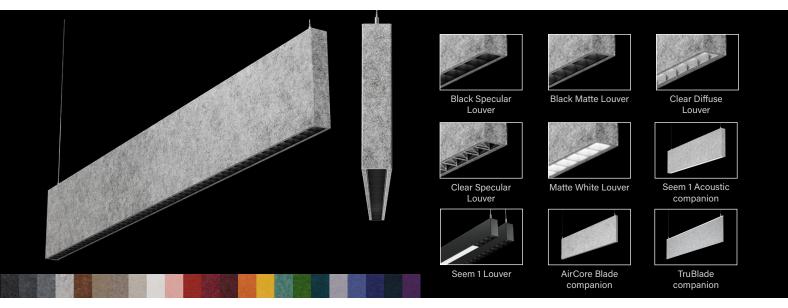
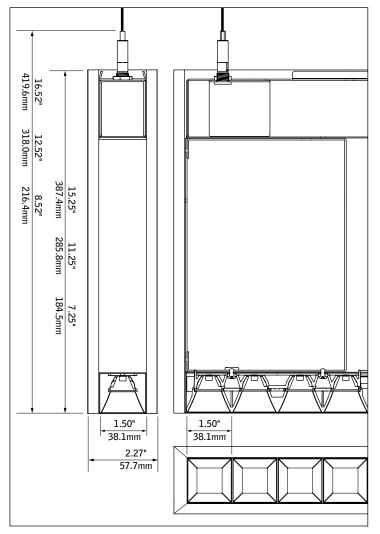
Seem[®] 1 Acoustic Louver





DIMENSIONAL DATA



FEATURES

Narrow, sound absorbing 1.5" aperture linear direct/indirect acoustic LED luminaire with louver and high-performance optics.

Available in 4' to 208' lengths in 6" increments with 8", 12" or 16" nominal housing heights in straight lengths.

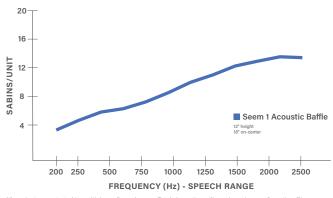
Deeply regressed louver cells provide 60° cut-off from light source to promote visual comfort.

Diversity of louver finishes to tailor how the light is perceived and experienced, from nearly invisible light sources with a striking transition to warmly illuminated louver cells with a smooth transition.

AirCore® Technology: patented, eco-friendly technology that maximizes sound absorption and reduces ecological impact.

Pair with Seem 1 Acoustic unlit baffle, Seem 1 Acoustic Trio, AirCore Blade[®], or TruBlade[®] to create a coordinated look in interior spaces.

ACOUSTIC PERFORMANCE



All products were tested in multiple configured arrays. Total absorption will vary based on configuration. Please refer to ASTM C423 reports for more information.

SPECIFICATIONS

Acoustic Material

Content	Housing material is 100% polyester containing up to 50% of recycled plastic bottles (PET felt) and is moisture resistant. See page 3 for color offering. Acoustic material colors are subject to change without notice. For the most current color options, please visit focalpointlights. com/acousticsolutions. Lead times may vary depending on color.
Cleaning and Care	Remove dust and debris with a clean, soft, lint-free cloth or vacuum
PET Thickness	9mm
Surface Burning Characteristcs	ASTM E84 Class A / CAN ULC S102 Flame Spread: 0, Smoke Development Index: 300

Acoustic Performance

Acoustic testing is performed on all Focal Point acoustic products and varies based on installation and configuration. ASTM C423 test reports can be downloaded from focalpointlights.com. Contact acoustic.solutions@focalpointlights.com for technical questions.

Sabins	Sabins is a unit of sound absorption. It measures how well one square foot of material absorbs sound. Focal Point has averaged the Sabins per unit at four specific frequency bands representing the human speech range (250, 500, 1000, 2000 Hz) to determine the Sabins per product.
	8' length, 12" height: 12" OC = 5.08 Sabins, 18" OC = 9.05 Sabins, 24" OC = 9.46 Sabins

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. LED drivers are replaceable from above. Color accuracy <3 SDCM

Weight - 12" height, 4' length = 13.38lbs. 12" height, 6' length = 19.51lbs. 12" height, 8' length = 25.64lbs.

