

ColorReach Powercore gen2

Date: _____
Type: _____
Firm Name: _____
Project: _____

RGBW, 13° Spread Lens, CQC

Premium long-throw exterior LED floodlight with intelligent color light

ColorReach Powercore high-performance LED luminaires are premium exterior long-throw dynamic color-changing luminaires for lighting tall buildings, bridges, and iconic structures. 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 ColorReach Powercore gen2 Product Guide at www.colorkinetics.com/ls/rgb/colorreach-rgbw/

Specifications

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

Output

Beam Angle	13°
Lumens [†]	10,423
Efficacy (lm/W)	42.8
LED Channels	Red/Green/Blue/4000 K

Electrical

Input Voltage	100 to 240 VAC, auto-ranging, 50/60 Hz
Power Consumption	290 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/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	ActiveSite Ready, works with Interact Landmark
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Lumen Maintenance

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

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

[§] L_{xx} = 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.

Physical

Dimensions (Height x Width x Depth)	522 x 733 x 143 mm (20.5 x 28.9 x 5.6 in)
Weight	34 kg (75 lb)
Effective Projected Area (EPA)	0.420 m ²
Housing Material	Die-cast aluminium, powder-coated finish
Lens	Tempered glass
Luminaire Connections	Integral male/female waterproof connector, 1.8 m (6 ft) unified power/data cable

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
Humidity	0 to 95%, non-condensing

Luminaire Run Lengths

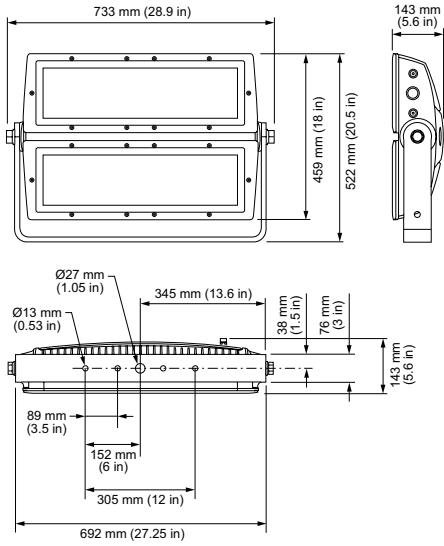
To calculate luminaire run lengths and total power consumption for your specific installation, download the Configuration Calculator from www.colorkinetics.com/support/install_tool/

Certification and Safety

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



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/support/ies.

Beam Angle	13°
LED	RGBW
Lumens	10,423
Efficacy (lm/W)	42.8

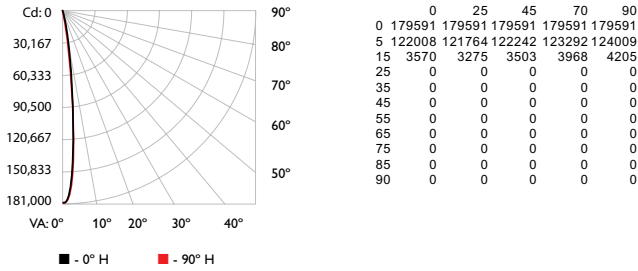


Illuminance at Distance

Distance	Center Beam fc	Beam Width
4 ft	11,224 fc	0.9 ft 0.9 ft
8 ft	2,806 fc	1.8 ft 1.9 ft
12 ft	1,247 fc	2.7 ft 2.8 ft
16 ft	702 fc	3.7 ft 3.7 ft
20 ft	449 fc	4.6 ft 4.6 ft
24 ft	312 fc	5.5 ft 5.6 ft

423 ft (128.9 m)
1 fc maximum distance
Vert. Spread: 13.1°
Horiz. Spread: 13.2°

Polar Candela Distribution



Zonal Lumen

Zone	Lumens	% Luminaire
0-30	10,422.6	100.0%
0-40	10,422.6	100.0%
0-60	10,422.6	100.0%
0-90	10,422.6	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	10,422.6	100.0%

For lux multiply fc by 10.7

Coefficients of Utilization - Zonal Cavity Method

RCC %:	Effective Floor Cavity Reflectance: 20%																			
	80				70				50				30				10			
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	1.16	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	1.01	0.99	
2	1.14	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	1.01	1.00	0.99	0.98	
3	1.12	1.09	1.06	1.04	1.10	1.08	1.05	0.98	1.05	1.03	1.02	1.03	1.02	1.00	1.01	1.00	0.99	0.98	0.97	
4	1.10	1.07	1.04	1.02	1.09	1.06	1.03	0.98	1.04	1.02	1.00	1.02	1.01	0.99	1.01	0.99	0.98	0.97	0.96	
5	1.09	1.05	1.02	1.00	1.08	1.04	1.02	0.97	1.03	1.01	0.99	1.01	1.00	0.98	1.00	0.99	0.98	0.97	0.96	
6	1.07	1.03	1.01	0.99	1.06	1.03	1.00	0.97	1.02	1.00	0.98	1.01	0.99	0.97	1.00	0.98	0.97	0.96	0.96	
7	1.06	1.02	1.00	0.98	1.05	1.02	0.99	0.96	1.01	0.99	0.97	1.00	0.98	0.97	0.99	0.97	0.96	0.96	0.96	
8	1.05	1.01	0.99	0.97	1.04	1.01	0.98	0.96	1.00	0.98	0.96	0.99	0.97	0.96	0.98	0.97	0.96	0.95	0.95	
9	1.04	1.00	0.98	0.96	1.03	1.00	0.97	0.95	0.99	0.97	0.96	0.98	0.97	0.95	0.98	0.96	0.95	0.95	0.95	
10	1.03	0.99	0.97	0.95	1.02	0.99	0.97	0.95	0.98	0.96	0.95	0.98	0.96	0.95	0.97	0.96	0.95	0.95	0.94	

Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire

	Item Number	Item 12NC
ColorReach Powercore gen2 RGBW, CQC Luminaire and 1.8 m (6 ft) leader cable only. Values in this specification sheet represent both the luminaire and spread lens combined. Spread lens available below in Associated Part.	423-000014-02	912400133579

Associated Part

13° Spread lens with bezel Trim bezel included.	120-000068-12	912400133593
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Accessories

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
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

