Date: _____ Type: _____

Firm Name: _____

Project: _____

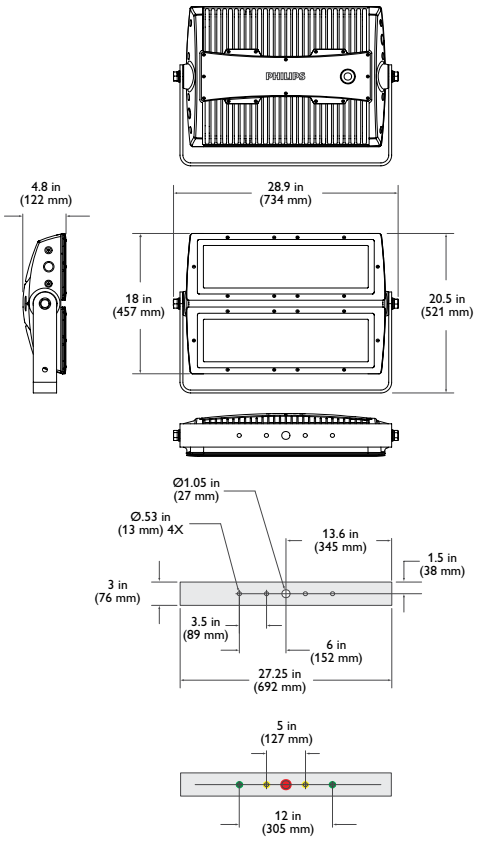
# eW Reach Powercore gen2

## 4000 K, 5° native (no spread lens), CQC

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.
- 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.
- 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.
- 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.

For detailed product information, please refer to the eW Reach Powercore gen2 Product Guide at www.philipscolorkinetics.com/ls/essentialwhite/ewreach/

PHILIPS

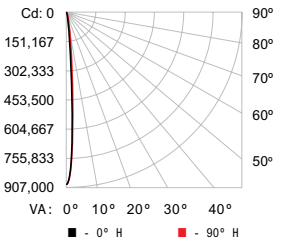
# Photometrics / eW Reach Powercore, 4000 K, 5° native (no spread lens)

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

## Full

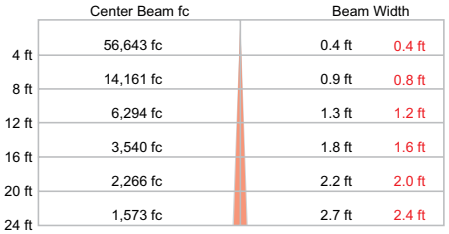
| | |
|---|---|
| Lumens | 13,575 |
| Efficacy | 56.2 lm / W |


### Polar Candela Distribution




| | 0 | 25 | 45 | 70 | 90 |
|---|---|---|---|---|---|
| 0 | 906299 | 906299 | 906299 | 906299 | 906299 |
| 5 | 168650 | 146570 | 126250 | 103360 | 96224 |
| 15 | 1658 | 1598 | 1576 | 1532 | 1520 |
| 25 | 471 | 469 | 495 | 500 | 554 |
| 35 | 253 | 243 | 262 | 247 | 350 |
| 45 | 158 | 149 | 152 | 153 | 156 |
| 55 | 124 | 161 | 118 | 128 | 121 |
| 65 | 114 | 102 | 102 | 105 | 98 |
| 75 | 91 | 77 | 77 | 77 | 72 |
| 85 | 69 | 68 | 68 | 68 | 68 |
| 90 | 68 | 68 | 67 | 67 | 67 |

