

# ColorBlast Powercore gen4

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

**RGBW, 100 – 277 VAC, 20° Spread  
Lens, Black Housing, UL/CE/CQC**

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

# Specifications

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

## Output

Beam Angle	20°
Lumens†	1,846
Efficacy (lm/W)	35.1
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)	50 W
Power Factor	0.99 @ 120 VAC 0.9 @ 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](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§	Ambient Temperature	Reported¶¶	Calculated¶¶
L <sub>90</sub>	50 °C	51,420	51,420
L <sub>80</sub>	50 °C	> 72,000	> 100,000
L <sub>70</sub>	50 °C	> 72,000	> 100,000
L <sub>50</sub>	50 °C	> 72,000	> 100,000

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

§ 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.

¶ 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.

## 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
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Mechanical Impact	IK10
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## Corrosion Resistance

Complies with ASTM B117 standard for > 1,500 hours
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Humidity	0 to 95%, non-condensing
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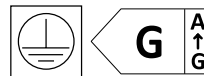
## Luminaire Run Lengths

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/)

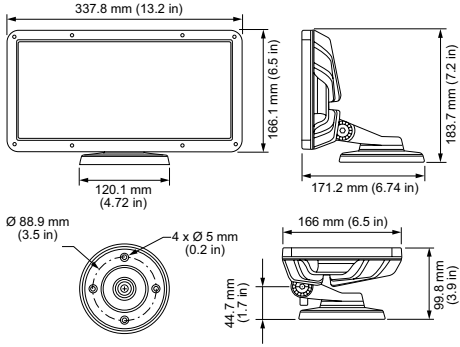
## Certification and Safety

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

For additional Energy Efficiency Class Information, please refer to <https://colorkinetics.helpdocs.io/article/cviis2p8qq>.



# Dimensions



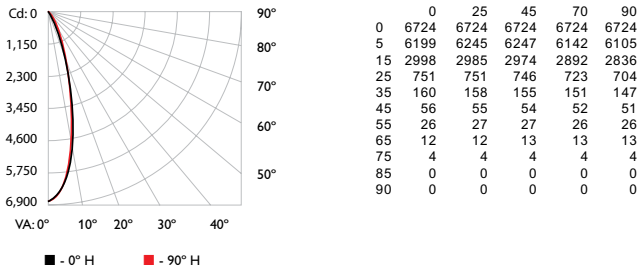
# Photometrics 20° frosted lens

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

Beam Angle	20°
LED	RGBW
Lumens	1,846
Efficacy (lm/W)	35.1



## Polar Candela Distribution



## Illuminance at Distance

	Center Beam fc	Beam Width
4 ft	420 fc	1.9 ft 1.9 ft
8 ft	105 fc	3.8 ft 3.8 ft
12 ft	47 fc	5.7 ft 5.7 ft
16 ft	26 fc	7.7 ft 7.6 ft
20 ft	17 fc	9.6 ft 9.5 ft
24 ft	12 fc	11.5 ft 11.4 ft

## Zonal Lumen

Zone	Lumens	% Luminaire
0-30	1,668.7	90.4%
0-40	1,767.6	95.8%
0-60	1,831.0	99.2%
0-90	1,846.0	100.0%
60-90	15.0	0.8%
70-100	3.5	0.2%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	1,846.0	100.0%

82 ft (25.0 m)  
1 fc maximum distance  
Vert. Spread: 26.9°  
Horiz. Spread: 26.8°

For lux multiply fc by 10.7

## 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	2	3	4	5	6	7	8	9	10	0	1	2	3
	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
	1.15	1.12	1.10	1.08	1.12	1.10	1.08	0.96	1.06	1.05	1.03	1.03	1.01	1.00	0.96
	1.10	1.06	1.03	1.00	1.08	1.05	1.02	0.92	1.02	0.99	0.97	0.99	0.97	0.95	0.96
	1.06	1.01	0.97	0.94	1.05	1.00	0.96	0.89	0.97	0.94	0.92	0.95	0.93	0.91	0.88
	1.03	0.97	0.92	0.89	1.01	0.96	0.92	0.85	0.94	0.90	0.88	0.92	0.89	0.87	0.86
	0.99	0.93	0.88	0.85	0.98	0.92	0.88	0.82	0.90	0.86	0.84	0.89	0.85	0.83	0.81
	0.96	0.89	0.84	0.81	0.95	0.88	0.84	0.79	0.87	0.83	0.80	0.86	0.82	0.80	0.78
	0.93	0.86	0.81	0.78	0.92	0.85	0.81	0.76	0.84	0.80	0.77	0.83	0.79	0.77	0.75
	0.90	0.83	0.78	0.75	0.89	0.82	0.78	0.74	0.81	0.77	0.74	0.80	0.77	0.74	0.73
	0.87	0.80	0.75	0.72	0.86	0.79	0.75	0.71	0.79	0.75	0.72	0.78	0.74	0.72	0.71
	0.85	0.77	0.73	0.70	0.84	0.77	0.73	0.69	0.76	0.72	0.70	0.75	0.72	0.69	0.68

# Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire	Item Number	Item 12NC
ColorBlast Powercore gen4, RGBW, 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>	423-000012-01	912400130376
<b>Associated Part</b>		
20° Spread Lens <i>Trim Ring required for mounting. Must be ordered separately.</i>	120-000185-08	912400130344
<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-rgbw/](http://www.colorkinetics.com/global/products/rgb/colorblast-powercore-gen4-rgbw/)