

# ColorBlast Powercore gen4

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

**RGB, 100 – 277 VAC, 20° Spread  
Lens, Black Housing, UL/CE/CQC**

## Exterior customizable floodlight 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 Family 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      | 20°            |
| Lumens†         | 1,488          |
| Efficacy (lm/W) | 33.7           |
| 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                         |
| Power Factor  | 0.93 @ 277 VAC                         |

*For 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 | ActiveSite Ready, works with Interact Landmark |
|--------------------------------|--|

## Lumen Maintenance

| Threshold§      | Ambient Temperature | Reported¶ | Calculated¶ |
|-----------------|---------------------|-----------|-------------|
| L <sub>90</sub> | 25 °C               | 51,400    | 51,400      |
|                 | 50 °C               | 51,400    | 51,400      |
| L <sub>80</sub> | 25 °C               |           | > 100,000   |
|                 | 50 °C               | > 72,000  | > 100,000   |
| L <sub>70</sub> | 25 °C               | > 72,000  | > 100,000   |
|                 | 50 °C               | > 72,000  | > 100,000   |
| L <sub>50</sub> | 25 °C               | > 72,000  | > 100,000   |
|                 | 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.

¶ 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.

†† When mounting to a junction box, the Color Kinetics wiring compartment accessory must be used to maintain a 3G vibration rating.

## Physical

|  |  |
|--|--|
| Dimensions<br>(Height x Width x Depth) | 183.7 x 338 x 171 mm (7.2 x 13.3 x 6.75 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, 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

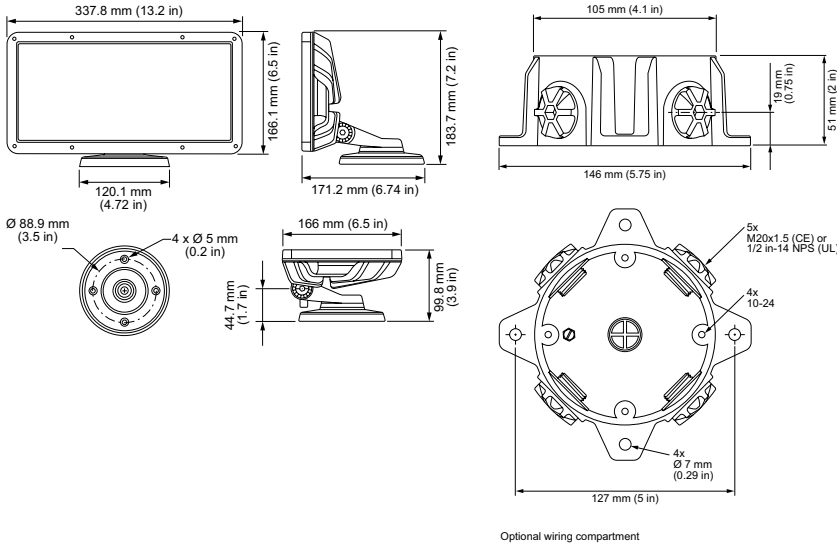
To calculate luminaire run lengths and total power consumption for your specific installation, download the Configuration Calculator from [www.colorkinetics.com/support/install\\_tool/](http://www.colorkinetics.com/support/install_tool/)

## Certification and Safety

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



# Dimensions



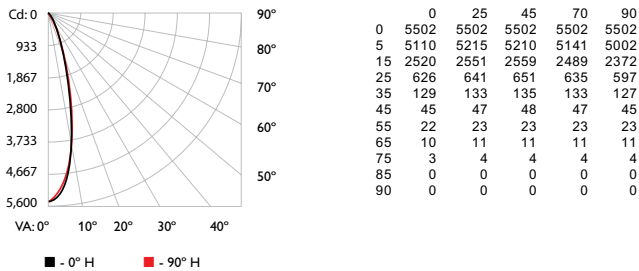
# Photometrics, 20° spread lens

Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at [www.colorkinetics.com/support/ies](http://www.colorkinetics.com/support/ies).

|                 |       |
|-----------------|-------|
| Beam Angle      | 20°   |
| LED             | RGB   |
| Lumens          | 1,488 |
| Efficacy (lm/W) | 33.7  |



## Polar Candela Distribution



## Zonal Lumen

| Zone   | Lumens  | % Luminaire |
|--------|---------|-------------|
| 0-30   | 1,347.4 | 90.5%       |
| 0-40   | 1,425.2 | 95.8%       |
| 0-60   | 1,476.0 | 99.2%       |
| 0-90   | 1,488.1 | 100.0%      |
| 60-90  | 12.1    | 0.8%        |
| 70-100 | 2.8     | 0.2%        |
| 90-120 | 0.0     | 0.0%        |
| 90-180 | 0.0     | 0.0%        |
| 0-180  | 1,488.1 | 100.0%      |

For lux multiply fc by 10.7

## Illuminance at Distance

|       | Center Beam fc | Beam Width      |
|-------|----------------|-----------------|
| 4 ft  | 344 fc         | 1.9 ft 1.9 ft   |
| 8 ft  | 86 fc          | 3.8 ft 3.8 ft   |
| 12 ft | 38 fc          | 5.7 ft 5.7 ft   |
| 16 ft | 21 fc          | 7.6 ft 7.6 ft   |
| 20 ft | 14 fc          | 9.5 ft 9.6 ft   |
| 24 ft | 10 fc          | 11.4 ft 11.5 ft |

