

Measurement Report

Created: 2026-07-20 20:17:11

Report Scope

The following profile(s) measurement runs are included:

- WarningTest-MixedRuns, Instrument: X-Rite i1 Pro · 10 runs

No. of Measurements:

10

Date range:

2026-01-06 – 2026-05-12

Warning — mixed instruments. Every run in a report should come from the same instrument and the same printer; the report cannot tell printers apart. These runs use a different instrument from the majority (X-Rite i1 Pro):

- WarningTest-MixedRuns @ 2026-02-17T10:00:00 — uses X-Rite ColorMunki
- WarningTest-MixedRuns @ 2026-04-14T10:00:00 — uses X-Rite ColorMunki

Warning — missing cube colours. These runs are missing one or more of the eight cube corners, so their cube-corner figures are less meaningful:

- WarningTest-MixedRuns @ 2026-03-03T10:00:00 — missing Cyan, Magenta
- WarningTest-MixedRuns @ 2026-04-28T10:00:00 — missing Cyan, Magenta

How to read this report

This report compares what your instrument measured against the chart's design colours (the reference values the chart was built from). Every number is a colour difference (ΔE_{00}): 0 is a perfect match, 1–2 is barely visible, and 10 or more is clearly different.

- Colour accuracy — the ΔE_{00} across the patches, split so you can see the bulk of the chart (all patches and the best 95%) apart from the few hardest patches (the worst 5%). Each metric is judged against your Pass thresholds.
- Paper white & darkest black — the brightest and deepest patches (L^*), a quick health check of your paper and maximum ink.
- Cube corners — paper white, composite black and the six primary and secondary inks. These say as much about your inks as about the instrument.

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

- A profiling chart is printed **WITHOUT** colour management (the raw print you measure to build a profile). It is not expected to match the design closely, so the ΔE can look large — that's normal. Here it is the **CHANGE** between dated reports that matters, not a single value.
- A verification chart is printed **THROUGH** your finished profile (colour management on). It **SHOULD** match the design closely, so low ΔE and passes mean the profile is still accurate; rising numbers over time tell you when it's worth re-profiling.

Because the design reference never changes, comparing dated reports of the same chart on the same printer is a clean, reliable signal of drift — ageing inks, a wandering printer, or an instrument going off. Save a report after each measurement to build that history. Screen and print colours here are approximate; the numbers come from your measurement file and are exact.

Report Results

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

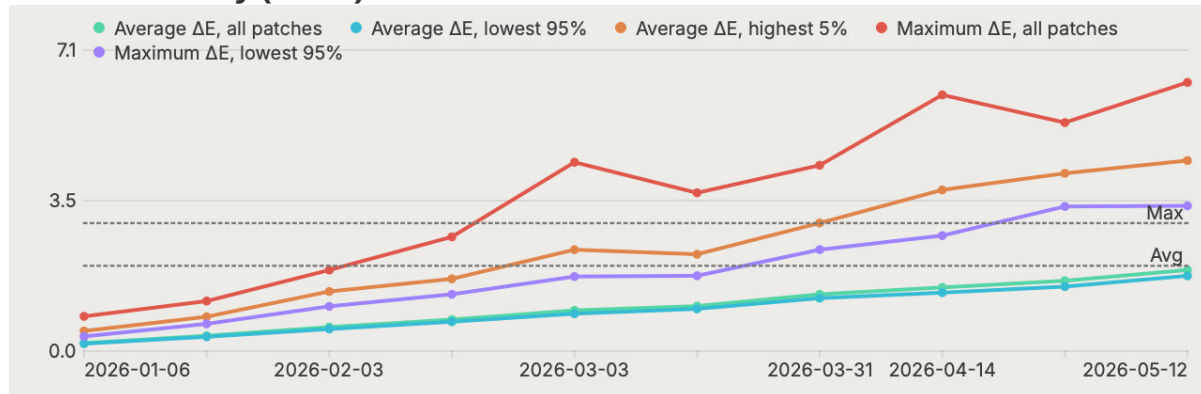
Metric	2026-01-06	2026-01-20	2026-02-03	2026-02-17	2026-03-03	2026-03-17
Average ΔE, all patches	Pass	Pass	Pass	Pass	Pass	Pass
Average ΔE, lowest 95%	Pass	Pass	Pass	Pass	Pass	Pass
Average ΔE, highest 5%	Pass	Pass	Pass	Pass	Fail	Fail
Maximum ΔE, all patches	Pass	Pass	Pass	Pass	Fail	Fail
Maximum ΔE, lowest 95%	Pass	Pass	Pass	Pass	Pass	Pass

