#### LED AREA LIGHTS - LSI SLICE MEDIUM (XLCM)



#### **DOE LIGHTING FACTS**

Department of Energy has verified representative product test data and results in accordance with its Lighting Facts Program. Visit www.lightingfacts.com for specific catalog strings.

LIG	LIGHT OUTPUT - XLCM						
		Туре 3	L Type FT	umens (N Type 5		TypeFTE	Watts (Nominal)
-#	SS	19900	22800	22900	15500	15800	193
Cool	но	27500	30900	31100	21200	21100	278
tra ite		19300	20000	20600	15000	15000	193
Neu	НО	26700	27800	28500	20100	20400	278

LED Chips are frequently updated therefore values may increase.

Project Name
Catalog #\_\_\_\_

US & Int'l. patents pending

SMARTTEC<sup>™</sup> - LSI drivers feature integral sensor which reduces drive current, when ambient temperatures exceed rated temperature, providing typical operation for 100,000 hours (contact factory for TM-21 life estimate for specific configuration).

ENERGY SAVING CONTROL OPTION - DIM - 0-10 volt dimming enabled with controls by others. .

**LEDS** - Select high-brightness LEDs in 5000K, or 4000K color temperature, 70 CRI.

**DISTRIBUTION/PERFORMANCE** - Types 3, FT, FT-L, FT-R, 5, and enhanced 5E and FTE. FT-L and FT-R allow for D180 mounting configurations with factory set optics for applications such as automotive front row. Exceptional uniformity creates bright environment at lower light levels. Internal Louver (IL) option available for improved backlight control without sacrificing street side performance for FT distribution. Consult factory for internal louver for FT-L and FT-R applications.

**HOUSING** - One-piece, die-formed aluminum housing contains factory prewired driver. Wiring access door (with safety lanyard) located underneath.

**OPTICAL UNIT** - Clear tempered flat glass lens permanently sealed to weather-tight aluminum optic frame creates an IP65 rated optical unit (includes pressure-stabilizing breather).

MOUNTING - Tapered rear design allows fixtures to be mounted in 90° and 120° configurations without the need for extension arms. Use with 3" reduced drilling pattern. A round pole plate is required for mounting to round poles. Wall mount available by ordering wall mounting bracket (BKS-XBO-WM-\*-CLR). Proprietary pole quick mount accessories available with horizontal mounting or fixed 15° angled mounting (PQMH-KIT-CLR and PQM15-KIT-CLR) for mounting to square poles. Top mounted reinforcement bracket for high wind or vibration (up to 36) applications available as installed option or field-mount accessory.

**ELECTRICAL** - Two-stage surge protection (including separate surge protection built into electronic driver) meets IEEE C62.41.2-2002, Location Category C. Available with universal voltage power supply 120-277 VAC (50/60Hz input), and 347-480 VAC. Optional button-type photocells (PCI) are available in 120, 208, 240, 277 or 347 volt (supply voltage must be specified).

**DRIVER** - Available in SS (Super Saver) and HO (High Output) drive currents. Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards. Driver and key electronic components can easily be accessed.

OPERATING TEMPERATURE - -40°C to +50°C (-40°F to +122°F)

FINISH - Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process.

The DuraGrip finish withstands extreme weather changes without cracking or peeling.

Available in black, bronze and white. Other standard LSI finishes available. Consult factory.

**WARRANTY** - LSI LED fixtures carry a limited 5-year warranty.

**PHOTOMETRICS** - Please visit our web site at <a href="https://www.lsi-industries.com">www.lsi-industries.com</a> for detailed photometric data.

**SHIPPING WEIGHT (in carton)** - One fixture: 25.25 lbs. (11.5 kg). Packed two per carton: 43.5 lbs. (19.7 kg).

**LISTING** - UL listed to U.S. and international safety standards. Suitable for wet locations. For a list of the specific products in this series that are DLC listed, please consult the LED Lighting section of our website or the Design Lights website at www.designlights.org.

This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.



Fixtures comply with ANSI C136.31-2010 American National Standard for Roadway Lighting Equipment - Luminaire Vibration 1.5G requirements.

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### **LED AREA LIGHTS - LSI SLICE MEDIUM (XLCM)**

#### LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: XLCM 5 LED SS CW UE BLK PCI120

Prefix	Distribution	Light Source	Drive Current	Color Temperature	Input Voltage	Finish	Options
XLCM	3 - Type III 5 - Type V FT - Forward Throw FT-L - Forward Optic Rotated for D180 Mount (Left Side) FT-R - Forward Optic Rotated for D180 Mount (Right Side) 5E - Type V Enhanced FTE - Forward Throw Enhanced	LED	SS - Super Saver HO -High Output	CW - Cool White (5000K) NW - Neutral White (4000K)	UE - Universal Voltage (120-277V) 347-480 Universal Voltage (347-480V)	BLK - Black BRZ - Bronze WHT - White	DIM - 0-10V Dimming (from external signal) Button Type Photocells PC1120 - 120V PC1208-277V - 208-277V PC1347 - 347V IL - Internal Louver (available with FT distribution only) HV - Vibration Reinforcement Bracket PCR 7P - Photoelectric Control Receptacle <sup>3</sup>

<b>LUMINAIRE EPA CHART - XLCM</b>				
Single	0.5			
D180°	1.0			
D90°	0.8			
T90°	1.7			
TN120°	1.7			
Q90°	1.9			
	Single D180° D90° T90° TN120°			

Note: House Side Shield adds to fixture
EPA. Consult Factory.

**Project Name** 

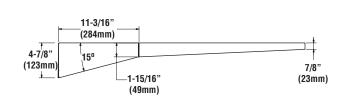
2<sub>Catalog #.</sub>

ACCESSORY ORDERING INFORMATION	(Accessories are	field installed)	
Description	Order Number	Description	Order Number
BKS-XBO-WM-*-CLR Wall Mount Bracket	382132CLR	FK277 Single Fusing (277V)	FK277 <sup>2</sup>
XLCM-3/FT-HSS RM External House Side Shield		DFK208, 240 Double Fusing (208V, 240V)	DFK208, 240 <sup>2</sup>
(Black only - rear mounted)	603159BLK <sup>1</sup>	DFK480 Double Fusing (480V)	DFK480 <sup>2</sup>
XLCM-FT-L/FT-R-HSS SM External House Side Shield		FK347 Single Fusing (347V)	FK347 <sup>2</sup>
(Black only - side mounted)	603161BLK <sup>1</sup>	PQMH-KIT-CLR Square Pole Quick Mount Horizontal Bracket	582328CLR
X3RPP Round Pole Plate for 3" RTP Poles	408273CLR	PQM15-KIT-CLR Square Pole Quick Mount Bracket w/fixed 15° A	Angle 582329CLR
X4RPP Round Pole Plate for 4" Poles	379967CLR	BKS-XLCM-HV-CLR Reinforcement Bracket	625744CLR
X5RPP Round Pole Plate for 5" Poles	379968CLR	ALSC UNV TL5 - AirLink 5 Pin Twist Lock Controller	661409
FK120 Single Fusing (120V)	FK120 <sup>2</sup>	ALSC UNV TL7 - AirLink 7 Pin Twist Lock Controller	661410

#### FOOTNOTES:

- 1 House Side Shields add to fixture EPA. Consult factory.
- 2 Fusing must be located in the hand hole of pole.
- 3 Photocell must be ordered separately. 7 pin standard. See Accessories.

