

# SOLID STATE AREA LIGHTING

## VRS SERIES-PLED PT

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

#### HOUSING

Unitized 0.125" heavy wall aluminum construction. Upper side vents are protected with perforated aluminum panels. Side vents and bottom lens frame vents provide passive and forced convective cooling of the **PLED™** module. Internal driver compartment is gasketed and sealed.

#### PLED™ OPTICAL MODULE

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.

#### LED DRIVER(S)

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 and mounted directly against the Electrical Housing to facilitate thermal transfer, held down by universal clamps to facilitate easy removal. 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 accessible installation.)

#### LED EMITTERS

High output LED's are utilized with drive currents ranging from 350mA to 1050mA. 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.

#### AMBER LED'S

PCA (Phosphor Converted Amber) LED's utilize phosphors to create color output similar to LPS lamps and have a slight output in the blue spectral bandwidth. TRA (True Amber) LED's utilize material that emits light in the amber spectral bandwidth only without the use of phosphors.

#### POST TOP MOUNTING

Four (4) 1" Square extruded aluminum arms welded to a cast aluminum pole top fitter. Arm assembly is mechanically attached to twin castings welded to either side of the housing.

#### FINISH

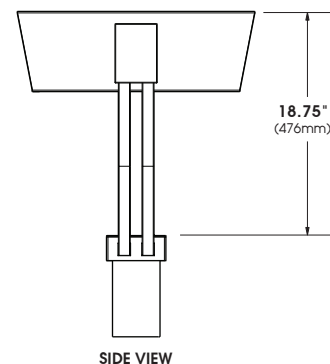
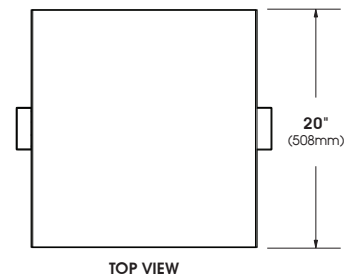
Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step sand blast and iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability. Texture finish is standard.

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

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



VRS PLED PT



2021091



# VRS SERIES - PLED PT

## LAMP/ELECTRICAL GUIDE

LED COUNT	SOURCE TYPE	SOURCE	INITIAL LUMENS - 4000K	INITIAL LUMENS - 3000K	INITIAL LUMENS - 5000K	L70 GREATER THAN (HR)	STARTING TEMP.	SYSTEM WATTS	VOLTS	MAX INPUT AMPS
40	LED	40 PLED Optical Module - 350mA	5,585 - 6,408	5,306 - 6,088	5,864 - 6,729	60,000+	-20°F	43	120 277	0.38 0.17
40	LED	40 PLED Optical Module - 525mA	8,059 - 9,246	7,656 - 8,784	8,462 - 9,709	60,000+	-20°F	65	120 277	0.55 0.24
40	LED	40 PLED Optical Module - 700mA	10,240 - 11,749	9,728 - 11,162	10,752 - 12,337	54,000+	-20°F	87	120 277	0.73 0.32
40	LED	40 PLED Optical Module - 1050mA	13,642 - 15,652	12,960 - 14,870	14,324 - 16,435	60,000+	-20°F	128	120 277	1.12 0.49
80	LED	80 PLED Optical Module - 350mA	10,824 - 12,419	10,283 - 11,798	11,365 - 13,040	60,000+	-20°F	86	120 277	0.75 0.33
80	LED	80 PLED Optical Module - 525mA	15,587 - 17,884	14,808 - 16,990	16,366 - 18,778	60,000+	-20°F	130	120 277	1.10 0.48
80	LED	80 PLED Optical Module - 700mA	19,767 - 22,680	18,779 - 21,546	20,755 - 23,814	60,000+	-20°F	174	120 277	1.45 0.63
80	LED	80 PLED Optical Module - 1050mA	26,255 - 30,124	24,942 - 28,618	27,568 - 31,630	60,000+	-20°F	257	120 277	2.23 0.96

### NOTES:

1. Max Input Amps is the highest of starting, operating, or open circuit currents
2. Lumen values for LED Modules vary according to the distribution type
3. System Watts includes the source watts and all driver components.
4. Fuse value should be sufficient to protect all wiring components. For electronic driver and LED component protection, use 10KV - 20KV surge suppressors.
5. L70(9K) - 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

## VRSPT SERIES-VLED

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

#### HOUSING

Unitized 0.125" heavy wall aluminum construction. Upper side vents are protected with perforated aluminum panels. Side vents and bottom lens frame vents provide passive and forced convective cooling of the **VLED®** module. Internal driver compartment is gasketed and sealed.

