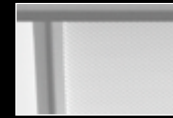


Equation™ 2 1x4

LED



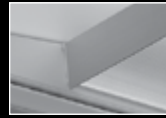
opal acrylic lens



MicroGlow lens

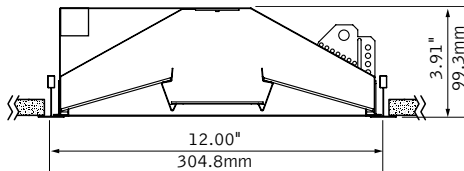


suspended or surface mount

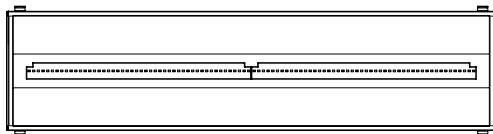


air return

DIMENSIONAL DATA



Overall height of luminaire with air return is 4.62"–4.89"



2 LED boards

FEATURES

Equation™ 2 blends sleek aesthetics with uniform diffuse illumination.

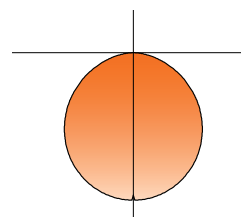
Center diffuser features MicroGlow prismatic lens for brightness control and visual comfort. Opal acrylic center lens may also be specified.

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.

PERFORMANCE



Opal Acrylic Lens
Delivered Lumens: 3500lm
Total System Watts: 37W

PRODUCT OVERVIEW

Lumen Output: 2000-5000lm
 Wattage: 21-57W
 LPW: 86-100
 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.

MOUNTING INFORMATION

grid

"G" flat tee
"ST" slot tee
4.62"-4.89"

drywall frame kit

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

Use tie-wire or screws to secure frame kit.

Cut out dimensions:
1': Min: 12.25"
Max: 12.563"
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 3000K, 3500K or 4000K with CRI>80, 3 SDCM. 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.

Electrical

Standard 120-277V driver includes 0-10V analog dimming. Power factor > .9. Optional DALI, Lutron EcoSystem or Step-dimming drivers available.

Emergency Battery

Bodine BSL310-CAN. Emergency output—10 watts for 90 minutes.

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 >60,000 hours Calculated: L70 at 135,000 hours
 L80 at >60,000 hours L80 at 80,000 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

Delivered Lumens	Tested System Watts	LPW
2000	21	98
2500	26	100
3000	31	98
3500	37	96
4000	43	93
4500	49	90
5000	57	86

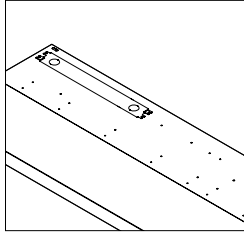
3500K data. *Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%. Multipliers: 2700K - 0.949, 3000K - 0.966, 4000K - 1.025, Preferred Light = 0.65.

ORDERING

Luminaire Series	FEQ2
Equation 2	FEQ2
Nominal Size	14
1' x 4'	14
Shielding	
Opal Acrylic Lens	AC
MicroGlow Prismatic Lens	MG
Lumen Output	
2000 Lumens	2000L
2500 Lumens	2500L
3000 Lumens	3000L
3500 Lumens	3500L
4000 Lumens	4000L
4500 Lumens	4500L
5000 Lumens	5000L
Color Temperature	
3000K	30K
3500K	35K
4000K	40K
3500K Preferred Light	P35K
Circuit	1C
Single Circuit	1C
Voltage	
UNV 120/277 Volt	UNV
347 Volt	347
<small>(Not available with SD5, DLM1 or NLT1. ENL1 & CLM1 recessed grid only. Transformer required for all drivers except LD1.)</small>	
Control System & Dimming Level	
0-10V - 10% Dimming	LD1
0-10V - 1% Dimming	L11
Lutron Hi-Lume EcoSystem (LDE1) - 1% Dimming	LH1
Lutron 5-Series EcoSystem (LDE5) - 5% Dimming	LU5
Step Dimming (120/277 only.)	SD5
DALI - 1% Dimming (3000 Lumens or less only.)	D11
Acuity nLight - 1% Dimming (Not available with EM or CP. 3000 Lumens or less only.)	NLT1
Enlighted Smart Sensor - 1% Dimming (Cannot combine with 347V & EM.)	ENL1
Osram Connected Lighting Module - 1% Dimming (Compatible with Daintree Networks & Osram ENCENLIUM and Simplux systems. Cannot combine with 347V & EM)	CLM1
Wattstopper DLM - 1% Dimming	DLM1
Mounting	
24" Aircraft Cable	C24
48" Aircraft Cable	C48
96" Aircraft Cable	C96
Drywall Frame Kit (NLT1, ENL1, CLM1 & DLM1 not available) (Cut out dimensions: Min: 12.25"/Max: 12.563" Min: 48.25"/Max: 48.563")	F
Grid	G
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 Pack 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

