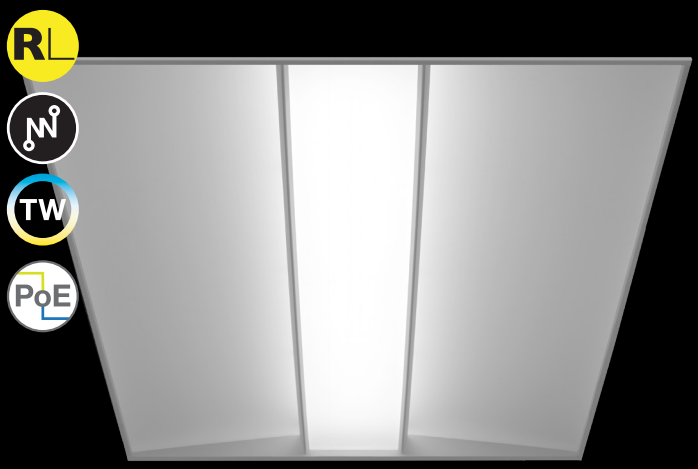
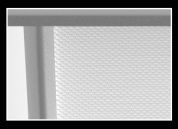
Equation® 2 2x4

LED

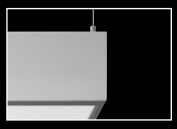
FOCAL POINT®



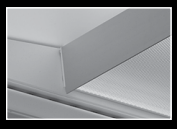
opal acrylic lens



MicroGlow lens

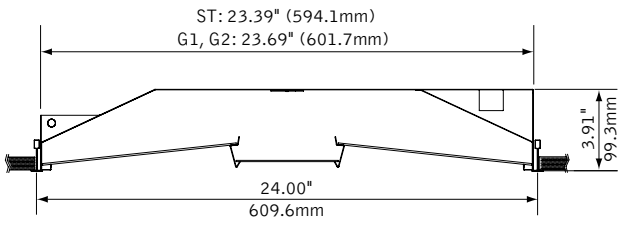


suspended or surface mount



air return

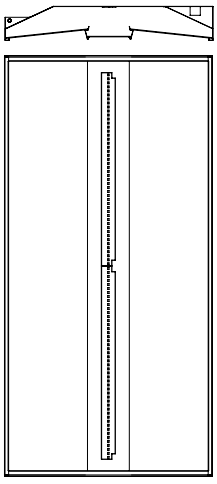
DIMENSIONAL DATA



Overall height of luminaire:
with air return is 4.62"–4.89"
with L1TW option 4.52"

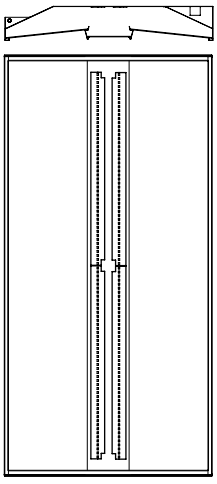
led options

Standard



2 LED boards

High Efficiency



4 LED boards

FEATURES

Equation™ 2 blends sleek aesthetics with uniform diffuse illumination.

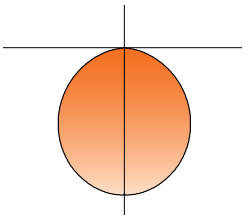
Center diffuser features MicroGlow prismatic lens for brightness control and visual comfort. Opal acrylic center lens may also be specified.

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.

PERFORMANCE



Opal Acrylic Lens

Delivered Lumens: 5000lm

Total System Watts: 47W

PRODUCT OVERVIEW

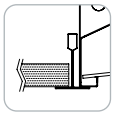
Lumen Output:	4000-8500lm
Wattage:	37-85W
LPW:	86-112
SDCM:	3

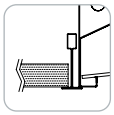
Photometric performance is measured in accordance with IESNA LM-79. Visit focalpointlights.com for complete photometric data..

