

eW Graze MX Powercore

Date: _____

Type: _____

Firm Name: _____

Project: _____

2700 K, 9° x 9° Beam Angle, 1219 mm (4 ft)

Premium exterior linear grazing luminaire with single temperature white light

eW Graze MX Powercore is a high-performance, exterior linear luminaire that features the most light output in our line of solid white light grazing luminaires. It is designed to highlight architectural features ranging from surface textures and molding details to archways and windows. Graze Essential White luminaires offer a single channel of white light. Available in 2700 K, 3000 K, and 4000 K. Multiple luminaire lengths, beam angles, output levels, and power consumption levels support a large range of façade or surface illumination applications. Low-profile housing, connectorized cabling, a universal power input range, and direct line voltage operation make Graze luminaires easy to install and operate.



- Tailor light output to specific applications—Available in four standard lengths (1 ft, 2 ft, 3 ft, and 4 ft), four performance levels (MX, QLX, QLX 5W, and EC), and six standard 9° x 9°, 10° x 60°, 15° x 30°, 30° x 60°, 60° x 30°, and 90° x 90° (EC only) beam angles.
- Flexible integration—Graze's ultra-low profile lets it fit discretely into almost any layout, from simple to elaborate.
- Customizable accessories - Customize your Graze luminaire with a choice of three accessories: mounting arm, masking shield, and graze louver. Mounting arm available in three sizes and three colors (black, white, and gray), and masking shield available in four lengths (1 ft, 2 ft, 3 ft, and 4 ft).
- Integrates patented Powercore technology that controls power output to luminaires directly from line voltage - rapidly, efficiently, and accurately.
- Graze provides years of reliable use under rugged conditions by meeting ANSI C136.31- 2010 standard with a 3G vibration rating, and elimination of water pooling on the lens.
- Smooth dimming capability—Patented DIMand technology offers smooth dimming capability with the DM-1000 0-10 V ELV Dimmer or selected reverse-phase ELV-type dimmers.
- Convenient push-and-click connectors let you easily and rapidly install Leader Cables and Jumper Cables. Constant torque locking hinges offer simple and consistent position control from various angles.

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

Specifications

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

Output

Color Temperature	2700 K
Beam Angle	9° x 9°
Lumens †	3634
Efficacy (lm/W) §§	61.2
CRI	82.7

Electrical

Input Voltage	100 to 277 VAC, auto-ranging, 50/60 Hz
Power Consumption (Maximum at full output, steady state)	60 W
Surge Limits ¶	1 kV maximum differential (L to N) 2 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	60,000	
	50 °C	60,000	
L 50	25 °C	60,000	
	50 °C	60,000	

† 305 mm (1 ft) lumen output measurements comply with IES LM-79-08 testing procedures. 610 mm (2 ft), 914 mm (3 ft), and 1219 mm (4 ft) measurements are estimated based on the 305 mm (1 ft) measurements.

‡ 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.

§§ Efficacy measurements are estimated based on the 305 mm (1 ft) measurements.

¶¶ 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.

Physical

Dimensions (Height x Width x Depth)	68 x 1219 x 72 mm (2.7 x 48 x 2.85 in)
Weight	4.2 kg (9.3 lb)
Housing Material	Extruded anodized aluminium
Lens	Clear UV-protected polycarbonate
Luminaire Connections	Integral male/female waterproof connectors
Mounting	Multi-positional, constant torque locking hinges

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

Vibration Resistance

Not compliant to ANSI C136.31, 3G. Special orders are available to conform to the standard. Please contact your Color Kinetics Lighting Sales rep for custom configurations.

Mechanical Impact IK10

Corrosion Resistance

Not suitable for salt spray or harsh chemical environments. Please refer to www.colorkinetics.com/KB/corrosion-resistance for more information.

