

ColorBlast IntelliHue Powercore gen4

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

**OptiField, 100 to 277 VAC, Black
Housing, BIS**

High-performance exterior OptiField luminaire with intelligent white and color light

ColorBlast IntelliHue Powercore gen4 produces high-quality white, pastel, and saturated color light, in the same precisely controllable luminaire. 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. ColorBlast IntelliHue Powercore offers a range of accessories that allow for 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.



- ColorBlast Powercore gen4 integrates the latest LED innovations, custom optics, and a 100 to 277 VAC direct connection. The ColorBlast Powercore gen4 family still retains the rock-solid reliability and no-compromises quality that earned Blast its unequalled reputation.
 - OptiField technology features extremely uniform illumination (5:1 or better on a 5 m x 5 m (16.4 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.
 - Delivers R9 values up to 90. Saturated red light gives objects and surfaces a vibrant and rich color that is ideal for spaces where ambience is important.
 - Chromasync technology improves color consistency between all LED luminaires in a family. 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.
 - Choose from a full line of high-quality accessories, from full and half glare shields, to a rock guard, for all Blast Powercore gen4 luminaires, eliminating the need for third-party solutions. All in your choice of white, gray, or black.
 - Blast is known for providing years of reliable use under rugged conditions. ColorBlast gen4 raises reliability even further with more protection from corrosion by meeting ASTM B117 standard for > 1,500 hours of corrosion resistance and ANSI C136.31-2010 standard with a 3G vibration rating, and elimination of water pooling.
 - 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.
 - Works seamlessly with the Color Kinetics full range of controllers, including Light System Manager, Video System Manager, Video System Manager Pro, iPlayer 3, Antumbra iColor Keypad, and ColorDial Pro—as well as third-party controllers.
- For detailed product information, please refer to the Blast gen4 Product Guide at www.colorkinetics.com/global/products/intellihue/colorblast-powercore-gen4-fta

Specifications

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

Output

Beam	Wall washing
Lumens All Channels Full On [†]	1,753
Lumens @ 2700 K*	1,085
Lumens @ 4000 K*	1,284
Efficacy (lm/W) All Channels Full On	36.9
Efficacy (lm/W) @ 2700 K	51.9
Efficacy (lm/W) @ 4000 K	46.7
CRI All Channels Full On	71
CRI @ 2700 K	92
CRI @ 4000 K	91
CRI @ 4000 K	91
CRI R9 @ 4000 K	90
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)	50 W
Power Factor	0.99 @ 120 VAC 0.88 @ 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)
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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	Philips ActiveSite Ready, works with Interact Landmark
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Lumen Maintenance

Threshold [§]	Ambient Temperature	Reported ^{¶¶}	Calculated ^{¶¶}
L ₉₀	25 °C	13,100	13,100
	50 °C	13,100	13,100
L ₈₀	25 °C		28,600
	50 °C	28,600	28,600
L ₇₀	25 °C	46,100	46,100
	50 °C	46,100	46,100
L ₅₀	25 °C	> 54,000	90,300
	50 °C	> 54,000	90,300

* 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.

§ L_{xx} = 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.

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 m ² (0.73 ft ²) (Luminaire plus Full Glare Shield)
Housing Material	Die-cast aluminium, black 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
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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

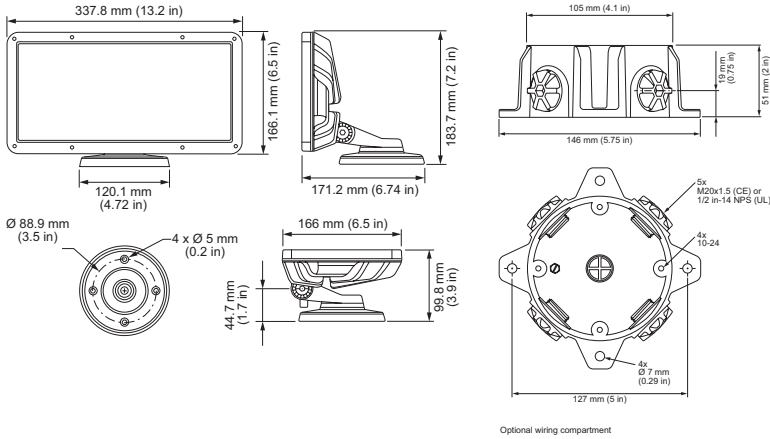
To calculate luminaire run lengths and total power consumption for your specific installation, download the Configuration Calculator from www.colorkinetics.com/support/install_tool/

