

## Secondary Calibration Standards for Spectrophotometers, Hellma®

### Certified UV/Vis calibration standards for spectrophotometers

To supply accurate results over the long run, spectrophotometers need to be calibrated in regular intervals. To this end, the Hellma Analytics calibration lab certified pursuant to DIN EN ISO 17025 offers ready-to-use, DAKKS certified calibration standards. Using UV/Vis calibration standards from the accredited Hellma calibration lab guarantees that the calibration operations performed are traceable to the NIST (National Institute of Standards and Technology) primary standards and the standards of the major pharmacopoeias (EP, DAB, USP).

The certified Hellma Analytics reference materials provide the user with a clean, easy, and efficient solution for checking the spectrophotometer.

Outside dimensions (HxWxD): 48 mm x 12.5 mm x 12.5 mm

#### ① Glass filters sets

for inspection of the spectrophotometers in respect of wavelength accuracy and photometrical accuracy

Type	Complete filter set consisting of	Wavelength nm	Order No.
666-S000	Holmium oxide glass filter 666-F1	279, 361, 453, 536, 638	10 55 16660
	Neutral density filter 666-F2, 0.25 abs.	440; 465; 546,1; 590; 635	
	Neutral density filter 666-F3, 0.5 abs.	440; 465; 546,1; 590; 635	
	Neutral density filter 666-F4, 1.0 abs.	440; 465; 546,1; 590; 635	
	Filter holder F0, empty as reference		
666-S001	Neutral density filter 666-F3, 0.5 abs.	440; 465; 546,1; 590; 635	10 55 16663
	Neutral density filter 666-F4, 1.0 abs.	440; 465; 546,1; 590; 635	
	Didymium glass filter 666-F7, 0.5–1.0 abs.	Wavelength accuracy: 329, 472, 512, 681, 875 Photometrical accuracy: 270, 280, 297, 320, 340	
666-S002	Neutral density filters 666-F2/-F3/-F4	440; 465; 546,1; 590; 635	10 55 16662

#### ② Liquid filters sets

for inspection of the spectrophotometers in respect of stray light behavior, resolution power, photometrical accuracy and wavelength accuracy pursuant to the European Pharmacopoeia

Type	Use	Contents	Wavelength nm	Order No.
667-UV100	Testing for stray light	Liquid filter UV1, potassium chloride Reference filter UV12, purified water	Cut-off 200	10 55 16678
667-UV200	Testing the spectral resolution	Liquid filter UV6, toluene in hexane Reference filter UV9, hexane	Scan from 265-270	10 55 16676
667-UV305	Testing the photometric accuracy	Liquid filter UV60, potassium dichromate 60 mg/l Liquid filter UV600, potassium dichromate 600 mg/l Reference filter UV14, perchloric acid	235, 257, 313, 350 430	10 55 16672
667-UV005	Testing the wavelength accuracy	Liquid filter UV5, holmium oxide in perchloric acid	241, 287, 361, 536, 640	10 55 16679
667-UV003	Complete set	Type 667-UV100/UV200/UV305/UV005		10 55 16677



**Hellma Analytics**  
High Precision in Spectro-Optics



DIN EN ISO 17025



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