

WS4™

4' LED Wet Location Linear Vapor Tight

Product Description

The Cree WS Series is a versatile IP65/IP66 rated and NSF certified rated 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 -25°C - +40°C (-13°F - +104°F).

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

Performance Summary

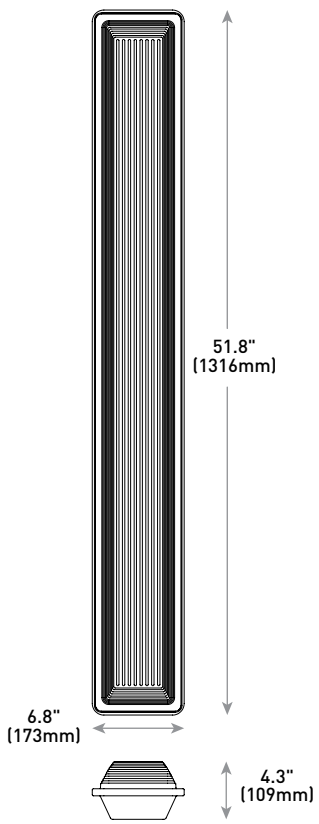
Initial Delivered Lumens: 4,100 or 6,100 lumens
Efficacy: Up to 142 LPW
Input Wattage: 30 or 43 watts
CRI: Minimum 80 CRI
CCT: 3500K, 4000K, 5000K
Input Voltage: 120-277 VAC or 347-480 VAC
Limited Warranty*: 5 years
Mounting: Ceiling, wall, or suspended
Dimming: 0-10V dimming to 10%
Operating Temperature Range: Up to +40°C (104°F)

*See <http://lighting.cree.com/warranty> for warranty terms

Accessories

Field-Installed	
Tamper Proof Kit WS4TPK - Includes 4 tamper proof screws and bit Tamper Proof Kit for Stainless Steel Latches WSSSL4TPK - 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

Luminaire (shown with LRA lens)



Ordering Information

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

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 - Required for car wash applications

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 (#316) latches optional
- Suitable for ceiling and wall mount
- Includes two stainless steel (#316) mounting brackets and bails for surface or suspended mounting
- **Weight:** 11.4 lbs. (5.2kg)

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:** -25°C to +40°C (-13°F to +104°F)
- **Transient Protection:** 6kV/3kA tested in accordance to IEEE/ANSI
- 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 rated
- Intended for covered canopy use
- Requires minimum 90°C supply conductors
- RoHS compliant. Consult factory for additional details
- Assembled in the U.S.A. of U.S. and imported parts
- DLC Premium 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

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 120-480V +/- 10%

WS Series Ambient Adjusted Lumen Maintenance ¹					
Ambient	Initial LMF	25K hr Projected ² LMF	50K hr Projected ² LMF	75K hr Calculated ³ LMF	100K hr Calculated ³ 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 TM-21 based on LM-80 data and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors

² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

³ In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

LFP and LFA Lenses (lens only)

