### **Product Description**

The FLEX Series LED troffer delivers up to 10,000 lumens with enhanced color quality and three different lens designs to fit the aesthetics of any space. The FLEX Series boasts a variety of inner optic accessories which provides greater design flexibility, making it perfect for both new construction and renovation. The slim and lightweight FLEX Series LED troffer boasts an efficacy of up to 159 LPW performance along with a wide variety of control options to meet local energy codes. The FLEX Series broad optionality of lumen packages, control packages, tunable white options, and factory installed accessories make this family highly specifiable.

### **Performance Summary**

Utilizes Cree TrueWhite® Technology (90 CRI)

Efficacy: Up to 159 LPW

Initial Delivered Lumens: 2,600 - 10,000 lumens

Input Power: 18 - 82 watts

CRI: 80+, 90+

CCT: 3000K, 3500K, 4000K, 5000K, Tunable White (SmartCast® Technology and Lutron Athena)

Input Voltage: 120-277 VAC or 347 VAC

Limited Warranty<sup>†</sup>: 10 years for luminaire and SmartCast controls; 5 years for Lutron Athena controls; up to 5 years for SmartCast® accessories; 1 year for luminaire accessories

Limited Warranty Emergency Back Up (EB) Battery: 1 Year on Battery Back Up. Test regularly in accordance with local codes

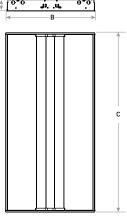
Controls: 0-10V, SmartCast/SmartCast Wireless with Adjustable CCT option, DALI, Lutron Athena/ Lutron Athena Tunable White

Mounting: Recessed (Designed for use in most ceiling grids including standard 1 1/2", 9/16", 15/16", hard ceiling, and surface mounting)

Room-side accessible removable lens

Assembled in the USA by Cree Lighting from US and imported parts





10V10, 10V1, DALI & AWNR Dimensions									
	DIM "A"	DIM "A" w/EB	DIM "B"	DIM "C"	Weight	Weight w/EB			
1x4	4.0" (101mm)	4.0" (101mm)	11.7" (298mm)	47.7" (1213mm)	11.0 lbs. (5.0kg)	16.0 lbs. (7.3kg)			
2x2	4.0" (101mm)	3.3" (84mm)	23.7" (603mm)	23.8" (604mm)	9.0 lbs. (4.1kg)	14.0 lbs. (6.4kg)			
2x4	4.0" (101mm)	3.3" (84mm)	23.7" (603mm)	47.7" (1213mm)	15.0 lbs. (6.8kg)	20.0 lbs. (9.1kg)			

Refer to page 5 for lens assembly images and dimensions as well as dimensional information for SmartCast and Lutron AWNS controls.

# Ordering Information

FLX							
Family	Size	Lumen Package	CRI/CCT	Lens*	Controls	Voltage	Options**
FLX	<b>14</b> 1x4	30L 3,000 Lumens 40L 4,000 Lumens 50L 5,000 Lumens 60L 6,000 Lumens	830 80 CRI, 3000K 835 80 CRI, 3500K 840 80 CRI, 4000K 850 80 CRI, 5000K	CRV ZR Curve ARC FLX Arc SQ Square	10V10 0-10V 10% Dimming - Available only with 26L-60L lumen packages 10V1 0-10V 1% Dimming SC1 SmartCast Wireless Technology with 1% Dimming, Integral Motion and Ambient Sensors	UNV Universal voltage 120-277 Volt 34 347 Volt - Not	CP Chicago Plenum  - Available with UNV voltage on  - Available with all controls except AWNR  - Not available with EB or GT options EB Emergency Backup  - Available with UNV voltage on
	22 26L 2x2 2,600 30L 3,000 40L 4,000 50L	2,600 Lumens <b>30L</b> 3,000 Lumens <b>40L</b> 4,000 Lumens	930 90 CRI, 3000K 935 90 CRI, 3500K 940 90 CRI, 4000K 950 90 CRI, 5000K		- For adjustable CCT functionality, luminaire must be ordered with 9ACK CRI/CCT [26L-60L lumen packages only] - Utilizes a multifunction sensor  DALI DALI Dimming to 1%  AWNR*  Lutron Athena Wireless Integral Fixture Control (RF only) with 1%  Dimming - Tunable white requires 9ACK CRI/CCT [26L-60L lumen	available with 10V10 controls	Provides 10W and 90 minutes of emergency operation     Not available with CP or GT options     GT Generator Transfer Device     Available with UNV voltage only     Not available with CP or EB options
	<b>24</b> 2x4	30L 3,000 Lumens 40L 4,000 Lumens 50L 5,000 Lumens 60L 6,000 Lumens 70L 7,000 Lumens 80L 8,000 Lumens 100L	9ACK 90 CRI, Adjustable Color 3000/K-500K in 100K increments - Available only with 26L-60L lumen packages (SC1 or AWNR/AWNS controls) - Available only with SC1 or AWNR/AWNS controls				

