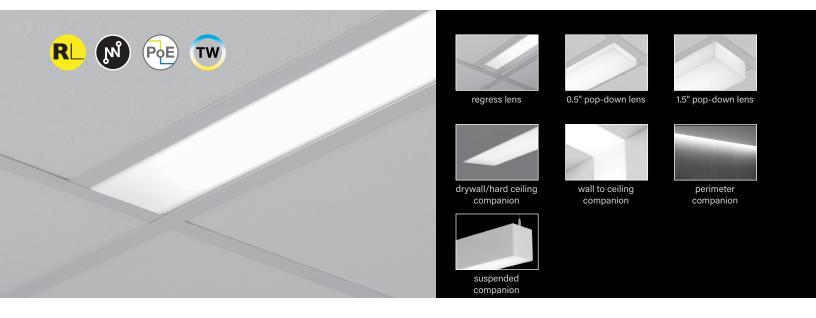
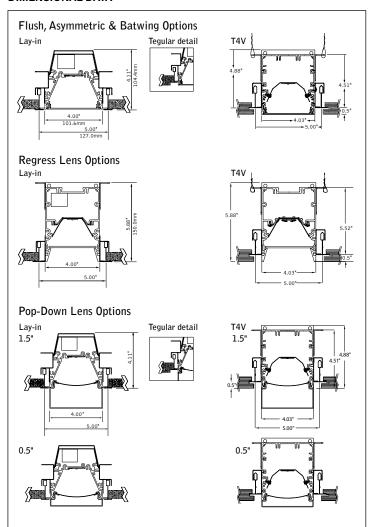
# Seem® 4 Grid Ceiling





# **DIMENSIONAL DATA**



# **FEATURES**

4" aperture recessed slot LED integrates with grid ceilings for a clean, unobtrusive aesthetic.

Individual units and continuous runs in 1" increments.

Available in flush, asymmetric, asymmetric room fill, batwing, regress, 0.5" or 1.5" pop-down lens.

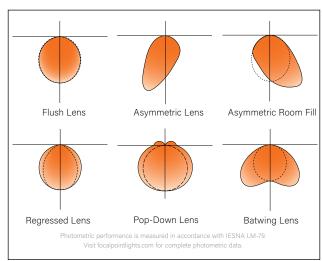
LED position and lens material optimized to provide the perfect blend of high performance and visual comfort.

Tunable White: Supports human activity, well-being, and preferences with a light quality that evolves throughout the day.

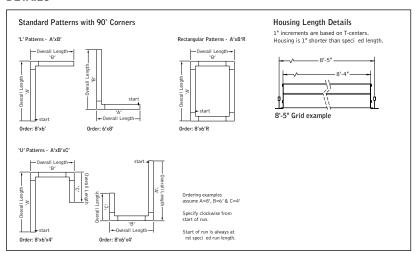
Connected Solutions: Integrates with wired and wireless building lighting control systems.

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

# **DISTRIBUTIONS**



# **DETAILS**



4' PERFORM	IANCE CHA	RT	LPW					
Lumen								
Output	Lumens	System Watts	BW	FL	AS	AF		
275LF	1100	10	120	142	122	124		
375LF	1500	13	126	135	126	129		
625LF	2500	22	125	122	126	128		
875LF	3500	32	123	120	125	127		
1000LF	4000	37	122	119	124	126		
1125LF	4500	41	121	118	122	124		
1250LF	5000	46	120	117	120	123		

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

4 PERFORMANO	CE CHART - RE	_ LF	PW .	
Lumen Nominal Tested				
Output	Lumens	System Watts	SR	SRXP
275LF	1100	12	79	98
375LF	1500	16	84	109
625LF	2500	26	84	110
875LF	3500	39	80	105
1000LF	4000	46	77	101
1125LF	4500	53	76	101
1250LF	5000	59	75	99

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

# 4' PERFORMANCE CHART - POP-DOWN

ALDEDECORMANICE CHART DECDECE

		0.5"		1.5"	
Lumen Output	Nominal Lumens	Tested System Watts	LPW	Tested System Watts	LPW
275LF	1100	13	89	12	89
375LF	1500	18	91	17	92
625LF	2500	32	88	30	88
750LF	3000	38	86	38	87

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



Options in orange qualify for the Quickship program. 1000' total, 48' maximum per pattern section. Refer to Quickship Guide for complete details including EM/EC options.

