



iCOLOR COVE NXT

POWERED BY CHROMACORE®



Color Kinetics® iColor® Cove NXT is a digital color-changing cove light that provides a wide, symmetrical beam angle in addition to the features found in the award winning iColor Cove. It brings color changing light and lighting effects to alcoves, task areas, accent areas and other tight spaces without the drawbacks, expense or constraints of conventional colored lighting methods, and the symmetrical beam angle makes it ideal for backlighting applications.

iColor Cove NXT is modular in design, and projects a soft-edge strip of light at a 120° by 120° beam angle. Each length of iColor Cove NXT can be controlled by a Color Kinetics controller or a third-party DMX 512 controller. Each fixture comes pre-addressed to light number one. With a Color Kinetics controller, simple effects, such as, fixed color and color wash, require no additional addressing. For other effects across multiple lights, including Chasing Rainbow or Color Sweep, address the fixtures using the on-board dipswitches, Serialized Addressing Software (SAS), or Zapi 1.5.

iColor Cove NXT is available in fixed lengths of six (6) and twelve (12) inches. Each fixture is cased in a low-profile, vented, molded plastic housing. The housing snaps directly into a one-piece mounting bracket; there is no need to open the case to mount the fixtures. The fixed position mounting brackets are indexed to lock the iColor Cove NXT into place, allowing for the uniform alignment of multiple fixtures. Using the optional adjustable position mounting brackets allows for easy rotation of fixtures.

To connect to power and data, each fixture is equipped with a three-pin header that attaches to a master cable, making installations with curves or complicated geometry easy to install. Each master cable is designed to be hardwired to a PDS-150e, which supplies power and data to all connected lights.

iCOLOR COVE SPECIFICATIONS

COLOR RANGE	16.7 million (24bit) additive RGB colors; continuously variable intensity output range
SOURCE	High brightness surface mount colored LEDs
BEAM ANGLE	120° x 120°
HOUSING	Two-piece vented plastic
MOUNTING BRACKET	One-piece fixed position provided. One-piece adjustable position, optional (Item# 101-000007-00)
CONNECTORS	3-pin power and data connector for use with master cable (sold separately); master cable unterminated for use with Color Kinetics PDS-150e
LISTINGS	C-UL US Listed, CE certified

COMMUNICATION SPECIFICATIONS

DATA INTERFACE	Color Kinetics data interface system
CONTROL	Color Kinetics full line of controllers and DMX 512 when using Color Kinetics power/data supply

ELECTRICAL SPECIFICATIONS

VOLTAGE REQUIREMENT	24VDC
POWER CONSUMPTION	Maximum: 4 Watts (6-inch) Maximum: 6.2 Watts (12-inch)
POWER SUPPLY	PDS-150e (ITEM# 109-000008-01)
MASTER CABLE	Wire Harness for iColor Cove (ITEM# 108-000013-00)

ENVIRONMENTAL SPECIFICATIONS

TEMPERATURE RANGE	-4°F to 122°F (-20°C to 50°C)
--------------------------	-------------------------------

SOURCE LIFE

Color Kinetics illumination products utilize high brightness LEDs as the illumination source. LED manufacturers predict LED life of up to 100,000 hours MTBF (mean time between failure), the standard used by conventional lamp manufacturers to measure source life. However, like all basic light sources, LEDs also experience lumen depreciation over time. So while LEDs can emit light for an extremely long period of time, MTBF is not the only consideration in determining useful life. LED lumen depreciation is affected by numerous environmental conditions such as ambient temperature, humidity and ventilation. Lumen depreciation is also affected by means of control, thermal management, current levels, and a host of other electrical design considerations.

Color Kinetics systems are expertly engineered to optimize LED life when used under normal operating conditions [ambient temperature: -4° F to 104° F (-20° C to 40° C), humidity: 0-95% non-condensing humidity, adequate ventilation and air volume] and when operated using typical color-changing effects. Long-term operation outside of these ranges or conditions, or at the upper limits of these ranges or conditions, may subject the product to further degradation of the LED source life, or in extreme cases, failure of internal components. Source life information is based on LED manufacturers' data, as well as other third party testing.



ITEM# 101-000015-00 (12-inch)
101-000015-01 (6-inch)

U.S. PATENTS 6,016,038, 6,150,774 AND 6,340,868
EUROPEAN PATENT 1,016,062
OTHER PATENTS PENDING

©2003 Color Kinetics Incorporated. All rights reserved. Chromacore, Color Kinetics, the Color Kinetics logo, ColorBlast, ColorBurst, ColorPlay, ColorScape, iColor, iColor Cove, iPlayer, QuickPlay, and SmartJuice are registered trademarks, and Chromatic, ColorBlaze, and Optibin are trademarks of Color Kinetics Incorporated.

