



Response to First Draft Revision 8/30/05

Thank you for allowing Feit Electric to provide input and feedback on the new specifications for Version 4.0. Our comments will be broken into two separate categories to coordinate with the current revisions and specifications for bare CFLs and covered reflector units.

Bare and Covered CFLs

- Increase in Efficacy- There is a correlation between efficacy and CCT so with Energy Star increasing the specifications of both at the same time this causes an unfair disadvantage of off the shelf testing for Version 4.0 specifications. In addition it is much more difficult to meet higher lumens per watt with higher CCT.
- Minimum Efficacy Covered Lamp- We suggest changing this to less than 16 watts = 50 and 16 watts or greater = 55. The old specification was lower lumens per watt for lamps under 16 watts therefore there are many covered CFL 60 watt replacements that meet the necessary 800 lumens (to be called a 60 watt replacement). Under V4.0 these lamps would not qualify as a 60 watt replacement.
- CCT- We understand that the color temperatures suggested in V4.0 are ANSI standards. However, those standards have not been required for CFLs over the past 10 years. The higher the CCT the less lumen per watt should be required (above 3000K). Since you are not reducing lumens on the CFL incandescent equivalency chart the customers are still looking for replacements with the correct lumens. A 4100K lamp should have lower minimum lumens per watt. Please note that it is much more difficult to make a cool white or daylight high lumen per watt lamp. These comments are for both bare/covered CFLs and reflectors.

Since the introduction of CFL technology, many manufacturers have developed a niche in colors. Some manufacturers have produced a 2650K, 2800K, 6000K, etc. It's very difficult to eliminate colors that have been allowed for the last 10 years. Manufacturers have sold specific colors. Every customer who has purchased a 5800K lamp and then goes to buy a replacement will find the color has changed to meet the new specs. They will take home the new bulb and have a different color. Then the consumer will not be happy. We need to keep V3.0 "CCT- between 2700K and 3000K. If not, packaging should clearly state the temperature and color of the product." This has worked up until now as packaging must clarify color temperature and description of color.

Another suggestion would be if the lamps CCT is not part of the set ellipse such as a 2850K the manufacture will conduct a 100 hour test to fall within one of the accepted CCT either one scale higher (3000K) or one scale lower (2700K) and note it on the packaging. This also keeps the CCT within a specific range so it does not change the lumens per watt.

When we examine 2650K lamps tested we have found as many as 4 can fall outside of the 2700 ellipse but could fall into an ellipse that is broader or an ellipse specifically made for 2650K. The restrictions on the CCT are too strict. We are requesting that information about expanding beyond 7-step ANSI Mac Adam ellipse is provided to all stakeholders explaining what additional tolerances would be allowed with at 10-step or 12-step ANSI Mac Adam ellipse or simply allowing additional color temperatures.

Additionally, the limit of no more than 1 lamp may fall outside of the ellipse is much too stringent. There should be at a minimum of 3-4 lamps to be allowed outside of the ellipse as different color temperatures will fall outside the ellipse. Manufacturers should be allowed to manufacture additional colors as long as it's noted on the packaging as to what color the lamps are. Commercial user's purchase and re-lamp large facilities with current lamp colors and to change that now would force manufacturers to make those lamps without Energy Star approval.

Finally, upon a manufacturer reviewing their initial qualifications and find that one of the items pass all of the other specifications but more than 1 lamp falls outside the ellipse that Energy Star allows that manufacturer to only re-test that lamp immediately for a 100-hour test for CCT to expedite the process of keeping that model qualified and reducing out of pocket expense. If the manufacturer can show that they have the proper equipment in house then the manufacturer should be allowed to conduct tests themselves for CCT only. This again will help minimize the excessive costs that manufacturers are continuously facing.