QS 5/10 DAY* Options in orange qualify for the Quickship program. 5-day up to 50 pieces, 10-day up to 150 pieces. Refer to Quickship Guide for complete details.

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.



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

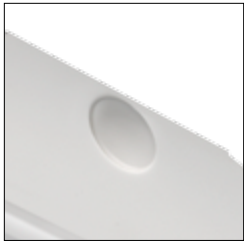
Acuity nLight - 1% Dimming (NLT1)
Acuity Model #nEPS-60-IO

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



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

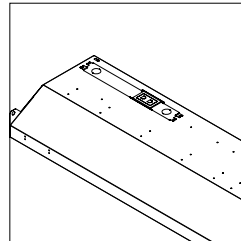
Enlighted Smart Sensor - 1% Dimming (ENL1)
Enlighted Model #SU-4E-01



Connected Lighting Module (CLM) enables each luminaire to be independently controlled and configured. Communicates wirelessly with Daintree Networks®, Osram ENCELIUM®, Osram Simlux™ 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)
Osram Model #ZBHA-CLM DIM

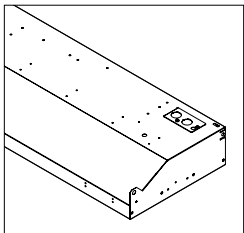
Serial labels will be provided on outside of luminaires and control unit.



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.



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

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
Enlighted Smart Sensor (ENL1)	SU-4E-01**	Enlighted RF	Enlighted	Integrated	Integrated	Yes	Wireless	Osram Optotronic , Philips SimpleSet
Legrand Wattstopper DLM (DLM1)	LMFC-011**	DLM	DLM	Enabled	Enabled	No	Wired	Osram Optotronic , Philips SimpleSet
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 (CLM1)	ZBHA-CLM**	ZigBee HA	Osram ENCELIUM & Simlux, Daintree 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.

Equation™ 2 1x4

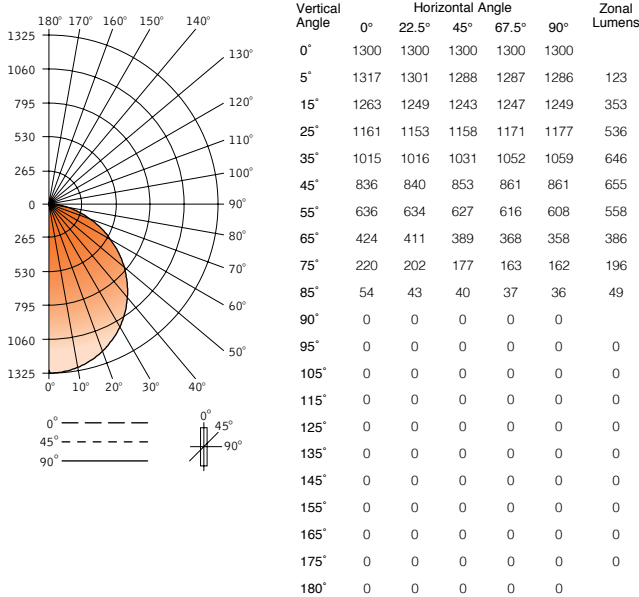
LED

FEQ2-14-AC-3500L-35K-1C-UNV-LD1

Filename: FEQ214AC3500L35K.IES
 Test #: 1246032 extrapolated

Lumens: 3501lm
 System Watts: 37W
 LPW: 95

CANDLEPOWER DISTRIBUTION



LUMEN SUMMARY

Zone	Lumens	% Fixture
0-30°	1011	28.9
0-40°	1657	47.3
0-60°	2870	82.0
0-90°	3501	100.0
Total Luminaire 0-180°	3501	100.0

LUMINANCE DATA (CD/M²)

Vertical Angle	0°	45°	90°
45°	3642	3715	3750
55°	3414	3370	3268
65°	3094	2837	2608
75°	2617	2106	1923
85°	1906	1405	1270

