ColorBlast Powercore gen4

RGBA, 100 – 277 VAC, 60° Spread Lens, Gray Housing, BIS

Exterior versatile and customizable luminaire with intelligent RGBA light

ColorBlast Powercore gen4 high-performance LED luminaires combine white and rich, saturated, color and color-changing effects with simplified installation. ColorBlast Powercore gen4 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 ColorBlast Powercore gen4 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 gen4 Product Guide at www.colorkinetics.com/global/products/rgb/colorblast-powercore-gen4-rgba/

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Specifications

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

Output

Beam Angle	60°
Lumens†	1,557
Efficacy (lm/W)	29.9
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)	50 W
Power Factor	0.99 @ 120 VAC
	0.91 @ 277 VAC
Surge Limits¶	1 kV maximum differential (L to N)
	2 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/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	Philips ActiveSite Ready, works with Interact Landmark

Lumen Maintenance

Threshold§	Ambient Temperature	Reported¶¶	Calculated¶¶
L$_{90}$	25 °C	11,300	11,300
	50 °C	11,300	11,300
L$_{80}$	25 °C		35,700
	50 °C	35,700	35,700
L$_{70}$	25 °C	> 54,000	63,300
	50 °C	> 54,000	63,300
L$_{50}$	25 °C	> 54,000	> 100,000
	50 °C	> 54,000	> 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, 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

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

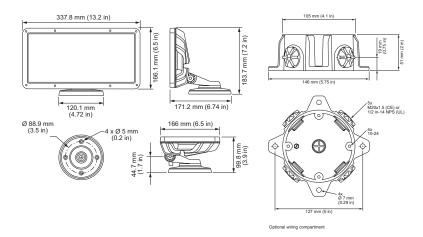|	
Approbation	BIS
Environment	Dry/Damp/Wet Location, IP66

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† Lumen measurement complies with IES LM-79-08 testing procedures.

§ 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.

¶¶ 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

337.8 mm (13.2 in)

166.1 mm (6.5 in)

120.1 mm (4.72 in)

183.7 mm (7.2 in)

171.2 mm (6.74 in)

105 mm (4.1 in)

19 mm (0.75 in)

51 mm (2 in)

146 mm (5.75 in)

5x M20x1.5 (CE) or 1/2 in-14 NPS (UL)

4x 10-24

Ø 88.9 mm (3.5 in)

4 x Ø 5 mm (0.2 in)

166 mm (6.5 in)

44.7 mm (1.7 in)

99.8 mm (3.9 in)

4x Ø 7 mm (0.29 in)

127 mm (5 in)
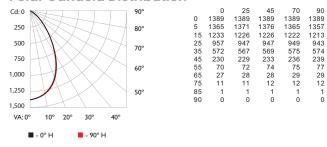
Optional wiring compartment

Photometrics 60º 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.
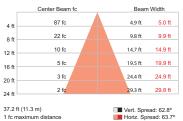
Beam Angle	60°
LED	RGBA
Lumens	1,557
Efficacy (lm/W)	29.9

60º

Polar Candela Distribution

Cd: 0

250
500
750
1,000
1,250
1,500

90° 80° 70° 60° 50°

VA: 0° 10° 20° 30° 40°

■ - 0° H   ■ - 90° H

	0	25	45	70	90
0	1389	1389	1389	1389	1389
5	1365	1371	1376	1365	1357
15	1233	1226	1226	1222	1213
25	957	947	947	949	943
35	572	567	569	575	574
45	230	229	233	236	239
55	70	72	74	75	77
65	27	28	28	29	29
75	11	11	12	12	12
85	1	1	1	1	1
90	0	0	0	0	0

Illuminance at Distance

	Center Beam fc	Beam Width	
4 ft	87 fc	4.9 ft	5.0 ft
8 ft	22 fc	9.8 ft	9.9 ft
12 ft	10 fc	14.7 ft	14.9 ft
16 ft	5 fc	19.5 ft	19.9 ft
20 ft	3 fc	24.4 ft	24.9 ft
24 ft	2 fc	29.3 ft	29.8 ft

37.2 ft (11.3 m)
1 fc maximum distance

■ Vert. Spread: 62.8°
■ Horiz. Spread: 63.7°

Zonal Lumen

Zone	Lumens	% Luminaire
0-30	921.9	59.2%
0-40	1,277.2	82.0%
0-60	1,517.7	97.5%
0-90	1,557.0	100.0%
60-90	39.3	2.5%
70-100	12.7	0.8%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	1,557.0	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
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	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.13	1.10	1.07	1.04	1.10	1.07	1.05	0.92	1.03	1.01	1.00	1.00	0.98	0.97	0.96	0.95	0.94	0.92
2	1.06	1.01	0.96	0.93	1.04	0.99	0.95	0.85	0.96	0.92	0.89	0.93	0.90	0.88	0.90	0.88	0.86	0.84
3	1.00	0.93	0.87	0.83	0.98	0.92	0.86	0.78	0.89	0.84	0.81	0.86	0.83	0.80	0.84	0.81	0.78	0.77
4	0.94	0.86	0.80	0.75	0.92	0.85	0.79	0.71	0.82	0.78	0.74	0.80	0.76	0.73	0.78	0.75	0.72	0.70
5	0.89	0.80	0.73	0.68	0.87	0.79	0.73	0.66	0.77	0.71	0.67	0.75	0.70	0.67	0.73	0.69	0.66	0.65
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	0.59
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	0.57	0.55
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	0.53	0.51
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	0.47
10	0.67	0.57	0.50	0.46	0.66	0.56	0.50	0.46	0.55	0.50	0.46	0.55	0.49	0.46	0.54	0.49	0.46	0.44

Luminaire and Accessories

Luminaire	Item Number	Item 12NC
ColorBlast Powercore gen4, RGBA, 100 – 277 VAC, Gray Housing, BIS	423-000013-08	912400137304
Luminaire only. Values in this specification sheet represent both the luminaire and spread lens combined. Spread lens available below in Associated Part.		
Associated Part		
60° Spread lens	120-000185-10	912400130346
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
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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