



# Metalux Industrial LED

# **Industrial LED lighting solutions**

Metalux ambient lighting solutions offer a complete family of LED lighting and controls products for a wide variety of applications. Industrial and commercial properties are comprised of an extensive range of individual spaces that require a unique combination of luminaires and lighting controls to meet specific lighting needs. Whether lighting the complex environment of a manufacturing facility or the customercentric experience at your local grocery store, Metalux offers a complete family of innovative and energy saving LED solutions for your next project.

# Table of contents

# Metalux

Integrated industrial solutions . . . . 3 - 4





**HBLED** High bay LED. . . . . . . . . . . . . 5 - 8



**SNLED** Linear LED striplight . . . . . . . . 27 - 30



Steeler LED High bay LED. . . . . . . . . . . . . . . . 9 - 12



**SWLED** Surface and wall LED . . . . . . . . 31 - 34



**TBLED** 



SkyBar single 



Industrial LED linear bay 



SkyBar 



Visium Commercial / Industrial LED . . . 21 - 24



VT2-LD4 Vaportite LED . . . . . . . . . . . . . . . . . . 41 - 44



**Altus** Commercial / Industrial LED . . . 25 - 26



VT4 LED 



# **Applications** Industrial LED

# Warehouse / Distribution

The Metalux product line of industrial LED fixtures is designed to enhance safety and productivity in your warehouse and distribution facility while also reducing your energy expense. Metalux's industrial LED solutions deliver highly uniform light and a long life to dramatically reduce the need to perform maintenance which requires additional labor costs and safety concerns.



# Food processing

Visibility, sanitation and temperature control are all critical considerations in a food processing facility. Metalux industry-leading Vaportite LED fixtures deliver exceptional lumen levels, enclosed lighting elements and a significantly reduced heat output when compared to non-LED fixtures.



# **Manufacturing**

Manufacturing facilities require systems that can perform continuously and sometimes under harsh conditions. Metalux LED industrial products are designed to support a safe and productive manufacturing environment while providing the flexibility to meet today's regulatory and environmental challenges.



# Big box retail

Big box retail applications require light distribution and lumen output similar to high bay applications while enhancing the appeal of the products being sold. The Metalux product line helps to maximize the customer experience by providing optimal visual comfort while showcasing the merchandise within the space.



# **Gymnasium**

Wide open, high ceiling areas that are common to gymnasiums and multi-purpose facilities present a unique challenge for lighting systems. The lighting fixtures and their application can be the difference in a poorly lit and energy hungry facility; or an energy efficient but uniformly lit space. Metalux LED industrial fixtures are designed to properly light the space with the fewest number of fixtures required, while being rugged enough to withstand impact from mobile sporting equipment.



## Grocery

Retail spaces with lower ceiling heights and higher architectural appeal require fixtures that provide the proper balance of form and function. Whether illuminating aisle ways and shelves or highlighting the vibrant colors in the produce department, Metalux products deliver a variety of lumen packages and color temperature options to highlight merchandise while enhancing the overall customer experience.



# Metalux Integrated industrial control solutions



# Metalux LED controls compatibility



## Analog dimming on-board

- Standard feature
- Works with 0-10V dimmers and sensors
- Integrated sensor system compatible

# Digital dimming on-board

- Fully addressable with Fifth Light systems
- Digital, 2-wire bus and controls

# Platform provides flexible control solutions

# Integrated sensor system applications



# Scalable controls solutions









## Integrated sensor controls

Integrated solutions optimized to meet energy codes for occupancy sensing and daylight harvesting.

- Reduces design time and complexity
- Guaranteed coverage
- Lowest installed cost for both technologies

## **Local controls**

Full range of code-compliant solutions from wallbox and ceiling sensors to the room controller system.

- Familiar and easy to use
- Integrates easily with standard 0-10V drivers

# System wide controls

Fifth Light offers fully addressable control for maximum flexibility

- Two-way communication with native DALI drivers
- Lighting Management Software for complete system-wide control

## Eaton offers solutions at all levels

# **Applications** Integrated sensor system

# Integrated sensor system - available now



## **Values**

- No new wiring to meet code: One electrical connection to make.
- Fully integrated design: sensor is factory pre-wired.
- No commissioning required: default settings meet most basic energy codes.
- Optional remote allows easy adjustment and user control
- Worry-free controls planning the sensor coverage overlaps typical lighting spacing.

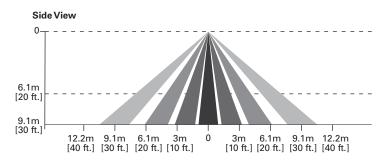
ISHH-01

**Programming** 

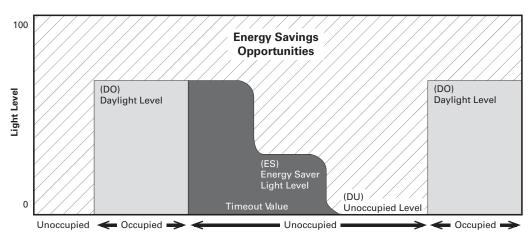
# **Programming remote**

Remote controls allow easy access to features of luminaire. Broadcast control allows one or more fixtures in line of sight to be controlled at once.

# Integrated sensor - coverage



# **Compatible with EM options**



Factory default levels can be found on luminaire spec sheets or consult your local Eaton representative.

ISHH-02 Local Control

WAREHOUSE / DISTRIBUTION | MANUFACTURING | GYMNASIUMS / MULTI-PURPOSE ROOMS / ATHLETIC CENTER | BIG BOX / RETAIL



The **HBLED** is the lighting solution for a wide variety of applications and mounting heights. Precision-designed optics, multiple distributions, and a choice of lumen outputs and color temperatures make the energy-efficient HBLED the ideal solution for industrial, commercial and other high bay applications.

## **Performance**

- Six lumen package options (12,000, 18,000, 24,000, 30,000, 36,000 and 48,000)
- Two correlated temperatures (4,000K and 5,000K)
- 85 CRI
- L84 at > 60,000 hours (at 55°C)
- High efficacy up to 129 lm/W
- Tool-less driver access for easy maintenance
- Precision optics narrow and wide distribution
- Optional 0-10V dimming driver (15% 100%)
- Multiple lens and wireguard options
- Five-year warranty

# Compliance

- cULus listed for damp location
- 55° ambient rating
- RoHS compliant
- DLC qualified







## **Features and benefits**

#### • LED Platform

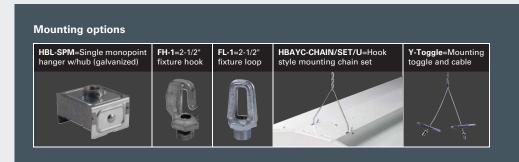
The proprietary low-power, low-brightness LED module assembly offers exceptional optical performance.

#### Controllable

Offers control flexibility and easy integration with optional 0-10V continuous dimming driver, providing additional energy savings when utilizing sensors. Available with native Fifth Light DALI drivers for complete digital energy management using the capable and scalable Fifth Light controllers and software.

#### Mounting

Choose from a variety of mounting methods, including pendant, chain, toggle, hook and loop. Suited for suspension mounting with optional wire hook and chain set or cable mounting. Single monopoint mounting also available with SPM tong hanger.





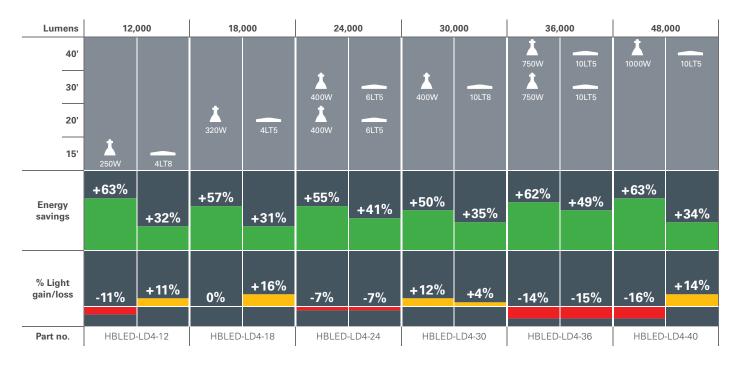
# **HBLED** Shielding options

Door frame and lens assembly are available for more demanding environments.



# **HBLED** System performance

HB LED performance				
Catalog number	Description	Delivered lumens	Input watts	Efficacy Im/W
HBLED-LD4-12-W-UNV-L850-ED1-U	Wide distribution, 12,000 lumens, UNV, 5000K, fixed output	12,505	104	120
HBLED-LD4-12-N-UNV-L850-ED1-U	Narrow distribution, 12,000 lumens, UNV, 5000K, fixed output	12,156	104	117
HBLED-LD4-18-W-UNV-L850-ED2-U	Wide distribution, 18,000 lumens, UNV, 5000K, fixed output	19,358	152	127
HBLED-LD4-18-N-UNV-L850-ED2-U	Narrow distribution, 18,000 lumens, UNV, 5000K, fixed output	18,818	152	124
HBLED-LD4-24-W-UNV-L850-ED2-U	Wide distribution, 24,000 lumens, UNV, 5000K, fixed output	24,002	203	118
HBLED-LD4-24-N-UNV-L850-ED2-U	Narrow distribution, 24,000 lumens, UNV, 5000K, fixed output	23,332	203	115
HBLED-LD4-30-W-UNV-L850-ED3-U	Wide distribution, 30,000 lumens, UNV, 5000K, fixed output	29,302	228	129
HBLED-LD4-30-N-UNV-L850-ED3-U	Narrow distribution, 30,000 lumens, UNV, 5000K, fixed output	28,483	228	125
HBLED-LD4-36-W-UNV-L850-ED3-U	Wide distribution, 36,000 lumens, UNV, 5000K, fixed output	35,944	307	117
HBLED-LD4-36-N-UNV-L850-ED3-U	Narrow distribution, 36,000 lumens, UNV, 5000K, fixed output	34,941	307	114
HBLED-LD4-48-N-UNV-L850-ED4-U	Narrow distribution, 48,000 lumens, UNV, 5000K, fixed output	46,312	401	115
HBLED-LD4-48-W-UNV-L850-ED4-U	Wide distribution, 48,000 lumens, UNV, 5000K, fixed output	48,108	402	120



20" x 48" Lumen maintenance							
Ambient temperature	TM-21 Lumen maintenance (60,000 hours)	Theoretical L70 (hours)					
55°C	> 84%	> 142,000					

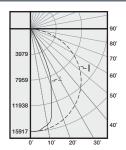
Ambient ratings							
Lumen package	Ambient rating	CD or 5LTD driver	Lensed	EM battery	HT option		
12,000	55°C	40°C	40°C	40°C	NA		
18,000	55°C	40°C	40°C	40°C	NA		
24,000	55°C	40°C	40°C	40°C	NA		
30,000	55°C	40°C	40°C	40°C	NA		
36,000	40°C	40°C	35°C <sup>2</sup>	35°C	NA		
48,000	40°C	35°C	35°C <sup>2</sup>	35°C	50°C		

NOTES: 2. Lens inserts only. 3. HT lumen package not available with emergency, dimming, or lensed options.

Certification data								
	cULus - Damp Location	CSA	IC Rated	LM79/LM80 Compliant	RoHS Compliant	DesignLights Consortium™ Qualified	CA Title 24	NOM Compliant

# **HBLED** Photometrics

#### HBLED-LD4-18-N-UNV-L850-ED2-U



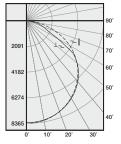
Fixed output drive Linear LED 5000K Spacing criterion: (II) 1.28 x mounting height, (1) 0.72 x mounting height Lumens = 18818 Input watts = 151.9W Efficacy = 123.9 lm/W Test: HBLED-LD4-18-N-L850-ED2-U.IES

#### Coefficients of utilization

	Effe	ctive	e flo	or ca	ity refl	ectar	ıce	20%		
rc		80	%			50%	,		30%	
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	119	119	119	119	111	111	111	106	106	106
1	112	108	105	102	102	100	98	98	96	95
2	105	98	93	89	93	89	86	90	87	84
3	98	90	84	79	86	81	77	83	79	75
4	92	82	76	70	79	73	69	77	72	68
5	86	76	69	64	73	67	63	71	66	62
6	81	70	63	58	68	62	57	66	61	57
7	76	65	58	53	63	57	53	62	56	52
8	72	61	54	49	59	53	49	58	52	48
9	68	57	50	45	55	49	45	54	49	45
10	64	53	47	42	52	46	42	51	46	42

Zonal	lumen summ	nary
Zone	Lumens	% Fixture
0-30	10076	53.5
0-40	13520	71.8
0-60	17434	92.6
0-90	18818	100.0
0-180	18818	100.0

## HBLED-LD4-24-W-UNV-L850-ED2-U



Fixed output driver Linear LED 5000K Spacing criterion: (II) 1.3 x mounting height, (1) 1.31 x mounting height Lumens = 24002 Input watts = 203.0W Ffficacy = 118.2 lm/W Test: HBLED-LD4-24-W-UNV-L850-ED2-U.IES

# Coefficients of utilization Effective floor cavity reflectance 80% 50% rw RCR 0 1 2 3 4 5 6 7

	70	50	30	10	50	30	10	50	30	10
3										
	119	119	119	119	111	111	111	106	106	106
	109	105	101	97	98	95	92	94	92	90
	100	92	85	79	86	81	77	83	79	75
	91	81	73	66	76	70	64	73	68	63
	83	71	63	56	67	60	55	65	59	54
	76	64	55	48	60	53	47	58	52	47
	70	57	48	42	54	47	41	53	46	41
	65	52	43	37	49	42	37	48	41	36
	61	47	39	33	45	38	33	44	37	32
	57	43	35	30	42	34	29	40	34	29
	53	40	32	27	38	31	27	37	31	26

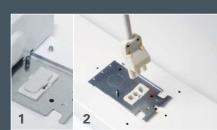
Zonal lumen summary Zone Lumens % Fixture 0-30 0-40 0-60 0-90

100.0

# Ideal for gymnasiums and multi-purpose facilities.

# **HBLED** Modular power supply

Eaton's Modular Power Supply allows external fixture access for safe and easy servicing. There is no need to remove lamps or reflectors to disconnect fixture power. Access to the individual fixture's power supply allows servicing without turning off all the fixtures disrupting occupants. Eaton's Modular Power Supply is a time saver in installation – simply plug and power.



- **1.** Modular power supply receptacle supplied mounted into fixture access plate.
- 2. Modular power cord and plugs in 120, 277, 347, and 480V configurations for easy plug and power into existing supply.



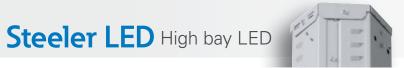
required for installation or disconnecting power.



with mounting box and modular power supply receptacle.

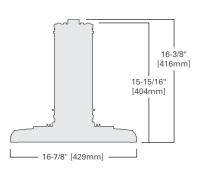
## Code compliance

- UL/cUL certified for make/break under load (UL2549)
- Meets NEC requirements for ballast disconnect (NEC 410.73G)
- Allows for addition of occupancy sensor without hard connections
- Receptacles complete with insulating/ dust cap



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Quality, style, performance. The Steeler LED is a designed for a wide variety of applications and mounting heights. Precision designed optics, multiple distributions, lumen outputs, and color temperatures make the Steeler LED ideal for industrial, commercial, manufacturing, gymnasium, and other applications that utilize traditional HID and linear fluorescent high bays. The proprietary discrete, low-brightness LED module assembly offers exceptional optical performance with the enhanced benefits of LED lighting, including energy savings, extended system life, and a reduced carbon footprint.

## Construction

- One-piece diecast aluminum lower housing with CRS driver compartment
- White polyester powder coat finish painted after fabrication
- Compact design for ease of installation
- cULus damp location, RoHS and LM79/LM80 compliant
- Suitable for suspension mounting with various mounting options
- Five-year warranty

## **Performance**

- Four standard lumen packages available (12,000, 18,000, 24,000, and 28,000)
- Proprietary low-power, low-brightness LED modules
- High efficacy up to 127 lm/W
- L83 at > 60,000 hours (at 55°C)
- Three correlated color temperatures (3500K, 4000K and 5000K) at ≥ 80 CRI
- -20°C 55°C ambient environments







# **Options**

- Precision optics Narrow, medium and wide distribution
- · Aluminum shroud for traditional aesthetic and additional cut-off
- Field installable uplight kit provides up to 10% uplight
- Modular Wiring System (MWS) for easy install
- · Integral occupancy and daylight dimming sensor available
- Emergency 20 watt remote mount

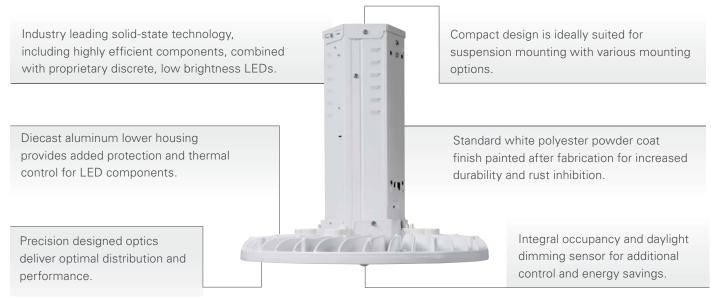
## **Controls**

• Offers control flexibility and easy integration with 0-10V continuous dimming driver, providing additional energy savings when utilizing our integrated sensors.

fifthlight

 Available with native Fifth Light DALI driver for complete digital energy management using the capable and scalable Fifth Light controllers and software.



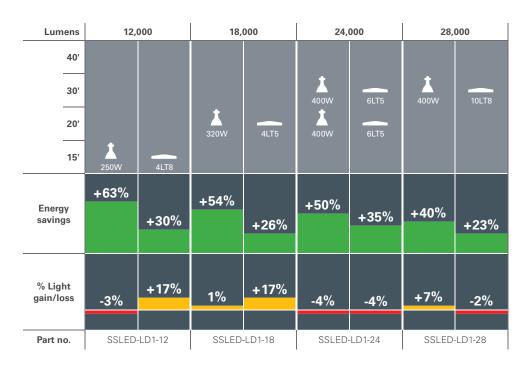


# **Steeler LED** Options and accessories



# **Steeler LED** System performance

SSLED performance				
Catalog number	Description	Delivered lumens	Input watts	Efficacy Im/W
Narrow				
SSLED-LD1-12-N-UNV-L840-CD1-U	Steeler LED 12,000 lumen, narrow distribution, 4000K, 0-10V	13,186	106	124
SSLED-LD1-18-N-UNV-L840-CD1-U	Steeler LED 18,000 lumen, narrow distribution, 4000K, 0-10V	19,101	162	118
SSLED-LD1-24-N-UNV-L840-CD2-U	Steeler LED 24,000 lumen, narrow distribution, 4000K, 0-10V	24,188	224	108
SSLED-LD1-28-N-UNV-L840-CD2-U	Steeler LED 28,000 lumen, narrow distribution, 4000K, 0-10V	27,090	271	100
Medium				
SSLED-LD1-12-M-UNV-L840-CD1-U	Steeler LED 12,000 lumen, medium distribution, 4000K, 0-10V	13,417	106	127
SSLED-LD1-18-M-UNV-L840-CD1-U	Steeler LED 18,000 lumen, medium distribution, 4000K, 0-10V	19,435	162	120
SSLED-LD1-24-M-UNV-L840-CD2-U	Steeler LED 24,000 lumen, medium distribution, 4000K, 0-10V	24,611	224	110
SSLED-LD1-28-M-UNV-L840-CD2-U	Steeler LED 28,000 lumen, medium distribution, 4000K, 0-10V	27,564	271	102
Wide				
SSLED-LD1-12-W-UNV-L840-CD1-U	Steeler LED 12,000 lumen, wide distribution, 4000K, 0-10V	13,274	106	125
SSLED-LD1-18-W-UNV-L840-CD1-U	Steeler LED 18,000 lumen, wide distribution, 4000K, 0-10V	19,229	162	119
SSLED-LD1-24-W-UNV-L840-CD2-U	Steeler LED 24,000 lumen, wide distribution, 4000K, 0-10V	24,350	224	109
SSLED-LD1-28-W-UNV-L840-CD2-U	Steeler LED 28,000 lumen, wide distribution, 4000K, 0-10V	27,272	271	101



Lumen maintenance							
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L70 (hours)					
55°C	> 83%	121,000					

Lumen packages and ambient temperature								
Lumen	Lumen 40°C 50°C							
12	STD	STD	STD					
18	STD	HT (CD2)	HT (CD2)					
24	STD	HT	N/A					
28	STD	N/A	N/A					

Certification data				
cULus - Damp Location	DesignLights Consortium™ Qualified	LM79/LM80 Compliant	RoHS Compliant	NOM Compliant

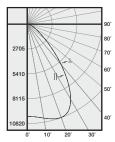
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# Steeler LED Photometrics

#### Narrow distribution, 19,101 lumens

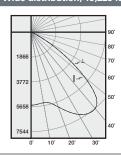
Electronic driver Linear LED 4000K Spacing criterion: (II) 0.8 x mtg height, ( $\perp$ ) 0.8 x mtg height Lumens = 19,101 Input watts = 162W Efficacy = 117.9 lm/W Test: SSLED-LD1-18-N-UNV-L840-CD1-U

#### Medium distribution, 19,436 lumens



Electronic driver Linear LED 4000K Spacing criterion: (II) 1.3 x mtg height, (1) 1.3 x mtg height Lumens = 19,436Input watts = 162W Efficacy = 120.0 lm/W Test: SSLED-LD1-18-M-UNV-L840-CD1-U

#### Wide distribution, 19,229 lumens



Electronic driver Linear LED 4000K Spacing criterion: (II) 1.9 x mtg height, (⊥) 1.9 x mtg height Lumens = 19,229Input watts = 162W Efficacy = 118.7 lm/W Test: SSLED-LD1-18-W-UNV-L840-CD1-U



Eaton's Modular Power Supply option is available for use with the SSLED. The modular power supply allows external fixture access for safe and easy servicing. Access to the individual fixture's power supply allows servicing without turning off all the fixtures disrupting occupants. Eaton's modular power supply is a time saver in installation – simply plug and power.



supplied mounted into fixture access plate.

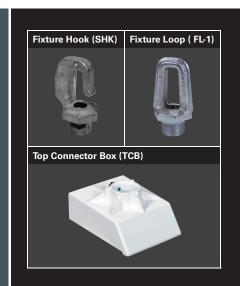


Modular power cord and plugs in 120, 277, 347, and 480V configurations for easy plug and power into existing supply

## Code compliance

- UL/cUL certified for make/ break under load (UL2549)
- Meets NEC requirements for ballast disconnect (NEC 410.73G)
- Allows for addition of hard connections
- Receptacles complete with insulating/dust cap

# Mounting options



GYMNASIUMS / MULTI-PURPOSE ROOMS / ATHLETIC CENTER | FOOD PROCESSING | BIG BOX / RETAIL | GROCERY



The TBLED luminaire designed for commercial and industrial low-bay applications is an innovative solution that delivers an unparalleled combination of performance and visual comfort. The TBLED low profile design and precise combination of vertical and horizontal distribution is the ideal solution for auditoriums, retail, big box, airports and municipal applications and is available in both medium and wide distributions.

## **Performance**

- One-piece low profile die-cast aluminum housing
- Three lumen packages (6,000, 8,000 and 11,000)
- Efficacy: delivers up to 126 lm/W
- CCT: 3500K, 4000K and 5000K
- Lumen maintenance L85 @ 60,000 hours
- Powder coat finish available in white, black, and bronze
- Surface, hook/loop, wall or pendant mounting options
- Rated for -40°C to 40°C ambient applications
- Standard 0-10V dimming, optional Fifth Light DALI
- cULus listed for wet locations, IP66 rated
- Five-year warranty

## **Compliance**

- cULus listed for damp location
- IP66 rated (surface or wall mount)
- RoHS compliant
- DLC qualified
- ISO 9001









## Features and benefits

## • LED Platform

WaveStream™ LED technology with patented AccuAim<sup>™</sup> optics arranged in exacting patterns provide superior performance and optimal distribution.

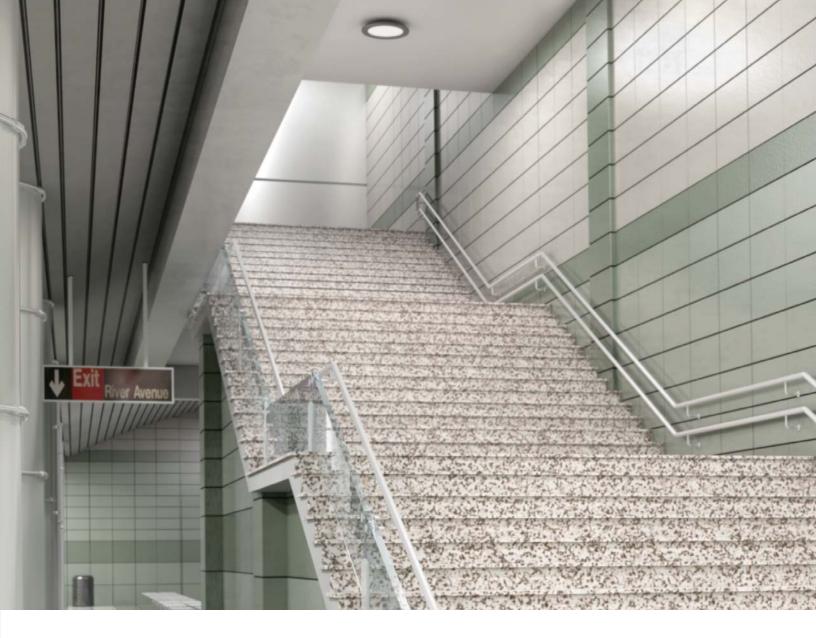
#### Controllable

Offers control flexibility and easy integration with optional 0-10V continuous dimming driver, providing additional energy savings when utilizing sensors. Available with native Fifth Light DALI drivers for complete digital energy management using the capable and scalable Fifth Light controllers and software.

#### Mounting

Standard fixture mounts to a square or octagonal 4" surface or recessed j-box via heavy-gauge quick mount bracket, or can be hook or pipe mounted using the included universal mounting kit. Additional mounting options include pendant or wall mount.

