

# Seem® 4 Grid Ceiling

LED



regress lens



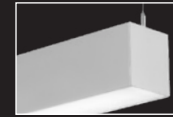
drywall/hard ceiling  
companion



wall to ceiling  
companion



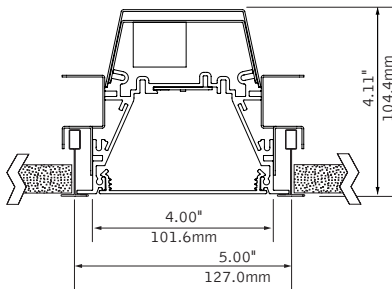
perimeter  
companion



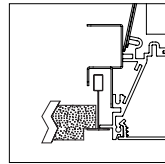
suspended  
companion

## DIMENSIONAL DATA

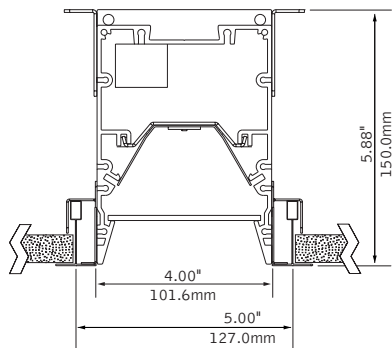
Flush lens, lay-in



Flush lens,  
Tegular detail



Regress lens, lay-in



## 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.

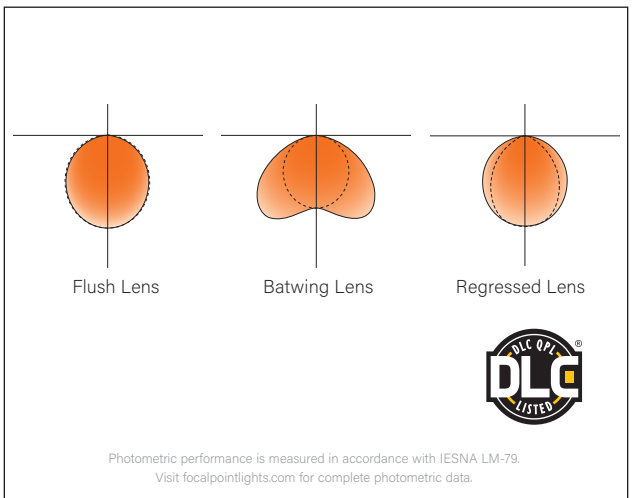
LED position and lens material optimized to provide the perfect blend of high performance and visual comfort.

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.

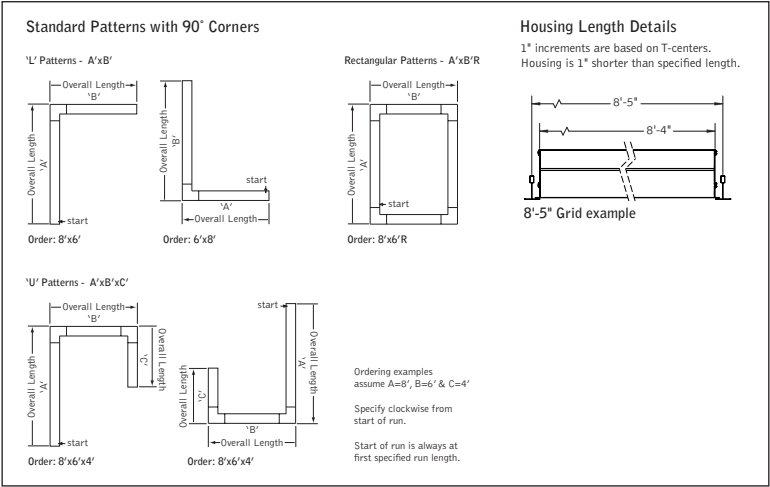
## DISTRIBUTIONS



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, 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, 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 > 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

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      275LF

(Not available with Lutron Drivers.)

375 Lumens per foot      375LF

(Not available with LU5 & LH1 Drivers)

625 Lumens per foot      625LF

(BW, FL & SR 3' minimum with LU5 & LH1 Drivers. SRXP 4' minimum with LU5 & LH1 Drivers.)

875 Lumens per foot      875LF

(SR & SRXP 3' minimum with LU5 & LH1 Drivers)

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      P35K

(BW & FL Lens only. 6" increments. Patterns not available.)

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      LVN

(No driver. Not available with EM or EC. LV Voltage only.)

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

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

DALI 1% Dimming (1000LF max.)      D11

Acuity nLight - 1% Dimming      NLT1

(3' minimum length. Not available with CP)

Enlighted Smart Sensor - 1% Dimming      ENL1

(3' minimum length.)

Osram Connected Lighting Module for ENCELUM systems - 1% Dimming      CLM1

(3' minimum length. Compatible with Osram ENCELUM and ENCELUM EDGE systems only)

Osram Connected Lighting Module for ZigBee Wireless Networks - 1% Dimming      CLMZ1

(3' minimum length. Not compatible with Osram ENCELUM systems)

Wattstopper DLM - 1% Dimming      DLM1

(3' minimum length.)

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      CP

Daylight Circuit      \_DC

Emergency Circuit      \_EC

Emergency Battery Pack†      \_EM

Emergency Control Device†      \_ECD

†(4' minimum. 120/277 Volt only. 7' minimum with CLM1, CLMZ1, DLM1, ENL1 & NLT1. EM or ECD not available at corners.)

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

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

(3' 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)



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.

