

# Seem® 4 Grid Ceiling

LED



regress lens



0.5" pop-down lens



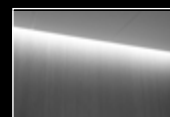
1.5" pop-down lens



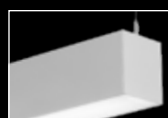
drywall/hard ceiling companion



wall to ceiling companion



perimeter companion

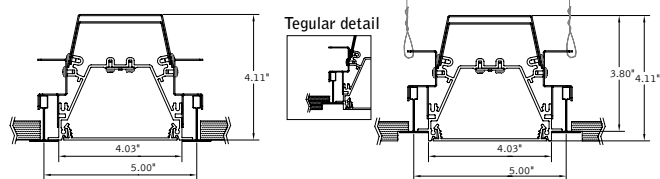


suspended companion

## DIMENSIONAL DATA

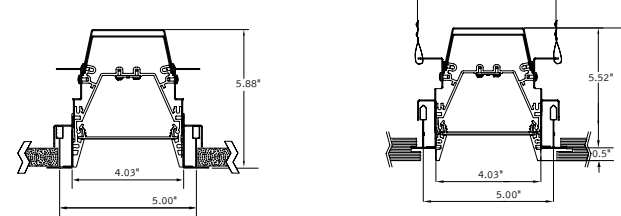
### Flush, Asymmetric & Batwing Options

Lay-in



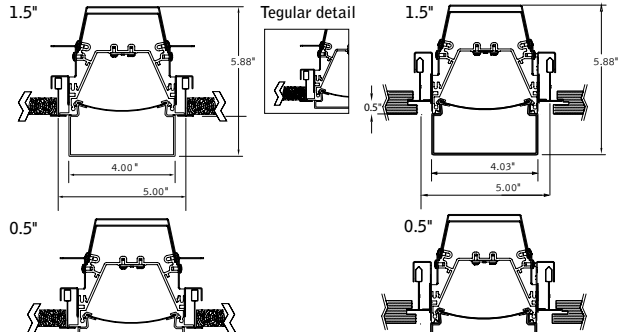
### Regress Lens Options

Lay-in



### Pop-Down Lens Options

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.

Available in flush, asymmetric, asymmetric room fill, batwing, regress, 0.5" or 1.5" pop-down lens.

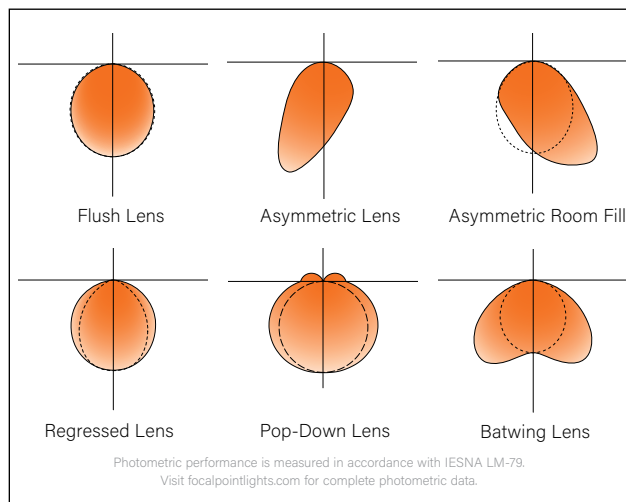
LED position and lens material optimized to provide the perfect blend of high performance and visual comfort.

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

Standard Patterns with 90° Corners

**'L' Patterns - A'xB'**

Order: 8'x6'

Order: 6'x8'

**'U' Patterns - A'xB'xC'**

Order: 8'x6'x4'

Order: 8'x6'x4'

Rectangular Patterns - A'xB'R

Order: 8'x6'R

Housing Length Details

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

8'-5" Grid example

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.

4' PERFORMANCE CHART

Lumen Output	Nominal Lumens	BW		FL		AS		AF	
		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	11.0	137
625LF	2500	19.0	131	19.7	127	18.3	137	18.5	135
875LF	3500	27.0	129	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 3500K, 80 CRI, 4' lengths. Lumen multiplier: 90+ CRI = 0.87 Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%.

