High output MR16 LED
Emergency lighting

**MR16 LED Illumination**
With the remarkable technology development in the last decade, the light-emitting diode (LED) is becoming the preferred solution in lighting applications. The emergency lighting industry is no exception: today virtually every new product introduced to market includes “white light” light LEDs for emergency illumination. Extremely efficient and long-lasting, LED lamps become the natural alternative to incandescent lamps due to three main advantages:

- **Lamp efficacy:** 50 - 100 lumen per watt compared to 15 - 30 lumen per watt for the best halogen lamp. Allowing for smaller batteries and units and/or remote capacity
- **Operational life:** 30,000+ hours, equivalent to a lifetime warranty in emergency lighting.
- **Lower lamp temperature:** (80 - 120°C) is a huge benefit for lighting in hazardous locations.

**MR16 LED Lamp Benefits**
- Reduces total cost of ownership, uses few fixture due to superior illumination, thus reducing installations cost and future maintenance of the entire system.
- UL-recognized components.
- Available for standard battery voltages 6V, 12V and 24V as well as 120V operation.
- Energy-efficient LED MR16 lamp provides equivalent lighting performance to a much higher watt halogen MR16 lamp.
- Reduces required battery capacity by 75%, for battery units and remote heads.
- Small profile, compact white lighting is ideal for architectural applications.
- Typical 30,000 hours of operational life.
- Vibration-resistant LED stands up to industrial environments.
- Ideal for indoor and outdoor use.

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**200-220-Lumen 4W MR16 LED**
Leading the technology trend, Lightalarms® offers a complete series of 4W MR16 LED lamps available for all the standard battery voltages: 6V, 12V, 24V and 120V. With up to 30,000 hours of operational life and a luminous flux of typically 200 to 220 lumens, they are available with most emergency heads designed to hold an MR16 lamp and meet the majority of illumination specifications. For example: one pair of LED emergency heads installed at a height of 7.5ft illuminates a 6ft by 55ft path of egress.

**340-Lumen 5W MR16 LED**
Keeping pace with technology, in 2012 we introduced a 12V-5W MR16 LED lamp. With a typical luminous flux of 340 lumens, this lamp has the same lighting performance as a 20W high-output halogen MR16. A twin emergency head installed at a height of 7.5ft illuminates 70ft path of egress.

**540-590 Lumen 6W MR16 LED**
A 6W MR16 LED lamp delivers up to 590 lumens for an average spacing in emergency lighting of 106 feet with an efficacy of 98.3 Lm/w, it is over 6 times the efficacy of a MR16 35W halogen with similar light output. This lamp can deliver the highest linear foot of illumination per watt on a path of egress! (spacing in feet / watt) 8.83ft compare to 1.37ft for a MR16 35W.
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Case Study: Fewer MR16 LED units required
Emergency lighting units with MR16 LED lamps provide the same illumination at floor level using significantly less units.
- Reduced Installation Costs, less product needed and labor.
- Reduced Energy Costs, keeping batteries charged at full capacity to be ready to respond to an emergency situation at any time.
- Reduced Maintenance and Testing Cost, less units to maintain and test in the Emergency Lighting System.
- Reduced Lamp Replacement Cost, LED lamps have a 30,000+ hour lamp life compare to only a few hundred hour typical with incandescent lamps.
- Reduced Environmental impact, less product materials, less batteries, less transportation, less packaging, less labor, less waste.

Compare
Where the building code requires an average of 1 foot-candle and a minimum of 0.1 foot-candle at floor level along the path of egress on a 150' x 9' x 9' corridor with an egress door at one end, a 150' x 6' path of egress, and a 7.5' unit mounting height.

Standard wedge-base 9W Incandescent Lamp
Standard Emergency Lighting Units with 9W wedge-base incandescent lamps requires a total of 10 double-head units or remotes

4W MR16 LED lamps
Same Standard Emergency Lighting Units with 4W MR16 LED lamps requires a total of 5 double-head units or remotes.

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5W MR16 LED lamps
Same Standard Emergency Lighting Units with 5W MR16 LED lamps requires a total of 3 double-head units or remotes

6W MR16 LED lamps
Same Standard Emergency Lighting Units with 6W MR16 LED lamps requires a total of 2 double-head units or remotes

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