

Seem® 1 Quartet

LED RECESSED

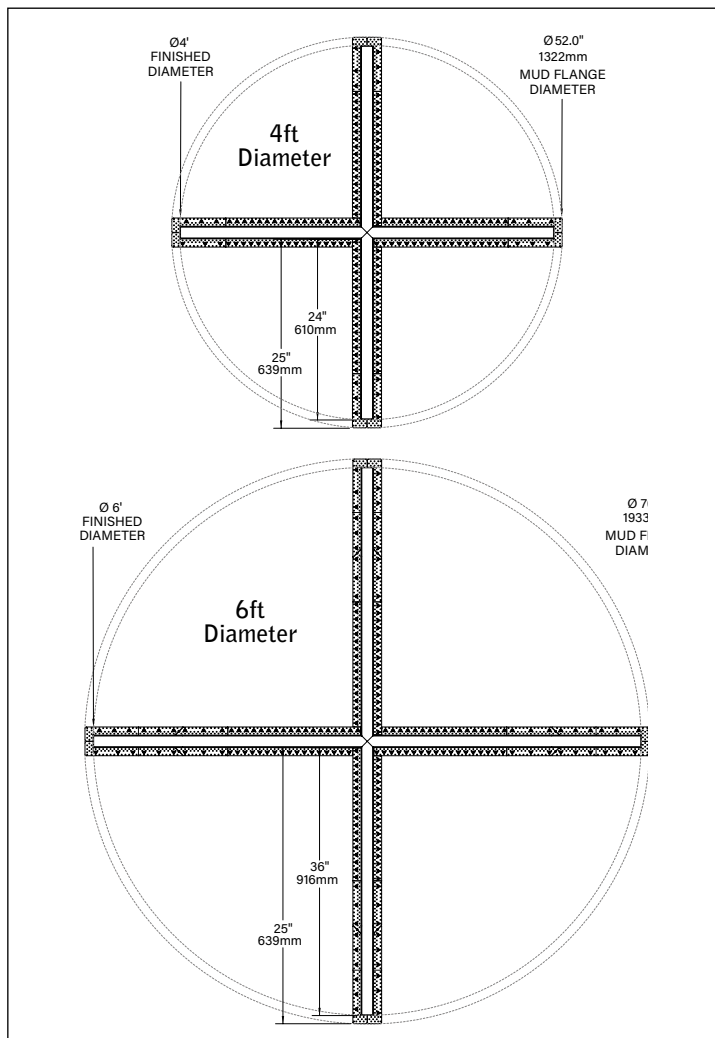


louver detail



point source ends detail

DIMENSIONAL DATA



FEATURES

Narrow 1.5" extruded aluminum 'X' shaped recessed LED luminaire with multiple shielding options.

Individual 4' or 6' diameter units in lens, louver or integrated point source downlight configurations.

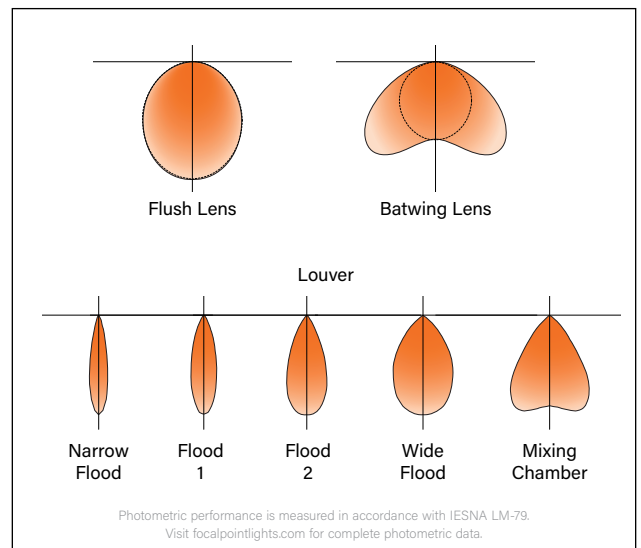
Deeply regressed louver cells provide 60° cut-off from light source to promote visual comfort.

Direct Lambertian or Batwing light distributions provide visual comfort with uniform illumination and brightness control.

Choice of point source output levels to meet a wide variety of application needs.

