



Automatic Brightness Control (ABC) Persistence

Two of these stakeholders noted that they agree with energy saving features being disabled only when:

- true HDR content is being played (if it reverts back after the content is no longer being viewed) or
 - the retail picture setting is selected.
- These stakeholders noted that as a result of the current proposal, manufacturers could encourage users to switch to preset picture settings that don't have energy saving features enabled by default



Automatic Brightness Control (ABC) Persistence

Manufacturers stated that:

- If ABC were to be enabled in every picture setting, they could look very similar, if not identical
- TVs need at least two preset picture settings which can provide a bright picture:
 - Vivid
 - HDR upscaling, which provides HDR-like picture experiences to the user
- EPA is already ensuring that ABC is being used properly because EPA is requiring that users be alerted if activation of a Special Function disables an energy saving feature.



EPA Findings

- EPA tested two popular 2017 UHD TV models to examine how ABC is being implemented and found that ABC is never implemented in Retail mode, but there are divergent approaches to implementing it in Home mode:
 - At least one manufacturer currently offers UHD TVs that implement ABC by default in all Home preset picture settings, including HDR upscaling
 - Other manufacturers continue to implement ABC in only the default or a handful of Home preset picture settings
 - It is most commonly not implemented in the brightest picture setting and with HDR upscaling
 - HDR upscaling may be a standalone preset picture setting or it could be a feature that may be enabled in certain picture settings
 - ABC now persists more widely in picture settings where it is enabled by default, even if users modify individual picture parameters like Backlight and Contrast.

EPA heard from retailers that stores increasingly demonstrate TVs in the brightest Home mode rather than Retail mode, to avoid playing built-in demos unique to each manufacturer and making it easier to compare picture quality with the same content across TVs.



Final Draft Specification

- EPA wants to ensure an even playing field by allowing manufacturers the flexibility to choose picture settings that do not have ABC enabled by default given the variability in how features like HDR upscaling are being implemented across TVs and manufacturers. EPA believes this will result in:
 - Good quality implementations of ABC in the picture settings where it is enabled, that will then persist in the home
 - User option to choose a picture setting without ABC enabled, along with a notification that alerts them that an energy saving feature will be disabled in that picture setting
- As a result, EPA is maintaining the proposal seen in Draft 2, along with additional language to prevent users from being encouraged to choose a picture setting that doesn't have ABC enabled by default:
- *The TV shall not contain subjective language to name or describe a Preset Picture Setting (e.g., optimal or preferred).*

EPA would appreciate stakeholder feedback on this language.

