

# LIRA LIGHT COLUMN

## LIGHT COLUMN

The Lira Light Column RGBW LED color changing column luminaire blends beauty, design, color and expression into a single powerful luminaire or color rotations are Red, Green, Blue and White. Color temperatures for pure White are now available in Warm (3000K), Neutral (4000K) and Cool (5000K) lumens. All selections can have duration of time set for each color to achieve exciting transitions - each color beautifully blending into the next programmed color (DMX Controller required for RGB).

Enjoy creating various lighting effects for all different applications or can be continuous warm, neutral, or cool white for an even glow. These columns can be conveniently programmed with other facade or fountain fixtures. This color-changing across all fixtures effect can be identically coordinated and timed, creating a multi-level fusion of light that will enhance any project design.

The standard heights of the Lira Light Column can range from 3 to 17 feet. Its column uses an acrylic lens, which is reinforced by integral tubing that creates a wireway for connection of top side and bottom side LEDs. Optional shields for lenses are available.



### STAR POWER™ OPTICAL SYSTEM

The Star Power™ reflector is an excellent system which provides great value and performance.

Project Name:

Type:

Cat #	Light Dist.	Wattage / Lens Ht.	Kelvin	Volts	Base Height	Mounting	Color	Options
Lira Light Column 6" OD <b>(LIR-6)</b>	Symmetric <b>(SYM)</b>	22W / 1' Lens <b>(22)</b>	3000K <b>(30K)</b> <i>Warm</i>	120-277 <b>(UNV)</b>	2' <b>(2)</b>	Anchor Base <b>(AB)</b>	Bronze <b>(BRZ)</b>	GFI Kit <b>(GFI)</b>
Lira Light Column 8" OD <b>(LIR-8)</b>		44W / 2' Lens <b>(44)</b>	4000K <b>(40K)</b> <i>Neutral</i>		4' <b>(4)</b>		White <b>(WHT)</b>	Banner Arms <b>(BA)</b>
		66W / 3' Lens <b>(66)</b>	5000K <b>(50K)</b> <i>Cool</i>		6' <b>(6)</b>		Silver <b>(SVR)</b>	
		88W / 4' Lens <b>(88)</b>	RGBW <b>(RGB)</b>		7' <b>(7)</b>		Hunter Green <b>(HGN)</b>	
		*LIR-6 max len ht. 110W / 5' Lens <b>(110)</b>			8' <b>(8)</b>		Black <b>(BLK)</b>	
					10' <b>(10)</b> <i>*LIR-6 max base ht.</i>		Graphite <b>(GPH)</b>	
					12' <b>(12)</b>		Grey <b>(GRY)</b>	
							Custom <b>(CS)</b>	

# PRODUCT SPECIFICATIONS

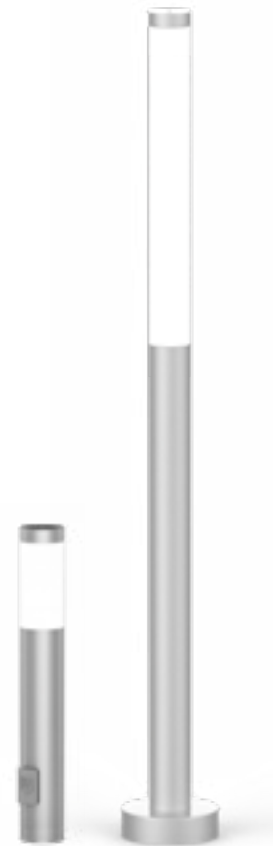
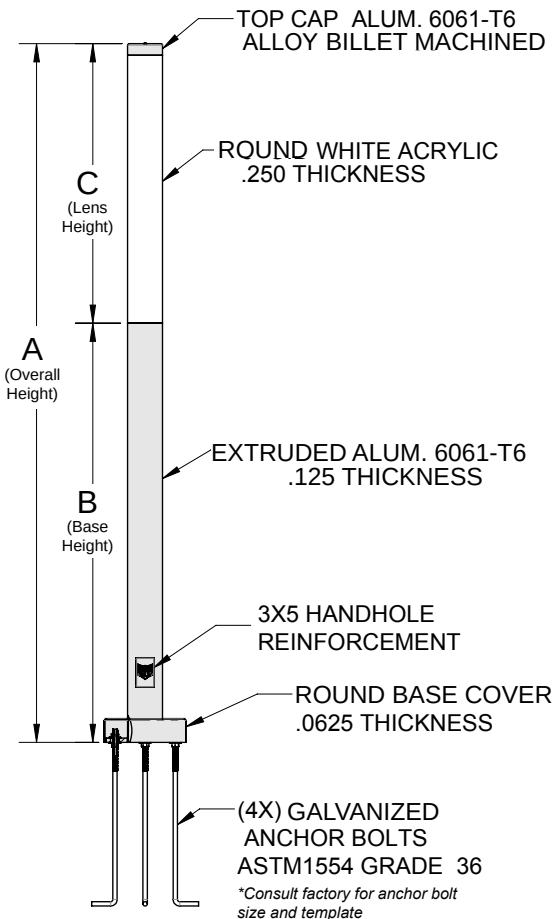
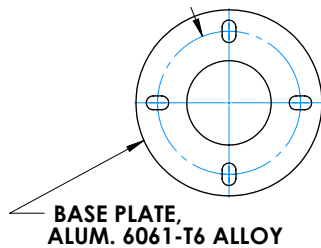
**Housing:** Aluminum Housing 600 Series  
**LED:** Lumileds Fortimo®. CRI 70  
**Optics:** Symmetrical  
**Watts:** 22-110

**Driver:** 0-10V Dimming driver as standard by Philips Advance  
 THD @ Max Load < 15%  
 Power Factor @ Max Load < 0.95  
**Kelvin:** 3000, 4000, 5000, or RGBW  
**Finish:** 5 mils Powder Coat  
**Warranty:** Standard Warranty is 5 years for Driver and LEDs

# PRODUCT DIMENSIONS

LIRA LIGHT COLUMN - LUMEN DATA CHART			
PART NUMBER	LUMENS	Lm/W	WATTS
LIR-X-SYM-22-30K	2860	130	22
LIR-X-SYM-22-40K	2948	134	22
LIR-X-SYM-22-50K	3036	138	22
LIR-X-SYM-22-RGB	2024	92	22
LIR-X-SYM-44-30K	5720	130	44
LIR-X-SYM-44-40K	5896	134	44
LIR-X-SYM-44-50K	6072	138	44
LIR-X-SYM-44-RGB	4048	92	44
LIR-X-SYM-66-30K	8580	130	66
LIR-X-SYM-66-40K	8844	134	66
LIR-X-SYM-66-50K	9108	138	66
LIR-X-SYM-66-RGB	6072	92	66
LIR-X-SYM-88-30K	11568	130	88
LIR-X-SYM-88-40K	11792	134	88
LIR-X-SYM-88-50K	12144	138	88
LIR-X-SYM-88-RGB	8096	92	88
LIR-X-SYM-110-30K	14300	130	110
LIR-X-SYM-110-40K	14740	134	110
LIR-X-SYM-110-50K	15180	138	110
LIR-X-SYM-110-RGB	10120	92	110

DIMENSION	LIR-6	LIR-8
<b>A</b>	3-14 FT	3-17 FT
<b>B</b>	2-10 FT	2-12 FT
<b>C</b>	1-4 FT	1-5 FT



Lira is available as short as 3 feet and up to 17 feet tall

**Note:** Lira Light Columns with a base 3' and under will come with an internal base plate which will be secured with set screws. Bases 4' and up will come with an attached external base plate and Round Base Cover

**Application**

As an individual luminaire with low mounting heights, it can be used for marking danger areas or in rows for illuminating corridors and passageways. With high mounting heights it can be used as a wall luminaire next to doors or for lighting small wall areas.

**Materials**

Luminaire housing constructed of die-cast marine grade, copper free ( $\leq 0.3\%$  copper content) A360.0 aluminum alloy  
Matte safety glass  
High temperature silicone gasket  
Mechanically captive stainless steel fasteners

**NRTL** listed to North American Standards, suitable for wet locations  
Protection class IP64  
Weight: 1.5lbs

**Electrical**

Operating voltage	120-277VAC
Minimum start temperature	-30° C
LED module wattage	4.2W
System wattage	5.8W
Controllability	0-10V dimmable
Color rendering index	Ra > 90
Luminaire lumens	362 lumens (3000K)
Lifetime at Ta = 15° C	>500,000 h (L70)
Lifetime at Ta = 35° C	434,000 h (L70)

**LED color temperature**

- 4000K - Product number + **K4**
- 3500K - Product number + **K35**
- 3000K - Product number + **K3 (EXPRESS)**
- 2700K - Product number + **K27**

**BEGA** can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

**Finish**

All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.

Available colors	Black (BLK)	White (WHT)	RAL:
	Bronze (BRZ)	Silver (SLV)	CUS:



**LED wall luminaire · directed light**

	LED	A	B	C
<b>22261</b>	<b>ADA</b> 4.2W	6 <sup>7</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>	2 <sup>5</sup> / <sub>8</sub>



LED linear ceiling and wall luminaires - unshielded

D - Vertical Wall  
Sconce on west  
side of building

**BEGA**

**Application**

LED linear ceiling and wall luminaire with unshielded light distribution. Arranged individually, in continuous bands of light or grouped together, these luminaires can accentuate building architecture while providing glare free illumination.

**Materials**

Luminaire housing and faceplate constructed of die-cast marine grade, copper free (≤0.3% copper content) A360.0 aluminum alloy  
White safety glass  
Silicone applied robotically to casting, plasma treated for increased adhesion  
High temperature silicone gasket  
Mechanically captive stainless steel fasteners

**NRTL** listed to North American Standards, suitable for wet locations  
Protection class IP 65  
Weight: 20.1 lbs

**Electrical**

Operating voltage	120-277V AC
Minimum start temperature	-40° C
LED module wattage	48.0 W
System wattage	55.0 W
Controllability	0-10V dimming
Color rendering index	Ra > 80
Luminaire lumens	3,359 lumens (3000K)
LED service life (L70)	60,000 hours

**LED color temperature**

- 4000K - Product number + **K4**
- 3500K - Product number + **K35**
- 3000K - Product number + **K3**
- 2700K - Product number + **K27**

**BEGA** can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

**Finish**

All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.

Available colors	Black (BLK)	White (WHT)	RAL:
	Bronze (BRZ)	Silver (SLV)	CUS:



**LED linear ceiling and wall luminaire · unshielded**

	LED	A	B	C
<b>24 320</b>	ADA 48.0W	59 ¼"	2 ¾"	3 ¾"



**BEGA** 1000 BEGA Way, Carpinteria, CA 93013 (805) 684-0533 info@bega-us.com

Due to the dynamic nature of lighting products and the associated technologies, luminaire data on this sheet is subject to change at the discretion of BEGA North America. For the most current technical data, please refer to bega-us.com  
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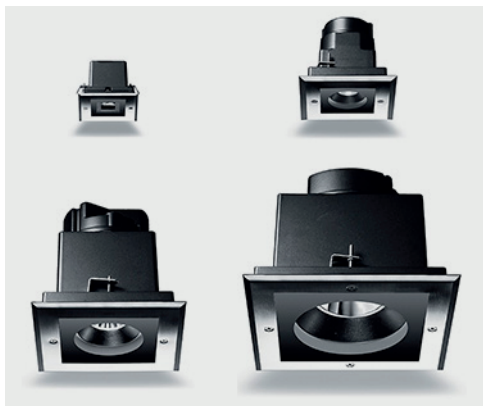


Collection of ceiling recessed luminaires for exterior applications. Available in 4 sizes with round or square design. Exceptional European build quality with high corrosion resistant finish. Robust marine grade die-cast aluminum construction, stainless steel fasteners and glass diffuser. Stainless steel 316L face plate with beveled edges.

