



ANSI Standards and Spiral CFL's

A White Paper: The Importance of Lamp and Ballast Compatibility

Based on their brightness, energy efficiency, and ease of use, compact fluorescent lamps (CFLs) have continued to grow in popularity, especially in residential applications. While integrated, screw-based CFLs have been popular in residential applications for many years, pin-based CFL technology has recently been experiencing increasing acceptance in residential applications as well as in hotel and hospitality settings.

To ensure lamp and ballast compatibility, standards for 4-pin CFLs and electronic ballasts were developed under the American National Standards Institute (ANSI).

The ANSI standards developed for compact fluorescent lamps are known as "ANSI _IEC C78.901-2005" and those for compact fluorescent ballasts are "C82.11." Designing to these standards allows for ease of replacement and insures product compatibility.

Entry of New Spiral CFLs to the Market

A number of new 4-pin spiral compact lamps have been introduced into the marketplace. These are mostly targeted for applications that have to comply with California's Title 24 Energy Code and/or the EPA's Energy Star Residential Lighting Fixture Program. These newer spiral lamps utilize industry standard lamp bases such as the GX24q-3 and could be installed in a fixture intended for use with ANSI standard lamps. However, many of these spiral lamps do not meet established ANSI specifications for 4-pin based compact fluorescent lamps. Therefore, unless these lamps are operated by a specific manufacturer's ballast, lamp / ballast compatibility cannot be guaranteed.

Impact of Lack of Standardization

This lack of standardization with these spiral lamps may create difficulty in finding the correct replacement lamp and could result in confusion for the end user. It may also cause improper lamp / ballast operation, which could adversely affect system performance and reduce lamp and/or ballast life.

In Summary

- If a 4-pin spiral CFL meets the applicable ANSI standard for its wattage, it should be compatible with a ballast designed according to ANSI Standards.
- If a spiral lamp does not meet an ANSI standard, then lamp / ballast compatibility cannot be guaranteed.
- Users are encouraged to familiarize themselves with the ANSI standards or contact their lamp or ballast manufacturer to ensure the optimal compatibility and performance of their 4-pin spiral CFL system.

Please note that Philips Advance ballasts are designed to operate lamps which meet ANSI standards and that Philips Lighting Electronics does not warranty the use of its ballasts with lamps which do not meet ANSI standards.

A leader in the ballast industry for over 60 years, Philips Lighting Electronics, based in Rosemont, Illinois, offers a full line of Philips Advance branded ballasts and drivers for fluorescent, HID, and LED light sources to the market's broad range of lighting fixture manufacturers and electrical distributors. For more information on Philips Lighting Electronics' complete product line and range of Smart Solutions™, visit our website at www.philips.com/advance or call us at (800) 322-2086.



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Philips Lighting Electronics
10275 W. Higgins Road
Rosemont IL 60018
Tel: 800-322-2086 Fax: 888-423-1882
Customer Support/Technical Service: 800-372-3331
OEM Support: 866-915-5886
www.philips.com/advance