



iW Reach Powercore gen2

Premium long-throw exterior floodlight with intelligent white light

PHILIPS



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iW Reach Powercore gen2 high-performance LED fixtures are premium exterior long-throw dynamic high-quality white luminaires for lighting tall buildings, bridges, and iconic structures. iW Reach Powercore gen2 outputs washes of white light in color temperatures ranging from a warm 2700 K to a cool 6500 K. A full range of accessories 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 aluminum housing.

- High-performance illumination in a wide range of color temperatures—Channels of warm, neutral, and cool white LEDs produce temperatures ranging from 2700 K to 6500 K, offering the greatest possible light intensity at all temperatures. Fixture brightness can be varied while maintaining constant temperature.
- Unparalleled light output—iWReach Powercore gen2 offers unprecedented output and punch for LED-based illumination of large-scale structures and objects.
- Expanded customization with a wide range of new Philips accessory options. To complement the native 5° lens, six standard secondary diffuser lenses can customize the fixture to produce 8°, 13°, 23°, 43°, 63°, and 5° x 17° (asymmetric) beam angles. The option to add or combine a louver, full glare shield, or half glare shield creates new aesthetic possibilities for designers and architects.
- Superior color consistency and accuracy—Optibin, an advanced binning algorithm, sets a new standard for the color consistency and uniformity of LED sources used in manufacturing.
- Integrates patented Powercore technology that controls power output to fixtures 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 fixtures over a single standard cable, dramatically simplifying installation and lowering total system cost.
- Simple fixture positioning—Rugged, slim-profile mounting bracket allows simple positioning and fixture rotation through a full 360°. Side locking bolts reliably secure fixture with standard wrench.
- Universal power input range—Accepts a universal power input range of 100 – 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.



Unparalleled light output

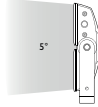
Each half of the fixture is individually addressable and controllable. New accessories, including a new louver and two glare shields, provide extra flexibility to help with dark sky compliance, discomfort glare, and trespass light.

Photometrics

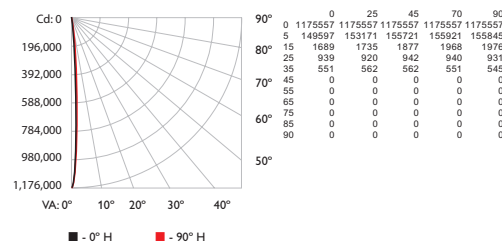
Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at www.philipscolorkinetics.com/support/ies.

iW Reach Powercore gen2 5° native lens, full unit

Lumens	Efficacy
14,880	64.8



Polar Candela Distribution



Illuminance at Distance

	Center Beam fc	Beam Width
4 ft	73,472 fc	0.4 ft 0.4 ft
8 ft	18,368 fc	0.7 ft 0.7 ft
12 ft	8,164 fc	1.1 ft 1.1 ft
16 ft	4,592 fc	1.4 ft 1.4 ft
20 ft	2,939 fc	1.8 ft 1.8 ft
24 ft	2,041 fc	2.1 ft 2.1 ft

1,085 ft (330.7 m)
1 fc maximum distance

Vert. Spread: 5.0°
Horiz. Spread: 5.1°

Zonal Lumen

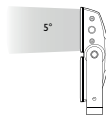
Zone	Lumens	% Luminaire
0-30	15,011.6	98.2%
0-40	15,286.6	100.0%
0-60	15,286.9	100.0%
0-90	15,286.9	100.0%
60-90	0.0	0.0%
70-100	0.0	0.0%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	15,286.9	100.0%

Coefficients Of Utilization - Zonal Cavity Method

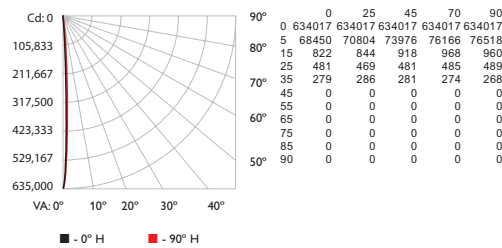
		Effective Floor Cavity Reflectance: 20%																										
RCC %:	80					70					50					30					10					0		
RW %:	70	50	30	0	0	70	50	30	0	0	50	30	0	0	50	30	0	0	50	30	0	0	50	30	0	0		
RCR:																												
0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.16	1.11	1.11	1.11	1.11	1.06	1.06	1.06	1.06	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00		
1	1.16	1.15	1.13	1.12	1.14	1.13	1.12	1.00	1.09	1.08	1.07	1.05	1.05	1.04	1.02	1.01	1.01	0.99	0.99	0.98	0.97	0.99	0.98	0.97	0.96	0.95		
2	1.14	1.12	1.10	1.08	1.12	1.10	1.08	0.99	1.07	1.06	1.04	1.04	1.03	1.02	1.02	1.01	1.00	0.99	0.98	0.97	0.99	0.98	0.97	0.96	0.95	0.94		
3	1.12	1.09	1.07	1.05	1.11	1.08	1.06	0.99	1.06	1.04	1.02	1.03	1.02	1.01	1.01	1.00	0.99	0.98	0.97	0.99	0.98	0.97	0.96	0.95	0.94	0.93		
4	1.11	1.07	1.05	1.03	1.09	1.06	1.04	0.98	1.04	1.02	1.01	1.03	1.01	1.00	1.01	1.00	0.99	0.98	0.97	0.99	0.98	0.97	0.96	0.95	0.94	0.93		
5	1.09	1.05	1.03	1.01	1.08	1.05	1.02	0.98	1.03	1.01	1.00	1.02	1.00	0.99	1.01	0.99	0.98	0.97	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92		
6	1.08	1.04	1.02	1.00	1.07	1.04	1.01	0.97	1.02	1.00	0.99	1.01	1.00	0.98	1.00	0.98	0.97	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91		
7	1.07	1.03	1.01	0.99	1.06	1.03	1.00	0.97	1.02	1.00	0.98	1.01	0.99	0.98	1.00	0.98	0.97	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91		
8	1.06	1.02	1.00	0.98	1.05	1.02	0.99	0.97	1.01	0.99	0.98	1.00	0.98	0.97	1.00	0.98	0.97	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91		
9	1.05	1.01	0.99	0.97	1.04	1.01	0.99	0.96	1.00	0.98	0.97	1.00	0.98	0.97	1.00	0.98	0.97	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91		
10	1.04	1.01	0.98	0.97	1.04	1.00	0.98	0.96	1.00	0.98	0.97	1.00	0.98	0.97	1.00	0.98	0.96	0.99	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90		

iW Reach Powercore gen2 5° diffuser lens, half unit

Lumens	Efficacy
7,287	62.6



Polar Candela Distribution



Illuminance at Distance

	Center Beam fc	Beam Width
4 ft	39,626 fc	0.3 ft 0.3 ft
8 ft	9,907 fc	0.6 ft 0.7 ft
12 ft	4,403 fc	1.0 ft 1.0 ft
16 ft	2,477 fc	1.3 ft 1.4 ft
20 ft	1,585 fc	1.6 ft 1.7 ft
24 ft	1,101 fc	1.9 ft 2.0 ft

795 ft (242.3 m)
1 fc maximum distance

Vert. Spread: 4.6°
Horiz. Spread: 4.9°

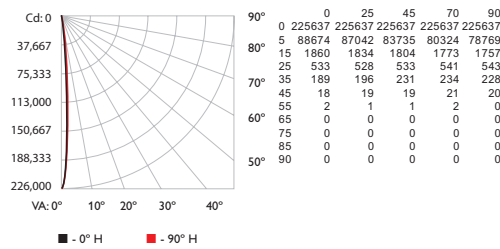
Zonal Lumen

Zone	Lumens	% Luminaire
0-30	7,361.6	98.2%
0-40	7,499.9	100.0%
0-60	7,500.2	100.0%
0-90	7,500.2	100.0%
60-90	0.0	0.0%
70-100	0.0	0.0%
90-120	0.0	0.0%
90-180	0.1	0.0%
0-180	7,500.3	100.0%