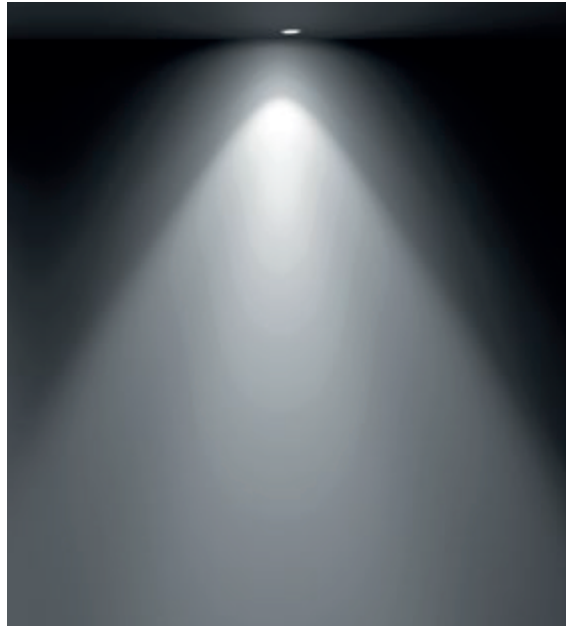
**Luminaire characteristics:**

**Power input:** 4W to 33.5W  
**Lumens:** 170lm to 2600lm (for 3000K, 90CRI)  
**Luminaire efficacy:** Up to 84 lm/W

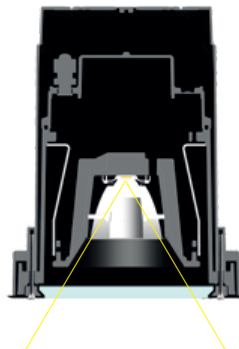
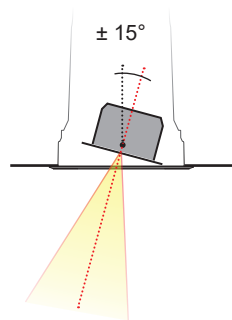
<b>Source:</b>	White LED module (LM-80) 2700K: 90CRI, 3000K: 90CRI, 4000K: 90CRI.
<b>Lumen maintenance:</b>	70% of initial lumens at 50 000 hours (L70), (LM79).
<b>Optics:</b>	Narrow flood and flood adjustable $\pm 15^\circ$ .
<b>Material:</b>	Body: Die-cast aluminum with stainless steel front trim. Diffuser: 10mm thick tempered semiacid-etched glass Hardware: Stainless steel screws and silicone gaskets Back box: Polypropylene
<b>Mounting:</b>	Recessed installation in false ceiling.
<b>Electrical:</b>	Microzip: Remote LED driver options on page 10. Minizip, zip and megazip: Integral high efficiency LED driver, rated at 50 000 hours, 120-277V.
<b>Dimming:</b>	0-10V dimming (120-277V), down to 15%.
<b>Finish:</b>	Stainless steel finish. Painted finish follows a double powder paint in 3 step process: surface treatment containing ceramic nano particles (Bonderite). Epoxy primer paint. Polyester powder paint with high resistance against UV rays and harsh weather conditions.
<b>Weight:</b>	Microzip comfort: 1.3lbs (0.6kg). Minizip comfort: 2.4lbs (1.1kg). Zip comfort: 7.5lbs (3.4kg). Megazip comfort: 13lbs (6kg).
<b>Glass surface temperature:</b>	Less than 37°C (99°F)
<b>Warranty:</b>	5 year limited warranty.
<b>Ratings:</b>	IP67, IK09
<b>Certification:</b>	cULus listed for wet location.



**OVERVIEW**

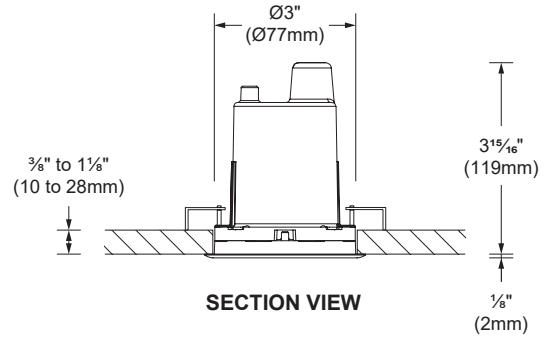
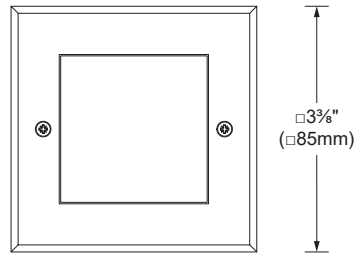
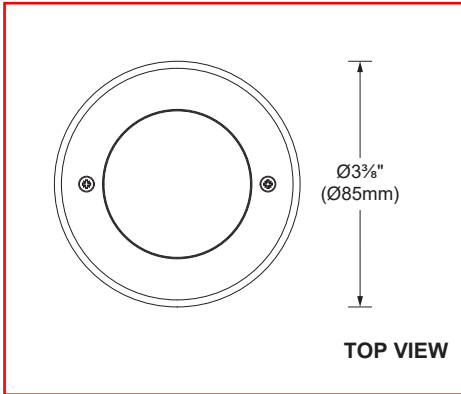


Narrow flood / flood optic



**DIMENSIONS**

**MICROZIP COMFORT**  
Remote driver

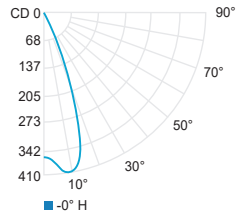


**PHOTOMETRIC DATA**

CCT (K)	CRI	LOAD (W)	OPTIC	LUMENS (lm)	EFFICACY (lm / W)	MAX CANDELA (cd)	MODELS (round / square)
2700K	90	4W	Flood 36°	160	45	380	S5515H / S5525H
3000K				170	47	405	S5515W / S5525W
4000K				175	48	415	S5515N / S5525N

Efficacy based on IESNA LM-79 test reports. Visit [sistimalux.com](http://sistimalux.com) for complete photometric data.

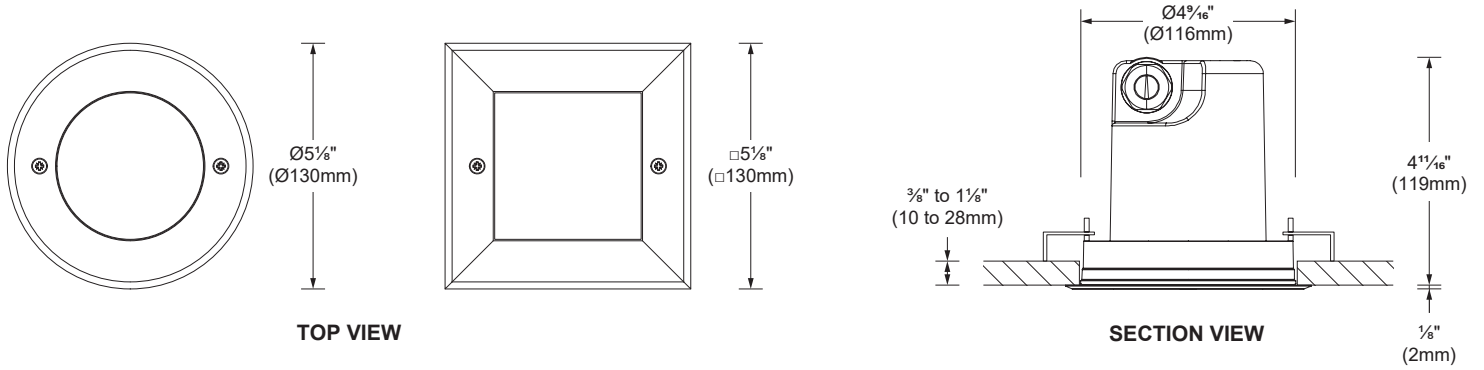
**Flood 36° (3000K, 90 CRI)**



Center beam fc	Beam width ft
90.4	1.3
22.6	2.6
10.0	3.8
5.65	5.1
3.62	6.4
2.51	7.7

**DIMENSIONS**

**MINIZIP COMFORT**  
Integral driver

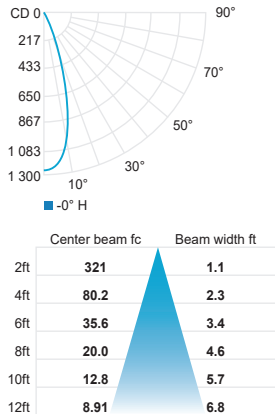


**PHOTOMETRIC DATA**

CCT (K)	CRI	LOAD (W)	OPTIC	LUMENS (lm)	EFFICACY (lm / W)	MAX CANDELA (cd)	MODELS (round / square)
2700K	90	9W	Flood 32°	405	47	1 210	S5545H / S5555H
3000K				430	49	1 280	S5545W / S5555W
4000K				455	52	1 345	S5545N / S5555N

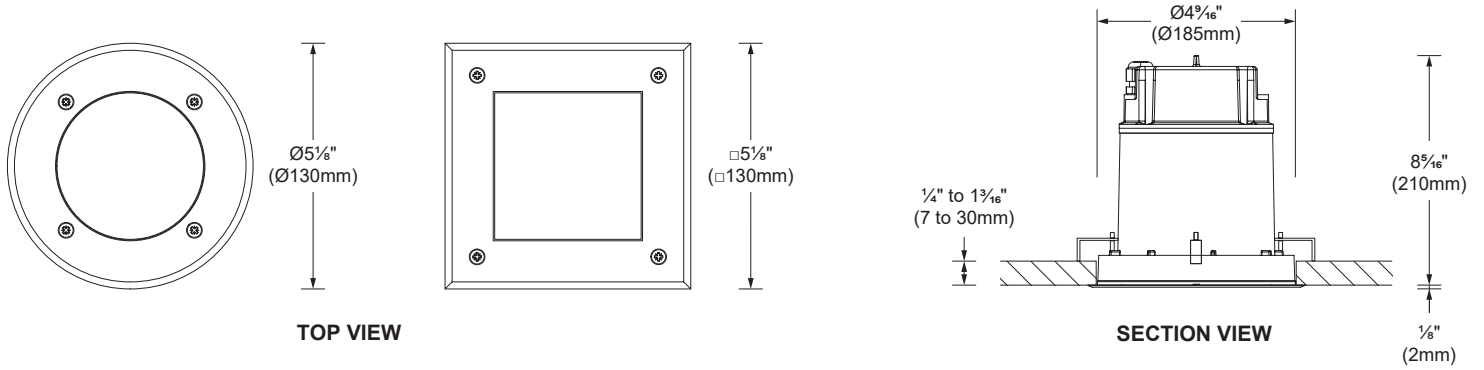
Efficacy based on IESNA LM-79 test reports. Visit [sistimalux.com](http://sistimalux.com) for complete photometric data.

