

Seem[®] 1

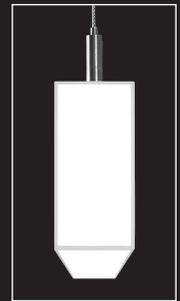
LED DIRECT/INDIRECT



pop-down lens

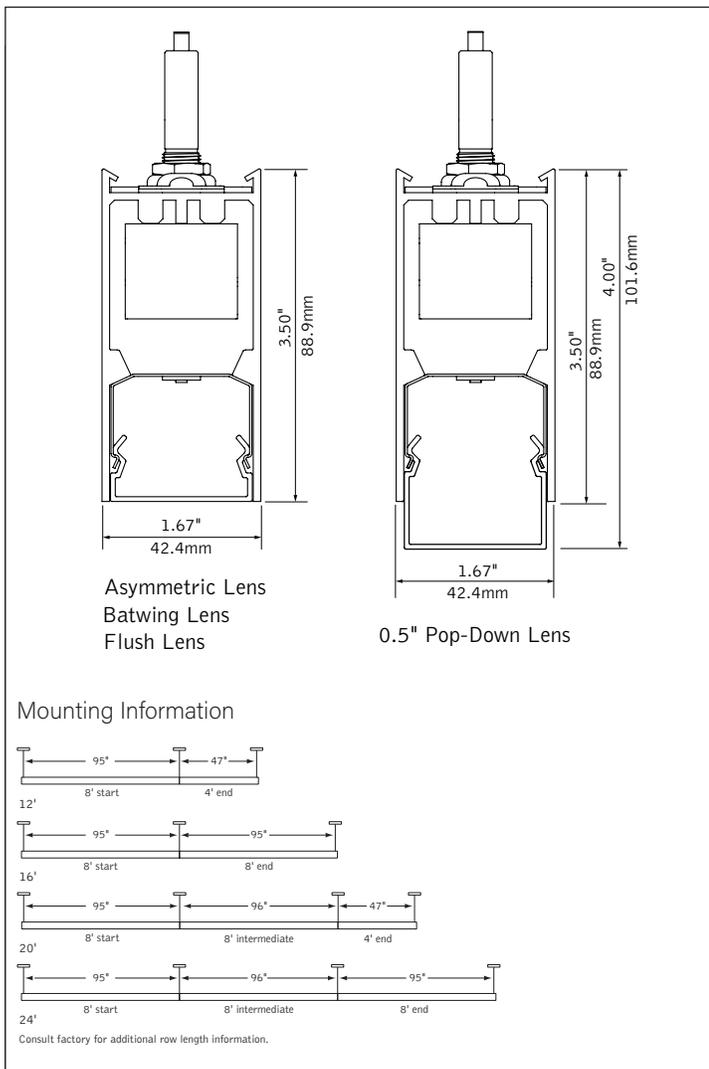


corner detail



lit end cap detail

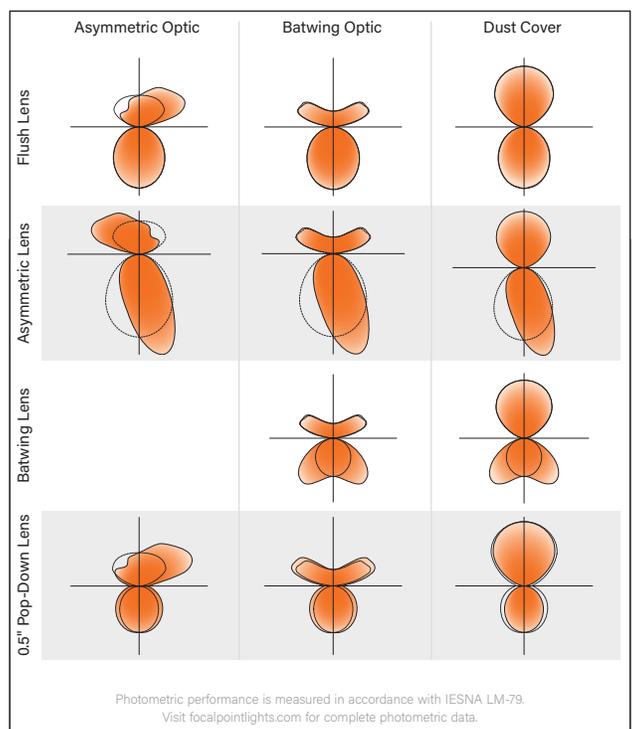
DIMENSIONAL DATA



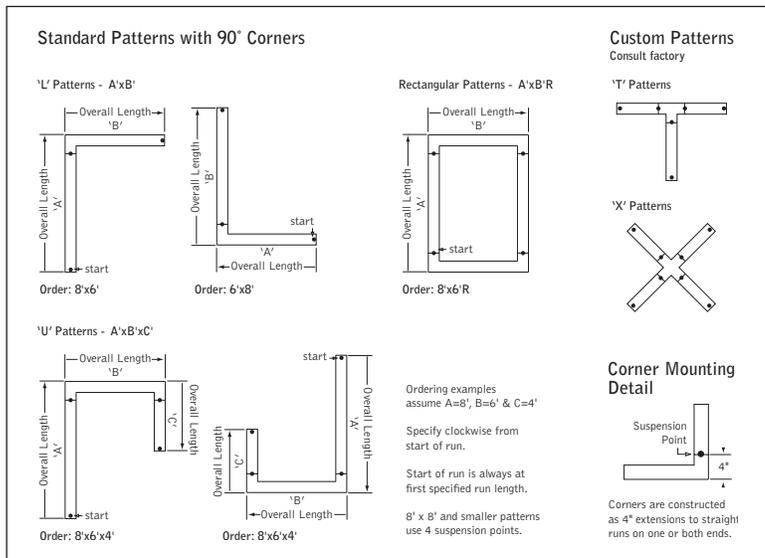
FEATURES

- Narrow extruded aluminum 1.5" linear direct/indirect LED with multiple shielding options.
- Individual units and continuous runs in 1" increments.
- LED position and frosted acrylic lenses optimized to provide the perfect blend of high performance and visual comfort.
- 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



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 3000K, 3500K or 4000K with both 80 and 90 CRI options. 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. Color accuracy <3 SDCM.

Construction

One piece extruded aluminum housing. Cast aluminum end caps. 8' unit weight: 15lbs.

Optic

Reflectors fabricated of 22 Ga. steel finished in High Reflectance White powder coat. Extruded acrylic lens .085" thick with frosted finish, up to 8' continuous. 15-30" recommended distance from wall for Asymmetric Lens (AS).

