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LIGHTING FIXTURE SCHEDULE
& CUT SHEET PACKAGE

THE LIGHTING DESIGN
ALLIANCE, INC.

LOS ANGELES
2830 TEMPLE AVENUE
LONG BEACH, CA 90806-2213

T: 562.989.3843
F: 562.989.3847

www.LightingDesignAlliance.com

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23 June 2023

REVISIONS:
1. 12 July 2024

STIPULATION SET
RETAIN FOR RECORDS
APPROVED

09/18/2025 
DATE APPROVED BY

38-DR-2022
7/16/2024

FIXTURE NOTES:

1. Fixtures shall include all accessories for installation as required by national or local electrical codes.
2. Electrical Engineer to determine all fixture voltages.
3. Electrical Engineer shall be responsible for emergency lighting, calculations and circuiting to meet code conformance as required by law.
4. Prior to the release of the lighting fixture order, the party responsible for fixture procurement (typically the Contractor) shall:
 - Verify all fixtures shall have appropriate UL, ETL or other recognized and accepted testing agency for dry, damp, or wet location installation as required by national or local electrical codes
 - Verify all integral or remote ballasts or drivers are recognized by UL, ETL or other recognized testing agency. Remote ballasts or drivers shall be listed as an "assembly" to operate with the luminaire
 - Verify fixture and ballast configuration conform with Title 24 or other local energy codes (e.g. tandem wiring, ballast factor, etc)
 - Work with the Contractor to verify items outlined in section 5 below.
5. Prior to the release of the lighting fixture order, contractor shall work with the lighting procurement agent to:
 - Verify fixture location and above-ceiling clearances for recessed fixtures. Contractor shall notify the Lighting Designer of any conflicts.
 - Verify final fixture voltages
 - Verify housing and trim compatibility with ceiling type (e.g. gyp. or suspended ceiling) and ceiling thickness
 - Verify field lengths of cove or perimeter lighting. These fixtures must not be dimensioned from lighting plans
 - Identify fire rated ceiling or floor assemblies and provide fire rated enclosures for fixtures to be installed in these conditions
 - Identify insulated ceiling areas and provide IC rated housing options for fixtures to be installed in these conditions. Contractor shall notify the Lighting Designer if an IC option is not available for the specified fixture(s).
6. Lamps or LED light engines shall be installed as outlined in the fixture schedule below.
7. Ceiling thicknesses in excess of 3/4" shall be identified in writing by the Architect or Contractor.
8. Walls directly illuminated (e.g. "wall grazing" or perimeter lighting systems) shall be a Level 5 finish, as defined in Gypsum Association GA 216-96.
9. The Architect and Lighting Designer shall approve fixture substitutions prior to bid, in accordance with section 26 00 00 specifications. If non-specified or non-approved alternates are installed, they shall be replaced at the Contractors sole expense (including backcharges by other trades such as drywall, painting, etc.), with no additional cost to the owner.
10. Contractor or Purchaser to supply all necessary parts, pieces and mounting brackets as necessary for a fully functioning and properly installed fixture. Refer to detail drawings for additional comments.
11. All remote power supplies:
 - To be mounted in an accessible, concealed, dry, well ventilated location, within manufacturer recommendations and distance
 - All fixtures on a control zone to have equal length wire to the power supply.
 - Contractor to provide fully code compliant LED system, Contractor to coordinate any necessary additional parts or enclosures (such as NEMA rated enclosures) for the power supply and fixtures to be code compliant.
12. Dimming types:
 - a. NON - Standard dimmer module configured to function as Non-Dim.
 - b. TRIAC - Forward phase dimming module, traditionally used for Incandescent, Halogen, or Mark 10 Fluorescent, 2-wire.
 - c. MLV - Forward phase dimming module for magnetic low voltage, 2-wire.
 - d. ELV - Reverse Phase dimming module, for electronic low voltage, 2-wire.
 - e. 0-10V - 0-10V dimming module with switched mains power (class 1) and low voltage intensity control (class 2), 4-wire.
 - f. Hi-LUMIE - Specialized dimming module for use with Lutron Hi-Lume dimming drivers, 3-wire, all class 1.
 - g. ECO - Specialized dimming module for Lutron Ecosystem dimming drivers with switched mains power (class 1) and proprietary digital control cables (class 2), 4-wire.
 - h. DALI - Digital dimming module with switched mains power (class 1) and digital control cables (class 2), 4-wire.
 - i. NON+DMX - Fixture requires normal non-dim switched mains power IN ADDITION TO serial data DMX signal from lighting control system. DMX interface will require additional control hardware and configuration. The services of a qualified lighting Systems Integrator is highly recommended.
 - j. DIM - Dimming requirements are not known; dimmer type TBD by lamp and / or driver/power supply selection.

Latest revisions HIGHLIGHTED

TYPE	DESCRIPTION	SHORT DESCRIPTION	MANUFACTURER & CATALOG #	LIGHT SOURCE	WATTS	VOLTS	LOAD TYPE	DIM TYPE	REMARKS
AL1	Stake-mounted landscape uplight with glare shield and: • Optics: 35° • Dimensions: 2.45"Ø x 8.65"L • Transformer: remote, dimming	Landscape Uplights	Hydrel LED • Luminaire: ASPEN-A-P1-90-27K-12-35-WSL-KM-C3-(FINISH) • Mount: PM60C • Transformer: TBD	Integral LED • CCT: 2700K • CRI: 90 • Lumens: 691	8	12	LED	MLV	• Conceal remote transformer in accessible, ventilated location. • Uplights may be subject to curfew dimming controls - circuit accordingly. • Contractor may specify alternative mounting accessories.
AL2	Tree ring with two uplights and one downlight and: • Optics: 35° • Dimensions: 2.45"Ø x 8.65"L • Transformer: remote, dimming	Tree Ring Lights	Hydrel LED • Luminaire: ASPEN-A-P2-90-27K-12-35-WSL-KM-C3-(FINISH) • Mount: TRAR 3FX 12S 78C BL • Transformer: TBD	Integral LED • CCT: 2700K • CRI: 90 • Lumens: 935	33	12	LED	MLV	• Conceal remote transformer in accessible, ventilated location. • Uplights may be subject to curfew dimming controls - circuit accordingly. • Contractor may specify alternative mounting accessories. • Ring to be mounted no less than 9' above grade. Confirm exact height.
BH1	Illuminated bollard with: • Optics: 108° • Dimensions: 5.6"L x 4"W x 39.3"H • Rating: IP65, IK08, B0-U0-G0 • Driver: Integral, dimming	Bollard	Ligman USA Prague 1 Small Bollard UPRA-10002-8W LED-EW-W27-(Finish)-120/177v	Integral LED • CCT: 2700K • CRI: 80 • Lumens: 1660	8	120/277	LED	0-10V	• Confirm exact location and orientation.
DW4	Decorative wall sconce, suitable for exterior, with: • Finish: satin black • Dimensions: 18"H x 4.5"W x 2.5" Proj. • ADA: yes • Rating: wet	Exterior Decorative Sconces - Facades	WAC Lighting WS-W29118-30K-BK	Integral LED • CCT: 3000K • CRI: 90 • Lumens: 789	16	120	LED	ELV	• Confirm finish and mounting height with Architect.



CATALOG NUMBER _____
 NOTES _____
 TYPE _____



ASPEN LED 12V/120V LED

Specifications

Weight:	1.6 lbs.
H:	5.85" (149mm) w/C1
	6.79" (172mm) w/C2
	8.65" (220mm) w/C3

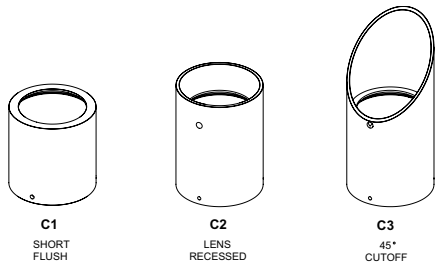
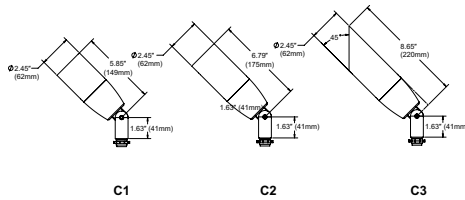
HIGHLIGHTS

- Accent lights are suitable for a variety of mounting applications including ground, wall, tree, sign and architectural accents
- Suitable for wet locations
- Integral driver for 120V
- Dimmable using standard Triac dimmer for 120V and dimmable using standard MLV dimmer and magnetic transformer for 12V
- Tapered-sure lock
- Available in 80CRI and 90CRI
- 1,100lm



Buy American

DIMENSIONS

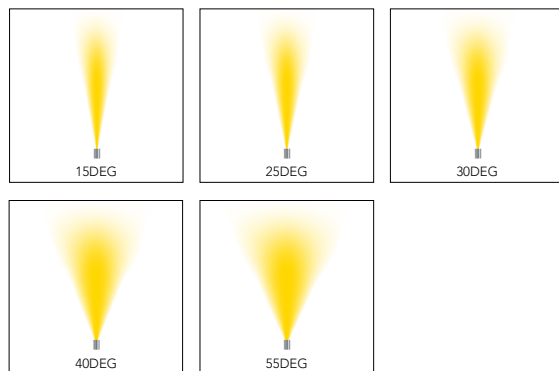


LUMEN PACKAGES

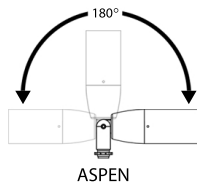
	15DEG	20DEG	25DEG	30DEG	35DEG	40DEG	45DEG	50DEG	55DEG
Delivered Lumens	685	623	659	642	674	656	634	639	641
Watts	11	11	11	11	11	11	11	11	11
LPW	62	57	60	58	61	60	58	58	58
Peak Candela	5,056	2,725	2,827	1830	1569	1212	982	742	664

