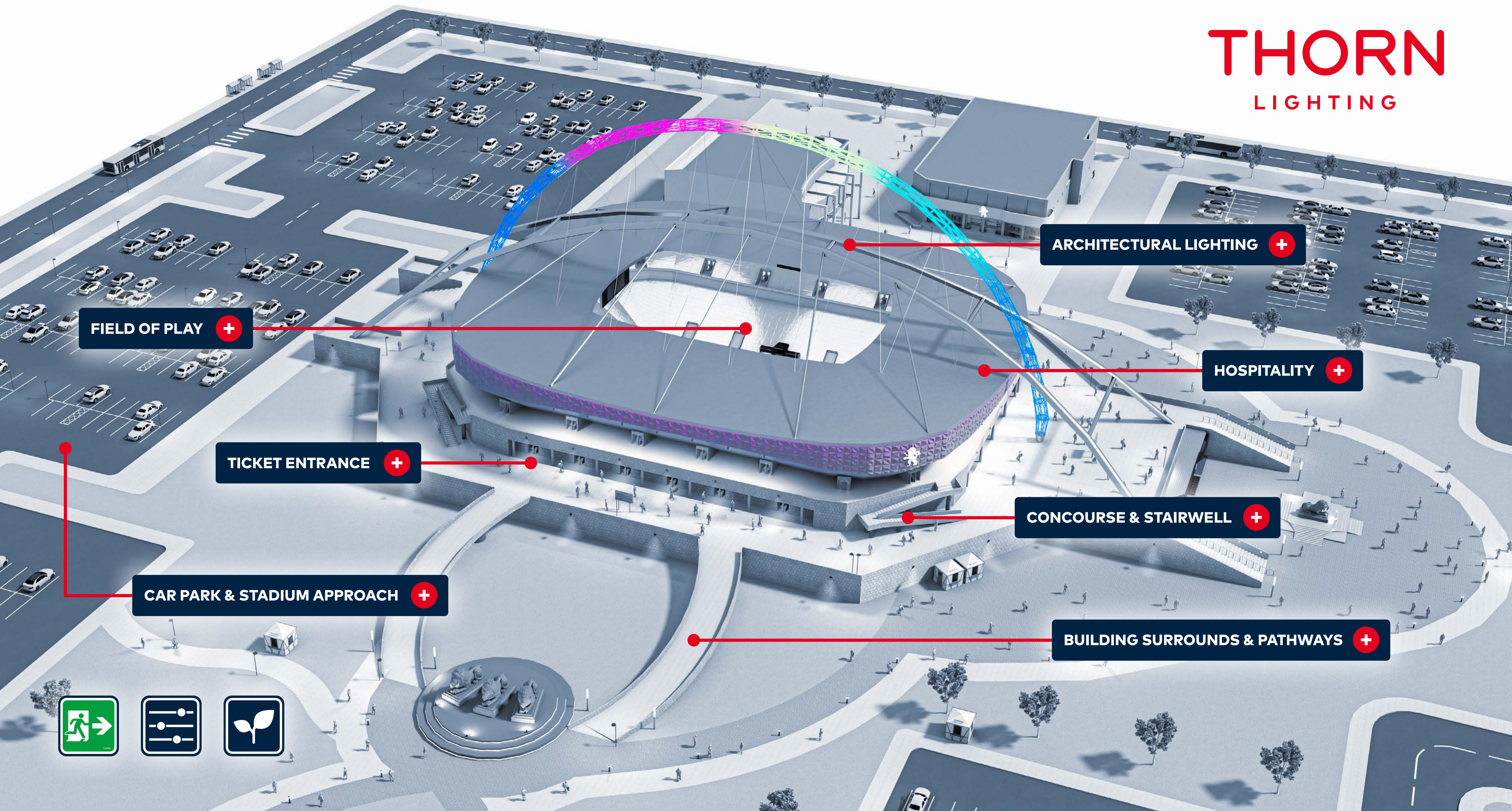


THORN

LIGHTING



FIELD OF PLAY +

ARCHITECTURAL LIGHTING +

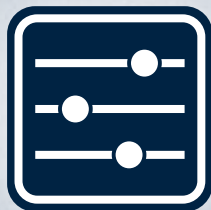
HOSPITALITY +

TICKET ENTRANCE +

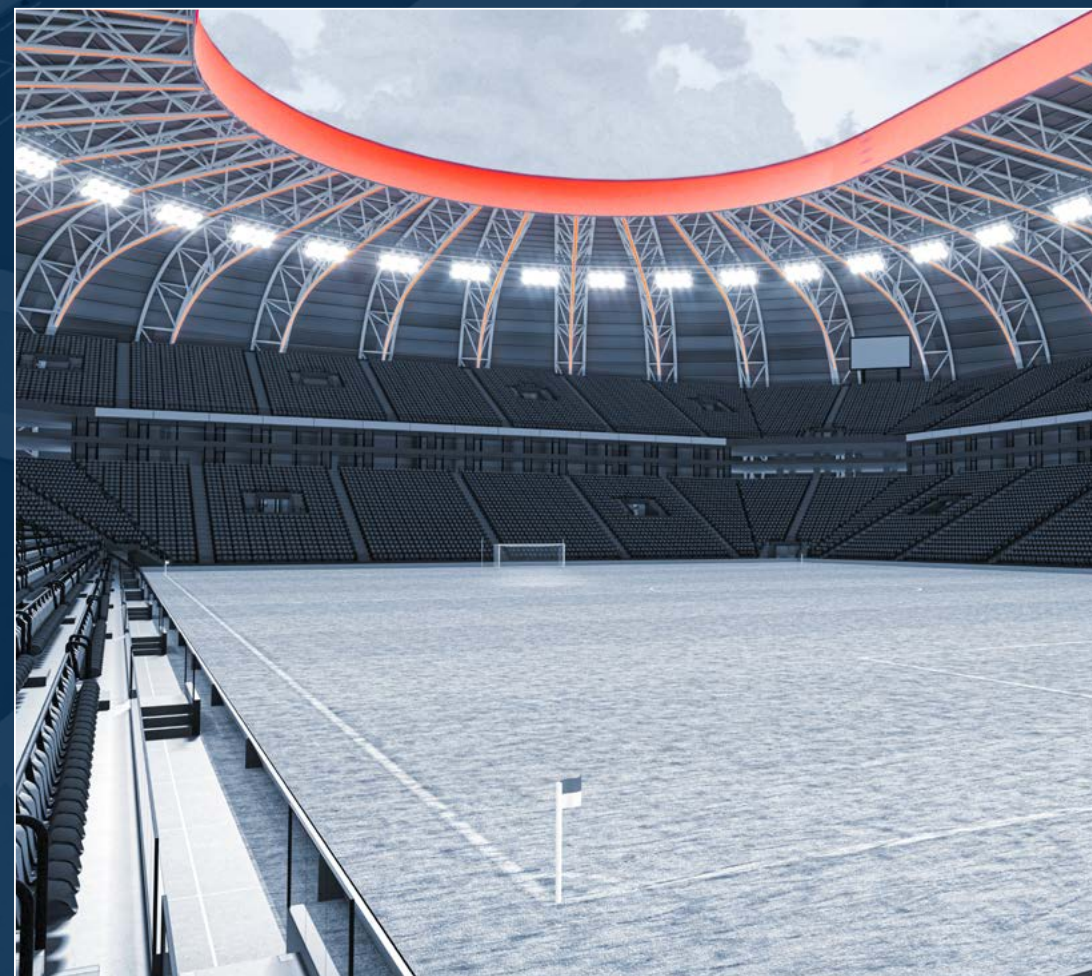
CONCOURSE & STAIRWELL +

CAR PARK & STADIUM APPROACH +

BUILDING SURROUNDS & PATHWAYS +



FIELD OF PLAY



FIELD OF PLAY

CAPTURING MOMENTS

EXTRAORDINARY OPTICS - A major challenge with illuminating any professional football stadium is getting the light levels exactly where they need to be in the most efficient way possible. This is why our designated team of sport optic engineers have ensured that even when a fixture is mounted fully horizontally, our range of intense optics ensure that light spill is minimised, spectator glare is low and the light levels are exactly where they need to be.

KEY CONSIDERATIONS

1 TURNKEY SOLUTIONS

From concept to completion, we're with you. Our team of experts are here to follow a full package solution from on-site surveys, professional grade lighting design all the way to final on-site commissioning.

2 FLICKER-FREE ILLUMINATION

Ensuring the driver box is not only easy to install with multiple installation position but delivers up to 1% flicker factor.

