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Illuminating the Path Forward: Optimism and Opportunity in India's Lighting Sector

As we move into the second quarter of the financial year, the Indian lighting industry is buoyed by a tangible sense of optimism. Despite ongoing challenges in the consumer market, the outlook is decidedly upbeat—a healthy sign, particularly with the festive season on the horizon. This confidence is not unfounded; it is anchored in India's remarkable economic ascent and fortified by strategic domestic initiatives that position our industry for significant growth.

Our industry's prospects are intrinsically linked to the nation's economic vitality. It was with great pride that we noted Niti Aayog's announcement of India becoming the world's fourth-largest economy, overtaking Japan with a GDP of $4.19 trillion. With projections of an impressive 6.2% growth rate in 2025 and per capita income having doubled over the past eleven years, the foundations for sustained demand are strong.

This national prosperity translates directly into industry-specific opportunities. A key driver is the increase in rural consumption, buoyed by easing inflation for rural workers. This surge in rural purchasing power is a clear tailwind for lighting sales, the positive effects of which we anticipate seeing in the coming months. While new U.S. tariffs have created uncertainty for some exporters, India's robust internal growth drivers and sizable domestic economy provide a powerful buffer. A potential bilateral trade agreement with the US could further transform these challenges into opportunities, expanding market access and boosting exports for our sector.

ELCOMA has always been a fervent supporter of the government's 'Make in India' vision, particularly in the critical area of local semiconductor manufacturing. Our collective aspirations received a monumental boost with the recent Union Cabinet approval for a new semiconductor plant in Jewar, Uttar Pradesh. This landmark joint venture between the HCL Group and Foxconn, with a projected monthly output of 20,000 wafers and the capacity to produce 36 million units, is a game-changer for the electronics component ecosystem and a testament to India's growing manufacturing prowess.

Beyond manufacturing, ELCOMA is committed to shaping the future of our industry on the global stage. This September, we are honoured to participate in the mega IEC General Meeting in New Delhi, organized by the Bureau of Indian Standards (BIS). This prestigious event positions India as a leading voice in international electrotechnical standardization. It offers a significant platform for ELCOMA members to showcase cutting-edge products, technologies, and solutions. In parallel, we will host a high-level panel discussion on the pivotal role the lighting industry can play in achieving India's Net Zero ambitions—a critical discourse for a sustainable future.

This journey of progress is chronicled and shared within our own community through our flagship publication, Illumination magazine. We are immensely grateful to our members, whose commitment to showcasing excellence in their lighting projects enriches every edition. We also extend our sincere thanks to the experts who contribute to our 'Tech Corner,' sharing invaluable knowledge that inspires and educates our readers.

The path ahead is bright. The lighting industry stands on the cusp of a transformative era, driven by world-class product standards, strong economic fundamentals, and the active support of government bodies like BIS and the Bureau of Energy Efficiency (BEE). Fuelled by the dedication of its stakeholders, ELCOMA is proud to lead from the front on this exciting journey.

Thank you and best wishes,

AMAL SENGUPTA
Secretary General
ELCOMA

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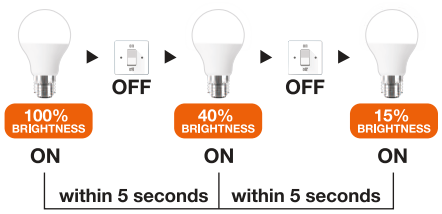

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Optimistic growth prospects in stabilising economy

Dear members,

As we step into the third quarter of 2025, I extend my warmest greetings to all industry members and partners. The performance of the lighting sector in the first quarter of this financial year has reflected encouraging signs, bolstered by a stabilising economic climate. India's rise to become the world's fourth-largest economy, overtaking Japan, alongside a doubling in per capita income, is a milestone that will positively impact consumer confidence and industry growth. With the IMF projecting a 6.3% GDP growth for FY 2024–25 and retail inflation easing to 3.53% in April, we expect an uptick in lighting sales, especially as an early and well-distributed monsoon could fuel rural demand and bridge the urban-rural consumption gap.

Meanwhile, the government's green light to the ₹3,700 crore semiconductor facility in Jewar, as part of the National Semiconductor Mission, reinforces our Make-in-India aspirations and strengthens the backbone of our manufacturing ecosystem. Additionally, the India–UK Free Trade Agreement is poised to double bilateral trade, further enhancing global opportunities for our industry. Despite global headwinds like new U.S. tariffs affecting exporter sentiment, India remains uniquely positioned with a robust domestic economy and strong internal growth levers.

At the regulatory forefront, recent developments demand our attention and active participation. The 35% anti-dumping duty on soft ferrite cores will have a direct impact on the cost structure of driver electronics—prompting a revaluation of sourcing and pricing strategies. Simultaneously, the Bureau of Energy Efficiency (BEE) has issued a critical advisory on the mandatory display of Star Labels across all e-commerce and retail platforms. ELCOMA, in collaboration with the Ministry of Consumer Affairs, has worked relentlessly to ensure proper enforcement after several instances of non-compliant LED and appliance sales. The advisory emphasizes that failure to meet these norms will attract penalties under the Energy Conservation Act, 2001.

As we gear up for the festive sales cycle and prepare for the landmark IEC General Meeting hosted by BIS this September—with its focus on sustainability, AI, and green energy—I urge all members to participate actively and represent India's innovation-driven lighting industry. I would also like to express my deep appreciation to the ELCOMA Secretariat and our contributors for enriching ILLUMINATION with their insights. Let us continue to foster innovation, uphold regulatory integrity, and collaborate with renewed energy to take this industry to greater heights.

Thank you for your continued support!

PARAG BHATNAGAR
President
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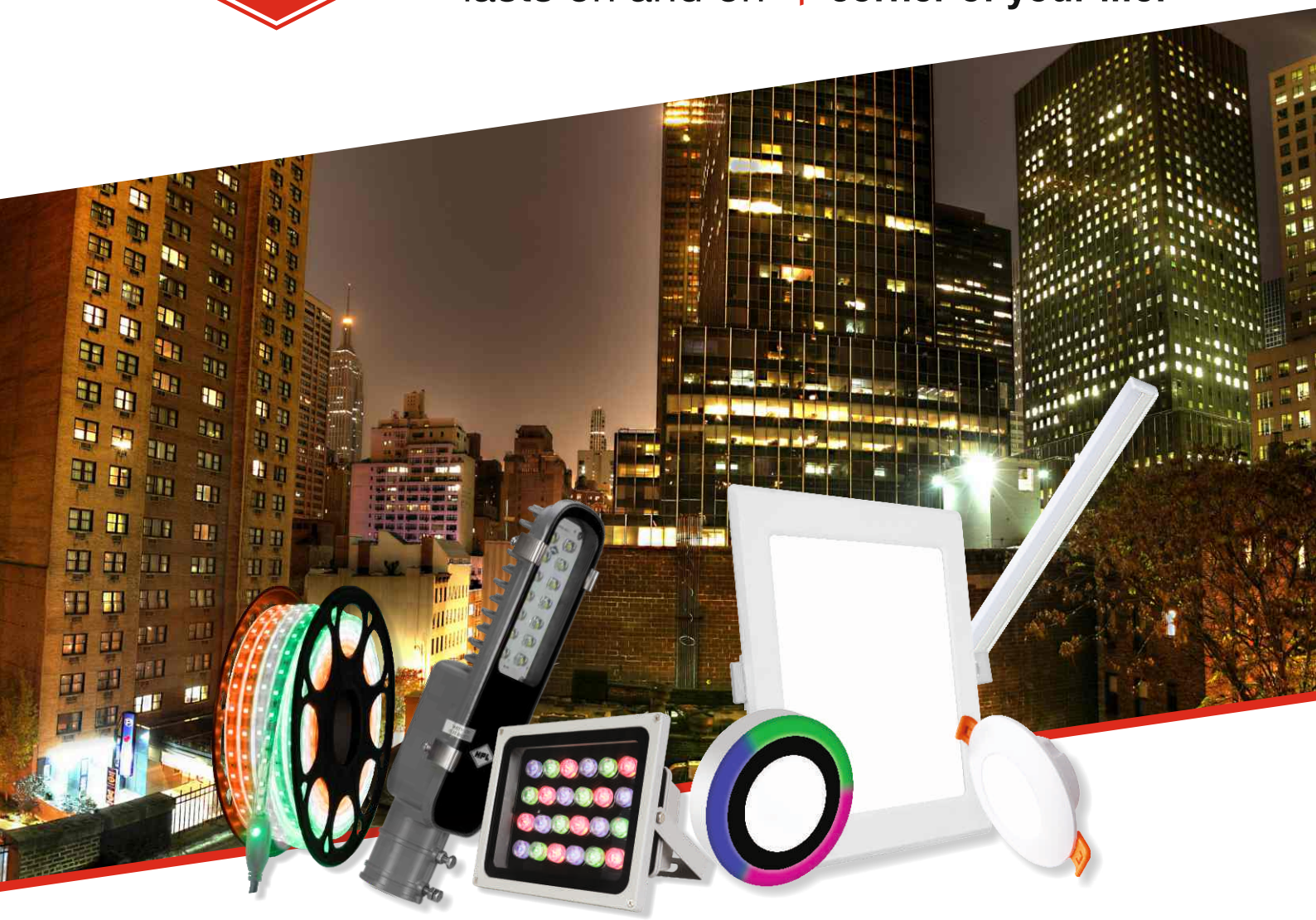

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Setting New Benchmarks in Manufacturing Excellence

IllumiNation spoke with Amit Mittal, Head of Lighting Business for Dixon Technologies and Rexxam Dixon on recent JV with Signify and how he is driving the next phase of growth in the company

You bring in a lot of experience of having worked in companies like Philips Lighting, Halonix and others prior to joining Dixon. How would you like to sum up your previous experience in becoming handy in Dixon?

Having worked with industry leader Philips Lighting and Halonix, I've gained valuable exposure to both structured, world- class manufacturing systems and fast-paced, cost-driven operations. At Philips, I learned the importance of lean manufacturing, quality systems, and process excellence at scale.

Halonix added a layer of agility- managing cost pressures while maintaining efficiency and responsiveness on the shop floor. This combination has been extremely beneficial at Dixon, where we operate in a high-volume, cost-sensitive environment.

My prior experience helps me drive productivity, implement robust processes, and maintain quality while scaling operations efficiently. It has also strengthened my ability to lead large teams, manage cross-functional coordination, and align plant KPIs with business goals.

Dixon and Signify have signed a JV recently. How do you see this journey going forward and its contribution to the overall lighting industry?

The joint venture between Dixon and Signify marks a pivotal moment for the Indian Lighting Industry. By combining Signify's global leadership in lighting innovation and technology with Dixon's robust manufacturing expertise and scale, we are uniquely positioned to drive the next phase of growth in both domestic and export markets. This partnership is more than just about capacity -it's about capability. We aim to deliver high- quality, energy-efficient lighting solutions at competitive costs, aligned with the 'Make in India' vision. Going forward, I see this JV setting new benchmarks in manufacturing excellence, speed to market, and sustainable practices.

LED being easier than CFL to assemble, hundreds of new traders/ manufacturers have forayed into manufacturing of LED products. This brings in a lot of competitiveness in market. How does Dixon handle this kind of situation in its endeavour to be and remain the best in class?

You're absolutely right. LED technology, being simpler to assemble compared to CFLs, has lowered the entry barrier and led to a surge of new players in the market. While this has increased competitiveness, Dixon views it as an opportunity to differentiate through scale, quality, and reliability. Our strength lies in high-volume, cost-efficient manufacturing backed by robust processes, automation, and deep customer partnerships. We focus on delivering consistent quality, meeting global standards, and offering end-to-end solutions -from design to delivery. Additionally, we invest in innovation, backward integration, and supply chain optimization to stay ahead.

