



# LED Lighting for Extreme Conditions

## Because Extremely Cold Environments Can Be an Everyday Reality

Regardless of your geographic location, winter can expose your facility to a variety of adverse weather extremes. In winter, heavy snow, freezing temperatures, ice and wind can create conditions where lighting reliability is especially critical to ensuring a safe work environment – especially when performing maintenance on luminaires is just not an option.

Emerson understands that in cold temperature environments your facility requires luminaires specifically designed for reliability and durability in frigid temperatures. Our Appleton LED Luminaires are instant on to full brightness and cold start capable at -40 °C (-40 °F). When arctic conditions cause temperatures to drop to as low as -55 °C (-67 °F), we offer several models certified for these extreme cold climates. For proper illumination in extreme temperature conditions, you need a lighting manufacturer who engineers ruggedly reliable and durable LED luminaires that ensure optimal light dispersion. From area to task, high bay to floodlight, our Appleton LED luminaires maximize usable light while providing unparalleled reliability, durability and energy efficiency in the toughest environments.

## Appleton LED Luminaires Designed for Your Toughest Environments

### Safe, Versatile, Ruggedly Reliable Solution, Even in Extreme Environments



- Instant on and cold-start capable as low as -55 °C (-67 °F), with no degradation of lumen output
- Multiple cable retention points for added safety
- Captive hardware prevents equipment damage and installer’s frustration

### Extensive Certifications and Environmental Ratings



- Industrial/Ordinary (Unclassified) Location
- Hazardous (Classified) Location (Class, Division, Group)
- Wet Locations, Marine Outside Type (Salt Water), American Bureau of Shipping (ABS)
- NEMA Enclosure Types (Type 3R, 4, 4X)
- Ingress Protection up to IP67
- IDA Dark Sky Approved Models
- Up to 10G Vibration

### Environmentally Sound, Lower Energy Usage, Efficient Design



- No mercury content, no UV or IR, and a much smaller carbon footprint
- Energy efficient saving up to 80% of energy costs compared to legacy sources
- 60,000+ hours between maintenance

### Superior Quality of Light for Safer Working Conditions







- Diverse Lighting Application Types (Task/Area, Floodlight, Low/High Bay)
- Light Pattern/Optics (IESNA Lateral Light Distribution Classification Type I, III, V)
- NEMA Type Distribution Patterns (NEMA 3x3, 5x5, 7x6, 7x7)

**APPLETON™**

For product information:  
[www.masteringled.com/smartled](http://www.masteringled.com/smartled)  
1.800.621.1506



Emerson offers the below Appleton LED Luminaire Product Series with optional cold start capabilities, which are identified with a special character in the part number logic. These product series models are NEC, CEC, ATEX and IECEx Certified and warranted for either -50 to +65 °C (-58 to +149 °F) or -55 to +65 °C (-67 to +149 °F) ambient temperature environments. They are available in either hazardous or industrial (ordinary) location models. Refer to product series catalog pages for more detailed product information (features, specifications and certifications).

| Product ①  | Classification      | Application                         | Operating Temperature          | Lumen Output | Equivalency (HID) | Wattage  | Efficacy (lm/W) | Voltage  | CCT                               |
|--|---------------------|-------------------------------------|--------------------------------|--------------|-------------------|----------|-----------------|--|-----------------------------------|
| <b>Mercmaster™ LED Low Profile Series Luminaires   Industrial Mercmaster LED Low Profile Series Luminaires</b>                                 |                     |                                     |                                |              |                   |          |                 |  |                                   |
|   | Hazardous, Ordinary | Area/Task, Low Bay, Emergency       | -50 to +65 °C (-58 to +149 °F) | 2,800–7,500  | 70W–250W          | 28W–51W  | Up to 146       | 24-48 Vdc; 100-277 Vac; 125-300 Vdc; 347-480 Vac; 0-10 V, Dimmable | 5000K, 4000K, 3000K, 1800K, Amber |
| <b>HB LED Multilens Bulkhead   Industrial HB LED Multilens Bulkhead</b>  |                     |                                     |                                |              |                   |          |                 |  |                                   |
|   | Hazardous, Ordinary | Bulkhead, Wall Mount, Surface Mount | -50 to +65 °C (-58 to +149 °F) | 2,500–6,800  | 70W–250W          | 31W–51W  | Up to 135       | 24-48 Vdc; 100-277 Vac; 125-300 Vdc; 0-10 V, Dimmable              | 5000K, 4000K, 3000K, 1800K, Amber |
| <b>Areamaster™ Generation 2 and High Lumen LED Series Luminaires   Industrial Areamaster Generation 2 and High Lumen LED Series Luminaires</b> |                     |                                     |                                |              |                   |          |                 |  |                                   |
|   | Hazardous, Ordinary | Flood                               | -55 to +65 °C (-67 to +149 °F) | 9,500–38,000 | 175W–1500W        | 73W–317W | Up to 141       | 120–277 Vac; 125–300 Vdc; 347–480 Vac; 0-10 V, Dimmable            | 5000K, 4000K, 3000K, 1800K, Amber |
| <b>Baymaster™ and High Lumen LED Series Luminaires   Industrial Baymaster and High Lumen LED Series Luminaires</b>                             |                     |                                     |                                |              |                   |          |                 |  |                                   |
|    | Hazardous, Ordinary | High Bay                            | -55 to +65 °C (-67 to +149 °F) | 9,500–38,000 | 175W–1500W        | 73W–317W | Up to 141       | 120–277 Vac; 125–300 Vdc; 347–480 Vac; 0-10 V, Dimmable            | 5000K, 4000K, 3000K, 1800K, Amber |

① Refer to product Series catalog pages for detailed product specifications and certification information; available on [www.masteringled.com](http://www.masteringled.com).