<sup>\*</sup> More information on Lutron controls can be found at <u>lutron.com</u>.

\* Refer to page 5 for lens images.

\*\* Consult factory for other options.













See https://www.creelighting.com/resources/warranties/ for warranty terms. For SmartCast accessories, consult SmartCast spec sheets for details on warranty terms.

## **Product Specifications**

## **CREE TRUEWHITE® TECHNOLOGY**

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology is a patented approach that delivers an exclusive combination of 90+ CRI, beautiful light characteristics and lifelong color consistency, all while maintaining high luminous efficacy - a true no compromise solution.

### **SMARTCAST® TECHNOLOGY**

SmartCast® Technology is the most intuitive and easiest to install intelligent light solution on the market. SmartCast® Technology delivers up to 70% energy savings at up to half the cost of other solutions. Luminaires combine best-in-class light with onboard sensors and intelligence to deliver a better light experience. Extreme energy productivity, code compliance and a better light experience without any extra design, installation or setup work.

## **CONSTRUCTION & MATERIALS**

- Durable 22 ga. cold rolled steel housing provides strength and uniformity
- Ultra-thin luminaire height and lightweight design effectively target a broad range of plenum spaces and allow for easy installations
- · Luminaire is pre-painted for enhanced matte finish
- Includes integrated hooks for mounting to t-bar, and cable slots for suspended
- · Luminaire sides and ends are hemmed in for safe, easy handling
- · Room-side accessible/removable lens snaps and locks into end caps for tool-less
- · Not for installation within 3" (76mm) of insulation
- Weight: Refer to tables on pages 1 and 5.
- Includes QR code on the back of the troffer housing which provides access to: Online installation instructions, Luminaire information (Part number, Serial number, Build date, and Warranty end date), and Warranty claim submission form
- Duplicate 1" and 2" QR code labels are included. 1" labels can be affixed next to fixtures, on site plans, or in maintenance records. 2" labels can be scanned from the ground when placed at an appropriate height

### **OPTICAL SYSTEM**

- Unique luminaire design creates perfect balance of both horizontal and vertical
- Optimized smooth acrylic lens eliminates pixelation and delivers a low-glare, diffused light distribution
- Additional diffuser options available. Refer to Inner Optic Overlay Diffuser Accessories table on page 5 for additional details

### **ELECTRICAL SYSTEM**

- Power Factor: >90% at full load
- Input Power: Stays constant over life
- Input Voltage: 120-277V, 50/60Hz or 347V, 50/60Hz. 347V w/ 9ACK-SC1, and DALI are
- Operating Temperature Range:  $0^{\circ}\text{C}$  +  $35^{\circ}\text{C}$  ( $32^{\circ}\text{F}$  +  $95^{\circ}\text{F}$ )
- Total Harmonic Distortion: < 20% at full load

### 10V DIMMING AND CONTROL

- 10V10 option provides continuous dimming to 10% and 10V1 option provides continuous dimming to 1% with 0-10V DC control protocol
- Maximum 10V Source Current: 0.45mA
- For use with Class 2 dimming systems only
- Use only lighting controls with neutral connection or controls intended for use with
- Reference https://cree.widen.net/s/2b8dlcwsvq/cr -flex -zr -cs -ln -ls -ur stylus-series-control-options-dimming-specsheet for recommended dimming controls and wiring diagrams

