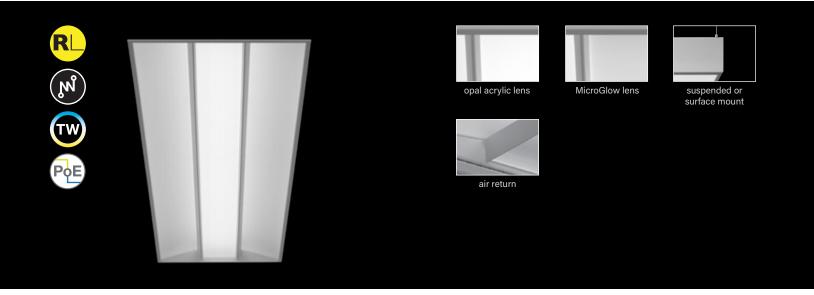
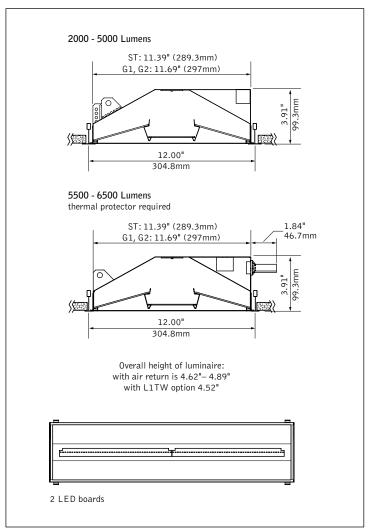
# Equation™ 2 1x4





## **DIMENSIONAL DATA**



## **FEATURES**

Equation <sup>™</sup> 2 blends sleek aesthetics with uniform diffuse illumination.

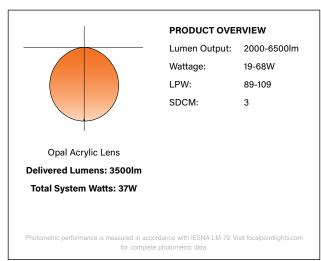
Center diffuser features MicroGlow prismatic lens for brightness control and visual comfort. Opal acrylic center lens may also be specified.

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

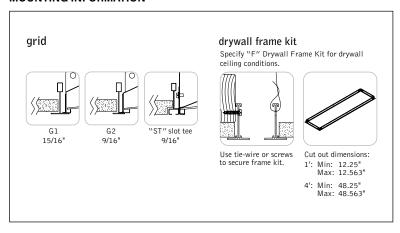
Connected Solutions: Integrates with wired and wireless building lighting control systems.

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

## **PERFORMANCE**



## MOUNTING INFORMATION



## **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: 19.4 lbs. Surface-mount/suspended weight: 24.2 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.

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 battery output—10 watts for 90 minutes. Emergency Circuit with Connected Solutions (DLM1, LMFS1, LMFSD, NLT1, 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.

Polyester powder coat applied over a multi-stage pre-treatment.

## Lumen Maintenance

Reported: L70 at >61,000 hours Calculated: L70 at 480,000 hours L80 at >61,000 hours L80 at 285,000 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	Lumen Output	Tested System Watts	LPW
2000	17	113	4500	41	107
2500	22	111	5000	46	107
3000	27	110	5500	60	92
3500	32	109	6000	67	89
4000	36	108	6500	76	86

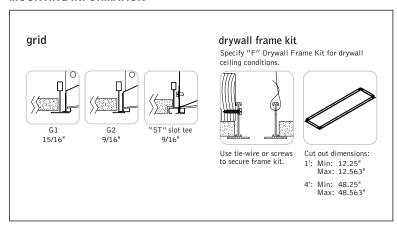
Based on 3500K, 80 CRI, Opal Acrylic Lens. Lumen multipliers: 90 + CRI = 0.87, MicroGlow Prismatic Lens = 0.95. Lumen output may vary +/-5%. Actual wattage may vary +/-5%.

