

# ColorBurst IntelliHue Powercore

Date: \_\_\_\_\_  
Type: \_\_\_\_\_  
Firm Name: \_\_\_\_\_  
Project: \_\_\_\_\_

**40° Spread Lens, Black Housing,  
Landscape**

## 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.
- 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/IntelliHue/ColorBurst-Powercore/](http://www.colorkinetics.com/IntelliHue/ColorBurst-Powercore/)



# Specifications

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

## Output

Beam Angle	40°
Lumens All Channels Full On†	1,276
Lumens @ 2700 K	925
Lumens @ 4000 K	949
Efficacy (lm/W) All Channels Full On	40
Efficacy (lm/W) @ 2700 K	49.8
Efficacy (lm/W) @ 4000 K	47.3
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](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	ActiveSite Ready, works with Interact Landmark
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## Lumen Maintenance

Threshold§	Ambient Temperature	Reported¶	Calculated¶
L <sub>90</sub>	25 °C	> 51,000	> 100,000
	50 °C	> 51,000	> 100,000
L <sub>80</sub>	25 °C	> 51,000	> 100,000
	50 °C	> 51,000	> 100,000
L <sub>70</sub>	25 °C	> 51,000	> 100,000
	50 °C	> 51,000	> 100,000
L <sub>50</sub>	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)	272 x 163 x 185 mm (10.7 x 6.42 x 7.28 in)
Weight	3.5 kg (7.7 lb)
Effective Projected Area (EPA)	26053 mm <sup>2</sup>
Housing Material	Die-cast aluminium, powder-coated finish
Lens	Clear tempered glass
Luminaire Connections	152 mm (6 in) flying leads

## 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

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

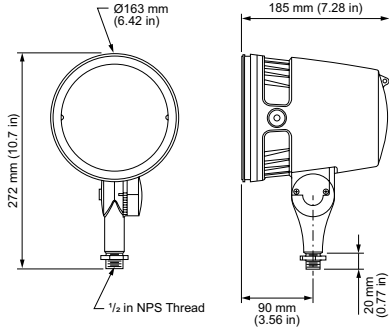
To calculate luminaire run lengths and total power consumption for your specific installation, download the Configuration Calculator from [www.colorkinetics.com/support/install\\_tool/](http://www.colorkinetics.com/support/install_tool/)

## Certification and Safety

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



# Dimensions



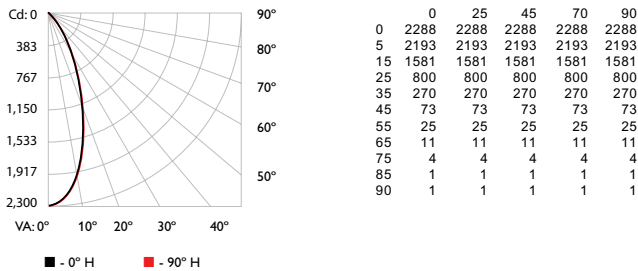
## Photometrics, 40° spread lens

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

Beam Angle	40°
LEDs	All channels full on
Lumens All Channels Full On	1,276
Efficacy (lm/W) All Channels Full On	40



## Polar Candela Distribution



## Zonal Lumen

Zone	Lumens	% Luminaire
0-30	1,000.7	78.5%
0-40	1,174.8	92.1%
0-60	1,257.7	98.6%
0-90	1,274.9	100.0%
60-90	17.2	1.3%
70-100	6.4	0.5%
90-120	0.3	0.0%
90-180	0.3	0.0%
0-180	1,275.2	100.0%

For lux multiply fc by 10.7

## Illuminance at Distance

	Center Beam fc	Beam Width
4 ft	143 fc	3.0 ft
8 ft	36 fc	6.0 ft
12 ft	16 fc	8.9 ft
16 ft	9 fc	11.9 ft
20 ft	6 fc	14.9 ft
24 ft	4 fc	17.9 ft

47.8 ft (14.6 m)  
1 fc maximum distance  
Vert. Spread: 40.9°  
Horiz. Spread: 40.9°

