



Tutorials for Deployment Edition

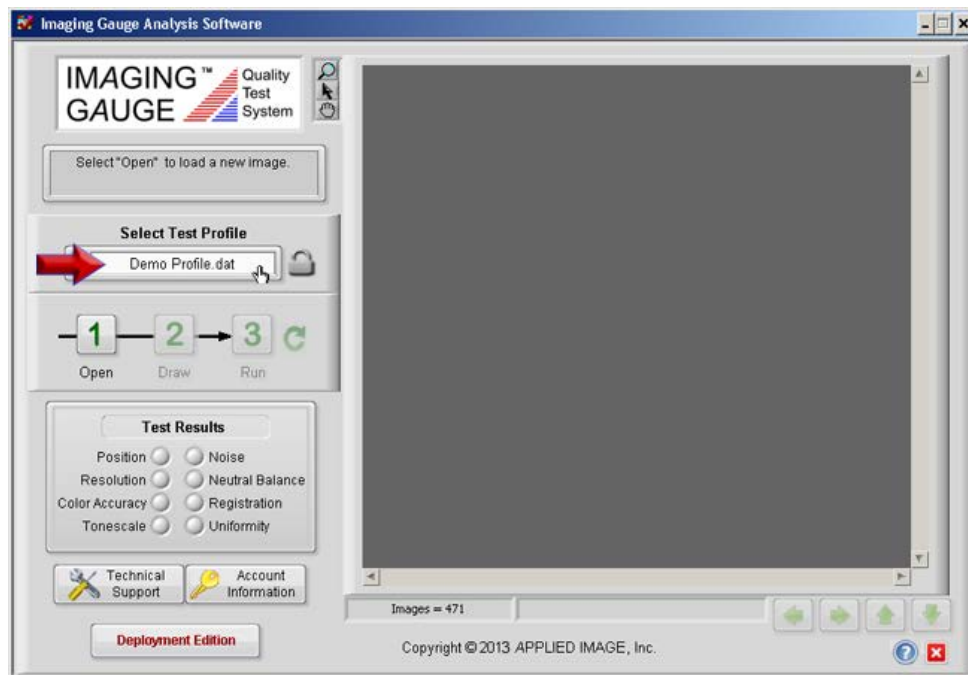


Tutorials are provided to demonstrate different aspects of the Imaging Gauge™ program. Completion of all tutorials is recommended to become familiar with the system.

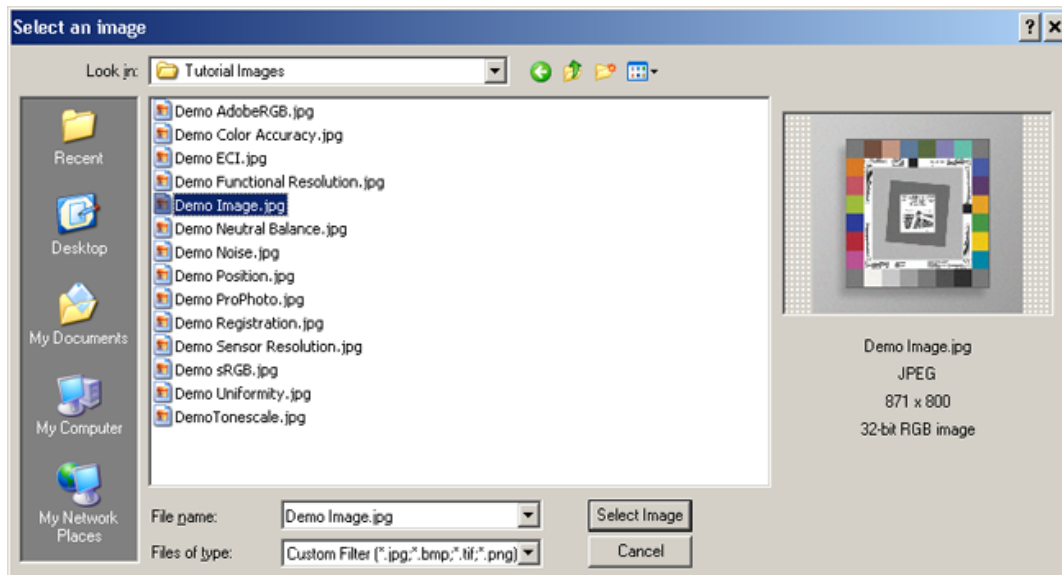
Tutorial Name	Page	Description
Tutorial 1: Using Image Analysis Tools	2	Covers the use of tools including the rectangular region tool for selecting the target, zoom tool, pan tool and select tool. Adjusting the test regions individually or as a whole is also shown.
Tutorial 2: Analyzing a Test Image	9	Demonstrates the full analysis process for an acceptable and unacceptable image
Tutorial 3: Adding a New Test Profile	14	Demonstrates how to import a new test profile. This process simulates a scenario where a new profile has been sent from technical support to modify the specification limits
Tutorial 4: Getting Technical Support	19	Shows the process of importing new technical support information and submitting a problem report to the technical support contact.
Tutorial 5: Managing the Account	25	Demonstrates the Account Management interface to activate a software license and add image actuations.
Tutorial 6: Viewing Summary Results	30	Runs images and opens the summary results file to demonstrate the data saved to file.

Tutorial 1: Image Adjustment Tools

1. Select "**Demo Profile.dat**" from the Profile Drop-Down list.

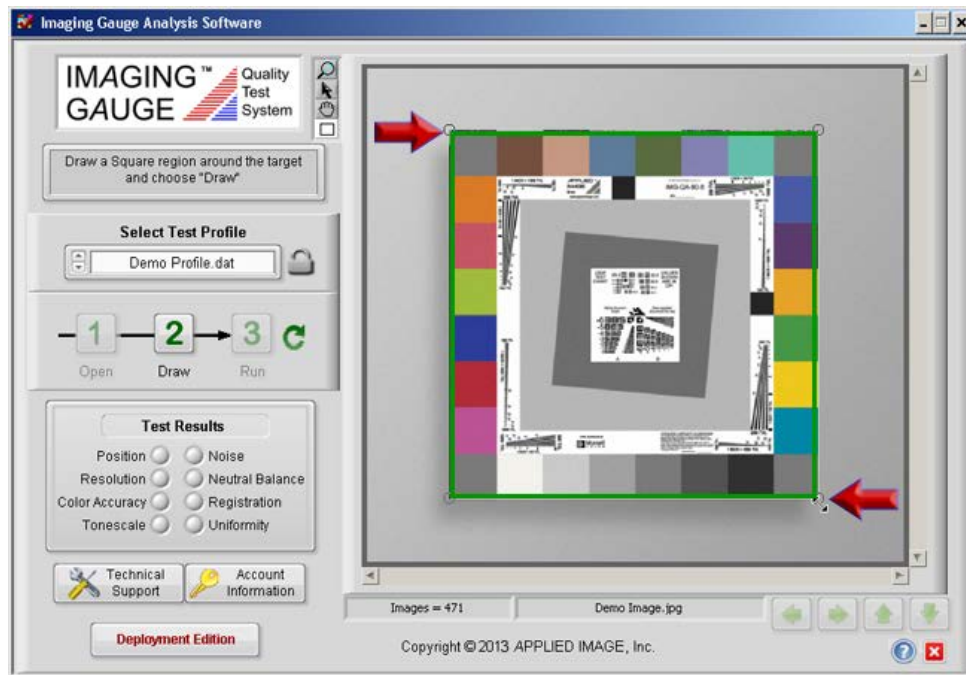


2. Select the **Open** button **1** to open an image.
3. Select "**Demo Image.jpg**" from the dialog box.



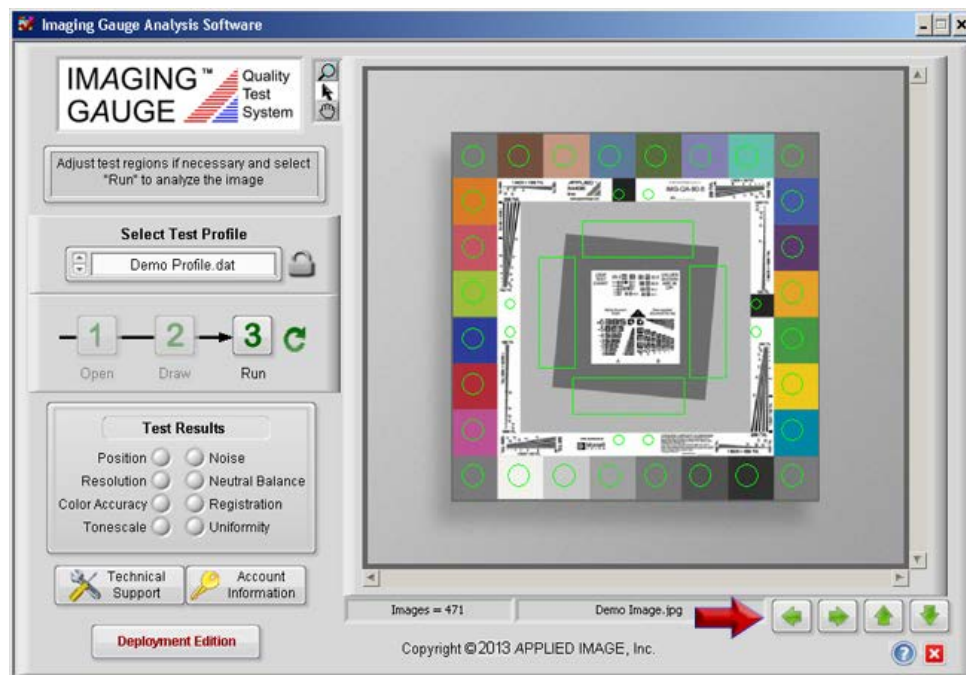
[3]

4. Press and hold the mouse from the upper left corner to the lower right corner of the target as shown.




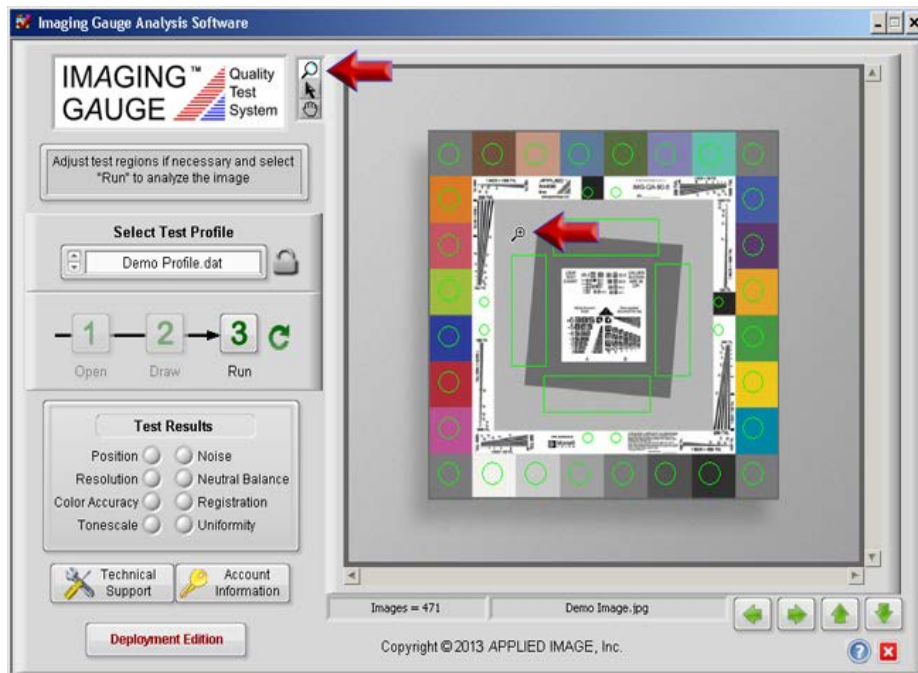
5. Choose the **Draw** button **2** to continue.


