



HUBBELL
Outdoor Lighting



SOLAR LIGHTING



SOLUTIONS



HUBBELL
Lighting

SOLAR LIGHTING

WHY SOLAR? HARNESS THE POWER OF THE SUN

Solar power is a abundant source of energy that can be converted directly into electricity using photovoltaics (PV). The energy of the sun (solar radiation) is captured by solar panels, an array of solar cells. With the advancements in solar technology coupled with the improvements in solid-state lighting, commercial and industrial applications can now realize the benefits of solar lighting. Hubbell Lighting is committed to providing innovative and sustainable lighting solutions which offset the rise in energy costs and our impact on the environment.

Hubbell Outdoor and Spaulding Lighting offer sustainable solar powered lighting solutions for area/site, roadway, floodlighting, pathway and wall/ceiling applications using the most popular luminaires. The available products include: Roadway LED, Cimarron area/site LED, Laramie LFS flood LED, Euroluxe® LED, Laredo LED wallpack and Tempe LED bollards. These solar powered lighting solutions offer an environmentally friendly “clean energy” solution to lighting with the potential benefits of receiving special incentives for renewable projects.

SOLAR POWERED LIGHTING FEATURES AND BENEFITS

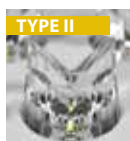
- ✦ Solar powered lighting offers an environmentally friendly solution to lighting
- ✦ Security, navigation and identification lighting for areas where grid tied power may be inaccessible, unreliable or too costly
- ✦ No trenching
- ✦ No wires
- ✦ No electric bills
- ✦ Funding may exist in certain areas for renewable projects
- ✦ Solar powered lighting system can be portable

Hubbell Lighting is pleased to partner with Solar Electric Power Company (SEPCO) to provide the most energy efficient and sustainable solar lighting solutions in the market.



LED TECHNOLOGY ENERGY-EFFICIENT SOLID STATE LIGHTING

Hubbell Lighting Solar powered fixtures feature superior designed high brightness LED systems, providing optimal optical performance while reducing energy consumption and lowering maintenance costs. These optical lenses are designed to distribute light where it is needed and comply with standard IES lighting distributions.



THE SYSTEM

INTEGRATED SOLAR ELECTRIC POWER ASSEMBLIES



Energy-efficient solid state lighting fixture for variety of applications



Solar panel with self-contained electrical power assemblies – 5 to 340w



Round Straight Steel (RSS) and Round Straight Aluminum (RSA) construction poles available



Complete solar lighting solution with instant sustainable off-grid power source

PRODUCTS

SOLAR LIGHTING APPLICATION SOLUTIONS

AREA/SITE



CR1 LED 12V DC

- * Decorative die-cast aluminum area/site luminaire
- * 30 LED light engine
- * 2700 - 4600 lumens standard
- * 4000, 5000K
- * IES Type II, III, IV, V

ROADWAY



RM LED 12V DC

- * Traditional die-cast aluminum roadway luminaire
- * 30 LED light engine
- * 2600 - 4600 lumens standard
- * 4000K, 5000K
- * IES Type II, III, IV, V

FLOODLIGHTING



Laramie LFS 12V DC

- * LED flood, die-cast construction with decorative styling
- * NEMA 6x6, 4x4, 1x1 beams
- * 950 lumens – 13.5w
- * 494 max CBCP
- * 5000K
- * 70 LPW nominal

WALL



Laredo LCC 12V DC

- * LED wallpack, die-cast construction with decorative styling
- * 12 LED system
- * 820 lumens – 12.8w
- * Compact full cut-off
- * 5000K
- * 3x spacing

WALL/CEILING



Euroluxe® 12V DC

- * 6 LED system
- * 923 lumens – 15w
- * Multiple Styles – Lens only, guard or shield
- * 5000K
- * 3x spacing
- * Bronze or White

PATHWAY



Tempe LED Bollards

- * Decorative round or square cast top with tamper resistant hardware
- * 31w and 46w LED systems
- * Rotatable LED assembly
- * 12 or 24 high brightness LED systems
- * 3500K, 5000K

