



iW Reach Compact Powercore

Premium long-throw compact exterior floodlight with intelligent white light

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iW Reach Compact Powercore combines all the benefits of LED-based lighting and control in a compact fixture specifically designed for large-scale installations, such as skyscrapers, casinos, bridges, piers, public monuments, and themed attractions. iW Reach Compact Powercore combines channels of warm, neutral, and cool LED sources to offer high-quality variable white light in color temperatures ranging from 2700 K – 6500 K. iW Reach Compact Powercore delivers intense, energy-efficient output at a reasonable price, opening up new possibilities for exterior illumination.

- Integrates Powercore technology — Powercore technology rapidly, efficiently, and accurately controls power output to fixtures directly from line voltage. Philips Data Enabler Pro merges line voltage and control data and delivers them to fixtures over a single standard cable, dramatically simplifying installation and lowering total system cost.
- 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.
- Superior color consistency — Optibin, a proprietary binning optimization process developed by Philips Color Kinetics, guarantees consistency of hue across LEDs, fixtures, and manufacturing runs.
- Versatile optics — Exchangeable spread lenses of 8°, 13°, 23°, 40°, 63°, and an asymmetric 5° x 17° support a variety of photometric distributions for a multitude of applications, including spotlighting, wall grazing, and asymmetric wall washing. Bezel and gasket are included with spread lenses for easy user installation.
- High-performance, cost-effective light — Significantly less cost to install, operate, and maintain than traditional light sources.
- 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 a standard wrench.
- Universal power input range — Accepts a universal power input range of 100 – 277 VAC, allowing consistent installation in any location around the world.



Intense light output

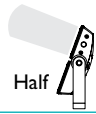
iW Reach Compact Powercore outputs thousands of lumens and throws light hundreds of feet, delivering legitimate LED-based white-light illumination of large-scale structures and objects in a compact, fully-sealed housing.

Photometrics / iW Reach Powercore

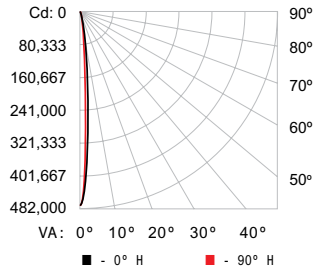
Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at www.philipscolorkinetics.com/support/ies.

5° (no spread lens)

Lumens	Efficacy
6785	56.5 lm / W



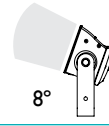
Polar Candela Distribution



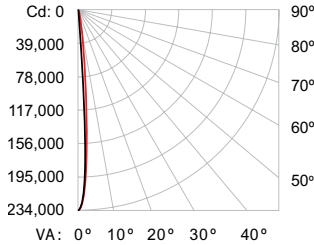
	0	25	45	70	90
0	1553	1553	1553	1553	1553
5	1185	1224	1319	1460	1530
15	245	304	491	1036	1398
25	96	104	147	542	1118
35	76	80	88	233	703
45	56	63	71	108	315
55	40	45	56	66	113
65	28	32	40	44	49
75	17	19	24	25	23
85	14	13	11	9	5
90	13	12	10	6	1

8° spread lens

Lumens	Efficacy
6185	49.7 lm / W



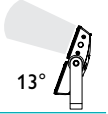
Polar Candela Distribution



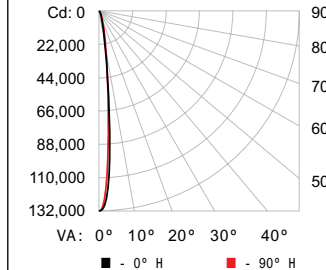
	0	25	45	70	90
0	233520	233520	233520	233520	233520
5	80126	76004	74534	74515	72919
15	968	965	959	952	952
25	257	257	260	260	266
35	143	139	133	132	169
45	80	75	72	75	77
55	60	59	52	55	54
65	47	45	41	42	40
75	37	35	33	33	32
85	31	30	30	30	30
90	30	30	30	30	30

13° spread lens

Lumens	Efficacy
6053	48.7 lm / W



Polar Candela Distribution



	0	25	45	70	90
0	131430	131430	131430	131430	131430
5	72586	67680	64489	63159	62851
15	2077	1839	1593	1401	1345
25	279	273	267	264	278
35	155	149	140	138	161
45	84	79	74	75	79
55	59	57	52	53	53
65	46	44	41	40	40
75	36	35	33	32	32
85	30	29	29	29	29
90	29	29	29	29	29

Illuminance at Distance

Center Beam fc	Beam Width
4 ft: 30,122 fc	0.4 ft 0.4 ft
8 ft: 7,531 fc	0.9 ft 0.8 ft
12 ft: 3,347 fc	1.3 ft 1.2 ft
16 ft: 1,883 fc	1.7 ft 1.6 ft
20 ft: 1,205 fc	2.2 ft 2.0 ft
24 ft: 837 fc	2.6 ft 2.4 ft

695 ft (211.8 m) 1 fc maximum distance
 ■ Vert. Spread: 6.2°
 ■ Horiz. Spread: 5.7°

Illuminance at Distance

Center Beam fc	Beam Width
4 ft: 14,595 fc	0.6 ft 0.6 ft
8 ft: 3,649 fc	1.1 ft 1.1 ft
12 ft: 1,622 fc	1.7 ft 1.7 ft
16 ft: 912 fc	2.3 ft 2.2 ft
20 ft: 584 fc	2.9 ft 2.8 ft
24 ft: 405 fc	3.4 ft 3.3 ft

