



REGULATION SUMMARY

DoE 10 CFR Part 430 (EPACT)

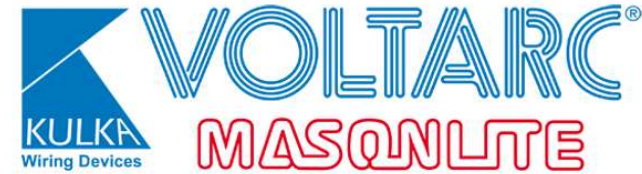
Energy Conservation Program: Energy Conservation Standards and Test Procedures for General Service Fluorescent Lamp and Incandescent Reflector Lamps

- 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 ≥ 84
- ✓ Lamps with a CCT $>4500K$ and $\leq 7000K$ LPW ≥ 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.¹

¹ - 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 $\geq 25W$

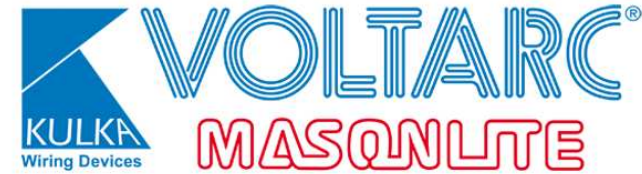
(Any straight-shaped lamp (commonly referred to as a 4-foot medium bi-pin lamp) with medium bi-pin bases of nominal overall length of 48" and rated wattage of $\geq 25W$)

➤ Requirement:

- ✓ Lamps with a CCT $\leq 4500K$ LPW ≥ 89
- ✓ Lamps with a CCT $>4500K$ and $\leq 7000K$ LPW ≥ 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 configuration¹

¹ - 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 ≥ 97

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

LPW ≥ 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:

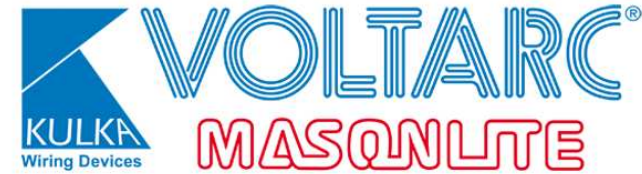
- ✓ Lamps with a CCT $\leq 4500\text{K}$ LPW ≥ 92
- ✓ Lamps with a CCT $>4500\text{K}$ and $\leq 7000\text{K}$ LPW ≥ 88

- ✓ 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.²
- ✓ Voltarc F96T12 (8') Design 50 series lamps are designed for use in cold temperature installations², have a high color-rendering index (CRI) of 90³ and are exempt from this regulation.

² - 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)

³ - 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 ≥ 86
 - ✓ Lamps with a CCT $>4500K$ and $\leq 7000K$ LPW ≥ 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 ≥ 76

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

LPW ≥ 72

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



FOOTNOTES

- ¹ - 10 CFR 430 Section III g “various other fluorescent lamps” – DOE does not extend coverage to GSFL with alternate lengths, diameters, bases or shapes
- ² - 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)
- ³ - 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