(1)



100V 115/120V 230/240V

ColorSource Series



GENERAL INFORMATION

ColorSource Linear combines the bright, bold output of the ColorSource family with a sleek linear design to create a versitile and affordable strip light. Whether being used to create a stunning wash of light on your stage or to light a wall, the ColorSource Linear uses ETC's unique RGB-L color system to provide beautiful LED lighting.

APPLICATIONS

- House of worship
- Universities and schools
- Hospitality
- Retail
- Exhibition centers
- Meeting rooms
- Clubs
- Cafetoriums

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
- ETC's RGB-L chipset (Red, Green, Blue and Lime)
 - Available in Original or Deep Blue
- · 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

MODEL	DESCRIPTION
CSLINEAR1	ColorSource Linear 1
CSLINEAR145	ColorSource Linear 1 RJ45
CSLINEAR1DB	ColorSource Linear 1 Deep Blue
CSLINEAR1DB45	ColorSource Linear 1 Deep Blue RJ45
CSLINEAR2	ColorSource Linear 2
CSLINEAR245	ColorSource Linear 2 RJ45
CSLINEAR2DB	ColorSource Linear 2 Deep Blue
CSLINEAR2DB45	ColorSource Linear 2 Deep Blue RJ45
CSLINEAR4	ColorSource Linear 4
CSLINEAR445	ColorSource Linear 4 RJ45
CSLINEAR4DB	ColorSource Linear 4 Deep Blue
CSLINEAR4DB45	ColorSource Linear 4 Deep Blue 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 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 2 for connector options.



ColorSource® Linear

ColorSource Series

SPECIFICATIONS

GENERAL

- RGB-L chipset color-mixing wash luminaire with eight emmitters
- IP20-rated for indoor use
- Power- and DMX-in/thru connections for simple setup
- Seven-segment, three-button interface
- 12 onboard, customizable presets and five sequences

PHYSICAL

- Rugged, die-cast, aluminum housing
- Two secondary lens slots
- Available in black, white or silver
 - Custom colors available upon request (contact ETC)
- Trunnions included

ELECTRICAL

- 100VAC to 240VAC 50/60Hz universal power input
- PowerCon in and thru power connections
- Up to 9 cells (0.5 meter segments, 15A max) may be linked via power thru connector
- Up to 10 cells (0.5 meter segments) total per circuit when used with ETC R20 relay module or Unison® Echo Relay Panel.
 - Consult breaker trip curves when used with other equipemnt
- Requires power from a non-dimmable source
- Inrush (Linear 1/Linear 2/Linear 4):
 - 120V: 35A/35.6A/67.5A (First half-cycle)
 - 240V: 49A/85.6A/153A (First half-cycle)
- ETL Listed to UL1573

LED*

- 20,000-hour LED life (at 70% intensity)
- 40 Luxeon® Z LED emitters (five per optic)
- *See additional LED notes and photometrics on page 3

COLOR

- Exclusive RGB-L Color array
 - Also available in Deep Blue array
- Unparrallelled brightness and color range
- Droop compensation maintains color accuracy during use
- Optically calibrated to ensure consistency across fixture

OPTICAL

- Homoginized optics for a consistent, smooth beam
- Primary field angle of 24.9° and beam angle of 14.5°
- Secondary lenses available for multiple beam-spread options.
 Refer to accessories charts for lenses available

CONTROL

- DMX512 in and thru via five-pin XLR or RJ45 connectors (End-of-line termination required)
- RGB, IRGBS, Direct and single channel control (See DMX control table for additional information)
- 15-bit virtual dimming engine provides smooth, high-quality theatrical fades
- RDM support for address and setting changes
- Local control of presets (12) and sequences (5)

THERMAL

- Luminiare is designed for continuous operation up to 104°F (40°C) ambient temperature and requires free flow of air around fixture housingAmbient operating temperature of 32° to 104°F (0° to 40°C)
- Active electronic thermal management using variable-speed fan

