Project		Catalog #		Type	
Prepared by		Notes		Date	

Metalux

Cruze SB 22CZ

2' x 2' LED Specification Grade Troffer

Typical Applications

Office • Education • Healthcare • Hospitality • Retail

Interactive Menu

- Order Information page 2
- Photometric Data page 3
- Connected Systems page 5
- VividTune™ Color Tuning Solutions page 5
- Product Warranty

Product Certification

UL CERTIFIED SAFETY • DLC LISTED • DLC PREMIUM • Efficiency Standards T24 Can be used to comply with California Title 24 Non-Residential • RoHS COMPLIANT • IC RATED • BAA BUY AMERICAN ACT • ISO SYSTEMS CERTIFIED

Product Features

Connected Systems • Bluetooth® • damp location • VividTune color tuning solutions

LINEAR DISCONNECT Safe and convenient means of disconnecting power • MWS MODULAR WIRING SYSTEM CLICK HERE

Top Product Features

- Matte white door provides access to drivers and LED from below
- Lens options - ribbed, smooth, round & square perforated
- High performance efficacy up to 157 lumens per watt
- Integrated sensor systems - occupancy, daylight and IoT connectivity
- VividTune CCT tuning options from 3000K–5000K or 2700K-6500K
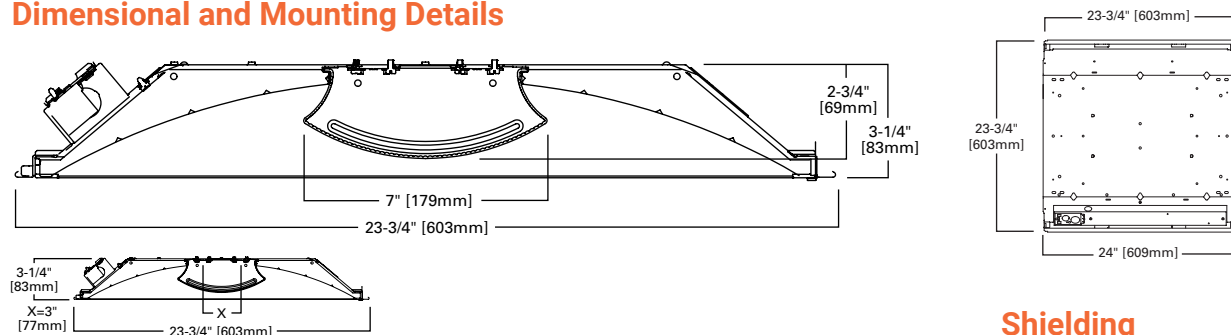- Options to meet Buy American and other domestic preference requirements

Dimensional and Mounting Details

2-3/4" [69mm]
3-1/4" [83mm]
7" [179mm]
23-3/4" [603mm]

3-1/4" [83mm]
X=3" [77mm]
X
23-3/4" [603mm]

23-3/4" [603mm]
23-3/4" [603mm]
24" [609mm]

Ceiling Compatibility

G Grid/Lay-in Standard

G Concealed T

G Slot Grid

Ceiling Type	Trim Type
Exposed Grid	Standard
Concealed T	Standard
Slot Grid	Standard
Flange	*

Shielding

2' wide versions shown for detail.

HRP - High-Efficiency Round Perf Inlay
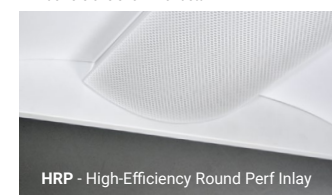
See ordering information for more shielding options.