- CRI- If more than 2 individual lamps have a CRI of less than 77 for V4.0 qualifications, you allow the manufacturer to submit only 100 hour test for compliance under V4.0 and not have to conduct or pay for the full life test. Please note these comments are for both bare/covered CFLs and reflectors.
- 1,000 hour lumen maintenance- This specification was initially used for early qualification under V2.0 which stated if you went for full qualification that it would eliminate the need to conduct the 1000-hour lumen maintenance. Since we are now required to have full life testing this specification should be omitted. In our history we have found that products may fail the 1000 hour lumen maintenance but pass lumen maintenance at 40% of life. This is not a perpetual early indicator for lumen maintenance problems and is a redundant test.

If this specification does continue, we want any manufacturer who has passed 1000 hour lumen maintenance but had more than 2 lamps outside of the 85% be allowed to submit only 1000 hour lumen maintenance tests for compliance under V4.0 and not have to conduct or pay for the full life test. This would be on current approved lamps only.

- 40% lumen maintenance- If more than 2 individual lamps measure less than the required 75% for V4.0 qualifications you allow any manufacturer who has passed 40% of rated life but had more than 2 lamps outside of the 75% be allowed to submit only 1000 hour lumen maintenance tests for compliance under V4.0 and not have to conduct or pay for the full life test.
- Run Time- Feit Electric supports the new specification of decreasing the run-up time to less than 1.0 minute per ANSI. However, lamps that use amalgam technology shall be excluded from 1.0 minute and packaging will be marked with a statement advising the approximate warm up time.

Reflectors

At the 2004 Energy Star meeting manufacturers were encouraged and told that if we passed the reflector tests, which were paid for by manufacturers, that we would not be tested in the next round of reflector tests. Now here we are again facing the same issues and expenses. Energy Star consistently down plays this cost incurred. Manufacturers have spent as much as \$25,000 or more for the mandatory reflector tests. It is not right to force these manufacturers to do this again.

Elevated temperature specs have an added cost. The current specification from V3.0 should be kept for all reflectors as long as the packaging is clearly marked not for use in ICAT cans. Lamps manufactured to be used in ICAT cans need to pass the elevated temperature testing. There are many applications such as track lighting, outdoor floods and non insulated cans that do not need elevated temperature reflectors. Once again you may force manufacturers to sell non Energy Star lamps for these other applications at a reduced manufacturing cost and therefore a lower selling price. By the way, the problem you have encountered in the reflector tests (lumen maintenance) will not be corrected with elevated temperature lamps.

Our suggestion is to keep the current specification for reflectors and use the off the shelf tests that were just conducted for non-ICAT can reflectors and make manufacturers note it on the packaging. Then keep the elevated temperature specification for those manufacturers who want the competitive edge and can afford the testing to make these products correct for ICAT can applications. This way the off the shelf tests don't go to waste and your transitioning to the next step of reflector technology.

If you do move forward with requiring all reflectors to pass elevated temperature testing there should be an exception for outdoor flood lamps and R20 reflector lamps. These lamps are not for use in ICAT cans and should be marked as such.

Quality Assurance- Prior to execution of these specifications we want clarification of what other systems or format will be allowed for Manufacturer Quality Control Processes to ensure they meet similar requirements such as ISO or Six Sigma.

Color Consistency- We strongly oppose this requirement. We currently maintain testing equipment calibrated to internal practices and standards however the requirement to test lamps and keep records for a 3-year period is excessive and cumbersome. Our recommendation is to require manufacturers to keep the records for a maximum of 1 year.

Product Selection Committee- This committee should be comprised of either 3 or 5 members so that a vote could not end in a tie and not be comprised of any manufacturers. The idea of this committee is supposed to be an “unbiased view of the existing CFL marketplace” and we feel that manufacturers will not be unbiased. Manufacturers will recommend the competitors products and not their own products. The only unbiased people that could be eligible for this committee would be EEPs since the majority of their money is going to fund these lamps. No manufacturers should be allowed.

Technical and Research Committee- There needs to be a limit that anyone who serves on one committee can not serve on the other committee at the same time to ensure unbiased opinions for product selection.