13



# TBLED WaveStream LED Technology



# **TBLED** System performance

TBLED performance		Delivered	Input	Efficacy
Catalog number	Description	lumens	watts	Im/W
Medium				
TBLED-LD1-6-M-UNV-L835-CD1-WHT-U	Low bay, WaveStream LED, 6K lumen, medium distribution, 3500K, dimming	5,643	51	111
TBLED-LD1-6-M-UNV-L840-CD1-WHT-U	Low bay, WaveStream LED, 6K lumen, medium distribution, 4000K, dimming	5,774	51	113
TBLED-LD1-6-M-UNV-L850-CD1-WHT-U	Low bay, WaveStream LED, 6K lumen, medium distribution, 5000K, dimming	6,420	51	126
TBLED-LD1-8-M-UNV-L835-CD1-WHT-U	Low bay, WaveStream LED, 8K lumen, medium distribution, 3500K, dimming	7,948	77	103
TBLED-LD1-8-M-UNV-L840-CD1-WHT-U	Low bay, WaveStream LED, 8K lumen, medium distribution, 4000K, dimming	8,133	77	106
TBLED-LD1-8-M-UNV-L850-CD1-WHT-U	Low bay, WaveStream LED, 8K lumen, medium distribution, 5000K, dimming	9,044	77	117
TBLED-LD1-11-M-UNV-L835-CD1-WHT-U	Low bay, WaveStream LED, 11K lumen, medium distribution, 3500K, dimming	10,491	108	97
TBLED-LD1-11-M-UNV-L840-CD1-WHT-U	Low bay, WaveStream LED, 11K lumen, medium distribution, 4000K, dimming	10,735	108	99
TBLED-LD1-11-M-UNV-L850-CD1-WHT-U	Low bay, WaveStream LED, 11K lumen, medium distribution, 5000K, dimming	11,937	108	111
Wide				
TBLED-LD1-6-W-UNV-L835-CD1-WHT-U	Low bay, WaveStream LED, 6K lumen, wide distribution, 3500K, dimming	5,342	51	105
TBLED-LD1-6-W-UNV-L840-CD1-WHT-U	Low bay, WaveStream LED, 6K lumen, wide distribution, 4000K, dimming	5,466	51	107
TBLED-LD1-6-W-UNV-L850-CD1-WHT-U	Low bay, WaveStream LED, 6K lumen, wide distribution, 5000K, dimming	6,078	51	119
TBLED-LD1-8-W-UNV-L835-CD1-WHT-U	Low bay, WaveStream LED, 8K lumen, wide distribution, 3500K, dimming	7,524	77	98
TBLED-LD1-8-W-UNV-L840-CD1-WHT-U	Low bay, WaveStream LED, 8K lumen, wide distribution, 4000K, dimming	7,699	77	100
TBLED-LD1-8-W-UNV-L850-CD1-WHT-U	Low bay, WaveStream LED, 8K lumen, wide distribution, 5000K, dimming	8,561	77	111
TBLED-LD1-11-W-UNV-L835-CD1-WHT-U	Low bay, WaveStream LED, 11K lumen, wide distribution, 3500K, dimming	9,932	108	92
TBLED-LD1-11-W-UNV-L840-CD1-WHT-U	Low bay, WaveStream LED, 11K lumen, wide distribution, 4000K, dimming	10,163	108	94
TBLED-LD1-11-W-UNV-L850-CD1-WHT-U	Low bay, WaveStream LED, 11K lumen, wide distribution, 5000K, dimming	11,300	108	105

Lumen maintenance					
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L70 (hours)			
40°C	> 85%	165,000			

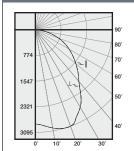
Lumen packages and ambient temperature				
Lumen	40°C			
6	STD			
8	STD			
11	STD			

Certification data				
cULus - Wet Location	DesignLights Consortium™ Qualified	LM79/LM80 Compliant	RoHS Compliant	NOM Compliant

15

# **TBLED** Photometrics

#### TBLED-LD1-8-M-UNV-L840-CD1



Electronic driver
Linear LED 4000K
Spacing criterion: (||) 1.3 x mounting
height, (L) 1.3 x mounting height
Lumens = 8133
Input watts = 77W
Efficacy = 105.6 Im/W
Test: TBLED-LD1-8-M-L840-CD1.IES

#### Coefficients of utilization

	Effe	ctive	floo	or cav	ity refle	ectar	ıce	20%		
rc		80	%			50%	,		30%	
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	119	119	119	119	111	111	111	106	106	106
1	109	104	100	96	98	95	92	94	91	89
2	99	91	85	79	86	81	76	83	78	74
3	91	80	72	66	76	70	64	73	68	63
4	83	72	63	56	68	61	55	65	59	54
5	77	64	55	49	61	54	48	59	52	47
6	71	58	49	43	55	48	42	53	47	42
7	66	53	44	38	50	43	38	49	42	37
8	61	48	40	34	46	39	34	45	38	33
9	58	44	36	31	43	35	30	41	35	30
10	54	41	33	28	39	32	28	38	32	28

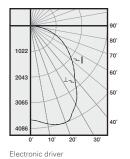
 Zone
 Lumens
 % Fixture

 0-30
 2462
 30.3

 0-40
 2005
 470

0-30	2462	30.3
0-40	3895	47.9
0-60	6534	80.3
0-90	8133	100.0
0-180	8133	100.0

#### TBLED-LD1-11-M-UNV-L840-CD1



Linear LED 4000K Spacing criterion: (II) 1.3 x mounting height, (LI) 1.3 x mounting height Lumens = 10735 Input watts = 108W Efficacy = 99.4 Im/W Test: TBLED-LD1-11-M-L840-CD1.IES

Coefficients of utilization Effective floor cavity reflectance 80% 50% 70 50 30 10 50 30 10 50 30 10 rw RCR 0 106 106 106 98 95 92 99 91 85 79 86 81 76 83 78 74 91 80 72 66 83 72 63 56 76 70 64 73 68 63 77 64 55 49 61 54 48 59 52 47 71 58 49 43 55 48 42 53 47 66 53 44 38 61 48 40 34 46 39 34 45 38 58 44 36 31 41 35

 Zonal lumen summary

 Zone
 Lumens
 % Fixture

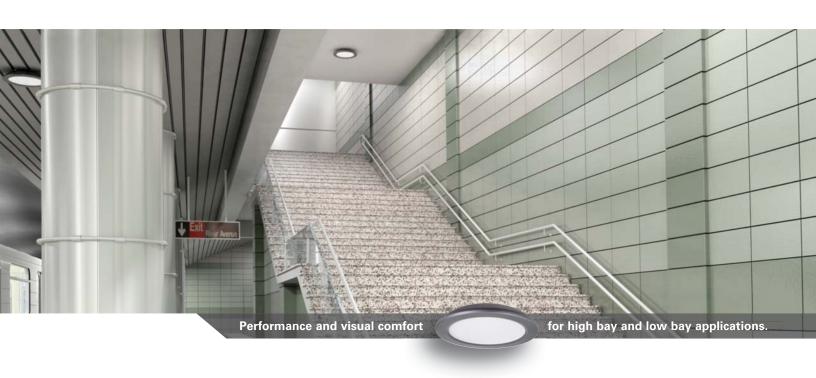
 0-30
 3249
 30.3

 0-40
 5141
 47.9

 0-60
 8625
 80.3

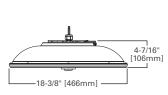
 0-90
 10735
 100.0

 0-180
 10735
 100.0

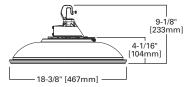


# **TBLED** Mounting

#### SURFACE MOUNT

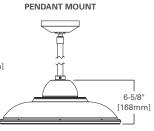


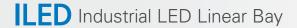
#### HOOK /PIPE MOUNT (INCLUDED)



# 18-3/8" [466mm] 4" [101mm] 22-9/16" [574mm]

WALL MOUNT







The **Industrial LED Linear Bay** is the energy efficient solution for both low bay and high bay applications. The Linear Bay has been optimized to provide maximum performance utilizing the latest in LED technology. Several lumen packages and distributions make it suitable for a wide range of applications including "big box" retail, shopping malls, school gymnasiums, light industrial, warehouse and manufacturing.

## Construction

- 4ft. and 8ft. specification grade full-body housing
- Low profile, narrow 11" housing
- Available in surface, suspended or continuous row mount
- cULus damp location
- Five-year warranty

## **Performance**

- Multiple lumen packages available:
   4ft.: 5,000, 7,000, 9,000, 11,000, 14,000, 16,000
   8ft.: 10,000, 14,000, 18,000, 22000, 28,000, 32,000
- High-performance efficacy up to 139 lm/W
- L86 at > 60,000 hours (at 35°C)
- Three correlated color temperatures (3500K, 4000K and 5000K) at typical 85 CRI
- -20°C 45°C ambient environments







# **Options**

- Precision optics narrow and wide distribution
- Shielding options include clear and frosted lenses, baffle or wireguard
- Modular Wiring System for easy install
- Emergency 7 watt and 14 watt options

## **Controls**

- Includes 0-10V (analog) dimming for control using Eaton wall dimmers, Greengate Room controllers, occupancy and/or daylight sensors and lighting controls panels.
- Available with native Fifth Light DALI drivers for complete digital energy management using the capable and scalable Fifth Light controllers and software.



# **ILED** Options and accessories

# **Shielding**

Door frame and lens assembly are available for more demanding environments.









# **ILED** System performance

ILED performance				
Catalog number	Description	Delivered lumens	Input watts	Efficacy Im/W
4ILED-LD4-5-W-UNV-L840-CD1-U	4ft. ILED, 5,000 lumen, wide, 40K, wide	5,101	37	139
4ILED-LD4-7-W-UNV-L840-CD1-U	4ft. ILED, 7,000 lumen, wide, 40K, wide	7,246	57	128
4ILED-LD4-9-W-UNV-L840-CD1-U	4ft. ILED, 9,000 lumen, wide, 40K, wide	9,092	74	123
4ILED-LD4-11-W-UNV-L840-CD1-U	4ft. ILED, 11,000 lumen, wide, 40K, wide	11,448	101	114
4ILED-LD4-14-W-UNV-L840-CD2-U	4ft. ILED, 14,000 lumen, wide, 40K, wide	13,824	115	121
4ILED-LD4-16-W-UNV-L840-CD2-U	4ft. ILED, 16,000 lumen, wide, 40K, wide	16,414	145	113
8ILED-LD4-10-W-UNV-L840-CD1-U	8ft. ILED, 10,000 lumen, wide, 40K, wide	10,202	73	139
8ILED-LD4-14-W-UNV-L840-CD2-U	8ft. ILED, 14,000 lumen, wide, 40K, wide	14,492	113	128
8ILED-LD4-18-W-UNV-L840-CD2-U	8ft. ILED, 18,000 lumen, wide, 40K, wide	18,184	148	123
8ILED-LD4-22-W-UNV-L840-CD2-U	8ft. ILED, 22,000 lumen, wide, 40K, wide	22,896	201	114
8ILED-LD4-28-W-UNV-L840-CD3-U	8ft. ILED, 28,000 lumen, wide, 40K, wide	27,648	229	121
8ILED-LD4-32-W-UNV-L840-CD3-U	8ft. ILED, 32,000 lumen, wide, 40K, wide	32,828	290	113

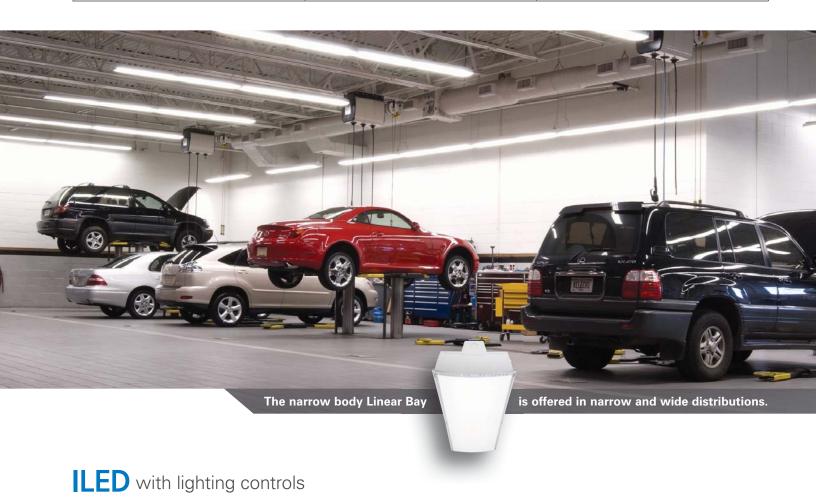
Lumens	9,0	000	12,	000	14,0	000	18,0	000	22,	000	28,	000
40'												
											1	
30'									400W	6LT5	400W	8LT5
					1		1		1	02.0	1	32.3
20'					250W	4LT5	320W	6LT8	400W	6LT5	400W	6LT5
15'	150W	3LT8	<b>‡</b> 175W	4LT8	<b>1</b> 250W	4LT5						
					- 500/		- FO9/					
Energy	+56%	+51%	+47%	- 0.40/	+59%	+47%	+58%		+56%	+42%	+49%	- 000/
savings				+34%				+32%		1-12/0		+33%
	+30%		+36%									
% Light gain/loss	T30 /0	+8%		+3%	-01		-01	+11%			+7%	+7%
gaiii/1088				+3/0	0%	-17%	-6%		-12%	-12%	<del>T</del> 7/0	<del>T /</del> /0
Part no.	4ILED-	-LD4-9	4ILED-	LD4-11	4ILED-	LD4-14	8ILED-	LD4-18	8ILED-	LD4-22	8ILED-	LD4-28

Lumen maintenance					
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L70 (hours)			
35°C	> 86%	171,000			

Certification data				
cULus - Damp Location	DesignLights Consortium™ Qualified	LM79/LM80 Compliant	RoHS Compliant	NOM Compliant

# **ILED** Photometrics

#### 4 ft. narrow 7,000 lumens 4 ft. wide 7,000 lumens 4 ft. wide w/baffle 7,000 lumens Electronic driver Electronic driver Electronic driver Linear LED 3500K Linear LED 4000K Linear LED 4000K Spacing criterion: Spacing criterion: Spacing criterion: (II) 1.3 x mtg height, (II) 1.3 x mtg height, (II) 1.1 x mtg height, (1) 0.6 x mtg height (⊥) 1.3 x mtg height (⊥) 1.3 x mtg height Lumens = 6392Lumens = 7246Lumens = 6625 Input watts = 57.0W Input watts = 56.6W Input watts = 56.6W 1700 Efficacy = 112.1 Im/W Efficacy = 120 Im/W Efficacy = 117 lm/W Test: 4ILED-LD4-7-W-Test: 4ILED-LD4-7-W-Test: 4ILED-LD4-7-N-UNV-L835.IES UNV-L840.IES TWB-UNV-L840.IES



# Fifth Light brings energy savings, control and addressability to Metalux luminaires

The future of lighting lies in smart controls in combination with smart lighting fixtures. From private offices to large-scale building management systems, Eaton's Lighting Solutions has a fully integrated answer for any project. Their Fifth Light brand offers a complete line of digital addressable control products to ensure two-way communication with every component in a building. Fifth Light hardware consists of multi-sensors, user interfaces, personal controls, ballasts, drivers and more. A wide array of software options integrate with VOIP phones, computers, tablets and mobile phones for complete control at your fingertips.

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with Multi-Mount (M) TWO 5/16"-18 MOUNTING STUDS 3/4" NPT INTERNAL THREAD WITH (16-13/16" BETWEEN) LOCKING SET SCREW 13-5/8" [345mm]

21-1/8"

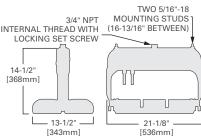
[536mm]

VISIUM 190

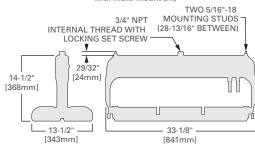
VISIUM 300 with Multi-Mount (M)

6-1/2"

[166mm]



VISIUM 600 with Multi-Mount (M)



The Visium LED high bay is a durable and high efficient solution for a variety of industrial and commercial applications. The Visium is constructed of extruded aluminum for optimal thermal control and longer system life. The Visium's modular design, multiple lens configurations and numerous mounting options allow for precise light positioning putting the light exactly where you need it.

# Construction

- Durable extruded aluminum housing provides excellent thermal control
- Standard black anodized housing for increased and rust inhibition
- Adjustable die cast mounting bracket for precision aiming
- IP66 rated
- ETL Listed and RoHS compliant
- DLC qualified





# **Performance**

- High efficacy up to 103 lm/W
- 5600K CCT
- L70 @ 225,000 hours
- Typical CRI: 70
- High impact tempered diffused lens
- -40°C to 55°C ambient rating

# **Options**

- Three standard lumen packages offered: 18,000, 30,000 and 61,000 lumens
- Precision optics multiple distributions
- Standard 0-10V dimming



# Resiliancy

The Visium series high bay is made from heavy-duty anodized extruded aluminum, which withstands an expansive temperature rating of -40°C to 55°C. Count on its built-in resiliency and high-impact-resistant tempered glass lens construction to deliver workhorse performance that stands up to the elements, even in wet and corrosive environments.

# **Efficiency**

Delivering 100 lumens per watt, the Visium provides up to 46% energy savings compared to legacy technology. The Visium's modular design, multiple lens configurations and numerous mounting options allow for precise light positioning so you can direct wider, longer or more angled light exactly where you need it. You'll not only get more light with fewer fixtures, you'll use up to 75% less energy - saving money and the environment.

# **Dependability**

Through unprecedented thermal heat management and an isolated power supply, we've designed a solution that stays cooler. The result: it maintains consistent performance and lasts longer, maintaining 95% light output for more than 10 years. Visium uses integrated smart electronics to constantly monitor temperature and health of the light system to ensure optimum LED performance and efficient operation day after day, year after year.

# Visium Models



# Visium System performance

	Visium 190	Visium 300	Visium 600
Lumen output <sup>1</sup>	18,200	30,850	61,700
System watts	190	300	600
Input voltage	VL: 120-277VAC VL: 347-480VAC <sup>2</sup>	VL: 120-277VAC VL: 347-480VAC <sup>2</sup>	VL: 120-277VAC VL: 347-480VAC <sup>2</sup>
CRI	>70	>70	>70
ССТ	5600K	5600K	5600K
EPA (aimed down) <sup>3</sup>	0.86 ft <sup>1</sup>	1.79 ft <sup>1</sup>	2.86 ft <sup>1</sup>
EPA (aimed flat vertically) <sup>3</sup>	1.74 ft <sup>1</sup>	2.67 ft <sup>1</sup>	4.15 ft <sup>1</sup>
Operating temperature	-40°C to 50°C	-40°C to 50°C	-40°C to 50°C
L70 hours	>225,000	>225,000	>225,000
IP rating	IP66	IP66	IP66

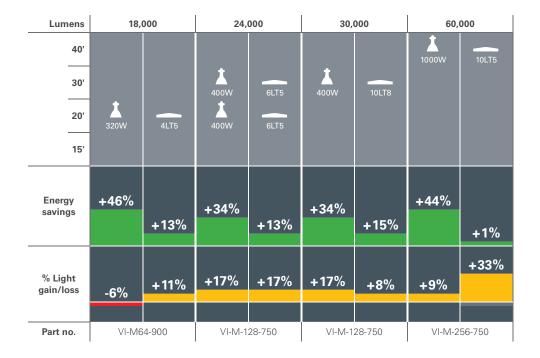
#### Notes:

- 1. The specifications listed were obtained under optimal testing conditions. Changes in options, features and conditions may result in slightly different performance specifications
- 2. VL: 127-430VDC VH: 450-600VDC
- ${\it 3. If aiming orientation is uncertain, design with "worst case" value. Contact Eaton for more information.}\\$

Pure power is required to ensure proper function and lifetime of Eaton fixtures. Prior to installation, an analysis should be performed to verify site power meets these requirements:

- > High frequency voltage should be below -40dB or .01V between 3KHZ and 100KHz
- > High frequency current should be below -50dB or .019A between 3KHz and 100KHz

If the power does not meet these criteria, waveform correction technology should be used to condition the power. Surge protection alone is not adequate. Eaton will not be liable for damage to fixtures due to poor power quality. Contact Eaton for more information.



Lumen maintenance					
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L70 (hours)			
55°C	> 83%	121,000			

Certification data				
ETL - Wet Location	DesignLights Consortium™ Qualified	LM79/LM80 Compliant	RoHS Compliant	NOM Compliant

23

# Visium Illumination tables

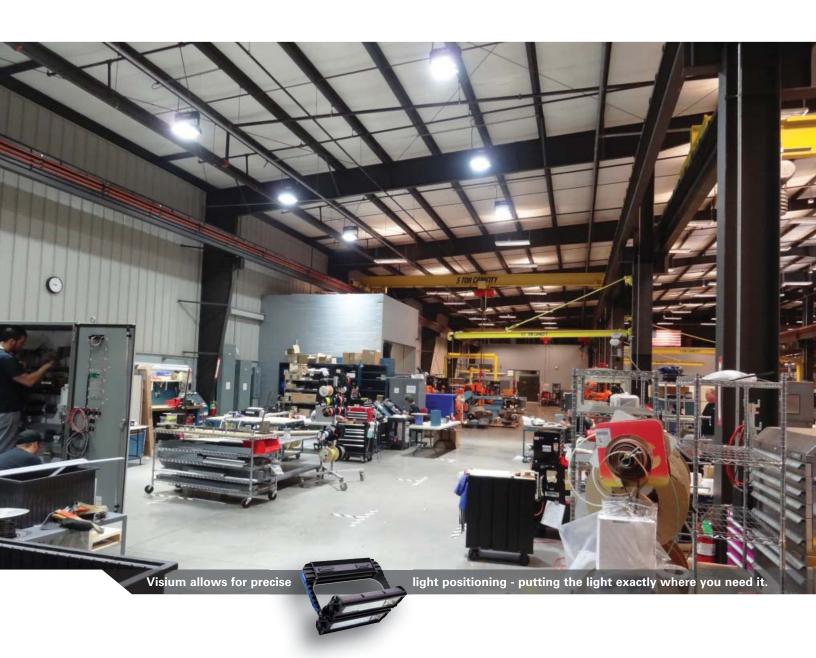
Visium 19 Illuminati		distance	e (FC) <sup>4</sup>		
Height	5	5N	5W	5EL	5EW
20 FT	16	256	123	97	58
30 FT	7	114	54	43	26
40 FT	4	64	31	24	15
50 FT	2	41	20	15	9
60 FT	2	29	13	11	7
70 FT	1	21	10	8	5

N			

<sup>4.</sup> Data based on a single luminaire at height shown.

Visium 30 Illuminati		distance	e (FC) <sup>4</sup>		
Height	5	5N	5W	5EL	5EW
20 FT	26	420	201	159	95
30 FT	12	187	89	71	42
40 FT	7	105	50	40	24
50 FT	4	67	32	25	15
60 FT	3	47	22	18	11
80 FT	2	26	13	10	6
100 FT	1	17	8	6	4

Visium 6		distance	e (FC) <sup>4</sup>		
Height	5	5N	5W	5EL	5EW
30 FT	24	374	178	142	84
40 FT	14	210	100	80	48
50 FT	8	134	64	50	30
60 FT	6	94	44	36	22
80 FT	3	52	26	20	12
100 FT	2	35	16	12	8
120 FT	1	23	11	9	5



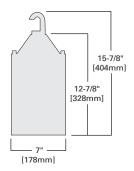
# Altus Commercial / Industrial LED

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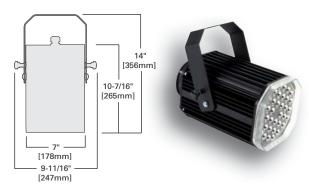


The Altus low bay is a durable and high efficient solution designed for a variety of industrial and commercial applications. Built to withstand the most complex of environments, the Altus is constructed of extruded aluminum for optimal thermal control and longer system life. The compact design with a wide angle distribution is suitable for most low bay applications and in most cases can reduce the required number of fixtures to achieve the desired light levels.

#### **Pendant with Hook Mount**



## **Free Hang Mount**



#### **Ceiling Mount**



## Construction

- Durable extruded aluminum housing provides excellent thermal control
- Standard black anodized housing for increased durability and rust inhibition.
- Compact size: 7" x 12"
- IP68 Rated for complex environments
- ETL listed and RoHS compliant



# **Performance**

- High efficacy up to 115 lm/W
- 5000K and 5700K CCT
- L70 @ 225,000 hours
- Typical CRI: 80
- Precision wide distribution
- High impact tempered diffused lens
- -40°C to 55°C ambient rating

# **Options**

- Two standard lumen packages offered: 7,500 and 14,000 lumens
- Three mounting options including suspended, surface or free hang

25

# **Altus** Illumination tables

Altus 80 - Average i		tion (FC	) <sup>2</sup>		
		Spaci	ng		
Height	15 FT	20 FT	25 FT	30 FT	35 FT
10 FT	34	19	12	9	7
15 FT	33	18	12	8	7
20 FT	32	18	11	8	6
25 FT	31	17	11	8	6
30 FT	30	17	11	8	6

	Altus 140 - Average illumination (FC) <sup>2</sup>						
	Spacing						
Height	15 FT	20 FT	25 FT	30 FT	35 FT		
10 FT	68	38	25	17	14		
15 FT	66	37	24	17	13		
20 FT	64	36	23	16	13		
25 FT	62	35	22	16	13		
30 FT	60	34	22	15	12		

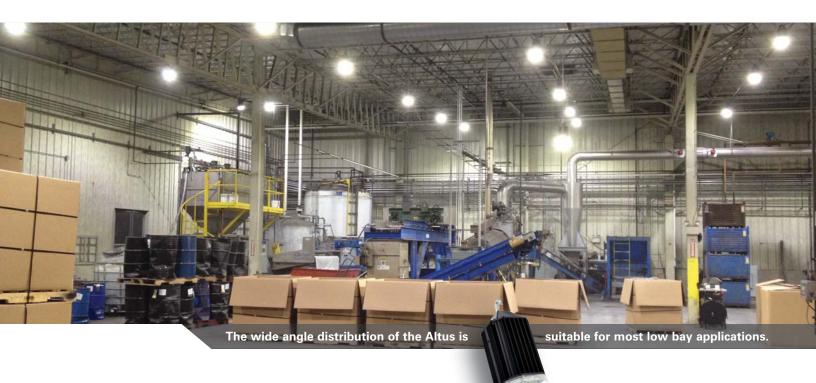
#### Notes:

# **Altus** System performance

	Altus 80	Altus 140
Lumen output <sup>1</sup>	7,500	13,800
System watts	80	120
Input voltage	VL: 90-277VAC	VL: 90-277VAC
CRI	>75	>80
ССТ	5000K	5700K
Operating temperature	-40°C to 55°C	-40°C to 55°C
L70 hours	>225,000	>225,000
IP rating	IP68	IP68

#### Notes

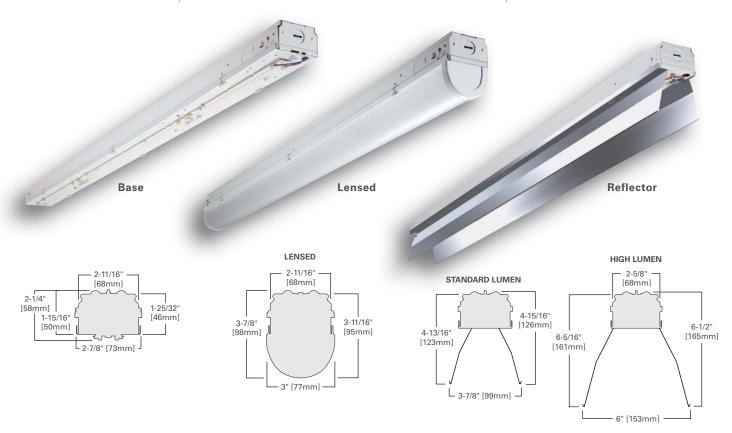
<sup>1.</sup> The specifications listed were obtained under optimal testing conditions. Changes in options, features and conditions may result in slightly different performance specifications among fixtures.



<sup>2.</sup> Data based on a 300' x 300' room, 80/50/20 reflectance.



WAREHOUSE / DISTRIBUTION | GYMNASIUMS / MULTI-PURPOSE ROOMS / ATHLETIC CENTER



Eaton introduces the latest generation of it's market-leading linear LED striplight, SNLED. Utilizing leading edge LED technology, the SNLED series provides a superior solution with both energy efficiency and maintenance reduction over traditional fluorescents. Offered in three unique versions - base, lensed and reflector, the SNLED provides application flexibility while further improving energy savings by offering controls compatibility for most any application.

#### **Performance**

- 8', 4' and 2' product configurations
- Three different models base, lensed and reflector
- Standard (SL) and high lumen (HL) packages
- Four correlated color temperatures (3000K, 3500K, 4000K and 5000K)
- High efficacy up to 131 lm/W
- Typical 85+ CRI
- Class 2, 24V DC constant driver with standard 0-10V dimming
- Step-dim, Fifth Light<sup>™</sup> (DALI) options available
- Ideal for surface and suspended applications
- L70 at 60,000 hours
- Five-year warranty

# **Compliance**

- LED modules comply with IESNA LM-79 and LM-80 standards
- cULus listed 1598 for damp locations
- RoHS compliant
- DLC qualified







## **Product controls**

All SNLED models are Powered by Fifth Light, starting with standard drivers that work with wall dimmers and sensors, up to digital drivers that work with Fifth Light whole-building systems. SNLED and Eaton controls will improve energy savings and user comfort for any space.

- 0 10V dimming is standard
- 120/277V occupancy and daylight sensors
- Fifth Light Digital Addressable Lighting Interface (DALI) Control Systems



27



1' x 4' lumen maintenance	e	
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L70 (hours)
25°C	> 92.9%	303,000

Certification data			
cULus - Damp Location	LM79/LM80 Compliant	RoHS Compliant	NOM Compliant

# **SNLED** System performance

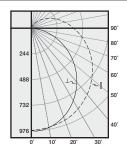
SNLED performance	(lensed)						
SNLED type	Stock* / MTO	Lumen type	Length	Catalog logic	Nominal lumens	Input watts	Efficacy Im/W
Full frost lens (LW)	MTO	Standard	4 ft.	4SNLED-LD4-16SL-LW-UNV-L8XX-CD1-U	1,819	16.21	111
Full frost lens (LW)	MTO	Standard	4 ft.	4SNLED-LD4-20SL-LW-UNV-L8XX-CD1-U	2,054	18.37	109
Full frost lens (LW)	Stock	Standard	4 ft.	4SNLED-LD4-23SL-LW-UNV-L8XX-CD1-U	2,399	21.68	111
Full frost lens (LW)	Stock	Standard	4 ft.	4SNLED-LD4-27SL-LW-UNV-L8XX-CD1-U	2,732	25.07	108
Full frost lens (LW)	MTO	Standard	4 ft.	4SNLED-LD4-30SL-LW-UNV-L8XX-CD1-U	3,062	28.43	106
Full frost lens (LW)	MTO	Standard	4 ft.	4SNLED-LD4-33SL-LW-UNV-L8XX-CD1-U	3,411	32.32	105
Full frost lens (LW)	MTO	Standard	4 ft.	4SNLED-LD4-37SL-LW-UNV-L8XX-CD1-U	3,778	36.64	101
Full frost lens (LW)	Stock	Standard	4 ft.	4SNLED-LD4-41SL-LW-UNV-L8XX-CD1-U	4,119	41.03	100
Full frost lens (LW)	MTO	Standard	4 ft.	4SNLED-LD4-44SL-LW-UNV-L8XX-CD1-U	4,457	45.66	96
Full frost lens (LW)	MTO	Standard	4 ft.	4SNLED-LD4-47SL-LW-UNV-L8XX-CD1-U	4,781	50.15	94
Full frost lens (LW)	MTO	Standard	4 ft.	4SNLED-LD4-50SL-LW-UNV-L8XX-CD1-U	5,100	56.3	89
Full frost lens (LW)	MTO	High	4 ft.	4SNLED-LD4-54HL-LW-UNV-L8XX-CD1-U	5,458	50.71	106
Full frost lens (LW)	MTO	Standard	8 ft.	8TSNLED-LD4-54SL-LW-UNV-L8XX-CD1-U	5,464	50.14	108
Full frost lens (LW)	MTO	Standard	8 ft.	8TSNLED-LD4-61SL-LW-UNV-L8XX-CD1-U	6,125	56.86	107
Full frost lens (LW)	Stock	Standard	8 ft.	8TSNLED-LD4-67SL-LW-UNV-L8XX-CD1-U	6,822	64.64	104
Full frost lens (LW)	Stock	Standard	8 ft.	8TSNLED-LD4-74SL-LW-UNV-L8XX-CD1-U	7,556	73.28	101
Full frost lens (LW)	MTO	Standard	8 ft.	8TSNLED-LD4-81SL-LW-UNV-L8XX-CD2-U	8,238	82.06	99
Full frost lens (LW)	MTO	Standard	8 ft.	8TSNLED-LD4-88SL-LW-UNV-L8XX-CD2-U	8,915	91.32	96
Full frost lens (LW)	MTO	Standard	8 ft.	8TSNLED-LD4-95SL-LW-UNV-L8XX-CD2-U	9,562	100.3	95

<sup>\*</sup>Stocked in either 3500K or 4000K.

