

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460



**OFFICE OF  
AIR AND RADIATION**

January 16, 2013

Dear ENERGY STAR® Displays Partner or Other Interested Party:

The U.S. Environmental Protection Agency (EPA) and Department of Energy (DOE) have received several questions regarding testing and qualification in the Version 6.0 ENERGY STAR Displays specification. In response, EPA is making a modest clarification to the eligibility criteria language to make clear EPA's intention regarding a Sleep Mode requirement. DOE is also clarifying aspects of the setup, luminance setting, and On Mode in the test method in direct response to stakeholder questions. These clarifications are described herein, and will appear shortly in an updated version of the specification on the ENERGY STAR website. This updated version will be denoted by "Rev. Jan-2013" in the title of the eligibility criteria and test method sections, and in the document's footer. The version number will remain 6.0.

**Sleep Mode Clarification**

One clarification underscores EPA's intention that when determining whether a model's Sleep Mode performance meets the specification's requirements, the party making this determination shall compare to those requirements (1) the power in the most energy consumptive Sleep Mode in the case of products with more than one Sleep Mode that may be manually selected or if the product can enter Sleep Mode via different methods (e.g., remote control or putting the host PC to sleep), or (2) the average power of all Sleep Modes in the case of products that automatically transition through more than one Sleep Mode. EPA and DOE are clarifying this point via the following modifications:

1. Section 3.4.3 in the eligibility criteria currently reads:

For products that offer more than one Sleep Mode (e.g., "Sleep" and "Deep Sleep"), measured Sleep Mode power ( $P_{\text{SLEEP}}$ ) in any Sleep Mode shall not exceed  $P_{\text{SLEEP\_MAX}}$  in the case of products without bridging or network connection capabilities, or  $P_{\text{SLEEP\_AP}}$  in the case of products tested with additional power-consuming capabilities, such as bridging connections or network connections.

To this, EPA is adding the following sentences:

If the product has a variety of Sleep Modes that may be manually selected, or if the product can enter Sleep Mode via different methods (e.g., remote control or putting the host PC to sleep), the measured Sleep Mode power ( $P_{\text{SLEEP}}$ ) of the Sleep Mode with the highest  $P_{\text{SLEEP}}$ , as measured per Section 6.5 of the Test Method, shall be the  $P_{\text{SLEEP}}$  reported for qualification. If the product automatically transitions through its various Sleep Modes, the average  $P_{\text{SLEEP}}$  of all Sleep Modes as measured in Section 6.5 of the Test Method shall be the  $P_{\text{SLEEP}}$  reported for qualification.

2. Section 6.5 C) in the test method currently reads:

If the product has a variety of Sleep Modes that can be manually selected, measurements shall be performed and recorded in all Sleep Modes. If the product automatically cycles through its various Sleep Modes, the measurement time shall be long enough to obtain a true average of all Sleep Modes, which will be the Sleep Mode power used for qualification.

From this, DOE is striking the last clause “which will be the Sleep Mode power used for qualification” since it now appears in the addition to Section 3.4.3 of the eligibility criteria, and is adding further clarity that the measurement shall still meet requirements outlined in Section 5.3 IEC 62301-2011. The revised Section 6.5 C) in the test method will read:

If the product has a variety of Sleep Modes that can be manually selected, or if the product can enter Sleep Mode via different methods (e.g., remote control or putting the host PC to sleep), measurements shall be performed and recorded in all Sleep Modes.

If the product automatically transitions through its various Sleep Modes, the measurement time shall be long enough to obtain an average of all Sleep Modes. The measurement shall still meet requirements (e.g., stability, measurement period, etc.) outlined in Section 5.3 of IEC 62301-2011.

### Test Method Clarifications

Additionally, DOE is making minor modifications to the test method language to clarify aspects of the setup, luminance setting, and On Mode:

3. Section 5.2 C) 2) of the test method currently does not specify VGA in its signal interface list and is only implied as an “Other Analog Interface.” In response to stakeholder questions and to reduce confusion, DOE is adding VGA in the signal connection priority list after all common digital interfaces.
4. Section 6.3 A) of the test method currently does not specify that the contrast settings should not be changed to set the luminance of the display. DOE is adding this clarification.
5. Section 6.3 C) of the test method currently does not explicitly include the time period for measuring On Mode with products that are tested with the VESA standard. DOE is adding clarification that the On Mode measurement shall be 10 minutes, which is identical to IEC 62087 when using the dynamic broadcast content.
6. Section 6.5 B) of the test method currently does not explicitly state how to place the host machine in Sleep Mode when testing the display in Sleep Mode. DOE is adding text to clarify that the Sleep Mode description for computer host machines comes from the Version 5.2 ENERGY STAR Computers specification.

If you have any questions or concerns about these clarifications related to the specification, please contact me at (202) 343-9845 or [Radulovic.Verena@epa.gov](mailto:Radulovic.Verena@epa.gov), or Joshua Forgotson, ICF International, at [Joshua.Forgotson@icfi.com](mailto:Joshua.Forgotson@icfi.com). For questions related to the test method, please contact Ashley Armstrong, DOE, at [Armstrong.Ashley@ee.doe.gov](mailto:Armstrong.Ashley@ee.doe.gov).

Thank you for your continued support of ENERGY STAR.

Best Regards,

A handwritten signature in black ink that reads "Verena Radulovic". The signature is written in a cursive style with a large initial 'V'.

Verena Radulovic, Product Manager  
ENERGY STAR for Consumer Electronics