

ILLUMILINE 2020™

LED LIGHT TUBING

High performance LED light fixture for direct or indirect lighting interior or exterior applications.

CAT:	FEET:
TYPE:	PROJECT:

FEATURES

- High output for wallwash, hand rail, outdoor covers. Fits into profiles less than 1" for discrete or visible illumination
- Rectangular (1/2" x 9/16") or rectangular with rounded top profile (1/2" x 3/4") tubing available in clear or frosted polycarbonate
 - Available in 1', 2', 3', 4', 6', 8' lengths
- Low maintenance, energy efficient lighting for high or low ambient light interior applications perfect for wall wash, hand rail, stairwell, shelving or any other indirect applications
- Smooth full range dimming capability with commercially available ELV (electronic low voltage) dimmers

SPECIFICATIONS

ILLUMILINE 2020	EFFICACY LM/WT	CRI	LM/FT	LM/LED	WT/FT	WT/LED
Warm White (2800°k) at 2" O.C.	42.9	83.3	265.1	44.2	6.2	1.03

Items in bold denote Title 24 High efficacy rating. Measurements are based on 350mA constant current power and design calculations will vary based on power supply and run lengths.

LED DATA RATED TO LM79 STANDARDS	WATTAGE	LED LIFE* / COLOR TEMP	VIEWING ANGLE
CREE XP-E SMD LED	3W LED driven to 1.1W per group of 3	50,000 hrs. Cool White (6000°k +/-150°k) White (5000°k +/-150°k) Neutral White (4000°k +/-150°k) Warm White (2800°k +/-150°k)	120°

* CREE XP-E LEDs are manufactured on linear PCB boards and operate at 1A Max drive current. Manufactured in series and operated at 350mA.

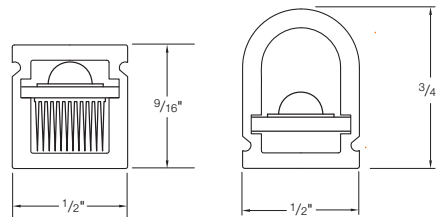
1. **Spacing** - Lamp spacing: 2" O.C.
2. **LED** - Uses 3W Cree XP-E SMD LEDs driven in groups of 3 to 1.1W mounted on a linear PCB
3. **Adjustability** - +/-45° Directional mounting bracket (90° total adjustability) offers the ability to manually set the angular throw of light
4. **Mounting** - Mounting channel for linear mounting or mounting clips (1 per foot) for radius curved applications
5. **Max LEDs** - 52 LEDs per 5A circuit
6. **Power Supply** - Listed Class II 12V DC power supply required
7. **Listing** - ETL wet listed for indoor or outdoor Class II applications
8. **Warranty** - 3 Year Warranty



PROFILE Without Mounting Channel

10 Profile

11 Profile



ILLUMILINE 2020 ORDER SPECIFICATION GUIDE

Example: IL2-10-C-XE-NW-2-MD

PRODUCT CODE	PROFILE	TUBE	LED TYPE	LED COLOR	LENGTH	END PREP	REQUIRED POWER SUPPLY
IL2	-	-	-	-	-	-	+ PSU
ILLUMILINE™ 2020	10 = 1/2" x 9/16" Rectangular 11 = 1/2" x 3/4" Rounded	C = Clear F = Frosted	XE = Cree XP-E LED	CW = Cool White WH = White NW = Neutral White WW = Warm White	1 = 1' 2 = 2' 3 = 3' 4 = 4' 6 = 6' 8 = 8'	MD = Male/Dead End MF = Male/Female	See power supply specsheets

REQUIRED POWER SUPPLY OPTIONS

- | | |
|--|--|
| <input type="checkbox"/> ADUL-300-5-5-12-D
<input type="checkbox"/> ADUL-200-3-5-12-D
<input type="checkbox"/> ADUL-75-1-5-12-D
<input type="checkbox"/> ADN-300-5-5-12-D
<input type="checkbox"/> ADN-200-3-5-12-D
<input type="checkbox"/> ADN-75-1-5-12-D
<input type="checkbox"/> JT-240-4-5-12-D
<input type="checkbox"/> JTH-240-4-5-12-D
<input type="checkbox"/> JT-60-1-5-12-D
<input type="checkbox"/> JTH-60-1-5-12-D
<input type="checkbox"/> MT-60-1-5-12-D | <h3>OPTIONAL DIMMERS</h3> <input type="checkbox"/> N-600
<input type="checkbox"/> N-1000
<input type="checkbox"/> NH-600
<input type="checkbox"/> NH-1000
<input type="checkbox"/> DIM-12V-8A
<input type="checkbox"/> DIM-OT-1-5-D |
|--|--|

See power supply specifications for more information

ORDERING INFORMATION

Products are manufactured to customer specified lengths. A light tube guide or drawing should accompany each order showing each tube length.

