

FLEX Series

FLX14™, FLX22™, and FLX24™ Specification LED Troffers

Rev. Date: V8 10/09/2023

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

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, Lutron T-Series and Lutron Athena]

Input Voltage: 120-277 VAC or 347 VAC

Limited Warranty: 10 years for luminaire, SmartCast controls, and Lutron VDO, VRF, LDE1 & PSQ0 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 Wireless with Adjustable CCT option, Lutron Vive, Lutron EcoSystem, DALI, Lutron Athena/Lutron Athena Tunable White Lutron T-Series 2 Channel 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

* See <http://creelighting.com/warranty> for warranty terms. For SmartCast accessories, consult SmartCast spec sheets for details on warranty terms.

Ordering Information

Example: FLX24-40L-835-ARC-10V1

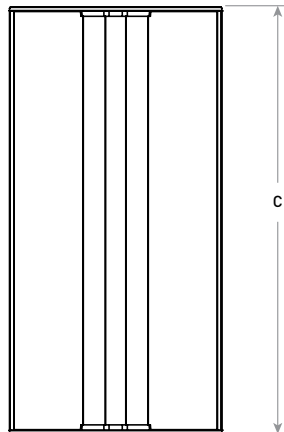
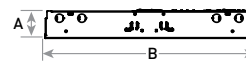
FLX	Product	Size	Lumen Package	CRI/CCT	Lens*	Control	Voltage	Options**
FLX	14 1x4	30L 3,000 Lumens 40L 4,000 Lumens 50L 5,000 Lumens 60L 6,000 Lumens	830 80 CRI, 3000K	CRV ZR Curve ARC FLX Arc SQ Square	10V10 0-10V 10% Dimming - Available only with 26L-60L lumen packages 10V1 0-10V 1% Dimming SC1 SmartCast Wireless Technology with 1% Dimming, Integral Motion and Ambient Sensors - For adjustable CCT functionality, luminaire must be ordered with 9ACK CRI/CCT (26L-60L lumen packages only) - Utilizes a multifunction sensor VDO+ Lutron Vive Wireless Integral Fixture Control w/Occupancy and Daylight Sensing - Utilizes a multifunction sensor VRF+ Lutron Vive Wireless Integral Fixture Control (RF only) LDE1+ Lutron HiLume 1% EcoSystem LED Driver with Soft-on, Fade to Black Dimming Technology PSQ0+ Lutron T-Series 2 Channel Tunable White - Requires 9ACK CRI/CCT option - Available only with 40L-60L lumen packages DALI DALI Dimming to 1% AWNRR+ Lutron Athena Integral Fixture Control (RF only) - Tunable white requires 9ACK CRI/CCT (26L-60L lumen packages only) - Utilizes a DALI2 driver	UNV Universal voltage 120-277 Volt 34 347 Volt - Not available with 10V10 controls	6PWSW Power Whip - 6', 5-Wire - Available with UNV voltage only 6PW6W Power Whip - 6', 6-Wire for use with luminaires w/ EB option - Available with UNV voltage only CP Chicago Plenum - Available with UNV voltage only - Not available with EB EB Emergency Backup - Available with UNV voltage only - Provides 10W and 90 minutes of emergency operation - GTD and EB cannot be used together GTD Generator Transfer Device - Available with UNV voltage only - GTD and EB cannot be used together - Not available with power whip options	
			835 80 CRI, 3500K					
			840 80 CRI, 4000K 850 80 CRI, 5000K					
	22 2x2	26L 2,600 Lumens 30L 3,000 Lumens 40L 4,000 Lumens 50L 5,000 Lumens	930 90 CRI, 3000K	9ACK 90 CRI, Adjustable Color 3000K-6500K in 100K increments - Available only with 26L-60L lumen packages (SC1 or Awnr controls) or 40L-60L lumen packages (PSQ0 control) - Available only with SC1, PSQ0 or Awnr controls	90 CRI, 3500K 940 90 CRI, 4000K 950 90 CRI, 5000K			
			935 90 CRI, 3500K					
			940 90 CRI, 4000K					
	24 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 10,000 Lumens	930 90 CRI, 3000K	9ACK 90 CRI, Adjustable Color 3000K-6500K in 100K increments - Available only with 26L-60L lumen packages (SC1 or Awnr controls) or 40L-60L lumen packages (PSQ0 control) - Available only with SC1, PSQ0 or Awnr controls	90 CRI, 3500K 940 90 CRI, 4000K 950 90 CRI, 5000K			
			935 90 CRI, 3500K					
			940 90 CRI, 4000K					

* More information on Lutron controls can be found at lutron.com.