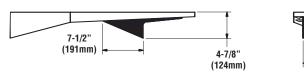
# 19-5/16" (490mm) 34-5/16 (871mm)

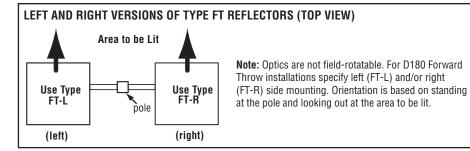


15-19/16"

(396mm)

#### **HOUSE SIDE SHIELD (rear mount)**





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Fixture Type Attachment 60/16/17
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## LED AREA LIGHTS - LSI SLICE MEDIUM (XLCM)

#### **BUG LISTING**

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		/\EU!!!	1000		
Drive Current	Color Temp.*	Lumens	Watts	LER	<b>BUG</b> Rating
	CW	27,493	270	102	B4-U0-G3
l ⊔∩	CW HCC	15 676	272	50	B3_H0_G3
110	044 1100	10,070	L1 L	- 00	DO 00 UZ
	NW	26,669	270	99	B4-U0-G3
SS	CW	19,936	181	110	B3-U0-G2
	NW	19,298	181	107	B3-U0-G2

#### XLCM - Type 5E

Drive Current	Color Temp.*	Lumens	Watts	LER	<b>BUG</b> Rating
H0	CW	21,173	268	79	B5-U0-G3
	NW	20,117	265	76	B4-U0-G2
SS	CW	15,543	182	85	B4-U0-G2
	NW	14,995	182	82	B4-U0-G2

#### XLCM - Type 5

Drive Current	Color Temp.*	Lumens	Watts	LER	BUG Rating
H0	CW	31,142	276	113	B4-U0-G3
	NW	28,532	268	106	B4-U0-G2
SS	CW	22,884	192	119	B4-U0-G2
	NW	20,575	181	114	B4-U0-G2

#### **XLCM - Type FTE**

<b>Drive Current</b>	Color Temp.*	Lumens	Watts	LER	BUG Rating
	CW	21,127	268	79	B3-U0-G4
H0	CW-HSS	14,636	272	54	B1-U0-G3
	NW	20,387	265	77	B3-U0-G4
	NW-HSS	14,033	265	53	B1-U0-G3
	CW	15,790	182	87	B2-U0-G3
SS	CW-HSS	10,798	182	59	B1-U0-G3
	NW	15,073	182	83	B2-U0-G3
	NW-HSS	10,296	182	57	B1-U0-G2

#### **XLCM - Type FT**

<b>Drive Current</b>	Color Temp.*	Lumens	Watts	LER	<b>BUG Rating</b>
	CW	30,937	276	112	B4-U0-G4
	CW-HSS	22,548	275	82	B3-U0-G4
H0	CW-IL	28,801	284	101	B3-U0-G4
	NW	27,814	273	102	B3-U0-G3
	NW-HSS	18,311	273	67	B2-U0-G3
	NW-IL	25,277	270	93	B3-U0-G3
	CW	22,815	192	119	B3-U0-G3
	CW-HSS	16,559	192	86	B2-U0-G3
SS	CW-IL	20,618	192	107	B3-U0-G3
	NW	19,985	181	111	B3-U0-G3
	NW-HSS	13,192	181	73	B2-U0-G3
	NW-IL	18,498	184	100	B3-U0-G3

\* Color Temperature: NW-4000K, CW-5000K

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Project Name \_ \_\_\_\_\_\_ Fixture Type \_\_ Catalog #\_







#### Wireless Lighting Controller 5 Pin & 7 Pin Twist Lock

The 5 Pin Twist Lock Controller (TL5) & The 7 Pin Twist Lock Controller (TL7) are intelligent wireless lighting controllers with exceptional fault tolerance & a multitude of features. Each TL5 & TL7 provides intelligent On/Off switching, dimming, control, highly accurate power metering, status monitoring of your lighting fixtures & digital sensor input (TL7 only).

#### **Features**

- · Integrated Photocell
- ANSI C136.41 Dimming Receptacle Support
- Utility grade power monitoring
- · Remote control and scheduling
- Flexible Dimming Controls
- Secure, over-the-air upgrades to support future enhancements
- · Seamless integration into the AirLink Site Manager system
- Digital sensor input for motion sensing (TL7 only)

#### **Power and Performance**

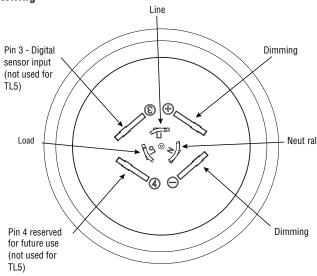
Operating environmental: -40°F to 158°F (-40°C to 70°C); 20% to 90% RH non-condensing; IP66

- Input power: 100–277 VAC +/- 10% (Max 305V)50/60 Hz
- Switched output: Default ON
- Load rating: 5A @ 100V to 277V (+/- 10%)
- Dimming control: 0-10V with short circuit protection
- Dimming output: maximum current 10mA
- Sensor input: One digital input that can be used for motion-based lighting controls (TL7 only)
- Power monitoring: Utility grade 2% accuracy
- Power readings: Voltage, Watts

#### Other

- Dimensions: 4.53" W x 2.68" H (115mm W x 68mm H)
- Radio: SNAP 2.4 GHz; 802.15.4; +20 dBm Transmit Power; -104 dBm Receive Sensitivity
- · Warranty: 5 years

#### Wiring



#### **Contact LSI Controls**





Support controls.support@lsi-industries.com 1 (800) 436-7800 (support, option 8)



Attachment E



## **PLB Series**

#### SOI AR POWERED LED BOLLARD

Project:	
Type:	Quantity:



The PLB series solar powered LED bollard is ideal for architectural and commercial pathway applications. The self-contained, stylish, contemporary design combined with high quality construction and unequalled solar powered performance make the PLB series an excellent fit where quality lighting is required.