484 ft (147.5 m) 1 fc maximum distance
 ■ Vert. Spread: 8.2°
 ■ Horiz. Spread: 7.9°

Illuminance at Distance

Center Beam fc	Beam Width
4 ft: 8,214 fc	0.8 ft 0.7 ft
8 ft: 2,054 fc	1.6 ft 1.4 ft
12 ft: 913 fc	2.4 ft 2.1 ft
16 ft: 513 fc	3.2 ft 2.8 ft
20 ft: 329 fc	4.1 ft 3.5 ft
24 ft: 228 fc	4.9 ft 4.2 ft

363 ft (110.6 m) 1 fc maximum distance
 ■ Vert. Spread: 11.6°
 ■ Horiz. Spread: 10.1°

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

RCC %:	80	70	50	30	10	0
RW %:	70	50	30	0	0	0
RCR:	0	119	119	119	119	119
1	116	114	112	111	111	111
2	113	111	108	106	106	106
3	111	108	105	103	103	103
4	109	106	103	101	101	101
5	108	104	101	99	99	99
6	107	102	99	97	97	97
7	105	101	97	95	95	95
8	104	100	96	94	94	94
9	103	99	95	93	93	93
10	103	99	95	93	93	93

Zonal Lumen

Zone	Lumens	% Fixture
0 - 60	6660.9	98.2 %
60 - 90	124.2	1.8 %
0 - 90	6785.1	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	0
RCR:	0	119	119	119	119	119
1	116	114	112	111	111	111
2	113	111	108	106	106	106
3	111	107	105	103	103	103
4	109	105	102	100	100	100
5	107	103	100	98	98	98
6	106	102	99	97	97	97
7	105	100	96	94	94	94
8	104	99	95	93	93	93
9	103	98	94	92	92	92
10	102	98	94	92	92	92

Zonal Lumen

Zone	Lumens	% Fixture
0 - 60	6074.6	98.2 %
60 - 90	110.8	1.8 %
0 - 90	6185.4	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	0
RCR:	0	119	119	119	119	119
1	116	114	112	111	111	111
2	113	111	107	105	105	105
3	110	107	104	102	102	102
4	108	104	101	99	99	99
5	107	102	99	97	97	97
6	105	100	97	95	95	95
7	104	99	96	94	94	94
8	102	98	95	93	93	93
9	101	97	94	92	92	92
10	100	96	93	91	91	91

Zonal Lumen

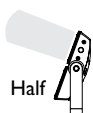
Zone	Lumens	% Fixture
0 - 60	5944.8	98.2 %
60 - 90	108.6	1.8 %
0 - 90	6053.4	100.0 %

Photometrics / iW Reach Powercore

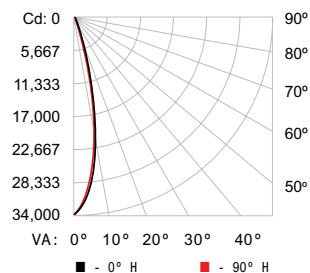
Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at www.philipscolorkinetics.com/support/ies.

23° spread lens

Lumens	Efficacy
6065	48.5 lm / W

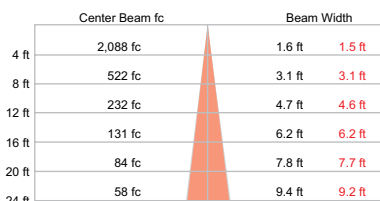


Polar Candela Distribution



	0	25	45	70	90
0	33407	33407	33407	33407	33407
5	28502	27782	27204	26804	26803
15	9252	8513	8001	7648	7614
25	1209	1040	928	862	860
35	193	178	167	163	166
45	103	98	94	92	95
55	70	67	64	63	63
65	52	50	48	46	45
75	39	38	35	34	33
85	30	29	29	29	29
90	29	29	29	29	29

Illuminance at Distance



183 ft (55.8 m) 1 fc maximum distance
■ Vert. Spread: 22.1° ■ Horiz. Spread: 21.8°

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

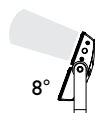
RCC %:	80	70	50	30	10	0
RW %:	Z0 50 30 0	Z0 50 30 0	50 30 20	50 30 20	50 30 20	0
RCR:	0 119 119 119 119	116 116 116 100	111 111 111	106 106 106	102 102 102	100
1	116 114 112 111	113 112 110 98	108 107 106	104 103 103	101 100 100	98
2	113 110 107 105	111 108 106 97	105 103 102	102 101 100	100 99 98	96
3	110 107 104 102	109 105 103 96	103 101 99	101 99 98	99 98 96	95
4	108 104 101 98	107 103 100 95	101 99 97	100 98 96	98 96 95	94
5	107 102 99 97	105 101 99 94	100 97 96	98 96 95	97 95 94	93
6	105 100 97 95	104 100 97 93	99 96 94	97 95 94	96 95 93	92
7	104 99 96 94	103 98 96 92	97 95 93	97 94 93	96 94 92	92
8	102 98 95 93	101 97 95 92	96 94 92	96 94 92	95 93 92	91
9	101 97 94 92	100 96 94 91	96 93 92	95 93 91	94 92 91	90
10	100 96 93 91	99 95 93 90	95 92 91	94 92 91	94 92 90	90

