POLARIS LIGHT



FREE GUIDE FOR UK PADEL CLUBS

Padel court lighting in the UK

LTA and SAPCA lux levels, glass-court layouts, planning permission and converting existing lights to LED, explained for club committees

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Written for club chairs, secretaries, treasurers and facility managers who are planning new padel lighting or an LED upgrade, indoors or outdoors.

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ABOUT THIS GUIDE

Who this guide is for, and how to use it

Padel is played in a glass and mesh enclosure, so lighting has to work for a fast ball off the walls, not only for a view of the floor. The right scheme also has to satisfy the local authority and, if you later cover the court, the same performance standard indoors.

This guide brings together the lighting, layout and planning advice in the Lawn Tennis Association's Padel Court Data Sheet and the SAPCA Code of Practice for the Construction of Padel Courts (September 2025), which the LTA hosts. It also notes the lighting rules in the International Padel Federation's Rules of Padel, in force from 1 January 2026. Every lux figure, mounting height and planning point in these pages comes from those documents or from the Polaris product facts listed in the sources. We have not invented numbers, and we have not included prices.

Six steps from idea to lit court



The six steps follow the order in the LTA and SAPCA project checklists: agree the use of the court, design to the published performance standard, apply for planning consent, then install and test.

1. Why padel lighting is different
2. LTA and SAPCA lux levels
3. How fittings are mounted
4. Glass courts, indoor and outdoor
5. Planning permission
6. Converting existing lights to LED
7. PS-PADEL-LINEAR and PS-POWER
8. Checklist and sources

THE COURT

Why padel lighting is different

A padel court is 20 m long by 10 m wide, fully enclosed by glass rebound walls and weld mesh. Play uses the ends and the sides, so players watch a ball come off the glass and often look up into the lights. Glare, reflections and vertical light on the walls matter more here than on an open tennis court.

The LTA and SAPCA both require a clear unobstructed height of at least 6.0 m above the playing area, including to the underside of any sports lighting that overhangs the court. For new build, both recommend 8.0 m where it is feasible. The FIP Rules of Padel, in force from 1 January 2026, say the same: a minimum of 6 m from the ground to the underside of the projectors, and 8 m is suggested for new facilities if the lights sit inside the vertical projection of the side walls.

What this means in practice

Choose a sport-specific optic with good cut-off, not a general amenity floodlight. The LTA and SAPCA warn that low-cost, low-wattage LED fittings with a symmetrical distribution are made for general areas and are not sport-specific products. Ask for tilt angles in the design, and, because play uses the walls, consider vertical calculations as well as the horizontal grid.

PERFORMANCE STANDARDS

LTA and SAPCA lux levels

For UK clubs, the figures to design to are the LTA Padel Court Data Sheet and the SAPCA Code of Practice (September 2025). Both set the same minimum illumination at ground level (Z=0), for outdoor and indoor courts:

Level of play	Average illuminance (E av)	Uniformity
National and international competition	**500** lux	**0.7**
Regional competition, school and recreational use	**300** lux	**0.5**

Source: LTA Padel Court Data Sheet, outdoor and indoor tables; SAPCA Code of Practice for the Construction of Padel Courts, September 2025, clause 3.3. Both documents use these figures for outdoor and indoor courts.

A 10% over-performance should be built into the initial design, which both documents describe as a 0.9 maintenance factor. Designs should use a 1.0 m by 1.0 m calculation grid over the playing area, centred on the net line, so dark or over-lit patches are not hidden in a coarser grid.

The FIP Rules of Padel require artificial light to be uniform and not to cause difficulty for players, officials or spectators. Detailed illuminance tables now sit in the FIP Courts' Homologation annex, which we have not reproduced here. For television and film, the FIP rules ask for at least 1,000 lux of vertical illumination, which may need to rise with camera distance. For UK club and recreational courts, use the LTA and SAPCA 300 lux and 500 lux figures above.

