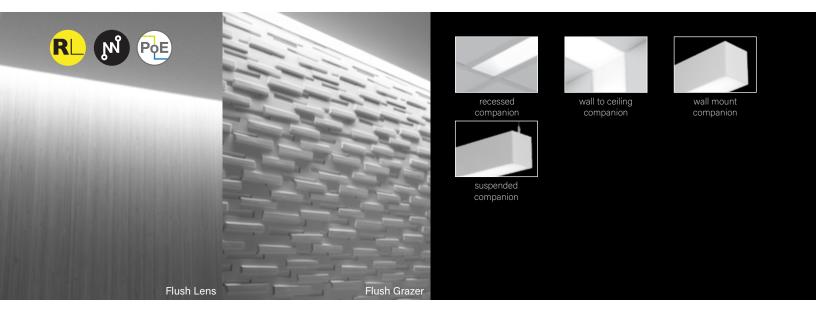
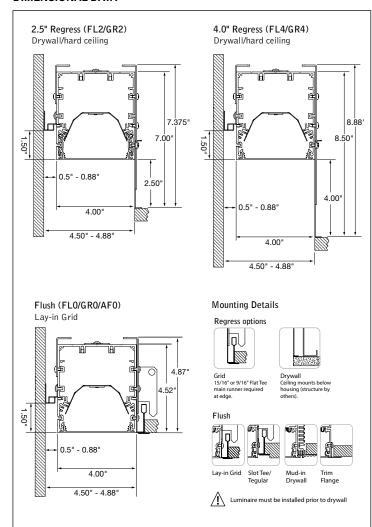
## Seem<sup>®</sup> 4





#### **DIMENSIONAL DATA**



#### **FEATURES**

Seem 4 perimeter provides a glowing transition between ceiling and wall with Flush, 2.5" regress or 4.0" regress lenses.

Grazer optic provides even vertical illumination and adds drama to a space by highlighting textured walls and architectural details.

Asymmetric Room Fill optic provides best efficacy and uniformity to light rooms and corridors from the perimeter.

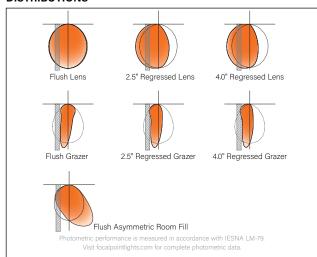
Adjustable housing option provides flexibility with +/- 3 inch adjustability for wall-to-wall illumination.

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.

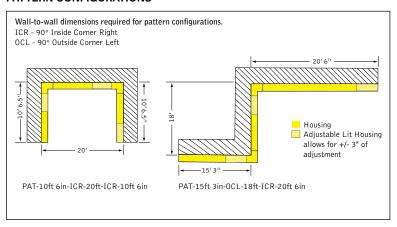
PoE compatible: Integrates with Power over Ethernet lighting systems via standard, low-voltage wires.

#### **DISTRIBUTIONS**



fixture: project:

#### PATTERN CONFIGURATIONS



#### 4' PERFORMANCE CHARTS

				LPW	
Lumen Output	Nominal Lumens	Tested System Watts	FL0	FL2	FL4
275LF	1100	12	99	92	89
375LF	1500	15	103	96	93
625LF	2500	25	103	96	93
875LF	3500	35	102	95	91
1000LF	4000	37	102	95	91

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

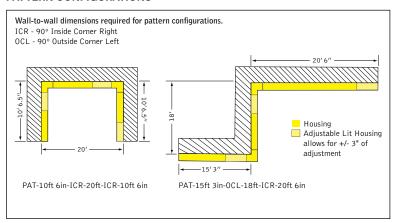
			LPW				
Lumen Output	Nominal Lumens	Tested System Watts	GR0	GR2	GR4	AF0	
275LF	1100	12	106	100	97	111	
375LF	1500	15	112	105	102	116	
625LF	2500	25	111	105	102	116	
875LF	3500	35	110	104	100	114	
1000LF	4000	37	110	104	100	114	

