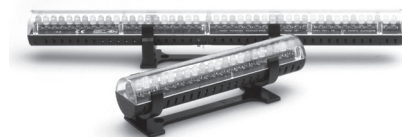




# iCOLOR COVE

POWERED BY CHROMACORE®



Color Kinetics® iColor® Cove is an award-winning digital color-changing cove light. 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.

iColor Cove is modular in design, and projects a soft-edge strip of light at a 110° beam angle. Each length of iColor Cove in an installation can be individually controlled either by the on-board controller or by an external controller. Using an external controller, a run of multiple iColor Cove units can be set to dynamic sequences such as the Chasing Rainbow, or synchronized to produce a soothing, uniform visual effect.

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

To connect to power and data, each segment 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

<b>COLOR RANGE</b>	16.7 million (24-bit) additive RGB colors; continuously variable intensity output range
<b>SOURCE</b>	High brightness colored LEDs
<b>BEAM ANGLE</b>	110° x 40°
<b>HOUSING</b>	Two-piece vented plastic
<b>CONNECTORS</b>	3-pin power and data connector for use with master cable; master cable unterminated for use with Color Kinetics PDS-150e
<b>LISTINGS</b>	C-UL US Listed, CE certified

## COMMUNICATION SPECIFICATIONS

<b>DATA INTERFACE</b>	Color Kinetics data interface system
<b>CONTROL</b>	Color Kinetics full line of controllers, DMX512 (RS485) compatible when using Color Kinetics power/data supply, and Stand Alone

## ELECTRICAL SPECIFICATIONS

<b>POWER REQUIREMENT</b>	24VDC
<b>POWER CONSUMPTION</b>	Maximum: 4.2 Watts (6-inch) Maximum: 6 Watts (12-inch)
<b>POWER SUPPLY</b>	PDS-150e (ITEM# 109-000008-01); PDS-60 24V (ITEM# 109-000017-XX)
<b>MASTER CABLE</b>	Wire Harness for iColor Cove (ITEM# 108-000013-00),



ITEM# 101-000002-00 (12-inch)  
101-000002-01 (6-inch)

U.S. PATENTS 6,016,038, 6,150,774, 6,340,868, AND 6,788,011  
FOREIGN PATENTS: EUROPE 1,016,062, AUSTRALIA 757,000,  
HONG KONG 1025416, AND CANADA 2,302,227  
OTHER PATENTS PENDING

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BRO013 Rev 12

Specifications subject to change without notice.

## DESCRIPTION OF SHOWS

<b>FIXED COLOR</b>	Static display of a single color
<b>COLOR WASH</b>	Colors transition gracefully from color to color, cycling through the entire color wheel
<b>CROSS FADE</b>	Colors cycle back and forth gracefully between two colors
<b>RANDOM COLOR</b>	Colors step or jump from one color to the next in random order
<b>FIXED COLOR STROBE</b>	A constant color appears in a rapid series of intense flashes of light
<b>VARIABLE COLOR STROBE</b>	A sequence of colors appear in a rapid series of intense flashes of light

## OPTIBIN™

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 you the most consistent control of color and intensity from product to product.

# iCOLOR COVE — 6”

## PHOTOMETRIC PERFORMANCE

### SOURCE SPECIFICATIONS

Optics:	Clear polycarbonate
Source:	24 LEDs (8 Red, 8 Green, 8 Blue)
Beam Angle:	110° x 40° (at 50% of peak illuminance)
Distribution:	Asymmetric direct illumination
CCT:	Adjustable 1,000–10,000K
CRI:	Not measurable (CIE 13.3-1995)

### ILLUMINANCE DISTRIBUTION

1.5'/0.5m					
0.2	0.5	0.5	0.5	0.5	0.2
2.5	5.4	5.9	5.9	5.4	2.5
0.7	1.8	2.2	2.2	1.8	0.7
8.0	19.4	24.0	24.0	19.4	7.9
1.6	4.7	11.0	11.0	4.7	1.6
17.0	50.5	118	118	50.2	16.9
0'/0m					
1.6	4.7	11.1	11.1	4.7	1.6
17.1	50.7	119	119	50.4	16.9
0.7	1.8	2.3	2.3	1.8	0.7
8.0	19.6	24.2	24.2	19.5	8.0
0.2	0.5	0.6	0.6	0.5	0.2
2.5	5.5	6.0	6.0	5.5	2.5
1.5'/0.5m					

