Blast Powercore gen5, IntelliHue

Date:		
Type:		
Firm Name:		
Project:		

100 – 277 VAC, 10° Native (no spread lens), White Housing, UL/CE/CQC

Exterior versatile and customizable luminaire with intelligent white and color light

Blast Powercore gen5, IntelliHue 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. Blast IntelliHue 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.



- 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.
- Delivers R9 values that can reach up to 81. Saturated red light gives objects and surfaces a vibrant and rich color that is ideal for spaces where ambience is important.

- Features an redesigned optical system that improves the quality of light from each LED, enhancing the color uniformity and color mixing capabilities of each Blast Powercore gen5, IntelliHue 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 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.
- Accepts power input 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 Product Guide at www.colorkinetics.com/global/products/intellihue/blast-powercore-gen5



Specifications

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

Output

Beam Angle	10°
Lumens All Channels Full On [†]	3,007
Lumens @ 2700 K *	2,136
Lumens @ 4000 K *	2,422
Lumens per channel *	R 595 / G 945 / B 219 / MW 1,178
Efficacy (lm/W) All Channels Full On	64
Efficacy (lm/W) @ 2700 K	79.7
Efficacy (lm/W) @ 4000 K	69.2
CRI @ 2700 K	82.5
CRI @ 4000 K	76.6
LED Channels	Red/Green/Blue/Mint White

Electrical

Input Voltage	100 to 277 VAC, auto-ranging, 50/60 Hz
Power Consumption	50 W
(Maximum at full output, steady state)	
Power Factor	0.99 @ 120 VAC
	0.88 @ 277 VAC
Surge Limits ¶	2 kV maximum differential (L to N)
	4 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 or Ethernet)

Control System

Color Kinetics full range of controllers, including Light System Manager, iPlayer 3, Antumbra iColor Keypad, and ColorDial Pro, or third-party controllers

Remote Monitoring & Management Works with Interact Landmark

Lumen Maintenance

Ambient

Threshold§	Temperature	Reported ¶¶	Calculated ¶¶
L 90	25 °C	>39,715	>39,715
	50 °C	>39,715	>39,715
L ₈₀	25 °C	>60,000	>98,607
	50 °C	>60,000	>98,607
L 70	25 °C	>60,000	>100,000
	50 °C	>60,000	>100,000
L 50	25 °C	-	>100,000
	50 °C	-	>100,000

Physical

183.7 x 337.8 x 171.2 mm (7.2 x 13.2 x 6.74 in)
3.9 kg (8.2 lb)
0.068 m² (0.73 ft²)
(Luminaire plus Full Glare Shield)
Die-cast aluminium, white powder-coated finish
Clear tempered glass
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

Corrosion Resistance

Complies with ASTM B117 standard for > 1,500 hours

Humidity 0 to 95%, non-condensing

IK10

Thermal Protection enabled

For additional Thermal Protection information, please refer to https://colorkinetics.helpdocs.io/article/sh301ducix

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.





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

[†] Full-on lumen output measurements comply with IES LM-79-08 testing procedures. 2700 K and 4000 K measurements are estimated based on the full-on measurements.

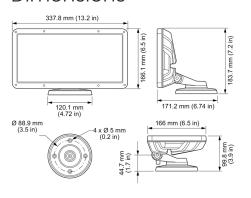
[§] Lxx = xx% lumen maintenance (when light output drops below xx% of initial output). All values are given at B10, or the median value where 90% of the LED population is better than the reported or calculated lumen maintenance measurement.

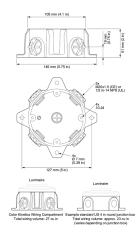
 $[\]P$ Minimum surge limits per IEC 61547, tested in accordance with IEC 61000-4-5.

 $^{\\ \ \, \}text{T} \text{When mounting to a junction box, the Color Kinetics wiring compartment accessory must be used to maintain a 3G vibration rating.} \\$

^{¶¶} 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





Photometrics 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 Angle	10°
LEDs	All channels full on
Lumens All Channels Full On	3,007.0
Efficacy (lm/W) All Channels Full On	64



Illuminance at Distance

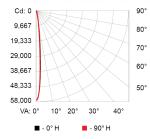
	Center Beam fc	Beam Width	
4 ft	3,539.1 fc	0.7 ft	0.6 ft
8 ft	884.8 fc	1.3 ft	1.3 ft
12 ft	393.2 fc	2.0 ft	1.9 ft
16 ft	221.2 fc	2.7 ft	2.6 ft
20 ft	141.6 fc	3.3 ft	3.2 ft
24 ft	98.3 fc	4.0 ft	3.9 ft
24 IL -			
	3.8 m (242 ft) fc maximum distance	■ Vert. Spread ■ Horiz. Sprea	

