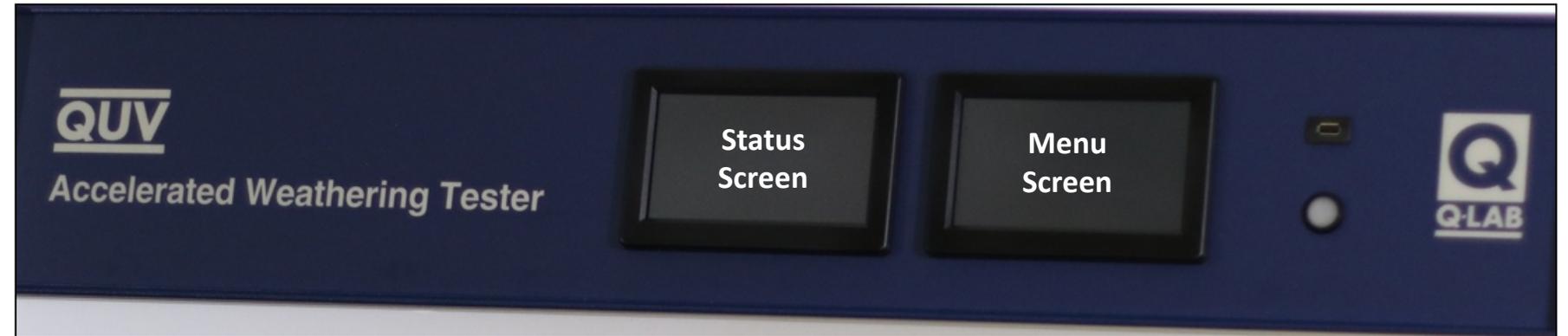


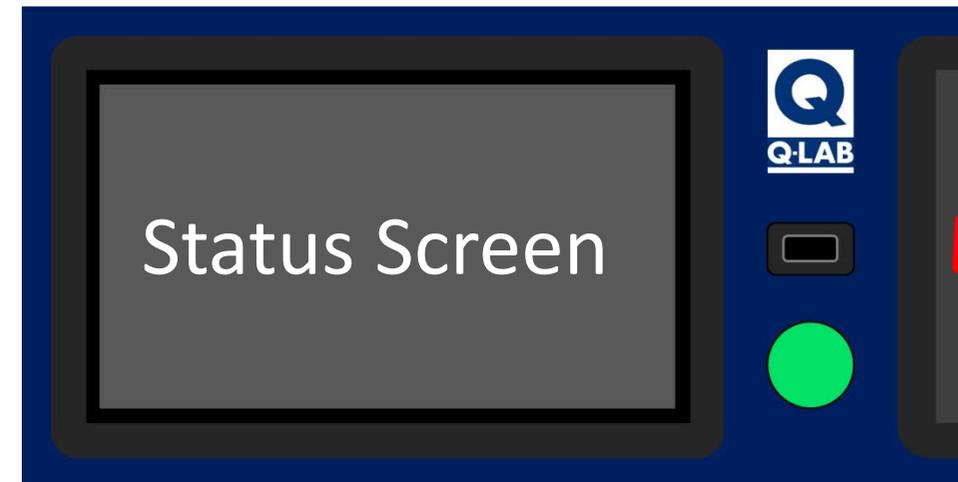
# QUV Gen 4 Main Controller Simulator

## Instructions

- Change the view to **Full Screen** from the View menu or using Ctrl-L
- Click buttons on-screen just like you would when operating the tester – including the USB port. Not all tester functionality is included in this simulator!
- Click the edge of the other screen to switch between Status and Menu screens (see below)



Click this area to view the Status Screen

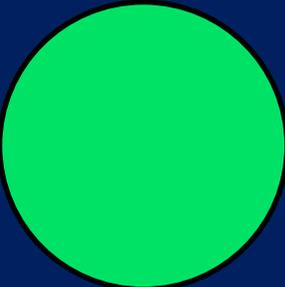


Click this area to view the Menu Screen

**Click here to begin**

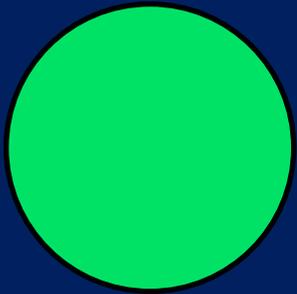


**Q-LAB**





**Q-LAB**



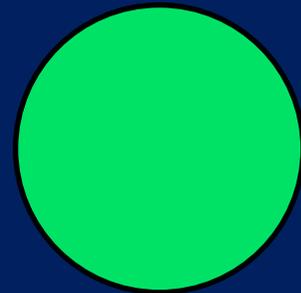


# Running Cycle A: ASTM G154 C...

Step 1 UV

	Irradiance (W/m <sup>2</sup> /nm) at control wavelength				Temperature (°C)
	1	2	3	4	
Actual	0.89	0.89	0.89	0.89	59
Set	0.89	0.89	0.89	0.89	60

	Step Time (Hrs:Mins)	Test Time (Hrs:Mins)	Total Time (Hrs)
Elapsed	4:43	16:43	59
Set	8:00	168:00	



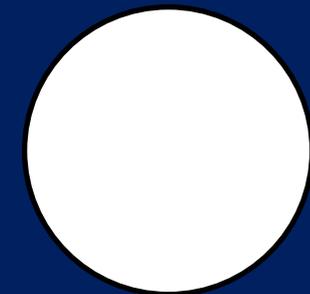


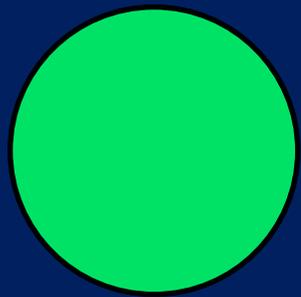
# Test Stopped A: ASTM G154 C...

