

**Minutes
Photometrics Working Group
Friday, 19 July 2019
D/FW Marriott Solana
Westlake, TX**

Chairman: Jerry Gorrell; Theatre Safety Programs

Recording secretaries: Richard Nix & Karl G. Ruling; ESTA

Members attending:

Justin Bennett; University of the Incarnate Word; P; U
Jerry Gorrell; Theatre Safety Programs; P; U
Michael Lay; Signify; P; MP
Mark Primrose; Kino Flo, Inc.; P; CP
Karl G. Ruling; Unit 12 Productions; I; DE

Visitor: Jim Bogdanowicz; Kino Flo

1 Opening Remarks

Jerry Gorrell called the meeting to order at 09:03. He welcomed all the attendees.

2 ESTA declarations

2.1 Call for patents

The following statement was read aloud to the working group 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, 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 revealed.

2.2 Reading of the anti-trust statement

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

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 or will not 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.

Pamphlets were displayed. Nothing was revealed.

3 Attendance and membership

3.1 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.

3.2 Introductions of attendees

Those present introduced themselves.

3.3 Determination of quorum

There are nine possible votes. A quorum is 3; a supermajority is 5.

Four voters present at the beginning of the meeting. This was a quorum.

3.4 Processing of new membership and status change requests

As of 27 June 2019, the following applications had been received:

Justin Bennett; University of the Incarnate Word; P; U (new application)

Michael Lay moved that Bennett's application be accepted. The motion was seconded. The motion was approved unanimously.

This raised the total possible votes to 10, making the quorum requirement 4 and a supermajority at least 6.

3.5 Changes to observer status

3.5.1 Changes due to attendance

None.

3.5.2 Changes due to missed ballots

None.

3.6 Consensus body

The consensus body during this meeting was:

| Name | Representing | Voting status | Int cat |
|------------------|-----------------------------------|---------------|---------|
| Mike Wagner | Arnold & Richter Cine Technik | P | MP |
| Ed Hyatt | Boston Illumination Group | P | CP |
| Larry Schoeneman | DesignLab Chicago, Inc. | P | DR |
| Wendy Luedtke | Electronic Theatre Controls, Inc. | P | MP |
| Mark Primrose | Kino Flo, Inc. | P | CP |
| Mike Wood | Mike Wood Consulting LLC | P | G |
| Michael Lay | Signify | P | MP |
| Mitch Hefter | Signify | A | MP |
| Jerry Gorrell | Theatre Safety Programs | P | U |
| Karl G. Ruling | Unit 12 Productions | I | DE |
| Justin Bennett | University of the Incarnate Word | P | U |

| Total votes possible | 10 | |
|------------------------------|----|----|
| Votes by interest categories | 2 | CP |
| | 1 | DE |
| | 1 | DR |
| | 1 | G |
| | 3 | MP |
| | 2 | U |

4 Approval of the minutes from the last meeting

See *PHMin10-2018DRAFT.pdf*

Mark Primrose moved that the minutes be approved as written. The motion was seconded. The motion was approved with a unanimous voice vote

5 Approval of agenda

Michael Lay moved that the agenda be approved. The motion was seconded. The motion was approved with a unanimous voice vote

6 Old Business

6.1 ANSI E1.9 – 2007 (R2017), Reporting Photometric Performance Data for Luminaires Used in Entertainment Lighting (Revision, reaffirmation, or withdrawal by 2 November 2022)

No news or updates.

6.2 ANSI E1.25 – 2012 (R2017), 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 2 November 2022)

No news or updates.

6.3 ANSI E1.35 – 2013 (R2018), Lens Quality Measurements for Pattern Projecting Luminaires Intended for Entertainment Use (Revision, reaffirmation, or withdrawal by 27 February 2023)

No news or updates.

6.4 ANSI E1.36 – 2007 (R2017), 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 2 November 2022)

No news or updates.

6.5 ANSI E1.41 – 2016, Recommendations for Measuring and Reporting Photometric Performance Data for Entertainment Luminaires Utilizing Solid State Light Sources (Revision, reaffirmation, or withdrawal by 16 September 2021)

No news or updates.

6.6 ANSI E1.48 – 2014 (R2019), A Recommended Luminous Efficiency Function for Stage and Studio Luminaire Photometry (Revision, reaffirmation, or withdrawal by 08 January 2024)

No news or updates.

6.7 BSR E1.54, ESTA Color Standard

From the draft October 2018 meeting minutes:

“Mike Wood said that he would write another draft of E1.54.”

Wendy Luedtke offered a short report via email, which was read to the assembly by Karl Ruling:

We are also delinquent in our E1.54 work anyway, to be honest. So if we were there, we'd have to say

in person that we don't have an update to vote on yet.

There was some discussion of the project. Mark Primrose of Kino Flo, Inc. said it was important to his company. They want to make it easier for their customers to match colors.

6.8 ANSI E1.55 – 2016, Standard for Theatrical Makeup Mirror Lighting (Revision, reaffirmation, or withdrawal by 16 September 2021)

No news or updates.

7 New business

7.1 Possible new project – baseline reporting of dimming curves for solid state lighting fixtures

[See LED Dimming – TSP_ProjectRequest.pdf and TSP_Dimming_ProjectRequest.pdf]

At their March 2019 meeting, the TSC voted to accept a new project combining the scopes of both project requests, assigning the project to the Photometrics Working Group. The group must vote to accept the project, and - if accepted- must develop a single, inclusive project scope.

