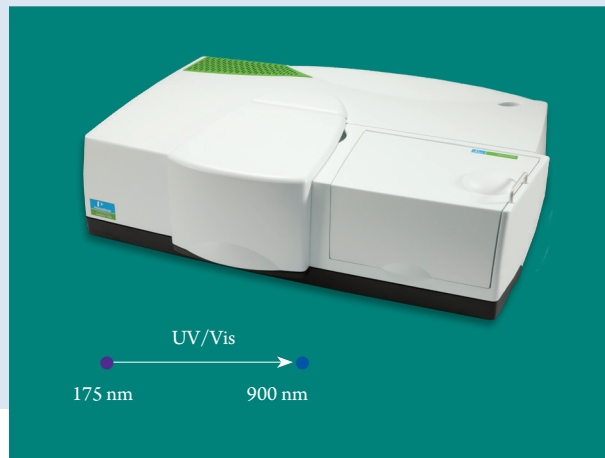


UV/Vis Spectroscopy

Typical Specifications of the High-Performance LAMBDA 850+ UV/Vis Spectrophotometer



LAMBDA 850+

Introduction

PerkinElmer UV/Vis spectrophotometers are built to the highest ISO-9001 manufacturing standards. This document presents typical performance specifications based on final tests of over 300 instruments at the end of the manufacturing process.

The LAMBDA™ series of spectrophotometers is the industry standard for high performance, flexibility and convenience. Each model includes the same range of modular components and snap-in accessories to tackle a range of tough applications. Whatever specifications are required, the LAMBDA series provides best-in-class accuracy, precision and reproducibility.

Choose the LAMBDA 850+ for ultra-high UV/Vis performance between 175 nm and 900 nm. For applications such as sun protection, reflectance properties of flat panel display screens, paint films, transmission and reflectance characterization of glass, solar cells, and more.

Specifications	LAMBDA 850+
Stray Light	
At 200 nm (12 g/L KCl)	> 2 A
At 220 nm (10 g/L NaI)	0.00004 % T
At 340 nm (50 mg/L NaNO ₂)	0.00003 % T
At 370 nm (50 mg/L NaNO ₂)	0.00003 % T
Wavelength Accuracy	
UV/Vis (656.1 nm)	± 0.09 nm
Wavelength Reproducibility	
Standard deviation of 10 measurements UV/Vis	≤ 0.002 nm
Photometric Accuracy	
NIST Filters 1 A	± 0.0020 A
NIST Filters 0.5 A	± 0.0015 A
K ₂ Cr ₂ O ₇ Solution USP/DAP method	± 0.0020 A
Photometric Linearity	
<i>Addition of filters UV/Vis at 546.1 nm, 2 nm slit, 1 second integration time</i>	
At 1.0 A	± 0.0050 A
Photometric Stability	
<i>After warm-up at 500 nm, 0 A, 2 nm slit, 2 second integration time, peak to peak</i>	
	± 0.00006 nm
Photometric Noise RMS	
0 A and 190 nm ⁽¹⁾	≤ 0.00010 A
0 A and 500 nm ⁽¹⁾	≤ 0.00005 A
4 A and 500 nm ⁽¹⁾	≤ 0.00100 A
<i>(1) 2 nm Fixed Slit</i>	