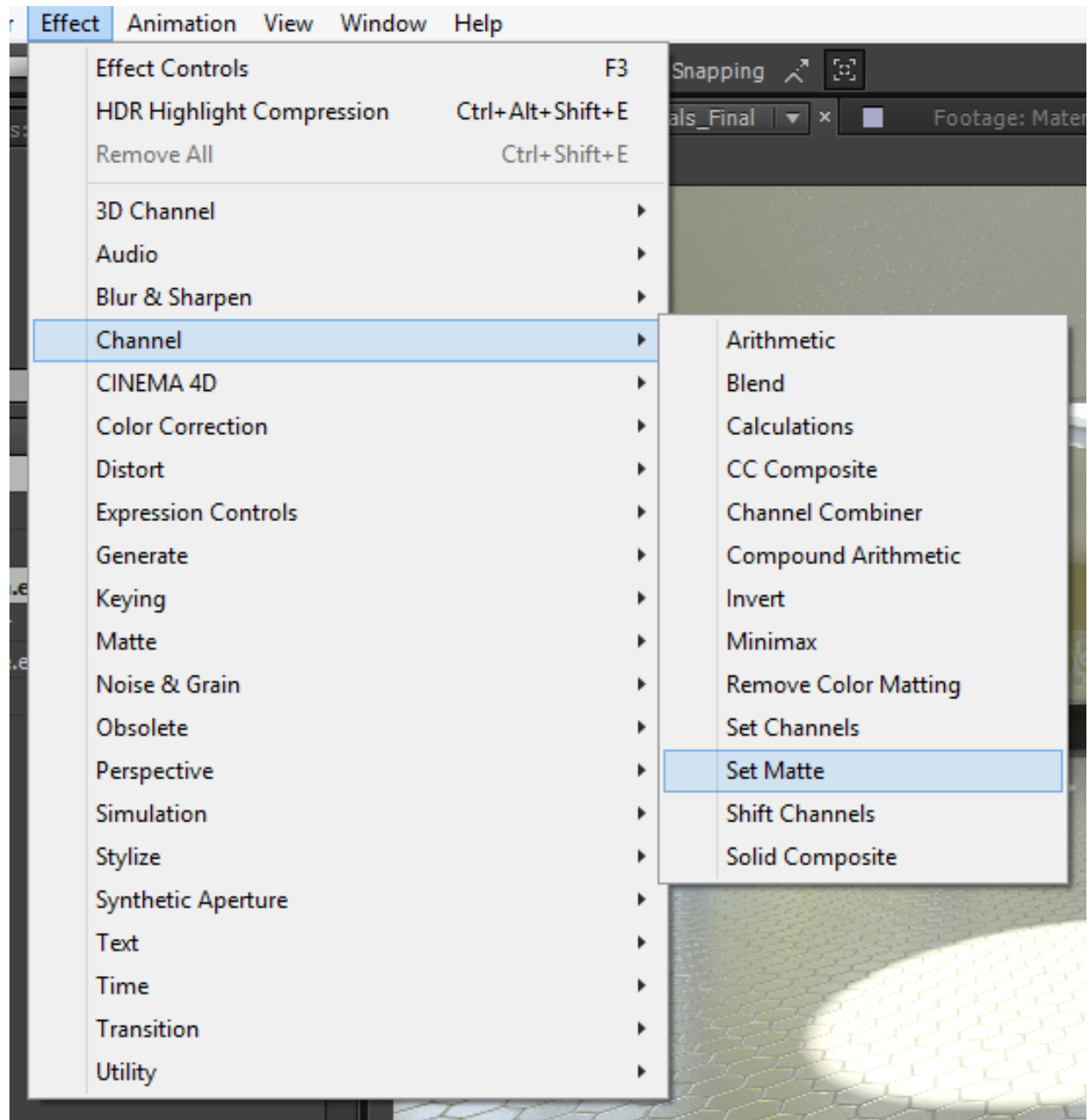
0:00:00:00  
00000 (29.97 fps)

