





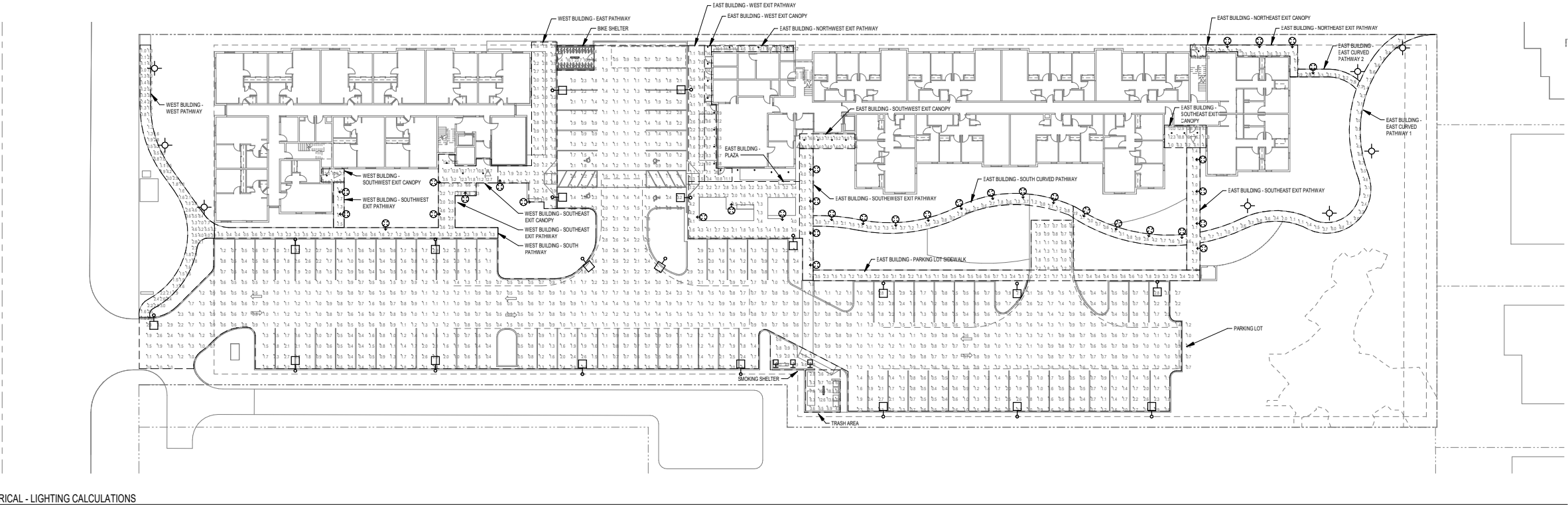


EXTERIOR LUMINAIRE SCHEDULE											
FIXTURE TYPE	PRODUCT DESCRIPTION	LOCATION	BASIS OF DESIGN MANUFACTURER/SERIES	SIZE	INPUT WATTS	LAMP SOURCE	CONTROL GEAR	INPUT VOLTAGE	FINISH	MOUNTING	NOTES
S1	PARKING LOT POLE FIXTURES	PARKING LOT	LIGMAN MAR 20' POLE	28"W X 17"L	38	LED 3000K CCT 80 CRI 4559 DELIVERED LM TYPE 3 DISTRIBUTION	0-10V	120 V	PER ARCHITECT	ON GRADE	
S2	PEDESTRIAL POLE	PATHWAYS	LIGMAN MAR 12' POLE	28"W X 17"L	38	LED 3000K CCT 80 CRI 4559 DELIVERED LM TYPE 3 DISTRIBUTION	0-10	120 V	PER ARCHITECT	ON GRADE	
S3	BOLLARD	PATHWAYS	LIGMAN JET	6.3"W X 10.6"LX39.3"H	14.3	LED 3000K CCT 85 CRI 1867 DELIVERED LM	0-10	120 V	PER ARCHITECT	ON GRADE	
S4	WALL PACK	EXTERIOR DOORS AND TRASH AREA	LIGMAN GINO 4 SERIES	8"W x 3.2"H x 4.3"D	8	LED, 3000K	INTEGRAL 0-10V DIMMING	MVOLT	STANDARD PER ARCHITECT	SURFACE WALL	
S5	SURFACE MOUNTED LINEAR	SMOKING AREA	HE WILLIAMS 96	7.38"W X 4.18"H X 4'L	30	LED 3000K CCT 85 CRI 4000 DELIVERED LM	0-10V	120 V	PER ARCHITECT	SURFACE	
L6	RECESSED DOWNLIGHT	EXTERIOR CANOPY	GOTHEM EVO	6"D	19.7W	LED 3000K, 90 CRI 2006 LUMENS	INTEGRAL	120V	PER ARCH	RECESSED	

LIGHTING CALCULATION SUMMARY		
in footcandles		
AREA	AVERAGE	MAX/MIN
WEST BUILDING - EAST PATHWAY	2.44	8.5
WEST BUILDING - SOUTH PATHWAY	1.78	8.75
WEST BUILDING - SOUTHEAST BUILDING EXIT CANOPY	10.96	3.91
WEST BUILDING - SOUTHEAST BUILDING EXIT PATHWAY	3.66	4
WEST BUILDING - SOUTHWEST BUILDING EXIT CANOPY	8.35	5.22
WEST BUILDING - SOUTHWEST BUILDING EXIT PATHWAY	2.74	3.15
WEST BUILDING - WEST PATHWAY	3.42	10.63
EAST BUILDING - EAST CURVED PATHWAY 1	3.9	10.5
EAST BUILDING - EAST CURVED PATHWAY 2	5.73	2.52
EAST BUILDING - NORTHEAST BUILDING EXIT CANOPY	10.65	1.12
EAST BUILDING - NORTHEAST BUILDING EXIT PATHWAY	1.19	10.33
EAST BUILDING - NORTHWEST BUILDING EXIT	9.09	3.46
EAST BUILDING - PARKINGLOT SIDEWALK	1.39	8.75
EAST BUILDING - PLAZA	2.71	8.54
EAST BUILDING - SOUTH CURVED PATHWAY	2.22	10.5
EAST BUILDING - SOUTHEAST BUILDING EXIT CANOPY	10.69	4.59
EAST BUILDING - SOUTHEAST BUILDING EXIT PATHWAY	1.77	5.17
EAST BUILDING - SOUTHWEST BUILDING EXIT CANOPY	14.07	1.66
EAST BUILDING - SOUTHWEST BUILDING EXIT PATHWAY	3.24	8.11
EAST BUILDING - WEST BUILDING EXIT CANOPY	13.57	2.89
EAST BUILDING - WEST BUILDING EXIT PATHWAY	3.84	9.18
BIKE SHELTER	11.35	4.23
SMOKING SHELTER	2.81	10
TRASH AREA	8.05	6.54
PARKING LOT	1.27	9

