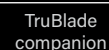
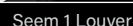
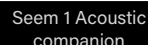
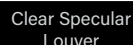
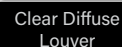
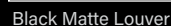
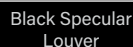
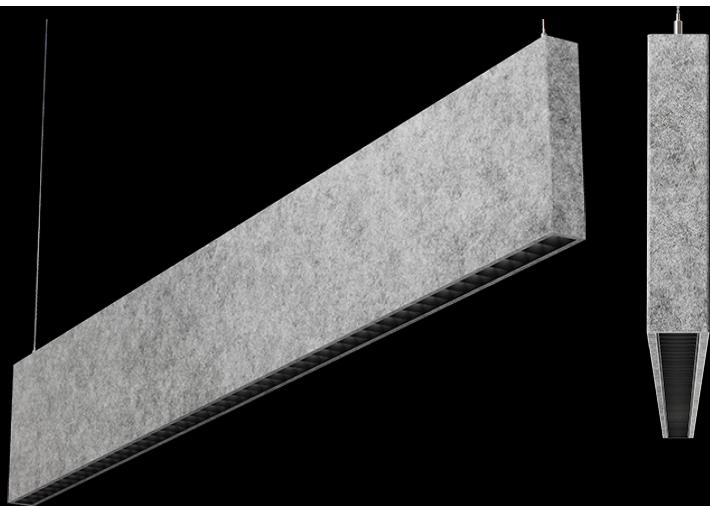


LED DIRECT



Technical drawings of the 1000 Series LED Linear Light fixture, showing side and front elevations with dimensions in inches and millimeters.

Side Elevation Dimensions:

- Total Height: 16.52" (419.6mm)
- Mounting Bracket Height: 1.25" (31.8mm)
- Main Body Height: 11.25" (285.8mm)
- Base Height: 8.52" (216.4mm)

Front Elevation Dimensions:

- Width: 1.50" (38.1mm)
- Depth: 2.27" (57.7mm)

The fixture features a mounting bracket at the top and a base with four LED modules. A detail view at the bottom right shows the four square LED modules arranged in a row.

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.

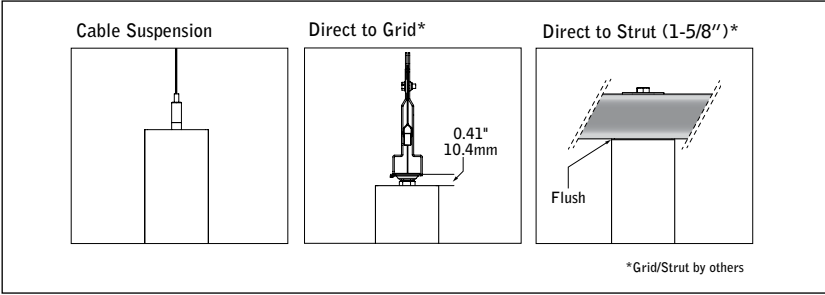
FREQUENCY (Hz) - SPEECH RANGE	SABINS/UNIT
200	3.5
250	4.2
500	5.5
750	6.8
1000	8.2
1250	9.8
1500	11.5
2000	13.2
2500	13.5

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:

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 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 Characteristics	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.

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 (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

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. 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	ASM1CS
See m1 Acoustic Louver	ASM1CS
Shielding	LC
Louver	LC
Louver Configuration	LF
Fully Louvered	LF
Luminaire Height	
(heights are nominal)	
8"	8
12"	12
16"	16
Lumen Output	
250 Lumens per foot	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, 80CRI or 90 CRI	27K or 927K
3000K, 80CRI or 90 CRI	30K or 930K
3500K, 80CRI or 90 CRI	35K or 935K
4000K, 80CRI or 90 CRI	40K or 940K
Circuit	1C
Single Circuit	1C
Voltage	UNV
120/277 UNV Volt	UNV
Control System & Dimming Level	
0-10V - 10% Dimming	LD1
0-10V - 1% Dimming	L11
Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming	LH1
DALI 1% Dimming	D11
Mounting	
Suspended	
(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)	
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	FL2
Wide Flood	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
Black Specular	BS
Clear Diffuse	CD
Clear Specular	CS
Matte White	WH
Acoustic Panel Color	
See page 3 for color offering	
Luminaire Length	ft in
(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
(16" maximum for DTG; consult factory for alternate lengths.)	