## 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		
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	1.00	1.00	1.00		
1	1.14	1.11	1.09	1.07	1.11	1.09	1.07	0.94	1.05	1.03	1.02	1.01	1.00	0.99	0.98	0.97	0.96	0.94	0.94	0.94	0.94		
2	1.08	1.04	1.00	0.97	1.06	1.02	0.99	0.89	0.99	0.96	0.94	0.96	0.94	0.92	0.93	0.91	0.90	0.88	0.88	0.88	0.88		
3	1.03	0.97	0.93	0.89	1.02	0.96	0.92	0.84	0.93	0.90	0.87	0.91	0.88	0.85	0.89	0.86	0.84	0.83	0.83	0.83	0.83		
4	0.99	0.92	0.86	0.82	0.97	0.90	0.86	0.79	0.88	0.84	0.81	0.86	0.83	0.80	0.85	0.82	0.79	0.78	0.78	0.78	0.78		
5	0.94	0.86	0.81	0.77	0.93	0.86	0.80	0.74	0.84	0.79	0.76	0.82	0.78	0.75	0.81	0.77	0.75	0.73	0.73	0.73	0.73		
6	0.90	0.82	0.76	0.72	0.89	0.81	0.76	0.70	0.80	0.75	0.71	0.78	0.74	0.71	0.77	0.73	0.71	0.69	0.69	0.69	0.69		
7	0.86	0.78	0.72	0.68	0.85	0.77	0.72	0.67	0.76	0.71	0.67	0.74	0.70	0.67	0.73	0.70	0.67	0.65	0.65	0.65	0.65		
8	0.82	0.74	0.68	0.64	0.81	0.73	0.68	0.63	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.63	0.62	0.62	0.62	0.62		
9	0.79	0.70	0.65	0.61	0.78	0.70	0.64	0.60	0.69	0.64	0.61	0.68	0.64	0.60	0.67	0.63	0.60	0.59	0.59	0.59	0.59		
10	0.76	0.67	0.62	0.58	0.75	0.66	0.61	0.57	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.57	0.56	0.56	0.56	0.56		

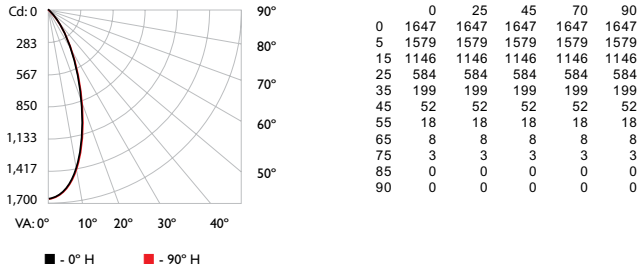
# Photometrics, 2700 K

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

Beam Angle	40°
LEDs at	2700 K
Lumens @ 2700 K	925
Efficacy (lm/W) @ 2700 K	49.8



## Polar Candela Distribution

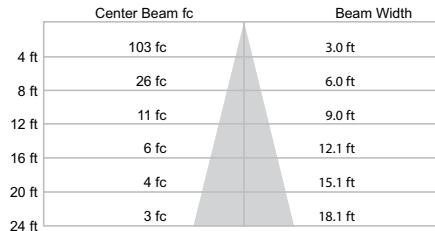


## Zonal Lumen

Zone	Lumens	% Luminaire
0-30	726.4	78.5%
0-40	854.1	92.3%
0-60	913.9	98.7%
0-90	925.4	100.0%
60-90	11.4	1.2%
70-100	3.7	0.4%
90-120	0.1	0.0%
90-180	0.4	0.0%
0-180	925.7	100.0%

For lux multiply fc by 10.7

## Illuminance at Distance



40.5 ft (12.3 m)  
1 fc maximum distance  
Vert. Spread: 41.3°  
Horiz. Spread: 41.3°

## 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	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	1.14	1.11	1.09	1.07	1.11	1.09	1.07	0.94	1.05	1.03	1.02	1.01	1.00	0.99	0.98	0.97	0.96	0.94
2	1.09	1.04	1.00	0.97	1.06	1.02	0.99	0.89	0.99	0.96	0.94	0.96	0.94	0.92	0.93	0.91	0.90	0.88
3	1.03	0.97	0.93	0.89	1.02	0.96	0.92	0.84	0.93	0.90	0.87	0.91	0.88	0.85	0.89	0.86	0.84	0.83
4	0.99	0.92	0.86	0.82	0.97	0.91	0.86	0.79	0.88	0.84	0.81	0.86	0.83	0.80	0.85	0.82	0.79	0.78
5	0.94	0.86	0.81	0.77	0.93	0.86	0.80	0.74	0.84	0.79	0.76	0.82	0.78	0.75	0.81	0.77	0.75	0.73
6	0.90	0.82	0.76	0.72	0.89	0.81	0.76	0.70	0.80	0.75	0.71	0.78	0.74	0.71	0.77	0.73	0.71	0.69
7	0.86	0.78	0.72	0.68	0.85	0.77	0.72	0.67	0.76	0.71	0.67	0.74	0.70	0.67	0.73	0.70	0.67	0.65
8	0.82	0.74	0.68	0.64	0.81	0.73	0.68	0.63	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.63	0.62
9	0.79	0.70	0.65	0.61	0.78	0.70	0.64	0.60	0.69	0.64	0.61	0.68	0.64	0.60	0.67	0.63	0.60	0.59
10	0.76	0.67	0.62	0.58	0.75	0.66	0.61	0.57	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.57	0.56