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 Battery

Emergency output - 10 watts for 90 minutes.

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. Canopy and cord white as standard.

Lumen Maintenance

Reported: L70 at >61,000 hours Calculated: L70 at 470,000 hours
 L90 at >61,000 hours L90 at 115,000 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.

PERFORMANCE CHARTS

See pages 3 & 4.

QS 10 DAY Options in orange qualify for the Quickship program. 1000' total. Refer to Quickship Guide for complete details.

ORDERING

Luminaire Series

Seem 1 LED Direct/Indirect **FSM1BS**

FSM1BS

Shielding

- Asymmetric Optic top/Asymmetric Lens bottom ASAS
- Asymmetric Optic top/Flush Lens bottom ASFL
- Asymmetric Optic top/0.5" Pop-Down Lens bottom ASPD05
- Batwing Optic top/Asymmetric Lens bottom BWAS
- Batwing Optic top/Flush Lens bottom BWFL
- Batwing Optic top/Batwing Lens bottom BWBW
- Batwing Optic top/0.5" Pop-Down Lens bottom BWPD05
- Dust Cover top/Asymmetric Lens bottom DCAS
- Dust Cover top/Flush Lens bottom DCFL
- Dust Cover top/Batwing Lens bottom DCBW
- Dust Cover top/0.5" Pop-Down lens bottom DCPD05