Utilizing solar power and LED lighting the PLB bollards are fully self contained and offer significant benefits over typical wired bollards:

- Low installed costs and minimal site impacts with no trenching, cabling or wiring
- Minimal ongoing costs with no electricity bills or bulbs to change
- Immune from power outages
- A sustainable choice without recurring carbon emissions

All of our solar powered lights are enabled by our innovative Solar Lighting Controller (SLC). The SLC in each light is "self-learning" and allows the lights to predictively adapt to their surroundings, providing a level of lighting performance and reliability unavailable in other solar lighting products.

#### TECHNICAL SPECIFICATIONS

#### Solar Module:

- High impact, UV resistant encapsulation
- High-efficiency mono-crystalline cells
- Integrated into bollard housing
- Used for day/night detection (no photocell required)

#### Solar Lighting Controller (SLC):

- High efficiency Maximum Power Point Tracking (MPPT) charge controller
- Micro-controller based technology
- Includes high-efficiency LED driver
- Integrated into bollard housing
- Designed to automatically manage lighting performance based on environmental conditions and lighting requirements
- Patent pending

#### Battery:

- High performance Lithium (LiFePO₄)
- Exceptional 8 10 year life cycle
- High temperature tolerance
- Contained within bollard post
- Designed for easy battery changes when required

## LEDs and Optics:

- High output Cree LEDs
- 100,000 hour L70 lifetime
- Warm (3000K) and neutral (4500K) white color temperatures available
- Type III and Type V high efficiency, cut-off optics
- Typical lumen output of 160 lumens

## Mechanical Construction:

- Cast, low copper aluminum housing
- Extruded, low copper aluminum post
- Stainless fasteners with security fastener option
- High strength mounting base
- Architectural grade, super durable, TGIC powder coat
- Four standard colors with custom colors available

#### Factory Set Lighting Profiles:

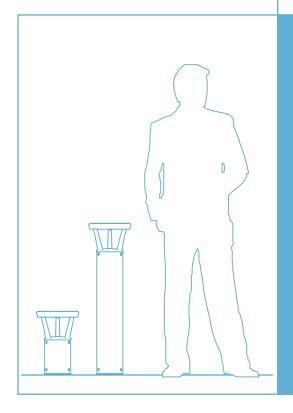
- On at dusk, off at dawn
- On at dusk, turn off after 6 hours
- On at dusk, dim to 30% after 6 hours till dawn
- On at dusk, off after 5 hours, on 1 hour before dawn
- On at dusk, dim to 30% after 5 hours, on 1 hour before dawn

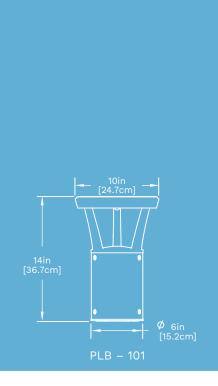
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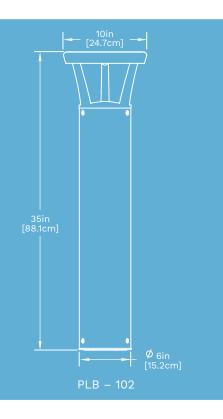


## PLB Series

### SOLAR POWERED LED BOLLARD



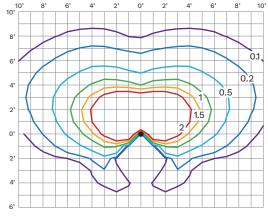




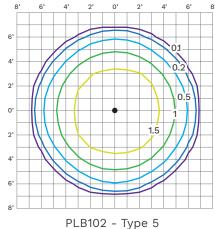
## **PHOTOMETRICS**

(IES files available on request)

If you have any questions, please don't hesitate to call us toll free at 1-844-279-8754 (USA & Canada).



PLB102 - Type 3



#### ORDER MATRIX

Series	Height	Finish	Distribution	LED Color	Lighting Profile	Options
PLB	<b>101</b> - 14"	<b>BK</b> - Black	ASM - Type 3	<b>ww</b> - 3000K	00 - Dusk till dawn	<b>WOB</b> - Ship Without Battery
	<b>102</b> - 36"	BZ - Bronze	<b>SYM</b> - Type 5	<b>NW</b> - 4500K	01 - Dark +6 hours then off	SEC - Security Fasteners
		<b>SV</b> - Silver			<b>02</b> - Dark +6 hours then 30%	<b>PA</b> - Pre-Ship Anchor Bolts
		WH - White			03 - Dark +5 hours, off, Dawn -1 hour	
		CC - Custom			04 - Dark +5 hours, 30%, Dawn -1 hour (DEFAULT)	

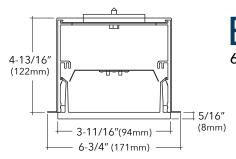
- Specifications subject to change without notice
- All light levels in foot candles (fc) with 4500K color temperature and 160 lumen output
- To convert to lux multiply light level by 10.7



te \_\_\_\_\_\_ Type \_\_\_\_\_







# **EDGE** EV6WET

6" Recessed Linear WET

#### **Key Features**

EV<sub>6</sub>

- Approved for wet location unless otherwise noted. IP65 and IK10 rated
- Fixture is built using corrosion resistant materials
- 6063-T5 Extruded aluminum housing
- Highly reflective die-formed white painted reflector
- All-inclusive module houses all LED system components in one compact unit
- Unit easily releases from the housing for room-side maintenance
- Wiring access available through bottom of housing
- 5-year limited warranty covers LED, driver and fixture
- UL and cUL listed
- Buy American Act compliant









Example Part #: EV6-WET-830HO-8'-IND-FLF-U-OL1-1-0-W

- WET	-	-	-	-	-	-	-	-	-	-
SHIELDING	CRI, CCT & OUTPUT	LENGTH	POSITION	MOUNTING	VOLTAGE	DRIVER	CIRCUITING	BATTERY & EMERGENCY	FINISH	FIXTURE OPTIONS

WET			
SHIELDING	CRI, CCT & OUTPUT	LENGTH <sup>1</sup>	POSITION <sup>2</sup>
<b>WET</b> - Satine Wet Lens Shielding pg. 2	_27 2700K _30 3000K _35 3500K _40 4000K CL Custom Lumens CW Custom Watts Lumen Output pg. 2 Example: 830HO is 8 = 80 CRI; 30 = 3000K; HO = High Output; Blank = Standard Output	Individual Fixture Length pg. 2	IND - Individual BOR - Beginning of Row MOR - Middle of Row EOR - End of Row Mounting pg. 3

