

# ColorBurst IntelliHue Powercore

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

**OptiField, Black Housing,  
Landscape**

## Exterior architectural and landscape spotlight OptiField luminaire with intelligent white and color light

ColorBurst IntelliHue Powercore produces high-quality white, pastel, and saturated color light, in the same precisely controllable luminaire for outdoor wall washing and spot lighting applications. IntelliHue technology delivers exceptional CRI and the ability to choose any CCT between 2000 K and 10000 K. OptiField technology delivers extremely uniform illuminance, providing smooth, even light and subtle shading with reduced setbacks—without hotspots or banding.



- OptiField technology features extremely uniform illumination (6.3:1 or better on a 6 x 4.3 m (14 x 19.7 ft) wall with 1 m (3 ft) setback) providing smooth walls of light that appear perfect to the eye. And thanks to our breakthrough optics, you can place luminaires exceptionally close to illuminated surfaces.
  - Expands customization with a wide range of options. Four housing color choices (black, gray, white, and bronze)—plus the option to add a 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 80 or greater 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.
  - 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.
- For detailed product information, please refer to the Burst Product Guide at [www.colorkinetics.com/global/products/intellihue/colorburst-powercore-optifield/](http://www.colorkinetics.com/global/products/intellihue/colorburst-powercore-optifield/)

# Specifications

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

## Output

Lumens All Channels Full On†	827
Lumens @ 2700 K*	609
Lumens @ 4000 K*	725
Efficacy (lm/W) All Channels Full On	28.5
Efficacy (lm/W) @ 2700 K	34.9
Efficacy (lm/W) @ 4000 K	32.2
CRI @ 2700 K	88
CRI @ 4000 K	80
CRI @ 4000 K	80
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)	30 W
Power Factor	0.92 @ 100 to 240 VAC > 0.85 @ 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](http://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 <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

\* Correlated color temperature (CCT) complies with ANSI C78.377-2008 for the chromaticity of solid state lighting products.

† 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.

¶ 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)	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, black 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
-------------------	------

### 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/](http://www.colorkinetics.com/support/install_tool/)

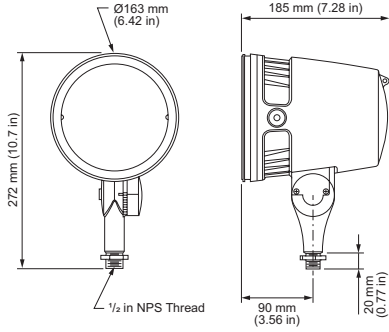
## Certification and Safety

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



# Dimensions

## Luminaire

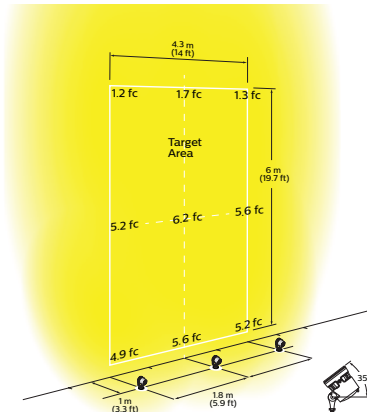
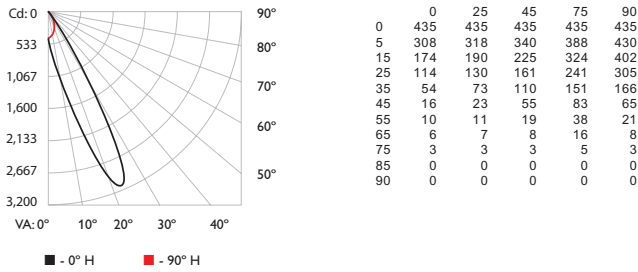


# Photometrics optfield

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](http://www.colorkinetics.com/global/support/ies).

