Lighting Description for Global Unity- SOHO

Enclosed is a lighting layout, and spec sheets for the exterior projector lights and
The interior based globe lights.

There are 4 projector RGBW LED up lights that illuminate the sculpture (colorburst)
There are 3 White only vertically installed lights installed inside of the globe (Vaya)

Both sets of lights are independently controlled by an iplayer computer that can control:

Nightly colors (I propose having a single color per day on the sculpture during the week and multi colors on the weekend with possible slow fades from one color to the next)
Inside the globe we can adjust the intensity of the white only light which will illuminate colored 3 form resin panels that also work as diffusers
Global clock so that they can start and stop whenever we want.
Intensity and lumen output can be controlled by dimming the fixtures.

Ideally the iplayer controller would be installed in the developer's office.

-Jeff Zischke

ColorBurst Powercore gen2

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

RGBW, 8° Native (no spread lens), Gray Housing, Landscape

Exterior architectural and landscape spotlight with intelligent RGBW light

ColorBurst Powercore gen2 is a high-output, exterior-rated LED lighting luminaire designed for accent and site lighting. Standard format Architectural and Landscape luminaires deliver full-color light output of up to 1,293 lumens to support a range of dynamic uplighting, floodlighting, and decorative lighting applications.

- Expands customization with a wide range of new accessory options. In addition to the native 8° lens, six different spread lenses can customize the luminaire to produce 10°, 20°, 40°, 60°, 80°, and 10° x 40° (asymmetric) beam angles. Four housing color choices (black, gray, and white,)—plus the option to add a louver, full glare shield, and half glare shield—create new aesthetic possibilities for designers and architects.
- Improves color consistency between all LED luminaires in a family with Chromasync technology. During the manufacturing process a calibrated light measurement device creates an algorithm to define a common color gamut for an entire family of LED luminaires. When Chromasync is enabled, color consistency between luminaires is achieved without having to manually adjust color points on each luminaire.
- Complies with ASTM B117 corrosion resistance standard for > 1,500 hours.
- Features an innovative, redesigned optical system that improves the quality of light from each LED, enhancing the color uniformity and color mixing capabilities of each ColorBurst Powercore gen2 luminaire.
- Improves durability with new flat lens that prevents water from pooling into the luminaire, keeping the LEDs protected and secure over the course of a luminaire's lifetime.
- 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.
- Universal power input range of 100 to 277 VAC.
- 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.

For detailed product information, please refer to the Burst Product Guide at www.colorkinetics.com/global/products/rgb/colorburst-powercore-rgbw-gen2/

