Essentia® Series Wrap

LED Wrap - 4' (1.2M)

Product Description

The Essentia® Series Wrap surface mounted LED wrap combines application flexibility and market leading energy efficiency and controls. The smart durable arc lens design provides smooth uniform light quality and an amazing 115 lumens per watt. The LED wrap features standard 0-10V dimming and optional occupancy sensing which delivers amazing energy savings and controllability. Applications: Hospitality, retail, industrial, commercial, petroleum

Performance Summary

Initial Delivered Lumens: 4,140 lumens

Input Power: 36 watts

Efficacy: 115 LPW

CRI: 80

CCT: 3000K, 3500K, 4000K Input Voltage: 120-277 VAC

L₇₀ Lifetime: 100,000 hours at 25°C

Limited Warranty[†]: 5 years

Dimming: 0-10V dimming to 5%

Limited Warranty Emergency Back Up (EB) Battery: 1 Year Battery Back Up. Test regularly in

accordance with local codes

Mounting: Surface Mount or Suspended

Accessories

Field-Installed

Dimming Occupancy Sensor w/Photocell S-WRAC-0C-1

- Enables daylight harvesting - Not for use with EB option
- Refer to installation instructions for details

Through Wiring Kit

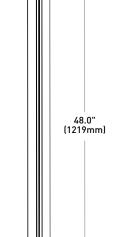
- Includes (3) #12AWG 54" (1372mm) Wires for Line (black), Neutral (white), Ground (green), (2) #18AWG 54" (1372mm) Wires for 0-10V Dimming (purple, gray) and (10) Wire Nuts Not for use with EB option

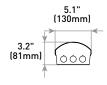
Decorative End Cap Accessory S-WR-EC



- Not for use when conduit enters the
- end of the luminaire

 Not for use with S-WRAC-0C-1
- accessory or EB option





Ordering Information

Example: S-WR4-40L-30K-10V

| S-WR | 4 | 40L | | | 10V | |
|------------------------------|-------|---------------------------------|--|------------------------------|--------------|---|
| Product | Size | Initial Delivered Lumens | сст | Voltage | Control | Options |
| S-WR Essentia Series Wrap | 4 48" | 40L 36W, 4,140 lumens | 30K 3000K 35K 3500K 40K 4000K | Blank 120-277 volt | 10V 0-10V | EB14 Emergency Backup - Minimum 90 minutes - 1,100 lumens |









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^{*}See http://lighting.cree.com/warranty for warranty terms

Product Specifications

CONSTRUCTION & MATERIALS

- · 24ga. steel frame provides strength and uniformity
- · Luminaire is post-painted with a soft matte white paint
- · Suitable for mounting in any orientation: uplight, downlight, wall
- · Can be mounted individually or in continuous rows
- Maximum continuous run is up to 47 luminaires at 120V and 110 luminaires at 277V
- Flexible mounting provisions allow for surface mounting, t-bar grid mounting, chain mounting; mounting hardware by others
- · Suitable for through wiring
- Weight: 7.7 lbs. (3.5kg)

OPTICAL SYSTEM

- IP40 lens assembly designed to prevent bug ingress
- Diffuse optical grade acrylic arc lens with matte finish
- · Provides 4.7% uplight

ELECTRICAL SYSTEM

- Integral, high-efficiency driver
- Power Factor: > 0.9 (standard luminaire); EB Option: 0.5 (120V) and 0.15 (277V)
- Input Power: Stays constant over life
- Input Voltage: 120-277V, 60Hz
- Operating Temperature Range: 0°C + 35°C (32°F + 95°F)
- Total Harmonic Distortion: < 20%
- 10V Source Current: 0.25mA

CONTROLS

- · Continuous dimming to 5% with 0-10V DC control protocol
- · For use with Class 2 dimming systems only
- · Use only lighting controls with neutral connection or controls intended for use with LED fixtures
- www.creelink.com/exLink.asp?70982140Z58R34I26620963 for recommended dimming controls and wiring diagrams

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- · Suitable for damp locations
- Designed for indoor use
- · Not intended for use in environments containing airborne corrosive agents such as chemical solvents, cleaners, or cutting fluids
- · RoHS compliant. Consult factory for additional details
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- UL924 (EB option). Maximum mounting height: 15.0' (4.6m)
- DLC qualified for linear ambient category, and DLC Premium qualified for stairwell category. Please refer to update link to https://www.designlights.org/search/ for most current information

| Electrical Data* | | | | | | | |
|---------------------|-------------------|------|-------------------|------|------|--|--|
| Initial | Initial System | | Total Current (A) | | | | |
| Delivered Lumens | Watts 120-277V | 120V | 208V | 240V | 277V | | |
| 40L | 36 | 0.30 | 0.17 | 0.15 | 0.13 | | |

