

Softlighter Concept

MOTIVATION

In the office

The importance of the working environment in sustaining the ever increasing demands on staff efficiency is well understood. Lighting will largely determine the nature of this environment, and encompasses the needs of the visual task, as well as the requirements of any health and safety legislation that may apply. The universal use of highly directional louvred downlighters in meeting these objectives is often counter-productive to achieving the primary goal, that is, a desire for a balanced visual environment in which staff feel good and work well. The unique Softlighter approach means no such compromise need be made.

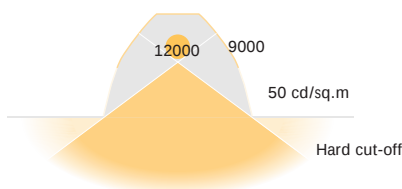
In retail environments

Energy and maintenance costs are affecting the way we light retail environments today. There is increasing awareness of the value of energy efficient ambient lighting, but to be effective, this needs to complement the use of display lighting rather than conflict with it. Many retail environments, such as Banks and Building Societies, have the added difficulty of meeting the needs of specific visual tasks for staff while still providing a stimulating environment for customers. The Softlighter system provides this flexibility.

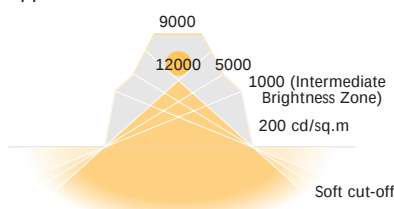
The Softlighter difference

Composite white/semi-specular louvre design controls the rate at which contrast is allowed to change within the luminaire. Softlighter is comfortable from any normal angle of view, while its soft edged spill light provides uniform vertical illumination to walls. For the retail environment the diffuse nature of Softlighter allows the effective use of display lighting and ensures good presentation of vertical displays.

An ordinary luminaire exhibits sudden and dramatic changes in the brightness of its surfaces depending on the angle at which it is viewed.



Softlighter's unique design incorporates graduated zones of brightness each one within a 5:1 ratio of its neighbour. The need for the eye to continuously adapt is reduced creating a comfortable appearance.



The Softlighter principle



The human eye has an enormous range of adaptation. Driving is a demanding visual task yet we accomplish this in both the brightest sunshine and the darkest night.

We become aware of visual stress however when we demand our sight to balance opposing levels of brightness within a short time scale. A simple analogy is that of non dipped car headlights at night, a form of disability glare most of us have experienced. Yet the same non dipped headlights seen during daylight create little or no visual impairment.

The glare we experience in this way is a function of the ratio of the brightness of the subject and its surroundings. For interiors using modern high efficient luminaires it is the most usual cause of discomfort.

The unique design of the Softlighter louvre controls the rate of change of brightness within its surface and its soft edged distribution enables the surrounding space to have only gradual changes in perceived brightness.

The example of the car headlights above sums up the principle behind Softlighter very simply. If there is more background brightness around the light source, then the source doesn't look as bright. By reflecting more light around the luminaire, Softlighter creates a more even, better distributed light. And because the light is less omnidirectional, fewer shadows are created.