



## Performance Qualification

### • UV Detector Linearity

#### • Instruments and Fluidics

<b>Instrument Name</b>	<b>Model</b>	<b>Supplier's Name</b>	<b>Serial Number</b>
Pump	G1312	Thermo Scientific	DE63055928
Autosampler	G1367	Thermo Scientific	DE64556796
Column Oven	Other	Thermo Scientific	not available
<b>UV Detector</b>	<b>G1315</b>	<b>Thermo Scientific</b>	<b>DEAA202921</b>
Chromeleon Datasystem	V. 6.80 SR16 Build 5387	Thermo Scientific	1904

<b>Accessories</b>	<b>Description</b>
Back Pressure Device	Capillary (L:15 m; ID:0,18 mm)
Sample 2	Caffeine in Water 10 µg/ml
Sample 3	Caffeine in Water 60 µg/ml
Sample 4	Caffeine in Water 140 µg/ml
Sample 5	Caffeine in Water 220 µg/ml
Sample 6	Caffeine in Water 300 µg/ml
Solvent A	Water (HPLC-Grade)

#### • Additional Information

Customer: Customer's Name  
 Operator: Operator's Name  
 Operator's Jobtitle

Execution Date: 2026-mars-11  
 Next Qualification: 2026-sept.

#### • Limits, Values and Test Results

	<b>Limit</b>	<b>Observed Value</b>	<b>Result</b>
<b>Detector Lin. - Corr. (UV)</b>	>= 99,900 %	99,978 %	<b>Test passed</b>
<b>Detector Lin. - RSD (UV)</b>	<= 5,000 % RSD	1,732 % RSD	<b>Test passed</b>

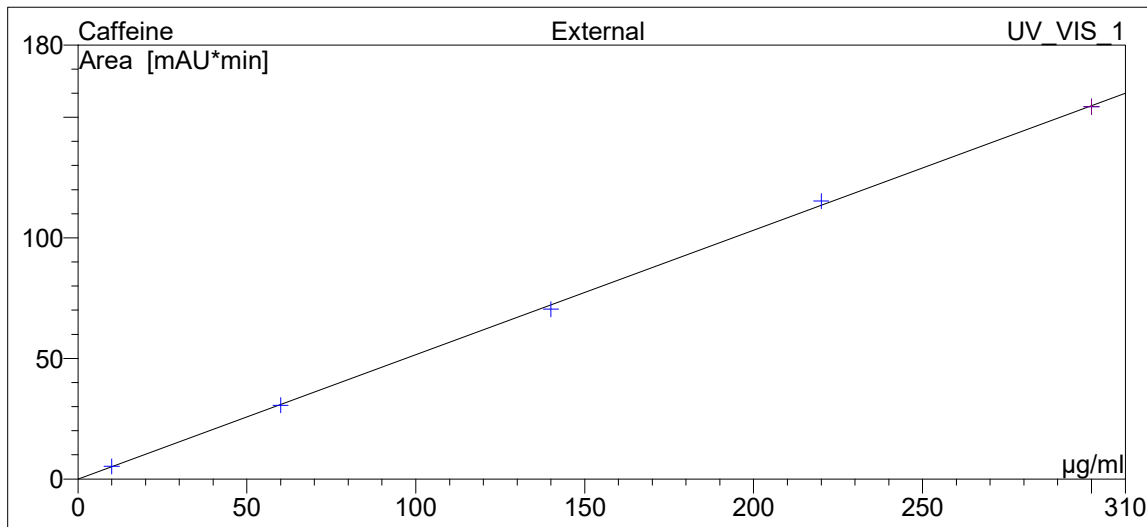
#### • Signatures

	<b>Signature</b>	<b>Date</b>
Submitter / Operator:		
Reviewer:		
Approver (e-sig. only):		

**• Data for Detector Linearity**

Sample Name	Amount µg/ml Caffeine UV_VIS_1	Area mAU*min Caffeine UV_VIS_1
Detector linearity_1	10,0	5,208
Detector linearity_2	60,0	30,585
Detector linearity_3	140,0	70,380
Detector linearity_4	220,0	115,258
Detector linearity_5	300,0	154,404

**• Calibration Curve**



Cal. Type UV_VIS_1	Number of Points UV_VIS_1	Offset UV_VIS_1	Slope UV_VIS_1
Lin	5	0,000	0,516

	Correlation Coefficient	RSD
	99,978 %	1,732 %
<b>Limit:</b>	<b>&gt;= 99,900 %</b>	<b>&lt;= 5,000 %</b>
<b>Result:</b>	<b>ok</b>	<b>ok</b>