

Agenda Item	7
Report No	ECI/28/26

The Highland Council

Committee: Economy and Infrastructure

Date: 20 August 2026

Report Title: Reducing Light Pollution: Draft Good Practice Guidance

Report By: Assistant Chief Executive - Place

1 Purpose/Executive Summary

- 1.1 This report sets out, for public consultation, draft Guidance aimed at reducing light pollution within Highland. The principal justification for this Guidance is that reducing light pollution will positively impact Highland's environment and its tourism economy.
- 1.2 The Guidance when finalised following consultation will be used:-
 - to encourage best practice in terms of minimising exterior lighting only to that necessary and only of a design and location that minimises harmful effects;
 - as a basis for a policy in the new Highland Local Development Plan on this topic; and
 - as a justification for applying and enforcing planning conditions relating to reducing light pollution.
- 1.3 The intended future Council policy and appended draft Guidance on this topic will also provide support for any local Highland community wishing to pursue a Dark Sky area designation bid.

2 Recommendations

- 2.1 Members are asked to:-
 - i. **Note** the positive impacts of reducing light pollution outlined in the report;
 - ii. **Approve** the Guidance within Appendix 2 as a basis for public consultation;
 - iii. **Agree** that prior to public consultation, officers add further illustrative material and Gaelic language content to the Guidance to enhance its readability and appearance; and
 - iv. **Note** that there will be a policy on reducing light pollution in the new Highland Local Development Plan which will be subject to future committee approval.

3 Implications

- 3.1 **Resource** – the draft Guidance has been prepared within the existing Service budget. It is proposed that consultation on that Guidance take place online to minimise its cost. Reduction of outdoor lighting emissions from Council assets could result in financial savings to the Council.
- 3.2 **Legal** - in Scotland, the Environmental Protection Act 1990 and Public Health etc (Scotland) Act 2008 established artificial light pollution as a statutory public nuisance if excessive light unreasonably and substantially interferes with the use or enjoyment of a home or other premises, and/or injures health or be likely to injure health. Military, transport and other essential infrastructure facilities are exempt from this requirement. Outdoor sports facility lighting is not exempted. Court decisions on this issue have taken account of the necessity for lighting and whether all reasonable steps have been taken to mitigate the adverse effects of such lighting. Currently, there is no legal justification for controlling light pollution that does not constitute a statutory public nuisance. Therefore, planning control aimed at reducing other forms of light pollution will rely largely on establishing, promoting and encouraging good practice.
- 3.3 **Risk**- the draft Guidance could be subject to objections and/or legal challenge, but the consultation will reveal the probability of this risk, and the committee can consider the implications prior to final approval.
- 3.4 **Health and Safety (risks arising from changes to plant, equipment, process, or people)** - reducing light pollution could affect people's health, safety and security. For example, some householders believe that bright exterior lighting acts as a mitigation to reduce the risk of crime and to improve the safety of pedestrian routes. Other households believe excessive light is a nuisance that negatively impacts their health, for example by interrupting sleep which can lead to tiredness, fatigue and increased stress levels.
- 3.5 **Gaelic**- In line with the council's Gaelic Language Policy, the draft Guidance will be augmented prior to publication to include Gaelic titles, headings and sub-headings.

4 Impacts

- 4.1 In Highland, all policies, strategies or service changes are subject to an integrated screening for impact for Equalities, Poverty and Human Rights, Children's Rights and Wellbeing, Climate Change, Islands and Mainland Rural Communities, and Data Protection. Where identified as required, a full impact assessment will be undertaken.
- 4.2 Considering impacts is a core part of the decision-making process and needs to inform the decision-making process. When taking any decision, Members must give due regard to the findings of any assessment.

