

# Blast Powercore gen5, RGBA

Date: \_\_\_\_\_

Type: \_\_\_\_\_

Firm Name: \_\_\_\_\_

Project: \_\_\_\_\_

100 – 277 VAC, 40° Spread Lens, Gray Housing, BIS

## Exterior versatile and customizable luminaire with intelligent RGBA light

Blast Powercore gen5, RGBA high-performance LED luminaires combine white and rich, saturated, color and color-changing effects with simplified installation. Blast Powercore gen5 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 Blast Powercore gen5 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 Product Guide at <https://www.colorkinetics.com/global/products/rgb/blast-powercore-gen5-rgba>

# Specifications

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

## Output

|                 |                      |
|-----------------|----------------------|
| Beam Angle      | 40°                  |
| Lumens †        | 2,037                |
| Efficacy (lm/W) | 43.8                 |
| LED Channels    | Red/Green/Blue/Amber |

## Electrical

|                                                             |                                                                                  |
|-------------------------------------------------------------|----------------------------------------------------------------------------------|
| Input Voltage                                               | 100 to 277 VAC, auto-ranging, 50/60 Hz                                           |
| Power Consumption<br>(Maximum at full output, steady state) | 46.4 W                                                                           |
| Power Factor                                                | 0.99 @ 120 VAC<br>0.91 @ 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/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 Works with Interact Landmark

## Lumen Maintenance

| Threshold§      | Ambient Temperature | Reported ¶¶ | Calculated ¶¶ |
|-----------------|---------------------|-------------|---------------|
| L <sub>90</sub> | 25 °C               | >39,715     | >39,715       |
|                 | 50 °C               | >39,715     | >39,715       |
| L <sub>80</sub> | 25 °C               | >60,000     | >98,607       |
|                 | 50 °C               | >60,000     | >98,607       |
| L <sub>70</sub> | 25 °C               | >60,000     | >100,000      |
|                 | 50 °C               | >60,000     | >100,000      |
| L <sub>50</sub> | 25 °C               | -           | >100,000      |
|                 | 50 °C               | -           | >100,000      |

## 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 m² (0.73 ft²)<br>(Luminaire plus Full Glare Shield) |
| Housing Material                       | Die-cast aluminium, gray 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 |
|----------|--------------------------|

### 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 | BIS                         |
| Environment | Dry/Damp/Wet Location, IP66 |

† 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.

§ 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.

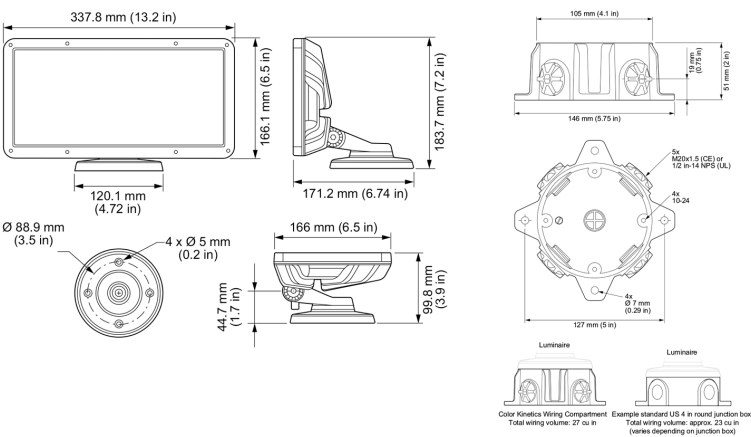
¶ Minimum surge limits per IEC 61547, tested in accordance with IEC 61000-4-5.

