Cruze
Recessed LED Luminaire

Metalux

EATON
Powering Business Worldwide

Cruze Recessed LED Luminaire

Performance, style, affordability. The **Cruze**™ LED combines contemporary styling and optimal illumination design with the technology of Eaton's Linear LED Platform. Its high performance LED system with advanced light distribution and attractive appearance delivers unprecedented energy savings, comfort and aesthetics all at an affordable price. Cruze offers a perfect balance of form and function making it an ideal choice for commercial office spaces, schools, hospitals, and retail merchandising areas.

Innovation you can rely on™

Cruze Recessed LED Luminaire

Construction

- Recessed: 2' x 2' and 2' x 4'
- Shallow depth: 3.25"
- Tool-less hinged door access
- cULus damp location / IC Rated / RoHS compliant
- Sustainable materials
- Five-year warranty

Performance

- High-performance efficacy up to 132 lumens per watt
- Energy savings in excess of 50% compared to traditional fluorescent troffers
- Four Correlated Color Temperatures (3000K, 3500K, 4000K, 5000K) at typical 85 CRI
- 2' x 2': L83 @ 60,000 hrs.
  2' x 4': L89 @ 60,000 hrs.
- Binning: Per ANSI, 3-step MacAdam ellipse

Options

- Four stocked lumen packages in two CCTs
  - 2' x 2': 2400 (22.6W) and 3400 (34.4W);
    2' x 4': 4000 (33.4W) and 5000 (44.5W)
  - Twelve additional lumen packages offered as MTO
- Four lens options – Ribbed Frosted, Smooth Frosted, Square Perforated and Round Perforated
- Universal (120V/277V) or 347V
- Emergency – EL (700), EL10W (10 watts) and EL14 (1400)
- Surface mount field install kits
- Flex wiring configurations
- Chicago plenum rated version

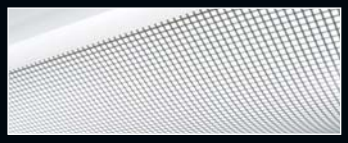
Controls

- Cruze can include a factory-installed integrated sensor system for occupancy and daylight dimming control, with programming and manual controls from an optional handheld remote.
- Cruze luminaires include 0-10V dimming drivers for control using wall dimmers (10% - 100%), daylighting sensors and room controllers from Eaton.
- Cruze luminaires are available with native DALI drivers for complete digital energy management using Fifth Light addressable lighting controls.

Lens options

Ribbed Frosted Acrylic Lens

Smooth Frosted Acrylic Lens



Square Pattern Insert

Round Pattern Insert

Cruze with Sensor

Optional Remote Control

Cruze luminaires with Integrated Sensor Controls

Get the best of both worlds. Metalux Cruze luminaires with LED technology are available with an optional integrated sensor system, optimized to meet energy codes for occupancy sensing and daylight harvesting. The sensor system is factory wired to the luminaire, switching on or off based on occupancy, and dimming the light when enough daylight is available, offering out-of-the-box operation using thoughtful default settings. When the application demands more, the sensor system has an optional remote control allowing changes from the default settings for occupancy, target light level, preset lighting levels, and to temporarily override automatic controls.

Energy Savings

Operating and maintenance costs of a lighting system are dramatically impacted by the specified lamp source and electrical system. Total system input watts and fixture operating life should be the driving considerations when addressing energy consumption and total cost of ownership. Energy savings increase when energy consumption is reduced and maintenance intervals are extended.

Fluorescent Product Comparison

Select 2' x 4' Cruze SKUs			Popular Fluorescent Fixtures			
Catalog Number	Lumens*	Wattage	Fixture Type	Lumens*	Wattage	Energy Savings
24CZ-LD4-75-UNV-L835-CD1-U	7503	74.5	Troffer 432	8402	109.7	-32%
24CZ-LD4-65-UNV-L835-CD1-U	6537	62.0	Troffer 332	6629	81.7	-24%
24CZ-LD4-55-UNV-L835-CD1-U	5433	50.2	Parabolic 332	5646	83.0	-40%
24CZ-LD4-45-UNV-L835-CD1-U	4455	39.3	Indirect Basket 332	4583	83.7	-53%
			Spec Dual Lens 228T5	4576	58.0	-32%
24CZ-LD4-40-UNV-L835-CD1-U	3941	33.4	Troffer 232	4310	52.0	-36%
			Indirect Basket 232	3873	72.0	-54%