Zonal Lumen

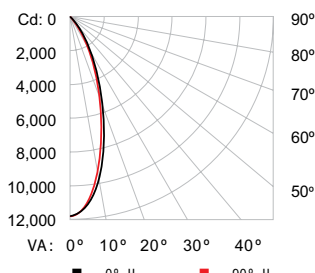
Zone	Lumens	% Fixture
0 - 60	5944.0	98.0 %
60 - 90	120.8	2.0 %
0 - 90	6064.8	100.0 %

40° spread lens

Lumens	Efficacy
6069	48.6 lm / W

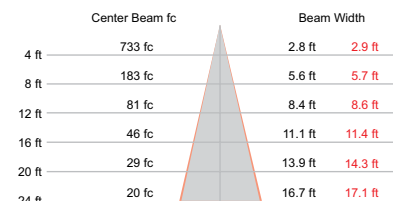


Polar Candela Distribution



	0	25	45	70	90
0	11728	11728	11728	11728	11728
5	11071	10985	10903	10856	10877
15	7584	7436	7361	7339	7356
25	3562	3446	3418	3457	3491
35	1123	1046	1017	1030	1047
45	276	241	221	220	225
55	105	98	93	92	93
65	66	64	62	59	58
75	43	41	39	37	36
85	27	26	26	26	26
90	26	26	26	26	26

Illuminance at Distance



108 ft (33.0 m) 1 fc maximum distance
■ Vert. Spread: 38.4° ■ Horiz. Spread: 39.3°

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

RCC %:	80	70	50	30	10	0
RW %:	Z0 50 30 0	Z0 50 30 0	50 30 20	50 30 20	50 30 20	0
RCR:	0 119 119 119 119	116 116 116 100	111 111 111	106 106 106	102 102 102	100
1	114 111 108 106	111 109 107 94	105 103 101	101 100 98	98 96 95	94
2	108 104 100 97	106 102 98 89	99 96 93	96 93 91	93 91 89	88
3	103 97 93 89	101 96 92 83	93 90 87	91 88 85	89 86 84	83
4	99 92 87 83	97 91 86 79	88 84 81	86 83 80	85 82 79	78
5	94 87 81 77	93 86 81 75	84 80 76	82 79 76	81 78 75	73
6	90 82 77 73	89 81 76 71	80 75 72	78 74 71	77 74 71	70
7	86 78 72 69	85 77 72 67	76 71 68	75 71 68	74 70 67	66
8	83 74 69 65	82 74 68 64	73 68 65	72 67 64	71 67 64	63
9	80 71 65 62	79 70 65 61	69 65 61	69 64 61	68 64 61	60
10	76 68 62 59	76 67 62 58	66 62 59	66 61 58	65 61 58	57

Zonal Lumen

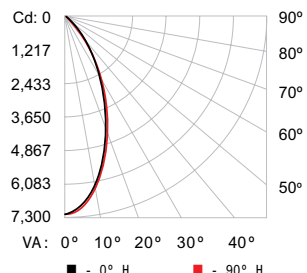
Zone	Lumens	% Fixture
0 - 60	5931.0	97.7 %
60 - 90	137.9	2.3 %
0 - 90	6068.8	100.0 %

63° spread lens

Lumens	Efficacy
6038	48.6 lm / W

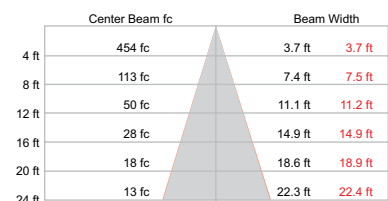


Polar Candela Distribution



	0	25	45	70	90
0	7266	7266	7266	7266	7266
5	6978	6965	6993	7033	7073
15	5512	5512	5548	5597	5687
25	3540	3442	3409	3390	3434
35	1793	1645	1566	1506	1518
45	733	624	561	521	525
55	261	212	187	172	173
65	105	90	83	75	74
75	51	46	41	36	35
85	26	23	23	24	24
90	23	0	0	0	0

Illuminance at Distance



85 ft (25.9 m) 1 fc maximum distance
■ Vert. Spread: 49.8° ■ Horiz. Spread: 50.0°

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

RCC %:	80	70	50	30	10	0
RW %:	Z0 50 30 0	Z0 50 30 0	50 30 20	50 30 20	50 30 20	0
RCR:	0 119 119 119 119	116 116 116 100	111 111 111	106 106 106	102 102 102	100
1	113 110 107 104	110 108 105 93	103 101 100	100 98 97	96 95 94	92
2	107 101 97 93	104 99 95 85	96 93 90	93 90 88	90 88 86	84
3	101 94 88 84	99 92 87 79	90 85 82	87 83 80	85 82 79	78
4	95 87 81 76	93 86 80 73	84 79 75	81 77 74	80 76 73	72
5	90 81 75 70	88 80 74 67	78 73 69	76 72 68	75 71 68	66
6	85 76 69 65	84 75 69 63	73 68 64	72 67 63	70 66 63	61
7	81 71 64 60	79 70 64 59	69 63 59	68 63 59	66 62 59	57
8	77 67 60 56	75 66 60 55	65 59 56	64 59 55	63 58 55	54
9	73 63 57 52	72 62 56 52	61 56 52	60 55 52	59 55 52	50
10	69 59 53 49	68 59 53 49	58 53 49	57 52 49	56 52 49	47

Zonal Lumen

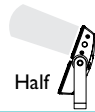
Zone	Lumens	% Fixture
0 - 60	5844.9	96.8 %
60 - 90	193.5	3.2 %
0 - 90	6038.4	100.0 %

Photometrics / iW Reach Powercore

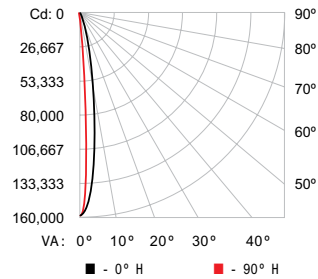
Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at www.philipscolorkinetics.com/support/ies.

