

WELCOME

WHAT YOU NEED TO KNOW ABOUT ENERGY STAR®

11/19/15 Webinar



TODAY'S TOPICS

- **ENERGY STAR®**
- The CSD List Certified (Lighting) **Subcomponent Database**
- MaxLite & ENERGY STAR®





MAXLITE PRESENTS: WHAT YOU NEED TO KNOW **ABOUT ENERGY STAR®**

Join us and learn the importance of the ENERGY STAR® program and the influence the program has on the evolution of the MaxLite LED product line.



JOIN US TO LEARN MORE!



Thursday, November 19 at 12pm EST To register click the "REGISTER NOW" button below



Find us on:











ENERGY STAR® HISTORY (PART 1)



ENERGY STAR® HISTORY (PART 1)

ENERGY STAR is a U.S. Environmental Protection Agency (EPA) voluntary program that helps businesses and individuals save money and protect our climate through superior energy efficiency. The ENERGY STAR program was established by EPA in 1992, under the authority of the Clean Air Act Section 103(g). The Clean Air Act directs the Administrator to

"conduct a basic engineering research and technology program to develop, evaluate, and demonstrate non-regulatory strategies and technologies for reducing air pollution."



ENERGY STAR® HISTORY (PART 2)



ENERGY STAR® HISTORY (PART 2)

• In 2005, Congress enacted the Energy Policy act and "established at the Department of Energy and the Environmental Protection Agency a voluntary program to identify and promote energy-efficient products and buildings in order to reduce energy consumption, improve energy security, and reduce pollution through voluntary labeling of or other forms of communication about products and buildings that meet the highest energy efficiency standards."











ENERGY STAR® IS PRIMARILY A RESIDENTIAL PROGRAM

• It's important to note that ENERGY STAR is primarily a residential program. The EPA has no intention of including commercial products (This is where DLC comes in). The EPA and DLC have general agreements not to share categories (although there are some limited exceptions/overlaps).







ENERGY STAR® INTEGRITY



ENERGY STAR® INTEGRITY

- To maintain consumer trust and improve the oversight of ENERGY STAR certified products, homes, and commercial facilities, EPA has implemented third—party certification requirements and testing.
- For Products: In order to earn the label, ENERGY STAR products must be third-party certified based on testing in EPA-recognized laboratories. In addition to up-front testing, a percentage of all ENERGY STAR products are subject to "off-the-shelf" verification testing each year. The goal of this testing is to ensure that changes or variations in the manufacturing process do not undermine a product's qualification with ENERGY STAR requirements.





ENERGY STAR® PARTNERSHIP & MARKET IMPACT MMAXLITE

ENERGY STAR® PARTNERSHIP & MARKET IMPACT

A broad range of 16,000 partners across every sector of the economy drive the ENERGY STAR program's success from manufacturers and trade associations, to retailers and efficiency program providers, to home builders and small businesses. ENERGY STAR has grown to represent products in more than 70 different categories, with more than 4.8 billion sold since 1992. EPA has evolved the ENERGY STAR program to serve as a national platform and a catalyst to deliver real energy efficiency by addressing market barriers.

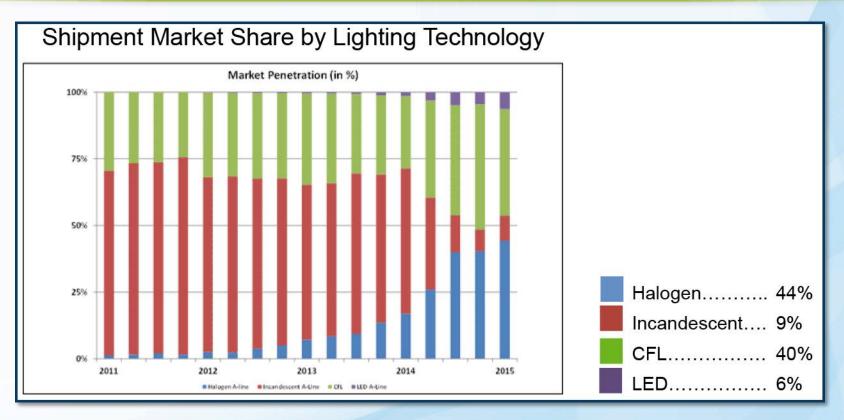








INEFFICIENT A-LINE BULBS STILL HOLD MAJORITY



- Despite quarterly decline, halogen A-line still secures top position
- LED A-lines steadily increasing

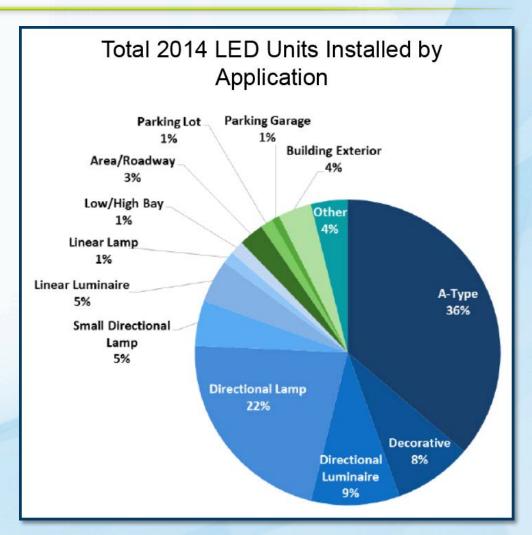




LED LIGHTING INSTALLATIONS

In 2014 EPA estimates:

- 15% of light bulbs shipped were ENERGY STAR certified
- 64% of CFLs shipped were ENERGY STAR certified
- 75% of LED bulbs shipped were ENERGY STAR certified
- From 2012 to 2014, the units of LED lighting installed in the U.S. increased four-fold to 215 million

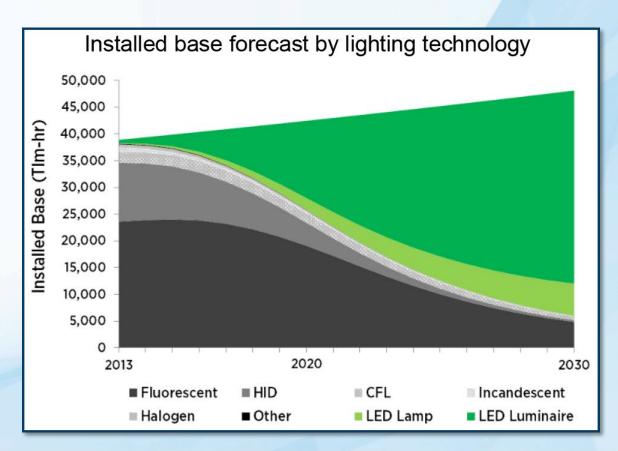






LED LIGHTING FORECASTED TO GROW DRAMATICALLY

- By 2020, LED lighting could account for approximately 40% of installed base (measured in lumen-hours)
- By 2030, LED lighting is forecasted to represent 84% of all lighting sales

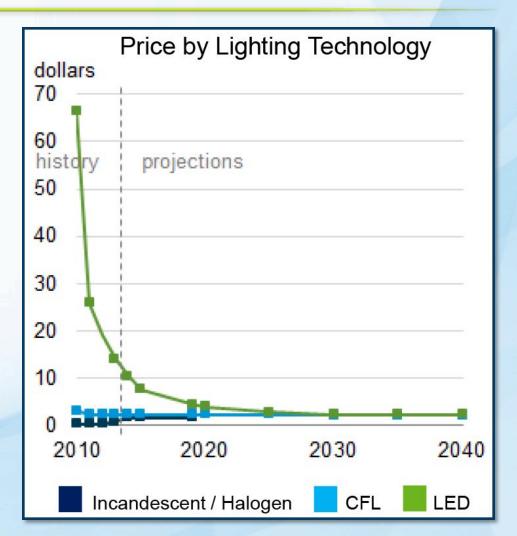






LED LIGHTING FORECASTED TO GROW DRAMATICALLY

- LED A-type averages \$13/klm by end of 2014, a 50% reduction from \$27/klm (klm= kilo lumen)
- Big box retailers A-type close to \$11/klm-5x that of halogen (\$2/klm) and non-dimmable CFL replacements (\$2.50/klm)
- LED lighting market is anticipated to grow 45% per year, from \$13.6 billion in 2014 and anticipated to reach \$63.1 billion by 2020.







WHY ENERGY STAR MATTERS

- Independent certification. Products are certified by accredited third-parties based on testing in labs recognized by EPA.
- Market surveillance. Products are subject to random "off-the-shelf" testing every year.
- Rigorous testing. Products are tested and evaluated against more than 20 requirements to deliver on consumer expectation.

For example:

- Minimum light output requirements to ensure you get as much light as the package claims for wattage equivalency.
- Dimmability. Products indicate whether they are dimmable or not on the front of the package. Those that are, dim to at least 20% & provide info on dimmer compatibility.

- Light where you want it. ENERGY STAR LED lighting products must demonstrate that they deliver light the way consumers expect them to. E.g. light in all directions, vs the limited range common with non-certified bulbs.
- Lasting performance. LED lighting can fade dramatically, degrade, or turn green if not properly designed. Products that have earned the ENERGY STAR
 - Are subject to 6 different requirements for color, to ensure good light color up front and over time
 - Undergo thousands of hours of testing to support those long life claims of 20+ years.
 - Undergo stress tests in operating environments similar to how you use the product
 - Carry a minimum 3-year warranty.



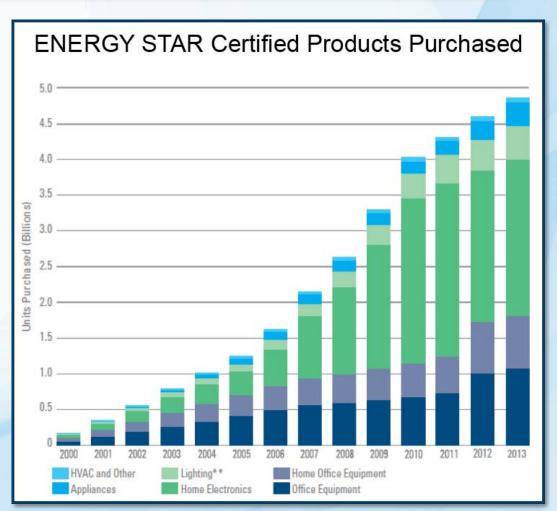


ENERGY STAR DRIVES SALES

- Nearly 90% of Americans recognize the ENERGY STAR label.
- Of households who purchased an ENERGY STAR certified product, 77% of them reported the label as influential to their purchasing decision.
- 75% of households that knowingly purchased an ENERGY STAR product in 2014 reported they are likely to recommend ENERGY STAR products to friends.

