



# ColorBlast IntelliHue Powercore gen4

Customizable exterior LED flood luminaire with intelligent color light



# ColorBlast IntelliHue Powercore gen4

## Customizable exterior LED flood luminaire with intelligent color light

ColorBlast IntelliHue Powercore gen4 high-performance LED luminaires combine white and rich, saturated, color and color-changing effects with simplified installation. ColorBlast IntelliHue Powercore gen4 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 Philips accessory options. In addition to the native 10° lens, five different diffuser 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 innovative, redesigned optical system that improves the quality of light from each LED, enhancing the color uniformity and color mixing capabilities of each ColorBlast IntelliHue Powercore gen4 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 Philips 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 Philips Color Kinetics line of controllers, including ColorDial Pro, iPlayer 3, and Light System Manager—as well as third-party controllers.



### Outdoor Rated

Fully sealed for maximum luminaire life and IP66-rated for outdoor applications, ColorBlast IntelliHue Powercore gen4 meets or exceeds specifications for use in wet locations. Rugged, die-cast aluminium housing is available in white, gray, or black powder-coated finish.

# Versatile Installation Options

ColorBlast IntelliHue Powercore gen4 offers saturated, color-changing LED light and high-quality white light, both indoors and outdoors. With its low-profile design, IP66-rated housing, multiple beam angles, and ease of installation and maintenance, ColorBlast IntelliHue Powercore gen4 is ideal for applications ranging from backlighting and display and signage lighting to floodlighting, façade- and wall-grazing, architectural detail highlighting, and artistic displays.

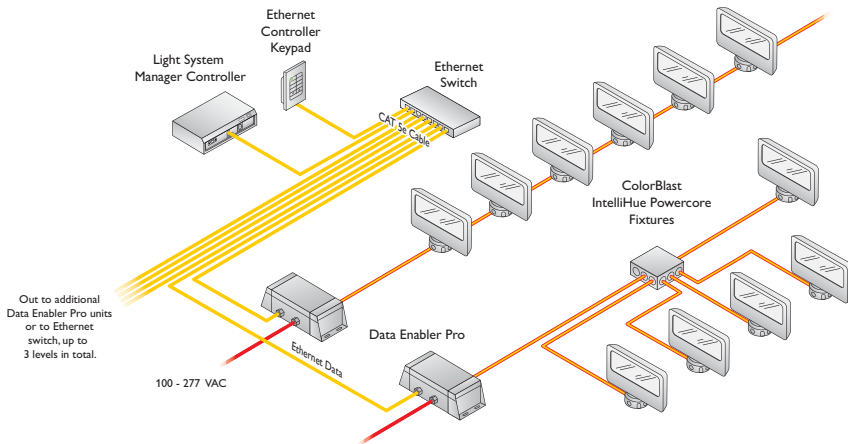
Philips offers a range of controllers to support installations from the simplest to the most complex. A simple application might use two ColorBlast IntelliHue Powercore gen4 luminaires with a ColorDial Pro controller to dramatically illuminate store window displays with pre-programmed color washes or fades. A larger installation

might use Philips Color Kinetics iPlayer 3 controller and its ColorPlay 3 light show authoring software to run transformative and imaginative custom light shows on dozens of ColorBlast IntelliHue Powercore gen4 luminaires installed in multiple interior or exterior locations.

Philips Color Kinetics Light System Manager, an Ethernet-based integrated controller and light show authoring system, cost-effectively enables large-scale, complex, and intricately designed installations. The Big Four Bridge that runs over the Ohio River and connects Louisville, Kentucky to Jeffersonville, Indiana (shown on the cover) uses ColorBlast Powercore luminaires to wash the bridge nightly with brilliant hues of slowly fading colors.

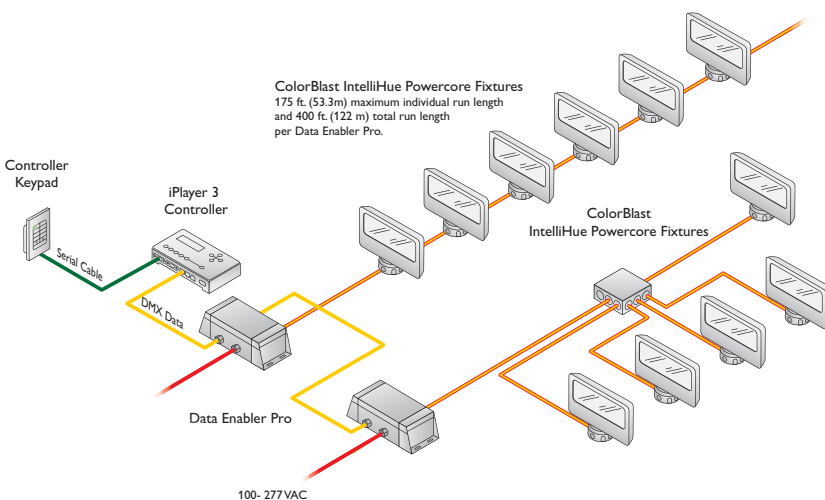
Regardless of the size and complexity of your installation, the planning time you spend up front can help streamline the installation and configuration of your luminaires. Keep these points in mind as you plan your installation:

- Create a lighting design plan that identifies and locates all luminaires, Data Enabler Pro devices, and controllers. Use this Product Guide and the online Configuration Calculator to determine whether to install luminaires in series or in parallel, how many luminaires you can install in a single run, and the maximum distances between Data Enabler Pro devices, luminaires, and controllers.
- To aid in addressing luminaires for color-changing light shows, record the serial number of each luminaire as you assign it to your lighting design plan, and create a layout map that records the address or position of each luminaire within a sequence of luminaires.
- Determine whether to address luminaires and configure your lighting system offline or interactively. With offline configuration, you stage and configure your system off-site, prior to installation. Offline configuration can be convenient when luminaires are to be installed in multiple locations or locations with difficult access. Interactive configuration is typically performed by an experienced technician, after luminaires have been installed. The interactive method can save time, since you connect and test your luminaires only once.



## Large-scale Ethernet installation with Light System Manager

Large-scale installations may include multiple runs of ColorBlast IntelliHue Powercore gen4 luminaires controlled by Light System Manager. Each Data Enabler Pro supports a single run of luminaires, and connects to an available port on the Ethernet Switch.



## Small-scale DMX installation with iPlayer 3

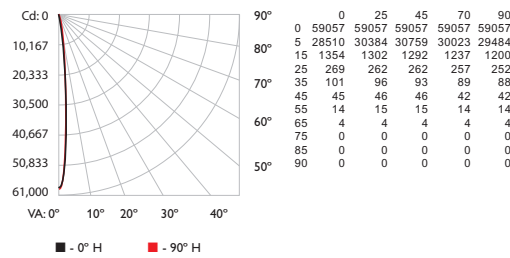
Small-scale installations may feature one or more runs of ColorBlast IntelliHue Powercore gen4 luminaires controlled by iPlayer 3. Data Enabler Pro devices can be connected in series to one or both DMX output ports on the iPlayer 3.

