

# ColorBlast Powercore gen4

Date: \_\_\_\_\_  
Type: \_\_\_\_\_  
Firm Name: \_\_\_\_\_  
Project: \_\_\_\_\_

**RGB, 100 – 277 VAC, 10° Native (no spread lens), White Housing, UL/CE/CQC**

## Exterior versatile and customizable luminaire with intelligent RGB light

ColorBlast Powercore gen4 high-performance LED luminaires combine white and rich, saturated, color and color-changing effects with simplified installation. ColorBlast Powercore gen4 offers a range of accessories that allow 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.



- Expands customization with a wide range of new accessory options. In addition to the native 10° lens, five different spread lenses can customize the luminaire to produce 20°, 40°, 60°, 80°, and 10° x 40° (asymmetric) beam angles. Three housing color choices (black, gray, and white) – plus the option to add or combine a louver, rock guard, full glare shield, and half glare shield – create new aesthetic possibilities for designers and architects.
- Improves color consistency between all LED luminaires in a family with Chromasync technology. During the manufacturing process a calibrated light measurement device creates an algorithm to define a common color gamut for an entire family of LED luminaires. When Chromasync is enabled, color consistency between luminaires is achieved without having to manually adjust color points on each luminaire.
- Meets ASTM B117 standard for > 1,500 hours of corrosion resistance and ANSI C136.31-2010 standard with a 3G vibration rating.
- Features an innovative, redesigned optical system that improves the quality of light from each LED, enhancing the color uniformity and color mixing capabilities of each ColorBlast Powercore gen4 luminaire.
- Improves durability with new flat lens that prevents water from pooling into the luminaire, keeping the LEDs protected and secure over the course of a luminaire's lifetime.
- 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.
- Universal power input range of 100 to 277 VAC.
- 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 Blast gen4 Product Guide at [www.colorkinetics.com/global/products/rgb/colorblast-powercore-gen4-rgb/](http://www.colorkinetics.com/global/products/rgb/colorblast-powercore-gen4-rgb/)

# Specifications

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

## Output

|                 |                |
|-----------------|----------------|
| Beam Angle      | 10°            |
| Lumens†         | 1,755          |
| Efficacy (lm/W) | 38.8           |
| LED Channels    | Red/Green/Blue |

## Electrical

|   |  |
|---|--|
| Input Voltage   | 100 to 277 VAC, auto-ranging, 50/60 Hz   |
| Power Consumption<br>(Maximum at full output, steady state) | 50 W   |
| Power Factor  | 0.99 @ 120 VAC<br>0.93 @ 277 VAC   |
| Surge Limits¶   | 1 kV maximum differential (L to N)<br>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) |
|-----------|---------------------------------|

### 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

| Threshold§      | Ambient Temperature | Reported¶¶ | Calculated¶¶ |
|-----------------|---------------------|------------|--------------|
| L <sub>90</sub> | 50 °C               | 51,420     | 51,420       |
| L <sub>80</sub> | 50 °C               | > 72,000   | > 100,000    |
| L <sub>70</sub> | 50 °C               | > 72,000   | > 100,000    |
| L <sub>50</sub> | 50 °C               | > 72,000   | > 100,000    |

† 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.

## Physical

|  |  |
|--|--|
| Dimensions<br>(Height x Width x Depth) | 183.7 x 337.8 x 171.2 mm (7.2 x 13.2 x 6.74 in)                                    |
| Weight                                 | 3.9 kg (8.2 lb)  |
| Effective Projected Area (EPA)         | 0.068 m <sup>2</sup> (0.73 ft <sup>2</sup> )<br>(Luminaire plus Full Glare Shield) |
| Housing Material                       | Die-cast aluminium, white powder-coated finish                                     |
| Lens                                   | Clear tempered glass   |
| Luminaire Connections                  | 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

## Vibration Resistance

Complies with ANSI C136.31, 3G

|                   |      |
|-------------------|------|
| Mechanical Impact | IK10 |
|-------------------|------|