4' PERFORMANCE CHART - REGRESS

Lumen Output	Nominal Lumens	SR		SRXP	
		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	30.0	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	39.0	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

Lumen Output	Nominal Lumens	0.5"		1.5"	
		Tested System Watts	LPW	Tested System Watts	LPW
275LF	1100	11.0	100	11.9	93
375LF	1500	14.7	102	15.8	95
625LF	2500	25.0	100	27.0	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%.

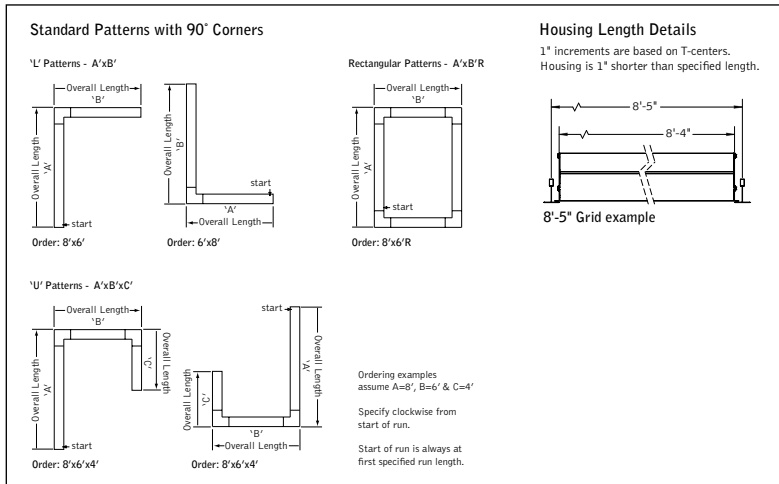
STANDARD WHITE

Luminaire Series	FSM4L
Seem 4 LED	FSM4L
Shielding	
Asymmetric Lens	AS
Asymmetric Room Fill	AF
Batwing Lens	BW
Flush Satin Lens	FL
Regress Lens	SR
Regress High Performance Lens	SRXP
0.5" Pop-Down Lens (750LF max.)	PD05
1.5" Pop-Down Lens (750LF max. individual units only)	PD15
Lumen Output	
275 Lumens per foot (Not available with LH1.)	275LF
375 Lumens per foot (Not available with LH1.)	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 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
Circuits & Zones	
1 Circuit, non-emergency	1C
Consult Ordering Guide on page 6 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 (625LF min.)	LH1
DALI 1% Dimming (1000LF max.)	D11
Wattstopper DLM - 1% Dimming**	DLM1
Wattstopper Fixture Sensor Low Density -** 1 1% Dimming	LMFS1
Wattstopper Fixture Sensor High Density -** 1 1% Dimming	LMFSD
Lutron Athena Wireless Node** 2	LAW1
Lutron Athena Wireless Sensor** 12	LAWS
Acuity nLight - 1% Dimming**	NLT1
Encelium CLM Connected Lighting Module -** 1% Dimming	CLM1
Current NX Enabled - 1% Dimming**	NXE1
WaveLinx Pro - 1% Dimming** 1 (3' min. length. 7' min. length with ECD/EM.) 1(not available with pop-down lenses) 2(0-10V standard. Consult factory for DALI) See sensor layout guide	WLXP
Ceiling Configuration	
Std. 15/16" Lay-in or Std. 15/16" Regular	G1 or T1
Std. 9/16" Lay-in or Std. 9/16" Regular	G2 or T2
9/16" Slot-tee Regular	G3
Tall 15/16" Lay-in or Tall 15/16" Regular	G4 or T4
Tall 15/16" Regular for specialty ceilings (0.5" drop)	T4V
Tall 9/16" Lay-in or Tall 9/16" Regular	G5 or T5
Node 9/16" Regular	T6
Factory Options	
(See page 6 for ordering details for DC, EC, EM & ECD.)	
Chicago Plenum	CP
(Not available with Flex Whip, DLM1, NLT1 or NXE1.)	
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.)	
6' New York City Flex Whip 120V or 277V	FN1Y or FN1Y2
6' Flex Whip	FW
Finish	
Matte White Housing	WH
Luminaire Length	
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. Individual units cannot be joined in the field.)	_ft _in
Pattern Options	
(4' min. length. Not available with Pop-Down Lenses. Consult factory for other pattern options.)	
'L' pattern	A' x B'
'U' pattern	A' x B' x C'
Rectangular pattern	A' x B' R



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.