STANDARD WHITE		
Luminaire Series		FSM4
Seem 4 LED	FSM4L	
Shielding Asymmetric Lens	AS	
Asymmetric Room Fill	AF	
Batwing Lens	BW	
Flush Satin Lens	FL	
Regress Lens	SR	
Regress High Performance Lens	SRXP	
0.5" Pop-Down Lens (750LF max.)	PD05 PD15	
1.5" Pop-Down Lens (750LF max. individual units only)	PDI5	
Lumen Output  275 Lumens per foot (Not available with LH1.)	275LF	
375 Lumens per foot (Not available with LHI.)	375LF	
625 Lumens per foot	625LF	
(BW, FL & SR 3' min. individual units only with LH1. SRXP 4' min. individual units only with LH1.)		
750 Lumens per foot (Pop-Down Lenses only)	750LF	
875 Lumens per foot (SR & SRXP 3' min. individual units only with LH1.)	875LF	
1000 Lumens per foot	1000LF	
1125 Lumens per foot	1125LF	
1250 Lumens per foot	1250LF	
Color Temperature		
2700K, 80+ CRI <b>or</b> 90+ CRI	27K or 927K	
3000K, 80+ CRI <b>or</b> 90+ CRI 3500K, 80+ CRI <b>or</b> 90+ CRI	30K or 930K 35K or 935K	
4000K, 80+ CRI <b>or</b> 90+ CRI	40K or 940K	
Circuits & Zones		
1 Circuit, non-emergency	1C	
Consult Ordering Guide on page 6 for	_C_Z_DL	
multiple circuiting and zoning options		
Voltage		
120/277 UNV Volt	UNV	
Low Voltage	LV	
Control System & Dimming Level		
0-10V - 10% Dimming 0-10V - 1% Dimming	LD1 L11	
U-IUV - 1% DIMMING	LII	

tem & Dimming Level	
0-10V - 10% Dimming	LD1
0-10V - 1% Dimming	L11
oltage, PoF compatible	IVN

Low Voltage, PoE compatible (No driver. Not available with EM or EC. LV Voltage only.) LH1

Lutron Hi-Lume EcoSystem (LDE1) 1% Dimming (625LF min.) DALI 1% Dimming (1000LF max.) D11

Wattstopper DLM - 1% Dimming\*\* DLM1 Wattstopper Fixture Sensor Low Density -\*\* LMFS1 1% Dimming

Wattstopper Fixture Sensor High Density -\*\* LMFSD 1% Dimming

Lutron Athena Wireless Node\*\* LAW1 Lutron Athena Wireless Sensor\*\* LAWS Acuity nLight - 1% Dimming\*\* NLT1

Enlighted Smart Sensor - 1% Dimming\*\* ENL1 Encelium CLM Connected Lighting Module -\*\* CLM1 1% Dimming

Current NX Enabled - 1% Dimming\*\* NXE1 WaveLinx Pro – 196 Dimming\*\*

\*\*(3' min. length. 7' min. length with ECD/EM. Not available with Pop-Down Lenses.) See sensor layout quide

**Ceiling Configuration** 

Std. 15/16" Lay-in or Std. 15/16" Tegular G1 or T1 Std. 9/16" Lay-in or Std. 9/16" Tegular G2 or T2 9/16" Slot-tee Tegular Tall 15/16" Lay-in or Tall 15/16" Tegular G4 or T4 T4V

Tall 15/16" Tegular for specialty ceilings (0.5" drop.) Tall 9/16" Lay-in **or** Tall 9/16" Tegular Node 9/16" Tegular

Factory Options (See page 6 for ordering details for DC, EC, EM & ECD.)

Chicago Plenum (Not available with Flex Whip, DLM1, NLT1 or NXE1. **Daylight Circuit** \_DC **Emergency Circuit** 

\_EM Emergency Battery Pack<sup>†</sup> Emergency Control Device† \_ECD

†(4' minimum. 6' minimum with patterns. Not available at corners. 120/277 Volt only.) 6' New York City Flex Whip 120V or 277V

FNY1 or FNY2 6' Flex Whip FW **Finish** 

WH

ft in

G5 or T5 T6

**Luminaire Length** 

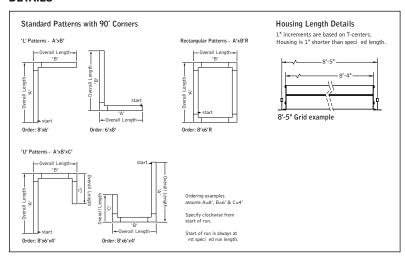
Matte White Housing

Specify luminaire/row length in 1" increments (2' minimum, lengths are nominal 1" increments based on T-centers. Housing length is 1" shorter than specified. Leave blank for patterns. Smaller increments available, consult factory individual units cannot be joined in the field.)

