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Our Ref.S15-3189/is

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To whom it may concern,

Re: Comments on ENERGY STAR Program Requirements Product Specification for Displays Eligibility Criteria Draft 1 Version 7.0

We, EIZO Corporation, a manufacturer and sale of flat panel monitors are very pleased to gain the opportunity to make comments on the ENERGY STAR display draft 1 Version 7.0 requirements.
Please see our comments as below.

Comments		Ref.
1	We would like you to define "a color gamut size of at least sRGB" more clearly. Please see an additional sheet, which explains the reason why we request.	2 SCOPE 3.3 On Mode Requirements 3.3.3
2	We think the power allowance of bridging like P_{DN} in version 6.0 should be set in version 7.0 also. Because all of monitors connected to Host Machine via USB must increase their power consumption.	2 SCOPE 3.4 Sleep Mode Requirements
3	If the monitor has a touch panel, the light transmission rate of the monitor may decrease 10-20%. Therefore, it is more difficult for the monitor with touch panel to satisfy the On Mode Power Requirements than that without touch panel at the same brightness condition. So, we would like to suggest setting the Touch Technology allowance at the On mode as well as the Sleep mode. e.g. $P_{ON\_T} = 0.1 \times P_{ON\_MAX}$	2 SCOPE 3.3 On Mode Requirements
4	The efficiency of AC/DC at 6% of rated power supply output power must be lower than that at 10%. For ensuring equity between AC powered displays and DC powered displays, we would like you to consider it not at 10% but at 6%.	2 SCOPE 3.4 Sleep Mode Requirements 3.4.1 $eff_{AC\_DC\_SLEEP}$
5	Since the bezel of our new monitors would be very thin (1mm), we can't put the Energy Star logo on their Front/Top. Could you allow us to put it on their back?	-

Improvements in backlights account for a significant proportion of the technologies expanding the color gamuts of LCD monitors. There are two major approaches to doing this: one involves expanding the color gamut of cold cathodes, the mainstream backlight technology; the other involves RGB LED backlights.

On the subject of color-gamut expansion using cold cathodes, while strengthening the LCD panel's color filter is a quick fix, this also lowers screen luminance by decreasing light transmissivity. Increasing the luminance of the cold cathode to counter this effect tends to shorten the life of the device and often results in lighting irregularities. Efforts to date have overcome these drawbacks to a large extent; many LCD monitors feature cold cathodes with wide color gamuts resulting from modification of their phosphors. This generates cost benefits as well, since it makes it possible to expand the color gamut without major changes in the existing structure.

Use of RGB LED backlights has increased relatively recently. These backlights make it possible to achieve higher levels of luminance and purity of color than cold cathodes. Despite certain disadvantages, including lower color stability (i.e., radiant-heat problems) than a cold cathode and difficulty in attaining a uniform white color across the entire screen, since it involves a mixture of RGB LEDs, these weaknesses have been resolved for the most part. RGB LED backlights cost more than cold-cathode backlights and are currently used in a fairly small proportion of LCD monitors. However, based on their efficacy in expanding color gamuts, the number of LCD monitors incorporating the technology will likely increase. This is also true for LCD televisions.

The FlexScan SX2761W achieves a 96% Adobe RGB coverage with a cold-cathode backlight

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