



High Intensity Fluorescent Lighting

With the recent improvements in the performance of fluorescent lighting, high intensity fluorescent (HIF) lighting for industrial and athletic facilities has become a viable option. Until recently nearly all areas with high ceilings in industrial and athletic facilities were illuminated with High Intensity Discharge (HID) lighting fixtures. HID fixtures include metal halide, high-pressure sodium, and mercury vapor.

HIF lighting offers better performance than HID lighting in many important areas:

- Better color performance
- Lamp flicker is eliminated
- Quieter operation
- Improved lumen maintenance (reduced light level degradation)
- The long warm-up time of HID fixtures is eliminated

This last point is extremely important as HID fixtures tend to be left on during the entire workday, because of their long warm-up times. HIF fixtures may be turned on and off as needed, and may also be controlled by automatic occupancy and daylight sensors.

HIF fixtures are available, and are eligible for Efficiency Maine incentives with T5, compact fluorescent, and High Performance T8 lamps and electronic ballasts. The Consortium for Energy Efficiency (CEE), a national nonprofit public benefits corporation, determines which products qualify as "High Performance T8s," and Efficiency Maine follows the CEE criteria. [Click here to access the current CEE list of qualifying equipment.](#) Note that this list is updated frequently. Your lighting vendor and/or Efficiency Maine staff can help you find HIF fixtures appropriate for your application.

HIF Fixture Types

Compact Fluorescent HIF Fixtures

These fixtures utilize multiple high wattage compact fluorescent lamps in a fixture housing that looks similar to traditional high intensity (HID) fixtures. Both the price of the fixtures and replacement lamps tend to be higher than other HIF options, but they are the only option that offers a traditional HID look.

T5 & T5 High Output HIF Fixtures

T5 lamps are more effective at projecting light longer distances than are most fluorescent lamps. For this reason, they are often the best choice when ceiling heights are high. High ceiling warehouses, manufacturing areas, and gymnasiums are all areas where T5 HIF fixtures work well.

High Performance Super T8 HIF Fixtures

These fixtures produce less glare than T5 fixtures, and provide higher efficacy (lumens per watt) than the other HIF options. Especially for areas with ceiling heights between 16 and 25 feet, this style of fixture is often the best choice.


Incentives for High Intensity Fluorescent Lighting

Efficiency Maine offers incentives for the following high intensity fluorescent lighting measures:

Measure Codes L40 & L41 – New High Intensity Fluorescent Fixtures

Measures L40 & L41 are for the installation of new High Intensity Fluorescent (HIF) lighting fixtures. This measure is intended for high ceiling (16' minimum) industrial and athletic applications. Compact fluorescent, T5, T5 high output, and high performance super T8 lamps with electronic ballasts ([see CEE List of qualifying equipment](#)) are all eligible for this measure. Minimum fixture wattage for this measure is 125 watts, if installing fixtures of lower wattage, measure codes L15, L16, L20, or L25 may be appropriate.

Measure Codes L40 & L41 – New High Intensity Fluorescent Fixtures (continued)

Measure	Code	Eligible Installations	Unit Incentive	Eligibility Criteria
 Low Glare High Efficiency Recessed Feixtures	L40	New Fluorescent Fixture for High and Low Bay Applications Retrofit	\$45 per Fixture	<ul style="list-style-type: none"> T5, T5 HO, and High Performance T8 Systems are eligible T8 Lamp and Ballast combination must be listed on the CEE List Each unit must have a wattage greater than 125W Must be installed in areas with ceiling heights of 16' or greater 1 Unit = 1 fixture with 4-12 lamps Overall fixture efficiency must exceed 80% Must be a new fixture replacing an HID fixture
	L41	Same as L40 Retrofit	\$35 per Fixture	<ul style="list-style-type: none"> T5, T5 HO, and High Performance T8 Systems are eligible T8 Lamp and Ballast combination must be listed on the CEE List Each unit must have a wattage greater than 125W Must be installed in areas with ceiling heights of 16' or greater 1 Unit = 1 new fixture with 4-12 Lamps Overall fixture efficiency must exceed 80%