

100V 115/120V



## GENERAL INFORMATION

ColorSource Linear Pearl is a variable white-light LED wash fixture that utilizes a mix of two different white LEDs that enable a user to set the color temperature anywhere between 2700 K and 6500 K. The Pearl array includes the same great feature set and high quality construction as their full color siblings including an impressively bright output and simple user interface.

Designed for installations that depend heavily on white light such as studios, houses of worship, and architectural installations, this array features flicker-free operation and an impressively smooth dimming curve.

### APPLICATIONS

- Houses of worship
- Universities and schools
- Studios
- Hospitality
- Retail
- Exhibition centers
- Meeting rooms

### PRODUCT FEATURES

- Available in three lengths
  - Linear 1 (0.5 Meters) - one cell of control
  - Linear 2 (1 Meter) - two cells of control
  - Linear 4 (2 Meters) - four cells of control
- 2700 K to 6500 K variable white light
- Homogenized optics
- Simple user interface with seven-segment display
- powerCON in and thru power connections
- DMX in and thru (5-pin XLR or RJ45)
- RDM or local configuration
- LED droop compensation for consistent output
- Optically calibrated
- Tour-ready, aluminum housing

## ORDERING INFORMATION

### ColorSource Linear Pearl

MODEL	DESCRIPTION
CSLINEARPRL1	ColorSource Linear Pearl 1
CSLINEARPRL145	ColorSource Linear Pearl 1 RJ45
CSLINEARPRL2	ColorSource Linear Pearl 2
CSLINEARPRL245	ColorSource Linear Pearl 2 RJ45
CSLINEARPRL4	ColorSource Linear Pearl 4
CSLINEARPRL445	ColorSource Linear Pearl 4 RJ45

Color Options: Fixtures ship standard in black. For additional colors please use the below color code suffix:

-1 for white or -5 for silver

Notes: ColorSource Linear Pearl luminaires ship with a pair of trunnions and a power cable with connector of choice. C-clamps are not included. See Power Input Cables on page 6 for connector options.



## PRODUCT SPECIFICATIONS (LINEAR 1/2/4)

## Source

LED details	40 / 80 / 120 Lumileds LUXEON® Z LEDs
Max lumens	5,649 / 11,298 / 22,596
Lumens per watt	50 / 52 / 51
L70 rating (hours to 70% output)	36,000 hours (estimate pending testing data)

## Color

Colors used	Warm white, cool white
Color temperature range	2700 K - 6500 K
Calibrated array	Yes
Red shift	No

## Optical

Beam angle range	15 degrees
Gate size	N/A
Aperture size	N/A
Pattern projection	No
Pattern size	N/A
Camera flicker control/Hz range	1,200 Hz (default) and 25,000 Hz (via RDM)
Notes	Lenses are available for beam control. See accessories section below

## Control

Input method	DMX-512 via 5-pin XLR or RJ45 connector
Protocols	DMX, RDM
Modes (footprint)	Variable Color Temperature: ICt (2) Direct: IWCS (4) 1 channel: I (1)
RDM configuration	Yes
UI type	7-segment address display
Local control	Yes
Onboard presets	Yes (12)
Onboard sequences	No
Onboard effects	No
Fixture to fixture control	Yes
Notes	Local level control via UI

## Electrical

Voltage range	100V-240VAC, 50/60Hz
Input method	powerCON in and thru
Inrush	35A / 35.6A / 67.5A (first half-cycle) at 120V
Fixtures per circuit	10 Cells (20A switched circuit, R20 module or similar)
Wattage (typical / standby)	113W / 1.5W, 219W / 3W, 444W / 5.3W at 120V
Current draw	0.95A / 1.83A / 3.74A at 120V

## Thermal

Ambient operating temp	0-40° C (32-104° F)
Fan (controllable)	Yes (no)
Droop compensation	Yes
dB range	24.2 / 28.4 / 31dBa average at 1m
BTUs/hour	385 / 747 / 1,514

## Physical

Materials	Die-cast aluminum and plastic
Color options	Black, white, silver or custom color
Mounting options	Yoke and floor
IP rating	IP-20
Weight	6.40lb (2.90kg) / 20.10lb (9.12kg) / 37.50lb (17.01kg)
Included accessories	Trunnions, power cable
Notes	See accessories list for power cable options

## Warranty

Full fixture	5 years
LED array	10 years

PRODUCT FEATURES



**ENDLESS LIGHT**

ColorSource Linear Pearl fixtures are designed to mount end-to-end without gaps in light for a smooth, linear wash.



