



SAT IMAGE overlay



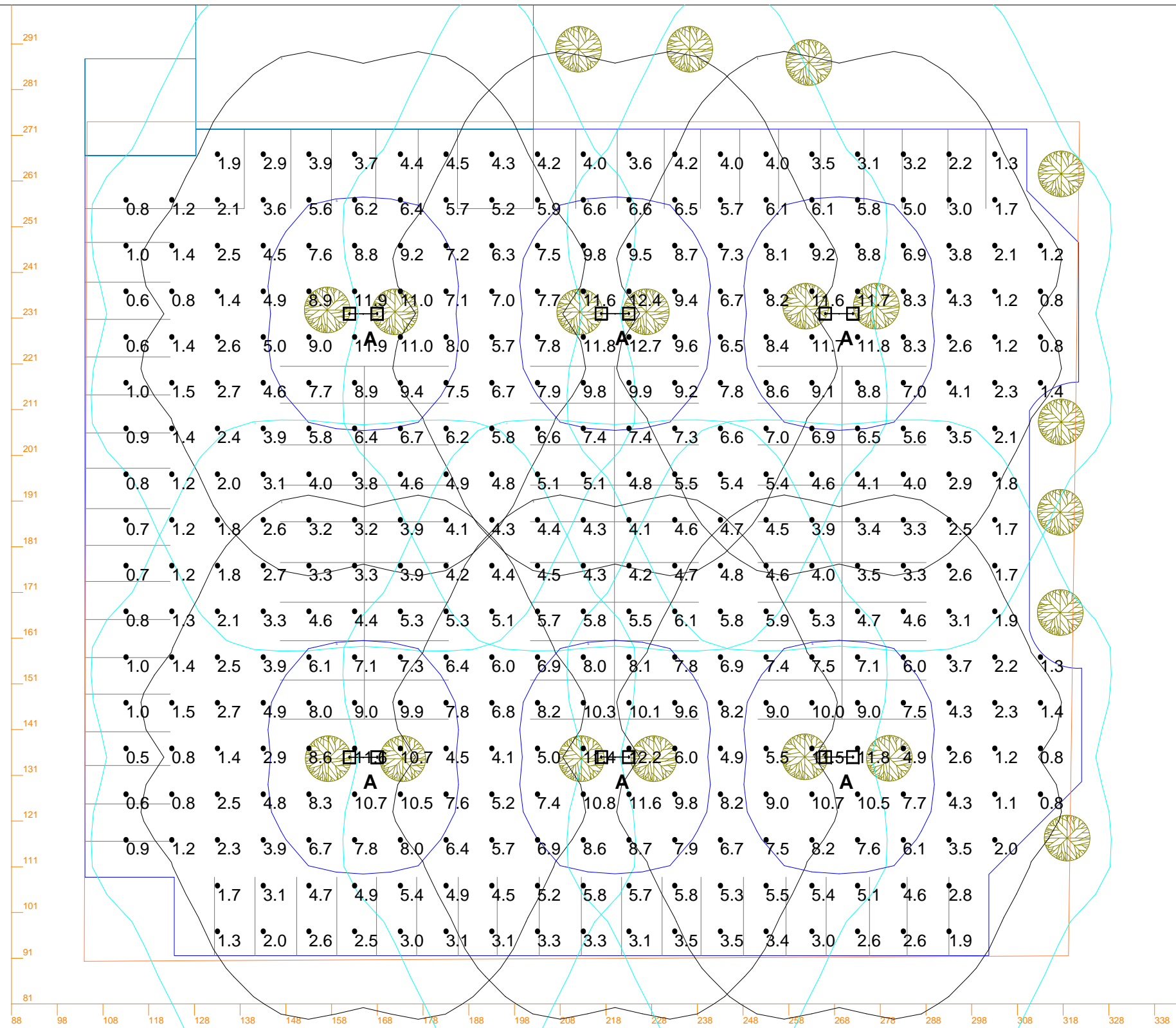
Scale: as noted

Date: 06/19/09

Drawn By: mjl

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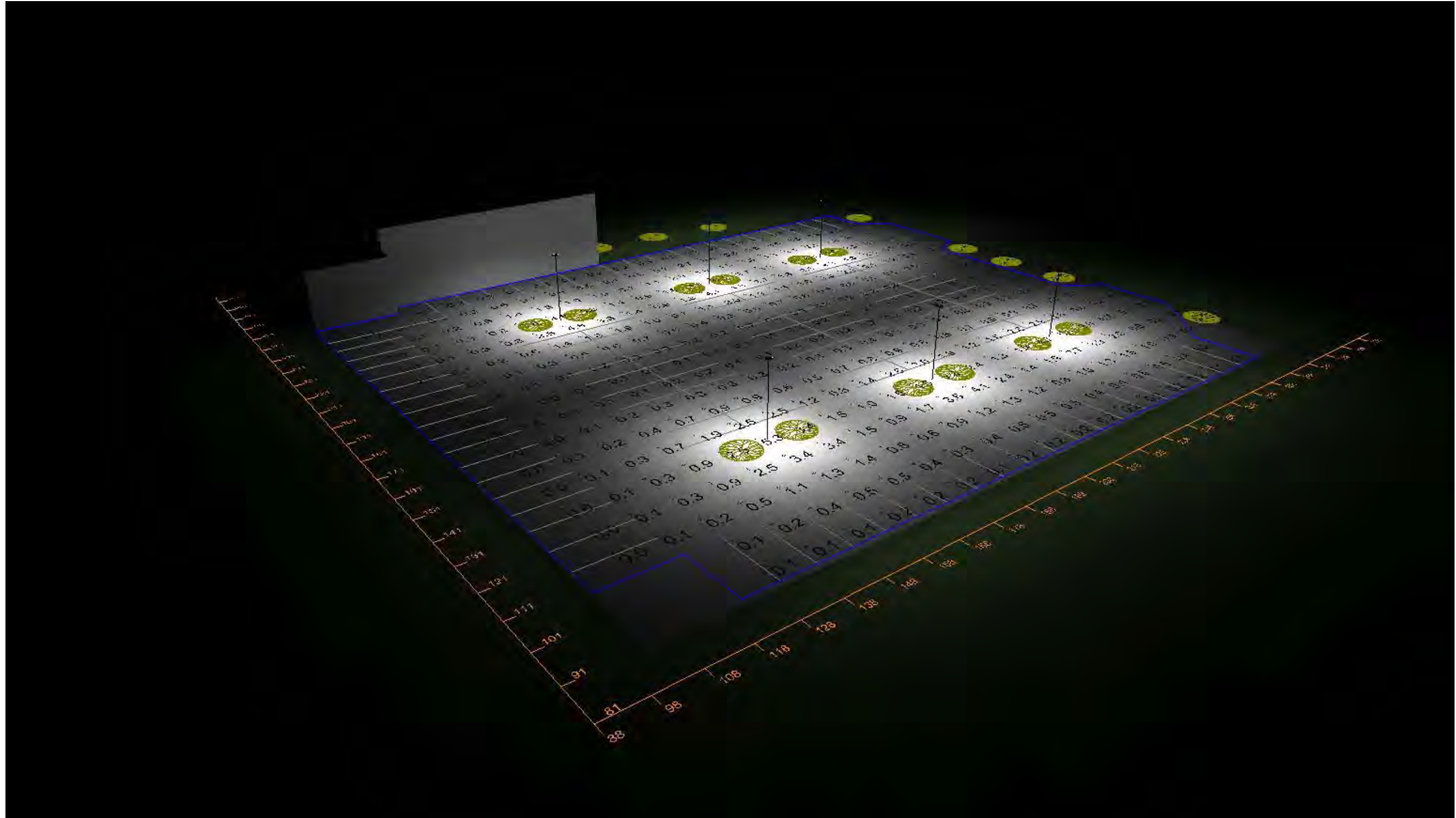


Image - Design Visualization LED



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## Energy Saving Analysis for:

Project:

Prepared: November 1, 2010

Contact: 0

Tel: -

Email: [0](#)

**Over 5 Years You will Save in**

Proposal A

Proposal B

**\$ 13,337**

**Energy Costs**

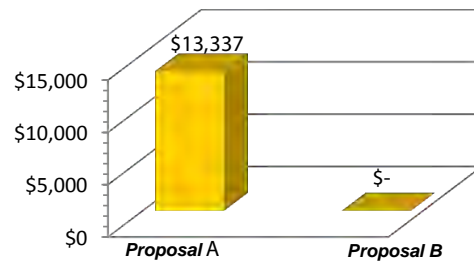
See details below...

## Project Assumptions

Square Feet Area	
Cost per kWh	\$ 0.15
Daily Operating Hrs	10 Hrs
Days/Year	365
Annual Operating Hrs	3,650 Hrs

Input
Output

## Period Energy Saving



	Existing	Proposal A	Proposal B
Fixture Catalog #	400w MH Area	ALED20	
Description	400w MH Area	22w LED Area	
Input Watts/ Fixture	450	22	
Quantity	12	24	
Total System Watts	5,400	528	
