

Operate Manual

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Terms and Conditions

- 1、 This machine is mainly used to measure spectral data, spectral diagrams, chromaticity values, color difference values of samples, and present qualified/unqualified color simulation diagrams, etc. Compact and lightweight, the test is highly accurate and easy to operate.
- 2、 Widely used in laboratories, factories, or field operations, it is sufficient to achieve optimal color measurement in quality control in almost all applications.
- 3、 The limited warranty period is the time from the first purchase of the instrument (time: such as one year). If your instrument requires service, please take the instrument to your local sales office and contact us for repair.
- 4、 In order to avoid affecting the accuracy of the instrument, please do not disassemble the instrument without permission. If the instrument is damaged due to unauthorized disassembly of the machine or incorrect use, the user is solely responsible.

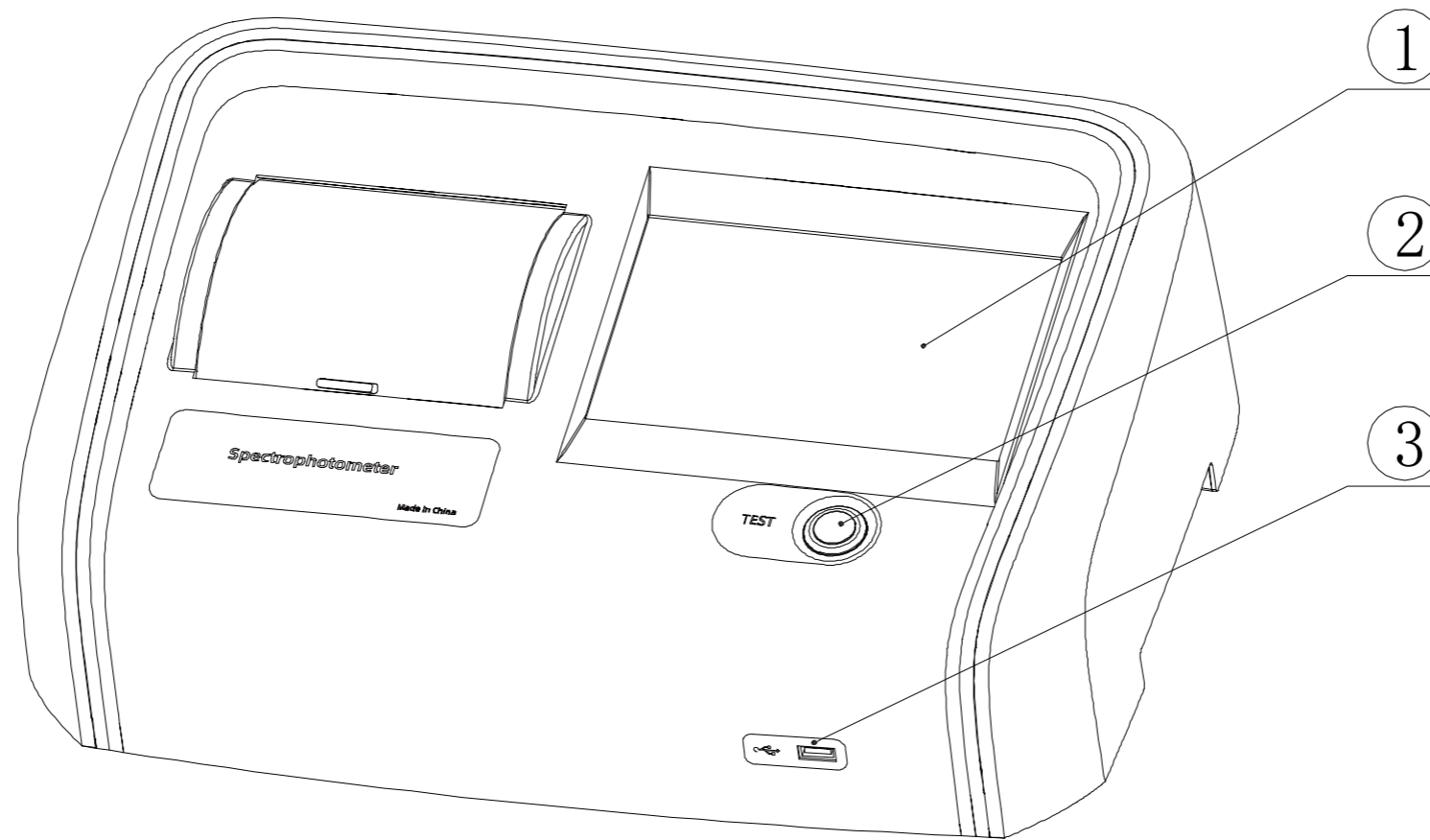
Precautions

- 1、 This machine is a precision instrument and cannot withstand collisions caused by falling. Please place it in a relatively flat place when using it.
- 2、 This machine is not moisture-proof or moisture-resistant. It may be damaged by moisture or liquid splashing into it.
- 3、 The screen of this machine is made of glass and is easily damaged by abnormal external forces or sharp objects.
4. Our company recommends using the original power adapter.
5. To ensure the normal operation of this machine, please do not store and use it in places that are too cold or too hot. Do not place this machine in humid places or under direct sunlight for long periods of time. Do not use this machine in harsh environments such as strong earthquakes. machine to avoid accidents.
6. This machine is a precision instrument, please avoid strong electromagnetic interference when using it.
7. To ensure accurate measurement, please keep the instrument stable and do not shake during testing.
8. This machine is a precision instrument. Please shut down the instrument for safekeeping after use.
9. Please store the instrument in a dry place.
10. It is prohibited to clean the inside of the integrating sphere.
11. If the instrument fails, please do not try to repair it yourself. Our customer service department will quickly provide help to customers.
12. This machine and the manual may be further improved or supplemented without prior notice. If you have any questions, please contact our company.

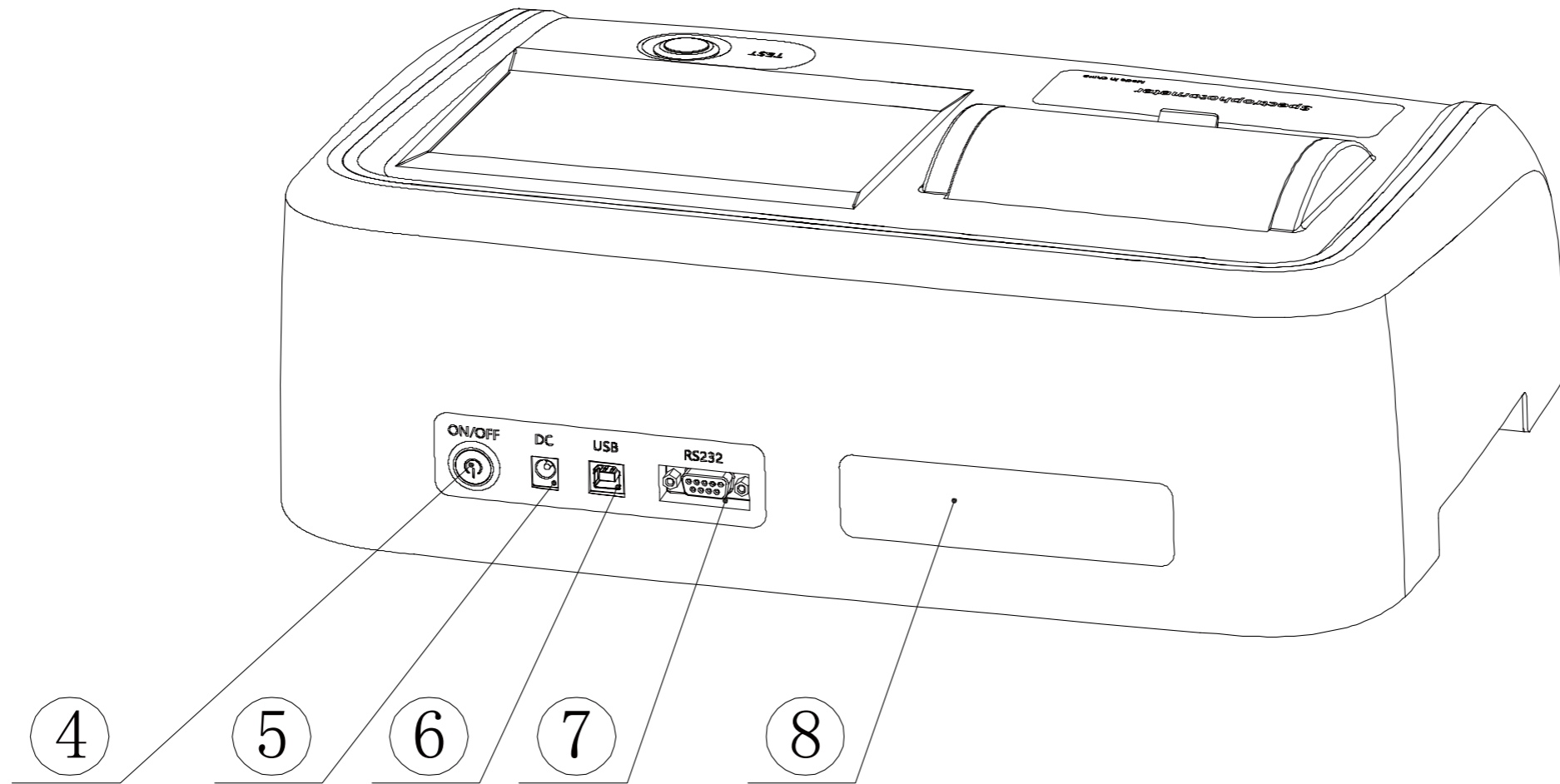
Function description

1. Transmission: d/0 (diffuse lighting, vertical reception)
2. Transmission measurement of liquids
3. It adopts 7.0-inch capacitive touch screen and has a good human-computer interaction interface.
4. Export data from U disk and view and manage it on PC
5. Provide professional color measurement and analysis software to meet users' analysis and management of test data.

Appearance structure introduction

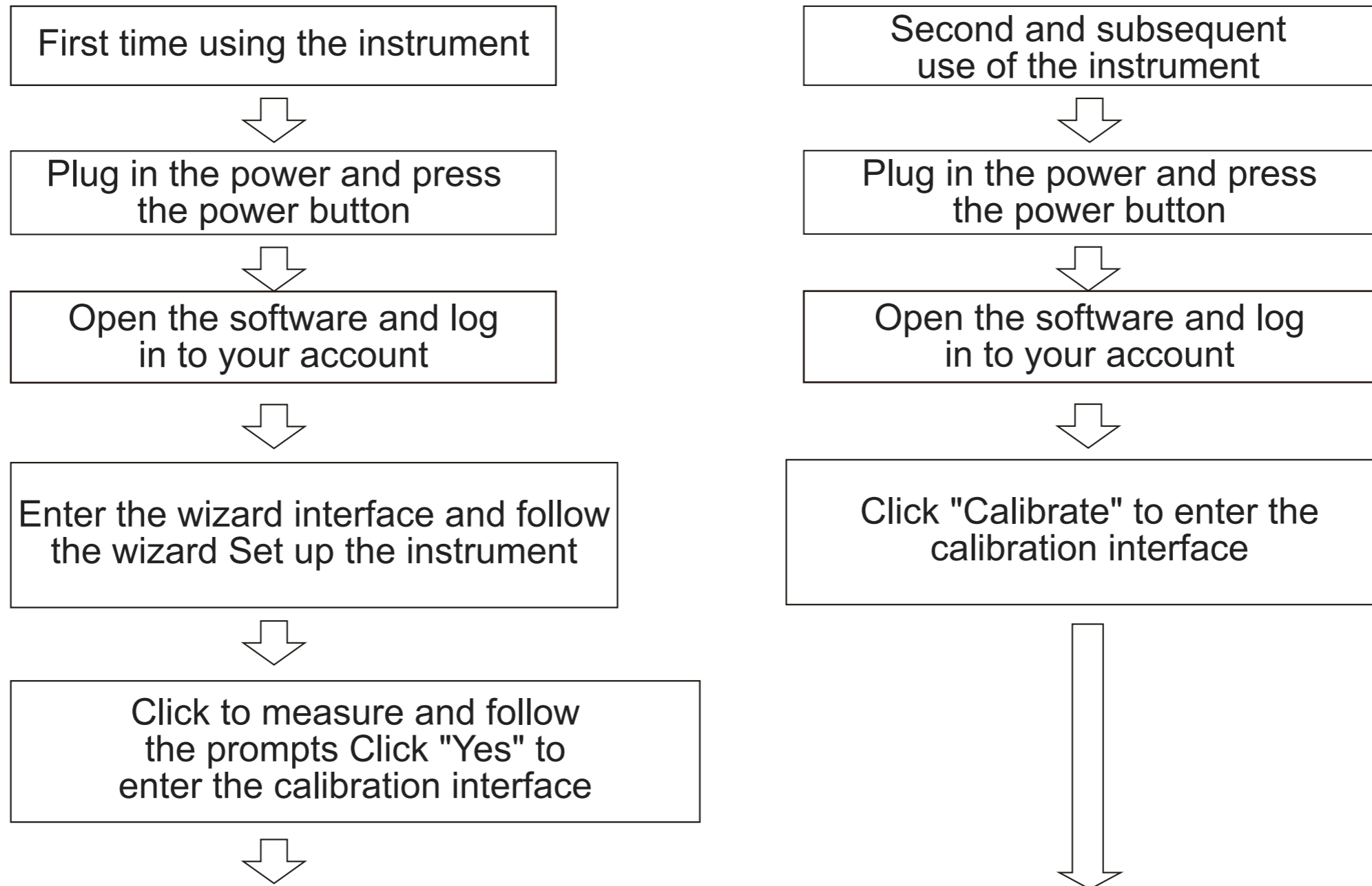


① Touchscreen ② Test keys ③ USB port

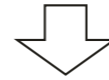


④Switch ⑤DC power socket ⑥USB-B port ⑦Serial port ⑧Nameplate

Measurement flow chart



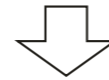
100% calibrated, measured air



Standard sample measurement, sample measurement



Check measurement results



Save or not save measurement results



Finish










Software interface introduction

[Features]

A-1

Main interface

The software is divided into 9 modules, namely: Measurement, Settings, Data Browsing, My Color, Personal Center, About, Log, Update, and Calibration.

 Measure	 Setting	 Data View
 My Color	 Individual Center	 About
 Daily Record	 Update	 Calibrate

A-1

A-2

Light source/angle: D65/10°
 Instrument temperature: 36.8°C
 Instrument humidity: 40.8%RH

Measure

Test Target --- Target0020 Test Sample --- Sample0001

Target	Sample	
L* = 99.99	L* = 45.82	dL* = -54.16 Black
a* = 0.03	a* = 1.24	da* = 1.21 Pass
b* = -0.03	b* = -1.34	db* = -1.30 Pass
C* = 0.04	C* = 1.82	dC* = 1.77 Pass
h = 310.99	h = 312.82	dH* = 0.00 Pass
		dE*94 54.19 Fail

Setting

Report

Save

Measure

A-2

[Log in]

There are two ways to log in: local login and network login. Enter your account number and password, and the instrument will automatically identify the account type. If you check Remember Password, you will automatically enter your account and password the next time you turn on the computer. If you check Automatically log in, you will skip the login page and enter the software directly the next time you turn on the computer.

B-1

The local login account is: admin, and the default password is the instrument serial number (can be modified in the personal center after logging in).

For example, the instrument serial number is: C81118C0128, then enter C81118C0128 in the login password field.

Language English ▼ Wifi Setting

Login Register

admin ▼

.....

Keep Password Auto Login

Login

[«Instructions»](#) [Forget Password?](#)

B-1

B-2

Network login

Online login requires an Internet connection. Click Register to register an account. You can select an email or mobile phone number to register. After registration is completed, you can log in using the registered account. Use network login to upload stored data to the cloud, and manage data on the Windows side.