Bottom line:

More than 4.8 billion products sold in the
 20 years since ENERGY STAR's inception.







ENERGY STAR LUMINAIRES SPECIFICATION 2.0

- Luminaires V2.0 Specification was released on May 29, 2015.
 - Any luminaire manufactured as of <u>June 1, 2016</u> must be certified to V2.0 to bear the ENERGY STAR mark.
 - All certifications to Luminaires V1.x expire on <u>June 1, 2016</u>
 - There IS NO GRANDFATHERING
- After <u>December 1, 2015</u>, no new products can be certified to to Luminaires V1.2
- Models already certified to V1.0 V1.2 will maintain their certification status until June 1, 2016.
- Point revision (V2.1) upcoming.



Lamps V2.0 Specification (still under development – Est. completion date Jan. 2016, effective Jan. 2017) will allow LED Filament Lamps, Miniature Decorative Lamps, warmer CCTs (2200K, 2500K), connected lamps and more!





BIG NEWS IN ENERGY STAR LUMINAIRES SPECIFICATION 2.0

- ENERGY STAR luminaires program 2.0 introduces an allowance for luminaires to be ES certified by including an E26 base certified lamp in the box with E26-based fixtures. Before this change, we were limited to GU24 fixtures and lamps. This is allowed immediately and required by June 1, 2016.
- ENERGY STAR luminaires program 2.0 also includes "connected" fixtures for the first time!



Connected Luminaire: A luminaire or retrofit which includes elements or instructions (hardware and software or firmware) required to enable communication in response to consumer-authorized energy or performance related commands and complies with all requirements for connected in the specification. These elements may be resident inside or outside of the base luminaire or retrofit.



ENERGY STAR® RESOURCES



ADDITIONAL RESOURCES AT THE ENERGY STAR TRAINING CENTER

ENERGYSTAR.GOV has a tremendous amount of training resources available for lighting sales reps and distributors.

Go to <u>Energystar.gov/training</u> – click on the Lighting category



NERGY STAR*, a U.S. Environmental Protection Agency and I.S. Department of Energy program, helps us all save money and protect our environment through energy efficient products and protects of the programment of prog

Promoting ENERGY STAR Qualified Residential Light Fixtures

What is ENERGY STAR?

ENERGY STAR is the U.S. government-backed symbol for energy efficiency. It identifies products in more than 60 categories, including light fixtures that use less energy without sacrificing performance or quality. ENERGY STAR qualified products are an easy, convenient solution to energy and cost concerns.

ENERGY STAR qualified products:

- · Save energy
- Save money
- Save the environment

How do light fixtures earn the ENERGY STAR?

ENERGY STAR qualified light fixtures meet strict energy efficiency guidelines and come with a minimum two year manufacturer warranty. ENERGY STAR qualified light fixtures are specially designed around extremely efficient light sources, resulting in better, more efficient performance. The advanced design allows the fixtures to distribute light more efficiently and evenly than traditional lighting, while saving energy and money.

Why sell ENERGY STAR qualified light fixtures?

- . More than 80% of households nationwide recognize the ENERGY STAR label.
- Qualified fixtures use about 75% less energy and produce about 75% less heat than standard incandescent lighting.
- By using less energy, qualified light fixtures reduce greenhouse gas emissions caused by burning fossil fuels at power plants.
- Replacing a home's five most frequently used light fixtures or the bulbs in them
 with ENERGY STAR qualified models can save \$70 a year in electricity costs.
- Consumers are looking for ways to reduce their energy bills and help the environment.
 Partnering with ENERGY STAR can increase sales and customer loyalty.
- Qualified fixtures have dedicated efficient light sources that last 10–50 times longer than traditional bulbs—convenient for hard-to-reach fixtures.

What in-store promotion ideas are available?

- . Print and place ENERGY STAR hang tags on all displayed qualified models.
- Co-brand a poster or banner with a retailer or manufacturer.
- . Distribute window decals for display on retailers' windows.
- Use an in-store or event banner to draw attention to a display of all your qualified energy-efficient products.
- · Offer sales associate training on qualified products
- Collaborate with your local utility to co-market qualified products.

