ColorBlast Powercore gen4

RGBW, 100 – 277 VAC, 80° Spread Lens, White 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/

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Specifications

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

Output

Beam Angle	80°
Lumens[†]	1,772
Efficacy (lm/W)	34.5
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.

Control

Interface	Data Enabler Pro (DMX/Ethernet)

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

Lumen Maintenance

Threshold[§]	Ambient Temperature	Reported[¶¶]	Calculated[¶¶]
L_{90}	50 °C	51,420	51,420
L_{80}	50 °C	> 72,000	> 100,000
L_{70}	50 °C	> 72,000	> 100,000
L_{50}	50 °C	> 72,000	> 100,000

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 m² (0.73 ft²) (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

Corrosion Resistance

Complies with ASTM B117 standard for > 1,500 hours

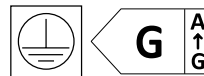|	
Humidity	0 to 95%, non-condensing

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/
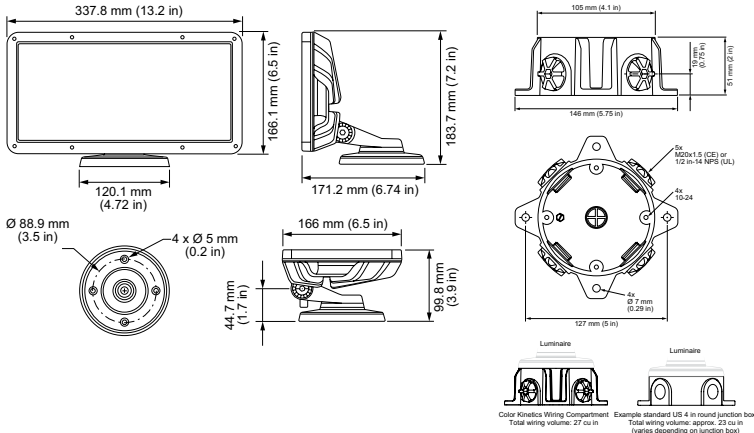
Certification and Safety

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

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

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

§ Lxx = 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.

Dimensions

Color Kinetics Wiring Compartment
Total wiring volume: 27 cu in

Example standard US 4 in round junction box
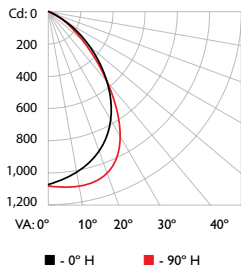Total wiring volume: approx. 23 cu in
(varies depending on junction box)

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.

Beam Angle	80°
LED	RGBW
Lumens	1,772
Efficacy (lm/W)	34.5

Polar Candela Distribution

	0	25	45	70	90
0	1086	1086	1086	1086	1086
5	1059	1079	1096	1097	1103
15	979	1012	1047	1078	1099
25	860	893	932	977	1006
35	674	688	702	729	747
45	406	397	386	370	365
55	185	171	152	131	122
65	69	62	53	46	43
75	23	22	20	18	17
85	3	3	3	3	3
90	0	0	0	0	0

■ - 0° H   ■ - 90° H

Illuminance at Distance

	Center Beam fc	Beam Width	
4 ft	68 fc	6.4 ft	6.3 ft
8 ft	17 fc	12.8 ft	12.6 ft
12 ft	8 fc	19.1 ft	18.9 ft
16 ft	4 fc	25.5 ft	25.2 ft
20 ft	3 fc	31.9 ft	31.5 ft
24 ft	2 fc	38.3 ft	37.9 ft

33 ft (10.1 m)
1 fc maximum distance

■ Vert. Spread: 77.2°
■ Horiz. Spread: 76.5°

Zonal Lumen

Zone	Lumens	% Luminaire
0-30	826.4	46.6%
0-40	1,266.4	71.5%
0-60	1,695.7	95.7%
0-90	1,771.7	100.0%
60-90	76.1	4.3%
70-100	23.3	1.3%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	1,771.7	100.0%

For lux multiply fc by 10.7

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

RCC %:	80				70				50			30			10			0
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	1.19	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	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	0.95	0.94	0.92	0.90
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	0.88	0.85	0.83	0.81
3	0.98	0.90	0.83	0.79	0.96	0.88	0.82	0.74	0.85	0.81	0.77	0.83	0.79	0.75	0.81	0.77	0.74	0.72
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	0.68	0.74	0.70	0.67	0.65
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	0.68	0.64	0.60	0.59
6	0.80	0.69	0.62	0.56	0.78	0.68	0.61	0.55	0.66	0.60	0.56	0.65	0.59	0.55	0.63	0.59	0.55	0.53
7	0.75	0.63	0.56	0.51	0.73	0.63	0.56	0.50	0.61	0.55	0.51	0.60	0.54	0.50	0.59	0.54	0.50	0.48
8	0.70	0.59	0.52	0.47	0.69	0.58	0.51	0.46	0.57	0.51	0.46	0.56	0.50	0.46	0.55	0.50	0.46	0.44
9	0.66	0.55	0.47	0.43	0.65	0.54	0.47	0.42	0.53	0.47	0.42	0.52	0.46	0.42	0.51	0.46	0.42	0.40
10	0.62	0.51	0.44	0.39	0.61	0.50	0.44	0.39	0.49	0.43	0.39	0.49	0.43	0.39	0.48	0.43	0.39	0.37

Luminaire and Accessories

Luminaire	Item Number	Item 12NC
ColorBlast Powercore gen4, RGBW, 100 – 277 VAC, White Housing, UL/CE/CQC	423-000012-00	912400130375
Luminaire only. Values in this specification sheet represent both the luminaire and spread lens combined. Spread lens available below in Associated Part.		

Associated Part	Item Number	Item 12NC
80° Spread lens	120-000185-11	912400130347
Trim Ring required for mounting. Must be ordered separately.		

Accessories	Item Number	Item 12NC
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

Power Supplies	Item Number	Item 12NC
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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www.colorkinetics.com/global/products/rgb/colorblast-powercore-gen4-rgbw/