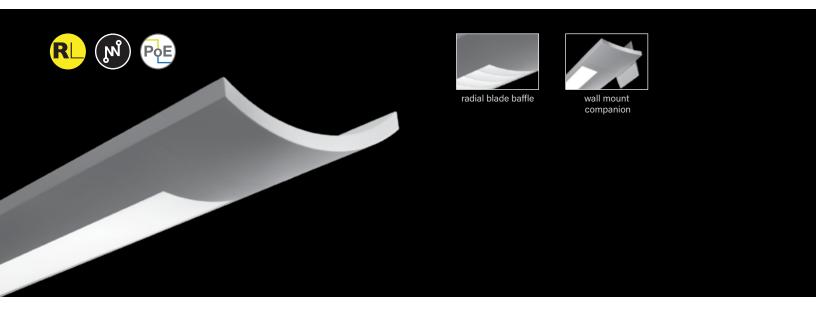
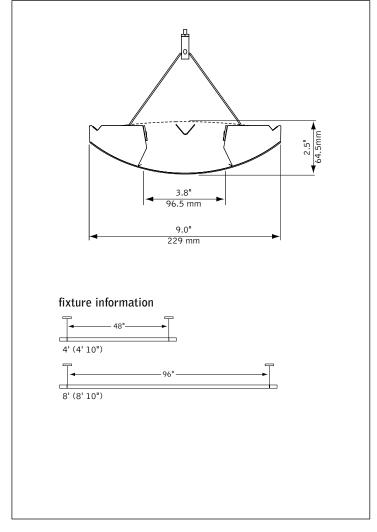
# Verve™ IV





#### **DIMENSIONAL DATA**



#### **FEATURES**

Suspended linear direct/indirect LED with frosted lens or Radial Baffle options.

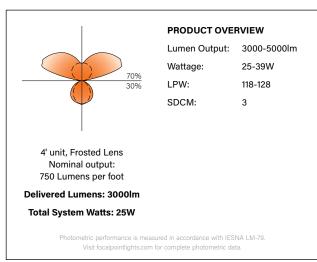
One-piece steel housing with 5" die-cast end caps

Verve IV is an excellent choice for commercial and educational facilities.

Connected Solutions: Integrates with wired and wireless building lighting control systems.

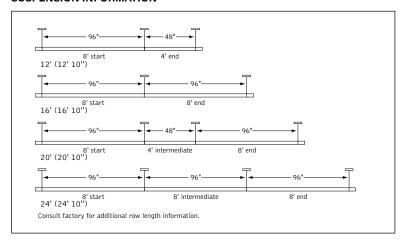
PoE compatible: Integrates with Power over Ethernet lighting systems via standard, low-voltage wires.

#### **PERFORMANCE**



ixture: projec

#### SUSPENSION INFORMATION



#### **SPECIFICATIONS**

#### LED Systems

Linear LED module incorporates premium LEDs on a robust platform to achieve excellent thermal management. Available in 3000K, 3500K, 4000K with CRI>80, 3SDCM. Contact factory for additional color temperature and CRI options. LED boards and drivers are replaceable.

#### Construction

One-piece 20 Ga. steel housing. Die-cast 5" end cap standard. For row installation, internal brackets form hairline joint. Standard lengths are available in 4' and 8'. All luminaires are provided with Y-cable suspension mounted on 48" or 96" centers. 4' unit weight: 20 lbs., 8' unit weight: 30 lbs.

#### Optic

Reflector fabricated of 22 Ga. steel finished in high reflectance matte white. 24 Ga. steel beam softening filter finished in matte white powder coat. .010" thick acrylic lens.

#### Electrical

Luminaires are pre-wired with factory installed branch circuit wiring and over-molded quick connects. Standard 120-277V constant current driver includes 0-10V analog dimming.Power factor > .9. PoE compatible: Integrates with Power over Ethernet lighting systems via standard, low-voltage wires. PoE runs require an independent PoE node and power feed for each luminaire section.

#### Emergency

Emergency Battery output—12 watts for 90 minutes. Maximum mounting height: 12.4ft. Emergency Circuit with Connected Solutions (NLT1, ENL1, CLM1, DLM1) shipped standard with leads to connect UL924 compliant device, by others. See EM/EC Guide on page 4 for default locations and ordering details.

#### Labels

UL and cUL listed. Suitable for Dry or Damp Locations, indoor use only.

#### Finish

Polyester powder coat applied over a multi-stage pre-treatment. Canopy finished in Matte Satin White.

#### Lumen Maintenance

Reported: L70 at >60,000 hours Calculated: L70 at 162,000 hours
L80 at >60,000 hours L80 at 102,000 hours
Derived from EPA TM-21 calculator. Based on typical conditions, consult factory for additional data.

#### Reliability

At Focal Point, our products are designed to stand the test of time. Each luminaire is engineered using superior components, manufactured with the utmost care and rigorously tested. Contact us for reliability data.