**Flood 32° (3000K, 90CRI)**



**DIMENSIONS**

**ZIP COMFORT**  
Integral driver

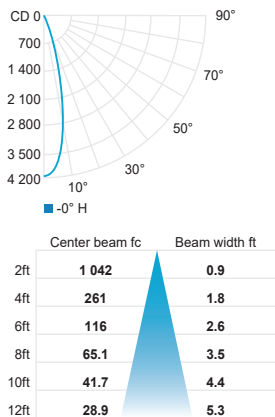


**PHOTOMETRIC DATA**

CCT (K)	CRI	LOAD (W)	OPTIC	LUMENS (lm)	EFFICACY (lm / W)	MAX CANDELA (cd)	MODELS (round / square)
2700K	90	15.5W	Narrow flood 25°	935	61	4 025	S5565H / S5575H
3000K				970	63	4 165	S5565W / S5575W
4000K				1 025	67	4 425	S5565N / S5575N

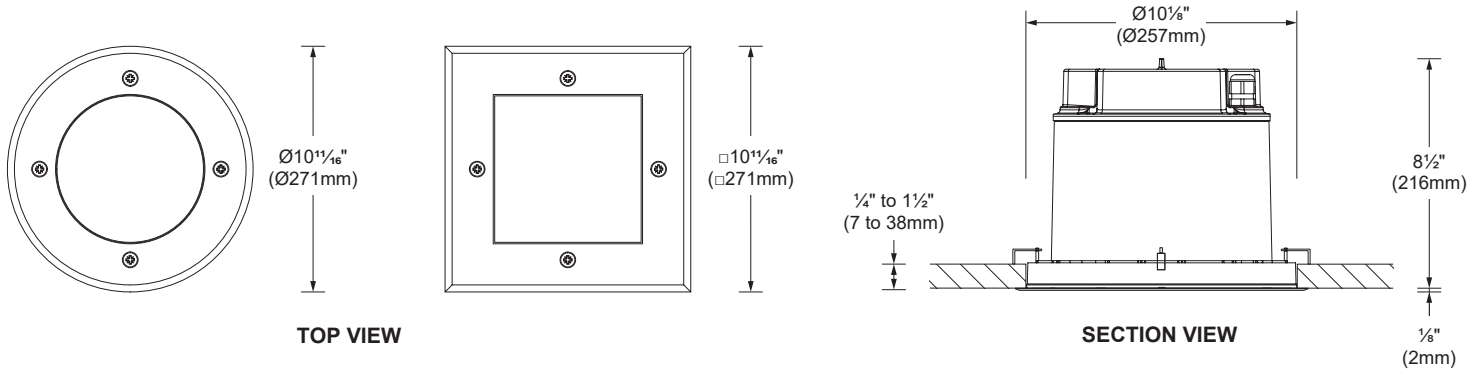
Efficacy based on IESNA LM-79 test reports. Visit [sistimalux.com](http://sistimalux.com) for complete photometric data.

**Narrow flood 25° (3000K, 90CRI)**



**DIMENSIONS**

**MEGAZIP COMFORT**  
Integral driver

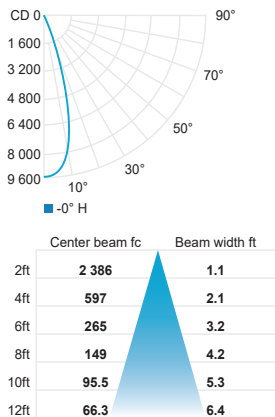


**PHOTOMETRIC DATA**

CCT (K)	CRI	LOAD (W)	OPTIC	LUMENS (lm)	EFFICACY (lm / W)	MAX CANDELA (cd)	MODELS (round / square)
2700K	90	33.5W	Flood 30°	2 515	75	9 230	S5585H / S5595H
3000K				2 600	78	9 545	S5585W / S5595W
4000K				2 800	84	10 270	S5585N / S5595N

Efficacy based on IESNA LM-79 test reports. Visit [sistimalux.com](http://sistimalux.com) for complete photometric data.

**Flood 30° (3000K, 90CRI)**



**CONNECTION ACCESSORY**

**9010** - IP68 field connector for microzip comfort.



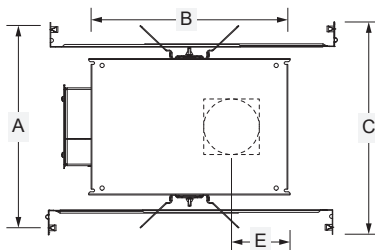
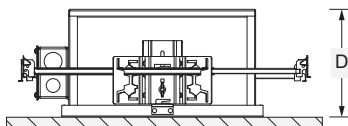
**9011** - IP68 field connector for minizip, zip and megazip comfort.



**HOUSING ACCESSORY** (minizip comfort model only)

**BI-MINIZIP-RD-IC-D10**  
Minizip comfort round insulated housing

**BI-MINIZIP-SQ-IC-D10**  
Minizip comfort square insulated housing



**Overall dimensions (AxB):** 12<sup>3</sup>/<sub>4</sub>" x 14<sup>3</sup>/<sub>8</sub>" (324 x 365mm)  
**Hanger bars (C):** 14<sup>1</sup>/<sub>4</sub>" to 26" (362 to 660mm)  
**Clearance (D):** 7<sup>1</sup>/<sub>2</sub>" (190mm)

**INSTALLATION INFORMATION**

**Ceiling thickness:** 1/8" - 1 1/8" (3mm - 29mm)  
**Cut-out round:** Ø4 1/2" (Ø115mm)  
**Cut-out square:** 4 1/2" x 4 1/2" (115 x 115mm)  
**Cut-out position (E):** 3 3/4" (95mm)

**ORDERING INFO**

- **19** -  
FIXTURE

HOUSING

**MODEL**

- Microzip comfort**     **Minizip comfort**     **Zip comfort**     **Megazip comfort**

**SHAPE**

- Round**     **Square**

**LED**

- 927** - 2700K, 90CRI     **930** - 3000K, 90CRI     **940** - 4000K, 90CRI

**OPTIC**

- Narrow flood**  
- Zip (25°)
- Flood**  
- Microzip (36°)  
- Minizip (32°)  
- Megazip (30°)

**VOLTAGE**

- UNV** - 120-277V<sup>(1)</sup>     **REM** - Remote<sup>(2)</sup>

**FINISH**

- 19** - Stainless steel

**DIMMING**

- D10** - 0-10V (down to 15%)

<sup>(1)</sup> Available for zip, minizip and megazip models.

<sup>(2)</sup> Available for microzip model.



**REMOTE LED DRIVER OPTIONS**  
(TO BE ORDERED SEPARATELY)

**Microzip comfort round and square • S5515, S5525 • 2W\* • 700mA**

**Wet location**

Min-max units	Watts	Voltage	Dimming protocol	Dimming range	Connection box dimensions	Max distance**	Connection box
1-2	04	120V	Leading and trailing edge (ELV and TRIAC)	Down to ±15%	6 x 4½" x 3" (152 x 114 x 76mm)	30ft (9m)	<b>4548-0700-004-120-LTE</b> <input type="checkbox"/>
3-6	14	120V	Lutron Hi Lume® 1% 2-wire (120V forward phase only)	Down to ±1%	6 x 4½" x 3" (152 x 114 x 76mm)	30ft (9m)	<b>4548-0700-014-120-D3</b> <input type="checkbox"/>
4-9	20	120-277V	Lutron Hi Lume® 1% EcoSystem™ (Soft-on, Fade to Black)	Down to ±1%	6 x 4½" x 3" (152 x 114 x 76mm)	30ft (9m)	<b>4548-0700-020-UNV-D2</b> <input type="checkbox"/>
1-14	30	120-277V	0-10V ELDOLED ECOdrive	Down to ±1%	14½" x 5" x 3½" (368 x 165 x 89mm)	118ft (36m)	<b>4549-0700-030-UNV-ED10</b> <input type="checkbox"/>
1-14	30	120-277V	0-10V ELDOLED SOLOdrive	Down to ±0.1%	14½" x 5" x 3½" (368 x 165 x 89mm)	118ft (36m)	<b>4549-0700-030-UNV-SD10</b> <input type="checkbox"/>

\* Wattage requirement for one (1) fixture (Remote fixture only).  
\*\* Calculated for 16AWG cable. Contact customer service for longer remote distance.

**Dry location**

Min-max units	Watts	Voltage	Dimming protocol	Dimming range	Connection box dimensions	Max distance**	Connection box
1-2	04	120V	Leading and trailing edge (ELV and TRIAC)	Down to ±15%	6 x 4½" x 3" (152 x 114 x 76mm)	30ft (9m)	<b>4444-0700-004-120-LTE</b> <input type="checkbox"/>
3-6	14	120V	Lutron Hi Lume® 1% 2-wire (120V forward phase only)	Down to ±1%	6 x 4½" x 3" (152 x 114 x 76mm)	30ft (9m)	<b>4443-0700-014-120-D3</b> <input type="checkbox"/>
4-9	20	120-277V	Lutron Hi Lume® 1% EcoSystem™ (Soft-on, Fade to Black)	Down to ±1%	6 x 4½" x 3" (152 x 114 x 76mm)	30ft (9m)	<b>4444-0700-020-UNV-D2</b> <input type="checkbox"/>
1-14	30	120-277V	0-10V ELDOLED ECOdrive	Down to ±1%	14½" x 5" x 3½" (368 x 165 x 89mm)	118ft (36m)	<b>4450-0700-030-UNV-ED10</b> <input type="checkbox"/>
1-14	30	120-277V	0-10V ELDOLED SOLOdrive	Down to ±0.1%	14½" x 5" x 3½" (368 x 165 x 89mm)	118ft (36m)	<b>4450-0700-030-UNV-SD10</b> <input type="checkbox"/>

\* Wattage requirement for one (1) fixture (Remote fixture only).  
\*\* Calculated for 16AWG cable. Contact customer service for longer remote distance.

**Application**

LED bollard with shielded 360° light distribution. This luminaire is designed to provide rotationally symmetric illumination of ground surfaces. Provided with mounting system that allows the luminaire to be adjusted independent of anchor bolt orientation.

**Materials**

Luminaire housing and base constructed of die-cast and extruded marine grade, copper free (≤0.3% copper content) A360.0 aluminum alloy  
 Borosilicate glass lens  
 Reflector made of pure anodized aluminum  
 High temperature silicone gasket  
 Mechanically captive stainless steel fastener

**NRTL** listed to North American Standards, suitable for wet locations  
 Protection class IP65  
 Weight: 19.4 lbs

**Electrical**

Operating voltage	120-277VAC
Minimum start temperature	-30° C
LED module wattage	14.4 W
System wattage	20.0 W
Controllability	0-10V, TRIAC, and ELV dimmable
Color rendering index	Ra > 80
Luminaire lumens	746 lumens (3000K)
Lifetime at Ta = 15° C	77,000 h (L70)
Lifetime at Ta = 55° C	53,000 h (L70)

**LED color temperature**

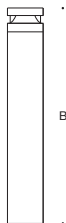
- 4000K - Product number + **K4**
- 3500K - Product number + **K35**
- 3000K - Product number + **K3**
- 2700K - Product number + **K27**

**BEGA** can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

**Finish**

All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.