FL_	-		-
MOUNTING	VOLTAGE	DRIVER	CIRCUITING
<b>FL(F) -</b> 1/2" Flange Mounting pg. 3	U - Universal (120 thru 277V) 1 - 120V 2 - 277V 3 - 347V Voltage pg. 3	OL1 - Osram (10%, 0-10v, standard) OL2 - Osram (1%, 0-10v) OL3 - Osram 347v (10%, 0-10v) EE1 - eldoLED ECOdrive (1%, 0-10v) EE3 - eldoLED ECOdrive (1%, 0-10v) PL2 - Philips Xitanium (1%, 0-10v) PS1 - Philips Xitanium (50%/100%) LH1 - Lutron Hi-lume (1%, EcoSystem) LH3 - Lutron Fi-lume (1%, 3-wire) L51 - Lutron 5-Series (5%, EcoSystem) ND - Non-Dimming Driver pg. 3	<ul> <li>1 - Single Circuit</li> <li>M - Multi Circuit</li> <li>E - Emergency (entire fixture)</li> <li>N - Night Light (entire fixture)</li> <li>Circuiting pg. 4</li> </ul>

BATTERY & EMERGENCY <sup>3</sup>	FINISH	FIXTURE OPTIONS	CONTROLS
O - None P - Philips Bodine 10W I - lota 10W IC - lota 10W (CEC Listed) E - Emergency Circuit Section N - Night Light Circuit Section L - Life Safety Circuit Section G - Philips Bodine GTD Battery and Emergency pg. 4	W - White S - Metallic Silver BL - Textured Black BR - Bronze GR - Graphite CC - Custom Color Finish pg. 4	<b>GLR</b> - Internal Fast Blow Fuse <b>EPF</b> - End Power Feed Fixture Options pg. 5	Pinnacle is able to accommodate different control solutions from different manufacturers. Consult Factory for more information.

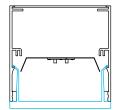
¹ Individual fixtures come in nominal 2′, 3′, 4′, 5′, 6′, 7′, & 8′ lengths, see pg. 2 for actual lengths. ²Specify position of fixture. Use IND for an individual fixture, use BOR, MOR, or EOR for building connected rows. ³Enter quantity for Battery and Emergency, Example 2P.

Specifications and dimensions subject to change without notice. Specification sheets that appear on pinnacle-ltg.com are the most recent version and supersede all other previously printed or electronic versions.

#### Shielding

#### WET

Satine Wet Lens



#### CRI, CCT & Output

- Specify either 80 or 90 CRI
- Longer lead-time may apply for 90 CRI. Consult factory

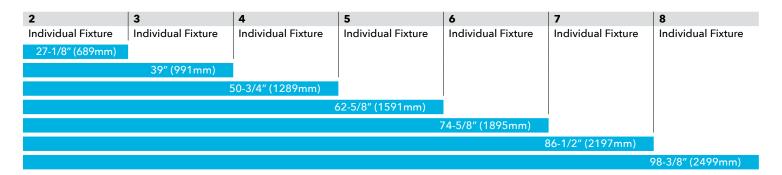
• 80 CRI = R9≥19 and 90 CRI = R9≥61

Custom	Output-	Lumens	<b>OR Watt</b>	age	
CL	Specify C	RI, CCT and	desired lum	ens (i.e. CL835500)	Specify lumens between standard offering listed below. Lumens are specified per color temp
CW	Specify C	RI, CCT and	desired wat	tage (i.e. CW9407)	Specify watts between standard offering listed below
80 CRI					
	Color	Output	Watts	Shielding	

	Color	Output	Watts per foot	Shielding <b>WET</b>	
				Satine Wet	
				Lumens/ft	LPW
830	3000K	Standard	4.6	366	79.6
830HO	3000K	High	8.6	678	78.6
835	3500K	Standard	4.6	377	82.0
835HO	3500K	High	8.6	698	80.9
840	4000K	Standard	4.6	384	83.5
840HO	4000K	High	8.6	711	82.4

90 CRI					
927	2700K	Standard	4.6	289	62.8
927HO	2700K	High	8.6	536	62.1
930	3000K	Standard	4.6	338	73.5
930HO	3000K	High	8.6	625	72.5
935	3500K	Standard	4.6	339	73.7
935HO	3500K	High	8.6	628	72.8
940	4000K	Standard	4.6	343	74.6
940HO	4000K	High	8.6	635	73.6

#### Length



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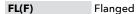
#### **Position**

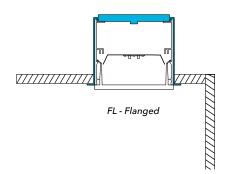
- When making rows with EDGE Wet, the rows must be ordered as individual units with a position specified
- Positions can either be "BOR" Beginning of Row, "MOR" Middle of Row, or "EOR" End of Row
- The connection between fixtures is less than 1/8"
- For single, non-connected units, specify as "IND" for individual

IND	BOR	MOR	EOR
Individual Fixture	Beginning of Row	Middle of Row	End of Row

#### Mounting

- Available with standard 1/2" flange (FL)
   Utilize Surface Mount for in-wall application. Building surface waterproofing by others
- End trims and power cord attached at factory
- Approved for wet location unless otherwise noted
- Refer to installation instructions during installation at the jobsite





#### Voltage

Some EDGE Wet configurations will not accommodate all voltage options; consult with factory

U	Universal
1	120 volt
2	277 volt
3	347 volt

#### Driver

- Standard Driver Option = OL1
- Driver Lifetime: 50,000 hours at 25°C ambient operating conditions
- For more driver options see Pinnacle Resource Guide
- Some EDGE Wet configurations will not accommodate all driver options; consult with factory

OL1	Osram Optotronic 10%, 0-10v
OL2	Osram Optotronic 1%, 0-10v, nominal 1% dimming range
OL3	Osram Optotronic 347v 10%, 0-10v, requires 347v option
EE1	eldoLED ECOdrive 1%, 0-10v Logarithmic
EE3	eldoLED ECOdrive 1%, DALI Logarithmic
PL2	Philips Advance Xitanium 1%, 0-10v
PS1	Philips Advance Xitanium Step Dimming 50%/100%
LH1	Lutron Hi-lume Soft-on, Fade-to-black 1%, EcoSystem, LDE1
LH3	Lutron Hi-lume 1%, 3-wire, Lutron-L3DA3W
L51	Lutron 5-Series 5%, EcoSystem, LDE5
ND	Non-Dimming

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#### How to specify Circuiting, Battery and Emergency



- Select fixture circuiting from options below
- Some EDGE Wet configurations will not accommodate all circuiting options, consult with factory

