

W1.1 Image Quality of Printers

INCITS W1.1 2004-002

Gloss and Gloss Uniformity

Yee Ng, Feb 4, 2004

Gloss/Gloss Uniformity Ad Hoc Teleconference Meeting Notes:

(2/3/2004 teleconference)

Present: Yee Ng (Chair, NexPress), Chunghui Kuo (Nexpress), Michael Viola (Cabot Corp), Eric Maggard (HP), Dale Mashtare (Xerox), Peter Morris (HP)

Absent members:

Dan Hann (RIT), Mike Pointer (National Physical Lab, UK), Eric Zeise (Nexpress), Pashant Mehta (ImageExpert), John Kessler (Paxar), Luke Cui (Lexmark), Sanjay Monie (W.R. Grace)

Next Teleconference: Tuesday, Feb 17, 2004 @ 1:30 EST.

Agenda:

- (1) Report on EI2004 Standard activities
- (2) Gloss Artifact round-robin experiment status.
- (3) Haze effect on perceived gloss on glossy experiment status.

The Gloss/Gloss uniformity ad hoc team met on Feb/3/2004 and approved the agenda. YN reviewed the discussions on Standard groups activities including SC28/W1/W1.1, TC42, TC130 and CIE. W1.1 team leaders have decided to start the write up of the 1st draft of a Working draft (WD) relating to print quality (of which our current gloss uniformity team is part of this). The target is to have the draft completed for circulation before the SC28's Plenary in May 2004. The rest of the W1.1 presentations can be found in the W1.1 website. W1.1 team has expressed an interest to adopt the psychophysical experimental method ISO/DIS 20462 currently being proposed by TC42 for photographic images, to be the subjective evaluation method for W1.1 team. YN has discussed with Brian Keelan (project editor, Kodak) about the potential usage with D50 illuminant as well as for gloss uniformity observations. BK's viewpoint is the methodology is not illuminant sensitive (currently D65 was used) if the materials evaluated do not exhibit spectra sensitivity to sharpness. As for the image rotation need for gloss measurements, this has not been tried before, but if the image viewing points' distance to the observers do not change much, the method can still be appropriate. Of course, more testing to verify the methodology will be needed. TC130 has a pending Standard draft on Lustre which is defined as: "the appearance characteristic of a surface that reflects more in some directions than it does in other directions, but not of such high gloss to form clear mirror images". N has agreed to exchange information with TC130 on the standard development relating to gloss. CIE has reported on many interesting subjects including effort on color appearance that can be affected by gloss. YN also got a report (NPL report COAM 19) from Mike Pointer (chair, CIE/TC 1-65) on the subject of

measurement of appearance of which gloss is one of the elements. YN will forward the information to the Gloss team members to further the standard development work.

DM has reported he has finished sorting the gloss artifact samples for the gloss artifact round-robin experiment and have identified needs for additional prints to fill some voids before the psychophysics experiment should start. He has agreed to identify the needs and forward that to potential contributors of prints (HP, Lexmark, Nexpress).

CK(Nexpress) has reported that he has prepared the six samples for the gloss/haze experiment and is ready to start the initial trial for the subjective evaluation. DM(Xerox), EM(HP) and PM(HP) have expressed interested to join in the round-robin experiment if the trial is successful YN will also contact LC (Lexmark) to confirm his interest to participate in the round-robin experiment.

YN also mentioned that ISO/IEC 19799 “Gloss Uniformity of Printed Pages” of which YN is the project editor, is now in the WD stage to welcome comments. This Standard WD deals with the objective measurements of gloss uniformity for printed pages on copiers (an optical original exists) and printers (digital files exist like as in W1.1) with subject matters including: differential gloss (we do that in W1.1), gloss uniformity within a page (we do that in W1.1), and gloss uniformity consistency within a print run (we don’t do that in W1.1). The objective measurement methodology (for common tests) is the same as what is being used in W1.1.

Next call-in conference: Tuesday, Feb 17, 2004, 1:30PM EST.

Proposed agenda:

- (1) Gloss Artifact round-robin additional samples status.
- (2) Gloss/haze psychophysics initial result.
- (3) DOI status.

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