



# iW Reach Compact Powercore

Premium long-throw exterior floodlight with intelligent white light

**PHILIPS**



# iW Reach Compact Powercore

## Premium long-throw exterior floodlight with intelligent white light

iW Reach Compact Powercore high-performance LED fixtures are premium exterior long-throw dynamic high-quality white luminaires for lighting tall buildings, bridges, and iconic structures. iW Reach Compact Powercore 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 Compact Powercore 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 Powercore technology—Powercore technology rapidly, efficiently, and accurately controls power output to fixtures directly from line voltage. The Philips Color Kinetics Data Enabler Pro merges line voltage with control data and delivers them over a single standard wire, 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

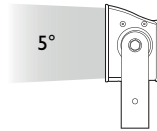
Fixtures produce thousands of lumens and throw light hundreds of feet. iW Reach Compact Powercore offers LED-based intelligent white light illumination of large-scale structures and objects. New accessories, including a new louver and two glare shields, provide extra flexibility to help with dark sky compliance, discomfort glare, and trespass light.

# Photometrics

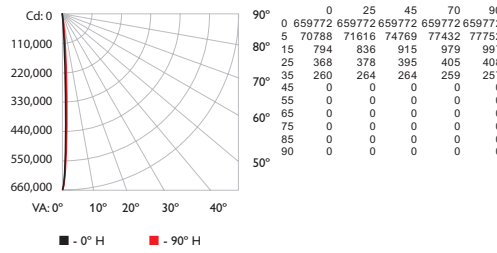
Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at [www.philipscolorkinetics.com/support/ies](http://www.philipscolorkinetics.com/support/ies).

## iW Reach Compact Powercore 5° native lens

Lumens	Efficacy
7,425	62.1



### Polar Candela Distribution



### Illuminance at Distance

	Center Beam fc	Beam Width
4 ft	41,236 fc	0.3 ft 0.3 ft
8 ft	10,309 fc	0.6 ft 0.7 ft
12 ft	4,582 fc	0.8 ft 1.0 ft
16 ft	2,577 fc	1.1 ft 1.3 ft
20 ft	1,649 fc	1.4 ft 1.6 ft
24 ft	1,145 fc	1.7 ft 2.0 ft

812 ft (247.5 m)  
1 fc maximum distance

Vert. Spread: 4.0°  
Horiz. Spread: 4.7°

### Zonal Lumen

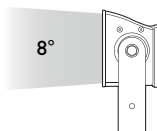
Zone	Lumens	% Luminaire
0-30	7,337.8	98.2%
0-40	7,471.8	100.0%
0-60	7,471.8	100.0%
0-90	7,471.8	100.0%
60-90	0.0	0.0%
70-100	0.0	0.0%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	7,471.8	100.0%

### Coefficients Of Utilization - Zonal Cavity Method

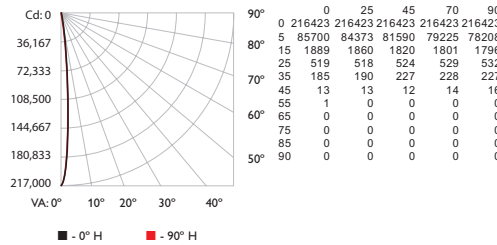
		Effective Floor Cavity Reflectance: 20%																							
RCC %:		80				70				50				30				10				0			
RW %:		70	50	30	0	70	50	30	0	50	30	0	50	30	0	50	30	0	50	30	0	50	30	0	
RCR:																									
0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00							
1	1.16	1.15	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	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	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	0.99								
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	1.03	1.01	0.97	1.02	1.00	0.99	1.01	1.00	0.98	1.00	0.98	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	0.97	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	0.97	0.96	0.99	0.97	0.96	0.96							

## iW Reach Compact Powercore 8° diffuser lens

Lumens	Efficacy
6,631	54.8



### Polar Candela Distribution



### Illuminance at Distance

	Center Beam fc	Beam Width
4 ft	13,526 fc	0.6 ft 0.6 ft
8 ft	3,382 fc	1.2 ft 1.1 ft
12 ft	1,503 fc	1.8 ft 1.7 ft
16 ft	845 fc	2.4 ft 2.3 ft
20 ft	541 fc	3.0 ft 2.8 ft
24 ft	376 fc	3.6 ft 3.4 ft

465 ft (141.7 m)  
1 fc maximum distance

Vert. Spread: 8.6°  
Horiz. Spread: 8.1°

### Zonal Lumen

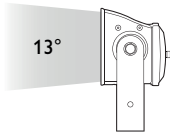
Zone	Lumens	% Luminaire
0-30	6,481.5	97.9%
0-40	6,604.0	99.8%
0-60	6,618.6	100.0%
0-90	6,618.6	100.0%
60-90	0.0	0.0%
70-100	0.0	0.0%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	6,618.6	100.0%