Step 1 UV

	Irradiance (W/m <sup>2</sup> /nm) at control wavelength				Temperature (°C)
	1	2	3	4	
Actual	0.00	0.00	0.00	0.00	25
Set	0.89	0.89	0.89	0.89	50

	Step Time (Hrs:Mins)	Test Time (Hrs:Mins)	Total Time (Hrs)
Elapsed	4:42	16:43	59
Set	8:00	168:00	





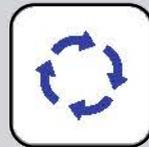
## Main Menu



Manage Test Timers



Settings



Manage Cycles



Diagnostics

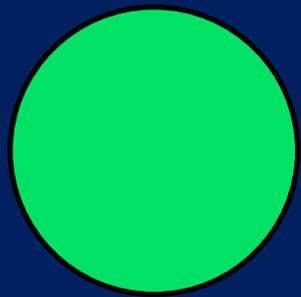


Calibrate



Contact Q-Lab



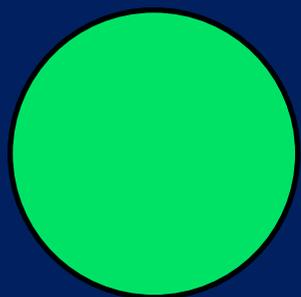


  **Manage Test Timers** 

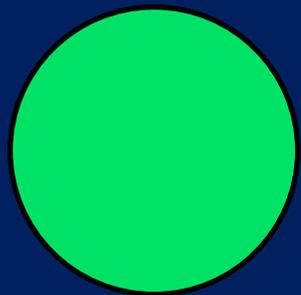
Action at End of Test

Elapsed (Hrs:Mins)  :

Duration (Hrs:Mins)  :



The screenshot shows a dialog box titled "Action at End of Test:" with a timer icon in the top left and a close button (X) in the top right. Below the title, it says "Current Selection: Stop + Alarm". There are five buttons arranged in two columns: "Stop", "Alarm", "Message Only", "Stop + Alarm", and "None". The "Stop + Alarm" button is highlighted in red, indicating it is the current selection. There are also two more close buttons (X) on the right side of the dialog box.

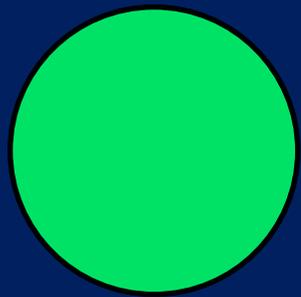


### Manage Cycles

\*New A B C D E G H I J K L M

Cycle Name

Step	Function	Irrad.	°C	Time
	1 UV	0.89	60	8:00
	2 Condensation	--	50	4:00
	3 Final - Go to step 1			

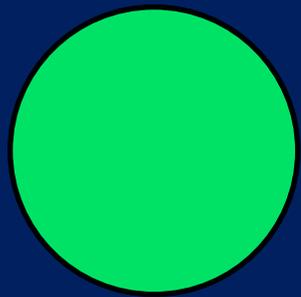


### Manage Cycles

\*New A B C D E F G H I J K L M

Cycle Name

Step	Function	Irrad.	°C	Time
1	UV	0.71	60	4:00
2	Condensation	--	50	4:00
3	Final - Go to step 1			



The image shows a tablet screen displaying the 'Manage Cycles' application. A 'Delete Cycle' dialog box is open in the center, asking for confirmation to delete the current cycle. The background interface includes a cycle list with columns for 'Step' and 'Function', and a 'RUN' button.

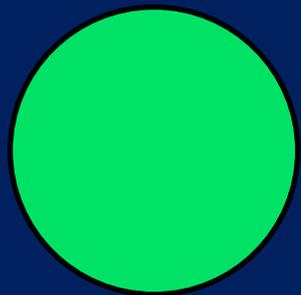
### Manage Cycles

Are you sure you want to delete the current cycle?

Yes No

Step	Function
1	UV
2	Condensation
3	Final - Go to step

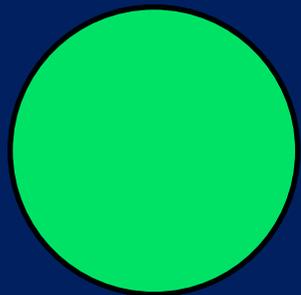
Additional UI elements visible: \*New, A, B, C, M, RUN, and a downward arrow button.



The screenshot shows the 'Manage Cycles' interface. At the top, there is a home icon, a refresh icon, and the title 'Manage Cycles'. Below this are tabs for '\*New', 'A', 'B', and 'C'. A 'Cycle Name' field is visible with a trash icon and a lock icon. A table lists steps with columns for 'Step' and 'Function':

Step	Function
1	UV
2	Condensation
3	Final - Go to step

A modal dialog box is open in the foreground, titled 'Current State: Not Locked'. It contains a 'Password to Lock:' field with the value '123'. Below the field is a numeric keypad with buttons for 7, 8, 9, 4, 5, 6, 1, 2, 3, -, 0, and a decimal point. A red button with a white 'X' is positioned to the right of the keypad, and a green button with a white checkmark is below it. A back arrow button is at the bottom right of the keypad. To the right of the dialog, a 'RUN' button is visible, along with a list of items labeled 'K', 'L', and 'M'. Other buttons include a pencil icon and a downward arrow.



