ColorReach Powercore gen2

RGBA, 8° Spread Lens, UL/CE

Exterior long–throw floodlight with intelligent RGBA light

ColorReach Powercore gen2 high-performance LED luminaires are premium exterior long-throw dynamic color-changing luminaires for lighting tall buildings, bridges, and iconic structures. ColorReach Powercore gen2, RGBA adds a separate amber LED which expands the available range of colors to include warmer tones such as rich gold, yellow, and orange shades. ColorReach Powercore offers a range of accessories that allow for customizable beam angles for floodlighting, spotlighting, wall washing, and grazing, along with the efficiency and cost-effectiveness of Powercore technology in a rugged die-cast aluminium housing.

- Improved color mixing—Updated Color Reach Powercore provides more punch and light quality for exterior long throw applications. End users will appreciate the clean mixed beam with higher application efficiency, allowing placement of light exactly where desired.

- Unparalleled light output—ColorReach Powercore offers unprecedented output and punch for LED-based illumination of large-scale structures and objects.

- Expanded customization with a wide range of new accessory options. To complement the native 5° lens, six standard secondary spread lenses can customize the luminaire to produce 8°, 13°, 23°, 43°, 63°, and 5° x 17° (asymmetric) beam angles. The option to add or combine a louver, full glare shield, or half glare shield creates new aesthetic possibilities for designers and architects.

- Superior color consistency and accuracy—Optibin, an advanced binning algorithm, sets a new standard for the color consistency and uniformity of LED sources used in manufacturing.

- 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.

- Simple luminaire positioning—Rugged, slim-profile mounting bracket allows simple positioning and luminaire rotation through a full 360°. Side locking bolts reliably secure luminaire with a standard wrench.

- Universal power input ranges of 100 to 240 VAC (CQC) and 100 to 277 (UL/CE).

- Works seamlessly with the complete Color Kinetics line of controllers, including ColorDial Pro, iPlayer 3, and Light System Manager – as well as third-party controllers.

For detailed product information, please refer to the Reach Product Guide at www.colorkinetics.com/global/products/rgb/colorreach-rgba/

COLORKINETICS

Specifications

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

Output

Beam Angle	8°
Lumens[†]	10,013
Efficacy (lm/W)	41.6
LED Channels	Red/Green/Blue/Amber

Electrical

Input Voltage	100 to 277 VAC, auto-ranging, 50/60 Hz
Power Consumption (Maximum at full output, steady state)	270 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/Ethernet)

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

Lumen Maintenance

Threshold[§]	Ambient Temperature	Reported[¶¶]	Calculated[¶¶]
L$_{70}$	25 °C		100,000
	50 °C		100,000

Physical

Dimensions (Height x Width x Depth)	522 x 753 x 158 mm (20.5 x 29.66 x 6.2 in)
Weight	34 kg (75 lb)
Effective Projected Area (EPA)	0.420 m²
Housing Material	Die-cast aluminium, black powder-coated finish
Lens	Tempered glass
Luminaire Connections	Integral male/female waterproof 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

Mechanical Impact	IK07

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

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

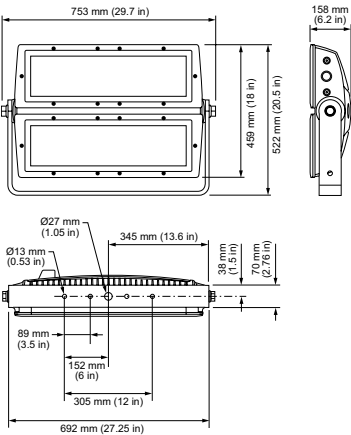|	
Approbation	UL/cUL, FCC Class A, CE, PSE
Environment	Dry/Damp/Wet Location, IP66

c(UL)us LISTED   CE   (P E S)

---

† Lumen measurement complies with IES LM-79-08 testing procedures.

§ 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

753 mm (29.7 in) · 158 mm (6.2 in) · 459 mm (18 in) · 522 mm (20.5 in)

Ø27 mm (1.05 in) · 345 mm (13.6 in) · 38 mm (1.5 in) · 70 mm (2.76 in)

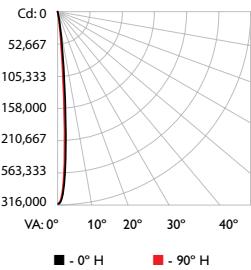Ø13 mm (0.53 in) · 89 mm (3.5 in) · 152 mm (6 in) · 305 mm (12 in) · 692 mm (27.25 in)

Photometrics 8° Spread Lens

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.
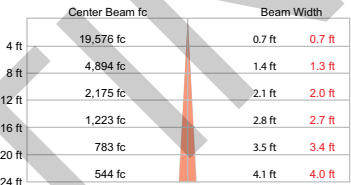
Beam Angle	8°
LED	RGBA
Lumens	10,013
Efficacy (lm/W)	41.6

