

Guidance to Floodlighting in Residential areas

In the **UK (England/Scotland/Wales)** there isn't a single statutory "maximum lux level" that automatically applies everywhere for **light spill from a floodlit football pitch onto neighbouring residential property**, but there *are widely used planning and nuisance guidance limits* that local planning authorities rely on.

Typical recommended light-spill limits (lux at neighbouring properties)

These guidance figures are **not absolute legal thresholds**, but are what planning officers and lighting consultants often use when assessing proposals:

Institute of Lighting Professionals / Society of Light and Lighting (ILP/SLL) recommendations

Light trespass (illumination reaching the *windows* or surfaces of nearby homes):

Environment Zone	Pre-curfew (before ~11 pm)	Post-curfew (after ~11 pm)
E1 (dark rural/village)	2 lux	1 lux
E2 (suburban/low background lighting)	5 lux	1 lux
E3 (urban residential)	10 lux	2 lux
E4 (bright town/city centre)	25 lux	5 lux

These are typical light-trespass limits within the **ILP's Guidance on the Reduction of Obtrusive Light (GN01)**, often referenced by UK councils when setting planning conditions on floodlights.

Local authorities frequently adopt guidance like:

- **≤10 lux pre-curfew** and **≤1-2 lux post-curfew** for *residential neighbours*.
- Some councils limit spill even lower (e.g., **≤1 lux at the façade** of neighbouring homes).

Example from sports floodlighting planning:

In specific planning cases:

- Floodlights for a football pitch were designed so that **light spill to nearby properties was limited to about 1 lux (moonlight level)** at closest residential façades.
- Another council reported floodlight design achieving **≈1 lux light overspill at 40 m from the lights**.

Why these limits matter:

- **Statutory nuisance vs planning conditions** – There's no nationwide statutory lux cap for all situations, but a council can treat *excessive light spill* as a statutory nuisance under the *Environmental Protection Act 1990* if it "unreasonably and substantially interferes with enjoyment of home/health."
- In **planning permissions**, councils routinely impose **conditions** requiring floodlights to comply with specified maximum lux values at boundaries or nearest residences to protect amenity.

What that means in practice:

For a **floodlit football pitch near housing in the UK**, reasonable planning guidance typically expects:

- **Light spill at nearby residential windows/land within ~1–10 lux** depending on local context and time of night, with **stricter limits after curfew** (often **1–2 lux**).
- Councils will normally require lighting designs that **keep spill as low as possible** with aiming, shielding, and curfew times (e.g., cutting off lights after ~10–11 pm).