

# **Common Landscape Lighting Design Flaws**

---

Consumer Awareness Guide

**Mark Carlson**  
**1/1/2016**  
**Revised 1/16/2019**

# General Information

The Consumer market is at a big disadvantage when it comes to understanding the 'expected outcome' of a landscape lighting installation. It is for this reason that this listing has been established, to identify the 10-Common Lighting Design Flaws found with this profession.

This awareness of what is considered a 'Flaw' is crucial for the consumer, as well as the trade practitioner. The reason it is stated this way is because many service providers do NOT even know that they are performing poorly—it's an Awareness to ALL.

Landscape lighting design flaws generally occur from one of the following reasons:

- **Lack of Service Provider Experience**
- **Lack of Consumer Awareness of what is Acceptable**
- **Lack of Caring by the Service Provider**—laziness or poor standards

The **Experiential Landscape Lighting Initiative (ELLI)** was established to provide education to both the Consumer and the Trade Practitioner. It serves to raise the bar and for the betterment of the discipline and art-form, which landscape lighting truly is. Although this document is a written description of these flaws, an upgraded presentation is available to review in the **"Educational Gallery—Presentations"** section, where graphics are included.

The Consumer, through this Understanding, has the opportunity to 'Measure', what is considered, "not-so-good" with that of, "good." As with anyone who spends time in study, the result of your efforts will greatly benefit you in the selection of service providers which are available to you. Ask to see their portfolio of work or spend time looking at photos and gallery images of their work—these are excellent opportunities to use this Guide of information to determine for yourselves, who is skilled versus not.

# Common Outdoor Lighting Design Flaws

The following will identify what I consider to be Common Flaws, as made by either the lighting designer or the lighting installer:

## 1. Poor Aiming or Placement

This is one of the most common flaws and it's a key defining measure in determining a lighting designer's ability. Most of the time it occurs because lighting service providers get lazy or they just don't care to aim them for the best application of light. And then again, a lot of times those providing these services don't really know what's best to do. Regardless, this is a big problem and it ruins many lighting designs.

Aiming the light is different than the Placement of the light fixture. Aiming applies to the direction of the light and what it is illuminating. Placement of fixtures is part of that, but it worries about where the fixture is located to avoid any obstacles. Both are critical aspects of ensuring the light is applied to what you wish, and it includes the avoidance of hitting something not desired—other plants, structures, etc. If the light illuminates something not desired, then this can provide distraction to the viewer.

These distractions can be in the form of what we refer to as, 'Hot Spots'. The best lighting designs avoid these problems, so that a clean visual display is achieved.

It should be noted too, that **the art of landscape lighting comes from being able to effectively design, locate and position lights, as well as aiming them properly so as not to see the light.**

And lastly, all work needs to be reviewed at night. Some designers and contractors say, "Oh, I don't need to do the night-time adjustments because I'm good enough during the day to know it's fine". As Consumers, don't fall for this excuse of laziness. Very few, if any are this accurate without seeing the lighting at night. This should be a 'red flag' for you about how skilled the lighting designer is, if they won't at least come back at night to perform this service.

There are times when minor adjustments or a small movement can make all the difference in the outcome of this project. Additionally, many designers will leave it up to their field crews to perform this work at night, but it often doesn't get done the right way or to the same quality control level.

## 2. Excessive Glare

This is another common issue with many providers, as care wasn't originally taken in the selection of best fixture for the job, or it was improperly positioned. In either case, it produces glare and it's both disturbing and distracting to the viewer.

The worst culprit of this crime, 'Excessive Glare' is that of the open-faced light fixture found on most every home—the wall sconce or pilaster light. Typically, these fixtures are exposed on all sides with clear glass, which makes them nothing more than a, “glare bomb”. Sure, these light fixtures throw out a lot of light, which serves its goal of function—a broad washing of illumination throughout the area. However, these kill any emotional value to the setting.

Another form of glare can be seen with the use of underwater lights. The reason for this is because water acts to control the distribution of light and it limits its ability. Therefore, what is commonly found in water features is seeing a blob of light where the source is. This glow of light becomes the 'hot spot', in a sense because the surrounding areas fall into darkness. It is this contrast in light and darkness that allows this.

