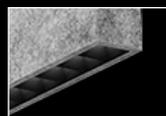
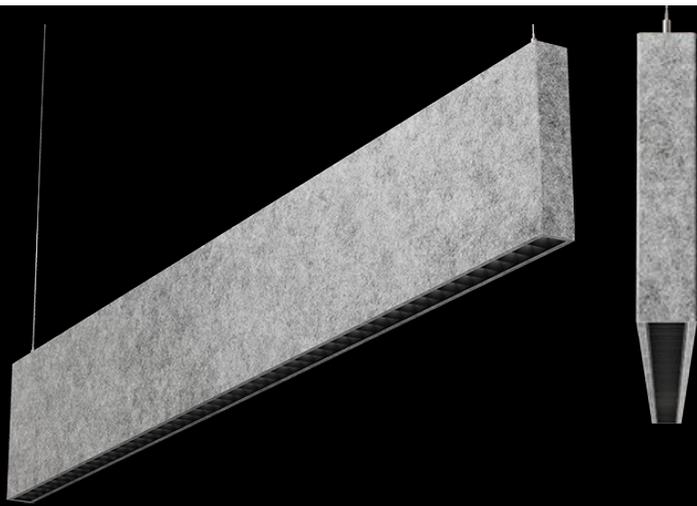
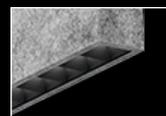


