In-Grade Collection Standard • RGBW



Lightvault







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A history of innovation

"They copied, and copied, and copied, but they couldn't copy my mind. So I left them sweating and stealing, a year-and-a-half behind." ~ Rudyard Kipling

Rudyard Kipling's quote sums up Kim Lighting's reputation as a premium outdoor luminaire manufacturer and industry leader for high quality in-grade illumination.

With decades of lighting expertise and innovation, we still follow the timeless values of innovation and uncompromising quality established over 80 years ago by our founder F. B. Nightingale.



Expanding on the Lightvault[®] 8, Kim Lighting has added RGBW color changing technology to the medium 10" and the large 13" fixture. The luminaire can be controlled wirelessly via Hubbell's Bluetooth[®] mobile app or by hard wiring directly to a DMX control system.

LIGHT VAULT 8

The Lightvault 8 is the industry's first Bluetooth[®] controlled in-grade luminaire. A downloadable Bluetooth[®] app gives you the ability to aim or dim the luminaire via a personal mobile device without compromising the integrity of the solid-state IP68 sealed light engine.



Time Line - The History of In-Grade Lighting

C50 Well Light débuts, introducing the idea of in-grade lighting.

1950

1962 The Kim Concept 3000 in-grade fixture launches.

1970 Kim's Concept 5000 enhances innovation, durability and performance.

1999

Lightvault enters the market, quickly becoming the leading industry standard. 2013



Lightvault 8 premieres, once again redefining the in-grade luminaire. 2015 Addition of RGBW for an infinite palette of color via wireless or DMX control system.

Durability

The Lightvault[®] 8 earns a well-deserved reputation for durability with a sealed IP68 rated light engine, advanced thermal management technology, tempered glass lens, UV-resistant pour box, and outer brass housing with a 25 year warranty against corrosion.

Ease of installation

The LTV8 family was designed with ease of installation in mind. The pour box with splice cover and debris shield ships ahead of time, allowing for placement and rough-in installation prior to concrete pour or landscape installation. A rebar cage is also available to tie the pour box into surrounding rebar when installing in concrete. The pour box can be installed flush with grade level, eliminating the need for a grout mask. The IP68 rated sealed splice compartment allows easy access to connection areas during final installation.

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Control Software

Lightvault[®] 8 RGBW

Set the mood with color by Aiming, dimming, and color control via Bluetooth® wireless or DMX hardwired connectivity.

Hubbell RGBW Connect App Features:

- Free downloadable App for Android or iOS mobile devices
- X-Y tilt controls for aiming $\pm 12^{\circ}$ in any direction
- Color selection via color wheel on "Home Screen"
- Ability to fine tune color output via "sliders" for Red, Green, Blue, and white on "Painter's Palette" screen
- Create, save, and rename 10 of your favorite color creations for future use on the "Preset" screen

reset 04 reset 06 reset 07 reset 08 reset 10

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🚯 Bluetooth



[®] HUB Light	BELL		
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unlimited color possibilities

Presets can be added

Lightvault 8 Standard White



Download Kim remote Bluetooth® app and pair with nearest fixture.



- Intensity (dimming) can be achieved via the slider directly below the color wheel on the "Home Screen" or on the Intensity wheel located on the "Intensity" (starburst) screen of the app
- Take a photo and select a color from the photo on the "Camera Screen" and watch the luminaire(s) you are paired with match the color in the photo instantaneously
- Ability to connect/control multiple fixtures at the same time as well as create/save fixture goups

DMX Features:

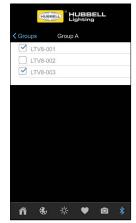
- Six inputs for attribute control; Four inputs (red, green, blue, and white) for intensity, two inputs for X-Y tilt
 - DMX-RDM enabled, controller supplied by others