### Coefficients Of Utilization - Zonal Cavity Method

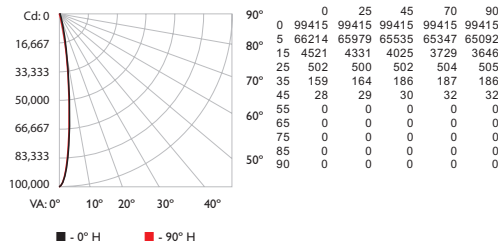
		Effective Floor Cavity Reflectance: 20%															
RCC %:	80					70					50					10	0
RW %:	70	50	30	0	70	50	30	0	70	50	30	0	70	50	30	0	
RCR:																	
0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.00
1	1.16	1.15	1.13	1.12	1.14	1.13	1.11	0.99	1.09	1.08	1.07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

iW Reach Compact Powercore  
13° diffuser lens

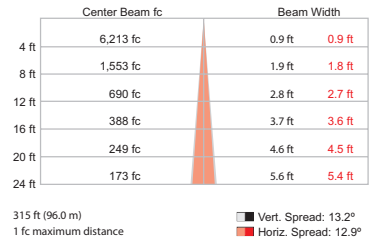
Lumens	Efficacy
6,562	54.3



Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

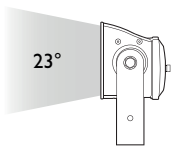
Zone	Lumens	% Luminaire
0-30	6,418.9	97.9%
0-40	6,529.8	99.6%
0-60	6,556.5	100.0%
0-90	6,556.5	100.0%
60-90	0.0	0.0%
70-100	0.0	0.0%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	6,556.5	100.0%

Coefficients Of Utilization - Zonal Cavity Method

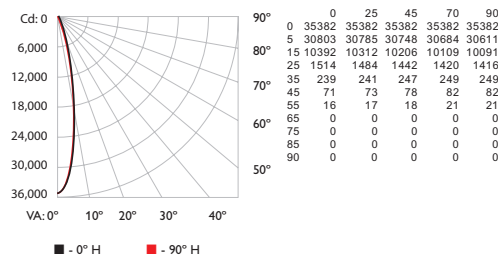
		Effective Floor Cavity Reflectance: 20%																			
RCC %:	80				70				50				30				10				0
RW %:	70	50	30	0	70	50	30	0	50	30	0	50	30	0	50	30	0	50	30	0	
RCR:																					
0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00			
1	1.16	1.14	1.13	1.11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

iW Reach Compact Powercore  
23° diffuser lens

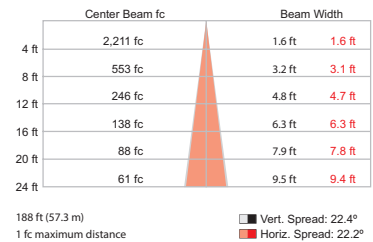
Lumens	Efficacy
6,428	53.1



Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

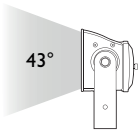
Zone	Lumens	% Luminaire
0-30	6,178.9	96.2%
0-40	6,345.6	98.8%
0-60	6,424.9	100.0%
0-90	6,425.6	100.0%
60-90	0.7	0.0%
70-100	0.0	0.0%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	6,425.6	100.0%

Coefficients Of Utilization - Zonal Cavity Method

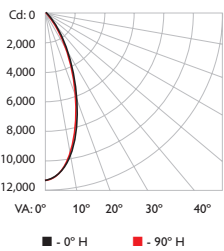
RCC %:		80				70				Effective Floor Cavity				Reflectance: 20%			
RW %:		70	50	30	0	70	50	30	0	50	30	10	0	50	30	20	0
RCR:																	
0	1.19	1.19	1.19	1.19	1.16	1.16	1.06	1.00	1.11	1.11	1.11	1.06	1.06	1.02	1.02	1.02	1.00
1	1.15	1.13	1.11	1.10	1.13	1.11	1.09	0.97	1.07	1.06	1.05	1.03	1.02	1.02	1.00	0.99	0.99
2	1.12	1.08	1.05	1.03	1.10	1.07	1.04	0.95	1.03	1.01	1.00	1.01	0.99	0.98	0.97	0.96	0.94
3	1.08	1.04	1.00	0.98	1.07	1.03	0.99	0.92	1.00	0.98	0.95	0.98	0.96	0.94	0.96	0.94	0.93
4	1.05	1.00	0.96	0.94	1.04	0.99	0.96	0.89	0.97	0.94	0.92	0.95	0.93	0.91	0.94	0.92	0.90
5	1.02	0.97	0.93	0.90	1.01	0.96	0.92	0.87	0.94	0.91	0.89	0.93	0.90	0.88	0.91	0.89	0.87
6	1.00	0.94	0.90	0.87	0.98	0.93	0.89	0.85	0.92	0.89	0.86	0.91	0.88	0.86	0.89	0.87	0.85
7	0.97	0.91	0.87	0.84	0.96	0.90	0.87	0.83	0.89	0.86	0.84	0.88	0.85	0.83	0.87	0.85	0.83
8	0.95	0.88	0.85	0.82	0.94	0.88	0.84	0.81	0.87	0.84	0.81	0.86	0.83	0.81	0.85	0.83	0.81
9	0.92	0.86	0.82	0.80	0.92	0.86	0.82	0.79	0.85	0.82	0.79	0.84	0.81	0.79	0.84	0.81	0.80
10	0.90	0.84	0.80	0.78	0.90	0.84	0.80	0.77	0.83	0.80	0.77	0.82	0.79	0.77	0.82	0.79	0.77

