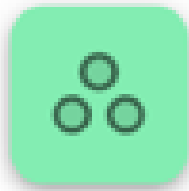


EasyGroup Supplemental Manual

for

EasyMatch Essentials L2 & Quality Central



Easy Group

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A60-1022-105

Required Version: 2026.5 and later for both Essentials L2 and EasyMatch Quality Central

Preface

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Overview

EasyGroup is a tool used to automatically group and taper color samples based on their color differences. Its purpose is to organize samples into groups with similar color values and determine an optimal sequence, or tapering order, that minimizes visible variation between adjacent samples.

Grouping clusters samples that are close in color, while tapering arranges samples within each group in a sequence that minimizes color difference between neighboring samples. This approach helps maximize usable material while maintaining visual consistency. In the current software generation, grouping and tapering are performed together as a single EasyGroup operation.

How EasyGroup Works

EasyGroup uses the color differences between samples to determine which samples belong together and how they should be arranged within each group. It first identifies samples that are close enough in color to meet the current EasyGroup settings, then places similar samples into the same group. After the groups are formed, EasyGroup determines a tapering order within each group to reduce visible color changes between neighboring samples and create a smoother visual progression. If a sample does not meet the required criteria, it may be shown as **Ungrouped** or **Failed**. As a result, EasyGroup not only identifies which samples belong in the same group but also provides the recommended order of samples within each group.

EasyGroup in Essentials L2

EasyGroup settings are configured and managed in Essentials L2. These settings determine how samples are grouped and tapered within a workspace.

Getting Started with EasyGroup in Essentials L2

When EasyGroup is ordered, a flash drive is provided. The flash drive includes the **EasyGroup license** required for activation in Essentials L2, as well as the **EasyGroup Supplement Manual**.

Activate the Easy Group License. Insert the flash drive containing the EasyGroup license into a USB port of the instrument. The EasyGroup activation dialog will appear automatically. Tap **ENABLE** to activate the EasyGroup feature.

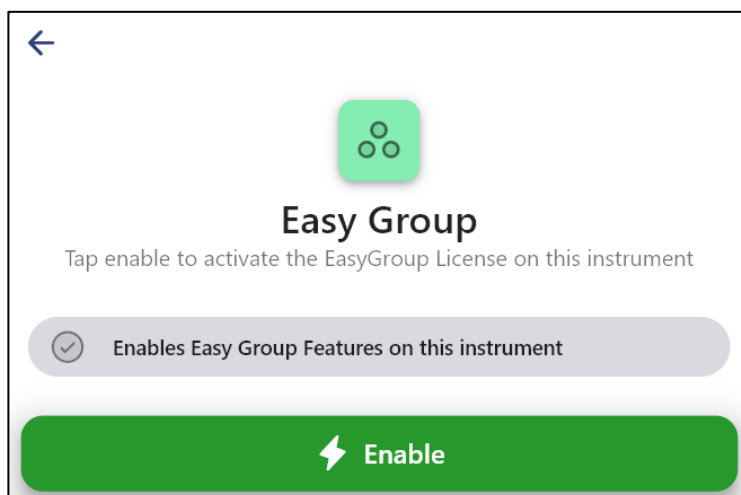


Figure 1. Activate Easy Group

Create a Workspace. Tap the **Workspace** icon at the bottom-right corner of the screen, then tap **+** in the Workspace dialog to add a new workspace. In the **Edit Workspace** dialog, configure the workspace as needed, including the standardization mode, standard target, and other workspace parameters. After the workspace is saved, it will open and display on the screen.

To configure EasyGroup parameters for the workspace, tap the **Workspace** icon again, select the workspace, and tap **EasyGroup**.

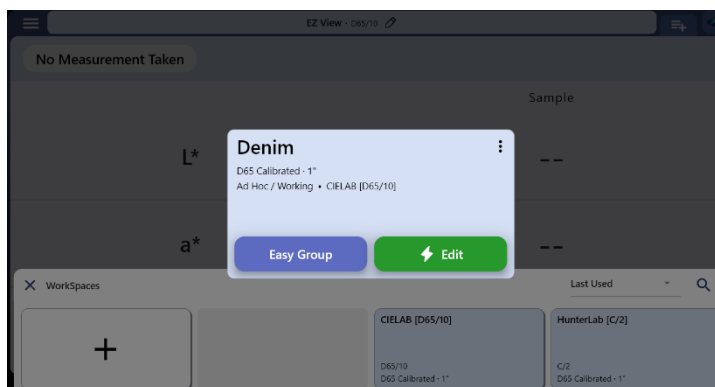


Figure 2. Workspace > Easy Group

You can then review and adjust the EasyGroup settings.