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

STANDARD WHITE		
Luminaire Series		FSM4PR
Seem 4 LED Perimeter Housing Type	FSM4PR	
Adjustable Lit Housing (Allows for +/- 3" adjustment to overall run length.	ALH	
3' minimum luminaire length.)  Fixed Housing	FXH	
(not recommended for wall to wall installations) Shielding		
Flush Lens* 2.5" Regress	FL0 FL2	
4.0" Regress Flush Grazer*	FL4 GR0	
2.5" Regress Grazer 4.0" Regress Grazer	GR2 GR4	
Flush Asymmetric Room Fil* *(Not available with Unlit Sliding Sleeves - SSB)	AF0	
Lumen Output 275 Lumens per foot	275LF	
(Not available with Lutron Drivers.)  375 Lumens per foot	375LF	
(Not available with LH1.) 625 Lumens per foot	625LF	
(3' minimum with LH1.) 875 Lumens per foot	875LF_	
1000 Lumens per foot Color Temperature	1000LF	
2700K, 80+ CRI <b>or</b> 90+ CRI 3000K, 80+ CRI <b>or</b> 90+ CRI	27K or 927K 30K or 930K	
3500K, 80+ CRI <b>or</b> 90+ CRI 4000K, 80+ CRI <b>or</b> 90+ CRI	35K or 935K 40K or 940K	
Circuits & Zones	1C	
1 Circuit, non-emergency Consult Ordering Guide on page 5 for multiple circuiting and zoning options	_C_Z_DL	
multiple circuiting and zoning options  Voltage		
120/277 UNV Volt Low Voltage	UNV LV	
Control System & Dimming Level		
0-10V - 10% Dimming 0-10V - 1% Dimming	LD1 L11	
Low Voltage, PoE compatible (No driver. Not available with EM or EC. LV Voltage only.)	LVN	
Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming	LH1	
DALI 1% Dimming Wattstopper DLM - 1% Dimming*	D11 DLM1	
(Not available with CP) Wattstopper Fixture Sensor* Low Density – 1% Dimming	LMFS1	
(Remote mounted sensor. See sensor layout guide)  Wattstopper Fixture Sensor*	LMFSD	
High Density – 1% Dimming (Remote mounted sensor. See sensor layout guide)		
Acuity nLight - 1% Dimming* (Not available with CP.)  Enlighted Smort Sensor, 19/ Dimmins*	NLT1	
Enlighted Smart Sensor - 1% Dimming* (Remote mounted sensor. See sensor layout guide) Encelium CLM Connected Lighting*	ENL1 CLM1	
Encelium CLM Connected Lighting* Module - 1% Dimming Current NX Enabled - 1% Dimming*	NXE1	
WaveLinx Pro – 1% Dimming*	WLXP	
(Remote mounted sensor. See sensor layout guide) *(3' minimum length. 7' minimum length with FXH & EM. Not available with ALH & EM. G & ST mounting only.)		
Mounting		
Flush Slot Tee / Tegular (FL0, GR0 Trim Flange Drywall	G ST	
& AF0) Trim Flange Drywall  Mud-in Trimless Drywall	TF XFF	
Regressed Grid (FL2, FL4, Trimless Drywall	G XF	
GR2 & GR4) Factory Options		
(See Ordering Guide on page 5 for ordering details for DC, EC, EM & ECD.)		
Chicago Plenum (Not available with flex whip)	CP	
Daylight Circuit Emergency Circuit	_DC EC	
Emergency Battery Packt	_EM	
Emergency Control Devicet	_ECD	
6' New York City Flex Whip (120V only) 6' New York City Flex Whip (277V only)	FNY1 FNY2	
6' Flex Whip	FW	
Fixed Housing with Unlit Sliding Sleeves (Set of two unlit 12" sleeves. Fixed housing in straight runs only. FL2, FL4, GR2 & GR4 only. 3' minimum luminiare length.)	SSB	
Finish		WH
Matte White Housing Luminaire Length	WH	ft in
Specify luminaire/row length in 1" increments	_ft _in	
(2' minimum length) Pattern Options		
Specify patterns based on wall-to-wall dimensions	PAT	
(See Pattern Configurations for example) Example: FSM4PR-ALH-FL2-625LF-35K-1C-	120-LD1-G-WH-PAT-	10-ICR-20-ICR-10

fixture: projec

#### PATTERN CONFIGURATIONS



### TW 4' PERFORMANCE CHARTS

				LPW	
Lumen Output	Nominal Lumens	Tested System Watts	FLO	FL2	FL4
275LF	1100	13.30	83.2	77.5	74.8
375LF	1500	17.34	86.5	80.6	77.7
625LF	2500	27.84	89.5	83.4	80.5
875LF	3500	37.22	94.2	87.7	84.7
1000LF	4000	42.39	94.4	0.88	84.9