Coefficients Of Utilization - Zonal Cavity Method

		Effective Floor Cavity Reflectance: 20%																							
RCC %:		80				70				50				30				10				0			
RW %:		70	50	30	0	70	50	30	0	50	30	0	50	30	0	50	30	0	50	30	0	50	30	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	1.06	1.02	1.02	1.02	1.00						
1	1.16	1.15	1.13	1.12	1.14	1.13	1.12	1.00	1.09	1.08	1.07	1.05	1.05	1.04	1.02	1.01	1.01	0.99							
2	1.14	1.12	1.10	1.08	1.12	1.10	1.08	0.99	1.07	1.06	1.04	1.04	1.03	1.02	1.02	1.01	1.01	0.99							
3	1.12	1.09	1.07	1.05	1.11	1.08	1.06	0.99	1.06	1.04	1.02	1.03	1.02	1.01	1.01	1.00	1.00	0.98							
4	1.11	1.07	1.05	1.03	1.09	1.06	1.04	0.98	1.04	1.02	1.01	1.03	1.01	1.00	1.01	1.00	0.99	0.98							
5	1.09	1.05	1.03	1.01	1.08	1.05	1.02	0.98	1.03	1.01	1.00	1.02	1.00	0.99	1.01	0.99	0.98	0.97							
6	1.08	1.04	1.02	1.00	1.07	1.04	1.01	0.97	1.02	1.00	0.99	1.01	1.00	0.98	1.00	0.99	0.98	0.97							
7	1.07	1.03	1.01	0.99	1.06	1.02	1.00	0.97	1.02	1.00	0.98	1.01	0.99	0.98	1.00	0.98	0.97	0.97							
8	1.06	1.02	1.00	0.98	1.05	1.02	0.99	0.97	1.01	0.99	0.98	1.00	0.98	0.97	0.99	0.98	0.97	0.96							
9	1.05	1.01	0.99	0.97	1.04	1.01	0.99	0.96	1.00	0.98	0.97	1.00	0.98	0.97	0.99	0.98	0.97	0.96							
10	1.04	1.00	0.98	0.97	1.04	1.00	0.98	0.96	1.00	0.98	0.97	0.99	0.98	0.96	0.99	0.97	0.96	0.95							

Lumens	Efficacy
6,732	55.9



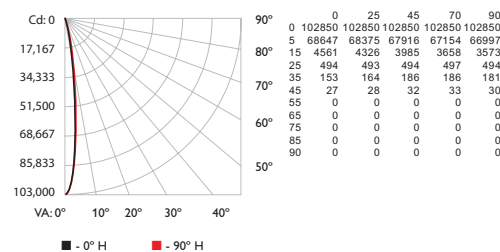
	Center Beam fc	Beam Width
4 ft	14,102 fc	0.6 ft 0.6 ft
8 ft	3,526 fc	1.2 ft 1.1 ft
12 ft	1,567 fc	1.8 ft 1.7 ft
16 ft	881 fc	2.4 ft 2.2 ft
20 ft	564 fc	3.0 ft 2.8 ft
24 ft	392 fc	3.6 ft 3.4 ft

475 ft (144.8 m)
1 ft maximum distance

Vert. Spread: 8.6°
 Horiz. Spread: 8.0°

		Effective Floor Cavity Reflectance: 20%															
RC :		80				70				50				10			
RW :		50	30	30	30	50	30	30	30	50	30	30	30	50	30	30	30
RCR :																	
0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.11	1.11	1.06	1.06	1.02	1.02	1.02	1.00	1.00
1	1.16	1.15	1.13	1.12	1.14	1.13	1.11	0.99	1.09	1.08	1.05	1.04	1.04	1.02	1.01	1.01	0.99
2	1.14	1.11	1.09	1.07	1.12	1.10	1.08	0.95	1.07	1.06	1.03	1.03	1.01	1.01	1.00	0.99	0.97
3	1.12	1.08	1.06	1.04	1.10	1.07	1.05	0.98	1.05	1.03	1.01	1.03	1.01	1.01	1.00	0.99	0.97
4	1.10	1.06	1.03	1.01	1.09	1.05	1.03	0.97	1.03	1.01	1.00	1.02	1.00	1.00	0.99	0.98	0.97
5	1.08	1.04	1.02	1.00	1.07	1.04	1.01	0.96	1.02	0.98	0.98	1.01	0.98	0.98	0.97	0.96	0.95
6	1.07	1.03	1.00	0.98	1.06	1.02	1.00	0.96	1.01	0.99	0.97	1.00	0.98	0.97	0.97	0.96	0.95
7	1.06	1.01	0.99	0.97	1.05	1.01	0.98	0.95	1.00	0.98	0.96	0.99	0.97	0.96	0.96	0.95	0.95
8	1.04	1.00	0.98	0.96	1.04	1.00	0.97	0.95	0.99	0.97	0.95	0.98	0.96	0.95	0.95	0.94	0.94
9	1.03	0.99	0.97	0.95	1.03	0.99	0.97	0.94	0.98	0.96	0.95	0.98	0.96	0.95	0.95	0.94	0.94
10	1.02	0.98	0.96	0.94	1.02	0.98	0.96	0.94	0.97	0.95	0.94	0.97	0.95	0.94	0.94	0.93	0.93

Lumens	Efficacy
6,706	55.7



	Center Beam fc	Beam Width
4 ft	6,428 fc	0.9 ft 0.9 ft
8 ft	1,607 fc	1.9 ft 1.8 ft
12 ft	714 fc	2.8 ft 2.7 ft
16 ft	402 fc	3.7 ft 3.6 ft
20 ft	257 fc	4.6 ft 4.5 ft
24 ft	179 fc	5.6 ft 5.4 ft

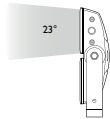
320 ft (97.5 m)
1 ft maximum distance

Vert. Spread: 13.2°
 Horiz. Spread: 12.8°

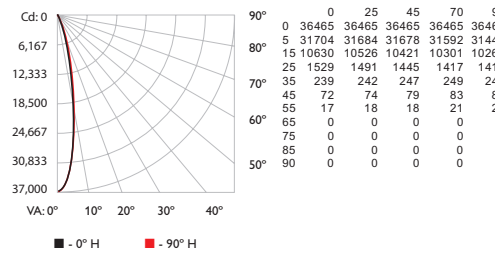
RCC %:		80				70				Effective Floor Cavity				Reflectance: 20%				
RW %:		70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR:																		
0	1.19	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.16	1.14	1.13	1.11	1.11	1.14	1.12	1.11	0.99	1.08	1.07	1.06	1.04	1.03	1.01	1.01	1.00	0.99
2	1.13	1.11	1.08	1.07	1.05	1.11	1.09	1.07	0.98	1.05	1.04	1.03	1.01	1.00	0.99	0.98	0.97	0.96
3	1.11	1.07	1.05	1.02	1.00	1.09	1.06	1.04	0.97	1.04	1.02	1.00	0.98	0.97	0.96	0.95	0.94	0.93
4	1.09	1.05	1.02	1.00	0.97	1.07	1.04	1.01	0.95	1.02	1.00	0.98	0.97	0.96	0.95	0.94	0.93	0.92
5	1.07	1.03	1.00	0.97	0.95	1.02	0.99	0.94	0.90	1.00	0.98	0.96	0.95	0.93	0.92	0.91	0.90	0.89
6	1.05	1.01	0.98	0.96	0.94	1.01	0.97	0.93	0.88	0.98	0.96	0.94	0.93	0.91	0.90	0.89	0.88	0.87
7	1.04	0.99	0.96	0.94	0.92	1.00	0.96	0.92	0.87	0.98	0.95	0.93	0.92	0.90	0.89	0.88	0.87	0.86
8	1.02	0.98	0.95	0.92	0.90	1.01	0.97	0.94	0.91	0.96	0.94	0.92	0.91	0.89	0.88	0.87	0.86	0.85
9	1.00	0.96	0.93	0.92	0.90	1.00	0.96	0.93	0.90	0.95	0.93	0.91	0.90	0.88	0.87	0.86	0.85	0.84
10	1.00	0.95	0.92	0.91	0.89	0.95	0.92	0.90	0.88	0.94	0.92	0.90	0.90	0.88	0.87	0.86	0.85	0.84

iW Reach Powercore gen2 23° diffuser lens, half unit

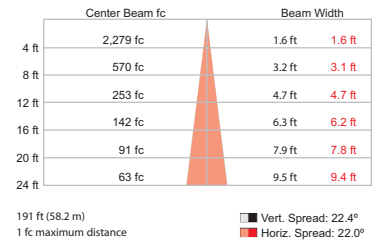
Lumens	Efficacy
6,568	54.6



Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

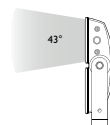
Zone	Lumens	% Luminaire
0-30	6,317.5	96.2%
0-40	6,484.2	98.8%
0-60	6,564.4	100.0%
0-90	6,565.1	100.0%
60-90	0.7	0.0%
70-100	0.0	0.0%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	6,565.1	100.0%