**WARM TO COOL**

Bright white light from 2700 K to 6500 K

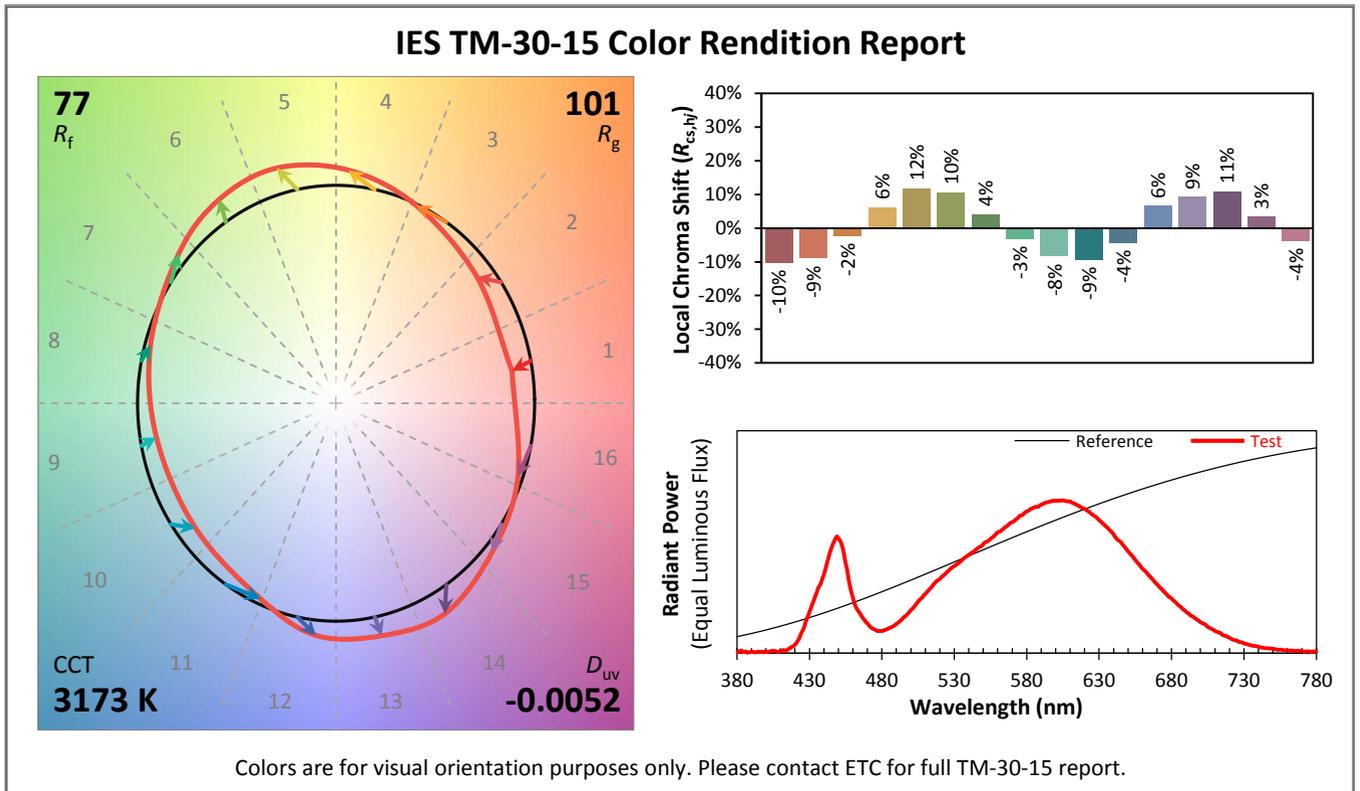


**GREAT FOR STUDIOS**

With refresh rates up to 25,000Hz, there is no need to worry about flicker on camera

