



LEAD BY LED

LIGHT EMITTING DIODE (LED) LIGHTS ARE CHANGING THE DIMENSIONS OF LIGHTINGS IN INTERIOR SPACES BOTH AESTHETICALLY AND ECOLOGICALLY.

BY BINDU GOPAL RAO

Set up a focal point with LED lights



1. Alok Hada, Director, Anusha Technovision



2. Vikas Gandhi, President and Business Head – Lighting (Tisva), Premium Fans, and Water Solutions Business, Usha International.

3. An LED chandelier steals attention in this gorgeous home by Anusha Technovision

LED lighting has developed swiftly over the past few decades and has come a long way with numerous transitions and upgrades. With the ever-evolving technology and the growing trends in the lighting domain, new features are included in making energy-efficient options infused with hi-tech features.

NEW TAKE

In the lighting space, LED technology has emerged as the frontrunner as the preferred choice for customers. It's the fastest growing segment and the technology that powers LEDs is evolving at a very fast pace offering newer and better products. The new features of LED lighting include higher brightness, lower wattages, lighting connected to the internet, Bluetooth, and the like. The lighting industry has been going through a transformation for the past couple of years. The introduction of LED-based systems enables increased control capabilities like switching and dimming and reduced operational costs and energy consumption. Raja Mukherjee, Business Unit Head, Lighting, Panasonic Life Solutions India Pvt. Ltd. explains, "with a focus on the quality of light, enriched efficiency and data driven acumen, connected lighting systems or CLS draws LED lighting and information technology collectively to take light beyond beam. An emerging class of lighting infrastructure with the ability to collect and share data possesses the power to transform how we live." Human Centric Lighting complements human performance, comfort, health, and well-being by balancing the visual, emotional, and biological benefits of

lighting for humans. "Advances alertness and concentration during learning by providing a better light environment. Flexible and prolific LED strip lights can be used in multiple manners. From wardrobes and cabinets to TV backlighting and stairways LED strip lights can be creatively used to transmit distinctive lighting effects to any space and place. Flexible, small, and adjustable, these strips can often be cut to size," adds Mukherjee.

DESIGN MANTRA

Design innovations include miniaturization which is the ability to install light fixtures in smaller dimensions. While the aperture of the luminaire is reduced in size, the output of light is getting better day by day. This ensures that the number of punctures in the ceiling is reduced and, thereby making the ceiling look clean. Alok Hada, Director, Anusha Technovision Pvt. Ltd. says "if you want to add character to any space or enhance the property's overall value, then LED wall lights or lamps are a great option. Though they were initially designed for garages and entrances they are integral to elevating the decor. With the flick of a remote, you can create mood lighting and an ambient atmosphere. Innovations in shapes are an added advantage, so LEDs in scones or chandeliers offer a seamless shift from traditional to conventional." The pandemic acted as a catalyst for numerous design innovations, and as people spent more and more time at home, personal spaces began taking center stage and getting a lot of attention – and lighting in homes began to get the attention it deserves as a crucial part of not just interiors, but also productivity and wellness. Vikas

Gandhi, President and Business Head – Lighting (Tisva), Premium Fans, and Water Solutions Business, Usha International says, "in the LED lighting space, people have now begun to experiment with varied lighting styles, such as dimmability and tunability or colour-changing. Furthermore, human-centric lighting has gained momentum in the LED space, as there is now a deeper understanding of the physiology, psychology, and philosophy behind it and how it influences one's wellbeing. Anti-glare indirect lighting designs are rising in popularity amongst most architects across homes and in the hospitality sector."

SMART SOLUTIONS

Integrating Lighting using the Internet of Things (IoT) is giving LED lights a tech edge. LED lighting has developed swiftly over the past few decades and has come a long way with numerous transitions and upgrades. With the ever-evolving technology and the growing trends in the lighting domain, new features are included in making energy-efficient options infused with hi-tech features. With a focus on the quality of light, enriched efficiency and data driven acumen, connected lighting systems or CLS draws



COURTESY: PANASONIC LIFE SOLUTIONS INDIA



4

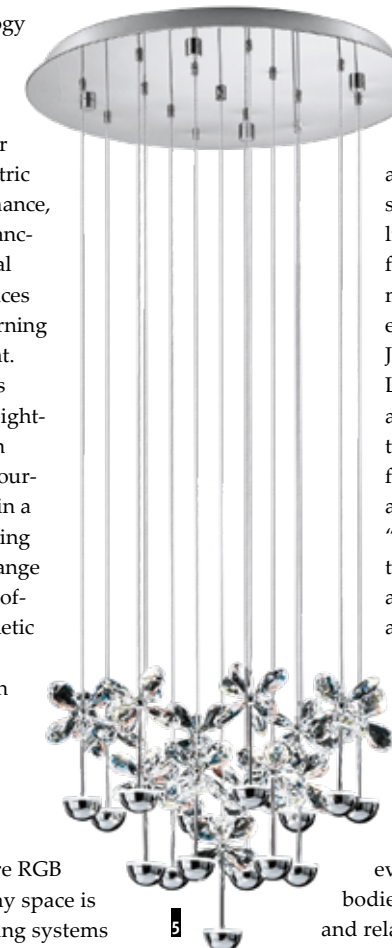


7

LED lighting and information technology collectively to take light beyond the beam. An emerging class of lighting infrastructure with the ability to collect and share data possesses the power to transform how we live. Human Centric Lighting complements human performance, comfort, health, and well-being by balancing the visual, emotional, and biological benefits of lighting for humans. Advances alertness and concentration during learning by providing a better light environment. Anuj Dhir, Vice President and Business Head for Commercial & Institutional Lighting Business, Wipro Lighting, says, "an optimally designed workplace can encourage efficiency, uplift mood, and result in a happier and healthier workforce. Keeping that in mind, Wipro Lighting's Aqua range caters to the artificial lighting needs of office spaces while maintaining the aesthetic quotient of the space." Aqua range of luminaires come with smart integration connected by Analog, Bluetooth, Dali, or Ethernet to provide Human Centric Lighting.

