

Blast Powercore gen5, RGBW

Date: _____

Type: _____

Firm Name: _____

Project: _____

100 – 277 VAC, 10° Native (no spread lens), White Housing, UL/CE/CQC

Exterior versatile and customizable luminaire with intelligent RGBW light

Blast Powercore gen5, RGBW 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 www.colorkinetics.com/global/products/rgb/blast-powercore-gen5-rgbw

Specifications

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

Output

Beam Angle	10°
Lumens †	2,547
Lumens per channel	R 467 / G 873 / B 204 / W 886
Efficacy (lm/W)	54
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)	47.0 W
Power Factor	0.99 @ 120 VAC 0.9 @ 277 VAC
Surge Limits ¶	2 kV maximum differential (L to N) 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.

Control

Interface	Data Enabler Pro (DMX or Ethernet)
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Control System

Color Kinetics full range of controllers, including Light System Manager, 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 ¶¶
	25 °C	50 °C		
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

† 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_{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.

¶¶ 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.

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) (Luminaire plus Full Glare Shield)	0.068 m ² (0.73 ft ²)
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

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/

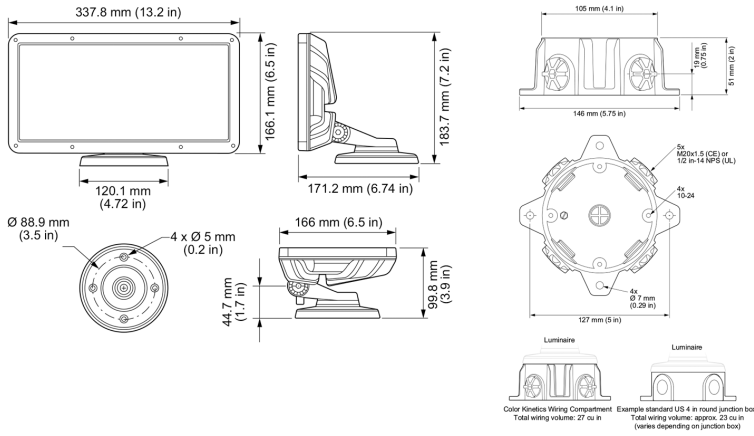
Certification and Safety

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/cvuis2p8qq>.



Dimensions

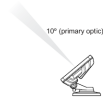


Photometrics 10° native (no spread lens)

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	RGBW
Lumens	2,547.0
Efficacy (lm/W)	54

Illuminance at Distance



Distance (ft)	Center Beam fc		Beam Width	
	Center Beam fc	Beam Width	Center Beam fc	Beam Width
4 ft	3,069.6 fc	0.7 ft	0.7 ft	
8 ft	767.4 fc	1.4 ft	1.4 ft	
12 ft	341.1 fc	2.1 ft	2.0 ft	
16 ft	191.8 fc	2.8 ft	2.7 ft	
20 ft	122.8 fc	3.5 ft	3.4 ft	
24 ft	85.3 fc	4.1 ft	4.1 ft	

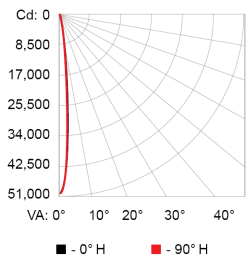
68.9 m (226 ft) 1 fc maximum distance
 Vert. Spread: 9.9°
 Horiz. Spread: 9.7°

Zonal Lumen

Zone	Lumens	% Luminaire
0-30	2423.6	95.1%
0-40	2488.9	97.7%
0-60	2532.4	99.4%
60-90	9.5	0.4%
70-100	3.9	0.2%
90-120	0.6	0.0%
0-90	2541.9	99.8%
90-180	5.8	0.2%
0-180	2547.7	100.0%

For lux multiply fc by 10.7

Polar Candela Distribution



VA	0°	10°	20°	30°	40°
0°	0	25	45	70	90
5°	49113	49113	49113	49113	49113
15°	23489	25074	26038	26856	27252
25°	1595	1727	1822	1932	2010
35°	255	266	278	299	313
45°	102	105	106	107	107
55°	41	41	41	41	40
65°	14	14	14	14	14
75°	6	6	6	6	6
85°	3	3	3	3	3
90°	1	1	1	1	1

Coefficients of Utilization - Zonal Cavity Method

RCC %	Effective Floor Cavity Reflectance: 20%															
	80				70				50				30			
RW %	70	50	30	0	70	50	30	0	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	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
2	1.13	1.10	1.07	1.05	1.11	1.08	1.06	0.96	1.05	1.03	1.02	1.02	1.01	0.99	0.99	0.98
3	1.10	1.06	1.03	1.01	1.08	1.05	1.02	0.95	1.02	1.00	0.99	1.00	0.98	0.97	0.98	0.96
4	1.08	1.03	1.00	0.98	1.06	1.02	0.99	0.93	1.00	0.98	0.96	0.99	0.97	0.95	0.97	0.95
5	1.05	1.01	0.98	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
6	1.04	0.99	0.95	0.93	1.02	0.98	0.95	0.91	0.97	0.94	0.92	0.96	0.93	0.92	0.94	0.93
7	1.02	0.97	0.93	0.91	1.01	0.96	0.93	0.90	0.95	0.93	0.91	0.94	0.92	0.90	0.93	0.91
8	1.00	0.95	0.92	0.90	0.99	0.95	0.92	0.89	0.94	0.91	0.89	0.93	0.91	0.89	0.92	0.90
9	0.99	0.94	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
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

Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire	Item Number	Item 12NC
Blast Powercore gen5, RGBW, 100 – 277 VAC, White Housing, UL/CE/CQC	423-000027-00	912400137697
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

