Equation™ 2 2x2

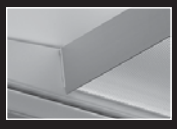
LED

FOCAL POINT®

opal acrylic lens

MicroGlow lens

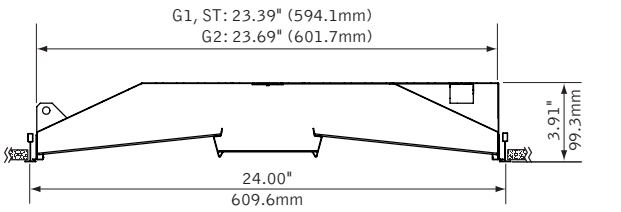
suspended or surface mount



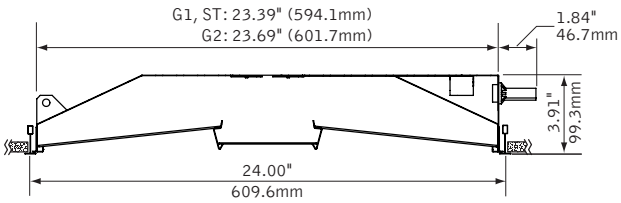
air return

DIMENSIONAL DATA

2000 - 5000 Lumens



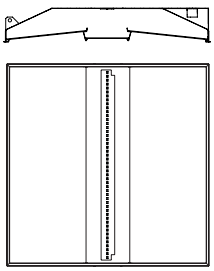
5500 - 7000 Lumens
thermal protector required



Overall height of luminaire with air return is 4.60"

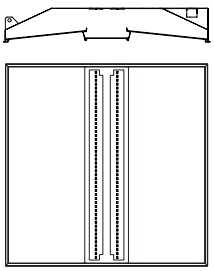
led options

Standard



1 LED board

High Efficiency



2 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.

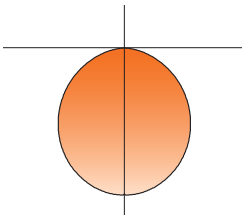
Premium LEDs operate efficiently to achieve excellent thermal management and reliable operation.

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

Preferred Light: Lighting for better color rendition and human preference.

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

PERFORMANCE



Opal Acrylic Lens

Delivered Lumens: 3500lm

Total System Watts: 35W

PRODUCT OVERVIEW

Lumen Output:	2000-7000lm
Wattage:	20-79W
LPW:	89-109
SDCM:	3

Photometric performance is measured in accordance with IESNA LM-79. Visit focalpointlights.com for complete photometric data. Visit designlights.org/QPL for model specifics.

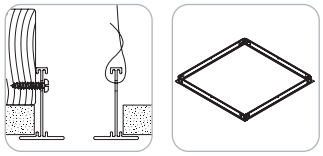
fixture: project:

MOUNTING INFORMATION

grid

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"

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, 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: 15.4 lbs. Surface-mount/suspended weight: 19 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 DALI, 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 (NLT1, ENL1, CLM1, CLMZ1, DLM1) 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 190,000 hours
L80 at 115,000 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.

PERFORMANCE CHART

Lumen Output		Tested System Watts	LPW
2000	2000L	18	106
2500	2500L	24	100
	2500LH	23	105
3000	3000L	30	97
	3000LH	27	107
3500	3500L	36	95
	3500LH	32	107
4000	4000LH	37	105
4500	4500LH	43	103
5000	5000LH	49	100
5500	5500LH	56	94
6000	6000LH	63	95
6500	6500LH	71	92
7000	7000LH	79	89

Based on 3500K, 80 CRI, Opal Acrylic Lens. Lumen multipliers: Preferred Light = 0.65, 90+ CRI = 0.87, MicroGlow Prismatic Lens = 0.94. Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%.