The screenshot shows a user interface for network login and registration. At the top, there is a dark header bar with a 'Language' dropdown menu set to 'English' and a 'Wifi Setting' button. Below the header, there are two tabs: 'Login' and 'Register', with the 'Register' tab currently selected. The main content area contains several input fields and buttons: a text input for 'Mobile Number Or Email', a text input for 'Password', a text input for 'Confirm Password', a text input for 'Please enter a nickname', an 'Input Code' text input, a blue 'Get Code' button, and a large blue 'Register' button at the bottom.

B-2

[Instrument settings]

C

The screenshot shows the 'Setting' menu of an instrument. At the top, there is a home icon, the title 'Setting', and environmental data: 'D65/10° 35.8°C 42.6%RH'. Below the title are six tabs: 'Instrument', 'Parameter', 'Tolerance', 'Display', 'Other', and 'Calibration', with an 'Apply' button to the right. The 'Instrument' tab is selected. It contains three main sections: 'High-precision measurement mode' with radio buttons for 'Enable' and 'Not enabled' (selected); 'Heating settings' with a checkbox for 'Enable heating' (unchecked) and a note: 'The current model of device does not support it. Please purchase a device that supports heating function'; and 'System Setting' with a 'Screen Light' slider and a 'Language' dropdown menu set to 'English'. To the right of these sections is a vertical list of settings: 'Factory Reset', 'Screen Rotation', 'Wifi Setting', 'Timezone Setting', and 'Screensaver settings', all of which are currently disabled (greyed out).

C-1



Instrument

Parameter

Tolerance

Display

Other

Calibration

Apply

Illuminant&Angle (The second illuminant is for calculating the metamerism)

First	<input type="text" value="D65"/>	<input type="text" value="10°"/>
Second	<input type="text" value="A"/>	<input type="text" value="2°"/>

CMC(l:c)

l	<input type="text" value="2.0"/>	c	<input type="text" value="1.0"/>
---	----------------------------------	---	----------------------------------

CIE94

KL	<input type="text" value="1.0"/>	KC	<input type="text" value="1.0"/>	KH	<input type="text" value="1.0"/>
----	----------------------------------	----	----------------------------------	----	----------------------------------

CIE 2000

KL	<input type="text" value="1.0"/>	KC	<input type="text" value="1.0"/>	KH	<input type="text" value="1.0"/>
----	----------------------------------	----	----------------------------------	----	----------------------------------



Instrument

Parameter

Tolerance

Display

Other

Calibration

Apply

CIE LAB&LCH

Hunter Lab

CIEDE2000

CIE LUV

CMC(l:c)&CIE94

Liquid

Temperature & humidity

Parameter adap

CIE LAB

		Upper Limit	Lower Limit	Between
dL*	± 2.0	White	Black	Pass
da*	± 2.0	Red	Green	Pass
db*	± 2.0	Yellow	Blue	Pass
dE*ab	2.0	Fail		Pass

CIE LCH

dC*	2.0	dH*	2.0
-----	-----	-----	-----

Setting D65/10° 35.8°C 42.4%RH

Instrument Parameter Tolerance **Display** Other Calibration Apply

Liquid chromaticity

EBC

ICUMSA

Color Diff.

Data

Figure

Metamerism

Find Similar Color

Pharmacopoeia color

Measure C/2° 27.6°C 25.2%RH

Test Target — Target0064 Test Sample — Sample0001

	Pt-Co/Hazen/APHA	Gardner Color	Saybolt	ASTM Color
Cuvette Light Path	Target	Sample	Diff Value	Judge
50mm	0.05	0.06	0.00	Pass

Setting

Report

Save

Measure

Setting D65/10° 35.9°C 42.4%RH

Instrument Parameter Tolerance Display **Other** Calibration Apply

Average

Single Test Average Test

Save Setting

Manual Save Auto Save

Naming Rules

Target	Target	+	<input checked="" type="checkbox"/> Number	+	<input type="checkbox"/> Date
Sample	Sample	+	<input checked="" type="checkbox"/> Number	+	<input type="checkbox"/> Date

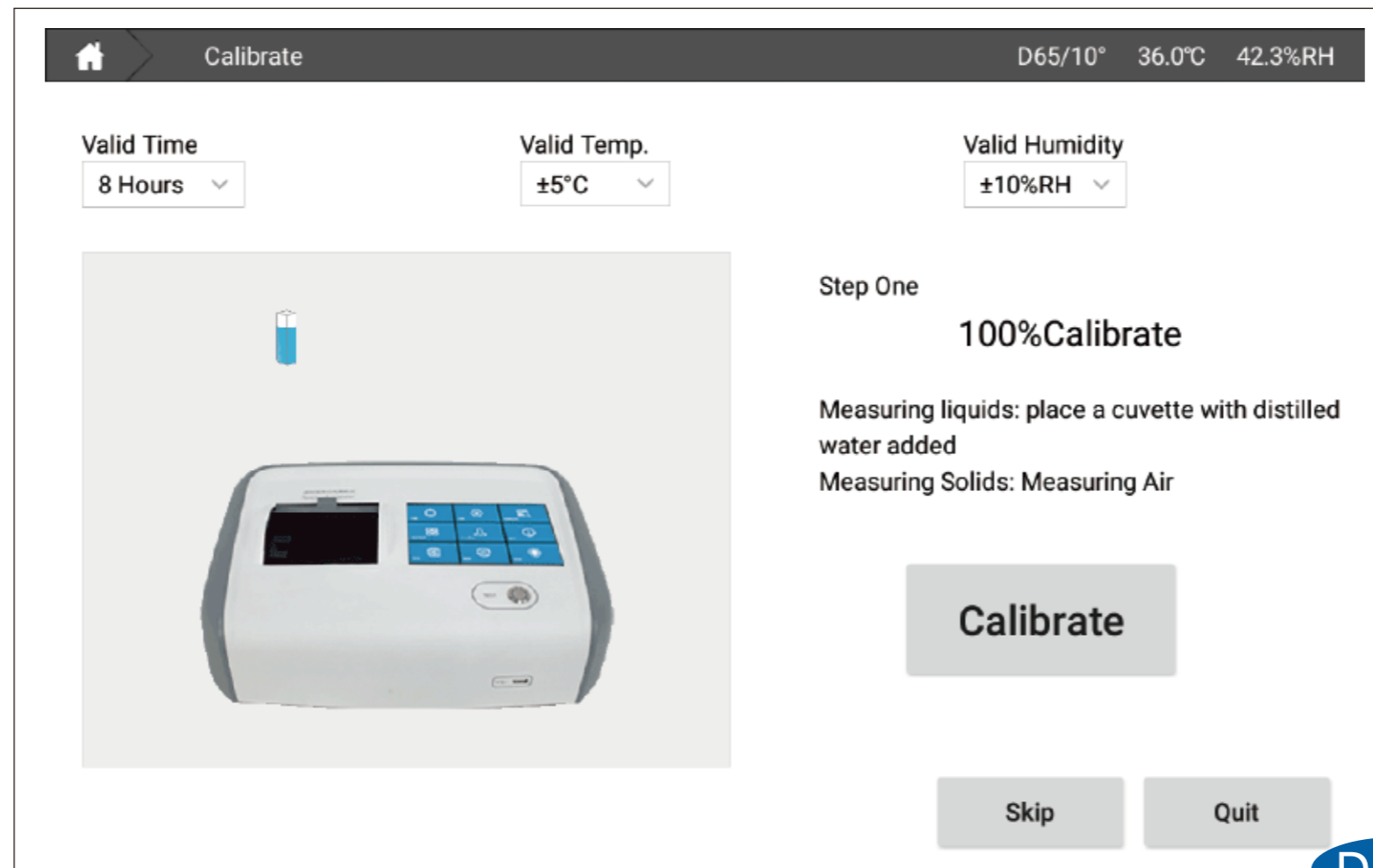
C-5

[Calibration]

D-1

100% Calibration

The instrument needs to be 100% calibrated and measured in air, just follow the software prompts. This page allows you to set the validity period of the calibration, including the calibration valid time, calibration valid temperature, and calibration valid humidity.



D-1/1

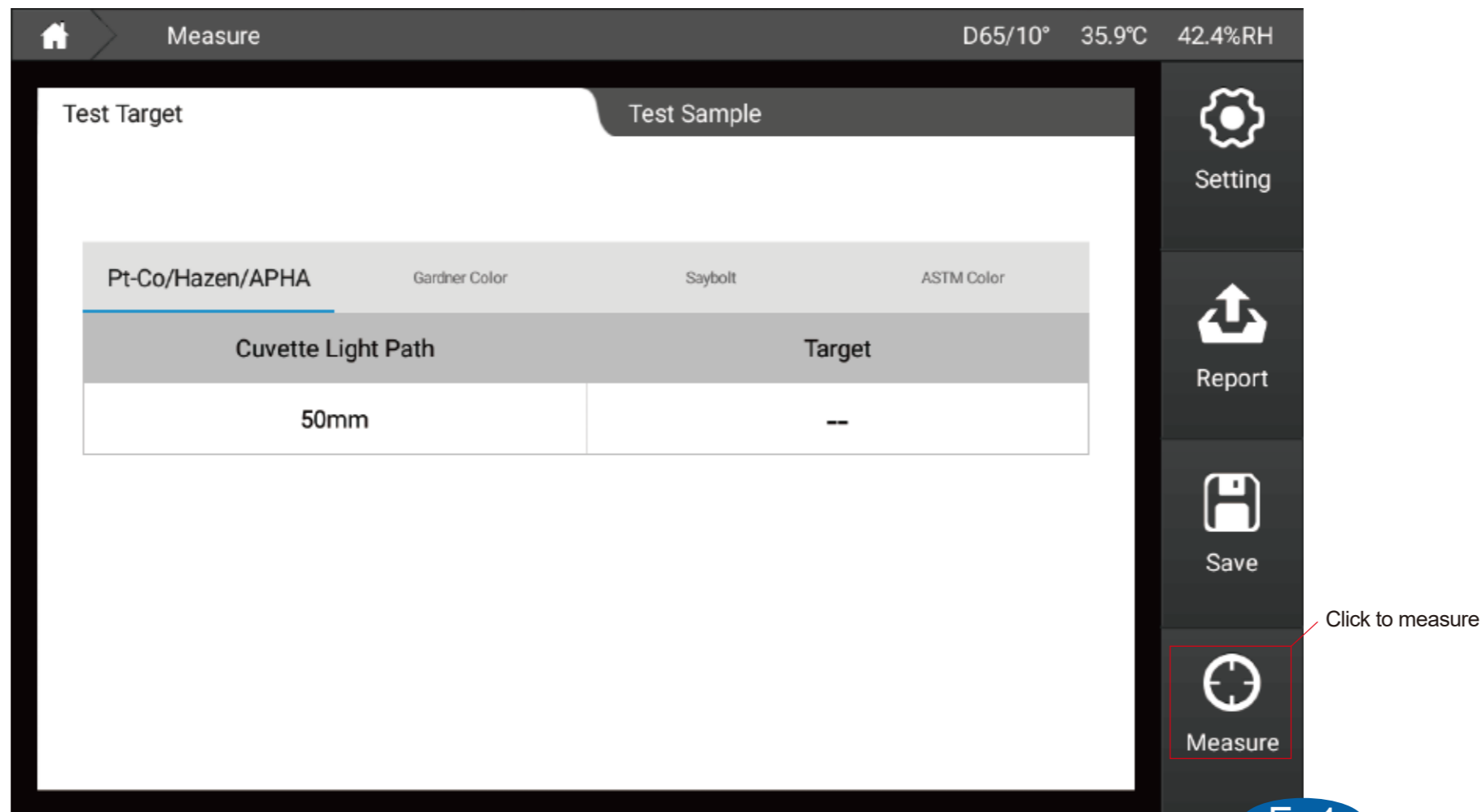
Air calibration

Using an instrument to measure air and perform air calibration can maintain the long-term stability of the instrument, reduce the impact of environmental changes on the measurement, and improve test accuracy.



Standard sample measurement

Click Measure on the home page to enter the standard sample measurement interface. After the sample placement is completed, click the measurement button in the lower right corner of the screen, or the test button on the side of the instrument. The measurement data will be displayed on the screen, and the measurement button will return to the pressable state, indicating that the measurement is completed.



Sample measurement

In the standard sample measurement interface, click Sample Measurement on the interface to switch to the sample measurement interface. Also after the sample placement is completed, click the measurement button in the lower right corner of the screen or the test button on the side of the instrument to measure sample data.

Measure

D65/10° 35.9°C 42.4%RH

Test Target --- Targetxxxx Test Sample

Pt-Co/Hazen/APHA	Gardner Color	Saybolt	ASTM Color	
Cuvette Light Path	Target	Sample	Diff Value	Judge
50mm	0.04	--	--	--

Setting

Report

Save

Measure

Click to measure

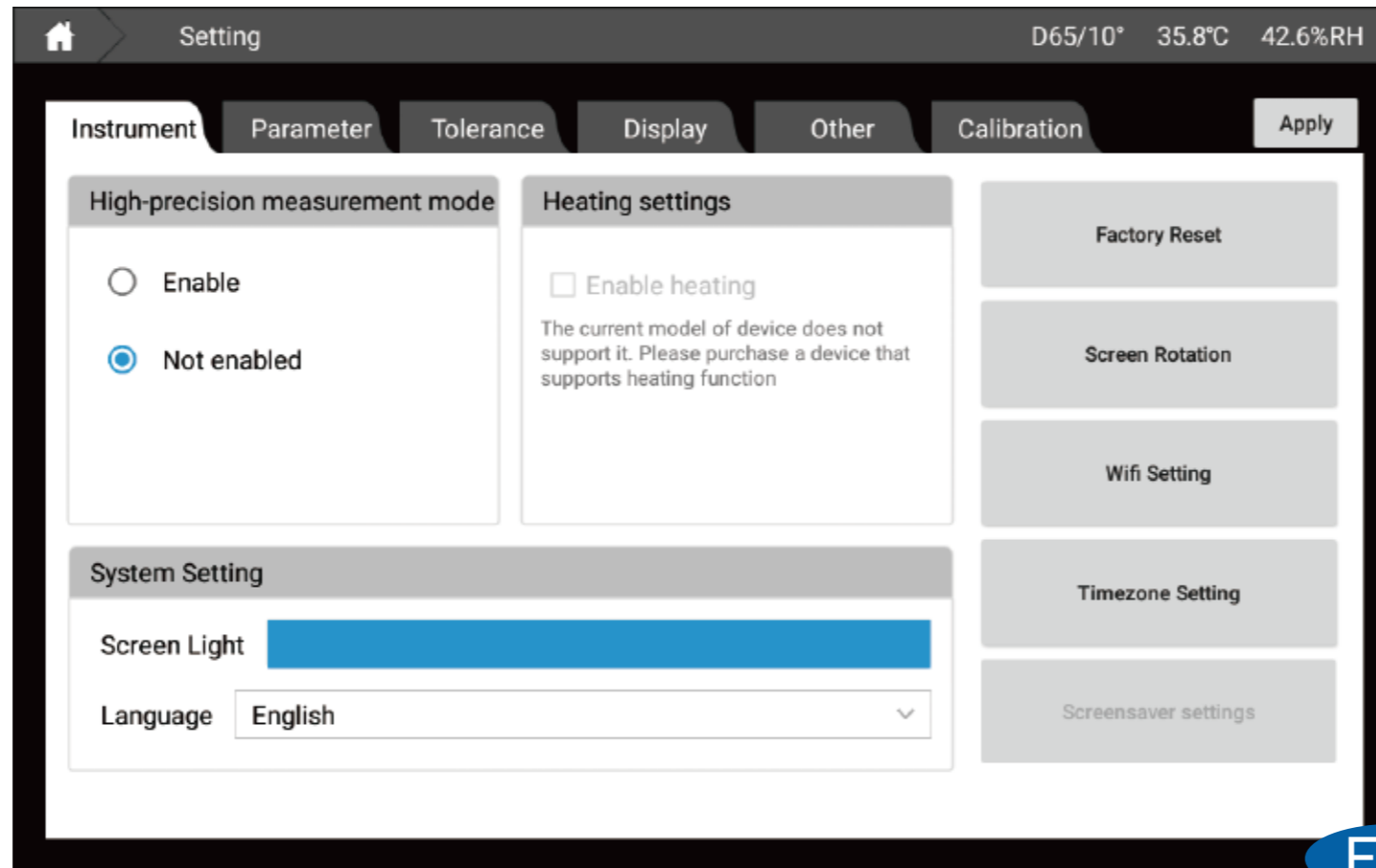
[Set up]

F-1

Instrument settings

Instrument settings are divided into 7 areas

1. High-precision measurement mode: Using intelligent zero-point calibration technology, the data is more reliable.
2. Heating setting: Provides a constant temperature sample tank with a temperature up to 90°C to ensure sample fluidity (DS-816N only).
3. System settings: You can set the screen backlight and language switching.
4. Screen rotation: Click the screen to rotate and the screen display direction will rotate 180°.
5. Factory reset: The software configuration is restored to the factory state.
6. Wi-Fi settings: You can select Wi-Fi and log in.
7. Time zone setting: time display in different countries, and the time can be automatically synchronized when connected to the Internet



F-2

Parameter settings

Parameter settings configure data calculations

1. Light source & angle: You can set the light source and angle for calculation data. The first light source and angle are calculation data in all modes, and the second light source is only used to calculate metamerism

(Note: Similar color search and my color display data Fixed to D65/10°)

2. CMC(l:c): You can set the l:c coefficient of CMC color difference formula.
3. CIE94: You can set the KL, KC, and KH coefficients of the CIE94 color difference formula.
4. CIE2000: You can set the KL, KC, and KH coefficients of the CIE2000 color difference formula.

