eW Fuse Powercore

Date:	
Туре:	
Firm Name:	
Project:	

2700 K, 10° x 60° beam angle, 12.5 W/ft, 305 mm (1 ft)

Interior linear grazing luminaire with single temperature white light

With narrow and medium beams of intense white light, eW Fuse Powercore is an excellent choice for a full range of surface grazing and wall-washing applications. Its ultra-compact form factor permits installation in tight spaces too small to accommodate conventional grazing luminaires with similar light output. eW Fuse Powercore meets or exceeds the performance of comparable linear fluorescent grazing luminaires while lowering installation, energy, and maintenance costs. Luminaires offer environmentally-conscious buyers a green, energy-efficient grazing luminaire with industry-leading quality and quantity of light.



- Lower cost than comparable fluorescent grazing luminaires— With long useful source life and low-maintenance operation, eW Fuse Powercore represents a cost-effective alternative to traditional grazing luminaires.
- High-performance illumination and beam quality—eW Fuse Powercore is available in 305 mm (1 ft) and 1219 mm (4 ft) die-cast aluminium housings with a 10° x 60° or 30° x 60° beam angle. Interlocking connectors accommodate end-to-end placement without visible light scalloping between luminaires.
- Multiple levels of power consumption—12.5 W/ft luminaires offer high-intensity light output of over 550 lumens per foot.
 8 W/ft luminaires are factory-set to a lower maximum power consumption level to support ASHRAE standards, LEED green building certification, and other power-limited projects.
- Multiple color temperatures—Available in 2700 K, 3000 K, 3500 K, and 4000 K color temperatures for applications calling for warm, neutral, or cool white light.
- Integrates patented Powercore technology—Powercore rapidly, efficiently, and accurately controls power directly from line voltage, eliminating the need for an external power supply. Contractor-friendly installation dramatically simplifies installation and lowers total system cost.

- Support for multiple voltages—Accepts power input of 100 to 277 VAC for consistent installation and operation from line voltage in a variety of locations.
- Digital Dimming—Smooth dimming down to 1% with optional Data Enabler Pro and digital control interface.
- Simple installation—Powercore integrated power management technology simplifies installation and allows long product runs. Easy-to-install 1219 mm (4 ft) mounting tracks allow quick project setup in linear applications.
- Easy mounting and positioning—With end-to-end locking power connectors that can make 180° turns, eW Fuse Powercore luminaires are easy to position in even the most challenging mounting circumstances. Luminaires rotate in 10° increments through 180° for precise aiming and color mixing. Optional mounting tracks support vertical and overhead positioning. 305 mm (1 ft) and 1.5 m (5 ft) jumper cables can add extra space between luminaires.

For detailed product information, please refer to the Fuse Product Guide at www.colorkinetics.com/global/products/essentialwhite/ewfusepc/



Specifications

Due to continuous improvements and innovations, specifications may change without notice.

Output

Color Temperature*	2700 K
Beam Angle	10° x 60°
Lumens†	553
Efficacy (lm/W)	45.7
CRI	83

Electrical

Input Voltage	100 to 277 VAC, auto-ranging, 50/60 Hz
Power Consumption	12.5 W
(Maximum at full output, steady state)	
Power Factor	0.99 @ 120 VAC
Surge Limits¶	0.5 kV maximum differential (L to N)
1 kV	maximum common (L to Gnd or N to Gnd)

For additional Surge Protection Requirements for LED Lighting Systems, please refer to www.colorkinetics.com/KB/surge-protection.

Control

Dimmer

Compatible with selected commercially available reverse-phase ELV-type dimmers

Lumen Maintenance

Threshold§	Ambient Temperature	Reported¶¶	Calculated¶¶
L ₇₀	25 °C 50 °C	50,000 37,000	
L ₅₀	25 °C 50 °C	90,000 80,000	

Physical

Dimensions	54 x 305 x 39 mm (2.12 x 12 x 1.56 in)
(Height x Width x Depth)	
Weight	0.45 kg (0.98 lb)
Housing Material	Die-cast aluminium, white powder-coated finish
Lens	Polycarbonate
Luminaire Connections	Integral male/female connectors

Temperature Ranges

-40 to 50 °C (-40 to 122 °F) Operating -20 to 50 °C (-4 to 122 °F) Startup -40 to 80 °C (-40 to 176 °F) Storage Humidity 0 to 95%, non-condensing

Luminaire Run Lengths

To calculate luminaire run lengths and total power consumption for your specific installation, download the Configuration Calculator from www.colorkinetics.com/support/install_tool/

Certification and Safety

Approbation	UL/cUL, FCC Class B, C-Tick, CCC
Environment	Dry/Damp Location, IP20



^{*} Correlated color temperature (CCT) complies with ANSI C78.377-2008 for the chromaticity of solid state lighting products.