Optic

60-degree cut-off to louvered light source and its image.

Mountina

Minimum mounting height 7.5" from the ceiling.

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. Power cord white as standard.

Canopy

Polyester powder coat applied over a multi-stage pre-treatment. Canopy white as standard.

Emergency Battery

Emergency output - 10 watts for 90 minutes. Maximum mounting height: 16.83ft.

Labels

ETL listed in accordance with UL standards. Suitable for Dry Locations, indoor use only.

Lumen Maintenance

Linear Source	
Reported: L70 at >61,000 hours	s Calculated: L70 at 470,000 hours
L90 at >61,000 hour	s L90 at 115,000 hours
Louvered Sources	
Reported: L70 at >54,000 hour	s Calculated: L70 at 138,000 hours
L90 at 43,000 hours	L90 at 43,000 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 and when mounted no less than 7.5" from the ceiling. 5-year limited warranty.

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

4' PERFORMANCE CHART

See page 4

ORDERING **Luminaire Series**

ASM1CBS Seem 1 Acoustic Louver Direct/Indirect ASM1CBS

Shielding		
twing Optic Top/Louver Bottom	BWLC	
Dust Cover Top/Louver Bottom	DCLC	
Louver Configuration		

Batwing

Fully Louvered LF Luminaire Height

(heights are nominal) 8" 8 12" 12

16" 16

Indirect Distribution

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 (Not available with D11)

Direct Louvered Distribution

(C

250 Lumens per foot onsult factory for available options)	250DL
375 Lumens per foot	375DL
500 Lumens per foot	500DL
625 Lumens per foot	625DL
750 Lumens per foot	750DL
875 Lumens per foot	875DL
1000 Lumens per foot	1000DL

Color Temperature

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

Circuit

Single Circuit 1C Dual Circuit 2C (Circuit 1 = Indirect, Circuit 2 = All Direct sources.)

UNV

LF

Voltage 120/277 UNV Volt UNV

Control System & Dimming Level

- 0-10V 10% Dimming LD1
- 0-10V 1% Dimming L11
- Lutron Hi-Lume EcoSystem (LDE1) -LH1
 - 1% Dimming
 - DALI 1% Dimming D11

Mounting

(Mounting hang kits ship with order. Power cable is 18" longer th Mounting hang kits stup with documents of longer power cable lenguis.) uspension length. Consult factory for longer power cable lenguis.) 24" Cable Suspension J24_ 148.

- 48" Cable Suspension J48_ 96" Cable Suspension J96_ 120" Cable Suspension J120_ (Specify canopy color White (WH), Black (BK) or Titanium Silver (TS). Example: J24WH.)
- (Consult factory for sloped ceiling applications) Distribution

Narrow Flood NFL

- Flood 1 FL1
- Flood 2 FI 2
- Wide Flood WFL
- Louvered Mixing Chamber LMC

Factory Options

- Black Cord BKCD
- Emergency Circuit _EC
- Emergency Battery Pack[†] _EM [†](6' minimum length. Consult factory for available options.)

Louver Finish

- ΒK Matte Black
- Black Specular BS
- Clear Diffuse CD
- Clear Specular CS
- Matte White WH