iW Reach Compact Powercore  
43° diffuser lens

Lumens	Efficacy
6,408	53



Polar Candela Distribution



90°	0	25	45	70	90
0	11358	11358	11358	11358	11358
5	10850	10840	10832	10808	10784
15	8057	8020	7951	7865	7820
25	4309	4253	4159	4063	4029
35	1507	1478	1428	1388	1382
45	339	333	330	333	334
55	87	89	92	96	97
65	28	30	31	35	35
75	0	0	0	2	2
85	0	0	0	0	0
90	0	0	0	0	0

Illuminance at Distance

Center Beam fc	Beam Width
710 fc	3.1 ft 3.0 ft
177 fc	6.2 ft 6.0 ft
79 fc	9.3 ft 9.0 ft
44 fc	12.5 ft 12.0 ft
28 fc	15.6 ft 15.0 ft
20 fc	18.7 ft 18.0 ft

106.5 ft (32.5 m)  
1 fc maximum distance  
Vert. Spread: 42.6°  
Horiz. Spread: 41.1°

Zonal Lumen

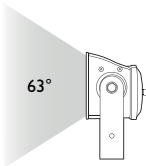
Zone	Lumens	% Luminaire
0-30	5,081.5	79.3%
0-40	6,005.3	93.7%
0-60	6,371.2	99.4%
0-90	6,406.7	100.0%
60-90	35.4	0.6%
70-100	3.5	0.1%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	6,406.7	100.0%

Coefficients Of Utilization - Zonal Cavity Method

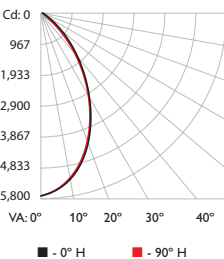
		Effective Floor Cavity Reflectance: 20%															
RCC %:	80	70	50	30	10	0											
RW %:	70	50	30	0	70	50	30	0	70	50	30	0	70	50	30	0	
RCR:																	
0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.00
1	1.14	1.11	1.09	1.07	1.11	1.09	1.07	0.95	1.05	1.03	1.02	1.01	1.00	0.99	0.98	0.97	0.94
2	1.09	1.04	1.00	0.97	1.07	1.03	0.99	0.89	0.99	0.97	0.94	0.96	0.94	0.92	0.92	0.90	0.89
3	1.04	0.98	0.93	0.90	1.02	0.96	0.92	0.84	0.94	0.90	0.87	0.92	0.89	0.86	0.89	0.87	0.85
4	0.99	0.92	0.87	0.83	0.97	0.91	0.86	0.79	0.89	0.85	0.82	0.87	0.83	0.81	0.85	0.82	0.80
5	0.95	0.87	0.82	0.78	0.93	0.86	0.81	0.75	0.84	0.80	0.77	0.83	0.79	0.76	0.81	0.78	0.75
6	0.90	0.82	0.77	0.73	0.89	0.81	0.76	0.71	0.80	0.75	0.72	0.79	0.75	0.72	0.77	0.74	0.71
7	0.87	0.78	0.72	0.69	0.85	0.77	0.72	0.67	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.67
8	0.83	0.74	0.69	0.65	0.82	0.74	0.68	0.64	0.72	0.68	0.64	0.71	0.67	0.64	0.71	0.67	0.64
9	0.79	0.71	0.65	0.61	0.78	0.70	0.65	0.61	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.64	0.61
10	0.76	0.67	0.62	0.58	0.75	0.67	0.62	0.58	0.66	0.61	0.58	0.65	0.61	0.58	0.65	0.61	0.58

iW Reach Compact Powercore  
63° diffuser lens

Lumens	Efficacy
6,325	52.3



Polar Candela Distribution



90°	0	25	45	70	90
0	5718	5718	5718	5718	5718
5	5598	5600	5602	5601	5589
15	4807	4820	4838	4853	4851
25	3616	3633	3663	3695	3695
35	2231	2260	2303	2346	2348
45	1024	1053	1096	1145	1156
55	334	348	360	409	415
65	94	99	109	127	129
75	15	20	23	31	33
85	0	0	0	0	0
90	0	0	0	0	0