Being best-in-class isn't just about price; it's about trust, scale, and the ability to evolve with customer needs-and that's where Dixon continues to lead.

Dixon is an approved PLI applicant in the PLI Scheme for multiple categories of products. Is there a process of learning between the different PLI Schemes for mutual gain and with your expertise by application of tools like Lean Manufacturing, Business Excellence, etc.?

Yes, as an approved applicant under multiple PLI schemes, Dixon places strong emphasis on cross-learning between different categories to drive mutual gains. Each PLI vertical presents unique challenges and opportunities, but the underlying principles of operational excellence, scalability, and cost-efficiency remain consistent. We have institutionalized a process of internal knowledge sharing across verticals- leveraging tools like Lean Manufacturing, Six Sigma, and Business Excellence frameworks to replicate best practices. For example, learnings from automation in one segment may inform improvements in another, or quality control insights from one line may be adapted to optimize yield elsewhere. This cross-pollination enhances speed, consistency, and compliance across the board, allowing us to maximize the impact of the PLI schemes while building a more agile and future-ready manufacturing ecosystem.

India's success story of mobile phone manufacturing has received global attention, and Dixon is very much a part of it. As an effective leader who excels at using instincts, insight, judgement, and technology what has been your key takeaways from mobile phone business that have been successfully implemented in LED lighting?

Leading the lighting vertical at Dixon, I've drawn heavily from the mobile phone business-particularly in areas of precision manufacturing, speed, and process discipline. We've adopted high-speed automation, SMT lines, and robust quality controls, all originally refined in the mobile segment. These practices have helped us scale LED lighting efficiently while maintaining cost competitiveness and quality. The mobile vertical also reinforced the importance of agility and tight supply chain coordination-both of which are now integral to our lighting operations. This cross- domain learning has strengthened our execution and positioned us as a reliable, best-in-class lighting

manufacturer.

ELCOMA has been supporting the vision of the Government for Make in India products and components. In lighting, while most finished products are locally made, we see a challenge in the components where we have high dependency on imports. How does Dixon plan to handle this challenge?

ELCOMA has played a pivotal role in advancing the Make in India vision, and Dixon is fully aligned with this goal. While the local ecosystem for finished lighting products is strong, the component dependency on imports-especially for drivers, chips, and other electronics-remains a key challenge.

To address this, Dixon is actively investing in backward integration and building strategic partnerships with domestic and global component suppliers. We're also working closely with the government and industry bodies to encourage localization of critical components. Our aim is to create a more resilient, self-reliant supply chain that supports long-term growth and value creation.

What is your vision for Dixon in the lighting domain over the next five years?

Over the next five years, I envision Dixon becoming a dominant, end-to-end player in the LED lighting industry-not just as a manufacturer but as a leader in innovation, quality, and sustainability. We aim to deepen our capabilities in smart and connected lighting solutions, leveraging IoT and energy- efficient technologies. With a strong focus on backward integration and supply chain resilience, we plan to significantly reduce import dependency and enhance 'Make in India' contributions. Our goal is to expand our market share domestically and globally, setting new benchmarks in cost-efficiency, speed, and customer-centricity, while driving the adoption of sustainable lighting solutions across industries and homes.

As Treasurer of ELCOMA, what role do you think ELCOMA can play in growth of the lighting industry?

I believe that ELCOMA plays a crucial role in accelerating the growth of India's lighting industry by fostering collaboration between manufacturers, government, and stakeholders. ELCOMA can drive standardization, promote innovation, and advocate policies that support 'Make in India' and sustainable lighting solutions. By facilitating knowledge sharing, capacity building, and addressing supply chain challenges-especially around localization of components-ELCOMA strengthens the ecosystem. Additionally, it acts as a bridge to ensure industry readiness for emerging technologies like smart lighting, helping members scale efficiently while aligning with national priorities.

ELCOMA has done a lot to curb and reduce the sale of illegal LED lights as evident from recent market visits vis-à-vis the situation in 2017, 2018. What further actions do you recommend ELCOMA to plan and execute going forward that will contribute to this cause?

ELCOMA's efforts in curbing illegal LED lights have shown promising results, as seen from recent market inspections compared to 2017-2018. Going forward, I recommend a multi-pronged approach to strengthen this cause: first, enhancing consumer awareness campaigns about the risks of substandard products; second, collaborating closely with regulatory authorities to increase market surveillance and enforcement; third, advocating for stricter penalties and faster legal action against counterfeiters; and finally, leveraging technology like digital authentication and traceability systems to ensure product genuineness. These steps, combined with continued industry collaboration, will help protect consumers and create a level playing field for genuine manufacturers.

IN A LIGHTER VEIN

How do you unwind after a hectic day or week at work?

After a hectic day or week, I like to unwind by immersing myself in my passions. Watching cricket helps me relax and enjoy some thrilling moments. I also follow the share market closely-it keeps me engaged and sharp outside work. When I want to slow down, I tune into the History Channel, which feeds my curiosity and offers a great way to disconnect. Balancing these interests with family time and some physical activity helps me recharge and stay focused.

What is/are your favourite holiday destination/s?

I do not have any specific choice. Since I live on the foothills of Himalayas, I do often visit places like Kasauli/Shimla.

What kind of food/cuisine do you like?

Typically Indian

Which is/are your favourite restaurant/s?

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Redefining the Future of Architectural Lighting

IllumiNation Chats with Sunil Bakhshi, Business Head – Trix / L&B at Focus Lighting on what it takes to continue to deliver high-specification and differentiated lighting solutions

Please tell us a bit about the journey of Focus Lighting

Founded in 2005 by visionary entrepreneur Mr. Amit Sheth, Focus Lighting began as a startup with a clear mission — to bring focused, uniquely engineered lighting solutions to India's rapidly expanding retail sector. With a commitment to precision, innovation, and design, Focus Lighting quickly positioned itself as a leader in the retail lighting space through its flagship brand, PLUS.

PLUS was launched with the intent to deliver indigenous, high-end lighting products designed to meet international standards, but at competitive Indian costs. Designed in Germany and manufactured in India, PLUS introduced breakthrough products combining innovative and ground breaking designs with advanced LED technology — tailor-made for the dynamic and demanding retail environment.

As the brand gained momentum, Focus Lighting scaled its capabilities. By 2013, it had established a fully equipped assembly unit and a cutting-edge R&D facility in Mumbai. The company also ventured into international markets, expanding its footprint to the Middle East and Europe with a representative office in Dubai.

In 2016, Focus Lighting entered a strategic collaboration with Bartenbach GmbH, a globally renowned leader in lighting innovation and technology development. This partnership propelled Focus into the high-end residential and hospitality lighting domains, further diversifying its portfolio and reinforcing its reputation as a technology-driven lighting brand.

The following year marked a major milestone — Focus Lighting at 2017, was publicly listed on the Bombay Stock Exchange (BSE) as Focus Lighting and Fixtures Ltd. This was accompanied by the commissioning of a fully integrated mega factory at 2018 -near Ahmedabad, Gujarat, consolidating three existing units in Mumbai under one roof to streamline manufacturing and scale up production.

Today, Focus Lighting stands as a formidable force in the Indian lighting industry. With a stronghold in retail, residential and hospitality segments, the company is now making significant inroads into the infrastructure lighting space — powering large-scale projects such as airports and city beautification initiatives across India.

From humble beginnings to a publicly listed innovation powerhouse, Focus Lighting continues to redefine the future of architectural lighting.

Please take us through the Product Portfolio of Focus Lighting

At Focus Lighting, we prefer to introduce ourselves not just as a lighting company, but as a lighting technology company. Our business philosophy is centered around delivering high-specification and differentiated lighting solutions, which combine innovation in design with the latest advancements in optics, electronics, and IoT technology. We focus on creating products that are not only aesthetically distinct, but also technically advanced — often incorporating patented features and exclusive designs developed in collaboration with top designers from Europe and India.

Our mission has always been to bridge the gap between aspiration and affordability. We aim to offer lighting solutions that meet European standards of quality and design, yet are accessible within the price sensitivity of the Indian market. This commitment allows us to deliver premium lighting experiences without compromising on value, making world-class lighting more attainable for a broader audience.

Focus Lighting operates with two brands under its umbrella: PLUS and TRIX. PLUS is our luxury segment, designed to cater to high-end and boutique lighting needs. The brand competes with leading international names in the architectural lighting space and features a portfolio that includes products exclusively designed by a team of experienced designers from both Europe and India. On the other hand, TRIX is positioned as a premium yet affordable offering, focused on specification-driven lighting solutions. It addresses the specific needs of the Indian market in sectors such as residential, hospitality, landscape, and retail, offering advanced features, differentiation, and continuous product upgrades.

What is the future roadmap for Focus Lighting in expanding market presence?

For years, Focus Lighting has built its reputation by working closely and directly on projects and with direct B2B customers, carving a niche in the architectural lighting segment. With a strong foundation in the professional lighting segment, the company is now poised to enter an exciting new phase of expansion.

Looking ahead, Focus Lighting is actively working to strengthen its national and international presence through a structured network of dealers and channel partners. This strategic move aims to make Focus Lighting's high-quality products more widely accessible, while ensuring deeper market penetration across diverse geographies.

Simultaneously, having established a respected name in the B2B architectural lighting space, Focus Lighting is now setting its sights on the rapidly growing B2C consumer lighting market. The company plans to introduce a distinct portfolio of state-of-the-art, sustainable, and design-led lighting products—offering uniqueness in both form and function. This foray into the consumer segment reflects Focus Lighting's broader vision to bring cutting-edge technology, aesthetic design, and eco-conscious innovation to everyday living spaces, empowering customers to experience lighting in a new and inspiring way.

We at Focus Lighting – look forward to some exciting times ahead -with a legacy of excellence and a future-focused mindset, Focus Lighting is ready to illuminate new paths- from iconic architectural landmarks to modern homes across the world.

What in your opinion on the impact of Government of India's Infrastructure Investments, specifically on highways, airports, ports, tunnels and sports infrastructure on Lighting Industry in India at present and in the coming decade?

The GOI commitment to developing world-class infrastructure is both visionary and transformative. The government is looking at infrastructure as a tool for social impact, economic acceleration, and regional connectivity. The GOI at one hand intends to provide seamless connectivity across the country, facilitating intra-country travel, tourism, and easier movement of people and goods. On the other, it's also a critical enabler for industry and commerce — ensuring that manufacturing hubs, ports, airports, and logistics networks are upgraded to global standards for faster, more efficient economic activity.

To this end, the Union Budget has allocated nearly ₹11 lakh Cr, which is more or less same from last year and is one of the largest infrastructure outlays in recent history. We foresee similar level of Budget allocations for coming few years as well.

From the perspective of the lighting industry, we confidently endorse this as a watershed moment. Lighting forms an integral part of any infrastructure project — whether it's functional illumination for highways and airports, or aesthetic and architectural lighting for monuments, public spaces, or cityscapes. On average, lighting accounts for 2% to 2.5% of the total project cost in large infrastructure works. We can clearly see the immense potential this unlocks for our industry.

We are now seeing strong demand for specialized lighting solutions — including smart poles, sustainable street lighting, landscape illumination, and programmable lighting for urban beautification and heritage zones.

We are also witnessing that industry is responding with innovation, reliability, and a focus on energy efficiency and smart concepts. Lighting solutions that are IoT-enabled, low-maintenance, and

resilient to diverse environmental conditions will be at the forefront of this change.

Overall, the government's infrastructure push is not only creating business opportunities for the lighting sector, but also enabling us to play a transformative role in shaping the visual and functional identity of New India.

