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



OFFICE OF AIR AND
RADIATION

May 2, 2019

Dear ENERGY STAR® Displays Brand Owner or Other Interested Party:

With this letter, the U.S. Environmental Protection Agency (EPA) is pleased to share the [Final Version 8.0 ENERGY STAR Displays specification](#). EPA would like to thank the many stakeholders who have invested time and effort to contribute feedback that has informed this specification revision process.

Version 8.0 requirements will become effective on January 28, 2020. This specification establishes challenging overall efficiency levels for all products and includes new and updated allowances to recognize energy-efficient implementations of popular features such as High Dynamic Range, higher color gamut, wide viewing angles, and USB-C power delivery. If all displays sold in the United States met these new requirements, the energy cost savings would grow to more than \$49 million each year and more than 900 million pounds of greenhouse gas emissions would be prevented.

This specification was developed through extensive engagement with stakeholders including numerous draft specifications and meetings. EPA received several comments in response to the Final Draft specification, requesting modifications to the maximum Total Energy Consumption equations and the allowances for curved Displays, Enhanced Performance Displays (EPDs), and USB Type C compatibility. EPA reviewed all comments thoroughly, held follow-up calls with stakeholders, and conducted additional analysis to identify appropriate adjustments. The enclosed [Comment Response Document](#) contains a summary of comments on the Final Draft specification and an explanation of EPA's response in each case. Stakeholder comments, previous drafts of the specification, and related materials are available on the Version 8.0 Displays [product development website](#).

Changes reflected in this Final Version 8.0 specification are summarized below:

- EPA updated the Partner Commitments for consistency with other consumer electronics specifications, including the electronic labeling requirements and the product material requirements. The product material requirements were updated to reference the four phthalates that were identified as substances of very high concern in the restriction of hazardous substances (RoHS) 3 directive¹, with which EPA harmonizes in relevant specifications.
- EPA increased the allowance for models supporting 45 W or greater USB-C Power Delivery and specified that only models supporting 45 W or greater USB-C Power Delivery shall receive the USB-C allowance.
- EPA added the definition of Power Delivery based on the USB Power Delivery Specification.
- EPA clarified that the tested Color Gamut as a continuous percentage of CIE LUV shall be used to calculate the Enhanced Performance Displays allowance.
- EPA replaced the two separate HDR allowances (E_{H600} and E_{H1000}) with a single HDR allowance (E_{HDR}) with two tiers corresponding to HDR 600 and HDR 1000 level performance, respectively. This

update does not change the content of the HDR allowance but rather clarified that only one allowance shall be allotted for HDR capability on the performance level.

Regarding stakeholder requests for further easing of the maximum Total Energy Consumption requirements and the EPD allowance, EPA determined that doing so would: compromise national savings delivered by the specification; reduce the specification's effectiveness in differentiating more efficient products; and disproportionately recognize models with certain features and select sizes. In order to fairly differentiate top-performing models of various sizes and features, EPA has not made the changes requested in these areas. Similarly, EPA lacked sufficient data to warrant revising the allowance for curved Displays. Throughout this specification development process, EPA considered comments and data and adjusted the criteria where warranted. A wide range of models from all major manufacturers are able to meet the proposed requirements, ensuring a good selection of certified models for purchasers.

Timeline and Next Steps

EPA shares partners' desire for a smooth transition from one ENERGY STAR specification to the next, so that consumers can expect ENERGY STAR labeled products to fully meet the latest requirements upon their effective date. With this in mind, EPA has established the following timeline:

- Effective immediately, manufacturers may elect to have their Certification Body (CB) certify their eligible products to the Version 8.0 requirements.
- As of September 16, 2019, CBs will be instructed to stop certifying new product submittals to Version 7.1. Note, however, that existing certifications will remain valid for purposes of ENERGY STAR qualification until January 28, 2020.
- Any display manufactured as of January 28, 2020, must meet Version 8.0 requirements to bear the ENERGY STAR mark. All certifications of products to the Version 7.1 specification will be invalid for purposes of ENERGY STAR qualification and the product finder will only include models certified to Version 8.0.

ENERGY STAR partnership as a manufacturer is limited to organizations that own and/or license a brand name under which they sell eligible products in the United States and/or Canada. Partnership is not available to original equipment manufacturers (OEMs) that do not sell directly to consumers or end users. OEMs may certify products on behalf of the ENERGY STAR brand owners/licensees; however, the brand owner must be the ENERGY STAR partner associated directly with the certified product models, since only partners are authorized to use the ENERGY STAR certification mark.

EPA thanks stakeholders who provided feedback during the specification revision process and looks forward to working with you as you certify and market your energy-efficient displays. Please direct any questions regarding the specification and its timeline to James Kwon at EPA, Kwon.James@epa.gov or (202) 564-8538 or Théo Keeley-LeClaire at ICF, Theo.Keeley-LeClaire@icf.com or (571) 373-5471. Questions regarding the test method can be directed to Jeremy Domm, U.S. Department of Energy, Jeremy.Dommu@ee.doe.gov, or (202) 586-9870. For any other Displays-related questions, please contact displays@energystar.gov.

Thank you for your continued support of the ENERGY STAR program.

Sincerely,



James Kwon, Product Manager
U.S. Environmental Protection Agency
ENERGY STAR for Consumer Electronics

Enclosures:

[Final Version 8.0 Displays Program Requirements](#)
[Displays Final Draft Version 8.0 Comment Response Document](#)
[Displays Final Version 8.0 Dataset](#)

¹Commission Delegated Directive (EU) 2015/863 of 31 March 2015 amending Annex II to Directive 2011/65/EU of the European Parliament and of the Council as regards the list of restricted substances, effective 2019.

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