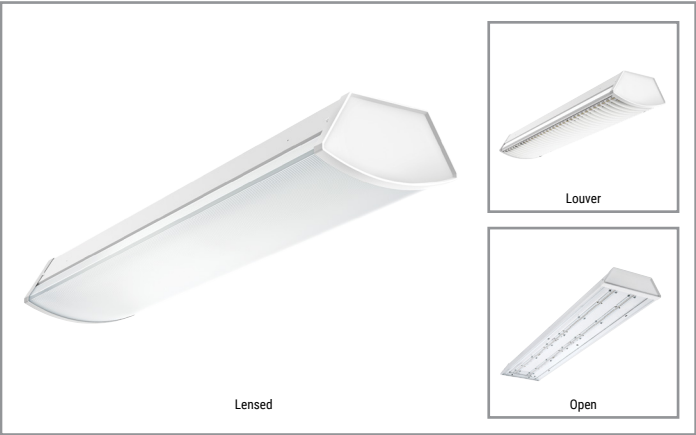


Project		Catalog #		Type	
Prepared by		Notes		Date	



# Metalux

## Cruze Linear Bay

LED Linear Bay Lighting System

### Typical Applications

Big Box Retail • Shopping Malls • School Gymnasium • Light Industrial • Warehouse • Manufacturing

### Interactive Menu

- Order Information [page 2](#)
- Energy Data [page 5](#)
- Photometric Data [page 6](#)
- Product Warranty

### Product Certification



### Product Features

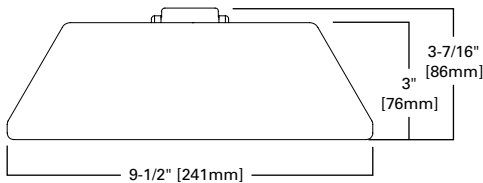


### Top Product Features

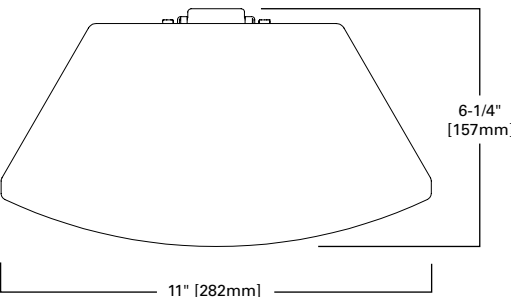
- 4ft and 8ft low profile, narrow 11" wide housing
- Available in surface, suspended and continuous row mount
- High-performance efficacy up to 176 lm/W
- Multiple Lumen Packages for Low Bay and High Bay Applications
- Options to meet Buy American and other domestic preference requirements

### Dimensional and Mounting Details

FLAT (NO LENS OR LOUVER)



CURVED (WITH LENS OR LOUVER)



[additional product diagrams](#)

## Order Information

SAMPLE ORDER NUMBER: **4CZL-9-LVR-UNV-L840-WLS4-CD-U** V Hangers included

Domestic Preferences	Length	Series	Mounting Arrangement	Lumen Output	Distribution	Shielding Options
Domestic Preferences <sup>(1)</sup>	Length	Series <sup>(2)</sup>	Mounting Arrangement	Lumen Output <sup>(4)</sup>	Distribution	Shielding Options
[Blank]=Standard BAA=Buy American Act TAA=Trade Agreements Act	4=4' Length 8=8' Length	CZL=LED High Bay	[Blank]=Stand Alone ER=End of Row <sup>(3)</sup> MR=Mid Row <sup>(3), (15)</sup>	4 ft. 5=5,000 Lumens 7=7,000 Lumens 9=9,000 Lumens 12=12,000 Lumens 16=16,000 Lumens	8 ft. 10=10,000 Lumens 14=14,000 Lumens 18=18,000 Lumens 24=24,000 Lumens 32=32,000 Lumens	[Blank]=No Lensing N=Narrow <sup>(5)</sup> M=Medium <sup>(5)</sup> W=Wide <sup>(5)</sup> FUL=Frosted with 8% Uplight Lens
<b>Notes</b> (1) Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to <a href="#">DOMESTIC PREFERENCES</a> website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.		<b>Notes</b> (2) DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to <a href="#">www.designlights.org</a> for details.	<b>Notes</b> (3) ER and MR mounting used in continuous row applications. (15) ELxxWEC not available with MR mounting.	<b>Notes</b> (4) See Table on page on page 6.	<b>Notes</b> (5) N, M, and W distribution not available in conjunction with FUL or LVRF.	

