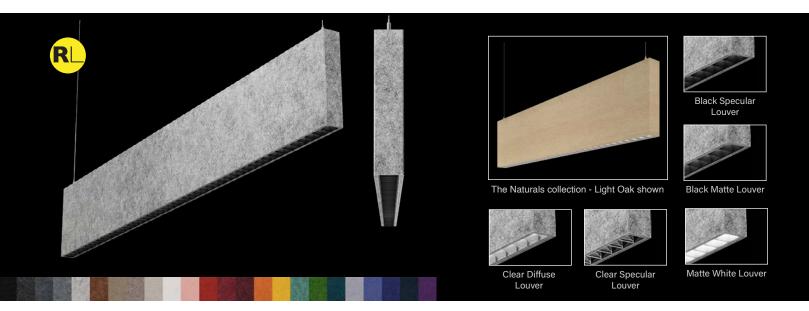
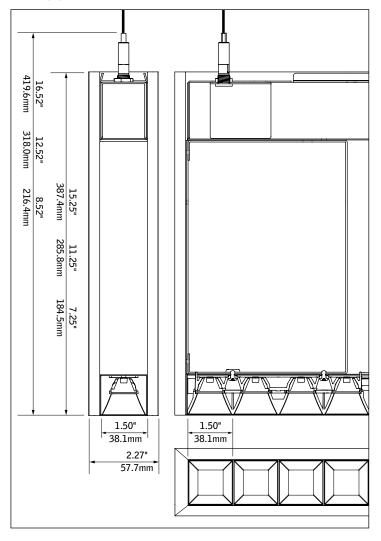
# Seem® 1 Acoustic Louver

LED DIRECT





# **DIMENSIONAL DATA**



# **FEATURES**

Narrow, sound absorbing 1.5" aperture linear direct acoustic 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.

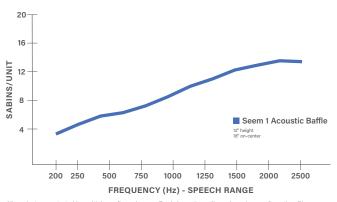
Diversity of louver finishes to tailor how the light is perceived and experienced, from nearly invisible light sources with a striking transition to warmly illuminated louver cells with a smooth transition.

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.

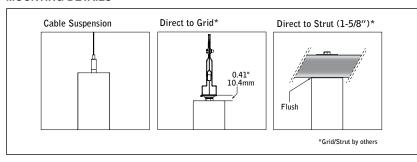
Available with The Naturals, a series of finishes that exude biophilic beauty

# **ACOUSTIC PERFORMANCE**



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

# **MOUNTING DETAILS**



# **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 with 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 = 10.75lbs. 12" height, 6' length = 16.13lbs. 12" height, 8' length = 21.5lbs.

# Optic

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

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 (suspended mounting only)

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

Calculated: L70 at 138,000 hours Reported: L70 at >54,000 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.

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.

LED system rated for operation in ambient environments up to 25°C. 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

ODDEDING		
ORDERING  Luminaire Series		ASM1CS
Seem 1 Acoustic Louver	ASM1CS	Admitoo
Shielding	1.0	LC
Louver  Louver Configuration	LC	LF
Fully Louvered	LF	
Luminaire Height		
(heights are nominal) <b>8"</b>	8	
12" 16"	12 16	
Lumen Output	10	
250 Lumens per foot	250DL	
375 Lumens per foot 500 Lumens per foot	375DL 500DL	
625 Lumens per foot	625DL	
750 Lumens per foot	750DL	
875 Lumens per foot	875DL	
1000 Lumens per foot	1000DL	
Color Temperature		
2700K, 80CRI <b>or</b> 90 CRI 3000K, 80CRI <b>or</b> 90 CRI	27K or 927K 30K or 930K	
3500K, 80CRI <b>or</b> 90 CRI	35K <b>or</b> 935K	
4000K, 80CRI <b>or</b> 90 CRI	40K or 940K	
Circuit		1C
Single Circuit	1C	
Voltage 120/277 UNV Volt	UNV	UNV
	OIV	
Control System & Dimming Level 0-10V - 10% Dimming	LD1	
0-10V - 10% Dimming	L11	
Lutron Hi-Lume EcoSystem (LDE1) -	LH1	
1% Dimming	D.44	
DALI 1% Dimming  Mounting	D11	
Suspended		
(Mounting hang kits ship with order. Power cable is 18" longer than suspension length. Consult factory for longer power		
cable lengths)	124	
24" Cable Suspension 48" Cable Suspension	J24 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)		
Surface Mounted (30" power cable standard. Consult factory for longer power		
cable lengths.)  Direct/Flush to Grid	DTG	
Direct/Flush to Strut	DTS	
Distribution		
Narrow Flood	NFL	
Flood 1	FL1	
Flood 2 Wide Flood	FL2 WFL	
Louvered Mixing Chamber	LMC	
Factory Options		
Black Cord	BKCD	
Emergency Circuit	_EC	
Emergency Battery Pack (5' min. length)	_EM	
Louver Finish		
Matte Black	BK BS	
Black Specular Clear Diffuse	CD	
Clear Specular	CS	
Matte White	WH	
Acoustic Panel Color		
See page 3 for color offering		
Luminaire Length (Luminaires are 3/4" longer than specified and cannot be cut		ft in
to length or joined in the field.)  Specify length in 6" increments	ft in	
from 4' to 208'	_ft _in	
(16' maximum for DTG, consult factory for alternate lengths.)		

(16' maximum for DTG, consult factory for alternate lengths.)