5° x 17° spread lens

Lumens	Efficacy
6785	56.5 lm / W

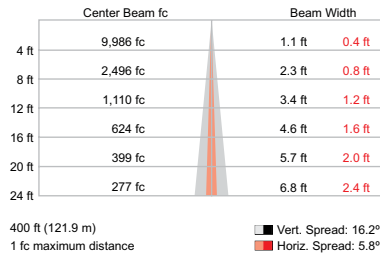


Polar Candela Distribution



	0	25	45	70	90
0	159770	159770	159770	159770	159770
5	118763	80410	45588	21788	16621
15	15752	1783	874	619	590
25	928	293	243	228	233
35	253	152	136	120	124
45	144	84	73	70	69
55	95	59	52	52	53
65	67	47	41	40	38
75	46	37	33	32	31
85	31	30	29	30	30
90	29	29	29	30	30

Illuminance at Distance



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	20	0	50	30	20	0	50	30	20	0	0
RCR:	0	119	119	119	119	116	116	116	100	111	111	111	106	106	106	102	102	102	100	100	
1	116	114	112	110	113	112	110	98	108	106	105	104	103	102	101	100	99	98	98	98	
2	113	109	107	105	111	108	106	96	105	103	101	102	101	99	99	98	97	96	96	96	
3	110	106	103	101	108	105	102	95	102	100	98	100	98	97	98	97	96	94	94	94	
4	108	103	100	98	106	102	100	94	101	98	96	99	97	95	97	96	94	93	93	93	
5	106	101	98	96	105	100	97	93	99	96	94	97	95	94	96	94	93	92	92	92	
6	104	99	96	94	103	99	96	92	97	95	93	96	94	92	95	93	92	91	91	91	
7	102	98	94	92	101	97	94	91	96	93	92	95	93	91	94	92	91	90	90	90	
8	101	96	93	91	100	96	93	90	95	92	91	94	92	90	93	91	90	89	89	89	
9	100	95	92	90	99	94	92	89	94	91	90	93	91	89	93	91	89	88	88	88	
10	98	94	91	89	98	93	91	88	93	90	89	92	90	88	92	90	88	88	88	88	

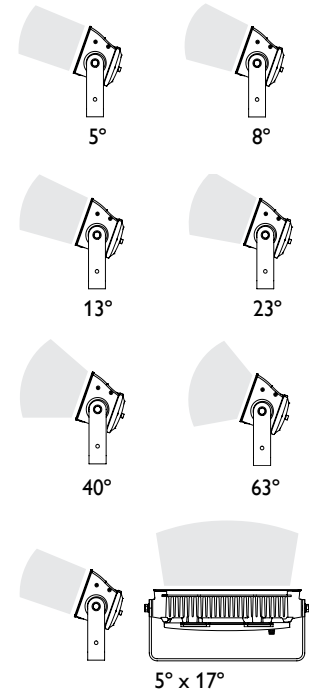
Zonal Lumen

Zone	Lumens	% Fixture
0 - 60	6011.2	98.2 %
60 - 90	112.8	1.8 %
0 - 90	6124.0	100.0 %

Specifications, UL / CE

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

Item	Specification	Details
Output	Beam Angle	5° native 8°, 13°, 23°, 40°, 63°, and 5° x 17° (asymmetric) spread lenses
	Color Temperature*	2700 K – 6500 K
	Efficacy (lm / W)	49.6 (5° native) 43.0 (8°) 43.0 (13°) 42.8 (23°) 41.8 (40°) 41.7 (63°) 43.4 (5° x 17°)
	CRI	79 (native beam, no spread lens, all channels full on)
	Lumen Maintenance‡	60,000 hours L70 @ 25° C 50,000 hours L70 @ 50° C 100,000 hours L50 @ 25° C 80,000 hours L50 @ 50° C
Electrical	Input Voltage	100 – 277 VAC, auto-switching, 50 / 60 Hz via Data Enabler Pro
	Power Consumption	125 W
	Power Factor	.963 (no spread lens, 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)	8.5 x 28.9 x 7.7 in (217 x 733 x 196 mm)
	Weight	51 lb (23 kg)
	Effective Projected Area (EPA)	0.186 m²
	Housing	Die-cast aluminium, powder-coated finish
	Lens	Tempered glass
	Fixture Connections	Integral male / female waterproof connector, 6 ft (1.8 m) unified power / data Leader Cable
	Temperature Ranges	-40° – 122° F (-40° – 50° C) Operating -4° – 122° F (-20° – 50° C) Startup -40° – 176° F (-40° – 80° C) Storage
	Humidity	0 – 95%, non-condensing
Certification and Safety	Certification	UL, CE, 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.