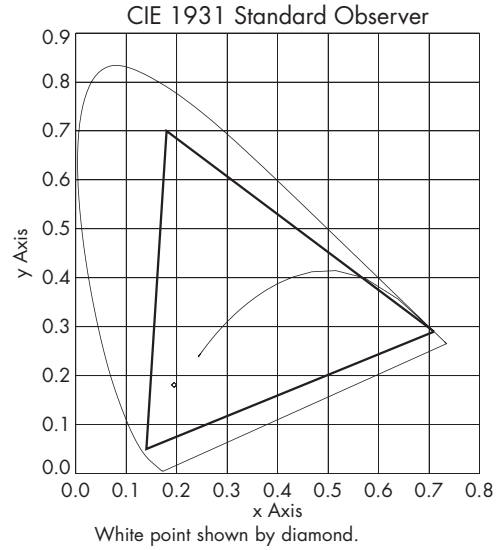
Units: Footcandles/Lux  
 Measured on: White  
 Distance from surface: 1'/.3m (from center of grid)  
 Multipliers: 0.15 Red, 0.65 Green, 0.21 Blue

### ILLUMINANCE

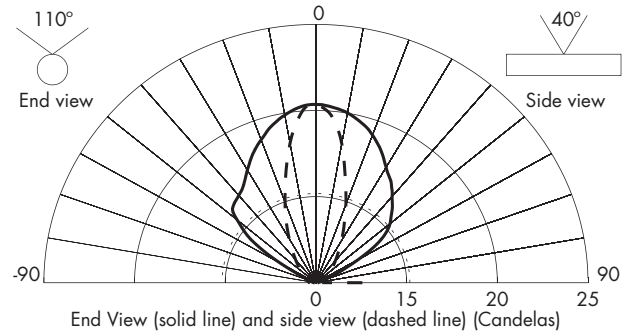
COLOR	3'	6'	9'	12'	15'
	1m	2m	3m	4m	5m
WHITE	1.9 20.7	0.5 5.2	0.2 2.3	0.1 1.3	0.1 0.8
RED	0.3 3.1	0.1 0.8	0.0 0.3	0.0 0.2	0.0 0.1
GREEN	1.3 13.5	0.3 3.4	0.1 1.5	0.1 0.8	0.0 0.5
BLUE	0.4 4.3	0.1 1.1	0.0 0.5	0.0 0.3	0.0 0.2

Measured in Footcandles/Lux on axis.

### GAMUT



### CANDLE POWER DISTRIBUTION



Measured on: White  
 Beam center: 20cd  
 Thin dashed lined: Indicates 50% of peak  
 Multipliers: 0.15 Red, 0.65 Green, 0.21 Blue

### LIGHT OUTPUT

COLOR	TOTAL OUTPUT (LUMENS)	POWER (WATTS)	EFFICACY (lm/w)
WHITE	25.3	3.0	8.5
RED	3.5	0.9	4.5
GREEN	16.1	1.3	14.0
BLUE	5.7	1.3	4.2

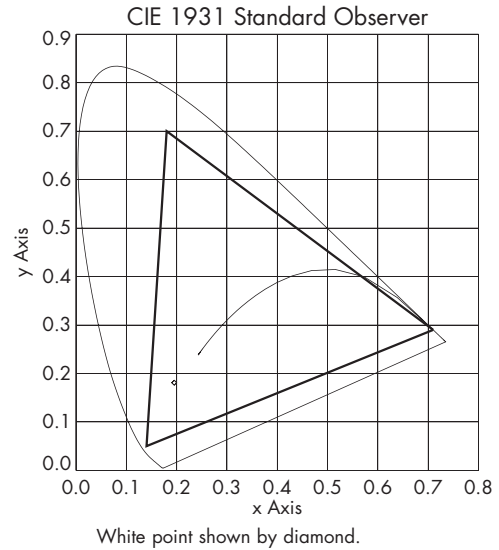
# iCOLOR COVE — 12”

