



HPLC HARDWARE

EQUIVALENCE OF MEASUREMENT UNITS FOR OQ TESTS

Equivalence of Measurement Units in OQ Tests

Agilent CrossLab provides a harmonized approach to compliance: not only it is compatible with systems from all leading vendors, the Automated Compliance Engine (ACE) is CDS neutral, working independently from the software used for system control and data reduction.

The measurements taken in the Noise and Drift and Injection Response tests typically use number of counts internally, but can also be expressed in different units, depending on the software used. This scaling provides richer information content and added consistency with the CDS used by the qualified system – representing an added convenience but not impacting the measurements made.

Because the conversion factors between units are applied to both the measurements and the limits, the specific unit selection has no relevance on the pass/fail test assessment.

The tables below list the limits for the Injection Response and the Signal Noise and Drift tests, depending on the CDS used to control the instrument. They can be used as a cross-reference of the equivalent tests limits in different units.

Note: Units other than those displayed below may be requested.

LC OQ Test: Injection Response

Configuration	EQP Limit	CDS Type			
		ChemStation	EZChrom	Empower	Chromeleon
Agilent/non-Agilent UV/UV-Vis	1200-1800 mAU* sec	1200-1800 mAU*sec	1200000-1800000 counts*sec	1200000-1800000 µV*sec	1200-1800 mAU*min

LC OQ Test: Noise and Drift

Configuration	EQP Limit		CDS Type			
			ChemStation	EZChrom	Empower	Chromeleon
Agilent VWD	Noise	0.040 mAU	0.040 mAU	0.040 mAU	40 µV	0.040 mAU
	Drift	0.500 mAU/hr	0.500 mAU/hr	0.500 mAU/hr	500 µV/hr	0.500 mAU/hr
Agilent MWD/DAD	Noise	0.050 mAU	0.050 mAU	0.050 mAU	50 µV	0.050 mAU
	Drift	5.000 mAU/hr	5.000 mAU/hr	5.000 mAU/hr	5,000 µV/hr	5.000 mAU/hr
Agilent UHPLC DAD (G4212A/B, G7117A/B/C)	Noise	0.030 mAU	0.030 mAU	0.030 mAU	30 µV	0.030 mAU
	Drift	3.000 mAU/hr	3.000 mAU/hr	3.000 mAU/hr	3,000 µV/hr	3.000 mAU/hr
Non-Agilent UV/UV-Vis	Noise	0.100 mAU	N/A	On request	100 µV	0.100 mAU
	Drift	10.000 mAU/hr			10,000 µV/hr	10.000 mAU/hr
Agilent RID	Noise	10.000 nRIU	10.000 nRIU	10.000 nRIU	10,000,000 (10*) µV	10.000 nRIU
	Drift	400.000 nRIU/hr	400.000 nRIU/hr	400.000 nRIU/hr	400,000,000 (400*) µV/hr	400.000 nRIU/hr
Waters RID	Noise	10.000 nRIU	N/A	On request	256 µV	10.000 nRIU
	Drift	400.000 nRIU/hr			10,240 µV/hr	400.000 nRIU/hr
Agilent ELSD	Noise	2.000 mV	2.000 mV	2.000 mV	2,000 µV	N/A
	Drift	5.000 mV/hr	5.000 mV/hr	5.000 mV/hr	5,000 µV/hr	
Non Agilent ELSD	Noise	2.000 mV	N/A	On request	2,000 µV	N/A
	Drift	5.000 mV/hr			5,000 µV/hr	
Non Agilent CD	Noise	0.100 µS	N/A	N/A	0.0001 mV	0.100 µSiemens
	Drift	10.000 µS/hr			0.010 mV/hr	10.000 µSiemens/hr

* Alternate values are for Empower 3 FR1 and later software.

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www.agilent.com/crosslab/compliance-steps

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