# **REGULATORY & VOLUNTARY QUALIFICATIONS**

- cULus Listed (UL1598)
- Suitable for damp locations
- Designed for indoor use only
- Requires minimum 90°C supply conductors
- Drivers and LEDs are UL Recognized in accordance with UL8750
- · Meets NEMA C82.77 standards
- UL924 (EB Option) Maximum mounting height: 15.0'(4.6m)
- EB option meets CA Title 20 Appliance Regulations
- CCEA approved when ordered with CP option. Not available with EB option
- · RoHS compliant. Consult factory for additional details
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- DLC and DLC Premium qualified versions available. Please refer to https://qpl. designlights.org/solid-state-lighting for most current information
- Assembled in the USA by Cree Lighting from US and imported parts
- Some configurations meet requirements of BAA and/or BABA. Consult factory when needed for a project: www.creelighting.com/BAA-BABA
- CA RESIDENTS WARNING: Cancer and Reproductive Harm www.p65warnings.ca.gov

## SmartCast® Technology

### INTEGRAL MOTION SENSOR

- Passive infrared (PIR)
- . Coverage area: Please refer to the PIR motion sensor coverage table
- · Not intended to be mounted higher than 20 ft.
- Operation:
  - · Grouped with a wall control: Luminaire will operate in vacancy mode
  - Not grouped with a wall control: Luminaire will operate in occupancy mode (auto-on/auto-
- Luminaires operate at full intensity until OneButton™ Setup is initiated by the Cree Lighting Configuration Tool

### AMBIENT LIGHT SENSOR

- · Sensor response matches response of human eye
- Not intended to be mounted higher than 20 ft. (6.1m)
- Luminaires operate at full intensity until OneButton™ Setup is initiated by the Cree Lighting Configuration Tool
- Daylight harvesting calibration performed automatically during OneButton™ Setup

### INTEGRAL WIRELESS COMMUNICATION

- 2.4GHz wireless mesh technology with AES 128-bit encryption
- Self assigns to quietest channel during OneButton™ Setup
- - 30 ft. (9.1m) in typical commercial applications
  - 300 ft. (91.4m) open air without obstructions
- Network: 250 devices max.
- Space: 100 devices max. per group
- FCC and IC certifications

### LUMINAIRE

- Energy metering with 4% accuracy
- Luminaires operate at full intensity until OneButton™ Setup is initiated by the Cree Lighting Configuration Tool
- 10 year power fail memory of settings
- NOTE: SmartCast luminaires must be installed on unswitched AC power. Constant power is required to maintain all luminaires on the SmartCast network. If wall control or manual dimming is required, a SmartCast wall control dimmer must be used for manual on, off, and dimming.

### DEPLOYMENT

Please refer to the SmartCast® Deployment Guide at https://cree.widen.net/s/mvxtfd2pcz/smartcastr-wireless-deployment-quide

# **PIR Motion Sensor Coverage**



	-						
Mounting Height - H	Motion Sensor Coverage Diameter - D (Feet)						
(Feet)	Sensitivity - High (Default)	Sensitivity - Medium	Sensitivity - Low				
10	20	10	8				
12	26	14	12				
14	28	15	13				
20	38	Not Recommended	Not Recommended				

FLEX Se	FLEX Series Ambient Adjusted Lumen Maintenance <sup>1</sup>										
Ambient	CRI	Initial LMF	25K hr Reported <sup>2</sup> LMF	50K hr Reported <sup>2</sup> LMF	75K hr Estimated <sup>3</sup> LMF	100K hr Estimated <sup>3</sup> LMF					
0°C (32°F)	80	1.04	1.00	0.90 <sup>3</sup>	0.81	0.73					
U C (32 F)	90	1.04	0.99	0.95 <sup>2</sup>	0.91	0.87					
5°C (41°F)	80	1.04	1.00	0.90 <sup>3</sup>	0.81	0.73					
5 C (41 F)	90	1.04	0.99	0.95 <sup>2</sup>	0.91	0.87					
10°C (50°F)	80	1.03	0.99	0.89 <sup>3</sup>	0.80	0.72					
10 C (50 F)	90	1.03	0.98	0.942	0.90	0.86					
15°C (59°F)	80	1.02	0.98	0.883	0.79	0.72					
15 C (59 F)	90	1.02	0.97	0.932	0.89	0.85					
20°C [68°F]	80	1.01	0.97	0.873	0.79	0.71					
20 C (68 F)	90	1.01	0.96	0.922	0.88	0.85					
25°C (77°F)	80	1.00	0.96	0.86 <sup>3</sup>	0.78	0.70					
25 C [// F]	90	1.00	0.95	0.91 <sup>2</sup>	0.87	0.84					
30°C (86°F)	80	0.99	0.95	0.853	0.77	0.69					
30 C (86 F)	90	0.99	0.93	0.892	0.85	0.81					
05°0 (05°5)	80	0.98	0.94	0.853	0.76	0.69					
35°C (95°F)	90	0.98	0.91	0.862	0.82	0.77					

\*\*Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors.