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

¶¶ 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

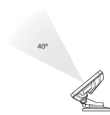


Photometrics 40° frosted lens

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](http://www.colorkinetics.com/global/support/ies).

|                 |         |
|-----------------|---------|
| Beam Angle      | 40°     |
| LED             | RGBA    |
| Lumens          | 2,037.0 |
| Efficacy (lm/W) | 43.8    |

Illuminance at Distance



|       | Center Beam fc | Beam Width      |
|-------|----------------|-----------------|
| 4 ft  | 161.5 fc       | 3.4 ft 3.4 ft   |
| 8 ft  | 40.4 fc        | 6.9 ft 6.9 ft   |
| 12 ft | 17.9 fc        | 10.3 ft 10.3 ft |
| 16 ft | 10.1 fc        | 13.8 ft 13.7 ft |
| 20 ft | 6.5 fc         | 17.2 ft 17.1 ft |
| 24 ft | 4.5 fc         | 20.6 ft 20.6 ft |

15.2 m (50 ft)  
1 fc maximum distance

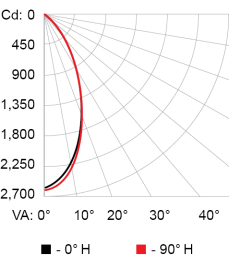
Vert. Spread: 46.5°  
Horiz. Spread: 46.4°

Zonal Lumen

| Zone   | Lumens | % Luminaire |
|--------|--------|-------------|
| 0-30   | 1306.5 | 64.2%       |
| 0-40   | 1666.2 | 81.9%       |
| 0-60   | 1960.7 | 96.4%       |
| 60-90  | 70.1   | 3.4%        |
| 70-100 | 25.3   | 1.2%        |
| 90-120 | 0.4    | 0.0%        |
| 0-90   | 2030.7 | 99.8%       |
| 90-180 | 4.1    | 0.2%        |
| 0-180  | 2034.9 | 100.0%      |

For lux multiply fc by 10.7

Polar Candela Distribution



|    | 0    | 25   | 45   | 70   | 90   |
|----|------|------|------|------|------|
| 0  | 2583 | 2583 | 2583 | 2583 | 2583 |
| 5  | 2485 | 2498 | 2507 | 2523 | 2529 |
| 15 | 1907 | 1899 | 1897 | 1923 | 1942 |
| 25 | 1125 | 1123 | 1103 | 1144 | 1181 |
| 35 | 555  | 558  | 547  | 594  | 628  |
| 45 | 249  | 247  | 252  | 273  | 291  |
| 55 | 97   | 100  | 104  | 110  | 119  |
| 65 | 42   | 44   | 46   | 49   | 50   |
| 75 | 18   | 20   | 21   | 22   | 22   |
| 85 | 3    | 4    | 5    | 5    | 5    |
| 90 | 0    | 0    | 0    | 0    | 0    |