8°

Polar Candela Distribution

Cd: 0, 52,667, 105,333, 158,000, 210,667, 563,333, 316,000

90° 80° 70° 60° 50°

VA: 0° 10° 20° 30° 40°

	0	25	45	70	90
0	313213	313213	313213	313213	313213
5	153885	149213	144566	135355	134763
15	0	0	0	0	0
25	0	0	0	0	0
35	0	0	0	0	0
45	0	0	0	0	0
55	0	0	0	0	0
65	0	0	0	0	0
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

■ - 0° H   ■ - 90° H

Illuminance at Distance

	Center Beam fc	Beam Width	
4 ft	19,576 fc	0.7 ft	0.7 ft
8 ft	4,894 fc	1.4 ft	1.3 ft
12 ft	2,175 fc	2.1 ft	2.0 ft
16 ft	1,223 fc	2.8 ft	2.7 ft
20 ft	783 fc	3.5 ft	3.4 ft
24 ft	544 fc	4.1 ft	4.0 ft

560 ft (170.7 m)
1 fc maximum distance

■ Vert. Spread: 9.9°
■ Horiz. Spread: 9.6°

Zonal Lumen

Zone	Lumens	% Luminaire
0-30	10,012.9	100.0%
0-40	10,012.9	100.0%
0-60	10,012.9	100.0%
0-90	10,012.9	100.0%
60-90	0.0	0.0%
70-100	0.0	0.0%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	10,012.9	100.0%

For lux multiply fc by 10.7

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

RCC %:	80				70				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	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.17	1.15	1.14	1.13	1.14	1.13	1.12	1.00	1.09	1.08	1.07	1.06	1.05	1.04	1.02	1.02	1.01	1.00
2	1.15	1.12	1.10	1.09	1.13	1.11	1.09	1.00	1.08	1.06	1.05	1.05	1.04	1.03	1.02	1.02	1.01	1.00
3	1.13	1.10	1.08	1.06	1.11	1.09	1.07	1.00	1.06	1.05	1.03	1.04	1.03	1.02	1.02	1.01	1.00	0.99
4	1.11	1.08	1.06	1.04	1.10	1.07	1.05	1.00	1.05	1.04	1.02	1.04	1.02	1.01	1.02	1.01	1.00	0.99
5	1.10	1.07	1.04	1.03	1.09	1.06	1.04	0.99	1.05	1.03	1.01	1.03	1.02	1.01	1.02	1.01	1.00	0.99
6	1.09	1.06	1.03	1.02	1.08	1.05	1.03	0.99	1.04	1.02	1.01	1.03	1.01	1.00	1.02	1.01	1.00	0.99
7	1.08	1.05	1.03	1.01	1.07	1.04	1.02	0.99	1.03	1.01	1.00	1.03	1.01	1.00	1.02	1.00	0.99	0.99
8	1.07	1.04	1.02	1.00	1.07	1.04	1.02	0.99	1.03	1.01	1.00	1.02	1.01	1.00	1.02	1.00	0.99	0.99
9	1.07	1.03	1.01	1.00	1.06	1.03	1.01	0.99	1.02	1.01	1.00	1.02	1.00	0.99	1.01	1.00	0.99	0.99
10	1.06	1.03	1.01	1.00	1.06	1.03	1.01	0.99	1.02	1.00	0.99	1.02	1.00	0.99	1.01	1.00	0.99	0.98

DISCONTINUED

Luminaire and Accessories

Luminaire	Item Number	Item 12NC
ColorReach Powercore gen2, RGBA, UL/CE	423-000014-01	912400133578

Luminaire only. Values in this specification sheet represent both the luminaire and spread lens combined. Spread lens available below in Associated Part.

Associated Part		
8° Spread lens with bezel	120-000068-17	912400133598

Trim bezel included.

Accessories		
Leader Cable, 100–277 VAC, UL, 3 m (10 ft)	108-000055-03	910503704066
Leader Cable, 100–277 VAC, UL, 15.2 m (50 ft)	108-000055-00	910503703137
Leader Cable, 100–277 VAC, CE/PSE, 3 m (10 ft)	108-000055-04	910503704067
Leader Cable, 100–277 VAC, CE/PSE, 15.2 m (50 ft)	108-000055-01	910503704064
Louver	120-000187-02	912400133589
Half Glare Shield	120-000187-01	912400133588
Full Glare Shield	120-000187-00	912400133587
Trim Bezel	120-000187-03	912400134263
13° Spread lens with bezel	120-000068-12	912400133593
23° Spread lens with bezel	120-000068-13	912400133594
43° Spread lens with bezel	120-000068-14	912400133595
63° Spread lens with bezel	120-000068-15	912400133596
5° x 17° Spread lens with bezel	120-000068-16	912400133597

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

COLOR**KINETICS**

Color Kinetics
www.colorkinetics.com/global/products/rgb/colorreach-rgba/