LEDs	All channels full on
Lumens All Channels Full On	827
Target area uniformity	5.2:1
Efficacy (lm/W) All Channels Full On	28.5

## Polar Candela Distribution



## Zonal Lumen

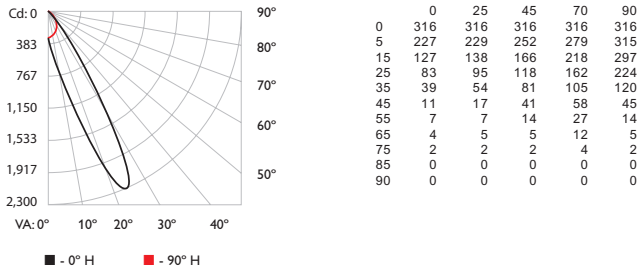
Zone	Lumens	% Luminaire
0-30	577.6	69.1%
0-40	755.8	90.4%
0-60	817.8	97.9%
60-90	13.7	1.6%
70-100	4.4	0.5%
90-120	0.4	0.0%
0-90	831.4	99.5%
90-180	4.2	0.5%
0-180	835.6	100.0%

For lux multiply fc by 10.7

## Optifield, 2700 K

LEDs at	2700 K
Lumens @ 2700 K	609
Efficacy (lm/W) @ 2700 K	34.9

## Polar Candela Distribution



## Illuminance at Distance

	Center Beam fc	Beam Width
3 ft	36.13 fc	0.9 ft 1.6 ft
5.9 ft	9.03 fc	1.8 ft 3.2 ft
8.9 ft	4.01 fc	2.6 ft 4.8 ft
11.8 ft	2.26 fc	3.5 ft 6.4 ft
14.8 ft	1.45 fc	4.4 ft 8 ft
17.8 ft	1 fc	5.3 ft 9.6 ft

## Zonal Lumen

Zone	Lumens	% Luminaire
0-30	421.7	69.3%
0-40	552.5	90.8%
0-60	596.3	97.9%
60-90	9.4	1.6%
70-100	3.1	0.5%
90-120	0.3	0.1%
0-90	605.7	99.5%
90-180	3.1	0.5%
0-180	608.8	100.0%

17.7 ft (5.4 m) 1 fc maximum distance  
 Vert. Spread: 16.9°  
 Horiz. Spread: 30.2°

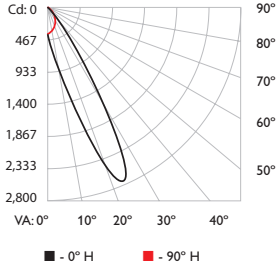
## Coefficients Of Utilization - Zonal Cavity Method

		Effective Floor Cavity Reflectance: 20%																	
RCC %:	80	70	50	30	10	0													
RW %:	70	50	30	20	10	0	50	30	20	10	0								
RCR:	9	1.19	1.19	1.19	1.16	1.16	1.16	0.99	1.11	1.11	1.11	1.06	1.06	1.02	1.02	1.02	0.99		
	1	1.13	1.1	1.07	1.05	1.1	1.08	1.05	0.93	1.04	1.02	1	1.098	0.97	0.96	0.95	0.94	0.92	
	2	1.07	1.02	0.97	0.94	1.05	1.096	0.86	0.97	0.93	0.91	0.93	0.91	0.89	0.91	0.89	0.87	0.85	
	3	1.01	0.94	0.89	0.85	0.99	0.93	0.88	0.79	0.9	0.86	0.82	0.87	0.84	0.81	0.85	0.82	0.8	0.78
	4	0.95	0.87	0.81	0.77	0.94	0.86	0.81	0.73	0.84	0.79	0.76	0.82	0.78	0.75	0.8	0.76	0.74	0.72
	5	0.9	0.81	0.75	0.7	0.88	0.8	0.74	0.68	0.78	0.73	0.69	0.77	0.72	0.69	0.75	0.71	0.68	0.67
	6	0.85	0.76	0.69	0.65	0.84	0.75	0.69	0.63	0.73	0.68	0.64	0.72	0.67	0.64	0.7	0.66	0.63	0.62
	7	0.81	0.71	0.64	0.6	0.79	0.7	0.64	0.58	0.69	0.63	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.57
	8	0.76	0.66	0.6	0.55	0.75	0.65	0.59	0.54	0.64	0.59	0.55	0.63	0.58	0.55	0.62	0.58	0.54	0.53
	9	0.72	0.62	0.56	0.51	0.71	0.61	0.55	0.51	0.6	0.55	0.51	0.59	0.54	0.51	0.59	0.54	0.51	0.49
	10	0.68	0.58	0.52	0.48	0.67	0.58	0.52	0.47	0.57	0.51	0.48	0.56	0.51	0.47	0.55	0.51	0.47	0.46

# Photometrics (cont.) Optifield, 4000 K

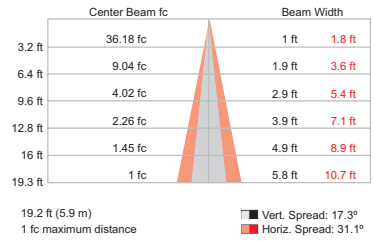
Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at [www.colorkinetics.com/global/support/ies](http://www.colorkinetics.com/global/support/ies).

