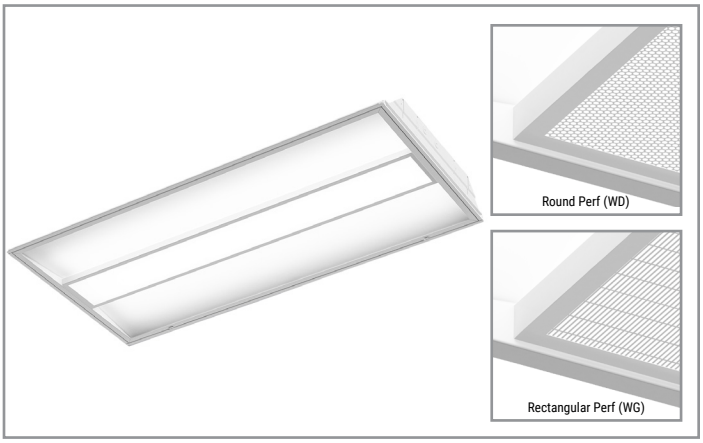
| | | | | | |
|---|---|---|---|---|---|
| Project | | Catalog # | | Type | |
| Prepared by | | Notes | | Date | |




# Corelite

## Class D3X LED

2' x 4' Recessed
3-1/4" Depth

**Typical Applications**
• Commerical Office Spaces • Schools • Hospitals • Retail Merchandising Areas

## Interactive Menu



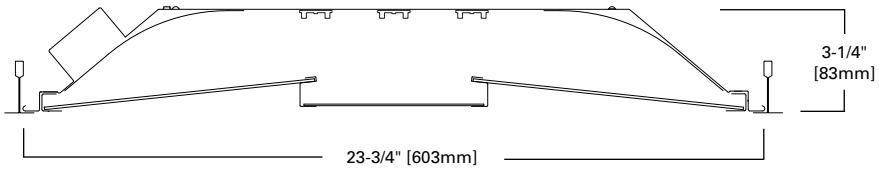
## Product Certification

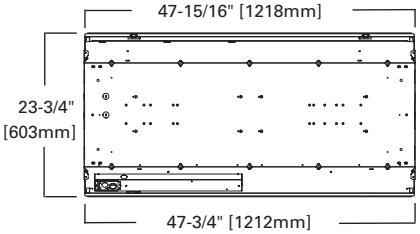
## Product Features

## Top Product Features

- Subtle, clean geometry in a fully luminous door-frame design
- Multiple lumen packages with efficacies up to 111 lumens per watt
- Three CCT options: 3000K, 3500K and 4000K at 80 or 90CRI
- VividTune CCT tuning options from 3000K–5000K or 2700K-6500K
- Drywall flange and surface mount kit available
- Options to meet Buy American and other domestic preference requirements

## Dimensional and Mounting Details




additional product diagrams

## Order Information

SAMPLE ORDER NUMBER: **D3X-WO-31L835-LD5-UNV-24-T1-STD-SWPD1**

| Domestic Preferences | Series | Shielding | Light Level (2x4) | CRI | Color Temperature | LED Revision | Input Voltage |
|---|---|---|---|---|---|---|---|
| **[Blank]**=Standard<br>**BAA**=Buy American Act<br>**TAA**=Trade Agreements Act | **D3X**=Class D3X LED Recessed | **WO**=Opal Lens<br>**WD**=Round Perf<br>**WG**=Rectangular Perf | **31L**=3100 Lumen, 22 W<br>**36L**=3600 Lumen, 27 W<br>**42L**=4200 Lumen, 31 W<br>**45L**=4500 Lumen, 34 W<br>**50L**=5000 Lumen, 38 W<br>**55L**=5500 Lumen, 43 W<br>**60L**=6000 Lumen, 48 W<br>**67L**=6700 Lumen, 54 W<br>**74L**=7400 Lumen, 62 W<br>**80L**=8000 Lumen, 68 W | **8**=80+ CRI<br>**9**=90+ CRI | **30**=3000K<br>**35**=3500K<br>**40**=4000K<br>**3050**=Tunable White 3000K-5000K<br>**2765**=Tunable White 2700K-6500K | **LD5**=LED 5.0 | **UNV**=Universal (120V-277V)<br>**347**=347V<br>**48V**=48V Low-voltage (Class 2) |
| **Notes**<br>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**<br>DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details. | **Notes** | **Notes**<br>Refer to performance table on Page 3 for more detail. | **Notes**<br>White tuning provides correlated color temperatures (CCT) between 3000K (warm) to 5000K (cool) or 2700K (warm) to 6500K (cool). May be combined with Wavelinx (WAA) sensor control systems only. Must be used in conjunction with W2A driver only. Must be used with two (2) 10V dimming control channels, 1 color, 1 intensity. Vivid Tune is not DLC Qualified. | | **Notes** | **Notes**<br>347V versions are not available with emergency or sensor options. |

