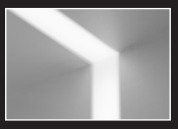
Seem® 2 Grid Ceiling

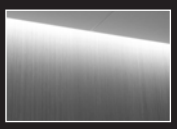
LED

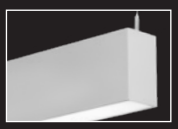
FOCAL POINT®


0.5" pop-down lens


regress lens

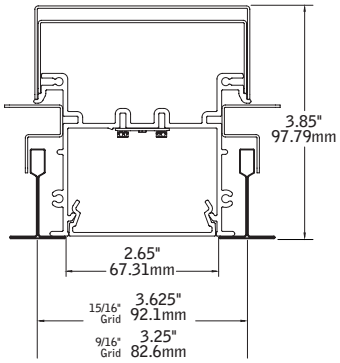

wall to ceiling companion


perimeter companion

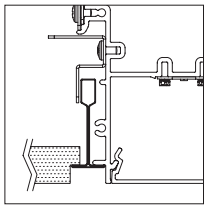

suspended & wall mount companions

DIMENSIONAL DATA

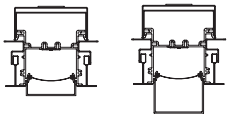
AS, BW, FL lens, lay-in



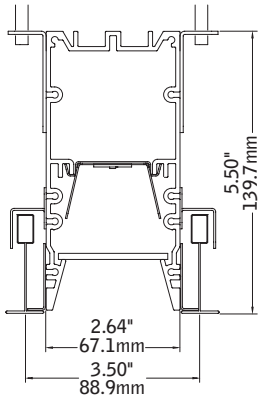
AS, BW, FL lens, Tegular detail



0.5" pop-down 1.5" pop-down



Regressed lens



FEATURES

Narrow extruded aluminum 2.5" aperture recessed slot LED.

Individual units and continuous runs in 1" increments.

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

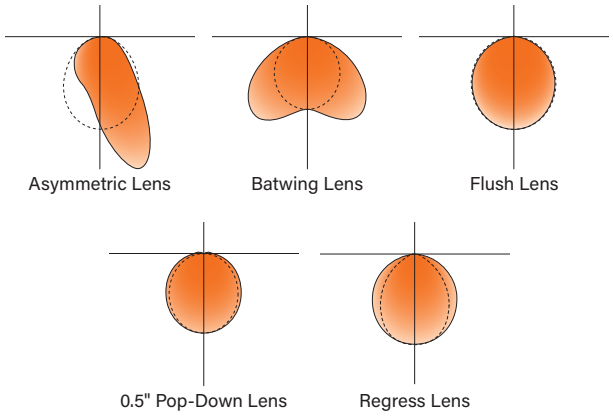
LED position and lens material optimized to provide the perfect blend of high performance and visual comfort.

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

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

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

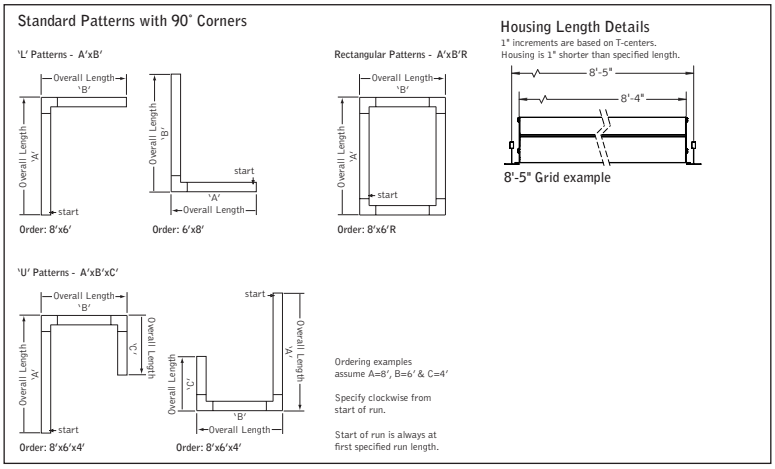
DISTRIBUTIONS



Photometric performance is measured in accordance with IESNA LM-79.
Visit focalpointlights.com for complete photometric data.

fixture: project:

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, 3 SDCM. 3500K and 4000K with CRI>90 have a cyanosis observation index (COI) of 3.3 or less. Non-Regress housing LED modules are replaceable from below, driver access above ceiling. Regress housing LED modules and drivers are replaceable from below.