Illuminance at Distance

Center Beam fc	Beam Width
357 fc	4.7 ft 4.9 ft
89 fc	9.4 ft 9.7 ft
40 fc	14.1 ft 14.6 ft
22 fc	18.9 ft 19.4 ft
14 fc	23.6 ft 24.3 ft
10 fc	28.3 ft 29.1 ft

75.5 ft (23.0 m)  
1 fc maximum distance  
Vert. Spread: 61.0°  
Horiz. Spread: 62.5°

Zonal Lumen

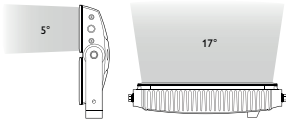
Zone	Lumens	% Luminaire
0-30	3,546.1	56.1%
0-40	4,976.2	78.7%
0-60	6,180.6	97.7%
0-90	6,324.6	100.0%
60-90	144.0	2.3%
70-100	27.6	0.4%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	6,324.6	100.0%

Coefficients Of Utilization - Zonal Cavity Method

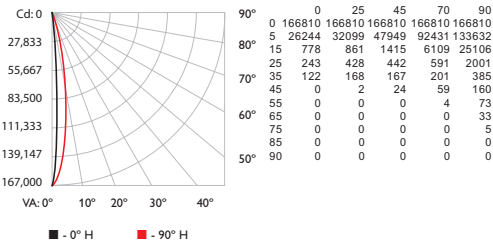
		Effective Floor Area												Reflectance: 20%			
RCC %:		80			70			50			30			10		0	
RW %:		70	50	30	0	70	50	30	0	70	50	30	0	70	50	30	0
RCR:																	
0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11	1.06	1.06	1.02	1.02	1.00	
1	1.13	1.10	1.07	1.04	1.10	1.07	1.05	0.92	1.03	1.01	0.99	1.00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

iW Reach Compact Powercore  
5° x 17° asymmetric lens

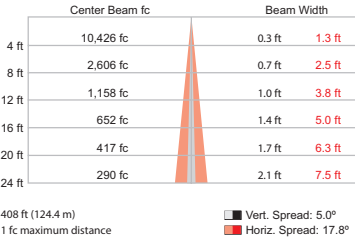
Lumens	Efficacy
6,534	54



Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

Zone	Lumens	% Luminaire
0-30	6,373.5	97.7%
0-40	6,487.7	99.5%
0-60	6,521.6	100.0%
0-90	6,523.1	100.0%
60-90	1.5	0.0%
70-100	0.2	0.0%
90-120	0.0	0.0%
90-180	0.1	0.0%
0-180	6,523.3	100.0%

Coefficients Of Utilization - Zonal Cavity Method

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

# 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†	7,425 (no spread lens, all channels full on)
	Efficacy (lm/W)	62.1 (no spread lens, all channels full on)
	CRI	79 (no spread lens, all channels full on)
Electrical	Input Voltage	100 – 277 VAC, auto-switching, 50/60 Hz
	Power Consumption	130 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)	350 x 733 x 196 mm (13.8 x 28.9 x 7.7 in)
	Weight	23 kg (51 lb)
	Effective Projected Area (EPA)	0.186 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
Certification and Safety	Humidity	0 – 95%, non-condensing
	Fixture Run Lengths	To calculate fixture 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
	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.

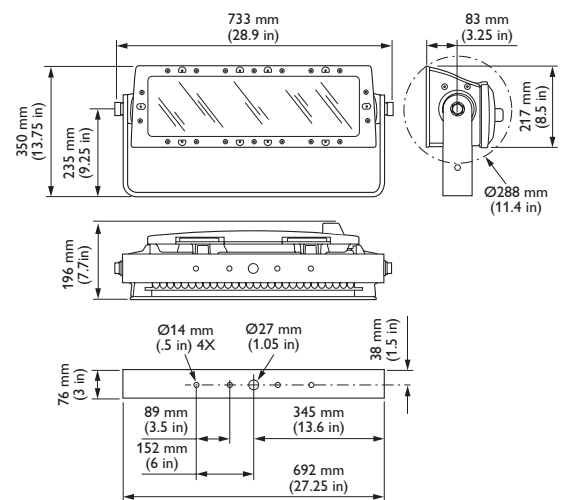
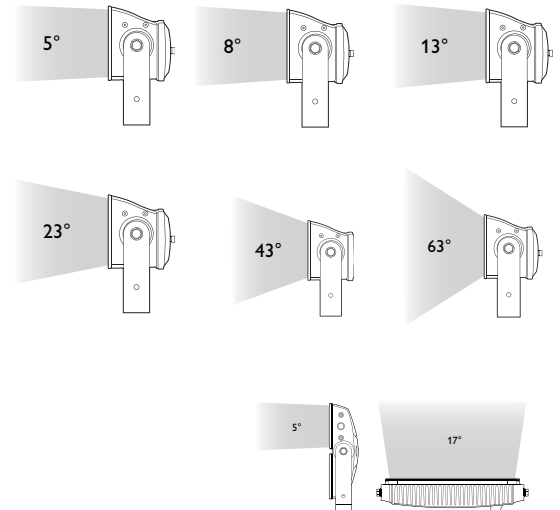


## Lumen Maintenance

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<sub>xx</sub> = 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.



