Seem® 4 Grid Ceiling

LED
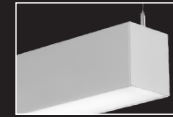
FOCAL POINT®

R L   N   PL   PoE

regress lens

drywall/hard ceiling companion

wall to ceiling companion
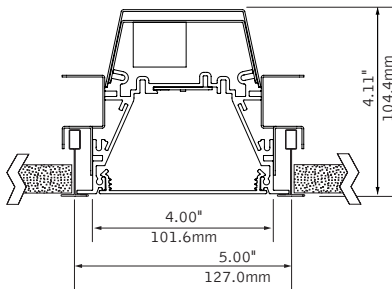
perimeter companion
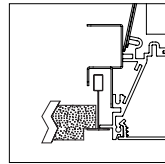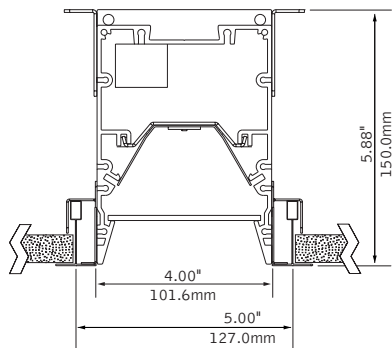
suspended companion

DIMENSIONAL DATA

Flush lens, lay-in

Flush lens, Tegular detail

4.11"
104.4mm

4.00"
101.6mm

5.00"
127.0mm

Regress lens, lay-in

5.88"
150.0mm

4.00"
101.6mm

5.00"
127.0mm

FEATURES

4" aperture recessed slot LED integrates with grid ceilings for a clean, unobtrusive aesthetic.

Individual units and continuous runs in 1" increments.

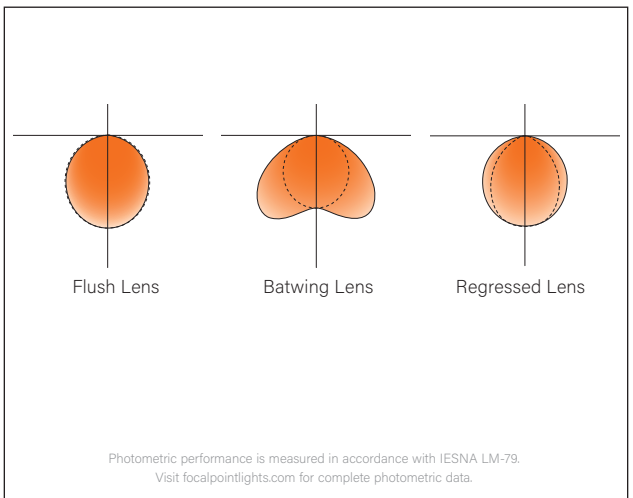Frosted acrylic lens provides uninterrupted illumination, without pixels or shadows.

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.
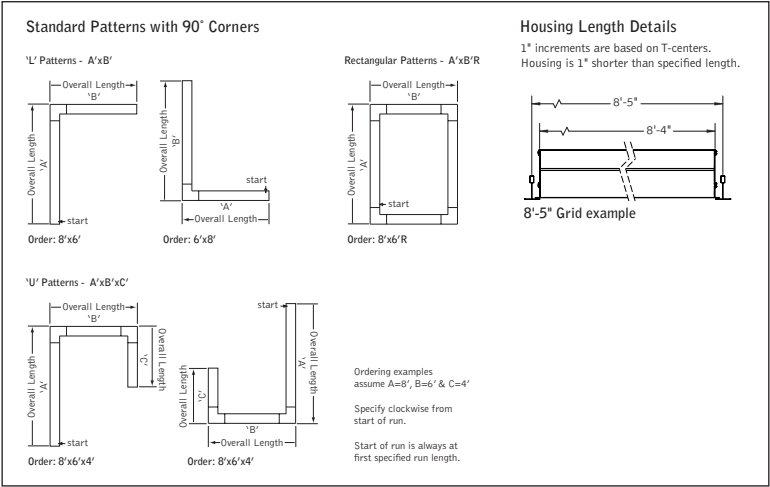
DISTRIBUTIONS

Flush Lens

Batwing Lens

Regressed Lens

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

DETAILS

Standard Patterns with 90° Corners

'L' Patterns - A'xB'

Overall Length 'B'
Overall Length 'A'
start
Order: 8'x6'

Overall Length 'B'
Overall Length 'A'
'A'
start
Overall Length
Order: 6'x8'

Rectangular Patterns - A'xB'R

Overall Length 'B'
Overall Length 'A'
start
Order: 8'x6'R

Housing Length Details

1" increments are based on T-centers.
Housing is 1" shorter than specified length.

