

# SOLID STATE AREA LIGHTING

## CTR SERIES - PLED

PROJECT NAME: \_\_\_\_\_

FIXTURE TYPE: \_\_\_\_\_

### FEATURES

#### Luminaire

Heavy gauge, corrosion resistant cast aluminum housing. Top is hinged for access. Luminaire base has 3" I.D. opening for tenon. All hardware is stainless steel.

#### PLED™ Optics

Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. LED optics completely seal each individual emitter to meet an IP66 rating. In asymmetric distributions, a micro-reflector inside the refractor re-directs the house side emitter output towards the street side and functions as a house side shielding element. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. Any one Panel, or group of Panels in a luminaire, have the same optical pattern. LED refractors produce standard site/area distributions. Panels are field replaceable and field rotatable in 90° increments and meet an IP66 rating.

#### LED Emitters

High output LED's are utilized with drive currents ranging from 350mA to 700mA. 70CRI Minimum. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

#### LED Driver

Constant current electronic with a power factor of >.90 and a minimum operating temperature of -40°F/-40°C. Driver(s) is/are UL and cUL recognized. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50,60Hz. (0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field installation.)

#### Amber LED

TRA (True Amber) LED's utilize material that emits light in the amber spectral bandwidth only without the use of phosphors.

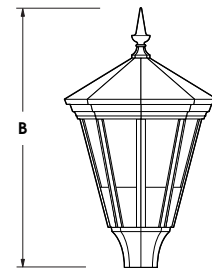
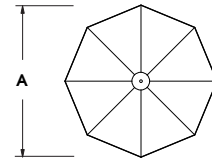
#### Finish

Polyester powder coat incorporates four step iron phosphate process to pretreat metal surface for maximum adhesion. Top coat is baked at 400°F for maximum hardness and exterior durability.

### CTR

(CTR SHOWN)

Patent pending



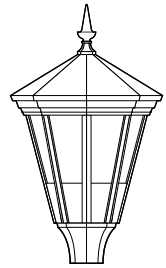
Fitter supplied to fit over 2 7/8" X 3" (73mm X 76mm) tenon.

	A	B
<b>CTR</b>	19" Dia. (483mm)	32.5" (826mm)
<b>CTRH</b>	21" Dia. (533mm)	32.5" (826mm)
<b>CTRR</b>	19.5" Dia. (495mm)	32.5" (826mm)

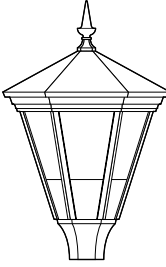
# CTR Series - PLED

## SPECIFICATIONS

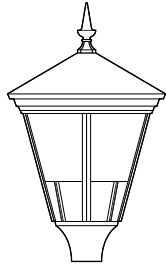
### Optional Styles



**CTRN**

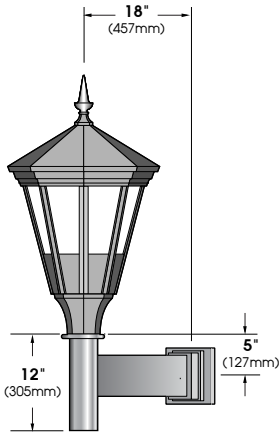


**CTRH**



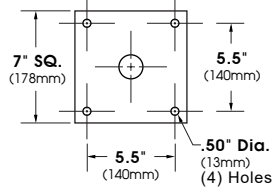
**CTRR**

### Wall Mounting



Extruded aluminum arm and cast aluminum wall bracket assembly provided with built in gasketed wire access for fixture/supply wire connection.