CO-EFFICIENTS OF UTILIZATION

Floor Ceiling Wall	80				70			20 50		30		10		00
	70	50	30	10	70	50	10	50	10	50	10	50	10	00
RCR 0	119	119	119	119	116	116	116	111	111	106	106	102	102	100
1	109	105	101	97	107	102	95	98	92	94	90	91	87	85
2	100	92	85	80	97	90	79	86	77	83	75	80	73	71
3	91	81	73	67	89	79	66	76	65	74	64	71	63	60
4	84	72	63	57	81	70	56	68	55	66	55	64	54	52
5	77	64	55	49	75	63	49	61	48	59	48	57	47	45
6	71	58	49	43	69	57	43	55	42	54	42	52	41	39
7	66	53	44	38	64	52	38	50	37	49	37	47	37	35
8	61	48	40	34	60	47	34	46	33	45	33	44	33	31
9	57	44	36	30	56	43	30	42	30	41	30	40	30	28
10	54	41	33	28	52	40	28	39	27	38	27	37	27	25

Numbers indicate percentage values of reflectivity.

Go to www.focalpointlights.com for additional photometric data.

Equation™ 2 1x4

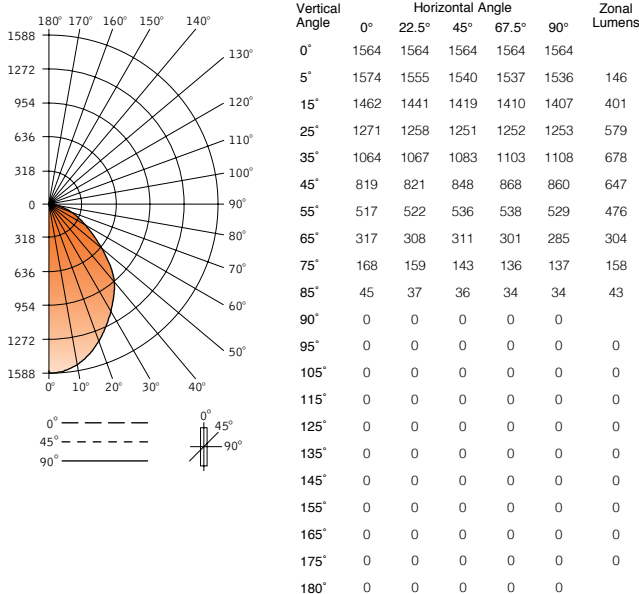
LED

FEQ2-14-MG-3500L-35K-1C-UNV-LD1

Filename: FEQ214MG3500L35K.IES
 Test #: 1237065 extrapolated

Lumens: 3432lm
 System Watts: 37W
 LPW: 93

CANDLEPOWER DISTRIBUTION



LUMEN SUMMARY

Zone	Lumens	% Fixture
0-30°	1126	32.8
0-40°	1804	52.6
0-60°	2928	85.3
0-90°	3432	100.0
Total Luminaire 0-180°	3432	100.0

LUMINANCE DATA (CD/M²)

Vertical Angle	0°	45°	90°
45°	3673	3806	3857
55°	2860	2963	2924
65°	2381	2335	2141
75°	2055	1753	1682
85°	1624	1313	1233

CO-EFFICIENTS OF UTILIZATION

Floor Ceiling Wall	80				70			20 50		30		10		00
	70	50	30	10	70	50	10	50	10	50	10	50	10	00
RCR 0	119	119	119	119	116	116	116	111	111	106	106	102	102	100
1	110	106	102	98	107	103	97	99	94	95	91	92	88	86
2	101	93	87	82	98	91	81	88	79	85	77	82	76	74
3	93	83	75	69	90	81	69	78	68	76	66	73	65	63
4	85	74	66	60	83	73	59	70	59	68	58	66	57	55
5	79	67	58	52	77	66	52	64	51	62	51	60	50	48
6	73	61	52	46	71	60	46	58	45	56	45	55	45	43
7	68	55	47	41	66	54	41	53	41	51	40	50	40	38
8	63	51	42	37	62	50	37	49	37	47	36	46	36	34
9	59	47	39	33	58	46	33	45	33	44	33	43	33	31
10	56	43	35	30	55	43	30	42	30	41	30	40	30	28

Numbers indicate percentage values of reflectivity.

Go to www.focalpointlights.com for additional photometric data.