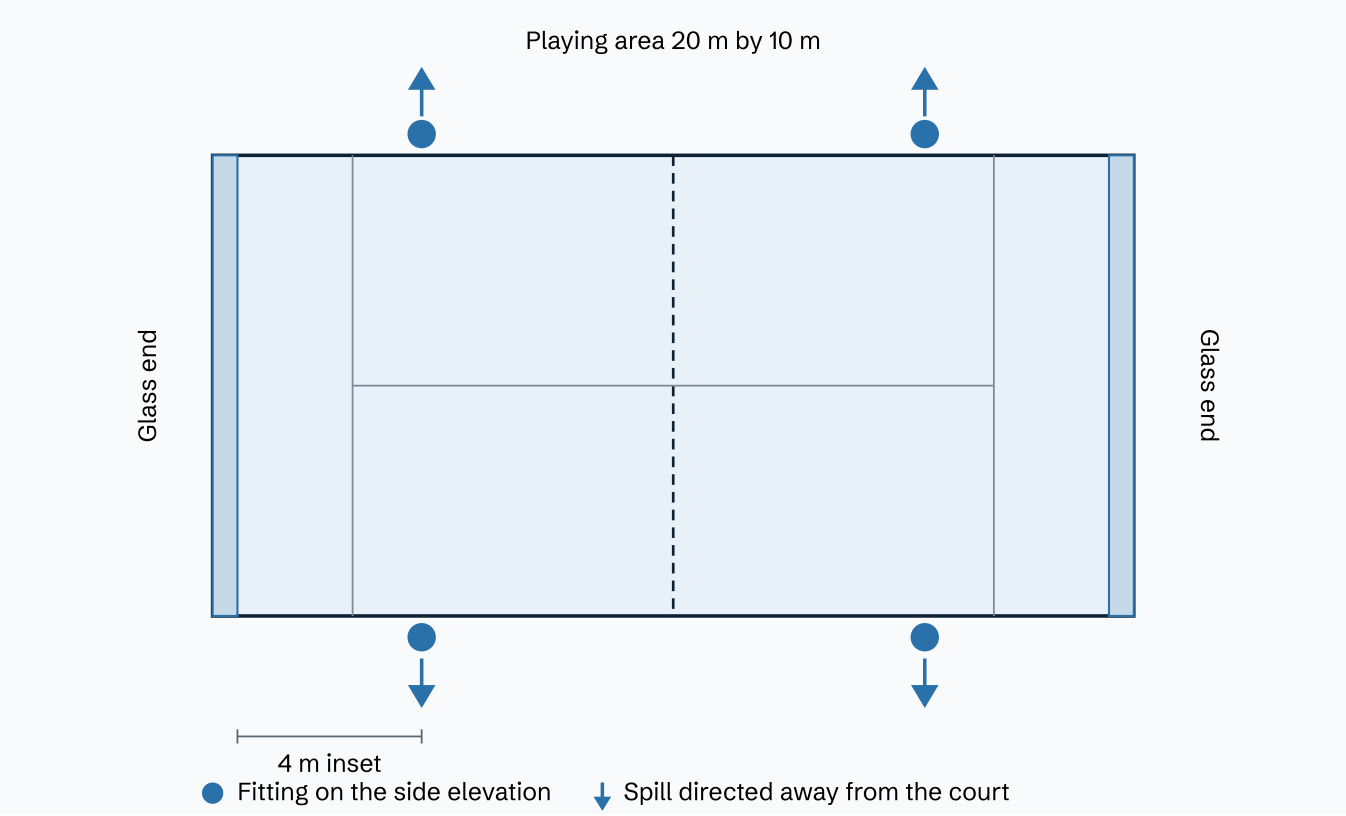
The LTA also notes that outdoor tennis courts in the UK are often lit to a higher standard than these padel minima. Clubs may wish to adopt a higher standard, or to carry out playing tests of a floodlit padel court, when they compare the two.

How fittings are mounted

The LTA describes two methods. SAPCA adds a third for covered courts. In every case the fittings must leave at least 6.0 m of clear height above the playing area.

Method	Where the fittings sit
Extended fence posts	Posts form part of the enclosure, with a top bracket for one or two fittings. They are usually inset by 4.0 m from the back of the court, on the side elevations. SAPCA calls this the preferred option, because the lighting becomes part of the enclosure and cabling can run inside the posts.
Stand-alone columns	Columns stand outside the enclosure, also 4.0 m from the back wall on the side elevations. The LTA says this may be the better choice where houses are close and you need tighter control of spill and glare.
Roof structure (covered courts)	SAPCA: fittings attach to the roof support at 6.0 m eaves height, again 4.0 m from the back wall above the side elevations.

Source: LTA Padel Court Data Sheet, floodlighting methods 1 and 2; SAPCA Code of Practice, clauses 3.1.1 to 3.1.3. This diagram is generic. It does not show lux levels.



Generic 20 m by 10 m court plan, with fittings on the side elevations inset 4 m from each back wall. Spill is shown away from the court. No lux figures.