Metric	2026-03-31	2026-04-14	2026-04-28	2026-05-12
Average ΔE, all patches	Pass	Pass	Pass	Pass
Average ΔE, lowest 95%	Pass	Pass	Pass	Pass
Average ΔE, highest 5%	Fail	Fail	Fail	Fail
Maximum ΔE, all patches	Fail	Fail	Fail	Fail
Maximum ΔE, lowest 95%	Pass	Pass	Fail	Fail

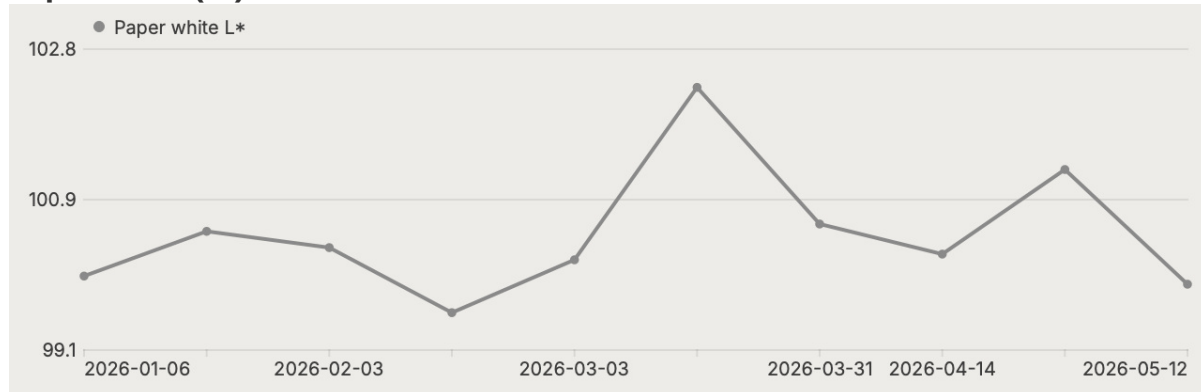
Trend over time (this printer)

A rising average or shifting white/black/colour over time points to ageing inks, printer drift, or instrument drift.

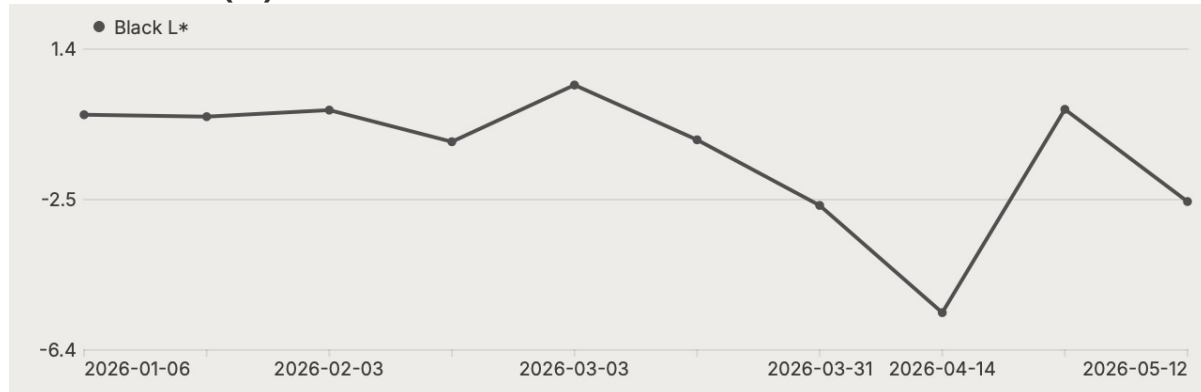
Colour accuracy (ΔE_{00})