| Size | Ceiling Type | Driver Type | Integrated Sensing Systems | Emergency Options | Options |
|---|---|---|---|---|---|
| **24**=2'x4' | **T1**=Grid/Lay-in (Flush), Concealed T, and Slot Grid | **STD**=Standard 0-10V (1%-100%)<br>**5LT**=DALI (1%-100%)<br>**LV1**=Low-voltage dimming driver (0-100%)<br>**STP**=Step Dimming (Bi-Level, 50%)<br>**LH**=Lutron HiLume 1% EcoSystems (LDE1)<br>**W2A**=White Tuning, 2 ch, Intensity and CCT control | **[Blank]**=No Sensor<br>**WAA**=WaveLinx Pro Wireless Integrated Sensor (A)<br>**WAB**=WaveLinx Lite Wireless Integrated Sensor (B)<br>**WLA**=Low-voltage Integrated Sensor (C)<br>**SVPD1**=0-10V Stand-alone Integrated Sensor (D) | **[Blank]**=No Emergency<br>**EL7W**=7-watt 120V-277V Integral EM Battery<br>**EL14W**=14-watt 120V-277V Integral EM Battery<br>**ETRD**=Iota Emergency Transfer Relay with dimming control | **[Blank]**=None<br>**CP**=Chicago Plenum<br>**W6**=6' Whip Flex Installed, A3/8-4/18GDIM |
| **Notes** | **Notes**<br>EQ Grid Clips are recommended for all 9/16" ceiling systems. Four required per fixture. See Accessories for ordering details. | **Notes**<br>STP or 5LT driver options not available in 31L and 36L lumen packages. | **Notes**<br>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 Pro 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 DLVP system pages for additional details and compatibility. (D) Consult SVPD series system pages for additional details and compatibility. | **Notes**<br>ETRD used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others). Must specify voltage as 120V or 277V when ordering. | **Notes**<br>See specification features for flexible metal conduit details. |

## Product Specifications

### Construction

- 3-1/4" housing depth constructed of die-formed, code gauge cold rolled steel
- Full length die-formed stiffeners and unibody endplate for added strength
- Endplates provided with Grid-Lock feature for safety
- High reflectance sheet metal internal reflectors

### 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 without tools

### Frame / Shielding

- Die formed, heavy gauge, flat steel door with reinforced mitered corners painted after fabrication
- Baked matte white enamel finish
- Positive light seals
- Angled frosted side lenses with smooth flat center lens
- Round perf and Rectangular perf patterns are available as additional aesthetic options

### Mounting

- Universal flange design works with most lay-in ceiling types
- Consult local code for appropriate tie-wire recommendations
- See Accessories section for drywall frame kit and surface mount kit options

### LED and Light Engine

- LED's are available in 3000K, 3500K, 4000K
- Tuning white options available with Cooper Lighting Solutions' Vividtune
- CRI options of either ≥80CRI or ≥90CRI
- Lumen output will be affected - please refer to the lumen adjustment factor tables
- TM21 life at 60,000 hours up to L93 and calculated L70 exceeds 351,000 hrs
- Drivers available in 120-277V and 347V

### 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 DLVP applications
- DALI 2.0, Lutron, and step-dimming available

### Emergency Options

- Optional 120-277V emergency 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
- 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 14 = 1400 lumens)
- UL 924 emergency/generator transfer options available

### 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
- Default flex option is A3/8-4/18GDIM; 3/8" flexible metal conduit with 2-#18 power and ground wires and 2-#18 UL-listed jacketed 0-10V +/- control wires
- Not all options may be combined and installation rating vary by type

### Weight

- 18.0 lbs.

### Compliance

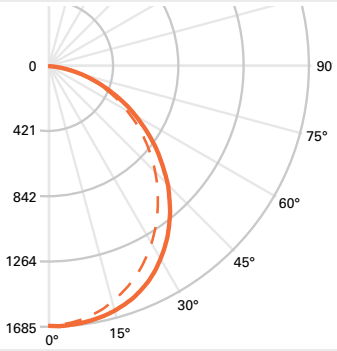
- IC rated for insulation contact
- cULus listed for damp locations
- RoHS compliant
- Tested to IESNA LM-79 and LM-80
- Stated life per TM21 standards
- Can be used for State of California Title 24 high efficacy luminaire

### Warranty

- Five year warranty standard. Optional ten year warranty available.