Humidity 0 to 95%, non-condensing

Thermal Protection enabled

For additional Thermal Protection information, please refer to <https://colorkinetics.helpdocs.io/article/sh301ducix>

Luminaire Run Lengths

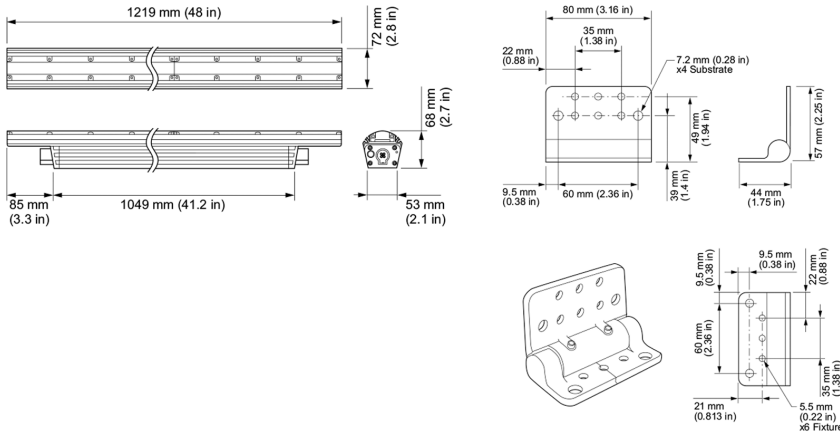
To calculate luminaire run lengths and total power consumption for your specific installation, download the Configuration Calculator from www.colorkinetics.com/support/install_tool/

Certification and Safety

Approbation	UL/cUL, FCC Class A, PSE, C-Tick
Environment	Dry/Damp/Wet Location, IP66



Dimensions



Photometrics 305 mm (1 ft), 9° x 9° beam angle

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	9° x 9°
LED	2700 K
Lumens	908.0
Efficacy (lm/W)	61.2



Illuminance at Distance

	Center Beam fc	Beam Width
4 ft	1,240 fc	0.7 ft 0.7 ft
8 ft	310 fc	1.5 ft 1.4 ft
12 ft	138 fc	2.2 ft 2.1 ft
16 ft	78 fc	3.0 ft 2.9 ft
20 ft	50 fc	3.7 ft 3.6 ft
24 ft	34 fc	4.4 ft 4.5 ft

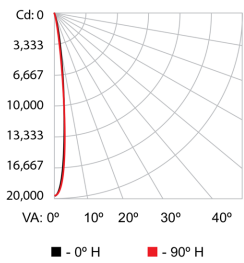
44 m (144 ft)
1 fc maximum distance
Vert. Spread: 10.6°
Horiz. Spread: 10.2°

Zonal Lumen

Zone	Lumens	% Luminaire
0-30	942.7	93.90%
0-40	960.2	95.60%
0-60	979.5	97.60%
60-90	14.2	1.40%
70-100	10.2	1.1%
90-120	7.3	0.70%
0-90	993.7	99%
90-180	10.3	1%
0-180	1,004.00	100%

For lux multiply fc by 10.7

Polar Candela Distribution



	0	25	45	70	90
0	19839	19839	19839	19839	19839
5	9711	9585	9513	9467	9649
15	940	780	694	511	445
25	85	95	81	81	77
35	26	28	27	23	32
45	15	15	15	11	15
55	10	10	9	8	12
65	7	7	7	6	7
75	4	4	3	4	6
85	2	3	3	3	5
90	2	2	2	3	4