Zonal Lumen

Zone	Lumens	% Luminaire
0-30	2834.4	94.3%
0-40	2913.8	96.9%
0-60	2977.6	99.0%
60-90	23.5	0.8%
70-100	10.0	0.3%
90-120	0.1	0.0%
0-90	3001.1	99.8%
90-180	5.8	0.2%
0-180	3006.9	100.0%

For lux multiply fc by 10.7

Polar Candela Distribution



	0	25	45	70	90
0	56626	56626	56626	56626	56626
5	25148		24815		25364
15	2200		2286	2360	2433
25	340	341	338	338	336
35	119	117	117	119	123
45		53	53	52	
55	24	24	24	24	25
65	13	13	14	14	15
75		7	8	9	9
85	2	2	2	2	2
90	0	0	0	0	0

Coefficents of Utilization - Zonal Cavity Method

																		-
									Eff	ecti	ve	Floor	Car	vity	Refle	cta	nce:	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	1.16	1.14	1.12	1.10	1.13	1.11	1.10	0.98	1.08	1.06	1.05	1.04	1.03	1.02	1.00	1.00	0.99	0.98
2	1.12	1.09	1.07	1.04	1.10	1.08	1.05	0.96	1.04	1.03	1.01	1.02	1.00	0.99	0.99			0.95
3	1.10	1.06	1.02	1.00	1.08	1.04	1.01	0.94	1.02	1.00	0.98	1.00	0.98	0.96	0.97	0.96	0.95	0.94
4		1.02						0.92	1.00						0.96			0.92
5	1.05	1.00	0.96	0.94	1.03	0.99	0.96	0.91	0.97	0.95	0.93	0.96	0.94	0.92	0.95	0.93	0.91	0.90
6	1.03	0.98	0.94	0.92	1.02	0.97	0.94	0.89	0.96	0.93	0.91	0.94	0.92	0.90	0.93	0.91	0.90	0.89
7		0.95						0.88	0.94	0.91	0.89				0.92			0.87
	0.99	0.94	0.90	0.88	0.98	0.93	0.90	0.87	0.92	0.90	0.88	0.92	0.89	0.87	0.91			0.86
		0.92						0.86	0.91						0.90			0.85
10	0.96	0.91	0.87	0.85	0.95	0.90	0.87	0.85	0.90	0.87	0.85	0.89	0.87	0.85	0.89	98.0	0.85	0.84

Photometrics 2700 K

Beam Angle	10°
LEDs at	2700 K
Lumens @ 2700 K	2,136
Efficacy (lm/W) @ 2700 K	79.7



Illuminance at Distance

Center Beam fc	Beam Width	
2,512.8 fc	0.7 ft	0.6 ft
628.2 fc	1.3 ft	1.3 ft
279.2 fc	2.0 ft	1.9 ft
157.0 fc	2.7 ft	2.6 ft
100.5 fc	3.3 ft	3.2 ft
69.8 fc	4.0 ft	3.9 ft
	2,512.8 fc 628.2 fc 279.2 fc 157.0 fc 100.5 fc	2,512.8 fc 0.7 ft 628.2 fc 1.3 ft 279.2 fc 2.0 ft 157.0 fc 2.7 ft 100.5 fc 3.3 ft

Zonal Lumen

Zone	Lumens	%	Luminaire
0-30	2012.4		94.3%
0-40	2068.8		96.99
0-60	2114.1		99.09
60-90	16.7		0.89
70-100	7.1		0.3%
90-120	0.1		0.09
0-90	2130.8		99.8%
90-180	4.1		0.29
0-180	2134.9		100.09

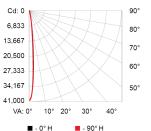
62.5 m (205 ft) 1 fc maximum distance Vert. Spread: 9.6
Horiz. Spread: 9