#### Circuiting

1	Single Circuit
M	Multi Circuit
E	Emergency Circuit only
N	Night Light Circuit only

- Battery and emergency section options are available in addition to fixture circuit
- Select battery and emergency section options below; factory shop drawing required
- Some EDGE Wet configurations will not accommodate all circuiting options, consult with factory

#### Battery and/or Emergency If Required

No battery or specific emergency section required

#### Battery

- Select battery section type if required, indicate total QTY. Example 2P
- 90 minute battery runtime; test button is integral to fixture
- No battery option available for 2' lengths

- Entire direct fixture housing is on battery for lengths up to 5'
  Half of direct fixture is on battery for 6', 7' or 8' housing lengths
  For more battery options available, see Pinnacle Resource Guide

0	No battery
_P	Philips Bodine 10w Integral
_l	lota 10w Integral
IC.	lota 10w Integral CEC Listed

#### For Approximate Battery Lumen Output

- Multiply battery wattage X fixture LPW shown on Lumen Table
- 92.3 (LPW)  $\times$  10 (watts) = 923 battery lumen output

#### Emergency

- Select emergency section type if required, indicate total QTY. Example 1E
- Combine battery and emergency section ordering codes if both options are selected

_E	Emergency circuit section
_N	Night Light circuit section
_L	Life Safety circuit section NO THROUGH WIRE
_G	Philips Bodine GTD, Generator Transfer Device section

#### **Battery OR Emergency Ordering Examples**

• Single circuit, 10w Integral Battery Ordering Code: 1-1P • Emergency only, 10w Integral Battery Ordering Code: E-1P

• Single circuit, GTD required Ordering Code: 1-1G

#### **Combination Section Ordering Examples**

- Single circuit, (1) 10w battery, (1) emergency section
- Multi circuit, (2) 10w battery, (2) emergency sections
- Single circuit, (1) night light section

Ordering Code: 1-1P1E Ordering Code: M-2P2E

Ordering Code: 1-1N

#### Finish

- Standard powder-coat textured white, metallic silver, textured black, graphite or bronze painted finish; consult factory for chip of standard paint finishes
- Selecting a fixture finish other than white may impact lumen output; consult factory for more information

W	White
S	Metallic Silver
BL	Textured Black
GR	Graphite
BR	Bronze
CC	Custom Color

L18-0029 Tru by Hilton

Specifications and dimensions subject to change without notice. Specification sheets that appear on pinnacle-ltg.com are the most recent version and supers of a present for the province of the contract of t



#### **Fixture Options**

- Additional options to enhance the fixture and finish of the product
- Consult factory for MR16 configurations

Internal Fast Blow Fuse **GLR** EPF **End Power Feed** 

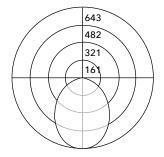
#### Controls

Pinnacle is able to accommodate different control solutions from different manufacturers. Consult Factory for more information.

#### **Photometrics**

#### Satine Wet Lens

Test # Catalog # EV6-WET-N-840-4 Lumens 1536 lm Watts 18.4 W Efficacy 83 LPW



#### Candela Distribution

Vert Angle	Horizo	ntal Ang	le		
3	0	22.5	45	67.5	90
0	643	643	643	643	643
5	638	638	638	637	637
10	626	625	624	623	622
15	605	601	600	598	594
20	578	571	570	565	560
25	541	532	531	523	518
30	499	490	487	477	472
35	452	444	439	428	422
40	404	396	388	377	371
45	353	346	338	326	321
50	302	298	289	278	273
55	253	250	243	232	227
60	206	204	198	190	185
65	162	160	156	150	147
70	120	120	118	114	112
75	82	83	84	82	81
80	49	51	53	54	54
85	22	25	29	31	32
90	1	5	10	14	15

#### Luminance Data (cd/sq.m)

Angle In	Average	Average	Average
Degrees	0-Deg	45-Deg	90-Deg
45	2685	2484	2330
55	2366	2156	1989
65	2050	1828	1681
75	1668	1504	1396
85	1302	1183	1201

For all available IES files, please visit our website at pinnacle-ltq.com. Photometry testing in accordance to IESNA-LM-79-08 at an NVLAP accredited testing laboratory. Testing conducted at 25°C ambient conditions

#### **Applications & Certificates**

Construction 6063-T5 extruded aluminum housing with welded ends. Internal lens gaskets seal housing to prevent moisture and debris from entering the fixture. Pressure equalizing vent allows fixture to "breathe" preventing condensation.

Shielding Solid acrylic diffuse snap-in lens with matte finish with an EPDM gasketed for

Mounting Fixtures can be installed individually or connected for a continuous run appearance. IND fixtures are individual fixtures and have no joining holes. IND fixtures cannot be joined. BOR fixtures are used for beginning of row and have joining holes on non-power end of fixture. MOR fixtures are used for middle of row and have joining holes on both ends of fixture. EOR fixtures are used for the end of a row and have no joining holes on power end of fixture. Consult factory for detailed installation instruc-

LED 25°C test environment. Lumen output/wattage has a margin of +/- 5%. All luminaire configurations tested in accordance with IES LM-79. Diodes tested in accordance with IES LM-80. Minimum lifetime greater than 60,000 hours. Lifetime Projection L70 = 134,700 hours and L90 = 40,100 hours. MacAdam 3-Step Ellipses. Not all products are Lighting Facts listed. For all available IES files, please visit our website at pinnacle-ltg.

CRI, CCT & Lumen Output Two lumen packages available. Standard and High (HO). Custom outputs are available. Specify custom lumens or watts between standard offering listed on CRI, CCT & Output page. 80 CRI is available for 3000K, 3500K, and 4000K. 90 CRI is available for 2700K, 3000K, 3500K, and 4000K. 80 CRI = R9≥19 and 90 CRI = R9>61.

Voltage Universal (U), 120 volt (1), 277 volt (2) and 347 volt (3) options available. Must specify OL3 in Driver section when 347 volt (3) is selected. Some EDGE Wet configurations will not accommodate all voltage options; consult with factory.

Driver Standard Driver Option is Osram 0-10V, 10% = OL1. Electronic driver, Power factor is >0.9 with a THD <20%. Driver Lifetime: 50,000 hours at 25°C ambient operating conditions. Ambient operating range: -20°F/-30°C to 107°F/42°C. For more driver options, see Pinnacle Resource Guide. Some EDGE Wet configurations will not accommodate all driver options.

Circuiting Select from single circuit (1), Multi circuit - For multiple circuiting and zone control, requires factory shop drawing (M), Emergency circuit (E) or Night Light circuit (N). For emergency circuiting situations that require no through wire or circuit separation, Life Safety Circuit should be selected. This will provide a separate power feed and only the Life Safety Circuit in that section. Some EDGE Wet configurations will not accommodate all circuiting options; consult with factory.