Pattern Options (4' min. length. Not available with Pop-Down Lenses. Consult factory for other pattern options.) 'L' pattern

A' x B' 'U' pattern A' x B' x C' Rectangular pattern A' x B' R

# **DETAILS**



# TW

# 4' PERFORMANCE CHART

4. PERFO	RMANCE CHAP	LF	w	
Lumen Output	Nominal Lumens	Tested System Watts	BW	FL
275LF	1100	13.30	87.1	84.9
375LF	1500	17.34	90.6	88.3
625LF	2500	27.84	93.8	91.4
875LF	3500	37.22	98.7	96.2
1000LF	4000	42.39	98.9	96.4
1125LF	4500	50.27	93.7	91.3

Based on 2700K, 80CRI, 4' lengths. Lumen output may vary  $\pm$  5%. Actual wattage may vary  $\pm$  5%.

TW 4' PERFORMANCE CHART - REGRESS									
Lumen	Nominal	Tested							
Output	Lumens	System Watts	SR	SRXP					
275LF	1100	14.72	74.4	88.6					
375LF	1500	19.36	77.5	92.3					
625LF	2500	31.47	79.6	94.8					
875LF	3500	42.01	83.4	99.4					
1000LF	4000	50.68	79.2	94.3					

Based on 2700K, 80CRI, 4' lengths. Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%.



# 4' PERFORMANCE CHART - POP-DOWN

		0.5"		1.5"	
Lumen Output	Nominal Lumens	Tested System Watts	LPW	Tested System Watts	LPW
275LF	1100	17.14	59.7	16.33	65.7
375LF	1500	22.79	61.4	21.58	68.3
625LF	2500	35.49	65.2	33.96	72.0
750LF	3000	42.39	65.4	40.28	72.7

Based on 2700K, 80CRI, 4' lengths. Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%.

# **Lumen Multipliers**

# Wattage Multipliers

	1.00			
CRI	Multiplier	ССТ	Multiplier	
80+	1.00	2700K	1.00	
90+	0.89	3000K	0.92	
		3500K	0.88	
		4000K	0.86	
		5000K	0.85	
		5700K	0.87	
		6500K	0.90	