Coefficients Of Utilization - Zonal Cavity Method

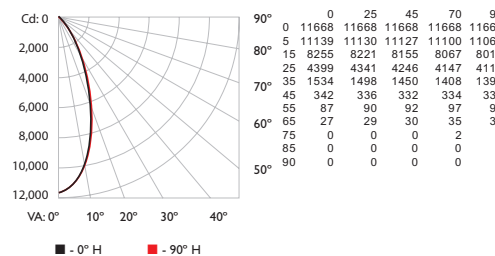
RCC %:	80	70	50	30	10	0
Effective Floor Cavity Reflectance: 20%	80	70	50	30	10	0
RCR:	0	1	2	3	4	5
0	1.19	1.19	1.19	1.19	1.16	1.16
1	1.15	1.13	1.11	1.10	1.13	1.11
2	1.12	1.08	1.05	1.03	1.10	1.07
3	1.08	1.04	1.01	0.98	1.07	1.03
4	1.05	1.00	0.96	0.94	1.04	0.99
5	1.02	0.97	0.93	0.90	1.01	0.96
6	1.00	0.94	0.90	0.87	0.99	0.93
7	0.97	0.91	0.87	0.84	0.96	0.91
8	0.95	0.89	0.85	0.82	0.94	0.88
9	0.92	0.86	0.82	0.79	0.91	0.85
10	0.90	0.84	0.80	0.78	0.89	0.83

iW Reach Powercore gen2 43° diffuser lens, half unit

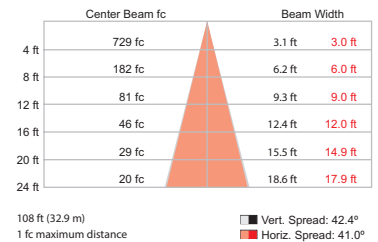
Lumens	Efficacy
6,544	54.4



Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

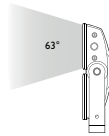
Zone	Lumens	% Luminaire
0-30	5,201.9	79.5%
0-40	6,139.2	93.8%
0-60	6,507.8	99.5%
0-90	6,543.1	100.0%
60-90	35.3	0.5%
70-100	3.4	0.1%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	6,543.1	100.0%

Coefficients Of Utilization - Zonal Cavity Method

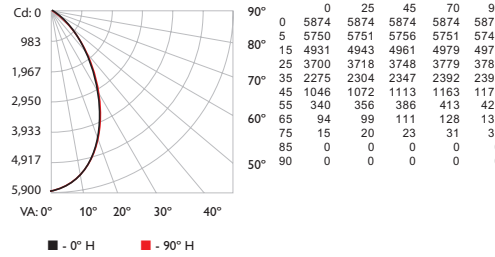
RCC %:	80	70	50	30	10	0
Effective Floor Cavity Reflectance: 20%	80	70	50	30	10	0
RCR:	0	1	2	3	4	5
0	1.19	1.19	1.19	1.19	1.16	1.16
1	1.14	1.11	1.09	1.07	1.11	1.09
2	1.09	1.04	1.00	0.97	1.07	1.03
3	1.04	0.98	0.93	0.90	1.02	0.97
4	0.99	0.92	0.87	0.83	0.97	0.91
5	0.95	0.87	0.82	0.78	0.93	0.86
6	0.91	0.82	0.77	0.73	0.89	0.82
7	0.87	0.78	0.73	0.69	0.85	0.77
8	0.83	0.74	0.69	0.65	0.82	0.74
9	0.79	0.71	0.65	0.62	0.78	0.70
10	0.76	0.67	0.62	0.58	0.75	0.67

iW Reach Powercore gen2 63° diffuser lens, half unit

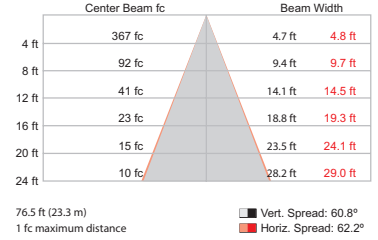
Lumens	Efficacy
6,461	53.7



Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

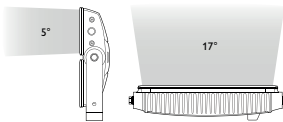
Zone	Lumens	% Luminaire
0-30	3,632.6	56.2%
0-40	5,091.0	78.8%
0-60	6,315.9	97.8%
0-90	6,461.2	100.0%
60-90	145.3	2.2%
70-100	27.6	0.4%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	6,461.2	100.0%

Coefficients Of Utilization - Zonal Cavity Method

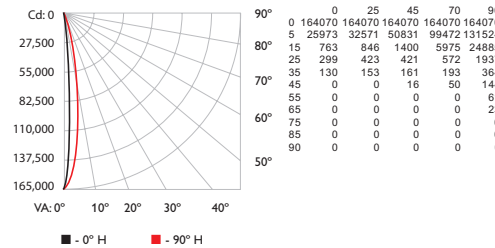
Effective Floor Cavity Reflectance: 20%		0		10		20		30		40		50		60		70		80		90	
RCC %:	80	70	60	50	40	30	20	10	0	0	10	20	30	40	50	60	70	80	90	0	0
RW %:	70	50	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RCR:	0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00	1.00	1.00
1	1.13	1.10	1.07	1.04	1.10	1.07	1.05	0.92	1.03	1.01	0.99	1.00	0.98	0.96	0.96	0.95	0.94	0.92	0.92	0.92	0.92
2	1.06	1.01	0.96	0.92	1.04	0.99	0.95	0.84	0.96	0.92	0.89	0.92	0.90	0.87	0.87	0.86	0.85	0.84	0.84	0.84	0.84
3	1.00	0.92	0.87	0.82	0.98	0.91	0.86	0.77	0.88	0.84	0.80	0.86	0.82	0.79	0.79	0.78	0.74	0.73	0.73	0.73	0.73
4	0.94	0.85	0.79	0.74	0.92	0.84	0.78	0.71	0.82	0.77	0.73	0.80	0.75	0.72	0.72	0.70	0.66	0.63	0.63	0.63	0.63
5	0.88	0.78	0.72	0.67	0.86	0.78	0.72	0.65	0.76	0.70	0.66	0.74	0.69	0.66	0.66	0.63	0.60	0.58	0.58	0.58	0.58
6	0.83	0.73	0.66	0.61	0.81	0.72	0.66	0.60	0.71	0.65	0.61	0.69	0.64	0.60	0.60	0.57	0.54	0.51	0.51	0.51	0.51
7	0.78	0.68	0.61	0.56	0.77	0.67	0.61	0.55	0.66	0.60	0.56	0.65	0.59	0.56	0.56	0.53	0.50	0.47	0.47	0.47	0.47
8	0.74	0.63	0.57	0.52	0.73	0.63	0.56	0.51	0.62	0.56	0.52	0.60	0.55	0.51	0.51	0.48	0.45	0.42	0.42	0.42	0.42
9	0.70	0.59	0.53	0.48	0.69	0.59	0.52	0.48	0.58	0.52	0.48	0.57	0.52	0.48	0.48	0.45	0.42	0.39	0.39	0.39	0.39
10	0.66	0.56	0.49	0.45	0.65	0.55	0.49	0.44	0.54	0.49	0.45	0.53	0.48	0.45	0.45	0.42	0.39	0.36	0.36	0.36	0.36

iW Reach Powercore gen2 5° x 17° asymmetric lens, half unit

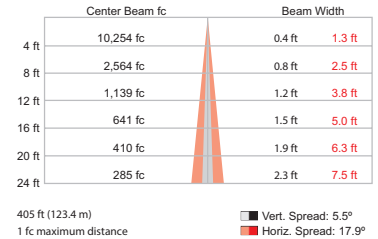
Lumens	Efficacy
6,694	55.6



Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

Zone	Lumens	% Luminaire
0-30	6,545.8	97.9%
0-40	6,654.9	99.6%
0-60	6,683.4	100.0%
0-90	6,684.2	100.0%
60-90	0.8	0.0%
70-100	0.0	0.0%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	6,684.2	100.0%

