eW Fuse Powercore

Date:	
Туре:	
Firm Name:	
Project:	

2700 K, 10° x 60° beam angle, 8 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†	442
Efficacy (lm/W)	57.1
CRI	82

Electrical

Input Voltage	100 to 277 VAC, auto-ranging, 50/60 Hz
Power Consumption	8 W
(Maximum at full output, steady state	2)
Power Factor	0.99 @ 120 VAC
Surge Limits¶	0.5 kV maximum differential (L to N)
1	«V 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

Thresholds	Ambient Temperature	Reported¶¶	Calculated¶¶
L ₇₀	25 °C 50 °C	65,000 65,000	
L ₅₀	25 °C 50 °C	65,000 65,000	

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.

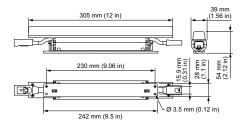
[‡] Refer to www.colorkinetics.com/support/appnotes/ for more information.

^{\$} 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.

[¶] 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



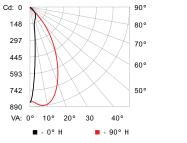
Photometrics 8 W/ft, 2700 K, 305 mm (1 ft)

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	442
Efficacy (Im/W)	57.1

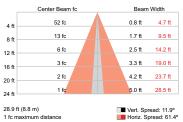


Polar Candela Distribution



	0.0	22.5	45.0	67.5	90.0
0	836	836	836	836	836
5	501	542	659	805	873
15	151	153	182	416	828
25	121	118	117	181	610
35	99	92	87	103	330
45	91	80	63	42	73
55	53	46	34	21	27
65	31	27	18	13	16
75	19	17	10	7	7
85	7	7	5	3	1
90	6	5	3	2	0

Illuminance at Distance



Zonal Lumen

ZONE	LUMENS	%FIXT
0 - 30	234	53.0
0 - 40	310	70.2
0- 60	394	89.1
0- 90	432	97.7
90-120	8	1.7
90-130	9	2.1
90-150	10	2.3
90-180	10	2.3
0-180	442	100.0

For lux multiply fc by 10.7

Coefficients of Utilization - Zonal Cavity Method

			Effe	ctive Floor Cavi	ty Reflectance:	20%
RC	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	119119119119	115115115115	110110110	105105105	100100100	98
1	111107104101	108105102 99	100 98 96	96 94 93	92 91 90	88
2	104 98 93 88	101 96 91 87	92 88 85	89 85 83	85 83 81	79
3	97 89 83 78	95 88 82 78	85 80 76	82 78 74	79 76 73	71
4	91 82 76 70	89 81 75 70	78 73 69	76 71 68	74 70 67	65
5	86 76 69 64	84 75 68 64	73 67 63	71 66 62	69 65 61	59
6	81 71 64 59	79 70 63 58	68 62 58	66 61 57	65 60 57	55
7	77 66 59 54	75 65 59 54	64 58 54	62 57 53	61 56 53	51
8	73 62 55 50	71 61 55 50	60 54 50	59 53 50	57 53 49	48
9	69 58 52 47	68 58 51 47	56 51 47	55 50 46	54 50 46	45
10	66 55 49 44	65 55 48 44	53 48 44	53 47 44	52 47 43	42

Luminaire	ltem Number	Item 12NC
eW Fuse Powercore, 2700 K, 10° x 60° beam angle, 8 W/ft, 305 mm (1 ft)	523-000065-24	910503704161
Accessories		
Leader Cable with Terminator and Strain Relief, UL/cUL, 3 m (10 ft)	108-000047-00	910503700972
Leader Cable with Terminator and Strain Relief, CE/CCC, 3 m (10 ft)	108-000047-01	910503700973
Wiring Compartment with Terminator	120-000077-01	910503700994
Jumper Cable, UL/cUL, 305 mm (1 ft)	108-000048-00	910503700974
Jumper Cable, UL/cUL, 1.5 m (5 ft)	108-000048-01	910503700975
Jumper Cable, CE/CCC, 305 mm (1 ft)	108-000048-02	910503700976
Jumper Cable, CE/CCC, 1.5 m (5 ft)	108-000048-03	910503700977
Terminators, 10/Box	120-000099-00	910503701120
Mounting Track, White, Quantity 1, 1219 mm (4 ft)	120-000124-00	910503701787
DM-1000 0-10 V ELV Dimmer	109-00036-00	912400135916