Many lighting designers choose to put lights into the water in the attempt to illuminate the stream, water feature or body of water, but the outcome usually is not good—it's spotty at best and doesn't provide justice to the element at hand. There are some applications in water that do work, such as when the light source is directly under or behind the spillway of the water feature, but that's about it.

Glare in general is undesirable by everyone. It is one of the three primary concerns with the Dark Sky Initiative. The three concerns are: Glare, Light Trespass, and Sky Glow are all part of the greater problem and they all can be controlled with effort. It should be noted that Glare and Lighting Trespass are items directly related to landscape lighting and how the lighting designer employs these lights on a project.

Sky Glow realistically isn't generated by low voltage landscape lighting systems—at least by most projects. I'm sure there are extremely large jobs where excessive amounts of lighting is used and improperly aimed into the sky, which contributes to the Sky Glow problem, but this is not the norm.

### **3. Over-Illuminated**

Generally, this this occurs because of two reasons: A) the designer may be unaware of a better way to illuminate a space, or B) the designer is aware of this problem and they are attempting to 'sell' more lights than is required. Either way, they are wrong. In the end, the design intent looks confusing or distracting, and it feels uncomfortable.

As can be expected, when a project design has too many lights and is over-illuminated, it becomes bland and it feels commercialized. This vast washing of light or spottiness distracts from what would normally be seen—a common destination element or focal point, as well as an even amount of shadow for interest.

There's another form of Over-Illumination and that is when light fixtures use excessive power (wattage) in their output. Some lighting designers don't place value on this element of design by

knowing how to properly use light, and they believe in using the highest available wattage source to illuminate a scene. Again, this is bad and unnecessary.

The lack of shadow provides for No Mood to the setting. One needs to consider this, especially as a lighting designer. There should be a balance, because it is night. Also, is your garden space to look like a sports complex or a surgery room? Shadow provides mood and feeling in these spaces.

## 4. Under-Illuminated

Obviously, this is the opposite of being over-illuminated, but it's still a problem. There are a few reasons for this type of problem: A) a lacking budget, B) allowing someone who doesn't really understand landscape lighting to 'act' as the lighting designer, or 3) the lighting designer doesn't really understand why lighting is important. As can be expected, these settings feel dark and uncomfortable—one might even be hesitant to proceed across the property in these conditions.

There are times when plenty of light fixtures are present, but the space still seems dark and under-illuminated. This occurs when the wrong light fixtures are used, and the setting is very 'spotty'. This phenomenon occurs due to the light not being distributed well and there is added distance between light sources filled with darkness, so the contrast is great.

The solution to some of this problem is to provide fill light or transitional light between these illuminated objects. This will make a space feel connected and part of one another, versus that of being segmented and somewhat harsh.

## 5. Poor Composition

This is another key defining measure in determining the designer's ability. A good lighting designer will have the basic understanding of the **Elements of Design—Shape, Form, Texture, Pattern, Color and Space**. Those that are experienced will have the ability to consider these elements, as well as having the ability to "see" lighting applications during the day time. It takes years to develop these skills.

Additionally, **Composition addresses—Balance, Contrast, Emphasis, Pattern & Rhythm, Unity and Movement**. Each of these components needs to be considered when illuminating a scene, setting or space. One's design will attribute to how each of these considerations works in an effective and thoughtful purpose.

Why is Composition so important? Because, it's a foundation in Art, Photography, and Design. There is much to consider in its role, but we will focus on some issues that are more prominent in this profession.

The first common issue we find relates to **Space**. This refers to **the feeling of Depth**. Space contains a Background, Middle Ground, and Foreground. And what tends to happen in this type of

flaw is that one or two of these parts is missing. For example, the distant background is completely in darkness. This makes the space feel unnatural and limited, due to this void.

**Emphasis** is another problem found with some lighting designers. It is the same thing as **Focus** or the **Focal Point**. The viewer's eye wants to rest on the most important thing (focal point) in a scene. Otherwise, the eye feels lost and wanders around in the space. This causes a sense of tension.