To LEARN MORE about ENERGY STAR and Qualified Products: Visit www.energystar.gov/training or call 1-888-STAR-YES (1-888-782-7937)





THE CERTIFIED LIGHTING SUBCOMPONENT DATABASE (CSD)

- The Certified Subcomponent Database (CSD) supports qualification of ENERGY STAR Luminaires by providing certified performance data for lighting subcomponents
- The use of the CSD is optional for luminaire partners. It is intended to streamline the certification process; subcomponents are not required to be listed on the CSD to be employed in an ENERGY STAR certified luminaire.
- The CSD is designed to contain certified performance data for: lamps, ballasts, fluorescent lamp-ballast platforms, GU24 based self-ballasted compact fluorescent lamps and HID lamps, GU24 based LED lamps, and LED light engines.
- The CSD is similar in purpose and function to the NEMA/ALA Lamp and Ballast Platform Matrix, but provides certified performance data required for certification of ENERGY STAR luminaires. The CSD can streamline the process of luminaire certification by providing manufacturers' makes, models and certified performance data of subcomponents. Depending on the type of luminaire, the subcomponents listed here may or may not meet the applicable requirements. In most instances, this approach to luminaire certification significantly reduces the luminaire manufacturer's testing burden, such that only limited additional testing is needed at the luminaire level (e.g., in situ temperature measurements and electrical safety testing).
- LED arrays/modules, LED drivers and LED power supplies will not be individually listed in the database, as
 no industry standard methods of measurement currently exist for measuring the performance of LED drivers.



THE CSD: LISTING PROCESS



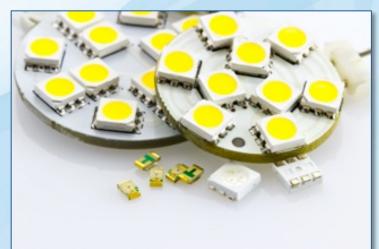
LISTING SUBCOMPONENTS ON THE CSD: PROCESS

Performance for subcomponents listed on the CSD has been certified to meet relevant requirements for use in ENERGY STAR certified luminaires.

Subcomponents in this database **are not ENERGY STAR certified** as a result of being listed. Subcomponents only certified for purposes of the CSD:

- May not carry any of the Program's certification or promotional marks on the products, on product packaging, or in associated literature either printed or electronic.
- May not be referred to as ENERGY STAR certified, rated, or approved.

Note: GU24-based integrated lamps that are ENERGY STAR certified may appear on both the CSD and the lamps certified product list.



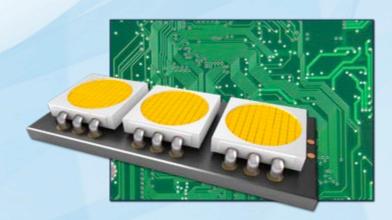


THE CSD: CERTIFICATION BODIES



CSD: CERTIFICATION BODIES

- CBs should submit certified product performance data to EPA for listing on the CSD
- CBs must review subcomponent data from the CSD when reviewing a luminaire for certification to determine that it meets the requirements for the specific type of luminaire to be certified.
- Lifetime Testing: The luminaires specification allows for initial (conditional) certification of luminaires based on completion of minimum lamp lifetime testing requirements. This provision requires that full lamp lifetime testing be completed, and requirements met, for full certification. In all instances where, subsequent to an initial CSD listing of a lamp or an initial luminaire certification, a certification body (CB) receives lifetime testing results indicating that the product fails to meet rated lifetime (as indicated on product packaging), the CB is required within 2 business days to report this information as a subcomponent (lamp) or luminaire testing failure to enforcement@energystar.gov.
- In order to list a subcomponent on the CSD, the CB shall ensure that all subcomponents listed in the database have met the following luminaire requirements for the specific subcomponent, where applicable:
 - Transient protection testing;
 - Electrical safety as tested by an OSHA NRTL;
 - Electromagnetic and radio frequency interference;
 - Lighting toxics reduction;
 - Labeling language for mercury content; and
 - Warranty





MAXLITE & ENERGY STAR



MAXLITE'S CSD LISTED PRODUCTS

 MaxLite has the most CSD-listed LED products.

MaxLite has shown a strong commitment to the ENERGY STAR program by continuing to develop the most LED light sources that are certified for the CSD database. MaxLite has the most light sources available to ease manufacturers' processes when trying to develop Certified LED luminaires.

