

ColorBurst Powercore gen2

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

RGBA, 20° Spread Lens, Gray Housing, Architectural

Architectural and landscape LED spotlight with intelligent color light

ColorBurst Powercore gen2 is a high-output, exterior-rated LED lighting luminaire designed for accent and site lighting. Standard format Architectural and Landscape luminaires deliver full-color light output of up to 1,151 lumens to support a range of dynamic uplighting, floodlighting, and decorative lighting applications.



- Expands customization with a wide range of new accessory options. In addition to the native 8° lens, six different spread lenses can customize the luminaire to produce 10°, 20°, 40°, 60°, 80°, and 10° x 40° (asymmetric) beam angles. Four housing color choices (black, gray, white, and bronze)—plus the option to add a louver, 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.
- Complies with ASTM B117 corrosion resistance standard for > 1,500 hours 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 ColorBurst Powercore gen2 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 ColorBurst Powercore gen2 Product Guide at www.colorkinetics.com/global/products/rgb/colorburst-powercore-rgba-gen2/

Specifications

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

Output

Beam Angle	20°
Lumens All Channels Full On†	990
Efficacy (lm/W) All Channels Full On	31
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)	33 W
Power Factor	> 0.9 @ 100 to 240 VAC > 0.85 @ 277 VAC

For 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	ActiveSite Ready, works with Interact Landmark
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Lumen Maintenance

Threshold [§]	Ambient Temperature	Reported [¶]	Calculated [¶]
L ₉₀	25 °C	11,357	11,357
	50 °C	10,488	10,488
L ₈₀	25 °C	35,713	35,713
	50 °C	27,019	27,019
L ₇₀	25 °C	> 54,000	63,326
	50 °C	45,761	45,761
L ₅₀	25 °C	> 54,000	> 100,000
	50 °C	> 54,000	92,986

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

§ L50 = 50% lumen maintenance (when light output drops below 50% 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.

¶ 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)	287 x 210 x 186 mm (11.3 x 8.3 x 7.3 in)
Weight	5.5 kg (12.1 lb)
Effective Projected Area (EPA)	26053 mm ²
Housing Material	Die-cast aluminium, powder-coated finish
Lens	Clear tempered glass
Luminaire Connections	1.8 m (6 ft) combined power data whip

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	IK08

Corrosion Resistance

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

Luminaire Run Lengths

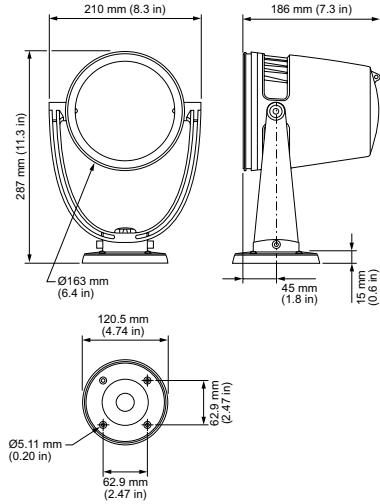
To calculate luminaire run lengths and total power consumption for your specific installation, download the Configuration Calculator from www.colorkinetics.com/support/install_tool/

Certification and Safety

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



Dimensions



Photometrics, 20° spread lens

Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at www.colorkinetics.com/support/ies.

Beam Angle	20°
LED	RGBA
Lumens All Channels Full On	990
Efficacy (lm/W) All Channels Full On	31

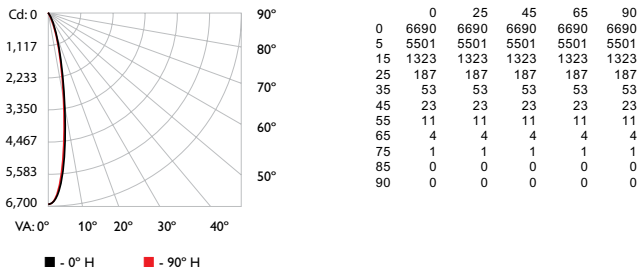


Illuminance at Distance

	Center Beam fc	Beam Width
4 ft	418.13 fc	1.3 ft
8 ft	405.53 fc	2.7 ft
12 ft	46.46 fc	4 ft
16 ft	26.13 fc	5.4 ft
20 ft	16.73 fc	6.7 ft
24 ft	11.61 fc	8.1 ft

