

ColorGraze EC Powercore

Date: _____
Type: _____
Firm Name: _____
Project: _____

**RGB, 90° x 90° Beam Angle, 610
mm (2 ft)**

Cost-effective exterior linear grazing luminaire with intelligent RGB light

ColorGraze EC Powercore is a cost-effective luminaire, featuring a wide 90° x 90° to highlight architectural features ranging from surface textures and molding details to archways and windows. Graze RGB luminaires offer rich, saturated color and color-changing effects. Multiple fixture 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. The Color Kinetics Data Enabler Pro merges line voltage with control data and delivers them to luminaires over a single standard cable, dramatically simplifying installation and lowering total system cost.
- 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.
- Works seamlessly with the Color Kinetics full range of controllers, including Light System Manager, Video System Manager, Video System Manager Pro, iPlayer 3, Antumbra iColor Keypad, and ColorDial Pro—as well as third-party controllers.
- 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/rgb/colorgrazeecpowercore/

Specifications

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

Output

Beam Angle	90° x 90°
Lumens†	482
Efficacy (lm/W)§§	15.4
LED Channels	Red/Green/Blue

Electrical

Input Voltage	100 to 277 VAC, auto-ranging, 50/60 Hz
Power Consumption (Maximum at full output, steady state)	20 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

Interface	Data Enabler Pro (DMX or Ethernet)
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Control System

Color Kinetics full range of controllers, including Light System Manager, Video System Manager Pro, iPlayer 3, Antumbra iColor Keypad, and ColorDial Pro, or third-party controllers

Remote Monitoring & Management	Philips ActiveSite Ready, works with Interact Landmark
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Lumen Maintenance

Threshold§	Ambient Temperature	Reported¶¶	Calculated¶¶
L ₇₀	25 °C	80,000	
	50 °C	60,000	
L ₅₀	25 °C	100,000	
	50 °C	80,000	

Physical

Dimensions (Height x Width x Depth)	68 x 610 x 72 mm (2.7 x 24 x 2.85 in)
Weight	2.1 kg (4.6 lb)
Housing Material	Extruded anodized aluminium
Lens	Frosted 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

Complies with ANSI C136.31, 3G	
Mechanical Impact	IK08

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
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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, CE, PSE, C-Tick
Environment	Dry/Damp/Wet Location, IP66



† 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.

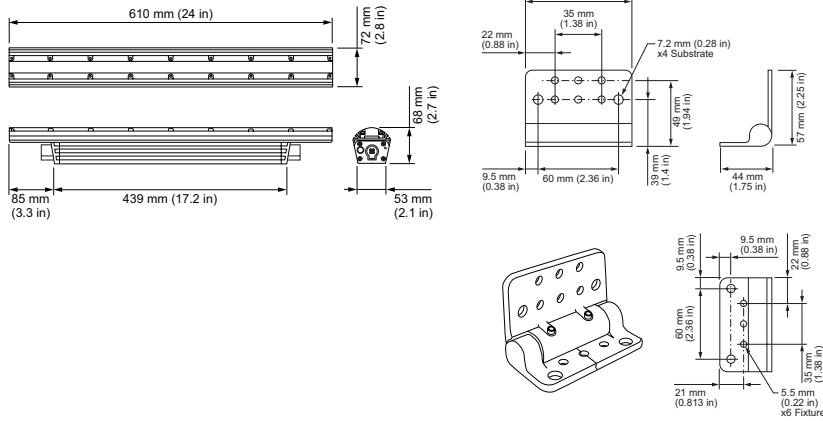
§ Lxx = xx% lumen maintenance (when light output drops below xx% of initial output). All values are given at B10, or the median value where 90% of the LED population is better than the reported or calculated lumen maintenance measurement.

¶ 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.

