# Acceptable wavelength band width for HPLC detectors when performing an HPLC Performance Qualification - Tech Information

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## Guidance on Wavelength Bandwidth Settings for HPLC Detectors During Performance Qualification (PQ)

When performing a High-Performance Liquid Chromatography (HPLC) Performance Qualification, selecting an appropriate wavelength bandwidth setting for the detector is critical to ensure accurate and reproducible results.

- The standard bandwidth setting for most HPLC detectors is 3 nm. This setting provides a good balance between sensitivity and spectral resolution.
- A bandwidth of 5 nm is generally considered too broad for PQ purposes, as it may compromise spectral resolution and lead to less precise peak identification.
- Conversely, a 1 nm bandwidth is typically too narrow, potentially introducing excessive noise and reducing signal stability, which can affect qualification outcomes.

**Recommendation:**
For PQ procedures, maintain the detector's wavelength bandwidth at **3 nm** unless otherwise specified by the instrument manufacturer or method-specific requirements.

*Click HERE for MICROSOLV PQ and HSQ Kit ordering information and pictures.*


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