LIGHTING	
	S1 - POLE-MOUNTED
	S2 - POLE-MOUNTED
	S3 - BOLLARD
	S5 - LINEAR
	S4 - WALL MOUNTED
	L6 - CANOPY RECESSED



1 SITE PLAN - ELECTRICAL - LIGHTING CALCULATIONS
1" = 30'-0"

- GENERAL NOTES:**
- A. THE LIGHTING ILLUMINATION SHOWN ON THIS DRAWING IS LESS THAN THAT REQUIRED BY FCC 10-37-4. THE LIGHTING DESIGN FOR THIS PROJECT IS BASED ON THE ILLUMINATING ENGINEERING SOCIETY (IES) STANDARDS AND OUR EXPERIENCE DESIGNING SIMILAR PROJECTS FOR THE SAFETY AND SECURITY OF USERS. THE LIGHTING HAS ALSO BEEN DESIGNED TO BE SENSITIVE TO THE VISUAL COMFORT OF THE RESIDENTS AND NEIGHBORS.

Exhibit B11

SHORE PINES
HOUSING PROJECT

TAX LOT 500 PARCEL,
HIGHWAY 101 AT 40TH ST.
FLORENCE, OR 97439

NORTHWEST BUILDING
ALTERNATIVES, INC
2316 SE WILLARD ST.
MILWAUKIE, OR 97222
503.654.1007
www.nwhousing.org

ARCHITECT

DAO ARCHITECTURE LLC
310 SW 4TH AVENUE, SUITE 610
PORTLAND, OR 97204

503.388.3680
www.daoarchitecture.com

CONSULTANT


pae-engineers.com

STAMP

NO. DATE

KEY PLAN

ISSUANCE

LAND USE REVIEW UPDATE

PROJECT NUMBER

2005

DATE

08/12/21

SCALE

AS SHOWN

DRAWING TITLE

SITE PLAN - LIGHTING
CALCULATIONS

SHEET NUMBER

E1.0A

MAR

Fixture Type S1/S2



Circular column-mounted area downlight.
Quintessential wolf in sheep's clothing;
street lighting performance hidden inside
urban lighting form.

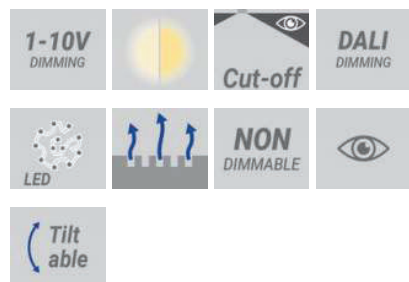
Luminaire structure

- Die-cast aluminium housing
- Pre-treated before powder coating ensuring high corrosion resistance
- Stainless steel fasteners in grade 316
- Durable silicone rubber gasket
- Clear toughened glass
- Surge protection 10kV

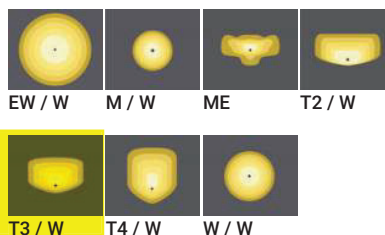


microVOS™
TECHNOLOGY

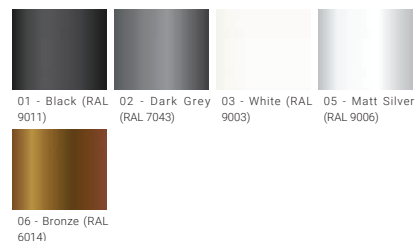
Feature



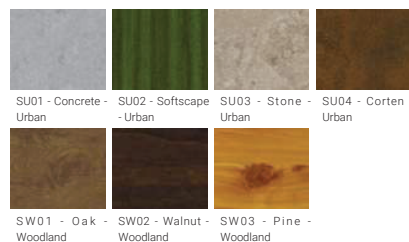
Light symbol



Product colour



Special finishes upon request



We reserve the right to make technical and design changes.

01:13, 17-05-2021

<https://www.ligman.com/mar-street-area-lighting-luminaires-ma-st3/>





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sales.cz@ligman.com

ASIA PACIFIC
LIGMAN Lighting Co.,Ltd.
17/2 Moo4 Monthong
Bangnampreaw
24150, Chachoengsao
Thailand
+66 2 108 6700
info@ligman.com