_ft _in

Acoustic Panel Color See page 3 for color offering

Luminaire Length

(Luminaires are are 3/4" longer than specified and cannot be cut to length or joined in the field). Specify length in 6" increments from 4' to 208'

ft

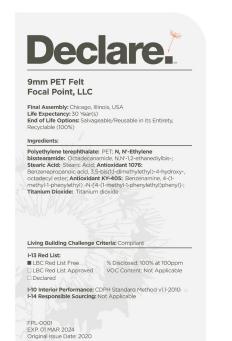
in

Acoustic Material Colors



STANDARD COLORS **PREMIUM COLORS*** PURE BLACK PBK CHARCOAL GRAY CHG CORNFLOWER BLUE CFB DENIM BLUE DNB MIDNIGHT BLUE MNB DEEP PURPLE DPP SLATE SLT SHADOW GRAY SDG BRD CHERRY RED CHR BERRY BRY BLUSH BLS BRICK RED SILVER GRAY SLG PEARL ICE PIC DEEP WATER DWT SEAFOAM SFM EMERALD GREEN EMG CARROT CRT PINEAPPLE CLASSIC WHITE CWH NATURAL LINEN NTL PNA CINNAMON **CNM** LIMESTONE LMS HAZELWOOD HZW

*Contact factory for lead time and pricing.



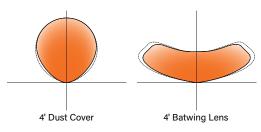
MANUFACTURER RESPONSIBLE FOR LABEL ACCURACY INTERNATIONAL LIVING FUTURE INSTITUTE[™] living-future.org/declare

LIGHT REFLECTIVITY 90 -75 % LIGHT REFLECTANCE 60 45 30 15 CWH SLG MZH SDG EMG CNM CHG MNB PNA ΤL CFB SLT CHR DNM PIC CRT BK

4' PERFORMANCE CHART INDIRECT DISTRIBUTION

Indirect	Dellamadum	Tested System Watts	Lumens per Watt (LPW)	
Lumen Output	Delivered Lumens		BW	DC
250LF	1000	8	118	123
375LF	1500	12	130	130
500LF	2000	15	134	134
625LF	2500	18	136	136
800LF	3200	24	133	133

PERFORMANCE CURVES



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

4' PERFORMANCE CHART LOUVER DISTRIBUTION

Distribution	Lumens per Foot	Tested System Watts	LPW
	250	11.0	92
	375	14.7	101
	500	19.3	106
WFL	625	24.3	105
	750	28.3	107
	875	32.6	107
	1000	37.0	108

Based on 4' luminaire, 3500K, 80 CRI, Matte Black baffle. Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%

PERFORMANCE CURVES







Flood 2 (FL2)

Wide Flood (WFL)

Louver Finish Color

Matte Black [BK]

Black Specular [BS]

Clear Diffuse [CD]

Matte White [WH]

Clear Specular [CS]



Louvered Mixing Chamber (LMC)

Multiplier

1.00

1.00

1.07

1.10

1.11

SEEM 1 ACOUSTIC LOUVER LUMEN MULTIPLIER TABLE

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 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	

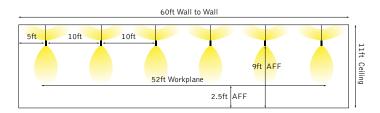
How To Use Lumen Multipliers

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

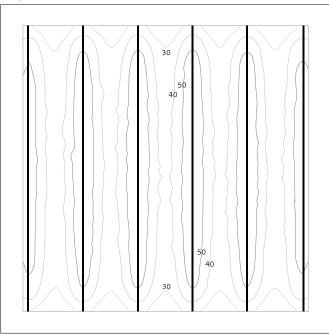
Louver Example: FSM1CBS-1000DL-930K-NFL-BS

(1000) x (0.83) x (1.34) x (1.00) ≈ 1112.2 lm (estimated delivered lumens)

SEEM 1 ACOUSTIC LOUVER APPLICATION EXAMPLE - BATWING INDIRECT / FULLY LOUVERED



Workplane Illuminance



Average Illuminance = 41 fc

Lighting Power Density (LPD) = 0.49

Seem 1 Acoustic Louver with batwing indirect and fully louvered direct illumination is a powerful and efficacious solution for open working environments. Workplanes benefit from 41 footcandles or more and superior uniformity with a lighting power density of less than 0.5 while maintaining luminaire on-center spacing of 10 feet or greater.

