

ColorBurst IntelliHue Powercore

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

**10° Spread Lens, Gray Housing,
Architectural**

Architectural and landscape LED spotlight with intelligent white and color light

ColorBurst IntelliHue Powercore brings the precise control of color and high-quality tunable white light in the same luminaire for outdoor wall washing and spot lighting applications. The IntelliHue technology delivers 80+ CRI (2700 K to 4000 K) and the ability to tint any CCT between 2000 K and 10000 K above and below the black-body curve.



- 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.
 - Color-changing and high-quality white light from the same luminaire—IntelliHue is an advanced approach to color mixing that enables high-quality intelligent color and white light from a single luminaire. Multiple channels of LED light sources combine to produce a full spectrum of precisely controllable light, including millions of saturated colors, pastels, and uniform white light with CRI of greater than 83 in the 2700 K to 4000 K range.
 - 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.
 - Delivers R9 values that can reach up to 77. Saturated red light gives objects and surfaces a vibrant and rich color that is ideal for spaces where ambience is important.
 - 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 IntelliHue Powercore 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 IntelliHue Powercore Product Guide at www.colorkinetics.com/global/products/intellihue/colorburst-powercore/

Specifications

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

Output

Beam Angle	10°
Lumens All Channels Full On†	1,322
Lumens @ 2700 K	914
Lumens @ 4000 K	932
Efficacy (lm/W) All Channels Full On	42
Efficacy (lm/W) @ 2700 K	48.8
Efficacy (lm/W) @ 4000 K	47.2
LED Channels	Red/Green/Blue/Mint White

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	> 51,000	> 100,000
	50 °C	> 51,000	> 100,000
L ₈₀	25 °C	> 51,000	> 100,000
	50 °C	> 51,000	> 100,000
L ₇₀	25 °C	> 51,000	> 100,000
	50 °C	> 51,000	> 100,000
L ₅₀	25 °C	> 51,000	> 100,000
	50 °C	> 51,000	> 100,000

† 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
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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

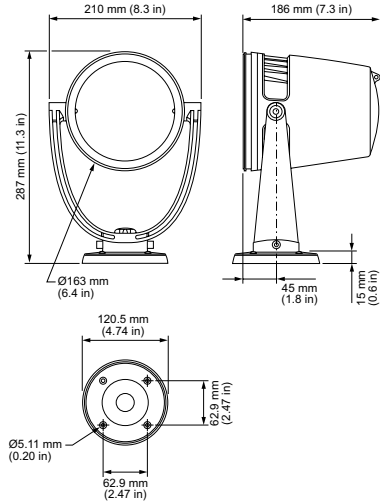
To calculate luminaire run lengths and total power consumption for your specific installation, download the Configuration Calculator from www.colorkinetics.com/support/install_tool/

Certification and Safety

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



Dimensions



Photometrics, 10° 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	10°
LEDs	All channels full on
Lumens All Channels Full On	1,322
Efficacy (lm/W) All Channels Full On	42

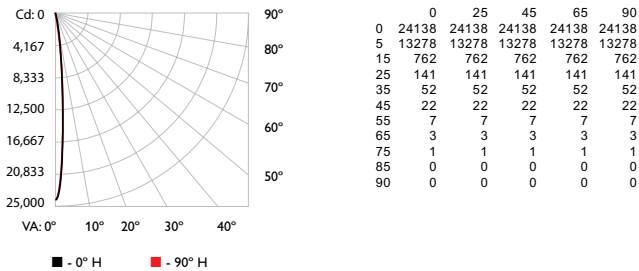


Illuminance at Distance

	Center Beam fc	Beam Width
4 ft	1,508.62 fc	0.8 ft
8 ft	377.15 fc	1.5 ft
12 ft	167.62 fc	2.3 ft
16 ft	94.29 fc	3.1 ft
20 ft	60.34 fc	3.8 ft
24 ft	41.91 fc	4.6 ft

155 ft (47.2 m) ■ Vert. Spread: 11°
1 fc maximum distance

Polar Candela Distribution



Zonal Lumen

Zone	Lumens	% Luminaire
0-30	1259.8	95.3%
0-40	1292.8	97.8%
0-60	1316.9	99.6%
60-90	4.1	0.3%
70-100	1.5	0.1%
90-120	0.0	0.0%
0-90	1321.0	99.9%
90-180	0.7	0.1%
0-180	1321.7	100.0%