Select 2' x 2' Cruze SKUs			Popular Fluorescent Fixtures			
Catalog Number	Lumens*	Wattage	Fixture Type	Lumens*	Wattage	Energy Savings
22CZ-LD4--UNV-L835-CD1-U	4394	49.2	Indirect Basket 2BX40	4324	68.2	-28%
22CZ-LD4-39-UNV-L835-CD1-U	3908	41.3	Troffer 2U6T8	3862	52.1	-21%
22CZ-LD4-29-UNV-L835-CD1-U	2920	28.2	Spec Dual Lens 224	2975	52.0	-46%
			Parabolic 2U6T8	2791	63.1	-55%
22CZ-LD4-24-UNV-L835-CD1-U	2417	22.6	Troffer 317	2601	42.9	-47%
			Parabolic 317	2588	49.1	-54%
			Spec Dual Lens 214	2403	30.0	-25%

*Lumens listed are delivered lumens.

Eaton's LED technology provides industry leading, energy-efficient performance. Cruze luminaires provide uniform illumination and superior efficacy. Cruze offers four color temperature choices with a wide range of lumen packages to provide best-in-class, breadth of line with efficacy reaching as high as 132† lumens per watt.

Cruze 2' x 4' - Stock or MTO**	Catalog Logic	Delivered Lumens	Watts	Efficacy (lm/W)
MTO	24CZ-LD4-30-UNV-L835-CD1-U	2940	24.6	120
MTO	24CZ-LD4-35-UNV-L835-CD1-U	3456	29.3	118
STOCK	24CZ-LD4-40-UNV-L835-CD1-U	3941	33.4	118
MTO	24CZ-LD4-45-UNV-L835-CD1-U	4455	39.3	113
STOCK	24CZ-LD4-50-UNV-L835-CD1-U	4934	44.5	111
MTO	24CZ-LD4-55-UNV-L835-CD1-U	5433	50.2	108
MTO	24CZ-LD4-60-UNV-L835-CD1-U	6021	56.2	107
MTO	24CZ-LD4-65-UNV-L835-CD1-U	6537	62.0	105
MTO	24CZ-LD4-70-UNV-L835-CD1-U	7080	68.8	103
MTO	24CZ-LD4-75-UNV-L835-CD1-U	7503	74.5	101

Cruze 2' x 2' - Stock or MTO**	Catalog Logic	Delivered Lumens	Watts	Efficacy (lm/W)
MTO	22CZ-LD4-20-UNV-L835-CD1-U	2056	18.9	108
STOCK	22CZ-LD4-24-UNV-L835-CD1-U	2417	22.6	107
MTO	22CZ-LD4-29-UNV-L835-CD1-U	2920	28.2	103
STOCK	22CZ-LD4-34-UNV-L835-CD1-U	3420	34.4	99
MTO	22CZ-LD4-39-UNV-L835-CD1-U	3908	41.3	95
MTO	22CZ-LD4-44-UNV-L835-CD1-U	4394	49.2	89

**Made to order (MTO) requires a typical four week lead time.

†132 lumens per watt is associated with a 2' x 4', 5000K version.

Note: 3000K, 4000K and 5000K performance data available on product specification sheets and online.

Ordering Information

Sample Number: 22CZ-LD4-34-UNV-L835-CD1-U

Rating	Series	Door Frame	Lamp Type	LED Lumens Output	Shielding	Voltage[2]
[Blank]=Standard **ATW-SW4**=Chicago Rated	**22CZ**=2' x 2' Cruze **24CZ**=2' x 4' Cruze	**[Blank]**=Flat White Steel Door (Standard)	**LD4**=LED 4.0	**2' x 2' Stock** **24**=2400 Lumens **34**=3400 Lumens **MTO**[8] **20**=2000 Lumens **29**=2900 Lumens **39**=3900 Lumens **44**=4400 Lumens **2' x 4' Stock** **40**=4000 Lumens **50**=5000 Lumens **MTO**[8] **30**=3000 Lumens **35**=3500 Lumens **45**=4500 Lumens **55**=5500 Lumens **60**=6000 Lumens **65**=6500 Lumens **70**=7000 Lumens **75**=7500 Lumens	**[Blank]**=Ribbed Frosted Acrylic Lens (Standard) **S**=Smooth Frosted Acrylic Lens **SQP**=Smooth Lens with Square Pattern Insert **RDP**=Smooth Lens with Round Pattern Insert	**347V**=347 Volt **UNV**=Universal Voltage 120-277[3]

