

Products

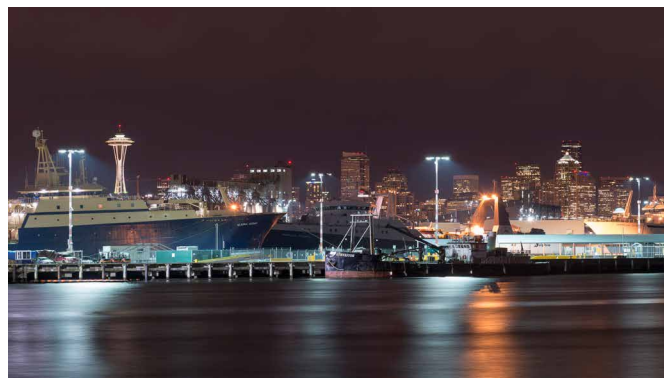
- BLP1000 LEP High Mast Luminaire

Customer

The Port of Seattle is over 100 years old and the 10th largest port in the United States. It creates nearly 200,000 jobs in the Seattle - Tacoma area and contributes \$17 billion to the local economy. Terminals 90/91 serve commercial workboats and 180 cruise ship departures each year for Carnival, Princess, and Royal Caribbean lines. The terminals are also home to the Northern Fishing Fleet.

Problem

Work on the docks goes on 24/7, and the existing 180 high-mast High-Pressure Sodium luminaires had reached their useful lifespan. HPS wasn't delivering the light coverage the Port needed to meet current standards and ensure optimum safety in a nighttime working environment. And there was a clear opportunity to save energy costs using a new lighting technology.



Solution

With existing poles at 65 feet high, the Port of Seattle retrofitted high energy use 1000W HPS with Bright Light Systems 540W BLP1000 Light Emitting Plasma (LEP) luminaires. LEP luminaires provide increased color recognition, are dimmable to 20%, and carry a lifetime rating of 50,000 hours. Energy costs for Terminals 90/91 are projected to be reduced by 50%. LEP luminaires are reliable, provide superior light distribution, and the crisp white light (5200K) enhances security cameras' image acuity and the ability to recognize faces.

Results

- Projected annual kWh saved: 508,518 kWh
- Projected annual energy savings: \$40,681
- Reduced CO2 emissions: 351 metric tons
- Payback: < 4.8 years

Payback Calculation

Description	Units	1000W HPS	BLP1000	Savings
Operating Costs				
Average Fixture Power	Watts	1185	540	645
Number of Fixtures	#	180	180	
Annual Energy Consumption	kWh	934,254	425,736	508,518
Annual Energy Cost	\$/Yr	\$74,740	\$34,059	\$40,681
Annual Maintenance Cost	\$/Yr	\$23,824	\$4,737	\$19,087
Annual Operating Cost	\$/Yr	\$98,564	\$38,796	\$59,768
Payback	Yrs	-	-	4.8
Annual Environmental Impact and Emissions				
Carbon Dioxide Emissions	Tons	644	294	351

* Assumes HPS 15K hrs, L70, 12 hrs/day operation, \$0.08 per kWh

"In order to provide the best conditions for our customers and work force, we needed to upgrade the lighting. Longshoremen have told me the new BLS plasma lights have significantly improved working conditions, and we are all very pleased with our new lighting on the piers. The luminaires installed easily onto our existing infrastructure, and we were able to aim the light where it's needed to eliminate dark areas. Looked at from all aspects, the upgrade has a positive effect on the environment. Bright Light Systems BLP1000 was the ideal solution for us." says **Robert Hoyman, Marine Maintenance Project Manager, Port of Seattle.**

(404) 490-4132

- **BLP1000 LEP High Mast Luminaire**

Features

- Reduces Energy Costs by 50%
- Increased Color Recognition
- Dark Sky Compliant
- UL 1598 Wet Location Listed
- Rated Lifetime 50,000 hours
- Uniform Light Distribution
- Easy Lamp Maintenance
- 5-Year Limited Warranty

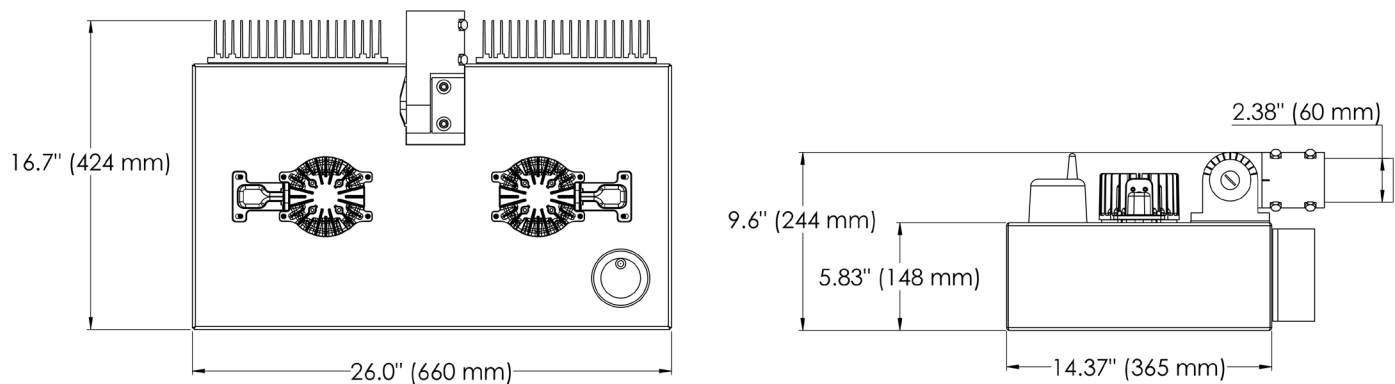
Specifications

Illumination Source	2 High Powered LEPs (Light Emitting Plasma)
Power Consumption	540 Watts
Source Lumens	46,000
Lumen Maintenance	70% @ 50,000 hours
Color Temperature	5200K
CRI	75
Operating Temperature	-40°C to +50°C
Approvals	UL 1598, CE, IP65



BLP1000

Dimensions



For more information:

BLP1000 Light Emitting Plasma (LEP) High Mast Luminaires. Please email or call and request BLS Data Sheet, or visit our website at www.brightlightsystems.com/BLP1000.html

Take Control of Your Lighting

(404) 490-4132