Do you see Human Centric Lighting becoming a major part of the Lighting Industry in India in the future?

Absolutely yes — Human Centric Lighting (HCL) is set to play a significant role in the future of the Indian lighting industry, although we are still in the early stages of adoption.

In India, the conversation around lighting has traditionally revolved around energy efficiency, cost, and durability. However, as awareness grows about the biological and psychological impact of light on human well-being, we are seeing a gradual shift in demand, especially in corporate offices, premium residential spaces, hospitality, and healthcare environments.

We have observed a rising interest in our conversations with architects, specifiers and customers on their inclination to idea of HCL by using tuneable white lighting, sensor-based automation, and daylight simulation to create more dynamic environments. This is being driven by increased interest in employee wellness, healthy living standards, and smart home integration. However, I feel the real potential for HCL in India will unfold as awareness spreads and costs come down through indigenous R&D and manufacturing.

While mass adoption might still take a few years, the trend is undeniable. Human Centric Lighting is no longer a niche concept — it's becoming a design and specification priority, and we expect it to become a key differentiator in the Indian lighting market in the near future.

What role will Controls and Automation play in the lighting space in the coming years? Is India's Lighting industry investing enough on R&D on this segment and what do we need to do to be a force in the global lighting industry?

I have a very strong view that Controls and Automation are going to be central to the next phase of growth & transition for the Indian lighting industry. As lighting moves beyond basic illumination, the demand for intelligent, adaptive, and energy-efficient systems is growing rapidly across applications.

In India, we are witnessing increased acceptance, although at small level of smart lighting solutions driven by IoT integration, wireless controls, motion sensors, daylight harvesting, and building management systems (BMS).

That said, our domestic R&D ecosystem in lighting controls is still maturing. Although we have small bright spots at basic software application development but a lot of the high-end control technologies, components, and protocols are still imported. While there is growing interest and some progress, India needs to invest more aggressively in developing indigenous control platforms, software interfaces, and scalable automation solutions tailored to local needs. To be a force in the global lighting industry, Indian manufacturers must go beyond just assembling or importing. We need to build deeper R&D capabilities in electronics, firmware, and UI/UX.

In short, controls and automation are no longer optional — they are fundamental to lighting's future. If India wants to lead globally, we must move up the value chain from manufacturing to innovation, with R&D and smart integration at the core of our strategy.

It is estimated that a large number of products being sold in India are non-compliant to safety and performance standards. How does this impact Focus Lighting and what kind of advocacy would you recommend going forward?

Yes, it's quite unfortunate that a large number of lighting products in the market today do not meet basic performance or safety standards. Many products are sold with a simple 2-year warranty or guarantee, but beyond that, there's little emphasis on long-term performance, light quality, or safety compliance.

Most end-users — and even some decision-makers — are not fully aware of critical lighting fundamentals like lumen depreciation, CCT (Correlated Colour Temperature) shift, improper beam angles, low optical efficiency, or the use of substandard electronics. As a result, the market often ends up making decisions based on price or superficial features, and the actual performance suffers. In the end, the customer doesn't get the right light for the right application — which is the most crucial aspect of lighting.

At our end, we've always believed that education is key. At Focus Lighting, we don't just sell products — we strongly emphasize specification integrity and performance metrics. More importantly, we work to spread awareness about the Science of Light. We conduct seminars for lighting specifiers, consultants, and architects, and invite them to our Experience Centres for live Feel & Experiences. Our sales teams also carry portable light demo boxes to conduct mock-ups and help clients make informed decisions.

This constant focus on specification, differentiation, and education has helped us secure a strong position in the market. We believe that empowering the customer with knowledge will always be more valuable than simply offering a product.

What are the challenges faced by the Indian Lighting Industry at present and how can such challenges can be mitigated?

The consumer lighting industry in India is undoubtedly navigating a challenging phase. These challenges aren't just at the industry level—they extend to consumer experience and environmental impact as well. At the core, there has been a significant stagnation in innovation. The market is flooded with "me-too" products, leading to a crowded space dominated by fragmented small-scale players. This saturation has put immense

pressure on pricing, leading to shrinking toplines and thinner bottom lines.

Adding to concern is the rise in promotional and replacement costs. Brands, in a bid to survive, are increasingly resorting to cost-cutting measures, which unfortunately reflects in the quality of products being offered to consumers. This downward spiral is evident in the lack of meaningful innovation, particularly in product specifications, reliability, and longevity.

This approach doesn't just affect business—it carries a broader environmental cost. Today, we're seeing LED products with much shorter lifespans than originally envisioned. This is creating an alarming volume of electronic waste and, worse, it undermines the fundamental promise of LED lighting—efficiency, durability, and sustainability.

I strongly believe it's time for companies to move boldly and think beyond the immediate price game. We must prioritize innovation in both design and engineering. The industry should introduce lighting solutions that are not only energy-efficient—as expected by regulatory bodies—but also reliable in performance, aligned with proper CCT and lumen specifications, and resilient to the irregularities of our power transmission systems.

Minimalism, in this context, should not be an excuse to cut corners. Instead, it should inspire streamlined, thoughtful design with fewer but higher-quality components—maximizing environmental savings while delivering true value to the consumer.

Unless we break out of this cycle of commoditization and start investing in truly differentiated product development, we risk compounding both financial and ecological costs. The future of lighting in India depends on how boldly and responsibly we choose to innovate today.

What is the kind of industry growth are you looking at and where do you think the lighting industry will reach in terms of CAGR in the next 5 years?

For some years now, most of the challenges were concentrated in consumer lighting (B2C) —things like pricing pressure, commoditization, and difficulty in driving topline growth despite growing volumes. But now, we're seeing those same issues start to surface in the B2B and projects side of the business as well. While the project space does come with some strong opportunities, there's also increasing pressure on pricing. And when that happens, there's always a risk that quality and specifications start getting compromised—just to meet tighter budgets. That's definitely a concern.

We're also seeing a rise in the number of small-scale players entering the B2B segment, which is making things even more competitive. For established players, it means doing business is becoming more competitive—not just in terms of margins but also in terms of maintaining differentiation and delivering real value. Because of these pressures, many lighting companies may start exploring adjacent categories within the electrical trade. It's a practical move—meant to safeguard operating costs and add some support to the topline in the short term.

That said, I still believe the core lighting business has a stable future. If managed well, and with a balanced approach, a CAGR of 6–7% over the next 3 to 4 years is very much achievable—even in this tough market.

However, Companies that are willing to invest in new products, new technologies, and newer marketing strategies—will absolutely outperform the market. They'll come out of this phase with stronger brands, better balance sheets, and a real edge in the years to come.

What are the three things you would like to advise ELCOMA to do by which it will serve the industry and the consumers?

ELCOMA has long played a pivotal role as the collective voice of the lighting industry in India. It has served as a vital platform, actively engaging with the Government of India and collaborating across departments to represent the industry's challenges, shape better specifications, and foster a more sustainable and consumer-centric lighting ecosystem.

I sincerely appreciate ELCOMA 's sustained and tireless efforts toward advancing the interests of the industry, protecting the environment, and ensuring long-term benefits for consumers and the nation at large.

In light of the current dynamics and future needs of the sector, I would like to propose the following recommendations for ELCOMA's continued leadership:

1. Facilitate Strategic Dialogue on Product Quality and Specifications

ELCOMA should take the lead in initiating a structured and ongoing dialogue among all stakeholders—manufacturers, policymakers, testing bodies, and domain experts—to drive improvements in product specifications and quality standards. This will safeguard both industry integrity and consumer trust.

2. Broaden Industry Engagement

It is important for ELCOMA to actively engage a wider spectrum of players across the lighting industry—including emerging brands, MSMEs, and innovation-led startups. A more inclusive approach will help address challenges more holistically and enrich the discourse with diverse perspectives.

3. Prioritize Consumer Welfare and Environmental Sustainability

ELCOMA should continue to strengthen its focus on long-term sustainability—placing environmental responsibility and consumer welfare at the centre of its agenda. This includes promoting practices that reduce e-waste, ensure energy efficiency, and uphold safety and durability in lighting products.

With these steps, I am confident ELCOMA can continue to play a defining role in shaping the future of the Indian lighting industry.

INTERVIEWED BY ILLUMINATION EDITORIAL TEAM

Bajaj Lighting Is Redefining the Glow of Indian Cricket at MCA Pune

Bajaj Lighting's recently completed project at MCA Stadium in Gahunje, Pune not just illuminates, but revolutionizes the ground, delivering an immersive experience for players, fans, and the ever-critical camera lens

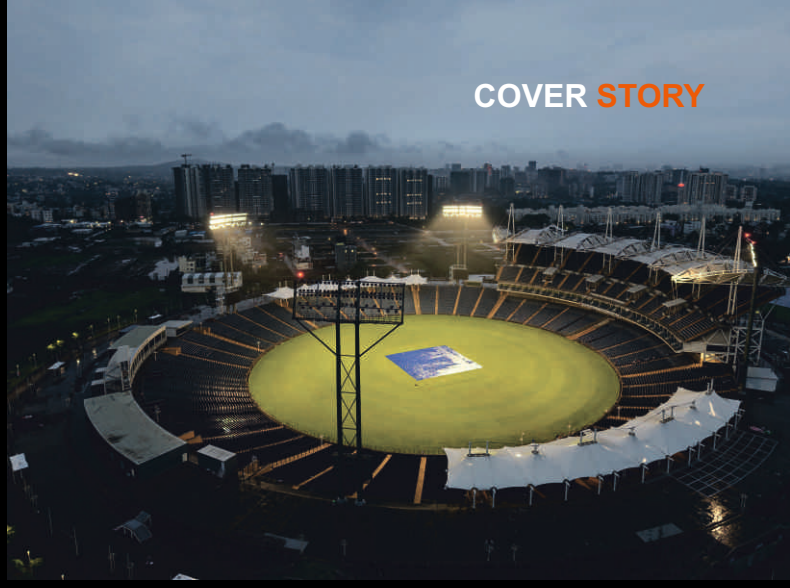
Bajaj Lighting recently completed a project that not just illuminates, but revolutionizes the Maharashtra Cricket Association (MCA) Stadium in Gahunje, Pune. The project is not merely an upgrade - it's a testament to innovation, a commitment to sustainability and a resounding signal that Indian sports infrastructure is ready for its global spotlight.

Stepping into the MCA Stadium today, there's a palpable shift in the atmosphere. Gone is the inconsistent gleam of traditional metal halide lamps. In their place, a symphony of high-performance Blaster LED floodlights now bathes the playing field in a brilliant, uniform glow. This transformation is more than a boost in brightness—it's about precision, clarity, and delivering an immersive experience for players, fans, and the ever-critical camera lens.

"This project reflects our unwavering commitment to pushing boundaries," said Rajesh Naik, COO - Bajaj Lighting Solutions. "At Bajaj Lighting, we believe illumination should inspire and empower. With the MCA Stadium, we've not only delivered world-class lighting but also laid the foundation for the future of Indian sporting venues—where technology, sustainability, and performance converge."

Mr. Rohit Pawar, President, Maharashtra Cricket Association, Pune said, "The Maharashtra Cricket Association has recently completed a remarkable retrofit project, transitioning from conventional lighting to cutting-edge, energy-saving LED lighting. This project was accomplished in record time, taking less than seven weeks from start to finish. As part of this upgrade, we successfully increased the illumination level by 30%, meeting international standards and ensuring excellent quality for HDTV telecasts. By shifting from conventional lights to LED technology, we have achieved an impressive 35% reduction in energy consumption, all while delivering significantly improved lighting performance. The results have been outstanding, and the Maharashtra Cricket Association has expressed their sincere appreciation for the efforts of Bajaj Electricals in completing this project within the specified timeframe. We extend our best wishes to Bajaj Electricals for their continued success and look forward to more such collaborations in the future."

