

IP65 : Suitable for Wet Locations

IK10 : Impact Resistant (Vandal Resistant)



UTA-80401

Tango 5 cylindrical surface exterior downlight LED

A range of cylindrical surface mounted exterior downlight luminaires. Developed for interior and exterior lighting using a variety of different lamp options. These include compact fluorescent lamps, and discharge lamps.

Low copper content die-cast aluminum housing and aluminum bottom frame with integral anti-glare baffles. Stainless steel screws. Durable silicone rubber gasket and clear toughened glass. Single cable entry. Housing is treated with a chemical chroma-tized protection before powder coating, ensuring high corrosion resistance. Integral control gear. Anodized high purity aluminum reflector.

Physical Data

Length: 6.3"

Height: 10.43"

Weight: 6.8 lbs

Lamp

☐ 30w - 2075lm - White - LED ☼

Beam Angle (Please Specify)

☐ N - Narrow Beam: 14 Deg

☐ M - Medium Beam: 24 Deg

☐ W - Wide Beam: 40 Deg

LED Color (Please Specify)

☐ W27 - 2700K

☐ W30 - 3000K

☐ W40 - 4000K

Voltage (Please Specify)

☐ 120V

☐ 277V

☐ Other _____

Color (Please Specify)

☐ 01-Black - RAL 9011

☐ 03-White - RAL 9003

☐ 05-Matt Silver - RAL 9006

☐ 06-Bronze - RAL 6014

☐ 02- Dark Grey - RAL 7043

☐ 04 - Metallic Silver - RAL 9006

☐ 07- Custom - RAL _____



Lens

☐ F - Frosted Lens

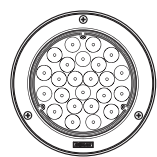
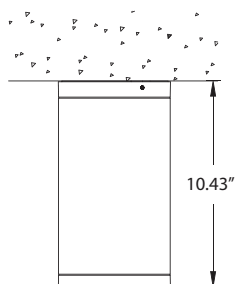
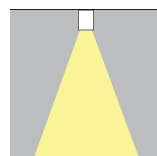
☐ C - Clear Lens



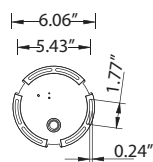
☐ SCE - Surface Conduit Entry Box - ☐ 1/2" Conduit ☐ 3/4" Conduit

☐ Mounting Ring

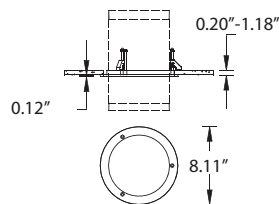
☐ HGT - Specify Custom Height _____ ft



Bottom view



Mounting detail



Mounting ring for semi recessed installation



Ordering Example : UTA - 80401 - White-30w - N - W30 - 120v - Options

PROJECT: _____ DATE: _____

TYPE: _____ QUANTITY: _____ NOTE: _____

Ligman Lighting USA reserves the right to change specifications without prior notice, please contact factory for latest information.
Due to the continual improvements in LED technology data and components may change without notice.

FIXTURE TYPE:
AD-01

LED Ceiling-mounted downlights - narrow beam

Housing: One piece die-cast aluminum for direct attachment to a 3 1/2" or 4" recessed octagonal wiring box using a mounting strap. Die castings are marine grade, copper free ($\leq 0.3\%$ copper content) A360.0 aluminum alloy.

Enclosure: Tempered clear glass, retained by a one piece, die-cast aluminum frame. Frame is secured by threading into luminaire housing. Fully gasketed for weather tight operation using a molded silicone rubber gasket.

Electrical: 26W LED luminaire, 31 total system watts, -30°C start temperature. Integral 120V through 277V electronic LED driver, 0-10V dimming. LED module(s) are available from factory for easy replacement. Standard LED color temperature is 3000K with an >80 CRI. Available in 4000K (>80 CRI); add suffix K4 to order.

Note: LEDs supplied with luminaire. Due to the dynamic nature of LED technology, LED luminaire data on this sheet is subject to change at the discretion of BEGA-US. For the most current technical data, please refer to www.bega-us.com.

Finish: All BEGA standard finishes are polyester powder coat with minimum 3 mil thickness. Available in four standard BEGA colors: Black (BLK); White (WHT); Bronze (BRZ); Silver (SLV). To specify, add appropriate suffix to catalog number. Custom colors supplied on special order

CSA certified to U.S. and Canadian standards, suitable for wet locations. Protection class IP65

Weight: 5.1 lbs.

Luminaire Lumens: 1805

Tested in accordance with LM-79-08

Type:
BEGA Product:
Project:
Voltage:
Color:
Options:
Modified:



	Lamp	β	A	B
66978	26W LED	21°	7 1/2	6 1/8

β = Beam angle

LED Ceiling-mounted downlights - narrow beam

Housing: One piece die-cast aluminum for direct attachment to a 3 1/2" or 4" recessed octagonal wiring box using a mounting strap. Die castings are marine grade, copper free ($\leq 0.3\%$ copper content) A360.0 aluminum alloy.

Enclosure: Tempered clear glass, retained by a one piece, die-cast aluminum frame. Frame is secured by threading into luminaire housing. Fully gasketed for weather tight operation using a molded silicone rubber gasket.

Electrical: 13.1W LED luminaire, 15 total system watts, -30°C start temperature. Integral 120V through 277V electronic LED driver, 0-10V dimming. LED module(s) are available from factory for easy replacement. Standard LED color temperature is 3000K with an 85 CRI. Available in 4000K (85 CRI); add suffix K4 to order.

Note: LEDs supplied with luminaire. Due to the dynamic nature of LED technology, LED luminaire data on this sheet is subject to change at the discretion of BEGA-US. For the most current technical data, please refer to www.bega-us.com.

Finish: All BEGA standard finishes are polyester powder coat with minimum 3 mil thickness. Available in four standard BEGA colors: Black (BLK); White (WHT); Bronze (BRZ); Silver (SLV). To specify, add appropriate suffix to catalog number. Custom colors supplied on special order

CSA certified to U.S. and Canadian standards, suitable for wet locations. Protection class IP65

Weight: 5.0 lbs.

Luminaire Lumens: 903

Type:
BEGA Product:
Project:
Voltage:
Color:
Options:
Modified:



Ceiling mounted downlights · narrow beam

	Lamp	β	A	B
66981	13.1W LED	13°	6	5

β = Beam angle

UHA-60385

Harrier 1 Inground LED



Physical Data

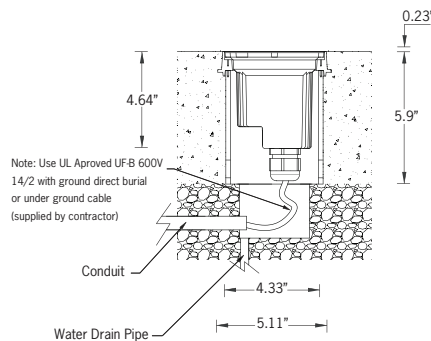
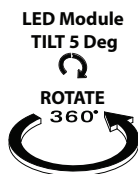
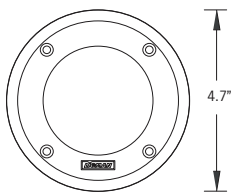
Length • 4.7"

Height • 5.9"

Weight • 1.1 lbs (A) 1.5 lbs (S)

IP67 • Suitable For Wet Locations

IK10 • Impact Resistant (Vandal Resistant)



A top range of inground uplights with a choice of round or square stainless steel or painted aluminum front rings. This 4" inground luminaire is provided with a low output LED board and integral driver, and is suitable as a marker light for illuminating shopping and pedestrian areas, parks, gardens and sculptures. This low glare luminaire is provided with a 0.4" thick tempered glass and is rated as a walkover luminaire. The glass has a special wrap around high temperature silicone gasket that provides additional ingress protection. A non slip lens is available as an option. This non slip coating is a proprietary coating that is infused into the glass to provide excellent traction in wet conditions.

To ensure efficient drainage, gravel must be used to a depth of 17" beneath the housing, and should also be placed around the luminaire. Low copper content die-cast aluminum housing with high corrosion resistance. The 0.24" thick front ring is available in grade 316 stainless steel or aluminum. Stainless steel fasteners in grade 316. Power is provided through a single PG1/2" watertight cable gland.

UF-B 600v underground feeder cable is recommended to provide power to the luminaire. Standard recessing box in high density polyethylene.

NOTE: This luminaire is provided with a remote mounted driver. A waterproof remote driver box can be provided as an option and should be specified.

Aluminum Casting

Less than 0.1% copper content – Marine Grade LM6 Aluminum High Pressure die casting provides excellent mechanical strength, clean detailed product lines and excellent heat dissipation.

Pre paint

8 step degrease and phosphate process that includes deoxidizing and etching as well as a zinc and nickel phosphate process before product painting.

Memory Retentive -Silicon Gasket.

Provided with special injection molded "fit for purpose" long life high temperature **memory retentive silicon gaskets**. Maintains the gaskets exact profile and seal over years of use and compression.

Thermal management.

