

Seem[®] 4

LED DIRECT/INDIRECT



FOCAL POINT[®]



flush lens
top & bottom



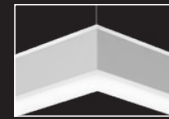
0.5" pop-up lens /
flush lens bottom



Batwing / 0.5"
pop-down lens



Batwing / 1.5"
pop-down lens



single point corner
suspension



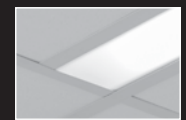
wall mount
companion



linear direct only
companion

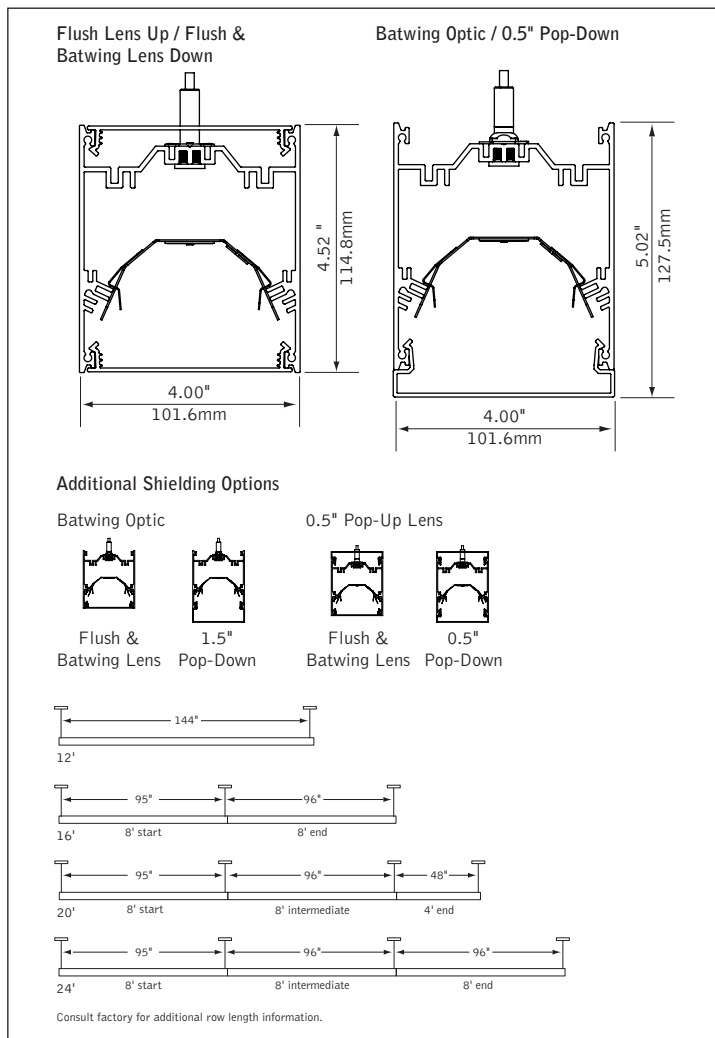


wall to ceiling
corner companion



recessed
companion

DIMENSIONAL DATA



FEATURES

Narrow extruded aluminum 4" linear direct/indirect LED with indirect batwing optic and Pop-lens options.

Features Right Light lumen levels allowing lumen and wattage design flexibility.

Individual units and continuous runs in 1' increments.

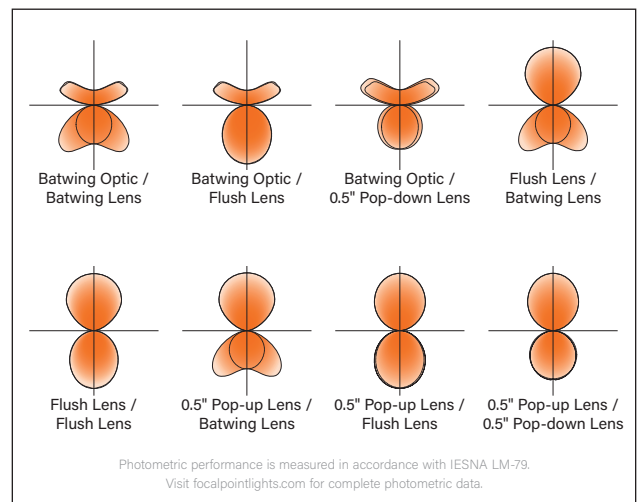
Frosted acrylic lenses provide uninterrupted illumination, without pixels or shadows.