COLORKINETICS

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

Vaya Tube

4000 K, Ethernet & DMX, 1.2 m (4 ft) 150 mm (6 in) Pitch, UL, CE, CQC

Exterior compact linear direct view luminaire with crisp white accent lighting

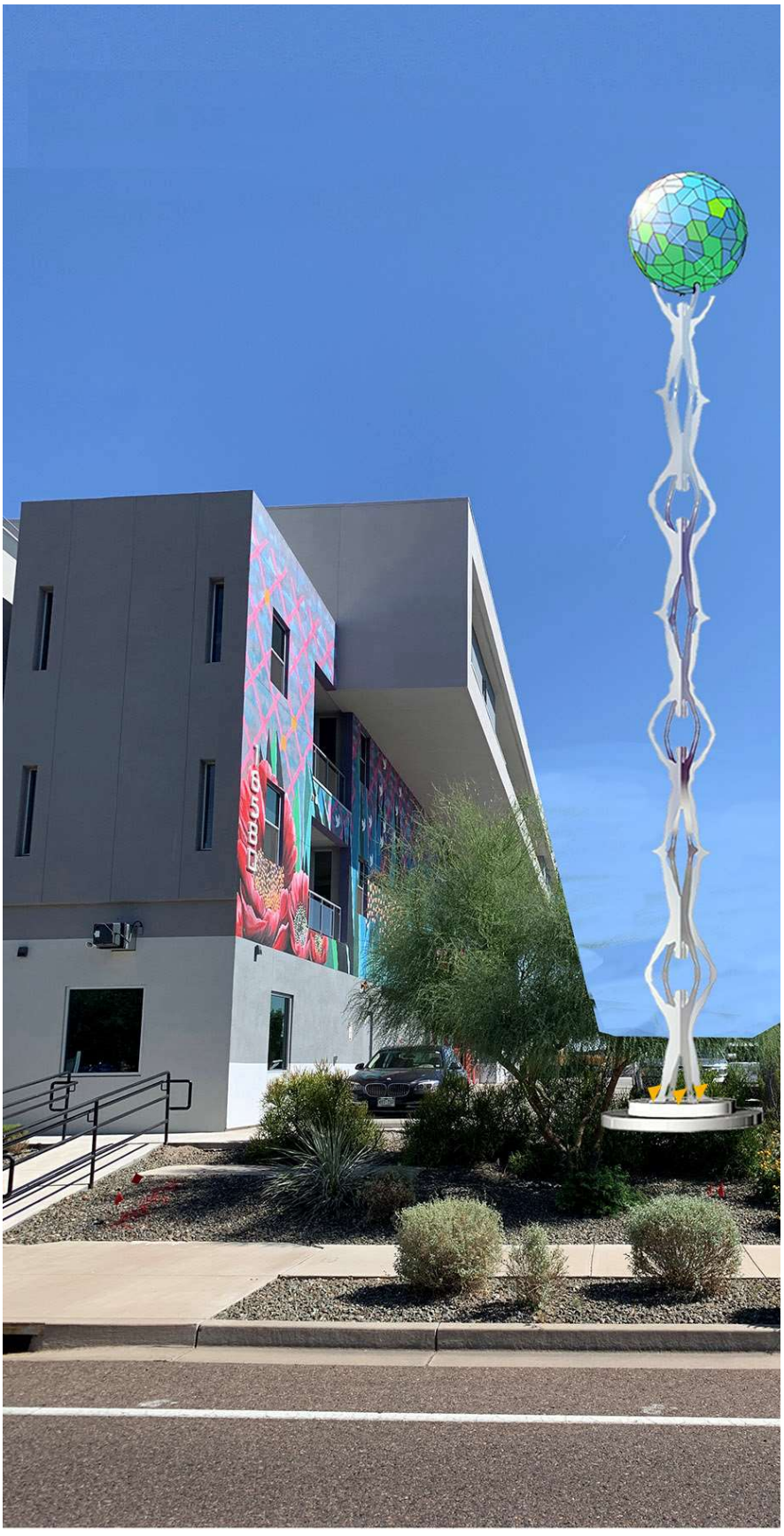
Vaya Tube is a compact direct view linear LED lighting solution for exterior low-resolution graphic lighting applications. Designed for media graphics with a resolution up to 150 mm, the DMX and KiNet-controllable system can transform entire facades with bright and uniform light in White. The light-weight luminaire minimizes the loading onto structures and cladding elements, while run-lengths of up to 12 m (40 ft) per Control Module port (x2) allow for flexible wiring. Simple push'n'click connectors ensure a simple, fast and reliable installation.

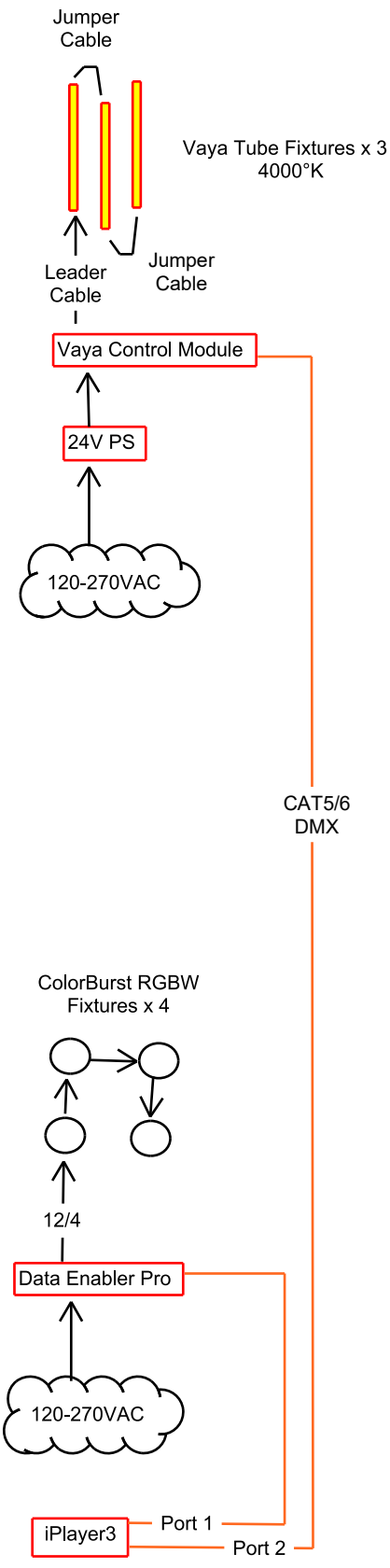
- Slim & Light-Weight - The slim form factor, different length options and light-weight of the luminaire ease the integration into façade cladding elements and minimize excess loading onto architectural structures.
- Uniform & Bright - Create a uniform band of light in a wide 180 degree viewing angle, while ensuring high visibility
- Contour & Content - Whether outlining the contour of a building, placing accents onto a façade or creating a media display of dynamic graphics, Vaya Tube places a variety of control options at your fingertips from static on/off setups to dynamic control in resolutions ranging from entire runs down to 150 mm (6 in) segments.
- Simple Wiring & Long Runlengths - With up to 12 m (40 ft) per Control Module port (x2), Vaya Tube offers flexibility in wiring and minimizes the number of required protrusions to the interior of the building. In static on-off applications, 14.4m (48 ft) of fixtures can be daisy-chained on a single power supply. Waterproof daisychain-connectors, combining low voltage power and data, make for simple, fast and reliable wiring connections.