The Maharashtra Premier League (MPL) and the Women's Maharashtra Premier League (WMPL) organised by the Maharashtra Cricket Association (MCA) kicked off from June 4 2025 at the very



same MCA International Stadium in Gahunje, Pune.

BEYOND BRIGHTNESS

The transition to LED lighting wasn't simply about being brighter. It was a strategic move, grounded in the demands of modern sport—particularly the unforgiving eye of high-definition television.

“We designed this system with ICC standards at its core,” explained a spokesperson for Bajaj Lighting. “Every fast-paced moment, every subtle movement on the field is now broadcast with crystal-clear precision to millions of viewers worldwide.”

The result? Vivid colors, zero flicker, and visual quality that positions MCA Stadium alongside the world's premier cricketing venues.

THE TECHNICAL BRILLIANCE BEHIND THE TRANSFORMATION

A Canvas of Light - Uniform illumination across the playing field creates a flawless visual experience. No dark patches. No glaring hotspots. Just even, professional-grade lighting that enhances performance and enjoyment alike.

The Smart Symphony - At the heart of the system lies a DMX-compatible smart control platform. This isn't just about turning lights on and off—it's a dynamic orchestration of lighting moods. With remote operation and scene-setting capabilities, the stadium can shift its ambiance from match intensity to concert vibrancy in seconds.

Eyes on the Ball, Not the Glare - Advanced glare control and precisely engineered beam angles ensure minimal visual disruption. Players stay focused. Spectators stay comfortable. And cameras capture every angle without distortion.

A Brighter, Greener Future - LED technology delivers substantial energy savings and a dramatically lower environmental footprint. This transition supports both operational efficiency and broader sustainability goals, aligning MCA Stadium with global green standards.

THE ART OF EXECUTION: CHALLENGES MET WITH EXPERTISE

Delivering a project of this magnitude wasn't without challenges. The MCA Stadium's distinctive bowl-shaped architecture and unique roof structure presented a complex installation environment. Yet, Bajaj Lighting's legacy of precision engineering and deep collaboration ensured smooth execution.

“Our structural adaptation expertise and close coordination with MCA officials were paramount,” shares a project lead.

The result? A seamless integration of new technology with existing infrastructure—executed with confidence, clarity, and craftsmanship.

BEYOND CRICKET: LIGHTING A COMMUNITY HUB

This lighting upgrade doesn't just transform match days—it redefines the stadium's role in the community. Night-time training sessions are now supported with professional-grade visibility. The venue can also host multi-sport events, live concerts, and civic gatherings, turning the stadium into a year-round hub of activity.

BUILT TO SHINE: BAJAJ LIGHTING'S ENDURING LEGACY

This landmark project at MCA Pune is more than a technological triumph—it's a reaffirmation of Bajaj Lighting's legacy. A division of Bajaj Electricals Ltd., the company has over 80 years of expertise, driven by the belief that lighting is not just about illumination, but about transformation.

Their guiding philosophy, Built to Shine, isn't just a tagline—it's a promise. One that's reflected in every floodlight, every design detail, and every project milestone.

As Indian cricket's global profile continues to rise, its infrastructure must keep pace. Bajaj Lighting stands firmly at the forefront—not just lighting stadiums, but illuminating futures. The MCA Stadium now shines as a beacon of what's possible when cutting-edge technology meets visionary execution.

And in that glow, the future of Indian cricket has never looked brighter.

AUTHOR: BAJAJ ELECTRICALS

Lighting the Way : Polycab Transforms Indian Railway Stations through Façade Lighting

MORBI RAILWAY STATION

From the bustling platforms of metropolitan hubs to the quiet dignity of small-town stations, India's railway infrastructure is undergoing a remarkable transformation. At the heart of this modernization effort lies an often-overlooked element that's redefining the passenger experience: professional façade lighting. As the Ministry of Railways pushes forward with ambitious station redevelopment projects, lighting has evolved from basic functionality to becoming a powerful tool for creating welcoming, safe, and visually striking transit spaces that reflect India's journey toward a modern, connected future

India's focus on infrastructure modernization, urban transformation, and energy-efficient solutions is driving robust demand for advanced outdoor lighting. The shift is evident: lighting is no longer viewed as a basic utility but as an integral element of intelligent urban planning. The market is rapidly evolving toward data-driven, energy-efficient systems, particularly in the LED segment.

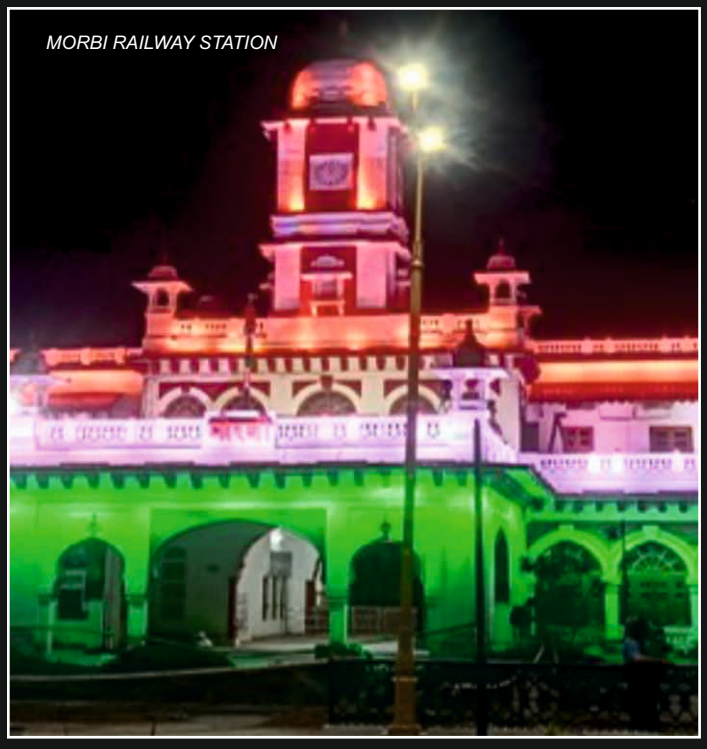
Public sector investments are further playing a significant role in this growth, especially in areas where lighting contribute to safety, heritage conservation, and aesthetic enhancement. Within this context, façade lighting has emerged as a high-impact, niche segment delivering both functional and symbolic value to public and private spaces.

Polycab India, has steadily expanded its presence in the professional lighting domain. Over the past few years, the company has made significant strides in façade lighting, establishing itself as a capable and reliable partner across high-profile projects.

In the Railway sector, under Amrit Bharat Station Scheme, Polycab has executed façade lighting for several key stations including Siwan, Thawe, Morbi, Surendra Nagar and Dwarka. Additionally, it has illuminated a cluster of six stations under the Bhavnagar Division—Palitana, Limbdi, Gondal, Sihor, Botad and Songad. These initiatives align with the Ministry of Railways' station redevelopment efforts, enhancing safety while adding visual appeal to public transit infrastructure.

Beyond transportation, Polycab has contributed to lighting upgrades in civic and cultural spaces such as the Siddharth

SIHOR JUNCTION



MORBI RAILWAY STATION

SURENDRANAGAR RAILWAY STATION

Nagar Collectorate and the spiritually significant Devraha Baba Samadhi Sthal. These installations are designed with durability and low maintenance in mind, critical for high-footfall and sensitive environments.

These successes demonstrate Polycab's ability to tailor solutions to varied contexts combining engineering precision with creative vision.

All these lighting installations illustrate how thoughtful design can transform infrastructure into landmarks. With in-house design support, manufacturing capabilities, and a commitment to quality and longevity, Polycab is positioning itself as a serious player in India's professional lighting space.

As India continues to reimagine its public spaces merging heritage with modernity, façade lighting will play a defining role. With its growing portfolio of successful projects, Polycab is fast becoming synonymous with lighting the nation's-built environment, both old and new.

AUTHOR: POLYCAB INDIA LIMITED

Illuminating History : Eveready Industries Executes Iconic Facade Lighting at Shaheed Smarak, Agra

In a landmark initiative celebrating India's heritage and honouring its valiant freedom fighters, Eveready Industries proudly completed a prestigious facade and landscape lighting project at Shaheed Smarak—the iconic Martyrs' Memorial located in Agra, Uttar Pradesh. This historic monument, a life-size statue of seven young martyrs who laid down their lives during the Quit India Movement in August 1942, has been transformed into a brilliantly illuminated symbol of patriotism and national pride.

With a project value of ₹8.5 crores, the lighting enhancement at Shaheed Smarak stands as a testament to Eveready Industries' technical expertise and design finesse in architectural illumination. The project involved a harmonious blend of advanced lighting technologies and meticulous attention to aesthetic and heritage sensitivities.

ARCHITECTURAL & FACADE LIGHTING EXCELLENCE

The centre piece of the transformation is the sophisticated facade lighting system featuring Linear Facade Lights and RGBW Flood Lights. These fixtures were strategically installed to accentuate the architectural contours of the monument, highlighting its solemn beauty against the Agra skyline. The RGBW (Red, Green, Blue, White) dynamic lighting system enables customized colour scenes and moods, allowing for versatile illumination on regular evenings and special national occasions.

LANDSCAPE AND SURROUNDING ILLUMINATION

Complementing the facade lighting is a thoughtfully designed landscape lighting plan that enhances the surrounding environment while maintaining the sanctity of the memorial. The use of elegant bollards and decorative poles creates a serene ambiance and provides subtle guidance for visitors walking through the premises. This blend of functionality and artistry elevates the overall experience for visitors, especially during night-time hours.

INTELLIGENT & DYNAMIC LIGHTING CAPABILITIES

A defining feature of the project is its

customizable lighting scenes, programmed to align with thematic occasions such as Independence Day, Republic Day, and other commemorative events. On these special days, the lighting system can display India's tricolour (Tiranga), multi-colour themes, single-toned RGBW washes, or special visual effects, turning the monument into a glowing tribute to the nation's legacy.

TECHNICAL CUSTOMIZATION FOR SITE-SPECIFIC NEEDS

To meet the unique architectural demands of the site, Eveready employed customized beam-angle flood luminaires and LED wall washers. These were carefully selected and configured with specific beam angles to ensure uniform illumination across the monument's surface, minimizing glare while maximizing visual impact. Additionally, GOBO projectors were installed to project symbolic patterns and motifs onto the memorial's surface, creating visually compelling and respectful homages to India's freedom struggle.

Eveready Industries extends its heartfelt gratitude to the Government of Uttar Pradesh and all associated authorities for entrusting this esteemed project to the organization. It has been a matter of immense pride and responsibility to contribute towards enhancing the legacy of a national symbol like Shaheed Smarak. This project reflects Eveready's ongoing commitment to national heritage, smart lighting innovation, and civic development.

AUTHOR: EVEREADY INDUSTRIES INDIA

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Illuminating Heritage: Lighting Design at The Residency, Lucknow by Signify

The Residency in Lucknow—also known as the British Residency or Residency Complex—is a historical landmark deeply embedded in India's colonial past. Once the residence of the British Resident General in the court of the Nawab of Awadh, it was a pivotal site during the 1857 revolt, particularly during the Siege of Lucknow. Today, the Residency stands preserved in its war-ravaged form, its shattered walls still bearing the scars of cannon fire—a silent yet powerful testament to history.

A LIGHTING APPROACH THAT RESPECTS THE PAST

The lighting design for The Residency, conceptualized by Lucent Worldwide, was guided by a clear philosophy: to reveal, not overpower. The ruins already speak volumes, and the lighting has been thoughtfully crafted to amplify their silent storytelling without disrupting their authenticity.