COLOUR FIX

LEDs can be used to produce the entire RGB colour spectrum. Colour-tuning for any space is made easy with controls of your lighting systems



5

via smartphone, tablet, mobile switches or even with your voice. Wipro Lighting has recently launched a stylish range of designer office space luminaire solutions called Aqua that has a range of curved luminaires. The linear sensibilities and modeled shapes of these lights make them major statement pieces for any commercial space. They are easy to mount with adjustable height suspension elevating the appeal of the place. Yogendra Joshi, Senior Manager-Marketing, Endo Lighting India says, "ENDO strives to be an Ethical Solution Company by manufacturing Earth and Human friendly lights for a sustainable society thereby creating a new relationship between "people" and "light". The properties of light enable us to create contrasts between light and shadow and to control the amount and spread of light to give new expressions to architectural spaces. Endo Lighting provide Solutions for displaying any subject – from interior materials, designs to products and even buildings themselves. With Endo's Tunable product line SYNCA artificial light has evolved closer to natural light, enriching our bodies and minds with excitement, liveliness and relaxation".

4&7. Simple and functional LED lights by Panasonic Life Solutions India that offer higher energy saving along with superior colour rendering properties.

5. Unlike other lights, LEDs never dim with time. This gorgeous chandelier by Usha International is a perfect combination of function and aesthetic.

6. Flexible and prolific LED strip lights can be used in multiple manners. From wardrobes and cabinets to TV backlighting and stairways LED strip lights can be creatively used to transmit distinctive lighting effects to any space and place.



3



8. Anuj Dhir, Vice President and Business Head for Commercial & Institutional Lighting Business, Wipro Lighting

9. Sumit Joshi CEO & MD Signify Innovations India Ltd-South Asia

10. Aryaman Jain, CEO, Innovative Lighting Designs Limited (ILD)

11. Modern day LED luminaires are available in a wide range of colour temperatures and an aesthetic that allows them to blend within the space, bringing a sense of warmth and comfort for the users.

12. More and more people are choosing to use smart LED lighting fixtures, and controlling lighting through digital devices like smartphones, tablets, or even through smart assistants (AI), making it super efficient and easy.



COURTESY: ILDL



COURTESY: ILDL

CHANGING TIMES

The lighting industry has evolved rapidly over the last few years. With major advances in technology, LED lighting is now considered ubiquitous thanks to its energy-saving and environment-friendly nature and connectivity potential. India is one of the major countries that has embraced LED lighting technology on a large scale. The initiatives of the Indian government along with product price reductions have surged the popularity of LEDs resulting in its increased adoption across commercial, residential, public sectors, and smart building projects. "With Philips Hue, our smart LED lighting system, consumers can integrate all the lights, sensors and switches in their homes through one app and operate them remotely. Additionally, consumers can create specific scenes for each room and can also sync their lights with movies, games, and music to create a truly immersive

experience. We can expect that by 2030, lighting in your home will be able to synchronize with everything from your doorbell to your television and music and will also be fully adjustable to individual preferences. It will pre-empt consumers' needs and complement their wellbeing," says Sumit Joshi CEO & MD Signify Innovations India Ltd- South Asia (Formerly Philips Lighting India Ltd).

GREEN VIBES

LED lighting fixtures have proven to hold a diverse set of prerequisites affecting the health of both humans and their environment. LEDs do not have mercury content and, hence during disposal, it does not pollute the atmosphere. By providing efficient energy conversion and extended lifespans, these bulbs help to save money on replacement bulbs and electrical energy consumption. Aryaman Jain, CEO, Innovative Lighting Designs Limited (ILD) says, "LED lighting is environmentally friendly and energy-efficient technology and has a far lesser carbon footprint as compared to its predecessors. One of the most important reasons for LEDs being eco-friendly is because they last longer than traditional light bulbs, resulting in lesser carbon emissions and optimum use of resources. LED lights have an excellent light distribution focused on a single direction. This allows the light to spread evenly throughout, reducing the number of lights needed in a particular space. Unlike fluorescent bulbs, LEDs are produced from recyclable materials making them a safe option for the environment." Most LEDs do not emit excessive heat or ultraviolet radiation which can be hazardous to people and the environment at large. The idea of Reduce, Reuse, Refuse and Recycle is gaining momentum within the lighting industry as well as the users and LED lighting is promoting it even further. **A&I**

WEBSITES:

- **Panasonic Life Solutions India:** www.lsin.panasonic.com
- **Anusha Technovision:** www.anushagroup.com
- **Innovative Lighting Designs Limited:** www.ildlimited.com
- **Usha International:** www.lightsbytisva.com
- **Wipro Lighting:** www.wiprolighting.com
- **Signify Innovations India:** www.signify.com/en-in
- **Endo Lighting:** www.endo-lighting.com