

# OUR SERVICES DISCOVER MORE.

ON-SITE  
EXPERTISE  
TO SUPPORT  
LIGHTING  
PERFORMANCE

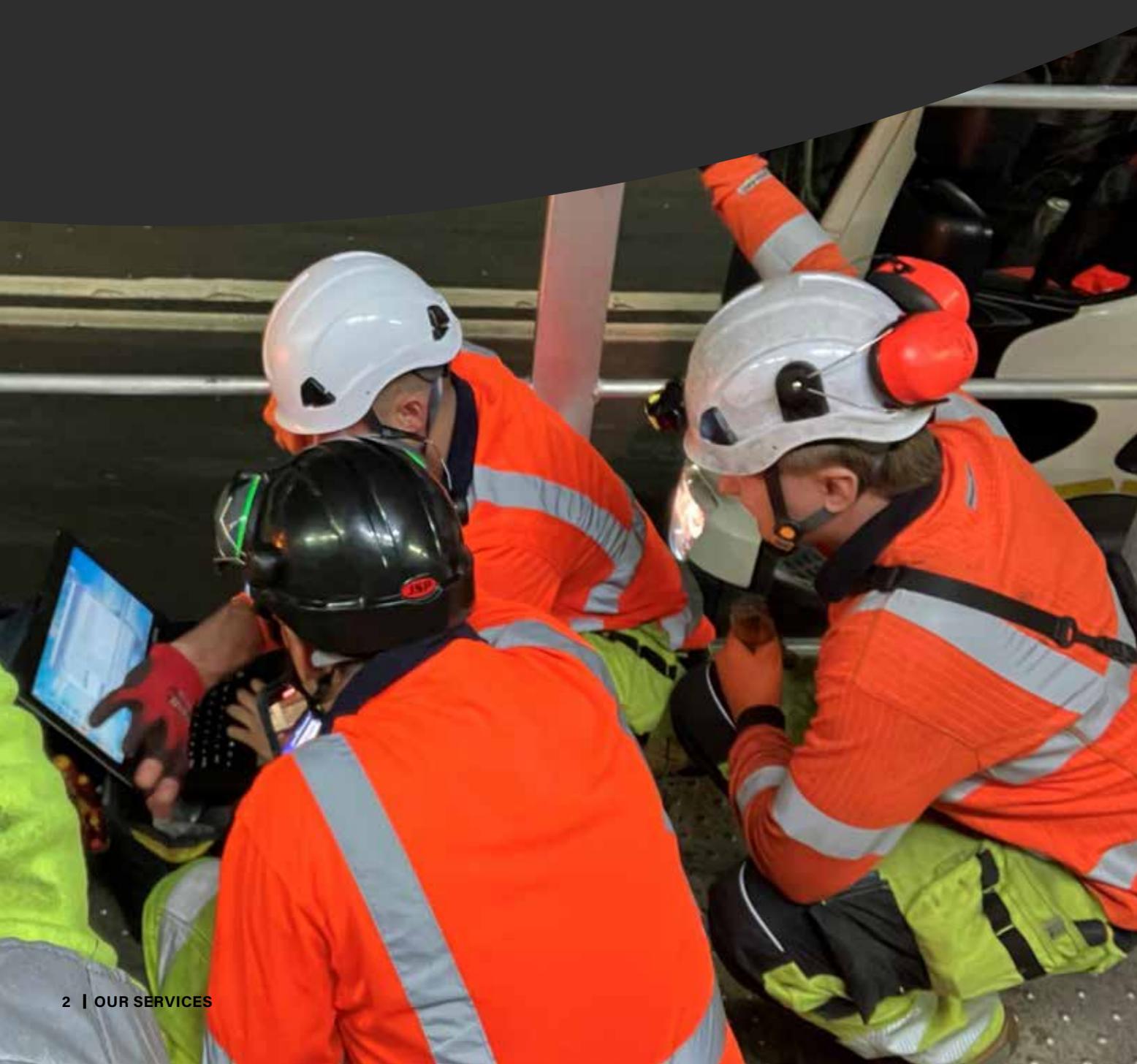


# WHAT WE OFFER

TRT Lighting provides a comprehensive range of site services designed to optimise the performance and longevity of our exterior lighting systems.

Working closely with contractors and end users, our engineers combine technical knowledge with hands-on site experience to make sure every project runs smoothly, safely, and to the highest standard.