6. Inspect the location of all inspections regions. .

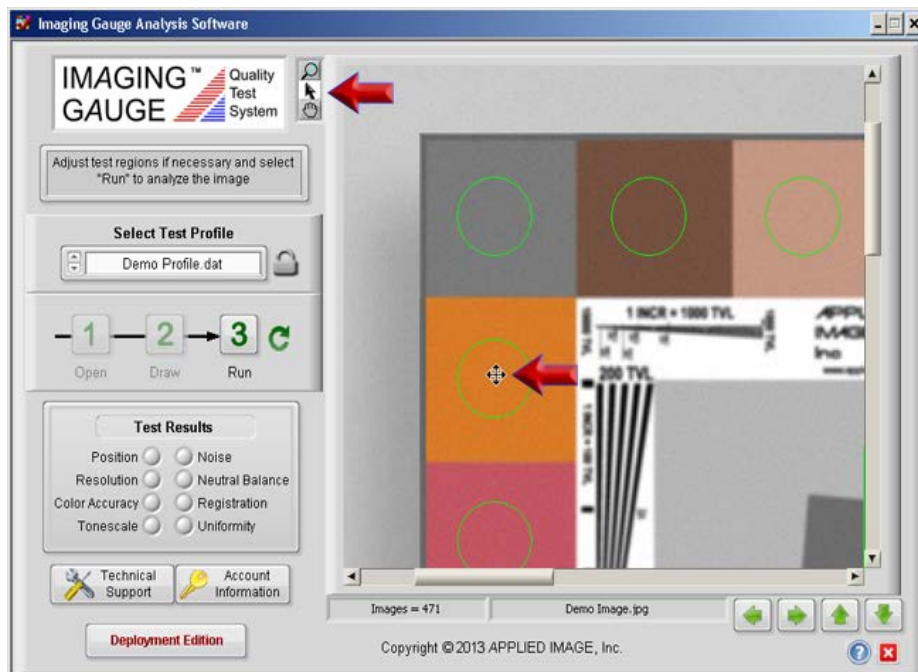


[4]

7. Select the **Zoom** tool  and click the mouse in the upper left corner of the image as shown:

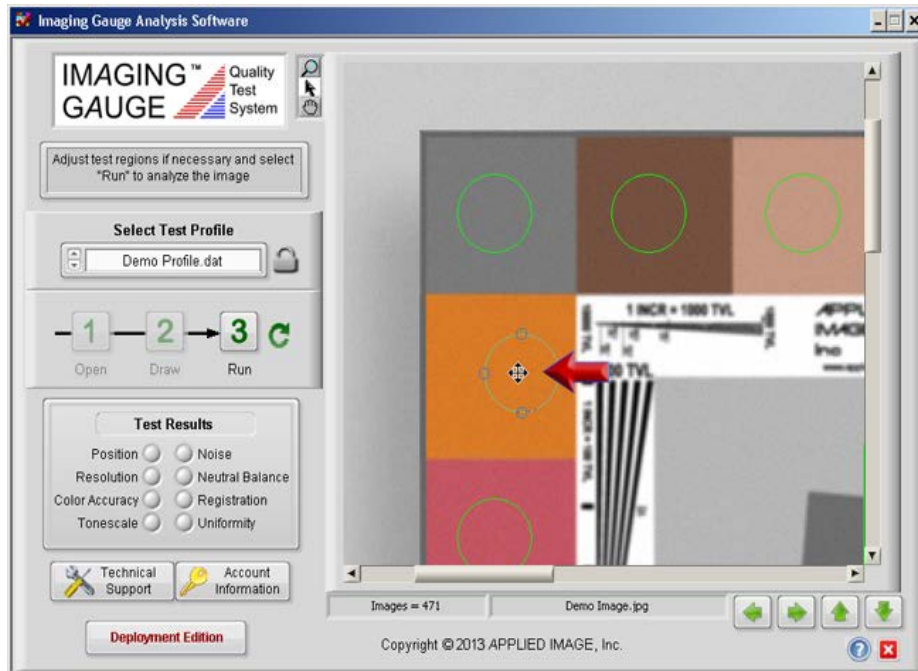



8. Select the **Pointer** tool  and move the cursor over a circular test region until the cursor shows a cross.

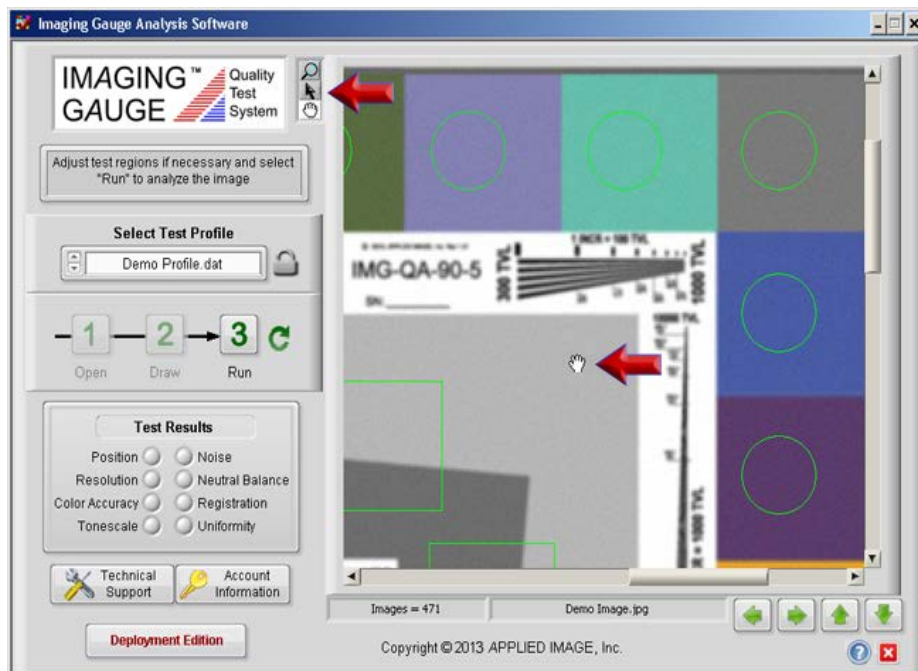


[5]

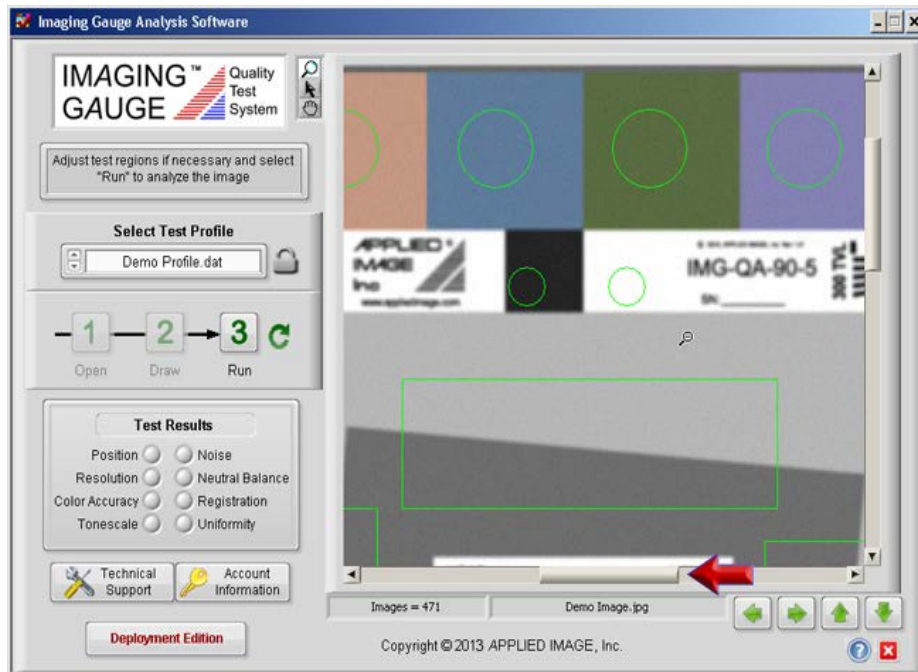
9. While holding down the mouse button, drag the circular test region to a slightly different location and release the mouse button.




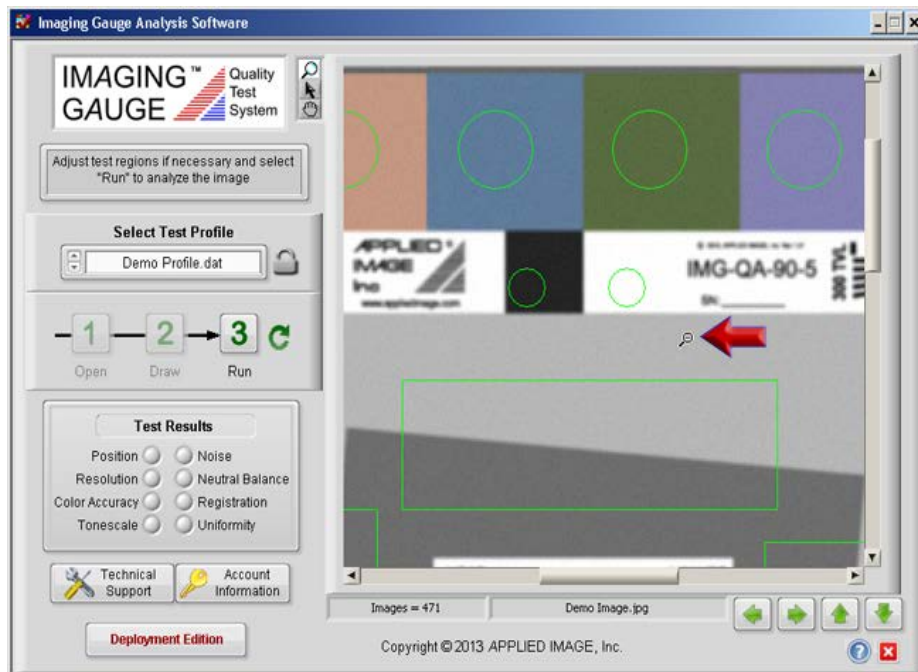
10. Select the **Pan** tool . Click and drag the mouse to move across the top of the image.