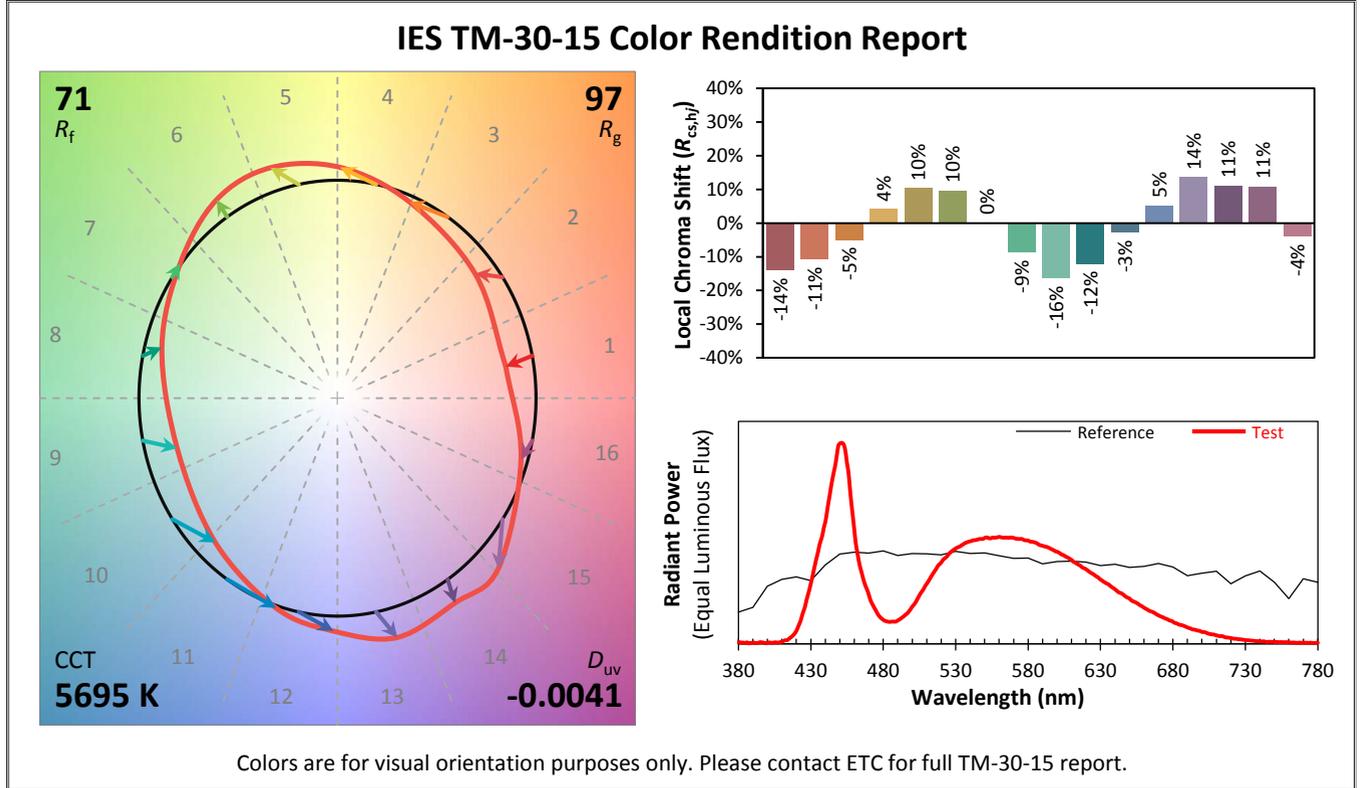
COLOR METRIC INFORMATION

TM-30-15 3200K - COLORSOURCE LINEAR PEARL



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Additional Color Metrics

	CS LINEAR PEARL 3200K	CS LINEAR PEARL 5600K
CRI $R_a$ ( $R_g$ )	81 (18)	74 (3)
TLCI	60	49

PHOTOMETRY

COLORSOURCE LINEAR PEARL PHOTOMETRY NOTE:

The Photometry information shown below is for the Linear 1 (0.5 meter) fixture. Each longer Linear fixture is made up of multiple half-meter sections.

When calculating photometry for the Linear 2 multiply the information shown below by two. When calculating photometry for the Linear 4, multiply the information below by four.

Due to the physical properties of linear products, this is the best method for determining photometry for longer fixtures.

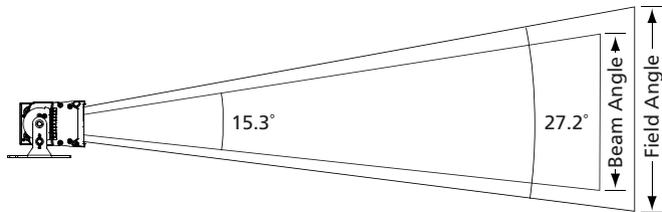
For a detailed explanation of linear photometry, please visit: <http://www.etconnect.com/WorkArea/DownloadAsset.aspx?id=10737489380>

For .ies files or lensing information, use the ColorSource PAR files and assume you have multiple fixtures (for the Linear 2 and the Linear 4) hung 0.5 meters on center.

