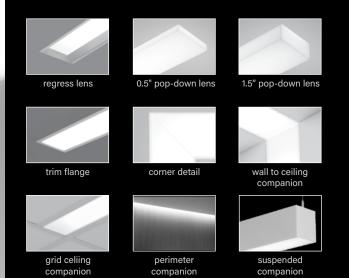
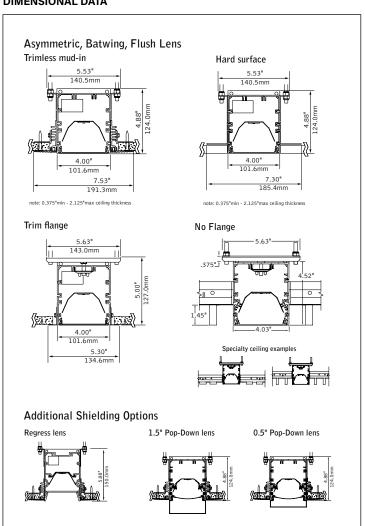
## Seem® 4 Drywall/Hard/Specialty Ceiling







#### **DIMENSIONAL DATA**



#### **FEATURES**

Extruded aluminum 4" aperture recessed slot LED integrates with drywall or hard ceilings or walls in a variety of mounting styles for a clean, unobtrusive aesthetic.

Individual units and continuous runs in 1" increments.

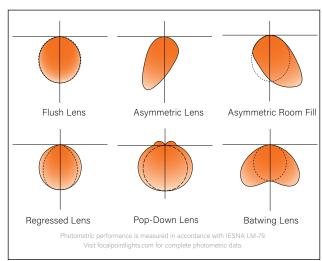
Available in flush, asymmetric, asymmetric room fill, batwing, regress,  $0.5^{\prime\prime}$  or  $1.5^{\prime\prime}$  pop-down lens.

Tunable White: Supports human activity, well-being, and preferences with a light quality that evolves throughout the day.

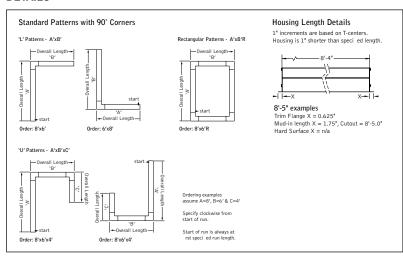
Connected Solutions: Integrates with wired and wireless building lighting control systems.

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

#### **DISTRIBUTIONS**



#### **DETAILS**



#### 4' PERFORMANCE CHART

		B\	W	F	L	A	S	Α	F
Lumen Output	Nominal Lumens	Tested System Watts	LPW	Tested System Watts	LPW	Tested System Watts	LPW	Tested System Watts	LPW
275LF	1100	8.8	125	9.1	121	8.5	130	8.6	128
375LF	1500	11.3	133	11.7	129	10.8	138	11	137
625LF	2500	19	131	19.9	126	18.3	137	18.5	135
875LF	3500	27	130	27.9	125	25.9	135	26.2	133
1000LF	4000	31.1	129	32.2	124	29.8	134	30.2	132
1125LF	4500	35.4	127	36.6	123	33.9	133	34.4	131
1250LF	5000	39.8	126	41.2	121	38.1	131	38.6	129

 $Based \ on \ 3500 K, 80 \ CRI, 4'lengths. \ Lumen \ multiplier: 90+CRI = 0.87. \ Lumen \ output \ may \ vary \ +/-5\%. \ Actual \ wattage \ may \ vary \ +/-5\%.$ 

#### 4' PERFORMANCE CHART - REGRESS

		S	R	SR	ΧP
Lumen Output	Nominal Lumens	Tested System Watts	LPW	Tested System Watts	LPW
275LF	1100	9.4	117	8.7	127
375LF	1500	12.5	120	11.1	135
625LF	2500	21.1	118	18.7	134
875LF	3500	30	117	26.5	132
1000LF	4000	34.6	116	30.6	131
1125LF	4500	39.5	114	34.8	129
1250LF	5000	44.4	113	39	128

Based on 3500K, 80 CRI, 4' lengths, Lumen multiplier; 90+ CRI = 0.87, Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%.