MAR

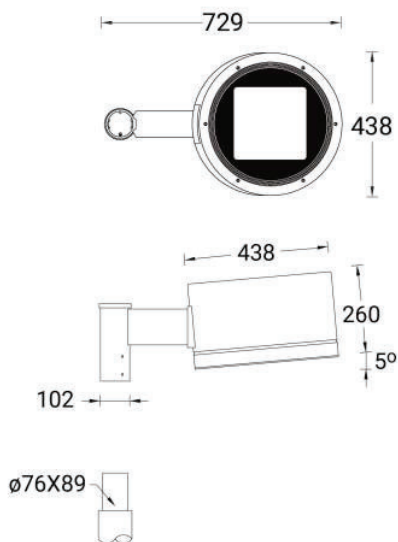
Fixture Type S1/S2

Technical information

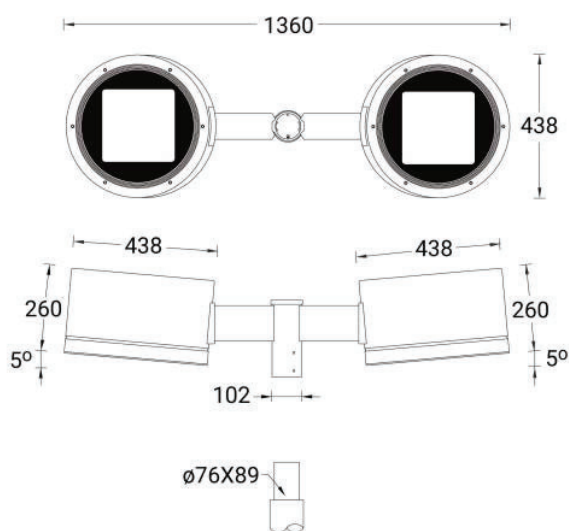
	Model number	Lamp	Power	Lumen	Optic	CCT / CRI	Dimming type	Weight	
1 side									
MAR 10	MA-97091	24 LED	38 W	4260 - 4917 lm	EW [108°, M [30°, ME [139°x58°], T2 [143°x47°], T3 [141°x70°], T4 [97°x77°], W [52°]	3000K CRI80, 4000K CRI80	DALI, 1-10V, On/Off	15.8 kg	
MAR 10	MA-97092	24 LED	54 W	5777 - 6666 lm	EW [108°, M [30°, ME [139°x58°], T2 [143°x47°], T3 [141°x71°], T4 [97°x77°], W [52°]	3000K CRI80, 4000K CRI80	DALI, 1-10V, On/Off	15.8 kg	
2 sides									
MAR 11	MA-97101	24 LED	76 W	8520 - 9834 lm	EW [108°, M [30°, T2 [143°x47°], T3 [141°x71°], T4 [97°x77°], W [52°]	3000K CRI80, 4000K CRI80	DALI, 1-10V, On/Off	30.8 kg	
MAR 11	MA-97102	24 LED	108 W	11554 - 13332 lm	EW [108°, M [30°, T2 [143°x47°], T3 [141°x71°], T4 [97°x77°], W [52°]	3000K CRI80, 4000K CRI80	DALI, 1-10V, On/Off	30.8 kg	

MAR

MAR 10



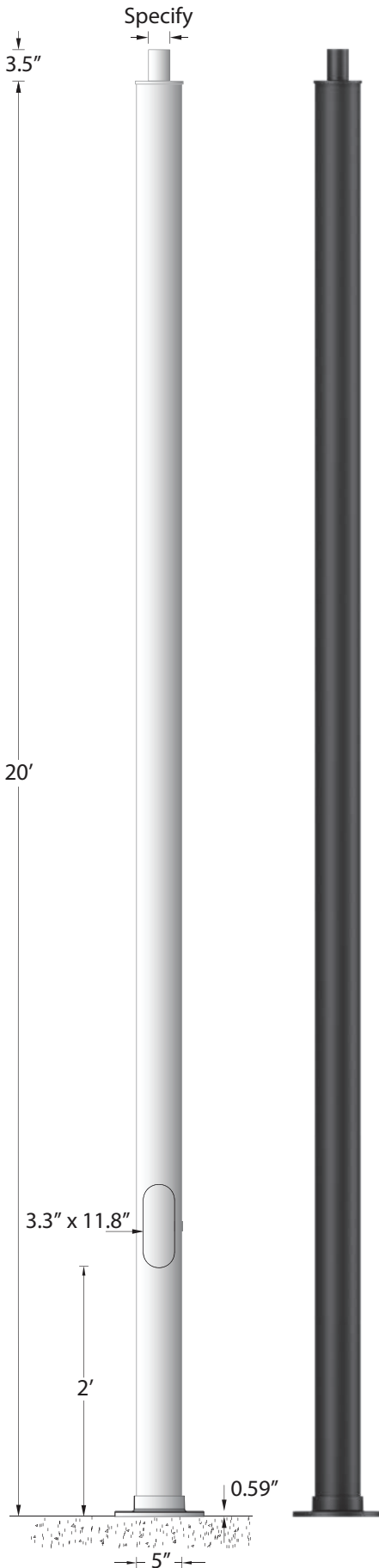
MAR 11



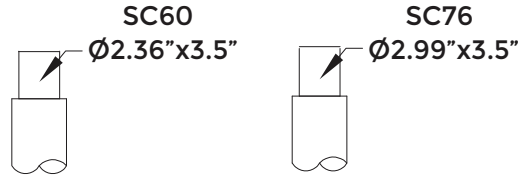
APD-RSA-5018-20'-5" DIA - .188"

Round Straight Aluminum Pole

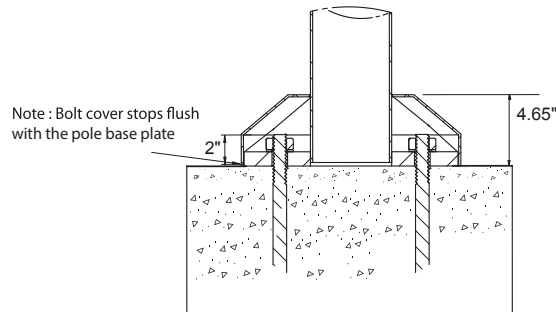
LIGMAN
S1 POLE



Tenon Post Top



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

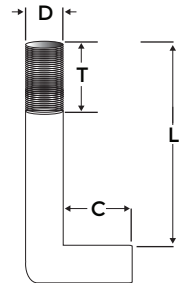
Failing to do this voids pole warranty
Foundation and Design by Others

Physical Data

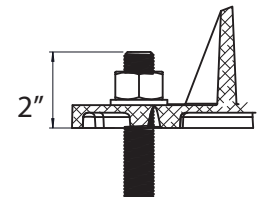
Pole Height: 20'
Pole Diameter: 5"
Thickness: 0.188"
Weight: 73 lbs

Anchor Bolt

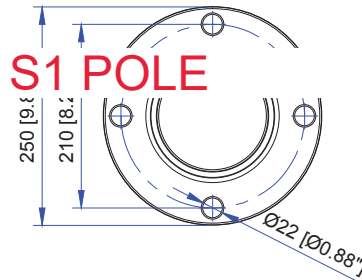
D x L x C x T
3/4 x 24 x 4 x 6



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.

