UV and Visible Plate Reader Qualification

Sealed Cell UV Plate Reader Reference

Purpose

This reference uses Starna's proven and universally accepted UV and visible reference materials for the qualification of 96-well plate readers.

Description

This device contains six Starna liquid CRMs in a black anodised aluminium microplate, manufactured to the Society of Biomolecular Screening (SBS) dimensional standards for a 96-well plate. The heat sealed, liquid filled cell format utilises 5mm path length cells that have a unique (patent applied for) bubble trap to minimise measurement errors. Potassium dichromate solution is used as an absorbance reference, and holmium oxide solution as a wavelength reference. These references are accepted by Pharmacopoeias and Standardisation Bodies as evidence of instrument qualification. Full details, spectra, etc of the individual reference materials may be found in the appropriate Starna data sheets.

The standard product has the following configuration of reference position and CRM:

Position	Reference
C2 - H2	Potassium dichromate 0.001M perchloric acid blank
C4 - H4	Potassium dichromate 40mg/l in 0.001M perchloric acid
C6 - H6	Potassium dichromate 80mg/l in 0.001M perchloric acid
C8 - H8	Potassium dichromate 120mg/l in 0.001M perchloric acid
C10 - H10	Potassium dichromate 160mg/l in 0.001M perchloric acid
C12 - H12	Holmium oxide (8%) in 10% perchloric acid

Absorbance values for the potassium dichromate references are certified at 235, 257, 313, & 350nm and range from approximately 0.1 A to 1.0 A. The Holmium solution has 14 certified peak values from 240 nm to 640 nm.

Any standard format Starna sealed liquid CRM is available in the Starna microplate format. These include references for wavelength accuracy, absorbance accuracy, stray light and resolution. Please contact Starna for more information.

Certification and Documentation

A Certificate of Calibration and Traceability and full instructions for use are provided with each Reference Material. The certificate is supplied in electronic format, on a USB drive in the same box as the references, allowing hard copy to be produced on demand and giving easy interface to the user's own IT systems. Certification measurements are made on a reference spectrophotometer that has been qualified using Standard Reference Materials certified by the National Institute of Standards and Technology (NIST) in the USA, or against primary physical references such as elemental emission lines..

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.

Warranty

STARNA offers a Lifetime Guarantee on all Starna reference materials, unless otherwise stated, such that any reference material that moves outside its published uncertainty budget will be replaced free of charge. This guarantee is subject to the reference materials being re-certified at least every two years and that the references have not been physically, thermally or optically abused. The STARNA UKAS accredited calibration laboratory aims to re-certify and despatch references within five working days from receipt.

How to Order

	CATALOGUE NUMBER
Starna Sealed Cell UV Plate Reader Reference	**RMMR-04081216HL**