6 Photometric Application

• 6.1 Window Layout

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- <u>6.5 Sample Table</u>

6.1 Window Layout

The photometric application only has a "measurement mode". Measurement mode is used when performing measurement and offline tasks such as data analysis.

To edit photometric report files or print using any created layout, click [Edit Printform] on the toolbar.

■Measurement mode

Open Sa	ave	Print	Measurement	Edit	Printform	(? Hel	Þ		
⊟-⊘ Pho-01.fquf └── Sample Table		Start S	top	Auto Zero	Search	Templa File Nar	me: Pho-01.fquf	s	Disconnect
	Add	Line Edit						EX EM 307.0 340.0	
		Sample Name	EX307.0_EM340.0	EQU_1	PF_1	K1	Comments	0.0	
	1	Sample3-1	125.182	1251.817	Pass	10.000		Arc Lamp	ON (3 hours)
Message ^	2	Sample3-2	114.354	1143.537	Pass	10.000			
Excitation Side Slit Motor C	3	Sample3-3	110.647	553.233	Fail	5.000		Sample Graph Par	ameters
Excitation Side Grating Mo									
Shutter Motor Check - OK	L 1							Settings	Load
Emission Side Slit Motor Cl									
Emission Side Grating Mot								Parameter	Value ^
Instrument Function Acau								[Instrument]	
Arc Lamp - mounted								EX Bandwidth	3.0 nm 🗉
Arc Lamp - Total Lighting								EM Bandwidth	3.0 nm
Mercury Lamp - mounted E								Sensitivity	Low
Mercury Lamp - Total Ligh								Accumulation Time	10 ms
Integrating Sphere - Not U								BNaueleogthel	
Sipper - Used								Column Name 1	EX307.0 EM5
Connection - Passed								EX Wavelength	307.0 nm
								EM Wavelength	340.0 nm
Sipper - Installed	-								

Window	Layout	of the	Photometric	Application
	2			11

No.	Name	Function
0	Photometric measurement toolbar	The buttons used for starting and stopping measurement and performing instrument control are located on this toolbar. Clicking ([Connect]) and establishing a connection with the instrument enables ([Start]) and other buttons.
0	Photometer status	The upper section displays the current wavelength and fluorescence intensity and the lower section displays the status of the fluorescence spectrophotometer.
		Displays the settings of the currently configured measurement parameters (settings

0	Parameter/graph view	such as parameters related to measurement and calibration curve equation), calibration curve graph, and sample graph. This view is used to configure, save, and load measurement parameters.
Ø	Sample table	Displays the measurement data (fluorescence intensity) at the registered wavelengths. If calculation and judgment equations for the fluorescence intensity of each sample are created and registered in advance, the calculation and judgment results are displayed in the relevant table columns when measurement is performed.

■Edit print form



Window Layout of the Photometric Application (Edit Print Form)

No.	Name	Function
0	Print form editing area	Edit properties such as position and size of printable objects placed on a report.
0	Properties view	Displays the properties of printable objects selected in the print form editing area. Properties such as link settings and text font can be changed.
0	Object list	Displays the printable objects that can be used in tree format. Either double-click on object names or drag object names into the print form editing area to add printable objects to a report file.

6.2 Menu Bar

- <u>6.2.1 [File] Menu</u>
- <u>6.2.2 [Edit] Menu</u>
- <u>6.2.3 [View] Menu</u>
- <u>6.2.4 [Graph] Menu</u>
- <u>6.2.5 [Instrument] Menu</u>
- <u>6.2.6 [Tools] Menu</u>
- <u>6.2.7 [Window] Menu</u>
- <u>6.2.8 [Help] Menu</u>

6.2.1 [File] Menu

	Command	Description
[Nev	w]	Close the currently open photometric file and clear the measurement parameter settings.
10	1	Open a saved file.
[Oben]		Reference " <u>1.2 File Types</u> "
	[Data]	Open a photometric file (.fquf).
	[Parameters]	Open a photometric measurement parameter file (.fmff).
	[Template]	Open a photometric template file (.futf).
[Clo	se]	Close the currently open file.
[Sav	re]	Save by overwriting the currently open file.
[Sav	re As]	Specify a filename and save a file such as a sample table or measurement parameter file.
	[Data]	Save a photometric file (.fquf).
	[Parameters]	Save the settings currently configured in the parameter view to a measurement parameter file (.fmff).
	[Template]	Save the currently configured measurement parameter and sample table information (excluding data) as a photometric template file (.futf).
[Tex	tt File Output]	Save the current sample table data and measurement parameter information to a text file (.txt) or CSV file (.csv). The format and conversion conditions for text file output are set via [User Setting] on the [Tools] menu.
(D	(P '1)	<u>" User Setting window (common)"</u>
(Red	cent File)	The three most recently opened files are displayed.
[Pro	perties]	Display the [File Properties] window. This window is used to check data information and perform operations such as renaming data sets.
	L J	Reference <u>"[File Properties] window"</u>
[Prii	nt Preview]	Display a preview of printer output.
	.1	Print the report file linked to the currently active table and view.
[Prii	ıtj	Reference <u>"[Quick Print] tab"</u>
[Exi	t]	Exit the photometric application and close the window.

6.2.2 [Edit] Menu

Reference "2.2.1 [Edit] Menu"

6.2.3 [View] Menu

Reference "2.2.2 [View] Menu"

6.2.4 [Graph] Menu

Command	Description
[Display Sample Graph with]	This command can only be used for fluorescence intensity in the photometric application.