3 LASER FOCUSED POSITIONING

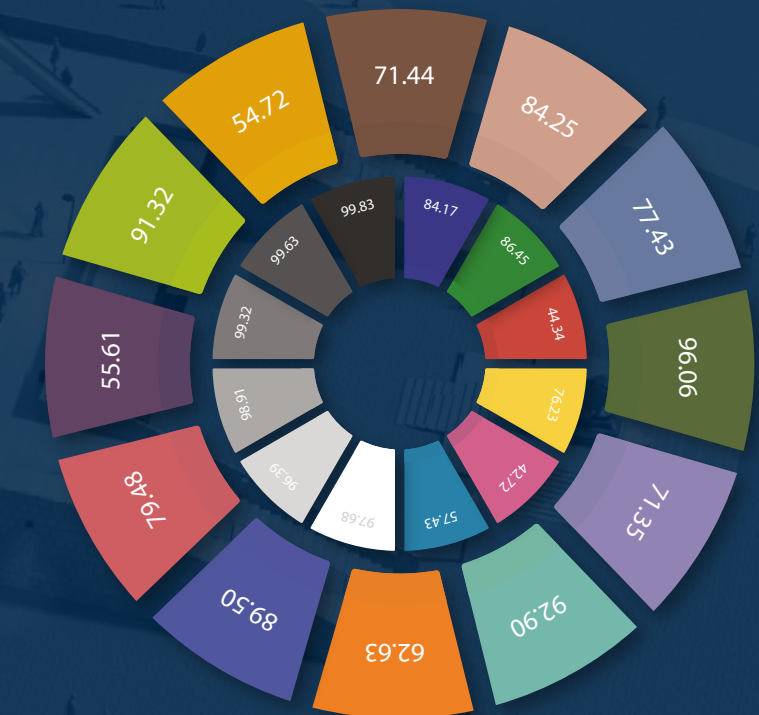
Our team of commissioning experts utilise laser technology to ensure that each light point is positioned perfectly to ensure optimal lit effect onto the field of play.

4 COLOUR RENDITION

Our stadium lighting solutions offer a light quality of up to CRI90+ for best in class professional broadcasting requirements.

5 FULL CONTROL

Our range of control solutions enable you to achieve the optimised connectivity on the pitch, with DMX control solutions for kinetic lighting scenes to support sporting and non-sporting events.



TLCI COLOUR CHARTS

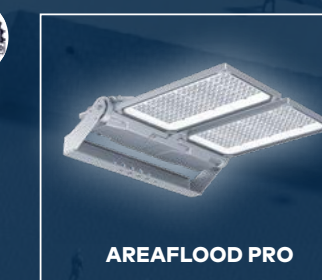
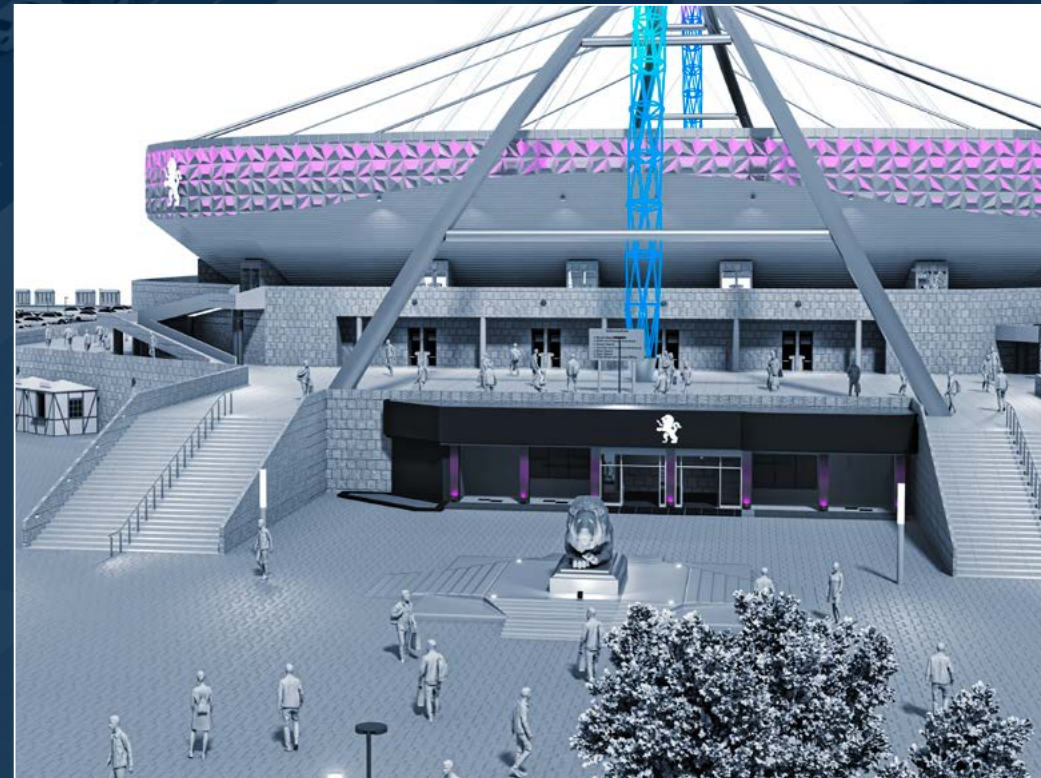
The Television Lighting Consistency Index (TLCI) is used to evaluate light quality. It measures the spectral power distribution of a luminaire using a spectroradiometer and analyses its television performance, assigning a colour value on a scale from 0 to 100.

