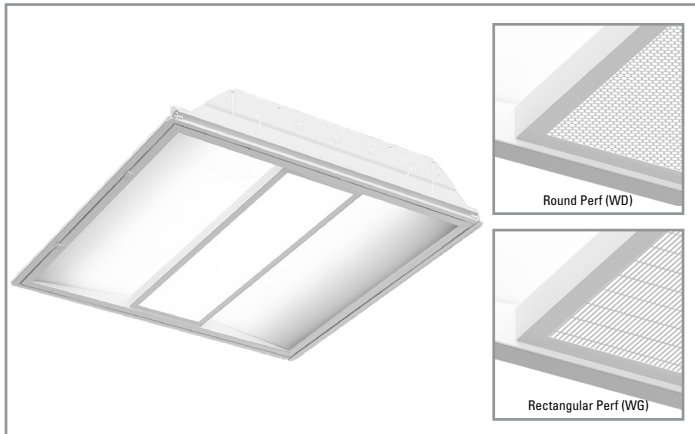


Project		Catalog #		Type	
Prepared by		Notes		Date	



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](#)
- VividTune™ Color Tuning Solutions [page 5](#)
- Product Warranty

Product Certification



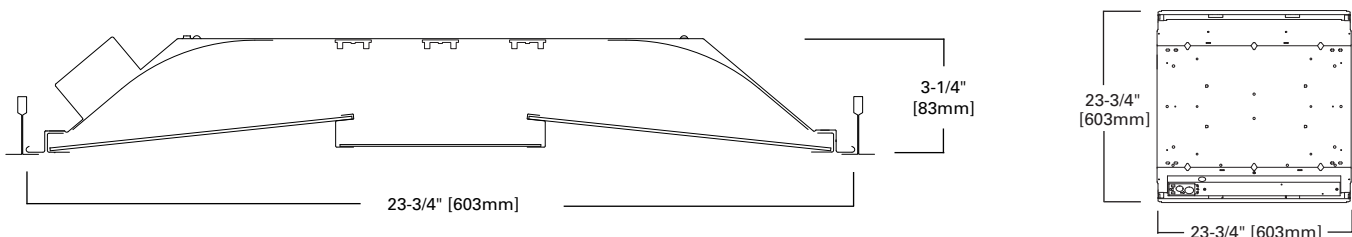
Product Features



Top Product Features

- Subtle, clean geometry in a fully luminous door-frame design
- Multiple lumen packages with efficacies up to 125 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

Dimensional and Mounting Details



[additional product diagrams](#)

Order Information

SAMPLE ORDER NUMBER: **D3X-WO-31L835-LD5-UNV-22-T1-STD-SWPD1**

Series	Shielding	Light Level (2x2)	CRI	Color Temperature	LED Revision	Input Voltage
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 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). 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%) SR=Sensor-ready for LWIPD1 (1%-100%) 5LT=Fiith Light DALI (5%-100%) LV1=DLVP (0%-100%) STP=Step Dimming (Bi-Level, 50%) LH=Lutron HiLume 1% EcoSystems (LDE1) L5=Lutron 5-Series 5% EcoSystems (LDE5) W2A=White Tuning, 2 ch, Intensity and CCT control	SWPD1=WaveLinX Wireless Integrated Sensor LWIPD1=LumaWatt Pro Wireless Integrated Sensor LWTPD1=LumaWatt Pro Wireless Tile-mount Sensor SVPD1=0-10V Stand-alone Integrated Sensor	EL7W=7-watt 120V-277V Integral EM Battery EL14W=14-watt 120V-277V Integral EM Battery ETRD=Iota Emergency Transfer Relay with dimming control	CP=Chicago Plenum W6=6' Whip Flex Installed, A3/8-4/18GDIM
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. Some systems may require field commissioning for operation. When luminaires is on an emergency circuit, integrated sensors require the ETRD Emergency Option to disable sensor control during emergency operation. Sensors are not available with the W2A driver.	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
- UGR < 19

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 Eaton's 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 sensor compatible for IoT capability
- LumaWatt Pro sensor compatible for IoT capability
- SVPD sensor compatible for out of the box functionality
- DLVP sensor and driver compatible for low voltage 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

