

**Minutes**  
**Photometrics Working Group**  
Friday, 18 March 2016  
Salt Lake City Downtown Marriott at City Creek  
75 South West Temple  
Salt Lake City, UT 84101

**Chairman:** Jerry Gorrell; Theatre Safety Programs; P; U

**Recording secretaries:** Erin Grabe & Karl G. Ruling: ESTA

**Members attending:**

Edward R. Condit; OSRAM Lighting Solutions (OSRAM Licht AG); O; MP  
Ed Hyatt; Boston Illumination Group, Inc.; O; CP  
Michael Lay; Philips Color Kinetics (Royal Philips); P; MP  
Wendy Luedtke; Rosco Laboratories; P; MP  
Karl G. Ruling; Unit 12 Productions; I; DE  
Mike Wagner; ARRI Inc. (Calif.); Arnold & Richter Cine Technik; P; MP

**1 Opening Remarks**

Jerry Gorrell called the meeting to order at 11:05.

**2 Attendance and membership**

**2.1 Introductions of those present and taking attendance**

Those present introduced themselves as Karl Ruling checked off their names on the green sign-in sheet.

**2.2 Determination of quorum**

Jerry Gorrell noted that a quorum was present. Business could be conducted.

**2.3 Recognition of alternate voting members**

There were none to recognize.

**2.4 Requirements for membership**

*The following statement was read aloud to the working group by Jerry Gorrell:*

Membership is open to all who are affected by the work of the group. Voters who would be in the designer or dealer/rental company interest category in particular are encouraged to become members. There is an annual \$100 participation fee for all members. Voting members are required to attend meetings and to vote on letter ballots. Voting members and their alternates may not miss three consecutive meetings or three consecutive letter ballots without a loss of voting status.

**2.5 Changes to observer status due to lack of attendance**

None.

**2.6 Cancellations**

*The following people have been removed from the membership list by request:*

David Bertenshaw; was Observer; G  
Larry Lieberman; Vision Quest Lighting; was Observer; CP  
Bill Klages; New Klages Inc.; was Observer; U  
André Broucke; was Observer; G  
Jefferey Knox; Schuler Shook; was Principal; DE  
Markus Salm; GLP German Light Products GmbH; was Alternate; MP  
Michael G. Davis ; Mole-Richardson Co.; was Observer; DE  
Ben Sweet-Block; Philips Color Kinetics; was Observer; MP

## 2.7 Removed because of no response to the participation fee

The following people have been removed because they did not respond to the participation fee notice. That is, they did not pay the invoice and they did not say they would not pay; there simply was no response. The voting status shown is what the voting status was; they now are no longer working group members.

Mosè Benaglia; Clay Paky S.P.A.; O; MP  
Charles H. Green; Charles H. Green; O; U  
Joseph M. Good\_III; Spectrum Professional Services; O; G  
Dennis Thykjær Jørgensen; Martin Professional A/S; O; MP  
Francois Juliat; Robert Juliat; O; MP  
Hiroshi Kita; Marumo Electric Co., Ltd.; O; MP  
Phil Klapwyk; IATSE Local 891; O; U  
Doug MacDonald; Designlab Chicago Inc.; O; DR  
Jim McHugh; Humboldt State University; O; U  
John T. Ryan; Altman Stage Lighting; O; MP  
Garrett Young; Prism Projection, Inc.; O; MP

## 2.8 Processing of new membership requests

*The following applications had been received:*

Edward Condit; OSRAM Lighting Solutions (OSRAM Licht AG); O; MP  
Darryl Ross; TMB; P; MP

Darryl Ross was not present.

Karl Ruling moved that they be accepted as observer members. The motion was seconded and then approved with a unanimous show of hands.

## 2.9 Consensus body

The full consensus body during this meeting, including those not present, was:

Delegate	Representing	Voting status	Int. cat.
Mike Wagner	Arnold & Richter Cine Technik	P	MP
Larry Schoeneman	DesignLab Chicago, Inc.	P	DR
Mark Ravenhill	GLP German Light Products Inc.	P	MP
Ken Vannice	Ken Vannice LLC	I	G
Mike Wood	Mike Wood Consulting LLC	P	G
Wendy Luedtke	Rosco Laboratories	P	MP
Michael Lay	Royal Philips	P	MP
Mitch Hefter	Royal Philips	A	MP
Kimberly Corbett Oates	Schuler Shook	P	DE
Jerry Gorrell	Theatre Safety Programs	P	U
Karl G. Ruling	Unit 12 Productions	I	DE
<b>Total votes possible</b>		<b>10</b>	

Votes by interest categories	
0	CP
2	DE
1	DR
2	G
4	MP
1	U

### 3 Approval of the minutes from the July 2015 meeting

See PHmin07-2015.pdf.