#### Warranty

LED system rated for operation in ambient environments up to 25°C. 5-year limited warranty.

#### 4' PERFORMANCE CHART

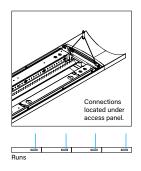
Lumens Per Foot	Delivered Lumens	System Watts	LPW
750LF	3000	25	120
875LF	3500	29	121
1000LF	4000	34	118
1125LF	4500	36	125
1250LF	5000	39	128

Based on Frosted Lens 70 indirect / 30 direct (FL70), 3500K. Shielding Multipliers: FL40 - 0.90, RB - 1.04. Color Temperature multipliers: 3000K - 1.035, 4000K - 0.975. \*Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%

ORDERING		
Fixture Series Verve IV LED	FV4LS	FV4LS
Shielding		
Frosted Lens - 70 Indirect / 30 Direct Distribution	FL70	
Frosted Lens - 40 Indirect / 60 Direct Distribution	FL40	
Radial Blade Baffle - White with frosted acrylic overlay 70 Indirect / 30 Direct Distribution	RB	
750 Lumens per foot 875 Lumens per foot 1000 Lumens per foot 1125 Lumens per foot 1250 Lumens per foot	750LF 875LF 1000LF 1125LF 1250LF	
Color Temperature 3000K	30K	
3500K	35K	
4000K	40K	
Circuits		1C
Single Circuit	1C	
Voltage	1.18.0.7	
120/277 UNV Volt 347 Volt	UNV 347	
(LD1 only)	347	
Low Voltage	LV	
Control System & Dimming Level 0-10V - 10% Dimming Low Voltage, PoE compatible (No driver Not available with EM or EC. LV Voltage only.)	LD1 LVN	
0-10V - 1% Dimming	L11	
Lutron Hi-Lume EcoSystem (LDE1)	1.114	
- 1% Dimming	LH1	
DALI - 1% Dimming Step Dimming (Not available with 750LF)	D11 SD5	
Acuity nLight - 1% Dimming	NLT1	
Enlighted Smart Sensor - 1% Dimming	ENL1	
Encelium CLM Connected Lighting Module - 1% Dimming	CLM1	
(Compatible with Encelium X Light Management System Wattstopper DLM - 1% Dimming	DLM1	
Mounting	DLIVII	
24" Cable Suspension	C24	
48" Cable Suspension 96" Cable Suspension (Add "P" for Chicago plenum. Eg: CP12) (Specify one of the following in place of "C" J - for 2" canopies at non-feed locations. CS - for sloped ceilings.)	C48 C96	
Factory Options		
Emergency Battery Pack (120/277V only)	_EM	
Emergency Circuit See EM/EC Guide for default locations and ordering details.)	_EC	
Dust Cover	DST	
Finish		
Titanium Silver Matte Satin White	TS WH	
Fixture Run Length	••••	
4'	4'	
8'	8'	
12' (8'+4')	12'	
16' (8'+8')	16'	
20' (8'+4'+8')	20'	
24' (8'+8'+8') (Longer run lengths available in 4' increments.)	24'	
(20190 131 lengths dvalidate in 4 incientifits.)		



Focal Point provides flexibility in meeting the needs of each project by integrating with several building lighting control systems. A variety of sensors, drivers and other components can be specified that allow the luminaires to communicate with wired and wireless networks. All zoning can be digitally reconfigured through the application software. Daylight harvesting, occupancy sensing, integration with HVAC systems, and individual controls enable the monitoring and modulating of light levels and temperature in order to save energy, reduce costs and maximize occupants' comfort. All Connected Solutions luminaires require a compatible building control system.





nLight\* provides a two-way wired digital lighting system allowing for on/off and dimming functionality, occupancy sensing, and multi-zone daylight harvesting.

Acuity nLight - 1% Dimming (NLT1) Acuity Model #nEPS-60-IO

CAT-5 Cable provided by others. Serial labels will be provided on outside of luminaires and control unit.





Enlighted smart sensor allows for occupancy sensing, daylight harvesting, energy usage, temperature and light level control. Communicates wirelessly with the Enlighted network.

Enlighted Smart Sensor - 1% Dimming (ENL1)
Enlighted Model #SU-5E-IOT

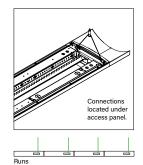


#### ENCELIUM

Encelium's Connected Lighting Module (CLM) is fully compatible with the Encelium X Light Management System, as well as with 0-10V and DALI based LED drivers to allow for individual luminaire control, including on/off and dimming functionalities, occupancy sensing, and multi-zone daylight harvesting.

Encelium CLM - 1% Dimming (CLM1)
Encelium Model #ZBHA-CLM-DIM-ENC

Serial labels will be provided on outside of luminaires and control unit.





