

## Draft Minutes

ASC OP/TF 1 –Committee for Optics and Electro-Optical Instruments – Optical Glass  
09:00 PST, Sunday February 8<sup>th</sup>, 2015

Nob Hill Room,  
Intercontinental Hotel  
888 Howard St., San Francisco, CA

### **1. Welcome and Introductions**

Hal Johnson called the meeting to order at 09:00. In attendance were Allen Krisiloff, Dave Aikens, Walt Czajkowski, Gordon Boulton, Dan Palmari, Doug Wilgis, Bob Hainsey, Donna Howland, and Leonard Hanssen. Quorum was established.

### **2. Approval of the agenda v2**

Allen Krisiloff motioned to accept the agenda. The motion was seconded by Leonard Hanssen and the motion passed.

### **3. Approval of the minutes for the November meeting**

Gordon Boulton moved to accept the minutes from the November 2014 meeting, Donna Howland seconded and the motion carried.

### **4. Group discussions**

#### **a. Review “Straw dog” standard OP1.2123**

Allen Krisiloff walked the group through his proposed changes to Hal Johnson’s draft. The key concept is to change from three letter acronyms for various grades to using grade labels that are more reflective of the values of the grades themselves. There was general acceptance of the concept by the committee.

Dave Aikens put forth a proposed labeling scheme to try and connect this standard with the draft of ISO 10110-18 which TC172 SC1 WG2 is working on. Allen then offered a contextual table to connect back to part 18, which worked off of Dave’s proposal. Everyone agreed that the resultant set of monikers was a distinct improvement. The proposed label system and example grades are given in Table 1.

For Striae, Dave proposed that we use the ABCD grading system from MIL-G-174B which he said was standard practice in the US and elsewhere. We could then add an Annex to the draft which would provide the mapping from the ABCD grades back to the values in Schott’s analysis, which would correspond with the ISO version of 12123.

Allen wasn't so sure this was a good idea, so he asked that we review Walt's table which had all the glass specifications currently used by the major glass suppliers. In that review, we saw that, in fact, the ABCD grades were used by CDGM, Hoya, and Ohara for Striae, and only Schott used the values for nm per 50 mm of thickness that shows up in ISO 12123. Since it was Peter Hartmann of Schott who led the project to develop ISO 12123, this wasn't so surprising.

Table 1. Proposed new version of labels and grades

Absolute index:	Nd±/50E-4
Index lot variation:	Nd±(LOT)/5E-5
Abbe tolerance	Vd±/0.8%
Stress birefringence	00/20
Bubbles	01/0.5x140
Homogeneity	02/040E-6
Striae	0S/A, B, C or D

Action: Hal Johnson to modify the draft per the suggestions of the committee

Action: Dave Aikens will circulate the new draft for ballot, and discuss the grades for Striae in the context of those ballot comments.

### **b. Review Glass Analysis Spreadsheet**

Since we had already gone back over the glass analysis spreadsheet as part of item 4a, we decided to skip it for this meeting.

Instead, we used the extra time available to review Allen Krisiloff's new draft proposal for ISO NWI 10110-18, which we expect to become the basis for OP1.0110-18.

It was generally agreed that the three glass standards, OP1.2123 and OP1.0110-18, seem to be converging, and we should be able to withdraw OP3.001 and use these two new standards in their place.

### **5. Time and place for next meeting**

Donna Howland proposed we schedule a tentative meeting for 17:00 EST on Monday April 20 in Baltimore, in conjunction with SPIE's DSS, provided we can get a room. Walt Czajkowski seconded, and the motion carried.

### **6. Adjourn**

At 10:32, Allen Krisiloff moved we adjourn. Donna Howland seconded, and the motion carried.