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**OPTIMIZATION OF SHADING EFFECT BY USING SHADING DEVICE  
INTEGRATED PHOTOVOLTAIC SYSTEM**

**YUTTANA TONGTUAM**

**A Thesis Submitted to the Graduate School of Naresuan University**

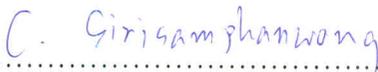
**in Partial Fulfillment of the Requirements**

**for the Doctor of Philosophy Degree in Renewable Energy**

**July 2014**

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This thesis entitled “Optimization of Shading Effect by Using Shading Device Integrated Photovoltaic System” submitted by Yuttana Tongtuam in partial fulfillment of the requirements for the Doctor of Philosophy Degree in Renewable Energy is hereby approved.

  
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