# Seem® 1 Acoustic Louver

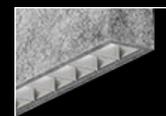
LED DIRECT/INDIRECT



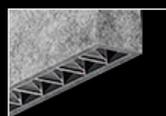
Black Specular Louver



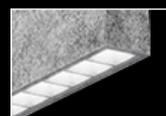
Black Matte Louver



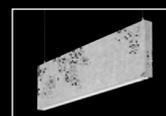
Clear Diffuse Louver



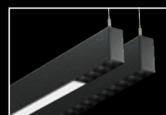
Clear Specular Louver



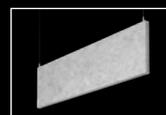
Matte White Louver



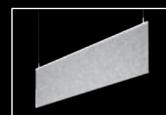
Seem 1 Acoustic companion



Seem 1 Louver

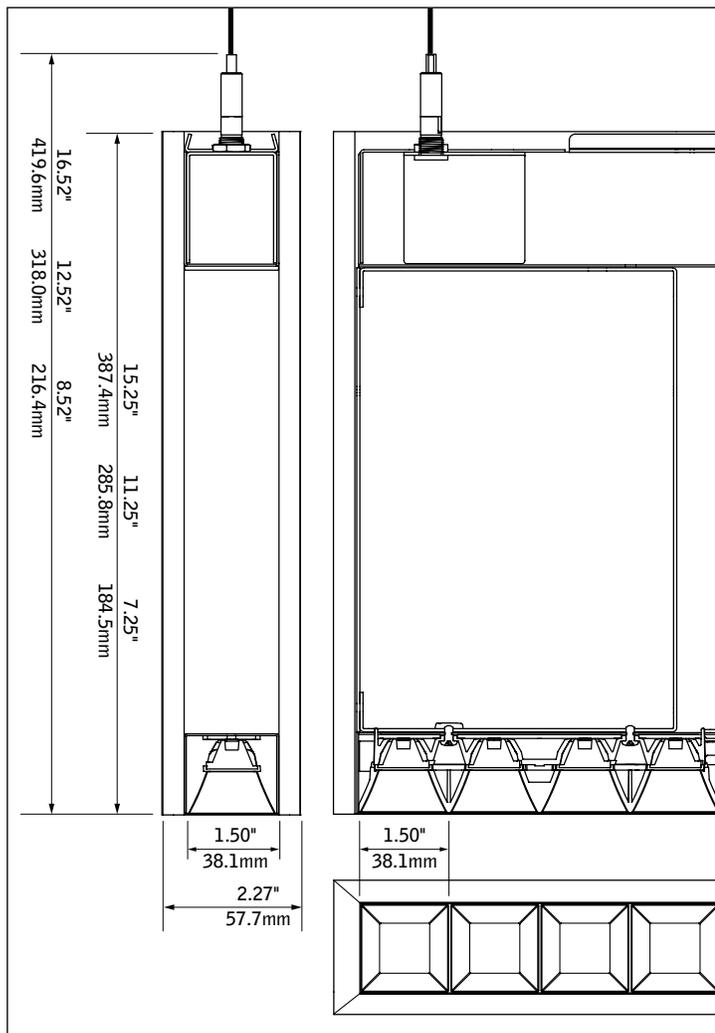


AirCore Blade companion



TruBlade companion

## 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.

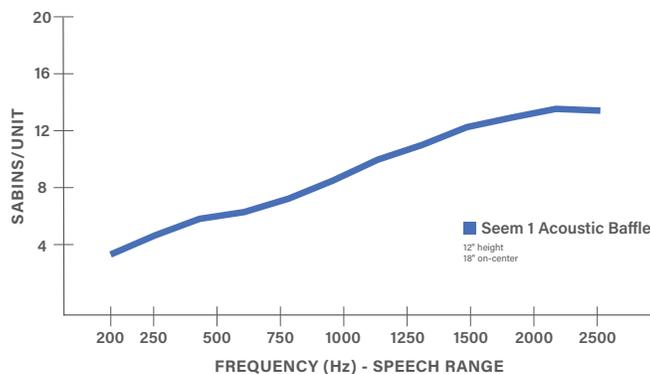
Deeply regressed louver cells provide 60° cut-off from light source to promote visual comfort.

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.

fixture:

project:

### SPECIFICATIONS

#### Acoustic Material

<b>Content</b>	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.
<b>Cleaning and Care</b>	Remove dust and debris with a clean, soft, lint-free cloth or vacuum
<b>PET Thickness</b>	9mm
<b>Surface Burning Characteristics</b>	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.

<b>Sabins</b>	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.

#### Mounting

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	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

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

Seem 1 Acoustic Louver Direct/Indirect ASM1CBS

#### ASM1CBS

#### Shielding

Batwing Optic Top/Louver Bottom BWLC  
Dust Cover Top/Louver Bottom DCLC

#### Louver Configuration

Fully Louvered LF

#### 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

250 Lumens per foot 250DL  
(Consult factory for available options)  
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, 80CRI or 90CRI 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.)

#### Voltage

120/277 UNV UNV

#### 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 than suspension length. Consult factory for longer power cable lengths.)

24" Cable Suspension J24\_\_  
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 FL2  
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

Matte Black BK  
Black Specular BS  
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 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\*



\*Contact factory for lead time and pricing.

## Declare.

**9mm PET Felt**  
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:**

Polyethylene terephthalate: PET; N, N'-Ethylene  
bisstearamide: Octadecanamide, N,N'-1,2-ethanediybis-;  
Stearic Acid; Antioxidant 1076;  
Benzenepropionic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-;  
octadecyl ester; Antioxidant KY-40S; Benzoxamine, 4-(1-  
methyl-1-phenylethyl)-N-(4-(1-methyl-1-phenylethyl)phenyl);  
Titanium Dioxide: Titanium dioxide

**Living Building Challenge Criteria: Compliant**

**I-13 Red List:**

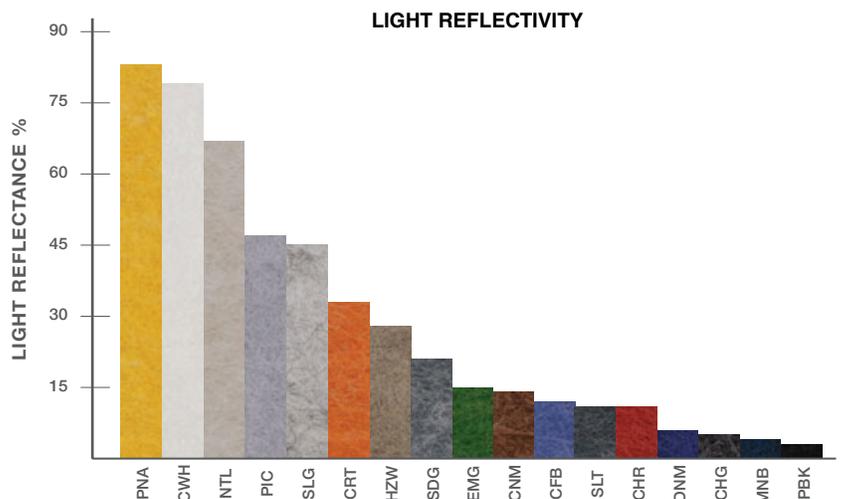
- LBC Red List Free      % Disclosed: 100% at 100ppm
- LBC Red List Approved    VOC Content: Not Applicable
- Declared

**I-10 Interior Performance:** CDPH Standard Method v11-2010

**I-14 Responsible Sourcing:** Not Applicable

FP-0001  
EXP 01 MAR 2024  
Original Issue Date: 2020

MANUFACTURED RESPONSIBLY FOR LABEL ACCURACY  
INTERNATIONAL LIVING FUTURE INSTITUTE™ [living-future.org/declare](http://living-future.org/declare)