Note: Information based on 4000K @ P1, 80CRI, 120 Volt with C1 cap and FLC lens

STANDARD DISTRIBUTION



AIMING DETAILS



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ASPEN_LED | Rev. 08/01/22
 Page 1 of 10



ORDERING INFORMATION

EXAMPLE: ASPEN SS P1 80CRI 30K 12 20DEG WSL KM C1 BL

ASPEN													
Series*	Material*	Performance Packages*	CRI*	Color Temperature*	Voltage*	Distribution*	Lens*	Mounting*					
ASPEN	A	Aluminum	P1	80CRI	27K	12 ¹ 12Vac	15DEG 15°	40DEG 40°	FLC	Flat Clear	KM	Knuckle	
	BR	Brass	P2	90CRI	30K	120 ² 120Vac	20DEG 20°	45DEG 45°	WSL	Watershed	35OR	350° rotational knuckle	
	SS	Stainless Steel	Note: P2 only available with 12volt			35K	Note: 120V only available with P1	25DEG 25°	50DEG 50°				
								30DEG 30°	55DEG 55°				
								35DEG 35°					
					50K	Note: 35k and 50K only available with 80CRI							

Mounting Accessories <i>Optional</i>			Options <i>Optional</i>			External Caps*		Finish*						
Independent Mounting			Stems			Internal Louver		C1 Short Flush		All Material				
JBA	Aluminum J-Box		S3 ³	3" Stem		IHL	Honeycomb Louver		C2	Recessed Lens				
JBB	Bronze J-Box Architectural		S6 ³	6" Stem		Internal Accessory		C3	45° Angle Cut		BL	Black Textured		
ARJB	J-Box, Aluminum		S_3	12" - 24" stems, available in 6" increments		L1	Prismatic Lens		BRS	Bronze Smooth		NAT	Natural Brass w/ Satin Clear	
CN4	4" rectangular canopy		S3BR ⁴	3" Stem Brass		L2	Linear Spread Lens		BRT	Bronze Textured		POL	Polished Brass w/ Gloss Clear	
CN4BR	4" rectangular canopy, brass			S6BR ⁴	6" Stem Brass		L3	Softening Lens		DBL	Black Smooth		Stainless Only	
CN5	5" round canopy		S_BR ⁴	12" - 24" stems, available in 6" increments		Internal Filters		DDB	Designer Bronze		BRSS	Brushed Stainless Steel		
CN5BR	5" round canopy, brass		EA_	12", 24" or 36"		FA	Amber		DNA	Natural Aluminum		NSS	Natural Stainless Steel	
WMC	Wall Mount Cover			EA45_	45", 12", 24" or 36"		FG	Green		NBS ⁷	Natural Bronze Smooth		PSS	Polished Stainless Steel
WMSA	Wall Mount with Splice Access		EA90_	90" - 12", 24" or 36"		FGD	Green Dichroic		STG	Steel Gray		Note: RALTBDD for pricing only, replace with applicable RAL call out when ready to order. See the RALBROCHURE for available options. It is recommended that Hydrel products only use textured paint.		
STK ⁸	Mounting Stake		Extended Arms⁵			FLB	Light Blue			VET	Verde Textured			
TRA ⁸	Tree Mounted J-Box, Aluminum					FM	Mercury Vapor		WH	White Textured				
TRB ⁸	Tree Mounted J-Box, Bronze					FMB	Medium Blue		WHS	White Smooth				
_TRAS ⁸	Tree Mounted J-Box with Aluminum mounting strap, available with 1-4 JBoxes per strap					FMBD	Medium Blue Dichroic		CF	Custom Finish				
_TRBS ⁸	Tree Mounted J-Box with Bronze mounting strap, available with 1-4 JBoxes per strap					FR	Red		RALTBDD	Ral Paint Finishes				
PM60A ⁸	Adjustable Post Mount					FRD	Red Dichroic		_Z ⁹	Zinc Undercoat (i.e. BLZ)				
PMBR60A ⁸	Adjustable Post Mount - Bronze													
PM60C	Post Mount with Conduit													
PMBR60C	Post Mount with Conduit - Bronze													
PM60D ⁸	Post Mount with Open Bottom													
PMBR60D ⁸	Post Mount with Open Bottom - Bronze													

*Required Fields

Notes:

- 1 Remote transformer required. Options for [remote transformers](#).
- 2 Integral Driver.
- 3 Aluminum stems only compatible with PM60A, PM60C and PM60D.
- 4 Brass stems only compatible with PMBR60A, PMBR60C and PMBR60D.
- 5 Extended arms compatible with WMC and WMSA.
- 6 Up to 2 options can be specified.
- 7 NBS paint uses specialty pigments to give a natural appearance that may vary by fixture.
- 8 Only available with 12 volt.
- 9 Zinc undercoat for harsh environments



PERFORMANCE DATA

LUMEN OUTPUT

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Contact factory for performance data on any configurations not shown here.

Performance Package	System Watts	Distribution Type	Field Angle		Beam Angle		27K (2700K, 80CRI)			30K (3000K, 80CRI)			35K (3500K, 80CRI)			40K (4000K, 80CRI)			50K (5000K, 80CRI)		
			°H	°V	°H	°V	Max CD	Lumens	LPW	Max CD	Lumens	LPW	Max CD	Lumens	LPW	Max CD	Lumens	LPW	Max CD	Lumens	LPW
P1 12 Volt	8	15DEG	33	33	19	19	5,180	702	88	5,374	728	91	5,471	741	93	5,665	768	96	5,858	794	99
		20DEG	45	45	22	22	2,792	639	80	2,897	663	83	2,949	675	84	3,053	699	87	3,158	722	90
		25DEG	44	44	24	24	2,897	675	84	3,005	700	88	3,060	713	89	3,168	738	92	3,276	764	96
		30DEG	56	56	30	30	1,875	658	82	1,945	682	85	1,980	694	87	2,050	719	90	2,120	744	93
		35DEG	57	56	37	36	1,608	691	86	1,668	717	90	1,698	729	91	1,758	755	94	1,818	781	98
		40DEG	65	64	41	40	1,242	672	84	1,288	697	87	1,311	710	89	1,358	735	92	1,404	760	95
		45DEG	74	73	45	44	1,006	650	81	1,044	674	84	1,063	686	86	1,100	711	89	1,138	735	92
		50DEG	86	85	53	51	760	654	82	788	679	85	802	691	86	831	716	90	859	740	93
		55DEG	93	93	56	54	681	657	82	706	682	85	719	694	87	744	719	90	770	743	93
		P2 12 Volt	12	15DEG	33	33	19	19	7,012	950	79	7,274	986	82	7,405	1,003	84	7,667	1,039	87	7,930
20DEG	45			45	22	22	3,780	865	72	3,921	897	75	3,992	913	76	4,133	945	79	4,274	978	82
25DEG	44			44	24	24	3,921	914	76	4,068	948	79	4,141	965	80	4,288	999	83	4,435	1,033	86
30DEG	56			56	30	30	2,538	890	74	2,632	923	77	2,680	940	78	2,775	973	81	2,870	1,006	84
35DEG	57			56	37	36	2,176	935	78	2,257	970	81	2,298	987	82	2,379	1,022	85	2,461	1,057	88
40DEG	65			64	41	40	1,681	909	76	1,744	943	79	1,775	960	80	1,838	994	83	1,901	1,028	86
45DEG	74			73	45	44	1,362	880	73	1,413	912	76	1,438	929	77	1,489	962	80	1,540	995	83
50DEG	86			85	53	51	1,029	886	74	1,067	919	77	1,086	935	78	1,125	968	81	1,163	1,002	84
55DEG	93			93	56	54	921	889	74	956	923	77	973	939	78	1,007	973	81	1,042	1,006	84

Performance Package	System Watts	Distribution Type	Field Angle		Beam Angle		27K (2700K, 80CRI)			30K (3000K, 80CRI)			35K (3500K, 80CRI)			40K (4000K, 80CRI)			50K (5000K, 80CRI)		
			°H	°V	°H	°V	Max CD	Lumens	LPW	Max CD	Lumens	LPW	Max CD	Lumens	LPW	Max CD	Lumens	LPW	Max CD	Lumens	LPW
P1 120 Volt	11	15DEG	33	33	19	19	4,568	619	56	4,710	638	58	4,755	644	59	5,056	685	62	5,078	688	63
		20DEG	45	45	22	22	2,463	563	51	2,539	581	53	2,563	586	53	2,725	623	57	2,737	626	57
		25DEG	44	44	24	24	2,555	595	54	2,634	614	56	2,659	620	56	2,827	659	60	2,840	662	60
		30DEG	56	56	30	30	1,653	580	53	1,704	598	54	1,721	603	55	1,830	642	58	1,838	645	59
		35DEG	57	56	37	36	1,418	609	55	1,461	628	57	1,475	634	58	1,569	674	61	1,576	677	62
		40DEG	65	64	41	40	1,095	592	54	1,129	611	56	1,140	617	56	1,212	656	60	1,217	659	60
		45DEG	74	73	45	44	887	573	52	915	591	54	924	596	54	982	634	58	986	637	58
		50DEG	86	85	53	51	670	577	52	691	595	54	697	601	55	742	639	58	745	641	58
		55DEG	93	93	56	54	600	580	53	619	597	54	625	603	55	664	641	58	667	644	59