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	0	50	30	20	0	50	30	20	0	50	30	20	0
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	1.06	1.02	1.02	1.02	1.02	1.00	1.01	1.00	1.00	0.98
1	1.16	1.14	1.12	1.11	1.13	1.12	1.10	0.98	1.08	1.07	1.06	1.04	1.03	1.03	1.03	1.01	1.00	1.00	1.00	0.98	1.01	1.00	1.00	0.98
2	1.13	1.10	1.07	1.05	1.11	1.08	1.06	0.97	1.05	1.03	1.02	1.02	1.01	1.01	1.00	1.00	0.99	0.98	0.98	0.96	1.00	0.99	0.98	0.96
3	1.10	1.06	1.04	1.01	1.09	1.05	1.03	0.95	1.03	1.01	0.99	1.01	0.99	0.97	0.97	0.99	0.97	0.96	0.96	0.95	0.99	0.97	0.96	0.95
4	1.08	1.04	1.00	0.98	1.06	1.03	1.00	0.94	1.01	0.98	0.96	0.99	0.97	0.95	0.95	0.97	0.95	0.94	0.94	0.93	0.97	0.95	0.94	0.93
5	1.06	1.01	0.98	0.96	1.05	1.00	0.97	0.93	0.99	0.96	0.94	0.97	0.95	0.94	0.94	0.96	0.94	0.93	0.93	0.92	0.96	0.94	0.93	0.92
6	1.04	0.99	0.96	0.94	1.03	0.98	0.95	0.91	0.97	0.95	0.93	0.96	0.94	0.92	0.92	0.95	0.93	0.92	0.92	0.91	0.95	0.93	0.92	0.91
7	1.02	0.97	0.94	0.92	1.01	0.97	0.94	0.90	0.96	0.93	0.91	0.95	0.92	0.91	0.91	0.94	0.92	0.91	0.91	0.90	0.93	0.91	0.90	0.89
8	1.01	0.96	0.93	0.90	1.00	0.95	0.92	0.89	0.94	0.92	0.90	0.94	0.91	0.90	0.90	0.93	0.91	0.90	0.89	0.89	0.93	0.91	0.89	0.89
9	0.99	0.94	0.91	0.89	0.98	0.94	0.91	0.88	0.93	0.91	0.89	0.92	0.90	0.88	0.88	0.92	0.90	0.88	0.88	0.88	0.92	0.90	0.88	0.88
10	0.98	0.93	0.90	0.88	0.97	0.93	0.90	0.87	0.92	0.89	0.88	0.91	0.89	0.87	0.87	0.91	0.89	0.87	0.87	0.87	0.91	0.89	0.87	0.87

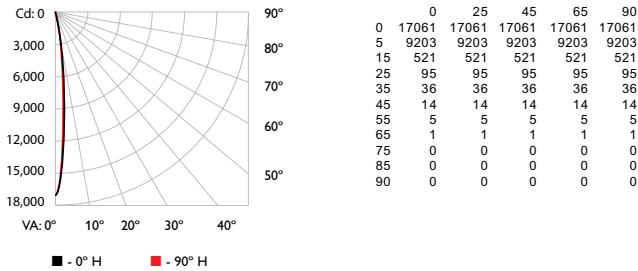
Photometrics, 2700 K

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	10°
LEDs at	2700 K
Lumens @ 2700 K	914
Efficacy (lm/W) @ 2700 K	48.8



Polar Candela Distribution



Zonal Lumen

Zone	Lumens	% Luminaire
0-30	873.4	95.6%
0-40	895.8	98.0%
0-60	911.2	99.7%
60-90	2.0	0.2%
70-100	0.5	0.1%
90-120	0.0	0.0%
0-90	913.2	100.0%
90-180	0.4	0.0%
0-180	913.6	100.0%

For lux multiply fc by 10.7

Illuminance at Distance

	Center Beam fc	Beam Width
4 ft	1,066.28 fc	0.8 ft
8 ft	266.57 fc	1.5 ft
12 ft	118.48 fc	2.3 ft
16 ft	66.64 fc	3 ft
20 ft	42.65 fc	3.8 ft
24 ft	29.62 fc	4.5 ft

130.5 ft (40 m) ■ Vert. Spread: 10.8°
1 fc maximum distance

Coefficients of Utilization - Zonal Cavity Method

	Effective Floor Cavity			Reflectance: 20%														
RCC %:	80	70	50	30	10	0												
RW %:	70	50	30	20	50	30	20	0										
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	1.16	1.14	1.12	1.11	1.14	1.12	1.11	0.98	1.08	1.07	1.06	1.04	1.04	1.03	1.01	1.00	1.00	0.98
2	1.13	1.10	1.08	1.06	1.11	1.08	1.06	0.97	1.05	1.04	1.02	1.03	1.01	1.00	1.00	0.99	0.98	0.97
3	1.10	1.07	1.04	1.01	1.09	1.05	1.03	0.96	1.03	1.01	0.99	1.01	0.99	0.98	0.99	0.97	0.96	0.95
4	1.08	1.04	1.01	0.98	1.07	1.03	1.00	0.94	1.01	0.99	0.97	0.99	0.97	0.96	0.98	0.96	0.95	0.94
5	1.06	1.01	0.98	0.96	1.05	1.01	0.98	0.93	0.99	0.97	0.95	0.98	0.96	0.94	0.96	0.95	0.93	0.92
6	1.04	0.99	0.96	0.94	1.03	0.99	0.96	0.92	0.98	0.95	0.93	0.96	0.94	0.93	0.95	0.93	0.92	0.91
7	1.02	0.98	0.95	0.92	1.02	0.97	0.94	0.91	0.96	0.94	0.92	0.95	0.93	0.91	0.94	0.92	0.91	0.90
8	1.01	0.96	0.93	0.91	1.00	0.96	0.93	0.90	0.95	0.92	0.90	0.94	0.92	0.90	0.93	0.91	0.90	0.89
9	0.99	0.95	0.92	0.90	0.99	0.94	0.91	0.89	0.94	0.91	0.89	0.93	0.91	0.89	0.92	0.90	0.89	0.88
10	0.98	0.93	0.90	0.89	0.97	0.93	0.90	0.88	0.92	0.90	0.88	0.92	0.90	0.88	0.91	0.89	0.88	0.87

