

# LD+A

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## Ready, Set, **Retrofit**



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by Bonnie Littman

**The ability to adjust color temperatures and intensities can improve the shopping experience and help build customer loyalty**

Retailing is reliant on lighting, not merely for illuminating the goods being sold but for creating the ideal ambiance that stimulates shoppers to make purchases. With the latest advances in LED technology, the value and impact of lighting on the shopping experience are underscored more than ever before. In particular, the color tunability of LEDs in one single fixture is proving to be an effective key to unlocking new and ingenious opportunities for retailers—helping to keep consumers in store longer, personalizing the shopping experience, and adding visual pop and prominence to products. There’s a cost-saving upside, as well: the ability to seamlessly control and adjust color temperatures and intensities in retail environments has the potential not only to decrease utility and maintenance bills, but also to generate more revenue through the acquisition of loyal customers.

How can retailers benefit from these recent LED lighting innovations? Here are a few ideas:

- **Bring the Outdoors In.** Time is of the essence for most shoppers, but with color tunable lighting, they might just forget about clock-watching and spend more time in store, especially if the lighting can be calibrated to accurately and continuously mimic natural daylight. Daylight color temperatures shift from warm to cool to warm throughout a 24-hour cycle—with a dawn temperature/output of approximately 3,500K/1,700 lumens, a noon setting of 6,000K/2,200 lumens, a mid-afternoon 4,200K/1,900 lumens and a sunset 2,700K/1,500 lumens. Consumers are able to detect these nuanced day-

light changes, triggering an instinctive awareness of time elapsed in a store.

Tunable white light can cause them to overlook these minutes spent by simulating the daylight scenarios. For example, at high noon, retail staffers can dial the lighting to a warmer temperature and lower intensity imitative of early morning, or if dusk is approaching, a touch of a button can turn back time to a brighter afternoon scene, encouraging more browsing.

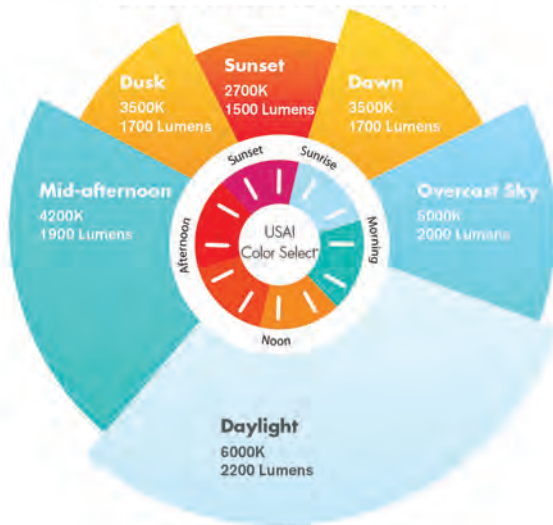
Daylight settings can also be recreated in store to simulate the environment in which consumers would use featured merchandise. If a brand is looking to promote new running sneakers, staffers can select a high intensity, cool blue light resembling an energizing gym session or morning run. Prospective buyers can then better envision themselves wearing these sneakers on an outdoor run.

Specific daylight treatments enhance the focal glow that directs people through a store, emphasizing key items within. A soft, even, warm light welcomes guests as they enter, while increasing intensity helps move them seamlessly toward the back, as shoppers are inclined to walk toward the brightest light. As retail fixtures and product priorities change, so can the color temperature and output of these lights, which can guide customers to different displays or merchandise. Color tunability additionally lets store staffers adjust these light scenes to fit a brand’s evolving needs and to better serve the customer.

“If you design the [lighting] installation in a smart way, people will follow



### LUMEN OUTPUT AND KELVIN TUNING GET PERSONAL



**USAI's system allows users to tune white light over the broadest possible color temperature range—from 2,200K to 6,000K, and control intensity from 100% down to 0.1%, mimicking a natural daylighting cycle in any environment at any time of day.**

tracks around a store and you can get them into the deep part of the shop by changing the brightness or the color temperature," says Prof. Jan Ejhed, head of the Lighting Laboratory at the Royal Institute of Technology in Sweden, who oversaw a study on the effect of retail lighting on consumer behavior.

- **One Fixture Does It All.** Dimmable fixtures that incorporate multiple color temperatures and intensities simplify design and maintenance expenditures by combining various lighting tasks into one luminaire, while adding flexibility to the retail design process.

Many lighting designers are already aware of the benefits of matching varying light treatments to different product categories. For example, orange carrots in a grocery appear more appetizing under a warm tone and wide beam spread at medi-

um intensity, while diamonds are displayed to optimum brilliance beneath a cool tone and narrow beam at high intensity, capturing their many facets. Now in a single fixture, retailers can highlight various types of products, displays and branding to fit the moods of the specific season, occasion and consumer. Designers and retail staff have the option to change up store interiors, merchandise and more, continually editing and recreating lighting effects without having to rip out and install new fixtures each time.

Color tunability is especially important in fashion and beauty retail destinations where different hues, fabrics and materials stand out when bathed in particular light treatments. For example, brightly colored attire and luxe materials like leather are at their visual best when displayed in warmer color temperatures, while darker clothing and crisp suits are better

enhanced in cooler light. Lighting that is fully versatile is also a huge plus because fashion brands typically launch new collections four times per year.

- **Personalized Lighting.** Customizing lighting to shoppers' personal needs is a significant feat for retail lighting. A recent study has shown that approximately 60 percent of purchasing decisions for clothing are made in the fitting room—and selectable lighting in changing areas provides a great opportunity to grow fashion sales. With color tunable light, customers can use controls to see garments in the lighting situations in which they will be worn, such as the office, nightclub, gym and pool—providing different color temperatures and intensities to match each scenario. Surveys have revealed that consumers were more likely to buy clothing they tried on in fitting rooms with scene control capability. Offering makeup patrons personalized lighting at beauty counters is another advancement that can change the retail game. If people can easily adjust kelvin to complement their diverse skin types, they will feel as beautiful as ever, and may be more motivated to make cosmetics purchases.

### EMPOWERMENT

As LEDs continue to gain a foothold in retail environments, color tunability creates a momentous opportunity to transform the shopping experience by empowering designers, store managers and consumers with more control over their lighting.

*Bonnie Littman is president and CEO of USAI Lighting.*