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

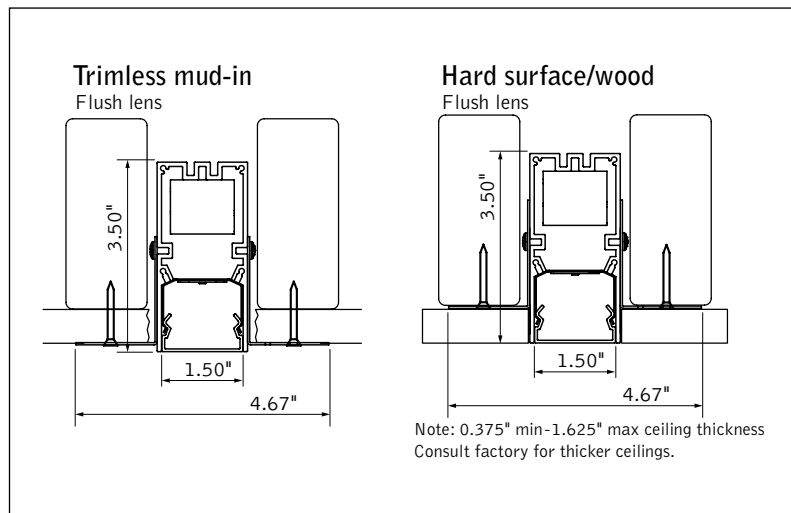
DISTRIBUTIONS



fixture:

project:

STANDARD LENS DIMENSIONAL DATA



STANDARD LENS PERFORMANCE CHART

Size	Lumen Output	Tested System Watts	BW		FL	
			Delivered lumens	LPW	Delivered lumens	LPW
4'	1000	11	1068	97	1013	92
	2000	20	2104	105	1994	100
	3000	30	3183	105	3017	99
	4000	40	4218	106	3998	101
	5000	49	5297	109	5020	103
6'	1500	15	1586	102	1503	97
	3000	30	3183	105	3017	99
	4500	44	4736	108	4489	103
	6000	58	6332	109	6002	104
	7500	72	7928	110	7515	104

Based on 3500K. Lumen multipliers: 90 CRI = 0.87. Delivered lumens may vary +/- 5%. Actual wattage may vary +/- 5%

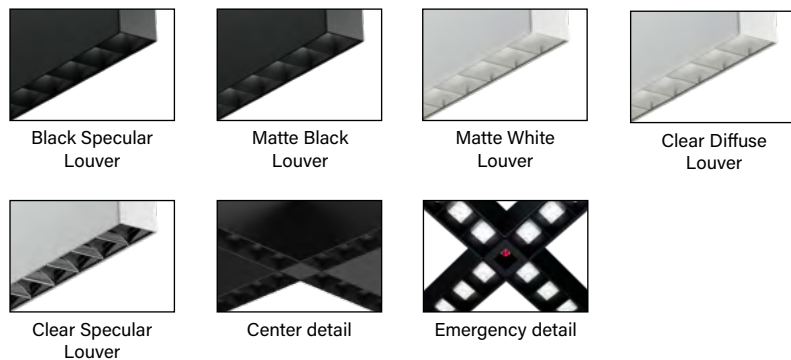
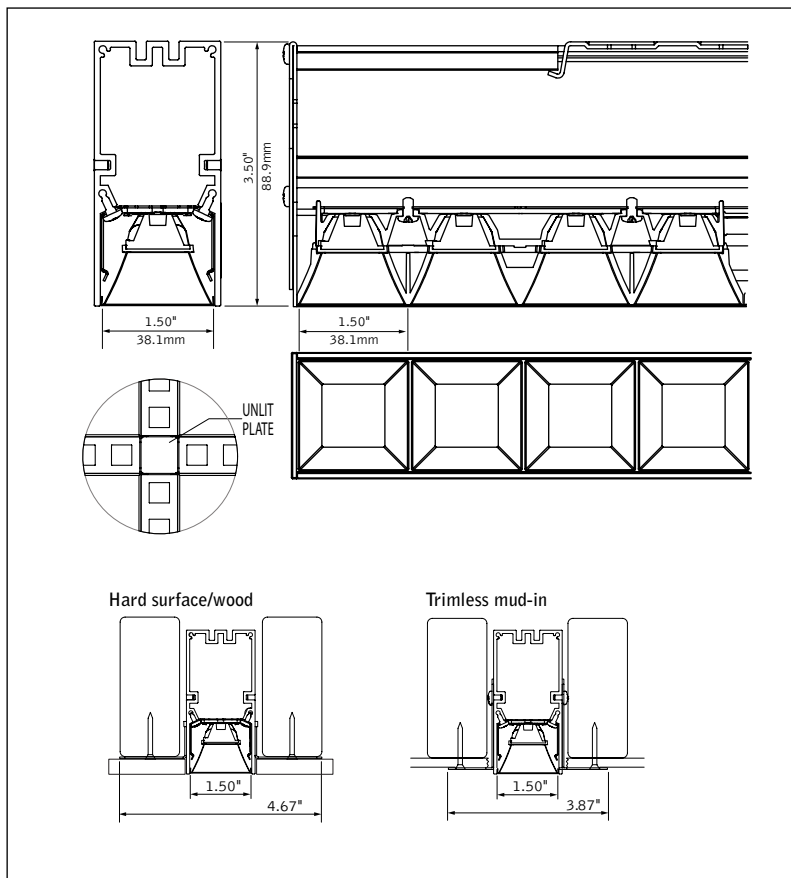
STANDARD LENS ORDERING