Construction
One piece extruded aluminum housing. 20 Ga. steel end caps. Steel driver compartment. Flush lens weights: 4' unit: 12.18 lbs., 8' unit: 21.34 lbs. Regress lens weights: 4' unit: 10.1 lbs., 8' unit: 20.2 lbs.

Optic
Extruded acrylic lens .060" thick with satin finish, up to 8' continuous. Regress lens .118" thick acrylic lay-in lens and 22 Ga. reflector finished in high reflectance white powder coat.

Electrical
Luminaires are pre–wired with factory installed branch circuit wiring and 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 - 10 watts for 90 minutes. Maximum mounting height: 19.3ft (FL), 15.6ft (PD05). Emergency Circuit with Connected Solutions (NLT1, ENL1, CLM1, CLMZ1, DLM1) shipped standard with leads to connect UL924 compliant device, by others.

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
Reported: L70 at >61,000 hours
L90 at >61,000 hours
Calculated: L70 at 480,000 hours
L90 at 130,000 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.

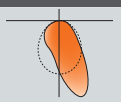
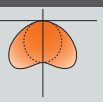
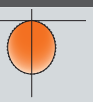
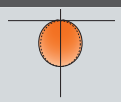
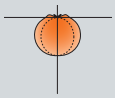
4' PERFORMANCE CHART
See page 3.

QS **10 DAY** Options in orange qualify for the Quickship program. 1000' total, 48' maximum per pattern section. Refer to Quickship Guide for complete details including EM/EC options.

ORDERING

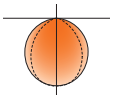
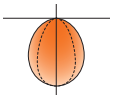
Luminaire Series		FSM2L
Seem 2 LED Grid	FSM2L	
Shielding		
Asymmetric Lens	AS	
Batwing Lens	BW	
Flush Lens	FL	
0.5" Pop-Down Lens	PD05	
1.5" Pop-Down Lens (Individual units only)	PD15	
Regress Lens (Housing height 5.5". Ceiling applications only)	SR	
Regress High Performance Lens (Housing height 5.5". Ceiling applications only)	SRXP	
Lumen Output		
125 Lumens per foot (LD1 & L11 only. 4' minimum. Not available on patterns.)	125LF	
250 Lumens per foot (3' minimum with LH1. Not available on patterns with LH1.)	250LF	
375 Lumens per foot	375LF	
500 Lumens per foot	500LF	
625 Lumens per foot	625LF	
750 Lumens per foot*	750LF	
875 Lumens per foot*	875LF	
1000 Lumens per foot*	1000LF	
*Not available with SR, SRXP shielding		
Color Temperature		
2700K, 80+ CRI **or** 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 (AS, BW & FL shielding only. 6" increments. Not available with Emergency Battery or patterns.)	P35K	
Circuits & Zones		
1 Circuit, non-emergency	1C	
Consult Ordering Guide on page 5 for multiple circuiting and zoning options	_C_Z_DL	
Voltage		
120/277 UNV Volt	UNV	
347 Volt (LD1 & L11 driver only.)	347	
Low Voltage	LV	
Control System & Dimming Level		
0-10V - 10% Dimming	LD1	
0-10V - 1% Dimming	L11	
Low Voltage, PoE compatible (No driver. Not available with EM or EC. LV Voltage only.)	LVN	
Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming	LH1	
DALI 1% Dimming	D11	
Acuity nLight - 1% Dimming (Not available with CP.)**	NLT1	
Enlighted Smart Sensor - 1% Dimming**	ENL1	
Osram Connected Lighting Module for ENCELIUM systems - 1% Dimming** (Compatible with Osram ENCELIUM and ENCELIUM EDGE systems only.)	CLM1	
Osram Connected Lighting Module for ZigBee Wireless Networks - 1% Dimming** (Not compatible with Osram ENCELIUM systems.)	CLMZ1	
Wattstopper® DLM - 1% Dimming** **(3' minimum length. Not available with patterns.)	DLM1	
Ceiling Configuration		
Std. 15/16" Lay-in (G1) **or** Tegular (T1)	G1 **or** T1	
Std. 9/16" Lay-in (G2) **or** Tegular (T2)	G2 **or** T2	
9/16" Slot-tee Tegular	G3	
Tall 15/16" Lay-in (G4) **or** Tegular (T4)	G4 **or** T4	
Tall 9/16" Lay-in (G5) **or** Tegular (T5)	G5 **or** T5	
Node 9/16" Tegular	T6	
Factory Options (See Ordering Guide on page 5 for ordering details for DC, EC, EM, & ECD.)		
Chicago Plenum (Not available with Flex Whip)	CP	
Daylight Circuit	_DC	
Emergency Circuit	_EC	
Emergency Battery Pack†	_EM	
Emergency Control Device†	_ECD	
†(4' minimum, 6' minimum with patterns. 120/277 Volt only. Not available at corners. 7' minimum with CLM1, CLMZ1, DLM1, ENL1 & NLT1.)		
6' New York City Flex Whip (120V)	FNY1	
6' New York City Flex Whip (277V)	FNY2	
6' Flex Whip	FW	
Finish		WH
Matte White Housing	WH	
Luminaire Length		ft in
Specify luminaire/row length in 1" increments (2' minimum, lengths are nominal 1" increments based on T-centers. Housing length is 1" shorter than specified. Leave blank for patterns. Smaller increments available, consult factory.)	_ft _in	
Pattern Options (4' minimum length)		
'L' pattern	A' x B'	
'U' pattern	A' x B' x C'	
Rectangular pattern (Consult factory for other pattern options)	A' x B' R	

