

iW Reach Powercore gen2

Date: _____
Type: _____
Firm Name: _____
Project: _____

23° Spread Lens, CQC

Premium long-throw exterior floodlight with intelligent white light

iW 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. iW 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.



- 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. Luminaire brightness can be varied while maintaining constant temperature.
- Unparalleled light output—iW 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.
- Superior color consistency and accuracy—Optibin, an advanced binning algorithm, sets a new standard for the color consistency and uniformity of LED sources used in manufacturing.
- Integrates 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 ranges of 100 to 240 VAC (CQC) and 100 to 277 (UL/CE).
- Works seamlessly with the complete Color Kinetics line of controllers, including ColorDial Pro, iPlayer 3, and Light System Manager – as well as third-party controllers.
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For detailed product information, please refer to the iW Reach Powercore gen2 Product Guide at www.colorkinetics.com/lis/intelliwhite/iwreach/

Specifications

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

Output

Color Temperature*	2700 K to 6500 K
Beam Angle	23°
Lumens (half unit)†	6,568
Lumens (no spread lens, full unit)*	14,880
Efficacy (lm/W) (half unit)	54.6
Efficacy (lm/W) (no spread lens, full unit)	64.8

Electrical

Input Voltage	100 to 240 VAC, auto-ranging, 50/60 Hz
Power Consumption (Maximum at full output, steady state)	290 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.

Control

Interface	Data Enabler Pro (DMX/Ethernet)
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Control System

Color Kinetics full range of controllers, including Light System Manager, Video System Manager Pro, iPlayer 3, Antumbra iColor Keypad, and ColorDial Pro, or third-party controllers

Remote Monitoring & Management	ActiveSite Ready, works with Interact Landmark
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Lumen Maintenance

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

* 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_{xx} = 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.

Physical

Dimensions (Height x Width x Depth)	522 x 733 x 143 mm (20.5 x 28.9 x 5.6 in)
Weight	34 kg (75 lb)
Effective Projected Area (EPA)	0.420 m ²
Housing Material	Die-cast aluminium, powder-coated finish
Lens	Tempered glass
Luminaire Connections	Integral male/female waterproof connector, 1.8 m (6 ft) unified power/data cable

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

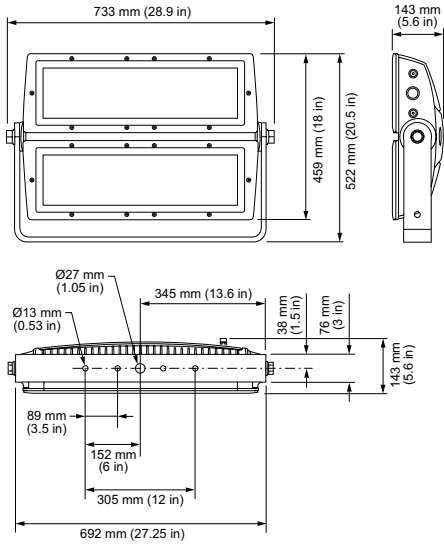
To calculate luminaire run lengths and total power consumption for your specific installation, download the Configuration Calculator from www.colorkinetics.com/support/install_tool/

Certification and Safety

Approbation	FCC Class A, CE, PSE, CQC, C-Tick
Environment	Dry/Damp/Wet Location, IP66



Dimensions



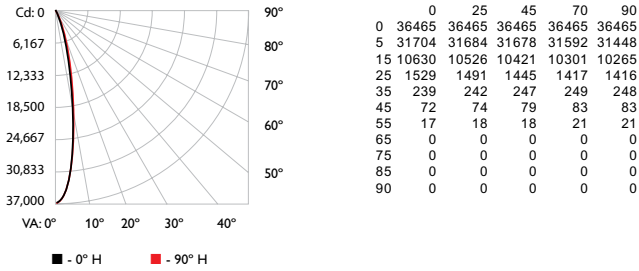
Photometrics, 23° Spread Lens, half unit

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

Beam Angle	23°
Lumens (half unit)	6,568
Efficacy (lm/W) (half unit)	54.6



Polar Candela Distribution

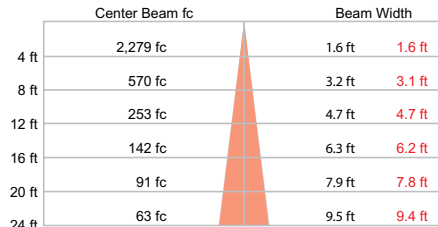


Zonal Lumen

Zone	Lumens	% Luminaire
0-30	6,317.5	96.2%
0-40	6,484.2	98.8%
0-60	6,564.4	100.0%
0-90	6,565.1	100.0%
60-90	0.7	0.0%
70-100	0.0	0.0%
90-120	0.0	0.0%
90-180	0.0	0.0%
0-180	6,565.1	100.0%