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

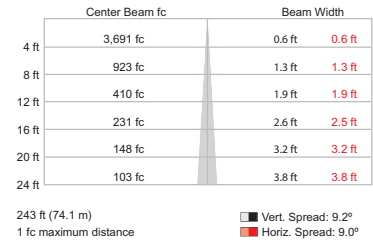
ColorBlast IntelliHue Powercore gen4  
All LED channels full on  
10° native lens

Lumens	Efficacy
2,434	50.8

### Polar Candela Distribution



### Illuminance at Distance



### Zonal Lumen

Zone	Lumens	% Luminaire
0-30	2,402.9	95.7%
0-40	2,462.2	98.0%
0-60	2,508.4	99.9%
0-90	2,511.6	100.0%
60-90	3.2	0.1%
70-100	0.1	0.0%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	2,511.6	100.0%

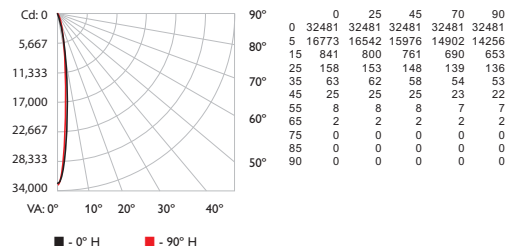
### Coefficients Of Utilization - Zonal Cavity Method

RC Cc :		Effective Floor Cavity Rectification: 20%												
RW :	80	70				50				10				
CC :	70	50	30	0	70	50	30	0	50	30	0	20	10	0
RCR:														
0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.16	1.11	1.11	1.11	1.11	1.06	1.06
1	1.16	1.14	1.13	1.11	1.14	1.12	1.11	0.99	1.08	1.07	1.06	1.05	1.04	1.03
2	1.13	1.10	1.08	1.05	1.11	1.09	1.08	0.97	1.06	1.04	1.03	1.01	1.00	0.99
3	1.11	1.07	1.04	1.02	1.09	1.06	1.03	0.96	1.03	1.01	0.98	0.99	0.98	0.97
4	1.08	1.04	1.01	0.99	1.07	1.03	1.00	0.95	1.01	0.99	0.97	1.00	0.98	0.96
5	1.06	1.02	0.99	0.97	1.05	1.01	0.98	0.94	1.00	0.98	0.95	0.98	0.96	0.94
6	1.05	1.00	0.97	0.95	1.04	0.99	0.96	0.92	0.98	0.96	0.94	0.97	0.95	0.93
7	1.03	0.98	0.95	0.93	1.02	0.98	0.95	0.91	0.97	0.94	0.92	0.96	0.94	0.92
8	1.01	0.97	0.94	0.92	1.01	0.96	0.93	0.90	0.95	0.93	0.91	0.94	0.92	0.91
9	1.00	0.95	0.92	0.90	1.00	0.95	0.92	0.89	0.94	0.92	0.90	0.93	0.91	0.90
10	0.99	0.94	0.91	0.90	0.98	0.94	0.91	0.89	0.93	0.91	0.89	0.93	0.91	0.89

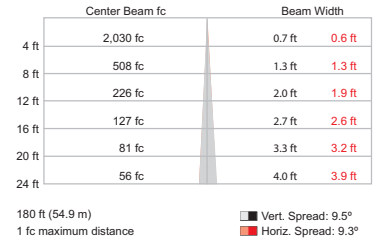
ColorBlast IntelliHue Powercore gen4  
2700 K, 10° native lens

Lumens	Efficacy	CRI*	CRI R9*
1,446	65.5	91.6	81.1

## Polar Candela Distribution



## Illuminance at Distance



## Zonal Lumen

Zone	Lumens	% Luminaire
0-30	1,398.0	95.6%
0-40	1,434.0	98.1%
0-60	1,459.7	99.9%
0-90	1,461.7	100.0%
60-90	2.0	0.1%
70-100	0.1	0.0%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	1,461.7	100.0%

### Coefficients Of Utilization - Zonal Cavity Method

		Effective Floor Cavity Reflection: 20%																
RCR %:		80				70				50				10				
RW %:		70	50	30	10	70	50	30	10	70	50	30	10	70	50	30	10	
RCR:																		
0	1	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02
1	1	1.16	1.14	1.13	1.11	1.14	1.12	1.11	1.09	1.08	1.07	1.06	1.04	1.04	1.03	1.01	1.01	1.00
2	1	1.13	1.10	1.08	1.07	1.11	1.09	1.08	1.06	1.05	1.04	1.03	1.01	1.01	1.00	0.98	0.98	0.97
3	1	1.11	1.07	1.04	1.02	1.09	1.06	1.03	1.02	1.03	1.01	0.99	0.98	0.98	0.98	0.97	0.97	0.95
4	1	1.08	1.04	1.01	0.99	1.07	1.03	1.00	0.95	1.01	0.99	0.97	1.00	0.98	0.96	0.98	0.96	0.95
5	1	1.06	1.02	0.99	0.96	1.05	1.01	0.98	0.93	1.00	0.98	0.96	0.98	0.96	0.94	0.97	0.95	0.94
6	1	1.04	1.00	0.97	0.94	1.03	0.98	0.96	0.92	0.98	0.95	0.94	0.97	0.95	0.93	0.96	0.94	0.92
7	1	1.03	0.98	0.95	0.93	1.02	0.98	0.95	0.91	0.97	0.94	0.92	0.96	0.93	0.92	0.95	0.93	0.91
8	1	1.01	0.96	0.93	0.91	1.00	0.96	0.93	0.90	0.95	0.93	0.91	0.94	0.92	0.91	0.94	0.92	0.90
9	1	1.00	0.95	0.92	0.90	0.99	0.95	0.92	0.89	0.94	0.92	0.90	0.93	0.91	0.90	0.93	0.91	0.89
10	1	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	0.89	0.92	0.90	0.88

For lux multiply fc by 10.7

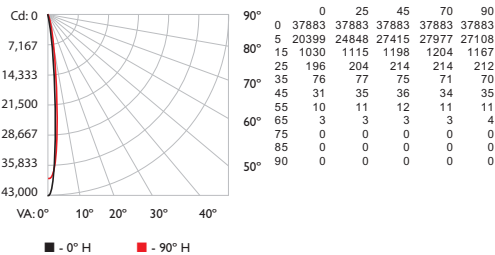
\* CRI refers to CRI  $R_a$  value, CRI R9 refers to R9 value in accordance with IESNA LM-79 standards.



ColorBlast IntelliHue Powercore gen4  
4000 K, 10° native lens

Lumens	Efficacy	CRI*	CRI R9*
1,773	62.5	86.2	65.8

Polar Candela Distribution



Illuminance at Distance

	Center Beam fc	Beam Width
4 ft	2,368 fc	0.7 ft 0.6 ft
8 ft	592 fc	1.3 ft 1.3 ft
12 ft	263 fc	2.0 ft 1.9 ft
16 ft	148 fc	2.6 ft 2.6 ft
20 ft	95 fc	3.3 ft 3.2 ft
24 ft	66 fc	3.9 ft 3.9 ft

195 ft (59.4 m)  
1 fc maximum distance

■ Vert. Spread: 9.3°  
■ Horiz. Spread: 9.2°

Zonal Lumen

Zone	Lumens	% Luminaire
0-30	1,752.3	95.6%
0-40	1,796.3	98.0%
0-60	1,829.7	99.9%
0-90	1,832.4	100.0%
60-90	2.6	0.1%
70-100	0.1	0.0%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	1,832.4	100.0%

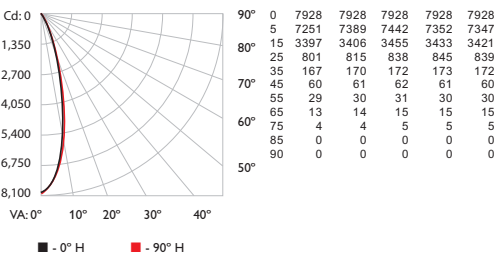
Coefficients Of Utilization - Zonal Cavity Method

		Effective Floor Cavity Reflectance: 20%													
RCC %:	80	70	50	30	10	0	20	10	0	20	10	0	20	10	0
RW %:	70	50	30	0	50	30	20	50	30	20	0	50	30	20	0
RCR:															
0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.02	1.02	1.00
1	1.16	1.14	1.13	1.11	1.14	1.12	1.11	1.08	1.07	1.06	1.04	1.04	1.01	1.01	0.98
2	1.13	1.10	1.08	1.06	1.11	1.09	1.06	0.97	1.05	1.04	1.02	1.03	1.01	1.00	0.98
3	1.11	1.07	1.04	1.02	1.09	1.06	1.03	0.96	1.03	1.01	0.99	1.01	0.99	0.98	0.96
4	1.08	1.04	1.01	0.99	1.07	1.03	1.00	0.94	1.01	0.99	0.97	0.99	0.98	0.96	0.95
5	1.06	1.02	0.99	0.96	1.05	1.01	0.98	0.93	0.99	0.97	0.95	0.98	0.96	0.94	0.93
6	1.04	1.00	0.97	0.94	1.03	0.99	0.96	0.92	0.98	0.95	0.94	0.97	0.95	0.93	0.92
7	1.03	0.98	0.95	0.93	1.02	0.97	0.95	0.91	0.96	0.94	0.92	0.96	0.93	0.92	0.91
8	1.01	0.96	0.93	0.91	1.00	0.96	0.93	0.90	0.95	0.93	0.91	0.94	0.92	0.91	0.90
9	1.00	0.95	0.92	0.90	0.99	0.95	0.92	0.89	0.94	0.92	0.90	0.93	0.91	0.90	0.89
10	0.99	0.94	0.91	0.89	0.98	0.93	0.91	0.88	0.93	0.90	0.89	0.92	0.90	0.88	0.88

