



# Outdoor Lighting Guidelines

*While outdoor lighting is necessary within the developed areas of the Sunshine Coast, the obtrusive effects of lighting can extend well beyond the boundaries of the area in which the lighting is installed. Objectionable aspects of outdoor lighting, such as glare, trespass, energy waste, and sky glow, have implications for the public including peoples' safety, security, quality of life, in addition to potentially harmful effects on ecology and our environment. Adverse impacts of lighting can be controlled and mitigated through careful consideration and attention to its design, installation, and use.*

*The Sunshine Coast Regional District sets out the following guidelines for outdoor lighting, with the objective of promoting responsible lighting within the community: Outdoor Lighting that is installed with care and attention to safety, security, and in a manner that:*

- ✓ considers where light is needed for peoples' safety and security, including the precise area and time of use.*
- ✓ minimizes glare, obtrusive light, and artificial sky glow by limiting outdoor lighting that is misdirected, excessive, or unnecessary;*
- ✓ mitigates and prevents degradation of the natural nighttime environment and night sky;*
- ✓ protects the natural environment from the adverse impacts of night lighting; and*
- ✓ conserves energy and resources where possible.*

*The following definitions help elaborate the lighting guidelines:*

*"light fixture" means an outdoor artificial illuminating device, installed permanently or temporarily, used for general illumination, flood lighting, or advertisement.*

*"fully shielded" means a light fixture manufactured and installed so that the light emitted by the fixture, either directly or indirectly, is projected below the horizontal plane passing through the lowest point on the fixture from which the light is emitted.*

*"glare" means spill light that visually obscures or causes visual discomfort.*

*"lumen" means the unit of measure of light emitted by a lamp.*

*"luminaire" means the part of a light fixture consisting of a lamp or bulb made up of an outer glass envelope and metal base enclosing a filament or arc tube and electrodes.*

*"light trespass" means light or glare that projects beyond the boundaries of a property where it is not wanted or needed.*

*"unshielded" means a light fixture that is not fully shielded.*

*The following best practices and guidelines are consistent with 'Crime Prevention through Environmental Design' principles, and with recommendations made by industry sources and advocacy groups, including the International Dark Skies Association, Illuminating Engineering Society of North America and Royal Astronomical Society of Canada. More details and specifications can be obtained from their respective websites ([www.darksky.org](http://www.darksky.org); [www.iesna.org](http://www.iesna.org); [www.rasc.ca](http://www.rasc.ca))*



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Provide adequate light for the intended area and use, but never over-light. Published standards for specific lighting tasks and lists of recommended luminaries and light fixtures may be obtained through professional industry sources, as outlined above.



Light up only when it is needed. Switch off lights when not required for safety, security or visual enhancement. Where possible, light fixtures should be connected to a timer or motion sensor to reduce unnecessary light. Motion sensors should be set for close proximity to avoid needless tripping of security lights.

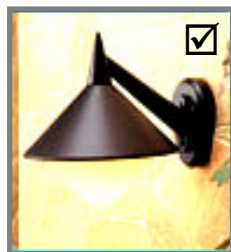
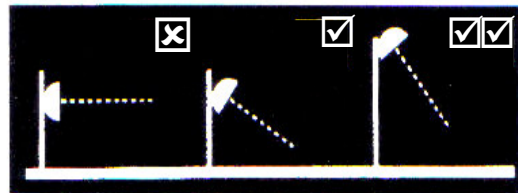
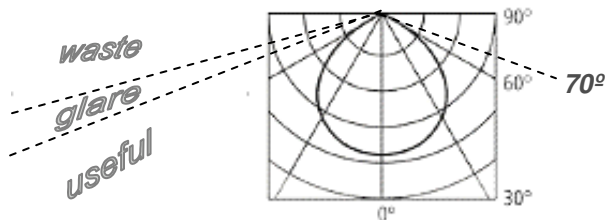


Choose and install light fixtures carefully to maximize their effectiveness on the intended property, and to minimize any adverse impact beyond the property.



Interior lights visible through an exterior window should be shielded where possible in order to avoid glare.

Light should be cast down to where it is needed. Keep glare to a minimum by ensuring that the main beam angle of all lights directed towards any potential observer is kept below 70°.



Use fully-shielded light fixtures. Light from unshielded fixtures is wasteful and can cause significant glare, which actually works against the productive light. Shielded fixtures eliminate upward light and minimize glare, allowing a smaller wattage bulb to be used.





