

Underscore InOut is a flexible continuous linear system for exterior applications, engineered for extreme conditions. This flexible system allows freedom of design on surface of any shape and size. Underscore InOut is the right solution where direct diffuse distribution is desired.

Luminaire characteristics:

Power input system: 1.5W/ft to 3.3W/ft
Lumens system for 2800K 80CRI: 109 to 205lm/ft
Luminaire efficacy for 2800K, 80CRI: Up to 72lm/W

Source: White LED (LM-80 tested)
 2500K / 2600K: 80CRI
 2800K / 2900K: 80CRI
 3700K: 80CRI

Lumen maintenance: See page 9 for details.

Optics: Underscore InOut can be used to create straight or curved lines on flat surfaces. Darkspot free lighting is guaranteed along the entire strip profile up to the end parts.

Material: Coextruded high performance polymer extrusion IP68 factory sealed assembly. Designed for extreme temperatures: -22°F to +113°F (-30°C to +45°C). The high performance polymer has been tested at 1760°F (960°C) with glow wire without igniting of smoke. Integral stainless steel splint system reducing mechanical stress and increase reliability.

Mounting: Universal surface mounted, using mounting accessories (included). Supplied with 3" (80mm) long cable with patented IP68 connection system. (page 5-6).

Electrical: 24V remote LED driver to be ordered separately (page 3). Control PWM.

Dimming: See dimming options on page 3.

Finish: White polymer extrusion with milky finish. Extruded anodized aluminum or stainless steel mounting clips.

Weight: 0.2lb/ft (0.1kg/ft)

Warranty: 5 year limited warranty.

Ratings: IP68, IK10

Certification:  cULus listed for wet location

ORDERING INFO

- - - - **01**
FIXTURE

MODEL	IU10 - 10mm		IU16 - 16mm	
SIDE BEND (2W/ft)	<input type="checkbox"/> 825 - 2600K	<input type="checkbox"/> 829 - 2900K	<input type="checkbox"/> 825 - 2600K	<input type="checkbox"/> 829 - 2900K
	<input type="checkbox"/> 838 - 3700K	<input type="checkbox"/> 846 - 4600K	<input type="checkbox"/> 838 - 3700K	<input type="checkbox"/> 846 - 4600K
TOP BEND (1.5W/ft)			<input type="checkbox"/> 825 - 2500K	<input type="checkbox"/> 828 - 2800K
			<input type="checkbox"/> 838 - 3700K	<input type="checkbox"/> 845 - 4600K
TOP BEND HO (3.3W/ft)			<input type="checkbox"/> 825 - 2500K	<input type="checkbox"/> 828 - 2800K
			<input type="checkbox"/> 836 - 3700K	<input type="checkbox"/> 844 - 4600K

LENGTH

Refer to configurations table on page 7. Select matching length from the dropdown menu (use scroll bar for more options)

MOUNTING

- AL** - Aluminum low support clips
- CL** - Stainless steel low support clips
- LP** - Aluminum low profile
- AH*** - Aluminum high support clips
- CH*** - Stainless steel high support clips
- HP*** - Aluminum high profile

FEED

- A** - Left feed (115mm)
- B** - Left feed (1500mm)
- C** - Left feed (3000mm)
- F** - Left feed (5000mm)
- D** - Right feed (115mm)
- E** - Right feed (1500mm)
- N** - No feed (for in-line modules)

FINISH

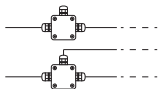
- 01** - White

* Only available for IU16 model.

ACCESSORY

(TO BE ORDERED SEPARATELY)

- 4543** - Wet location connection box
For cable Ø 3/16" to 7/16" (4mm to 11mm)



REMOTE LED DRIVER OPTIONS (TO BE ORDERED SEPARATELY)
Wattage requirement per foot: 1.5, 2 or 3.3W/ft, CV24V.