\*\*Ji naccordance with IES TM-21, Reported values based and on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED.

\*\*Z stimated values are calculated and represent interpolate that exceed the 6x test duration of the LED.



Deliver	ed Lumen	s & Electri	cal Data*													
Size Lumen Package		CRI	Control	Initial Delivered			Current (A)			EB/GT Wattage	EB/GT Current (A)					
	Раскаде			Lumens	120-277V	347V**	120V	208V	240V	277V	347V**	120-277V	120V	208V	240V	277V
		80	10V10, 10V1, SC1, DALI, AWNR, AWNS		18	18	0.17	0.10	0.08	0.07	0.05	21	0.19	0.11	0.09	0.08
2x2	26L	90/9ACK	10V10, 10V1, SC1, DALI, AWNR, AWNS	2,600	21	24	0.19	0.11	0.10	0.09	0.07	24	0.22	0.13	0.11	0.10
		80	10V10, 10V1, SC1, DALI, AWNR, AWNS		21	21	0.19	0.11	0.09	0.08	0.06	24	0.22	0.12	0.11	0.09
1x4, 2x2, 2x4	30L	90/9ACK	10V10, 10V1, SC1, DALI, AWNR, AWNS	3,000	26	28	0.23	0.13	0.12	0.10	0.09	29	0.26	0.15	0.13	0.11
		80	10V10, 10V1, SC1, DALI, AWNR, AWNS		27	29	0.24	0.14	0.12	0.10	0.09	30	0.27	0.15	0.13	0.11
1x4, 2x2, 2x4	40L	90/9ACK	10V10, 10V1, SC1, DALI, AWNR, AWNS	4,000	33	36	0.31	0.18	0.16	0.14	0.12	36	0.34	0.19	0.17	0.15
		80	10V10		35	N/A	0.31	0.18	0.15	0.13	N/A	38	0.34	0.19	0.17	0.14
1x4, 2x2, 2x4		90/9ACK	10V10, 10V1, SC1, DALI, AWNR, AWNS		41	44	0.35	0.20	0.17	0.15	0.13	44	0.37	0.21	0.18	0.16
1x4, 2x4	50L	80	10V1, SC1, AWNR, AWNS	5,000	35	35	0.31	0.18	0.15	0.13	0.12	38	0.34	0.19	0.17	0.14
2x2		80	10V1, SC1, AWNR, AWNS		40	40	0.32	0.17	0.15	0.13	0.11	43	0.36	0.21	0.18	0.16
		80	10V10, 10V1, SC1, DALI, AWNR, AWNS		39	41	0.32	0.18	0.15	0.13	0.11	42	0.35	0.20	0.18	0.15
1x4, 2x4	60L	90/9ACK	10V10, 10V1, SC1, DALI, AWNR, AWNS	6,000	49	53	0.43	0.24	0.20	0.18	0.16	52	0.43	0.25	0.24	0.19
2x4	701	80	10V1, SC1, DALI, AWNR, AWNS	7,000	47	49	0.41	0.24	0.20	0.17	0.15	50	0.44	0.25	0.21	0.19
ZX4	70L	90	10V1, SC1, DALI, AWNR, AWNS	7,000	56	59	0.49	0.28	0.24	0.21	0.18	59	0.51	0.30	0.25	0.22
2x4	80L	80	10V1, SC1, DALI, AWNR, AWNS	8,000	54	57	0.47	0.27	0.23	0.20	0.18	57	0.49	0.29	0.25	0.21
۷,44	OUL	90	10V1, SC1, DALI, AWNR, AWNS	0,000	65	69	0.57	0.33	0.28	0.24	0.21	68	0.60	0.34	0.29	0.25
2x4	100L	80	10V1, SC1, DALI, AWNR, AWNS	10,000	67	70	0.58	0.34	0.29	0.25	0.22	69	0.61	0.35	0.30	0.26
<b>∠∧</b> ₩	TOOL	90	10V1, SC1, DALI, AWNR, AWNS	10,000	78	82	0.68	0.39	0.34	0.29	0.25	81	0.70	0.41	0.35	0.30

<sup>\*</sup> Electrical data at 25°C [77°F]. Actual wattage and lumens may differ by +/- 10% when operating between 120-277V or 347V +/- 10%.
\*\* Not available with 10V10 controls.

