

W1.1 Image Quality of Printers

INCITS W1.1 2003 – 046

Gloss and Gloss Uniformity

Yee S. Ng, July 24, 2003

Gloss/gloss uniformity ad hoc Teleconference Meeting Notes

(7/22/2003 teleconference)

Present: Yee Ng (Chair, NexPress), Dale Mashtare (Xerox), Luke Cui (Lexmark),
Chung-Hui Kuo (nexpress)

Absent members:

Pashant Mehta (ImageExpert), Dan Hann (RIT), Mike Pointer (National
Physical Lab, UK), Jeff Wang (NexPress), Eric Maggard (HP), Eric Zeise
(NexPress), John Kessler (Paxar), Peter Morris (HP)

Next Teleconference: Tuesday August 5, 2003 @ 1:30 PM EST

Agenda

1. Review/modify agenda
2. Discussion on logistics for round-robin experiment (subjective) with gloss artifact samples as well as the newer version test chart.
3. Schedule next teleconference

The Gloss/gloss uniformity ad hoc met on 8/22/2003. The ad hoc team approved the agenda (W1.1 2003-042) and additional discussion topics for the With-in-page gloss uniformity measurement

The team discussed the finding after printing of the Micro-gloss/gloss artifacts test charts (shown in INCITS W1.1 2003-042). As reported by CK, it appears that the 100%K patch seems to generate a lot more colorant coverage (cause too much inking in some inkjet printers) than expected. Also the 30% CMY step appears in some cases to cause test printers to produce a single color black patch (perhaps due to some GCR function that does not get turned off). DM will update his test charts (both in CMYK mode as well as RGB mode – those new test charts are in pages 3-5 of this document) and we will retest the printing again. It is however apparent that the current test chart is quite effective to generate gloss grain for the round-robin experiment when proper papers are used. DM also is going to draft an experimental procedure for the round-robin experiment and pass that around for review.

YN then propose a method to report the gloss uniformity Within-page measurement using the five gloss uniformity test charts (in INCITS W1.1 2003-021). The five test charts consists of two sets 24 color bands (3 red {high, medium, low}, 3 green {high, medium, low}, 3 blue {high, medium, low}, 3 magenta {high, medium, low}, 3 cyan {high, medium, low}, 3 yellow {high, medium, low}, 3 single color black {high, medium, low}, 3 tri-color black {high, medium, low}), one set runs in the in-track direction, and the 2nd set runs in the cross-track direction. Since we have decided in previous meeting to

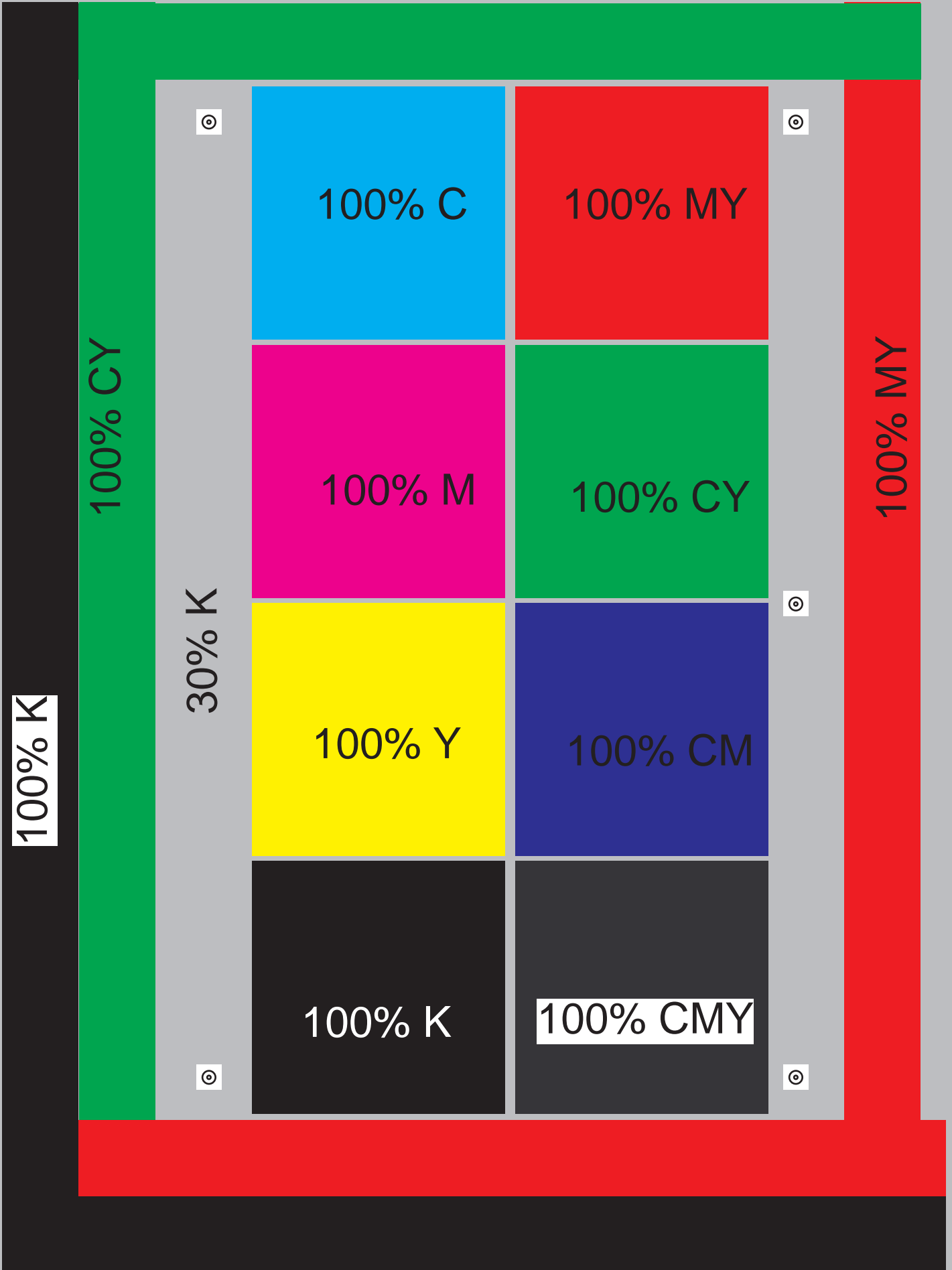
measure each band at five locations (one gloss measurement for each location), the five page test chart can generate a total of 240 data points, 10 data points for each of the color (intensity) set. We can then report the gloss uniformity Within-page data in a spreadsheet consisting of 24 rows of data (one for each color {intensity} designation). Within each row (that is represented by 10 raw gloss data {not shown on the spreadsheet}): the mean gloss value, gloss Standard deviation and the maximum gloss variation will be reported. The team accepts this concept. Further experiment will be conducted to further classify the impact of different type of paper and color's effect on the psychophysical interpretation of the gloss uniformity within-page later on.