** Consult factory for other options.



10V10, 10V1, LDE1, DALI, Awnr AND PSQ0 CONTROLS



10V10, 10V1, LDE1, DALI & PSQ0 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 Vive controls.



US: creelighting.com T (800) 236-6800 F (262) 504-5415

Canada: creelighting-canada.com T (800) 473-1234 F (800) 890-7507

Product Specifications

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 mounting
- 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 entry
- Not for installation within 3" (76mm) of insulation
- **Weight:** Refer to tables on pages 1 and 5.

OPTICAL SYSTEM

- Unique luminaire design creates perfect balance of both horizontal and vertical illumination
- 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, LDE1, DALI and PSQ0 are 60Hz only
- **Operating Temperature Range:** 0°C - + 35°C (32°F - + 95°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 LED fixtures
- Reference <https://cree.widen.net/s/2b8dlcwsq/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
- Meets Buy American requirements within ARRA
- **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 (manual-on/auto-off)
 - Not grouped with a wall control: Luminaire will operate in occupancy mode (auto-on/auto-off)
- 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
- **Range:**
 - 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

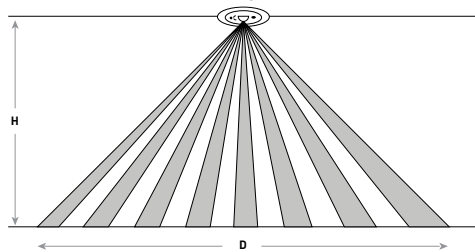
LUMINAIRE

- 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-guide>

PIR Motion Sensor Coverage



Mounting Height - H (Feet)	Motion Sensor Coverage Diameter - D (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 Series Ambient Adjusted Lumen Maintenance ¹					
Ambient	Initial LMF	25K hr Reported ² LMF	50K hr Reported ² LMF	75K hr Estimated ³ LMF	100K hr Estimated ³ LMF
0°C (32°F)	1.04	0.99	0.95	0.91	0.87
5°C (41°F)	1.04	0.99	0.95	0.91	0.87
10°C (50°F)	1.03	0.98	0.94	0.90	0.86
15°C (59°F)	1.02	0.97	0.93	0.89	0.85
20°C (68°F)	1.01	0.96	0.92	0.88	0.85
25°C (77°F)	1.00	0.95	0.91	0.87	0.84
30°C (86°F)	0.99	0.93	0.89	0.85	0.81
35°C (95°F)	0.98	0.91	0.86	0.82	0.77

¹ 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.

² In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED.

³ Estimated values are calculated and represent time durations that exceed the 6x test duration of the LED.

