IMPACT OF QUALITY OF LIGHT ON RETAIL SALES



of high quality lighting for some time, and are aware that quality lighting enhances the perception of value of both merchandise and the retail environments in which it is sold. Some of the important findings in this research include:

- High quality lighting, especially when it uses high CRI sources, renders colors more vividly, this is crucial for the surfaces of fabrics and furniture, as well as for food, produce, jewelry, clothing, and of course, people.
- Contrasts, i.e. the effect of light and dark areas, are decisive. These contrasts are enhanced by the careful use of directional display lighting. Customer behavior in retail areas is influenced significantly by perception and a sense of well-being. Light is an important design tool which impacts these parameters.
- High quality lighting makes customers more comfortable, and customers who are more comfortable in an environment tend to stay longer and shop more.
- High quality lighting can greatly enhance the desired traffic flow through a retail space, directing customers to intended point of sale areas. Because light conveys emotions, lends spaces atmosphere and makes it easier for people to find their way around.
- Quality lighting, especially high CRI, enhances the appearance of customers themselves, rendering skin tones and hair in a more flattering light-this is especially important in apparel and jewelry retailing as well as in hospitality, where the positive effects of socializing is enhanced when people look better.
- •Quality lighting creates a specific mood for a store that is an integral part of the brand of the retailer, and enhances not only products but the entire experience of the store.

Sophisticated retailers have known about the benefits Extensive quantitative data on the direct effects of high CRI LED lighting on retail sales is not yet available because these are very new products. However, the considerable research that is available on the positive effects of quality lighting in retail indicates that failure to adopt the most recent advances in lighting technology puts retailers at risk of missing the considerable ROI available from happier, more loyal customers, increased sales, and lower operating costs in the form of energy savings and lower replacement expenditures.

> On the following page is a collection of secondary research and articles in trade publications on the topic of the impact of lighting in retail environments. Quotes from retailers are excerpted from the various studies:

"In fact, over a 2-year period, traffic counts increased by one-third after the lighting program was implemented. Over the same period, data showed that merchants' sales increased 38 percent; profits increased 19 percent."

- National Lighting Bureau study, Colonial Park Plaza, PA

"Buying: Of the 4.6 % sample of all shoppers who stopped to browse at the end-cap display, more than 2x as many purchased when the display shelves were illuminated (33.3%) as did when they were not illuminated (14.3%). A relative increase of nearly 133%."

- Hera Lighting study, GNC store
- "People cannot look at lighting as an expense, but rather as a way to increase sales and profitability. You can have the most beautiful store and the best jewelry, but in the end you want to be able to present your jewelry in the best possible light."
- Mickey Minagorri, director of business development Artco Group, a Miami-based planning and design company

A study commissioned by lighting supplier Xicato conducted in a London House of Fraser store shoe display found there is a strong link between the quality of accent light sources, in terms of color rendering ability and in particular the rendering of deep reds, and the attention-grabbing potential of retail displays, according to the outcome of an on-site evaluation by end-users and lighting designers. The study was conducted by independent researcher, Colette Knight, and peer reviewed by University College London. http://www.xicato.com/downloads/House_of_Fraser_July_2011.doc.pdf

A Hera Lighting-commissioned study conducted by Merchant Mechanics at GNC health and nutrition stores found that:

- 4.6% of store customers browsed the illuminated end-cap compared with only 2.6% of customers who browsed the display when the illumination was off.
- Of the 4.6% of store customers who stopped at the end-cap to browse merchandise, 33.3% made a purchase when the lighting was on compared with 14.3% when the lighting was off.
- When the end-cap displays were lit, 21.6% of customers glanced into the storefront compared with 12.1 % when the lights were off.
- There was a greater tendency for shoppers to glance into the store when approaching from the store's side opposite the illuminated display than when approaching from the same side.
- When the display illumination was on, an average of 3.7% of passing mall pedestrians were attracted into the store. The figure fell to 2.1 % when the illumination was off.
- The average amount of time spent browsing by a shopper who stopped at the end-cap display increased from 8.4 seconds when the light was off to 17.8 seconds when the end-cap was illuminated. http://www.heralighting.com/fileadmin/media/pdfs2011/Merchant_20Mechanics-LIGHTNING_Up_Sales_Part_1.pdf

A lighting system change made to save energy and improve aesthetics at the Thalhimer Brothers Cloverleaf Mall branch store in Richmond, Virginia contributed to an annual sales increase of \$1 million. When the profit portion of the sales increase is considered along with the energy savings of some \$20,000 per year, the payback period for replacing a six-year-old system and installing 800 new luminaires and lamps was less than 12 months.

http://www.nlb.org/index.cfm?cdid=10418

Colonial Park Plaza, at the time a 500,000 square-foot, 72-store mall in Harrisburg, Pennsylvania installed a new lighting system that provided more light and efficiency giving what shoppers characterized as new "sparkle" to the center's promenade area, as well as depth and brilliance to surface colors. As a result, the mall's appearance brightened, and more people started shopping there. In fact, over a 2-year period, traffic counts increased by one-third after the lighting program was implemented. Over the same period, data showed that merchants' sales increased 38 percent; profits increased 19 percent. Given the center's new appearance and traffic flow, more retailers opened stores there, cutting the center's vacancy rate 32 percent and in turn increasing sales.

http://www.nlb.org/index.cfm?cdid=10336

Zumtobel's latest applied research is devoted to the topic "Attention, attractiveness and perception mediated by lighting in retail spaces". Zumtobel conducted a two-part study in cooperation with Prof. Jan Ejhed, head of the lighting laboratory at the Royal Institute of Technology (KTH) in Stockholm, and Dr. Roland Greule from the Hamburg University of Applied Sciences (HAW). The purpose of this investigation was to determine the factors that are decisive in retail lighting when it comes to selling more merchandise, increasing footfall and extending the amount of time customers spend in a shop.

http://lighting.com/ideal-retail-lighting-forstores/

One of the most important aspects of jewelry store design is display lighting. Yet jewelry store owners often treat lighting as a cost rather than a tool to boost sales, say interior designers and lighting manufacturers.

http://www.jckonline.com/article/285060-Displaying_Jewelry_in_the_Best_Light.php

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