The last important element that is problematic with some designers is, **Balance**. It can also mean **having symmetry**, and when it is present, there's a sense of calm. One can see this in lighting designs that have too much lighting in one area versus another. Or, it can be seen where lights are spread too far apart creating a random, blotchy or spotty look. There's always a sense of tension due to the area being unbalanced.

Many lighting designers haven't learned to use softer, fill lighting between areas of higher lighting levels. Fill light or it's sometimes referred to as, Transitional lighting, can connect these spaces together and to aid in Unifying the setting.

## 6. Architectural Mindset

This is a coined term because there's no real name for it. It's a smaller problem, as compared to some of the other flaws because it falls into the Composition category. It occurs when the lighting designer, highlights primarily or only the architecture of the structure without including the landscaped areas surrounding it. From a compositional stand point, this could be the middle ground area that's illuminated, while leaving the foreground and background areas in darkness.

It's commonly found with many landscape lighting designs, especially in those locations that have expansive land areas with lawn/turf. It's hard to understand why those calling themselves, "landscape lighting designers" would employ this type of design, as it's all architectural lighting. Where is the "landscape"...that is supposed to be illuminated?

It should be noted that even though this is considered a Flaw, many of the architectural applications look very nice—they are well done. But, the design still lacks from the missing parts of the composition. Because of this, the structure looks daunting and stark against the surrounding blackness of night. This does not make the visitor feel comfortable, instead it provides a sense of tension.

## 7. Lack of Destination

This problem occurs frequently and it is when the space does Not identify or define a destination point. These settings fail to connect the viewer to a focal element to direct their attention and to lead them comfortably to that point. Again, this problem is associated with Composition because you are not providing the **Emphasis** in the space.

As it was mentioned earlier, when destination points are missing, they cause confusion for the viewer. These spaces create added tension and they cause the eye to wander in search of something to lock onto.

Another way of looking at it is that the visitor “questions” the setting, so tension arises—you never want to pose questions to those experiencing the space. All decisions should be naturally made, so that movement and flow can occur—this makes the environment, calming and a positive experience.

## 8. Overuse of Colors

The use of color in lighting design can be good, but within reason for the experience desired. This is relatively a new experience for many consumers, as the lighting industry has begun releasing these types of products to the market over the past decade.

So, why is this a Common Flaw? It’s because very few know how to properly employ colored lighting into these natural environments. If you consider that the consumer and many lighting designers see this opportunity, as a fun display to enchant themselves and their visitors. I would ask, has any of these people considered the impact of color(s), as it might concern their emotional experience to these spaces? I highly doubt it. This question is a **psychological consideration**.

Additionally, the reason for this increased use of colored lights is because it’s a ‘new toy’ to play with. Most landscape lighting designers that use multiple colors (overuse of colors) has no idea of these psychological impacts. If color is applied sparingly, then it is much more acceptable. And, when it is limited, it provides for a more powerful impression on mood. This is something to consider.

Color and the use of colors is subjective by nature, so there may be some that absolutely adore it and find pleasure in its experience. Awareness of this is the key point in this topic. Color use is much more complex than one thinks, and it is why the artist understands Color Theory. This is a basic concept and understanding in their work, as it should be applied equally in lighting design.

To dig a little deeper, **Color Theory** combines the use of a **Color Wheel, Color Harmony, and Color Context**. The basics to the **Color Wheel** associate Primary, Secondary and Tertiary colors and their relationship in Color Mixing.

**Color Harmony** is the pleasing arrangement of parts—in the case of visual experience, what is pleasing to the eye. This Harmony engages the viewer and creates an inner-sense of Order, Balance, and Interest. If the color is Not in harmony, then the experience can feel Boring or Chaotic. The human brain rejects what it cannot organize or understand.

There are Analogous Colors and Complementary Colors—these are described below:

- **Analogous Colors**—any 2 to 4 colors that are side-by-side on the color wheel.

- **Complementary Colors**—any 2 colors that are opposite each other on the color wheel. These colors provide for a maximum contrast and they have maximum stability.

