sheen
a brand of Elektron Technology

Appearance

Spectromatch Gloss

This new portable spectrophotometer combines the latest and most advanced technology in micro-electronics and colorimetry.

While providing high precision measurement based on 10nm spectral resolution in agreement with many other high-end spectrophotometers, it offers excellent performance in many applications, from laboratory analysis to on-site quality control.

Spectromatch 45/0°

Colour + Gloss Measurement in One Unit

For many products, the colour effect can be influenced by the variation of gloss.

Spectromatch Gloss measures both attributes using the built-in 60° glossmeter, and displays colour and gloss data simultaneously. This unique feature helps to efficiently identify the potential causes of mismatch.

Spectromatch d/8°

Long Term Stability

Spectromatch Gloss is available either in sphere d/8° or 45/0° geometries, equipped with an exclusive illumination system. This advanced technology provides highly reliable temperature independent measurement and long term stability, with 3-month calibration interval.

elektron technology

Sheen Instruments
info@sheeninstruments.com
www.sheeninstruments.com

Broers Building
JJ Thomson Avenue
Cambridge CB3 0FA UK

Tel: +44 (0)1223 371 000

Appearance Spectromatch Gloss

Excellent Repeatability on Textured Surfaces

The d/8° version specially offers a patented technique to eliminate influences caused by measuring direction: an exclusive built-in white hemisphere enhances light distribution and ensures optimum circumferential illumination, thus providing an excellent repeatability, particularly for measurements of textured surfaces.

Key Features

Exclusive illumination system:

- Excellent short & long term stability
- Long calibration intervals (every 3 months)
- Temperature stable measurement 10° – 40°C (50° – 104°F)
- Simple maintenance

Available geometries:

- 45/0° or d/8° SPIN, Ø11mm (0.43″) aperture
- Buit-in 60° glossmeter, 5 x 10mm (0.2″ x 0.4″) aperture for both versions
- Output to PC (Easy-link software included)
- Guarantee: 10 years on light source, 2 years on the instrument

Truly Portable

Powerful internal data processing, ease of use and compact design bring maximum reliability and flexibility to your daily operations.

Performance

Colour

- Spectral range: 400-700 nm, 10nm interval
- Precision/Repeatability: 0.01 ΔE*, 1σ (10 measurements on white tile)
- Inter-instruments agreement: 0.2 ΔE*, 1σ (on 12 BCRA tiles)
- Colorimetric systems: CIELab/Ch, Lab(h), XYZ, Yxy
- Differences: ΔE*, ΔE(h), ΔECMC, ΔEFMC2, ΔE94, ΔE99, ΔE2000, and ΔL*a*b*, ΔL*C*h* and Δ of other components
- Indices:

- YIE313, YID1925, WIE313, CIE, Berger
- Opacity, Metamerism
- Colour strength

- 13 illuminants: A, C, D50, D55, D65, D75, F2, F6, F7, F8, F10, F11, UL30
- Observer: 2° or 10°

Gloss 60°

- Range: 0-180GU (Gloss Unit)
- Repeatability/reproducibility: 0.2/1.GU
- Measuring area: 5 x 10mm (0.2″ x 0.4″)

General

- Memory: 200 standards, 999 samples
- Automatic functions: colour search, store, average
- Pass/Fail function, with adjustable tolerances
- Programmable user configuration: limited functions for routine check, or full capability
- Lightweight: 500 gr.
- Large display 60 x 30 mm (2.4″ x 1.2″): colour & gloss data, spectral curves, auto switch-off
- Languages: English, French, German, Italian, Spanish, Japanese
- Energy efficiency: ± 8,000 measurements / battery set
- Operating temperature: 10°C – 42°C (50°F – 110°F)
- Humidity: < 85% rH, non condensing/35°C (95°F)

Sheen Instruments
info@sheeninstruments.com
www.sheeninstruments.com

Broers Building
JJ Thomson Avenue
Cambridge CB3 0FA UK

Tel: +44 (0)1223 371 000

Appearance Spectromatch Gloss

Professional Documentation

Easy-link software included for:
- download of colour data, differences, spectral data to Windows Excel, upload standard values from PC - QC report with trends graphs showing customised tolerancing - instant and efficient documentation with prepared templates (Lab plot, data, trends graphs etc.)