11. Use the horizontal scroll bar to move to the center of the image.

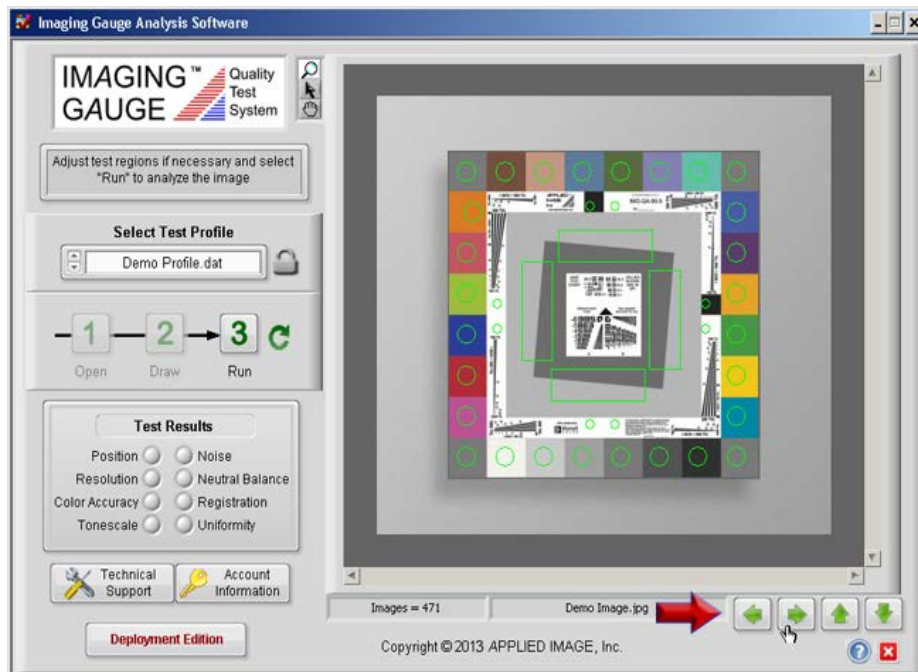


12. Select the **Zoom** tool . Move the cursor into the image area hold down the **Shift** key. Notice that the cursor changes from a [+] to a [-]. While holding the **Shift** key, click the mouse in the center of the image. Notice that the image de-magnifies.

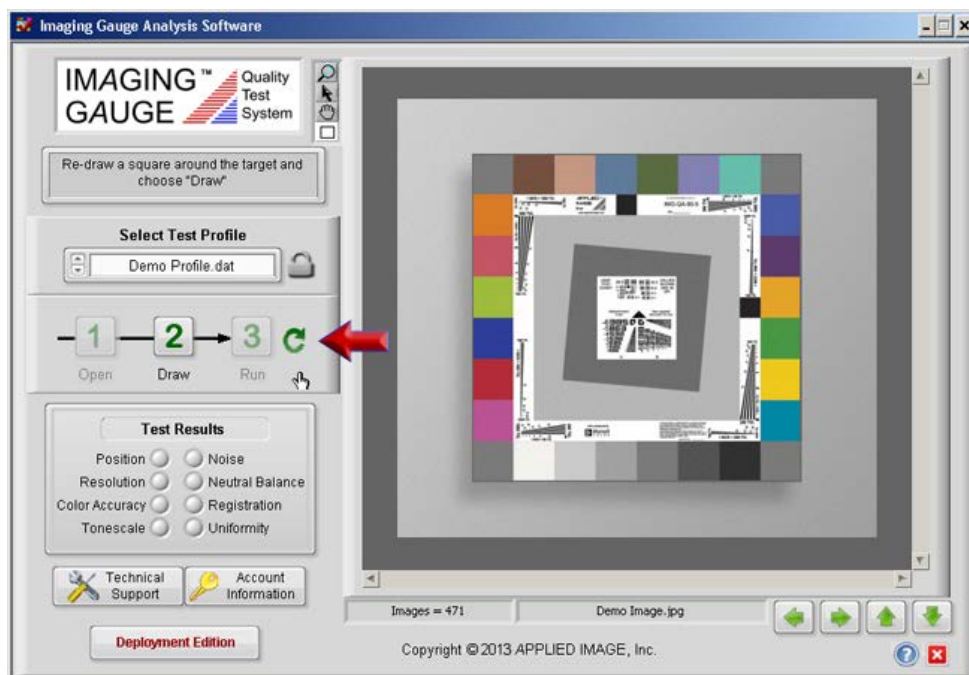


[7]

13. Adjust the test regions using the left, right , up and down arrows

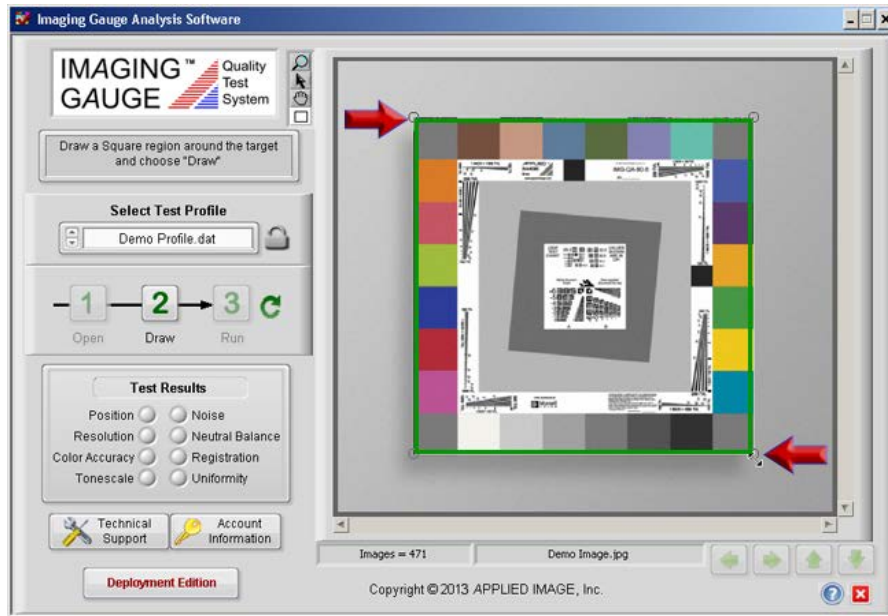


14. Select the **Reset** button to clear all test regions and begin with the opened image.



[8]

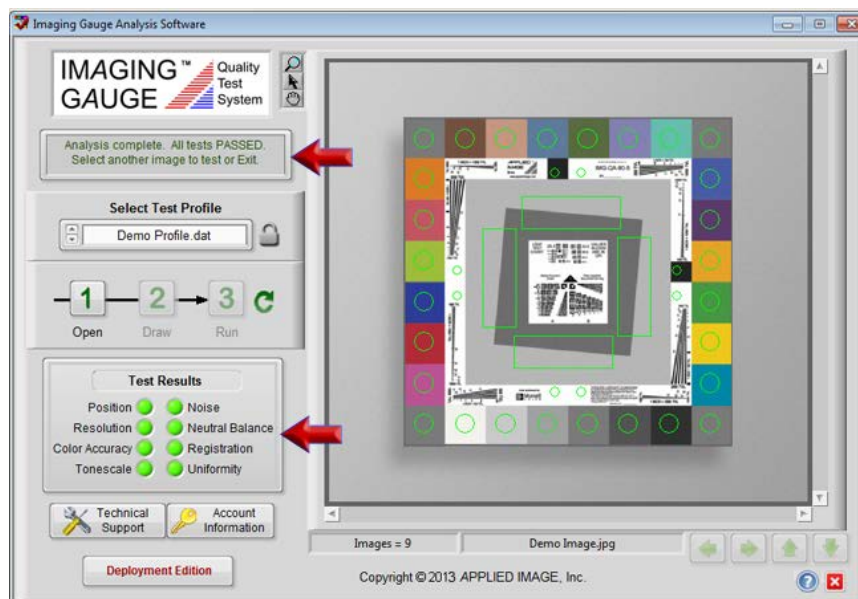
15. Press and hold the mouse from the upper left corner to the lower right corner of the target as shown to Redraw a square region around the target.



16. Choose the **Draw** button **2** to continue.

17. Inspect the location of all inspections regions and select the **Run** button **3** when all regions are positioned properly.

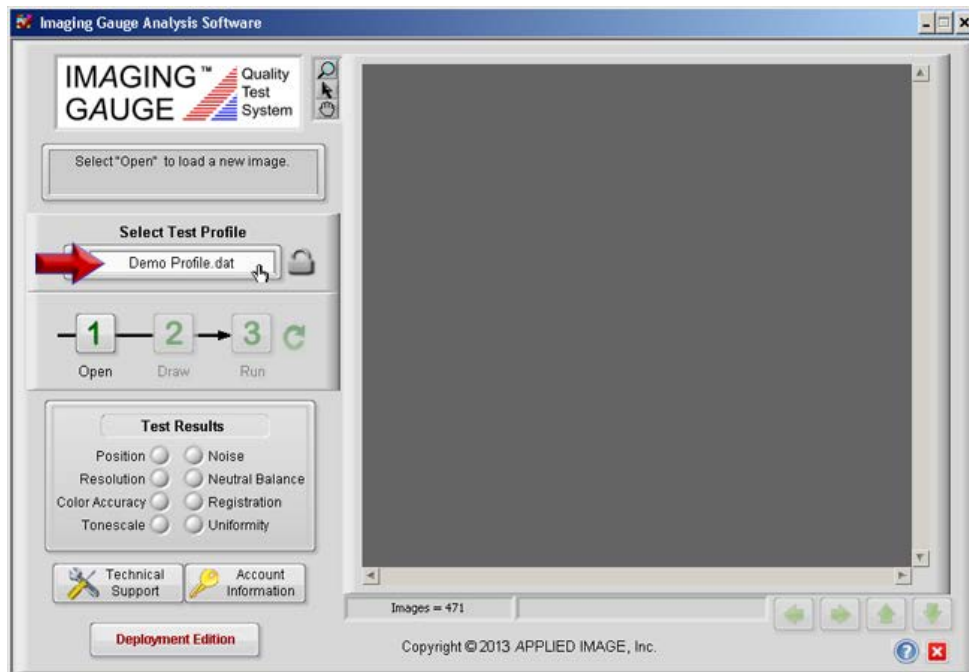
18. Note that all tests passed.