BUILDING SURROUNDS & PATHWAYS

SAFE AND COMFORTABLE WELCOME

LIGHTING PERFORMANCE - Event days are exceptionally busy. During these times it's essential that spectators, staff and security personnel can clearly identify others in the vicinity. As such, it's important that we enhance safety in these areas. Great lighting with an emphasis on cylindrical illumination can ensure that facial features and key identifying factors are as clear as possible.

DEPENDABLE LIGHTING - Stadium events are regularly held at maximum capacity and it's often great lighting that adds to the spectator excitement whilst also helping security staff to maintain the health and wellbeing of visitors. This also means that the light fixtures utilised across the site need to be durable, hard wearing and reliable throughout their lifetime - both in day-to-day scenarios and emergency situations.



ARCHITECTURAL LIGHTING

LIGHT THAT SHAPES IDENTITIES

Supporters of any club are passionate about the space they frequent whilst supporting the team they hold dear. When a club's ambassadors approach the stadium, we have an enormous opportunity to inspire them and build upon their loyalty. Lighting can turn a stadium into a landmark destination and have a huge effect on increasing civic pride.

KEY CONSIDERATIONS

1 TOTAL CONTROL

Ensuring full connectivity for a flexible lighting solution across a range of events.

2 CREATING ATMOSPHERE

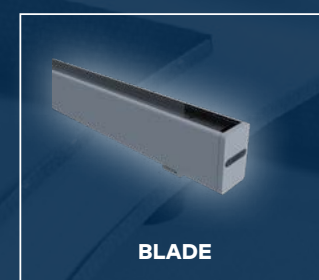
Having the flexibility to switch lighting scenes with options to increase the subtlety of the effect.

3 ENHANCING ARCHITECTURE

Light can really accent the features of a stadium whether historic or modern.

4 CREATING VISUAL INTEREST

Utilising light in a way that cements the spirit of the club at the heart of its community.



BLADE



PLAZA R



PLAZA S



CONTRAST



VISTA FLEX



RAZE ARCHITECTURAL



ALUMET



VERTIGO W



CAR PARKS & STADIUM APPROACH

SAFE AND SECURE WAYFINDING

SUPPORTER SAFETY - Car parks welcome both visitor and home supporters. This is where lighting becomes a comforting element that supports people and enhances the overall experience of their visit.

Lighting solutions can enhance non-visual communication. We always aim to provide a lighting design that delivers great cylindrical illumination to ensure that facial expressions and nonverbal communication is improved by our lighting solutions.



CAR PARK & STADIUM APPROACH



TICKET ENTRANCE

ILLUMINATING EXPERIENCES

KEY CONSIDERATIONS

- 1 LIGHTING FOR CLARITY**
Whether a spectator O1 O3 regularly visits the venue or the stadium is brand new to someone - it's important that we utilise lighting to aid wayfinding and can easily find the best ticket entrance gate.
- 2 PRIORITISING SPECTATOR SAFETY**
Good cylindrical illumination and strong light quality helps spectators to find their friends and family through clearer facial recognition.
- 3 LIGHT LEVELS DESIGNED IN**
Ticket entrances are often very busy and can be quite complex to illuminate well. This is where great lighting design can make all the difference.



CARAT



PIAZZA



LEDFIT



ISARO PRO

TICKET ENTRANCE



CONCOURSE & STAIRWELLS

FINDING YOUR SEAT

KEY CONSIDERATIONS

1 CLEAR WAYFINDING

These spaces also double up as hospitality areas, meeting points and incredibly busy exit routes. Lighting these spaces well massively enhances spectator experience and helps people move around the stadium.