Luminaire Series		FSM1F
Seem 1		FSM1F
Profile		Q
Quartet		Q
Nominal Size		
4' Diameter (2' arms)	4	
6' Diameter (3' arms)	6	
Shielding		
Batwing Lens	BW	
Flush Lens	FL	
Lumen Output		
4' Diameter	1000 Lumens	1000L
	2000 Lumens	2000L
	3000 Lumens	3000L
	4000 Lumens	4000L
	5000 Lumens	5000L
6' Diameter	1500 Lumens	1500L
	3000 Lumens	3000L
	4500 Lumens	4500L
	6000 Lumens	6000L
	7500 Lumens	7500L
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		1C
1 Circuit, non-emergency	1C	
Voltage		
120/277 UNV Volt	UNV	
347 Volt (LD1 driver only)	347	
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	LH1	
DALI 1% Dimming	D11	
Ceiling Configuration		XFF
Mud-in Trimless	XFF	
Factory Options		
Chicago Plenum	CP	
Emergency Circuit	_EC	
Emergency Battery Pack	_EM	
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	

fixture:

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LOUVER DIMENSIONAL DATA



LOUVER DISTRIBUTIONS

	NFL	FL1	FL2	WFL	LMC
Beam Spread	20°	29°	43°	67°	68°
Spacing Criteria	0.36	0.50	0.70	0.98	1.18