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%		0		10		20		30		40		50		60		70		80		90	
RCC %:	80	70	60	50	40	30	20	10	0	0	10	20	30	40	50	60	70	80	90	0	0
RW %:	70	50	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	1.00	1.00
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	1.01	1.01	1.01	0.99	0.97	0.97	0.97
2	1.13	1.10	1.08	1.06	1.11	1.08	1.07	0.98	1.06	1.04	1.03	1.03	1.02	1.01	1.00	0.99	0.97	0.97	0.96	0.96	0.96
3	1.11	1.07	1.04	1.02	1.09	1.06	1.04	0.96	1.04	1.02	1.00	1.01	1.00	0.98	0.99	0.98	0.97	0.96	0.95	0.95	0.95
4	1.09	1.05	1.02	0.99	1.07	1.04	1.01	0.95	1.02	1.00	0.98	1.00	0.98	0.97	0.98	0.97	0.95	0.94	0.94	0.94	0.94
5	1.07	1.02	0.99	0.97	1.06	1.02	0.99	0.94	1.00	0.98	0.96	0.99	0.97	0.95	0.97	0.95	0.93	0.92	0.92	0.92	0.92
6	1.05	1.00	0.97	0.95	1.04	1.00	0.97	0.93	0.99	0.96	0.94	0.97	0.95	0.94	0.96	0.95	0.93	0.92	0.92	0.92	0.92
7	1.03	0.99	0.96	0.94	1.02	0.98	0.95	0.92	0.97	0.95	0.93	0.96	0.94	0.93	0.95	0.94	0.92	0.91	0.91	0.91	0.91
8	1.02	0.97	0.94	0.92	1.01	0.97	0.94	0.91	0.96	0.94	0.92	0.95	0.93	0.91	0.94	0.93	0.91	0.90	0.90	0.90	0.90
9	1.00	0.96	0.93	0.91	1.00	0.95	0.93	0.90	0.95	0.92	0.91	0.94	0.92	0.90	0.94	0.92	0.90	0.89	0.89	0.89	0.89
10	0.99	0.95	0.92	0.90	0.99	0.94	0.92	0.89	0.94	0.91	0.90	0.93	0.91	0.90	0.93	0.91	0.89	0.88	0.88	0.88	0.88

Specifications, UL/CE

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

Item	Specification	Details
Output	Beam Angle	5° primary optic (no spread lens) 8°/13°/23°/43°/63°/5° x 17° (asymmetric) spread lenses
	Color Temperature*	2700 K – 4000 K (all channels full on)
	Lumens†	14,880 (no spread lens, full unit, all channels full on)
	Efficacy (lm/W)	64.8 (no spread lens, full unit, all channels full on)
	CRI	79 (no spread lens, full unit, all channels full on)
Electrical	Input Voltage	100 – 277 VAC, auto-switching, 50/60 Hz
	Power Consumption	250 W maximum at full output, steady state
	Power Factor	.99 @ 120 VAC
Control	Interface	Data Enabler Pro (DMX/Ethernet)
	Control System	Philips Color Kinetics full range of controllers, including Light System Manager, iPlayer 3, and ColorDial Pro, or third-party controllers
Physical	Dimensions (Height x Width x Depth)	522 x 733 x 122 mm (20.5 x 28.9 x 4.8 in)
	Weight	34 kg (75 lb)
	Effective Projected Area (EPA)	0.42 m²
	Housing	Die-cast aluminium, powder-coated finish
	Mechanical Impact	IK07
	Lens	Tempered glass
	Fixture Connections	Integral male/female waterproof connector;
	Temperature Ranges	-40° – 50° C (-40° – 122° F) Operating -20° – 50° C (-4° – 122° F) Startup -40° – 80° C (-40° – 176° F) Storage
	Humidity	0 – 95%, non-condensing
Certification and Safety	Fixtures Run Lengths	To calculate fixture run lengths and total power consumption for your specific installation, download the Configuration Calculator from www.philipscolorkinetics.com/support/install_tool/
	Certification	UL/cUL, FCC Class A, CE, PSE
	Environment	Dry/Damp/Wet Location, IP66

* Color temperatures conform to nominal CCTs as defined in ANSI Chromaticity Standard C78.

† Lumen measurement complies with IES LM-79-08 testing procedures.

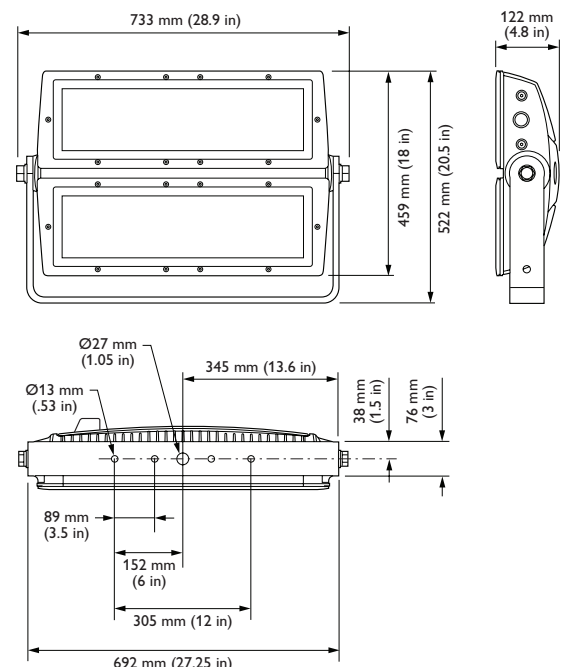
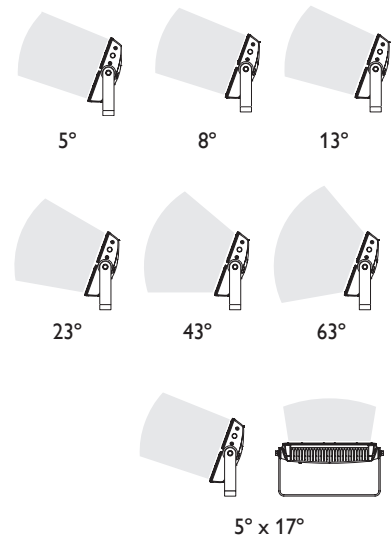


Lumen Maintenance

Threshold§	Ambient Temperature	Reported¶	Calculated¶
L90	@ 25°C	42,000 hrs	84,000 hrs
	@ 50°C	42,000 hrs	48,000 hrs
L80	@ 25°C	42,000 hrs	>100,000 hrs
	@ 50°C	42,000 hrs	>100,000 hrs
L70	@ 25°C	42,000 hrs	>100,000 hrs
	@ 50°C	42,000 hrs	>100,000 hrs

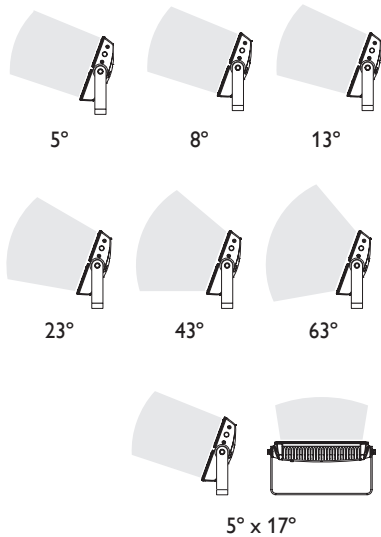
§ L_{xx} = xx% lumen maintenance (when light output drops below xx% of initial output). All values are given at B50, or the median value where 50% of the LED population is better than the reported or calculated lumen maintenance measurement.

¶ 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.



