Fiberli Express

ISSUE 11
OCTOBER 2026

We are pleased to present our new issue, where we explore the new dimensions of light at the intersection of technology, architecture, and science. As the lighting industry continues to transform through energy efficiency, smart systems, and innovative technologies, Fiberli continues to bring next-generation solutions together with projects around the world.

In this issue, we explore DOT DIAMOND, bringing a new approach to point-source lighting; the Energy Savings Calculator, which allows you to calculate your potential lighting savings; and DMX and RDM, the communication protocols behind smart lighting. We also take a closer look at the story of Baku Tower, Azerbaijan's tallest building, brought to life with light by Fiberli, as well as the potential of 570 nm yellow LED technology in the field of photobiomodulation.

Welcome to the new issue of Fiberli Express. Enjoy reading.

- Next-Generation Point-Source Lighting Solution – DOT DIAMOND
- Energy Savings Calculator: Calculate Your Lighting Savings
- The Communication Language of Smart Lighting: DMX and RDM
- Baku Tower: Azerbaijan's Tallest Building Shines with Fiberli
- 570 nm Yellow LED: Is a New Era Beginning in Photobiomodulation?

Next-Generation Point-Source Lighting Solution
DOT DIAMOND

Bringing a building back to life with light at night is not simply a matter of using a powerful lighting system. It requires the right engineering, reliable technology, and a sustainable design approach.

Point-source lighting systems, particularly those used on the facades of high-rise buildings, are exposed to wind, rain, temperature fluctuations, and challenging environmental conditions throughout the year. Moreover, even a minor failure in these systems can result in significant maintenance costs and prolonged interruptions due to the height of the installation points. In conventional systems, a problem at a single point often requires intervention across a larger part of the system.

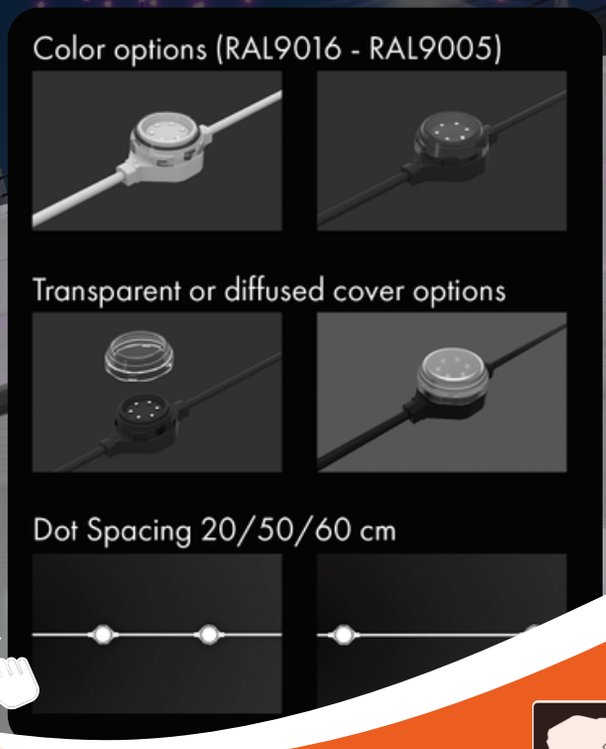
Fiberli Dot Diamond takes a different approach to this challenge.

More Than a Luminaire: A Modular System

One of the key advantages of Dot Diamond is its modular structure, which allows each individual dot to operate independently within the system. If a single dot fails, the entire system continues to operate. The faulty dot can be quickly and easily removed and replaced with a new one without taking the system out of service.

This approach significantly simplifies maintenance, particularly on high-rise facades. There is no need for lengthy interventions, complex maintenance operations, or dismantling the entire system. Maintenance teams can simply intervene at the specific point where it is needed.





Click here to visit product page

Next-Generation Point-Source Lighting Solution
DOT DIAMOND

Less downtime, easier maintenance, and lower operating costs.