Wind Load Map



Die-Cast Base Cover



Maximum EPA

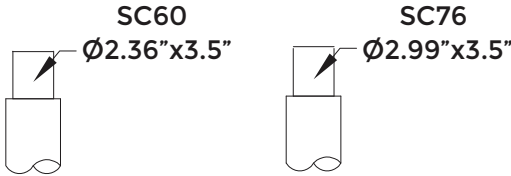
MPH	90	100	110	120	130
EPA	7.2	5.0	4.6	3.7	3.0

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

Round Straight Aluminum Pole



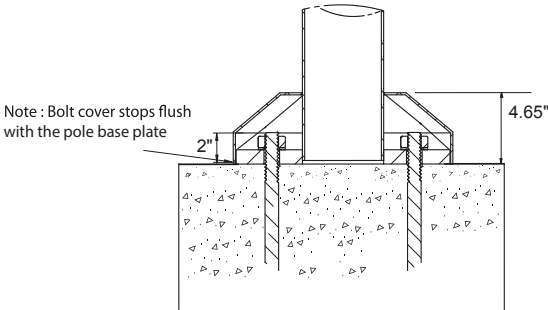
Tenon Post Top



Physical Data

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

Pole Mount Install Notes

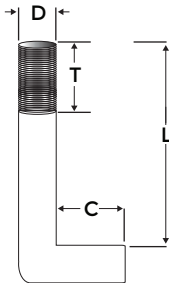


A level concrete base is poured and finished flush. This provides a uniform load displacement pad for the forces created by wind and luminaire weight

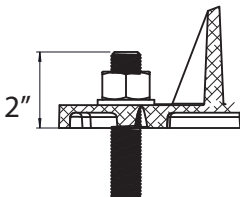
Failing to do this voids pole warranty
Foundation and Design by Others

Anchor Bolt

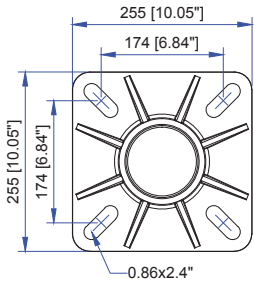
D x L x C x T
3/4 x 18 x 4 x 6



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.

Wind Load Map



Die-Cast Base Cover



Maximum EPA

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

JET 57 (JE-10573)
Fixture Type S3

Luminaire structure

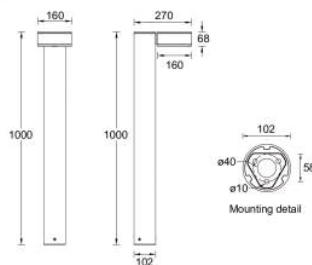
- Die-cast aluminium housing
- Extruded aluminium column
- Pre-treated before powder coating ensuring high corrosion resistance
- Single cable entry
- Stainless steel fasteners in grade 316
- Durable silicone rubber gasket
- Clear toughened glass
- Integral control gear

Product description

Ø102 - 1000 mm - 1 side - Round



JET 57
JE-10573


Light symbol


VW

Product colour

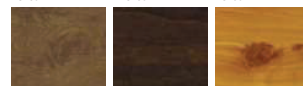

01 - Black (RAL 9011) 02 - Dark Grey (RAL 7043) 03 - White (RAL 9003) 05 - Matt Silver (RAL 9006)



06 - Bronze (RAL 6014)

Special finishes upon request


SU01 - Concrete - Urban SU02 - Softscape - Urban SU03 - Stone - Urban SU04 - Corten - Urban



SW01 - Oak - Woodland SW02 - Walnut - Woodland SW03 - Pine - Woodland

Technical information

Lamp	1 COB
Lamp type	COB
Dimming type	DALI, 1-10V, On/Off
EEC	A++
Material	Aluminium
Weight	5.4 kg
Operating temperature	-20 °C to 40 °C

Luminaire	
Power	15 W
Lumen	1105 - 1119 lm
Efficacy	74 - 75 lm/W
CCT / CRI	3000K CRI80, 4000K CRI80
Drive current	350 mA

Optic	VW [74°]
MacAdam Ellipse	3 SDCM
Lifetime L90B10 (hours)	>55,400
Lifetime L80B10 (hours)	>55,400
Lifetime L80B50 (hours)	>55,400

We reserve the right to make technical and design changes.

01:59, 22-06-2021

<https://www.ligman.com/jet-57-je-10573/>

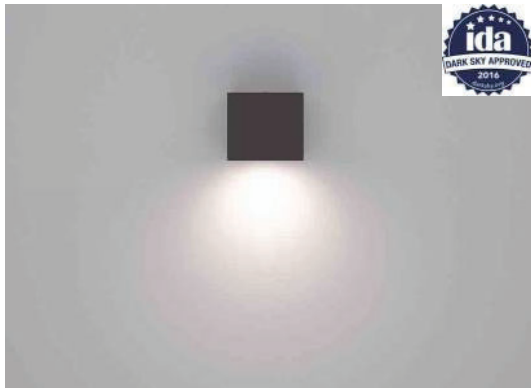
EUROPE
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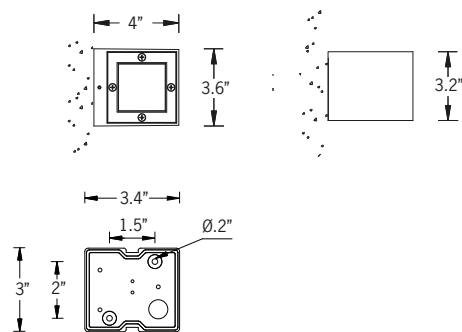
UCI-31591

Gino 2 Downlight

LIGMAN
Fixture Type S4



5w COB 236 Lumens
IP65 • Suitable For Wet Locations
IK07 • Impact Resistant
Weight 2.2 lbs



Mounting Detail

236 LUMENS 30W 3000k

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.

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)

Facade-mounted building and area lighting range. Sleek, compact and expansive luminaire family with lighting packages and optics to address any need.

A range of small, square and rectangular wall mounted luminaires with options of upward or downward light distributions. Ideally suited to illuminate the wall and surfaces in front of wall and for light accents on vertical surfaces using high efficiency LED's. The Gino is suitable for indoor and outdoor applications and provides a clean, visually appealing solution for small, unobtrusive wall mounted luminaires.

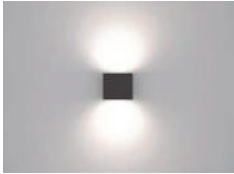
This luminaire is available in 2 different sizes and in combinations of down, up or up/down light distributions. The Gino 1 and Gino 2 have a decorative spike option for added lighting effects. The Gino 1 and 2 mounts over a 3” octagonal junction box, a 4” j-box cover plate is available upon request. Frosted or clear lenses are available.