SNLED performance	(reflector)						
SNLED type	Stock* / MTO	Lumen type	Length	Catalog logic	Nominal lumens	Input watts	Efficacy Im/W
Miro reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-19SL-RM-UNV-L8XX-CD1-U	2,092	16	117
Miro reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-23SL-RM-UNV-L8XX-CD1-U	2,362	18	125
Miro reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-27SL-RM-UNV-L8XX-CD1-U	2,760	22	125
Miro reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-31SL-RM-UNV-L8XX-CD1-U	3,142	25	124
Miro reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-35SL-RM-UNV-L8XX-CD1-U	3,523	28	123
Miro Reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-39SL-RM-UNV-L8XX-CD1-U	3,924	32	121
Miro Reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-42SL-RM-UNV-L8XX-CD1-U	4,346	37	115
Miro reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-47SL-RM-UNV-L8XX-CD1-U	4,738	41	115
Miro reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-50SL-RM-UNV-L8XX-CD1-U	5,127	46	110
Miro reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-54SL-RM-UNV-L8XX-CD1-U	5,500	50	108
Miro reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-58SL-RM-UNV-L8XX-CD1-U	5,866	56	103
Miro reflector (RM)	MTO	High	4 ft.	4SNLED-LD4-62HL-RM-UNV-L8XX-CD1-U	6,278	51	122
Miro reflector (RM)	MTO	Standard	8 ft.	8TSNLED-LD4-62SL-RM-UNV-L8XX-CD1-U	6.285	50	124
Miro reflector (RM)	MTO	Standard	8 ft.	8TSNLED-LD4-70SL-RM-UNV-L8XX-CD1-U	7.045	57	123
Miro reflector (RM)	MTO	Standard	8 ft.	8TSNLED-LD4-78SL-RM-UNV-L8XX-CD1-U	7,847	65	121
Miro reflector (RM)	MTO	Standard	8 ft.	8TSNLED-LD4-85SL-RM-UNV-L8XX-CD1-U	8.692	73	116
Miro reflector (RM)	MTO	Standard	8 ft.	8TSNLED-LD4-95SL-RM-UNV-L8XX-CD2-U	9,476	82	116
Miro reflector (RM)	MTO	Standard	8 ft.	8TSNLED-LD4-101SLRM-UNV-L8XX-CD2-U	10,254	91	111
Miro reflector (RM)	MTO	Standard	8 ft.	8TSNLED-LD4-109SL-RM-UNV-L8XX-CD2-U	10,999	100	109

# **SNLED** Photometrics

#### 4SNLED-LD4-41SL-LW-UNV-L840-CD1-U



Electronic driver
Linear LED 4000K
Spacing criterion: (||) 1.22 x mounting
height, (L) 1.36 x mounting height
Lumens = 4219
Input watts = 35.5W
Efficacy = 118.7 Im/W
Test: 4SNLED-LD4-41SL-LW-UNV-L840-CD1-U.IES

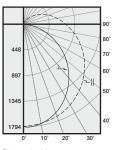
## Coefficients of utilization

	Effe	ctive	e flo	or ca	vity refle	ectar	ıce	20%		
rc	80%				50%			30%	,	
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	115	115	115	115	102	102	102	94	94	94
1	102	96	91	86	85	81	77	78	75	72
2	92	82	74	68	73	67	62	67	62	58
3	83	71	62	55	63	56	51	58	52	48
4	76	63	53	46	56	48	42	51	45	40
5	69	56	46	39	50	42	36	46	39	34
6	64	50	41	34	45	37	31	41	35	30
7	59	45	36	30	40	33	28	38	31	26
8	55	41	32	26	37	30	24	34	28	23
9	51	37	29	23	34	27	22	32	25	21
10	48	34	26	21	31	24	20	29	23	19

#### Zonal lumen summary

Zone	Lumens	% Fixture
0-30	762	18.1
0-40	1262	29.9
0-60	2339	55.4
0-90	3538	83.9
0-180	4219	100.0

#### 8TSNLED-LD4-74SL-LW-UNV-L840-CD1-U



Electronic driver
Linear LED 4000K
Spacing criterion: (||) 1.22 x mounting
height, (⊥) 1.36 x mounting height
Lumens = 7742
Input watts = 73.3W
Efficacy = 105.7 lm/W
Test: 8TSNLED-LD4-74SL-LW-UNV-L840-CD1-U.IES

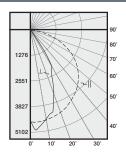
#### Coefficients of utilization

	Effe	Effective floor cavity reflectance						20%		
rc		80	%			50%	D		30%	
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	115	115	115	115	102	102	102	94	94	94
1	102	96	91	86	85	81	77	78	75	72
2	92	82	74	68	73	67	62	67	62	58
3	83	71	62	55	63	56	51	58	52	48
4	76	63	53	46	56	48	42	51	45	40
5	69	56	46	39	50	42	36	46	39	34
6	64	50	41	34	45	37	31	41	35	30
7	59	45	36	30	40	33	28	38	31	26
8	55	41	32	26	37	30	24	34	28	23
9	51	37	29	23	34	27	22	32	25	21
10	48	34	26	21	31	24	20	29	23	19

#### Zonal lumen summary

Zone	Lumens	% Fixture
0-30	1398	18.1
0-40	2316	29.9
0-60	4292	55.4
0-90	6491	83.9
0-180	7742	100.0

## 4SNLED-LD4-62HL-RM-UNV-L840-CD1-U



Electronic driver
Linear LED 4000K
Spacing criterion: (III) 1.22 x mounting
height, (L) 1.36 x mounting height
Lumens = 4219
Input watts = 35.5W
Efficacy = 118.7 Im/W
Test: 45NLED-LD4-62H-RM-UNV-L840-CD1-U.IES

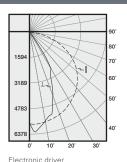
#### Coefficients of utilization

rc		80	0/		,	ty reflectance 20%			30%	
			_	40					_	_
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	119	119	119	119	111	111	111	106	106	106
1	112	108	105	103	102	100	98	98	96	95
2	105	98	93	89	93	89	86	90	87	84
3	98	90	83	78	85	80	76	83	79	75
4	91	82	75	70	78	73	69	76	72	68
5	85	75	68	63	72	66	62	71	65	61
6	80	69	62	57	67	61	56	65	60	56
7	75	64	57	52	62	56	52	61	55	51
8	71	60	53	48	58	52	47	57	51	47
9	67	56	49	44	54	48	44	53	48	44
10	63	52	45	41	51	45	41	50	44	41

Zonal lumen summary

Zone	Lumens	% Fixture	
0-30	3266	50.8	
0-40	4597	71.5	
0-60	6014	93.5	
0-90	6431	100.0	
0-180	6431	100.0	

## 8TSNLED-LD4-78SL-RM-UNV-L840-CD1-U



Linear LED 4000K
Spacing criterion: (II) 1.22 x mounting
height, (L) 1.36 x mounting height
Lumens = 4219
Input watts = 35.5W
Efficacy = 118.7 Im/W
Test 8TSNLED-LD4-785L-RM-UNV-L840-CD1-U.IES

#### Coefficients of utilization

	Effective floor cavity reflectance						20%				
rc		80	%			50%			30%		
rw	70	50	30	10	50	30	10	50	30	10	
RCR											
0	119	119	119	119	11	1 111	111	106	106	106	
1	112	108	105	103	10:	2 100	98	98	96	95	
2	105	98	93	89	93	89	86	90	87	84	
3	98	90	83	78	85	80	76	83	79	75	
4	91	82	75	70	78	73	69	76	72	68	
5	85	75	68	63	72	66	62	71	65	61	
6	80	69	62	57	67	61	56	65	60	56	
7	75	64	57	52	62	56	52	61	55	51	
8	71	60	53	48	58	52	47	57	51	47	
9	67	56	49	44	54	48	44	53	48	44	
10	63	52	45	41	51	45	41	50	44	41	

 Zonal lumen summary

 Zone
 Lumens
 % Fixture

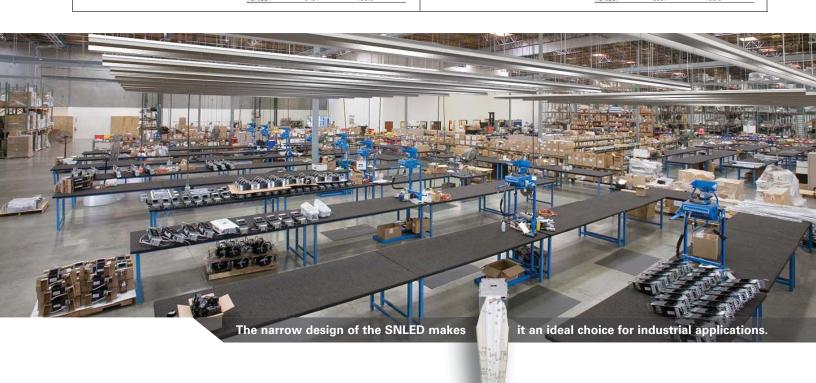
 0-30
 4082
 50.8

 0-40
 5745
 71.5

 0-60
 7517
 93.5

 0-90
 8037
 100.0

 0-180
 8037
 100.0



WAREHOUSE / DISTRIBUTION | MANUFACTURING | GYMNASIUMS / MULTI-PURPOSE ROOMS / ATHLETIC CENTER | BIG BOX / RETAIL



Smart, versatile, efficient. The SWLED is a versatile LED surface, suspended or wall mount luminaire which can be used in a broad range of commercial and industrial applications. This series provides customers with a high quality luminaire utilizing the latest LED, solid state lighting and electronic driver technology for optimal performance and maximized energy efficiency. Offered with three different lens distributions and three different lens options which provides uniform light distribution that is an ideal choice for general purpose lighting where customers want to move away from traditional fluorescent solutions.

## Construction

- Surface, suspended and wall: 4 ft. and 2 ft.
- Depth: Two different options, minimum 4.00"
- Steel housing with high impact polymer end caps
- cULus, damp location rated
- RoHS compliant
- Five-year warranty

#### **Performance**

- Three lens options: LC (clear), LN (semi-frost narrow), LW (full-frost wide)
- Lens offers even illumination
- Excellent performance, ranging up to 117 lm/W
- Energy savings in excess of 50% compared to traditional fluorescent products
- Three correlated color temperatures (3500K, 4000K and 5000K)
- 4 ft.: L70 @ 60,000 hrs., 2 ft.: L70 @ 60,000 hrs.
- Binning: Per ANSI, 3-step MacAdam ellipse







# **Options**

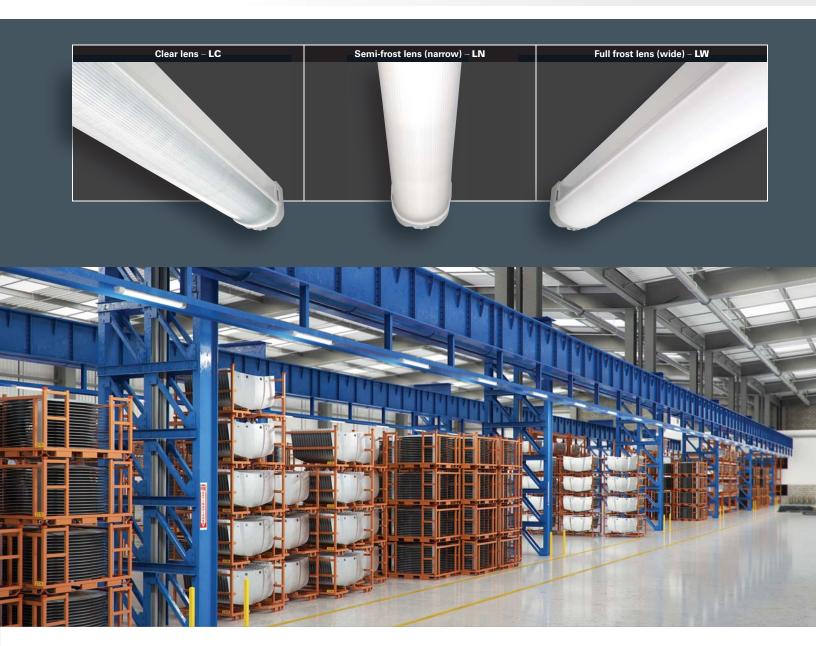
- 16 MTO lumen packages in three different CCTs
- 0 to 10V dimmable driver (standard) with optional DALI solutions and 1% high definition dimming
- Emergency
  - EL7W=7 watt (120V-277V),
  - EL14W=14 watt (120V-277V)
  - 347V-480V (consult factory)
- Convenience outlet is available
- Fuse options available

## **Controls**

- SWLED includes 0-10V (analog) dimming for control using wall dimmers, Greengate Room Controllers, occupancy and/or daylight sensors and lighting controls panels from Eaton.
- SWLED is available with native Fifth Light DALI drivers for complete digital energy management using the capable and scalable Fifth Light controllers and software.







# **Title 24 Compliant**

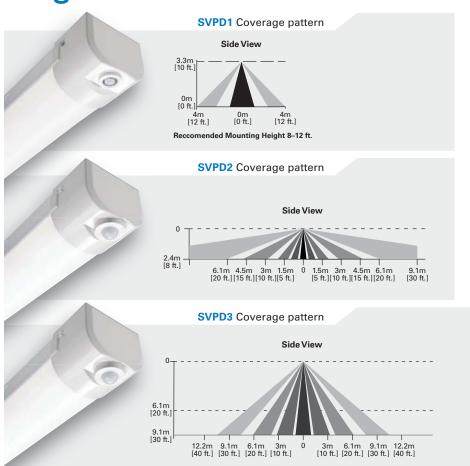
RECOMMENDED APPLICATIONS	Can be used to comply with <b>T24</b> California Non-Residentia Lighting Controls requirements	MEETS AND EXCEEDS TITLE 24 WITH ADDITIONAL CONTROLS					
Warehouse industrial open area	✓	<b>.</b> 110			.1.		
Warehouse aisles	<b>√</b>	<b>7</b>	<b>&gt;</b>		-0-		
Entry, waiting, lobby and storage	<b>✓</b>	Occupancy	Luminaire		Daylighting		
Stairwell, corridor and hallways	<b>√</b>	Sensor	Dimming	X	Control		
Cafeteria, multipurpose and gym	<b>√</b>	Lighting Pov	ver	Tuning			
Restroom vanity	<b>√</b>	Density		Control			

NOTES: 1. Power Adjustment Factor (PAF) available when coupled with controls. See 140.6-A of California Title 24. 2. For more details on Title 24, refer to eaton.com/lightingenergyexperts

# **SWLED** System performance

SWLED performance										
Lens type	Lumen type	Length	Catalog logic	Nominal lumens	Input watts	Efficacy Im/W				
Full frost (LW)	Standard	2 ft.	2SWLED-LD4-8SL-LW-UNV-L8XX-CD1-SVPD2-U	800	10.1	105				
Full frost (LW)	Standard	2 ft.	2SWLED-LD4-16SL-LW-UNV-L8XX-CD1-SVPD2-U	1,600	18.9	99.5				
Full frost (LW)	Standard	2 ft.	2SWLED-LD4-20SL-LW-UNV-L8XX-CD1-SVPD2-U	2,000	23.5	92				
Full frost (LW)	High	2 ft.	2SWLED-LD4-24HL-LW-UNV-L8XX-CD1-SVPD2-U	2,400	24.9	94.5				
Full frost (LW)	High	2 ft.	2SWLED-LD4-28HL-LW-UNV-L8XX-CD1-SVPD2-U	2,800	29.1	89.5				
Full frost (LW)	Standard	4 ft.	4SWLED-LD4-16SL-LW-UNV-L8XX-CD1-SVPD2-U	1,500	12.8	116.7				
Full frost (LW)	Standard	4 ft.	4SWLED-LD4-20SL-LW-UNV-L8XX-CD1-SVPD2-U	2,000	17.6	113.6				
Full frost (LW)	Standard	4 ft.	4SWLED-LD4-28SL-LW-UNV-L8XX-CD1-SVPD2-U	2,800	25.6	109.6				
Full frost (LW)	Standard	4 ft.	4SWLED-LD4-32SL-LW-UNV-L8XX-CD1-SVPD2-U	3,200	30	101.7				
Full frost (LW)	Standard	4 ft.	4SWLED-LD4-36SL-LW-UNV-L8XX-CD1-SVPD2-U	3,600	35.2	102.1				
Full frost (LW)	Standard	4 ft.	4SWLED-LD4-40SL-LW-UNV-L8XX-CD1-SVPD2-U	4,000	40.4	99.1				
Full frost (LW)	High	4 ft.	4SWLED-LD4-44HL-LW-UNV-L8XX-CD1-SVPD2-U	4,400	39.2	112.2				
Full frost (LW)	High	4 ft.	4SWLED-LD4-48HL-LW-UNV-L8XX-CD1-SVPD2-U	4,800	43.3	110.9				
Full frost (LW)	High	4 ft.	4SWLED-LD4-52HL-LW-UNV-L8XX-CD2-SVPD2-U	5,200	46.8	111.0				
Full frost (LW)	High	4 ft.	4SWLED-LD4-56HL-LW-UNV-L8XX-CD2-SVPD2-U	5,600	51.1	109.6				
Full frost (LW)	High	4 ft.	4SWLED-LD4-60HL-LW-UNV-L8XX-CD2-SVPD2-U	6,000	55.5	108.1				
Full frost (LW)	High	4 ft.	4SWLED-LD4-64HL-LW-UNV-L8XX-CD2-SVPD2-U	6,400	60	106.7				
Full frost (LW)	High	4 ft.	4SWLED-LD4-70HL-LW-UNV-L8XX-CD2-SVPD2-U	7,000	69	101.4				

# Integrated sensor



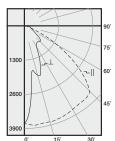
## A Broad Range of Sensor Options

The SWLED is available with a selection of integrated sensors for various applications. The 500 sq. ft. (SVPD1) and 900 sq. ft. (SVPD2) sensors can be used on 8-10 ft. ceilings and walls, while the 1200 sq. ft. (SVPD3) sensor can be used up to 30 ft. All three options feature auto-on occupancy detection, auto-dim to 50%, and daylight harvesting capabilities. Each can be customized using the optional remote control which unlocks additional features as well, such as an energy saver mode and three daylight harvesting modes.



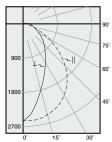
# **SWLED** Photometrics

#### SWLED 4', 4000 lumens (clear lens)



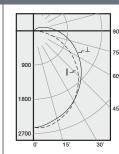
Electronic driver
Linear LED 3500K
Spacing criterion:
(II) 1.5 x mtg height,
(L) 0.3 x mtg height
Lumens = 4909
Input watts = 42.5W
Efficacy = 115.5 lm/W
Test: 4SWLED-LD440SL-LC-UNV-L835CD1-SVPD1-U.IES

#### SWLED 4', 4000 lumens (narrow lens)



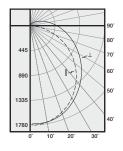
Electronic driver
Linear LED 3500K
Spacing criterion:
(II) 1.3 x mtg height,
(L) 0.7 x mtg height
Lumens = 4692
Input watts = 42.5W
Efficacy = 110.4 lm/W
Test: 4SWLED-LD440SL-LN-UNV-L835CD1-SVPD1-U.IES

#### SWLED 4', 4000 lumens (wide lens)



Electronic driver
Linear LED 3500K
Spacing criterion:
(II) 1.2 x mtg height,
(L) 1.2 x mtg height
Lumens = 973
Input watts = 7W
Efficacy = 139.0 lm/W
Test: 4SWLED-LD440SL-LW-UNV- EL7WL835-CD1-SVPD2-U.IES

#### 4SWLED-LD4-64HL-LW-UNV-L840-CD2-SVPDx



Electronic driver
Linear LED 4000K
Spacing criterion: (II) 1.25 x mounting
height, (L) 1.3 x mounting height
Lumens = 6497
Input watts = 66.4W
Efficacy = 97.9 Im/W
Test: 4SWLED-LD4-64HL-LW-UNV-L840-CD2-SVPDx.IES

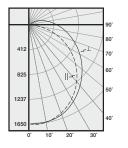
#### Coefficients of utilization

	Effe	Effective floor cavity reflectance								
rc		80	%			50%	,	30%		
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	117	117	117	117	106	106	106	99	99	99
1	104	99	94	89	89	86	82	84	81	78
2	94	85	77	71	77	71	66	72	68	63
3	85	74	65	58	67	60	55	63	57	53
4	78	65	56	49	59	52	46	56	50	45
5	72	58	49	42	53	45	40	50	44	38
6	66	52	43	36	48	40	35	45	39	33
7	61	47	38	32	43	36	30	41	34	30
8	57	43	34	28	40	32	27	38	31	26
9	53	39	31	25	36	29	24	35	28	24
10	50	36	28	23	34	27	22	32	26	21

#### Zonal lumen summary

Zone	Lumens	% Fixture	
0-30	1391	21.4	
0-40	2288	35.2	
0-60	4141	63.7	
0-90	5888	90.6	
0-180	6497	100.0	

#### 4SWLED-LD4-60HL-LW-UNV-L840-CD2-SVPDx



Electronic driver
Linear LED 4000K
Spacing criterion: (||) 1.25 x mounting
height, (L) 1.3 x mounting height
Lumens = 6021
Input watts = 60.4W
Efficacy = 99.7 Im/W
Test: 4SWLED-LD4-60HL-LW-UNV-L840-CD2-SVPDx.IES

## Coefficients of utilization

	Effe	Effective floor cavity reflectance						20%		
rc		80	%			50%	,		30%	
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	117	117	117	117	106	106	106	99	99	99
1	104	99	94	89	89	86	82	84	81	78
2	94	85	77	71	77	71	66	72	68	63
3	85	74	65	58	67	60	55	63	57	53
4	78	65	56	49	59	52	46	56	50	45
5	71	58	49	42	53	45	40	50	44	38
6	66	52	43	36	48	40	35	45	39	33
7	61	47	38	32	43	36	30	41	34	30
8	57	43	34	28	40	32	27	38	31	26
9	53	39	31	25	36	29	24	35	28	24
10	50	36	28	23	34	27	22	32	26	21

Zonal lumen summary

Zone	Lumens	% Fixture	
0-30	1289	21.4	
0-40	2120	35.2	
0-60	3838	63.7	
0-90	5456	90.6	
0-180	6021	100.0	

# Media Center Restrooms / Directory Robert Smith Performance Center

The SWLED is an ideal choice for both

new	construction	on and retr	ofit applic	ations.

2' Lumen maintenance					
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L70 (hours)			
40°C	> 83%	121,000			

4' Lumen maintenance					
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L70 (hours)			
40°C	> 90%	201,000			

Certification data				
cULus - Damp Location	DesignLights Consortium™ Qualified	LM79/LM80 Compliant	RoHS Compliant	NOM Compliant

# SkyBar Single Low bay LED





The SkyBar™ Single Blade, two blade or four blade provides the perfect configuration to fit any high bay or low bay environment. By providing multiple lumen packages and distributions, the SkyBar gives the necessary optical freedom and flexibility to meet the requirements for a wide variety of lighting applications. SkyBar utilizes the advantages of the patented WaveStream™ technology to deliver a stylish LED alternative to traditional high bay lighting for commercial and industrial applications.

## **Performance**

- Multiple lumen packages available. 4 ft.: 3,000, 4,000, 5,000, 6,000, and 7,000 lumens 8 ft.: 6,000, 8,000, 10,000, 12,000, and 14,000 lumens
- High-performance efficacy up to 119 lm/W
- Three correlated color temperatures (3500K, 4000K and 5000K) at typical 85 CRI
- Standard uplight
- Five-year warranty

# Compliance

- LED modules comply with IENSA LM-79 and LM-80 standards
- UL listed, rated for up to 40°C ambient
- RoHS compliant







# **Options**

- Narrow and wide distributions
- Universal (120V-277V) or 347/480V
- Emergency 7 watt and 14 watt options
- Optional reflector shield for downlight only

#### **Controls**

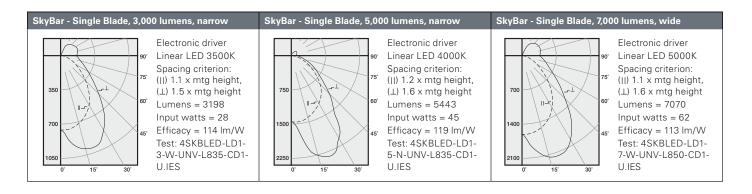
- SkyBar luminaires include (0-10V) dimming drivers for control using wall dimmers (10% - 100%), daylighting sensors and room controllers from Eaton.
- SkyBar luminaires are available with native DALI drivers for complete digital energy management using Fifth Light addressable lighting controls.

fifthliaht

SkyBar - 4 blade, 19,000 lumens				
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L70 (hours)		
40°C	> 83	115,000		

Certification data					
cULus - Damp Location	CSA	LM79/LM80 Compliant	RoHS Compliant	DesignLight™ Consortium Qualified	NOM Compliant

# SkyBar Single Photometrics













# SkyBar High bay LED



The **SkyBar**<sup>TM</sup> series reimagines high bay and low bay lighting with distinctive aesthetics, industry-first uplight and exceptional optical performance. Multiple lumen packages and distributions provide design freedom for a wide variety of lighting applications. With patented WaveStream<sup>TM</sup> technology, SkyBar high bay luminaires deliver a stylish LED alternative to traditional fluorescent lighting in both commercial, retail and industrial environments.

### **Performance**

- Multiple lumen packages available.
   Two-blade: 10,000 and 14,000 lumens
   Four-blade: 19,000, 24,000 and 29,000 lumens
- High-performance efficacy in excess of 100 lm/W
- Three correlated color temperatures (3500K, 4000K and 5000K) at typical 85 CRI
- Uplight in excess of 10%
- Five-year warranty

### **Compliance**

- LED modules comply with IENSA LM-79 and LM-80 standards
- UL listed
- RoHS compliant







### **Options**

- Two-blade (17-1/2" x 50-11/32") and four-blade (22-1/2" x 50-11/32") configurations
- Multiple distributions with field-adjustable blades
- Universal (120V-277V) or 347/480V
- Emergency 10 watt and 20 watt options

### **Controls**

- SkyBar luminaires include (0-10V) dimming drivers for control using wall dimmers (10% - 100%), daylighting sensors and room controllers from Eaton.
- SkyBar luminaires are available with native DALI drivers for complete digital energy management using Fifth Light addressable lighting controls.

# **SkyBar** Application versatility

SkyBar fixture blades can be independently positioned vertically or horizontally, as well as inward or outward facing at 20 degree angles to create many different combinations and unique distributions. The result is a vast array of custom configurations which maximize illumination control and performance. The versatility of the SkyBar series makes it ideal for high bay and low bay applications that require a lighting fixture that delivers up light, a unique aesthetic and superior optical performance.