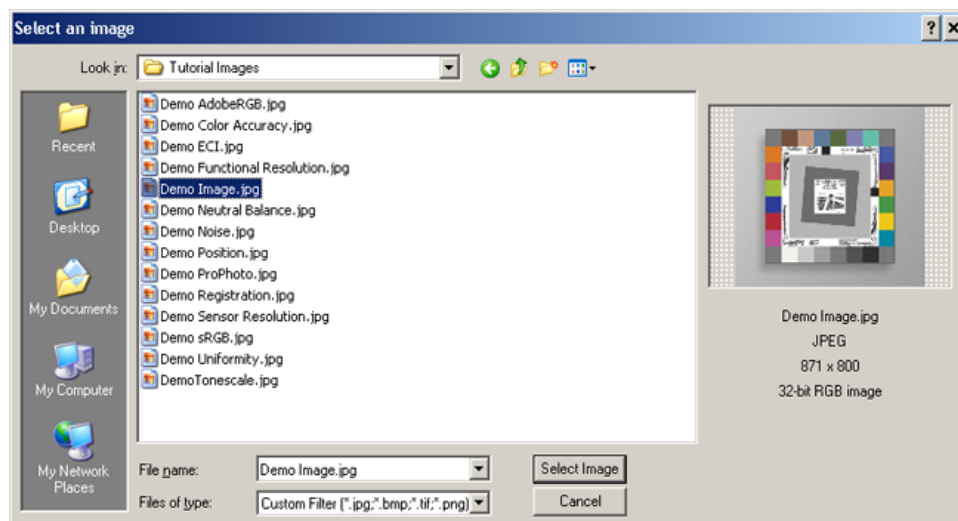
End of Tutorial

Tutorial 2: Analyzing a Test Image

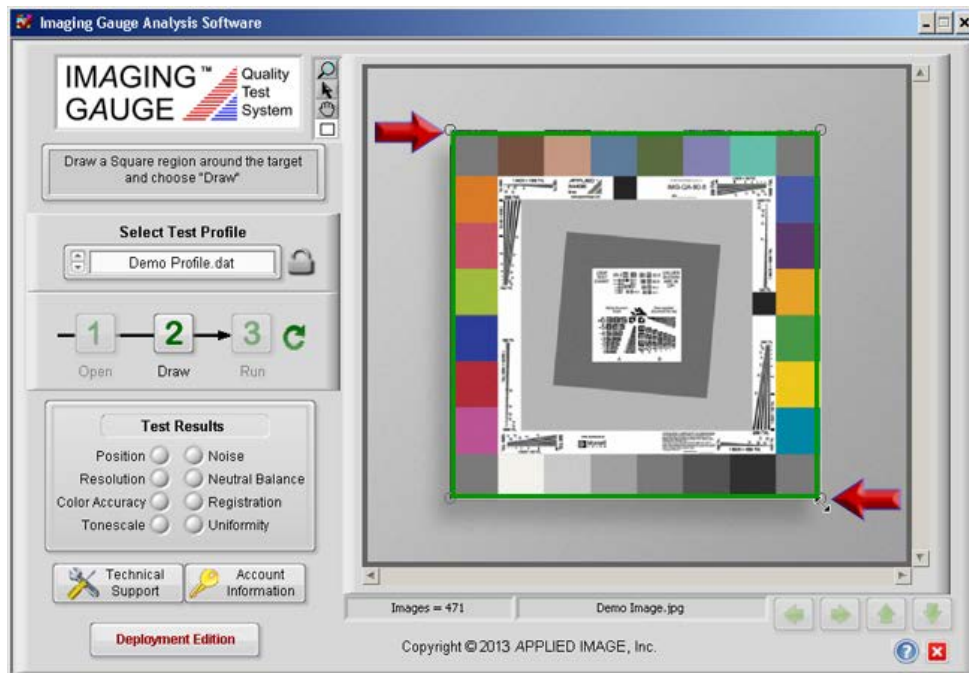
1. Select "**Demo Profile.dat**" from the Profile Drop-Down list.



2. Select the **Open** button to open an image.
3. Select "**Demo Image.jpg**" from the dialog box.

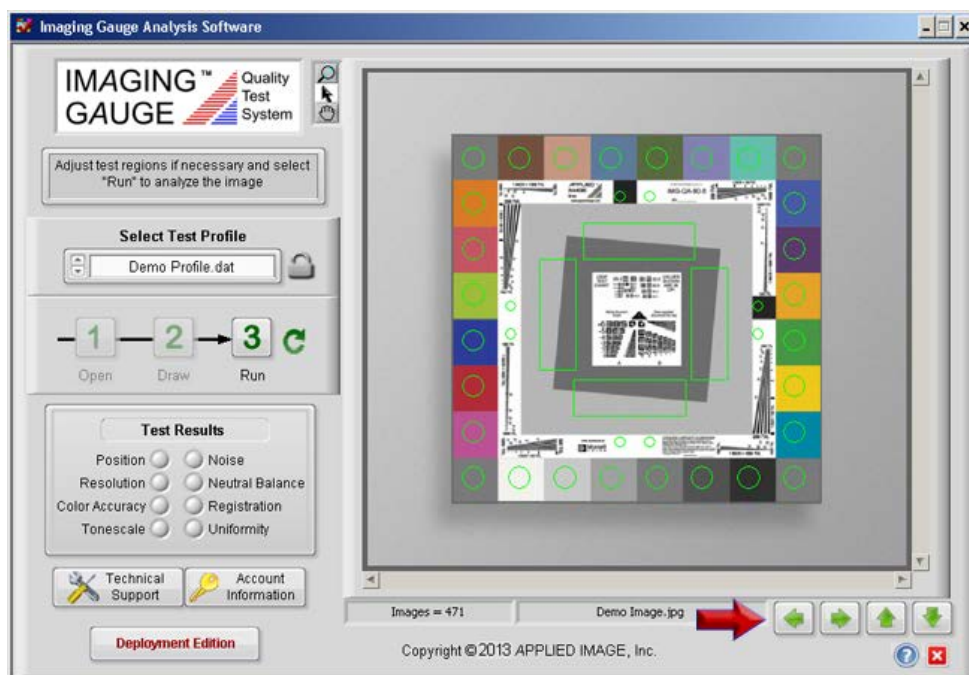


4. Press and hold the mouse from the upper left corner to the lower right corner of the target as shown.



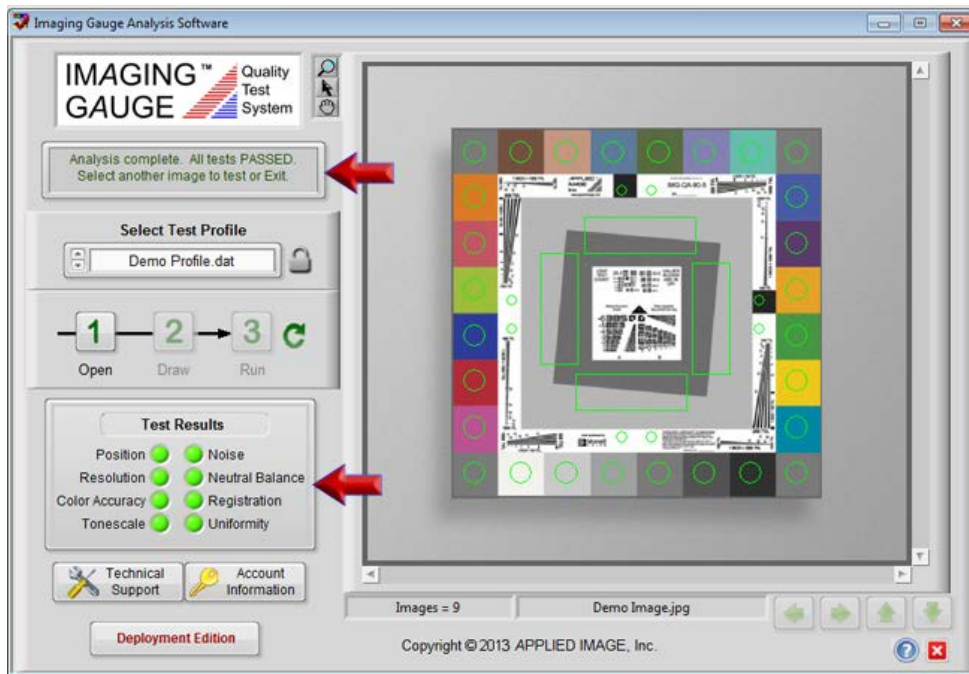
5. Choose the **Draw** button **2** to continue.

6. Inspect the location of all inspection regions and use the adjustment buttons to move all regions simultaneously. To move Individual regions, press and hold the left-mouse button, then drag the region to the new location. Release the button.



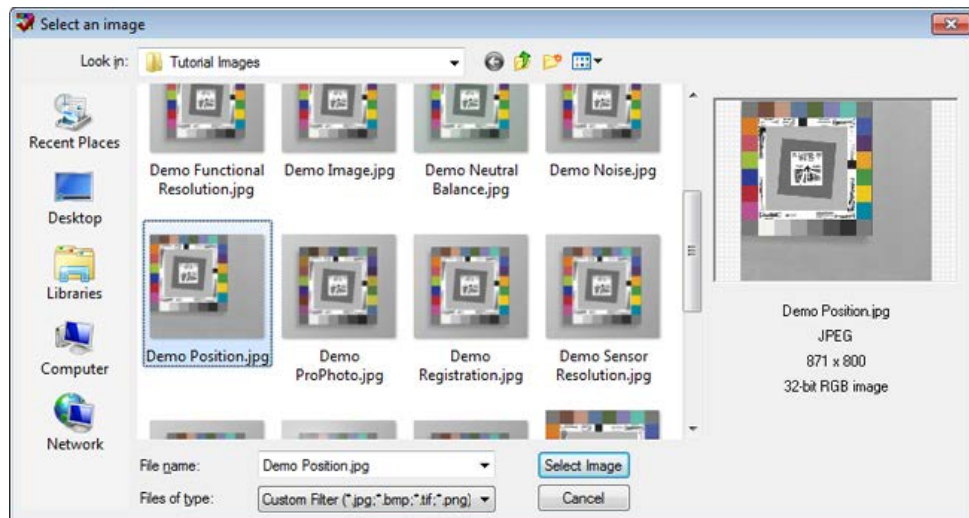
7. Select the **Run** button **3** when all regions are positioned properly.

8. Note that all tests passed.



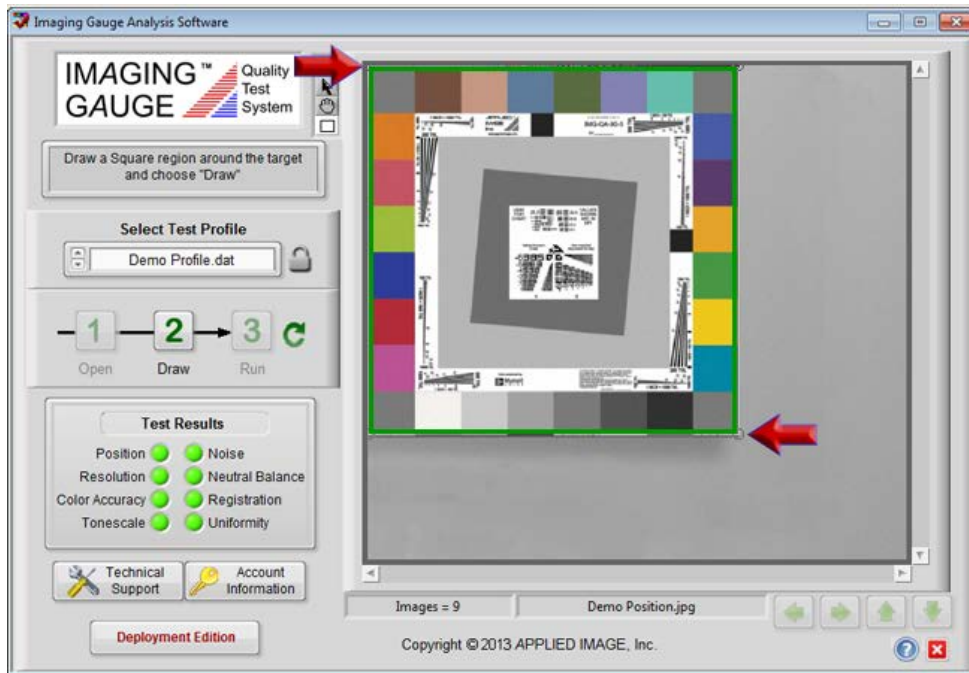
9. Select the **Open** button **1** to open another image.