Delivered Emergency Lumens								
Size	Lumen Package	CRI	Approximate Delivered Emergency Lumens					
2x2	26L	80	1,440					
ZXZ	26L	90/ACK	1,240					
1x4, 2x2, 2x4	30L	80	1,430					
184, 282, 284	301	90/ACK	1,150					
1,4/ 2,2/ 2,4/	40L	80	1,480					
1x4, 2x2, 2x4	40L	90/ACK	1,210					
1/ 22 2/	50L	80	1,430					
1x4, 2x2, 2x4	50L	90/ACK	1,220					
1/ 2/	60L	80	1,430					
1x4, 2x4	60L	90/ACK	1,220					
2x4	70L	80	1,490					
ZX4	/UL	90	1,250					
2x4	001	80	1,480					
284	80L	90	1,230					
2(	1001	80	1,490					
2x4	100L	90	1,280					

# **Accessories**

Field-Installed

Drywall Grid Adapter
DGA14-WHT 1x4, Single Pack
DGA14-WHT-10PK 1x4, 10-Pack
DGA22-WHT-10PK 2x2, 10-Pack
DGA22-WHT-10PK 2x2, 10-Pack
DGA24-WHT 2x4, Single Pack
DGA24-WHT-10PK 2x4, 10-Pack

Surface Mount Kit SMK-FLX14 (1x4) SMK-FLX22 (2x2) SMK-FLX24 (2x4)

- Not for use with AWNR control

SmartCast® Technology Configuration Tool

- One required per project when SC1 control is selected

SmartCast® Technology Face Plates <u>CFP-1-WH</u> - Matching face plate, 1-gang, white

CFP-2-WH

- Matching face plate, 2-gang, white

SmartCast® Technology Wireless Dimmer CSC-CWD-UNVN-WH (neutral wire required) CSC-CWD-UNV-WH (no neutral required)

SmartCast® Technology Adjustable CCT Wireless Dimmer CSC-CCD-UNVN-WH (neutral wire required)
CSC-CCD-UNV-WH (no neutral required)

- For use only with luminaires with SmartCast controls and 9ACK - 3000K-5000K adjustable CCT

SmartCast® Technology Wireless Switch
CSC-CWS-UNVN-WH (neutral wire required)
CSC-CWS-UNV-WH (no neutral required)

SmartCast® 5-Button Wireless Scene Controller CSC-SC-A-5B-UNVN-WH (w/o text) CSC-SC-A-5S-UNVN-WH (w/scene text) CSC-SC-A-5C-UNVN-WH (w/CCT text) Available sequents 10.000

- Available only with 9ACK

CSC-SC-A-5X-UNVN-WH (w/custom text)

SmartCast® Technology Wireless Plug Load Controller

SmartCast® 10V Zone Controller

CSC-ZC-10V-CWC

- Intelligent sensing and control of

0-10V luminaires



# Inner Optic Overlay Diffuser Accessories (for use with ARC Lens only)

### Field-Installed

### For use with 10V10, 10V1, DALI, and AWNR controls

Wavy Inner Optic Diffuser, 10-Pack FLX-WVD-4 (1x4 & 2x4 luminaires)

FLX-WVD-2 (2x2 luminaires)

Perforated Inner Optic Diffuser, 10-Pack

FLX-PFD-4 (1x4 & 2x4 luminaires)

FLX-PFD-2 (2x2 luminaires)

Diffuse Inner Optic, 10-Pack

FLX-STD-4 (1x4 & 2x4 luminaires)

FLX-STD-2 (2x2 luminaires)

Brushed Metal Inner Optic Diffuser, 10-Pack FLX-BMD-4 (1x4 & 2x4 luminaires)

FLX-BMD-2 (2x2 luminaires)

Striped Inner Optic Diffuser, 10-Pack FLX-STRD-4 (1x4 & 2x4 luminaires)

FLX-STRD-2 (2x2 luminaires)

Sample Inner Optic Diffuser Kit

FLX-SMPL-4 (1x4 & 2x4 luminaires)

FLX-SMPL-2 (2x2 luminaires)
- Includes one of each optic overlay diffuse accessory (wavy,

perforated, diffuse, brushed metal and striped)

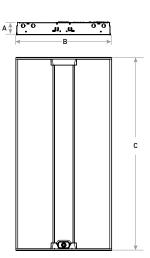
# Inner Optic Overlay Diffuser Accessories