PERFORMANCE CHART

See page 6

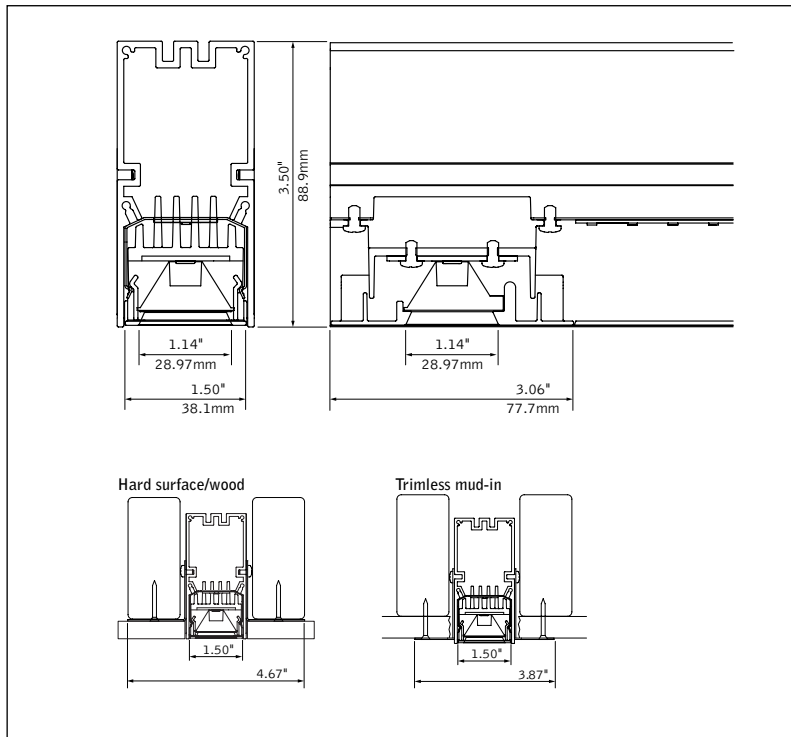
LOUVER ORDERING

	Luminaire Series	FSM1F
	Seem 1	FSM1F
	Profile	Q
	Quartet	Q
	Nominal Size	
	4' Diameter (2' arms)	4
	6' Diameter (3' arms)	6
	Shielding	LC
	Louver only	LC
	Lumen Output	
4' Diameter	2000 Lumens	2000L
	3000 Lumens	3000L
	4000 Lumens	4000L
	5000 Lumens	5000L
	6000 Lumens	6000L
	7000 Lumens	7000L
	8000 Lumens	8000L
6' Diameter	3000 Lumens	3000L
	4500 Lumens	4500L
	6000 Lumens	6000L
	7500 Lumens	7500L
	9000 Lumens	9000L
	10500 Lumens	10500L
	12000 Lumens	12000L
	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
	Circuit	1C
	Single Circuit	1C
	Voltage	
	120/277 UNV Volt	UNV
	347 Volt (LD1 driver only)	347
	Low Voltage	LV
	Control System & Dimming Level	
	0-10V - 10% Dimming	LD1
	0-10V - 1% Dimming	L11
	Low Voltage, PoE compatible <small>(No driver. Not available with EM or EC. LV Voltage only.)</small>	LVN
	Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming	LH1
	DALI 1% Dimming	D11
	Ceiling Configuration	XFF
	Mud-in Trimless	XFF
	Louver Distribution	
	Narrow Flood	NFL
	Flood 1	FL1
	Flood 2	FL2
	Wide Flood	WFL
	Louvered Mixing Chamber	LMC
	Factory Options	
	Chicago Plenum	CP
	Emergency Circuit†	_EC
	Emergency Battery Pack†	_EM
	<small>† (Illuminates full housing, 120/277 Volt only)</small>	
	6' New York City Flex Whip (120V)	FNY1
	6' New York City Flex Whip (277V)	FNY2
	6' Flex Whip	FW
	Louver Finish	
	Matte Black	BK
	Black Specular	BS
	Clear Diffuse	CD
	Clear Specular	CS
	Matte White	WH
	Housing Finish	
	Matte Black	BK
	Titanium Silver	TS
	Matte White	WH

fixture:

project:

POINT SOURCE DETAILS



POINT SOURCE ORDERING

Luminaire Series		FSM1F
Seem 1		FSM1F
Profile		Q
Quartet		Q
Nominal Size		
4' Diameter (2' arms)		4
6' Diameter (3' arms)		6
Shielding		
Batwing Lens + Point Source Ends		BWPSE
Flush Lens + Point Source Ends		FLPSE
Point Source Lumens		
250 Lumens		250L
350 Lumens		350L
450 Lumens		450L
Point Source Distribution		
Narrow Flood		NFL
Flood 1		FL1
Flood 2		FL2
Wide Flood		WFL
Lensed Lumen Output		
4' Diameter	880 Lumens	880L
	1760 Lumens	1760L
	2640 Lumens	2640L
	3520 Lumens	3520L
	4400 Lumens	4400L
6' Diameter	1380 Lumens	1380L
	2760 Lumens	2760L
	4140 Lumens	4140L
	5520 Lumens	5520L
	6900 Lumens	6900L
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

PERFORMANCE CHART (LENSED AREA)

Size	Lumen Output	Tested System Watts	BW		FL	
			Delivered lumens	LPW	Delivered lumens	LPW
4'	880	10	939	95	890	90
	1760	18	1845	104	1749	99
	2640	27	2794	104	2648	99
	3520	35	3700	106	3507	100
	4400	43	4649	108	4407	102
6'	1380	14	1457	101	1381	96
	2760	28	2924	104	2771	99
	4140	41	4347	106	4121	101
	5520	53	5814	109	5511	103
	6900	66	7281	110	6902	104

Based on 3500K. Lumen multipliers: 90 CRI = 0.87. Delivered lumens may vary +/- 5%. Actual wattage may vary +/- 5%

PERFORMANCE CHART (POINT SOURCE)

