

# eW Reach Powercore gen2

Date: \_\_\_\_\_  
Type: \_\_\_\_\_  
Firm Name: \_\_\_\_\_  
Project: \_\_\_\_\_

4000 K, 23° Spread Lens, UL/CE

## Exterior long-throw floodlight with single temperature white light

eW Reach Powercore gen2 high-performance LED luminaires are premium exterior long-throw dynamic high-quality white luminaires for lighting tall buildings, bridges, and iconic structures. eW Reach Powercore gen2 outputs washes of white light in color temperatures ranging from a warm 2700 K to a cool 6500 K. A full range of accessories allow for customizable beam angles for floodlighting, spotlighting, wall washing, and grazing, along with the efficiency and cost-effectiveness of Powercore technology in a rugged die-cast aluminium housing.



- Multiple options for design flexibility—Luminaires 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.
- Superior color consistency and accuracy—Optibin, an advanced binning algorithm, sets a new standard for the color consistency and uniformity of LED sources used in manufacturing resulting in color consistency within 2 SDCM.
- Digital Dimming—Smooth dimming down to 1% with optional Data Enabler Pro and digital control interface.
- Unparalleled light output—eW Reach Powercore gen2 offers unprecedented output and punch for LED-based illumination of large-scale structures and objects.
- Expanded customization with a wide range of new accessory options. To complement the native 5° lens, six standard secondary spread lenses can customize the luminaire to produce 8°, 13°, 23°, 43°, 63°, and 5° x 17° (asymmetric) beam angles. The option to add or combine a louver, full glare shield, or half glare shield creates new aesthetic possibilities for designers and architects.
- Integrates patented Powercore technology that controls power output to luminaires directly from line voltage – rapidly, efficiently, and accurately. The Color Kinetics Data Enabler Pro merges line voltage with control data and delivers them to luminaires over a single standard cable, dramatically simplifying installation and lowering total system cost.
- Simple luminaire positioning—Rugged, slim-profile mounting bracket allows simple positioning and luminaire rotation through a full 360°. Side locking bolts reliably secure luminaire with a standard wrench.
- Universal power input range of 100 to 277 VAC.

For detailed product information, please refer to the Reach Powercore Family Product Guide at [www.colorkinetics.com/global/products/essentialwhite/ewreach/](http://www.colorkinetics.com/global/products/essentialwhite/ewreach/)

# Specifications

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

## Output

Color Temperature*	4000 K
Beam Angle	23°
Lumens (half unit)†	6,446
Lumens (no spread lens, full unit)*	14,646
Efficacy (lm/W) (half unit)	51.1
Efficacy (lm/W) (no spread lens, Full unit)	60.9
CRI	79.5

## Electrical

Input Voltage	100 to 277 VAC, auto-ranging, 50/60 Hz
Power Consumption (Maximum at full output, steady state)	250 W
Power Factor	0.99 (no spread lens, full unit, all channels full on) @ 120 VAC

*For Surge Protection Requirements for LED Lighting Systems, please refer to [www.colorkinetics.com/KB/surge-protection](http://www.colorkinetics.com/KB/surge-protection).*

## Control

### Dimmer

On/Off; digital dimming by 4 connector cable & DE Pro	
Remote Monitoring & Management	ActiveSite Ready, works with Interact Landmark

## Lumen Maintenance

Threshold§	Ambient Temperature	Reported¶	Calculated¶
L <sub>90</sub>	25 °C	42,300	
	50 °C	42,300	
L <sub>80</sub>	25 °C		100,000
	50 °C		100,000
L <sub>70</sub>	25 °C		100,000
	50 °C		100,000

## Physical

Dimensions (Height x Width x Depth)	522 x 733 x 158 mm (20.5 x 28.9 x 6.2 in)
Weight	34 kg (75 lb)
Effective Projected Area (EPA)	0.420 m <sup>2</sup>
Housing Material	Die-cast aluminium, powder-coated finish
Lens	Tempered glass
Luminaire Connections	Integral male/female waterproof connectors

## Temperature Ranges

-40 to 50 °C (-40 to 122 °F) Operating
-20 to 50 °C (-4 to 122 °F) Startup
-40 to 80 °C (-40 to 176 °F) Storage