COOPER Lighting Solutions

Order Information

SAMPLE ORDER NUMBER: **22CZ-LD5-34-UNV-L835-CD1-U**

Domestic Preferences [1]	Rating	Series [2]	Door Frame	Lamp Type	Lumen Output	Shielding	Voltage [5]	Options
[Blank]=Standard **BAA**=Buy American Act **TAA**=Trade Agreements Act	**[Blank]**=Standard **ATW-SW4**=Chicago Rated	**22CZ**=2x2 Cruze SB	**[Blank]**=Flat White Steel Door (standard)	**LD5**=LED 5.0	**Cruze SB** **20**=2000 Lumens [3] **24**=2400 Lumens [3] **29**=2900 Lumens **34**=3400 Lumens **39**=3900 Lumens **44**=4400 Lumens **Standard Efficacy** **20SE**=2000 Lumens [3],[4] **24SE**=2400 Lumens [3],[4] **32SE**=3200 Lumens [4] **39SE**=3900 Lumens [4] **44SE**=4400 Lumens [4]	**[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 **HRP**=High-Efficiency Round Perf Inlay	**UNV**=Universal Voltage 120-277 **347V**=347 Volt [6] **48V**=48 Volt Low-voltage (Class 2) [C] **120V**=120 Volt [7] **277V**=277 Volt [7]	**GL**=Single Element Fuse **GM**=Double Element Fuse

Notes

(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 DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.

Notes

(2) DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.

Notes

(3) With integral test switch/indicator/laser test. For approximate delivered lumens multiply the lumens per watt of the desired fixture by the wattage of the emergency battery pack (100 lm/W x 7=700 lumens). IES-format photometry for luminaire under emergency operation available. (4) White tuning not available with this model.

Notes

(5) Products also available in non-US voltages and frequencies for international markets. (6) 347V versions are not available with emergency options. SD, 5LTD, and SR drivers with 347V are available but not DLC qualified. (7) Must specify voltage as 120V or 277V when ordering GTR2 option. (C) Consult WaveLinx Low-Voltage or DLVP system pages for additional details and compatibility.

Emergency Options	CRI/CCT	Flex
[Blank]=No emergency **EL7W**=7-watt 120V-277V emergency battery pack installed [8] **EL14W**=14-watt 120V-277V emergency battery pack installed [8] **ELV7W**=Low-voltage system, 7-watt emergency battery pack [C] **ELV14W**=Low-voltage system, 14-watt emergency battery pack [C] **GTR2**=Bodine Generator Transfer Relay [9],[10] **ETRD**=Iota Emergency Transfer Relay with dimming control [9]	**L830**=80CRI, 3000K **L835**=80CRI, 3500K **L840**=80CRI, 4000K **L850**=80CRI, 5000K **L930**=90CRI, 3000K **L935**=90CRI, 3500K **L940**=90CRI, 4000K **L950**=90CRI, 5000K **L83050**=80CRI 3000K-5000K White Tuning [11] **L93050**=90CRI 3000K-5000K White Tuning [11] **L82765**=80CRI 2700K-6500K White Tuning [11] **L92765**=90CRI 2700K-6500K White Tuning [11]	**[Blank]**=No Flex **A3/8-4/18GDIM**=3/8" Flex with 0-10V Dimming Leads **A3/8-2/18G**=3/8" Flex with line and common **A3/8-5/18GDIM**=Flex with 0-10V Dimming leads and Blue for alternate wiring. See below for details.

Notes

(8) With integral test switch/indicator/laser test. For approximate delivered lumens multiply the lumens per watt of the desired fixture by the wattage of the emergency battery pack (100 lm/W x 7=700 lumens). IES-format photometry for luminaire under emergency operation available. (9) 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. (10) Must specify voltage as 120V or 277V when ordering GTR2 option. (C) Consult WaveLinx Low-Voltage or DLVP system pages for additional details and compatibility.

Notes

(11) White tuning provides correlated color temperatures (CCT) between 3000K (warm) to 5000K (cool) or 2700K (warm) to 6500K (cool). Must be used in conjunction with W2A driver only. Must be used with two (2) 10V dimming control channels, 1 color, 1 intensity. May be combined with Wavelinx sensor control systems only.

