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

OFFICE OF AIR AND RADIATION

October 27, 2022

Dear ENERGY STAR® Audio/Video Partner or Other Interested Stakeholder,

The Environmental Protection Agency (EPA) is pleased to share a first draft of the Version 4.0 ENERGY STAR Audio/Video specification. EPA monitors market and technology developments and reviews specifications regularly, looking for opportunities to recognize increased energy savings. The Agency sees an opportunity to improve the ENERGY STAR Audio/Video specification by referencing the latest industry standard test method that better reflects products that exist today and expanding scope to realize additional energy savings. EPA thanks stakeholders for their comments on the discussion guide, and engagement in subsequent conversations about improving the specification and test method.

Over the past few years, EPA and the U.S. Department of Energy (DOE) have worked alongside industry as part of the Consumer Technology Association's (CTA) R3 Working Group 3 to develop an updated test procedure for audio/video products for use by the ENERGY STAR program. This newly completed test provides results that better represent the way products are likely to be used by consumers.

The proposals reflected in this draft of the specification are based on an analysis of 312 models in the ENERGY STAR V3.0 dataset, as well as limited product testing that EPA completed. The Agency seeks additional data from stakeholders to establish performance requirements noted as 'TBD' and to demonstrate the need to adjust levels that are proposed based on test results from the new CTA test method.

In addition to adopting the latest CTA/ANSI test method, EPA proposes the following changes in this Draft 1 specification:

- **Definitions and Scope**: EPA made minor updates to the definitions throughout the specification to harmonize with the CTA 2084-A test procedure. EPA also proposes a definition for Tower/ PA systems to provide guidance on acceptable configurations and clarifying the scope to establish energy efficiency requirements. The revised test method also allows for testing of battery powered devices and as such EPA proposes to include them in the scope of the specification.
- **Rounding**: EPA made editorial updates to the significant digits and rounding section to harmonize with other recently updated ENERGY STAR specifications.
- **EPS requirements**: EPA has revised the EPS requirements to level VI consistent with the U.S. federal energy conservation standards.
- **Idle mode requirements:** EPA proposes reducing the base allowance for Idle State power requirements based on data from the ENERGY STAR certified product list and welcomes stakeholder feedback, along with any data stakeholders can share to fine tune the requirements if needed. With the proposed criteria, EPA expects about a 40% improvement in terms of savings in Idle State across all Audio/Video product categories compared to the previous version of the specification.

- **On mode requirements**: EPA is proposing a reduction in the On Mode power allowance for Blu-Ray DVD from 10.5 W to 5.4 W. An analysis of EPA's current dataset supports a healthy selection of products from a range of manufacturers that would qualify at this level. With the revised criteria, EPA expects a pass rate of 25% for DVD players and an overall 19% pass rate for optical disc players based on the On Mode requirements.
- **Sleep mode requirements**: EPA proposes to eliminate all the networking allowances in sleep mode as technology has rapidly evolved over the past decade and most products that have networking capability have demonstrated that they can meet the base allowance level.
- **APD requirements**: EPA proposes that Idle State power requirements be met irrespective of the APD timing default settings. This proposal is based on the fact that duty cycle data demonstrate significant savings potential given that a product typically spends an average of 146 hours in idle mode every year. Products used for Mass Notification and Emergency Communications Systems and those subject to ANSI/UL 2572 are exempt from this requirement.
- **Products with Audio Amplification shipped without speakers**: Prior to proposing efficiency requirements for products with audio amplification shipped without speakers in a forthcoming Draft 2 Specification, EPA seeks to enhance its dataset for these products such that it is more representative of the market and robust per the updated CTA-2084 test method. As such, EPA welcomes any new data generated per the CTA-2084 test method, as well as proposals on how to address energy use of these products most appropriately.

EPA will host a webinar to discuss and answer questions regarding the Draft 1 on Tuesday, November 15 from 1 to 3 PM Eastern Time. Please register here to attend. Again, stakeholders are encouraged to provide feedback and any relevant data for use in determining the ENERGY STAR performance levels no later than December 9, 2022 via e-mail to audiovideo@energystar.gov. 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 Audio/Video product specification, please visit the Audio/Video Version 4.0 product development webpage, which also hosts the previously published stakeholder comments regarding a Version 4.0 specification.

Please contact me at Kwon.James@epa.gov or (202) 564-8538, or Abhishek Jathar at ICF at Abhishek.Jathar@icf.com or (202) 862-1203, with any questions or concerns. For any general audio/video related questions, please contact audiovideo@energystar.gov. Thank you for your continued support of the ENERGY STAR program.

Best Regards,

James Kwon, EPA Product Manager
ENERGY STAR for Consumer Electronics

Enclosures:
ENERGY STAR Audio Video Version 4.0 Draft 1 Specification