eW Fuse Powercore

Date:	
Туре:	
Firm Name:	
Project:	

2700 K, 10° x 60° beam angle, 8 W/ ft, 1219 mm (4 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†	1,796
Efficacy (lm/W)	57.9
CRI	82

Electrical

Input Voltage	100 to 277 VAC, auto-ranging, 50/60 Hz
Power Consumption	32 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	65,000 65,000	
L ₅₀	25 °C 50 °C	65,000 65,000	

Physical

Dimensions	53 x 1219 x 41 mm (2.06 x 48 x 1.62 in)
(Height x Width x Depth)	
Weight	1.98 kg (4.37 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

Dry/Damp Location, IP20



Environment

^{*} 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.

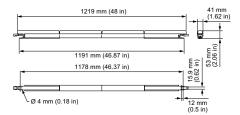
[‡] Refer to www.colorkinetics.com/support/appnotes/ for more information.

[§] 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



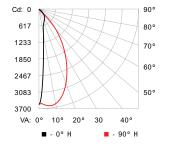
Photometrics 8 W/ft, 2700 K, 1219 mm (4 ft)

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	1,796.00
Efficacy (lm/W)	57.9



Polar Candela Distribution



	0.0	22.5	45.0	67.5	90.0
0	3462	3462	3462	3462	3462
5	2054	2219	2705	3281	3571
15	615	625	728	1616	3336
25	486	473	482	707	2500
35	400	369	349	408	1379
45	368	332	254	178	340
55	213	184	142	85	109
65	124	108	74	51	62
75	78	70	42	29	26
85	31	30	21	13	4
90	24	23	16	8	1

Illuminance at Distance



Zonal Lumen

201101	Luillell	
ZONE	LUMENS	%FIX
0 - 30	944	52.5
0 - 40	1250	69.6
0- 60	1594	88.7
0- 90	1749	97.4
90-120	34	1.9
90-130	41	2.3
90-150	47	2.6
90-180	47	2.6
0-180	1796	100.0

For lux multiply fc by 10.7

Coefficients of Utilization - Zonal Cavity Method

			Effec	ctive Floor Cavi	ity 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	118118118118	115115115115	110110110	104104104	100100100	97
1	111107104101	108105102 99	100 98 96	96 94 92	92 91 89	87
2	104 98 92 88	101 96 91 87	92 88 85	88 85 82	85 83 80	78
3	97 89 83 78	95 88 82 77	84 80 76	82 78 74	79 75 73	71
4	91 82 75 70	89 81 74 70	78 73 68	76 71 67	73 69 66	64
5	86 76 69 64	84 75 68 63	73 67 63	70 66 62	69 64 61	59
6	81 71 64 58	79 70 63 58	68 62 58	66 61 57	64 60 56	55
7	77 66 59 54	75 65 58 54	63 58 53	62 57 53	60 56 52	51
8	73 62 55 50	71 61 55 50	60 54 50	58 53 49	57 52 49	47
9	69 58 51 47	68 57 51 47	56 51 46	55 50 46	54 49 46	44
10	66 55 48 44	64 54 48 44	53 48 44	52 47 43	51 47 43	42

Luminaire	Item Number	Item 12NC
eW Fuse Powercore, 2700 K, 10° x 60° beam angle, 8 W/ft, 1219 mm (4 ft)	523-000065-40	910503703179
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	109-000036-00	912400135916