CRI SCALING	Multiplier
90CRI	0.83
Note: Information based on ASPEN 12 volt	
CRI SCALING	Multiplier
90CRI	0.77
Note: Information based on ASPEN 120 volt	
EXTERNAL CAP	Multiplier
C2	0.70
C3	0.965

OPERATING TEMPERATURE: -20°C through 45°C (120v, Aluminum Material)
 -20°C through 50°C (12v, Aluminum Material)
 -20°C through 30°C (120v and 12v, Stainless Steel and Brass Material)

PHOTOMETRIC DIAGRAMS

To see complete photometric reports or download .ies files for this product, visit www.hydrrel.com



FEATURES & SPECIFICATIONS

MATERIAL: Body, caps and knuckle machined from 6061-T6 aluminum. BR - machined from 360 brass. SS- machined from 304 stainless steel.

LIGHT SOURCE: Proprietary high output LEDs. Units have near constant light output when supplied with 11VAC-14VAC to combat voltage drop. All within 3 MacAdam ellipses.

VOLTAGE: 12 Volt AC, 120 volt AC.

DISTRIBUTION: Available 15DEG, 20DEG, 25DEG, 30DEG, 35DEG, 40DEG, 45DEG, 50DEG, 55DEG

LENS: FLC - Cut from heat strengthened borosilicate glass for superior clarity and strength. WSL - Molded heat strengthened borosilicate glass for superior clarity and strength, where the glass and the top of the door are flush to allow water to shed off the fixture.

MOUNTING: Knuckle is 1/2" NPSM, mounts to 7/8" thru hole.

POWER SUPPLY: Remote 12VAC transformer, purchased separately. For 120VAC driver is integral. 12VAC dimmable using a remote magnetic transformer. 120V AC dimmable using a standard Triac dimming switch/systems.

FINISH: Super durable polyester TGIC powder coat finish (standard). Optional zinc undercoat for harsh environments.

FEATURES: Tapered "Sure Lock" knuckle seat for infinite aiming and an unparalleled locking ability. Any combination of up to 2 lens accessories/color filter/shielding can be specified in any cap style and are held securely by a removable stainless steel clip ring.

BUY AMERICAN: Hydrel products are assembled in the USA. Our products meet the Buy America(n) government procurement requirements under FAR, DFARS, and DOT. Please refer to www.acuitybrands.com/resources/buy-american

LISTING: cCSAus, Wet location. Laboratory tests conducted by CSA to UL Standards UL-1598, UL-8750 and UL-1838. IP66 Rated.

WARRANTY: 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Consult factory for details

NOTE: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

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 Page 4 of 10



REMOTE TRANSFORMERS



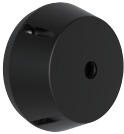

Transformers may be loaded to 100% capacity, however the recommended load range for optimal efficiency is 40-80%.
Non-Isolated Transformers: Suitable for use with landscape type lighting
Isolated Transformers: Suitable for use with underwater and landscape type lighting

		Part #
	<ul style="list-style-type: none"> • 10 and 20 watts, 120V to 12VAC or 277V to 12VAC magnetic • Must be mounted in a listed weatherproof enclosure • Dimmable by using a magnetic low voltage dimmer switch • Non-Isolated • Suitable for LED 	Examples: TM10 120 TM10 277 TM20 120 TM20 277 See spec sheet for more options
	<ul style="list-style-type: none"> • 100 watts, 120V to 12VAC magnetic • Rated for outdoor surface mount, minimum of 12" above finished grade with the wire connection terminals facing down • Resettable circuit breaker • Two 1/2" knock-outs in the side • Dimmable by using a magnetic low voltage dimmer switch • Non-Isolated • Suitable for LED 	Example: TM100 120 See spec sheet for more options
	<ul style="list-style-type: none"> • 300 watts, 120V to 12VAC magnetic • Rated for outdoor surface mount, minimum of 12" above finished grade with the wire connection terminals facing down • Multi-tap secondary output allowing 12-15 Volt • Internal on/off switch-circuit breaker • Five "knock-outs" in the bottom cover plate (two 1/2", two 3/4" and one 1-1/2") • Dimmable by using a magnetic low voltage dimmer switch • Non-Isolated • Suitable for LED 	Example: TM300 120 See spec sheet for more options
	<ul style="list-style-type: none"> • 15 watts, 120V to 12VAC electronic • Maximum remote distance is 10' • Non-Isolated Suitable for LED 	Example: TE15 120 See spec sheet for more options
	<ul style="list-style-type: none"> • 60 and 75 watts, 120V to 12VAC electronic • Maximum remote distance is 10' • Non-Isolated Suitable for LED 	Examples: TE60 120 TE75 120 See spec sheet for more options



REMOTE TRANSFORMERS

Transformers may be loaded to 100% capacity, however the recommended load range for optimal efficiency is 40-80%.
Non-Isolated Transformers: Suitable for use with landscape type lighting
Isolated Transformers: Suitable for use with underwater and landscape type lighting

		Part #
	<ul style="list-style-type: none"> • Stepdown transformers are two winding isolated type • Two separate wiring compartments isolate primary and secondary leads • Housed in weatherproof enclosure • Meets requirements of article 680 N.E.C. Listed by U.L. • 100 watt 120/12,13,14 ac (T1901) • 300 watt 120/12,13,14 ac (T1903) • 900 watt 120,12,13,14 ac (T1904) • 500 watt 120/12,13,14 ac (1905) • Dimmable by using magnetic low voltage dimmer switch • Isolated - can be used near underwater application • Suitable for LED 	<p>Examples: T1901 (100watts) T1903 (300watts) T1904 (900 watts) T1905 (500 watts) See spec sheet for more options</p>
	<ul style="list-style-type: none"> • Ground power post mount • 15 watts, 120V to 12V AC, electronic • Non-Isolated, suitable for LED • Non-Dimmable • Stem length available from 3" to 36" 	<p>Examples: PM60B ET15 120 S3 BL PMBR60B ET15 120 S6 POL See spec sheet for more options</p>
	<ul style="list-style-type: none"> • Wall mount power box • 15 watts, 120V to 12V AC, electronic • 20 watts, 120V to 12V AC, magnetic • ET15 - Electronic is non-dimmable • M20 - Magnetic is dimmable using low voltage magnetic dimmer switch • Non-isolated, suitable for LED 	<p>Examples: WP2J ET15 120 12C BL WP2S M50 120 34C BRS See spec sheet for more options</p>
	<ul style="list-style-type: none"> • 300 watt • A combination junction box and transformer box • Box includes a junction box, transformer housing, and anti-wicking chamber to prevent water being drawn from the conduit into the transformer housing • Completely pre-wired with interconnecting leads which are terminated and embedded in high temperature sealing compound to prevent wicking • M300 watt 120 or 277 volt can be used with LED 12VAC • M300 Dimmable using low voltage magnetic dimmer switch • Suitable for LED • Non-Isolated 	<p>Examples: BPTA or BPTB See spec sheet for more options</p>



