

# ColorBlast Powercore gen4

Date: \_\_\_\_\_  
Type: \_\_\_\_\_  
Firm Name: \_\_\_\_\_  
Project: \_\_\_\_\_

**RGB, 100 – 277 VAC, 10° x 40°  
Asymmetric Spread Lens, Gray  
Housing, UL/CE/CQC**

## Exterior versatile and customizable luminaire with intelligent RGB 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-rgb/](http://www.colorkinetics.com/global/products/rgb/colorblast-powercore-gen4-rgb/)

# Specifications

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

## Output

Beam Angle	10° x 40°
Lumens <sup>†</sup>	1,583
Efficacy (lm/W)	35.4
LED Channels	Red/Green/Blue

## 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 0.93 @ 277 VAC
Surge Limits <sup>¶</sup>	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](http://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	Philips ActiveSite Ready, works with Interact Landmark
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## Lumen Maintenance

Threshold <sup>§</sup>	Ambient Temperature	Reported <sup>¶¶</sup>	Calculated <sup>¶¶</sup>
L <sub>90</sub>	25 °C	51,400	51,400
	50 °C	51,400	51,400
L <sub>80</sub>	25 °C	> 72,000	> 100,000
	50 °C	> 72,000	> 100,000
L <sub>70</sub>	25 °C	> 72,000	> 100,000
	50 °C	> 72,000	> 100,000
L <sub>50</sub>	25 °C	> 72,000	> 100,000
	50 °C	> 72,000	> 100,000

<sup>†</sup> Lumen measurement complies with IES LM-79-08 testing procedures.

<sup>§</sup> L<sub>xx</sub> = 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.

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

<sup>¶¶</sup> 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 <sup>2</sup> (0.73 ft <sup>2</sup> ) (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
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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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## Luminaire Run Lengths

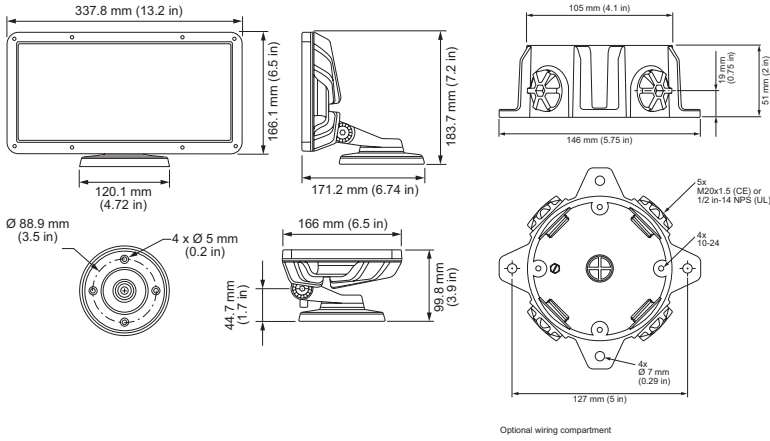
To calculate luminaire run lengths and total power consumption for your specific installation, download the Configuration Calculator from [www.colorkinetics.com/support/install\\_tool/](http://www.colorkinetics.com/support/install_tool/)

## Certification and Safety

Approbation	UL/cUL, FCC Class A, CE, PSE, CQC, RCM
Environment	Dry/Damp/Wet Location, IP66



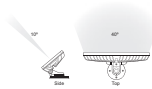
# Dimensions



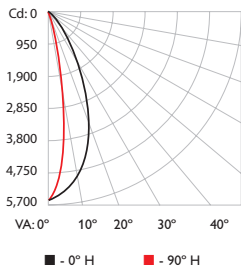
# Photometrics 10° x 40° asymmetric spread lens

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](http://www.colorkinetics.com/global/support/ies).

Beam Angle	10° x 40°
LED	RGB
Lumens	1,583
Efficacy (lm/W)	35.4



## Polar Candela Distribution



	0	25	45	70	90
90°	0	5567	5567	5567	5567
80°	5	5363	5210	4902	4624
70°	15	4219	3201	1815	991
60°	25	2445	1293	426	187
50°	35	923	380	127	69
	45	236	112	56	35
	55	66	47	30	18
	65	28	24	16	8
	75	12	10	6	2
	85	0	0	0	0
	90	0	0	0	0

## Illuminance at Distance

Center Beam fc	Beam Width
4 ft: 348 fc	3.4 ft 1.2 ft
8 ft: 87 fc	6.8 ft 2.3 ft
12 ft: 39 fc	10.2 ft 3.5 ft
16 ft: 22 fc	13.5 ft 4.6 ft
20 ft: 14 fc	16.9 ft 5.8 ft
24 ft: 10 fc	20.3 ft 7.0 ft

74.5 ft (22.7 m)  
1 fc maximum distance  
■ Vert. Spread: 45.9°  
■ Horiz. Spread: 16.5°

## Zonal Lumen

Zone	Lumens	% Luminaire
0-30	1,336.3	84.4%
0-40	1,482.8	93.6%
0-60	1,564.6	98.8%
0-90	1,583.4	100.0%
60-90	18.8	1.2%
70-100	5.4	0.3%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	1,583.4	100.0%

For lux multiply fc by 10.7

## Coefficients of Utilization - Zonal Cavity Method

RCC %:	80	70	50	30	10	0					
RW %:	70	50	30	20	50	30	20	0			
RCR:	0	1	2	3	4	5	6	7	8	9	10
0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11
1	1.14	1.12	1.10	1.08	1.12	1.10	1.08	0.95	1.06	1.04	1.03
2	1.10	1.05	1.02	0.99	1.07	1.04	1.01	0.91	1.01	0.98	0.96
3	1.05	1.00	0.95	0.92	1.03	0.98	0.94	0.87	0.96	0.93	0.90
4	1.01	0.95	0.90	0.86	0.99	0.94	0.89	0.83	0.92	0.88	0.85
5	0.97	0.90	0.85	0.82	0.96	0.89	0.85	0.79	0.88	0.84	0.81
6	0.94	0.86	0.81	0.78	0.92	0.85	0.81	0.76	0.84	0.80	0.77
7	0.90	0.82	0.78	0.74	0.89	0.82	0.77	0.73	0.81	0.77	0.73
8	0.87	0.79	0.74	0.71	0.86	0.79	0.74	0.70	0.78	0.73	0.70
9	0.84	0.76	0.71	0.68	0.83	0.76	0.71	0.67	0.75	0.71	0.68
10	0.81	0.73	0.69	0.65	0.80	0.73	0.68	0.65	0.72	0.68	0.65

# Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire	Item Number	Item 12NC
ColorBlast Powercore gen4, RGB, 100 – 277 VAC, Gray Housing, UL/CE/CQC <i>Luminaire only. Values in this specification sheet represent both the luminaire and spread lens combined. Spread lens available below in Associated Part.</i>	123-000155-04	912400133535
<b>Associated Part</b>		
10° x 40° Spread lens	120-000185-12	912400130348
<i>Trim Ring required for mounting. Must be ordered separately.</i>		
<b>Accessories</b>		
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
<b>Power Supplies</b>		
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