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

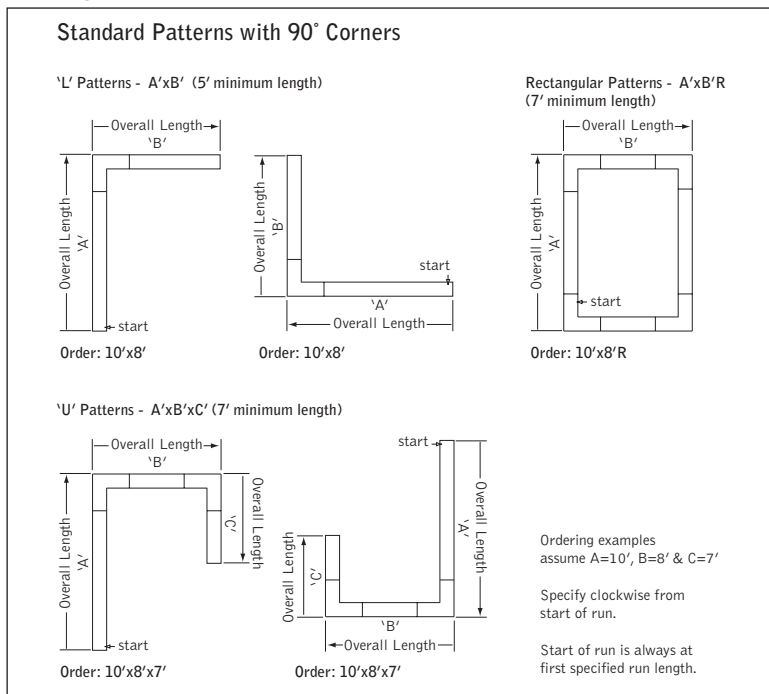
Choice of output levels and light distributions to meet a wide variety of application needs.

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 2700K, 3000K, 3500K or 4000K with >80 or 90 CRI, 3 SDCM. 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

9-12' luminaires ship on 13' (157") pallets, forklift extensions of 72" are required to avoid damage. One piece extruded aluminum housing. Die cast aluminum end caps. 3' unit weight: 14.75lbs., 4' unit weight: 19lbs., 5' unit weight: 25lbs., 12' unit weight: 47lbs.

Optic

Reflectors fabricated of 22 Ga. steel finished in High Reflectance White powder coat. Extruded acrylic lens .085" thick with satin finish, up to 12' continuous.

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. Dimming range 100% to 10%. 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

Bodine BSL310LP. Emergency output - 10 watts for 90 minutes. Maximum mounting height: Flush Lens - 20.18ft. Maximum mounting height: Pop-Down Lens - 15.54ft

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 395,000 hours
Reported: L90 at >61,000 hours Calculated: L90 at 100,000 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 Direct/Indirect LED

FSM4BS

FSM4BS

Shielding

- Batwing Optic Top / Batwing Lens Bottom BWBW
- Batwing Optic Top / Flush Lens Bottom BWFL
- Batwing Optic Top / 0.5" Pop-Down Bottom BWPD05
- Batwing Optic Top / 1.5" Pop-Down Bottom (3' - 12' individual lengths only) BWPD15
- Flush Lens Top / Batwing Lens Bottom FLBW
- Flush Lens Top / Flush Lens Bottom FLFL
- 0.5" Pop-Up Lens Top / Batwing Lens Bottom PUBW
- 0.5" Pop-Up Lens Top / Flush Lens Bottom PUFL
- 0.5" Pop-Up Lens Top / 0.5" Pop-Down Lens Bottom PUPD05

Direct Distribution

(875 Lumens per foot maximum for xxPD05 & xxPD15. See driver compatibility chart on page 3.)

- 275 Lumens per foot 275DN
- 375 Lumens per foot 375DN
- 625 Lumens per foot 625DN
- 875 Lumens per foot 875DN
- 1000 Lumens per foot 1000DN
- 1125 Lumens per foot 1125DN
- 1250 Lumens per foot 1250DN

Indirect Distribution

(1000 Lumens per foot maximum for PUXx. See driver compatibility chart on page 3.)

- 275 Lumens per foot 275UP
- 375 Lumens per foot 375UP
- 625 Lumens per foot 625UP
- 875 Lumens per foot 875UP
- 1000 Lumens per foot 1000UP
- 1125 Lumens per foot 1125UP
- 1250 Lumens per foot 1250UP

Color Temperature

- 2700K, 80+ CRI or 2700K, 90+ CRI 27K or 927K
- 3000K, 80+ CRI or 3000K, 90+ CRI 30K or 930K
- 3500K, 80+ CRI or 3500K, 90+ CRI 35K or 935K
- 4000K, 80+ CRI or 4000K, 90+ CRI 40K or 940K

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 4 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

- DALI - 1% Dimming LH1
- (1000 lumens per foot max.) D11

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 4 for ordering details for DC, EC, EM & ECD.)