PERFORMANCE

CEILING MOUNT APPLICATION PERFORMANCE



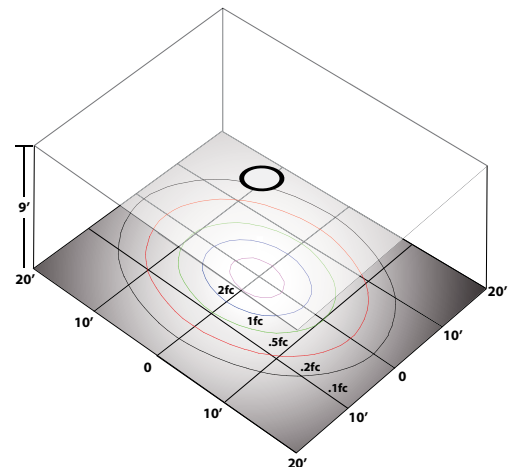
The Hubbell Outdoor Euroluxe® 12V DC wall/ceiling mount fixture utilizes energy saving LEDs and improved uniformity.

Fixture: Hubbell Outdoor Euroluxe® 12V DC

Mounting Height: 9 ft

Lumens: 923

IES file: BRLD01.IES



PERFORMANCE

WALL MOUNT APPLICATION PERFORMANCE



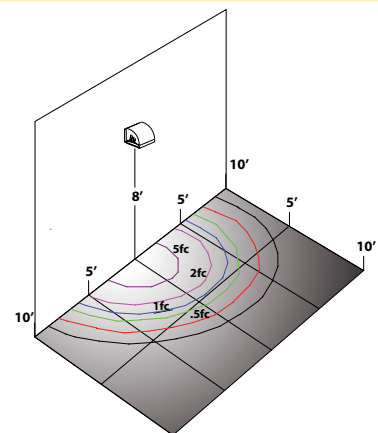
The Hubbell Outdoor Laredo LCC 12V DC wallpack fixture utilizes lensed LEDs for maximum performance and spacing.

Fixture: Hubbell Outdoor Laredo LCC 12V DC

Mounting Height: 8 ft

Lumens: 820

IES file: LCC12LU5K.IES



PERFORMANCE

FLOODLIGHTING APPLICATION PERFORMANCE



The Hubbell Outdoor Laramie LFS LED 12V DC available in narrow, medium or wide flood lighting applications.

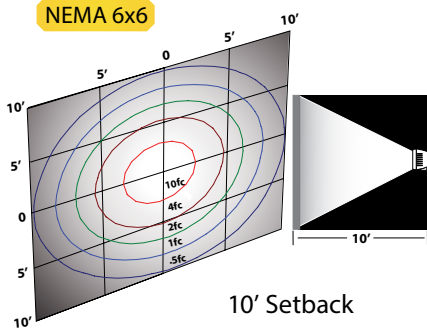
Fixture: Hubbell Outdoor Laramie LFS LED 12V or 24V DC

Three beams: NEMA 6x6, 4x4, 1x1

Lumens: 809 Wide, 888 Medium, , 908 Narrow,

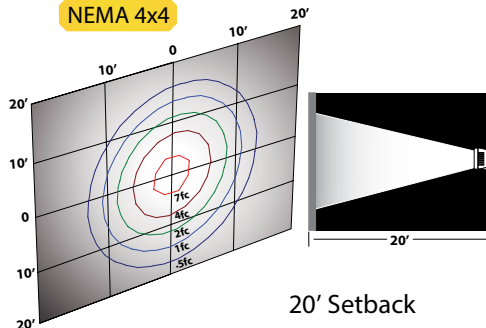
IES files: LFS12LD5KW.IES, LFS12LD5KM.IES, LFS12LD5KN.IES

