FlexElite IntelliHue

Date:
Type:
Firm Name:
Project:

1 Node, White Node/Cable with dome lens

Exterior bright and beautiful flexible direct view luminaire with intelligent white and color light

FlexElite is the brightest and most flexible member of our popular Flex family, and it includes a 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, and longer run lengths and node spacing let you take on larger challenges. FlexElite IntelliHue produces high-quality white light, subtle pastels, and saturated colors, in the same luminaire.

- Modular Design—FlexElite's advanced technology frees you from the limitations posed by static numbers of nodes on flexible cables—enabling longer run lengths (up to 1,000 feet) with variable node spacing. This flexibility allows you to take on a wide range of outdoor applications, from arenas to office buildings to bridges.
- Brighter Output—FlexElite is the brightest Flex luminaire available, with FlexElite IntelliHue achieving 150 lumens per node. Brighter output lets you take on larger structures and create ambitious, large-scale designs that get noticed.
- Four-Color Options—Choose FlexElite 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 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 aluminum and glass design, extensive testing, and years of experience, FlexElite can handle extreme conditions, humidity, heat, cold, and ice—delivering reliable performance.
- Complete Solution—Including the CM-550 48VCA4 and PDS-400 48V CA4 power/data supplies specifically designed for FlexElite which ensures seamless integration and years of trouble-free operation. FlexElite also works with the full range of Color Kinetics controllers and Interact Landmark remote lighting management software.

For detailed product information, please refer to the FlexElite Product Guide at www.colorkinetics.com/global/products/intellihue/flexelite-intellihue/

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Specifications

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

Output

Viewing Angle	180°
Lumens Per Node (all channels full on) †	64
Lumens @ 2200 K	75
Lumens @ 2700 K	68
Lumens @ 3000 K	65
Lumens @ 3500 K	69
Lumens @ 4000 K	73
Lumens @ 5000 K	68
Lumens @ 5700 K	66
Lumens @ 6500 K	64
Luminance Per Node	6,315 cd/m²
On-Axis Candela per node	20
Efficacy (lm/W) per node all channels full on	28.3
CRI All Channels Full On	82
LED Channels	Red/Green/Royal Blue/Lime Green

Electrical

Input Voltage	48 VDC via PDS-400 48V CA4, or CM-550 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.

Control

Interface	PDS-400 48V CA4
	CM-550 48V CA4 (IP00/DIN Rail or IP66/Surface Mount)
Control Channels	4 channels per node

For additional Control Channel information, please refer to https://colorkinetics.helpdocs.io/article/fv5rkpvclq.

Control System

Color Kinetics full range of controllers, including iPlayer 3, iPlayer 4, Antumbra iColor Keypad, and ColorDial Pro, or third-party controllers

Remote Monitoring & Management Works with Interact Landmark

Lumen Maintenance

Threshold§	Ambient Temperature	Reported ¶¶	Calculated ¶¶
L_{90}	25 °C	> 42,000	44,802
	50 °C	35,439	35,439
L_{80}	25 °C	> 42,000	> 100,000
	50 °C	> 42,000	80,740
L_{70}	25 °C	> 42,000	> 100,000
	50 °C	> 42,000	> 100,000
L_{50}	25 °C	> 42,000	> 100,000
	50 °C	> 42,000	> 100,000

Physical

Dimensions (Height x Width x Depth)	71.28 x 97.81 x 50.66 mm (2.81 x 3.85 x 1.99 in) Node with dome lens
Weight	0.25 kg (0.57 lb)
Housing Material	White 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

Thermal Protection enabled

For additional Thermal Protection information, please refer to https://colorkinetics.helpdocs.io/article/sh301ducix

Maximum Luminaires Per Power/Data Supply

PDS-400 48V CA4: 146 nodes (3 channel DMX and Ethernet)
CM-550 48VCA4: 170 nodes (3 channel DMX and Ethernet)
For additional FlexElite run length information please refer to https://colorkinetics.helpdocs.io/article/zkhh66h2gr

Certification and Safety

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

For additional Energy Efficiency Class Information, please refer to https://colorkinetics.helpdocs.io/article/cviis2p8qq.

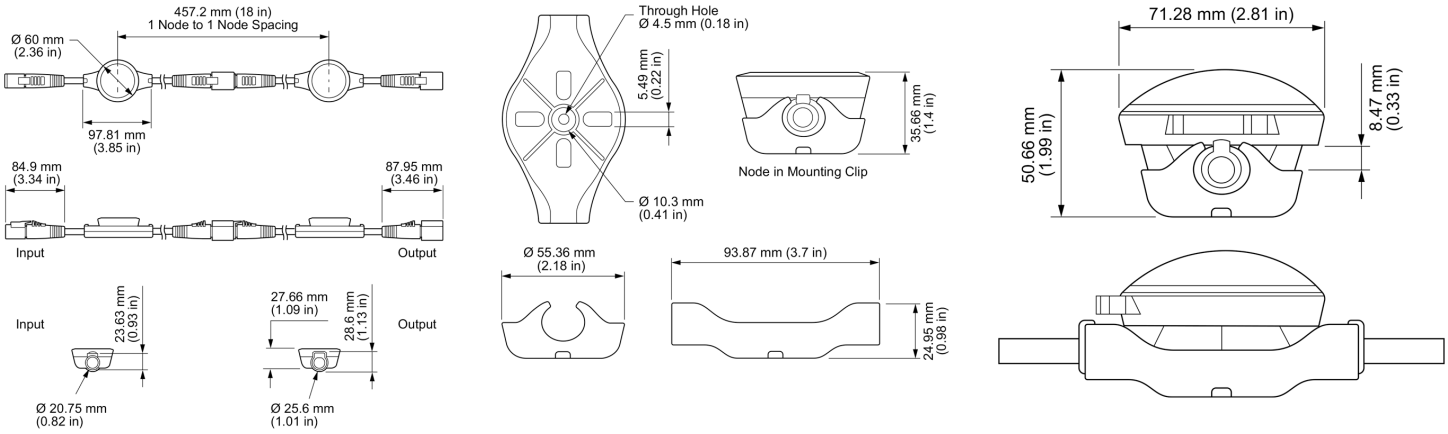
† Lumen output measurements comply with IES LM-79-08 testing procedures.

