

ColorBlast Powercore gen4

Date: _____
Type: _____
Firm Name: _____
Project: _____

**RGB, 100 – 277 VAC, 80° Spread
Lens, Gray Housing, BIS**

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/

Specifications

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

Output

Beam Angle	80°
Lumens†	1,444
Efficacy (lm/W)	32.9
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¶	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)
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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 ₉₀	25 °C	51,400	51,400
	50 °C	51,400	51,400
L ₈₀	25 °C	> 72,000	> 100,000
	50 °C	> 72,000	> 100,000
L ₇₀	25 °C	> 72,000	> 100,000
	50 °C	> 72,000	> 100,000
L ₅₀	25 °C	> 72,000	> 100,000
	50 °C	> 72,000	> 100,000

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

§ L_{xx} = 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 ² (0.73 ft ²) (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

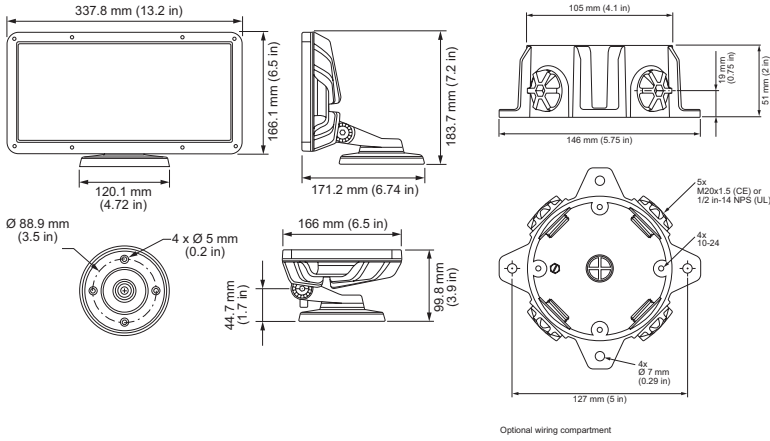
To calculate luminaire run lengths and total power consumption for your specific installation, download the Configuration Calculator from www.colorkinetics.com/support/install_tool/

Certification and Safety

Approbation	BIS
Environment	Dry/Damp/Wet Location, IP66



Dimensions



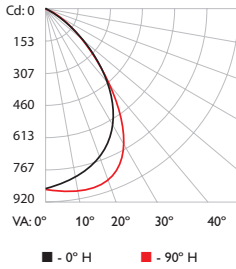
Photometrics 80° spread lens

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.

Beam Angle	80°
LED	RGB
Lumens	1,444
Efficacy (lm/W)	32.9



Polar Candela Distribution



	0	25	45	70	90
90°	0	867	867	867	867
80°	5	838	863	875	881
70°	15	783	822	850	878
60°	25	704	738	776	814
50°	35	558	574	593	617
	45	339	340	333	325
	55	155	147	132	116
	65	58	53	47	40
	75	20	19	17	16
	85	3	3	3	2
	90	0	0	0	0

Illuminance at Distance

	Center Beam fc	Beam Width
4 ft	54 fc	6.4 ft 6.5 ft
8 ft	14 fc	12.8 ft 13.1 ft
12 ft	6 fc	19.1 ft 19.6 ft
16 ft	3 fc	25.5 ft 26.1 ft
20 ft	2 fc	31.9 ft 32.6 ft
24 ft	2 fc	38.3 ft 39.2 ft

Zonal Lumen

Zone	Lumens	% Luminaire
0-30	669.6	46.4%
0-40	1,029.7	71.3%
0-60	1,382.3	95.7%
0-90	1,444.2	100.0%
60-90	61.9	4.3%
70-100	18.9	1.3%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	1,444.2	100.0%

29.5 ft (8.9 m)
1 fc maximum distance
Vert. Spread: 77.1°
Horiz. Spread: 78.4°

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	1.09	1.06	1.04	0.91	1.02	1.00	0.98	0.98	0.97	0.95
	2	1.05	0.99	0.94	0.89	1.02	0.97	0.92	0.82	0.93	0.90	0.86	0.90	0.87	0.84
	3	0.98	0.90	0.83	0.78	0.95	0.88	0.82	0.73	0.85	0.81	0.77	0.83	0.79	0.75
	4	0.91	0.82	0.75	0.70	0.89	0.81	0.74	0.66	0.78	0.73	0.68	0.76	0.71	0.67
	5	0.85	0.75	0.68	0.62	0.83	0.74	0.67	0.60	0.72	0.66	0.61	0.70	0.65	0.61
	6	0.80	0.69	0.61	0.56	0.78	0.68	0.61	0.54	0.66	0.60	0.55	0.65	0.59	0.55
	7	0.75	0.63	0.56	0.51	0.73	0.63	0.56	0.50	0.61	0.55	0.50	0.60	0.54	0.50
	8	0.70	0.59	0.51	0.46	0.69	0.58	0.51	0.45	0.57	0.50	0.46	0.56	0.50	0.46
	9	0.66	0.54	0.47	0.43	0.65	0.54	0.47	0.42	0.53	0.47	0.42	0.52	0.46	0.42
	10	0.62	0.51	0.44	0.39	0.61	0.50	0.44	0.39	0.49	0.43	0.39	0.48	0.43	0.39

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, 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>	123-000155-08	912400137301
Associated Part		
80° Spread lens	120-000185-11	912400130347
<i>Trim Ring required for mounting. Must be ordered separately.</i>		
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