- Black Cord BKCD
- Daylight Circuit _DC
- Emergency Circuit _EC
- Emergency Battery Pack[†] _EM
- Emergency Control Device[†] _ECD

[†](4' minimum. 120/277 Volt Only. EM or ECD not available at corners.)

Finish

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

Luminaire/Row Length

(3' minimum length. Leave blank for patterns. Lengths are nominal)

Specify in 1' increments

(Lengths are nominal, up to 12' individuals available. See Run Chart (page 4) for ordering codes. Smaller increments available, consult factory for details. Leave blank for patterns.)

Pattern Options

- 'L' pattern (5' minimum length) A' x B'
- 'U' pattern (7' minimum length) A' x B' x C'
- Rectangular pattern (7' minimum length) A' x B'R
- (Consult factory for other pattern options)



DRIVER COMPATIBILITY CHART

Driver Description	Driver Code	Lumens per foot						
		275	375	625	875	1000	1125	1250
0-10V - 10% Dimming	LD1	✓	✓	✓	✓	✓	✓	✓
0-10V - 1% Dimming	L11	✓	✓	✓	✓	✓	✓	✓
DALI - 1% Dimming	D11	✓	✓	✓	✓	✓		
Lutron Hi-Lume - 1% EcoSystem	LH1	✓	✓	✓	✓	✓	✓	✓

4' PERFORMANCE CHART

Direct Distribution	Indirect Distribution	Distribution % (Direct/Indirect)	Total Delivered Lumens	Tested System Watts	Lumens Per Watt (LPW)						Tested System Watts	Lumens Per Watt (LPW)		
					BWBW	BWFL	FLBW	FLFL	PUBW	PUFL		BWPD05	BWPD15	PUPD05
275DN	275	50/50	2200	22	116	118	105	107	103	105	25	103	106	93
	375	42/58	2600	25	118	119	108	109	105	106	28	106	109	95
	625	31/69	3600	35	124	124	110	111	105	106	38	113	116	98
	875	24/76	4600	46	124	125	108	109	102	103	49	116	118	97
	1000	22/78	5100	50	124	124	107	108	101	102	53	116	118	97
	1125	20/80	5600	52	122	123	108	109	—	—	55	115	117	—
375DN	1250	18/82	6100	57	122	123	107	108	—	—	60	116	118	—
	275	58/42	2600	25	119	119	109	109	107	107	30	99	93	91
	375	50/50	3000	28	120	120	111	111	108	108	33	102	96	94
	625	38/62	4000	37	125	125	112	112	108	108	43	109	105	96
	875	30/70	5000	49	125	125	110	110	104	105	54	112	109	96
	1000	27/73	5500	53	125	125	109	109	103	104	58	113	110	96
625DN	1125	25/75	6000	55	123	123	110	110	—	—	60	112	110	—
	1250	23/77	6500	59	123	123	109	109	—	—	65	113	111	—
	275	69/31	3600	33	116	118	109	111	108	109	41	95	99	89
	375	63/37	4000	36	117	119	110	112	108	110	44	97	102	91
	625	50/50	5000	46	121	123	111	113	108	109	54	104	107	94
	875	42/58	6000	57	122	123	110	111	105	106	65	107	110	94
875DN	1000	38/62	6500	62	122	123	109	110	104	105	70	108	111	94
	1125	36/64	7000	63	121	122	109	110	—	—	71	108	110	—
	1250	33/67	7500	68	121	122	109	110	—	—	76	109	111	—
	275	76/24	4600	43	114	114	109	109	108	108	55	90	94	86
	375	70/30	5000	47	115	115	110	110	108	109	58	92	96	87
	625	58/42	6000	56	119	119	111	111	108	108	68	97	101	90
1000DN	875	50/50	7000	68	120	120	110	110	105	106	79	101	104	91
	1000	47/53	7500	72	120	120	109	109	105	105	83	102	105	91
	1125	44/56	8000	74	119	119	109	109	—	—	85	102	105	—
	1250	41/59	8500	78	119	119	109	109	—	—	90	103	106	—
	275	78/22	5100	48	113	113	108	108	107	107	—	—	—	—
	375	73/27	5500	51	114	114	109	109	108	108	—	—	—	—
1125DN	625	62/38	6500	60	117	117	110	110	107	108	—	—	—	—
	875	53/47	7500	72	119	119	109	109	105	105	—	—	—	—
	1000	50/50	8000	76	119	119	109	109	105	105	—	—	—	—
	1125	47/53	8500	78	118	118	109	109	—	—	—	—	—	—
	1250	44/56	9000	82	118	118	108	108	—	—	—	—	—	—
	275	80/20	5600	53	112	113	108	109	107	108	—	—	—	—
1250DN	375	75/25	6000	56	113	114	109	110	107	108	—	—	—	—
	625	64/36	7000	66	116	117	110	110	107	108	—	—	—	—
	875	56/44	8000	77	118	118	109	109	105	106	—	—	—	—
	1000	53/47	8500	81	118	118	108	109	105	105	—	—	—	—
	1125	50/50	9000	83	117	117	109	109	—	—	—	—	—	—
	1250	47/53	9500	88	117	118	108	109	—	—	—	—	—	—
1250DN	275	82/18	6100	57	111	112	107	109	106	107	—	—	—	—
	375	77/23	6500	60	112	113	108	110	106	108	—	—	—	—
	625	67/33	7500	70	115	116	109	110	106	107	—	—	—	—
	875	59/41	8500	81	116	117	108	109	105	106	—	—	—	—
	1000	56/44	9000	86	116	117	108	110	104	105	—	—	—	—
	1125	53/47	9500	88	116	117	108	108	—	—	—	—	—	—
1250	50/50	10000	92	116	117	107	108	—	—	—	—	—	—	