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 incldued 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

М	ODEL	DESCRIPTION
DF	PJ-5	5ft PowerCon to PowerCon fixture to fixture jumper
DF	PJ-10	10ft PowerCon to PowerCon fixture to fixture jumper

Luminaire Accessories

CSL1Y	ColorSource Linear 1 Yoke
CSL1DY	ColorSource Linear 1 Double-Yoke
CSLBD	ColorSource Linear barn door (2x .5 meter sections)
CSLL	ColorSource Linear 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

PHOTOMETRICS

COLORSOURCE LINEAR PHOTOMETRY NOTE:

The Photometry information shown below is for the Linear 1 (.5 meter) fixture. Each longer Linear fixture is made up of multiple half-meter sections.

When figuring photometry for the Linear 2 multiply the information shown below by two. When figuring 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.

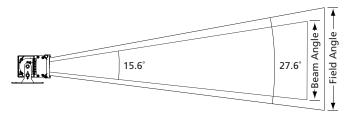
For a detailed explanation of linear photometry, please visit: http://www.etcconnect.com/WorkArea/DownloadAsset.aspx?id=10737489380

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 1

Mode	Degree	Candela	Field	Beam	Power	Lumens
			Lumens	Lumens	Consumption	Per Watt
Full / RGB	27.6	35,621	2,481	1,382	93.2	26.6
Full / Direct	27.6	37,616	2,611	1,439	104	25.1
3200K / RGB	27.6	33,601	2,363	1,330	78.9	29.9
5600K / RGB	27.6	35,269	2,461	1,387	93.9	26.2
Red / RGB	27.6	8,190	568	305	27.8	20.4
Green / RGB	27.6	11,073	699	366	30.4	23.0
Blue / RGB	27.6	3,369	225	121	32.9	32.9

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

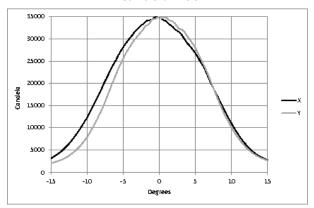


Throw Distance (d)	10ft	15ft	20ft	25ft	188.7ft
	3.0m	4.6m	6.1m	7.6m	57.5m
Field Diameter	4.9ft	7.4ft	9.8ft	12.3ft	
	1.5m	2.2m	3.0m	3.7m	_
Illuminance (fc)	356	158	89	57	1
Illuminance (lux)	3,834	1,704	959	613	10.76

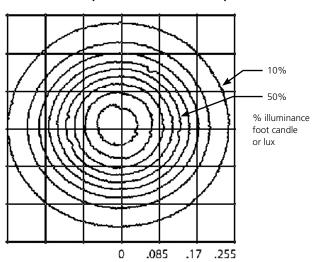
To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared

For field diameter at any distance, multiply distance by 0.491 For beam diameter at any distance, multiply by 0.274

Candela Plot



Iso-Illuminance Diagram (Flat Surface Distribution)

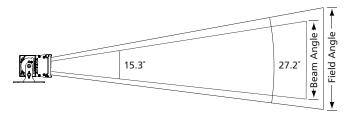


PHOTOMETRICS

ColorSource Linear 1 Deep Blue

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Lumens Per Watt
Full / RGB	27.2	31,917	2,141	1,173	71.8	29.8
Full / Direct	27.2	36,097	2,429	1.329	101.7	23.9
3200K / RGB	27.2	35,356	2,366	1,296	77.5	30.5
5600K / RGB	27.2	31,760	2,126	1,165	71.6	29.7
Red / RGB	27.2	8,221	566	308	27.5	27.5
Green / RGB	27.2	11,022	675	354	30.3	30.3
Blue / RGB	27.2	27	81	44	31.2	31.2

