

Minutes
Photometrics Working Group
27 January 2021
via WebEx

Chairperson: Jerry Gorrell; Theatre Safety Programs

Recording secretaries: Richard Nix & Karl Ruling; ESTA

Members attending:

Jason Osterman; Altman Lighting; P; MP
Jerry Gorrell; Theatre Safety Programs; P; U
Karl G. Ruling; Unit 12 Productions; I; DE
Mark Primrose; Kino Flo, Inc.; P; MP
Michael Lay; Candela Controls, Inc; P; DR
Mike Wood; Mike Wood Consulting LLC; P; G
Mitch Hefter; Signify; P; MP
Robert Haycock; UC Berkeley; O; U
Steven J. Rust; Theatre Projects Consultants, Inc.; O; DE
Tucker Downs; Tucker Downs; I; G
Wendy Luedtke; Electronic Theatre Controls, Inc.; P; MP

1 Opening Remarks

Jerry Gorrell called the meeting to order at 15:02.

2 ESTA declarations

2.1 Call for patents

Jerry Gorrell read the following statement aloud to the working group:

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

Jerry Gorrell read the following statement aloud to the working group:

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.

Karl Ruling displayed the pamphlet to his camera.

No anti-trust concerns were reported.

3 Attendance and membership

3.1 Requirements for membership

Jerry Gorrell read the following statement aloud to the working group:

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

3.3 Determination of quorum

As of 8 January there are 12 voting members: a quorum is 4; the minimum for a supermajority is 7.

3.4 Processing of new membership and status change requests

John David (Javid) Butler re-applied for membership with a different company and interest category: HDR Consulting LLC; P; DE.

Mike Wood moved to accept the change of status. The motion was seconded, and carried without objection or abstention.

3.5 Changes to observer status due to lack of participation

None as of 8 January 2021.

3.6 Consensus body

The consensus body during this meeting was:

Delegate	Representing	Voting status	Int. cat.
Jason Osterman	Altman Lighting	P	MP
Pete Borchetta	Altman Lighting	A	MP
Michael Lay	Candela Controls, Inc	P	DR
Wendy Luedtke	Electronic Theatre Controls, Inc.	P	MP
Hans Lau	I.A.T.S.E. Local 728	P	U
Matthew Ardine	I.A.T.S.E. Local 728	A	U
Mark Primrose	Kino Flo, Inc.	P	MP
Jim Bogdanowicz	Kino Flo, Inc.	A	MP
Mike Wood	Mike Wood Consulting LLC	P	G
John David (Javid) Butler	HDR Consulting LLC	P	DE
Mitch Hefter	Signify	P	MP
Jerry Gorrell	Theatre Safety Programs	P	U
Tucker Downs	Tucker Downs	I	G
Karl G. Ruling	Unit 12 Productions	I	DE
Justin Bennett	University of the Incarnate Word	P	U

Delegate	Representing	Voting status	Int. cat.
	Total votes possible	12	
	Votes by interest category	0	CP
		4	MP
		2	DE
		1	DR
		2	G
		3	U

4 Approval of the minutes from the last meeting

See PHmin10-2020_DRAFT.pdf.

Wendy Luedtke requested a change in wording in the second paragraph of item 6.7, from “his vote” to “their vote.”

Mike Wood moved to approve the minutes as revised. The motion was seconded and carried unanimously, without objection or abstention.

5 Approval of agenda

Mitch Hefter moved to approve the agenda as submitted. The motion was seconded and carried unanimously, without objection or abstention.

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 action or news.

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 action or news.

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 action or news.

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 action or news.

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

Mike Wood said that discussion is necessary, because there are concerns today that were not concerns when this standard was first drafted. His feeling is that the standard will definitely need to be revised, so he moved to open the standard for revision now, and he will return to the next meeting with suggestions for specific revisions. The motion was seconded and there was more discussion. The motion carried

unanimously, without objection or abstention, which was a supermajority.

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 action or news.

6.7 ANSI E1.54 – 2021, ESTA Color Standard and informational doc

Karl Ruling reported that it is now published on our website, but they are not listed together since the informational document is not an actual standard. It does not have an alphanumeric designation, so it sorts in a different location in the list.

