DAY-O-LITE

VLL Series | VLL-1644-DI

Date	Notes
Project	
Type Qty	

Features

ADA compliant linear wall luminaire.

Perforated steel fascia with white acrylic overlay

Programmable driver for custom lumen packages.

0-10V dimming to 1% standard. Dim-to-off available.

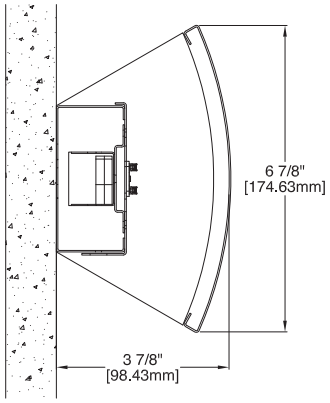
DMX, Lutron and DALI protocols also available.

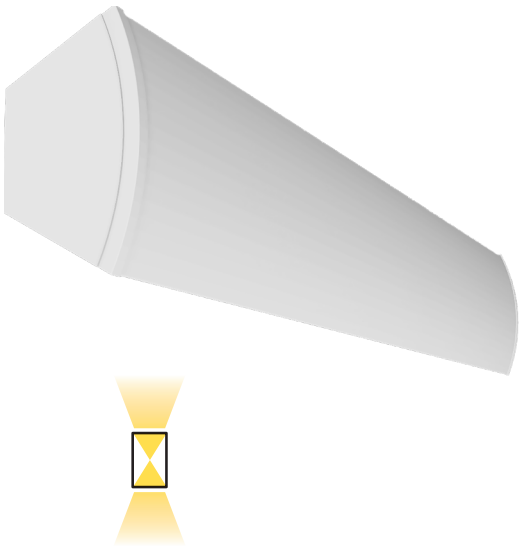
Sensor Ready for wireless Smart Lighting Solutions.

80/90CRI, Tunable White, RGBW & RGBWW.

Bios SkyBlue™ circadian solutions available.

Declare Red List Approved.





Ordering Guide

MODEL	OPTICS	CCT[1]	LUMENS[2]	LENGTH	MOUNTING[3]	FINISH	OPTIONS
VLL-1644-DI	**PF**				**WM**		
VLL-1644-DI Direct/Indirect	Perforated with white acrylic overlay.	**STATIC WHITE** 27 = 2700K 80CRI 30 = 3000K 80CRI 35 = 3500K 80CRI 40 = 4000K 80CRI 50 = 5000K 80CRI **BIOS SkyBlue** Circadian solutions **TUNABLE 2**-Channel 2700K-6500K Fixed CCT Range 2DIM10 = for 0-10V 2DMX = for DMX 2ESN = for Philips 2CAS = for Casambi 2LUT = for Lutron **TUNABLE 3**-Channel 1800K-6500K 92 CRI Selectable CCT Range 3DIM10 = for 0-10V **DIM-TO-WARM** DTW = Dim-to-Warm (2700K-6500K) 0-10V 3DTW = Dim-to-Warm (1800K-6500K) 0-10V **RGB + WHITE** (DMX) RGB = RGB RGBW = RGBW RGBWW = RGBWW	LO = 563/ft (5W/ft, 113LPW) SO = 750/ft (7W/ft, 111LPW) HO = 938/ft (9W, 107LPW **CUSTOM** For custom lumens specify value < HO	4 = 4 ft 6 = 6 ft 8 = 8 ft For other enter row length (e.g. 48 = 48 ft)	WM = Wall Mount	W = White CC = Custom Color AMW = Anti-Microbial White	**DIMMING DRIVERS** DIM10 = 0-10V (1%) - **Standard** DTO = 0-10V (Dim-to-Off) DIMST = 0-10V Step Dimming 347 = 0-10V (347V) DIMSR = DALI Sensor Ready (5.0%) DALI = DALI (5.0%) DMX = DMX **LUTRON™ DIMMING DRIVERS** LDE1 = Hi-Lume 1% EcoSystem LD2 = Digital 1% (DALI-2) L3DA3W = Hi-Lume 1% 3-Wire **SENSORS & CONTROLS**[4] AVO = Avi-On Sensor AWNS = Lutron Athena Sensor ESN = EasySense Sensor UTS = Ultrasonic Occupancy Sensor CAS = Casambi Wireless Control **EMERGENCY**[5] EMC = Emergency Circuit GTD = Generator Transfer Device EPC4 = 4W Emergency Battery EPC6 = 6.5W Emergency Battery EPC10 = 10W Emergency Battery EPC12 = 12W Emergency Battery **WIRING & OTHER** FWH = Flexible Wiring Harness

[1]All LED, BIOS, Tunable White, DTW, and RGB/W options and Ordering Codes page 2.