Flexible Metal Conduit Options

Flex options available for 0-10V dimming control, DALI dimming control, emergency and night light functions. 72-inch factory-installed and pre-wired to driver, fitted to luminaire housing access plate with 90° enclosed FMC connector. Not all options may be combined and installation ratings vary by type. See online configurator for all flex options. **A3/8-4/18GDIM series notes:** Factory installed dimming option 3/8" flexible metal conduit with 2-#18 power and ground wires and 2-#18 UL-listed jacketed 0-10V +/- control wires. Meets UL 66, 83, 1479, 1569, 1581, 2556. NEC® 250.118, 300.22(C), 392, 396, 330, 501, 502, 503, 504, 505, 518, 520, 530, 645, 72; Federal Specification A-A-59544 (formerly J-C-30B); all applicable OSHA and HUD Requirements. UL Classified 1-, 2-, and 3-hour through penetration with applicable fire stop product (not included). May be surface mounted, fished and/or embedded in plaster. Cable tray and approved raceway rated, install per NEC®; Environmental Air-Handling Space Installation per NEC® 300.22(C).

Driver Type	No. of Drivers	Integrated Sensing Systems	Sensor Accessories	Packaging	Accessories (order separately) [18]
CD=0-10V Driver (1%-100% Dimming) **5LTD**=DALI Driver (5%-100% Dimming) **5LTHD**=DALI Driver (1%-100% Dimming) **LV**=Low-voltage System Driver (0%-100% Dimming) [C] **SD**=Step Dimming Driver (50%-100% Dimming) [12] **LH**=Lutron HiLume (LDE1 series) 1%-100% EcoSystem Driver with Soft-on Fade to Black dimming [F] **W2A**=White Tuning, 2 ch, Analog 0-10V Intensity and CCT Control [13] **SR**=Sensor-ready Driver (1%-100% Dimming)	**1**=1 Driver	**WAA**=WaveLinx Wireless Integrated Sensor [14],[A] **WAB**=WaveLinx Lite Wireless Integrated Sensor [15],[B] **WLA**=Low-voltage Integrated Sensor [16],[C] **SVPD1**=0-10V Stand-alone Integrated Sensor [15],[D]	**DV**=Dual Band [17]	**U**=Unit Pack **PAL**=Job Pack, out of carton **PALC**=Job Pack, in carton	**EQ-CLIP-U**=T-BAR Safety Earthquake Clips [19] **DF-22W-U**=2' x 2' Drywall Frame Kit **SK-22-WS**= 2' x 2' Shallow Surface Mount Kit **SK-22-WT**= 2' x 2' Tall Surface Mount Kit **ISHH-01**=Programming Remote for Integrated Sensor [D] **ISHH-02**=Personal Control Remote for Integrated Sensor [D]

Notes

(12) Step dim (SD) driver option is not available with 2000, 2400, 2900 and 3400 lumen packages and 2000SE, 2400SE and 3200SE versions. (13) White tuning provides correlated color temperatures (CCT) between 3000K (warm) to 5000K (cool) or 2700K (warm) to 6500K (cool). Must be used in conjunction with W2A driver only. Must be used with two (2) 10V dimming control channels, 1 color, 1 intensity. May be combined with Wavelinx sensor control systems only.

Integrated options must be used in conjunction with the associated system and may not be compatible with other options or accessories. Please refer to the following: (C) Consult WaveLinx Low-Voltage or DLVP system pages for additional details and compatibility. (F) Consult Marketplace Options - Lutron system pages for additional details and compatibility. Compatible only with driver series shown, and may require two or more drivers. Requires field commissioning to operate or dim. Contact Lutron at www.lutron.com.

Notes

(14) WAA sensor to be used with CD or W2A driver. (15) WAB and SVPD1 sensor to be used with CD driver. (16) WLA sensor to be used with LV driver.

Integrated options must be used in conjunction with the associated system and may not be compatible with other options or accessories. Please refer to the following: (A) Consult WaveLinx system pages for additional details and compatibility. (B) WaveLinx Lite devices are not currently compatible with the WaveLinx Wireless Area Controller. Consult WaveLinx Lite system pages for additional details and compatibility. (C) Consult WaveLinx Low-Voltage or DLVP system pages for additional details and compatibility. (D) Consult SVPD series system pages for additional details and compatibility.

Notes

(17) Provides blank band on opposite side from sensor band to provide symmetric appearance.