4.3 Integrated Impact Assessment - Summary

- 4.3.1 An Integrated Impact Assessment screening has been undertaken on 10 July 2026. The conclusions have been subject to the relevant Manager Review and Approval.
- 4.3.2 The Screening process has concluded that there are no impacts on protected characteristics or human rights. There are likely positive impacts on places, especially rural areas and financially, energy consumption will be reduced decreasing energy costs and reducing greenhouse gas emissions. There are also likely to be positive human health and wellbeing impacts and other positive environmental impacts on wildlife. Members are asked to consider the summary in the table below and within **Appendix 1** to support the decision-making process.

4.3.3

Impact Assessment Area	Conclusion of Screening
Equality	Neutral
Socio-economic	Positive
Human Rights	Positive
Children's Rights and Wellbeing	Neutral
Island and Mainland Rural	Positive
Climate Change	Positive
Data Rights	Neutral

5 Background

- 5.1 Committee will recall at its [28 May 2026 meeting](#) that it noted the benefits of reducing light pollution. In summary: there are environmental benefits in terms of reduced (in part carbon) emissions and lower adverse impacts on humans and wildlife; financial benefits in reduced energy usage and bills; and tourism economy benefits in terms of retaining and enhancing visitors' ability to enjoy the night sky.
- 5.2 May Committee also agreed that officers formulate and consult on a specific light pollution reduction policy within the new Highland Local Development Plan (HLDP) and that interim technical guidance be brought to committee for approval before the end of this calendar year. **Appendix 2** provides a draft of that guidance for consultation and suggests what a future HLDP policy on this topic would seek to address (see paragraph 6.4 below).

6 The Draft Guidance

- 6.1 The Reducing Light Pollution: Draft Good Practice Guidance is attached within **Appendix 2**. The Guidance has been prepared taking account of published best practice across UK public authorities and what measures are likely to be appropriate to Highland circumstances.
- 6.2 Once approved it is intended that this non-statutory Guidance will be used as a material planning consideration in development management decisions where light pollution is a relevant issue because of the development proposal's type and/or location.

6.3 Once the future HLDP is prepared and published then it will include a reducing light pollution policy, which will provide a statutory development plan “hook” that will cross reference the Guidance and therefore add importance and status to its application.

6.4 The future HLDP policy will:-

- establish and promote the good practice principle that all exterior/outdoor lighting be minimised only to that necessary and be of a design and location that minimises harmful effects;
- define “necessity” including issues such as operational requirements of public agencies and businesses, security, and public health and safety;
- define “minimise” with reference to the number, illuminance, energy usage, splay and hours of operation of lights;
- define “harmful effects” including sky glow, glare and spillage;
- within the existing Isle of Rum Dark Sky area and any subsequently designated Highland Dark Sky areas, require via planning condition that any planning application be accompanied by a Lighting Assessment within which the applicant must demonstrate that any exterior/outdoor lighting is necessary, has been minimised, and is of a design and location that minimises harmful effects;
- outwith any designated Highland Dark Sky area, require via planning condition that a similar Lighting Assessment be produced for any national or major scale planning application that in the opinion of the Council is likely to increase light pollution within any designated Highland Dark Sky area; and
- cross-reference the final version of the Guidance drafted within **Appendix 2**.

6.5 The Guidance within **Appendix 2** has been drafted to provide the foundation for the future HLDP policy. Its sections:-

- define its purpose, status and connection to the future HLDP policy;
- list the benefits of reducing light pollution;
- provide general guidance to encourage good practice for lighting proposals which are outwith the control of the planning system;
- provide definitions of key terms;
- provide guidance to applicants on what the Lighting Assessment (where required) should include and address; and
- provide a model planning condition for a Lighting Assessment.

7 Next Steps

7.1 If Committee approve the Guidance, then prior to publication as a consultative document, it will be desktop published, illustrative material added and Gaelic language content inserted. It will be made available via the Council’s website, a press release issued and an invitation to comment online made. Community councils, other standard planning policy consultees and development industry representatives will be emailed direct to encourage responses.

- 7.2 A 6-week consultation period is proposed. Thereafter, officers will collate responses, draft any recommended changes and report them back to committee for consideration and final approval of the Guidance.