ORDERING

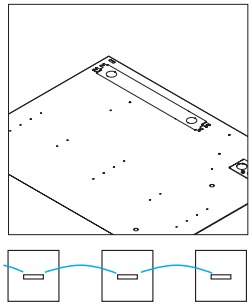
Luminaire Series		**FEQ2**
Equation 2	FEQ2	
Nominal Size		**22**
2' x 2'	22	
Shielding		
Opal Acrylic Lens	AC	
MicroGlow Prismatic Lens	MG	
Lumen Output		
Standard		
2000 Lumens	2000L	
2500 Lumens	2500L	
3000 Lumens	3000L	
3500 Lumens	3500L	
High Efficiency		
2500 Lumens	2500LH	
3000 Lumens	3000LH	
3500 Lumens	3500LH	
4000 Lumens	4000LH	
4500 Lumens	4500LH	
5000 Lumens	5000LH	
5500 Lumens*	5500LH	
6000 Lumens*	6000LH	
6500 Lumens*	6500LH	
7000 Lumens* (*Grid, Slot Tee Only)	7000LH	
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	
3500K, Preferred Light	P35K	
Circuit		**1C**
Single Circuit	1C	
Voltage		
UNV 120/277 Volt (Not available with 5500LH, 6000LH, 6500LH & 7000LH)	UNV	
120 Volt	120	
277 Volt	277	
347 Volt (Not available with SD5, CLM1, CLMZ1, DLM1, ENL1 or NLT1. Transformer required for all drivers except LD1.)	347	
Low Voltage	LV	
Control System & Dimming Level		
0-10V - 10% Dimming	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	LH1	
Lutron 5-Series EcoSystem (LDE5) - 5% Dimming	LU5	
DALI - 1% Dimming	D11	
Step Dimming	SD5	
Acuity nLight - 1% Dimming (Not available with EM or CP.)	NLT1	
Enlighted Smart Sensor - 1% Dimming	ENL1	
Osram Connected Lighting Module for ENCELIUM systems - 1% Dimming (Compatible with Osram ENCELIUM and ENCELIUM EDGE systems only. Not available with EM.)	CLM1	
Osram Connected Lighting Module for ZigBee Wireless Networks - 1% Dimming (Not compatible with Osram ENCELIUM systems. Not available with EM.)	CLMZ1	
Wattstopper DLM - 1% Dimming (Not available with EM.)	DLM1	
Mounting		
24" Aircraft Cable	C24	
48" Aircraft Cable	C48	
96" Aircraft Cable	C96	
Drywall Frame Kit (NLT1, ENL1, CLM1, CLMZ1 & DLM1 not available) (Cut out dimensions: Min: 24.25"/Max: 24.563")	F	
15/16" Grid	G1	
9/16" Grid	G2	
Slot Tee	ST	
Surface Mount (NLT1 & DLM1 not available)	SM	
Factory Options		
Air Return (Overall height with Air Return is 4.62"–4.89")	AR	
Chicago Plenum	CP	
Emergency Battery with Integral Test Switch (Cannot combine with 347V Not available with 5500LH, 6000LH, 6500LH & 7000LH)	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 Quickship program. 5-day up to 100 pieces, 10-day up to 300 pieces. Refer to Quickship Guide for complete details.

CONNECTED™ SOLUTIONS

Equation™ 2 2x2 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.†



nLIGHT

nLight® provides a two-way wired digital lighting system allowing for on/off and dimming functionality, occupancy sensing, and multi-zone daylight harvesting.

Acuity nLight - 1% Dimming (NLT1)
Acuity Model #nEPS-60-IO

CAT-5 Cable provided by others.Serial labels will be provided on outside of luminaires and control unit.

enlighted
A Siemens Company

Enlighted smart sensor allows for occupancy sensing, daylight harvesting, energy usage, temperature and light level control. Communicates wirelessly with the Enlighted network.