## DETAILS



## 4' PERFORMANCE CHART

Lumen Output	Nominal Lumens	LPW			
		BW		FL	
		Tested System Watts		Tested System Watts	
275LF	1100	10.4	106	10.8	102
375LF	1500	13.9	108	14.5	104
625LF	2500	24.1	104	24.9	100
875LF	3500	34.8	101	35.9	97
1000LF	4000	40.1	100	41.2	97
1125LF	4500	45.6	99	46.9	96

Based on 2700K, 90CRI, 4' lengths. Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%.

## 4' PERFORMANCE CHART - REGRESS

Lumen Output	Nominal Lumens	LPW			
		SR		SRXP	
		Tested System Watts		Tested System Watts	
275LF	1100	11.1	99	10.3	107
375LF	1500	15.5	97	13.8	109
625LF	2500	26.8	93	23.8	105
875LF	3500	38.7	90	34.2	102
1000LF	4000	44.3	90	39.1	102

Based on 2700K, 90CRI, Based on 2700K, 80CRI, 4' lengths. Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%.

## 4' PERFORMANCE CHART - POP-DOWN

Lumen Output	Nominal Lumens	0.5"		1.5"	
		Tested System Watts	LPW	Tested System Watts	LPW
275LF	1100	13.1	84	14.1	78
375LF	1500	18.3	82	19.6	76
625LF	2500	31.7	79	34.3	73
750LF	3000	38.8	77	41.9	72

Based on 2700K, 90CRI, 4' lengths. Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%.

### Lumen Multipliers

CRI	Multiplier
80+	1.16
90+	1.00

### Wattage Multipliers

CCT	Multiplier
2700K	1.00
3000K	0.96
3500K	0.92
4000K	0.89
5000K	0.88
5700K	0.87



## TUNABLE WHITE

### Luminaire Series

Seem 4 LED FSM4L

### Shielding

Batwing Lens BW

Flush Satin Lens FL

Regress Lens (1000LF max.) SR

Regress High Performance Lens (1000LF max.) SRXP

0.5" Pop-Down Lens (750LF max.) PD05

1.5" Pop-Down Lens (750LF max. individual units only) PD15

### Lumen Output

275 Lumens per foot 275LF

(BW, FL, SR & SRXP 3' min. with DTTW. SR, SRXP, PD05 & PD15 3' min. with LT1. FL & BW 4' min. with LT1.)

375 Lumens per foot 375LF

(BW, FL, SR & SRXP 3' min. with LT1.)

625 Lumens per foot 625LF

750 Lumens per foot (Pop-Down Lenses only) 750LF

875 Lumens per foot 875LF

1000 Lumens per foot 1000LF

1125 Lumens per foot 1125LF

### Color Temperature

Tunable White: 2700-6500K, 80+ CRI 2765T

Tunable White: 2700-6500K, 90+ CRI 92765T

### Circuits & Zones

1 Circuit, non-emergency 1C

Consult Ordering Guide on page 6 for multiple circuiting and zoning options \_C\_Z\_DL

### Voltage

120/277 UNV Volt UNV

### Control System & Dimming Level

Lutron T-Series - 1% Dimming LT1

DALI 1% Dimming D1TW

(DT6 control. Requires two addresses, one for intensity & one for CCT tuning. Consult factory for DT8.)

Acuity nLight - 1% Dimming\*\* NLT1

\*\*(Consult factory. Not available with Pop-Down Lenses.)