ColorSource Linear Pearl 1

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Lumens Per Watt
CT Mode (3200 K)	27.2	50,316	3,261	1,868	82.0W	40
CT Mode (5600 K)	27.2	43,061	2,791	1,598	57.3W	49
Direct Mode Full (4000 K)	27.2	75,732	4,908	2,811	113.5W	43

Metric conversions: For meters, multiply feet by 0.3048  
For lux, multiply footcandles by 10.76

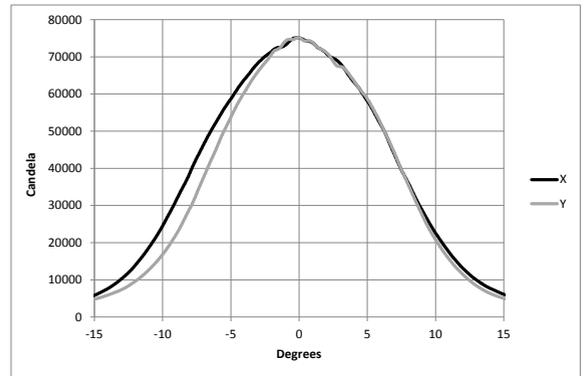


Throw Distance (d)	10ft	15ft	20ft	25ft	275.2ft
	3.0m	4.6m	6.1m	7.6m	83.9m
Field Diameter	4.8ft 1.5m	7.3ft 2.2m	9.7ft 2.7m	12.1ft 3.7m	-
Illuminance (fc)	757	337	189	121	1
Illuminance (lux)	8,152	3,623	2,038	1,304	10.76

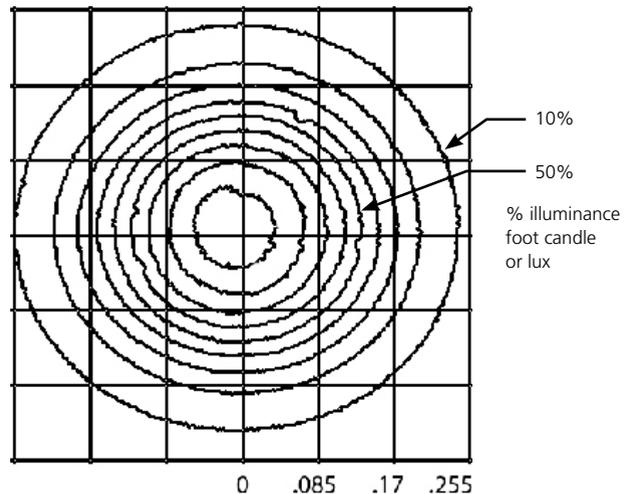
To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared

For field diameter at any distance, multiply distance by 0.484  
For beam diameter at any distance, multiply by 0.269

Candela Plot



Iso-Illuminance Diagram (Flat Surface Distribution)

