

Minutes
Photometrics Working Group
Friday, 22 October 2004
Harrah's Las Vegas Casino & Hotel
Las Vegas, NV

Presiding chairman: Jerry Gorrell; Theatre Safety Programs; P; U

Recording secretary: Karl G. Ruling; ESTA

Members attending: Thomas Tyler; Altman Stage Lighting; A; MP
Rick Loudenburg; Barbizon Light (the Barbizon Companies); P; DR
Jim McHugh; Humboldt State University; P; U
Ken Vannice; Colortran (Leviton Manufacturing Co., Inc.); P; MP
Michael Lay; Strand Lighting (Strand Lighting Ltd.); P; MP

Visitors: Matthew Immel, Humboldt State University

1 Opening remarks

Jerry Gorrell called the meeting to order at 08:04.

2 Attendance and membership

2.1 Introductions of those present and taking attendance

A trillium and pink attendance sign-in sheet was circulated. Those present introduced themselves.

2.2 Determination of quorum

Gorrell noted that we have six voting members present, more than enough for a quorum or to pass a supermajority vote.

2.3 Recognition of alternate voting members

Tom Tyler was recognized.

2.4 Requirements for membership

Jerry Gorrell reminded the assembly that membership is open to all who are affected by the work of the group; membership in ESTA is not a requirement. However, 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

Mike Wood of Mike Wood Consulting LLC had applied as an observer member in the general interest category.

Ken Vannice moved that Mike Wood's application be accepted. The motion was seconded. The motion was approved by a unanimous show of hands.

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

Name	Company	Representing	Voting status	Int. cat.
John T. Ryan	Altman Stage Lighting	Altman Stage Lighting	P	MP
Thomas Tyler	Altman Stage Lighting	Altman Stage Lighting	A	MP
Rick Loudenburg	Barbizon Light (Denver)	Barbizon Companies	P	DR
Jim McHugh	Humboldt State University/IES	Humboldt State University	P	U

Name	Company	Representing	Voting status	Int. cat.
Ken Vannice	Colortran	Leviton Manufacturing Co., Inc.	P	MP
Bill Klages	New Klages Inc.	New Klages Inc.	P	U
Michael Lay	Strand Lighting	Strand Lighting Ltd.	P	MP
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	U
		total votes	7	
			3	MP
			0	CP
			1	DR
			3	U
			0	G

[Since the last meeting, PLASA's representatives had been removed from the consensus body. James Eade had been moved to observer status at the request of his superior, Ron Bonner, PLASA's Technical Resources Manager. Tony Douglas-Beveridge had retired.]

3 Approval of the minutes from the previous meeting

Mike Lay moved that the draft minutes of the March 2004 meeting be approved as written. The motion was seconded. The motion was accepted by a unanimous show of hands.

4 Call for patents

Jerry Gorrell read the following statement aloud to the assembly:

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

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

No patent issues were brought to the attention of the assembly.

and Anti-Trust Statement

Jerry Gorrell read the following statement aloud to the assembly:

"The ESTA Board of Directors, the Technical Standards Committee, and the leadership of this Working Group will reject or nullify any actions that restrain trade. Anyone who feels that an action restraining trade is being or has been taken is requested to bring the 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 any member of this working group may be found individually liable for any action that restrains trade taken by this working group. An individual convicted of a violation of the Sherman Act may be fined as much as \$100,000 and be imprisoned for up to three years. An easy to read pamphlet describing restraint of trade is available from the Technical Standards Committee."

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

5 Approval of agenda

Tom Tyler moved that the draft agenda be approved. The motion was seconded. The motion was approved with a unanimous show of hands.

6 Old Business — Resolution of BSR E1.25 public review comments and objections
 Representatives from ETC had submitted some remarks by email and fax, and these were discussed.

