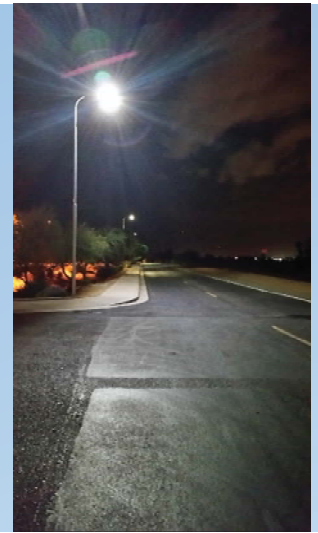
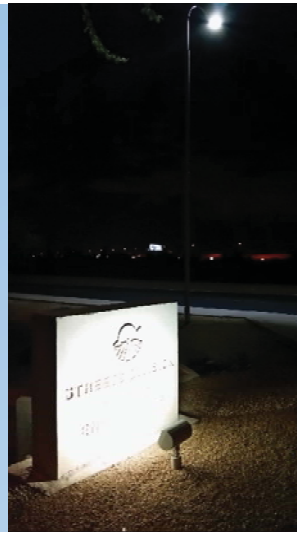


# Case Study:

## City of Chandler - Luminaire Test Site

### Roadway Lighting

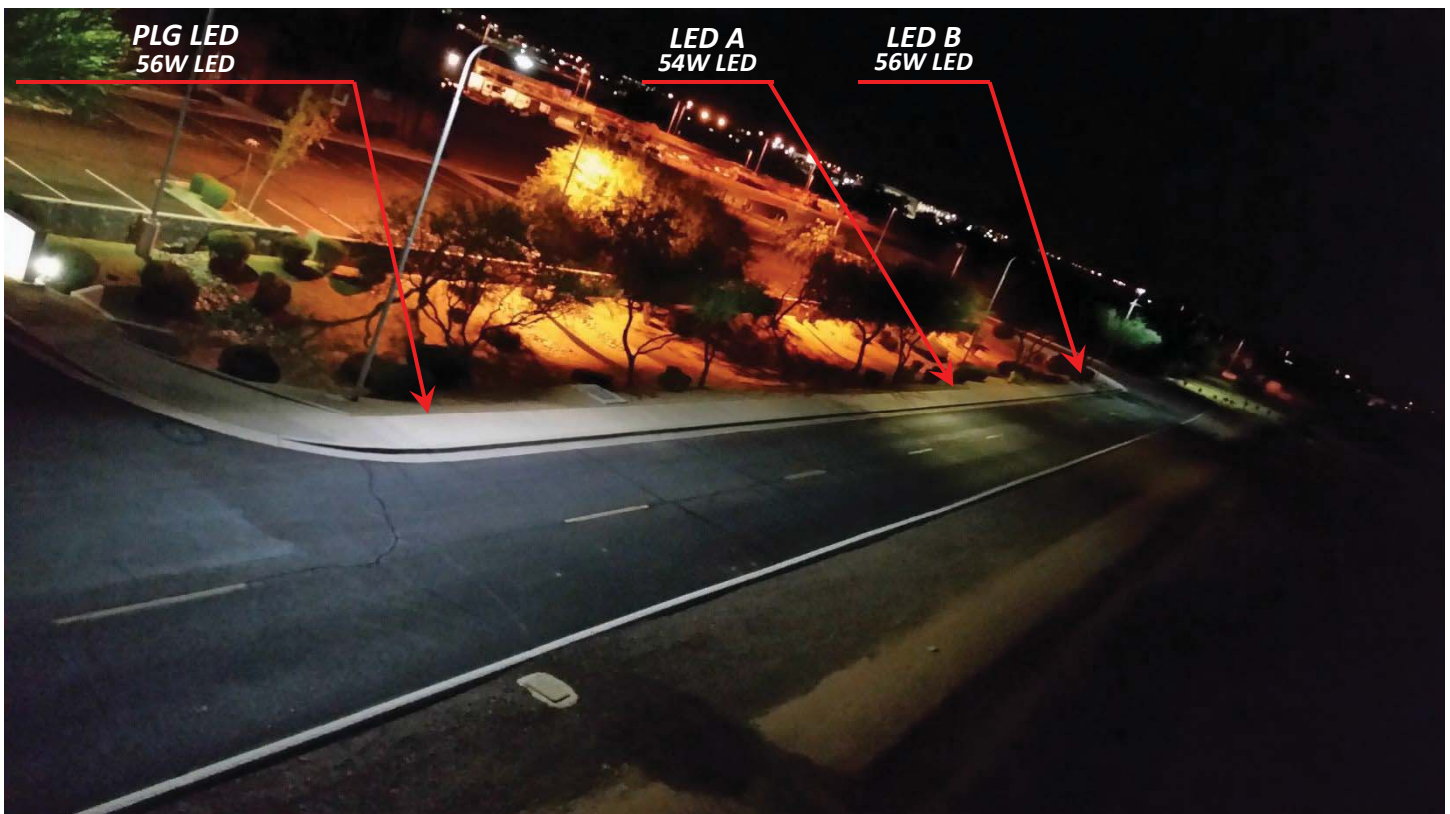


The City of Chandler, AZ, has a quarter mile stretch of roadway directly in front of its Traffic Engineering office that it utilizes to test and showcase different roadway lighting technology. Along this roadway, there are HPS, Induction, Metal Halide, and several LED Luminaires, all working side by side. This test strip shows the different aspects of common types of roadway lighting, but also shows how different LED manufacturers compare to each other.