For detailed product information, please refer to the Vaya Tube Product Guide at www.colorkinetics.com/global/products/vaya/tube-white/

COLORKINETICS
vaya series

Global Unity - Color Kinetics One Line Diagram





Global Unity
Jeff Zischke

Specifications

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

Output

Color Temperature*	4000 K
Beam Angle	165° x 110°
Lumens†	809
On-Axis Candela	190
Efficacy (lm/W)§§	65.6
CRI	84

Electrical

Input Voltage	24 VDC
Power Consumption (Maximum at full output, steady state)	12 W

For additional Surge Protection Requirements for LED Lighting Systems, please refer to www.colorkinetics.com/KB/surge-protection.

Control

Interface	Kinet or DMX via Vaya Control Module On-Off via Power Leader Cable

Control System

Full range of Color Kinetics controllers and trigger devices, as well as Dynalite or third-party controllers

Lumen Maintenance

Threshold§	Ambient Temperature	Reported¶¶	Calculated¶¶
L_{90}	25 °C	> 60,000	> 100,000
	50 °C	> 60,000	61,000
L_{80}	25 °C	> 60,000	> 100,000
	50 °C	> 60,000	> 100,000
L_{70}	25 °C	> 60,000	> 100,000
	50 °C	> 60,000	> 100,000

Physical

Dimensions (Height x Width x Depth)	66 x 1,200 x 46.6 mm (2.6 x 47.24 x 1.83 in) Including mounting bracket 66 x 1,200 x 34.2 mm (2.6 x 47.24 x 1.35 in) Excluding mounting bracket
Weight	780 g (1.7 lb)
Housing Material	Extruded polycarbonate, dark grey
Lens	Translucent plastic

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

Vibration Resistance

Complies with ANSI C136.31

Mechanical Impact	IK09

Corrosion Resistance

Complies with ASTM B117 standard for > 1,500 hours

Humidity	0 to 95%, non-condensing

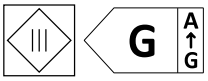
Luminaire Run Lengths

To calculate luminaire run lengths for your specific installation, download the Configuration Calculator from http://www.colorkinetics.com/vaya/Configuration-Calculator/

Certification and Safety

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

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



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

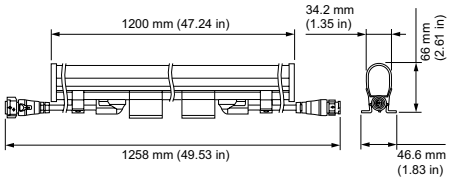
† 300 mm (1 ft) lumen output measurements comply with IES LM-79-08 testing procedures. 1200 mm (4 ft) measurements are estimated based on the 300 mm (1 ft) measurements.

§ Lxx = 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.

§§ Efficacy measurements are estimated based on the 300 mm (1 ft) measurements.

¶¶ 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

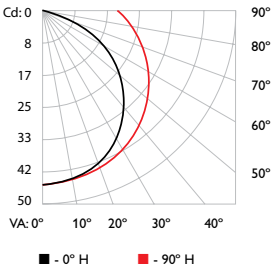


Photometrics 4000 K, 0.3 m (1 ft), UL/CE/CQC

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.