4' PERFORMANCE CHART

			LPW	
Lumens Output	Delivered Lumens	Tested System Watts		
			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

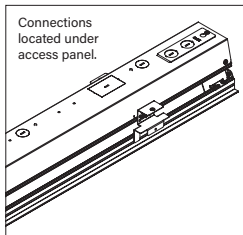
Based on 3500K, 80 CRI, 4' lengths. Lumen multipliers: Preferred Light = 0.65, 90+ CRI = 0.87.  
Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%.

4' PERFORMANCE CHART - REGRESS

			LPW	
Lumens Output	Delivered Lumens	Tested System Watts		
			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%.

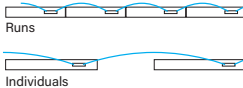
Focal Point provides flexibility in meeting the needs of each project by integrating with several building lighting control systems. A variety of sensors, drivers and other components can be specified that allow the luminaires to communicate with wired and wireless networks. All zoning can be digitally 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.\*



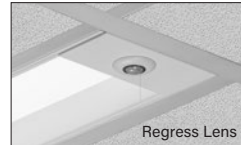
nLight<sup>®</sup> provides a two-way wired digital lighting system allowing for on/off and dimming functionality, occupancy sensing, and multi-zone daylight harvesting.

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

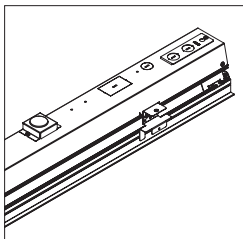


Regress Lens



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

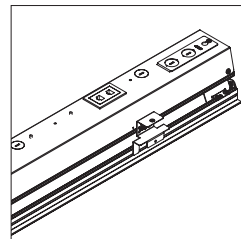
Enlighted Smart Sensor - 1% Dimming (ENL1)  
Enlighted Model #SU-5E-IOT



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

Osram CLM - 1% Dimming (CLM1 & CLM21)  
Osram Model #ZBHA-CLM DIM

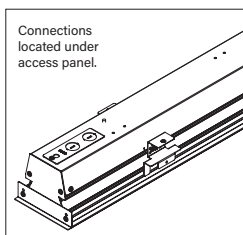
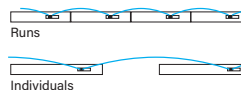
Serial labels will be provided on outside of luminaires and control unit.



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.

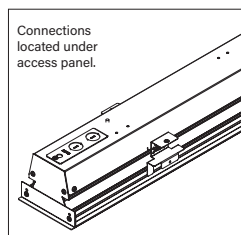
Wattstopper DLM - 1% Dimming (DLM1)  
Wattstopper Model #LMFC-011

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



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

Lutron Hi-Lume EcoSystem - 1% Dimming (LH1)  
Lutron Model #LDE1  
Lutron 5-Series EcoSystem - 5% Dimming (LU5)  
Lutron Model #LDE5



A two-way digital network that enables on/off and dimming functionality, occupancy sensing, and multi-zone daylight harvesting. Communicates with Züm wireless and SpaceBuilder working with Züm 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 Züm<sup>™</sup> 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	<b>eldoLED ECOdrive</b> , eldoLED SOLOdrive
Crestron (D11, L11)	Specified Driver	DALI 0-10V	Crestron Züm Wireless & SpaceBuilder	Enabled	Enabled	No	Wired	<b>eldoLED ECOdrive (DALI)</b> , <b>Advance by Signify (0-10V)</b>
Enlighted Smart Sensor (ENL1)	SU-5E-IOT**	Enlighted RF	Enlighted	Integrated	Integrated	Yes	Wireless	<b>Advance by Signify</b> , Osram Dexal
Legrand Wattstopper DLM (DLM1)	LMFC-011**	DLM	DLM	Enabled	Enabled	No	Wired	<b>Advance by Signify</b> , Osram Optotronic
Lutron EcoSystem (LH1 & LU5)	LDE1** LDE5**	EcoSystem	Quantum, Energi Savr Node, Energi TriPak	Enabled	Enabled	No	Wired	<b>Lutron Hi-Lume</b> <b>Lutron 5-Series</b>
Osram CLM for ENCELUM systems (CLM1)	ZBHA-CLM**	ZigBee HA	Osram ENCELUM & ENCELUM EDGE	Enabled	Enabled	No	Wireless	<b>Osram Optotronic</b>
Osram CLM for ZigBee Wireless Networks (CLMZ1)	ZBHA-CLM**	ZigBee HA	Daintree Networks & open ZigBee Networks	Enabled	Enabled	No	Wireless	<b>Osram Optotronic</b>

\*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



## HOW TO USE THIS GUIDE

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

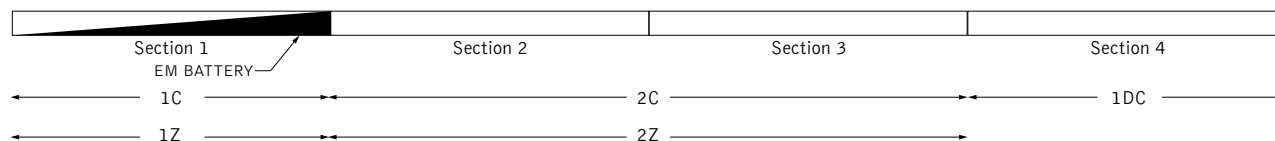
Refer to the run chart for standard run configurations, consult factory for custom configurations.

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.

EXAMPLE	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	
	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

**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			
		SWITCHING CIRCUIT	DIMMING ZONE	DAYLIGHT ZONE	SEPARATE ELECTRICAL FEEDS			EM
						DAYLIGHT CIRCUIT	EMERGENCY CIRCUIT	
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.