



# Low Voltage LED Lighting for Pools and Spas

*UL offers a streamlined evaluation program for isolated, low-voltage underwater LED luminaires*

## Benefits of low-voltage LED lighting

LED low-voltage lighting offers several advantages over the traditional 120V pool lighting systems.

- Certification and testing to UL676, the Standard for Underwater Luminaires, is greatly simplified versus 120V underwater luminaires, reducing cost and time to market. Note – the National Electrical Code® (NEC®) requires all underwater lighting to be listed, regardless of voltage.
- Isolated, low-voltage underwater luminaires provide an enhanced level of safety for swimmers, while long-life LEDs reduce maintenance cycles and costs for pool owners.
- Pool and spa luminaire manufacturers have much greater flexibility in lighting design since they are no longer limited to the round, metal and glass construction materials best suited for lamp-based technologies.
- Installation is simplified by allowing for lighter, i.e., smaller American Wire Gauge (AWG), conductors and elimination of the requirement for an equipment grounding conductor.
- Pool owners can enjoy a wide spectrum of colorful lighting with the ability to integrate more advanced lighting control features.

- Low-voltage luminaires for pools and spas have been required in Europe for decades. Let us help you access global markets by testing to IEC 60598-2-18.

## Why UL?

Rapidly evolving thinking regarding energy efficiency and product safety—along with exciting technological advances—is driving the evolution of the lighting industry, providing greater opportunities and presenting growing challenges. As you prepare to go to market with your lighting products, partner with UL — we provide a variety of solutions to meet your lighting needs, including:

- Safety
- Energy efficiency
- Performance
- Global market access
- Technical training

Visit [UL.com/lighting](https://www.ul.com/lighting) for information on the above solutions.

**For more information, contact us at:**

**In the Americas: [LightingInfo@UL.com](mailto:LightingInfo@UL.com)**

**In Europe: [AppliancesLighting.EU@UL.com](mailto:AppliancesLighting.EU@UL.com)**

**In GC: [GC.LightingSales@UL.com](mailto:GC.LightingSales@UL.com)**

**In ANZ: [CustomerService.ANZ@UL.com](mailto:CustomerService.ANZ@UL.com)**

**In ASEAN: [UL.ASEAN.AHLSales@UL.com](mailto:UL.ASEAN.AHLSales@UL.com)**

**In Japan: [CustomerService.JP@UL.com](mailto:CustomerService.JP@UL.com)**

**In Korea: [Sales.KR@UL.com](mailto:Sales.KR@UL.com)**

**In MEA: [UL.MEA@UL.com](mailto:UL.MEA@UL.com)**

**In South Asia: [Sales.IN@UL.com](mailto:Sales.IN@UL.com)**



## Empowering Trust®

UL and the UL logo are trademarks of UL LLC © 2021.

0821