The KFL collection is extremely versatile and can adapt to virtually any application, which requires a variety of architectural mounting options with the same level of flexibility.

- Architectural Junction Box
- In-grade Staked
- Surface Conduit Mount
- Wall or Ceiling Mount
- Stanchion Mount
- Wall Mount Side Pole Mount Twin Mount
- Surface Mount Tenon
- Side Pole Mount Tenon Twin Mount Tenon
- Post Top Mount Triple Mount Tenon
- Twin Post Top Mount Stanchion Mount Tenon
- Stanchion Mount Tenon Twin Post Top Mount
The striking, timeless form of Kim Lighting's KFL Collection floodlights seamlessly blends high performance optics, controls, scalability and architectural mounting options that cover a variety of applications and enhance their environment.

The Intent linear floodlight family joins Kim Lighting’s extensive floodlight offering. This compact architectural floodlight provides optimal appearance and performance for exterior wall washing, grazing or sign lighting applications in Static White, RGBW and RGBA configurations.
desired effect
Wall Grazing is a technique where lighting is positioned close to the wall with the intent of highlighting the textures of the wall. Wall grazing is a popular technique used in landscape and façade lighting. This technique is commonly used on natural materials such as stone to bring out variety and imperfections in the texture.

common distribution
Wall Grazing

general guideline
By placing the lights close to the wall it forces the beam of light to hit the wall at a narrow angle. This narrow angle highlights the textures of the wall by creating shadows. The size of the shadowing can be adjusted by moving the beam of light closer or further from the wall.
Wall Washing is a description used when the intent is to light a wall evenly. This is most commonly used when lighting murals, signage, or drawing attention to a vertical surface. Washing walls will help remove the visual appearance of any surface inconsistencies.

**desired effect**

**common distribution**

Wall Washing

**general guideline**

Luminaire setback is an important metric for wall washing. Space between the lit surface and the luminaire will help create even illumination on the wall and remove the possibilities of shadowing. Fixture spacing must also be considered to avoid scalloping on the wall.
The intensity and length of the beam can be adjusted by modifying the setback of the luminaire. Evaluate center beam candlepower to help determine the intensity in the center of the luminaire’s beam. Consider using optical accessories such as a glare shield or barn doors to prevent light from spilling off of the desired surface reducing glare.

desired effect
Column lighting is a lighting technique where a narrow beam of light is aimed upward to highlight the desired target. Column lighting is used to highlight architectural features of buildings or sculptures.

column lighting
Column lighting is a lighting technique where a narrow beam of light is aimed upward to highlight the desired target. Column lighting is used to highlight architectural features of buildings or sculptures.

general guideline
The intensity and length of the beam can be adjusted by modifying the setback of the luminaire. Evaluate center beam candlepower to help determine the intensity in the center of the luminaire’s beam. Consider using optical accessories such as a glare shield or barn doors to prevent light from spilling off of the desired surface reducing glare.
Luminaire setback is an important factor in sign lighting if the goal is to evenly illuminate the sign. Rectangular signage is more common than square, so vertical and horizontal distributions can be helpful in optimizing target illumination.

**desired effect**
Illuminating signs is similar to wall washing but may have physical boundaries. Sign lighting can be achieved by using a number of lighting effects; the type of lighting used would be based on the type of sign and the desired effect.

**common distribution**
Horizontal Distributions

**general guideline**
Luminaire setback is an important factor in sign lighting if the goal is to evenly illuminate the sign. Rectangular signage is more common than square, so vertical and horizontal distributions can be helpful in optimizing target illumination.
In creating ambient lighting, the goal should be to achieve a uniform light level across the canopy so the light will reflect back to light the space (see page 38 for more information on reflection). In trying to achieve a dramatic effect, you can use other lighting effects such as grazing or highlighting to illuminate the architectural features of the canopy. The goal of canopy lighting is a smooth glow on the ceiling without being able to see the direct lighting source.