Typical EasyGroup Parameters

- dE CMC max (standard): Maximum allowed color difference between a sample and the standard
- dE CMC max (avg all): Maximum allowed color difference between a sample and the average of all samples
- dE CMC max (group): Maximum allowed color difference between samples within the same group
- Minimum Group Size: Minimum number of samples required to form a group
- L/C ratio: Ratio used in the dE CMC color difference calculation
- These parameters control how the EasyGroup algorithm determines group membership and tapering order.
- After configuration, the settings are **saved with the workspace**.

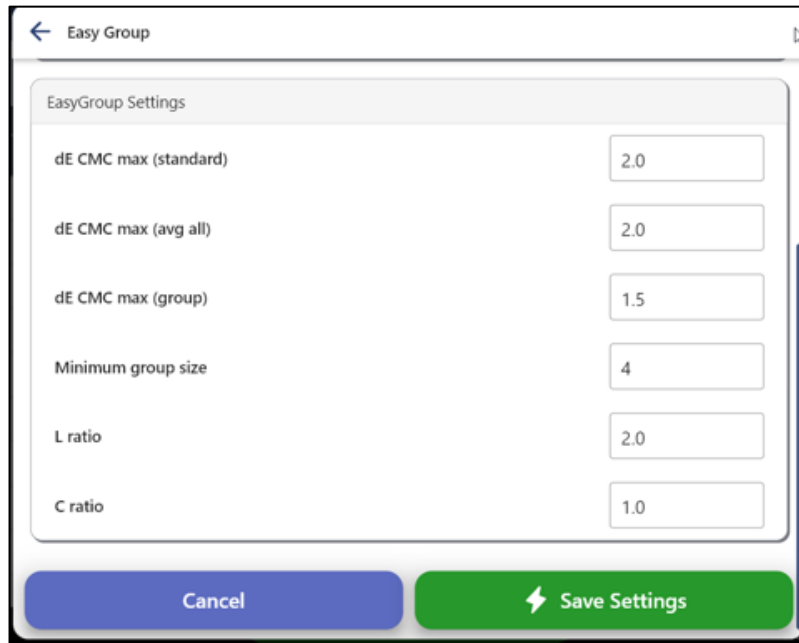
The image shows a software dialog box titled "Easy Group". Inside the dialog, there is a section labeled "EasyGroup Settings". This section contains six rows, each with a parameter name on the left and a numerical input field on the right. The parameters and their values are: "dE CMC max (standard)" with value 2.0, "dE CMC max (avg all)" with value 2.0, "dE CMC max (group)" with value 1.5, "Minimum group size" with value 4, "L ratio" with value 2.0, and "C ratio" with value 1.0. At the bottom of the dialog, there are two buttons: a blue "Cancel" button on the left and a green "Save Settings" button on the right, which includes a white lightning bolt icon.

Figure 3. EasyGroup Settings

Run EasyGroup in Essentials L2

Open a job containing color samples, tap the **Workspace** icon, select the current workspace, and tap **EASYGROUP**. When the EasyGroup dialog opens, review the settings and, if needed, select a different job within the same workspace. Tap **RUN EASYGROUP** to begin the analysis.