Battery & Emergency Select battery or emergency options if required. If battery or emergency option is not required, enter 0. Battery duration is 90 minutes as standard. Test button is integral to fixture. For more Battery options, see Pinnacle Resource Guide.

Finish Standard powder-coat textured white, metallic silver, textured black, graphite or bronze painted finish; consult factory for chip of standard paint finishes or for additional custom color and finish options.

#### Controls Consult Factory

Labels UL and cUL Listed, approved for wet location unless otherwise noted. IP65 and IK10 rated.

#### **Buy American Act Compliant**

Warranty EDGE Wet LED offered with a 5-year limited warranty. Covers LED, driver and

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Specifications and dimensions subject to change without notice. Specification sheets that appear on pinnacle-ltg.com are the most recent version and supers de all other in the provided preference of the contractions.

## **DART Maxi**

## Adjustable Professional Projector Flood Light

Concept: Professional adjustable LED projector.

Housing: Die-cast aluminum body and joints for maximum heat dissapation. Materials: Die-cast aluminum housing powder coated in Ferrite Grey Color. Optics: High efficiency LED Chip on Board. Different optical systems depending on beam angles. NSP version: an indirect optic with a LED module directed towards the highly reflective anodised aluminium parabolic reflector, a transparent PMMA refractive screen and heat-pipe dissipation. SP and FL versions: a hybrid optic composed of an anodised mirrored aluminium reflector, optical glass lenses, a black anodised aluminium lens holder and a holographic filter. MWFL and WFL versions: with precision optics with convex facets in highly

**Mounting:** Adjustable up to  $\pm 45^{\circ}$  on the horizontal pane and  $+90^{\circ}/-45^{\circ}$  on the vertical plane with aim locking set screw. Can be installed directly to mounting surface.

reflective anodised aluminium and a holographic filter. ASYMMETRICAL version:

Installation: Pre-cabled with 10' SJOOW 18-3 cable (second 18-2 direct burial

cable for 0-10V and DALI dimmable version).

Finish: Ferrite Grey

Driver: Non-Dimmable, 0-10V Dimmable or DALI Dimmable Wattage: 56W/88W (SP, FL, MWFL, WFL or ASYM), 29W (NSP)

a highly reflective preanodised brushed aluminium optic.

Color Temperature: 3000°K / 4000°K

**CRI:** 84

Voltage: Universal Voltage 120-277V AC 50/60Hz

IK Rating: IK10 IP Rating: IP66 rated

Certifications: cULus Wet Location Listed E488257

Tested in accordance with LM-79-08

Warranty: 5 year limited warranty





NSP Optic Shown



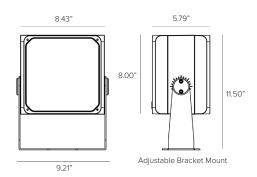


ımens:			3000K	4000K
Narrow Spot 6°	29W	=	2134Lm	2190Lm
Spot 17°	56W	=	3580Lm	3673Lm
	80W	=	4609Lm	4812Lm
Flood 27°	56W	=	4021Lm	4126Lm
	80W	=	5177Lm	5404Lm
MWFL 38°	56W	=	5150Lm	5284Lm
	80W	=	6631Lm	6922Lm
WFL 52°	56W	=	5137Lm	5270Lm
	80W	=	6614Lm	6904Lm
Asymmetric 85°x76°	56W	=	5741Lm	5890Lm
	80W	=	7391Lm	7715Lm
	Narrow Spot 6° Spot 17° Flood 27° MWFL 38° WFL 52°	Narrow Spot 6° 29W	Narrow Spot 6° 29W =	Mens: 3000K  Narrow Spot 6° 29W = 2134Lm  Spot 17° 56W = 3580Lm  80W = 4609Lm  Flood 27° 56W = 4021Lm  80W = 5177Lm  MWFL 38° 56W = 5150Lm  80W = 6631Lm  WFL 52° 56W = 5137Lm  80W = 6614Lm  Asymmetric 85°x76° 56W = 5741Lm  80W = 7391Lm

PRODUCT CODE	DRIVER	OPTICS	WATTAGE	FINISH	COLOR TEMP
DAL — Dart Maxi	ND - Non-dimmable electronic	NS — Narrow Spot 6°	<b>L2</b> — 29W	FE – Ferrite Grey	<b>30</b> — 3000K
	<b>10</b> – 0-10V Dimming	SP — Spot 17°	<b>L3</b> — 56W		<b>40</b> — 4000K
	<b>DA</b> <sup>1</sup> – DALI Dimming	FL — Flood 27°	<b>L4</b> — 88W	]	
	SOW and BOW	MW - Medium Wide Flood 3	38°		
	optics only	WF - Wide Flood 52°			
		AS — Asymmetric 85°x76°			



#### Views



L18-0029 Tru by Hilton Attachment E

## DART MAXI

Optical Acc	cessories:
Maximum	of two optical accessories per fixture
1E3093	Holder ring. CNC machined anodised and powder coated aluminium. Dimension 7.7in x 7.7in. <b>Required for use of all filters.</b>
1E3088	Chromatic filter Red. Glass with dichroic treatment. <b>Not suitable for Asymmetric optic.</b> To be completed with dedicated holder ring. Diameter 6.62in.
1E3089	Chromatic filter Green. Glass with dichroic treatment. <b>Not suitable for Asymmetric optic.</b> To be completed with dedicated holder ring. Diameter 6.62in.
1E3090	Chromatic filter Blue. Glass with dichroic treatment. <b>Not suitable for Asymmetric optic.</b> To be completed with dedicated holder ring. Diameter 6.62in.
1E3091	Chromatic filter Yellow. Glass with dichroic treatment. <b>Not suitable for Asymmetric optic.</b> To be completed with dedicated holder ring. Diameter 6.62in.
1E3092	Chromatic filter Magenta. Glass with dichroic treatment. <b>Not suitable for Asymmetric optic.</b> To be completed with dedicated holder ring. Diameter 6.62in.
1E3094	Blade light filter. PMMA holographic filter for a blade of light effect. <b>Not suitable for Asymmetric</b> . To be completed with dedicated holder ring. Diameter 6.62in.
1E3095	Asymmetric screen. Powder coated stainless steel. <b>Not suitable with 1E3096</b> .
1E3096	Anti-glare grid. The central elements may be removed to obtain two different levels of glare control. Powder coated stainless steel. <b>Not suitable with 1E3095</b> .

INSTALLAT	INSTALLATION ACCESSORIES:					
Maximum o	of one installation accessory per fixture					
1E3026	Plate for fitting rotation. Powder coated stainless steel.					
1E3028	Earthspike. Powder coated stainless steel.					
1E3098	Laser pointing system. To be installed by friction on the projector's body. Powder coated stainless steel. Provided with laser.					