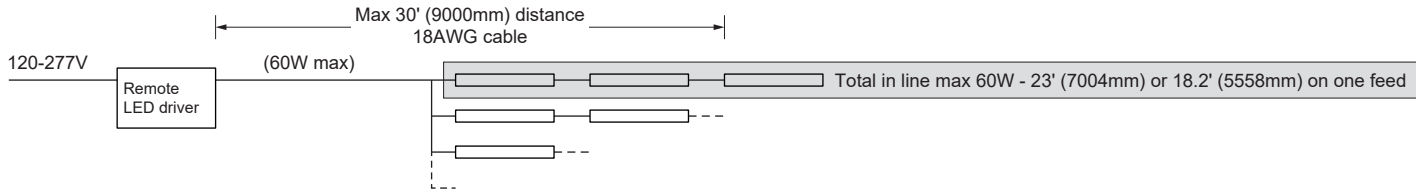
Watts	Voltage	Rated	Dimming protocol	Dimming range	Dimensions	Max distance 18AWG
<input type="checkbox"/> 4449-0024-060-UNV-D10						
60	120-277V	Indoor	0-10V	Down to ±10%	12" x 8" x 4" (305 x 203 x 102mm)	30ft(9m)
<input type="checkbox"/> 4449-0024-075-UNV-D10						
75	120-277V	Indoor	0-10V	Down to ±10%	12" x 8" x 4" (305 x 203 x 102mm)	30ft(9m)
<input type="checkbox"/> 4549-0024-075-UNV-D10						
75	120-277V	Outdoor	0-10V	Down to ±10%	14" x 5" x 3" (356 x 127 x 76mm)	30ft(9m)
<input type="checkbox"/> 4447-0024-096-UNV-D2						
96	120-277V	Indoor	Lutron Hi Lume® 0.1% EcoSystem™ (Soft-on, Fade to Black)	Down to ±0.1%	10 1/2" x 5 1/2" x 2" (266 x 139 x 50mm)	28ft (8.5m)
<input type="checkbox"/> 4546-0024-200-2C-UNV-ND						
200	120-277V	Outdoor	None	None	12 1/4" x 4 1/2" x 2 3/8" (312 x 113.5 x 60.5mm)	28ft (8.5m)

See page 4 for suggested wiring diagram. For longer remote distance, contact customer service.

SUGGESTED WIRING DIAGRAM

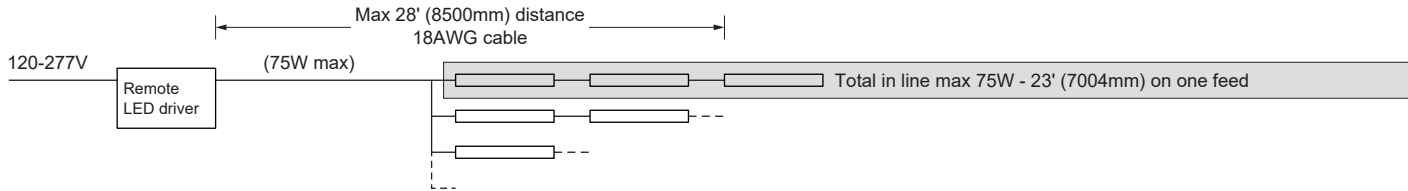
LED DRIVER CODE : 4449-0024-060-UNV-D10

Wmax for in line with 1.5W/ft model: 35W - 23' (7004mm)
 Wmax for in line with 2W/ft model: 46W - 23' (7004mm)
 Wmax for in line with 3.3W/ft model: 60W - 18.2' (5216mm)
 Wmax for driver box: 60W