ACCENT MOUNTING ACCESSORIES

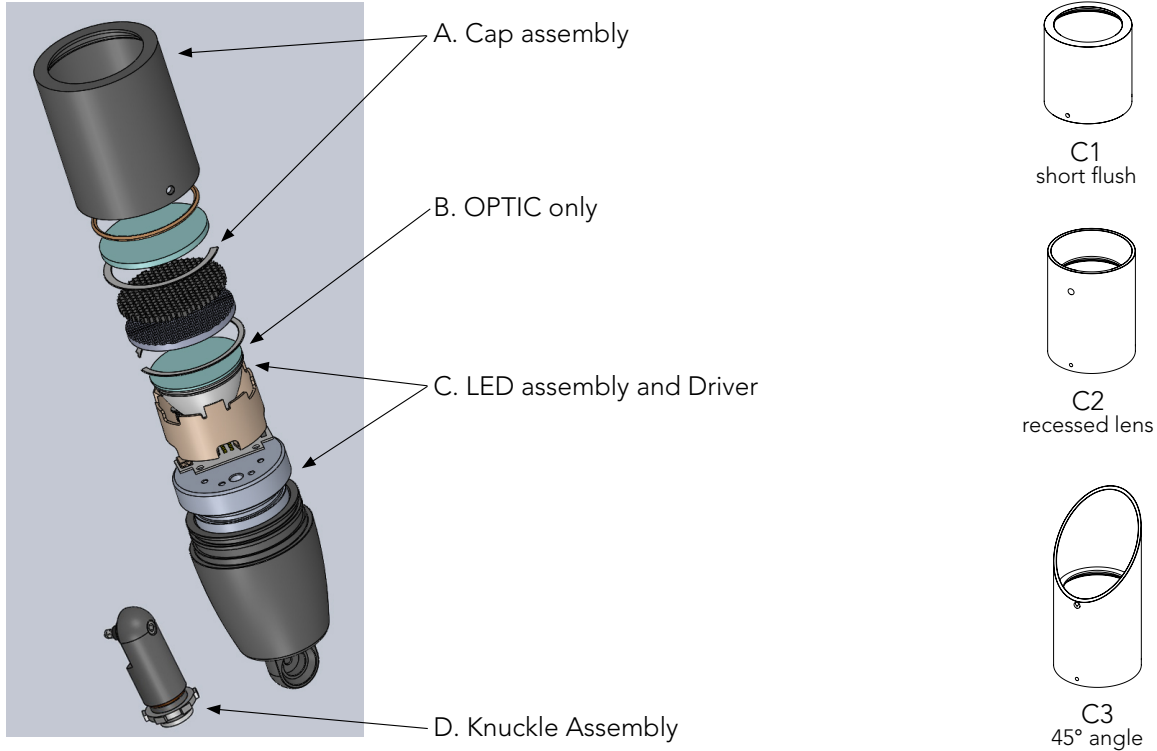
		Part #
	<ul style="list-style-type: none"> JBA/JBB Junction box for direct fixture mounting Available in cast bronze or aluminum Used where splicing is required for single or multiple fixtures Drilled and tapped to specified requirements May be Ground or wall mounted 	Examples: JBA 34E 34F 78G BL JBB 12A 12C 78G See spec sheet for more options
	<ul style="list-style-type: none"> ARJB Architectural Junction Box Available in cast aluminum For direct mounting of a single lighting fixture Designed for architectural and landscape application Recommended for mounting on a rigid metallic conduit 	Example: ARJB 12B 78C BL See spec sheet for more options
	<ul style="list-style-type: none"> CN4 wall plate canopy Available in aluminum or brass Shape rectangular to mount over a standard switch box Thru hole sized for standard 1/2 pipe thread Fixtures secured via locking nut (for thru hole) or threaded knuckle 	Example: CN4 78C BL See spec sheet for more options
	<ul style="list-style-type: none"> CN5 wall mount canopy Available in Aluminum, Brass or stainless steel Shape round to mount over a standard 4" round or octagonal box. Thru hole sized for standard 1/2 pipe thread Fixture secured via locking nut (for thru hole) or threaded knuckle 	Example: CNS 78C BL See spec sheet for more options
	<ul style="list-style-type: none"> WMC wall mount cover Available in cast aluminum Wall mount cover or mounting fixture over wall box (by others) 	Examples: WMC 78C BL See spec sheet for more options
	<ul style="list-style-type: none"> WMSA wall mount splice access Available in cast aluminum Wall mount with splice access plate for mounting a variety of fixtures Integral splice access compartment for easy fixture connections To be mounted over a recessed wall box 	Example: WMSA 78C BL See spec sheet for more options



ACCENT MOUNTING ACCESSORIES

		Part #
	<ul style="list-style-type: none"> • TRA/TRB tree mount junction box • Available in cast aluminum or bronze Includes a splice box with a mounting plate • Placement of small accent fixtures around or on a structure, like a tree 	Examples: TRA 12B 78C BL TRB 12B 78C See spec sheet for more options
	<ul style="list-style-type: none"> • TRAS/TRBS tree mount junction box with strap. • Available in cast aluminum or bronze • Includes one or more splice boxes with a polypropylene strap • Placement of small accent fixtures around the trunk or branch of a tree 	Examples: 2TRAS 12B 78C DDB 1TRBS 12B 78C See spec sheet for more options
	<ul style="list-style-type: none"> • STK ground mounting stake • Low voltage portable installations only • UV Stable plastic 	Example: STK See spec sheet for more options
	<ul style="list-style-type: none"> • Post Mounts PM60A, PM60C and PM60D Ground Mounting posts • Available in aluminum or brass • Suitable for fixtures with 1/2" knuckles • Fixtures are secured with a locking nut • PM60A and PM60D are used only with low volt fixtures • PM60C can be used with low or line voltage fixtures • Optional stems are offered in lengths from 3" to 36" 	Examples: PM60A S3 BL PMBR60C S12BR BRS PM60D BL See spec sheet for more options
	<ul style="list-style-type: none"> • EA-Extended Arms • Available in lengths 12", 24" and 36" • Available in angles 45° and 90° • Material available in aluminum • Extended arms are compatible with WMC and WMSA wall mounts 	Examples: WMC EA12 12C BL WMSA EA4512 12C BRS
	<ul style="list-style-type: none"> • Tree Ring TRAR 2FX, TRAR 3FX, TRAR 4XF, TRAR 5FX, TRAR 6FX • Stainless Steel Ring and Hardware • Can accommodate trees between 10" to 15" in diameter • Available in 2, 3, 4, 5 and 6 fixture configurations 	Examples: TRAR 5FX 12S 12C BL TRAR 3FX 12S 12C BRS Note: TRAR is sold separately. See spec sheets for options

ASPEN SPARE PARTS LIST






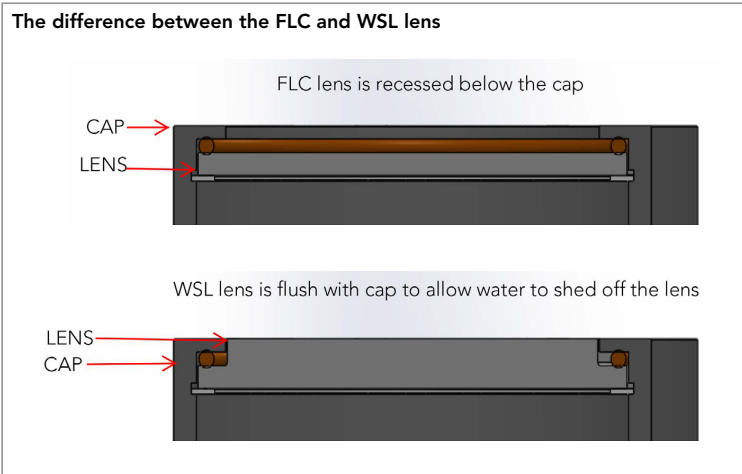
Part Number	Description
A. Cap Assembly CAPAASPEN C1 XX¹ XXX² XXX³ CAPAASPEN C2 XX¹ XXX² XXX³ CAPAASPEN C3 XX¹ XXX² XXX³ 1. Available material finishes: A, BR, SS 2. Available lens: FLC, WSL 3. Add paint finish	Cap Assembly will include the cap, lens and o-ring
B. OPTIC only OPTASPEN XX¹ 1. Available distributions: 15DEG, 20DEG, 25DEG, 30DEG, 35DEG, 40DEG, 45DEG, 50DEG, 55DEG	One piece snap on optic only
C. LED Assembly+ Driver module LEDAASPEN XX¹ XXX² XXX³ XXX⁴ XXX⁵ 1. Available Performance Packages: P1, P2 2. Available CRI: 80CRI, 90CRI 3. Available colors: 27K, 30K, 35K, 40K, 50K 4. Available voltage: 12, 120 5. Available distributions: 15DEG, 20DEG, 25DEG, 30DEG, 35DEG, 40DEG, 45DEG, 50DEG, 55DEG	Includes LED array, optics, encapsulated driver (120v)
D. KAASPEN XX¹ XXX² XXX³ 1. Available material finishes: A, BR, SS 2. Available knuckle: KM, 350R 3. Add paint finish	Knuckle Assembly



ASPEN INTERNAL ACCESSORIES

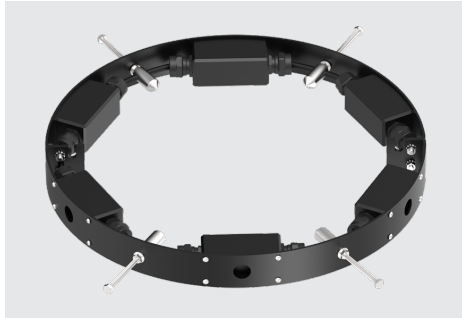
Internal Accessories can be ordered separate and are field replaceable

	<p>INTERNAL HONEYCOMB LOUVER</p> <ul style="list-style-type: none"> • Hexagonal cell louver with 45° cut-off • includes retaining ring 	<p>Example: IHLASPEN</p>
	<p>INTERNAL ACCESSORY LENSES</p> <ul style="list-style-type: none"> • L1 Prismatic Lens • L2 Linear Spread Lens • L3 Softening Lens • includes retaining ring 	<p>Examples: LAASPEN L1 LAASPEN L2 LAASPEN L3</p>
	<p>INTERNAL COLORED FILTERS</p> <ul style="list-style-type: none"> • FA Amber • FG Green • FGD Green Dichroic • FLB Light Blue • FM Mercury Vapor • FMB Medium Blue • FMBD Medium Blue Dichroic • FR Red • FRD Red Dichroic • includes retaining ring 	<p>Examples: CFASPEN FA CFASPEN FG CFASPEN FGD CFASPEN FLB CFASPEN FM CFASPEN FMB CFASPEN FMBD CFASPEN FR CFASPEN FRD</p>