LM6 Aluminum is used for its **excellent mechanical strength and thermal dissipation properties** in low and high ambient temperatures. The superior thermal heat sink design by Ligman used in conjunction with the driver, controls thermals below critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10% lumen depreciation at 50,000 hours.

Surge Suppression

Standard 10kv surge suppressor provided with all fixtures.

BUG Rating

B0 - U1 - G0

Finishing

All Ligman products go through an extensive finishing process that includes fettling to improve paint adherence.

Paint.

UV Stabilized 4.9Mil thick powder coat paint and baked at 200 Deg C.

This process ensures that Ligman products can withstand harsh environments. Rated for use in natatoriums.

Hardware.

Provided Hardware is **Marine grade 316 Stainless steel**.

Anti Seize Screw Holes

Tapped holes are infused with a **special anti seize compound** designed to prevent seizure of threaded connections, due to electrolysis from heat, corrosive atmospheres and moisture.

Crystal Clear Low Iron Glass Lens.

Provided with tempered, impact resistant **crystal clear low iron glass** ensuring no green glass tinge.

Optics & LED

Precise optic design provides **exceptional light control and precise distribution of light**. LED CRI > 80

Lumen - Maintenance Life


L80 /B10 at 50,000 hours (This means that at least 90% of the LED still achieve 80% of their original flux)

Standard Options

Lamp	Frame	Beam	LED Color
8w LED 389 Lumens	A • Aluminum [Choose Finish Color] S • Stainless Steel	N • Narrow - 20° M • Medium - 30° W • Wide - 50°	W27 • 2700K W30 • 3000K W40 • 4000K

Finish Color
01 - Black - RAL 9011
02 - Dark Grey - RAL 7043
03 - White - RAL 9003
04 - Metallic Silver - RAL 9006
05 - Matte Silver - RAL 9006
06 - Bronze - RAL 6014
07 - Custom RAL

Options (Consult Factory for Pricing)

TLT - LED 5° Tilt Module	
ADA - Anti-Slip Lens	
F - Frosted Lens	
A80191 - Remote Driver Box	

Ordering Example : UHA - 60385 - 8w - A - N - W30 - 02 - 120/277v

UHA	Lamp	Frame	Beam	LED Color	Color	Voltage	Options
60385	8w LED	S Stainless Steel A Aluminum (Choose Color)	N Narrow M Medium W Wide	W27 2700K W30 3000K W40 4000K	01 Black 02 Dark Grey 03 White 04 Metallic Silver 05 Matte Silver 06 Bronze 07 Custom RAL	120/277v Other (Specify)	TLT LED 5° Tilt Module A80191 Remote Driver Box ADA Anti-Slip Lens F Frosted Lens

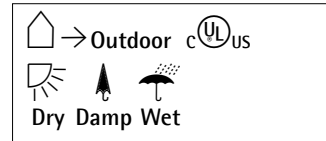
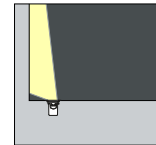
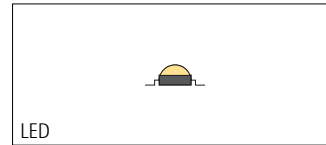
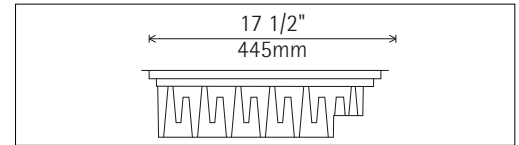
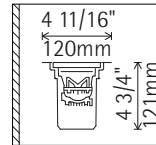
PROJECT: DATE: QUANTITY:

TYPE: NOTE:

Head Office:
7144 NW Progress Ct
Hillsboro, Oregon 97124
Tel: 503-645-0500
Fax: 503-645-8100
www.ligmanlightingusa.com

FIXTURE TYPE: AG-01

Grazing light wallwasher

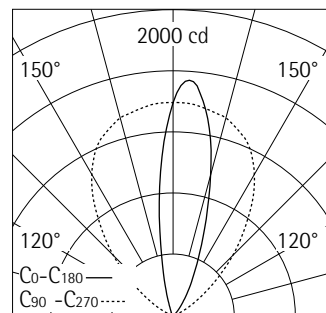


32808.023

LED 24W 2520lm 3000K warm white
Dimmable
Version 2
Covered mounting detail

Product description

For mounting in accessories.
Housing: polymer, black.
Control gear, 60Hz, 120V dimmable, 277V switchable. Longitudinally water-tight cable AWG14, L 31 1/2" / 800mm.
LED module: high-power LEDs on metal-core PCB. Collimating lens made of optical polymer. $\pm 10^\circ$ tilt. Softec lens.
Cover frame: stainless steel. Safety glass: 3/8" / 10mm, clear.
Installation with separate connection sleeve.
Mounting in recessed housing: can be driven over in vehicles with pneumatic tyres. Load 4500lb.wt / 20kN.
Mounting in hollow floor: mounting kit to be ordered separately.
120V: Dimming with external dimmers possible (trailing edge).
Suitable for wet location (IP68): dust-proof.
Weight 6.94lbs / 3.15kg



Technical data

Luminous flux of the luminaire	1058lm
Connected load	31W
Luminaire efficacy	34lm/W
Color deviation	2 SDCM
Color rendition index	CRI>90
Lumen maintenance	L90/B10 ≤ 50000 h
LED failure rate	0.1% ≤ 50000 h
LMF	E
Temperature on the cover glass	126°F / 52°C

For your regional contact in the
ERCO Sales network click here
www.erco.com/contact

Technical region: 120V/60Hz, 277V/
60Hz

We reserve the right to make technical
and design changes.

Edition: 11.04.2017

Current version under
www.erco.com/32808.023

Planning data

Cleaning (a)	1				2				3			
Ambient conditions	P	C	N	D	P	C	N	D	P	C	N	D
LMF	0.96	0.94	0.90	0.86	0.93	0.91	0.86	0.81	0.92	0.90	0.84	0.79
RSMF	0.99	0.97	0.95	0.92	0.98	0.97	0.95	0.92	0.98	0.97	0.95	0.92

Hours of operation (h)	1000	5000	10000	20000	30000	40000	50000
LLMF	1.00	0.99	0.98	0.96	0.94	0.92	0.90
LSF	1	1	1	1	1	1	1

MF	LMFxRSMFxLLMFxLSF
MF	Maintenance Factor
LMF	Luminaire Maintenance Factor
RSMF	Room Surface Maintenance Factor
LLMF	Lamp Lumens Maintenance Factor
LSF	Lamp Survival Factor
P	Room pure
C	Room clean
N	Room normal
D	Room dirty

Technical data based on international standards and directives

IEC 60598	Luminaires – Parts 1 + 2: General requirements, particular requirements and tests
IEC 62031	LED modules for general lighting – Safety specifications
IEC 62471	Photobiological safety of lamps and lamp systems
UL 1598	Luminaires
UL 1574	Standard for Track Lighting Systems
UL 8750	Standard for Light Emitting Diode (LED) Equipment for Use in Lighting Products
IES LM-79-08	Electrical and Photometric Measurements of Solid-State Lighting Products
IES LM-80-08	Measuring Lumen Maintenance of LED Light Sources
CIE 13	Method of measuring and specifying color rendering properties of light sources

All technical data are subject to industry standard tolerances.
See also www.erco.com/erco-led

Accessories



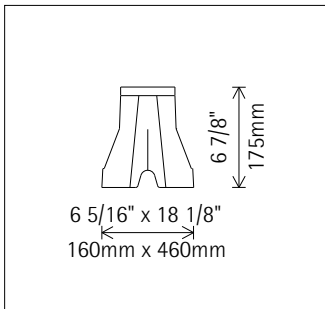
33958.023

Connection sleeve
for cable diameters of 0.25" - 0.80".
Polymer conduit, two-part PUR cast resin.
Length 5 15/16" / 150mm.
Width 1 1/4" / 32mm.
Height 2 3/8" / 59mm.
Weight 0.99lbs / 0.45kg



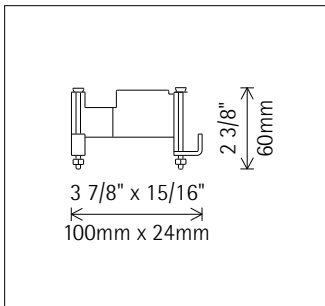
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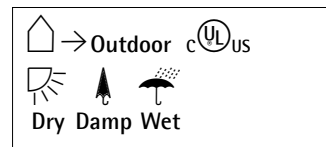
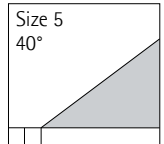
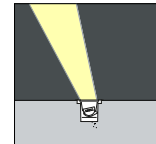
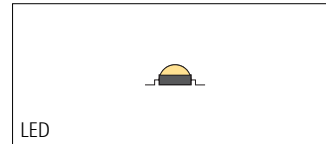
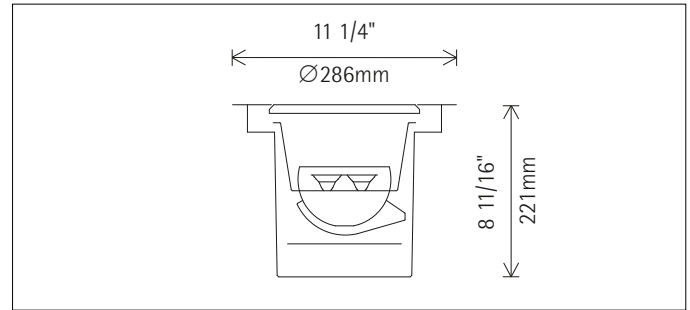
Recessed housing
Polymer, black.
4 cable entries.
Load 4500lb.wt / 20kN.
Weight 1.88lbs / 0.85kg