Application	Uplight	Aesthetics	Optical performance
Warehouse	<b>✓</b>		<b>✓</b>
Distribution centers	<b>✓</b>		<b>✓</b>
Showrooms	<b>✓</b>	<b>✓</b>	<b>✓</b>
Atriums	<b>✓</b>	<b>✓</b>	<b>✓</b>
Convention centers	<b>✓</b>	<b>✓</b>	<b>✓</b>
Big box	<b>✓</b>	<b>✓</b>	<b>✓</b>
Grocery stores	<b>✓</b>	<b>✓</b>	<b>✓</b>
Auditoriums	<b>✓</b>		<b>✓</b>

### Blade adjustment options

- Vertical
- 20° tilt in or out 🚄 🥌
- Horizontal

### Field adjustable blades offer:

- Unique distributions
- Increased uplight
- Customizable fixture performance





Blades rotate up and lock into position for protection during shipment



### Wide distribution optical pattern



### Narrow distribution optical pattern

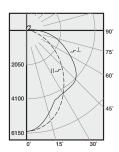


### Narrow distribution optical pattern



### SKBLED-LD1-19-W-UNV-L840-CD2-U

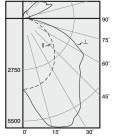
Wide distribution - all blades tilted out 20°



Dimming driver Linear LED 4000K Spacing criterion: (II) 1.1 x mtg height, (⊥) 1.1 x mtg height Lumens = 18959 Input watts = 183 Efficacy = 103 lm/W Test: P24086

### SKBLED-LD1-24-N-UNV-L840-CD4-U

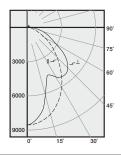
Narrow distribution - outer blades vertical. inner blades horizontal



Electronic driver Linear LED 4000K Spacing criterion: (II) 1.2 x mtg height, (L) 1.8 x mtg height Lumens = 21360 Input watts = 251 Efficacy = 85 lm/W Test: P24061

### SKBLED-LD1-19-N-UNV-L840-CD2-U

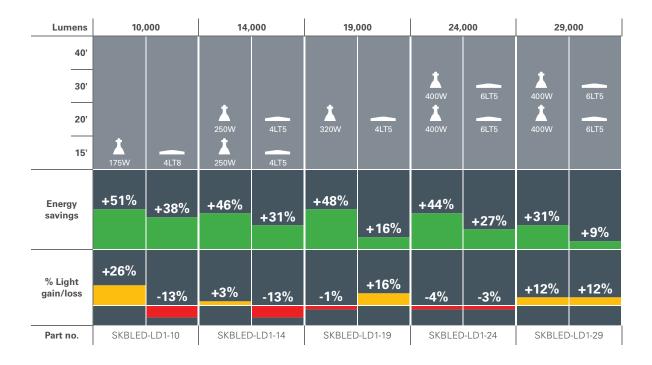
Narrow distribution - all blades tilted out 20°



Dimming driver Linear LED 4000K Spacing criterion: (II) 1.1 x mtg height, ( $\perp$ ) 0.7 x mtg height Lumens = 19055 Input watts = 183 Efficacy = 104 lm/W Test: P24064

# **SkyBar** System performance

SKBLED performance				
Catalog number	Description	Delivered lumens	Input watts	Efficacy Im/W
SKBLED-LD1-10-N-UNV-L840-CD1-U	4ft. SkyBar, 10,000 lumen, narrow, UNV, 4000K, dimming	9,861	94	105
SKBLED-LD1-10-W-UNV-L840-CD1-U	4ft. SkyBar, 10,000 lumen, wide, UNV, 4000K, dimming	9,713	94	103
SKBLED-LD1-14-N-UNV-L840-CD2-U	4ft. SkyBar, 14,000 lumen, narrow, UNV, 4000K, dimming	14,336	152	94
SKBLED-LD1-14-W-UNV-L840-CD2-U	4ft. SkyBar, 14,000 lumen, wide, UNV, 4000K, dimming	14,121	152	93
SKBLED-LD1-19-N-UNV-L840-CD2-U	4ft. SkyBar, 19,000 lumen, narrow, UNV, 4000K, dimming	19,152	183	105
SKBLED-LD1-19-W-UNV-L840-CD2-U	4ft. SkyBar, 19,000 lumen, wide, UNV, 4000K, dimming	18,865	183	103
SKBLED-LD1-24-N-UNV-L840-CD4-U	4ft. SkyBar, 24,000 lumen, narrow, UNV, 4000K, dimming	24,797	251	99
SKBLED-LD1-24-W-UNV-L840-CD4-U	4ft. SkyBar, 24,000 lumen, wide, UNV, 4000K, dimming	24,425	251	97
SKBLED-LD1-29-N-UNV-L840-CD4-U	4ft. SkyBar, 29,000 lumen, narrow, UNV, 4000K, dimming	29,188	313	93
SKBLED-LD1-29-W-UNV-L840-CD4-U	4ft. SkyBar, 29,000 lumen, wide, UNV, 4000K, dimming	28,750	313	92



SkyBar - 4 blade, 19,000 lumens								
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L70 (hours)						
40°C	> 83	115,000						

SkyBar - 4 blade, 24,000 lumens									
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L80 (hours)							
40°C	> 87	110,000							

Certification data					
cULus - Damp Location	CSA	LM79/LM80 Compliant	RoHS Compliant	DesignLight™ Consortium Qualified	NOM Compliant

39

# **SkyBar** Photometrics

### SkyBar - 2 blade narrow, 10,000 lumens SkyBar - 2 blade wide, 10,000 lumens SkyBar - 4 blade narrow, 19,000 lumens Electronic driver Electronic driver Electronic driver Linear LED 4000K Linear LED 4000K Linear LED 4000K Spacing criterion: Spacing criterion: Spacing criterion: (II) 1.2 x mtg height, (II) 1.2 x mtg height, (II) 1.2 x mtg height, 1400 (⊥) 1.6 x mtg height ( $\perp$ ) 1.6 x mtg height ( $\perp$ ) 1.6 x mtg height Lumens = 9861 Lumens = 9701 Lumens = 19152 Input watts = 94 Input watts = 94 Input watts = 183 Efficacy = 105 lm/W Efficacy = 103 lm/W Efficacy = 105 lm/W Test: SKBLED-LD1-Test: SKBLED-LD1-Test: SKBLED-LD1-10-N-UNV-L840-10-W-UNV-L840-19-N-UNV-L840-CD1-U.IES CD1-U.IES CD2-U.IES SkyBar - 4 blade wide, 19,000 lumens SkyBar - 4 blade narrow, 29,000 lumens SkyBar - 4 blade narrow, 24,000 lumens Electronic driver Electronic driver Electronic driver Linear LED 4000K Linear LED 4000K Linear LED 4000K Spacing criterion: Spacing criterion: Spacing criterion: (II) 1.2 x mtg height, (II) 1.2 x mtg height, (II) 1.2 x mtg height, (⊥) 1.6 x mtg height ( $\perp$ ) 1.6 x mtg height (⊥) 1.6 x mtg height Lumens = 18964 Lumens = 24797 Lumens = 29188 Input watts = 183 Input watts = 251 Input watts = 313Efficacy = 105 lm/W Efficacy = 99 lm/W Efficacy = 93 lm/W Test: SKBLED-LD1-Test: SKBLED-LD1-Test: SKBLED-LD1-19-W-UNV-L840-24-N-UNV-L840-29-N-UNV-L840-5850 CD2-U.IES CD4-U.IES CD4-U.IES



# VT2-LD4 Vaportite LED

### FOOD PROCESSING



The Vaportite LED series is an energy-efficient industrial vaportite fixture that features rugged and durable construction. The Vaportite LED incorporates a full metal fixture liner inside a reinforced fiberglass housing with a high impact diffuser. The series is designed for maximum operation in commercial institutional and industrial environments for both interior and exterior applications.

### Construction

- Reinforced fiberglass housing with high-impact diffuser
- cULus wet location, IP65 and NSF (4 ft. housing)
- RoHS compliant
- Wet location listed

### **Performance**

- High efficacy up to 130 lm/W
- Three CCT colors: 3500K, 4000K, 5000K
- Typical CRI: 85
- Medium and wide distributions
- L84 at 60,000 hours
- -20°C to 35°C ambient rating







### **Options**

- Eight standard lumen packages and three housing sizes
  - 2': 2,000 and 3,000 lumen
  - 4': 4,000, 6,000, and 8,000 lumen
  - 8': 9,000, 12,000, and 16,000 lumen
- Three lensing options
- Fifth Light DALI

### **Controls**

- Includes 0-10V (analog) dimming for control using Eaton wall dimmers, Greengate Room Controllers, occupancy and/or daylight sensors and lighting controls panels.
- · Available with native Fifth Light DALI drivers for complete digital energy management using the capable and scalable Fifth Light controllers and software.



# VT2-LD4 with lighting controls

### **Greengate integrated solutions**

Greengate lighting controls from Eaton's Lighting Solutions integrate easily with Metalux utility LED Series luminaires. Luminaires include standard 0-10V continuous dimming drivers for easy and flexible integration with lighting control panels, occupancy sensors, daylighting controls and room controllers. Greengate lighting control products combine energy-savings and maintenance-free technology to deliver the most reliable, cost-effective energy management solutions on the market.





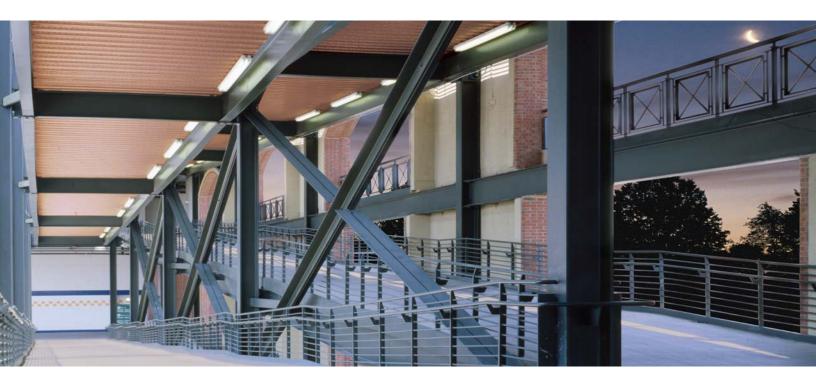






# VT2-LD4 System performance

VT2-LD4 performance				
Catalog number	Description	Delivered lumens	Input watts	Efficacy Im/W
2VT2-LD4-3-DR-UNV-L840-CD1-WL-U	2 ft. vaportite, LED, 3,000 lumen, DR lens	3,616	27.7	131
2VT2-LD4-3-DR-UNV-L850-CD1-WL-U	2 ft. vaportite, LED, 3,000 lumen, DR lens	3,825	27.7	138
4VT2-LD4-4-DR-UNV-L840-CD1-WL-U	4 ft. vaportite, LED, 4,000 lumen, DR lens	4,529	38.1	119
4VT2-LD4-4-DR-UNV-L850-CD1-WL-U	4 ft. vaportite, LED, 4,000 lumen, DR lens	4,788	38.1	126
4VT2-LD4-6-DR-UNV-L840-CD1-WL-U	4 ft. vaportite, LED, 6,000 lumen, DR lens	6,023	56.2	107
4VT2-LD4-6-DR-UNV-L850-CD1-WL-U	4 ft. vaportite, LED, 6,000 lumen, DR lens	6,370	56.2	113
4VT2-LD4-8-FR50-UNV-L840-CD1-WL-U	4 ft. vaportite, LED, 8,000 lumen, FR50 lens	8,758	81.1	108
4VT2-LD4-8-FR50-UNV-L850-CD1-WL-U	4 ft. vaportite, LED, 8,000 lumen, FR50 lens	9,262	81.1	114
8VT2-LD4-9-DR-UNV-L840-CD1-WL-U	8 ft. vaportite, LED, 9,000 lumen, DR lens	10,605	105.2	101
8VT2-LD4-9-DR-UNV-L850-CD1-WL-U	8 ft. vaportite, LED, 9,000 lumen, DR lens	11,211	105.2	107
8VT2-LD4-12-DR-UNV-L840-CD2-WL-U	8 ft. vaportite, LED, 12,000 lumen, DR lens	12,199	114.6	106
8VT2-LD4-12-DR-UNV-L850-CD2-WL-U	8 ft. vaportite, LED, 12,000 lumen, DR lens	12,905	114.6	113
8VT2-LD4-16-FR50-UNV-L840-CD2-WL-U	8 ft. vaportite, LED, 16,000 lumen, FR50 lens	17,516	162.2	108
8VT2-LD4-16-FR50-UNV-L850-CD2-WL-U	8 ft. vaportite, LED, 16,000 lumen, FR50 lens	18,525	162.2	114



VT2-LD4		
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L70 (hours)
25°C	> 91	247,000

Certification data						
cULus - Damp Location	CSA	IC Rated	LM79/LM80 Compliant	RoHS Compliant	DesignLight <sup>™</sup> Consortium Qualified	NOM Compliant

### 2VT2-LD4-3-DR-UNV-L840-CD1-WL-U

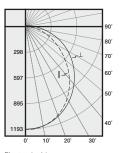
Flectronic driver Linear LED 4000K Spacing criterion: (II) 1.29 x mounting height, (1) 1.26 x mounting height Lumens = 3616 Input watts = 27.7W Efficacy = 130.5 lm/W Test: 2VT2-LD4-3-DR-UNV-L840-CD1-WI-LLIES

### Coefficients of utilization

	Effe	ctive	20%						
rc		80	%		50	1%		30%	
rw	70	50	30	10	50 3	0 10	50	30	10
RCR									
0	118	118	118	118	110 11	0 110	105	105	105
1	108	103	98	94	96 9	2 89	91	89	86
2	98	89	82	76	83 7	8 73	80	75	71
3	89	78	70	63	73 6	7 61	70	64	60
4	81	69	60	53	65 5	8 52	62	56	51
5	75	62	53	46	58 5	1 45	56	49	44
6	69	56	47	40	52 4	5 39	51	44	39
7	64	50	41	35	48 4	0 35	46	39	34
8	60	46	37	31	44 3	6 31	42	35	31
9	56	42	34	28	40 3	3 28	39	32	28
10	52	39	31	26	37 3	0 25	36	30	25

Zonal lumen summary Zone 0-30 Lumens % Fixture 943 26.1 0-40 0-60 2728 75.4 0-90 0-180 3616

### 2VT2-LD4-3-FR50-UNV-L840-CD1-WL-U



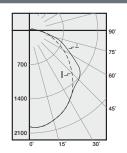
Electronic driver Linear LED 4000K Spacing criterion: (II) 1.21 x mounting height, (1) 1.25 x mounting height Lumens = 3550 Input watts = 27.7W Ffficacy = 128.1 lm/W Test: 2VT2-LD4-3-FR50-UNV-L840-CD1-WI-LLIES

### Coefficients of utilization

	Effe	Effective floor cavity reflectance								
rc		80	%			50%	Ď		30%	
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	118	118	118	118	109	109	109	104	104	104
1	107	102	97	93	94	91	88	90	87	84
2	97	88	81	75	82	77	72	78	74	70
3	88	77	69	62	72	65	60	69	63	59
4	81	69	60	53	64	57	51	61	55	50
5	74	61	52	45	57	50	44	55	48	43
6	69	55	46	40	52	44	39	50	43	38
7	64	50	41	35	47	40	34	45	39	34
8	59	46	37	31	43	36	31	42	35	30
9	55	42	34	28	40	33	28	38	32	27
10	52	39	31	25	37	30	25	36	29	25

Zonal lumen summary Zone 0-30 Lumens % Fixture 25.9 919 0-40 0-60 2598 0-90 3427 0-180

### 4VT2-LD4-6-DR-UNV-L835-CD1-U



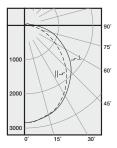
Electronic driver Linear LED 3500K Spacing criterion: (II) 1.2 x mounting height, ( $\perp$ ) 1.2 x mounting height Lumens = 5882 Input watts = 56W Efficacy = 104.7 lm/W Test: 4VT2-LD4-6-DR-UNV-L835-CD1-U.IES

### Coefficients of utilization

	Епте			or cav		y reflectance				
rc		80	%			50%	)		30%	)
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	119	119	119	119	110	110	110	105	105	105
1	108	103	98	94	96	93	90	92	89	87
2	98	89	82	76	84	78	73	80	75	71
3	89	78	70	63	73	67	61	70	65	60
4	81	69	60	53	65	58	52	62	56	51
5	75	62	52	46	58	51	45	56	49	44
6	69	55	46	40	52	45	39	51	44	39
7	64	50	41	35	48	40	35	46	39	34
8	59	46	37	31	44	36	31	42	35	31
9	56	42	34	28	40	33	28	39	32	28
10	52	39	31	25	37	30	25	36	30	25

Zonal lumen summary Zone Lumens % Fixture 0-30 26.1 0-40 0-60 4463 5804 98.7 0-90 0-180

### 4VT2-LD4-8-FR50-UNV-L835-CD1-U



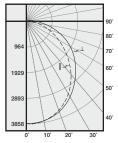
Electronic driver Linear LED 3500K Spacing criterion: (II) 1.2 x mounting height, (1) 1.2 x mounting height Lumens = 5882 Input watts = 56W Efficacy = 104.7 Im/W Test: 4VT2-LD4-8-FR50-UNV-L835-CD1-U.IES

### efficients of utilization

Coem	ICIE	HILS	0	uı	IIIzati	OII				
	Effe	ctive	flo	or ca	vity refle	ctar	ice	20%		
rc		80	%			50%	,		30%	
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	118	118	118	118	109	109	109	104	104	104
1	107	102	97	93	94	91	87	90	87	84
2	97	88	81	75	82	76	72	78	73	69
3	88	77	69	62	72	65	60	69	63	58
4	81	68	59	53	65	57	51	61	55	50
5	74	61	52	45	57	50	44	55	48	43
6	69	55	46	39	52	44	38	50	43	38
7	64	50	41	35	47	40	34	45	39	34
8	59	46	37	31	43	36	30	42	35	30
9	55	42	34	28	40	32	27	38	32	27
10	52	39	31	25	37	30	25	36	29	25

Zonal lumen summary Zone Lumens % Fixture 0-30 0-40 0-60 96.4 0-90 8248 100.0 0-180

### 8VT2-LD4-12-FR50-UNV-L835-CD1-U



Linear LED 3500K Spacing criterion: (II) 1.2 x mounting height, (1) 1.2 x mounting height Lumens = 11546 Input watts = 114.6W Efficacy = 100.8 lm/W Test: 8VT2-LD4-12-FR50-UNV-L835-CD1-U.IES

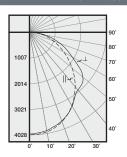
### Coefficients of utilization

	Effe	ctive	flo	or cav	vity ref	ectai	nce	20%		
rc		80	%			50%	D		30%	
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	118	118	118	118	109	109	109	104	104	104
1	107	102	97	93	94	91	87	90	87	84
2	97	88	81	75	82	76	72	78	73	69
3	88	77	69	62	72	65	60	69	63	58
4	81	68	59	53	64	57	51	61	55	50
5	74	61	52	45	57	50	44	55	48	43
6	69	55	46	39	52	44	38	50	43	38
7	64	50	41	35	47	40	34	45	39	34
8	59	46	37	31	43	36	30	42	35	30
9	55	42	34	28	40	32	27	38	32	27
10	52	39	31	25	37	30	25	35	29	25

Zonal lumen summary

Zone	Lumens	% Fixture	
0-30	2970	25.7	
0-40	4821	41.8	
0-60	8405	72.8	
0-90	11138	96.5	
0-180	11546	100.0	

### 8VT2-LD4-12-DR-UNV-L835-CD1-U



Linear LED 3500K Spacing criterion: (II) 1.2 x mounting height, (1) 1.2 x mounting height Lumens = 11764 Input watts = 112.4W Efficacy = 104.7 lm/W Test: 8VT2-LD4-12-DR-UNV-L835-CD1-U.IES

### Coefficients of utilization

	Effe	ctive	flo	or ca	vity refle	ectai	nce	20%		
rc		80	%			50%	Ď		30%	
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	119	119	119	119	110	110	110	105	105	105
1	108	103	98	94	96	93	90	92	89	87
2	98	89	82	76	84	78	73	80	75	71
3	89	78	70	63	73	67	61	70	65	60
4	81	69	60	53	65	58	52	62	56	51
5	75	62	52	46	58	51	45	56	49	44
6	69	55	46	40	52	45	39	51	44	39
7	64	50	41	35	48	40	35	46	39	34
8	59	46	37	31	44	36	31	42	35	31
9	56	42	34	28	40	33	28	39	32	28
10	52	39	31	25	37	30	25	36	30	25

Zonal lumen summary % Fixture Zone Lumens 0-30 0-40 4980 42.3 0-60 0-90 11608 98.7 0-180 11764 100.0

# VT4 LED Vaportite LED

MANUFACTURING FOOD PROCESSING



VT4 LED delivers efficient performance in a rugged design. Utilizing a robust heat management system, the VT4 LED series is suitable for interior and exterior applications and can be chain, cable or stem mounted. Designed for maximum operation in commercial institutional and industrial high bay environments where weathering, humidity and dust or corrosive fumes are present.

### Construction

- Reinforced fiberglass housing with high-impact diffuser
- cULus wet Location
- IP65 and IP67 up to 1500 PSI hose down rating
- NSF NEMA 4x
- RoHS Compliant

### **Performance**

- High efficacy up to 125 lm/W
- Two CCT colors: 4000K and 5000K
- Typical CRI: 85
- NSF certified
- NEMA 4x, IP67 up to 1500 PSI hose down rating
- -20°C to 40°C ambient rating



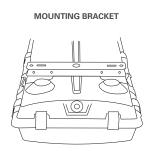
### **Options**

- Five lumen package options ranging from 11,000 - 28,000
- Clear and frosted lens options
- Chain, cable or stem mounting options
- Optional 0-10V dimming driver
- Optional stainless steel hardware



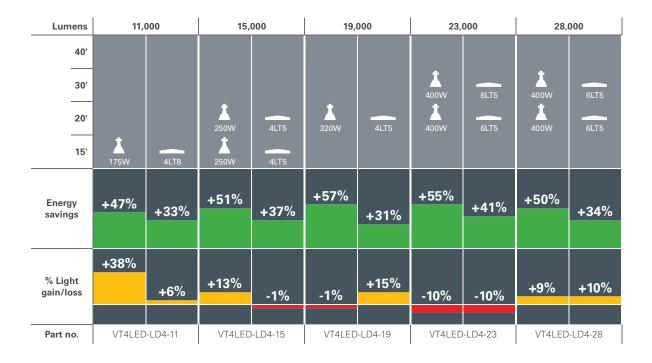
# VT4 LED Installation





# **VT4-LED** Photometrics

VT4LED performance	T4LED performance						
Catalog number	Description	Delivered lumens	Input watts	Efficacy Im/W			
VT4LED-LD4-11-DR-UNV-L850-CD1-WL-U	4 ft. vaportite, LED, 11,000 lumen, clear acrylic, UNV, 5000K, dimming, wet	11,796	104	113			
VT4LED-LD4-11-DRF-UNV-L850-CD1-WL-U	4 ft. vaportite, LED, 11,000 lumen, frosted acrylic, UNV, 5000K, dimming, wet	11,595	102	113			
VT4LED-LD4-15-DR-UNV-L850-CD2-WL-U	4 ft. vaportite, LED, 15,000 lumen, clear acrylic, UNV, 5000K, dimming, wet	15,951	138	115			
VT4LED-LD4-15-DRF-UNV-L850-CD2-WL-U	4 ft. vaportite, LED, 15,000 lumen, frosted acrylic, UNV, 5000K, dimming, wet	15,681	138	113			
VT4LED-LD4-19-DR-UNV-L850-ED2-WL-U	4 ft. vaportite, LED, 19,000 lumen, clear acrylic, UNV, 5000K, fixed output, wet	19,056	151	126			
VT4LED-LD4-19-DRF-UNV-L850-ED2-WL-U	4 ft. vaportite, LED, 19,000 lumen, frosted acrylic, UNV, 5000K, fixed output, wet	18,734	152	123			
VT4LED-LD4-23-DR-UNV-L850-CD2-WL-U	4 ft. vaportite, LED, 23,000 lumen, clear acrylic, UNV, 5000K, dimming, wet	23,310	204	114			
VT4LED-LD4-23-DRF-UNV-L850-CD2-WL-U	4 ft. vaportite, LED, 23,000 lumen, frosted acrylic, UNV, 5000K, dimming, wet	22,916	204	112			
VT4LED-LD4-28-DR-UNV-L850-ED3-WL-U	4 ft. vaportite, LED, 28,000 lumen, clear acrylic, UNV, 5000K, fixed output, wet	28,316	226	125			
VT4LED-LD4-28-DRF-UNV-L850-ED3-WL-U	4 ft. vaportite, LED, 28,000 lumen, frosted acrylic, UNV, 5000K, fixed output, wet	27,838	227	123			

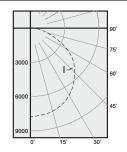


VT4-LED		
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L70 (hours)
25°C	> 91	247,000

Certification data						
cULus - Damp Location	CSA	IC Rated	LM79/LM80 Compliant	RoHS Compliant	DesignLight <sup>™</sup> Consortium Qualified	NOM Compliant

# VT4-LED Ordering information

### VT4LED-LD4-23-DR-UNV-L850-CD2



Electronic driver
Linear LED 5000K
Spacing criterion: (||) 1.3 x mounting
height, (⊥) 1.3 x mounting height
Lumens = 22895
Input watts = 204W
Efficacy = 114.2 Im/W
Test: VT4LED-LD4-23-DR-UNV-L850-CD2.IES

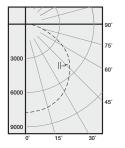
### Coefficients of utilization

	Effe	ctive	e flo	or ca	vity reflects	ance	20%		
rc		80	%		50	%		30%	
rw	70	50	30	10	50 30	10	50	30	10
RCR									
0	119	119	119	119	110 11	0 110	105	105	105
1	108	103	99	95	96 93	3 90	92	89	87
2	98	90	83	77	84 79	74	80	76	72
3	89	79	71	64	74 67	7 62	71	65	61
4	82	70	61	54	66 58	3 53	63	57	52
5	75	62	53	47	59 51	46	57	50	45
6	69	56	47	41	53 45	5 40	51	44	39
7	64	51	42	36	48 41	35	47	40	35
8	60	46	38	32	44 37	7 31	43	36	31
9	56	42	34	29	40 33	3 28	39	33	28
10	52	39	31	26	37 30	26	36	30	25

### Zonal lumen summary

Zone	Lumens	% Fixture	
0-30	6129	26.3	
0-40	10135	43.5	
0-60	17947	77.0	
0-90	22895	98.2	
0-180	23310	100.0	

### VT4LED-LD4-23-DRF-UNV-L850-CD2



Electronic driver
Linear LED 5000K
Spacing criterion: (||) 1.3 x mounting
height, (L) 1.31 x mounting height
Lumens = 22172
Input watts = 204W
Efficacy = 112.2 Im/W
Test: VT4LED-LD4-23-DRF-UNV-L850-CD2.IES

### Coefficients of utilization

	Effe	ctive	flo	or cav	ity refle	ectar	ıce	20%		
rc		80	%			50%	,		30%	
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	118	118	118	118	109	109	109	104	104	104
1	108	103	98	94	95	92	89	91	88	85
2	98	89	82	77	83	78	73	79	75	71
3	89	79	70	64	73	67	61	70	65	60
4	82	70	61	54	65	58	52	62	56	51
5	75	62	53	47	58	51	45	56	50	45
6	69	56	47	41	53	45	40	51	44	39
7	64	51	42	36	48	41	35	46	40	35
8	60	46	38	32	44	37	31	42	36	31
9	56	43	34	29	40	33	28	39	33	28
10	52	39	31	26	37	31	26	36	30	25

 Zonal lumen summary

 Zone
 Lumens
 % Fixture

 0-30
 6113
 26.7

 0-40
 10007
 43.7

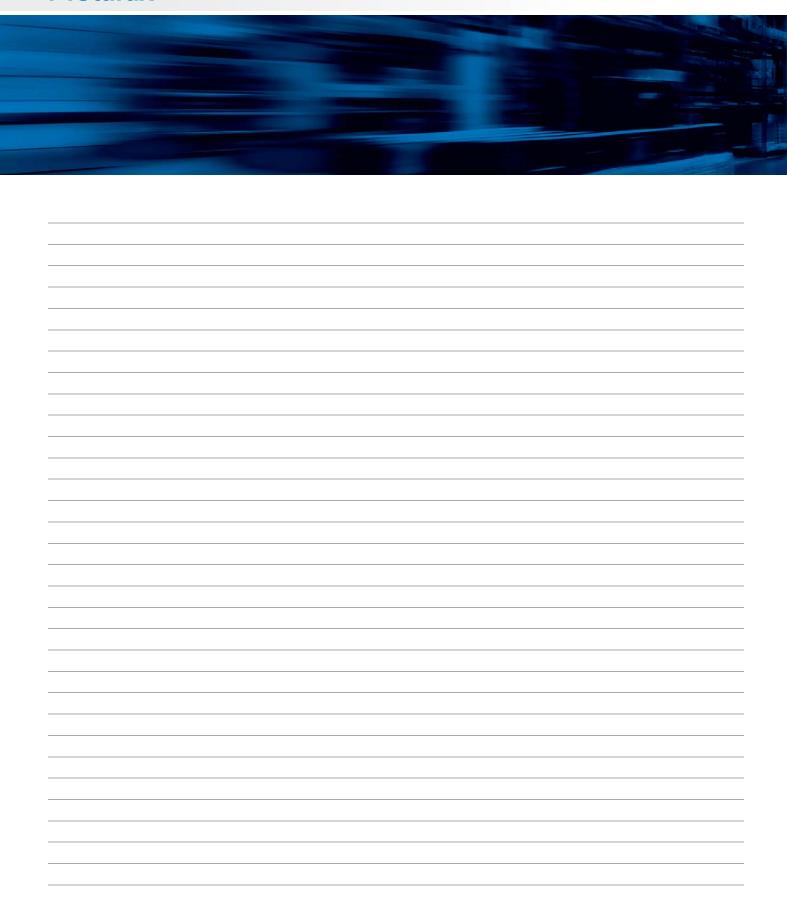
 0-60
 17317
 75.6

 0-90
 22172
 96.8

 0-180
 22914
 100.0



# Metalux Industrial LED



49







# Metalux Industrial LED

### **Industrial LED lighting solutions**

Metalux ambient lighting solutions offer a complete family of LED lighting and controls products for a wide variety of applications. Industrial and commercial properties are comprised of an extensive range of individual spaces that require a unique combination of luminaires and lighting controls to meet specific lighting needs. Whether lighting the complex environment of a manufacturing facility or the customercentric experience at your local grocery store, Metalux offers a complete family of innovative and energy saving LED solutions for your next project.