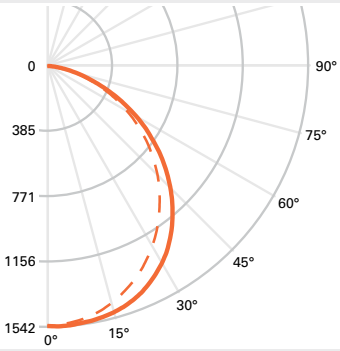
## Photometric Data

View IES files




**FILE NAME:** D3X-WO-45L835-LD5-UNV-24.IES
**LAMP:** (LD5) LED 3500K
**LUMENS:** 4422 Lm
**WATTS:** 34.0 W
**EFFICACY:** 130 Lm/W
**TEST NO.:** P258495
**SC:** (II) 1.22, (⊥) 1.26

0° (II) – – – – –
90° (⊥) ————————




**FILE NAME:** D3X-WG-45L835-LD5-UNV-24.IES
**LAMP:** (LD5) LED 3500K
**LUMENS:** 4159 Lm
**WATTS:** 34.0 W
**EFFICACY:** 122 Lm/W
**TEST NO.:** P258436
**SC:** (II) 1.24, (⊥) 1.32

0° (II) – – – – –
90° (⊥) ————————

Note: Refer to IES files for more product data.

## Energy and Performance Data

| 2x4 – D3X Light Level Outputs (3500K, 80 CRI) | | | | |
|---|---|---|---|---|
| **Series** | **Lumen Package** | **Delivered Lumens** | **Wattage** | **Efficacy (LPW)** |
| D3X-WO | 31L | 3092 | 22.2 | 139 |
| | 36L | 3551 | 26.5 | 134 |
| | 42L | 4093 | 31.2 | 131 |
| | 45L | 4422 | 34.0 | 130 |
| | 50L | 4863 | 37.8 | 129 |
| | 55L | 5402 | 42.7 | 127 |
| | 60L | 5835 | 47.7 | 122 |
| | 67L | 6570 | 53.9 | 122 |
| | 74L | 7230 | 61.6 | 117 |
| | 80L | 7837 | 67.5 | 116 |

**Lumen Maintenance**

| Ambient Temperature | TM-21 Lumen Maintenance (60,000 hours) | Theoretical L70 (Hours) |
|---|---|---|
| 25°C | >93% | 351,000 |

**Color Data (3500K)**

| | | 80CRI | 90CRI |
|---|---|---|---|
| TM-30-15 | $R_f$ | 82.6 | 92.8 |
| | $R_g$ | 94.9 | 100.7 |
| CRI/CIE | $R_a$ | 83.8 | 96.2 |
| | $R_9$ | 15.5 | 69.3 |

**Lumen Adjustment Factors**

| CCT | 80 CRI | 90 CRI |
|---|---|---|
| 3000K | 0.960 | 0.830 |
| 3500K | 1.000 | 0.861 |
| 4000K | 1.000 | 0.883 |

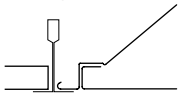
**Example Calculation:**
50L / 3500K / 80 CRI
Lumen Output selected = 4863 lms

3500K / 90 CRI Desired
Lumen Adjustment Factor = 0.861

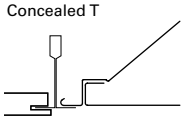
Adjusted Lumen Output = 4863 lms x 0.861 = 4187 lms

## Ceiling Compatability

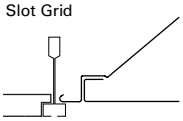
Grid/Lay-in Flush



Concealed T



Slot Grid

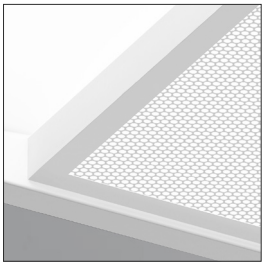


## Accessories (Ordered Separately)

**EQ-CLIP-U** = T-BAR Safety Earthquake Clips
**DF-24-W** = 2' x 4' Drywall Frame Kit
**SK-24-WS** = 2' x 4' Field Install Surface Mount Kit, Shallow

## Shielding Options

**Opal Lens (WO)**



**Round Perf (WD)**

**Rectangular Perf (WG)**

## Control Systems

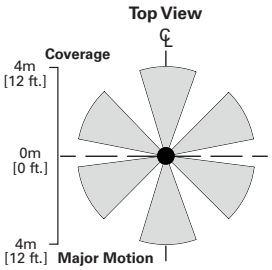
- WaveLinx Pro Wireless
- WaveLinx Lite Wireless
- WaveLinx Wired
- DVLP

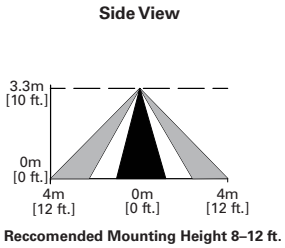
Connected Systems CLICK HERE

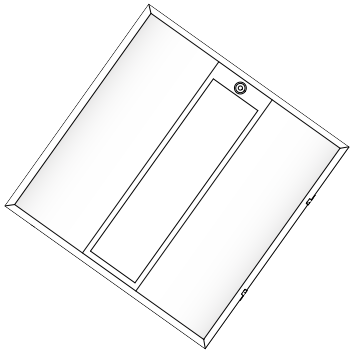
The Class D3X with Integrated Sensor technology provides automatic energy savings without sacrificing performance. The Class D3X delivers superior lighting with integrated occupancy and daylighting controls.

