WS4™
4' LED Wet Location Linear

WS4™

Product Description

The versatile Cree WS Series wet location linear luminaire is suitable for indoor and outdoor applications. Constructed of one-piece molded, durable fiberglass-reinforced polyester and UV-stabilized, impact-resistant diffused acrylic shielding, the Cree WS Series is wet location listed and water-tight sealed for IP65 rating, which provides protection from external elements. The operating temperature range is -25°C to 35°C, allowing for cold to hot weather environment installations.

Performance Summary

Cree Full Definition

Delivered Light Output: 4700, 5000, 5900 and 6300 lumens

Efficacy: Up to 98 LPW

CRI: FD (Full Definition) color - minimum 80 CRI

CCT: 3500K, 4000K, 5000K, 5700K

Input Voltage: 120-277 VAC

Lifetime: Designed to last 70,000 hours at 25°C

Warranty: 10 years†

Dimensions: L 51.8″ x W 6.8″ x H 4.3″
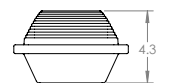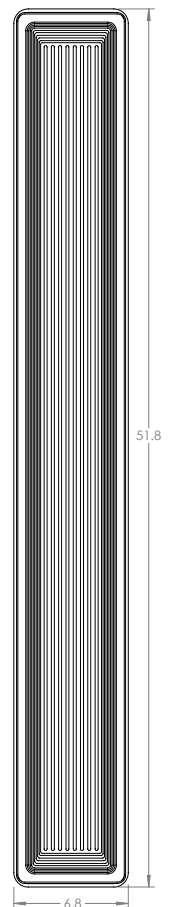
Weight: 12 lbs.

Mounting: Ceiling or wall

Dimming: 0-10V dimming: 10% - 47L and 50L; 15% - 59L and 63L*

51.8

6.8

4.3

Ordering Information

Example: WS4-59L-35K-10V-FD

WS Series						
Product	**Lumen Output**	**Color Temperature**	**Voltage**	**Dimming**	**Color/CRI**	**Options**
WS4	**47L** 50W 4700 lumens - **94 LPW** (35K) 50W 4700 lumens - **94 LPW** (40K) **50L** 51W 5000 lumens - **98 LPW** (50K) 51W 5000 lumens - **98 LPW** (57K) **59L** 63W 5900 lumens - **94 LPW** (35K) 63W 5900 lumens - **94 LPW** (40K) **63L** 64W 6300 lumens - **97 LPW** (50K) 64W 6300 lumens - **97 LPW** (57K)	**35K** 3500 Kelvin **40K** 4000 Kelvin **50K** 5000 Kelvin **57K** 5700 Kelvin	**Blank** 120-277 VAC	**10V** 0-10V dimming (standard)	**FD** FD = Full Definition Color - CRI 80 (standard)	**SSL** **Stainless Steel Latches**

Accessories

Accessories
WS4TPK Tamper Proof Kit (includes four tamper proof screws and bit)
WSSSL4TPK Tamper Proof Kit (for stainless steel latches; includes four tamper proof screws and bit)
WS4MBK Mounting Bracket Kit (includes two stainless steel surface mount brackets)**
WS4CSK Cable Suspension Kit (includes two stainless steel brackets with 5' aircraft cable)**

† See www.cree.com/lighting for warranty terms.

* Reference www.cree.com/lighting for recommended dimming controls and wiring diagrams.

** Reference to installation sheet for details.

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CREE®

U.S.: www.cree.com/lighting   T (800) 236-6800   F (262) 504-5415   Canada: www.cree.com/canada   T (800) 473-1234   F (800) 890-7507

Product Specifications

CREE FULL DEFINITION

Providing color quality that meets the needs of many spaces and is superior to most incumbent lighting technologies while at the same time minimizing expenses without impacting quality and safety, Cree Full Definition is a cost-effective lighting solution for lower-traffic areas.

CONSTRUCTION & MATERIALS

- Constructed of fiberglass reinforced polyester.
- Polycarbonate latches.
- Two 1/2″ entry points are provided (one at each end of the housing) for continuous feed.
- Top of housing has six embossments providing mounting flexibility to uneven surfaces.

LUMEN MAINTENANCE FACTORS

- Reference www.cree.com/lighting for detailed lumen maintenance factors.

OPTICAL SYSTEM

- Full Definition LEDs.
- Frosted injection molded acrylic shielding.
- Polyurethane gasketing is poured in place, providing a continuous, seamless seal.
- Highly reflective reflector plate provides maximum efficiency.

ELECTRICAL SYSTEM

- **Power Factor** = 0.9 nominal.
- **Input Power**: Stays constant over life.
- **Input Voltage**: 120-277 VAC.
- **Temperature Rating**: Designed to operate in temperatures -25°C to 35°C.
- **Total Harmonic Distortion**: < 20%.

CONTROLS

- Continuous dimming with 0-10V DC control protocol.*
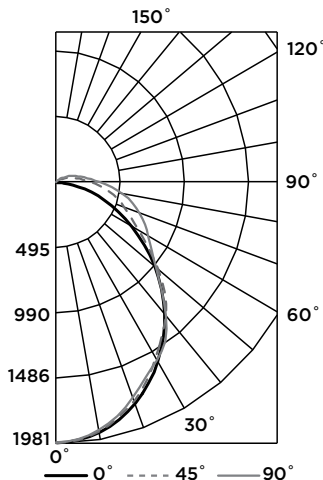
REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus listed.
- IP65 rated.
- UL listed for wet locations.

Photometry

WS4™
WS4-59L-35K-10V-FD / Based on DTC Report Test #: 38552

Fixture photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%.

Coefficients Of Utilization

RCC %:	80			
RW %:	70	50	30	0
RCR: 0	1.18	1.18	1.18	1.18
1	1.06	1.00	.95	.91
2	.96	.87	.79	.73
3	.87	.76	.67	.61
4	.80	.67	.58	.51
5	.73	.60	.51	.44
6	.68	.54	.45	.39
7	.63	.49	.40	.34
8	.59	.45	.36	.31
9	.55	.41	.33	.27
10	.51	.38	.30	.25

Effective Floor Cavity Reflectance: 20%

Zonal Lumen Summary

Zone	Lumens	Luminaire
0-30	1,482	24.9%
0-40	2,387	40.2%
0-60	4,075	68.6%
0-90	5,556	93.5%
0-180	5,941	100%

Reference www.cree.com/lighting for detailed photometric data.

Average Luminance Table (cd/m2)

Vertical Angle	Horizontal Angle		
	0°	45°	90°
0°	1,992	1,992	1,992
45°	1,152	1,163	1,170
55°	831	878	889
65°	530	586	731
75°	278	357	597
85°	86	192	425

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