Notes

(19) An EQ Grid Clip is recommended for all 9/16" ceiling systems. Four required per fixture. (18) Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.

Integrated options must be used in conjunction with the associated system and may not be compatible with other options or accessories. Please refer to the following: (D) For use with SVPD sensor only. Consult SVPD series system pages for additional details and compatibility.

Product Specifications

Construction
- Die formed of code gauge prime cold rolled steel with full length die-formed stiffeners
- Unibody endplates attached with interlocking tabs and screws
- Hemmed side flanges
- Four auxiliary fixture end suspension points provided
- Optional earthquake clips available

Integrated Controls
- 0-10V dimming to 1% standard
- WaveLinx wireless sensor compatible for standalone, controlled, connected, and IoT capability
- SVPD sensor compatible for standalone functionality
- Low-voltage sensor and driver compatible for WaveLinx Low-Voltage and DLVP applications
- DALI 2.0, Lutron, and step-dimming available

LED and Light Engine
- Long-life LED systems coupled with electrical driver
- Color accuracy ≤3-Step MacAdam ellipse (SDCM)
- Available in 3000K, 3500K, 4000K, or 5000K with a minimum CRI of 80
- L70 is more than 60,000 hours based on TM21 testing standards
- Available in 120-277V and 347V

Emergency Battery Options
- 120-277V battery available in 7W or 14W
- 90-minute backup period for code compliance
- Test switch with laser pointer and testing from floor feature for ease of use
- EZ Key feature prevents accidental discharge during construction
- Generator transfer options available

Finish
- Multistage, iron phosphate pretreatment
- Housing finished with 90% white enamel

Hinging/Latching
- Positive cam action steel latches with baked white enamel finish
- Safety-lock T-hinges allow hinging and latching either side
- Door assembly hinges down for easy access from below

Frame/Shielding
- Die formed, heavy gauge flat steel door
- Mitered corners and painted after fabrication
- Baked matte white enamel finish
- Positive light seals
- Acrylic frosted lens

Compliance
- IC rated for insulation contact
- cULus listed for damp locations
- RoHS compliant
- Tested to IESNA LM-79 and LM-80
- Stated life tested to TM21 standards
- Can be used for State of California Title 24 high efficacy luminaire
- Options to meet Buy American and other domestic preference requirements
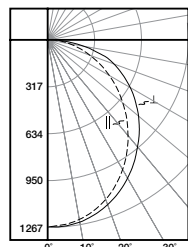
Warranty
- Five-year warranty standard. Optional ten year warranty available.

Photometric Data

View IES files
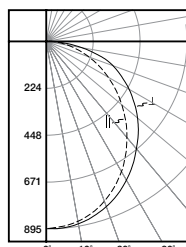
22CZ-LD5-24-UNV-L835-CD1-U
Electronic Driver
Linear LED 3500K
Spacing criterion: (II) 1.17 x mounting height, (⊥) 1.25 x mounting height
Lumens: 2470
Input Watts: 19.6W
Efficacy: 126 LPW
Test Report: 22CZ-LD5-24-UNV-L835-CD1-U.IES

22CZ-LD5-34-UNV-L835-CD1-U
Electronic Driver
Linear LED 3500K
Spacing criterion: (II) 1.17 x mounting height, (⊥) 1.25 x mounting height
Lumens: 3497
Input Watts: 29.4W
Efficacy: 118.9 LPW
Test Report: 22CZ-LD5-34-UNV-L835-CD1-U.IES

Energy and Performance Data

Lumen Maintenance

Version	TM-21 Lumen Maintenance (60,000 hours) [2]	Theoretical L70 (Hours) [3]
Standard	> 89%	> 173,000
High Efficiency	> 89%	> 188,000

Notes: (2) Supported by IES TM-21 standards. (3) Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, that explains proper use of IES TM-21 and LM-80.

Shielding

Lumen Adjustment Factors		
S	RDP/SQP	HRP
1.05	0.670	0.883

Load Data (Stock Product)

Thd	6.78%
Power Factor	0.99
Weight (lbs.)	12.5
Low Temp. Start	-20°C

Shipping Data

Catalog No.	Wt.
22CZ-LD5-27	12.5 lbs.
22CZ-LD5-36	12.5 lbs.