Dot Diamond was developed not only for its technical performance but also for its design, which preserves architectural integrity. Thanks to its elegant and compact form, it integrates seamlessly with the building facade without overpowering the architectural character of the structure in daylight.

The next-generation 4-in-1 RGBW LED technology enables rich and impressive lighting scenarios with true-to-life colors. From dynamic animations to smooth color transitions, a wide range of visual scenarios can be designed according to the architectural identity of the building and the specific requirements of the project. In this way, the facade is not simply illuminated; it becomes a medium for communication and an immersive experience.

Dot Diamond also prioritizes ease of installation and operation in facade applications. Its lightweight structure, weighing only 70 grams, helps keep the additional structural load placed on the building to a minimum.

Designed for the Continuity of Light
At Fiberli, a lighting product is more than just a luminaire that produces light. It is part of the entire project lifecycle—from installation and maintenance to service life and visual performance.

Reflecting this philosophy, Dot Diamond stands out as a facade lighting system designed for easy installation, quick replacement, safe operation, and uninterrupted performance.
Because the value of an impressive light show is measured not only by how good it looks, but also by how reliable and sustainable it is.
Dot Diamond. Designed to complement architecture by day, and bring the building to life at night. Engineered to ensure the continuity of light.

Fiberli

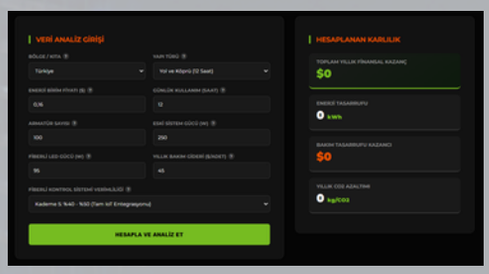


Energy Savings Calculator: Calculate Your Lighting Savings

Converting lighting systems to LED technology can deliver significant benefits in terms of energy consumption, maintenance costs, and carbon emissions. But how much could your project actually save?

The Fiberli Energy Savings Calculator allows you to easily see the potential benefits of switching to high-efficiency Fiberli LED solutions by comparing your existing lighting system with a more efficient alternative.

By entering basic information such as the number of luminaires, operating hours, energy costs, and your current lighting system, you can quickly calculate:



- Your annual energy savings,
- Your financial savings,
- Your maintenance cost advantage,
- Your reduction in CO_2 emissions.
-

Every project has different requirements. That is why seeing the actual benefits of an LED conversion based on your own project data is the first step toward making the right investment decision.

The transformation to a more efficient future starts today.
👉 Calculate your savings potential now: fiberli.com/energy-savings/