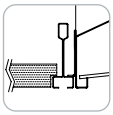
fixture: project:

MOUNTING INFORMATION

grid

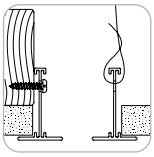

G1
15/16"

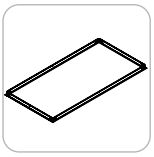

G2
9/16"


"ST" slot tee
9/16"

drywall frame kit

specify "F" Drywall Frame Kit for drywall ceiling conditions.


Use tie-wire or screws to secure frame kit.


Cut out dimensions:
2': Min: 24.25"
Max: 24.563"
4': Min: 48.25"
Max: 48.563"

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, 4000K or Tunable White (2700K-6500K), with CRI>80 or CRI>90, 3SDCM. 3500K and 4000K with CRI>90 have a cyanosis observation index (COI) of 3.3 or less. Contact factory for additional color temperature and CRI options. 0-10V dimming driver standard. LED modules and drivers are replaceable from below.

Construction

One piece 24 Ga. steel reflector and housing. Bottom access 24 Ga. steel driver compartment. Positional brackets supplied as standard. Standard weight: 27.3 lbs. Surface-mount/suspended weight: 35.5 lbs.

Optic

24 Ga. steel reflectors finished in matte satin white powder coat. .080" thick frosted white acrylic diffusers. Center shielding options include .080" thick opal acrylic lens or MicroGlow prismatic lens with optical filter overlay.

Electrical

Standard 120-277V driver includes 0-10V analog dimming. Power factor > .9. Optional Lutron EcoSystem or Step-dimming drivers available. PoE compatible: Integrates with Power over Ethernet lighting systems via standard, low-voltage wires.

Emergency

Emergency battery output—10 watts for 90 minutes. Emergency Circuit with Connected Solutions (DLM1, LMFS1, LMFSD, ENL1, CLM1, NXE1, WLXP) requires a UL924 compliant device, consult factory.

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

Reported: L70 at >61,000 hours
L80 at >61,000 hours
Calculated: L70 at 460,000 hours
L80 at 280,000 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.

STANDARD WHITE PERFORMANCE CHART

Lumen Output		Tested System Watts	LPW
4000	4000L	33	119
	4000LH	31	126
4500	4500L	39	112
	4500LH	34	129
5000	5000L	45	106
	5000LH	37	129
5500	5500L	51	106
	5500LH	43	124
6000	6000LH	47	123
6500	6500LH	51	122
7000	7000LH	55	121
7500	7500LH	59	120
8000	8000LH	63	119
8500	8500LH	67	118

Based on 3500K, 80 CRI, Opal Acrylic Lens. Lumen multipliers: 90+ CRI = 0.87, MicroGlow Prismatic Lens = 0.94. Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%.