Total Load kW	5.4 kW	0.5 kW	
Annual kWh	19,710 kWh	1,927 kWh	
Annual Energy Cost	\$ 2,957	\$ 289	
Monthly Energy Cost	\$ 246	\$ 24	
Per Fixture Cost		\$ 422	\$ -
Total Equipment Cost		\$ 10,128	
Install Labor & Materials		\$ 3,600	
Annual Cost of Sys Maintenance	\$ 239	\$ -	
Annual Lamp Disposal Charges	\$ -	\$ -	
Rebate \$\$ per Fixture		\$ 120	\$ -
Total Project Rebate		- \$ 2,880	
Total Cost of Ownership 5 yrs	15,976	12,293	

## Energy Savings & Payback Analysis

Watts/ Square Foot			
Annual Energy Savings		\$ 2,667	
Energy Saving Over 5 yrs		\$ 13,337	
Monthly Energy Cost for Waiting		\$ 222	
Annual Operating Savings		\$ 2,906	
<b>Years to Payback</b>		<b>3.73 yrs</b>	
<b>Your Rate of Return IRR</b>	5% Annual Rate of Inflation	<b>14%</b>	
<b>Period of Evaluation</b>		<b>5 yrs</b>	<b>5 yrs</b>

Savings estimates are based on assumptions subject to change. Actual savings may vary.