8'-5"
8'-4"
8'-5" Grid example

'U' Patterns - A'xB'xC'

Overall Length 'B'
Overall Length 'A'
Overall Length 'C'
start
Order: 8'x6'x4'

start
Overall Length 'A'
Overall Length 'C'
Overall Length 'B'
start
Order: 8'x6'x4'

Ordering examples assume A=8', B=6' & C=4'

Specify clockwise from start of run.

Start of run is always at first specified run length.

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

Construction
One piece extruded aluminum housing. 20 Ga. steel end caps. Steel driver compartment, flush lens only. Flush lens weights: 4' unit: 11 lbs., 8' unit: 22 lbs.
Regress lens weights: 4' unit: 20 lbs., 8' unit: 40 lbs.

Optic
Extruded acrylic lens .085" 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 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 - 10 watts for 90 minutes. Maximum mounting height: 19.2ft. Emergency Circuit with Connected Solutions (NLT1, ENL1, CLM1, 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 > 61,000 hours   Calculated: L70 at > 480,000 hours
           L90 > 61,000 hours   L90 at > 128,000 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.

ORDERING

Luminaire Series		FSM4L
Seem 4 LED	FSM4L	

Shielding		_____
Batwing Lens	BW	
Flush Satin Lens	FL	
Regress Lens	SR	
Regress High Performance Lens	SRXP	

Lumen Output		_____
275 Lumens per foot (Not available with LH1.)	275LF	
375 Lumens per foot (Not available with LH1.)	375LF	
625 Lumens per foot (BW, FL & SR 3' minimum with LH1. SRXP 4' minimum with LH1. Patterns not available with LH1.)	625LF	
875 Lumens per foot (SR & SRXP 3' minimum with LH1. SR & SRXP with LH1 not available on patterns.)	875LF	
1000 Lumens per foot	1000LF	
1125 Lumens per foot	1125LF	
1250 Lumens per foot	1250LF	

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 (BW & FL Lens only. 6" increments. Patterns not available.)	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	
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 (1000LF max.)	D11	
Acuity nLight - 1% Dimming (Not available with CP.)*	NLT1	
Enlighted Smart Sensor - 1% Dimming*	ENL1	
Encelium CLM Connected* Lighting Module - 1% Dimming (Compatible with Encelium X Light Management System.)	CLM1	
Wattstopper DLM - 1% Dimming* *(3' minimum length. Patterns not available.)	DLM1	

Ceiling Configuration		_____
Std. 15/16" Lay-in **or** Std. 15/16" Tegular	G1 **or** T1	
Std. 9/16" Lay-in **or** Std. 9/16" Tegular	G2 **or** T2	
9/16" Slot-tee Tegular	G3	
Tall 15/16" Lay-in **or** Tall 15/16" Tegular	G4 **or** T4	
Tall 9/16" Lay-in **or** Tall 9/16" Tegular	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. Not available at corners. 120/277 Volt only. 7' minimum with CLM1, 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	_ft _in	

(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. Individual units cannot be joined in the field.)

| **Pattern Options** (4' minimum length)		_____
'L' pattern	A' x B'	
'U' pattern	A' x B' x C'	
Rectangular pattern	A' x B' R	

(Consult factory for other pattern options)

4' PERFORMANCE CHART

| Lumens Output	Delivered Lumens	Tested System Watts	LPW	
			BW	FL
275	1100	10	111	108
375	1500	13	121	119
625	2500	22	117	115
875	3500	32	116	114
1000	4000	37	115	112
1125	4500	41	113	110
1250	5000	46	112	110

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%.

4' PERFORMANCE CHART - REGRESS

Lumens Output	Delivered Lumens	Tested System Watts	LPW	
			SR	SRXP
275	1100	12	79	98
375	1500	16	84	109
625	2500	26	84	110
875	3500	39	80	105
1000	4000	46	77	101
1125	4500	53	76	101
1250	5000	59	75	99

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%.

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.†

Connections located under access panel.

Runs

Individuals
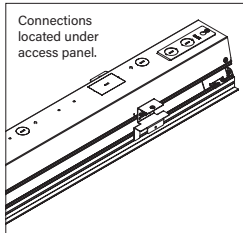
nLIGHT

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.

Flush Lens

Regress Lens

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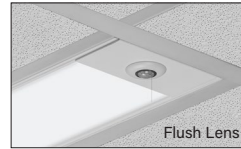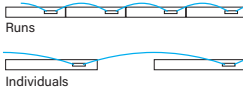
Enlighted smart sensor allows for occupancy sensing, daylight harvesting, energy usage, temperature and light level control. Communicates wirelessly with the Enlighted network.

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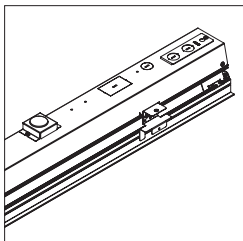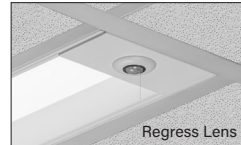
ENCELIUM

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.

