



ABOUT THE LUSIO ESSENTIALS BAY SERIES

The Lusio Essentials Bay Series is a family of high efficacy LED fixtures engineered to maximize performance and value. Essentials version 2.0 is introduced with the latest LED technology sorted to provide the same industry leading efficacy at 4000K or 5000K color temperatures. Separated finned aluminum heat sinks are designed to promote heat transfer from the LEDs by allowing air to pass. This keeps the LEDs cool so their useful life is extended. Ideally suited for one-for-one replacement of traditional fluorescent and HID light sources or new construction projects, the Lusio Essentials Bay Series can significantly reduce lighting costs and provide a very attractive return on investment. The Lusio Essentials Bay Series is backed by a 5-year warranty.

ESSENTIALS 2MS FIXTURE DESCRIPTION

With a nominal 10-inch x 2-foot modular form, the Lusio Essentials Bay Series 2MS fixture is equivalent in light output to 2-lamp T5HO fluorescent, 4-lamp T8 fluorescent, or 175W metal halide fixtures and reduces power consumption by 40% to meet strict energy codes.

FIXTURE PERFORMANCE

	WATTAGE ¹	LUMENS ¹	EFFICACY ¹	CRI ²
NL-BAFN: NO LENS, NO BAFFLE				
4000K/5000K ³	59	6,000	101.7	75
NL-BAFY: NO LENS WITH BAFFLE				
4000K/5000K ³	59	5,900	100.0	75
CA-BAFN: CLEAR ACRYLIC LENS, NO BAFFLE				
4000K/5000K ³	59	5,900	100.0	75
CA-BAFY: CLEAR ACRYLIC LENS WITH BAFFLE				
4000K/5000K ³	59	5,700	96.6	75
FP-BAFN: FROSTED POLYCARBONATE LENS, NO BAFFLE				
4000K/5000K ³	59	5,400	91.5	75

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

DIMENSIONS

INS (CMS) • LBS (KGS)

LENGTH ¹	WIDTH ¹	DEPTH ¹	WEIGHT	WEIGHT WITH BATTERY BACKUP
23-1/4 (59.1)	9-3/4 (24.8)	2-1/4 (5.7)	8 (3.6)	12 (5.4)

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

POWER FACTOR

120V	0.990
277V	0.881
347V	0.972
480V	0.923

TOTAL HARMONIC DISTORTION

120V	9.7%
277V	15.9%
347V	14.8%
480V	17.2%

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 for 10-20 ft (3-6 m) and 21-40 ft (6-12 m) mounting heights. Sensors with instant on/off functionality are available for all models. Dimming sensors that ramp light to high mode levels and fade light to low mode levels (or off) are available for 120-277V models only.
- **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 Lusio Accessories sheet for more information.
- **WARRANTY:** Limited 5-year warranty. See complete warranty coverage and exclusions details at www.LusioLighting.com.
- **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)

SAMPLE ORDERING NUMBER¹

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

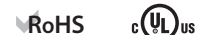


LW-LUSIO-ES2-2MS							
PART NUMBER		LED COLOR TEMPERATURE		LENS		OPTIC	
		40 4000K ANSI ²		CA Clear acrylic lens		BAFN No baffle ³	
		50 5000K ANSI ²		FP Frosted polycarbonate lens ³		BAFY Reflector baffles ³	
				NL No lens			

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

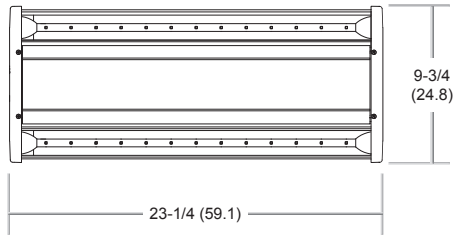
CORD/PLUG		BATTERY BACK-UP	
CL715 Locking plug, 6 ft, 15 AMP, 277V ⁸	CL2420 Locking plug, 6 ft, 15 AMP, 347V ⁸	EMB Emergency battery back-up ⁴	
CL720 Locking plug, 6 ft, 20 AMP, 277V ⁸	CL820 Locking plug, 6 ft, 15 AMP, 480V ⁸		
C6W 600v SO cord, 6 ft, no plug ⁸	CL515 Locking plug, 6 ft, 120V ⁸		
C515 Straight plug, 6 ft, 120V ⁸	C15W 15 ft, 600V SO cord, no plug ⁸		
For no cord/plug, leave part number field blank.		For no battery back-up, leave part number field blank.	

