

# ReachElite High Punch Powercore gen3, RGBW

Date:

Type:

Firm Name:

Project:

**200 W, 3°, Native (no spread lens), UL/cUL, CE, CQC**

## High-performance exterior long-throw floodlight with intelligent 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 418 m (1,373 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 3° native beam angle ReachElite introduces a new level of precision and punch to the premium exterior LED luminaire market.



- High punch—ReachElite's High Punch 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 3° beam angle allows for the light to hit targets up to 564 m (1,852 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.
- Flexible field-installed accessories—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. Color Kinetics accessories make project customization simple.
- Integrates patented Powercore technology—Patented Powercore controls power output to luminaires directly from line voltage - rapidly, efficiently, and accurately. The latest Powercore technology coupled with Data Enabler Pro gen3 enables longer run lengths of up to 400 feet, simplifying installations and reducing costs.
- Application adaptability—ReachElite High Punch excels in a wide range of lighting applications including spot lighting, and wall grazing. 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.
- Chromasync technology—Improves color consistency between all LED luminaires within 2 SDCM and simplifies commissioning. The color control algorithm utilizes active temperature measurement combined with the data measured during manufacturing each array.
- Reliable—ReachElite Powercore provides years of reliable use under rugged conditions. ReachElite offers more protection from corrosion by meeting ASTM B117 standard for > 1,500 hours of corrosion resistance and ANSI C136.31 with a 5G vibration rating (3G with Slipfitter mount), and elimination of water pooling on main cover lens and accessories.
- Easily Controlled—Works seamlessly with Color Kinetics controllers, including iPlayer4, iPlayer 3, Antumbra iColor Keypad, and ColorDial Pro, as well as third-party controllers.

For detailed product information, please refer to the ReachElite Product Guide at [www.colorkinetics.com/global/products/rgb/reachelite-highpunch-powercore-gen3-rgbw](http://www.colorkinetics.com/global/products/rgb/reachelite-highpunch-powercore-gen3-rgbw)

# Specifications

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

## Output

|                                  |                                     |
|----------------------------------|-------------------------------------|
| Beam Angle                       | 3°                                  |
| Lumens †                         | 7,910                               |
| Lumens per channel               | R 1,320 / G 2,922 / B 902 / W 3,228 |
| Efficacy (lm/W) (no spread lens) | 42.5                                |
| LED Channels                     | Red/Green/Blue/4000 K               |

## Electrical

|                                        |                                                                                  |
|----------------------------------------|----------------------------------------------------------------------------------|
| Input Voltage                          | 100 to 277 VAC, auto-ranging, 50/60 Hz                                           |
| Power Consumption                      | 200 W                                                                            |
| (Maximum at full output, steady state) |                                                                                  |
| Power Factor                           | 0.99 @ 120 VAC<br>0.81 @ 277 VAC                                                 |
| Surge Limits ¶                         | 2 kV maximum differential (L to N)<br>4 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 or Ethernet) |
| Control Channels                                                                                                                                                                    | 4 channels per module              |
| For additional Control Channel information, please refer to <a href="https://colorkinetics.helpdocs.io/article/fv5rkvclq">https://colorkinetics.helpdocs.io/article/fv5rkvclq</a> . |                                    |

### Control System ‡

Color Kinetics full range of controllers, including iPlayer 3, iPlayer4, Antumbra iColor Keypad, and ColorDial Pro, or third-party controllers

Remote Monitoring & Management Works with Interact Landmark

## Lumen Maintenance

| Threshold§ | Ambient Temperature | Reported ¶¶ | Calculated ¶¶ |
|------------|---------------------|-------------|---------------|
| L 90       | 25 °C               | >39,588     | >39,588       |
|            | 50 °C               | >39,588     | >39,588       |
| L 80       | 25 °C               | >55,000     | >98,480       |
|            | 50 °C               | >55,000     | >98,480       |
| L 70       | 25 °C               | >55,000     | >100,000      |
|            | 50 °C               | >55,000     | >100,000      |
| L 50       | 25 °C               | -           | >100,000      |
|            | 50 °C               | -           | >100,000      |

## Physical

|                                        |                                                                                                         |
|----------------------------------------|---------------------------------------------------------------------------------------------------------|
| Dimensions<br>(Height x Width x Depth) | 344.2 x 702.8 x 406 mm (13.56 x 27.68 x 16 in)                                                          |
| Weight                                 | 28 kg (61.7 lb)                                                                                         |
| Effective Projected Area<br>(EPA)      | 100: 0.182 m² (1.96 ft²), 200: 0.252 m² (2.71 ft²), 300: 0.455 m² (4.90 ft²)<br>With full glare shield. |
| Housing Material                       | Die-cast aluminium, black 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

|                                                                    |                                                       |
|--------------------------------------------------------------------|-------------------------------------------------------|
| ANSI C136.31 with a 5G vibration rating (3G with Slipfitter mount) |                                                       |
| Mechanical Impact                                                  | IK09 (IK10 with Louver or Wire Rack Guard accessory.) |