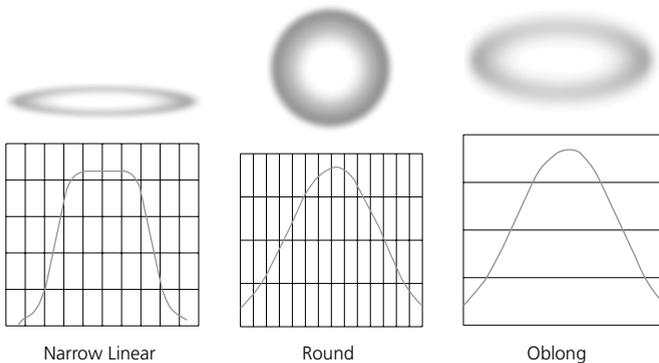


ADDITIONAL ORDERING INFORMATION

Secondary Lens Options

<b>MODEL</b>	<b>DESCRIPTION:</b> The following lenses are cut for ColorSource luminaires and create round, linear or oblong field patterns as described below. These lenses are not sized for use in Selador® Classic fixtures.	
<b>HORIZONTAL</b>		Linear lenses may be combined to create desired field size
CSLVNLH.5	Very Narrow Linear Horizontal	
CSLNLH.5	Narrow Linear Horizontal lens	
CSLMLH.5	Medium Linear Horizontal lens	
CSLWLH.5	Wide Linear Horizontal lens	
CSLXWLH.5	Extra Wide Linear Horizontal lens	
<b>VERTICAL</b>		
CSLVNLV.5	Very Narrow Linear Vertical lens	
CSLNLV.5	Narrow Linear Vertical lens	
CSLMLV.5	Medium Linear Vertical lens	
CSLWLV.5	Wide Linear Vertical lens	
CSLXWLV.5	Extra Wide Linear Vertical lens	
<b>ROUND</b>		
CSLVNR.5	Very Narrow Round Lens	
CSLNR.5	Narrow Round Lens	
CSLMR.5	Medium Round Lens	
CSLWR.5	Wide Round Lens	
CSLXWR.5	Extra Wide Round Lens	

Typical Lens Field Profiles



Power Consumption at Full Intensity

MODEL	VOLTAGE (V)	CURRENT (A)	WATTS
CS Linear 1	120 / 240	0.95 / 0.50	114 / 112
CS Linear 2	120 / 240	1.83 / 0.96	219 / 214
CS Linear 4	120 / 240	3.74 / 1.92	444 / 431

ADDITIONAL ORDERING INFORMATION

Power Input Cables

Use information below to order 5' power input leads with factory-fitted connectors.

MODEL	DESCRIPTION
DPA-A	5ft powerCON to parallel blade U-ground (Edison) connector
DPA-B	5ft powerCON to 20A two-pin and ground (stage-pin) connector
DPA-C	5ft powerCON to grounded 20A twistlock connector
DPA-X	5ft powerCON to bare-end power input lead

Note: One cable of your choice is included with each fixture

Power-Thru Jumpers

Power thru jumpers connect to luminaire's output (thru) connector to provide power to a successive luminaire in-line

MODEL	DESCRIPTION
DPJ-5	5ft powerCON to powerCON fixture to fixture jumper
DPJ-10	10ft powerCON to powerCON fixture to fixture jumper

Luminaire Accessories

MODEL	DESCRIPTION
CSL1Y	ColorSource Linear Pearl 1 Yoke
CSL1DY	ColorSource Linear Pearl 1 Double-Yoke
CSLBD	ColorSource Linear Pearl barn door (2 x 0.5 meter sections)
CSLL	ColorSource Linear Pearl louver (.5 meter section)
400CC	C-Clamp (does not ship with fixture)
400SC	Safety Cable (32in)
DPSJ-25	25ft powerCON to Edison input power cable with inline switch

NOTES ABOUT LED LUMINAIRES

All LED sources experience some lessening of light output and some color shift over time. LED output will vary with thermal conditions. Thermal conditions can be affected by ambient temperatures and orientation. Based on the LED manufacturer's B50 L70 specification, a ColorSource Pearl luminaire will achieve ~70% of its initial output after 36,000 hours of typical usage. In individual situations, LEDs will be used for different durations and at different levels. This can eventually lead to minor alterations in color performance, necessitating slight adjustments to presets, cues or programs.

CONTROL

DMX Input Channel Profiles

DMX Channel	ct (Variable color temperature)	dir (Direct)	1ch (One channel)
1	Intensity	Intensity	Intensity
2	Color temperature	Warm white	
3		Cool white	
4		Strobe*	

\*Use DMX values of 0 or 255 for no strobe. Use values of 1-254 to increase the strobe rate from 1 per second up to 33 per second.

PHYSICAL

ColorSource Linear Pearl Pearl Dimensions

MODEL	HEIGHT		WIDTH		DEPTH	
	in	mm	in	mm	in	mm
Linear 1	4.29	109	19.61	499	6.04	153
Linear 2	4.29	109	39.37	1000	6.04	153
Linear 4	4.29	109	78.40	1991	6.04	153