33293.000

Mounting kit
Mounting in hollow floors.
2 mounting brackets: stainless steel.
Clamp extension 1/16" - 1 13/16" / 1-46mm.
Load 4500lb.wt / 20kN.
Floor aperture: 16 5/8" - 3 7/8" / 422mmx98mm
Weight 0.30lbs / 0.14kg



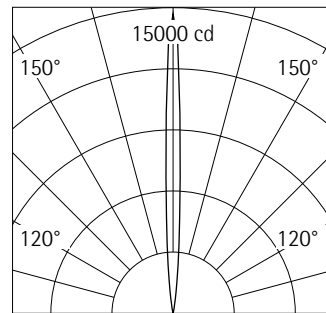


35110.023

LED 4W 420lm 3000K warm white
0-10V dimmable
Version 8
Covered mounting detail
Spherolit lens, narrow spot

Product description

Housing: polymer, black.
Control gear 120V, 60Hz, dimmable.
Longitudinally watertight cable
5xAWG14, L 31 1/2" / 800mm.
LED module: high-power LEDs on
metal-core PCB. Collimating lens made
of optical polymer. 0-30° tilttable, rotat-
able through 360°.
Optical cut-off 40° from horizontal.
Screw-fastened cover ring with flush
safety glass: stainless steel. Safety glass:
9/16" / 15mm, clear.
Installation with separate connection
sleeve.
Mounting in recessed housing: can be
driven over in vehicles with pneumatic
tyres. Load 11240lb.wt / 50kN.
Mounting in hollow floor: mounting kit
to be ordered separately.
Dimming with external dimmers possi-
ble (0-10V).
Suitable for wet location (IP68): dust-
proof.
Weight 12.06lbs / 5.47kg
Available from 2nd quarter 2017



h(ft)	E(fc)	D
		5°
15	65	1'4"
12	102	1'1"
9	181	0'9"
6	408	0'6"
3	1633	0'3"

Technical data

Luminous flux of the luminaire	301lm
Connected load	6W
Luminaire efficacy	50lm/W
Color deviation	2 SDCM
Color rendition index	CRI>90
Lumen maintenance	L90/B10 ≤50000h
LED failure rate	0.1% ≤50000h
LMF	E
Temperature on the cover glass	86°F / 30°C

For your regional contact in the
ERCO Sales network click here
www.ercosales.com/contact

Planning data

Cleaning (a)	1				2				3			
Ambient conditions	P	C	N	D	P	C	N	D	P	C	N	D
LMF	0.96	0.94	0.90	0.86	0.93	0.91	0.86	0.81	0.92	0.90	0.84	0.79
RSMF	0.91	0.83	0.68	0.51	0.90	0.81	0.67	0.50	0.90	0.81	0.67	0.50

Hours of operation (h)	1000	5000	10000	20000	30000	40000	50000
LLMF	1.00	0.99	0.98	0.96	0.94	0.92	0.90
LSF	1	1	1	1	1	1	1

MF	LMFxRSMFxLLMFxLSF
MF	Maintenance Factor
LMF	Luminaire Maintenance Factor
RSMF	Room Surface Maintenance Factor
LLMF	Lamp Lumens Maintenance Factor
LSF	Lamp Survival Factor
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D	Room dirty

Technical data based on international standards and directives

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All technical data are subject to industry standard tolerances.
See also www.erco.com/erco-led

Accessories



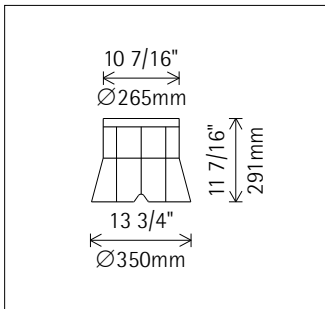
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Connection sleeve
for cable diameters of 0.25" - 0.80".
Polymer conduit, two-part PUR cast resin.
Length 5 15/16" / 150mm.
Width 1 1/4" / 32mm.
Height 2 3/8" / 59mm.
Weight 0.99lbs / 0.45kg



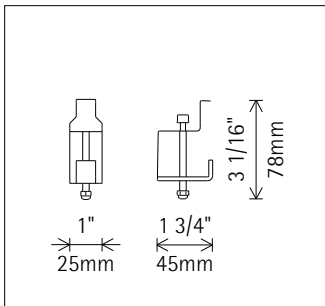
33964.000

Recessed housing
Polymer, black.
4 cable entries.
Load 11240lb.wt / 50kN.



33988.000

Mounting kit
Mounting in hollow floors.
3 mounting brackets: stainless steel.
Clamp extension 7/16" - 1 13/16" / 11-46mm.
Load 4500lb.wt / 20kN.
Floor aperture:
Size 5: ø 10 1/16" / 255mm
Size 7: ø 11 9/16" / 293mm



ULA-60001

Light Linear LA 1 Inground

Inground



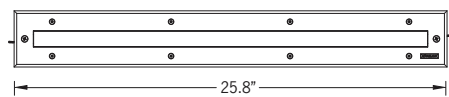
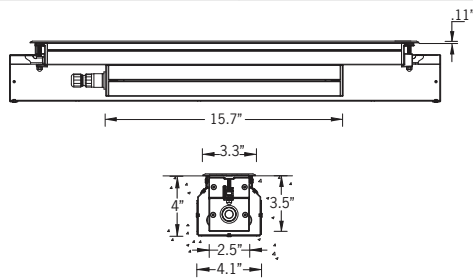
Physical Data

Length • 25.8"

Height • 4"

Weight • 10 lbs

IP67 • Suitable For Wet Locations
IK09 • Impact Resistant (Vandal Resistant)



Light Linear LA inground family is a range of small profile linear product that complements the Light Linear LA recessed wall, surface wall and pendant luminaires. The inground fixture is available with a selection of optics, as well as a forward throw asymmetric distribution that is achieved with an internally tilted gear tray. This walkover rated luminaire is available with RGBW color changing, as well as static white color in 2700K, 3000K and 4000K formats. The Light Linear LA inground is provided with a concrete pour or dirt mounting recessing box as a standard. This recessing box can be shipped to the jobsite ahead of time, if requested.

The Light Linear LA is suitable for wall grazing, wall washing, column lighting and uplight applications and can be used in many applications including; commercial, historic, or modern architectural interiors and exteriors. Two different lengths are provided allowing the luminaire installation to be tailored exactly to the architectural structure. The luminaire is provided with an integral driver. A remote driver can be provided, please contact the factory for more details.

Options of clear or frosted tempered 8mm thick glass with a load rating of 1,100lb.

Aluminum

Less than 0.1% copper content – Marine Grade 6060 extruded & LM6 Aluminum High Pressure die casting provides excellent mechanical strength, clean detailed product lines and excellent heat dissipation.

Pre paint

8 step degrease and phosphate process that includes deoxidizing and etching as well as a zinc and nickel phosphate process before product painting.

Memory Retentive -Silicon Gasket.

Provided with special injection molded "fit for purpose" long life high temperature **memory retentive silicon gaskets**. Maintains the gaskets exact profile and seal over years of use and compression.

Thermal management.

LM6 Aluminum is used for its **excellent mechanical strength and thermal dissipation properties** in low and high ambient temperatures. The superior thermal heat sink design by Ligman used in conjunction with the driver, controls thermals below critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10% lumen depreciation at 50,000 hours.

Surge Suppression

Standard 10kv surge suppressor provided with all fixtures.

Finishing

All Ligman products go through an extensive finishing process that includes fettling to improve paint adherence.

Paint

UV Stabilized 4.9Mil thick powder coat paint and baked at 200 Deg C. This process ensures that Ligman products can withstand harsh environments. Rated for use in natatoriums.

Frame & Hardware.

Marine grade 316 Stainless steel.

Anti Seize Screw Holes

Tapped holes are infused with a **special anti seize compound** designed to prevent seizure of threaded connections, due to electrolysis from heat, corrosive atmospheres and moisture.

Crystal Clear Low Iron Glass Lens.

Provided with tempered, impact resistant **crystal clear low iron glass** ensuring no green glass tinge.