FLX14™, FLX22™, and FLX24™ Specification LED Troffer

Delivered Lumens & Electrical Data*																
Size	Lumen Package	CRI	Control	Initial Delivered Lumens	Wattage		Current (A)					EB/GTD Wattage	EB/GTD Current (A)			
					120-277V	347V**	120V	208V	240V	277V	347V**	120-277V	120V	208V	240V	277V
2x2	26L	80	10V10, 10V1, SC1, VDO, VRF, DALI, LDE1, AWRNR	2,600	18	21	0.17	0.10	0.08	0.07	0.06	21	0.19	0.11	0.09	0.08
		90/9ACK	10V10, 10V1, SC1, VDO, VRF, DALI, LDE1, AWRNR		21	24	0.19	0.11	0.10	0.09	0.07	24	0.22	0.13	0.11	0.10
1x4, 2x2, 2x4	30L	80	10V10, 10V1, SC1, VDO, VRF, DALI, LDE1, AWRNR	3,000	21	24	0.19	0.11	0.09	0.08	0.07	24	0.22	0.12	0.11	0.09
		90/9ACK	10V10, 10V1, SC1, VDO, VRF, DALI, LDE1, AWRNR		26	28	0.23	0.13	0.12	0.10	0.09	29	0.26	0.15	0.13	0.11
1x4, 2x2, 2x4	40L	80	10V10, 10V1, SC1, VDO, VRF, DALI, LDE1, AWRNR	4,000	27	29	0.24	0.14	0.12	0.10	0.09	30	0.27	0.15	0.13	0.11
		90/9ACK	10V10, 10V1, SC1, VDO, VRF, DALI, LDE1, AWRNR, 9ACK-PSQ0		33	36	0.31	0.18	0.16	0.14	0.12	36	0.34	0.19	0.17	0.15
1x4, 2x2, 2x4	50L	80	10V10, 10V1, SC1, VDO, VRF, DALI, LDE1, AWRNR	5,000	35	38	0.31	0.18	0.15	0.13	0.12	38	0.34	0.19	0.17	0.14
		90/9ACK	10V10, 10V1, SC1, VDO, VRF, DALI, LDE1, AWRNR, 9ACK-PSQ0		41	44	0.35	0.20	0.17	0.15	0.13	44	0.37	0.21	0.18	0.16
1x4, 2x4	60L	80	10V10, 10V1, SC1, VDO, VRF, DALI, LDE1, AWRNR	6,000	42	44	0.37	0.21	0.18	0.16	0.14	45	0.39	0.23	0.20	0.17
		90/9ACK	10V10, 10V1, SC1, VDO, VRF, DALI, LDE1, AWRNR, 9ACK-PSQ0		49	53	0.43	0.24	0.20	0.18	0.16	52	0.43	0.25	0.24	0.19
2x4	70L	80	10V1, SC1, VDO, VRF, DALI, LDE1, AWRNR	7,000	47	49	0.41	0.24	0.20	0.17	0.15	50	0.44	0.25	0.21	0.19
		90	10V1, SC1, VDO, VRF, DALI, LDE1, AWRNR		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, VDO, VRF, DALI, LDE1, AWRNR	8,000	54	57	0.47	0.27	0.23	0.20	0.18	57	0.49	0.29	0.25	0.21
		90	10V1, SC1, VDO, VRF, DALI, LDE1, AWRNR		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, VDO, VRF, DALI, LDE1, AWRNR	10,000	67	70	0.58	0.34	0.29	0.25	0.22	69	0.61	0.35	0.30	0.26
		90	10V1, SC1, VDO, VRF, DALI, LDE1, AWRNR		78	82	0.68	0.39	0.34	0.29	0.25	81	0.70	0.41	0.35	0.30

* 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
		90/ACK	1,240
1x4, 2x2, 2x4	30L	80	1,430
		90/ACK	1,150
1x4, 2x2, 2x4	40L	80	1,480
		90/ACK	1,210
1x4, 2x2, 2x4	50L	80	1,430
		90/ACK	1,220
1x4, 2x4	60L	80	1,430
		90/ACK	1,220
2x4	70L	80	1,490
		90	1,250
2x4	80L	80	1,480
		90	1,230
2x4	100L	80	1,490
		90	1,280