Calcluation Details

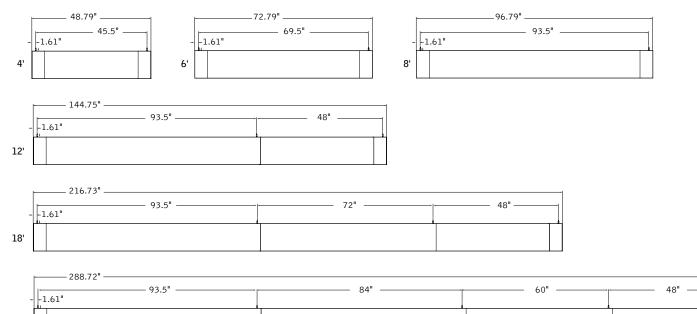
Room Area:	60ft x 60ft
Calculation Area:	52ft x 52ft
Ceiling Height:	11ft
Luminaire Height:	9ft AFF
Luminiare Spacing:	10ft OCS
Workplane Height:	2.5ft AFF
Reflectances:	80/50/20
Light Loss Factor:	0.9

Luminaire Details

Shielding:	Batwing Indirect Fully Louvered, Wide Flood, Direct
Lumens per foot:	250 Indirect 250 Direct
Louver finish:	Matte Black

Installation		Lumens/ft	Louver	LPD	Workplane		Ceiling	
Ceiling Height	On-center Spacing	(UP/DN)	Distribution	(Watts/ft ²)	Average Footcandles	Uniformity (avg. to min.)	Average Footcandles	Uniformity (avg. to min.)
11ft	- 10ft	250/250	WFL	0.49	43.1	1.99	29.1	2.69
			LMC		42.1	2.11	28.9	2.69
12.5ft			WFL		41.9	1.79	29.0	2.64
			LMC		41.0	1.77	28.8	2.65
12.5ft	12ft	375/250	WFL	0.48	41.9	1.88	35.5	3.27
			LMC		41.0	1.96	35.3	3.29

MOUNTING DETAILS



24'

 \downarrow FEED LOCATION

RUN CHART

Run length (ft)	Housing Configuration Section Lengths	# of hang points per run
9	5 + 4	3
10	6 + 4	3
11	7 + 4	3
12	8 + 4	3
13	8 + 5	3
14	8 + 6	3
15	8 + 7	3
16	8 + 8	3
17	8 + 5 + 4	4
18	8 + 6 + 4	4
19	8 + 7 + 4	4
20	8 + 7 + 5	4
21	8 + 7 + 6	4
22	8 + 7 + 7	4
23	8 + 7 + 8	4
24	8 + 7 + 5 + 4	5
25	8 + 7 + 6 + 4	5
26	8 + 7 + 7 + 4	5
27	8 + 7 + 7 + 5	5
28	8 + 7 + 7 + 6	5

Run length (ft)	Housing Configuration Section Lengths	# of hang points per run
29	8 + 7 + 7 + 7	5
30	8 + 7 + 7 + 8	5
31	8 + 7 + 7 + 5 + 4	6
32	8 + 7 + 7 + 6 + 4	6
33	8 + 7 + 7 + 7 + 4	6
34	8 + 7 + 7 + 7 + 5	6
35	8 + 7 + 7 + 7 + 6	6
36	8 + 7 + 7 + 7 + 7	6
37	8 + 7 + 7 + 7 + 8	6
38	8 + 7 + 7 + 7 + 5 + 4	7
39	8 + 7 + 7 + 7 + 6 + 4	7
40	8 + 7 + 7 + 7 + 7 + 4	7
41	8 + 7 + 7 + 7 + 7 + 5	7
42	8 + 7 + 7 + 7 + 7 + 6	7
43	8 + 7 + 7 + 7 + 7 + 7	7
44	8 + 7 + 7 + 7 + 7 + 8	7
45	8 + 7 + 7 + 7 + 7 + 5 + 4	8
46	8 + 7 + 7 + 7 + 7 + 6 + 4	8
47	8 + 7 + 7 + 7 + 7 + 7 + 4	8
48	8 + 7 + 7 + 7 + 7 + 7 + 5	8