Optics & LED

Precise optic design provides **exceptional light control and precise distribution of light**. LED CRI > 80

Lumen - Maintenance Life

L80 /B10 at 50,000 hours (This means that at least 90% of the LED still achieve 80% of their original flux)

Standard Options

Lamp	Beam	LED Color	Options (Consult Factory for Pricing)
28w LED	VN • Very Narrow 12°	W27 • 2700K	F - Frosted Lens
2847 Lumens	N • Narrow 14°	W30 • 3000K	
	M • Medium 24°	W40 • 4000K	
	W • Wide 44°		
	E • Elliptical 18°x35°		

Ordering Example : ULA - 60001 - 28w - N - W30 - 120/277v - Options

ULA	60001	Lamp	Beam	LED Color	Voltage	Options
		28w LED				
			VN Very Narrow	W27 2700K	120/277v	F Frosted Lens
			N Narrow	W30 3000K	Other (Specify)	
			M Medium	W40 4000K		
			W Wide			
			E Elliptical			

PROJECT:

DATE:

QUANTITY:

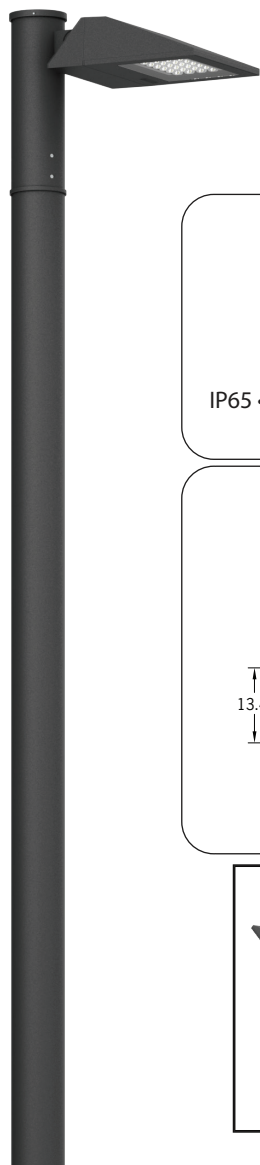
TYPE:

NOTE:

FIXTURE TYPE:
AG-04

UVK-90001

Vekter 5

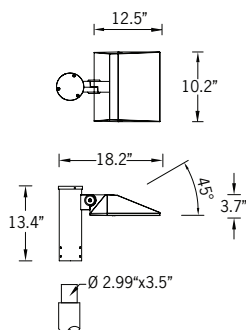


Physical Data

Length • 18.2"

Weight • 16.7 lbs

IP65 • Suitable For Wet Locations
IK08 • Impact Resistant



A slim wedge shaped pole mount area light with a variety of different distributions to suit all lighting designer's requirements. This luminaire has been designed to provide excellent light distribution patterns using a low wattage LED package. The result is excellent spacing to mounting height ratios, with a uniform lighting layout that meets code requirements using less energy. The Vekter can be utilized to suit specific light patterns using the asymmetrical type II, III, IV and symmetrical lens optics, as well as variations of these for precise light distribution requirements. An example of this is using a combination of Type II & Type IV distribution optics inside the same fixture. Type V distributions in medium, wide, very wide & extra wide are also available. These fixtures are adjustable, and can also be aimed as floodlights to provide focus lighting in specific areas, as well as facade lighting. This luminaire is suitable for most applications and complies to dark sky requirements when mounted in the horizontal position. Designed for lighting private roadways, car parks, exhibition areas, service stations and truck stops. Internal house side shields are available as an option. Available with a selection of integral electronic and dimmable electronic drivers as well as a provision to install wireless lighting controls to integrate with building management systems.

For 55w version 5000lm, see UVK-90002

Aluminum Housing**Less than 0.1% copper content – Marine Grade LM6 Aluminum**

provides excellent mechanical strength, clean detailed product lines and excellent heat dissipation.

Pre paint

8 step degrease and phosphate process that includes deoxidizing and etching as well as a zinc and nickel phosphate process before product painting.

Memory Retentive -Silicon Gasket.

Provided with special injection molded "fit for purpose" long life high temperature **memory retentive silicon gaskets** with integrated waterproof barriers. Maintains the gaskets exact profile and seal over years of use and compression.

Thermal management.

LM6 Aluminum is used for its **excellent mechanical strength and thermal dissipation properties** in low and high ambient temperatures. The superior thermal heat sink design by Ligman used in conjunction with the driver, controls thermals below critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10% lumen depreciation at 50,000 hours.

Surge Suppression

Standard 10kv surge suppressor provided with all fixtures.

Finishing.

All Ligman products go through an extensive finishing process that includes fettling to improve paint adherence.

Paint.

UV Stabilized 4.9Mil thick powder coat paint and baked at 200 Deg C.

This process ensures that Ligman products can withstand harsh environments. Bollard is powdercoated internally for additional protection.

Hardware.

Provided Hardware is **Marine grade 316 Stainless steel.**

Anti Seize Screw Holes

Tapped holes are infused with a **special anti seize compound** designed to prevent seizure of threaded connections, due to electrolysis from heat, corrosive atmospheres and moisture.

Crystal Clear Low Iron Glass Lens.

Provided with tempered, impact resistant **crystal clear low iron glass** ensuring no green glass tinge.

Optics & LED

Precise optic design provides **exceptional light control and precise distribution of light.** LED CRI > 80

Lumen - Maintenance Life

L80 /B10 at 50,000 hours (This means that at least 90% of the LED still achieve 80% of their original flux)

Standard Options

Lamp

40w LED
3836 Lumens
for M,W,VW & EW
Beams

[2x40w see UVK-90011]
[2x55w see UVK-90012]

Beam - Type V

M • Medium 32°

W • Wide 52°

VW • Very Wide 65°

EW • Extra Wide 108°

T2 • Type II Distribution - 3367lm

T3 • Type III Distribution - 3385lm

T4 • Type IV Distribution - 3440lm

LED Color

W27 • 2700K

W30 • 3000K

W40 • 4000K

Finish Color

01 - Black - RAL 9011
02 - Dark Grey - RAL 7043
03 - White - RAL 9003
04 - Metallic Silver - RAL 9006
05 - Matte Silver - RAL 9006
06 - Bronze - RAL 6014
07 - Custom RAL



Options (Consult Factory for Pricing)

OS • Occupancy Sensor

HSS • House Side Shield

F • Frosted Lens

Ordering Example : UVK - 90001 - 40w - T2 - W30 - 02 - 120/277v - Options

UVK	Lamp		Beam		LED Color		Color		Voltage		Options		
	90001	40w LED											
			M	Medium	W27	2700K	01	Black	120/277v		OS	Occupancy Sensor	
			W	Wide	W30	3000K	02	Dark Grey	Other (Specify)		HSS	House Side Shield	
			VW	Very Wide	W40	4000K	03	White			F	Frosted Lens	
			EW	Extra Wide			04	Metallic Silver					
			T2	Type II Distribution			05	Matte Silver					
			T3	Type III Distribution			06	Bronze					
			T4	Type IV Distribution			07	Custom RAL					

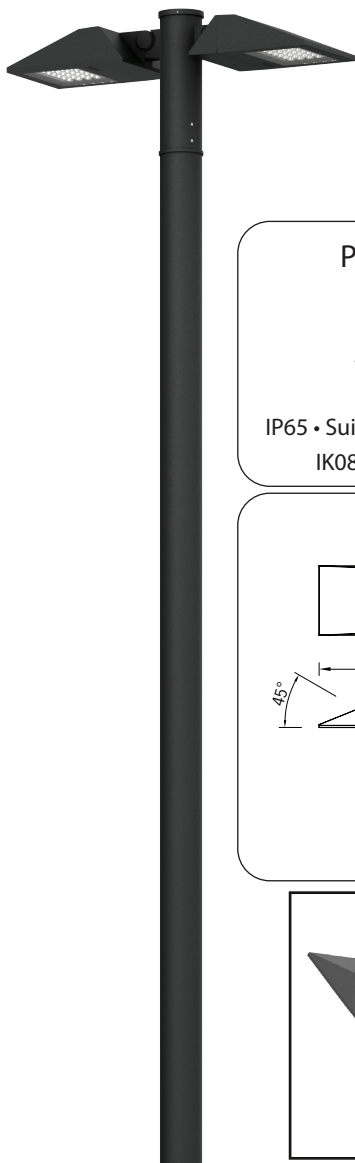
PROJECT: DATE: QUANTITY: TYPE: NOTE:
FIXTURE TYPE:
AP-01

UVK-90011

Vekter 6



LIGHTING USA

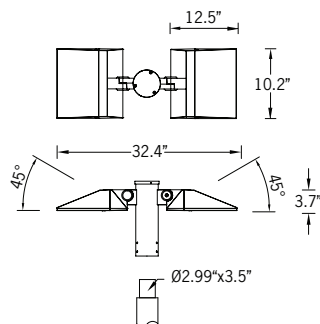


Physical Data

Length • 32.4"

Weight • 29 lbs

IP65 • Suitable For Wet Locations
IK08 • Impact Resistant



A slim wedge shaped pole mount area light with a variety of different distributions to suit all lighting designer's requirements. This luminaire has been designed to provide excellent light distribution patterns using a low wattage LED package. The result is excellent spacing to mounting height ratios, with a uniform lighting layout that meets code requirements using less energy. The Vekter can be utilized to suit specific light patterns using the asymmetrical type II, III, IV and symmetrical lens optics, as well as variations of these for precise light distribution requirements. An example of this is using a combination of Type II & Type IV distribution optics inside the same fixture. Type V distributions in medium, wide, very wide & extra wide are also available. These fixtures are adjustable, and can also be aimed as floodlights to provide focus lighting in specific areas, as well as facade lighting. This luminaire is suitable for most applications and complies to dark sky requirements when mounted in the horizontal position. Designed for lighting private roadways, car parks, exhibition areas, service stations and truck stops. Internal house side shields are available as an option. Available with a selection of integral electronic and dimmable electronic drivers as well as a provision to install wireless lighting controls to integrate with building management systems.