Next call-in teleconference: Tuesday, August 5, 2003 @1:30 PM EST

Proposed agenda for August 5, 2003

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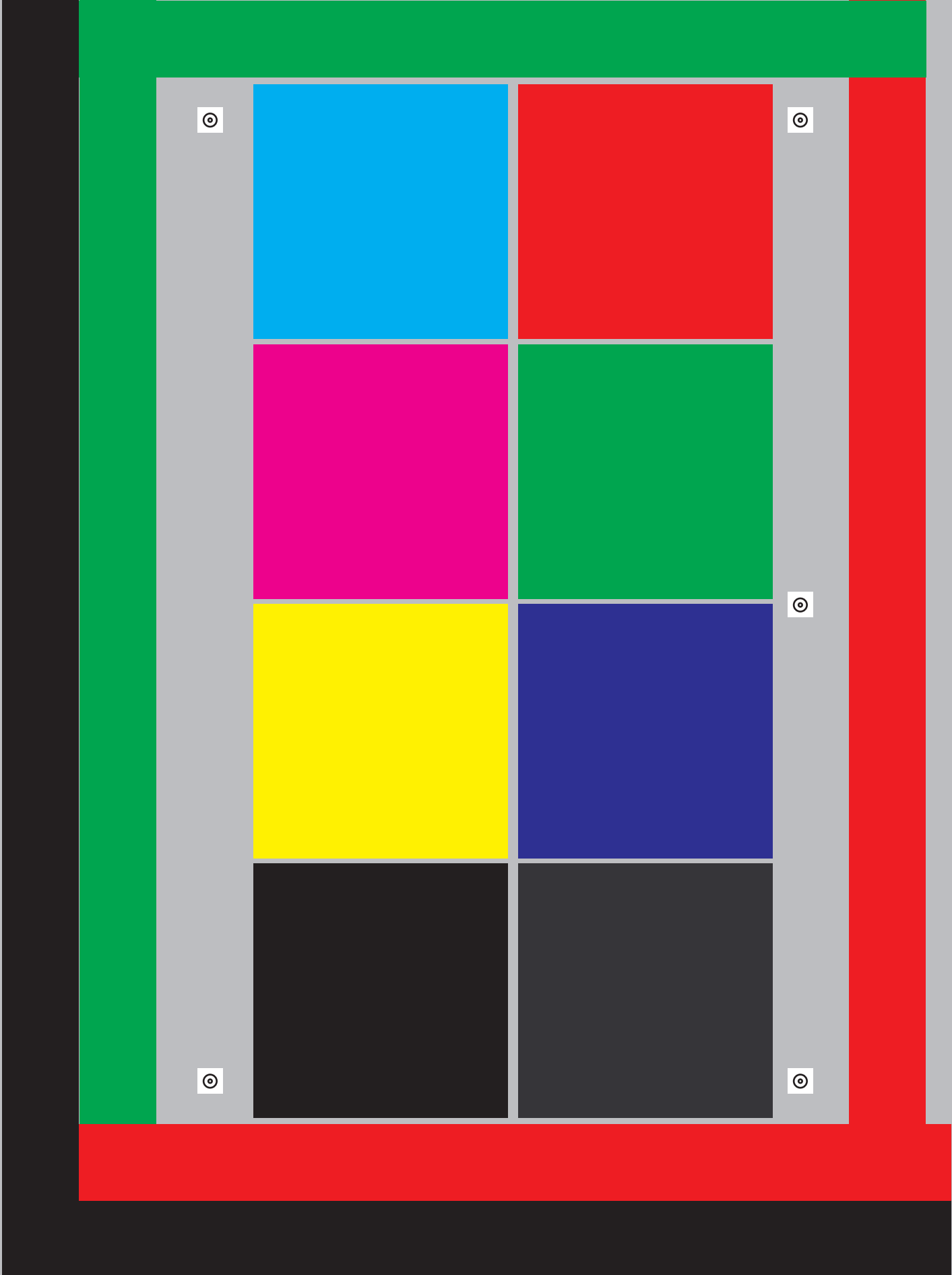