Mechanical Impact	IK07
Humidity	0 to 95%, non-condensing

## Luminaire Run Lengths

To calculate luminaire run lengths and total power consumption for your specific installation, download the Configuration Calculator from [www.colorkinetics.com/support/install\\_tool/](http://www.colorkinetics.com/support/install_tool/)

## Certification and Safety

Approbation	UL/cUL, FCC Class A, CE, PSE
Environment	Dry/Damp/Wet Location, IP66



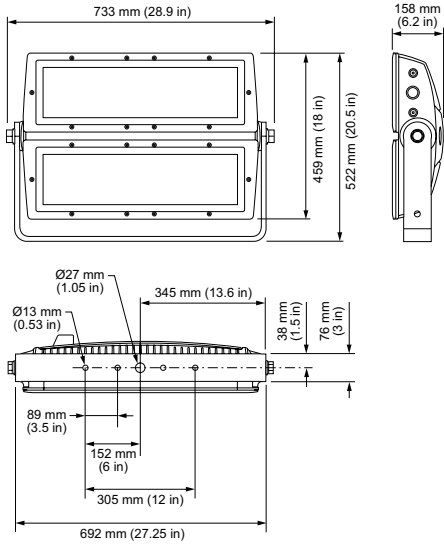
\* Correlated color temperature (CCT) complies with ANSI C78.377-2008 for the chromaticity of solid state lighting products.

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

§ L<sub>xx</sub> = xx% lumen maintenance (when light output drops below xx% of initial output). All values are given at B10, or the median value where 90% 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.

# Dimensions



## Photometrics, 23° Spread Lens, half unit

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

Beam Angle	23°
LED	4000 K
Lumens (half unit)	6,446
Efficacy (lm/W) (half unit)	51.1

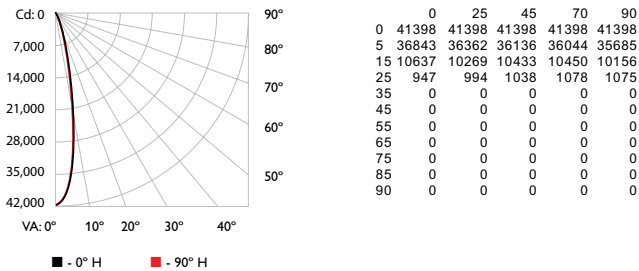


## Illuminance at Distance

	Center Beam fc	Beam Width
4 ft	2,587 fc	1.5 ft 1.5 ft
8 ft	647 fc	3.0 ft 3.0 ft
12 ft	287 fc	4.5 ft 4.5 ft
16 ft	162 fc	6.0 ft 6.0 ft
20 ft	104 fc	7.5 ft 7.5 ft
24 ft	72 fc	9.0 ft 9.1 ft

203 ft (61.9 m)  
1 fc maximum distance  
Vert. Spread: 21.3°  
Horiz. Spread: 21.4°

## Polar Candela Distribution



## Zonal Lumen

Zone	Lumens	% Luminaire
0-30	6,441.9	99.9%
0-40	6,446.1	100.0%
0-60	6,446.1	100.0%
0-90	6,446.1	100.0%
60-90	0.0	0.0%
70-100	0.0	0.0%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	6,446.1	100.0%