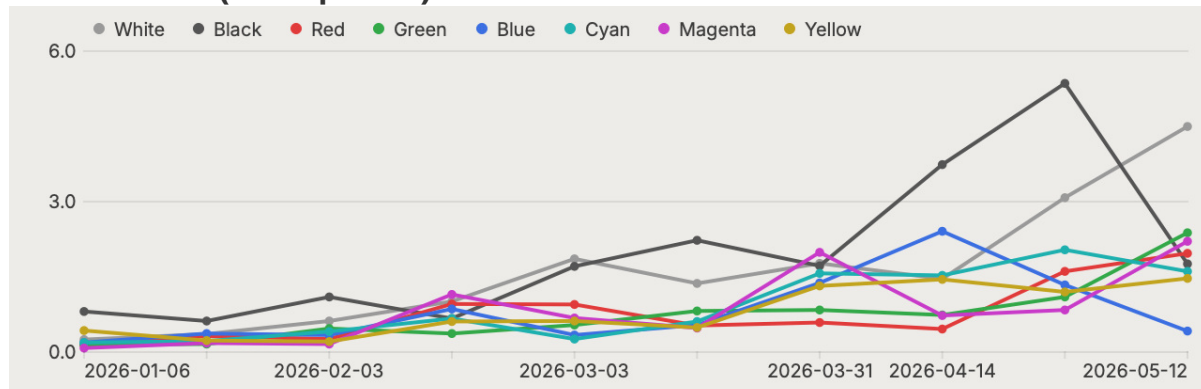
Paper white (L^*)



Darkest black (L^*)



Cube corners (ΔE_{00} per ink)



Overview of Measurement Metrics

Metric	2026-01-06	2026-01-20	2026-02-03	2026-02-17	2026-03-03	2026-03-17
Average ΔE , all patches	0.19	0.36	0.56	0.74	0.95	1.05
Average ΔE , lowest 95%	0.17	0.34	0.52	0.69	0.88	0.99
Average ΔE , highest 5%	0.47	0.81	1.40	1.69	2.38	2.27
Maximum ΔE , all patches	0.81	1.17	1.90	2.68	4.43	3.71
Maximum ΔE , lowest 95%	0.34	0.64	1.05	1.33	1.75	1.76
Spread (std. dev.)	0.10	0.17	0.28	0.36	0.52	0.47
Paper white L*	100.0	100.6	100.4	99.6	100.2	102.3
Black L*	-0.3	-0.3	-0.2	-1.0	0.5	-0.9
White ΔE_{00}	0.25	0.36	0.62	1.01	1.86	1.37
Black ΔE_{00}	0.81	0.62	1.10	0.67	1.71	2.23
Red ΔE_{00}	0.14	0.32	0.26	0.96	0.95	0.53
Green ΔE_{00}	0.15	0.16	0.47	0.37	0.54	0.82
Blue ΔE_{00}	0.19	0.37	0.34	0.86	0.34	0.54
Cyan ΔE_{00}	0.19	0.22	0.41	0.67	0.26	0.61
Magenta ΔE_{00}	0.08	0.18	0.16	1.15	0.68	0.48
Yellow ΔE_{00}	0.43	0.23	0.21	0.61	0.62	0.49

Metric	2026-03-31	2026-04-14	2026-04-28	2026-05-12
Average ΔE , all patches	1.33	1.49	1.65	1.90
Average ΔE , lowest 95%	1.24	1.37	1.51	1.76
Average ΔE , highest 5%	3.00	3.78	4.17	4.47
Maximum ΔE , all patches	4.36	6.00	5.36	6.30
Maximum ΔE , lowest 95%	2.38	2.71	3.39	3.40
Spread (std. dev.)	0.61	0.77	0.90	0.93
Paper white L*	100.7	100.3	101.3	99.9
Black L*	-2.6	-5.4	-0.2	-2.5
White ΔE_{00}	1.77	1.46	3.08	4.50
Black ΔE_{00}	1.72	3.74	5.36	1.76
Red ΔE_{00}	0.59	0.46	1.61	1.97
Green ΔE_{00}	0.84	0.74	1.10	2.38
Blue ΔE_{00}	1.38	2.41	1.34	0.42
Cyan ΔE_{00}	1.57	1.53	2.04	1.61
Magenta ΔE_{00}	1.99	0.73	0.84	2.21
Yellow ΔE_{00}	1.32	1.45	1.20	1.47

Detailed data per measurement run

Measurement run — 2026-01-06T10:00:00 — 216 patches

Profile name: WarningTest-MixedRuns

Colour accuracy (ΔE_{00} vs the chart's design)

Metric	Measured ΔE_{00}	Threshold	Result
Average ΔE , all patches	0.19	2.00	Pass
Average ΔE , lowest 95%	0.17	2.00	Pass
Average ΔE , highest 5%	0.47	2.00	Pass
Maximum ΔE , all patches	0.81	3.00	Pass
Maximum ΔE , lowest 95%	0.34	3.00	Pass
Spread (std. dev.)	0.10	—	—

Paper white & darkest black

White (I24) — L^* 100.0

Black (A1) — L^* -0.3

Cube corners (the eight ink extremes)