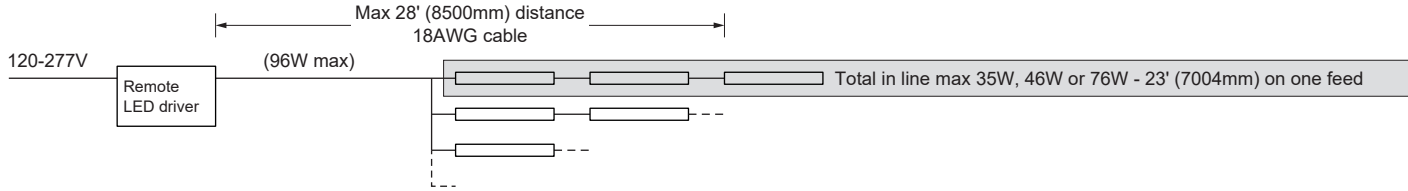
LED DRIVER CODE : 4449-0024-075-UNV-D10

Wmax for in line with 1.5W/ft model: 35W - 23' (7004mm)
 Wmax for in line with 2W/ft model: 46W - 23' (7004mm)
 Wmax for in line with 3.3W/ft model: 75W - 23' (7004mm)
 Wmax for driver box: 75W



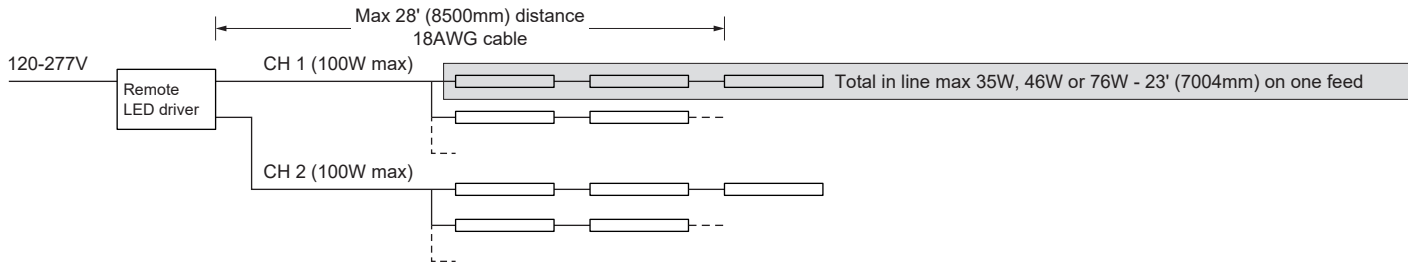
LED DRIVER CODE : 4447-0024-096-UNV-D2

Wmax for in line with 1.5W/ft model: 35W - 23' (7004mm)
 Wmax for in line with 2W/ft model: 46W - 23' (7004mm)
 Wmax for in line with 3.3W/ft model: 76W - 23' (7004mm)
 Wmax for driver box: 96W

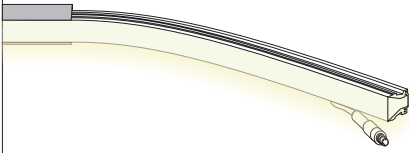

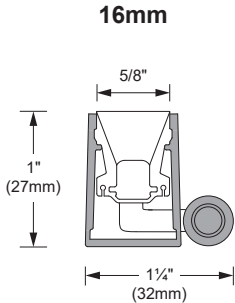
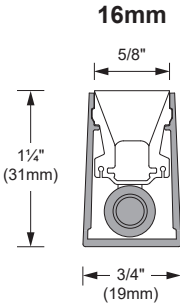
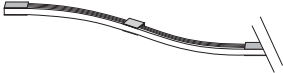
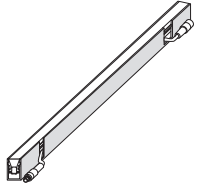
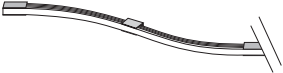
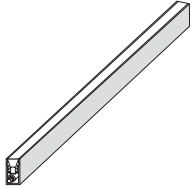
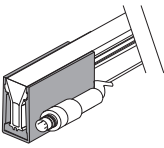
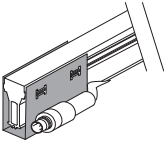
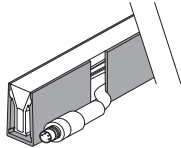
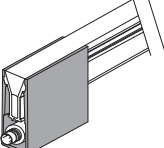
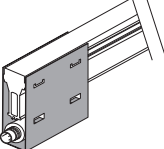
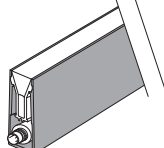