# Table of contents

### Metalux

Integrated industrial solutions . . . . 3 - 4





**HBLED** High bay LED. . . . . . . . . . . . . 5 - 8



**SNLED** Linear LED striplight . . . . . . . . 27 - 30



Steeler LED High bay LED. . . . . . . . . . . . . 9 - 12



**SWLED** Surface and wall LED . . . . . . . . 31 - 34



**TBLED** 



SkyBar single 



Industrial LED linear bay 



SkyBar 



Visium Commercial / Industrial LED . . . 21 - 24



VT2-LD4 Vaportite LED . . . . . . . . . . . . . . . . . . 41 - 44



**Altus** Commercial / Industrial LED . . . 25 - 26



VT4 LED 



# **Applications** Industrial LED

### Warehouse / Distribution

The Metalux product line of industrial LED fixtures is designed to enhance safety and productivity in your warehouse and distribution facility while also reducing your energy expense. Metalux's industrial LED solutions deliver highly uniform light and a long life to dramatically reduce the need to perform maintenance which requires additional labor costs and safety concerns.



### Food processing

Visibility, sanitation and temperature control are all critical considerations in a food processing facility. Metalux industry-leading Vaportite LED fixtures deliver exceptional lumen levels, enclosed lighting elements and a significantly reduced heat output when compared to non-LED fixtures.



### **Manufacturing**

Manufacturing facilities require systems that can perform continuously and sometimes under harsh conditions. Metalux LED industrial products are designed to support a safe and productive manufacturing environment while providing the flexibility to meet today's regulatory and environmental challenges.



### Big box retail

Big box retail applications require light distribution and lumen output similar to high bay applications while enhancing the appeal of the products being sold. The Metalux product line helps to maximize the customer experience by providing optimal visual comfort while showcasing the merchandise within the space.



### **Gymnasium**

Wide open, high ceiling areas that are common to gymnasiums and multi-purpose facilities present a unique challenge for lighting systems. The lighting fixtures and their application can be the difference in a poorly lit and energy hungry facility; or an energy efficient but uniformly lit space. Metalux LED industrial fixtures are designed to properly light the space with the fewest number of fixtures required, while being rugged enough to withstand impact from mobile sporting equipment.



### Grocery

Retail spaces with lower ceiling heights and higher architectural appeal require fixtures that provide the proper balance of form and function. Whether illuminating aisle ways and shelves or highlighting the vibrant colors in the produce department, Metalux products deliver a variety of lumen packages and color temperature options to highlight merchandise while enhancing the overall customer experience.



## Metalux Integrated industrial control solutions



### Metalux LED controls compatibility



### Analog dimming on-board

- Standard feature
- Works with 0-10V dimmers and sensors
- Integrated sensor system compatible

### Digital dimming on-board

- Fully addressable with Fifth Light systems
- Digital, 2-wire bus and controls

### Platform provides flexible control solutions

### Integrated sensor system applications



### Scalable controls solutions









### Integrated sensor controls

Integrated solutions optimized to meet energy codes for occupancy sensing and daylight harvesting.

- Reduces design time and complexity
- Guaranteed coverage
- Lowest installed cost for both technologies

### **Local controls**

Full range of code-compliant solutions from wallbox and ceiling sensors to the room controller system.

- Familiar and easy to use
- Integrates easily with standard 0-10V drivers

### System wide controls

Fifth Light offers fully addressable control for maximum flexibility

- Two-way communication with native DALI drivers
- Lighting Management Software for complete system-wide control

### Eaton offers solutions at all levels

# **Applications** Integrated sensor system

### Integrated sensor system - available now



### **Values**

- No new wiring to meet code: One electrical connection to make.
- Fully integrated design: sensor is factory pre-wired.
- No commissioning required: default settings meet most basic energy codes.
- Optional remote allows easy adjustment and user control
- Worry-free controls planning the sensor coverage overlaps typical lighting spacing.

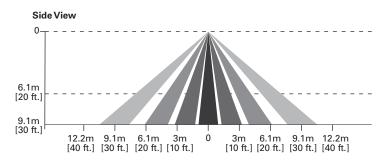
ISHH-01

**Programming** 

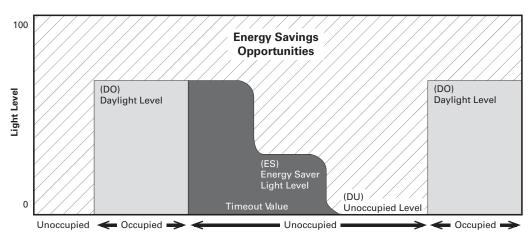
### **Programming remote**

Remote controls allow easy access to features of luminaire. Broadcast control allows one or more fixtures in line of sight to be controlled at once.

### Integrated sensor - coverage



### **Compatible with EM options**



Factory default levels can be found on luminaire spec sheets or consult your local Eaton representative.

ISHH-02 Local Control

WAREHOUSE / DISTRIBUTION | MANUFACTURING | GYMNASIUMS / MULTI-PURPOSE ROOMS / ATHLETIC CENTER | BIG BOX / RETAIL



The **HBLED** is the lighting solution for a wide variety of applications and mounting heights. Precision-designed optics, multiple distributions, and a choice of lumen outputs and color temperatures make the energy-efficient HBLED the ideal solution for industrial, commercial and other high bay applications.

### **Performance**

- Six lumen package options (12,000, 18,000, 24,000, 30,000, 36,000 and 48,000)
- Two correlated temperatures (4,000K and 5,000K)
- 85 CRI
- L84 at > 60,000 hours (at 55°C)
- High efficacy up to 129 lm/W
- Tool-less driver access for easy maintenance
- Precision optics narrow and wide distribution
- Optional 0-10V dimming driver (15% 100%)
- Multiple lens and wireguard options
- Five-year warranty

### Compliance

- cULus listed for damp location
- 55° ambient rating
- RoHS compliant
- DLC qualified







### **Features and benefits**

### • LED Platform

The proprietary low-power, low-brightness LED module assembly offers exceptional optical performance.

### Controllable

Offers control flexibility and easy integration with optional 0-10V continuous dimming driver, providing additional energy savings when utilizing sensors. Available with native Fifth Light DALI drivers for complete digital energy management using the capable and scalable Fifth Light controllers and software.

### Mounting

Choose from a variety of mounting methods, including pendant, chain, toggle, hook and loop. Suited for suspension mounting with optional wire hook and chain set or cable mounting. Single monopoint mounting also available with SPM tong hanger.

### Mounting options HBAYC-CHAIN/SET/U=Hook HBL-SPM=Single monopoint FH-1=2-1/2 Y-Toggle=Mounting hanger w/hub (galvanized) fixture hook fixture loop style mounting chain set toggle and cable



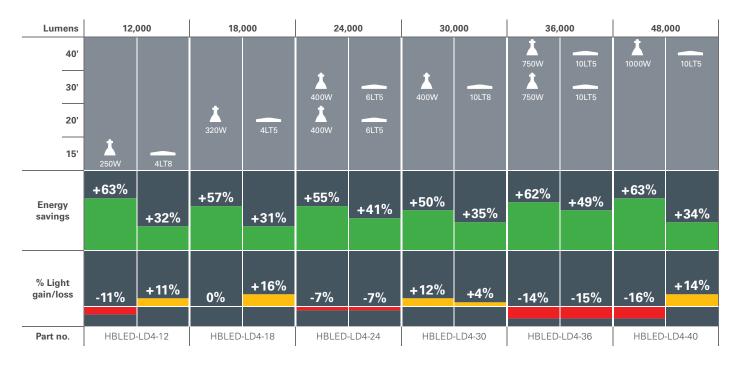
# **HBLED** Shielding options

Door frame and lens assembly are available for more demanding environments.



# **HBLED** System performance

HB LED performance				
Catalog number	Description	Delivered lumens	Input watts	Efficacy Im/W
HBLED-LD4-12-W-UNV-L850-ED1-U	Wide distribution, 12,000 lumens, UNV, 5000K, fixed output	12,505	104	120
HBLED-LD4-12-N-UNV-L850-ED1-U	Narrow distribution, 12,000 lumens, UNV, 5000K, fixed output	12,156	104	117
HBLED-LD4-18-W-UNV-L850-ED2-U	Wide distribution, 18,000 lumens, UNV, 5000K, fixed output	19,358	152	127
HBLED-LD4-18-N-UNV-L850-ED2-U	Narrow distribution, 18,000 lumens, UNV, 5000K, fixed output	18,818	152	124
HBLED-LD4-24-W-UNV-L850-ED2-U	Wide distribution, 24,000 lumens, UNV, 5000K, fixed output	24,002	203	118
HBLED-LD4-24-N-UNV-L850-ED2-U	Narrow distribution, 24,000 lumens, UNV, 5000K, fixed output	23,332	203	115
HBLED-LD4-30-W-UNV-L850-ED3-U	Wide distribution, 30,000 lumens, UNV, 5000K, fixed output	29,302	228	129
HBLED-LD4-30-N-UNV-L850-ED3-U	Narrow distribution, 30,000 lumens, UNV, 5000K, fixed output	28,483	228	125
HBLED-LD4-36-W-UNV-L850-ED3-U	Wide distribution, 36,000 lumens, UNV, 5000K, fixed output	35,944	307	117
HBLED-LD4-36-N-UNV-L850-ED3-U	Narrow distribution, 36,000 lumens, UNV, 5000K, fixed output	34,941	307	114
HBLED-LD4-48-N-UNV-L850-ED4-U	Narrow distribution, 48,000 lumens, UNV, 5000K, fixed output	46,312	401	115
HBLED-LD4-48-W-UNV-L850-ED4-U	Wide distribution, 48,000 lumens, UNV, 5000K, fixed output	48,108	402	120



20" x 48" Lumen maintenance					
Ambient temperature	TM-21 Lumen maintenance (60,000 hours)	Theoretical L70 (hours)			
55°C	> 84%	> 142,000			

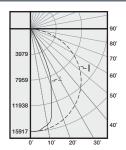
Ambient ratings					
Lumen package	Ambient rating	CD or 5LTD driver	Lensed	EM battery	HT option
12,000	55°C	40°C	40°C	40°C	NA
18,000	55°C	40°C	40°C	40°C	NA
24,000	55°C	40°C	40°C	40°C	NA
30,000	55°C	40°C	40°C	40°C	NA
36,000	40°C	40°C	35°C <sup>2</sup>	35°C	NA
48,000	40°C	35°C	35°C <sup>2</sup>	35°C	50°C

NOTES: 2. Lens inserts only. 3. HT lumen package not available with emergency, dimming, or lensed options.

Certification data							
cULus - Damp Location	CSA	IC Rated	LM79/LM80 Compliant	RoHS Compliant	DesignLights Consortium™ Qualified	CA Title 24	NOM Compliant

# **HBLED** Photometrics

### HBLED-LD4-18-N-UNV-L850-ED2-U



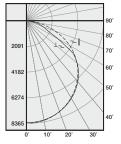
Fixed output drive Linear LED 5000K Spacing criterion: (II) 1.28 x mounting height, (1) 0.72 x mounting height Lumens = 18818 Input watts = 151.9W Efficacy = 123.9 lm/W Test: HBLED-LD4-18-N-L850-ED2-U.IES

### Coefficients of utilization

	Effe	ctive	e flo	or ca	ity refl	ectar	ıce	20%		
rc		80	%			50%	,		30%	
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	119	119	119	119	111	111	111	106	106	106
1	112	108	105	102	102	100	98	98	96	95
2	105	98	93	89	93	89	86	90	87	84
3	98	90	84	79	86	81	77	83	79	75
4	92	82	76	70	79	73	69	77	72	68
5	86	76	69	64	73	67	63	71	66	62
6	81	70	63	58	68	62	57	66	61	57
7	76	65	58	53	63	57	53	62	56	52
8	72	61	54	49	59	53	49	58	52	48
9	68	57	50	45	55	49	45	54	49	45
10	64	53	47	42	52	46	42	51	46	42

Zonal	lumen summ	nary
Zone	Lumens	% Fixture
0-30	10076	53.5
0-40	13520	71.8
0-60	17434	92.6
0-90	18818	100.0
0-180	18818	100.0

### HBLED-LD4-24-W-UNV-L850-ED2-U



Fixed output driver Linear LED 5000K Spacing criterion: (II) 1.3 x mounting height, (1) 1.31 x mounting height Lumens = 24002 Input watts = 203.0W Ffficacy = 118.2 lm/W Test: HBLED-LD4-24-W-UNV-L850-ED2-U.IES

### Coefficients of utilization Effective floor cavity reflectance 80% 50% rw RCR 0 1 2 3 4 5 6 7

	70	50	30	10	50	30	10	50	30	10
3										
	119	119	119	119	111	111	111	106	106	106
	109	105	101	97	98	95	92	94	92	90
	100	92	85	79	86	81	77	83	79	75
	91	81	73	66	76	70	64	73	68	63
	83	71	63	56	67	60	55	65	59	54
	76	64	55	48	60	53	47	58	52	47
	70	57	48	42	54	47	41	53	46	41
	65	52	43	37	49	42	37	48	41	36
	61	47	39	33	45	38	33	44	37	32
	57	43	35	30	42	34	29	40	34	29
	53	40	32	27	38	31	27	37	31	26

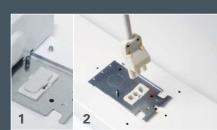
Zonal lumen summary Zone Lumens % Fixture 0-30 0-40 0-60 0-90

100.0

# Ideal for gymnasiums and multi-purpose facilities.

# **HBLED** Modular power supply

Eaton's Modular Power Supply allows external fixture access for safe and easy servicing. There is no need to remove lamps or reflectors to disconnect fixture power. Access to the individual fixture's power supply allows servicing without turning off all the fixtures disrupting occupants. Eaton's Modular Power Supply is a time saver in installation – simply plug and power.



- **1.** Modular power supply receptacle supplied mounted into fixture access plate.
- 2. Modular power cord and plugs in 120, 277, 347, and 480V configurations for easy plug and power into existing supply.



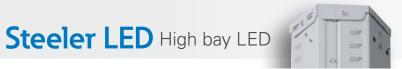
required for installation or disconnecting power.



with mounting box and modular power supply receptacle.

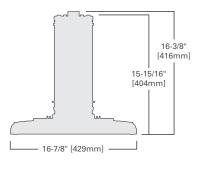
### Code compliance

- UL/cUL certified for make/break under load (UL2549)
- Meets NEC requirements for ballast disconnect (NEC 410.73G)
- Allows for addition of occupancy sensor without hard connections
- Receptacles complete with insulating/ dust cap



WAREHOUSE / DISTRIBUTION | MANUFACTURING | GYMNASIUMS / ATHLETIC CENTER | BIG BOX / RETAIL | GROCERY





Quality, style, performance. The Steeler LED is a designed for a wide variety of applications and mounting heights. Precision designed optics, multiple distributions, lumen outputs, and color temperatures make the Steeler LED ideal for industrial, commercial, manufacturing, gymnasium, and other applications that utilize traditional HID and linear fluorescent high bays. The proprietary discrete, low-brightness LED module assembly offers exceptional optical performance with the enhanced benefits of LED lighting, including energy savings, extended system life, and a reduced carbon footprint.

### Construction

- One-piece diecast aluminum lower housing with CRS driver compartment
- White polyester powder coat finish painted after fabrication
- Compact design for ease of installation
- cULus damp location, RoHS and LM79/LM80 compliant
- Suitable for suspension mounting with various mounting options
- Five-year warranty

### **Performance**

- Four standard lumen packages available (12,000, 18,000, 24,000, and 28,000)
- Proprietary low-power, low-brightness LED modules
- High efficacy up to 127 lm/W
- L83 at > 60,000 hours (at 55°C)
- Three correlated color temperatures (3500K, 4000K and 5000K) at ≥ 80 CRI
- -20°C 55°C ambient environments







### **Options**

- Precision optics Narrow, medium and wide distribution
- · Aluminum shroud for traditional aesthetic and additional cut-off
- Field installable uplight kit provides up to 10% uplight
- Modular Wiring System (MWS) for easy install
- · Integral occupancy and daylight dimming sensor available
- Emergency 20 watt remote mount

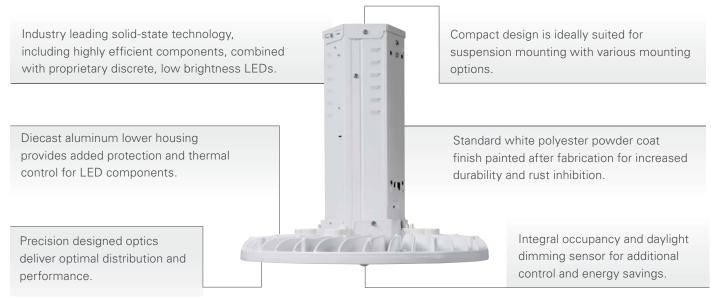
### **Controls**

• Offers control flexibility and easy integration with 0-10V continuous dimming driver, providing additional energy savings when utilizing our integrated sensors.

fifthlight

 Available with native Fifth Light DALI driver for complete digital energy management using the capable and scalable Fifth Light controllers and software.



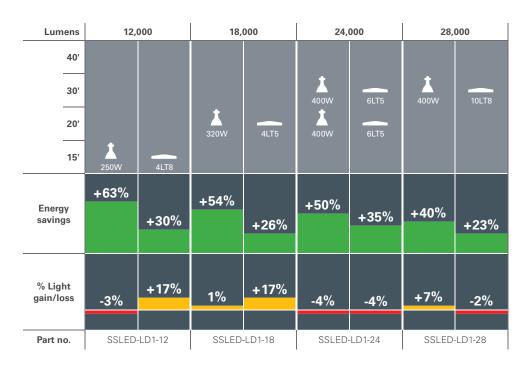


# **Steeler LED** Options and accessories



# **Steeler LED** System performance

SSLED performance				
Catalog number	Description	Delivered lumens	Input watts	Efficacy Im/W
Narrow				
SSLED-LD1-12-N-UNV-L840-CD1-U	Steeler LED 12,000 lumen, narrow distribution, 4000K, 0-10V	13,186	106	124
SSLED-LD1-18-N-UNV-L840-CD1-U	Steeler LED 18,000 lumen, narrow distribution, 4000K, 0-10V	19,101	162	118
SSLED-LD1-24-N-UNV-L840-CD2-U	Steeler LED 24,000 lumen, narrow distribution, 4000K, 0-10V	24,188	224	108
SSLED-LD1-28-N-UNV-L840-CD2-U	Steeler LED 28,000 lumen, narrow distribution, 4000K, 0-10V	27,090	271	100
Medium				
SSLED-LD1-12-M-UNV-L840-CD1-U	Steeler LED 12,000 lumen, medium distribution, 4000K, 0-10V	13,417	106	127
SSLED-LD1-18-M-UNV-L840-CD1-U	Steeler LED 18,000 lumen, medium distribution, 4000K, 0-10V	19,435	162	120
SSLED-LD1-24-M-UNV-L840-CD2-U	Steeler LED 24,000 lumen, medium distribution, 4000K, 0-10V	24,611	224	110
SSLED-LD1-28-M-UNV-L840-CD2-U	Steeler LED 28,000 lumen, medium distribution, 4000K, 0-10V	27,564	271	102
Wide				
SSLED-LD1-12-W-UNV-L840-CD1-U	Steeler LED 12,000 lumen, wide distribution, 4000K, 0-10V	13,274	106	125
SSLED-LD1-18-W-UNV-L840-CD1-U	Steeler LED 18,000 lumen, wide distribution, 4000K, 0-10V	19,229	162	119
SSLED-LD1-24-W-UNV-L840-CD2-U	Steeler LED 24,000 lumen, wide distribution, 4000K, 0-10V	24,350	224	109
SSLED-LD1-28-W-UNV-L840-CD2-U	Steeler LED 28,000 lumen, wide distribution, 4000K, 0-10V	27,272	271	101



Lumen maintenance					
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L70 (hours)			
55°C	> 83%	121,000			

Lumen packages and ambient temperature						
Lumen	40°C	50°C	55°C			
12	STD	STD	STD			
18	STD	HT (CD2)	HT (CD2)			
24	STD	HT	N/A			
28	STD	N/A	N/A			

Certification data				
cULus - Damp Location	DesignLights Consortium™ Qualified	LM79/LM80 Compliant	RoHS Compliant	NOM Compliant

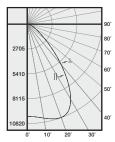
11

# Steeler LED Photometrics

### Narrow distribution, 19,101 lumens

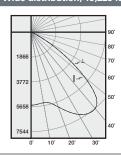
Electronic driver Linear LED 4000K Spacing criterion: (II) 0.8 x mtg height, ( $\perp$ ) 0.8 x mtg height Lumens = 19,101 Input watts = 162W Efficacy = 117.9 lm/W Test: SSLED-LD1-18-N-UNV-L840-CD1-U

### Medium distribution, 19,436 lumens



Electronic driver Linear LED 4000K Spacing criterion: (II) 1.3 x mtg height, (1) 1.3 x mtg height Lumens = 19,436Input watts = 162W Efficacy = 120.0 lm/W Test: SSLED-LD1-18-M-UNV-L840-CD1-U

### Wide distribution, 19,229 lumens



Electronic driver Linear LED 4000K Spacing criterion: (II) 1.9 x mtg height, (⊥) 1.9 x mtg height Lumens = 19,229Input watts = 162W Efficacy = 118.7 lm/W Test: SSLED-LD1-18-W-UNV-L840-CD1-U



Eaton's Modular Power Supply option is available for use with the SSLED. The modular power supply allows external fixture access for safe and easy servicing. Access to the individual fixture's power supply allows servicing without turning off all the fixtures disrupting occupants. Eaton's modular power supply is a time saver in installation – simply plug and power.



supplied mounted into fixture access plate.

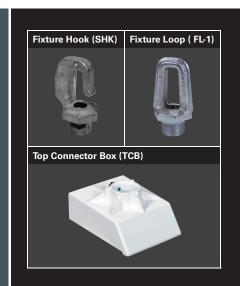


Modular power cord and plugs in 120, 277, 347, and 480V configurations for easy plug and power into existing supply

### Code compliance

- UL/cUL certified for make/ break under load (UL2549)
- Meets NEC requirements for ballast disconnect (NEC 410.73G)
- Allows for addition of hard connections
- Receptacles complete with insulating/dust cap

# Mounting options



GYMNASIUMS / MULTI-PURPOSE ROOMS / ATHLETIC CENTER | FOOD PROCESSING | BIG BOX / RETAIL | GROCERY



The TBLED luminaire designed for commercial and industrial low-bay applications is an innovative solution that delivers an unparalleled combination of performance and visual comfort. The TBLED low profile design and precise combination of vertical and horizontal distribution is the ideal solution for auditoriums, retail, big box, airports and municipal applications and is available in both medium and wide distributions.

### **Performance**

- One-piece low profile die-cast aluminum housing
- Three lumen packages (6,000, 8,000 and 11,000)
- Efficacy: delivers up to 126 lm/W
- CCT: 3500K, 4000K and 5000K
- Lumen maintenance L85 @ 60,000 hours
- Powder coat finish available in white, black, and bronze
- Surface, hook/loop, wall or pendant mounting options
- Rated for -40°C to 40°C ambient applications
- Standard 0-10V dimming, optional Fifth Light DALI
- cULus listed for wet locations, IP66 rated
- Five-year warranty

### **Compliance**

- cULus listed for damp location
- IP66 rated (surface or wall mount)
- RoHS compliant
- DLC qualified
- ISO 9001









### Features and benefits

### • LED Platform

WaveStream™ LED technology with patented AccuAim<sup>™</sup> optics arranged in exacting patterns provide superior performance and optimal distribution.

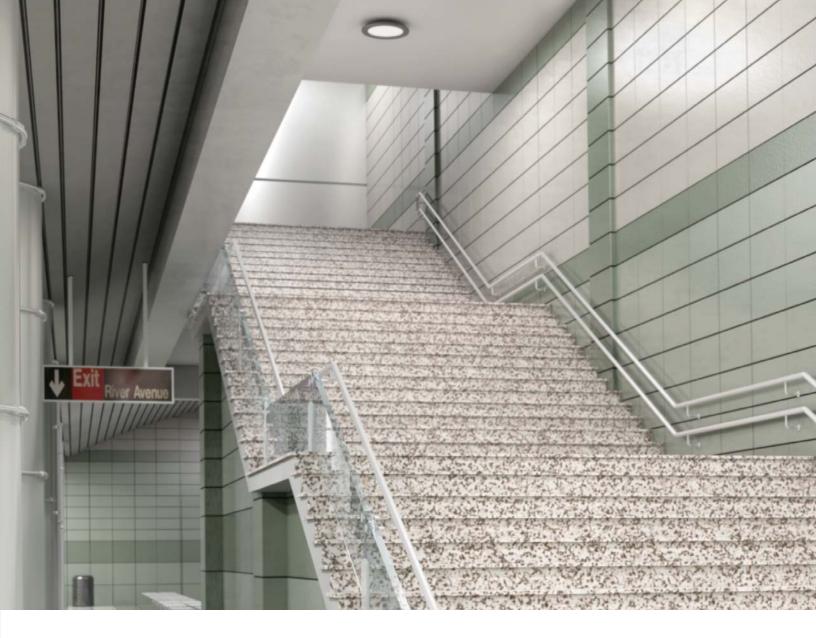
### Controllable

Offers control flexibility and easy integration with optional 0-10V continuous dimming driver, providing additional energy savings when utilizing sensors. Available with native Fifth Light DALI drivers for complete digital energy management using the capable and scalable Fifth Light controllers and software.

### Mounting

Standard fixture mounts to a square or octagonal 4" surface or recessed j-box via heavy-gauge quick mount bracket, or can be hook or pipe mounted using the included universal mounting kit. Additional mounting options include pendant or wall mount.

