

# ColorBlast Powercore gen4

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

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

## 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/](http://www.colorkinetics.com/global/products/rgb/colorblast-powercore-gen4-rgba/)

# Specifications

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

## Output

Beam Angle	10° x 40°
Lumens <sup>†</sup>	1,655
Efficacy (lm/W)	31.2
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 <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	11,300	11,300
	50 °C	11,300	11,300
L <sub>80</sub>	25 °C		35,700
	50 °C	35,700	35,700
L <sub>70</sub>	25 °C	> 54,000	63,300
	50 °C	> 54,000	63,300
L <sub>50</sub>	25 °C	> 54,000	> 100,000
	50 °C	> 54,000	> 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, 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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## Luminaire Run Lengths

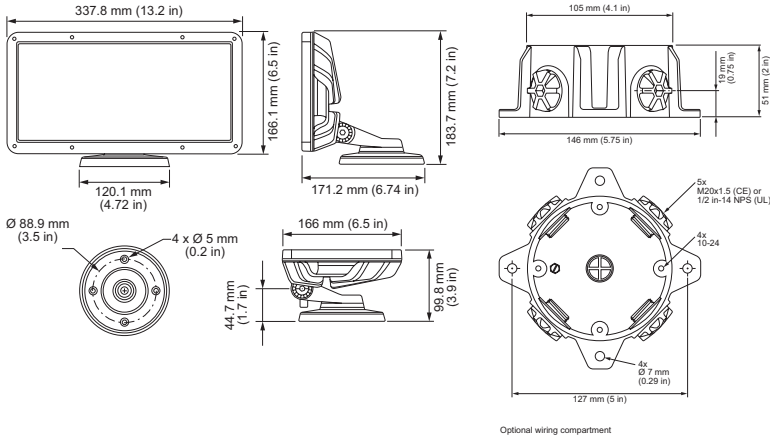
To calculate luminaire run lengths and total power consumption for your specific installation, download the Configuration Calculator from [www.colorkinetics.com/support/install\\_tool/](http://www.colorkinetics.com/support/install_tool/)

## Certification and Safety

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



# Dimensions



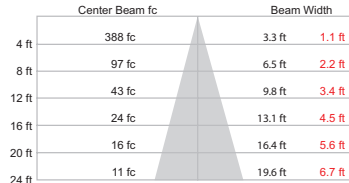
# Photometrics 10° x 40° frosted lens

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

Beam Angle	10° x 40°
LED	RGBA
Lumens	1,655
Efficacy (lm/W)	31.2



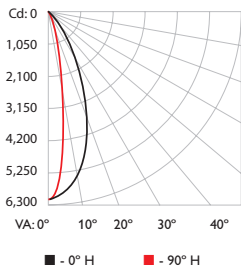
## Illuminance at Distance



## Zonal Lumen

Zone	Lumens	% Luminaire
0-30	1,417.5	85.6%
0-40	1,562.4	94.4%
0-60	1,640.9	99.2%
0-90	1,655.0	100.0%
60-90	14.0	0.8%
70-100	2.9	0.2%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	1,655.0	100.0%

## Polar Candela Distribution



VA	0°	25°	45°	70°	90°
0°	0	6207	6207	6207	6207
5°	5	5954	5697	5280	4910
15°	15	4595	3345	1797	933
25°	25	2520	1258	389	175
35°	35	883	341	117	65
45°	45	214	101	52	32
55°	55	63	43	27	15
65°	65	26	20	13	5
75°	75	9	6	3	0
85°	85	0	0	0	0
90°	90	0	0	0	0

78.7 ft (23.9 m)  
1 fc maximum distance

Vert. Spread: 44.5°  
Horiz. Spread: 16.0°

For lux multiply fc by 10.7

## 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	50	30	20	0
RCR:	0	1.19	1.19	1.19	1.18	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	1.14	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	0.99	0.98	0.97
	2	1.10	1.06	1.02	0.99	1.08	1.04	1.01	0.91	1.01	0.98	0.96	0.98	0.96	0.94	0.95	0.94	0.92
	3	1.06	1.00	0.96	0.93	1.04	0.99	0.95	0.87	0.96	0.93	0.91	0.94	0.91	0.89	0.92	0.90	0.88
	4	1.02	0.95	0.91	0.87	1.00	0.94	0.90	0.83	0.92	0.89	0.86	0.90	0.87	0.85	0.88	0.86	0.84
	5	0.98	0.91	0.86	0.83	0.96	0.90	0.86	0.80	0.88	0.84	0.81	0.87	0.83	0.81	0.85	0.82	0.80
	6	0.94	0.87	0.82	0.79	0.93	0.86	0.82	0.77	0.85	0.81	0.78	0.83	0.80	0.77	0.82	0.79	0.77
	7	0.91	0.83	0.78	0.75	0.90	0.83	0.78	0.74	0.82	0.77	0.74	0.80	0.77	0.74	0.79	0.76	0.74
	8	0.88	0.80	0.75	0.72	0.87	0.80	0.75	0.71	0.78	0.74	0.72	0.78	0.74	0.71	0.77	0.73	0.71
	9	0.85	0.77	0.72	0.69	0.84	0.77	0.72	0.68	0.75	0.72	0.69	0.75	0.71	0.68	0.74	0.71	0.68
	10	0.82	0.74	0.70	0.67	0.81	0.74	0.70	0.66	0.73	0.69	0.66	0.73	0.69	0.66	0.72	0.69	0.66

# Luminaire and Accessories

Use Item Number when ordering in North America

<b>Luminaire</b>	<b>Item Number</b>	<b>Item 12NC</b>
ColorBlast Powercore gen4, RGBA, 100 – 277 VAC, Black 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>	423-000013-01	912400130380
<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, Black	120-000185-01	912400130337
Louver, Black	120-000185-05	912400130341
Rock Guard, Black	120-000185-07	912400130343
Half Glare Shield, Black	120-000185-14	912400130350
Full Glare Shield, Black	120-000185-03	912400130339
Wiring Compartment UL/cUL, Black	106-000011-30	910503704147
Wiring Compartment CE, Black	106-000011-40	910503703275
<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



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Color Kinetics  
[www.colorkinetics.com/global/products/rgb/colorblast-powercore-gen4-rgba/](http://www.colorkinetics.com/global/products/rgb/colorblast-powercore-gen4-rgba/)