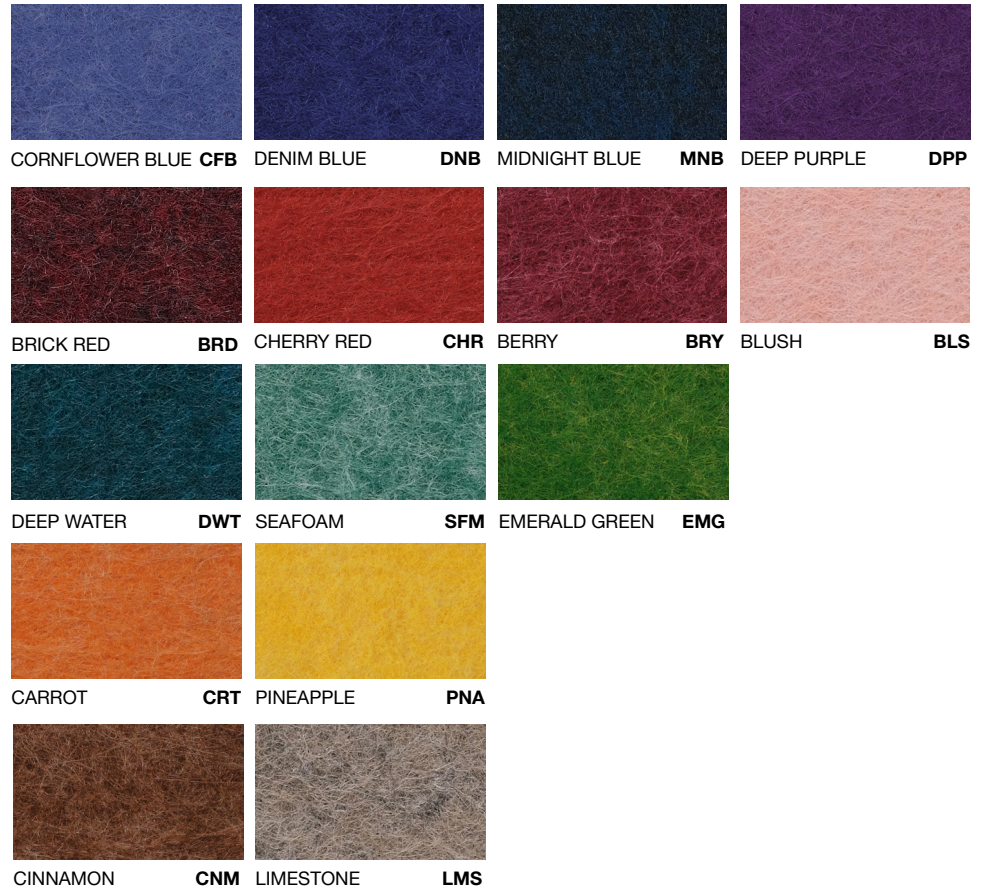
Acoustic Material Colors



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-ethanediylbis-; Stearic Acid; Antioxidant 1076: Benzenepropanoic acid, 3,5-bis(1-(dimethylethyl)-4-hydroxy-octadecyl ester; Antioxidant KY-405: Benzenamine, 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

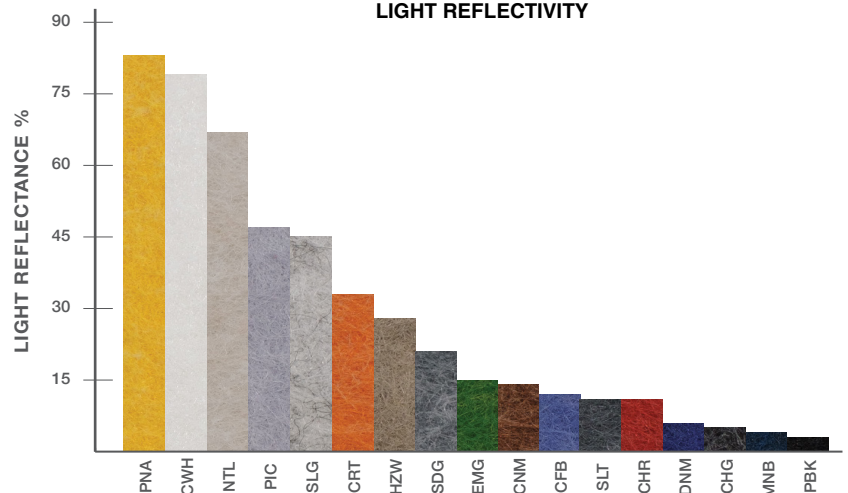
I-10 Interior Performance: CDPH Standard Method v1.1-2010

