

**Minutes**  
**Photometrics Working Group**  
Friday, 22 October 2010  
Las Vegas Hilton Hotel  
Las Vegas, NV

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

**Recording secretary:** Karl G. Ruling; ESTA

**Members attending:**

Ryan Fletcher; ARRI Inc.; O; MP

Rick Loudenburg; Barbizon Light (Denver), the Barbizon Companies; P; DR

Ed Hyatt; Boston Illumination Group, Inc.; O; CP

Charles H. Green; O; U

Mark Ravenhill; GLP German Light Products Inc. (GLP German Light Products GmbH); P; MP

Markus Salm; GLP German Light Products GmbH; A; MP

Ken Vannice; Leviton Manufacturing Co., Inc.; P; MP

Mike Wood; Mike Wood Consulting LLC; P; G

Bill Klages; New Klages Inc.; O; U

Ron Bonner; PLASA; P; G

Chris Wyatt; Philips Entertainment (Royal Philips Electronics); P; MP

Michael Lay; Philips Strand Lighting (Royal Philips Electronics); A; MP

**Visitor:** Jennie Gorrell; Theatre Safety Programs

**1 Opening Remarks**

Jerry Gorrell called the meeting to order at 8:03.

**2 Attendance and membership**

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

A bright orange sign-in sheet was circulated while those present introduced themselves.

**2.2 Determination of quorum**

Jerry Gorrell surveyed the people at the table and then announced that we have a quorum.

**2.3 Recognition of alternate voting members**

There were none to recognize at the start of the meeting.

**2.4 Requirements for membership**

Gorrell reminded the assembly that membership is open to all who are materially affected by the work of the group, but voting members are required to vote on letter ballots and to attend meetings. If a voting member and his alternate both miss three meetings in a row, they are moved to observer status. This will be done at the end of the third meeting missed.

**2.5 Changes to observer status**

Principals (and alternates, if applicable) who have missed the last two meetings and who will have not meet the minimum attendance requirements for voters if this meeting also is missed:

- None

**2.6 Processing of new membership requests**

Pending applications:

- Ryan Fletcher; ARRI Inc. (Arnold & Richter Cine Technik); Observer; MP

- Mark Ravenhill; German Light Products; Principal; MP
- Markus Salm; German Light Products; Alternate; MP
- Garrett Young; Prism Projection; Principal; MP
- Chris Wyatt; Philips Entertainment (Royal Philips Electronics); Principal; MP (Michael Lay to become alternate.)

Garrett Young was not present.

Mike Wood moved that all the applicants be given the membership status requested, with the except for Garrett Young, who should be accepted as an observer. The motion was seconded and then approved with a show of hands.

## 2.7 Consensus body

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

Name	Company	Representing (This is the primary sort field.)	Voting status	Int. cat.
Rick Loudenburg	Barbizon Light (Denver)	Barbizon Companies	P	DR
Mark Ravenhill	GLP German Light Products Inc.	GLP German Light Products GmbH	P	MP
Markus Salm	GLP German Light Products Inc.	GLP German Light Products GmbH	A	MP
Ken Vannice	Leviton Manufacturing Co., Inc.	Leviton Manufacturing Co., Inc.	P	MP
Mike Wood	Mike Wood Consulting LLC	Mike Wood Consulting LLC	P	G
Ron Bonner	PLASA	PLASA	P	G
Chris Wyatt	Philips Entertainment	Royal Philips Electronics	P	MP
Michael Lay	Philips Strand Lighting	Royal Philips Electronics	A	MP
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	U
		Total votes	7	
		Votes by interest category	0	CP
			3	MP
			1	DR
			1	U
			2	G
			0	DE

## 3 Approval of the minutes from the 3 April 2010 meeting

See *PHmin03-2009.pdf*

Mike Wood moved that the draft minutes be accepted. The motion was seconded and then approved with a show of hands.

## 4 ESTA declarations

### 4.1 Call for patents

The following statement was read aloud to the assembly by Jerry Gorrell:

"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 or 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."