90 CRI

Lumen Adjustment Factors 80->90 CRI	
3000K	0.88
3500K	0.861
4000K	0.865
5000K	0.87

Example of Lumen Adjustment Calculation

22CZ-LD5-34-UNV-L935-CD1-U
at 90CRI at 3500K

Lumen Adjustment Factor = 0.861

Total Light Output =
3,497 lm x 0.861 = 3,010 lm

$$\text{Efficacy} = \frac{3{,}010 \text{ lm}}{29.4 \text{W}} = 102.3 \text{ lm/W}$$

Energy and Performance Data

Catalog Logic (Ribbed Lens)	Delivered Lumens	Watts	Efficacy (lm/W)
22CZ-LD5-20-UNV-L830-CD1-U	1964	16.4	120
22CZ-LD5-20-UNV-L835-CD1-U	2086	16.4	127
22CZ-LD5-20-UNV-L840-CD1-U	2128	16.4	130
22CZ-LD5-20-UNV-L850-CD1-U	2302	16.4	141
22CZ-LD5-24-UNV-L830-CD1-U	2325	19.6	119
22CZ-LD5-24-UNV-L835-CD1-U	2470	19.6	126
22CZ-LD5-24-UNV-L840-CD1-U	2519	19.6	128
22CZ-LD5-24-UNV-L850-CD1-U	2725	19.6	139
22CZ-LD5-29-UNV-L830-CD1-U	2729	23.5	116
22CZ-LD5-29-UNV-L835-CD1-U	2899	23.5	123
22CZ-LD5-29-UNV-L840-CD1-U	2957	23.5	126
22CZ-LD5-29-UNV-L850-CD1-U	3199	23.5	136
22CZ-LD5-34-UNV-L830-CD1-U	3292	29.4	112
22CZ-LD5-34-UNV-L835-CD1-U	3497	29.4	119
22CZ-LD5-34-UNV-L840-CD1-U	3567	29.4	121
22CZ-LD5-34-UNV-L850-CD1-U	3858	29.4	131
22CZ-LD5-39-UNV-L830-CD1-U	3701	36.4	102
22CZ-LD5-39-UNV-L835-CD1-U	3932	36.4	108
22CZ-LD5-39-UNV-L840-CD1-U	4011	36.4	110
22CZ-LD5-39-UNV-L850-CD1-U	4338	36.4	119
22CZ-LD5-44-UNV-L830-CD1-U	4173	41.8	100
22CZ-LD5-44-UNV-L835-CD1-U	4433	41.8	106
22CZ-LD5-44-UNV-L840-CD1-U	4522	41.8	108
22CZ-LD5-44-UNV-L850-CD1-U	4891	41.8	117

Standard Efficacy Versions

Catalog Logic (Ribbed Lens)	Delivered Lumens	Watts	Efficacy (lm/W)
22CZ-LD5-20SE-UNV-L830-CD1-U	1948	17.2	113
22CZ-LD5-20SE-UNV-L835-CD1-U	2069	17.2	120
22CZ-LD5-20SE-UNV-L840-CD1-U	2110	17.2	123
22CZ-LD5-20SE-UNV-L850-CD1-U	2283	17.2	133
22CZ-LD5-24SE-UNV-L830-CD1-U	2322	21.1	110
22CZ-LD5-24SE-UNV-L835-CD1-U	2467	21.1	117
22CZ-LD5-24SE-UNV-L840-CD1-U	2516	21.1	119
22CZ-LD5-24SE-UNV-L850-CD1-U	2722	21.1	129
22CZ-LD5-32SE-UNV-L830-CD1-U	3015	30.5	99
22CZ-LD5-32SE-UNV-L835-CD1-U	3203	30.5	105
22CZ-LD5-32SE-UNV-L840-CD1-U	3267	30.5	107
22CZ-LD5-32SE-UNV-L850-CD1-U	3534	30.5	116
22CZ-LD5-39SE-UNV-L830-CD1-U	3728	34.9	107
22CZ-LD5-39SE-UNV-L835-CD1-U	3960	34.9	114
22CZ-LD5-39SE-UNV-L840-CD1-U	4039	34.9	116
22CZ-LD5-39SE-UNV-L850-CD1-U	4369	34.9	125
22CZ-LD5-44SE-UNV-L830-CD1-U	4118	40.0	103
22CZ-LD5-44SE-UNV-L835-CD1-U	4375	40.0	109
22CZ-LD5-44SE-UNV-L840-CD1-U	4463	40.0	112
22CZ-LD5-44SE-UNV-L850-CD1-U	4827	40.0	121