CATALOG NUMBER _____
 NOTES _____
 TYPE _____



TRAR Tree Ring Architectural

HIGHLIGHTS

- Thoughtful and durable design, available in 2, 3, 4, 5 and 6 fixture configurations
- IP66 rated aluminum junction box
- Stainless Steel fasteners
- Designed for 10"-15" diameter trees. Please consult factory for custom diameters.
- For specified Hydrel landscape and accent fixtures
- Matching tree ring and jbox finish

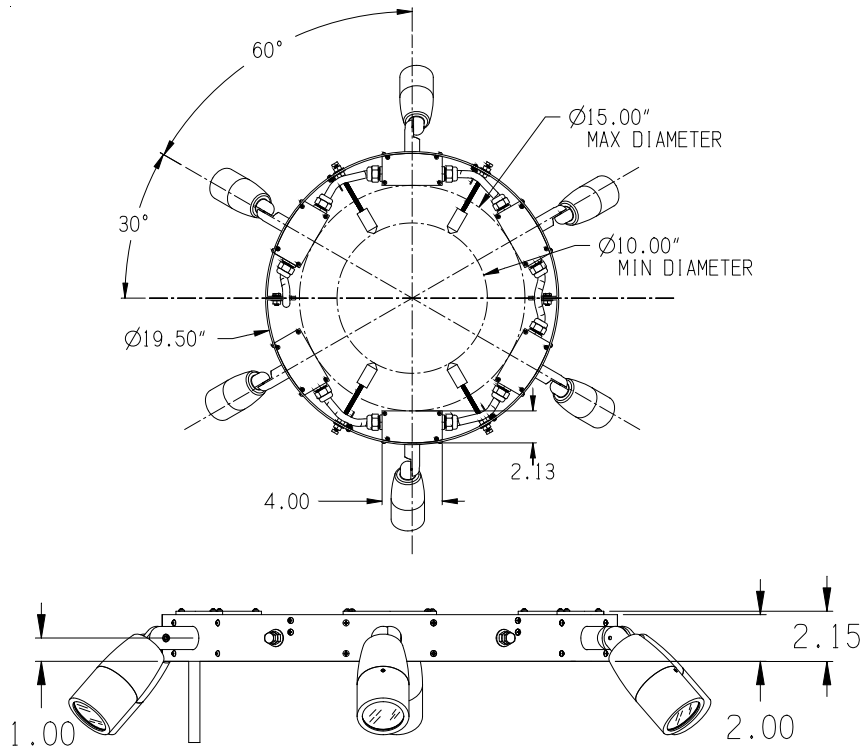
IP66



Specifications

Minimum Tree Diameter:	10" (254mm)
Maximum Tree Diameter:	15" (381mm)
Overall Diameter:	19 1/2" (495mm)
Weight:	22lbs. based on TRAR 6FX

DIMENSIONS



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 Phone: 800-705-SERV (7378) • www.hydrel.com

TRAR | Rev. 05/17/21
 Page 1 of 3



ORDERING INFORMATION

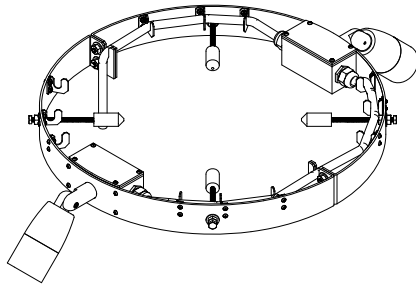
EXAMPLE: TRAR 2FX 12S 78C BL

Model	Number of Fixtures*	Conduit Entries*	Fixture Opening*	Finish*
TRAR	2FX 2fixtures	12S 1/2" side conduit entry	12C Accepts 1/2"NPT threaded knuckle	BL Black Textured
	3FX 3fixtures	12B 1/2" bottom conduit entry	78C Accepts 7/8" thru hole	BRS Bronze Smooth
	4FX 4fixtures	<i>Note: 12B required for 120volt fixtures</i>		BRT Bronze Textured
	5FX 5fixtures			DBL Black Smooth
	5FX 5fixtures			DDB Designer Bronze
	6FX 6fixtures			DNA Natural Aluminum
				NBS Natural Bronze Smooth
				STG Steel Gray
				VET Verde Textured
				WH White Textured
				WHS White
				RALTBD <i>Note: RALTBD for pricing only, replace with applicable RAL call out when ready to order. See the RALBROCHURE for available options. It is recommended that Hydrel products only use textured paint.</i>

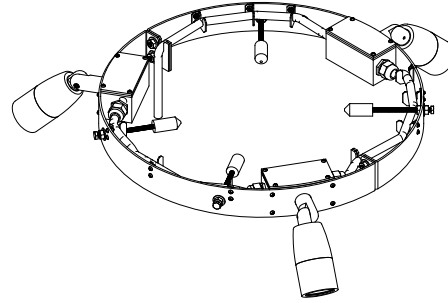
Note: If fixture is ordered with Brass material and has the following finishes BRZ, NAT, POL, select NBS finish for the TRAR
Note: If fixture is ordered with Stainless Steel material and has the following finishes BRSS, NSS, PSS, select STG finish for the TRAR.

FIXTURE MOUNTING INFORMATION

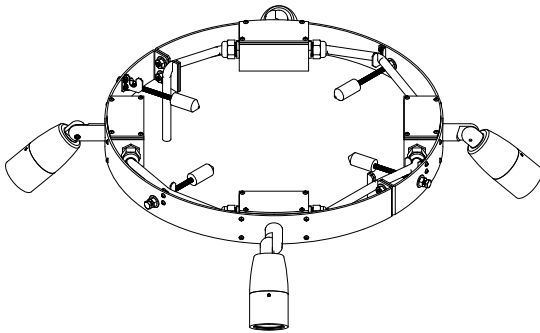
Conduit Entries	Fixture mounting	Fixture that uses this mounting
12S	12C	4610, 4620, 4630, 4640
12S	78C	Alder, Aspen, Cedar, Palm, Pine, Placer, Millerton



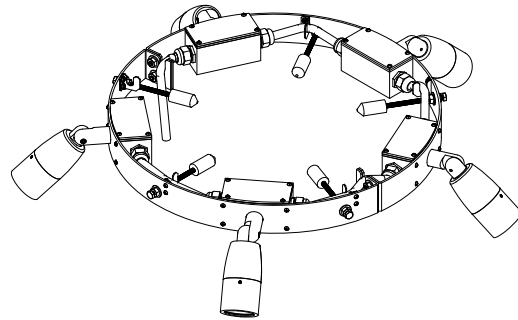
2FX tree ring



3FX tree ring



4FX tree ring



5FX tree ring

SPECIFICATIONS AND FEATURES

MATERIAL: Stainless steel outer ring and hardware. Aluminum junction boxes.

Fixture Mounting: One (1) opening at "C" location per junction box.

Conduit Entries: One (1) 1/2" NPT openings per TRAR.

Junction Box: Cast aluminum with daisy chained cord seals and cords.

Mounting Strap: Stainless steel ring secured to trunk with adjustable bolt rods to adjust to tree diameter.

Finish: See options and notes.

BUY AMERICAN: This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/resources/buy-american for additional information.

WARRANTY: 1-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

Consult factory for details.

NOTE: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

UPRA-10002

Prague 1 Small Bollard



8w LED
855 Lumens

IP65
Suitable for wet locations

IK08
Impact Resistant [Vandal Resistant]

Weight - 10.3 lbs



Construction

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.

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. Rated for use in natatoriums.

Inspired by Nature Finishes
The Inspired by nature Finishing is a unique system of decorative powder coating. Our metal decoration process can easily transform the appearance of metal or aluminum product into a wood grain finish.

This patented technology enables the simulation of wood grain, and even marble or granite finish through the use of decorative powder coating.

The wood grain finish is so realistic that it's almost undistinguishable from real wood, even from a close visual inspection. The system of coating permeates the entire thickness of the coat and as a result, the coating cannot be removed by normal rubbing, chipping, or scratching.

The Coating Process
After pre-treatment the prepared parts are powder coated with a specially formulated polyurethane powder. This powder provides protection against wear, abrasion, impact and corrosion and acts as the relief base color for the finalized metal decoration.

The component is then wrapped with a sheet of non-porous film with the selected decoration pattern printed on it using special high temperature inks.

This printed film transfer is vacuum-sealed to the surface for a complete thermo print and then transferred into a customized oven. The oven transforms the ink into different forms within the paint layer before it becomes solid. Finally, the film is removed, and a vivid timber look on aluminum remains.

Wood grain coating can create beautiful wood-looking products of any sort. There are over 300 combinations of designs currently in use. Wood grains can be made with different colors, designs, etc.

Our powder coatings are certified for indoor and outdoor applications and are backed by a comprehensive warranty. These coatings rise to the highest conceivable standard of performance excellence and design innovation.

- Added Benefits**
- Resistance to salt-acid room, accelerated aging
 - Boiling water, lime and condensed water resistant
 - Anti-Graffiti, Anti-Slip, Anti-Microbial, Anti-Scratch
 - Super durable (UV resistant)
 - TGIC free (non-toxic)

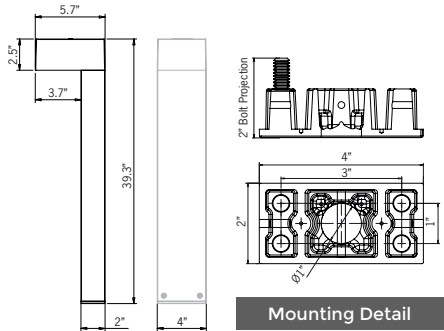
Hardware
Provided Hardware is Marine grade 316 Stainless steel.