Designation:	Assistant Chief Executive - Place
Date:	17 July 2026
Authors:	Tim Stott, Development Plans Manager Melissa Lumsden, Graduate Planner
Background Papers:	Hyperlinked within report
Appendices:	Appendix 1 – Integrated Impact Assessment Appendix 2 – Reducing Light Pollution: Draft Good Practice Guidance

Appendix 1: Integrated Impact Assessment Screening

About proposal

What does this proposal relate to? Policy

Proposal name: Reducing Light Pollution: Draft Good Practice Guidance

High level summary of the proposal: The Council has prepared draft guidance on the topic of reducing light pollution and will develop a later statutory planning policy with the same aim. This initial report seeks committee approval to consult on draft guidance on this topic.

Who may be affected by the proposal? Highland residents, visitors and developers.

Start date of proposal:

End date of proposal:

Does this proposal result in a change or impact to one or more Council service? No

Does this relate to an existing proposal? No

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Sign off date: 2026-07-15

Equalities, poverty, and human rights

Protected characteristics

Select what impact the proposal will have on the following protected characteristics:

Sex: No impact

Age: No impact

Disability: No impact

Religion or belief: No impact

Race: No impact

Sexual orientation: No impact

Gender reassignment: No impact

Pregnancy and maternity: No impact

Marriage and civil partnership: No impact

Protected characteristics impact details: There are no impacts identified on any protected characteristic. The Guidance (and future policy) will have exceptions that will not require reduced lighting where it is necessary for security and safety purposes. In many cases, lighting can be controlled to have reduced emissions but still provide security and safeguard public safety. For example, light can be directed downwards, been turned off at times when it is not needed and reduced in intensity. Therefore, the elderly, disabled or other vulnerable people should not be impacted.

Poverty and socio-economic

What impact is the proposal likely to have on the following?

Prospects and opportunities: No impact

Places: Positive

Financial: Positive

Poverty and socio-economic impact details: This policy will not affect prospects and opportunities as there will be no impact on ability to access education, employment or training. Reducing lighting emissions saves on public, business and domestic energy bills. If any other Dark Sky Area is established in Highland, then this will be a tourism asset that should assist the rural economy and related employment. Many residents of quiet rural areas believe that their health and wellbeing can be maintained and enhanced by reduced light pollution.

Human rights

Which of the below human rights will be affected by this proposal? Protocol 1, Article 1: Right to peaceful enjoyment of property

What impact do you consider this proposal to have on the human rights of people? Positive

Human rights impact details: Reducing light pollution will positively impact the right to peaceful enjoyment of property as extreme levels of artificial light can create a nuisance and impact how people feel within their homes. Excessive lighting can lead to intrusive lighting into people's property boundaries, potentially harming enjoyment within their property. Through reducing excessive light, light pollution can be kept to a minimum, allowing people to enjoy their homes and outdoor spaces without glare, light intrusion and bright night conditions. The Guidance (and future policy) will not prohibit domestic security lighting simply attempt to persuade householders to limit it's impact on neighbours and the night sky.

Equalities, poverty and human rights screening assessment

What impact do you think there will be to equalities, poverty and human rights? Positive impact

Is a Full Impact Assessment required? No

Children's rights and wellbeing

What likely impact will the proposal have on children and young people? There may be indirect impacts on schoolchildren in terms of the lighting of their routes to and from school. However the Guidance (and future policy) will allow expectations to ensure that identified safer routes to school will remain adequately lit. More generally, reducing light pollution that poses a statutory nuisance and affects sleep patterns will be a positive impact.

Which of the below children's rights will be affected by the proposal? No children's rights will be affected

Explain how the children's rights selected above will be affected: There will be no direct impacts on children's rights. There may be indirect impacts on schoolchildren in terms of the lighting of their routes to and from school. However the Guidance (and future policy) will allow expectations to ensure that identified safer routes to school will remain adequately lit. More generally, reducing light pollution that poses a statutory nuisance and affects sleep patterns will be a positive impact.