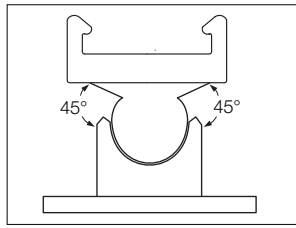


ILLUMILINE 2020™ LED LIGHT TUBING

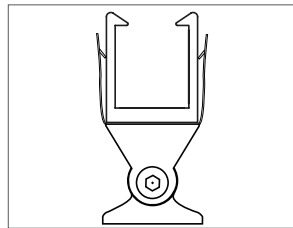
MOUNTING ACCESSORIES



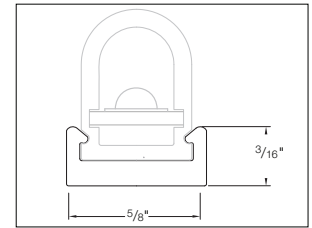
IL2-MCL Rectangular mounting clip
3" clear Polycarbonate mounting clip
IL2-R-MCL Radius mounting clip
1" clear Polycarbonate mounting clip



IL2-11-ADJ-MOUNT 11 Series adjustable mounting bracket with 45° angle adjustment



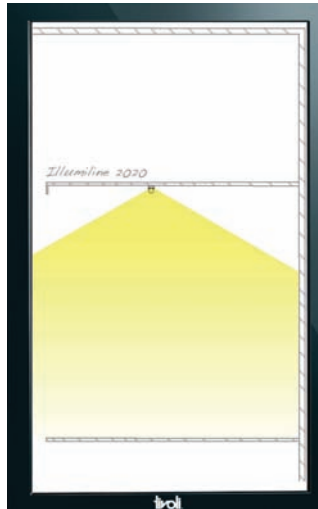
IL2-10-ADJ-MOUNT 10 Series adjustable mounting bracket with 45° angle adjustment



IL2-10-MCH-10 10 Series Mounting Channel - 10' length (Clear Polycarbonate)
IL2-11-MCH-10 11 Series Mounting Channel - 10' length (Clear Polycarbonate)
IL2-DBL-TP Tubing double sided tape



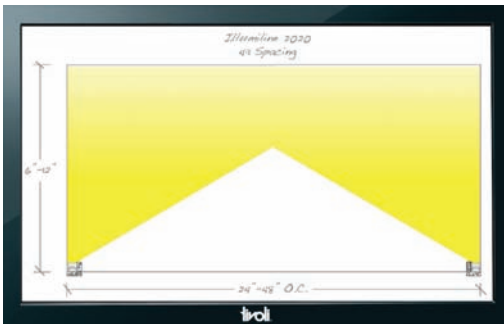
Under Cabinet / Task Lighting



Shelf Lighting



Cove Lighting



Indirect Lighting

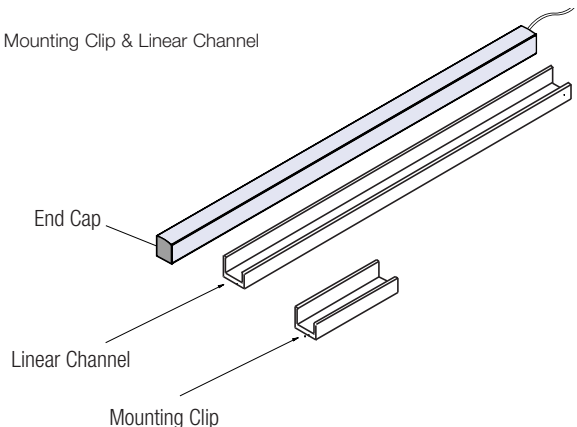
LED BINNING

LED's are made in lots and sorted into bins based on wavelength ranges that achieve colors. Tivoli uses a range of 2700°k to 2900°k for warm white, 3000°k to 3400°k for neutral white and 5200° to 5800°K for white. Individual orders are bin-sorted to within plus or minus 100°k and it is recommended to purchase 10% replacement stock within that bin lot to ensure matched color for needed replacements. White LEDs vary slightly in color temperature from bin to bin. Tivoli references each bin location number on the packing list and labels it on each LED product accordingly. During installation, it is very important that like bins are located in close proximity for color consistency. The overall color will visually appear consistent even with multiple bins located in surrounding areas. However, if different bins are located in close proximity there may be slight color variations visible.