ColorBlast IntelliHue Powercore gen4  
All LED channels full on  
20° diffuser lens

Lumens	Efficacy
2,121	40.2

Polar Candela Distribution



Illuminance at Distance

	Center Beam fc	Beam Width
4 ft	496 fc	1.9 ft 1.9 ft
8 ft	124 fc	3.8 ft 3.8 ft
12 ft	55 fc	5.7 ft 5.7 ft
16 ft	31 fc	7.6 ft 7.7 ft
20 ft	20 fc	9.4 ft 9.6 ft
24 ft	14 fc	11.3 ft 11.5 ft

89 ft (27.1 m)  
1 fc maximum distance

■ Vert. Spread: 26.6°  
■ Horiz. Spread: 26.9°

Zonal Lumen

Zone	Lumens	% Luminaire
0-30	1,929.6	90.7%
0-40	2,038.5	95.8%
0-60	2,110.3	99.2%
0-90	2,127.2	100.0%
60-90	17.0	0.8%
70-100	4.0	0.2%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	2,127.2	100.0%

Coefficients Of Utilization - Zonal Cavity Method

		Effective Floor Cavity Reflectance: 20%																		
RCC %:	80	70	50	30	10	0	80	70	50	30	20	10	0	80	70	50	30	20	10	0
RW %:	70	50	30	0	50	30	20	50	30	20	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	1.02	1.02	1.02	1.00			
1	1.15	1.12	1.10	1.08	1.12	1.10	1.08	0.96	1.06	1.05	1.03	1.03	1.01	0.99	0.98	0.98	0.96			
2	1.10	1.06	1.03	1.01	1.08	1.05	1.02	0.92	1.02	0.99	0.97	0.99	0.97	0.95	0.96	0.95	0.93			
3	1.06	1.01	0.97	0.94	1.05	1.00	0.96	0.89	0.98	0.95	0.92	0.95	0.93	0.91	0.93	0.91	0.89			
4	1.03	0.97	0.93	0.89	1.01	0.96	0.92	0.85	0.94	0.90	0.88	0.92	0.89	0.87	0.90	0.88	0.86			
5	0.99	0.93	0.88	0.85	0.98	0.92	0.88	0.82	0.90	0.87	0.84	0.89	0.86	0.83	0.87	0.85	0.83			
6	0.96	0.89	0.85	0.81	0.95	0.88	0.84	0.79	0.87	0.83	0.81	0.86	0.83	0.80	0.85	0.82	0.80			
7	0.93	0.86	0.81	0.78	0.92	0.85	0.81	0.77	0.84	0.80	0.78	0.83	0.80	0.77	0.82	0.79	0.76			
8	0.90	0.83	0.78	0.75	0.89	0.82	0.78	0.74	0.81	0.78	0.75	0.81	0.77	0.75	0.80	0.77	0.74			
9	0.87	0.80	0.76	0.73	0.86	0.80	0.75	0.72	0.79	0.75	0.72	0.78	0.75	0.72	0.77	0.74	0.71			
10	0.85	0.78	0.73	0.70	0.84	0.77	0.73	0.70	0.76	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69			

For lux multiply fc by 10.7

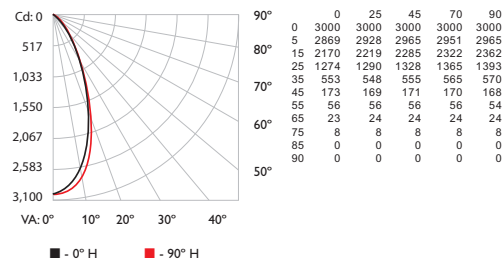
\* CRI refers to CRI R<sub>a</sub> value, CRI R9 refers to R9 value in accordance with IESNA LM-79 standards.

## ColorBlast IntelliHue Powercore gen4

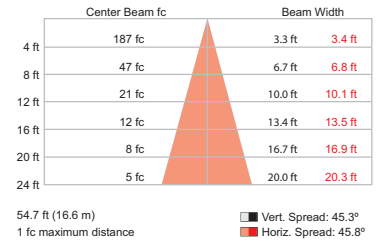
### All LED channels full on 40° diffuser lens

Lumens	Efficacy
2,047	39.9

### Polar Candela Distribution



### Illuminance at Distance



### Zonal Lumen

Zone	Lumens	% Luminaire
0-30	1,491.1	72.8%
0-40	1,836.3	89.7%
0-60	2,016.4	98.5%
0-90	2,047.0	100.0%
60-90	30.6	1.5%
70-100	7.9	0.4%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	2,047.0	100.0%

### Coefficients Of Utilization - Zonal Cavity Method

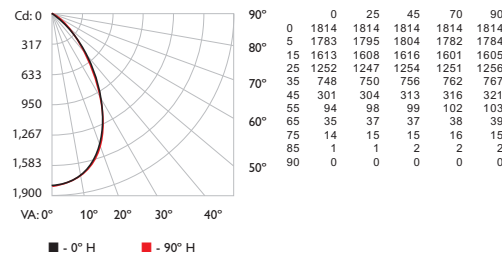
RCC %:	80	70	50	30	10	0
RW %:	70	50	30	0	50	30
RCR:	0	1	2	3	4	5
0	1.19	1.19	1.19	1.19	1.16	1.16
1	1.13	1.11	1.08	1.06	1.11	1.09
2	1.08	1.03	0.99	0.96	1.06	1.01
3	1.03	0.96	0.91	0.87	1.01	0.95
4	0.97	0.90	0.84	0.80	0.96	0.89
5	0.93	0.84	0.79	0.74	0.91	0.83
6	0.88	0.79	0.74	0.69	0.87	0.79
7	0.84	0.75	0.69	0.65	0.83	0.74
8	0.80	0.71	0.65	0.61	0.79	0.70
9	0.77	0.67	0.61	0.57	0.75	0.67
10	0.73	0.64	0.58	0.54	0.72	0.63

## ColorBlast IntelliHue Powercore gen4

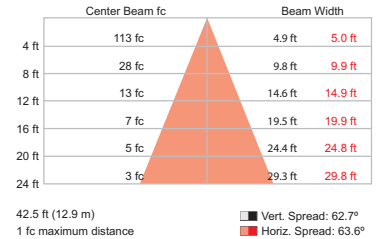
### All LED channels full on 60° diffuser lens

Lumens	Efficacy
2,039	39.9

### Polar Candela Distribution



### Illuminance at Distance



### Zonal Lumen

Zone	Lumens	% Luminaire
0-30	1,204.6	59.1%
0-40	1,669.6	81.9%
0-60	1,987.4	97.5%
0-90	2,039.2	100.0%
60-90	51.9	2.5%
70-100	16.7	0.8%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	2,039.2	100.0%

### Coefficients Of Utilization - Zonal Cavity Method

RCC %:	80	70	50	30	10	0
RW %:	70	50	30	0	50	30
RCR:	0	1	2	3	4	5
0	1.19	1.19	1.19	1.19	1.16	1.16
1	1.13	1.10	1.07	1.04	1.10	1.07
2	1.06	1.01	0.96	0.92	1.04	0.99
3	1.00	0.93	0.87	0.83	0.98	0.91
4	0.94	0.86	0.80	0.75	0.92	0.85
5	0.89	0.80	0.73	0.68	0.87	0.79
6	0.84	0.74	0.67	0.63	0.82	0.73
7	0.79	0.69	0.62	0.58	0.78	0.68
8	0.75	0.64	0.58	0.53	0.74	0.64
9	0.71	0.60	0.54	0.49	0.70	0.60
10	0.67	0.57	0.50	0.46	0.66	0.56