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

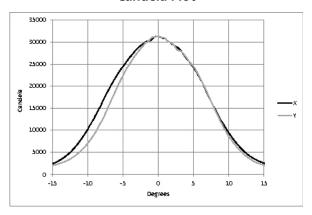


Throw Distance (d)	10ft	15ft	20ft	25ft	178.7ft	
	3.0m	4.6m	6.1m	7.6m	54.5m	
Field Diameter	4.8ft	7.3ft	9.7ft	12.1ft		
	1.5m	2.2m	2.9m	3.7m	_	
Illuminance (fc)	319	142	80	51	1	
Illuminance (lux)	3,436	1,527	859	550	10.76	

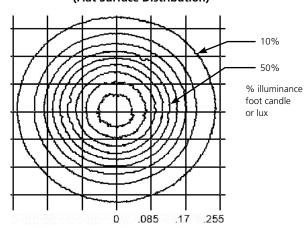
To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared

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

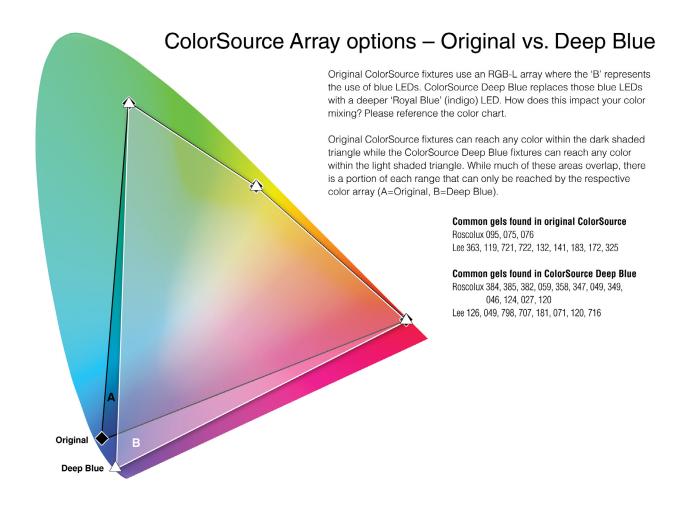
Candela Plot



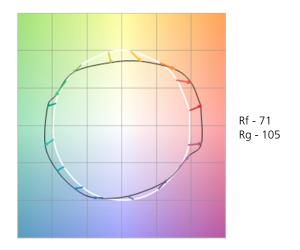
Iso-Illuminance Diagram (Flat Surface Distribution)



COLORSOURCE LINEAR VS COLORSOURCE LINEAR DEEP BLUE



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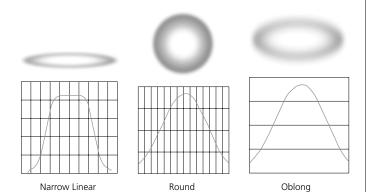


ADDITIONAL ORDERING INFORMATION

Secondary Lens Options

MODEL	DESCRIPTION: The following lense	es are cut for			
WIODEL	ColorSource luminaires and create round, linear				
	or oblong field patterns as described below. These				
	lenses are not sized for use in Selac				
	fixtures.				
HORIZONTAL					
CSLVNLH.5	Very Narrow Linear Horizontal	Linear lenses			
CSLNLH.5	Narrow Linear Horizontal lens	may be combined to			
CSLMLH.5	Medium Linear Horizontal lens	create desired			
CSLWLH.5	Wide Linear Horizontal lens field size				
CSLXWLH.5	Extra Wide Linear Horizontal lens				
VERTICAL					
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				
ROUND					
CSLVNR.5	Very Narrow Round Lens				
CSLNR.5	Narrow Round Lens				
	Narrow Rouria Leris				
CSLMR.5	Medium Round Lens				
CSLWR.5					