All other brand or product names are trademarks or registered trademarks of their respective owners.

BRO114 Rev 01

Specifications subject to change without notice.

iCOLOR COVE NXT — 6”

PHOTOMETRIC PERFORMANCE

SOURCE SPECIFICATIONS

Optics:	Clear polycarbonate
Source:	24 LEDs (8 Red, 8 Green, 8 Blue)
Beam Angle:	120° x 120° (at 50% of peak illuminance)
Distribution:	Symmetric direct illumination
CCT:	Adjustable 1,000–10,000K
CRI:	Not measurable (CIE 13.3-1995)

ILLUMINANCE DISTRIBUTION

1.5'/0.5m					
0.0	0.1	0.2	0.2	0.1	0.0
0.5	1.0	2.1	2.1	1.0	0.5
0.1	0.3	0.7	0.7	0.3	0.1
1.0	3.2	7.5	7.5	3.2	1.0
0.2	0.7	3.2	3.2	0.7	0.2
2.1	7.5	34.4	34.4	7.5	2.1
0.2	0.7	3.2	3.2	0.7	0.2
2.1	7.5	34.4	34.4	7.5	2.1
0.1	0.3	0.7	0.7	0.3	0.1
1.0	3.2	7.5	7.5	3.2	1.0
0.0	0.1	0.2	0.2	0.1	0.0
0.5	1.0	2.1	2.1	1.0	0.5
1.5'/0.5m					

0'/0m

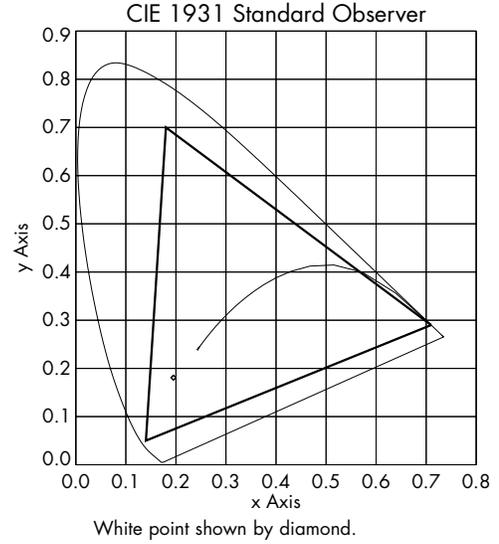
Units: Footcandles/Lux
 Measured on: White
 Distance from surface: 1'/.3m (from center of grid)
 Multipliers: 0.33 Red, 0.29 Green, 0.38 Blue

ILLUMINANCE

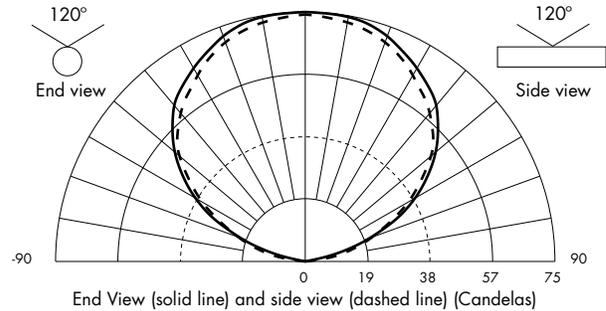
COLOR	3'	6'	9'	15'
	1m	2m	3m	5m
WHITE	8.9 95.8	2.2 23.7	1.0 10.8	0.3 3.2
RED	2.9 31.2	0.7 7.5	0.3 3.2	0.1 1.1
GREEN	2.5 26.9	0.6 6.5	0.3 3.2	0.1 1.1
BLUE	3.4 36.6	0.8 8.6	0.4 4.3	0.1 1.1

Measured in Footcandles/Lux on axis.

GAMUT



CANDLE POWER DISTRIBUTION



Measured on: White
 Beam center: 75 cd
 Thin dashed lined: Indicates 50% of peak
 Multipliers: 0.33 Red, 0.29 Green, 0.38 Blue

TYPICAL LIGHT OUTPUT

COLOR	TOTAL OUTPUT (LUMENS)	POWER (WATTS)	EFFICACY (lm/w)
WHITE	23.9	3.6	6.6
RED	7.8	0.9	8.6
GREEN	6.9	1.6	4.3
BLUE	9.1	1.6	5.6