Options	CCT	Options	Driver Type	Number of Drivers	Packaging	Product Family
Emergency **EL**=Emergency Installed, 700 Lumens[4] **EL14**=Emergency Installed, 1400 Lumens[4] **EL10W**=Emergency Installed, 10 Watts[4, 9]	**L830**=3000K **L835**=3500K **L840**=4000K **L850**=5000K	**Flex**[7] **Flex**=Multiple Configurations Available	**CD**=0-10V Dimming Driver (Standard) **SD**=Step-dim Driver[10] **5LTD**=Fifth Light DALI Driver (10% - 100% Dimming)[5, 11]	**1**=1 Driver	**U**=Unit Pack **PALC**=Job Pack, in Carton	**S**=Integrated Sensor (coming soon)

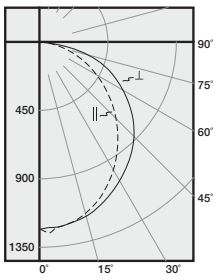
Control Type	Occupancy Technology	Sensing Technology	Coverage Pattern	Packaging	Accessories (Order Separately)
DV=Dual Band[12] **V**=Analog (0-10V) Output for Local Control[6]	**P**=Passive Infrared	**D**=Dimming Daylight Harvesting (Closed Loop)	**1**=~144 Square Feet	**U**=Unit Pack **PALC**=Job Pack, in Carton	**EQ-CLIP-U**=T-BAR Safety Earthquake Clips[1] **DF-22-W**=2' x 2' Drywall Frame Kit **DF-24-W**=2' x 4' Drywall Frame Kit **SK-22-WS**=2' x 2' Shallow Surface Mount Kit **SK-24-WS**=2' x 4' Shallow Surface Mount Kit **SK-22-WT**=2' x 2' Tall Surface Mount Kit **SK-24-WT**=2' x 4' Tall Surface Mount Kit **DF10P-C_**=Decorator Dimmer, 0-10V **SF10P-_**=Decorator Slide Dimmer, 0-10V **HHPRG-MS**=Programming Remote for Integrated Sensor

NOTES: 1. An EQ Grid Clip is recommended for all 9/16" ceiling systems. **2.** Products also available in non-US voltage and frequencies for international markets. **3.** Not available when specifying emergencies, voltage must be specific. **4.** Emergency battery packs are mounted to back of fixture in self-contained housing per UL. **5.** Must be used in conjunction with a DALI control system. For a complete listing of Fifth Light Technology products and other solutions from Cooper Controls, visit www.coopercontrol.com. **6.** Integrated sensor works only with "CD" driver and is factory prewired to the driver for stand-alone control. **7.** Flex does not include dimming leads. Control leads provided by others. **8.** Made-to-order (MTO) requires four week lead time. **9.** For delivered lumens, take lumens per watt of desired fixture and multiply by 10 watts (100 lm/W x 10 = 1000 lumens delivered). **10.** Step dim driver option is not available with 2000, 2400 and 2900 lumen packages. **11.** Fifth Light (5LTD) driver option is not available with 2000, 2400 and 2900 lumen packages. **12.** Provides blank band on opposite side from sensor band to provide symmetric appearance.

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

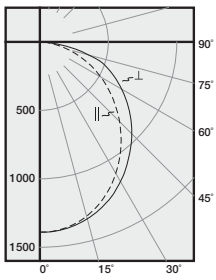
Photometrics

Cruze 2' x 2', 3400 Lumens



Electronic Driver
Linear LED 3500K
Spacing criterion:
(||) 1.2 x mtg height,
(⊥) 1.3 x mtg height
Lumens = 3420
Input Watts = 34.5
Efficacy = 99.1 lm/W
Test: 22CZ-LD4-34-UNV-L835-CD1-U.IES

Cruze 2' x 4', 4000 Lumens



Electronic Driver
Linear LED 3500K
Spacing criterion:
(||) 1.2 x mtg height,
(⊥) 1.3 x mtg height
Lumens = 3941
Input Watts = 33.4
Efficacy = 118 lm/W
Test: 24CZ-LD4-40-UNV-L835-CD1-U.IES

Size	Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours)	Theoretical L70 (Hours)
2' x 4'	25°C	> 89	> 201,000

Size	Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours)	Theoretical L70 (Hours)
2' x 2'	25°C	> 83	> 117,000

Certification Data				
cULus - Damp Location	IC Rated	LM79/LM80 Compliant	ROHS Compliant	NOM Compliant

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