January 16th, 2015

Ms. Verena Radulovic
Product Manager
ENERGY STAR Program
U.S. Environmental Protection Agency
Via e-mail: displays@energystar.gov

Re: Panasonic Comments on ENERGY STAR Displays V7.0 Draft 1 Eligibility Criteria:

Panasonic appreciates the opportunity to comment on ENERGY STAR Displays V7.0 Draft 1 Eligibility Criteria. As a leading manufacturer and marketer of display technologies, Panasonic is a strong supporter of the ENERGY STAR brand and its program objectives, which have been exemplified in the current lineup of our most efficient display models ever.

Section 1)A)1)b) Signage Display:

This definition states: "An Electronic Display WITH pixel density less than or equal to 5,000 pixels per square inch (pixels/in2)."

The word "WITH" in the above definition replaces "typically with" in Version 6.0. A 62.3-inch display with 4K resolution (3840 x 2160) has a pixel density of 5,000 pixels per square inch. Any 4K resolution signage display with a screen diagonal less than 62.3 inches would not satisfy this definition. Also, this definition does not take into account future 8K resolution displays.

As discussed during the ENERGY STAR Displays webinar on December 11th, we recommend modifying this definition to specify the signage display screen diagonal rather than the resolution. For example, displays with screen diagonals 30-inches or greater would be defined as signage displays. Less than 30-inches would be defined as computer monitors.

Section 2.1.1 Included Products:

The phrase "powered directly from ac mains" should include the additional phrase "or via an external power supply".

Section 3.3.1 On Mode Requirements;

In the current Version 6.0, the maximum On Mode power specification is directly proportional to the screen area. This is appropriate since the display power will naturally increase in proportion to the screen area. The proposed Version 7.0 change to a hyperbolic tangent function to define the maximum power will unfortunately penalize larger displays.

The maximum On Mode power specified in Table 1 is not sufficient for high brightness signage displays intended for high brightness environments. These signage displays with screen brightness typically greater than 600 cd/m2 should be given an extra power allowance based on their maximum brightness.

The current luminance allowance in Table 1 is 75.0 multiplied by the total luminance of the display in megacandelas (75.0 x l). We recommend increasing the 75.0 factor to 100.0.

We would also like a clarification of the Screen Area unit used in calculating the Table 1 total luminance of the display in megacandelas (as-shipped luminance multiplied by the screen area). We believe that the Area unit is intended to be square inches in order to result in a reasonable luminance allowance. We are asking for this clarification because the luminance of the display is typically reported in candelas per square meters.

Section 3.3.5: Power Allowance For Signage Displays with ABC enabled by default: TBD (to be determined).

Signage displays are designed for a broad spectrum of applications with ambient brightness ranging from moderate (indoor) to very bright (outdoor). We recommend retaining the power allowance for signage displays with ABC enabled by default.

Section 3.4.2 Table 3: Full Network Connectivity Allowance:

Due to the commonality of network connection circuitry used for signage displays and televisions, we recommend that the Full Network Connectivity allowance be the same as for the recently published ENERGY STAR Televisions V7.0. This allows a maximum of 3.0 watts for Full Network Connectivity.

Section 3.4.3 Table 4: Additional Functions Sleep Mode Power Allowances:

An occupancy sensor has the capability to save energy by automatically turning on/off equipment depending on whether viewers are detected. In order to ensure that this function can continue to provide this benefit, we recommend that the Version 6.0 maximum limit of 0.5 watts be retained.

Panasonic has been a longtime proponent of the ENERGY STAR program and believes its partnership with EPA has provided a valuable tool by which consumers can make better informed choices about their purchases of energy efficient products.

As always, Panasonic appreciates the opportunity to comment on the ENERGY STAR Displays V7.0 Draft 1 Eligibility Criteria and welcomes the opportunity to further discuss our views with you.

Sincerely,

Mark J. Sharp
Group Manager
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