

ColorBlast Powercore gen4

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

**RGBW, 100 – 277 VAC, 40° Spread
Lens, White Housing, UL/CE/CQC**

Exterior versatile and customizable luminaire with intelligent RGBW 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-rgbw/

Specifications

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

Output

| | |
|-----------------|----------------------|
| Beam Angle | 40° |
| Lumens† | 1,819 |
| Efficacy (lm/W) | 35.1 |
| LED Channels | Red/Green/Blue/White |

Electrical

| | |
|---|--|
| Input Voltage | 100 to 277 VAC, auto-ranging, 50/60 Hz |
| Power Consumption (Maximum at full output, steady state) | 50 W |
| Power Factor | 0.99 @ 120 VAC 0.9 @ 277 VAC |
| Surge Limits¶ | 1 kV maximum differential (L to N) 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.

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 ₉₀ | 50 °C | 51,420 | 51,420 |
| L ₈₀ | 50 °C | > 72,000 | > 100,000 |
| L ₇₀ | 50 °C | > 72,000 | > 100,000 |
| L ₅₀ | 50 °C | > 72,000 | > 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.

¶ 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 (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 ² (0.73 ft ²) (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 |
|----------|--------------------------|

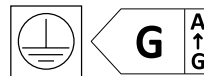
Luminaire Run Lengths

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

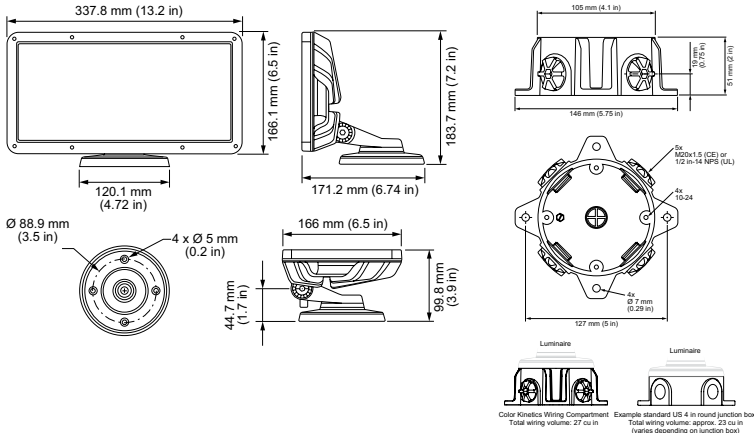
Certification and Safety

| | |
|-------------|--|
| 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 <https://colorkinetics.helpdocs.io/article/cviis2p8qq>.



Dimensions



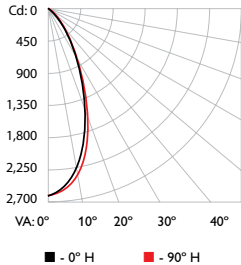
Photometrics 40° frosted lens

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.

| | |
|-----------------|-------|
| Beam Angle | 40° |
| LED | RGBW |
| Lumens | 1,819 |
| Efficacy (lm/W) | 35.1 |



Polar Candela Distribution



| | | | | | |
|-----|----|------|------|------|------|
| | 0 | 25 | 45 | 70 | 90 |
| 90° | 0 | 2600 | 2600 | 2600 | 2600 |
| 80° | 5 | 2499 | 2535 | 2564 | 2550 |
| 70° | 15 | 1917 | 1950 | 1995 | 2015 |
| 60° | 25 | 1143 | 1155 | 1177 | 1193 |
| 50° | 35 | 510 | 501 | 499 | 500 |
| | 45 | 167 | 156 | 155 | 151 |
| | 55 | 56 | 54 | 53 | 52 |
| | 65 | 25 | 25 | 25 | 24 |
| | 75 | 10 | 10 | 10 | 10 |
| | 85 | 0 | 0 | 1 | 1 |
| | 90 | 0 | 0 | 0 | 0 |

Illuminance at Distance

| Center Beam fc | Beam Width |
|----------------|-----------------|
| 4 ft: 163 fc | 3.4 ft 3.4 ft |
| 8 ft: 41 fc | 6.8 ft 6.8 ft |
| 12 ft: 18 fc | 10.2 ft 10.2 ft |
| 16 ft: 10 fc | 13.6 ft 13.6 ft |
| 20 ft: 7 fc | 17.0 ft 17.1 ft |
| 24 ft: 5 fc | 20.3 ft 20.5 ft |