4' PERFORMANCE CHART

Lumen Output	Delivered Lumens	Tested System Watts	Lumens Per Watt (LPW)				
			 AS	 BW	 FL	 PD05	 PD15
125LF	500	5	108	103	99	95	97
250LF	1000	9	108	103	99	95	97
375LF	1500	13	118	113	108	105	106
500LF	2000	18	120	115	110	106	108
625LF	2500	23	116	111	107	103	105
750LF	3000	28	116	111	106	103	104
875LF	3500	32	115	110	106	102	104
1000LF	4000	39	113	107	102	99	100

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

4' PERFORMANCE CHART - REGRESS LENS

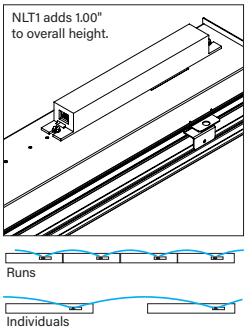
		 SR		 SRXP	
Lumen Output	Delivered Lumens	Tested System Watts	LPW	Tested System Watts	LPW
125LF	500	7	72	6	84
250LF	1000	16	72	13	83
375LF	1500	26	71	19	84
500LF	2000	34	72	26	83
625LF	2500	43	72	33	83

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

CONNECTED™ SOLUTIONS

Seem® 2 Grid Ceiling
LED

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.†

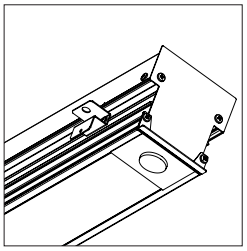


nLIGHT

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

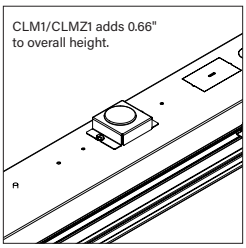
CAT-5 Cable provided by others. Serial labels will be provided on outside of luminaires and control unit.



enlighted™
A Siemens Company

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

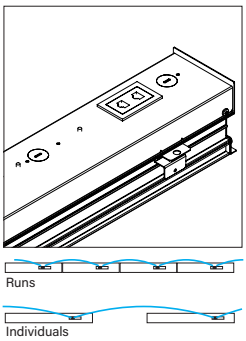


OSRAM

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.

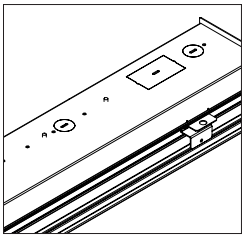


legrand® WATTSTOPPER®

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

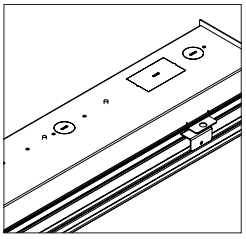
CAT-5 Cable provided by others. Serial labels will be provided on outside of luminaires and control unit.



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



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), Advance by Signify (0-10V)**
Enlighted Smart Sensor (ENL1)	SU-5E-IOT**	Enlighted RF	Enlighted	Integrated	Integrated	Yes	Wireless	**Advance by Signify**, Osram Optotronic
Legrand Wattstopper DLM (DLM1)	LMFC-011**	DLM	DLM	Enabled	Enabled	No	Wired	**Advance by Signify**, Osram Optotronic
Lutron EcoSystem (LH1)	LDE1**	EcoSystem	Quantum, Energi Savr Node, Energi TriPak	Enabled	Enabled	No	Wired	**Lutron Hi-Lume**
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**

*Not all compatible networks may be listed. **For performance data and additional control system details please visit the connected solutions manufacturer websites. Primary drivers are listed in **bold.** To specify a particular driver please consult factory.
†Controls systems supplied by others.

