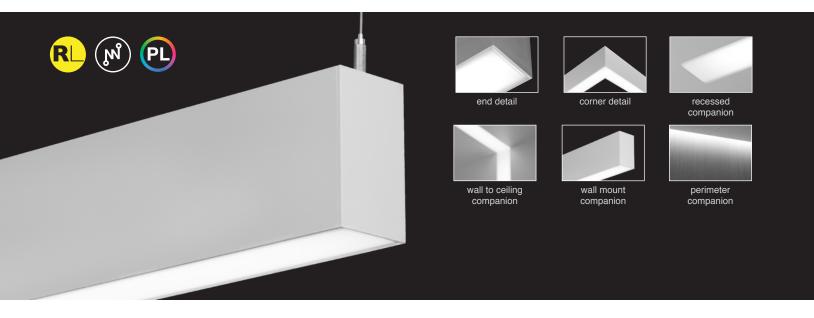
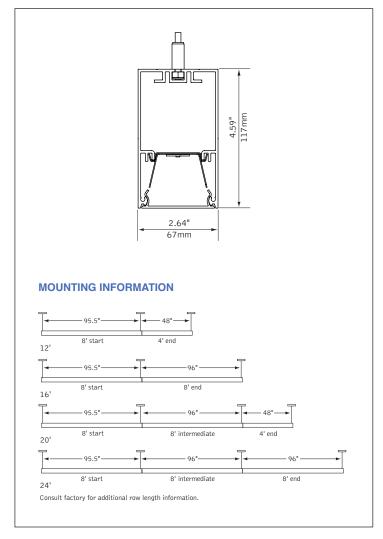
# Seem® 2





# **DIMENSIONAL DATA**



# **FEATURES**

Narrow extruded aluminum 2.5" linear direct LED.

Individual units and continuous runs in 1' increments.

Frosted acrylic lens provides uninterrupted illumination, without pixels or shadows.

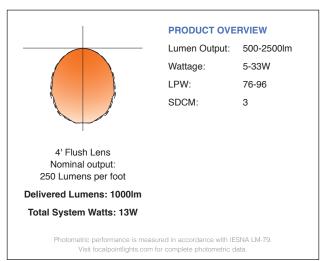
LED position and lens material optimized to provide the perfect blend of high performance and visual comfort.

Choice of output levels to meet a wide variety of application needs.

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

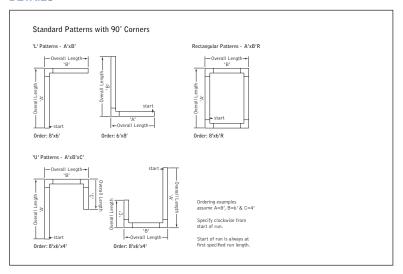
Preferred Light: Lighting for better color rendition and human preference.

# **PERFORMANCE**



fixture: projec

# **DETAILS**



# **SPECIFICATIONS**

# LED System

Proprietary linear LED module incorporates premium LEDs on a robust platform to achieve excellent thermal management. LEDs are placed to promote a uniform appearance. Available in 2700K, 3000K, 3500K or 4000K with CRI>80 or CRI>90, 3SDCM. LED modules and drivers are replaceable from below.

#### Construction

One piece extruded aluminum housing. Cast aluminum end caps. 2' unit weight: 4.8 lbs., 3' unit weight: 7.2 lbs., 4' unit weight: 9.6 lbs., 5' unit weight: 12 lbs.

#### Optic

Reflectors fabricated of 22 Ga. steel finished in High Reflectance White powder coat. Extruded acrylic lens .07" thick with satin finish, up to 8' continuous.

#### 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.

# **Emergency Battery**

Output - 10 watts for 90 minutes. Maximum mounting height: 17.9ft. See EM/EC Guide 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.

# Lumen Maintenance

 $(Derived \ from \ EPA\ TM-21\ calculator.\ Based\ on\ typical\ conditions,\ consult\ factory\ for\ additional\ data.)$ 

# 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

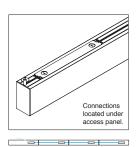
Shielding	Lumens per Foot	Delivered Lumens	Tested System Watts	LPW
	125LF	500	5	96
Flush Lens	250LF	1000	13	80
Flush Lens	375LF	1500	19	79
	625LF	2500	33	76

Based on 3500K, 80 CRI, 4' lengths, Lumen multipliers: Preferred Light = 0.65, 90+ CRI = 0.87. Lumen output may vary +/-5%. Actual wattage may vary +/-5%.

