

Reference on DOE General Service Fluorescent Lamp Rulemaking Effective July 14, 2012

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DOE General Service Fluorescent Lamp Rulemaking – July 14, 2012



Lamp Type	Correlated Color Temperature	Energy Conservation Standard lm/W
4-Foot (T8-T12) Medium Bi-pin* ≥25W	≤ 4500K	89
	> 4500K and ≤ 7000K	88
2-Foot (T8-T12) U-Shaped ≥25W	≤ 4500K	84
	> 4500K and ≤ 7000K	81
8-Foot (T8-T12) Single Pin Slimline ≥52W	≤ 4500K	97
	> 4500K and ≤ 7000K	93
8-Foot (T8-T12) High Output	≤ 4500K	92
	> 4500K and ≤ 7000K	88
4-Foot (T5) Miniature Bi-pin Standard Output ≥26W	≤ 4500K	86
	> 4500K and ≤ 7000K	81
4-Foot (T5) Miniature Bi-pin High Output ≥49W	≤ 4500K	76
	> 4500K and ≤ 7000K	72

*Note: 2', 3' & 5' medium bi-pin lamps are not impacted by GSFL rulemaking



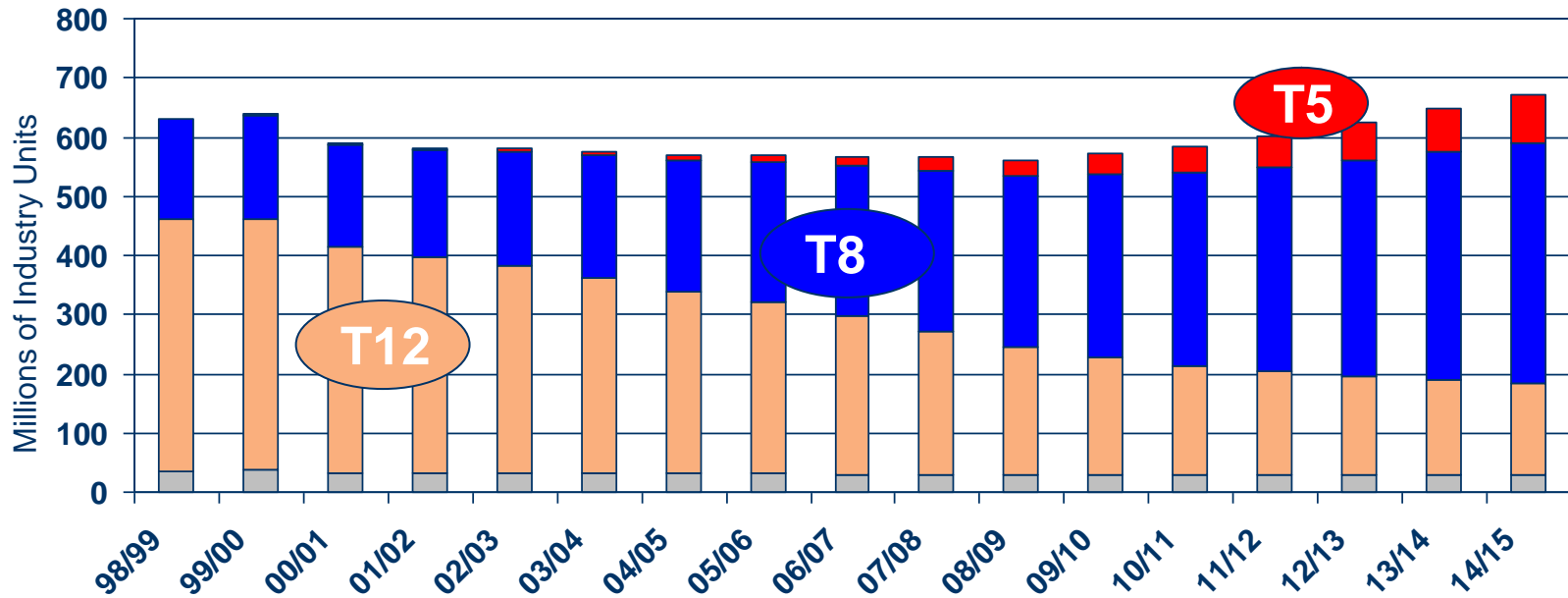
DOE General Service Fluorescent Lamp Rulemaking - Exemptions