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

				LPW					
	umen utput	Nominal Lumens	Tested System Watts	GRO	GR2	GR4	AF0		
2	75LF	1100	13.30	89.8	84.7	82.1	93.4		
3	75LF	1500	17.34	93.4	88.1	85.4	97.1		
6	25LF	2500	27.84	96.7	91.2	88.4	100.5		
8	75LF	3500	37.22	101.7	96.0	93.0	105.8		
10	000LF	4000	42.39	102.0	96.2	93.3	106.0		

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

#### Lumen Multipliers

#### Wattage Multipliers

CRI	Multiplier
+08	1.00
90+	0.89

CCT	Multiplier
2700K	1.00
3000K	0.92
3500K	0.88
4000K	0.86
5000K	0.85
5700K	0.87
6500K	0.90

**TUNABLE WHITE Luminaire Series** FSM4PR Seem 4 LED Perimeter FSM4PR **Housing Type** Adjustable Lit Housing ALH (Allows for +/- 3" adjustment to over 3' minimum lum Fixed Housing (not recommended for wall to wall installations) Shielding snielding
Flush Lens'
2.5" Regress
4.0" Regress
Flush Grazer'
2.5" Regress Grazer
4.0" Regress Grazer
Hush Asymmetric Room Fill'
available with Unlit Sliding Sleeves - SSB) FL2 FL4 GR0 GR2 \*(Not available w **Lumen Output** 275 Lumens per foot 275LF in with D1TW. 4' min with LT1.)
375 Lumens per foot 375LF 625 Lumens per foot 875 Lumens per foot\*
1000 Lumens per foot\*
\*(3' 6" min with ALH) 875LF 1000LF **Color Temperature** Tunable White: 2700-6500K, 80+ CRI 2765T Tunable White: 2700-6500K, 90+ CRI 92765T Circuits & Zones 1 Circuit, non-emergency Consult Ordering Guide on page 5 for multiple circuiting and zoning options \_C\_Z\_DL Voltage UNV 120/277 UNV Volt UNV **Control System & Dimming Level** Lutron T-Series - 1% Dimming IT1 DALI - 1% Dimming (DT6 control. Requires two addresses, one for intensity D1TW & one for CCT tuning. Consult factory for DT8.)

Acuity nLight - 1% Dimming+ NLT1 (Not available with CP)
Enlighted Smart Sensor - 1% Dimmingt ENL1 †(Consult factory) Mounting Lay-in Grid Slot Tee / Tegular G (FL0, GR0 & AF0) Trim Flange Drywall Mud-in Trimless Drywall Regressed Grid Trimless Drywall (FL2, FL4, GR2 & GR4) **Factory Options** (See Ordering Guide on page 5 for ordering details for DC, EC, EM & ECD Chicago Plenum Daylight Circuit \_DC Emergency Circuit \_EC Emergency Battery Pack† \_EM Emergency Control Device† \_ECD †(Consult factory) 6' New York City Flex Whip (120V only) FNY1 6' New York City Flex Whip (277V only) FNY2 6' Flex Whip FW Fixed Housing with Unlit Sliding Sleeves SSB (Set of two unlit 12" sleeves. Fixed housing in straight runs only. FL2, FL4, GR2 & GR4 only. 3' minimum luminiare length.) Finish WH Matte White Housing WH **Luminaire Length** ft in Specify luminaire/row length in 1" increments
(2' minimum length)

Example: FSM4PR-ALH-FL2-625LF-35K-1C-120-LD1-G-WH-PAT-10-ICR-20-ICR-10

PAT

**Pattern Options** 

Specify patterns based on wall-to-wall dimensions (See Pattern Configurations for example)

#### **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 and drivers are replaceable from below.

#### Construction

One piece extruded aluminum housing. 20 Ga. steel end caps, bulkheads, sliding sleeve and regress leg. 4' unit weight: 19 lbs.

#### Optio

Reflectors fabricated of 22 Ga. steel finished in High Reflectance White powder coat. Extruded acrylic lens .085" thick with satin finish, up to 8' continuous.

#### Flectrical

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. Dimming range 100% to 10%.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

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

 $\begin{tabular}{lll} Reported: & L70 > 61,000 hours & Calculated: L70 at > 480,000 hours \\ & L90 > 61,000 hours & L90 at > 128,000 hours \\ \end{tabular}$ 

(Derived from EPA T M-21 calculator. Based on typical conditions, consult factory for additional data.)

#### Reliability

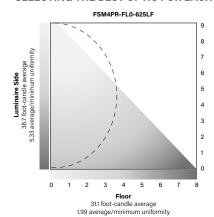
At Focal Point, our products are designed to stand the test of time. Each luminaire is engineered using superior components, manufactured with the utmost care and rigorously tested. Contact us for reliability data.