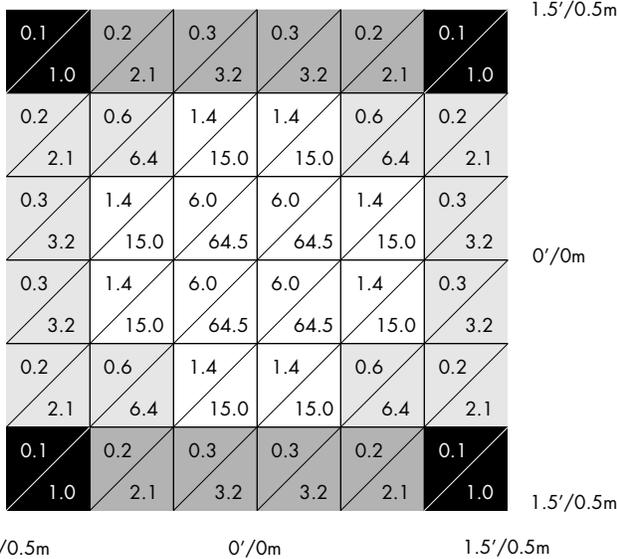
iCOLOR COVE NXT — 12”

PHOTOMETRIC PERFORMANCE

SOURCE SPECIFICATIONS

Optics: Clear polycarbonate
 Source: 45 LEDs (15 Red, 15 Green, 15 Blue)
 Beam Angle: 120° x 120° (at 50% of peak illuminance)
 Distribution: Symmetric direct illumination
 CCT: Adjustable 1,000–10,000K
 CRI: Not measurable (CIE 13.3-1995)

ILLUMINANCE DISTRIBUTION



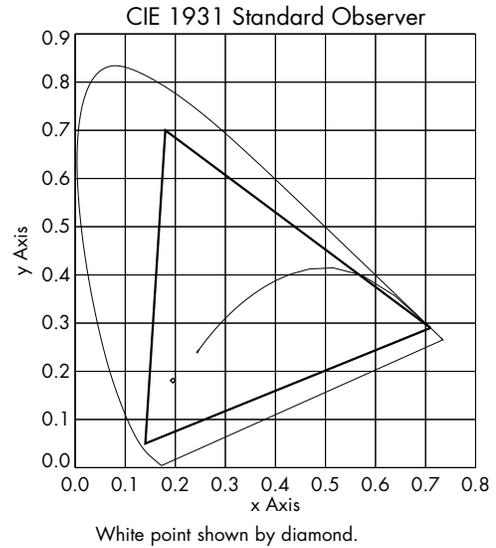
Units: Footcandles/Lux
 Measured on: White
 Distance from surface: 1'/.33m (from center of grid)
 Multipliers: 0.33 Red, 0.29 Green, 0.38 Blue

ILLUMINANCE

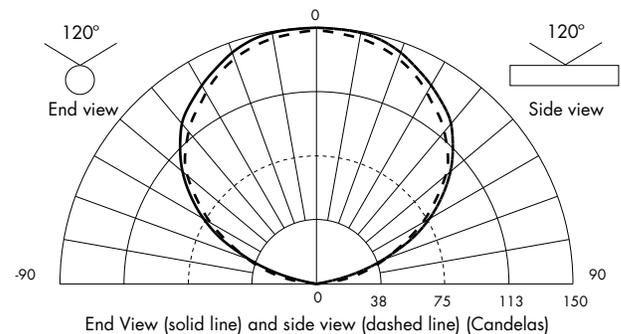
COLOR	3' 1m	6' 2m	9' 3m	15' 5m
WHITE	16.7 179.8	4.2 45.2	1.9 20.5	0.7 7.5
RED	5.5 59.2	1.4 15.1	0.6 6.5	0.2 2.2
GREEN	4.8 51.7	1.2 12.9	0.5 5.4	0.2 2.2
BLUE	6.4 68.9	1.6 17.2	0.7 7.5	0.3 3.2

Measured in Footcandles/Lux on axis.