[2]Lumens at 80CRI, 4000K. Photometry page 4.

[3]See page 3 for mounting details.

[4]All Sensor & Control options page 2.

[5]EPC6 is standard unless otherwise specified. EPC not for DMX drivers.

BAA letter of compliance available at www.dayolite.com.

LED, BIOS, Sensor & Control Ordering Codes

LED

Static White
30 = 3000K 80 CRI
35 = 3500K 80 CRI
40 = 4000K 80 CRI
50 = 5000K 80 CRI

927 = 2700K 90 CRI
930 = 3000K 90 CRI
935 = 3500K 90 CRI
940 = 4000K 90 CRI

Tunable[1] 2-Channel
2700K-6500K 80 CRI
Fixed CCT Range

2DIM10 = 0-10V
2DMX = DMX 80
2CAS = Casambi Wireless
2ESN = Philips EasySense
2LUT = Lutron (LD2)

92DIM10 = 0-10V 90 CRI
92DMX = DMX 90 CRI
92CAS = Casambi Wireless 90 CRI
92ESN = Philips EasySense 90 CRI
92LUT = Lutron (LD2) 90 CRI

Tunable[1] 3-Channel
1800K-6500K 92 CRI
Selectable range CCT (factory set)

3DIM10 = 0-10V Dimming

Dim-to-Warm[2]
DTW = 6500K-2700K 80 CRI
9DTW = 6500K-2700K 90 CRI

3DTW = 6500K-1800K 92 CRI
Selectable range CCT (factory set).
To specify write in the desired range; eg. 65/18 = 6500K-1800K, or 57/22 = 5700K-2200K.

RGB/W[3]
RGB = RGB only
RGB27 = RGB w/2700K
RGB30 = RGB w/3000K
RGB35 = RGB W/3500K
RGB40 = RGB w/4000K
RGB50 = RGB w/5000K
RGBWW = RGB w/2700K-6500K
ADV = Advanced Color 125mm increment RGB or RGBW pixel control

Single Color
RED = Red
BLU = Blue
GRN = Green
AMB = Amber

BIOS SkyBlue

BIOS SkyBlue biological technology brings the benefits of blue skies inside. BIOS SkyBlue is the only spectrally optimized circadian solution to target the region that drives wellness benefits including: increased alertness, enhanced productivity, better mood, and better sleep. More information may be found at www.bioslighting.com or by contacting Day-O-Lite directly. All options for 0-10V control.

BIOS Biological Static
For daytime applications. BIOS Static Biological LED features key BIOS SkyBlue (490nm) for maximum daytime circadian impact.

B30 = 3000K
B35 = 3500K
B40 = 4000K

BIOS Biological Dynamic White
Designed to transition from daytime to evening in a dim-to-warm protocol. The daytime CCT includes full BIOS SkyBlue (490nm) for maximum daytime circadian impact, while the evening spectrum removes BIOS SkyBlue for minimal circadian stimulus after hours.

B30D = 3000K-2700K
B35D = 3500K-3000K
B40D = 4000K-3500K

BIOS Biological Tunable White
Designed to transition from daytime to evening in a tunable white protocol. The daytime CCT includes full BIOS SkyBlue (490nm) for maximum daytime circadian impact, while the evening spectrum removes BIOS SkyBlue for minimal circadian stimulus after hours.

B30T = 3000K-2700K
B35T = 3500K-2700K
B40T = 4000K-2700K

Sensors & Controls

Sensors*

AVO = Avi-On Sensor
AWNS = Lutron Athena Sensor
ESN = EasySense Sensor
UTS = Ultrasonic Occupancy Sensor

Wireless Control

CAS = Casambi

Other Options

Additional sensor and wireless control options available. Contact factory for details.