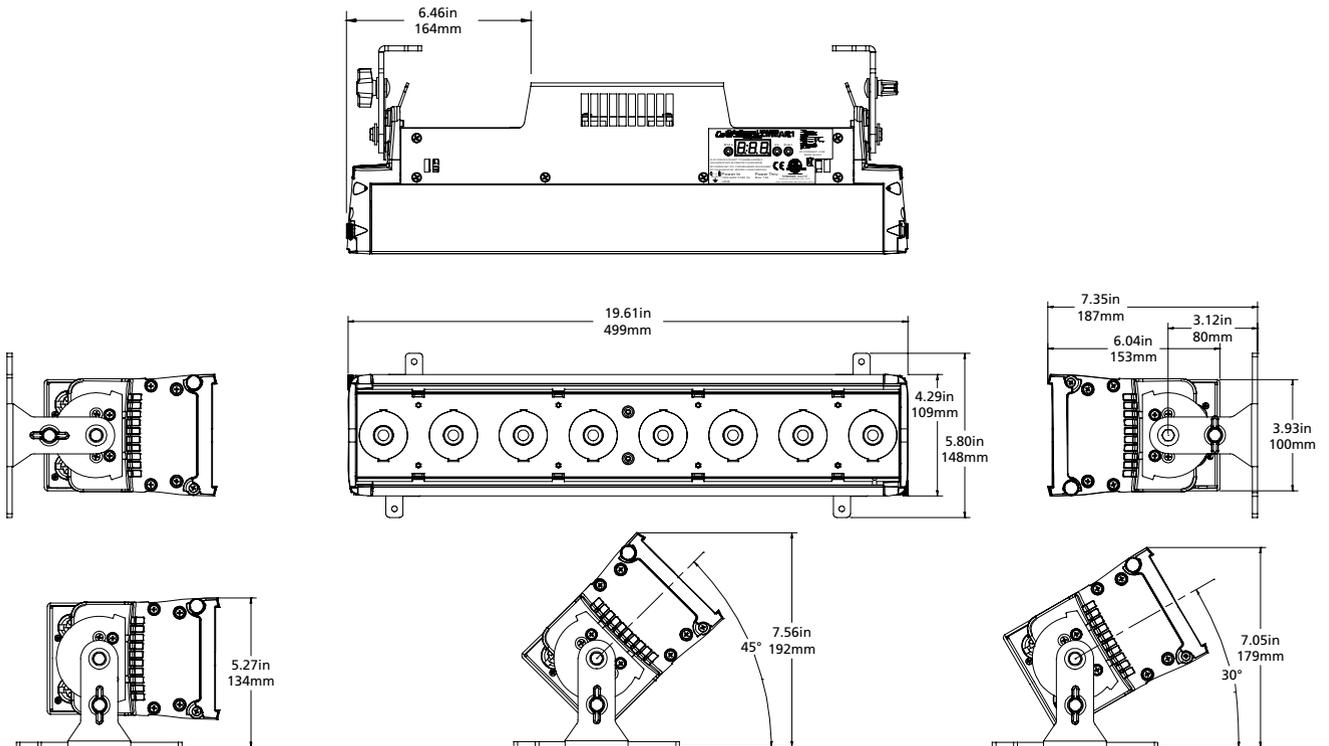
\*Does not include mounting hardware

ColorSource Linear Pearl Pearl Weights

MODEL	WEIGHT*		SHIPPING WEIGHT	
	lb	kg	lb	kg
Linear 1	6.40	2.90	7.90	3.58
Linear 2	20.10	9.12	23.50	10.66
Linear 4	37.50	17.01	39.87	18.08