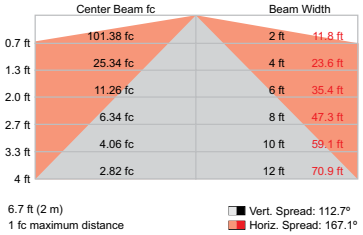
Beam Angle	165° x 110°
LED	4000 K
Lumens	202
Efficacy (lm/W)	65.6

Polar Candela Distribution



	0	22.5	45	67.5	90
0	45	45	45	45	45
5	45	45	45	45	45
15	43	44	44	44	44
25	41	41	42	42	43
35	36	37	38	40	40
45	30	31	34	37	37
55	23	25	30	33	34
65	16	19	25	29	30
75	8	13	20	25	26
85	1	8	15	20	22
90	0	6	13	18	20

Illuminance at Distance



For lux multiply fc by 10.7

Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire	Item Number	Item 12NC
Vaya Tube, 4000 K, Ethernet & DMX, 1.2 m (4 ft) 150 mm (6 in) Pitch, UL, CE, CQC	350-000014-07	912400130509
Accessories		
Vaya Control Module, Ethernet & DMX, 24V, IP66, 2-Port	320-000014-01	912400130537
Vaya Tube Leader-Jumper Cable, 15 m (50 ft), UL, CE, CQC	308-000014-05	912400133652
Vaya Tube Leader-Jumper Cable, 1.5 m (5 ft), UL, CE, CQC	308-000014-04	912400133651
Vaya Tube Leader-Jumper Cable, 0.3 m (1 ft), UL, CE, CQC	308-000014-09	912400134183
Vaya Tube Power Leader Cable, 15 m (50 ft), UL, CE, CQC – for static on-off applications only	308-000014-07	912400133654
Vaya Tube Power Leader Cable, 1.5 m (5 ft), UL, CE, CQC – for static on-off applications only	308-000014-06	912400133653
Power Supplies		
Power Supply, 320 W 24V, 100 to 277 V, IP67, UL/CE/PSE	309-000014-01	912400130539
Power Supply, 150 W 24V, 100 to 277V, IP67, UL, CE, PSE – for static on-off applications only	309-000014-00	912400130538
Replacement Parts		
Spare Part, X-Lock Terminator, 1PC	320-000014-02	912400134540

COLORKINETICS

vaya series

Specifications

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

Output

Beam Angle	8°
Lumens All Channels Full On†	1,293
Efficacy (lm/W) All Channels Full On	40
LED Channels	Red/Green/Blue/White

Electrical

Input Voltage	100 to 277 VAC, auto-ranging, 50/60 Hz
Power Consumption (Maximum at full output, steady state)	33 W
Power Factor	> 0.9 @ 100 to 240 VAC > 0.85 @ 277 VAC
Surge Limits¶	1 kV maximum differential (L to N) 2 kV maximum common (L to Gnd or N to Gnd)

For additional Surge Protection Requirements for LED Lighting Systems, please refer to www.colorkinetics.com/KB/surge-protection.

Control

Interface	Data Enabler Pro (DMX/Ethernet)

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§	Ambient Temperature	Reported¶¶	Calculated¶¶
L_{90}	25 °C	> 51,000	> 100,000
	50 °C	> 51,000	60,140
L_{80}	25 °C	> 51,000	> 100,000
	50 °C	> 51,000	> 100,000
L_{70}	25 °C	> 51,000	> 100,000
	50 °C	> 51,000	> 100,000
L_{50}	25 °C	> 51,000	> 100,000
	50 °C	> 51,000	> 100,000

Physical

Dimensions (Height x Width x Depth)	272 x 163 x 185 mm (10.7 x 6.42 x 7.28 in)
Weight	3.5 kg (7.7 lb)
Effective Projected Area (EPA)	26053 mm²
Housing Material	Die-cast aluminium, gray powder-coated finish
Lens	Clear tempered glass
Luminaire Connections	152 mm (6 in) flying leads

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	IK08

Corrosion Resistance

Complies with ASTM B117 standard for > 1,500 hours

Humidity	0 to 95%, non-condensing

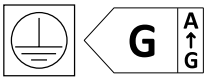
Luminaire Run Lengths

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

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



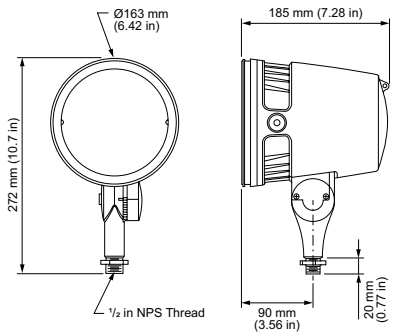
† Lumen measurement complies with IES LM-79-08 testing procedures.

