

# UR Series

UR2-48™ and UR3-48™ LED Upgrade Kit – 4'

## Product Description

The UR Series 4ft (1219mm) LED upgrade kit delivers 4500 lumens of enhanced spectrum 80 CRI light while achieving over 100 lumens per watt at the system level. This innovative kit is designed for upgrading existing 1'x4' (305mm x 1219mm) or 2'x4' (610mm x 1219mm) fixtures to energy saving LED. The UR Series is available in neutral or cool color temperatures and with step dimming or 0-10V dimming. The UR Series upgrade kit is easy to install and fits into almost any existing linear fluorescent fixture making it a perfect upgrade option where energy savings and long life are critical.

## Performance Summary

Upgrade Existing 1'x4' (305mm x 1219mm) & 2'x4' (610mm x 1219mm) fixtures

Efficacy: 102 LPW at source level

System Delivered Light Output: 4500 lumens

Target Fixture Delivered Light Output: 4000 lumens\*

Input Power: 44 watts

CRI: 80

CCT: 3500K, 4000K

Input Voltage: 120-277 VAC or 347 VAC

Limited Warranty\*: 7 years

Lifetime: Designed to last 50,000 hours

Controls: Step Level to 50% or 0-10V Dimming to 5%

Mounting: Existing dry or damp rated linear fluorescent fixtures including troffers, parabolics, strips, wraps, volumetric/baskets and industrials; not intended for use in vaportights

## Accessories

| Field-Installed                       |
|---------------------------------------|
| Emergency Backup<br>UR-EB10W<br>- 10W |

## Ordering Information

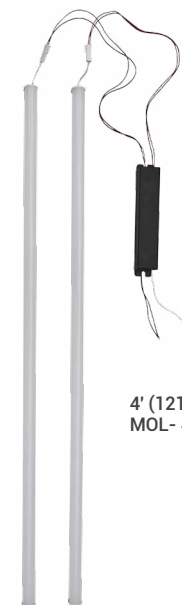
Fully assembled kit is composed of two components that must be ordered separately.

Example: **Lightbar:** UR 48 35K FD LB 2 + **Driver:** UR2 48 45L 10V FD DR

| Lightbar (Driver must be ordered separately) |        |  |              |                |   |
|--|--------|--|--------------|----------------|---|
| UR   | 48     |  | FD           | LB             |   |
| Series                                       | Length | CCT                                      | Options      | Lightbar       | Number of Lightbars   |
| UR   | 48     | 35K<br>3500 Kelvin<br>40K<br>4000 Kelvin | FD<br>80 CRI | LB<br>Lightbar | 2<br>2 Lightbar Kit<br>3<br>3 Lightbar Kit<br>6<br>6 Lightbar Bulk Pack |

| Driver (Lightbar must be ordered separately) |        |                                   |   |  |         |              |
|--|--------|-----------------------------------|---|--|---------|--------------|
|  | 48     | 45L                               |   |  | FD      | DR           |
| Product                                      | Length | Lumen Output                      | Voltage   | Control  | Options | Driver       |
| UR2<br>2 Lightbar<br>UR3<br>3 Lightbar       | 48     | 45L<br>44W, 4500 lumens - 102 LPW | Blank<br>120-277 Volt (Standard)<br>34<br>347 Volt (Optional)<br>- Available with 10V control option only | S<br>Step Dimming to 50%<br>10V<br>0-10V Dimming to 5% | FD      | DR<br>Driver |

\* Varies by fixture



4' (1219mm) LED Lightbar  
MOL- 44" (1118mm)

The UR Series upgrade kit ships as two components: lightbars and driver. Each component must be ordered separately.



Rev. Date: V3 01/13/2015



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Product Specifications

CREE LED TECHNOLOGY

Cree's total systems approach to product development is a comprehensive engineering philosophy that combines the most advanced LED sources, driver technologies, optics and forms. The result is highly-reliable luminaire solutions for indoor applications that reduce energy use, extend lifetimes, and maximize illumination performance and quality.