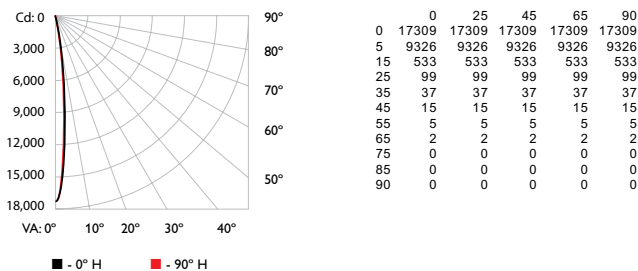
Photometrics, 4000 K

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	10°
LEDs at	4000 K
Lumens @ 4000 K	932
Efficacy (lm/W) @ 4000 K	47.2



Polar Candela Distribution



Zonal Lumen

Zone	Lumens	% Luminaire
0-30	890.0	95.5%
0-40	913.3	98.0%
0-60	929.3	99.7%
60-90	2.1	0.2%
70-100	0.5	0.1%
90-120	0.0	0.0%
0-90	931.4	100.0%
90-180	0.4	0.0%
0-180	931.8	100.0%

For lux multiply fc by 10.7

Illuminance at Distance

	Center Beam fc	Beam Width
4 ft	1,081.82 fc	0.8 ft
8 ft	270.45 fc	1.5 ft
12 ft	120.20 fc	2.3 ft
16 ft	67.61 fc	3 ft
20 ft	43.27 fc	3.8 ft
24 ft	30.05 fc	4.5 ft

131.7 ft (40.1 m) ■ Vert. Spread: 10.8°
1 fc maximum distance

Coefficients of Utilization - Zonal Cavity Method

	Effective Floor Cavity			Reflectance: 20%														
RCC %:	80	70	50	30	10	0												
RW %:	70	50	30	20	50	30	20	0										
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	1.16	1.14	1.12	1.11	1.13	1.12	1.11	0.98	1.08	1.07	1.06	1.04	1.04	1.03	1.01	1.00	1.00	0.98
2	1.13	1.10	1.08	1.05	1.11	1.08	1.06	0.97	1.05	1.04	1.02	1.02	1.01	1.00	1.00	0.99	0.98	0.97
3	1.10	1.07	1.04	1.01	1.09	1.05	1.03	0.95	1.03	1.01	0.99	1.01	0.99	0.98	0.99	0.97	0.96	0.95
4	1.08	1.04	1.01	0.98	1.07	1.03	1.00	0.94	1.01	0.99	0.97	0.99	0.97	0.96	0.98	0.96	0.95	0.94
5	1.06	1.01	0.98	0.96	1.05	1.01	0.98	0.93	0.99	0.97	0.95	0.98	0.96	0.94	0.96	0.95	0.93	0.92
6	1.04	0.99	0.96	0.94	1.03	0.99	0.96	0.92	0.97	0.95	0.93	0.96	0.94	0.92	0.95	0.93	0.92	0.91
7	1.02	0.98	0.94	0.92	1.01	0.97	0.94	0.91	0.96	0.93	0.92	0.95	0.93	0.91	0.94	0.92	0.91	0.90
8	1.01	0.96	0.93	0.91	1.00	0.95	0.93	0.90	0.95	0.92	0.90	0.94	0.92	0.90	0.93	0.91	0.90	0.89
9	0.99	0.94	0.92	0.90	0.99	0.94	0.91	0.89	0.93	0.91	0.89	0.93	0.91	0.89	0.92	0.90	0.89	0.88
10	0.98	0.93	0.90	0.88	0.97	0.93	0.90	0.88	0.92	0.90	0.88	0.92	0.90	0.88	0.91	0.89	0.88	0.87

Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire	Item Number	Item 12NC
ColorBurst IntelliHue Powercore <i>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>	423-000003-21	912400135470
Associated Part		
10° Spread Lens <i>Trim Ring or Glare Shield required for mounting. Must be ordered separately.</i>	120-000189-18	912400135371
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



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Color Kinetics
www.colorkinetics.com/global/products/intellihue/colorburst-powercore/