Certification and Safety

Approbation	BIS
Environment	Dry/Damp/Wet Location, IP66



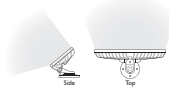
Dimensions



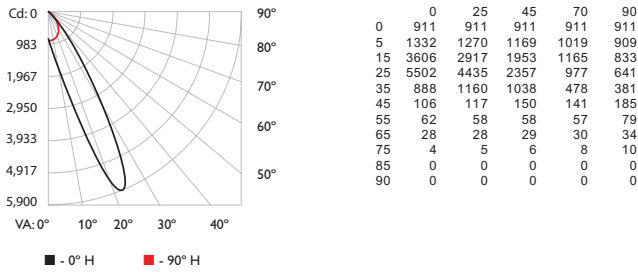
Photometrics optiField, all channels full on

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	Wall washing
LEDs	All channels full on
Lumens All Channels Full On	1,753.00
Target area uniformity	4.2:1
Efficacy (lm/W) All Channels Full On	36.9



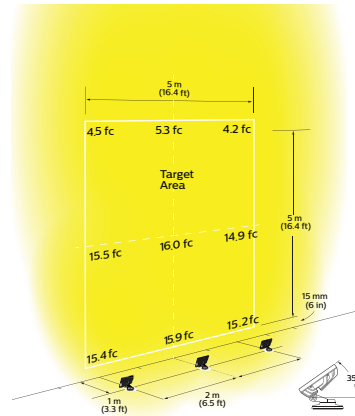
Polar Candela Distribution



Zonal Lumen

Zone	Lumens	% Linaire
0-30	1169.6	66.7%
0-40	1523.7	86.9%
0-60	1707.7	97.4%
60-90	46.1	2.6%
70-100	10.6	0.6%
90-120	0.0	0.0%
0-90	1753.8	100.0%
90-180	0.0	0.0%
0-180	1753.8	100.0%

For lux multiply fc by 10.7

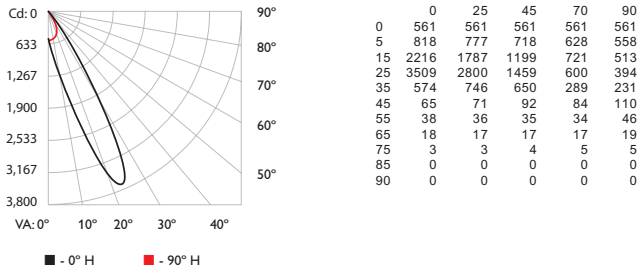


ColorBlast Powercore gen4, OptiField Notes. Although this luminaire is designed to meet a large number of installation needs, specifically wall heights, we recommend using a measurement area like the example with a measurement grid of 5 m (16.4 ft) or smaller. This approach will help you consistently create simulations that match mock-ups. In order to achieve the highest delivered illuminance and maximum level of uniformity, we recommend aiming the luminaire at a 35° rotation.

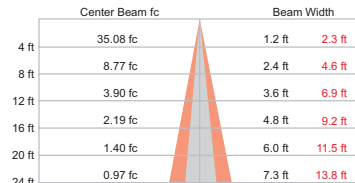
OptiField, 2700 K

Beam Angle	10° x 40°
LEDs at	2700 K
Lumens @ 2700 K	1,085
Target area uniformity	3.9:1
Efficacy (lm/W) @ 2700 K	51.9

Polar Candela Distribution



Illuminance at Distance



23.7 ft (7.2 m) 1 fc maximum distance

■ Vert. Spread: 17.2° ■ Horiz. Spread: 32.0°

Zonal Lumen

Zone	Lumens	% Linaire
0-30	727.4	67.0%
0-40	949.5	87.5%
0-60	1058.7	97.6%
60-90	26.3	2.4%
70-100	5.8	0.5%
90-120	0.0	0.0%
0-90	1085.0	100.0%
90-180	0.0	0.0%
0-180	1085.0	100.0%

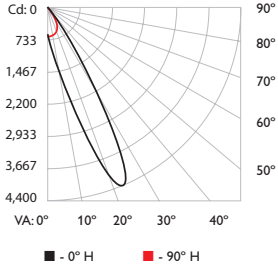
Coefficients of Utilization - Zonal Cavity Method

RCC %:	Effective Floor Cavity Reflectance: 20%																	
	80	70	50	30	10	0	80	70	50	30	10	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	1.13	1.10	1.07	1.05	1.10	1.08	1.05	0.93	1.04	1.02	1.00	1.00	0.98	0.97	0.96	0.95	0.94	0.92
2	1.07	1.01	0.97	0.93	1.04	1.00	0.96	0.85	0.96	0.93	0.90	0.93	0.91	0.88	0.90	0.88	0.86	0.85
3	1.01	0.94	0.88	0.84	0.99	0.92	0.87	0.79	0.89	0.85	0.82	0.87	0.83	0.80	0.85	0.82	0.79	0.77
4	0.95	0.87	0.81	0.76	0.93	0.85	0.80	0.72	0.83	0.78	0.75	0.81	0.77	0.74	0.79	0.76	0.73	0.71
5	0.89	0.80	0.74	0.69	0.88	0.79	0.73	0.67	0.78	0.72	0.68	0.76	0.71	0.68	0.74	0.70	0.67	0.65
6	0.84	0.75	0.68	0.64	0.83	0.74	0.68	0.62	0.72	0.67	0.63	0.71	0.66	0.62	0.70	0.65	0.62	0.60
7	0.80	0.70	0.63	0.59	0.78	0.69	0.63	0.57	0.68	0.62	0.58	0.66	0.61	0.58	0.65	0.61	0.57	0.56
8	0.75	0.65	0.59	0.54	0.74	0.65	0.58	0.53	0.63	0.58	0.54	0.62	0.57	0.54	0.61	0.57	0.53	0.52
9	0.71	0.61	0.55	0.50	0.70	0.60	0.54	0.50	0.59	0.54	0.50	0.59	0.53	0.50	0.58	0.53	0.50	0.48
10	0.68	0.57	0.51	0.47	0.67	0.57	0.51	0.46	0.56	0.50	0.47	0.56	0.50	0.46	0.54	0.50	0.46	0.45