**desired effect**

Canopy lighting can be used to create a dramatic architectural effect as you would see in large colosseum, museum or even interior applications. Canopy lighting can be used to highlight artwork, architectural features or to create ambient illumination. The goal of canopy lighting is a smooth glow on the ceiling without being able to see the direct lighting source.

**common distribution**

Medium Flood

Wide

**general guideline**

In creating ambient lighting, the goal should be to achieve a uniform light level across the canopy so the light will reflect back to light the space (see page 38 for more information on reflection). In trying to achieve a dramatic effect, you can use other lighting effects such as grazing or highlighting to illuminate the architectural features of the canopy. Luminaires need to be mounted high enough so occupants are unable to see the light source.
Spot lighting is best achieved with the fixtures setback away from the target to allow for uniform lighting. Typically spot lighting will use a narrow beam angle. However, wider beam angles can be used depending on the size of the target object. With larger setbacks, the distance between the illuminated surface and the luminaire need to be evaluated for objects that could obstruct the light, including occupants that may be walking through the space.

The desired effect is to highlight features such as clocks, flags, statues, signs or anything that needs to be highlighted. The goal of spot lighting is to draw attention to these features.

A common distribution is Spot Narrow. This ensures that the light is directed precisely where it is needed, avoiding unnecessary illumination of surrounding areas.

**General Guideline**

Spot lighting is used to highlight features such as clocks, flags, statues, signs or anything that needs to be highlighted. The goal of spot lighting is to draw attention to these features.

**Applications**

- Grazing
- Washing
- Column Lighting
- Sign
- Canopy Lighting
- Spot Lighting
- Landscape and Trees
- Area Lighting
- Bridges

**Intention**

- Color
- Color & White

**KFL**

- Color
- Color & White
The goal of landscape lighting is to allow for the beauty of surrounding trees, shrubbery and flowers to extend into the night. Often, lighting can be used to add an additional dramatic effect to the landscape. High light levels are normally not needed unless it is also being used for ambient lighting in the space.

**desired effect**

Any

**general guideline**

Wide distributions are normally used for shrubbery and narrow for taller trees. Colored lighting is normally not used.

(see page 39 for more information on absorption)
Area lighting is best achieved with higher mounting heights and wide beam angles. To reduce glare, it is best to keep the luminaires below a 65º tilt angle if possible. Floodlighting is also commonly mounted midway up the pole to supplement area lighting.

**desired effect**

Just as a traditional area light is used, a floodlight can be mounted to a pole to provide lighting in a parking lot, loading space or large open corridor. The benefit in using a floodlight in this type of application is glare reduction because the light is thrown further. Be aware that sometimes using floods in this way can be more visually obtrusive.

**common distribution**

Medium  Medium Flood  Wide

**general guideline**

Area lighting is best achieved with higher mounting heights and wide beam angles. To reduce glare, it is best to keep the luminaires below a 65º tilt angle if possible. Floodlighting is also commonly mounted midway up the pole to supplement area lighting.
desired effect

Floodlighting on bridges is used to highlight the vertical elements and architectural detail.

common distribution

Spot Narrow

Space restrictions normally limit the allowable setback on bridges, so more luminaires are required to achieve the desired effect. Shielding is also recommended as to not distract drivers or pedestrians when moving through the space.

general guideline

Space restrictions normally limit the allowable setback on bridges, so more luminaires are required to achieve the desired effect. Shielding is also recommended as to not distract drivers or pedestrians when moving through the space.