ORDERING		
Luminaire Series Seem 2 LED	FSM2LS	FSM2LS
Shielding Flush Satin Lens	FL	FL
Lumen Output	1051.5	
125 Lumens per foot (LD1, L11 & D11 only. 4" minimum.) 250 Lumens per foot (Not available with LU5 & LH1.	125LF 250LF	
4' minimum with D11) 375 Lumens per foot	375LF	
(4' minimum with LU5, LH1 & D11) 625 Lumens per foot (3' minimum with LU5 & LH1 Drivers)	625LF	
Color Temperature		
2700K, 80+ CRI <b>or</b> 90+ CRI	27K or 927K	
3000K, 80+ CRI or 90+ CRI	30K or 930K	
3500K, 80+ CRI or 90+ CRI	35K or 935K	
4000K, 80+ CRI or 90+ CRI	40K or 940K	
3500K, Preferred Light (Not available with Emergency Battery or patterns)	P35K	
<b>Circuit</b> Single Circuit	1C	1C
<b>Voltage</b> UNV 120/277 Volt	UNV	UNV
Control System & Dimming Level		
0-10V - 10% Dimming 0-10V - 1% Dimming Lutron Hi-Lume EcoSystem (LDE1) -	LD1 L11	
1% Dimming (3' minimum length)	LH1	
Lutron 5-Series EcoSystem (LDE5) - 5% Dimming (3' minimum length)	LU5	
DALI - 1% Dimming (3' minimum length)	D11	
Acuity nLight - 1% Dimming (3' minimum length)	NLT1	
Enlighted Smart Sensor - 1% Dimming (3' minimum length)	ENL1	
Osram Connected Lighting Module for ENCELIUM systems - 1% Dimming (3' minimum length. Compatible with Osram ENCELIUM and ENCELIUM EDGE systems only)	CLM1	
Osram Connected Lighting Module for ZigBee Wireless Networks - 1% Dimming (3' minimum length. Not compatible with Osram ENCELIUM systems)	CLMZ1	
Wattstopper DLM - 1% Dimming (3' minimum length)	DLM1	
Mounting		
24" Cable Suspension	C24	
48" Cable Suspension	C48	
96" Cable Suspension (Add "P" for Chicago plenum. Eg: CP12) (Specify "J" in place of "C" for 5" Dia canopies at power feed and 2" dia	C96	
canopies at non-feed locations) (Consult factory for sloped ceiling applications)  Surface Mount	SM	
(Not available with DLM1 or NLT1)  Factory Options		
Emergency Circuit	EC	
Emergency Battery Pack	_EM	
(4' minimum. 7' minimum with CLM1, CLM21, DLM1, ENL1 & NLT1. See EM/EC Guide for default locations and ordering details.)		
<b>Finish</b> Titanium Silver	TC	
Matte White Housing	TS WH	
Luminaire Length	Χ'	
Specify luminaire/row length in 1' increments (Smaller increments available, Consult factory for details.)	^	
Pattern Options (3' minimum length)		
'L' pattern 'U' pattern	A' x B' A' x B' x C'	
Rectangular pattern (Consult factory for other pattern options)	A'xB'R	



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.<sup>†</sup>





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 between segments of a run. CAT-5 Cable provided by others at start of run. Serial labels will be provided on outside of luminaires and control unit.



# enlighted

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-4E-01

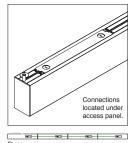


# **OSRAM**

Connected Lighting Module (CLM) enables each luminaire to be independently controlled and configured. Communicates wirelessly with Daintree Networks®, Osram ENCELIUM®, Osram ENCELIUM EDGE™, and other networks using the ZigBee® HA communication protocol to allow for on/off and dimming functionality, occupancy sensing and multi-zone daylight harvesting.

Osram CLM - 1% Dimming (CLM1 & CLMZ1)
Osram Model #ZBHA-CLM DIM

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



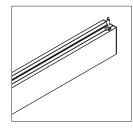
# **la legrand**

 $\mathbf{WATTSTOPPER}^{\circ}$ 

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 between segments of a run. Segment Network Wire provided by others at start of run. Serial labels will be provided on outside of luminaires and control unit.