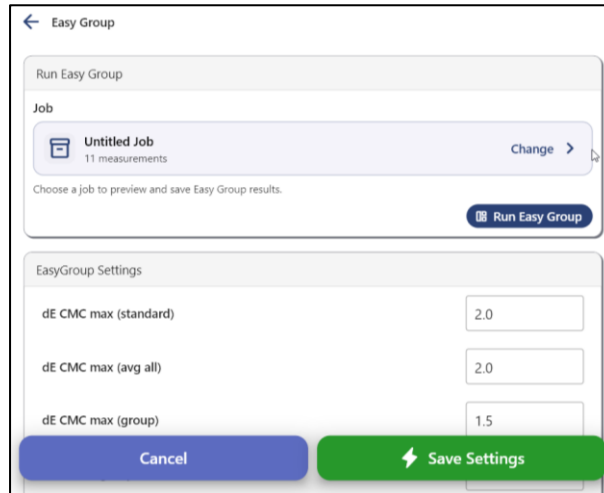


Figure 4. Run EasyGroup in Essentials L2

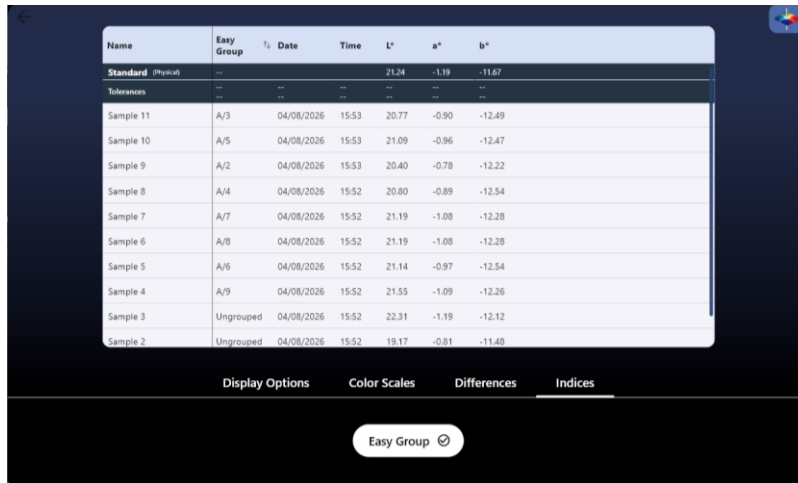
The system processes all samples in the job using the configured settings and automatically performs both grouping and tapering. An **EasyGroup** field will appear in the view showing the analysis results. If the results are acceptable, tap **SAVE** to store the EasyGroup result in the job. If not, tap **CANCEL** to return to the EasyGroup dialog, adjust the settings, and run EasyGroup again. Each time EasyGroup is run, the grouping and tapering results for the job are recalculated based on the current EasyGroup settings. Tap Save to replace the previous EasyGroup results with the new results.

Name	Date	Time	L*	a*	b*	Easy Group
Standard (Physical)			21.24	-1.19	-11.67	---
Tolerances	---	---	---	---	---	---
Sample 1	04/08/2026	15:51	20.88	-0.83	-11.86	A/1
Sample 9	04/08/2026	15:53	20.40	-0.78	-12.22	A/2
Sample 11	04/08/2026	15:53	20.77	-0.90	-12.49	A/3
Sample 8	04/08/2026	15:52	20.80	-0.89	-12.54	A/4
Sample 10	04/08/2026	15:53	21.09	-0.96	-12.47	A/5
Sample 5	04/08/2026	15:52	21.14	-0.97	-12.54	A/6
Sample 7	04/08/2026	15:52	21.19	-1.08	-12.28	A/7
Sample 6	04/08/2026	15:52	21.19	-1.08	-12.28	A/8

Figure 5. Easy Group Results in Essentials L2

Viewing Results in Essentials L2

After the EasyGroup result is saved, edit the Color Data Table view and enable EasyGroup in the Indices tab.



Name	Easy Group	Date	Time	L*	a*	b*
Standard (Physical)	--	--	--	21.24	-1.19	-11.67
Tolerances	--	--	--	--	--	--
Sample 11	A/3	04/08/2026	15:53	20.77	-0.90	-12.49
Sample 10	A/5	04/08/2026	15:53	21.09	-0.96	-12.47
Sample 9	A/2	04/08/2026	15:53	20.40	-0.78	-12.22
Sample 8	A/4	04/08/2026	15:52	20.80	-0.89	-12.54
Sample 7	A/7	04/08/2026	15:52	21.19	-1.08	-12.28
Sample 6	A/8	04/08/2026	15:52	21.19	-1.08	-12.28
Sample 5	A/6	04/08/2026	15:52	21.14	-0.97	-12.54
Sample 4	A/9	04/08/2026	15:52	21.55	-1.09	-12.26
Sample 3	Ungrouped	04/08/2026	15:52	22.31	-1.19	-12.12
Sample 2	Ungrouped	04/08/2026	15:52	19.17	-0.81	-11.48