# ALED20



JOB NAME: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 TYPE: \_\_\_\_\_

## DESCRIPTION

LED Area Lights

## SPECIFICATIONS

### Color Uniformity:

RAB's range of CCT (Correlated color temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI

### Finish:

C78.377-2008.  
 Chip and fade resistant polyester powder coat finish.

### Gaskets:

High temperature silicone.

### Green Technology:

RC LEDs are Mercury and UV free.

### Housing:

Precision die cast aluminum housing, lens frame and mounting plate.

### 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.

### Lumen Maintenance:

The LED will deliver 70% of its initial lumens at 50,000 hours of operation.

### UL Listing:

Suitable for wet locations. Suitable for mounting within 4' of the ground.

### Warranty:

RAB LED fixtures give you peace of mind because both the fixture and light engine components are backed by RAB's 5 Year Warranty. For more information,

### Ambient Temperature:

Suitable for use in 50C (122F) ambient temperatures

### Cold Weather Starting:

The minimum starting temperature is -30°C

### Color Accuracy:

70 CRI

### Dark Sky Approved:

The International Dark Sky Association has approved this product as a full cutoff, fully shielded luminaire.

### Driver:

Automatic Voltage Sensing Driver for 120 – 277 volts

### EPA:

0.10

### Fixture Efficacy:

63 Lumens per Watt

### For use on LEED Buildings:

IDA Dark Sky Approval means that this fixture can be used to achieve LEED Credits for Light Pollution Reduction.

### Heatsink:

Integral cast aluminum mounting pad and external fins for optimal heat sinking to ensure cool operation with maximum LED life and light output.

### LED Light Engine:

Two Multi-chip 10W high output long life LED Driver: Constant Current, Class 2

### Light Color:

5584 K (Daylight)

### Patents:

The ALED20 design is protected under patents pending in Canada, U.S., China, Taiwan and Mexico.

### Total Harmonic Distortion:

THD = 8.4%

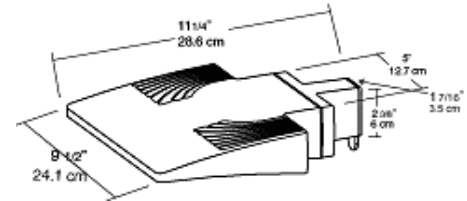
### Color:

Bronze

### Weight:

5.1

## DIMENSIONS



## ORDERING INFORMATION

LED	Total Watts	Lamp Type	Lamp Base	Ballast	Starting Amps/ Operating Amps				Input Watts	LAMP ANSI	Initial Lumens	Lamp Hours
					120V	208V	240V	277V				
Lamp supplied with fixture	20	L.E.D.	Thermal Heatsink	Constant Current	0.5	0.5	0.5	0.125	22	N/A	1401	50000
<b>Factory Installed Options</b>												
Add suffix to Catalog Number				Photocontrol for 277V (/PC2)								
												Photocontrol for 120V (/PC)

Note: Specifications may change without notice



# PS4-11-20D2

JOB NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

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

## DESCRIPTION

Square steel poles drilled for 2 Area Lights at 180°. Designed for ground mouting. Poles are stocked nationwide for quick shipment. Protective packaging ensures poles arrive at the job site good as new.

## SPECIFICATIONS

### Base Plates:

Slotted base plates 36,000 p.s.i.

### Color:

Bronze

### Hand Holes:

Reinforced with grounding lug and removable cover.

### Shaft:

46,000 p.s.i. minimum yield

### Shipping Protection:

All poles are shipped in individual corrugated cartons to prevent finish damage.

### Anchor Bolt Templates:

WARNING: Template must be printed on 11" x 17" sheet for actual size. CHECK SCALE BEFORE USING. Templates shipped with anchor bolts and available

### Anchor Bolt:

3/4" x 17" x 3" Galvanized anchor bolts and galvanized hardware and anchor bolt template. All bolts have a 3" hook

### Base Dimension:

8"

### Bolt Circle:

8-9"

### Gauge:

11

### Hand Hole Dimensions:

3" x 5"

### Height:

20 FT

### MaxEPA's/Max Weights:

70MPH: 8.3 ft<sup>2</sup>/240 lb

80MPH: 5.6 ft<sup>2</sup>/165 lb

90MPH: 3.6 ft<sup>2</sup>/110 lb

100MPH: 2.2 ft<sup>2</sup>/75 lb

110MPH: 1.0 ft<sup>2</sup>/45 lb

120MPH: 0.2 ft<sup>2</sup>/20 lb

### Pre-Shipped Anchor Bolts:

Bolts can be pre-shipped upon request for additional freight charge

### Shaft Size:

4"

### Terms of Sale:

Pole Terms of Sale is available

### Wall Thickness:

1/8"

### Weight:

137

## DIMENSIONS