Instead of adopting a uniform lighting scheme, the designer used varied color temperatures to highlight architectural elements individually. Warm tones subtly reveal the texture of aged brickwork, while cooler tones add visual depth to relatively intact structures. This interplay creates a layered narrative that guides the viewer's gaze from one ruin to the next, allowing each element to be appreciated in its unique historical and architectural context.

Signify collaborated closely with the lighting designer to ensure that the technical aspects of the lighting products matched the design intent. Linear fixtures were predominantly chosen for their ability to remain discreet—the light source remains hidden, and the fixtures themselves are camouflaged within the structure. Projectors were also strategically used to break visual monotony and introduce dynamic accents across the site.

FAÇADE AND LANDSCAPE IN HARMONY

One of the standout features of this project is the seamless integration of façade and landscape lighting. Rather than treating them as separate elements, the lighting designer created a cohesive visual experience. The softly lit lawns and surrounding flowerbeds complement the illuminated façades, allowing a gentle transition between built structures and their natural surroundings. This holistic approach brings the entire complex to life after dark, offering visitors a rich and immersive nocturnal experience.

Lighting as a Medium of Storytelling

The lighting scheme at The Residency goes beyond aesthetics—it becomes a medium of storytelling. It doesn't attempt to beautify the battle scars of history but instead elevates and preserves their meaning. In doing so, the site transforms into a living museum—where history isn't just seen, but deeply felt.

This sensitive design approach reflects a growing trend in architectural lighting: honoring heritage while enhancing both visibility and visitor experience. At The

Residency, lighting is not just functional—it is emotional, poetic, and deeply contextual.

MEETING HERITAGE-SPECIFIC EXPECTATIONS

Given the site's historic importance, the customer had clear expectations: all installations had to be non-invasive, ensuring no damage to the building surfaces, and the lighting fixtures needed to blend seamlessly with the existing structures. These requirements were respected throughout the project, ensuring that modern interventions did not compromise the integrity of the centuries-old monument.

AUTHOR: SIGNIFY INNOVATIONS INDIA LIMITED

Smart LED Lighting Design Ecosytem - Communication, Control, Regulation & Application

Programmable logic controllers (PLCs) introduction in electronic space made remarkable technological transformation for controlling technical systems in the mid of 20th century. At that moment lighting control was a part of building automation and control systems (BACS), utilizing solid-state devices like generic PLCs and dedicated smart devices (actuators). Another milestone in this space happened in the start of the 21st century, when due to widespread use of wireless communication networks and protocols, BACS was further upgraded. Worldwide, BACS also known as Home and Building Electronic Systems (HBES) are based on microcontrollers and PLCs.

Intelligent lighting systems, a subset of BACS/HBES, use various methodologies to provide efficient, flexible, and customized lighting solutions. These methodologies include standard protocols, intelligent methods, control systems and sensors. Standard protocols are widely used in smart lighting systems to ensure compatibility between different devices. Open protocols, which have published features usable by anyone, allow interoperability between devices from different manufacturers. This interoperability offers flexibility and a wide choice of compatible solutions, simplifying updates and implementations. Intelligent methods, such as artificial intelligence (AI), the Internet of Things (IoT), and neural networks, enhance the performance and functionality of smart lighting systems. These methods enable systems to learn from user behavior, environmental factors, and other inputs, adjusting lighting levels and patterns accordingly. Control systems are crucial for smart lighting, allowing users to monitor and adjust lighting levels, color, and other settings via mobile apps, voice commands, or other interfaces. This provides flexibility and convenience. Sensors in smart lighting systems detect and respond to environmental changes. For example, motion sensors can turn on lights when a room is occupied, and light sensors can adjust lighting levels based on ambient light. Intelligent lighting systems contribute significantly to safety and energy savings. A luminous flux control system can offer additional energy savings of up to 20–30%. Smart lighting systems aim to achieve multiple goals, including energy efficiency, safety, reliability, room design, user comfort, environmental effects, security, and automation.

Communication protocols in smart lighting systems can be wired, wireless, or hybrid. Wired solutions are stable and efficient, while wireless networks are easily extendable, scalable, and cost-effective. Examples of open wired protocols include KNX, 0–10 V, Digital Addressable Lighting Interface (DALI), Digital MultipleX (DMX), Power Line Communications, Power Over Ethernet and BACNET. Open wireless protocols include Zigbee, Bluetooth Low Energy (BLE), Long Range (LoRa), Long Rnage Wide Area Network (LoRaWAN), Narrowband Internet of Things (NBIOT), Sigfox and Cellular. In top of that there is hybrid system as well. With the rapid development of IoT, the interconnection of all things is becoming a future trend in intelligent lighting.

In this article, our focus on smart lighting control system, there types, applications and regulations that lead towards smart LED lighting design ecosytems to move towards sustainability goals.

SMART LIGHTING CONTROL SYSTEMS

A smart lighting control system can automatically sense and interact with its environment, users, and other smart devices to optimize lighting. These systems can be isolated (using the DALI protocol) or integrated into a broader building automation system (using KNX or BACNET protocols). A key aspect is the digitalization of controls, converting inputs into digital signals for effective processing.

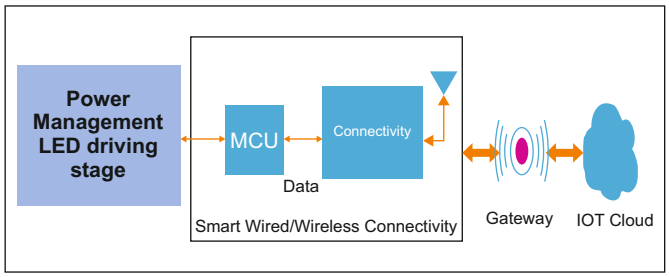

Fig.1 Smart Lighting Design Block Diagram

A smart lighting system includes input devices like sensors and switches; output devices like actuators; system devices such as power supply units and gateways; controllers for programmable functions; and supervisors for remote control.

The data transfer uses physical support like wires and radio waves and communicates digitally or via packets. Smart device components consist of a bus coupling unit, application module, and application program. Data type commands for actions and states for status information. Smart actuators can be embedded in the luminaires.

Smart Wireless Lighting Control

System

A wireless lighting system represents the optimal solution for renovation projects or the adaptation of existing systems where the installation of cables would be expensive in terms of execution times and costs. An exceptional feature is its scalability, which allows one to wirelessly control a single area or larger projects, with thousands of wireless devices. Smart lights have a chip inside them so that they can communicate with other devices wirelessly. Each light can connect to an app, a smart assistant, or another smart accessory to control the lights, change their color, or control them remotely. The major popular smart wireless lighting control systems are Zigbee, BLE, LoRa, LoRAWAN, NBIOT, Cellular. All have use case depends on application, cost, range and flexibility.

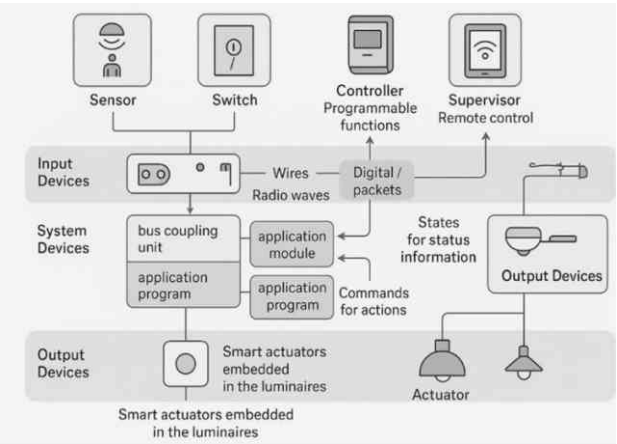

Fig.2 Smart Lighting System Design Block Diagram

Smart Wired Lighting Control System

Wired control systems for regulating the luminous flux of devices connected to the network in addition to presence and illuminance sensors for controlling LED lights. They can include the KNX bus, 1/10 V analog control, and DALI protocol, allowing operation at the on/off level and dimming functions. The DMX lighting control (adopted for shows with high-speed controls) not only allows one to control dimming but also changes in the color of the light and any movements of the elements carrying the LED light, where provided. The optimal functions of the DMX protocol have been enhanced by using IP-based networks, i.e., over Ethernet cables and via wireless LAN (WLAN), which are normally available in various environments.

Smart Hybrid Lighting Control System

Although, wired controls, despite their installation difficulty and higher cost, offer greater reliability than wireless ones. Hybrid applications have been activated that integrate the wireless mode with the wired one, such as the wired and wireless DALI application through a DALI wireless gateway. Such a solution makes it easier to carry out extensions of the system.

SMART LIGHTING APPLICATIONS

Smart lighting applications are broadly classified in two categories; first indoor public/industrial lighting space, and the other is outdoor/street lighting space.

Smart Indoor Public and Industrial Lighting

In tertiary buildings, lighting accounts for a significant portion of electricity consumption. Smart lighting systems can reduce energy use while maintaining or enhancing performance, comfort, and safety. European Standards EN 52120 and EN 51193 highlight the importance of smart lighting controls for energy efficiency.

Key Control Strategies:

- Scheduling: Time-based adjustments.
- Daylighting: Utilizing natural light.
- Occupancy: Adjusting based on presence.
- Zoning: Optimizing light levels per zone.
- Remoting: Remote control and supervision.

LED luminaires with dimming drivers and PWM techniques enhance energy efficiency. Combining these with smart controls maximizes savings. Energy Efficiency Classes (EN ISO 52120) [23]:

Class A: High-performance systems with control.

Class B: Advanced systems with centralized management

Class C: Standard systems with basic automation.

Class D: Non-energy efficient, traditional systems.

Table 1 shows the classification of the smart lighting control according to the functions for presence, daylighting, and sunscreen controls. Table 2 shows the impact (BAC factor) per unit of the smart lighting control in the energy

	Commercial				Home			
Occupancy Control	**A**	**B**	**C**	**D**	**A**	**B**	**C**	**D**
Manual Switch								
Manual Plus Automatic General OFF								
Automatic ON/OFF								
Manual ON & Automatic OFF								
Daylight Control								
Centralized Manual								
Local Manual								
Automatic ON/OFF								
Dimming Auto								
Sunscreen Control								
Manual								
Motorized with Manual override								
Motorized with Automatic drive								
Combined light/curtain/HVAC control								

Table 1: The classification of smart lighting (EN ISO 52120)

	BAC Factor			
	A	B	C	D
Offices	0.72	0.85	1	1.1
Schools	0.76	0.88	1	1.1
Hospitals	1	1	1	1.1
Hotels	0.76	0.88	1	1.1
Restaurants	1	1	1	1.1
Wholesale	1	1	1	1.1

Table 2: BAC Factors for Lighting System (EN ISO 52120)

performance according to the class. Table 2 highlights that in cases of the renovation of an interior lighting system, including a smart lighting control for an office building, it is possible to obtain an energy saving of around 30%.

Smart Outdoor and Street Lighting

Smart lighting systems in smart cities enhance public safety and energy efficiency by detecting hazards, managing traffic, and adjusting lighting based on occupancy. They support vehicle communication, optimize traffic flow, and provide real-time information, such as parking availability. Key benefits include reduced energy use, lower light pollution and improved road safety, especially with the adoption of LED technology.

The European standard EN 13201 defines criteria for road lighting to ensure safety, visual comfort, and energy efficiency. Lighting categories are determined through risk analysis and consider factors like traffic flow, visual complexity, and environmental brightness. The standard sets minimum photometric requirements such as luminance, uniformity, and glare control. Adaptive lighting—introduced in the standard—allows lighting levels to adjust in real time based on traffic, weather, and ambient light. This enables energy savings by reducing lighting during low traffic periods without compromising safety.