*If remote sensor is used, please consult factory for compatibility with driver.

[1]Tunable white may be controlled by a number of dimming protocols as shown. 2-Channel has a fixed range of 2700K-6500K. 3-Channel has a maximum range of 1800K-6500K, but other sub-ranges may be specified. 3-Channel Tunable White has a third diode to more closely approximate the black body curve in the mid CCT ranges. Contact Day-O-Lite for details.

[2]Dim-to-Warm mimics incandescent dimming by warming the CCT from 6500K-2700K (2DTW) or 6500K-1800K (3DTW) as light levels are dimmed.

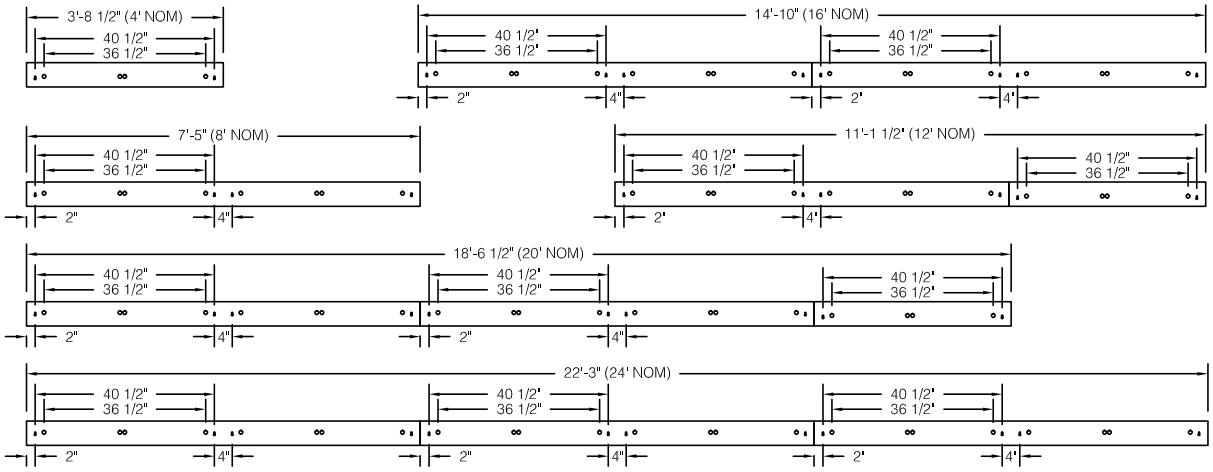
[3]All RGB, RGBW, RGBWW and ADV options for DMX control (by others). 80 CRI standard.

Linear Sections and Mounting Location

NOMINAL LENGTH	ACTUAL LENGTH	KEY SLOT O.C. 1	KEY SLOT O.C. 2	KEY SLOT O.C. 3	KO O.C.
4'	3' 8-1/2"	40 1/2"			36 1/2"
8'	7' 5"	40 1/2"			36 1/2"
12'	11' 1-1/2"	40 1/2"	40 1/2"		36 1/2"
16'	14' 10"	40 1/2"	40 1/2"		36 1/2"
20'	18' 6-1/2"	40 1/2"	40 1/2"	40 1/2"	36 1/2"
24'	22' 3"	40 1/2"	40 1/2"	40 1/2"	36 1/2"

Individual fixtures and rows are continuously illuminated and joined with included aligner brackets and hardware. Power feed locations and mounting locations are shown below.

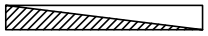
Individual fixtures up to 8' nominal and continuous rows up to 24' nominal are dimensioned as shown below. Continuous rows longer than 8' including EPC/EMC and sensor locations must be approved prior to manufacturing.



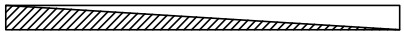
Emergency & Sensor Locations

EPC will control entire length of individual fixtures. Individual fixtures of differing lengths will deliver the same lumens under EPC power (a 4' fixture will deliver the same total lumens over half the length of an 8' fixture). EMC controlled individual fixtures will deliver lumens per foot as originally specified, unless dimmed at time of power loss. Consult factory for EMC dimming override device.