Catalog Logic (Smooth Lens)	Delivered Lumens	Watts	Efficacy (lm/W)
22CZ-LD5-20-S-UNV-L830-CD1-U	2003	16.4	122
22CZ-LD5-20-S-UNV-L835-CD1-U	2128	16.4	130
22CZ-LD5-20-S-UNV-L840-CD1-U	2170	16.4	132
22CZ-LD5-20-S-UNV-L850-CD1-U	2348	16.4	143
22CZ-LD5-24-S-UNV-L830-CD1-U	2372	19.6	121
22CZ-LD5-24-S-UNV-L835-CD1-U	2519	19.6	128
22CZ-LD5-24-S-UNV-L840-CD1-U	2570	19.6	131
22CZ-LD5-24-S-UNV-L850-CD1-U	2780	19.6	142
22CZ-LD5-29-S-UNV-L830-CD1-U	2784	23.5	118
22CZ-LD5-29-S-UNV-L835-CD1-U	2957	23.5	126
22CZ-LD5-29-S-UNV-L840-CD1-U	3016	23.5	128
22CZ-LD5-29-S-UNV-L850-CD1-U	3263	23.5	139
22CZ-LD5-34-S-UNV-L830-CD1-U	3358	29.4	114
22CZ-LD5-34-S-UNV-L835-CD1-U	3567	29.4	121
22CZ-LD5-34-S-UNV-L840-CD1-U	3638	29.4	124
22CZ-LD5-34-S-UNV-L850-CD1-U	3936	29.4	134
22CZ-LD5-39-S-UNV-L830-CD1-U	3775	36.4	104
22CZ-LD5-39-S-UNV-L835-CD1-U	4011	36.4	110
22CZ-LD5-39-S-UNV-L840-CD1-U	4091	36.4	112
22CZ-LD5-39-S-UNV-L850-CD1-U	4425	36.4	122
22CZ-LD5-44-S-UNV-L830-CD1-U	4256	41.8	102
22CZ-LD5-44-S-UNV-L835-CD1-U	4522	41.8	108
22CZ-LD5-44-S-UNV-L840-CD1-U	4612	41.8	110
22CZ-LD5-44-S-UNV-L850-CD1-U	4989	41.8	119

Standard Efficacy Versions

Catalog Logic (Smooth Lens)	Delivered Lumens	Watts	Efficacy (lm/W)
22CZ-LD5-20SE-S-UNV-L830-CD1-U	1987	17.2	115
22CZ-LD5-20SE-S-UNV-L835-CD1-U	2110	17.2	123
22CZ-LD5-20SE-S-UNV-L840-CD1-U	2153	17.2	125
22CZ-LD5-20SE-S-UNV-L850-CD1-U	2328	17.2	135
22CZ-LD5-24SE-S-UNV-L830-CD1-U	2369	21.1	112
22CZ-LD5-24SE-S-UNV-L835-CD1-U	2516	21.1	119
22CZ-LD5-24SE-S-UNV-L840-CD1-U	2567	21.1	122
22CZ-LD5-24SE-S-UNV-L850-CD1-U	2776	21.1	132
22CZ-LD5-32SE-S-UNV-L830-CD1-U	3075	30.5	101
22CZ-LD5-32SE-S-UNV-L835-CD1-U	3267	30.5	107
22CZ-LD5-32SE-S-UNV-L840-CD1-U	3332	30.5	109
22CZ-LD5-32SE-S-UNV-L850-CD1-U	3605	30.5	118
22CZ-LD5-39SE-S-UNV-L830-CD1-U	3802	34.9	109
22CZ-LD5-39SE-S-UNV-L835-CD1-U	4039	34.9	116
22CZ-LD5-39SE-S-UNV-L840-CD1-U	4120	34.9	118
22CZ-LD5-39SE-S-UNV-L850-CD1-U	4457	34.9	128
22CZ-LD5-44SE-S-UNV-L830-CD1-U	4201	40.0	105
22CZ-LD5-44SE-S-UNV-L835-CD1-U	4463	40.0	112
22CZ-LD5-44SE-S-UNV-L840-CD1-U	4552	40.0	114
22CZ-LD5-44SE-S-UNV-L850-CD1-U	4924	40.0	123