Distribution	Beamspread	Point Source Lumens	Delivered Lumens	Tested Watts	LPW
Narrow Flood (NFL)	21°	250L	258	3.2	81.2
		350L	360	4.3	82.9
		450L	458	5.7	80.2
Flood 1 (FL1)	28°	250L	254	3.2	79.8
		350L	354	4.3	81.5
		450L	450	5.7	78.9
Flood 2 (FL2)	42°	250L	249	3.2	78.2
		350L	346	4.3	79.8
		450L	441	5.7	77.3
Wide Flood (WFL)	53°	250L	242	3.2	76.1
		350L	337	4.3	77.7
		450L	429	5.7	75.2

Based on 3500K. Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%

Focal Point LLC reserves the right to change specifications for product improvement without notification.

Circuit	
Single Circuit	1C
Dual Circuit	2C
<small>(Independent control of Lens & Point Source distributions)</small>	
Voltage	
120/277 UNV Volt	UNV
347 Volt (LD1 driver only)	347
Low Voltage	LV
Control System & Dimming Level	
0-10V - 10% Dimming	LD1
0-10V - 1% Dimming	L11
Low Voltage, PoE compatible	LVN
<small>(No driver. Not available with EM or EC. LV Voltage only)</small>	
Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming	LH1
DALI 1% Dimming	D11
Ceiling Configuration	XFF
Mud-in Trimless	XFF
Factory Options	
Chicago Plenum	CP
Emergency Circuit†	_EC
Emergency Battery Pack†	_EM
<small>† (Illuminates full housing. 120/277 Volt only)</small>	
6' New York City Flex Whip (120V)	FNY1
6' New York City Flex Whip (277V)	FNY2
6' Flex Whip	FW
Housing Finish	
Matte Black	BK
Titanium Silver	TS
Matte White	WH

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 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

Extruded aluminum housing. Cast aluminum end caps. Luminaire will not exceed 21lbs.

Optic

Reflectors fabricated of 22 Ga. steel finished in High Reflectance White powder coat. Extruded acrylic lens .07" thick with frosted finish. 60-degree cut-off to louvered light source and its image.

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. Maximum mounting height: 18.5ft.

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

Lensed Source

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

Louvered Sources

Reported: L70 at >54,000 hours	Calculated: L70 at 138,000 hours
L90 at 43,000 hours	L90 at 43,000 hours

Point Sources

Reported: L70 at >55,000 hours	Calculated: L70 at 226,000 hours
L90 at 54,000 hours	L90 at 54,000 hours

