

GLARE

Glare is caused by the contrast between a bright and a dark area or object.

For example, if 1 luminaire is installed in a room, the occupants may consider that glare is an issue. However, if 6 luminaires are installed, they may not consider glare to be an issue. This is because the darker surrounds have been brightened and the contrast has been reduced.

Glare can be minimised by:

1. **Reducing the contrast** – eg. painting the background walls white.
2. **Adding extra luminaires** - to brighten up darker areas which will minimize the contrast between darker and brighter areas.
3. **Reducing the Lamp wattage** - Extra Luminaires may be needed to compensate for loss of light levels.
4. **Positioning of Luminaires** - If the Luminaires are spread evenly over the area to be illuminated.
5. **Aiming** - If the Luminaires are aimed away from the normal viewing angle of the occupants, this will reduce the contrast.
6. **Shielding of Luminaires** - Adding Shields/Baffles or allowing natural objects (hedges, flowers etc) to stand between the luminaire and the Occupants.
7. **Creating Distance** - If the luminaires are moved away (eg. used on higher poles).
8. **Changing the Colour of the Light Source** – eg. Generally HPS is regarded as causing less glare (but is also less effective) than white light.
9. **Using a Larger Luminaire** – eg. Using a 400w Lamp in a 1000w reflector.

LIGHT SPILL

Light Spill is when light falls outside the object to be illuminated.

1. With most external lighting schemes, typically carparks or sports pitches, there can be some spill of light. For internal lighting, the spill is usually redirected back into the target area by reflectances from the Wall, roof, etc.
2. The primary control of light spill is at the design stage. Light spill can be minimized by the use of appropriate luminaires and their location, height and aiming. The spill can be predicted in advance. Luminaires with precise optics can minimize light spill.
3. Adding shields and baffles or natural objects (hedges, walls etc) can further aid the process.
4. To avoid light spill, it may be required to use asymmetric luminaires near the 'sensitive' perimeter to prevent any back spill.