Brushed Metal	
Striped	
Perforated	
Wavy	
Diffuse	

### SC1 SMARTCAST® TECHNOLOGY CONTROL AWNS CONTROLS SHOWN WITH CRV LENS SHOWN WITH ARC LENS

# نا. الد



For use with SC1 and AWNS Controls

FLX-SCLV-WVD-4 (1x4 & 2x4 luminaires) FLX-SCLV-WVD-2 (2x2 luminaires)

Perforated Inner Optic Diffuser, 10-Pack

FLX-SCLV-PFD-4 [1x4 & 2x4 luminaires]

FLX-SCLV-STD-4 (1x4 & 2x4 luminaires) FLX-SCLV-STD-2 (2x2 luminaires)

Brushed Metal Inner Optic Diffuser, 10-Pack FLX-SCLV-BMD-4 (1x4 & 2x4 luminaires)

Striped Inner Optic Diffuser, 10-Pack FLX-SCLV-STRD-4 (1x4 & 2x4 luminaires) FLX-SCLV-STRD-2 (2x2 luminaires)

FLX-SCLV-PFD-2 (2x2 luminaires)

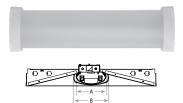
FLX-SCLV-BMD-2 (2x2 luminaires)

Diffuse Inner Optic, 10-Pack

Wavy Inner Optic Diffuser, 10-Pack

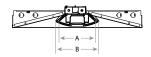
SC1 and AWNS Dimensions										
	DIM "A"	DIM "A" w/EB	DIM "B"	DIM "C"	Weight	Weight w/EB				
1x4	4.0" (101mm)	4.0" (101mm)	11.7" (298mm)	47.7" (1213mm)	11.0 lbs. (5.0kg)	16.0 lbs. (7.3kg)				
2x2	4.0" (101mm)	3.3" (84mm)	23.7" (603mm)	23.8" (604mm)	9.0 lbs. [4.1kg]	14.0 lbs. (6.4kg)				
2x4	4.0" (101mm)	3.3" (84mm)	23.7" (603mm)	47.7" (1213mm)	15.0 lbs. (6.8kg)	20.0 lbs. (9.1kg)				

# LENS ASSEMBLY



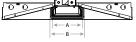






ARC





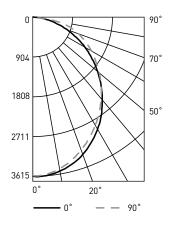
SQ

Lens Assembly Dimensions						
	Lens Width DIM "A"	Endcap Width DIM "B"				
CRV	7.3" (185mm)	7.9" (200mm)				
ARC	5.4" (138mm)	6.2" (157mm)				
SQ	5.4" (138mm)	6.2" (157mm)				

# **Photometry**

# FLX24-100L-930-ARC-10V1-UNV BASED ON RESTL REPORT TEST #: PL16330-001A

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	108	103	99	95				
2	98	90	83	77				
3	90	79	71	64				
4	82	70	61	54				
5	76	63	54	47				
6	70	56	47	41				
7	65	51	42	36				
8	60	47	38	32				
9	56	43	35	29				
10	53	40	32	27				

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

Average Luminance Table (cd/m²)							
	9						
		0°	45°	90°			
ngle	45°	4,495	4,373	4,454			
Vertical Angle	55°	4,145	4,133	4,377			
Verti	65°	3,739	4,003	4,497			
-	75°	3,110	4,066	4,960			
	85°	2,061	4,185	5,209			

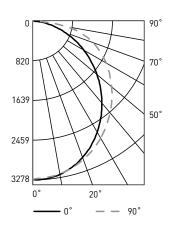
Zonal Lumen Summary						
Zone	Lumens	% Lamp	Luminaire			
0-30	2,697	N/A	28.0%			
0-40	4,338	N/A	45.0%			
0-60	7,468	N/A	77.5%			
0-90	9,641	N/A	100%			
0-180	9,641	N/A	100%			
0-180	9,641	N/A	100%			

 $Reference \ \underline{https://creelighting.com/products/indoor/troffers/flex-series} \ for \ detailed \ photometric \ data.$ 