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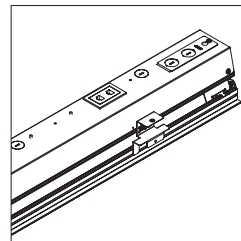
A Digital Lighting Management (DLM) system that provides two-way wired communication between networked luminaires and control system to allow for on/off and dimming functionality, occupancy sensing and multi-zone daylight harvesting.

Wattstopper DLM - 1% Dimming (DLM1)
Wattstopper Model #LMFC-011

Runs

Individuals

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

Connections located under access panel.
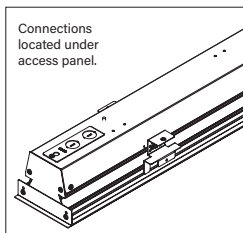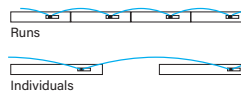
LUTRON®

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
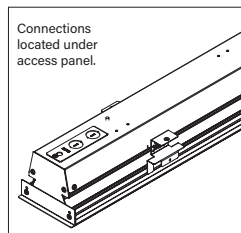
Connections located under access panel.

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,** 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

*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:** _____

EXAMPLE

HOUSING SECTION	SECTION LENGTH	SHARED ELECTRICAL FEED, NORMAL POWER			FACTORY OPTIONS			
					SEPARATE ELECTRICAL FEEDS			
		SWITCHING CIRCUIT	DIMMING ZONE	DAYLIGHT ZONE	DAYLIGHT CIRCUIT	EMERGENCY CIRCUIT	ECD	EM
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

Section 1 · Section 2 · Section 3 · Section 4
EM BATTERY
1C — 2C — 1DC
1Z — 2Z
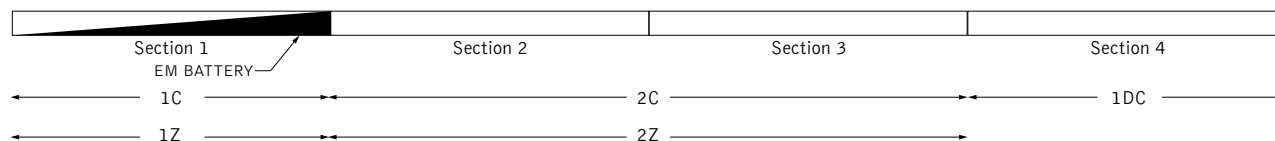
KEY

C = Switching Circuit
Switched Hot / Shared Neutral

Z = Dimming Zone
Dimming Control Wires

DL = Daylight Zone
Daylight Dimming Control Wires

DC = Daylight Circuit
Switched Hot / Separate Neutral

EC = Emergency Circuit
Switched Hot / Separate Neutral

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®

| 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	EM
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Totals / Ordering Codes								

WORKSHEET

Combine to create Circuits & Zones ordering code

Enter as individual Factory Options

RUN CHART

Run length (ft)	Housing Configuration Section Lengths	Run length (ft)	Housing Configuration Section Lengths	Run length (ft)	Housing Configuration Section Lengths	Run length (ft)	Housing Configuration Section Lengths
9	5 + 4	21	8 + 8 + 5	33	8 + 8 + 8 + 5 + 4	45	8 + 8 + 8 + 8 + 8 + 5
10	6 + 4	22	8 + 8 + 6	34	8 + 8 + 8 + 6 + 4	46	8 + 8 + 8 + 8 + 8 + 6
11	7 + 4	23	8 + 8 + 7	35	8 + 8 + 8 + 7 + 4	47	8 + 8 + 8 + 8 + 8 + 7
12	8 + 4	24	8 + 8 + 8	36	8 + 8 + 8 + 8 + 4	48	8 + 8 + 8 + 8 + 8 + 8
13	8 + 5	25	8 + 8 + 5 + 4	37	8 + 8 + 8 + 8 + 5		
14	8 + 6	26	8 + 8 + 6 + 4	38	8 + 8 + 8 + 8 + 6		
15	8 + 7	27	8 + 8 + 7 + 4	39	8 + 8 + 8 + 8 + 7		
16	8 + 8	28	8 + 8 + 8 + 4	40	8 + 8 + 8 + 8 + 8		
17	8 + 5 + 4	29	8 + 8 + 8 + 5	41	8 + 8 + 8 + 8 + 5 + 4		
18	8 + 6 + 4	30	8 + 8 + 8 + 6	42	8 + 8 + 8 + 8 + 6 + 4		
19	8 + 7 + 4	31	8 + 8 + 8 + 7	43	8 + 8 + 8 + 8 + 7 + 4		
20	8 + 8 + 4	32	8 + 8 + 8 + 8	44	8 + 8 + 8 + 8 + 8 + 4		

Standard run configurations, consult factory for custom configurations.