Available colors	Black (BLK)	White (WHT)	RAL:
	Bronze (BRZ)	Silver (SLV)	CUS:



LED bollard · 360° distribution				
	LED	A	B	Anchorage
<b>99570</b>	14.4 W	6 1/2	39 3/8	<b>79817</b>

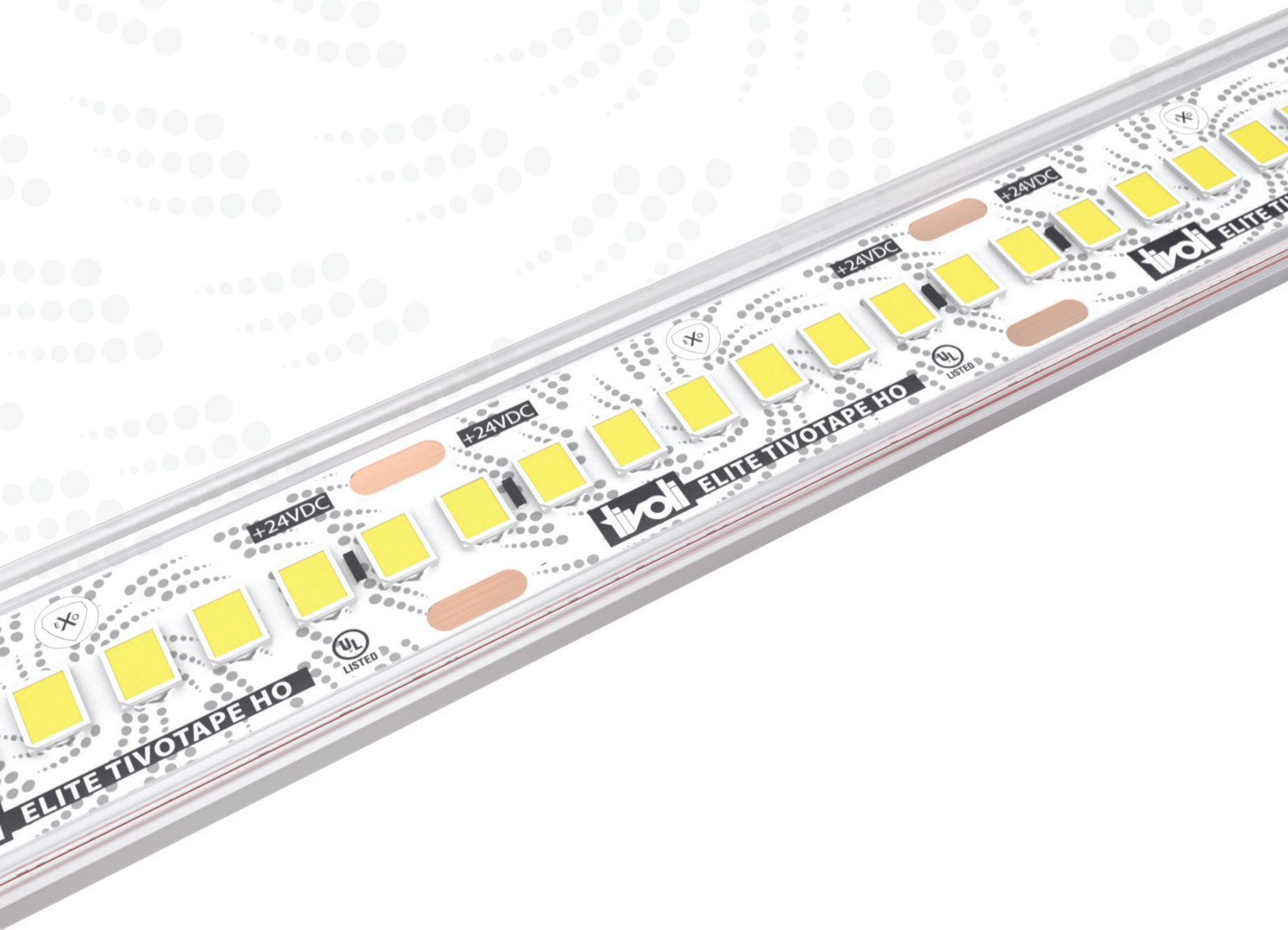




G - Wall Cap  
Landscape Lights

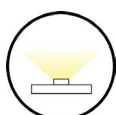
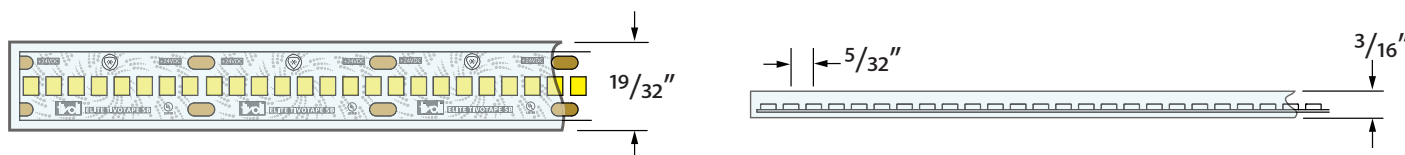
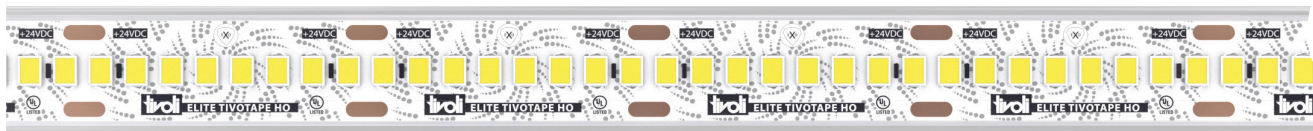
# ELITE

ZERO DROP TECHNOLOGY



HO Outdoor ELITE TivoTape™

## HIGH OUTPUT (HO)



4.5 W/ft  
478LM/ft



4oz. Trace



High Efficacy



97 CRI



Compliant



VHB Adhesive



Silicone Jacket



2200K



2400K



2700K



3000K



3500K



4000K



5000K

## Ordering Information



PRODUCT CODE	INTENSITY	INSTALL	LED COLOR	VOLTAGE
TPLE	HO	O		24

TPLE = TivoTape ELITE

HO = High Output

O = Outdoor

22 = 2200K

24 = 24V DC

24 = 2400K

27 = 2700K

30 = \*3000K

35 = 3500K

40 = 4000K

50 = 5000K



### TivoTape Run Lengths & End Preps

Please specify length of run with quantity of run(s) and end prep type at time of ordering.

Note: Only (1) end prep needed for each run (see page 19)

\*This product is in compliance with the California Energy Code Title 24 JA8-2016 in 3000K and only when incorporating a specific power supply.



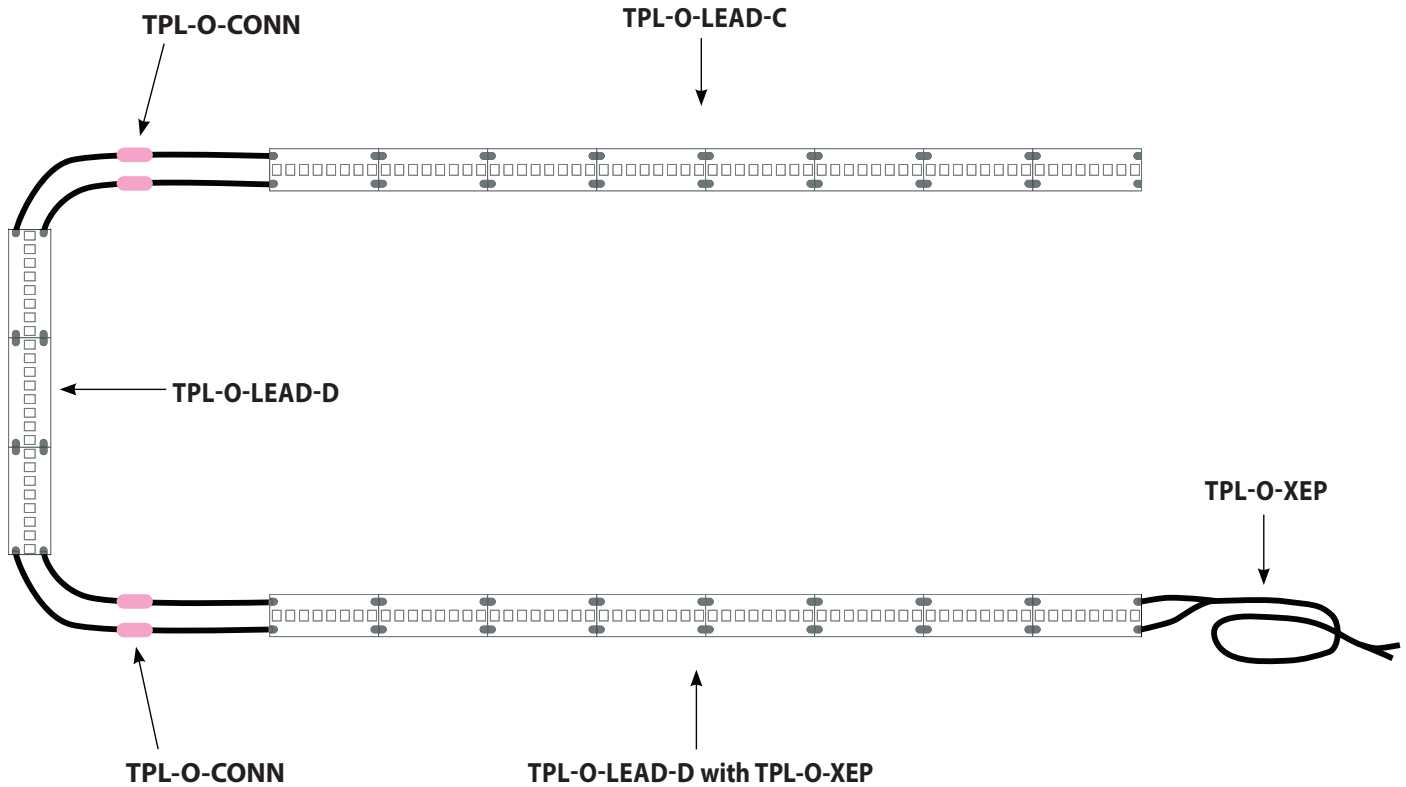
**HO Data**

Electrical & Photometric Data (Based on 3000K)							
Input Voltage	24V DC						
Dimming Option	MLV/ELV/0-10V/DMX						
Power Supply	Class 2						
Wire Size (End Prep)	18 AWG, 2 wire						
Power Consumption	4.5 W/ft.						
Color Temperature (CCT)	2200K	2400K	2700K	3000K	3500K	4000K	5000K
Lumen Output	423	447	470	478	484	504	511
Efficacy	94	99	105	106	107	112	113
Color Rendering Index (CRI)	99	97	97	97	94	93	90
R9	92						
TM-30-15 Fidelity Index ( $R_f$ )	93						
TM-30-15 Gamut Index ( $R_g$ )	103						

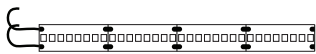
Physical	
LED Package	2835
LEDs/ft	73
Operating Temperature	-40°F (-40°C) ~ +140°F (+60°C)
Environment	IP67 Wet Location
Maximum Run Length	20'
Maximum Run Length w/ JA8 Compliant Power Supply	17'
Copper Trace	4 Ounce
Adhesive	3M VHB Tape
Dimension	19/32" (15mm)

Performance	
Certification	UL Listed
Lumen Maintenance (L70) Hours	60,000
Binning Tolerance	1.5 Step MacAdam Elipse
Warranty	3 Years

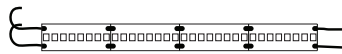
Power Leads and Jumpers (Installed by Tivoli's certified solderers)



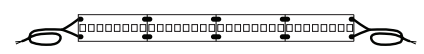
Power Leads and Jumpers **Must Be Specified For Each Run At Time Of Ordering.**



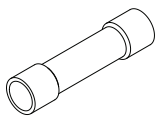
**TPL-O-LEAD-C**  
LEAD END  
24" standard 2 conductor 18AWG lead wire  
factory attached to one end of tape.