## PHOTOMETRIC PERFORMANCE

### SOURCE SPECIFICATIONS

Optics: Clear polycarbonate  
 Source: 45 LEDs (15 Red, 15 Green, 15 Blue)  
 Beam Angle: 110° x 40° (at 50% of peak illuminance)  
 Distribution: Asymmetric direct illumination  
 CCT: Adjustable 1,000–10,000K  
 CRI: Not measurable (CIE 13.3-1995)

### GAMUT

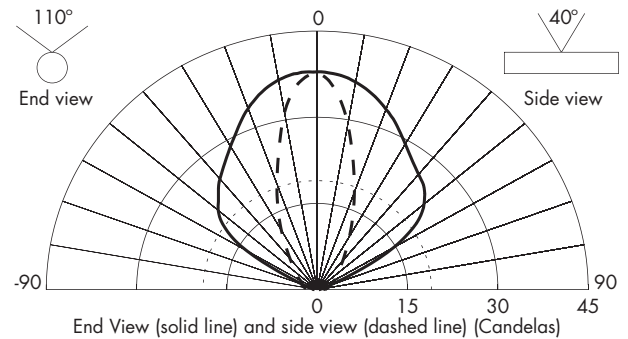


### ILLUMINANCE DISTRIBUTION

0.8	1.4	1.3	1.3	1.4	0.8	1.5'/0.5m
9.1	14.9	13.8	13.9	14.9	9.1	
2.1	4.0	4.5	4.5	4.0	2.12	
22.9	43.0	48.5	48.5	42.9	22.8	
3.9	9.2	18.3	18.3	9.1	3.9	
42.0	98.6	197	197	98.2	41.8	
3.9	9.2	18.4	18.4	9.2	3.9	0'/0m
42.1	99.0	198	198	98.5	41.9	
2.1	4.0	4.5	4.5	4.0	2.1	
23.0	43.3	48.9	48.9	43.2	22.9	
0.9	1.4	1.3	1.3	1.4	0.9	1.5'/0.5m
9.2	15.0	13.9	14.0	15.0	9.1	
1.5'/0.5m		0'/0m		1.5'/0.5m		

Units: Footcandles/Lux  
 Measured on: White  
 Distance from surface: 1'/.33m (from center of grid)  
 Multipliers: 0.15 Red, 0.65 Green, 0.21 Blue

### CANDLE POWER DISTRIBUTION



Measured on: White  
 Beam center: 38 cd  
 Thin dashed line: Indicates 50% of peak  
 Multipliers: 0.15 Red, 0.65 Green, 0.21 Blue

### ILLUMINANCE

COLOR	3'	6'	9'	12'	15'
	1m	2m	3m	4m	5m
WHITE	3.8	0.9	0.4	0.2	0.2
	40.5	10.1	4.5	2.5	1.6
RED	0.6	0.1	0.1	0.0	0.0
	6.1	1.5	0.7	0.4	0.2
GREEN	2.4	0.6	0.3	0.2	0.1
	26.3	6.6	2.9	1.6	1.1
BLUE	0.8	0.2	0.1	0.0	0.0
	8.5	2.1	0.9	0.5	0.3

