ChromIQ

Measurement Report - Verification of Profile - CP1500-600p-verify

Created: 2026-10-23 18:34:55

Report type: Grey and tone check · Judged against: Quick check

This report judges the profile built in CP1500-600p, run 1. It was verified by printing a chart through that profile, measuring it, and comparing the measurements with the chart's own aim values. The measurements it covers are listed under Report Scope.

Report Scope

The following verification run is included:

- CP1500-600p-verify, Instrument: X-Rite i1 Pro 3 · Measurements: 1

No. of Measurements:

1

Date range:

2026-10-23 – 2026-10-23

This kind of report judges 2 metrics: Average ΔCh, grey balance of the grey ramp; Maximum ΔCh, grey balance of the grey ramp. Any other limit the set defines is not part of it.

How to read this report

This report compares what the instrument measured against the chart's design colours (the reference values the chart was built from). Most numbers are colour differences in ΔE00: 0 is a perfect match, 1–2 is barely visible, and 10 or more is clearly different. The others name their own unit: ΔCh for a colour cast, ΔL* for a lightness difference, L* for a lightness.

- Average ΔCh, grey balance of the grey ramp: How neutral the greys of the printed test chart are on average: how far each step of the grey ramp sits from having no colour cast at all. Lightness is ignored, only the cast is counted.
- Maximum ΔCh, grey balance of the grey ramp: The worst single step of the grey ramp. One step with a cast is visible in a photograph even when the average looks healthy.

The four verdict words. A limit set is one column of the limits table: the numbers a report is judged against. Every row of the results ends in one of four verdict words.

- PASS: the measured value is within the limit for that row.
- FAIL: the measured value is over the limit for that row.
- INFO: the number is shown for information only and nothing was judged from it. That happens when the sheet is a profiling measurement, which is never graded, and when the row needs something about the print that was not recorded; the note under the results names the rows in that last case.
- N-A (not applicable): the value could not be worked out from the measured chart. A raised number beside it points to the note under the results that names what is missing.

A column marked “printed raw” under “Judged against” is a sheet printed without the profile. Its paper and solid colour rows are judged against the profile where the limit set has a limit for them; its values that compare the print with the chart's design colours read INFO, with a numbered note that says so. A column's Overall word is PASS when every row that could be checked passed; a row the test chart used could not answer is not counted as a failure, and the sentence under the word says how many there were.

What the numbers mean depends on how the chart was printed:

- A profiling chart is printed WITHOUT colour management (the raw print that is measured to build a profile). It is not expected to match the design closely, so the ΔE can look large, and that is normal. Here it is the CHANGE between dated reports that matters, not a single value.
- A verification chart is printed THROUGH the finished profile, with the printer's colour management off. It SHOULD match the design closely, so low ΔE and passes mean the profile is still accurate; numbers rising over time mean that the profile describes the printer less well than it did. (Printed raw instead, the same sheet is a check of the printer itself, and the report says which way each sheet was printed.)

The ΔE figures measure a whole chain in one number: the profile's conversion of each colour to printer values, the printer's behaviour on the day, and the instrument's own small uncertainty. A rising number means something in that chain has moved; by itself it does not say which part.

These figures show how one profile holds up over time. They are not a fair measure for ranking papers or printers against each other: where a sheet is split by the profile's gamut, the averages cover only the colours each profile can print, and that set differs with every paper. A glossy paper keeps more of the difficult, saturated colours than a matte one, so its average can look worse while it is printing better.

Because the design reference never changes, comparing dated reports of the same chart on the same printer is a clean, reliable signal of change: ageing inks, a wandering printer, or an instrument going off. Screen and print colours here are approximate; the numbers come from the measurement file and are exact.

Report Results

The following results are extracted from the detailed Colour accuracy data shown below for each measurement.

Metric	2026-10-23
Average ΔCh, grey balance of the grey ramp	**PASS**
Maximum ΔCh, grey balance of the grey ramp	**PASS**
Overall	**PASS**
Judged against	Quick check

Detailed data per measurement

Measurement of 2026-10-23T18:33:51, 576 patches

Profile name: CP1500-600p-verify

How this verification was produced

What this measured	how accurate this profile is — this chart was built only from colours the profile promised it can print, and every figure compares a patch with that promise
Printed	as it is (Raw) — the profile is already inside this chart from the moment it was made, so printing it unchanged is exactly right; nothing was skipped
Colour management at the printer	off
Readings belong to this chart	verified — every patch holds the colour the chart asked for
How the colours were judged	as measured — no white adjustment: every difference counts, the paper's own tone included. (This is a way of comparing, not a rendering intent — a raw print has no intent at all.)
Reference for the ΔE figures	the profile's own colorimetric targets · PROVISIONAL-r2 · 4904 of 16608 master colours in this profile's gamut

Colour accuracy (ΔE00 against the chart's design)

Metric	Measured ΔE00	Limit	Result
Average ΔCh, grey balance of the grey ramp	**1.26**	3.00	**PASS**
Maximum ΔCh, grey balance of the grey ramp	**2.15**	7.00	**PASS**
For information (no limit applies)			
Standard deviation ΔE00, all patches	**0.67**	—	—

This verdict was recorded against the limit set Quick check when the report was made.

For information (no limit applies)

Paper white and darkest black (L*)

White (32L) - L* 94.6, a* 0.7, b* -2.5

Black (35I) - L* 9.2, a* -3.6, b* -8.5

Cube corners (ΔE00)

Corner	Expected	Measured	ΔE00
White (32L)			**0.58**
Black (35I)			**9.90**
Red (14I)			**12.49**
Green (33C)			**34.51**
Blue (48E)			**17.10**
Cyan (8J)			**33.51**
Magenta (17K)			**27.08**
Yellow (6A)			**7.81**

Worst patches

Patch	Expected	Measured	ΔE00	Patch	Expected	Measured	ΔE00
22L			**4.68**	18J			**3.13**
17J			**4.27**	39H			**3.13**
7B			**4.07**	18B			**3.10**
29B			**3.63**	29A			**3.10**
18H			**3.52**	11E			**3.07**
29D			**3.31**	2H			**3.00**
18L			**3.22**	14J			**2.88**
20J			**3.14**	13E			**2.88**