Kingfisher Lighting: FAQ Sheet

Technical & Design:

How will glare, light spill and obtrusive light be controlled?

These factors are controlled through good product design, lighting design and installation.

Product:
Our fitting incorporates several features to minimise glare and light spill, including precision optics with the use lenses and reflectors as well as built-in shielding. These components help direct light onto the playing surface and reduce unwanted illumination beyond the site boundary.

Lighting Design:
A professional lighting design considers the correct beam type, wattage, aiming angles and the surrounding environment to ensure effective and compliant performance. The Institute of Lighting Professionals (ILP) provides guidance on the control of obtrusive light within document GN01, which reputable lighting companies will follow to demonstrate compliance with recommended limits.

Installation:
Having a strong product and well-considered design is only effective if it can be implemented correctly on site. This is why a deep understanding of real-world environments, gained through 35 years of industry experience, is essential to ensuring that what is designed on paper is successfully realised on the field.

Planning:

Will planning permission be required for an LED upgrade?

This will depend on the local planning authority, who should always be consulted before any works begin. Providing a lighting design and a supporting lighting statement will help them determine whether full planning consent is necessary.

How does the design mitigate impact on nearby residents or wildlife?

A well-considered lighting design incorporates detailed spill-light calculations to demonstrate compliance with ILP GN01 for obtrusive light (impact on nearby properties) and ILP GN08 Bats and Artificial Lighting, which covers ecological considerations. By following these guidelines, the scheme minimises light intrusion for residents and protects wildlife habitats. This approach ensures the lighting solution is both effective and environmentally responsible.

What lighting standards should we design to?

When determining the appropriate lighting standard, we consider both the client's requirements and the relevant governing body guidance, principally England Hockey and the International Hockey Federation (FIH).

For competitive hockey, the typical minimum requirement is Class II, which, among other criteria, requires a maintained average illuminance of 350 lux. For higher-level, non-broadcast

national competition, a Class I specification may be more appropriate, requiring a maintained average illuminance of 500 lux.

Ultimately, selecting the correct lighting level depends on understanding the client's needs and the relevant governing body guidelines.

What limits apply to light spill and vertical illuminance at residential boundaries?

In the UK, limits on light spill and vertical illuminance at residential boundaries are based on guidance from the Institution of Lighting Professionals (ILP), specifically Guidance Note 01 – The Reduction of Obtrusive Light (GN01). This is the document most local planning authorities refer to when assessing sports lighting proposals.

The limits depend on the property depend on the environmental zone (E0–E4) they reside in, which reflects how sensitive the surrounding area is to light. Most hockey pitches near housing are treated as E2 (rural) or E3 (suburban), with a pre-curfew vertical illuminance limit of 5- and 10-lux respectively. These values represent the maximum vertical illuminance measured at the façade or window of a residential property and are measured looking towards the lighting installation.

There are additional light spill requirements set out within GN01 and the corresponding environmental zone, such as luminaire intensity and sky glow (upward light ratio) that must also be calculated and met.

Are there maximum glare limits we must comply with?

Glare refers to the visual discomfort within a person's field of view when a light source is significantly brighter than the surrounding environment and the eye struggles to adapt. Limits to glare on nearby residents are controlled through luminaire intensity, which is the amount of light emitted from a luminaire in a particular direction, and vertical illuminance at façades, both of which are set by GN01.

What environmental lighting zone (E0–E4) applies to our site?

The applicable environmental lighting zone is set out in ILP Guidance Note 01, produced by the Institution of Lighting Professionals detailed in the table below. The zone depends on the character of the surrounding environment, particularly the level of existing ambient lighting and proximity to residential areas.

Environmental Lighting Zones

Zone	Environment Type	Typical Examples
E0	Intrinsically dark	National parks, protected landscapes
E1	Dark	Rural countryside, villages

Zone	Environment Type	Typical Examples
E2	Low district brightness	Edge-of-town or rural residential areas
E3	Medium district brightness	Suburban residential areas
E4	High district brightness	Town centres, commercial districts

What enforcement mechanisms ensure lights are switched off on time?

To ensure sports pitch lighting is switched off at the agreed time, particularly where a planning permission includes operating restrictions, an automated control system, such as a time clock. These are relatively easy to install and a cost-effective solution to prevent lights being activated outside permitted hours.

Would ecological surveys (e.g. bats) likely be required?

Whether an ecological survey is required depends on the site and potential ecological sensitivities, but for sports lighting projects it is common for the local planning authority (LPA) to request an assessment where there is a reasonable likelihood of ecological impact.

A survey, particularly for bats, may be required if the site is close to features that could support wildlife, such as:

- Tree lines, woodland, or hedgerows
- Watercourses or ponds
- Dark corridors used for commuting bats
- Protected habitats or designated sites

Installation:

Can the existing masts and electrical infrastructure be reused?