#### Warranty

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

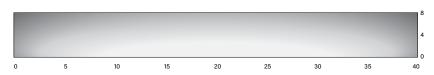
#### SELECTING THE BEST OPTIC FOR EACH APPLICATION

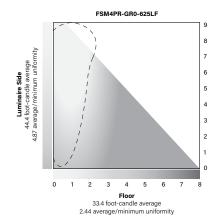
8' W x 40' L x 9' H Corridor | 80/50/20 Reflectances | 0.9 Light Loss Factor



#### Standard Lens

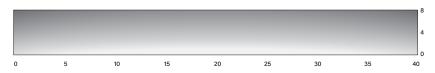
The standard optic results in a Lambertian light distribution that provides uniform illumination. It is ideal to create a glowing transition between the walls and ceiling, adding dimension to the space.

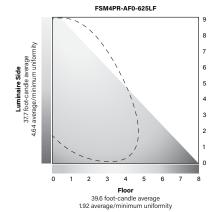




#### Grazer Lens

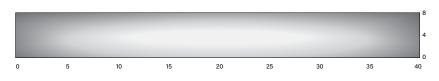
The grazer optic closely grazes walls, highlighting textures and architectural details. It is intended to provide even illumination and deliver maximum visual impact on the vertical surfaces.





#### Asymmetric Room Fill Lens

The asymmetric room fill optic projects light into the space to evenly illuminate horizontal planes. It is ideal to light rooms and corridors from the perimeter, resulting in superior efficacy and uniformity on the floor.





### Seem<sup>®</sup> 4 Perimeter

I FD

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
<b>La legrand</b> °	DLM1	LMFC-011	DLM	DLM	Enabled	No	Wired	Advance by Signify, Optotronic by eldoLED
WATTSTOPPER*	LMFS1	LMFS-601 & LMFI-111	DLM	DLM	Enabled	No	Wireless	Advance by Signify
and the second	LMFSD	LMFS-601	Wireless	DLIVI	Lilabled	NO	Wireless	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
@CRESTRON.	D11	Specified	DALI	Crestron Zūm Wireless &	Enabled	Enabled No	Wired	eldoLED ECOdrive
Connections located und access panel.	, L11	Driver	0-10V	SpaceBuilder				Advance by Signify
ENCELIUM	CLM1	ZBHA-CLM- DIM-ENC	ZigBee	Encelium X Light Management System	Enabled	No	Wireless	Optotronic by eldoLED Advance by Signify
€ Enlighted	ENL1	SU-5E-IOT	Enlighted RF	Enlighted	Integrated	Yes	Wireless	Advance by Signify
Connectio located un access pa	s eler el. LH1	LDE1	EcoSystem	Quantum, Energi Savr Node, Energi TriPak	Enabled	No	Wired	Lutron Hi-Lume
nLight Connection located un excess participation of the content o	s stered NLT1	nEPS-60-IO	nLight	nLight	Enabled	No	Wired	eldoLED ECOdrive, eldoLED SOLOdrive
LIGHTING CONTROLS	NXE1	NXFM-LV	NX	NX Distributed Intelligence	Enabled	No	Wired	Optotronic by eldoLED

<sup>\*</sup>Not all compatible networks may be listed. \*\*For performance data and additional control system details please visit the connected solutions manufacturer websites. Primary drivers are listed in **bold.** To specify a particular driver please consult factory. †Controls systems supplied by others.

## 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	RED ELECTRICAL F	EED,	FACTORY OPTIONS			
т	HOUSING	SECTION		NORMAL POWER		SEPARATI	ELECTRICAL FEE	os	
	SECTION LENGTH	LENGTH	SWITCHING CIRCUIT	DIMMING ZONE	DAYLIGHT ZONE	DAYLIGHT CIRCUIT	EMERGENCY CIRCUIT	ECD	EM
EXAMPLE	1	8	1C	1Z					1EM
Ę	2	8	2C	2Z					
	3	8	2C	2Z					
	4	8				1DC			
	Totals / Ord	ering 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	LENGTH:		JOB NAME:			FIXTURE TYPE:				
		SHAR	SHARED ELECTRICAL FEED,			FACTORY OPTIONS					
	HOUSING	SECTION		NORMAL POWER		SEPARA	TE ELECTRICAL FE	EDS			
	SECTION	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	Run lengt (ft)	th 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.