



**Advanced**  
LIGHTING TECHNOLOGIES

# THE WHITE LIGHT PROJECT

CASE STUDY

FLINDERS STREET STATION  
RAILWAY LIGHTING





In 2015, the Victorian Government announced a **\$100m refurbishment** of Melbourne's Flinders Street Station.

**The station** is at the heart of Melbourne's metropolitan rail network, handling over 200,000 passenger journeys each day. Some areas of the building required upgrading and restoration, while commuter access and facilities were also due to be upgraded. Advanced Lighting Technologies were engaged to supply LED lighting along the platforms throughout the entire station.

## THE STATION

**Completed in 1909 and servicing more than 25 million passengers per year, Melbourne's Flinders Street Station is one of the oldest and busiest railway stations in the country. It's also one of the city's most recognisable landmarks, and has been a meeting point for generations of Victorians.**

After over a century of use, parts of the heritage-listed building were in need of refurbishing. **Public Transport Victoria (PTV)**, in partnership with **Metro Trains Melbourne (MTM)** commenced a large-scale redevelopment in 2015. The project included structural works, waterproofing, façade and roof repair and restoring the building's heritage clock tower. Works to platforms, entrances, toilets, subways and information displays were also included. Part of these works involved updating the lighting along the station's many platforms.

# THE WHITE LIGHT PROJECT

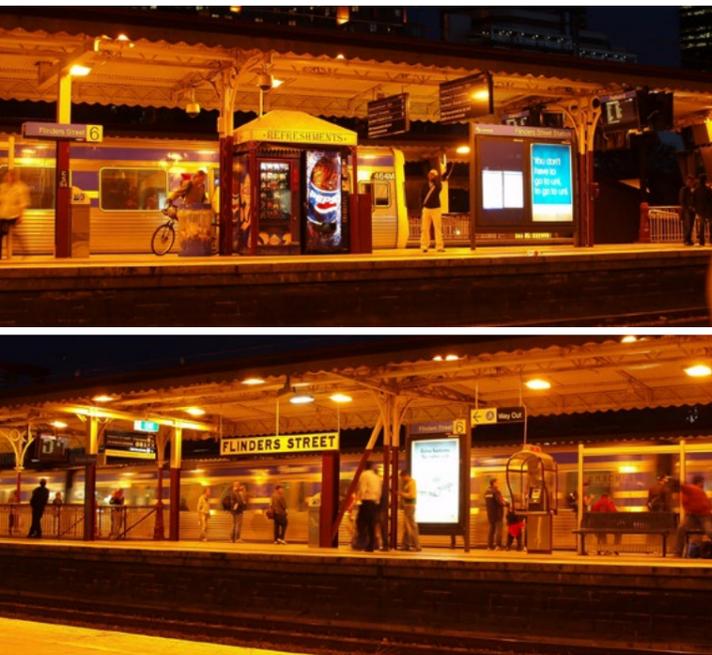
The existing lighting along the station's platforms consisted of high-pressure sodium lamps (HPS) in steel shoebox-style luminaires. Used primarily for their high efficacy and relatively long life, HPS lamps produce a warm, orange glow which renders colour very poorly, making it difficult to distinguish some colours from others. The existing lighting had fallen behind MTM's platform illumination standards, and an upgrade was required.

Consulting firm WSP Australia was engaged to undertake the upgrade, and a brand new lighting concept was developed.

