

# FlexElite iColor

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

**RGBW, 20 Nodes, Black Node/  
Cable, 152 mm (6 in) On-Center  
Node Spacing**

## Exterior bright and beautiful flexible direct view luminaire with intelligent RGBW light

FlexElite is the brightest and most flexible member of our popular Flex family. It includes a from-the-ground-up redesign of all major elements, from its form factor to internal electronics to mechanical design. We created FlexElite to meet the challenges posed by large, unconventional buildings and structures. At its core, you'll find an innovative modular design that lets you create the exact number and configuration of nodes that you need for your design. FlexElite's sections and jumper cables click together quickly and easily, allowing unequalled customization impossible with less-modular solutions. Longer run lengths and node spacing let you take on larger challenges than possible in the past. FlexElite RGBW adds a separate white LED creating better-quality whites compared to RGB.



- **Modular Design**—FlexElite's advanced technology frees you from the limitations posed by static numbers of nodes on flexible cables—enabling longer run lengths and node spacing. You can choose sections with the number of nodes you need. Plus, multiple jumper cable lengths let you get the node spacing you need for your design—achieving the right resolution. FlexElite can deliver run lengths of up to 1,000 feet per run, with variable distances between nodes. With FlexElite, you can take on a wide range of outdoor applications, from arenas to office buildings to bridges.
- **Brighter Output**—FlexElite is the brightest Flex luminaire available, outputting over 100 lumens per node in RGBA versions, over 110 lumens per node in RGBW versions, and over 130 lumens per node in IntelliHue versions. At its brightest, FlexElite IntelliHue achieves 150 lumens per node. Brighter output lets you take on larger structures and create ambitious, large-scale designs that get noticed. And our lumen measurement complies with IES LM-79-08 testing procedures for consistency.
- **Four-Color Options**—FlexElite luminaires are natively designed as four-channel luminaires. Choose IntelliHue for the highest quality white light and dynamic color in the same luminaire. Choose RGBW or RGBA for deep color with white or amber. FlexElite includes our proprietary Chromasync technology for maximum color consistency.
- **Simple Installation**—Push-and-click connectors ensure reliable connections, while intuitive mounting options make it easy for installers to mount FlexElite on any structure.
- **Proven Reliability**—FlexElite is designed to be extremely reliable, year after year. Thanks to smart design, extensive testing, and years of experience, FlexElite can handle extreme conditions, humidity, heat, cold, and ice—delivering reliable performance.
- **Complete Solution**—An advanced, reliable luminaire is a critical part of your direct-view lighting solution, but it's not the only element that matters. That's why Color Kinetics offers a full range of complementary solutions—including power/data supplies, controllers, and much more. All designed and optimized to ensure seamless integration and years of trouble-free operation. For example, we designed our PDS-400 48V CA4 power/data supply specifically for FlexElite. And FlexElite integrates with Philips ActiveSite, our remote monitoring solution.

For detailed product information, please refer to the FlexElite Product Guide at [www.colorkinetics.com/global/products/rgb/flexelite-icolor-rgbw/](http://www.colorkinetics.com/global/products/rgb/flexelite-icolor-rgbw/)

# Specifications

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

## Output

|   |                           |
|---|---------------------------|
| Viewing Angle                                       | 140°                      |
| Lumens Per Node (all channels full on) <sup>†</sup> | 111                       |
| Lumens per single channel                           | R 36 / G 68 / B 19 / W 79 |
| Lumens per combined channels                        | R+G 114 / R+B 52 / G+B 86 |
| Lumens @ 2200                                       | 93                        |
| Lumens @ 2700                                       | 117                       |
| Lumens @ 3000                                       | 120                       |
| Lumens @ 3500                                       | 118                       |
| Lumens @ 4000                                       | 115                       |
| Lumens @ 5000                                       | 114                       |
| Lumens @ 5700                                       | 112                       |
| Lumens @ 6500                                       | 110                       |
| Luminance Per Node                                  | 89,939 cd/m <sup>2</sup>  |
| On-Axis Candela per node                            | 42                        |
| Efficacy (lm/W) per node                            | 46.3                      |
| LED Channels  | Red/Green/Blue/4000 K     |

