UR Series

2', 4' LED Upgrade Kit

Rev. Date: V8 02/26/2025

Product Description

The UR Series LED upgrade kit provides up to 8,400 Lumens of 80 CRI light while achieving up to 135 lumens per watt at the system level. This innovate kit is designed for retrofitting exisiting 1' x 2' (305mm x 610mm), 2' x 2' (610mm x 610mm), 1' x 4' (305mm x 1219mm) & 2' x 4' (610mm x 1219mm) fixtures to energy saving LED technology. The UR series is available in multiple color temperatures and offers 0-10V smooth dimming. The UR series upgrade is easy to install and fits into almost any existing linear floursescent fixture making it a perfect upgrade option where energy savings and long life are important.

Performance Summary

Upgrade Existing 1' x 2' (305mm x 610mm), 2' x 2' (610mm x 610mm), 1' x 4' (305mm x 1219mm) & 2' x 4' (610mm x 1219mm) fixtures

Efficacy: Up to 135 LPW at system level

System Delivered Light Output: 2,600 Lumens - 8,400 Lumens

Target Fixture Delivered Light Output*: 2,360 Lumens - 6,875 Lumens

Input Power: 21 watts - 62 watts

CRI: 80

CCT: 3000K, 3500K, 4000K

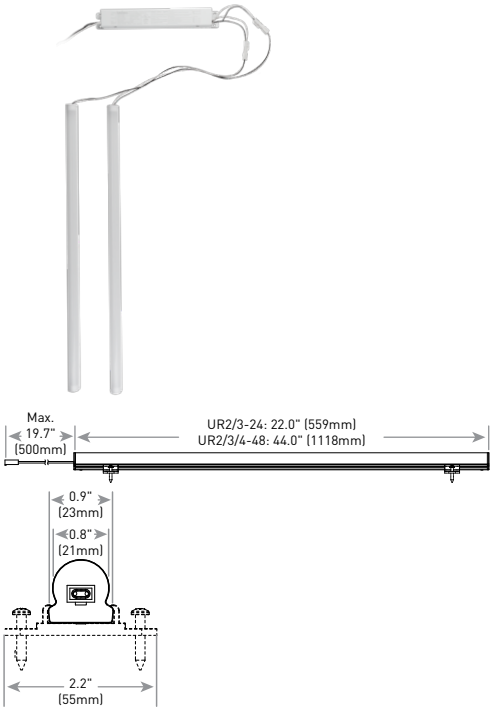
Input Voltage: 120-277 VAC

Limited Warranty†: 1 year

Controls: 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

† See https://www.creelighting.com/resources/warranties/ for warranty terms
* Varies by fixture



Ordering Information

Fully assembled kit is composed of lightbars and drivers included.
Example: UR2-24-26L-830-10V5-UNV-BP

UR						10V5	UNV	
Family	**Size**	**Lumen Package**	**CRI/CCT**	**Lens**	**Distribution**	**Control**	**Voltage**	**Packaging**
UR2 Two-Light Bars w/ Driver	**24** 24"	**26L** 2,600 Lumens	**830** 80 CRI, 3000K	**Blank** Round	**Blank** Light Bar	**10V5** 0-10V Dimming to 5%	**UNV** Universal 120-277V	**BP** Light Bars and Drivers shipped separately in cartons.
UR2 Two-Light Bars w/ Driver	**24** 24"	**32L** 3,200 Lumens	**840** 80 CRI, 4000K	**Blank** Round	**Blank** Light Bar	**10V5** 0-10V Dimming to 5%	**UNV** Universal 120-277V	**BP** Light Bars and Drivers shipped separately in cartons.
UR3 Three-Light Bars w/ Driver	**24** 24"	**39L** 3,900 Lumens	**835** 80 CRI, 3500K	**Blank** Round	**Blank** Light Bar	**10V5** 0-10V Dimming to 5%	**UNV** Universal 120-277V	**Blank** Ships as Individual sellable kit
UR3 Three-Light Bars w/ Driver	**48** 48"	**63L** 6,300 Lumens	**840** 80 CRI, 4000K	**Blank** Round	**Blank** Light Bar	**10V5** 0-10V Dimming to 5%	**UNV** Universal 120-277V	**BP** Light Bars and Drivers shipped separately in cartons.
UR4 Four-Light Bars w/ Driver	**48** 48"	**84L** 8,400 Lumens	**835** 80 CRI, 3500K	**Blank** Round	**Blank** Light Bar	**10V5** 0-10V Dimming to 5%	**UNV** Universal 120-277V	**BP** Light Bars and Drivers shipped separately in cartons.
UR4 Four-Light Bars w/ Driver	**48** 48"	**84L** 8,400 Lumens	**840** 80 CRI, 4000K	**Blank** Round	**Blank** Light Bar	**10V5** 0-10V Dimming to 5%	**UNV** Universal 120-277V	**BP** Light Bars and Drivers shipped separately in cartons.