GAMUT



CANDLE POWER DISTRIBUTION



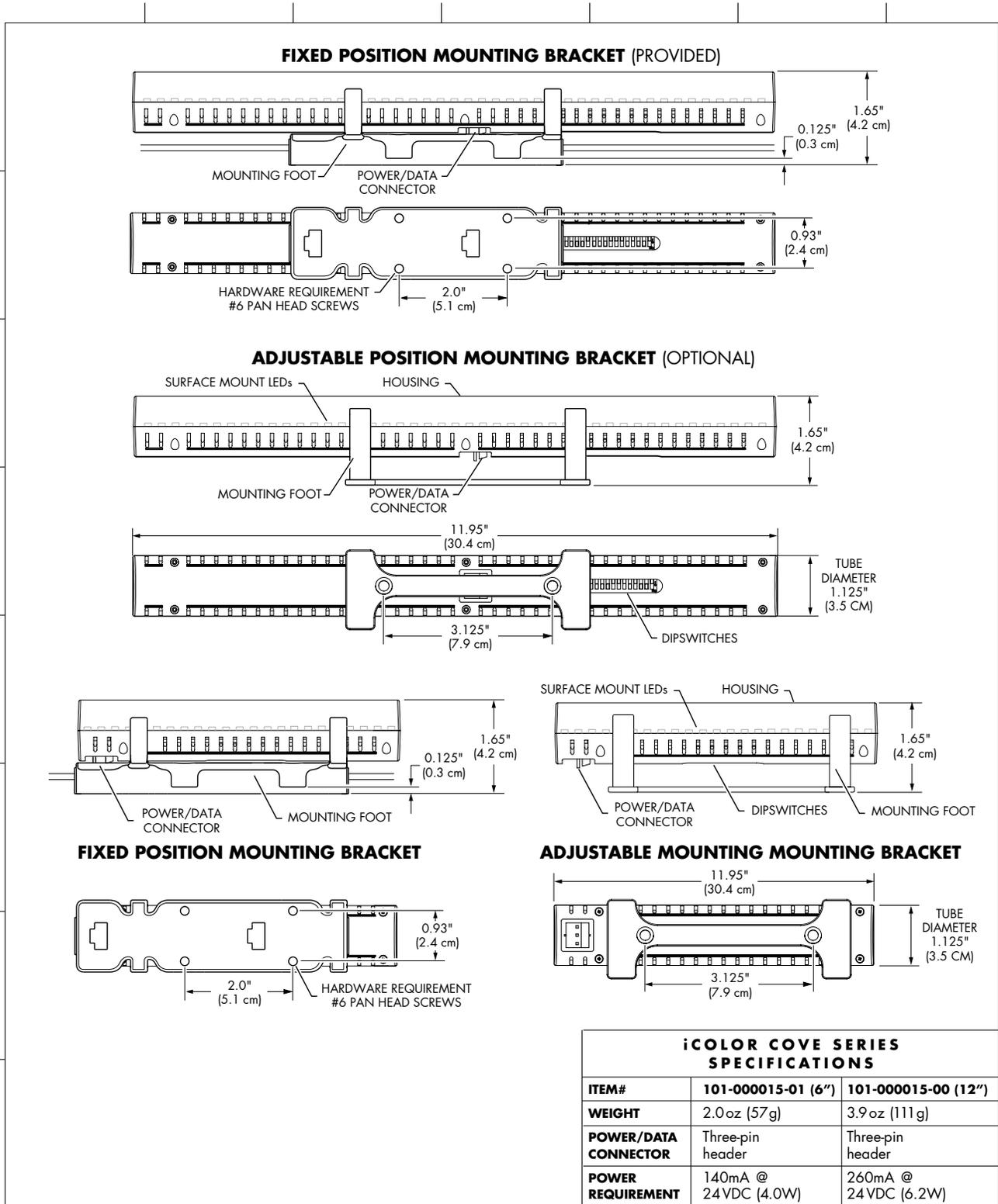
Measured on: White
 Beam center: 150 cd
 Thin dashed line: Indicates 50% of peak
 Multipliers: 0.33 Red, 0.29 Green, 0.38 Blue

TYPICAL LIGHT OUTPUT

COLOR	TOTAL OUTPUT (LUMENS)	POWER (WATTS)	EFFICACY (lm/w)
WHITE	45	5.6	8.1
RED	14.8	1.6	9.2
GREEN	13.0	2.2	5.9
BLUE	17.2	2.2	7.8