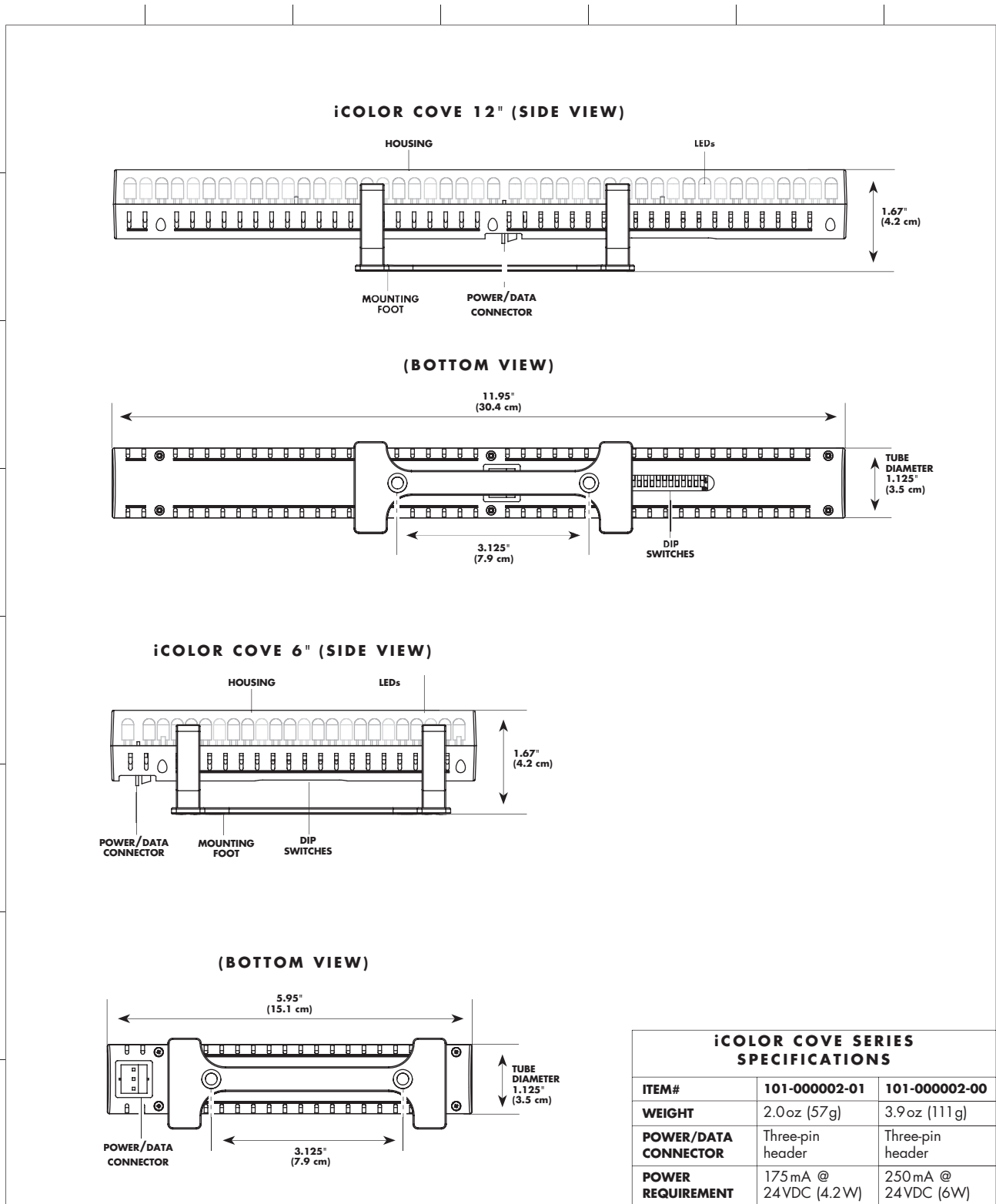
Measured in Footcandles/Lux on axis.

### LIGHT OUTPUT

COLOR	TOTAL OUTPUT (LUMENS)	POWER (WATTS)	EFFICACY (lm/w)
WHITE	52.4	6.1	8.5
RED	7.6	1.7	4.5
GREEN	34.3	2.5	14.0
BLUE	10.4	2.5	4.2