Ordering Guide

Linear Circuitry, Zones & Factory Options

FOCAL POINT®

HOW TO USE THIS GUIDE

Fill out the worksheet on the following page to specify your requirements for circuitry, zones, and factory options.

Refer to the run chart for standard run configurations, consult factory for custom configurations.

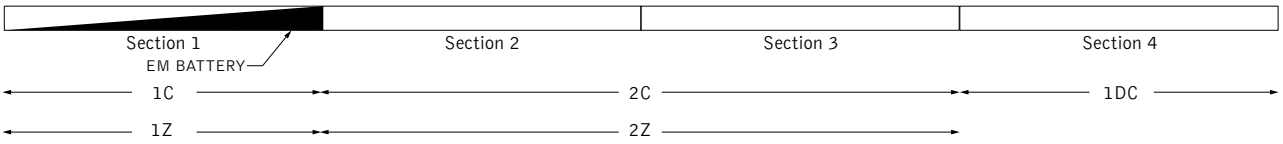
Complete the Totals / Ordering Codes at the bottom of the worksheet and add to your ordering logic on the cut sheet.

Submit the worksheet along with your order.

TOTAL RUN LENGTH: 32ft **JOB NAME:** _____ **FIXTURE TYPE:** _____

	HOUSING SECTION	SECTION LENGTH	SHARED ELECTRICAL FEED, NORMAL POWER			FACTORY OPTIONS			
						SEPARATE ELECTRICAL FEEDS			EM
			SWITCHING CIRCUIT	DIMMING ZONE	DAYLIGHT ZONE	DAYLIGHT CIRCUIT	EMERGENCY CIRCUIT	ECD	
EXAMPLE	1	8	1C	1Z					1EM
	2	8	2C	2Z					
	3	8	2C	2Z					
	4	8				1DC			
	Totals / Ordering Codes		2C	2Z		1DC			1EM

ORDERING: FSM4L-FL-625LF-35K- **2C2Z** -UNV-LD1-G2- **1DC-1EM** -WH-32ft



KEY	
C = Switching Circuit Switched Hot / Shared Neutral	**DC = Daylight Circuit** Switched Hot / Separate Neutral
Z = Dimming Zone Dimming Control Wires	**EC = Emergency Circuit** Switched Hot / Separate Neutral
DL = Daylight Zone Daylight Dimming Control Wires	**EM = Emergency Battery** Unswitched Hot / Shared Neutral
	ECD = Emergency Control Device Unswitched Hot / Separate Neutral

DEFAULTS

- Zones and Factory Options illuminate entire sections from 4' to 8' in length.
- One shared or isolated circuit and zone required per housing section.
- Limit of one EM or ECD per housing section.
- Additional electrical feed required for applications greater than three shared circuits and zones.
- Each DC, EC and ECD require an additional electrical feed.
- ECD not available in the same housing section as EC.
- Longer lead times and additional pricing may apply for custom run configurations.

CUSTOM LENGTHS

- If partial illumination of emergency or daylight section is required, indicate in ordering guide and add "partial illumination" in Order Notes. Drawing required.
- Engineering validation required, longer lead times may apply.

Ordering Guide Worksheet

Linear Circuitry, Zones & Factory Options

FOCAL POINT®

WORKSHEET

TOTAL RUN LENGTH: _____ **JOB NAME:** _____ **FIXTURE TYPE:** _____

HOUSING SECTION	SECTION LENGTH	SHARED ELECTRICAL FEED, NORMAL POWER			FACTORY OPTIONS			
					SEPARATE ELECTRICAL FEEDS			EM
		SWITCHING CIRCUIT	DIMMING ZONE	DAYLIGHT ZONE	DAYLIGHT CIRCUIT	EMERGENCY CIRCUIT	ECD	
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Totals / Ordering Codes		_C	_Z	_DL	_DC	_EC	_ECD	_EM

Combine to create Circuits & Zones ordering code

Enter as individual Factory Options

RUN CHART

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

Run length (ft)	Housing Configuration Section Lengths
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
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

Run length (ft)	Housing Configuration Section Lengths
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 + 8 + 4

Run length (ft)	Housing Configuration Section Lengths
45	8 + 8 + 8 + 8 + 8 + 8 + 5
46	8 + 8 + 8 + 8 + 8 + 8 + 6
47	8 + 8 + 8 + 8 + 8 + 8 + 7
48	8 + 8 + 8 + 8 + 8 + 8 + 8

Standard run configurations, consult factory for custom configurations.