13



# TBLED WaveStream LED Technology



# **TBLED** System performance

TBLED performance		Delivered	Input	Efficacy
Catalog number	Description	lumens	watts	Im/W
Medium				
TBLED-LD1-6-M-UNV-L835-CD1-WHT-U	Low bay, WaveStream LED, 6K lumen, medium distribution, 3500K, dimming	5,643	51	111
TBLED-LD1-6-M-UNV-L840-CD1-WHT-U	Low bay, WaveStream LED, 6K lumen, medium distribution, 4000K, dimming	5,774	51	113
TBLED-LD1-6-M-UNV-L850-CD1-WHT-U	Low bay, WaveStream LED, 6K lumen, medium distribution, 5000K, dimming	6,420	51	126
TBLED-LD1-8-M-UNV-L835-CD1-WHT-U	Low bay, WaveStream LED, 8K lumen, medium distribution, 3500K, dimming	7,948	77	103
TBLED-LD1-8-M-UNV-L840-CD1-WHT-U	Low bay, WaveStream LED, 8K lumen, medium distribution, 4000K, dimming	8,133	77	106
TBLED-LD1-8-M-UNV-L850-CD1-WHT-U	Low bay, WaveStream LED, 8K lumen, medium distribution, 5000K, dimming	9,044	77	117
TBLED-LD1-11-M-UNV-L835-CD1-WHT-U	Low bay, WaveStream LED, 11K lumen, medium distribution, 3500K, dimming	10,491	108	97
TBLED-LD1-11-M-UNV-L840-CD1-WHT-U	Low bay, WaveStream LED, 11K lumen, medium distribution, 4000K, dimming	10,735	108	99
TBLED-LD1-11-M-UNV-L850-CD1-WHT-U	Low bay, WaveStream LED, 11K lumen, medium distribution, 5000K, dimming	11,937	108	111
Wide				
TBLED-LD1-6-W-UNV-L835-CD1-WHT-U	Low bay, WaveStream LED, 6K lumen, wide distribution, 3500K, dimming	5,342	51	105
TBLED-LD1-6-W-UNV-L840-CD1-WHT-U	Low bay, WaveStream LED, 6K lumen, wide distribution, 4000K, dimming	5,466	51	107
TBLED-LD1-6-W-UNV-L850-CD1-WHT-U	Low bay, WaveStream LED, 6K lumen, wide distribution, 5000K, dimming	6,078	51	119
TBLED-LD1-8-W-UNV-L835-CD1-WHT-U	Low bay, WaveStream LED, 8K lumen, wide distribution, 3500K, dimming	7,524	77	98
TBLED-LD1-8-W-UNV-L840-CD1-WHT-U	Low bay, WaveStream LED, 8K lumen, wide distribution, 4000K, dimming	7,699	77	100
TBLED-LD1-8-W-UNV-L850-CD1-WHT-U	Low bay, WaveStream LED, 8K lumen, wide distribution, 5000K, dimming	8,561	77	111
TBLED-LD1-11-W-UNV-L835-CD1-WHT-U	Low bay, WaveStream LED, 11K lumen, wide distribution, 3500K, dimming	9,932	108	92
TBLED-LD1-11-W-UNV-L840-CD1-WHT-U	Low bay, WaveStream LED, 11K lumen, wide distribution, 4000K, dimming	10,163	108	94
TBLED-LD1-11-W-UNV-L850-CD1-WHT-U	Low bay, WaveStream LED, 11K lumen, wide distribution, 5000K, dimming	11,300	108	105

Lumen maintenance						
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L70 (hours)				
40°C	> 85%	165,000				

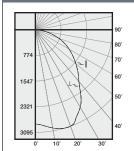
Lumen packages and ambient temperature				
Lumen	40°C			
6	STD			
8	STD			
11	STD			

Certification data				
cULus - Wet Location	DesignLights Consortium™ Qualified	LM79/LM80 Compliant	RoHS Compliant	NOM Compliant

15

# **TBLED** Photometrics

### TBLED-LD1-8-M-UNV-L840-CD1



Electronic driver
Linear LED 4000K
Spacing criterion: (||) 1.3 x mounting
height, (L) 1.3 x mounting height
Lumens = 8133
Input watts = 77W
Efficacy = 105.6 Im/W
Test: TBLED-LD1-8-M-L840-CD1.IES

### Coefficients of utilization

	Effe	ctive	flo	or cav	ity refl	ectai	nce	20%				
rc	80%					50%			30%			
rw	70	50	30	10	50	30	10	50	30	10		
RCR												
0	119	119	119	119	111	111	111	106	106	106		
1	109	104	100	96	98	95	92	94	91	89		
2	99	91	85	79	86	81	76	83	78	74		
3	91	80	72	66	76	70	64	73	68	63		
4	83	72	63	56	68	61	55	65	59	54		
5	77	64	55	49	61	54	48	59	52	47		
6	71	58	49	43	55	48	42	53	47	42		
7	66	53	44	38	50	43	38	49	42	37		
8	61	48	40	34	46	39	34	45	38	33		
9	58	44	36	31	43	35	30	41	35	30		
10	54	41	33	28	39	32	28	38	32	28		

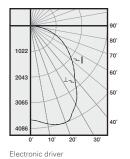
 Zone
 Lumens
 % Fixture

 0-30
 2462
 30.3

 0-40
 2005
 470

0-30	2462	30.3
0-40	3895	47.9
0-60	6534	80.3
0-90	8133	100.0
0-180	8133	100.0

### TBLED-LD1-11-M-UNV-L840-CD1



Linear LED 4000K Spacing criterion: (II) 1.3 x mounting height, (LI) 1.3 x mounting height Lumens = 10735 Input watts = 108W Efficacy = 99.4 Im/W Test: TBLED-LD1-11-M-L840-CD1.IES

Coefficients of utilization Effective floor cavity reflectance 80% 50% 70 50 30 10 50 30 10 50 30 10 rw RCR 0 106 106 106 98 95 92 99 91 85 79 86 81 76 83 78 74 91 80 72 66 83 72 63 56 76 70 64 73 68 63 77 64 55 49 61 54 48 59 52 47 71 58 49 43 55 48 42 53 47 66 53 44 38 61 48 40 34 46 39 34 45 38 58 44 36 31 41 35

 Zonal lumen summary

 Zone
 Lumens
 % Fixture

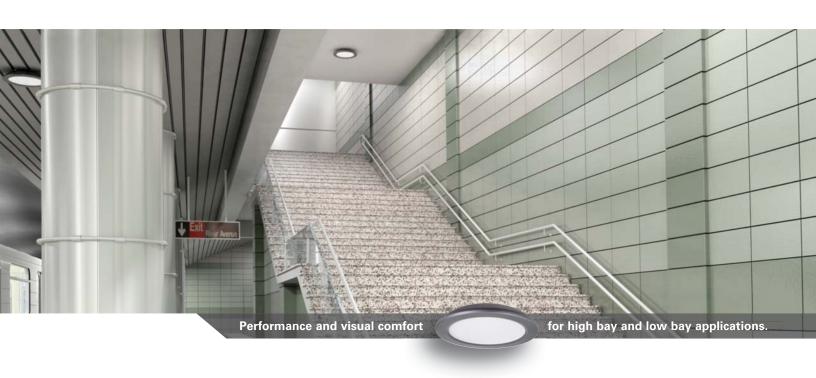
 0-30
 3249
 30.3

 0-40
 5141
 47.9

 0-60
 8625
 80.3

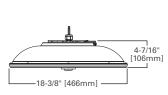
 0-90
 10735
 100.0

 0-180
 10735
 100.0

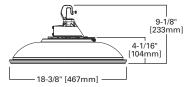


# **TBLED** Mounting

### SURFACE MOUNT

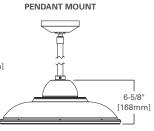


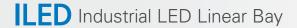
### HOOK /PIPE MOUNT (INCLUDED)



# 18-3/8" [466mm] 4" [101mm] 22-9/16" [574mm]

WALL MOUNT







The **Industrial LED Linear Bay** is the energy efficient solution for both low bay and high bay applications. The Linear Bay has been optimized to provide maximum performance utilizing the latest in LED technology. Several lumen packages and distributions make it suitable for a wide range of applications including "big box" retail, shopping malls, school gymnasiums, light industrial, warehouse and manufacturing.

### Construction

- 4ft. and 8ft. specification grade full-body housing
- Low profile, narrow 11" housing
- Available in surface, suspended or continuous row mount
- cULus damp location
- Five-year warranty

### **Performance**

- Multiple lumen packages available:
   4ft.: 5,000, 7,000, 9,000, 11,000, 14,000, 16,000
   8ft.: 10,000, 14,000, 18,000, 22000, 28,000, 32,000
- High-performance efficacy up to 139 lm/W
- L86 at > 60,000 hours (at 35°C)
- Three correlated color temperatures (3500K, 4000K and 5000K) at typical 85 CRI
- -20°C 45°C ambient environments







### **Options**

- Precision optics narrow and wide distribution
- Shielding options include clear and frosted lenses, baffle or wireguard
- Modular Wiring System for easy install
- Emergency 7 watt and 14 watt options

### **Controls**

- Includes 0-10V (analog) dimming for control using Eaton wall dimmers, Greengate Room controllers, occupancy and/or daylight sensors and lighting controls panels.
- Available with native Fifth Light DALI drivers for complete digital energy management using the capable and scalable Fifth Light controllers and software.



# **ILED** Options and accessories

### **Shielding**

Door frame and lens assembly are available for more demanding environments.









# **ILED** System performance

ILED performance				
Catalog number	Description	Delivered lumens	Input watts	Efficacy Im/W
4ILED-LD4-5-W-UNV-L840-CD1-U	4ft. ILED, 5,000 lumen, wide, 40K, wide	5,101	37	139
4ILED-LD4-7-W-UNV-L840-CD1-U	4ft. ILED, 7,000 lumen, wide, 40K, wide	7,246	57	128
4ILED-LD4-9-W-UNV-L840-CD1-U	4ft. ILED, 9,000 lumen, wide, 40K, wide	9,092	74	123
4ILED-LD4-11-W-UNV-L840-CD1-U	4ft. ILED, 11,000 lumen, wide, 40K, wide	11,448	101	114
4ILED-LD4-14-W-UNV-L840-CD2-U	4ft. ILED, 14,000 lumen, wide, 40K, wide	13,824	115	121
4ILED-LD4-16-W-UNV-L840-CD2-U	4ft. ILED, 16,000 lumen, wide, 40K, wide	16,414	145	113
8ILED-LD4-10-W-UNV-L840-CD1-U	8ft. ILED, 10,000 lumen, wide, 40K, wide	10,202	73	139
8ILED-LD4-14-W-UNV-L840-CD2-U	8ft. ILED, 14,000 lumen, wide, 40K, wide	14,492	113	128
8ILED-LD4-18-W-UNV-L840-CD2-U	8ft. ILED, 18,000 lumen, wide, 40K, wide	18,184	148	123
8ILED-LD4-22-W-UNV-L840-CD2-U	8ft. ILED, 22,000 lumen, wide, 40K, wide	22,896	201	114
8ILED-LD4-28-W-UNV-L840-CD3-U	8ft. ILED, 28,000 lumen, wide, 40K, wide	27,648	229	121
8ILED-LD4-32-W-UNV-L840-CD3-U	8ft. ILED, 32,000 lumen, wide, 40K, wide	32,828	290	113

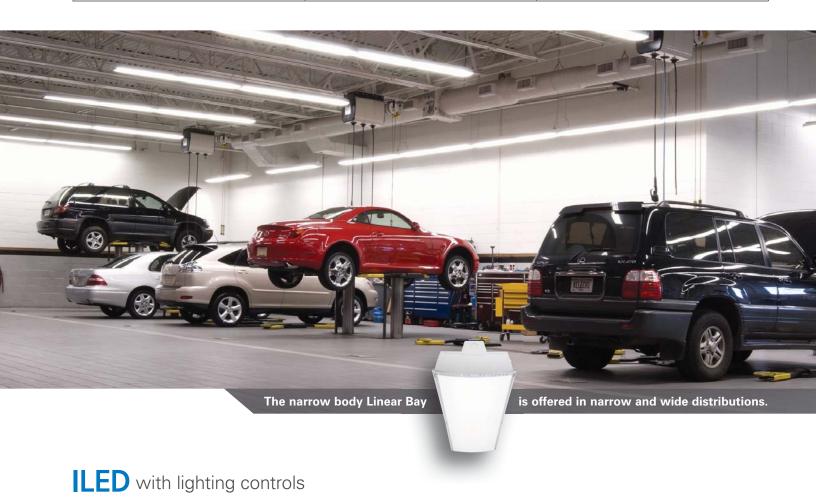
Lumens	9,0	000	12,	000	14,0	000	18,0	000	22,	000	28,	000
40'												
											1	
30'									400W	6LT5	400W	8LT5
					1		1		1	32.0	1	32.3
20'					250W	4LT5	320W	6LT8	400W	6LT5	400W	6LT5
15'	150W	3LT8	<b>1</b> 75W	4LT8	<b>1</b> 250W	4LT5						
					+59%		+58%					
Energy	+56%	+51%	+47%	+34%	+33 /0	+47%	+30 /0		+56%	+42%	+49%	. 220/
savings				+3470				+32%		/ 3		+33%
	+30%		+36%									
% Light gain/loss		+8%		+3%	0%	-17%	-6%	+11%	-12%	-12%	+7%	+7%
-					0 /0	-17 /0	-0 /0		- 12 /0	- 12 /0		
Doub and	411.50	LD4.0	411.50	L D 4 44	ALL ED	D4.14	OII ED	LD4.40	OULED	D4.00	OU ED	LD4.00
Part no.	4ILED	-LD4-9	4ILED-	LU4-11	4ILED-	LD4-14	SILED-	LD4-18	8ILED-	LD4-22	8ILED-	LD4-28

Lumen maintenance							
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L70 (hours)					
35°C	> 86%	171,000					

Certification data				
cULus - Damp Location	DesignLights Consortium™ Qualified	LM79/LM80 Compliant	RoHS Compliant	NOM Compliant

# **ILED** Photometrics

### 4 ft. narrow 7,000 lumens 4 ft. wide 7,000 lumens 4 ft. wide w/baffle 7,000 lumens Electronic driver Electronic driver Electronic driver Linear LED 3500K Linear LED 4000K Linear LED 4000K Spacing criterion: Spacing criterion: Spacing criterion: (II) 1.3 x mtg height, (II) 1.3 x mtg height, (II) 1.1 x mtg height, (1) 0.6 x mtg height (⊥) 1.3 x mtg height (⊥) 1.3 x mtg height Lumens = 6392Lumens = 7246Lumens = 6625 Input watts = 57.0W Input watts = 56.6W Input watts = 56.6W 1700 Efficacy = 112.1 Im/W Efficacy = 120 Im/W Efficacy = 117 lm/W Test: 4ILED-LD4-7-W-Test: 4ILED-LD4-7-W-Test: 4ILED-LD4-7-N-UNV-L835.IES UNV-L840.IES TWB-UNV-L840.IES



### Fifth Light brings energy savings, control and addressability to Metalux luminaires

The future of lighting lies in smart controls in combination with smart lighting fixtures. From private offices to large-scale building management systems, Eaton's Lighting Solutions has a fully integrated answer for any project. Their Fifth Light brand offers a complete line of digital addressable control products to ensure two-way communication with every component in a building. Fifth Light hardware consists of multi-sensors, user interfaces, personal controls, ballasts, drivers and more. A wide array of software options integrate with VOIP phones, computers, tablets and mobile phones for complete control at your fingertips.

WAREHOUSE / DISTRIBUTION | MANUFACTURING | GYMNASIUMS / ATHLETIC CENTER | FOOD PROCESSING



with Multi-Mount (M) TWO 5/16"-18 MOUNTING STUDS 3/4" NPT INTERNAL THREAD WITH (16-13/16" BETWEEN) LOCKING SET SCREW 13-5/8" [345mm]

VISIUM 190

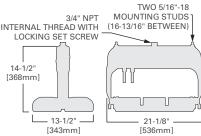
### VISIUM 300 with Multi-Mount (M)

21-1/8"

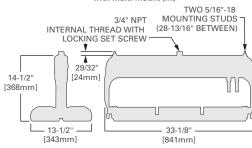
[536mm]

6-1/2"

[166mm]



### VISIUM 600 with Multi-Mount (M)



The Visium LED high bay is a durable and high efficient solution for a variety of industrial and commercial applications. The Visium is constructed of extruded aluminum for optimal thermal control and longer system life. The Visium's modular design, multiple lens configurations and numerous mounting options allow for precise light positioning putting the light exactly where you need it.

### Construction

- Durable extruded aluminum housing provides excellent thermal control
- Standard black anodized housing for increased and rust inhibition
- Adjustable die cast mounting bracket for precision aiming
- IP66 rated
- ETL Listed and RoHS compliant
- DLC qualified





### **Performance**

- High efficacy up to 103 lm/W
- 5600K CCT
- L70 @ 225,000 hours
- Typical CRI: 70
- High impact tempered diffused lens
- -40°C to 55°C ambient rating

### **Options**

- Three standard lumen packages offered: 18,000, 30,000 and 61,000 lumens
- Precision optics multiple distributions
- Standard 0-10V dimming



### Resiliancy

The Visium series high bay is made from heavy-duty anodized extruded aluminum, which withstands an expansive temperature rating of -40°C to 55°C. Count on its built-in resiliency and high-impact-resistant tempered glass lens construction to deliver workhorse performance that stands up to the elements, even in wet and corrosive environments.

### **Efficiency**

Delivering 100 lumens per watt, the Visium provides up to 46% energy savings compared to legacy technology. The Visium's modular design, multiple lens configurations and numerous mounting options allow for precise light positioning so you can direct wider, longer or more angled light exactly where you need it. You'll not only get more light with fewer fixtures, you'll use up to 75% less energy - saving money and the environment.

### **Dependability**

Through unprecedented thermal heat management and an isolated power supply, we've designed a solution that stays cooler. The result: it maintains consistent performance and lasts longer, maintaining 95% light output for more than 10 years. Visium uses integrated smart electronics to constantly monitor temperature and health of the light system to ensure optimum LED performance and efficient operation day after day, year after year.

# Visium Models



# Visium System performance

	Visium 190	Visium 300	Visium 600
Lumen output <sup>1</sup>	18,200	30,850	61,700
System watts	190	300	600
Input voltage	VL: 120-277VAC VL: 347-480VAC <sup>2</sup>	VL: 120-277VAC VL: 347-480VAC <sup>2</sup>	VL: 120-277VAC VL: 347-480VAC <sup>2</sup>
CRI	>70	>70	>70
ССТ	5600K	5600K	5600K
EPA (aimed down) <sup>3</sup>	0.86 ft <sup>1</sup>	1.79 ft <sup>1</sup>	2.86 ft <sup>1</sup>
EPA (aimed flat vertically) <sup>3</sup>	1.74 ft <sup>1</sup>	2.67 ft <sup>1</sup>	4.15 ft <sup>1</sup>
Operating temperature	-40°C to 50°C	-40°C to 50°C	-40°C to 50°C
L70 hours	>225,000	>225,000	>225,000
IP rating	IP66	IP66	IP66

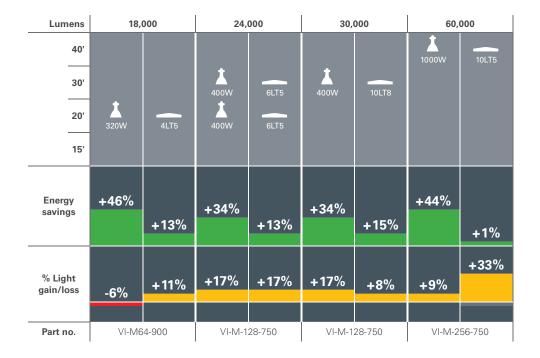
### Notes:

- 1. The specifications listed were obtained under optimal testing conditions. Changes in options, features and conditions may result in slightly different performance specifications
- 2. VL: 127-430VDC VH: 450-600VDC
- ${\it 3. If aiming orientation is uncertain, design with "worst case" value. Contact Eaton for more information.}\\$

Pure power is required to ensure proper function and lifetime of Eaton fixtures. Prior to installation, an analysis should be performed to verify site power meets these requirements:

- > High frequency voltage should be below -40dB or .01V between 3KHZ and 100KHz
- > High frequency current should be below -50dB or .019A between 3KHz and 100KHz

If the power does not meet these criteria, waveform correction technology should be used to condition the power. Surge protection alone is not adequate. Eaton will not be liable for damage to fixtures due to poor power quality. Contact Eaton for more information.



Lumen maintenance				
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L70 (hours)		
55°C	> 83%	121,000		

Certification data				
ETL - Wet Location	DesignLights Consortium™ Qualified	LM79/LM80 Compliant	RoHS Compliant	NOM Compliant

23

# Visium Illumination tables

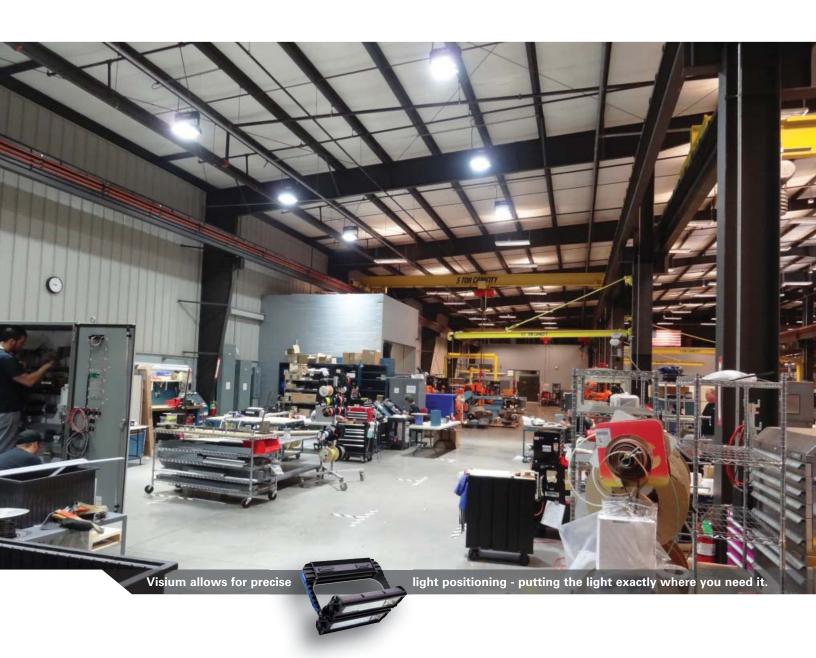
Visium 190 - Illumination at a distance (FC) <sup>4</sup>					
Height	5	5N	5W	5EL	5EW
20 FT	16	256	123	97	58
30 FT	7	114	54	43	26
40 FT	4	64	31	24	15
50 FT	2	41	20	15	9
60 FT	2	29	13	11	7
70 FT	1	21	10	8	5

N			

<sup>4.</sup> Data based on a single luminaire at height shown.

Visium 300 - Illumination at a distance (FC) <sup>4</sup>					
Height	5	5N	5W	5EL	5EW
20 FT	26	420	201	159	95
30 FT	12	187	89	71	42
40 FT	7	105	50	40	24
50 FT	4	67	32	25	15
60 FT	3	47	22	18	11
80 FT	2	26	13	10	6
100 FT	1	17	8	6	4

Visium 600 - Illumination at a distance (FC) <sup>4</sup>					
Height	5	5N	5W	5EL	5EW
30 FT	24	374	178	142	84
40 FT	14	210	100	80	48
50 FT	8	134	64	50	30
60 FT	6	94	44	36	22
80 FT	3	52	26	20	12
100 FT	2	35	16	12	8
120 FT	1	23	11	9	5



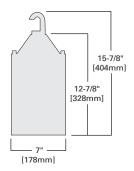
## Altus Commercial / Industrial LED

WAREHOUSE / DISTRIBUTION | MANUFACTURING | FOOD PROCESSING

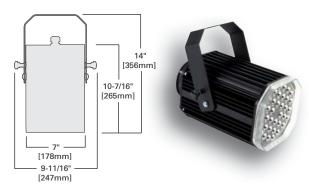


The Altus low bay is a durable and high efficient solution designed for a variety of industrial and commercial applications. Built to withstand the most complex of environments, the Altus is constructed of extruded aluminum for optimal thermal control and longer system life. The compact design with a wide angle distribution is suitable for most low bay applications and in most cases can reduce the required number of fixtures to achieve the desired light levels.

### **Pendant with Hook Mount**



### **Free Hang Mount**



### **Ceiling Mount**



### Construction

- Durable extruded aluminum housing provides excellent thermal control
- Standard black anodized housing for increased durability and rust inhibition.
- Compact size: 7" x 12"
- IP68 Rated for complex environments
- ETL listed and RoHS compliant



### **Performance**

- High efficacy up to 115 lm/W
- 5000K and 5700K CCT
- L70 @ 225,000 hours
- Typical CRI: 80
- Precision wide distribution
- High impact tempered diffused lens
- -40°C to 55°C ambient rating

### **Options**

- Two standard lumen packages offered: 7,500 and 14,000 lumens
- Three mounting options including suspended, surface or free hang

25

# **Altus** Illumination tables

	Altus 80 - Average illumination (FC) <sup>2</sup>					
		Spaci	ng			
Height	15 FT	20 FT	25 FT	30 FT	35 FT	
10 FT	34	19	12	9	7	
15 FT	33	18	12	8	7	
20 FT	32	18	11	8	6	
25 FT	31	17	11	8	6	
30 FT	30	17	11	8	6	

	Altus 140 - Average illumination (FC) <sup>2</sup>					
		Spaci	ng			
Height	15 FT	20 FT	25 FT	30 FT	35 FT	
10 FT	68	38	25	17	14	
15 FT	66	37	24	17	13	
20 FT	64	36	23	16	13	
25 FT	62	35	22	16	13	
30 FT	60	34	22	15	12	

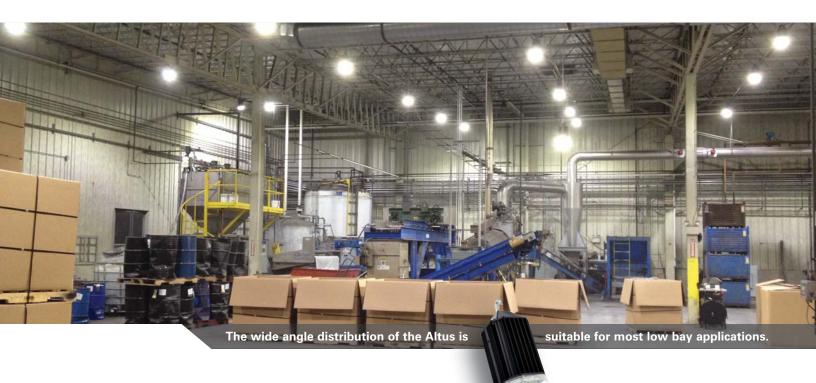
### Notes:

# **Altus** System performance

	Altus 80	Altus 140
Lumen output <sup>1</sup>	7,500	13,800
System watts	80	120
Input voltage	VL: 90-277VAC	VL: 90-277VAC
CRI	>75	>80
ССТ	5000K	5700K
Operating temperature	-40°C to 55°C	-40°C to 55°C
L70 hours	>225,000	>225,000
IP rating	IP68	IP68

### Notes

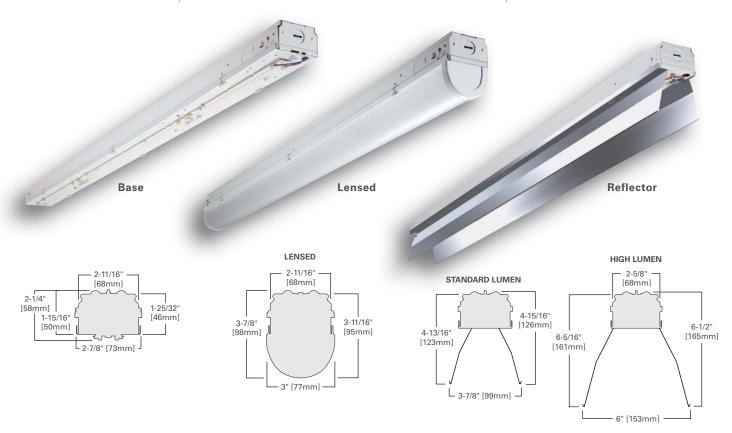
<sup>1.</sup> The specifications listed were obtained under optimal testing conditions. Changes in options, features and conditions may result in slightly different performance specifications among fixtures.



<sup>2.</sup> Data based on a 300' x 300' room, 80/50/20 reflectance.



WAREHOUSE / DISTRIBUTION | GYMNASIUMS / MULTI-PURPOSE ROOMS / ATHLETIC CENTER



Eaton introduces the latest generation of it's market-leading linear LED striplight, SNLED. Utilizing leading edge LED technology, the SNLED series provides a superior solution with both energy efficiency and maintenance reduction over traditional fluorescents. Offered in three unique versions - base, lensed and reflector, the SNLED provides application flexibility while further improving energy savings by offering controls compatibility for most any application.

### **Performance**

- 8', 4' and 2' product configurations
- Three different models base, lensed and reflector
- Standard (SL) and high lumen (HL) packages
- Four correlated color temperatures (3000K, 3500K, 4000K and 5000K)
- High efficacy up to 131 lm/W
- Typical 85+ CRI
- Class 2, 24V DC constant driver with standard 0-10V dimming
- Step-dim, Fifth Light<sup>™</sup> (DALI) options available
- Ideal for surface and suspended applications
- L70 at 60,000 hours
- Five-year warranty

### **Compliance**

- LED modules comply with IESNA LM-79 and LM-80 standards
- cULus listed 1598 for damp locations
- RoHS compliant
- DLC qualified







### **Product controls**

All SNLED models are Powered by Fifth Light, starting with standard drivers that work with wall dimmers and sensors, up to digital drivers that work with Fifth Light whole-building systems. SNLED and Eaton controls will improve energy savings and user comfort for any space.

- 0 10V dimming is standard
- 120/277V occupancy and daylight sensors
- Fifth Light Digital Addressable Lighting Interface (DALI) Control Systems



27



1' x 4' lumen maintenance			
	Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L70 (hours)
	25°C	> 92.9%	303,000

Certification data			
cULus - Damp Location	LM79/LM80 Compliant	RoHS Compliant	NOM Compliant

# **SNLED** System performance

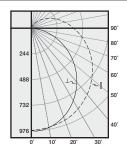
SNLED performance	(lensed)						
SNLED type	Stock* / MTO	Lumen type	Length	Catalog logic	Nominal lumens	Input watts	Efficacy Im/W
Full frost lens (LW)	MTO	Standard	4 ft.	4SNLED-LD4-16SL-LW-UNV-L8XX-CD1-U	1,819	16.21	111
Full frost lens (LW)	MTO	Standard	4 ft.	4SNLED-LD4-20SL-LW-UNV-L8XX-CD1-U	2,054	18.37	109
Full frost lens (LW)	Stock	Standard	4 ft.	4SNLED-LD4-23SL-LW-UNV-L8XX-CD1-U	2,399	21.68	111
Full frost lens (LW)	Stock	Standard	4 ft.	4SNLED-LD4-27SL-LW-UNV-L8XX-CD1-U	2,732	25.07	108
Full frost lens (LW)	MTO	Standard	4 ft.	4SNLED-LD4-30SL-LW-UNV-L8XX-CD1-U	3,062	28.43	106
Full frost lens (LW)	MTO	Standard	4 ft.	4SNLED-LD4-33SL-LW-UNV-L8XX-CD1-U	3,411	32.32	105
Full frost lens (LW)	MTO	Standard	4 ft.	4SNLED-LD4-37SL-LW-UNV-L8XX-CD1-U	3,778	36.64	101
Full frost lens (LW)	Stock	Standard	4 ft.	4SNLED-LD4-41SL-LW-UNV-L8XX-CD1-U	4,119	41.03	100
Full frost lens (LW)	MTO	Standard	4 ft.	4SNLED-LD4-44SL-LW-UNV-L8XX-CD1-U	4,457	45.66	96
Full frost lens (LW)	MTO	Standard	4 ft.	4SNLED-LD4-47SL-LW-UNV-L8XX-CD1-U	4,781	50.15	94
Full frost lens (LW)	MTO	Standard	4 ft.	4SNLED-LD4-50SL-LW-UNV-L8XX-CD1-U	5,100	56.3	89
Full frost lens (LW)	MTO	High	4 ft.	4SNLED-LD4-54HL-LW-UNV-L8XX-CD1-U	5,458	50.71	106
Full frost lens (LW)	MTO	Standard	8 ft.	8TSNLED-LD4-54SL-LW-UNV-L8XX-CD1-U	5,464	50.14	108
Full frost lens (LW)	MTO	Standard	8 ft.	8TSNLED-LD4-61SL-LW-UNV-L8XX-CD1-U	6,125	56.86	107
Full frost lens (LW)	Stock	Standard	8 ft.	8TSNLED-LD4-67SL-LW-UNV-L8XX-CD1-U	6,822	64.64	104
Full frost lens (LW)	Stock	Standard	8 ft.	8TSNLED-LD4-74SL-LW-UNV-L8XX-CD1-U	7,556	73.28	101
Full frost lens (LW)	MTO	Standard	8 ft.	8TSNLED-LD4-81SL-LW-UNV-L8XX-CD2-U	8,238	82.06	99
Full frost lens (LW)	MTO	Standard	8 ft.	8TSNLED-LD4-88SL-LW-UNV-L8XX-CD2-U	8,915	91.32	96
Full frost lens (LW)	MTO	Standard	8 ft.	8TSNLED-LD4-95SL-LW-UNV-L8XX-CD2-U	9,562	100.3	95

<sup>\*</sup>Stocked in either 3500K or 4000K.