Setting D65/10° 35.8°C 42.5%RH

Instrument Parameter Tolerance Display Other Calibration Apply

Illuminant&Angle (The second illuminant is for calculating the metamerism)

First D65 10°

Second A 2°

CMC(l:c)

l 2.0 c 1.0

CIE94

KL 1.0 KC 1.0 KH 1.0

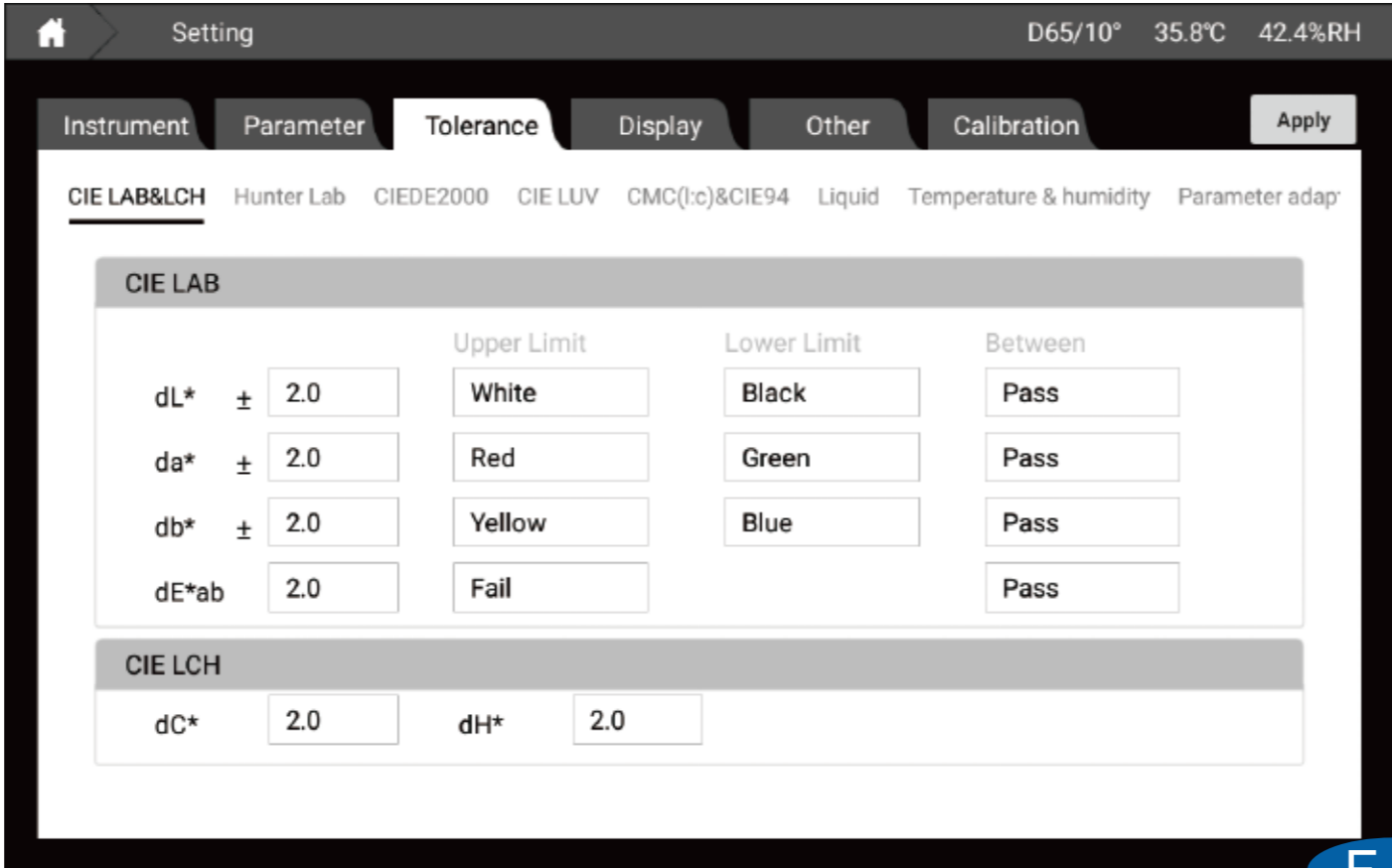
CIE 2000

KL 1.0 KC 1.0 KH 1.0

F-3

Tolerance settings

Tolerance is used to determine whether the measured data is qualified. When the measured data exceeds the tolerance range, it will prompt that the data is unqualified. When the measured data is less than or equal to the tolerance, it will prompt that the data is qualified. In this interface, you can set the tolerances of different color difference formulas and modes. (CIELAB can user-defined prompt language)



Display setting

Display settings can set the content displayed under the "Measurement Page". Divided into the following categories:

1. Liquid color: platinum-cobalt color, Gardner color, cyber special color, ASTM COLOR;
2. Beer color (EBC);
3. Sugar color (ICUMSA);
4. Color difference: CIELABCH, CIEDE2000, CIE94, CMC, HunterLab;
5. Data: This mode can display all parameters that the instrument can test;
6. Graphics: CIE LAB diagram, Yxy diagram, Luv diagram, transmittance curve, absorbance curve;
7. Metamerism: measure metamerism parameters;
8. Similar color search: Find the color closest to the current measurement data from the "My Color" database;
9. Pharmacopoeia color number: Search the pharmacopoeia color number from the selected pharmacopoeia database;

Setting D65/10° 35.8°C 42.4%RH

Instrument Parameter Tolerance **Display** Other Calibration Apply

Liquid chromaticity

EBC

ICUMSA

Color Diff.

Data

Figure

Metamerism

Find Similar Color

Pharmacopoeia color

Measure C/2° 27.6°C 25.2%RH

Test Target --- Target0064 Test Sample --- Sample0001

Pt-Co/Hazen/APHA	Gardner Color	Saybolt	ASTM Color	
Cuvette Light Path	Target	Sample	Diff Value	Judge
50mm	0.05	0.06	0.00	Pass

Setting

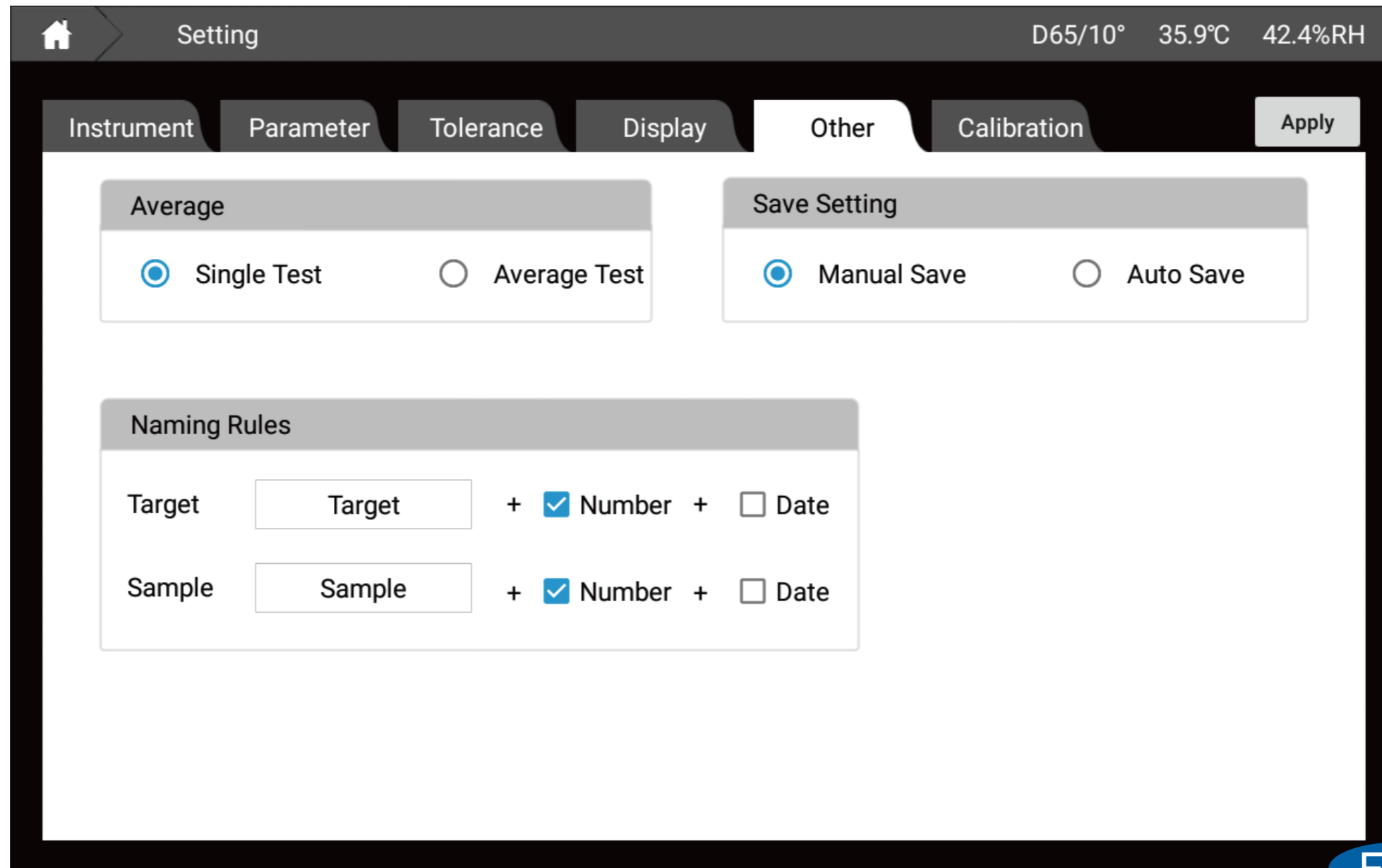
Report

Save

Measure

F-5

Other settings



F-5

F-6

Data scaling

Setting D65/10° 35.9°C 42.4%RH

Instrument Parameter Tolerance Display Other Calibration Apply

Pt-Co/Hazen/APHA Gardner Color Saybolt Astm Color

	Standard value	Measurement value	Calibrated value

Tips: The current parameter range is [0, 500], it is recommended to evenly add calibration points within the range

READ ADD GRADIENT CLEAR GRADIENT SAVE

F-6

[Data browsing]

G

1. The left side of the page displays the standard sample data list, and the right side displays the sample data list under the standard sample;
2. In the lower left corner of the page, you can search and sort standards or samples according to name, time or remarks;
3. After clicking on one of the standard samples, you can see the sample data details under the standard sample data on the right side of the interface;
4. Long press the standard or sample to choose to call up, modify, delete the current selection, delete all, save to My Colors, and export the report;
5. Click the standard sample to enter the sample detailed information interface, where you can search for samples under the current standard sample, export the current display data, and upload the current display data;
6. Click Parameter Edit to pop up the parameter editing window, where you can select the parameters displayed in the data interface.

Home Data View D65/10° 36.1°C 42.2%RH

Target	Edit	Name	Mode	L*	a*	b*	C
Target0002							

Target Sample Search Name ▼ Sort by name ▲ Export Import

Standard search box

Standard sample data list

G-1

Home Data View D65/10° 36.2°C 42.2%RH

Target	Edit	Name	Mode	L*	a*	b*	C
Target0002	Target	Target0002	Transmittance	99.99	0.03	-0.03	0.0
	0	Sample0001	Transmittance	99.99	0.03	-0.03	0.0
	1	Sample0002	Transmittance	99.99	0.03	-0.03	0.0
	2	Sample0003	Transmittance	99.98	0.03	-0.03	0.0
	3	Sample0004	Transmittance	99.98	0.03	-0.04	0.0

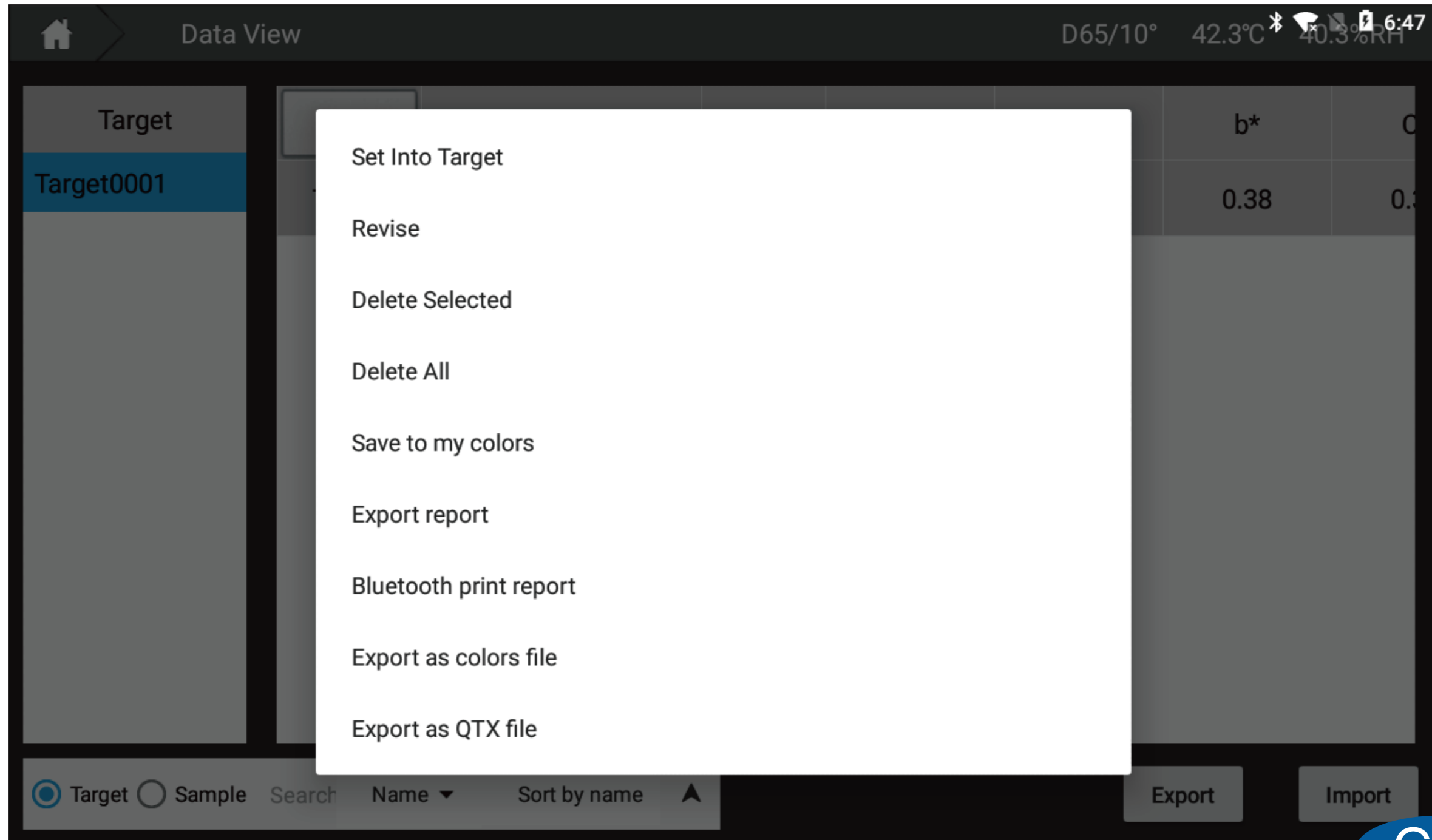
Target Sample Search Name ▼ Sort by name ▲

Export Import

Sample data list

Can export current display data and upload current display data

G-2



G-3

Home Data View D65/10° 36.3°C 42.0%RH

Parameter selection

Target	Color space	L*	<input type="button" value="ADD"/> <input type="button" value="DELETE"/> <input type="button" value="REMOVE ALL"/>	<p>Selected parameters</p> <p>L*</p> <p>a*</p> <p>b*</p> <p>C*</p> <p>h</p> <p>dE*ab</p>	<input type="button" value="TOP"/> <input type="button" value="UP"/> <input type="button" value="DOWN"/> <input type="button" value="BOTTOM"/>
	Color space diff	a*			
	Color difference	b*			
	Whiteness	C*			
	Yellowness	h			
	Blackness and Transmittance	X	<input type="button" value="FINISH"/>		
	Color fastness	Y			
	Strength	Z			
	Color density	x			

Target Sample Search Name Sort by name Export Import

G-4

[My color]



My color is the data saved by the user. This data can be used to call up the standard sample. Similar color search is performed in the database.

