



# eW Reach Powercore gen2

Premium long-throw exterior LED floodlight with solid white light

# eW Reach Powercore gen2

## Premium long-throw exterior LED floodlight with solid white light

eW Reach Powercore gen2 combines all the benefits of LED-based lighting and control in an elegant fixture specifically designed for large-scale installations, such as skyscrapers, casinos, bridges, piers, public monuments, and themed attractions. With significantly more lumen output than any other competitive fixture and unprecedented light projection, this powerful fixture represents the next generation in exterior illumination. Fixtures are available in a warm 2700 K or a cool 4000 K. Custom configurations with custom channels of white or color LED sources are also available to support special applications.

- Integrates Powercore technology — Powercore technology rapidly, efficiently, and accurately controls power output to fixtures directly from line voltage.
- Versatile optics — 5° native beam angle and 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.
- Unique split design — Spread lenses fit over each half of the fixture to support diffuser combinations. For instance, you could use one spread lens on the fixture's lower half to bathe a large façade with light at street level, and a different spread lens to project light hundreds of feet up the building's walls.
- 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 — eW Reach Powercore gen2 accepts a universal power input range of 100 – 240 VAC, allowing consistent installation in any location around the world.



### Unparalleled Light Output

Fixtures produce thousands of lumens and throw light hundreds of feet. eW Reach Powercore gen2 offers legitimate LED-based white light illumination of large-scale structures and objects.

# Photometrics

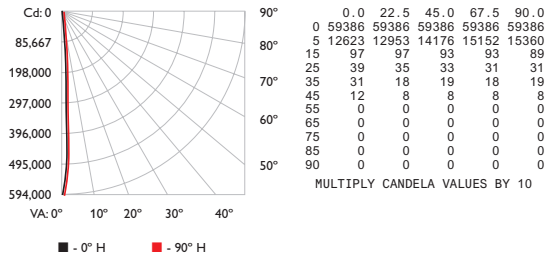
Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at [www.philipscolorkinetics.com/support/ies](http://www.philipscolorkinetics.com/support/ies).

## eW Reach Powercore gen2 2700 K 5° native (no spread lens), full unit

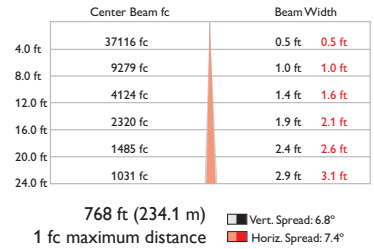
Lumens	10,520
Efficacy	44.3 lm / W



### Polar Candela Distribution



### Illuminance at Distance



### Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	10323	98.1
0- 40	10467	99.5
0- 60	10520	100.0
0- 90	10520	100.0
90-180	0	0.0
0-180	10520	100.0

### Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

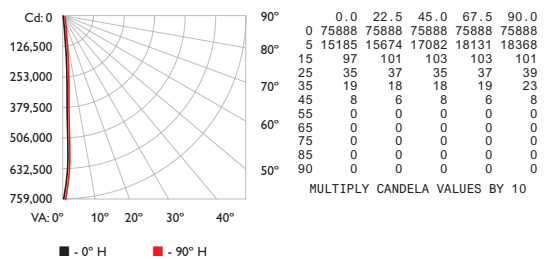
RC	80	70	50	30	10	0	
RW	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	10 0	0
0	119119119119	116116116116	1111111111	106106106	102102102	100	100
1	116115114112	114113112111	109108107	105105104	102102101	99	99
2	114112110108	112110108107	107106105	104103102	102101100	99	99
3	112109107105	111108106104	106104103	104102101	102101100	99	98
4	111107105103	110107104103	105103101	103102100	10110099	98	98
5	110106103102	108105103101	104102100	102101100	10110099	98	98
6	108105102100	107104102100	103101100	10210099	1019998	97	97
7	107104101100	10710310199	10210099	10110098	1019998	97	97
8	10610310099	10610210099	10210098	1019998	1009998	97	97
9	10610210098	10510210098	1019998	1019998	1009997	97	97
10	1051019998	1041019998	1019998	1009997	1009997	97	97

## eW Reach Powercore gen2 4000 K 5° native (no spread lens), full unit

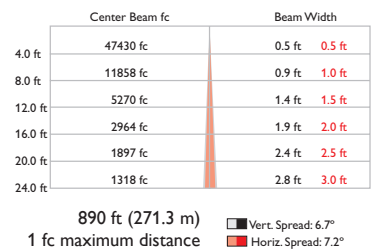
Lumens	12,838
Efficacy	53.7 lm / W



### Polar Candela Distribution



### Illuminance at Distance



### Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	12646	98.5
0- 40	12779	99.5
0- 60	12838	100.0
0- 90	12838	100.0
90-180	0	0.0
0-180	12838	100.0

### Coefficients Of Utilization - Zonal Cavity Method

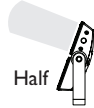
Effective Floor Cavity Reflectance: 20%

RC	80	70	50	30	10	0	
RW	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	10 0	0
0	119119119119	116116116116	1111111111	106106106	102102102	100	100
1	116115114112	114113112111	109108107	105105104	102102101	99	99
2	114112110108	112110109107	107106105	105104103	102101101	99	99
3	113110107105	111108106105	106104103	104103101	102101100	99	99
4	111108105103	110107104103	105103102	103102101	102100100	99	98
5	110106104102	109105103101	104102101	103101100	10110099	98	98
6	109105103101	108104102100	103101100	10210199	10110099	98	98
7	108104102100	107103101100	10310199	10210099	10110098	98	98
8	10710310199	10610310199	10210099	10110098	1019998	98	98
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10	10510210098	10510210098	1019998	1019998	1009998	97	97

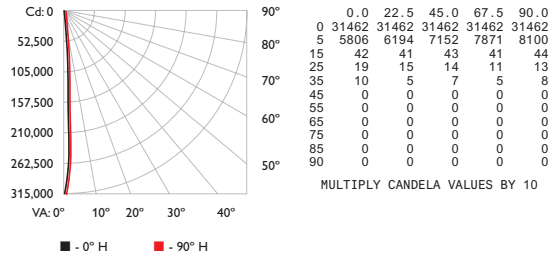
For lux multiply fc by 10.7

eW Reach Powercore gen2  
2700 K  
5° native (no spread lens), half unit

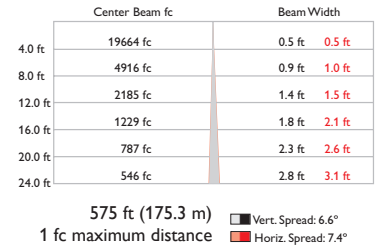
Lumens	5,274
Efficacy	42.6 lm / W



Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	5218	98.9
0- 40	5269	99.9
0- 60	5274	100.0
0- 90	5274	100.0
90-180	0	0.0
0-180	5274	100.0

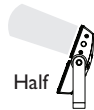
Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