From pre-design surveys to post-installation testing and long-term maintenance, we provide the insight and practical support needed to deliver lighting systems that work as well in practice as they do on paper.



## OUR SERVICES INCLUDE:



### TECHNICAL SURVEYS

Pre-design and tender surveys to support accurate planning and successful project delivery.



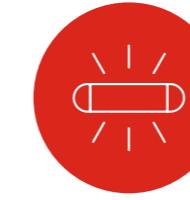
### COMMISSIONING (TUNNEL PROJECTS)

On-site testing to confirm lighting systems are correctly installed and perform as designed.



### LUMINANCE SURVEYS

Assessments of light quality and user experience.



### ILLUMINANCE SURVEYS

Post-installation performance testing (Site Acceptance Testing) to confirm compliance.



### MAINTENANCE & REPAIRS

Fast, practical on-site support to minimise downtime. Including, diagnosis, repair, and component replacement.



### WARRANTY SUPPORT

Expert technical evaluation and responsive visits to resolve issues efficiently.

→ With decades of experience across roads, tunnels and public spaces, TRT's Site Services team helps contractors deliver with confidence — and gives clients peace of mind that their lighting will perform for years to come.

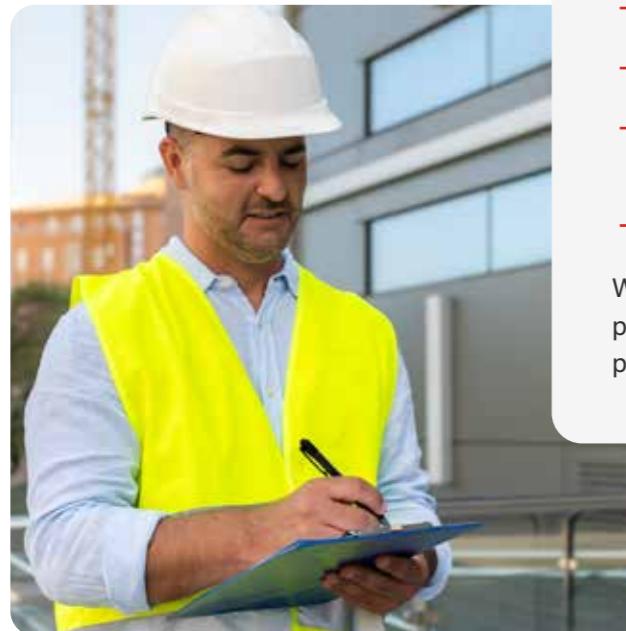
# PRE-INSTALLATION

**Technical surveys provide the foundation for effective lighting design. Conducted on site, they capture accurate measurements, photographs and environmental data to inform safe, practical, and efficient lighting solutions.**

By visiting in person, our engineers identify key site factors that desktop studies often miss, ensuring designs are grounded in real-world conditions.

Surveys are most effective when carried out in partnership with the installing contractor. This collaborative approach ensures designs are practical, cost-effective, and deliver the best outcome for the client.

→ The data gathered forms the foundation for detailed, tailored proposals.



## TYPICAL ACTIVITIES INCLUDE:

- Driver replacement and programming adjustments
- Control wiring verification
- Programming, testing and adjusting luminaires to meet lighting design requirement
- Fault diagnosis and resolution

With a combination of technical expertise and practical experience, TRT ensures every installation performs safely, reliably, and to specification.

## COMMISSIONING (TUNNEL PROJECTS ONLY)

Post-installation commissioning verifies that lighting systems are integrated, programmed, and performing exactly as designed.

Working alongside control and SCADA providers, TRT engineers perform detailed fault finding and system integration checks, ensuring all luminaires are correctly addressed and function in harmony with the control infrastructure.



# POST INSTALLATION SURVEYS (SAT)

**Following installation, TRT conducts Site Acceptance Tests (SAT) to verify performance against specification.**

Using calibrated measuring equipment and specialist software, our engineers measure luminance and illuminance to confirm compliance with multiple British Standards, such as BS EN 5489:2-2016.

All instruments are certified and traceable, with calibration records provided both on site and within the final report.

These independent tests give contractors confidence in their installation and provide clients with assurance that their lighting system is operating safely and efficiently.

# LIGHTING MEASUREMENT EQUIPMENT

## ROAD LIGHTING MEASUREMENT

TRT Lighting offer a lighting measurement service to verify the lighting levels of existing and/or new lighting installation, both luminance and illuminance measurements are taken. The equipment used to measure the luminance values is the TechnoTeam Mobil Digital Camera and associated LMK2000 software.