**TPL-O-LEAD-D**  
LEAD/LEAD  
24" standard 2 conductor 18AWG lead wire  
factory attached to both ends of tape.

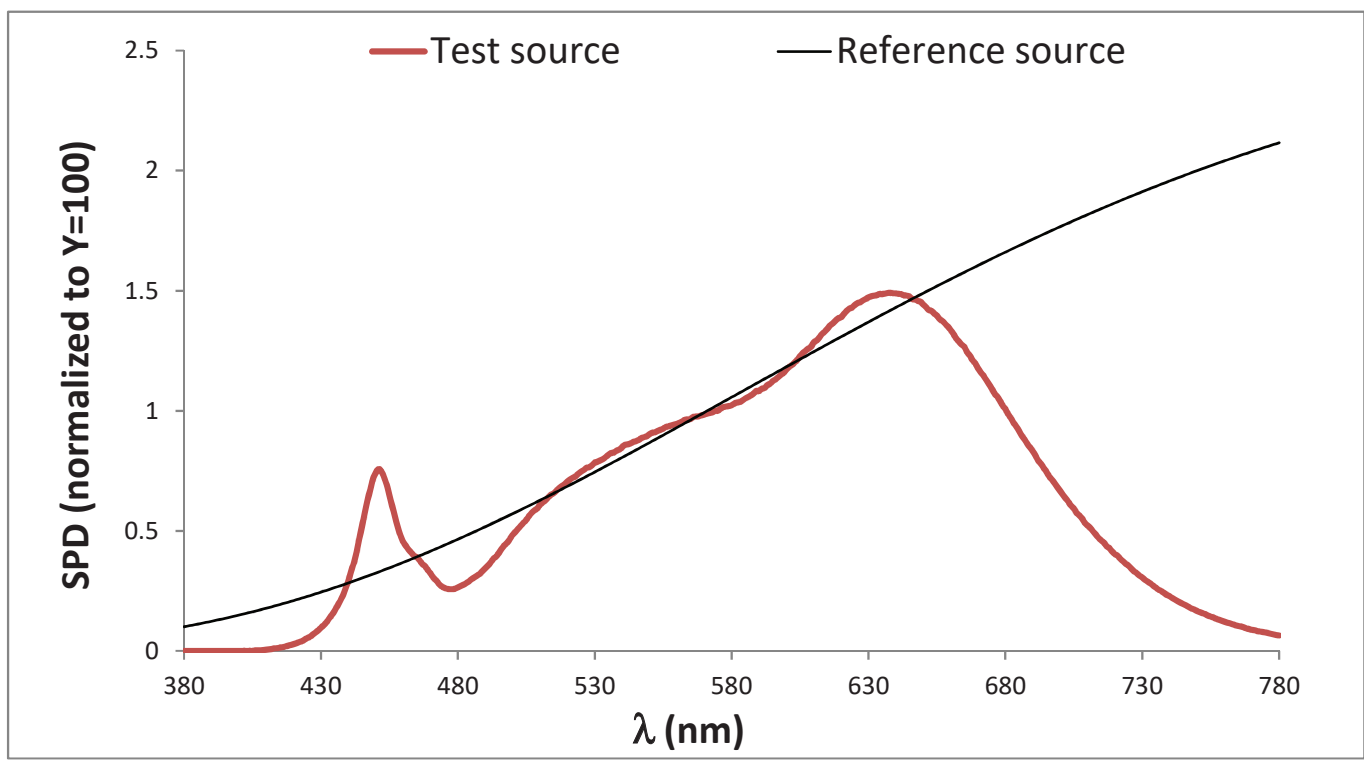


**TPL-O-XEP**  
EXTRA LEAD WIRE  
Additional factory attached 18AWG lead wire to  
extend lengths of LEAD-C and LEAD-D up to 20  
ft max. Sold per foot (not shipped as spooled  
wire).

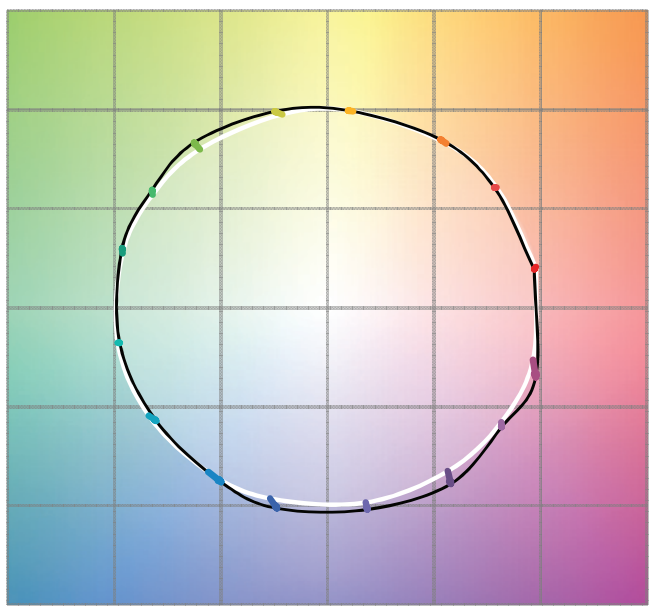


**TPL-O-CONN**  
18-22AWG BUTT CONNECTORS  
Used to interconnect factory attached lead wires. Sold individually.  
(2 ea required per connection).

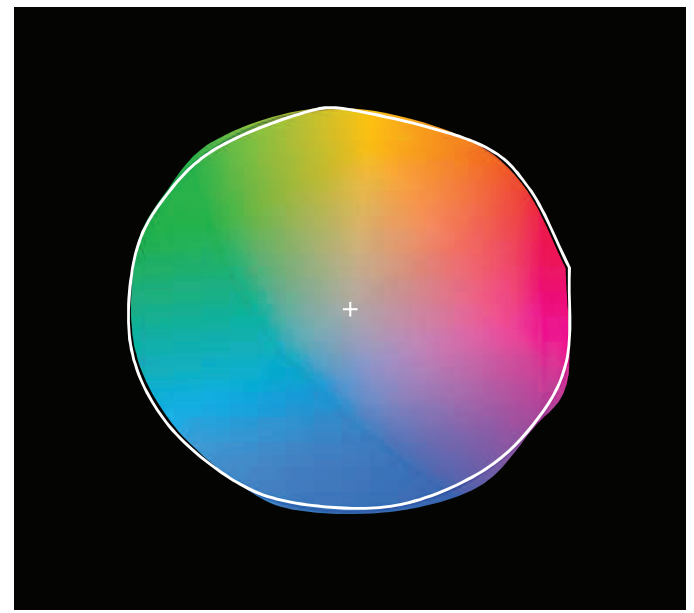
**HO IESNA TM-30-15**



**Color Vector Graphic**

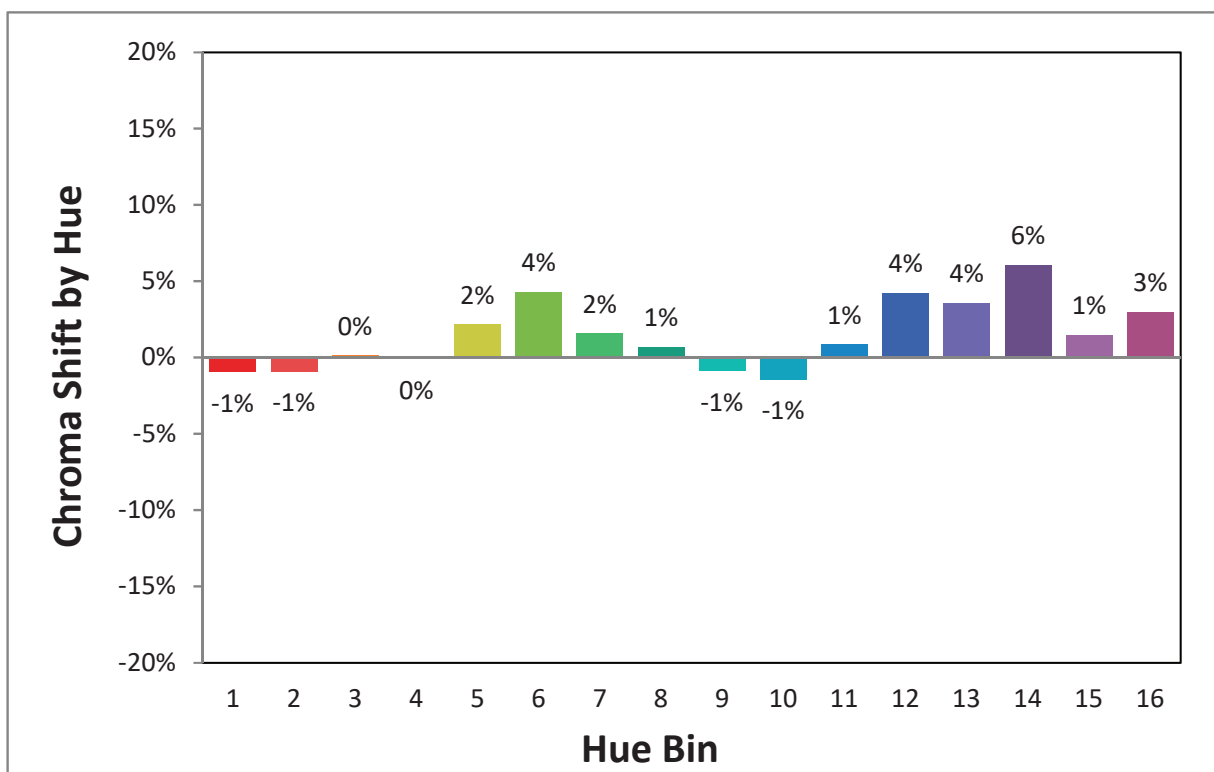
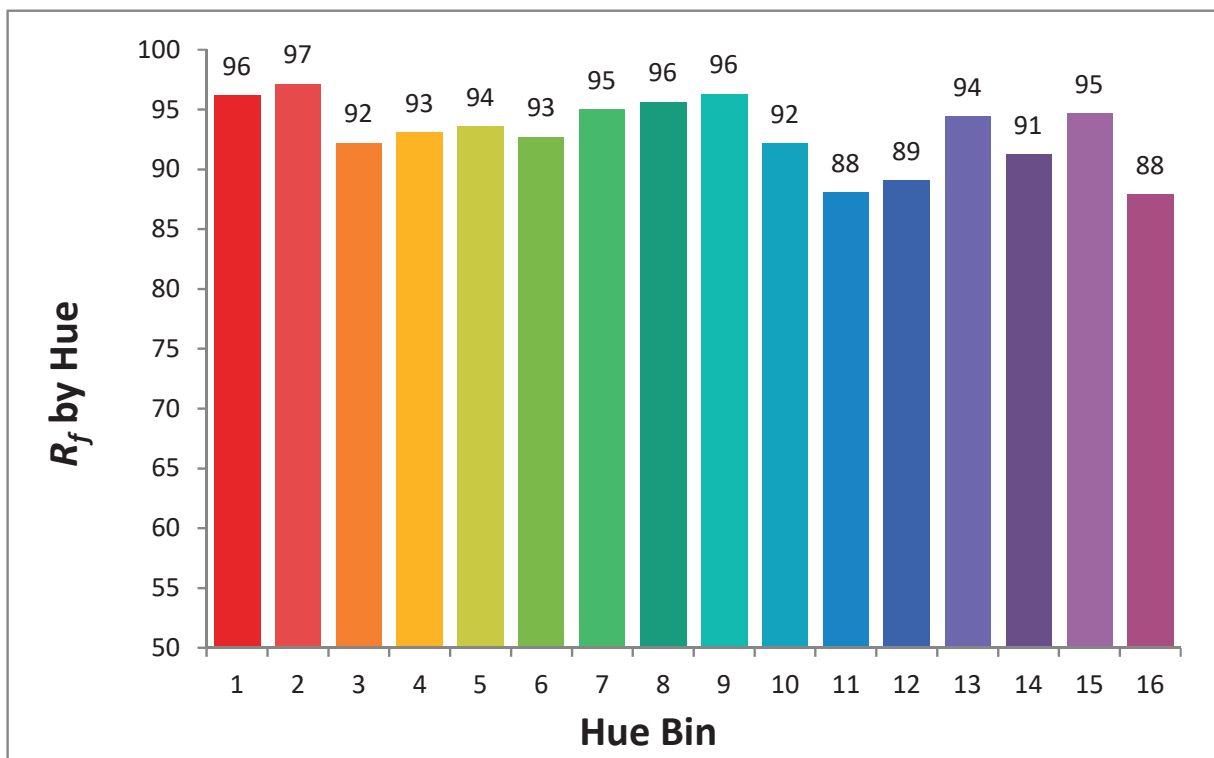


