

February 15, 2010

California 2008 Title 24 Section 148

As the state of California continues to pave the way in energy efficiency for the rest of the United States, it has once again pushed efficiency levels in the lighting industry. Effective January 1, 2010, Title 24 Section 148 put into effect new requirements for signs. Pertaining to Universal Lighting Technologies Signa product line, this legislation dictates that a sign must be equipped with at least one of the following light sources.

1. High pressure sodium lamps; or
2. Metal halide lamps that are:
 - A. Pulse start or ceramic served by a ballast that has a minimum efficiency of 88 percent or greater, or
 - B. Pulse start that are 320 watts or smaller, are not 250 watt or 175 watt lamps, and are served by a ballast that has a minimum efficiency of 80 percent.
Where ballast efficiency is the measured output wattage to the lamp divided by the measured operating input wattage when tested according to ANSI C82.6-2205; or
3. Neon or cold cathode lamps with transformers or power supply efficiency greater than or equal to following:
 - A. A minimum efficiency of 75 percent when the transformer or power supply rated output current is less than 50mA; or
 - B. A minimum efficiency of 68 percent when the transformer or power supply rated output current is 50mA or greater.
Where the ratio of the output wattage to the input wattage is at 100 percent tubing load; or
4. ...
5. Light emitting diodes (LEDs) with a power supply having an efficiency of 80 percent or greater; or
6. ...
7. Electronic ballasts with a fundamental output frequency not less than 20kHz;

Universal Lighting's Signa brand offers a number of solutions that meet and exceed these stringent requirements. For channel letter applications, the new Signa LED System offers a driver that exceeds the 80% efficiency requirement. For linear fluorescent lamps, all models of Signa's Electronic Sign Ballast family have an output frequency above the required 20 kHz making them fully compliant. In addition Signa also offers a number of high pressure sodium and pulse start metal halide ballasts that meet the requirements of Title 24. A full copy of California's Title 24 can be found [here](#).

Best Regards,



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