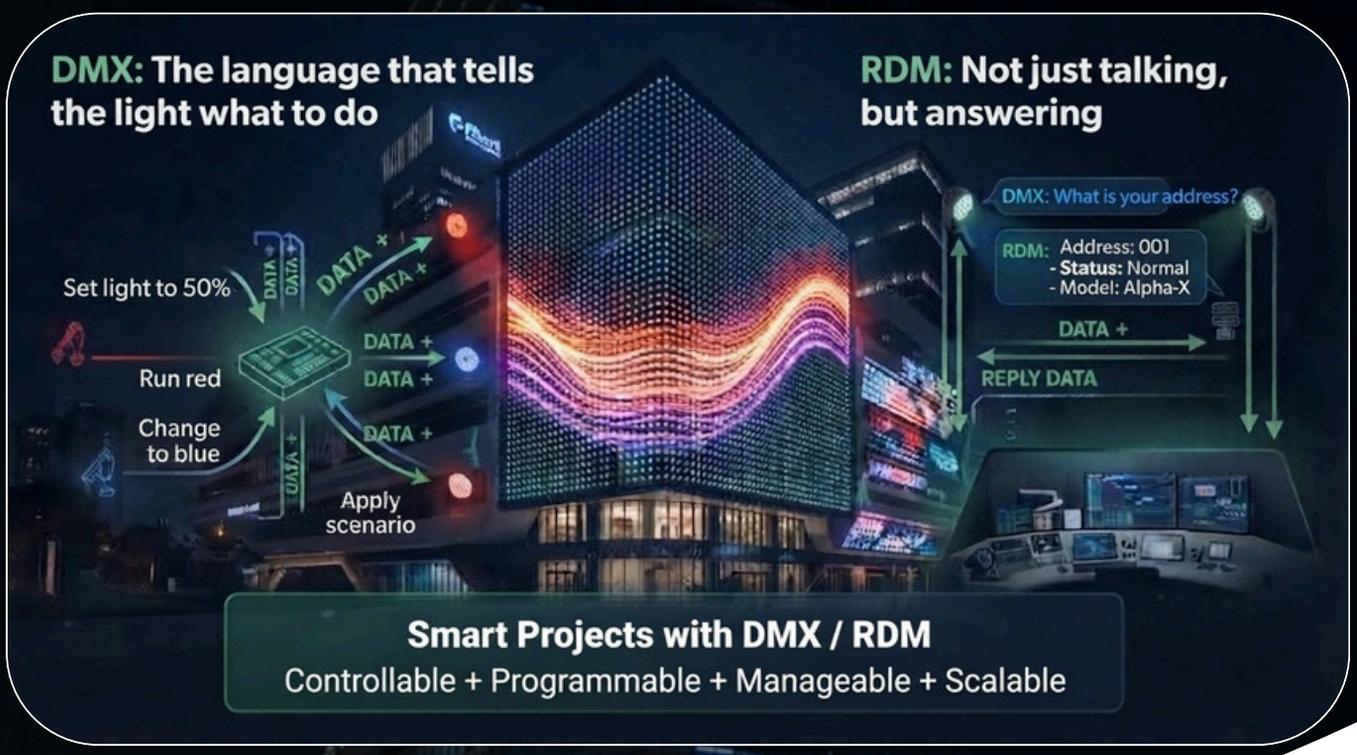


The Communication Language of Smart Lighting: DMX and RDM

Light is no longer simply visible—it can now communicate.

Lighting technology has evolved far beyond simply illuminating a space. Today, the color, intensity, movement, and atmosphere created by light can change according to time, location, and specific needs. Technologies that enable lighting fixtures to communicate with centralized control systems play a key role in this transformation.

This is where DMX and RDM come into play.
So, how can hundreds of luminaires be controlled simultaneously? How are lighting scenes implemented? And how can the status of an individual luminaire be monitored remotely?
The answer lies in the digital communication infrastructure of lighting.



The Communication Language of Smart Lighting: DMX and RDM

DMX: The Language That Tells Light What to Do

Widely used in professional lighting systems, DMX512 is the digital communication language between a control system and lighting fixtures.

A control system can send commands to a luminaire such as:

- “Set the light level to 50%.”
- “Operate in red.”
- “Gradually transition to blue.”
- “Run this lighting scene.”

As a result, lighting systems are no longer simply devices that turn on and off. They become dynamic systems that can be programmed, adapt to different scenarios, and transform the character of a space. Particularly with color-controlled LED luminaires such as RGB and RGBW, DMX enables a wide range of creative and dynamic lighting applications.

Imagine a building...

A facade consisting of hundreds of LED luminaires can operate with different lighting scenarios throughout the day. White light can be used during regular hours, warm tones in the evening, and dynamic color transitions on special occasions.

DMX does not simply tell light to “turn on” or “turn off”; it defines how the light should behave.

RDM: When Lighting Can Respond

While DMX primarily sends commands from the control system to the luminaires, sending commands alone is not enough for large-scale projects.

- Which luminaire is located where?
- Which DMX address is it using?
- What is the device model?
- Is it correctly identified within the system?

The Communication Language of Smart Lighting: DMX and RDM

This is where RDM – Remote Device Management comes into play.
RDM enables two-way communication over the DMX infrastructure, allowing the control system to receive information from compatible luminaires and remotely manage certain settings.

Simply put:
DMX: “Luminaire, set your light output to 70%.”
RDM: “Luminaire, who are you, what is your address, and what is your status?”