**Color Distortion Graphic**



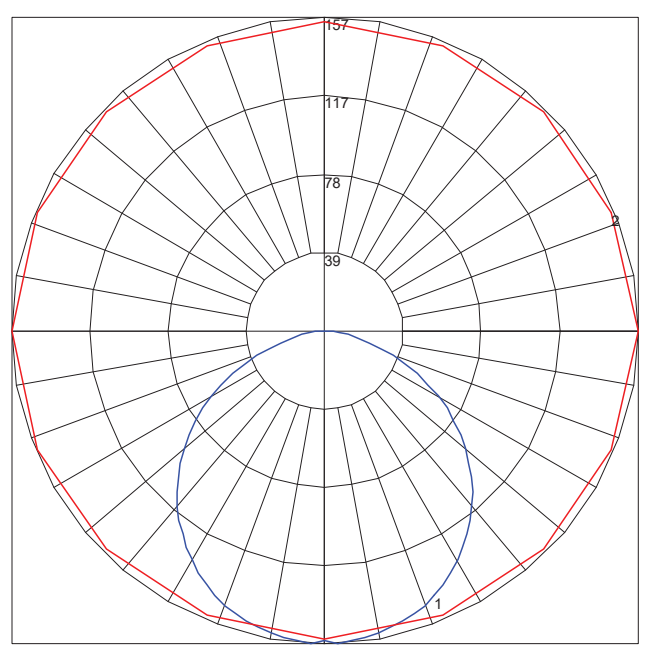
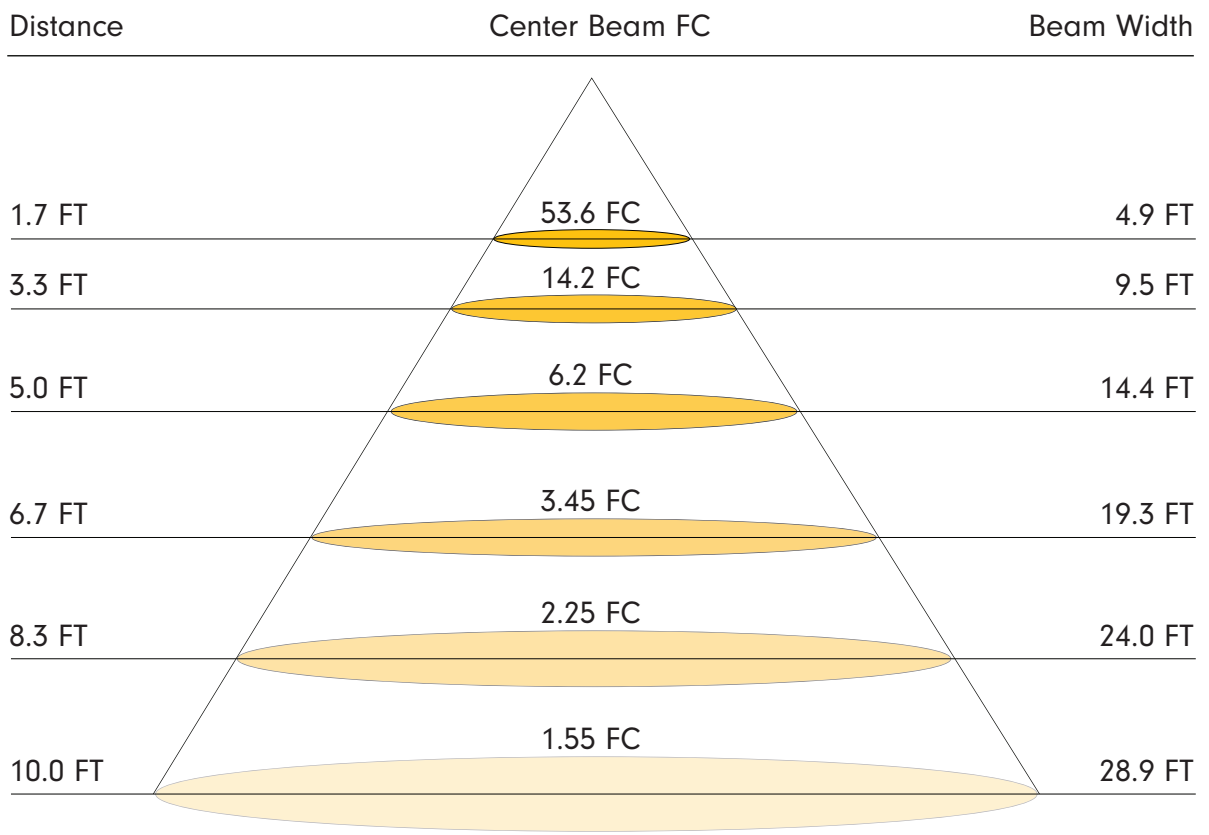


HO IESNA TM-30-15





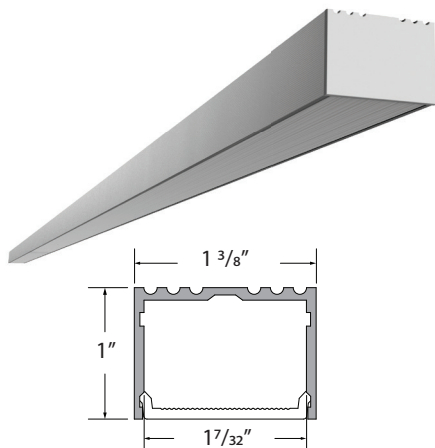
**HO** Photometric Data (Based on 3000K / 1' strip)



Maximum Candela = 156.5  
 Located At Horizontal Angle = 0  
 Vertical Angle = 2.5  
 #1 Vertical Plane Through Horizontal Angles (0-180) (Through Max. Cd.)  
 #2 Vertical Cone Through Vertical Angle (2.5) (Through Max. Cd.)

## Mounting Channel

### ALTON



**ALTN-CHAN-SLV-6.5**  
Anodized Aluminum Extrusion,  
available in 6.5' lengths



**ALTN-LNS-OPL-6.5**  
Lens, opal, length 6.5'



**ALTN-LNS-CLR-6.5**  
Lens, clear, length 6.5'



**ALTN-LNS-DIF-6.5**  
Lens, diffuser, length 6.5'

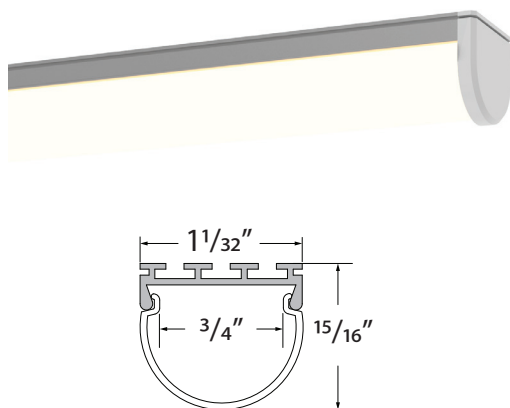


**ALTN-EC-01**  
Solid End Cap



**ALTN-EC-02**  
Powerfeed End Cap

### DOME



**DOME-CHAN-SLV-6.5**  
Anodized Aluminum Extrusion,  
available in 6.5' lengths



**DOME-LNS-OP-6.5**  
Lens, opal, length 6.5'

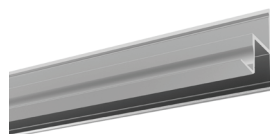
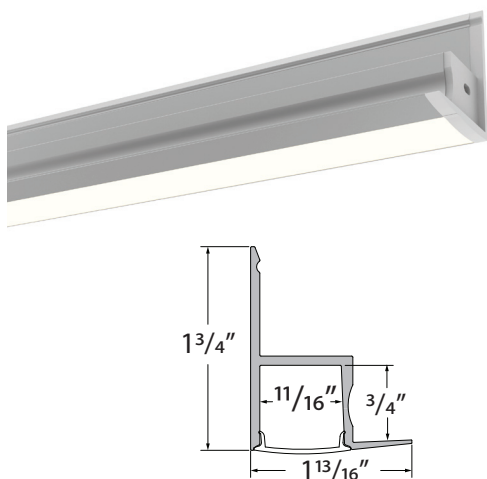


**DOME-EC-01**  
Solid End Cap



**DOME-EC-02**  
Power feed End Cap

### EDGE



**EDGE-CHAN-SLV-6.5**  
Anodized Aluminum Extrusion,  
available in 6.5' lengths



**EDGE-LNS-OP-6.5**  
Lens, opal, length 6.5'

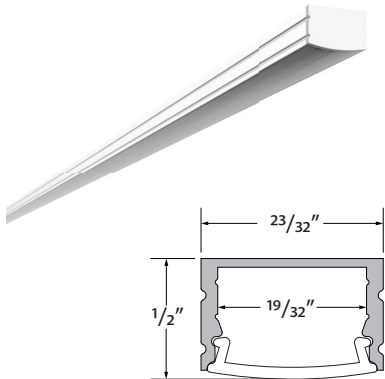


**EDGE-EC-01**  
Solid End Cap



**EDGE-EC-02**  
Powerfeed End Cap

**MOFETT**



**MOFT-CHAN-SLV-6.5**  
Anodized Aluminum Extrusion,  
available in 6.5' lengths



**MOFT-LNS-OPL-6.5**  
Lens, opal, length 6.5'



**MOFT-LNS-CLR-6.5**  
Lens, clear, length 6.5'



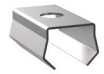
**MOFT-LNS-DIF-6.5**  
Lens, diffuser, length 6.5'



**MOFT-EC-01**  
Solid End Cap

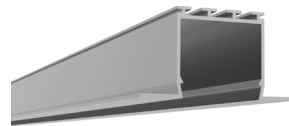
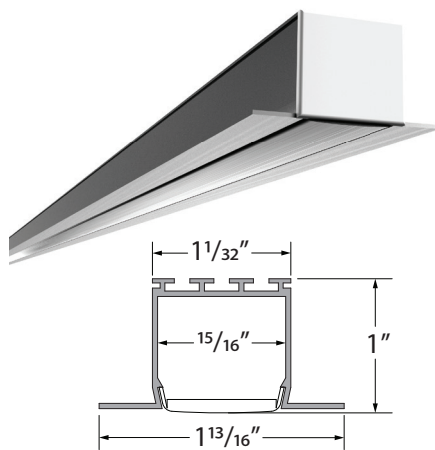


