# ColorGraze MX4 Powercore

Date:	
Туре:	
Firm Name:	
Project:	

RGBA, 30° x 60° Beam Angle, 914 mm (3 ft)

# Exterior linear grazing luminaire with intelligent RGBW or RGBA light

ColorGraze MX4 Powercore is a high-performance, exterior linear luminaire designed to highlight architectural features ranging from surface textures and molding details to archways and windows. Graze RGBW luminaires add a separate white LED creating better-quality whites compared to RGB. Graze RGBA luminaires add a separate amber LED which expands the available range of colors to include warmer tones such as rich gold, yellow, and orange shades. Multiple fixture lengths, and beam angles 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), and five standard 9° x 9°, 10° x 60°, 15° x 30°, 30° x 60°, and 60° x 30° 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 Promerges 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/colorgraze-mx4-powercore/



# Specifications

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

#### Output

Beam Angle	30° x 60°
Lumens <sup>†</sup>	1,641
Efficacy (lm/W) <sup>§§</sup>	30.1
LED Channels	Red/Green/Blue/Amber

#### **Electrical**

Input Voltage	100 to 277 VAC, auto-ranging, 50/60 Hz
Power Consumption	55.5 W
(Maximum at full output, steady state)	

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

#### Control

Interface	Data Enabler Pro (DMX or Ethernet)
Control System	
Color Kingties full range of cont	rollors including Light System Manager

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

#### **Lumen Maintenance**

Threshold§	Ambient Temperature	Reported¶	Calculated¶
L <sub>70</sub>	25 °C 50 °C	70,000 65,000	> 100,000 > 100,000
L <sub>50</sub>	25 °C 50 °C	75,000 70,000	

#### **Physical**

Dimensions (Height x Width x Depth)	68 x 915 x 72 mm (2.7 x 36 x 2.85 in)
Weight	3.2 kg (7.1 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.

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









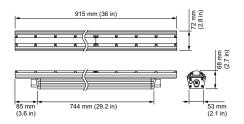
<sup>† 305</sup> mm (1 ft) lumen output measurements comply with IES LM-79-08 testing procedures. 610 mm (2 ft), 914 mm (3 ft), and 1219 mm (4 ft) measurements are estimated based on the 305 mm (1 ft) measurements.

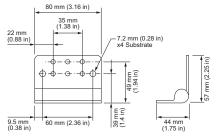
<sup>§</sup> Lxx = xx% lumen maintenance (when light output drops below xx% of initial output). All values are given at B10, or the median value where 90% of the LED population is better than the reported or calculated lumen maintenance measurement.

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.

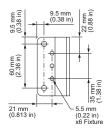
<sup>§§</sup> Efficacy measurements are estimated based on the 305 mm (1 ft) measurements.

## **Dimensions**









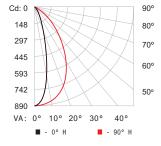
# Photometrics, 305 mm (1 ft), 30° x 60° beam angle

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	30° x 60°
LED	RGBA
Lumens	547
Efficacy (lm/W)	30.1



### Polar Candela Distribution



	0	25	45	70	90
0	887	887	887	887	887
5	806	816	840	872	883
15	394	445	558	743	814
25	110	144	245	521	669
35	29	37	76	279	455
45	13	15	23	109	234
55	9	9	10	34	85
65	6	6	5	11	24
75	3	2	2	4	6
85	1	1	1	1	1
90	1	1	0	0	0

#### Illuminance at Distance



#### **Zonal Lumen**

	Z	one	Lumens	%	Fixtur	re
0	-	60	533.2		97.5	%
60	-	90	13.2		2.4	%
0	_	90	546.4		99 9	%

For lux multiply fc by 10.7

#### Coefficients of Utilization - Zonal Cavity Method

					Effective Floor Cavity Reflectance:									:	20%			
RCC %:		8	0			7	0			50			30			10		0
RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	50	30	20	0
RCR: 0	119	119	119	119	116	116	116	100	111	111	111	106	106	106	102	102	102	100
1	113	110	108	105	111	108	106	93	104	102	100	100	99	97	97	96	95	93
2	107	102	98	95	105	101	97	87		94	91	94	92	89	91	89	88	86
3	102	95	90	86	100	94	89	81		87	84	89	85	82	86	84	81	80
4	96	89	83	79	95	88	82	75	85	81	77	83	79	76	81	78	75	74
5	92	83	77	73	90	82	77	70	80	75	72	79	74	71	77	73	70	69
6	87	78	72	68	86	77	71	66	76	71	67	74	70	66	73	69	66	64
7	83	73	67	63	82	73	67	62	72	66	63	70	66	62	69	65	62	61
8	79	69	63	59	78	69	63	58	68	63	59	67	62	59	66	62	58	57
9	75	66	60	56	74	65	60	55	64	59	56	63	59	55	63	58	55	54
10	72	62	57	53	71	62	56	52	61	56	53	60	56	52	60	55	52	51

Luminaire	Item Number	Item 12NC
ColorGraze MX4 Powercore RGBA, 30° x 60° Beam Angle, 914 mm (3 ft)	423-000002-13	910503704715
Accessories		
Inground Enclosure, Outer Box for 914 mm (3 ft) luminaire	120-000190-05	912400133689
Inground Enclosure, Inner Box for 914 mm (3 ft) luminaire	120-000190-04	912400133688
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)	108-000055-07	910503705065
Leader Cable with Terminator, CE/PSE, 15.2 m (50 ft)	108-000055-06	910503705064
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, 914 mm (3 ft)	120-000081-02	910503700747
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, 914 mm (36 in)	120-000202-02	912400135851
Masking Shield, 914 mm (36 in)	120-000203-02	912400135859
Power/Data Supplies		
Data Enabler Pro, 3/4 in / 1/2 in NPT (U.S. trade size conduit)	106-00004-00	910503701210
Data Enabler Pro, PG21/PG13 (metric size conduit)	106-00004-01	910503701211