CHROMACORE[®] | OPTIBIN[®] | POWERCORE[®]
CKTECHNOLOGY | CKTECHNOLOGY | CKTECHNOLOGY

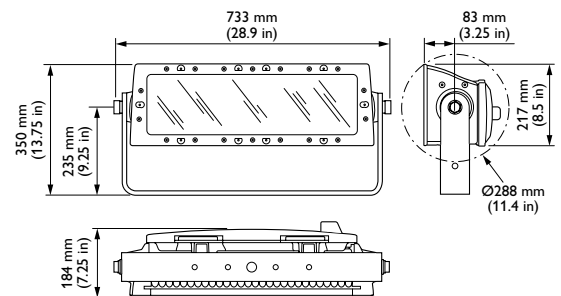
Lumen Maintenance

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.

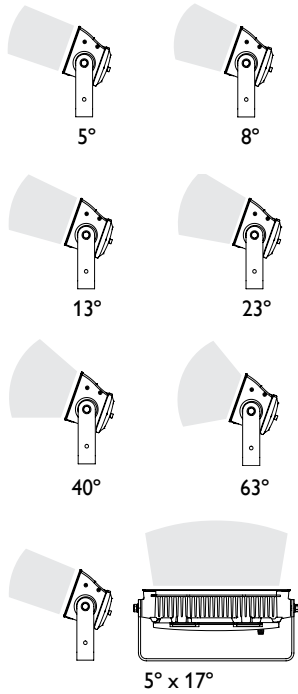
† Lumen maintenance figures are based on lifetime prediction graphs supplied by LED source manufacturers. Whenever possible, figures use measurements that comply with IES LM-80-08 testing procedures.

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° native 8°, 13°, 23°, 40°, 63°, and 5° x 17° (asymmetric) spread lenses
	Color Temperature*	2700 K – 6500 K
	Efficacy (lm / W)	49.6 (5° native) 43.0 (8°) 43.0 (13°) 42.8 (23°) 41.8 (40°) 41.7 (63°) 43.4 (5° x 17°)
	CRI	79 (native beam, no spread lens, all channels full on)
	Lumen Maintenance†	60,000 hours L70 @ 25° C 50,000 hours L70 @ 50° C 100,000 hours L50 @ 25° C 80,000 hours L50 @ 50° C
Electrical	Input Voltage	100 – 240 VAC, auto-switching, 50 / 60 Hz via Data Enabler Pro
	Power Consumption	125 W
	Power Factor	.963 (no spread lens, 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)	8.5 x 28.9 x 7.7 in (217 x 733 x 196 mm)
	Weight	51 lb (23 kg)
	Effective Projected Area (EPA)	0.186 m ²
	Housing	Die-cast aluminium, powder-coated finish
	Lens	Tempered glass
	Fixture Connections	Integral male / female waterproof connector, 6 ft (1.8 m) unified power / data Leader Cable
	Temperature Ranges	-40° – 122° F (-40° – 50° C) Operating -4° – 122° F (-20° – 50° C) Startup -40° – 176° F (-40° – 80° C) Storage
	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 www.philipscolorkinetics.com/support/install_tool/
	Certification and Safety	Certification
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.



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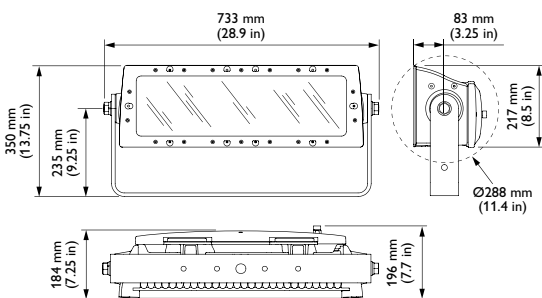
Lumen Maintenance

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.



Fixture and Accessories

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

- One or more Data Enabler Pro devices.
- Any Philips Color Kinetics controller, including Light System Manager, iPlayer 3, and ColorDial Pro, or a third-party controller.
- One 6 ft (1.8 m) leader cable to connect each iW Reach Compact 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.

Item	Type	Item Number	Philips 12NC
iW Reach Compact Powercore <i>Includes 10 ft (3 m) leader cable</i>	UL / cUL	523-000096-00	912400130189
	CE / PSE	523-000096-01	912400130234

iW Reach Compact Powercore <i>Includes 6 ft (1.8 m) leader cable</i>	CQC / CE / PSE	523-000083-02	912400130286
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Replacement Leader Cable	UL	3.0 m (10 ft)	108-000055-03	910503704066
		15.2 m (50 ft)	108-000055-00	910503703137
	CE	3.0 m (10 ft)	108-000055-04	910503704067
		15.2 m (50 ft)	108-000055-01	910503704064

Replacement Leader Cable 6 ft (1.8 m)	CQC / CE / PSE	108-000043-03	910503700454
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Spread Lens with bezel	13°	120-000068-00	910503700506
	23°	120-000068-01	910503700507
	40°	120-000068-02	910503700508
	63°	120-000068-03	910503700509
	Asymmetric (5° x 17°)	120-000068-04	910503700510
	8°	120-000068-05	910503700511

Data Enabler Pro	3/4 in / 1/2 in NPT (U.S. trade size conduit)	106-000004-00	910503701210
	PG21 / PG13 (metric size conduit)	106-000004-01	910503701211

Use Item Number when ordering in North America.