iCOLOR COVE NXT

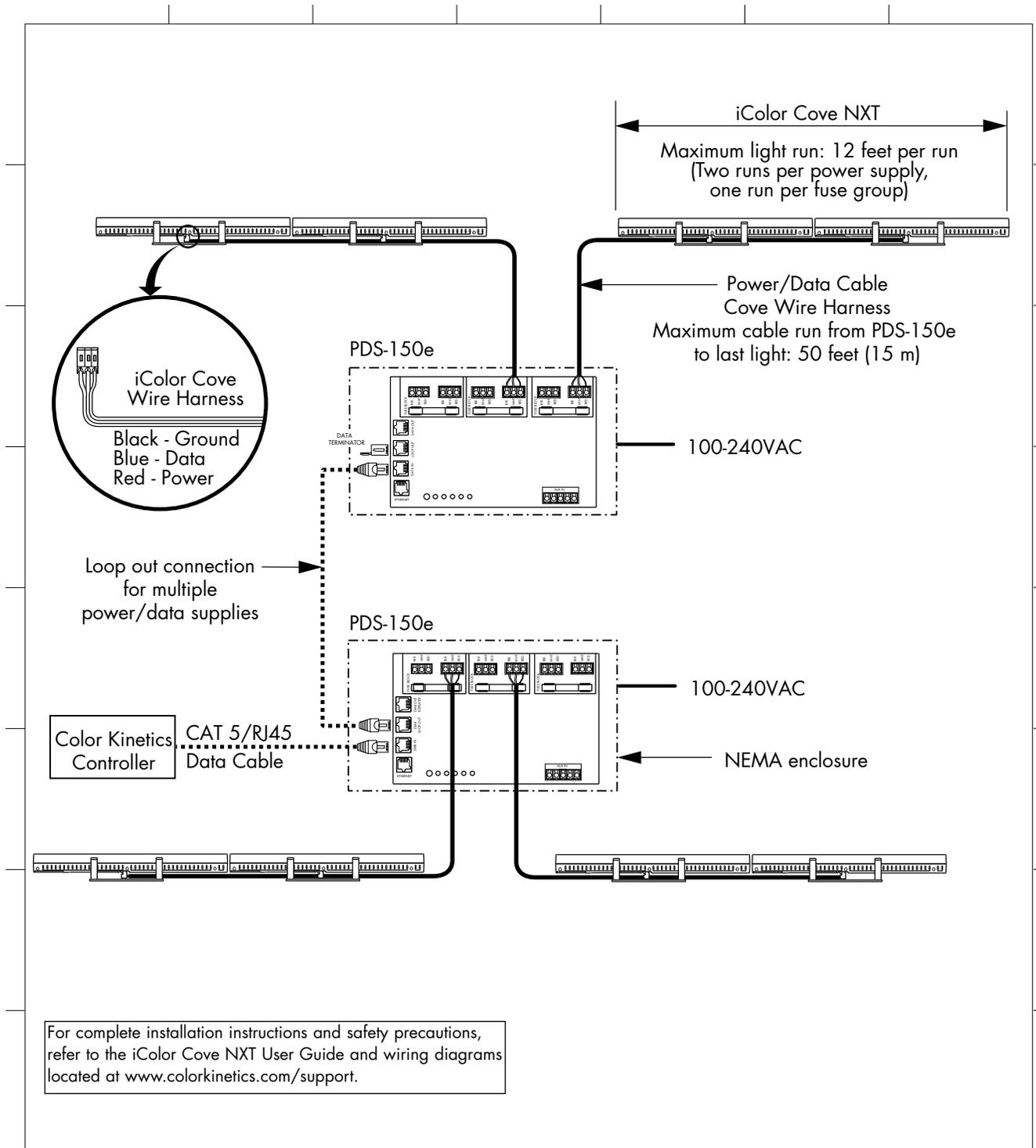
PHYSICAL DIMENSIONS



iCOLOR COVE SERIES SPECIFICATIONS		
ITEM#	101-000015-01 (6")	101-000015-00 (12")
WEIGHT	2.0oz (57g)	3.9oz (111g)
POWER/DATA CONNECTOR	Three-pin header	Three-pin header
POWER REQUIREMENT	140mA @ 24VDC (4.0W)	260mA @ 24VDC (6.2W)

iCOLOR COVE NXT

FUNCTIONAL FLOW DIAGRAM



U.S. AND FOREIGN PATENTS AND PATENTS PENDING

Color Kinetics Incorporated grants the purchaser of its lighting products and controllers a personal and non-transferable license to use Chromacore®, its patented technology for networkable control of LED-based color-changing lighting fixtures for illumination, display and design. This license is granted only by Color Kinetics Incorporated, and may not be transferred except by the grantor. The design, duplication, manufacture, or sale of other products using networkable control of LED-based color-changing lighting may be prohibited and is not licensed hereunder. Other patents pending.

COLOR CONSISTENCY

There are inherent variations in the fabrication processes of all semiconductor materials. For LEDs, this variance results in differences in the color and intensity of light output as well as electrical characteristics. Due to these differences, LED manufacturers sort production into "bins," but insuring the availability of a single bin is very difficult. To minimize this issue and achieve optimal color consistency in its products, Color Kinetics has developed and uses a proprietary technology called Optibin™. Optibin is an advanced production binning optimization process that minimizes the effects of LED variance for the best possible output uniformity in the final product. Color Kinetics Optibin technology gives the most consistent control of color and intensity from product to product.