# Minutes Photometrics Working Group

Friday, November 13, 1998 Hyatt Regency Phoenix

Chairmen: Daniel K. Haydt; Remote Source Lighting International; Principal; Producer

Tom Pincu; Moodie, Pincu & Associates, Inc.; Principal; Producer

Recording secretary: Karl G. Ruling, ESTA

Members attending: Thomas Tyler; Altman Stage Lighting; Principal; Producer

Rick Loudenburg; Barbizon Rockies; Principal; General interest

Lee J. Bloch; Bloch Design Group; Principal; User

Ed Hyatt; Boston Illumination Group; Principal; Producer

Ronald G. Mink; Electronic Theatre Controls; Alternate; Producer

Gregg Esakoff; ETC West; Principal; Producer Bill Klages; New Klages Inc.; Principal; User Ken Vannice; NSI Corporation; Principal; Producer Tim Hansen; Oasis Stage Werks; Principal; User

Tim Cox; PLASA; Alternate; General interest (joined at this meeting)

Bill Ellis; PRG/Vanco Lighting Services; Principal; User Ron Rykowski; Radiant Imaging, Inc.; Principal; Producer Mitch Hefter; Rosco/Entertainment Technology; Principal; User

Joseph M. Good, III; Spectrum Professional Services; Principal; General

interest

Jerry Gorrell; Theatre Safety Programs; Principal; User Thomas A. Hough; Vari-Lite, Inc.; Observer; General interest

(joined at this meeting)

Larry Lieberman; Vision Quest Lighting; Principal; General interest

Visitor: Don Smith; Lighting Sciences, Inc.

# 1 Opening Remarks

Dan Haydt and Tom Pincu welcomed all to Phoenix and called the meeting to order at 3:12 p.m.

# 2 Attendance and membership

#### 2.1 Introductions of those present

Those attending introduced themselves.

# 2.2 Determination of quorum (7 needed)

Fifteen voting members were present at the beginning of the meeting, so Pincu announced that we have a quorum.

# 2.3 Recognition of alternate voting members

Gregg Esakoff arrived late, so Ron Mink was recognized as the voting representative for ETC, rather than Gregg Esakoff.

# 2.4 Requirements for membership

#### 2.5 Processing of new membership requests

Approved Minutes 13 November 1998 Photo/98-5009

Applications were received from Tim Cox, alternate for PLASA, and Thomas Hough, observer for Vari-Lite. Mitch Hefter moved they be accepted. Ken Vannice seconded. Unanimous by show of hands.

# 3 Approval of the minutes from the previous meeting

Dan Haydt asked if there was a motion to approve the minutes of the previous meeting. Bill Ellis moved that the minutes be approved. Tom Pincu seconded the motion. Unanimous by show of hands.

# 4 Call for patents

Dan Haydt read the following statements:

"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."

"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."

# 5 Approval of agenda

Jerry Gorrell moved that the agenda be accepted. Lee Bloch seconded the motion. Unanimous by show of hands.

# 6 Task group reports

6.1 Nutrition Label task group: Larry Lieberman (head), Gregg Esakoff, Tom Tyler, Danny Haydt, Rick Loudenburg

#### 6.1.1 Resolution of comments received during letter ballot (if any)

No comments had been received with the letter ballots at the time of the meeting. However, several people expressed dissatisfaction with the draft document and its fitness for public review. They were concerned that the errors in the document would undercut the credibility of the working group and the Technical Standards Program.

The group was asked if anyone wanted to change their votes.

Joseph Good and Lee Bloch rescinded their "Accept" votes and changed them to "Accept in Part." The rest of the group let their "Accept" votes stand. The comments to support Good and Bloch's negative votes were as follows:

Approved Minutes 13 November 1998 Photo/98-5009

Joseph Good:

- 2.3 IES defines far-field photometry to be greater than or equal to 5 times the aperture. The unique nature of some of these luminaires may require that a "ten times" definition be used.
- 2.1.4 The IES says that near field photometry is less than five times the aperture. See my comment on 2.3.
- 3.1.4 Normal procedures today dictate relative photometry where output of lamp is actually measured, and measured output of luminaire is recalibrated to comply with the published lamp lumen rating.

Therefore, reported performance should be normalized and reported as if the test were run with the theoretical lamp. If actual lumens are not available or measured, fixture efficiency cannot be measured or reported.

The exact definition from pg. 31, IESNA Handbook, 8th Ed:

"To avoid the use of standard lamps, the relative method is widely applied. It consists in the evaluation of the photometric characteristics of a lamp by comparison with the measured lumen or spectral output of a test lamp."

3.1.5 — Procedures today dictate performance to be normalized to a ballast factor of 1. This allows much easier ballast selection and performance corrections

Annex A — The throw multipliers in the example diagrams at the end of the draft standard are incorrect by a factor of two.

