

Illuminating Engineering Society of North America Annual Conference 2011

**Austin, Texas, USA
31 October – 1 November 2011**

ISBN: 978-1-61839-283-1

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2011) by the Illuminating Engineering Society of North America (IES)
All rights reserved.

Printed by Curran Associates, Inc. (2011)

For permission requests, please contact the Illuminating Engineering Society of North America (IES)
at the address below.

Illuminating Engineering Society of North America (IES)
120 Wall Street
Floor 17
New York, NY 10005-4001

Phone: (212) 248-5000
Fax: (212) 248-5017

ies@ies.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

Photopic & Scotopic Light Perception, Related to Outdoor Lighting	1
<i>Michelle Bell, Fred Hasler</i>	
An Experimental Horizontal Solar Light Pipe System	25
<i>Liliana O. Beltran, Nesrine Mansour, Jialiang Wang</i>	
Camera-Aided Illuminance Measurement: A Pilot Study	33
<i>Honyi Cai, Zachary D. Steinkuhler, Joshua P. Shore</i>	
An Analysis on Spectral Power Distribution with Maximum LER for Specified Color Quality and Color Temperature	43
<i>Po-Chieh Hung</i>	
Daylight-Matched Lighting for Mixed Illumination Environments	52
<i>Michael E. Miller, Jacob Gilman</i>	
Luminance as an Alternative Metric for Lighting Design	57
<i>Rebecca Mintz</i>	
Preliminary Results from an Integrated Lighting and Daylight Control Demonstration at Fort Irwin	83
<i>Maulin Patel, Abby Enscoe, Satyen Mukherjee, Dagnachew Birru</i>	
Exploring Flicker in Solid-State Lighting: What You Might Find, and How to Deal With It	97
<i>Michael Poplawski, Naomi J. Miller</i>	
Laboratory Evaluation of LED T8 Replacement Lamp Products	116
<i>E. E. Richman, B. R. Kinzey, N. J. Miller</i>	
Wireless Lighting Control: A Life Cycle Cost Evaluation of Multiple Lighting Control Strategies	142
<i>Dane Sanders, Darcie Chinnis</i>	
A Method for Projecting Lumen Maintenance of LED Light Sources (TM-21)	161
<i>Ralph Tuttle, Kei Haraguchi, Mark Hodapp, Jianzhong Jiao, Cameron Miller, Yoshi Ohno, Trenton Pulsipher, Emil Radkov, Eric Richman, David Szombatfalvy</i>	
Use of Anti-Reflective Glass in Lighting Products	177
<i>Kevin L. Willmorth, David P. Maikowski</i>	
Study on Glareindices - A User-Friendly Glare Evaluating Program Based on HDR Images	198
<i>Hanshu Yin, Marc Schiler</i>	
Study on HDR Image as an Luminance Mapping Tool	223
<i>Hanshu Yin, Marc Schiler</i>	
Workplane Illuminance Estimation for Robust Daylight Harvesting Lighting Control	246
<i>Shenqiu Zhang, Dagnachew Birru</i>	
Author Index	