Specifications, CQC

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



Item	Specification	Details
Output	Beam Angle	5° primary optic (no spread lens) 8°/13°/23°/43°/63°/5° x 17° (asymmetric) spread lenses
	Color Temperature*	2700 K – 4000 K (all channels full on)
	Lumens†	14,880 (no spread lens, full unit, all channels full on)
	Efficacy (lm/W)	64.8 (no spread lens, full unit, all channels full on)
	CRI	79 (no spread lens, full unit, all channels full on)
Electrical	Input Voltage	100 – 240 VAC, auto-switching, 50/60 Hz
	Power Consumption	250 W maximum at full output, steady state
	Power Factor	.99 (no spread lens, full unit, all channels full on) @ 120 VAC
Control	Interface	Data Enabler Pro (DMX/Ethernet)
	Control System	Philips Color Kinetics full range of controllers, including Light System Manager, iPlayer 3, and ColorDial Pro, or third-party controllers
Physical	Dimensions (Height x Width x Depth)	522 x 733 x 122 mm (20.5 x 28.9 x 4.8 in)
	Weight	34 kg (75 lb)
	Effective Projected Area (EPA)	0.42 m²
	Housing	Die-cast aluminium, powder-coated finish
	Mechanical Impact	IK07
	Lens	Tempered glass
	Fixture Connections	Integral male/female waterproof connector, 1.8 m (6 ft) unified power/data cable
	Temperature Ranges	-40° – 50° C (-40° – 122° F) Operating -20° – 50° C (-4° – 122° F) Startup -40° – 80° C (-40° – 176° F) Storage
	Humidity	0 – 95%, non-condensing
Certification and Safety	Fixtures Run Lengths	To calculate fixture run lengths and total power consumption for your specific installation, download the Configuration Calculator from www.philipscolorkinetics.com/support/install_tool/
	Certification	CQC, CE, FCC Class A, PSE
	Environment	Dry/Damp/Wet Location, IP66

* Color temperatures conform to nominal CCTs as defined in ANSI Chromaticity Standard C78.

† Lumen measurement complies with IES LM-79-08 testing procedures.

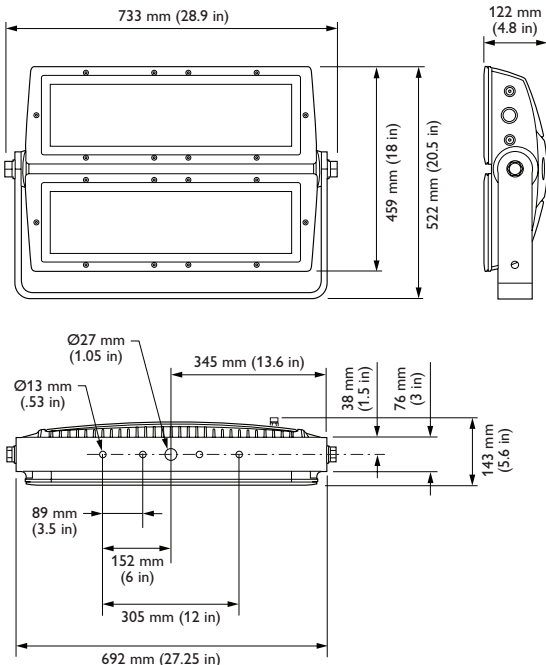


Lumen Maintenance

Threshold§	Ambient Temperature	Reported¶	Calculated¶
L90	@ 25°C	42,000 hrs	84,000 hrs
	@ 50°C	42,000 hrs	48,000 hrs
L80	@ 25°C	42,000 hrs	>100,000 hrs
	@ 50°C	42,000 hrs	>100,000 hrs
L70	@ 25°C	42,000 hrs	>100,000 hrs
	@ 50°C	42,000 hrs	>100,000 hrs

§ L_{xx} = xx% lumen maintenance (when light output drops below xx% of initial output). All values are given at B50, or the median value where 50% of the LED population is better than the reported or calculated lumen maintenance measurement.

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Fixtures and Data Enabler Pro

iW Reach Powercore gen2 fixtures are part of a complete line-voltage system that includes fixtures and:

- One or more Data Enabler Pro devices.
- Any Philips controller, including Light System Manager, iPlayer 3, and ColorDial Pro, or a third-party controller.
- One 1.8 m (6 ft) leader cable (included with CQC fixture) or one 3 m (10 ft) leader cable to connect each iW Reach Powercore gen2 fixture to a junction box or Data Enabler Pro.
- 4-conductor copper wire to connect iW Reach Powercore gen2 fixtures in series or in parallel. Standard 12 AWG (2.05 mm) stranded wire is recommended.

Fixtures

Item	Type	Item Number*	Philips 12NC
iW Reach Powercore gen2 UL/CE <i>(Leader cable sold separately)</i>	UL/CE	523-000094-02	912400133460
iW Reach Powercore gen2 CQC <i>(Includes 1.8 m (6 ft) leader cable)</i>	CQC	523-000045-52	912400133493

Data Enabler




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.

Accessories

All of the Philips Color Kinetics accessories are designed to provide customizable options for controlling and dispersing light as well as added protection.

Item	Item Number	Philips 12NC
Leader Cable, 100–277 VAC, UL, 3 m (10 ft)	108-000055-03	910503704066
Leader Cable, 100–277 VAC, UL, 15.2 m (50 ft)	108-000055-00	910503703137
Leader Cable, 100–277 VAC, CE/PSE, 3 m (10 ft)	108-000055-04	910503704067
Leader Cable, 100–277 VAC, CE/PSE, 15.2 m (50 ft)	108-000055-01	910503704064
Leader Cable, 100–240 VAC, CE/PSE, 1.8 m (6 ft)	108-000043-03	910503700454

Item	Item Number	Philips 12NC	
Louver <i>(Requires Trim Bezel)</i>	120-000187-02	912400133589	
Half Glare Shield <i>(Requires Trim Bezel)</i>	120-000187-01	912400133588	
Full Glare Shield <i>(Requires Trim Bezel)</i>	120-000187-00	912400133587	

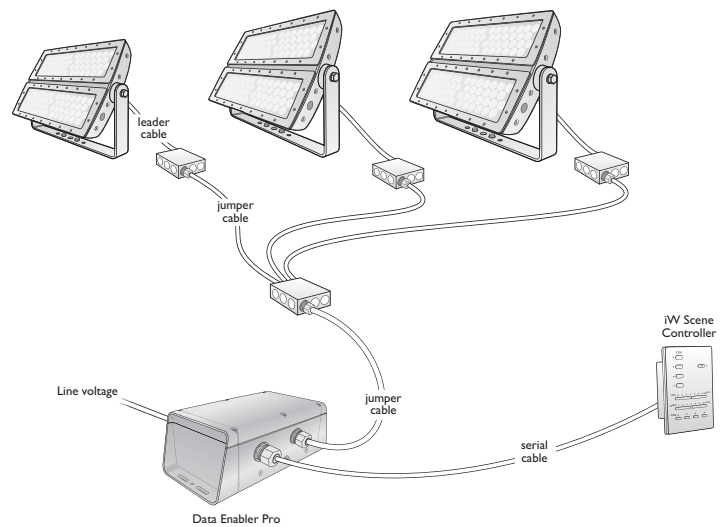
Use Item Number when ordering in North America.

Item	Item Number	Philips 12NC	
Trim Bezel	120-000187-03	912400134263	  
8° Spread Lens with Bezel	120-000068-17	912400133598	
13° Spread Lens with Bezel	120-000068-12	912400133593	
23° Spread Lens with Bezel	120-000068-13	912400133594	
43° Spread Lens with Bezel	120-000068-14	912400133595	
63° Spread Lens with Bezel	120-000068-15	912400133596	
5° X 17° Asymmetric Spread Lens with Bezel	120-000068-16	912400133597	

Use Item Number when ordering in North America.

Typical iW Reach Powercore gen2 installation

For detailed wiring diagrams visit
www.philipscolorkinetics.com/support/wiring/ls_prod.html



✱ Refer to the iW Reach Powercore gen2 Installation Instructions for specific warning and caution statements.