# **Photometry**

# FLX24-100L-930-CRV-10V1-UNV BASED ON RESTL REPORT TEST #: PL16304-001A

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	108	103	98	94		
2	98	89	82	75		
3	89	78	69	62		
4	81	69	59	52		
5	74	61	52	45		
6	69	55	46	39		
7	64	50	41	35		
8	59	45	37	31		
9	55	42	33	28		
10	52	38	30	25		

Effective Floor Cavity Reflectance: 20%

Average Luminance Table (cd/m²)							
	)						
		0°	45°	90°			
ngle	45°	4,051	4,341	4,714			
cal A	55°	3,738	4,292	4,892			
Vertical Angle	65°	3,377	4,409	5,313			
	75°	2,846	4,804	6,064			
	85°	2,059	5,089	5,578			

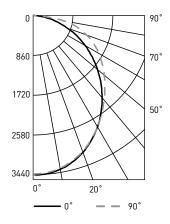
Zonal Lumen Summary						
Zone	Lumens	% Lamp	Luminaire			
0-30	2,496	N/A	25.9%			
0-40	4,070	N/A	42.3%			
0-60	7,216	N/A	74.9%			
0-90	9,631	N/A	100%			
0-180	9,631	N/A	100%			

 $Reference \ \underline{https://cree lighting.com/products/indoor/troffers/flex-series} \ for \ detailed \ photometric \ data.$ 

# **Photometry**

# FLX24-100L-930-SQ-10V1-UNV BASED ON RESTL REPORT TEST #: PL16329-001B

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



Coefficients Of Utilization – Zonal Cavity Method					
RC %:	80				
RW %:	70	50	30	10	
RCR: 0	119	119	119	119	
1	108	103	99	95	
2	98	89	82	76	
3	89	78	70	63	
4	82	69	60	53	
5	75	62	53	46	
6	69	56	47	40	
7	64	51	42	35	
8	60	46	38	32	
9	56	42	34	28	
10	52	39	31	26	

Effective	Floor	Cavity	Reflectance:	20%

Average Luminance Table (cd/m²)							
Horizontal Angle							
		0°	45°	90°			
ngle	45°	4,246	4,346	4,498			
cal A	55°	3,927	4,244	4,604			
Vertical Angle	65°	3,565	4,284	4,955			
-	75°	3,011	4,478	5,512			
	85°	2,030	4,015	4,278			

Zonal Lumen Summary							
Zone	Lumens	% Lamp	Luminaire				
0-30	2,596	N/A	27.0%				
0-40	4,192	N/A	43.6%				
0-60	7,322	N/A	76.2%				
0-90	9,610	N/A	100%				
0-180	9,610	N/A	100%				

 $Reference\ \underline{https://creelighting.com/products/indoor/troffers/flex-series}\ for\ detailed\ photometric\ data.$ 

# **Application Reference**

Open Space							
Spacing	Lumen Package	CRI	Initial Delivered Lumens	Wattage	LPW	w/ft²	Average fc
		80		18	144	0.27	
	26L	90/9ACK	2,600	21	124	0.32	36
		80	0.000	21	143	0.32	42
0 0	30L	90/9ACK	3,000	26	115	0.39	42
8 x 8	(0)	80	4 000	27	148	0.41	F.
	40L	90/9ACK	4,000	33	121	0.50	56
	===	80		35	143	0.53	
	50L	90/9ACK	5,000	41	122	0.62	70
		80	2 ANN  _	18	144	0.23	
	26L	90/9ACK		21	124	0.26	30
		80		21	143	0.26	
	30L	90/9ACK	3,000	26	115	0.33	35
8 x 10		80	4 nnn  -	27	148	0.34	
40	40L	90/9ACK		33	121	0.41	47
		80	5,000	35	143	0.44	
	50L	90/9ACK		41	122	0.51	58
		80		18	144	0.18	
	26L	90/9ACK	2,600	21	124 0.21 24	24	
		80		21	143	0.21	- 28
	30L	90/9ACK	3,000	26	115	0.26	
10 x 10		80		27	148	0.27	
	40L	90/9ACK	4,000	33	121	0.33	37
		80		35	143	0.35	
	50L	90/9ACK	5,000	41	122	0.41	47
		80		18	144	0.14	
	26L	90/9ACK	2,600	21	124	0.17	19
		80		21	143	0.17	
	30L	90/9ACK	3,000	26	115	0.21	22
10 x 12		80		27	148	0.22	
	40L	90/9ACK	4,000	33	121	0.26	30
		80		35	143	0.28	
	50L	90/9ACK	5,000	41	122	0.33	37

10' ceiling: 80/50/20 reflectances; 2.5' workplane, open room. LLF: 1.0 Initial Open Space: 50' x 40' x 10 Applies to ARC, CRV and SQ lenses.