Dimming slider



Select color from photo



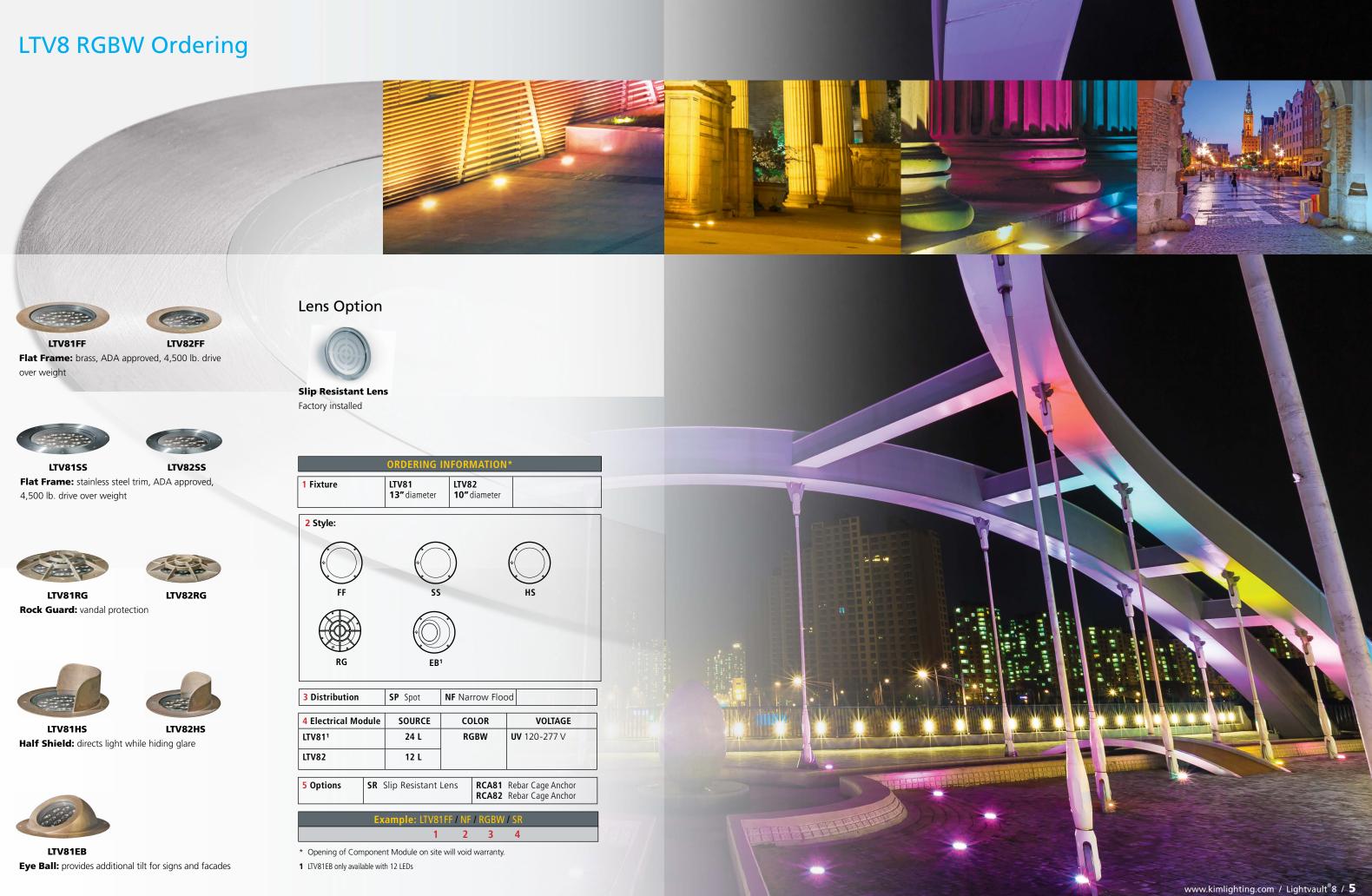
Create groupings



Bluetooth[®] app available for iPhone and Android.



iming/dimming capability



LTV81HS	LTV82HS
Half Shield: directs light while	hiding glare



LTV8 Ordering



Lens Option





Prismatic Lens For diffused light, factory installed

Slip Resistant Lens Can be added to prismatic lens, factory installed

ORDERING INFORMATION*						
1 Fixture	LTV81 13" diameter	LTV82 10" diameter	LTV83 8" diameter			
2 Style:						
FF FF	* • • •		HS			
RG			DM			

3 Distribution		SP Spot	NF Narrow Flood		d	ww	١	Wall	Wasl	
4 Electrical Module		SOURCE	COLOR		VOLTAGE			AGE		
LTV81		36 L	3K			U	V 120) - [277	V
LTV82		18 L	– 4K 4000K 5K 5000K –							
LTV83		12 L								
5 Options		Slip Resistant Le Prismatic Lens	ens	RC	CA82	Re	bar C bar C bar C	ag	, je Ai	nchor
		Example: LTV	/81FF / N	NF /	3K /	SR				
				2	3	4			_	
								-		

* Opening of Component Module on site will void warranty.