§ Lxx = 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.

¶ Minimum surge limits per IEC 61547, tested in accordance with IEC 61000-4-5.

¶¶ 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

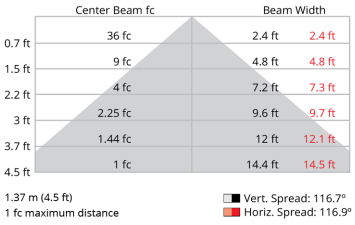


Photometrics all channels full on with dome lens

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.

Viewing Angle	180°
LEDs	All channels full on
Lumens Per Node (all channels full on)	64.0
Efficacy (lm/W) per node all channels full on	28.3

Illuminance at Distance

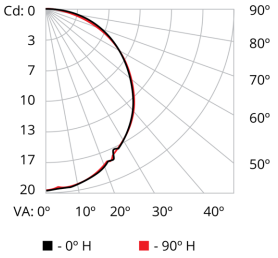


Zonal Lumen

Zone	Lumens	% Luminaire
0-30	15.4	23.9%
0-40	25.3	39.4%
0-60	45.5	70.7%
60-90	16.9	26.3%
70-100	10.5	16.3%
90-120	1.9	3.0%
0-90	62.4	97.0%
90-180	1.9	3.0%
0-180	64.3	100.0%

For lux multiply fc by 10.7

Polar Candela Distribution



	0	25	45	70	90
0	20	20	20	20	20
5	20	19	19	20	20
15	19	19	19	19	19
25	17	17	17	18	17
35	16	16	16	16	16
45	13	13	13	13	13
55	10	10	10	10	10
65	8	8	8	8	8
75	5	5	5	5	5
85	3	3	3	3	3
90	2	2	2	2	2

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	1.18	1.18	1.18	1.18	1.15	1.15	1.15	0.97	1.09	1.09	1.09	1.04	1.04	1.04	0.99	0.99	0.99	0.97
1	1.06	1.01	0.96	0.91	1.03	0.98	0.94	0.79	0.93	0.9	0.86	0.89	0.86	0.83	0.85	0.82	0.8	0.78
2	0.96	0.87	0.8	0.73	0.93	0.85	0.78	0.65	0.81	0.75	0.7	0.77	0.72	0.68	0.73	0.69	0.66	0.63
3	0.87	0.76	0.67	0.6	0.84	0.74	0.66	0.55	0.71	0.64	0.58	0.67	0.62	0.57	0.64	0.59	0.55	0.53
4	0.8	0.67	0.58	0.51	0.77	0.65	0.57	0.47	0.63	0.55	0.49	0.6	0.53	0.48	0.57	0.52	0.47	0.45
5	0.73	0.6	0.5	0.43	0.71	0.58	0.5	0.4	0.56	0.48	0.42	0.54	0.47	0.41	0.51	0.45	0.41	0.38
6	0.67	0.54	0.44	0.38	0.65	0.53	0.44	0.35	0.5	0.43	0.37	0.48	0.42	0.36	0.47	0.4	0.36	0.33
7	0.63	0.49	0.4	0.33	0.61	0.48	0.39	0.31	0.46	0.38	0.32	0.44	0.37	0.32	0.42	0.36	0.32	0.29
8	0.58	0.44	0.36	0.3	0.56	0.43	0.35	0.28	0.42	0.34	0.29	0.4	0.34	0.29	0.39	0.33	0.28	0.26
9	0.54	0.41	0.32	0.26	0.53	0.4	0.32	0.25	0.38	0.31	0.26	0.37	0.31	0.26	0.36	0.3	0.25	0.24
10	0.51	0.37	0.29	0.24	0.49	0.37	0.29	0.23	0.36	0.28	0.24	0.34	0.28	0.23	0.33	0.27	0.23	0.21

Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire	Item Number	Item 12NC
FlexElite IntelliHue, 1 Node, White Node/Cable Dome lens sold separately	401-000001-01	912400136336
Accessories		
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), White, UL/CE	108-000085-15	912400136435
FlexElite Jumper Cable, 500 mm (1.7 ft), White, UL/CE	108-000085-16	912400136436
FlexElite Jumper Cable, 610 mm (2 ft), White, UL/CE	108-000085-17	912400136437
FlexElite Jumper Cable, 1 m (3.3 ft), White, UL/CE	108-000085-18	912400136438
FlexElite Jumper Cable, 1.5 m (5 ft), White, UL/CE	108-000085-19	912400136439
FlexElite Jumper Cable, 2 m (6.6 ft), White, UL/CE	108-000085-20	912400136440
FlexElite Jumper Cable, 3 m (10 ft), White, UL/CE	108-000085-21	912400136441
FlexElite Dome Lens, White, 10 pieces	120-000204-03	912400136445
FlexElite Single Node Mounting Clip, White, 10 pieces	120-000204-01	912400136443
Power Supplies		
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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