



(Fixture shown with optional integrated occupancy sensor.)

### 2 LED MODULES (2M) FIXTURE OVERVIEW

With a nominal 10-inch x 4-foot modular form, the Essentials 2M fixture is equivalent in light output to 4-lamp T5HO fluorescent or 250W metal halide light fixtures and reduces power consumption by 53-62% to meet strict energy codes.

### ABOUT THE ESSENTIALS SERIES

The Essentials Series from Flextronics Lighting Solutions is a family of high efficacy LED fixtures engineered to maximize performance and value. Ideally suited for one-for-one replacement of traditional fluorescent and HID light sources or new construction projects, Essentials fixtures significantly reduce lighting costs and provide a very attractive return on investment. The Essentials Series is backed by a 5-year warranty.

### ESSENTIALS 2M • FIXTURE PERFORMANCE

	WATTAGE <sup>1</sup>	LUMENS <sup>1</sup>	EFFICACY <sup>1</sup>	CRI <sup>2</sup>
<b>NL-BAFN: NO LENS, NO BAFFLE</b>				
4000K/5000K <sup>3</sup>	110	12,300	111.8	75
<b>NL-BAFY: NO LENS WITH BAFFLE</b>				
4000K/5000K <sup>3</sup>	110	11,800	107.3	75
<b>CA-BAFN: CLEAR ACRYLIC LENS, NO BAFFLE</b>				
4000K/5000K <sup>3</sup>	110	11,800	107.3	75
<b>CA-BAFY: CLEAR ACRYLIC LENS WITH BAFFLE</b>				
4000K/5000K <sup>3</sup>	110	11,700	106.4	75
<b>FP-BAFN: FROSTED POLYCARBONATE LENS, NO BAFFLE</b>				
4000K/5000K <sup>3</sup>	110	11,000	100.0	75

<sup>1</sup>Typical at 120V and 25°C (77°F).    <sup>2</sup>Typical CRI.    <sup>3</sup>Consult factory for other CCT offerings. Lead times may be longer.

### ESSENTIALS 2M • DIMENSIONS

INS (CMS) • LBS (KGS)

LENGTH <sup>1</sup>	WIDTH <sup>1</sup>	DEPTH <sup>1</sup>	WEIGHT	WEIGHT WITH BATTERY BACKUP
43-5/8 (110.8)	9-3/4 (24.8)	2-1/4 (5.7)	12 (5.4)	16 (7.2)

<sup>1</sup>Dimensions listed are for the fixture only. See dimensional drawings for measurements with mounting hardware.

### POWER FACTOR

120V	0.997
277V	0.952
347V	0.988
480V	0.969

### TOTAL HARMONIC DISTORTION

120V	6.5%
277V	11.9%
347V	10.3%
480V	10.8%

### FEATURES

#### POWER AND CONTROL

- **POWER INPUT:** 100-277V or 347-480V (50/60 hz)
- **DIMMING:** Optional factory installed dimmable power supply (10-100% dimming) interfaces with standard third party 0-10V dimmers.
- **SENSORS:** Optional on-board, factory installed occupancy sensors available. See Accessories sheet for more information.
- **EMERGENCY BATTERY BACK-UP:** For 120-277V fixtures only, optional on-board, factory installed battery back-ups are available that produce 1,900-2,100 lumens for a minimum of 90 minutes.

#### LUMEN MAINTENANCE

- **L70 LIFE:** 90% lumen maintenance at 70,000 hours (77°F/25°C ambient); L70 predicted life is more than 200,000 hours

#### LISTINGS AND CERTIFICATIONS

- UL | CUL listed for safety (1598)
- UL | CUL dry/damp location listed
- RoHS compliant
- FCC Class B
- Lighting Facts (U.S. Department of Energy) certified
- DesignLights™ Consortium approved