### Corrosion Resistance

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

### Thermal Protection enabled

For additional Thermal Protection information, please refer to <https://colorkinetics.helpdocs.io/article/sh301ducix>

### 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, CQC, RCM |
| Environment                                                                                                                                                                                   | Dry/Damp/Wet Location, IP66            |
| For additional Energy Efficiency Class Information, please refer to <a href="https://colorkinetics.helpdocs.io/article/cviis2p8qq">https://colorkinetics.helpdocs.io/article/cviis2p8qq</a> . |                                        |



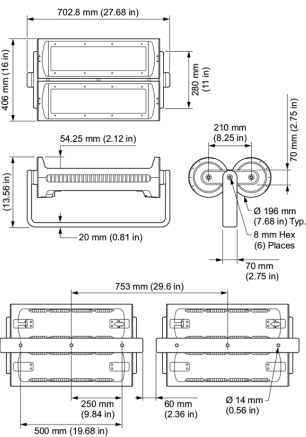
† Native beam lumen output measurements comply with IES LM-79-08 testing procedures. All other beam angle measurements are estimated based on the native beam measurements. ReachElite 200 and 300 output measurements are estimated based on ReachElite 100 measurements.

§ 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.

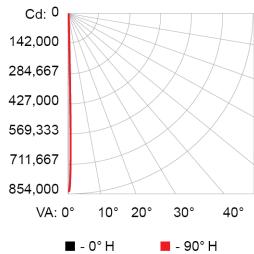
Dimensions



Photometrics 100 W, 3°, Native (no spread lens)

|                                  |         |
|----------------------------------|---------|
| Beam Angle                       | 3°      |
| LED                              | RGBW    |
| Lumens                           | 3,955.0 |
| Efficacy (lm/W) (no spread lens) | 42.5    |

Polar Candela Distribution



|          |        |        |        |        |
|----------|--------|--------|--------|--------|
| 0        | 25     | 45     | 70     | 90     |
| 0 835715 | 835715 | 835715 | 835715 | 835715 |
| 5 18519  | 17078  | 15458  | 13262  | 11509  |
| 15 722   | 701    | 649    | 604    | 570    |
| 25 205   | 205    | 205    | 184    | 181    |
| 35 121   | 127    | 125    | 106    | 104    |
| 45 80    | 87     | 92     | 76     | 73     |
| 55 73    | 74     | 78     | 51     | 48     |
| 65 30    | 31     | 34     | 30     | 27     |
| 75 12    | 13     | 11     | 11     | 9      |
| 85 1     | 1      | 1      | 1      | 0      |
| 90 0     | 0      | 0      | 0      | 0      |

Illuminance at Distance



|       | Center Beam fc | Beam Width    |
|-------|----------------|---------------|
| 4 ft  | 52,232.2 fc    | 0.2 ft 0.2 ft |
| 8 ft  | 13,058.1 fc    | 0.4 ft 0.4 ft |
| 12 ft | 5,803.6 fc     | 0.6 ft 0.6 ft |
| 16 ft | 3,264.5 fc     | 0.8 ft 0.8 ft |
| 20 ft | 2,089.3 fc     | 1.1 ft 1.1 ft |
| 24 ft | 1,450.9 fc     | 1.3 ft 1.3 ft |