COOPER Lighting Solutions

Control Systems

- WaveLinx Wireless
- WaveLinx Wired
- WaveLinx Lite
- DLVP
- VividTune

Connected Systems
CLICK HERE

The Cruze SB with Integrated Sensor technology provides automatic energy savings without sacrificing performance. The Cruze SB delivers superior lighting with integrated occupancy and daylighting controls.

For standalone and controlled applications, the WaveLinx Lite integral sensor provides out-of-the-box functionality with no gateways required and factory startup is not needed.

When more connectivity is required, the WaveLinx Wireless sensor meets modern code and utility requirements, delivers energy and cost savings, while enabling buildings to become smart buildings.
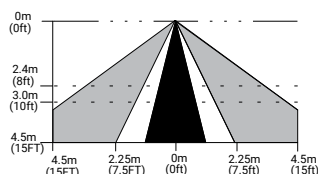
The WaveLinx Wireless Connected Lighting System combined with Trellix provides an open IoT platform and infrastructure that connects intelligent sensors leveraging the real-estate of the physical light fixture to solve higher complexity problems to deliver actionable insights through the aggregation of valuable data.
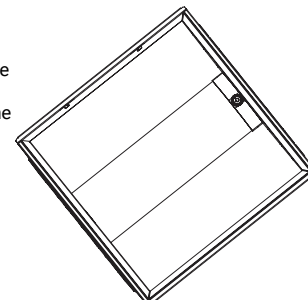
TOP VIEW:
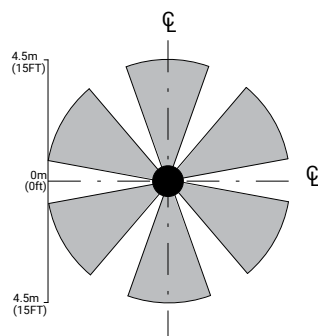
SIDE VIEW:

Note: Installation of integrated sensors within 3-ft (1m) of HVAC air vents is not recommended. The pattern shown is intended solely as a general guide and is not to scale.

Systems comparison chart

Cooper Lighting Solutions provides many lighting system solutions designed to satisfy code requirements and meet the unique needs of any project.

	Standalone	**Controlled** WaveLinx Lite	**Connected** WaveLinx Pro	**Enterprise** Trellix
Occupancy	Yes	Yes	Yes	Yes
Daylighting	Yes	Yes	Yes	Yes
Wallstations	–	Yes	Yes	Yes
Gateways	–	–	1 WAC	300 WACs
Devices (MAX)	–	50 per Area (1400 per site)	200 per WAC2	32,500 per Core Enterprise
Software	–	WaveLinx Lite Mobile App	WaveLinx Pro Mobile App	Trellix Core
Areas	–	28 per Site	50 per WAC2	up to 3,000
Zones	–	16 per Area	16 per Area	up to 9,000
Scheduling	–	–	Local	Global
VividTune™	–	–	Yes	Yes
Plug-Load Control	–	–	Yes	Yes
Low-Voltage Power	–	–	Yes	Yes
Integration	–	–	–	BACnet, API
Dashboards	–	–	–	Energy, Occupancy
Configuration	–	Installer	Technician	Technician / IT