Michael Lay. Seconded. Approved with show of hands.

### 4 ESTA declarations

#### 4.1 Call for patents

*The following statement is to be read aloud to the assembly:*

ESTA intends not to publish any standard that contains protected intellectual property, unless that information can be licensed by anyone for a reasonable fee. ESTA uses a process of open patent and copyright disclosures to implement its intent. ESTA does not conduct patent or copyright searches and does not warrant that its standards contain no protected intellectual property.

In keeping with the open disclosures policy, I ask if anyone present wishes to notify this working group of the existence of a patent, patent application, copyright, or other intellectual property that might protect material in a standard being developed by this working group. You need not be the holder of the patent or copyright to notify this working group of its existence.

Nothing was reported.

#### 4.2 Reading of the Anti-trust statement

*The following statement is to be read aloud to the working group:*

ESTA and its members take seriously their obligation to comply with all applicable antitrust laws. Therefore, during this meeting and during all ESTA events, all discussions will be limited to those subjects that are permitted by the antitrust laws. All members should refrain from any discussion or mention of competitively sensitive subjects such as the current or future prices charged for any member product or services, current or future marketing plans or strategies, and current or future costs, including employee salaries. There also must be no agreement on the suppliers or customers that members will do business with or the markets in which members will conduct business.

Violations of the antitrust laws can have serious consequences. If you have any questions or concerns about anything that is discussed at a ESTA meeting, please bring your concern to ESTA management. An easy to read pamphlet describing the antitrust laws is available from the ESTA staff.

### 5 Approval of agenda

Wendy Luedtke moved that the draft agenda be approved as written. The motion was seconded and then approved with a show of hands.

### 6 Old Business

#### 6.1 ANSI E1.9 – 2007 (R2012), Reporting Photometric Performance Data for Luminaires Used in Entertainment Lighting (Revision, reaffirmation, or withdrawal by 2017)

No news or action at this time.

**6.2 ANSI E1.25 – 2012, Recommended Basic Conditions For Measuring The Photometric Output Of Stage And Studio Luminaires By Measuring Illumination Levels Produced On A Planar Surface** (Revision, reaffirmation, or withdrawal by 2017)  
No news or action at this time.

**6.3 ANSI E1.35 – 2013, Lens Quality Measurements for Pattern Projecting Luminaires Intended for Entertainment Use** (Revision, reaffirmation, or withdrawal by 2018)  
No news or action at this time.

**6.4 ANSI E1.36 – 2007 (R2012), Model Procedure for Permitting the Use of Tungsten-Halogen Incandescent Lamps and Stage and Studio Luminaires in Vendor Exhibit Booths in Convention and Trade Show Exhibition Halls** (Revision, reaffirmation, or withdrawal by 2017)  
No news or action at this time.

**6.5 ANSI E1.48 – 2014, A Recommended Luminous Efficiency Function for Stage and Studio Luminaire Photometry** (Revision, reaffirmation, or withdrawal by 2019)

**6.6 ANSI E1.54 – 2015, ESTA Color Standard**  
No action at this time.

Erin Grabe reported the number of Photometrics Working Group standards downloaded to date. E1.54 is very new, but very popular.

## **7 New business**

**7.1 Revision of ANSI E1.41 – 2012, Recommendations for Measuring and Reporting Photometric Performance Data for Entertainment Luminaires Utilizing Solid State Light Sources**  
Revision to reference IES TM-30-15 for color rendering.

Wendy Luedtke moved that we revise ANSI E1.41. The motion was seconded. The motion was approved by a show of hands. [Note that this motion will have to be affirmed by letter ballot. A revision requires a supermajority vote, and too few voters were present to meet that criteria. A supermajority is a majority of the voting body and 2/3rds of more of those who voted. With a voting body of 10, a supermajority is more than five. The meeting had five voters.]

There was discussion in which the reference to E1.9 was updated.

Karl Ruling moved that the revised E1.41 be offered for public review after the ANSI PINS challenge period, contingent on there being no challenges. The motion was seconded and then approved by a show of hands.

**7.2 Revision of ANSI E1.55 – 2015, Standard for Theatrical Makeup Mirror Lighting**  
Revision to reference IES TM-30-15 for color rendering in addition to CRI and CQS.