Website: creelighting.com
US: (800) 236-6800 **Canada:** (800) 473-1234

CREE LIGHTING

Product Specifications

CREE LIGHTING LED TECHNOLOGY

Cree Lighting'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
- Includes two durable, movable plastic mounting clips with integrated magnets allow for simple snap on design to luminaire
- Polycarbonate lens and endcaps
- Shatterproof design
- **Weight:** UR2-24: 1.7 lbs. (0.75kg); UR3-24: 1.8 lbs. (0.82kg); UR3-48: 2.2 lbs. (0.98kg); UR4-48: 2.8lbs. (1.27kg)

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

- **Power Factor:** > 0.9 at full load
- **Input Power:** Stays constant over life
- **Input Voltage:** 120-277V, 50/60Hz
- **Operating Temperature Range:** -20°C - +45°C (-4°F - +113°F)
- **Total Harmonic Distortion:** < 20% at full load

CONTROLS

- 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://cree.widen.net/s/9sc962ctfv/0-10v-step-and-les-controls-options-spec-sheet-cr-flex-zr-troffers-ls-ur-styllus-ws-cdr-kbl for recommended dimming controls and wiring diagrams

REGULATORY & VOLUNTARY QUALIFICATIONS

- 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 only
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- RoHS compliant. Consult factory for additional details
- DLC Qualified. Please refer to https://qpl.designlights.org/solid-state-lighting for most current information
- ⚠ **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov

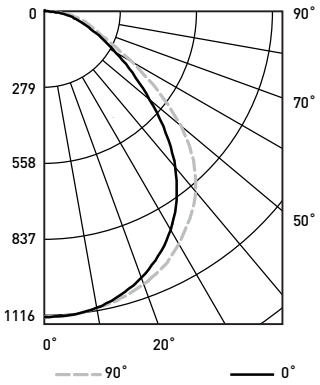
Delivered Lumens & Electrical Data*

Series	Size	Lumen Package	System Delivered Light Output	Target Fixture Delivered Light Output	System Watts 120-277V	Total Current (A)			
						120V	208V	240V	277V
UR2	24	26L	2,600	2,360	21	0.18	0.11	0.10	0.09
		32L	3,200	2,700	25	0.21	0.13	0.12	0.10
UR3	24	39L	3,900	3,510	32	0.27	0.16	0.14	0.13
UR3	48	63L	6,300	5,100	47	0.39	0.22	0.20	0.17
UR4	48	84L	8,400	6,875	62	0.52	0.30	0.26	0.23

* Data provided at 25°C (77°F). Actual lumens and wattages may differ by +/- 10% when operating between 120-277V +/-10%.

Photometry

UR2-24-32L-830-10V5-UNV IN A 2 x 2 RECESSED TROFFER BASED ON STANDARD-TECH TEST # JBE200416-C
Luminaire photometry has been conducted in accordance with IES LM-79. IES LM-79 specifies the entire luminaire as the source resulting in a luminaire 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	75	68
4	85	73	65	59
5	78	66	57	51
6	72	60	51	45
7	67	54	46	40
8	63	50	42	36
9	59	46	38	32
10	55	42	35	29

Effective Floor Cavity Reflectance: 20%

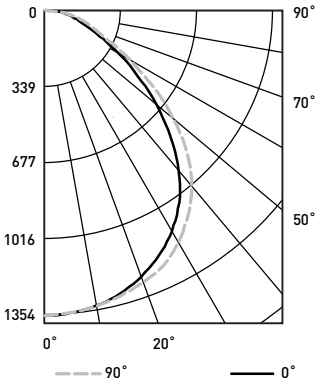
Average Luminance Table (cd/m2)				
	Horizontal Angle			
Vertical Angle	0°	45°	90°	
45°	3,043	3,355	3,727	
55°	2,346	2,724	3,016	
65°	1,869	1,758	2,099	
75°	1,684	1,462	2,076	
85°	1,642	1,809	2,160	

Zonal Lumen Summary			
Zone	Lumens	% Lamp	Luminaire
0-30	868	N/A	31.5%
0-40	1,411	N/A	51.2%
0-60	2,327	N/A	84.4%
0-90	2,747	N/A	99.6%
0-180	2,758	N/A	100%

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

Photometry

UR2-48-42L-830-10V5-UNV IN A 2 x 4 RECESSED TROFFER BASED ON STANDARD-TECH TEST #: JBE200416-J
Luminaire photometry has been conducted in accordance with IES LM-79. IES LM-79 specifies the entire luminaire as the source resulting in a luminaire 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	75	69
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	35	29

Effective Floor Cavity Reflectance: 20%

Average Luminance Table (cd/m2)				
	Horizontal Angle			
Vertical Angle	0°	45°	90°	
45°	1,806	1,956	2,045	
55°	1,421	1,572	1,652	
65°	1,030	977	1,183	
75°	899	881	1,104	
85°	1,011	963	873	

Zonal Lumen Summary			
Zone	Lumens	% Lamp	Luminaire
0-30	1,063	N/A	31.3%
0-40	1,737	N/A	51.2%
0-60	2,874	N/A	84.6%
0-90	3,387	N/A	99.7%
0-180	3,396	N/A	100%

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

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CREE LIGHTING®