

W1.1 Image Quality of Printers

INCITS W1.1 2003 – 024

Gloss and Gloss Uniformity

Yee S. Ng, May 8, 2003

Gloss/gloss uniformity ad hoc Teleconference Meeting Notes

(5/6/2003 teleconference)

Present: Yee Ng (Chair, NexPress), Chung H. Kuo (NexPress), Jeff Wang (NexPress), Dale Mashtare (Xerox), Eric Maggard (HP)

Absent members:

Pashant Mehta (ImageExpert), John Kessler (Paxar), Dan Hann (RIT), Mike Pointer (National Physical Lab, UK)

Next Teleconference: Tuesday May 20, 2003 @ 1:30 PM EST

Agenda

1. Review/modify agenda.
2. Gloss Uniformity test chart discussion
3. Schedule next teleconference

The Gloss/gloss uniformity ad hoc met on 5/6/2003. The ad hoc team approved the agenda. YN informed the team that Professor Mike Pointer (National Physical Lab, UK) is interested to participate in the gloss uniformity discussion. The team welcomes Professor Pointer's participation. The team will meet face to face on May 15, 2003 in the PICS2003 conference after hour to look at gloss artifact samples and discuss future direction for micro-gloss measurements and discuss the within-page gloss uniformity test chart. The team then discussed the new version test chart for within-page gloss uniformity (Gloss Uniformity Test Target 1-1, 1-2,1-3, 2-1 and 2-2). The default mode for printing is in the landscape mode. The team has requested an annotation page be created to accompany the test charts. CK/YN will follow through with that request. YN reported that in test usage, some printers have problem to continuously printing some test chart (for example test target 1-1 with high coverage vertical strips) due to fusing issue over time. So the Standard test may need to request fewer print sets. From a gloss uniformity within-page measurement viewpoint, YN proposed the following method (use test target 2-1 and 2-2 as examples):

- (1) Identify 3 areas for gloss measurements (left, center and right) per horizontal density strip. Measure the gloss values (Gleft, Gcenter, Gright) of these 3 locations (# of samples to take per location – TBD).
- (2) For each strip, report the maximum delta G (dGmax) value between the 3 horizontal measurements locations. Report the dGmax for all the strips.
- (3) For each strip, report the mean gloss value (Gmean) value for these 3 locations. Report the Gmean value for all the strips. These first 3 steps completed the objective measurement piece of the within-page gloss uniformity measurement (of course for the horizontal strips only). These 3

steps can be repeated for the vertical strips using test charts 1-1, 1-2 and 1-3 for objective measurements.

- (4) Use the gloss jnd curves (right now we only have that for G60 measurement) and the Gmean value of the density strips to normalize the dGmax values for the strip that linked the objective measurement to the subjective evaluations. Of course we realize that much more subjective evaluation work in the jnd interpretation area needs to be done (for non-black patches) at G60. So the first test probably starts with the objective measurements only.

Next call-in teleconference: Tuesday, May 20, 2003 @1:30 PM EST

Proposed agenda for May 20, 2003

1. Review/modify agenda
2. Review discussions at the PICS2003 meeting
3. Continue discussion on Gloss Uniformity test chart and micro-gloss measurements
4. Schedule next teleconference

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