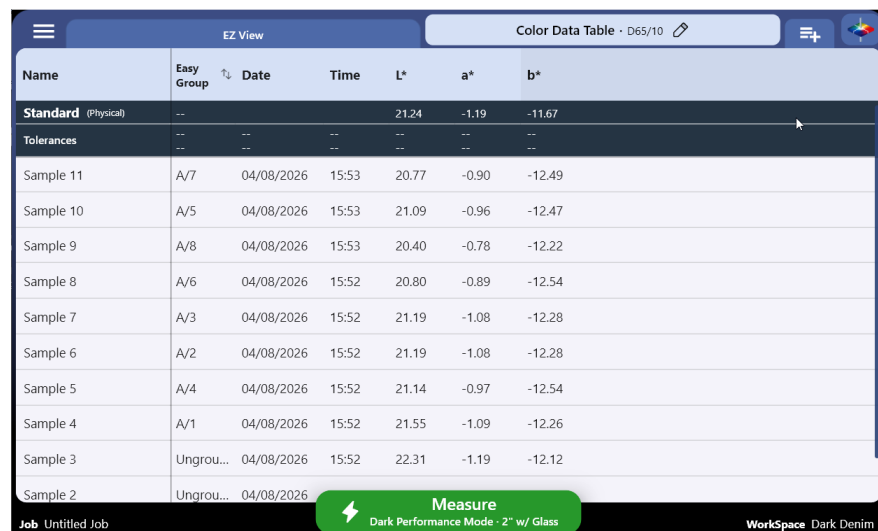
Figure 6. Color Data Table Indices in Essentials L2

A new **EasyGroup** column will then appear in the Color Data Table, displaying the group ID and tapering order for each sample in the format **Group/Order**. For example, **A/1** indicates the first sample in Group A, while **B/4** indicates the fourth sample in Group B.

A sample may also show one of the following special result statuses:

Ungrouped: The sample meets the dE CMC tolerances for the standard and the average of all samples but cannot be placed into any group.

Failed: The sample fails one or more dE CMC tolerance requirements for the standard or average.



Name	Easy Group	Date	Time	L*	a*	b*
Standard (Physical)	--	--	--	21.24	-1.19	-11.67
Tolerances	--	--	--	--	--	--
Sample 11	A/7	04/08/2026	15:53	20.77	-0.90	-12.49
Sample 10	A/5	04/08/2026	15:53	21.09	-0.96	-12.47
Sample 9	A/8	04/08/2026	15:53	20.40	-0.78	-12.22
Sample 8	A/6	04/08/2026	15:52	20.80	-0.89	-12.54
Sample 7	A/3	04/08/2026	15:52	21.19	-1.08	-12.28
Sample 6	A/2	04/08/2026	15:52	21.19	-1.08	-12.28
Sample 5	A/4	04/08/2026	15:52	21.14	-0.97	-12.54
Sample 4	A/1	04/08/2026	15:52	21.55	-1.09	-12.26
Sample 3	Ungrou...	04/08/2026	15:52	22.31	-1.19	-12.12
Sample 2	Unarou...	04/08/2026				

Figure 7. Easy Group Results in Essentials L2

Essentials L2 2026.5 and above includes a dedicated EasyGroup View. The EasyGroup View provides a graphical display of grouped and tapered measurements so results can be reviewed visually in the same workspace.

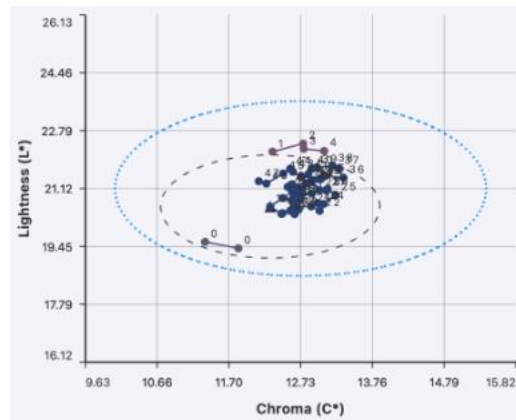


Figure 8. EasyGroup View in Essentials L2

EasyGroup in Quality Central

To use Quality Central, the Quality Central license must first be activated through Essentials L2 on the instrument. Once the EasyGroup feature is enabled in Essentials L2, it is automatically available for the corresponding sensor in Quality Central.

