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Ms. Taylor Jantz-Sell
Environmental Protection Agency
ENERGY STAR Lighting Program Manager
1200 Penn. Ave NW 6202J
Washington, DC 20460

Subject: Comments on ENERGY STAR Lamps Specification V1.0 Final Draft

Dear Ms. Jantz-Sell,

Philips has reviewed the ENERGY STAR Lamp Specification V1.0 Final Draft and appreciates the opportunity to provide comments.

We look forward to working with the EPA on the development of the ENERGY STAR Lamp specification V1.0. If you have any questions, please contact Jennifer Burns at 202-403-8092 or Jennifer.burns@philips.com.

Sincerely,

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Philips comments to ENERGY STAR Lamps V1.0 Final Draft

2.0 Effective Date

A 12 month transition period is not adequate for re-design and re-testing of new products. For CFLs, a 40% life test data is required to pre-qualify a product, a 10 K hour product will need 7 months (4,000 hours) to test the products. If we add the design and approbation time (UL, FCC, CSA approbations), tooling (making of new molds), internal testing and production ramp-up, it becomes clear that one year is not enough time.
Proposal: Allow 18 months transition and set the effective date to March 1, 2015.

10.3 Rapid Cycle Stress Test

This issue remains problematic as some models barely exceed the 100 msec. time that the EPA prescribes for “instant” start lamps. It cannot be detected the difference in starting time between 100 msec. and 300 msec. without instruments. The EPA is imposing a requirement that people will not really appreciate, but will make the lamps more expensive.
As mentioned before, the European 244/2009 directive has adopted 300 msec. for the differentiation point between instant start and pre-heat lamps. Proposal: Allow the lamps to survive one cycling per every two hours of rated life for lamps with a starting time ≤ 300 msec. instead of ≤ 100 sec. The adoption of the same standard as Europe (300 msec.) will allow us to standardize the designs and keep a lower cost for the products.

11.5 Run-up Time

CFL Covered products contain an amalgam that serves to optimize the light output and thus, provide a higher efficacy for CFLs that run rather hot, such as the ones with an outer Cover or Reflector types.
This increase in efficacy provided by the amalgam has a disadvantage, which is to slow down the lamp run-up. Therefore, covered CFLs greatly increase their efficacy by the use of an amalgam. The EPA will be eliminating from the program a lot of very good and efficient CFLs just for keeping this strict requirement.
The European 244/2009 directive for lamps actually prescribes the run up at 60% Φ (light) rather than 80% Φ. Above 60% Φ, there is already sufficient light in the room and it is actually hard to distinguish with the eye the 60% Φ point from the 80%. We really need instruments to detect this. This European requirement can be seen below.
Proposal: Either adopt the European standard of 60% Φ instead of 80% or change the requirement to 80% Φ in ≤ 150 sec, instead of ≤ 120 sec.

Table 4

Functionality requirements for compact fluorescent lamps

Functionality parameter	Stage 1	Stage 5
Lamp survival factor at 6 000 h	≥ 0,50	≥ 0,70
Lumen maintenance	At 2 000 h: ≥ 85 % (≥ 80 % for lamps with second lamp envelope)	At 2 000 h: ≥ 88 % (≥ 83 % for lamps with second lamp envelope) At 6 000 h: ≥ 70 %
Number of switching cycles before failure	≥ half the lamp lifetime expressed in hours ≥ 10 000 if lamp starting time > 0,3 s	≥ lamp lifetime expressed in hours ≥ 30 000 if lamp starting time > 0,3 s
Starting time	< 2,0 s	< 1,5 s if P < 10 W < 1,0 s if P ≥ 10 W
Lamp warm-up time to 60 % Φ	< 60 s or < 120 s for lamps containing mercury in amalgam form	< 40 s or < 100 s for lamps containing mercury in amalgam form
Premature failure rate	≤ 2,0 % at 200 h	≤ 2,0 % at 400 h
UVA + UVB radiation	≤ 2,0 mW/klm	≤ 2,0 mW/klm
UVC radiation	≤ 0,01 mW/klm	≤ 0,01 mW/klm
Lamp power factor	≥ 0,50 if P < 25 W ≥ 0,90 if P ≥ 25 W	≥ 0,55 if P < 25 W ≥ 0,90 if P ≥ 25 W
Colour rendering (Ra)	≥ 80	≥ 80

14.1 Lamp Shape Dimensions

The 5% tolerance on the MOL for Omnidirectional ANSI Standard lamps opens the door for consumer complaints in regards to lamps not fitting into existing fixtures and/or table lamps, which could negatively impact the adoption of the LED technology (similar to the CFL issue). It is important that guidelines like ANSI be upheld and serve as the standardization for products in the market. This tolerance is like allowing the non-standard category to exist in the specification for SSL. Due to the fact that most omnidirectional products on the market today are designed to comply with the ANSI standard C78.20-2003, allowing this tolerance appears to show favor to one manufacturer.

With the products having a 5% tolerance on the MOL makes them noncompliant with the ANSI standard C78.20-2003 due to the fact that the standard has a maximum limit and does not include a tolerance beyond the MOL. The allowance for manufacturing variation in the standard (mentioned in the final draft comment box) is based on a larger sample size (production run) than what is being required in the lamp specification.

We don't agree with the exception for the 5% tolerance only applying to omnidirectional lamps. The dimensions of all lamps are critical to the final application, and the ANSI standard provides a means for ensuring that the products are designed accordingly.

Also, allowing this tolerance could potentially hurt the credibility of the program, seeing that several MR16 products were delisted for this same issue. The solution to the MR16 MOL issue was to work with ANSI to create a standard that would provide an outline that reflected the variations in the SSL technology. We believe that this process should continue to be the way of working, recognizing that it is important for the EPA to have industry standards that can be referenced in the specifications. Proposal: We ask that the 5% tolerance for the MOL be removed.