

Minutes for the first official teleconference meeting of the IEEE P1789

Date: 12/12/08

Start time: 1.00 PM

End time: 2:00 PM

Attendees:

Brad Lehman (Chair), Faisal Khan (Vice-Chair), Steve Paolini, Eric Richman, Anatoly Shteynberg, Arnold Wilkins, Regan Zane

Details:

1. Brad Lehman (chair) introduced himself and introduced everyone on the line. Then he explained the meeting outline and explained the history and the scope of PAR 1789 "Recommended Practices of Modulating Current in High Brightness LEDs for Mitigating Health Risks to Viewers." Dr. Lehman talked about the various responsibilities of the committee members.

2. Faisal Khan (Vice-chair) introduced himself and discussed the road map of this committee for the next two years.

3. Discussions on existing LED drivers, hardware, and existing solutions. The dominant factor to relate the health hazard is the current waveform of the driver, which influences the brightness. Health risks are involved with low frequency LED drivers. It was mentioned that our standards group should not endorse specific technologies or manufacturers, but we should discuss more about methods.

4. Two websites for the PAR group were introduced where the information regarding this standard committee could be found. Anindita Bhattacharya is presently acting as the web discussion facilitator. These websites are:

<http://www.linkedin.com/e/gis/1356527>>

<http://grouper.ieee.org/groups/1789/>>

It is expected that everyone immediately join the linkedin group and begin technical discussions.

5. Dr. Lehman introduced Professor Wilkins to discuss the health issues related to LED lighting. Dr. Wilkins presented an overview on the modulating frequency of the LED driver and its relationship to health risks. According to him:

- a) Any modulation frequency greater than 5 kHz is safe.
- b) For 120 Hz or 100 Hz driver, if there is a 40% drop in brightness, it could be a potential health hazard depending on the luminance level.
- c) Long term effect of lighting on seizures has not been studied. However, the temporary effect that can trigger an epileptic seizure has been thoroughly studied.

6. There was a call for involving other standards groups, particularly from Japan to become involved. Members of this PARS agreed to contact several of their colleagues in Japan that they knew worked on related issues.

7. It was asked to the attendees to voluntarily act as the secretary of the committee. Because nobody responded, the Vice-Chair will continue to act as the secretary temporarily.

8. Meeting was adjourned.