2 SOLUTIONS BUILT TO LAST

High IK & IP ratings are key to ensure that your light fixtures can stand strong throughout their lifetime in a potentially intense environment.

3 LIGHT CONTROL

The lighting here can really enhance the spectator experience and doubled up with a reliable control system, can enhance energy savings during quieter times as well.



AQUAFORCE PRO



EYEKON



POPPACK



ESCORT

CONCOURSE & STAIRWELL

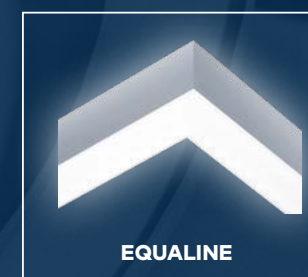


HOSPITALITY

CAPTURING EXPERIENCES

TAKING SPECTATORS TO THE NEXT LEVEL - Often attending a match through the hospitality experience is something quite memorable for fans. Great lighting here makes an enormous difference and can make people feel at home in a premium environment. Whether the lit effect needs to be calm and controllable for catering environments or more functional for social spaces, it's essential that reliable lighting solutions are the backbone of these areas.

Another major consideration is getting the emergency lighting element right at the lighting design stage. Our range of emergency lighting solutions, from our central battery systems to emergency signage to stand alone solutions are designed with safety at the forefront. It's essential that throughout the stadium, fans experience safe light levels in case of any power outage.



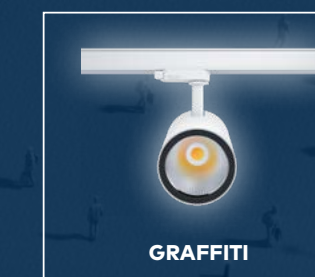
EQUALINE



NOVALINE STYLE



CHALICE PRO



GRAFFITI

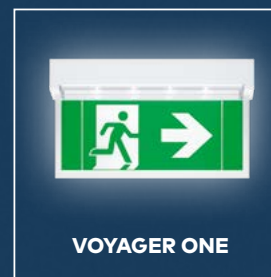


EMERGENCY

A SAFE WAY OUT

Our Voyager range of emergency luminaires are designed, manufactured and tested to meet the latest European standards regarding safety and electromagnetic compatibility. The purpose of emergency lighting is to allow people to make their way safely out of buildings in the event of an emergency, for example during a black out. Emergency safety lighting and illuminated exit signage ensures able bodied people can safely evacuate a building to a place of safety. In these situations, lighting can save lives and keep people calm.

It goes without saying that emergency lighting must comply with all relevant rules and regulations. But the best emergency lighting goes further, incorporating flexible luminaires with ease of installation and maintenance, long life and energy efficiency. Thorn's 90+ years of experience and reputation for quality are your guarantee of an optimal emergency lighting solution.



WE CARE

SUSTAINABLE STADIUMS

How we illuminate sports stadia needs to deliver on the environmental needs of the planet as well as the expectations of spectators both attending live and watching remotely.

It's important that we manage light spill into surrounding areas, including the night sky. Delivering exceptional spectator experience whilst maximising energy saving potential is an essential balance to achieve. The community around our stadiums form a huge part of the ethos and brand of the club. By utilising solutions with optical excellence and working with our expert lighting designers, we're able to make a positive impact on those neighbouring communities and the natural environment.

**BUILD
BACK
BETTER
GREEN**



SUSTAINABLE DEVELOPMENT GOALS



GOOD HEALTH AND WELL-BEING

Sport inspires us to care for our health and well-being. However, light can have a notable impact. For example, light helps ensure the safety of spectators in and around the stadium whilst enhancing their overall experience.



SUSTAINABLE CITIES & COMMUNITIES

Whether the sporting club is large or small – often it's the local community that lives within the heart of the team. This is why lighting optics are key and we ensure that illumination stays exactly where it's needed.