Children's rights and wellbeing screening assessment

What impact do you think there will be to children's rights and wellbeing? Positive impact

Is a Full Impact Assessment required? No

Data protection

Will your proposal involve processing personal data? No

Data protection screening assessment

What change will there be to the way personal data is processed? No personal data will be processed

Is a Full Impact Assessment required? No

Island and mainland rural communities

Does your proposal impact island and mainland rural communities? Yes

Could people in island and mainland rural communities be affected differently? Yes

How could the impact differ? Island and mainland rural communities are likely to gain further benefits from this Guidance (and future policy). Within Highland, island and mainland rural communities have and enjoy darker skies than urban areas. Highland's only current Dark Sky Area (the Isle of Rum) is a case in point. Other islands and remote rural areas are best placed to apply for Dark Sky Area status and an active planning policy of reducing light pollution in these areas would be the most appropriate way for the Council to support this. Dark night skies can be a tourism asset and help support the local rural economy.

Have any negative impacts been identified? No

Island and mainland rural communities screening assessment

What impact do you think there will be to island and mainland rural communities? Minor Differences

Is a Full Impact Assessment required? No

Climate change

Does the proposal involve activities that could impact on greenhouse gas emissions (CO₂e)? Yes

Does the proposal have the potential to affect the environment, wildlife or biodiversity? Yes

Does the proposal have the potential to influence resilience to extreme weather or changing climate? Yes

Provide information regarding your selection above: All environmental impacts are positive. The proposal seeks to reduce energy consumption through reducing the amount of unnecessary and excessive levels of lighting which will reduce greenhouse gas emissions and will positively impact the environment. The environment, wildlife and biodiversity will be positively impacted as light pollution disrupt the circadian body clock of wildlife. This creates a barrier to migration, movement and ecosystem integrity. For example, if glare or light trespass is present then nocturnal animals can be negatively impacted through interfering with their nocturnal tendencies which for many amphibians impacts their reproduction, reducing populations.

Climate change screening assessment

Have you identified potential impact for any of the areas above or marked any as not known? Yes

Is a Full Impact Assessment required? No

Reducing Light Pollution: Draft Good Practice Guidance

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1 PURPOSE

1.1 The Guidance is intended to reduce existing and potential future light pollution across Highland via establishing and encouraging good practice, a supportive policy framework and the application of planning control to developments that are of a scale and/or location most likely to have harmful light pollution effects. Once implemented, this suite of measures should assist any Highland community wishing to pursue a Dark Sky area bid. Its intended audience is any individual, business or other organisation who/which has or intends to provide exterior artificial lighting within Highland. The Guidance is not intended to apply to temporary (up to 28 days in any calendar year) lighting such as at Christmas or at outdoor events.

1.2 In Scotland, the statutory framework for the topic is provided by the Environmental Protection Act 1990 and Public Health etc (Scotland) Act 2008, which established artificial light pollution as a statutory public nuisance if excessive light unreasonably and substantially interferes with the use or enjoyment of a home or other premises, and/or injures health or be likely to injure health. Military, transport and other essential infrastructure facilities are exempted from this requirement. Outdoor sports facility lighting is not exempted. Court decisions on this issue have taken account of the necessity for lighting and whether all reasonable steps have been taken to mitigate the adverse effects of such lighting. Currently, there is no legal justification for controlling light pollution that does not constitute a statutory public nuisance. This Guidance has been prepared taking account of this legal framework, what is within the control of the Council, and what can be achieved by establishing and encouraging good practice.

2 STATUS

2.1 This is the consultative draft version of the Guidance. It is issued for a period of 6 weeks with online comments invited. All comments received will be considered by the Highland Council and the relevant committee will approve a finalised version, which will be placed on the Council's website. Following its approval it will become a material consideration for development management purposes.

2.2 The approved Guidance will provide the supporting detail of, foundation for, and will be cross-referenced within, a Reducing Light Pollution policy in the forthcoming Highland Local Development Plan (HLDP), which will be published in 2027. Once this HLDP is adopted then the Guidance will be cross-referenced in this part of the statutory approved development plan and gain enhanced decision-making status from such.