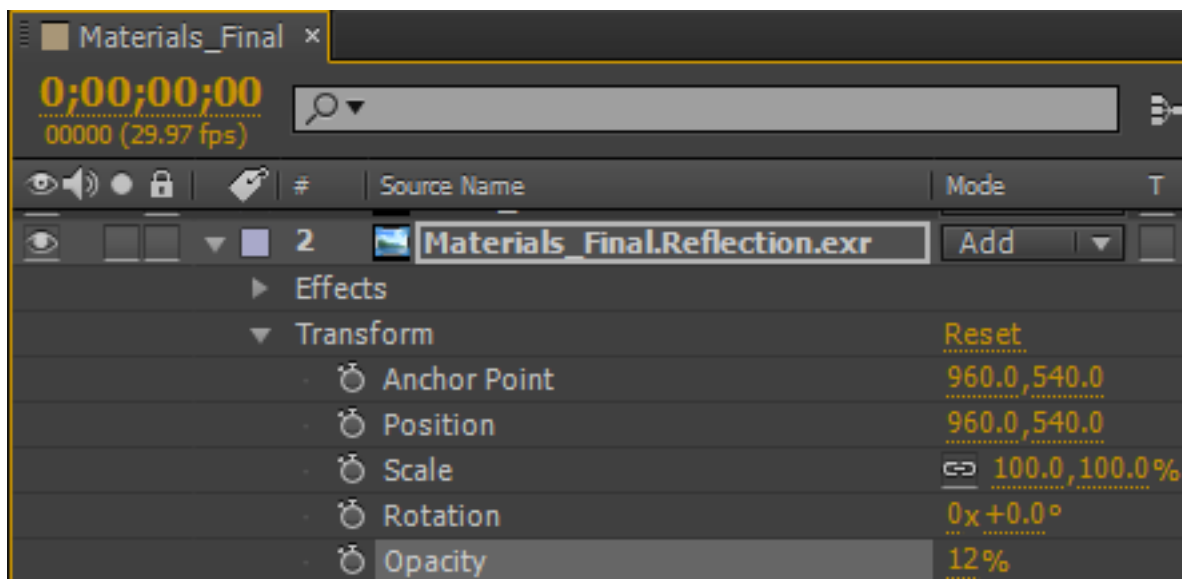
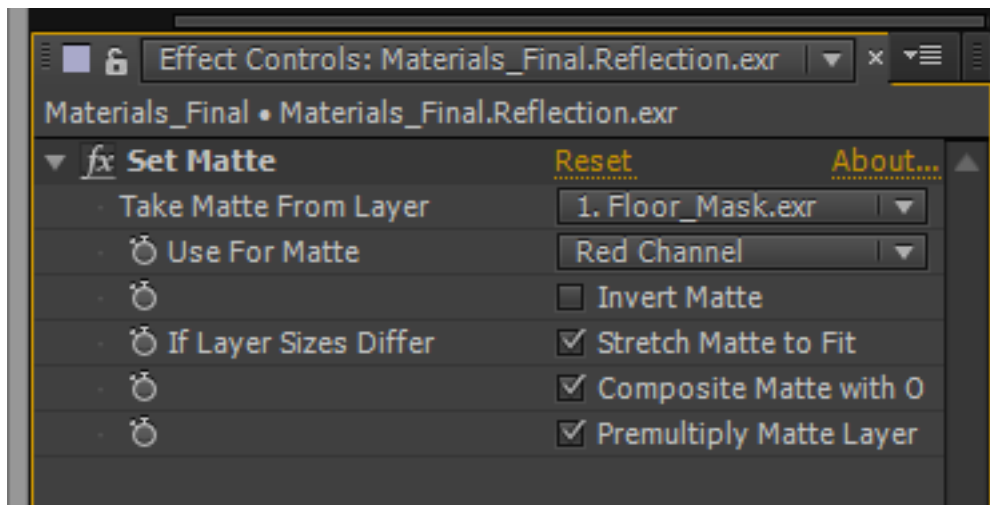
Icons: Eye, Mute, Lock, Tag, #, Search, Camera, \* (Scene), Upload, Grid, Sphere, Location, Graph

