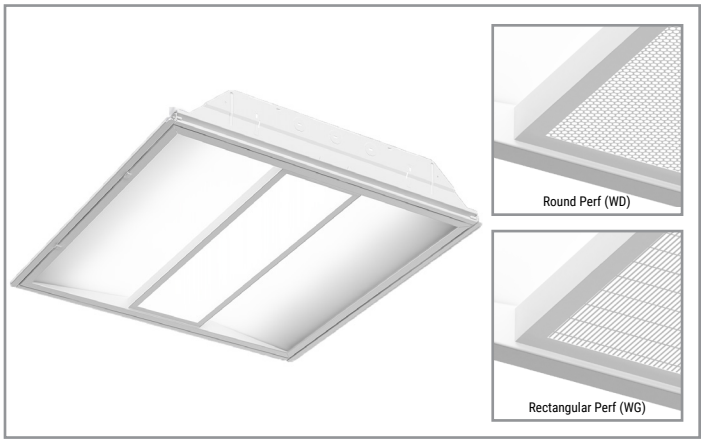
Project		Catalog #		Type	
Prepared by		Notes		Date	



Corelite

Class D3X LED

2' x 2' Recessed
3-¹/₄" Depth

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

Interactive Menu

- Order Information page 2
- Photometric Data page 3
- Energy and Performance Data page 3
- Control Systems page 4
- VividTune™ Color Tuning Solutions page 5
- Product Warranty

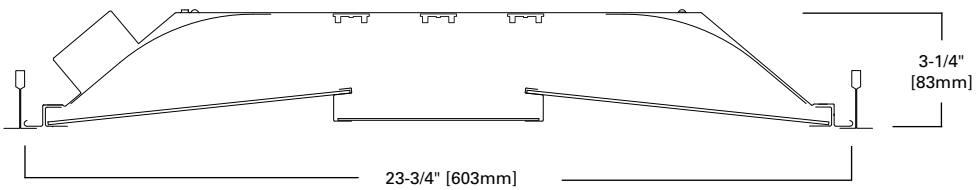
Product Certification

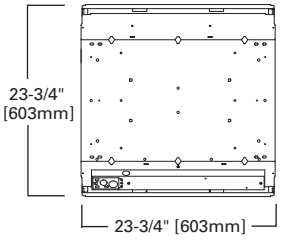
Product Features

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-22-T1-STD-SWPD1**

Domestic Preferences	Series	Shielding	Light Level (2x2)	CRI	Color Temperature	LED Revision	Input Voltage
[Blank]=Standard **BAA**=Buy American Act **TAA**=Trade Agreements Act	**D3X**=Class D3X LED Recessed	**WO**=Opal Lens **WD**=Round Perf **WG**=Rectangular Perf	**20L**=2000 Lumen, 16 W **25L**=2500 Lumen, 21 W **31L**=3100 Lumen, 27 W **35L**=3500 Lumen, 31 W **40L**=4000 Lumen, 36 W **44L**=4400 Lumen, 40 W	**8**=80+ CRI **9**=90+ CRI	**30**=3000K **35**=3500K **40**=4000K **3050**=Tunable White 3000K-5000K **2765**=Tunable White 2700K-6500K	**LD5**=LED 5.0	**UNV**=Universal (120V-277V) **347**=347V **48V**=48V Low-voltage (Class 2)
Notes 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** DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.	**Notes**	**Notes** Refer to performance table on Page 3 for more detail.	**Notes** 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** 347V versions are not available with emergency or sensor options.

Size	Ceiling Type	Driver Type	Integrated Sensing Systems	Emergency Options	Options
22=2'x2'	**T1**=Grid/Lay-in (Flush), Concealed T, and Slot Grid	**STD**=Standard 0-10V (1%-100%) **5LT**=DALI (1%-100%) **LV1**=Low-voltage dimming driver (0-100%) **STP**=Step Dimming (Bi-Level, 50%) **LH**=Lutron HiLume 1% EcoSystems (LDE1) **W2A**=White Tuning, 2 ch, Intensity and CCT control	**[Blank]**=No Sensor **WAA**=WaveLinx Pro Wireless Integrated Sensor (A) **WAB**=WaveLinx Lite Wireless Integrated Sensor (B) **WLA**=Low-voltage Integrated Sensor (C) **SVPD1**=0-10V Stand-alone Integrated Sensor (D)	**[Blank]**=No Emergency **EL7W**=7-watt 120V-277V Integral EM Battery **EL14W**=14-watt 120V-277V Integral EM Battery **ETRD**=Iota Emergency Transfer Relay with dimming control	**[Blank]**=None **CP**=Chicago Plenum **W6**=6' Whip Flex Installed, A3/8-4/18GDIM
Notes	**Notes** EQ Grid Clips are recommended for all 9/16" ceiling systems. Four required per fixture. See Accessories for ordering details.	**Notes** STP or 5LT driver options not available in 20L, 25L, 31L and 36L lumen packages.	**Notes** 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** 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** 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 L94 and calculated L70 exceeds 368,000 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

