

Page 23 of the ENERGY STAR® Program Requirements Product Specification for Lamps (Light Bulbs), Eligibility Criteria Version 1.0, DRAFT 1 indicates that the EPA is contemplating making “All Lamps Marketed As Dimmable” an ENERGY STAR requirement. This would be a tremendous mistake.

The Dimming Requirements Note contains the primary problem – dimmable is defined as compatibility with “the installed base of dimmers,” a reference to legacy phase-cut dimmer technology, also known as Traic, which is designed specifically for incandescent lamps, not solid-state lamps. Problems such as “compatibility,” an ambiguous term at best, dimming level, noise and flicker are cited. However, these problems are just the tip of the iceberg.

In essence, any effort that makes phase-cut dimmer compatibility an ENERGY STAR® requirement shackles new lighting technologies to a fundamentally incompatible legacy dimming technology. Phase-cut dimming compatibility does not come without compromises, including added cost and reduced efficiency, among others. Is pointing consumers to a web site with a list of “compatible” dimmers the answer? How many consumers know exactly what dimmers are installed in their homes?

More importantly, this requirement fails to recognize the myriad new dimming techniques that are possible in the solid-state lighting era. Why stifle innovation by encumbering it with fundamentally broken legacy support.

The installed base of dimmers in the US is roughly 150 million. A phase-cut dimmer compatibility requirement fails to provide inexpensive, efficient dimming for all the sockets that do not have dimmers, a market that could be an order of magnitude larger. Whether it’s wireless lamps that are dimmable via smartphones, lamps with built-in occupancy intelligence, or lamps that can be dimmed via a simple wall toggle switch, solid state lamp dimming technology is rapidly evolving.

Making phase-cut dimmer compatibility an ENERGY STAR® Requirement would be a huge step backwards in an industry that is rapidly moving forwards. I believe the answer to the dimming issue is clear package labeling, not encumbering innovation with a requirement to support a fundamentally incompatible legacy technology.

Respectfully,  
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