EXPEDITED AVAILABILITY

QSR-PLED

SPECIFICATIONS

OPTICAL HOUSING

Heavy cast low copper aluminum (A356 alloy; <0.2% copper) assembly with integral cooling fins. The Optical Panel mounting surface is milled flat (surface variance <± .003") to facilitate thermal transfer of heat to housing and cooling fins. Solid barrier wall separates optical and electrical compartments. The optical and electrical compartments are integrated to create one assembly. Minimum wall thickness is .188".

ELECTRICAL HOUSING w/ INTEGRATED ARM Heavy cast low copper aluminum (A356 alloy; <0.2% copper) assembly with integral cooling ribs surrounding the electrical compartment and a flat surface on the top of the arm to accommodate a photocell receptacle. Solid barrier wall separates optical and electrical compartments. The optical compartment and electrical compartment with the integrated support arm combine to create one assembly. Minimum wall thickness is .188". Cast and hinged driver assembly cover is integrated with wiring compartment cover.

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. 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 Type III and Type IV site/area distributions. Panels are field replaceable and field rotatable in 90° increments. LED's are 4000K CCT.

LED DRIVER(S)

Constant current electronic with a power factor of >,90 and a minimum operating temperature of -40°F. 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.

FINISH

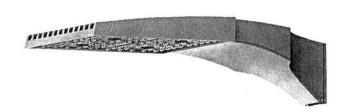
Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step media blast and iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability.

PROJECT NAME:

Kessler Ridge apartment

PROJECT TYPE:

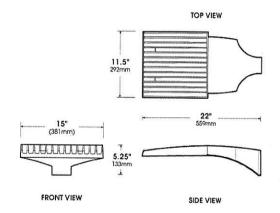
Site light pole type 'PL'



QSR-LED*

* UNIVERSAL POLE MOUNTING BRACKET INCLUDED

PATENT PENDING







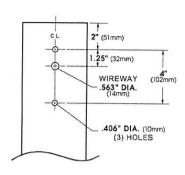


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SPECIFICATIONS

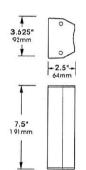
POLE DRILLING TEMPLATE



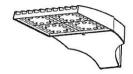
UNIVERSAL POLE MOUNTING BRACKET



FITS ROUND OR SQUARE POLES.



PLED™ MODULES



24 LED Array

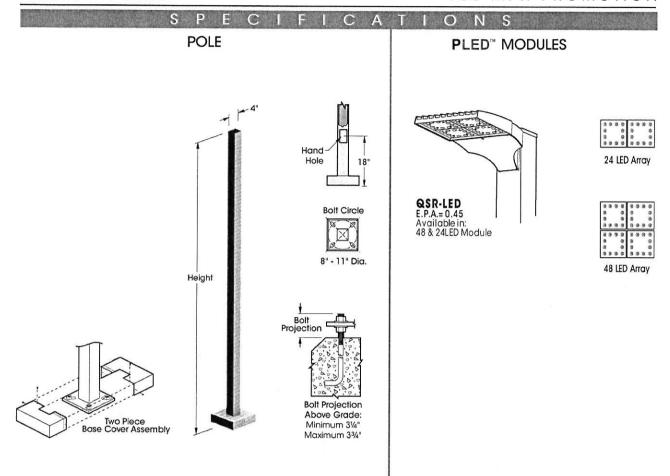
QSR-LED E.P.A.= 0.45 Available in: 48 & 24LED Module