Typical Lens Field Profiles



Power Consumption at Full Intensity

MODEL	VOLTAGE (V)	CURRENT (A)	WATTS
CS Linear 1	120 / 240	0.95 / 0.48	115 / 112
CS Linear 2	120 / 240	1.82 / 0.91	218 / 213
CS Linear 4	120 / 240	3.68 / 1.82	438 / 426
CS Linear 1 DB	120 / 240	0.92 / 0.46	110 / 108
CS Linear 2 DB	120 / 240	1.82 / 0.91	218 / 214
CS Linear 4 DB	120 / 240	3.70 / 1.83	440 / 428

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 luminaire will achieve ~70% of its initial output after 20,000 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 Profile	DMX Channels	Channel Assignments	Notes
5ch- Default	5	1-INT 2-Red 3-Green 4-Blue 5-Strobe	
RGB	3	1-Red 2-Green 3-Blue	
1ch	1	1-INT	This mode controls the intensity of Preset 1
Direct	6	1-INT 2-Red 3-Green 4-Blue/Indigo* 5-Lime 6-Strobe	*Original ColorSource Linear fixture uses blue in channel 4; Deep Blue ColorSource Linear fixture uses indigo in channel 4.

PHYSICAL

ColorSource Linear Dimensions

MODEL	HEIGHT		IODEL HEIGHT WIDTH		DEPTH		
	inches	mm	inches	mm	inches	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	

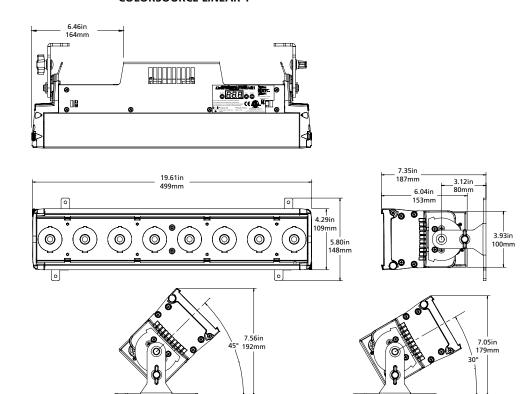
^{*}Does not include mounting hardware

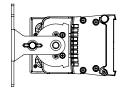
ColorSource Linear Weights

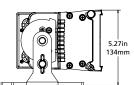
MODEL	WEIGHT*		SHIPPING WEIGHT	
	lbs	kgs	lbs	kgs
Linear 1	6.40	2.90	7.90	3.58
Linear 2	20.10	9.12	23.50	10.66
Linear 4	37.50	17.01	39.87	18.08

^{*}Does not include mounting hardware

COLORSOURCE LINEAR 1

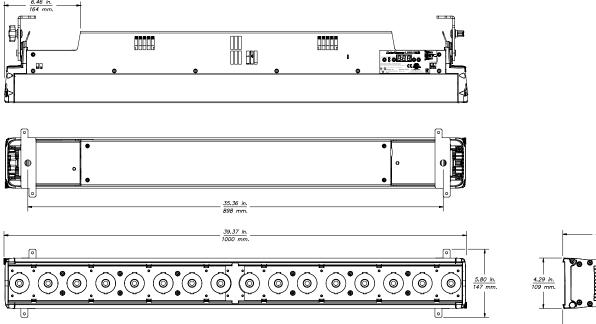


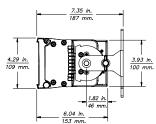




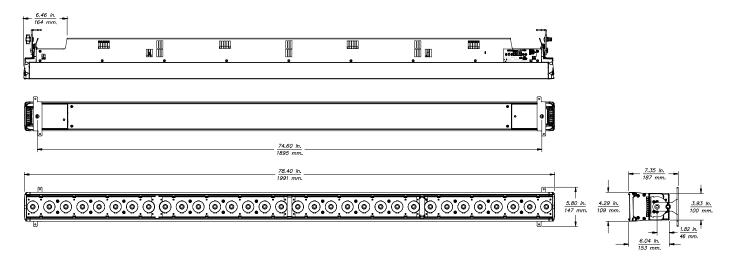
PHYSICAL

COLORSOURCE LINEAR 2





COLORSOURCE LINEAR 4





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