## Electrical

|                   |                            |
|-------------------|----------------------------|
| Input Voltage     | 48 VDC via PDS-400 48V CA4 |
| Power Consumption | 2.5 W                      |

(Maximum per node at full output, steady state)

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

## Control

|           |                 |
|-----------|-----------------|
| Interface | PDS-400 48V CA4 |
|-----------|-----------------|

### 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 | Philips ActiveSite Ready, works with Interact Landmark |
|--------------------------------|--|

## Lumen Maintenance

| Threshold <sup>§</sup> | Ambient Temperature | Reported <sup>¶¶</sup> | Calculated <sup>¶¶</sup> |
|------------------------|---------------------|------------------------|--------------------------|
| L <sub>90</sub>        | 25 °C               | > 42,000               | 44,802                   |
|                        | 50 °C               | 35,439                 | 35,439                   |
| L <sub>80</sub>        | 25 °C               | > 42,000               | > 100,000                |
|                        | 50 °C               | > 42,000               | 80,740                   |
| L <sub>70</sub>        | 25 °C               | > 42,000               | > 100,000                |
|                        | 50 °C               | > 42,000               | > 100,000                |
| L <sub>50</sub>        | 25 °C               | > 42,000               | > 100,000                |
|                        | 50 °C               | > 42,000               | > 100,000                |

<sup>†</sup> Lumen output measurements comply with IES LM-79-08 testing procedures.

<sup>§</sup> 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.

<sup>¶¶</sup> Due to voltage/power loss in leader and jumper cables, most installations will not be able to install the full 150 nodes per PDS. Please consult Color Kinetics for maximum run length calculations for your projects.

<sup>¶¶¶</sup> 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<br>(Height x Width x Depth) | 60 x 97.81 x 27.66 mm (2.36 x 3.85 x 1.09 in) |
| Weight                                 | 2.65 kg (5.84 lb)                             |
| Housing Material                       | Black PBT plastic and powder-coated aluminium |
| Lens                                   | Tempered glass                                |
| Luminaire Connections                  | Integrated watertight 5-pin connector         |

### Temperature Ranges

-40 to 55 °C (-40 to 131 °F) Operating  
 > 0 °C (> 32 °F) Handling  
 -20 to 50 °C (-4 to 122 °F) Startup  
 -40 to 80 °C (-40 to 176 °F) Storage

### Vibration Resistance

Complies with ANSI C136.31, 3G

|                   |                                 |
|-------------------|---------------------------------|
| Mechanical Impact | IK06 (IK10 with dome installed) |
|-------------------|---------------------------------|

### Corrosion Resistance

Complies with ASTM B117 standard for > 1,500 hours

|          |                          |
|----------|--------------------------|
| Humidity | 0 to 95%, non-condensing |
|----------|--------------------------|

### Maximum Luminaires Per Power/Data Supply

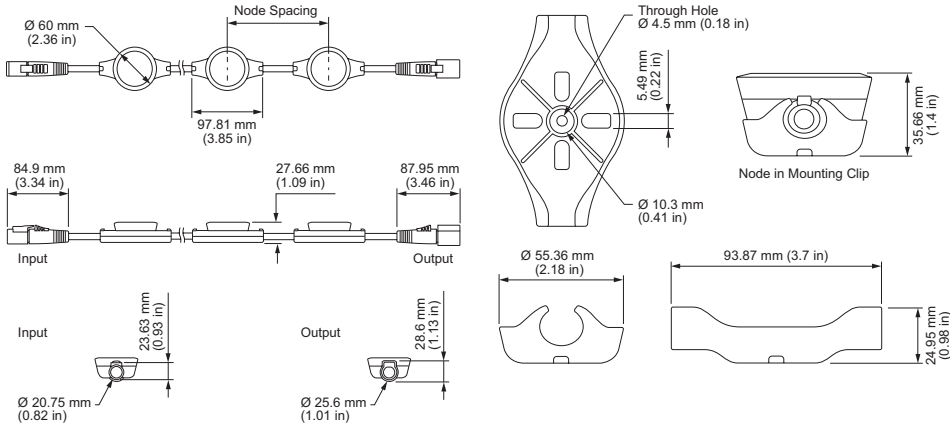
PDS-400 48V CA4: 150 nodes  
 CM-550 48VCA4: 200 nodes

