

Single sheet insert

Farrar Scientific Energy Star® , CEC and NSF Testing Services

Farrar Scientific offers a suite of testing and remediation services designed to improve product performance and achieve compliance with existing and emerging third-party certification such as International Energy Star, California Energy Commission (CEC), and National Sanitation Foundation, Standard 7 (NSF) criteria.

Global warming and other global environmental problems are closely related to the energy consumed in our daily lives. Energy consumption of refrigerated products used in domestic, commercial, laboratory and industrial applications continues to play a role in marketing to USA and global markets.

The international ENERGY STAR Program has been implemented since October 1995 based on an agreement between the governments of Japan and the United States. It provides energy saving criteria for refrigerated products and other equipment with the objective of protecting the global environment. ENERGY STAR labeled products indicate that they have met the program's energy saving specifications.

Farrar Scientific contract services to appliance and equipment manufacturers is based on a a step-by-step process.

- Snapshot
- Analysis
- Remediation or Amendment Plan
- Comparison Against Snapshot
- Testing, Documentation and Submittal

Energy Star®, CEC and NSF Testing

Each testing project follows a process designed to facilitate work and manage resources in accordance with client

specifications. For existing products, each model or model number is assigned an individual work order, and all work is divided into measurable segments.

1. Snapshot

- a. The initial phase is a product snapshot using analytical instruments to measure product and individual component parameters.
- b. When the Snapshot is completed, the Farrar team will establish target metrics and confirm the project approach.

2. Analysis

- a. Through component analytics, the Farrar team builds a map of performance state points.
- b. All energy loads are evaluated at each stage of the system, and opportunities for improvement are isolated, identified and prioritized.

3. Remediation or Amendment Plan

- a. Based on the State 2 analysis, the Farrar team constructs a remediation or amendment plan to weigh cost/benefit for all components in the bill of materials.
- b. The remediation plan is expressed mathematically as to expected performance over a range of conditions.
- c. Once the revision is proven in theory, an economic model is built to balance the cost vs. benefit.
- d. Finally, a proof of concept is assembled and put into operation.

4. Comparison Snapshot

- a. Using the proof of concept model, the Farrar team duplicates the Snapshot and compares performance against the original to determine how performance metrics are met.
- b. Depending on the outcome, the process moves to the next step, or reverts to another cycle of analysis and remediation.

5. Testing, Documentation and Submittal

- a. Once all performance metrics are met, a complete documentation package is prepared for submittal to the appropriate agency.
- b. Typically, third party agencies include Energy Star, California Energy Commission (CEC) or the National Sanitation Foundation (NSF).
- c. Upon completion, all materials are turned over to the client representative for distribution, archiving and internal documentation.

Logo: Energy Balance

Caption:

Farrar Scientific testing and evaluation protocols are based on the exclusive Farrar Scientific EnergyBalance™ process that combines off-the-shelf components, refrigerant chemistry, lubrication and electronic controls into an efficient and properly apportioned end product which meets third-party criteria for energy-savings, performance and safety.

Logo



Boilerplate

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