### Manage Cycles

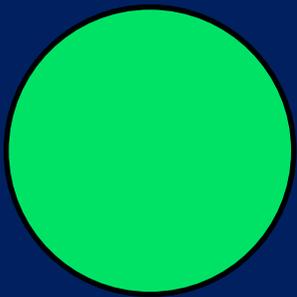
\*New A B C D E G H

Cycle Name ASTM C

Step	Function	Irrad.
1	UV	0.89
2	Condensation	--
3	Final - Go to step 1	

Buttons: Edit Step, Delete Step, Add Step Before, Add Step After, Cancel

Buttons: RUN, Edit, Down Arrow



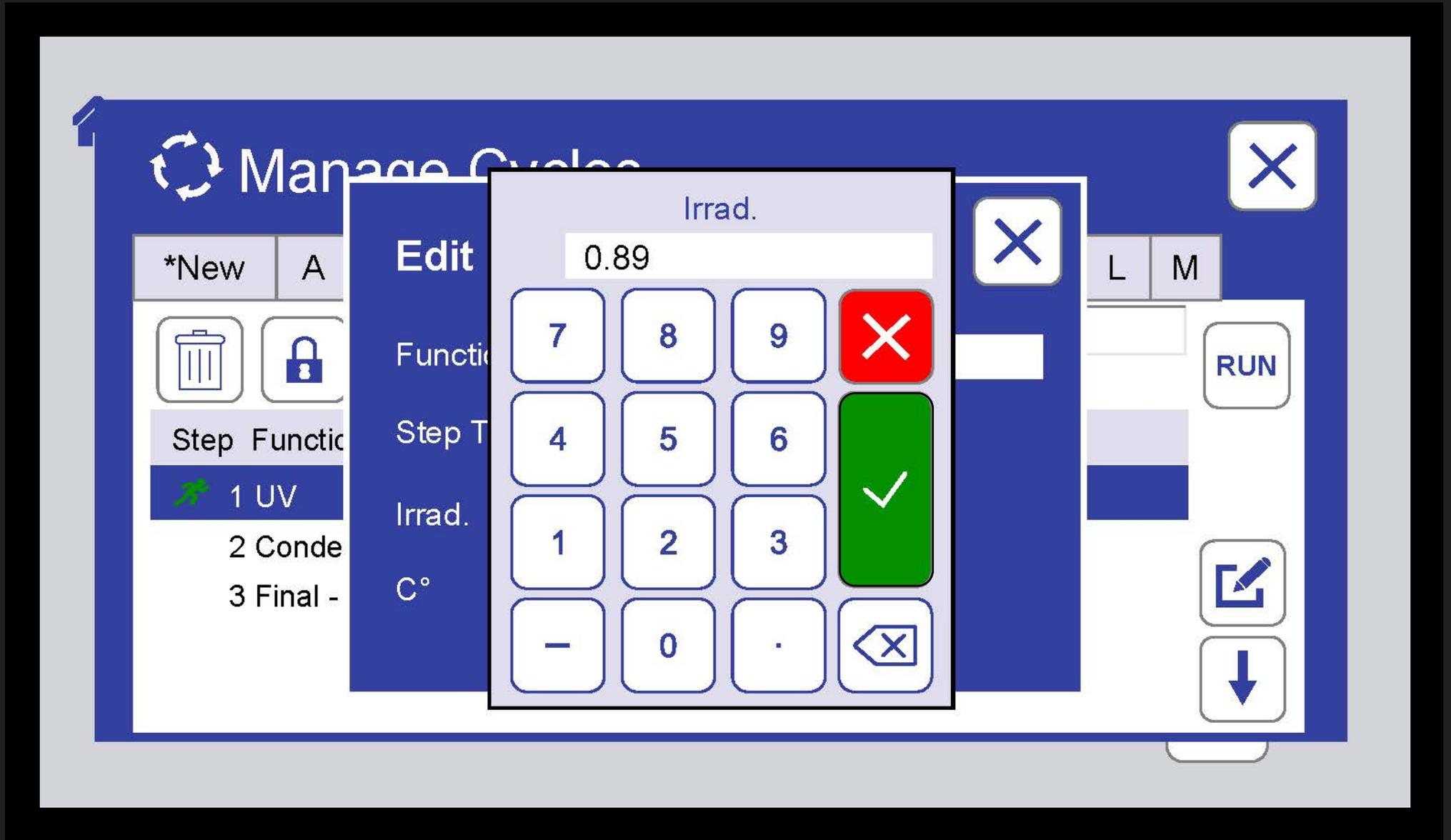
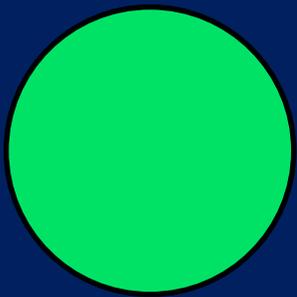
The image shows a software interface for managing cycles. The main window is titled "Manage Cycles" and has a blue header. It contains a table of steps and a detailed "Edit Step 1" dialog box.

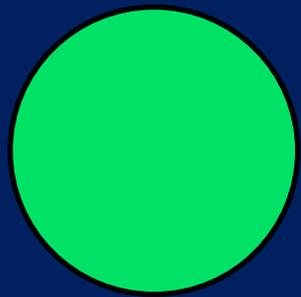
Step	Function
1	UV
2	Condens
3	Final - G

The "Edit Step 1" dialog box is open, showing the following settings:

- Function: UV
- Step Time: 8 : 0
- Irrad.: 0.89
- BP/IBP: 60
- CAT: (empty)

On the right side of the main window, there are several control buttons: a "RUN" button, a button with a pencil icon (likely for editing), and a button with a downward arrow (likely for navigating to the next step).

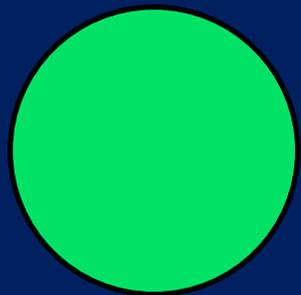




The image shows a tablet screen with a 'Manage Cycles' application. A 'Run From Step' dialog box is open over the main screen. The dialog box contains the following fields:

- Cycle Letter: A
- Cycle Name: ASTM G154 CYCLE 1
- Step Number: 1
- Start Time in Step: 0 : 00 (hh mm)

The main 'Manage Cycles' screen shows a table with columns 'Step' and 'Function'. The first row is highlighted in red and contains '1 UV'. Other rows are partially visible: '2 Cor' and '3 Fin'. The 'Manage Cycles' screen also has a 'RUN' button at the top right and a 'RUN' button at the bottom right. The 'Run From Step' dialog has a 'RUN' button at the bottom right and a 'RUN' button at the top right.



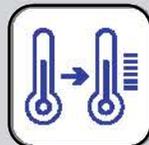
## Calibrate



Calibrate Irradiance  
with smart sensor

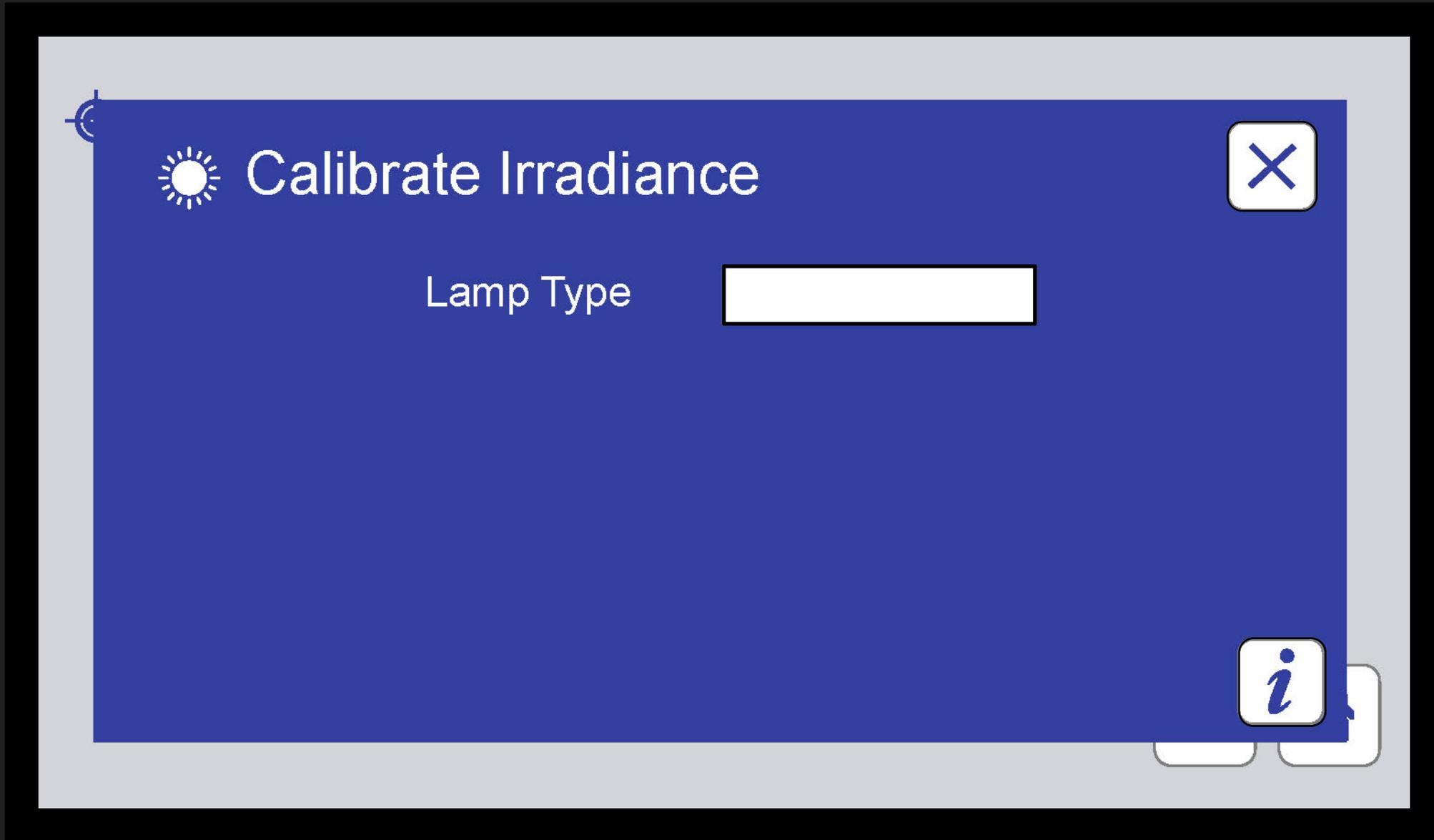
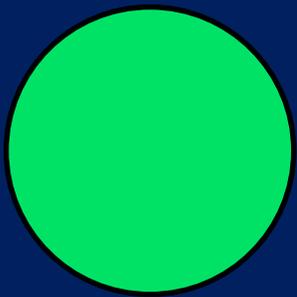


