

5 PRINCIPLES OF RESPONSIBLE LIGHTING - THE COLOR OF LIGHT MUST BE ENVIRONMENTALLY APPROPRIATE

WHAT IS CCT, OR THE COLORS OF LIGHT?

Colors of lighting are typically measured through the Correlated Color Temperature. There are many different colors of lighting available, but not all of them are good for use outdoors. Color temperatures from 2200K to 4000K are considered warm or white.

Color temperatures above 4000K should not be used outdoors for several reasons.

- Color temperatures above this CCT contain too much blue light for nighttime use outdoors
- Blue light can disrupt the health of the natural nighttime environment for plants and animals. This impacts the environment on land, in freshwater, or in the ocean.

It is also important to remember how bright the light source is and how long it shines also affects how much impact it has on the environment

- The color of interior lighting at night has a greater impact on humans because we spend more time under brighter lights indoors.



This applies to landscape lighting the same way it does for building or sign lighting. This photo shows three different color temperatures being used in one space. There should only be one color temperature in this space and it should be warmer for the health of the plants.

WHAT ARE THE DIFFERENT COLORS OF OUTDOOR LIGHTING?

2200K



This color temperature is considered very warm, but there are warmer light sources! Using this color of light in parks, anywhere near water, and near areas with wildlife is beneficial to the environment. It can also provide a more historic nighttime appearance for an area.

2700K



This color temperature is considered warm. Using this color of light can be beneficial where use by people at night and the environment need to be given equal priority. Using this color of light in residential zones or mixed-use areas can help create a cozy nighttime experience.

3000K



This color temperature is considered warm-white. It is an accepted standard choice for most outdoor lighting needs. Using this color of light in active commercial or downtown environments helps us see the colors of materials in more detail at night.

4000K



This color temperature is considered white. Using this color of light is appropriate on larger roads that have higher speed limits or are busier at nighttime as it can improve drivers' visibility and reaction times when objects or pedestrians are in the road.



HOW DOES THIS PRINCIPLE IMPACT THE TOWN OF VIENNA?

The new outdoor lighting ordinance will help the Town by providing guidelines for when to use the different colors of light within this acceptable outdoor range - 2200K to 4000K. This will help by:

- Improving consistency in which color temperatures are used throughout the Town
- Helping the Town reduce the amount of blue light outdoors at night to help protect the environment
- Improving neighborhood character by standardizing on the preferred residential color temperature

Do you have a preference for one of these colors of light in your neighborhood? Tell us about it - be sure to take the Town's Outdoor Lighting Survey!