Top of the page: You can select and modify my color library. You can pull down to select different libraries. You can also click "Manage" to rename and delete the color library. You can also click "New" to add a color rate; page

Middle: Displays data under the currently selected color library (L*, a*, b" data are data calculated under the D65/10° parameter);

Bottom of the page: You can search, display, back up data (requires inserting a USB flash drive), add a piece of data to the current color library, synchronize data to the cloud, delete data, etc.



Select:

My color library >

data from D65/10°

Sample0002

SCI

L* = 86.65

a* = 27.69

b* = 99.46

Target0002

SCI

L* = 99.99

a* = 0.03

b* = -0.03

Sample0001

SCI

L* = 99.99

a* = 0.03

b* = -0.03

Search

Name ▼

Sort by time



Export

Import

Create

Delete

H-1

My Color D65/10° 36.3°C 41.9%RH

Select: My color library

Sample0002
SCI

L* = 86.65
a* = 27.69
b* = 99.46

data from D65/10°

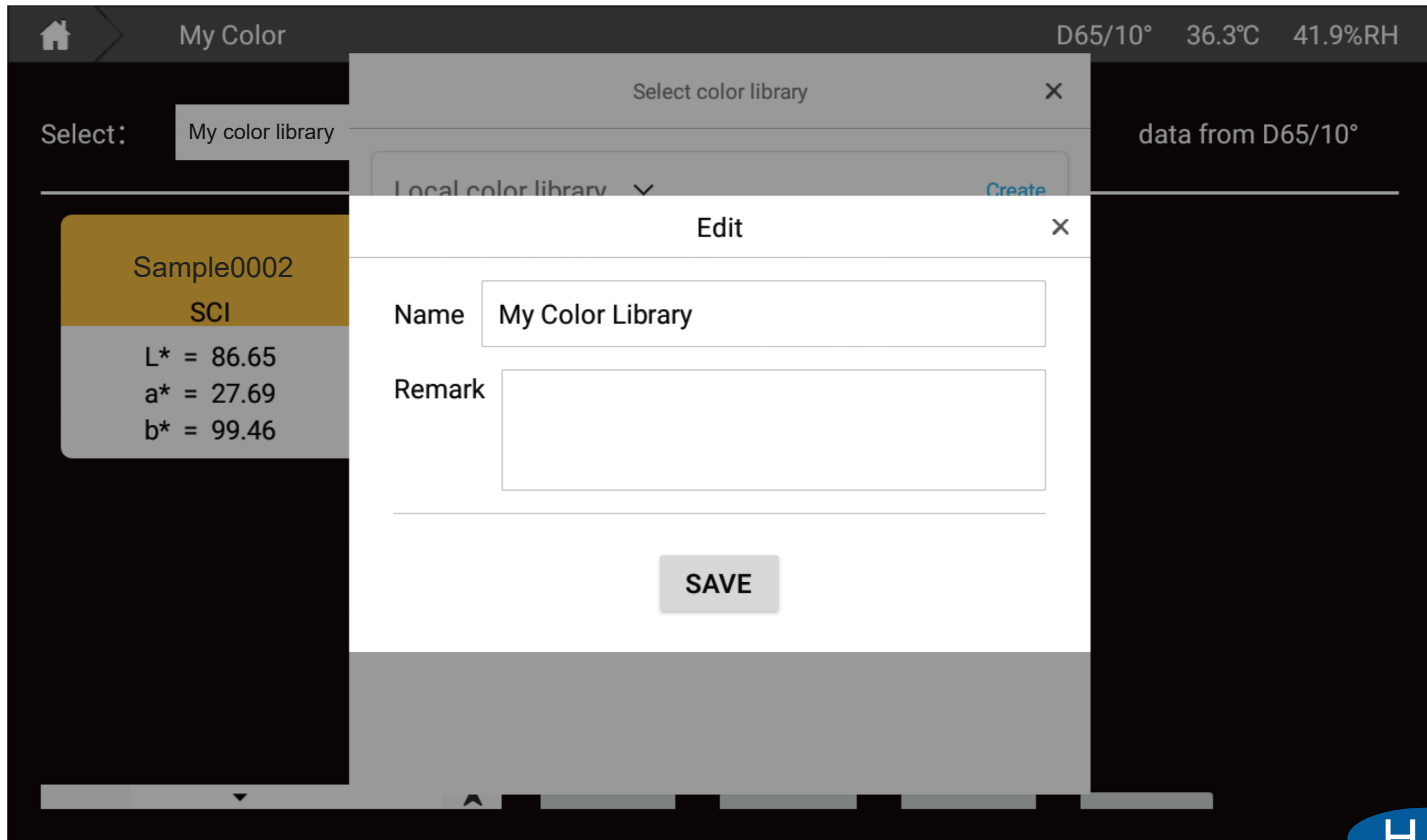
Select color library ×

Local color library ▼ Create

My Color Library ⋮

Cloud color library ^

H-2



H-3

My Color

Select: My color library

Sample0002
SCI

L* = 86.65
a* = 27.69
b* = 99.46

Color Detail

L* = 86.65
a* = 27.69
b* = 99.46

Spectrum Curve

Wavelength (nm)

Name: Sample0002

Remark:

Set Into Target

Finish

Create Time: 2016-06-03 10:52:28


55/10° 36.3°C 41.9%RH


data from D65/10°

H-4

41.9%RH
55/10°

Create My Color

Select: 



Name

Remark

Manual Input | **Instrument Measure**

SCI | SCE

L*: | L*:

a*: | a*:

b*: | b*:

D65 | 10°

Preview

FINISH

H-5

41.9%RH
55/10°

Select:

Home
Create My Color ×

Manual Input
Instrument Measure

Name

Remark

FINISH

Measure

SCI

L*:

a*:

b*:

360nm:

370nm:

380nm:

390nm:

400nm:

H-6

[Personal center]

I-1

The personal center interface allows you to modify the account password and log out of the current account.

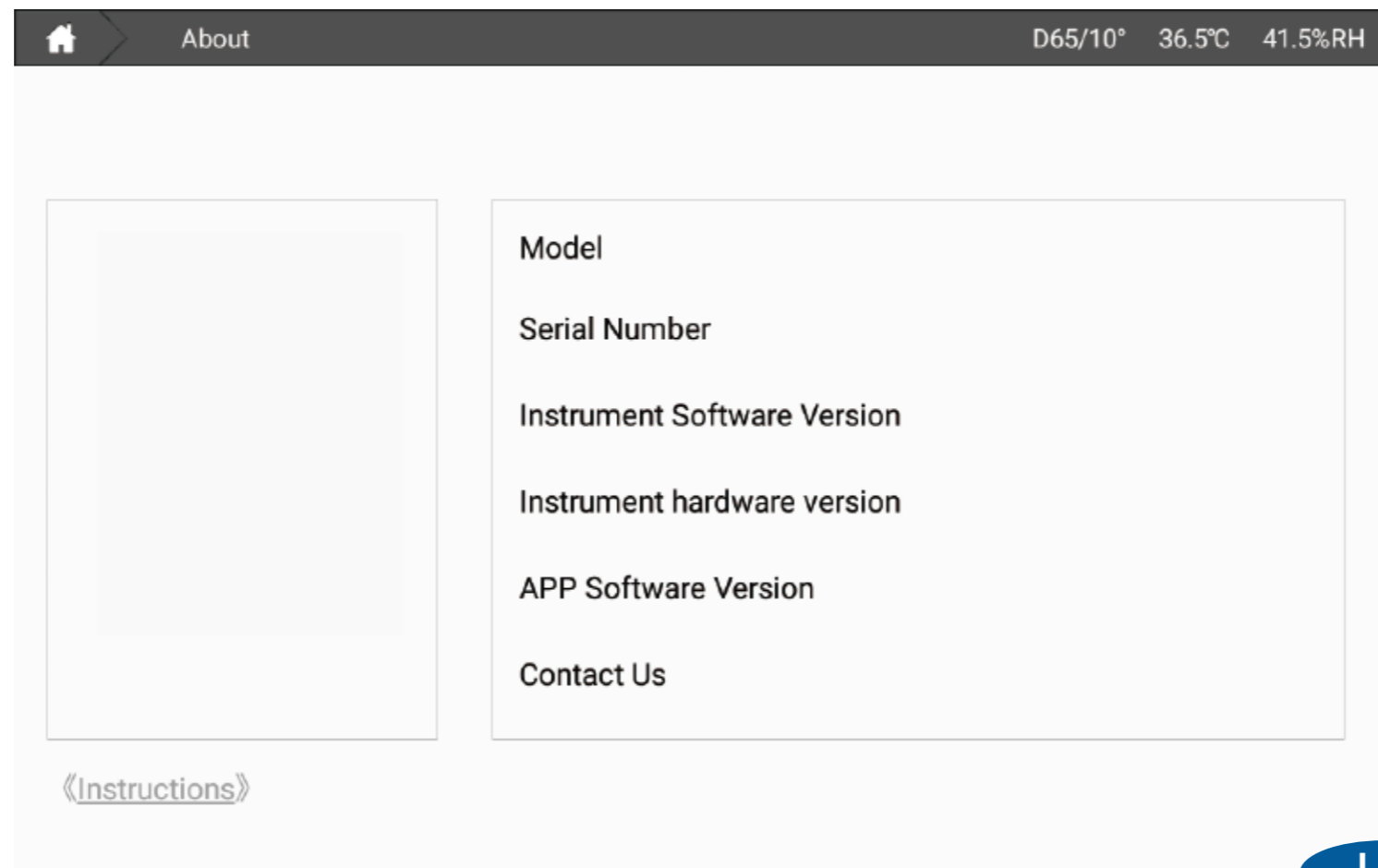
The screenshot displays the 'Individual Center' interface. At the top, a dark header bar contains a home icon, the text 'Individual Center', and weather data: 'D65/10° 36.5°C 41.6%RH'. Below the header, there are two main sections. The first section, titled 'Change Password', contains three input fields: 'Old Password', 'New Password', and 'New Password Confirm'. An 'Enter' button is positioned below these fields. The second section, titled 'Audit trail', features a toggle switch for 'Audit trail' and a button labeled 'SUB-ACCOUNT MANAGEMENT'. A 'Logout' button is located to the right of the 'Change Password' section.

I-1

[About]

J-1

About the interface, you can view instrument information, such as software version, instrument version, instrument serial number, instrument model, etc.



J-1

[Log]



In the log interface, you can see the instrument's login information, calibration information, instrument error information, etc.

The screenshot shows a log interface with a dark header bar. On the left is a home icon, followed by the text 'Daily Record'. On the right of the header bar are the environmental conditions: 'D65/10° 36.6°C 41.5%RH'. Below the header is a list of log entries:

- 2024-05-20 01:58:53.7 Account Login admin
- 2024-05-20 01:58:50.2 Post: 0
- 2024-05-20 01:38:55.9 Account Login admin
- 2024-05-20 01:38:52.2 Post: 0
- 2024-05-20 01:33:18.7 0% calibration succeed
- 2024-05-20 01:27:05.3 Account Login admin
- 2024-05-20 01:21:50.4 Power on self test: 0
- 2024-05-20 00:48:38.1 Power on self test: 0
- 2021-01-01 00:00:31.5 Power on self test: 0
- 2024-05-20 00:23:49.4 Power on self test: 0
- 2021-01-01 00:00:31.6 Power on self test: 0
- 2024-05-13 09:35:57.5 Power on self test: 0
- 2021-01-01 00:00:32.9 Power on self test: 0
- 2021-01-01 00:03:55.5 0% calibration succeed
- 2024-05-06 00:14:56.7 Power on self test: 0
- 2024-04-30 06:07:46.3 Power on self test: 0
- 2021-01-01 00:00:33.8 Power on self test: 0

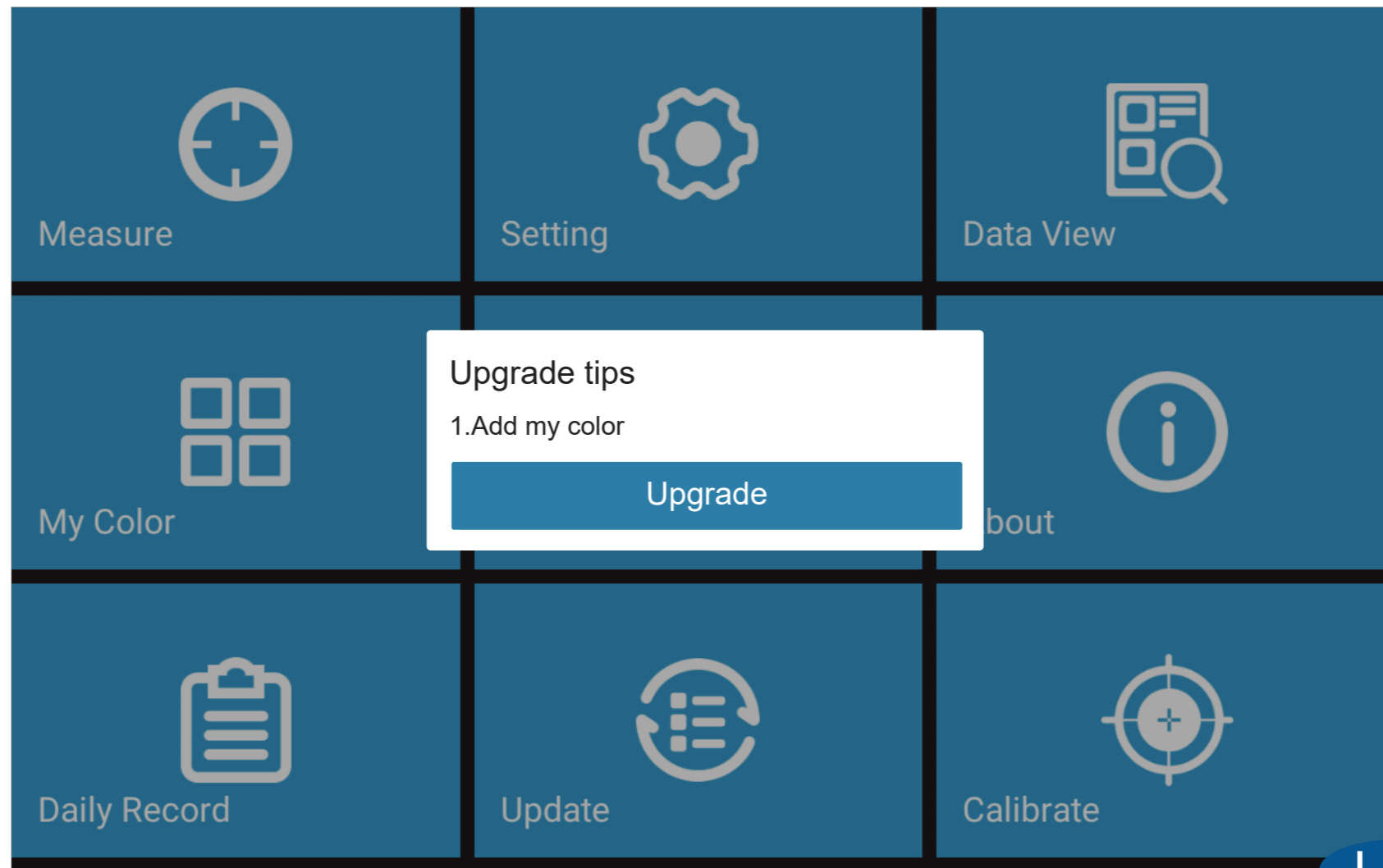
A 'DEVICECHECK' button is located in the top right corner of the log list area.