For lux multiply fc by 10.7

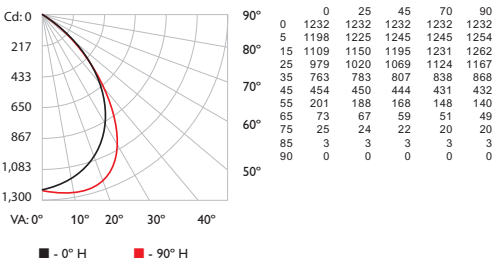
ColorBlast IntelliHue Powercore gen4

All LED channels full on

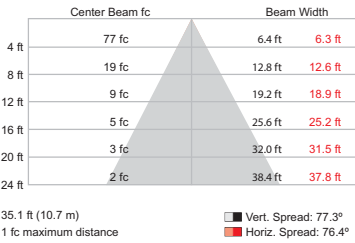
80° diffuser lens

Lumens	Efficacy
2,012	39.3

Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

Zone	Lumens	% Luminaire
0-30	943.6	46.9%
0-40	1,445.7	71.9%
0-60	1,928.8	95.9%
60-90	83.2	4.1%
70-100	25.5	1.3%
90-120	0.0	0.0%
0-90	2,011.9	100.0%
90-180	0.0	0.0%
0-180	2,011.9	100.0%

Coefficients Of Utilization - Zonal Cavity Method

		Effective Floor Cavity Reflections: 20%															
RCC %:	80	70	50	30	10	0	50	30	20	10	0	50	30	20	10	0	
RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	10	0	
RCR:	0	1	2	3	4	5	6	7	8	9	10	0	1	2	3	4	
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	1.12	1.09	1.06	1.03	1.09	1.06	1.04	0.91	1.02	1.00	0.98	0.99	0.97	0.95	0.94	0.92	
2	1.05	0.98	0.94	0.89	1.02	0.97	0.92	0.82	0.94	0.9	0.86	0.90	0.87	0.85	0.88	0.83	
3	0.98	0.90	0.84	0.79	0.96	0.88	0.83	0.74	0.86	0.81	0.77	0.83	0.79	0.76	0.81	0.77	
4	0.91	0.82	0.75	0.70	0.89	0.81	0.74	0.67	0.78	0.73	0.69	0.76	0.72	0.68	0.74	0.70	
5	0.85	0.75	0.68	0.63	0.84	0.74	0.67	0.60	0.72	0.66	0.62	0.70	0.65	0.61	0.69	0.64	
6	0.80	0.69	0.62	0.56	0.78	0.68	0.61	0.55	0.66	0.60	0.56	0.65	0.60	0.55	0.64	0.59	
7	0.75	0.64	0.56	0.51	0.73	0.63	0.56	0.50	0.61	0.55	0.51	0.60	0.55	0.50	0.59	0.54	
8	0.70	0.59	0.52	0.47	0.69	0.58	0.51	0.46	0.57	0.51	0.46	0.56	0.50	0.46	0.55	0.50	
9	0.66	0.55	0.48	0.43	0.65	0.54	0.47	0.42	0.53	0.47	0.43	0.52	0.46	0.42	0.51	0.46	
10	0.62	0.51	0.44	0.39	0.61	0.50	0.44	0.39	0.50	0.43	0.39	0.49	0.43	0.39	0.48	0.43	

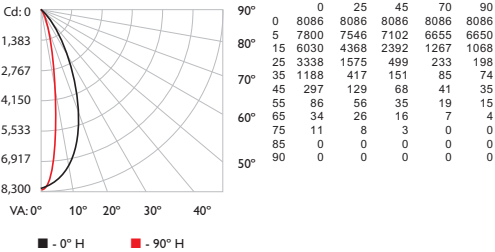
ColorBlast IntelliHue Powercore gen4

All LED channels full on

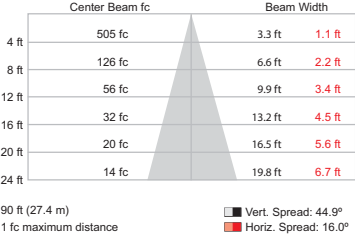
10° x 40° asymmetric lens

Lumens	Efficacy
2,201	42.8

Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

Zone	Lumens	% Luminaire
0-30	1,883.5	85.6%
0-40	2,077.9	94.4%
0-60	2,183.0	99.2%
0-90	2,201.2	100.0%
60-90	18.2	0.8%
70-100	3.7	0.2%
90-120	0.0	0.0%
0-90	2,201.2	100.0%
90-180	0.0	0.0%
0-180	2,201.2	100.0%

Coefficients Of Utilization - Zonal Cavity Method

		80				70				Effective Floor Cavity Reflectance: 20%				10				0	
RCC %:		70	50	30	0	70	50	30	0	50	30	20	50	30	20	50	30	20	0
RW %:		70	50	30	0	70	50	30	0	50	30	20	50	30	20	50	30	20	0
0	1.19	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	1.12	1.10	1.08	1.12	1.10	1.08	1.06	0.96	1.06	1.04	1.03	1.02	1.01	1.00	0.99	0.98	0.97	0.95
2	1.10	1.06	1.02	0.99	1.08	1.04	1.01	0.91	1.01	0.98	0.96	0.94	0.98	0.96	0.94	0.95	0.94	0.92	0.91
3	1.06	1.00	0.96	0.93	1.04	0.99	0.95	0.87	0.96	0.93	0.90	0.89	0.94	0.91	0.89	0.92	0.90	0.88	0.86
4	1.01	0.95	0.91	0.87	1.00	0.94	0.90	0.83	0.92	0.88	0.86	0.85	0.90	0.87	0.85	0.88	0.86	0.84	0.82
5	0.96	0.91	0.86	0.82	0.96	0.90	0.85	0.80	0.88	0.84	0.81	0.81	0.87	0.83	0.81	0.85	0.82	0.80	0.79
6	0.94	0.87	0.82	0.78	0.93	0.86	0.82	0.76	0.85	0.81	0.79	0.78	0.83	0.80	0.77	0.82	0.79	0.77	0.75
7	0.91	0.83	0.78	0.75	0.90	0.83	0.78	0.73	0.81	0.77	0.74	0.74	0.80	0.77	0.74	0.79	0.76	0.74	0.72
8	0.88	0.80	0.75	0.72	0.87	0.79	0.75	0.71	0.78	0.74	0.71	0.71	0.78	0.74	0.71	0.77	0.73	0.71	0.70
9	0.85	0.77	0.72	0.69	0.84	0.77	0.72	0.68	0.76	0.72	0.69	0.69	0.75	0.71	0.68	0.74	0.71	0.68	0.67
10	0.82	0.74	0.70	0.66	0.81	0.74	0.69	0.66	0.73	0.69	0.66	0.66	0.72	0.69	0.66	0.72	0.68	0.66	0.65

