

ReachElite iColor 300 Powercore

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

RGBW, 100 to 277 VAC, 10° Spread
Lens, UL/cUL, CE, CQC

High-performance long-throw exterior LED luminaire with RGBW light

ReachElite is a premium exterior long-throw luminaire designed to light large-scale outdoor structures ranging from bridges and facades to monuments and skyscrapers. Powerful enough to hit targets over 732 m (2,400 ft) away with the 300 W luminaire, ReachElite raises the bar for optical control, performance and beam quality in LED lighting. What sets ReachElite apart from the competition is its application efficiency, high punch, and adaptability. ReachElite delivers high-quality white and color light exactly where you want it. With a native beam angle under 3°, ReachElite introduces a new level of precision and punch to the premium exterior LED luminaire market.



- Application adaptability—ReachElite excels in a wide range of lighting applications including flood lighting, spot lighting, wall grazing and wall washing. Optional secondary accessories combined with easy precise aiming bring ultimate in system flexibility to customize the look and performance of any project. Precision optical system allows for placement freedom.
 - High punch—ReachElite's optical system enables the layering of precise high quality light. Increased application efficacy is realized as a result of high illuminance sources. As a result luminaires can be placed at far greater distances from surfaces to be illuminated. The native 2.6° beam angle allows for the light to hit targets up to 732 m (2,400 ft) away using the 300 W luminaire, without sacrificing light efficiency or quality.
 - Design flexibility—ReachElite is available in three versions: 100 W, 200 W, and 300 W. Each luminaire contains either one, two, or three 100 W heads that can be aimed independently of each other. This empowers lighting designers to utilize multiple applications and beam direction in a single luminaire.
 - Chromasync technology improves color consistency between all LED luminaires within 2SDCM and simplifies commissioning. The color control algorithm utilizes active temperature measurement combined with the data measured during manufacturing each array. When Chromasync is enabled, color consistency between luminaires is achieved without having to manually adjust color points on each luminaire.
 - Flexible field-installed accessories for beam shaping, glare control and mounting allow easy project customization. Choose from a full line of high-quality accessories, from seven different spread lenses, a louver, full and half glare shields, a rock guard, and a slipfitter mount for all ReachElite luminaires. All in black.
 - ReachElite Powercore provides years of reliable use under rugged conditions. ReachElite raises reliability even further with more protection from corrosion by meeting ASTM B117 standard for > 1,500 hours of corrosion resistance and ANSI C136.31-2010 standard with a 3G vibration rating, and elimination of water pooling on main cover lens and accessories.
 - 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.
 - Works seamlessly with the Color Kinetics full range of controllers, including Light System Manager, Video System Manager, Video System Manager Pro, iPlayer 3, Antumbra iColor Keypad, and ColorDial Pro—as well as third-party controllers.
- For detailed product information, please refer to the ReachElite iColor 300 Powercore Product Guide at www.colorkinetics.com/ls/rgb/ReachElite-iColor-Powercore-RGBW/

Specifications

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

Output

Beam Angle	10°
Lumens [†]	9,528
Efficacy (lm/W) (with spread lens)	32.3
LED Channels	Red/Green/Blue/4000 K

Electrical

Input Voltage	100 to 277 VAC, auto-ranging, 50/60 Hz
Power Consumption (Maximum at full output, steady state)	300 W
Power Factor	0.99 @ 120 VAC 0.90 @ 277 VAC
Surge	4 kV maximum common (Gnd to L, Gnd to N)

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 ₉₀	25 °C	23,100	23,100
	50 °C	23,100	23,100
L ₈₀	25 °C	> 51,000	67,000
	50 °C	> 51,000	67,000
L ₇₀	25 °C	> 51,000	> 100,000
	50 °C	> 51,000	> 100,000
L ₅₀	25 °C	> 51,000	> 100,000
	50 °C	> 51,000	> 100,000

[†] ReachElite 100 lumen output measurements comply with IES LM-79-08 testing procedures. ReachElite 300 measurements are estimated based on the ReachElite 100 measurements.

[§] 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)	449.3 x 702.8 x 615.8 mm (17.68 x 27.68 x 24.25 in)
Weight	41 kg (90.3 lb)
Effective Projected Area (EPA)	0.455 m ² (4.90 ft ²) With full glare shield.
Housing Material	Die-cast aluminium, powder-coated finish
Lens	Clear tempered glass
Luminaire Connections	Integral male/female waterproof 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	
Mechanical Impact	IK09 (IK10 with Louver or Wire Rock Guard accessory.)