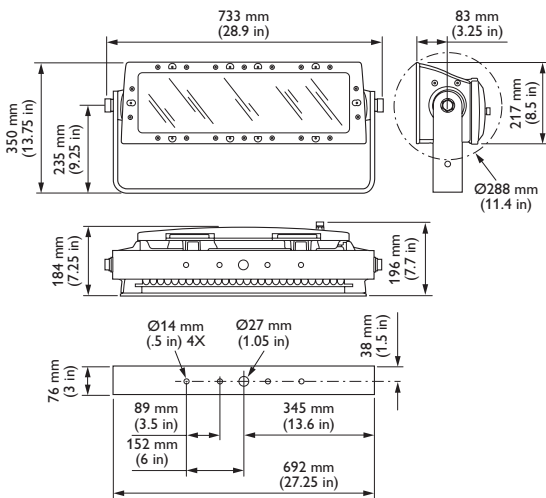
# Specifications, CQC

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†	7,425 (no spread lens, all channels full on)
	Efficacy (lm/W)	62.1 (no spread lens, all channels full on)
	CRI	79 (no spread lens, all channels full on)
Electrical	Input Voltage	100 – 240VAC, auto-switching, 50/60 Hz
	Power Consumption	130 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)	350 x 733 x 196 mm (13.8 x 28.9 x 7.7 in)
	Weight	23 kg (51 lb)
	Effective Projected Area (EPA)	0.186 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	Certification	CQC, CE, FCC Class A, PSE
	Environment	Dry/Damp/Wet Location, IP66
	Fixture Run Lengths	To calculate fixture 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>

\* 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<sub>xx</sub> = 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.

CHROMACORE®  
CKTECHNOLOGY

O P T I B I N®  
CKTECHNOLOGY

POWERCORE®  
CKTECHNOLOGY

## Fixtures and Data Enabler Pro

iW Reach Compact Powercore 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 ColorReach Powercore fixture to a junction box or Data Enabler Pro.
- 4-conductor copper wire to connect iW Reach Compact Powercore 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 UL/CE (Leader cable sold separately)	UL/CE	523-000096-02	912400133461
iW Reach Powercore CQC (Includes 1.8 m (6 ft) leader cable)	CQC	523-000045-03	912400133494

### 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 (Requires Trim Bezel)	120-000187-02	912400133589	
Half Glare Shield (Requires Trim Bezel)	120-000187-01	912400133588	
Full Glare Shield (Requires Trim Bezel)	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.

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

## Installation

iW Reach Compact Powercore, 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 Compact Powercore 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 Compact Powercore 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

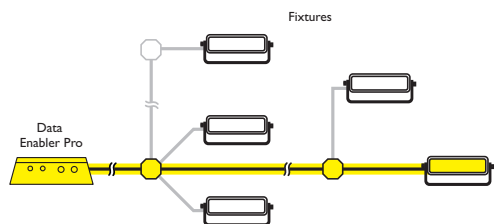
When installing in damp or wet locations, you must seal all junction boxes and Data Enabler Pro devices with electronics-grade RTV silicone sealant so that water or moisture cannot enter or accumulate in wiring compartments, cables, fixtures, or other electrical parts. You must use suitable outdoor-rated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

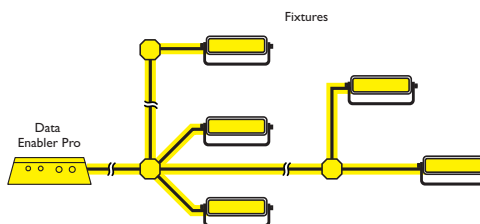
1. Refer to the lighting design plan, architectural diagram, or other diagram that shows the physical layout of the installation to identify the locations of all switches, controllers, Data Enabler Pro devices, fixtures, and cables.

iW Reach Compact Powercore 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/](http://www.philipscolorkinetics.com/support/install_tool/), or consult Application Engineering Services at [support@colorkinetics.com](mailto: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 175 ft (53.3 m)



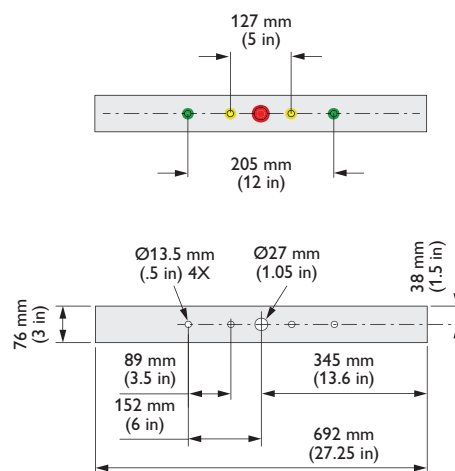
Data Integrity – total length 400 ft (122 m)

2. Ensure that the fixture mounting locations and substrates are sufficiently sturdy to bear the weight of each iW Reach Compact Powercore 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 Compact Powercore 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 0.186 m<sup>2</sup>.