For lux multiply fc by 10.7

# Specifications

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

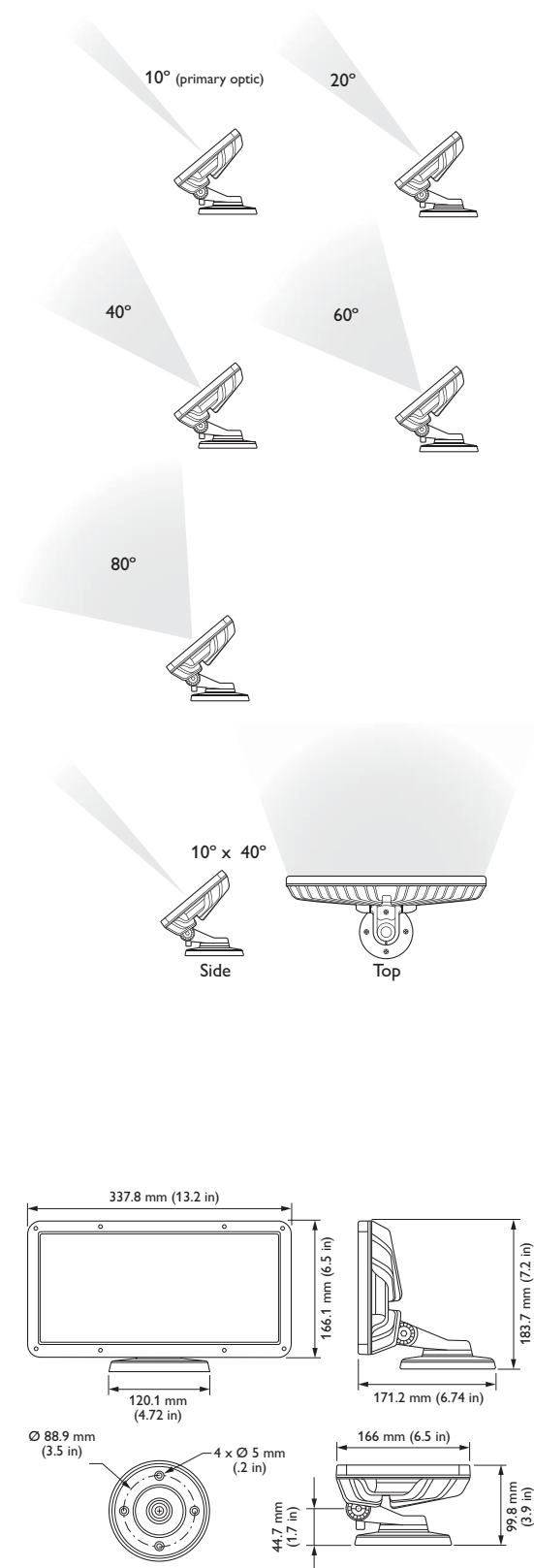
Item	Specification	Details					
Output	Beam Angle	10° primary optic (no diffuser) Optional diffusers: 20° / 40° / 60° / 80° / 10° x 40° (asymmetric)					
	Color Temperature	All LED channels full on		2,700k		4,000k	
	Lumens*	2,434		1,446		1,773	
	Efficacy	50.8		65.5		62.5	
	CRI**			91.6		86.2	
	CRI R9**			81.1		65.8	
	Lumen Maintenance†			L50	L70	L80	L90
		Reported	@ 25	> 47,100	> 47,100	44,600	> 45,000
			@ 50	> 47,100	> 51,000	> 51,000	> 51,000
		Calculated	@25	> 100,000	> 100,000	44,600	44,600
		@50	> 100,000	> 100,000	> 100,000	44,600	
Effective Projected Area (EPA)	0.068 m² (0.73 ft²)						
Electrical	Input Voltage	100 to 277 VAC, auto-ranging, 50/60 Hz via Data Enabler Pro					
	Power Consumption	50 W maximum at full output, steady state					
	Power Factor	0.99 @ 120 VAC, 0.88 @ 277 VAC					
Control	Interface	Data Enabler Pro (DMX/Ethernet)					
	Control System	Philips 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					
Physical	Dimensions (Height x Width x Depth)	183.7 x 338 x 171 mm (7.2 x 13.3 x 6.75 in)					
	Weight	3.9 kg (8.2 lb)					
	Housing	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					
	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 <a href="http://www.philipscolorkinetics.com/support/install_tool/">www.philipscolorkinetics.com/support/install_tool/</a>					
Certification and Safety	Certification	UL/cUL, FCC Class A, CE, PSE, CQC, RCM					
	Environment	Dry/Damp/Wet Location, IP66					
	Corrosion Resistance	ASTM B117 > 1,500 hours					
	Vibration Resistance	ANSI C136.31-2010 3G					
	Mechanical Impact	IK10					

\* Lumen measurement complies with IES LM-79-08.

† L70 = 70% lumen maintenance (when light output drops below 70% of initial output). Ambient luminaire temperatures specified. Lumen maintenance calculations are based on lifetime prediction graphs supplied by LED source manufacturers. Calculations for white-light LED luminaires are based on measurements that comply with IES LM-80-08 testing procedures. Refer to [www.philipscolorkinetics.com/support/appnotes/](http://www.philipscolorkinetics.com/support/appnotes/) for more information.

\*\* CRI refers to CRI  $R_a$  value, CRI R9 refers to R9 value in accordance with IESNA LM-79 standards.

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# Luminaires and Data Enabler Pro

ColorBlast IntelliHue Powercore gen4 luminaires are part of a complete system which includes:

- One or more Data Enabler Pro devices
- Any Philips controller, including Light System Manager, iPlayer 3, and ColorDial Pro, or a third-party controller
- 4-conductor copper wire to connect ColorBlast IntelliHue Powercore gen4 luminaires in series or in parallel. Standard 12 AWG 4 mm<sup>2</sup> (0.1 in) stranded wire is recommended.

Item	Housing Color	Item Number*	Philips 12NC
ColorBlast IntelliHue Powercore gen4 UL/CE	White	423-000011-00	912400130371
	Black	423-000011-01	912400130372
	Gray	423-000011-04	912400133545
ColorBlast IntelliHue Powercore gen4 CQC	White	423-000011-02	912400130373
	Black	423-000011-03	912400130374
	Gray	423-000011-05	912400133546

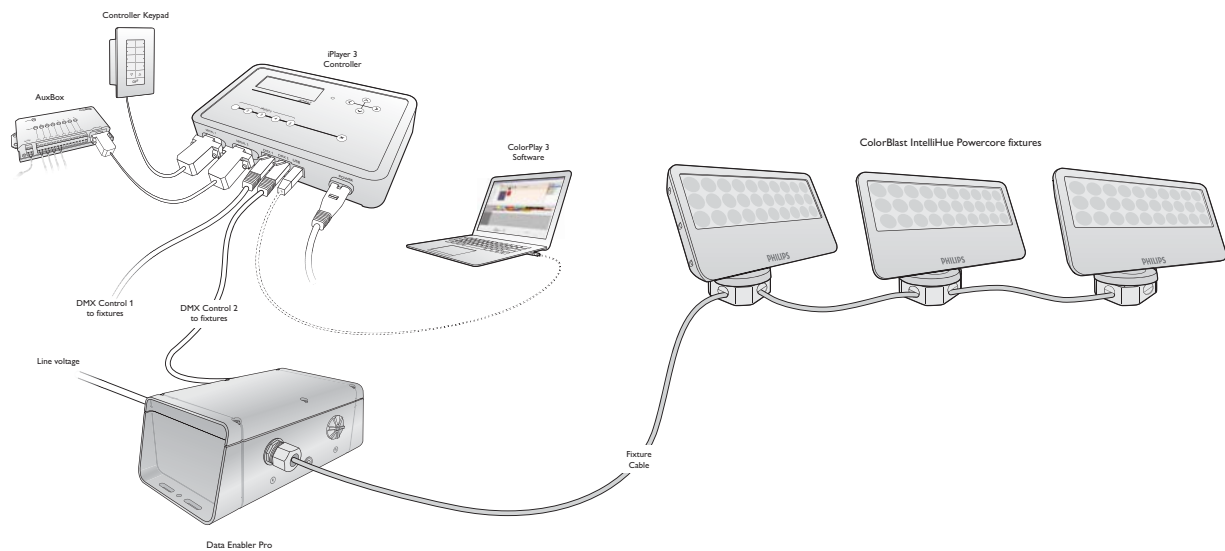
Item	Style	Item Number*	Philips 12NC
Data Enabler Pro	3/4 in / 1/2 in NPT (US trade size conduit)	106-000004-00	910503701210
	PG21/PG13 (metric size conduit)	106-000004-01	910503701211

\*Use Item Number when ordering in North America.

## Included in the box

ColorBlast IntelliHue Powercore gen4 luminaire
(2) 8-32 stainless steel screws for indoor installation
(4) 10-24 stainless steel screws for outdoor installation
5 mm hex wrench
2.5 mm hex wrench
Installation Instructions

## Typical ColorBlast IntelliHue Powercore gen4 system installation




## Accessories

All of the Philips Color Kinetics accessories are designed to provide customizable options for controlling and dispersing light as well as added protection. Any of the accessories can be used in tandem, although a Trim Ring is required when using a Diffuser.