10. Select "**Demo Position.jpg**" from the dialog box and choose **Select Image**.



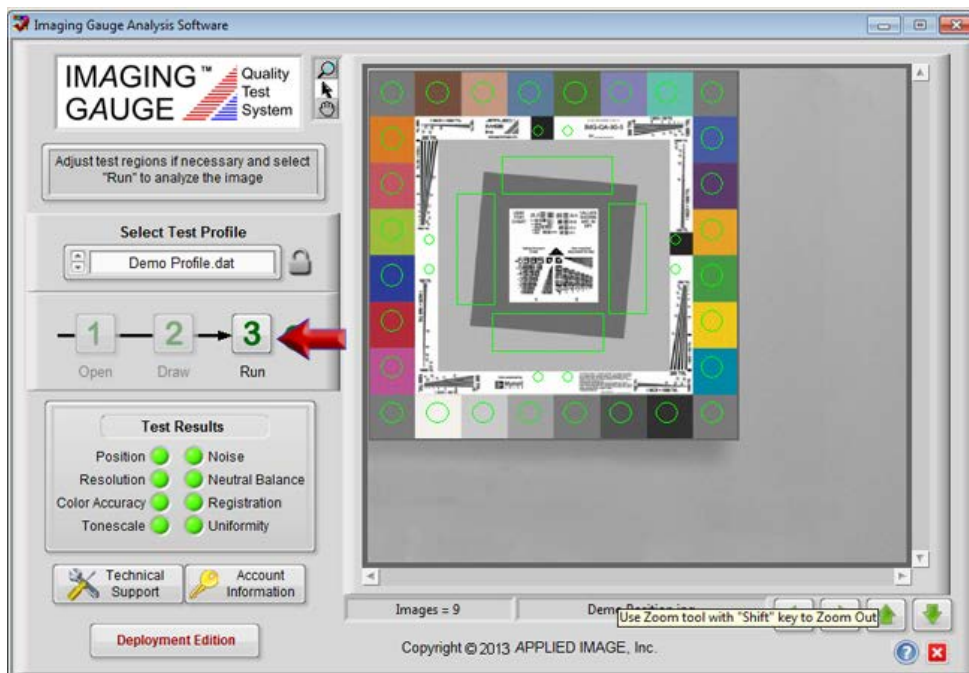
[12]

11. Press and hold the mouse from the upper left corner to the lower right corner of the target as shown.



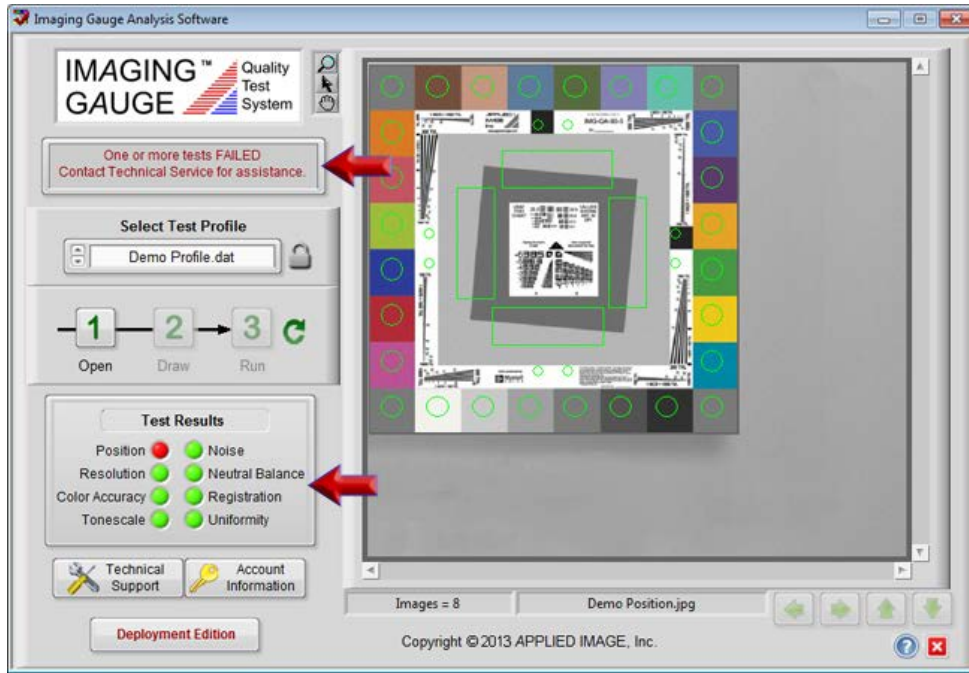
12. Inspect the location of all inspections regions and use the adjustment buttons as necessary.

Select the **Run** button **3**.



[13]

13. Note that the Position test failed.

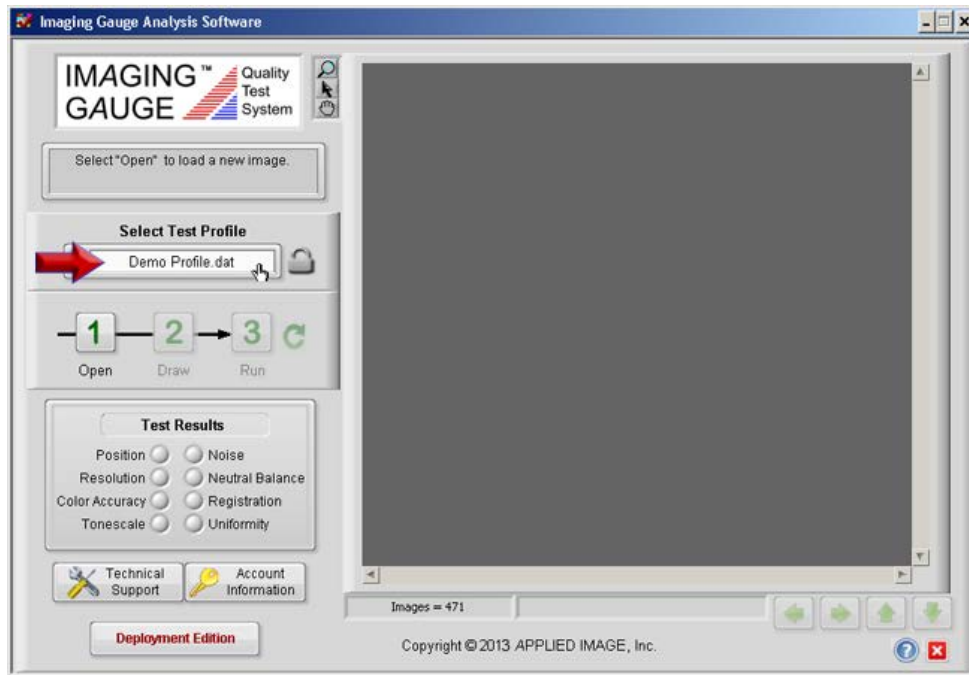



14. Repeat this Tutorial for the other Demo Images in the folder. Inspect the images using the Image Adjustment tools understand the defects in each image that causes it to fail.

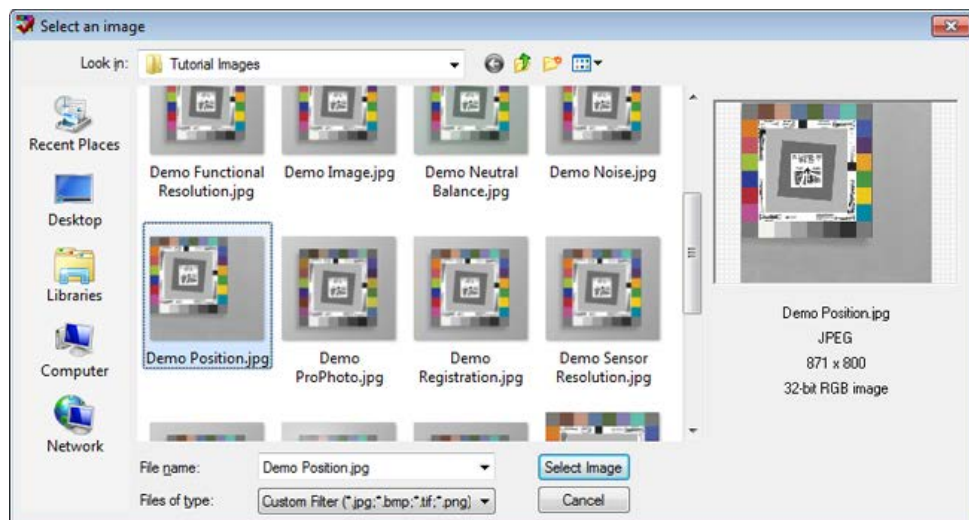
End of Tutorial

Tutorial 3: Adding a New Test Profile

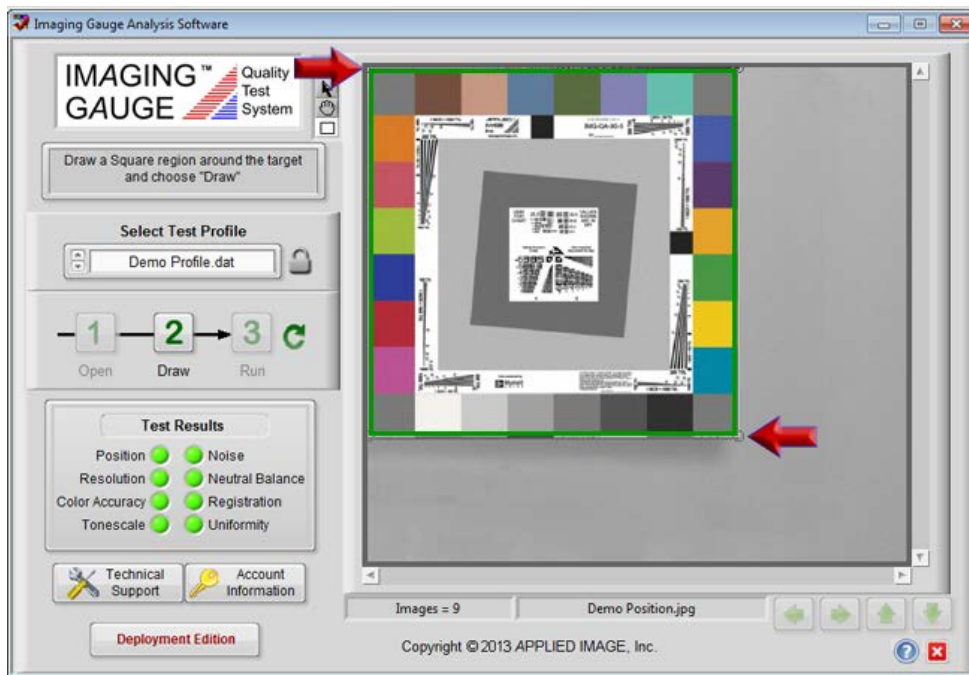
1. Select "**Demo Profile.dat**" from the Profile Drop-Down list.