NEMA 6x6



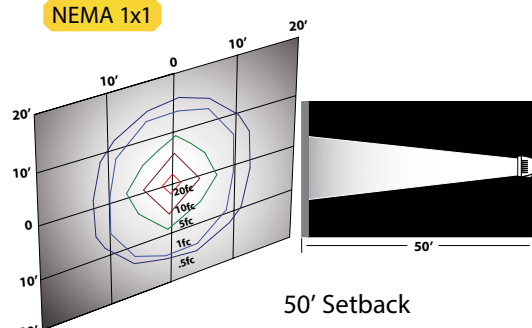
10' Setback

NEMA 4x4



20' Setback

NEMA 1x1



50' Setback

PERFORMANCE

AREA/SITE APPLICATION PERFORMANCE



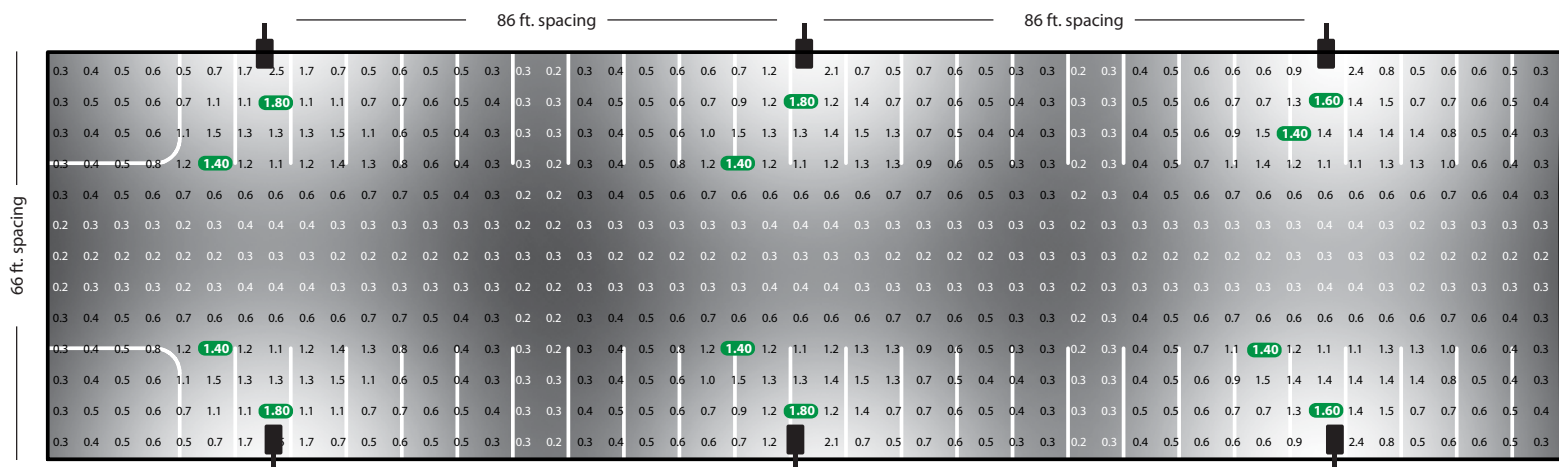
Spaulding Lighting's CR1 12V DC area/site lighters is a perfect fit for parking area and site applications in areas with abundant solar energy and remote applications. The CR1 utilizes the off the grid lighting solution with low maintenance and energy savings. State-of-the art LEDs provide better uniformity and elimination hot spots.

Fixture: Spaulding Lighting CR1 LED 12V DC

Mounting Height: 14 ft

Lumens: 2710

IES file: CR1D-30LD-5K.IES



Average	.62	Max	2.6	Minimum	.02	Avg/min	3.10	Max/min	13.00
---------	-----	-----	-----	---------	-----	---------	------	---------	-------

PERFORMANCE

WALKWAY APPLICATION PERFORMANCE



The stylish Spaulding Lighting Tempe LED Bollards available in round or square styles, featuring distinct cast aluminum ribbed design tops.

