

FY11 Solid-State Lighting Award Selections				
Core Technology Research Projects				
Award Winners	City,State	Project Description	DOE Funding	Total Project Funding
University of Rochester	Rochester, NY	This project will increase the efficiency and light output of OLEDs by improving the device's light extraction through the use of an internal scattering layer. The goal for this project is to demonstrate increased light output that is closer to today's traditional lighting products.	\$1,247,881	\$1,521,931
Arizona Board of Regents for Arizona State University	Tempe, AZ	This project will demonstrate an efficient, stable white OLED using a single emitter. Use of a single emitter has the potential to simplify the device structure, which will in turn reduce costs for the consumer.	\$664,785	\$835,332
Research Triangle Institute	Research Triangle Park, NC	This project will develop and validate methodologies for predicting the lifetime of integrated SSL luminaires, or lighting units. The ultimate outcome from this project will be a reliability prediction tool for use by designers and manufacturers of LED luminaires, which will lead to more consistent and accurate performance data and greater consumer confidence in LED product reliability.	\$1,699,318	\$2,124,147
Soraa, Inc.	Goleta, CA	This project will develop high-efficiency LEDs that can be operated at high current for greater light output. These improved LEDs would then enable the development of cost-effective LED packages with an estimated efficacy of 150 lumens per watt.	\$678,257	\$968,938
Product Development Projects				
Award Winners	City,State	Project Description	DOE Funding	Total Project Funding
Philips Lumileds Lighting Company, LLC	San Jose, CA	This project seeks to make use of high-voltage, low-current LED designs, in order to simplify driver requirements, improve driver efficiency, and reduce system cost. The proposed warm-white LED package will deliver light with an efficacy of 130 lumens per watt at high-temperature operation.	\$1,987,200	\$2,484,000
Cree, Inc.	Goleta, CA	This project will investigate various design trade-offs in Cree's high-brightness LED package design and fabrication. The research will enable high-output, warm-white LED packages with an efficacy of 128 lumens per watt.	\$1,610,681	\$2,119,317
Solid-State Lighting Manufacturing Projects				
Award Winners	City,State	Project Description	DOE Funding	Total Project Funding
Veeco Process Equipment, Inc.	Plainview, NY	This project will enable significant reductions in manufacturing costs for LEDs, accomplished through the introduction of an aluminum-nitride (AlN) buffer layer that allows for growth on silicon. The results of the project will translate into a more economical product for the consumer.	\$4,000,000	\$5,005,640
Moser Baer Technologies, Inc.	Canandaigua, NY	This project will reduce the cost of manufacturing OLED lighting panels through improved processing techniques. Moser Baer Technologies' pilot manufacturing line in Canandaigua, NY, will be used to demonstrate these manufacturing improvements.	\$2,906,324	\$3,900,925