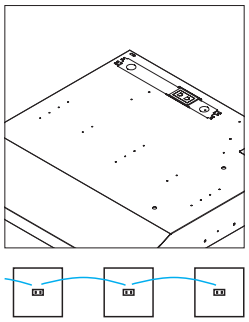
Enlighted Smart Sensor - 1% Dimming (ENL1)
Enlighted Model #CS-D2

OSRAM

Connected Lighting Module (CLM) enables each luminaire to be independently controlled and configured. Communicates wirelessly with Daintree Networks®, Osram ENCELIUM®, Osram ENCELIUM EDGE™, and other networks using the ZigBee® HA communication protocol to allow for on/off and dimming functionality, occupancy sensing and multi-zone daylight harvesting.

Osram CLM - 1% Dimming (CLM1 & CLMZ1)
Osram Model #ZBHA-CLM DIM

Serial labels will be provided on outside of luminaires and control unit.

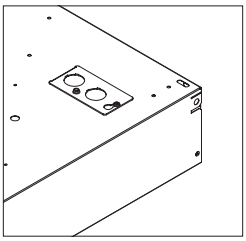


legrand® WATTSTOPPER®

A Digital Lighting Management (DLM) system that provides two-way wired communication between networked luminaires and control system to allow for on/off and dimming functionality, occupancy sensing and multi-zone daylight harvesting.

Wattstopper DLM - 1% Dimming (DLM1)
Wattstopper Model #LMFC-011

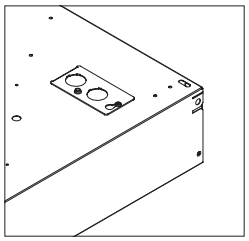
CAT-5 Cable provided by others. Serial labels will be provided on outside of luminaires and control unit.



LUTRON®

A two-way digital network that enables on/off and dimming functionality, occupancy sensing, and multi-zone daylight harvesting working with Quantum®, Energi Savr Node™, and Energi TriPak® using EcoSystem® communication protocol.

Lutron Hi-Lume EcoSystem - 1% Dimming (LH1)
Lutron Model #LDE1
Lutron 5-Series EcoSystem - 5% Dimming (LU5)
Lutron Model #LDE5



CRESTRON®

A two-way digital network that enables on/off and dimming functionality, occupancy sensing, and multi-zone daylight harvesting. Communicates with Zūm wireless and SpaceBuilder working with Zūm hub scheduling or FUSION management.

DALI - 1% Dimming (D11)
0-10V - 1% Dimming (L11)
Note: 0-10V is not a digital network but is compatible with Creston Zūm™ system.

CONNECTED SOLUTIONS DETAILS

Connected Solution	Model #	Protocol	Compatible Networks*	Occupancy	Daylight	Temperature Reporting	Communication to Luminaire	Drivers
Acuity nLight (NLT1)	nEPS-60-IO**	nLight	nLight	Enabled	Enabled	No	Wired	**eldoLED ECOdrive,** eldoLED SOLOdrive
Crestron (D11, L11)	Specified Driver	DALI 0-10V	Crestron Zūm Wireless & SpaceBuilder	Enabled	Enabled	No	Wired	**eldoLED ECOdrive (DALI), Advance by Signify (0-10V)**
Enlighted Smart Sensor (ENL1)	CS-D2**	Enlighted RF	Enlighted	Integrated	Integrated	Yes	Wireless	**Advance by Signify**, Osram Dexal
Legrand Wattstopper DLM (DLM1)	LMFC-011**	DLM	DLM	Enabled	Enabled	No	Wired	**Advance by Signify**, Osram Optotronic
Lutron EcoSystem (LH1 & LU5)	LDE1,** LDE5**	EcoSystem	Quantum, Energi Savr Node, Energi TriPak	Enabled	Enabled	No	Wired	**Lutron Hi-Lume Lutron 5-Series**
Osram CLM for ENCELIUM systems (CLM1)	ZBHA-CLM**	ZigBee HA	Osram ENCELIUM & ENCELIUM EDGE	Enabled	Enabled	No	Wireless	**Osram Optotronic**
Osram CLM for ZigBee Wireless Networks (CLMZ1)	ZBHA-CLM**	ZigBee HA	Daintree Networks & open ZigBee Networks	Enabled	Enabled	No	Wireless	**Osram Optotronic**

*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.