GLASS, INDOOR AND OUTDOOR

Glass courts, indoor halls and covers

Most UK courts use toughened glass rebound panels at the ends, with weld mesh above and along the sides. SAPCA requires 12 mm kitemarked glass for outdoor courts and for courts under a canopy; 10 mm may be considered indoors. Because the ball is played off those surfaces, a design that only reports horizontal lux on the floor can miss glare and uneven light on the walls. SAPCA says planning authorities may ask for additional vertical lighting calculations.

The same 300 lux and 500 lux figures apply indoors and outdoors in the LTA and SAPCA tables. If an outdoor court may later be covered, the LTA says the indoor standard should be adopted from the start, or provision made in the switchgear, ducting and cabling for a later upgrade.

Covered and indoor courts also change how the fittings are held. SAPCA allows them on the roof structure, as in the table above. If the structure has fully enclosed or retractable sides, SAPCA says emergency lighting must be installed to local building-control requirements. FIP recommends a north to south court axis outdoors, with a variation between north-north-east and north-north-west, to limit the effect of the sun.



Covered padel courts, with fittings and rails along the enclosure. Existing project photo.

PLANNING

Every UK padel court needs planning consent

The LTA is direct: building a padel court, whether on a new site or over an existing tennis court, is development and needs formal planning consent from the local authority. That includes glass or mesh fencing 3.0 m and 4.0 m high, and any proposed floodlighting posts and fittings. SAPCA repeats the point and adds that lighting posts 6.0 m above the playing surface need consent before work starts. The site owner or client is responsible for the application.

A detailed lighting design pack is part of that application. SAPCA says the pack should be produced by a specialist consultant or contractor, and that designs next to homes should include both lux and candela calculations so they can be checked against the Institute of Lighting Professionals Guidance Notes for the Reduction of Obtrusive Light 2021.

> If homes stand 30 m to 50 m from the court, SAPCA says a noise assessment is often required as well, and it recommends that those reports form part of the application. Lighting, drainage, environmental disturbance and Biodiversity Net Gain also need to be considered. Incomplete applications risk being rejected.

Planning requirements may also mean the lighting design has to be prepared by a consultant rather than a manufacturer, where the authority sets specific criteria.

UPGRADES

Converting existing lights to LED

Where a padel court already has floodlights, or is being added to an existing floodlit site, both the LTA and SAPCA say the design should make the most of the current columns, fittings and cabling, and should check for conflicts with underground services. A new LED scheme still needs to be designed to the current 300 lux or 500 lux standard, with a 0.9 maintenance factor and a 1.0 m grid.

Check that any existing planning consent was discharged, and whether the new design stays within it. Extended fence posts, stand-alone columns and roof mounts all still need 6.0 m of clear height. On a glass court, replacing older floodlights with a sport-specific, cut-off LED optic is often the difference between a usable court and one that glares off the walls. We have not included running-cost or energy-saving figures in this guide, because we have not measured them on a named padel project for this edition.

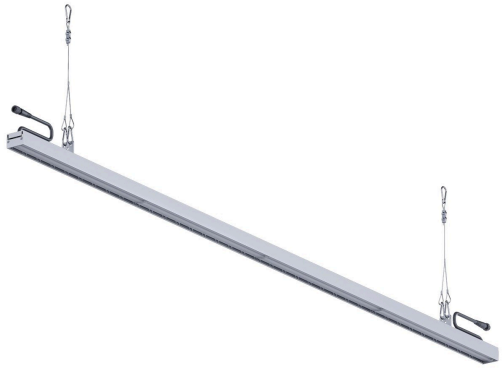
SAPCA gives a typical electrical load of 1.2 kW to 2.4 kW per court for LED sports lighting, on a single-phase supply, and says a three-phase supply may be needed for several courts. Treat that range as SAPCA's typical figure, not as a design for your site.

POLARIS FITTINGS

PS-PADEL-LINEAR and PS-POWER

Two Polaris fittings are used for padel. The facts below are taken from the published product pages. Every Polaris fitting has a 5-year warranty. We have not added prices.

PS-PADEL-LINEAR is a slim 1989 mm linear LED for indoor and covered courts. It can be mounted on the guardrail or hung from the roof, and fittings link along the run with plug-in terminals, fed from a remote Inventronic driver box. A P30 asymmetric optic with a cut-off lens sends light onto the court and keeps the source out of the player's eye line. Models are 24 W, 40 W, 55 W or 60 W, with up to 10,800 lumens and up to 190 lm/W. The housing is aluminium 6063 with a PC optic, rated IP65 and IK10. Input is 180 to 528 V. Controls include DALI-2, D4i, 0/1-10 V, PWM and a knob dimmer.