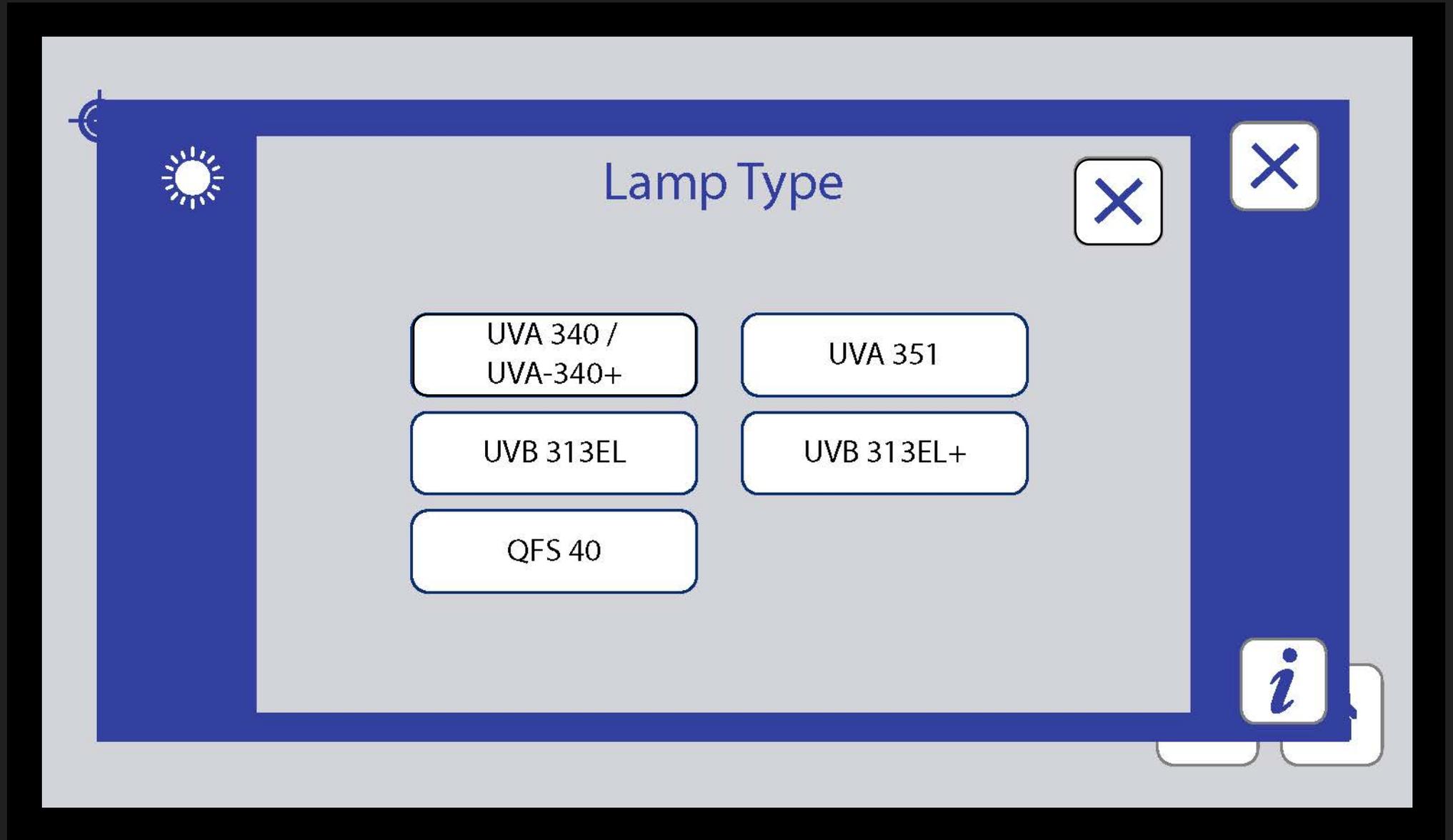
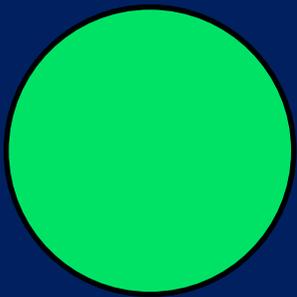
Calibrate Temperature  
with smart sensor

