



"Designing and Manufacturing Excellence"

April 17, 2003
Ms. Darcy Hoffmeyer
ICF Consulting
1725 Eye Street, NW Suite 1000
Washington, DC 20006

Subject: ENERGY STAR for EXIT Signs - Draft 2 Comments

Dear Darcy:

We feel that the Draft 2 provisions, will begin a trend in EXIT sign construction that will reduce the overall visibility and reliability of the product. While we believe that it is an improvement from Draft 1, Draft 2 does not protect the integrity and intent of the EXIT sign. Reducing the power consumption of an electric sign from 5 watts to 3 watts may cause manufacturers to replace transformers with non-magnetic components in their designs. Such a move would increase the susceptibility of the EXIT sign to become inoperable in the event of a AC line spike. Thus, the end result would be a weakening of the reliability of the EXIT sign. A standard statement about luminance depreciation will create an atmosphere of uncertainty for the end user. Lastly, establishing a new set of requirements without preparing for the upcoming 9th Edition of UL924 could result in prematurely outdated ENERGY STAR requirements.

As an EXIT sign is intended to direct people to the means of egress, in some instances, it will save lives. This benefit should not be compromised for energy savings. An EXIT sign should never fail to save a life due to design inferiority because a manufacturer was looking for a sales advantage with the ENERGY STAR logo. Underwriters Laboratories has began the work with the UL924 Standards Technical Panel (STP) to develop requirements for the 9th edition of UL924. During the initial discussions, the question being asked is how can we make an EXIT sign be more visible. Even though evolving technologies permit reduced input power consumption, a design point will be reached where sign reliability is compromised for reduced electrical ratings.

The proposed lamp degradation marking seems to be of no value. With reductions in power consumption as the main focus for ENERGY STAR, it seems inappropriate to require an EXIT sign manufacturer to inform the end user about arbitrary luminance depreciation. As Draft 2 has recognized that EXIT sign visibility is outside the mission of ENERGY STAR, so too luminance depreciation is beyond the mission of ENERGY STAR. Also, a standard statement would likely create more confusion to the end user than provide usable information. The first point of confusion would be the question of when the light output level is below current building code requirements after the sign has been installed? This issue has never been resolved by NFPA or UL for signs after installation. Another confusing issue would be determining who is responsible for judging that light output levels are below current building code requirements after a sign has been installed? A logical answer is the Authority Having Jurisdiction (AHJ). But, in general, AHJ's are not qualified to make an objective determination of EXIT sign brightness.

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Furthermore, lamp degradation is not the only cause of an EXIT sign's failure to meet current building codes light output levels. A damaged non-magnetic component (caused by an AC line spike) would certainly cause unacceptable light levels. Would ENERGY STAR require a standard statement indicating that a particular EXIT sign design is particularly susceptible to AC line spikes, which may lead to light output levels dropping below current building codes requirements? Therefore, without a definitive instruction to the end user regarding luminance depreciation, a standard statement serves no other purpose than to deliver undue alarm to the end user and promote further rift between electric and non-electric sign manufacturers.

At this time, UL is preparing new requirements for EXIT signs in the 9th edition of UL924. Draft 2 only considers the 8th edition of UL924. Draft 2 makes no mention of the upcoming edition. If the NFPA and UL reach their ultimate goal, EXIT signs will become more visible, including a consideration of visibility through smoke. How will Draft 2 accommodate changes to EXIT sign construction as required by future editions of UL924?

In summation, we see ENERGY STAR's fundamental purpose as a means to inform the users of EXIT signs as to which products promote overall input power savings. Draft 2 does more than this by straying into areas of EXIT sign reliability and visibility with its provisions. As such, we feel that Draft 2 is outside the realm of its intended purpose and requires further modification.

Best regards,

A handwritten signature in black ink that reads "Richard D. Bakas". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Richard D. Bakas
Engineering Manager

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