3 BENEFITS OF REDUCING LIGHT POLLUTION

3.1 Currently, not all exterior artificial lighting is necessary, wasting energy, emissions and money. Many lights are brightening areas that don't need highlighted, on at times of day when not required, and illuminate excessively relative to their intended purpose.

3.2 Many local residents and visitors derive enjoyment from looking up at or more formally observing the night sky. It represents a visual asset of tourism, educational and scientific value that is worthy of protection from unnecessary light pollution which can reduce and obscure the quality of that asset.

3.3 Light pollution can have a negative impact on certain species particularly nocturnal animals and amphibians affecting sleep patterns, feeding, reproduction and migration.

3.4 Similarly, human sleep can be disrupted by light pollution close to residential properties thereby negatively impact health through increasing tiredness, fatigue and stress.

3.5 This Guidance recognises that exterior artificial lighting is appropriate in certain circumstances to reduce crime, allow sporting and business activity to continue during winter darkness hours and protect public safety which is why the geographic extent of application of the policy will be limited as described in sections 5 and 6 below.

4 DEFINITIONS

4.1 Policies and guidance are more easily understood, applied and enforced if they are written in clear and unambiguous language. The topic of light pollution requires the use of certain jargon which can be defined as follows:

- *Light pollution* – artificial outdoor/exterior lighting that exceeds its required purpose and is deemed obtrusive because of its of splay, illuminance, glare, hours of operation, and/or results in other harmful effects.
- *Sky glow* – the brightening of the night sky from artificial and natural sources.
- *Illuminance* - the amount of light falling on a surface and is measured in lumens per square metre.

- *Luminance* - the amount of light the human eye sees radiating or reflecting from an object measured in candelas per square metre.
- *Glare* - uncomfortable brightness of a light source when viewed against a darker background.
- *Luminaires* - fittings into which lamps/bulbs are placed to protect against weather and physical damage. They may also incorporate optical devices to control and direct the light to reduce uncontrolled light escape. They are generally either fixed like a lamp post) or variable angle (like a security light).
- *Spillage* – light that misses its intended target and function. Also sometimes called light trespass.

5 FUTURE POLICY

5.1 As stated above, it is intended that the forthcoming Proposed Highland Local Development Plan (HLDP), which will be published in 2027, will contain a Reducing Light Pollution policy. This policy will cross-reference this Guidance and therefore give it greater decision-making legitimacy by, on adoption of the HLDP, affording it a “hook” in the statutory approved development plan.

5.2 An Integrated Impact Assessment screening has been carried out in respect of the Guidance which determined that only neutral or positive effects were likely to occur from its implementation. However, all policies in the new HLDP will need to be subject to a Strategic Environmental Assessment which will provide a fuller opportunity to consider environmental effects and if necessary, mitigation.

5.3 Similarly, the future HLDP will be subject to a statutory representations phase and an “Examination” of any unresolved objections by a Scottish Government appointed Reporter. This independent hearing and judgment of objectors’ concerns with any future HLDP policy will also offer an opportunity, if required, formally to consider any concerns about the detail of this Guidance.

6 DEVELOPER REQUIREMENTS

6.1 Within the current Isle of Rum and any future designated Dark Sky area within Highland, all applicants for planning permission will be required, via application of a planning condition, to submit a Lighting Assessment. Additionally, outwith any designated Highland Dark Sky area, a Lighting Assessment will be required for any national or major scale planning application which, in the opinion of the Council, is likely to increase light pollution within any designated Highland Dark Sky area. The Lighting Assessment should be proportionate to the scale of the proposal. For example, for householder applications, there may be no exterior lighting proposed or it may be of very small scale. In these cases, a short, written statement from the applicant will suffice.