# **TUNABLE WHITE**

I VV	TONABLE WHITE		
	Luminaire Series		FSM4L
	Seem 4 LED	FSM4L	
	Shielding		
	Batwing Lens Flush Satin Lens	BW FL	
	Regress Lens (1000LF max.)	SR	
Regress Hig	gh Performance Lens (1000LF max.)	SRXP	
	0.5" Pop-Down Lens (750LF max.)	PD05	
1.5" Pop-Dov	vn Lens (750LF max. individual units only)	PD15	
	Lumen Output		
	275 Lumens per foot (BW, FL, SR & SRXP 3' min. with D1TW.	275LF	
	375 Lumens per foot (BW, FL, SR & SRXP 3' min.)	375LF	
	625 Lumens per foot	625LF	
750 Lui	mens per foot (Pop-Down Lenses only)	750LF	
	875 Lumens per foot	875LF	
	1000 Lumens per foot	1000LF	
	1125 Lumens per foot	1125LF	
Tunch	Color Temperature le White: 2700-6500K, 80+ CRI	276ET	
	le White: 2700-6500K, 80+ CRI	2765T 92765T	
	Circuits & Zones	02,00.	
	1 Circuit, non-emergency	1C	
Consu	It Ordering Guide on page 6 for	_C_Z_DL	
multip	le circuiting and zoning options		
	Voltage		UNV
	120/277 UNV Volt	UNV	
Con	trol System & Dimming Level		
(D. (.    1.)	DALI 1% Dimming	D1TW	
	r offers DT6 control. It requires two addresses, & one for CCT tuning. Consult factory for DT8.		
	Extended lead time applies.)  Lutron Athena Wireless Sensor**	LAWS	
	Acuity nLight - 1% Dimming**	NLT1	
Enlighte	ed Smart Sensor - 1% Dimming**	ENL1	
**(Consult f	actory. Not available with Pop-Down Lenses.)		
	See sensor layout guide		
C+d 1E /	Ceiling Configuration 16" Lay-in or Std. 15/16" Tegular	C1 or T1	
	/16" Lay-in <b>or</b> Std. 15/16" Tegular	G1 or T1 G2 or T2	
Ota. 5	9/16" Slot-tee Tegular	G3	
Tall 15/	/16" Lay-in <b>or</b> Tall 15/16" Tegular	G4 <b>or</b> T4	
Tall 15	/16" Tegular for specialty ceilings (0.5" drop.)	T4V	
Tall 9	/16" Lay-in <b>or</b> Tall 9/16" Tegular	G5 or T5	
	Node 9/16" Tegular	T6	
	Factory Options 6 for ordering details for DC, EC, EM & ECD.)		
(See page		СР	
	Chicago Plenum (Not available with Flex Whip, NLT1 or NXE1.)	CF	
	Daylight Circuit	_DC	
	Emergency Circuit	_EC	
	Emergency Battery Pack	_EM	
	Emergency Control Device	_ECD	
CLNI	†(Consult factory)	END/4 END/0	
o New Yo	ork City Flex Whip 120V <b>or</b> 277V 6' Flex Whip	FNY1 <b>or</b> FNY2 FW	
	Finish		WH
	Matte White Housing	WH	
	Luminaire Length		ft in
	aire/row length in 1" increments	_ft _in	
Housing length is 1"	s are nominal. 1" increments based on T-centers. shorter than specified. Leave blank for patterns.		
smaller increments	available, consult factory. Individual units cannot be joined in the field.)		
	Pattern Options		
(4' min.	length. Not available with Pop-Down Lenses. Consult factory for other pattern options.)		
	'L' pattern	A' x B'	
	'U' pattern	A' x B' x C'	
	Rectangular pattern	A' x B' R	

# **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 CRI>80 or CRI>90, 3 SDCM or Tunable White (2700K-6500K), CRI>80, >90. 3500K and 4000K with CRI>90 have a cyanosis observation index (COI) of 3.3 or less. LED modules are replaceable from below. Asymmetric, Flush, Batwing and Pop-Down lenses driver access from above. Regress lens driver access from below.

#### Construction

One piece extruded aluminum housing. 20 Ga. steel end caps. Steel driver compartment, flush lens only. Flush, Batwing and Pop-Down lens weights: 4' unit: 11 lbs., 8' unit: 22 lbs. Regress lens weights: 4' unit: 20 lbs., 8' unit: 40 lbs.

#### Optio

Asymmetric, Flush, Batwing lens extruded acrylic .085" thick with satin finish up to 8' continuous. Pop-Down lens extruded acrylic .06" thick with frosted finish, up to 8' continuous. Regress lens .118" thick acrylic lay-in lens. 22 Ga. reflector finished in High Reflectance White powder coat.

#### 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

Emergency Battery output - 10 watts for 90 minutes. Maximum mounting height: 19.2ft. Emergency Circuit with Connected Solutions (DLM1, LMFS1, LMFSD, NLT1, ENL1, CLM1, NXE1, WLXP) shipped standard with leads to connect UL924 compliant device, by others.

# 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.

### Lumen Maintenance

 $\begin{tabular}{lll} Reported: & L70 > 61,000 & hours & Calculated: L70 & at > 480,000 & hours \\ & L90 > 61,000 & hours & L90 & at > 128,000 & hours \\ Derived from EPA TM-21 calculator. Based on typical conditions, consult factory for additional data. \\ \end{tabular}$ 

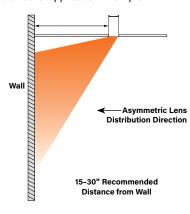
# Reliability

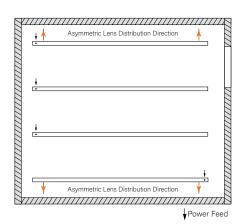
At Focal Point, our products are designed to stand the test of time. Each luminaire is engineered using superior components, manufactured with the utmost care and rigorously tested. Contact us for reliability data.

### Warranty

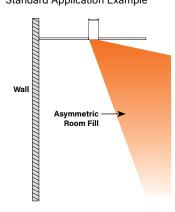
LED system rated for operation in ambient environments up to 25°C. 5-year limited warranty.