- Information on Lusio accessories is available on a separate specification sheet.
- Consult factory for other color temperatures or 80 CRI minimum. Lead times and efficacy may be affected.
- BAFN must be selected with the frosted polycarbonate lens (FP) option. BAFY is suggested for mounting heights below 15 feet (4.6 m).
- 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.
- The hook/loop option (HOOK) ships separately from the fixture and includes a Lusio cable kit that is required to level the fixture.
- 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 Lusio cable kits.
- 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 Lusio Accessories page for more information.
- Cords are not available on fixtures with MBR, HOOK, or EMB options. All cords are 16/3 and white.

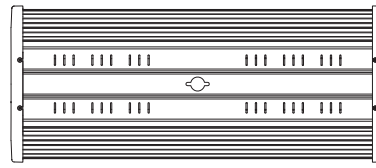


DIMENSIONS: INS (CMS)

BOTTOM VIEW



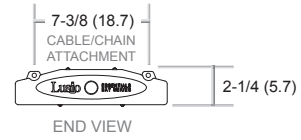
TOP VIEW



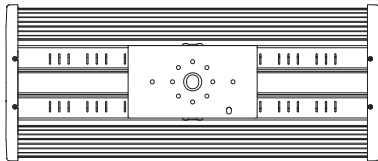
PENDANT MOUNT



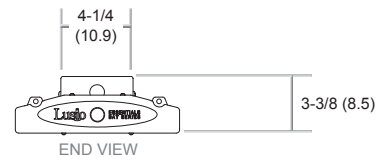
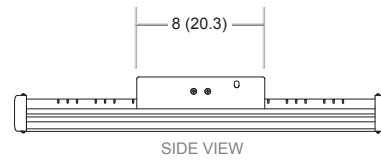
SIDE VIEW



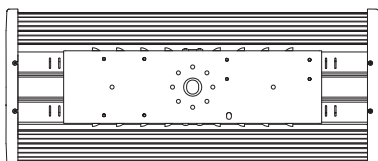
WITH BOX FOR SURFACE/STEM MOUNT



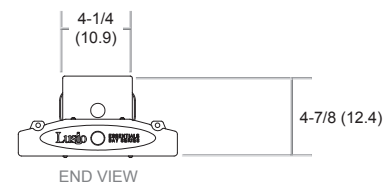
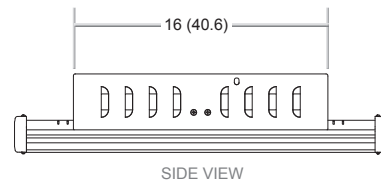
TOP VIEW



WITH BOX FOR EMERGENCY BATTERY BACK-UP



TOP VIEW



LUSIO ESSENTIALS BAY SERIES v 2.0 • 2 SHORT LED MODULES (2MS)

CLEAR ACRYLIC LENS WITHOUT BAFFLE

Description

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

Fixture Data

Part Number: LW-LUSIO-ES2-2MS-50-CA-BAFN

CCT: 5000K

Fixture Lumen Output: 5,900 lms

Fixture Wattage: 59W (110-277V)

Fixture Efficacy Rating: 100 lm/W

Spacing Criteria

Diagonal	1.48	
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 reports. See www.lusiolighting.com for IES files.

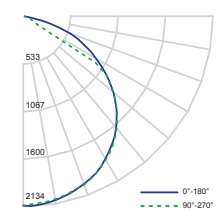
Zonal Lumen Summary

Zone	Lumens	% Fixture
0° - 30°	1,699.2	29%
0° - 40°	2,836.6	48%
0° - 60°	5,130.5	87%
0° - 90°	5,900.1	100%
0° - 180°	5,900.0	100%

Candela Distribution Array

	0°	45°	90°
0°	2,125	2,125	2,125
10°	2,093	2,088	2,083
20°	2,001	1,998	2,010
30°	1,848	1,864	1,859
40°	1,625	1,662	1,635
50°	1,324	1,373	1,323
60°	948	983	191
70°	572	93	96
80°	104	54	55
90°	19	19	19

Candela Plot



Coefficients of Utilization

RCR	80				70				50				30				10				0			
	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0	0	0	0		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100					
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86						
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73						
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	62						
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56	54						
5	78	65	57	50	76	64	56	50	62	55	50	60	54	49	58	53	49	46						
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43	41						
7	67	53	45	39	65	53	44	39	51	44	38	50	43	38	48	42	38	36						
8	62	49	40	35	60	48	40	34	47	39	34	45	39	34	44	38	34	32						
9	58	45	36	31	56	44	36	31	43	36	31	42	35	31	41	35	30	29						
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26						

