

UR Series

2', 4' LED Upgrade Kit

Rev. Date: V1 12/01/2020

Product Description

The UR Series LED upgrade kit provides up to 10,000 Lumens of 80 CRI light while achieving up to 135 lumens per watt at the system level. This innovative kit is designed for retrofitting 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 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 fluorescent 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 - 10,000 Lumens

Target Fixture Delivered Light Output*: 2,360 Lumens - 8,500 Lumens

Input Power: 21 watts - 81 watts

CRI: 80

CCT: 3000K, 3500K, 4000K, 5000K

Input Voltage: 120-277 VAC

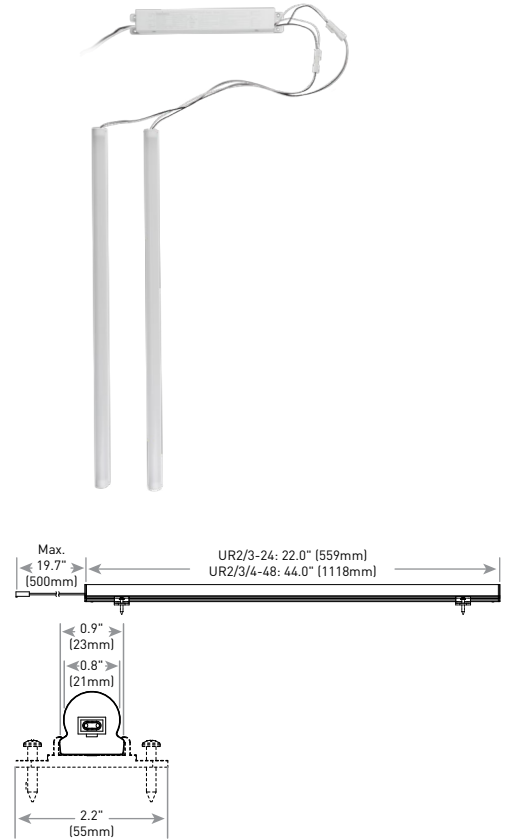
Limited Warranty*: 5 years

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 <http://creelighting.com/warranty> for warranty terms

* Varies by fixture



Ordering Information

Fully assembled kit is composed of lightbars and drivers included.

For 1'x2' or 2'x2' fixtures Example: UR2-24-26L-835-10V5-UNV								
	24					10V5	UNV	
Series	Size	System Lumens	CRI/CCT	Lens	Distribution	Control	Voltage	Packaging
UR2 2 Lightbars With Driver	24 24"	2 Bars Only 26L 2,600 Lumens	830 80 CRI, 3000K	Blank Round	Blank Light Bar	10V5 0-10V Dimming to 5%	UNV - Universal 120-277V	Blank Ships as Individual sellable kit
UR3 3 Lightbars With Driver		3 Bars Only 32L 3,200 Lumens	835 80 CRI, 3500K					BP Light Bars and Drivers shipped separately in cartons.
		39L 3,900 Lumens	840 80 CRI, 4000K					
		48L 4,800 Lumens	850 80 CRI, 5000K					
For 1'x4' or 2'x4' fixtures Example: UR4-48-84L-835-10V5-UNV								
	48					10V5	UNV	
Series	Size	System Lumens	CRI/CCT	Lens	Distribution	Control	Voltage	Packaging
UR2 2 Lightbars With Driver	48 48"	2 Bars Only 42L 4,200 Lumens	830 80 CRI, 3000K	Blank Round	Blank Light Bar	10V5 0-10V Dimming to 5%	UNV - Universal 120-277V	Blank Ships as Individual sellable kit
UR3 3 Lightbars With Driver		50L 5,000 Lumens	835 80 CRI, 3500K					BP Light Bars and Drivers shipped separately in cartons.
UR4 4 Lightbars With Driver		3 Bars Only 63L 6,300 Lumens	840 80 CRI, 4000K					
		75L 7,500 Lumens	850 80 CRI, 5000K					
		4 Bars Only 84L 8,400 Lumens						
		100L 10,000 Lumens						



CREE  **LIGHTING**

US: creelighting.com (800) 236-6800

Canada: creelighting-canada.com (800) 473-1234

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); UR2-48: 1.9 lbs. (0.86kg); 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://www.creelink.com/exLink.asp?70982140Z58R34I26620963> 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 www.designlights.org/QPL for most current information
- **CA RESIDENTS WARNING:** Cancer and Reproductive Harm - www.p65warnings.ca.gov

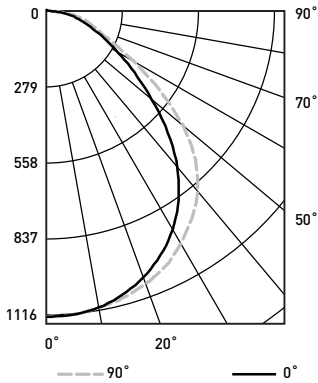
Delivered Lumens & Electrical Data*									
Series	Size	Lumen Package	System Delivered Light Output	Target Fixture Delivered Light Output	System Watts 120-277V	Total Current (A)			
						120V	208V	240V	277V
UR2	24	26L	2,600	2,360	21	0.18	0.11	0.10	0.09
		32L	3,200	2,700	25	0.21	0.13	0.12	0.10
UR3	24	39L	3,900	3,510	32	0.27	0.16	0.14	0.13
		48L	4,800	4,090	38	0.32	0.19	0.17	0.15
UR2	48	42L	4,200	3,410	32	0.26	0.15	0.14	0.12
		50L	5,000	4,410	42	0.34	0.20	0.18	0.16
UR3	48	63L	6,300	5,100	47	0.39	0.22	0.20	0.17
		75L	7,500	6,375	62	0.52	0.30	0.26	0.23
UR4	48	84L	8,400	6,875	62	0.52	0.30	0.26	0.23
		100L	10,000	8,500	81	0.68	0.39	0.34	0.31

* 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-79-08. IES LM-79-08 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/m ²)			
Vertical Angle	Horizontal Angle		
	0°	45°	90°
	45°	3,043	3,355
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

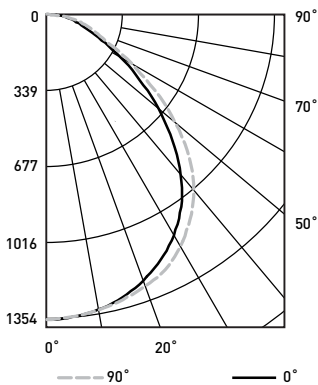
Zonal Lumen Summary			
Zone	Lumens	% Lamp	Luminaire
0-30	868	N/A	31.5%
0-40	1,411	N/A	51.2%
0-60	2,327	N/A	84.4%
0-90	2,747	N/A <td>99.6%</td>	99.6%
0-180	2,758	N/A	100%

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-79-08. IES LM-79-08 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/m ²)			
Vertical Angle	Horizontal Angle		
	0°	45°	90°
	45°	1,806	1,956
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