74.2 ft (22.6 m)  
1 fc maximum distance  
Vert. Spread: 26.6°  
Horiz. Spread: 26.9°

## 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   | 50   | 30   | 20   | 50   | 30   | 20   | 50   | 30   | 20   | 0    |  |  |
| 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 | 1.00 | 1.00 | 1.00 |  |  |
| 1      | 1.15                                    | 1.12 | 1.10 | 1.08 | 1.12 | 1.10 | 1.08 | 0.96 | 1.06 | 1.05 | 1.03 | 1.03 | 1.01 | 1.00 | 0.99 | 0.98 | 0.98 | 0.96 | 0.96 | 0.96 | 0.96 |  |  |
| 2      | 1.10                                    | 1.06 | 1.03 | 1.00 | 1.08 | 1.05 | 1.02 | 0.92 | 1.02 | 0.99 | 0.97 | 0.99 | 0.97 | 0.95 | 0.96 | 0.95 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 |  |  |
| 3      | 1.06                                    | 1.01 | 0.97 | 0.94 | 1.05 | 1.00 | 0.96 | 0.89 | 0.97 | 0.94 | 0.92 | 0.95 | 0.93 | 0.91 | 0.93 | 0.91 | 0.89 | 0.88 | 0.88 | 0.88 | 0.88 |  |  |
| 4      | 1.03                                    | 0.97 | 0.92 | 0.89 | 1.01 | 0.96 | 0.92 | 0.85 | 0.94 | 0.90 | 0.88 | 0.92 | 0.89 | 0.87 | 0.90 | 0.88 | 0.86 | 0.84 | 0.84 | 0.84 | 0.84 |  |  |
| 5      | 0.99                                    | 0.93 | 0.88 | 0.85 | 0.96 | 0.92 | 0.88 | 0.82 | 0.90 | 0.87 | 0.84 | 0.89 | 0.86 | 0.83 | 0.87 | 0.85 | 0.82 | 0.81 | 0.81 | 0.81 | 0.81 |  |  |
| 6      | 0.96                                    | 0.89 | 0.84 | 0.81 | 0.95 | 0.88 | 0.84 | 0.79 | 0.87 | 0.83 | 0.80 | 0.86 | 0.82 | 0.80 | 0.85 | 0.82 | 0.79 | 0.78 | 0.78 | 0.78 | 0.78 |  |  |
| 7      | 0.93                                    | 0.86 | 0.81 | 0.78 | 0.92 | 0.85 | 0.81 | 0.76 | 0.84 | 0.80 | 0.77 | 0.83 | 0.80 | 0.77 | 0.82 | 0.79 | 0.77 | 0.76 | 0.76 | 0.76 | 0.76 |  |  |
| 8      | 0.90                                    | 0.83 | 0.78 | 0.75 | 0.89 | 0.82 | 0.78 | 0.74 | 0.81 | 0.77 | 0.75 | 0.80 | 0.77 | 0.74 | 0.80 | 0.76 | 0.74 | 0.73 | 0.73 | 0.73 | 0.73 |  |  |
| 9      | 0.87                                    | 0.80 | 0.76 | 0.72 | 0.86 | 0.80 | 0.75 | 0.72 | 0.79 | 0.75 | 0.72 | 0.78 | 0.74 | 0.72 | 0.77 | 0.74 | 0.72 | 0.71 | 0.71 | 0.71 | 0.71 |  |  |
| 10     | 0.85                                    | 0.77 | 0.73 | 0.70 | 0.84 | 0.77 | 0.73 | 0.69 | 0.76 | 0.73 | 0.70 | 0.76 | 0.72 | 0.70 | 0.75 | 0.72 | 0.70 | 0.69 | 0.69 | 0.69 | 0.69 |  |  |

# Luminaire and Accessories

Use Item Number when ordering in North America

| Luminaire  | Item Number   | Item 12NC    |
|--|---------------|--------------|
| ColorBlast Powercore gen4 RGB, 100 – 277 VAC, Black Housing, UL/CE/CQC<br><i>Luminaire only. Values in this specification sheet represent both the luminaire and spread lens combined. Spread lens available below in Associated Part.</i> | 123-000155-01 | 912400130352 |
| <b>Associated Part</b>   |               |              |
| 20° Spread lens<br><i>Trim Ring required for mounting. Must be ordered separately.</i>   | 120-000185-08 | 912400130344 |
| <b>Accessories</b>   |               |              |
| Trim Ring, Black   | 120-000185-01 | 912400130337 |
| Louver, Black  | 120-000185-05 | 912400130341 |
| Rock Guard, Black  | 120-000185-07 | 912400130343 |
| Half Glare Shield, Black   | 120-000185-14 | 912400130350 |
| Full Glare Shield, Black   | 120-000185-03 | 912400130339 |
| Wiring Compartment UL/cUL, Black   | 106-000011-30 | 910503704147 |
| Wiring Compartment CE, Black   | 106-000011-40 | 910503703275 |
| <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 |

