



High Impact Retail Lighting Solutions
Lighting that sells.



High Impact Retail lighting

is high quality interior lighting used to illuminate stores or specific products in the stores, including window displays. Lumileds is lighting fashion, retail (e.g. flagship stores), fresh food, supermarkets and showrooms around the world.

Today, high impact retail lighting can be either traditional or LED lighting. Traditional lighting includes linear fluorescent lamps (LFLs), compact fluorescent lamps (CFLs), halogen, and high-intensity discharge (HID) lights. LED is the technology of choice for new installations and refurbishment to meet lighting efficiency standards and for providing greater design flexibility.



Luxury Goods Market Continues to Grow

Luxury goods and experience sales are on the rise, as the global economy picks up and the middle class in developing economies expand. The 16th edition of Bain & Company's 'Luxury Goods Worldwide Market Study', shows the latest trends in the market.

Research found that the global luxury market is estimated to have grown to almost €1.2 trillion in 2017, a 5% increase from the previous year. 'Luxury cars' is the most significant segment by size, at €489 billion, up 6%, while personal luxury goods take the secondary spot at €262 billion, up 5%.¹

In addition, the global market for fashion luxury products will see strong growth in the coming years, according to a study by EY-Parthenon. Valued at around \$420 billion today, the industry for high-end shoes, watches, bags and more is set to reach a size of nearly \$500 billion by 2020, with the premium segment overtaking the top luxury segment as the main driver of growth.²

¹ Consultancy.uk (United Kingdom), *Luxury market booms to over €1 trillion thanks to personal goods consumption*, Feb. 8, 2018
² Consultancy.eu (Europe), *Premium products driving growth in \$420 billion luxury fashion market*, April 16, 2018

Together with our customers, Lumileds is making the world better, safer, more beautiful—with light. At Lumileds we're collaborating with our customers to push the boundaries of light. We have an ambitious vision for the future of light, and we're taking the lead. The best innovation happens when great minds work together—when we act with integrity as trusted partners to our customers, honoring commitments, offering deep expertise, and going the extra mile. Because it's only together that we can make the world better, safer, more beautiful—with light.

For companies who require innovative lighting solutions, Lumileds is a global leader employing more than 9,000 team members operating in over 65 countries. Lumileds partners with its customers to push the boundaries of light.

Creating branded experiences with high impact lighting.

The retail sector provides an attractive business opportunity for luminaire manufacturers. Savvy retailers are seeking lighting solutions that produce a branded experience aimed directly at their target customers. This creates an excellent opportunity to market high impact lighting solutions that use modern, connected technology to attract and motivate today's consumer.

Lumileds understands what drives retailers' lighting decisions and offers a comprehensive portfolio that allows luminaire manufacturers to create limitless lighting effects. These solutions can help manufacturers create the unique experiences their retail customers desire—whether that's warm and inviting, cool and edgy, or anything in between.

Today's brick-and-mortar retail: Playing by new rules.

Retail is experiencing a renaissance in the physical realm—especially in premier sectors such as shoes, clothing, accessories and consumer electronics. Experts are finding that brick-and-mortar stores are growing in both revenue and number. This is driven in part by forward-thinking retailers that are investing in innovative ways to draw shoppers into their stores through experiences that are unique, branded and consistent, both throughout the store and from store to store.

A key factor in this high impact experience is in-store lighting. By carefully curating their lighting, retailers can create an ambiance and shopping experience that reinforces their brand at every turn. Edgy, cool lighting may work well for retailers wishing to attract shoppers who want the latest and greatest, while softer lighting might be a better option for stores that encourage shoppers to take their time and peruse the merchandise.

The in-store experience is further enhanced with the deployment of IoT-based smart lighting. Retailers can create an omnichannel experience with connected lighting and indoor mapping that is informed by shoppers' smartphones. The data collected through these connected devices provide retailers with insight into how to improve all aspects of merchandising, from where a product is located to how to best display it. The data can also be used to enhance customer service in creative ways, such as highlighting sale items as a customer enters an aisle.

Deploying lighting in new and impactful ways can provide brick-and-mortar retailers with a competitive edge and a consistently positive experience that keeps customers coming in and spending big.

A retail renaissance in the United States.

The United States presents the perfect case study for the re-emergence of brick-and-mortar retail as demonstrated by statistics from a 2018 Deloitte report.¹

Despite the loss of some notable giants, the numbers prove that most people still prefer to shop in person. Brick-and-mortar stores account for 91% of all retail sales. And while online growth outpaces physical retail on a percentage basis, brick-and-mortar stores contribute more than half of all retail growth.

This growth is greatly aided by a healthy U.S. economy, which shows every sign of a full recovery from the 2008-09 recession.

¹ Deloitte Insights, *The great retail bifurcation: Why the retail "apocalypse" is really a renaissance*, March 14, 2018
² NCSL (National Conference of State Legislatures), *National Unemployment Rate Drops to 3.7 Percent in September 2018*, October 5, 2018
³ Trading Economics, *United States Consumer Sentiment*, September 28, 2018

With Lumileds as a partner, luminaire manufacturers can offer innovative lighting solutions that retail customers can use to differentiate their stores and turn them into destinations shoppers return to, again and again.

Unemployment is at a 16-year low, dropping to 3.7% in September 2018.² Consumer confidence is at its highest structural level since 2000, reaching 100.1.³ And consumers are financially healthier right now. In 2017, household debt was less than 10% of disposable income—a figure 25% lower than at the height of the recession in 2009.

While the economy has improved for most everyone, it should be noted that over the past decade the growth in net worth and discretionary income dramatically skews toward high-income Americans. Not surprisingly, high-end retailers in the U.S. project a five-year revenue growth that at 81% is dramatically higher than price-based and midrange counterparts. High-end retailers also project net-positive store openings.