LED DRIVER CODE : 4546-0024-200-2C-UNV-ND

Wmax for in line with 1.5W/ft model: 35W - 23' (7004mm)
 Wmax for in line with 2W/ft model: 46W - 23' (7004mm)
 Wmax for in line with 3.3W/ft model: 76W - 23' (7004mm)
 Wmax for driver box: 200W



MODEL AND MOUNTINGS

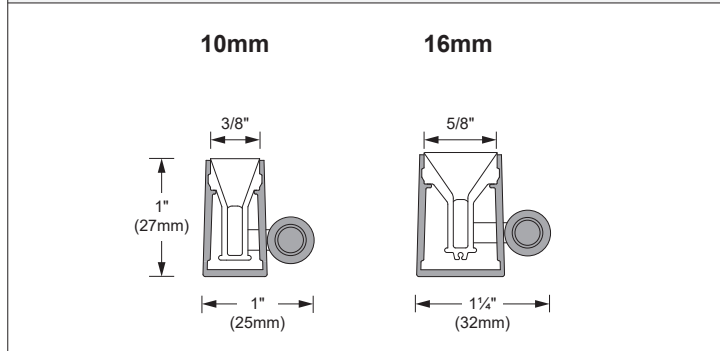
TOP BEND			
			
LOW CLEARANCE MOUNTING - 1" HEIGHT WITH EXPOSED CONNECTORS		HIGH PROFILE MOUNTING - 1 1/4" HEIGHT WITH HIDDEN CONNECTORS	
			
CURVED INSTALLATION	STRAIGHT INSTALLATION	CURVED INSTALLATION	STRAIGHT INSTALLATION
 <p>Minimum curvature radius: 10" (250mm)</p>		 <p>Minimum curvature radius: 10" (250mm)</p>	
CLIP OPTIONS	PROFILE OPTION	CLIP OPTIONS	PROFILE OPTION
<p>AL - Anodized Aluminum clips</p>  <p>CL - Stainless steel clips</p> 	<p>LP - Anodized Aluminum profile</p> 	<p>AH - Anodized Aluminum clips</p>  <p>CH - Stainless steel clips</p> 	<p>HP - Anodized Aluminum profile</p> 

All mounting clips length: 1 1/2" (40mm)
All profile length follows model length. See page 7 for all available lengths.