SNLED performance	(reflector)						
SNLED type	Stock* / MTO	Lumen type	Length	Catalog logic	Nominal lumens	Input watts	Efficacy Im/W
Miro reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-19SL-RM-UNV-L8XX-CD1-U	2,092	16	117
Miro reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-23SL-RM-UNV-L8XX-CD1-U	2,362	18	125
Miro reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-27SL-RM-UNV-L8XX-CD1-U	2,760	22	125
Miro reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-31SL-RM-UNV-L8XX-CD1-U	3,142	25	124
Miro reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-35SL-RM-UNV-L8XX-CD1-U	3,523	28	123
Miro Reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-39SL-RM-UNV-L8XX-CD1-U	3,924	32	121
Miro Reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-42SL-RM-UNV-L8XX-CD1-U	4,346	37	115
Miro reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-47SL-RM-UNV-L8XX-CD1-U	4,738	41	115
Miro reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-50SL-RM-UNV-L8XX-CD1-U	5,127	46	110
Miro reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-54SL-RM-UNV-L8XX-CD1-U	5,500	50	108
Miro reflector (RM)	MTO	Standard	4 ft.	4SNLED-LD4-58SL-RM-UNV-L8XX-CD1-U	5,866	56	103
Miro reflector (RM)	MTO	High	4 ft.	4SNLED-LD4-62HL-RM-UNV-L8XX-CD1-U	6,278	51	122
Miro reflector (RM)	MTO	Standard	8 ft.	8TSNLED-LD4-62SL-RM-UNV-L8XX-CD1-U	6.285	50	124
Miro reflector (RM)	MTO	Standard	8 ft.	8TSNLED-LD4-70SL-RM-UNV-L8XX-CD1-U	7.045	57	123
Miro reflector (RM)	MTO	Standard	8 ft.	8TSNLED-LD4-78SL-RM-UNV-L8XX-CD1-U	7,847	65	121
Miro reflector (RM)	MTO	Standard	8 ft.	8TSNLED-LD4-85SL-RM-UNV-L8XX-CD1-U	8.692	73	116
Miro reflector (RM)	MTO	Standard	8 ft.	8TSNLED-LD4-95SL-RM-UNV-L8XX-CD2-U	9,476	82	116
Miro reflector (RM)	MTO	Standard	8 ft.	8TSNLED-LD4-101SLRM-UNV-L8XX-CD2-U	10,254	91	111
Miro reflector (RM)	MTO	Standard	8 ft.	8TSNLED-LD4-109SL-RM-UNV-L8XX-CD2-U	10,999	100	109

# **SNLED** Photometrics

### 4SNLED-LD4-41SL-LW-UNV-L840-CD1-U



Electronic driver
Linear LED 4000K
Spacing criterion: (||) 1.22 x mounting
height, (L) 1.36 x mounting height
Lumens = 4219
Input watts = 35.5W
Efficacy = 118.7 Im/W
Test: 4SNLED-LD4-41SL-LW-UNV-L840-CD1-U.IES

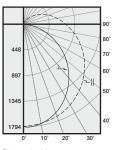
### Coefficients of utilization

	Effe	ctive	e flo	or ca	vity refle	ectar	ıce	20%		
rc		80	%			50%		30%		
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	115	115	115	115	102	102	102	94	94	94
1	102	96	91	86	85	81	77	78	75	72
2	92	82	74	68	73	67	62	67	62	58
3	83	71	62	55	63	56	51	58	52	48
4	76	63	53	46	56	48	42	51	45	40
5	69	56	46	39	50	42	36	46	39	34
6	64	50	41	34	45	37	31	41	35	30
7	59	45	36	30	40	33	28	38	31	26
8	55	41	32	26	37	30	24	34	28	23
9	51	37	29	23	34	27	22	32	25	21
10	48	34	26	21	31	24	20	29	23	19

### Zonal lumen summary

Zone	Lumens	% Fixture
0-30	762	18.1
0-40	1262	29.9
0-60	2339	55.4
0-90	3538	83.9
0-180	4219	100.0

### 8TSNLED-LD4-74SL-LW-UNV-L840-CD1-U



Electronic driver
Linear LED 4000K
Spacing criterion: (||) 1.22 x mounting
height, (⊥) 1.36 x mounting height
Lumens = 7742
Input watts = 73.3W
Efficacy = 105.7 lm/W
Test: 8TSNLED-LD4-74SL-LW-UNV-L840-CD1-U.IES

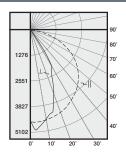
### Coefficients of utilization

	Effe	ctive	e flo	or ca	vity refl	ecta	nce	20%		
rc		80	%			50%	D		30%	
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	115	115	115	115	102	102	102	94	94	94
1	102	96	91	86	85	81	77	78	75	72
2	92	82	74	68	73	67	62	67	62	58
3	83	71	62	55	63	56	51	58	52	48
4	76	63	53	46	56	48	42	51	45	40
5	69	56	46	39	50	42	36	46	39	34
6	64	50	41	34	45	37	31	41	35	30
7	59	45	36	30	40	33	28	38	31	26
8	55	41	32	26	37	30	24	34	28	23
9	51	37	29	23	34	27	22	32	25	21
10	48	34	26	21	31	24	20	29	23	19

### Zonal lumen summary

Zone	Lumens	% Fixture
0-30	1398	18.1
0-40	2316	29.9
0-60	4292	55.4
0-90	6491	83.9
0-180	7742	100.0

### 4SNLED-LD4-62HL-RM-UNV-L840-CD1-U



Electronic driver
Linear LED 4000K
Spacing criterion: (III) 1.22 x mounting
height, (L) 1.36 x mounting height
Lumens = 4219
Input watts = 35.5W
Efficacy = 118.7 Im/W
Test: 45NLED-LD4-62H-RM-UNV-L840-CD1-U.IES

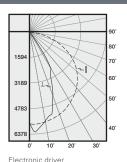
### Coefficients of utilization

rc		80	0/		,	ctar 50%			30%	
			_	40		_			_	_
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	119	119	119	119	111	111	111	106	106	106
1	112	108	105	103	102	100	98	98	96	95
2	105	98	93	89	93	89	86	90	87	84
3	98	90	83	78	85	80	76	83	79	75
4	91	82	75	70	78	73	69	76	72	68
5	85	75	68	63	72	66	62	71	65	61
6	80	69	62	57	67	61	56	65	60	56
7	75	64	57	52	62	56	52	61	55	51
8	71	60	53	48	58	52	47	57	51	47
9	67	56	49	44	54	48	44	53	48	44
10	63	52	45	41	51	45	41	50	44	41

Zonal lumen summary

Zone	Lumens	% Fixture	
0-30	3266	50.8	
0-40	4597	71.5	
0-60	6014	93.5	
0-90	6431	100.0	
0-180	6431	100.0	

### 8TSNLED-LD4-78SL-RM-UNV-L840-CD1-U



Linear LED 4000K
Spacing criterion: (II) 1.22 x mounting
height, (L) 1.36 x mounting height
Lumens = 4219
Input watts = 35.5W
Efficacy = 118.7 Im/W
Test 8TSNLED-LD4-785L-RM-UNV-L840-CD1-U.IES

### Coefficients of utilization

	Effe	ctive	e flo	or ca	vity ref	ecta	nce	20%		
rc		80	%			50%	0		30%	
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	119	119	119	119	11	1 111	111	106	106	106
1	112	108	105	103	10:	2 100	98	98	96	95
2	105	98	93	89	93	89	86	90	87	84
3	98	90	83	78	85	80	76	83	79	75
4	91	82	75	70	78	73	69	76	72	68
5	85	75	68	63	72	66	62	71	65	61
6	80	69	62	57	67	61	56	65	60	56
7	75	64	57	52	62	56	52	61	55	51
8	71	60	53	48	58	52	47	57	51	47
9	67	56	49	44	54	48	44	53	48	44
10	63	52	45	41	51	45	41	50	44	41

 Zonal lumen summary

 Zone
 Lumens
 % Fixture

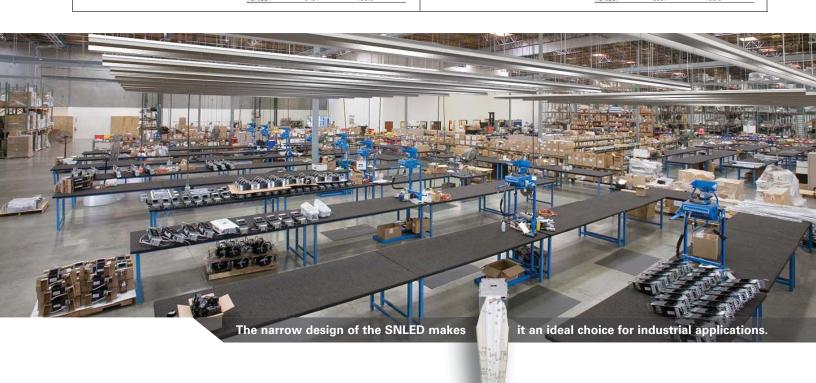
 0-30
 4082
 50.8

 0-40
 5745
 71.5

 0-60
 7517
 93.5

 0-90
 8037
 100.0

 0-180
 8037
 100.0



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Smart, versatile, efficient. The SWLED is a versatile LED surface, suspended or wall mount luminaire which can be used in a broad range of commercial and industrial applications. This series provides customers with a high quality luminaire utilizing the latest LED, solid state lighting and electronic driver technology for optimal performance and maximized energy efficiency. Offered with three different lens distributions and three different lens options which provides uniform light distribution that is an ideal choice for general purpose lighting where customers want to move away from traditional fluorescent solutions.

### Construction

- Surface, suspended and wall: 4 ft. and 2 ft.
- Depth: Two different options, minimum 4.00"
- Steel housing with high impact polymer end caps
- cULus, damp location rated
- RoHS compliant
- Five-year warranty

### **Performance**

- Three lens options: LC (clear), LN (semi-frost narrow), LW (full-frost wide)
- Lens offers even illumination
- Excellent performance, ranging up to 117 lm/W
- Energy savings in excess of 50% compared to traditional fluorescent products
- Three correlated color temperatures (3500K, 4000K and 5000K)
- 4 ft.: L70 @ 60,000 hrs., 2 ft.: L70 @ 60,000 hrs.
- Binning: Per ANSI, 3-step MacAdam ellipse







### **Options**

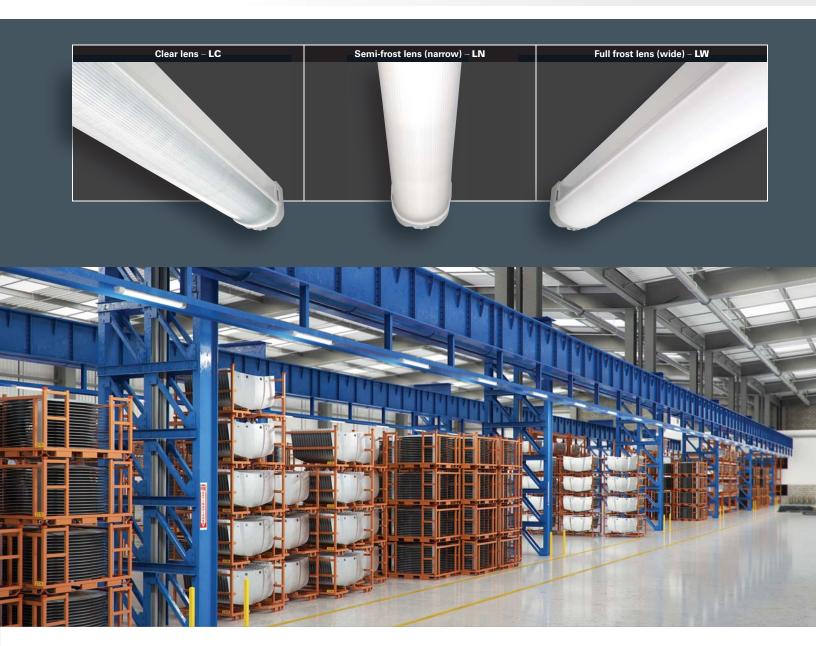
- 16 MTO lumen packages in three different CCTs
- 0 to 10V dimmable driver (standard) with optional DALI solutions and 1% high definition dimming
- Emergency
  - EL7W=7 watt (120V-277V),
  - EL14W=14 watt (120V-277V)
  - 347V-480V (consult factory)
- Convenience outlet is available
- Fuse options available

### **Controls**

- SWLED includes 0-10V (analog) dimming for control using wall dimmers, Greengate Room Controllers, occupancy and/or daylight sensors and lighting controls panels from Eaton.
- SWLED is available with native Fifth Light DALI drivers for complete digital energy management using the capable and scalable Fifth Light controllers and software.







# **Title 24 Compliant**

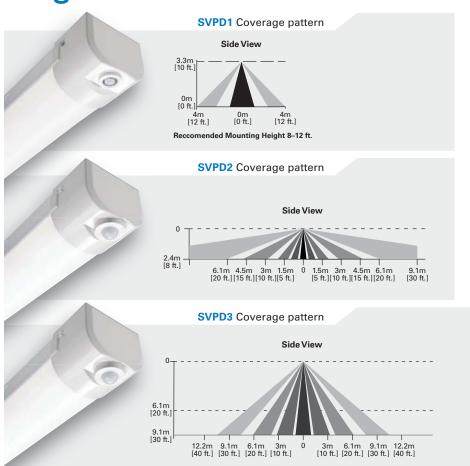
RECOMMENDED APPLICATIONS	Can be used to comply with <b>T24</b> California Non-Residentia Lighting Controls requirements	MEETS AN WITH ADD	ND EXCEED		
Warehouse industrial open area	✓	<b>.</b> 110			.1.
Warehouse aisles	<b>√</b>	<b>7</b>	<b>&gt;</b>		-0-
Entry, waiting, lobby and storage	<b>✓</b>	Occupancy	Luminaire		Daylighting
Stairwell, corridor and hallways	<b>√</b>	Sensor	Dimming	X	Control
Cafeteria, multipurpose and gym	<b>√</b>	Lighting Pov	ver	Tuning	
Restroom vanity	<b>√</b>	Density		Control	

NOTES: 1. Power Adjustment Factor (PAF) available when coupled with controls. See 140.6-A of California Title 24. 2. For more details on Title 24, refer to eaton.com/lightingenergyexperts

# **SWLED** System performance

SWLED perform	ance					
Lens type	Lumen type	Length	Catalog logic	Nominal lumens	Input watts	Efficacy Im/W
Full frost (LW)	Standard	2 ft.	2SWLED-LD4-8SI-LW-UNV-L8XX-CD1-SVPD2-U	800	10.1	105
Full frost (LW)	Standard	2 ft.	2SWLED-LD4-16SL-LW-UNV-L8XX-CD1-SVPD2-U	1,600	18.9	99.5
Full frost (LW)	Standard	2 ft.	2SWLED-LD4-20SL-LW-UNV-L8XX-CD1-SVPD2-U	2,000	23.5	92
Full frost (LW)	High	2 ft.	2SWLED-LD4-24HL-LW-UNV-L8XX-CD1-SVPD2-U	2,400	24.9	94.5
Full frost (LW)	High	2 ft.	2SWLED-LD4-28HL-LW-UNV-L8XX-CD1-SVPD2-U	2,800	29.1	89.5
Full frost (LW)	Standard	4 ft.	4SWLED-LD4-16SL-LW-UNV-L8XX-CD1-SVPD2-U	1,500	12.8	116.7
Full frost (LW)	Standard	4 ft.	4SWLED-LD4-20SL-LW-UNV-L8XX-CD1-SVPD2-U	2,000	17.6	113.6
Full frost (LW)	Standard	4 ft.	4SWLED-LD4-28SL-LW-UNV-L8XX-CD1-SVPD2-U	2,800	25.6	109.6
Full frost (LW)	Standard	4 ft.	4SWLED-LD4-32SL-LW-UNV-L8XX-CD1-SVPD2-U	3,200	30	101.7
Full frost (LW)	Standard	4 ft.	4SWLED-LD4-36SL-LW-UNV-L8XX-CD1-SVPD2-U	3,600	35.2	102.1
Full frost (LW)	Standard	4 ft.	4SWLED-LD4-40SL-LW-UNV-L8XX-CD1-SVPD2-U	4,000	40.4	99.1
Full frost (LW)	High	4 ft.	4SWLED-LD4-44HL-LW-UNV-L8XX-CD1-SVPD2-U	4,400	39.2	112.2
Full frost (LW)	High	4 ft.	4SWLED-LD4-48HL-LW-UNV-L8XX-CD1-SVPD2-U	4,800	43.3	110.9
Full frost (LW)	High	4 ft.	4SWLED-LD4-52HL-LW-UNV-L8XX-CD2-SVPD2-U	5,200	46.8	111.0
Full frost (LW)	High	4 ft.	4SWLED-LD4-56HL-LW-UNV-L8XX-CD2-SVPD2-U	5,600	51.1	109.6
Full frost (LW)	High	4 ft.	4SWLED-LD4-60HL-LW-UNV-L8XX-CD2-SVPD2-U	6,000	55.5	108.1
Full frost (LW)	High	4 ft.	4SWLED-LD4-64HL-LW-UNV-L8XX-CD2-SVPD2-U	6,400	60	106.7
Full frost (LW)	High	4 ft.	4SWLED-LD4-70HL-LW-UNV-L8XX-CD2-SVPD2-U	7,000	69	101.4

# Integrated sensor



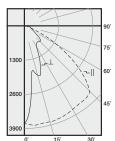
### A Broad Range of Sensor Options

The SWLED is available with a selection of integrated sensors for various applications. The 500 sq. ft. (SVPD1) and 900 sq. ft. (SVPD2) sensors can be used on 8-10 ft. ceilings and walls, while the 1200 sq. ft. (SVPD3) sensor can be used up to 30 ft. All three options feature auto-on occupancy detection, auto-dim to 50%, and daylight harvesting capabilities. Each can be customized using the optional remote control which unlocks additional features as well, such as an energy saver mode and three daylight harvesting modes.



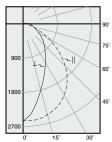
# **SWLED** Photometrics

### SWLED 4', 4000 lumens (clear lens)



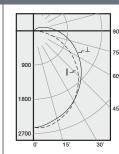
Electronic driver
Linear LED 3500K
Spacing criterion:
(II) 1.5 x mtg height,
(L) 0.3 x mtg height
Lumens = 4909
Input watts = 42.5W
Efficacy = 115.5 lm/W
Test: 4SWLED-LD440SL-LC-UNV-L835CD1-SVPD1-U.IES

### SWLED 4', 4000 lumens (narrow lens)



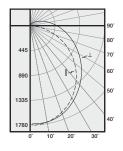
Electronic driver
Linear LED 3500K
Spacing criterion:
(II) 1.3 x mtg height,
(L) 0.7 x mtg height
Lumens = 4692
Input watts = 42.5W
Efficacy = 110.4 lm/W
Test: 4SWLED-LD440SL-LN-UNV-L835CD1-SVPD1-U.IES

### SWLED 4', 4000 lumens (wide lens)



Electronic driver
Linear LED 3500K
Spacing criterion:
(II) 1.2 x mtg height,
(L) 1.2 x mtg height
Lumens = 973
Input watts = 7W
Efficacy = 139.0 lm/W
Test: 4SWLED-LD440SL-LW-UNV- EL7WL835-CD1-SVPD2-U.IES

### 4SWLED-LD4-64HL-LW-UNV-L840-CD2-SVPDx



Electronic driver
Linear LED 4000K
Spacing criterion: (II) 1.25 x mounting
height, (L) 1.3 x mounting height
Lumens = 6497
Input watts = 66.4W
Efficacy = 97.9 Im/W
Test: 4SWLED-LD4-64HL-LW-UNV-L840-CD2-SVPDx.IES

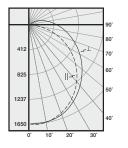
### Coefficients of utilization

	Effe	ctive	e flo	or cav	ity refle	ctar	ice	20%		
rc		80	%		50%			30%		
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	117	117	117	117	106	106	106	99	99	99
1	104	99	94	89	89	86	82	84	81	78
2	94	85	77	71	77	71	66	72	68	63
3	85	74	65	58	67	60	55	63	57	53
4	78	65	56	49	59	52	46	56	50	45
5	72	58	49	42	53	45	40	50	44	38
6	66	52	43	36	48	40	35	45	39	33
7	61	47	38	32	43	36	30	41	34	30
8	57	43	34	28	40	32	27	38	31	26
9	53	39	31	25	36	29	24	35	28	24
10	50	36	28	23	34	27	22	32	26	21

### Zonal lumen summary

Zone	Lumens	% Fixture	
0-30	1391	21.4	
0-40	2288	35.2	
0-60	4141	63.7	
0-90	5888	90.6	
0-180	6497	100.0	

### 4SWLED-LD4-60HL-LW-UNV-L840-CD2-SVPDx



Electronic driver
Linear LED 4000K
Spacing criterion: (||) 1.25 x mounting
height, (L) 1.3 x mounting height
Lumens = 6021
Input watts = 60.4W
Efficacy = 99.7 Im/W
Test: 4SWLED-LD4-60HL-LW-UNV-L840-CD2-SVPDx.IES

### Coefficients of utilization

	Effe	ctive	e flo	or ca	vity refle	ectar	ıce	20%		
rc		80	%			50%	,		30%	
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	117	117	117	117	106	106	106	99	99	99
1	104	99	94	89	89	86	82	84	81	78
2	94	85	77	71	77	71	66	72	68	63
3	85	74	65	58	67	60	55	63	57	53
4	78	65	56	49	59	52	46	56	50	45
5	71	58	49	42	53	45	40	50	44	38
6	66	52	43	36	48	40	35	45	39	33
7	61	47	38	32	43	36	30	41	34	30
8	57	43	34	28	40	32	27	38	31	26
9	53	39	31	25	36	29	24	35	28	24
10	50	36	28	23	34	27	22	32	26	21

Zonal lumen summary

Zone	Lumens	% Fixture
0-30	1289	21.4
0-40	2120	35.2
0-60	3838	63.7
0-90	5456	90.6
0-180	6021	100.0

# Media Center Restrooms / Directory Robert Smith Performance Center

2' Lumen maintenance

The SWLED is an ideal choice for both

Ambient temperature TM-21 lumen maintenance (60,000 hours) Theoretical L70 (hours)

40°C > 83% 121,000

4' Lumen maintenance		
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L70 (hours)
40°C	> 90%	201,000

new construction and retrofit applications.

Certification data				
cULus - Damp Location	DesignLights Consortium™ Qualified	LM79/LM80 Compliant	RoHS Compliant	NOM Compliant

# SkyBar Single Low bay LED





The SkyBar™ Single Blade, two blade or four blade provides the perfect configuration to fit any high bay or low bay environment. By providing multiple lumen packages and distributions, the SkyBar gives the necessary optical freedom and flexibility to meet the requirements for a wide variety of lighting applications. SkyBar utilizes the advantages of the patented WaveStream™ technology to deliver a stylish LED alternative to traditional high bay lighting for commercial and industrial applications.

### **Performance**

- Multiple lumen packages available. 4 ft.: 3,000, 4,000, 5,000, 6,000, and 7,000 lumens 8 ft.: 6,000, 8,000, 10,000, 12,000, and 14,000 lumens
- High-performance efficacy up to 119 lm/W
- Three correlated color temperatures (3500K, 4000K and 5000K) at typical 85 CRI
- Standard uplight
- Five-year warranty

### Compliance

- LED modules comply with IENSA LM-79 and LM-80 standards
- UL listed, rated for up to 40°C ambient
- RoHS compliant







### **Options**

- Narrow and wide distributions
- Universal (120V-277V) or 347/480V
- Emergency 7 watt and 14 watt options
- Optional reflector shield for downlight only

### **Controls**

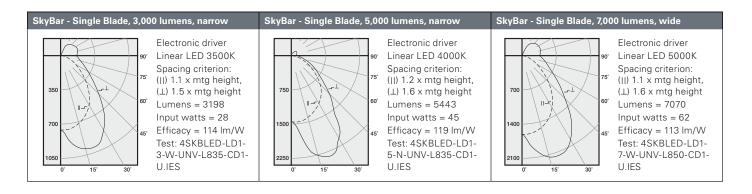
- SkyBar luminaires include (0-10V) dimming drivers for control using wall dimmers (10% - 100%), daylighting sensors and room controllers from Eaton.
- SkyBar luminaires are available with native DALI drivers for complete digital energy management using Fifth Light addressable lighting controls.

fifthliaht

SkyBar - 4 blade, 19,000 lumens					
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L70 (hours)			
40°C	> 83	115,000			

Certification data					
cULus - Damp Location	CSA	LM79/LM80 Compliant	RoHS Compliant	DesignLight™ Consortium Qualified	NOM Compliant

# SkyBar Single Photometrics













# SkyBar High bay LED



The **SkyBar**<sup>TM</sup> series reimagines high bay and low bay lighting with distinctive aesthetics, industry-first uplight and exceptional optical performance. Multiple lumen packages and distributions provide design freedom for a wide variety of lighting applications. With patented WaveStream<sup>TM</sup> technology, SkyBar high bay luminaires deliver a stylish LED alternative to traditional fluorescent lighting in both commercial, retail and industrial environments.

### **Performance**

- Multiple lumen packages available.
   Two-blade: 10,000 and 14,000 lumens
   Four-blade: 19,000, 24,000 and 29,000 lumens
- High-performance efficacy in excess of 100 lm/W
- Three correlated color temperatures (3500K, 4000K and 5000K) at typical 85 CRI
- Uplight in excess of 10%
- Five-year warranty

### **Compliance**

- LED modules comply with IENSA LM-79 and LM-80 standards
- UL listed
- RoHS compliant







### **Options**

- Two-blade (17-1/2" x 50-11/32") and four-blade (22-1/2" x 50-11/32") configurations
- Multiple distributions with field-adjustable blades
- Universal (120V-277V) or 347/480V
- Emergency 10 watt and 20 watt options

### **Controls**

- SkyBar luminaires include (0-10V) dimming drivers for control using wall dimmers (10% - 100%), daylighting sensors and room controllers from Eaton.
- SkyBar luminaires are available with native DALI drivers for complete digital energy management using Fifth Light addressable lighting controls.

# **SkyBar** Application versatility

SkyBar fixture blades can be independently positioned vertically or horizontally, as well as inward or outward facing at 20 degree angles to create many different combinations and unique distributions. The result is a vast array of custom configurations which maximize illumination control and performance. The versatility of the SkyBar series makes it ideal for high bay and low bay applications that require a lighting fixture that delivers up light, a unique aesthetic and superior optical performance.