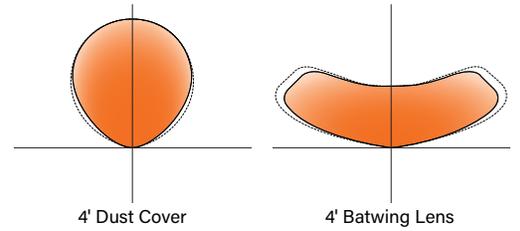


#### 4' PERFORMANCE CHART INDIRECT DISTRIBUTION

Indirect Lumen Output	Delivered Lumens	Tested System Watts	Lumens per Watt (LPW)	
			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

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

#### PERFORMANCE CURVES

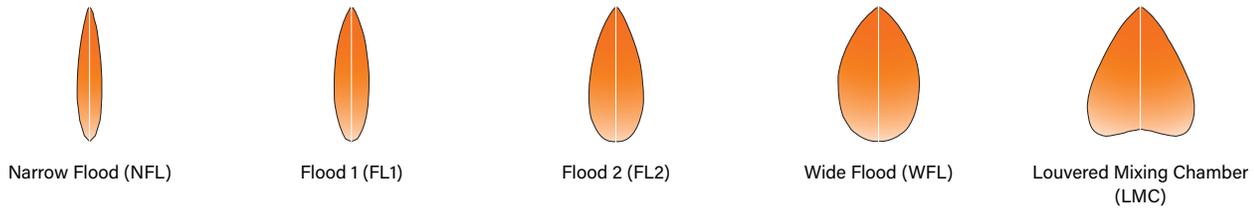


#### 4' PERFORMANCE CHART LOUVER DISTRIBUTION

Distribution	Lumens per Foot	Tested System Watts	LPW
WFL	250	11.0	92
	375	14.7	101
	500	19.3	106
	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



#### SEEM 1 ACOUSTIC LOUVER LUMEN MULTIPLIER TABLE

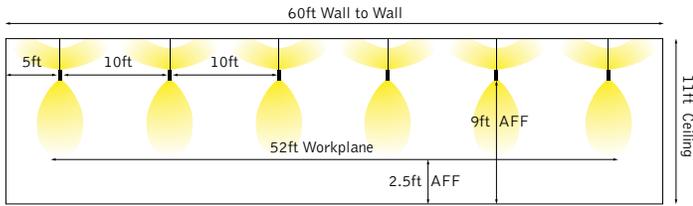
Louver Color Temperature & CRI		Louver Distribution		Louver Finish	
Color Temperature	Multiplier	Distribution	Multiplier	Color	Multiplier
2700K, 80+ CRI [27K]	0.95	Narrow Flood [NFL]	1.34	Matte Black [BK]	1.00
2700K, 90+ CRI [927K]	0.80	Flood 1 [FL1]	1.14	Black Specular [BS]	1.00
3000K, 80+ CRI [30K]	0.97	Flood 2 [FL2]	1.21	Clear Diffuse [CD]	1.07
3000K, 90+ CRI [930K]	0.83	Wide Flood [WFL]	1.00	Clear Specular [CS]	1.10
3500K, 80+ CRI [35K]	1.00	Louvered Mixing Chamber [LMC]	0.97	Matte White [WH]	1.11
3500K, 90+ CRI [935K]	0.85				
4000K, 80+ CRI [40K]	1.03				
4000K, 90+ CRI [940K]	0.87				

**How To Use Lumen Multipliers**

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

**Louver Example:** FSM1CBS-1000DL-930K-NFL-BS  
 $(1000) \times (0.83) \times (1.34) \times (1.00) \approx 1112.2$  lm (estimated delivered lumens)