- 10.0 lbs.

Compliance

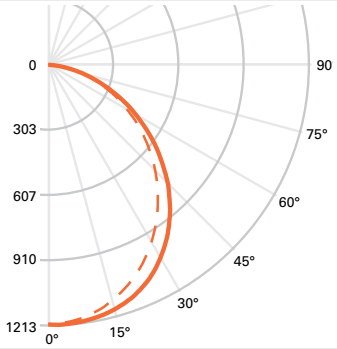
- IC rated for insulation contact
- cULus listed for damp locations
- RoHS compliant
- Tested to IESNA LM-79 and LM-80
- Stated life per TM21 standards
- Can be used for State of California Title 24 high efficacy luminaire

Warranty

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

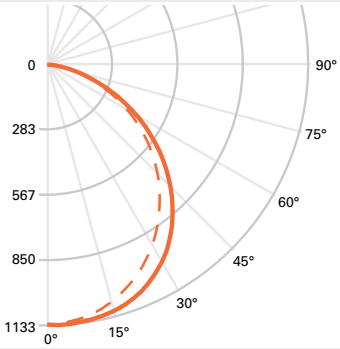
Photometric Data

View IES files



FILE NAME: D3X-WO-31L835-LD5-UNV-22.IES
LAMP: (LD5) LED 3500K
LUMENS: 3169 Lm
WATTS: 26.6 W
EFFICACY: 119 Lm/W
TEST NO.: P257529
SC: (II) 1.2, (⊥) 1.28

0° (II) – – – – –
90° (⊥) ——————



FILE NAME: D3X-WG-31L835-LD5-UNV-22.IES
LAMP: (LD5) LED 3500K
LUMENS: 2973 Lm
WATTS: 26.6 W
EFFICACY: 111 Lm/W
TEST NO.: P220081
SC: (II) 1.2, (⊥) 1.3

0° (II) – – – – –
90° (⊥) ——————

Note: Refer to IES files for more product data.

Energy and Performance Data

2x2 – D3X Light Level Outputs (3500K, 80 CRI)				
Series	**Lumen Package**	**Delivered Lumens**	**Wattage**	**Efficacy (LPW)**
D3X-WO	20L	2058	16.5	125
	25L	2554	20.9	122
	31L	3169	26.6	119
	35L	3574	30.6	117
	40L	4062	35.6	114
	44L	4434	39.6	112

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:
31L / 3500K / 80 CRI
Lumen Output selected = 3169 lms

3500K / 90 CRI Desired
Lumen Adjustment Factor = 0.861

Adjusted Lumen Output = 3169 lms x 0.861 = 2729 lms

Lumen Maintenance

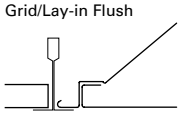
Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours)	Theoretical L70 (Hours)
25°C	>94%	368,000

Color Data (3500K)

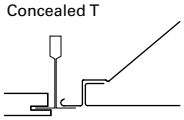
		80CRI	90CRI
TM-30-15	R_f	82.6	92.8
	R_g	94.9	100.7
CRI/CIE	R_a	83.8	96.2
	R_9	15.5	69.3

Ceiling Compatability

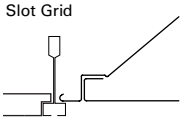
Grid/Lay-in Flush



Concealed T



Slot Grid

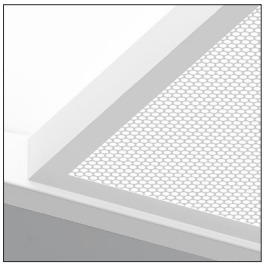


Accessories (Ordered Separately)