The Lighting Assessment must include:

- A **justification** of the necessity of the lighting proposed; e.g., personal or business security, health and safety to allow safe operational use of the site/property in hours of darkness, or to enhance the appearance of a historic building or other structure.
- A **lighting plan** specifying all exterior lighting types (intended lamps/bulbs and their illuminance level, beam width, colour of light, luminaires, whether a timer/dimmer control is fitted, and the intended hours of operation) and their locations (intended mounting height, orientation and tilt angle relative to horizontal).
- A **sensitive receptor plan** specifying the location of any nearby residential properties, public spaces and viewpoints, and habitats and species likely to be adversely affected by light from the proposed development.
- A written description of any **mitigation** within the wider application proposal that will reduce light pollution such as existing or proposed tree planting, bunding or other site structures such as fences that will reduce light spillage and glare.

6.2 The above Lighting Assessment requirement will be applied and if necessary, enforced via a planning condition which will be attached to any relevant permission. That condition will address or may prescribe, depending on the specifics of the development and/or location:

- operational hours of the lighting;
- illuminance levels;
- mounting/column heights;
- types of bulbs, lamps and luminaires;
- tilt/beam angle of lighting relative to the horizontal;
- no interference or distraction to transport movements (aviation or road traffic);
- a maximum acceptable quantitative increase in luminance experienced by nearby dwellings;
- provision or retention of screening vegetation, bunding, fencing or other structures to contain light spillage;
- erection of demonstration luminaires and a review of their impacts after installation.

6.3 An example planning condition is set out below.

Prior to the commencement of the development, the applicant shall submit for the written approval of the planning authority a Lighting Assessment (as described in the Council's approved Guidance). This should demonstrate how the lighting proposed is the minimum necessary for the development to operate safely, productively and securely. The Assessment will also demonstrate how the lighting proposed and any associated mitigation will eliminate or reduce any light pollution effects.

Reason for condition: *To ensure the correct implementation of lighting, to prevent or reduce light pollution and to reduce energy use and its associated emissions.*

6.4 The Highland Council already applies a model planning condition in respect of aviation lighting on tall mast structures including wind turbine generators. This condition is aimed at aviation safety not light pollution. The UK legal and policy framework for onshore wind turbine generator lighting comprises the Air Navigation Order 2016 ('ANO'), Article 222 and Civil Aviation Authority publication CAP 764: "Policy and Guidelines on Wind Turbines and Policy Statement DAP124: Lighting of Onshore Wind Turbine Generators in the United Kingdom with a maximum blade tip height at or in excess of 150m Above Ground Level. These prescribe 5 red lights for each turbine structure. These lights are to be fitted with control devices to allow them to be turned off or dimmed during daylight hours with good meteorological visibility. Recommendations are made for illuminance levels but not for light splay and therefore the good practice element of this Guidance may encourage lighting manufacturers and developers to adopt better practice on this topic.

6.5 The good practice element of the Guidance is intended for universal application within Highland whether or not a particular lighting proposal requires planning permission.

6.6 The Council has considered formulating policy and guidance on light pollution that has a multi-level spatial or zoning dimension. For example, other public authorities have identified buffer zones around Dark Sky areas where an intermediate level of control applies. These zone boundaries are easier to identify, justify and defend where there is a clear divide between urban and rural areas. Within Highland, there is a more nuanced transition from urban to rural because of its history of dispersed rural settlement in particular within crofting areas which would challenge the identification and defensibility of definitive dividing lines between areas that should be subject to a control policy and those which should not. Instead, the Council intends to apply the control policy within the current and any future designated Highland Dark Sky areas and outwith those areas to any major or national scale application that may, in the Council's opinion, adversely impact on any designated Dark Sky area.

6.7 However, this is a consultative draft document and therefore views are invited on potential alternative approaches. Other planning authorities have used a simple fixed distance buffer from a designated Dark Sky area boundary to apply a lower degree of policy protection. This offers the benefit of simplicity but is arbitrary and not evidence based and could therefore be subject to challenge.

7 GENERAL GOOD PRACTICE GUIDANCE

7.1 Most lighting proposals are outwith the control of the planning system and therefore this Guidance is aimed at encouraging anyone choosing and implementing exterior lighting in Highland first to consider its necessity and if required its number, type, siting, design and operation.