Item	Item Number	Philips 12NC	Color	
Diffuser Trim Ring	120-000185-00	912400130336	White	
	120-000185-01	912400130337	Black	
	120-000185-15	912400133530	Gray	
Louver	120-000185-04	912400130340	White	
	120-000185-05	912400130341	Black	
	120-000185-17	912400133532	Gray	
Rock Guard	120-000185-06	912400130342	White	
	120-000185-07	912400130343	Black	
	120-000185-18	912400133533	Gray	
Half Glare Shield	120-000185-13	912400130349	White	
	120-000185-14	912400130350	Black	
	120-000185-19	912400133534	Gray	
Full Glare Shield	120-000185-02	912400130338	White	
	120-000185-03	912400130339	Black	
	120-000185-16	912400133531	Gray	

✳ For complete instructions on how to install the accessories, refer to the *ColorBlast IntelliHue Powercore gen4 Accessory Installation Instructions*. <http://www.colorkinetics.com/ls/IntelliHue/ColorBlast-Powercore-gen4/>

Item	Item Number	Philips 12NC	
Diffuser (Spread Lens), 20°	120-000185-08	912400130344	
Diffuser (Spread Lens), 40°	120-000185-09	912400130345	
Diffuser (Spread Lens), 60°	120-000185-10	912400130346	
Diffuser (Spread Lens), 80°	120-000185-11	912400130347	
Diffuser (Spread Lens), 10° X 40° Asymmetric	120-000185-12	912400130348	

# Installation

ColorBlast IntelliHue Powercore gen4 offers rich, saturated wall-washing color and color-changing effects with Powercore technology. Powercore, which integrates LED power and data management within the luminaire, eases installation by eliminating the need for external power supplies.

## Owner/User Responsibilities

It is the responsibility of the contractor, installer, purchaser, owner, and user to install, maintain, and operate ColorBlast IntelliHue Powercore gen4 luminaires in such a manner as to comply with all applicable codes, state and local laws, ordinances, and regulations. Consult with the appropriate electrical inspector to ensure compliance.

## Installing in Damp or Wet Locations

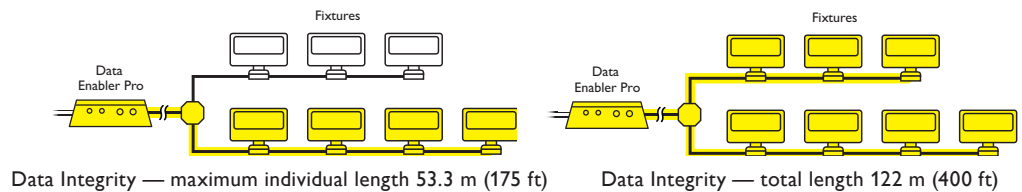
When installing in damp or wet locations, it is good practice to seal all luminaires and junction boxes with electronics-grade RTV silicone sealant to ensure that moisture cannot enter or accumulate in wiring compartments, cables, or other electrical parts. You must use suitable outdoor-rated junction boxes when installing in damp or wet locations. Additionally, you must use gaskets, clamps, and other parts required for installation to comply with all applicable local and national codes

# Create a Lighting Design Plan and Layout Grid

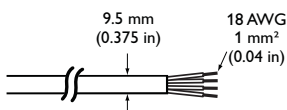
1. Determine the appropriate location of each Data Enabler Pro in relation to the light luminaires, and of the light luminaires in relation to each other.

ColorBlast IntelliHue Powercore gen4 luminaires can be installed in series or in parallel (wired to a common junction box). The maximum number of luminaires each Data Enabler Pro can support depends on specific configuration details such as luminaire spacing, circuit size, line voltage, and method of connection (in series or in parallel). For more information, and for help calculating the number of luminaires your specific installation can support, download the Configuration Calculator from [www.colorkinetics.com/support/install\\_tool/](http://www.colorkinetics.com/support/install_tool/), or consult Application Engineering Services at [support@colorkinetics.com](mailto:support@colorkinetics.com).

In addition to maximum luminaire run lengths determined by the electrical configuration, each Data Enabler Pro imposes maximum run lengths based on data integrity. To ensure data integrity, maximum individual run length should not exceed 53.3 m (175 ft), and the total cable length per Data Enabler Pro should not exceed 122 m (400 ft).

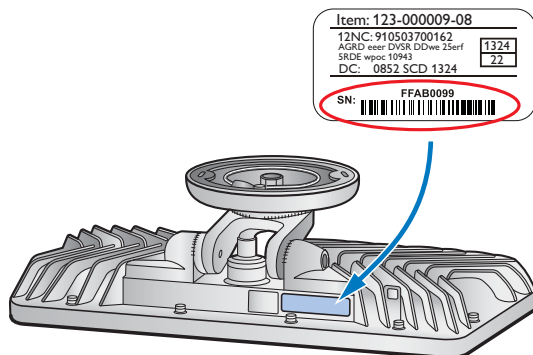


## Leader Cable connector dimensions



2. On an architectural diagram or other diagram that shows the physical layout of the installation, identify the locations of all switches, controllers, Data Enabler Pro devices, luminaires, and cables.

- Each ColorBlast IntelliHue Powercore gen4 luminaire comes pre-programmed with a unique serial number. As you unpack the luminaires, record the serial numbers in a layout grid (typically a spreadsheet or list) for easy reference and light addressing.

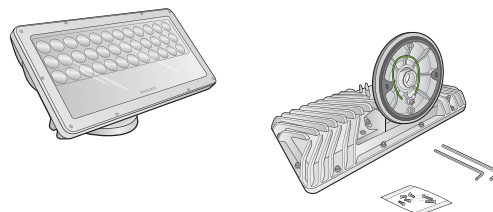


- Assign each luminaire to a position in the lighting design plan.
- To streamline installation and aid in light show programming, you can affix a weatherproof label identifying the order or placement in the installation to an inconspicuous location on each light luminaire's housing.

## Start the Installation

- Install all Data Enabler Pro devices, including any interfaces with controllers. Data Enabler Pro devices and external controllers send power and control signals to the luminaires over the single luminaire cable. Additional cabling is required to connect luminaires together in series.
- Verify that all additional supporting equipment (switches, controllers) is in place.
- Ensure that all additional parts and tools are available, including:
  - The included 8-32 screws for indoor installations, or the 10-24 stainless steel screws for outdoor installations
  - The included 5 mm and 2.5 hex key wrenches
  - In the US, one 102 mm (4 in) round US electrical junction box per luminaire, rated for your application, with 89 mm (3.5 in) center-to-center screw holes for attaching the luminaire's base. (Refer to the junction box manufacturer's literature for additional items required for mounting or sealing.)
  - A sufficient length of 12 AWG 4 mm<sup>2</sup> (0.1 in), 4-conductor stranded copper wire
  - Conduit as required
  - Electronics-grade room temperature vulcanizing (RTV) silicone sealant

✱ For complete instructions on how to wire the Data Enabler Pro, refer to the Data Enabler Pro Product Guide or Installation Instructions.



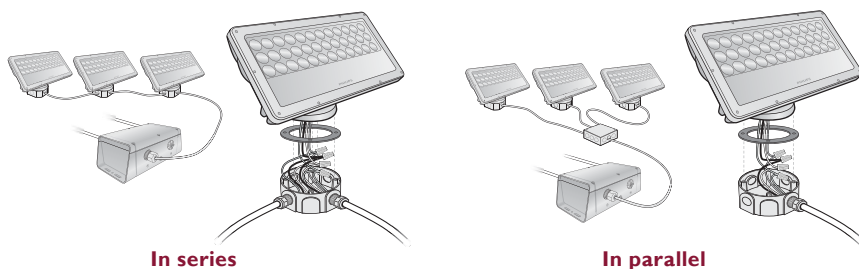
### Included in the box

ColorBlast IntelliHue Powercore gen4 luminaire
(2) 8-32 stainless steel screws for indoor installation
(4) 10-24 stainless steel screws for outdoor installation
5 mm hex wrench
2.5 mm hex wrench
Installation Instructions

✱ When installing ColorBlast IntelliHue Powercore gen4 luminaires, the input earth ground, canopy earth ground, and luminaire cable earth ground must all be connected together.