General service fluorescent lamp means any fluorescent lamp which can be used to satisfy the majority of fluorescent lighting applications, but does not include any lamp designed and marketed for the following non-general applications:

- (1) Fluorescent lamps designed to promote plant growth;
- (2) Fluorescent lamps specifically designed for cold temperature applications;**
- (3) Colored fluorescent lamps;
 - a) CRI less than 40
 - b) Correlated color temperature less than 2,500K or greater than 7,000K
- (4) Impact-resistant fluorescent lamps;**
- (5) Reflectorized or aperture lamps;
- (6) Fluorescent lamps designed for use in reprographic equipment;
- (7) Lamps primarily designed to produce radiation in the ultra-violet region of the spectrum; and
- (8) Lamps with a Color Rendering Index of 87 or greater.**

From 10 CFR 430.2 <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr;sid=438865da15d32d36a12b302ccb2110d0;rgn=div5;view=text;node=10%3A3.0.1.4.17;idno=10;cc=ecfr#10:3.0.1.4.17.1.9.1>

NAFTA Linear Fluorescent Market Transformation

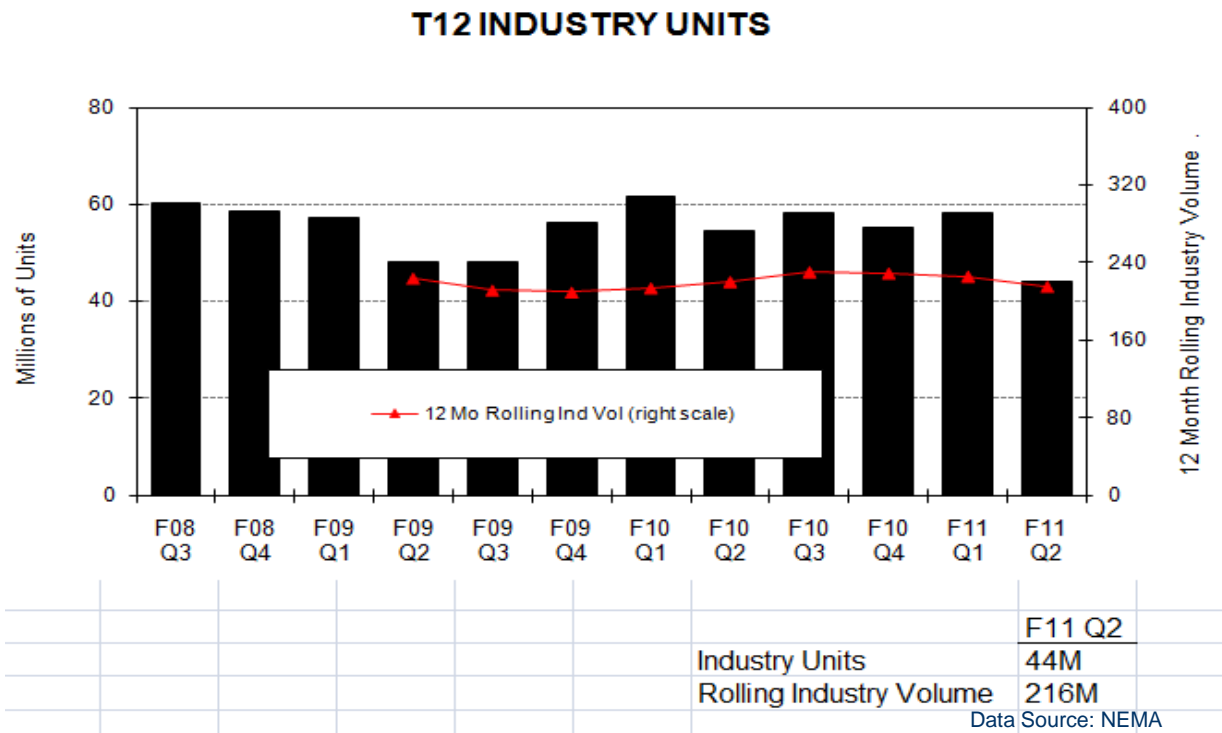


Historical Data Source: NEMA

Despite the decline of T12 in the NAFTA Market and the rise of higher efficacy T8 & T5 fluorescent solutions....



