

W1.1 Subgroup on MicroUniformity Update

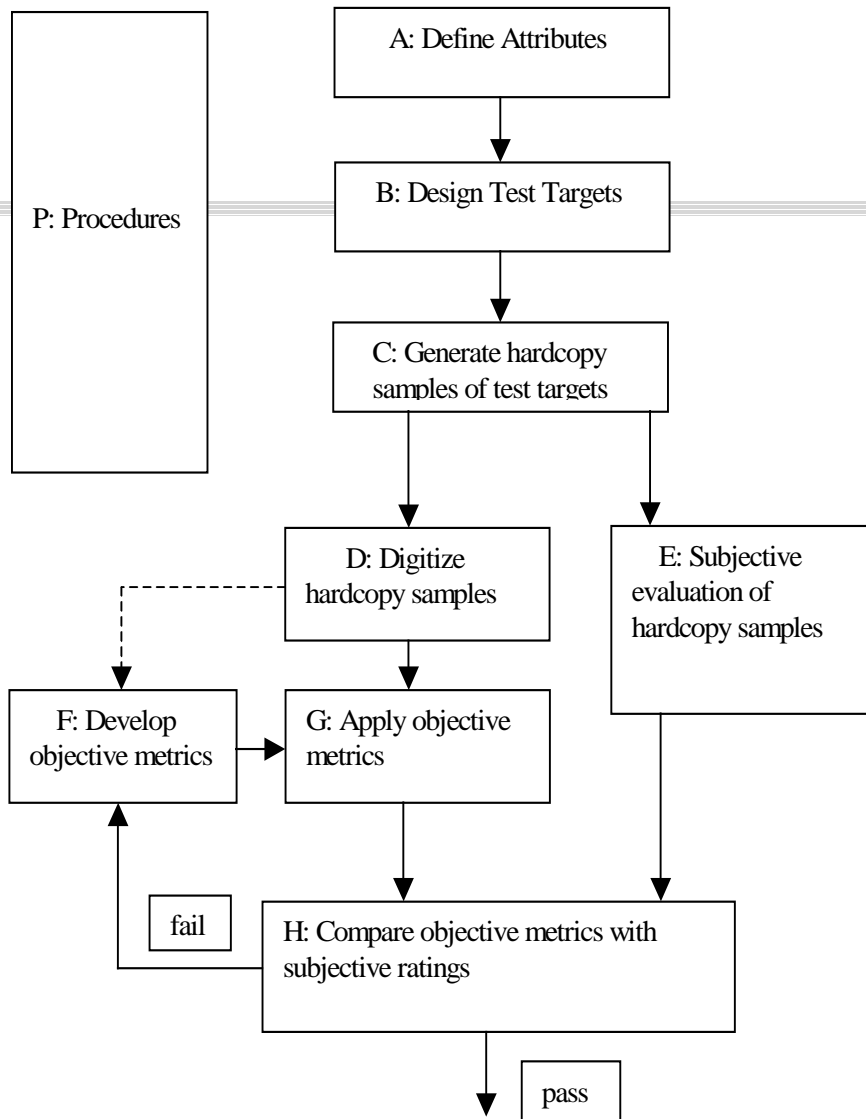
*Robert Zeman, Paul Kane, Eastman
Kodak*