For 2x55w version 9972lm, see UVK-90012

Aluminum Housing

Less than 0.1% copper content – Marine Grade LM6 Aluminum provides excellent mechanical strength, clean detailed product lines and excellent heat dissipation.

Pre paint

8 step degrease and phosphate process that includes deoxidizing and etching as well as a zinc and nickel phosphate process before product painting.

Memory Retentive -Silicon Gasket.

Provided with special injection molded "fit for purpose" long life high temperature **memory retentive silicon gaskets** with integrated waterproof barriers. Maintains the gaskets exact profile and seal over years of use and compression.

Thermal management.

LM6 Aluminum is used for its **excellent mechanical strength and thermal dissipation properties** in low and high ambient temperatures. The superior thermal heat sink design by Ligman used in conjunction with the driver, controls thermals below critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10% lumen depreciation at 50,000 hours.

Surge Suppression

Standard 10kv surge suppressor provided with all fixtures.

Finishing.

All Ligman products go through an extensive finishing process that includes fettling to improve paint adherence.

Paint.

UV Stabilized 4.9Mil thick powder coat paint and baked at 200 Deg C. This process ensures that Ligman products can withstand harsh environments. Bollard is powdercoated internally for additional protection.

Hardware.

Provided Hardware is **Marine grade 316 Stainless steel.**

Anti Seize Screw Holes

Tapped holes are infused with a **special anti seize compound** designed to prevent seizure of threaded connections, due to electrolysis from heat, corrosive atmospheres and moisture.

Crystal Clear Low Iron Glass Lens.

Provided with tempered, impact resistant **crystal clear low iron glass** ensuring no green glass tinge.

Optics & LED

Precise optic design provides **exceptional light control and precise distribution of light.** LED CRI > 80

Lumen - Maintenance Life

L80 /B10 at 50,000 hours (This means that at least 90% of the LED still achieve 80% of their original flux)

Standard Options

Lamp

2x40w LED
2x3836 Lumens
for M,W,VW & EW
Beams

[40w see UVK-90001]
[55w see UVK-90002]

Beam - Type V

M • Medium 32°
W • Wide 52°
VW • Very Wide 65°
EW • Extra Wide 108°

T2 • Type II Distribution - 2x3367lm
T3 • Type III Distribution - 2x3385lm
T4 • Type IV Distribution - 2x3440lm

LED Color

W27 • 2700K
W30 • 3000K
W40 • 4000K

Finish Color

01 - Black - RAL 9011
02 - Dark Grey - RAL 7043
03 - White - RAL 9003
04 - Metallic Silver - RAL 9006
05 - Matte Silver - RAL 9006
06 - Bronze - RAL 6014
07 - Custom RAL



Options (Consult Factory for Pricing)

OS • Occupancy Sensor
HSS • House Side Shield
F • Frosted Lens

Ordering Example : UVK - 90011 - 2x40w - T2 - W30 - 02 - 120/277v - Options

	Lamp		Beam		LED Color		Color		Voltage		Options		
UVK	90011	2x40w LED											
			M	Medium	W27	2700K	01	Black		120/277v		OS	Occupancy Sensor
			W	Wide	W30	3000K	02	Dark Grey		Other (Specify)		HSS	House Side Shield
			VW	Very Wide	W40	4000K	03	White				F	Frosted Lens
			EW	Extra Wide			04	Metallic Silver					
			T2	Type II Distribution			05	Matte Silver					
			T3	Type III Distribution			06	Bronze					
			T4	Type IV Distribution			07	Custom RAL					

PROJECT:

DATE:

QUANTITY:

TYPE:

NOTE:

FIXTURE TYPE:
AP-02

Head Office:
7144 NW Progress Ct
Hillsboro, Oregon 97124
Tel: 503-645-0500
Fax: 503-645-8100

www.ligmanlightingusa.com



Physical Data

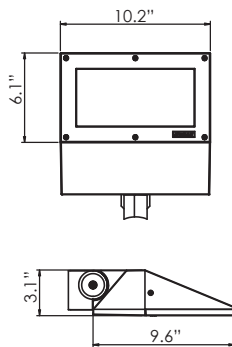
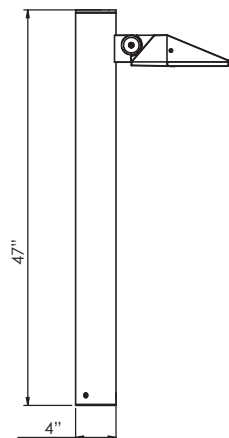
Length • 13.6"

Height • 47"

Weight • 16.5lbs

IP65 • Suitable For Wet Locations

IK08 • Impact Resistant (Vandal Resistant)



The Vekter bollard range is designed utilizing specially developed optics to provide exceptional spacing and uniformity. This fixture complements the Vekter wall and pole top luminaire. This lighe fixture is available in 20w and 27w configurations with a single or double head options with a selection of beam spreads that include Type II, III, IV and type V in medium, wide, very wide and extra wide distributions. This fixture range is unique in that designer's can be creative with the required light distribution and incorporate various optics within the same fixture. e.g using type II and type IV distribution optics within the same fixture. Developed for lighting driveways, pathways and squares.

Aluminum

Less than 0.1% copper content – Marine Grade 6060 extruded & LM6 Aluminum High Pressure die casting provides excellent mechanical strength , clean detailed product lines and excellent heat dissipation.

Pre paint

8 step degrease and phosphate process that includes deoxidizing and etching as well as a zinc and nickel phosphate process before product painting.

Memory Retentive -Silicon Gasket.

Provided with special injection molded "fit for purpose" long life high temperature **memory retentive silicon gaskets**. Maintains the gaskets exact profile and seal over years of use and compression.

Thermal management.

LM6 Aluminum is used for its **excellent mechanical strength and thermal dissipation properties** in low and high ambient temperatures. The superior thermal heat sink design by Ligman used in conjunction with the driver, controls thermals below critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10% lumen depreciation at 50,000 hours.

Surge Suppression

Standard 10kv surge suppressor provided with all fixtures.

Finishing.

All Ligman products go through an extensive finishing process that includes fettling to improve paint adherence.

Paint.

UV Stabilized 4.9Mil thick powder coat paint and baked at 200 Deg C. This process ensures that Ligman products can withstand harsh environments. Rated for use in natatoriums.

Hardware.

Provided Hardware is **Marine grade 316 Stainless steel**.

Anti Seize Screw Holes

Tapped holes are infused with a **special anti seize compound** designed to prevent seizure of threaded connections, due to electrolysis from heat, corrosive atmospheres and moisture.

Crystal Clear Low Iron Glass Lens.

Provided with tempered, impact resistant **crystal clear low iron glass** ensuring no green glass tinge.

Optics & LED

Precise optic design provides **exceptional light control and precise distribution of light**. LED CRI > 80

Lumen - Maintenance Life

L80 /B10 at 50,000 hours (This means that at least 90% of the LED still achieve 80% of their original flux)

Standard Options

Lamp

20w LED

1932 Lumens
for M,W,VW & EW
Beams

Beam - Type V

M • Medium 31°
W • Wide 53°
VW • Very Wide 66°
EW • Extra Wide 110°

T2 • Type II Distribution - 1704lm
T3 • Type III Distribution - 1712lm
T4 • Type IV Distribution - 1679lm

LED Color

W27 • 2700K
W30 • 3000K
W40 • 4000K

Finish Color

01 - Black - RAL 9011
02 - Dark Grey - RAL 7043
03 - White - RAL 9003
04 - Metallic Silver - RAL 9006
05 - Matte Silver - RAL 9006
06 - Bronze - RAL 6014
07 - Custom RAL



Options (Consult Factory for Pricing)

HGT • Custom Height

NAT • Natatorium &
High Salt Environments.

F • Frosted Lens

Ordering Example : UVK - 10001 - 20w LED - M - W30 - 02 - 120/277v - Options

UVK	Lamp	Beam	LED Color	Color	Voltage	Options
10001	20w LED					
		M Medium W Wide VW Very Wide EW Extra Wide	W27 2700K W30 3000K W40 4000K	01 Black 02 Dark Grey 03 White 04 Metallic Silver 05 Matte Silver 06 Bronze 07 Custom RAL	120/277v Other (Specify)	HGT Custom Height NAT Natatorium Rated F Frosted Lens
		T2 Type II Distribution T3 Type III Distribution T4 Type IV Distribution				

PROJECT:

DATE:

QUANTITY:

TYPE:

NOTE:

FIXTURE TYPE:
AP-03





DUO BOLLARD

FIXTURE TYPE:
AP-04

Duo Bollard

Duo Family Aluminum LED Bollard

FIXTURE TYPE: _____

PROJECT NAME: _____



Double aluminum extrusion uprights with wood or metal center accents and LED light source.