277.4 m (910 ft)  
1 fc maximum distance

Vert. Spread: 3.0°  
Horiz. Spread: 3.0°

Zonal Lumen

| Zone   | Lumens  | %      | Luminaire |
|--------|---------|--------|-----------|
| 0-30   | 3,719.5 | 94.0%  |           |
| 0-40   | 3,792.7 | 95.9%  |           |
| 0-60   | 3,912.8 | 98.9%  |           |
| 60-90  | 42.2    | 1.1%   |           |
| 70-100 | 13.3    | 0.3%   |           |
| 90-120 | 0.0     | 0.0%   |           |
| 0-90   | 3,955.0 | 100.0% |           |
| 90-180 | 0.0     | 0.0%   |           |
| 0-180  | 3,955.0 | 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    |      |      |      |      |      |
| RW %:  |      | 70                                      | 50   | 30   | 0    | 70   | 50   | 30   | 0    | 50   | 30   | 20   | 50   | 30   | 20   | 0    | 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 | 1.00 |
| 1      | 1.16 | 1.14                                    | 1.13 | 1.11 | 1.14 | 1.12 | 1.11 | 0.99 | 1.08 | 1.07 | 1.06 | 1.05 | 1.04 | 1.03 | 1.01 | 1.01 | 0.99 |
| 2      | 1.13 | 1.11                                    | 1.08 | 1.06 | 1.11 | 1.09 | 1.07 | 0.98 | 1.06 | 1.04 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 0.97 |
| 3      | 1.11 | 1.08                                    | 1.05 | 1.03 | 1.09 | 1.06 | 1.04 | 0.97 | 1.04 | 1.02 | 1.00 | 1.02 | 1.00 | 0.99 | 1.00 | 0.98 | 0.96 |
| 4      | 1.09 | 1.05                                    | 1.02 | 1.00 | 1.08 | 1.04 | 1.02 | 0.96 | 1.02 | 1.00 | 0.98 | 1.01 | 0.99 | 0.97 | 0.99 | 0.98 | 0.95 |
| 5      | 1.07 | 1.03                                    | 1.00 | 0.98 | 1.06 | 1.02 | 1.00 | 0.95 | 1.01 | 0.99 | 0.97 | 1.00 | 0.98 | 0.96 | 0.98 | 0.97 | 0.95 |
| 6      | 1.06 | 1.02                                    | 0.99 | 0.97 | 1.05 | 1.01 | 0.98 | 0.94 | 1.00 | 0.97 | 0.96 | 0.99 | 0.97 | 0.95 | 0.98 | 0.96 | 0.94 |
| 7      | 1.05 | 1.00                                    | 0.97 | 0.95 | 1.04 | 1.00 | 0.97 | 0.94 | 0.99 | 0.96 | 0.95 | 0.98 | 0.96 | 0.94 | 0.97 | 0.95 | 0.93 |
| 8      | 1.03 | 0.99                                    | 0.96 | 0.95 | 1.03 | 0.99 | 0.96 | 0.93 | 0.98 | 0.96 | 0.94 | 0.97 | 0.95 | 0.94 | 0.96 | 0.95 | 0.93 |
| 9      | 1.02 | 0.98                                    | 0.96 | 0.94 | 1.02 | 0.98 | 0.95 | 0.93 | 0.97 | 0.95 | 0.93 | 0.97 | 0.95 | 0.93 | 0.96 | 0.94 | 0.92 |
| 10     | 1.02 | 0.97                                    | 0.95 | 0.93 | 1.01 | 0.97 | 0.95 | 0.92 | 0.97 | 0.94 | 0.93 | 0.96 | 0.94 | 0.93 | 0.96 | 0.94 | 0.92 |

# Luminaire and Accessories

Use Item Number when ordering in North America

| Luminaire                                                                                                                                        | Item Number   | Item 12NC    |
|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|
| ReachElite High Punch Powercore gen3, RGBW, 200 W, 3°, Native (no spread lens), UL/cUL, CE, CQC<br>Luminaire only. Leader cable sold separately. | 423-000232-00 | 912400138204 |
| Accessories                                                                                                                                      |               |              |
| Slipfitter Mount, 2-3/8in                                                                                                                        | 120-000197-04 | 912400135534 |
| Louver                                                                                                                                           | 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, 10°                                                                                                                 | 120-000197-07 | 912400135537 |
| 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 |
| 4 Conductor Leader Cable, For use with all ReachElite family luminaires, 100 to 277 VAC, 15.2 m (50 ft), UL                                      | 108-000055-00 | 910503703137 |
| 4 Conductor Leader Cable, For use with all ReachElite family luminaires, 100 to 277 VAC, 15.2 m (50 ft), CE/PSE                                  | 108-000055-01 | 910503704064 |
| 4 Conductor Leader Cable, For use with all ReachElite family luminaires, 100 to 277 VAC, 3 m (10 ft), UL                                         | 108-000055-03 | 910503704066 |
| 4 Conductor Leader Cable, For use with all ReachElite family luminaires, 100 to 277 VAC, 3 m (10 ft), Black, CE/PSE                              | 108-000055-04 | 910503704067 |
| 4 Conductor Leader Cable, For use with all ReachElite family luminaires, 100 to 277 VAC, 3 m (10 ft), BIS                                        | 108-000055-13 | 912400137373 |
| 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 |
| Data Enabler Pro gen3, 3/4 in / 1/2 in NPT (U.S. trade size conduit) 100 to 277 VAC, UL                                                          | 106-000004-04 | 912400138114 |
| Data Enabler Pro gen3, M25 / M20 (metric size conduit) 100 to 240 VAC, CE                                                                        | 106-000004-05 | 912400138115 |