1E3026







#### DART MAXI

#### **OPTICAL SYSTEM**

The optical system is the heart of every lighting fixture and its role is to adapt to the lamp, control emission and create the light beam. Every optical system is different, calibrated by a specific lamp to maximise performance and designed to interpret a lighting task to the full. Following rapid developments in LED lamps and new technology associated with them it is now more important than ever to look for new solutions, geometry and materials. Given the importance and specificity of this function Targetti has an internal design department dedicated to constantly creating and evolving its optical systems. Extremely innovative proprietary systems that are very different to each other, often protected by patents are developed with careful attention to the precision of the light beams and the best efficiency possible.

#### **Reflector Optics:**

#### **INDIRECT**

Narrow and defined beams. Created to fill the increasing need for more powerful, net and highly collimated beams, they exploit the classic lighting principle using a pure parabolic reflector lit by a lamp that is turned backwards towards the reflector and completely hidden from view. Using powerful state of the art COB module placed in focus of a mirror reflector resulted in having to design unusual solutions to allow for proper heat dissipation on one hand, and to minimise the shadow created in the beam by the lamp itself on the other hand. Thanks to a complex heat-pipe system, usually used in micro-computers that can transfer large quantities of heat through very small sections, the lamp can work at an ideal temperature to ensure long life and maximum efficiency.





#### **HYBRID**

**Performance and control.** Based on the combined use of reflectors and lenses to combine the advantages of two light control methods. High efficiency and clean beams for well collimated beams that are completely free from fall-off halos, which is a normal effect of light that is not controlled in optics with a simple reflector. Inside a classic faceted reflector a frame is inserted which positions one or more optical glass lens in front of the lamp: while the reflector controls the periphery of the beam, the lenses manage its central part separately, the part that normally escapes out of control. Cancelling "spurious" light is combined with flux recovery and an increase in intensity inside the beam.

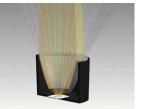




#### FACETED

**Maximum Efficiency of soft light.** Made from high vacuum metallised plastic protected with a Scratch Proof Formula or from polished anodised pure aluminium, their high reflectance always ensures high optical efficiency. Profiles designed with the best simulation software and the ellipsoidal convex facets overlaid on them are calibrated to generate various beam angles with an optimal light mix to create precise, soft, clean beams.





#### **ASYMMETRICAL**

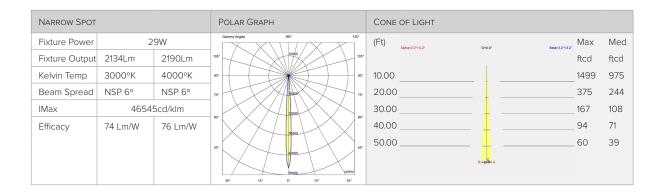
**Uniform light for vertical serfaces.** These are optics which make it possible to obtain an uniform effect on vertical surfaces for the entire height while at the same time widen the beam for increased longitudinal uniformity and better installation distance. Typically they use reflectors with very complex and innovative geometry that can be made of metallised plastic or reflective aluminium or use extruded lenses as in the case of linear lamps. What makes them unique is their ability to direct beams right from the surface nearest the fixture, making the light "attachment" imperceptible.

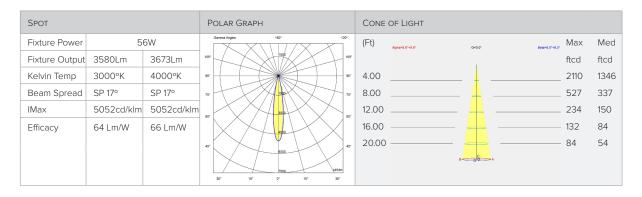




#### DART MAXI

#### Photometric Information

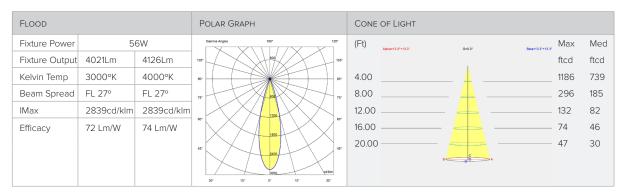


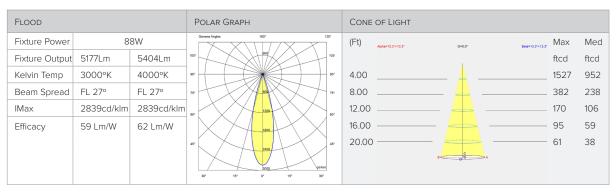


SPOT				Polar Graph	Cone	OF LIGHT				
Fixture Power	88	3W		Gamma Angles 180° 120°	(Ft)	Alpha=8.6"+8.6"	G=0.0*	Beta=8.5*+8.5*	Max	Med
Fixture Output	4609Lm	4812Lm	105	1950					ftcd	ftcd
Kelvin Temp	3000°K	4000°K	90°	90'	4.00				2717	1734
Beam Spread	SP 17°	SP 17°	75°	190	8.00		_		679	433
IMax	5052cd/klm	5052cd/klm	) 1	3000	12.00				302	193
Efficacy	53 Lm/W	55 Lm/W	60"	600	16.00				170	108
			45°	45*	20.00	)			109	69
				500 (vision 500)		В	C → A			

#### DART MAXI

#### **Photometrics**



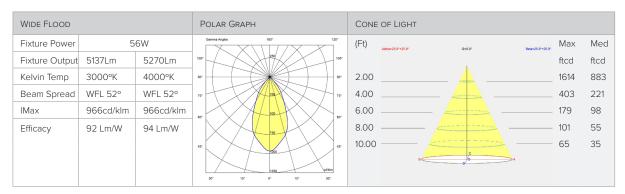


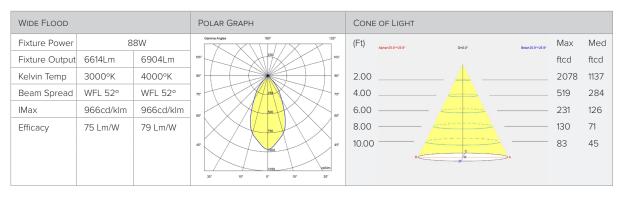
MEDIUM WIDE F	LOOD		POLAR GRAPH CONE OF LIGHT		
Fixture Power	56W		Genma Angles 180° 120° (Ft) Alpha=18.0°+18.0° G=0.0° Beta=18.0°+18.0°	Max	Med
Fixture Output	5150Lm	5284Lm	100° Mas not at G	ftcd	ftcd
Kelvin Temp	3000°K	4000°K	w 2.00	2206	1411
Beam Spread	MWFL 38°	MWFL 38°	79 4.00	551	353
IMax	1333cd/klm	1333cd/klm	6.00	245	157
Efficacy	92 Lm/W	94 Lm/W	8.00	138	68
			49 10.00	88	56
			300 A 900 A 900 A		

