By Candle Light-

Set includes-

22 Candle props with parented lights to simulate candle light

13 Material files to change the wax colors of the candles

Material files to hide and reveal the candle flame

5 Glass shaders for votive candle glass

6 Metal Shaders for candle sticks and bases

15 uberlight presets with ambient occlusion for fill light

15 uberlight presets that are ambient only for fill light

Low poly dome to enclose the environment

Candle light never loses its charm and with these props and lights you can add beautiful candle light to your scenes with ease.

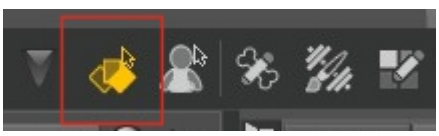
Each candles stick has an attached candle with flame and parented lights. Also included are material files to turn the flames on and off if you prefer to post work them in. The 22 candle prop styles range from antique to modern and also include candles without sticks that can be placed in other containers or held aloft. To add yet more flexibility to the set I have also included material presets for 13 additional wax colors, 12 enamels for candle sticks and bases, 6 metal shaders that use ray traced reflections and 5 glass shaders.

Also included in the set is 30 uberlight set ups. 15 use ambient occlusion and 15 are saved as ambient lights so that you can choose the speed that suits you better. These lights can be used as fill lights in your scenes to simulate darker fill light that would naturally occur in rooms or outdoor scenes.

USE:

Candlesticks will load into your scene with lights to simulate candlelight parented to the flames of the candlesticks. All of them will load in the 0 position in your scene. When moving the candles to position them be sure to move the candlestick so that the lights follow them properly.

To apply a different shader or material be sure that the candlestick and the surface you wish to change are both selected. The easiest way to do that is with the surface selection tool.



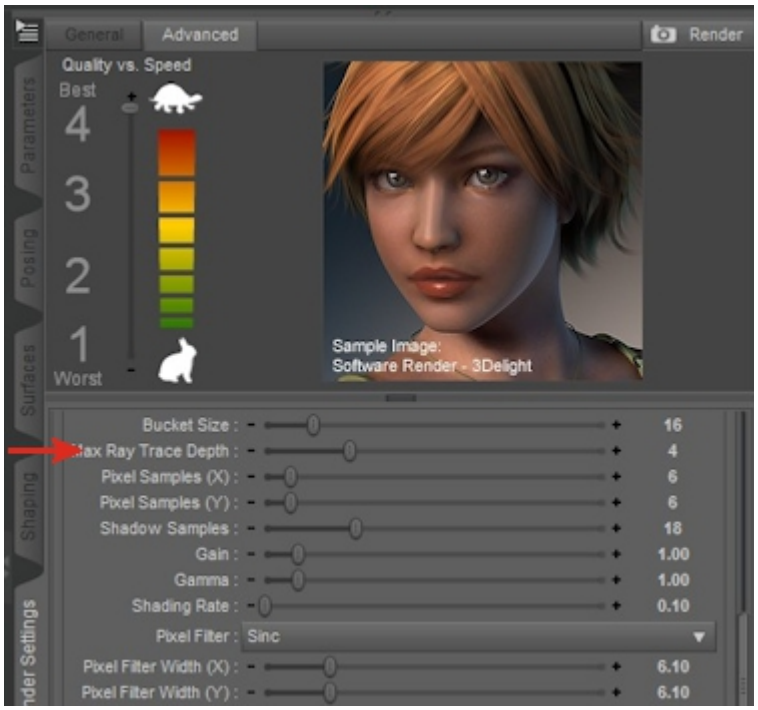
When you load an uberenviroment light it will load in a light and a parented uberenviroment sphere. The sphere will not be rendered in your final render and does not cast shadows in your scene. If it is obscuring your view when your setting up a scene simply click they eye in the scene tab next to the environmental sphere (below the uberenviroment light).

Hints and information:

Use care when placing multiple candles near each other as they will each generate a fair bit of candle light and they may over light each other or the scene. There are adjustments that you can make to lesson this effect which I will discuss later.

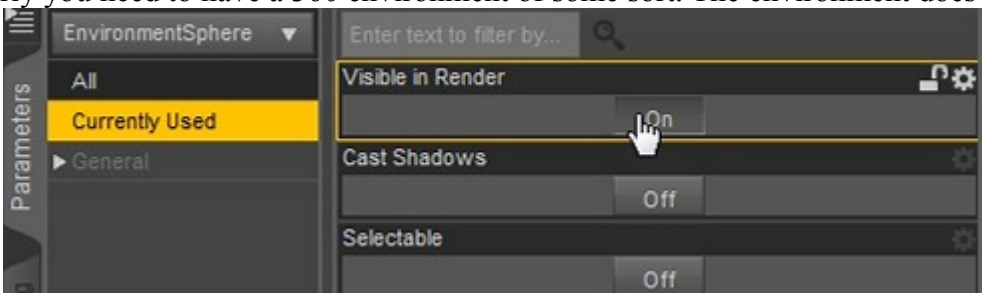
Also keep in mind that every candle light has ray traced shadows. Each of those shadows will add at least a little time to your overall render time. You can elect to change them to mapped shadows but run the risk of "sprites" due to a current 3delight issue. The lights with ambient occlusion will also add time to renders. This is especially true if you hair or other transmapped areas are taking up a fair bit of your render. You may wish to apply a more advanced shader to the transmapped areas that will let you turn off ray tracing on those areas. If you can do that will of course depend on your scene.

Reflection and Glass- Reflection is an important part of the metallic shaders and glass. Two things to keep in mind are that in order for the ray traced reflections and the glass to work properly there needs to be something to reflect. The second thing to consider is that what ever is being reflected needs to be lighted as well. The low levels of light outside the circles of light cast by the candlesticks may not be bright enough to give you good light on the objects to be reflected. Even with an uberlight in the scene this may be true. One option to make sure that objects to be reflected in scenes using these lights are fully lit is to put a spotlight behind the camera aimed toward what ever your candlesticks will be reflecting.



In order for ray traced reflections to work properly you need to have your advanced render settings high enough so that the ray tracing works properly. In general a setting of 4 for max ray depth is adequate. There is the possibility of situations where you may need a higher setting. For example, if you have multiple layers of glass that the camera is viewing through. But the higher the setting the longer your render will take on areas that are using ray tracing for reflections or refraction.

For glass to render properly you need to have a 360 environment of some sort. The environment does not need to part of your final render or to be viable to your . You can make the uberenviroment sphere viable in the render or you can use the low poly reflection dome included in the product.

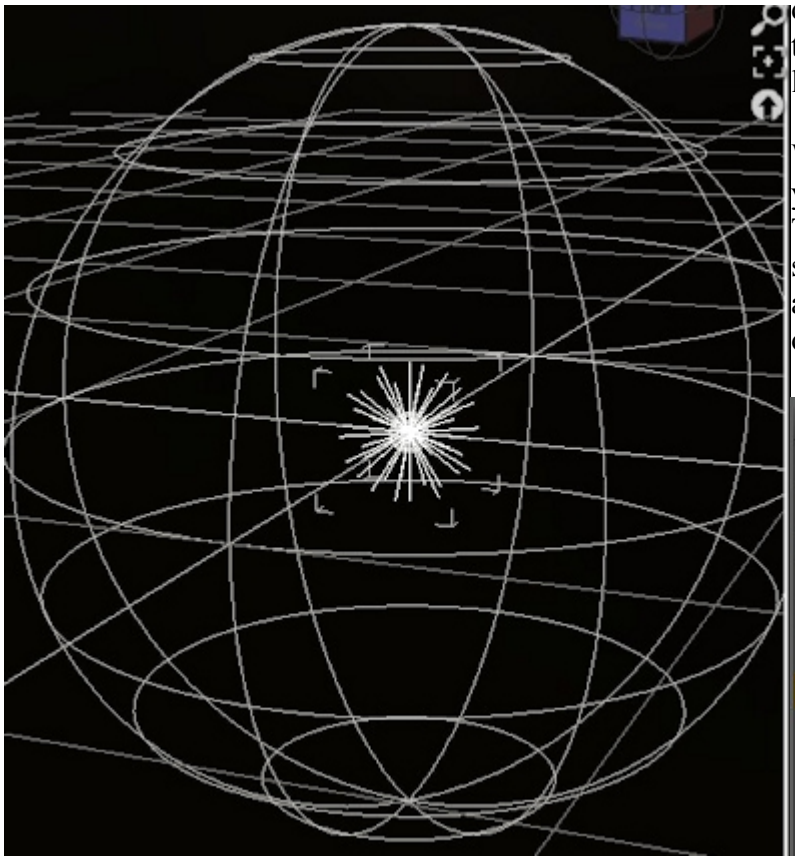


You will need to include enough in your scene to give you a background for the objects in order to hide the 360 environment you need to make the glass work properly. I also suggest that you put some other objects that fit the scene just behind your camera for a better reflected effect.

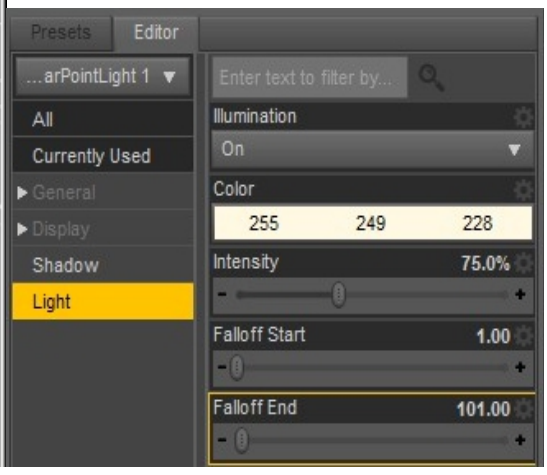
Glass and reflection will always add some time to your renders due to the computations necessary so keep that in mind when setting up your scene and your expectations for speed of render.

Lights:

Each candle light uses 2 point lights to get the desired effect and they need to remain parented in place to give the wax the correct look. One of those lights is an shader light and that is why the lighting looks “odd before render'. I find these lights give better results with skin textures and the odd look before render is worth it. The other light used for the candle light is a linear point light and it is responsible for the shadows and the main part of lighting as it moves away from the light source. These lights use decay/falloff and they are less bright as they move away from the center of the light.



When you select the light in your scene you will see “balls” around the light. These indicate how far out the decay is set to start (small ball in the very center) and to end. The larger they are the further out your light will remain bright.



If you use a single candle and it's lights then the light will have almost total dissipated by the time you go 100 out on all the axises. Anything beyond that point will be in darkness. At times candle light may be all the lighting you may want in your scene for aesthetic reasons.

If your after a more realistic effect you need to be aware that there would be other light present in the scene. Even in a fully enclosed room with just one candle lit you would have reflection of the candle off of the surfaces of the room and any thing else in the room. The light level you get from that would depend on the color of those surfaces. Outdoors there would also be some ambient light due to the moon and any other light in the environment Because of this you will want to load an uber light into your scene to help fill some of that ambient light.

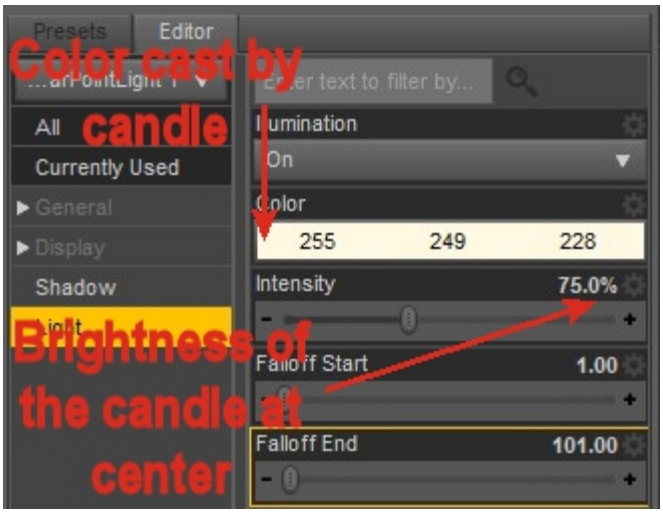
In this case the fill light is used in an all white environment so that you can see clearly the amount of light that is added. The white surfaces here are also lighter than they would be if they were darker and reflect the greater amount of light that would be bouncing back off of light colored surfaces.

