

## What illuminance levels are achievable with the RAYLUX White-Light range for various external applications?

In many cases, the information can be found in BSEN12464 Lighting of Work Places Part 2 - Outdoor work places 2007.

This standard focuses on the recommendations for outdoor work places that are used at night to ensure that adequate and appropriate lighting is provided for visual comfort and performance and so that obtrusive light pollution is avoided.

In addition recommendations are given for good lighting practice with emphasis on guidance rather than specific solutions, so the designer has greater choice to explore new techniques and use innovative equipment such as RAYLUX LED.

The examples below are taken from BSEN standards/or have office guidance and include actual projects delivered with Raytec LED technology.

| Area example   | Levels                      |
|--|-----------------------------|
| Walkways (exclusively for pedestrians)                 | 5 lux (Em)                  |
| Traffic areas (for slowly moving vehicles)             | 10 lux (Em)                 |
| Car Park (light traffic)                               | 5 lux (Em)                  |
| Medium/Heavy Traffic                                   | 10-20 lux (Em)              |
| Industrial Storage (short term handling)               | 20 lux (Em)                 |
| Industrial Storage (continuous handling)               | 50 lux (Em)                 |
| Airport Hangar Apron                                   | 20 lux (Em)                 |
| Terminal Apron   | 30 lux (Em)                 |
| Prisons (Perimeter - level dependant – contact Raytec) | 3-10 lux (Em)               |
| Power Plants (pedestrian movement within safe zones)   | 5 lux (Em)                  |
| Perimeter (see also Raytec Surveillance Q&A document)  | 5-10 lux (Em or Ev if CCTV) |
| CCTV (see also Raytec Surveillance Q&A document)       | 3-7 lux (Ev)                |

For specific reference sites or typical example please contact Raytec.

Em = Average Maintained

Ev = Average maintained Vertical (see vertical illuminance)

Note: LEDs are suitable for low energy applications, high power applications requiring high illuminance levels (often >100 lux) are often uneconomical (unless maintenance/or access is a problem). If failure is unacceptable, LED's are undeniably the best solution.