[Renew]

L-1

When connected to the Internet, you can click Update to check whether there is new software and obtain the latest software.

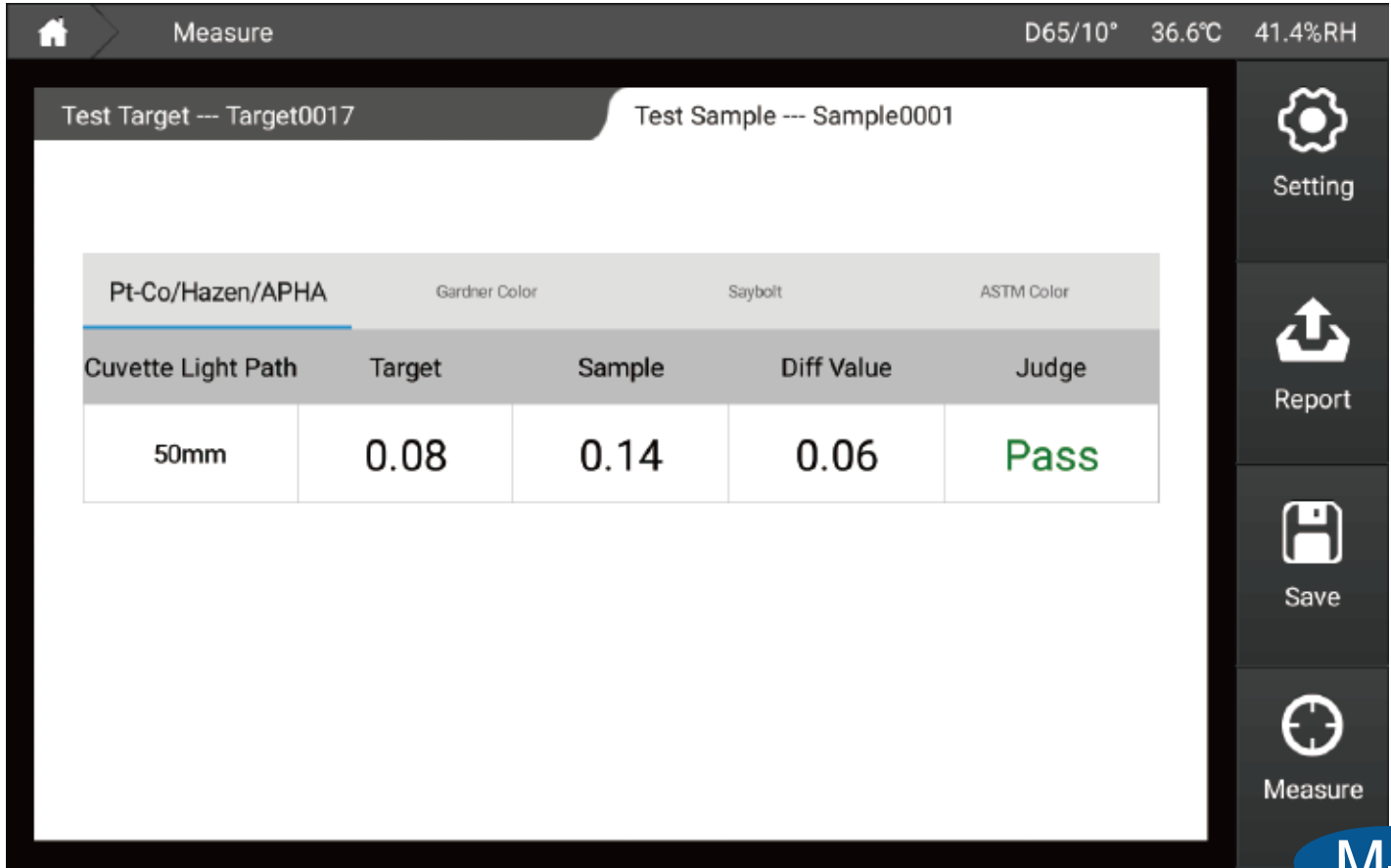


Measurement interface introduction

[Liquid color]

M-1

This interface can test platinum-cobalt color, Gardner color, cyber characteristic, and ASTM COLOR value respectively, and at the same time automatically determine whether the sample is qualified through the set tolerance.



The screenshot displays a measurement interface with a top status bar showing 'Measure', 'D65/10°', '36.6°C', and '41.4%RH'. Below this, there are tabs for 'Test Target --- Target0017' and 'Test Sample --- Sample0001'. The main area contains a table with the following data:

Pt-Co/Hazen/APHA	Gardner Color	Saybolt	ASTM Color	
50mm	0.08	0.14	0.06	
Cuvette Light Path	Target	Sample	Diff Value	Judge
50mm	0.08	0.14	0.06	Pass

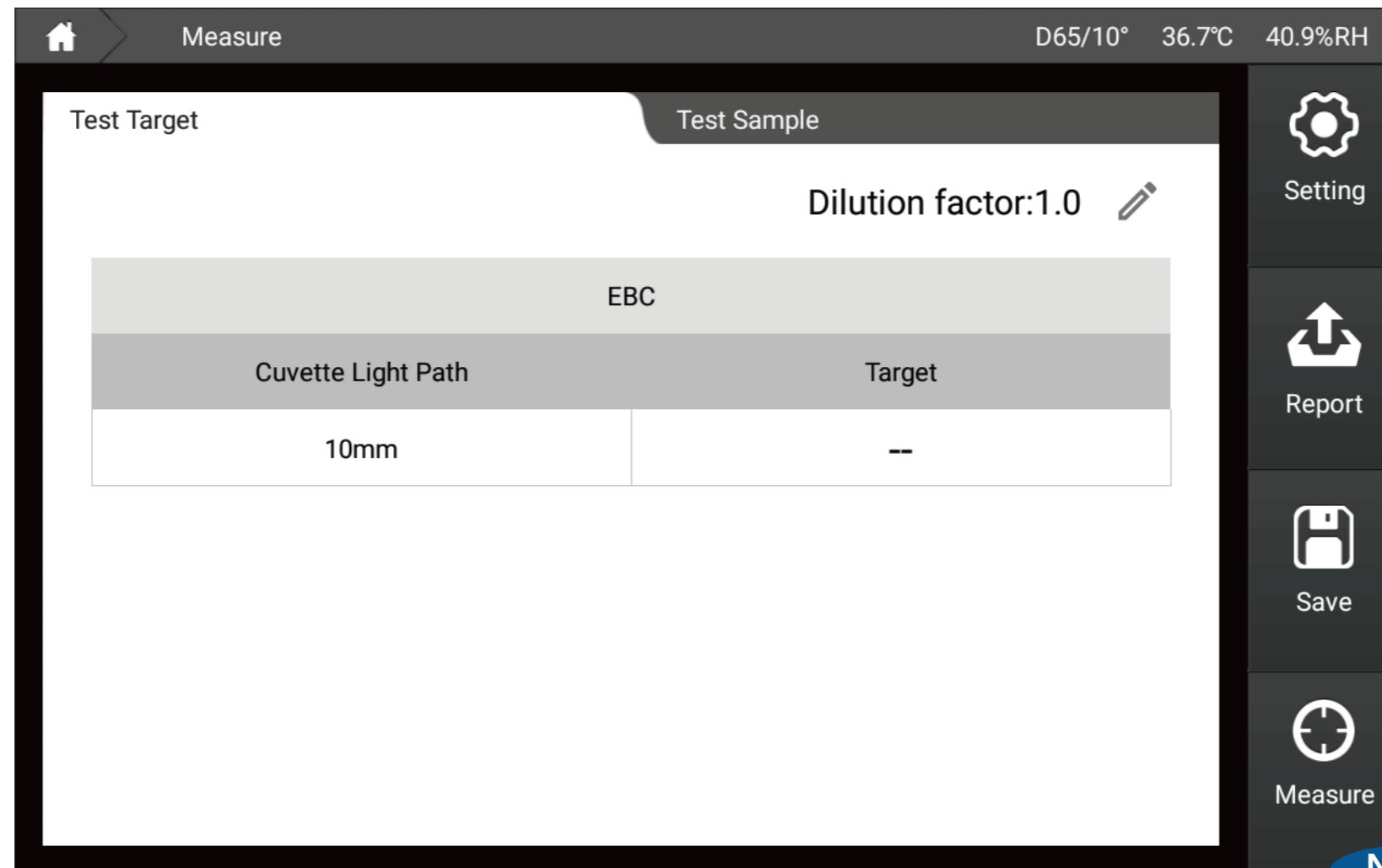
On the right side of the interface, there are four icons: a gear for 'Setting', an upward arrow for 'Report', a floppy disk for 'Save', and a circular arrow for 'Measure'.

M-1

[Beer Color (EBC)]

N-1

This interface can test the color value of beer, set the dilution factor, and automatically determine whether the sample is qualified through the set tolerance.

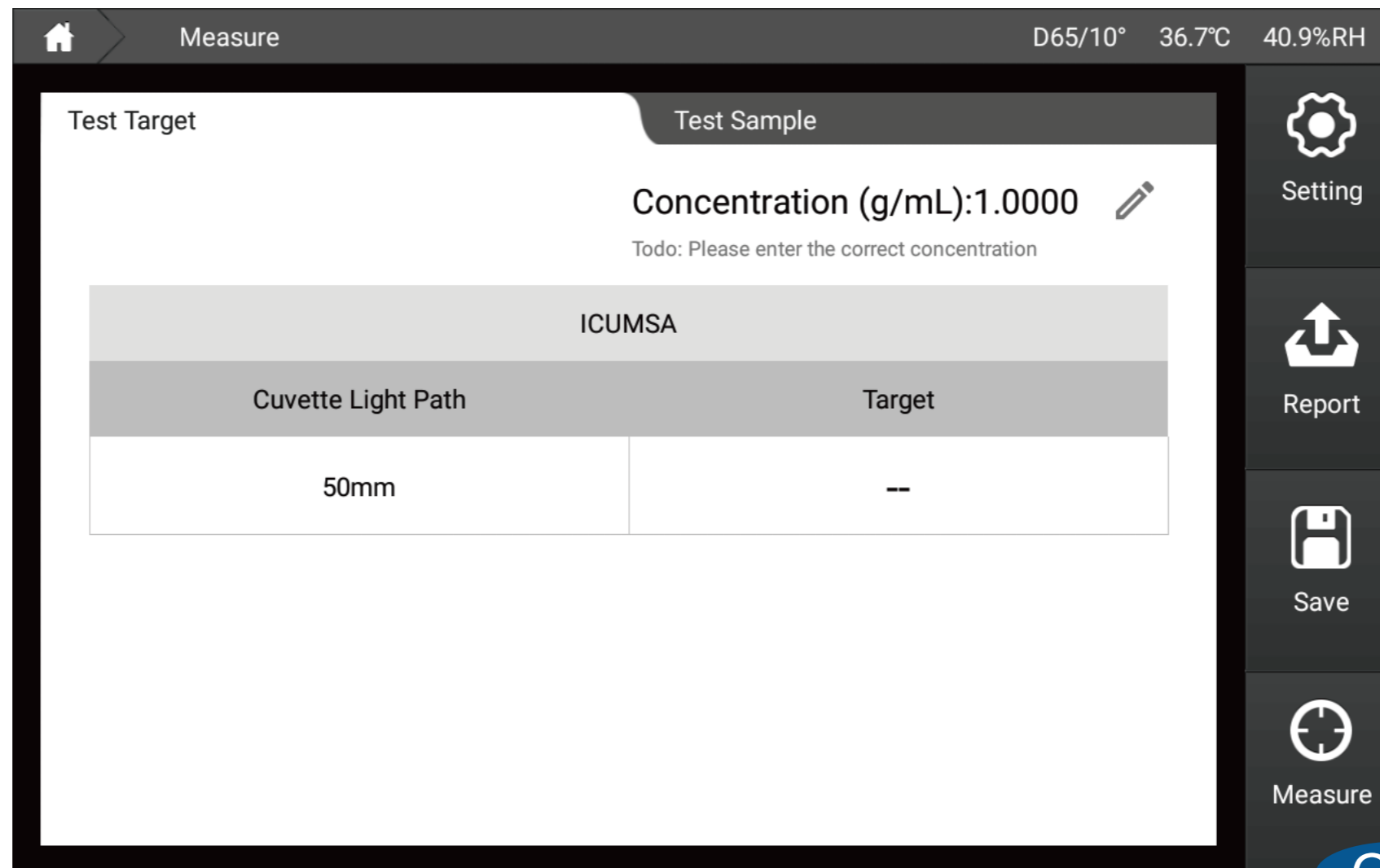


N-1

[Sugar color]

0-1

This interface can test the sugar color value, input the concentration (g/ml), and automatically determine whether the sample is qualified through the set tolerance.



0-1

[Color difference]

P-1

In this interface, you can measure the L^* , a^* , b^* , c^* , h values of the sample color, and calculate and display dL^* , da^* , db^* , dc^* , dH^* , and dE^* by comparing it with the standard sample. ab , and at the same time, it automatically determines whether the sample is qualified through the set tolerance.


The screenshot shows a software interface for color measurement. At the top, it displays 'Measure' and environmental conditions: 'D65/10° 36.7°C 40.9%RH'. Below this, there are two tabs: 'Test Target --- Target0018' and 'Test Sample --- Sample0001'. The main area is divided into three sections: 'Target', 'Sample', and a comparison section. The 'Target' section shows: $L^* = 99.99$, $a^* = 0.04$, $b^* = -0.03$, $C^* = 0.05$, and $h = 316.33$. The 'Sample' section shows: $L^* = 99.99$, $a^* = 0.03$, $b^* = -0.03$, $C^* = 0.04$, and $h = 319.16$. The comparison section shows: $dL^* = 0.00$ Pass, $da^* = -0.00$ Pass, $db^* = 0.00$ Pass, $dc^* = -0.00$ Pass, $dH^* = 0.00$ Pass, and $dE^*_{ab} = 0.00$ Pass. On the right side, there is a vertical sidebar with four buttons: 'Setting' (gear icon), 'Report' (upload icon), 'Save' (floppy disk icon), and 'Measure' (crosshair icon).