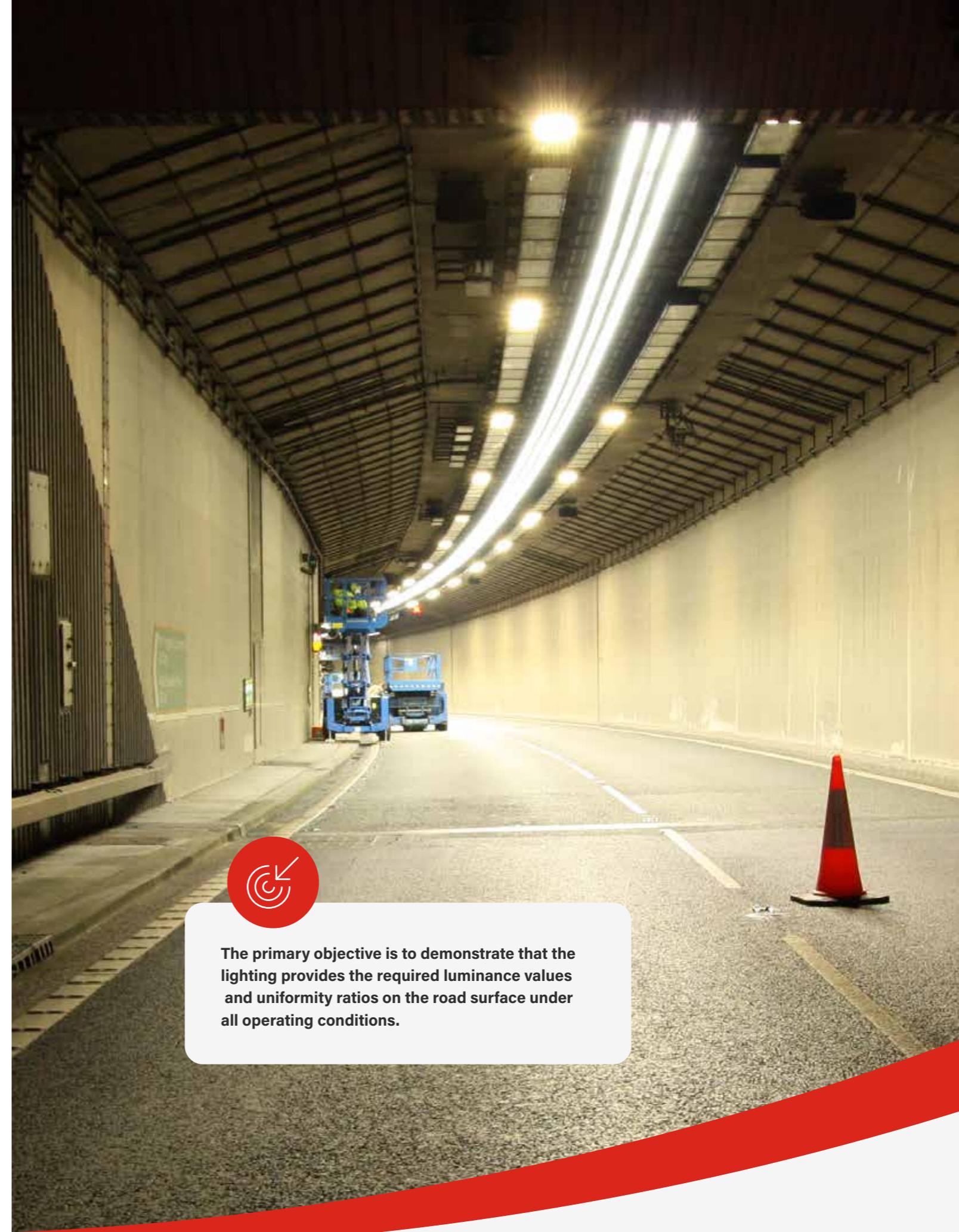


**Canon 450D (digital/reflex)**  
Sigma 18-50mm F2.8 EX DC Macro

Unlike traditional luminance type meters which consider only a small point on the road at which the equipment is aimed, the TRT digital camera takes a full luminance photograph. This luminance photograph offers a unique advantage over other forms of luminance measurement as it can be analysed in detail off site. Any point within this photograph can be zoomed in on and the luminance at any location measured.

