The lighting designer and new technologies: Lighting for enhancing business in shops & restaurants – The Do’s & Don’ts of retail lighting

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This paper will address issues of successful retail lighting schemes to make the audience familiar with the Do's & Don’ts. It will also look into the details of designing lighting particularly for window displays, external shop signage and outdoor terraces of restaurants. A holistic approach for retail lighting will be presented with case studies of ‘good’ and ‘bad’ lighting solutions, mostly from Europe, to underline the impacts of lighting on the retail business in the respective countries.

More often than not, natural light creates the visual image of buildings during the day. Then what is it that defines building envelopes at night? What makes them recognisable from a distance? The answer is (you’ve guessed it!) electric lighting. It is often the sole form giver to the building and the creator of visual appearances at night.

Night-time views are different from those by day. The application of lighting can help to define and control views into and out of the site and act as a device to draw people through and towards key features such as facades, window displays etc. It is important that the lower levels of the buildings, which are predominantly retail, are lit in a consistent way in order to ground the buildings and provide human scale. Architectural features such as columns should be positively illuminated to emphasise their form and create a sense of verticality. Soffits and overhangs have a tendency to make the structure look gloomy. Therefore special attention needs to be given to these areas to help to render them inviting.

From a retailer’s perspective, lighting can be an essential contributor to the overall success of the business; it has the potential to communicate different messages.

An attention-grabbing window that effectively displays products whilst remaining permeable. Bally’s Christmas display in London/UK. Lighting design: Light Bureau; Photo: Julian Abrams
messages in retail environments. It can:

- Attract – brightly illuminated shop fronts can be visible from a distance, eye-catching lit signs/facades invite window shoppers. The higher their illuminance level, the more they stand out against their surroundings and the greater their power of attraction. On the other hand does “brighter” always mean “better”?
- Create a brand identity – where a well-illuminated logo or name of a product after darkness can help with its legibility and sometimes even with way finding
- Influence moods – with carefully controlled lit environments, that invite customers to restaurants with open air terraces at night
- Act as a marketing tool – with temporary lighting solutions for empty shop fronts when during the first months after the final construction phase, all the shops and restaurants in the building might not be occupied. Dark, empty windows make for a lifeless and uninviting atmosphere. The general illuminance levels for pedestrian lighting also rely on spill light coming from shop windows. Therefore alternative lighting treatment can be suggested for all perimeter windows still awaiting tenants.

Nowadays, it is commonly known that good lighting can “bring” money to the store, and on the other hand often tenanted commercial and retail accommodation can have an undesirable overall impact on the visual appearance of the development after dark if not designed with care.

On a number of new developments the landlord therefore develops a strong set of guidelines or policies regarding artificial lighting to assist tenants (retailers and restaurant owners) when they consider the lit appearance of their businesses at all times, including when they are closed. They are asked to ensure that the lighting to the interior and exterior of their units is maintained to the highest standards and is pursuant to the property owner’s recommendations, which in turn will ensure that lighting which is designed by or on behalf of owners will make a positive contribution towards the overall development.

Another important aspect which can play a key role in the success or failure of retail, and can add value to the development in terms of saving money, are flexible lighting control and management systems. Lighting control guarantees the right lighting at the right place at the right time. Automated control of shop lighting guarantees a number of benefits such as: high flexibility, task-dependent lighting alteration, dynamic or static lighting and less power consumption and, as a consequence of that, lower costs. Regardless of whether these functions are accomplished manually, by time switches, or by computer, a lighting system can only be controlled if appropriate provision is made when it is installed. Lighting management encompasses all systems which go beyond mere “on/off” control – systems which include tools for executing overriding one-off commands and for regulating lighting by responding to variance from set point values. Building management systems offer the ultimate in flexible, smart control. Via a two-wire bus cable, they “network” all installations and services systems, such as lighting, sunscreen and window blind control, air conditioning, heating and security systems. As the “intelligence” is installed in the end appliances, a building bus network does not require a sophisticated centralised control centre.

Strangely enough, even on a bright day shop windows need lighting. Without it, disturbing reflections occur; passers-by looking into the windows then see

A warmly lit shop front makes for a lively street perimeter. Project: Prêt A Manger in New Oxford Street, London/UK. Lighting design: Light Bureau; Photo: Paul Traynor/Light Bureau

A good example of how accent lighting (focal glow) creates interest without needing high levels of lighting in the 1960’s. Project: Store window display at night, Filene’s, Washington Street, Women’s dress display Boston, USA, between 1954-1959. Lighting design: unknown; Photo/copyright: Nishan Bichajian, Courtesy of Kepes/Lynch Collection, Rotch Visual Collections, MIT
not the merchandise on display, but themselves or the buildings behind them. During night time, levels of illumination can be much lower and it is highly recommended to have two lighting scenes to save energy, reduce environmental impact and be sustainable. The above requirements are unquestionable nowadays, whereby light and poorly designed lighting can have obvious effects through excessive spill light (light pollution) and the subsequent production of CO2, which adds to greenhouse gases and supports global warming effects. Aspects such as minimizing over-lighting surfaces, spill light from illuminated façades, glare control, spill light and light trespass, the use of automatic lighting control systems, daylight sensors, low-energy lamps and long-life light sources, plus minimizing lamp replacement and sourcing equipment responsibly will also be addressed.

In particular, the paper will explore ideas and seek answers as to how the independent lighting designer can add value to the experience of the built and lighting environment in the retail sector. All issues that are crucial for a lighting designer to be familiar with.

Proposed lighting scenarios for retail lighting.

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<thead>
<tr>
<th>Time of Day</th>
<th>Scene 1</th>
<th>Scene 2</th>
<th>Scene 3</th>
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<tbody>
<tr>
<td>Early Morning</td>
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<td>OFF</td>
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<tr>
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<td>Night</td>
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<td>ON</td>
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<tr>
<td>Late Night</td>
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Elevation and section of a temporary solution in the form of an image panel covering the full size of the window, or grille backlit with concealed fluorescent battens/LED panels. The panel can, for instance, show images and logos of the future tenant or photo-realistic renderings of the new development.

Schematic detail of a temporary shop front.