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Advanced Lighting

US Industry Study with Forecasts for **2015 & 2020**

Study #2743 | May 2011 | \$4900 | 276 pages

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As traditional incandescent lamps are made illegal, advanced lighting products will do particularly well in the residential building market, where incandescent lamps have been dominant.

US demand to rise 9.3% annually through 2015

US demand for advanced lighting is forecast to increase 9.3 percent per annum through 2015 to \$11.2 billion. A government-mandated phaseout of traditional incandescent lamps and a projected improvement in the cost effectiveness of advanced lighting will drive gains. As traditional incandescent lamps are phased out within two years, demand for advanced lighting products will do particularly well in the residential building market, where incandescent lamps have been dominant for more than a century because of their low cost and high quality of light. The elimination of these lamps will power growth in advanced lighting sales through 2015. But because advanced lighting products have much longer useful lives than incandescent lamps, the average replacement rate for residential lighting will decrease over time, eventually depressing advanced lighting demand.

Lower costs to spur non-residential, outdoor uses

In nonresidential building and outdoor lighting applications, traditional incandescent lamps account for a smaller share of the market, so the government phaseout will have less impact on advanced lighting demand. Instead, a projected decrease in the cost of advanced lighting, particularly for light emitting diodes (LEDs), will spur demand growth through 2015. Businesses,

US Advanced Lighting Demand (\$7.2 billion, 2010)



LEDs
43%

CFLs
19%

Advanced HID
13%

Halogen
12%

Other Types
13%

institutions and government entities will turn to advanced lighting products to lower energy expenses and to reduce the labor costs of replacing lighting products.

LEDs to lead gains

Demand for LEDs will grow the fastest of any advanced lighting product through 2015, rising nearly 15 percent per year to \$6.1 billion. Increased penetration in the residential building market will support advances. While the EISA will also boost unit sales of compact fluorescent lamps (CFLs) and halogen lamps through 2015, over the long term LEDs are expected to take market share from these types. LEDs consume far less energy than halogens, do not contain

mercury (unlike CFLs) and last considerably longer on average than halogens or CFLs. These advantages, combined with a rapid decline in unit prices, will eventually result in LEDs leading the residential market in both unit sales and value demand.

Sales of metal halide lamps (a type of high intensity discharge lamp) and halogen lamps will benefit from a projected rebound in motor vehicle manufacturing through 2015. Metal halide lamps will gradually increase their share of the motor vehicle market as more motor vehicle manufacturers begin to install metal halide headlamps as standard equipment.

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Sample Text, Table & Chart

MARKETS

OEM & Aftermarket

Vehicular demand for advanced lighting derives from both OEM and aftermarket applications. The OEM segment accounts for the majority of demand, representing 69 percent of the total in 2010. Demand for advanced lighting in OEM applications is forecast to expand through 2015, but is expected to decline thereafter. The increase in demand for advanced lighting in OEM applications is driven by trends in the number of vehicles produced and by the demand for advanced lighting products initially installed on new motor vehicles. Demand for advanced lighting in OEM applications suffered between 2005 and 2010 in a weak macroeconomic environment depressed demand. Consequently, OEM demand for advanced lighting products declined between 2005 and 2010. Production of motor vehicles has already begun to recover and is expected to continue to expand through 2015, spurring OEM demand for advanced lighting.

Further boosting OEM demand will be a continued increase in the adoption of metal halide headlamps. Metal halide headlamps, which cost more than the halogen headlamps they typically displace, are expected to find greater use because of the superior visibility they offer drivers of motor vehicles. The value of advanced lighting products used per vehicle will also benefit from the greater use of LEDs in exterior lighting. LEDs, which typically compete with incandescent bulbs for many of the smaller lighting applications, will see increased use as the price of LEDs decreases through 2015, making them cost competitive with incandescents.

Aftermarket demand for advanced lighting is a function of replacement demand and retrofit or upgrade demand. Replacement

134

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SAMPLE TEXT

TABLE VI-7

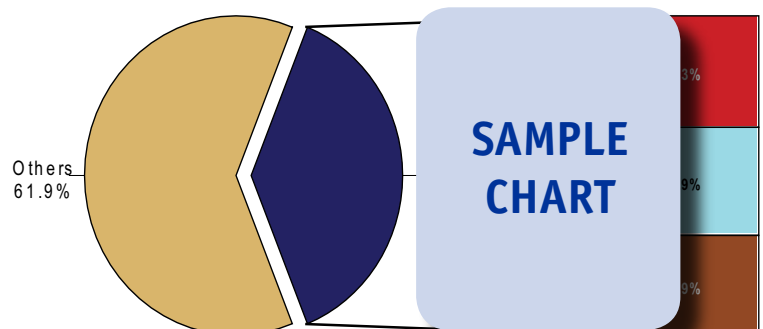
SOUTH ADVANCED LIGHTING DEMAND BY SUBREGION & MARKET (million dollars)