48 LED Array

DER	TNG	IN	F O	R M A	TION
LED COUNT	VOLTAGE	WATTS	LUMENS	REPLACES HID	OPTIONS
	• = Specify Voltage				J Company
24	□ 120	68	7548	150W	SURGE PROTECTORSP
24	208	68	7480	150W	
48		79	10349	250W	☐ HOUSE SIDE SHIELD HS-PLET
48	□ 2//	79	10270	250W	
48		160	18240	400W	
48		160	18040	400W	
	* = Specify Voltage				
24	□ 347	68	7548	150W	
24	□ 480	68	7480	150W	
48		70	10340	250W	
48		79	10270	250W	
48		160	18240		
48		160	18040	400W	
	24 24 48 48 48 48 48 48 48	LED COUNT VOLTAGE	LED COUNT VOLTAGE WATTS	LED COUNT VOLTAGE WATTS LUMENS	LED COUNT VOLTAGE WATTS LUMENS REPLACES HID 24 □ 120 68 7548 150W 24 □ 208 68 7480 150W 48 □ 277 79 10349 250W 48 □ 160 18240 400W 48 □ 160 18040 400W 48 □ 347 68 7548 150W 24 □ 347 68 7480 150W 24 □ 480 68 7480 150W 48 □ 79 10349 250W 48 □ 79 10270 250W 48 □ 79 10270 250W 48 □ 160 18240 400W

QSR - PLED

100 MPH PROMOTION

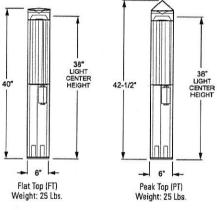


*=Specify Voltage *=Specify Vol	POLE	CATALOG #	VOLTAGE	WATTS	LUMENS	REPLACES HID	LED COUNT	OPTIONS
15'0'-4" \$q - 11Ga			* = Specify Voltage		WANTE			
15'0'-4" \$q - 11Ga	15'0"- 4" Sq - 11Ga	SNTS-154-11/QSR/2480/PLED-III/*/RAL-8019/DBZ	□ 120	68	7548	150W	24	SURGE PROTECTOR
"200"-4" \$q - 11Ga	15'0"- 4" Sq - 11Ga			68	7480	150W		
200"-4" \$q - 11Ga	MOIOI 4110- 110-	W CALTE COA 13 COCO CACCO IDICE III CA CALL COSO COCO	A STATE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS	70	10040	050111		☐ HOUSE SIDE SHIELD
25'0"-4" Sq - 11Ga SNTS-254-11/QSR/4810/PLED-III/*/RAL-8019/DBZ 160 18240 400W 48 25'0"-4" Sq - 11Ga SNTS-254-11/QSR/4810/PLED-IV/*/RAL-8019/DBZ 160 18040 400W 48 *- specify Voltage *-			□ 277				-	LI HOUSE SIDE SHIELD
25'0"-4" \$q - 11Ga	20'0"- 4" Sq - 11Ga	SN15-204-11/QSR/4850/PLED-IV/*/RAL-8019/DBZ		79	102/0	250W	48	
25'0"-4" \$q - 11Ga	25'0"- 4" Sq - 11Ga	SNTS-254-11/QSR/4810/PLED-III/*/RAL-8019/DBZ		160	18240	400W	48	
15'0'- 4" \$q - 11Ga □ \$NT\$-154-11/Q\$R/2480/PLED-III/*/RAL-8019/DBZ □ 347 68 7548 150W 24 15'0"- 4" \$q - 11Ga □ \$NT\$-154-11/Q\$R/2480/PLED-IV/*/RAL-8019/DBZ □ 480 68 7480 150W 24 20'0"- 4" \$q - 11Ga □ \$NT\$-204-11/Q\$R/4850/PLED-III/*/RAL-8019/DBZ 79 10349 250W 48 20'0"- 4" \$q - 11Ga □ \$NT\$-204-11/Q\$R/4850/PLED-IV/*/RAL-8019/DBZ 79 10270 250W 48 25'0"- 4" \$q - 11Ga □ \$NT\$-254-11/Q\$R/4810/PLED-III/*/RAL-8019/DBZ 160 18240 400W 48	25'0"- 4" \$q - 11Ga			160	18040			
15'0'-4" \$q - 11Ga			* = Specify Voltage					
15'0'-4" \$q - 11Ga	15'0"- 4" Sq - 11Ga	SNTS-154-11/QSR/2480/PLED-III/*/RAL-8019/DBZ	□ 347	68	7548	150W	24	
20'0"-4" Sq - 11Ga		SNTS-154-11/QSR/2480/PLED-IV/*/RAL-8019/DBZ		68	7480	150W		
20'0"-4" Sq - 11Ga	20'0"- 4" Sa - 11Ga	SNTS-204-11/QSR/4850/PLED-III/*/RAL-8019/DBZ		79	10349	250W	48	
		SNTS-204-11/QSR/4850/PLED-IV/*/RAL-8019/DBZ		79	10270	250W		
pros	25'0"- 4" Sq - 11Ga	SNTS-254-11/QSR/4810/PLED-III/*/RAL-8019/DBZ		160	18240	400W	48	
	25'0"- 4" Sq - 11Ga	SNTS-254-11/QSR/4810/PLED-IV/*/RAL-8019/DBZ		160	18040	400W		

