

Blast Powercore gen5, RGBA

Date:

Type:

Firm Name:

Project:

100 – 277 VAC, 60° Spread Lens, Black Housing,
UL/CE/CQC

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	60°
Lumens †	1,788
Efficacy (lm/W)	38.4
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, black 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	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/cvis2p8qq>.



† 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.

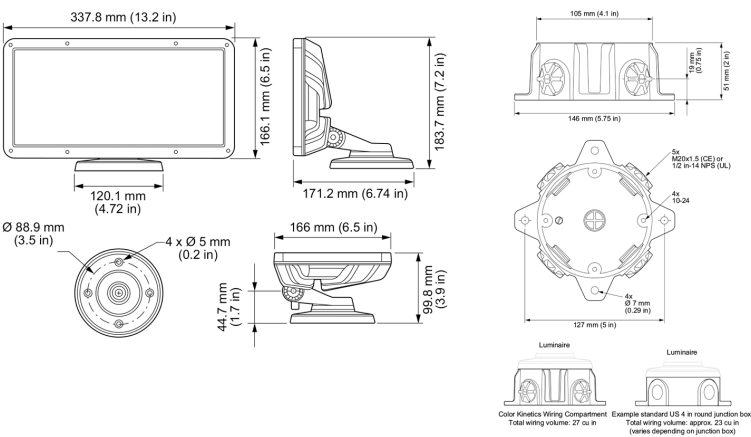
¶ Minimum surge limits per IEC 61547, tested in accordance with IEC 61000-4-5.

†† 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 60° 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	60°
LED	RGBA
Lumens	1,788.0
Efficacy (lm/W)	38.4

Illuminance at Distance



	Center Beam fc	Beam Width
4 ft	100.4 fc	4.8 ft 4.9 ft
8 ft	25.1 fc	9.6 ft 9.8 ft
12 ft	11.2 fc	14.4 ft 14.7 ft
16 ft	6.3 fc	19.1 ft 19.6 ft
20 ft	4.0 fc	23.9 ft 24.5 ft
24 ft	2.8 fc	28.7 ft 29.4 ft

12.2 m (40 ft)
1 fc maximum distance

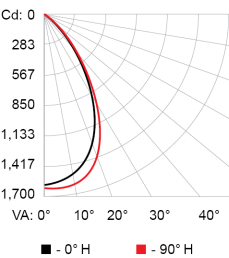
Vert. Spread: 61.8°
Horiz. Spread: 63.0°

Zonal Lumen

Zone	Lumens	% Luminaire
0-30	1059.3	59.4%
0-40	1457.7	81.8%
0-60	1729.4	97.0%
60-90	49.3	2.8%
70-100	17.3	1.0%
90-120	0.3	0.0%
0-90	1778.8	99.8%
90-180	3.7	0.2%
0-180	1782.4	100.0%

For lux multiply fc by 10.7

Polar Candela Distribution



Cd: 0	0	25	45	70	90
0	1606	1606	1606	1606	1606
5	1567	1591	1608	1625	1632
15	1400	1446	1481	1516	1529
25	1063	1106	1140	1173	1184
35	609	635	655	672	674
45	236	243	250	254	252
55	75	77	78	79	78
65	30	32	33	33	33
75	13	14	14	14	14
85	2	3	3	3	3
90	0	0	0	0	0

Coefficients of Utilization - Zonal Cavity Method

		Effective Floor Slab Reflectance: 20%																			
RCC %:		80				70				50				30				20			
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			
1		1.13	1.10	1.07	1.04	1.10	1.07	1.05	0.92	1.03	1.01	0.99	0.98	0.96	0.96	0.95	0.94	0.92			
2		1.06	1.01	0.96	0.92	1.04	0.99	0.95	0.85	0.96	0.92	0.89	0.93	0.90	0.87	0.90	0.87	0.85			
3		1.00	0.93	0.87	0.83	0.98	0.91	0.86	0.78	0.89	0.84	0.81	0.86	0.83	0.79	0.84	0.81	0.78			
4		0.94	0.86	0.80	0.75	0.92	0.85	0.79	0.71	0.82	0.77	0.73	0.80	0.76	0.73	0.78	0.75	0.72			
5		0.89	0.80	0.73	0.68	0.87	0.79	0.72	0.66	0.77	0.71	0.67	0.75	0.70	0.67	0.73	0.69	0.66			
6		0.84	0.74	0.67	0.63	0.82	0.73	0.67	0.61	0.72	0.66	0.62	0.70	0.65	0.61	0.69	0.64	0.61			
7		0.79	0.69	0.62	0.58	0.78	0.68	0.62	0.56	0.67	0.61	0.57	0.66	0.61	0.57	0.64	0.60	0.56			
8		0.75	0.64	0.58	0.53	0.74	0.64	0.58	0.52	0.63	0.57	0.53	0.62	0.56	0.53	0.61	0.56	0.52			
9		0.71	0.60	0.54	0.50	0.70	0.60	0.54	0.49	0.59	0.53	0.49	0.58	0.53	0.49	0.57	0.52	0.49			
10		0.67	0.57	0.51	0.46	0.66	0.56	0.50	0.46	0.55	0.50	0.46	0.55	0.50	0.46	0.54	0.49	0.46			

Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire

Blast Powercore gen5, RGBA, 100 – 277 VAC, Black Housing, UL/CE/CQC
Luminaire only. Values in this specification sheet represent both the luminaire and spread lens combined. Spread lens available below in Associated Part.

Item Number	Item 12NC
423-000028-01	912400137702

Associated Part

60° Spread lens
Trim Ring required for mounting. Must be ordered separately.

120-000185-10	912400130346
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Accessories

Trim Ring, Black
Louver, Black
Rock Guard, Black
Half Glare Shield, Black
Full Glare Shield, Black
Wiring Compartment UL/cUL, Black
Wiring Compartment CE, Black
Architectural Mounting Arm, for use with Blast, Graze, Graze Compact, Burst Architectural, and Vaya Flood. Short, gray
Architectural Mounting Arm, for use with Blast, Graze, Graze Compact, Burst Architectural, and Vaya Flood. Medium, gray
Architectural Mounting Arm, for use with Blast, Graze, Graze Compact, Burst Architectural, and Vaya Flood. Long, gray

120-000185-01	912400130337
120-000185-05	912400130341
120-000185-07	912400130343
120-000185-14	912400130350
120-000185-03	912400130339
106-000011-30	910503704147
106-000011-40	910503703275
120-000206-00	912400136642
120-000206-01	912400136643
120-000206-02	912400136644

Power Supplies

Data Enabler Pro, 3/4 in / 1/2 in NPT (U.S. trade size conduit)
Data Enabler Pro, PG21/PG13 (metric size conduit)

106-000004-00	910503701210
106-000004-01	910503701211



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

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