# iCOLOR COVE

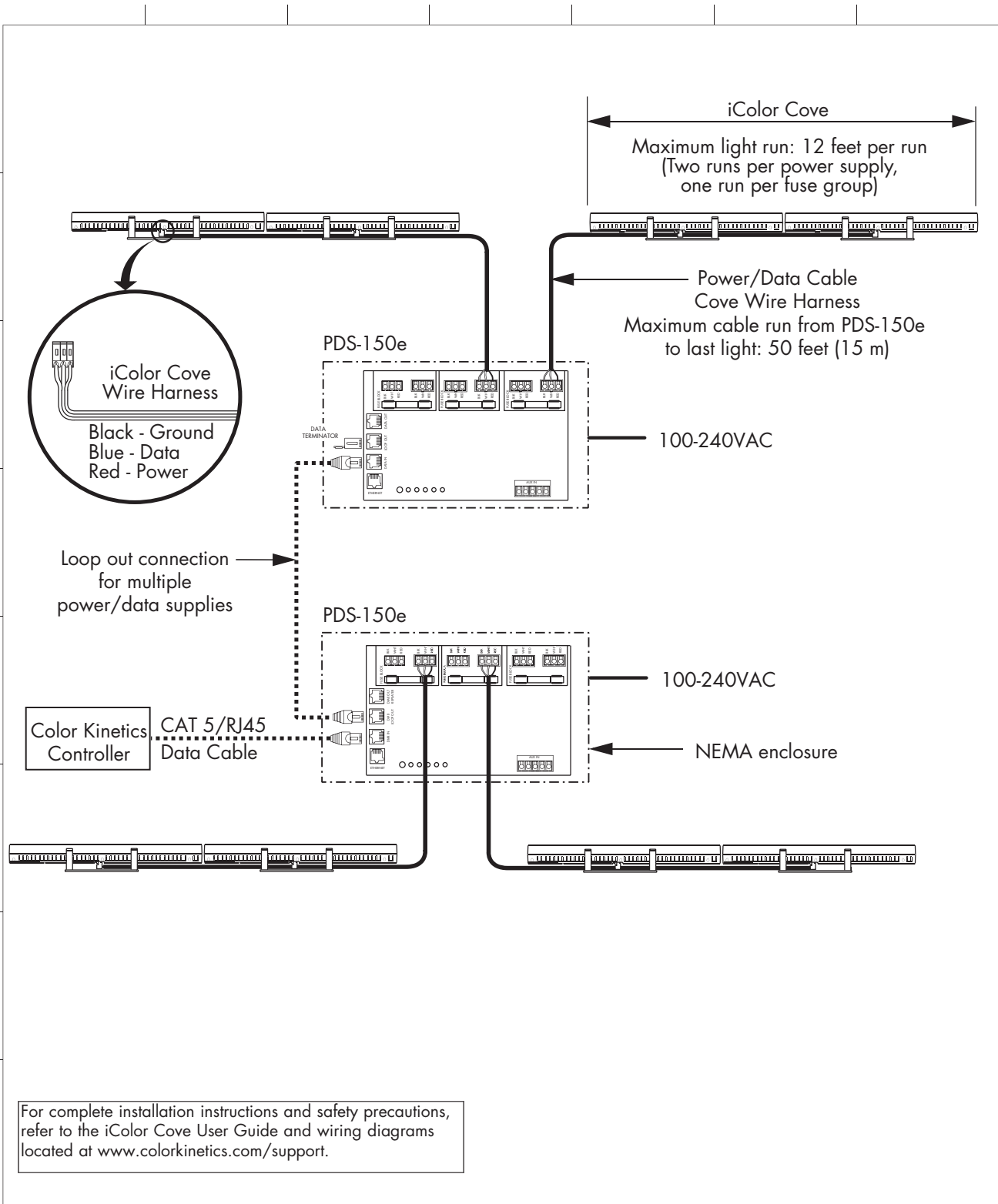
## PHYSICAL DIMENSIONS



iCOLOR COVE SERIES SPECIFICATIONS		
ITEM#	101-000002-01	101-000002-00
WEIGHT	2.0oz (57g)	3.9oz (111g)
POWER/DATA CONNECTOR	Three-pin header	Three-pin header
POWER REQUIREMENT	175mA @ 24VDC (4.2W)	250mA @ 24VDC (6W)

# iCOLOR COVE

## FUNCTIONAL FLOW DIAGRAM



#### **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.

#### **U.S. AND FOREIGN PATENTS AND PATENTS PENDING**