# Lee Bloch:

I think you want to send it out with the highest possibility of success. You want to have some credibility. I think that it is ill advised to send it out at this time with the basic definition and terminology errors that exist."

After some discussion, the secretary drafted the following resolution to express the consensus of the working group:

"We realize that the document contains errors. However, we think that these errors and others can be addressed in public review. We will accept these comments and deal with them as part of the public review. Also, we will circulate these comments with the document as part of the public review."

Joseph Good moved that the above response be accepted as a resolution to the comments. Jerry Gorrell seconded the motion. Accepted unanimously by show of hands.

Approved Minutes 13 November 1998 Photo/98-5009

6.1.2 Public Review Process and public comment responses

The above comments will be appended to the document and will be offered as part of the public review.

- 6.1.3 Ron Rykowski volunteered his company's services to produce a number of additional cutsheet examples to be included in the next draft revision.
- 6.2 Explanation of photometric procedures: Bill Klages (head), Anne Valentino
- 6.2.1 What do we want to do?

No motion was offered, but the group discussed the desirability of developing the document Bill Klages is working on into an article in <u>Protocol</u> and a small pamphlet.

Joseph (Jody) Good said that Tom Lemmons is interested in an article on field verification. Jody Good will revisit that with him.

6.2.2 How do we want to do it?

Those attending the meeting were urged to send comments on the text to Bill Klages by December 1. klages@compuserve.com

6.2.3 Schedule for doing it.

Bill Klages said he would revise it for the Dallas/Ft. Worth meeting and incorporate any comments he receives.

6.3 IES testing LM or standard: Lee Bloch (head), Jody Good, Jim Grosh, Gregg Esakoff, Ron Rykowski

Don Smith, the Chairman of IES Photometry of Stage and Studio Luminaires Sub-Committee, was present and reported that the group would meet at 8:00 a.m. on November 14 at the Crowne Plaza Holiday Inn. The document will be designated LM76.

7 Other business

None.

8 Schedule for future meetings

Larry Lieberman moved we next meet on January 23, 1999, from 7:00 p.m. 11:00 p.m. at the Dallas/Ft. Worth Marriott Hotel. Jerry Gorrell seconded the motion. Unanimous.

9 Adjournment

Jerry Gorrell moved we adjourn. Lee Bloch seconded the motion. There were no objections. Dan Haydt declared the meeting adjourned at 5:48 p.m.

Name	Company	Status	Interest Cat.
Andre Broucke	ADB, Theatre and TV Lighting Division	0	Р
John Luk	Altman Stage Lighting	Α	Р
Thomas Tyler	Altman Stage Lighting	Р	Р
Rick Loudenburg	Barbizon Rockies	Р	G
Lee J. Bloch	Bloch Design Group	Р	U
Ed Hyatt	Boston Illumination Group	Р	Р
Martin Moore	c/o Unusual Engineering Ltd.	I	G
Angelo Cavenati	Clay Paky S.P.A.	Р	Р
Francesco Romagnoli	Clay Paky S.P.A.	Α	Р
David Bertenshaw	David Bertenshaw	0	Р
Ronald G. Mink	Electronic Theatre Controls	А	Р
Gregg Esakoff	ETC West	Р	Р
Mike Wood	High End Systems	0	Р
Jim McHugh	Humboldt State University/IES	Р	U
Jim Grosh	Jim Grosh Associates	Р	G
Tom Pincu	Moodie, Pincu & Associates, Inc.	Р	Р
Bill Klages	New Klages Inc.	Р	U
Ken Vannice	NSI Corporation	Р	Р
Tim Hansen	Oasis Stage Werks	Р	U
Tim Cox	PLASA	A P	G
Tony Douglas- Beveridge	PLASA Standards Office	Р	G

Name	Company	Status	Interest Cat.
Bill Ellis	PRG/Vanco Lighting Services	Р	U
Ron Rykowski	Radiant Imaging, Inc.	Р	Р
Daniel K. Haydt	Remote Source Lighting International	Р	Р
Robert Mumm	Robert Mumm	0	G
Mitch Hefter	Rosco/Entertain ment Technology	Р	U
Joseph M. Good, III	Spectrum Professional Services	Р	G
Milton Davis	Strand Lighting	Α	Р
Jerry Gorrell	Theatre Safety Programs	Р	U
Anne Valentino	Vari-Lite, Inc.	0	Р
Thomas A. Hough	Vari-Lite, Inc.	0	G
Larry Lieberman	Vision Quest Lighting	Р	G

# Voting Status

- Principal voting representative for a company or organization Alternate voting representative for a company or organization
- Individual representing no organization other than himself or herself
- 0 Observer; non-voting

- Interest Categories
  P Producer (manufacturer) of luminaires
- User of luminaires U
- G General interest in luminaires