#### 4' PERFORMANCE CHART - POP-DOWN

		0.5"		1.5"	
Lumen Output	Nominal Lumens	Tested System Watts	LPW	Tested System Watts	LPW
275LF	1100	11	100	11.9	93
375LF	1500	14.7	102	15.8	95
625LF	2500	25	100	27	93
750LF	3000	30.3	99	32.7	92
875LF	3500	35.7	98	38.6	91
1000LF	4000	41.3	97	44.7	89

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



STANDARD WHITE		
Luminaire Series		FSM4L
Seem 4 LED	FSM4L	
Shielding		
Asymmetric Lens	AS	
Asymmetric Room Fill	AF	
Batwing Lens	BW	
Flush Satin Lens 0.5" Pop-Down Lens (1000LF max.)	FL PD05	
1.5" Pop-Down Lens (1000LF max. individual units only)	PD15	
Regress Lens*	SR	
Regress High Performance Lens*	SRXP	
*(Ceiling applications only)		
Lumen Output	27ELE	
275 Lumens per foot (Not available with LH1) 375 Lumens per foot (Not available with LH1)	275LF 375LF	
625 Lumens per foot	625LF	
(BW, FL & SR 3' min. individual units only with LH1. SRXP 4' min. individual units only with LH1.)		
750 Lumens per foot (Pop-Down Lenses only)	750LF	
875 Lumens per foot	875LF	
(SR & SRXP 3' min. individual units only with LH1.)  1000 Lumens per foot	1000LF	
1125 Lumens per foot	1125LF	
1250 Lumens per foot	1250LF	
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 <b>or</b> 90+ CRI	35K or 935K	
4000K, 80+ CRI <b>or</b> 90+ CRI	40K or 940K	
Circuits & Zones		
1 Circuit, non-emergency	1C	
Consult Ordering Guide on page 6 for multiple circuiting and zoning options	_C_Z_DL	
· · · · · · · · · · · · · · · · · · ·		
<b>Voltage</b> 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) -	LH1	
1% Dimming (625LF min.)		
DALI 1% Dimming (1000LF max.)	D11	
Wattstopper Fixture Sensor** Low Density - 1% Dimming	LMFS1	
Wattstopper Fixture Sensor**	LMFSD	
High Density – 1% Dimming		
Lutron Athena Wireless Sensor**1	LAWS	
WaveLinx Pro – 1% Dimming*	WLXP	
¹(0-10V standard. Consult factory for DALI) **(3' min. length. 7' min. with ECD/EM. Not available with Pop-Down Lenses) <u>See sensor layout guide</u>		
Ceiling Configuration		
	NF	
No Flange for specialty ceilings (Ex. slat, panel, cloud systems.)		
Trim Flange Drywall	TF	
Trim Flange Wood Mud-in Trimless, pre-set for 1/2" Drywall	TFW XF1	
Mud-in Trimless, pre-set for 5/8" Drywall	XF2	
Mud-in Trimless, set thickness in field (Mounting equipment assembled in field)	XFF	
(Mounting equipment assembled in field)  Non-Drywall Hard Surface	XFN	
Hard Surface, Wood	XFW	
Factory Options		
(See page 6 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 <sup>†</sup>	_EM	
Emergency Control Device†	_ECD	
†(4' minimum. 6' minimum with patterns. 120/277 Volt only. Not available at corners.)		
6' New York City Flex Whip 120V or 277V	FNY1 or FNY2	
6' Flex Whip	FW	
Finish		WH
Matte White Housing	WH	
Luminaire Length		ft in
Specify luminaire/row length in 1" increments (2' minimum. Housing length is 1" shorter than specified. Leave blank for patterns.)	_ft _in	
Leave blank for patterns.)		
Pattern Options (4' min. length. Not available with Pop-Down Lenses.		
Consult factory for other pattern options.)		
'L' pattern 'U' pattern	A' x B' A' x B' x C'	
U pattern	AXDXC	

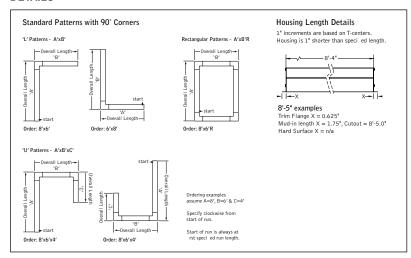
'U' pattern

Rectangular pattern

A' x B' x C'

A' x B' R

#### **DETAILS**



### TW 4' PERFORMANCE CHART

Lumen	Nominal	Tested	N. C.	
Output	Lumens	System Watts	BW	FL
275LF	1100	13.30	87.3	83.2
375LF	1500	17.34	90.8	86.5
625LF	2500	27.84	94.0	89.5
875LF	3500	37.22	98.9	94.2
1000LF	4000	42.39	99.2	94.4
1125LF	4500	50.27	93.9	89.4

I PW

Based on 2700K, 80CRI, 4' lengths. Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%.

#### 4' PERFORMANCE CHART - REGRESS Delivered Tested Lumen Output Lumens **System Watts** SR SRXE 275LF 1100 14.72 74.4 88.6 375LF 1500 19.36 77.5 92.3 625I F 2500 31,47 79.6 94.8 875LF 3500 42.01 83.4 99.4 1000LF 4000 50.68 94.3

Based on 2700K, 80CRI, 4' lengths. Lumen output may vary +/-5%. Actual wattage may vary +/-5%.