Additional Options (Consult Factory For Pricing)



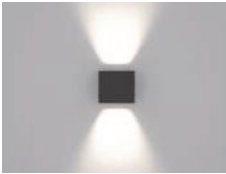
SCDT
Surface Conduit Decorative Trim





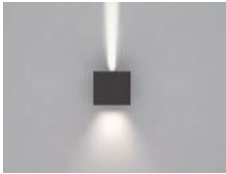
Gino 1

• UGI-31581-2x4w-2x126lm



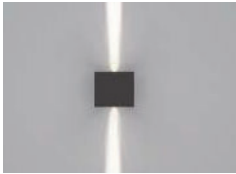
Gino 1

• UGI-31582-2x2w-2x51lm



Gino 1

• UGI-31583-2x2w-2x27lm



Gino 1

• UGI-31584-2x2w-2x5lm



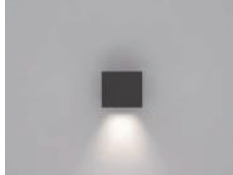
Gino 1

• UGI-31631-2x6w-2x444lm



Gino 2

• UGI-31591-5w-236lm



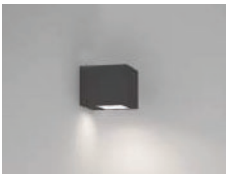
Gino 2

• UGI-31592-2w-51lm



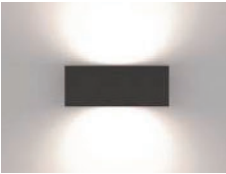
Gino 2

• UGI-31593-2w-3lm



Gino 2

• UGI-31621-6w-444lm



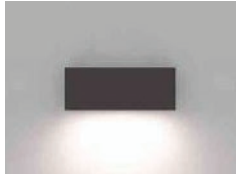
Gino 3

• UGI-31601-2x8w-2x281lm



Gino 3

• UGI-31651-2x10w-2x491lm



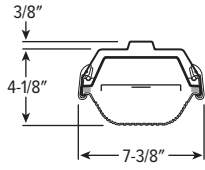
Gino 4

• UGI-31611-8w-298lm



Gino 4

• UGI-31641-10w-982lm



Shown with PCFR or HIAFR diffuser

CATALOG #:

TYPE:

PROJECT:

FEATURES

- Fully gasketed fixture resists dust, bugs, and moisture
- Standard stainless steel latches protect the fixture from corrosion in harsh environments
- Latches ensure a tight seal and provide easy access to electrical components.
- Tamper-resistant latches available
- Closed-cell polyurethane gasket poured and formed in place to ensure tight seal—does not absorb water or support fungal growth
- NSF/ANSI Standard 2—Splash Zone certified
- IP65, IP66, and IP67 certified
- Made Right Here® in the USA

SPECIFICATIONS

- ENCLOSURE** — Outer housing consists of 5VA (f1) fiberglass, rated for flame and weather resistance.
- INTERNAL HOUSING** — .050" aluminum.
- LATCHING** — Stainless steel latches. Injection-molded polycarbonate latches available (not recommended for use in harsh environments, such as a car wash).
- REFLECTOR** — 92% minimum average reflective white polyester powder coat bonded to phosphate-free, multi-stage pretreated metal.
- SHIELDING** — Frosted, ribbed, impact-resistant acrylic.
- ELECTRICAL** — High quality mid-power LED board. L70 >50,000 hours. -20°C to 40°C maximum ambient operating temperature (restrictions apply, see Performance Data for details). -40°C minimum operating temperature with LA40 option.
- MOUNTING** — Surface or suspended. Stainless steel ceiling mount brackets included.
- LISTINGS** —
 - cETLus conforms to UL STD 1598 and UL STD 8750. Certified to CAN/CSA STD C22.2 No. 250.0. Suitable for dry or damp locations.
 - DesignLights Consortium qualified product. Not all versions of this product may be DLC qualified, see the DLC Qualified Products List at www.designlights.org/QPL.
 - cETLus listed as suitable for wet locations when specified with watertight hub, STOW or SOOW cord, or mini-male receptacle option.
 - NSF/ANSI Standard 2—Splash Zone certified, IP65, IP66, and IP67 certified, and rated for NEMA 4X.
- WARRANTY** — 5-year limited warranty, see hew.com/warranty.

ORDERING EXAMPLE: 96 - 4 - L62/830 - HIAFR - OPTIONS - DRV - UNV

ORDERING INFO

SERIES	LENGTH	LUMENS ⁽¹⁾	CRI	CCT	SHIELDING
96	2' 2'	2'	8 80	30 3000K	HIAFR Frosted, ribbed, impact-resistant acrylic
	4' 4'	L21 2,100lm		35 3500K	PCFR Frosted, ribbed, UV stabilized polycarbonate ⁽³⁾
	8' 8' ⁽²⁾	L29 2,900lm		40 4000K	DFR Drop, frosted, impact-resistant acrylic
		4'		50 5000K	DCL Drop, clear, impact-resistant acrylic with frosted ends
		L40 4,000lm			
		L62 6,200lm			
		L81 8,100lm			
		L110 11,000lm			
		8'			
		L80 8,000lm			
		L130 13,000lm			
		L160 16,000lm			
		L220 22,000lm			

OPTIONS ⁽⁴⁾

(L____)	Additional lower lumen packages available. ⁽⁶⁾ Example: 4,100 nominal lumens = 96-4-L62/840-HIAFR-(L41).
EM/10W	10-watt emergency battery ⁽⁷⁾
EM/6WC	6-watt emergency, low temperature battery ⁽⁸⁾
LA40	-40°C minimum operating temperature
WET/1	(1) 1/2" watertight hub, side access ⁽⁹⁾
WET/2	(2) 1/2" watertight hubs, side access ⁽¹⁰⁾
WTT/1	(1) 1/2" watertight hub, back access ⁽¹¹⁾
WTT/2	(2) 1/2" watertight hub, back access ⁽¹²⁾
SSCMB	Stainless steel chain mounting brackets ⁽¹³⁾
PCL	Injection-molded polycarbonate latches ⁽¹⁴⁾
TP	Tamper-resistant screws ⁽¹⁵⁾
WMB	Stainless steel 45° wall mount bracket ⁽¹⁶⁾