RCR=Room Cavity Ratio RC=Effective Ceiling Cavity Reflectance RW=Wall Reflectance
Effective Floor Cavity Reflectance = 20%



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-ES2-2MS-50-CA-BAFY

CCT: 5000K

Fixture Lumen Output: 5,700 lms

Fixture Wattage: 59W (110-277V)

Fixture Efficacy Rating: 97 lm/W

Spacing Criteria

Diagonal	1.48	
Lateral Plane	0°-180°	90°-270°
	1.34	1.32

CCT Light Output Conversions

4000K: 1.00

Test date: 28-JUNE-2013

Tests done in accordance with LM79. Consult factory for LM79 reports. See www.lusiolighting.com for IES files.

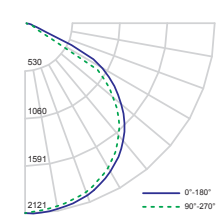
Zonal Lumen Summary

Zone	Lumens	% Fixture
0° - 30°	1,695.7	30%
0° - 40°	2,832.7	50%
0° - 60°	5,102.3	90%
0° - 90°	5,699.9	100%
0° - 180°	5,700.0	100%

Candela Distribution Array

	0°	45°	90°
0°	2,115	2,115	2,115
10°	2,103	2,087	2,071
20°	2,041	2,022	2,001
30°	1,908	1,906	1,861
40°	1,705	1,725	1,625
50°	1,406	1,437	1,285
60°	1,004	997	351
70°	162	131	102
80°	58	49	40
90°	19	18	18

Candela Plot



Coefficients of Utilization

RCR	80				70				50				30				10				0			
	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0	0	0	0		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100					
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87						
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75						
3	93	83	76	70	91	82	75	69	79	73	68	76	71	67	74	70	66	64						
4	85	74	66	60	83	73	65	59	71	64	59	68	63	58	66	61	57	55						
5	79	66	58	52	77	65	57	51	63	56	51	61	55	50	60	54	50	48						
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42						
7	67	54	46	40	66	53	45	40	52	45	39	51	44	39	49	43	39	37						
8	63	49	41	36	61	49	41	35	47	40	35	46	40	35	45	39	35	33						
9	58	45	37	32	57	45	37	32	44	37	32	43	36	32	42	36	31	30						
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27						

RCR=Room Cavity Ratio RC=Effective Ceiling Cavity Reflectance RW=Wall Reflectance
Effective Floor Cavity Reflectance = 20%



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-ES2-2MS-50-FP-BAFN

CCT: 5000K

Fixture Lumen Output: 5,400 lms

Fixture Wattage: 59W (110-277V)

Fixture Efficacy Rating: 92 lm/W

Spacing Criteria

Diagonal	1.22	
Lateral Plane	0°-180°	90°-270°
	1.16	1.1

CCT Light Output Conversions

4000K: 1.00

Test date: 28-JUNE-2013

Tests done in accordance with LM79. Consult factory for LM79 reports. See www.lusiolighting.com for IES files.

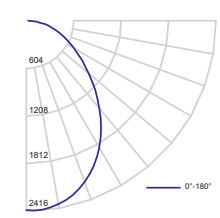
Zonal Lumen Summary

Zone	Lumens	% Fixture
0° - 30°	1,774.7	33%
0° - 40°	2,772.6	51%
0° - 60°	4,410.7	82%
0° - 90°	5,399.9	100%
0° - 180°	5,400.0	100%

Candela Distribution Array

	0°	45°	90°
0°	2,407	2,407	2,407
10°	2,364	2,337	2,316
20°	2,177	2,127	2,085
30°	1,856	1,786	1,719
40°	1,449	1,367	1,285
50°	1,040	966	896
60°	708	652	601
70°	454	412	374
80°	238	202	172
90°	22	18	18

Candela Plot



Coefficients of Utilization

RCR	80				70				50				30				10				0			
	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0	0	0	0		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100					
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85						
2	100	92	85	80	97	90	84	79	87	82	77	83	79	75	80	77	74	72						
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61						
4	84	73	64	58	82	72	64	58	69	62	57	67	61	56	65	60	55	53						
5	78	66	57	51	76	65	56	50	62	55	50	60	54	49	59	53	49	47						
6	72	59	51																					