

**Email received on October 26, 2010 from Lyn Raffelson.**

Dear Energy Star Team,

We at good Earth Lighting have reviewed this latest release of the specifications for Energy Star labeled lighting products and have found some changes from the previous drafts we feel represent significant issues.

The first and most significant change is the planned elimination of the NEMA/ALA Matricies for lamps and ballasts. This will mean much more testing for future products (beyond Jan. 2011). Now like products from different sources using the same lamp and ballast platform will require repeated testing. As there are far fewer lamp and ballast manufacturers who's products are utilized by manufacturers submitting fixtures requesting the Energy Star label, this will result in a huge increase in the amount of testing, testing time and cost to the Energy Star program. As the more energy efficient light sources are more costly than the inefficient incandescent counterparts, this will have the effect of increasing the costs of the energy efficient light sources. Continued focus should be kept for the general performance characteristics of lamps and ballasts in the matrix type format with a small level of fixture level performance just to insure the lamps and ballasts are utilized properly and efficiently. This means we will have to add the performance testing to the Client Test Program from UL. Lamp and ballast manufacturers, ISO approved should be allowed to continue to use their own labs for general and component level tests such as frequency, lamp current, power factor etc, monitored by a third party such as ISO approval parties or NEMA as we have.

The second change (which was also in the last draft) is that there are now fixture level tests (beyond only a thermal test), for ALL light sources including fluorescent. In the old EPA RLF4.2 standard all of the fluorescent electrical and photometric was tested on the lamp and ballast and included in the NEMA matricies. This means much more outside fixture level testing as almost all of the fixture manufacturers do not have the equipment (such as the photo-goniometer required for the Zonal Testing). Since the zonal requirements were developed by testing existing Energy Star approved fixtures to bench mark for Solid State lighting it seems unnecessary and only adding time and expense with minimal positive impact to the Energy Star program as it is likely none of the fluorescent fixtures will have difficulty passing the requirements.

The third concern is related to the "grandfathering" of existing approved products based on the testing from the old requirements. In many cases, the old approvals were actually based on the Matrix data and not test data. Additionally, the amount of testing needed for both the old and the new requirements is deferred to the Certifying Body, who gets paid based on the level of testing they perform. Since the matrix data was not third party and little data is available for the new requirements, the total impact of this is not clear yet but could result in a substantial amount of testing and extreme levels of delay as the CBs try to digest the huge level of testing required by Jan 1, 2011.

The 4<sup>th</sup> change, while definitely in the preferred direction, relates to the efficacy limit being reduced from 70lm/W to 65lm/W. This is helpful except for the fact that previously single lamp, 13W units and below will be significantly challenged as the old requirement was 50lm/W and will be further exacerbated when the 70lm/W kicks in two years down the road. We suggest a different specification for 13w and below be continued for fluorescent.

Best regards,  
Lyn Raffelson