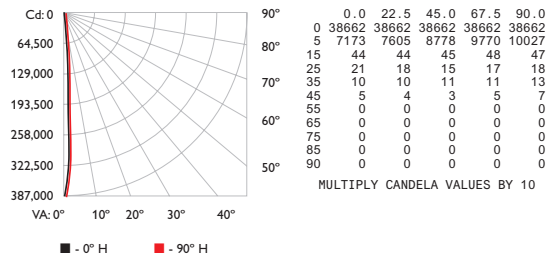
RC	80	70	50	30	10	0		
RW	70	50	30	10	50	30	10	0
0	119119119119	116116116116	1111111111	106106106	102102102	100		
1	117115114113	114113112111	109108107	105105104	102102101	100		
2	114112110108	113110109107	107106105	105104103	102101101	99		
3	113110107106	111108106105	106104103	104103102	102101100	99		
4	111108105104	110107105103	105103102	103102101	102101100	99		
5	110106104102	109106103102	104102101	103101100	102100	99		
6	109105103101	108105102101	103102100	102101100	101100	99		
7	108104102100	107104102100	103101100	102100	99	101100		
8	107103101100	106103101100	102100	99	102100	99		
9	106103101	106102100	99	102100	99	101		
10	106102100	99	105102100	99	101100	98		

eW Reach Powercore gen2  
4000 K  
5° native (no spread lens), half unit

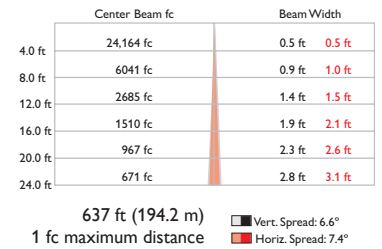
Lumens	6,525
Efficacy	53.1 lm / W



Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	6415	98.3
0- 40	6488	99.4
0- 60	6525	100.0
0- 90	6525	100.0
90-180	0	0.0
0-180	6525	100.0

Coefficients Of Utilization - Zonal Cavity Method

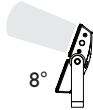
Effective Floor Cavity Reflectance: 20%

RC	80	70	50	30	10	0		
RW	70	50	30	10	50	30	10	0
0	119119119119	116116116116	111111111	106106106	102102102	100		
1	116115114112	114113112111	109108107	105105104	102102101	100		
2	114112110108	112110109107	107106105	105104103	102101101	99		
3	113110107105	111108106105	106104103	104103101	102101100	99		
4	111108105103	110107104103	105103102	103102101	102100	99		
5	110106104102	109105103101	104102101	103101100	101100	99		
6	109105102101	108104102100	103101100	102101	99	101100		
7	108104102100	107103101100	103101	99	102100	99		
8	107103101	106103101	99	102100	99	101100		
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10	105102100	98	105102100	98	101	99		

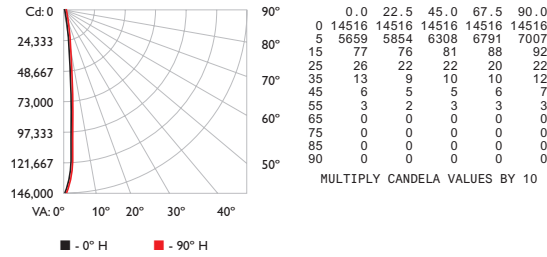
For lux multiply fc by 10.7

eW Reach Powercore gen2  
2700 K  
8° spread lens, half unit

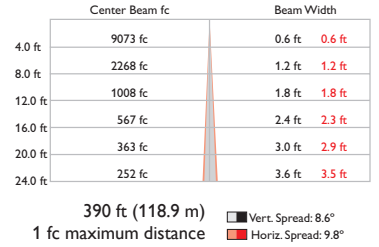
Lumens	4,656
Efficacy	37.6 lm / W



Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	4521	97.1
0- 40	4587	98.5
0- 60	4654	99.9
0- 90	4656	100.0
90-180	0	0.0
0-180	4656	100.0

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

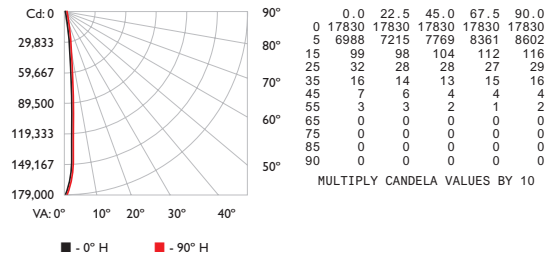
RC	80	70	50	30	10	0
RW	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	10 0 0
0	119119119119	116116116116	1111111111	106106106	102102102	100
1	116115113112	114113111110	109108107	105104104	102101101	99
2	114111109107	112110108106	107105104	104103102	101100100	98
3	112109106104	110107105103	105103102	103101100	101100 99	98
4	110106104102	109105103101	104102100	102100 99	100 99 98	97
5	108105102100	107104101 99	102100 99	101 99 98	100 98 97	96
6	107103100 98	106102100 98	101 99 98	100 98 97	99 98 97	96
7	106102 99 97	105101 99 97	100 98 97	100 98 96	99 97 96	95
8	105101 98 97	104100 98 96	100 98 96	99 97 96	98 97 95	95
9	104100 97 96	103100 97 96	99 97 95	98 96 95	98 96 95	94
10	103 99 97 95	102 99 97 95	98 96 95	98 96 95	97 96 95	94

eW Reach Powercore gen2  
4000 K  
8° spread lens, half unit

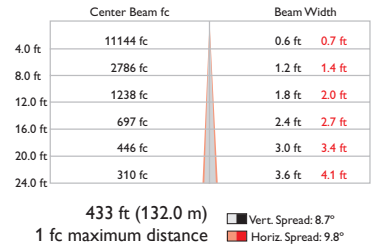
Lumens	5,734
Efficacy	46.7 lm / W



Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	5589	97.5
0- 40	5676	99.0
0- 60	5733	100.0
0- 90	5734	100.0
90-180	0	0.0
0-180	5734	100.0

Coefficients Of Utilization - Zonal Cavity Method

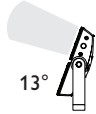
Effective Floor Cavity Reflectance: 20%

RC	80	70	50	30	10	0
RW	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	10 0 0
0	119119119119	116116116116	1111111111	106106106	102102102	100
1	116115113112	114113111110	109108107	105104104	102101101	99
2	114111109107	112110108106	107105104	104103102	101101100	98
3	112109106104	110107105103	105103102	103102100	101100 99	98
4	110107104102	109106103101	104102100	102100 99	100 99 98	97
5	109105102100	107104102100	103100 99	101 99 98	100 98 97	97
6	107103101 99	106103100 98	101 99 98	100 99 97	99 98 97	96
7	106102 99 98	105102 99 97	101 99 97	100 98 97	99 97 96	95
8	105101 98 97	104101 98 97	100 98 96	99 97 96	98 97 96	95
9	104100 98 96	103100 97 96	99 97 96	98 97 95	98 96 95	95
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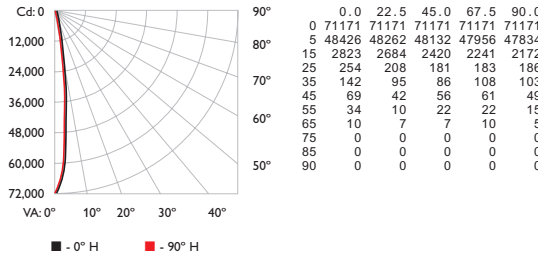
For lux multiply fc by 10.7

eW Reach Powercore gen2  
2700 K  
13° spread lens, half unit

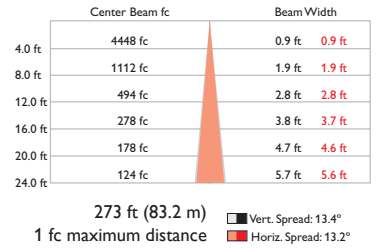
Lumens	4,644
Efficacy	37.5 lm/W



Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	4507	97.1
0- 40	4572	98.5
0- 60	4637	99.8
0- 90	4644	100.0
90-180	0	0.0
0-180	4644	100.0