PS-PADEL-LINEAR, a 1989 mm linear fitting for indoor and covered padel courts, shown on suspension cables.

PS-POWER is the anti-glare sports floodlight used on outdoor courts and on mixed sports sites. The padel optic is 100 x 60 degrees at 5000K. A DIP switch sets output to 100, 80, 60 or 40 percent. Models are 150 W, 240 W and 400 W, at 170 lm/W, with an optional angle-adjustable visor and a stainless mesh that raises impact protection to IK10. The fitting is IP66, with a PMMA lens and tempered glass cover. The driver is Sosen.

The right choice depends on the court: linear fittings on the guardrail or roof for indoor and covered play, or a padel-optic floodlight on the enclosure posts or on stand-alone columns outdoors. A lux plot for your court will show whether the design meets 300 lux or 500 lux with the required uniformity.

CHECKLIST

Before you go to planning or tender

- [ ] Agree the level of play, and therefore whether the design target is 300 lux at 0.5 uniformity or 500 lux at 0.7 uniformity, at ground level.
- [ ] Say whether the court is outdoor, covered or indoor, and whether an outdoor court might later be covered.
- [ ] Design to a 0.9 maintenance factor, on a 1.0 m by 1.0 m grid centred on the net line.
- [ ] Keep at least 6.0 m clear height above the playing area, and consider 8.0 m for new build.
- [ ] Choose the mounting method: extended fence posts, stand-alone columns, or the roof structure on a covered court, with fittings inset 4.0 m from the back wall on the side elevations.
- [ ] Use sport-specific optics with disclosed tilt angles, and consider vertical calculations because play uses the glass and mesh walls.
- [ ] Apply for planning consent for the court, the 3 m and 4 m fencing, and the lighting posts and fittings, with a lighting design pack. Allow for a noise assessment if homes are 30 m to 50 m away.
- [ ] If you are converting existing lights, check the current consent, the posts or columns, and underground services.
- [ ] After installation, test the lighting against the submitted design, as SAPCA recommends, and plan annual cleaning and a check of aiming.

Free lighting survey

Tell us about your courts. We survey the site, produce a lighting design pack for planning, and supply and install the fittings.

Every Polaris product carries a 5-year warranty.

CALL US

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Sources

Lawn Tennis Association, *LTA Padel Court Data Sheet*, PDF at lta.org.uk/siteassets/play/padel/file/lta-padel-court-guidance.pdf (file dated April 2020). Planning consent, court dimensions, 6.0 m and 8.0 m clear height, floodlighting methods 1 and 2, 4.0 m inset, outdoor and indoor lux tables (500 lux at 0.7 and 300 lux at 0.5), 0.9 maintenance factor, 1.0 m calculation grid, vertical calculations, and advice on later covering and existing floodlit sites are taken from this data sheet.

SAPCA, *The SAPCA Code of Practice for the Construction of Padel Courts*, September 2025, PDF hosted by the LTA at lta.org.uk/globalassets/padel-venues/cop-for-padel-courts-sept-25.pdf. Planning (including lighting posts at 6.0 m, lighting design packs, noise assessment at 30 m to 50 m, and Biodiversity Net Gain), mounting methods including the roof structure, typical load of 1.2 kW to 2.4 kW per court, the same lux tables and maintenance factor, 1.0 m grid, ILP Guidance Notes for the Reduction of Obtrusive Light 2021, vertical calculations, testing and annual maintenance, 12 mm glass, and emergency lighting in enclosed covers are taken from this code.

International Padel Federation, *Rules of Padel*, in force from 1 January 2026, at padelfip.com. Uniform lighting, poles outside the court, 6 m minimum and 8 m suggested height to the underside of the projectors, 1,000 lux vertical illumination for television and film, and north to south orientation are taken from the illumination and orientation sections. Detailed illuminance tables are referred to the FIP Courts' Homologation annex, which is not quoted in this edition.

Polaris product pages, as published at polarislight.com/products/ps-padel-linear and polarislight.com/products/ps-power, November 2026. Service description (survey, lighting design pack, supply and install, 5-year warranty on fittings) as already stated on polarislight.com. This guide does not replace the LTA data sheet, the SAPCA code, a lighting design or a planning decision. Figures may change if those bodies update their guidance. Polaris Light Ltd, polarislight.com. Edition 1, November 2026.