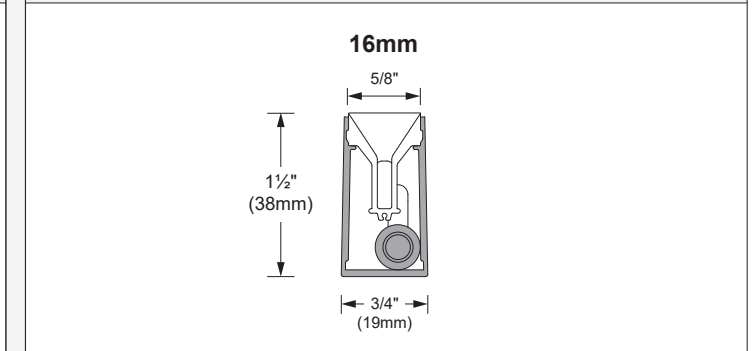
MODEL AND MOUNTINGS



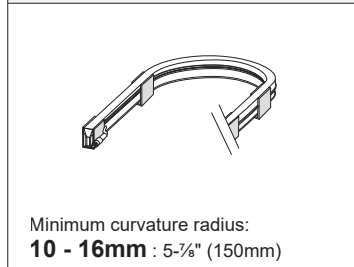
LOW CLEARANCE MOUNTING - 1" HEIGHT WITH EXPOSED CONNECTORS



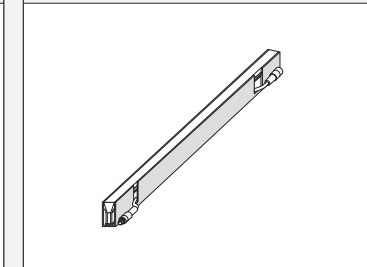
HIGH PROFILE MOUNTING - 1 1/2" HEIGHT WITH HIDDEN CONNECTORS



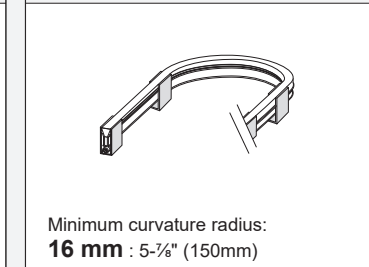
CURVED INSTALLATION



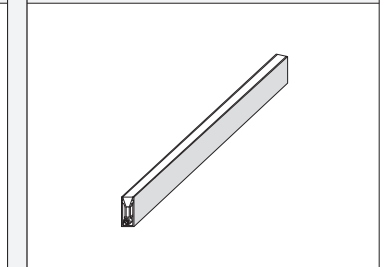
STRAIGHT INSTALLATION



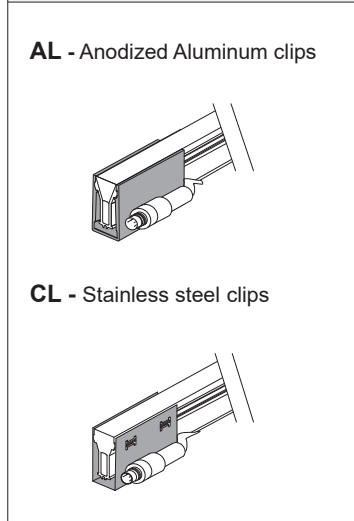
CURVED INSTALLATION



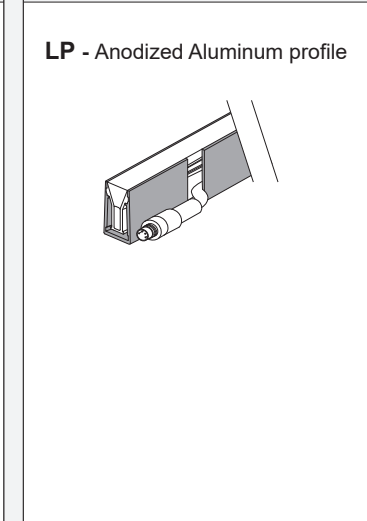
STRAIGHT INSTALLATION



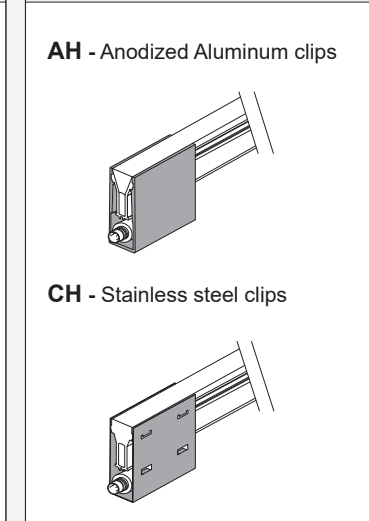
CLIP OPTIONS



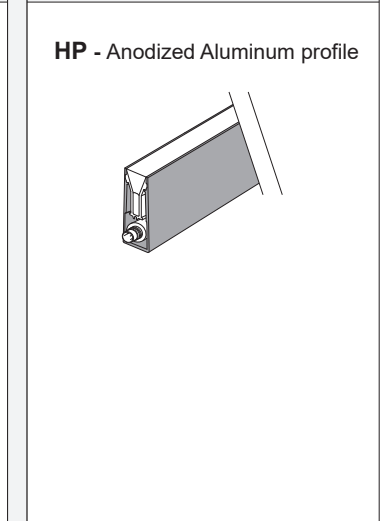
PROFILE OPTION



CLIP OPTIONS



PROFILE OPTION



All mounting clips length: 1 3/8" (40mm)
All profile length follows model length. See page 7 for all available lengths.