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

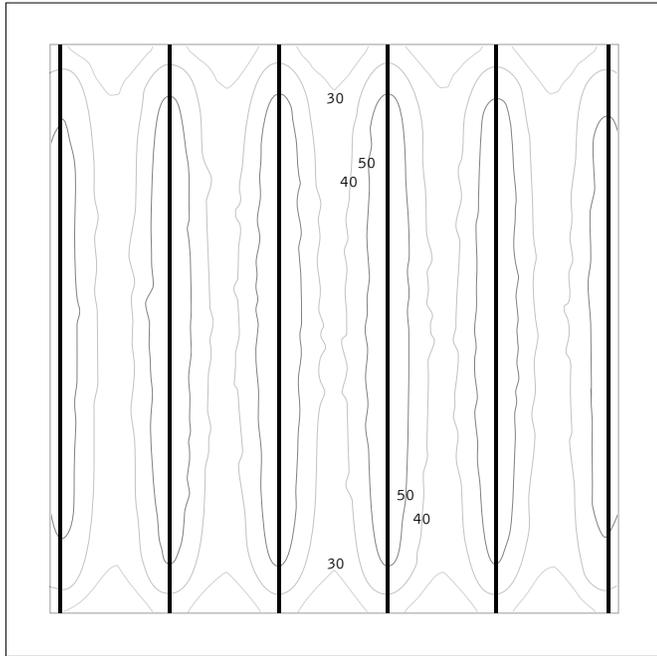


**Average Illuminance** = 41 fc

**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.

Workplane Illuminance



**Calculation Details**

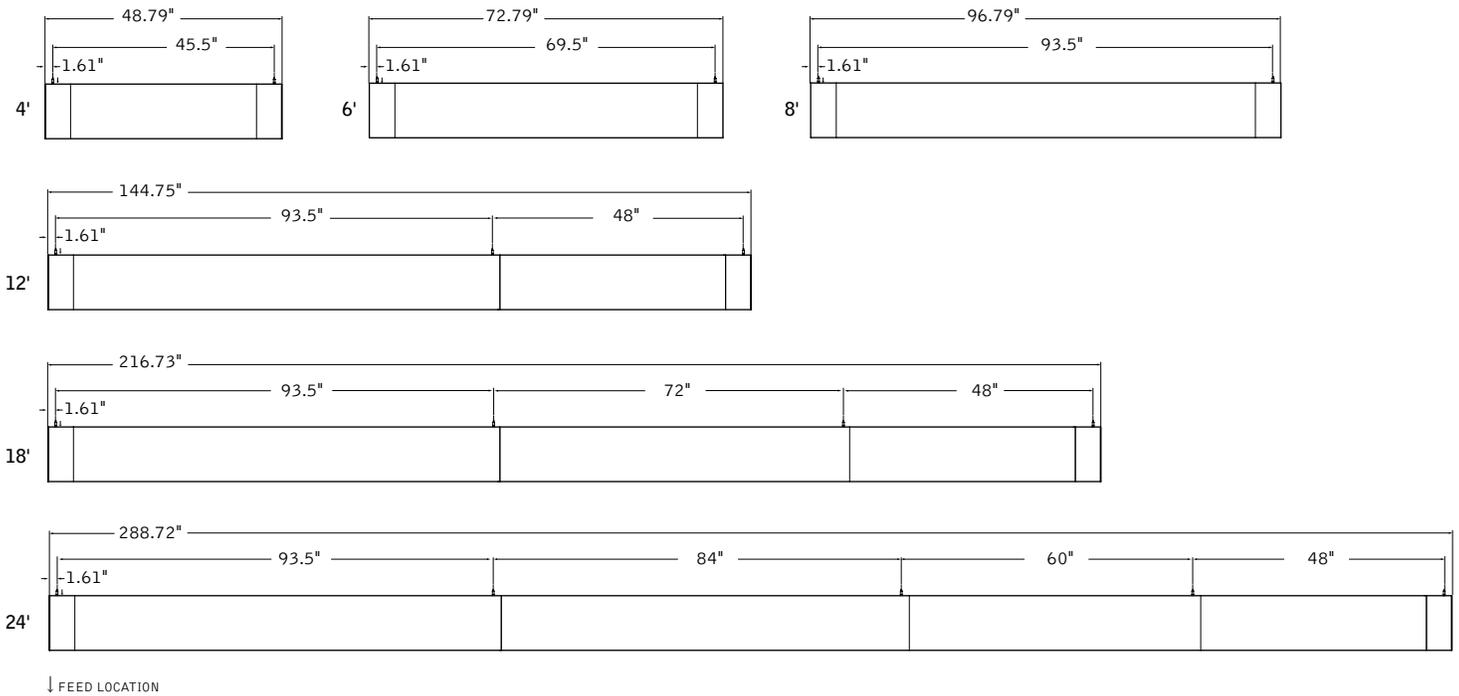
- Room Area: 60ft x 60ft
- Calculation Area: 52ft x 52ft
- Ceiling Height: 11ft
- Luminaire Height: 9ft AFF
- Luminaire Spacing: 10ft OCS
- Workplane Height: 2.5ft AFF
- Reflectances: 80/50/20
- Light Loss Factor: 0.9

**Luminaire Details**

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

Installation		Lumens/ft (UP/DN)	Louver Distribution	LPD (Watts/ft²)	Workplane		Ceiling	
Ceiling Height	On-center Spacing				Average Footcandles	Uniformity (avg. to min.)	Average Footcandles	Uniformity (avg. to min.)
11ft	10ft	250/250	WFL	0.49	<b>43.1</b>	<b>1.99</b>	<b>29.1</b>	<b>2.69</b>
			LMC		42.1	2.11	28.9	2.69
12.5ft	10ft	250/250	WFL	0.49	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



## 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