Voltage	CCT/CRI	Emergency Options	Surge Protection	Sensor	Driver Type
Voltage	CCT/CRI	Emergency Options	Surge Protection	Sensor	Driver Type
UNV=Universal 120-277 Voltage UNC=Universal 347/480 Voltage 120V=120 Volt 277V=277 Volt 347V=347 Volt <sup>(7)</sup> 480V=480 Volt <sup>(7)</sup>	L835=80CRI / 3500K L840=80CRI / 4000K L850=80CRI / 5000K L935=90CRI / 3500K L940=90CRI / 4000K L950=90CRI / 5000K	EL7W=Emergency Installed, 7 Watts <sup>(8), (9)</sup> EL14W=Emergency Installed, 14 Watts <sup>(8), (9)</sup> EL20W=Emergency Installed, 20 Watts GTR2=Bodine Generator Transfer Relay <sup>(10)</sup> ETRD=Iota Emergency Transfer Relay with dimming control <sup>(10)</sup> EL7WEC=EM test switch located on end-cap <sup>(16)</sup> EL14WEC=EM test switch located on end-cap <sup>(16)</sup> EL20WEC=EM test switch located on end-cap <sup>(16)</sup>	[Blank]=6KV/3kA 10KV-S= Designed to withstand up to 10kV/5kA	MS=360° or 180° Motion Sensor Installed WLS2=WaveLinX Lite, Motion/Daylight dimming, BLE Programmable, up to 15' WLS4=WaveLinX Lite, Motion/Daylight dimming, BLE Programmable, up to 40' WPS2=WaveLinX Pro, Motion/Daylight dimming, WAC Programmable, up to 15' WPS4=WaveLinX Pro, Motion/Daylight dimming, WAC Programmable, up to 40'	CD=0-10V Dimming (standard) 1=1 Driver 2=2 Drivers (14,000, 16,000, 18,000, 22,000 lumen) 3=3 Drivers (32,000 lumen) 4=4 Driver (28,000 lumen) SLTD=Fifth Light DALI 1=1 Driver 2=2 Drivers (14,000, 16,000, 18,000, 22,000 lumen) 3=3 Drivers (28,000, 32,000 lumen)
<b>Notes</b> (7) EL not available in 347 or 480V configurations.		<b>Notes</b> (8) Max. ambient 35C for EL options. (9) EL not available in 347 or 480V configurations. (10) Used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others). GTR2 option includes 2 relays on fixtures with dimming drivers. ETRD option only requires one relay when used on a dimming fixture. Must specify voltage as 120V or 277V when ordering these devices. (16) ELxxWEC not available with MR mounting.			

Options	Wiring Options	Packaging	Accessories
Options	Wiring Options	Packaging	Accessories (order separately) <sup>(14)</sup>
PAF=Painted After Fabrication	PI_NG=Plug In System (1, 2, or 3 Circuit Capability), No Ground (ground provided by fixture body) <sup>(13)</sup> PI_WG=Plug In System (1, 2, or 3 Circuit Capability), With Ground (separate ground wire in harness) <sup>(13)</sup> CPI_NG=Crossover Plug In System (2 or 3 Circuit Capability), No Ground (ground provided by fixture body) <sup>(13)</sup> CPI_WG=Crossover Plug In System (2 or 3 Circuit Capability), With Ground (separate ground wire in harness) <sup>(13)</sup> MP=Modular Power Receptacle (Used in conjunction with modular cord accessories) C3=3ft cord, single circuit C6=6ft cord, single circuit C3DIM=3ft cord, single circuit with 0-10V dimming C6DIM=6ft cord, single circuit with 0-10V dimming	U=Unit Pack PAL=Palletized Out of Carton PALC=Palletized In Carton	HBAYC-CHAIN/SET-U=(2) Hooks, 36" Chain Sets w/S-Hooks TOGGLE--Single Toggle, #2 Cable (Specify 10' or 30') LOOP--Loop Hanger, #2 Cable (Specify 10' or 30') MC6=6' Modular Power Cord MPC6=6' Modular Power Cord & Plug (Specify Voltage) MDS6=6' Modular Power Cord with MWS 27DS18/2G06MP Connector CZL-SMK-PK=Surface Mount Kit CZL-CRCK=CZL Curved Row Conversion Kit (for use with lensed or louver configurations) CZL-FRCK=CZL Flat Row Conversion Kit (for use with flat profile configurations) CZL-CWG-PK=CZL 4ft Curved Wire Guard (for use with lensed or louver configurations) CZL-FWG-PK=CZL 4ft Flat Wire Guard (for use with flat profile configurations)
	<b>Notes</b> (13) MP option not compatible with EL, GTR, ETRD options.		<b>Notes</b> (14) Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.