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.

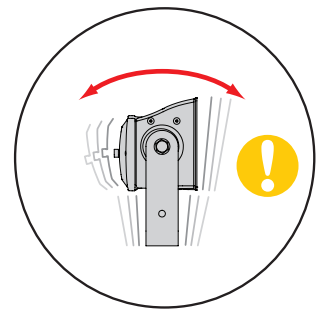
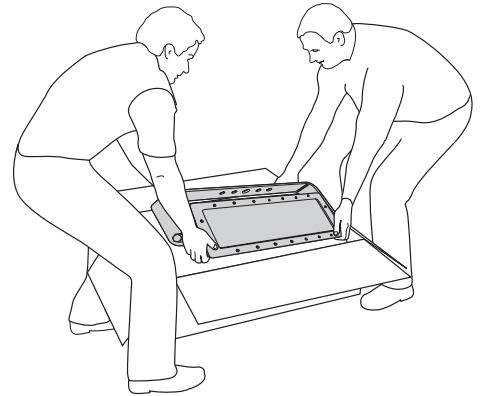
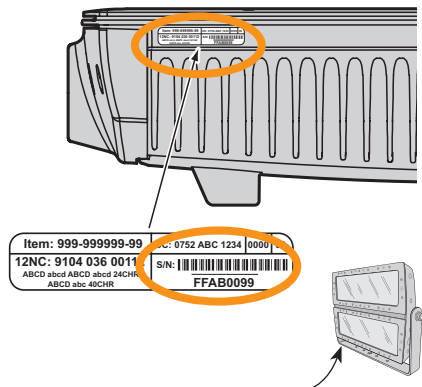
#### Mounting bracket dimensions for pre-drilling



*\* 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

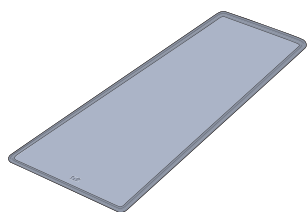
1. Unpack iW Reach Compact Powercore fixtures. Because each iW Reach Compact Powercore fixture weighs 34 kg (75 lb), you may need two people to lift the fixture out of the box and position it in the mounting location.
2. Each iW Reach Compact Powercore fixture comes pre-programmed with a unique serial 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.



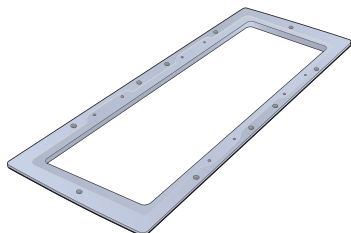
Do not rest iW Reach Compact Powercore on its back, as doing so may damage the connector port. Be careful not to tip the fixture over during positioning.

## Attach Accessory Lenses (Optional)

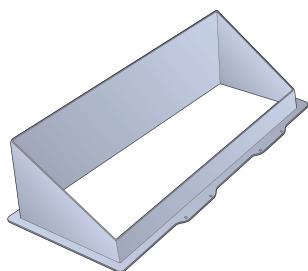
Accessories can be installed to change the beam angle or add extra glare control to the fixture in outdoor environments.



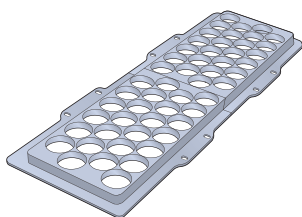
Spread Lens



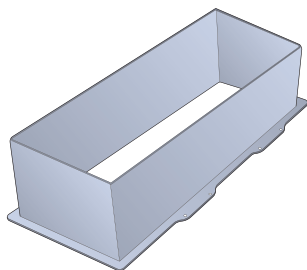
Trim Bezel



Half Glare Shield



Louver

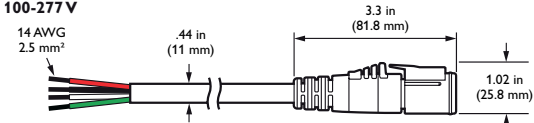


Full Glare Shield

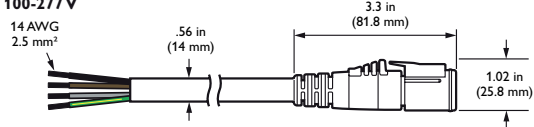
\* For complete instructions on how to install the accessories, refer to the *Accessory Installation Instructions* at <http://www.colorkinetics.com/lis/accessories/Reach-Powercore/>