OCCUPANCY SENSORS ⁽¹⁷⁾

OCCWS HB350W-L3W-____	High Bay passive infrared 360° lens ⁽¹⁸⁾
OCCWS FSP-321B-L_-120-480	Factory-installed occupancy and daylight control, 120V–480V. ⁽¹⁹⁾

CONTROL ⁽⁵⁾

DIM	Dimming driver	120 120V
DRV	Non-dimming driver	277 277V
		UNV 120-277V
		347 347V ⁽²⁰⁾

VOLTAGE

ACCESSORIES

TPTG TOOL Tamper-resistant tool for tri-grove screws. ⁽²¹⁾

NOTES

- Lumen output based on 4000 CCT and HIAFR shielding. Actual lumens may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA. Additional lumen package available, see options.
- Acrylic diffusers only.
- Not available with 8' units.
- Stainless steel latches required for applications with harsh chemicals. Cord and receptacle options available. See page 3 for CORD OPTIONS.
- See page 2 for ADDITIONAL CONTROL OPTIONS.
- Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.
- Not available with L110 or L220 lumen packages. 4' or 8' only. Temperature restrictions apply. See page 2 for FIXTURE PERFORMANCE DATA.
- Not available with L110 or L220 lumen packages. 4' or 8' only. Rated for -20°C to 25°C ambient temperature. Consult factory for availability.
- Factory-installed in end of housing.
- Factory-installed in ends of housing; not available with occupancy sensor option.
- 4' only, factory-installed in back of fixture.
- 4' only, factory-installed in back of fixture.
- 2 per fixture.
- Not recommended for use in harsh environments, such as a car wash.
- This option requires a tamper-resistant tool, see Accessories.
- 2 per fixture. See page 3 for MOUNTING DETAILS.
- Not available with IP66 or IP67 certification when specified with occupancy sensor.
- Factory-installed; must specify 120 or 277V.
- Must specify lens, L2 or L3. See page 4 for OCCUPANCY SENSOR DETAILS.
- Not available with EM drivers.
- Tamper-resistant tool must be ordered separately. Please specify quantity required per project.



FIXTURE PERFORMANCE DATA

	LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)	MAXIMUM TEMPERATURE (°C)	
					STANDARD	EMERGENCY
2'	L21	2201	18	120.5	40	—
	L29	3028	25	118.4	40	—
4'	L40	4086	30	137.4	40	40
	L62	6434	48	134.0	40	30
	L81	8121	65	125.0	30	25
	L110	11075	88	126.2	30	—
8'	L80	8018	61	132.8	40	40
	L130	13026	95	138.0	40	30
	L160	16188	123	133.3	30	25
	L220	22056	166	135.7	30	—

- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Wattage shown is average for 120V through 277V input.
- Results based on 4000K and HIAFR shielding actual lumens may vary +/-5%
- Use multiplier tables to calculate additional options.

MULTIPLIER TABLES

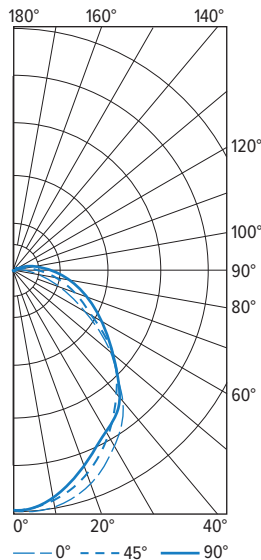
	COLOR TEMPERATURE	
	CCT	CONVERSION FACTOR
80 CRI	2700K	0.94
	3000K	0.96
	3500K	0.97
	4000K	1.00
	5000K	1.03
90 CRI	2700K	0.77
	3000K	0.79
	3500K	0.80
	4000K	0.83
	5000K	0.86

SHIELDING	
LENS	CONVERSION FACTOR
HIAFR	1.00
PCFR	0.91
DFR	1.05
DCL ¹	1.06

¹ Due to lens being clear, striations in the light distribution will be visible.

PHOTOMETRY

96-4-L62/840-HIAFR-DRV Report #: 20008.0; 08/15/17 | Total Luminaire Output: 6434 lumens; 48.3 Watts | Efficacy: 133.1 lm/W | 83.6 CRI; 4041K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	2318	2318	2318	
5	2352	2298	2283	220
15	2259	2169	2120	617
25	2066	1943	1865	899
35	1780	1666	1704	1065
45	1370	1379	1389	1055
55	943	1007	1062	901
65	546	695	828	691
75	231	449	599	457
85	38	251	361	252
90	15	185	272	
95	14	150	217	143
105	8	84	138	79
115	4	39	85	39
125	0	8	42	14
135	0	0	9	2
145	0	0	2	1
155	0	0	0	0
165	0	0	0	0
175	0	0	0	0
180	0	0	0	

ZONE	LUMENS	% FIXTURE
0 - 30	1736	27
0 - 40	2801	44
0 - 60	4757	74
0 - 90	6156	96
90 - 120	262	4
90 - 150	275	4
90 - 180	278	4
0 - 180	6434	100

ADDITIONAL CONTROL OPTIONS

Note: Lumen restrictions apply, consult product builder at hew.com/product-builder.

CATALOG NUMBER	DESCRIPTION
DRV	Driver prewired for non-dimming applications
DIM	Dimming driver prewired for 0-10V low voltage applications
DIM1	1% dimming driver prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (TRIAC and ELV compatible, 120V only)
DIM TRC	Line voltage dimming driver (TRIAC compatible, 120V or 277V only)
SD40	40% step-dimming driver
SD50	50% step-dimming driver
DALI	DALI dimming driver
LTE LINE	Lutron Hi-lume 1% 2-wire dimming driver forward phase line voltage controls (120V only)
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver
ELDO SOLOB	EldoLED Solodrive, 0.1% dimming driver for 0-10V controls
ELDO SOLOB DALI	EldoLED Solodrive, 0.1% dimming driver for DALI controls
ELDO ECO1	EldoLED Ecodrive, 1% dimming driver for 0-10V controls
ELDO ECO1 DALI	EldoLED Ecodrive, 1% dimming driver for DALI controls





General Illumination Round Downlight

6"