P-1


Measure D65/10° 36.8°C 40.8%RH


Test Target --- Target0019 Test Sample --- Sample0001

Target	Sample	
L* = 99.99	L* = 84.73	dL' = -15.26 Fail
a* = 0.03	a* = 0.74	dC' = 1.44 Pass
b* = -0.03	b* = 1.01	dH' = -0.37 Pass
C* = 0.05	C* = 1.25	
h = 314.85	h = 53.95	
		dE*2000 9.46 Fail


Setting


Report



Save



Measure


Measure D65/10° 36.9°C 40.7%RH


Test Target --- Target0022 Test Sample --- Sample0001

Target	Sample	
(Hunter)	(Hunter)	
<p>L = 99.99</p> <p>a = 0.03</p> <p>b = -0.03</p>	<p>L = 80.31</p> <p>a = 0.08</p> <p>b = 0.53</p>	<p>dL = -19.67 Fail</p> <p>da = 0.04 Pass</p> <p>db = 0.56 Pass</p>
		<p>dEab</p> <p style="color: red; font-size: 1.2em;">19.68 Fail</p>


 Setting


 Report


 Save



 Measure


P-3


Measure D65/10° 36.8°C 40.8%RH


Test Target --- Target0021 Test Sample --- Sample0001

Target	Sample	
L* = 99.99	L* = 75.37	dL* = -24.62 Black
a* = 0.04	a* = 0.58	da* = 0.54 Pass
b* = -0.03	b* = 0.81	db* = 0.84 Pass
C* = 0.05	C* = 1.00	dC* = 0.95 Pass
h = 321.92	h = 54.38	dH* = 0.31 Pass
		dEcmc(2.0:1.0) 8.45 Fail


 Setting


 Report


 Save



 Measure


P-4


Measure D65/10° 36.8°C 40.8%RH


Test Target --- Target0020 Test Sample --- Sample0001

Target	Sample	
L* = 99.99	L* = 45.82	dL* = -54.16 Black
a* = 0.03	a* = 1.24	da* = 1.21 Pass
b* = -0.03	b* = -1.34	db* = -1.30 Pass
C* = 0.04	C* = 1.82	dC* = 1.77 Pass
h = 310.99	h = 312.82	dH* = 0.00 Pass
		dE*94 54.19 Fail

 Setting

 Report

 Save

 Measure

P-5

[Data]

Q-1

Home Data View D65/10° 36.2°C 42.2%RH

Target	Edit	Name	Mode	L*	a*	b*	C
Target0002		Target0002	Transmittance	99.99	0.03	-0.03	0.0
	0	Sample0001	Transmittance	99.99	0.03	-0.03	0.0
	1	Sample0002	Transmittance	99.99	0.03	-0.03	0.0
	2	Sample0003	Transmittance	99.98	0.03	-0.03	0.0
	3	Sample0004	Transmittance	99.98	0.03	-0.04	0.0

Target Sample Search Name ▼ Sort by name ▲ Export Import

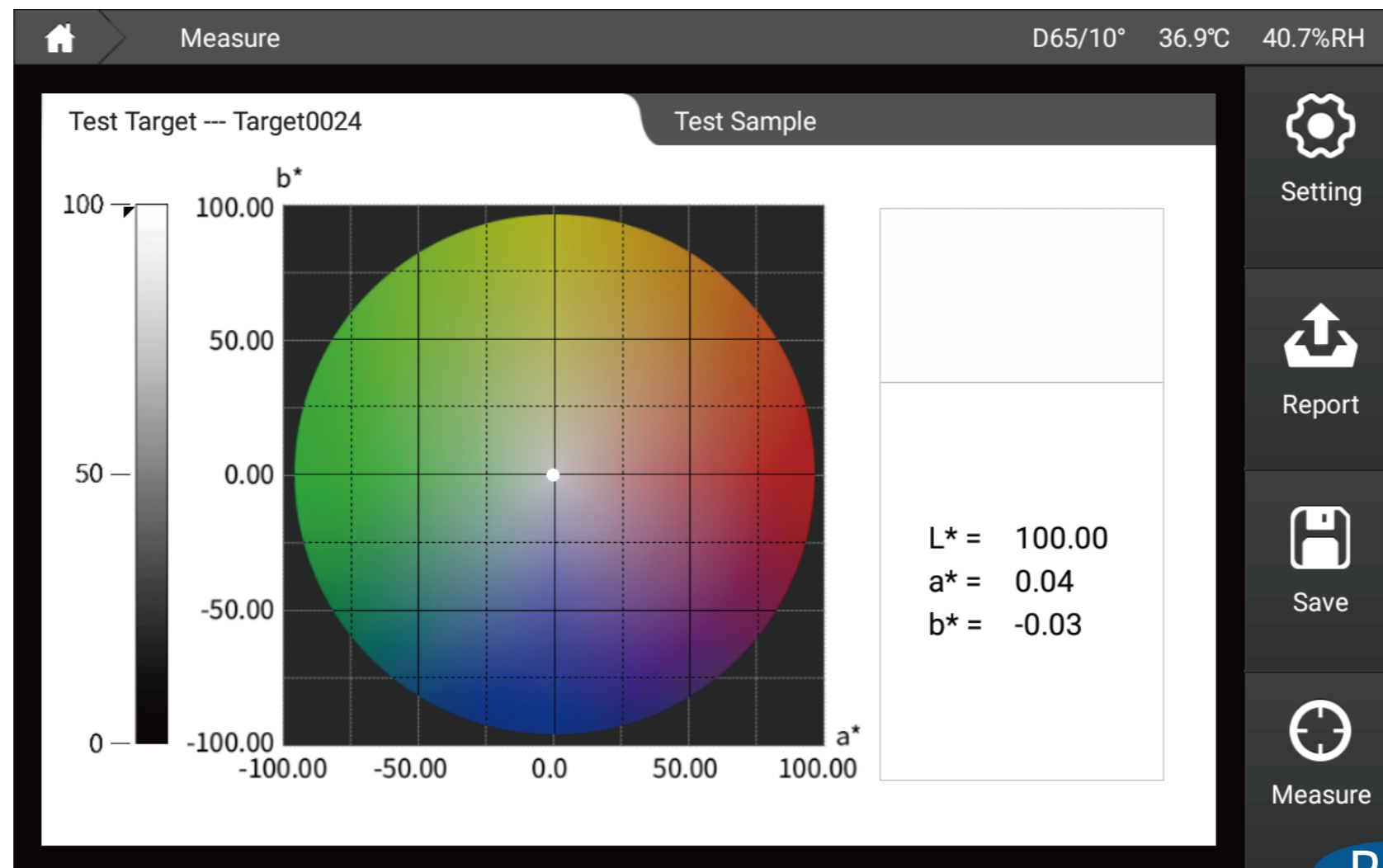
Q-1

[Graphics]

R-1

CIE LAB

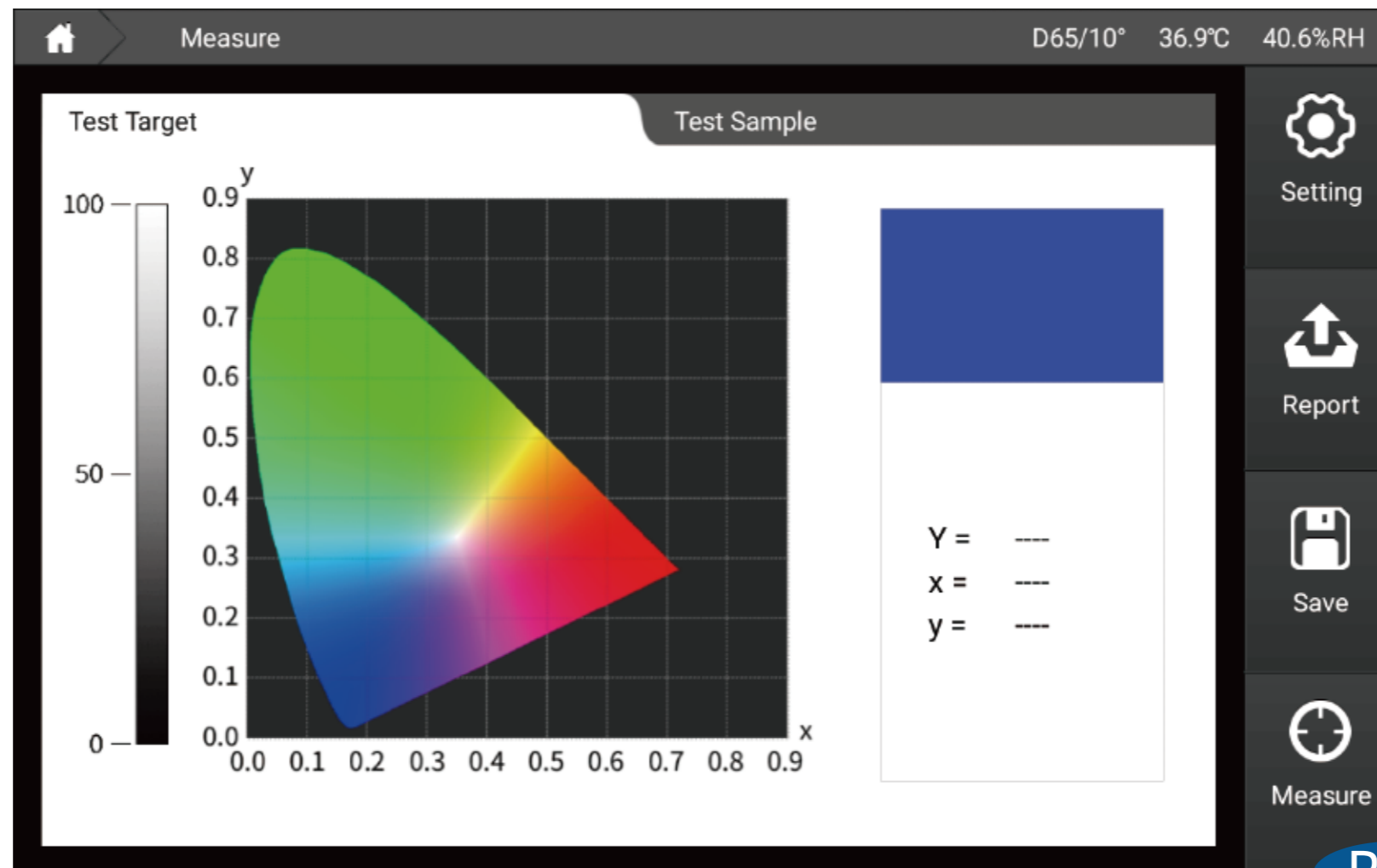
In this interface, you can measure the L^* , a^* , and b^* values of the sample, and use the a^* and b^* values of the sample to draw points on the CIELAB chart and display the L^* , a^* , and b^* values of the data.



R-2

Yxy

In this interface, you can measure the Y, x, and y values of the sample, and use the x and y values of the sample to draw points on the Yxy diagram and display the Y, x, and y values of the data.