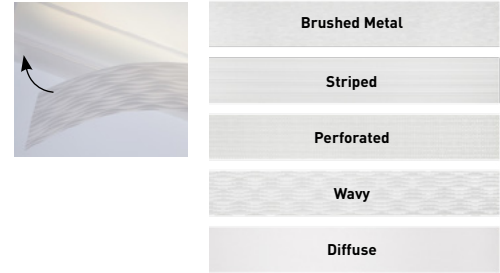
Accessories

Field-Installed			
<p>Drywall Grid Adapter DGA14-WHT 1x4, Single Pack DGA14-WHT-10PK 1x4, 10-Pack DGA22-WHT 2x2, Single Pack DGA22-WHT-10PK 2x2, 10-Pack DGA24-WHT 2x4, Single Pack DGA24-WHT-10PK 2x4, 10-Pack</p> <p>Surface Mount Kit SMK-FLX14 (1x4) SMK-FLX22 (2x2) SMK-FLX24 (2x4) - Not for use with AWNR control</p>	<p>SmartCast® Technology Configuration Tool CCT-CWC-1 - One required per project when SC1 control is selected</p> <p>SmartCast® Technology Face Plates CFP-1-WH - Matching face plate, 1-gang, white CFP-2-WH - Matching face plate, 2-gang, white</p> <p>SmartCast® Technology Wireless Dimmer CSC-CWD-UNVN-WH (neutral wire required) CSC-CWD-UNV-WH (no neutral required)</p> <p>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</p> <p>SmartCast® Technology Wireless Switch CSC-CWS-UNVN-WH (neutral wire required) CSC-CWS-UNV-WH (no neutral required)</p> <p>SmartCast® 5-Button Wireless Scene Controller CSC-SC-5B-CWC-WH (w/o text) CSC-SC-5S-CWC-WH (w/scene text) CSC-SC-5C-CWC-WH (w/CCT text) - Available only with 9ACK CSC-SC-5X-CWC-WH (w/custom text)</p>	<p>SmartCast® Technology Wireless Plug Load Controller CPLC-JB-CWC</p> <p>SmartCast® Touchscreen Control CSC-TS-A-BK</p> <p>SmartCast® Wireless Gateway with Wi-Fi CSC-GW-CWC-W - Required with SmartCast Touchscreen Control</p> <p>SmartCast® Wall Plug Power Supply CSC-WPS-120V - For use with SmartCast Wireless Gateway with Wi-Fi</p>	<p>SmartCast® Ceiling Plug Power Supply CSC-CPS-120V - For use with SmartCast Wireless Gateway with Wi-Fi</p> <p>SmartCast® 10V Zone Controller CSC-ZC-10V-CWC - Intelligent sensing and control of 0-10V luminaires</p>

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

Field-Installed	
For use with 10V10, 10V1, LDE1, DALI, PSQ0, and AWRN controls	For use with SC1, VDO, and VRF Controls
Wavy Inner Optic Diffuser, 10-Pack FLX-WVD-4 (1x4 & 2x4 luminaires) FLX-WVD-2 (2x2 luminaires)	Wavy Inner Optic Diffuser, 10-Pack FLX-SCLV-WVD-4 (1x4 & 2x4 luminaires) FLX-SCLV-WVD-2 (2x2 luminaires)
Perforated Inner Optic Diffuser, 10-Pack FLX-PFD-4 (1x4 & 2x4 luminaires) FLX-PFD-2 (2x2 luminaires)	Perforated Inner Optic Diffuser, 10-Pack FLX-SCLV-PFD-4 (1x4 & 2x4 luminaires) FLX-SCLV-PFD-2 (2x2 luminaires)
Diffuse Inner Optic, 10-Pack FLX-STD-4 (1x4 & 2x4 luminaires) FLX-STD-2 (2x2 luminaires)	Diffuse Inner Optic, 10-Pack FLX-SCLV-STD-4 (1x4 & 2x4 luminaires) FLX-SCLV-STD-2 (2x2 luminaires)
Brushed Metal Inner Optic Diffuser, 10-Pack FLX-BMD-4 (1x4 & 2x4 luminaires) FLX-BMD-2 (2x2 luminaires)	Brushed Metal Inner Optic Diffuser, 10-Pack FLX-SCLV-BMD-4 (1x4 & 2x4 luminaires) FLX-SCLV-BMD-2 (2x2 luminaires)
Striped Inner Optic Diffuser, 10-Pack FLX-STRD-4 (1x4 & 2x4 luminaires) FLX-STRD-2 (2x2 luminaires)	Striped Inner Optic Diffuser, 10-Pack FLX-SCLV-STRD-4 (1x4 & 2x4 luminaires) FLX-SCLV-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, 9ACK-PSQ0 perforated, diffuse, brushed metal and striped)	