| Lamp or Light Engine Manufacturer | Lamp or Light Engine Brand Name | Lamp or Light Engine Model Name | Lamp or Light Engine Model Number | Date CB Notified Manufacturer of Product Certification | Product Type |
|---|---------------------------------------|---------------------------------|-----------------------------------|---|--------------------------------|
| Maxiite | MaxLED | 10A19GUDLED27 | 10A19GUDLED27 | 10/21/2014 | GU24 Based Integrated LED Lamp |
| Maxiite | MaxLED | 10A19GUDLED30 | 10A19GUDLED30 | 10/21/2014 | GU24 Based Integrated LED Lamp |
| Maxiite | MaxLED | 12A19GUDLED27 | 12A19GUDLED27 | 10/21/2014 | GU24 Based Integrated LED Lamp |
| Maxlite | MaxLED | 12A19GUDLED30 | 12A19GUDLED30 | 10/21/2014 | GU24 Based Integrated LED Lamp |
| Maxiite | MaxLED | 17A21GUDLED27 | 17A21GUDELD27 | 10/21/2014 | GU24 Based Integrated LED Lamp |
| Maxlite | MaxLED | 17A21GUDLED30 | 17A21GUDELD30 | 10/21/2014 | GU24 Based Integrated LED Lamp |
| Maxiite | MaxLED | 7A19GUDLED27 | 7A19GUDLED27 | 10/21/2014 | GU24 Based Integrated LED Lamp |
| Maxlite | MaxLED | 7A19GUDLED30 | 7A19GUDLED30 | 10/21/2014 | GU24 Based Integrated LED Lamp |
| Maxiite | MaxLED | LEPM03A0927GU | LEPM03A0927GU | 1/14/2015 | GU24 Based Integrated LED Lamp |
| Maxiite | MaxLED | LEPM03A0930GU | LEPM03A0930GU | 12/5/2014 | GU24 Based Integrated LED Lamp |
| Maxite | MaxLED | SKBO07GUDLED27 | SKBO07GUDLED27 | 11/14/2013 | GU24 Based Integrated LED Lamp |
| Maxlite | MaxLED | SKB007GUDLED30 | SKBO07GUDLED30 | 9/12/2013 | GU24 Based Integrated LED Lamp |
| Maxite | MaxLED | SKB007GUDLED30 | SKBO07GUDLED30 | 10/2/2013 | GU24 Based Integrated LED Lamp |
| Maxiite | MaxLED | SKB007GUDLED41 | SKBO07GUDLED41 | 9/12/2013 | GU24 Based Integrated LED Lamp |
| Maxite | MaxLED | SKBO10GUDLED30 | SKBO10GUDLED30 | 3/11/2013 | GU24 Based Integrated LED Lamp |
| Maxiite | MaxLED | SKRR3009GUDLED27 | SKRR3009GUDLED27 | 11/14/2013 | GU24 Based Integrated LED Lamp |
| Maxite | MaxLite | RR1530W | RR1530W | 4/22/2014 | LED Light Engines |
| Maxiite | MaxLite | RR1540W | RR1540W | 4/22/2014 | LED Light Engines |
| Maxiite | MaxLite | RR2630 | RR2630 | 10/25/2013 | LED Light Engines |
| Maxite | MaxLite | RR2640 | RR2640 | 10/25/2013 | LED Light Engines |
| Maxite | MaxLite | RR3430 | RR3430 | 10/25/2013 | LED Light Engines |
| Maxiite | MaxLite | RR3440 | RR3440 | | |
| Maxiite | MaxLite | SKBO10GUDLED27 | SKBO10GUDLED27 | | |
| Maxite | MaxLite | SKBO10GUDLED41 | SKBO10GUDLED41 | | |



ENERGY STAR

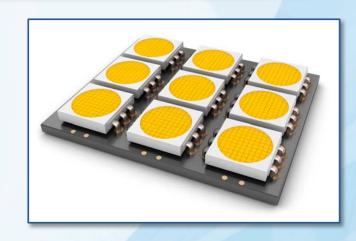
MAXLITE & ENERGY STAR



MAXLITE & ENERGY STAR

MaxLite's Participation in product spec development efforts.

MaxLite continued to assist the Environmental Protection Agency (EPA) in product spec development efforts in a number of ways. This included providing EPA with a "Proposal for AC LED Modules without heat sinks" procedure for inclusion of new AC LED Modules in Luminaire Certification efforts. Additionally, MaxLite attended and participated in the working session during the 2014 ENERGY STAR Partner Meeting in helping to develop Luminaires version 2.0 specifications.



To search for MaxLite's ENERGY STAR certified products visit:

http://www.maxlite.com/dlc-energy-star-products





PARTNER OF THE YEAR



MAXLITE: ENERGY STAR PARTNER OF THE YEAR

- The U.S. Environmental Protection Agency (EPA) has recognized MaxLite with a 2015 ENERGY STAR Partner of the Year Award for its leadership in reducing greenhouse gas emissions by manufacturing energy-efficient products and educating consumers about energy efficiency. MaxLite's accomplishments were recognized at the ENERGY STAR Partner of the Year Awards ceremony in Washington, D.C. on April 20, 2015.
- MaxLite received the ENERGY STAR Partner of the Year Award for the third time. The company was first honored in 2009, and again in 2014, for its leadership in manufacturing products that earn the ENERGY STAR, the government-backed symbol of energy efficiency. MaxLite offers a portfolio of more than 200 ENERGY STAR certified indoor and outdoor lamps and luminaires.













TRADITONAL LED SECURITY LIGHT WITH PHOTOCELL

• MaxLite's ENERGY STAR®-certified 12-watt MaxLED® Traditional Security Light Fixture with dusk-to-dawn PhotoCell provides optimal illumination for outdoor commercial and industrial environments. Available in an architectural bronze finish, the fixtures are backed by MaxLite's five-year limited warranty.





LED FAUX CAN

ENERGY STAR-certified LED Faux Cans accomplish the task of recessed downlighting without the time and expense of working with drywall. They are mountable to a four-inch junction box, allowing installers to achieve downlighting without the use of a bulky can, or labor associated with cutting open the ceiling. An optional mounting bracket allows existing recessed cans to be retrofitted with the faux can, for an easy upgrade to more energy-efficient lighting. LED Faux Cans feature driverless technology that increases performance and reliability over the fixture's lifetime.

Equivalent to a 75-watt Par 30 halogen lamp, LED Faux Cans offer vivid color rendering with a 90-plus CRI standard. The fixtures are wet-listed, making them suitable for virtually any indoor application that calls for downlighting.