Application	Uplight	Aesthetics	Optical performance
Warehouse	<b>✓</b>		<b>✓</b>
Distribution centers	<b>✓</b>		<b>✓</b>
Showrooms	<b>✓</b>	<b>✓</b>	<b>✓</b>
Atriums	<b>✓</b>	<b>✓</b>	<b>✓</b>
Convention centers	<b>✓</b>	<b>✓</b>	<b>✓</b>
Big box	<b>✓</b>	<b>✓</b>	<b>✓</b>
Grocery stores	<b>✓</b>	<b>✓</b>	<b>✓</b>
Auditoriums	<b>✓</b>		<b>✓</b>

### Blade adjustment options

- Vertical
- 20° tilt in or out 🚄 🥌
- Horizontal

### Field adjustable blades offer:

- Unique distributions
- Increased uplight
- Customizable fixture performance





Blades rotate up and lock into position for protection during shipment



### Wide distribution optical pattern



### Narrow distribution optical pattern

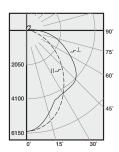


### Narrow distribution optical pattern



### SKBLED-LD1-19-W-UNV-L840-CD2-U

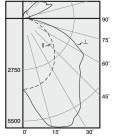
Wide distribution - all blades tilted out 20°



Dimming driver Linear LED 4000K Spacing criterion: (II) 1.1 x mtg height, (⊥) 1.1 x mtg height Lumens = 18959 Input watts = 183 Efficacy = 103 lm/W Test: P24086

### SKBLED-LD1-24-N-UNV-L840-CD4-U

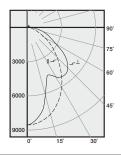
Narrow distribution - outer blades vertical. inner blades horizontal



Electronic driver Linear LED 4000K Spacing criterion: (II) 1.2 x mtg height, (L) 1.8 x mtg height Lumens = 21360 Input watts = 251 Efficacy = 85 lm/W Test: P24061

### SKBLED-LD1-19-N-UNV-L840-CD2-U

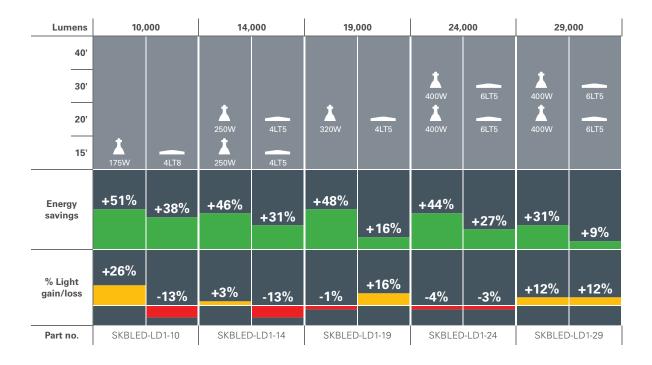
Narrow distribution - all blades tilted out 20°



Dimming driver Linear LED 4000K Spacing criterion: (II) 1.1 x mtg height, ( $\perp$ ) 0.7 x mtg height Lumens = 19055 Input watts = 183 Efficacy = 104 lm/W Test: P24064

# **SkyBar** System performance

SKBLED performance				
Catalog number	Description	Delivered lumens	Input watts	Efficacy Im/W
SKBLED-LD1-10-N-UNV-L840-CD1-U	4ft. SkyBar, 10,000 lumen, narrow, UNV, 4000K, dimming	9,861	94	105
SKBLED-LD1-10-W-UNV-L840-CD1-U	4ft. SkyBar, 10,000 lumen, wide, UNV, 4000K, dimming	9,713	94	103
SKBLED-LD1-14-N-UNV-L840-CD2-U	4ft. SkyBar, 14,000 lumen, narrow, UNV, 4000K, dimming	14,336	152	94
SKBLED-LD1-14-W-UNV-L840-CD2-U	4ft. SkyBar, 14,000 lumen, wide, UNV, 4000K, dimming	14,121	152	93
SKBLED-LD1-19-N-UNV-L840-CD2-U	4ft. SkyBar, 19,000 lumen, narrow, UNV, 4000K, dimming	19,152	183	105
SKBLED-LD1-19-W-UNV-L840-CD2-U	4ft. SkyBar, 19,000 lumen, wide, UNV, 4000K, dimming	18,865	183	103
SKBLED-LD1-24-N-UNV-L840-CD4-U	4ft. SkyBar, 24,000 lumen, narrow, UNV, 4000K, dimming	24,797	251	99
SKBLED-LD1-24-W-UNV-L840-CD4-U	4ft. SkyBar, 24,000 lumen, wide, UNV, 4000K, dimming	24,425	251	97
SKBLED-LD1-29-N-UNV-L840-CD4-U	4ft. SkyBar, 29,000 lumen, narrow, UNV, 4000K, dimming	29,188	313	93
SKBLED-LD1-29-W-UNV-L840-CD4-U	4ft. SkyBar, 29,000 lumen, wide, UNV, 4000K, dimming	28,750	313	92



SkyBar - 4 blade, 19,000 lumens				
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L70 (hours)		
40°C	> 83	115,000		

SkyBar - 4 blade, 24,000 lumens				
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L80 (hours)		
40°C	> 87	110,000		

Certification data					
cULus - Damp Location	CSA	LM79/LM80 Compliant	RoHS Compliant	DesignLight™ Consortium Qualified	NOM Compliant

39

# **SkyBar** Photometrics

### SkyBar - 2 blade narrow, 10,000 lumens SkyBar - 2 blade wide, 10,000 lumens SkyBar - 4 blade narrow, 19,000 lumens Electronic driver Electronic driver Electronic driver Linear LED 4000K Linear LED 4000K Linear LED 4000K Spacing criterion: Spacing criterion: Spacing criterion: (II) 1.2 x mtg height, (II) 1.2 x mtg height, (II) 1.2 x mtg height, 1400 (⊥) 1.6 x mtg height ( $\perp$ ) 1.6 x mtg height ( $\perp$ ) 1.6 x mtg height Lumens = 9861 Lumens = 9701 Lumens = 19152 Input watts = 94 Input watts = 94 Input watts = 183 Efficacy = 105 lm/W Efficacy = 103 lm/W Efficacy = 105 lm/W Test: SKBLED-LD1-Test: SKBLED-LD1-Test: SKBLED-LD1-10-N-UNV-L840-10-W-UNV-L840-19-N-UNV-L840-CD1-U.IES CD1-U.IES CD2-U.IES SkyBar - 4 blade wide, 19,000 lumens SkyBar - 4 blade narrow, 29,000 lumens SkyBar - 4 blade narrow, 24,000 lumens Electronic driver Electronic driver Electronic driver Linear LED 4000K Linear LED 4000K Linear LED 4000K Spacing criterion: Spacing criterion: Spacing criterion: (II) 1.2 x mtg height, (II) 1.2 x mtg height, (II) 1.2 x mtg height, (⊥) 1.6 x mtg height ( $\perp$ ) 1.6 x mtg height (⊥) 1.6 x mtg height Lumens = 18964 Lumens = 24797 Lumens = 29188 Input watts = 183 Input watts = 251 Input watts = 313Efficacy = 105 lm/W Efficacy = 99 lm/W Efficacy = 93 lm/W Test: SKBLED-LD1-Test: SKBLED-LD1-Test: SKBLED-LD1-19-W-UNV-L840-24-N-UNV-L840-29-N-UNV-L840-5850 CD2-U.IES CD4-U.IES CD4-U.IES



# VT2-LD4 Vaportite LED

### FOOD PROCESSING



The Vaportite LED series is an energy-efficient industrial vaportite fixture that features rugged and durable construction. The Vaportite LED incorporates a full metal fixture liner inside a reinforced fiberglass housing with a high impact diffuser. The series is designed for maximum operation in commercial institutional and industrial environments for both interior and exterior applications.

### Construction

- Reinforced fiberglass housing with high-impact diffuser
- cULus wet location, IP65 and NSF (4 ft. housing)
- RoHS compliant
- Wet location listed

### **Performance**

- High efficacy up to 130 lm/W
- Three CCT colors: 3500K, 4000K, 5000K
- Typical CRI: 85
- Medium and wide distributions
- L84 at 60,000 hours
- -20°C to 35°C ambient rating







### **Options**

- Eight standard lumen packages and three housing sizes
  - 2': 2,000 and 3,000 lumen
  - 4': 4,000, 6,000, and 8,000 lumen
  - 8': 9,000, 12,000, and 16,000 lumen
- Three lensing options
- Fifth Light DALI

### **Controls**

- Includes 0-10V (analog) dimming for control using Eaton wall dimmers, Greengate Room Controllers, occupancy and/or daylight sensors and lighting controls panels.
- · Available with native Fifth Light DALI drivers for complete digital energy management using the capable and scalable Fifth Light controllers and software.



# VT2-LD4 with lighting controls

### **Greengate integrated solutions**

Greengate lighting controls from Eaton's Lighting Solutions integrate easily with Metalux utility LED Series luminaires. Luminaires include standard 0-10V continuous dimming drivers for easy and flexible integration with lighting control panels, occupancy sensors, daylighting controls and room controllers. Greengate lighting control products combine energy-savings and maintenance-free technology to deliver the most reliable, cost-effective energy management solutions on the market.





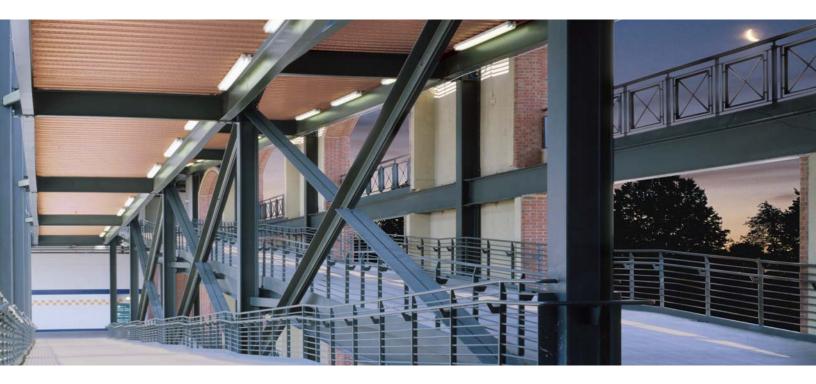






# VT2-LD4 System performance

VT2-LD4 performance				
Catalog number	Description	Delivered lumens	Input watts	Efficacy Im/W
2VT2-LD4-3-DR-UNV-L840-CD1-WL-U	2 ft. vaportite, LED, 3,000 lumen, DR lens	3,616	27.7	131
2VT2-LD4-3-DR-UNV-L850-CD1-WL-U	2 ft. vaportite, LED, 3,000 lumen, DR lens	3,825	27.7	138
4VT2-LD4-4-DR-UNV-L840-CD1-WL-U	4 ft. vaportite, LED, 4,000 lumen, DR lens	4,529	38.1	119
4VT2-LD4-4-DR-UNV-L850-CD1-WL-U	4 ft. vaportite, LED, 4,000 lumen, DR lens	4,788	38.1	126
4VT2-LD4-6-DR-UNV-L840-CD1-WL-U	4 ft. vaportite, LED, 6,000 lumen, DR lens	6,023	56.2	107
4VT2-LD4-6-DR-UNV-L850-CD1-WL-U	4 ft. vaportite, LED, 6,000 lumen, DR lens	6,370	56.2	113
4VT2-LD4-8-FR50-UNV-L840-CD1-WL-U	4 ft. vaportite, LED, 8,000 lumen, FR50 lens	8,758	81.1	108
4VT2-LD4-8-FR50-UNV-L850-CD1-WL-U	4 ft. vaportite, LED, 8,000 lumen, FR50 lens	9,262	81.1	114
8VT2-LD4-9-DR-UNV-L840-CD1-WL-U	8 ft. vaportite, LED, 9,000 lumen, DR lens	10,605	105.2	101
8VT2-LD4-9-DR-UNV-L850-CD1-WL-U	8 ft. vaportite, LED, 9,000 lumen, DR lens	11,211	105.2	107
8VT2-LD4-12-DR-UNV-L840-CD2-WL-U	8 ft. vaportite, LED, 12,000 lumen, DR lens	12,199	114.6	106
8VT2-LD4-12-DR-UNV-L850-CD2-WL-U	8 ft. vaportite, LED, 12,000 lumen, DR lens	12,905	114.6	113
8VT2-LD4-16-FR50-UNV-L840-CD2-WL-U	8 ft. vaportite, LED, 16,000 lumen, FR50 lens	17,516	162.2	108
8VT2-LD4-16-FR50-UNV-L850-CD2-WL-U	8 ft. vaportite, LED, 16,000 lumen, FR50 lens	18,525	162.2	114



VT2-LD4		
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L70 (hours)
25°C	> 91	247,000

Certification data						
cULus - Damp Location	CSA	IC Rated	LM79/LM80 Compliant	RoHS Compliant	DesignLight™ Consortium Qualified	NOM Compliant

### 2VT2-LD4-3-DR-UNV-L840-CD1-WL-U

Electronic driver
Linear LED 4000K
Spacing criterion: (III) 1.29 x mounting
height, (L) 1.26 x mounting height
Lumens = 3616
Input watts = 27.7W
Efficacy = 130.5 Im/W
Test: 2VT2-LD4-3-DR-UNV-L840CD1-WI-JILFS

### Coefficients of utilization

	Effe	ctive	flo	or ca	vity ref	ectai	nce	20%			
rc		80	%			50%	Ď	30%			
rw	70	50	30	10	50	30	10	50	30	10	
RCR											
0	118	118	118	118	110	110	110	105	105	105	
1	108	103	98	94	96	92	89	91	89	86	
2	98	89	82	76	83	78	73	80	75	71	
3	89	78	70	63	73	67	61	70	64	60	
4	81	69	60	53	65	58	52	62	56	51	
5	75	62	53	46	58	51	45	56	49	44	
6	69	56	47	40	52	45	39	51	44	39	
7	64	50	41	35	48	40	35	46	39	34	
8	60	46	37	31	44	36	31	42	35	31	
9	56	42	34	28	40	33	28	39	32	28	
10	52	39	31	26	37	30	25	36	30	25	

 Zonal lumen summary

 Zone
 Lumens
 % Fixture

 0-30
 943
 26.1

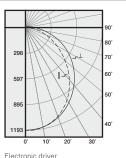
 0-40
 1541
 42.6

 0-60
 2728
 75.4

 0-90
 3533
 97.7

 0-180
 3616
 100.0

### 2VT2-LD4-3-FR50-UNV-L840-CD1-WL-U



Electronic driver
Linear LED 4000K
Spacing criterion: (III) 1.21 x mounting
height, (LI) 1.25 x mounting height
Lumens = 3550
Input watts = 27.7W
Efficacy = 128.1 Im/W
Test: 2VT2-LD4-3-FR50-UNV-L840CD1-WI-JUES

### Coefficients of utilization

	Effe	ctive	flo	20%						
rc		80	%			50%	0		30%	
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	118	118	118	118	109	109	109	104	104	104
1	107	102	97	93	94	91	88	90	87	84
2	97	88	81	75	82	77	72	78	74	70
3	88	77	69	62	72	65	60	69	63	59
4	81	69	60	53	64	57	51	61	55	50
5	74	61	52	45	57	50	44	55	48	43
6	69	55	46	40	52	44	39	50	43	38
7	64	50	41	35	47	40	34	45	39	34
8	59	46	37	31	43	36	31	42	35	30
9	55	42	34	28	40	33	28	38	32	27
10	52	39	31	25	37	30	25	36	29	25

 Zonal lumen summary

 Zone
 Lumens
 % Fixture

 0-30
 919
 25.9

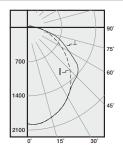
 0-40
 1491
 42.0

 0-60
 2598
 73.2

 0-90
 3427
 96.5

 0-180
 3550
 100.0

### 4VT2-LD4-6-DR-UNV-L835-CD1-U



Electronic driver
Linear LED 3500K
Spacing criterion: (II) 1.2 x mounting height, (LJ 1.2 x mounting height Lumens = 5882
Input watts = 56W
Efficacy = 104.7 Im/W
Test: 4/T2-LD4-6-DR-UNV-L835-CD1-U.IES

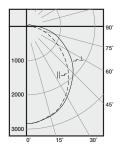
### Coefficients of utilization

	Effe	ctive	flo	or ca	ity refle	ectai	nce	20%		
rc		80	%			50%			30%	,
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	119	119	119	119	110	110	110	105	105	105
1	108	103	98	94	96	93	90	92	89	87
2	98	89	82	76	84	78	73	80	75	71
3	89	78	70	63	73	67	61	70	65	60
4	81	69	60	53	65	58	52	62	56	51
5	75	62	52	46	58	51	45	56	49	44
6	69	55	46	40	52	45	39	51	44	39
7	64	50	41	35	48	40	35	46	39	34
8	59	46	37	31	44	36	31	42	35	31
9	56	42	34	28	40	33	28	39	32	28
10	52	39	31	25	37	30	25	36	30	25

Zonal lumen summary
Zone Lumens

Zone	Lumens	% Fixture
0-30	1536	26.1
0-40	2490	42.3
0-60	4463	75.9
0-90	5804	98.7
0-180	5882	100.0

### 4VT2-LD4-8-FR50-UNV-L835-CD1-U



Electronic driver
Linear LED 3500K
Spacing criterion: (III) 1.2 x mounting
height, (I.) 1.2 x mounting height
Lumens = 5882
Input watts = 56W
Efficacy = 104.7 Im/W
Test: 4VT2-LD4-8-FR50-UNV-L835-CD1-U.IES

### Coefficients of utilization

Coem	Coefficients of utilization												
	Effe	ctive	flo	or ca	vity refle	ectar	nce	20%					
rc		80	%			50%	,		30%				
rw	70	50	30	10	50	30	10	50	30	10			
RCR													
0	118	118	118	118	109	109	109	104	104	104			
1	107	102	97	93	94	91	87	90	87	84			
2	97	88	81	75	82	76	72	78	73	69			
3	88	77	69	62	72	65	60	69	63	58			
4	81	68	59	53	65	57	51	61	55	50			
5	74	61	52	45	57	50	44	55	48	43			
6	69	55	46	39	52	44	38	50	43	38			
7	64	50	41	35	47	40	34	45	39	34			
8	59	46	37	31	43	36	30	42	35	30			
9	55	42	34	28	40	32	27	38	32	27			
10	52	39	31	25	37	30	25	36	29	25			

 Zonal lumen summary

 Zone
 Lumens
 % Fixture

 0-30
 2200
 25.7

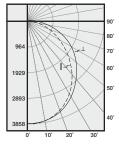
 0-40
 3573
 41.8

 0-60
 6232
 96.4

 0-90
 8248
 100.0

 0-180
 8553
 100.0

### 8VT2-LD4-12-FR50-UNV-L835-CD1-U



Electronic driver
Linear LED 3500K
Spacing criterion: (III) 1.2 x mounting
height, (LJ) 1.2 x mounting height
Lumens = 11546
Input watts = 114.6W
Efficacy = 100.8 Im/W
Test: 8VT2-LD4-12-FR50-UNV-L835-CD1-U.IES

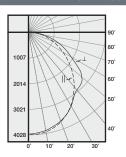
### Coefficients of utilization

	Effe	ctive	flo	20%						
rc		80	%			50%			30%	
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	118	118	118	118	109	109	109	104	104	104
1	107	102	97	93	94	91	87	90	87	84
2	97	88	81	75	82	76	72	78	73	69
3	88	77	69	62	72	65	60	69	63	58
4	81	68	59	53	64	57	51	61	55	50
5	74	61	52	45	57	50	44	55	48	43
6	69	55	46	39	52	44	38	50	43	38
7	64	50	41	35	47	40	34	45	39	34
8	59	46	37	31	43	36	30	42	35	30
9	55	42	34	28	40	32	27	38	32	27
10	52	39	31	25	37	30	25	35	29	25

Zonal lumen summary

Zone	Lumens	% Fixture	
0-30	2970	25.7	
0-40	4821	41.8	
0-60	8405	72.8	
0-90	11138	96.5	
0-180	11546	100.0	

### 8VT2-LD4-12-DR-UNV-L835-CD1-U



Electronic driver
Linear LED 3500K
Spacing criterion: (II) 1.2 x mounting
height, (L) 1.2 x mounting height
Lumens = 11764
Input watts = 112.4W
Efficacy = 104.7 Im/W
Test: 8VT2-LD4-12-DR-UNV-L835-CD1-U.IES

### Coefficients of utilization

	Effe	ctive	flo	or ca	nce	20%				
rc		80	%		50%			30%		
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	119	119	119	119	110	110	110	105	105	105
1	108	103	98	94	96	93	90	92	89	87
2	98	89	82	76	84	78	73	80	75	71
3	89	78	70	63	73	67	61	70	65	60
4	81	69	60	53	65	58	52	62	56	51
5	75	62	52	46	58	51	45	56	49	44
6	69	55	46	40	52	45	39	51	44	39
7	64	50	41	35	48	40	35	46	39	34
8	59	46	37	31	44	36	31	42	35	31
9	56	42	34	28	40	33	28	39	32	28
10	52	39	31	25	37	30	25	36	30	25

# Zonal lumen summary Zone Lumens % Fixture 0-30 3071 26.1 0-40 4980 42.3 0-60 8927 75.9 0-90 11608 98.7 0-180 11764 100.0

# VT4 LED Vaportite LED

MANUFACTURING FOOD PROCESSING



VT4 LED delivers efficient performance in a rugged design. Utilizing a robust heat management system, the VT4 LED series is suitable for interior and exterior applications and can be chain, cable or stem mounted. Designed for maximum operation in commercial institutional and industrial high bay environments where weathering, humidity and dust or corrosive fumes are present.

### Construction

- Reinforced fiberglass housing with high-impact diffuser
- cULus wet Location
- IP65 and IP67 up to 1500 PSI hose down rating
- NSF NEMA 4x
- RoHS Compliant

### **Performance**

- High efficacy up to 125 lm/W
- Two CCT colors: 4000K and 5000K
- Typical CRI: 85
- NSF certified
- NEMA 4x, IP67 up to 1500 PSI hose down rating
- -20°C to 40°C ambient rating



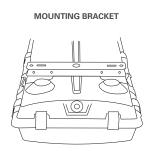
### **Options**

- Five lumen package options ranging from 11,000 - 28,000
- Clear and frosted lens options
- Chain, cable or stem mounting options
- Optional 0-10V dimming driver
- Optional stainless steel hardware



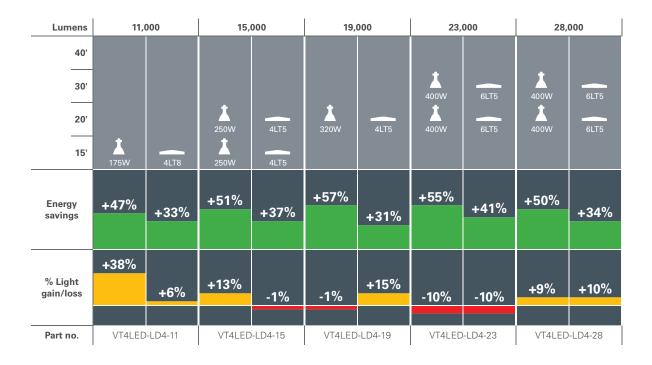
# VT4 LED Installation





# **VT4-LED** Photometrics

VT4LED performance				
Catalog number	Description	Delivered lumens	Input watts	Efficacy Im/W
VT4LED-LD4-11-DR-UNV-L850-CD1-WL-U	4 ft. vaportite, LED, 11,000 lumen, clear acrylic, UNV, 5000K, dimming, wet	11,796	104	113
VT4LED-LD4-11-DRF-UNV-L850-CD1-WL-U	4 ft. vaportite, LED, 11,000 lumen, frosted acrylic, UNV, 5000K, dimming, wet	11,595	102	113
VT4LED-LD4-15-DR-UNV-L850-CD2-WL-U	4 ft. vaportite, LED, 15,000 lumen, clear acrylic, UNV, 5000K, dimming, wet	15,951	138	115
VT4LED-LD4-15-DRF-UNV-L850-CD2-WL-U	4 ft. vaportite, LED, 15,000 lumen, frosted acrylic, UNV, 5000K, dimming, wet	15,681	138	113
VT4LED-LD4-19-DR-UNV-L850-ED2-WL-U	4 ft. vaportite, LED, 19,000 lumen, clear acrylic, UNV, 5000K, fixed output, wet	19,056	151	126
VT4LED-LD4-19-DRF-UNV-L850-ED2-WL-U	4 ft. vaportite, LED, 19,000 lumen, frosted acrylic, UNV, 5000K, fixed output, wet	18,734	152	123
VT4LED-LD4-23-DR-UNV-L850-CD2-WL-U	4 ft. vaportite, LED, 23,000 lumen, clear acrylic, UNV, 5000K, dimming, wet	23,310	204	114
VT4LED-LD4-23-DRF-UNV-L850-CD2-WL-U	4 ft. vaportite, LED, 23,000 lumen, frosted acrylic, UNV, 5000K, dimming, wet	22,916	204	112
VT4LED-LD4-28-DR-UNV-L850-ED3-WL-U	4 ft. vaportite, LED, 28,000 lumen, clear acrylic, UNV, 5000K, fixed output, wet	28,316	226	125
VT4LED-LD4-28-DRF-UNV-L850-ED3-WL-U	4 ft. vaportite, LED, 28,000 lumen, frosted acrylic, UNV, 5000K, fixed output, wet	27,838	227	123

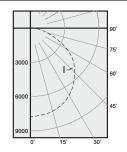


VT4-LED		
Ambient temperature	TM-21 lumen maintenance (60,000 hours)	Theoretical L70 (hours)
25°C	> 91	247,000

Certification data						
cULus - Damp Location	CSA	IC Rated	LM79/LM80 Compliant	RoHS Compliant	DesignLight™ Consortium Qualified	NOM Compliant

# VT4-LED Ordering information

### VT4LED-LD4-23-DR-UNV-L850-CD2



Electronic driver
Linear LED 5000K
Spacing criterion: (||) 1.3 x mounting
height, (⊥) 1.3 x mounting height
Lumens = 22895
Input watts = 204W
Efficacy = 114.2 Im/W
Test: VT4LED-LD4-23-DR-UNV-L850-CD2.IES

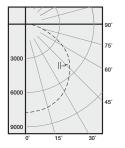
### Coefficients of utilization

	Effective floor cavity reflectance						20%			
rc		80	%			50%	,		30%	
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	119	119	119	119	110	110	110	105	105	105
1	108	103	99	95	96	93	90	92	89	87
2	98	90	83	77	84	79	74	80	76	72
3	89	79	71	64	74	67	62	71	65	61
4	82	70	61	54	66	58	53	63	57	52
5	75	62	53	47	59	51	46	57	50	45
6	69	56	47	41	53	45	40	51	44	39
7	64	51	42	36	48	41	35	47	40	35
8	60	46	38	32	44	37	31	43	36	31
9	56	42	34	29	40	33	28	39	33	28
10	52	39	31	26	37	30	26	36	30	25

### Zonal lumen summary

Zone	Lumens	% Fixture
0-30	6129	26.3
0-40	10135	43.5
0-60	17947	77.0
0-90	22895	98.2
0-180	23310	100.0

### VT4LED-LD4-23-DRF-UNV-L850-CD2



Electronic driver
Linear LED 5000K
Spacing criterion: (||) 1.3 x mounting
height, (L) 1.31 x mounting height
Lumens = 22172
Input watts = 204W
Efficacy = 112.2 Im/W
Test: VT4LED-LD4-23-DRF-UNV-L850-CD2.IES

### Coefficients of utilization

	Effective floor cavity reflectance						20%			
rc		80	%			50%	,		30%	
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	118	118	118	118	109	109	109	104	104	104
1	108	103	98	94	95	92	89	91	88	85
2	98	89	82	77	83	78	73	79	75	71
3	89	79	70	64	73	67	61	70	65	60
4	82	70	61	54	65	58	52	62	56	51
5	75	62	53	47	58	51	45	56	50	45
6	69	56	47	41	53	45	40	51	44	39
7	64	51	42	36	48	41	35	46	40	35
8	60	46	38	32	44	37	31	42	36	31
9	56	43	34	29	40	33	28	39	33	28
10	52	39	31	26	37	31	26	36	30	25

 Zonal lumen summary

 Zone
 Lumens
 % Fixture

 0-30
 6113
 26.7

 0-40
 10007
 43.7

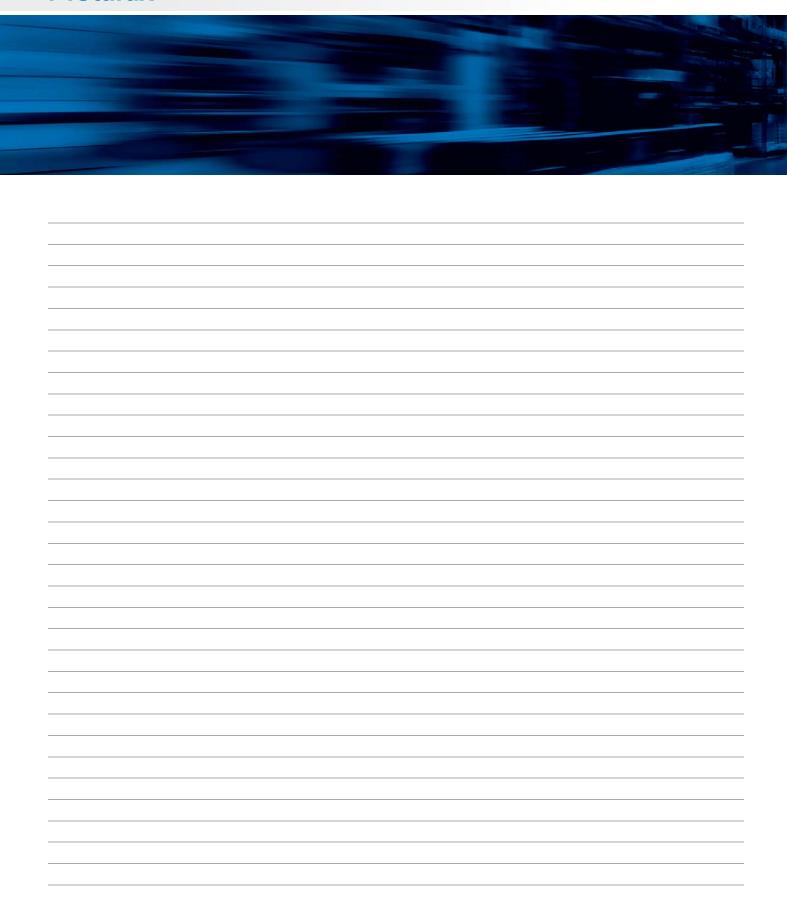
 0-60
 17317
 75.6

 0-90
 22172
 96.8

 0-180
 22914
 100.0



# Metalux Industrial LED



49

