

COVELINE™ 120 LED

Innovative line voltage LED fixture with flexibility, adjustability and full range dimming.

CAT:	FEET:
TYPE:	PROJECT:

FEATURES

- 120VAC flexible system bends 90° horizontal and 30° vertical to fit concave and convex curves without special hardware
- Runs directly off line voltage up to 200' on a 12A circuit
- Modular LED board replacement
- Use in both low and high ambient light interior applications
- Integral clear dust cover lens
- Full range dimming with any standard ELV (electronic) or LV (magnetic) low voltage dimmer with no color shift; See page 4 for specific tested models (not compatible with incandescent dimmers)
- Operates at 120V AC using 3 module series per foot; 36 Triple Chip LEDs operating in series (using no integral driver)
- No catastrophic failure due to single LED outage
- Quick connects included for easy extension
- Low maintenance, energy efficient lighting with less wattage than comparable T5 lamp

SPECIFICATIONS

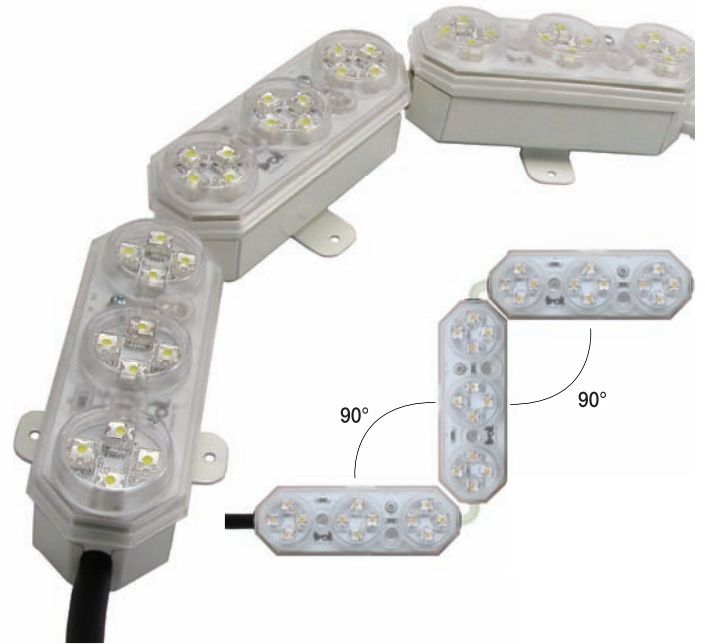
COVELINE 120	EFFICACY LM/WT	CRI	LM/FT	WT/FT
Neutral White 3400°	60	62.3	324	5.5

Items in bold denote Title 24 High efficacy rating. Measurements are based on 120V AC power design calculations will vary based on run lengths.

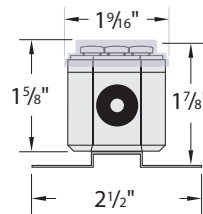
LED DATA RATED TO LM79 STANDARDS	WATTAGE	LED LIFE* / COLOR TEMP	VIEWING ANGLE
12 Triple Chip LED modules in 3 unit segments	5.5W per 3 unit segment	40,000 hrs. White (5500°k +/-50°k) Neutral White (3200°k +/-50°k) Neutral White (3400°k +/-50°k) Warm White (2800°k +/-50°k) Warm White (2400°k +/-50°k)	160°

* Ultra Bright Triple Chip LEDs are manufactured on three PCB's for a total of 36 LEDs wired in series orientation and operate at 52% of LED manufacturers maximum current spec rating.