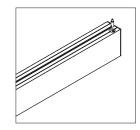


# **\$\text{LUTRON}**

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

Lutron 5-Series EcoSystem - 5% Dimming (LU5) Lutron Model #LDE5



# **CRESTRON**

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 Zūm™ 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), Philips Xitanium (0-10V)
Enlighted Smart Sensor (ENL1)	SU-4E-01**	Enlighted RF	Enlighted	Integrated	Integrated	Yes	Wireless	Philips SimpleSet, Osram Optotronic
Legrand Wattstopper DLM (DLM1)	LMFC-011**	DLM	DLM	Enabled	Enabled	No	Wired	Philips SimpleSet, Osram Optotronic
Lutron EcoSystem (LH1 & LU5)	LDE1,** LDE5**	EcoSystem	Quantum, Energi Savr Node, Energi TriPak	Enabled	Enabled	No	Wired	Lutron Hi-Lume Lutron 5-Series
Osram CLM for ENCELIUM systems (CLM1)	ZBHA-CLM**	ZigBee HA	Osram ENCELIUM & ENCELIUM EDGE	Enabled	Enabled	No	Wireless	Osram Optotronic
Osram CLM for ZigBee Wireless Networks (CLMZ1)	ZBHA-CLM**	ZigBee HA	Daintree Networks & open ZigBee Networks	Enabled	Enabled	No	Wireless	Osram Optotronic

# Seem® EM/EC Guide



 ${\tt FSM1, FSM1W, FSM2L-FL, FSM2L-FL2, FSM2LS, FSM2LW, FSM4L-FL/SR/SRXP, FSM4L-FL2, FSM4LS, FSM4LW, FSM4LP, FSM6L-FL/SR/SRXP*}$ 

# **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	Seption 5
	Ordering example: FSM4L-FI	<b>1EM-</b> WH-36ft			
:	2 EM/EC – START & END	OF RUN			
	Section 1	Section 2	Section 3	Section 4	Seption 5
(	Ordering example: FSM4L-FI	<b>2EM</b> -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 3RD SECTION

Section 1	Section 2	Section 3	Section 4	Section 5	
Ordering example: FSM4L-FI	L <b>1EM-3</b> -WH-40ft				
THREE EM IN 1 <sup>ST</sup> , 3 <sup>RD</sup> AN	ID 6 <sup>™</sup> SECTIONS				
Section 1	Section 2	Section 3	Section 4	Section 5	Section 6

# Ordering example: FSM4L-FL... 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
9	5 + 4
10	6 + 4
11	7 + 4
12	8 + 4
13	8 + 5
14	8 + 6
15	8 + 7
16	8 + 8
17	8 + 5 + 4
18	8 + 6 + 4
19	8 + 7 + 4
20	8 + 8 + 4
21	8 + 8 + 5
22	8 + 8 + 6
23	8 + 8 + 7
24	8 + 8 + 8
25	8 + 8 + 5 + 4
26	8 + 8 + 6 + 4
27	8 + 8 + 7 + 4

Run length (ft)	Housing Configuration Section Lengths
28	8 + 8 + 8 + 4
29	8 + 8 + 8 + 5
30	8 + 8 + 8 + 6
31	8 + 8 + 8 + 7
32	8 + 8 + 8 + 8
33	8 + 8 + 8 + 5 + 4
34	8 + 8 + 8 + 6 + 4
35	8 + 8 + 8 + 7 + 4
36	8 + 8 + 8 + 8 + 4
37	8 + 8 + 8 + 8 + 5
38	8 + 8 + 8 + 8 + 6
39	8 + 8 + 8 + 8 + 7
40	8 + 8 + 8 + 8 + 8
41	8 + 8 + 8 + 8 + 5 + 4
42	8 + 8 + 8 + 8 + 6 + 4
43	8 + 8 + 8 + 8 + 7 + 4
44	8 + 8 + 8 + 8 + 4
45	8 + 8 + 8 + 8 + 8 + 5
46	8 + 8 + 8 + 8 + 8 + 6
47	8 + 8 + 8 + 8 + 8 + 7
48	8 + 8 + 8 + 8 + 8 + 8

Standard run configurations, consult factory for custom configurations.

<sup>\*</sup>Recessed and suspended only. Does not include direct/indirect, pop-down lens or asymmetric options