## Corrosion Resistance

Complies with ASTM B117 standard for > 1,500 hours

|          |                          |
|----------|--------------------------|
| Humidity | 0 to 95%, non-condensing |
|----------|--------------------------|

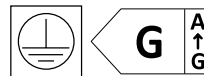
## Luminaire Run Lengths

To calculate luminaire run lengths and total power consumption for your specific installation, download the Configuration Calculator from [www.colorkinetics.com/support/install\\_tool/](http://www.colorkinetics.com/support/install_tool/)

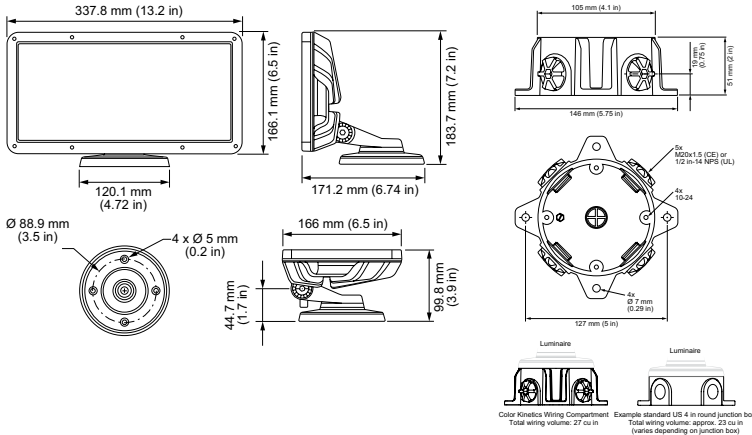
## Certification and Safety

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

For additional Energy Efficiency Class Information, please refer to <https://colorkinetics.helpdocs.io/article/cviis2p8qq>.



# Dimensions



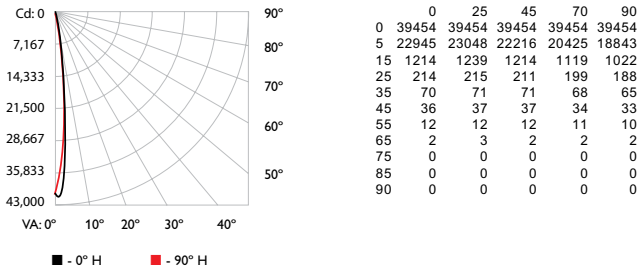
# Photometrics 10° native (no spread lens)

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      | 10°      |
| LED             | RGB      |
| Lumens          | 1,755.00 |
| Efficacy (lm/W) | 38.8     |



## Polar Candela Distribution



## Illuminance at Distance

| Center Beam fc | Beam Width    |
|----------------|---------------|
| 4 ft: 2,466 fc | 0.6 ft 0.6 ft |
| 8 ft: 616 fc   | 1.3 ft 1.2 ft |
| 12 ft: 274 fc  | 1.9 ft 1.9 ft |
| 16 ft: 154 fc  | 2.5 ft 2.5 ft |
| 20 ft: 99 fc   | 3.1 ft 3.1 ft |
| 24 ft: 69 fc   | 3.8 ft 3.7 ft |

## Zonal Lumen

| Zone   | Lumens  | % Luminaire |
|--------|---------|-------------|
| 0-30   | 1,741.4 | 95.8%       |
| 0-40   | 1,780.8 | 98.0%       |
| 0-60   | 1,815.8 | 99.9%       |
| 0-90   | 1,817.9 | 100.0%      |
| 60-90  | 2.1     | 0.1%        |
| 70-100 | 0.0     | 0.0%        |
| 90-120 | 0.0     | 0.0%        |
| 90-180 | 0.0     | 0.0%        |
| 0-180  | 1,817.9 | 100.0%      |