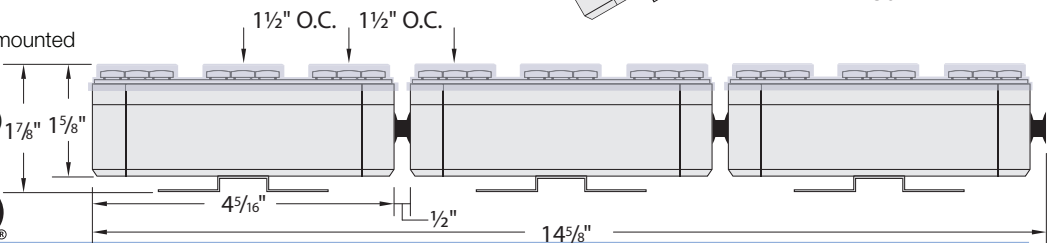
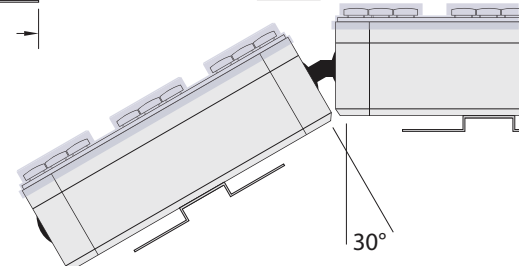
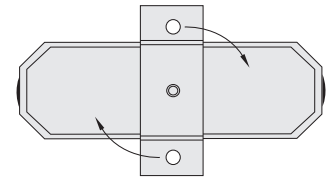
1. **Spacing** - 4 LED groups spacing: 1.5" O.C.
2. **LED PCB** - Each PCB unit contains 12 triple chip LEDs in clusters of 4. Coveline 120 is series wired in 3 unit segments for a total of 5.5W
3. **Adjustability** - +/-10, 20 & 30° Directional mounting to manually set angular throw of light individually, distributing a 160° beam spread
4. **Colors** - Available in 5500°K, 3400°K, 3200°K, 2800°K, 2400°K, Blue, Green, Yellow, Red and Orange: Other colors available upon request
5. **Mounting** - Swivel-foot mounting feet mounted at the base of each unit - See Profiles
6. **Power** - 120V AC input (277V AC using step down transformer)
7. **Max run length** - 200' at 12A
8. **Listing** - ETL Listed for indoor use
9. **Warranty** - 3 Year Warranty



PROFILES



Swivel Mounting Feet



COVELINE™ 120 POWER SET ORDER GUIDE

Example: CVL120-U-24-PWR

PRODUCT CODE	LED TYPE	LED COLOR	PREP
CVL120-	U	-	PWR
COVELINE™ 120	Ultra Bright Triple Chip	24 = Warm White 2400°K 28 = Warm White 2800°K 32 = Neutral White 3200°K 34 = Neutral White 3400°K 55 = White 5500°K	PWR = Power Set (1' NOM) with 6" lead wire

COVELINE™ 120 LIGHT EXTENSION ORDER GUIDE

Example: CVL120-U-24-LE6

PRODUCT CODE	LED TYPE	LED COLOR	PREP
CVL120-	U	-	LE6
COVELINE™ 120	Ultra Bright Triple Chip	24 = Warm White 2400°K 28 = Warm White 2800°K 32 = Neutral White 3200°K 34 = Neutral White 3400°K 55 = White 5500°K	LE1 = 1' NOM Light Extension LE2 = 2' NOM Light Extension LE6 = 6' NOM Light Extension

System must have one PWR Power Set per circuit run length start. See page 4.



COVELINE™ 120 LED

REPLACEMENT PCBS

CAT. NO.	LED COLOR
CVL-120-PCB-U-24*	Warm White 2400°K
CVL-120-PCB-U-28*	Warm White 2800°K
CVL-120-PCB-U-32*	Neutral White 3200°K
CVL-120-PCB-U-34*	Neutral White 3400°K
CVL-120-PCB-U-55*	White 5500°K

* Includes 2 each Nylon screws



REPLACEMENT PCB MODULES

JUMPERS

CAT. NO.	DESCRIPTION
CVL-120-JUMPER-1	Male/Female moxex jumper cable - 1' length
CVL-120-JUMPER-2	Male/Female moxex jumper cable - 2' length
CVL-120-JUMPER-4	Male/Female moxex jumper cable - 4' length
CVL-120-JUMPER-8	Male/Female moxex jumper cable - 8' length

