



ENERGY STAR® Quality Assurance Testing Program for Residential Light Fixtures (QA4)

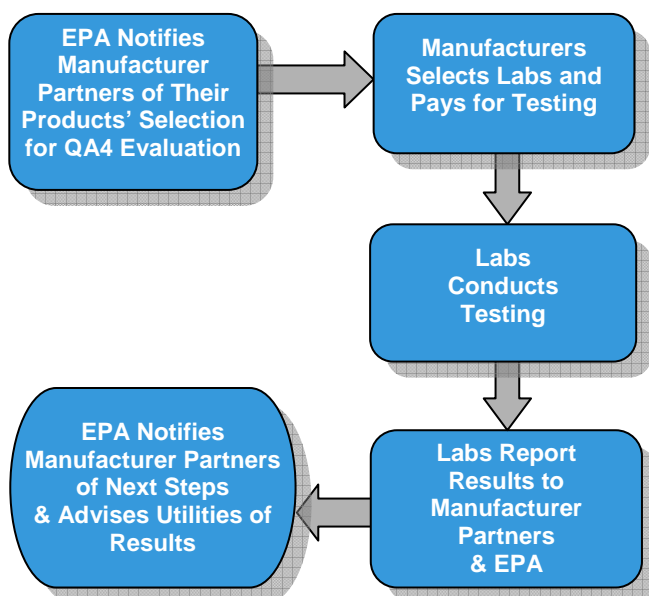
Program History

In October 2005, the US Environmental Protection Agency (EPA) launched a new quality assurance testing initiative called "QA4" under Version 4.0 of the ENERGY STAR specification for residential light fixtures. The purpose of this initiative is to ensure consumers continue to receive superior quality and energy efficient performance from ENERGY STAR labeled lighting products. Manufacturer requirements concerning QA4 have been included in the latest specification, ENERGY STAR Program Requirements for Residential Light Fixtures: Version 4.1.

How QA4 Works

EPA selects ENERGY STAR qualified residential lighting fixtures each year to undergo quality assurance testing. Any ENERGY STAR qualified fixture or GU24 based integrated lamp is eligible to be tested. In addition, lamp-and-ballast platforms used in ENERGY STAR qualified fixtures are also eligible for testing. Product candidates are selected by utilities, energy efficiency program sponsors and EPA based on market uptake, installer experiences and consumer feedback. Additional nominations may be submitted by retailers, designers, homebuilders, manufacturers, or other industry stakeholders. In order to limit the burden on manufacturers, EPA selects no more than two products for testing from each manufacturer in a given year.

QA4 Testing Process



Testing Parameters

All quality assurance testing is done by a third-party laboratory. The laboratory purchases samples through retail channels or manufacturer-direct if unavailable through retail distribution. The parameters tested for each fixture include:

Performance Parameters

- Efficacy
- Lamp start time
- Correlated Color Temperature (CCT)
- Color Rendering Index (CRI)
- Lamp base type
- Lumen Maintenance (1000 and 4000 hours)
- Maximum ballast operating case temperature

Informational Parameters

- Product packaging
- Lamp labeling information

Detailed information on these parameters can be found in the ENERGY STAR residential light fixture specification, version 4.1.

Results

Passing Test(s):

If a product passes all tests, no further steps are taken; the manufacturer Partner has ensured that consumers are purchasing a product with the energy savings and quality performance expected from an ENERGY STAR qualified product.

Failing Test(s):

If a product fails to meet the requirements of any of the test parameters, the product is delisted within 30 days for a minimum of six (6) months. The manufacturer Partner must stop labeling the product as ENERGY STAR qualified. Once the problem has been corrected, it can be submitted for requalification with ENERGY STAR.

For More Information

For more detailed information please refer to the [Quality Assurance Testing Guidelines and Procedures Manual](#) located on the ENERGY STAR Web site (www.energystar.gov).

For further questions, please contact:

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