Direct Distribution

- 125 Lumens per foot 125DN
- (Consult factory for Lutron and DALI)
- 250 Lumens per foot 250DN
- 375 Lumens per foot 375DN
- 500 Lumens per foot 500DN
- 625 Lumens per foot 625DN

Indirect Distribution

- 125 Lumens per foot 125UP
- (Consult factory for Lutron and DALI)
- 250 Lumens per foot 250UP
- 375 Lumens per foot 375UP
- 500 Lumens per foot 500UP
- 625 Lumens per foot 625UP
- 800 Lumens per foot* 800UP
- 1000 Lumens per foot* 1000UP

*Not available with DALI

Color Temperature

- 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

Circuits & Zones

- 1 Circuit, non-emergency 1C
- 2 non-emergency circuits provide independent control of Direct and Indirect sources 2C
- Consult Ordering Guide on page 5 for multiple circuiting and zoning options _C_Z_DL

Voltage

- 120/277 UNV Volt UNV
- 347 Volt 347
- (LD1 driver only)
- 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
- DALI 1% Dimming D11
- (625 lumens per foot max)

Mounting

- 24" Cable Suspension C24_
- 48" Cable Suspension C48_
- 96" Cable Suspension C96_

(Specify canopy color White (WH), Black (BK) or Titanium Silver (TS). Example: C24WH.) (Specify one of the following in place of "C" J - for 2" canopies at non-feed locations. CS - for sloped ceiling applications.)

Factory Options

(See Ordering Guide on page 5 for ordering details for DC, EC, EM & ECD.)

- Black Cord BKCD
- Lit End Caps LE
- (Pair, adds 2" to overall luminaire length. ASFL, BWFL & DCFL shielding only. Not available with P35K.)

- Daylight Circuit _DC
- Emergency Circuit _EC
- Emergency Battery Pack† _EM
- Emergency Control Device† _ECD

†(5' minimum length. 120/277 Volt only.)

Finish

- Black BK
- Titanium Silver TS
- Matte White Housing WH

Luminaire Length

Specify luminaire/row length in 1" increments _ft_in

(4' minimum. Leave blank for patterns. Smaller increments available, consult factory.)

Pattern Options

(4' minimum length)

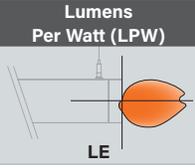
- 'L' pattern A' x B'
 - 'U' pattern A' x B' x C'
 - Rectangular pattern A' x B' R
- (Consult factory for other pattern options)

