



# REGULATION SUMMARY

DoE 10 CFR Part 430 (EPACT)

Energy Conservation Program: Energy Conservation Standards and Test Procedures for General Service Fluorescent Lamp and Incandescent Reflector Lamps

- Effective Date: September 14, 2009
- Compliance Date: July 14, 2012



EPCA (Energy Policy and Conservation Act) defines “general service fluorescent lamp” as follows:

- ❑ Fluorescent lamps which can be used to satisfy the majority of fluorescent applications, but does not include any lamp designed and marketed for the following non general lighting applications:
  - Fluorescent lamps designed to promote plant growth.
  - Fluorescent lamps specifically designed for cold temperature installations.
  - Colored fluorescent lamps.
  - Impact-resistant fluorescent lamps.
  - Reflectorized or aperture lamps.
  - Fluorescent lamps designed for use in reprographic equipment.
  - Lamps primarily designed to produce radiation in the ultra-violet region of the spectrum.
  - Lamps with a color rendering index of 87 or greater



## EPACT REQUIREMENT

*2-foot medium bi-pin U-shaped lamps with a rated wattage of  $\geq 25W$  and  $< 28W$*

➤ Requirement:

- ✓ Lamps with a CCT  $\leq 4500K$  LPW  $\geq 84$
- ✓ Lamps with a CCT  $>4500K$  and  $\leq 7000K$  LPW  $\geq 81$

- ✓ Voltarc U-series lamps (includes the TriLightMax®, TriLight®, Tufstraight® and Tufbend®-U series of T12 lamps) are not affected by these requirements due to use of RDC base configuration.<sup>1</sup>

<sup>1</sup> - 10 CFR 430 Section III g “various other fluorescent lamps” – DOE does not extend coverage to GSFL with alternate lengths, diameters, bases or shapes



## EPACT REQUIREMENT

*4-foot medium bi-pin (MBP), straight-shaped lamps with a  
rated wattage  $\geq 25W$*

*(Any straight-shaped lamp (commonly referred to as a 4-foot medium bi-pin lamp) with medium bi-pin bases of nominal overall length of 48" and rated wattage of  $\geq 25W$ )*

➤ Requirement:

- ✓ Lamps with a CCT  $\leq 4500K$  LPW  $\geq 89$
- ✓ Lamps with a CCT  $>4500K$  and  $\leq 7000K$  LPW  $\geq 88$

- ✓ Voltarc F48T12 lamps (includes the TriLightmax®, TriLight® and Tufstraight® series of T12) are not affected by these requirements due to use of RDC base configuration<sup>1</sup>

<sup>1</sup> - 10 CFR 430 Section III g “various other fluorescent lamps” – DOE does not extend coverage to GSFL with alternate lengths, diameters, bases or shapes



## EPACT REQUIREMENT

*8-foot single pin (SP), instant start, slimline lamps with a rated wattage  $\geq 52W$*

➤ Requirement:

✓ Lamps with a CCT  $\leq 4500K$

LPW  $\geq 97$

✓ Lamps with a CCT  $>4500K$  and  $\leq 7000K$

LPW  $\geq 93$

✓ Not manufactured by Voltarc



## EPACT REQUIREMENT

***8-foot High Output (HO), recessed double contact (rdc), rapid start HO lamps  
recessed double contact bases (rdc) of nominal overall length of 96" and  
0.800 nominal amperes operating current***

➤ Requirement:

- ✓ Lamps with a CCT  $\leq 4500\text{K}$  LPW  $\geq 92$
- ✓ Lamps with a CCT  $>4500\text{K}$  and  $\leq 7000\text{K}$  LPW  $\geq 88$

- ✓ Voltarc F96T8 and F96T12 (8') lamps (includes the Trilightmax®, Trilight®, Tufstraight®, Tufbend®-U and Cold Climate / Diffuser jacketed straight lamp series of T12 lamps) are designed for use in cold temperature installations and are exempt from this regulation.<sup>2</sup>
- ✓ Voltarc F96T12 (8') Design 50 series lamps are designed for use in cold temperature installations<sup>2</sup>, have a high color-rendering index (CRI) of 90<sup>3</sup> and are exempt from this regulation.

<sup>2</sup> - Cold Temperature fluorescent lamp means a fluorescent lamp specifically designed to start at  $-20^{\circ}\text{F}$  when used with a ballast conforming to the requirements of ANSI Standard C78.1-1991 and is expressly designated as a cold temperature lamp both in markings on the lamp and in marketing materials (including but not limited to catalogs, sales literature and promotional material)

<sup>3</sup> - Colored fluorescent lamp means a fluorescent lamp designed and marketed as a colored lamp and with either of the following characteristics:

- A CRI less than 40 (as determined according to the method given in CIE Publication 13.2 (see 10 CFR 430.22))
- A lamp correlated color temperature less than 2500K or greater than 6600K



## EPACT REQUIREMENT

*4-foot Miniature Bipin Standard Output lamps  
(4'T5 MNBP lamp, standard output  $\geq 26W$ )*

➤ Requirement:

- ✓ Lamps with a CCT  $\leq 4500K$  LPW  $\geq 86$
- ✓ Lamps with a CCT  $>4500K$  and  $\leq 7000K$  LPW  $\geq 81$

- ✓ Voltarc F48T5 (4') Standard Output Lamps (CW/841 & DL/865) exceed the LPW requirements!



## EPACT REQUIREMENT

*4-foot Miniature Bipin High Output lamps  
(4'T5 MNBP lamp, HO  $\geq$  49W)*

- Requirement:
  - ✓ Lamps with a CCT  $\leq$  4500K LPW  $\geq$  76
  - ✓ Lamps with a CCT  $>$ 4500K and  $\leq$  7000K LPW  $\geq$  72
- ✓ Voltarc F48T5 (4') High Output Lamps (CW/841 & DL/865) exceed the LPW requirements!



## FOOTNOTES

- <sup>1</sup> - 10 CFR 430 Section III g “various other fluorescent lamps” – DOE does not extend coverage to GSFL with alternate lengths, diameters, bases or shapes
- <sup>2</sup> - Cold Temperature fluorescent lamp means a fluorescent lamp specifically designed to start at -20°F when used with a ballast conforming to the requirements of ANSI Standard C78.1-1991 and is expressly designated as a cold temperature lamp both in markings on the lamp and in marketing materials (including but not limited to catalogs, sales literature and promotional material)
- <sup>3</sup> - Colored fluorescent lamp means a fluorescent lamp designed and marketed as a colored lamp and with either of the following characteristics:
  - A CRI less than 40 (as determined according to the method given in CIE Publication 13.2 (see 10 CFR 430.22))
  - A lamp correlated color temperature less than 2500K or greater than 6600K