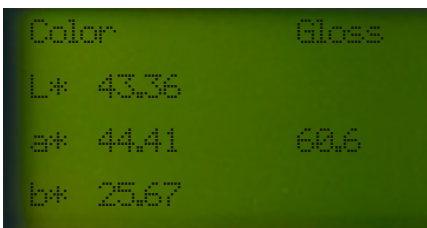




Total Appearance Control – color and gloss in one unit.

The overall appearance of a product is influenced by color and gloss. A sample of the same color but higher gloss level is visually perceived darker and more saturated than a low gloss sample. In order to get a uniform appearance, both attributes need to be controlled. The spectro-guide is unique as it measures both attributes simultaneously. Thus, the cause of a mismatch can be clearly defined in any situation.

- Color (45/0 or sphere) and 60° gloss are displayed at the same time
- In compliance with international specifications - DIN approval for gloss measurement
- Tolerances for color and gloss allow quick pass/fail decisions in production



Easy to use and handle

The spectro-guide makes quality control simple and secure - even for color beginners. Thanks to the intuitive pulldown menu and the four cursor button operation quality control has never been easier.

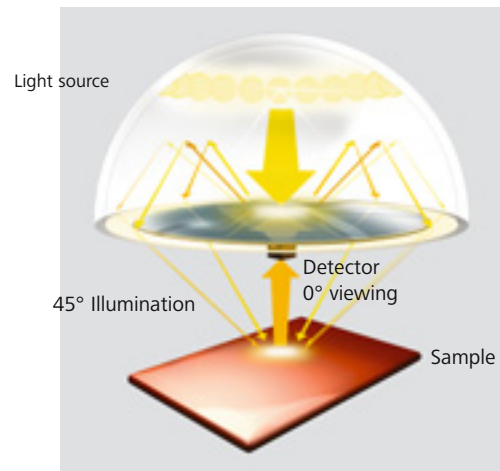
- Light weight and small size - weighs only 500 g
- Ergonomic design - can easily measure difficult to access areas
- Designated buttons for standard and sample readings
- Customization of the display to your needs



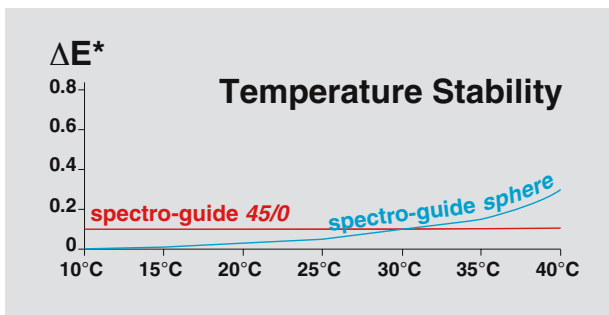


Highly repeatable on textured surfaces

The key criterion for a 45/0 instrument is a circumferential illumination. spectro-guide 45/0 is using a unique, patented measurement principle to achieve a 100 % circumferential illumination. A white coated hemisphere acts as a mixing chamber and guarantees completely uniform illumination. Thus, any influence of measurement direction is eliminated and excellent repeatability even on highly textured surfaces is guaranteed.



Measurement principle spectro-guide 45/0
True circumferential illumination for best repeatability on textured samples.



Always precise color values

With the new spectro-guide you can measure any color: dark - brilliant - steep reflectance curves. The 10 nm spectral resolution not only ensures highly precise color results, but also an excellent agreement with competitive color instruments - even bench-top units.

Additionally, a patented illumination control provides temperature independent results - also in extreme conditions.

Always ready to use

Economical and reliable operation of a color instrument is often taken as given. spectro-guide guarantees superior accuracy for many years and low maintenance efforts.

- Long lasting standard AA batteries - up to 8,000 readings per set
- 10 years warranty on the lightsource - no lamp changes needed
- Rugged and compact design
- Stable, long-term calibration - needed only every three months



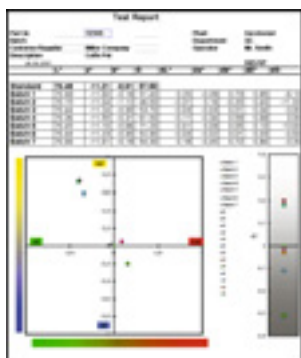
Professional Documentation with easy-link

ISO 9000 requires documentation of color data. easy-link, included with spectro-guide, offers all of the necessary tools:

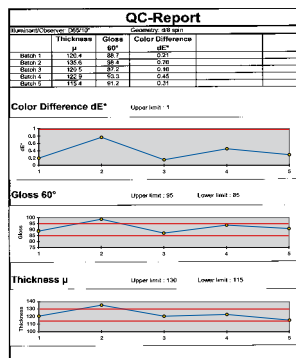
- Easy and direct data transfer from the instrument to Excel®
- Predefined QC-report templates (Lab-plot, trend graphs, etc.) are included
- All relevant quality data can be easily summarized in one report: Color – Gloss – Film Thickness
- Easy management of your standards



Complete color QC-report



Trend analysis: Color – Gloss – Film Thickness



Easy Management of your Standards

Manual entry of standards

If you have to match colors and the physical sample is no longer available, you can easily enter the spectral data in Excel®. The standards can then be transferred to spectro-guide – all within a second.

Back-up your standard data

For safety reason, it is recommended to store your complete database of standards on the PC. They can be downloaded with the individual tolerances to spectro-guide – whenever needed.

Establish your tolerances

Use the auto tolerancing feature to easily set-up your production window. Measure at least 20 visually accepted production trials, transfer the readings to Excel® and have the tolerances automatically calculated for you – saving time and headaches.

Ordering Information

Cat. No.	Description
E-4545	BYKWARE easy-link

Hardware Requirements:

Operating system Windows® 95 or higher
 Microsoft Excel® 97 or higher, including VBA – Visual Basic for Applications
 Free serial interface



The new micro-TRI-gloss also transfers gloss values to easy-link, see page 17.

Training spectro-guide

BYK-Gardner offers you more than just an instrument. We assist you in analyzing your color readings, understanding how to set tolerances and as a result be able to use the spectro-guide to save time and money and at the same time improve your quality. Therefore, the instrument comes with a half day training course including:

1. Color Theory

- The building blocks of color: illuminant, observer, object
- Color differences with interpretation

2. Operation and Software Training

- Measure samples and standards by single and average readings
- Save, recall and delete measurements
- Change illuminants, observers, color scales
- Direct data transfer to Excel®



Ordering Information

Cat. No.	Description
E-6834	spectro-guide <i>sphere</i> gloss
E-6801	spectro-guide <i>45/0</i> gloss
EE-6800	Extended Warranty one year additional

Comes complete with:

spectro-guide
 Black calibration standard
 White calibration standard with certificate
 Green checking reference
 High gloss standard
 Sample area locator
 BYKWARE easy-link
 Interface cable
 4 x AA batteries
 Hand strap
 Carrying case
 Operating instructions
 Color theory folder
 Training



For Calibration
 Services
 see page 173

Standards

	Color	Gloss
ASTM	D 2244, E 308, E 1164	D 523, D 2457
DIN	5033, 5036, 6174	67530
	ISO 7724	EN ISO 7668 DIN EN ISO 2813

Technical Specifications

Color Geometry	Gloss Geometry	Color Aperture	Gloss Aperture
d/8 spin	60°	11 mm	5 x 10 mm
45/0	60°	11 mm	5 x 10 mm
Color			
Spectral Range		400 - 700 nm	
Spectral Interval		10 nm	
Repeatability		0.01 ΔE^* , 1 σ^1	
Reproducibility		0.2 ΔE^* , 1 σ^2	
Color Systems		CIELab/Ch; Lab(h); XYZ; Yxy	
Color Differences		ΔE^* ; $\Delta E(h)$; ΔE_{FMC2} ; ΔE_{94} ; ΔE_{CMC} ; ΔE_{99} ; ΔE_{2000}	
Indices		YIE313; YID1925; WIE313; CIE; Berger; Color strength; Opacity; Metamerism	
Illuminants		A; C; D50; D55; D65; D75; F2; F6; F7; F8; F10; F11; UL30	
Observer		2°; 10°	
Gloss			
Gloss Range		0 - 180 GU ³	
Repeatability		0.2 GU ³	
Reproducibility		1.0 GU ³	
Memory		200 Standards, 999 Samples	
Languages		English; German; French; Italian; Spanish; Japanese	
Power Supply		4 AA alkaline; NiCd or MH batteries	
Operating Temperature		10 °C - 42 °C (50 °F - 110 °F)	
Humidity		< 85% relative humidity, non-condensing / 35 °C (95 °F)	
Dimensions		9.5 x 8 x 18 cm (3.7 x 3.2 x 7 in)	
Weight		approx. 0.5 kg (approx. 1.1 lbs)	

¹10 consecutive measurements on white tile

³Gloss Unit

²average on 12 BCRA II tiles