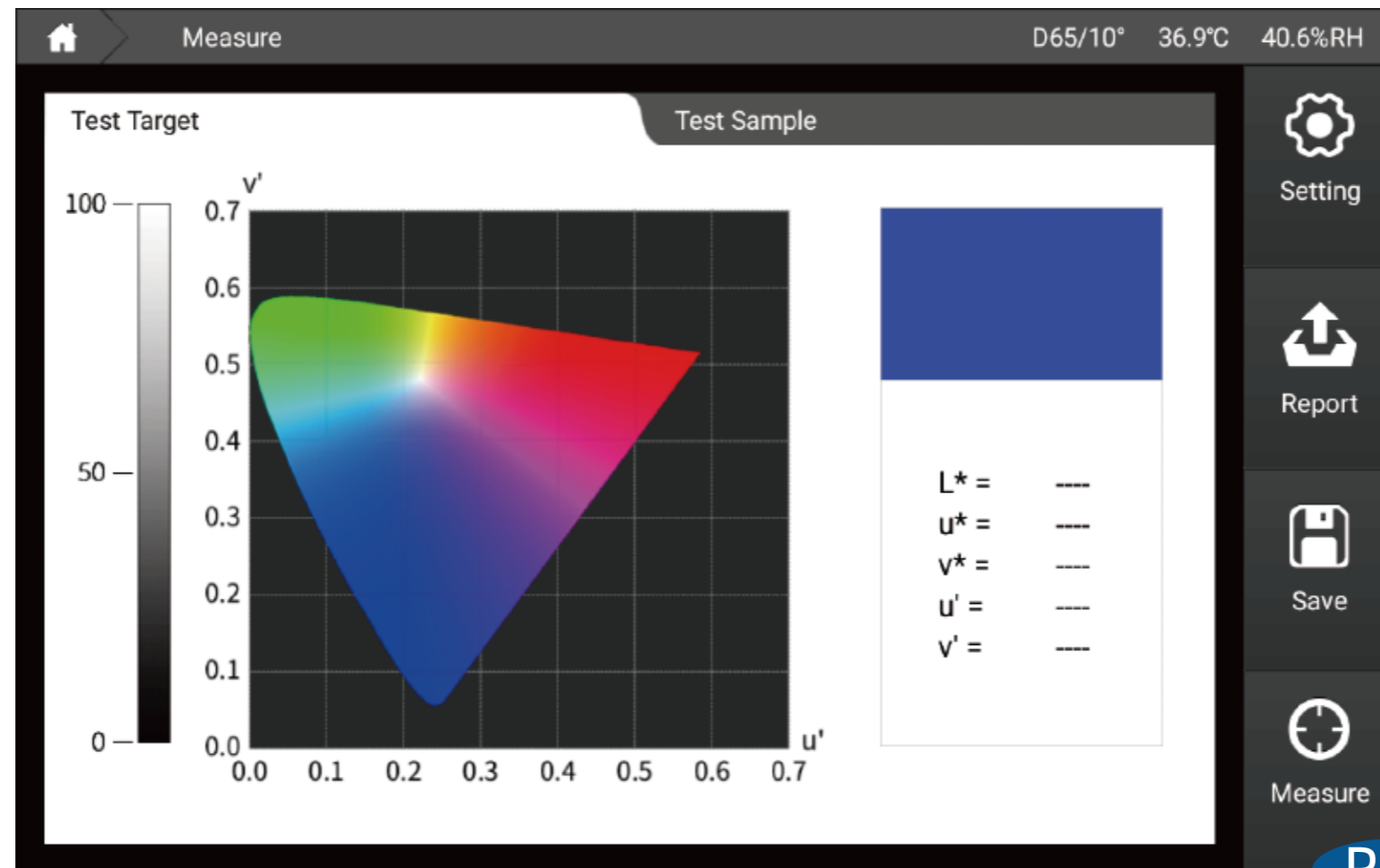


R-2

R-3

Luv

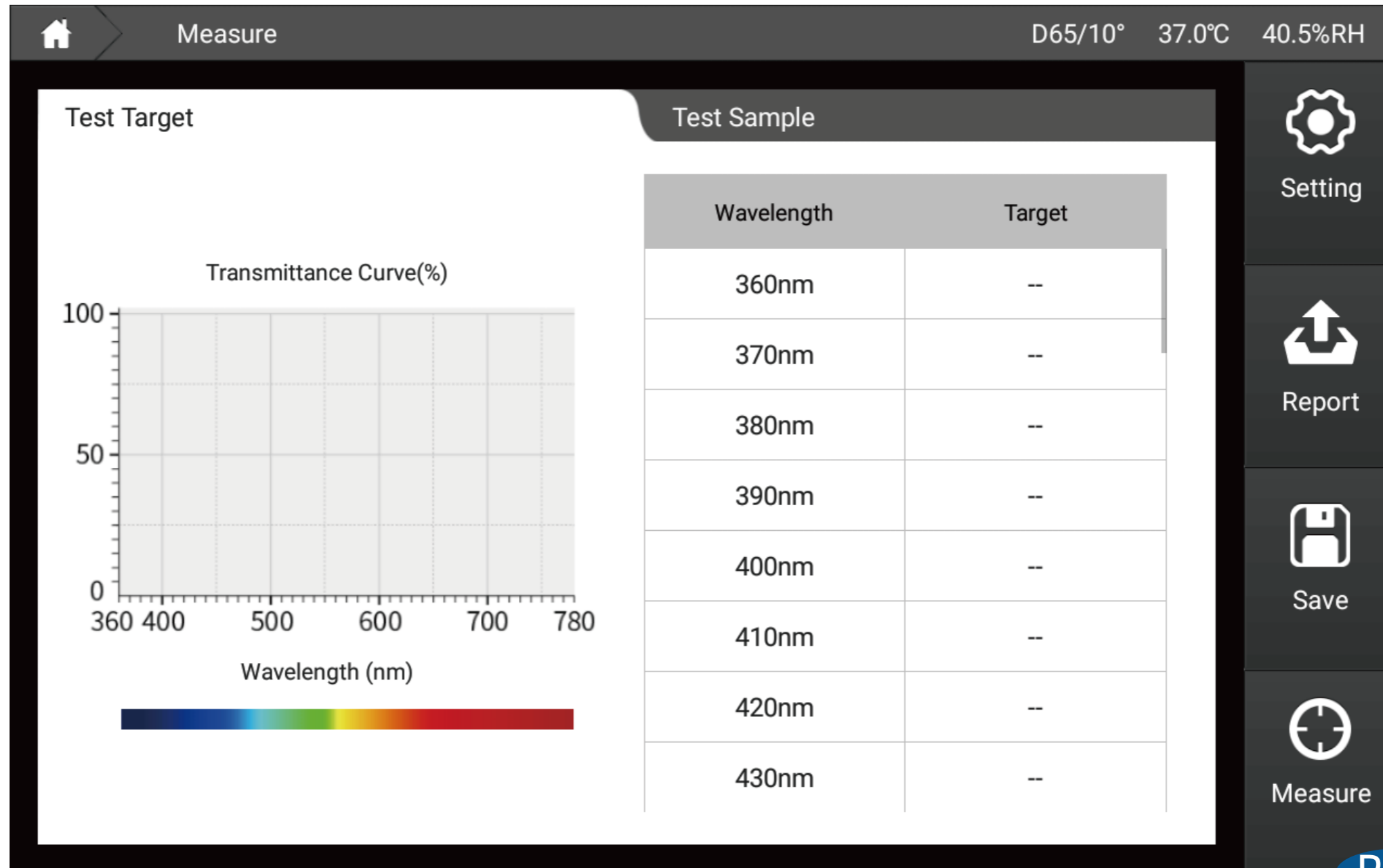
In this interface, you can measure the L^* , u^* , and v^* values of the sample, and use the u' and v' values of the sample to draw points on the Luv chart and display the L^* , u^* , and v^* values of the data.



R-3

R-4

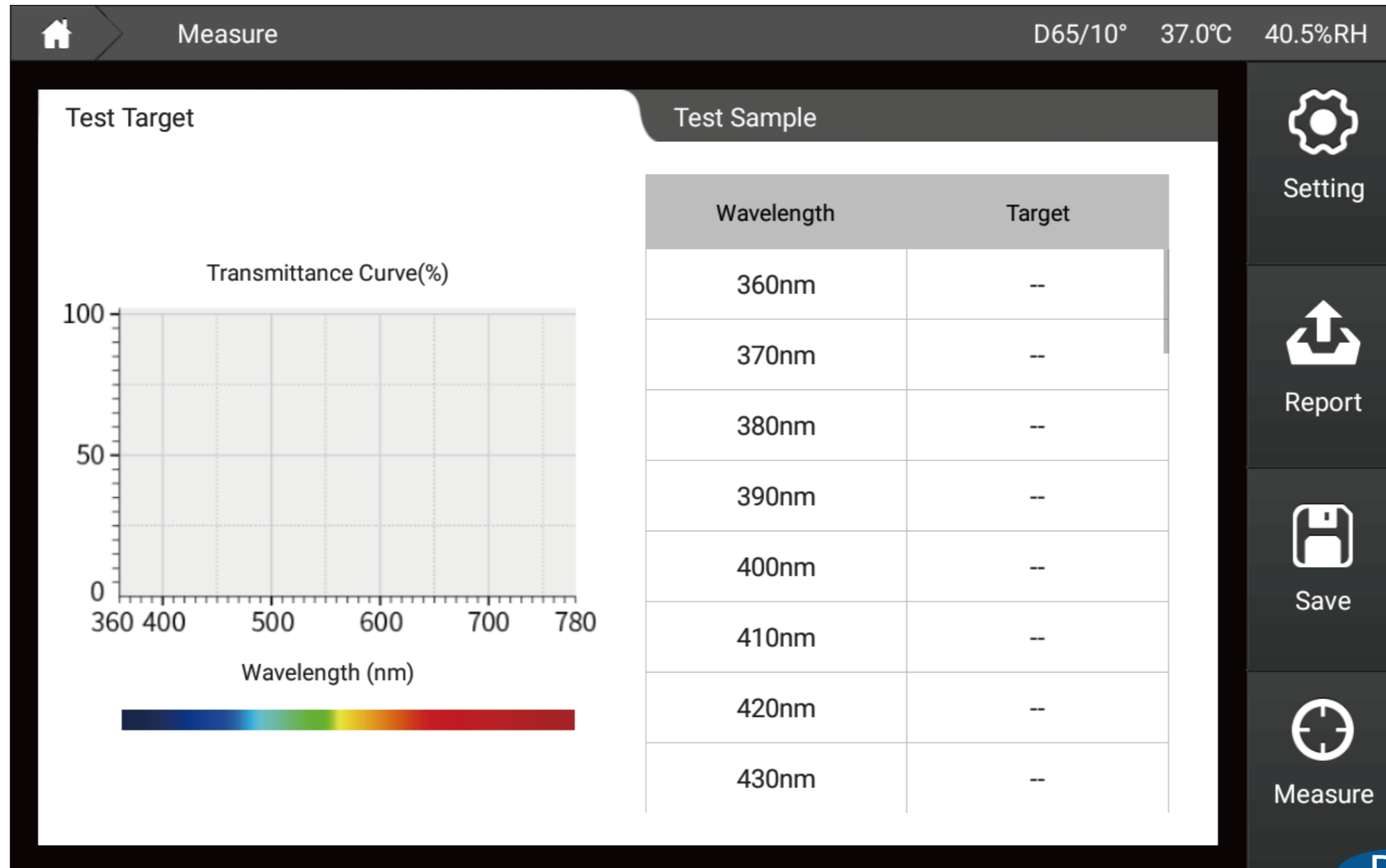
K/S curve



R-4

R-5

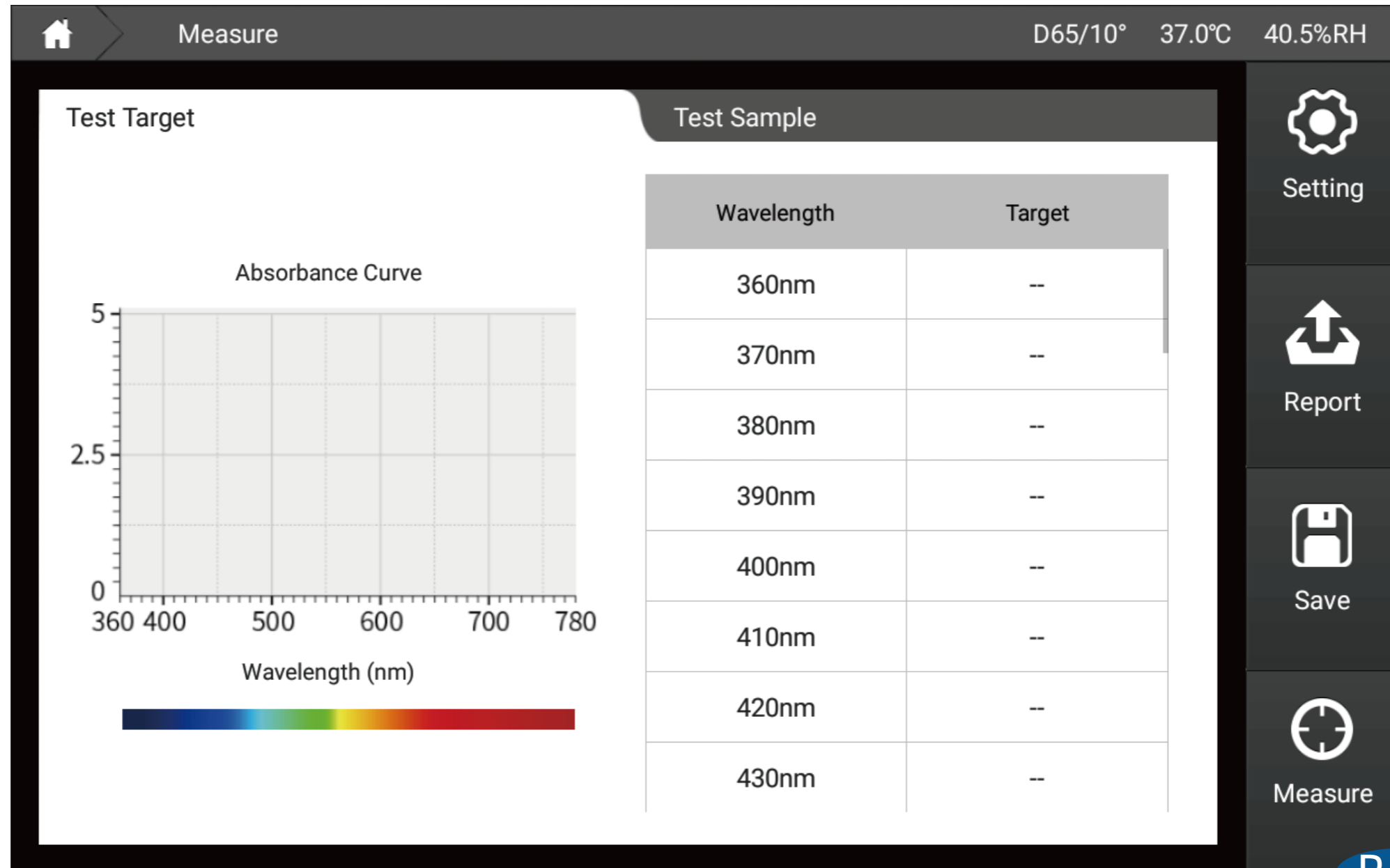
K/S transmittance curve



R-5

R-6

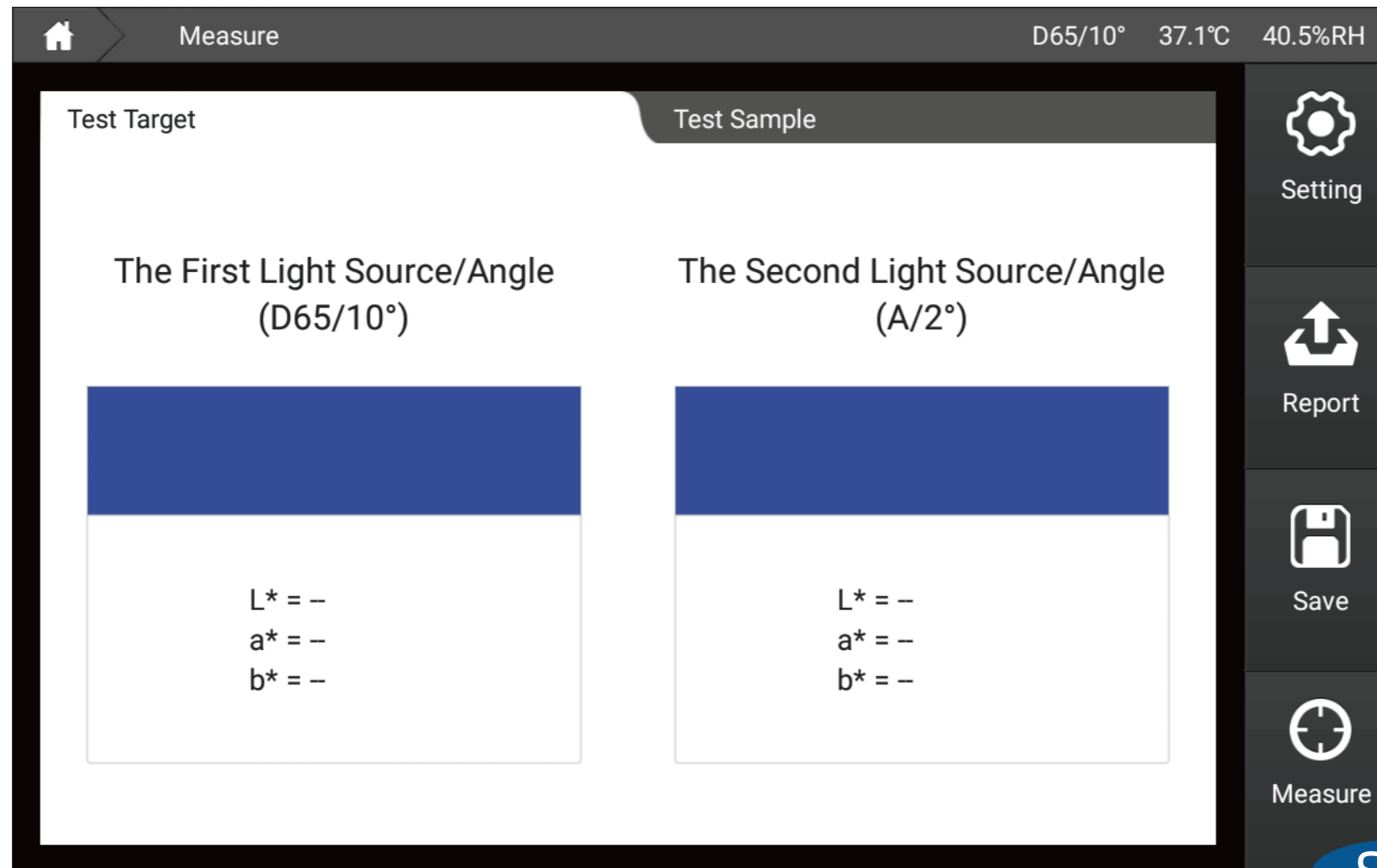
Absorbance curve



[Metamerism]

S-1

The left side of the interface is the value calculated by using the first light source/angle for the measured sample, and the right side is the value calculated by using the second light source/angle for the measured sample. The metameric values shown below in the interface are calculated by the sample at the angles of the two light sources. Metameric values.