Feature Set

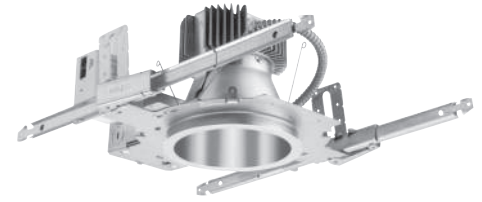
- Bounding Ray™ optical design
- Unitized optics mechanically attach the light engine to the lower reflector for complete optical alignment.
- 45° cutoff to source and source image
- Fully serviceable and upgradeable lensed LED light engine
- 70% lumen maintenance at 60,000 hours
- 2.5 SDCM; 85 CRI typical, 90+ CRI optional
- Fixtures are wet location, covered ceiling
- Available with 10% dimming, 1% dimming, or dim to dark
- Batwing distribution with feathered edges provides even illumination on horizontal and vertical surfaces
- ENERGY STAR® certified product

Distribution

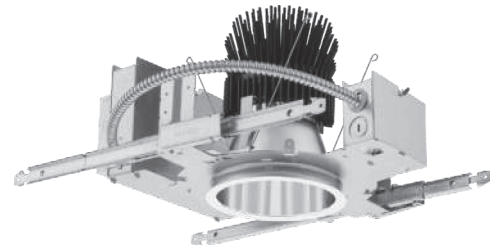


Superior Performance

Nominal Lumens	250	500	750	1000	1500	2000	2500	3000	3500	4000	4500	5000	6000	8000	10,000	12,000	15,000	17,500
Delivered Lumens	297	519	776	994	1471	2006	2537	3077	3542	4027	4533	5256	6371	8247	10637	12332	15776	17801
Wattage	3.4	6.2	8.2	9.6	14.7	19.7	24.7	29.5	33.8	39.0	47.3	48.7	57.6	74.9	97.1	115.0	150.9	175.3
Lumens per Watt	87.4	83.7	94.6	103.5	100.1	101.8	102.7	104.3	104.8	103.3	95.8	107.9	110.6	110.1	109.5	107.2	104.5	101.5



250 - 8,000 lumens



10,000 - 17,500 lumens

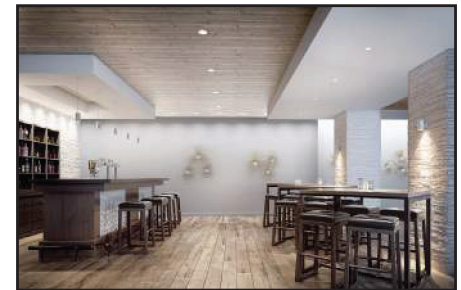
Coordinated Apertures | Multiple Layers of Light



General Illumination Layer | EVO



High Center Beam Layer | Incito



EVO + Incito — Multiple Layers of Light

Core



Downlight



Adjustable



Open Wallwash



Lensed Wallwash



Cylinder



Pinhole



Bevel



Hyperbolic

Healthcare



MRI



Surgical Suite



Patient Room

Special Applications



Dynamic



Food Service



Vandal/Tamper



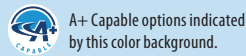
Clean Room



Shower



Steam Room



Design2Ship Quick Ship Program: Options in green text qualify for Design2Ship — 5 business days from order entry to ship. Refer to Design2Ship Brochure for complete program details. **Maximum Order Quantity: 100 units; 50 for Chicago Plenum.**

Luminaire Type:

Catalog Number:

EXAMPLE: EV06 35/150 AR MWD LSS MVOLT EZ1

Series	Color Temperature	Nominal Lumen Values	Reflector & Flange Color	Trim Style	Distribution
EV06	27/ 2700 K	02 250 lumens	AR Clear	(blank) Self-flanged	VND Very Narrow (0.5 s/mh)
	30/ 3000 K	05 500 lumens	PR Pewter	FL Flangeless	ND Narrow (0.7 s/mh)
	35/ 3500 K	07 750 lumens	WTR Wheat		MD Medium (0.9 s/mh)
	40/ 4000 K	10 1000 lumens	GR Gold		MWD Medium Wide (1.0 s/mh)
	50/ 5000 K	15 1500 lumens	WR ¹ White		WD Wide (1.2 s/mh)
		20 2000 lumens	BR ¹ Black		
		25 2500 lumens	WRAMF ¹ White Anti-microbial		
		30 3000 lumens			
		35 3500 lumens			

Finish	Voltage	Driver ⁴	
LSS Semi-specular	MVOLT	GZ10 0-10V driver dims to 10%	ECOS2 ⁵ Lutron® Hi-Lume® 2-wire forward-phase driver. Minimum dimming level 1%, 120V only. Minimum 1000 lumens/Maximum 4000 lumens.
LD Matte-diffuse	120	GZ1 0-10V driver dims to 1%	ECOD ⁵ Lutron Ecosystem digital Hi-Lume 1% soft-on, fade to black. Max: 4000LM.
LS Specular	277	EZ10 eldoLED 0-10V ECOdrive. Linear dimming to 10% min.	
	347 ^{2,3}	EZ1 eldoLED 0-10V ECOdrive. Linear dimming to 1% min.	
		EZB eldoLED 0-10V SOLOdrive. Logarithmic dimming to <1%.	
		EDAB ⁵ eldoLED SOLOdrive DALI. Logarithmic dimming to <1%.	
		EDXB ⁵ eldoLED POWERdrive DMX with RDM (remote device management). Square Law dimming to <1%. Includes termination resistor. Refer to DMXR Manual. Minimum 1000 lumens/Maximum 15000 lumens.	

Control Interface	Options	
NLT ⁶ nLight® dimming pack controls	SF Single fuse. Specify 120V or 277V.	N80 ¹⁰ nLight® Lumen Compensation
NLTER ^{2,6,9} nLight® dimming pack controls emergency circuit	TRW ⁷ White painted flange	BGTD Bodine generator transfer device. Specify 120V or 277V.
NLTAIR2 ¹³ nLight® AIR enabled	TRBL ⁸ Black painted flange	90CRI High CRI (90+)
NLTAIRER2 ^{2,9,13} nLight® AIR enabled emergency	EL Emergency battery pack, 10W, with integral test switch	CP ¹¹ Chicago Plenum. Specify 120V or 277V for 5000lm and above.
EXA1 XPoint Wireless, eldoLED driver. Linear dimming to 1%	ELR Emergency battery pack, 10W, with self-diagnostics, with remote test switch	HAO ¹² HAO High Ambient Option (40°C)
EXAB XPoint Wireless, eldoLED driver. Logarithmic dimming to dark	ELSD Emergency battery pack, 10W, with self-diagnostics, integral test switch	RRL_ RELOC®-ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Refer to RRL for complete nomenclature
	ELRSD Emergency battery pack, 10W, with self-diagnostics, remote test switch	
	E10WCP Emergency battery pack, 10W Constant Power, CA Title 20 compliant with integral test switch	
	E10WCPR Emergency battery pack, 10W Constant Power, CA Title 20 compliant with remote test switch	