I-14 Responsible Sourcing: Not Applicable

FPL-0001
EXP. 01 MAR 2024
Original Issue Date: 2020

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

LIGHT REFLECTIVITY

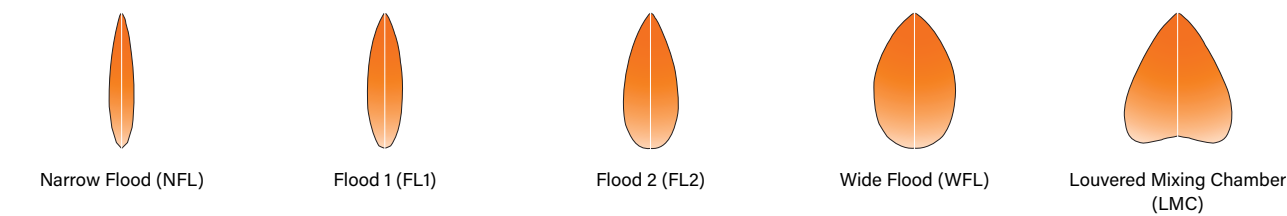


4' PERFORMANCE CHART

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



MULTIPLIER TABLE

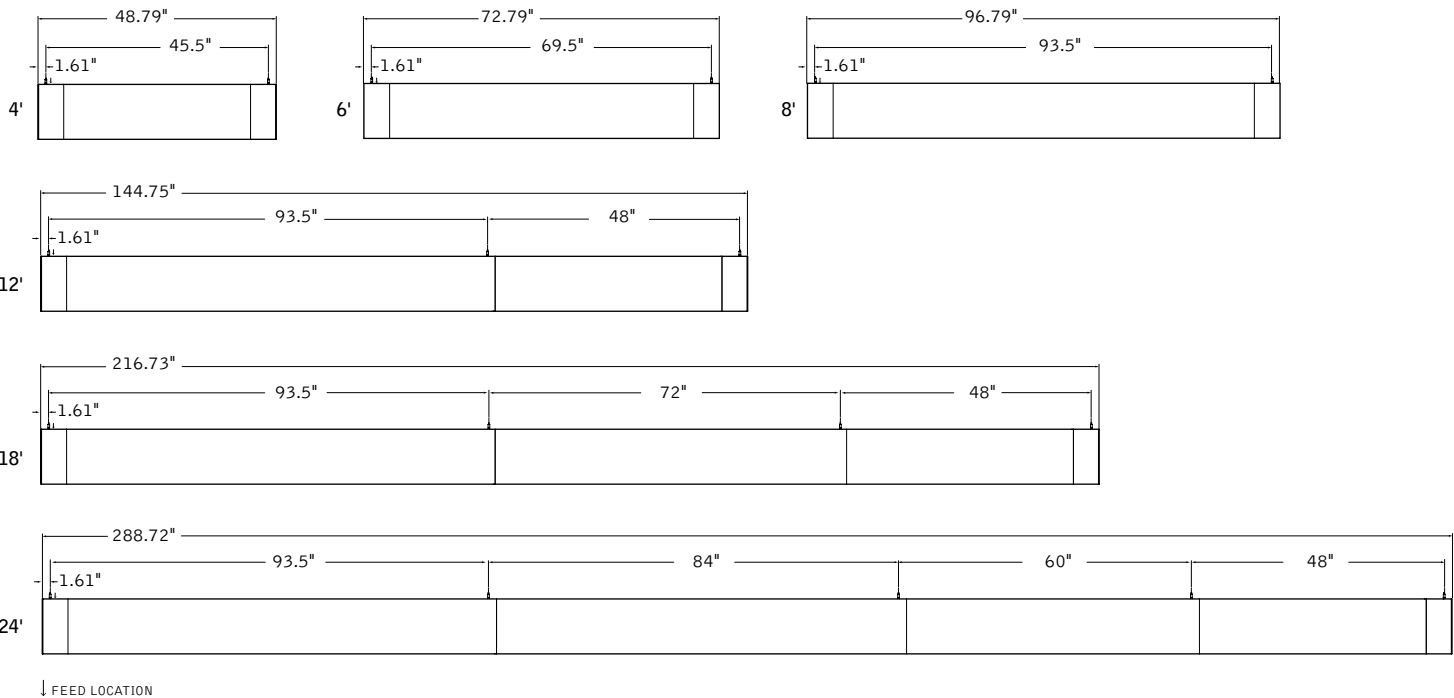
Color Temperature & CRI		Louver Distribution		Louver Finish	
Color Temperature	Multiplier	Distribution	Multiplier	Color	Multiplier
2700K, 80+ CRI [27K]	0.95	Narrow Flood [NFL]	1.34	Matte Black [BK]	1.00
2700K, 90+ CRI [927K]	0.80	Flood 1 [FL1]	1.14	Black Specular [BS]	1.00
3000K, 80+ CRI [30K]	0.97	Flood 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