### TW

#### 4' PERFORMANCE CHART - POP-DOWN

		0.5"		1.5"		
Lumen Output	Nominal Lumens	Tested System Watts	LPW	Tested System Watts	LPW	
275LF	1100	17.14	64.7	16.33	67.3	
375LF	1500	22.79	66.5	21.58	70.0	
625LF	2500	35.49	70.6	33.96	73.8	
750LF	3000	42.39	70.8	40.28	74.5	

Based on 2700K, 80CRI, 4' lengths. Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%.

#### **Lumen Multipliers**

#### Wattage Multipliers

u	p.i.c.c	wattage mai	iipiioi o	
CRI	Multiplier	сст	Multiplier	
80+	1.00	2700K	1.00	
90+	0.89	3000K	0.92	
		3500K	0.88	
		4000K	0.86	
		5000K	0.85	
		5700K	0.87	
		6500K	0.90	

**TUNABLE WHITE Luminaire Series** FSM4L Seem 4 LED FSM4L Shielding **Batwing Lens** BW Flush Satin Lens 0.5" Pop-Down Lens (750LF max.) PD05 1.5" Pop-Down Lens (750LF max. individual units only) PD15 Regress Lens\* SR Regress High Performance Lens\* SRXP **Lumen Output** 275 Lumens per foot (BW, FL, SR & SRXP 3' min. with D1TW.) 275LF 375 Lumens per foot (BW, FL, SR & SRXP 3' min.) 375LF 625 Lumens per foot 625I F 750 Lumens per foot (Pop-Down Lenses only) 750LF 875 Lumens per foot 875LF 1000 Lumens per foot 1000I F 1125 Lumens per foot 1125LF **Color Temperature** Tunable White: 2700-6500K, 80+ CRI 2765T 92765T Tunable White: 2700-6500K, 90+ CRI **Circuits & Zones** 1 Circuit, non-emergency 1C Consult Ordering Guide on page 6 for  $_C_Z_DL$ multiple circuiting and zoning options Voltage UNV 120/277 UNV Volt UNV **Control System & Dimming Level DALI 1% Dimming** D1TW (Default driver offers DT6 control. It requires two addresses, one for intensity & one for CCT tuning. Consult factory for DT8.

Extended lead time applies.) **Ceiling Configuration** No Flange for specialty ceilings Trim Flange Drywall TF TFW Trim Flange Wood Mud-in Trimless, pre-set for 1/2" Drywall XF1 Mud-in Trimless, pre-set for 5/8" Drywall XF2 Mud-in Trimless, set thickness in field XFF Non-Drywall Hard Surface XFN XFW Hard Surface, Wood **Factory Options** (See page 6 for ordering details for DC, E Chicago Plenum CP (Not available with Flex Whip) **Daylight Circuit** DC \_EC **Emergency Circuit** \_EM Emergency Battery Pack† \_ECD Emergency Control Device<sup>†</sup> FNY1 or FNY2 6' New York City Flex Whip 120V or 277V FW 6' Flex Whip **Finish** WH Matte White Housing WH **Luminaire Length** ft in Specify luminaire/row length in 1" increments (2' minimum. Housing length is 1" shorter than specified. Leave blank for patterns.) Pattern Options
(4' min. length. Not available with Pon-Down Consult factory for other pattern options.)

'L' pattern

'U' pattern

Rectangular pattern

A' x B'

A' x B' x C'

A' x B' R

#### **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 or Tunable White (2700K-6500K), CRI>80, >90. 3500K and 4000K with CRI>90 have a cyanosis observation index (COI) of 3.3 or less. LED modules and drivers are replaceable from below.

#### Construction

One piece extruded aluminum housing. 20 Ga. steel end caps. Housing for new construction applications. XFW acceptable for use with wood, consult factory for Type IC availability. 2' unit weight: 12 lbs., 3' unit weight: 16 lbs., 4' unit weight: 20 lbs., 5' unit weight: 24 lbs.

#### Optic

Asymmetric, Flush and Batwing lens extruded acrylic .085" thick with satin finish up to 8' continuous. Pop-Down lens extruded acrylic .06" thick with frosted finish, up to 8' continuous. Regress lens .118" thick acrylic lay-in lens. 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

Output - 10 watts for 90 minutes. Maximum mounting height: 19.2ft. Emergency Circuit with Connected Solutions (LMFS1, LMFSD, WLXP) 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.)

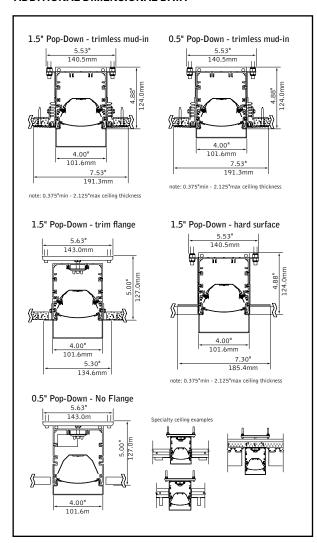
#### Reliability

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.

