How-to guides

Ely with full cut-off obtrusive light shield
Old Weybridge, Surrey

Typical cut-off achieved with Universal OLS

Typical cut-off achieved with Medium OLS

Obtrusive light shields

While our Diamond Optic® is designed to minimise spill light by using the variable reflector system to tailor the light distribution to the areas being lit, there are some applications, where luminaires are placed in close proximity to windows of residential property for example, where shields are desirable to minimise light nusance.

- The unique design of Diamond Optic® allows these shields to be fitted within the bowl of the luminaire, rendering them as discreet as possible.
- A range of shields is available, from our Universal OLS which provides approximately 30° of cut-off, to our Medium OLS giving 45° of cut-off* and on to our Full OLS for full backlight cut-off*.
- The Universal and Medium obtrusive light shields are fitted to the optic tray using magnetic strips allowing them to be fitted at the factory or on site and they can be easily moved to fine-tune the lighting control. Full shields are mechanically fixed within the luminaire.
- Shields can be fitted to control light both behind and in front of the luminaire if required.
- Special shields can be made to suit specific requirements.

* Availability depends on the depth of glazing in the fitting.

Strand B fitted with a Full Cut-off OLS

Windsor Street fitted with a Universal OLS

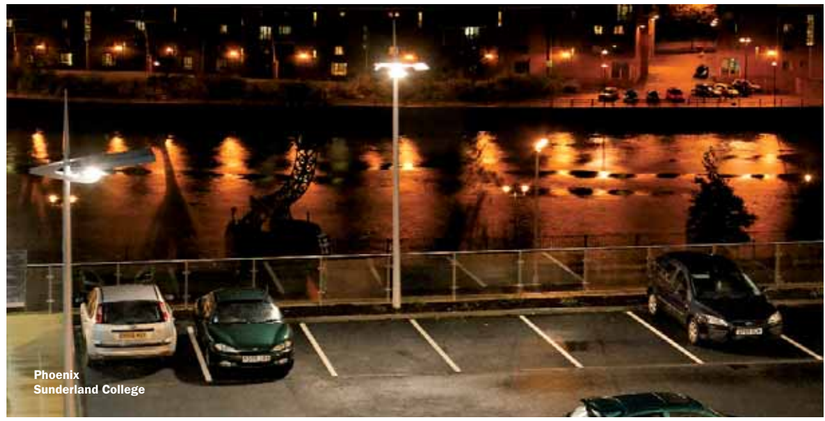
Optima Stratum 450 fitted with a Medium OLS

Lighting car parks

Car parks are primarily illuminated for safety and security but at the same time, it is important their lighting does not visually degrade the surrounding night-time environment or waste energy.

- High wattage, wide-beam floodlights mounted on columns or adjacent buildings could cause glare to drivers and make potential criminals less easy to see by pedestrians.
- Luminaires that create ‘light spill’ onto adjacent properties should be avoided, refer to Clean Neighbourhoods and Environmental Act 2005.
- If a building has a dedicated architectural lighting scheme, then it is important that the car park lighting does not detract from the effect.
- The best solution to avoid potential problems is the use of high quality luminaires mounted on columns offering good, uniform lighting across the car park.
- Consider the location of the columns – they should not reduce the number of parking bays and should provide visual legibility to the project both night and day.
- Always use the minimum number of lighting points to achieve the required illuminance.
- The versatile DW Windsor Diamond Optic®, with its adjustable beam pattern (see pages 16-19) is a useful tool for achieving the optimum lighting coverage with the minimum number of fittings.
- People often recognise their car by its colour so make sure the light sources you specify offer at least moderate colour rendering. Low pressure sodium makes colour recognition very difficult.
- Columns are very vulnerable to vehicle damage, so ensure that they are located where they can’t be hit – consider the use of bollards or rail systems to protect columns.
- Parking meters and pay and display machines should be positioned in a well lit area, with clear visability.

Outdoor Car Park recommended lighting levels		
Light traffic car parks (i.e. shops, apartments, cycle parks):	Eav ≥ 5 lux	Uo ≥ 25%
Medium traffic (i.e. department stores, offices, sports facilities):	Eav ≥ 10 lux	Uo ≥ 25%
Heavy traffic (i.e. schools, churches, major sports facilities)	Eav ≥ 20 lux	Uo ≥ 25%



Phoenix
Sunderland College