BOLLARD LIGHT TYPE 'BL'

6" SQUARE ALUMINUM BOLLARD TYPE: LED PROJECT: NOTES: EXAMPLE OSA6S -L20/830 - AC DBR AB **OPTIONS** -DIM UNV -. • SERIES LUMEN CRIA SHIELDING HOUSING FINISH OPTIONS ANCHOR DRIVER VOLTAGE CCT TOP OPTIONS

CROSS SECTIONSS



FEATURES

- LEDs provide high-efficacy, good color rendering, a variety of color options, and 50,000 hours rated life (L70).
- Square aluminum bollard features a highly reflective bowl reflector with colormatched trim for effective light distribution and pleasing appearance day or night.
- Available with flat or peak top.
- ► Up to 2000-lumen module.
- ► 80 CRI minimum.
- ► 2700K, 3000K, 3500K, or 4000K.
- Finned, extruded aluminum heat sink for maximum heat dissipation.
- ► This fixture is proudly made in the USA.

ORDERING INFORMATION

S	F	R	ı	F	2

OSA6S

6" Square Aluminum Bollard

LED PACKAGE

	Example: l	L20/830	TO THE OWNER OF THE OWNER OWNER OF THE OWNER OWN
LUMEN PACKAGE	NOMINAL LUMENS	MINIMUM CRI & CCT	AVERAGE SYSTEM WATTAGE
L11	1100	827 = 80 CRI, 2700K 830 = 80 CRI, 3000K	17
L20	2000	835 = 80 CRI, 3500K 840 = 80 CRI, 4000K	27

Nominal lumens based on 3500K CCT, actual lumens may vary.

SHIELD/REFLECTOR

See back for shielding details.

AC

Acrylic lens with bowl reflector

HOUSING TOP

FT	Flat top
PT	Peak top

FINISH OPTIONS

14)
10
05)
(RAL #9006)
03)
color

ANCHOR BOLTS

Anchor bolts (Three 3/8" x 12" cast-in galvanized steel anchor J-bolts, shipped with fixture. Mounting template included.) AB LAB Less anchor bolts

PAB

Pre-shipped anchor bolts (Three 3/8" x 12" cast-in galvanized steel anchor J-bolts. Mounting template included.)

OPTIONS

Single fuse (120V, 277V, or 347V only; must SF specify voltage) Double fuse (208V, 240V, or 480V only; must specify voltage) DF

DRIVER

Driver prewired for non-dimming applications DIM 10% dimming driver prewired for 0-10V low voltage applications

VOLTAGE

120	120V
208	208V
240	240V
277	277V
UNV	120-277V
347	347V
480	480V

SPECIFICATIONS

Housing - Fabricated aluminum, minimum .125" thick.

Housing Top — Formed aluminum, minimum .125" thick.

Reflector - Spun aluminum upper and lower reflectors with clear specular finish. Shield – UV stabilized clear aproving sealed with silicone. Type V distribution.

Electrical – High quality mid-power LED board. L70 at 50,000 hours. Prewired at

factory for easy field installation. Rated -40°F minimum starting temperature.