For lux multiply fc by 10.7

## Coefficients of Utilization - Zonal Cavity Method

RCC %:	Effective Floor Cavity Reflectance: 20%																							
	80				70				50				30				10				0			
RCR:	70	50	30	0	70	50	30	0	50	30	20	0	50	30	20	0	50	30	20	0	50	30	20	0
0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11	1.06	1.06	1.06	1.06	1.02	1.02	1.02	1.02	1.00	1.02	1.02	1.02	1.00
1	1.16	1.14	1.12	1.10	1.13	1.11	1.10	0.98	1.08	1.06	1.05	1.04	1.03	1.02	1.02	1.01	1.01	1.00	0.99	0.98	1.01	1.00	0.99	0.98
2	1.12	1.09	1.06	1.04	1.10	1.07	1.05	0.96	1.04	1.02	1.01	1.02	1.00	0.99	0.99	0.98	0.98	0.97	0.96	0.95	0.99	0.98	0.97	0.95
3	1.09	1.05	1.02	1.00	1.08	1.04	1.01	0.94	1.02	0.99	0.97	0.99	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.97	0.96	0.94	0.93
4	1.07	1.02	0.99	0.96	1.05	1.01	0.98	0.92	0.99	0.96	0.94	0.97	0.95	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.96	0.94	0.92	0.91
5	1.04	0.99	0.95	0.93	1.03	0.98	0.95	0.90	0.97	0.94	0.92	0.95	0.93	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.94	0.92	0.90	0.89
6	1.02	0.96	0.93	0.90	1.01	0.96	0.92	0.88	0.94	0.92	0.89	0.93	0.91	0.89	0.89	0.88	0.88	0.87	0.87	0.86	0.92	0.90	0.88	0.87
7	0.99	0.94	0.90	0.88	0.98	0.93	0.90	0.86	0.92	0.89	0.87	0.91	0.89	0.87	0.87	0.86	0.86	0.85	0.85	0.84	0.90	0.88	0.86	0.86
8	0.97	0.92	0.88	0.86	0.97	0.91	0.88	0.85	0.90	0.87	0.85	0.90	0.87	0.85	0.85	0.84	0.84	0.83	0.83	0.82	0.89	0.87	0.85	0.84
9	0.95	0.90	0.86	0.84	0.95	0.89	0.86	0.83	0.89	0.86	0.84	0.88	0.85	0.83	0.83	0.82	0.82	0.81	0.81	0.80	0.87	0.85	0.83	0.82
10	0.93	0.88	0.84	0.82	0.93	0.88	0.84	0.81	0.87	0.84	0.82	0.86	0.84	0.82	0.82	0.81	0.81	0.80	0.80	0.79	0.86	0.83	0.82	0.81

# Photometrics, 5° native (no spread lens), full unit

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

Beam Angle	5°
LED	4000 K
Lumens (no spread lens, full unit)	14,646
Efficacy (lm/W) (no spread lens, Full unit)	60.9



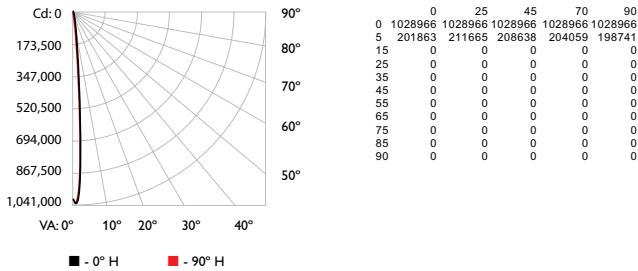
## Illuminance at Distance

	Center Beam fc	Beam Width
4 ft	64,310 fc	0.4 ft 0.4 ft
8 ft	16,078 fc	0.9 ft 0.8 ft
12 ft	7,146 fc	1.4 ft 1.3 ft
16 ft	4,019 fc	1.9 ft 1.7 ft
20 ft	2,572 fc	2.3 ft 2.1 ft
24 ft	1,786 fc	2.8 ft 2.5 ft

1,015 ft (309.4 m)  
1 fc maximum distance

■ Vert. Spread: 6.7°  
■ Horiz. Spread: 6.1°

## Polar Candela Distribution



## Zonal Lumen

Zone	Lumens	% Luminaire
0-30	15,025.9	100.0%
0-40	15,025.9	100.0%
0-60	15,025.9	100.0%
0-90	15,025.9	100.0%
60-90	0.0	0.0%
70-100	0.0	0.0%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	15,025.9	100.0%