# **Acoustic Materials**



FOCAL POINTS

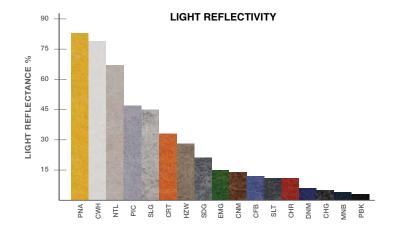
DPP

**BLS** 





# STANDARD PET **PREMIUM PET** PURE BLACK PBK CHARCOAL GRAY CHG **DNB** MIDNIGHT BLUE CORNFLOWER BLUE CFB DENIM BLUE SLATE **SLT** SHADOW GRAY SDG **BRD** CHERRY RED CHR BERRY BRICK RED SILVER GRAY SLG PEARLICE PIC DEEP WATER **DWT** SEAFOAM **SFM** EMERALD GREEN CLASSIC WHITE **CWH** NATURAL LINEN NTL CARROT **CRT** PINEAPPLE **PNA** HAZELWOOD HZW CINNAMON **CNM** LIMESTONE **LMS**



# PET Focal Point, LLC Final Assembly: Chicago, Illinois, USA Life Expectancy: 30 Year(s) End of Life Options: Salvageable/Reusable in its Entirety, Recyclable (100%) Ingredients: Polyethylente: Octadecanamide, N.N\*-1.2-ethanediylbis-; Stearic Acid: Stearic Acid: Antioxidant 1076: Benzenepropanoic acid: 3.5-bis(11-dimethylethyl)-4-hydroxy-, octadecyl ester; Antioxidant KY-405: Benzenamine, 4-(1methyl-1-phenylethyl) -N-(4-(1-methyl-1-phenylethyl)-phenyl]-; Titanium Dioxide: Titanium dioxide Living Building Challenge Criteria: Living Building Challenge Criteria: Living Building Challenge Criteria: Living Building Challenge Criteria: 1-13 Red List: Living Building Challenge Criteria: Living Building Challenge Criteria: 1-10 Interior Performance: Not Compliant 1-14 Responsible Sourcing: Not Applicable PPL-0001 EXP. 01 APR 2025 Original Issue Date: 2020

MNB DEEP PURPLE

BRY BLUSH

# 4' PERFORMANCE CHART

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**











(LMC)

Wide Flood (WFL)

**MULTIPLIER TABLE** 

# **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

# **Louver Finish**

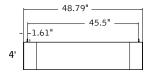
Color	Multiplier
Matte Black [BK]	1.00
Black Specular [BS]	1.00
Clear Diffuse [CD]	1.07
Clear Specular [CS]	1.10
Matte White [WH]	1.11

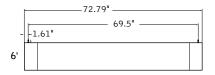
# **How To Use Lumen Multipliers**

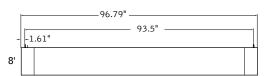
Formula: (Lumen Output Value) x (Color Temperature & CRI) x (Distribution) x (Finish)

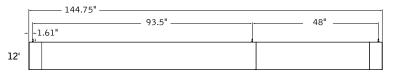
**Louver Example:** ASM1CS-1000DL-930K-NFL-BS  $(1000) \times (0.83) \times (1.34) \times (1.00) \approx 1112.2 \text{ Im (estimated delivered lumens)}$ 

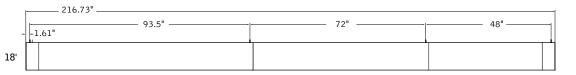
# MOUNTING DETAILS (see Run Chart on following page for number of hang points per run)

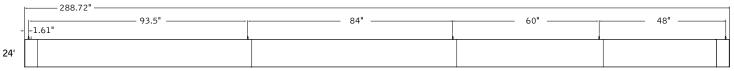




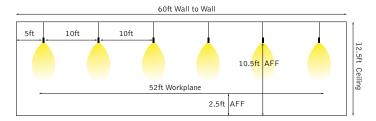




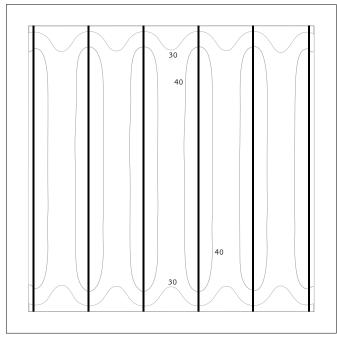




# SEEM 1 ACOUSTIC LOUVER APPLICATION EXAMPLE



# Workplane Illuminance



# Average Illuminance = 38 fc

# **Lighting Power Density (LPD)** = 0.38

Seem 1 Acoustic Louver with fully louvered direct illumination is a powerful and efficacious solution for open working environments. Workplanes benefit from 32 footcandles or more and superior uniformity with a lighting power density of less than 0.38 while maintaining luminaire on-center spacing of 8 feet or greater.

# **Calcluation Details**

Room Area: 60ft x 60ft Calculation Area: 52ft x 52ft Ceiling Height: 12.5ft Luminaire Height: 10.5ft AFF Luminiare Spacing: 10ft OCS Workplane Height: 2.5ft AFF Reflectances: 80/50/20 Light Loss Factor: 0.9

# **Luminaire Details**

Shielding: Fully Louvered, Wide Flood

Lumens per foot: 375 Direct
Louver finish: Matte Black

Installation			Louver	LPD	Workplane		
Ceiling Height	AFF	On-center Spacing	Lumens/ft	Distribution	(Watts/ft²)	Average Footcandles	Uniformity (avg. to min.)
11ft	9ft	2501.5	WFL	0.24	33.1	2.00	
1111 911	04		LMC		32.0	1.95	
		- 8ft	250LF	WFL	0.34	31.7	2.03
12.5ft 10.5ft	10 F#			LMC		32.0	1.95
	10.511	10ft	375LF	WFL	0.38	38.1	1.98
				LMC	0.30	36.8	1.96

# **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+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+5	8