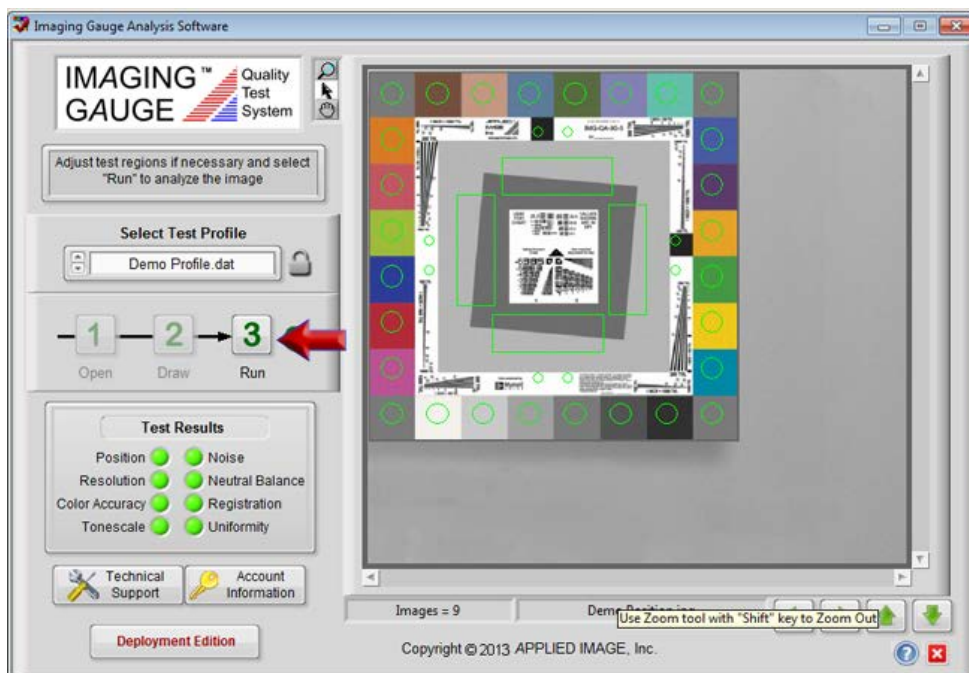
2. Select the **Open** button  to open an image.
3. Select "**Demo Position.jpg**" from the dialog box and choose **Select Image**.



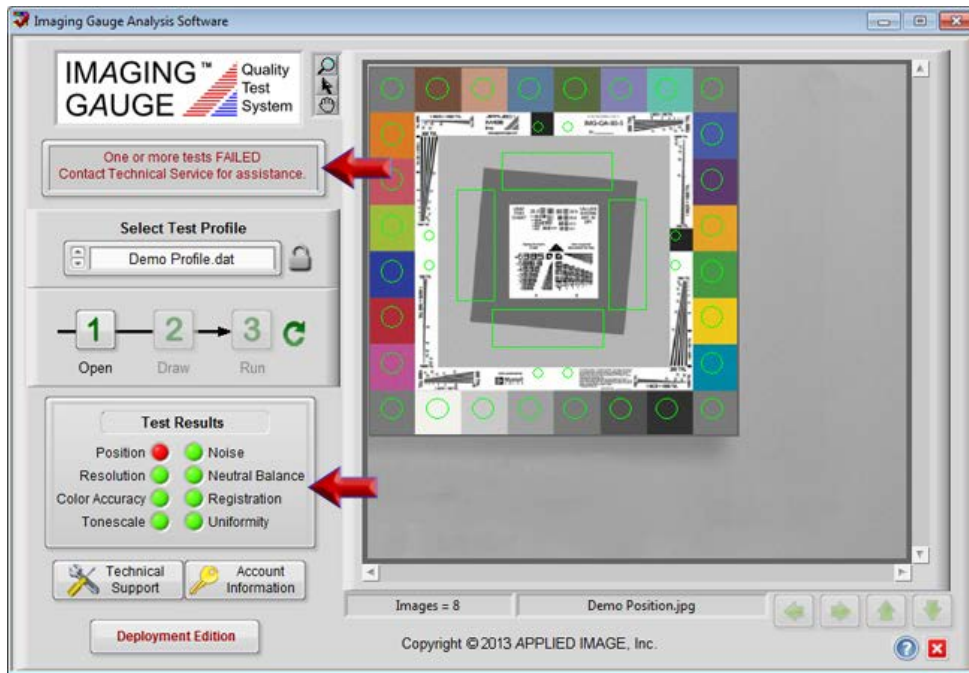
4. Press and hold the mouse from the upper left corner to the lower right corner of the target as shown. Select the **Draw** 2 button.



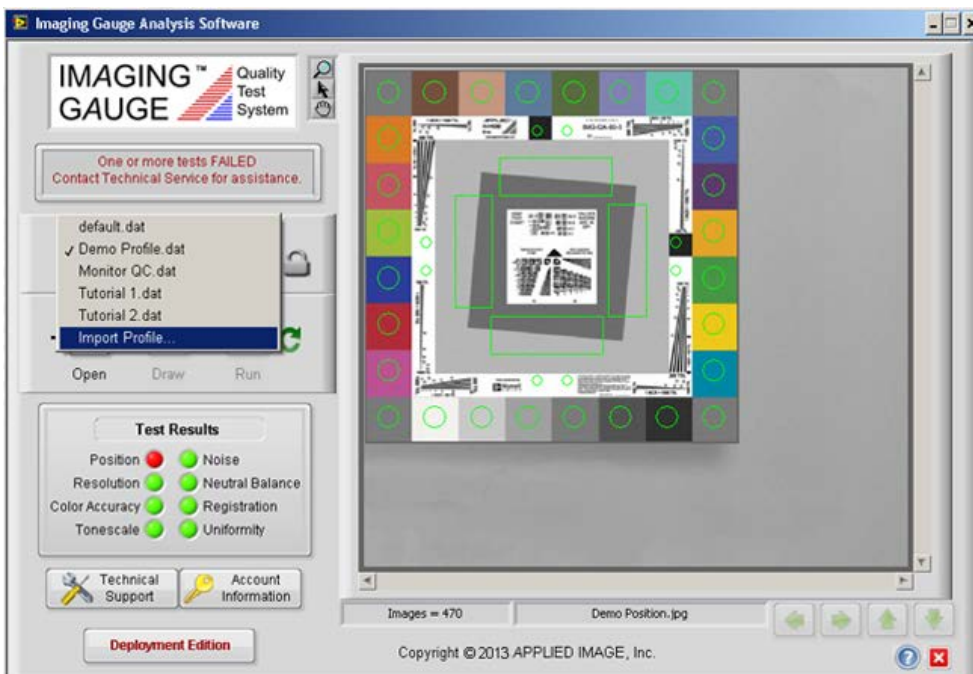
5. Inspect the location of all inspections regions and use the adjustment buttons as necessary. Select the **Run** 3 button.



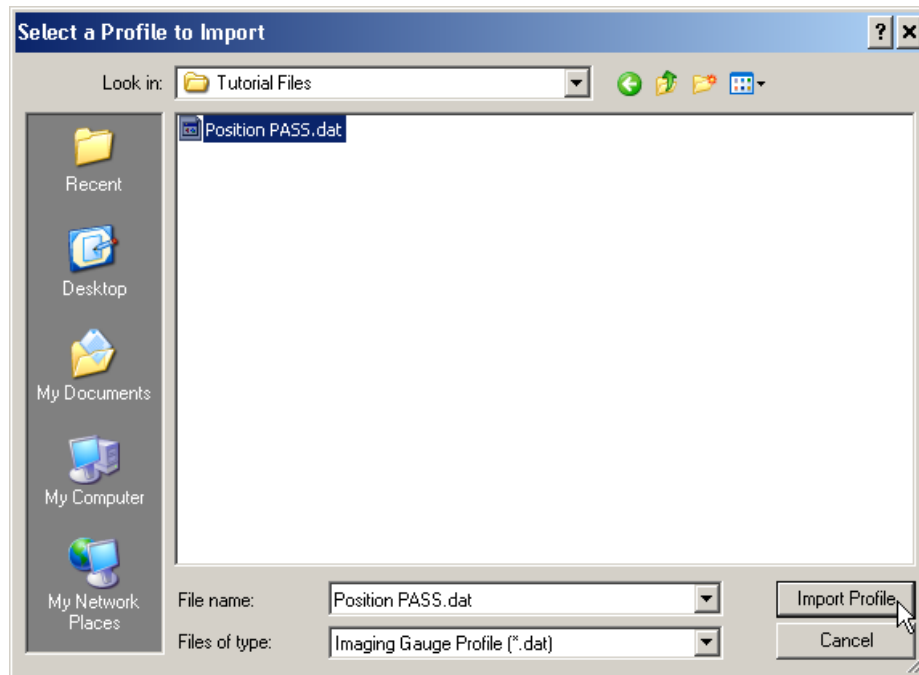
6. Note that the Position test failed.