Item	2000	2005	2010	2015	2020
South GDP (bil \$)					
\$ lighting/mil \$ GDP					
South Advanced Lighting Demand					
By Subregion:					
South Atlantic					
East South Central					
West South Central					
By Market:					
Nonresidential					
Residential					
Motor Vehicle					
Other					
% South					
Total Advanced Lighting Demand	1970	2885	7150	11150	10050

SAMPLE TABLE

CHART VII-1

ADVANCED LIGHTING MARKET SHARE BY COMPANY (\$7.2 billion, 2010)



SAMPLE CHART

Sample Profile, Table & Forecast

TABLE IV-3
ADVANCED FLUORESCENT LAMP
DEMAND BY TYPE & MARKET
 (million dollars)

Item	2000	2005	2010	2015	2020
Households (mil)	100	100	100	100	100
\$ fluorescent/household	15	10	10	15	15
Advanced Fluorescent Lamp Demand					
By Type:					
CFLs					
Energy-Efficient					
High-Output					
By Market:					
Nonresidential					
Residential					
Other	15	10	10	15	15

**SAMPLE
TABLE**

COMPANY PROFILES

Cree Incorporated

4600 Silicon Drive
 Durham, NC 27703
 919-313-5300
<http://www.cree.com>

Revenues: \$1.6 billion
 US Revenues: \$1.6 billion
 Employment: 10,000

Key Products: LED lighting and lamps

**SAMPLE
PROFILE**

Cree develops and manufactures semiconductor materials and devices based on silicon carbide, gallium nitride (GaN) and related compounds. The Company's products include light emitting diodes (LEDs), materials, and high-power and radio frequency products.

The Company is active in the US advanced lighting market via the production of LED products, which accounted for \$790 million of its total revenues in FY 2010. Among Cree's LED products are chips, components and lamps. LED chips from the Company are blue and green products composed of GaN and related materials. These chips are employed in such end uses as cellular phone backlighting, digital camera flashes, traffic signals, automotive dashboard lighting and full-motion video signs. Examples of these products are EZBRIGHT, XTHIN and ULTRATHIN high-brightness LEDs; GENERATION II MEGABRIGHT LEDs for indoor lighting and other white-light applications; and RAZERTHIN mid-brightness LEDs.

Cree produces XLAMP high-performance and lighting-class LED components available in white and various colors. These components

"Demand for CFLs is forecast to increase 3.1 percent per annum through 2015 to \$1.6 billion. Consumers switching over to CFLs as replacements for traditional incandescent lamps as a result of the EISA's ban on incandescents will drive growth. CFLs are forecast to increase their share of the overall residential lighting market (which includes both advanced and traditional lighting) by a considerable percentage; however, ..."

--Section IV, pg. 88

OTHER STUDIES

Lamps

This study analyzes the US lamp industry. It presents historical demand data for the years 2000, 2005 and 2010, and forecasts for 2015 and 2020 by lamp type (e.g., incandescent, halogen, fluorescent, high intensity discharge) and market (e.g., buildings, consumer products, motor vehicles, outdoor lighting). The study also considers market environment factors, details industry structure, evaluates company market share and profiles industry players.

#2773 July 2011..... \$5100

World Electric Lighting

Global demand for electric lighting is forecast to climb 4.5 percent annually through 2014. Gains in developing countries will outpace sales in the US, Western Europe and Japan. China alone will account for nearly half of all new product demand through 2014. LEDs will record the fastest market gains. This study analyzes the \$6.8 billion world electric lighting industry, with forecasts for 2014 and 2019 by product, market, world region and for 26 countries. It also evaluates company market share and profiles industry participants.

#2708December 2010..... \$5900

World Lighting Fixtures

Global lighting fixture demand will climb 5.8 percent annually through 2014. China will account for one-third of all new demand, surpassing the US to become the largest market. Vehicular lighting will grow the fastest based on increasing motor vehicle output and a shift toward more expensive units.

This study analyzes the \$96 billion world lighting fixture industry, with forecasts for 2014 and 2019 by product, market, world region and for 24 countries. It also evaluates company market share and profiles industry competitors.

#2684September 2010..... \$6100

Sensors

Demand for sensors in the US will rise 6.1 percent annually through 2014. The motor vehicle market will grow the fastest based on a rebound in motor vehicle production and the rising use of newer sensor-laden systems. Proximity and positioning and chemical property sensors will be the fastest growing types.

This study analyzes the \$9.7 billion US sensors industry, with forecasts for 2014 and 2019 by product and market. The study also reviews sensor technology, evaluates company market share and profiles industry competitors.

#2662September 2010..... \$4900

World Automotive Sensors

Global demand for light vehicle OEM automotive sensors will advance 11.8 percent annually through 2014. North America will be the fastest growing region, far outpacing the Asia/Pacific and other regions based on a rebounding US market and higher per-vehicle sensor revenues. This study analyzes the \$9.1 billion world automotive sensor industry, with forecasts for 2014 and 2019 by product, world region and for 23 countries. It also evaluates company market share and profiles industry participants.

#2640June 2010..... \$5700

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