

Lighting Answers: T8 Fluorescent Lamps

The T8 fluorescent lamp is the standard for new construction and is a popular replacement for 34-watt T12 lamps. All major lamp manufacturers market T8 lamps of various wattages in linear and U-shaped configurations.

Lighting Answers: T8 Fluorescent Lamps, produced by the National Lighting Product Information Program (NLPIP), is an update to the 1993 report of the same title. It explores developments in 4-foot, 32-watt T8 lamps.

This report gives lighting professionals an overview of the performance claims for initial light output, rated life, lumen maintenance, and color. It discusses the uncertainties associated with these performance attributes and with power requirements. Knowledge of these uncertainties will help lighting professionals to evaluate performance differences and to estimate total costs more accurately.



The report provides answers to questions about T8 fluorescent lamps such as:

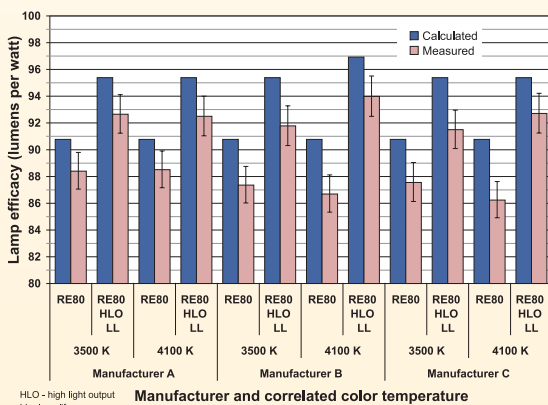
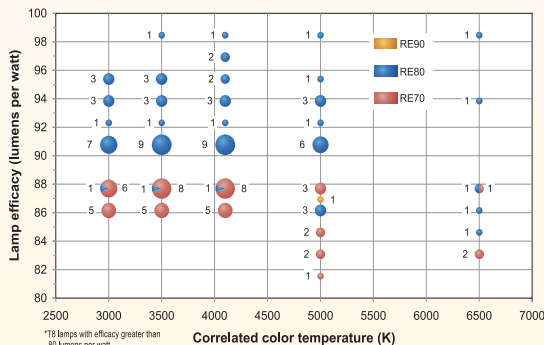
- What is their light output?
- What are their power requirements?
- How efficacious are they?
- What is their life expectancy?
- How well do they maintain light output?
- What is their color?
- How does overall performance compare?
- How much do they cost?
- Who makes them?

The report suggests that the CRI designations of RE70 and RE80 are reliable differentiators for “good” and “better” categories. RE70 models have generally good performance in light output, efficacy, and life, and have the lowest initial cost among T8 fluorescent lamps. RE80 models could be considered a “better” category because they provide higher light output and efficacy at a marginally higher cost.

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HLO - high light output
LLO - long life
Manufacturer and correlated color temperature

Samples of efficacy information found in *Lighting Answers: T8 Fluorescent Lamps*

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