CONSTRUCTION & MATERIAL

- Lightweight aluminum heat sink housing provides strength and durability
- Durable plastic mounting clips with integrated magnets allow for simple snap on design to fixture
- Shatterproof design

OPTICAL SYSTEM

- Specialized polycarbonate lens design for optimal light distribution and smooth visual effect
- Measured and designed to achieve optimal light performance in existing fluorescent troffers

ELECTRICAL SYSTEM

- Integral, high-efficiency driver and power supply
- **Power Factor:** = 0.9 nominal
- **Input Power:** Stays constant over life
- **Input Voltage:** 120-277V, 347V, 50/60Hz
- **Operating Temperature Range:** 0°C - +35°C (32°F - +95°F)
- **Total Harmonic Distortion:** < 20%
- **Source Current:** 0.25mA

CONTROLS

- Step dimming to 50%.
- Continuous dimming to 5% with 0-10V DC control protocol.

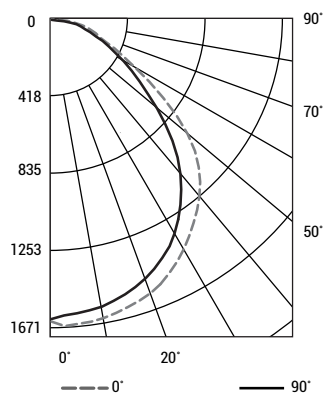
REGULATORY & VOLUNTARY QUALIFICATIONS

- DLC qualified. Please refer to [www.designlights.org/QPL](http://www.designlights.org/QPL) for most current information
- UL1598C (Retrofit Kit)
- This product is UL Classified for U.S. and Canada for use in existing linear fluorescent fixtures
- Suitable for damp locations
- Designed for indoor use
- Meets FCC Part 15 standards for conducted and radiated emissions

Photometry

UR2 48 45L 40K FD INSTALLED IN A 2X4 RECESSED TROFFER BASED ON CESTL REPORT TEST #: 2013-0080

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 - Zonal Cavity Method |     |     |     |     |
|---|-----|-----|-----|-----|
| RC %:   | 80  |     |     |     |
| RW%:  | 70  | 50  | 30  | 10  |
| RCR: 0  | 119 | 119 | 119 | 119 |
| 1   | 110 | 105 | 101 | 98  |
| 2   | 100 | 93  | 86  | 81  |
| 3   | 92  | 82  | 74  | 68  |
| 4   | 85  | 73  | 65  | 59  |
| 5   | 78  | 66  | 57  | 51  |
| 6   | 72  | 60  | 51  | 45  |
| 7   | 67  | 54  | 46  | 40  |
| 8   | 63  | 50  | 41  | 36  |
| 9   | 59  | 46  | 38  | 32  |
| 10  | 55  | 42  | 34  | 29  |

Effective Floor Cavity Reflectance: 20%

| Average Luminance Table (cd/m²) |     |       |       |       |
|---------------------------------|-----|-------|-------|-------|
| Horizontal Angle                |     |       |       |       |
| Vertical Angle                  |     | 0°    | 45°   | 90°   |
|                                 | 45° | 2,181 | 2,364 | 2,367 |
|                                 | 55° | 1,700 | 1,956 | 2,131 |
|                                 | 65° | 1,353 | 1,277 | 1,475 |
|                                 | 75° | 1,210 | 979   | 1,432 |
|                                 | 85° | 1,275 | 1,284 | 1,593 |
|                                 | 90° |       |       |       |

| Zonal Lumen Summary |        |        |           |
|---------------------|--------|--------|-----------|
| Zone                | Lumens | % Lamp | Luminaire |
| 0-30                | 1,286  | N/A    | 31.2%     |
| 0-40                | 2,095  | N/A    | 50.9%     |
| 0-60                | 3,488  | N/A    | 84.7%     |
| 0-90                | 4,118  | N/A    | 100%      |
| 0-180               | 4,118  | N/A    | 100%      |