#### **VLED®** OPTICS

Low copper A356 alloy (<.2% copper) cast aluminum housing. Integrated clear tempered glass lens sealed with a continuous silicone gasket protects emitters (LED's) and emitter Reflector-Prism optics, and seals the module from water intrusion and environmental contaminants. Module is sealed to meet an IP67 rating. Each emitter is optically controlled by a Reflector-Prism injection molded from H12 acrylic (3 types per module; one from 0° - 50°; one from 50° - 65°; one from 65° - 72°). Each Reflector-Prism has indexing pins for aiming and is secured to an optical plate made of matte black anodized aluminum. The optical plate locates every Reflector-Prism over an emitter. Reflector-Prisms are secured to the optical plate with a UV curing adhesive. The Reflector-Prisms are arrayed to produce IES Type II, III, IV, and V-SQ distributions. The entire Optical Module is field rotatable in 90° increments. Both module and drivers are factory wired using water resistant, insulated cord.

#### LED DRIVER

Drivers are UL and cUL recognized mounted on a single plate and factory prewired with quick-disconnect plugs. Constant current driver is electronic and has a power factor of >0.90 and a minimum operating temperature of -40°F. Drivers accept an input of 120-277V, 50/60Hz or 347-480V, 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 accessible installation.)

#### LED EMITTERS

High output LED's are utilized with drive currents ranging from 350mA to 1050mA. 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.

#### MOUNTINGS

**Post Top Arms** - Four (4) 1" Square extruded aluminum arms welded to a cast aluminum pole top fitter. Arm assembly is mechanically attached to castings welded to either side of the housing.

**Wall** - Heavy wall extruded aluminum arm with draw bolts integrates with a cast aluminum wall plate and mounting bracket.

**Canopy** - Standard 1" high cast aluminum mounting plate with central wireway or 2" high heavy gauge wire box with 3/4" conduit knockouts on each side.

#### FINISH

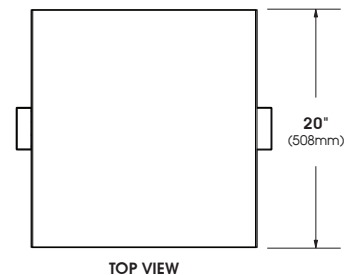
Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step sand blast and iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability. Texture finish is standard.

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

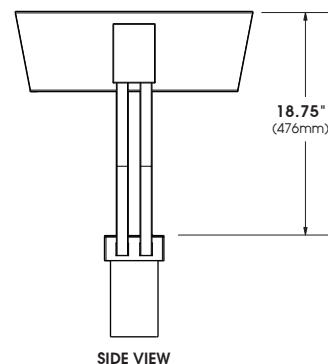
FIXTURE TYPE: \_\_\_\_\_



VRS LED PT



TOP VIEW



SIDE VIEW

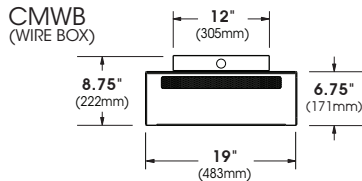
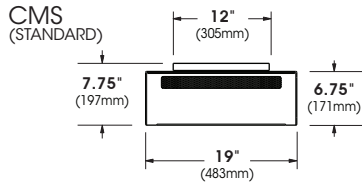


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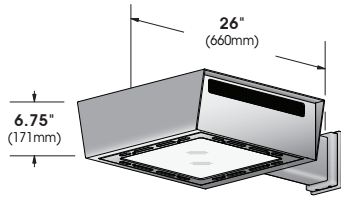
# VRSPT SERIES - VLED

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

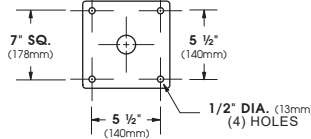
### CANOPY MOUNT



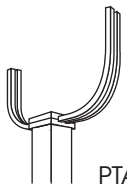
### WALL MOUNT



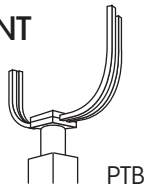
### WALL PLATE



### YOLK MOUNT



PTA



PTB

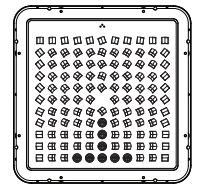
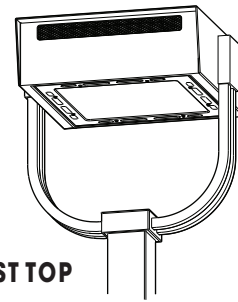
STANDARD TENON ASSEMBLY FOR 4" & 5" SQ. POLES.