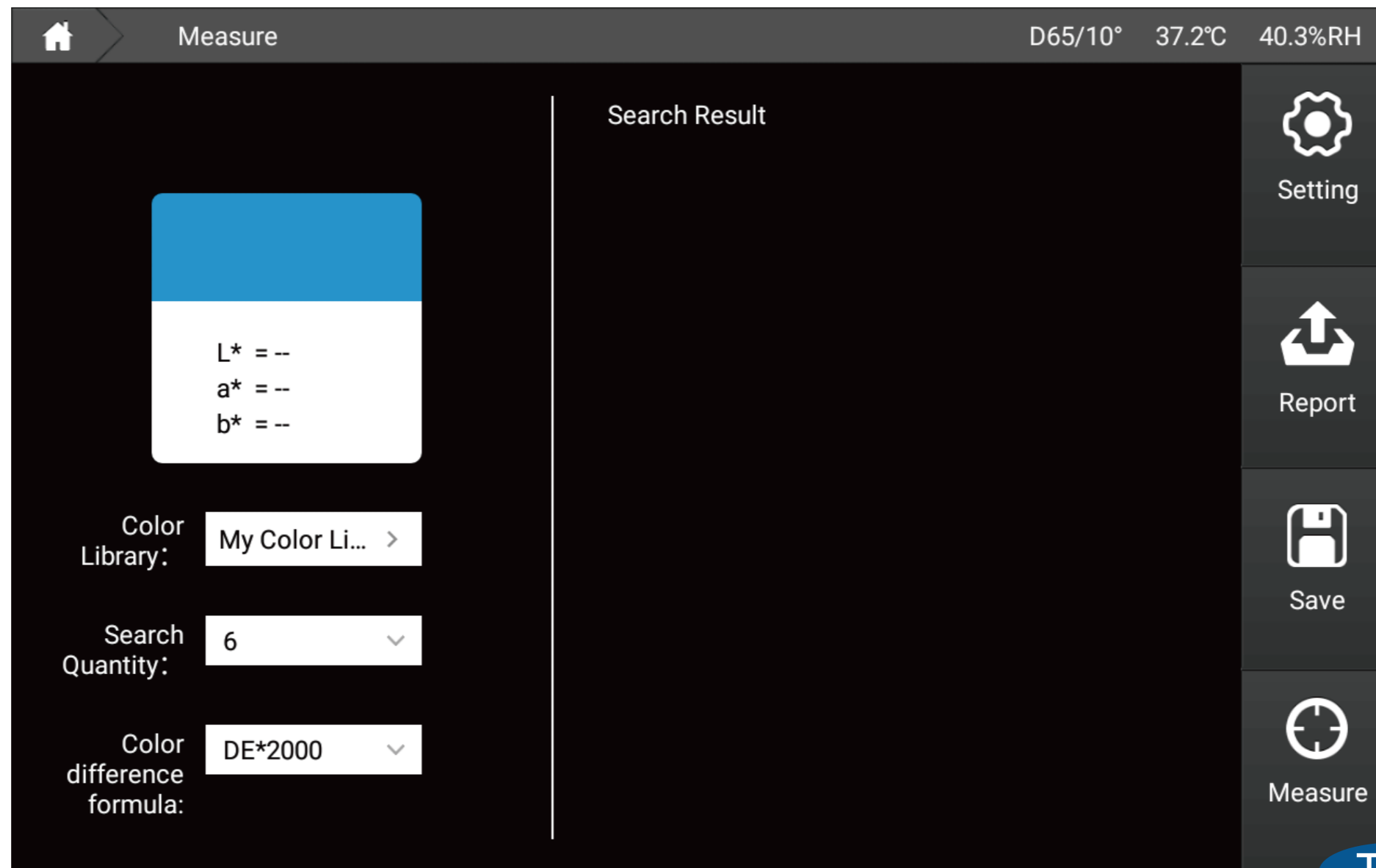


S-1

[Similar color search]

T-1

Finds the color closest to the current measurement from the My Colors database.



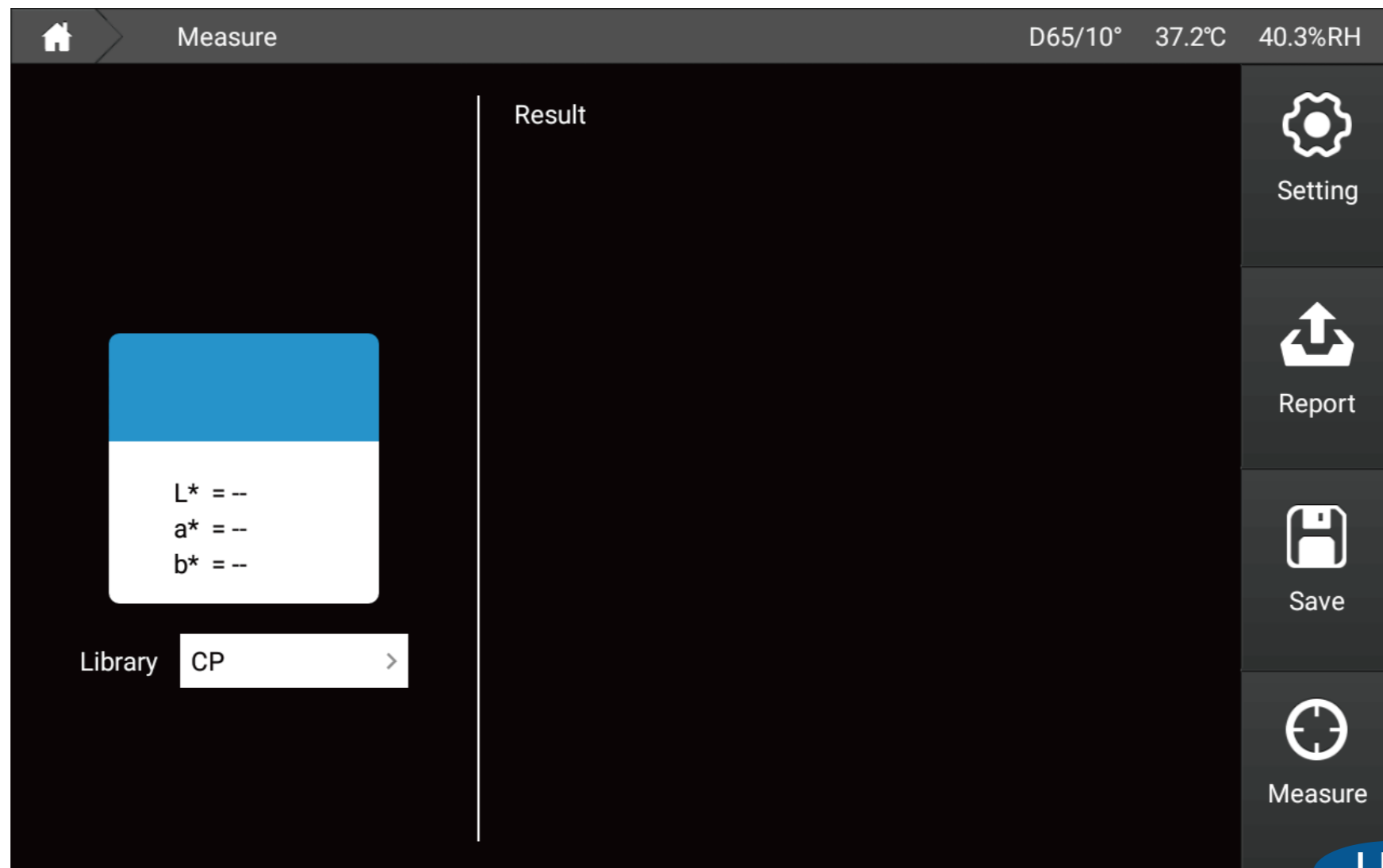
T-1

[Pharmacopoeia color number]

U-1

Select the pharmacopoeia library you want to compare

After measurement, the instrument will provide three closer pharmacopoeia color numbers, and the closest one is displayed at the top.



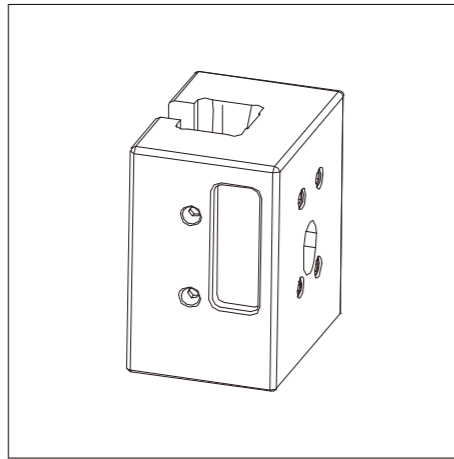
U-1

Exception handling analysis

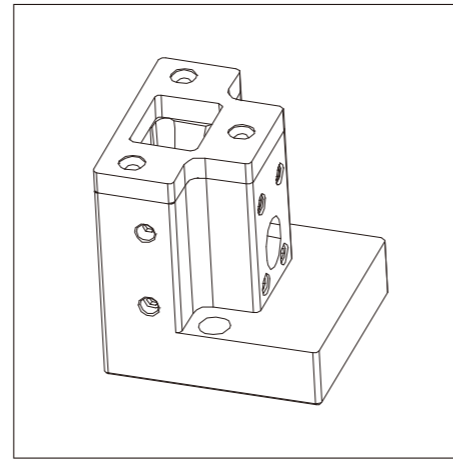
Abnormal situation	Analyze	Approach
1. The instrument cannot be turned on	The power connection may be abnormal	Check whether the power interface is in good contact and plug in the power
2. Calibration failed	<ol style="list-style-type: none"> 1. Check whether the test port is blocked by foreign objects during calibration 2. Whether there are impurities in distilled water 	<ol style="list-style-type: none"> 1. Remove foreign objects and ensure there is no obstruction 2. Replace the liquid to ensure there are no impurities in the distilled water.
3. Measurement results report errors	Tolerance settings may be abnormal	Check tolerance settings and adjust
4. Abnormal test values	<ol style="list-style-type: none"> 1. Are the cuvettes placed correctly and completely 2. Is the cuvette damaged and at the test port 	<ol style="list-style-type: none"> 1. Check whether the cuvette is placed in place, ensure that the fixture is in the correct position and the cuvette is fully inserted. 2. Check the surface condition of the cuvette to ensure there is no impact on the test.

Appendix

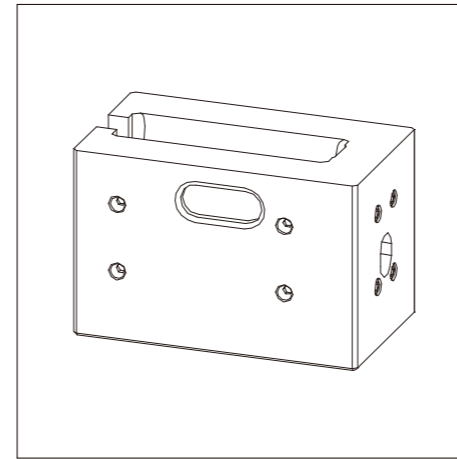
Standard accessories



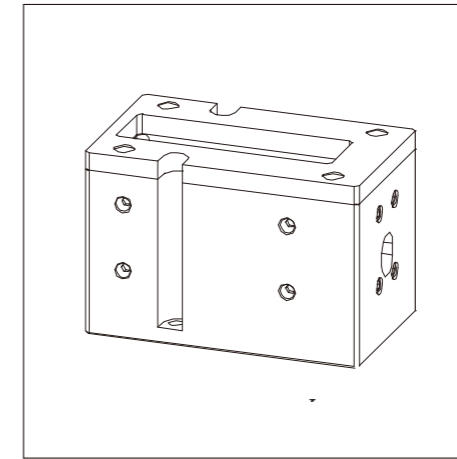
10mm cuvette holder



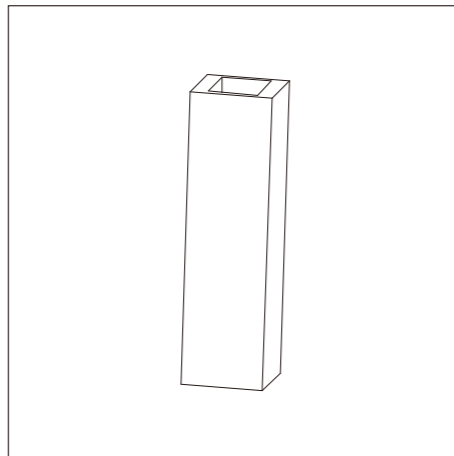
10mm cuvette holder (816N)



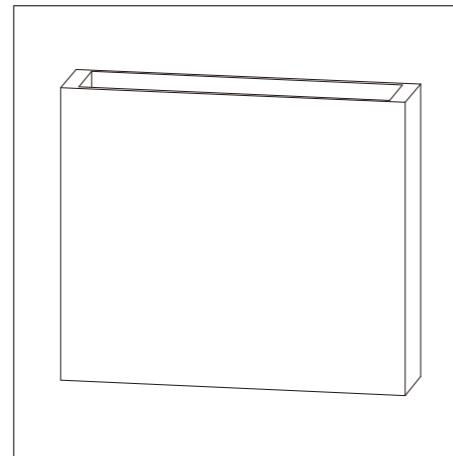
50mm cuvette holder



50mm cuvette holder (816N)

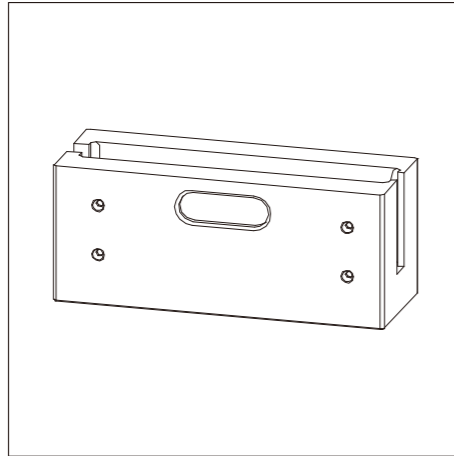


10mm cuvette

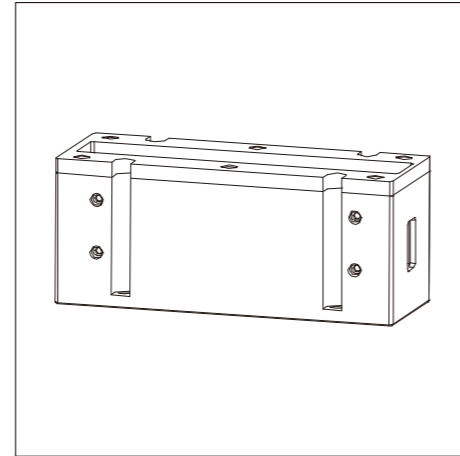


50mm cuvette

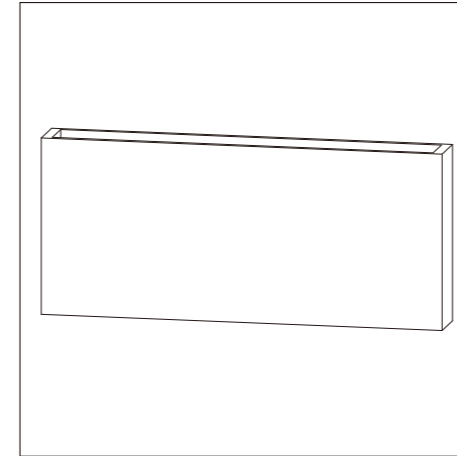
Optional accessories



100mm cuvette holder



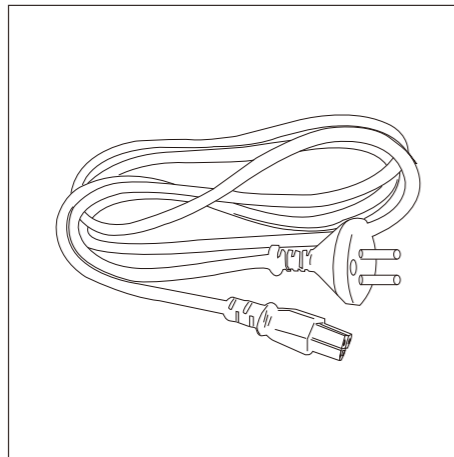
100mm cuvette holder (816N)



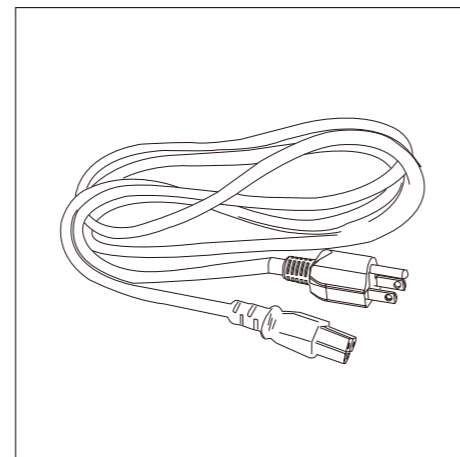
100mm cuvette



trolley case



European standard plug



American standard plug

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