An adaptive lighting system automatically adjusts the lighting level based on various factors, such as brightness, traffic, and weather conditions. This type of lighting offers several advantages, including greater safety, energy savings, and better visual comfort for drivers.

SMART LIGHTING SYSTEM REGULATIONS

The regulation plays a major role in this space where there are lot of options for the designer and user. Standard protocols are widely used in smart lighting systems to ensure compatibility between different devices. The DALI protocol is described in the International Standard IEC 62386-101:2022, “Digital Addressable Lighting Interface – Part 101: General Requirements – System Components”. The European Standard EN 50090 covers HBES, which includes any combination of electronic devices linked by a digital transmission network for automated, decentralized, and distributed process control in residential and commercial building applications, including lighting controls. The KNX protocol, approved by the European Committee of Electrotechnical Standardization (CENELEC) at the end of 2003, is the European Standard for generic HBES according to EN 50090. It is also included in the international standard EN 13321-1, “Open Data Communication in Building Automation, Controls, and Building Management – Home and Building Electronic System – Part 1: Product and System Requirements”. In 2006, KNX was adopted as the international Standard ISO/IEC 14543-10:2020, “Information Technology—Home Electronic Systems (HES) Architecture Part 3–10: Amplitude Modulated Wireless Short-Packet (AMWSP) Protocol Optimized for Energy Harvesting—Architecture and Lower Layer Protocols”. Wireless protocols are included in Standard IEEE 802.15, “Working Group for Wireless Specialty Networks (WSN)” and Standard IEEE 802.15.4-2020, “Standard for Low-Rate Wireless Networks Amendment: Privacy Enhancements”. Interior lighting systems must be designed according to Standard EN 12464-1:2021, “Light and Lighting – Lighting of Workplaces – Part 1: Indoor Workplaces”, which defines the performance and minimum characteristics of the lighting installation. External road lighting systems must be designed according to Standard EN 13201, “European Standard Road Lighting – 2015,” organized into five parts:

- Part 1: Selection of Lighting Classes
- Part 2: Performance Requirements
- Part 3: Calculation of Performance
- Part 4: Methods of Measuring Lighting Performance
- Part 5: Energy Performance Indicators.

The energy performance of lighting systems can be analyzed by Standard UNI EN ISO 52120-1:2021, “Energy Performance of Buildings – Contribution of Building Automation, Controls, and Building Management – Part 1: General Framework and Procedures”, which replaced the European standard UNI15232, “Energy Performance of Buildings – Impact of Building Automation, Controls, and Building Management”. Minimum standards for smart lighting systems refer to Standard EN 15193-1:2021, “Energy Performance of Buildings – Energy Requirements for Lighting”.

CONCLUSION

This article presents a smart LED design ecosystem starting from introduction to

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open communication protocols: wired and wireless. Wired solutions are more stable in terms of efficiency and speed and are not subject to interference, while wireless networks are easily extensible, easily scalable, and have lower costs. Control systems allow users to monitor and adjust lighting levels, colour, and other settings and can make a significant contribution to safety and energy savings. The combination of LED luminaires with smart lighting controls permits the maximum optimization of the energy efficiency of the system. In fact, energy efficiency is a primary goal as smart lighting systems use advanced technologies to optimize energy consumption, reduce waste, and reduce costs.

As already noted, safety and security of people and property are essential, as smart street lighting systems provide them thereby reducing the risk of accidents. Intelligent lighting systems implement multiple functions based on the traditional active and interactive actions of light to be transmitted as electromagnetic radiation that contributes to safety in movement and the perception of natural and anthropic obstacles and dangers. It is necessary to combine the innovation of components equipped with intrinsic active intelligence with the functional performance of the structures of the overall system, the general objectives of continuity of service, energy saving, the protection of health and privacy of people, interactivity, and the needs of smart cities and smart roads.

Intelligent lighting systems use various methodologies that include both standard protocols, intelligent methods, control systems, and sensors and allow interoperability between products from different manufacturers. They offer flexibility and a wide selection of simplified updates and implementations to the installed systems, control systems or means of transmission of protocols have characteristics of efficiency, distance limits, and communication speed.

AUTHOR: AMAN JHA, PHD (IIT DELHI), SENIOR MEMBER, IEEE , GENERAL MANAGER, HAVELLS LIGHTING

Second GB Meeting of 2025 held at Mumbai

The 2nd Governing Body Meeting of the year 2025 was held on 3 June 2025 at Polycab Office, Mumbai, and this event was sponsored by M/s. Polycab India. 30 participants representing ELCOMA members, mostly from the GB were present in the meeting. In this meeting, the newly joined members were invited for introduction. The meeting started with senior officials from BIS making a detailed presentation on the upcoming mega event on IEC General Meeting which will be held in Delhi in September 2025. Mr. Parag Bhatnagar, President of ELCOMA, thanked the BIS team and then formally proceeded to start the meeting, after reading the minutes of the previous Governing Body meeting held on 24 January 2025, which was approved. After the President's address, Mr. Amal Sengupta, Secretary General of ELCOMA read out Secretary's points to the GB. The committee reports were presented by Mr. Nitish Poonia. There was an enthralling discussion on ELCOMA Board's vision and the key objectives with maximum participation by members.

The meeting came to an end with a vote of thanks by the President. Mr. Parag Bhatnagar volunteered to sponsor the next GB by Havells, which will be held in New Delhi in August 2025.

IEC General Meeting 2025 – Opportunities for the Indian Lighting Industry

Bureau of Indian Standards (BIS), the national standards body of India, also represents India at International Electrotechnical Commission (IEC) and International Organization for Standardization (ISO), ensuring that the standards published at international level are in line with the national requirements.

BIS is hosting the prestigious 89th edition of IEC General Meeting from 08 to 19 September 2025 in New Delhi which will be a congregation of events that will bring together experts from across the globe. Organizing IEC's flagship event, the IEC General Meeting in India holds enormous significance, as it positions India as one of the leading voices in the matters of International Standardization in the electrotechnical sphere. One of the prime objectives of hosting this event will be to provide the Indian Industry the chance to make the most of the opportunities to shape international standards, network and collaborate with the global technological powerhouses, and showcase the advancements made by the Indian Industry to the world. Also, the presence of global experts will be utilized to gain insights on technological advancements and global best practices in the various workshops on emerging topics scheduled during the GM.

PROGRAM SCHEDULE FOR IEC GM

International Electrotechnical Commission (IEC) is an international standards organization publishing globally relevant International Standards for all electrical, electronic and related technologies, with a membership of over 160 countries. The Indian National Committee of IEC, responsible for India's participation in IEC, is managed by Bureau of Indian Standards (BIS).

India participates actively in the IEC affairs. At present, India holds the Vice Presidency of IEC, and is also represented in IEC's governance bodies such as IEC Board, the core executive body of IEC, Standardization Management Board (SMB), the body overseeing management of IEC's standards work and other important bodies such as Market Strategy Board (MSB), Business Advisory Committee (BAC) and Governance Review and Audit Committee (GRAC). India is also Participating member in 129 Technical Committees, and Observing Member in 51 Technical Committees.

EVENTS SCHEDULED DURING IEC GM 2025

During the GM scheduled to be held in September 2025 in New Delhi, in addition to the Management and Governance meetings, over 40 Technical Committee and their sub-group meetings, workshops on several themes relevant to sustainability and an exhibition comprising of exhibitors from the electrotechical sector are scheduled to be held.

TECHNICAL COMMITTEE MEETINGS

The Technical Committees and their sub-groups will deliberate on the various standards under development. Making most of the opportunity of having the meetings in India, the Indian Industry can consider nomination of subject matter experts in the relevant Technical Committees to participate as observers, and receive a first-hand exposure to see international standard formulation work. Further, Industry may also consider identifying the experts who are in a position to offer long term commitment for participation in IEC's standardization work in the relevant fields, and nominate them as designated experts from India in such ongoing and future projects.

Of particular interest to the Lighting sector could be the Technical Committees IEC TC 59 - Performance of household and similar electrical appliances and IEC TC 61 - Safety of household and similar electrical appliances and their related sub-groups.

The IEC has also published a map for standards (which can be viewed at https://mapping.iec.ch/#/maps/102) on the safety and performance of household appliances. This map provides an

Event	Dates	Venue
IEC Management Meetings	15 - 19 September 2025	• Bharat Mandapam
Technical Committee Meetings	08 -19 September 2025	• India Habitat Centre • India International Centre • BIS Headquarters, New Delhi
Workshops	08 -19 September 2025	• Bharat Mandapam • India Habitat Centre • India International Centre
Exhibition	15 -19 September 2025	• Bharat Mandapam

overview of the safety and performance standards developed by the IEC that are available for a given type of electrical appliance.

Moreover, several projects of relevance that are ongoing under both the Committees will be discussed in their Plenary and sub-groups meetings during IEC GM in September 2025, and the Indian Industry will have a great opportunity to participate and shape the international standards by putting forth viewpoints based on national context.

It will therefore be a great opportunity for the Indian Industry to not only shape International standards, but offer long-term commitment for the cause of international standardization.

WORKSHOPS

During the GM, workshops on several emerging areas are also scheduled to be held. The list of workshops scheduled to be held during IEC GM is as follows:

- Low voltage direct current symposium from 10 - 11 Sep 2025
- Brain computer interface and Quantum Technology Joint Workshop on 12 Sep 2025
- Electricity and safety in the 21st century on 12 Sep 2025
- Fostering a sustainable world on 15 Sep 2025
- Artificial Intelligence for Bharat: Shaping the Future with Innovation on 16 Sep 2025
- Connecting the World: Standards & Innovations in Fiber Optics on 16 Sep 2025
- All-electric and Connected Society on 18 Sep 2025
- Smart standards – Value for Industries on 19 Sep 2025

The workshops have been curated in a way to cover relevant topics in the form of panel discussions, comprising of a mix of Indian as well as international experts as panelists.

EXHIBITION

The GM will witness the participation of global technological leaders, Senior Management of other National Standards Bodies and High-level Government functionaries. This will offer a great opportunity for the Indian Industry to showcase its technological prowess to the world.

With this view, an exhibition is scheduled to be organized from 15 - 19 Sep 2025 during the IEC GM, where Indian Industry (including startups at the incubation stage) and Research Institutes will also be given an opportunity to showcase latest innovations from the electrotechnical field to the international standardization community, and which will also present a very good opportunity to network with representatives from leading Fortune 500 companies from the electrotechnical sector.

The following Pavilions will be part of the exhibition:

- Electric Lamp and Component Manufacturers (ELCOMA) Pavilion
- Indian Electrical and Electronics Manufactures' Association (IEEMA)Pavilion
- Society of Indian Automobile Manufacturers (SIAM) Pavilion
- Start-Up Pavilion
- BIS Pavilion

This will present a very good platform for fostering meaningful dialogue with the visiting international representatives from Industry and other stakeholder groups such as consumers, laboratories, etc., and offer opportunities for future partnerships.

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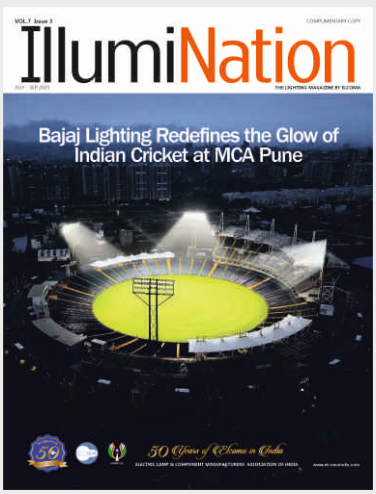
For further information, please contact International Relations Department at iecgm2025@bis.gov.in



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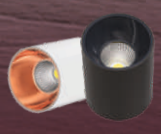

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Reclaiming the Night: Tackling Light Pollution in the Age of LEDs

As our world becomes increasingly urbanized, the demand for artificial light has grown in lockstep. LED technology, with its high efficiency, connectivity, and low maintenance, has become the preferred solution for illuminating our expanding cities. While essential for safety and visibility, the widespread adoption of poor-quality LED lighting presents a significant challenge: light pollution, which threatens our view of the cosmos, disrupts ecosystems, and wastes energy.