Corner	Expected	Measured	ΔE_{00}
White (I24)			0.25
Black (A1)			0.81
Red (H13)			0.14
Green (B7)			0.15
Blue (A6)			0.19
Cyan (B12)			0.19
Magenta (H18)			0.08
Yellow (I19)			0.43

Worst patches

Patch	Expected	Measured	ΔE_{00}	Patch	Expected	Measured	ΔE_{00}
A1			0.81	F9			0.36
G20			0.65	E23			0.36
B14			0.47	H6			0.35
E1			0.45	H15			0.34
F17			0.44	C3			0.34
I19			0.43	C2			0.34
B20			0.43	F5			0.33
D15			0.41	E19			0.32

Measurement run — 2026-01-20T10:00:00 — 216 patches

Profile name: WarningTest-MixedRuns

Colour accuracy (ΔE_{00} vs the chart's design)

Metric	Measured ΔE_{00}	Threshold	Result
Average ΔE , all patches	0.36	2.00	Pass
Average ΔE , lowest 95%	0.34	2.00	Pass
Average ΔE , highest 5%	0.81	2.00	Pass
Maximum ΔE , all patches	1.17	3.00	Pass
Maximum ΔE , lowest 95%	0.64	3.00	Pass
Spread (std. dev.)	0.17	—	—

Paper white & darkest blackWhite (I24) — L^* 100.6
 Black (A1) — L^* -0.3
Cube corners (the eight ink extremes)

Corner	Expected	Measured	ΔE_{00}
White (I24)			0.36
Black (A1)			0.62
Red (H13)			0.32
Green (B7)			0.16
Blue (A6)			0.37
Cyan (B12)			0.22
Magenta (H18)			0.18
Yellow (I19)			0.23

Worst patches

Patch	Expected	Measured	ΔE_{00}	Patch	Expected	Measured	ΔE_{00}
A23			1.17	F2			0.67
I20			0.93	D15			0.67
A11			0.88	F8			0.64
F12			0.81	G20			0.64
C3			0.80	A22			0.62
H19			0.79	A1			0.62
E16			0.76	A2			0.61
F4			0.72	F11			0.60

Measurement run — 2026-02-03T10:00:00 — 216 patches

Profile name: WarningTest-MixedRuns

Colour accuracy (ΔE_{00} vs the chart's design)

Metric	Measured ΔE_{00}	Threshold	Result
Average ΔE , all patches	0.56	2.00	Pass
Average ΔE , lowest 95%	0.52	2.00	Pass
Average ΔE , highest 5%	1.40	2.00	Pass
Maximum ΔE , all patches	1.90	3.00	Pass
Maximum ΔE , lowest 95%	1.05	3.00	Pass
Spread (std. dev.)	0.28	—	—

Paper white & darkest blackWhite (I24) — L^* 100.4Black (A1) — L^* -0.2**Cube corners (the eight ink extremes)**

Corner	Expected	Measured	ΔE_{00}
White (I24)			0.62
Black (A1)			1.10
Red (H13)			0.26
Green (B7)			0.47
Blue (A6)			0.34
Cyan (B12)			0.41
Magenta (H18)			0.16
Yellow (I19)			0.21

Worst patches

Patch	Expected	Measured	ΔE_{00}	Patch	Expected	Measured	ΔE_{00}
E6			1.90	D23			1.07
A20			1.86	C10			1.07
D15			1.73	F10			1.07
G11			1.71	I15			1.05
E19			1.63	B20			1.03
A17			1.14	A15			1.00
A1			1.10	I13			1.00
G14			1.08	G22			0.98

Measurement run — 2026-02-17T10:00:00 — 216 patches

Profile name: WarningTest-MixedRuns

Colour accuracy (ΔE_{00} vs the chart's design)

Metric	Measured ΔE_{00}	Threshold	Result
Average ΔE , all patches	0.74	2.00	Pass
Average ΔE , lowest 95%	0.69	2.00	Pass
Average ΔE , highest 5%	1.69	2.00	Pass
Maximum ΔE , all patches	2.68	3.00	Pass
Maximum ΔE , lowest 95%	1.33	3.00	Pass
Spread (std. dev.)	0.36	—	—

Paper white & darkest blackWhite (I24) — L^* 99.6Black (A1) — L^* -1.0**Cube corners (the eight ink extremes)**

Corner	Expected	Measured	ΔE_{00}
White (I24)			1.01
Black (A1)			0.67
Red (H13)			0.96
Green (B7)			0.37
Blue (A6)			0.86
Cyan (B12)			0.67
Magenta (H18)			1.15
Yellow (I19)			0.61