NAFTA T12 Market



... Industry continues to install and replace in total >200M T12 lamps per year.

» Installed base of T12 magnetic systems = Est. 750M

DOE 2012 – Replacement Lamp Options

- OSRAM SYLVANIA customer base demands a range of options for current T12 installations.
- We have responded with a variety of solutions without compromising light quality or levels necessary for their specific applications.
 - » From high CRI T12 product replacements which satisfy the minimum customer requirements.
 - » To high efficiency T8 alternatives which save energy, provide longer life and greater value.

DOE 2012 – Replacement Lamp Summary

Lamps That Do Not Meet DOE GSFL Rulemaking	Replacement Lamp
FO32 T8 700	FO32 T8 700 XP
FO96 T8 700	FO96 T8 800
F40T12 & F34T12/SS Except Deluxe Colors	F40T12/900* and F34T12/900/SS (90 CRI)
FB40T12 & FB34T12/SS Except Deluxe Colors	FB40T12/900 and FB34T12/900/SS (90 CRI)
F96T12 & F96T12/SS Except Deluxe and Supersaver Plus	F96T12/900 and F96T12/900/SS (90 CRI)
F96T12/HO & F96T12/HO/SS Except Deluxe and Cold Temp	F96T12/800/HO and F96T12/800/HO/SS (80 CRI)

*T12s to 90 CRI to meet NOM 028

DOE 2012 – Replacement Lamp Guide

SYLVANIA Replacement Guide For Fluorescent Lamps Eliminated In 2012 By DOE General Service Fluorescent Rulemaking

In 2009 the United States Department of Energy issued efficacy standards for general service fluorescent lamps that implement new lumens per watt regulations for linear and U-bend types. The new standards, which become effective on July 14, 2012, will result in elimination of many inefficient 4-foot T12 and 2-foot T12 U-bend lamps, most 8-foot T12 lamps and some 4-foot T8 lamps from the marketplace. To help lighting users with their selection process, SYLVANIA has developed this replacement guide. The guide lists lamps which do not meet the minimum efficacy requirements and will therefore be eliminated. The guide also provides product replacements which satisfy the minimum requirements of the energy legislation and gives recommended, high efficiency alternatives which save energy, provide longer life and greater value. Where item numbers are listed as TBD, OSRAM SYLVANIA does not currently manufacture these lamps, but plans to introduce them for sale before the effective legislation implementation date. For product availability and specific recommendations contact your SYLVANIA sales professional.

Lamp Type Eliminated In 2012 Item Number	Minimum Replacement Item Number	Upgrade Item Number Ballast Change Req'd Performance Improvement	Upgrade Item Number Ballast Change Req'd Performance Improvement	Upgrade Item Number Ballast Change Req'd Performance Improvement
FO32/741/ECO/UPC 30/CS 1/SKU 21524	FO32/741/XP/ECO 21712	FO32/841/ECO 21781 Ballast Change Req'd: N Improved Color Quality, Higher Light Output	FO32/841/XP/ECO3 21767 Ballast Change Req'd: N Up to 28% longer life	FO28/841/XP/SS/ECO3 22179 Ballast Change Req'd: N Up to 12.5% Energy Savings, Up to 50% Longer Life
FO32/735/ECO/PALLET 1776/CS 1/SKU 21545	FO32/735/XP/ECO 22044	FO32/835/ECO 21779 Ballast Change Req'd: N Improved Color Quality, Higher Light Output	FO32/835/XP/ECO3 21763 Ballast Change Req'd: N Up to 28% longer life	FO28/835/XP/SS/ECO3 22178 Ballast Change Req'd: N Up to 12.5% Energy Savings, Up to 50% Longer Life
FO32/730/ECO2P[OSL] 30/CS 2/SKU 21567	FO32/730/XP/ECO 21711	FO32/830/ECO 21777 Ballast Change Req'd: N Improved Color Quality, Higher Light	FO32/830/XP/ECO3 21759 Ballast Change Req'd: N Up to 28% longer life	FO28/830/XP/SS/ECO3 22177 Ballast Change Req'd: N Up to 12.5% Energy Savings, Up to

<http://assets.sylvania.com/assets/Documents/FluorescentDOE2012.21fb529a-b25e-440d-8a4c-9779871e62a7.pdf>