

# Instructions for using the test sheet

With the Print Tech Project Test Sheet you can test the quality of your printer, be it a laser printer, an ink jet printer or a digital printer.

First, download the OCAD file and the PDF file of the test sheet on MC's web page at http://lazarus.elte.hu/mc/print-tech/

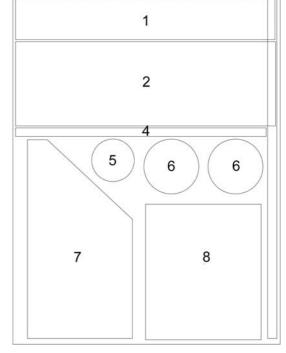
Then you can print the file with your printer and start comparing the spot colour printed test sheet to your own result (if you don't have the OCAD software you may use the PDF version):

OF

- 1. Basic colours of orienteering maps
  - Correct hues of colours
  - Evenness of colour surfaces (no stripes, no holes, no bubbles)
  - Sharpness of straight, round and diagonal edges of the coloured areas

You can adjust the colours of your printer by editing the colour table in the OCAD file.

- 2. Most common screens on orienteering maps
  - Correct hues of colours
  - Evenness of colour surfaces (no stripes, no holes, no bubbles)
  - Sharpness of straight, round and diagonal edges
  - No Moiré effect
- Vertical accurateness of measurements.
- 4. Horizontal accurateness of measurements.



PrintTech Project

9/10

3

- 5. If the resolution of the printer is sufficient, there is no Moiré effect
- 6. The resolution of the printer
  - Clear thin lines (outer three circles are 0.05 mm with the spacing of 0.05 each, then 0.10 mm, 0.15 mm, 0.20 mm and 0.25 mm respectively)
  - If the resolution of the printer is sufficient, there are no gaps or zig-zag edges in the lines and no Moiré effect



## 7. The permissible combinations of screens

- Look how the different screens have been printed on each other (overprinting effect)?
  - Do all blue screens printed together with yellow screens appear as on the offset printed map?
  - Do contour lines have the same appearance as on the offset printed map for all combinations of screens?
  - No fuzzy contour appearance in the green areas
- compare the rendering of the brown and blue line in the coloured area and the white area with that of the offset printed map

## 8. Some sample maps in different scales

- General appearance of the printed sheet compared with the test sheet
- Readability of the maps
- How clear symbols appear when they are placed in areas of colour?
- The purple colour of the course shall not cover the map symbols

#### 9. The paper

- The test sheet is printed on G-Print (matt, 115 gr). G-Print is widely used for printing orienteering maps. The paper is a coated matte paper with high whiteness and smooth surface. The durability of the paper and printed colours is very good even in wet and cold conditions.
- You can compare the quality of your paper to G-Print.
- Some papers used in printing are too glossy (lustrous), and some pigments used for printing contain sustances that cause a glossy appearance. This may cause inconvenience for reading the map in the sun light and in night orienteering when a bright light is used.

### 10. The technical quality of the printed test sheet

- If the quality of the printer is good, there are no stripes or coloured spots on the paper
- The quality of the printer must be so good that all the colours are the same every day and during the whole process.
- To avoid a glossy appearance, the colours shall not be very reflective

It would be very useful if the users of this test file and test sheet could send their test sheets to the MC. The attached form, "Technical Report" should be filled out carefully by the firm which printed the test sheet.

Please send the filled form with some samples of the printed test sheet via mail to the IOF Map Commission, Håvard Tveite, Kajav. 24, N-1430 Ås, Norway.

You can also send the empty OCAD file by e-mail to havard.tveite@umb.no. Delete all drawn symbols, but keep intact the colour table and the symbol table.