For lux multiply fc by 10.7

## Coefficients Of Utilization - Zonal Cavity Method

RCC %:	Effective Floor Cavity Reflectance: 20%																		
	80			70			50			30			10			0			
RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	0	50	30	20	0
RCR:	0	1.19	1.19	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00	1.00
1	1.17	1.15	1.14	1.13	1.14	1.13	1.12	1.00	1.09	1.08	1.08	1.06	1.05	1.05	1.02	1.02	1.02	1.00	1.00
2	1.15	1.12	1.11	1.09	1.13	1.11	1.09	1.00	1.08	1.07	1.05	1.05	1.04	1.03	1.03	1.02	1.01	1.00	1.00
3	1.13	1.10	1.08	1.06	1.12	1.09	1.07	1.00	1.07	1.05	1.04	1.05	1.03	1.02	1.03	1.02	1.01	1.00	1.00
4	1.12	1.09	1.06	1.05	1.11	1.08	1.06	1.00	1.06	1.04	1.03	1.04	1.03	1.02	1.03	1.02	1.01	1.00	1.00
5	1.11	1.07	1.05	1.04	1.10	1.07	1.05	1.00	1.05	1.04	1.02	1.04	1.03	1.02	1.03	1.02	1.01	1.00	1.00
6	1.10	1.07	1.04	1.03	1.09	1.06	1.04	1.00	1.05	1.03	1.02	1.04	1.02	1.01	1.03	1.02	1.01	1.00	1.00
7	1.09	1.06	1.04	1.02	1.08	1.05	1.03	1.00	1.04	1.03	1.01	1.04	1.02	1.01	1.03	1.02	1.01	1.00	1.00
8	1.08	1.05	1.03	1.02	1.08	1.05	1.03	1.00	1.04	1.02	1.01	1.03	1.02	1.01	1.03	1.01	1.01	1.00	1.00
9	1.08	1.05	1.03	1.01	1.07	1.04	1.02	1.00	1.04	1.02	1.01	1.03	1.02	1.01	1.03	1.01	1.00	1.00	1.00
10	1.07	1.04	1.02	1.01	1.07	1.04	1.02	1.00	1.03	1.02	1.01	1.03	1.02	1.01	1.03	1.01	1.00	1.00	1.00

# Luminaire and Accessories

Use Item Number when ordering in North America

### Luminaire

	Item Number	Item 12NC
eW Reach Powercore gen2 4000 K, UL/CE	523-000093-15	912400133466
<i>Luminaire only. Values in this specification sheet represent both the luminaire and spread lens combined. Spread lens available below in Associated Part.</i>		

### Associated Part

23° Spread lens with bezel <i>Trim bezel included.</i>	120-000068-13	912400133594
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### Accessories

3 Conductor Leader Cable, UL/cUL, 3 m (10 ft)	108-000056-03	910503704071
3 Conductor Leader Cable, CE, 3 m (10 ft)	108-000056-04	910503704072
3 Conductor Leader Cable, UL/cUL, 15.2 m (50 ft)	108-000056-00	910503703138
3 Conductor Leader Cable, CE, 15.2 m (50 ft)	108-000056-01	910503704069
4 Conductor Leader Cable (required to digitally dim unit, w/DE Pro), UL/cUL, 3 m (10 ft)	108-000055-03	910503704066
4 Conductor Leader Cable (required to digitally dim unit, w/DE Pro), CE, 3 m (10 ft)	108-000055-04	910503704067
4 Conductor Leader Cable (required to digitally dim unit, w/DE Pro), UL/cUL, 15.2 m (50 ft)	108-000055-00	910503703137
4 Conductor Leader Cable (required to digitally dim unit, w/DE Pro), CE, 15.2 m (50 ft)	108-000055-01	910503704064
Louver	120-000187-02	912400133589
Half Glare Shield	120-000187-01	912400133588
Full Glare Shield	120-000187-00	912400133587
Trim Bezel	120-000187-03	912400134263
8° Spread lens with bezel	120-000068-17	912400133598
13° Spread lens with bezel	120-000068-12	912400133593
43° Spread lens with bezel	120-000068-14	912400133595
63° Spread lens with bezel	120-000068-15	912400133596
5° x 17° Spread lens with bezel	120-000068-16	912400133597

# Luminaire and Accessories (cont.)

Use Item Number when ordering in North America

	Item Number	Item 12NC
<b>Power Supplies</b>		
Data Enabler Pro (required to digitally dim unit), PG21/PG13 (metric size conduit)	106-000004-01	910503701211
Data Enabler Pro, PG21/PG13 (metric size conduit)	106-000004-01	910503701211



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