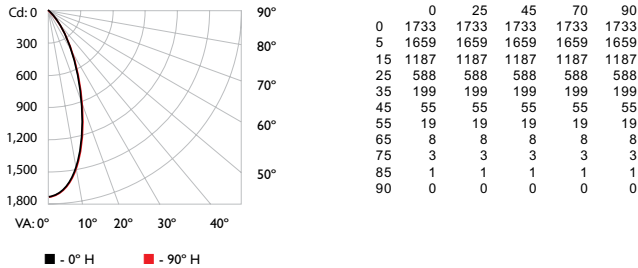
# Photometrics, 4000 K

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

Beam Angle	40°
LEDs at	4000 K
Lumens @ 4000 K	949
Efficacy (lm/W) @ 4000 K	47.3



## Polar Candela Distribution

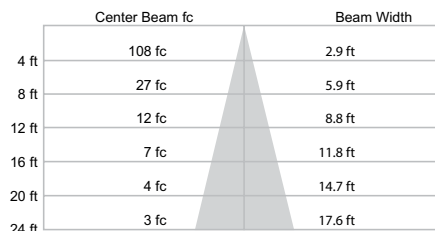


## Zonal Lumen

Zone	Lumens	% Luminaire
0-30	747.0	78.7%
0-40	875.0	92.2%
0-60	936.6	98.7%
0-90	948.9	99.9%
60-90	12.3	1.3%
70-100	4.5	0.5%
90-120	0.2	0.0%
90-180	0.5	0.1%
0-180	949.4	100.0%

For lux multiply fc by 10.7

## Illuminance at Distance



41.6 ft (12.7 m)  
1 fc maximum distance  
Vert. Spread: 40.3°  
Horiz. Spread: 40.3°

## 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	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	1.14	1.11	1.09	1.07	1.11	1.09	1.07	0.94	1.05	1.03	1.02	1.01	1.00	0.99	0.98	0.97	0.96	0.94
2	1.09	1.04	1.00	0.97	1.06	1.02	0.99	0.89	0.99	0.96	0.94	0.96	0.94	0.92	0.93	0.91	0.90	0.88
3	1.04	0.97	0.93	0.89	1.02	0.96	0.92	0.84	0.93	0.90	0.87	0.91	0.88	0.85	0.89	0.86	0.84	0.83
4	0.99	0.92	0.87	0.83	0.97	0.91	0.86	0.79	0.88	0.84	0.81	0.87	0.83	0.80	0.85	0.82	0.79	0.78
5	0.94	0.87	0.81	0.77	0.93	0.86	0.81	0.74	0.84	0.79	0.76	0.82	0.78	0.75	0.81	0.77	0.75	0.73
6	0.90	0.82	0.76	0.72	0.89	0.81	0.76	0.70	0.80	0.75	0.72	0.78	0.74	0.71	0.77	0.73	0.71	0.69
7	0.86	0.78	0.72	0.68	0.85	0.77	0.72	0.67	0.76	0.71	0.68	0.75	0.70	0.67	0.74	0.70	0.67	0.66
8	0.83	0.74	0.68	0.65	0.81	0.73	0.68	0.63	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.64	0.62
9	0.79	0.70	0.65	0.61	0.78	0.70	0.65	0.60	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.60	0.59
10	0.76	0.67	0.62	0.58	0.75	0.67	0.62	0.58	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.57	0.56

# Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire	Item Number	Item 12NC
ColorBurst IntelliHue Powercore <i>Black Housing, Landscape Luminaire only. Values in this specification sheet represent both the luminaire and spread lens combined. Spread lens available below in Associated Part.</i>	423-000003-23	912400135471
<b>Associated Part</b>		
40° Spread Lens <i>Trim Ring or Glare Shield required for mounting. Must be ordered separately.</i>	120-000189-13	912400133443
<b>Accessories</b>		
Trim Ring gen2, Black	120-000189-21	912400135450
Half Glare Shield gen2, Black	120-000189-25	912400135454
Full Glare Shield gen2, Black	120-000189-29	912400135458
Louver	120-000189-17	912400133447
Wiring Compartment, 4 in diameter, Black, CE	106-000011-40	910503703275
Wiring Compartment, 4 in diameter, Black, UL	106-000011-30	910503704147
<b>Power/Data 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/Is/IntelliHue/ColorBurst-Powercore/](http://www.colorkinetics.com/Is/IntelliHue/ColorBurst-Powercore/)