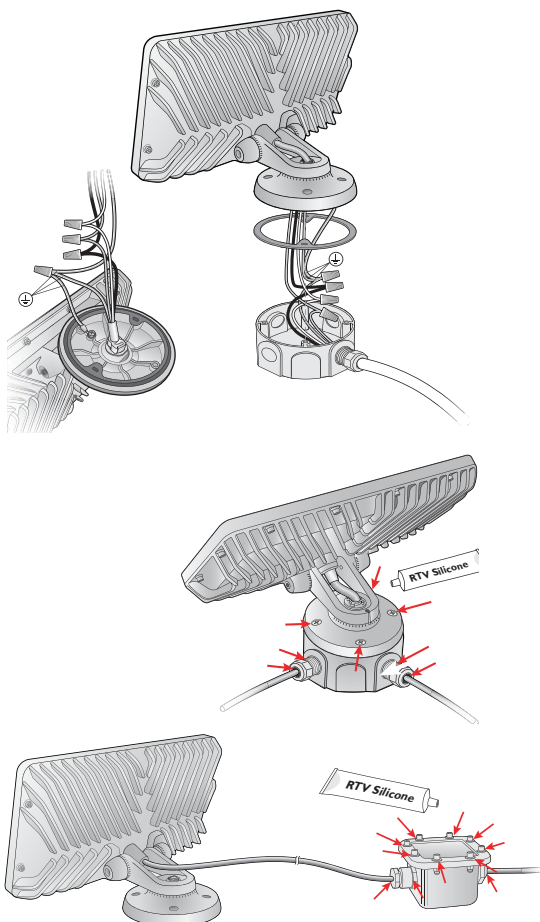
## Install the Luminaires

ColorBlast IntelliHue Powercore gen4 luminaires can be installed in series or in parallel (wired to a common junction box). Each luminaire requires a dedicated junction box for mounting. Ensure that all junction boxes are suitable for the environment and sealed, if necessary, and that all wiring between junction boxes complies with local codes.



✳ In locations where US junction boxes are not available, you can mount luminaires directly to a wall or other mounting surface. For help with your specific installation, consult your local support organization, or contact Application Engineering Services at [support@colorkinetics.com](mailto:support@colorkinetics.com).

✳ Wiring between junction boxes must comply with local codes.



Make sure the power is OFF before mounting and connecting ColorBlast IntelliHue Powercore gen4 luminaires.

1. Mount junction boxes in accordance with the lighting design plan. Each luminaire is designed for mounting in a 102 mm (4 in) round US electrical junction box, rated for your application, with 89 mm (3.5 in) center-to-center screw holes for attaching the luminaire's base.

Luminaires are supplied with a grounding wire attached to the luminaire's base (canopy). The canopy ground wire can be attached to a grounding point in the junction box, or connected with the ground in the luminaire cable.

2. If installing luminaires in a series, pull 4-conductor copper wire between each junction box in the series.

If installing luminaires in parallel, pull 4-conductor copper wire from a common junction box to each luminaire's junction box.

The maximum cable run from a Data Enabler Pro to any individual ColorBlast IntelliHue Powercore gen4 luminaire is 53 m (175 ft). When installing in parallel, the total cable length cannot exceed 122 m (400 ft).

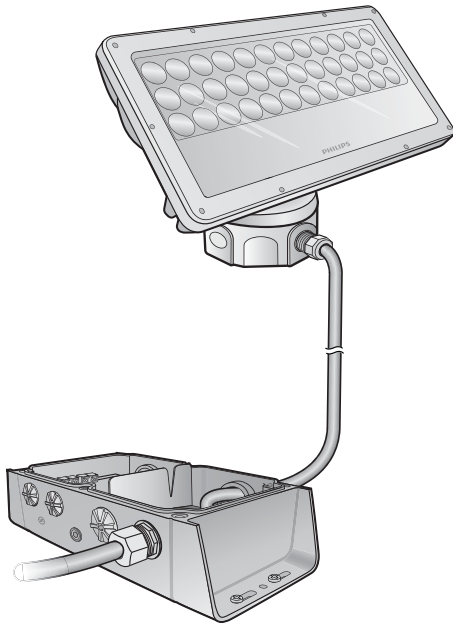
3. Trim the cable from the luminaire to fit in the junction box, leaving enough cable to make wiring connections.
4. Insert the luminaire cable and the canopy ground wire through the attached gasket ring before making wire connections. When attaching the luminaire to the junction box, ensure that the gasket is compressed evenly.
5. Use wire nuts to connect line, neutral, ground, and data. If installing in series, connect the leader cable from each luminaire to the luminaire's junction box. If installing in parallel, connect the leader cable from each luminaire to the lead wire from the Data Enabler Pro in the common junction box.

Attach the canopy ground wire to a grounding point in the junction box, or combine it with the luminaire cable ground with a wire nut.

6. Tuck wire connections into the junction box, and use the provided screws to attach the luminaire to the junction box.
7. If installing in a damp or wet location, seal all junction boxes with electronics-grade RTV silicone sealant. Use gaskets, clamps, and other parts and fittings required to comply with local outdoor wiring codes.

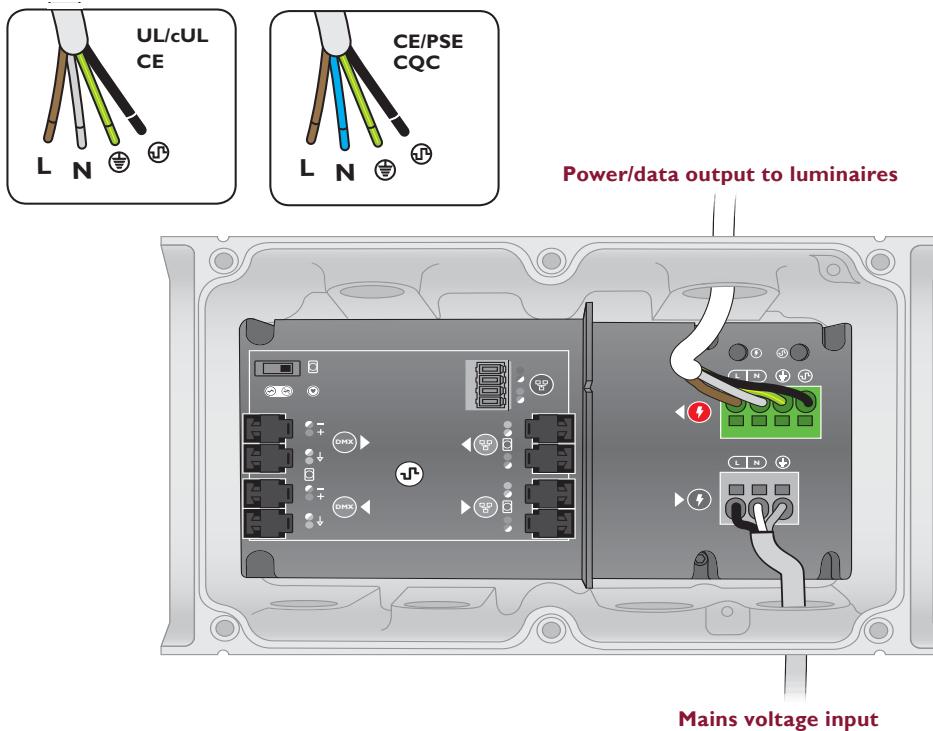


8. Run the wiring from the first junction box in the series to the Data Enabler Pro, or, if installing in parallel, run the wiring from the common junction box to the Data Enabler Pro. Secure connections within the Data Enabler Pro housing.



Data Enabler Pro

9. Secure the Data Enabler Pro cover. If installing in a wet or damp location, seal the Data Enabler Pro with electronics-grade RTV silicone sealant.