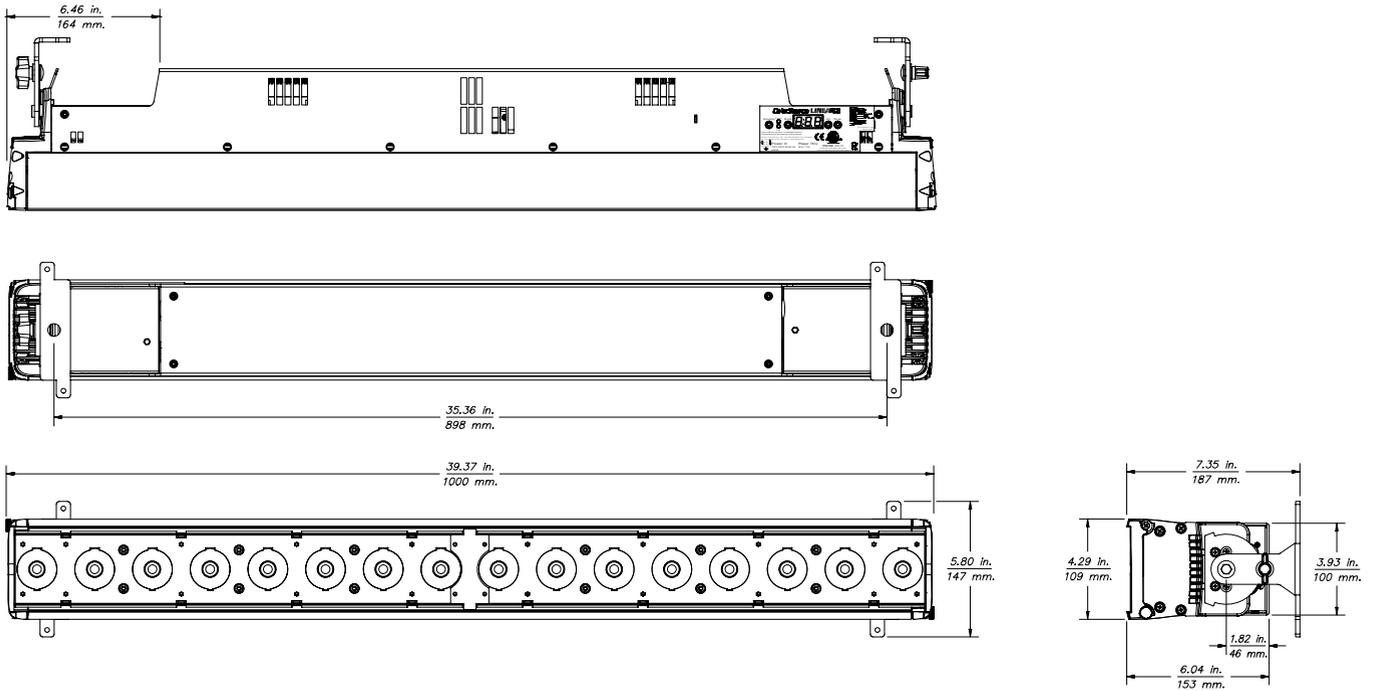
\*Does not include mounting hardware

COLORSOURCE LINEAR PEARL 1

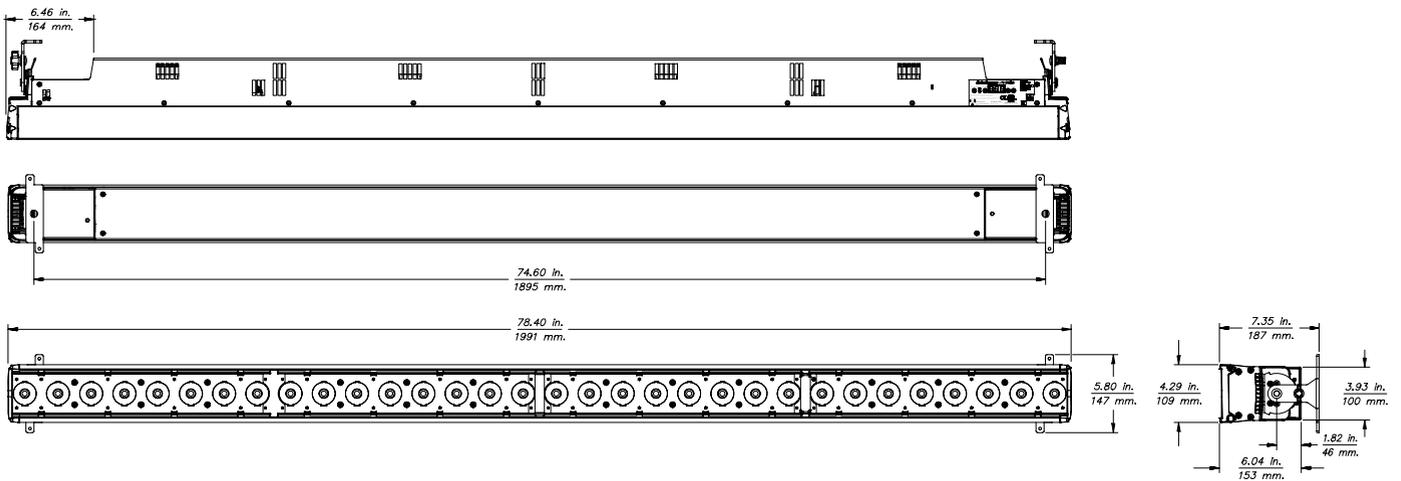


PHYSICAL

COLORSOURCE LINEAR PEARL 2



COLORSOURCE LINEAR PEARL 4



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