81.7 ft (25 m) 1 fc maximum distance ■ Vert. Spread: 19.1°

Polar Candela Distribution



Zonal Lumen

Zone	Lumens	% Luminaire
0-30	921.0	93%
0-40	955.5	96.50%
0-60	983.3	99.30%
60-90	6.4	0.60%
70-100	2.1	0.20%
90-120	0.1	0%
0-90	989.7	99.90%
90-180	0.5	0.10%
0-180	990.3	100%

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		
RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	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	1.02	1.02	1.00	1.02	1.02	1.00		
	1	1.15	1.13	1.11	1.10	1.13	1.11	1.09	0.97	1.07	1.06	1.04	1.03	1.02	1.01	1.00	0.99	0.98	0.97	0.98	0.97		
	2	1.11	1.08	1.05	1.03	1.09	1.06	1.04	0.94	1.03	1.01	0.99	1.00	0.99	0.97	0.98	0.96	0.95	0.94	0.95	0.94		
	3	1.08	1.04	1.00	0.97	1.06	1.02	0.99	0.92	1.00	0.97	0.95	0.98	0.95	0.94	0.95	0.94	0.92	0.91	0.92	0.91		
	4	1.05	1.00	0.96	0.93	1.03	0.99	0.95	0.89	0.97	0.94	0.92	0.95	0.92	0.91	0.93	0.91	0.90	0.88	0.88	0.88		
	5	1.02	0.98	0.93	0.90	1.01	0.96	0.92	0.87	0.94	0.91	0.89	0.93	0.90	0.88	0.91	0.89	0.87	0.86	0.86	0.86		
	6	0.99	0.94	0.90	0.87	0.98	0.93	0.89	0.85	0.92	0.88	0.86	0.90	0.87	0.85	0.89	0.87	0.85	0.84	0.84	0.84		
	7	0.97	0.91	0.87	0.84	0.96	0.90	0.87	0.83	0.89	0.86	0.84	0.88	0.85	0.83	0.87	0.85	0.83	0.82	0.82	0.82		
	8	0.95	0.88	0.85	0.82	0.94	0.88	0.84	0.81	0.87	0.84	0.81	0.86	0.83	0.81	0.85	0.83	0.81	0.80	0.80	0.80		
	9	0.92	0.86	0.82	0.80	0.92	0.86	0.82	0.79	0.85	0.82	0.79	0.84	0.81	0.79	0.84	0.81	0.79	0.78	0.78	0.78		
	10	0.90	0.84	0.80	0.78	0.90	0.84	0.80	0.77	0.83	0.80	0.78	0.83	0.80	0.78	0.82	0.79	0.77	0.77	0.77	0.77		

Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire

	Item Number	Item 12NC
ColorBurst Powercore gen2 <i>RGBA, Gray Housing, Architectural Luminaire only. Values in this specification sheet represent both the luminaire and spread lens combined. Spread lens available below in Associated Part.</i>	423-000005-21	912400135486

Associated Part

20° Spread Lens <i>Trim Ring or Glare Shield required for mounting. Must be ordered separately.</i>	120-000189-12	912400133442
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Accessories

Trim Ring gen2, Gray	120-000189-20	912400135449
Half Glare Shield gen2, Gray	120-000189-24	912400135453
Full Glare Shield gen2, Gray	120-000189-28	912400135457
Louver	120-000189-17	912400133447
Mounting Arm, Short, Gray	120-000201-03	912400135843
Mounting Arm, Medium, Gray	120-000201-04	912400135844
Mounting Arm, Long, Gray	120-000201-05	912400135845
Wiring Compartment, 4 in diameter, Gray, CE	106-000011-42	910503703277
Wiring Compartment, 4 in diameter, Gray, UL	106-000011-32	910503704149

Power/Data 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