## PI Option Ordering Information

Catalog Number Suffix	Number of Circuits	Circuit Wired To Ballast	Catalog Numbering System
PI 1 BLK	1	Black	The PI System is available in sections up to 8' in length for continuous row wiring by simply plugging the sections together. Each PI section is factory wired to the ballast leads. Color coding of wires is as follows: <b>PI-1</b> = One Circuit - 2 Wires: one black, one white <b>PI-2</b> = Two Circuits - 3 Wires: one black, one blue, one white <b>PI-3</b> = Three Circuits - 4 wires: one black, one blue, one red, one white
PI 2 BLU	2	Blue	
PI 2 BLK	2	Black	
PI 3 RED	3	Red	When ordering the PI2/PI3 System it is necessary to specify the number of fixtures required for each circuit. Each circuit in fixture must be ordered as a separate line item, with a different hot wire color specified. All wiring to external feeds, using cord or cord & plug, are responsibility of installing licensed contractor. Cord and cord & plug sets must be ordered separately if PI option is chosen.
PI 3 BLU	3	Blue	
PI 3 BLK	3	Black	

## PI1 - Single Circuit Plug-In

SAMPLE ORDER NUMBER: **PI1BLK-WG**

Catalog Number Suffix	Ground Wires
<b>PI1</b> =Single Circuit	<b>NG</b> =No Ground (ground provided by fixture body) <b>WG</b> =With Ground (separate ground wire in harness)
<b>BLK</b> =Black Hot	

Specifications &amp; dimensions subject to change without notice. Consult your Cooper Lighting Solutions Representative for availability and ordering information.

## PI2 - Two Circuit Plug-In

SAMPLE ORDER NUMBER: **PI2BLK-WG**

Catalog Number Suffix	Ground Wires
<b>PI2</b> =Two Circuit	<b>Leave Blank</b> =Single Neutral <b>2NEU</b> =Two Neutrals
<b>BLK</b> =Black Hot <b>BLU</b> =Blue Hot	
<b>Leave Blank</b> =Single Neutral <b>/WHT</b> =White Neutral <b>/GRY</b> =Gray Neutral	<b>NG</b> =No Ground (ground provided by fixture body) <b>WG</b> =With Ground (separate ground wire in harness)

## PI3 - Three Circuit Plug-In

SAMPLE ORDER NUMBER: **PI3BLK-WG**

Catalog Number Suffix	Ground Wires
<b>PI3</b> =Three Circuit	<b>Leave Blank</b> =Single Neutral <b>2NEU</b> =Two Neutrals
<b>BLK</b> =Black Hot <b>BLU</b> =Blue Hot <b>RED</b> =Red Hot	
<b>Leave Blank</b> =Single Neutral <b>/WHT</b> =White Neutral <b>/GRY</b> =Gray Neutral	<b>NG</b> =No Ground (ground provided by fixture body) <b>WG</b> =With Ground (separate ground wire in harness)

## Product Specifications

## Construction

- Specification grade, full body housing
- End plates and socket tracks are die formed cold rolled steel
- Available in 4' and 8' lengths
- Integral driver channel for added strength
- Numerous KO's for easy installation

## Electrical

- LED's available in 3500K, 4000K, and 5000K with a CRI > 80
- Available for 120-277V, 347V and 480V
- 0-10V dimming driver standard
- Optional modular power receptacle meets UL2459 and NEC 410.73
- UL/cUL rated for make and break under load from outside of the luminaire