In most cases, yes - this is common and often straightforward.
Existing masts can usually be retained provided sufficient structural information is available, either from the original manufacturer's datasheet or through a structural survey and certification report.
For the electrical infrastructure, LED upgrades typically reduce the load on existing cabling. Suitability can often be assessed during a site survey; however, full verification requires a detailed electrical survey to confirm the system is safe and capable of supporting the new installation.

What is the estimated installation timetable and any associated downtime for the pitch?

The installation timeline is project specific. Wherever possible, we aim to minimise disruption by scheduling works during quieter periods, such as school holidays or by developing a tailored plan that allows the facility to remain operational while work is underway.

As a general guide:

- Retrofit (replacing fittings on an existing system) - typically around 5 working days for a 350-lux system.
- New installation - typically 5 working days for ground works, followed by 7 working days for the mechanical and electrical installation (masts, fittings cabling etc.), once the concrete bases have cured.

These timelines may vary based on site conditions, access, and any additional requirements identified during a full site survey. Careful planning and close coordination with site operations help ensure the works are completed safely and efficiently.

- Do you provide a full turnkey service (design, supply, install, commissioning)?

Yes. Kingfisher Lighting provides a complete turnkey solution, managing every stage of the project from start to finish. Our service includes:

- Initial consultation
- Site surveys
- Lighting design
- Planning support
- Funding guidance
- Supply of all equipment
- Installation, including groundworks and full mechanical and electrical works
- System commissioning

This end-to-end approach ensures the project is delivered seamlessly, with a single point of contact providing you with complete peace of mind.

Energy Efficiency & Environment:

What level of energy savings (%) can we expect?

Typically, energy savings of 50–70% can be achieved, depending on the existing system and layout. Even greater savings are possible with the addition of lighting controls, such as dimming, zoning, or time scheduling.

These reductions not only lower energy costs but also reduce maintenance requirements and extend the lifespan of the lighting system.

Is it possible to recycle of the old fittings?

Yes, old luminaires can often be recycled, but not through normal metal recycling alone because they contain electrical components and discharge lamps that must be treated as Waste Electrical and Electronic Equipment (WEEE).

Most of the luminaire body, which is often die-cast aluminium or steel, is fully recyclable through standard metal recycling streams once the electrical components are removed.

The metal halide lamps must be handled separately because they contain small amounts of mercury and metal salts.

The magnetic ballasts, ignitors and capacitors must go through WEEE recycling because they contain electrical materials and sometimes oils or resins.

Costing & Funding:

What is the total cost for supply and installation for a 350 and 500 lux system?

On a retrofit system, it will vary depending on the existing layout, infrastructure, and access, Typically, it ranges from £25,000 - £28,000 for a 350-lux solution and £35,000 - £40,000 for a 500-lux solution.

What maintenance costs should be expected over the lifespan of the lights?

Maintenance requirements vary depending on factors such as the product, site location, the type and age of any existing infrastructure, and the level of usage. While solutions are tailored to each site, we typically recommend maintenance every 2–3 years at an estimated cost of around £2,000 per visit.

For systems designed and installed by Kingfisher Lighting, selecting a maintenance package also provides an extended onsite warranty, covering all costs for repairs or replacements. This protects your investment and ensures the continued performance of the lighting system, giving you complete peace of mind.

Operation & User Experience:

Will the system allow flexible switching (e.g., half-pitch, warm-up zones, training vs match settings)?

Flexible switching is available as an optional upgrade, with a range of control systems tailored to the specific needs of each project. Typically, a wireless app-controlled system is the preferred choice due to its ease of installation and the flexibility it provides. This allows you to select different lighting scenes and operate the system either on-site or remotely, helping to save both time and money.

Kingfisher Lighting will also provide full lifetime support for the installation at no additional cost, ensuring any questions, adjustments, or issues are addressed promptly to give you additional peace of mind.

Can the system be controlled remotely (phone app, online portal)?

Yes, the control system we offer will enable you to do this. The app-controlled system, when paired with an internet connection, enables full remote management, providing flexibility and convenience.

Warranties & Support

What warranties are provided on the luminaires, drivers, columns, and control system?

The length of warranty depends on the product being used and its application but typically it is between 5- and 10-years on all luminaires and control systems.

Our sports lighting columns come with a 15-year warranty, a design life of 25 years, and a typical lifespan of up to 40 years when properly maintained.

When Kingfisher Lighting conducts the installation, you get the benefit of a 2-year on-site warranty covering all costs for repairs or replacements, which can be extended with a maintenance package.

Do you offer ongoing servicing or maintenance packages?

Yes. We offer optional maintenance packages that provide full coverage on parts and labour for up to 10 years, giving you complete peace of mind and ensuring the continued performance of your lighting system.