## Leader Cable connector dimensions

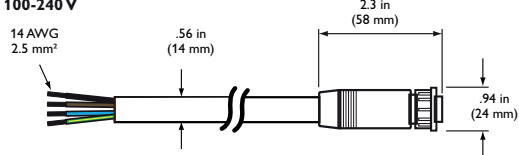
### UL / cUL 100-277 V



### CE / PSE 100-277 V

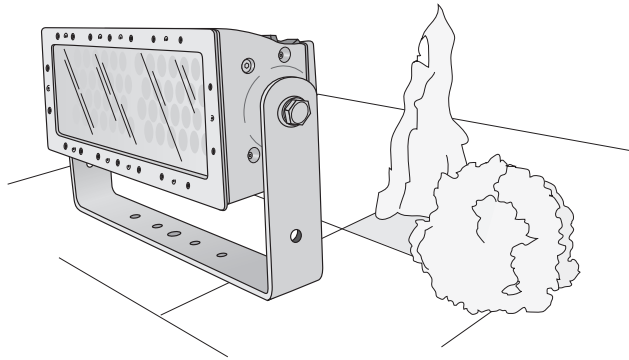


### CQC 100-240 V

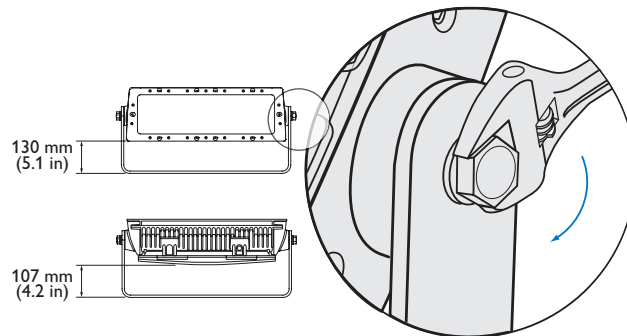


## Position and Mount Fixtures

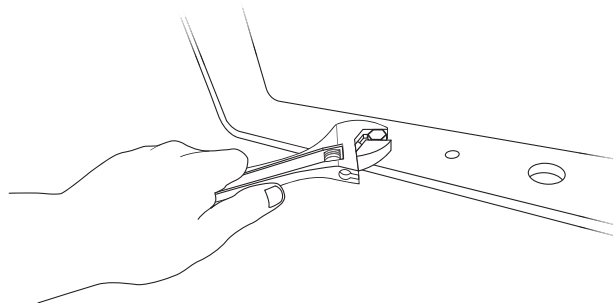
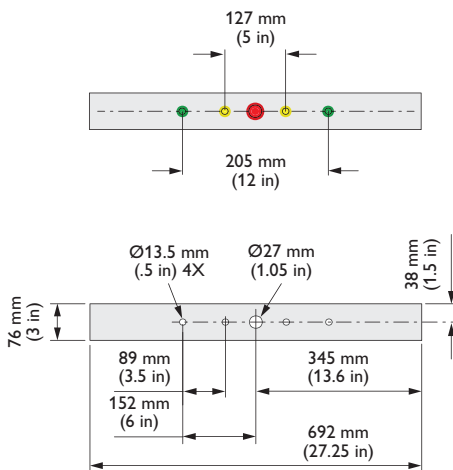
1. Position each iW Reach Compact Powercore fixture in its designated mounting location. Make sure the mounting area is clear of debris and other obstructions.



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 107 mm (4.2 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 Compact Powercore fixtures.

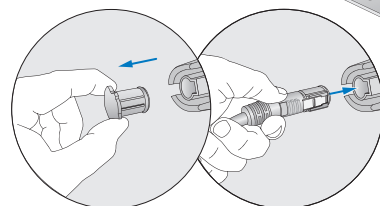
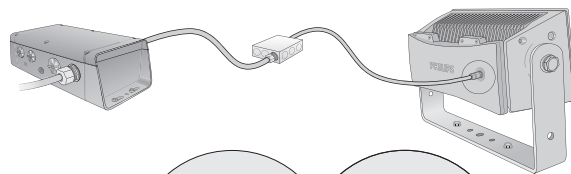
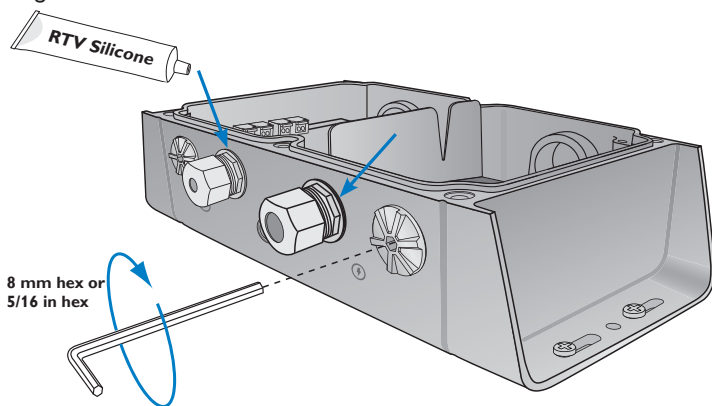
1. Mount junction boxes in accordance with the lighting design plan.

