

# Compact Fluorescent Lamp (CFL)

A compact fluorescent lamp (CFL) is an energy-efficient alternative to incandescent light bulbs. It produces light by exciting mercury vapor within the glass tube, causing it to emit ultraviolet (UV) light.



## Overview

### Compact Fluorescent Technology

A compact fluorescent lamp (CFL) serves as a highly energy-efficient alternative to traditional incandescent light bulbs. By exciting mercury vapor within the glass tube, the lamp generates ultraviolet light which is then converted into visible light via a phosphor coating. This design ensures significantly lower power consumption and a notably longer operational lifespan compared to conventional lighting solutions.

## Technical Specifications

### Operating Principle

- Mercury vapor excitation
- Ultraviolet (UV) emission
- Phosphor coating conversion

### Light Source Technology

Compact Fluorescent (CFL)

## Performance Metrics

### Efficiency Benefits

Energy Efficient • Long Lifespan • Low Power Consumption