Wendy Luedtke moved that we revise ANSI E1.55. The motion was seconded. The motion was approved by a show of hands. [Note that this motion will have to be affirmed by letter ballot. A revision requires a supermajority vote, and too few voters were present to meet that criteria. A supermajority is a majority of the voting body and 2/3rds of more of those who voted. With a voting body of 10, a supermajority is more than five. The meeting had five voters.]

The document was revised at the meeting. Wendy Leudtke moved that we accept the revisions. The motion was seconded. The motion was approved by a show of hands.

Karl Ruling moved that the revised E1.55 be offered for public review after the ANSI PINS challenge period, contingent on there being no challenges. The motion was seconded and then approved by a show of hands.

Mike Wagner said that TM-30-15 is vast improvement over CRI, but that there is still work to do on the Rg value. He asked whether the reference to the 2015 edition is good, to which Karl Ruling said that it is, since that is the current version of TM-30. If the IES releases a new edition, we will consider referencing the new one.

### **7.3 Other New Business**

None.

## **8 Other business**

### **8.1 Above & Beyond Awards**

It was announced that the nomination site is open year round at [http://tsp.esta.org/tsp/news/award\\_nomination.html](http://tsp.esta.org/tsp/news/award_nomination.html).

### **8.2 Investors in Innovation**

It was noted that the Investors in Innovation donation site is at [http://tsp.esta.org/tsp/inv\\_in\\_innovation/sponsor.html](http://tsp.esta.org/tsp/inv_in_innovation/sponsor.html)

Karl Ruling suggested that people make donations and encourage others to do so.

### **8.3 Other other business**

None.

## **9 Schedule for future meetings**

The next meeting is scheduled for July 15, 4pm – 6pm, at the Roosevelt Hotel. We will have WebEx, reported Erin Grabe.

## **10 Adjournment**

Wendy Luedtke moved that the meeting adjourn. The motion was seconded. Hearing no objections, Jerry Gorrell declared the meeting adjourned at 12:12.

Name	Company	Representing	Voting status	Int. cat.
Robert Barbagallo	Solotech Inc.	Solotech Inc.	O	DR
Lee J. Bloch	Bloch Design Group, Inc.	Bloch Design Group, Inc.	O	U
Ron Bonner	PLASA Technical Resources Office	PLASA EU	O	G
Edward R. Condit	OSRAM Lighting Solutions	OSRAM Licht AG	O	MP
Bill Ellis	Candela Controls, Inc.	Candela Controls, Inc.	O	U
Gregg Esakoff	ETC West	Electronic Theatre Controls, Inc.	O	MP
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	U
Erin Grabe	ESTA	ESTA	exf	G
Tim Hansen	Oasis Stage Werks	Oasis Stage Werks	O	U
Mitch Hefter	Philips Lighting	Royal Philips	A	MP
A C Hickox	Domingo Gonzalez Associates	Domingo Gonzalez Associates	O	U
Ed Hyatt	Boston Illumination Group, Inc.	Boston Illumination Group	O	CP
Frank Kjær Jensen	Martin Professional ApS	Harman International Industries	O	MP
Michael Lay	Philips Color Kinetics	Royal Philips	P	MP
Rick Loudenburg	Barbizon Light (Denver)	Barbizon Companies	O	DR
Wendy Luedtke	Rosco Laboratories	Rosco Laboratories	P	MP
Kimberly Corbett Oates	Schuler Shook	Schuler Shook	P	DE
Mark Ravenhill	GLP German Light Products Inc.	GLP German Light Products Inc.	P	MP
Darryl Ross	TMB	TMB	O	MP
Karl G. Ruling	Unit 12 Productions	Unit 12 Productions	I	DE
Karl G. Ruling	ESTA	ESTA	exf	G
Larry Schoeneman	DesignLab Chicago, Inc.	DesignLab Chicago, Inc.	P	DR
Ford Sellers	Chauvet Lighting	Chauvet Lighting	O	MP
Keith Sklar	Actors' Equity Association	Actors' Equity Association	O	G
Robert Timmerman	Philips Color Kinetics	Royal Philips	O	MP

<b>Name</b>	<b>Company</b>	<b>Representing</b>	<b>Voting status</b>	<b>Int. cat.</b>
Ken Vannice	Ken Vannice LLC	Ken Vannice LLC	I	G
Mike Wagner	ARRI Inc. (Calif.)	Arnold & Richter Cine Technik	P	MP
Mike Wood	Mike Wood Consulting LLC	Mike Wood Consulting LLC	P	G

**Keys to the Codes:****Interest category**

CP Custom-market Producer  
DE DEsigner  
DR Dealer or Rental company  
G General interest  
MP Mass-market Producer  
U User

**Voting status**

P Principal  
A Alternate  
I Individual  
O Observer