

December 28, 2009

Mr. Hampton Newsome  
Federal Trade Commission  
Office of the Secretary, Room H-135 (Annex N)  
600 Pennsylvania Avenue, NW  
Washington, DC, 20580

Dear Mr. Newsome:

The Consortium for Energy Efficiency (CEE) respectfully submits the following comments on the Notice of Proposed Rulemaking published by the Federal Trade Commission (FTC) on October 27, 2009 (Proposed Lamp Labeling Amendments, P084206). The Consortium's comments were developed by the CEE Residential Lighting Committee.

## General Comments

CEE thanks the FTC for conducting consumer research regarding the communication of energy and other performance information on lamp labels and for using its research findings to inform the proposed lamp labeling amendments. These steps give CEE confidence that the proposed label was developed based on demonstrated consumer preferences and created with the typical U.S. consumer in mind.

The Notice of Proposed Rulemaking describes that FTC undertook this revision of lamp labeling requirements to "help consumers understand new high-efficiency bulbs and help them choose bulbs that meet their needs." To further progress toward that goal, CEE recommends that the FTC develop standard definitions for terms such as "energy saving" and "energy efficient" to provide manufacturers with sufficient guidance and direction to use when developing their lamp packaging. This recommendation is based on the CEE members' hypothesis that pending minimum energy performance standards promulgated by the U.S. Department of Energy (DOE) for general service lamps may prompt some manufacturers to promote low wattage products as energy efficient lamps when more efficient alternatives exist.

## Front and Rear Panel Format

Based on both CEE member efficiency programs' experience in consumer education and the FTC's research findings, CEE supports the proposed requirement to have different pieces of information

appear on the front and back (or side) of lamp packaging. We agree with the proposal to indicate light output and energy use on the front of the packaging (because these are important product attributes for consumers to quickly understand) and to list more detailed information listed on the back (or side) of the packaging, as illustrated in Figure 2 in the FTC Notice of Proposed Rulemaking.

## Brightness / Light Output

In FTC's research on consumer preferences, it was found that consumers slightly favor the term "brightness" over "light output" to indicate the number of lumens a lamp produces. While CEE acknowledges that the term "brightness" is more familiar to most consumers, we recommend that the FTC require "light output" instead because this is the term accepted in the lighting industry. According to the National Electrical Manufacturers Association (NEMA) Energy Policy Glossary, a lumen is defined as "a unit of measurement of the total light output from a specific source."<sup>1</sup> While the NEMA Energy Policy Glossary is not a document aimed at a consumer audience, consumers who work with lighting designers or read manufacturer product literature will likely be exposed to the term "light output" and not "brightness." CEE believes that having multiple terms for lumen output could lead to consumer confusion.

In addition, the Lighting Research Center indicates that "lamps with higher correlated color temperature (CCT) values produce greater brightness perception than lamps with lower CCT of the same luminance."<sup>2</sup> Because brightness perception is influenced by other factors, such as CCT, we are concerned using the term "brightness" could misrepresent the consumer's experience with a lamp. Based on this, we recommend that FTC be require the term "light output" on the label, which addresses only the lumens emitted and not the consumer's perception. If the label were to truly communicate brightness, it would need to take into account other factors like CCT that cannot be expressed in the form of lumens.

CEE supports the FTC's decision not to require information on the label that equates the light output of high efficiency lamps to incandescent lamps (e.g., 13W fluorescent is equal to 60W incandescent). We agree with the rationale provided by the FTC that watt equivalence information is likely to become less relevant as DOE minimum energy performance standards for lamps take effect in 2012 and that including it on the label could slow consumers' transition to using lumens to denote light output. However, we appreciate that consumers are accustomed to seeing wattage equivalence information on lamp labels and believe its absence could cause consumer confusion in the short term. As a result, we recommend that the FTC allow manufacturers to provide this information on the label on a voluntary basis. CEE suggests requiring manufacturers who choose to include watt equivalence information on the label to use a smaller font size than is used for the light output information.

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<sup>1</sup> The National Electric Manufacturers Association. Energy Policy Glossary. Accessed December 17, 2009. <http://www.nema.org/gov/energy/glossary/#L>.

<sup>2</sup> Lighting Research Center, Lighting Answers "How Valid are the Claims Regarding Full Spectrum Light Sources?" <http://www.lrc.rpi.edu/programs/nlpip/lightinganswers/fullSpectrum/claims.asp> September 2003 (Revised March 2005).

To further decrease the potential for consumer confusion, CEE recommends that the FTC include information on incandescent wattage equivalence (similar to Figure 5 in the rulemaking document) in the proactive national program of “consumer awareness, information, and education” that it will be pursuing with DOE, which is described in the Notice of Proposed Rulemaking. CEE believes such a program will be critical in helping consumers become familiar with the proposed label during the transition period. Because energy efficiency programs play an important role in educating their customers about efficiency, CEE would like to indicate its willingness to work with the FTC and DOE in the development of the consumer education program.

