

epoS

Multidisciplinary
Innovation

Fastness Assesstment Device For Textiles



WHAT IS **COLIMAGE FA**?

Utilizing image processing technology, COLIMAGE FA enables objective evaluation of textile color fastness.

It performs measurements in accordance with the “TS EN ISO 105-A11*: Determination of Colour Fastness Grades by Digital Imaging Techniques” standard. In this way, it ensures accurate results in textile color fastness by preventing errors such as:

- human eye subjectivity,
- inappropriate or expired light sources,
- incorrect placement of samples in the light cabinet,
- use of faded or contaminated gray scales,
- evaluation of samples unsuitable for measurement.



Colimage FA is the first of its kind worldwide, entirely developed by our team, from design to software. Utilizing image processing technology for measurements, it delivers highly accurate color fastness results on all types of fabrics.

***ISO 105-A11: Determination of Colour Fastness Grades by Digital Imaging Techniques**

Color Fastness to Washing
(ISO 105-C06)

Color Fastness to Rubbing
(ISO 105-X12)

Color Fastness to Ironing
(ISO 105-X11)

Color Fastness to Peroxide Bleaching
(ISO 105-N02)

Color Fastness to Hypochlorite Bleaching
(ISO 105-N01)

**Determination of Head-Tail and
Edge-Center-Edge Color Differences**

Color Fastness to Artificial Light
(ISO 105-B02)

Color Fastness to Industrial Atmospheres
(ISO 22775)

HOW IT WORKS **COLIMAGE FA**?

Samples are evaluated in a controlled, consistent, and standardized manner in accordance with the ISO 105-A11 standard.

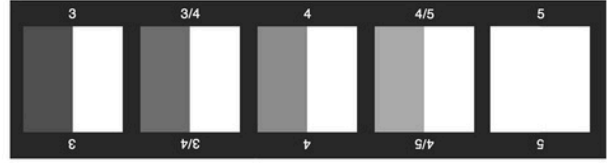
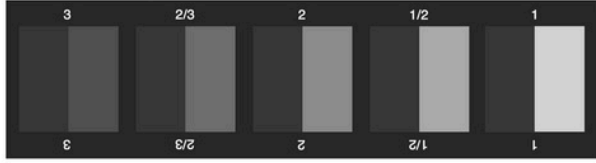
Thanks to its simple interface, color difference assessments between batches and all color fastness evaluations are completed in seconds.

Staining in multi-fiber absorbent pads is automatically detected in sequence for acetate, cotton, nylon, polyester, acrylic, and wool fibers, allowing for simultaneous evaluation.

COLIMAGE FA, quickly performs fading assessments for dyed or printed fabric samples. Thanks to fabric frames of different sizes, the fastness values of desired colors in printed

WITH COLIMAGE FA...

The staining and fading degrees of your samples are evaluated with high accuracy. (The high margin of error in subjective assessments using gray scales - ISO 105 A03 and ISO 105 A02 - is eliminated.)



Inappropriate sample measurements are prevented.
(This avoids issues arising from incorrect rubbing, ensuring that the assessment of the rubbing pad or the poorly stained multi-fiber absorbent pad is not compromised.)



Color Fastness to Water
(ISO 105-E01)

Color Fastness to Perspiration
(ISO 105-E04)

Color Fastness to Sea Water
(ISO 105-E02)

Color Fastness to Chlorinated Water
(ISO 105-E03)

Color Fastness to Dry Cleaning
(ISO 105-D01)

Potential of Phenolic Yellowing
(ISO 105-X18)

Color Fastness to Saliva
(ISO 53160-1)

Color Fastness to Perspiration
(ISO 105-E04)

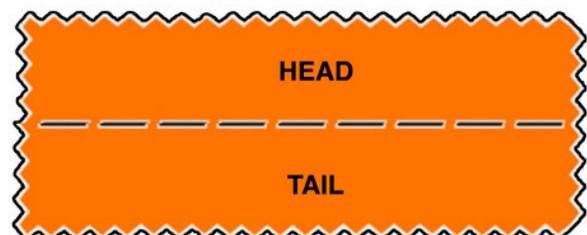
Sonuç / Result : 3-4



Sonuç / Result : 3.54

It provides the opportunity for detailed examination.

(The magnifying glass icon on the device allows for a detailed view of the fastness values.)



Color differences between batches are monitored.

(For production control purposes, the assessment of head-tail and wing differences between batches/lot numbers can be easily performed and reported.)



Measurement on All Fabric Types

Fast and precise color measurement on all fabric types with Colimage FA's advanced image processing technology.