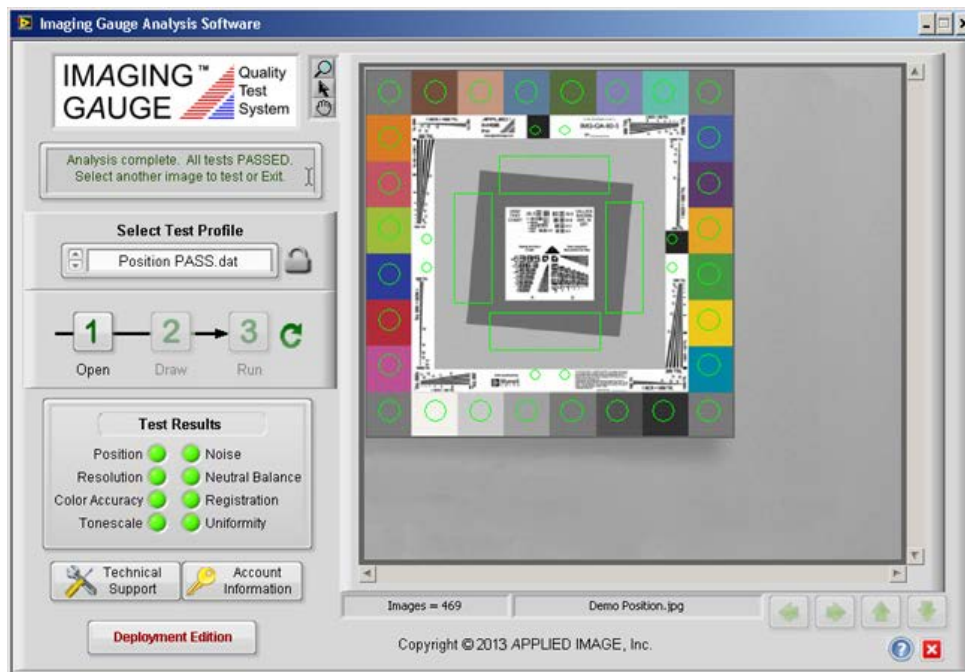
7. Select "Import Profile..." from the **Select Test Profile** drop-down menu.




8. Navigate to the "**Position PASS.dat**" profile located in the **C:\Imaging Gauge Files\Support Files\Tutorial Files** directory. Select Import Profile.

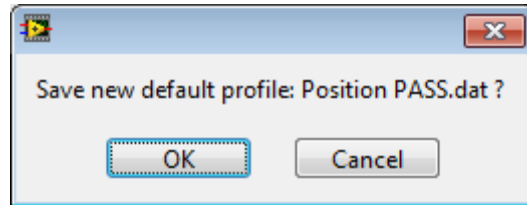


9. Note that the newly imported profile is automatically selected. Open and run the image "**Demo Position.jpg**". Note that all tests passed using the new profile.



10. Select the Default Profile button .

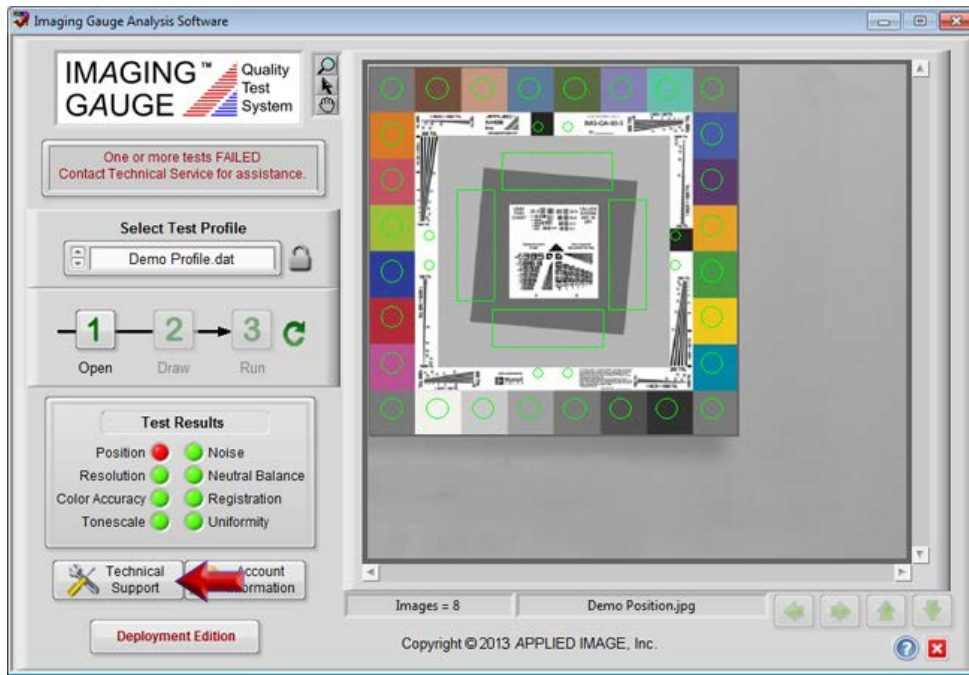
11. Select OK to save the new profile as the default profile. The next time Imaging Gauge is run, this profile will be automatically loaded.



End of Tutorial

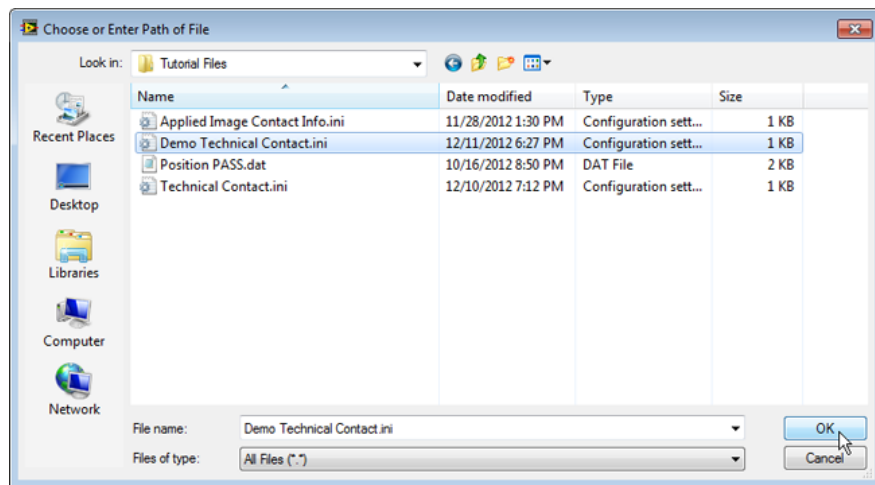
Tutorial 4: Getting Technical Support

1. Select "**Demo Profile.dat**" from the Profile Drop-Down list and perform the steps in Tutorial 2 to process the "Demo Position.jpg" image..
2. Select the **Technical Support** button after the image is processed.



3. Note that the default support information is for APPLIED IMAGE, Inc. Technical service of imaging equipment is available for purchase from APPLIED IMAGE. For this tutorial, a fictional company is used to simulate a typical support organization that has the Enterprise Edition installed. Select the **Import** button to update the contact information.

4. Navigate to the "**Demo Technical Contact.ini**" file located in c:\Imaging Gauge Files\Support Files\Tutorial Files directory. Select **OK**.



5. Note that the information is updated on the interface panel. Enter a new number for the **Contact Phone**. Click the cursor in another field to record the change. Note that the **Save** button is activated. Select the **Save** button.

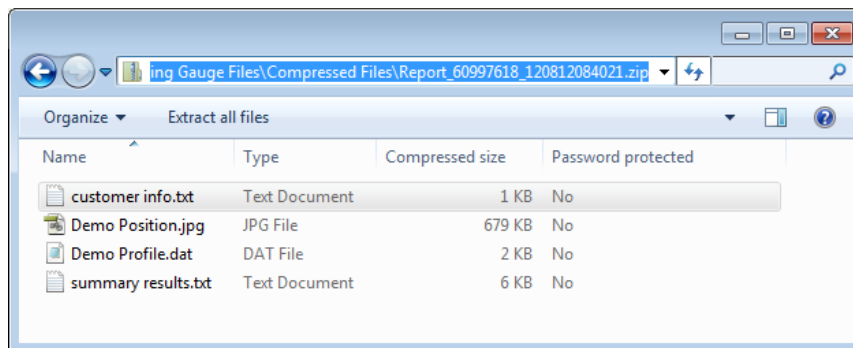
6. Enter sample information in the text fields and select the **Create File** button.

The screenshot shows the 'Imaging Gauge™ Technical Support Interface' window. It is divided into two main sections: 'Company Information' and 'Technical Contact Information'. Below these are three numbered steps: '1. Enter Information', '2. Create Report File', and '3. Transfer File'. In the '2. Create Report File' section, the 'Create File' button is highlighted with a red arrow. The 'View File' button is also visible. The 'Company Information' section contains fields for Company Name, Street Address, City, State / Province, Zip Code, Country, Phone Number, and Website. The 'Technical Contact Information' section contains fields for Contact Name, Contact Phone, FAX Number, E-mail Address, Support Website, Support Folder, and Other. The '1. Enter Information' section contains fields for Name, E-mail, Phone, and Problem Description. The '3. Transfer File' section contains buttons for 'E-Mail File to Technical Support', 'Upload to Technical Support Website', and 'Move to Technical Support Folder'. The copyright notice 'Copyright © 2013 APPLIED IMAGE, Inc.' is at the bottom.

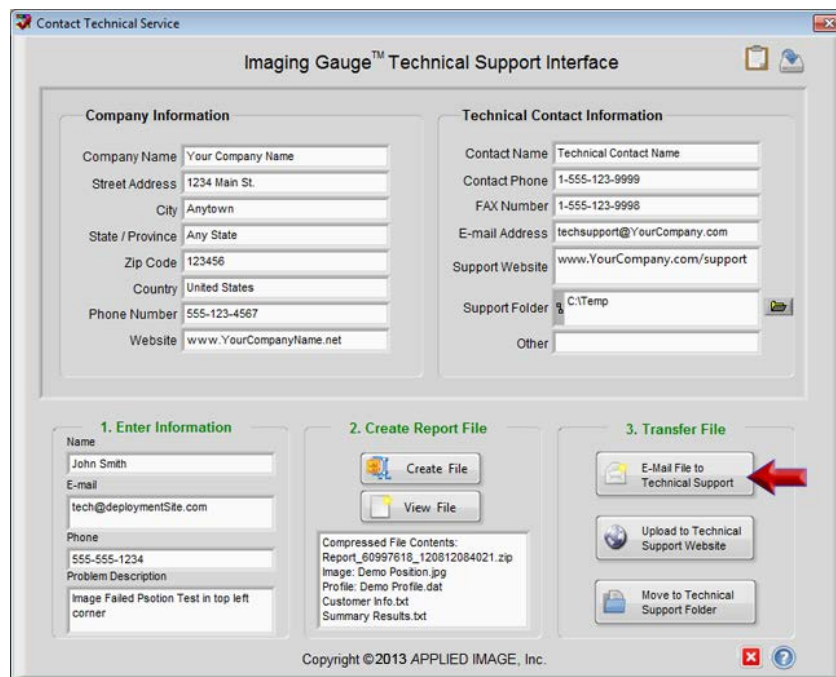
7. Select **View File**.

The screenshot shows the 'Imaging Gauge™ Technical Support Interface' window, similar to the previous one, but with the 'View File' button highlighted by a red arrow. The 'View File' button is located in the '2. Create Report File' section. Below the 'View File' button, the 'Compressed File Contents' are listed: 'Report_60997618_120812084021.zip', 'Image: Demo Position.jpg', 'Profile: Demo Profile.dat', 'Customer Info.txt', and 'Summary Results.txt'. The 'Company Information' and 'Technical Contact Information' sections remain the same. The '1. Enter Information' section also remains the same. The '3. Transfer File' section contains the same buttons. The copyright notice 'Copyright © 2013 APPLIED IMAGE, Inc.' is at the bottom.

