

Draft Minutes

ASC OP/TF 5- Committee for Optics and Electro-Optical Instruments - Aspheric Optics

January 15, 2013, 11:00-12:00 EST (-5:00 GMT)

Held by teleconference

1. Welcome and Introductions

R. Youngworth opened the meeting at 11:01 EST with introductions. On the phone were Dave Aikens, Donna Howland, Doug Hoover, Marla Dowell, Kate Medicus, Joe Tipps, and Brian Stamper. Paul Murphy joined at 11:05.

2. Adoption of Agenda

D. Aikens moved we adopt the agenda, and Brian Stamper seconded the motion, which carried unanimously. Meeting documents were available online and were also sent by e-mail.

3. Review of Minutes and Review of Action Item Status

D. Aikens moved we accept the minutes from the previous meeting. K. Medicus seconded, and the motion carried. D. Aikens reported that the current drawing capabilities in Zemax doesn't seem to be significantly different. He has contacted Zemax to get a more clear direction on the new drawing capabilities mentioned in their recent update notes. K. Medicus distributed a draft outline. There are no other major action items on our action tracker at this time. The standing request to submit votes for quorum on standards votes was mentioned by R. Youngworth.

Update: After the meeting, D. Aikens' item was effectively closed. He noted that the sag table and aspheric coefficients are automatically generated and added as a note, consistent with ISO 10110-12 (to some extent). There are limitations in functionality as the point density cannot be changed, filtering, or the direction of the sag table. Defaults seem to be picked. The surface equation is also not noted and it is required per -12. The main improvement is that it saves from cutting and pasting the coefficients and sag table so it is a small step in the right direction.

4. Review of OP1.0110-12

R. Youngworth walked us through the current version of the difference between OP1.0110-12 and ISO 10110-12 DAM. The ISO DAM explicitly references Qbfs, and includes the recursion formulas for it but then allows Qcon with a note. The current version of OP1.0110-12 explicitly references Qbfs and Qcon, but does not include the recursion relationships. P. Murphy asked if we had Qbfs with conic was available in any of the standards; they are not. Inclusion of such a form should be addressed in the next review cycle for completeness of these formulations.

Action Item: D. Aikens to circulate OP1.0110-12 for adoption as a national standard.

5. Discussion of St. Gallen ISO 10110-12amd and -19

R. Youngworth gave a report on the meeting at St. Gallen. The US has contributed discussions on -12 and -19, and continued discussions on -5 and -6 which are also being modified. The leader on -19 Dirk Jahn expressed concern of the use of the word "freeform" especially in the title of the standard. It would be nice if -12 covered some specific surfaces, and -19 covered others, but they are on different review cycles, so there would be a period of overlap which is problematic. The distributed notes from the meeting cover the salient points appropriately.

6. Aspheric Metrology Draft Update

K. Medicus has submitted an outline of a new standard, OP1.006 for aspheric metrology. She walked us through her outline. Some questions she would like to address are 1) do we want to include freeform surfaces, or just aspheric

surfaces? 2) How should we remove radius error? Different options? 3) should we include mid-spatial frequency evaluation of aspheres? 4) what about the other notes in the outline; where should they go in the standard. D. Aikens briefly summarized what ISO standards exist, and how this standard would fit with other standards.

Action: Everyone – read outline and send comments to K. Medicus, via kmedicus@optimaxsi.com by Feb 1, 2013.

Action: D. Aikens to send K. Medicus an editable version of an OP standard Feb 1, 2013.

7. Additional Items

K. Medicus mentioned she has started a dialog with some of the members of the German delegation to TC213, but nothing concrete yet. This is in regard to our important main activity on asphere metrology.

No other additional items were raised.

8. Time and place for next meeting of TF5

R. Youngworth recommended the next meeting will be another telecom at 11:00 EDT April 9th, 2013. D. Aikens moved to meet at that time, and D. Hoover seconded. The motion carried.

9. Adjourn

D. Aikens moved we adjourn, K. Medicus seconded, and the motion carried. The meeting adjourned at 11:57 EST.