STANDARD WHITE Luminaire Series		FEQ2
Equation 2	FEQ2	
Nominal Size	14	14
Shielding	17	
Opal Acrylic Lens	AC	
MicroGlow Prismatic Lens	MG	
Lumen Output 2000 Lumens	2000L	
2500 Lumens	2500L	
3000 Lumens 3500 Lumens	3000L 3500L	
4000 Lumens	4000L	
4500 Lumens 5000 Lumens	4500L 5000L	
5500 Lumens*	5500L	
6000 Lumens* 6500 Lumens*	6000L 6500L	
(*Grid, Slot Tee Only)	00002	
Color Temperature		
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	35K or 935K	
4000K, 80+ CRI or 90+ CRI	40K or 940K	40
Circuit Single Circuit	1C	1C
Voltage	10	
UNV 120/277 Volt	UNV	
(5000 Lumens max.) 120 Volt	120	
277 Volt	277	
347 Volt (Transformer required for all drivers except	347	
LD1 and CLM1. Not available with EM.)  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	LH1	
DALI - 1% Dimming Step Dimming	D11 SD5	
Wattstopper DLM - 1% Dimming	DLM1	
(Not available with CP) Wattstopper Fixture Sensor	LMFS1	
Low Density – 1% Dimming Wattstopper Fixture Sensor	LMFSD	
High Density – 1% Dimming Acuity nLight - 1% Dimming	NLT1	
(Not available with CP) Enlighted Smart Sensor - 1% Dimming	ENL1	
Encelium CLM Connected Lighting	CLM1	
Module - 1% Dimming Current NX Enabled - 1% Dimming (Not available with CP)	NXE1	
WaveLinx Pro – 1% Dimming	WLXP	
Mounting	C24	
24" Aircraft Cable 48" Aircraft Cable	C24 C48	
96" Aircraft Cable	C96	
Drywall Frame Kit (Not available with CLM1 DLM1 NLT1 or NXE1)	F	
(Not available with CLM1, DLM1, NLT1 or NXE1.) (Cut out dimensions: Min: 12.25"/Max: 12.563" Min: 48.25"/Max: 48.563")		
15/16" Grid 9/16" Grid	G1 G2	
Slot Tee	ST	
Surface Mount (Not available with CLM1, DLM1, NLT1 or NXE1.)	SM	
Factory Options	A.D.	
Air Return (Overall height with Air Return is 4.62"–4.89")	AR	
Chicago Plenum (Not available with flex whip)	СР	
Emergency Battery with Integral Test Switch	EM	
(Cannot combine with 347V)		
6' New York City Flex Whip (120V)	FNY1	
6' New York City Flex Whip (277V)	FNY2	
6' Flex Whip Finish	FW	WH
Matte Satin White	WH	



fixture: project:

## MOUNTING INFORMATION



## **TUNABLE WHITE PERFORMANCE CHART**

Lumen Output	Delivered Lumens	Tested System Watts	LPW
2000L	2001	24	82
2500L	2508	30	83
3000L	3009	35	87
3500L	3503	40	87
4000L	4010	46	87
4500L	4508	52	88
5000L	4999	62	81
5500L	5500	69	80
6000L	6011	75	80
6500L	6478	82	79

Based on 2700K, 80 CRI, Opal Acrylic Lens. Lumen output may vary  $\pm$  5%. Actual wattage may vary  $\pm$  5%.

## **Lumen Multipliers**

CRI	Multiplier
80+	1.00
90+	0.89
Shielding	Multiplier

Shielding	Multiplier
AC	1.00
MG	0.94

## Wattage Multipliers

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



TUNABLE WHITE		
W Luminaire Series		FEQ2
Equation 2	FEQ2	
Nominal Size		14
1' x 4'	14	
Shielding		
Opal Acrylic Lens MicroGlow Prismatic Lens	AC MG	
	IVIG	
Lumen Output 2000 Lumens	2000L	
2500 Lumens	2500L	
3000 Lumens	3000L	
3500 Lumens	3500L	
4000 Lumens 4500 Lumens	4000L 4500L	
5000 Lumens	5000L	
5500 Lumens*	5500L	
6000 Lumens* 6500 Lumens*	6000L 6500L	
(*Grid, Slot Tee Only)	0300L	
Color Temperature		
Tunable White: 2700-6500K, 80+ CRI	2765T	
Tunable White: 2700-6500K, 90+ CRI	92765T	
Circuit		1C
Single Circuit	1C	
Voltage		
UNV 120/277 Volt (5000 Lumens max.)	UNV	
120 Volt	120	
277 Volt	277	
Control System & Dimming Level		
0-10V - 1% Dimming (Not available with surface or cable mount. Overall luminaire height increases to 4.52")	L1TW	
Lutron T-Series - 1% Dimming	LT1	
DALI - 1% Dimming DT6 control. Requires two addresses, one for intensity &	D1TW	
one for CCT tuning. Consult factory for DT8.)		
Mounting	C24	
24" Aircraft Cable (Not available with L1TW) 48" Aircraft Cable (Not available with L1TW)	C24 C48	
96" Aircraft Cable (Not available with L1TW)	C96	
Drywall Frame Kit	F	
(Cut out dimensions: Min: 12.25"/Max: 12.563" Min: 48.25"/Max: 48.563")		
15/16" Grid	G1	
9/16" Grid Slot Tee	G2 ST	
Surface Mount (Not available with L1TW)	SM	
Factory Options		
Air Return	AR	
(Overall height with Air Return is 4.62"-4.89")		
Chicago Plenum (Not available with flex whip)	СР	
Emergency Battery	EM	
with Integral Test Switch	ENIV1	
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	



## Equation™ 2 1x4

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	C	Ordering Code	Model #**	Protocol	Compatible Networks*	Occupancy & Daylight	Temperature Reporting	Communication to Luminaire	Drivers
La legrand <sup>®</sup>		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
		LMFSD	LMFS-601	Wireless					Optotronic by eldoLED (Dexal)
COOPER Lighting Solutions	0	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	No	Wired -	eldoLED ECOdrive
CHESTHON.		L11	Driver	0-10V	SpaceBuilder				Advance by Signify
ENCELIUM	0	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
<b>\$LUTRON</b>		LH1	LDE1	EcoSystem	Quantum, Energi Savr Node, Energi TriPak	Enabled	No	Wired	Lutron Hi-Lume
пLight		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.