

Blast Powercore gen5, RGBA

Date:

Type:

Firm Name:

Project:

100 – 277 VAC, 10° Native (no spread lens), White 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	10°
Lumens †	2,637
Lumens per channel	R 494 / G 944 / B 221 / A 828
Efficacy (lm/W)	56.8
LED Channels	Red/Green/Blue/Amber

Electrical

Input Voltage	100 to 277 VAC, auto-ranging, 50/60 Hz
Power Consumption (Maximum at full output, steady state)	46.4 W
Power Factor	0.99 @ 120 VAC 0.91 @ 277 VAC

Surge Limits ¶	2 kV maximum differential (L to N) 4 kV maximum common (L to Gnd or N to Gnd)
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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)
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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 90	25 °C	>39,715	>39,715
	50 °C	>39,715	>39,715
L 80	25 °C	>60,000	>98,607
	50 °C	>60,000	>98,607
L 70	25 °C	>60,000	>100,000
	50 °C	>60,000	>100,000
L 50	25 °C	-	>100,000
	50 °C	-	>100,000

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 m² (0.73 ft²) (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
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Corrosion Resistance

Complies with ASTM B117 standard for > 1,500 hours

Humidity	0 to 95%, non-condensing
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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/

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.

§ 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.

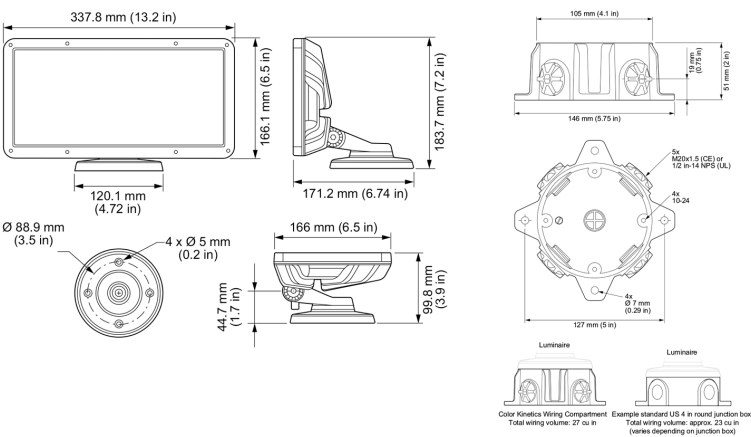
¶ Minimum surge limits per IEC 61547, tested in accordance with IEC 61000-4-5.

†† 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

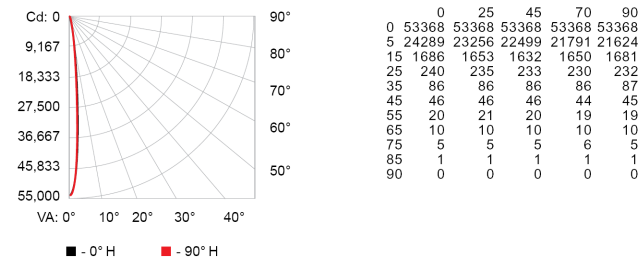


Photometrics 10° native (no spread lens)

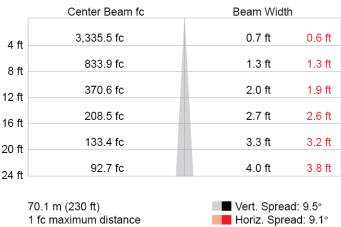
Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at www.colorkinetics.com/global/support/ies.

Beam Angle	10°
LED	RGBA
Lumens	2,637.0
Efficacy (lm/W)	56.8

Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

Zone	Lumens	% Luminaire
0-30	2503.5	94.9%
0-40	2560.7	97.1%
0-60	2614.7	99.1%
60-90	16.7	0.6%
70-100	7.3	0.3%
90-120	0.6	0.0%
0-90	2631.4	99.8%
90-180	5.8	0.2%
0-180	2637.2	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	50	30	20	10	0	50	30	20	10	0		
RW %:	70	50	30	0	70	50	30	0	50	30	20	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	1.00	0.99
1	1.16	1.14	1.12	1.11	1.13	1.12	1.10	0.98	1.08	1.07	1.06	1.04	1.03	1.02	1.01	1.00	0.99	0.98
2	1.13	1.10	1.07	1.05	1.11	1.08	1.06	0.96	1.05	1.03	1.01	0.99	0.99	0.98	0.97	0.97	0.96	0.95
3	1.10	1.06	1.03	1.01	1.08	1.05	1.02	0.95	1.02	1.00	0.98	0.97	0.98	0.97	0.97	0.95	0.94	0.93
4	1.08	1.03	1.00	0.97	1.06	1.02	0.99	0.93	1.00	0.98	0.96	0.98	0.96	0.95	0.97	0.95	0.94	0.93
5	1.05	1.01	0.97	0.95	1.04	1.00	0.97	0.92	0.98	0.96	0.94	0.97	0.95	0.93	0.96	0.94	0.92	0.91
6	1.03	0.99	0.95	0.93	1.02	0.98	0.95	0.91	0.97	0.94	0.92	0.95	0.93	0.91	0.94	0.92	0.91	0.90
7	1.02	0.97	0.93	0.91	1.01	0.96	0.93	0.89	0.95	0.92	0.90	0.94	0.92	0.90	0.93	0.91	0.90	0.89
8	1.00	0.95	0.92	0.90	0.99	0.95	0.92	0.88	0.94	0.91	0.89	0.93	0.91	0.89	0.92	0.90	0.88	0.86
9	0.98	0.93	0.90	0.88	0.98	0.93	0.90	0.87	0.92	0.90	0.88	0.92	0.89	0.88	0.91	0.89	0.87	0.87
10	0.97	0.92	0.89	0.87	0.96	0.92	0.89	0.86	0.91	0.89	0.87	0.91	0.88	0.87	0.90	0.88	0.86	0.86

Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire	Item Number	Item 12NC
Blast Powercore gen5, RGBA, 100 – 277 VAC, White Housing, BIS	423-000028-06	912400137704
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
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
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



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Color Kinetics
<https://www.colorkinetics.com/global/products/rgb/blast-powercore-gen5-rgba>

08/05/2022