Jason Osterman was not present to speak on behalf of the TSP Dimming Project he had requested. There is no representation for Altman Lighting, Osterman's company, on the Photometrics Working Group.

The two dimming project proposals were discussed, but no action to adopt either project could be taken. There were too few people present to adopt a new project.

Justin Bennett explained some of the background behind his proposal (LED Dimming – TSP_ProjectRequest.pdf), which asks a general question about how to report in a graphical form (or some other useful way) the dimming curve for an LED fixture.

Karl Ruling read the other proposal (TSP_Dimming_ProjectRequest.pdf) aloud to the assembly. It asks for developing luminaire classifications for different qualities of dimming performance.

After considerable discussion, the group consensus was that developing a way to describe dimming performance would be challenging but perhaps not insurmountable.

Jerry Gorrell suggested that we need to bring more of the stakeholders to the table for a larger discussion, before voting on accepting this project. He suggested trying to target more of them specifically to attend the next Westlake meeting for further discussions. He appointed Justin Bennett, Michael Lay, and Mark Primrose to an ad hoc task group, which will collectively solicit participants for a larger focus group. The group will schedule a September WebEx meeting as necessary, and will report back to the working group in October.

8 Other business and announcements

8.1 Ecodesign

From the draft October 2018 meeting minutes:

“Mike Wood reported on the work to exempt stage and studio luminaires. A blanket exemption is not possible. However, they have not accepted many of the exemptions needed so a lot of stage and studio luminaires will not pass. Not hopeful.”

Karl Ruling reported that exemptions for the live performance and video production will allow the vast majority of stage and studio lighting can continue to be used—for now. The drive for increasing energy efficiency and efficacy of lighting equipment is on-going. Additional restrictions may be proposed in the future.

Mark Primrose said that PLASA has a useful Ecodesign update site: <https://www.plasa.org/ecodesign-updates/>

8.2 IES

Wendy Luedtke offered an "IES update" via email, which was read to the assembly by Karl Ruling:

It is expected that the IES will publish two annexes (E and F) to TM-30-18 in late summer/early fall.

These annexes will also be available free of charge for download from the IES website and will offer research-backed usage guidelines for TM-30, for example what R_f, R_g, and other values might be a suitable range for a given application's design intent.

8.3 Awards

8.3.1 Above & Beyond Awards

People were reminded that the nomination site is open year-round at

http://tsp.esta.org/tsp/news/award_nomination.html.

8.4 Education

8.4.1 INNOVA

The site can be accessed at <http://innova.usitt.org>. Content and content providers are still being sought. If you are interested, email standards@esta.org to be put in touch with someone.

8.4.2 NAMM

Ideas for educational workshops at NAMM should be sent to ESTA staff.

9 Schedule for future meetings

The full meeting schedule may be found at <http://www.esta.org/ESTA/meetings.php>.

9.1 Fall ESTA meetings

The fall ESTA meetings are scheduled to occur 24-27 October 2019 in Westlake, TX. The Photometrics Working Group is scheduled to meet on Sunday 27 October, from 14:00 to 18:00.

9.2 Future meetings

The consensus was that the working group should meet in January, during the NAMM 2020 trade show in Anaheim.

Richard Nix said he would request a meeting time for the working group.

10 Adjournment

Michael Lay moved the meeting adjourn. The agenda having been completed, Jerry Gorrell declared the meeting adjourned at 10:25.

| Delegate | Representing | Voting status | Int. cat. |
|-------------------|-----------------------------------|---------------|-----------|
| Robert Barbagallo | Solotech Inc. | O | DR |
| Justin Bennett | University of the Incarnate Word | P | U |
| Bill Ellis | Candela Controls, Inc. | O | U |
| Mike Garl | Mike Garl Consulting LLC | exf | |
| Jerry Gorrell | Theatre Safety Programs | P | U |
| Erin Grabe | ESTA | exf | G |
| Tim Hansen | Oasis Stage Werks | O | U |
| Robert Haycock | UC Berkeley | O | U |
| Mitch Hefter | Signify | A | MP |
| Ed Hyatt | Boston Illumination Group | P | CP |
| Frank Kjær Jensen | Harman International Industries | O | MP |
| Michael Lay | Signify | P | MP |
| Rick Loudenburg | Barbizon Companies | O | DR |
| Wendy Luedtke | Electronic Theatre Controls, Inc. | P | MP |
| Richard J. Nix | ESTA | exf | G |
| Mark Primrose | Kino Flo, Inc. | P | CP |
| Mark Ravenhill | GLP German Light Products Inc. | O | MP |
| Karl G. Ruling | Unit 12 Productions | I | DE |
| Karl G. Ruling | ESTA | exf | G |
| Larry Schoeneman | DesignLab Chicago, Inc. | P | DR |
| Ford Sellers | Chauvet Lighting | O | MP |
| Keith Sklar | Actors' Equity Association | O | G |
| Robert Timmerman | Signify | O | MP |
| Mike Wagner | Arnold & Richter Cine Technik | P | MP |

| Delegate | Representing | Voting status | Int. cat. |
|-----------|--------------------------|---------------|-----------|
| Mike Wood | Mike Wood Consulting LLC | P | G |

CP = Custom-market Producer

MP = Mass-market Producer

P = Principal voter

DE = DEsigner

U = User

A = Alternate voter

DR = Dealer or Rental company

I = Individual voter

G = General interest

O = Observer