TENON ASSEMBLY FOR TAPERED OR SQ. POLES. TENON ASSEMBLY IS ALSO AVAILABLE AS AN OPTION FOR 4", 5" OR 6" SQ. POLES

DECORATIVE RING SUPPLIED FOR 6" SQ. POLES. (SPECIFY POLE I.D.)

SPECIFY MOUNTING ASSEMBLY:  
PTB27-TO FIT OVER 2 7/8" O.D. TENON.  
PTB23-TO FIT OVER 2 3/8" O.D. TENON.

### VLED® MODULES



120 LED Module

### VRS LED POST TOP

E.P.A. = 1.66  
Available in:  
120, 80, 64 & 48 LED Module

### Approximate Average Lumens - 4000K

(Lumens median of all distributions)

	350mA			525mA			700mA		
	Watts	Lumens	HID Eq.	Watts	Lumens	HID Eq.	Watts	Lumens	HID Eq.
48	53	5,843	70-100	77	8,046	100-175	103	10,074	200-250
64	71	7,791	100-175	102	10,728	175	138	12,402	315-350
80	87	9,164	150-175	130	12,493	200-250	173	15,539	350-400
100	110	11,055	200	160	15,295	350-400	-	-	-
120	129	13,265	250	192	18,354	400-450	-	-	-

Spec/Order Example: VRS LED PT/VLED-IV/48LED 700mA-CW 120/PTB/RAL8019-S

## S P E C / O R D E R I N G I N F O R M A T I O N

MODEL	OPTICS	LED	MOUNTING	FINISH	OPTIONS
<input type="checkbox"/> VRS LED PT	<input checked="" type="checkbox"/> <b>VLED®</b> <input type="checkbox"/> TYPE II <b>VLED-II</b> ..... <input type="checkbox"/> TYPE III <b>VLED-III</b> ..... <input type="checkbox"/> TYPE IV <b>VLED-IV</b> ..... <input type="checkbox"/> TYPE V <b>VLED-V-SQ</b> .....	No. LEDs <input type="checkbox"/> 120LED <sup>1</sup> <input type="checkbox"/> 700mA <input type="checkbox"/> NW (4000K)* <input type="checkbox"/> 100LED <sup>1</sup> <input type="checkbox"/> 525mA <input type="checkbox"/> CW (5000K) <input type="checkbox"/> 80LED <input type="checkbox"/> 350mA <input type="checkbox"/> WW (3000K) <input type="checkbox"/> 64LED <input type="checkbox"/> 48LED  <small>NOTE: 1 - AVAILABLE IN ARM AND POST TOP MODELS ONLY. NOT AVAILABLE IN 700mA.</small>	YOLK MOUNT <input type="checkbox"/> PTA ..... <input type="checkbox"/> PTB .....  WALL MOUNT <input type="checkbox"/> WM .....  CANOPY MOUNT <input type="checkbox"/> CMS ..... <small>(STANDARD)</small> <input type="checkbox"/> CMWB ..... <small>(WIRE BOX)</small>	STANDARD TEXTURED FINISH <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>  <small>FOR SMOOTH FINISH REPLACE SUFFIX "T" WITH SUFFIX "S" (EXAMPLE: RAL-9005-S)</small>  <small>SEE USALTG.COM FOR ADDITIONAL COLORS</small>	<input type="checkbox"/> HIGH-LOW DIMMING FOR HARDWIRED SWITCHING OR NONINTEGRATED MOTION SENSOR ..... <b>HLSW</b> <input type="checkbox"/> INTERNAL HOUSE SIDE SHIELDS ..... <b>HS</b> <input type="checkbox"/> EXTERNAL HOUSE SIDE SHIELD ..... <b>EHS</b> <input type="checkbox"/> PHOTO CELL + VOLTAGE (EXAMPLE: PC120V) ..... <b>PC+V</b> <input type="checkbox"/> TWIST LOCK RECEPTACLE ONLY ..... <b>TPR</b> <input type="checkbox"/> 7-PIN TWIST LOCK RECEPTACLE ONLY ..... <b>TPR7</b> <input type="checkbox"/> SINGLE FUSE (120V, 277V, 347V) ..... <b>SF</b> <input type="checkbox"/> DOUBLE FUSE (208V, 240V, 480V) ..... <b>DF</b> <input type="checkbox"/> STEP DIM MOTION SENSOR (PROGRAMMED 50/100) ..... <b>MS-F211</b> <input type="checkbox"/> REMOTE MOTION SENSOR CONFIGURATOR ..... <b>MS-FC10</b>
		OTHER LED COLORS AVAILABLE CONSULT FACTORY  VOLTAGE <input type="checkbox"/> 120 <input type="checkbox"/> 208 <input type="checkbox"/> 240 <input type="checkbox"/> 277 <input type="checkbox"/> 347 <input type="checkbox"/> 480			