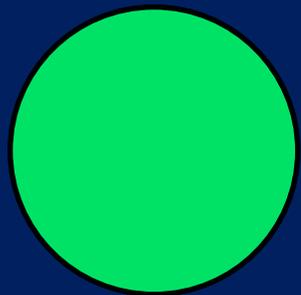


Calibrate Temperature  
with reference thermometer





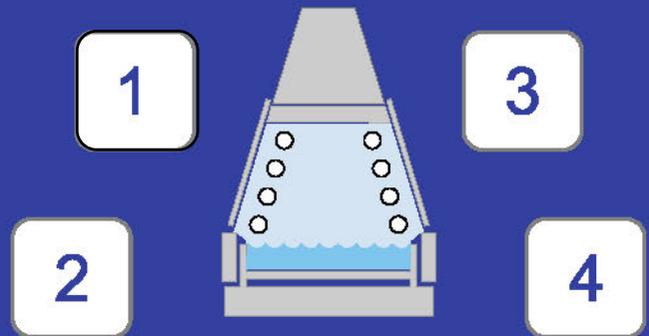




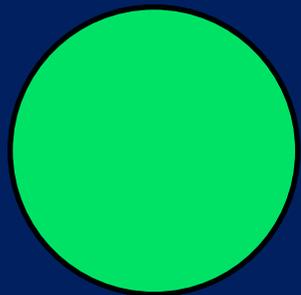
 **Calibrate Irradiance** 

Lamp Type UVA 340 / UVA-340+

**0.89** W/m<sup>2</sup>/nm  
@340nm



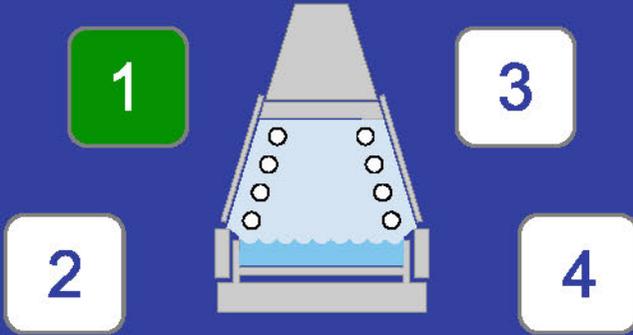




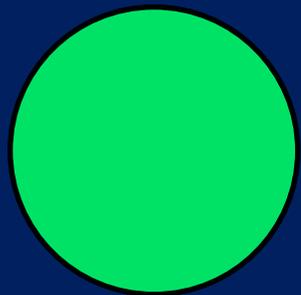
 **Calibrate Irradiance** 

Lamp Type UVA 340 / UVA-340+



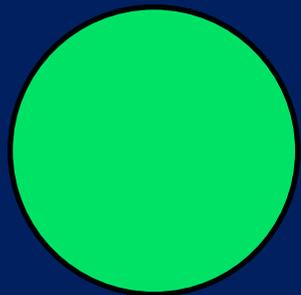






 **Calibrate Temperature** 

Black Panel Sensor (°C)	<input type="text" value="59.3"/>	Calibrate BP/IBP 
Reference Device (°C)	<input type="text" value="58"/>	

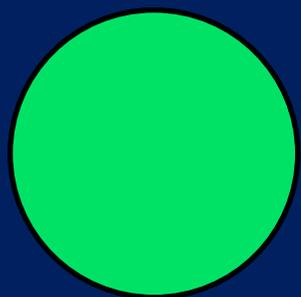


Calibrate Irradiance

**i Smart Sensor Information**

Smart Sensor Type:	UC10/UV
Serial Number:	19-19308-12-UC10/UV
Last Calibration*:	6 August 2019
Calibration* Expiration:	<b>6 August 2020</b>

\*Calibration refers to the Smart Sensor, not the tester's on-board sensor(s).



 ? Diagnostics 

D1 Laboratory Temperature: 29°C

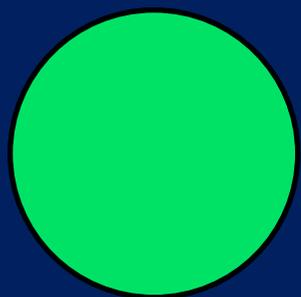
D2 UV Prop: 6°C Int: 200 On: 85%

D3 Condensation Prop: 10°C Int: 30 On: 0%

D4 Water Temperature: 43°C

D5 Controller Temperature: 22°C





 **? Diagnostics** 

D7 Software Version: 5.013

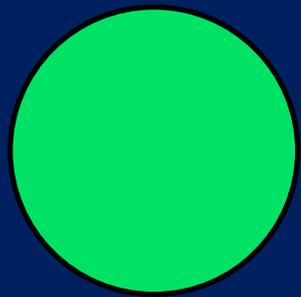
D9 Total Energy Elapsed: 1408687 J/m<sup>2</sup>

D10 Hours Since Last UV Calibration: 1

D11 UV% CH1: 55 CH2: 52 CH3: 57 CH4: 53

D12 Dark Prop: 6°C Int:200 On: 8.4%

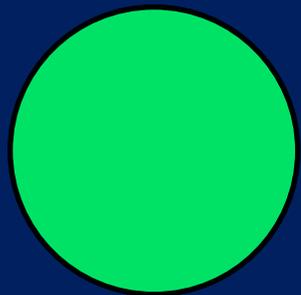
  

 ? Diagnostics 

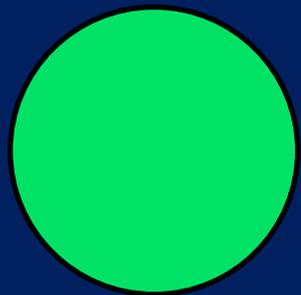
D14 Serial Number: 20-7709-92-SPRAY-RP

D15 MAC Address: 10 bd-55-00-00-e5 



 Contact Q-Lab 

For help visit  
<https://www.q-lab.com/support>



## Settings



Volume



Ethernet



Display Options

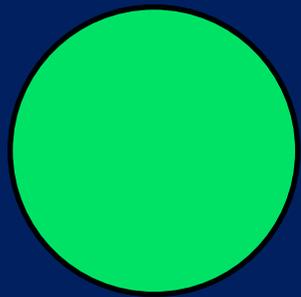


Machine Configuration

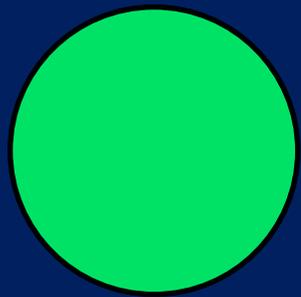


Language &  
Date/Time





A screenshot of a 'Volume' settings menu. The menu has a blue background and a white border. At the top left is a gear icon, and at the top right is a close button (an 'X' in a square). The title 'Volume' is displayed next to a speaker icon. Below the title are two volume sliders. The first slider is labeled 'Alarm' and is set to 100%. The second slider is labeled 'Touch' and is also set to 100%. Each slider has a speaker icon on the left and a speaker icon with sound waves on the right. The sliders are white bars with a white volume icon on the left and a white speaker icon on the right.