Fixture: Tempe LED Bollard

Mounting Height: 2.75 ft

Lumens: 1379 Asymmetric

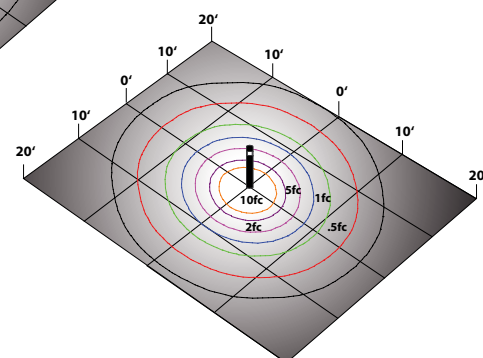
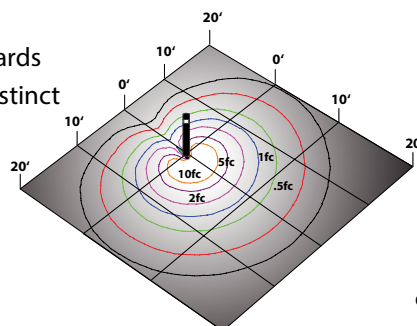
IES file: TMR-24LU-5K-XX.IES

Fixture: Tempe LED Bollard

Mounting Height: 2.75 ft

Lumens: 2341 Symmetric

IES file: TMR-24LU-5K-XX.IES



PERFORMANCE

ROADWAY APPLICATION PERFORMANCE



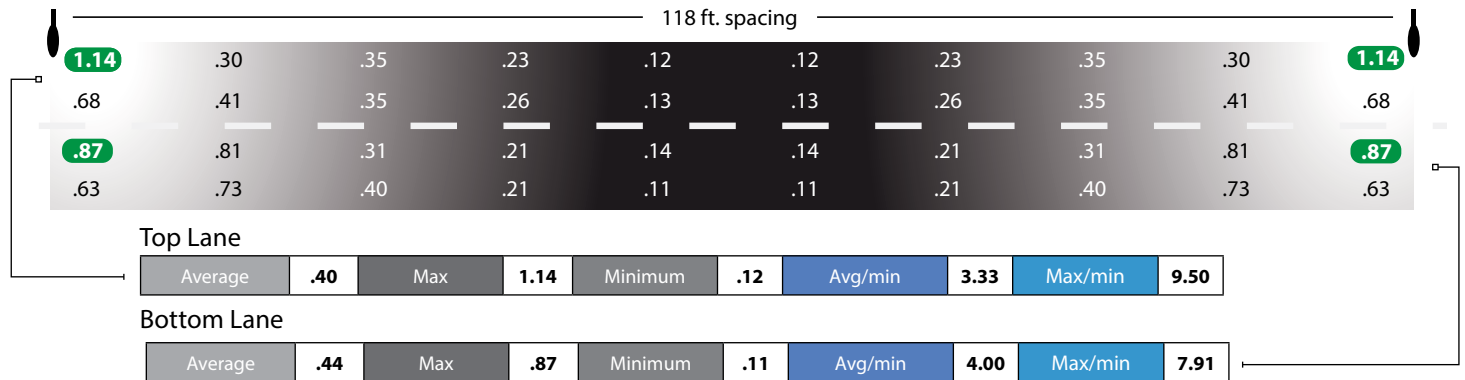
The Hubbell Outdoor LED Roadway 12V DC meets RP-8 2007 guidelines for local applications while utilizing LED advantages of better uniformity and eliminating hot spots. This off the grid lighting solution provides low maintenance and energy savings with long life LEDs.

Fixture: Hubbell Outdoor LED Roadway 12V DC

Mounting Height: 18 ft

Lumens: 2710

IES file: RMCT-30L-D-5K.IES



Illumination guidelines and standards for roadway illumination have several variables and characteristics to consider. Below is a table outlining footcandle readings published by the IESNA for roadway applications.

Illuminance Method: (RP-8) Recommended Minimum Maintained Average lux (fc)

Application		Pavement Classification lux (fc)			Uniform Illuminance	Veiling luminance Ratio
Roadway Type	Pedestrian Conflict Area	R1	R2/R3	R4	E avg/ E min	Lv max/L avg
Local	High	6 (0.6)	9 (0.9)	8 (0.8)	6.0	0.4
	Medium	5 (0.5)	7 (0.7)	6 (0.6)	6.0	0.4
	Low	3 (0.3)	4 (0.4)	4 (0.4)	6.0	0.4

Base on current IESNA guidelines