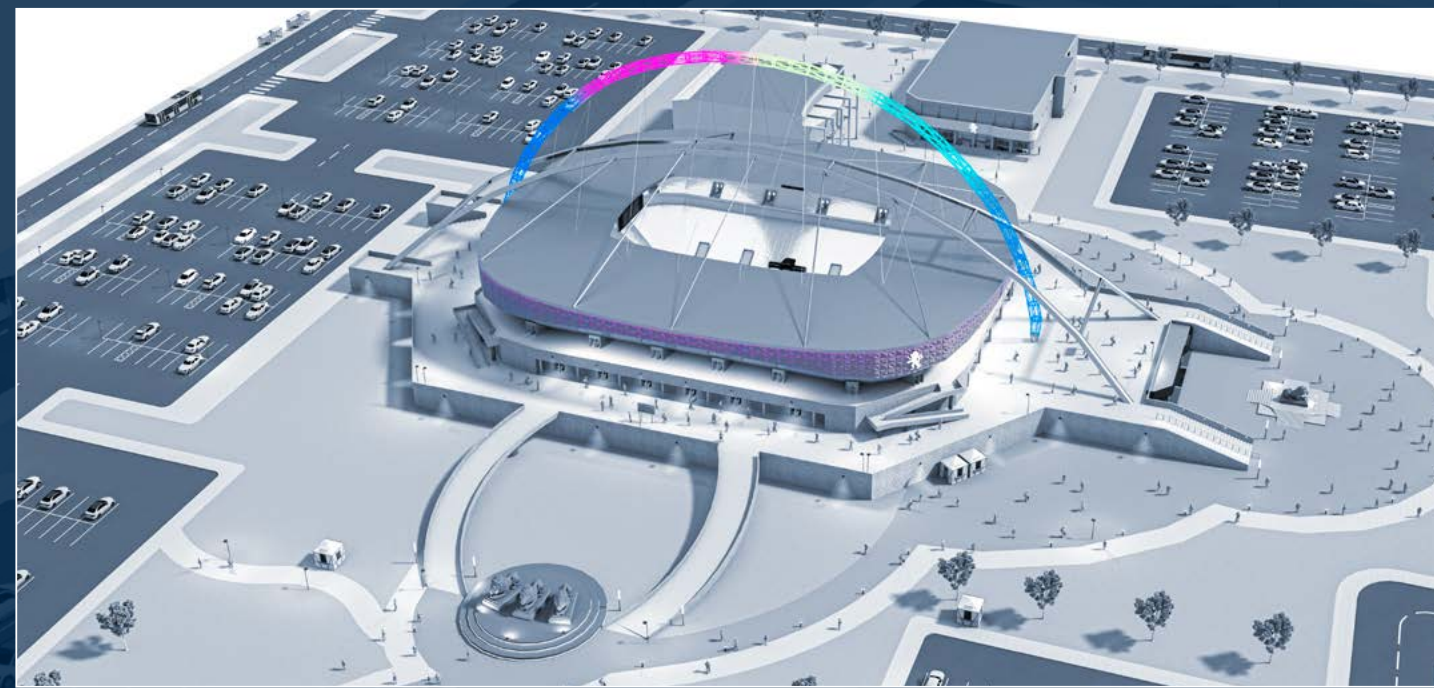


CLIMATE ACTION

Beyond the pitch, a stadium can be a hub of activity around the clock. Hospitality spaces, retail environments, event hubs all require great illumination and here's where a control system can ensure that you can achieve your climate action goals.






[CLICK HERE TO READ MORE ABOUT OUR SUSTAINABILITY COMMITMENTS](#)





CONTROLS AND CONNECTIVITY

SAME SPECTACLE – MANAGED EFFICIENTLY

- 
UrbaSens Civic Connect – Cellular based technology, offering a full suite of data analysis and reporting. Providing sustainability data of carbon reductions, energy savings and in addition, a clear heatmap view of how the space is used – pedestrian footfall and vehicle activity.
- 
Variable Light Distribution – Taking building surround illumination to the next level by integrating different optics within the same luminaire to ensure pedestrians, cycle paths and roadways are visually identifiable and correctly lit.
- 
UrbaSens Sentinel – Autonomous motion detection and increased energy savings whilst supporting NightTune & Variable Light Distribution.
- 
BasicDim – Even though there are significant energy savings to be had by upgrading from old lighting technology to more energy efficient LED solutions – there's an additional 60% decrease in energy consumption by implementing intelligent controls. When those controls are wireless, then you can connect all light points via a mesh network, which means it's possible to use existing cabling infrastructure and still benefit from the energy savings that come from ensuring that light points dim down when pedestrian and automotive traffic levels are low.
- 
NightTune – A sustainable solution, adjusting both colour temperature and output to protect the nocturnal environment, wildlife and promoting human wellbeing without compromising safety.