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.

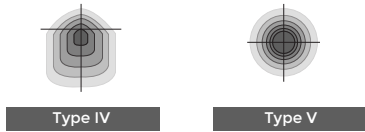
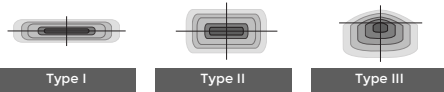
Crystal Clear Low Iron Glass Lens
Provided with tempered, impact resistant crystal clear low iron glass ensuring no green glass tinge.

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

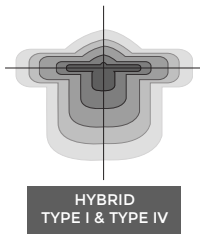
Lumen - Maintenance Life
L80 /B10 at 50,000 hours (This means that at least 90% of the LED still achieve 80% of their original flux)



Ligman's micro Variable Optical System provides the ability to interchange, mix & rotate optics to provide specific light distributions for optimized spacing and uniformity.



The variable optic system allows for the designer to create hybrid distributions for precise lighting requirements.



A new contemporary bollard design family, meeting Dark Sky requirements, utilizing MicroVos Technology to get maximum spacing and excellent uniformity.

Small, medium and large size LED bollards incorporate optional symmetrical and asymmetrical light distributions, in a variety of different heights. Clean architectural design with no visible hardware, at the top of the luminaire are the further characteristics of this bollard. Ideal for lighting pathways, entrances, square, and terraces.

Color temperature from 2700K, 3000K, 3500K and 4000K, LED CRI >80. Aluminum housing and extruded aluminium column with high corrosion resistance. Stainless steel fasteners in grade 316. Durable silicone rubber gasket and clear toughened glass. Powder coating with high corrosion resistance and chemical chromated protection.

To meet International Dark Sky criteria, 3000k or warmer LEDs must be selected.



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.

UPRA-10002

Prague 1 Small Bollard



PROJECT		DATE	
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QUANTITY		TYPE		NOTE	
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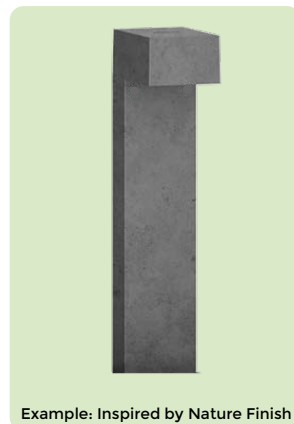
ORDERING EXAMPLE || UPRA - 10002 - 8w - T2 - W30 - 02 - 120/277v - Options

UPRA-10002					
LAMP	BEAM	LED COLOR	FINISH COLOR	VOLTAGE	
8w LED 855 Lumens	T1 - Type I Distribution T2 - Type II Distribution T3 - Type III Distribution T4 - Type IV Distribution M - Medium 32" W - Wide 52" VW - Very Wide 65" EW - Extra Wide 108" -T1- -T2- -T3- -T4- 	W27 - 2700K W30 - 3000K W35 - 3500K W40 - 4000K	01 - BLACK RAL 9011 02 - DARK GREY RAL 7043 03 - WHITE RAL 9003 04 - METALLIC SILVER RAL 9006 05 - MATTE SILVER RAL 9006 06 - LIGMAN BRONZE 07 - CUSTOM RAL INSPIRED BY NATURE FINISHES SW01 - OAK FINISH SW02 - WALNUT FINISH SW03- PINE FINISH DF - DOUGLAS FIR FINISH CW - CHERRY WOOD FINISH NW - NATIONAL WALNUT FINISH SU01 - CONCRETE FINISH SU02 - SOFTSCAPE FINISH SU03 - STONE FINISH SU04 - CORTEN FINISH	120/277v Other - Specify	

ADDITIONAL OPTIONS

- NAT - Natatorium Rated
- HGT - Custom Bollard Height
- AMB - Turtle Friendly Amber LED
- INR - Internal Nature Finish Reflector

Custom Finishes Available Upon Request
Consult factory for pricing and lead times



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Prague Product Family



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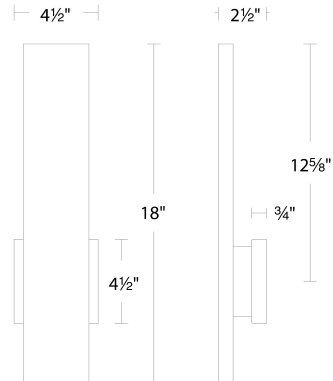
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UTA-20011

Tango 36 Single Head Post Top



38w LED
2777 Lumens

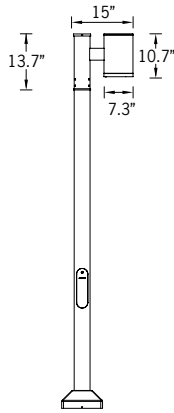
IP65
Suitable for wet locations

IK08
Impact Resistant [Vandal Resistant]

EPA - 0.60

Weight - 42.5 lbs

POLE NOT INCLUDED



Construction

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.

BUG Rating
B1 - U0 - G1

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)

Circular form technical post top range. Flexible post top lighting solutions for perfect symmetrical or asymmetrical task lighting.

Tango post top luminaire was developed to complement the Tango and Jet range of wall mount luminaires as well as the Jet square bollards, using energy saving LED modules. This cylindrical profiled luminaire mounted on a round aluminum pole, is available narrow, medium and wide beams and complies with IDA Dark Sky requirements. Designed for residential and shopping areas, squares and parks.

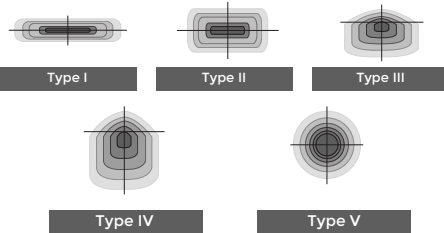
Color temperature 2700K, 3000K, 3500K and 4000K, LED CRI >80 and life time 50,000 Hours. High pressure die-cast marine grade LM6 aluminum body that is pre-treated with a nickel and zinc phosphate and then powder coated with a 4.9mil thick paint finish ensuring high corrosion resistance.

Marine grade 316 stainless steel fasteners. Durable memory retentive silicone rubber gasket and clear tempered glass lens. This luminaire is provided prewired with power cord to the handhole to simplify installation.

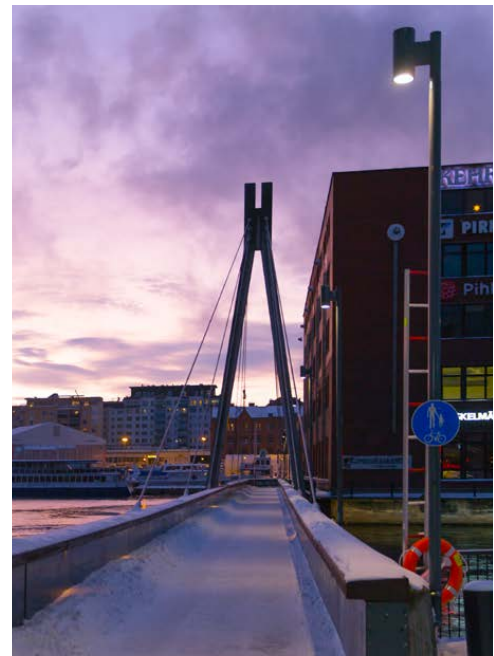
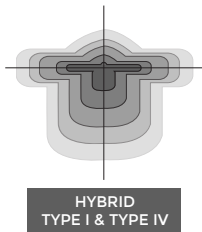
To meet International Dark Sky criteria, 3000k or warmer LEDs must be selected.



Ligman's micro Variable Optical System provides the ability to interchange, mix & rotate optics to provide specific light distributions for optimized spacing and uniformity.



The variable optic system allows for the designer to create hybrid distributions for precise lighting requirements.



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UTA-20011

Tango 36 Single Head Post Top



PROJECT	<input type="text"/>	DATE	<input type="text"/>
QUANTITY	<input type="text"/>	TYPE	<input type="text"/>
NOTE	<input type="text"/>		

ORDERING EXAMPLE || UTA - 20011 - 38w - T2 - W30 - 02 - 120/277v - Options

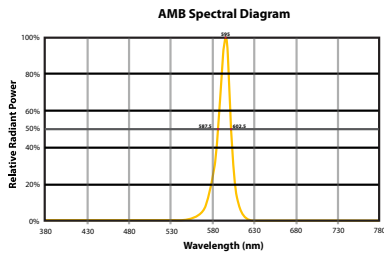
UTA-20011	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	LAMP	BEAM	LED COLOR	FINISH COLOR	VOLTAGE
	38w LED 2777 Lumens	T1 - Type I Distribution T2 - Type II Distribution T3 - Type III Distribution T4 - Type IV Distribution	W27 - 2700K W30 - 3000K W35 - 3500K W40 - 4000K	01 - BLACK RAL 9011 02 - DARK GREY RAL 7043 03 - WHITE RAL 9003 04 - METALLIC SILVER RAL 9006 05 - MATTE SILVER RAL 9006 06 - LIGMAN BRONZE 07 - CUSTOM RAL	120/277v Other - Specify

<input type="text"/>	<input type="text"/>	<input type="text"/>
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ADDITIONAL OPTIONS

- DIM - 0-10v Dimming
- NAT - Natatorium Rated
- AMB - Turtle Friendly Amber LED

CITY OF FLAGSTAFF & TURTLE FRIENDLY COMPLIANT



Narrow-Spectrum Amber LEDs

Peak wavelength between 585 & 595 nanometers and a full width of 50% power no greater than 15 nanometers.