6.8 ANSI E1.55 – 2016, Standard for Theatrical Makeup Mirror Lighting

Revision, reaffirmation, or withdrawal by 16 September 2021.

There was discussion about what action might be necessary. The consensus was to let it rest on the agenda for action at a future meeting.

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

Progress report and a new draft document.

Karl Ruling reported that he had sent both a new draft, and a DOCX with markups from Wendy Luedtke.

Tucker Downs expressed agreement with Wendy Luedtke's comments.

There was discussion of Wendy's comment that the output should be a function of the input. Jason Osterman said he thought this is where people would start in commissioning, and must address the specific algorithms being used in the actual dimming curves, i.e. 10% control output is not necessarily 10% dimmer output on a mains dimmer. With mains dimming, the dimmer feeding the luminaire is not part of the LED luminaire, but, that dimmer output should still be part of the reportable information relative to the test. A primary concern is the actual dimmer output in RMS volts, which would be the control input to the luminaire.

There was discussion about the stability of output.

The task group will continue work on revising the draft standard.

6.10 BSR E1.73, Guidelines for the measurement and reporting of luminaire spectral power/absorbance for the entertainment industry

Tucker Downs said he was not yet ready to offer a thorough report, but he would have a better update at the next meeting.

7 New business

None.

8 Other business and announcements

8.1 Above & Beyond Awards

The Above & Beyond nomination site is open year-round at http://tsp.esta.org/tsp/news/award_nomination.html.

8.2 Other announcements

Jerry Gorrell reported that the ASSP has revised ANSI Z359 (the Fall Protection Code), which is now available for free download.

9 Schedule for future meetings

The ESTA meeting schedule is posted at <http://www.esta.org/ESTA/meetings.php>.

The next meeting is scheduled for 15:00 EDT on Wednesday 14 April 2021. (It will be Daylight Saving Time then.)

10 Adjournment

The agenda being complete, and there being no further business brought forth, Jerry Gorrell declared the meeting adjourned at 15:42.

Photometrics Working Group members as of 22 February 2021

Delegate	Representing	Voting status	Int. cat.
Matthew Ardine	I.A.T.S.E. Local 728	A	U
Robert Barbagallo	Solotech Inc.	O	DR
Justin Bennett	University of the Incarnate Word	P	U
Jim Bogdanowicz	Kino Flo, Inc.	A	MP
Pete Borchetta	Altman Lighting	A	MP
John David (Javid) Butler	HDR Consulting LLC	P	DE
Tucker Downs	Tucker Downs	I	G
Bill Ellis	Candela Controls, Inc.	O	U
Mike Garl	Mike Garl Consulting LLC	exf	
Robert Goddard	Goddard Design Co.	O	CP
Nicolas Goerg	Rosco Laboratories	O	CP
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	P	MP
Ed Hyatt	Boston Illumination Group	O	CP
Frank Kjær Jensen	Harman International Industries	O	MP
Timothy S. Kang	ASC, Motion Imaging Technical Council	O	CP
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
Richard J. Nix	ESTA	exf	G
Jason Osterman	Altman Lighting	P	MP

Photometrics Working Group members as of 22 February 2021

Delegate	Representing	Voting status	Int. cat.
Mark Primrose	Kino Flo, Inc.	P	MP
Karl G. Ruling	Unit 12 Productions	I	DE
Karl G. Ruling	ESTA	exf	G
Steven J. Rust	Theatre Projects Consultants, Inc.	O	DE
Ford Sellers	Chauvet Lighting	O	MP
Keith Sklar	Actors' Equity Association	O	G
Robert Timmerman	Signify	O	MP
Mike Wood	Mike Wood Consulting LLC	P	G

Key to codes:

P	Principal voter	CP	Custom-market producer
A	Alternate voter	DE	Designer
I	Individual voter	DR	Dealer/Rental company
O	Observer, non-voter	G	General interest
exf	ex officio, staff	MP	Mass-market producer
		U	User