### Wall Plate



### PLED™ Modules



**CTR-LED** E.P.A. = 1.45  
Available in:  
36 LED Module Max



**CTRH-LED** E.P.A. = 1.53  
Available in:  
36 LED Module Max



36 LED Module



**CTRR-LED** E.P.A. = 1.49  
Available in:  
36 LED Module Max

## SPEC/ORDERING INFORMATION

Spec/Order Example: CTRN/PLED-II/20LED-700mA/CW/FM/RAL-8019-S

Luminaire	Optics	LED Mode			Voltage	Mounting	Finish	Options
Luminaire	Optics	LED			Voltage	Mounting	Finish	Options
<input type="checkbox"/> CTRN <input type="checkbox"/> CTRH <input type="checkbox"/> CTRR	<b>PLED™</b> Distribution Type <input type="checkbox"/> Type II <b>PLED-II</b> <input type="checkbox"/> Type II Front Row <b>PLED-II-FR</b> <input type="checkbox"/> Type III Med. <b>PLED-III-M</b> <input type="checkbox"/> Type III Wide <b>PLED-III-W</b> <input type="checkbox"/> Type IV <b>PLED-IV</b> <input type="checkbox"/> Type IV <b>PLED-IV-FT</b> <input type="checkbox"/> Type V Narrow <b>PLED-VSQ-N</b> <input type="checkbox"/> Type V Med. <b>PLED-V-SQ-M</b> <input type="checkbox"/> Type V Wide <b>PLED-V-SQ-W</b>	<input type="checkbox"/> 36LED <input type="checkbox"/> 20LED	<input type="checkbox"/> 700mA <sup>1</sup> <input type="checkbox"/> 525mA <input type="checkbox"/> 350mA	<input type="checkbox"/> NW (4000K)* <input type="checkbox"/> CW (5000K) <input type="checkbox"/> WW (3000K)  Other LED Colors Available Consult Factory  <input type="checkbox"/> Amber <sup>2</sup> <input type="checkbox"/> True Amber <sup>3</sup> TRA	<input type="checkbox"/> 120 <input type="checkbox"/> 208 <input type="checkbox"/> 240 <input type="checkbox"/> 277 <input type="checkbox"/> 347 <input type="checkbox"/> 480	<b>Post Top</b> <input type="checkbox"/> FM Expansion Fitter Flush Mount <input type="checkbox"/> PT Pole Tenon  <b>Arm Mount</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2-180 <input type="checkbox"/> 2-90 <input type="checkbox"/> 3-90 <input type="checkbox"/> 3-120 <input type="checkbox"/> 4-90  <b>Wallmount</b> <input type="checkbox"/> WM	<b>Standard Textured Finish</b> <input type="checkbox"/> Black <b>RAL-9005-T</b> <input type="checkbox"/> White <b>RAL-9003-T</b> <input type="checkbox"/> Grey <b>RAL-7004-T</b> <input type="checkbox"/> Dark Bronze <b>RAL-8019-T</b> <input type="checkbox"/> Green <b>RAL-6005-T</b>  For smooth finish replace suffix "T" with suffix "S" (Example: RAL-9500-S)  Consult factor for custom colors	<input type="checkbox"/> Internal House Side Shield inc. LED Count (Example: HS-PLED/48) <b>HS-PLED</b> <input type="checkbox"/> Twist Lock Receptable Only <b>TPR</b> <input type="checkbox"/> 7-Pin Twist Lock Receptable Only <b>TPR7</b> <input type="checkbox"/> High-Low Dimming for Switch by Others/Select Levels 50/100 or 25/100 (Example: HLSW/25) <b>HLSW</b> <input type="checkbox"/> Photo Cell + Voltage (Example: PC120V) <b>PC+V</b> <input type="checkbox"/> Single Fuse (120V, 277V) <b>SF</b> <input type="checkbox"/> Double Fuse (208V, 240V) <b>DF</b> <input type="checkbox"/> Blue-Tooth Programmable Photo/Motion Sensor (Factory - Motion 50/100; Photo 75c) <b>MS-F311</b>

**NOTES:**  
 1 - 700mA not for use with TRA LED's  
 2 - Narrow band Ambers have no Definable CCT equivalent  
 3 - Available in 350mA & 525mA drive currents only

# CTR Series - PLED

## LED/ Electrical Guide

### LED/ELECTRICAL GUIDE

LED Count	Applied B-U-G Rating	Source	Initial Lumens - 4000K CCT	Initial Lumens - 3000K CCT	Initial Lumens - 5000K CCT	L70 greater than (HR)	Starting Temp.	System Watts	Volts	Max Input Amps
20	III B1-U0-G1 VSQ B2-U0-G0	20 PLED® Optical Module – 350mA	2023 - 2376	1922 - 2258	2124 - 2494	90,000+	-40°C	22	120 277 347	.18 .08 .06
20	III B1-U0-G1 VSQ B2-U0-G1	20 PLED® Optical Module – 525mA	2871 - 3373	2728 - 3204	3014 - A3541	90,000+	-40°C	33	120 277 347	.28 .12 .10
20	III B1-U0-G1 VSQ B3-U0-G1	20 PLED® Optical Module – 700mA	3602 - 4231	3422 - 4020	3781 - 4442	90,000+	-40°C	44	120 277 347	.37 .16 .13
36	III B1-U0-G1 VSQ B3-U0-G1	36 PLED® Optical Module – 350mA	3642 - 4278	3641 - 4065	3824 - 4491	90,000+	-40°C	39.6	120 277 347	.33 .14 .11
36	III B2-U0-G2 VSQ B3-U0-G1	36 PLED® Optical Module – 525mA	5172 - 6075	4914 - 5772	5430 - 6377	90,000+	-40°C	59.4	120 277 347	.50 .21 .17
36	III B2-U0-G2 VSQ B3-U0-G2	36 PLED® Optical Module – 700mA	6485 - 7616	6161 - 7236	6808 - 7995	90,000+	-40°C	79.2	120 277 347	.66 .29 .23

