

Fogra 51 and 52 profiles do not match ISO 12647/2 2013

So is this problem? Well it could be if you are trying to print to exactly match the CMYK and white paper Lab figures from in the current ISO 12647/2 2013 standard.

The reason for the difference is, in itself, reasonable. The white paper Lab figures for the 8 'new' papers in the standard, called 'Print Substrates' is based on work carried out by the Paperdam group in the late 2000's. Fogra has rightly noted that for Print substrate PS1, premium coated and Print substrate 5, wood free uncoated the OBA (optical brightener) content had increased by the time they were producing the Fogra 51 and 52 date sets for these papers, which are used to produce the new ECI profiles, PSO coated v3 and PSO uncoated Fogra 52 v3.

These additional OBAs result in a very bright 'blue' white paper which changes the b-figures for both paper types.

So Fogra have changed the Lab values (white backing figures shown below) for both PS1 and PS5 papers:

PS1

ISO 12647/2 2013 – L95 a1 b-4

Fogra 51 – L95 a1 b-6

PS 5

ISO 12647/2 2013 – L95 a1 b-4

Fogra 52 – L94 a2 b-10

This then mandates remapping the CMYK values for both papers, changing the CMY Lab values for the Colorant Description (CD) referenced in the standard:

PS1 (CD1)

ISO 12647/2 2013

Cyan L56 a-36 b-51

Magenta L48 a75 b-4

Yellow L89 a-4 b93

Fogra 51

Cyan L56 a-35 b-53

Magenta L48 a75 b-5

Yellow L89 a-4 b92

So the changes could be considered minor for the coated paper PS1. The black does not change.

PS 5 (CD5)

ISO 12647/2 2013

Cyan L60 a-25 b-44

Magenta L55 a60 b-2

Yellow L89 a-3 b76

Black L33 a1 b1

Fogra 52 – L94 a2 b-10

Cyan L59 a-22 b-48

Magenta L55 a60 b-4

Yellow L88 a-3 b72

Black L33 a1 b0

These show a larger change to the CMYK solid colours which should be expected due to the greater change in the wood free uncoated white paper figures in the Fogra 52 dataset.

So in practise, what are the implications of using Fogra 51 and 52 based profiles, from ECI or other sources? The main issue will be with process control on presses.

If online, near line or off line systems are set to validate and control to ISO 12647/2 2013 figures, especially for the wood free uncoated PS5 papers, the colour aged prepress

workflow and proofing is using a Fogra based 51 or 52 profile the figures used for the press to match will not be correct. A small amount to the coated, larger for the uncoated.

So it will be best practise to use the Fogra 51 and 52 Lab figures as the target when printing.

There is a move from Fogra to quickly revise ISO 12647/2 2013 to these numbers, which I believe is sensible.