[See sensor layout guide](#)

### 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 15/16" Tegular for specialty ceilings (0.5" drop) T4V

Tall 9/16" Lay-in or Tall 9/16" Tegular G5 or T5

Node 9/16" Tegular T6

### Factory Options

(See page 6 for ordering details for DC, EC, EM & ECD.)

Chicago Plenum CP

(Not available with Flex Whip, NLT1 or NXET)

Daylight Circuit \_DC

Emergency Circuit \_EC

Emergency Battery Pack<sup>1</sup> \_EM

Emergency Control Device<sup>1</sup> \_ECD

<sup>1</sup>(Consult factory)

6' New York City Flex Whip 120V or 277V FNY1 or FNY2

6' Flex Whip FW

### Finish

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

(4' min. length. Not available with Pop-Down Lenses.)

Consult factory for other pattern options.)

'L' pattern A' x B'

'U' pattern A' x B' x C'

Rectangular pattern 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 are replaceable from below. Asymmetric, Flush, Batwing and Pop-Down lenses 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, Batwing and Pop-Down lens weights: 4' unit: 11 lbs., 8' unit: 22 lbs. Regress lens weights: 4' unit: 20 lbs., 8' unit: 40 lbs.

### Optic

Asymmetric, Flush, 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

Emergency Battery output - 10 watts for 90 minutes. Maximum mounting height: 19.2ft. Emergency Circuit with Connected Solutions (DLM1, LMFS1, LMFSD, NLT1, CLM1, NXE1, 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  
L90 > 61,000 hours

Calculated: L70 at > 480,000 hours  
L90 at > 128,000 hours

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

### Reliability

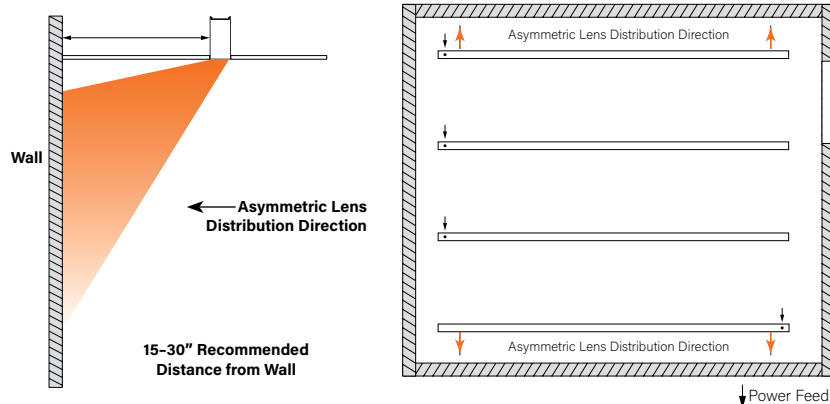
At Focal Point, our products are designed to stand the test of time. Each luminaire is engineered using superior components, manufactured with the utmost care and rigorously tested. Contact us for reliability data.

