

# ColorReach Powercore gen2

Date: \_\_\_\_\_  
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Firm Name: \_\_\_\_\_  
Project: \_\_\_\_\_

**RGBA, 23° 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-rgb/](http://www.colorkinetics.com/global/products/rgb/colorreach-rgb/)

# Specifications

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

## Output

Beam Angle	23°
Lumens†	9,320
Efficacy (lm/W)	38.7
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](http://www.colorkinetics.com/KB/surge-protection).

## Control

Interface	Data Enabler Pro (DMX/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 <sub>70</sub>	25 °C 50 °C		100,000 100,000

## 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
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## Corrosion Resistance

Not suitable for salt spray or harsh chemical environments. Please refer to [www.colorkinetics.com/KB/corrosion-resistance](http://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/](http://www.colorkinetics.com/support/install_tool/)

## Certification and Safety

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



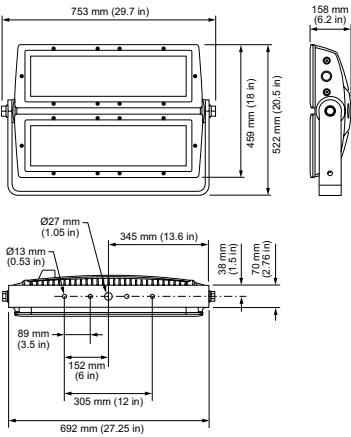
† Lumen measurement complies with IES LM-79-08 testing procedures.

§ 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

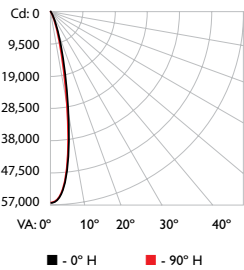


Photometrics 23° Spread Lens

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](http://www.colorkinetics.com/global/support/ies).

Beam Angle	23°
LED	RGBA
Lumens	9,320
Efficacy (lm/W)	38.7

Polar Candela Distribution



	0	25	45	70	90
0	56399	56399	56399	56399	56399
5	50365	50466	50223	49686	49764
15	15345	14912	14857	14767	14343
25	1433	1392	1320	1263	1255
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

Illuminance at Distance

	Center Beam fc	Beam Width
4 ft	3,525 fc	1.6 ft 1.6 ft
8 ft	881 fc	3.1 ft 3.1 ft
12 ft	392 fc	4.7 ft 4.7 ft
16 ft	220 fc	6.3 ft 6.3 ft
20 ft	141 fc	7.8 ft 7.8 ft
24 ft	98 fc	9.4 ft 9.4 ft

238 ft (72.5 m)  
1 fc maximum distance

■ Vert. Spread: 22.1°  
■ Horiz. Spread: 22.2°

Zonal Lumen

Zone	Lumens	% Luminaire
0-30	9,312.8	99.9%
0-40	9,319.7	100.0%
0-60	9,319.7	100.0%
0-90	9,319.7	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	9,319.7	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	80	70	50	30	20	10	0			
RW %:	70	50	30	10	0	70	50	30	10	0	50	30	20	10	0	50	30	20	10	0
RCR:	1.19	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	1.00
1	1.15	1.14	1.12	1.10	1.10	1.13	1.11	1.10	0.98	1.07	1.06	1.05	1.04	1.03	1.02	1.00	1.00	0.98	0.97	0.95
2	1.12	1.09	1.06	1.04	1.04	1.10	1.07	1.05	0.96	1.04	1.02	1.01	1.01	1.00	0.99	0.99	0.98	0.97	0.95	0.93
3	1.09	1.05	1.02	0.99	0.99	1.08	1.04	1.01	0.94	1.01	0.99	0.97	0.99	0.97	0.96	0.94	0.93	0.92	0.90	0.88
4	1.06	1.02	0.98	0.96	0.96	1.05	1.01	0.98	0.92	0.99	0.96	0.94	0.97	0.95	0.93	0.95	0.94	0.92	0.90	0.89
5	1.04	0.99	0.95	0.93	0.93	1.03	0.98	0.95	0.90	0.96	0.94	0.91	0.95	0.93	0.91	0.94	0.92	0.90	0.88	0.87
6	1.02	0.96	0.92	0.90	0.90	1.00	0.95	0.92	0.88	0.94	0.91	0.89	0.93	0.90	0.89	0.92	0.90	0.88	0.86	0.85
7	0.99	0.94	0.90	0.88	0.88	0.98	0.93	0.90	0.86	0.92	0.89	0.87	0.91	0.88	0.87	0.90	0.88	0.86	0.85	0.84
8	0.97	0.91	0.88	0.85	0.85	0.96	0.91	0.88	0.84	0.90	0.87	0.85	0.89	0.87	0.85	0.89	0.86	0.84	0.84	0.83
9	0.95	0.89	0.86	0.84	0.84	0.94	0.89	0.86	0.83	0.88	0.85	0.83	0.88	0.85	0.83	0.87	0.84	0.83	0.82	0.81
10	0.93	0.87	0.84	0.82	0.82	0.92	0.87	0.84	0.81	0.86	0.84	0.81	0.86	0.83	0.81	0.85	0.83	0.81	0.80	0.79

# Luminaire and Accessories

Use Item Number when ordering in North America

## Luminaire

ColorReach Powercore gen2, RGBA, UL/CE

## Item Number

423-000014-01

## Item 12NC

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

23° Spread lens with bezel

120-000068-13

912400133594

*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

8° Spread lens with bezel

120-000068-17

912400133598

13° Spread lens with bezel

120-000068-12

912400133593

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



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