Corrosion Resistance

Complies with ASTM B117 standard for > 1, 500 hours	
Humidity	0 to 95%, non-condensing

Luminaire Run Lengths

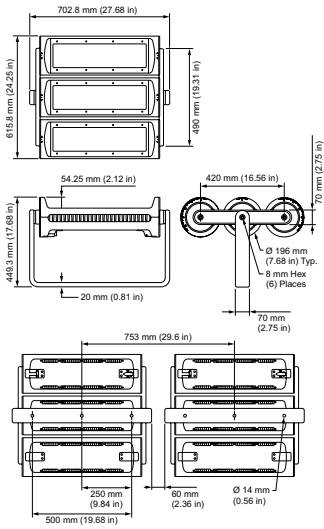
To calculate luminaire run lengths and total power consumption for your specific installation, download the Configuration Calculator from www.colorkinetics.com/support/install_tool/

Certification and Safety

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



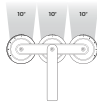
Dimensions



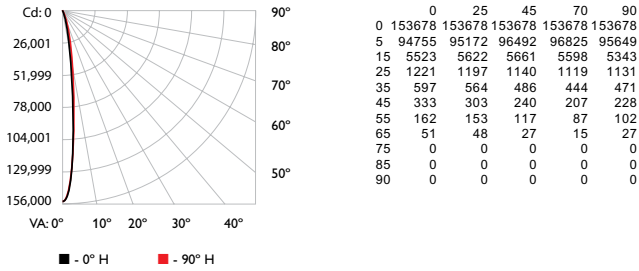
Photometrics, RGBW, 100 to 277 VAC, 10°

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	10°
LED	RGBW
Lumens	9,528
Efficacy (lm/W) (with spread lens)	32.3



Polar Candela Distribution



Zonal Lumen

Zone	Lumens	% Luminaire
0-30	8856.0	92.9%
0-40	9178.2	96.3%
0-60	9494.4	99.6%
60-90	33.9	0.4%
70-100	0.3	0.0%
90-120	0.0	0.0%
0-90	9528.6	100.0%
90-180	0.0	0.0%
0-180	9528.6	100.0%

For lux multiply fc by 10.7

Illuminance at Distance

	Center Beam fc	Beam Width
4 ft	9,604.86 fc	0.8 ft 0.9 ft
8 ft	2,401.20 fc	1.7 ft 1.7 ft
12 ft	1,067.22 fc	2.5 ft 2.6 ft
16 ft	600.30 fc	3.3 ft 3.4 ft
20 ft	384.18 fc	4.1 ft 4.3 ft
24 ft	266.79 fc	5.0 ft 5.1 ft

678 ft (206.6 m)
1 fc maximum distance

Legend: ■ Vert. Spread: 11.8° ■ Horiz. Spread: 12.1°

Coefficients of Utilization - Zonal Cavity Method

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

Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire	Item Number	Item 12NC
ReachElite iColor 300 Powercore RGBW, 100 to 277 VAC, 10° Spread Lens, UL/cUL, CE, CQC Luminaire only. Leader cable sold separately.	423-000303-00	912400135527
Associated Part		
Spread Lens With Trim Bezel, 10°	120-000197-07	912400135537
Accessories		
Slipfitter Mount, 2-3/8in	120-000197-04	912400135534
Louwer	120-000197-02	912400135532
Rock Guard	120-000197-03	912400135533
Half Glare Shield	120-000197-01	912400135531
Full Glare Shield	120-000197-00	912400135530
Spread Lens With Trim Bezel, 5°	120-000197-06	912400135536
Spread Lens With Trim Bezel, 20°	120-000197-08	912400135538
Spread Lens With Trim Bezel, 40°	120-000197-09	912400135539
Spread Lens With Trim Bezel, 60°	120-000197-10	912400135540
Spread Lens With Trim Bezel, 80°	120-000197-11	912400135541
Spread Lens With Trim Bezel, 10° x 40°	120-000197-12	912400135542
Leader Cable, 50 ft, UL	108-000055-00	910503703137
Leader Cable, 50 ft, CE	108-000055-01	910503704064
Leader Cable, 50 ft, CCC	108-000055-02	910503704065
Leader Cable, 10 ft, UL	108-000055-03	910503704066
Leader Cable, 10 ft, CE	108-000055-04	910503704067
Leader Cable, 10 ft, CCC	108-000055-05	910503704068
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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Color Kinetics
www.colorkinetics.com/ls/rgb/ReachElite-iColor-Powercore-RGBW/