

Efficiency Solutions for Supermarkets

Lighting for Refrigerated Cases, Display Floor & Parking Lot Illumination

Benefits

- Improve product visibility in food store applications as a result of light being directed onto the product shelves rather than non-critical areas
- Reduce lighting-related energy consumption by up to 78% compared to fluorescent lamps
- Lower heating load by up to 8% compared to fluorescent lamps
- Shorten compressor run time due to the reduced heating load
- 50,000 guaranteed run hours reduces maintenance costs compared to fluorescent lamps
- Lengthen compressor life as a result of reduced run times

Application and Savings

High-efficiency lighting has been one of the most popular and effective energy conservation measures, accounting for a large percentage of the overall savings achieved to date. Indeed, as building owners converted from incandescent lamps to T-12 fluorescents, then later to T-8 and T-5 fixtures with electronic ballasts, lighting-related energy usage has been greatly reduced.

Despite the savings that have been achieved, LED lighting represents a quantum leap forward.

In refrigerated display cases, LED lighting provides improved product visibility, reduced energy consumption and electrical demand, lower maintenance costs, and extended fixture life (upwards of 50,000 hours) when compared to incandescent and fluorescent lamps. And since LED lights generate very little heat, the net cooling capacity of the display case is increased, compressor run-time is reduced, and equipment life is extended.

LED lighting is also available for a wide variety of general applications. LED T-8 drop-in replacements provide savings of more than 50% over standard fluorescent lamps. Screw-in replacement lights are presently being offered for MR 16, PAR20 and PAR38 lamps, while additional fixtures are coming into the market to satisfy a growing variety of lighting needs.

Parking lots are typically lit with fixtures using very high-wattage HID lamps. These lights normally operate for 10 – 12 hours per day. **LED and induction lighting solutions consume about 50% of the electricity and have guaranteed useful lives of 4 to 10 times of the existing fixtures**, which lowers ongoing maintenance expenses associated with lamp and ballast replacement.