For lux multiply fc by 10.7

Coefficents of Utilization - Zonal Cavity Method

									Eff	ecti	ve	Floor	Cav	/ity	Refle	cta	nce:	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	1.16	1.14	1.12	1.10				0.98	1.08								0.99	0.98
2	1.12	1.09	1.07	1.04				0.96	1.04	1.03	1.01	1.02	1.00	0.99	0.99			0.95
3	1.10	1.06	1.02	1.00	1.08	1.04	1.01	0.94	1.02	1.00	0.98	1.00	0.98	0.96	0.97	0.96	0.95	0.94
4		1.02			1.06	1.01	0.98	0.92	1.00	0.97	0.95	0.98	0.96	0.94	0.96			0.92
5	1.05	1.00	0.96	0.94	1.03	0.99	0.96	0.91	0.97	0.95	0.93	0.96	0.94	0.92	0.95	0.93	0.91	0.90
6	1.03	0.98	0.94	0.92	1.02	0.97	0.94	0.89	0.96	0.93	0.91	0.94	0.92	0.90	0.93	0.91	0.90	0.89
7	1.01	0.95	0.92	0.90	1.00	0.95	0.92	88.0	0.94	0.91	0.89	0.93	0.91	0.89	0.92	0.90	88.0	0.87
8	0.99	0.94	0.90	0.88	0.98	0.93	0.90	0.87	0.92	0.90	0.88	0.92	0.89	0.87	0.91	0.89	0.87	0.86
9	0.97	0.92	0.89	0.87				0.86	0.91	0.88	0.86	0.90	88.0	0.86	0.90	0.87	0.86	0.85
10	0.96	0.91	0.87	0.85	0.95	0.90	0.87	0.85	0.90	0.87	0.85	0.89	0.87	0.85	0.89	98.0	0.85	0.84

Polar Candela Distribution



_	0	25	45	70	90
0	40204	40204	40204	40204	40204
5	17855	17688	17619	17750	18008
15		1586	1623	1676	1727
25	242	242	240	240	239
35	85	83	83	85	87
45	37	38	38	37	38
55	17	17	17	17	18
65	9	9	10	10	11
75	5	5	5	6	6
85	1	1	1	1	1
90	0	0	0	0	0

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/global/support/ies.

Beam Angle	10°
LEDs at	4000 K
Lumens @ 4000 K	2,422
Efficacy (lm/W) @ 4000 K	69.2





Illuminance at Distance Center Beam fc

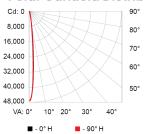




Zone 0-30 0-40 0-60 60-90 70-100 90-120 0-90 90-180	2279.2 2344.8 2396.2 19.3 8.5 0.6 2415.6 6.0	% Luminaire 94.1% 96.8% 99.0% 0.8% 0.3% 0.0% 99.8%
90 - 180 0 - 180	6.0 2421.5	0.2% 100.0%

For lux multiply fc by 10.7

Polar Candela Distribution



0	25	45	70	90
0 46661	46661	46661	46661	46661
5 19882	19697	19608	19738	19982
15 1843	1864	1918	1964	2021
25 283	285	283	279	275
35 99	96	94	95	98
45 42	42	43	42	43
55 19	20	20	20	21
65 11	11	11	12	13
75 6	6	6	7	7
85 1	1	1	1	1
90 0	0	0	0	0

Coefficents of Utilization - Zonal Cavity Method

									Eff	ecti	ve	Floor	Cav	/ity	Refle	ecta	nce:	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		1.14						0.98	1.07								0.99	0.97
2	1.12	1.09	1.07	1.04	1.10	1.07	1.05	0.96	1.04	1.03	1.01	1.02	1.00	0.99	0.99	0.98	0.97	0.95
		1.05						0.94	1.02									0.93
		1.02						0.92	0.99								0.93	0.92
		1.00						0.91	0.97						0.94			0.90
		0.97						0.89	0.95								0.89	0.89
		0.95						88.0		0.91	0.89	0.93	0.90	0.88	0.92	0.90	88.0	0.87
		0.93						0.87							0.91			0.86
		0.92							0.91						0.89			0.85
10	0.96	0.90	0.87	0.85	0.95	0.90	0.87	0.84	0.89	0.87	0.85	0.89	0.86	0.85	0.88	0.86	0.84	0.84

Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire	Item Number	Item 12NC
Blast Powercore gen5, IntelliHue, 100 – 277 VAC, White Housing, UL/CE/CQC	423-000026-00	912400137691
Accessories		
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
20° Spread lens	120-000185-08	912400130344
40° Spread lens	120-000185-09	912400130345
60° Spread lens	120-000185-10	912400130346
80° Spread lens	120-000185-11	912400130347
10°x40° Spread lens	120-000185-12	912400130348
Wiring Compartment UL/cUL, White	106-000011-31	910503704148
Wiring Compartment CE, White	106-000011-41	910503703276
Architectural Mounting Arm, for use with Blast, Graze, Graze Compact, Burst Architectural, and Vaya Flood. Short, gray	120-000206-00	912400136642
Architectural Mounting Arm, for use with Blast, Graze, Graze Compact, Burst Architectural, and Vaya Flood. Medium, gray	120-000206-01	912400136643
Architectural Mounting Arm, for use with Blast, Graze, Graze Compact, Burst Architectural, and Vaya Flood. Long, gray	120-000206-02	912400136644
Power 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