Installation

iW Reach Compact Powercore, a high-performance exterior architectural floodlight with extended light projection, is designed to brilliantly and dynamically illuminate prominent, signature façades. Because each iW Reach Compact Powercore fixture weighs 51 lb (23 kg), 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 over the fixture's primary lens.

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

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 wet or damp locations. Additionally, you must use gaskets, clamps, and other parts required for installation to comply with all applicable local and national codes.

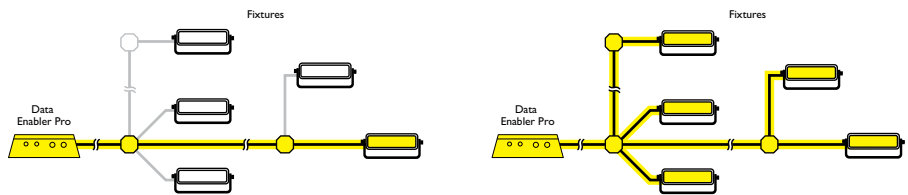
Prepare for the Installation

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/, 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 175 feet (53.3 m), and the total cable length per Data Enabler Pro should not exceed 400 feet (122 m).

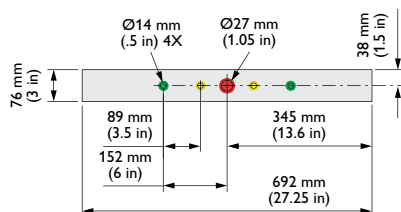
✳ To streamline the configuration of complex installations, record the serial number (DMX) or IP address (Ethernet) and location of each Data Enabler Pro.



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

Data Integrity – total length 400 ft (122 m)

Mounting bracket dimensions for pre-drilling



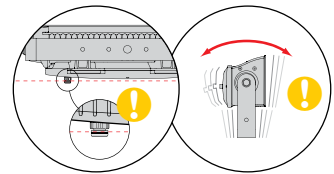
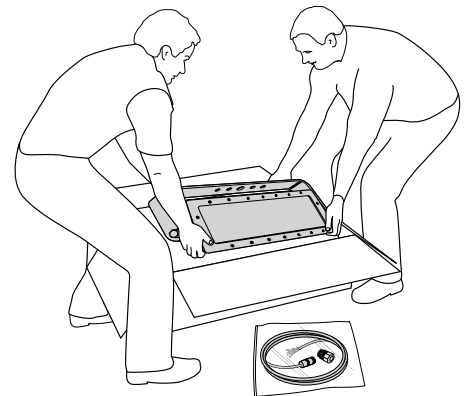
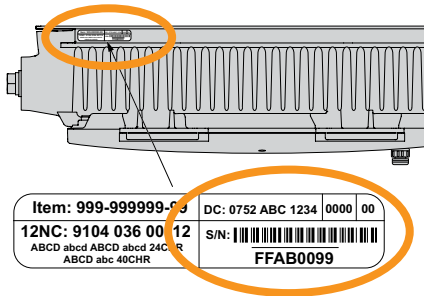
2. Ensure that the fixture mounting locations and substrates are sufficiently sturdy to bear the weight of each iW Reach Compact Powercore fixture. Pre-drill holes in the mounting substrate if necessary, making reference to the mounting bracket dimensions. Use at least two screws to secure each fixture, 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 51 lb (23 kg), and has an effective projected area (EPA) of 0.186 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.

Unpack the Fixtures

1. Unpack iW Reach Compact Powercore fixtures. Because each iW Reach Compact Powercore fixture weighs 51 lb (23 kg), 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. As you unpack the fixtures, record the serial numbers in a layout grid (typically a spreadsheet or list) for easy reference and light addressing.

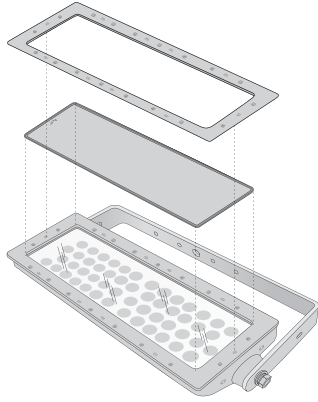


*** Do not rest iW Reach Compact Powercore on its back, as doing so may damage the connector port. Be careful not to tip the fixture over during positioning.**

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.

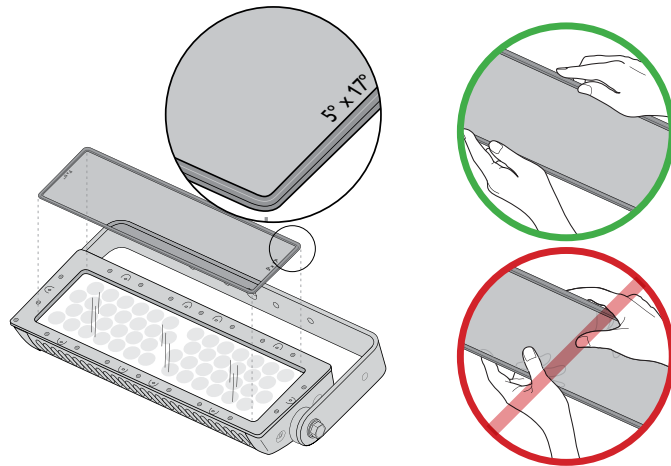
Attach Spread Lenses (Optional)

Exchangeable iW Reach Compact Powercore spread lenses of 8°, 13°, 23°, 40°, 63°, and an asymmetric 17° x 5° support a variety of photometric distributions for a multitude of applications, including spotlighting, wall grazing, and asymmetric wall washing.