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

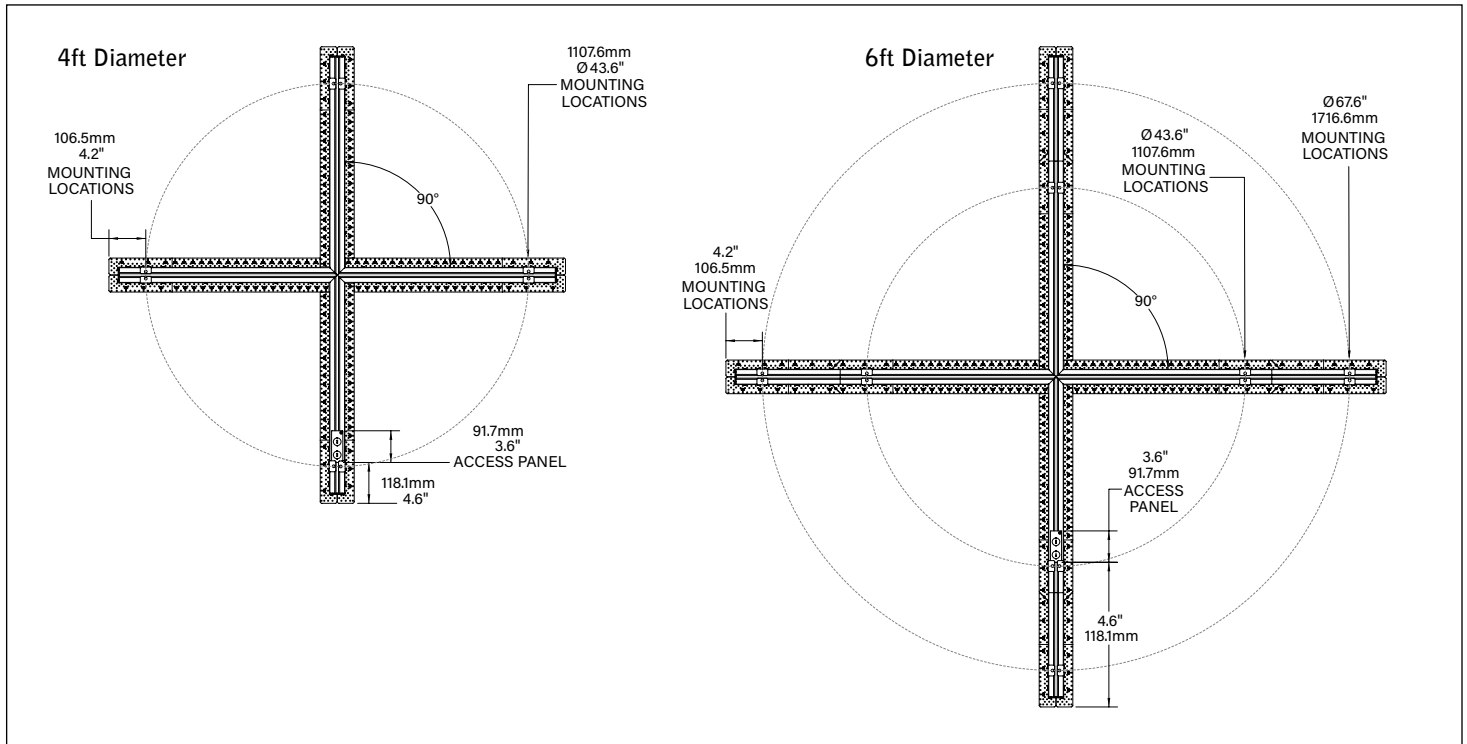
Reliability

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.

MOUNTING DETAILS



LOUVERED PERFORMANCE CHART

Size	Lumen Output	Tested System Watts	NFL		FL1		FL2		WFL		LMC	
			Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW
4'	2000	19.8	2704	136	2301	116	2440	123	2013	102	1947	98
	3000	28.3	3999	141	3403	120	3610	128	2977	105	2879	102
	4000	38.0	5513	145	4691	123	4976	131	4104	108	3969	104
	5000	46.1	6894	150	5867	127	6222	135	5132	111	4963	108
	6000	53.9	8147	151	6933	129	7353	136	6065	113	5865	109
	7000	62.5	9388	150	7989	128	8474	136	6988	112	6759	108
	8000	71.1	10728	151	9130	128	9684	136	7986	112	7724	109
6'	3000	29.8	4055	136	3451	116	3661	123	3019	101	2920	98
	4500	41.5	5998	145	5105	123	5414	131	4465	108	4319	104
	6000	55.3	8269	150	7037	127	7464	135	6156	111	5953	108
	7500	68.1	10340	152	8800	129	9334	137	7698	113	7445	109
	9000	82.8	12220	148	10399	126	11030	133	9097	110	8798	106
	10500	94.7	14081	149	11983	127	12710	134	10483	111	10138	107
	12000	107.6	16092	150	13695	127	14526	135	11980	111	11586	108

Based on 3500K, 80 CRI. Delivered lumens may vary +/- 5%. Actual wattage may vary +/- 5%

Louver Color Temperature & CRI

Color Temperature	Multiplier
2700K, 80+ CRI [27K]	0.95
2700K, 90+ CRI [927K]	0.80
3000K, 80+ CRI [30K]	0.97
3000K, 90+ CRI [930K]	0.83
3500K, 80+ CRI [35K]	1.00
3500K, 90+ CRI [935K]	0.85
4000K, 80+ CRI [40K]	1.03
4000K, 90+ CRI [940K]	0.87

Louver Finish

Color	Multiplier
Matte Black [BK]	1.00
Black Specular [BS]	1.00
Clear Diffuse [CD]	1.07
Clear Specular [CS]	1.10
Matte White [WH]	1.11

Louver Distribution

Distribution	Multiplier
Narrow Flood [NFL]	1.34
Flood 1 [FL1]	1.14
Flood 2 [FL2]	1.21
Wide Flood [WFL]	1.00
Louvered Mixing Chamber [LMC]	0.97

How To Use Lumen Multipliers

Formula: (Lumen Output Value) x (Color Temperature & CRI) x (Distribution) x (Finish)