

Recommended Light Fixtures

Go for fixtures with a light directed towards the surface that needs to be illuminated. Remember that light emitted upward does not help; and that light emitted toward the horizon contributes to glare. Fixtures that effectively use light provide energy savings and reduce skyglow.

With the massive arrival of LED on the lighting market, new challenges are emerging linked to light pollution control. Indeed, a major part of new fixtures are equipped with LED, emitting a very white light and consequently, a large proportion of blue light. Not only does blue light multiply sky glow due to larger diffusion than other colors, but it has also been shown that nocturnal blue light may have different negative impacts on health due to the biological clock disturbance it creates.

The use of dark sky friendly fixtures with a reduced amount of blue light will also protect the night, human health and the environment.

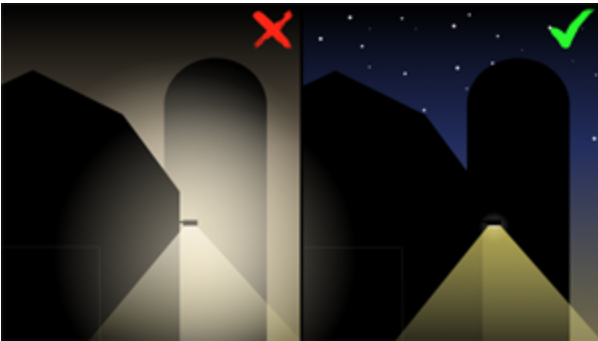
To be recommended, light fixtures need to be full cut-off/fully shielded/U0 and emit less than 10% of blue light (between 405 and 530nm).

To get the benefits of LED lights while limiting negative impacts on the dark sky and health, here are a range of fixtures that can be equipped with **PC-amber LED (1800K)**, **Amber LED**, **mix of warm-white + amber LED** and/or **optical filters** in order to limit the amount of blue light emitted.

To help in the development of night friendly luminaires, we encourage you to talk about those with your electrician/seller/distributor.



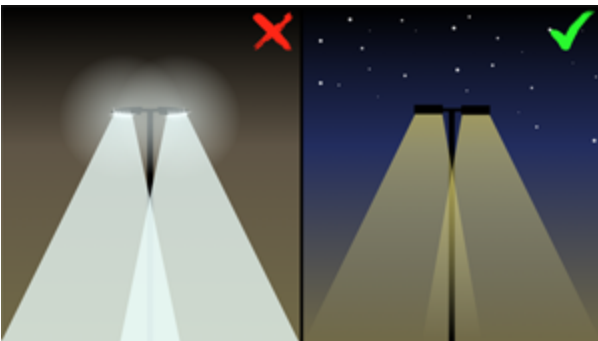
Choose light fixtures producing a uniform illumination with an intensity that is not excessive. This allows the eye to adapt to the ambient light while providing the required visibility and security. Reducing the intensity greatly reduces light pollution caused by the reflection on the ground which is even more important in winter.



The timing and duration lighting use is another thing to consider. Installing a timer, a motion detector, or the simple act of turning off the lights when going to bed, the idea is to use lighting when needed. There are also smart devices for LED road lighting that control the intensity depending on the time.



Try to use amber/yellow light sources instead of white. The blue part of the white spectrum is the worst for the sky glow and the human health because. Moreover, an amber light attracts fewer insect, resulting in an ecological benefit and less inconvenience.



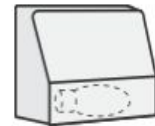
Chose Amber or light fixtures rated 2700 Kelvin for better night vision, less impact on the environment, human Health, and the night sky.

BAD

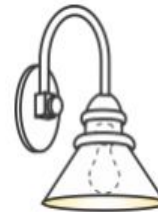
GOOD



Tip : Make sure the fixture is aligned horizontally and choose the intensity of the lamp wisely.



Tip : A motion detector is ideal to use the light only when needed.



Tip : Choose a light fixture where the lamp is hidden to reduce glare.



Cool-white
> 2700 K



Yellow
« bug free »



Warm-white
< 2700 K

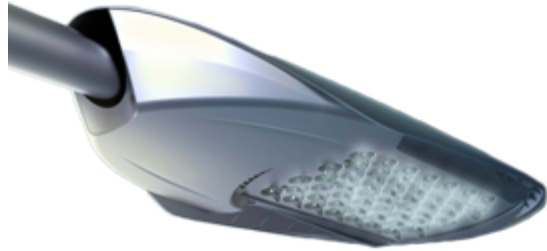


Amber

Tip : Yellow light bulbs are an efficient and cheap way to reduce the negative impacts of light at night.

PHILIPS

PC-Amber LED 1800K





PC-Amber LED 1800K





PC-Amber LED 1800K





2200K LED (60%) + Amber LED(40%)



Multiple models available with low blue light PC-amber LED 1800K on custom order.





Full cutoff fixtures and AMBER and 2700 K LED available:

http://www.acuitybrandslighting.com/library/HLP/DOCUMENTS/OTHERDOCUMENTS/HL_2922_POST%20TOP%20FCO%20LED%20BROCHURE.PDF

and

http://www.acuitybrandslighting.com/library/HLP/DOCUMENTS/OTHERDOCUMENTS/HL_1685_GLASWERKS%20LED%20FLAT%20GLASS%20BROCHURE.PDF