LEDs at	4000 K
Lumens @ 4000 K	725
Efficacy (lm/W) @ 4000 K	32.2



	0	25	45	75	90
0	372	372	372	372	372
5	260	270	291	342	378
15	150	165	196	282	356
25	100	114	141	210	271
35	47	65	97	132	145
45	14	21	50	70	55
55	8	9	17	32	17
65	5	6	7	13	7
75	2	2	3	4	2
85	0	0	0	0	0
90	0	0	0	0	0

## Illuminance at Distance



Zone	Lumens	% Luminaire
0-30	506.8	69.3%
0-40	662.8	90.6%
0-60	716.2	97.9%
60-90	11.6	1.6%
70-100	3.7	0.5%
90-120	0.3	0.0%
90-90	727.7	99.5%
90-180	3.5	0.5%
0-180	731.2	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	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	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1	
	1	1.13	1.1	1.07	1.05	1.05	1.05	0.93	1.04	1.02	1	0.98	0.97	0.96	0.95	0.94	0.92		
	2	1.07	1.02	0.97	0.94	1.05	1	0.96	0.86	0.97	0.93	0.91	0.89	0.91	0.89	0.87	0.85		
	3	1.01	0.94	0.89	0.85	0.99	0.93	0.88	0.79	0.9	0.86	0.82	0.87	0.84	0.81	0.85	0.82	0.8	0.78
	4	0.95	0.87	0.81	0.77	0.94	0.86	0.81	0.73	0.84	0.79	0.76	0.82	0.78	0.75	0.8	0.76	0.74	0.72
	5	0.9	0.81	0.75	0.7	0.88	0.8	0.74	0.68	0.78	0.73	0.69	0.77	0.72	0.69	0.75	0.71	0.68	0.67
	6	0.85	0.76	0.69	0.65	0.84	0.75	0.69	0.63	0.73	0.68	0.64	0.72	0.67	0.64	0.7	0.66	0.63	0.62
	7	0.81	0.71	0.64	0.6	0.79	0.7	0.64	0.58	0.69	0.63	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.57
	8	0.76	0.66	0.6	0.55	0.75	0.66	0.59	0.54	0.64	0.59	0.55	0.63	0.58	0.55	0.62	0.58	0.54	0.53
	9	0.72	0.62	0.56	0.51	0.71	0.61	0.55	0.51	0.6	0.55	0.51	0.59	0.54	0.51	0.59	0.54	0.51	0.49
	10	0.68	0.58	0.52	0.48	0.67	0.58	0.52	0.47	0.57	0.51	0.48	0.56	0.51	0.47	0.55	0.51	0.47	0.46

# Luminaire and Accessories

Use Item Number when ordering in North America

<b>Luminaire</b>	<b>Item Number</b>	<b>Item 12NC</b>
ColorBurst IntelliHue Powercore, OptiField, Black Housing, Landscape	423-000003-33	912400136620
<b>Accessories</b>		
Trim Ring gen2, Black	120-000189-21	912400135450
Half Glare Shield gen2, Black	120-000189-25	912400135454
Mounting Arm, Short, Black	120-000201-00	912400135840
Mounting Arm, Medium, Black	120-000201-01	912400135841
Mounting Arm, Long, Black	120-000201-02	912400135842
Wiring Compartment, 4 in diameter, Black, CE (cover not included)	106-000011-40	910503703275
Wiring Compartment, 4 in diameter, Black, UL (cover not included)	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



© 2021 Signify Holding. All rights reserved. Specifications are subject to change without notice. No representation or warranty as to the accuracy or completeness of the information included herein is given and any liability for any action in reliance thereon is disclaimed.

Color Kinetics  
[www.colorkinetics.com/global/products/intellihue/colorburst-powercore-optifield/](http://www.colorkinetics.com/global/products/intellihue/colorburst-powercore-optifield/)