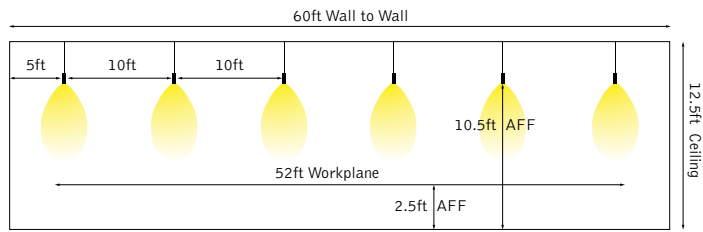
Formula: (Lumen Output Value) x (Color Temperature & CRI) x (Distribution) x (Finish)

Louwer Example: ASM1CS-1000DL-930K-NFL-BS
(1000) x (0.83) x (1.34) x (1.00) ≈ 1112.2 lm (estimated delivered lumens)

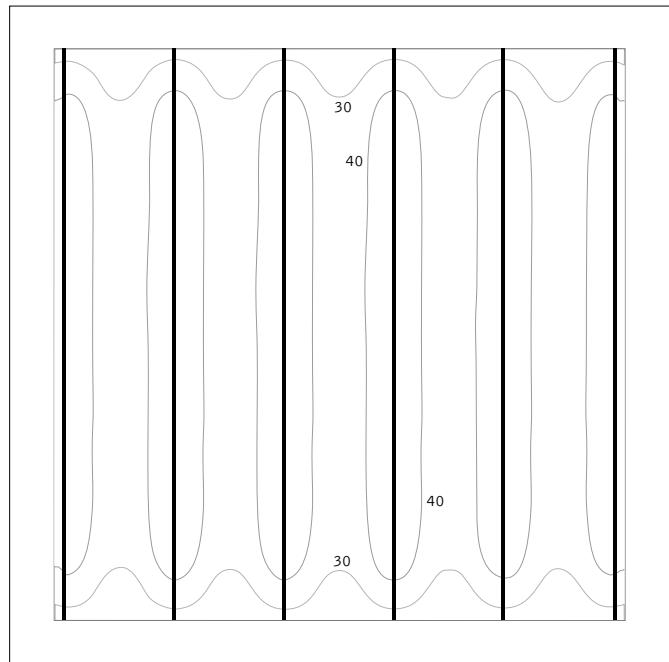
MOUNTING DETAILS (see Run Chart on following page for number of hang points per run)



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.

Calcuation 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		On-center Spacing	Lumens/ft	Louver Distribution	LPD (Watts/ft²)	Workplane	
Ceiling Height	AFF					Average Footcandles	Uniformity (avg. to min.)
11ft	9ft	8ft	250LF	WFL	0.34	33.1	2.00
				LMC		32.0	1.95
12.5ft	10.5ft	10ft	375LF	WFL	0.38	31.7	2.03
				LMC		32.0	1.95
				WFL		38.1	1.98
				LMC		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 + 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

Standard run configurations, consult factory for custom configurations and longer run lengths.