Revolution in Color Management

Ensuring color fastness, ΔL , Δa , Δb , ΔC , ΔH , ΔE values and quality sustainability



On/Off Tone

Color evaluation in accordance with CIE 2000 2:1 and 1:1, CMC 2:1 and 1:1, CIE 1976, CIE 1994

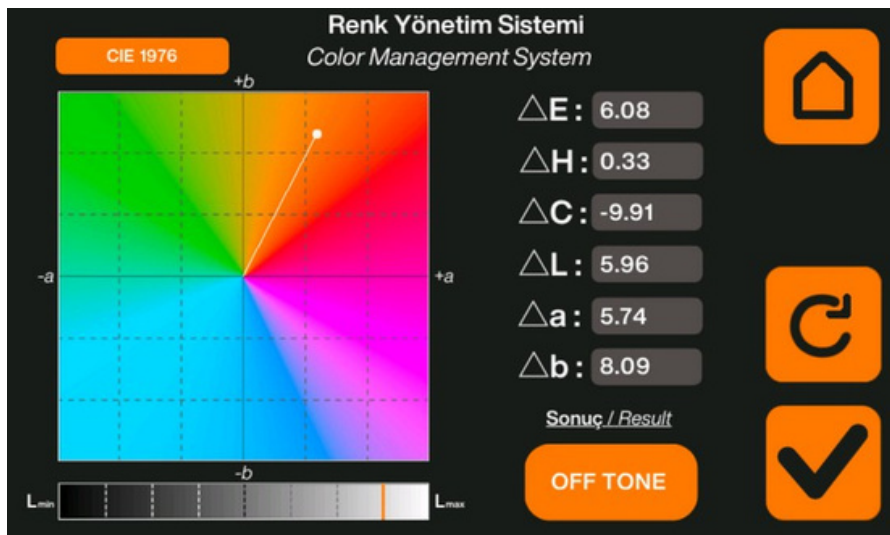
Measurement Independent of Fabric Type, Texture, and Colors

Rapid Measurement

Capability for Fastness Measurement

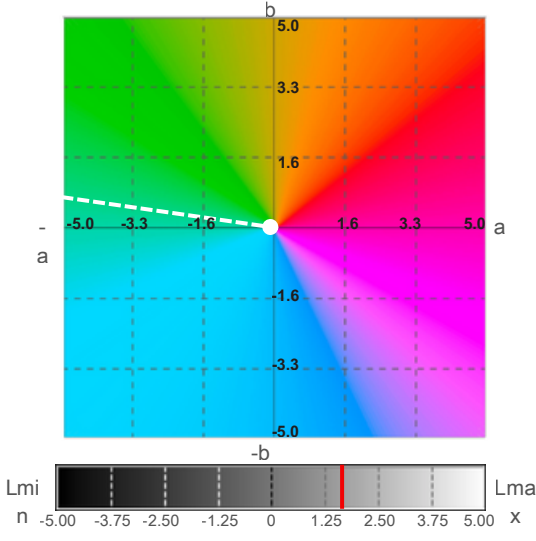
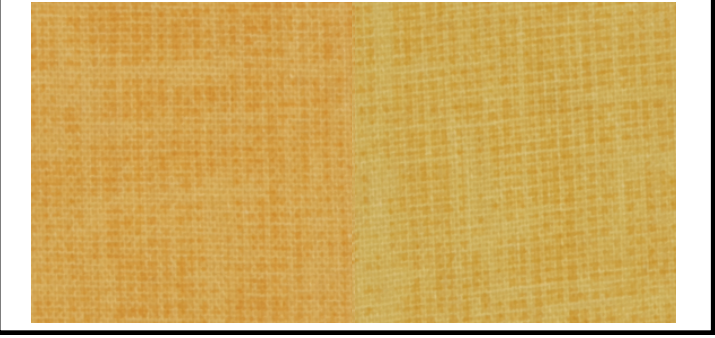
Accurate Evaluation on Non-Uniform Colors

Digital Reporting – Ability to Create a Visual Archive



- Visualization on a coordinate plane
- Identifying color changes
- Accurate and reliable color assesment

Test Tarihi - Test Date	02.06.2025 / 12:54:07
Müşteri Adı - Customer Name	EPS Teknoloji
Numune/Parti Adı - Sample/Lot Name	TEST

Renk Değişimi - Color Shift	Dijital Görseller - Digital Images
	
Referans - Reference	Numune - Sample

Test Sonuçları ve Sınır Değerleri

Test Results and Limit Values

$\Delta E / \Delta E_{set}$	4.42 / 5.00	$\Delta L / \Delta L_{set}$	1.49 / 5.00
$\Delta H / \Delta H_{set}$	6.08 / 20.00	$\Delta a / \Delta a_{set}$	6.22 / 5.00
$\Delta C / \Delta C_{set}$	1.59 / 20.00	$\Delta b / \Delta b_{set}$	0.87 / 5.00
ΔE Methodu - ΔE Method	Gri Skala - Grey Skale	Sonuç - Result	
CIEDE2000	3.12 - [3]	Off - Tone	

COLIMAGE FA REPORTING SYSTEM

The test report provided by COLIMAGE FA enables assessments to be recorded quickly and systematically.