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.



Tango Product Family



Tango 29

- UTA-31861-37w-2777lm - Down
- UTA-31861-29w-2566lm [ASYM] - Down
- UTA-31863-42w-3418lm [ASYM] - Down



Tango 30

- UTA-31871-37w-2777lm - Down
- UTA-31871-29w-2566lm [ASYM] - Down
- UTA-31873-42w-3418lm [ASYM] - Down



Tango 31

- UTA-31881-2x37w-2x2777lm - Up/Down
- UTA-31882-2x29w-2x3521lm [ASYM] - Up/Down
- UTA-31883-2x42w-2x3418lm [ASYM] - Up/Down



Tango 32

- UTA-31891-2x37w-2x3521lm - Up/Down
- UTA-31892-2x39w-2x2566lm [ASYM] - Up/Down
- UTA-31893-2x29w-2x2777lm [ASYM] - Up/Down



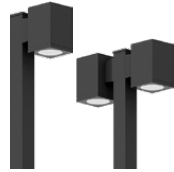
Tango 33

- UTA-80551-37w-2777lm
- UTA-80552-29w-2566lm [ASYM]
- UTA-80553-42w-3418lm [ASYM]



Tango 34

- UTA-80561-37w-2777lm
- UTA-80562-29w-2566lm [ASYM]
- UTA-80563-42w-3418lm [ASYM]



Tango 35

- UTA-20731-37w-2777lm
- UTA-20732-2x37w-2x2777lm



Tango 36

- UTA-20001-38w-4265lm
- UTA-20011-37w-2777lm

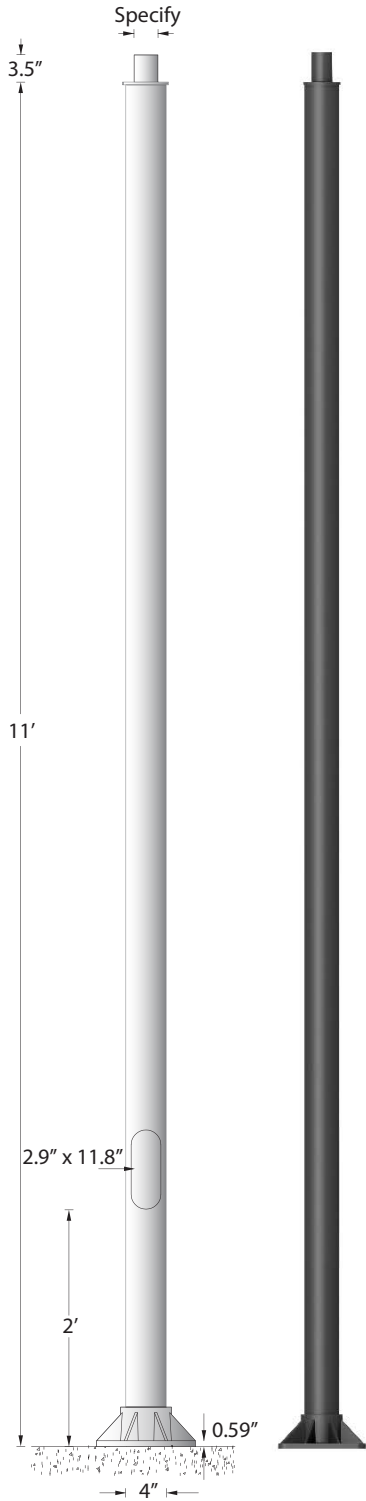


Tango 37

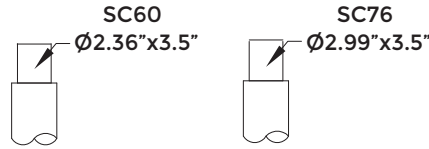
- UTA-20021-2x38w-2x4265lm
- UTA-20022-2x37w-2x2777lm

APD-RSA-4018-11'-4.0" DIA .188"

Round Straight Aluminum Pole



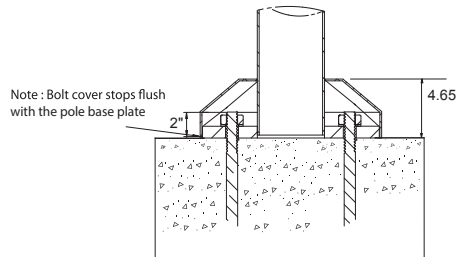
Tenon Post Top



Physical Data

Pole Height: 11'
 Pole Diameter: 4"
 Thickness: 0.188"
 Weight: 29.3 lbs

Pole Mount Install Notes

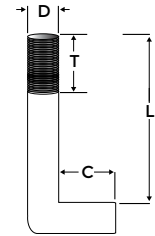


A level concrete base is poured and finished flush. This provides a uniform load displacement pad for the forces created by wind and luminaire weight

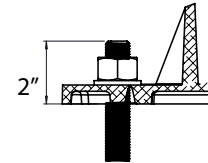
Failing to do this voids pole warranty
Foundation and Design by Others

Anchor Bolt

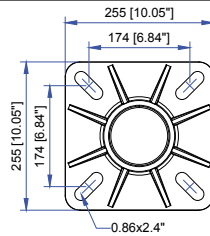
D x L x C x T
 3/4 x 18 x 4 x 6



Bolt Projection



Mounting Base



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.

Die-Cast Base Cover



Maximum EPA

MPH	90	100	110	120	130
EPA	7.8	6.0	5.5	4.3	3.4

Wind Load Map



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.

APD-RSA-4018-11'-4.0" DIA .188"

Round Straight Aluminum Pole



PROJECT		DATE	
---------	--	------	--

QUANTITY		TYPE		NOTE	
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ORDERING EXAMPLE || APD-RSA-4018-11'-4.0" DIA .188"-SC60-02-Options

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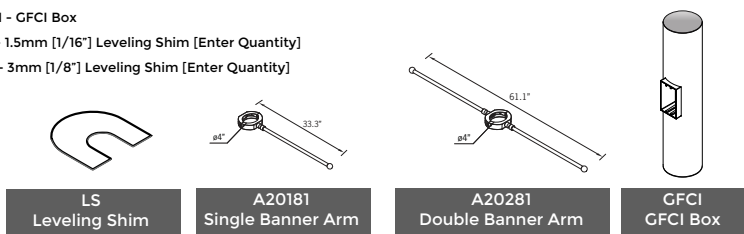
TENON	FINISH COLOR	ADDITIONAL OPTIONS - CONSULT FACTORY FOR PRICING
-------	--------------	--

- SC60 - 2.36" x 3.5" Tenon
SC76 - 2.99" x 3.5" Tenon
- 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

- A20181 - Single Banner Arm
- A20281 - Double Banner Arm
- GFCI - GFCI Box
- 1LS - 1.5mm [1/16"] Leveling Shim [Enter Quantity]
- 3LS - 3mm [1/8"] Leveling Shim [Enter Quantity]

- INSPIRED BY NATURE FINISHES**
- SW01 - OAK FINISH
 - SW02 - WALNUT FINISH
 - SW03 - PINE FINISH
 - DF - DOUGLAS FIR FINISH
 - CW - CHERRY WOOD FINISH
 - NW - NATIONAL WALNUT FINISH
 - SU01 - CONCRETE FINISH
 - SU02 - SOFTSCAPE FINISH
 - SU03 - STONE FINISH
 - SU04 - CORTEN FINISH

THERE IS AN ADDITIONAL COST FOR THESE FINISHES



Banner arms are designed with a safety break-away at the clamp with an internal safety wire that prevents the arm from falling to the ground. It is important to calculate the additional EPA loading on the pole based on the size and quantity of banners.

Adding banners will affect the EPA of the pole and should be taken into consideration before installing.

Incorrect pole loading of any type voids pole warranty.

Inspired by Nature Finishes
The Inspired by nature Finishing is a unique system of decorative powder coating. Our metal decoration process can easily transform the appearance of metal or aluminum product into a wood grain finish.

This patented technology enables the simulation of wood grain, and even marble or granite finish through the use of decorative powder coating.

The wood grain finish is so realistic that it's almost undistinguishable from real wood, even from a close visual inspection. The system of coating permeates the entire thickness of the coat and as a result, the coating cannot be removed by normal rubbing, chipping, or scratching.

The Coating Process
After pre-treatment the prepared parts are powder coated with a specially formulated polyurethane powder. This powder provides protection against wear, abrasion, impact and corrosion and acts as the relief base color for the finalized metal decoration.

The component is then wrapped with a sheet of non-porous film with the selected decoration pattern printed on it using special high temperature inks.

