

**Minutes**  
**Photometrics Working Group**  
Saturday, 15 July 2006  
Dallas/Ft. Worth Airport Marriott South  
4151 Centreport Boulevard  
Ft. Worth, Texas

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

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

**Members attending:** Ken Vannice; Colortran (Leviton Manufacturing Co., Inc.); P; MP  
Mike Wood; Mike Wood Consulting LLC; O; G  
Nic Bowker; PLASA; PLASA; P; G  
Michael Lay; Strand Lighting (Genlyte Group LLC); P; MP

**Visitors:** None

**1 Opening Remarks**

The meeting was called to order at 14:07 by Jerry Gorrell. Mike Wood was welcomed to the meeting. He is usually not present at the working group's meetings in Ft. Worth because of a scheduling conflict with the ESTA Board meeting.

**2 Attendance and membership**

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

A blue attendance sign-in sheet was circulated.

**2.2 Determination of quorum**

Four voting members were present. The minimum for a quorum with this working group is three. Gorrell announced that a quorum was present and business could be conducted.

**2.3 Recognition of alternate voting members**

There were none to recognize.

**2.4 Requirements for membership**

Gorrell reminded the assembly that membership is open to all who are 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 Processing of new membership requests**

Michael Lay reapplied because the part of Strand Lighting in which he works had been sold to Genlyte and was now part of the Genlyte Group LLC. It had been owned by Strand Lighting Ltd. in the UK. Nic Bowker moved that Lay's application be accepted. The motion was seconded and then approved by a show of hands.

Name	Company	Representing	Voting status	Int. cat.
John T. Ryan	Altman Stage Lighting	Altman Stage Lighting	P	MP
Rick Loudenburg	Barbizon Light (Denver)	Barbizon Companies	P	DR
Ken Vannice	Colortran	Leviton Manufacturing Co., Inc.	P	MP
Nic Bowker	PLASA	PLASA	P	G
Michael Lay	Strand Lighting	Genlyte Group LLC	P	MP

Name	Company	Representing	Voting status	Int. cat.
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	U
		Total votes possible	6	
		Votes by interest category	3	MP
			0	CP
			1	DR
			1	U
			1	G

**3 Approval of the minutes from the previous meeting**

See document number Photo/2006-5002, file name PHmin01-2006.pdf. Ken Vannice moved that the draft minutes of the January meeting (the previous meeting) be accepted as written. The motion was seconded and then approved by a voice vote.

**4 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 issues were brought to the attention of the assembly.

**and 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 some of the easy-to-read pamphlets. No one requested one, and no one reported any restraint of trade issues.

**5 Approval of agenda**

Karl Ruling asked to add a discussion under "Other business" of perhaps making the document he wrote in response to the Las Vegas Convention Center tungsten-halogen lamp policy a project to write an American National Standard. Ken Vannice moved that the agenda so modified be accepted. The motion was seconded and then approved with a show of hands.

**6 Old Business**

## 6.1 BSR E1.25

Ruling reported that the TSC and ESTA Board had approved BSR E1.25, and that ANSI had approved it on 13 July 2006. Now it needs to be published.

## 6.2 Revision of ANSI E1.9-2001

### 6.2.1 Public review results

Ruling reported that no comments had been received. See document Photo/2006-5006, file name SmmryPblcRvwE1-9-200x.pdf, for an official report of no comments.

### 6.2.2 Consideration of late comment

See file LateHeidi.pdf. Ruling asked if it is actually a comment on our BSR E1.9-200x? Is it relevant?

The consensus was that the email was not relevant to our standard. It was a forwarded internal communication about Martin Professional's data sheet.

### 6.2.3 Next step in revising ANSI E1.9-2001

Ken Vannice moved that BSR E1.9-200x, Reporting Photometric Performance Data for Luminaires Used in Entertainment Lighting (document number Photo/2005-5010, file name E1-9\_2005-5010.pdf), be accepted as an American National Standard. The motion was seconded. The motion shall be decided by letter ballot to allow all voting members a chance to vote on the final approval of the document.

There was a discussion of whether John Ryan should be included on the ballot distribution, since he will be moved to observer status at the end of this meeting, unless he arrives before the meeting is over. The consensus was that he is at this time, when the motion was made, a voting member, and therefore should be included.

## 7 New business

Mike Wood presented his draft document ("LensQualityProposal.pdf") and described the problem he was trying to address. ETC has a line of new lenses for the Source Four ellipsoidal reflector spotlight that are better than the old ones, but how does one quantify "better"? Wood had hit on the idea that a stage and studio luminaire lens system is a low-pass filter because of the way that it loses detail, and worked with that idea in developing a simple image analysis technique. His paper presents the basic method, which is based on contrast ratios, but it needs some work. One open item is, How many points would need to be measured? Lenses, particularly wide-angle lenses, vary greatly in image quality from center to edge. There is also the issue, How should the information be presented? The method results in two contrast ratio measurements. Do end-users need a single number?