STANDARD WHITE

Luminaire Series			**FEQ2**
Equation 2		FEQ2	
Nominal Size			**24**
2' x 4'		24	
Shielding			
Opal Acrylic Lens		AC	
MicroGlow Prismatic Lens		MG	
Lumen Output			
Standard Output	4000 Lumens	4000L	
	4500 Lumens	4500L	
	5000 Lumens	5000L	
	5500 Lumens	5500L	
High Efficiency	4000 Lumens	4000LH	
	4500 Lumens	4500LH	
	5000 Lumens	5000LH	
	5500 Lumens	5500LH	
	6000 Lumens	6000LH	
	6500 Lumens	6500LH	
	7000 Lumens	7000LH	
	7500 Lumens	7500LH	
	8000 Lumens	8000LH	
	8500 Lumens	8500LH	
Color Temperature			
2700K, 80+ CRI **or** 90+ CRI		27K **or** 927K	
3000K, 80+ CRI **or** 90+ CRI		30K **or** 930K	
3500K, 80+ CRI **or** 90+ CRI		35K **or** 935K	
4000K, 80+ CRI **or** 90+ CRI		40K **or** 940K	
Circuit			**1C**
Single Circuit		1C	
Voltage			
UNV 120/277 Volt		UNV	
347 Volt (Transformer required for all drivers except LD1 and CLM1. Not available with EM)		347	
Low Voltage		LV	
Control System & Dimming Level			
0-10V - 10% Dimming (Not Right Light as standard, consult factory)		LD1	
0-10V - 1% Dimming		L11	
Low Voltage, PoE compatible (No driver. Not available with EM. LV Voltage only.)		LVN	
Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming Step Dimming		SD5	
Wattstopper DLM - 1% Dimming (Not available with CP.)		DLM1	
Wattstopper Fixture Sensor Low Density – 1% Dimming		LMFS1	
Wattstopper Fixture Sensor High Density – 1% Dimming		LMFSD	
Enlighted Smart Sensor - 1% Dimming		ENL1	
Encelium CLM Connected Lighting Module - 1% Dimming (Maximum 5500 Lumens)		CLM1	
Current NX Enabled – 1% Dimming (Not available with CP.)		NXE1	
WaveLinx Pro – 1% Dimming		WLXP	
Mounting			
24" Aircraft Cable		C24	
48" Aircraft Cable		C48	
96" Aircraft Cable		C96	
Drywall Frame Kit (Not available with CLM1, DLM1, NLT1 or NXE1.) (Cut out dimensions: Min: 24.25"/Max: 24.563" Min: 48.25"/Max: 48.563")		F	
15/16" Grid		G1	
9/16" Grid		G2	
Slot Tee		ST	
Surface Mount (Not available with CLM1, DLM1, NLT1 or NXE1.)		SM	
Factory Options			
Air Return (Overall height with Air Return is 4.62"–4.89")		AR	
Chicago Plenum (Not available with flex whip)		CP	
Emergency Battery† with Integral Test Switch (Cannot combine with 347V)		EM	
6' New York City Flex Whip (120V)		FNY1	
6' New York City Flex Whip (277V)		FNY2	
6' Flex Whip		FW	
Finish			**WH**
Matte Satin White		WH	

QS 5/10† DAY

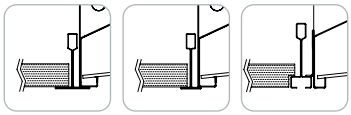
Options in orange qualify for the Quikckship program. 5-day up to 100 pieces, 10-day up to 300 pieces. Emergency Battery is 10-day only. Refer to Quickship Guide for complete details.

Focal Point LLC reserves the right to change specifications for product improvement without notification.

fixture: project:

MOUNTING INFORMATION

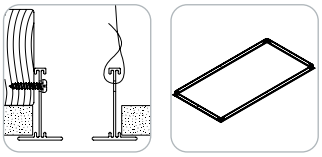
grid



G1 15/16" G2 9/16" "ST" slot tee 9/16"

drywall frame kit

specify "F" Drywall Frame Kit for drywall ceiling conditions.



Use tie-wire or screws to secure frame kit.

Cut out dimensions:
2': Min: 24.25" Max: 24.563"
4': Min: 48.25" Max: 48.563"

TUNABLE WHITE PERFORMANCE CHART

Lumen Output		Delivered Lumens	Tested System Watts	LPW
4000	4000L	3998	41	98
	4000LH	4002	40	101
4500	4500L	4497	46	98
	4500LH	4510	45	101
5000	5000L	5011	51	98
	5000LH	5015	50	101
5500	5500L	5517	61	91
	5500LH	5517	59	94
6000	6000LH	6061	64	95
6500	6500LH	6512	67	98
7000	7000LH	7006	71	98
7500	7500LH	7519	77	98
8000	8000LH	8006	82	98
8500	8500LH	8512	86	99

Based on 2700K, 80 CRI, Opal Acrylic Lens. Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%.