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 energyand cost savings, while enabling buildings to become smartbuildings.

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.



## 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 Wireless | Enterprise Trellix |
|---|---|---|---|---|
| **Occupancy** | Yes | Yes | Yes | Yes |
| **Daylighting** | Yes | Yes | Yes | Yes |
| **Gateways** | – | – | 1 WAC | 300 WACs |
| **Devices** | – | 50 per Area (1400 per site) | 150 per WAC | 45,000 per Core Enterprise |
| **Software** | – | WaveLinx Lite Mobile App | WaveLinx Mobile App | Trellix Core |
| **Areas** | – | 28 per Site | 16 per WAC | up to 4,800 |
| **Zones** | – | 16 per Area | 16 per Area | up to 76,800 |
| **Scheduling** | – | – | Local | Global |
| **VividTune™** | – | – | Yes | Yes |
| **Plug-Load Control** | – | – | Yes | Yes |
| **Integration** | – | – | – | BACnet, API |
| **Dashboards** | – | – | – | Energy, Occupancy |
| **Configuration** | – | Installer | Technician | Technician / IT |

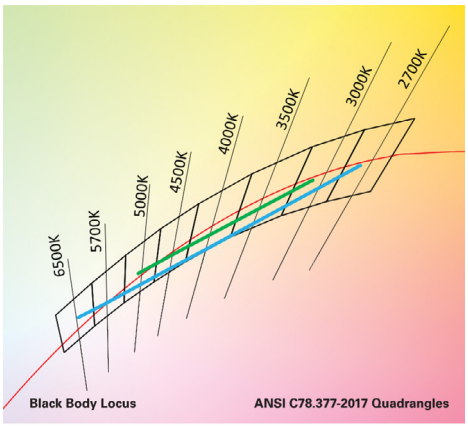
## SCALABILITY

devices → areas → floors → buildings

VividTune™
color tuning solutions

## Class D3X 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.




## Energy and Performance Data

**Tunable White - Lumen Adjustment Factors**

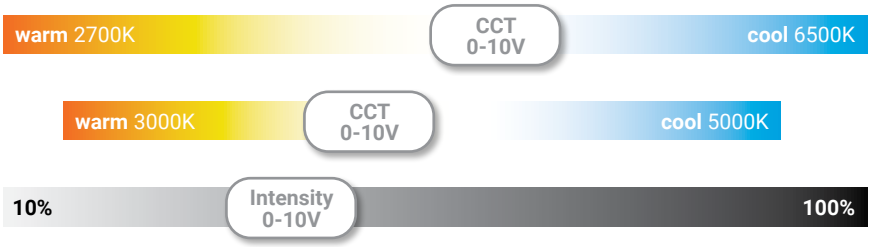
| CCT | 3000K-5000K | | 2700K-6500K | |
|---|---|---|---|---|
| | 80 CRI | 90 CRI | 80 CRI | 90 CRI |
| 2700K | - | - | 0.923 | 0.789 |
| 3000K | 0.950 | 0.783 | 0.949 | 0.820 |
| 3500K | 1.006 | 0.855 | 0.983 | 0.861 |
| 4000K | 1.056 | 0.923 | 1.004 | 0.888 |
| 4500K | 1.066 | 0.939 | 1.022 | 0.911 |
| 5000K | 1.066 | 0.939 | 1.036 | 0.929 |
| 6500K | - | - | 1.051 | 0.955 |

**2'x 4' Class D3X LED - Example of Approximate Lumen Calculation**

| CCT Setting | Standard Catalog # | VividTune 80 CRI Catalog # | VividTune 90 CRI Catalog # |
|---|---|---|---|
| | D3X-WO-55L835-LD5-UNV-24-T1-STD | D3X-WO-55L83050-LD5-UNV-24-T1- W2A | D3X-WO-55L93050-LD5-UNV-24-T1- W2A |
| 3000K | - | 5132 | 4230 |
| 3500K | 5402 | 5434 | 4619 |
| 4000K | - | 5705 | 4986 |
| 4500K | - | 5759 | 5072 |
| 5000K | - | 5759 | 5072 |

## 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.




**Example of Lumen Adjustment Calculation**

D3X-WO-55L83050-LD5-UNV-24-T1-W2A

at 80 CRI tuned to 3500K

*Adjusted Lumen = published lm x adjusted lm factor*

*Adjusted Lumen = 5402 x 1.006*

*Adjusted Lumen = 5434 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.



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