Spectral calibration Instruction

1. Start the Nanoready to enter the homepage, and then select the **Instrument Diagnostics**, as the Figure.1 shows.



Figure.1

2. Select **Performance Verification**, as the Figure.2 shows.



Figure.2

3. Open a dose of calibration solution, as the Figure.3 shows.

Firstly, add the pure water to the pedestal to do the blank test, and then wipe off the water by the clean paper.

Take 2 µl calibration solution and add it on the pedestal, and then click **Measure**, check the result at last. On the **Performance Verification** interface, it will suggest that the test is okay, if the line of error(%) is green as the Figure.4 shows. Please do this procedure for **5 times** constantly.

It will suggest that the performance verification is okay, if all the values of error of 5 times are green. However, if the line of error is red, as the Figure.5 shows, the optical





Figure.3

Figure.4

n		Performan	ice verificati	2021-04-07 14:07:03				
B Measure	🚔 No.3							
	PathLength	1mm	0.2mm	0.1mm	0.05mm	0.03mm		
IR	Target absorbance	0.64	0.128	0.064	0.032	0.0192		
My Data	Current absorbance	0.6704	0.1347	0.0690	0.0320	0.0190		
M	Average absorbance	0.6514	0.1302	0.0651	0.0300	0.0177		
Instrument Disposition	Error (%)	4.75%	5.23%	7.81%	0%	-1.04%		
	Standard deviation	0.7980	0.1595	0.0798	0.0368	0.0218		
Settings	Ø Blank		🕲 Measur	e		C Back		

Figure.5

4. Wipe off the solution on the pedestal, go back to the Instrument Diagnostics interface. Click the three points (1,2,3) marked in the screen as Figure.6 shown to enter into the **instrument parameter setting** interface.



Figure.6

Click **Back** in the Figure.7, and then click **OK** in the Figure.8 to enter the **single calibration** interface as the Figure.9 shows.







Figure.8



Figure.9

5. Clean the pedestal and then do the blank test by adding 2ul pure water. After the blank test, please add 2ul calibration solution and click **Measure**. The message as below will pop up after the result comes out.

If the value of the error is green, click **Cancel** as the Figure.10 shows.

If the value is red, click the **OK** as the Figure.11 shows. Clean the pedestal. Repeat to **measure** by adding 2ul calibration solution until the value of error shows green for 3 times. Then the single calibration is finished. And click **Back** to exit the calibration interface.

2		Single calibration		2021-04-07 14:02-56 Message			
5	A No.1	No.1				e calibra- ?	
asure				Cancel		OK	
	PathLength	1mm	0.2mm	0.1mm	0.05mm	0.03mm	
8	Target absorbance	0.64	0.128	0.064	0.032	0.0192	
Data	Current absorbance	0.6383	0.1279	0.0640	0.0309	0.0182	
	Average absorbance	0.6383	0.1279	0.0640	0.0309	0.0182	
iunen i	Error (%)	-0.27%	-0.08%	0%	-3.44%	-5.21%	
Poincs	Standard deviation	0	0	0	0	0	
	 Blank 		🕲 Measur	e		C Back	
						No.	
	Performance verification com	pleted				- Actual and	

Figure.10

n		Single calibration		2021-04-07 14:11:1			
6 Measure	🚔 No.2			Message Whether to write calibra- tion parameters?			
	PathLength	1mm	0.2mm	Cancel	mmc0.0	OK.	
118	Target absorbance	0.64	0.128	0.064	0.032	0.0192	
My Data	Current absorbance	0.6710	0.1391	0.0688	0.0307	0.0171	
M •	Average absorbance	0.6509	0.1308	0.0643	0.0286	0.0156	
Instrument Diagnostics	Error (%)	4.84%	8.67%	7.50%	-4.06%	-10.94%	
2	Standard deviation	0.9209	0.1854	0.0911	0.0406	0.0221	
Settings	Blank		6 Measure			C Back	

Figure.11

6. After the calibration, enter the **Performance Verification** of the **Instrument Diagnostics.** Repeat step 3, until the values of error in 5 times are all green. The calibration is finished.

Thank you for your kind support. Any questions, please feedback to us. LifeReal service department.