THE DARK SIDE OF LIGHT

The glow of artificial light that blankets our cities has far-reaching consequences.

- **For Science:** A clear, dark sky is fundamental for astronomers. The increasing "sky glow" from urban centers obscures the cosmos, hiding stars and planets and hindering scientific discovery.
- **For Wildlife:** The natural world, finely tuned to the cycles of day and night, is severely disrupted. Migrating birds are drawn off course by bright cities, often leading to exhaustion and death. Newly hatched sea turtles, which rely on the moon's reflection on the water to find the ocean, can become disoriented by coastal lighting and crawl inland. Young salmon navigating freshwater rivers to the sea can have their migration patterns disturbed. Insects and moths, vital pollinators, are fatally attracted to bright lamps.
- **For the Environment:** Light pointed uselessly at the sky is wasted light. This inefficiency translates directly into wasted energy, contributing to increased CO_2 emissions and other atmospheric pollutants.

FINDING THE RIGHT BALANCE: PRINCIPLES OF RESPONSIBLE LIGHTING

Simplistic solutions, such as turning off lights completely, are often impractical as they can compromise public safety. The key lies not in eliminating light, but in using it intelligently. This approach is built on four key principles:

- **Conserve:** Use light only when and where it is required. Implement time schedules and motion detection to maximize energy savings.
- **Contain:** Direct light precisely onto the intended surface to prevent light spillage into unintended areas, including the sky.
- **Control:** Dim lighting to a level that is no brighter than necessary to ensure safety and visibility.
- **Colour:** Use warm white light where possible, limiting the amount of shorter-wavelength blue and violet light, which is more disruptive to wildlife and contributes more significantly to sky glow.

THE SCIENCE OF SMART LIGHTING

Building on these principles, recent research has led to the development of new spectral solutions that preserve the dark sky while meeting urban needs. For example, some regulations defined by astronomical institutes now specify that a luminaire's spectrum must meet strict criteria, such as at least 86% of the total radiance must be located between 550 nm and 700 nm (the amber to red part of the spectrum) and there must not be any singular emission below 500 nm (the blue-green part of the spectrum) higher than 1/50th of the highest emission peak.

To enforce such standards, international organizations have developed robust measurement systems. The two primary bodies are the International Commission on Illumination (CIE), whose recommendations form the basis for European standards, and the International Dark-Sky Association (IDA), which works in combination with

the Illuminating Engineering Society of North America (IESNA).

A key tool used by the IDA and IESNA is the BUG rating. This system classifies a luminaire's potential for light pollution by measuring its light output in three zones:

- B (Backlight): The backward-facing light, which can cause light trespass onto adjacent properties.
- U (Uplight): The light directed above the luminaire, which is the primary cause of sky glow.
- G (Glare): The forward-facing light at high angles, which can cause disabling glare for drivers and pedestrians.

Each zone is rated on a scale from 0 (best) to 5 (worst). For example, a luminaire with a BUG rating of B2 U0 G1 has good control over uplight (U0) and glare (G1) but mediocre control over backlight (B2). It is crucial to note that the BUG rating is based on absolute lumen values, meaning a lower-wattage lamp will inherently achieve a better rating.

A BEACON OF HOPE: THE CANARY ISLANDS

The Canary Islands, home to several renowned observatories, offer the clearest night skies in Europe. Here, the quality of the sky is protected by Spanish law, which mandates that municipalities actively implement measures to mitigate light pollution, proving that development and dark skies can coexist.

Optimal urban lighting requires a delicate balance between the safety and comfort of people, energy efficiency, and ecological considerations. The good news is that the right technology and design principles exist today. The responsibility now falls to city leaders to set the right requirements and implement these solutions, with a clear understanding of the profound impact that light has on our environment.

AUTHOR: MEGHA SONI, SIGNIFY INNOVATIONS INDIA LTD.

World Metrology Day

The food we eat, the clothes we wear,
In every single way, measurements matter.
But in daily life, we often don't see,
The impacts of metrology on you and me.

The measurement of length, the temperature, the weight,
The time, the electricity, the mole and the light.
Metrology ensures, that we get every parameter right,
And protects us, from unfair practices making law tight.

In healthcare, precise measurements save lives,
The right dose of medicine, and the right diagnosis that thrives.
In transportation, accurate measurements guide,
Ensuring safety in the skies with pride.

In the world of light, where brightness is the key,
From LED bulbs to fixtures, the guiding force is metrology.
The measurements of lumens and lux ensure standards,
Performance of lighting systems ensures safety standards.

On roads that shine, with bright headlight,
Metrology's role, is the main highlight.
Taillights signal, with accuracy anew,
In automotive lighting, precision is the key,
Ensuring safety, for you and me.

Measurements matter, in every single way,
In science, trade and economy to sway.
Standardization is the key, to global unity,
Mighty is the science, that talks metrology.

Quality and safety, is the heart of every single test,
Metrology ensures, good, better and the best.
In environment, innovation, mathematics and technology,
Accurate and precise measurements, uplift the quality.

One science, one world,
Metrology is the only thread, that binds the world.
All countries together, take a pledge of unity,
Which shows, the importance of metrology.

On May 20th, we celebrate with pride,
World Metrology Day, that measurements guide.
A day to honour the science so great,
That brings precision and accuracy, changing human's fate.

On World Metrology Day, adopt its practical assessment,
In various fields, by promoting research and development.
Explain the importance of metrology, its uses to sing,
By serving humanity, by raising the standard of living.

A poem by Dr. J.K. Jain, CMD, Fiem Industries Limited and Dr. Hem Chandra Kandpal, Vice President R&D, Fiem Industries Limited

Advancing Lighting Technology through Standardization

Revisions and New Developments in Indian Standards

Lighting plays a critical role in ensuring safety, enhancing productivity, improving visual comfort, and enabling energy efficiency across residential, commercial, and public infrastructure. As lighting technologies continue to evolve rapidly, there is a parallel need for standards to keep pace with advancements, support innovation, and safeguard consumer interests.

Bureau of Indian Standards is the National Standard Body of India established under the BIS Act 2016 for the harmonious development of the activities of standardization, marking and quality certification of goods and for matters connected therewith or incidental thereto.

ETD 23 'Lamps & Related Equipment' & ETD 49 'Illumination Engineering & Luminaires' sectional committees of Bureau of Indian Standards has been actively engaged in revising key Indian Standards in the lighting sector and developing new ones to address emerging application areas.

MAJOR REVISIONS OF EXISTING STANDARDS

A number of important Indian Standards that form the backbone of lighting product safety, performance, and application are currently undergoing revision to align with the latest global developments and field requirements:

a) IS 16102 Series: Self-ballasted LED lamps for general lighting services- Safety & Performance

Part 1- Safety Requirements – Key Changes

- Scope expanded to cover lamps up to 60 W, including rechargeable and smart LED lamps.
- Added requirements for photobiological safety, abnormal operating conditions, and ingress protection.

Part 2 - Performance Requirements – Key Changes

- Scope extended to include higher wattage lamps.
- Defined minimum performance requirements (life, efficacy, CRI).
- LM-80 data introduced for lumen maintenance.
- Marking requirements updated and CRI consistency maintained.
- Sampling and passing criteria revised for better compliance evaluation.

b) IS 16103 Series: LED modules for general lighting- Safety & Performance

Part 1- Safety Requirements- Key Changes

- New definitions introduced for replaceable, non-replaceable, and non-user-replaceable LED modules.
- Marking clause restructured with an added informative table and revised requirements, especially for built-in modules and working voltage.
- Additional safety provisions related to luminaire design in contact with water and working voltage.
- Abnormal temperature test introduced to assess safety under fault conditions.

Part 2 - Performance Requirements – Key Changes

- Updated terms and definitions, especially regarding failure mechanisms
- Enhanced EMC provisions with references to harmonic current requirements
- Modification in requirements on luminous efficacy, family concept
- Addition of new requirements for lumen maintenance
- Provision to consider 500 hours as ageing time for electrical characteristics.

c) IS 16614 Series: Double- Capped LED Linear Lamps – Safety & Performance

Part 1 – Safety Requirements – Key Changes

- Modification in the Group Guideline of Double-capped LED Lamp (see Table 1)
- Addition of photo biological safety hazard testing

Part 2 – Performance Requirements – Key Change through amendment

- Introduction of IS 16105 for lumen maintenance and maintained chromaticity coordinates data for the derivation of maintained values at 6 000 h

d) IS 10322 series 'Luminaires'

As one of the foundational standards, this series is being comprehensively revised to reflect latest trends in luminaire design, efficiency, ingress protection, thermal management, and user safety.

Part 1 general requirements and tests-

Aligned with latest IEC 60958-1 with modification in the ambient temperature conditions, Supply Cord and wiring dimensions.

Part 5 Particular Requirements (all sections)- Aligned with respective latest IEC Publications.

e) IS 3646 (Part 1): Code of Practice for Interior Illumination

This revision has been undertaken to include recommendations for lighting in the following areas:

- Traffic zones inside buildings
- Logistics and warehouses
- Industrial activities and crafts
- Offices
- Retail premises
- Places of public
- Educational premises
- Health care premises
- Transportation areas

f) IS 1944 'Code of Practice for Lighting of Public Thoroughfares'-

- Consolidation of Parts: Parts 1, 2, 5, 6, and 7 have been merged into a single comprehensive standard covering:

- Motorized roads, junctions, roundabouts

- Toll plazas, bus/truck bays

- Pedestrian zones, cycle tracks, outdoor car parks

- Underpasses and tunnels

- **Expanded Coverage:** Incorporates road categories per IRC standards, with relevance to National and State Highways, urban and smart city roads, and addresses practical challenges faced by stakeholders like concessionaires, consultants, and developers.
- **Updated Luminaire Classification:** Replaces old classification (cut-off types) with Spread, Throw, Control per IS 10322-5-3, and includes ANSI/IES IES Types (I–V, VS) and BUG ratings for sustainability.
- **Technical Enhancements:**

- Recommended luminance and illuminance values by road type

- Standardized calculation and measurement methods

- Guidance on luminaire parameters and smart lighting

- Introduction of light pollution and night-time impact concepts

g) National Lighting Code, SP 72

National Lighting Code has been taken up for revision to integrate the significant advancements that have occurred in the field of lighting over the past decade such as LED lighting technology, smart lighting systems, Advance lighting strategies in specialized applications such as horticulture, heritage sites, healthcare, tunnels, and more. The updated code (currently under revision) will encompass 15 parts and 45 sections.

UPCOMING REVISIONS

a) IS 15885 (Part 2/Section 13): Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules)

A revision of this standard is planned to align with international practices and address compatibility and safety issues.

b) IS 16107 (Part 2/Section 2) : Performance requirements of LED lamps for general lighting

Updates are planned to reflect improvements in efficacy, colour rendering, lumen maintenance, and dimming compatibility.

NEW AREAS OF STANDARDIZATION

In addition to revising existing standards, Indian Standards on new application areas that require clear guidelines for safety, performance, and durability are under development:

a) Luminaires for Swimming Pools and Similar Applications (IEC 60598-2-18)

This new standard specifies the requirements for fixed luminaires intended for use in water, or in contact with water, in, for example, the basins of swimming pools, fountains, paddling pools, and garden pools, and for use with electric light sources.

b) Lighting System Characteristics for Selected Outdoor Applications (IEC TR 63540:2024)

This new standard aims to provides an overview of configuration, interfaces with other devices, communications, control strategies and characteristics of various outdoor lighting systems with relevant functionalities. Applications selected for inclusion are:

- outdoor parking area lighting;
- road and street lighting;
- pedestrian and cycle pathways lighting.

