



LED | L70 Lifetime (02/01/25)



## LED Lifetime Statement

Day-O-Lite LED fixtures are rated with an L70 lifespan of at least 50,000 hours, equating to over 11 years of operation at 12 hours per day. This rating ensures that the fixtures maintain L70 performance well beyond their 5-year warranty period and aligns with the expected operational lifespan of standard LED drivers as warranted by their manufacturers.

The L70 rating is calculated using the Energy Star TM-21 method, which requires the following laboratory-derived inputs:

1. In-situ diode operating temperature at 25°C ambient.
2. In-situ diode operating current at 25°C ambient.
3. LM-80 test data from the diode manufacturer at minimum of 6,000 operational hours.

The TM-21 algorithm extrapolates L70 data based on laboratory conditions, considering temperature and operational parameters during testing. However, actual LED longevity in real-world applications varies due to factors such as:

1. Local ambient temperature fluctuations
2. Power supply consistency
3. Environmental conditions (e.g., vibration, moisture exposure)
4. Control system usage (e.g., daylight harvesting, occupancy sensing)

While some manufacturers publish L70 values at or exceeding 100,000 hours, Day-O-Lite adheres to a conservative and data-driven approach, publishing L70 = 50,000 hours to ensure a realistic and reliable performance expectation over the product's lifetime. Higher published lifetimes may not accurately reflect real-world operating conditions, and are less accurate.

For more information please contact:

Day-O-Lite  
126 Chestnut Street  
Warwick, RI 02888  
(401) 261-3535