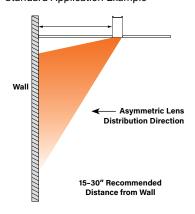
#### Warranty

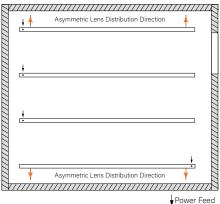
LED system rated for operation in ambient environments up to 25°C. 5-year limited warranty.

#### ADDITIONAL DIMENSIONAL DATA

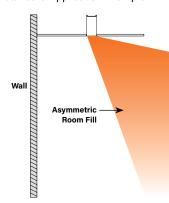


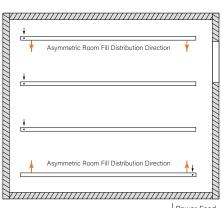
#### **DIRECT ASYMMETRIC** Standard Application Example





## **DIRECT ASYMMETRIC ROOM FILL** Standard Application Example





Power Feed



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>

Connected Solution	Ordering Code	Model #**	Protocol	Compatible Networks*	Occupancy & Daylight	Temperature Reporting	Communication to Luminaire	Drivers
La legrand <sup>®</sup>	LMFS1	LMFS-601 & LMFI-111	DLM	DLM	Enabled	No	Wireless	Advance by Signify
WATTSTOPPER*	LMFSD	LMFS-601	Wireless	DLM	Enabled	INO	wireless	Optotronic by eldoLED (Dexal)
COOPER Lighting Solutions	WLXP	OEM-WAA	WaveLinx Wireless	WaveLinx Pro Trellix	Enabled	No	Wireless (WaveLinx Pro Wireless Area Controller)	Advance by Signify
Connections located under access panel.	D11	Specified	DALI	Crestron Zūm Wireless &	Enabled	No	Wired	eldoLED ECOdrive
@CRESTRON.	L11	Driver	0-10V	SpaceBuilder	Enabled	No	wired	Advance by Signify
**LUTRON	LAWS	A-WN-D01- OCC-WH	DALI, 0-10V	Athena Wireless	Integrated	No	Wireless	Advance by Signify
Connections located under stoces panel	LH1	LDE1	EcoSystem	Quantum, Energi Savr Node, Energi TriPak	Enabled	No	Wired	Lutron Hi-Lume

<sup>\*</sup>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

#### **Direct Only 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.

	TOTAL RUN	LENGTH:	32ft	JOB NAME:			FIXTURE TYPE: _		
			SHA	RED ELECTRICAL F	EED,		NS		
	HOUSING	SECTION		NORMAL POWER		SEPARAT	E ELECTRICAL FEE	os	
m	SECTION	LENGTH	SWITCHING CIRCUIT	DIMMING ZONE	DAYLIGHT ZONE	DAYLIGHT CIRCUIT	EMERGENCY CIRCUIT	ECD	EM
EXAMPL	1	8	1C	1Z					1EM
Ę	2	8	2C	2Z					
	3	8	2C	2Z					
	4	8				1DC			
	Totals / Ord	ering Codes	2C	2 <b>Z</b>		1DC			1EM

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

Section 1 EM BATTERY	Section 2	Section 3	Section 4
1C	2	c —	1DC
1Z	2	Z	

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®

	TOTAL RUN	LENGTH:		JOB NAME:			FIXTURE TYPE:		
			SHAR	ED ELECTRICAL F	EED,		FACTORY OPTI	ONS	
		SECTION LENGTH	NORMAL POWER			SEPARATE ELECTRICAL FEEDS			
	SECTION	LENGTH	SWITCHING CIRCUIT	DIMMING ZONE	DAYLIGHT ZONE	DAYLIGHT CIRCUIT	EMERGENCY CIRCUIT	ECD	EM
	1								
	2								
	3								
	4								
	5								
	6								
	7								
WOF	8								
WORKSHEET	9								
ET	10								
	11								
	12								
	13								
	14								
	15								
	16								
	17								
	18								
	19								
	20								
	Totals / Ord	ering Codes							

Combine to create Circuits & Zones ordering code

Enter as individual Factory Options

#### **RUN CHART**

HOW CHAIT					
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
10	6 + 4	22	8 + 8 + 6	34	8 + 8 + 8 + 6 + 4
11	7 + 4	23	8 + 8 + 7	35	8 + 8 + 8 + 7 + 4
12	8 + 4	24	8 + 8 + 8	36	8 + 8 + 8 + 8 + 4
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

Run length (ft)	Housing Configuration Section Lengths
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.