^{*} Electrical data at 25° C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V +/- 10% when operating between 120-270V +/- 10% when operating between 120-270V +/- 10% when 0perating between 120-270V +/- 10% when 0per

| Recommended Essentia® Series Flat Panel Lumen Maintenance Factors (LMF)¹ | | | | | | |
|--|----------------|---|------------------------------|------------------------------|-------------------------------|--|
| Ambient | Initial LMF | 25K hr Projected ² LMF | 50K hr Calculated³ LMF | 75K hr Calculated³ LMF | 100K hr Calculated³ LMF | |
| 25°C (77°F) | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | |

¹Lumen maintenance values at 25°C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing 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 (IDUT) i.e. the packaged LED chip)

Application Reference

| Open Space | | | | | | |
|-----------------|--------------------------------|--------|---------|-----|-------|------------|
| Spacing (ft) | Initial Delivered Lumens | Lumens | Wattage | LPW | w/ft² | Average fc |
| 8x8 | | | | | 0.54 | 57.8 |
| 8x10 | 40L | 4,140 | 36 | 115 | 0.45 | 48.2 |
| 10x10 | | | | | 0.36 | 38.6 |
| 10x12 | | | | | 0.29 | 30.9 |

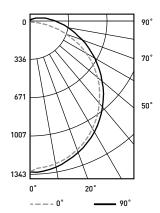
^{9&#}x27; Ceiling, 80/50/20 Reflectances, 2.5 workplane. LLF: 1.0 Initial. Open Space: 50' x 40'

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)

Photometry

S-WR4-40L-40K-10V BASED ON DTC REPORT TEST #: PL08677-001B

Luminaire photometry has been conducted in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a luminaire efficiency of 100%.



Initial Delivered Lumens: 4,348 Efficacy: 121.0 LPW S/M: 1.24

| Coefficients Of Utilization – Zonal Cavity Method | | | | | |
|--|-----|-----|-----|-----|--|
| RC %: | 80 | | | | |
| RW %: | 70 | 50 | 30 | 10 | |
| RCR: 0 | 118 | 118 | 118 | 118 | |
| 1 | 106 | 101 | 96 | 92 | |
| 2 | 96 | 87 | 80 | 74 | |
| 3 | 87 | 76 | 67 | 61 | |
| 4 | 80 | 67 | 58 | 51 | |
| 5 | 73 | 60 | 51 | 44 | |
| 6 | 67 | 54 | 45 | 38 | |
| 7 | 63 | 49 | 40 | 33 | |
| 8 | 58 | 44 | 36 | 30 | |
| 9 | 54 | 41 | 32 | 27 | |
| 10 | 51 | 38 | 29 | 24 | |

| Effective Floor Cavity Reflectance: 20% | Effective | Floor | Cavity | Reflectance: | 20% |
|---|-----------|-------|--------|--------------|-----|
|---|-----------|-------|--------|--------------|-----|

| Average Luminance Table (cd/m²) | | | | | | |
|---------------------------------|-----|-------|-------|-------|--|--|
| | • | | | | | |
| | | 0° | 45° | 90° | | |
| Vertical Angle | 45° | 7,733 | 7,041 | 6,902 | | |
| | 55° | 7,445 | 6,522 | 6,449 | | |
| Verti | 65° | 6,924 | 5,913 | 6,051 | | |
| _ | 75° | 5,813 | 5,281 | 5,768 | | |
| | 85° | 3,773 | 5,040 | 6,067 | | |

| Zonal Lumen Summary | | | | | | |
|---------------------|--------|--------|-----------|--|--|--|
| Zone | Lumens | % Lamp | Luminaire | | | |
| 0-30 | 1,035 | N/A | 23.8% | | | |
| 0-40 | 1,701 | N/A | 39.1% | | | |
| 0-60 | 3,049 | N/A | 70.1% | | | |
| 0-90 | 4,145 | N/A | 95.3% | | | |
| 0-180 | 4,349 | N/A | 100.0% | | | |
| | | | | | | |

 $Reference\ http://lighting.cree.com/products/indoor/surface-ambient/essentia-series-wrap\ for\ detailed\ photometric\ data$