

WS Series

WS4™ Wet Location Linear Vapor Tight — 4'

Rev. Date: V9 08/16/2024

Product Description

The Cree Lighting WS Series is a versatile IP65/IP66 rated and NSF certified fixture that provides sealed protection against dust and water ingress. Constructed of a one-piece, durable fiberglass housing and available with either diffused acrylic or polycarbonate lenses; the WS Series can be suspended or surface mounted while maintaining its operating range of -40°C - +40°C (-40°F - +104°F).

Applications: Food processing, animal containment, parking garages, garden centers, breezeways, cold-storage and other industrial applications

Performance Summary

Initial Delivered Lumens: 4,100 or 6,100 lumens

Efficacy: Up to 142 LPW

Input Wattage: 30 or 43 watts

CRI: Minimum 80 CRI

CCT: 3500K, 4000K, 5000K

Input Voltage: 120-277 VAC or 347-480 VAC

Limited Warranty*: 5 years for luminaire; 1 year for luminaire accessories

Mounting: Ceiling, wall, or suspended

Dimming: 0-10V dimming to 10%

Operating Temperature Range: Up to +40°C (104°F)

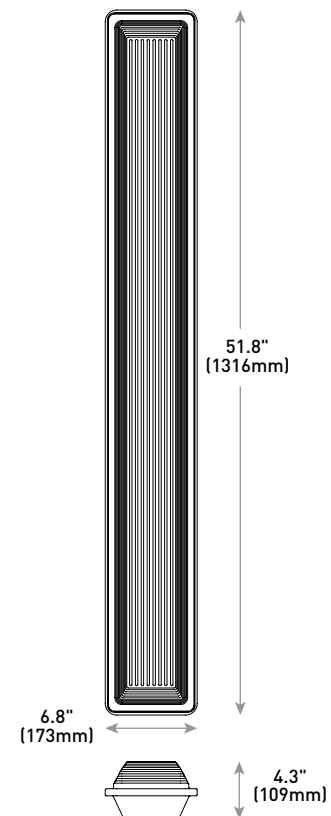
Assembled in the USA by Cree Lighting from US and imported parts

* See <https://www.creelighting.com/resources/warranties> for warranty terms

Accessories

Field-Installed	
Tamper Proof Kit WS4TPK - Includes 4 tamper proof screws and bit	Stainless Steel Safety Cables SC-5C - 5.0' (1.5m) Cable - Two required per luminaire - Non-NSF certified
Tamper Proof Kit for Stainless Steel Latches WSSSL4TPK - Includes 4 tamper proof screws and bit	

Luminaire (shown with LRA lens)



Ordering Information

Example: WS4-C-40L-LFA-35K-8-UL

WS4	C				8		
Product	Series	Lumen Package	Lens	CCT	CRI	Voltage	Options
WS4	C	40L 30W, 4,100 lumens 60L 43W, 6,100 lumens	LFA Frosted Acrylic LFP Frosted Polycarbonate LRA Ribbed Acrylic	35K 3500K 40K 4000K 50K 5000K	8 80+ CRI	UL 120-277 Volt UH 347-480 Volt	SSL Stainless Steel Latches



CREE ⇄ **LIGHTING**

Website: [creelighting.com](https://www.creelighting.com)

US: (800) 236-6800 Canada: (800) 473-1234

Product Specifications

CONSTRUCTION & MATERIALS

- Molded one-piece reinforced fiberglass housing
- Two 3/4" IP entry points are provided (one at each end of the housing) for continuous feed
- Includes eight captive white thermoplastic latches standard; stainless steel latches optional
- Suitable for ceiling and wall mount
- Includes two stainless steel mounting brackets and bails for surface or suspended mounting
- Weight:** 11.4 lbs. (5.2kg)
- Includes QR code on the LED tray inside the housing which provides access to: Online installation instructions, Luminaire information (Part number, Serial number, Build date, and Warranty end date), and Warranty claim submission form
- Duplicate 1" and 2" QR code labels are included. 1" labels can be affixed next to fixtures, on site plans, or in maintenance records. 2" labels can be scanned from the ground when placed at an appropriate height