ETC remarks: We agree with the comments submitted by Robert E. Levin of Osram Sylvania, specifically comment 1 from public review period 5/18/04~8/3/04. Much of the information in the BSR E1.25 document is in conflict with LM-73-04, some of it too vague for proper use, and in general the document confuses the requirements for accurate and reliable photometry testing. We do not see a justified basis for BSR E1.25 and recommend this document be withdrawn.

The working group drafted the following resolution:

"Accept in part. Where it is possible for E1.25 to be congruent with LM-73-04 it shall be. However, the bulk of LM-73-04 describes a measurement technique that is outside the scope and purpose of E1.25. Also, LM-73-04 does not address the testing of luminaires that use fluorescent sources. In short, LM-73-04 is a useful document, but it does not cover all the needs of the market.

"Your comment that E1.25 is too vague to be useful is too vague for us to modify the standard to attempt to satisfy you. Please give more specific advice on what needs to be changed, added, or deleted to satisfy you."

The working group then drafted resolutions to the public review comments on BSR E1.25.

Ken Vannice moved that the comment resolutions (Photo/2004-5011) be accepted. The motion was seconded. The motion was approved by a unanimous show of hands. This was a supermajority (6 of a voting body of 7) of the working group.

Jim McHugh moved that the revised version of BSR E1.23 (Photo/2003-5001r5) be sent to a third public review. The motion was seconded. The motion was approved by a supermajority of the consensus body on a roll call ballot:

Name	Company	Representing	Voting status	Int. cat.	Yes	No	Abstain
John T. Ryan	Altman Stage Lighting	Altman Stage Lighting	P	MP			
Thomas Tyler	Altman Stage Lighting	Altman Stage Lighting	A	MP	X		
Rick Loudenburg	Barbizon Light (Denver)	Barbizon Companies	P	DR	X		
Jim McHugh	Humboldt State University/IES	Humboldt State University	P	U	X		
Ken Vannice	Colortran	Leviton Manufacturing Co., Inc.	P	MP	X		
Bill Klages	New Klages Inc.	New Klages Inc.	P	U			
Michael Lay	Strand Lighting	Strand Lighting Ltd.	P	MP	X		
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	U	X		
		total votes	7		6	0	0
			3	MP	3	0	0
			0	CP	0	0	0
			1	DR	1	0	0
			3	U	2	0	0
			0	G	0	0	0

7 New business — Reaffirmation, revision, or withdrawal of ANSI E1.9-2001

There was a discussion of the possibility of reaffirming, revising, or withdrawing ANSI E1.9-2001 at this time. Karl Ruling reminded people that some action must have been taken or be in process by the fifth birthday of the standard's approval. That would be in 2006. The concerns expressed by ETC below were also part of this discussion.

Jim McHugh moved that we take no action on this at this time and that the issue be revisited at some time closer to the 5th birthday. The motion was seconded. The motion was approved by a unanimous show of hands.

ETC remarks: We reaffirm the benefit and value of the ANSI E1.9-2001 standard for the entertainment lighting industry. However, we would like to request two primary revisions for consideration, and several other revisions pertaining to formatting and less critical issues (see attached file). The primary requests for revisions are as follows:

1) ANSI E1.9-2001 section 1 Scope, add a similar statement contained in LM-73-04 Foreword, which should read "ANSI E1.9-2001 is to be used in conjunction with ANSI/IESNA LM-73-04, or equivalent internationally recognized standard". Reference to the same should also be made within section 3.1.6 Photometric Procedure.

The consensus of the working group was that we would be in favor of adding text like this to the scope, but the standard is not required to be revised, reaffirmed, or withdrawn at this time, and this seems to be too small a point to open the process of revision.

2) ANSI E1.9-2001 section 3.1.4 Lamp Used For Gathering Photometric Data, remove the text "(if available)" in the second sentence. The reason is that if the rated/specified lamp lumens are not available, it implies that it is unknown and therefore in conflict with LM-73-04 section 4.5 which states "Data shall be prorated to the manufacturer's rated lumens for that lamp type". Furthermore, LM-73-0 section 4.5.1 specifically requires that both the rated and measured lamp lumens be known, and states that "A calibration constant shall be established by taking the ratio of the rated lumen output for the specific lamp type to the measured relative total lumen output of the bare test lamp. Measured relative luminous intensities of the luminaire shall be multiplied by the constant to calculate [and report] the luminous intensities (in candelas) based on the rated lumens for the particular lamp used".