FEATURES:

- High power, low wattage COB LED light source
- Available with wood, aluminum, or custom material accent panels
- Concealed anchor bolt base and mounting hardware

SPECIFICATIONS:

CONSTRUCTION: Rectangular extruded aluminum 6063-T6 tubes connected to aluminum 6061-T6 base plate and internal supports with an aluminum 319 top casting.

Bollard is fastened to a concrete anchor bolt base with concealed hardware accessible behind accent panel. Anchor bolt kit includes (4) hot dip galvanized anchor bolts and fasteners and a ridged concrete pour template.

ELECTRICAL: Constant current electronic driver available in 120V or 277V input. Standard output is 12W. All drivers are Underwriters Laboratories recognized with 0-10V dimming standard. Fixture is internally prewired to the electrical splice box located in the fixture base.

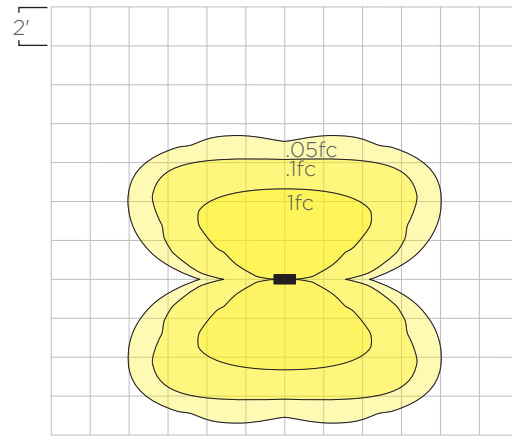
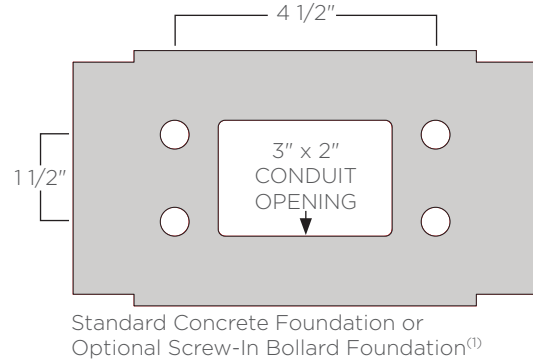
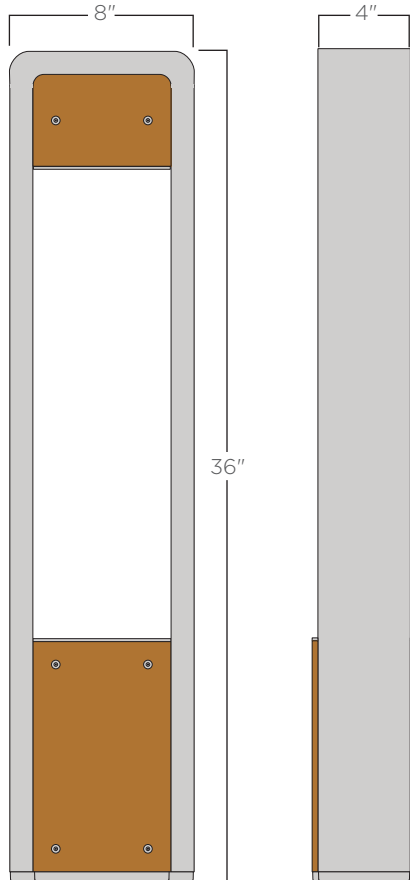
OPTICAL SYSTEM: Chip on board LEDs have solderless connections for field upgradability. Available in 2700K, 3000K, 3500K and 4000K color temperatures. Consult factory for additional lumen options.

FINISHES AND MATERIALS: Woods are finished with a low VOC waterborne matte exterior finish containing UV and mildew inhibitors. All aluminum parts are polyester powder coat painted.

HARDWARE: Fasteners are stainless steel. Anchor bolt kits are hot dip galvanized.



FIXTURE TYPE:
AP-04



ORDERING GUIDE: EXAMPLE: DBL-36-L27S0-C5-P1/S6-120-STD



DBL	36	SO					
1	2	3	4	5	6	7	8

1	Series	4	Light Source	7	Voltage
DBL	Duo Bollard	SO	680 Lumens	120	120V
2	Overall Height	5	Bollard Finish	277	277V
36	36"	C*	See color options on finishes technical sheet	8	Special
3	Color Temperature	CSM	Custom Color	STD	Standard
L27	2700K LED	6	Panel Material	MOD	Modified
L30	3000K LED	P1/S*	Wood (specify wood color) ⁽²⁾		
L35	3500K LED	P2/C*	Aluminum (specify paint color) ⁽²⁾		
L40	4000K LED	WS	Weathering Steel		

1. Spec sheet for Screw-In Bollard Foundation is available in the Accessories section.
2. See color options on finishes technical sheet.

Date: _____ Customer: _____

Project: _____

Type: _____ Qty: _____

selux

Olivio Medio LED



Order Code: **OLML** - _____ - _____ - _____ - _____ - _____ - _____ - _____

Pole Order Code: _____
 Series Height Finish Options

OLML	Series	OLML Olivio Medio LED				
	Optics	S09 Spot, 9°	F40 Medium, 41°	F80 Flood, 78°	ASM Asymmtric (no SLH or SLV option)	
	Mounting	U Universal	T1 Single Pole Top			
	Light Engine	L46 46W nominal	L23 23W nominal			
	CCT	30 3000K	40 4000K			
	Finish	WH White	BK Black	BZ Bronze	SV Silver	SP Specify Premium Color
	Voltage	120	208	240	277	
	Options	DS ¹ Dark Sky 0° Tilt Option	DM ² Dimming, 0-10V	SLH Spread Lens Horizontal (fixed)	SLV Spread Lens Vertical (fixed)	20kA 20kA Surge Supression
		¹ IDA certified "Dark Sky Friendly" for Universal Mounting Only				
		² Only available with L46				

¹ IDA certified "Dark Sky Friendly" for Universal Mounting Only

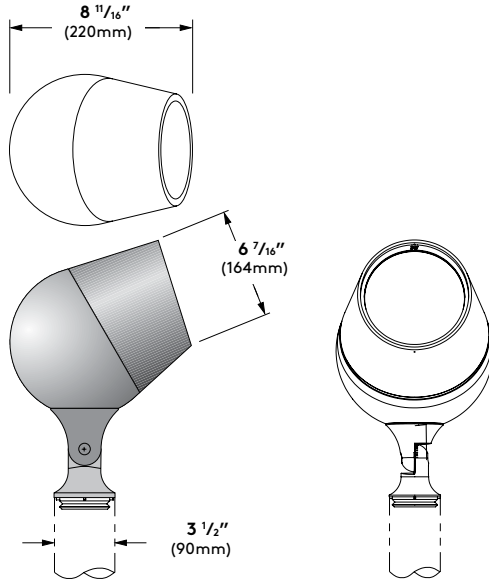
² Only available with L46

Product Modifications

Please list modification requirements for review by factory:

Approvals

OLML-T1



Specifications

1. Luminaire Housing - Two piece high pressure die cast housing, made of low copper aluminum alloy. Single recessed captive screw allows easy access to light engine & gear tray components.

2. Gasketing - (not shown) UV and ozone-resistant silicone gasket between fixture housing and lens base provide IP67 level ingress protection. IP rated micro-membrane ensures pressure compensation.

3. Lens - (not shown) Tempered clear glass lens.

4. LED Light Engine - (not shown) made from high flux COB and vacuum metalized aluminum reflectors. Selux is using brand name LED manufacturers. Available in 3000K and 4000K, CRI minimum 80. Reflectors made from high purity aluminum to ensure high efficiencies throughout lifetime. Complete light engine can be removed easily for future upgrade. LED light engine provides a reported lumen maintenance of 84.3% at 60,000 hours. L70 calculated greater than 60,000 hours.

6. LED Driver - (not shown) Selux uses brand name high efficiency LED drivers. LEDs are driven by RoHS compliant high-efficiency driver. Excellent for cold temperature starting and instant

on. Min. operating temperature -40°C/ -40°F.

7. Surge Protector - (not shown) Designed to protect luminaire from electrical surge up to 10kA. Surge protection up to 20kA optional.

8. Power Cord - (not shown) Pre-installed at factory and fed hidden through the luminaire hinge and hinge arm. Power cords are specified to fit the length of the pole specified with the luminaire.

Exterior Luminaire Finish -

Selux utilizes a high quality Polyester Powder Coating. All Selux luminaires and poles are finished in our Tiger Drylac certified facility and undergo a five stage intensive pretreatment process where product is thoroughly cleaned, phosphated and sealed. Selux powder coated products provide excellent salt and humidity resistance as well as ultra violet resistance for color retention. All products are tested in accordance with test specifications for coatings from ASTM and PCI.

Standard exterior colors are White (WH), Black (BK), Bronze (BZ), and Silver (SV). Selux premium colors (SP) are available, please specify from your Selux color selection guide. Hot Dip Galva-

nized finish (GV) on all steel parts also available.