OPTICAL SYSTEM

- Three injection molded lens choices: frosted ribbed acrylic, frosted acrylic, and frosted UV-stabilized polycarbonate
- Polyurethane gasketing is poured in place, providing a continuous, seamless seal

ELECTRICAL SYSTEM

- Input Voltage:** 120-277V or 347-480V, 50/60Hz
- Power Factor:** > 0.9 at full load
- Total Harmonic Distortion:** < 20% at full load
- Operating Temperature Range:** -40°C to +40°C (-40°F to +104°F)
- Integral 6kV/3kA surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current

CONTROLS

- Continuous dimming to 10% with 0-10V DC control protocol standard
- 10V Source Current:** 0.15mA
- Use only lighting controls with neutral connection or controls intended for use with LED fixtures
- Reference [dimming document](#) for additional information

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- IP65 and IP66 rated in accordance with IEC Publication 60598-1
- Intended for covered canopy use
- Requires minimum 90°C supply conductors
- RoHS compliant. Consult factory for additional details
- ANSI C136.2 6kV/3kA surge protection, tested in accordance with IEEE/ANSI C62.41.2
- Assembled in the USA by Cree Lighting from US and imported parts
- Some configurations meet requirements of BAA and/or BABA. Consult factory when needed for a project: www.creelighting.com/BAA-BABA
- DLC qualified. Please refer to www.designlights.org/QPL for most current information
- NSF Splash-Zone 2 Certified.
Refer to <http://info.nsf.org/Certified/Food/> for additional details
- CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov

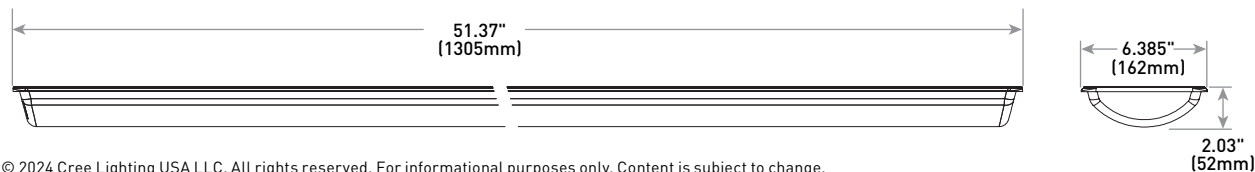
Electrical Data*										
Lumen Package	CCT	Delivered Lumens (all lenses)	System Watts 120-480V	Efficacy (LPW)	Total Current (A)					
					120V	208V	240V	277V	347V	480V
40L	All	4,100	30	137	0.25	0.14	0.13	0.11	0.09	0.06
60L	All	6,100	43	142	0.36	0.21	0.18	0.15	0.12	0.09

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347-480V +/- 10%

WS Series Ambient Adjusted Lumen Maintenance¹					
Ambient	Initial LMF	25K hr Reported² LMF	50K hr Reported² LMF	75K hr Estimated³ LMF	100K hr Estimated³ LMF
0°C (32°F)	1.04	0.98	0.92	0.87	0.82
5°C (41°F)	1.03	0.97	0.91	0.86	0.81
10°C (50°F)	1.03	0.97	0.91	0.86	0.81
15°C (59°F)	1.02	0.96	0.91	0.85	0.81
20°C (68°F)	1.01	0.93	0.88	0.83	0.78
25°C (77°F)	1.00	0.93	0.87	0.82	0.77
30°C (86°F)	0.99	0.92	0.87	0.82	0.77
35°C (95°F)	0.98	0.91	0.86	0.81	0.77
40°C (104°F)	0.97	0.91	0.85	0.80	0.76

¹ Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the [Temperature Zone Reference Document](#) for outdoor average nighttime ambient conditions.
² In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED.
³ Estimated values are calculated and represent time durations that exceed the 6x test duration of the LED.

LFP and LFA Lenses (lens only)



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