This printed film transfer is vacuum-sealed to the surface for a complete thermo print and then transferred into a customized oven. The oven transforms the ink into different forms within the paint layer before it becomes solid. Finally, the film is removed, and a vivid timber look on aluminum remains.

Wood grain coating can create beautiful wood-looking products of any sort. There are over 300 combinations of designs currently in use. Wood grains can be made with different colors, designs, etc.

Our powder coatings are certified for indoor and outdoor applications and are backed by a comprehensive warranty. These coatings rise to the highest conceivable standard of performance excellence and design innovation.

Added Benefits

- Resistance to salt-acid room, accelerated aging
- Boiling water, lime and condensed water resistant
- Anti-Graffiti, Anti-Slip, Anti-Microbial, Anti-Scratch
- Super durable (UV resistant)
- TGIC free (non-toxic)

More Custom Finishes Available Upon Request

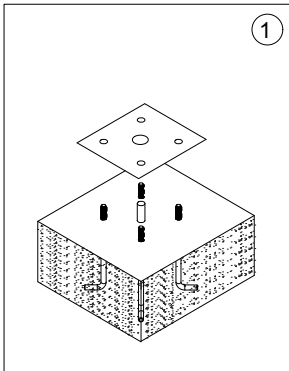
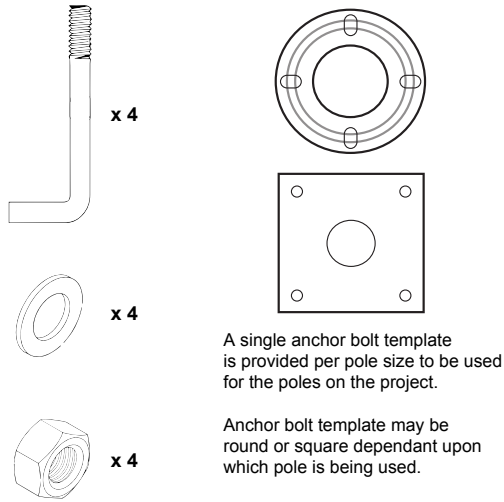
Consult factory for pricing and lead times



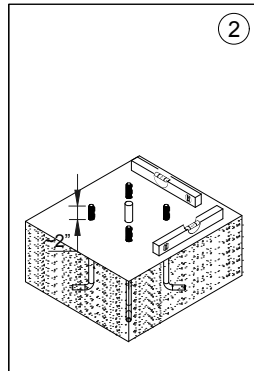
Example: Inspired by Nature Finish

Anchor Bolt Installation for Poles

What's Included Per Pole



Use anchor bolt template to set anchor bolts into concrete as per civil engineering instructions.

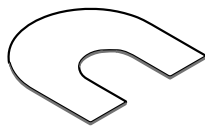


Ensure that the concrete is plumb using a level. Failing to do this will result in pole being uneven or tilted.

Ligman does not provide foundation details. A local engineer that is familiar with the site soil conditions should provide this information.

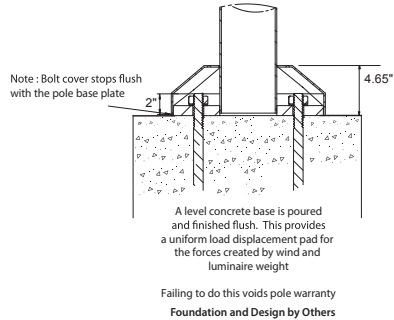
NOTE:
Ligman does not recommend using leveling bolts for pole installations.

Leveling shims can be provided, contact Ligman for more information.



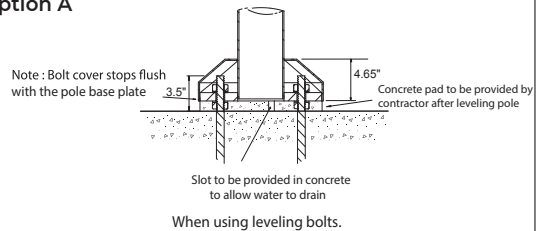
Leveling Shim Example

Preferred Pole Installation



In rare instances where leveling bolts have to be used, it is important that a flush concrete surface is created to mount the pole base plate.
NOTE: When using leveling bolts, bolt projection should be 3.5"

Using Leveling Bolts Option A

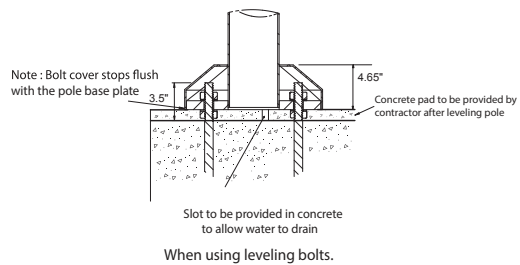


After establishing a level platform the space between the original concrete surface and the pole base should be filled with concrete and finished flush.

This provides a uniform load displacement pad for the forces created by wind and luminaire weight

Foundation and Design by Others

Using Leveling Bolts Option B



After establishing a level platform the space between the original concrete surface and the pole base should be filled with concrete and finished flush.

This provides a uniform load displacement pad for the forces created by wind and luminaire weight

INSTALLATION AND SERVICE MANUAL



For installation of TANGO 36,37 POST TOP .
Model. UTA-20001,UTA-20011,UTA-20021 AND UTA-20031

Product drawing (dimensions)

SUITABLE FOR WET LOCATIONS

1
2
3

Connect Power and Ground Wire.

UTA-20021-20031

UTA-20001-20011

Notice to installer :

1. **WIRING INSTRUCTIONS** Warning : RISK OF FIRE AND ELECTRICAL SHOCK. : FIXTURE MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN ONLY>FIXTURE IS INTENDED FOR INSTALLATION IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, LOCAL AND FEDERAL CODE SPECIFICATIONS. DISCONNECT POWER BEFORE SERVICING.
2. This fixture has a **VOLTAGE SPECIFIC BALLAST**, Check that the supply voltage is the same as the installed ballast voltage.

Ligman Lighting USA

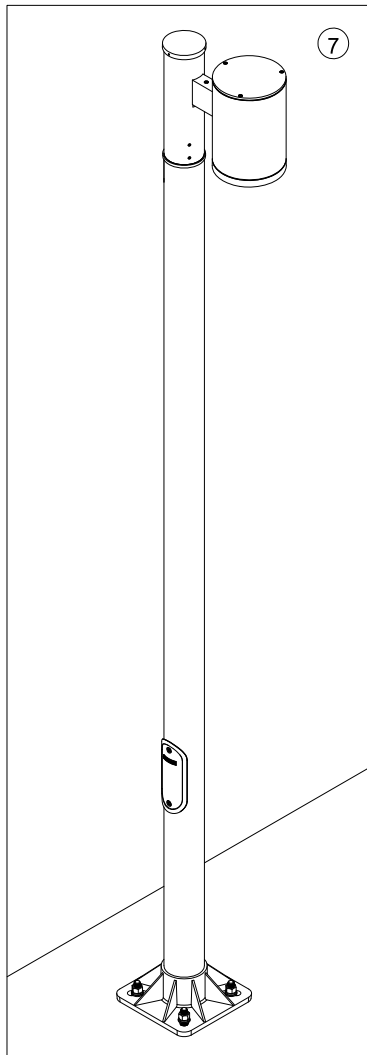
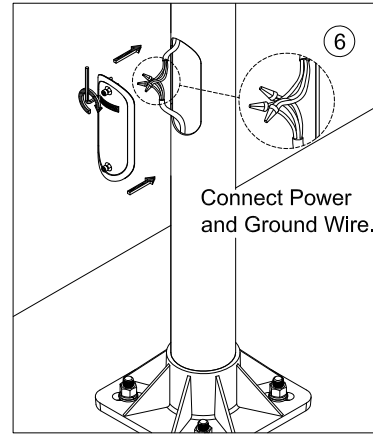
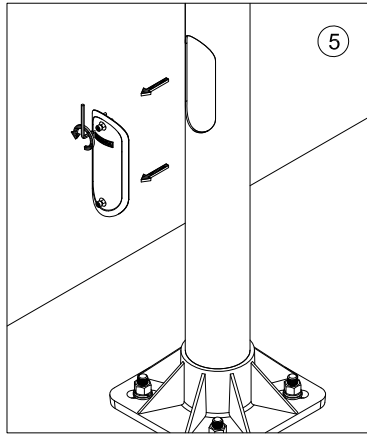
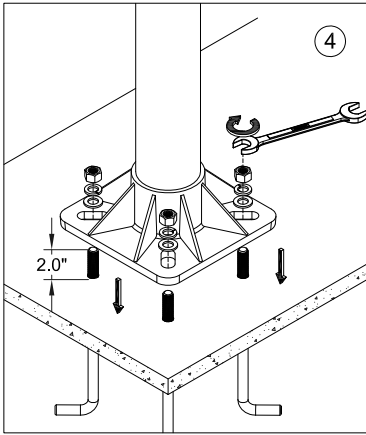
7144 NW Progress Court, Hillsboro
Oregon, 97124, USA
Tel : 503 645 0500 | Fax : 503 645 8100

www.ligmanlightingusa.com



UTA-20001 16/09/17/REV.0 KIE
1/2

FM-TS-13/25-05-2007-REV.2



UTA-20001 16/09/17/REV.0 KIE
2/2