

# ColorBlast Powercore gen4

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Project: \_\_\_\_\_

**RGBA, 100 – 277 VAC, 80° Spread  
Lens, White 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/](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	80°
Lumens†	1,532
Efficacy (lm/W)	29.6
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](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>	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

† 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, 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
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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

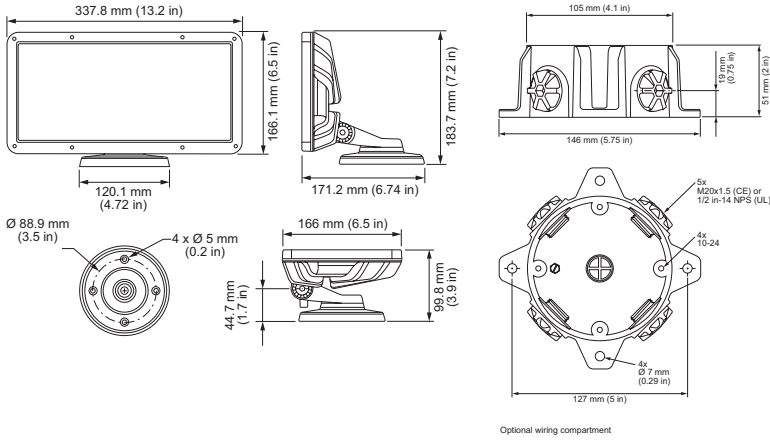
To calculate luminaire run lengths and total power consumption for your specific installation, download the Configuration Calculator from [www.colorkinetics.com/support/install\\_tool/](http://www.colorkinetics.com/support/install_tool/)

## Certification and Safety

Approbation	BIS
Environment	Dry/Damp/Wet Location, IP66



# Dimensions



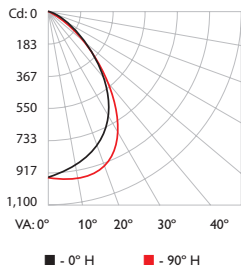
# Photometrics 80° frosted lens

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	80°
LED	RGBA
Lumens	1,532
Efficacy (lm/W)	29.6



## Polar Candela Distribution



	0	25	45	70	90
90°	0	952	952	952	952
80°	5	926	947	962	965
70°	15	849	884	915	948
60°	25	749	778	814	857
50°	35	578	590	606	636
	45	340	338	333	324
	55	151	141	126	111
	65	56	51	45	38
	75	19	18	17	15
	85	2	2	2	2
	90	0	0	0	0

## Illuminance at Distance

	Center Beam fc	Beam Width
4 ft	60 fc	6.3 ft 6.3 ft
8 ft	15 fc	12.6 ft 12.7 ft
12 ft	7 fc	18.9 ft 19.0 ft
16 ft	4 fc	25.1 ft 25.3 ft
20 ft	2 fc	31.4 ft 31.6 ft
24 ft	2 fc	37.7 ft 38.0 ft

## Zonal Lumen

Zone	Lumens	% Luminaire
0-30	723.5	47.2%
0-40	1,104.8	72.1%
0-60	1,469.5	95.9%
0-90	1,532.4	100.0%
60-90	62.9	4.1%
70-100	19.4	1.3%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	1,532.4	100.0%

30.9 ft (9.4 m)  
1 fc maximum distance  
Vert. Spread: 76.3°  
Horiz. Spread: 76.7°

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	1.19	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	1.12	1.09	1.06	1.03	1.10	1.06	1.04	0.91	1.02	1.00	0.98	0.99	0.97	0.95
	2	1.05	0.99	0.94	0.90	1.02	0.97	0.92	0.82	0.94	0.90	0.87	0.91	0.87	0.85
	3	0.98	0.90	0.84	0.79	0.96	0.88	0.83	0.74	0.86	0.81	0.77	0.83	0.79	0.76
	4	0.91	0.82	0.75	0.70	0.89	0.81	0.74	0.67	0.79	0.73	0.69	0.76	0.72	0.68
	5	0.85	0.75	0.68	0.63	0.84	0.74	0.67	0.60	0.72	0.66	0.62	0.70	0.65	0.61
	6	0.80	0.69	0.62	0.57	0.78	0.68	0.61	0.55	0.67	0.60	0.56	0.65	0.60	0.56
	7	0.75	0.64	0.56	0.51	0.73	0.63	0.56	0.50	0.62	0.55	0.51	0.60	0.55	0.51
	8	0.70	0.59	0.52	0.47	0.69	0.58	0.52	0.46	0.57	0.51	0.47	0.56	0.50	0.46
	9	0.66	0.55	0.48	0.43	0.65	0.54	0.48	0.42	0.53	0.47	0.43	0.52	0.47	0.43
	10	0.63	0.51	0.44	0.40	0.61	0.51	0.44	0.39	0.50	0.44	0.39	0.49	0.43	0.39

# 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, White Housing, BIS <i>Luminaire only. Values in this specification sheet represent both the luminaire and spread lens combined. Spread lens available below in Associated Part.</i>	423-000013-06	912400137302
<b>Associated Part</b>		
80° Spread lens	120-000185-11	912400130347
<i>Trim Ring required for mounting. Must be ordered separately.</i>		
<b>Accessories</b>		
Trim Ring, White	120-000185-00	912400130336
Louver, White	120-000185-04	912400130340
Rock Guard, White	120-000185-06	912400130342
Half Glare Shield, White	120-000185-13	912400130349
Full Glare Shield, White	120-000185-02	912400130338
Wiring Compartment UL/cUL, White	106-000011-31	910503704148
Wiring Compartment CE, White	106-000011-41	910503703276
<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/)