## Energy Use / Efficiency

CEE members have gained considerable experience communicating energy use information to consumers through their administration of lighting efficiency programs. Based on this experience, CEE supports the FTC proposal to require lamp energy use be indicated by an annual operating cost figure (in dollars).

Further, CEE agrees with the decision made by the FTC (informed by its research findings) not to require lumens per watt information or a five-star rating system on the label. While we agree that lumens per watts information should not be required to be put on the label, CEE recommends that manufacturers wishing to include lumens per watt be allowed to do so on a voluntary basis because it is a standard metric for efficiency within the lighting industry. However, due to the reasons cited by the FTC in the Notice of Proposed Rulemaking (confusion about stars as a product quality indicator and interplay with the ENERGY STAR label), we recommend that the FTC prohibit the star system from being used on the label.

## Life

In their efficiency programs, CEE members carefully consider the lifetimes associated with the lighting products they promote in order to ensure that lamps: 1) meet consumer’s expectations and 2) continue to deliver energy savings over time. Based on the expertise we have developed in communicating lamp lifetime to consumers, CEE supports the FTC’s proposal to require that lamp lifetime be listed on the label in years rather than in hours. While using hours is both more accurate and consistent with standard industry practice, we understand that the FTC’s research findings indicate that years are more useful to the consumer (as long as the label indicates how the number of years is calculated). In addition to increasing consumer understanding, expressing lifetime in years has the added benefit of helping to ensure that all manufacturers use the same assumptions when calculating lamp lifetime values.

## Color Appearance

CEE agrees with the proposal to use a color scale on the label to indicate the lamp’s color temperature and supports the specific proposal made by the FTC. To increase the color scale’s usefulness to consumers, CEE recommends the addition of low and high Kelvin values at the ends of the scale (similar to the low and high operating cost values provided on the EnergyGuide label, but in different units). We believe these Kelvin values would provide consumers with a frame of reference that would be useful in their decision making. Due to consumers’ unfamiliarity with the

color appearance of lamps (as shown in the FTC’s research findings), CEE also recommends that lamp color appearance be part of the DOE-FTC consumer education program, with messaging similar to that shown in Figure 5 of the Notice of Proposed Rulemaking.

In terms of printing the color scale in black and white or in color, CEE recognizes that there are additional costs to manufacturers to print the scale in color. In addition, CEE is concerned that it may be difficult for the colors printed on packaging to truly represent the Kelvin temperatures they are supposed to indicate. For these reasons, we support the FTC’s proposal to have the color scale printed in black and white on lamp packaging. However, based on the FTC’s research findings that the color version of the scale performed better among consumers, we ask the FTC to explore the implications of allowing manufacturers to print a color version of the scale on a voluntary basis. When exploring this option, CEE asks that FTC consider whether consumer confusion would result from having two versions of the color scale in the market (one printed in black and white and one printed in color).

CEE also supports the FTC’s proposal to require the phrase “Light Appearance” rather than “Color Appearance” on the label, as the FTC’s research findings indicate that this terminology is clearer to consumers. In addition, this term is more consistent with the “Light Output” term CEE recommends for conveying lumen output.

## Mercury

CEE supports including the proposed disposal language on the label for lamps that contain mercury. However, CEE recommends increasing the prevalence of the term “recycle” by changing the language in one of two ways, “Recycle according to local, state, and federal disposal laws” or “Dispose according to local, state, and federal recycling laws.” Because efficiency programs promote the energy savings associated with CFLs, they are especially attuned to the importance of recycling these lamps to maximize their environmental benefits.

## CRI

CEE believes that a lamp’s ability to render colors accurately is an important performance attribute for consumers to understand. While we support the FTC proposal to not require its disclosure on the label for the reasons outlined below, we recommend that manufacturers wishing to indicate the CRI of their lamps be permitted to do so on a voluntary basis.

CEE agrees with the rationale in the Notice of Proposed Rulemaking that “there is no need for mandatory CRI disclosures because EISA sets a minimum CRI standard of 80 for all lamps beginning in 2012.” In addition, according to the National Institute for Standards and Technology (NIST), CRI will only provide a valid comparison of color rendering for lamps with the same chromaticity.<sup>3</sup> Due to CEE members’ expertise in educating consumers on different aspects of lighting, we anticipate that educating consumers on the complexities of CRI would pose a significant

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<sup>3</sup> The National Institute for Standards and Technology. Color Rendering of Light Sources. <http://physics.nist.gov/Divisions/Div844/facilities/vision/color.html>. Accessed on December 17, 2009.

challenge. Lastly, CRI is not a metric that has been demonstrated to work well with all light sources. Currently NIST is researching an alternative metric called a Color Quality Scale (CQS), which would address the limitations CRI has in measuring solid state lighting sources.

Thank you for your consideration of these comments. Please contact CEE Program Manager Eileen Eaton at (617) 337-9263 with any questions.

Sincerely,



Marc Hoffman  
Executive Director