Colour + Gloss Measurement in One Unit

For many products, the colour effect can be influenced by the variation of gloss.

Spectromatch Gloss measures both attributes using the built-in 60° glossmeter, and displays colour and gloss data simultaneously. This unique feature helps to efficiently identify the potential causes of mismatch.

Long Term Stability

Spectromatch Gloss is available either in sphere d/8° or 45/0° geometries, equipped with an exclusive illumination system. This advanced technology provides highly reliable temperature independent measurement and long term stability, with 3-month calibration interval.

Special Specifications for Automotive Industry

In order to guarantee an uniform appearance to interior car components from various suppliers, very tight tolerances are specified.

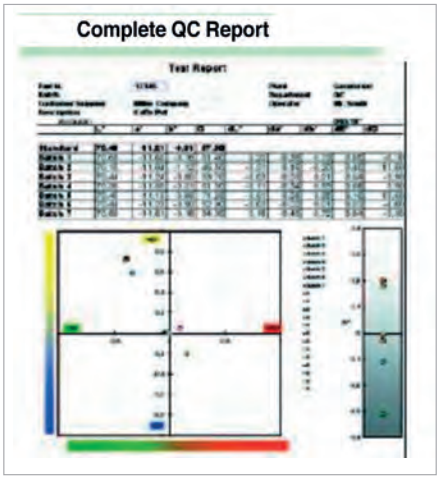
Typical range for colour Δ L*a*b*= ± 0.5, and for gloss < 5 GU = ± 0.3 to 0.5.

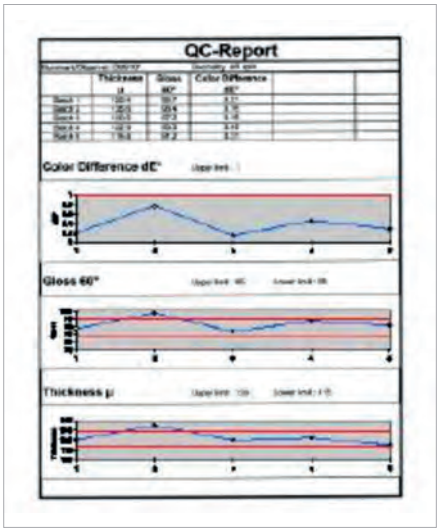
Sheen Instruments can supply upon request special series of Spectromatch (d/8 & 45/0) and Glossmaster to meet these stringent requirements.
They offer 60° gloss measurement with outstanding specifications:

Spectromatch /gloss 60° (0-10 GU): repeatability ± **0.1**, reproducibility ± **0.5** GU

Tri-Glossmaster 20-60-85° & **Glossmaster** 60°: repeatability ± **0.1**, reproducibility ± **0.2** GU

All these special units can be ordered with additional 0-10 GU gloss standard. Please consult with Sheen Instruments.





Sheen Instruments
info@sheeninstruments.com
www.sheeninstruments.com

Broers Building
JJ Thomson Avenue
Cambridge CB3 0FA UK

Tel: +44 (0)1223 371 000

Appearance Spectromatch Gloss

Ordering References

Cat No	Geometry	Measuring area, Sq (mm)
281	45/0°	11
282	d/8° - SPIN	11
Note: For particular applications, special geometries of Micromatch version are available:		
181/3	Micromatch plus 45/0°, aperture 4mm (0.16˝)	
185	Micromatch plus 45/0°, glass-sealed aperture 20mm ϕ (0.8˝)	
Optional Acessories		
BG4401	USB adapter	
190	MatchMaster, colour matching software	

Standards

	Colour	Gloss
ASTM	D1925, 2244, E308, E313, 1164	D523, 2457
DIN	5033, 5036, 6174	67530
ISO	7724	
EN ISO		7668
DIN ENI SO		2831

Note
Owing to continuous development, we reserve the right to introduce improvements and modify specifications without prior notice.

Sheen Instruments
info@sheeninstruments.com
www.sheeninstruments.com

Broers Building
JJ Thomson Avenue
Cambridge CB3 0FA UK

Tel: +44 (0)1223 371 000