

# ColorReach Compact Powercore

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

**RGBA, 23° Spread Lens, UL/CE**

## Exterior long-throw compact floodlight with intelligent RGBA light

ColorReach Compact Powercore combines all the benefits of LED-based lighting and control in a premium exterior long-throw dynamic color-changing luminaire for lighting tall buildings, bridges, and iconic structures. This compact luminaire delivers intense, energy-efficient output at a reasonable price, opening up new possibilities for exterior illumination. ColorReach Compact Powercore, 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 Compact 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. Custom configurations with custom channels of white or color LED sources are also available to support special applications.



- Improved color mixing—Updated Color Reach Compact 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 Compact 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/colorreachcompact-rgba/](http://www.colorkinetics.com/global/products/rgb/colorreachcompact-rgba/)

# Specifications

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

## Output

Beam Angle	23°
Lumens†	4,421
Efficacy (lm/W)	32.4
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)	135 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)	350 x 753 x 211 mm (13.75 x 29.66 x 8.3 in)
Weight	23.4 kg (51.6 lb)
Effective Projected Area (EPA)	0.186 m <sup>2</sup>
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

## Vibration Resistance

Complies with ANSI C136.31, 3G with standard yoke when used with 3 bolts.

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.

## 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



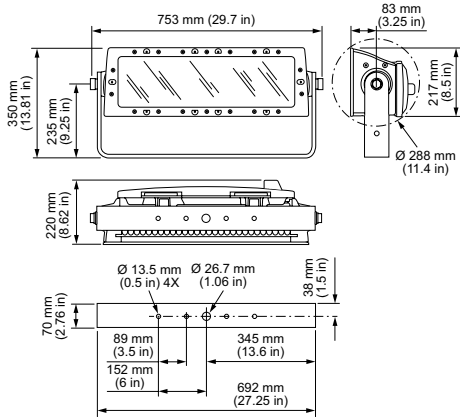
† Lumen measurement complies with IES LM-79-08 testing procedures.

§ L<sub>xx</sub> = 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	4,421
Efficacy (lm/W)	32.4



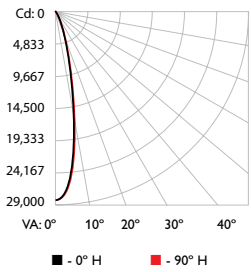
## Illuminance at Distance

Distance	Center Beam fc	Beam Width
4 ft	1,768 fc	1.5 ft 1.5 ft
8 ft	442 fc	3.0 ft 3.0 ft
12 ft	196 fc	4.5 ft 4.6 ft
16 ft	110 fc	6.0 ft 6.1 ft
20 ft	71 fc	7.5 ft 7.6 ft
24 ft	49 fc	9.0 ft 9.1 ft

## Zonal Lumen

Zone	Lumens	% Luminaire
0-30	4,418.2	99.9%
0-40	4,420.6	100.0%
0-60	4,420.6	100.0%
0-90	4,420.6	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	4,420.6	100.0%

## Polar Candela Distribution



Cd	0	25	45	70	90
0	28284	28284	28284	28284	28284
5	24852	24495	24651	24978	25064
15	6921	6804	7000	7205	7278
25	603	573	593	615	603
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

## Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

RCC %:	80	70	50	30	10	0												
RW %:	70	50	30	0	50	30	20	50	30	20	0							
RCR:	0	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	1.16	1.14	1.12	1.10	1.13	1.11	1.10	0.98	1.08	1.06	1.05	1.04	1.03	1.02	1.01	1.00	0.98
	2	1.12	1.09	1.06	1.04	1.10	1.07	1.05	0.96	1.04	1.02	1.01	1.02	1.00	0.99	0.98	0.97	0.95
	3	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	0.97	0.96	0.94
	4	1.07	1.02	0.99	0.96	1.05	1.01	0.98	0.92	0.99	0.96	0.94	0.97	0.95	0.93	0.96	0.94	0.92
	5	1.04	0.99	0.95	0.93	1.03	0.98	0.95	0.90	0.97	0.94	0.92	0.95	0.93	0.91	0.94	0.92	0.90
	6	1.02	0.96	0.93	0.90	1.01	0.96	0.92	0.88	0.94	0.92	0.89	0.93	0.91	0.89	0.92	0.90	0.88
	7	0.99	0.94	0.90	0.88	0.99	0.93	0.90	0.86	0.92	0.89	0.87	0.91	0.89	0.87	0.91	0.88	0.86
	8	0.97	0.92	0.88	0.86	0.97	0.91	0.88	0.85	0.90	0.87	0.85	0.90	0.87	0.85	0.89	0.87	0.85
	9	0.95	0.90	0.86	0.84	0.95	0.89	0.86	0.83	0.89	0.86	0.84	0.89	0.85	0.83	0.87	0.85	0.83
	10	0.94	0.88	0.84	0.82	0.93	0.88	0.84	0.81	0.87	0.84	0.82	0.86	0.84	0.82	0.86	0.83	0.82

For lux multiply fc by 10.7

# Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire	Item Number	Item 12NC
ColorReach Compact Powercore, RGBA, UL/CE	423-000015-03	912400133584
<i>Luminaire only. Values in this specification sheet represent both the luminaire and spread lens combined. Spread lens available below in Associated Part.</i>		
<b>Associated Part</b>		
23° Spread lens with bezel	120-000068-13	912400133594
<i>Trim bezel included.</i>		
<b>Accessories</b>		
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
<b>Power Supplies</b>		
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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Color Kinetics  
[www.colorkinetics.com/global/products/rgb/colorreachcompact-rgba/](http://www.colorkinetics.com/global/products/rgb/colorreachcompact-rgba/)