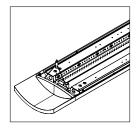
WATTSTOPPER®

A Digital Lighting Management (DLM) system that provides two-way wired communication between networked luminaires and control system to allow for on/off and dimming functionality, occupancy sensing and multi-zone daylight harvesting.

Wattstopper DLM - 1% Dimming (DLM1)

Wattstopper Model #LMFC-011

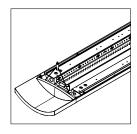
Segment Network Wire provided by others. Serial labels will be provided on outside of luminaires and control unit.



### **\$\tutron**

A two-way digital network that enables on/off and dimming functionality, occupancy sensing, and multi-zone daylight harvesting working with Quantum\*, Energi Savr Node™, and Energi TriPak\* using EcoSystem\* communication protocol.

Lutron Hi-Lume EcoSystem - 1% Dimming (LH1) Lutron Model #LDE1





A two-way digital network that enables on/off and dimming functionality, occupancy sensing, and multi-zone daylight harvesting. Communicates with Zūm wireless and SpaceBuilder working with Zūm hub scheduling or FUSION management.

DALI - 1% Dimming (D11) 0-10V - 1% Dimming (L11)

Note: 0-10V is not a digital network but is compatible with Creston  $Z\bar{u}m^{m}$  system.

#### CONNECTED SOLUTIONS DETAILS

Connected Solution	Model #	Protocol	Compatible Networks*	Occupancy	Daylight	Temperature Reporting	Communication to Luminaire	Drivers
Acuity nLight (NLT1)	nEPS-60-IO**	nLight	nLight	Enabled	Enabled	No	Wired	eldoLED ECOdrive, eldoLED SOLOdrive
Crestron (D11, L11)	Specified Driver	DALI 0-10V	Crestron Zūm Wireless & SpaceBuilder	Enabled	Enabled	No	Wired	eldoLED ECOdrive (DALI), Advance by Signify (0-10V)
Enlighted Smart Sensor (ENL1)	SU-5E-IOT**	Enlighted RF	Enlighted	Integrated	Integrated	Yes	Wireless	Advance by Signify, Optotronic by eldoLED
Legrand Wattstopper DLM (DLM1)	LMFC-011**	DLM	DLM	Enabled	Enabled	No	Wired	Advance by Signify, Optotronic by eldoLED
Lutron EcoSystem (LH1)	LDE1**	EcoSystem	Quantum, Energi Savr Node, Energi TriPak	Enabled	Enabled	No	Wired	Lutron Hi-Lume
Encelium CLM Connected Lighting Module (CLM1)	ZBHA-CLM- DIM-ENC*	ZigBee	Encelium X Light Management System	Enabled	Enabled	No	Wireless	Optotronic by eldoLED Advance by Signify

## EM/EC Guide

#### **VERVE IV LED - FV4LS**

#### **DEFAULT LOCATIONS**

- By default, EM/EC are located at the end (last section) of a run when one EM/EC location is specified, and at the start and end when
  two locations are specified.
- EM/EC illuminate entire sections from 4' to 8' in length.
- Feed location is at start of run. All EC's are fed individually at the end of each fixture segment.

#### 1 EM/EC - END OF RUN

Section 1	Section 2	Section 3	Section 4	Tertion 5	
Ordering example: FV4LS-FL70 1EM-WH-36ft					
2 EM/EC - START & END	OF RUN				
Section 1	Section 2	Section 3	Section 4	Tegtion 5	

Ordering example: FV4LS-FL70... 2EM-WH-36ft

#### **ALTERNATE LOCATIONS AND QUANTITIES**

If more than two locations are required, or specific locations within run need to be specified, indicate in the ordering string.
 ONE EM IN 3<sup>RD</sup> SECTION

Section 1	Section 2	Section 3	Section 4	Section 5
Ordering example: FV4LS-FL70 1EM	<b>I-3</b> -WH-40ft			
TUDEE EM IN 1ST ORD AND OTH OF	CTIONIC			
THREE EM IN 1 <sup>ST</sup> , 3 <sup>RD</sup> AND 6 <sup>TH</sup> SE	CHONS			
	Section 2	Section 3	Section 4	Section 5

Ordering example: FV4LS-FL70... 3EM-1-3-6-WH-48ft

#### **CUSTOM LENGTHS**

- If partial illumination of emergency section is required, indicate quantity in ordering string and partial illumination in Order Notes. Drawing required.
- · Longer lead times may apply.

Run length (ft)	Housing Configuration Section Lengths
12	8 + 4
16	8 + 8
20	8 + 4 + 8
24	8 + 8 + 8
28	8 + 8 + 8 + 4

Run length (ft)	Housing Configuration Section Lengths
32	8 + 8 + 8 + 8
36	8 + 8 + 8 + 8 + 4
40	8 + 8 + 8 + 8 + 8
44	8 + 8 + 8 + 8 + 8 + 4
48	8 + 8 + 8 + 8 + 8 + 8

Standard run configurations, consult factory for custom configurations.