Coefficients of Utilization - Zonal Cavity Method

RCC %:	Effective Floor Cavity Reflectance: 20%														
	80	70	50	30	10	0	80	70	50	30	10	0			
RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	0
RCR:	0	1	2	3	4	5	6	7	8	9	10	0	1	2	3
	1.19	1.19	1.19	1.16	1.16	1.16	0.99	1.11	1.11	1.11	1.06	1.06	1.06	1.06	1.01
	1.15	1.13	1.12	1.10	1.13	1.11	1.10	0.97	1.07	1.06	1.05	1.03	1.02	1.02	1.00
	1.12	1.09	1.06	1.04	1.10	1.07	1.05	0.95	1.04	1.02	1.01	1.01	1.00	0.98	0.98
	1.09	1.05	1.02	1.00	1.08	1.04	1.01	0.94	1.02	0.99	0.97	0.99	0.97	0.96	0.94
	1.07	1.03	0.99	0.97	1.08	1.01	0.98	0.92	0.99	0.97	0.95	0.98	0.96	0.94	0.93
	1.05	1.00	0.97	0.94	1.04	0.99	0.96	0.91	0.98	0.95	0.93	0.96	0.94	0.92	0.95
	1.03	0.98	0.95	0.92	1.02	0.97	0.94	0.90	0.96	0.93	0.91	0.95	0.92	0.91	0.84
	1.01	0.96	0.93	0.91	1.00	0.96	0.93	0.89	0.94	0.92	0.90	0.93	0.91	0.89	0.92
	1.00	0.95	0.91	0.89	0.99	0.94	0.91	0.88	0.93	0.90	0.89	0.92	0.90	0.88	0.91
	0.98	0.93	0.90	0.88	0.97	0.93	0.90	0.87	0.92	0.89	0.87	0.91	0.89	0.87	0.90
	0.97	0.92	0.89	0.87	0.96	0.91	0.89	0.86	0.91	0.88	0.86	0.9	0.88	0.86	0.85

Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire	Item Number	Item 12NC
eW Graze MX Powercore, 2700 K, 9° x 9° Beam Angle, 1219 mm (4 ft)	523-000080-45	910503703733
Accessories		
4 Conductor Leader Cable, 100 to 277 VAC, 3 m (10 ft), UL	108-000055-03	910503704066
4 Conductor Leader Cable, 100 to 277 VAC, 15.2 m (50 ft), UL	108-000055-00	910503703137
4 Conductor Leader Cable, 100 to 277 VAC, 3 m (10 ft), CE/PSE	108-000055-04	910503704067
4 Conductor Leader Cable, 100 to 277 VAC, 15.2 m (50 ft), CE/PSE	108-000055-01	910503704064
4 Conductor Leader Cable, 100 to 277 VAC, 3 m (10 ft), BIS	108-000055-13	912400137373
4 Conductor Leader Cable, 1.52 m (5 ft), UL, for Inground Enclosure	108-000055-09	912400134321
4 Conductor Leader Cable, 1.52 m (5 ft), CE, for Inground Enclosure	108-000055-10	912400134322
Jumper Cable for use with Graze, UL/cUL, End-to-End	108-000057-00	910503703139
Jumper Cable for use with Graze, UL/cUL, 305 mm (1 ft)	108-000057-03	910503704076
Jumper Cable for use with Graze, UL/cUL, 1.5 m (5 ft)	108-000057-06	910503704079
Jumper Cable for use with Graze, UL/cUL, 3 m (10 ft)	108-000057-09	910503704082
Jumper Cable for use with Graze, CE/PSE, End-to-End	108-000057-01	910503704074
Jumper Cable for use with Graze, CE/PSE, 305 mm (1 ft)	108-000057-04	910503704077
Jumper Cable for use with Graze, CE/PSE, 1.5 m (5 ft)	108-000057-07	910503704080
Jumper Cable for use with Graze, CE/PSE, 3 m (10 ft)	108-000057-10	910503704083
Jumper Cable for use with Graze, BIS, End-to-End	108-000057-18	912400137377
Jumper Cable for use with Graze, BIS, 1.5 m (5 ft)	108-000057-19	912400137378
Architectural Mounting Arm, Short, Gray	120-000206-00	912400136642
Architectural Mounting Arm, Medium, Gray	120-000206-01	912400136643
Architectural Mounting Arm, Long, Gray	120-000206-02	912400136644
Symmetric Louver, 1219 mm (4 ft)	120-000202-03	912400135852
Masking Shield, 1219 mm (4 ft)	120-000203-03	912400135860
Graze Glare Shield, 1220 mm (4 ft)	120-000081-03	910503700748
Inground Enclosure, Outer Box for 1219 mm (4 ft) luminaire	120-000190-07	912400133691
Inground Enclosure, Inner Box for 1219 mm (4 ft) luminaire	120-000190-06	912400133690
Power Supplies		
Data Enabler Pro, 3/4 in / 1/2 in NPT (U.S. trade size conduit)	106-000004-00	910503701210
Data Enabler Pro, PG21/PG13 (metric size conduit)	106-000004-01	910503701211