White & Color

Applications

Grazing
Washing
Column Lighting
Sign
Canopy Lighting
Spot Lighting
Landscape and Trees
Area Lighting

Bridges

INT: COLOR
INT: WHITE
INT: COLOR & WHITE
INT: COLOR & WHITE
DISTRIBUTIONS
APPLICATIONS

INTENT
STATIC WHITE
RGBW COLOR

KFL
STATIC WHITE
RGBW COLOR

Narrow Spot
(7x7)

Spot
(11x11)

Narrow
(15x15)

Narrow Medium
(23x23)

Medium
(33x33)

Medium Flood
(54x54)

Wall Graze
(13x40)
DISTRIBUTIONS
APPLICATIONS

INTENT
STATIC WHITE
RGBW COLOR

KFL
STATIC WHITE
RGBW COLOR

vertical distributions

horizontal distributions
The KFL is available with six distinct distribution patterns to illuminate a variety of applications.
application considerations

All floodlighting applications have several considerations that must be measured before selecting the correct luminaire. Once these are determined, it becomes significantly easier to find the right luminaire, output, distribution and mounting, as long as you have the right tools.

MULTIPLE BEAM COVERAGE
When a large area is to be illuminated, multiple fixtures are often required to produce satisfactory coverage of the target. By using complementary optical designs in combination, virtually any surface can be illuminated uniformly.

PATTERN OVERLAP
Increasing the overlap between adjacent beam patterns will reduce the contrast between illuminated areas and shadowing, however shadow width will not be reduced, as this is a function of setback distance.
There are many ways that light can react when hitting a surface: reflection, refraction, transmittance, absorption, or a combination of any of those. Understanding these effects will help you understand how the light will appear in the application.

**SETBACK EFFECTS**
As the setback distance increases, the required beam pattern size decreases for the same target area. Although distribution plays into this as well. Narrowing the beam pattern as the setback increases means the level of illumination and area of coverage.

**SETBACK DISTANCE**
One of the largest impacts on appearance of surface details is setback distance. The availability of a wide range of complementary optical distributions means that the appropriate setback distance can be used to achieve desired shadowing and surface appearance.

**SHADOW WIDTH AND SETBACK DISTANCE**
Shadowing from surface detail is inversely proportional to set back distance. Shallow set back distances render deep shadows. As setback distances increase, the depth of shadows decrease.
**COLOR EFFECTS**

**blending RGB and White**

Blending Red, Green, and Blue with a 6500K White LED produces opportunities to tune white light into any hue, with any degree of saturation desired. This allows lighting to be tuned to produce the desired surface appearance, enhanced or muted, that might be desired.

**RGB+W Creates White Light Effect**

Blending white light with RGB color, produces a wide range of white light effects. Any hue can be created, from the warmth of candle light to cool blue moonlight, along with any pastel shade. This expands the range of a single white light source over the entire spectra, in addition to adding saturation and hue adjustment to suit a specific desired lighting effect to enhance or accent surfaces or landscape features.

**RGB combined to make White**

Mixing RGB colors will generate approximation of white light. The chart to the left shows the approximate values Between Red, Green and Blue to create any shade of white light from warm dimmed incandescent to bright daylight.
Blending Red, Green, and Blue with a 6500K White LED produces opportunities to tune white light into any hue, with any degree of saturation desired. This allows lighting to be tuned to produce the desired surface appearance, enhanced or muted, that might be desired.
There are four ways that light can react when hitting a surface: reflection, refraction, transmittance, absorption, or a combination of any of those. Understanding these effects will help you understand how the light will appear in the application.

**COLOR LIGHTING SURFACE**

**REFLECTION**
A pure white surface reflects all colors meaning any and all colors from a light directed at a white surface will bounce off and fill back into the space. A white surface will appear the color of the light shining on it and will also reflect that color on other nearby objects. Reflectance is expressed as the percentage of light leaving the surface divided by the amount hitting the surface.

**REFRACTION**
As light enters and exits a transparent material, the beam angle will change direction. If the two surfaces are parallel the exit angle will equal the entry angle, for no net change in direction. An example of this is a window pane. If the two surfaces are not parallel, the light will bend. An example of this is a lens or a prism. In the case of the prism, white light can be separated into the colors that make up the white light. Water droplets can also act like a lens and separate colors into a rainbow.

**TRANSMITTANCE**
Transmittance occurs when light travels through a transparent media. The media can be gas, solid or liquid. The best examples of this are air (gas), glass (solid) or water (liquid). As light travels through the media some light will be absorbed. Because light either travels through the material or is absorbed, no light is reflected off of the surface and cannot be perceived on the surface.