### Illuminance at Distance




954 ft (290.1 m)
1 fc maximum distance

Vert. Spread: 6.3°
Horiz. Spread: 5.8°

### 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 | 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 | 113 | 111 | 114 | 112 | 111 | 99 | 108 | 107 | 106 | 104 | 104 | 103 | 101 | 101 | 100 | 98 |
| 2 | 113 | 110 | 108 | 106 | 111 | 109 | 107 | 98 | 106 | 104 | 103 | 103 | 102 | 101 | 100 | 99 | 99 | 97 |
| 3 | 111 | 108 | 105 | 103 | 109 | 106 | 104 | 97 | 104 | 102 | 100 | 102 | 100 | 99 | 100 | 99 | 97 | 96 |
| 4 | 109 | 105 | 103 | 100 | 108 | 104 | 102 | 96 | 103 | 100 | 99 | 101 | 99 | 98 | 99 | 98 | 97 | 96 |
| 5 | 108 | 104 | 101 | 99 | 107 | 103 | 100 | 96 | 101 | 99 | 97 | 100 | 98 | 97 | 99 | 97 | 96 | 95 |
| 6 | 106 | 102 | 99 | 97 | 105 | 102 | 99 | 95 | 100 | 98 | 96 | 99 | 97 | 96 | 98 | 97 | 95 | 95 |
| 7 | 105 | 101 | 98 | 96 | 104 | 100 | 98 | 95 | 100 | 97 | 96 | 99 | 97 | 95 | 98 | 96 | 95 | 94 |
| 8 | 104 | 100 | 97 | 96 | 103 | 100 | 97 | 94 | 99 | 97 | 95 | 98 | 96 | 95 | 97 | 96 | 94 | 94 |
| 9 | 103 | 99 | 97 | 95 | 103 | 99 | 96 | 94 | 98 | 96 | 95 | 98 | 96 | 94 | 97 | 95 | 94 | 93 |
| 10 | 102 | 98 | 96 | 94 | 102 | 98 | 96 | 94 | 98 | 96 | 94 | 97 | 95 | 94 | 97 | 95 | 94 | 93 |

### Zonal Lumen

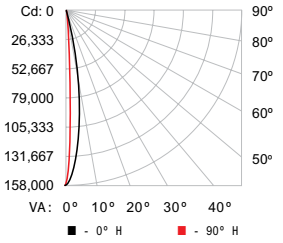
| Zone | Lumens | % Fixture |
|---|---|---|
| 0 - 60 | 13,314.7 | 98.1 % |
| 60 - 90 | 259.9 | 1.9 % |
| 0 - 90 | 13,574.6 | 100.0 % |

For lux multiply fc by 10.7

## Half

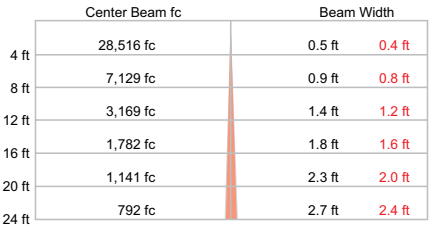
| | |
|---|---|
| Lumens | 6,788 |
| Efficacy | 55.7 lm / W |


### Polar Candela Distribution




| | 0 | 25 | 45 | 70 | 90 |
|---|---|---|---|---|---|
| 0 | 456257 | 456257 | 456257 | 456257 | 456257 |
| 5 | 86488 | 90885 | 87899 | 76386 | 72307 |
| 15 | 839 | 829 | 830 | 807 | 793 |
| 25 | 236 | 236 | 254 | 265 | 287 |
| 35 | 127 | 124 | 133 | 125 | 185 |
| 45 | 80 | 75 | 77 | 77 | 81 |
| 55 | 62 | 77 | 59 | 65 | 62 |
| 65 | 57 | 50 | 51 | 52 | 49 |
| 75 | 45 | 38 | 38 | 38 | 36 |
| 85 | 34 | 34 | 33 | 34 | 34 |
| 90 | 33 | 33 | 33 | 33 | 33 |