**Color Context** relates to how a color behaves or feels in relation to other colors next to it.

Lastly, each color can affect one's emotional state and there are separate studies on this. Color can impact the mood of a setting, especially when it applies to lighting. It is for this reason lighting is a key component to the theater—theatrical lighting. My point is, landscape lighting designers need to consider these emotional impacts when utilizing color—they should Not be using color as a play activity.

Poor color combinations and overuse can provide a sense of 'cheapness' or that of Not being in an elegant setting. Many designers end up making the outdoor environment more of a 'Theme Park' look—to overwhelm the senses, enchant, or to attempt to provide 'Awe'. But this rarely occurs, and what ends up happening is the viewer feels uneasy and somewhat tense through these experiences. It also tends to make the space look tacky, in many cases.

## 9. Overuse of Lights

This problem is common, but typically occurs with newer service providers. The reason being—inexperienced. It's likely they don't understand there are a variety of products available which will do a better job in illuminating these spaces. Another reason, which is worse, they do know better and are doing it only for the increased cost to the project.

Overuse is normally seen with path lighting along walks or drives. It is also found on stairways or decks—lights placed in every step or several at each step. Walls, columns, posts and other structures have a similar theme—multiple light fixtures everywhere. Are these truly necessary? In most cases, not.

One of the issues related to this problem is that it affects the Composition of the design, once again. By utilizing multiple light fixtures, it establishes a **Rhythm, Pattern** and even a sense of **Emphasis** to the viewer, where this becomes the focus. This is the last thing I'm sure the lighting designer intends for his/her job. These Patterns will distract the eye and they feel unnatural, as well.

A great example of this that we've all seen is in the lined walk way to the front door of someone's home, and there are an excessive number of light fixtures used. Some have called this the "Runway Look", as one might relate to an airport. It's as if the owner is trying to guide or land the plane! This is very undesirable.

## 10. Poor Techniques

This final classification of Common Flaws is more of a catch-all category to capture multiple flaws occurring in one setting. Unfortunately, this happens more than we'd all like to see. In many cases,

Poor Techniques occur when service providers are rushed, or just don't care enough about the outcome of the lighting project. In some cases, they occur because the service provider just chose the easiest or simplest way to install light fixtures.

If we consider those jobs that are rushed or those which are simple and easy, then we will generally find the lighting designer is performing in a "production-oriented" environment. They see most every job as the same—to get in and out of the job quickly, because time is money. They tend to provide 'cookie-cutter' projects (ones that look the same), because that's what they know.

The other reason in understanding why these combined flaws occur is Only because the lighting designer truly is ineffective and lacks knowledge. This is truly unfortunate because it hurts everyone—the professional, the industry, and the consumer. This type of behavior is part of the profession and how this profession is viewed.

There is No governing authority to correct Poor Practice and these Poor Techniques from being provided. The only way to prevent this from becoming more prevalent is through Education and Understanding what is right and wrong.

Poor Techniques include poor practices & standards, as well as the use of poor products. Landscape lighting products are another area of concern because there are so many available on the market. The best way to ensure this quality is to do research and to make the best selection of your service provider as you can—and choose those with Experience.

## Final Thoughts

This listing of Common Flaws is just that. Even though I provide extended understanding into these categories, there is much to consider when performing landscape lighting design. One should not take it lightly and assume that everyone knows the same or even provides the same level of services, because they DON'T. The Consumer needs to be Aware of this—use due diligence in your selection of the best designer.

The Consumer should understand and consider that most landscape lighting designers might only work with the following aspects in a job: **Safety, Security, Aesthetics, and Task**—these are all based on **Function**. The problem with this is that it does Not include the **Emotional** aspect and value of this work.

Consumers and Lighting Designers all need to utilize this Guide, as a means in evaluating work or photos. Don't just take the service provider's word that they are the greatest designer out there or that they have all these awards or certifications. Such items are easily obtained if one puts any effort into it. The true measure is in actual work. And, lighting designers need to use this to better understand what they are doing.

Thank you for taking the time to read this and to better educate yourself in this wonderful art-form. There is additional study materials under the "**Educational Gallery**".