51 ft (15.5 m)
1 fc maximum distance
Vert. Spread: 45.9°
Horiz. Spread: 46.2°

Zonal Lumen

| Zone | Lumens | % Luminaire |
|--------|---------|-------------|
| 0-30 | 1,306.9 | 71.9% |
| 0-40 | 1,616.9 | 88.9% |
| 0-60 | 1,784.5 | 98.1% |
| 0-90 | 1,818.5 | 100.0% |
| 60-90 | 34.0 | 1.9% |
| 70-100 | 10.8 | 0.6% |
| 90-120 | 0.0 | 0.0% |
| 90-180 | 0.0 | 0.0% |
| 0-180 | 1,818.5 | 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 | 20 | 50 | 30 | 20 | 0 | | | | | | | | | | | |
| RCR: | 0 | 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 | 1.13 | 1.11 | 1.08 | 1.06 | 1.11 | 1.08 | 1.06 | 0.94 | 1.04 | 1.03 | 1.01 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.93 |
| | 2 | 1.08 | 1.03 | 0.99 | 0.95 | 1.05 | 1.01 | 0.97 | 0.87 | 0.98 | 0.95 | 0.92 | 0.95 | 0.92 | 0.90 | 0.92 | 0.90 | 0.88 | 0.87 |
| | 3 | 1.02 | 0.96 | 0.91 | 0.87 | 1.00 | 0.94 | 0.90 | 0.81 | 0.92 | 0.88 | 0.85 | 0.89 | 0.86 | 0.83 | 0.87 | 0.84 | 0.82 | 0.80 |
| | 4 | 0.97 | 0.90 | 0.84 | 0.80 | 0.95 | 0.88 | 0.83 | 0.76 | 0.86 | 0.82 | 0.78 | 0.84 | 0.80 | 0.77 | 0.82 | 0.79 | 0.77 | 0.75 |
| | 5 | 0.92 | 0.84 | 0.78 | 0.74 | 0.91 | 0.83 | 0.78 | 0.71 | 0.81 | 0.76 | 0.73 | 0.80 | 0.75 | 0.72 | 0.78 | 0.74 | 0.72 | 0.70 |
| | 6 | 0.88 | 0.79 | 0.73 | 0.69 | 0.86 | 0.78 | 0.73 | 0.67 | 0.77 | 0.72 | 0.68 | 0.75 | 0.71 | 0.68 | 0.74 | 0.70 | 0.67 | 0.66 |
| | 7 | 0.84 | 0.74 | 0.68 | 0.64 | 0.82 | 0.74 | 0.68 | 0.63 | 0.72 | 0.67 | 0.64 | 0.71 | 0.67 | 0.63 | 0.70 | 0.66 | 0.63 | 0.62 |
| | 8 | 0.80 | 0.70 | 0.64 | 0.60 | 0.79 | 0.70 | 0.64 | 0.59 | 0.69 | 0.64 | 0.60 | 0.68 | 0.63 | 0.60 | 0.67 | 0.63 | 0.59 | 0.58 |
| | 9 | 0.76 | 0.67 | 0.61 | 0.57 | 0.75 | 0.66 | 0.61 | 0.56 | 0.65 | 0.60 | 0.57 | 0.64 | 0.60 | 0.56 | 0.63 | 0.59 | 0.56 | 0.55 |
| | 10 | 0.73 | 0.63 | 0.58 | 0.54 | 0.72 | 0.63 | 0.57 | 0.53 | 0.62 | 0.57 | 0.53 | 0.61 | 0.57 | 0.53 | 0.60 | 0.56 | 0.53 | 0.52 |

Luminaire and Accessories

Use Item Number when ordering in North America

| Luminaire | Item Number | Item 12NC |
|--|--------------------|------------------|
| ColorBlast Powercore gen4, RGBW, 100 – 277 VAC, White Housing, UL/CE/CQC | 423-000012-00 | 912400130375 |
| <i>Luminaire only. Values in this specification sheet represent both the luminaire and spread lens combined. Spread lens available below in Associated Part.</i> | | |
| Associated Part | | |
| 40° Spread lens | 120-000185-09 | 912400130345 |
| <i>Trim Ring required for mounting. Must be ordered separately.</i> | | |
| Accessories | | |
| 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 |
| Wiring Compartment UL/cUL, White | 106-000011-31 | 910503704148 |
| Wiring Compartment CE, White | 106-000011-41 | 910503703276 |
| 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/global/products/rgb/colorblast-powercore-gen4-rgbw/