



### Products

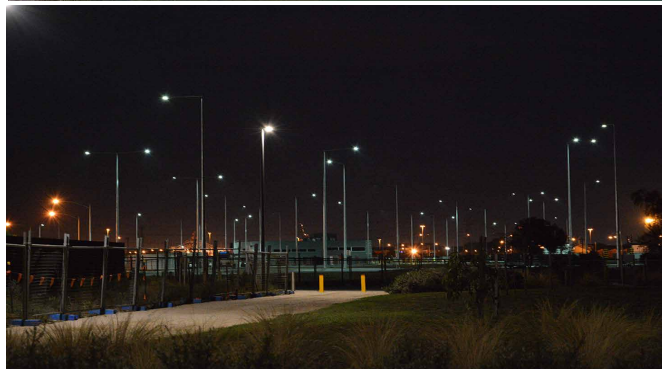
- BLP1100 LEP High Mast Luminaire
- Bright Light Management System (BLMS)

### Customer

The Port of Melbourne, located in the State of Victoria, is the largest container and general cargo port in Australia. Due to start operations in the final quarter of 2016, Victoria International Container Terminal (VICT) will be one of the most automated and advanced container terminal operations in the world. When fully developed VICT will have a total of five ship-to-shore cranes, and will be able to handle at least 1.4 million containers annually.

### Problem

The new terminal is located in close proximity to a residential area. The Port of Melbourne Corp (PoMC) mandated strict light trespass and obtrusive lighting (glare) compliance for terminal lighting. The customer required not only an energy efficient lighting solution with adaptive control to maximize energy savings but also one that met their tough illuminance targets without impacting nearby residents.



### Solution

Install the most advanced high-mast plasma fitting in the market, the BLP1100 Light Emitting Plasma (LEP) High Mast. The BLP1100 consumes only 540 watts and its small, compact light source with optical control minimizes obtrusive lighting and glare that you would otherwise get from LED. The full-spectrum, white light offers improved color recognition and better night-time visibility for increased safety and security. A 50,000 hour L<sub>70</sub> lifetime eliminates maintenance cycles for \$10,836 in cost savings annually.

### Results

- Projected annual kWh saved: 927,158 kWh
- Projected annual energy savings: \$83,444
- Projected annual maintenance savings: \$10,836
- Achieved 40 lux avg illuminance targets
- Payback: 3.3 years

### Payback Calculation

Description	Units	1000W HPS	BLP1100 LEP	Savings
<b>Operating Costs</b>				
Average Fixture Power	Watts	1080	540	540
Number of Fixtures	#	350	350	
Annual Energy Consumption	kWh	1,655,640	728,482	927,158
Annual Energy Cost	\$/Yr	\$149,008	\$65,563	\$83,444
Annual Maintenance Cost	\$/Yr	\$15,441	\$4,605	\$10,836
<b>Annual Operating Cost</b>	<b>\$/Yr</b>	<b>\$164,449</b>	<b>\$70,169</b>	<b>\$94,280</b>
<b>Payback</b>	<b>Yrs</b>	-	-	<b>3.3</b>
<b>Annual Environmental Impact and Emissions</b>				
<b>Carbon Dioxide Emissions</b>	<b>Tons</b>	<b>1,142</b>	<b>502</b>	<b>639</b>

\* Assumes HPS 15K hrs, L70, 12 hrs/day operation, \$0.09 per kWh

*Anders Dømmestrup, CEO of VICT says, "Installing Bright Light Systems' leading-edge, plasma lighting with sophisticated networked lighting controls helps us achieve VICT's project goals of reducing energy consumption and minimizing obtrusive lighting for surrounding communities, while providing the safest possible environment for our workers. It further demonstrates our commitment to becoming one of the most advanced and sustainable container terminal facilities in the world."*

**(404) 490-4132**



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## Features

- 50% Lower Energy Costs
- Optional Wireless Control
- Dark Sky Compliant
- UL 1598 Wet Location Listed
- Rated Lifetime 50,000 hours
- Uniform Light Distribution
- Full Illumination in 60 seconds
- 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	>70
Operating Temperature	-40°C to +50°C
Approvals	UL1598, RCM, IP65, CE



BLP1100

## Lighting Controls

### Features & Specifications:

- Adaptive Controls
  - Nodes support 2.4 GHz IEEE 802.15.4 communication, 128-bit AES encryption, up to 500m range
  - BLS 3G/LTE cellular gateway for remote monitoring and control, and revenue-grade energy measurement
- Bright Light Management System (BLMS)
  - Cloud-based lighting management platform accessible from any web-enabled laptop, smartphone, or tablet
  - Provides grouping/zoning, energy consumption data, predictive maintenance info, and event-based scheduling

### For more information:

**BLP1100 Light Emitting Plasma (LEP) High Mast Luminaires.** Please email or call and request BLS Data Sheet, or visit our website to download at [www.brightlightsystems.com/BLP1100.html](http://www.brightlightsystems.com/BLP1100.html)

**Bright Light Management System (BLMS) Wireless Control.** Please email or call and request BLS Data Sheet, or visit our website to download at [www.brightlightsystems.com/BLMS.html](http://www.brightlightsystems.com/BLMS.html)

*Take Control of your **Lighting***

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