Worst patches

Patch	Expected	Measured	ΔE_{00}	Patch	Expected	Measured	ΔE_{00}
D8			2.68	G2			1.39
A8			2.41	B20			1.35
G22			2.12	F10			1.34
D2			1.54	A2			1.33
C9			1.51	C5			1.32
D14			1.44	C8			1.31
H5			1.43	H6			1.29
G7			1.42	B13			1.26

Measurement run — 2026-03-03T10:00:00 — 214 patches

Profile name: WarningTest-MixedRuns

Colour accuracy (ΔE_{00} vs the chart's design)

Metric	Measured ΔE_{00}	Threshold	Result
Average ΔE , all patches	0.95	2.00	Pass
Average ΔE , lowest 95%	0.88	2.00	Pass
Average ΔE , highest 5%	2.38	2.00	Fail
Maximum ΔE , all patches	4.43	3.00	Fail
Maximum ΔE , lowest 95%	1.75	3.00	Pass
Spread (std. dev.)	0.52	—	—

Paper white & darkest black
 White (I21) — L* 100.2

 Black (A1) — L* 0.5
Cube corners (the eight ink extremes)

Corner	Expected	Measured	ΔE_{00}
White (I22)			1.86
Black (A1)			1.71
Red (H12)			0.95
Green (B7)			0.54
Blue (A6)			0.34
Cyan (missing) (B6)			0.26
Magenta (missing) (G5)			0.68
Yellow (I17)			0.62

Worst patches

Patch	Expected	Measured	ΔE_{00}	Patch	Expected	Measured	ΔE_{00}
F3			4.43	G15			1.86
G13			3.10	I22			1.86
G18			2.68	H17			1.80
G20			2.41	D20			1.75
D14			2.07	G21			1.73
A15			2.06	A1			1.71
A19			1.95	D17			1.69
A20			1.91	B20			1.56

Measurement run — 2026-03-17T10:00:00 — 216 patches

Profile name: WarningTest-MixedRuns

Colour accuracy (ΔE_{00} vs the chart's design)

Metric	Measured ΔE_{00}	Threshold	Result
Average ΔE , all patches	1.05	2.00	Pass
Average ΔE , lowest 95%	0.99	2.00	Pass
Average ΔE , highest 5%	2.27	2.00	Fail
Maximum ΔE , all patches	3.71	3.00	Fail
Maximum ΔE , lowest 95%	1.76	3.00	Pass
Spread (std. dev.)	0.47	—	—

Paper white & darkest blackWhite (I24) — L^* 102.3
 Black (A1) — L^* -0.9
Cube corners (the eight ink extremes)

Corner	Expected	Measured	ΔE_{00}
White (I24)			1.37
Black (A1)			2.23
Red (H13)			0.53
Green (B7)			0.82
Blue (A6)			0.54
Cyan (B12)			0.61
Magenta (H18)			0.48
Yellow (I19)			0.49

Worst patches

Patch	Expected	Measured	ΔE_{00}	Patch	Expected	Measured	ΔE_{00}
D23			3.71	E24			1.97
F10			2.44	F11			1.94
H3			2.42	I16			1.81
A1			2.23	D13			1.77
F12			2.18	G9			1.76
D24			2.12	G4			1.75
I23			2.08	C12			1.74
F9			2.06	H10			1.73

Measurement run — 2026-03-31T10:00:00 — 216 patches

Profile name: WarningTest-MixedRuns

Colour accuracy (ΔE_{00} vs the chart's design)

Metric	Measured ΔE_{00}	Threshold	Result
Average ΔE , all patches	1.33	2.00	Pass
Average ΔE , lowest 95%	1.24	2.00	Pass
Average ΔE , highest 5%	3.00	2.00	Fail
Maximum ΔE , all patches	4.36	3.00	Fail
Maximum ΔE , lowest 95%	2.38	3.00	Pass
Spread (std. dev.)	0.61	—	—

Paper white & darkest black

White (I24) — L^* 100.7

Black (A1) — L^* -2.6

Cube corners (the eight ink extremes)

Corner	Expected	Measured	ΔE_{00}
White (I24)			1.77
Black (A1)			1.72
Red (H13)			0.59
Green (B7)			0.84
Blue (A6)			1.38
Cyan (B12)			1.57
Magenta (H18)			1.99
Yellow (I19)			1.32