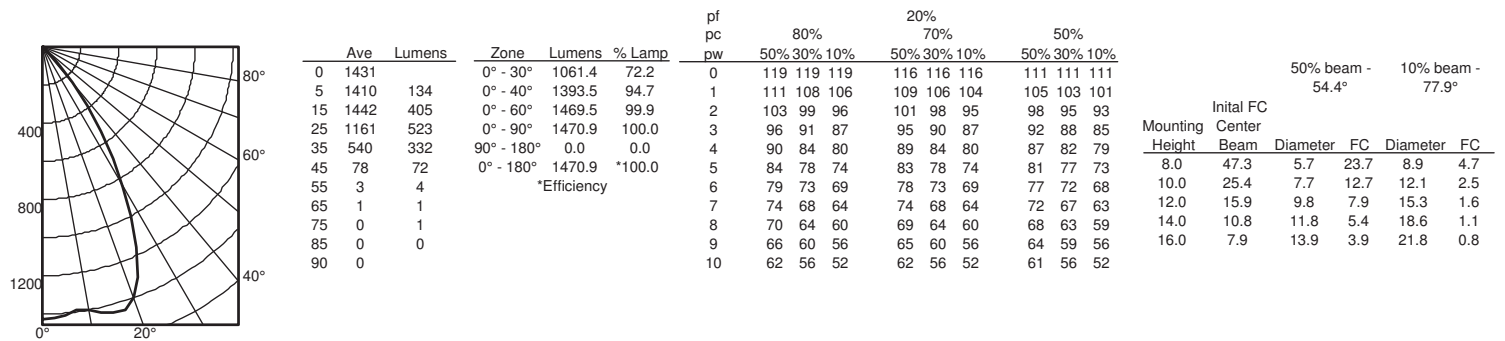
ACCESSORIES – order as separate catalog numbers (shipped separately)

SCA6	Sloped ceiling adapter. Degree of slope must be specified (5D, 10D, 15D, 20D, 25D, 30D). Ex: SCA6 10D. Refer to TECH-190 .
CTA4-8 YKHL	Ceiling thickness adapter for 10,000LM and above (extends mounting frame to accommodate ceiling thickness up to 5"). Adds ~4" to fixture height.
CTA4-8 YK	Ceiling thickness adapter for 8,000LM and below (extends mounting frame to accommodate ceiling thickness up to 5"). Adds ~4" to fixture height.
GVRT	Vandal-resistant trim accessory. Refer to TECH-200 .
ISD BC	0-10V wallbox dimmer. Refer to ISD-BC .

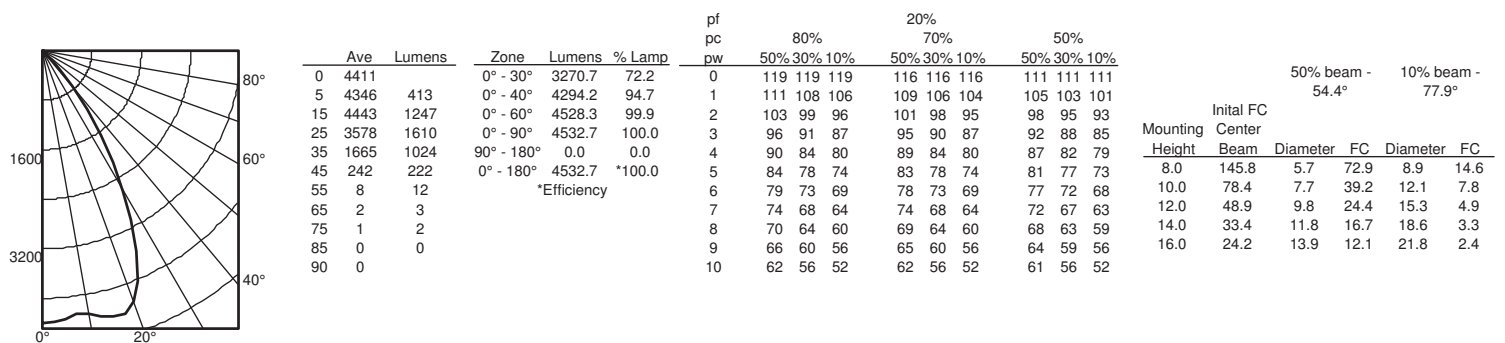
ORDERING NOTES

- Not available with finishes.
- Not available with emergency battery pack options.
- Supplied with factory installed step down transformer.
- Refer to [TECH-240](#) for compatible dimmers.
- Not available with nLight® and XPoint options.
- Specify voltage.
- For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not applicable with WR (white reflector) or FL (flangeless) option.
- For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not applicable with BR (black reflector) or FL (flangeless) option.
- ER for use with generator supply power. Will require an emergency hot feed and normal hot feed.
- Fixture begins at 80% light level. Must be specified with NLT or NLTER. Only available with EZ10 and EZ1 drivers.
- 12,000LM max with EL or nLight® options. 5,000LM max with Lutron drivers combined with EL. Not available with ELR, HAO, EXA1, or EXAB options.
- Only available 5000LM - 15,000LM with eldoLED drivers.
- Not available DALI or DMX drivers. Not available with CP or N80 options. Not recommended for metal ceiling installations.

EV06 35/15 AR MWD LS INPUT WATTS: 14.7, DELIVERED LUMENS: 1471LM, LPW= 100, 1.03 S/MH, TEST NO. LTL27783P1505



EV06 35/45 AR MWD LS INPUT WATTS: 47.3, DELIVERED LUMENS: 4532.7LM, LPW= 95.8, 1.03 S/MH, TEST NO. LTL27783P1649



EV06 35/175 AR MWD LS INPUT WATTS: 175.3, DELIVERED LUMENS: 17801LM, LPW=101.5, 1.06 S/MH, TEST NO. ISF 34035P268

