Addressing Barriers to Energy Efficient Fixtures and Ceiling Fans

David Shiller, Residential Light Fixtures Marketing Manager

Kate Lewis, Ceiling Fan Marketing Manager
Barriers to Address

- Inventory, product selection and availability
- Replacement lamps and ballasts
- Price points
- Technical product concerns
  - Color
  - Pin standardization
  - Dimmability
  - Magnetic vs. electronic ballasts
ENERGY STAR Qualified Product

• Inventory
  – EPA working closely with showrooms, retailers, electrical distributors, builders, and e-tailers to drive product stocking and inventory

• Product Availability and Selection
  – Increase of products from 5249 qualified fixtures to over 9,100 over the past year
  – New product, as well as product families now available (including multi-light chandeliers)
  – Increase in decorative product
ENERGY STAR Qualified Product

- Replacement lamps and ballasts
  - Amended spec to ANSI standardized bases
  - Working with showrooms, retailers, and manufacturers to encourage the stocking and availability of replacement lamps
  - Manufacturers beginning to use replaceable ballasts, removable without soldering or screws.
  - Progress towards universal ballasts that drive multiple lamp wattages.
  - NEMA and ALA are working with industry to determine a workable solution to further standardized pin base for lamps
• Some retailers and showrooms are slow to adopt ENERGY STAR qualified product because the price points are higher than incandescent product.

• However, many savvy retailers and showrooms use ENERGY STAR as an *upsell* to *increase profits* and *build loyalty* with their consumers.

• Lamp-ballast combination pricing is decreasing, helping to drive lower price points.

• ALA-NEMA matrix has helped manufacturers quickly develop product and minimize financial testing burden.
Technical Product Concerns

- NEMA and LRC are currently working on ways to address lamp color.

- Lamp manufacturers continue to work on a solution for dimmability. Some two-wire dimmable product will be available later this year.

- Increased use of electronic ballasts minimizes humming and other concerns associated with magnetic ballasts.
“The ENERGY STAR Program is having a decided impact on the residential lighting marketplace.”

Home Lighting & Accessories Magazine
December, 2003
Conventional Ceiling Fans

- **New trends 2004**
  - Continued move away from “appliance”: Models even more creative than last year in design.
  - Designers are getting more daring and manufacturers are taking risks with design
  - Fans being designed around themes and families
  - Back to the basics: pulley fans making a comeback?

- With more creative designs, technologies are emerging such as halogen for smaller light kit space and changes in motor design

- Because of the variety in designs, people are beginning to install fans in non-traditional rooms
Conventional Ceiling Fans
Conventional Ceiling Fans
Conventional Ceiling Fans
Specification Overview

- Key Requirements Tier 1:
  - Minimum CFM and CFM/watt requirements
  - Pin based option in light kits
  - Minimum 30-year motor, 1-year component, and 2-year light kit warranty requirements

- Key Requirements Tier 2:
  - Initial 5% testing tolerance will be dropped; products must meet absolute minimum levels

- Items left to explore:
  - Standby power and noise
Testing Requirements: Labs

- ETL Semko, Hunter, and UL Taiwan

Source: ETL Semko
Testing Requirements: Labs

Source: ETL Semko
Testing Requirements (cont)

- Ceiling Fans are tested for total CFM and CFM/watt
- Light kits must be attached during test if sold with fan
- Light kits are tested to ENERGY STAR light fixture requirements
Airflow Efficiency for ENERGY STAR Qualified Residential Ceiling Fans

Representative Models

- Low Airflow Efficiency (CFM/W)
- Medium Airflow Efficiency (CFM/W)
- High Airflow Efficiency (CFM/W)
ENERGY STAR and Design

Sea Gull Lighting
ENERGY STAR and Design

Casablanca
ENERGY STAR and Design

Hunter Fan

Hunter for Costco

Harbor Breeze
Supply: 2002 vs. 2004

Ceiling Fan Supply 2002 Vs 2004 (Models Vs Finishes)

Ceiling Fan Lighting Products Supply 2002 Vs 2004 (Models Vs Finishes)
Why Lighting

- Fans are efficient products already
  - EPA goal: messaging
  - Ceiling fans with lighting account for highest sales and greatest savings
  - Many fans are used for general lighting as well as air movement
  - Utility interest in maximizing energy savings
Cool Change Tips:

• Ceiling fans cool people, not rooms – turn them off when you leave.

• Adjust your thermostat during fan use to save on air conditioning costs.

• For year-round savings, reverse the fan motor in the winter to redistribute warm air.

Source: Casablanca Web site
Why Lighting

Source: Emerson Fan Web site
The Market Actors

MANUFACTURERS

RETAIL CHANNELS:
- Showrooms
- DIY
- Hardware

END MARKET SEGMENTS:
- New Construction Builder
- Retail Consumer
Sales Barriers

- ENERGY STAR relevance in this category
- Demand vs. supply
- Aesthetics rule
- Fans with lighting and rebates
  - Integrated lighting: clear
  - Qualified fan + qualified light kit: not so clear
Wrap-up

• Attend the partner breakout session this afternoon at 3:30
• Roundtable discussion that will include ceiling fan manufacturers, utility representatives, and a retailer
• Goal is to answer the following overarching question:
  – “Now that we have the inventory and interest from various market players, how do we kick-start demand and increase sales of ENERGY STAR qualified ceiling fan products?”