[Court Settine]	Display the graph settings window for [Sample Graph].	
[Graph Setting]	Reference "[Customize Graph] window"	

6.2.5 [Instrument] Menu

Reference "2.2.3 [Instrument] Menu"

6.2.6 [Tools] Menu

Reference "2.2.4 [Tools] Menu"

■[User Settings] window (photometric application)

The settings on the [Text File Formats], [Text Output], and [PDF Output] (Option) tabs are the same for all of the basic analysis applications.

Reference "[User Setting] window (common)"

[General] tab

User Settir	ngs				×
General	Text File Formats	Quick Print	Text Output		
Numb	er of Displayed Dec	imal Places			
Samp	le Table and Sampl	e Graph:	3		
Restaurant line in the second seco	ounding is used for a	only displaynin	g, not for calc	ulation.	
© Ro	Sample Table and Sample Graph: Sample Table and Sample Graph:				
			C	OK Ca	ancel

[User Settings] Window - [General] Tab

	Item	Description
[Number of Displayed Decimal Places]		Configure settings such as the number of decimal places displayed for numerical values in tables and scale values on graphs.
		NOTE Settings related to calculation cannot be changed after measurement parameters are created.
	[Sample Table and Sample Graph]	Select the number of decimal places for the numerical values of sample table data and the scale of sample graphs. Selection options: 1 to 6
	[Rounding is used	Select this setting when performing concentration calculation using internal data and operations with an equation with respect to fluorescence intensity. (Default setting)
	for only displaying, not for calculation]	NOTE When this setting is selected, the number of displayed digits can be changed after measurement parameters are created.

	[Rounded values are used for calculation]	Select this setting when performing concentration calculation and operations with an equation using fluorescence intensity rounded to the set number of display digits.
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[Quick Print] tab

er Setting		X
ieneral Te	xt File Formats Quick Print Text Output	
<u>P</u> rint Item:	Sample Table Sample Graph Mesurement Parameters	
<u>R</u> eport File: C:\RF-Data	a\Report\PhotometricSampleTable.frpt Browse Reset]
	ОК	Cancel

[User Settings] Window - [Quick Print] Tab

Item	Description	
	Displays the views and data tables that can be linked to report files.	
[Print Item]	Hint [Measurement Parameters] refers to the [Parameters] tab in the parameter view.	
[Report File]	Clicking an item in the [Print Item] list selects it and displays the name and save destination of the report file to which it is linked.	
[Browse]	Display the report file selection window.	
[Reset]	Return links to their initial state.	

6.2.7 [Window] Menu

Reference "5.2.7 [Window] Menu"

6.2.8 [Help] Menu

Reference "2.2.6 [Help] Menu"

6.3 Parameter/Graph View

Reference "5.3 Parameter/Graph View"

6.4 [Photometric Measurement Parameters] Window

This window is used for configuring and saving measurement parameters. When nothing is displayed in the parameter display area, the required parameters are displayed in wizard format.

The tabs are displayed in the order of [Instrument Parameter] tab \Rightarrow [Wavelengths] tab \Rightarrow [Measurement Parameters (Sample)] tab and the [Photometric Measurement Parameters] window is displayed last.

The [Photometric Measurement Parameters] window is displayed from the second time onwards. Click the tab for

configuration and set the parameters.

The [Photometric Measurement Parameters] window comprises the [Wavelengths], [Measurement Parameters (Sample)], [Formula], [Pass/Fail], [Instrument Parameter], and [Attachment] tabs. While the settings on each tab are the same as the [Quantitation Measurement Method] window, the number of wavelengths that can be registered in the photometric application is limited to 10.

Reference "5.4 [Quantitation Measurement Parameters] Window"

6.5 Sample Table

Entries in the table other than factors such as comments and values are determined once the file is saved and closed. Therefore these entries can no longer be edited the next time the file is opened.

Ad	Add Line Edit				
	Sample Name	Sample ID	EX320.0_EM350.0	Comments	
1	Sample_1	ID101	416.111		
2	Sample_2	ID102	408.770		
3	Sample_3	ID103	411.521		
4	Sample_4	ID104	416.350		
5	Sample_5	ID105	417.254		

Sample Table

	Item	Description		
[Add	l Line]	Add a row to the sample table.		
[Edit]		Select a row to edit and click this button to display the [Edit Table] window. Sample name, sample ID, and option name can all be edited at once in the [Edit Table] window.		
Sample table		The following columns can be displayed. Show or hide columns by setting their display status in the [Sample Table Properties] window that is displayed by clicking [Properties] on the right-click menu. Sample Table Properties Columns Sample Name Show Hide Show Dption Hide Show		
		Type Hide Ex Hide Date Hide Image: Complex transformed by the second sec		
	[Sample Name]	Displays sample names. ^{*1}		
[[Sample ID]	Displays sample ID names. ^{*1}		
	[Option]	Displays option names. ^{*1}		
	[Type]	Displays the measurement type. "Unknown" is displayed for normal data, "Unk-Repeat" for repetition data, and "Average" for averaged values.		

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[Ex]	Select this checkbox to exclude the corresponding data point from the sample graph.		
	Hint Clicking [Hide Excluded Lines] on the right-click menu hides excluded rows.		
[Date]	Displays the date of data capture.		
[Time]	Displays the time of data capture.		
[EX**_EM**]	Displays the fluorescence intensity values of the set wavelengths.		
	Hint If manual entry is set in the measurement parameters, values can be entered directly.		
[Comments]	Enter a comment. ^{*1}		

 $*1\;$ This can be changed in the [Edit Table] window or by direct entry.