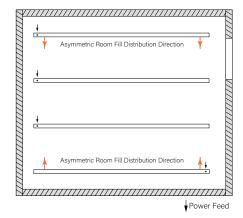
# **DIRECT ASYMMETRIC**Standard Application Example





# **DIRECT ASYMMETRIC ROOM FILL** Standard Application Example







Focal Point provides flexibility in meeting the needs of each project by integrating with several building lighting control systems. A variety of sensors, drivers and other components can be specified that allow the luminaires to communicate with wired and wireless networks. All zoning can be digitally reconfigured through the application software. Daylight harvesting, occupancy sensing, integration with HVAC systems, and individual controls enable the monitoring and modulating of light levels and temperature in order to save energy, reduce costs and maximize occupants' comfort. All Connected Solutions luminaires require a compatible building control system.<sup>†</sup>

Connected Solution		Ordering Code	Model #**	Protocol	Compatible Networks*	Occupancy & Daylight	Temperature Reporting	Communication to Luminaire	Drivers	
		DLM1	LMFC-011	DLM	DLM	Enabled	No	Wired	Advance by Signify, Optotronic by eldoLED	
WATTSTOPPER*		LMFS1	LMFS-601 & LMFI-111 LMFS-601	DLM Wireless	DLM	Enabled	No	Wireless	Advance by Signify  Optotronic by eldoLED  (Dexal)	
COOPER Lighting Solutions		WLXP	OEM-WAA	WaveLinx Wireless	WaveLinx Pro Trellix	Enabled	No	Wireless (WaveLinx Pro Wireless Area Controller)	Advance by Signify	
@ CDESTRON	Connections located under access panel	D11	Specified	DALI	Crestron Zūm Wireless &	Enabled	No	Wired	eldoLED ECOdrive	
@ CRESTRON.			L11	Driver	0-10V	SpaceBuilder	Enabled			Advance by Signify
ENCELIUM	CLM1 adds 0.78" to overall height.	CLM1	ZBHA-CLM- DIM-ENC	ZigBee	Encelium X Light Management System	Enabled	No	Wireless	Optotronic by eldoLED Advance by Signify	
<b>€</b> Enlighted		ENL1	SU-5E-IOT	Enlighted RF	Enlighted	Integrated	Yes	Wireless	Advance by Signify	
	Adds 0.78" to overall height.	LAW1	A-WN-D01- RF-WH	DALI, 0-10V	Athena Wireless	Enabled	No	Wireless	Advance by Signify	
<b>%LUTRON</b>		LAWS	A-WN-D01- OCC-WH	DALI, 0-10V	Athena Wireless	Integrated	No	Wireless	Advance by Signify	
	Connections located under access panel	LH1	LDE1	EcoSystem	Quantum, Energi Savr Node, Energi TriPak	Enabled	No	Wired	Lutron Hi-Lume	
nLight	Connections located under access panel	NLT1	nEPS-60-IO	nLight	nLight	Enabled	No	Wired	eldoLED ECOdrive, eldoLED SOLOdrive	
LIGHTING CONTROLS	NXE1 adds 1.00" to overall height.	NXE1	NXFM-LV	NX	NX Distributed Intelligence	Enabled	No	Wired	Optotronic by eldoLED	

# Ordering Guide

# **Direct Only Linear Circuitry, Zones & Factory Options**



### **HOW TO USE THIS GUIDE**

Fill out the worksheet on the following page to specify your requirements for circuitry, zones, and factory options.

Refer to the run chart for standard run configurations, consult factory for custom configurations.

Complete the Totals / Ordering Codes at the bottom of the worksheet and add to your ordering logic on the cut sheet.

Submit the worksheet along with your order.

	TOTAL RUN LENGTH:		32ft JOB NAME:			FIXTURE TYPE:			
		SHA	SHARED ELECTRICAL FEED,			FACTORY OPTIONS			
ш	HOUSING	SECTION		NORMAL POWER		SEPARATI	ELECTRICAL FEE	os	ЕМ
	SECTION	LENGTH	SWITCHING CIRCUIT	DIMMING ZONE	DAYLIGHT ZONE	DAYLIGHT CIRCUIT	EMERGENCY CIRCUIT	ECD	
EXAMPLE	1	8	1C	1Z					1EM
Ę	2	8	2C	2Z					
	3	8	2C	2Z					
	4	8				1DC			
	Totals / Ordering Codes		2C	<b>2Z</b>		1DC			1EM