For lux multiply fc by 10.7

Illuminance at Distance



191 ft (58.2 m)
1 fc maximum distance
Vert. Spread: 22.4°
Horiz. Spread: 22.0°

Coefficients of Utilization - Zonal Cavity Method

RCC %:	Effective Floor Cavity Reflectance: 20%																			
	80				70				50				30				10			
RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	50	30	20	0		
RCR:	0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00	
	1	1.15	1.13	1.11	1.10	1.13	1.11	1.09	0.97	1.07	1.06	1.05	1.03	1.02	1.02	1.00	0.99	0.99	0.97	
	2	1.12	1.08	1.05	1.03	1.10	1.07	1.04	0.95	1.03	1.01	1.00	1.01	0.99	0.98	0.98	0.97	0.96	0.94	
	3	1.08	1.04	1.01	0.98	1.07	1.03	1.00	0.92	1.00	0.98	0.96	0.98	0.96	0.94	0.96	0.94	0.93	0.91	
	4	1.05	1.00	0.96	0.94	1.04	0.99	0.96	0.90	0.97	0.94	0.92	0.95	0.93	0.91	0.94	0.92	0.90	0.89	
	5	1.02	0.97	0.93	0.90	1.01	0.96	0.92	0.87	0.94	0.91	0.89	0.93	0.90	0.88	0.92	0.89	0.88	0.86	
	6	1.00	0.94	0.90	0.87	0.99	0.93	0.89	0.85	0.92	0.89	0.86	0.91	0.88	0.86	0.89	0.87	0.85	0.84	
	7	0.97	0.91	0.87	0.84	0.96	0.91	0.87	0.83	0.89	0.86	0.84	0.88	0.85	0.83	0.87	0.85	0.83	0.82	
	8	0.95	0.89	0.85	0.82	0.94	0.88	0.84	0.81	0.87	0.84	0.82	0.86	0.83	0.81	0.86	0.83	0.81	0.80	
	9	0.92	0.86	0.82	0.80	0.92	0.86	0.82	0.79	0.85	0.82	0.80	0.84	0.81	0.79	0.84	0.81	0.79	0.78	
	10	0.90	0.84	0.80	0.78	0.90	0.84	0.80	0.77	0.83	0.80	0.78	0.82	0.80	0.77	0.82	0.79	0.77	0.76	

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.

Beam Angle	5°
Lumens (no spread lens, full unit)	14,880
Efficacy (lm/W) (no spread lens, full unit)	64.8



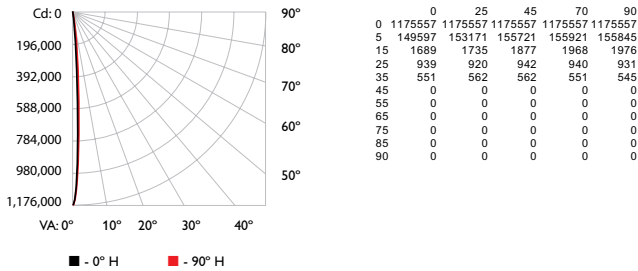
Illuminance at Distance

	Center Beam fc	Beam Width
4 ft	73,472 fc	0.4 ft 0.4 ft
8 ft	18,368 fc	0.7 ft 0.7 ft
12 ft	8,164 fc	1.1 ft 1.1 ft
16 ft	4,592 fc	1.4 ft 1.4 ft
20 ft	2,939 fc	1.8 ft 1.8 ft
24 ft	2,041 fc	2.1 ft 2.1 ft

1,085 ft (330.7 m)
1 fc maximum distance

Vert. Spread: 5.0°
 Horiz. Spread: 5.1°

Polar Candela Distribution



Zonal Lumen

Zone	Lumens	% Luminaire
0-30	15,011.6	98.2%
0-40	15,286.6	100.0%
0-60	15,286.9	100.0%
0-90	15,286.9	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	15,286.9	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	1.16	1.15	1.13	1.12	1.14	1.13	1.12	1.00	1.09	1.08	1.07	1.05	1.05	1.04	1.02	1.01	1.01	0.99	0.99
2	1.14	1.12	1.10	1.08	1.12	1.10	1.08	0.99	1.07	1.06	1.04	1.04	1.03	1.02	1.02	1.01	1.00	0.99	0.99
3	1.12	1.09	1.07	1.05	1.11	1.08	1.06	0.99	1.06	1.04	1.02	1.03	1.02	1.01	1.01	1.00	0.99	0.98	0.98
4	1.11	1.07	1.05	1.03	1.09	1.06	1.04	0.98	1.04	1.02	1.01	1.03	1.01	1.00	1.01	1.00	0.99	0.98	0.98
5	1.09	1.05	1.03	1.01	1.08	1.05	1.02	0.98	1.03	1.01	1.00	1.02	1.00	0.99	1.01	0.99	0.98	0.97	0.97
6	1.08	1.04	1.02	1.00	1.07	1.04	1.01	0.97	1.02	1.00	0.99	1.01	1.00	0.98	1.00	0.99	0.98	0.97	0.97
7	1.07	1.03	1.01	0.99	1.06	1.03	1.00	0.97	1.02	1.00	0.98	1.01	0.99	0.98	1.00	0.98	0.97	0.96	0.96
8	1.06	1.02	1.00	0.98	1.05	1.02	0.99	0.97	1.01	0.99	0.98	1.00	0.98	0.97	1.00	0.98	0.97	0.96	0.96
9	1.05	1.01	0.99	0.97	1.04	1.01	0.99	0.96	1.00	0.98	0.97	1.00	0.98	0.97	0.99	0.98	0.97	0.96	0.96
10	1.04	1.01	0.98	0.97	1.04	1.00	0.98	0.96	1.00	0.98	0.97	0.99	0.98	0.96	0.99	0.97	0.96	0.96	0.96

Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire

	Item Number	Item 12NC
iW Reach Powercore gen2 CQC Luminaire and 1.8 m (6 ft) leader cable only. Values in this specification sheet represent both the luminaire and spread lens combined. Spread lens available below in Associated Part.	523-000045-52	912400133493

Associated Part

23° Spread lens with bezel Trim bezel included.	120-000068-13	912400133594
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Accessories

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

Power Supplies

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



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Color Kinetics
www.colorkinetics.com/ls/intelliwhite/iwreach/