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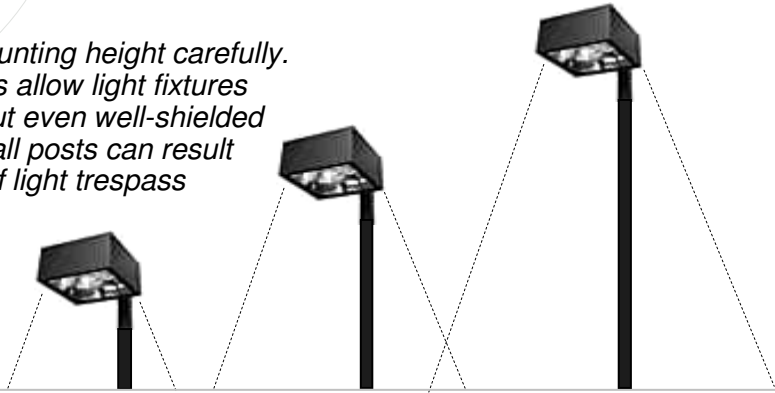


Use high quality luminaires designed to minimize glare by controlling the light output in order to keep light within the intended area.



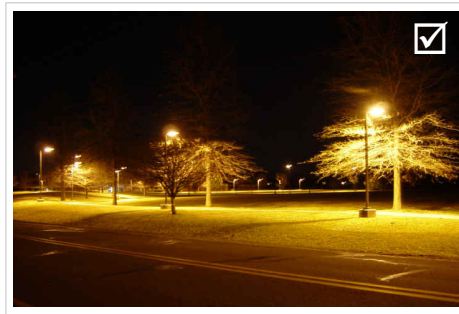
If aimed precisely, luminaires with more concentrated light beams keep light focused on the intended area or object being lit, while reducing spill light and glare.

Consider light fixture mounting height carefully. Lower main beam angles allow light fixtures to be mounted higher, but even well-shielded fixtures placed on very tall posts can result in a significant amount of light trespass onto neighbouring properties.

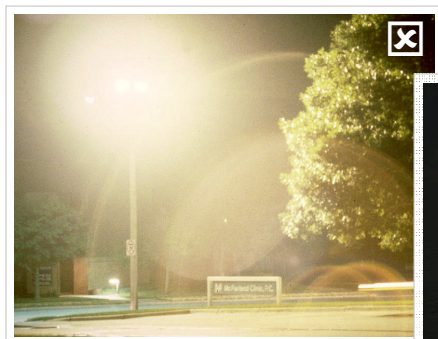


This can cause light trespass; light where it is not wanted or needed.

Light fixtures should be positioned to give adequate uniformity of the illuminated area.



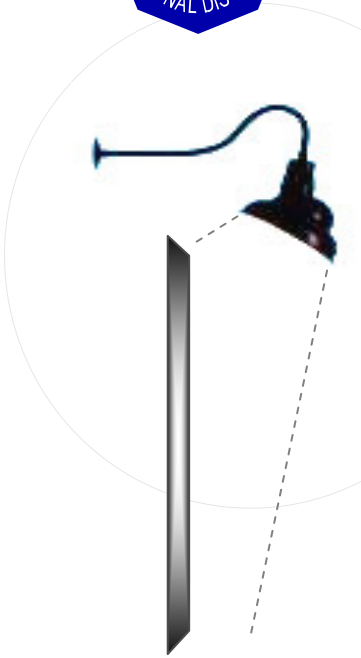
Light fixtures should always be focused on the intended subject, not outwards or elsewhere.



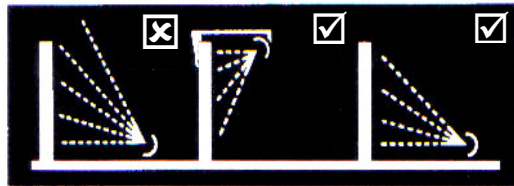
A few bright fixtures or ones that are too low to the ground can create "hot spots" that make less-lit areas in between seem dark.



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Illuminated signs should have their light fixtures positioned from above and in front, with light kept to the area of the sign.



If there are no alternatives to lighting from below then the use of shields, baffles and louvers will help reduce spill light and glare.

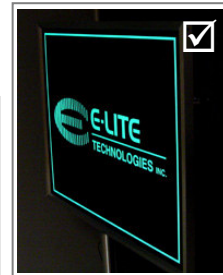


Internally illuminated and fully back-lit signs should be avoided.



Where permitted, back-lit signs should have their backgrounds completely opaqued, such that only the letters or symbols comprising the sign emit light.

Illuminated channel letter signs produce minimal glare when the size of letters is limited.



Efficient and effective use of light fixtures can offer significant energy and cost savings. New, improved light sources are now available, which produce considerably more light per unit of energy. Newer fixtures also provide better light control, directing light where it is needed rather than wasting significant amounts of light and energy. In general, incandescent bulbs should be avoided, or replaced with higher energy efficiency lamps.