## Finish

- Electrostatically applied, baked white enamel finish
- Multistage cleaning cycle
- Iron phosphate coating with rust inhibitor

## Optics

- Optical modules are enclosed inside housing to protect against damage
- Various distributions and lensing options available
- Optional white louver available for longitudinal shielding
- Heavy duty wireguard available

## Mounting

- Suitable for surface, suspension mounting with optional wire hook and chain set, stem or cable mounting
- Adjustable top brackets provide flexibility for various mounting locations

## Compliance

- cULus listed for damp locations -20 C – 65 C ambient environments (Reference Ambient chart for all ambient)
- RoHS compliant
- LED modules comply with IESNA LM-79/LM-80 testing standards
- DesignLights Consortium Qualified and classified for both DLC Standard and DLC Premium, refer to [www.designlights.org](http://www.designlights.org) for details

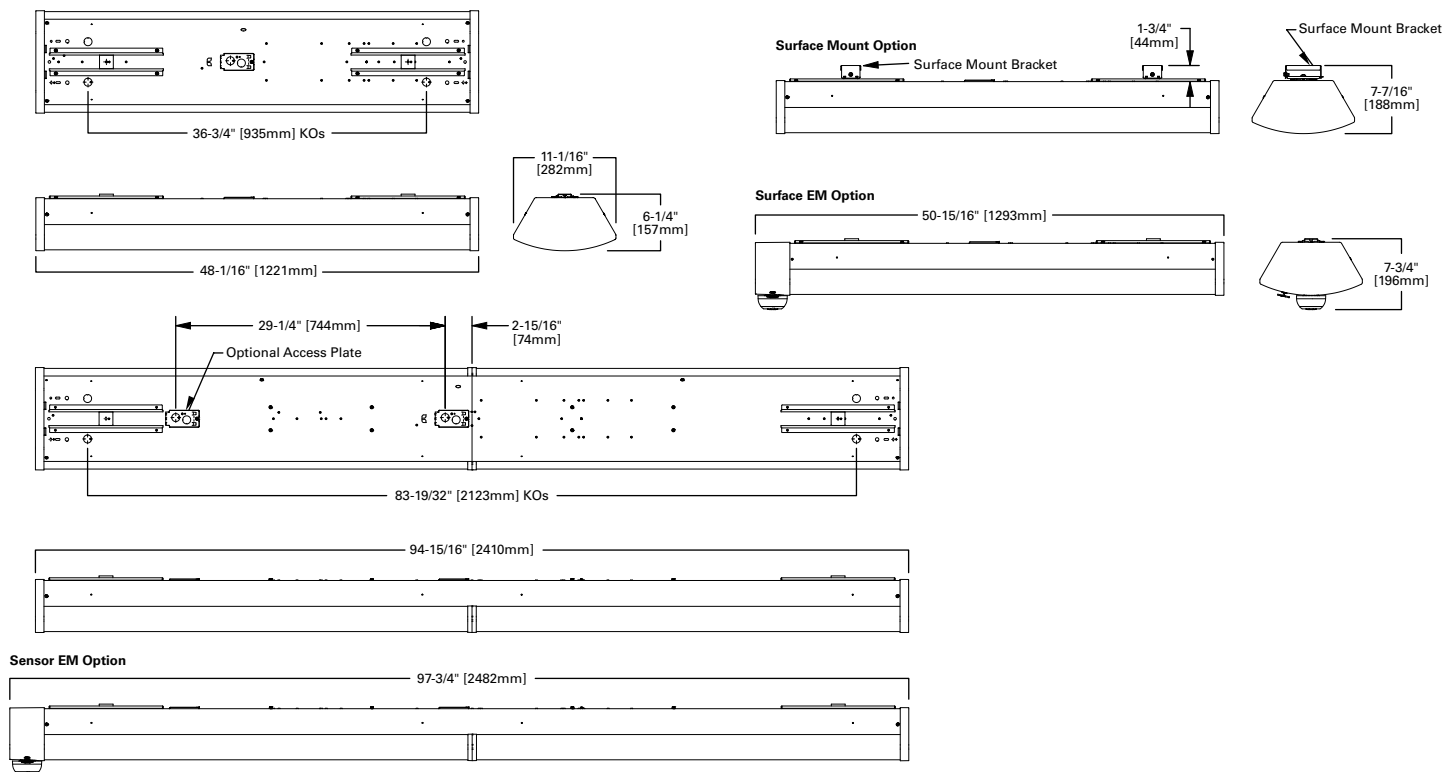
## Integrated Controls

- MS integrated sensor provides 600 sqft of coverage at maximum height of 40'
- Integrated Wavelinx Wireless Sensor option provides 1200 sq. ft. coverage