§ L50 = 50% lumen maintenance (when light output drops below 50% 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

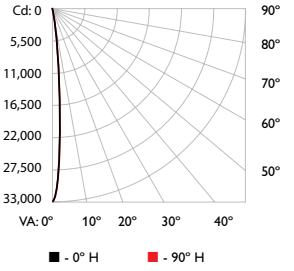


Photometrics 8° native (no spread lens)

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.

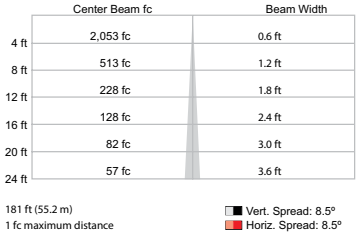
Beam Angle	8°
LED	RGBW
Lumens All Channels Full On	1,293.00
Efficacy (lm/W) All Channels Full On	40

Polar Candela Distribution



	0	25	45	70	90
0	32843	32843	32843	32843	32843
5	13033	13033	13033	13033	13033
15	660	660	660	660	660
25	129	129	129	129	129
35	50	50	50	50	50
45	23	23	23	23	23
55	7	7	7	7	7
65	2	2	2	2	2
75	1	1	1	1	1
85	0	0	0	0	0
90	0	0	0	0	0

Illuminance at Distance



Zonal Lumen

Zone	Lumens	% Luminaire
0-30	1,236.5	95.5%
0-40	1,267.7	97.9%
0-60	1,292.2	99.8%
0-90	1,294.9	100.0%
60-90	2.7	0.2%
70-100	0.7	0.1%
90-120	0.0	0.0%
90-180	0.5	0.0%
0-180	1,295.4	100.0%

For lux multiply fc by 10.7

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	1.19	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	1.16	1.14	1.13	1.11	1.14	1.12	1.11	0.99	1.08	1.07	1.06	1.04	1.04	1.03	1.01	1.01	1.00	0.98
2	1.13	1.10	1.08	1.06	1.11	1.09	1.06	0.97	1.05	1.04	1.02	1.03	1.01	1.00	1.00	0.99	0.98	0.97
3	1.11	1.07	1.04	1.02	1.09	1.06	1.03	0.96	1.03	1.01	0.99	1.01	0.99	0.98	0.99	0.98	0.96	0.95
4	1.08	1.04	1.01	0.99	1.07	1.03	1.00	0.94	1.01	0.99	0.97	0.99	0.98	0.96	0.98	0.96	0.95	0.94
5	1.06	1.02	0.99	0.96	1.05	1.01	0.98	0.93	0.99	0.97	0.95	0.98	0.96	0.94	0.97	0.95	0.94	0.93
6	1.04	1.00	0.97	0.94	1.03	0.99	0.96	0.92	0.98	0.95	0.94	0.97	0.95	0.93	0.96	0.94	0.92	0.92
7	1.03	0.98	0.95	0.93	1.02	0.98	0.95	0.91	0.97	0.94	0.92	0.96	0.93	0.92	0.95	0.93	0.91	0.91
8	1.01	0.96	0.93	0.91	1.00	0.96	0.93	0.90	0.95	0.93	0.91	0.94	0.92	0.91	0.94	0.92	0.90	0.90
9	1.00	0.95	0.92	0.90	0.99	0.95	0.92	0.89	0.94	0.92	0.90	0.93	0.91	0.90	0.93	0.91	0.89	0.89
10	0.99	0.94	0.91	0.89	0.98	0.94	0.91	0.88	0.93	0.91	0.89	0.92	0.90	0.89	0.92	0.90	0.89	0.88

Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire	Item Number	Item 12NC
ColorBurst Powercore gen2, RGBW, Gray Housing, Landscape	423-000004-20	912400135477
Accessories		
Trim Ring gen2, Gray	120-000189-20	912400135449
Half Glare Shield gen2, Gray	120-000189-24	912400135453
Full Glare Shield gen2, Gray	120-000189-28	912400135457
Louver	120-000189-17	912400133447
10° Spread Lens	120-000189-18	912400135371
20° Spread Lens	120-000189-12	912400133442
40° Spread Lens	120-000189-13	912400133443
60° Spread Lens	120-000189-14	912400133444
80° Spread Lens	120-000189-15	912400133445
Spread Lens, 10°x40°	120-000189-16	912400133446
Wiring Compartment, 4 in diameter, Gray, CE (cover not included)	106-000011-42	910503703277
Wiring Compartment, 4 in diameter, Gray, UL (cover not included)	106-000011-32	910503704149
Power/Data 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

COLORKINETICS