199 ft (60.7 m)  
1 fc maximum distance

■ Vert. Spread: 9.0°  
■ Horiz. Spread: 8.9°

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   | 20   | 50   | 30   | 20   | 0    |      |      |      |      |      |      |      |      |      |      |
| RCR:   | 0  | 1.19 | 1.19 | 1.19 | 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 | 1.13 | 1.11 | 1.14 | 1.12 | 1.11 | 0.99 | 1.08 | 1.07 | 1.06 | 1.04 | 1.04 | 1.03 | 1.01 | 1.01 | 0.98 |
|        | 2  | 1.13 | 1.10 | 1.08 | 1.06 | 1.11 | 1.09 | 1.06 | 0.97 | 1.05 | 1.04 | 1.02 | 1.03 | 1.01 | 1.00 | 1.00 | 0.99 | 0.98 |
|        | 3  | 1.11 | 1.07 | 1.04 | 1.02 | 1.09 | 1.06 | 1.03 | 0.96 | 1.03 | 1.01 | 0.99 | 1.01 | 0.99 | 0.98 | 0.98 | 0.98 | 0.96 |
|        | 4  | 1.08 | 1.04 | 1.01 | 0.99 | 1.07 | 1.03 | 1.00 | 0.94 | 1.01 | 0.99 | 0.97 | 0.99 | 0.98 | 0.96 | 0.96 | 0.96 | 0.95 |
|        | 5  | 1.06 | 1.02 | 0.99 | 0.96 | 1.05 | 1.01 | 0.98 | 0.93 | 0.99 | 0.97 | 0.95 | 0.98 | 0.96 | 0.94 | 0.94 | 0.94 | 0.93 |
|        | 6  | 1.04 | 1.00 | 0.97 | 0.94 | 1.03 | 0.99 | 0.96 | 0.92 | 0.98 | 0.95 | 0.93 | 0.97 | 0.95 | 0.93 | 0.93 | 0.93 | 0.92 |
|        | 7  | 1.03 | 0.98 | 0.95 | 0.93 | 1.02 | 0.97 | 0.95 | 0.91 | 0.96 | 0.94 | 0.92 | 0.96 | 0.93 | 0.92 | 0.92 | 0.92 | 0.91 |
|        | 8  | 1.01 | 0.96 | 0.93 | 0.91 | 1.00 | 0.96 | 0.93 | 0.89 | 0.95 | 0.93 | 0.91 | 0.94 | 0.92 | 0.91 | 0.91 | 0.91 | 0.90 |
|        | 9  | 1.00 | 0.95 | 0.92 | 0.90 | 0.99 | 0.95 | 0.92 | 0.89 | 0.94 | 0.91 | 0.90 | 0.93 | 0.91 | 0.90 | 0.90 | 0.90 | 0.89 |
|        | 10 | 0.98 | 0.94 | 0.91 | 0.89 | 0.98 | 0.93 | 0.91 | 0.88 | 0.93 | 0.90 | 0.89 | 0.92 | 0.90 | 0.89 | 0.89 | 0.89 | 0.88 |

# Luminaire and Accessories

Use Item Number when ordering in North America

| <b>Luminaire</b>  | <b>Item Number</b> | <b>Item 12NC</b> |
|---|--------------------|------------------|
| ColorBlast Powercore gen4, RGB, 100 – 277 VAC, White Housing, UL/CE/CQC | 123-000155-00      | 912400130351     |
| <b>Accessories</b>  |                    |                  |
| Trim Ring, White  | 120-000185-00      | 912400130336     |
| Louver, White   | 120-000185-04      | 912400130340     |
| Rock Guard, White   | 120-000185-06      | 912400130342     |
| Half Glare Shield, White  | 120-000185-13      | 912400130349     |
| Full Glare Shield, White  | 120-000185-02      | 912400130338     |
| 20° Spread lens   | 120-000185-08      | 912400130344     |
| 40° Spread lens   | 120-000185-09      | 912400130345     |
| 60° Spread lens   | 120-000185-10      | 912400130346     |
| 80° Spread lens   | 120-000185-11      | 912400130347     |
| 10°x40° Spread lens   | 120-000185-12      | 912400130348     |
| Wiring Compartment UL/cUL, White  | 106-000011-31      | 910503704148     |
| Wiring Compartment CE, White  | 106-000011-41      | 910503703276     |
| <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     |