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

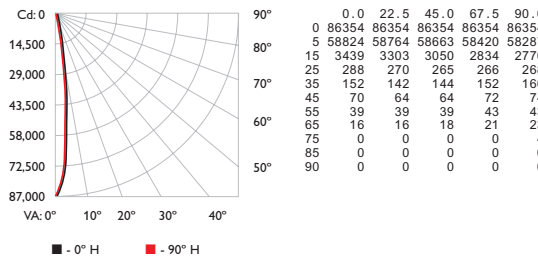
RC	80			70			50			30			10			0		
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	0			
0	119119119119	116116116116	111111111111	106106106	102102102	100												
1	116114113111	114112111110	108107106	105104103	101101100	99												
2	113110108106	111109107105	106104103	103102101	100	99	97											
3	111107105102	109106104102	104102100	102100	99	100	98	97	96									
4	109105102100	107104101	99	102100	98	100	98	97	99	97	96	95						
5	107103100	97	106102	99	97	100	98	96	99	97	95	98	96	95	94			
6	105101	98	96	104100	97	95	99	97	95	98	96	94	97	95	94	93		
7	104	99	96	94	103	99	96	94	98	95	94	97	95	93	96	94	93	92
8	102	98	95	93	101	97	95	93	96	94	92	96	94	92	95	93	92	91
9	101	96	94	92	100	96	93	92	95	93	91	95	93	91	94	92	91	90
10	100	95	93	91	99	95	92	91	94	92	91	94	92	90	93	92	90	90

eW Reach Powercore gen2  
4000 K  
13° spread lens, half unit

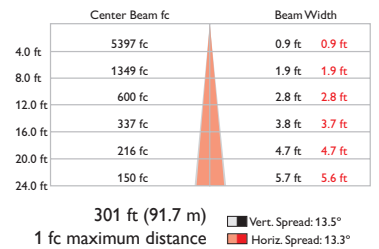
Lumens	5,739
Efficacy	46.7 lm / W



Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	5532	96.4
0- 40	5624	98.0
0- 60	5714	99.6
0- 90	5739	100.0
90-180	0	0.0
0-180	5739	100.0

Coefficients Of Utilization - Zonal Cavity Method

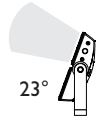
Effective Floor Cavity Reflectance: 20%

RC	80			70			50			30			10			0		
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	0			
0	119119119119	116116116116	111111111111	106106106	102102102	100												
1	116114113111	114112111110	108107106	105104103	101101100	98												
2	113110108106	111109107105	106104102	103102100	100	99	98	97										
3	111107104102	109106103101	103101100	101100	98	99	98	97	96									
4	109104101	99	107103101	99	102	99	97	100	98	96	98	97	95	94				
5	107102	99	97	105101	99	96	100	98	96	99	96	95	97	96	94	93		
6	105100	97	95	104100	97	95	98	96	94	97	95	94	96	94	93	92		
7	103	99	96	94	102	98	95	93	97	95	93	96	94	92	95	93	92	91
8	102	97	94	92	101	97	94	92	96	93	92	95	93	91	94	93	91	90
9	100	96	93	91	100	95	93	91	95	92	91	94	92	90	94	92	90	90
10	99	95	92	90	99	94	92	90	94	91	90	93	91	90	93	91	89	89

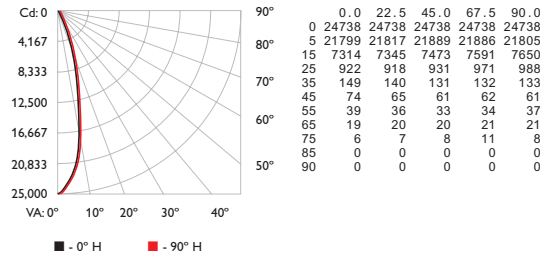
For lux multiply fc by 10.7

eW Reach Powercore gen2  
2700 K  
23° spread lens, half unit

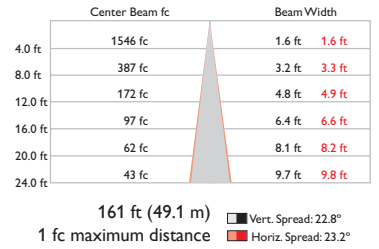
Lumens	4,644
Efficacy	37.5 lm / W



Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	4435	95.5
0- 40	4531	97.6
0- 60	4614	99.3
0- 90	4644	100.0
90-180	0	0.0
0-180	4644	100.0

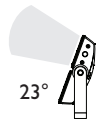
Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

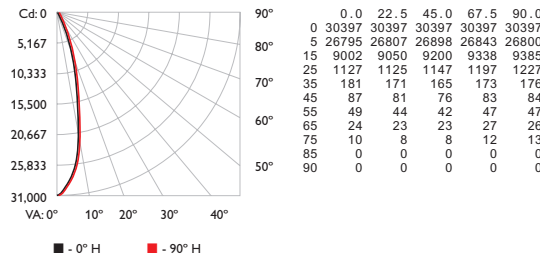
RC	80	70	50	30	10	0					
RW	70	50	30	10	50	30	10	50	30	10	0
0	119119119119	116116116116	111111111111	106106106106	102102102102	100					
1	1151131111109	113111109108	107106104	103102101	100	99	98	97	96	95	94
2	111108105102	109106104101	103101	99	100	99	97	98	96	95	94
3	108103100	106102	99	96	100	97	95	97	95	93	95
4	105100	96	93	103	99	95	92	97	94	91	95
5	102	96	92	89	101	95	92	89	94	91	88
6	99	93	89	86	98	93	89	86	91	88	86
7	97	90	86	84	96	90	86	83	89	85	83
8	94	88	84	81	93	87	84	81	87	83	81
9	92	86	82	79	91	85	82	79	84	81	79
10	90	84	80	77	89	83	80	77	83	79	77

eW Reach Powercore gen2  
4000 K  
23° spread lens, half unit

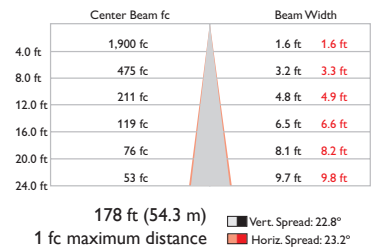
Lumens	5,716
Efficacy	46.5 lm / W



Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	5454	95.4
0- 40	5575	97.5
0- 60	5680	99.4
0- 90	5716	100.0
90-180	0	0.0
0-180	5716	100.0

Coefficients Of Utilization - Zonal Cavity Method

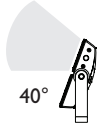
Effective Floor Cavity Reflectance: 20%

RC	80	70	50	30	10	0					
RW	70	50	30	10	50	30	10	50	30	10	0
0	119119119119	116116116116	111111111111	106106106	102102102	100					
1	1151131111109	113111109108	107106104	103102101	100	99	98	97	96	95	94
2	111108105102	109106104101	103101	99	100	99	97	98	96	95	94
3	108103100	106102	99	96	100	97	95	97	95	93	95
4	105100	96	93	103	99	95	92	97	94	91	95
5	102	96	92	89	101	95	92	89	94	91	88
6	99	93	89	86	98	93	89	86	91	88	86
7	97	90	86	84	96	90	86	83	89	85	83
8	94	88	84	81	93	87	84	81	87	83	81
9	92	86	82	79	91	85	82	79	84	81	79
10	90	83	80	77	89	83	80	77	83	79	77