Quality Central uses the EasyGroup configuration defined in Essentials L2. EasyGroup settings cannot currently be edited in Quality Central.

EasyGroup analysis performed in Quality Central will be saved back to the Essentials L2 job.

Run EasyGroup in Quality Central

Connect Quality Central and the instrument to the same network, then locate the instrument in the instrument list. Open the job within the workspace and select the samples to analyze.

Unlike Essentials L2, which processes all samples in the job, Quality Central allows EasyGroup to run on selected samples only. Click **RUN EASYGROUP** to apply the EasyGroup settings saved in Essentials L2. For unselected samples in the job, the EasyGroup column will be labeled as "--". Each time EasyGroup is run, the grouping and tapering results for the job are recalculated based on the current EasyGroup settings. Click **SAVE** to store the EasyGroup results in the Quality Central job.

Easy Group Results						
Name	L*	a*	b*	Date	Time	Easy Group
Standard (Ad Hoc / Working)	23.02	-1.32	-11.83			Standard
Tolerances	--	--	--	--	--	--
Sample 44	21.94	-0.87	-13.02	03/26/2026	14:18	A/1
Sample 20	22.19	-0.92	-13.02	03/26/2026	14:12	A/2
Sample 49	22.12	-0.95	-12.86	03/26/2026	14:19	A/3
Sample 25	22.08	-1.02	-12.90	03/26/2026	14:13	A/4
Sample 18	22.03	-1.06	-12.84	03/26/2026	14:11	A/5
Sample 46	22.23	-1.02	-12.90	03/26/2026	14:18	A/6
Sample 53	22.27	-1.02	-12.75	03/26/2026	14:20	A/7
Sample 22	22.32	-0.92	-12.64	03/26/2026	14:12	A/8
Sample 38	22.24	-0.98	-12.61	03/26/2026	14:16	A/9
Sample 26	22.17	-1.07	-12.51	03/26/2026	14:13	A/10
Cancel Save						

Figure 9. Easy Group Results in Quality Central

Viewing Results in Quality Central

Once EasyGroup results are saved into the job, open the **Color Data Table** view of this job. If the view is not already present, add it first. Then right-click on Color Data Table and select **EDIT VIEW**. Open the **INDICES** tab and check **EASYGROUP**.