Dimensions



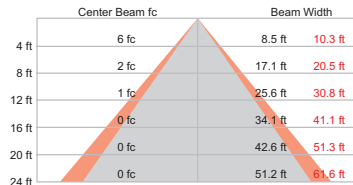
Photometrics 305 mm (1 ft), 90° x 90° beam angle

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	90° x 90°
LED	RGB
Lumens	241
Efficacy (lm/W)	15.4



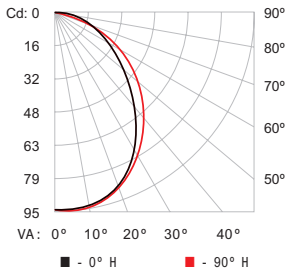
Illuminance at Distance



Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	72	30.0
0- 40	116	48.1
0- 60	192	79.4
0- 90	237	98.3
90-120	4	1.7
90-130	4	1.7
90-150	4	1.7
90-180	4	1.7
0-180	241	100.0

Polar Candela Distribution



VA	0	5	15	25	35	45	55	65	75	85	90
0.0	0.0	22.5	45.0	67.5	90.0	93.7	93.7	93.7	93.7	93.7	93.7
93.7	93.7	93.4	93.4	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
90.3	90.2	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4
81.5	82.0	83.2	83.7	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8
65.2	66.6	70.7	72.5	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
50.3	51.4	53.9	57.7	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5
33.1	34.1	38.1	41.2	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3
22.2	22.0	23.3	25.9	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5
14.9	14.2	13.2	13.1	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9
9.8	8.8	6.6	4.3	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
7.6	6.6	4.3	1.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity 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	10 0	0
0	119119119119	116116116116	110110110	105105105	100100100	98	
1	108104 99 95	105101 97 94	97 93 90	92 90 87	89 86 85	82	
2	99 91 84 79	96 89 83 77	85 80 75	82 77 73	78 75 72	69	
3	91 80 72 66	88 79 71 65	75 69 64	72 67 63	70 65 61	59	
4	83 72 63 56	81 70 62 56	67 61 55	65 59 54	63 57 53	51	
5	77 64 55 49	75 63 55 49	61 54 48	59 52 47	57 51 47	45	
6	71 58 49 43	69 57 49 43	55 48 42	53 47 42	52 46 41	39	
7	66 53 44 38	64 52 44 38	50 43 38	49 42 37	47 41 37	35	
8	62 48 40 34	60 48 40 34	46 39 34	45 38 34	43 38 33	31	
9	58 44 36 31	56 44 36 31	43 36 31	41 35 30	40 34 30	28	
10	54 41 33 28	53 41 33 28	39 33 28	38 32 28	37 32 28	26	

Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire	Item Number	Item 12NC
ColorGraze EC Powercore, RGB, 90° x 90° Beam Angle, 610 mm (2 ft)	123-000079-41	910503703368
Accessories		
Inground Enclosure, Outer Box for 610 mm (2 ft) luminaire	120-000190-03	912400133687
Inground Enclosure, Inner Box for 610 mm (2 ft) luminaire	120-000190-02	912400133686
Leader Cable with Terminator, UL/cUL, 3 m (10 ft)	108-000055-03	910503704066
Leader Cable with Terminator, UL/cUL, 15.2 m (50 ft)	108-000055-00	910503703137
Leader Cable with Terminator, CE/PSE, 3 m (10 ft)	108-000055-04	910503704067
Leader Cable with Terminator, CE/PSE, 15.2 m (50 ft)	108-000055-01	910503704064
Jumper Cable, UL/cUL, End-to-End	108-000057-00	910503703139
Jumper Cable, UL/cUL, 305 mm (1 ft)	108-000057-03	910503704076
Jumper Cable, UL/cUL, 1.5 m (5 ft)	108-000057-06	910503704079
Jumper Cable, UL/cUL, 3 m (10 ft)	108-000057-09	910503704082
Jumper Cable, CE/PSE, End-to-End	108-000057-01	910503704074
Jumper Cable, CE/PSE, 305 mm (1 ft)	108-000057-04	910503704077
Jumper Cable, CE/PSE, 1.5 m (5 ft)	108-000057-07	910503704080
Jumper Cable, CE/PSE, 3 m (10 ft)	108-000057-10	910503704083
Glare Shield, 610 mm (2 ft)	120-000081-01	910503700746
Mounting Arm, Short, Gray	120-000201-03	912400135843
Mounting Arm, Medium, Gray	120-000201-04	912400135844
Mounting Arm, Long, Gray	120-000201-05	912400135845
Symmetric Louver, 610 (2 ft)	120-000202-01	912400135850
Masking Shield, 610 mm (2 ft)	120-000203-01	912400135858
Power/Data 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

