

Blast Powercore gen5, RGBW

Date: _____

Type: _____

Firm Name: _____

Project: _____

100 – 277 VAC, 20° 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	20°
Lumens †	1,943
Efficacy (lm/W)	41.3
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)
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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 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)	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
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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/

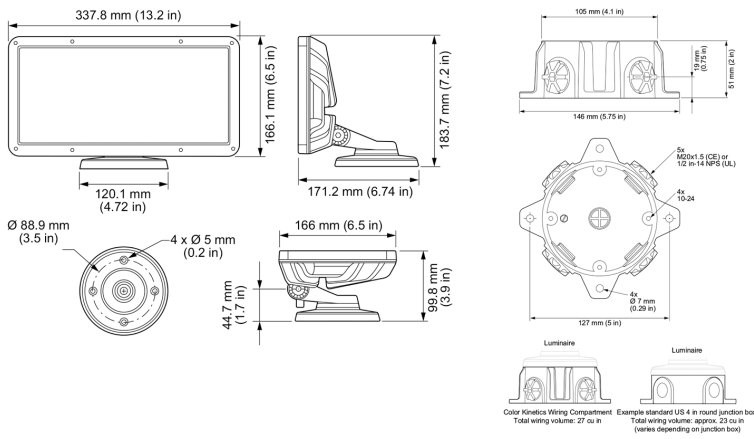
Certification and Safety

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/cviis2p8qq>.



Dimensions



Photometrics 20° 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	20°
LED	RGBW
Lumens	1,943.0
Efficacy (lm/W)	41.3

Illuminance at Distance



	Center Beam fc	Beam Width
4 ft	423.7 fc	2.0 ft 2.0 ft
8 ft	105.9 fc	4.0 ft 3.9 ft
12 ft	47.1 fc	6.0 ft 5.9 ft
16 ft	26.5 fc	7.9 ft 7.9 ft
20 ft	16.9 fc	9.9 ft 9.8 ft
24 ft	11.8 fc	11.9 ft 11.8 ft

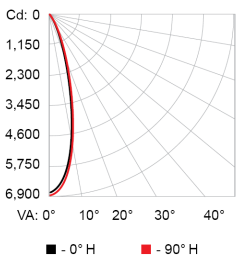
Zonal Lumen

Zone	Lumens	% Luminaire
0-30	1733.9	89.3%
0-40	1844.2	94.9%
0-60	1914.9	98.6%
60-90	23.6	1.2%
70-100	8.8	0.5%
90-120	0.2	0.0%
0-90	1938.4	99.8%
90-180	4.1	0.2%
0-180	1942.5	100.0%

24.4 m (82 ft) 1 fc maximum distance
 Vert. Spread: 27.9°
 Horiz. Spread: 27.6°

For lux multiply fc by 10.7

Polar Candela Distribution



	0	25	45	70	90
0	6780	6780	6780	6780	6780
5	6237	6274	6307	6356	6390
15	2883	2879	2883	2917	2956
25	721	719	720	728	742
35	160	161	161	162	163
45	56	57	58	58	58
55	28	29	29	29	30
65	15	15	16	16	16
75	7	7	7	7	8
85	1	1	2	2	2
90	0	0	0	0	0

Coefficients of Utilization - Zonal Cavity Method

RCC %:	Effective Floor Cavity Reflectance: 20%														
	80	70	50	30	10	0	80	70	50	30	10	0			
RW %:	70	50	30	0	70	50	30	0	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	1.14	1.12	1.10	1.08	1.12	1.10	1.08	0.96	1.06	1.04	1.03	1.02	1.01	1.00
	2	1.10	1.06	1.03	1.00	1.08	1.04	1.01	0.92	1.01	0.99	0.97	0.96	0.96	0.95
	3	1.06	1.01	0.97	0.93	1.04	0.99	0.96	0.88	0.97	0.94	0.91	0.95	0.92	0.90
	4	1.02	0.96	0.92	0.88	1.00	0.95	0.91	0.84	0.93	0.89	0.87	0.91	0.88	0.86
	5	0.99	0.92	0.87	0.84	0.97	0.91	0.87	0.81	0.89	0.86	0.83	0.88	0.85	0.82
	6	0.95	0.88	0.84	0.80	0.94	0.87	0.83	0.78	0.86	0.82	0.79	0.85	0.81	0.79
	7	0.92	0.85	0.80	0.77	0.91	0.84	0.80	0.75	0.83	0.79	0.76	0.82	0.79	0.76
	8	0.89	0.82	0.77	0.74	0.88	0.81	0.77	0.73	0.80	0.76	0.74	0.79	0.76	0.73
	9	0.86	0.79	0.74	0.71	0.85	0.79	0.74	0.70	0.78	0.74	0.71	0.77	0.73	0.71
	10	0.84	0.76	0.72	0.69	0.83	0.76	0.72	0.68	0.75	0.71	0.69	0.75	0.71	0.68

Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire

Blast Powercore gen5, RGBW, 100 – 277 VAC, White 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
423-000027-00	912400137697

Associated Part

20° Spread lens
Trim Ring required for mounting. Must be ordered separately.

120-000185-08	912400130344
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Accessories

Trim Ring, White
Louver, White
Rock Guard, White
Half Glare Shield, White
Full Glare Shield, White
Wiring Compartment UL/cUL, White
Wiring Compartment CE, White
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

120-000185-00	912400130336
120-000185-04	912400130340
120-000185-06	912400130342
120-000185-13	912400130349
120-000185-02	912400130338
106-000011-31	910503704148
106-000011-41	910503703276
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