*Based on 3500k, 4' lengths. *Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%. Pop-Up Lens/Pop-down lens lumen output may vary +/- 5%

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.

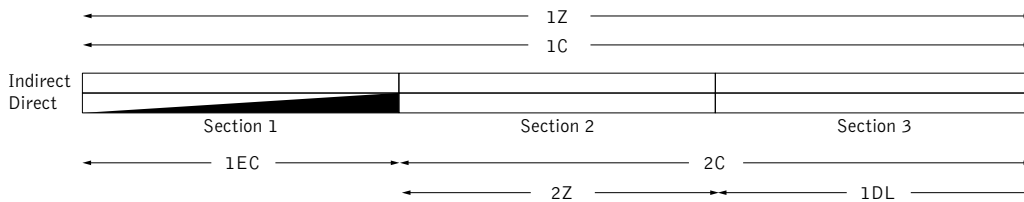
Refer to the run chart for standard run configurations, consult factory for custom configurations.

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
						DAYLIGHT CIRCUIT	EMERGENCY CIRCUIT	ECD	
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-FLFL-275DN-625UP-35K- **2C2Z1DL** -UNV-LD1-C24WH- **1EC** -WH-24ft



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

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

TOTAL RUN LENGTH: _____			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
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	Ordering Code
9	5 + 4	9
	9	9(IND)
10	6 + 4	10
	5 + 5	10(5+5)
	10	10(IND)
11	7 + 4	11
	11	11(IND)
12	8 + 4	12
	6 + 6	12(6+6)
	12	12(IND)
13	8 + 5	13
14	8 + 6	14
15	8 + 7	15
16	8 + 8	16
17	8 + 5 + 4	17
18	8 + 6 + 4	18

Run Length (ft)	Housing Configuration Section Lengths	Ordering Code
19	8 + 7 + 4	19
20	8 + 8 + 4	20
21	8 + 8 + 5	21
22	8 + 8 + 6	22
23	8 + 8 + 7	23
24	8 + 8 + 8	24
25	8 + 8 + 5 + 4	25
26	8 + 8 + 6 + 4	26
27	8 + 8 + 7 + 4	27
28	8 + 8 + 8 + 4	28
29	8 + 8 + 8 + 5	29
30	8 + 8 + 8 + 6	30
31	8 + 8 + 8 + 7	31
32	8 + 8 + 8 + 8	32
33	8 + 8 + 8 + 5 + 4	33
34	8 + 8 + 8 + 6 + 4	34

Run Length (ft)	Housing Configuration Section Lengths	Ordering Code
35	8 + 8 + 8 + 7 + 4	35
36	8 + 8 + 8 + 8 + 4	36
37	8 + 8 + 8 + 8 + 5	37
38	8 + 8 + 8 + 8 + 6	38
39	8 + 8 + 8 + 8 + 7	39
40	8 + 8 + 8 + 8 + 8	40
41	8 + 8 + 8 + 8 + 5 + 4	41
42	8 + 8 + 8 + 8 + 6 + 4	42
43	8 + 8 + 8 + 8 + 7 + 4	43
44	8 + 8 + 8 + 8 + 8 + 4	44
45	8 + 8 + 8 + 8 + 8 + 5	45
46	8 + 8 + 8 + 8 + 8 + 6	46
47	8 + 8 + 8 + 8 + 8 + 7	47
48	8 + 8 + 8 + 8 + 8 + 8	48

Standard run configurations, consult factory for custom configurations.