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

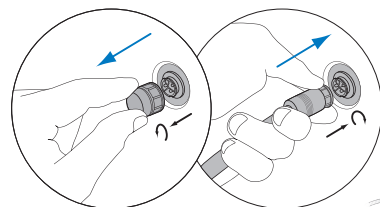
If installing fixtures in parallel, pull 4-conductor copper wire from a common junction box to each fixture's junction box.

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

- If necessary, remove the connector cap from the port on the back of the iW Reach Compact Powercore housing. Insert the leader cable into the port. .
- 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.
- Tuck wire connections into the junction box.
- 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.



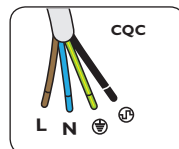
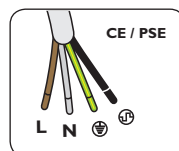
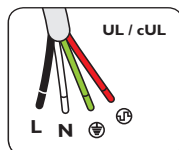
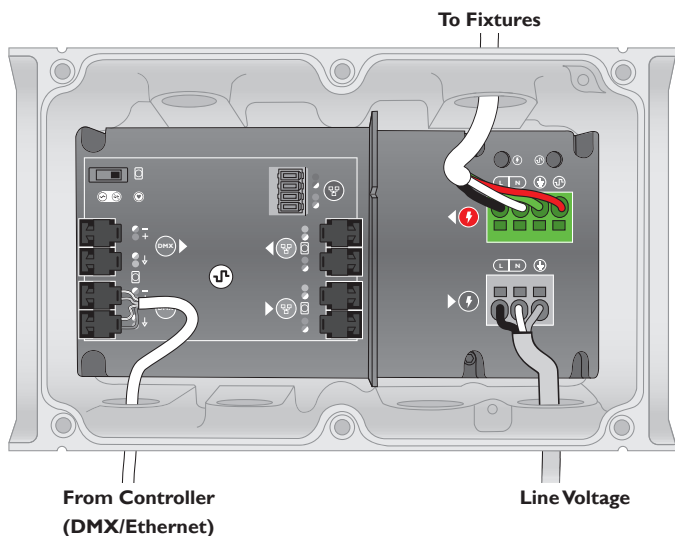
UL/CE (100-277 VAC)



CQC (100-240 VAC)

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

- 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.
- Secure the Data Enabler Pro cover. Seal the Data Enabler Pro with



electronics-grade RTV silicone sealant.

## Controlling iW Reach Compact Powercore Fixtures

Philips Color Kinetics offers a number of control options for iW Reach Compact Powercore 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 Compact Powercore fixtures.

iW Reach Compact Powercore 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 Compact Powercore fixture, 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, you must address and configure iW Reach Compact Powercore fixtures as you would any color-changing (RGB) fixture.

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

## Addressing iW Reach Compact Powercore Fixtures

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

You address and configure iW Reach Compact Powercore 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 Compact Powercore fixtures operate in 8-bit mode by default. You can configure fixtures to operate in 16-bit mode, which increases resolution for

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

✳ You can download QuickPlay Pro addressing and configuration software from [www.philipscolorkinetics.com/support/addressing](http://www.philipscolorkinetics.com/support/addressing).

smoother dimming and more precise control.

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 Compact Powercore 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 Compact Powercore 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 Compact Powercore configurations, assuming a starting

DMX Channel Assignments

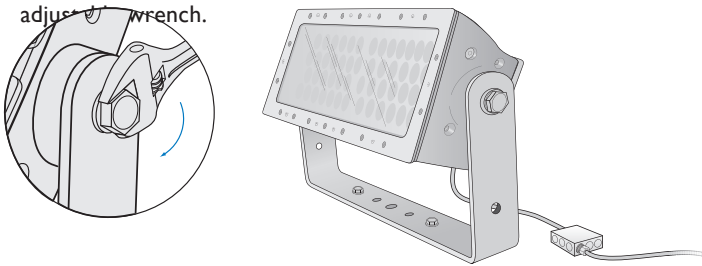
8-Bit Mode						
Full-Fixture Mode	1	2	3			
	Warm	Neutral	Cool			

16-Bit Mode						
Full-Fixture Mode	1	2	3	4	5	6
	Warm	Warm	Neutral	Neutral	Cool	Cool

DMX address of 1.

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 adjuster wrench.



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

⚠ For exterior applications with direct exposure to water, iW Reach Compact Powercore 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.