No protected intellectual property was brought to the attention of the assembly.

#### **4.2 Anti-trust statement**

The following statement was read aloud to the assembly by Jerry Gorrell:

"The ESTA Board of Directors, the Technical Standards Committee, and the leadership of this working group will reject or nullify any actions that unlawfully restrain trade. Anyone who feels that such an action is being or has been taken is requested to bring that matter to the attention of the chair immediately. Anyone who feels that actions in restraint of trade have been taken and not properly annulled is requested to notify the TSC chair or ESTA president immediately.

"ESTA legal counsel has informed us that violations of the anti-trust laws can have serious consequences. Individuals engaged in certain unlawful conduct can be found criminally liable. An individual convicted of a criminal violation of the Sherman Act may be fined as much as \$1,000,000 and imprisoned for up to ten years. An easy to read pamphlet describing restraint of trade issues is available from the Technical Standards Manager."

Karl Ruling, the Technical Standards Manager, held up one of the easy-to-read pamphlets to show that copies were available at the meeting.

No restraint of trade actions were brought to the attention of the assembly.

#### **5 Approval of agenda**

Ken Vannice moved that the draft agenda be accepted. The motion was seconded and then approved with a show of hands.

#### **6 Old Business**

##### **6.1 ANSI E1.9-2007, Reporting Photometric Performance Data for Luminaires Used in Entertainment Lighting**

No news or action. We'll work on it in 2012.

##### **6.2 ANSI E1.25-2006, Recommended Basic Conditions For Measuring The Photometric Output Of Stage And Studio Luminaires By Measuring Illumination Levels Produced On A Planar Surface**

No news or action. We'll work on it in 2011.

##### **6.3 ANSI E1.35 - 2007, Lens Quality Measurements for Pattern Projecting Luminaires Intended for Entertainment Use**

No news or action needed. Work at 2012.

##### **6.4 ANSI E1.36 - 2007, 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**

No news or action. We'll work on it in 2012.

##### **6.5 BSR E1.41 - 201x , Recommendations for Measuring and Reporting Photometric Performance Data for Entertainment Luminaires Utilizing Solid State Light Sources**

*See E1-41SSLDraft0-3.pdf. Discussion of document, consideration of further revisions or first public review.*

The draft standard was discussed.

Bill Klages suggested that the redundant definitions be omitted. Mike Wood agreed.

Klages also suggested using Munsell values instead of XY coordinates. Wood said that both could be used.

Color efficiency was discussed. Wood explained how color efficiency is calculated. Klages asked that an explanation of this should be provided to be read with the standard. It could be an appendix or another linked publication. Wood asked if the published document could have color in it. Ruling said that it could. Most of our standards are sold as PDFs, and the few that are sold in hard-copy can be printed on a color printer.

The limitations of the gamut of some luminaires and how this would affect the use of the standard was discussed. Mike Wood said that if a luminaire cannot produce a particular CQS color, that color should be omitted from the averaging used to produce the color efficiency rating. Text to that effect needs to be added to the draft standard.

There was further discussion of describing white that is "color corrected."

There was also discussion of perhaps using color volume. It's very good for showing exactly the color output of a luminaire, but it is more complicated for the end-user to understand and is difficult to render in print or on a static screen.

Mike Wood asked for comments on the draft by the end of December.

We'll have a working group meeting in January with the intention of having a document ready for public review.

#### **7 New business**

None.

#### **8 Other business**

None.

#### **9 Schedule for future meetings**

There is no meeting scheduled now, but we'll ask to have a meeting scheduled for some day on Saturday January 22 through Monday January 24 at the Dallas/Ft. Worth Marriott Solana in Westlake, TX.

#### **10 Adjournment**

Ken Vannice moved that the meeting adjourn. The motion was seconded. Hearing no objections, Jerry Gorrell declared the meeting adjourned at 8:57.