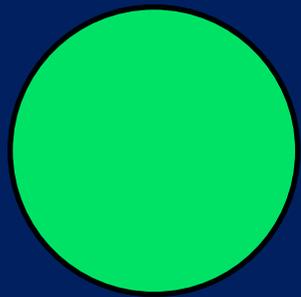
 **Display Options** 

Display:

Status Screen Brightness:   

Main Menu Screen Brightness:   

Sleep After:  \*Recommended

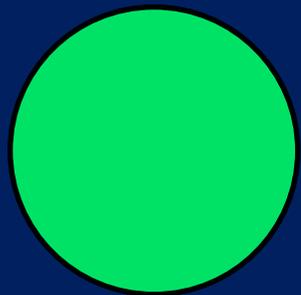


Sleep After:

Current Selection: 15 Minutes

1 Minute	5 Minutes
<b>15 Minutes</b>	30 Minutes
1 Hour	2 Hours
4 Hours	8 Hours

The image shows a tablet interface with a settings menu. The menu is titled 'Sleep After:' and shows the current selection as '15 Minutes'. There are eight buttons arranged in a 4x2 grid, each representing a different sleep duration. The '15 Minutes' button is highlighted in blue. To the right of the buttons are two sun icons and two close buttons (X).

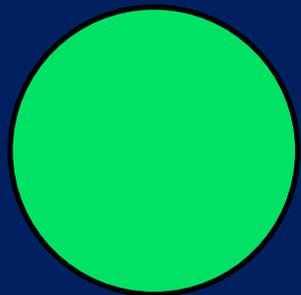


## Language & Date/Time



Language

Day	Month	Year	hh	mm
<input type="text" value="5"/>	<input type="text" value="March"/>	<input type="text" value="2020"/>	<input type="text" value="9"/>	<input type="text" value="31"/>

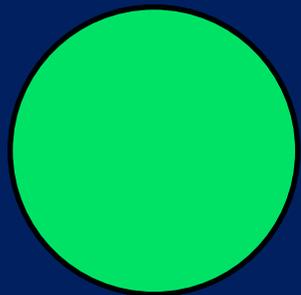


Language: ✕

Current Selection: English ✕

English	Français
Español	Deutsch
Italiano	中
日本	한국어

The image shows a language selection dialog box on a tablet screen. The dialog has a blue border and a light gray background. At the top, it says 'Language:' followed by a close button (✕). Below that, it says 'Current Selection: English' with another close button (✕). The main area contains eight buttons arranged in two columns. The first button, 'English', is highlighted in blue. The other buttons are white with blue borders. The languages listed are English, Français, Español, Deutsch, Italiano, 中 (Chinese), 日本 (Japanese), and 한국어 (Korean). In the top left corner of the dialog, there is a gear icon and a speech bubble icon with a clock and the letter 'A'. At the bottom right of the dialog, there are two more buttons, partially visible.



## Ethernet



Tester Name

QUV Gen 4 Simulator

IP Address

10

10

12

100

Subnet Mask

255

255

255

0

Default Gateway

10

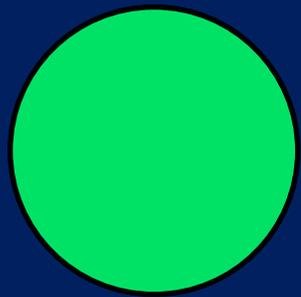
10

12

21

Destination Port

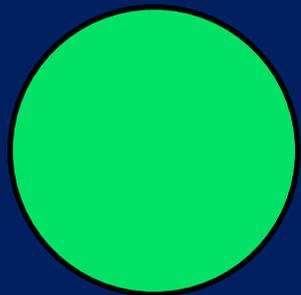
9100



 **Machine Configuration** 

X13 Lamp Service interval	<input type="text" value="400"/>	Hrs
X14 Door Interlock Delay	<input type="text" value="1"/>	Secs
X22 UV Sensor Calibration Interval	<input type="text" value="500"/>	Hrs
X36 UV+Spray Active?	<input type="text" value="No"/>	
X44 Irradiance Low Deviation	<input type="text" value="0.20"/>	W/m <sup>2</sup> /nm

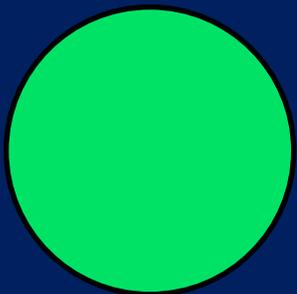




 **Machine Configuration** 

X49 Spray On Time	<input type="text" value="5"/>	Secs
X50 Spray Off Time	<input type="text" value="0"/>	Secs
X500 Serial Number Year	<input type="text" value="20"/>	
X501 Serial Number Unique ID	<input type="text" value="7709"/>	
X502 Serial Number Series Nr	<input type="text" value="92"/>	

