luca'bsdf

The objective hair shine measurement system

The luca'bsdf allows professional and extensive measurement of hair tresses in view of their visual appearance. The test system enables the user to objectively assess the influence of hair care products or environmental stress on the appearance of human hair. With luca'bsdf time- and resource intensive panel studies with probands are a thing of the past. The tress is illuminated with polarized light and the light reflected is separated from the scattered underground by means of polarization filters.

Besides the assessment of the shine level according to the equation of Reich/Robbins another indicator is the combing level of the hair tress. The color of the hair tresses is measured spatially resolved with the luca'color camera by means of the tristimulus approach. Numeric values are generated for the sparkle on the surface of the hair by means of a dynamic illumination and evaluation of the sparkle points. The client software enables the individual configuration of the measuring process and provides the measurement data in a spreadsheet for easy processing.

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Measuring method

opsira luminance camera luca'color is the principal component of the test system. The robust case reduces the environmental effects to a minimum and moreover enables easy operation of the measurement system. A thermostat inside the test facility provides for constant environmental conditions during the measurement process. This combined with high-quality components enables very high repeat accuracy of more than 98%.

Measuring quantities

Shine	relative shine value
Parallelism of hair fibers	relative parallelism value
Color	L*a*b*, Lab99 (further color systems possible)
Glitter	number of glitter points with short angular lifetime / ROI
Repeat accuracy	> 98 %
Duration of total measurement	approx. 1 min

Specifications

Dimensions	l 760 mm x w 1000 mm x h 760 mm
Weight	approx. 40 kg
Computer system	Win7-PC (optional component)
Current supply	230 VAC (optional 115 VAC)

Typical values of a standard configuration. Changes are possible depending on the system configuration. Variations to the technical data may occur due to the permanent improvement and development of our measurement systems. We do not assume any juristic responsibility or liability whatsoever for such variations or misprints. The General Terms and Conditions of Trade of the opsira GmbH are valid. luca'bsdf · GB · V00130513 · © opsira GmbH · www.koellekunter.de