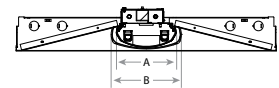
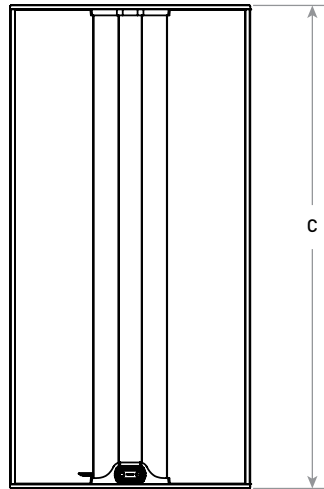
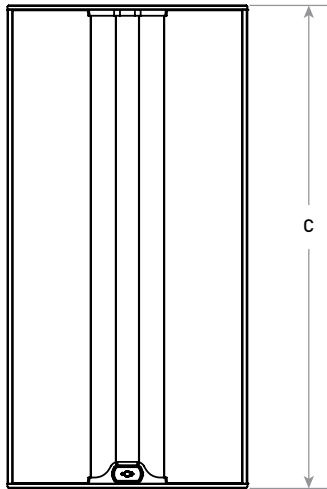
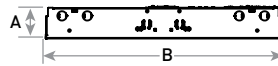
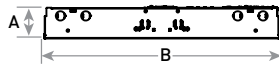
Inner Optic Overlay Diffuser Accessories



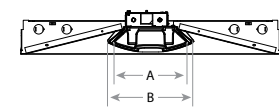
SC1 SMARTCAST® TECHNOLOGY CONTROL

VDO/VRF CONTROLS

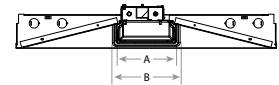
LENS ASSEMBLY



CRV



ARC



SQ

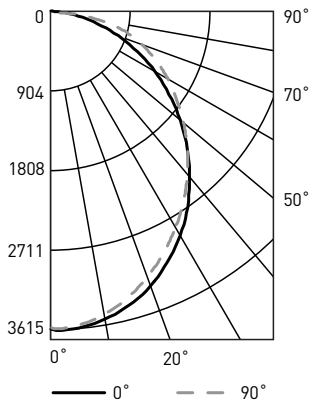
SC1, VDO, VRF, LDE1 Dimensions						
	DIM "A"	DIM "A" w/EB	DIM "B"	DIM "C"	Weight	Weight w/EB
1x4	4.0" [101mm]	4.0" [101mm]	11.7" [298mm]	47.7" [1213mm]	11.0 lbs. [5.0kg]	16.0 lbs. [7.3kg]
2x2	4.0" [101mm]	3.3" [84mm]	23.7" [603mm]	23.8" [604mm]	9.0 lbs. [4.1kg]	14.0 lbs. [6.4kg]
2x4	4.0" [101mm]	3.3" [84mm]	23.7" [603mm]	47.7" [1213mm]	15.0 lbs. [6.8kg]	20.0 lbs. [9.1kg]

Lens Assembly 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)			
Vertical Angle	Horizontal Angle		
	0°	45°	90°
	45°	4,495	4,373
55°	4,145	4,133	4,377
65°	3,739	4,003	4,497
75°	3,110	4,066	4,960
85°	2,061	4,185	5,209

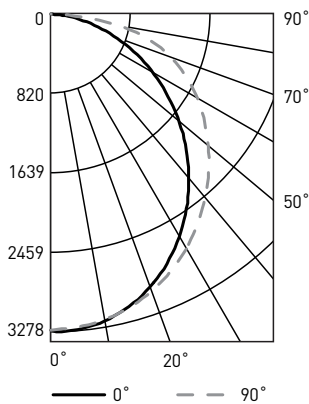
Zonal Lumen Summary			
Zone	Lumens	% Lamp	Luminaire
0-30	2,697	N/A	28.0%
0-40	4,338	N/A	45.0%
0-60	7,468	N/A	77.5%
0-90	9,641	N/A	100%
0-180	9,641	N/A	100%