LED Count	Applied B-U-G Rating	Source	Initial Lumens - 4000K CCT	Initial Lumens - 3000K CCT	Initial Lumens - 5000K CCT	L70 greater than (HR)	Starting Temp.	System Watts	Volts	Max Input Amps
<b>True Amber LED - 590nm</b>										
20	III B0-U0-G0 VSQ B1-U0-G0	20 PLED® Optical Module – 350mA	606 - 712			90,000+	-40°C	17	120 277 347	.14 .06 .05
20	III B0-U0-G0 VSQ B1-U0-G0	20 PLED® Optical Module – 525mA	861 - 1011			90,000+	-40°C	25.4	120 277 347	.21 .09 .07
36	III B0-U0-G0 VSQ B1-U0-G0	36 PLED® Optical Module – 350mA	1094 - 1284			90,000+	-40°C	30.5	120 277 347	.25 .11 .09
36	III B1-U0-G1 VSQ B1-U0-G0	36 PLED® Optical Module – 525mA	1552 - 1823			90,000+	-40°C	45.7	120 277 347	.38 .16 .13

- 1) Max Input Amps is the highest of starting, operating, or open circuit currents
- 2) System Watts includes the source watts and all driver components.
- 3) Lumen values for LED Modules vary according to the distribution type
- 4) Fuse value should be sufficient to protect all wiring components. For electronic driver and LED component protection, use 20KV surge suppressors.
- 5) L70(10K) – TM-21 6x rule applied

**WARNING:** All fixtures must be installed in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.

# SOLID STATE AREA LIGHTING

## CTR SERIES-LED

### SPECIFICATIONS

#### LUMINAIRE

Prismatic borosilicate glass refracting lens with specular top reflector. Heavy gauge, corrosion resistant cast aluminum housing. Top is hinged for access. Luminaire base has 3" I.D. opening for tenon. All hardware is stainless steel.

#### LED POWER ARRAY™

Three-dimensional array of individual LED Tubes fastened to a retaining plate. Each LED Tube consists of circuit board populated with a multiple of LED's and is mechanically fastened to a radial aluminum heat sink. An acrylic lens and end cap protects the LED Tube's internal components.

#### VERTICAL POWER™ ARRAY WITH REFRACTING

**GLOBE:** LED Tubes are aligned vertically and arranged radially to produce an even raw light distribution that simulates standard light sources. Used in conjunction with the external prismatic refracting lens which provides the optical control.

#### LED EMITTERS

High Output LED's are driven at 350mA for nominal 1 Watt output each. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult factory for other LED options.

#### LED DRIVER

UL and CUL recognized High Power Factor, Constant Current LED drivers operate on input voltages from 120-277VAC, 50/60hz. Consult Factory for (347-480VAC). Driver is mechanically fastened to a retaining bracket. Main Power quick disconnect provided. Driver has a minimum 4KV of internal surge protection, 10KV & 20KV Surge Protector optional. Dimming and High-Low Driver options available.

#### FINISH

Polyester powder coat incorporates four step iron phosphate process to pretreat metal surface for maximum adhesion. Top coat is baked at 400°F for maximum hardness and exterior durability.

PROJECT NAME: \_\_\_\_\_

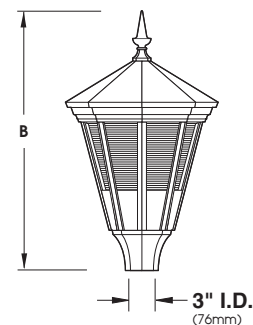
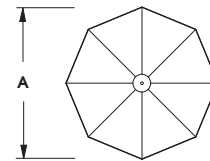
PROJECT TYPE: \_\_\_\_\_



**CTR\***

\*CTRN SHOWN

PATENT PENDING



FIXTURE	A	B
<b>CTRN</b>	19.5" 495mm	31" 787mm
<b>CTRH</b>	21" 533mm	32.5" 826mm
<b>CTRR</b>	19.5" 495mm	32.5" 826mm

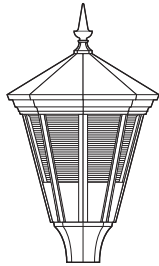


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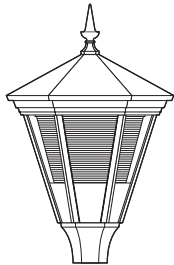
# CTR SERIES - LED

