

9.3 Lighting recommendations

9.3.1 Illuminances

Offices contain rooms with different functions. Tables 9.3 to 9.5 give the recommended maintained illuminances for the most common spaces in an office building. The recommended maintained illuminance is the minimum average illuminance that should be provided in the given space throughout the life of the installation. Unless specified otherwise, the recommended maintained illuminance is measured on a horizontal working plane at desk height. Table 9.3 gives the recommended maintained illuminances for the primary office spaces. A primary office space is a space where most of the work is done and where most of the staff spend most of their time.

Table 9.3 Recommended maintained illuminances on a horizontal working plane in primary office spaces.

Space	Recommended maintained illuminance
Open plan office – mainly screen based work	300 lx
Open plan office – mainly paper based work	500 lx
Deep plan core area (more than 6m from window)	500 lx
Cellular office – mainly screen based work	300 lx
Cellular office – mainly paper based work	500 lx
Graphics work stations	300 lx
Dealing rooms	300–500 lx
Executive offices	300–500 lx

These maintained illuminances are adequate for task performance but are insufficient to ensure comfortable visual conditions, particularly for deep offices with windows and large open plan offices. For deep offices with windows, there is a risk that the parts of the office away from the windows will look dull compared with the parts adjacent to the windows. This perception can be overcome by taking care to light the walls of the office as well as the horizontal plane. For large open plan offices, lighting the walls is still useful but will not be effective in the centre of the office where there are no walls. In such areas, an additional illuminance criterion should be applied. This is the ratio of cylindrical illuminance to horizontal illuminance at a height of 1.2 m above the floor. Table 9.4 gives the minimum values of this ratio recommended for different floor reflectances.

Table 9.4 The minimum cylindrical/horizontal illuminance ratios recommended for different floor reflectances

Floor reflectance	Minimum cylindrical/horizontal illuminance ratio
0.1	0.48
0.2	0.37
0.3	0.26