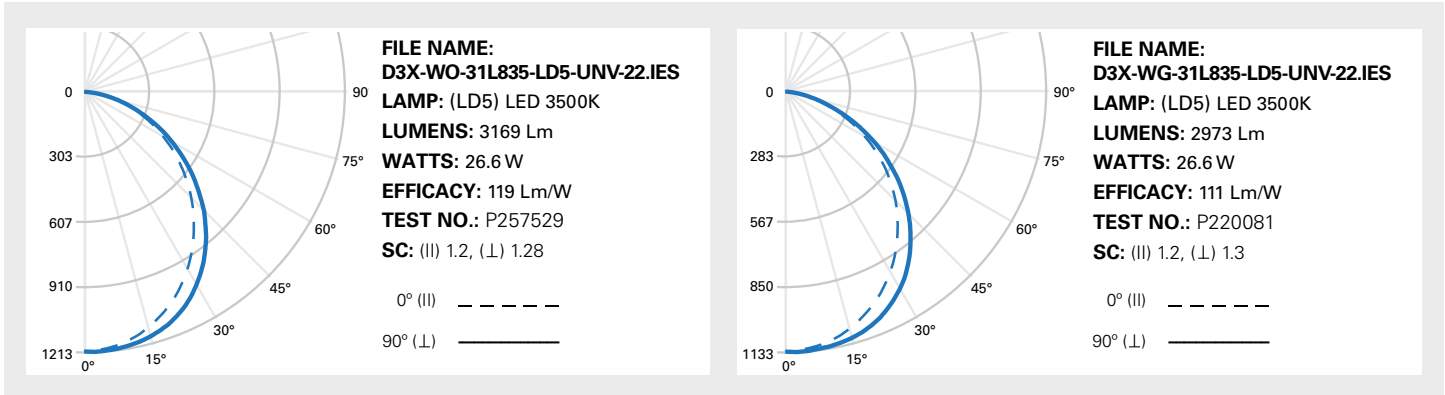
- IC rated for insulation contact
- cULus listed for damp locations
- RoHS compliant
- Tested to IESNA LM-79 and LM-80
- Stated life per TM21 standards
- Can be used for State of California Title 24 high efficacy luminaire

Warranty

- Five year warranty standard

Photometric Data

[View IES files](#)



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

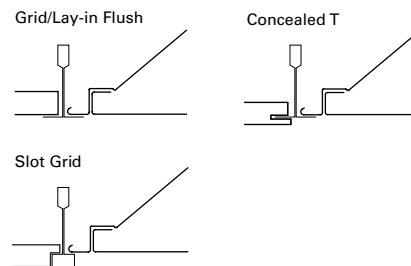
Lumen Maintenance

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 _g	15.5	69.3

Ceiling Compatibility



Accessories (Ordered Separately)

EQ-CLIP-U = T-BAR Safety Earthquake Clips

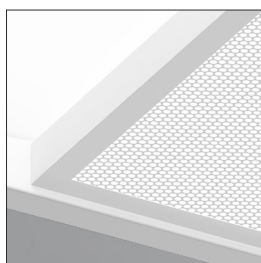
DF-22-W = 2' x 2' Drywall Frame Kit

SK-22-WS = 2' x 2' Field Install Surface Mount Kit, Shallow

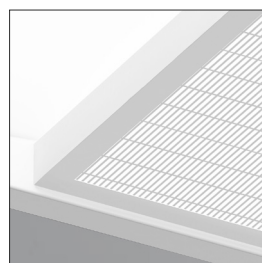
Shielding Options



Opal Lens (WO)



Round Perf (WD)



Rectangular Perf (WG)

Control Systems

- WaveLinx
- DLVP
- LumaWatt Pro
- iLumin Plus
- VividTune

SVPD1 Integrated Sensor

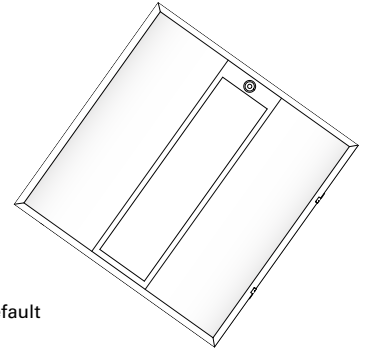
The Class D3X with Integrated Sensor technology provides automatic energy savings without sacrificing performance. Traditionally, these types of energy savings required coordination between the luminaire and a lighting control system. The D3X delivers superior lighting with integrated occupancy and daylighting controls.

Capture the benefits of traditional lighting controls, without complicated coverage planning or special wiring. Ideal for new construction or retrofit, the D3X delivers automatic ON to an energy saving light level, while ensuring lighting is turned OFF when the space is unoccupied.

The integral daylight sensor reduces the need for special daylight zone planning. Each luminaire will automatically adjust the light level based on reflected light beneath the sensor in a closed loop method.

