



## SOLAR LIGHTING SOLUTIONS

# UL 8801 Outline of Investigation for PV Luminaire Systems

Advancements in technology and the growing interest in solar solutions has brought photovoltaic (PV) lighting to the forefront of our industry. From residential applications to commercial and public areas and to remote rural areas where the need for lighting must be independent of infrastructure, there is a need for reliable and practical PV lighting systems.

PV Lighting has applications in multiple segments in and related to the lighting industry, including:

- Lighting manufacturers that design, brand or bring to market PV lighting systems
- Lighting manufacturers that design, brand or bring to market low voltage luminaires and components (with or without integral batteries)
- Commercial component controls manufacturers who sell to lighting manufacturers
- Infrastructure component controls manufacturers who sell to lighting and controls brands for roadway, pedestrian right of way, and building area lighting applications

UL 8801 Outline of Investigation defines the safety considerations and criteria for evaluating lighting systems that include PV modules for gathering energy, batteries for storing that energy, LED luminaires to illuminate and controls to manage the interaction between the module and battery. Instead of separate certifications for each component UL 8801 creates a path to a combined certification, saving money and bringing products to market faster. UL services include safety testing to help you manage the safety risks at a level comparable to that of other lighting

equipment currently subject to the NEC and AHJ oversight, and an optional performance annex that establishes minimum benchmarks for sustaining light output over a period of time and verifying your claims about that performance.

- Safety certification to earn the basic UL Mark is based on PV module compliance with a subset of the requirements of IEC/UL 61730. Testing for the battery system and luminaires (or LED arrays and driver circuitry) is also targeted and streamlined.
- Optional system performance assessment to compete in the market with independently validated performance earns that product an additional badge on the UL certification Mark.

Our experienced engineers have the expertise to evaluate your simple or complex systems and help you with the safe and effective deployment of these technologies.

**Contact us at [lightinginfo@UL.com](mailto:lightinginfo@UL.com) or 1+877-UL.HELPS for a quote or to learn more about how UL can help your PV lighting plans.**

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