# VRSPT SERIES - VLED

## LAMP/ELECTRICAL GUIDE

LED COUNT	SOURCE TYPE	SOURCE	INITIAL LUMENS - 4000K	INITIAL LUMENS - 3000K	INITIAL LUMENS - 5000K	L70 GREATER THAN (HR)	STARTING TEMP.	SYSTEM WATTS	VOLTS	MAX INPUT AMPS
48	LED	48 VLED* Optical Module - 350mA	5,664 - 6,022	5,381 - 5,721	5,947 - 6,323	60,000+	-20°F	53	120 277 347	0.45 0.20 0.16
48	LED	48 VLED* Optical Module - 525mA	7,799 - 8,292	7,409 - 7,877	8,189 - 8,707	60,000+	-20°F	77	120 277 347	0.65 0.26 0.23
48	LED	48 VLED* Optical Module - 700mA	9,765 - 10,382	9,277 - 9,863	10,253 - 10,901	60,000+	-20°F	103	120 277 347	0.86 0.38 0.30
64	LED	64 VLED* Optical Module - 350mA	7,552 - 8,030	7,174 - 7,629	7,930 - 8,432	60,000+	-20°F	71	120 277 347	0.60 0.26 0.21
64	LED	64 VLED* Optical Module - 525mA	10,399 - 11,057	9,879 - 10,504	10,919 - 11,610	60,000+	-20°F	102	120 277 347	0.85 0.37 0.30
64	LED	64 VLED* Optical Module - 700mA	12,111 - 12,693	11,505 - 12,058	12,717 - 13,328	60,000+	-20°F	138	120 277 347	1.15 0.50 0.40
80	LED	80 VLED* Optical Module - 350mA	8,883 - 9,445	8,439 - 8,973	9,327 - 9,917	60,000+	-20°F	87	120 277 347	0.73 0.33 0.26
80	LED	80 VLED* Optical Module - 525mA	12,110 - 12,876	11,505 - 12,232	12,716 - 13,520	60,000+	-20°F	130	120 277 347	1.09 0.47 0.38
80	LED	80 VLED* Optical Module - 700mA	15,138 - 15,866	14,381 - 15,073	15,895 - 16,659	60,000+	-20°F	173	120 277 347	1.45 0.63 0.50
100	LED	120 VLED* Optical Module - 350mA	10,812 - 11,297	10,271 - 10,732	11,353 - 11,862	60,000+	-20°F	110	120 277 347	0.92 0.40 0.32
100	LED	120 VLED* Optical Module - 525mA	14,958 - 15,632	14,210 - 14,850	15,706 - 16,414	60,000+	-20°F	160	120 277 347	1.34 0.58 0.47
120	LED	120 VLED* Optical Module - 350mA	12,973 - 13,557	12,324 - 12,879	13,622 - 14,235	60,000+	-20°F	129	120 277 347	1.08 0.47 0.38
120	LED	120 VLED* Optical Module - 525mA	17,950 - 18,758	17,053 - 17,820	18,848 - 19,696	60,000+	-20°F	192	120 277	1.60 0.70

### NOTES:

1. Max Input Amps is the highest of starting, operating, or open circuit currents
2. Lumen values for LED Modules vary according to the distribution type
3. System Watts includes the source watts and all driver components.
4. Fuse value should be sufficient to protect all wiring components. For electronic driver and LED component protection, use 10KV - 20KV surge suppressors.
5. L70(9K) - 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.