

ours, light source colour, colour rendering group, limiting glare index, veiling reflections?

- Qualitative requirements: Have the aspects of the design that cannot be quantified been carefully considered?

General planning

- Daylight and electric lighting: What is the relationship between these forms of lighting? Is it possible or desirable to provide a control system to match the electric lighting to the daylight available?
- Protection from solar glare and heat gain: Are the windows designed to limit the effects of solar glare and heat gain on the occupants of the building? Do the window walls have suitable reflectances?
- Choice of electric lighting system: Is general, localised or local lighting for task or display most appropriate for the situation? Does obstruction make some form of local lighting necessary?
- Choice of lamp and luminaire: Does the light source have the required lumen output, luminous efficacy, colour properties, lumen maintenance, life, run-up and re-strike properties? Is the proposed lamp and luminaire package suitable for the application? Is air handling heat recovery appropriate? Will the luminaire be safe in the environmental conditions? Will it withstand the environmental conditions? Does it have suitable maintenance characteristics and mounting facilities? Does it conform to *BS 4533/BS EN 60598-1* or other appropriate standard? Does the luminaire have an appropriate appearance, and will it enable the desired effect to be created? Are reliable photometric data available?
- Maintenance: Has a maintenance schedule been agreed? Has a realistic maintenance factor been estimated based on the agreed schedule or, if not, have the assumptions used to derive the maintenance factor been clearly recorded? Is the equipment resistant to dirt deposition? Can the equipment be easily maintained, is the equipment easily accessible, and will replacement parts be readily available?
- Control systems: Are control systems for matching the operation of the lighting to the availability of daylight and the pattern of occupancy appropriate? Is a dimming facility desirable? Have manual switches or local override facilities been provided, are they easily accessible, and is their relationship to the lighting installation understandable?
- Interactions: How will the lighting installation influence other building services? Is it worth recovering the heat produced by the lamps? If so, have the airflow rates been checked in relation to the operating efficacy of the lamps?

Detailed planning

- Layout: Is the layout of the installation consistent with the objectives and the physical constraints? Has allowance been made for the effects of obstruction by building structure, other services, machinery and furniture? Has the possibility of undesirable high luminance reflections from specular surfaces