- Images of the analyzed samples are presented to the user in the relevant test sections of the report. This helps prevent misleading changes over time (such as fading, wear, or loss) in the measured fabric samples.

- Results for samples or measurements that are unsuitable for evaluation are highlighted in red on the report. This ensures that the relevant fastness tests are conducted in compliance with standards.

- The conducted assessments are presented to the user at the end of the test, as shown in the sample test report. This not only saves time but also prevents erroneous documentation. Test reports can be instantly printed or saved to a computer USB or Wi-Fi.



COLIMAGE FA



COLOR FASTNESS TEST REPORT

TEST DATE	
CUSTOMER NAME	
SAMPLE NAME	

COLOR FASTNESS	IMAGES/RESULTS	
Color Fastness to Rubbing	Dry	Wet
Color Fastness to Washing	Lekeme	Renk Değişimi
	CA CO PA PES PAN WO	Orjinal Kumaş Solma
Color Fastness to Perspiration (Acid)		
	4 4 4-5 4 2-3 2-3	
Color Fastness to Perspiration (Alkali)		
	5 5 5 5 5 5	
Color Fastness to Dry Cleaning		
	4-5 4-5 4-5 4-5 4-5 4-5	

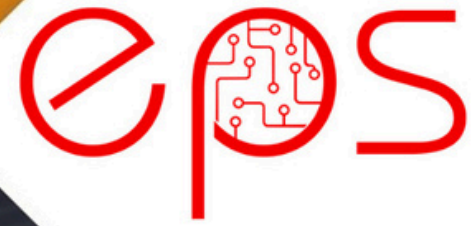


PRODUCTION COLOR CONTROL TEST REPORT

TEST DATE	14.05.2024 - 16:57:47					
CUSTOMER NAME	DEMO					
PARTİ ADI/NO	BAŞ	SON	REFERANS	SOL KENAR	ORTA	SAĞ KENAR
Parti (Değir)1						
Parti (Değir)2						
Parti (Değir)3						
Parti (Değir)4						
Parti (Değir)5						
Parti (Değir)6						
Parti (Değir)7						
Parti (Değir)8						

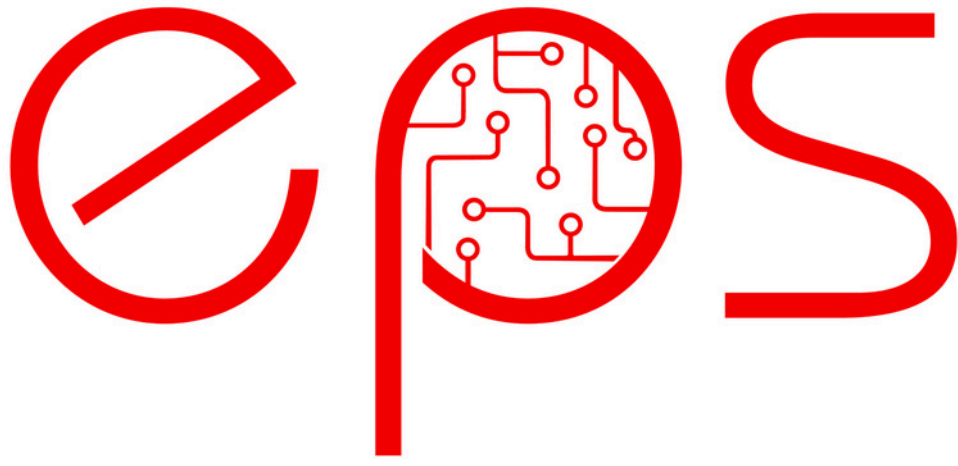


Benefits of COLIMAGE FA In Establishing a Common Language with Your Customers:



- Quality Standardization
- Shift Work Efficiency
- Personnel Cost and Productivity
- Simple Interface and Ease of Use
- Integrated Image Reporting
- Fast and Reliable Results
- Digitalization in Reporting
- Sustainability in Quality
- Numerical Objective Evaluation
- 24/7 Technical Support





Multidisciplinary Innovation



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Colimage FA color fastness device for textiles has been produced by EPS Teknoloji in Turkey.

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