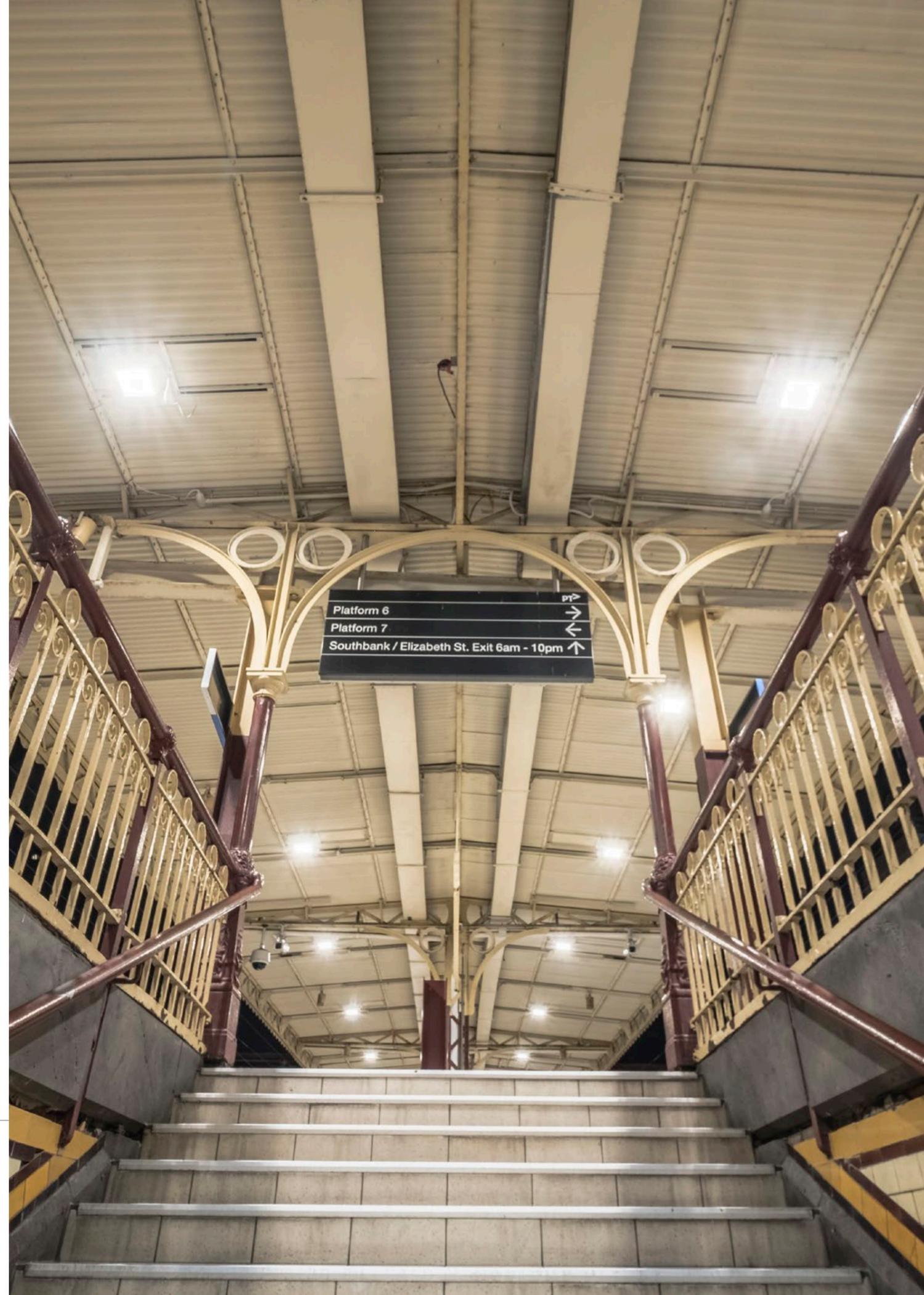
Dubbed **"The White Light Project"**, the new solution had to comply with MTM's platform lighting standards without compromising the station's unique heritage and architectural features.

A number of luminaires were identified as possible candidates, with each included in a detailed 3D model to help ensure glare, reflectance and shadowing wouldn't interfere with CCTV equipment or disrupt train driver's vision of their surroundings, including signalling.

There was one clear winner – **Advanced Lighting Technologies'** Cree CPY Series LED luminaire.