MEDIUM WIDE F	LOOD		POLAR GRAPH	Cone	OF LIGHT				
Fixture Power	8	8W	Gamma Angles 180° 120°		Alpha=19.0*+19.0*	G=0.0°	Beta=19.0*+19.0*	Max	Med
Fixture Output	6631Lm	6922Lm	105"			Max not at G		ftcd	ftcd
Kelvin Temp	3000°K	4000°K	90'	2.00		🛕		2965	1897
Beam Spread	MWFL 38°	MWFL 38°	75'	4.00				741	474
IMax	1333cd/klm	1333cd/klm	60° 60°	6.00		_		329	211
Efficacy	75 Lm/W	79 Lm/W		8.00				185	119
			45° 7500 (cábin	10.00	В	C C		119	78
			30° 15° 0° 15° 30°						

#### DART MAXI

#### **Photometrics**



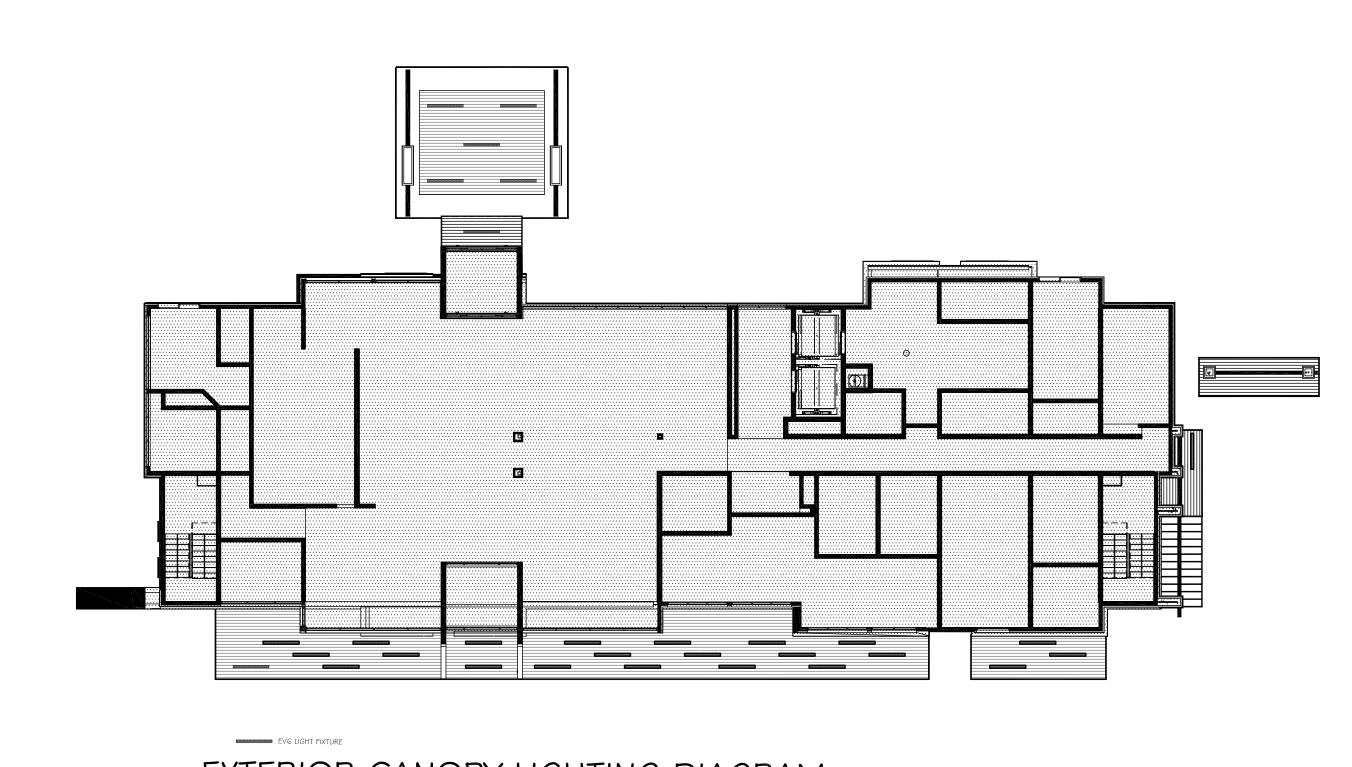


ASYMMETRIC			POLAR GRAPH CONE OF LIGHT		
Fixture Power	56W		Genna Angles 180° 120° (Ft) Apparet. 5°+4.5° G=0.0° Beller*13.5°+2.2°	Max	Med
Fixture Output	5741Lm	5890Lm	100° Mair not at 0	ftcd	ftcd
Kelvin Temp	3000°K	4000°K	w 2.00	_ 1811	1191
Beam Spread	85° x 76°	85° x 76°	18 4.00	453	298
IMax	895cd/klm	895cd/klm	6.00	- 201	132
Efficacy	103 Lm/W	105 Lm/W	8.00	- 113	74
			45 10.00 - c	- 72 ∍	48
			30" 15" 0" 15" 30"		

ASYMMETRIC			POLAR GRAPH	CONE OF LIGHT
Fixture Power	88W		Gamma Angles 160° 120°	(Ft) Appar44.5' 0+0.0' Bear73.5'+2.2' Max Med
Fixture Output	7391Lm	7715Lm	105'	Max not at G ftcd ftcd
Kelvin Temp	3000°K	4000°K	90'	2.00 932 241
Beam Spread	85° x 76°	85° x 76°	75'	4.00 233 60
IMax	895cd/klm	895cd/klm	60'	6.00 104 27
Efficacy	84 Lm/W	88 Lm/W	750	8.00 — 58 15
			45'	10.00 - 37 10
			30° 15° 0° 15° 30°	







EXTERIOR CANOPY LIGHTING DIAGRAM

| " = 20'-0"

Uale Sweeney

ARCHITECT
5715 143rd Place SI

JUNIC. 01017

DATE: 05/26/15

DWILEY: DS

CHOREY: DS

DEVELOPEMENT DRAFT NOT FOR CONSTRUCTION

ILTON - TRU HOTEI

EXTERIOR CANOPY TIGHTING DIAGRAM

PRINT D

L18-0029 Tru by Hilton SHEET NO.
Attachment EST-3