7.2 The choice of lamp, bulb and luminaire is critical to minimising light pollution. Those wishing to choose and implement a lighting scheme may be more interested in cost, decoration, light colour, energy efficiency, weight and durability rather than light pollution. Pages 111 to 113 of Appendix 2 of the [Guidance to accompany the Statutory Nuisance Provisions of the Public Health etc \(Scotland\) Act 2008](#) give further details on the pros and cons of the choices available. For example, excessive illuminance lighting can be counter-productive for security purposes by creating glare and dark shadows that obscures CCTV footage. Infrared lighting and cameras may be far more effective security solutions and ones that don't cause visible light pollution. The Institution of Lighting Professionals has also produced a comprehensive [Guidance Note on The Reduction of Obtrusive Light](#).

7.3 The Council encourages all those who have or intend to provide exterior artificial lighting within Highland to consider the issue of light pollution in making the choice of lamp, bulb and luminaire. In particular, the Council wishes to encourage lighting with: a sensor or other control mechanism to minimise its duration; a lamp/bulb that maximises energy efficiency but minimises illuminance only to that necessary; and, a luminaire that directs light downwards and minimises spillage and glare.

7.4 The choice of location and direction of lighting affects light pollution. Even if light is directed downwards it can be reflected upwards if projected on to a lightly coloured or wet surface. Historic buildings and other structures are often lit during hours of darkness which can enhance their appearance and visual accessibility to the general public but from a light pollution point of view could better be illuminated from the top of the structure by downlighters of darker surfaces rather than ground mounted uplighters. Similarly, maintenance of lighting is relevant. Poorly maintained lighting that flickers can cause light nuisance to adjoining residential properties.

7.5 Table 1 below offers advice to assist in purchasing lighting that will have sufficient but not excessive illuminance for typical tasks and operations. No specific quantitative standards are recommended because this will vary by development and location but general principles such as the hours of operation (a curfew between 10pm and 8am) and no direct light splay above the horizontal are suggested.

Table 1: Specific Advice on Lighting for Typical Tasks and Operations

Task / Operation	Illuminance Level & Lighting Type	Other Advice
Domestic property lighting	500 lumens are generally sufficient brightness to navigate within property boundaries; 1000 lumens are generally sufficient brightness for parking and getting keys into the door; 1500+ lumens are unrequired for domestic use.	The lumens, watts and colour temperature can be found on the lighting box. It is better to use multiple lights that are lower lumens than one of extreme brightness.

	Lighting above 500 lumens should have a light shield.	
Security lighting	• 2000 lumen tungsten halogen lamp utilising infra-red detectors; • For domestic security lighting, low-level lighting e.g. 600 lumen fluorescent; • Bulkhead or porch lights are a better alternative to domestic security lights because they have lower light pollution and energy consumption.	Other security measures like CCTV that uses infrared lighting and cameras meaning visible lighting is not required should be considered first. Any visible lighting system should be turned off when not in use. Each property's lighting requirements should be looked at holistically to reduce the likelihood of glare, light intrusion or dark spots. Any sensor-controlled lighting should be positioned appropriately to ensure it is not activated by the movements of people or wildlife outwith the area being secured.
Sport facility floodlights	• Generally, horizontal illuminance at ground level should be between 100-500 lux; • Vertical illuminance is dependent on the sport as it should be taller than where the ball is expected to reach; • The midpoint of the light's main beam, when measured from a downwards vertical position, should not exceed 70°; • Each lamp should generally not exceed 1kw; • Internal louvres should be fitted to help prevent light spilling upwards or horizontally and ideally double asymmetric beams, to ensure the lighting is being pointed downwards and then reflected across the sports area.	Hours of operation: floodlighting should not be used between 22:00-08:00, to reduce disturbance to neighbouring properties. To reduce glare and spillage beyond the area intended to be lit all luminaires should incorporate lighting shields. Generally, lighting should be mounted as high as possible to ensure the ability to direct light downwards.