

UR Series

4' LED Upgrade Kit

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 retrofitting existing 1' x 4' (305mm x 1219mm) or 2' x 4' (610mm x 1219mm) luminaires 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 luminaire making it a perfect upgrade option where energy savings and long life are critical.

Performance Summary

Upgrade Existing 1' x 4' (305mm x 1219mm) & 2' x 4' (610mm x 1219mm) fixtures
Efficacy: 102 LPW at source level
System Delivered Light Output: 4,500 lumens
Target Fixture Delivered Light Output: 4,000 lumens*
Input Power: 44 watts
CRI: 80
CCT: 3500K, 4000K
Input Voltage: 120-277 VAC or 347 VAC
Limited Warranty¹: 7 years
Limited Warranty Emergency Back Up (EB) Battery: 1 Year Battery Back Up. Test regularly in accordance with local codes
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

¹ See <http://lighting.cree.com/warranty> for warranty terms
* Varies by fixture

Accessories

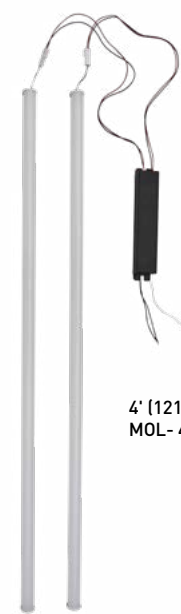
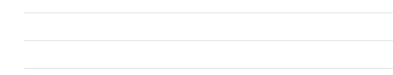
Field-Installed	
Emergency Backup UR-EB10W - Provides 90 minutes of emergency operation - 10W output power - 1,020 lumen output - Available on 120-277V only	Rotatable Mount Clip Kit UR-RMK - Includes 12 clips

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 48"	35K 3500K 40K 4000K	FD 80 CRI	LB Lightbar	2 2 Lightbar Kit 3 3 Lightbar Kit 6 6 Lightbar Bulk Pack

Driver (Lightbar must be ordered separately)						
	48	45L			FD	DR
Product	Length	Lumen Output	Voltage	Control	Options	Driver
UR2 2 Lightbar UR3 3 Lightbar	48 48"	45L 44W, 4,500 lumens – 102 LPW	Blank 120-277V 34 347V - Available with 10V control option only	5 Step Dimming to 50% 10V 0-10V Dimming to 5%	FD	DR Driver



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: V7 04/18/2018



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 luminaire
- Shatterproof design

OPTICAL SYSTEM

- Specialized 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
- **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%

CONTROLS

- Step dimming to 50%
- Continuous dimming to 5% with 0-10V DC control protocol
- **10V Source Current:** 0.25mA
- Use only lighting controls with neutral connection or controls intended for use with LED fixtures
- Reference <https://www.creelink.com/exLink.asp?70982140Z58R34I26620963>

REGULATORY & VOLUNTARY QUALIFICATIONS

- UL1598C (Retrofit Kit)
- This product is UL Classified for U.S. and Canada for use in existing linear fluorescent luminaires
- Suitable for damp locations
- Designed for indoor use
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- RoHS compliant. Consult factory for additional details

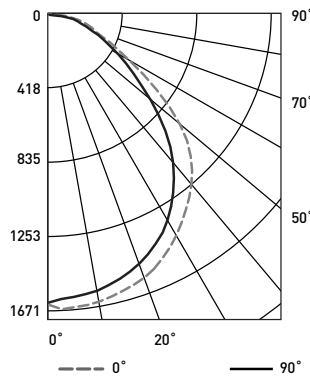
Electrical Data*						
Lumen Output	System Watts 120-347V	Total Current (A)				
		120V	208V	240V	277V	347V
45L	44	0.37	0.21	0.18	0.16	0.13
45L w/EB10W Accessory	53	0.44	0.25	0.22	0.19	N/A

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

Photometry

UR2-48-45L-40K-FD IN A 2 x 4 RECESSED TROFFER BASED ON CESTL REPORT TEST #: 2013-0080

Luminaire 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 luminaire efficiency of 100%



Average Luminance Table (cd/m ²)			
Vertical Angle	Horizontal 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

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%

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%

Reference lighting.cree.com/products/indoor/upgrade-solutions/ur-series for detailed photometric data