Installation

iW Reach Powercore gen2, a high-performance exterior architectural floodlight with extended light projection, is designed to brilliantly illuminate signature façades with washes of cool and warm white light. Because each iW Reach Powercore gen2 fixture weighs 34 kg (75 lb), you may need two people to lift the fixture out of the box and position it in the mounting location. Optional accessory optics require the installation of both a spread lens and a bezel on each half of the fixture

Owner/User Responsibilities

It is the responsibility of the contractor, installer, purchaser, owner, and user to install, maintain, and operate iW Reach Powercore gen2 fixtures 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

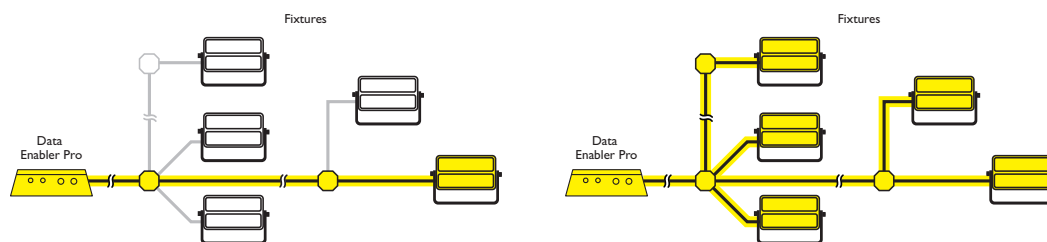
When installing in damp or wet locations, you must seal all junction boxes and Data Enabler Pro devices with electronics-grade RTV silicone sealant so that water or moisture cannot enter or accumulate in wiring compartments, cables, fixtures, or other electrical parts. You must use suitable outdoor-rated 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.

Prepare for the Installation

1. Refer to the lighting design plan, architectural diagram, or other diagram that shows the physical layout of the installation to identify the locations of all switches, controllers, Data Enabler Pro devices, fixtures, and cables.

iW Reach Powercore gen2 fixtures can be installed in series or in parallel (wired to a common junction box). The maximum number of fixtures each Data Enabler Pro can support depends on specific configuration details such as fixture spacing, circuit size, line voltage, and method of connection (in series or in parallel). For more information, and for help calculating the number of fixtures your specific installation can support, download the Configuration Calculator from www.philipscolorkinetics.com/support/install_tool/, or consult Application Engineering Services at support@colorkinetics.com.

In addition to maximum fixture 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).



Data Integrity – maximum individual length 53.3 m (175 ft)

Data Integrity – total length 122 m (400 ft)

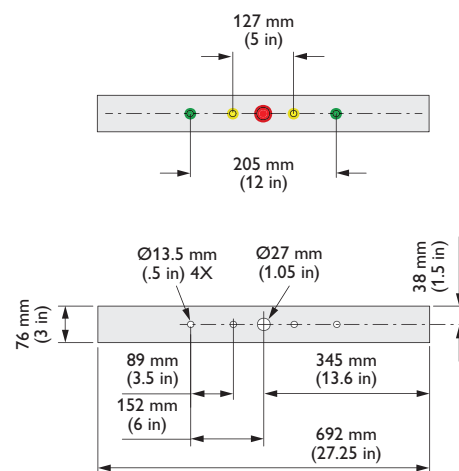
2. Ensure that the fixture mounting locations and substrates are sufficiently sturdy to bear the weight of each iW Reach Powercore gen2 fixture. Pre-drill holes in the mounting substrate if necessary, making reference to the mounting bracket dimensions. Use at least two screws to secure each fixture, one on either side of the mounting bracket's central screw hole.

If mounting iW Reach Powercore gen2 on a lighting pole, make sure the pole can both support the total weight of the fixtures and withstand the maximum velocity winds to which it will be subjected. Each fixture weighs 34 kg (75 lb), and has an effective projected area (EPA) of 0.42 m².

3. Install all Data Enabler Pro devices, including any interfaces with controllers. Data Enabler Pro and external controllers send power and control signals to fixtures over the single leader cable.
4. Verify that all additional supporting equipment (switches, controllers) is in place.
5. Ensure that all additional parts and tools are available, including:

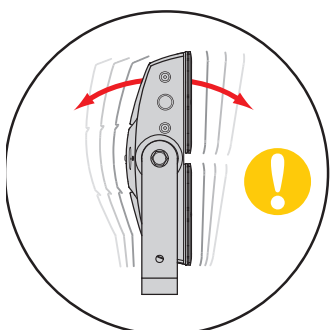
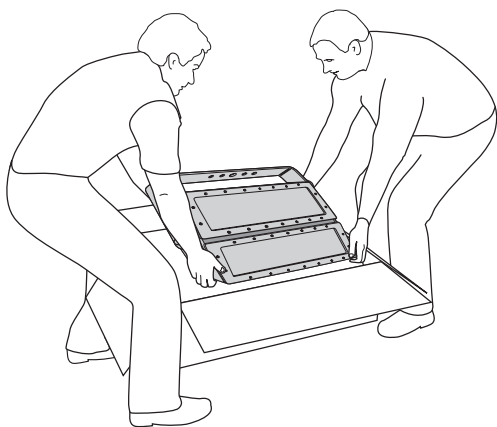
- A 28 mm hex or adjustable wrench for adjusting the locking bolts on the fixture bracket.
- One electrical junction box per fixture, rated for your application. (Refer to the junction box manufacturer's literature for additional items required for mounting or sealing.)
- A sufficient length of 4-conductor copper wire. We recommend 12 AWG (2.05 mm) stranded wire.
- Conduit as required.
- Electronics-grade room temperature vulcanizing (RTV) silicone sealant.

Mounting bracket dimensions for pre-drilling



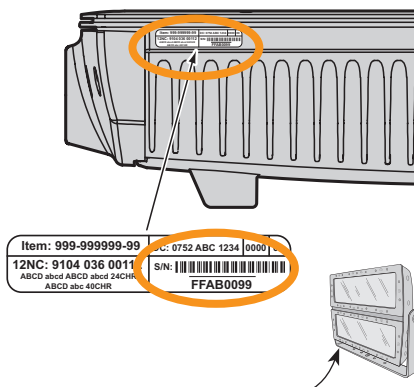
** To streamline the configuration of complex installations, record the serial number (DMX) or IP address (Ethernet) and location of each Data Enabler Pro.*

Unpack the Fixtures



Do not rest iW Reach Powercore gen2 on its back, as doing so may damage the connector port. Be careful not to tip the fixture over during positioning.

1. Unpack iW Reach Powercore gen2 fixtures. Because each iW Reach Powercore gen2 fixture weighs 34 kg (75 lb), you may need two people to lift the fixture out of the box and position it in the mounting location.
2. Each iW Reach Powercore gen2 fixture comes pre-programmed with a unique serial number. If you plan to control fixtures independently, record the serial numbers in a layout grid (typically a spreadsheet or list) for easy reference and light addressing.

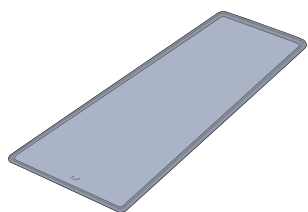


3. Assign each fixture to a position in the lighting design plan.
4. To streamline installation and aid in light show programming, you can affix a weatherproof label identifying the order or placement in the installation to an inconspicuous location on each light fixture's housing.

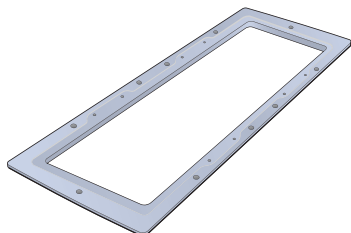
Attach Accessory Lenses (Optional)

Accessories can be installed to change the beam angle or add extra glare control to the fixture in outdoor environments.