Worst patches

Patch	Expected	Measured	ΔE_{00}	Patch	Expected	Measured	ΔE_{00}
E1			4.36	F5			2.52
A21			3.68	C6			2.44
H5			3.39	G1			2.40
D16			3.19	F11			2.38
D15			3.05	A7			2.31
C2			2.83	H12			2.28
F4			2.63	F21			2.27
G15			2.54	F10			2.25

Measurement run — 2026-04-14T10:00:00 — 216 patches

Profile name: WarningTest-MixedRuns

Colour accuracy (ΔE00 vs the chart's design)

Metric	Measured ΔE00	Threshold	Result
Average ΔE, all patches	1.49	2.00	Pass
Average ΔE, lowest 95%	1.37	2.00	Pass
Average ΔE, highest 5%	3.78	2.00	Fail
Maximum ΔE, all patches	6.00	3.00	Fail
Maximum ΔE, lowest 95%	2.71	3.00	Pass
Spread (std. dev.)	0.77	—	—

Paper white & darkest black

White (I20) — L* 100.3

Black (A1) — L* -5.4

Cube corners (the eight ink extremes)

Corner	Expected	Measured	ΔE00
White (I24)			1.46
Black (A1)			3.74
Red (H13)			0.46
Green (B7)			0.74
Blue (A6)			2.41
Cyan (B12)			1.53
Magenta (H18)			0.73
Yellow (I19)			1.45

Worst patches

Patch	Expected	Measured	ΔE00	Patch	Expected	Measured	ΔE00
G4			6.00	I8			3.23
C8			4.63	F1			2.92
G1			4.03	F9			2.88
F10			3.92	C24			2.71
A1			3.74	H6			2.64
D1			3.56	A21			2.59
D15			3.38	C10			2.56
A9			3.27	F6			2.55

Measurement run — 2026-04-28T10:00:00 — 214 patches

Profile name: WarningTest-MixedRuns

Colour accuracy (ΔE_{00} vs the chart's design)

Metric	Measured ΔE_{00}	Threshold	Result
Average ΔE , all patches	1.65	2.00	Pass
Average ΔE , lowest 95%	1.51	2.00	Pass
Average ΔE , highest 5%	4.17	2.00	Fail
Maximum ΔE , all patches	5.36	3.00	Fail
Maximum ΔE , lowest 95%	3.39	3.00	Fail
Spread (std. dev.)	0.90	—	—

Paper white & darkest black
 White (I20) — L^* 101.3

 Black (A1) — L^* -0.2
Cube corners (the eight ink extremes)

Corner	Expected	Measured	ΔE_{00}
White (I22)			3.08
Black (A1)			5.36
Red (H12)			1.61
Green (B7)			1.10
Blue (A6)			1.34
Cyan (missing) (B6)			2.04
Magenta (missing) (G5)			0.84
Yellow (I17)			1.20

Worst patches

Patch	Expected	Measured	ΔE_{00}	Patch	Expected	Measured	ΔE_{00}
A1			5.36	F9			3.52
E20			4.95	D22			3.42
F5			4.75	H5			3.42
A8			4.68	F1			3.39
G24			4.45	G2			3.36
B11			3.92	I22			3.08
D14			3.81	C7			2.94
D19			3.55	F10			2.93

Measurement run — 2026-05-12T10:00:00 — 216 patches

Profile name: WarningTest-MixedRuns

Colour accuracy (ΔE00 vs the chart's design)

Metric	Measured ΔE00	Threshold	Result
Average ΔE, all patches	1.90	2.00	Pass
Average ΔE, lowest 95%	1.76	2.00	Pass
Average ΔE, highest 5%	4.47	2.00	Fail
Maximum ΔE, all patches	6.30	3.00	Fail
Maximum ΔE, lowest 95%	3.40	3.00	Fail
Spread (std. dev.)	0.93	—	—

Paper white & darkest black

White (H12) — L* 99.9

Black (A1) — L* -2.5

Cube corners (the eight ink extremes)

Corner	Expected	Measured	ΔE00
White (I24)			4.50
Black (A1)			1.76
Red (H13)			1.97
Green (B7)			2.38
Blue (A6)			0.42
Cyan (B12)			1.61
Magenta (H18)			2.21
Yellow (I19)			1.47

Worst patches

Patch	Expected	Measured	ΔE00	Patch	Expected	Measured	ΔE00
G2			6.30	C10			3.66
E2			5.62	H19			3.65
A8			5.26	B2			3.44
F17			4.62	F2			3.40
I24			4.50	A14			3.36
B20			4.25	G12			3.33
B11			4.16	I4			3.26
H17			3.67	D15			3.25