ORDERING: FSM4L-FL-625LF-35K- 2C2Z -UNV-LD1-G2- 1DC-1EM -WH-32ft

Section 1 EM BATTERY	Section 2	Section 3	Section 4
1C	2	c —	1DC
1Z	2	Z	

KEY		
C = Switching Circuit Switched Hot / Shared Neutral	DC = Daylight Circuit Switched Hot / Separate Neutral	
Z = Dimming Zone Dimming Control Wires	EC = Emergency Circuit Switched Hot / Separate Neutral	
<b>DL = Daylight Zone</b> Daylight Dimming Control Wires	EM = Emergency Battery Unswitched Hot / Shared Neutral	
	ECD = Emergency Control Device Unswitched Hot / Separate Neutral	

# **DEFAULTS**

- Zones and Factory Options illuminate entire sections from 4' to 8' in length.
- One shared or isolated circuit and zone required per housing section.
- Limit of one EM or ECD per housing section.
- Additional electrical feed required for applications greater than three shared circuits and zones.
- Each DC, EC and ECD require an additional electrical feed.
- ECD not available in the same housing section as EC.
- Longer lead times and additional pricing may apply for custom run configurations.

# **CUSTOM LENGTHS**

- If partial illumination of emergency or daylight section is required, indicate in ordering guide and add "partial illumination" in Order Notes. Drawing required.
- Engineering validation required, longer lead times may apply.

# Ordering Guide Worksheet



**Linear Circuitry, Zones & Factory Options** 

FOCAL POINT

	TOTAL RUN	AL RUN LENGTH: JOB NAME:			FIXTURE TYPE:				
		HOUSING SECTION	SHARED ELECTRICAL FEED,		FACTORY OPTIONS				
			NORMAL POWER			SEPARATE ELECTRICAL FEEDS			
	SECTION LEN	LENGTH	SWITCHING CIRCUIT	DIMMING ZONE	DAYLIGHT ZONE	DAYLIGHT CIRCUIT	EMERGENCY CIRCUIT	ECD	EM
	1								
	2								
	3								
	4								
	5								
	6								
	7								
WOI	8								
WORKSHEET	9								
EET	10								
	11								
	12								
	13								
	14								
	15								
	16								
	17								
	18								
	19								
	20								
	Totals / Ord	ering Codes							

Combine to create Circuits & Zones ordering code

Enter as individual Factory Options

RUN CHART						
Run length (ft)	Housing Configuration Section Lengths	Run length (ft)	Housing Configuration Section Lengths	Run length (ft)		
9	5 + 4	21	8 + 8 + 5	33	8 + 8 + 8 -	
10	6 + 4	22	8 + 8 + 6	34	8 + 8 + 8 -	
11	7 + 4	23	8 + 8 + 7	35	8 + 8 + 8 -	
12	8 + 4	24	8 + 8 + 8	36	8 + 8 + 8 -	
13	8 + 5	25	8 + 8 + 5 + 4	37	8 + 8 + 8 -	
14	8 + 6	26	8 + 8 + 6 + 4	38	8 + 8 + 8 -	
15	8 + 7	27	8 + 8 + 7 + 4	39	8 + 8 + 8 -	
16	8 + 8	28	8 + 8 + 8 + 4	40	8 + 8 + 8 -	
17	8 + 5 + 4	29	8 + 8 + 8 + 5	41	8 + 8 + 8 +	
18	8 + 6 + 4	30	8 + 8 + 8 + 6	42	8 + 8 + 8 +	
19	8 + 7 + 4	31	8 + 8 + 8 + 7	43	8 + 8 + 8 + 8	
20	8 + 8 + 4	32	8 + 8 + 8 + 8	44	8 + 8 + 8 +	

Housing Configuration Section Lengths	length (ft)	Housing Configuration Section Lengths
8 + 8 + 8 + 5 + 4	45	8 + 8 + 8 + 8 + 8 + 5
8 + 8 + 8 + 6 + 4	46	8 + 8 + 8 + 8 + 8 + 6
8 + 8 + 8 + 7 + 4	47	8 + 8 + 8 + 8 + 8 + 7
8 + 8 + 8 + 8 + 4	48	8+8+8+8+8+8
8 + 8 + 8 + 8 + 5		
8 + 8 + 8 + 8 + 6	,	

+ 8 + 8 8 + 5 + 4 8 + 6 + 4 8 + 7 + 4

Standard run configurations, consult factory for custom configurations.