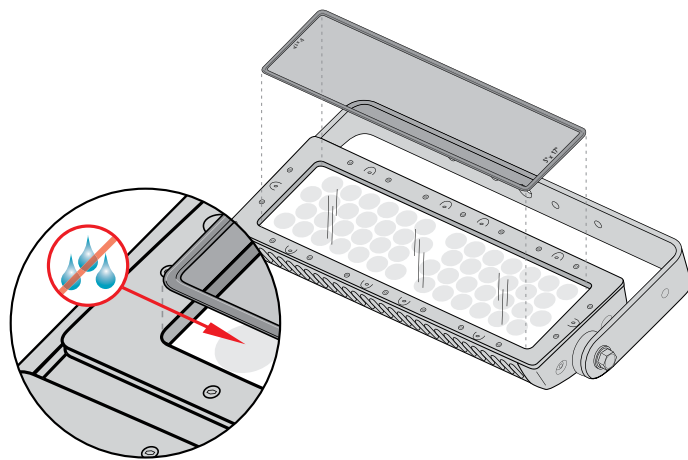


* For installation in extreme environments, refer to the Reach Spread Lens Kit Installation Instructions for details on sealing the spread lens and bezel to prohibit water ingress.

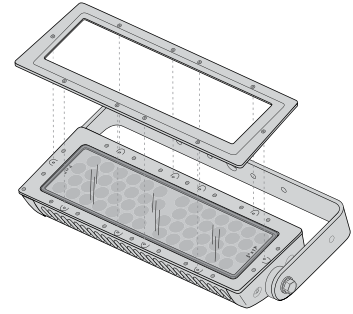
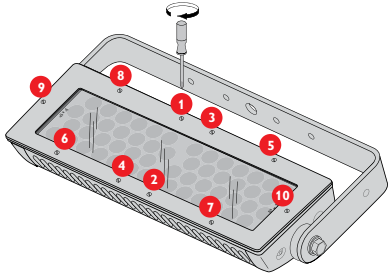
1. Unpack and confirm the contents of the box. Each box contains one lens kit, consisting of a spread lens with attached rubber gasket, and a bezel with 10 captured mounting screws.
2. Clean both sides of the spread lens and the face of the iW Reach Compact Powercore housing, including glass surfaces, using a mild, non-abrasive cleaner. Ensure that all surfaces are dry, and that the gasket is properly fitted to the lens.
3. Position the spread lens so that the beam-angle designation on the side of the lens is face up. Handle the spread lens by the gasket, making sure not to touch or soil either surface of the spread lens.



4. Place the spread lens on top of the iW Reach Compact Powercore housing. Make sure that the spread lens and gasket are seated properly within the fixture housing. Also make sure that there is no moisture between the spread lens and the glass, as any moisture will compromise the effectiveness of the spread lens.

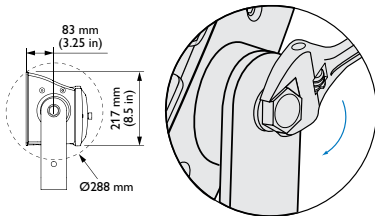


- Position the bezel over the spread lens.
- With a standard #2 Phillips screwdriver, attach the bezel to the fixture housing using the provided screws. To ensure a watertight seal, tighten the screws to approximately 20 – 30 in-lbs (2.2 – 3.4 Nm) in the sequence shown below.

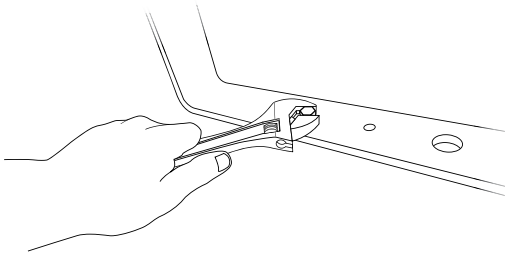


Position and Mount Fixtures

- 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 9.1 in (231 mm) clearance.



- 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.



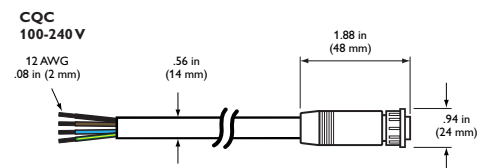
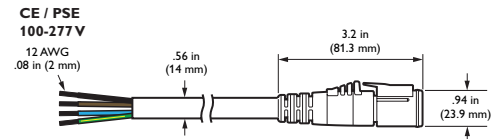
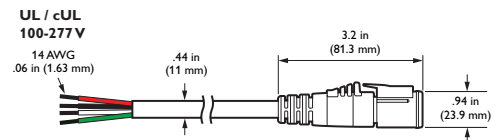
Connect the Fixtures

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

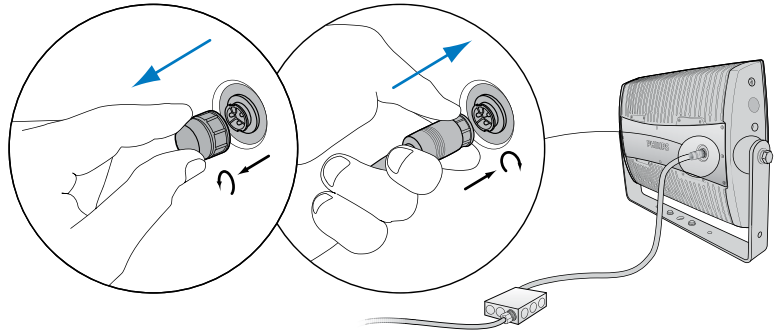
- Mount junction boxes in accordance with the lighting design plan.
- If installing fixtures in a series, pull 4-conductor copper wire between each junction box in the series.