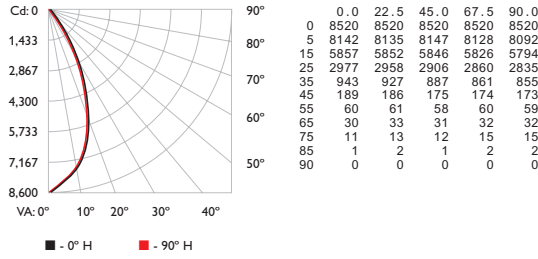
For lux multiply fc by 10.7

eW Reach Powercore gen2  
2700 K  
40° spread lens, half unit

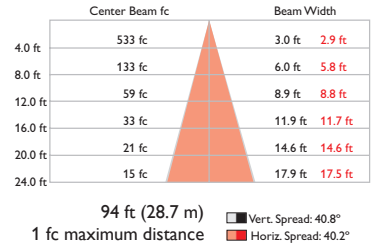
Lumens	4,528
Efficacy	36.5 lm / W



Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	3682	81.3
0- 40	4288	94.3
0- 60	4480	98.9
0- 90	4528	100.0
90-180	0	0.0
0-180	4528	100.0

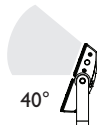
Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

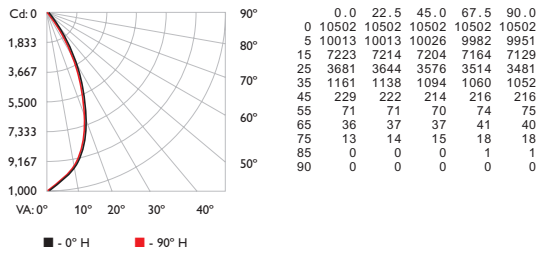
RC	80	70	50	30	10	0					
RW	70	50	30	10	50	30	10	50	30	10	0
0	119119119119	116116116116	111111111111	106106106	102102102	100					
1	1141111109107	111109107105	105103102	10110099	989796	94					
2	10910410197	1071039996	999794	969492	949290	89					
3	104989490	102979389	949188	928986	908785	84					
4	99928784	98918783	898582	878481	868380	79					
5	95878278	93878278	858077	837977	827876	75					
6	91837774	90827773	817673	797572	787572	71					
7	87797369	86787369	777269	767269	757168	67					
8	84757066	82746966	736965	726865	716865	64					
9	80716663	79716662	706562	696562	686562	61					
10	77686360	76686359	676259	666259	666259	58					

eW Reach Powercore gen2  
4000 K  
40° spread lens, half unit

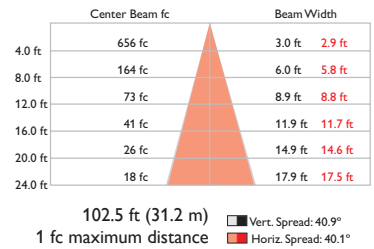
Lumens	5,570
Efficacy	45.3 lm / W



Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	4533	81.4
0- 40	5255	94.3
0- 60	5513	99.0
0- 90	5570	100.0
90-180	0	0.0
0-180	5570	100.0

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

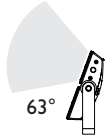
RC	80	70	50	30	10	0					
RW	70	50	30	10	50	30	10	50	30	10	0
0	119119119119	116116116116	111111111111	106106106	102102102	100					
1	1141111109107	111109107105	105104102	10110099	989796	94					
2	10910410197	1071039996	999794	969492	949290	89					
3	104989490	102979389	949188	928986	908785	84					
4	99938784	98918783	898582	878481	868380	79					
5	95878278	94878278	858177	837977	827876	75					
6	91837774	90827773	817673	797572	787572	71					
7	87797370	86787369	777269	767269	757168	67					
8	84757066	82746966	736965	726865	716865	64					
9	80716663	79716662	706562	696562	686562	61					
10	77686360	76686359	676359	666259	666259	58					

For lux multiply fc by 10.7

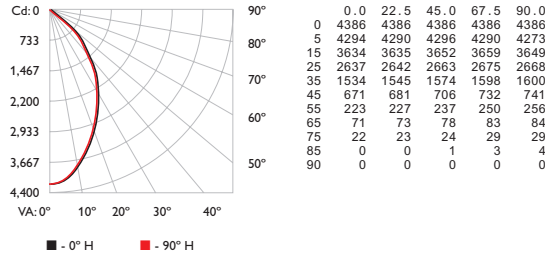


eW Reach Powercore gen2  
2700 K  
63° spread lens, half unit

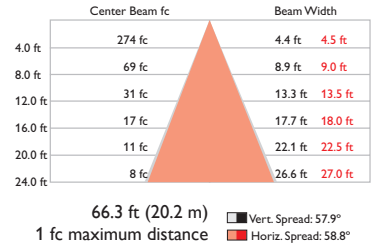
Lumens	4,506
Efficacy	36.4 lm / W



Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	2632	58.4
0- 40	3614	80.2
0- 60	4394	97.5
0- 90	4506	100.0
90-180	0	0.0
0-180	4506	100.0

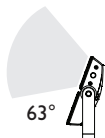
Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

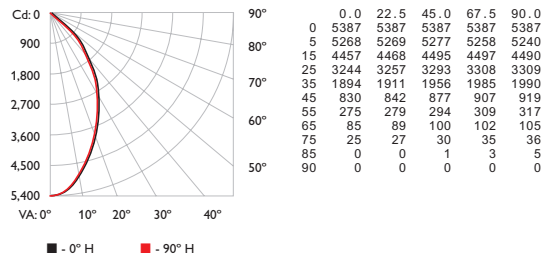
RC	80	70	50	30	10	0					
RW	70	50	30	10	50	30	10	50	30	10	0
0	119119119119	116116116116	111111111111	106106106	102102102	100					
1	113110107104	110107105103	103101100	100 98 97	96 95 94	92					
2	106101 96 92	104 99 95 91	96 92 89	93 90 87	90 88 86	84					
3	100 93 87 83	98 91 86 82	89 84 81	86 82 79	84 81 78	76					
4	94 86 79 75	92 84 79 74	82 77 73	80 76 72	78 75 72	70					
5	89 79 73 68	87 78 72 68	77 71 67	75 70 66	73 69 66	64					
6	84 74 67 62	82 73 67 62	71 66 62	70 65 61	68 64 61	59					
7	79 69 62 57	78 68 62 57	67 61 57	65 60 57	64 60 56	55					
8	75 64 58 53	73 64 57 53	62 57 53	61 56 53	60 56 52	51					
9	71 60 54 49	70 60 54 49	59 53 49	58 53 49	57 52 49	47					
10	67 57 50 46	66 56 50 46	55 50 46	54 49 46	54 49 46	44					

eW Reach Powercore gen2  
4000 K  
63° spread lens, half unit

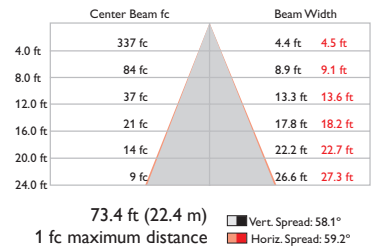
Lumens	5,563
Efficacy	45.2 lm / W



Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	3242	58.3
0- 40	4459	80.2
0- 60	5425	97.5
0- 90	5563	100.0
90-180	0	0.0
0-180	5563	100.0