There was discussion.

Ken Vannice moved that we start a project based on Mike Wood's lens quality quantification research to develop an American National Standard. The motion was seconded and approved by a unanimous show of hands of those present. The details of the project for the PINS form are as follows:

"Title: Standard for Lens Quality Measurements for Pattern Projecting Luminaires Intended for Entertainment Use"

"Scope: The standard presents a method for measuring lens quality with particular emphasis on contrast and perceived image quality (sharpness). It also offers a method for presenting these results on a datasheet in a format that is readily understood by a typical end-user and that allows the end-user to directly compare lenses in a meaningful way."

**8 Other business**

Ruling read aloud the LVCC halogen lamp restriction policy that he had drafted for the Las Vegas Convention and Visitors Authority. The document is written in the form of a standard, and Ruling suggested that we might make it one. The document addresses the concerns that LVCVA staff have about tungsten-halogen lamps, and also has provisions for allowing the use of stage and studio luminaires on a trade show floor. These are Listed for use on stages and in studios, which a convention center show floor is not.

Michael Lay moved that we start a project to create an American National Standard that would be a model policy for the used of tungsten-halogen lamps and stage and studio luminaires in trade shows and exhibition halls. The motion was seconded and approved on a unanimous voice vote.

**9 Schedule for future meetings**

It was announced that the next meeting is scheduled for Friday, 20 October 2006, 08:00 to 10:00 in the morning, at the Las Vegas Hilton, 3000 Paradise Road, Las Vegas, Nevada. After some discussion, the working group asked that the meeting time be pushed back to 9:00 to 11:00. Ruling said he would ask to have the meeting rescheduled to 9:00 to 11:00.

**10 Changes to observer status**

Principals (and alternates) 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:

John T. Ryan; Altman Stage Lighting

Jerry Gorrell announced that John T. Ryan was now moved to observer status because of his lack of attendance.

**11 Adjournment**

Nic Bowker moved that the meeting adjourn. The motion was seconded. The motion was approved with a unanimous show of hands. Jerry Gorrell declared the meeting adjourned at 15:11.

### Working Group Membership and Contact Information as of 2 August 2006

Name	Company	Representing (This is the sort field.)	Vote status	Int. cat.
Andre Broucke	ADB - TTV Technologies	ADB-TTV Group	O	MP
John Luk	Altman Stage Lighting	Altman Stage Lighting	O	MP
John T. Ryan	Altman Stage Lighting	Altman Stage Lighting	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
Francesco Romagnoli	Clay Paky S.P.A.	Clay Paky S.P.A.	O	MP
David Bertenshaw	David Bertenshaw	David Bertenshaw	O	G
A C Hickox	Domingo Gonzalez Associates	Domingo Gonzalez Associates	O	U
Gregg Esakoff	ETC West	Electronic Theatre Controls, Inc.	O	MP
Michael Lay	Strand Lighting	Genlyte Group LLC	P	MP
Mitch Hefter	Entertainment Technology	Genlyte Group LLC	O	G
Jim McHugh	Humboldt State University/IES	Humboldt State University	O	U
Robert Mokry	I C Lighting	I C Lighting	O	G
Jim Grosh	Jim Grosh Associates	Jim Grosh Associates	O	G
Ken Vannice	Colortran	Leviton Manufacturing Co., Inc.	P	MP
Afsan Quazi	Lighting & Electronics, Inc.	Lighting & Electronics, Inc.	O	G
Hiroshi Kita	Marumo Electric Co., Ltd.	Marumo Electric Co., Ltd.	O	MP
Mike Wood	Mike Wood Consulting LLC	Mike Wood Consulting LLC	O	G
Tom Pincu	Moodie, Pincu & Associates, Inc.	Moodie, Pincu & Associates, Inc.	O	MP
Bill Klages	New Klages Inc.	New Klages Inc.	O	U
Tim Hansen	Oasis Stage Werks	Oasis Stage Werks	O	U
Nic Bowker	PLASA	PLASA	P	G
James Eade	PLASA	PLASA	O	G
Ron Rykowski	Radiant Imaging, Inc.	Radiant Imaging, Inc.	O	G
Andrew Nichols	Selecon	Selecon NZ Ltd.	O	MP
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
Eckart Steffens	SOUNDLIGHT	VPLT	O	G

**Key to codes:**

P principal voting member	MP mass-market producer interest category
A alternate voting member	CP custom-market producer interest category
I individual voting member	DR dealer or rental company interest category
O observer, non-voting	U user interest category
	G general-interest interest category