As per the guidance in the British Standards and Technical Reports a measurement location area is marked up, this is usually achieved by placing four cones on the kerb in line with the area to be considered. The luminance camera is then placed on a tripod 60m in advance of the measurement zone at a height of 1.5m, this position simulates a driver's view of the road.

Once the operator is happy with the view and position of the camera, three separate high quality photographs, each with a different exposure time, are automatically taken. Once imported into the LMK Lab Soft software these three images are converted into a single luminance photograph which can be analysed off site.



The following images shows a section of road where luminance measurements were to be taken. Using the LMK camera has the additional benefit of taking a high quality camera image of the location.



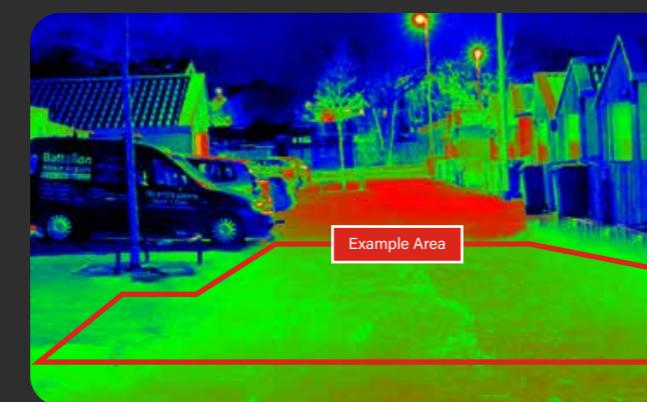
#### THE PSEUDOCOLOR IMAGE

The pseudocolor image represents the different luminance values in terms of colour, in the image below the luminance ranges from  $27\text{cd/m}^2$  represented by white and down to  $0\text{cd/m}^2$  shown by the black. Any location on the image can be zoomed in on and the luminance at any location can be assessed simply by hovering the cursor over said location.



Further detailed assessment can be undertaken by measuring the luminance of an area, this is achieved by drawing a region on any location of the pseudocolor image in the LMK software. This is shown in the following image, an example area has been drawn on the roadway.

The analysis work is done off site meaning the time spent on the roadway is kept to a minimum, measurements can be taken under a rolling road block without the need for expensive road closures or even from the side of the roadway if traffic is quiet enough to take an unobstructed image and the risk is deemed low enough.



## MAINTENANCE & REPAIRS

**TRT provides expert on-site support to ensure lighting systems continue to perform safely and efficiently throughout their operational life. Our engineers carry out repairs on site where possible or manage replacements seamlessly when required.**

Regular inspections and luminance surveys help monitor system performance, track gradual changes over time, and maintain compliance with relevant standards. These checks give end users peace of mind and support contractors in delivering high-quality, reliable installations.

TRT's team is experienced in maintaining complex lighting systems across a variety of environments, offering responsive service and practical solutions to keep installations performing at their best.

Luminance surveys on existing installations offer the same rigorous evaluation as a Site Acceptance Test, whether for periodic checks or independent assessments of third-party installations.

# WARRANTY SUPPORT

In addition to maintenance services, TRT provides dedicated warranty support to keep lighting assets performing reliably for years to come.

Our technical team coordinates visits efficiently, working around existing maintenance schedules to minimise disruption. Every assessment is carried out by experienced engineers who understand the product, the application, and the standards it must meet.

This hands-on approach ensures any issues are resolved quickly and professionally, maintaining the quality and reliability that TRT is known for.



Please contact  
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for further details and pricing.



**When it comes to tunnel projects, every system needs to work seamlessly, lighting included. TRT's team understand the operational demands of these environments and bring the same precision and professionalism we apply to our own control systems.**

**Their lighting surveys and on-site support have been invaluable in ensuring our installations meet both safety and performance requirements. It's a partnership built on technical trust and attention to detail. Exactly what's needed in complex tunnel infrastructure.**

Kirk Smith (Services Director) PDS Ltd

## WHY CHOOSE TRT LIGHTING?

-  When you choose TRT, you are working with a UK manufacturer that understands lighting from design through to operation.
-  Our engineers combine technical knowledge with practical site experience, supporting contractors and clients at every stage – from initial survey and commissioning to maintenance and long-term support.
-  Proudly Made in Britain and part of the family-owned F.W. Thorpe Group, TRT offers the reassurance of proven quality and lasting support.
-  The result is lighting that performs as it should: **safely, efficiently, and reliably.**



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