

Lenovo's Comment on Energy Star 5.0 Tier1 Draft

1. **Lenovo supports the proposed formula for calculating the on-state power consumption limit in the EPA 5.0 Tier 1 draft:**
 - a. Lenovo believes the use of screen size & resolution is more representative of the products available today and in the future.
 - b. Lenovo has demonstrated with products released this year that the new requirement can be achieved by using commercially available technology.

2. **Lenovo has a concern regarding the Energy Star 5.0 Tier 1 test condition which does not define a consistent test condition:**
 - a. Lenovo believes a defined test condition, as in version 4.1, provides a more valid method for end users to interpret power consumption.
 - b. Lenovo has evaluated various monitors and found that by significantly reducing the brightness to levels most users would find too dim for use, nonetheless the design would pass the current requirement in 5.0 Tier 1.
 - c. Lenovo believes the existing 175 cd/m² measurement point should be retained in Energy Star 5.0.

Lenovo suggests that the EPA continue to use 175nits as the setting for the luminance test condition for version 5.0. Specifically, Lenovo suggest changing the corresponding words of "default setting" on page 12 and 13 of the version 5.0 draft to "175cd/m²". Below is the summary of the suggested changes to the draft:

- a. Page 12, at the Section of Luminance Test Patterns and Procedures, change "the unit's default setting" to "**175cd/m²**";
 - b. Page 13, at the Section I, Display Set-up and Characterization, change "the unit's default setting" to "**175cd/m²**";
 - c. Page 13, at Section J, Test Method, On Mode 3, change "the unit's default setting" to "**175cd/m²**";
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3. **Lenovo also suggests that the EPA tighten the sleep/off power requirement to be ≤ 1 watt and ≤ 0.5 watt respectively and to create a different levels for different power achievement (e.g. level 1: sleep ≤ 1 w, off ≤ 0.5 w. Level 2: sleep ≤ 2 w, off ≤ 1 w).**
 - a. The above suggested level 1(sleep ≤ 1 w, off ≤ 0.5 w) power requirement is achievable today. Lenovo has demonstrated that this requirement can be achieved with the multiple products released this year.
 - b. China has released a similar energy standard this year and the above level1 requirement is included. Lenovo has also achieved this requirement with multiple products released this year.