For example:
Bin No. **WB3**
Bin No. **WD3**

B3 should be installed close to each other.
D3 should be installed close to each other
B3 and D3 should **NOT** be installed close to each other.

Mounting Clip & Linear Channel



Lighting Effects Accessories.

Mounting clips are recommended as a standard mounting accessory. This method is effective for curved or straight applications. Mounting clips should be placed every 6".

Mounting channel is recommended for uneven mounting surfaces or when applications require a cover. Clear lens covers are used to protect LED modules from the environment without diminishing light output. Frosted lens Illumiline is used to soften light for an even glow.



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RECOMMENDED POWER SUPPLIES

PART #	PRIMARY AND SECONDARY	TOTAL WATTAGE / AMPERAGE PER BREAKER	LISTING	DIMENSIONS	WEIGHT	ELECTRONIC OR AC MAGNETIC	DIMMABLE (Y OR N)
ADUL-75-1-5-12-D	85-264V AC / 12V DC	75 / 1X5A	UL/ETL	10"W X 10"L X 4"D		Electronic	Y: C & D
ADUL-200-3-5-12-D	85-264V AC / 12V DC	200 / 3X5A	UL/ETL	10"W X 10"L X 4"D		Electronic	Y: C & D
ADUL-300-5-5-12-D	85-264V AC / 12V DC	300 / 5X5A	UL/ETL	10"W X 10"L X 4"D		Electronic	Y: C & D
ADNM-75-1-5-12-D	85-264V AC / 12V DC	75 / 1X5A	UL/ETL	12"W X 12"L X 4.25"D		Electronic	Y: C & D
ADNM-200-3-5-12-D	85-264V AC / 12V DC	200 / 3X5A	UL/ETL	12"W X 12"L X 4.25"D		Electronic	Y: C & D
ADNM-300-5-5-12-D	85-264V AC / 12V DC	300 / 5X5A	UL/ETL	12"W X 12"L X 4.25"D		Electronic	Y: C & D
JT-60-1-5-12-D	120V AC / 12V DC	60 / 1X5A	ETL	4.25"W X 8.50"L X 3.25"D		Magnetic	Y: A, B, C & D
JTH-60-1-5-12-D	277V AC / 12V DC	60 / 1X5A	ETL	4.25"W X 8.50"L X 3.25"D		Magnetic	Y: C, D, E & F
JT-240-4-5-12-D	120V AC / 12V DC	240 / 4X5A	ETL	8.50"W X 16.00"L X 4.50"D		Magnetic	Y: A, B, C & D
JTH-240-4-5-12-D	277V AC / 12V DC	240 / 4X5A	ETL	8.50"W X 16.00"L X 4.50"D		Magnetic	Y: C, D, E & F
MT-60-1-5-12-D	100-240V AC / 12V DC	60 / 1X5A	UL	4.25"W X 12.32"L X 4.00"D		Electronic	N

DIMMERS

SELECTOR	DIMMER	TYPE	CONTROL SIGNAL	INPUT VOLTAGE	OUTPUT VOLTAGE	MAX LOAD	BREAKER RATING	DIMENSIONS
A	N-600	AC Magnetic	N/A	120V AC	120V AC	450W Max.	N/A	Recessed Single gang box
B	N-1000	AC Magnetic	N/A	120V AC	120V AC	800W Max.	N/A	Recessed Dual gang box
C	DIM-12V-8A	DC Digital	N/A	12V DC	12V DC	96W	8A*	Single gang box
D	DIM-OT-1-5-D	Control Interface	1-10VDC	12V DC	12/24V DC	60W	5A**	7"L X 1½"W X ¾"H
E	NH-600	AC Magnetic	N/A	277V AC	277V AC	450W	N/A	Recessed Single gang box
F	NH-1000	AC Magnetic	N/A	277V AC	277V AC	800W	N/A	Recessed Dual gang box

**OTDIM applications require 1 each OTDIM per 5 amp circuit

PRODUCT SPECIFICATION GUIDE

LED TYPE	VOLTAGE	MAX. LED PER 5A CIRCUIT
Cree XP-E LED	12V	52