For this reason, RDM can make commissioning, addressing, and maintenance processes easier to manage, particularly in projects involving a large number of luminaires.

A Small Difference, A Major Advantage in Large-Scale Projects
Managing 10 luminaires is not the same as managing hundreds.
As the number of luminaires increases, processes such as commissioning, addressing, maintenance, fault detection, and system reconfiguration become increasingly critical. The two-way communication provided by RDM can help centralize and remotely manage a significant portion of these processes on compatible devices.

Fiberli’s Approach: Not Just Light, but Controllable Light
For Fiberli, lighting is about much more than simply producing the right amount of light.
A successful lighting project requires the integrated consideration of multiple components, including luminaire design, optical performance, electronic infrastructure, control systems, and long-term operability.

With more than 35 years of experience, Fiberli focuses on developing lighting solutions that not only meet today’s requirements but are also capable of responding to the future needs of lighting control and management. Because in professional lighting, the important question is not only: “How much light do we produce?”
but also: ***“How precisely, flexibly, and intelligently can we control that light?”***

Baku Tower: Azerbaijan’s Tallest Building Shines with Fiberli

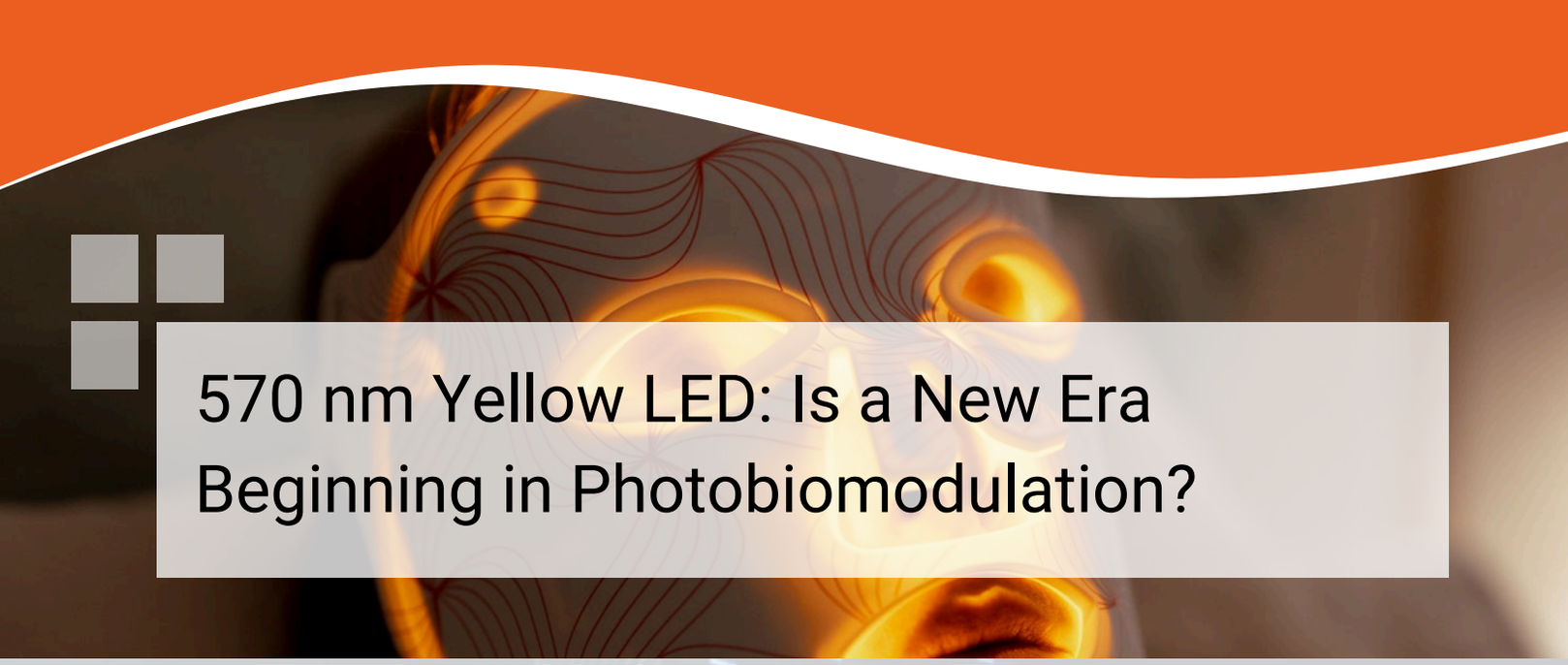
Standing 52 floors and reaching 252 meters in height, Baku Tower is the tallest building in Azerbaijan and one of the most recognizable landmarks of Baku. Thanks to Fiberli’s architectural facade lighting solution, the tower has been transformed into a striking nighttime landmark that enriches the city skyline.