CONCLUSION

The ongoing standardization work in the field of lighting reflects a comprehensive effort to align Indian Standards with emerging technologies, global best practices, and evolving user needs. For the effective implementation of these standards, active involvement and support from the lighting industry—including manufacturers, designers, testing agencies, and system integrators—is crucial. Their engagement will ensure smoother adoption, wider compliance, and the delivery of high-quality, reliable, and future-ready lighting products.

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Signify transforms 78K+ lives in Andhra Pradesh through Har Gaon Roshan CSR initiative

In line with its #BrighterLivesBetterWorld vision, Signify has illuminated 230 villages in Parvathipuram Manyam district, Andhra Pradesh, under its flagship Har Gaon Roshan CSR initiative. This transformative project has brought sustainable lighting solutions to 17,766 families, positively impacting over 78,200 lives across the region.

The project was officially inaugurated in a ceremony attended by Shri Shyam Prasad, IAS (District Collector, Parvathipuram Manyam), alongside senior leadership from Signify and implementation partner Jana Kalyana Samakhya (JKS). The project implementation, carried out in partnership with grassroots NGO Jana Kalyana Samakhya (JKS), involved community engagement to ensure the outdoor lighting solutions were optimally placed and properly maintained. Local community members were trained in basic maintenance of the lighting systems, creating a sustainable model for long-term impact.

Nikhil Gupta, Head of Marketing, Strategy, Government Affairs & CSR - Signify, Greater India, said, "Access to reliable lighting is a cornerstone of development—it empowers individuals, strengthens communities, and drives progress. With Har Gaon Roshan, our aim goes beyond infrastructure; we are enabling safer environments, better learning outcomes, and economic opportunities. Each installation reflects our enduring commitment to sustainability, social impact, and our belief in the transformative power of light to create brighter lives and a better world."

The Har Gaon Roshan CSR initiative taps villages in remote and underserved regions where electricity infrastructure is available, but adequate outdoor lighting is still lacking. By leveraging energy-efficient LED lighting solutions, the program provides sustainable illumination that requires minimal maintenance while delivering maximum impact. This milestone in Andhra Pradesh represents a significant advancement in Signify's ongoing commitment to illuminate rural India.

The Har Gaon Roshan CSR initiative has already brought light to a host of villages across India. This collaborative effort has been carried out with active support from the district administration and village representatives, bringing together various stakeholders to realise a shared goal of rural empowerment through lighting.

AUTHOR: SIGNIFY INNOVATIONS INDIA LIMITED

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Philips Sparkle - Made from robust material, it is going to stand the test of time, while its French gold body color and amber color glass tubes mesmerize our customers exuding beauty and charm. With a diameter of 80 cms and a max height of 6 feet, it is definitely the grandest chandelier ever from Signify.

This remarkable new addition to our portfolio is a testament to our continuous endeavor to deliver the best of innovations to customers across India and our vision for how light can transform spaces. Designed not just to illuminate, but to command attention and create unforgettable experiences, it truly sets a new standard for monumental design. We invite you to discover how this latest innovation from Signify will elevate interiors, becoming a beacon of unparalleled sophistication and a symbol of our leadership in the lighting industry.




Bajaj Launches Velaris Wall Light Series – Where Décor Meets Illumination

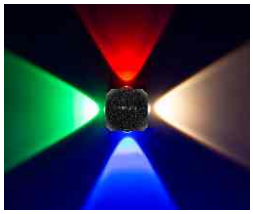
Bajaj Lighting introduces the Velaris Wall Light Series, a bold and stylish leap into the world of outdoor décor lighting. Designed for discerning consumers and design-conscious professionals alike, the Velaris range blends high-performance LED technology with contemporary aesthetics, offering a sophisticated solution for outdoor spaces. Velaris offers lighting that's as beautiful as it is functional. From guiding guests to setting the perfect evening mood, the Velaris Wall Light Series is a shining example of how lighting can be smart, stylish, and spirited.

Crafted with versatility in mind, the Velaris Wall Light Series offers

- Multiple Lighting Configurations : 2 Way, 4 Way, 6 Way, and 8 Way lighting options to suit diverse lighting needs and effects.
- Dynamic Colour Options : vibrant lighting combinations including Red, Blue, Green, and Warm Day Light (WDL).
- Contemporary Form Factors : Available in Oval, Square, and 'K' shapes
- Compact, Wall-Mounted Design : Designed to make a big impression with a small footprint—perfect for both expansive walls and cozy nooks.

Velaris doesn't just light up a space—it elevates it. The modern design adds a refined aesthetic to exteriors, making it a preferred choice for homeowners, architects, and lighting consultants. It is perfect for areas where soft, directional lighting is desired, Velaris enhances ambiance without overwhelming the senses. From chic apartment balconies and garden pathways to boutique resorts and public corridors, Velaris adapts to every environment with ease and with robust LED technology, Velaris promises energy efficiency, low maintenance, and long-lasting brilliance.






Luker Electric Launches New Industrial LED Lighting Range with 5-year Warranty

Luker Electric Technologies recently introduced a new range of industrial LED lighting solutions designed for reliability, energy efficiency, and durability. The lineup includes FARO Well Glass LED Lights, AVIOR High Bay LED Lights Outdoor, ALCOR LN5Y LED Flood Lights, and STRADA LN5Y LED Street Lights, all backed by a 5-year warranty.

FARO Well Glass LED Lights : These weather-resistant lights are perfect for harsh environments, providing durable illumination for warehouses and outdoor spaces. They offer high efficiency with a long lifespan of up to 50,000 hours.

AVIOR High Bay LED Lights : Designed for large spaces with high ceilings, AVIOR lights deliver superior brightness while reducing energy consumption. Their versatile design ensures optimal coverage and long-lasting performance.

ALCOR LN5Y LED Flood Lights : Ideal for outdoor applications like construction sites and sports fields, these floodlights offer high brightness and energy savings, with robust, weather-resistant construction for reliable performance.

STRADA LN5Y LED Street Lights : These smart street lights ensure uniform illumination for roads and highways, enhancing visibility and reducing energy use. They are durable, weather-resistant, and perfect for municipal lighting.

Just About Power Launches 150W Driver

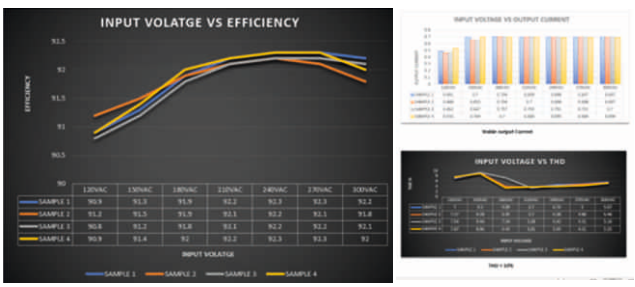
JAP-Just About Power, has introduced a revolutionary new 150W driver that is set to redefine the lighting industry. This innovative driver stands out for its compact design, remarkable efficiency, and budget-friendly pricing, making it an ideal choice for lighting manufacturers looking for quality and cost-effectiveness.

JAP's latest 150W driver has been meticulously designed, developed, manufactured, and tested entirely in India and what makes this product truly exceptional is its approximately 20% reduction in size and 20% reduction in cost compared to conventional drivers—all achieved without compromising on quality. Efficiency is a crucial factor in power drivers, and JAP has successfully engineered this model to deliver an impressive efficiency rating of up to 93%. This high efficiency ensures minimal energy loss, making it the perfect choice for leading lighting manufacturers striving for sustainability and performance.

JAP's 150W driver delivers a consistently stable output current while keeping Total Harmonic Distortion (THD) below 10%, ensuring clean and reliable performance. The driver demonstrates its exceptional durability by successfully withstanding a 6KV surge test. This rigorous test is conducted in both common and differential modes, starting at 3KV and increasing in 0.5KV increments every 25 seconds. With five pulses applied to both polarities at each level, JAP's driver ensures robust protection and reliable performance in demanding conditions.

Thanks to JAP's complete in-house design and development process, customers can request modifications to meet their specific requirements. Additionally, there is an option for a ripple-free design, ensuring smooth and consistent operation for even the most demanding applications.

Engineered with an innovative design, it not only meets all test parameters but also offers exceptional quality at a competitive price, making it a smart and reliable choice for any application.



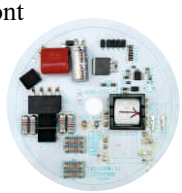
GANIT Launches DCOB Technology

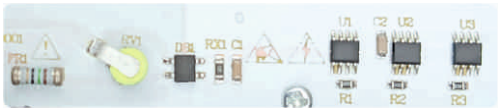
GANIT recently introduced DCOB (Driver Component on Board) technology, which according to them is a revolutionary advancement that surpasses the current DOB (Driver on Board) technology widely used in the industry today.

In a DOB setup, the components are mounted with Linear IC Based Technology on LED board and it provides full wattage/output properly only between 220-230V. Since the power conditions in India vary between 90-270V, DOB designs face challenges in these trying conditions

With DCOB, all essential components that are required in a Driver circuit are completely mounted on the MCPCB, which allows the LED luminaire to be operated in a voltage range of 85-285V with full wattage and output. This gives DCOB a clear edge over DOB systems. DCOB technology also offers significant space-saving advantages. By mounting the driver on the board, DCOB offers smaller, more versatile fixtures without sacrificing performance. The improved thermal management capabilities of DCOB ensure that the LEDs can operate at their ideal temperature, delivering better lumen maintenance and higher color stability throughout the lifespan of the product.

Though DOB solutions may seem more cost-effective upfront due to their linear circuit, the long-term operational costs of DCOB-based systems prove to be far superior. DCOB lamps and luminaires require fewer replacements, which in turn reduces waste.





GANIT offers a wide range in DCOB Technology ranging from 10W to 400W in regular CCTs and color configurations. They also offer RGB models with remote capabilities.

According to GANIT, DCOB technology is not just an upgrade; it's a game-changer and they are proud to be at the forefront of this evolution, setting new standards for what's possible in LED lighting.

Sanjay Sachdeva Appointed as MD and CEO at Bajaj Electricals Limited

Bajaj Electricals Limited announced the appointment of Mr. Sanjay Sachdeva as the Managing Director and Chief Executive Officer, effective from 15th April 2025.

Joining Hindustan Unilever as a Management Trainee in 1989, Sanjay spent over three decades at the conglomerate, moving across various marketing, sales, and general management leadership roles. Through his over thirty-years long tenure at Unilever, he has held key leadership positions across Brazil, China, the Middle East, North Africa, Turkey, and Russia. His latest assignment with the organisation was with Unilever Japan, where he held the position of Managing Director and Chief Executive Officer.

In his new role at Bajaj Electricals, Sanjay would be responsible for managing all the business verticals and their operations.

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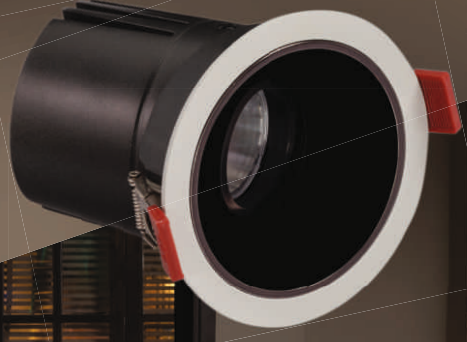

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