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



OFFICE OF AIR AND RADIATION

August 28, 2018

Dear ENERGY STAR® Displays Partner or Other Interested Stakeholder:

The U.S. Environmental Protection Agency (EPA) welcomes your input on the enclosed <u>Draft 2 Version 8.0 ENERGY STAR Displays specification.</u> The proposed Draft 2 requirements reflect feedback received on Draft 1. Comments on Draft 2 are requested **by September 26, 2018**. This letter summarizes the proposed changes.

In response to Draft 1, EPA received three sets of written comments as well as verbal feedback during a webinar EPA hosted on May 7, 2018. EPA made a number of adjustments to the specification as a result. These changes and EPA's rationale for them are highlighted in noteboxes throughout the specification. Additional responses are reflected in the Draft 1 comment response document. The Draft 2 Version 8.0 specification includes the following changes:

Dataset

EPA received a request to clarify which models were considered in EPA's analysis. EPA
updated its <u>dataset</u> with models certified as of May 2018. EPA has clarified this analysis
by referring specifically to 'unique' models that represent a unique tested model number.

Monitors Eligibility Criteria

- Computer Monitors Energy Requirements: In Draft 2, EPA has made a slight revision to the resolution coefficient and intercept values for the Maximum TEC equation. Further, EPA has applied a single requirement across all size bins for an overall total dataset pass rate of about 28% for ac-powered models.
- Enhanced Performance Displays: In response to comments received on Draft 1, EPA is proposing a continuous function to apply for enhanced performance displays (EPD) energy allowance for the variable Color Gamut instead of applying two separate discrete allowances. EPA is also proposing to raise the minimum Total Native Resolution requirement from 2.6 to 3.6 megapixels for models to apply the EPD allowance.
- Occupancy Sensor: EPA is proposing to remove the Occupancy Sensor allowance for monitors as there are no data indicating that the presence of such feature will draw significantly more power.
- **Touch Technology:** In Draft 2, EPA proposes a revision to the energy allowance for monitors with touch technology from 20% in Draft 1 to 15% of $E_{TEC\ MAX}$.
- Curved Monitors: In response to Draft 1 comments, EPA is proposing an allowance of 5% for curved monitors.

Signage Display Definition and Eligibility Criteria

- Signage Displays Definition: In response to Draft 1 comments and to better
 differentiate monitors from signage displays, EPA proposes to require that signage
 displays meet three instead of two of the listed criterion and has added a fifth criterion
 related to remote management. EPA also received feedback to create a specific product
 subcategory for tiled displays with On Mode power requirements similar to comparably
 sized single panel signage displays. In Draft 2, EPA is proposing a definition for Tiled
 Display System and Maximum Tiled Configuration.
- **Signage Display On Mode Requirements:** EPA received feedback that the On Mode power limit equation was relatively more stringent for displays over 65 diagonal inches compared to the criteria for smaller models. In Draft 2, EPA is proposing a revised level to recognize the top models across the spectrum of sizes, luminance, and resolution.

General Requirements for Monitors and Signage Displays

In Draft 2, EPA is proposing requirements for general user information and notifications. EPA also added direction regarding use of forced menus and sleep mode settings. In response to stakeholder comments, EPA is not requiring energy savings features to persist across all preset picture modes. EPA intends for these requirements to better inform consumers about which mode meets ENERGY STAR requirements and for users to easily return to the ENERGY STAR tested mode by selecting Default Picture Setting.

Test Method

In response to Draft 1 comments, EPA and DOE are proposing the definition of Tiled Display System and Maximum Tiled Configuration and new guidelines for testing the maximum configurations of tiled displays. EPA and DOE are also proposing to add USB-C to the signal interface order of testing preference list.

Stakeholders are requested to provide comments on the Draft 2 specification no later than September 26, 2018. Please send comments via e-mail to displays@energystar.gov. All comments received will be posted to the ENERGY STAR Product Development website, unless the submitter specifically requests that his or her comments remain confidential.

On Wednesday, September 5, 2018, at 12 pm U.S. Eastern Time, EPA will host a stakeholder webinar to present details on Draft 2 Version 8.0 ENERGY STAR Displays specification and address stakeholder questions and concerns. If you wish to attend this webinar, please register prior to the webinar.

The exchange of ideas and information between EPA, industry, and other interested parties is critical to the success of ENERGY STAR. To track EPA's progress in revising the ENERGY STAR displays products specification and to review comments, please visit the Product Development Web site at www.energystar.gov/RevisedSpecs and click on "Version 8.0 is in development" under "Displays."

Thank you for taking the time to review this draft specification. Please contact me at Kwon.James@epa.gov or (202) 564-8538 or Amit Khare at ICF, Amit.Khare@icf.com or (703) 272-6668 with any questions or concerns. For any questions related to the Displays test method, please contact Jeremy Dommu, DOE, at Jeremy.Dommu@ee.doe.gov or (202) 586-9870.

Best Regards,

James Kwon, Product Manager

ENERGY STAR for Consumer Electronics

Enclosures:

Draft 2 Version 8.0 ENERGY STAR Displays Specification

Draft 2 Displays Test Method

Draft 2 Displays Data Set

Draft 1 Comment Response Document