



## Performance Qualification

### • *Injector and Flow Precision*

#### • *Instruments and Fluidics*

<i>Instrument Name</i>	<i>Model</i>	<i>Supplier's Name</i>	<i>Serial Number</i>
Pump	G1311A	DIONEX	DE40926267
Autosampler	G1329A	DIONEX	DE64777905
Column Oven	Other	DIONEX	not available
UV Detector	G1315A	DIONEX	DE40520990
Chromeleon Datasystem	V. 6.80 SR15 Build 4656 (243	DIONEX	1904

<i>Accessories</i>	<i>Name</i>
Back Pressure Device	Capillary (L:15 m; ID:0,18 mm)
Sample 4	Caffeine in Water 140 µg/ml
Solvent A	Water (HPLC-Grade)

#### • *Additional Information*

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

Execution Date: juin-29-20  
 Next Qualification: déc-20

#### • *Limits, Values and Test Results*

	<i>Limit</i>	<i>Observed Value</i>	<i>Result</i>
Injector Precision - Area	1,000 % RSD	0,238 % RSD	Test passed
Flow Precision - Ret. Time	0,070 % RSD OR 0,0200 min SD	0,307 % RSD  0,0011 min SD	Test passed

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**• Data for Injector and Flow Precision Test: Volume**

**5,0 µl**

<b>Sample Name</b>	<b>Ret. Time min Caffeine UV_VIS_1</b>	<b>Area mAU*min Caffeine UV_VIS_1</b>
Injector and flow reproducibility_1	0,3433	112,470
Injector and flow reproducibility_2	0,3433	112,228
Injector and flow reproducibility_3	0,3433	111,845
Injector and flow reproducibility_4	0,3433	111,996
Injector and flow reproducibility_5	0,3433	111,813
Injector and flow reproducibility_6	0,3433	111,473
Injector and flow reproducibility_7	0,3433	112,013
Injector and flow reproducibility_8	0,3433	112,119
Injector and flow reproducibility_9	0,3467	112,119
Injector and flow reproducibility_10	0,3433	111,941
<b>Average:</b>	<b>0,3437</b>	<b>112,002</b>
<b>RSD:</b>	<b>0,307 %</b>	<b>0,238 %</b>
<b>RSD Limit:</b>	<b>0,070 %</b>	<b>1,000 %</b>
<b>SD:</b>	<b>0,0011</b>	
<b>SD Limit:</b>	<b>0,0200</b>	
<b>Result:</b>	<b>ok</b>	<b>ok</b>

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## Injection and Retention Time Precision

Name	Area mAU*min Caffeine UV_VIS_1	Ret. Time min Caffeine UV_VIS_1	Sample No.	Area Dev. from mean [%]	No.
Injector and flow reproducibility_1	112,470	0,343	1	0,418	1
Injector and flow reproducibility_2	112,228	0,343	2	0,202	2
Injector and flow reproducibility_3	111,845	0,343	3	-0,140	3
Injector and flow reproducibility_4	111,996	0,343	4	-0,005	4
Injector and flow reproducibility_5	111,813	0,343	5	-0,169	5
Injector and flow reproducibility_6	111,473	0,343	6	-0,472	6
Injector and flow reproducibility_7	112,013	0,343	7	0,010	7
Injector and flow reproducibility_8	112,119	0,343	8	0,105	8
Injector and flow reproducibility_9	112,119	0,347	9	0,105	9
Injector and flow reproducibility_10	111,941	0,343	10	-0,054	10
<b>Average:</b>	<b>112,002</b>	<b>0,344</b>			
<b>RSD:</b>	<b>0,238 %</b>	<b>0,307 %</b>			
<b>SD:</b>		<b>0,001 min</b>			

### Calculation of RSD and Average

	Area:	Retention Time:
Sum of x:	1120,01779	3,43666667
sum of sq(x):	125444,6271	1,181077778
Sq of sum (x):	1254439,849	11,81067778
STD:	0,26710664	0,001054093
Average:	112,001779	0,343666667
RSD:	0,002384843	0,003067195
Number of samples:	10	10

### Determination of Pump Unit for Dionex DGPs

Sequence name: PQ\_INJECTOR\_FLOW\_REPRO  
 Right end of the sequence name : EPRO  
 Pump's model number: G1311A  
 Pump's model variant: n.a.  
 Pump unit:

### Evaluation of Accessories (Following autosampler uses standard 3 or 5 instead of stan

ModelNo	Loop Volume	Evaluation	Reference value for report
WPS-3000	40	0	S4
ACC-3000	200	0	

ACC-3000T	200	0
WPS-3000	344	0
WPS-3000	250	0









<b>Ret. Time Deviation from the mean value [%]</b>
-0,097
-0,097
-0,097
-0,097
-0,097
-0,097
-0,097
-0,097
-0,097
0,873
-0,097

ard 4):