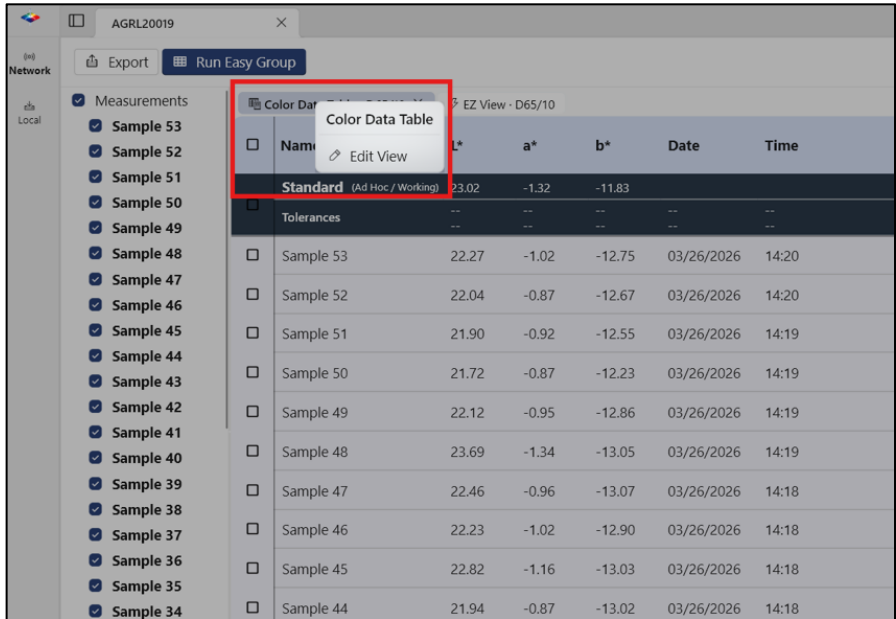


Figure 10. Edit View for Color Data Table in Quality Central

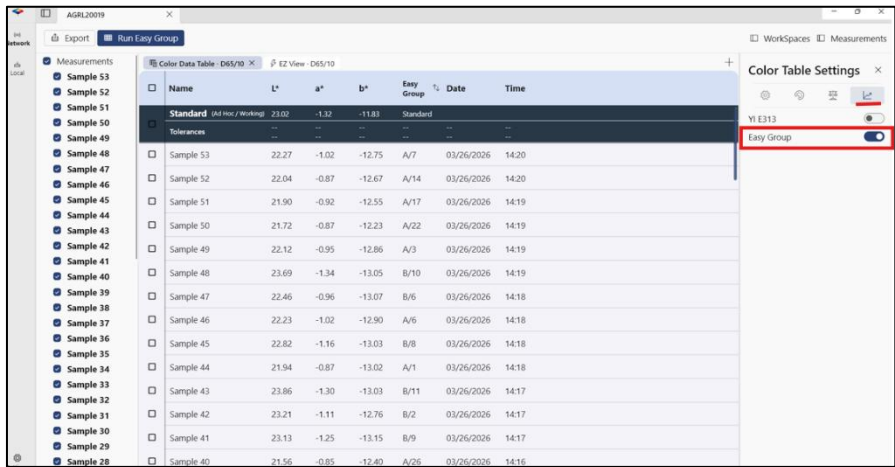


Figure 11. Easy Group Column in Quality Central

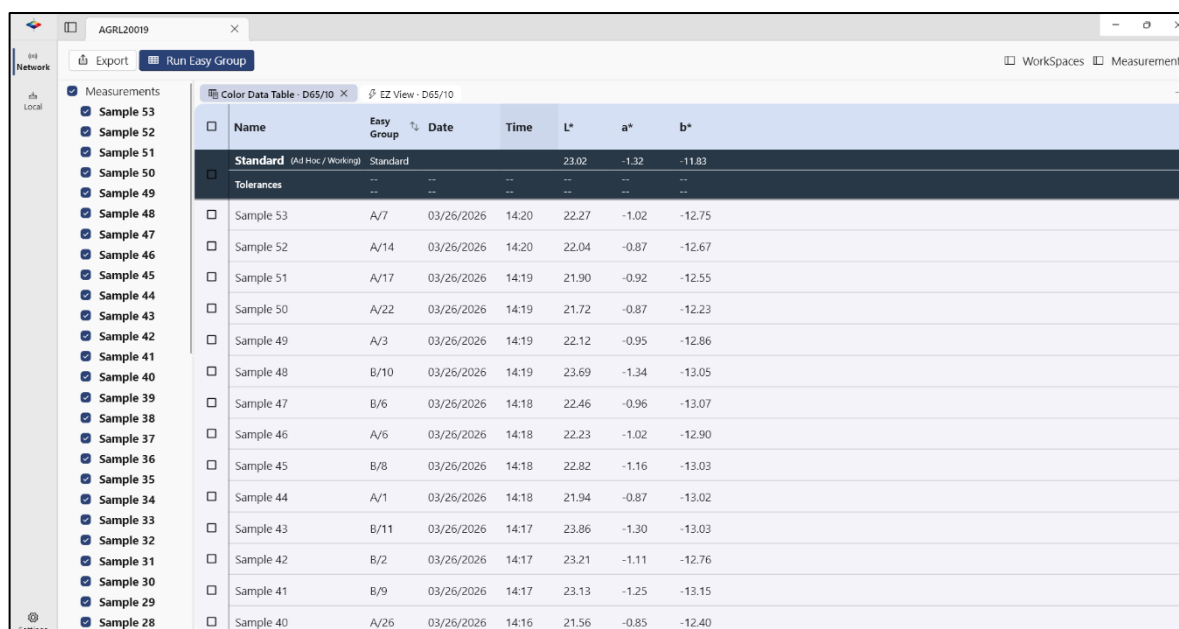
A new **EasyGroup** column will appear in the Color Data Table view and display the assigned group and tapering order for each processed sample. The result format is shown as **Group/Order**, for example:

- **A/1, A/2, A/3**
- **B/1, B/2**

The **letter** represents the assigned group, and the **number** represents the tapering order within that group.

Some samples may display special result statuses:

- **Ungrouped** – The sample meets tolerance requirements but cannot be placed into a valid group.
- **Failed** – The sample does not meet one or more EasyGroup tolerance requirements.