Coefficients Of Utilization - Zonal Cavity Method

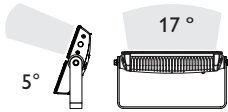
Effective Floor Cavity Reflectance: 20%

RC	80	70	50	30	10	0					
RW	70	50	30	10	50	30	10	50	30	10	0
0	119119119119	116116116116	111111111111	106106106	102102102	100					
1	113110107104	110107105103	103101100	100 98 97	96 95 94	92					
2	106101 96 92	104 99 95 91	96 92 89	93 90 87	90 88 86	84					
3	100 93 87 83	98 91 86 82	89 84 81	86 82 79	84 81 78	76					
4	94 86 79 75	92 84 79 74	82 77 73	80 76 72	78 75 72	70					
5	89 79 73 68	87 78 72 68	76 71 67	75 70 66	73 69 66	64					
6	84 74 67 62	82 73 67 62	71 66 62	70 65 61	68 64 61	59					
7	79 69 62 57	78 68 62 57	67 61 57	65 60 57	64 60 56	55					
8	75 64 58 53	73 64 57 53	62 57 53	61 56 52	60 56 52	51					
9	71 60 54 49	70 60 53 49	59 53 49	58 53 49	57 52 49	47					
10	67 57 50 46	66 56 50 46	55 50 46	54 49 46	54 49 46	44					

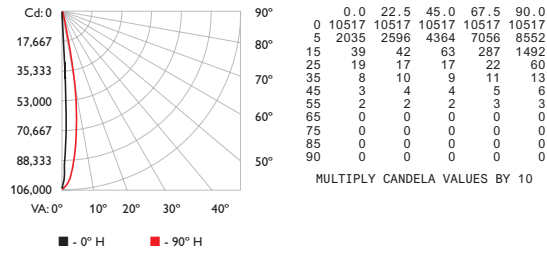
For lux multiply fc by 10.7

eW Reach Powercore gen2  
2700 K  
5° x 17° spread lens, half unit

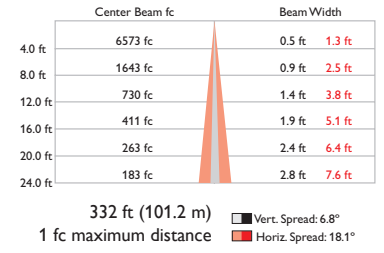
Lumens	4,678
Efficacy	37.8 lm / W



Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	4554	97.3
0- 40	4617	98.7
0- 60	4674	99.9
0- 90	4678	100.0
90-180	0	0.0
0-180	4678	100.0

Coefficients Of Utilization - Zonal Cavity Method

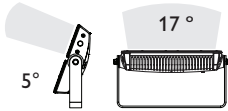
Effective Floor Cavity Reflectance: 20%

RC	Effective Floor Cavity Reflectance: 20%														
	80		70		50		30		10		0				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	0
0	119119119119	116116116116	111111111111	106106106	102102102	100									
1	116114113111	114112111110	108107106	105104103	101101100	99									
2	113110108106	111109107105	106104103	103102101	100100	99	97								
3	111107105102	109106104102	104102100	102100	99	100	98	97	96						
4	109105102100	107104101	99	102100	98	100	98	97	99	97	96	95			
5	107103100	97	106102	99	97	100	98	96	99	97	95	98	96	95	94
6	105101	98	96	104100	97	95	99	97	95	98	96	94	97	95	93
7	104	99	96	94	103	99	96	94	98	95	94	97	95	93	92
8	102	98	95	93	101	97	95	93	96	94	92	96	94	92	91
9	101	96	94	92	100	96	93	92	95	93	91	95	93	91	90
10	100	95	93	91	99	95	92	91	94	92	90	94	92	90	90

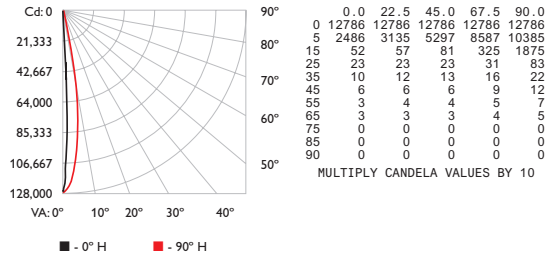
For lux multiply fc by 10.7

eW Reach Powercore gen2  
4000 K  
5° x 17° spread lens, half unit

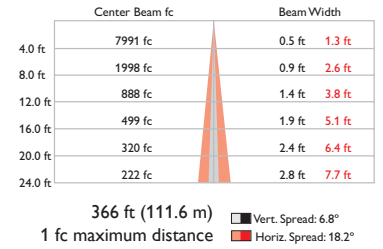
Lumens	5,797
Efficacy	47.1 lm / W



Polar Candela Distribution



Illuminance at Distance



Zonal Lumen

ZONE	LUMENS	%FIXT
0- 30	5573	96.1
0- 40	5666	97.7
0- 60	5770	99.5
0- 90	5797	100.0
90-180	0	0.0
0-180	5797	100.0

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

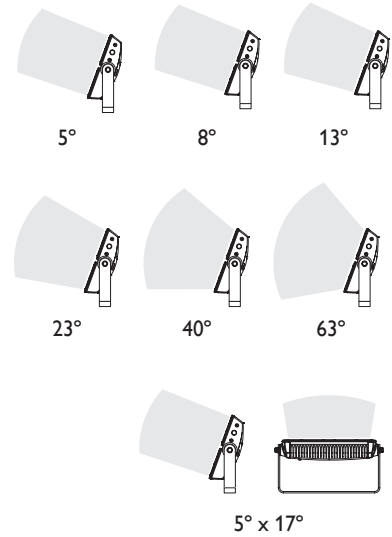
RC	80			70			50			30			10			0		
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119119119119	116116116116	111111111111	106106106	102102102	100												
1	116114113111	114112111109	108107106	104104103	101101100	98												
2	113110108106	111109106105	106104102	103101100	100 99 98	97												
3	111107104102	109106103101	103101 99	101 99 98	99 98 97	95												
4	108104101 99	107103100 98	101 99 97	100 98 96	98 96 95	94												
5	106102 99 97	105101 98 96	100 97 95	98 96 95	97 95 94	93												
6	105100 97 95	104 99 96 94	98 96 94	97 95 93	96 94 93	92												
7	103 98 95 93	102 98 95 93	97 94 92	96 94 92	95 93 92	91												
8	101 97 94 92	101 96 94 92	96 93 91	95 93 91	94 92 91	90												
9	100 95 93 91	99 95 92 90	94 92 90	94 92 90	93 91 90	89												
10	99 94 91 90	98 94 91 89	93 91 89	93 91 89	92 90 89	88												

