



## **GUARDIAN CLARITY™ & LIGHTING IN RETAIL**

### **GLASS AND LIGHT**

In the retail segment, the storefront glazing and the lighting design play a key role in capturing the attention of passersby: a reflective glass showing more of the surroundings rather than the interiors as well as a low light contrast due to a poor lighting concept strongly reduce the attractiveness of exposed merchandise. The combination of the excellent anti-reflective power of Guardian Clarity™ together with an effective lighting design will provide an extraordinary experience to retail customers.

### **GUARDIAN CLARITY™ AND LIGHTING DESIGN**

Thanks to a light reflection value  $< 0.8\%$ , Guardian Clarity™ represents the ideal glazing solution to minimize the visual disturbing effect of daylight reflections, with a feeling that no obstacles exist between the passerby and the goods.

Lighting design often undergoes a complex study elaborated by designers and strongly related to boundary conditions; Guardian's aim is to provide basic recommendations on how to conceive a lighting project for retail segment in combination with Guardian Clarity™.



REGULAR GLASS



GUARDIAN CLARITY™



### Colour temperature of light

The colour temperature of a light is the measure of the colour appearance of a lighting source. Light colours are categorized in warm, neutral and cool (Temperatures in K):

- **Warm Lights (<3000K):**  
emphasize red and yellow colours, fading the blues and the greens;
- **Neutral Lights (3000-3700K):**  
respect the natural aspect of all colours;
- **Cool Lights (>3700K):**  
emphasize mainly blue colours, fading the reds and the greens.



### Storefront background

In the phase of storefront setting up, a slightly blueish residual reflection may be visible on the Guardian Clarity™ glazing: it is a visible phenomenon happening with an intense natural light directly coming onto the glass, associated with poor lighting inside the shop (dark indoor environment). This can be minimized by adopting **light rather than dark backgrounds** and respecting the basics of light contrasts leveraging the **Light Layering** concepts.



### Light layering\*

1. **Ambient lighting:**  
general lighting throughout the store. From 30-300 lux to 500-1000 lux, depending on store image. Luminaires are generally uniform with symmetric distribution.
2. **Perimetral lighting:**  
space lighting for specific areas (ex. walls). Conceived in a ratio of 3:1 with ambient lighting to enhance light contrast. Typical solutions are track or monopoint luminaires.
3. **Accent lighting:**  
lighting emphasizing the features of the merchandise. In a ratio of 5:1 with ambient lighting (up to 15:1 or even 30:1 in jewellery stores), the lighting focus is achieved by spots with intense and relatively narrow light beams. Excessive brightness must be avoided to limit direct or indirect glare.
4. **Decorative lighting:**  
lighting with a decorative purpose, enhancing the appeal/look of the space: mainly used in high-end department stores or designer boutiques. Quite common is the use of sconces, pendants, chandelier.

\*: IESNA Lighting Handbook – 9<sup>th</sup> Ed.