### Warranty

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

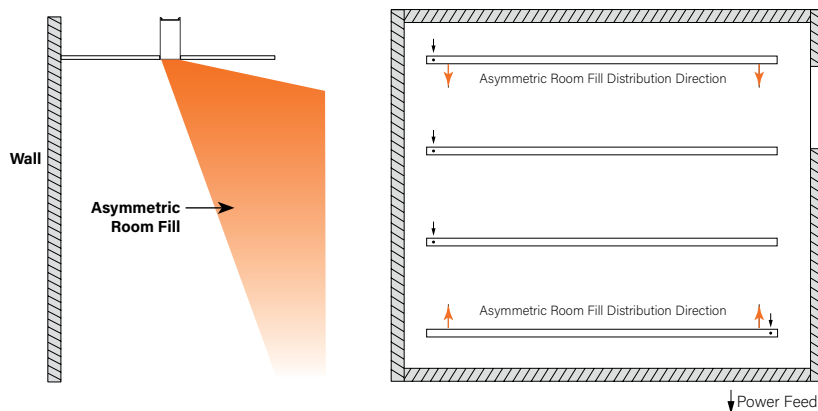
## DIRECT ASYMMETRIC

### Standard Application Example








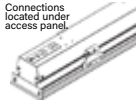







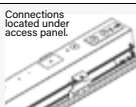



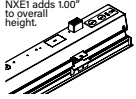


## DIRECT ASYMMETRIC ROOM FILL

### Standard Application Example



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.†

Connected Solution	Ordering Code	Model #**	Protocol	Compatible Networks*	Occupancy & Daylight	Temperature Reporting	Communication to Luminaire	Drivers	
 WATTSTOPPER®		DLM1	LMFC-011	DLM	DLM	Enabled <sup>1</sup>	No	Wired 	Advance by Signify, Optotronic by eldoLED
		LMFS1	LMFS-601 & LMFI-111	DLM Wireless	DLM	Integrated <sup>2</sup>	No	Wireless	Advance by Signify
		LMFSD	LMFS-601						Optotronic by eldoLED (Dexal)
		WLXP	OEM-WAA	WaveLinX Wireless	WaveLinX Pro Trellix	Integrated <sup>2</sup>	No	Wireless (WaveLinX Pro Wireless Area Controller)	Advance by Signify
	 Connections located under access panel.	D11	Specified Driver	DALI	Crestron Züm Wireless & SpaceBuilder	Enabled <sup>1</sup>	No	Wired	eldoLED ECOdrive
		L11		0-10V					Advance by Signify
	 CLM1 adds 0.78" to overall height.	CLM1	ZBHA-CLM-DIM-ENC	ZigBee	Encelium X Light Management System	Enabled <sup>1</sup>	No	Wireless	Optotronic by eldoLED Advance by Signify
	 Adds 0.78" to overall height.	LAW1	A-WN-D01-RF-WH	DALI, 0-10V	Athena Wireless	Enabled <sup>1</sup>	No	Wireless	Advance by Signify
		LAWS	A-WN-D01-OCC-WH	DALI, 0-10V	Athena Wireless	Integrated <sup>2</sup>	No	Wireless	Advance by Signify
	 Connections located under access panel.	LH1	LDE1	EcoSystem	Quantum, Energi Savr Node, Energi TriPak	Enabled <sup>1</sup>	No	Wired	Lutron Hi-Lume
	 Connections located under access panel.	NLT1	nEPS-60-IO	nLight	nLight	Enabled <sup>1</sup>	No	Wired 	eldoLED ECOdrive, eldoLED SOLOdrive
		NXE1	NXFM-LV	NX	NX Distributed Intelligence	Enabled <sup>1</sup>	No	Wired 	Optotronic by eldoLED
	 NXE1 adds 1.00" to overall height.								

\*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. <sup>1</sup>Enabled: Fixture supplied with a Node/ Controller. Sensor to be provided by others. <sup>2</sup>Integrated: Fixture supplied with an installed Sensor.

# 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.

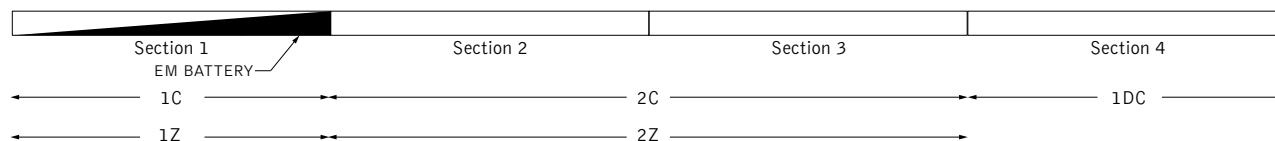
Refer to the run chart for standard run configurations, consult factory for custom configurations.

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: <u>32ft</u>		JOB NAME: _____			FIXTURE TYPE: _____			
EXAMPLE	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



TOTAL RUN LENGTH: _____		JOB NAME: _____			FIXTURE TYPE: _____			
HOUSING SECTION	SECTION LENGTH	SHARED ELECTRICAL FEED, NORMAL POWER			FACTORY OPTIONS			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								

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.