Product Nominations- We agree to the 6/year maximum. Depending on the number of unique models any given manufacturer produces, this could be at least 50% of their models tested in one year. Any more than this would be excessive.

There should not be any manufacturer to manufacturer nomination of product. This industry is very competitive and small. If you allow manufacturers to nominate each other during crucial times of bidding for new or existing business it could be viewed as uncompetitive. I think the manufacturers have enough to do to ensure their own products meet the specifications and allow this to be a non-bias nomination process.

Costs and Funding of Third Party Testing and Verification Program- The testing of Energy Star products are becoming increasingly expensive. Our suggestion is to have test fees split among all Energy Star Partner manufacturers. If a manufacturer wants to become an Energy Star partner then they need to pay an annual membership fee that would be pooled for testing fees. This way all manufacturers are paying the same amount regardless if their products are “lucky” enough to be selected for off the shelf testing or not. This will alleviate the financial burden for smaller manufacturers and keep everyone’s cost to a minimum.

Additionally, if summary data is collected EEPS partners wanting that information should be charged for the summary data to help off set the testing costs to the manufacturers. Some “lucky” manufacturers have had 2-3 lamps tested in each cycle, while others are rarely tested or not tested at all. It is expensive to be continuously “lucky”. All manufacturers should be responsible for testing fees. With 108 different manufacturers listed there should be plenty of funds to pool and plenty of products to select from.

Marginal Failure Process- This needs to be increased to allow for more than one sample of one test, because it’s not a true representation that this product is bad. For example, if a lamp fails CCT by one lamp and another lamp fails rapid cycle this is not a bad lamp. Energy Star needs to allow reasonable tolerances, not ask for perfection. Our

recommendation is to not set limitations and determine if each unique test is possibly a marginal failure.

Disqualification Appeals Process- Throughout the appeal process the test results will be kept confidential until the appeal process is complete. The manufacturer is innocent until proven guilty. Additionally, if a manufacturer does have to appeal, that process should also be kept confidential until a determination is made.

The 3 failures in one year and all products are tested is unacceptable. Given the increased specifications and the possible product mix this could be difficult. If a manufacturer is “lucky enough” to have 3 models selected for the first test cycle and the product mixture is a covered A lamp and two reflectors the testing criteria will be more difficult to meet than say a bare lamp. Since this could be a possibility, I suggest changing the specifications to state that if all 6 lamps selected for off the shelf test fail in one testing year that all of the manufacturers product be tested. We understand the need for quality control. However, with increased specifications for elevated temperature testing and raising the bar for all other products this may be unfair to a manufacturer.

Effective Date- The industry needs at least six months to meet the new specifications, work with engineers, sources, conduct proper in house testing, develop apparatuses in house, and get testing labs ready to ensure we can meet these specifications. Our suggestion is to have an effective date of January 1, 2007 for V4.0 which will allow industry enough time to be prepared for all of the new specifications especially on reflectors. The last date to submit qualifications for V3.0 would be October 2006.

Additionally, any products that currently meet V3.0 specifications and can prove the product meets all of the new specifications for V4.0 should be grandfathered in. However, if a lamp marginally does not pass one of the new V4.0 specs, for example CCT, the manufacturer then needs to complete the 100 hour test only for CCT and that will be acceptable for qualifications of V4.0. Energy Star will then test within the 36 month period. Any item that can provide proof that it currently meets V4.0 specification will not be retested until 36 months from the time the new specifications are implemented. This would be the same thing that was done with the new fixture specifications. The manufacturer would be liable for testing costs to ensure that his products meet the new specifications.

Additional Commitments- If a manufacturer partner does not submit sales data showing sales in the US market or has no sales on a biannual basis they need to be removed from the Energy Star listing. Private label sales shall count as sales. This will allow for the list to be simple to use and provide clarity the list and an accurate portrayal of what's available in the market place.

If a manufacturer does not provide the sales data in a timely fashion a letter should be sent out to the manufacturer warning they need to provide the sales data or they will be removed from the website.