For lux multiply fc by 10.7

# Specifications

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

Item	Specification	2700 K*	4000 K*
Output	Beam Angle	5° primary optic (no spread lens) 8° / 13° / 23° / 40° / 63° / 5° x 17° (asymmetric) spread lenses	
	Lumens†	10,520 (no spread lens, full unit)	12,838 (no spread lens, full unit)
	Efficacy (lm / W)	44.3 (no spread lens, full unit)	53.7 (no spread lens, full unit)
	CRI	81 (no spread lens, full unit)	81 (no spread lens, full unit)
	Lumen Maintenance‡	60,000 hours L70 @ 25° C	90,000 hours L50 @ 25° C
Electrical	Input Voltage	100 – 240 VAC, auto-switching, 50 / 60 Hz	
	Power Consumption	250 W maximum at full output, steady state	
	Power Factor	.989 @ 120 VAC (no spread lens, full unit)	
Control		On / Off	
Physical	Dimensions (Height x Width x Depth)	20.5 x 28.9 x 4.8 in (521 x 734 x 122 mm)	
	Weight	75 lb (34 kg)	
	Effective Projected Area (EPA)	0.42 m²	
	Housing	Die-cast aluminium, powder-coated finish	
	Lens	Tempered glass	
	Fixture Connections	6 ft (1.8 m) 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 / cUL, FCC Class A, CE, PSE	
	Environment	Dry / Damp / Wet Location, IP66	

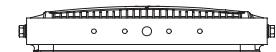
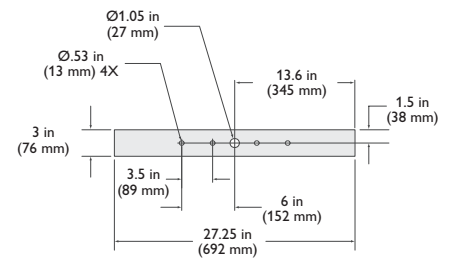
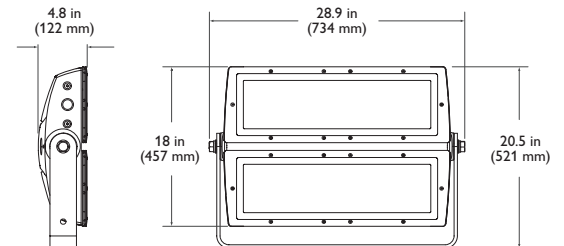
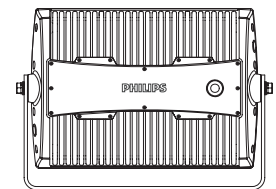


\* Correlated color temperature (CCT) complies with ANSI C78.377-2008 for the chromaticity of solid state lighting products.



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

‡ L70 = 70% lumen maintenance (when light output drops below 70% of initial output). L50 = 50% lumen maintenance (when light output drops below 50% of initial output). Ambient luminaire temperatures specified. Lumen maintenance calculations are based on lifetime prediction graphs supplied by LED source manufacturers. Calculations for white-light LED fixtures are based on measurements that comply with IES LM-80-08 testing procedures. Refer to [www.philipscolorkinetics.com/support/appnotes/lm-80-08.pdf](http://www.philipscolorkinetics.com/support/appnotes/lm-80-08.pdf) for more information.



OPTIBIN<sup>®</sup> | POWERCORE<sup>®</sup>  
CK TECHNOLOGY | CK TECHNOLOGY

## Fixture and Accessories

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

- One 6 ft (1.8 m) Leader Cable to connect each eW Reach Powercore gen2 fixture to a power source.
- 3-conductor copper wire to connect eW Reach Powercore gen2 fixtures in series or in parallel. Standard 12 AWG (2.05 mm) stranded wire is recommended.

### Custom Configurations

In addition to the standard configurations listed here, custom configurations are also available with non-standard color temperatures or Royal Blue. Refer to the eW Reach Powercore gen2 Ordering Information sheet at [www.philipscolorkinetics.com/ls/essentialwhite/ewreach/](http://www.philipscolorkinetics.com/ls/essentialwhite/ewreach/) for complete information.

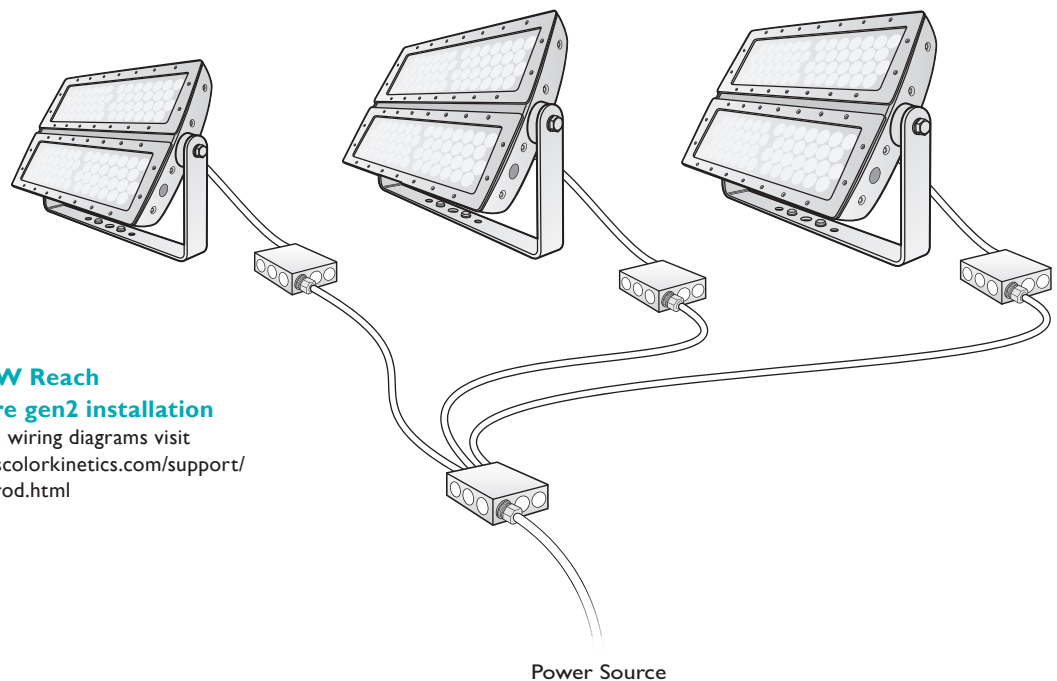
Component	Available Non-Standard Options
Color Temperature	3000 K, 3500 K, 5000 K, 5500 K, 6000 K, 6500 K
Color	Royal Blue

Item	Type	Item Number	Philips 12NC
eW Reach Powercore gen2 <i>Includes 6 ft (1.8 m) Leader Cable</i>	2700 K	523-000044-50	910503703936
	4000 K	523-000044-52	910503703937

Replacement Leader Cable 6 ft (1.8 m)	UL / cUL	108-000046-00	910503700621
	CE / PSE	108-000046-01	910503700622

Spread Lens with bezel	8°	120-000068-05	910503700511
	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

Use Item Number when ordering in North America.



### Typical eW Reach Powercore gen2 installation

For detailed wiring diagrams visit [www.philipscolorkinetics.com/support/wiring/ls\\_prod.html](http://www.philipscolorkinetics.com/support/wiring/ls_prod.html)

# Installation

eW Reach Powercore gen2, a high-performance exterior architectural white floodlight with extended light projection, is designed to brilliantly illuminate prominent, signature façades. Because each eW Reach Powercore gen2 fixture weighs 75 lb (34 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 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 eW Reach Powercore gen2 fixtures in such a manner as to comply with all applicable codes, state and local laws, ordinances, and regulations. Consult with the appropriate electrical inspector to ensure compliance.