4' Individual

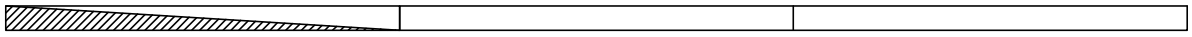


8' Individual



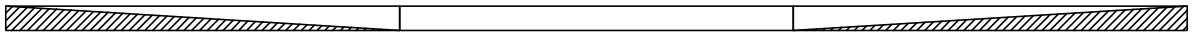
For individual fixtures to 8' EPC/EMC will power entire fixture.

24' Row (3x8')



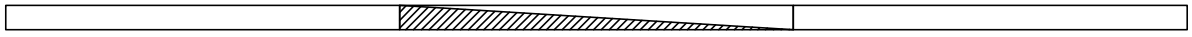
For continuous rows longer than 8' one EPC/EMC will be located in the feed section (end-left) of the row as shown below.

24' Row (3x8')



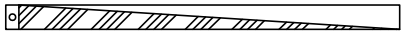
If two EPC/EMC's are required their default locations will be in the feed section (end-left) and last section (end-right) as below.

24' Row (3x8')



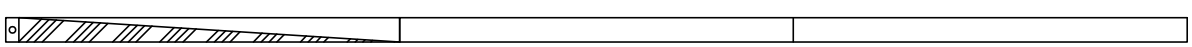
Custom placement of one or more EPC/EMC's must be clearly identified during ordering.

8' Individual



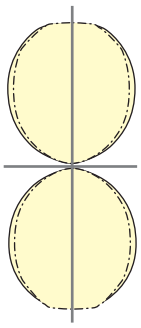
SENSORS (Integral) for individual fixtures will control entire length of fixture and will be located on feed end of fixture.

24' Row (3x8')



SENSORS for rows by default will control the feed section (end-left) of the row. Sensors can control more than an 8' section within a row. Consult factory for sensor/section options, or for multiple sensors in a continuous row.

Photometry



VLL-1644-DI-PF-40-**LO**-4

4000K CCT
WATTS: 20
LUMENS: 2250
LPW = 113
Distribution:
50% Direct:
50% Indirect

VLL-1644-DI-PF-40-**SO**-4

4000K CCT
WATTS: 27
LUMENS: 3000
LPW = 111
Distribution:
50% Direct:
50% Indirect

WPPL-6-D-CA-40-**HO**

4000K CCT
WATTS: 35
LUMENS: 3750
LPW = 107
Distribution:
50% Direct:
50% Indirect

4000K @ 80CRI, 4'.
Use the following multipliers for other CCTs: 2700K x 0.94, 3000K x 0.96, 3500K x 0.98, 5000K x 1.03. IES files @ www.dayolite.com

Specifications

HOUSING: Die-formed, 20-gauge,cold rolled steel housing. Adjustable LED tray allows for continuous wall-to-wall illumination.

REFLECTOR: Die-formed, 20-gauge cold rolled steel finished in a baked white enamel.

OPTICS: Die-formed, 20-gauge, cold rolled perforated steel with 1/16" holes at 3/32" O.C. with a white acrylic translucent overlay. End caps are welded to shielding.

LED: Static white LED modules in 27/30/35/40 & 50K CCT, 80/90CRI. Lumen maintenance minimum L_{70}= 50,000 hours. 3 SDCM color consistency. BIOS SkyBlue, RGB, RGBW, RGBWW, and Dim-to-Warm options available; field replaceable.

DRIVER: Standard driver is Class 2 AOC 0-10V to 1%, Dim-to-Off available. 120/277V input, PF > 90%, THD < 20 @ 120V. DMX, DALI & Lutron protocols available. All drivers prewired for connection to control system (by others); field replaceable.

MOUNTING: Standard installation is direct to junction box or conduit feed. Mounting holes provided for additional supporting hardware (supplied by others).

FINISH: Steel fixture housing and steel components are finished in baked white enamel applied over a five-stage pretreatment process.

CERTIFICATION: cETLus listed conforming to UL STD. 1598 and certified to CSA STD C22.2 NO. 250.0. Suitable for dry & damp locations. Union Made in the United States of America. I.B.E.W., ADA and BAA compliant, Declare Red List Approved.

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