#### FIXTURE

- **ENVIRONMENT:** Dry/damp locations. For interior applications.
- **HEAT SINKS:** Extruded aluminum heat sinks provide optimal thermal management, decreasing LED junction temperature and ensuring long life.
- **POWER SUPPLY ACCESS:** Center channel cover is hinged for easy access to power supplies and quick wiring.
- **OPTICS:** Two highly reflective white coated optics are available to enhance light output and reduce glare.
- **LENSES:** Recommended UV stable clear acrylic or frosted polycarbonate. Also available without a lens. Consult acrylic/polycarbonate chemical resistance chart for guidance in selecting the appropriate lensing material for your application.
- **WIRE GUARDS:** Optional wire guards can be field installed. See Accessories sheet for more information.
- **WARRANTY:** Limited 5-year warranty. Consult factory for complete warranty coverage and exclusions details.
- **REPLACEABLE LED LIGHT MODULES:** Allows field replacement of individual light modules.
- **AMBIENT OPERATING TEMPERATURES**  
**Cable, Loop/Hook, and Stem Mounted Fixtures:** -31° to 131°F (-35° to 55°C)  
**Fixtures with Emergency Battery Back-ups and All Surface Mounted Fixtures:** -31° to 122°F (-35° to 50°C)

### 2M SAMPLE ORDERING NUMBER<sup>1</sup>

LW-LUSIO-ES2-2M-40-CA-BAFN-120-MBR



(Fixture shown with optional integrated occupancy sensor.)

LW-LUSIO-ES2-2M			
PART NUMBER	LED COLOR TEMPERATURE	LENS	OPTIC
	<b>40</b> 4000K ANSI <sup>2</sup>	<b>CA</b> Clear acrylic lens	<b>BAFN</b> No baffle <sup>3</sup>
	<b>50</b> 5000K ANSI <sup>2</sup>	<b>FP</b> Frosted polycarbonate lens <sup>3</sup>	<b>BAFY</b> Reflector baffles <sup>3</sup>
		<b>NL</b> No lens	

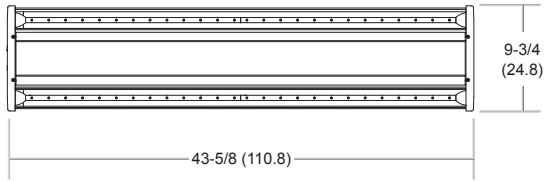
VOLTAGE	MOUNTING	DIMMING	OCCUPANCY SENSOR
<b>120</b> 120V <b>208</b> 208V <b>240</b> 240V	<b>277</b> 277V <b>347</b> 347V <b>480</b> 480V	<b>MBR</b> Mounting bracket for surface mount and 3/4-inch stem mount. Not required with the emergency battery back-up (EMB) option. <sup>4</sup>	<b>DIMY</b> Dimming
	<b>HOOK</b> Hook/loop mount <sup>5</sup>		<b>OCC20</b> 10-20 ft (3-6 m) heights
	For a cable ready fixture, leave part number field blank. <sup>6</sup>	For no dimming, leave part number field blank.	<b>OCC40</b> 21-40 ft (6-12 m) heights
			<b>OCCDIM20</b> 10-20 ft (3-6.1 m) heights <sup>7</sup>
			<b>OCCDIM40</b> 21-40 ft (6.4-12.1 m) heights <sup>7</sup>
			For no sensor, leave part number field blank.

CORD/PLUG	BATTERY BACK-UP	<ol style="list-style-type: none"> <li>Information on accessories is available on a separate specification sheet.</li> <li>Consult factory for other color temperatures or 80 CRI minimum. Lead times and efficacy may be affected.</li> <li>BAFN must be selected with the frosted polycarbonate lens (FP) option. BAFY is suggested for mounting heights below 15 feet (4.6 m).</li> <li>Mounting bracket (MBR) ships separately from the fixture for pre-installation. Mounting bracket features are included with the battery back-up (EMB) option. The mounting bracket and emergency battery back-up enclosure can be attached to a ceiling junction box and have a center knockout to accept a 3/4-inch rigid conduit or power cord. Junction box and rigid conduit are not included. See installation instructions for more information.</li> <li>The hook/loop option (HOOK) ships separately from the fixture and includes a cable kit that is required to level the fixture.</li> <li>All fixtures are cable ready and have a center opening to accept a 1/2-inch stem mount. Support cables and rigid conduit are not included. See accessories for cable kits.</li> <li>Occupancy sensors with dimming are only available for 120-277V models and require a wireless programmer (Part No. LW-LUSIO-ES2-OCCDIMPROG) for setup. See the Accessories page for more information.</li> <li>Cords are not available on fixtures with MBR, HOOK, or EMB options. All cords are 16/3 and white.</li> </ol>
<b>CL715</b> Locking plug, 6 ft, 15 AMP, 277V <sup>8</sup> <b>CL720</b> Locking plug, 6 ft, 20 AMP, 277V <sup>8</sup> <b>C6W</b> 600v SO cord, 6 ft, no plug <sup>8</sup> <b>C515</b> Straight plug, 6 ft, 120V <sup>8</sup>	<b>CL2420</b> Locking plug, 6 ft, 15 AMP, 347V <sup>8</sup> <b>CL820</b> Locking plug, 6 ft, 15 AMP, 480V <sup>8</sup> <b>CL515</b> Locking plug, 6 ft, 120V <sup>8</sup> <b>C15W</b> 15 ft, 600V SO cord, no plug <sup>8</sup>	
For no cord/plug, leave part number field blank.	<b>EMB</b> Emergency battery back-up <sup>4</sup>	
	For no battery back-up, leave part number field blank.	