5 Year Limited LED Luminaire Warranty -

Selux offers a 5 Year Limited Warranty to the original purchaser that the Olivio Medio LED Solar luminaire shall be free from defects in material and workmanship for up to five (5) years from date of shipment. This limited warranty covers the LED driver and LED array when installed and operated according to Selux instructions. Fixture suitable for ambient temperature of 40° C (104° F).

Listings and Ratings: Luminaire and LED tested to IP67 and IESNA LM-79-08 standards. LED tested to LM-80 standards. Luminaire and LED tested at 25°C ambient temperature.

OLIVIO LED suitable for ambient temperatures of 40°C (104°F). Minimum operating temperature of luminaire at -40°C (-40°F).

NRTL Listed for wet location (i.e. UL, CSA)

Visit selux.us for our LED End of Life recycling policy.

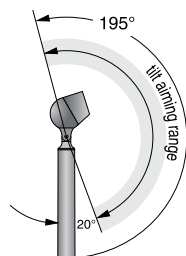
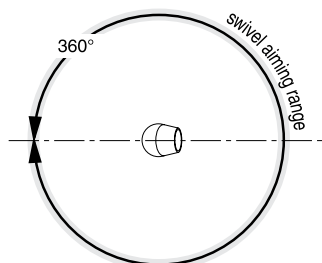
Lumen Output for OLML

Olivio Medio LED	S09	F40	F80	ASM
3000K CRI>80	3208 lm CBCP 46602.8 cd	3263 lm CBCP 5273.9 cd	3010 lm CBCP 2052 cd	2068 lm CBCP 1678 cd
4000K CRI>80	3252 lm CBCP 47253cd	3308 lm CBCP 5347.6cd	3052 lm CBCP 2080.7cd	2820 lm CBCP 1970cd

Mounting

Single Pole Top (T1)

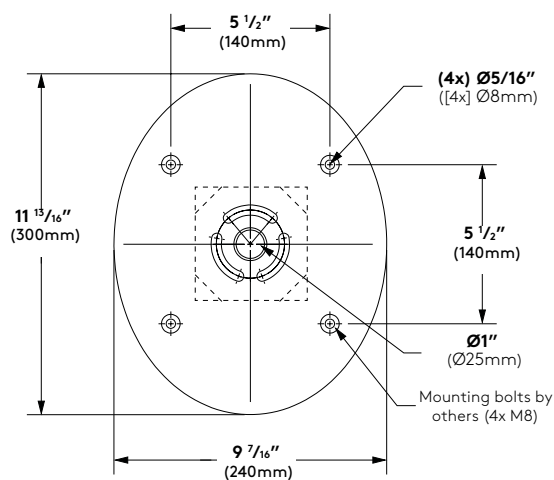
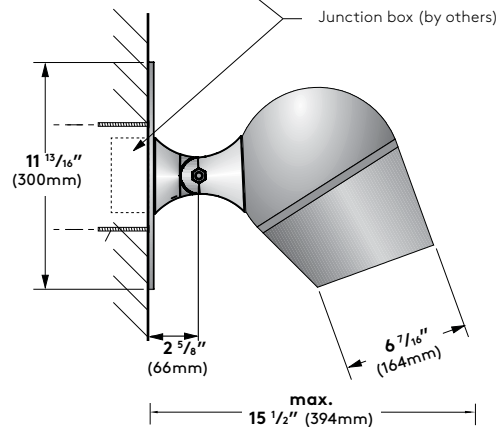
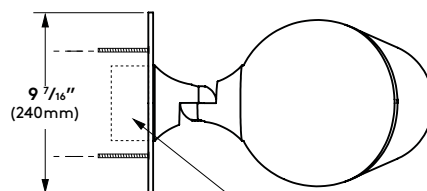
EPA = 0.7 ft² (0.065 m²)
Weight = 17 lbs. (7.7 kg)



8 11/16" (220mm)

Pole Height
(16' shown)

Universal Surface Mounting (U)



Note: Wall plate is mounted to surface structure and over junction box (by others)

UVK-30001

Austin-Vekter 1 Small



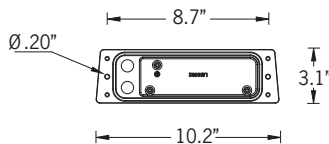
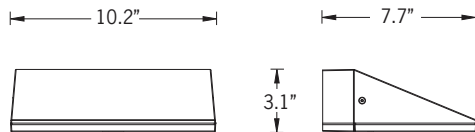
Physical Data

Length • 10.2"

Height • 3.1"

Weight • 7 lbs

IP65 • Suitable For Wet Locations
IK08 • Impact Resistant (Vandal Resistant)



Mounting Detail

A wedge shaped range of small profile wall mounted luminaires for use in uplight or downlight applications. This product is provided with a range of high powered LEDs with a selection of optics.

The Vekter is unique as it is available with Type II, III, IV & V light distribution options that facilitates wider spacing and even light distribution between the light fixtures. Wide spacings of up to 40' on center can be achieved using a type II optic with uniformity that complies to path of egress requirements. This provides higher energy saving and reduced installation costs. The Vekter can be manufactured using different type beam optics to achieve custom distribution, e.g using type II and type IV optics inside the same luminaire. Integral electronic control gear is housed in a special waterproof box that can be detached from the optical chamber for easy installation.

Mounting plate for 3" and 4" junction box is provided with the fixture. Matching surface mount conduit boxes are available as an option.

The Austin-Vekter is suitable for lighting footpaths, building facades, building entrances and parking areas around buildings. This fixture comes standard with a clear lens, optional frosted lens available as an adder in options below.

For the Austin-Vekter 27w, please see UVK-30002

Aluminum Casting

Less than 0.1% copper content – Marine Grade LM6 Aluminum High Pressure die casting provides excellent mechanical strength, clean detailed product lines and excellent heat dissipation.

Pre paint

8 step degrease and phosphate process that includes deoxidizing and etching as well as a zinc and nickel phosphate process before product painting.

Memory Retentive -Silicon Gasket.

Provided with special injection molded "fit for purpose" long life high temperature **memory retentive silicon gaskets**. Maintains the gaskets exact profile and seal over years of use and compression.

Thermal management.

LM6 Aluminum is used for its **excellent mechanical strength and thermal dissipation properties** in low and high ambient temperatures. The superior thermal heat sink design by Ligman used in conjunction with the driver, controls thermals below critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10% lumen depreciation at 50,000 hours.

Surge Suppression

Standard 10kv surge suppressor provided with all fixtures.

BUG Rating

B0-U0-G0

Finishing

All Ligman products go through an extensive finishing process that includes fettling to improve paint adherence.

Paint.

UV Stabilized 4.9Mil thick powder coat paint and baked at 200 Deg C.

This process ensures that Ligman products can withstand harsh environments.

Hardware.

Provided Hardware is **Marine grade 316 Stainless steel**.

Anti Seize Screw Holes

Tapped holes are infused with a **special anti seize compound** designed to prevent seizure of threaded connections, due to electrolysis from heat, corrosive atmospheres and moisture.

Crystal Clear Low Iron Glass Lens.

Provided with tempered, impact resistant **crystal clear low iron glass** ensuring no green glass tinge.

Optics & LED

Precise optic design provides **exceptional light control and precise distribution of light**. LED CRI > 80

Lumen - Maintenance Life

L80 /B10 at 50,000 hours (This means that at least 90% of the LED still achieve 80% of their original flux)

Standard Options

Lamp

20w LED 1932 Lumens
for M,W,VW & EW Beam

Beam

M • Medium 31°
W • Wide 53°
VW • Very Wide 66°
EW • Extra Wide 110°

T2 • Type II Distribution - 1704lm
T3 • Type III Distribution - 1712lm
T4 • Type IV Distribution - 1679lm

LED Color

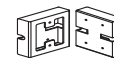
W27 • 2700K
W30 • 3000K
W40 • 4000K

Finish Color

01 - Black - RAL 9011
02 - Dark Grey - RAL 7043
03 - White - RAL 9003
04 - Metallic Silver - RAL 9006
05 - Matte Silver - RAL 9006
06 - Bronze - RAL 6014
07 - Custom RAL



Options (Consult Factory for Pricing)



SCE • Custom Surface
Conduit Entry Box

EMR • Remote Emergency Pack

F - Frosted Lens

NAT - Natatorium
& High Corrosion
Environments

Ordering Example : UVK - 30001 - 20w - T2 - W30 - 02 - 120/277v - Options

UVK	Lamp	Beam	LED Color	Color	Voltage	Options
30001	20w LED					
		M Medium	W27 2700K	01 Black	120/277v	SCE Surface Conduit Entry
		W Wide	W30 3000K	02 Dark Grey	Other (Specify)	EMR Remote Emergency Pack
		VW Very Wide	W40 4000K	03 White		F Frosted Lens
		EW Extra Wide		04 Metallic Silver		NAT Natatorium Rated
		T2 Type II Distribution		05 Matte Silver		
		T3 Type III Distribution		06 Bronze		
		T4 Type IV Distribution		07 Custom RAL		

PROJECT: DATE: QUANTITY: TYPE: NOTE:

Head Office:
7144 NW Progress Ct
Hillsboro, Oregon 97124

Tel: 503-645-0500
Fax: 503-645-8100

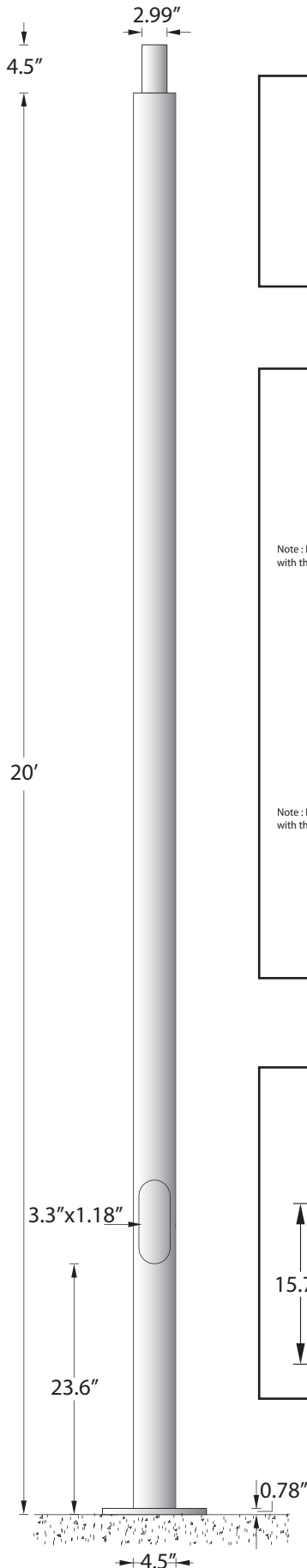
www.ligmanlightingusa.com

FIXTURE TYPE:
AW-01

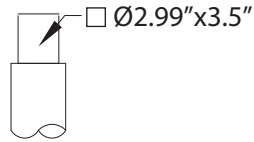
Rev 3/16

SPD-RSS-4512- 20' - 4.5" DIA - .125"

Straight Round Galvanized Steel Powder Coated Pole

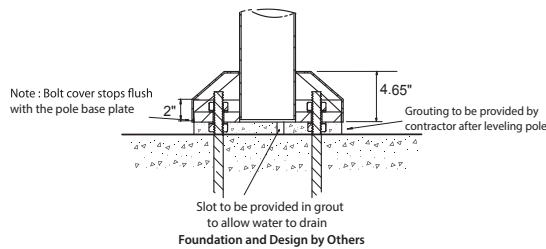


Tenon Post Top

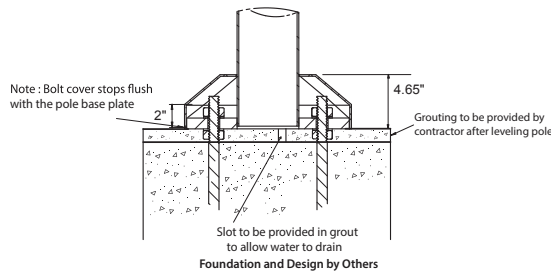


Pole Mount Install Notes

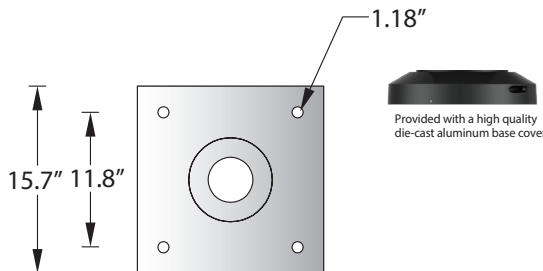
Option A



Option B



Mounting Base



Physical Data

Pole Height: 20'

Pole Diameter: 4.5"

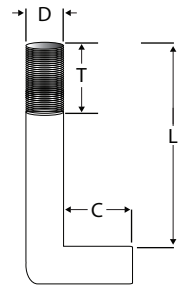
Thickness: 0.125"

Weight: 157.6 lbs

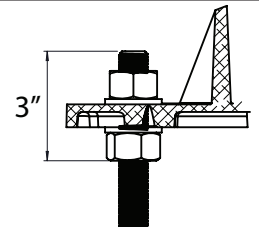
Anchor Bolt Size in Inches

D x L x C x T

$\frac{3}{4} \times 24 \times 4 \times 6$



Bolt Projection



Color (Please Specify)

☐ 01-Black - RAL 9011

☐ 03-White - RAL 9003

☐ 05-Matt Silver - RAL 9006

☐ 06-Bronze - RAL 6014

☐ 02- Dark Grey - RAL 7043

☐ 04 - Metallic Silver - RAL 9006

☐ 07- Custom - RAL _____



Maximum EPA

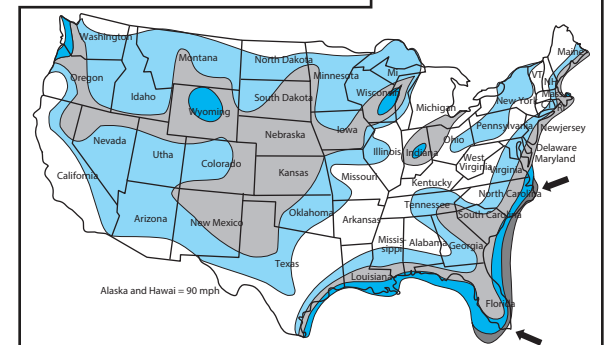
Wind Speed (mph)

Mph	70	80	90	100	110
EPA	11.3	8.2	6.1	4.6	3.5

Wind speed

- Below 70 mph
- 70-80 mph
- 80-90 mph
- 90-100 mph
- Over 100 mph
- Special high winds Over 100 mph

Wind Velocity Map



Not to scale template:

This drawing is being furnished for reference dimensions only and cannot be used as a template to set anchor bolts. Since it is "not to scale" Ligman accepts no responsibility for its intended use. Refer to site plans and specification before installing any anchor bolts.

*** Contact Ligman Lighting USA for bolt template prior to pouring anchor bolts.**



Rev: 11/13

PROJECT: _____ DATE: _____

TYPE: _____ QUANTITY: _____ NOTE: _____

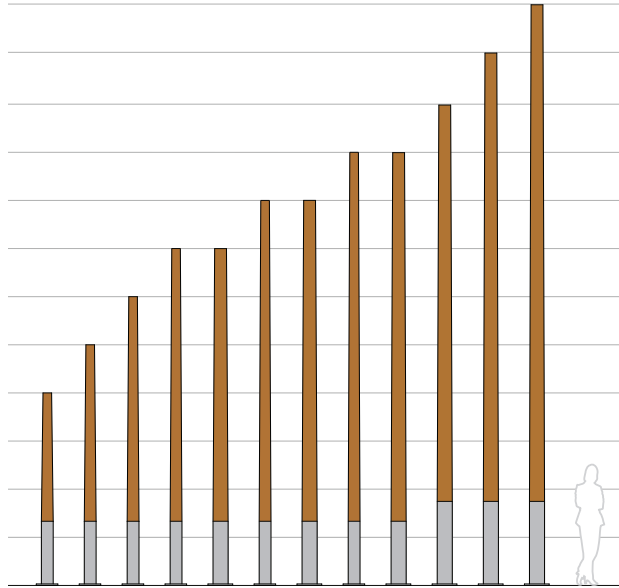
Ligman Lighting USA reserves the right to change specifications without prior notice, please contact factory for latest information.
Due to the continual improvements in LED technology data and components may change without notice.

FIXTURE TYPE:
P-01

Bol 8' – 24' Round Tapered and Straight Wood Poles

FIXTURE TYPE: _____

PROJECT NAME: _____



Round Taper

Glulam solid wood and aluminum pole available in 8' – 24' lengths. Tenon adapters, slip fitters and side bracket mounts are available for luminaire mounting.

FEATURES:

- Round extruded aluminum pole base with flush handhole cover held with countersunk stainless steel fasteners.
- Tapered, round, solid glulam wood pole

SPECIFICATIONS:

HOUSING: Solid wood pole is assembled through glulam construction and precision machined using CNC technology. An electrical raceway is provided in the pole's center for wiring. Laminations measure no more than 2" in thickness. Adhesive complies with ASTM D-2559 glulam construction specifications for extreme exposed weather conditions, is waterproof and rated for wet or dry use exposure.

Glulam wood shaft is fastened to aluminum pole base welded to a 3/4" thick aluminum anchor bolt base. Anchor bolt kit includes (4) 3/4" hot dip galvanized anchor bolts and fasteners and ridged concrete pour template.

FIXTURE MOUNTING: Fixtures mount either by 2 3/8", 2 7/8", 3 1/2", or 4" diameter by 4" tall tenon or drill mount for arm brackets. Consult factory for other tenon sizes. Luminaires shall be provided by others.



ELECTRICAL: A 5/16" – 18 grounding point is provided on the aluminum pole base. Wireway access is provided through a NEC compliant handhole with a flush, gasketed cover plate.

FINISHES AND MATERIALS: Woods are finished with a low VOC waterborne matte exterior finish containing UV and mildew inhibitors. All aluminum parts are polyester powder coat painted.

HARDWARE: Fasteners are stainless steel. Anchor bolt kits are hot dip galvanized.

FIXTURE TYPE:
P-02