LED ARCHITECTURAL TORCHIERE

A contemporary classic, MaxLite's ENERGY STAR-certified LED Torchiere evenly diffuses warm, inviting light with a shade high enough to conceal the top of the lamp. The torchiere's cool-to-the-touch operating temperatures make it suitable floor lighting for dorm rooms, bedrooms and family spaces.

Available in black or white finish, the dimmable torchiere includes MaxLite's ENERGY STAR-rated 12W LED GU24 lamp. The fixture is relampable up to 23W using LED GU24 lamps.



Phone: 1-800-555-5629 | Fax: 973-244-7333 | Web: www.maxlite.com | E-mail: info@maxlite.com | Revised: 08-27-15 | MAXLITE



LED FLUSH MOUNT CEILING FIXTURES

Available in several classic designs, LED Flush Mount Ceiling Fixtures are the attractive, energy-efficient choice for corridor and accent lighting in residential and hospitality applications such as hallways, bedrooms, kitchens, utility rooms and closets.

The collection's traditional, contemporary and architectural styles are offered with brushed nickel or oil-rubbed bronze trim encircling a variety of glass diffuser types. LED Flush Mounts are available in small (11-inch), medium (13-15inch) and large (16-17-inch) diameters. The dimmable fixtures are rated for use in damp locations such as bathrooms and laundry areas.



PRODUCT DESCRIPTION:

May life's LED Flush Mount Ceiling Fixtures feature "Driverless" DOR technology for improved reliability. Available in traditional, alabaster, pearl, alabaster nickel oil rubbed bronze, and brushed nickel trim styles. These LED Flush Mount Ceiling Fixtures are ideal for corridor and accent lighting in homes, hotels. motels and property management applications

| DIMMER CONTROLS | | | | | |
|-----------------|-------------|-----------|--|--|--|
| Lutron | Skylark C-L | CTL-153P | | | |
| Lutron | Diva CL | DVCL 153P | | | |
| Lutron | Lumea | LGCL-153P | | | |
| Leviton | Illumatech | IP106-1LZ | | | |

. Dedicated 120v, 60Hz operation

ORDERING:

| ORDER | MODEL | WATTS | DESCRIPTION | DIMENSIONS (D" X H") | SOURCE LUMEN (Nominal | LIFE (L ₇₀ , | сст |
|---------|----------------------|-------|---|-------------------------|-----------------------------|-------------------------|--------|
| 74601 | ML2LA11SABNI827 | 11 | 11W x 11* Architectural Brushed Nickel | 11.75 x 3.5 | | 35,000 | 2,700K |
| 74589 | ML2LA11STRORB827 | 11 | 11W x 11" Traditional Oil Rub Bronze | 11.4 × 6.0 | 800 | | |
| 74595 | ML2LA119CBNIP827 | 11 | 11W x 11* Contemp. Brushed Nickel Acrylic | 11.0 x 6.0 | | | |
| 74591 | ML2LA15MTRORB827 | 15 | 15W x 13" Traditional Oil Rub Bronze | 13.25 x 6.0 | | | |
| 74597 | ML2LA15MCBNIP827 | 15 | 15W x 13" Contemp. Brushed Nickel Acrylic | 14.5 x 4.0 | | | |
| 74603 | ML2LA15MABN/827 | 15 | 15W x 15" Architectural Brushed Nickel | 14.6 x 4.0 | 100000 | | |
| 74593 | ML2LA15LTRORB827 | 15 | 15W x 15° Traditional Oil Rub Bronze | 15.4 x 6.0 | 1,000 | | |
| 74599 | ML2LA15LCBNIP827 | 15 | 15W x 17" Contemp. Brushed Nickel Acrylic | 17.0 x 4.2 | | | |
| 7.000.1 | AR OF A SEL ADDROUGH | 16 | 16W v 17" Ambitoch uni Doughard Mickel | 17.0 × 4.2 | | | |

Lighting layouts and spacing criteria available upon request
Please contact your MaxLite representative to order products that don't have order codes listed here.

Phone: 1-800-555-5629 | Fax: 973-244-7333 | Web; www.maxlite.com | E-mail: info@maxlite.com Revised: 08-25-15



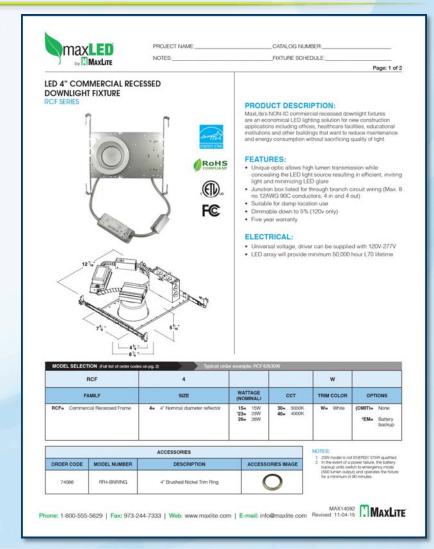




LED COMMERCIAL RECESSED DOWNLIGHT FIXTURES

 Offered in a variety of aperture sizes, color temperatures and wattages, MaxLite's ENERGY STAR-certified LED Commercial Recessed Downlights are an easy-to-install, high-performance lighting solution.

NON-IC commercial downlight recessed fixtures are an economical LED lighting solution for new construction applications including offices, healthcare facilities, educational institutions and other buildings that want to reduce maintenance and energy consumption without sacrificing quality of light.