Located on Heydar Aliyev Avenue, the building stands out with its contemporary glass facade and elegant architectural form. To preserve and accentuate its visual identity after sunset, Fiberli developed a dynamic LED facade lighting system specifically designed around the building’s architectural features.
Fiberli C-Line18, WL, and WS luminaires were used throughout the project to emphasize the tower’s horizontal and vertical lines, facade geometry, and overall architectural proportions. Carefully designed dynamic lighting scenes create a sophisticated visual impact while reinforcing the building’s presence within Baku’s urban landscape.

Designed for challenging outdoor environments, Fiberli’s professional LED lighting solutions deliver outstanding reliability, energy efficiency, and long-lasting performance. The lighting system not only enhances the building’s architectural aesthetics but also provides a sustainable solution with minimal maintenance requirements.



As a global architectural lighting manufacturer with completed projects in more than 75 countries, Fiberli continues to illuminate iconic buildings around the world. The Baku Tower project is another example of our commitment to combining innovative LED technology with contemporary architecture, creating memorable landmarks that stand out both day and night.



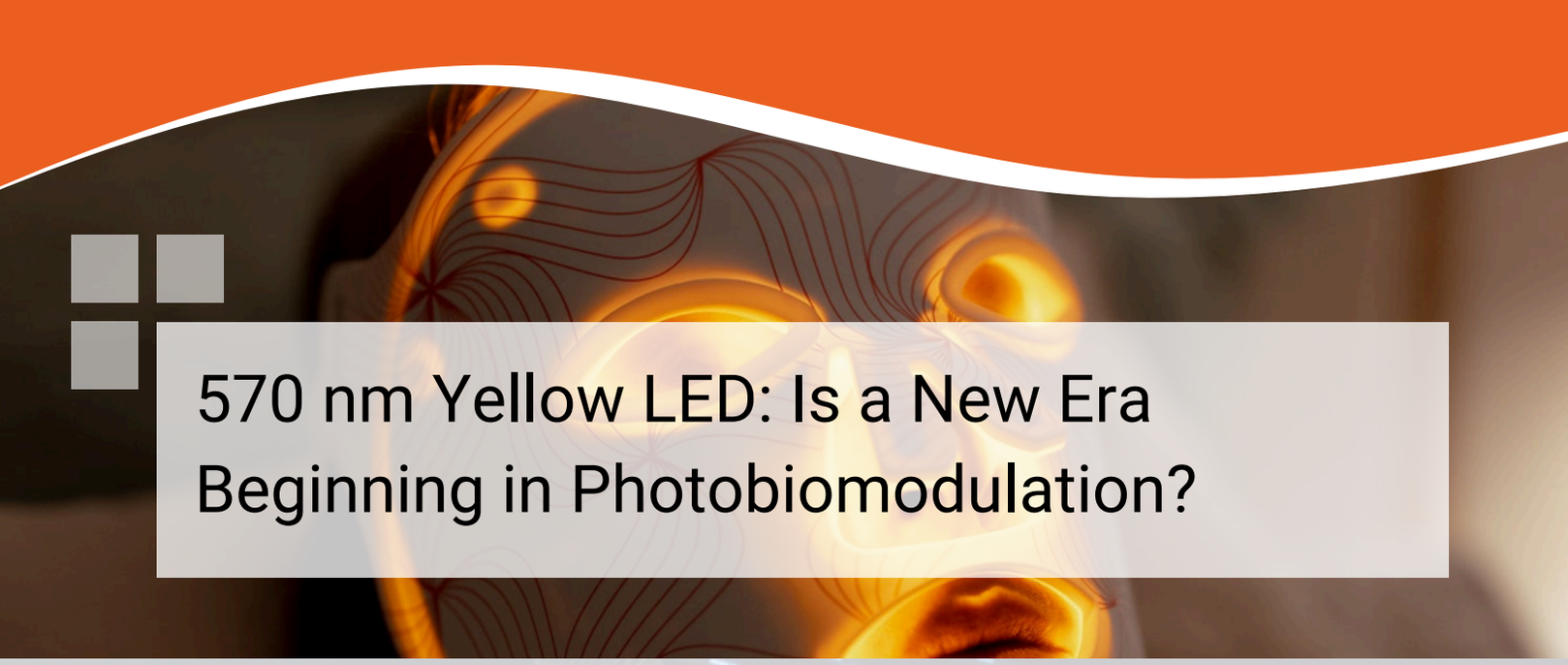
570 nm Yellow LED: Is a New Era Beginning in Photobiomodulation?