# Settings



Volume



Display O



Language  
Date/Time

↶ Current Screen #103

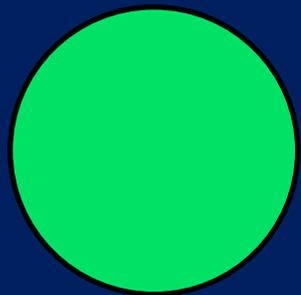
Jump To Screen # 123

7	8	9	✖
4	5	6	✔
1	2	3	
-	0	.	⏪ ✖

Ethernet

Machine Configuration





## Expert Parameters



Expert Parameter Group

X1 UV Proportional Band

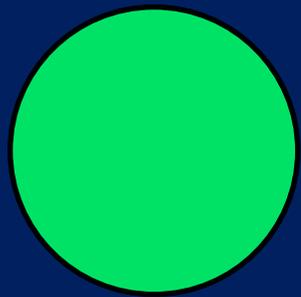
X2 UV Integral

X3 Chamber High Temperature Deviation

X4 Chamber Low Temperature Deviation

X5 Condensation Proportional Band



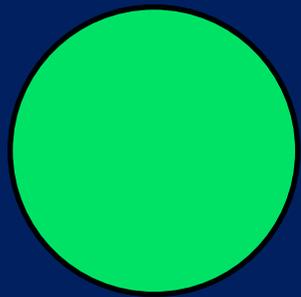


  **Expert Parameter Group**  

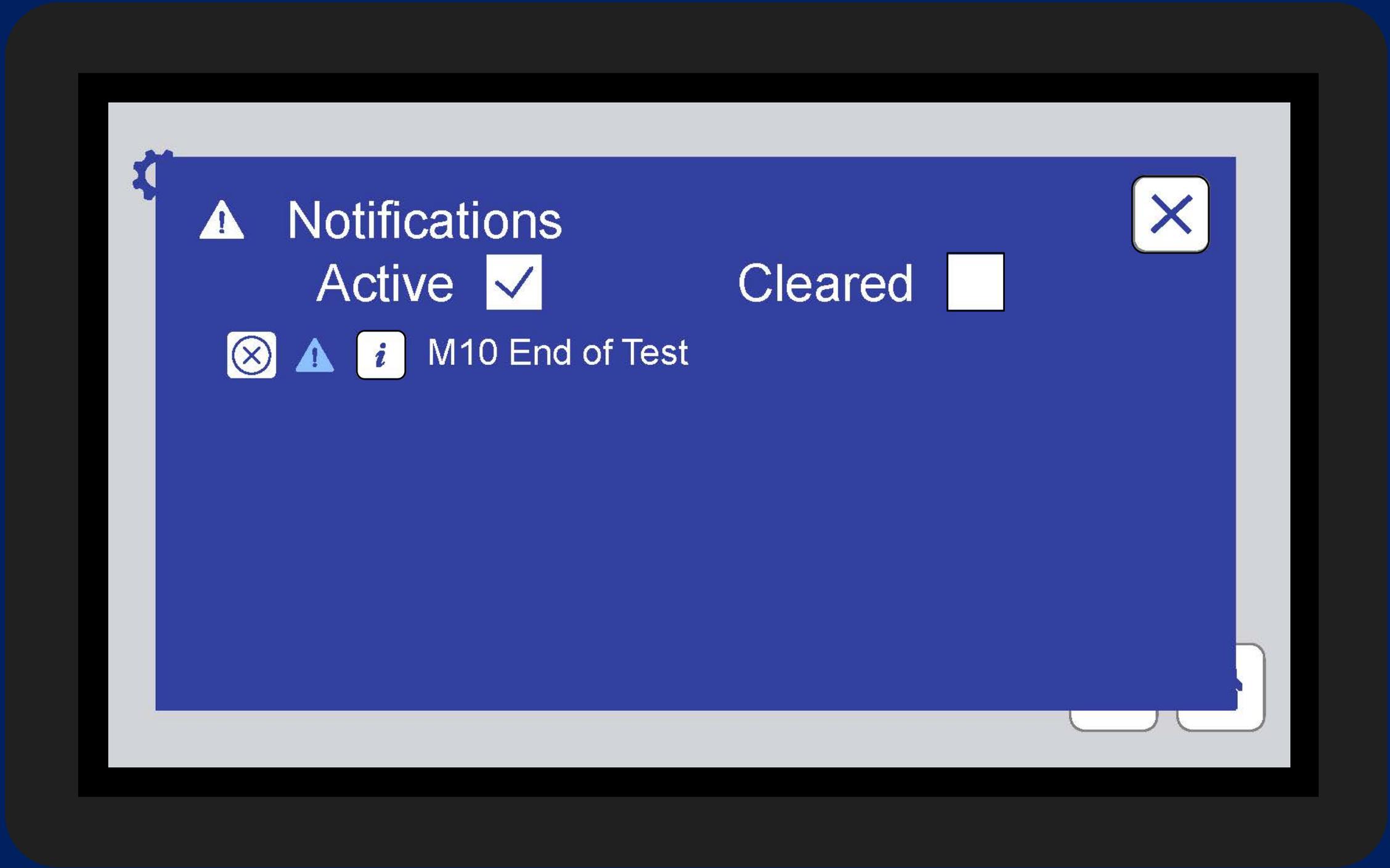
Current Selections ALL

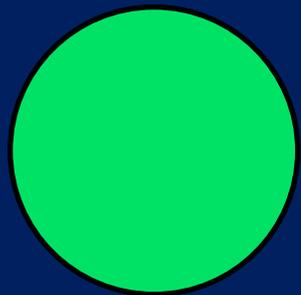
<b>All</b>	General
Water Spray	Humidity
Chamber Air Temperature	Blowers
Maintenance	Irradiance



The image shows a tablet screen displaying a software interface for configuring parameters. The main window is titled "Expert Parameter Group" and has a close button (X) in the top right corner. Below the title, it says "Current Selections: ALL". There are four parameter selection buttons arranged in a 2x2 grid: "Black Panel Temperature", "Temperature", "Water Immersion", and "Condensation". To the left of the main window is a vertical sidebar with a gear icon at the top, a person icon with a star, and a list of options: "Expe", "X1 U", "X2 U", "X3 C", "X4 C", and "X5 C". A left-pointing arrow button is positioned between the sidebar and the main window. To the right of the main window is a vertical sidebar with a close button (X) at the top and a downward-pointing arrow button below it. The entire interface is set against a light gray background.





 **Notifications** 

Active  Cleared

-   M10 End of Test
-   M2 Outer Cover is Off
-   M25 Lab Temperature At Alarm 30°... 

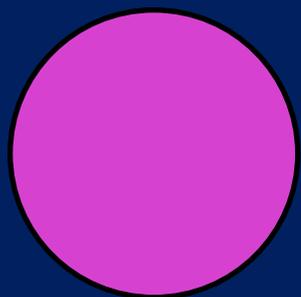


## M10 End of Test



Cycle:	ASTM G154 CYCLE 1
Step Nr:	1 (Condensation)
Test Time (Hrs:Mins):	33:16
Occurred Date:	05-March-2020 09:27
Cleared Date:	05-March-2020 09:28

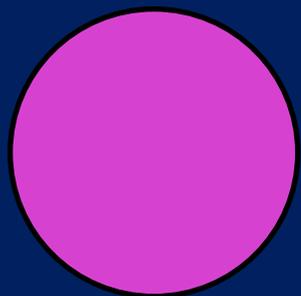




  **USB Options** 

**Install New Software** The software on the USB is newer than the version currently running. This will take up to 10 minutes.

**Export Diagnostics** Export Virtual Stripchart and Diagnostics files to USB drive. This will take up to 5 minutes.



 **USB Options** 

**Install New**

**Export Diag**

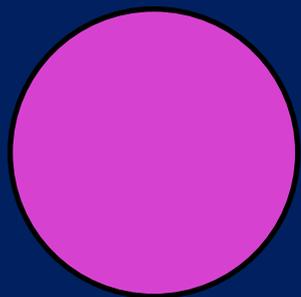
**Install New Software**

Installing Software will take 10 minutes, are you sure you want to proceed?

**OK** **Cancel**

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The screenshot shows a software interface with a blue background. At the top, there is a header bar with a USB icon, the text "USB Options", and a close button (an 'X' in a square). Below the header, there are two buttons: "Install New" and "Export Diagnostics". The "Export Diagnostics" button is highlighted, and a smaller dialog box is open over it. This sub-dialog has a title "Export Diagnostics" and contains the text: "Exporting Virtual Stripchart and Diagnostics files may take up to 5 minutes. Would you like to continue?". At the bottom of the sub-dialog are two buttons: "Yes" and "No".



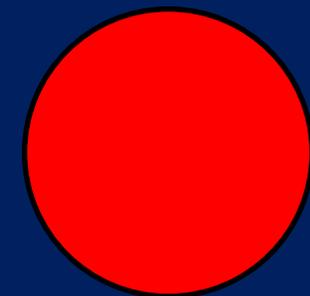
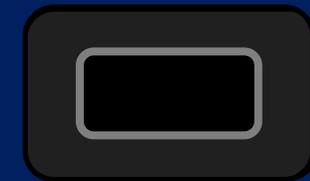
# Test Suspended A: ASTM G154 C...

