ColorReach Compact Powercore

Date:	
Туре:	
Firm Name:	
Project:	

RGBA, 13° 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 Promerges 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/



Specifications

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

Output

Beam Angle	13°
Lumens [†]	4,852
Efficacy (lm/W)	33.6
LED Channels	Red/Green/Blue/Amber

Electrical

Input Voltage	100 to 277 VAC, auto-ranging, 50/60 Hz
Power Consumptio	n 135 W
(Maximum at full output, s	eady state)
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/Etherne

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

Inresnoida	Ambient Temperature	Reported¶¶	Calculated¶¶
L ₇₀	25 °C 50 °C		100,000 100,000

Physical

Dimensions	350 x 753 x 211 mm (13.75 x 29.66 x 8.3 ir
(Height x Width x Depth)	
Weight	23.4 kg (51.6 lb
Effective Projected Ar	a (EPA) 0.186 m
Housing Material	Die-cast aluminium, black powder-coated finis
Lens	Tempered glas
Luminaire Connection	Integral male/female waterproc connector

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

Corrosion Resistance

Not suitable for salt spray or harsh chemical environments. Please refer to 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/

Certification and Safety

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







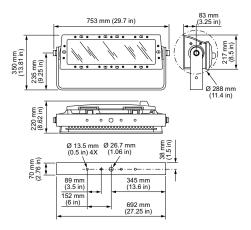
[†] Lumen measurement complies with IES LM-79-08 testing procedures.

^{\$} 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



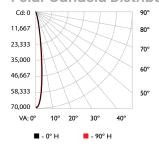
Photometrics 13° Spread Lens

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	13°
LED	RGBA
Lumens	4,852
Efficacy (Im/W)	33.6



Polar Candela Distribution



	0	25	45	70	90
0	69154	69154	69154	69154	69154
5	50664	48887	48058	48080	48511
15	2354	2299	2346	2566	2697
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
		-45			

Illuminance at Distance

	Center Beam fc	Beam	Width
4 ft	4,322 fc	1.0 ft	1.0 ft
8 ft	1,081 fc	2.0 ft	1.9 ft
12 ft	480 fc	3.0 ft	2.9 ft
16 ft	270 fc	4.0 ft	3.9 ft
20 ft	173 fc	4.9 ft	4.8 ft
24 ft	120 fc	5.9 ft	5.8 ft
	(80.2 m)	■ Vert. Sprea	nd: 14.1°

Zonal Lumen

		-	
Zone	Lumens	%	Luminaire
0-30	4,582.0		100.0%
0-40	4,582.0		100.0%
0-60	4,582.0		100.0%
0-90	4,582.0		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	4,582.0		100.0%

For lux multiply fc by 10.7

Coefficients of Utilization - Zonal Cavity Method

									Eff	ecti	ive	Floor	Car	vity	Refle	cta	nce:	20%
RCC	%:		80			7	70			50			30			10		0
RW	%:7	0 50	30	0	70	50	30	0	50	30	20	50	30	20	50	30	20	0
R	CR:																	
C	1.1	9 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	1.1	6 1.15	1.13	1.12	1.14	1.13	1.11	0.99	1.09	1.08	1.07	1.05	1.04	1.04	1.02	1.01	1.01	0.99
2	1.1	4 1.11	1.09	1.07	1.12	1.10	1.08	0.99	1.07	1.05	1.04	1.04	1.03	1.02	1.01	1.00	1.00	0.98
3	1.1	2 1.08	1.06	1.04	1.10	1.07	1.05	0.98	1.05	1.03	1.01	1.03	1.01	1.00	1.01	1.00	0.99	0.97
4	1.1	0 1.06	1.03	1.01	1.09	1.05	1.03	0.97	1.03	1.01	1.00	1.02	1.00	0.99	1.00	0.99	0.98	0.97
5	1.0	8 1.04	1.02	1.00	1.07	1.04	1.01	0.96	1.02	1.00	0.98	1.01	0.99	0.98	0.99	0.98	0.97	0.96
6	1.0	7 1.03	1.00	0.98	1.06	1.02	1.00	0.96	1.01	0.99	0.97	1.00	0.98	0.97	0.99	0.97	0.96	0.95
7	1.0	5 1.01	0.99	0.97	1.05	1.01	0.98	0.95	1.00	0.98	0.96	0.99	0.97	0.96	0.98	0.97	0.95	0.95
8	1.0	4 1.00	0.97	0.96	1.03	1.00	0.97	0.94	0.99	0.97	0.95	0.98	0.96	0.95	0.97	0.96	0.95	0.94
9	1.0	3 0.99	0.96	0.95	1.02	0.99	0.96	0.94	0.98	0.96	0.94	0.97	0.96	0.94	0.97	0.95	0.94	0.93
10	1.0	2 0 00	0.00	0.04	1.02	0.00	0.05	0.03	0.07	0.05	0.04	0.07	0.00	0.03	0.06	ao 0	0.03	0.03

Luminaire	Item Number	Item 12NC
ColorReach Compact Powercore, RGBA, UL/CE	423-000015-03	912400133584
Luminaire only. Values in this specification sheet represent both the luminaire and sp	oread lens combined. Spread lens available below in A	ssociated Part.
Associated Part		
13° Spread lens with bezel	120-000068-12	912400133593
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
Power 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