**MOFT-EC-02**  
Powerfeed End Cap



**MOFT-CLP-SLV**  
Clip, Metal

**NOYES**



**NOYS-CHAN-SLV-6.5**  
Anodized Aluminum Extrusion,  
available in 6.5' lengths



**NOYS-LNS-OPL-6.5**  
Lens, opal, length 6.5'



**NOYS-LNS-CLR-6.5**  
Lens, clear, length 6.5'



**NOYS-LNS-DIF-6.5**  
Lens, diffuser, length 6.5'



**NOYS-EC-01**  
Solid End Cap

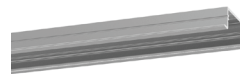
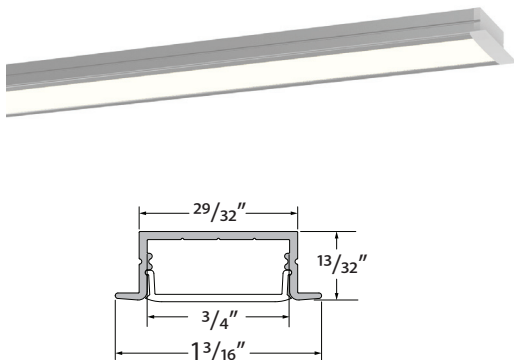


**NOYS-EC-02**  
Powerfeed End Cap



**NOYS-SPRING-CLP**  
Clip, Spring, Metal

**WARNER**



**WRNR-CHAN-SLV-6.5**  
Anodized Aluminum Extrusion,  
available in 6.5' lengths



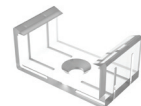
**WRNR-LNS-OP-6.5**  
Lens, opal, length 6.5'



**WRNR-EC-01**  
Solid End Cap



**WRNR-EC-02**  
Power feed End Cap



**WRNR-MTBK**  
Mounting Clip



## Recommended Power Supplies

### ADNM - NON DIMMING

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADNM Series Class 2 Transformer	ADNM-90-1-4-24-D	Indoor / Outdoor	100-277V AC 5ø60 Hz	24V DC	1	90W	3.75A
	ADNM-120-1-4-24-D				1	96W	4A
	ADNM-240-2-4-24-D				2	2x96W	2x4A
	ADNM-320-3-4-24-D				3	3x96W	3x4A

### ADNM - 0-10V DIMMING

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADNM Series Class 2 Transformer	ADNM-90-1-4-24-DOT	Indoor / Outdoor	100-277V AC 5ø60 Hz	24V DC	1	90W	3.75A
	ADNM-120-1-4-24-DOT				1	96W	4A
	ADNM-240-2-4-24-DOT				2	2x96W	2x4A
	ADNM-320-3-4-24-DOT				3	3x96W	3x4A

### ADNM - DMX SINGLE ADDRESS

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADNM Series Class 2 Transformer	ADNM-90-1-4-24-DIN	Indoor / Outdoor	100-277V AC 5ø60 Hz	24V DC	1	90W	3.75A
	ADNM-120-1-4-24-DIN				1	96W	4A
	ADNM-240-2-4-24-DIN				2	2x96W	2x4A
	ADNM-320-3-4-24-DIN				3	3x96W	3x4A

### ADNM - DMX MULTI ADDRESS

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADNM Series Class 2 Transformer	ADNM-240-2-4-24-DIN-2	Indoor / Outdoor	100-277V AC 5ø60 Hz	24V DC	2	2x96W	2x4A
	ADNM-320-3-4-24-DIN-3				3	3x96W	3x4A

### ADNM - DMX/DALI FLICKER-FREE FOR TV STUDIO

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADNM Series Class 2 Transformer	ADNM-120-1-4-24-DTV	Indoor / Outdoor	100-277V AC 5ø60 Hz	24V DC	1	1x96W	1x4A
	ADNM-240-2-4-24-DTV				2	2x96W	2x4A
	ADNM-320-3-4-24-DTV				3	3x96W	3x4A



## Recommended Power Supplies

### ER - JA8 w/ELITE 3000K

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ER Series Class 2 Driver	ER-80-1-3.3-24-D	Indoor/ Outdoor	120-277V AC	24V DC	1	80W	3.3A
ER Series Class 2 0-10V Dimming	ERG-80-24-DIM1-10						

### INFINITY - MLV / ELV / 0-10V / PWM / TRIAC

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	MIN LOAD	CIRCUIT CAPACITY
Infinity Series Class 2 Transformer	INF-J-30-1-1.3-24	Indoor / Outdoor	100 - 277V AC	24VDC	1	30W	3W	1.3A
	INF-J-60-1-2.5-24				1	60W	6W	2.5A
	INF-J-96-1-4-24				1	96W	9W	4A
	INF-J-192-2-4-24				2	2x96W	2x9W	2x4A
	INF-J-288-3-4-24				3	3x96W	3x9W	3x4A

## Recommended Dimmers

### DIMMING - 0-10V

DESCRIPTION	CAT NO	APPLICATION	INPUT VOLTAGE	OUTPUT VOLTAGE	MAX LOAD
0-10V Dimmer	DIM-LD-010	Indoor	12V/24V DC	12V/24V DC	30 mA max. output (sink only)

### DIMMING - MLV

DESCRIPTION	CAT NO	APPLICATION	INPUT VOLTAGE	OUTPUT VOLTAGE	MAX LOAD
MLV Dimmer	N-600	Indoor	120V AC	120V AC	450W
	N-1000				800W
	N-1500				1200W
	D-600				450W
	M-600				450W
	M-1000				800W

### DIMMING - ELV

DESCRIPTION	CAT NO	APPLICATION	INPUT VOLTAGE	OUTPUT VOLTAGE	MAX LOAD
ELV Dimmer	ME-600	Indoor	120V AC	120V AC	450W
	DE-300				300W

## Recommended Dimmers

### DIMMING - DMX

DESCRIPTION	CAT NO	APPLICATION	INPUT VOLTAGE	OUTPUT PROTOCOL	MAX UNIVERSE
DMX Controller	TVOQ-1-WH	Indoor	5V DC	DMX 512	1
	TVOQ-2-BK		6V DC		
	TVOQ-2-WH				
	TVOQ-10-BK-7				
	TVOQ-10-WH-7		6-7V DC		2



**TVOQ-1-WH**  
WH (White only)



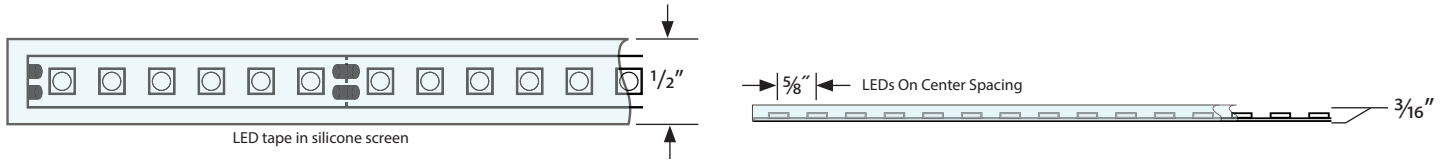
**TVOQ-10-XX-7**  
XX = BK (Black), WH (White)



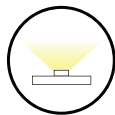
**TVOQ-2-XX**  
XX = BK (Black), WH (White)

**H - Gabion Wall Glass  
Block Landscape Lights**

**HIGH OUTPUT** | TivoTape™ Outdoor (factory installed power lead wires)



24V DC



4.4 W/ft | 321lm/ft



Non-Field Cuttable  
(See page 6 for details)



Max Continuous Run



Dimmable



VHB Tape



Silicone Jacket



UV and Saltwater  
Resistant



Warranty



2200K



2400K



2700K



3000K



3500K



4000K



5000K

**Ordering Information**

PRODUCT CODE	INTENSITY	INSTALL	LED COLOR	VOLTAGE
<b>TPLD</b>	<b>HO</b>	<b>O</b>		<b>24</b>
<b>TPLD</b> Tivotape DEFINE 90+ CRI	<b>HO</b> High Output	<b>O</b> Outdoor	<b>22</b> 2200K <b>24</b> 2400K <b>27</b> 2700K <b>30</b> 3000K <b>35</b> 3500K <b>40</b> 4000K <b>50</b> 5000K	<b>24</b> 24V DC



**TivoTape Run Lengths & End Preps**

Please specify length of run with quantity of run(s) and end prep type at time of ordering.  
Note: Only (1) end prep needed for each run (see page 2)  
Outdoor TivoTape is non-field cuttable - Factory Prep Only



**Electrical & Photometric Data (Based on 90+ CRI / 3000K)**

<b>Input Voltage</b>	<b>24V DC</b>						
<b>Dimming Option</b>	<b>MLV/ELV/0-10V</b> <i>Consult factory for DMX dimming</i>						
<b>Power Supply</b>	<b>Class 2</b>						
<b>Wire Size (End Prep)</b>	<b>18 AWG, 2 wire</b>						
<b>Power Consumption</b>	<b>4.4W/ft.</b>						
<b>Color Temperature (CCT)</b>	<b>2200K</b>	<b>2400K</b>	<b>2700K</b>	<b>3000K</b>	<b>3500K</b>	<b>4000K</b>	<b>5000K</b>
<b>Lumen Output</b>	<b>250</b>	<b>257</b>	<b>313</b>	<b>321</b>	<b>327</b>	<b>330</b>	<b>337</b>
<b>Efficacy</b>	<b>65</b>	<b>69</b>	<b>72</b>	<b>73</b>	<b>75</b>	<b>78</b>	<b>79</b>
<b>Color Rendering Index (CRI)</b>	<b>94</b>	<b>93</b>	<b>93</b>	<b>93</b>	<b>91</b>	<b>90</b>	<b>90</b>
<b>R9</b>	<b>&gt;50</b>						

**Physical**

<b>LED Package</b>	<b>5050</b>
<b>Cut Increments</b>	<b>4" (non-field cuttable - Factory prep only)</b>
<b>LEDs/ft</b>	<b>18</b>
<b>Operating Temperature</b>	<b>-40°F (-40°C) ~ 140°F (60°C)</b>
<b>Environment</b>	<b>IP67 Wet Location, Conformally Coated</b>
<b>Maximum Run Length</b>	<b>21'</b>
<b>Copper Trace</b>	<b>3 Ounce</b>
<b>Adhesive</b>	<b>3M VHB Tape</b>
<b>Dimension</b>	<b>1/2" (12.7mm) Jacket</b>

**Performance**

<b>Certification</b>	<b>UL Listed</b>
<b>Lumen Maintenance (L70) Hours</b>	<b>60,000</b>
<b>Binning Tolerance</b>	<b>2 Step MacAdam Elipse</b>
<b>Warranty</b>	<b>3 Years</b>

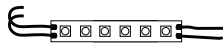


**Power Leads and Jumpers** Installed by Tivoli's certified solderers



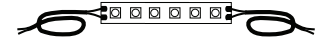
**TPL-O-LEAD-C**

LEAD END  
24" standard 2 conductor 18AWG lead wire  
factory attached to one end of tape.