William Kress, Toshiba America

Rene Rasmussen, Xerox Corporation

George Chiu, Purdue University

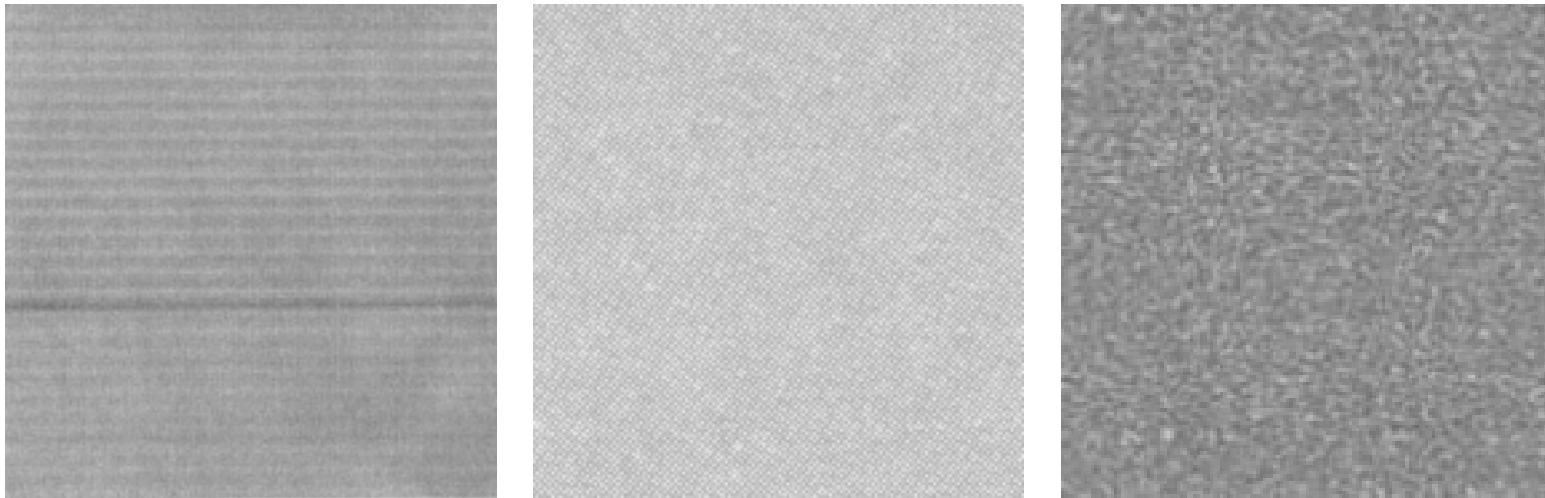
Eric Zeise, NexPress Solutions LLC



The Process for Developing the W1.1 Standards

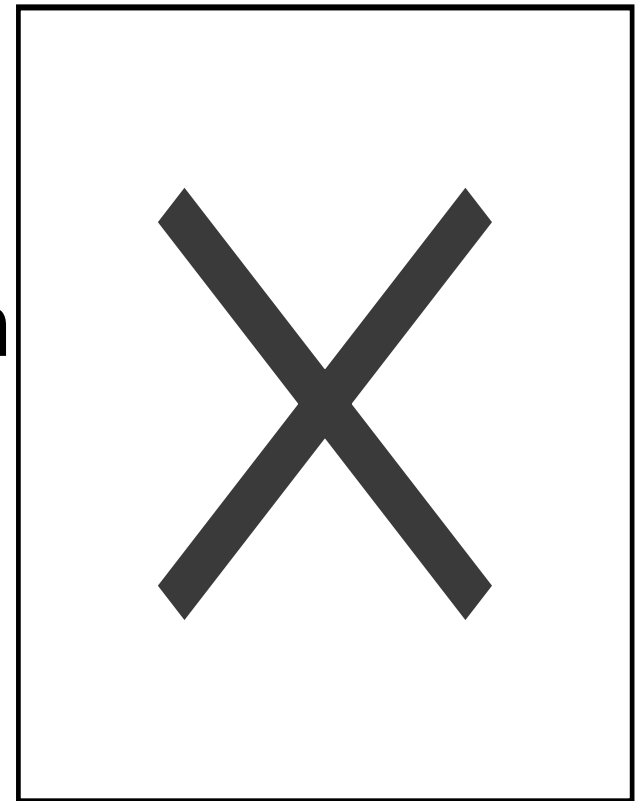
Define Attributes

- Streaks, Bands, Voids, Textures, Noise
- Samples posted on website



Design Test Targets

- Flat field evaluated at
 - $L^* = 40, 60, 80$
- Voids at $L^* = 0$
- Samples cut to 25mm



Generate Hardcopy Samples

- Samples sets generated on 5 inkjet systems, four EP systems, one thermal system and one digital silver system.
- All these sets are being re-done...
- New color calibration targets

Procedures

- Mean sample levels; blue sky color
- Samples cut to 25mm and mounted on 100mm substrate for viewing
- Initial technologies chosen
- Suprathreshold functionalities desired
- Non-proprietary analysis code written
- Samples banded at several frequencies

Procedures, cont'd

- “Nominal/best” modes chosen to reduce effort: nominal paper/process, best/best
- Scanner calibration problem dialogues

Measurement Problem

- Desired: convenient, affordable, reliable, quick
- Microdensitometers, drums: tedious, costly
- Flatbeds: logical, except for lack of repeatability, accuracy and uniformity
- Impetus and support for resolution of this problem by W.A. Kress

Next Efforts

- Regeneration of targets
- Measurement of the samples
- Development of objective metrics

You're Invited!

- To join this effort and lend your energy and creativity to this task
- http://www.ncits.org/tc_home/w11htm/incits_w11.htm