## Certification and Safety

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



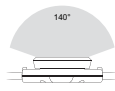
# Dimensions



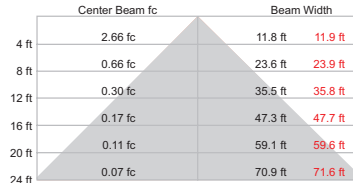
# Photometrics all channels full on

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

|  |                      |
|--|----------------------|
| Viewing Angle                          | 140°                 |
| LEDs                                   | All channels full on |
| Lumens Per Node (all channels full on) | 111                  |
| Efficacy (lm/W) per node               | 46.3                 |



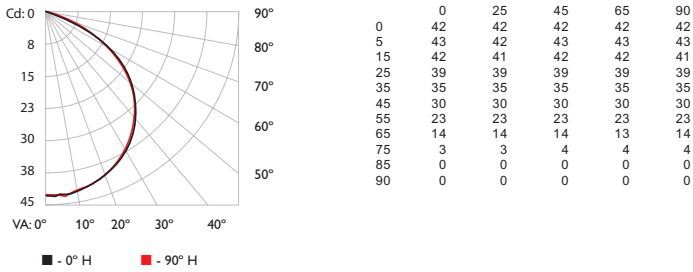
## Illuminance at Distance



## Zonal Lumen

| Zone   | Lumens | % Luminaire |
|--------|--------|-------------|
| 0-30   | 33.6   | 29.0%       |
| 0-40   | 55.5   | 47.9%       |
| 0-60   | 98.3   | 84.8%       |
| 60-90  | 17.6   | 15.2%       |
| 70-100 | 4.3    | 3.7%        |
| 90-120 | 0.0    | 0.0%        |
| 0-90   | 115.9  | 100.0%      |
| 90-180 | 0.0    | 0.0%        |
| 0-180  | 115.9  | 100.0%      |

## Polar Candela Distribution



## Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

| RCC %: | 80 | 70   | 50   | 30   | 10   | 0    |      |      |      |      |      |      |      |      |      |      |      |      |      |
|--------|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| RW %:  | 70 | 50   | 30   | 0    | 50   | 30   | 20   | 50   | 30   | 20   | 0    |      |      |      |      |      |      |      |      |
| RCR:   | 0  | 1.19 | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.11 | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | 1    |      |      |
|        | 1  | 1.1  | 1.06 | 1.02 | 0.99 | 1.07 | 1.04 | 1.07 | 0.99 | 0.97 | 0.94 | 0.95 | 0.93 | 0.91 | 0.92 | 0.9  | 0.88 | 0.86 |      |
|        | 2  | 1.01 | 0.93 | 0.87 | 0.81 | 0.98 | 0.91 | 0.85 | 0.74 | 0.88 | 0.83 | 0.79 | 0.84 | 0.8  | 0.77 | 0.81 | 0.78 | 0.75 | 0.73 |
|        | 3  | 0.92 | 0.82 | 0.74 | 0.68 | 0.9  | 0.8  | 0.73 | 0.64 | 0.78 | 0.71 | 0.66 | 0.75 | 0.7  | 0.65 | 0.72 | 0.68 | 0.64 | 0.62 |
|        | 4  | 0.84 | 0.73 | 0.64 | 0.58 | 0.82 | 0.71 | 0.64 | 0.55 | 0.69 | 0.62 | 0.57 | 0.67 | 0.61 | 0.56 | 0.65 | 0.59 | 0.55 | 0.53 |
|        | 5  | 0.78 | 0.65 | 0.56 | 0.5  | 0.75 | 0.64 | 0.56 | 0.48 | 0.62 | 0.55 | 0.49 | 0.6  | 0.54 | 0.49 | 0.58 | 0.53 | 0.48 | 0.46 |
|        | 6  | 0.72 | 0.59 | 0.5  | 0.44 | 0.7  | 0.58 | 0.49 | 0.42 | 0.56 | 0.49 | 0.43 | 0.54 | 0.48 | 0.43 | 0.53 | 0.47 | 0.42 | 0.4  |
|        | 7  | 0.66 | 0.53 | 0.45 | 0.39 | 0.65 | 0.52 | 0.44 | 0.37 | 0.51 | 0.43 | 0.38 | 0.49 | 0.43 | 0.38 | 0.48 | 0.42 | 0.38 | 0.36 |
|        | 8  | 0.62 | 0.48 | 0.4  | 0.34 | 0.6  | 0.48 | 0.4  | 0.33 | 0.46 | 0.39 | 0.34 | 0.45 | 0.39 | 0.34 | 0.44 | 0.38 | 0.34 | 0.32 |
|        | 9  | 0.58 | 0.44 | 0.36 | 0.31 | 0.56 | 0.44 | 0.36 | 0.3  | 0.43 | 0.36 | 0.31 | 0.42 | 0.35 | 0.3  | 0.41 | 0.35 | 0.3  | 0.28 |
|        | 10 | 0.54 | 0.41 | 0.33 | 0.28 | 0.53 | 0.4  | 0.33 | 0.27 | 0.39 | 0.33 | 0.28 | 0.39 | 0.32 | 0.28 | 0.38 | 0.32 | 0.28 | 0.26 |