### Illuminance at Distance




675 ft (205.7 m)
1 fc maximum distance

Vert. Spread: 6.5°
Horiz. Spread: 5.8°

### 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 | 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 | 113 | 111 | 114 | 112 | 111 | 99 | 108 | 107 | 106 | 104 | 104 | 103 | 101 | 101 | 100 | 98 |
| 2 | 113 | 110 | 108 | 106 | 111 | 109 | 107 | 98 | 106 | 104 | 103 | 103 | 102 | 101 | 100 | 99 | 99 | 97 |
| 3 | 111 | 108 | 105 | 103 | 109 | 106 | 104 | 97 | 104 | 102 | 100 | 102 | 100 | 99 | 100 | 99 | 97 | 96 |
| 4 | 109 | 105 | 103 | 100 | 108 | 104 | 102 | 96 | 103 | 100 | 99 | 101 | 99 | 98 | 99 | 98 | 97 | 96 |
| 5 | 108 | 104 | 101 | 99 | 107 | 103 | 100 | 96 | 101 | 99 | 97 | 100 | 98 | 97 | 99 | 97 | 96 | 95 |
| 6 | 106 | 102 | 99 | 97 | 105 | 102 | 99 | 95 | 100 | 98 | 96 | 99 | 97 | 96 | 98 | 97 | 95 | 95 |
| 7 | 105 | 101 | 98 | 96 | 104 | 100 | 98 | 95 | 100 | 97 | 96 | 99 | 97 | 95 | 98 | 96 | 95 | 94 |
| 8 | 104 | 100 | 97 | 96 | 103 | 100 | 97 | 94 | 99 | 97 | 95 | 98 | 96 | 95 | 97 | 96 | 94 | 94 |
| 9 | 103 | 99 | 97 | 95 | 103 | 99 | 96 | 94 | 98 | 96 | 95 | 98 | 96 | 94 | 97 | 95 | 94 | 93 |
| 10 | 102 | 98 | 96 | 94 | 102 | 98 | 96 | 94 | 98 | 96 | 94 | 97 | 95 | 94 | 97 | 95 | 94 | 93 |

### Zonal Lumen

| Zone | Lumens | % Fixture |
|---|---|---|
| 0 - 60 | 6657.5 | 98.1 % |
| 60 - 90 | 130.3 | 1.9 % |
| 0 - 90 | 6787.8 | 100.0 % |

For lux multiply fc by 10.7

## Specifications

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

| Item | Specification | 2700 K* (Full Unit) | 4000 K* (Full Unit) |
|---|---|---|---|
| Output | Lumens† | 11,763 | 13,575 |
| | Efficacy (lm / W) | 50.2 | 56.2 |
| | CRI | 80 | 83 |
| | Lumen Maintenance‡ | | |
| 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 | |
| Control | | On / Off; digital dimming by 4 connector cable & DE Pro | |
| 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 $m^2$ | |
| | 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<br>-4° – 122° F (-20° – 50° C) Startup<br>-40° – 176° F (-40° – 80° C) Storage | |
| | 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/ | |
| | Humidity | 0 – 95%, non-condensing | |
| Certification and Safety | Certification | CQC, 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.

## Lumen Maintenance

| Threshold* | Ambient Temperature | Reported† | Calculated† |
|---|---|---|---|
| $L_{90}$ | @ 25°C | 42,300 hrs | 84,100 hrs |
| | @ 50°C | 42,300 hrs | 48,300 hrs |
| $L_{80}$ | @ 25°C | 42,300 hrs | >100,000 hrs |
| | @ 50°C | 42,300 hrs | >100,000 hrs |
| $L_{70}$ | @ 25°C | 42,300 hrs | >100,000 hrs |
| | @ 50°C | 42,300 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.

## Fixtures and Accessories

| Item | Type | Item Number | Philips 12NC |
|---|---|---|---|
| eW Reach Powercore gen2<br>*Includes 6 ft (1.8 m) leader cable* | 2700 K | 523-000044-51 | 912400130275 |
| | 4000 K | 523-000044-53 | 912400130276 |
| 3 Conductor Replacement Leader Cable; 6 ft (1.8 m) | CE | 108-000046-01 | 910503700622 |
| 4 Conductor Replacement Leader Cable (required to digitally dim unit, w/ DE Pro): 6 ft (1.8 m) | CE | 108-000043-03 | 910503700454 |
| Data Enabler Pro (required to digitally dim unit) | PG21 / PG13 (metric size conduit) | 106-000004-01 | 910503701211 |
| 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 |

Use Item Number when ordering in North America.

Philips Color Kinetics
3 Burlington Woods Drive
Burlington, Massachusetts 01803 USA
Tel 888.385.5742
Tel 617.423.9999
Fax 617.423.9998
www.philipscolorkinetics.com
@ColorKinetics



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