**ABSORPTION**
As referenced above, pure white surfaces will reflect all colors, but colored surfaces will absorb some light. This means that when working with colored light it can get tricky to predict the appearance it will have on a colored surface. If the surface color does not contain the color of the light, all light will be absorbed, resulting in a false black appearance.

Colored surfaces, on the other hand, appear their respective color because they absorb the light that does not match their color. For example if white light is shining on a red surface, the surface is reflecting back only the red component of the white light, absorbing the rest and appearing red. This means that when working with colored light it can get tricky to predict the appearance it will have on a colored surface if a light source does not contain the color of the object, then there is none of that color to be reflected back, and the object will appear black. An example of this would be if you shine purple light on a green object. With no green in the light source, the object simply appears black.
**CONSTRUCTION MOUNTING OPTIONS**

**KFL**
- KFL1
- KFL2
- KFL3

**INTENT**
- INT

- Wall Mount (WM)
- Side Pole (SPM)
- Twin Mount (PT)
- Yoke (Y)

- Junction Box (JBR)
- Architectural Junction Box (JB1)
- In-Grade Staked Box (JBR30/32)
- Wall Mount (WM)
- Side Pole (SPM)
- Twin Mount (PT)

Dimensions are for illustration purposes only.
CONSTRUCTION MOUNTING OPTIONS

KFL
KFL1
KFL2
KFL3

INTENT
INT

Post Top Mount (PT)
Twist, Post Top Mount (PT2)

Dimensions are for illustration purposes only.
CONSTRUCTION
MOUNTING OPTIONS

KFL
KFL1
KFL2
KFL3

INTENT
INT

Dimensions are for illustration purposes only.
CONSTRUCTION
MOUNTING OPTIONS

KFL
KFL1
KFL2
KFL3

INTENT
INT

Wall/Ceiling Mount (WM)
Surface Mount (J-27N)
Knuckle (K)
Yoke (Y)
Post Top Mount (PT)
Twin Post Top Mount (PT2)

KFL2-K-PT
KFL2-K-PT2
KFL2-K-WM
KFL2-K-J-27N

Dimensions are for illustration purposes only.
CONSTRUCTION
MOUNTING OPTIONS

KFL
KFL1
KFL2
KFL3

INTENT
INT

KFL3-S-SPT
KFL3-S-SMT
KFL3-S-MQB
KFL3-S-M3E
KFL3-S-M2B
KFL3-S-SM2
KFL3-S-M2B
KFL3-S-M2B
KFL3-S-SM2

Dimensions are for illustration purposes only.

Slipfitter (S)
Side Pole Tenon (SPT)
Twin Mount Tenon (SMT)
Twin Mount Tenon (M2B)
Twin Mount Tenon (M3E)
Twin Mount Tenon (WM2)
Twin Mount Tenon (SM2)

Wall Mount Tenon (M2B)
Wall Mount Tenon (M3E)

Stanchion Tenon (SM2)

KFL1
KFL2
KFL3

Dimensions are for illustration purposes only.
CONSTRUCTION

MOUNTING OPTIONS

KFL
KFL1
KFL2
KFL3

INTENT
INT

Wall Mount – Adjustable Arm

3" Adjustable Arms

6" Adjustable Arms

12" Adjustable Arms

Ground Mount – Knuckle (K)

J-25N

JBR1

SM18

Dimensions are for illustration purposes only.
With the versatile mounting option offered in the KFL, you are able to tilt the luminaire up to 290 degrees. This extensive range of motion allows for more possibility of applications to be illuminated.
The Intent features a Knuckle and Adjustable Arm Mount which is able to pivot 180 degrees allowing for tailored made aiming.
KFL Barn Door and Half Glare Shield optical options allow for more customization and reduction of unnecessary glare.

INTENT For additional glare control, the Intent offers louvers that are both functional and architectural in look and function.