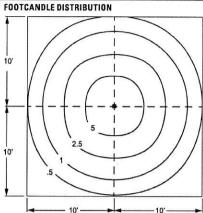
Finish - Super durable polyester powder coat bonded to phosphate-free, multi-stage pretreated metal, meets and exceeds AAMA 2604 specifications for outdoor durability. Mounting — Minimum 2" recessed in ground with four-point hot dip galvanized 1/4" A36 steel baseplate. For accurate installation a fullscale mounting template is provided with each bollard and anchor bolt order. Labels – cETLus conforms to UL STD 1598 and UL STD 8750; Certified to CAN/CSA STD C22.2 No. 250.0. Suitable for wet locations. Warranty - 5-year limited warranty, see hew.com/warranty.

PHOTOMETRY

TEST REPORT INFORMATION

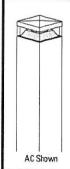
- Test Report #: 100570727CHI-004
- ► Date: 09/12/12
- ► Lamp Type: LED
- ► Rated Lumens: 1039
- ► Watts: 27.5
- ► Lumens Per Watt: 37.8
- ► CRI:84.6
- ► CCT: 3001K

Catalog #: OSA6S-L20/830-AC-FT-WHT



FIXTURE DETAILS

SHIELDING



MOUNTING TEMPLATE **MOUNTING DETAILS** Concrete bollard housings are installed with anchor bolts embedded in a below grade footing (by others). All fastening hardware must not contact soil. 4" min. Anchor bolts Mounting template is provided with each order. A pdf file (not to scale) of the mounting template is available at www.hew.com Electrical conduit

HSLED13B





Bullet shape die cast aluminum flood with spotlighting for over 40 feet away. 13 Watt LED High Performance Light Engine.

Color: Black

Weight: 3.5 lbs

	Project:		Type:		
	Prepared	By:	Date:		
	**************************************	30.0-20.W.			
		ner i de la caracteria de la calegra de la calegra	e e e e e e e e e e e e e e e e e e e	THE MAIN LINE STREET, I TO SEE THE	
		Barrio Dia Compani di Sonti Compani di Artico di		*****	
[Driver Info		LED Info		
Т	vpe:	Constant Current	Watts:	13W	

120V: 0.13A Color Temp 5100K (Cool) 208V: 0.08A 67 CRI Color Accuracy: 240V 100,000 0.074 L70 Lifespan: 277V: 0.06A Lumens: 787 Input Watts: 15W Efficacy: 52 I PW 86% Efficiency:

Technical Specifications

Listings

UL Listing:

Suitable for wet locations. Suitable for ground mounting.

IESNA LM-79 & IESNA LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and 80, and have received the Department of Energy "Lighting Facts" label.

LED Characteristics

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

LEDs

13 Watt high output, long-life LED.

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warrantied to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for (SSL) Products, ANSI C78.377-2008.

Optical

Spotlight Distribution:

Beam Angle of 11° and Field Angle of 24° enables the HSLED to produce a very narrow spot distribution.

Lumen Maintenance:

100,000 hours Life Based on LM-80 Tests.

NEMA Type:

2H x 2V Beam Spread.

Electrical

Driver

Constant Current, Class 2, 100-277V, 50-60Hz, 100-240VAC 0.3-0.15A, 277VAC 0.15A.

Surge Protection:

4kV

Construction

Ambient Temperature:

Suitable for use in 40°C ambient temperatures.

Cold Weather Starting:

The minimum starting temperature is -40°F/-40°C.

Thermal Management:

Cast aluminum patent pending Thermal Management system for optimal heat sinking. The HSLED is designed for cool operation, most efficient output and maximum LED life by minimizing LED junction temperature.

Housing:

Precision die-cast aluminum housing, hood and mounting arm.

Gaskets:

High Temperature Silicone.

Finish

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

Green Technology:

Mercury and UV free, and RoHS compliant.

Other

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

California Title 24:

HSLED13 complies with 2013 California Title 24 building and electrical codes as a commercial outdoor non-pole-mounted fixture < 30 Watts when used with a photosensor control. Select catalog number PCS900(120V) or PCS900/277 to order a photosensor.

Patents:

The design of the HSLED is protected by Taiwan Patent 01510965 and patents pending in US, Canada, China, and Mexico.

Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act

Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods— Buy American Act— Construction Materials (October 2010).

Trade Agreements Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.