100% K

30% K



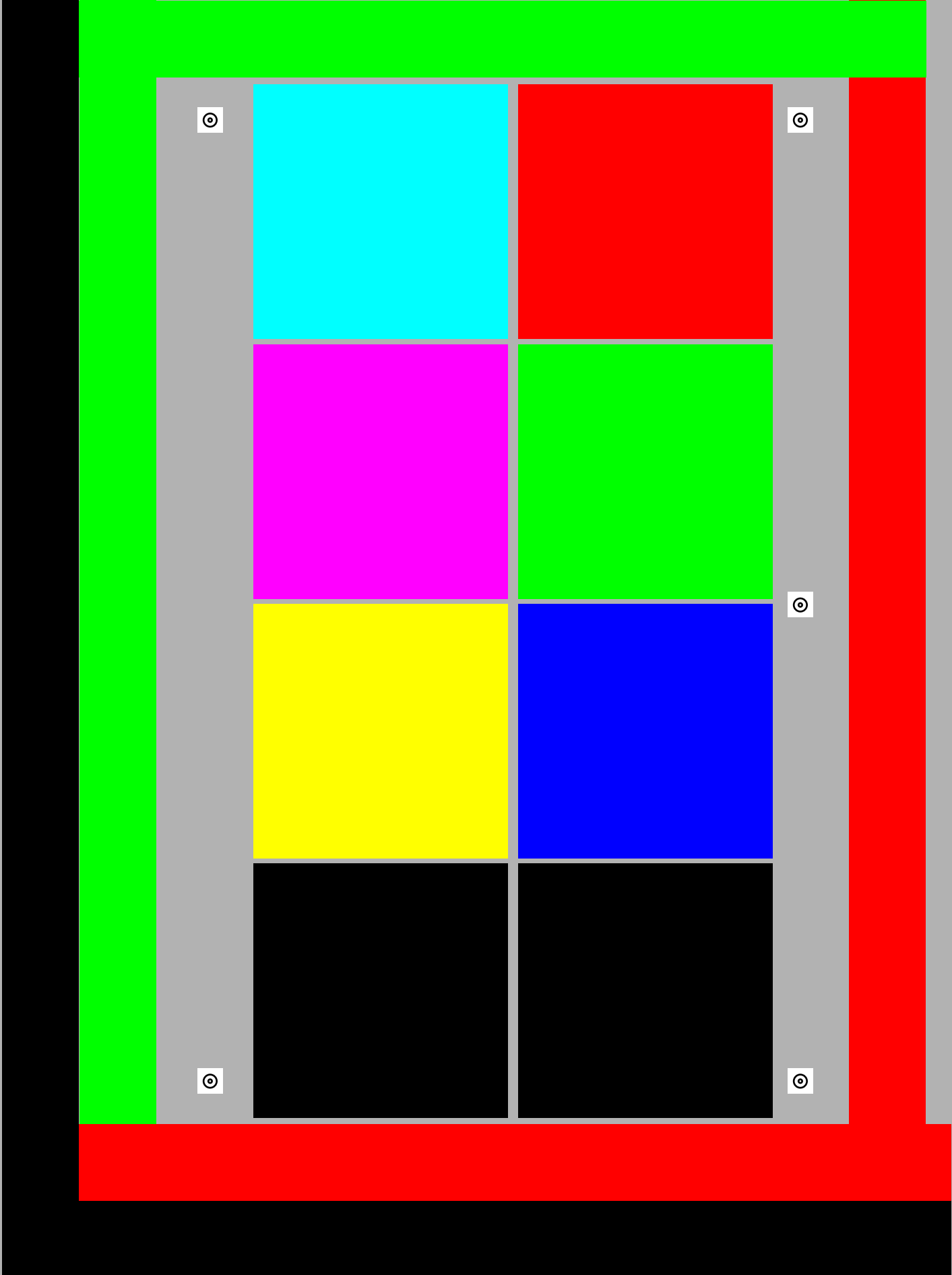
W1.1 Microgloss / Gloss Artifacts Test Target v2.0



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