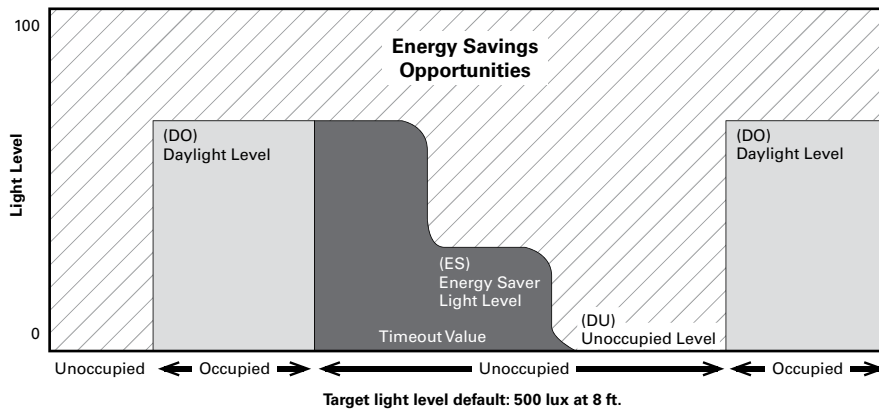
Occupied daylight light levels and unoccupied light levels can be adjusted using the integrated sensor programming remote (Catalog Number: ISHH-01). The integrated sensor personal remote (Catalog Number: ISHH-02) provides code compliant manual raise, lower, ON, OFF control.

The D3X with Integrated Sensor is easy to install with no special wiring and ensures energy savings out-of-the-box with default control settings.



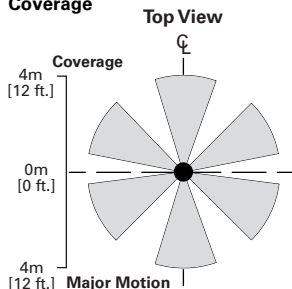
How it works:

- As the user enters the space controlled by the integral sensor, the lighting turns ON to the daylight level (default 500 lux).
- Lighting will remain at the daylight level until the space is unoccupied. This will start the occupancy timeout period (default 20 minutes).
- If the space remains unoccupied for half of the timeout period, the lighting will automatically reduce to the Energy Saver light level. This adjustable light level is typically half of the occupied daylight level.
- At the end of the timeout period the lighting will go to the unoccupied light level. This adjustable light level uses the OFF default setting.

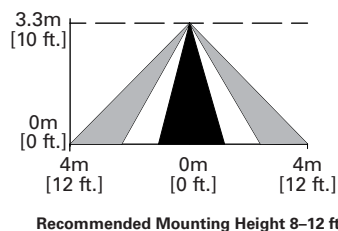


ISHH-01 Programming Remote

Coverage



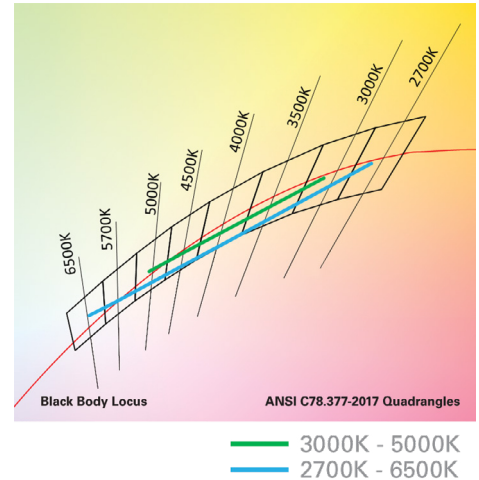
Side View





Class D3X with VividTune Tunable White

VividTune tunable white luminaires from Eaton 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.



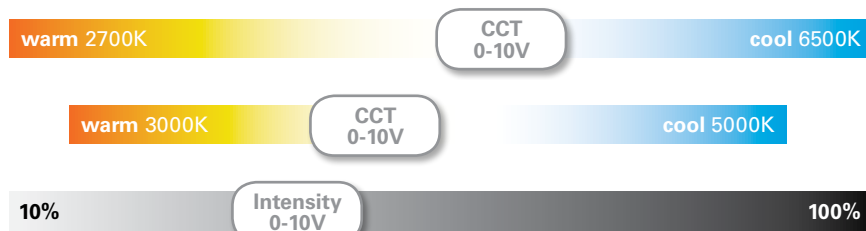
Energy and Performance Data

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			
	Standard Catalog #	VividTune 80 CRI Catalog #	VividTune 90 CRI Catalog #
CCT Setting	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. For suggested control configurations, go to www.eaton.com/lighting for tunable white application guides.



Example of Lumen Adjustment Calculation

D3X-WO-25L83050-LD5-UNV-22-T1-W2A
at 80 CRI tuned to 3500K

$$\text{Adjusted Lumen} = \text{published lm} \times \text{adjusted lm factor}$$

$$\text{Adjusted Lumen} = 2554 \times 0.986$$

$$\text{Adjusted Lumen} = 2518 \text{ lm}$$

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