	#	Source Name	Mode	T	TrkMat	Parent
<input type="checkbox"/>	1	Floor_Mask.exr	Normal			None
<input checked="" type="checkbox"/>	2	Materials_Final.Reflection.exr	Normal		None	None
<input type="checkbox"/>	3	Materials_Final.exr	Normal		None	None

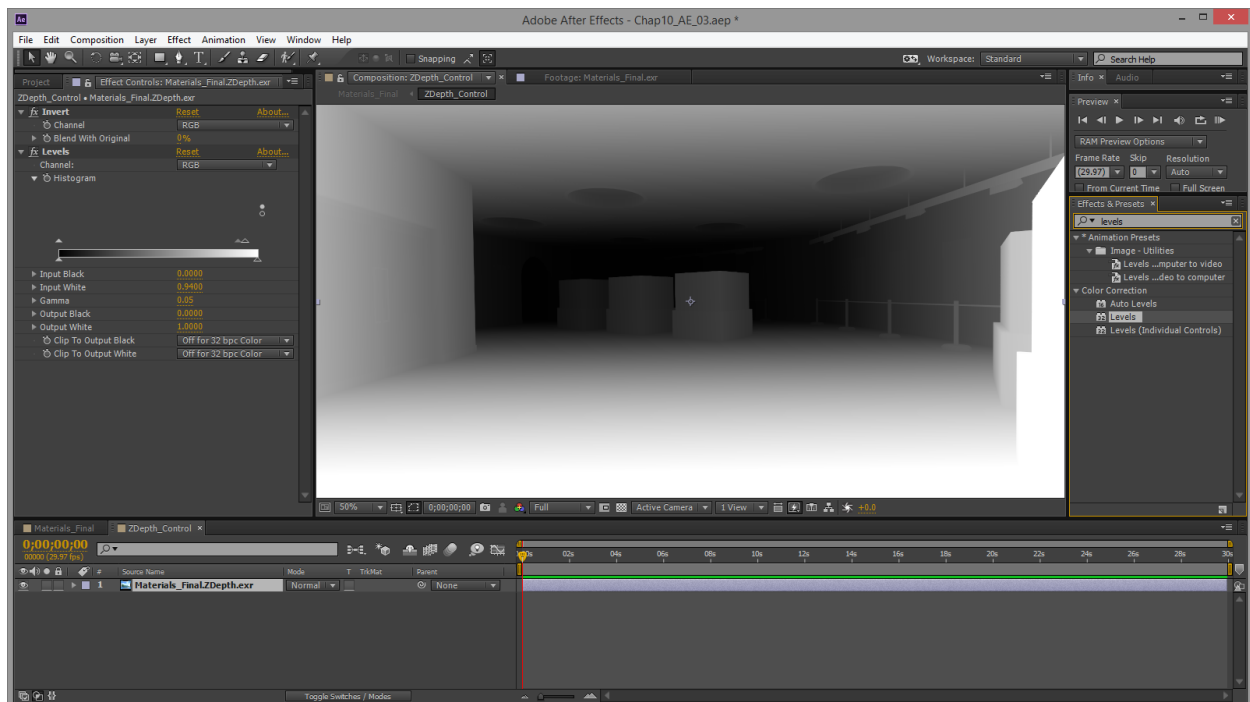
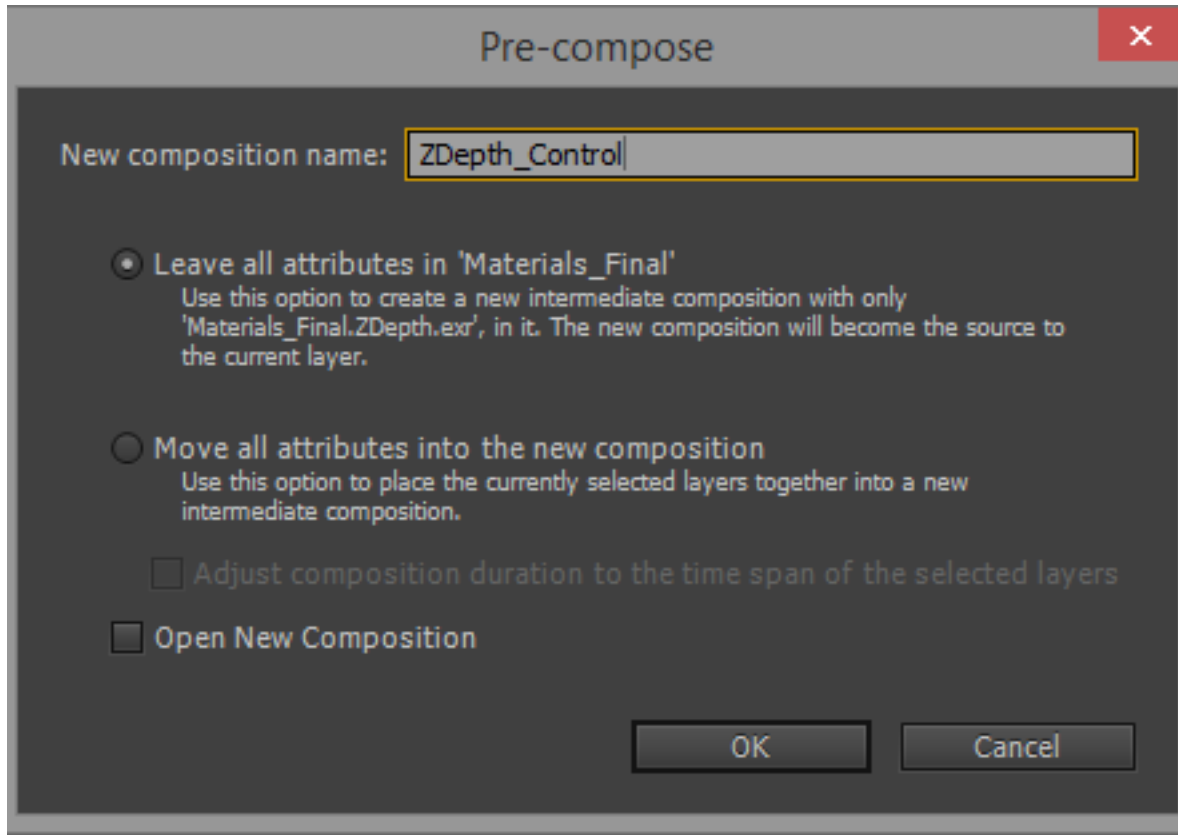
Icons: Copy, Paste, Settings