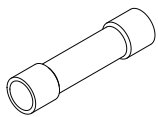
**TPL-O-LEAD-D**

LEAD/LEAD  
24" standard 2 conductor 18AWG lead wire  
factory attached to both ends of tape.



**TPL-O-XEP**

EXTRA LEAD WIRE  
Additional factory attached 18AWG lead wire to  
extend lengths of LEAD-C and LEAD-D up to 20  
ft max. Sold per foot (not shipped as spooled  
wire).

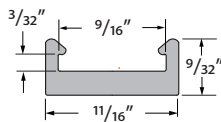


**TPL-O-CONN**

18-22AWG BUTT CONNECTORS  
Used to interconnect factory attached lead wires. Sold individually.  
(2 ea required per connection).

**Mounting Channel**

**M CHAN**

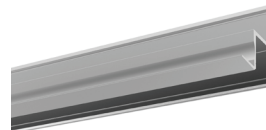
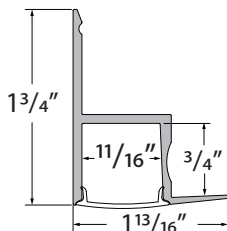


**MCHAN-8-LP**

Low profile mounting channel,  
clear polycarbonate, length 8'.

**NOTE:** No Lens option

**EDGE**



**EDGE-CHAN-SLV-6.5**

Anodized Aluminum Extrusion,  
available in 6.5' lengths



**EDGE-LNS-OP-6.5**

Lens, opal, length 6.5'



**EDGE-EC-01**

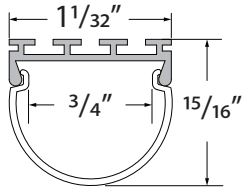
Solid End Cap



**EDGE-EC-02**

Powerfeed End Cap

**DOME**



**DOME-CHAN-SLV-6.5**  
Anodized Aluminum Extrusion,  
available in 6.5' lengths



**DOME-LNS-OP-6.5**  
Lens, opal, length 6.5'

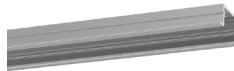
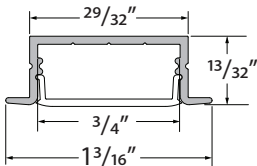


**DOME-EC-01**  
Solid End Cap



**DOME-EC-02**  
Powerfeed End Cap

**WARNER**



**WRNR-CHAN-SLV-6.5**  
Anodized Aluminum Extrusion,  
available in 6.5' lengths



**WRNR-LNS-OP-6.5**  
Lens, opal, length 6.5'



**WRNR-EC-01**  
Solid End Cap

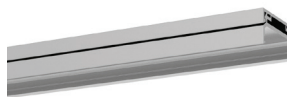
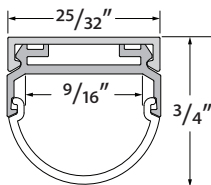
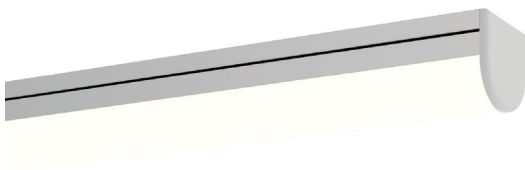


**WRNR-EC-02**  
Power feed End Cap



**WRNR-MTBK**  
Mounting Clip

**HORIZON**



**HRIZ-CHAN-SLV-6.5**  
Anodized Aluminum Extrusion,  
available in 6.5' lengths



**HRIZ-LNS-OP-6.5**  
Lens, opal, length 6.5'

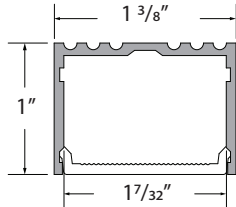
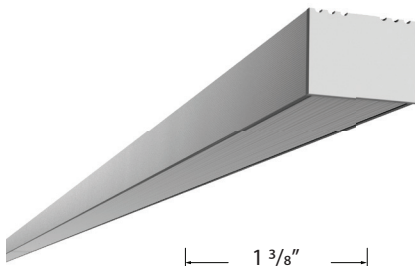


**HRIZ-EC-01**  
Solid End Cap



**HRIZ-EC-02**  
Powerfeed End Cap

**ALTON**



**ALTN-CHAN-SLV-6.5**  
Anodized Aluminum Extrusion,  
Available in 6.5' lengths



**ALTN-LNS-OPL-6.5**  
Lens, Opal, 6.5' length



**ALTN-LNS-CLR-6.5**  
Lens, Clear, 6.5' length



**ALTN-LNS-DIF-6.5**  
Lens, Diffuser, 6.5' length

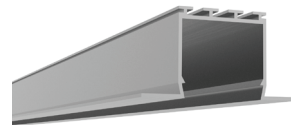
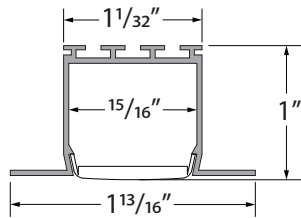
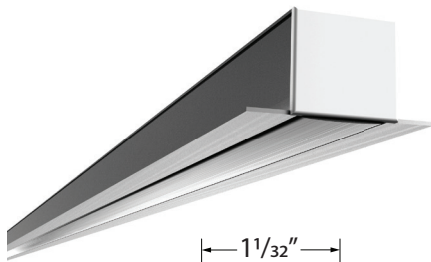


**ALTN-EC-01**  
Solid End Cap



**ALTN-EC-02**  
Powerfeed End Cap

**NOYES**



**NOYS-CHAN-SLV-6.5**  
Anodized Aluminum Extrusion,  
Available in 6.5' lengths



**NOYS-LNS-OPL-6.5**  
Lens, Opal, 6.5' length



**NOYS-LNS-CLR-6.5**  
Lens, Clear, 6.5' length



**NOYS-LNS-DIF-6.5**  
Lens, Diffuser, 6.5' length



**NOYS-EC-01**  
Solid End Cap

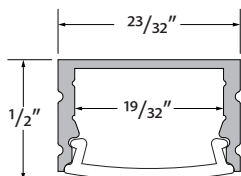
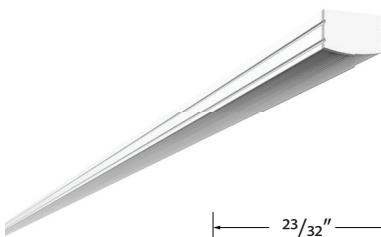


**NOYS-EC-02**  
Powerfeed End Cap



**NOYS-SPRING-CLP**  
Clip, Spring, Metal

**MOFETT**



**MOFFT-CHAN-SLV-6.5**  
Anodized Aluminum Extrusion,  
Available in 6.5' lengths



**MOFFT-LNS-OPL-6.5**  
Lens, Opal, 6.5' length



**MOFFT-LNS-CLR-6.5**  
Lens, Clear, 6.5' length



**MOFFT-LNS-DIF-6.5**  
Lens, Diffuser, 6.5' length



**MOFFT-EC-01**  
Solid End Cap



**MOFFT-EC-02**  
Powerfeed End Cap



**MOFFT-CLP-SLV**  
Clip, Metal



## Recommended Power Supplies

### ADNM - NON DIMMING

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADNM Series Class 2 Transformer	ADNM-90-1-4-24-D	Indoor / Outdoor	100-277V AC 5ø60 Hz	24V DC	1	90W	3.75A
	ADNM-120-1-4-24-D				1	96W	4A
	ADNM-240-2-4-24-D				2	2x96W	2x4A
	ADNM-320-3-4-24-D				3	3x96W	3x4A

### ADNM - 0-10V DIMMING

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADNM Series Class 2 Transformer	ADNM-90-1-4-24-DOT	Indoor / Outdoor	100-277V AC 5ø60 Hz	24V DC	1	90W	3.75A
	ADNM-120-1-4-24-DOT				1	96W	4A
	ADNM-240-2-4-24-DOT				2	2x96W	2x4A
	ADNM-320-3-4-24-DOT				3	3x96W	3x4A

### ADNM - DMX SINGLE ADDRESS

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADNM Series Class 2 Transformer	ADNM-90-1-4-24-DIN	Indoor / Outdoor	100-277V AC 5ø60 Hz	24V DC	1	90W	3.75A
	ADNM-120-1-4-24-DIN				1	96W	4A
	ADNM-240-2-4-24-DIN				2	2x96W	2x4A
	ADNM-320-3-4-24-DIN				3	3x96W	3x4A

### ADNM - DMX MULTI ADDRESS

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADNM Series Class 2 Transformer	ADNM-240-2-4-24-DIN-2	Indoor / Outdoor	100-277V AC 5ø60 Hz	24V DC	2	2x96W	2x4A
	ADNM-320-3-4-24-DIN-3				3	3x96W	3x4A

### ADNM - DMX/DALI FLICKER-FREE FOR TV STUDIO

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADNM Series Class 2 Transformer	ADNM-120-1-4-24-DTV	Indoor / Outdoor	100-277V AC 5ø60 Hz	24V DC	1	1x96W	1x4A
	ADNM-240-2-4-24-DTV				2	2x96W	2x4A
	ADNM-320-3-4-24-DTV				3	3x96W	3x4A



## Recommended Power Supplies

### INFINITY - MLV / ELV / 0-10V / PWM / TRIAC

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	MIN LOAD	CIRCUIT CAPACITY
Infinity Series Class 2 Transformer	INF-J-30-1-1.3-24	Indoor / Outdoor	100 - 277V AC	24VDC	1	30W	3W	1.3A
	INF-J-60-1-2.5-24				1	60W	6W	2.5A
	INF-J-96-1-4-24				1	96W	9W	4A
	INF-J-192-2-4-24				2	2x96W	2x9W	2x4A
	INF-J-288-3-4-24				3	3x96W	3x9W	3x4A

## Recommended Dimmers

### DIMMING - 0-10V

DESCRIPTION	CAT NO	APPLICATION	INPUT VOLTAGE	OUTPUT VOLTAGE	MAX LOAD
0-10V Dimmer	DIM-LD-010	Indoor	12V/24V DC	12V/24V DC	30 mA max. output (sink only)

### DIMMING - MLV

DESCRIPTION	CAT NO	APPLICATION	INPUT VOLTAGE	OUTPUT VOLTAGE	MAX LOAD
MLV Dimmer	N-600	Indoor	120V AC	120V AC	450W
	N-1000				800W
	N-1500				1200W
	D-600				450W
	M-600				450W
	M-1000				800W

### DIMMING - ELV

DESCRIPTION	CAT NO	APPLICATION	INPUT VOLTAGE	OUTPUT VOLTAGE	MAX LOAD
ELV Dimmer	ME-600	Indoor	120V AC	120V AC	450W
	DE-300				300W

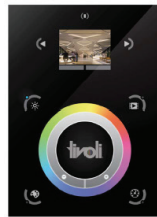
Recommended Dimmers

**DIMMING - DMX**

DESCRIPTION	CAT NO	APPLICATION	INPUT VOLTAGE	OUTPUT PROTOCOL	MAX UNIVERSE
DMX Controller	TVOQ-1-WH	Indoor	5V DC	DMX 512	1
	TVOQ-2-BK		6V DC		
	TVOQ-2-WH				
	TVOQ-10-BK-7				
	TVOQ-10-WH-7		6-7V DC		2



**TVOQ-1-WH**  
WH (White only)



**TVOQ-10-XX-7**  
XX = BK (Black), WH (White)



**TVOQ-2-XX**  
XX = BK (Black), WH (White)