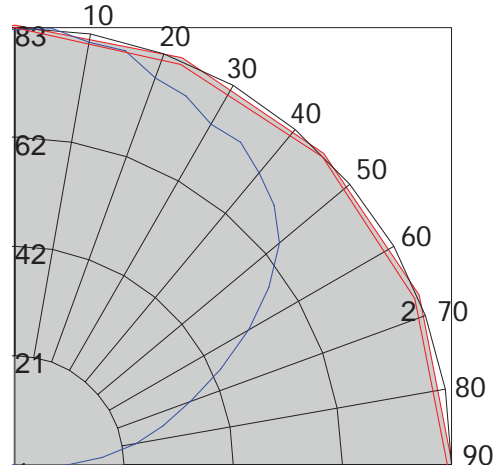
LUMEN DEPRECIATION

Tivoli designs LED fixtures to meet optimal heat dissipation and efficacy requirements by LED suppliers. Designs are based upon testing to meet or exceed L50 and L70 guidelines. Lumen depreciation can be tracked through these guidelines, which represent the point at which light output is below 50% (color) or 70% (whites) of initial light output. LED lifespan calculations are based upon data supplied by LED manufacturers. Typically, LED product failures occur within fixture construction, interdependent component failure, or operation under adverse conditions.

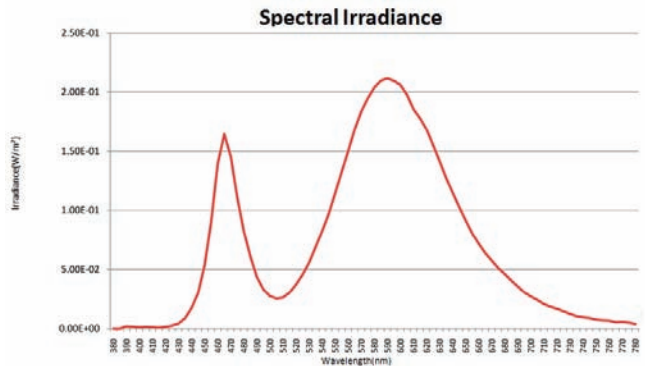
Tivoli operates LEDs at a derated current to maximize LED lifespan. Conditions such as excessive voltage, vibration, heat and other adverse conditions may negatively effect LED lifespan.

Lamp Color

Lamp color selections can accent the hidden color within a surface, bringing out details or patterns not seen in a broad spectrum of light. Tivoli™ uses a range of 2400K to 3400K for warm white and 5500K for white. Color temperatures are created by manufacturer LED modules that blend different color bins together to achieve rich color temperatures. Individual orders will be bin-sorted to within plus or minus 100K and it is recommended to purchase 10% replacement stock within that bin lot to insure matched color for needed replacements. Individual modules will vary in color and application design needs to incorporate cross blending to create color uniformity. Tivoli's Coveline LED product is intended for use as an indirect cove lighting product. Use in direct view or backlit applications may not yield acceptable results.

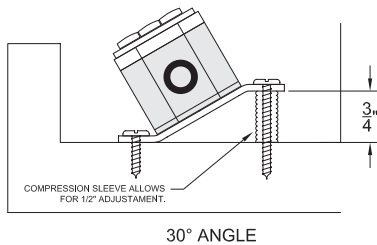
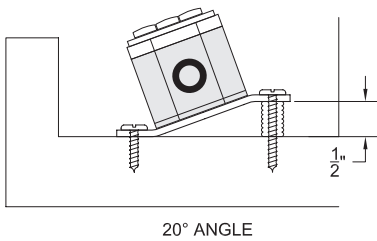
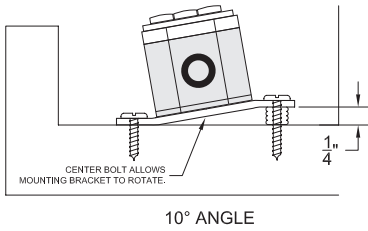
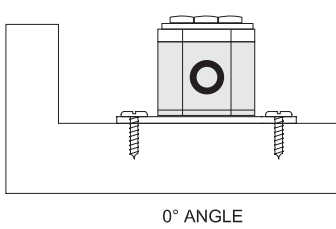


Maximum Candela = 83.155 Located At Horizontal Angle = 90, Vertical Angle = 175
 # 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.); BLUE
 # 2 - Horizontal Cone Through Vertical Angle (175) (Through Max. Cd.); RED



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MOUNTING






Swivel Mounting Feet

All Coveline™ 120 modules include integrated swivel mounting feet. Each unit can be mounted in various positions and can also incorporate angled mounting in 10°, 20° and 30°.