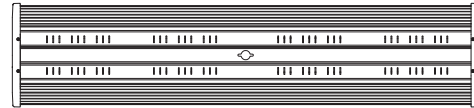


**DIMENSIONS: INS (CMS)**

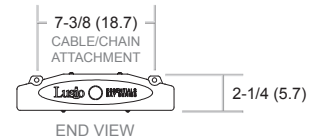
**BOTTOM VIEW**



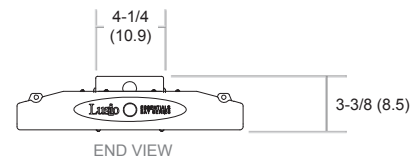
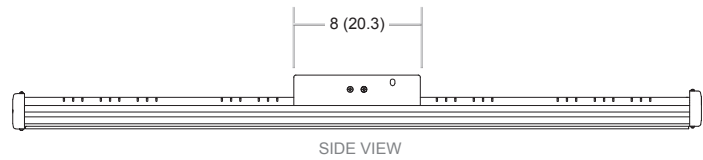
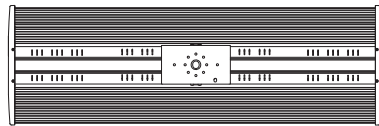
**TOP VIEW**



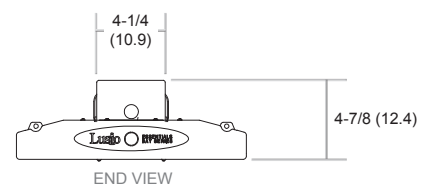
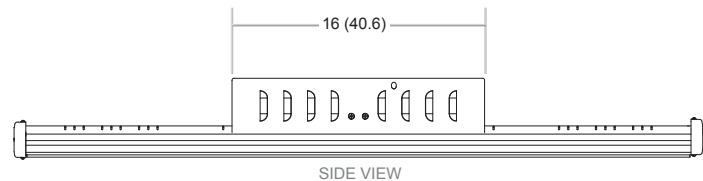
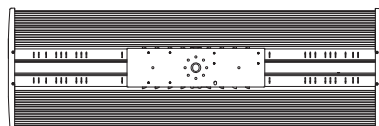
**PENDANT MOUNT**



**WITH BOX FOR SURFACE/STEM MOUNT**



**WITH BOX FOR EMERGENCY BATTERY BACK-UP**



### CLEAR ACRYLIC LENS WITHOUT BAFFLE

#### Description

Wide distribution maximizes spacing and provides high uniformity. Typically used for mounting heights of 15-24 feet (4.5-7.3 m).

#### Fixture Data

**Part Number:** LW-LUSIO-ES2-2M-50-CA-BAFN

**CCT:** 5000K

**Fixture Lumen Output:** 11,800 lms

**Fixture Wattage:** 110W (110-277V)

**Fixture Efficacy Rating:** 107 lm/W

#### Spacing Criteria

Diagonal	1.46	
Lateral Plane	0°-180°	90°-270°
	1.3	1.3

#### CCT Light Output Conversions

**4000K:** 1.00

Test date: 28-JUNE-2013  
Tests done in accordance with LM79. Consult factory for LM79 and IES files.

