## STATEMENT OF CONSIDERATIONS

REQUEST BY CREE, INC. FOR AN ADVANCED WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS UNDER COOPERATIVE AGREEMENT NO. DE-FC26-08NT01577, W(A)-2009-063, CH-1534

The petitioner, Cree, Inc. (Cree), was awarded this cooperative agreement for the performance of work entitled, "Efficient White SSL Component for General Illumination." The purpose of the cooperative agreement is to develop the technology, fabrication processes, and prototypes to demonstrate warm white solid-state lamps based on GaN semiconductor Light Emitting Diodes (LEDs) and phosphor down-conversion LEDs that are viable replacements for energy inefficient incandescent lighting solutions. The objective of this program is to improve both the LED power efficiency as well as demonstrating novel phosphor converters in LED products that achieve higher luminous efficiencies both at room temperature and elevated.

The total estimated cost of the cooperative agreement is \$2,558,959, with Cree's cost-sharing of approximately 22% or \$562,971. DOE is providing the remaining 78% or \$1,995,988. The period of performance is from May 1, 2008 through April 30, 2010.

The Petitioner, is clearly competent in the field of technology relating to this cooperative agreement as demonstrated in the Petitioner's response, to questions 5 and 6, in the attached copy of its waiver petition. As noted in its waiver petition, Petitioner has extensive experience in gallium nitride-based LED products in addition to expertise in the design and manufacture of commercial semiconductor products utilizing silicon carbide and gallium nitride technologies. In addition Cree has more than 300 domestic patents related to semiconductor technology. The more relevant of these patents are referenced in Cree's attached petition. Cree's response demonstrates its technical competency in the field of semiconductors and LED lighting.

In its response to question 10 of the attached waiver petition, Cree states that Lumileds along with other companies are developing similar technologies, and that Cree competes in the U.S. and foreign marketplaces with these companies. Cree states that this waiver will help maintain competition in this technology, as well strengthen the technology position against Asian and European competition for next generation lighting applications. Grant of the waiver will have a positive effect on competition and market concentration.

In addition, this project is under the Solid State Lighting Program (SSL) Program, and subject to a Determination of Exceptional Circumstances (EC). The Solid State Lighting Program is to develop advanced solid state lighting technologies that, compared to conventional lighting technologies, are much more energy efficient, longer lasting, and cost-competitive, by targeting a product system efficiency of 50 percent with lighting that accurately reproduces sunlight spectrum. The SSL program has a multi-tier structure. One tier consists of a competitively selected SSL Partnership whose membership includes organizations that have or will have the capacity to manufacture SSL systems, i.e., the entire package from wall plug to illumination. Another tier is the Core Technology Program, which will focus on finding solutions to the more difficult shared technical barriers identified by the SSL partnership. It focuses on the R&D efforts of universities, national laboratories, and other research institutions. There is also a Product Development tier which focuses on developing or improving commercially usable materials, devices or systems. This cooperative agreement is in the Product Development Program. Under the SSL EC, any entity having the right to use or sell any subject invention in the United State and/or any other country must agree that any products embodying the subject invention or produced through the use of the subject invention will be substantially manufacture in the United States.

This advance waiver of the Government's rights in inventions is subject to the usual advanced patent waiver and background data licensing provisions. The terms of the advanced patent waiver include the usual Government license, march-in rights, and preference for U.S. industry provisions set out in 35 U.S.C. 202-204. The advance patent waiver also includes the attached U.S. Competitiveness clause (paragraph t) which requires products embodying any waived invention or produced through the use of any waived invention be manufactured substantially in the United States unless the participant can show to the satisfaction of DOE that it is not commercially feasible to do so. The Petitioner further agrees to make the above condition binding on any assignee or licensee or any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees. Should the Contractor or other such entity receiving rights in any waived invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by DOE.

Considering the foregoing, and in view of the statutory objectives to be obtained and the factors to be considered under DOE's statutory waiver policy, all of which has been considered, it has been determined that this waiver as set forth above will best serve the interest of the United States and the general public.

Mark P. Dvorscak
Deputy Chief Counsel
Intellectual Property Law Division

Date: Dec. 9, 2009

Based upon the foregoing Statement of Considerations and representations in the attached waiver petition, it is determined that the interests of the United States and the general public will best be served by a waiver of patent rights of the scope described above, and therefore the waiver is granted. This waiver will not apply to any modification or extension of the cooperative agreement, where through such modification or extension, the purpose, scope or cost of the contract has been substantially altered.

CONCURRENCE:	APPROVAL:
James. Brodrick	Flow A Continue I/
Office of Energy Efficiency and	Patri A. Gottlieb Assistant General Counsel for Technology
Renewable Energy	Assistant General Counsel for Technology Transfer and Intellectual Property, GC-62
Office of Building Technologies, EE-2J	
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Date: March 8. 2010	Date: 3-12-2010

(t) U. S. COMPETITIVENESS The Contractor agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States unless the Contractor can show to the satisfaction of the DOE that it is not commercially feasible to do so. In the event the DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The Contractor agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the Contractor or other such entity receiving rights in the invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by the DOE.