Draft Minutes

ASC OP/TF 2 –Committee for Optics and Electro-Optical Instruments –Appearance Imperfections Standard Meeting (Held in conjunction with OSA Optical Fabrication and Testing)

June 24, 2012 08:30 -13:00 PDT

Monterey Plaza Hotel 400 Cannery Row, Monterey CA 93940
Big Sur Room 1

Welcome and introductions G. Boultbee began the meeting at 08:40 PDT, with M. Dowell, D. Aikens, and C. Gaugh in person and D. Howland and A. Krisiloff by telephone.

Approval of Agenda A. Krisiloff moved we approve the agenda, and C. Gaugh seconded. The motion carried.

Approval of Minutes from January Meeting A. Krisiloff suggested we add a note that R. Williamson arrived later in section 4. C. Gaugh moved we approve the amended minutes, and M. Dowell seconded, and the motion carried.

Status of Action Items The group reviewed our action items.

1. A. Krisiloff change the title to surface imperfections – done
2. A. Krisiloff revise the scope to be consistent with the title – not sure; we will look at it today
3. A. Krisiloff review the course and reconcile the naming of the accumulation rules to be consistent with standard practice. – done; to be reviewed today
4. Committee to review the document and supply project leader with detailed feedback on the current revision via the phorum by the end of March – not done, but several people submitted paper or pdf redlines.
5. D. Aikens confirm everyone has access to the phorum – done

Status of interactions with Army D. Aikens reported that he has not been back to the Army since his visit in January. C. Gaugh announced that Davidson has taken delivery on a SavvyInspectorTM and is evaluating it for use in their process.

Work on next draft of OP1.002, including Annex F . M. Dowell asked if the Army wanted OEOSC to take on the responsibility of describing the comparison standard on their own. The challenge is that right now, the only connection to the brightness of the standards is a set of calibrated values in the SavvyInspectorTM, and that's a system made by a private company. The committee had a lengthy discussion of what to do about a reference drawing for the comparison standard. In the end, we decided we should make a version of the drawing with both SIRA and SavvyInspectorTM measurement values and reconsider at the next meeting.

A. Krisiloff offered up a version 7 of the draft. Since we had reviewed version 6 before the meeting, we distributed the new version to everyone at the meeting.

He then took the committee through W. Royall's comments one by one. Unaided eye should be without magnification, all defects should be binned, and area imperfections on coatings that do not effect performance should be allowed.

D. Aikens suggested we drop the old version of the accumulation rules, since they do not add value. He also suggested that we provide a notation to allow the designer to specify a maximum criterion only, such as by adding a /M after the notation. Everyone was in agreement with both points.

A. Krisiloff walked us through the new version of the accumulation rules, and the general consensus was that the new system was fine, but that the word "test" should be replaced by "evaluation" or "rule" depending on where it was used.

A. Krisiloff agreed that we can delete the Annex with the old scratch accumulation equations.

D. Aikens suggested we add a section for "scratch length rules" to make it clear whether the scratch length was measured along the scratch on the surface or on a 2D projection of the surface. To override this rule, and have the scratch length evaluated along the actual surface, the designer can indicate this by adding a /A after the notation.

D. Aikens suggested we reconsider how we have defined scratches. A 4:1 aspect ratio may not make sense, since a very small imperfection could be 20um by 80um, which is not visually resolvable as a scratch. C. Gaugh suggested a definition of scratches as having "apparent length".

A. Krisiloff mentioned that W. Royall objected to the definition of sleeks as being smooth; there are smooth features which are not sleeks, and all sleeks are specifically very narrow. D. Aikens agreed, saying that sleeks are always very narrow and shallow; typically less than 3 um wide and about as deep. A. Krisiloff will consider what wording makes the most sense.

ISO proposal based on OP1.002 D. Aikens said that he sent a justification of ANS OP1.002 as opposed to ISO. The German and Swiss delegations have requested a CD for a new version of ISO 10110-7 which incorporates scratch and dig.

Action Items from this meeting

D. Aikens will make a version of the drawing with both SIRA and SavvyInspectorTM measurement values and reconsider to the next meeting.

G. Boultbee find a more succinct statement on allowability of stains from the MIL stds.

M. Dowell to talk to Gerry Fraser about brightness standards.

A. Krisiloff will incorporate all of the changes described above, and provide a new draft by the end of July.

D. Aikens will prepare a CD for a new ISO 10110-7 for review at the next meeting.

Time and place for the next meeting D. Aikens suggested a conference call. M. Dowell moved that we schedule it for Tuesday, August 21st at 13:00 EDT. C. Gaugh seconded and the motion carried.

Adjourn. M. Dowell moved we adjourn, and M. Dowell seconded. The motion carried and we adjourned 12:37.