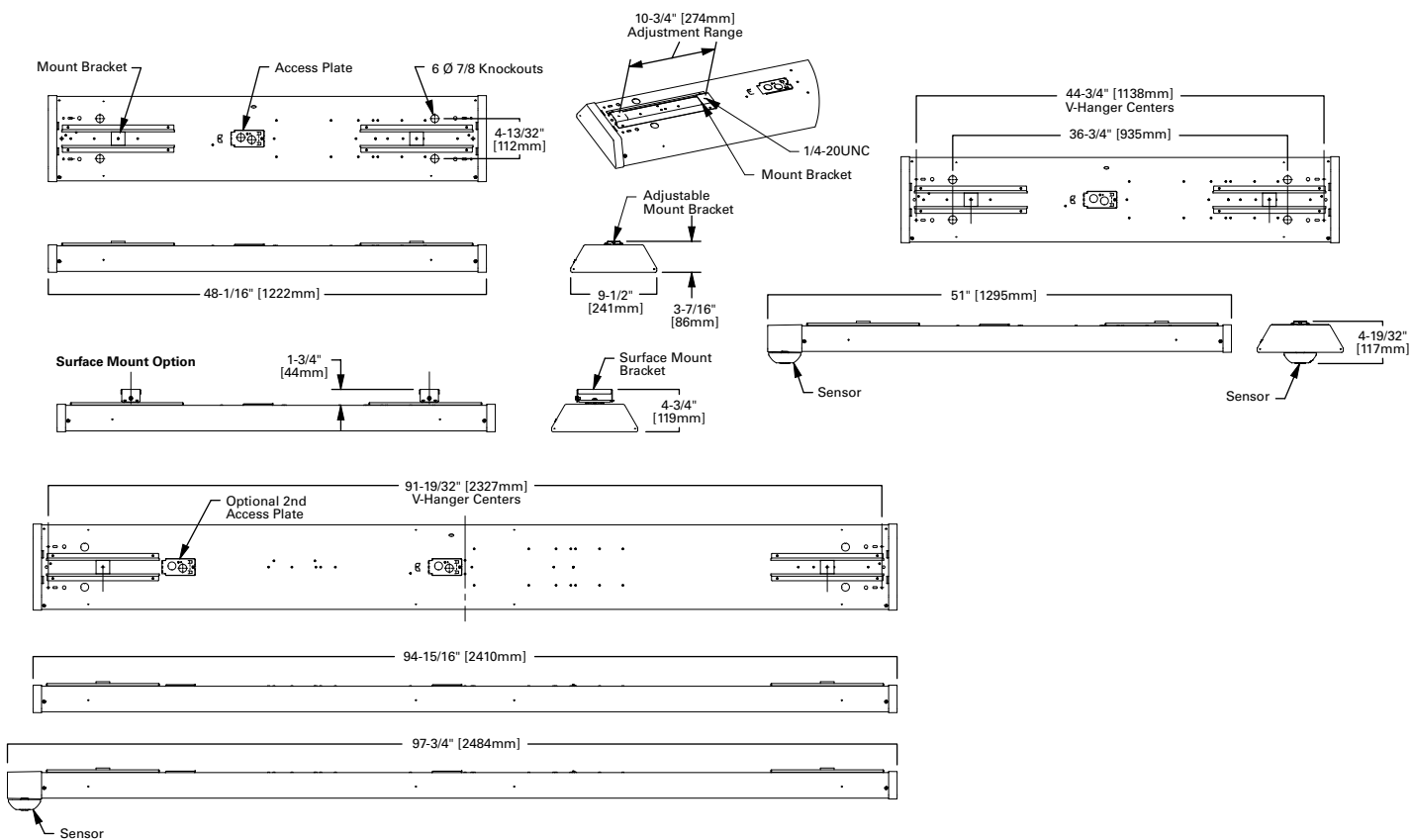
## Warranty

- Five year limited warranty.

