

Novo-Gloss IQ Image Quality

Conforms to the following International standards:
BS EN ISO 2813, ASTM D523, ASTM D2457, DIN 67530, JIS 8741

The **Novo-Gloss Image Quality** uses patented technology to measure the complex interaction of a surface with a light. The instrument profiles complete specular reflectance and calculates gloss, peak specular reflectance, Distinctness of Image (DOI) and Reflection Haze.



Complete Characterisation of Specular Appearance

- Gloss
- Specular Reflectance
- Haze
- Distinctness of Image

Understand Surface Quality

The Novo-Gloss IQ characterises reflective properties in a way that simulates the perception of a human observer, giving a detailed understanding of surface quality. Micro-structures on the surface of a high gloss surface can cause a reflected image to bloom and become indistinct, longer wavelength surface ripples known as orange peel can also distort this image. The Novo-Gloss IQ uses the complete specular reflectance data to calculate; Gloss, Peak Specular Reflectance, Haze and Distinctness of Image values.

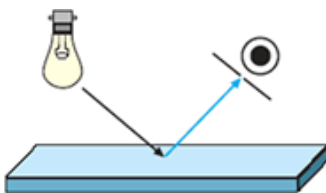
Traditional specular instruments use optical masks and simple diodes to measure specified parts of the reflected image; the Novo-Gloss IQ profiles ALL specular reflectance, measuring at +/- 6° from the specular angle at 20° and 60° geometries.

Novo-Gloss IQ vs. Gloss, Haze and DOI Meters

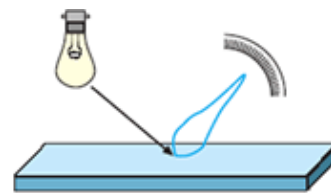
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Dual Angle Instrument

The Novo-Gloss IQ characterises surfaces at 20° and 60° geometries giving it superb resolution and the flexibility to accurately measure any surface from matt to mirror finish.



Traditional Gloss Meter measures the amount of reflective light at a set arc



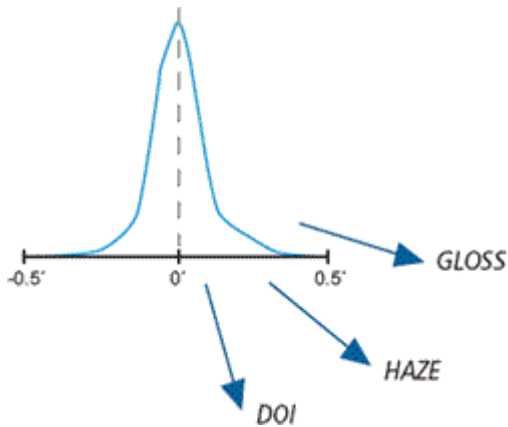
The Novo-Gloss IQ profiles the reflectance across the specular range



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Goniophotometric Profile

Using the Novo-Soft IQ and the supplied USB data cable, the user can overlay and compare the specular reflectance curves of similar materials; this graphical fingerprint can highlight the most subtle variations in surface quality.



Gloss Measurement Verified to Existing Standards

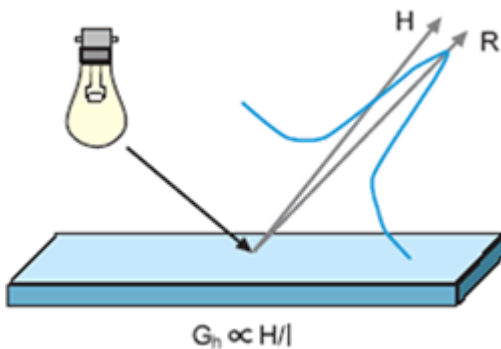
The Novo-Gloss IQ operates within the strict angular tolerances detailed in international standards such as ASTM D523 & ISO 2813 therefore gloss values obtained on flat surfaces are indistinguishable from traditional instruments.

More Accurate Gloss Measurement

The Novo-Gloss IQ array technology makes it more accurate and repeatable than a traditional gloss meter throughout the gloss range. Traditional gloss-meters must be placed on a completely flat surface as slight variations in sample curvature or instrument placement will result in large errors, the Novo-Gloss IQ automatically adjusts for curvature or positioning errors and calculates true gloss values.

Peak Specular Reflectance

The instrument calculates the peak specular reflectance of a surface, a value that is independent of sample curvature, positioning, Haze and DOI effects.

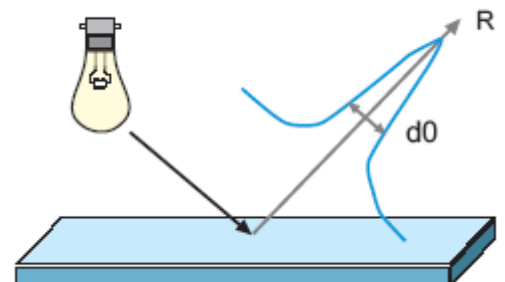


Haze

Reflection Haze is defined as the spread of the specular component of reflected light from a glossy surface. Surface Haze is often caused by micro-structures on the top surface of the glossy material and is observed as “blooming” or “milky halo” around the reflected image. This characteristic is undetectable with a traditional gloss meter but is often associated with a drop in the perceived quality of a sample.

Distinctness of Image (DOI)

The DOI of a material determines how clearly an observer can discern a reflected image in its surface. Human perception associates “high quality” to surfaces that demonstrate excellent reflective properties, especially ones which show a “deep”, “clear” and “crisp” glossiness. By measuring DOI with Novo-Gloss IQ the user can objectively determine the reflective properties of high quality materials. The DOI of a surface is affected by gloss, haze and surface distortions such as polish marks and orange peel.



Gloss Specifications

Dual Angle Operation

20° High Gloss Surfaces such as Automotive, polished metals and plastics

60° Universal Angle – All gloss finishes

- Resolution 0.1GU
- Repeatability 0.1GU
- Reproduceability 0.5GU

Standards : Verified to ASTM D523, ISO 2813 ASTM D2457, DIN 67530, JIS 8741

Haze Specifications

Dual Angle Operation

Measures Haze and RSPEC at 20 and 60 Degrees

- Resolution 0.1HU
- Repeatability 0.2HU
- Reproduceability 0.5HGU

Peak Specular Reflectance

- Resolution 0.1%
- Repeatability 0.2%
- Reproduceability 0.5%

Standards : ASTM E430

DOI Specification

Dual Angle Operation

Measures DOI at 20 and 60 Degrees

- Resolution 0.1%
- Repeatability 0.2%
- Reproduceability 0.5%

Standards : ASTM E430

Goniophotometric Analysis

Displayed/Analysed in Novo-Soft IQ

Dual Angle Operation

- Range 14-26°
- Range 54-66°
- Resolution 0.05°
- Repeatability 0.2%
- Reproduceability 0.5%

Accessories

- Integrated BAM traceable calibration standard.
- Additional BAM traceable mirror finish standard.
- Manual
- Protective instrument case
- 4 x AA high power batteries
- USB Data Cable
- Novo-Soft IQ software CD
- Screwdriver

Extras

- Free Extended
- Free Light Source Warranty
- UKAS Calibration
- Calibration and Service



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