#### PLG Fixture Installed: SBX Series Retrofit



Part No. PLG-SBX-02-II-50-60



*Aerial Picture of PLG 56W Fixture, along with 2 different LED Competitors fixtures*

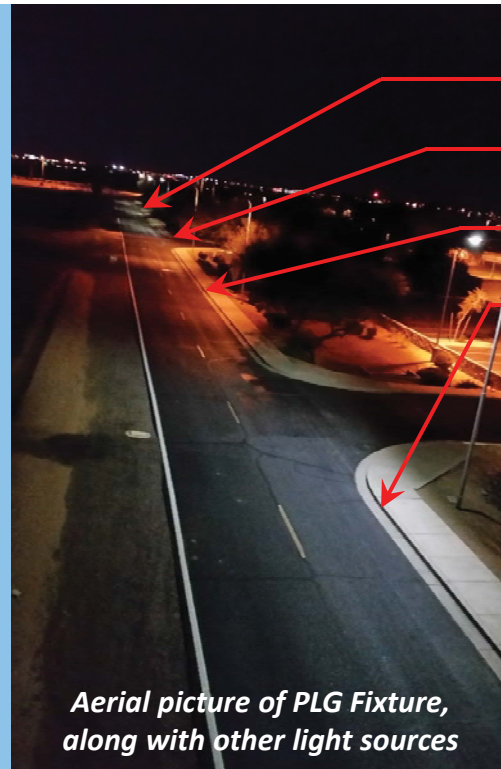
Efficient Lighting - Complete Project Management - Sustainable Solutions

(Web) [www.PLGLED.com](http://www.PLGLED.com) | (Email) [Info@PLGLED.com](mailto:Info@PLGLED.com) | (Phone) 480-218-6104



# Specifications:

	<b>Chandler Spec</b>	<b>PLG Rating</b>
<b>Warranty</b>	5 Year	5 Year
<b>Construction</b>	Corrosion-Resistant Aluminum	Aluminum 5250 Alloy
<b>BUG Rating</b>	B2-U0-B2	B1-U0-B1
<b>Minimum Lumens</b>	4,500	5,286
<b>Maximum Watts</b>	70	56
<b>Serviceability</b>	Replaceable Modules	Replaceable Modules
<b>Cooling</b>	Passive Heatsink	Aluminum
<b>Ambient Temp.</b>	-10 to +50 C	-30 to 50 C
<b>CCT</b>	4,000 to 5,000 K	5,000 K
<b>L-70</b>	> 90,000 Hours	> 100,000 Hours
<b>Power Factor</b>	> .90	> .90
<b>THD</b>	< 20%	< 20%
<b>LM-80, LM-79</b>	Available	Available
<b>Environment</b>	> IP-65	IP-66
<b>Input Voltage</b>	120V to 277V	120V to 277V



Other LED's

Induction

HPS

PLG LED

*Aerial picture of PLG Fixture, along with other light sources*

When viewed side by side, PLG's light performance far exceeds other competitors on the test strip. While all of the local LED's have essentially the same power consumption (54 to 56 Watt), the PLG light fixture has more illumination, better color rendering, and uniform distribution. Below are some of the light readings taken from the test strip:

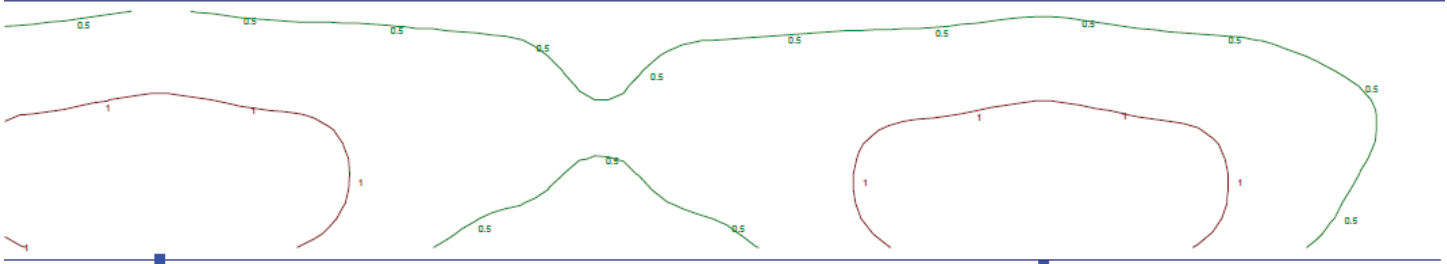
	<b>PLG</b>	<b>LED A</b>	<b>LED B</b>
<b>Illumination 30', 0°</b>	.69 FC	.3 FC	.89 FC
<b>Illumination 40', 90°</b>	.43 FC	.32 FC	.36 FC

**"PLG's fixture was visually brighter than other fixtures of similar wattage. It had a superior light distribution, with a wider coverage area."**

- Hector Peralta,  
Traffic Signal &  
Streetlight Supervisor

## Typical Residential Street:

<b>Road Width:</b>	35'	<b>City of Chandler Standard</b>	<b>Chandler Spec</b>	<b>PLG Performance</b>
<b>Pole Spacing:</b>	130'	<b>Min Average Foot-candles</b>	.7	.8
<b>Mounting Height:</b>	30'	<b>Uniformity Ration (Avg-to-Min)</b>	6:1	4:1



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