



Lighting Recommendations

The color quality and intensity of light required for food processing operations varies depending on the activities that are taking place. The table below describes common bulb types and recommended intensities for interior and exterior lighting situations.

Bulb type	Expected lifetime (hours)	Color quality (100 = sunlight)	Maximum brightness (lumens)	Efficiency (lumens/watt)
Incandescent	3,000	100	2,900	15.3
Fluorescent	10,000	62	7,750	47.8
Mercury vapor	24,000	45	19,000	47.8
Metal halide	10,000	21	71,000	71.0
Low-pressure sodium	18,000	0	33,000	183
High-pressure sodium	24,000	21	45,000	113

Summary:

The color quality of incandescent light appears closest to sunlight but they are not as bright or as energy efficient as other types. They are also more short-lived. Compared to incandescent types, fluorescent lights are more energy efficient but are not as bright. Mercury vapor lights are brighter and more efficient but the color quality is lower. Metal halide lights are very bright and very efficient but do not last as long as the other bright types.

Low pressure sodium types are extremely efficient but they give off a yellow glow that is only suitable for exterior lighting situations. High pressure sodium lights are usually a better alternative because they are brighter than the low pressure types and have better color quality.