## Installing in Wet or Damp Locations

When installing in wet or damp locations, you must seal all junction boxes 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. Determine the appropriate location of the eW Reach Powercore gen2 fixtures in relation to each other.

eW Reach Powercore gen2 fixtures can be installed in series or in parallel (wired to a common junction box). The maximum number of fixtures each circuit 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).

2. 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 3-conductor copper wire. We recommend 12 AWG (2.05 mm) stranded wire.
  - Conduit as required
  - Electronics-grade room temperature vulcanizing (RTV) silicone sealant

## Position and Mount Fixtures

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

If mounting eW Reach Powercore gen2 on a lighting pole, make sure the pole can both support the total weight of the fixtures and withstand the maximum velocity winds to which it will be subjected. Each fixture weighs 75 lb (34 kg), and has an effective projected area (EPA) of 0.42 m<sup>2</sup>.

### Included in the box

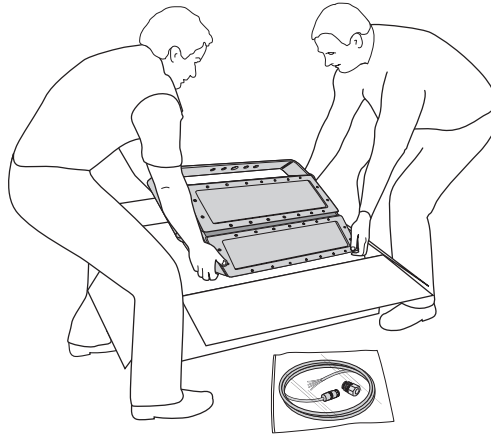
eW Reach Powercore gen2 fixture

6 ft (1.8 m) Leader Cable

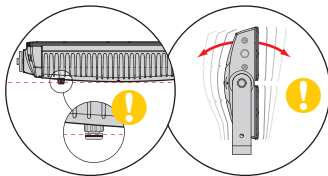
Cable Strain Relief

Installation Instructions

1. Unpack eW Reach Powercore gen2 fixtures. You may need two people to lift the fixture out of the box and position it in the mounting location.

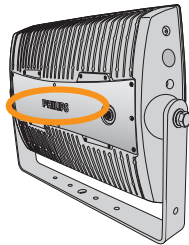


2. Position each eW Reach Powercore gen2 fixture in its designated mounting location. Make sure the mounting area is clear of debris and other obstructions.



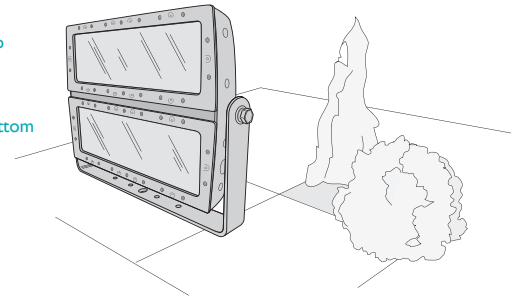
Do not rest eW Reach Powercore gen2 its back, as doing so may damage the connector port. Be careful not to tip the fixture over during positioning.

Philips logo is upright

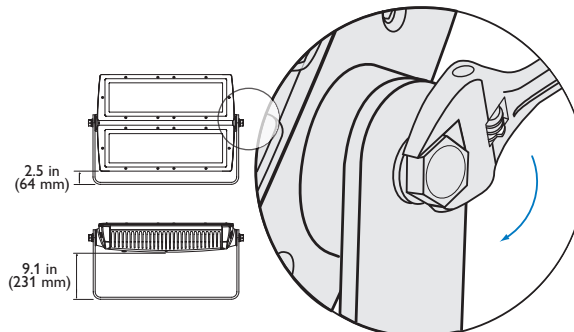


Top

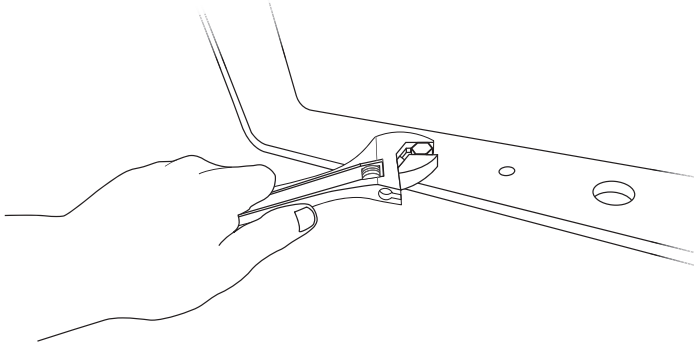
Bottom



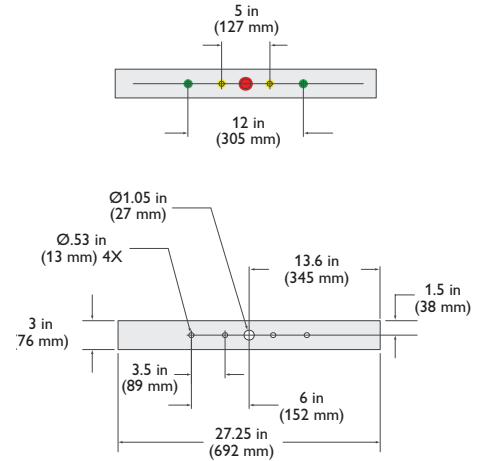
3. Loosen the locking bolts, using a 28 mm hex or adjustable wrench, and rotate the fixture to access the mounting bracket. Tilting the fixture 90° affords 9.1 in (231 mm) clearance.



- 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.



Mounting bracket dimensions for pre-drilling

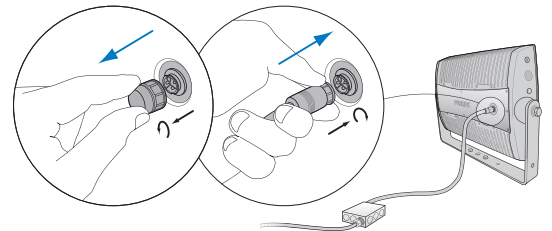


## Connect Fixtures

eW Reach Powercore gen2 fixtures can be installed in series or in parallel (wired to a common junction box). Ensure that all junction boxes are suitable for the environment and that all wiring between junction boxes complies with local codes.

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

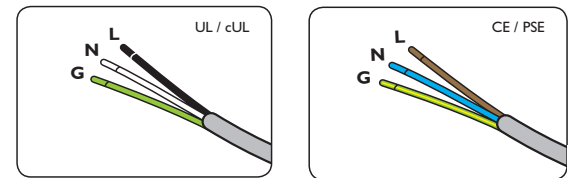
- Install junction boxes. (Refer to the manufacturer's literature for additional items required for mounting or sealing.)
- If installing fixtures in a series, pull 3-conductor copper wire between each junction box in the series. If installing fixtures in parallel, pull 3-conductor copper wire from a power source to a common junction box, and from the common junction box to each fixture's junction box.
- If necessary, remove the connector cap from the port on the back of the eW Reach Powercore gen2 housing. Insert the Leader Cable into the port. Turn the Leader Cable's lock nut to the right until it locks into place.
- Use wire nuts to connect line, neutral, and ground. 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 power source in the common junction box.
- Tuck wire connections into the junction box.