1 Eye Ball equipped with 18 LEDs for the LTV81 SP and NF, 12 LEDs for the LTV82, and 5 LEDs for the LTV83 SP and NF.

2 LTV81EB WW equipped with 16 LEDs, LTV83EB WW equipped with 8 LEDs.









LTV83FF LTV81FF LTV82FF Flat Frame: brass, ADA approved, 4,500 lb. drive over weight





LTV81SS LTV82SS LTV83SS Flat Frame: stainless steel trim, ADA approved, 4,500 lb. drive over weight



Rock Guard: vandal protection



LTV82RG

LTV83RG





LTV81HS LTV82HS Half Shield: directs light while hiding glare



LTV83HS











LTV81EB LTV82EB **Eye Ball:** provides additional tilt for signs and facades



LTV83EB







LTV81DM LTV82DM LTV83DM Directional Marker: for vehicle traffic area. 4,500 lb. drive over weight

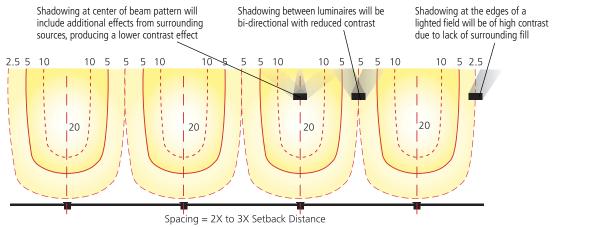
Applications

Lighting Effects

In-grade uplighting is effective for washing and modeling of wall surfaces and landscape features. However, the limited range of adjustment and tight optical distributions make location and distribution selection more sensitive than above grade floodlighting systems. When properly considered and carefully applied, in-grade uplighting can be attractive, as well as unobtrusive.

SULTER TIVE

Wall Washing



Beam Pattern Overlap

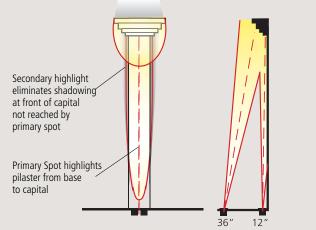
Optimizing beam pattern overlap is critical to achieve a desired level of uniformity. Increased space will generate more scalloping. Overlapping patterns create uniformity and soften shadow and modeling effects.

Setback Consideration

24' - 36

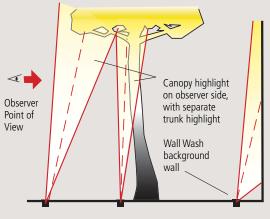
The greater the setback, the flatter the surface will appear. Tighter setbacks will produce deeper shadowing and texture modeling, on stone or masonary detailing.

Layering Effect on Columns



Architectural Feature Highlights

Layering light effects to emphasize details, such as columns or pilasters creates drama and interest. However, grazing effects held close to surfaces cannot reach features projecting beyond the fixture center line. Additional sources focused on these features keep them from being lost in shadow.



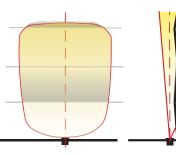
Landscape Layering

Depth is created by lighting objects or surfaces farther away from the observer's point of view. Highlights and accents nearer the observer create drama and interest. Lighting in front of tree canopies and trunks, enhance visual interest.

Surface Modeling

When illuminating surfaces from the ground, surface consistency and quality must be considered with grazing or wash effects. Horizontal variations are particularly troublesome, as small undulations in texture or consistency are exaggerated by lighting that is located with minimal setback distance. It is generally best to apply the greatest setback distance possible, while still producing the desired result.

Wall Washing Effect



Reduces wash effect and amplifies

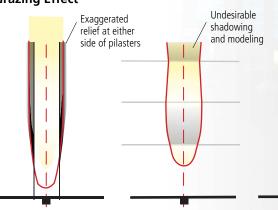
surface defects and texture.



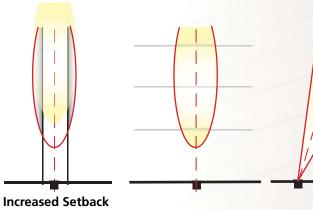
Increased Setback Creates smooth surface appearance and optimizes wall wash performance.

Grazing Effect

Too Little Setback



Too Little Setback Amplified surface defects and texture.



Smoothes lighting effect and reduces visibility of surface defects.



ALERA LIGHTING ARCHITECTURAL AREA LIGHTING BEACON PRODUCTS COLUMBIA LIGHTING COMPASS DUAL-LITE HUBBELL CONTROL SOLUTIONS HUBBELL INDUSTRIAL LIGHTING HUBBELL OUTDOOR LIGHTING KIM LIGHTING KURT VERSEN LITECONTROL PRESCOLITE

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