4' PERFORMANCE CHART

Direct Distribution	Indirect Distribution	Distribution % (Direct/Indirect)	Total Delivered Lumens	Tested System Watts	Lumens Per Watt (LPW)											
					 ASAS	 ASFL	 ASPD05	 BWAS	 BWBW	 BWFL	 BWPD05	 DCAS	 DCBW	 DCFL	 DCPD05	
125DN	125UP	50/50	1000	12	87	84	84	84	84	84	81	81	87	87	84	84
	250UP	33/67	1500	16	103	100	101	99	99	96	96	96	101	101	98	99
	375UP	25/75	2000	19	111	109	109	106	106	104	104	104	109	109	107	107
	500UP	20/80	2500	22	118	116	117	112	112	111	111	111	116	116	114	114
	625UP	17/83	3000	26	122	120	121	116	116	114	115	115	120	119	118	118
	800UP	14/86	3700	33	122	120	121	115	115	114	114	114	119	119	118	118
	1000UP	11/89	4500	39	123	122	122	116	116	115	116	116	120	120	119	120
250DN	125UP	67/33	1500	16	101	96	97	99	94	94	95	101	97	97	97	97
	250UP	50/50	2000	19	111	108	108	108	104	104	105	110	106	106	106	107
	375UP	40/60	2500	23	116	113	114	112	109	109	110	115	112	112	112	112
	500UP	33/67	3000	26	122	119	120	117	114	115	115	120	117	117	117	118
	625UP	29/71	3500	30	125	122	123	119	117	117	118	123	120	120	120	121
	800UP	24/76	4200	36	124	122	122	118	116	116	117	122	120	120	120	120
	1000UP	20/80	5000	43	125	123	124	119	117	117	118	123	121	121	121	121
375DN	125UP	75/25	2000	20	105	101	101	103	98	99	100	106	100	101	101	102
	250UP	60/40	2500	24	113	109	110	110	106	106	107	112	107	108	108	109
	375UP	50/50	3000	27	117	114	114	114	110	110	111	116	112	112	112	113
	500UP	43/57	3500	30	122	119	119	118	114	115	115	120	117	117	117	118
	625UP	38/62	4000	34	124	122	122	120	117	117	118	123	120	120	120	120
	800UP	32/68	4700	41	124	122	122	119	116	116	117	122	119	120	120	120
	1000UP	25/75	5500	47	125	123	123	119	117	117	118	123	120	121	121	121
500DN	125UP	80/20	2500	25	109	103	104	108	101	101	102	110	103	103	103	104
	250UP	67/33	3000	28	116	110	110	113	107	107	108	115	109	109	109	109
	375UP	57/43	3500	32	119	114	114	116	111	111	111	118	113	112	113	113
	500UP	50/50	4000	35	123	118	119	119	115	115	115	121	117	117	117	117
	625UP	44/56	4500	39	125	121	121	121	117	117	117	123	119	119	119	120
	800UP	38/62	5200	45	124	121	121	120	116	116	117	123	119	119	119	119
	1000UP	33/67	6000	51	125	122	122	120	117	117	117	123	120	120	120	120
625DN	125UP	83/17	3000	30	107	101	99	106	100	100	98	107	101	101	101	99
	250UP	71/29	3500	33	112	107	105	110	105	105	103	112	106	106	106	104
	375UP	60/40	4000	37	116	111	109	113	108	108	107	114	110	110	110	108
	500UP	56/44	4500	40	119	115	113	116	112	112	110	118	114	114	114	112
	625UP	50/50	5000	44	121	117	116	118	114	114	112	120	116	116	116	115
	800UP	44/56	5700	50	121	118	117	117	114	114	113	120	116	116	116	115
	1000UP	35/65	6500	57	122	119	118	118	115	115	114	121	117	117	117	116

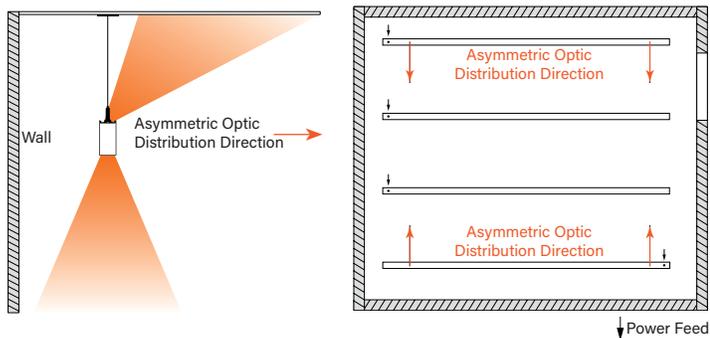
*Based on 3500K, 4' lengths. Lumen Multipliers: Preferred Light = 0.65, 90 CRI = 0.87, Delivered lumens may vary +/- 5%. Actual wattage may vary +/- 5%.

LIT END CAP PERFORMANCE CHART

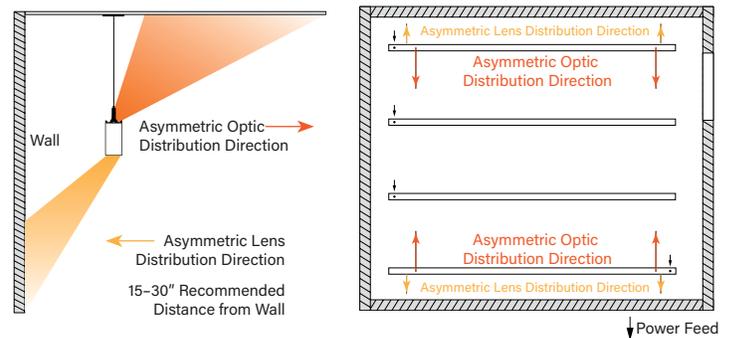
Direct Distribution	Delivered Lumens Per End Cap	Tested System Watts Per End Cap	Lumens Per Watt (LPW)
			