[†] Lumen output measurements comply with IES LM-79-08 testing procedures.

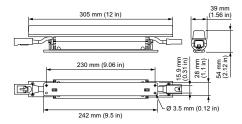
[‡] Refer to www.colorkinetics.com/support/appnotes/ for more information.

[§] Lxx = xx% lumen maintenance (when light output drops below xx% of initial output). All values are given at B10, or the median value where 90% of the LED population is better than the reported or calculated lumen maintenance measurement.

 $[\]P$ Minimum surge limits per IEC 61547, tested in accordance with IEC 61000-4-5.

^{¶¶}Lumen maintenance figures are based on lifetime prediction graphs supplied by LED source manufacturers. Whenever possible, figures use measurements that comply with IES LM-80-08 testing procedures. In accordance with TM-21-11, Reported values represent the interpolated value based on six times the LM-80-08 total test duration (in hours). Calculated values represent time durations that exceed six times the total test duration.

Dimensions



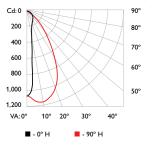
Photometrics 12.5 W/ft, 2700 K, 305 mm (1 ft)

Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at www.colorkinetics.com/global/support/ies.

Beam Angle	10° x 60°
LED	2700 K
Lumens	553
Efficacy (lm/W)	45.7



Polar Candela Distribution



0 5 15 25 35 45 55 65 75 85 90	0.0 1078 660 191 151 113 118 63 39 22 11 8	22.5 1078 715 192 144 111 100 55 32 19 10 8	45.0 1078 881 216 148 108 72 39 20 12 6 4	67.5 1078 1063 520 205 120 47 24 15 8 3	90.0 1078 1127 1110 868 466 88 32 18 8

Illuminance at Distance



Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	301	54.4
0- 40	396	71.6
0- 60	496	89.7
0- 90	541	97.8
90-120	9	1.7
90-130	11	2.0
90-150	12	2.2
90-180	12	2.2
0-180	553	100.0

For lux multiply fc by 10.7

Coefficients of Utilization - Zonal Cavity Method

		Effective Floor Cavity Reflectance: 20%	6
80	70	50 30 10 0	
70 50 30 10	70 50 30 10	50 30 10 50 30 10 50 30 10 0	
119119119119	116116116116	110110110 105105105 100100100 9	8
111108104102	108105102100	101 98 96 97 95 93 93 91 90 8	8
104 98 93 89	102 96 92 88	92 89 85 89 86 83 86 83 81 7	9
98 90 84 79	95 88 83 78	85 81 77 82 78 75 80 77 74 7	2
92 83 76 71	90 82 75 71	79 74 70 77 72 68 74 71 67 6	6
87 77 70 65	85 76 69 64	74 68 64 72 67 63 70 65 62 6	0
82 71 65 60	80 71 64 59	69 63 59 67 62 58 65 61 58 5	6
77 67 60 55	76 66 60 55	64 59 54 63 58 54 62 57 54 5	2
73 63 56 51	72 62 56 51	61 55 51 59 54 50 58 54 50 4	9
70 59 53 48	68 58 52 48	57 52 48 56 51 47 55 51 47 4	6
66 56 49 45	65 55 49 45	54 49 45 53 48 45 52 48 44 4	3
	70 50 30 10 119119119119 111108104102 104 98 93 89 98 90 84 79 92 83 76 71 87 77 70 65 82 71 65 60 77 67 60 55 73 63 56 51 70 59 53 48	70 50 30 10 70 50 30 10 119119119119 116116116116 111108104102 108105102100 104 98 93 89 102 96 92 88 98 90 84 79 95 88 83 78 92 83 76 71 90 82 75 71 87 77 70 65 85 76 69 64 82 71 65 60 80 71 64 59 77 67 60 55 76 66 60 55 73 63 56 51 76 62 56 57 05 95 34 88 68 58 52 48	80 70 50 30 10 70 50 30 10 50 30 10 50 30 10 10 50 30 10 10 10 50 30 10 10 50 30 10 50 50 30 10 50 30 10 50 30 10 50 30 10 50 30 10 50 30 10 50 30

ltem Number	Item 12NC 910503701717	
523-000065-08		
108-000047-00	910503700972	
108-000047-01	910503700973	
120-000077-01	910503700994	
108-000048-00	910503700974	
108-00048-01	910503700975	
108-00048-02	910503700976	
108-000048-03	910503700977	
120-00099-00	910503701120	
120-000124-00	910503701787	
109-00036-00	912400135916	
	523-000065-08 108-000047-00 108-000047-01 120-000077-01 108-000048-00 108-000048-01 108-000048-02 108-000048-03 120-000099-00 120-000124-00	