LENGTHS

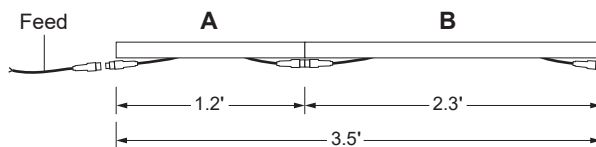
0.8'	L: 10" (254mm)
1.0'	L: 1' (304mm)
1.2'	L: 1'-1 1/8" (354mm)
1.3'	L: 1'-3 3/8" (404mm)
1.5'	L: 1'-5 3/8" (454mm)
1.7'	L: 1'-7 3/8" (504mm)
1.8'	L: 1'-9 3/4" (554mm)
2.0'	L: 1'-11 3/4" (604mm)
2.1'	L: 2'-1 3/4" (654mm)
2.3'	L: 2'-3 3/4" (704mm)
2.5'	L: 2'-5 5/8" (754mm)
2.6'	L: 2'-7 5/8" (804mm)
2.8'	L: 2'-9 5/8" (854mm)
3.0'	L: 2'-11 5/8" (904mm)
3.1'	L: 3'-1 1/2" (954mm)
3.3'	L: 3'-3 1/2" (1004mm)
6.6'	L: 6'-6 7/8" (2004mm)
9.9'	L: 9'-10 1/4" (3004mm)
13.1'	L: 13'-1 5/8" (4004mm)
16.4'	L: 16'-5" (5004mm)
23.0'	L: 22'-11 3/4" (7004mm)

COMBINED MODULES

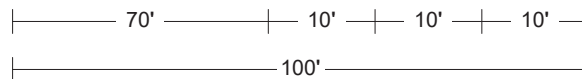
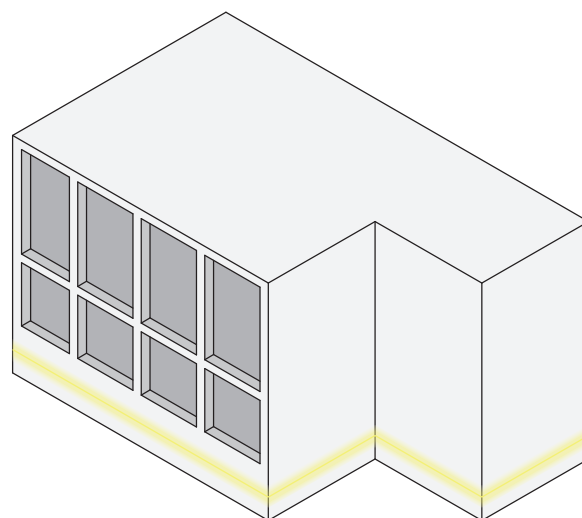
Standard modules can be combined in continuous rows, to create other length options. Thanks to the side positioning of the connectors, it avoids dark areas.

To get the desired length, simply choose standard modules to combine (example : **A+B**). For in-line modules (**B**), no feed is required.

Each module is supplied with 3" (80mm) long cable with connector, to interconnect the modules, up to 23' (7004mm) long.



TOP VIEW



ATTENTION: When ordering, each part of the design must be calculated separately.

- 70' + 3 x 10'
- 1 x 100'

FEED OPTIONS (INCLUDED)

LEFT FEED

*STANDARD

⁽¹⁾Low profile side bend is only available in 115mm or 1500mm
Please refer to instruction sheet for more options.

A - Cable with female connector
Length = 4½" (115mm)



B - Cable with female connector
Length = 59" (1500mm)



C⁽¹⁾ - Cable with female connector
Length = 118" (3000mm)



F⁽¹⁾ - Cable with female connector
Length = 193 ¾" (5000mm)



RIGHT FEED

* AS REQUIRED DEPENDING ON THE INSTALLATION, SEE IMAGE BELOW

D - Cable with male connector
Length = 4½" (115mm)