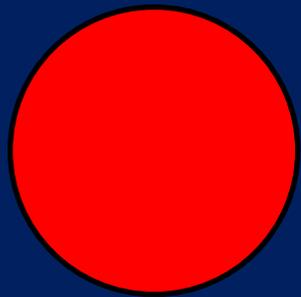
Step 1 UV

	Irradiance (W/m <sup>2</sup> /nm) at control wavelength				Temperature (°C)
	1	2	3	4	
Actual	0.00	0.00	0.00	0.00	59
Set	0.89	0.89	0.89	0.89	60

	Step Time (Hrs:Mins)	Test Time (Hrs:Mins)	Total Time (Hrs)
Elapsed	0:46	16:43	748
Set	8:00	168:00	

RUN





## Main Menu



Manage Test Timers



Settings



Manage Cycles



Diagnostics

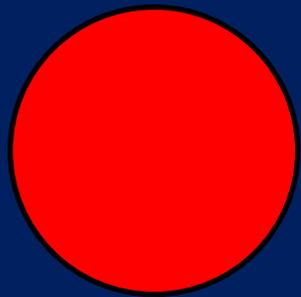


Calibrate



Contact Q-Lab





## Main Menu



Manage Test Timers



Settings



Manage Cycles



Diagnostics

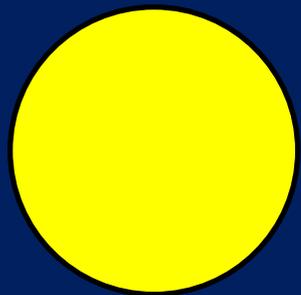


Calibrate



Contact Q-Lab





## Main Menu



Manage Test Timers



Settings



Manage Cycles



Diagnostics

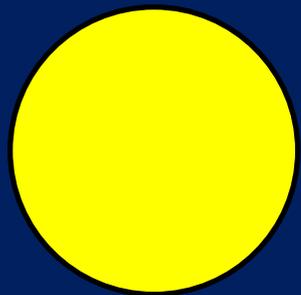


Calibrate



Contact Q-Lab





## Main Menu



Manage Test Timers



Settings



Manage Cycles



Diagnostics



Calibrate



Contact Q-Lab



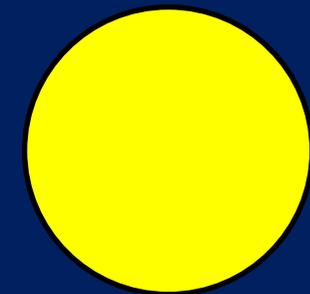


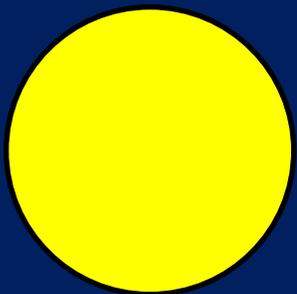
# Running Cycle A: ASTM G154 C...

Step 1 UV

	Irradiance (W/m <sup>2</sup> /nm) at control wavelength				Temperature (°C)
	1	2	3	4	
Actual	0.89	0.89	0.89	0.89	57
Set	0.89	0.89	0.89	0.89	60

	Step Time (Hrs:Mins)	Test Time (Hrs:Mins)	Total Time (Hrs)
Elapsed	0:48	16:43	748
Set	8:00	168:00	





  Notifications 

Active  Cleared

   M49 Power Disrupted

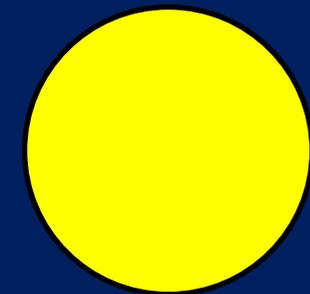


# Running Cycle A: ASTM G154 C...

Step 1 UV

	Irradiance (W/m <sup>2</sup> /nm) at control wavelength				Temperature (°C)
	1	2	3	4	
Actual	0.67	0.69	0.62	0.57	57
Set	0.89	0.89	0.89	0.89	60

	Step Time (Hrs:Mins)	Test Time (Hrs:Mins)	Total Time (Hrs)
Elapsed	0:48	16:43	748
Set	8:00	168:00	





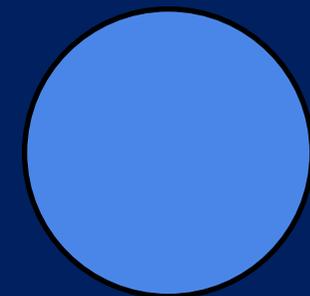
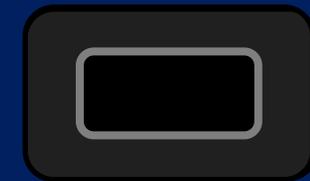
# Test Completed A: ASTM G154 C...

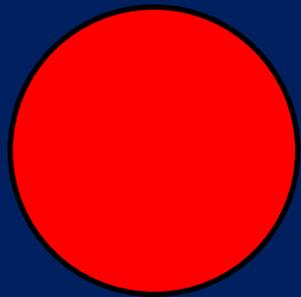
Step 1 UV

	Irradiance (W/m <sup>2</sup> /nm) at control wavelength				Temperature (°C)
	1	2	3	4	
Actual	0.00	0.00	0.00	0.00	58
Set	0.89	0.89	0.89	0.89	60

	Step Time (Hrs:Mins)	Test Time (Hrs:Mins)	Total Time (Hrs)
Elapsed	4:00	168:00	336
Set	4:00	168:0	

RUN

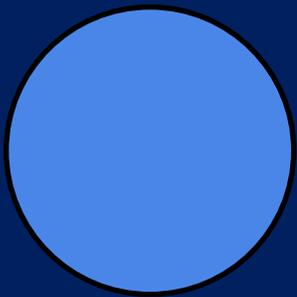




 **Notifications** 

Active  Cleared

   M1 Door Is Open

A screenshot of a notification panel on a device. The panel has a blue background and is partially pulled down from the top. At the top left, there is a small house icon. The main title is 'Notifications' with a white warning triangle icon to its left. Below the title, there are two toggle switches: 'Active' with a white checkmark icon, and 'Cleared' with an empty white square. In the top right corner of the panel, there are two icons: a yellow square with a white speaker and a white 'x', and a white square with a blue 'x'. Below the title, there is a notification for 'M13 End of Test Shutdown' with three icons to its left: a white square with a blue 'x', a blue warning triangle, and a white square with a blue 'i'.

Notifications

Active  Cleared

M13 End of Test Shutdown