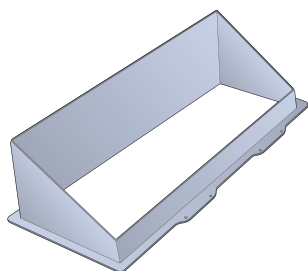
* For complete instructions on how to install the accessories, refer to the *Accessory Installation Instructions* at <http://www.colorkinetics.com/lis/accessories/Reach-Powercore/>



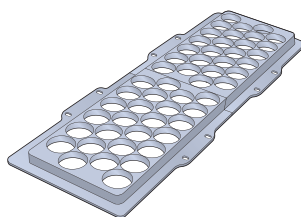
Spread Lens



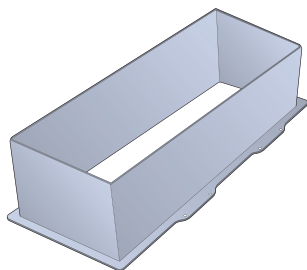
Trim Bezel



Half Glare Shield



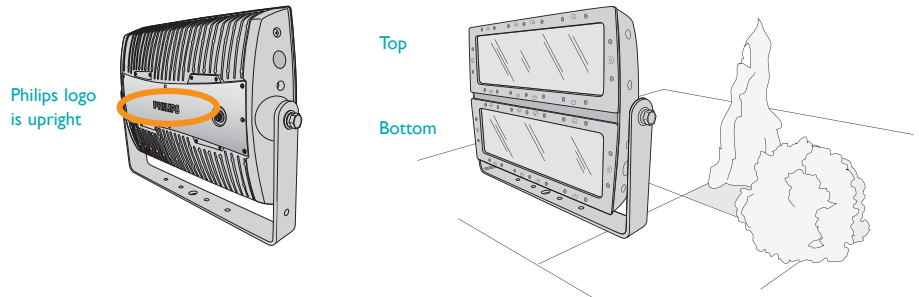
Louver



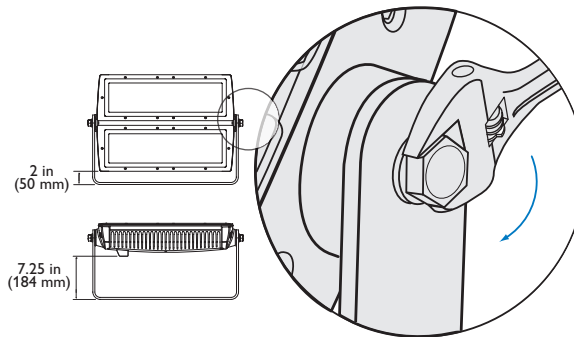
Full Glare Shield

Position and Mount Fixtures

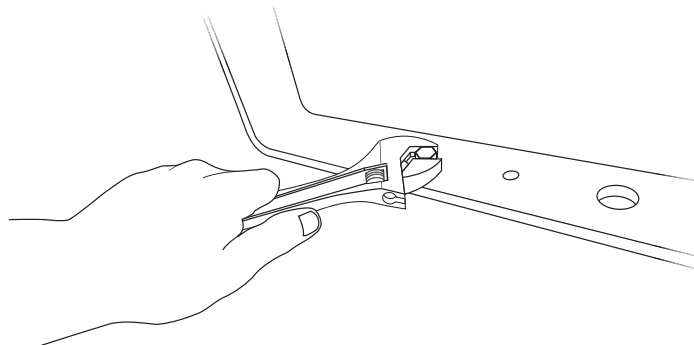
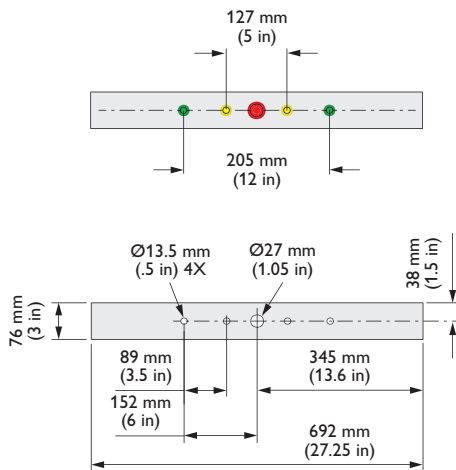
1. Position each iW Reach Powercore gen2 fixture in its designated mounting location. Make sure the mounting area is clear of debris and other obstructions.



2. Loosen the locking bolts, using a 28 mm hex or adjustable wrench, and rotate the fixture to access the mounting bracket. Tilting the fixture 90° affords 184 mm (7.25 in) clearance.



3. If mounting holes have been pre-drilled, align the mounting bracket's screw holes with the pre-drilled holes. Mount the fixture bracket using hardware appropriate for the mounting substrate. Use at least two screws to secure each fixture, one on either side of the mounting bracket's central screw hole.



Connect the Fixtures

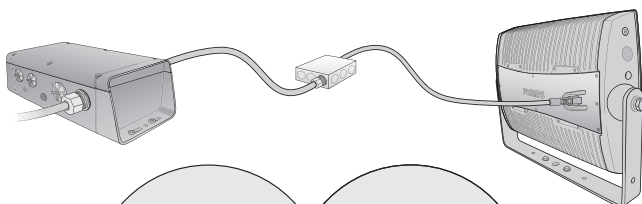
Make sure the power is OFF before connecting iW Reach Powercore gen2 fixtures.

1. Mount junction boxes in accordance with the lighting design plan.
2. If installing fixtures in a series, pull 4-conductor copper wire between each junction box in the series.

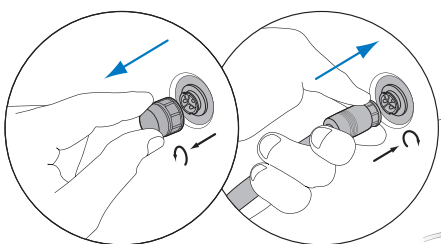
If installing fixtures in parallel, pull 4-conductor copper wire from a common junction box to each fixture's junction box.

The maximum cable run from a Data Enabler Pro to any individual iW Reach Powercore gen2 fixture is 53 m (175 ft). When installing in parallel, the total cable length cannot exceed 122 m (400 ft).

3. If necessary, remove the connector cap from the port on the back of the iW Reach Powercore gen2 housing. Insert the leader cable into the port. Turn the leader cable's lock nut to the right until it locks into place.
4. Use wire nuts to connect line, neutral, ground, and data. If installing in series, connect the leader cable from each fixture to the fixture's junction box. If installing in parallel, connect the leader cable from each fixture to the lead wire from the Data Enabler Pro in the common junction box.



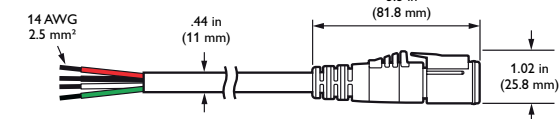
UL/CE (100–277 VAC)



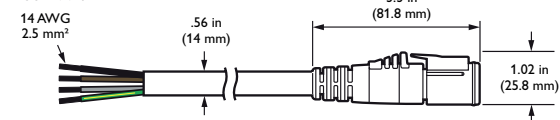
CQC (100–240 VAC)