What these successful retailers have grasped is the need to understand their customers at a granular level, and turn this data into insight that drives repeat business through a branded experience uniquely their own.

Brick-and-mortar retail isn't dying. Quite the opposite. Studies show that high-end retailers in particular are experiencing a rise in both revenue and store openings.

So what separates retailers that continue to break ground on new stores from those that can't keep their doors open? Increasingly, success depends on creating a unique environment that draws in shoppers and keeps them coming back.

Lighting is an essential part of this customer-centric experience. In fact, today's lighting often goes beyond showcasing merchandise and enhancing the customer experience to actually influencing purchasing behavior.

Lumileds product portfolio is perfectly positioned to help luminaire manufacturers create these branded experiences for retailers. Our High Impact Retail Lighting Solutions—developed in collaboration with leading lighting manufacturers, lighting designers and fashion brands—create maximum appeal for stores and their merchandise.

Right now is an ideal time to capitalize on the growing demand for custom retail lighting experiences.

This attractive market outlook for High Impact Retail drives a growing demand for well-designed, high quality of light type of fixtures and lighting systems that offer easy to use controls and tunability.

Optimized Colors and Vivid Whites

The LUXEON Stylist Series features CrispColor and CrispWhite Technologies optimized to showcase fashion and other merchandise. With world-class, in-house phosphor capabilities, Lumileds delivers high color rendering solutions (High CRI/TM-30) that provide the highest quality of light and consistent color throughout the store. These solutions are color tunable, allowing for more or less saturation to achieve signature colors that enhance the retailer's brand.

Integrated Solutions

Luminaire manufacturers looking for integrated solutions can get LUXEON LEDs built to customer specifications on the Matrix Platform. Lumileds will also partner with manufacturers to create connected, smart lighting solutions. What's more, ultra-thin Integrated Light Guides—an Advanced Technology of the Matrix Platform—allow for an unprecedented level of light control. It offers the capability of turning an array of individual, pixelated LEDs into a truly uniform light surface that is more visually pleasing and enhances the ambiance the retailer desires. This feature becomes increasingly important as form factors grow smaller and smaller.

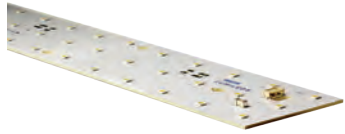
Consistent Light Quality

Both retailers and shoppers expect a uniform experience from fixture to fixture and even store to store. Lumileds enables consistency across multiple solutions and technology platforms, providing luminaire manufacturers the ability to seamlessly combine linear lighting with spotlights to create the effect the retailer seeks, each time the lights come on.





Products – Top picks from our portfolio that add the best value.



Matrix Platform: Simplifying system design through integrated connectivity, controls and application specific driver topologies, enabling smaller and more elegant luminaires. Reducing system costs through a patented circuitry for CCT tuning and dim to warm electronics that pairs with single channel drivers and can achieve high definition pulse width modulation dimming down to 0.1%.



LUXEON CoB Core Range: Due to its small Light Emitting Surface (LES) and industry-leading thermal resistance, LUXEON CoB is easy to work with, enabling simplified and less expensive luminaire designs.



LUXEON CoB Core Range – High Density: Providing unsurpassed performance, lifetime and quality of light for spotlights and downlights, including ultra-efficient 90+ CRI that eliminates the tradeoff between efficacy and quality of light.



LUXEON CoB Stylist Series: Accentuates merchandise through special color points and spectrally engineered solutions.



LUXEON 2835 Line: A collection of compact devices that allows for design freedom and provides a superior overall system solution when a project requires high lumen output and good efficacy.



LUXEON 2835 Stylist Series: Mid power series offering industry leading efficiency and reliability in a wide variety of voltage and lumen output options for linear lighting solutions.

What makes Lumileds solution better and different?

- The only 90CRI with breakthrough efficacy, which eliminates the tradeoff between desired light quality and required lm/W
- Specifically created for retail lighting, LUXEON Stylist Series creates impactful lighting, revealing the whitest whites and highlighting rich colors to increasing contrast
- Both LUXEON Stylist Series and custom white color points are offered across CoB and Mid Power products for perfectly consistent spot, downlight and linear lighting
- Enables the design of high punch miniature fixtures with superior quality of light and crisp uniform beams

About Lumileds

Companies developing automotive, mobile, IoT and illumination lighting applications need a partner who can collaborate with them to push the boundaries of light. With over 100 years of inventions and industry firsts, Lumileds is a global lighting solutions company that helps customers around the world deliver differentiated solutions to gain and maintain a competitive edge. As the inventor of Xenon technology, a pioneer in halogen lighting and the leader in high performance LEDs, Lumileds builds innovation, quality and reliability into its technology, products and every customer engagement. Together with its customers, Lumileds is making the world better, safer, more beautiful —with light.

To learn more about our lighting solutions, visit lumileds.com.



©2018 Lumileds Holding B.V. All rights reserved.
LUXEON is a registered trademark of the Lumileds Holding B.V.
in the United States and other countries.

lumileds.com

Neither Lumileds Holding B.V. nor its affiliates shall be liable for any kind of loss of data or any other damages, direct, indirect or consequential, resulting from the use of the provided information and data. Although Lumileds Holding B.V. and/or its affiliates have attempted to provide the most accurate information and data, the materials and services information and data are provided “as is,” and neither Lumileds Holding B.V. nor its affiliates warrants or guarantees the contents and correctness of the provided information and data. Lumileds Holding B.V. and its affiliates reserve the right to make changes without notice. You as user agree to this disclaimer and user agreement with the download or use of the provided materials, information and data. A listing of Lumileds product/patent coverage may be accessed at lumileds.com/patents.