#### Minutes Photometrics Working Group Thursday 16 July 2020 via WebEx

#### Chairpersons:

Richard Nix; ESTA (acting chairperson until Jerry Gorrell's arrival) Jerry Gorrell; Theatre Safety Programs

Recording secretaries: Richard Nix & Karl Ruling; ESTA

#### Attendees:

Justin Bennett; University of the Incarnate Word; P; U John David (Javid) Butler; Moda Light; P; MP Tucker Downs; Tucker Downs; O; G Jerry Gorrell; Theatre Safety Programs; P; U Mitch Hefter; Signify; P; MP Hans Lau; I.A.T.S.E. Local 728; P; U Michael Lay; Candela Controls, Inc; P; DR Wendy Luedtke; Electronic Theatre Controls, Inc.; P; MP Jason Osterman; Altman Lighting; P; MP Mark Primrose; Kino Flo, Inc.; P; MP Karl G. Ruling; Unit 12 Productions; I; DE Mike Wood; Mike Wood Consulting LLC; P; G

Visitors: Jason Marin Jason Potterf; Cisco Systems

#### 1 Opening Remarks

Richard Nix called the meeting to order at 14:02. He thanked all for attending.

#### 2 ESTA declarations

#### 2.1 Call for patents

The following statement was read aloud to the working group by Richard Nix:

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 Richard Nix:

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 <u>or will not</u> 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.

Karl Ruling showed a copy of the easy-to-read pamphlet in front of his camera. No concerns were raised.

## 3 Attendance and membership

## 3.1 Requirements for membership

The following statement was read aloud to the working group by Richard Nix:

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 letter ballots without a loss of voting status.

# 3.2 Introductions of attendees

Attendees were introduced.

#### 3.3 Determination of quorum

As of 25 July there are 14 votes possible. A quorum would be at least five voters present. The minimum for a supermajority vote would be eight.

Richard Nix announced that a quorum was present, enough voters to pass a motion needing a supermajority.

# 3.4 Processing of new membership and status change requests

None as of 25 June 2020.

#### 3.5 Changes to observer status due to lack of participation

To be moved to observer status due to lack of attendance, if this meeting is also missed: Ed Hyatt; Boston Illumination Group, Inc.; Principal; CP. Not present. Moved to observer. Wendy Luedtke; Electronic Theatre Controls, Inc.; Principal; MP. Present, so no change. Nicolas Goerg; DMG Lumiere representing Rosco Laboratories; Principal; CP. Not present. Moved to observer.

| Delegate        | Representing                          | Voting status | Int. cat. |
|-----------------|---------------------------------------|---------------|-----------|
| Jason Osterman  | Altman Lighting                       | Р             | MP        |
| Pete Borchetta  | Altman Lighting                       | А             | MP        |
| Timothy S. Kang | ASC, Motion Imaging Technical Council | Р             | СР        |
| Michael Lay     | Candela Controls, Inc                 | Р             | DR        |
| Wendy Luedtke   | Electronic Theatre Controls, Inc.     | Р             | MP        |
| Hans Lau        | I.A.T.S.E. Local 728                  | Р             | U         |
| Matthew Ardine  | I.A.T.S.E. Local 728                  | А             | U         |
| Mark Primrose   | Kino Flo, Inc.                        | Р             | MP        |
| Jim Bogdanowicz | Kino Flo, Inc.                        | А             | MP        |
| Mike Wood       | Mike Wood Consulting LLC              | Р             | G         |

#### 3.6 Consensus body

| Delegate                  | Representing                     | Voting status | Int. cat. |
|---------------------------|----------------------------------|---------------|-----------|
| John David (Javid) Butler | Moda Light                       | Р             | MP        |
| Mitch Hefter              | Signify                          | Р             | MP        |
| Jerry Gorrell             | Theatre Safety Programs          | Р             | U         |
| Karl G. Ruling            | Unit 12 Productions              | l             | DE        |
| Justin Bennett            | University of the Incarnate Word | Р             | U         |
|                           | Total votes possible             | 12            |           |
|                           | - Votes by interest category -   | 1             | СР        |
|                           |                                  | 5             | MP        |
|                           |                                  | 1             | DE        |
|                           |                                  | 1             | DR        |
|                           |                                  | 1             | G         |
|                           |                                  | 3             | U         |

# 4 Approval of the minutes from the last meeting

See PHmin04-2020\_DRAFT.pdf.

Mike Wood moved to approve the minutes as written. The motion was seconded. The motion was approved with no abstentions and no objections.

#### 5 Approval of agenda

Javid Butler moved that the agenda be approved. The motion was seconded. Then SPD was added as "New business" and the amended agenda was accepted, with no abstentions and no objections.

# 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) Tucker Downs said that he would like to see spectral power distribution to be reported. This was discussed, and the consensus was that the spectral power distribution should be reported, but reporting SPDs should be a new project.

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 action.

**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 action.

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 action.

# 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 action.

**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 action.

# 6.7 BSR E1.54, ESTA Color Standard

A proposed comment resolution document and revised draft standard had been sent to the working group two days before the meeting. They were discussed. No one objected to the lack of review time before the meeting.