## S P E C I F I C A T I O N S

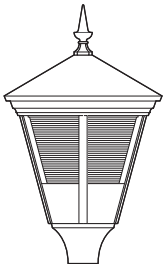
### OPTIONAL STYLES



CTRN

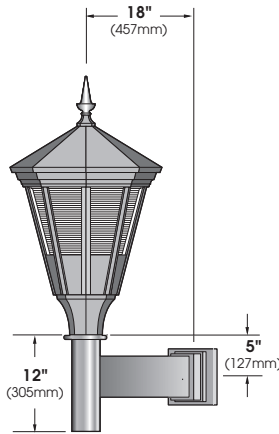


CTRH



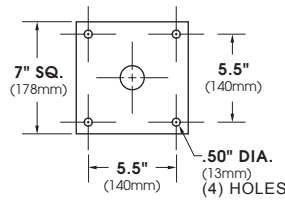
CTRR

### WALL MOUNT



EXTRUDED ALUMINUM ARM BRACKET AND CAST ALUMINUM WALL BRACKET ASSEMBLY PROVIDED WITH BUILT IN GASKETED WIRE ACCESS FOR FIXTURE/SUPPLY WIRE CONNECTION.

### WALL PLATE



### LED POWER ARRAY™ MODULES



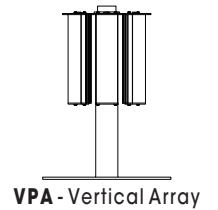
**CTR-LED** E.P.A.= 1.45

Available in:  
6 Array 48LED Max.  
8 Array 64LED Max.  
10 Array 80LED Max.



**CTRH-LED** E.P.A.= 1.53

Available in:  
6 Array 48LED Max.  
8 Array 64LED Max.  
10 Array 80LED Max.



VPA - Vertical Array



**CTRR-LED** E.P.A.= 1.49

Available in:  
6 Array 48LED Max.  
8 Array 64LED Max.  
10 Array 80LED Max.

PATENT PENDING

## O R D E R I N G I N F O R M A T I O N

LUMINAIRE	OPTICS	# of LED's	COLOR	VOLTAGE	MOUNTING	FINISH	OPTIONS
<b>LUMINAIRE</b>	<b>OPTICS</b>	<b>LED</b>			<b>MOUNTING</b>	<b>FINISH</b>	<b>OPTIONS</b>
LUMINAIRE	VERTICAL POWER ARRAY (CLEAR PRISMATIC GLOBE)	# of LEDs	COLOR	VOLTAGE	ARM MOUNT	STANDARD TEXTURED FINISH	
<input type="checkbox"/> CTRN-LED	<input type="checkbox"/> VPA - III .....	<input type="checkbox"/> 80LED (90 Watts)	<input type="checkbox"/> NW (4000K)* *STANDARD	<input type="checkbox"/> 120	<input type="checkbox"/> 1 .....	<input type="checkbox"/> BLACK RAL-9005-T	<input type="checkbox"/> HOUSE SIDE SHIELD...HS
<input type="checkbox"/> CTRH-LED	<input type="checkbox"/> VPA - V .....	<input type="checkbox"/> 64LED (71 Watts)	<input type="checkbox"/> CW (5000K)	<input type="checkbox"/> 208	<input type="checkbox"/> 2-180 .....	<input type="checkbox"/> WHITE RAL-9003-T	<input type="checkbox"/> DIMMABLE DRIVER(S) (0-10V)..... DIM
<input type="checkbox"/> CTRR-LED		<input type="checkbox"/> 48LED (53 Watts)	<input type="checkbox"/> WW (3000K)	<input type="checkbox"/> 240	<input type="checkbox"/> 2-90 .....	<input type="checkbox"/> GREY RAL-7004-T	<input type="checkbox"/> HIGH-LOW DIMMING FOR HARDWIRED SWITCHING OR NON-INTEGRATED MOTION SENSOR..... HLSW
		<input type="checkbox"/> 36LED (41 Watts)	OTHER LED COLORS AVAILABLE CONSULT FACTORY	<input type="checkbox"/> 277	<input type="checkbox"/> 3-90 .....	<input type="checkbox"/> DARK BRONZE RAL-8019-T	<input type="checkbox"/> PHOTO CELL + VOLTAGE (EXAMPLE: PC120V) ... PC+V
		Wattages are Max Input Watts		<input type="checkbox"/> 347	<input type="checkbox"/> 3-120 .....	<input type="checkbox"/> GREEN RAL-6005-T	<input type="checkbox"/> 10KV SURGE PROTECTOR..... 10SP
				<input type="checkbox"/> 480	<input type="checkbox"/> 4-90 .....		<input type="checkbox"/> 20KV SURGE PROTECTOR (277V & 480V Only) ... 20SP
					WALL MOUNT	FOR SMOOTH FINISH REMOVE SUFFIX "T" (EXAMPLE: RAL-9500)	
					<input type="checkbox"/> WM .....	SEE USALTG.COM FOR ADDITIONAL COLORS	
					POST TOP		
					<input type="checkbox"/> PT .....		