LED technology is rapidly advancing not only in lighting but also in healthcare and aesthetic applications. In recent years, 570 nm yellow LED technology has begun to attract attention alongside red, blue, and near-infrared LEDs, which have been used in photobiomodulation for many years.

Yellow LED light, operating at wavelengths of approximately 570–590 nm, is receiving increasing interest for applications aimed at supporting sensitive skin, reducing the appearance of redness, and supporting the skin barrier. Dermatology experts emphasize that different LED wavelengths should not be viewed as alternatives to one another, but rather as complementary technologies.

A recent clinical study in this field compared two treatment combinations in volunteers with photoaged skin: one combining 570 nm yellow LED + 620 nm red LED + 850 nm near-infrared LED, and another using the same combination with 590 nm yellow LED. After eight weeks of treatment, both approaches produced improvements in wrinkles, pore appearance, skin texture, and brown spots. However, the combination containing 570 nm yellow LED was reported to produce better results, particularly in the appearance of wrinkles and brown spots.





570 nm Yellow LED: Is a New Era Beginning in Photobiomodulation?

The research highlights an important point for LED technology: even small differences in wavelength can affect biological activity. This once again demonstrates the importance of selecting the appropriate wavelength and maintaining spectral precision in photobiomodulation applications.

However, it is important to note that the study was conducted with only 30 participants, and the treatment was administered in combination with red and near-infrared LEDs. Therefore, the current findings do not demonstrate that 570 nm is superior on its own; rather, they indicate that the LED combination incorporating this wavelength produced more effective results.

As scientific research continues to advance, success in LED technology will be measured not only by the ability to produce light, but also by the ability to deliver the right wavelength for the intended biological effect.



In the 11th issue of Fiberli Express, we explored the different dimensions of lighting at the intersection of technology, efficiency, architecture, and science. We shared DOT DIAMOND, bringing a new approach to point-source lighting; the Energy Savings Calculator, designed to help measure savings in lighting investments; and DMX and RDM, the communication language of smart lighting.

We also shared the story of Baku Tower, Azerbaijan's tallest building, brought to life with light through Fiberli's signature, while exploring the potential of 570 nm yellow LED technology in the field of photobiomodulation. Across every topic, we once again saw that light is not merely a tool for illumination, but a powerful force for transformation spanning efficiency, smart technologies, architecture, and science.At Fiberli, we will continue to share innovations shaping the future of light and inspiring projects from around the world.

See you in our next issue.



A better way to see!

Fiberli
+90 (242) 228 81 50
info@fiberli.com
www.fiberli.com


Bakü Tower / Azerbaycan
A better way to see!