## Lensed and Louver Dimensional and Mounting Details



## Flat (no Lens and Louver) Dimensional and Mounting Details



Energy and Performance Data

Energy and Performance Data by Catalog Number

	Lumen Output (4000K)										Watts	Efficacy									
	Base	N	M	W	FUL	LVR	N-LVR	M-LVR	W-LVR	LVRF	277V	Base	N	M	W	FUL	LVR	N-LVR	M-LVR	W-LVR	LVRF
4CZL-5	5,270	4,948	4,983	4,961	4,643	4,352	4,171	4,234	4,257	3,830	31	168	158	159	158	148	139	133	135	136	122
4CZL-7	7,521	7,062	7,112	7,080	6,627	6,211	5,953	6,042	6,075	5,467	44	170	159	161	160	150	140	134	136	137	123
4CZL-9	9,543	8,961	9,025	8,984	8,409	7,882	7,553	7,667	7,709	6,937	54	176	165	166	165	155	145	139	141	142	128
4CZL-12	12,841	12,057	12,143	12,088	11,314	10,605	10,163	10,316	10,372	9,334	77	167	157	158	157	147	138	132	134	135	122
4CZL-16	17,223	16,172	16,287	16,213	15,175	14,224	13,631	13,837	13,912	12,519	103	167	157	158	157	147	138	132	134	135	121
8CZL-10	10,539	9,896	9,967	9,921	9,286	8,704	8,341	8,467	8,513	7,661	63	168	158	159	158	148	139	133	135	136	122
8CZL-14	15,042	14,124	14,225	14,160	13,254	12,423	11,905	12,085	12,150	10,934	89	170	159	161	160	150	140	134	136	137	123
8CZL-18	19,087	17,922	18,050	17,967	16,817	15,764	15,106	15,334	15,418	13,874	109	176	165	166	165	155	145	139	141	142	128
8CZL-24	25,681	24,114	24,286	24,175	22,628	21,210	20,326	20,632	20,744	18,667	154	167	157	158	157	147	138	132	134	135	122
8CZL-32	34,446	32,344	32,575	32,426	30,350	28,449	27,263	27,674	27,824	25,039	206	167	157	158	157	147	138	132	134	135	121

	Lumen Output (5000K)										Watts	Efficacy									
	Base	N	M	W	FUL	LVR	N-LVR	M-LVR	W-LVR	LVRF	277V	Base	N	M	W	FUL	LVR	N-LVR	M-LVR	W-LVR	LVRF
4CZL-5	5,292	4,969	5,004	4,981	4,663	4,370	4,188	4,251	4,274	3,847	31	169	159	160	159	149	140	134	136	137	123
4CZL-7	7,553	7,092	7,142	7,110	6,655	6,238	5,978	6,068	6,101	5,490	44	170	160	161	160	150	141	135	137	138	124
4CZL-9	9,584	8,999	9,063	9,021	8,444	7,915	7,585	7,699	7,741	6,966	54	176	166	167	166	156	146	140	142	143	128
4CZL-12	12,895	12,108	12,194	12,138	11,361	10,649	10,205	10,360	10,416	9,373	77	168	158	159	158	148	139	133	135	136	122
4CZL-16	17,296	16,240	16,356	16,281	15,239	14,284	13,689	13,895	13,971	12,572	103	168	157	158	158	148	138	133	135	135	122
8CZL-10	10,584	9,938	10,008	9,963	9,325	8,741	8,376	8,503	8,549	7,693	63	169	159	160	159	149	140	134	136	137	123
8CZL-14	15,105	14,183	14,284	14,219	13,309	12,475	11,955	12,136	12,201	10,980	89	170	160	161	160	150	141	135	137	138	124
8CZL-18	19,167	17,997	18,126	18,043	16,888	15,830	15,170	15,399	15,482	13,932	109	176	166	167	166	156	146	140	142	143	128
8CZL-24	25,789	24,215	24,388	24,277	22,723	21,299	20,411	20,719	20,832	18,746	154	168	158	159	158	148	139	133	135	136	122
8CZL-32	34,591	32,480	32,712	32,562	30,477	28,568	27,377	27,790	27,941	25,144	206	168	157	158	158	148	138	133	135	135	122