BEFORE



## THE SOLUTION

**Advanced Lighting Technologies has a wealth of railway lighting experience. We've provided lighting solutions to some of Australia's largest railway operators, and offer a range of lighting products sourced from global leaders like Cree.**

Cree have been at the forefront of LED innovation for years, having developed industry-leading products like the Cree CPY Series LED luminaire. The CPY Series offers up to 20,000 lumens with outstanding efficacy, and is capable of reducing energy use by more than 60% compared to traditional light sources.

After a brief trial and feedback from a range of stakeholders, it was decided the Cree CPY Series would be rolled out across the entire project. However, installing the latest LED technology in a 100+ year old building isn't without its challenges.

In order to maintain Flinders Street Station's heritage appeal, it was decided a correlated colour temperature

(CCT) of 3500K would best suit the project. Advanced Lighting Technologies worked very closely with Cree to produce the custom colour, ensuring the light was warm enough to match the stations architecture, without affecting safety and visibility along the platforms.

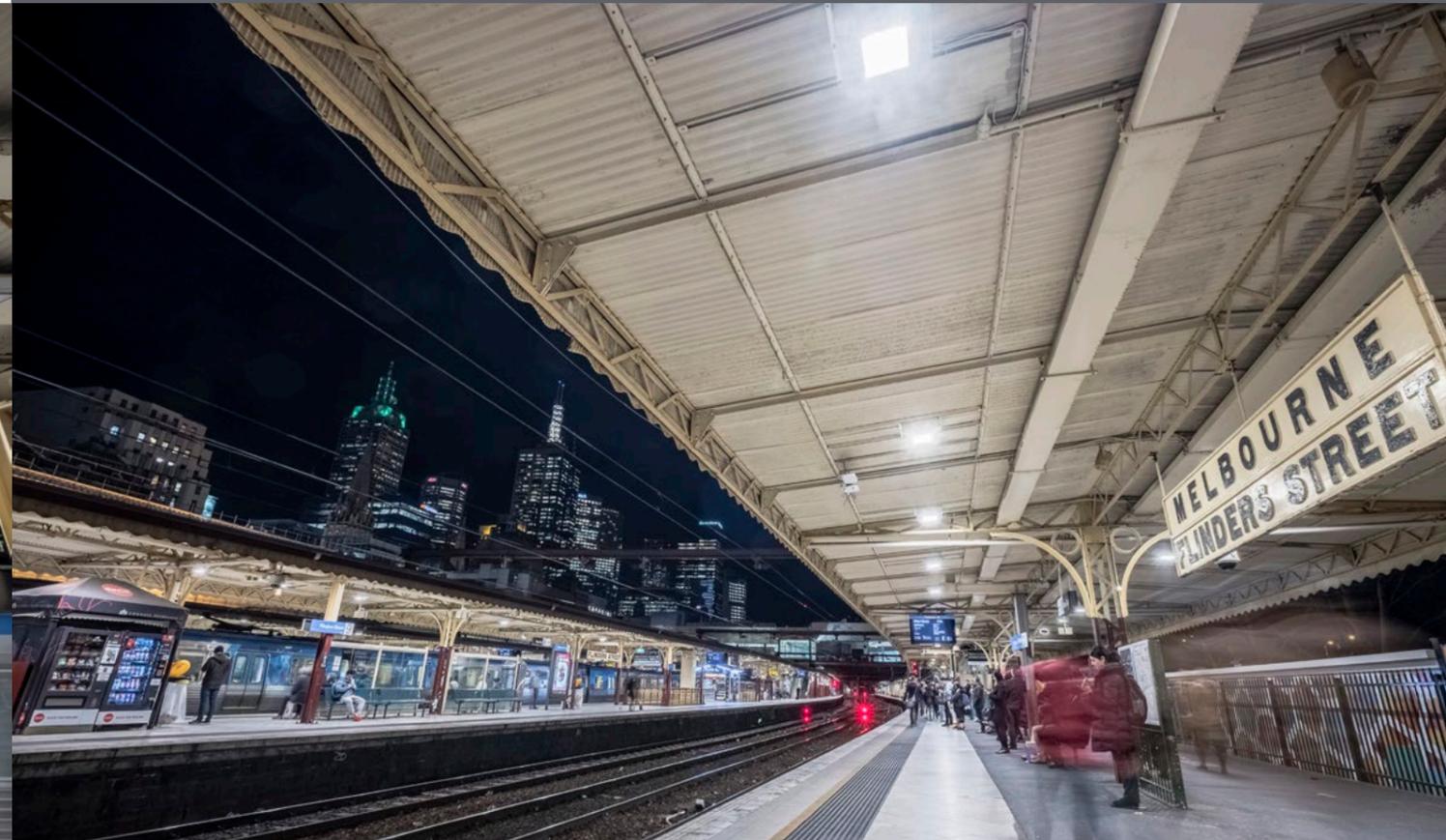
The installation process also required creative thinking; the station's corrugated roofing and existing uni-strut mounting meant the CPY Series (designed to be recessed into a canopy/soffit roof) needed a unique solution. Working closely with a local supplier, Advanced Lighting Technologies developed a custom-made trim for the luminaire, meaning a majority of the new fittings could be installed in the same position as the old ones, saving time and money by minimising the need for re-wiring.