Reference <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)			
Vertical Angle	Horizontal Angle		
	0°	45°	90°
	45°	4,051	4,341
55°	3,738	4,292	4,892
65°	3,377	4,409	5,313
75°	2,846	4,804	6,064
85°	2,059	5,089	5,578

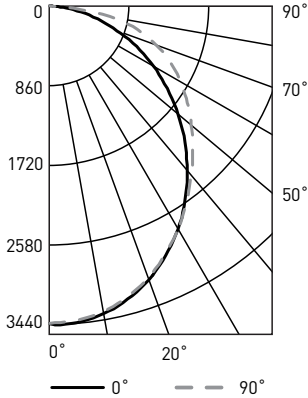
Zonal Lumen Summary			
Zone	Lumens	% Lamp	Luminaire
0-30	2,496	N/A	25.9%
0-40	4,070	N/A	42.3%
0-60	7,216	N/A	74.9%
0-90	9,631	N/A	100%
0-180	9,631	N/A	100%

Reference <https://creelighting.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 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	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)			
Vertical Angle	Horizontal Angle		
	0°	45°	90°
45°	4,246	4,346	4,498
55°	3,927	4,244	4,604
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 <https://creelighting.com/products/indoor/troffers/flux-series> for detailed photometric data.

Application Reference

Open Space								
Spacing	Lumen Package	CRI	Initial Delivered Lumens	Wattage	LPW	w/ft²	Average fc	
8 x 8	26L	80	2,600	18	144	0.27	36	
		90/9ACK						21
	30L	80	3,000	21	143	0.32	42	
		90/9ACK						26
	40L	80	4,000	27	148	0.41	56	
		90/9ACK						33
	50L	80	5,000	35	143	0.53	70	
		90/9ACK						41
	8 x 10	26L	80	2,600	18	144	0.23	30
			90/9ACK					
30L		80	3,000	21	143	0.26	35	
		90/9ACK						26
40L		80	4,000	27	148	0.34	47	
		90/9ACK						33
50L		80	5,000	35	143	0.44	58	
		90/9ACK						41
10 x 10		26L	80	2,600	18	144	0.18	24
			90/9ACK					
	30L	80	3,000	21	143	0.21	28	
		90/9ACK						26
	40L	80	4,000	27	148	0.27	37	
		90/9ACK						33
	50L	80	5,000	35	143	0.35	47	
		90/9ACK						41
	10 x 12	26L	80	2,600	18	144	0.14	19
			90/9ACK					
30L		80	3,000	21	143	0.17	22	
		90/9ACK						26
40L		80	4,000	27	148	0.22	30	
		90/9ACK						33
50L		80	5,000	35	143	0.28	37	
		90/9ACK						41

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.

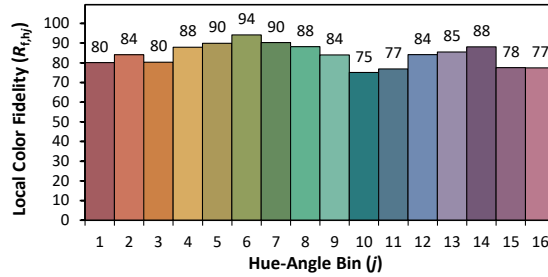
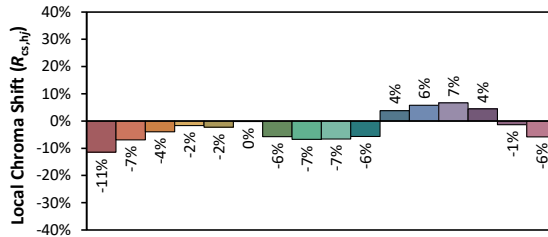
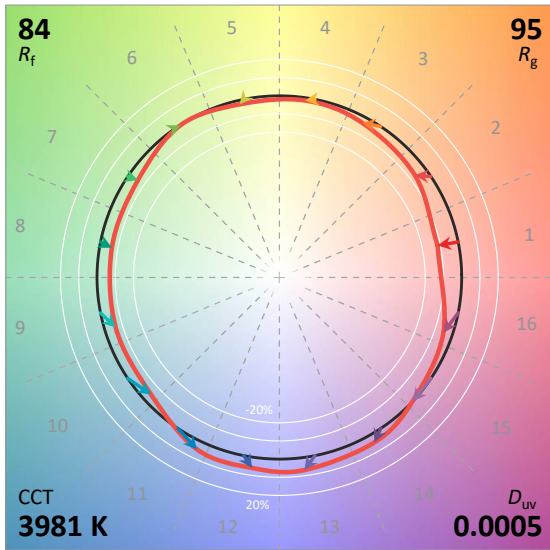
Application Reference