Toggle Switches / Modes







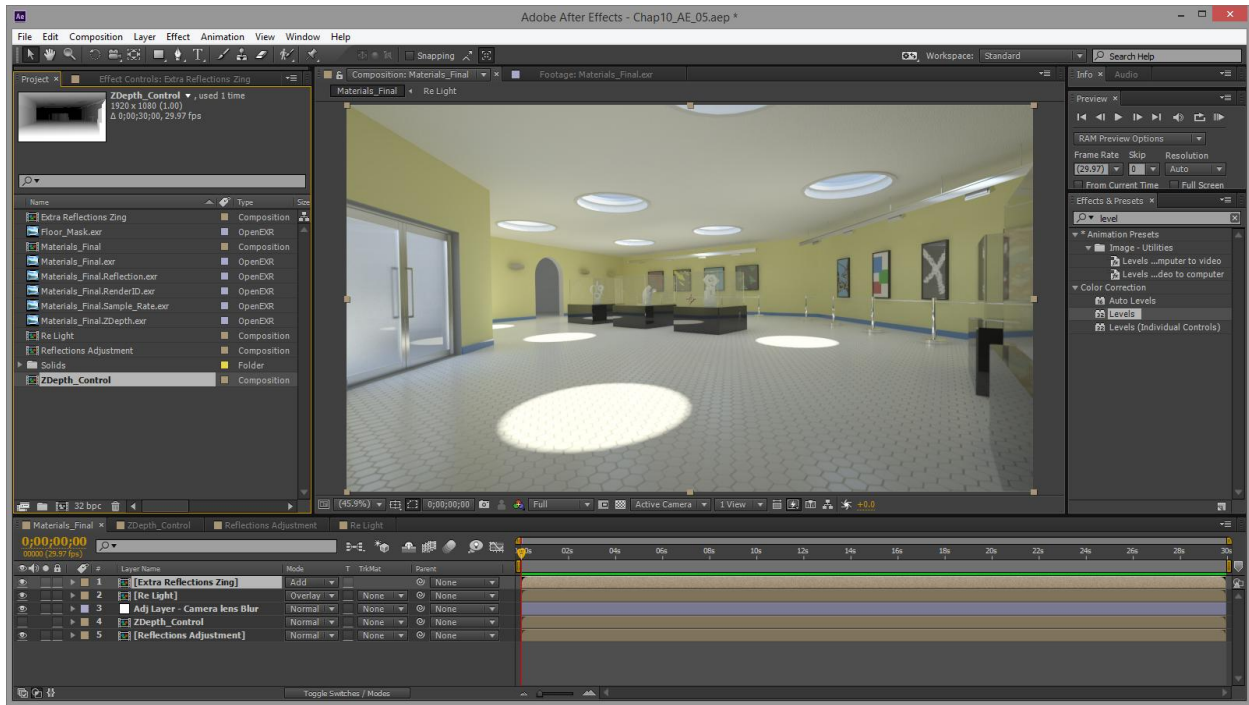


Project [lock icon] Effect Controls: Adj Layer - Camera lens Blur [dropdown] [menu icon]

Materials\_Final • Adj Layer - Camera lens Blur

▼ fx **Camera Lens Blur** [Reset](#) [About...](#)

- ▶  Blur Radius [2.5](#)
- ▼ Iris Properties
  - Shape [Hexagon](#) ▼
  - ▶  Roundness [0%](#)
  - ▶  Aspect Ratio [1.0](#)
  - ▶  Rotation [0x +0.0°](#)
  - ▶  Diffraction Fringe [100.0](#)
- ▼ Blur Map
  - Layer [1. ZDepth\\_Control](#) ▼
  - Channel [Luminance](#) ▼
  - Placement [Center Map](#) ▼
  - ▶  Blur Focal Distance [0.0000](#)
  - Invert Blur Map
- ▼ Highlight
  - ▶  Gain [0](#)
  - ▶  Threshold [0.8000](#)
  - ▶  Saturation [0](#)
  - Edge Behavior  Repeat Edge Pixels
  - Use Linear Working Space



Project [lock icon] Effect Controls: Adjustment Layer 4 [dropdown] [close icon]

Materials\_Final • Adjustment Layer 4

▼ fx SA Color Finesse 3 [Reset](#) [Options...](#) [About...](#)

▼ Parameters

## Color Finesse 3

Full Interface Load Preset Reset About

▼ Simplified Interface

- ▶ Levels - Auto Correct
- ▶ Hue Offset
- ▶ Curves
- ▼ HSL
  - ▼ Master
    - ▶ Hue 0.00
    - ▶ Saturation 100.00
    - ▶ Vibrance 10.00
    - ▶ Brightness 0.00
    - ▶ Contrast 20.00
    - ▶ Contrast Center 0.500
    - ▶ RGB Gain 1.100
    - ▶ Gamma 1.000
    - ▶ Pedestal 0.000
  - ▶ Highlights
  - ▶ Midtones
  - ▶ Shadows
- ▶ RGB
- ▶ Limiter

Materials\_Final x

0:00:00:00  
00000 (29.97 fps)

Layer Name Mode T TrkMat

1 [Vignette] Normal

Masks

Mask 1 Add Inverted

- Mask Path Shape...
- Mask Feather 182.0, 182.0 pixels
- Mask Opacity 20%
- Mask Expansion 0.0 pixels

Transform Reset

2 Color Finesse Normal None

Toggle Switches / Modes

Materials\_Final Render Queue x

Current Render Elapsed:

Render	#	Comp Name	Status	Started	Render Time	Comment
✓	1	Materials_Final	Queued	-	-	

Render Settings: Current Settings... Log: Errors Only

Output Module: Photoshop Output To: Materials\_Final (0:00:00:00).psd

Message: RAM: Renders Started:

