

# IG Iray Candles User Notes

As the title says, this isn't so much a user guide as it is a bunch of notes that will help you make the most of this product in your renders. One thing that really struck me while I was researching and designing this set was wide variety of perceptions as to just what a burning candle really looks like. From what your eye sees, to what a camera lens sees and ultimately to what your mind's eye imagines a burning candle looks like. None of these visions are exactly the same as the others and yet each one is, in its own way, completely true. Ultimately I choose to go with creating a product that looks right to my eye knowing fully that someone else may not think they look exactly right. That is the main purpose of this guide, to help you to quickly adjust this product from my vision of what I think looks right, to what your render actually needs. Ultimately every scene is pretty unique so I can't definitively say you need to adjust this to that, but hopefully I can point you in the right direction.

## Candle Flame

This is probably the most subjective item in this product. Early on in designing this product I realized that it wasn't possible to create one single universal candle flame material that would look and feel right in all situations. A big part of the difficulty is in creating a material that both looks like a burning flame while also creating and casting realistic light into your scene. The default materials are what I think are the best and most universally good looking, but I have also included 5 other flame material options. #2 and 3 are both more orange than the default, while #5 and 6 are more yellow. #4 gives you a more balanced whiter light. There are also three different settings for the intensity of the light created by candle flame.

## Candle Wax

Wax is another pretty subjective looking material. The biggest issue here is how translucent the candle looks, and that can really be affected by your render settings, especially your Exposure Value. Raising or lowering the wax's Translucency Weight by 0.05-0.1 can have a significant effect. Lowering the weight gives you a more solid look while higher values give you a more see through effect.

There are two sets of wax presets, one in the material folder and one in the shader folder. Why two sets? Originally there was just the one set of universal surface shaders, but while creating the promos for the set with lots and lots of candles in each scene, it became apparent that having to select each candle object, and then selecting the right surface on each object, each time, was completely not user friendly, so the material set was created. A big part of the original design was to have a set of universal wax shaders that could be used on any surface, not just the candles in this set, so both variations are included.

## Designs Notes

The main focus behind this set was to make a set of candles that could function as realistic background props or accent lighting, or even the main source of illumination in your scene. To that end I tried to make these as high res as required to create and cast realistic light, while also keeping them low res enough that they don't overly bloat your video card's memory while rendering. To help achieve that end I ended up choosing to do simple yet classic accessory props. I also tried to avoid using dedicated texture files as much as possible to keep the memory footprint low.

## Exposure Values

By default, the camera exposure settings in Daz Studio are set for a studio environment or a bright outdoor scene. So if you put one single candle in your scene, it isn't going to cast anything close to the amount of light your camera is set up for. To compensate for this, you can lower your Exposure Value (Render Settings/Tone Mapping) so that your scene appears brighter. What is the right number? That really depends on your scene and the other light sources in it. Pretty much you just have to keep lowering your EV and then doing a test render until you get a pleasing balance of light in your scene.

## Bloom Settings

There are a couple Bloom Filter presets to help you get started in achieving a natural bloom effect in your render. To summarize the way the bloom filter works, the lower the bloom threshold is the bigger the bloom effect, while raising the threshold lessens the effect. If that was it, the couple of presets I gave you would be all you would need to know to get the effect you want. But there are also a couple of other things that can affect your bloom filter. Obviously if you have greatly adjusted the Exposure Value it will affect the apparent amount of light in your scene. Plus, the filter is affected by how close your camera is to the object. Close up objects require a lower threshold to get the same effect as you get from further away.