LED ARCHITECTURAL RECESSED DOWNLIGHT FIXTURES

MaxLite's Energy Star certified Architectural Downlight Fixtures are offered in 4, 6 and 8" aperture sizes, work with a wide variety of ceiling systems and can be vertically adjusted up to 5 inches.

For new construction applications that require superior lighting performance, flexible installation options and durability, MaxLite's Energy Star certified Non-IC architectural recessed downlights are an energy-efficient alternative to HID, fluorescent and traditional incandescent fixtures. The architectural recessed fixtures are offered with a 5-inch vertical adjustment and mounting brackets compatible with a wide variety of ceiling systems.







LED RECESSED **DOWNLIGHT RETROFITS**

Designed as an energy-efficient lighting solution for remodeling or new construction projects, MaxLite's LED Recessed Retrofit downlights are the ideal replacements for 50- to 75-watt incandescent lamps in the industry's most popular four- and six-inch recessed downlight fixtures. Part of the MaxLED® family of products, the LED Recessed Retrofit downlights deliver uniform color distribution and superior quality lighting compared to most incandescent and CFL fixtures. ENERGY STAR®-certified models are available.

The 4" Retrofit LED module with integral trim (RR409) and an E26 medium screw base adapter have been classified for use with most 4" housings on the market, including IC/airtight and non-IC incandescent recessed housings.

Constructed with high efficacy LEDs and an integral dimmable driver (dimming at 120V only), the fixtures feature an optical diffuser that produces high lumen transmission and even illumination. The fixtures are suitable for damp and wet locations, including kitchens and showers.

FEATURES:

- 120-277V universal power supply
- · High lumen transmission and diffusing for even illumination
- . Dimmable down to 10 percent (See page 2 for recommended dimmers)
- Driver power factor: >.90, THD <20% and has integral thermal protection to sense high temperature or
- . The driver mounts externally to the module, allowing future replacement, if needed.
- · Suitable for damp and wet locations
- · Supplied with an E26 base adapter
- 90-degree beam angle

CONSTRUCTION:

- · Durable die-casting aluminum heat sink with integrated
- . Module construction includes LED, heat sink, lens and white trim
- Impact-resistant plastic lens
- . Installs into 4-inch cans using blade springs

Luminaire Ordering Information:

| Watts | Order Number | Model Number | Inc. Equivalent | Lumens | CRI | Lamp Life (Hrs.) | Dimensions Dia"x H" | CCT |
|-------|-----------------|--------------|--------------------|--------|-----|---------------------|------------------------|------|
| 9 | 71778 | RR40930W* | 50 | 500 | 80 | 50,000 | 5" x 3.5" | 3000 |
| 9 | 71780 | RR40950W | 50 | 525 | 80 | 50,000 | 5" X 3.5" | 5000 |

eroy Star Qualified Lighting layouts and spacing criteria available upon request











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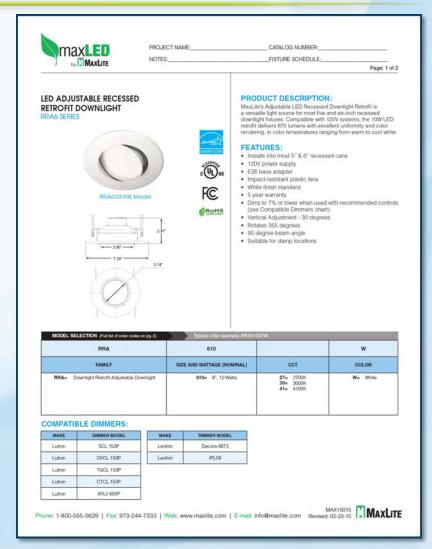
CATALOG NUMBER NOTES





LED ADJUSTABLE RECESSED RETROFIT DOWNLIGHT

 MaxLite's Adjustable LED Recessed Downlight Retrofit is a versatile light source for most five and six-inch recessed downlight fixtures. Compatible with 120V systems, the 10W LED retrofit delivers 875 lumens with excellent uniformity and color rendering, in color temperature ranging from warm to cool white.







LED COMMERCIAL RECESSED RETROFIT DOWNLIGHTS

The commercial-grade LED Recessed Downlight Retrofits are ideal for retrofitting inefficient fixtures in malls, hospitals, airports, offices, lobbies and other commercial applications. ENERGY STAR®-certified models are available.

The easy-to-install downlight retrofits can mount easily to existing fixtures using only friction. Additionally, the retrofits come standard with a patent-pending quick connect case and conduit that connects easily to an existing junction box (See <u>Installation Video</u>). The downlights produce high quality light, consistent and reliable performance, high efficiency and superior value for the commercial and architectural market.



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LED OMNIDIRECTIONAL TRADITIONAL SHAPE A-LAMPS

Designed in a classic, rounded form factor, the new ENERGY STAR®-certified 9-watt omnidirectional A-lamp replaces a 60W incandescent bulb with more than 85 percent savings in energy throughout its 25,000-hour lifetime. The lamp replicates a true incandescent bulb with a 300-degree beam angle that produces even light in all directions. LED A-line lamps are suited to a wide variety of residential and commercial applications, including pendants, wall sconces and table and floor lamps. Also available in 6-watt, 11-watt, and 15-watt (replacing 40W, 75W, and 100W incandescent lamps).