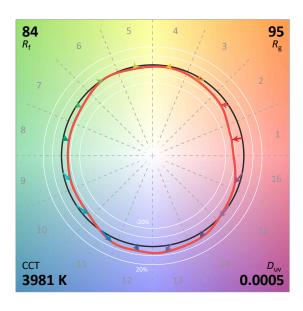
# **Application Reference**

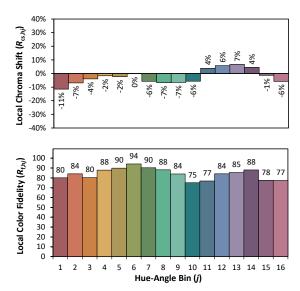
			Initial Delivered				Average
Spacing	Lumen Package	CRI	Lumens	Wattage	LPW	w/ft²	fc
	60L	80	6,000	42	143	0.63	56
	OUL	90/9ACK	0,000	49	122	0.74	30
	70L	80	7,000	47	149	0.71	65
8 x 8	700	90	7,000	56	125	0.84	0.5
0 x 0	80L	80	8,000	54	148	0.81	74
	OUL	90	0,000	65	123	0.98	/4
	100L	80	10,000	67	149	1.01	93
	TOOL	90	10,000	78	128	1.17	73
	60L	80	6,000	42	143	0.53	46
	OUL	90/9ACK	0,000	49	122	0.61	40
	70L	80	7,000	47	149	0.59	54
8 x 10	/UL	90	7,000	56	125	0.70	34
8 X IU	80L	80	8,000	54	148	0.68	61
	8UL	90		65	123	0.81	
	100L	80	10,000	67	149	0.84	77
		90		78	128	0.98	<i>''</i>
	/01	80	6,000	42	143	0.42	37
	60L	90/9ACK		49	122	0.49	
	701	80	7.000	47	149	0.47	
10 10	70L	90	7,000	56	125	0.56	43
10 x 10	001	80	0.000	54	148	0.54	, o
	80L	90	8,000	65	123	0.65	49
	4001	80	10.000	67	149	0.67	
	100L	90	10,000	78	128	0.78	62
	(0)	80	/ 000	42	143	0.34	00
	60L	90/9ACK	6,000	49	122	0.39	29
	FOL	80	7.000	47	149	0.38	٥,
10 10	70L	90	7,000	56	125	0.45	34
10 x 12		80		54	148	0.43	
	80L	90	8,000	65	123	0.52	39
		80		67	149	0.54	
	100L	90	10,000	78	128	0.62	49

25' ceiling: 80/50/20 reflectances; 2.5' workplane, open room. LLF: 1.0 Initial Open Space: 50' x 40' x 10 Applies to ARC, CRV and SQ lenses.

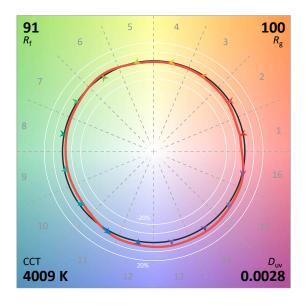
# **ANSI/IES TM-30-18**

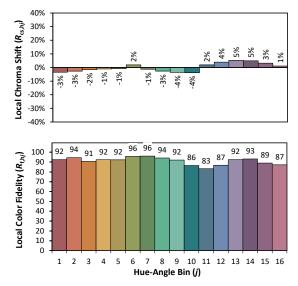
4000K, 80 CRI Based on RESTL TEST #: PL16472-001





4000K, 90 CRI Based on RESTL TEST #: PL16468-001





# Replacement Parts

EB Replacement Kit FLX-EBKIT-I0

- Replaces EB driver in existing ZR/FLX luminaires Available only with UNV voltage

# **Lens Replacement Kits**

			RLK
Product	Lens	Controls	Replacement Lens Kit
FLX14/24 - For use with 1x4 and 2x4 luminaires FLX22 - For use with 2x2 luminaires	CRV - ZR Curve ARC - FLX Arc SQ - Square	BLANK - For use with 10V10, 10V1, LDE1, DALI, and AWNR controls SCLV - For use with SC1, VD0, VRF, and AWNS controls	RLK - Replacement Lens Kit

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