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

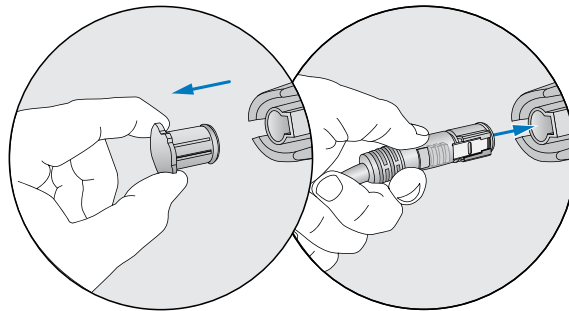
The maximum cable run from a Data Enabler Pro to any individual iW Reach Compact Powercore fixture is 175 feet (53 m). When installing in parallel, the total cable length cannot exceed 400 feet (122 m).



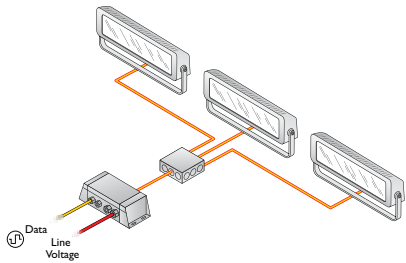
- If necessary, remove the connector cap from the port on the back of the iW Reach Compact Powercore housing. Insert the leader cable into the port. Turn the leader cable's lock nut to the right until it locks into place.



CQC (100 – 240 VAC)

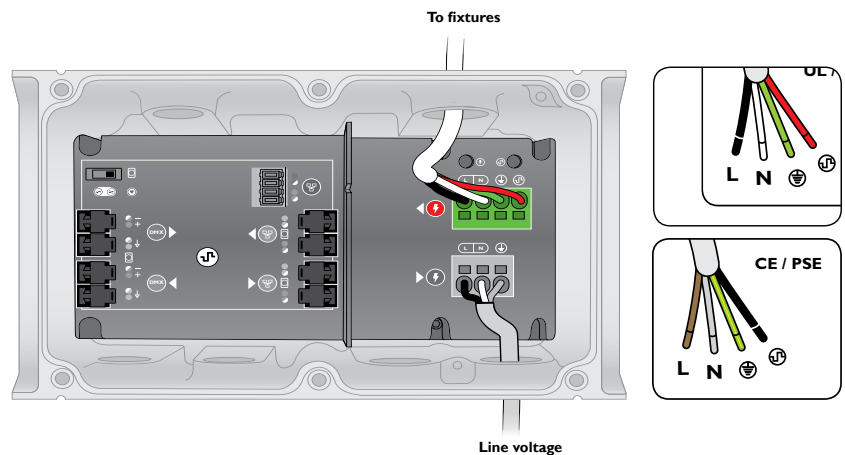


UL / CE (100 – 277 VAC)

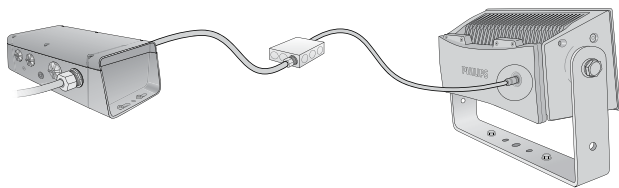


iW Reach Compact Powercore fixtures installed in parallel

- 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.
- 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.



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

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 a 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.

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

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 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, 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.

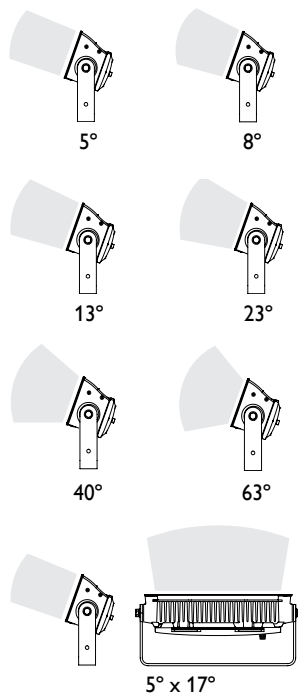
** You can download QuickPlay Pro addressing and configuration software from www.philipscolorkinetics.com/support/addressing.*

LED Channels

RGB	iW Reach Compact Powercore
Red	Warm
Green	Neutral
Blue	Cool

⚠ 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.



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 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 address of 1.

DMX Channel Assignments Per Fixture

8-bit Mode	1		2		3	
	Warm		Neutral		Cool	
16-Bit Mode	1	2	3	4	5	6
	Warm	Warm	Neutral	Neutral	Cool	Cool

Aim and Lock the Fixtures

Make sure the power is ON before addressing and configuring 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.



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DAS-000110-00 R02 6-14