Lumen Multipliers

CRI	Multiplier
80+	1.00
90+	0.89

Shielding	Multiplier
AC	1.00
MG	0.94

Wattage Multipliers

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 — FEQ2
Equation 2 — FEQ2

Nominal Size — 24
2' x 4' — 24

Shielding
Opal Acrylic Lens — AC
MicroGlow Prismatic Lens — MG

Lumen Output

Standard Output
4000 Lumens — 4000L
4500 Lumens — 4500L
5000 Lumens — 5000L
5500 Lumens — 5500L

High Efficiency
4000 Lumens — 4000LH
4500 Lumens — 4500LH
5000 Lumens — 5000LH
5500 Lumens — 5500LH
6000 Lumens — 6000LH
6500 Lumens — 6500LH
7000 Lumens — 7000LH
7500 Lumens — 7500LH
8000 Lumens — 8000LH
8500 Lumens — 8500LH

Color Temperature
Tunable White: 2700-6500K, 80+ CRI — 2765T
Tunable White: 2700-6500K, 90+ CRI — 92765T

Circuit — 1C
Single Circuit — 1C

Voltage — UNV
UNV 120/277 Volt — UNV

Control System & Dimming Level
0-10V - 1% Dimming (Not available with surface or cable mount. Overall luminaire height increases to 4.52") — L1TW
DALI - 1% Dimming (Default driver offers DT6 control. It requires two addresses, one for intensity & one for CCT tuning. Consult factory for DT8. Extended lead time applies.) — D1TW

Mounting
24" Aircraft Cable (Not available with L1TW) — C24
48" Aircraft Cable (Not available with L1TW) — C48
96" Aircraft Cable (Not available with L1TW) — C96
Drywall Frame Kit (Cut out dimensions: Min: 24.25"/Max: 24.563" Min: 48.25"/Max: 48.563") — F
15/16" Grid — G1
9/16" Grid — G2
Slot Tee — ST
Surface Mount (Not available with L1TW) — SM

Factory Options
Air Return (Overall height with Air Return is 4.62"–4.89") — AR
Chicago Plenum (Not available with flex whip) — CP
Emergency Battery with Integral Test Switch — EM
6' New York City Flex Whip (120V) — FNY1
6' New York City Flex Whip (277V) — FNY2
6' Flex Whip — FW

Finish — WH
Matte Satin White — WH

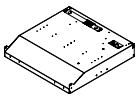
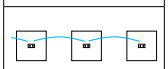
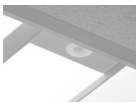
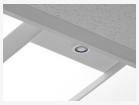
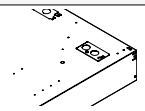
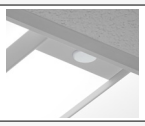
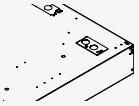
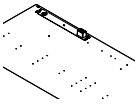
Focal Point LLC reserves the right to change specifications for product improvement without notification.

CONNECTED® SOLUTIONS

Equation™ 2 2x4

LED

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.†

Connected Solution	Ordering Code	Model #**	Protocol	Compatible Networks*	Occupancy & Daylight	Temperature Reporting	Communication to Luminaire	Drivers
legrand® / WATTSTOPPER® 	DLM1	LMFC-011	DLM	DLM	Enabled	No	Wired 	**Advance by Signify**, Optotronic by eldoLED
	LMFS1	LMFS-601 & LMFI-111	DLM Wireless	DLM	Enabled	No	Wireless	**Advance by Signify**
	LMFSD	LMFS-601						**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 	L11	Specified Driver	0-10V	Crestron Zūm Wireless & SpaceBuilder	Enabled	No	Wired	**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**
LUTRON 	LH1	LDE1	EcoSystem	Quantum, Energi Savr Node, Energi TriPak	Enabled	No	Wired	**Lutron Hi-Lume**
NX LIGHTING CONTROLS 	NXE1	NXFM-LV	NX	NX Distributed Intelligence	Enabled	No	Wired	**Optotronic by eldoLED**

*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.