Ambient Ratings

Lumen Package	Ambient Max.	EM
4CZL-5-UNV	65°C	50°C
4CZL-7-UNV	65°C	50°C
4CZL-9-UNV	60°C	50°C
4CZL-12-UNV	55°C	50°C
4CZL-16-UNV	55°C	50°C
8CZL-10-UNV	65°C	50°C
8CZL-14-UNV	65°C	50°C
8CZL-18-UNV	60°C	45°C
8CZL-24-UNV	55°C	40°C
8CZL-32-UNV	55°C	40°C

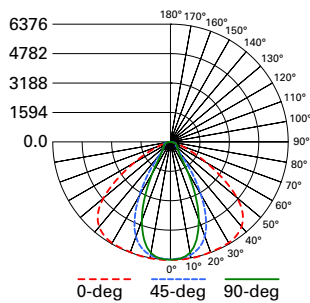
Energy Data

Size	Lumen SKU	Watts
4'	5000	31
	7000	44
	9000	54
	12000	77
	16000	103
8'	10000	63
	14000	89
	18000	109
	24000	154
	32000	206

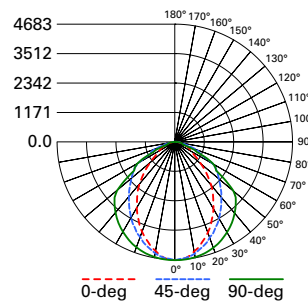
CCT Scaling Factors

835	0.982
840	1.000
850	1.004
935	0.812
940	0.812
950	0.836

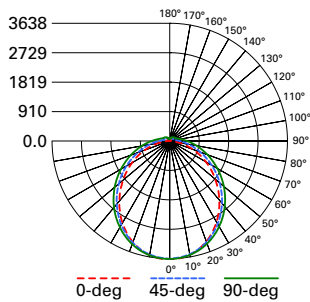
## Photometric Data

 View IES files


**4CZL-9-UNV-N-L840-CD-U**  
Electronic Driver  
LED 4000K  
Spacing criterion: (II) 1.48 x mounting height, (⊥) 0.81 x mounting height  
Lumens: 8961  
Input Watts: 54W  
Efficacy: 165.9 LPW  
Test Report: 4CZL-9-UNV-N-L840-CD-U.IES



**4CZL-12-UNV-LVR-L840-CD-U**  
Electronic Driver  
LED 4000K  
Spacing criterion: (II) 1.01 x mounting height, (⊥) 1.31 x mounting height  
Lumens: 10605  
Input Watts: 77W  
Efficacy: 137.7 LPW  
Test Report: 4CZL-12-UNV-LVR-L840-CD-U.IES



**4CZL-12-UNV-FUL-L840-CD-U**  
Electronic Driver  
LED 4000K  
Spacing criterion: (II) 1.19 x mounting height, (⊥) 1.25 x mounting height  
Lumens: 11314  
Input Watts: 77W  
Efficacy: 146.9 LPW  
Test Report: 4CZL-12-UNV-FUL-L840-CD-U.IES

## Modular F-Bay Power Supply Option

Cooper Lighting's F-Bay Modular Power Supply option is available for use with all F-Bay products. The modular power supply allows external fixture access for safe and easy servicing. Access to the individual fixture's power supply allows servicing without turning off all the fixtures, disrupting occupants. F-Bay Modular Power Supply is a time saver in installation – **simply plug & power.**



1. Modular Power Supply Receptacle supplied mounted into fixture Access Plate
2. Modular Power Cord & Plugs in 120, 277, 347, & 480V configurations for easy plug & power into existing supply

No internal fixture access required for installation or disconnecting power

## Code Compliance

- UL/cUL Certified for Make/Break under load (UL2549)
- Meets NEC requirements for ballast disconnect (NEC 410.73G)
- Receptacles complete with insulating/dust cap