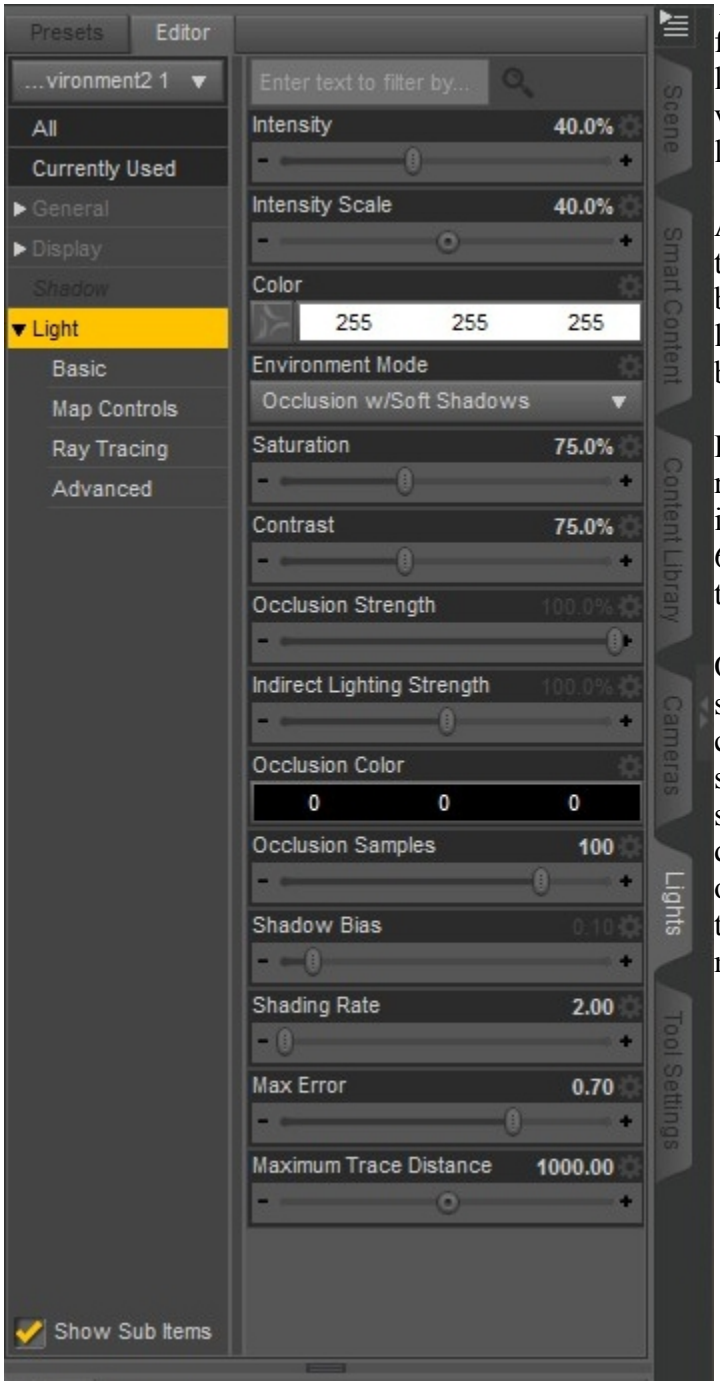
How much light you need in a scene will depend on your goals and personal taste. But in general you will need at least 1 candle light fairy near what you want to show up well in your render and a fill (uberlight) so that you have some light in the rest of your scene.

As you can see a single candle cast a fair amount of light so if you multiple candles you may need to alter some of the settings so that they don't over light part of your scene. You may also want to change some setting of the fill lights in order to have more brightly light scenes as well.

The risk of having the candles over light objects in the scene or each other is lessened if the candles are spaced further apart and you take advantage of the decay/fall off of the candle lights.

Making changes to the point lights is fairly simple and straight forward. The primary changes you may chose to make are to the color and intensity. Intensity will change how bright the light is at the start of fall off and the color will change the color of the light that the candle is casting. You can use a darker color for a darker light. A more saturated color or a different color would be a less realist effect for regular candles. Also remember that altering the falloff/decay will alter how far out the light goes as it diminishes.





The other thing you may choose to alter is the fill light (uber light) used in the scene. The fill lights included with the scene represent a variety of times you might use a candle for light.

As you can see from the product thumbnails the lights have a different base color that will be the color of the light that they cast. The level of that color can be adjusted to your taste by changing the strength of the saturation.

How bright these lights can be adjusted by raising the level of the intensity. For example in this image we could change the intensity to 65 or even 100 and have stronger fill light in the scene.

One last adjustment you may need to make in some cases is the maximum trace distance. It controls how far out from the center of the scene the uber environment light is active. For small spaces with lower light levels at a distance you may wish to lower this. For large outdoor scenes with deep depth (distance) to the back of the scene that will be rendered you may need to raise this number.

Don't be afraid to use these lights with other types of lights. For example you may choose to use an uberlight from a different set of lights that may even have an additional light in it to give you moon light and shadow from it. Or you may choose to add your own distance light for moonlight.