Javid Butler moved to accept the revised comment resolutions document. The motion was seconded. The motion carried with 10 yes votes. (Jerry Gorrell and Timothy S. Kang were not present.)

Javid Butler moved to accept BSR E1.54 as an American National Standard. The motion was seconded. The question will be decided by letter ballot.

Mike Wood moved that we publish the notes document too. The motion was seconded. The question will be decided by letter ballot.

Jerry Gorrell joined the meeting at this time and took over running it.

# 6.8 ANSI E1.55 - 2016, Standard for Theatrical Makeup Mirror Lighting (Revision, reaffirmation, or

withdrawal by 16 September 2021) No news or action.

# 6.9 BSR E1.69, Reporting the Low-End Dimming Performance of Entertainment Luminaires Using LED Sources

In public review until 4 August, closing after this meeting.

# 7 New business

Discussion of a new standard for reporting spectral power distributions. Tucker Downs agreed to write a proposal for a new standard for reporting spectral power distributions.

IES documents were suggested as documents to be considered: IES TM-33-18 and the IES TM-30-18 calculator. An old one was TM-27-14.

Wendy Luedtke noted that most handheld meters don't have even 5 nm resolution—it's coarser than that. The output may appear very detailed on a graph, but it's interpolated.

Hans Lau noted in chat that the Design Lights Consortium, financed by US electrical utilities, has proposed the following SPD reporting requirement: <u>https://www.designlights.org/default/assets/File/Workplan/DLC\_SSL-Technical-</u> <u>RequirementsV5\_0\_DRAFT1\_1-29-19.pdf</u>

# 8 Other business and announcements

# 8.1 Above & Beyond Awards

Attendees were reminded that the Above & Beyond nomination site is open year-round at <u>http://tsp.esta.org/tsp/news/award\_nomination.html</u>.

# 8.2 Other business and announcements

None.

# 9 Schedule for future meetings

The full meeting schedule may be found at <u>http://www.esta.org/ESTA/meetings.php</u>. The autumn TSP meetings are scheduled to be the second week of October by WebEx, with the Photometrics Working Group scheduled for 17:00 to 20:00 on October 14.

# 10 Adjournment

Wendy Luedtke moved to adjourn the meeting. The motion was seconded. The agenda having been completed and hearing no objections, Jerry Gorrell declared the meeting adjourned at 15:35.

| Delegate                  | Representing                          | Voting status | Int. cat. |
|---------------------------|---------------------------------------|---------------|-----------|
| Matthew Ardine            | I.A.T.S.E. Local 728                  | A             | U         |
| Robert Barbagallo         | Solotech Inc.                         | 0             | DR        |
| Justin Bennett            | University of the Incarnate Word      | Р             | U         |
| Jim Bogdanowicz           | Kino Flo, Inc.                        | A             | MP        |
| Pete Borchetta            | Altman Lighting                       | A             | MP        |
| John David (Javid) Butler | Moda Light                            | Р             | MP        |
| Tucker Downs              | Tucker Downs                          | 0             | G         |
| Bill Ellis                | Candela Controls, Inc.                | 0             | U         |
| Mike Garl                 | Mike Garl Consulting LLC              | exf           |           |
| Robert Goddard            | Goddard Design Co.                    | 0             | СР        |
| Nicolas Goerg             | Rosco Laboratories                    | 0             | СР        |
| Jerry Gorrell             | Theatre Safety Programs               | Р             | U         |
| Erin Grabe                | ESTA                                  | exf           | G         |
| Tim Hansen                | Oasis Stage Werks                     | 0             | U         |
| Robert Haycock            | UC Berkeley                           | 0             | U         |
| Mitch Hefter              | Signify                               | P             | MP        |
| Ed Hyatt                  | Boston Illumination Group             | 0             | СР        |
| Frank Kjær Jensen         | Harman International Industries       | 0             | MP        |
| Timothy S. Kang           | ASC, Motion Imaging Technical Council | Р             | СР        |
| Hans Lau                  | I.A.T.S.E. Local 728                  | Р             | U         |
| Michael Lay               | Candela Controls, Inc                 | Р             | DR        |
| Rick Loudenburg           | Barbizon Companies                    | 0             | DR        |
| Wendy Luedtke             | Electronic Theatre Controls, Inc.     | P             | MP        |

| Delegate         | Representing                   | Voting status | Int. cat. |
|------------------|--------------------------------|---------------|-----------|
| Richard J. Nix   | ESTA                           | exf           | G         |
| Jason Osterman   | Altman Lighting                | Р             | MP        |
| Mark Primrose    | Kino Flo, Inc.                 | Р             | MP        |
| Mark Ravenhill   | GLP German Light Products Inc. | 0             | MP        |
| Karl G. Ruling   | Unit 12 Productions            | I             | DE        |
| Karl G. Ruling   | ESTA                           | exf           | G         |
| Larry Schoeneman | Larry Schoeneman               | 0             | G         |
| Ford Sellers     | Chauvet Lighting               | 0             | MP        |
| Keith Sklar      | Actors' Equity Association     | 0             | G         |
| Robert Timmerman | Signify                        | 0             | MP        |
| Mike Wood        | Mike Wood Consulting LLC       | Р             | 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         |