**Working Group Membership and Contact Information as of 1 November 2010**

Name	Company	Representing (This is the primary sort field.)	Voting status	Int. cat.
Larry Busch	ADB Lighting Technologies	ADB Lighting Technologies	O	MP
John Luk	Altman Stage Lighting	Altman Stage Lighting	O	MP
John T. Ryan	Altman Stage Lighting	Altman Stage Lighting	O	MP
André Broucke	André Broucke	André Broucke	O	G
Ryan Fletcher	ARRI Inc. (Calif.)	Arnold & Richter Cine Technik	O	MP
Rick Loudenburg	Barbizon Light (Denver)	Barbizon Companies	P	DR
Lee J. Bloch	Bloch Design Group, Inc.	Bloch Design Group, Inc.	O	U
Ed Hyatt	Boston Illumination Group, Inc.	Boston Illumination Group	O	CP
Bill Ellis	Candela Controls, Inc.	Candela Controls, Inc.	O	U
Charles H. Green	Charles H. Green	Charles H. Green	O	U
Francesco Romagnoli	Clay Paky S.P.A.	Clay Paky S.P.A.	O	MP
David Bertenshaw	David Bertenshaw	David Bertenshaw	O	G
Doug MacDonald	Designlab Chicago	Designlab Chicago Inc.	O	DR
A C Hickox	Domingo Gonzalez Associates	Domingo Gonzalez Associates	O	U
Gregg Esakoff	ETC West	Electronic Theatre Controls, Inc.	O	MP
Mark Ravenhill	GLP German Light Products Inc.	GLP German Light Products GmbH	P	MP
Markus Salm	GLP German Light Products GmbH	GLP German Light Products GmbH	A	MP
Jim McHugh	Humboldt State University/IES	Humboldt State University	O	U
Francesc Rodelles Vinyoles	Institut del Teatre	Institut del Teatre	O	D
Ken Vannice	Leviton Manufacturing Co., Inc.	Leviton Manufacturing Co., Inc.	P	MP
Afsan Quazi	Lighting & Electronics, Inc.	Lighting & Electronics, Inc.	O	G
Dennis Thykjær Jørgensen	Martin Professional A/S	Martin Professional A/S	O	MP
Hiroshi Kita	Marumo Electric Co., Ltd.	Marumo Electric Co., Ltd.	O	MP
Mike Wood	Mike Wood Consulting LLC	Mike Wood Consulting LLC	P	G
Bill Klages	New Klages Inc.	New Klages Inc.	O	U
Tim Hansen	Oasis Stage Werks	Oasis Stage Werks	O	U

Name	Company	Representing (This is the primary sort field.)	Voting status	Int. cat.
Ron Bonner	PLASA	PLASA	P	G
James Eade	PLASA	PLASA	O	G
Garrett Young	Prism Projection, Inc.	Prism Projection, Inc.	O	MP
Ron Rykowski	Radiant Imaging, Inc.	Radiant Imaging, Inc.	O	G
Francois Juliat	Robert Juliat	Robert Juliat	O	MP
Chris Wyatt	Philips Entertainment	Royal Philips Electronics	P	MP
Mitch Heffer	Entertainment Technology	Royal Philips Electronics	O	G
Michael Lay	Philips Strand Lighting	Royal Philips Electronics	A	MP
Kimberly Corbett	Schuler Shook	Schuler Shook	O	DE
Jefferey Knox	Schuler Shook	Schuler Shook	O	DE
John Allard	Softsun	Softsun	O	CP
Robert Barbagallo	Solotech Inc.	Solotech Inc.	O	DR
Joseph M. Good_III	Spectrum Professional Services	Spectrum Professional Services	O	G
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	U
Larry Lieberman	Vision Quest Lighting	Vision Quest Lighting	O	CP

**Key to codes:**

P principal voting member  
A alternate voting member  
I individual voting member  
O observer, non-voting

MP mass-market producer interest category  
CP custom-market producer interest category  
DR dealer or rental company interest category  
U user interest category  
G general-interest interest category  
DE designer