Coefficients of Utilization - Zonal Cavity Method

|        |      | Effective Floor Cavity Reflectance: 20% |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|--------|------|-----------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| RCC %: | 80   | 70                                      | 50   | 30   | 10   | 0    | 70   | 50   | 30   | 10   | 0    | 70   | 50   | 30   | 10   | 0    |      |
| RW %:  | 80   | 70                                      | 50   | 30   | 10   | 0    | 70   | 50   | 30   | 10   | 0    | 50   | 30   | 20   | 10   | 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 | 1.02 | 1.02 | 1.00 |
| 1      | 1.13 | 1.10                                    | 1.07 | 1.05 | 1.06 | 1.08 | 1.05 | 0.92 | 1.03 | 1.01 | 1.00 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 |
| 2      | 1.07 | 1.01                                    | 0.97 | 0.93 | 1.04 | 0.99 | 0.95 | 0.85 | 0.96 | 0.93 | 0.90 | 0.93 | 0.90 | 0.88 | 0.90 | 0.88 | 0.84 |
| 3      | 1.01 | 0.94                                    | 0.88 | 0.84 | 0.99 | 0.92 | 0.87 | 0.79 | 0.89 | 0.85 | 0.82 | 0.87 | 0.83 | 0.80 | 0.85 | 0.82 | 0.78 |
| 4      | 0.95 | 0.87                                    | 0.81 | 0.76 | 0.93 | 0.86 | 0.80 | 0.73 | 0.84 | 0.79 | 0.75 | 0.81 | 0.77 | 0.74 | 0.80 | 0.76 | 0.73 |
| 5      | 0.90 | 0.81                                    | 0.75 | 0.70 | 0.88 | 0.80 | 0.74 | 0.68 | 0.78 | 0.73 | 0.69 | 0.76 | 0.72 | 0.68 | 0.75 | 0.71 | 0.68 |
| 6      | 0.85 | 0.76                                    | 0.69 | 0.65 | 0.84 | 0.75 | 0.69 | 0.63 | 0.73 | 0.68 | 0.64 | 0.72 | 0.67 | 0.64 | 0.71 | 0.66 | 0.63 |
| 7      | 0.81 | 0.71                                    | 0.65 | 0.60 | 0.79 | 0.70 | 0.64 | 0.59 | 0.69 | 0.64 | 0.60 | 0.68 | 0.63 | 0.59 | 0.67 | 0.62 | 0.59 |
| 8      | 0.77 | 0.67                                    | 0.61 | 0.56 | 0.76 | 0.66 | 0.60 | 0.55 | 0.65 | 0.60 | 0.56 | 0.64 | 0.59 | 0.56 | 0.63 | 0.59 | 0.55 |
| 9      | 0.73 | 0.63                                    | 0.57 | 0.53 | 0.72 | 0.63 | 0.57 | 0.52 | 0.62 | 0.56 | 0.52 | 0.61 | 0.56 | 0.52 | 0.60 | 0.55 | 0.51 |
| 10     | 0.70 | 0.60                                    | 0.54 | 0.50 | 0.69 | 0.59 | 0.53 | 0.49 | 0.58 | 0.53 | 0.49 | 0.58 | 0.53 | 0.49 | 0.57 | 0.52 | 0.48 |

# Luminaire and Accessories

Use Item Number when ordering in North America

| Luminaire                                                                                                                                                 | Item Number   | Item 12NC    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|
| Blast Powercore gen5, RGBA, 100 – 277 VAC, Gray Housing, BIS                                                                                              | 423-000028-08 | 912400137706 |
| Luminaire only. Values in this specification sheet represent both the luminaire and spread lens combined. Spread lens available below in Associated Part. |               |              |
| Associated Part                                                                                                                                           |               |              |
| 40° Spread lens                                                                                                                                           | 120-000185-09 | 912400130345 |
| Trim Ring required for mounting. Must be ordered separately.                                                                                              |               |              |
| Accessories                                                                                                                                               |               |              |
| Trim Ring, Gray                                                                                                                                           | 120-000185-15 | 912400133530 |
| Louver, Gray                                                                                                                                              | 120-000185-17 | 912400133532 |
| Rock Guard, Gray                                                                                                                                          | 120-000185-18 | 912400133533 |
| Half Glare Shield, Gray                                                                                                                                   | 120-000185-19 | 912400133534 |
| Full Glare Shield, Gray                                                                                                                                   | 120-000185-16 | 912400133531 |
| Wiring Compartment UL/cUL, Gray                                                                                                                           | 106-000011-32 | 910503704149 |
| Wiring Compartment CE, Gray                                                                                                                               | 106-000011-42 | 910503703277 |
| Architectural Mounting Arm, for use with Blast, Graze, Graze Compact, Burst Architectural, and Vaya Flood. Short, gray                                    | 120-000206-00 | 912400136642 |
| Architectural Mounting Arm, for use with Blast, Graze, Graze Compact, Burst Architectural, and Vaya Flood. Medium, gray                                   | 120-000206-01 | 912400136643 |
| Architectural Mounting Arm, for use with Blast, Graze, Graze Compact, Burst Architectural, and Vaya Flood. Long, gray                                     | 120-000206-02 | 912400136644 |
| 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 |