Open Space								
Spacing	Lumen Package	CRI	Initial Delivered Lumens	Wattage	LPW	w/ft²	Average fc	
8 x 8	60L	80	6,000	42	143	0.63	56	
		90/9ACK						49
	70L	80	7,000	47	149	0.71	65	
		90						56
	80L	80	8,000	54	148	0.81	74	
		90						65
	100L	80	10,000	67	149	1.01	93	
		90						78
	8 x 10	60L	80	6,000	42	143	0.53	46
			90/9ACK					
70L		80	7,000	47	149	0.59	54	
		90						56
80L		80	8,000	54	148	0.68	61	
		90						65
100L		80	10,000	67	149	0.84	77	
		90						78
10 x 10		60L	80	6,000	42	143	0.42	37
			90/9ACK					
	70L	80	7,000	47	149	0.47	43	
		90						56
	80L	80	8,000	54	148	0.54	49	
		90						65
	100L	80	10,000	67	149	0.67	62	
		90						78
	10 x 12	60L	80	6,000	42	143	0.34	29
			90/9ACK					
70L		80	7,000	47	149	0.38	34	
		90						56
80L		80	8,000	54	148	0.43	39	
		90						65
100L		80	10,000	67	149	0.54	49	
		90						78

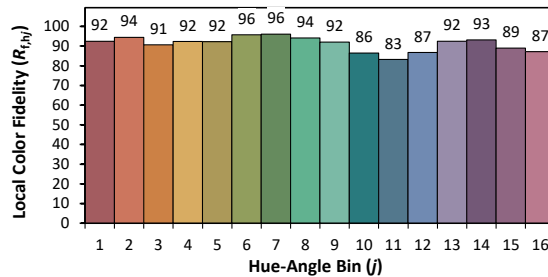
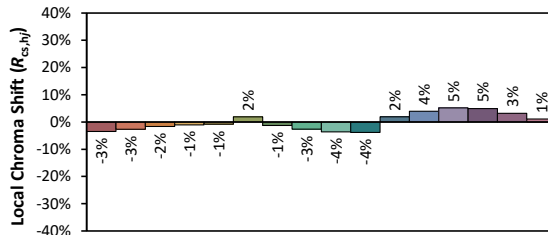
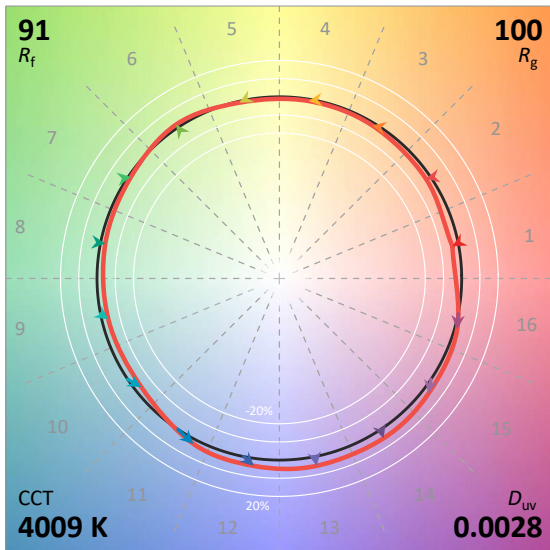
25' ceiling: 80/50/20 reflectances; 2.5' workplane, open room. LLF: 1.0 Initial
Open Space: 50' x 40' x 10
Applies to ARC, CRV and SQ lenses.

ANSI/IES TM-30-18

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



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



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