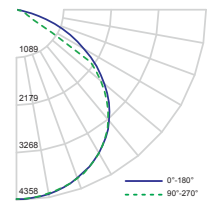
#### Zonal Lumen Summary

Zone	Lumens	% Fixture
0° - 30°	3,467.1	30%
0° - 40°	5,771.7	49%
0° - 60°	10,301.9	87%
0° - 90°	11,799.8	100%
0° - 180°	11,799.8	100%

#### Candela Distribution Array

	0°	45°	90°
0°	4,341	4,341	4,341
10°	4,283	4,276	4,271
20°	4,096	4,108	4,109
30°	3,784	3,826	3,789
40°	3,309	3,376	3,278
50°	2,642	2,691	2,532
60°	1,804	1,754	375
70°	936	206	207
80°	159	77	76
90°	37	37	38

#### Candela Plot



Clear acrylic lens without baffle

### CLEAR ACRYLIC LENS WITH BAFFLE

#### Description

Optional: Optically designed white baffle provides glare control, reducing viewing angle to the source. Baffle is factory installed and must be specified at time of order.

#### Fixture Data

**Part Number:** LW-LUSIO-ES2-2M-50-CA-BAFY

**CCT:** 5000K

**Fixture Lumen Output:** 11,700 lms

**Fixture Wattage:** 110W (110-277V)

**Fixture Efficacy Rating:** 106 lm/W

#### Spacing Criteria

Diagonal	1.46	
Lateral Plane	0°-180°	90°-270°
	1.32	1.32

#### CCT Light Output Conversions

**4000K:** 1.00

Test date: 28-JUNE-2013  
Tests done in accordance with LM79. Consult factory for LM79 and IES files.

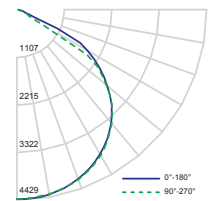
#### Zonal Lumen Summary

Zone	Lumens	% Fixture
0° - 30°	3,517.5	30%
0° - 40°	5,857.7	50%
0° - 60°	10,493.6	90%
0° - 90°	11,700.0	100%
0° - 180°	11,700.0	100%

#### Candela Distribution Array

	0°	45°	90°
0°	4,409	4,409	4,409
10°	4,370	4,351	4,358
20°	4,188	4,203	4,203
30°	3,881	3,933	3,914
40°	3,429	3,517	3,438
50°	2,759	2,883	2,729
60°	1,905	1,974	752
70°	301	247	215
80°	108	87	84
90°	38	37	38

#### Candela Plot



Clear acrylic lens and baffle

### FROSTED POLYCARBONATE LENS

#### Description

Optional: Semi-diffuse frosted lens provides glare control and LED protection. Frosted lens is factory installed and must be specified at time of order.

#### Fixture Data

**Part Number:** LW-LUSIO-ES2-2M-50-FP-BAFN

**CCT:** 5000K

**Fixture Lumen Output:** 11,000 lms

**Fixture Wattage:** 110W (110-277V)

**Fixture Efficacy Rating:** 100 lm/W

#### Spacing Criteria

Diagonal	1.24	
Lateral Plane	0°-180°	90°-270°
	1.14	1.16

#### CCT Light Output Conversions

**4000K:** 1.00

Test date: 28-JUNE-2013  
Tests done in accordance with LM79. Consult factory for LM79 and IES files.

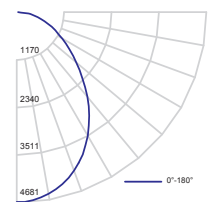
#### Zonal Lumen Summary

Zone	Lumens	% Fixture
0° - 30°	3,510.8	32%
0° - 40°	5,530.6	50%
0° - 60°	8,890.2	81%
0° - 90°	11,000.1	100%
0° - 180°	11,000.1	100%

#### Candela Distribution Array

	0°	45°	90°
0°	4,671	4,671	4,671
10°	4,539	4,571	4,588
20°	4,150	4,210	4,241
30°	3,509	3,585	3,613
40°	2,707	2,779	2,786
50°	1,927	1,976	1,972
60°	1,306	1,340	1,340
70°	829	857	866
80°	429	443	463
90°	36	45	59

#### Candela Plot



Frosted polycarbonate lens

PHOTOMETRIC AND DISTRIBUTION DATA IS TYPICAL FOR THIS FIXTURE. PERFORMANCE WILL VARY DEPENDING ON LED AND POWER SUPPLY. THIS FIXTURE IS MANUFACTURED TO AN OVERALL PERFORMANCE TOLERANCE OF +/- 6%.