Photometrics (cont.) OptiField, 4000 K

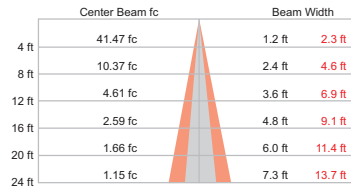
Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at www.colorkinetics.com/global/support/ies.

Beam Angle	10° x 40°
LEDs at	4000 K
Lumens @ 4000 K	1,284
Target area uniformity	4:01
Efficacy (lm/W) @ 4000 K	46.7



	0	25	45	70	90
0	664	664	664	664	664
5	970	921	850	742	660
15	2632	2128	1420	852	606
25	4151	3304	1728	709	466
35	672	876	767	343	274
45	78	85	109	100	131
55	46	43	42	41	55
65	21	21	21	21	23
75	4	4	5	6	6
85	0	0	0	0	0
90	0	0	0	0	0

Illuminance at Distance



Zone	Lumens	% Luminaire
0-30	860.3	67.0%
0-40	1122.0	87.4%
0-60	1252.3	97.5%
60-90	31.8	2.5%
70-100	7.1	0.6%
90-120	0.0	0.0%
0-90	1284.1	100.0%
90-180	0.0	0.0%
0-180	1284.1	100.0%

25.8 ft (7.8 m) Vert. Spread: 17.2°
1 fc maximum distance Horiz. Spread: 31.9°

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	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	1.13	1.10	1.07	1.05	1.10	1.08	1.05	0.93	1.04	1.02	1.00	1.00	0.98	0.97	0.96	0.95	0.94	0.92
2	1.07	1.01	0.97	0.93	1.04	1.00	0.95	0.85	0.96	0.93	0.90	0.93	0.90	0.88	0.90	0.88	0.86	0.84
3	1.01	0.93	0.88	0.84	0.98	0.92	0.87	0.78	0.89	0.85	0.82	0.87	0.83	0.80	0.85	0.82	0.79	0.77
4	0.95	0.87	0.80	0.76	0.93	0.85	0.80	0.72	0.83	0.78	0.74	0.81	0.77	0.74	0.79	0.76	0.73	0.71
5	0.89	0.80	0.74	0.69	0.88	0.79	0.73	0.67	0.77	0.72	0.68	0.76	0.71	0.68	0.74	0.70	0.67	0.65
6	0.84	0.75	0.68	0.63	0.83	0.74	0.68	0.62	0.72	0.67	0.63	0.71	0.66	0.62	0.69	0.65	0.62	0.60
7	0.80	0.70	0.63	0.59	0.78	0.69	0.63	0.57	0.68	0.62	0.58	0.66	0.61	0.58	0.65	0.61	0.57	0.56
8	0.75	0.65	0.59	0.54	0.74	0.64	0.58	0.53	0.63	0.58	0.54	0.62	0.57	0.53	0.61	0.57	0.53	0.52
9	0.71	0.61	0.55	0.50	0.70	0.60	0.54	0.49	0.59	0.54	0.50	0.59	0.53	0.50	0.58	0.53	0.50	0.48
10	0.68	0.57	0.51	0.47	0.67	0.57	0.51	0.46	0.56	0.50	0.47	0.55	0.50	0.46	0.54	0.50	0.46	0.45

Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire	Item Number	Item 12NC
ColorBlast IntelliHue Powercore gen4, OptiField, 100 to 277 VAC, Black Housing	423-000017-04	912400137296
Accessories		
Rock Guard, Black	120-000185-07	912400130343
Half Glare Shield, Black	120-000185-14	912400130350
Full Glare Shield, Black	120-000185-03	912400130339
Wiring Compartment UL/cUL, Black	106-000011-30	910503704147
Wiring Compartment CE, Black	106-000011-40	910503703275
Power Supplies		
Data Enabler Pro, 3/4 in / 1/2 in NPT (US 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/colorblast-powercore-gen4-fta