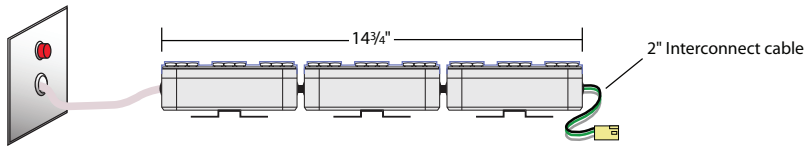


MOUNTING SPACERS

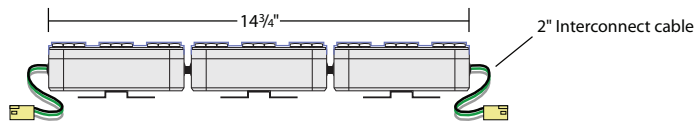
CAT. NO.	DESCRIPTION	
CVL-120-SPACE-V	Spacers: Assorted pack (3-10°, 3-20°, 3-30°)	
CVL-120-SPACE-10KX	10° Spacers: 10 pack	
CVL-120-SPACE-10KC	10° Spacers: 100 pack	
CVL-120-SPACE-20KX	20° Spacers: 10 pack	
CVL-120-SPACE-20KC	20° Spacers: 100 pack	
CVL-120-SPACE-30KX	30° Spacers: 10 pack	
CVL-120-SPACE-30KC	30° Spacers: 100 pack	

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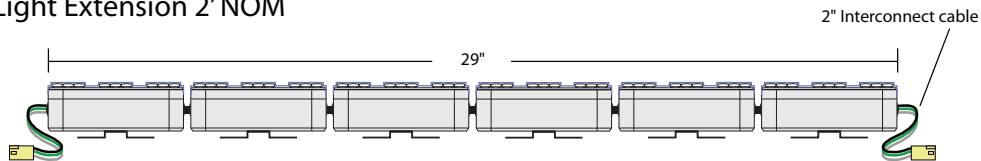
PWR Power Set (Required at start of each circuit) 1' NOM



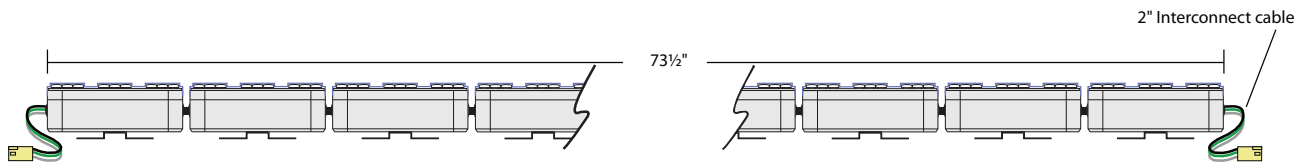
LE1 Light Extension 1' NOM



LE2 Light Extension 2' NOM



LE6 Light Extension 6' NOM



POWER CONNECTOR FEATURES

- Molex connectors ensure maximum run length
- PWR Power Set has lead wire for run length start and molex connector end
- LE Light extensions have molex connectors on both ends for easy run length connections
- Coveline 120 will operate no magnetic and electronic low voltage dimmers.

DIMMER COMPATIBILITIES

Coveline 120 has been tested with the following dimmers for compatability.

DIMMER TYPE	MODEL TESTED
LV MAGNETIC	Lutron DLV and NLV Series dimmers
ELV ELECTRONIC	ETC ELV 10 Dimming module

Not compatible with standard incandescent dimmer.