Name	Easy Group	Date	Time	L*	a*	b*
Standard (Ad Hoc / Working)	Standard			23.02	-1.32	-11.83
Tolerances						
Sample 53	A/7	03/26/2026	14:20	22.27	-1.02	-12.75
Sample 52	A/14	03/26/2026	14:20	22.04	-0.87	-12.67
Sample 51	A/17	03/26/2026	14:19	21.90	-0.92	-12.55
Sample 50	A/22	03/26/2026	14:19	21.72	-0.87	-12.23
Sample 49	A/3	03/26/2026	14:19	22.12	-0.95	-12.86
Sample 48	B/10	03/26/2026	14:19	23.69	-1.34	-13.05
Sample 47	B/6	03/26/2026	14:18	22.46	-0.96	-13.07
Sample 46	A/6	03/26/2026	14:18	22.23	-1.02	-12.90
Sample 45	B/8	03/26/2026	14:18	22.82	-1.16	-13.03
Sample 44	A/1	03/26/2026	14:18	21.94	-0.87	-13.02
Sample 43	B/11	03/26/2026	14:17	23.86	-1.30	-13.03
Sample 42	B/2	03/26/2026	14:17	23.21	-1.11	-12.76
Sample 41	B/9	03/26/2026	14:17	23.13	-1.25	-13.15
Sample 40	A/26	03/26/2026	14:16	21.56	-0.85	-12.40

Figure 12. Easy Group Results in Quality Central

EasyGroup View in Quality Central

Quality Central 2026.5 and above includes a dedicated EasyGroup View. The EasyGroup View provides a graphical display of grouped and tapered measurements so results can be reviewed visually in the same workspace.

After running EasyGroup, click + in the view area and select EasyGroup to add the view. The EasyGroup View plots Lightness (L^*) versus Chroma (C^*) and displays samples by group and tapering order. Lines connect samples within a group to show the tapering sequence. Hover over a point to view details including the sample name, assigned group, order, L^* , and C^* .

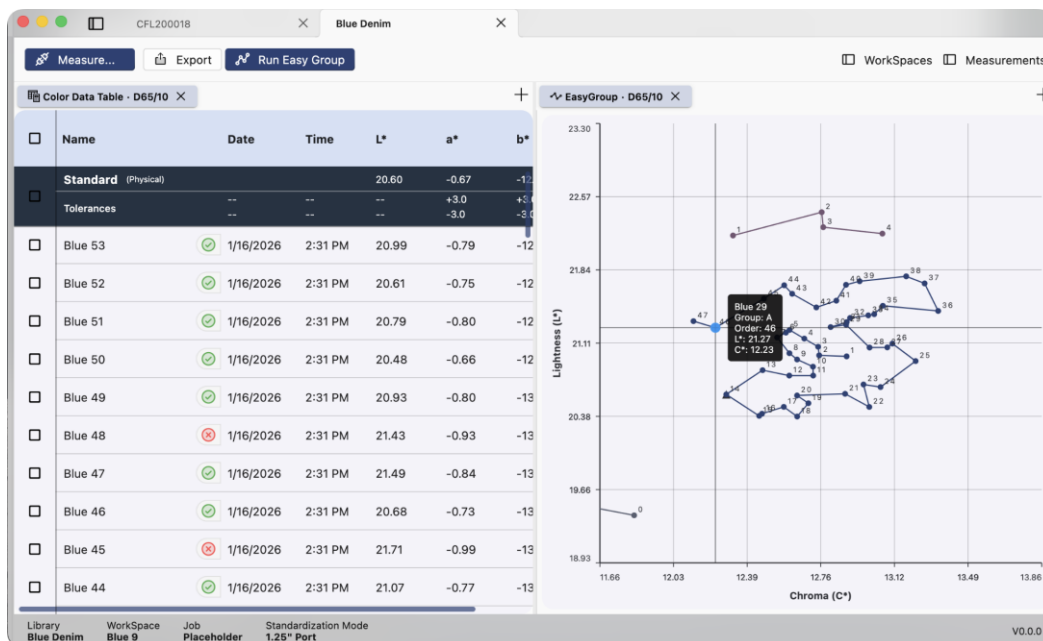


Figure 12. EasyGroup View in Quality Central

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