



Starna scientific
'Setting the Standard'

Quality Assurance in the Analytical Laboratory

Starna Rhodamine Quantum Counter

Starna Rhodamine B Solution Cell

Purpose

This design is used by several instrument manufacturers as a quantum counter to determine spectral response factors, and thereby calculate 'corrected' fluorescence spectra.

Description and Discussion

High concentration of Rhodamine B in an organic solvent. The solution is permanently heat-sealed into a triangular high quality far UV quartz cell.

In use, a small proportion of the spectrofluorometer excitation radiation is directed on to the front surface of the quantum counter. The cell is designed to provide unity quantum conversion, i.e. one-to-one excitation to emission, so the resulting fluorescence is directly proportional to the intensity of the excitation radiation. This fluorescence is measured by a photomultiplier and the resulting data can be used to calculate spectral response factors, and hence 'corrected' spectra. The usable range is 220 nm – 580 nm, and across this range the absorbance profile is almost completely flat. At the emission maximum of Rhodamine B (630 nm) the emission should be independent of the excitation wavelength.

Certification and Documentation

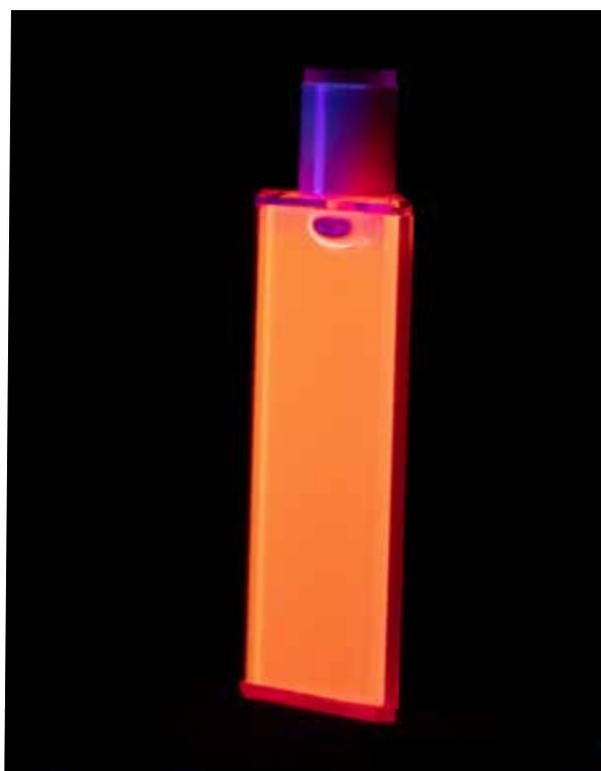
STARNA warrants that all its Reference Materials have been produced in accordance with ISO17034. The ISO 17034 compliant certificate supplied states that the Reference Material has the required stability and homogeneity characteristics and is fit for its intended use..

How to Order

CATALOGUE NUMBER

Starna Rhodamine Quantum Counter Cell

4-TB/RHB



Accreditation

Starna Scientific is accredited to both ISO 17034 as a Reference Material producer, and ISO/IEC 17025 as a Calibration Laboratory for optical reference measurements. Starna Scientific's manufacturing facility is accredited to the ISO 9001 Quality Management System with BSI. For details see www.starna.com/accreditations.



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