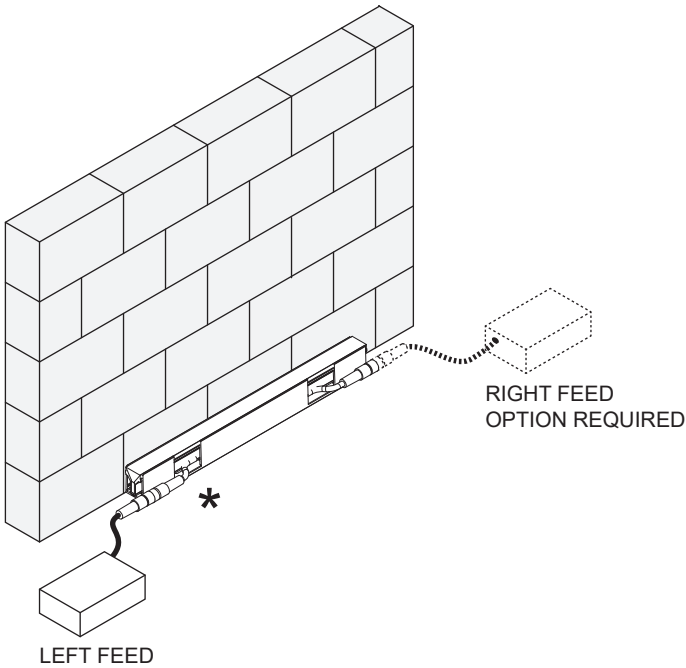


E - Cable with male connector
Length = 59" (1500mm)

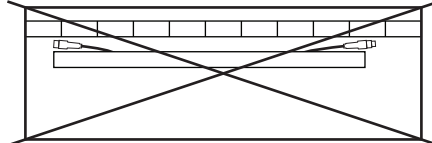
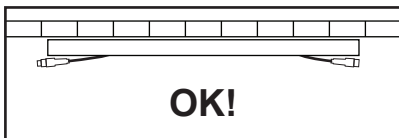


NO FEED

N - No feed (for in-line modules)

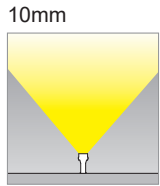


*For side bend low clearance mounting, connectors must be positioned opposite of the wall.

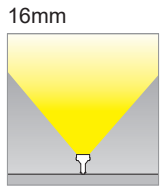


PHOTOMETRIC DATA

SIDE BEND

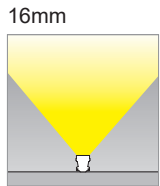


CCT (K)	CRI	LOAD (W/ft)	LUMENS (lm/ft)	EFFICACY (lm/W)	MAX CANDELA (cd/ft)	MODELS
2600K	80	2	135	67	32	IU10-S-825
2900K			131	65	31	IU10-S-829
3700K			148	74	35	IU10-S-838
4600K			141	70	33	IU10-S-846



CCT (K)	CRI	LOAD (W/ft)	LUMENS (lm/ft)	EFFICACY (lm/W)	MAX CANDELA (cd/ft)	MODELS
2600K	80	2	143	71	37	IU16-S-825
2900K			138	69	35	IU16-S-829
3700K			158	79	40	IU16-S-838
4600K			152	76	39	IU16-S-846

TOP BEND



CCT (K)	CRI	LOAD (W/ft)	LUMENS (lm/ft)	EFFICACY (lm/W)	MAX CANDELA (cd/ft)	MODELS
2500K	80	1.5	105	70	28	IU16-T-825
2800K			109	72	29	IU16-T-828
3700K			122	81	33	IU16-T-838
4600K			137	91	37	IU16-T-845
2500K	80	3.3	196	59	57	IU16-T-HO-825
2800K			205	62	59	IU16-T-HO-828
3700K			227	68	66	IU16-T-HO-836
4600K			255	77	74	IU16-T-HO-844

*For products that use a remote LED driver, total system wattage will vary according to the efficacy of the remote LED driver selected.

LUMEN MAINTENANCE

Version	L70 B10 77°F (25°)	L70 B10 104°F (40°)	L80 B10 77°F (25°)	L80 B10 104°F (40°)
TOP BEND	-	-	84 000h	84 000h
TOP BEND - HO	-	-	80 000h	72 000h
SIDE BEND	69 000h	69 000h	-	-