SCALABILITY

devices → areas → floors → buildings

VividTune™
color tuning solutions

22 Cruze SB LED with VividTune Tunable White

VividTune tunable white luminaires from Cooper Lighting Solutions deliver high-quality light in a broad range of continuously variable color temperatures and intensities. Create a dynamic environment by adjusting the ambient light warmer or cooler to influence mood, support the task at hand, or create a dramatic ambience. The ability to control correlated color temperature and intensity separately using simple controls is the next evolution of LED lighting for the commercial, educational, healthcare and hospitality space. The unparalleled flexibility and number of available lighting environments enable users to find the right light with tunable white.


Black Body Locus   ANSI C78.377-2017 Quadrangles

— 3000K - 5000K
— 2700K - 6500K
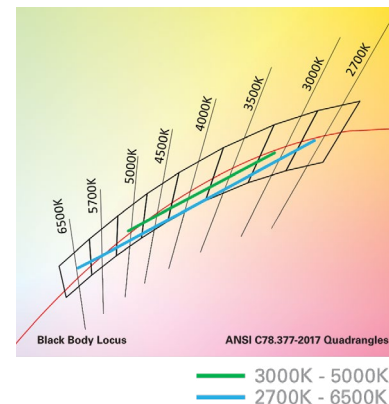
Performance Data*

Tunable White - Lumen Adjustment Factors				
CCT	3000K-5000K		2700K-6500K	
	80 CRI	90 CRI	80 CRI	90 CRI
2700K	-	-	0.902	0.771
3000K	0.929	0.765	0.928	0.801
3500K	0.983	0.836	0.960	0.841
4000K	1.032	0.902	0.981	0.868
4500K	1.042	0.918	0.999	0.891
5000K	1.042	0.918	1.012	0.908
6500K	-	-	1.027	0.933

2' x 2' Cruze SB LED - Example of Approximate Lumen Calculation			
	Standard Catalog #	VividTune 80 CRI Catalog #	VividTune 90 CRI Catalog #
CCT Setting	22CZ-LD5-34-UNV-L835-CD1-U	22CZ-LD5-34-UNV-L83050-W2A1-U	22CZ-LD5-34-UNV-L93050-W2A1-U
3000K	-	3247	2673
3500K	3497	3436	2921
4000K	-	3608	3154
4500K	-	3642	3209
5000K	-	3642	3209

Controlling VividTune Tunable White

VividTune luminaires make tunable white more accessible by using simple and familiar controls. From wall dimmers to wireless controls, VividTune tunable white luminaires are compatible with industry standard 0-10V dimming controls. A single 0-10V dimming input is used to control intensity (brightness) while a second 0-10V dimming input is used to adjust CCT. For suggested control configurations, go to www.cooperlighting.com for tunable white application guides.

warm 2700K   CCT 0-10V   cool 6500K

warm 3000K   CCT 0-10V   cool 5000K

10%   Intensity 0-10V   100%
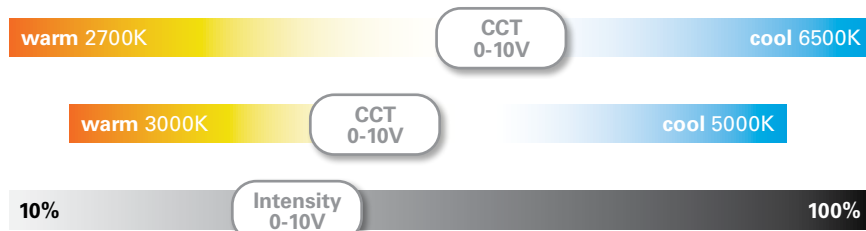
Example of Lumen Adjustment Calculation

22CZ-LD5-34-UNV-L83050-W2A1-U at 80 CRI tuned to 3500K

Adjusted Lumen = published lm x adjusted lm factor

Adjusted Lumen = 3497 x 0.983

Adjusted Lumen = 3436 lm

* Lumen adjustment factors are for reference and may be different for each product selected. Refer to IES files for actual performance data on each.

COOPER Lighting Solutions