Thank you for your comment. This would be a good comment to submit when E1.9 is revisited for revision or reaffirmation.

At this time, the working group does not agree that normalization of lamp data is required in all cases. Some manufacturers, because of the high variability of lamps and the difficulty of positioning the lamp in exactly the same place in the optical system in every luminaire, find that measuring the output of a fairly large sampling of luminaires and lamps and taking an average is a better way of characterizing the performance of their luminaires. This is not the method specified in LM-73-04.

The attached files you sent were a copy of the draft agenda for this meeting, a preliminary data sheet for the Source Four Revolution, and your email of 10 December 2003 asking that E1.9 be modified to match your preliminary data sheet. There were no comments referencing the agenda, so we have nothing to respond to in regard to the attached agenda. The data sheet and your comments of 10 December 2003 were discussed at the January 2004 working group meeting. Please see the minutes of that meeting. The working group continues to hold the opinion it held in January.

The working group feels that too few people are using E1.9 to give us a good sense at this time of what is particularly good or egregious about it. We would like the industry to have some more experience with it before making changes.

As a side note regarding ANSI/IESNA LM-73-04 in section 2.8 Detectors, it states "See Section 5.0 for information on the use of digital cameras for photometric testing". However, there is in fact no reference or information contained in section 5 about digital camera photometry.

LM-73-04 does not address digital camera photometry. Since this is the most common measuring technique in the entertainment luminaire industry, the usefulness of LM-73-04 for the entertainment industry is limited.

8 Other business

None.

9 Schedule for future meetings

Karl Ruling announced that the next meeting would be at the Royal York hotel in Toronto on Saturday, 19 March 2005 from 13:00 to 17:00. There will be no meeting in January 2005 in Ft. Worth.

10 Changes to observer status

Principals (and alternates) who have missed the last two meetings:

Rick Loudenburg; Barbizon

Rick Loudenburg was present so no change in status for missing a third meeting was warranted.

11 Adjournment

Jim McHugh moved that the meeting adjourn. The motion was seconded. The motion was approved by acclamation. Jerry Gorrell announced that the meeting was adjourned at 10:13.

Working Group Membership and Contact Information as of 27 December 2004

Name	Company	Representing (This is the sort field.)	Voting status	Int cat
Andre Broucke	ADB - TTV Technologies	ADB-TTV Group	O	MP
John T. Ryan	Altman Stage Lighting	Altman Stage Lighting	P	MP
John Luk	Altman Stage Lighting	Altman Stage Lighting	O	MP
Thomas Tyler	Altman Stage Lighting	Altman Stage Lighting	A	MP
Rick Loudenburg	Barbizon Light (Denver)	Barbizon Companies	P	DR
Lee J. Bloch	Blue Sky Design, Ltd.	Blue Sky Design, Ltd.	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
Woody Smith	Coemar USA Inc.	Coemar USA Inc.	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
Mitch Hefter	Entertainment Technology	Genlyte Group LLC	O	G
Dawn K. Crosby	Vari-Lite	Genlyte Thomas Group LLC	O	MP
Jim McHugh	Humboldt State University/IES	Humboldt State University	P	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
Ashley Rice	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.	P	U
Tim Hansen	Oasis Stage Werks	Oasis Stage Werks	O	U
James Eade	PLASA	PLASA	O	G
Ron Rykowski	Radiant Imaging, Inc.	Radiant Imaging, Inc.	O	G
David Jenkins	Radiant Imaging, Inc.	Radiant Imaging, Inc.	O	G
Robert Mumm	Robert Mumm	Robert Mumm	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
Michael Lay	Strand Lighting	Strand Lighting Ltd.	P	MP
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
- 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