Leader Cable connector dimensions

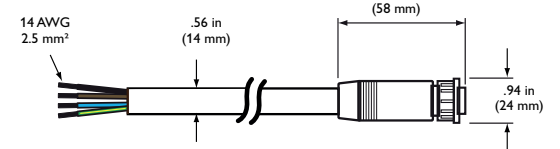
UL / cUL 100-277 V



CE / PSE 100-277 V



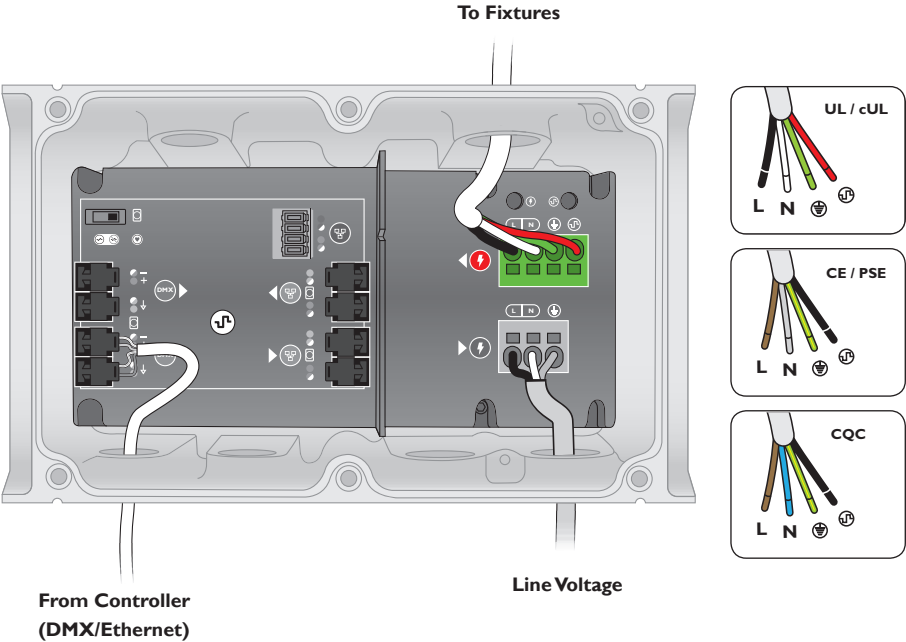
CQC 100-240 V



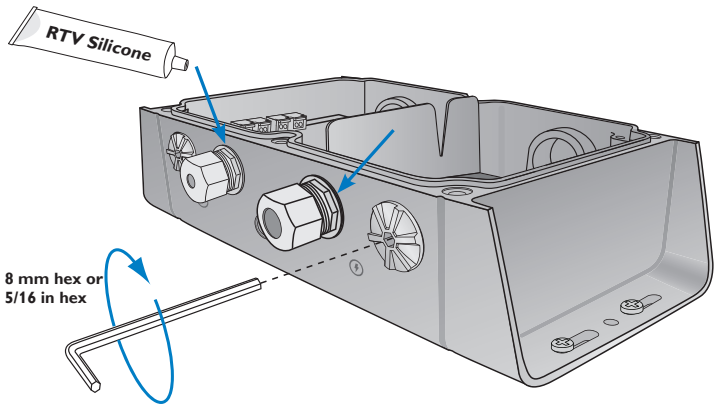
5. Tuck wire connections into the junction box.
6. Seal all junction boxes with electronics-grade RTV silicone sealant. Use gaskets, clamps, and other parts and fittings required to comply with local outdoor wiring codes.
7. Run the wiring from the first junction box in the series to the Data Enabler 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.

✱ Refer to the Data Enabler Pro Product Guide for complete installation and operation details.



8. Secure the Data Enabler Pro cover. Seal the Data Enabler Pro with electronics-grade RTV silicone sealant.



Controlling iW Reach Powercore gen2 Fixtures

Philips Color Kinetics offers a number of control options for iW Reach Powercore gen2 fixtures, from simple to complex

Displaying Fixed Light Output

For installations in which you want to manually adjust the brightness and color temperature of all fixtures in unison, use ColorDial Pro or iColor Keypad. With these controllers, no fixture node addressing or configuration is necessary.

ColorDial Pro and iColor Keypad are Power-Over-Ethernet (PoE) devices that require a PoE switch, or a conventional Ethernet switch with a PoE injector. Refer to the ColorDial Pro or iColor Keypad documentation for details on how to install and use these controllers with iW Reach Powercore gen2 fixtures.

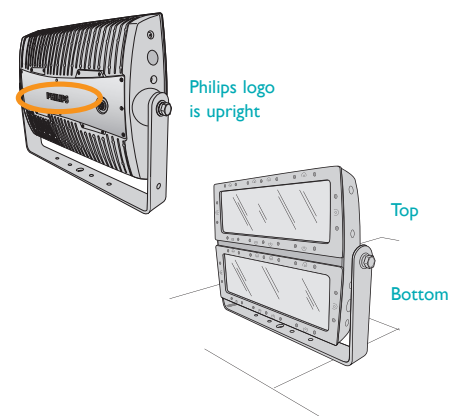
iW Reach Powercore gen2 has three LED channels: warm, neutral, and cool. You can easily control all fixtures in unison using the Fixed Color effect in iColor Player or iColor Keypad, or the Fixed Color or Variable Color effect in ColorDial Pro.

Displaying Dynamic Light Output

For dynamic installations in which you want to display different light output on each iW Reach Powercore gen2 fixture, or each fixture half, simultaneously, you must use an RGB-based DMX or Ethernet controller such as iPlayer 3 or Light System Manager. To support dynamic effects that automatically modify brightness and color temperature on individual fixtures or each half of a fixture, you must address and configure iW Reach Powercore gen2 fixtures as you would any color-changing (RGB) fixture.

iW Reach Powercore gen2 fixtures use DMX addresses to communicate with controllers. The number of DMX addresses each iW Reach Powercore gen2 fixture requires depends on the fixture's configuration.

* ColorDial Pro is an 8-bit controller. You must use a 16-bit compatible controller to operate fixtures in 16-bit mode.



Addressing iW Reach Powercore gen2 Fixtures

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

You address and configure iW Reach Powercore gen2 fixtures using QuickPlay Pro addressing and configuration software. Fixtures are identified within QuickPlay Pro by serial number, so you will need the layout grid that you created when you recorded the serial numbers of your fixtures during installation planning.

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

iW Reach Powercore gen2 fixtures operate in 8-bit mode by default. You can configure fixtures to operate in 16-bit mode, which increases resolution for smoother dimming and more precise control. You can also configure fixtures to operate in half-fixture mode or full-fixture mode. In full-fixture mode,

* You can download QuickPlay Pro addressing and configuration software from www.philipscolorkinetics.com/support/addressing.

the top and bottom halves of the fixture work in unison (show the same light output simultaneously). In half-fixture mode, the two halves work independently (can show different light output simultaneously).

In 8-bit mode, fixtures use one DMX address per LED channel. In 16-bit mode, fixtures 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 fixture resolution from 256 dimming steps to 65,536 (256 x 256) dimming steps.

You can address and configure iW Reach Powercore gen2 fixtures in much the same way as you would address any RGB fixture. The red channel corresponds to the warm LEDs, the green channel corresponds to the neutral LEDs, and the blue channel corresponds to the cool LEDs.

iW Reach Powercore gen2 fixtures come factory-addressed with a starting DMX address of 1. For lighting designs where fixtures work in unison, all fixtures can be assigned the same starting DMX address. Changes to the default starting DMX addresses 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 light output on different fixtures, you must assign unique DMX addresses to your fixtures and sort them in a useful order.

The following table shows the DMX channel assignments for the different possible iW Reach Powercore gen2 configurations, assuming a starting DMX address of 1.

LED Channels

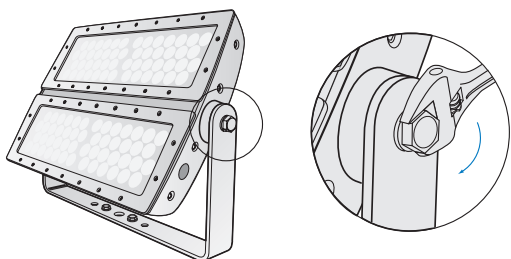
RGB	iW Reach Powercore gen2
Red	Warm
Green	Neutral
Blue	Cool

DMX Channel Assignments

8-Bit Mode												
Full-Fixture Mode	Top Half/Bottom Half											
	1				2				3			
	Warm				Neutral				Cool			
Half-Fixture Mode	Top Half						Bottom Half					
	1		2		3		4		5		6	
	Warm		Neutral		Cool		Warm		Neutral		Cool	
16-Bit Mode												
Full-Fixture Mode	Top Half/Bottom Half											
	1		2		3		4		5		6	
	Warm		Warm		Neutral		Neutral		Cool		Cool	
Half-Fixture Mode	Top Half						Bottom Half					
	1	2	3	4	5	6	7	8	9	10	11	12
	Warm	Warm	Neutral	Neutral	Cool	Cool	Warm	Warm	Neutral	Neutral	Cool	Cool

Aim and Lock the Fixtures

1. Aim the fixtures by rotating each fixture to the correct angle.
2. Lock the fixtures by tightening the locking bolts using a 28 mm hex or adjustable wrench.



✳ Do not look directly into the fixture when aiming and locking.

✳ For exterior applications with direct exposure to water, iW Reach Compact Powercore gen2 fixtures should not be aimed directly upwards, as water may pool on the lens and affect beam quality. Instead, the fixture should be angled to allow for proper water drainage.

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DAS-000030-00 R08 23 MAR 2016



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