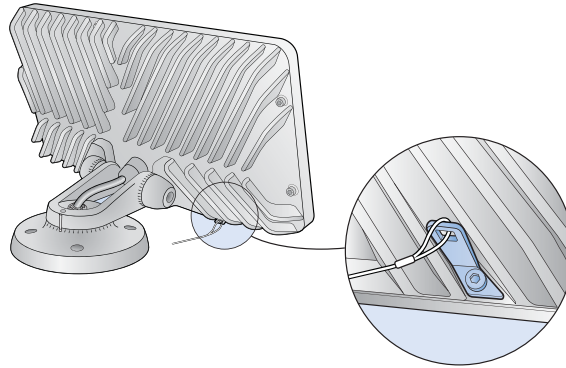
\* Refer to the Data Enabler Pro Product Guide for comprehensive installation and configuration instructions. You can view or download the guide from [www.philipscolorkinetics.com/ls/pds/dataenablerpro](http://www.philipscolorkinetics.com/ls/pds/dataenablerpro)

### Safety cable minimum requirements

Material	304 or 316 Stainless Steel
Size	4 mm (5/32 in) nominal diameter. Minimum break load must be greater than 1,089 kg (2,400 lb).
Construction	7 x 7 (49 wires) preformed stranded

## Attach Safety Cable (Optional)

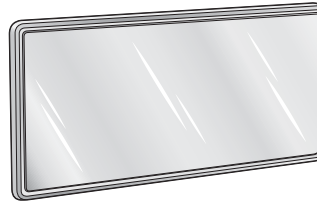
Each ColorBlast IntelliHue Powercore gen4 luminaire is designed for use with a safety cable to tether it to a secure anchor point. When dictated by local or state code or advised by a structural engineer, attach a safety cable to the bracket on the back of the luminaire. Attach the safety cable to the mounting surface using a method that follows the code or engineer's requirements.



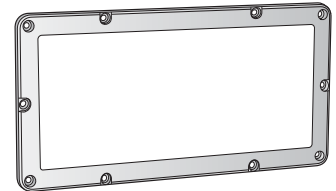
## Attach Accessories (Optional)

Accessories can be installed to change the beam angle or add extra protection to the luminaire in outdoor environments.

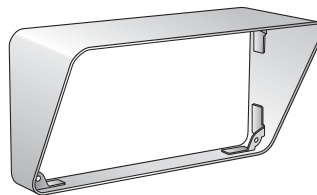
✳ For complete instructions on how to install the accessories, refer to the *Accessory Installation Instructions*.



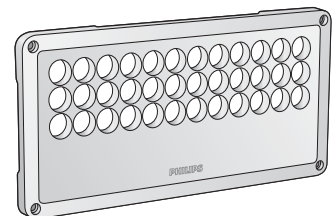
Spread Lens



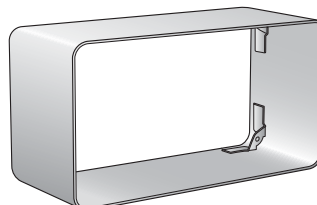
Trim Ring



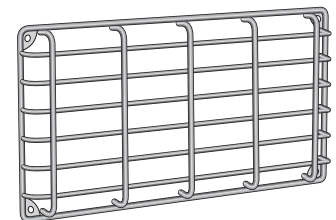
Glare Shield - Half



Louver



Glare Shield - Full




Rock Guard

# Address and Configure the Luminaires

Make sure the power is ON before addressing and configuring luminaires.

You address and configure ColorBlast Gen4 Powercore luminaires using QuickPlay Pro addressing and configuration software, which you can download for free from [www.philipscolorkinetics.com/support/addressing/](http://www.philipscolorkinetics.com/support/addressing/).

- In Ethernet installations, you can address and configure your luminaires using QuickPlay Pro with a computer connected to your lighting installation’s network. QuickPlay Pro can automatically discover all of your luminaires, controllers, and Data Enabler Pro devices for quick configuration.
- In DMX installations, you can address and configure your luminaires using QuickPlay Pro with iPlayer 3 or SmartJack Pro. You can manually enter luminaire serial numbers, or you can import a spreadsheet listing each luminaire’s serial number and starting DMX address.

 You will need the layout grid that you created when you recorded the serial numbers of the light luminaires in your installation.

## Addressing ColorBlast Powercore Luminaires

ColorBlast Powercore luminaires operate in 8-bit mode by default. You can configure ColorBlast Powercore to operate in 16-bit mode, which increases luminaire resolution for smoother dimming.

In 8-bit mode, luminaires use one DMX address per LED channel (red, green, and blue). In 16-bit mode, luminaires use two DMX addresses per LED channel. The first DMX address corresponds to the “coarse” data for that channel, and the second corresponds to the “fine” data. By using double the number of DMX addresses, 16-bit mode increases luminaire resolution from 256 dimming steps to 65,536 (256 x 256) dimming steps.

DMX Channel Assignments						
8-Bit Mode	1		2		3	
	Red		Green		Blue	
16-Bit Mode	1	2	3	4	5	6
	Red Coarse	Red Fine	Green Coarse	Green Fine	Blue Coarse	Blue Fine

ColorBlast IntelliHue Powercore gen4 luminaires come factory-addressed with a starting DMX address of 1. For lighting designs where luminaires work in unison, all luminaires can be assigned the same starting DMX address. Changes to the default starting DMX address are not necessary, but if lights were previously readdressed for use in other installations, you must reset them. For light show designs that show different colors on different luminaires, you must assign unique DMX addresses to your luminaires and sort them in a useful order.

## Setting Luminaire Dimming Curve

Dimming curves describe how slowly or quickly a luminaire dims at different levels of input. For finer control, ColorBlast IntelliHue Powercore gen4 offers three different dimming curves for use in different situations and applications:

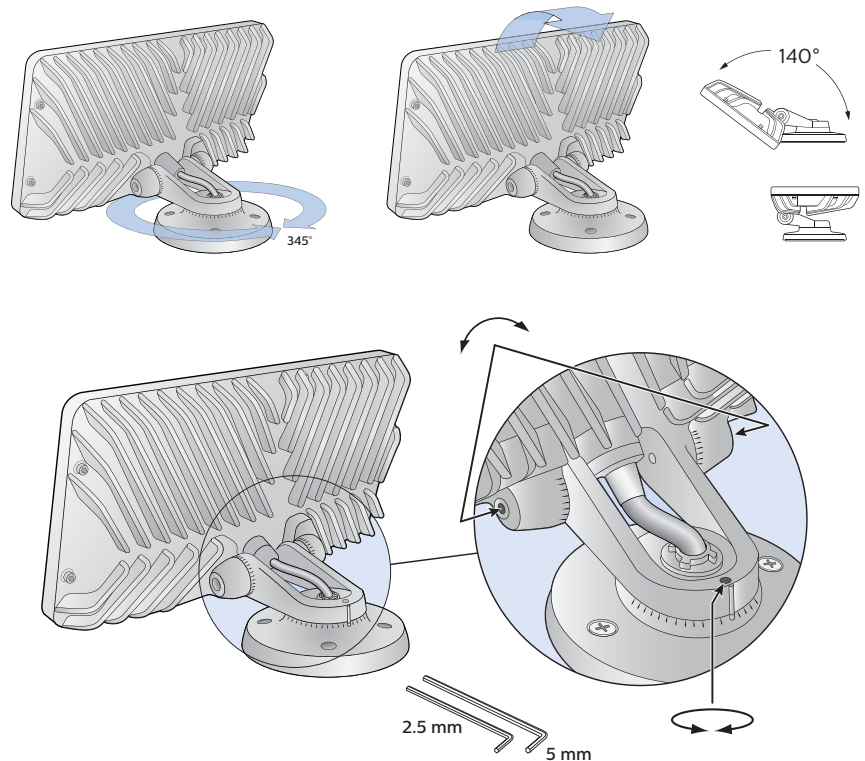
- **Normal**  
The non-linear (gamma) dimming curve used in most Philips Color Kinetics LED lighting luminaires. ColorBlast IntelliHue Powercore gen4 luminaires use the normal dimming curve by default.
- **Linear**  
A dimming curve with a linear relationship between power input and DMX output.
- **Tungsten**  
A non-linear dimming curve that emulates the dimming curve of incandescent lamps on a DMX dimmer. This curve offers the most control at low intensities.

### Setting LED Transition Speed

Normally, LEDs react to DMX or other control data instantaneously. In some cases, you may want to slow down the reaction speed to achieve smoother transitions when the intensity of different LED channels changes. ColorBlast IntelliHue Powercore gen4 offers five levels of decreasing LED transition speed, from Fast (instant snap changes) to Delay-4 (slowest transition speed).

## Aim and Lock the Luminaires

\* Do not look directly into the luminaire when aiming and locking.



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DAS-000151-00 R01 15 Jan 2018



Philips Color Kinetics  
3 Burlington Woods Drive  
Burlington, Massachusetts 01803 USA  
Tel 888.385.5742  
Tel 617.423.9999  
Fax 617.423.9998  
[www.colorkinetics.com](http://www.colorkinetics.com)