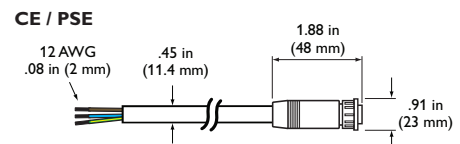
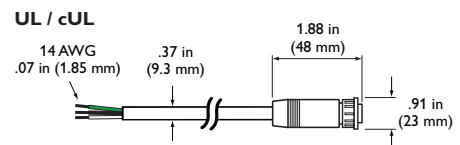
## Connect to Power

You can connect the first junction box in a series, or a common junction box in a parallel installation, directly to a power source.

- Run a sufficient length of 3-conductor wire from the first junction box in the series to the power source, or, if installing in parallel, run the wiring from the common junction box to the power source.
- If installing in a wet or damp location, seal all junction boxes with electronics-grade RTV silicone sealant. Use gaskets, clamps, and other parts and fittings required to comply with local outdoor wiring codes.



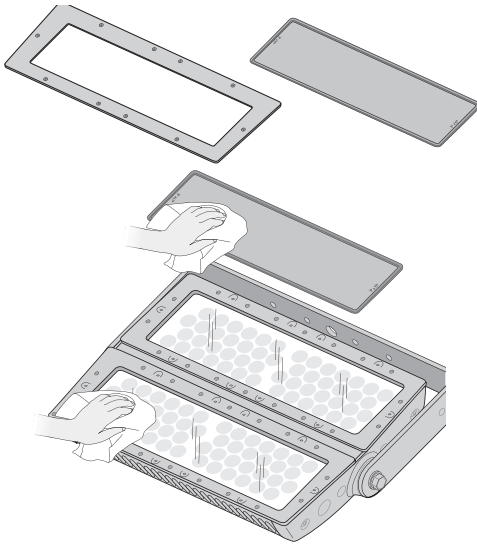
Leader Cable connector dimensions



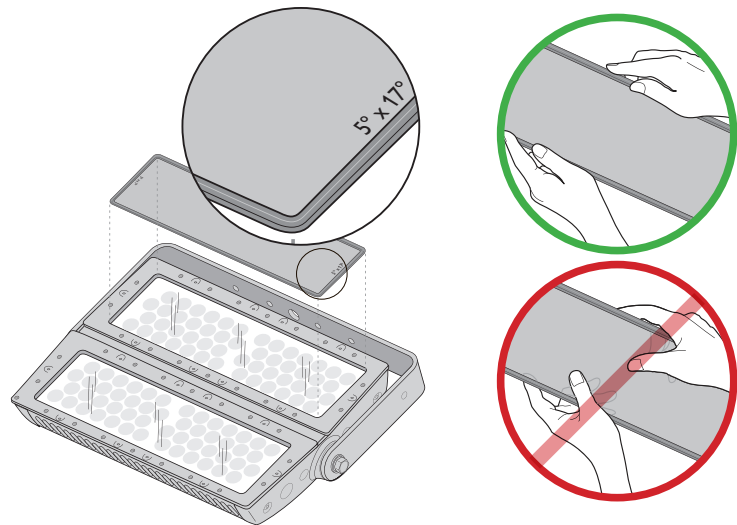



## Attach Spread Lenses (Optional)

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. You can install different spread lenses on each half of the fixture's housing for precise control of light diffusion.

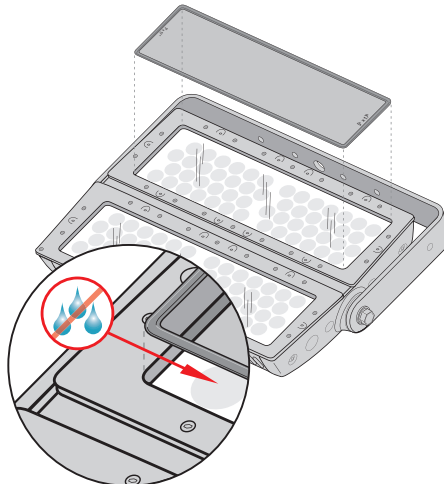


1. Unpack and confirm the contents of the box. Each box contains one lens kit, consisting of a spread lens with attached rubber gasket, and a bezel with 10 captured mounting screws.
2. Clean both sides of the spread lens and the face of the eW Reach Powercore gen2 housing, including glass surfaces, using 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.

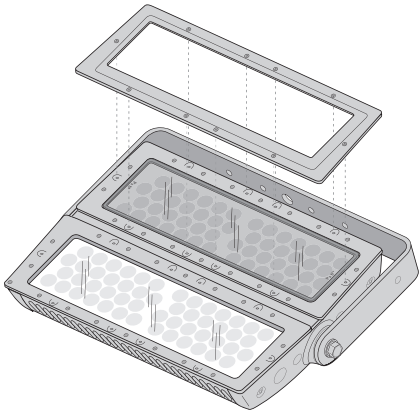


 For installations in extreme environments, refer to the Reach Spread Lens Kit Installation Instructions for details on sealing the spread lens and bezel to prohibit water ingress.

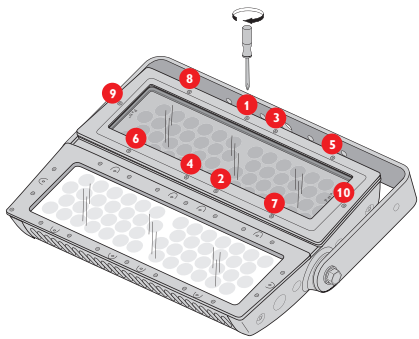
4. Place the spread lens on top of the eW Reach Powercore gen2 housing. Make sure that the spread lens and gasket are seated properly within the fixture housing. Also make sure that there is no moisture between the spread lens and the glass lens, as any moisture will compromise the effectiveness of the spread lens.



5. Position the bezel over the spread lens.



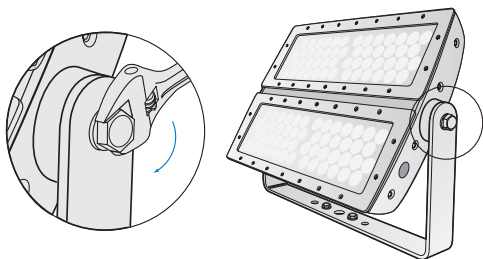
6. With a standard #2 Phillips screwdriver, attach the bezel to the fixture housing using the provided screws. To ensure a watertight seal, tighten the screws to approximately 20 – 30 in-lbs (2.2 – 3.4 Nm) in the sequence shown below.




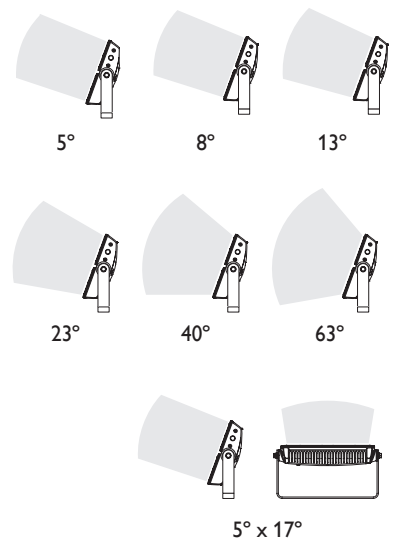
## Aim and Lock the Fixtures

Make sure that the power is ON before aiming fixtures. Do not look directly into the fixture when aiming and locking.

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.



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







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