Strictly matched for color quality and consistency, the 9-watt model is available in 2700K, 3000K and 4000K correlated color temperatures (CCTs) and delivers up to 800 lumens and 89 lm/W efficacy. The lamp is dimmable down to 10 percent on a wide variety of dimming control systems and is offered in a standard medium base and GU24 base for easy installation into a wide range of lamps and fixtures used in both residential and commercial applications.







LED OMNIDIRECTIONAL A-LAMPS

MaxLite's award-winning, ENERGY STAR®-certified LED Omnidirectional A-Line lamps replicate true A19 and A21 incandescents with a 300-degree beam angle that produces even light in all directions. Available in four wattages (7W, 10W, 12W, 17W), the lamps replace 40-100W incandescent bulbs with more than 80 percent savings in energy. The 17W (100W equivalent) won the 2014 Lighting For Tomorrow Award for best replacement lamp.

Named one of the "Top 100 New Building Products" by Professional Builder Magazine, Omnidirectional A-Line lamps are suited to a wide variety of residential and commercial applications, including pendants, wall sconces and table and floor lamps. They are dimmable down to 10 percent on a wide variety of dimming control systems.





LED BR LAMPS

The highly efficient LED family of lamps replace up to 100-watt incandescent reflectors, significantly reducing consumers' carbon footprint while maintaining a very high quality of light. The LED BR lamps are the ideal lighting solution for recessed and architectural residential, retail, office space and hospitality applications. ENERGY STAR®-certified models are available.







LED PAR LAMPS

Providing better quality light than CFL lamps and offering superior cost savings to incandescent alternatives, MaxLite's family of LED PAR lamps are available in 2700K, 3000K, and 4100K (4000K) correlated color temperature (CCT) and deliver high-quality light in retail, residential, recessed, track lighting and architectural lighting. ENERGY STAR®-certified models are available.





LED CANDLE LAMPS

The LED Candelabra bulbs are designed to simulate an incandescent candelabra bulb with true backlighting. Available in a torpedo styles with an E12 base, MaxLite's family of candelabra replacement bulbs are offered in clear envelope, and are designed to replace up to a 25-watt incandescent bulb in wall sconces and decorative chandeliers in residential and commercial applications. ENERGY STAR®-certified models are available.







LED G25 GLOBE

The ENERGY STAR® LED G25 Globe consumes just six watts but replaces a 40-watt incandescent bulb. This frosted lamp, with a standard Edison E26 base, is ideal for pendant, vanity lighting applications in residential, hospitality and commercial environments and is offered in 2700K (warm white) correlated color temperature (CCT).

LED G25 GLOBE

MaxLite LED G25 retrofit lamp is ideal for providing high-PROJECT NAME quality lighting for globe, vanity, and decorative fixtures throughout homes and hospitality applications. It consumes CATALOG NUMBER only 6 watts and replaces a 40-watt incandescent lamp, resulting in up to 85 percent savings in energy. This lamp has an average rated life of 25,000 hours and it is dimmable NOTES

> FIXTURE TYPE



FEATURES:

- Lumens: 450
- 6 watts
- 25,000 hour life (L70)
- CRI: 82
- · Five year warranty
- · Dimmable down to 10 percent
- Suitable for damp locations
- Not for use in enclosed luminaires



| MAKE | DIMMER MODEL | MAKE | DIMMER MODEL |
|--------|--------------|---------|--------------|
| Lutron | CTCL-153P | Leviton | IPL06 |
| Lutron | DVCL-153P | Leviton | IPI10 |
| Lutron | LGCL-153P | Leviton | 6631-LW |
| Lutron | S-600 | Leviton | 6683-IW |

Lamp Ordering Information:

| Watts | Order Number | Model Number | Incandescent Equivalent | Lumens | Lamp Life (Hrs.) | Dimensions (W"xH") | сст |
|-------|--------------|--------------|----------------------------|--------|---------------------|-----------------------|------|
| 6 | 73984 | 6G25DLED27 | 40W | 450 | 25,000 | 4,78" x 3.15" | 2700 |

Lighting layouts and spacing criteria available upon request







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LED MR16 LAMPS

Available in a GU5.3 base, MaxLite's LED MR16 is a highly efficient LED lamp that replaces up to 50-watt halogen lamps. The lamp maintains a high quality of light, and is suitable for architectural, accent and track lighting in residential, retail, museum and hospitality applications.





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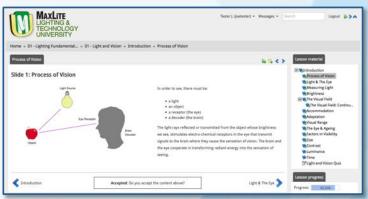
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THANKS FOR ATTENDING!



QUESTIONS/ANSWERS

Thank you everyone for your attention! Please feel free to use this opportunity to ask any questions you may have about MaxLite or the products/topics discussed in this presentation.

FOR MORE INFORMATION ABOUT OTHER MAXLITE PRODUCTS, OR FOR LIGHTING QUESTIONS IN GENERAL; PLEASE CONTACT:

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