# Luminaire and Accessories

Use Item Number when ordering in North America

| Luminaire  | Item Number   | Item 12NC    |
|--|---------------|--------------|
| FlexElite iColor, RGBW, 20 Nodes, Black Node/Cable, 152 mm (6 in) On-Center Node Spacing | 401-000002-32 | 912400136325 |
| <b>Accessories</b>   |               |              |
| FlexElite Leader Cable, 7.5 m (25 ft), Black, UL/CE                                      | 108-000085-00 | 912400136420 |
| FlexElite Leader Cable, 15 m (50 ft), Black, UL/CE                                       | 108-000085-01 | 912400136421 |
| FlexElite Leader Cable, 30 m (100 ft), Black, UL/CE                                      | 108-000085-02 | 912400136422 |
| FlexElite Leader Cable, 60 m (200 ft), Black, UL/CE                                      | 108-000085-03 | 912400136423 |
| FlexElite Jumper Cable, 305 mm (1 ft), Black, UL/CE                                      | 108-000085-04 | 912400136424 |
| FlexElite Jumper Cable, 500 mm (1.7 ft), Black, UL/CE                                    | 108-000085-05 | 912400136425 |
| FlexElite Jumper Cable, 610 mm (2 ft), Black, UL/CE                                      | 108-000085-06 | 912400136426 |
| FlexElite Jumper Cable, 1 m (3.3 ft), Black, UL/CE                                       | 108-000085-07 | 912400136427 |
| FlexElite Jumper Cable, 1.5 m (5 ft), Black, UL/CE                                       | 108-000085-08 | 912400136428 |
| FlexElite Jumper Cable, 2 m (6.6 ft), Black, UL/CE                                       | 108-000085-09 | 912400136429 |
| FlexElite Jumper Cable, 3 m (10 ft), Black, UL/CE  | 108-000085-10 | 912400136430 |
| FlexElite Dome Lens, Black, 10 pieces  | 120-000204-02 | 912400136444 |
| FlexElite Single Node Mounting Clip, Black, 10 pieces                                    | 120-000204-00 | 912400136442 |
| <b>Power Supplies</b>  |               |              |
| PDS-400 48V CA4, UL  | 109-000035-00 | 912400135914 |
| PDS-400 48V CA4, CE  | 109-000035-01 | 912400136495 |
| CM-550 48V CA4, Ethernet, IP66   | 109-000039-00 | 912400136906 |
| CM-550 48V CA4, Ethernet, IP00, DIN  | 109-000038-00 | 912400136904 |



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