Advanced Lighting Technologies is the **sole authorised distributor** of Cree lighting products in Australia.

**CREE**   
AUTHORISED DISTRIBUTOR



**CREE CPY SERIES CANOPY**  
MINIMUM 70 CRI  
CCT: 4000K, 5700K  
FLAT OR DROP LENS OPTIC  
SLIM, LOW-PROFILE DESIGN  
DIRECT, PENDANT OR SKIRT MOUNT  
EXCLUSIVE DELTAGUARD® FINISH  
0-10V & DALI DIMMING OPTIONS



## THE RESULT

An iconic Melbourne landmark like Flinders Street Station deserves to be displayed in the best possible light, and passengers who frequent the station should be made to feel safe and secure no matter what the time of day.

The stations' upgraded platform lighting solution finds the balance between functional and visually comfortable lighting without detracting from the station's French Renaissance-inspired architecture.

The upgrade has been a resounding success, achieving full compliance with MTM's platform illumination standards from day one, without disrupting the view of CCTV cameras or the effectiveness of train signalling equipment. Train drivers have also acknowledged a vast improvement in visibility and quality of light.

Advanced Lighting Technologies are extremely proud to have played a small role in the refurbishment of such a grand old building like Flinders Street Station, helping to ensure it continues to serve the people of Melbourne for generations to come.



Advanced Lighting Technologies are specialists in architectural, commercial and industrial lighting. **Whatever the application, whatever the budget – we'll have a solution that fits your needs.**



**Advanced Lighting Technologies  
Australia Inc**

110 Lewis Road  
Wantirna South, Victoria  
AUSTRALIA 3152

T: +61 3 9800 5600  
F: +61 3 9800 5533

E: [sales@adlt.com.au](mailto:sales@adlt.com.au)

[www.adlt.com.au](http://www.adlt.com.au)

**Advanced Lighting Technologies  
New Zealand Ltd**

8 Boeing Place  
Mount Maunganui  
NEW ZEALAND

T: +64 7 579 0163  
F: +64 7 579 0164

E: [light@adlt.co.nz](mailto:light@adlt.co.nz)

[www.adlt.co.nz](http://www.adlt.co.nz)

**Advanced Lighting Technologies  
Asia Pte Ltd**

Block 4008, Ang Mo Kio Avenue 10  
#04-06, Techplace I  
SINGAPORE 569625

T: +65 6844 2338  
F: +65 6844 2339

E: [sales@adlt.com.sg](mailto:sales@adlt.com.sg)

[www.adlt.com.sg](http://www.adlt.com.sg)