EQ-CLIP-U = T-BAR Safety Earthquake Clips
DF-22-W = 2' x 2' Drywall Frame Kit
SK-22-WS = 2' x 2' Field Install Surface Mount Kit, Shallow

Shielding Options

Opal Lens (WO)



Round Perf (WD)

Rectangular Perf (WG)

Control Systems

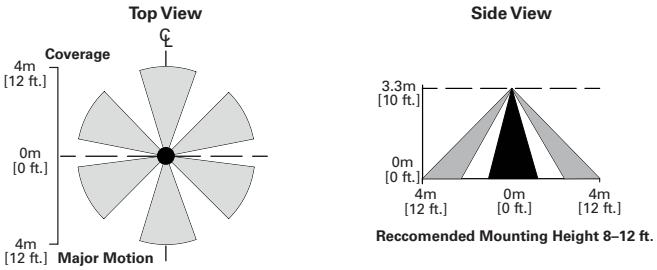
- WaveLinx Pro Wireless
- WaveLinx Lite Wireless
- WaveLinx Wired
- DVLP

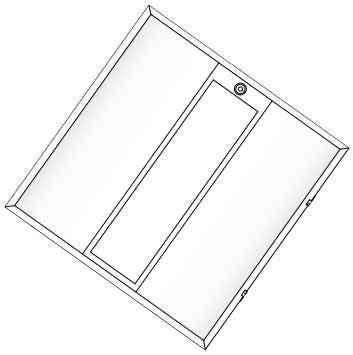
Connected Systems CLICK HERE

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 Pro 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

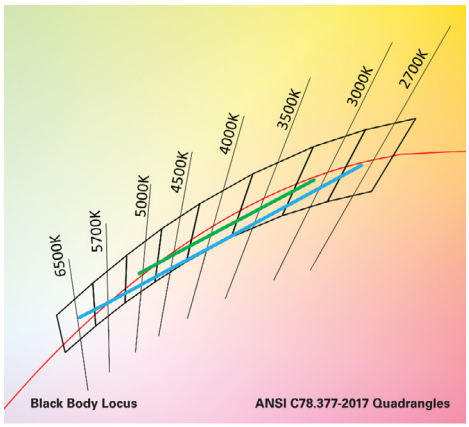
SCALABILITY

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

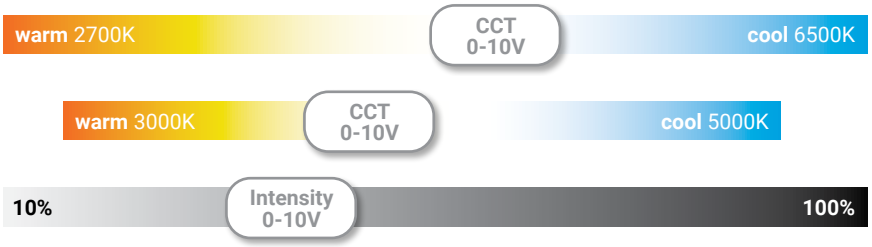
CCT	3000K-5000K		2700K-6500K	
	80 CRI	90 CRI	80 CRI	90 CRI
2700K	-	-	0.905	0.773
3000K	0.932	0.767	0.931	0.804
3500K	0.986	0.838	0.964	0.844
4000K	1.036	0.905	0.984	0.871
4500K	1.045	0.921	1.002	0.894
5000K	1.045	0.921	1.016	0.911
6500K	-	-	1.031	0.936

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

CCT Setting	Standard Catalog #	VividTune 80 CRI Catalog #	VividTune 90 CRI Catalog #
	D3X-WO-25L835-LD5-UNV-22-T1-STD	D3X-WO-25L83050-LD5-UNV-22-T1- W2A	D3X-WO-25L93050-LD5-UNV-22-T1- W2A
3000K	-	2380	1959
3500K	2554	2518	2140
4000K	-	2646	2311
4500K	-	2669	2352
5000K	-	2669	2352

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-25L83050-LD5-UNV-22-T1-W2A

at 80 CRI tuned to 3500K

Adjusted Lumen = published lm x adjusted lm factor

Adjusted Lumen = 2554 x 0.986

Adjusted Lumen = 2518 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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