125LF	55	0.6	91
250LF	115	1.0	110
375LF	172	1.5	116
500LF	229	1.9	119
625LF	291	2.5	116

Based on 3500K. Lumen multipliers: 90 CRI = 0.87. Delivered lumens may vary +/- 5%. Actual wattage may vary +/- 5%. Tested System Watts is not incremental, but the portion of overall wattage consumed by the Lit End Cap module

INDIRECT ASYMMETRIC Standard Application Example



DIRECT/INDIRECT ASYMMETRIC Standard Application Example



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.

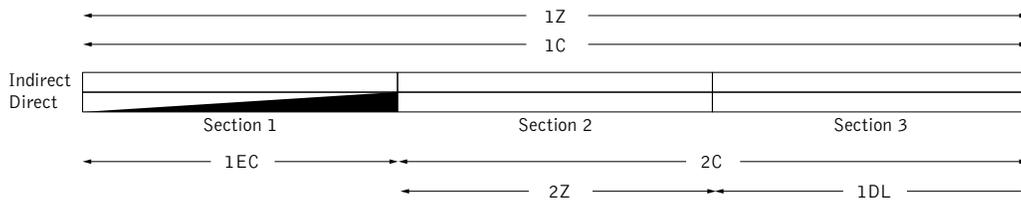
Refer to the run chart for standard run configurations, consult factory for custom configurations.

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.

TOTAL RUN LENGTH: <u>24ft</u>		JOB NAME: _____				FIXTURE TYPE: _____			
HOUSING SECTION	SECTION LENGTH	LIGHT DISTRIBUTION	SHARED ELECTRICAL FEED, NORMAL POWER			FACTORY OPTIONS			
			SWITCHING CIRCUIT	DIMMING ZONE	DAYLIGHT ZONE	SEPARATE ELECTRICAL FEEDS			EM
1	8	Indirect	1C	1Z					
		Direct					1EC		
2	8	Indirect	1C	1Z					
		Direct	2C	2Z					
3	8	Indirect	1C	1Z					
		Direct	2C		1DL				
Totals / Ordering Codes			2C	2Z	1DL		1EC		

ORDERING: FSM4BS-FL-625UP-125DN-35K- **2C2Z1DL** -UNV-LD1-C24- **1EC** -WH-24ft



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	ECD = Emergency Control Device Unswitched Hot / Separate Neutral
	EM = Emergency Battery Unswitched Hot / Shared Neutral

DEFAULTS

- Zones and Factory Options illuminate entire sections from 4' to 8' in length.
- EC, EM, and ECD only available for direct distribution.
- One shared or isolated circuit and zone required per housing section.
- Additional electrical feed required for applications greater than three shared circuits and zones.
- Limit of one EM or ECD per housing section.
- Each EC, DC 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	LIGHT DISTRIBUTION	SHARED ELECTRICAL FEED, NORMAL POWER			FACTORY OPTIONS			EM
			SWITCHING CIRCUIT	DIMMING ZONE	DAYLIGHT ZONE	SEPARATE ELECTRICAL FEEDS			
						DAYLIGHT CIRCUIT	EMERGENCY CIRCUIT	ECD	
1		Indirect							
		Direct							
2		Indirect							
		Direct							
3		Indirect							
		Direct							
4		Indirect							
		Direct							
5		Indirect							
		Direct							
6		Indirect							
		Direct							
7		Indirect							
		Direct							
8		Indirect							
		Direct							
9		Indirect							
		Direct							
10		Indirect							
		Direct							
11		Indirect							
		Direct							
12		Indirect							
		Direct							
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.