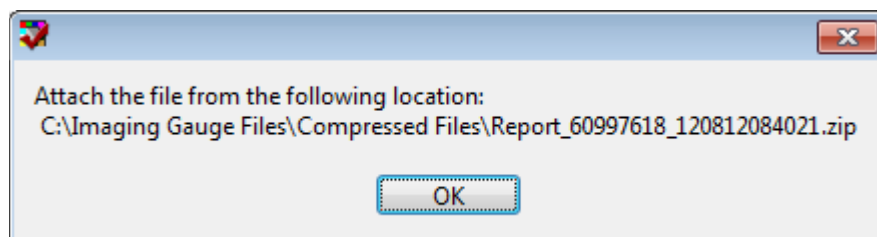
8. Note the files included in the compressed Zip file.



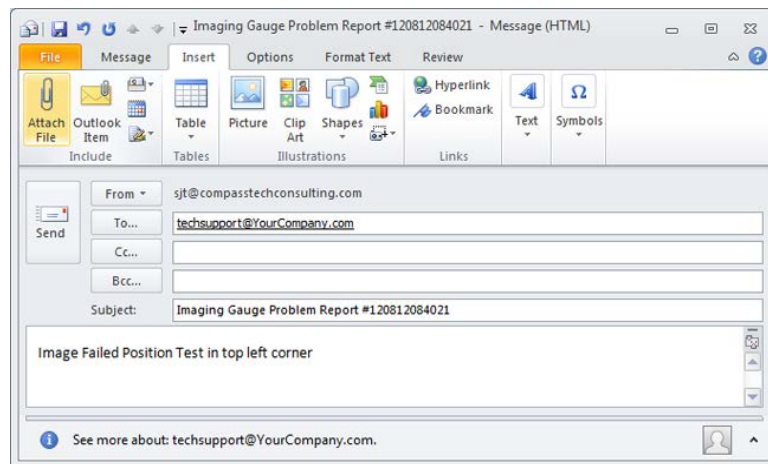
9. Select **E-Mail** file to Technical Support.



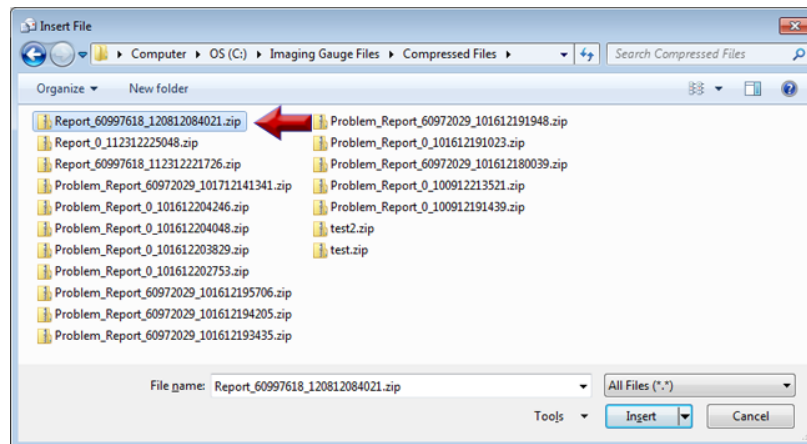
10. Note the file name to attach and select **OK**.



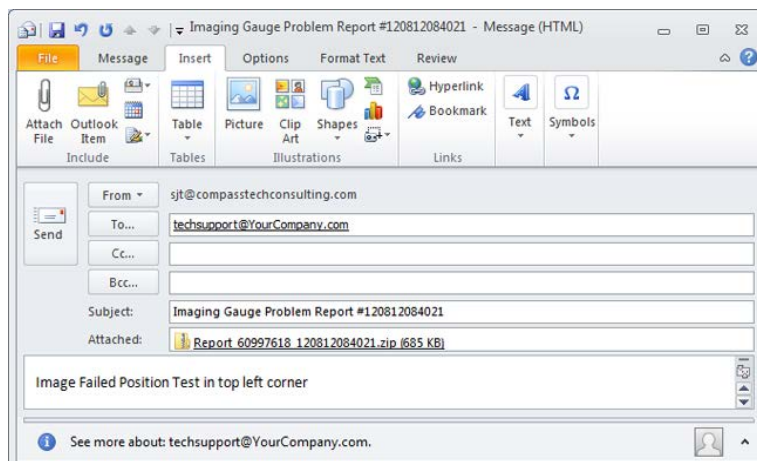
11. The following dialog will vary depending on the system's default E-mail program. Note that the technical support e-mail address, the subject line and the problem description are automatically added to the e-mail.



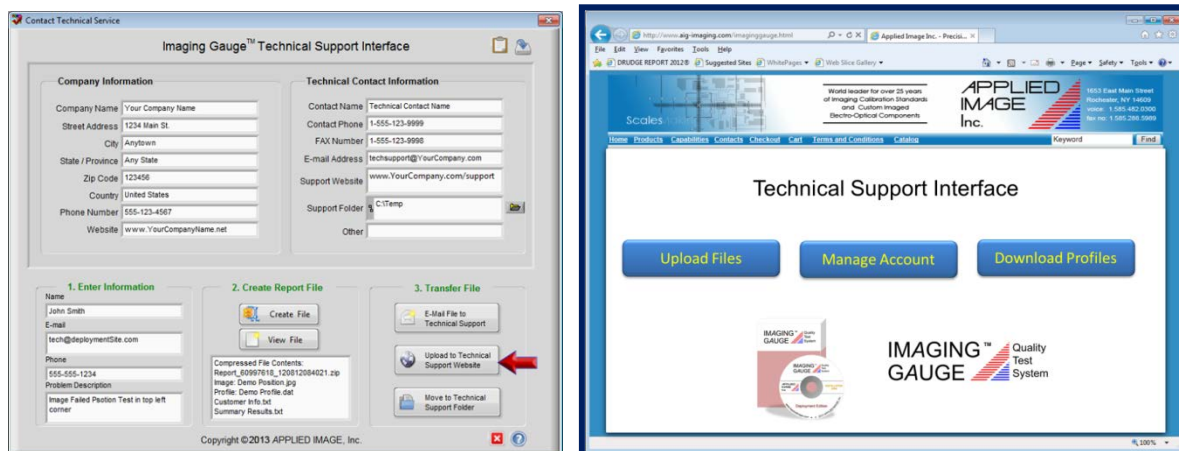
12. Select **Attach File** and navigate to the saved compressed file. Select **Insert** (or similar button for your e-mail program).



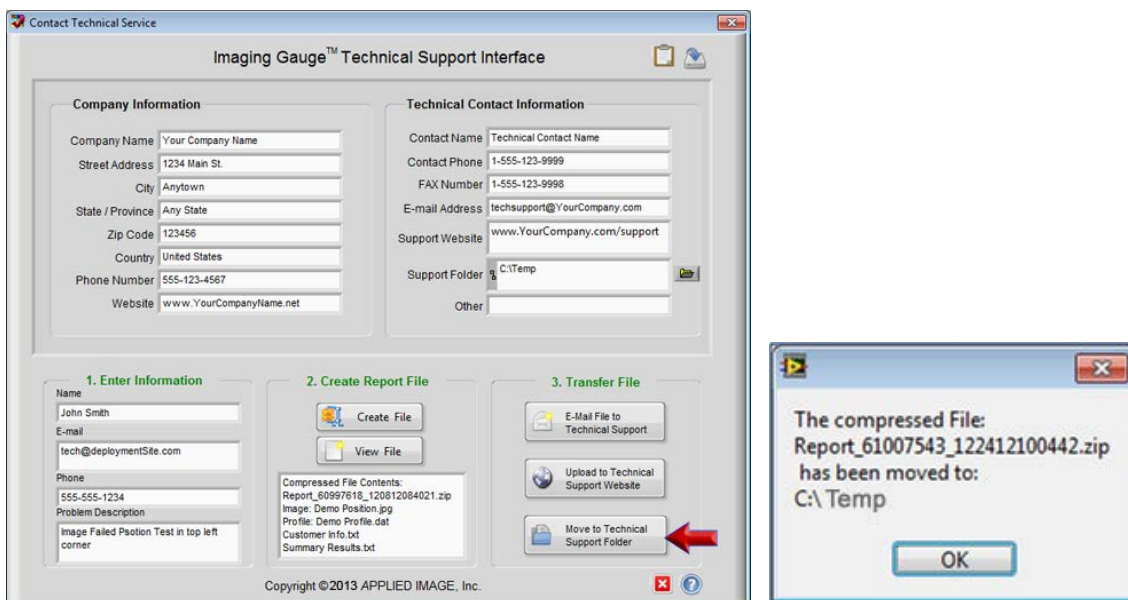
13. Cancel the e-mail since the fictional e-mail does not exist.



14. **Note** the **Upload to Technical Support Website** option. If selected, this would open the URL in the Support Website field. A sample website is shown below.



15. **Note** the **Move to Technical Support Folder** option. If selected, this would move the compressed file to the **Support Folder** location and a confirmation window would be displayed.

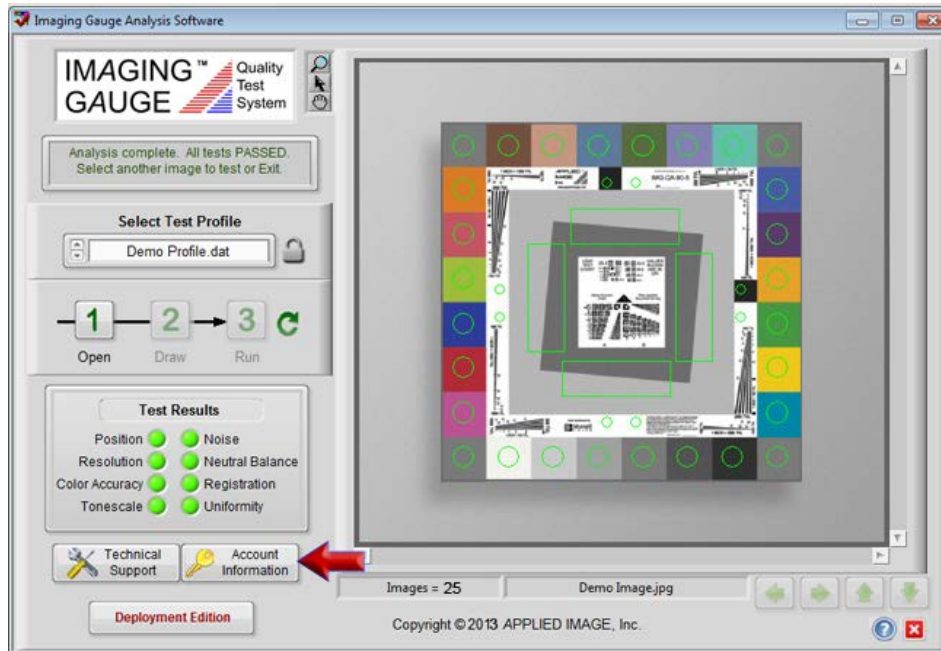


End of Tutorial

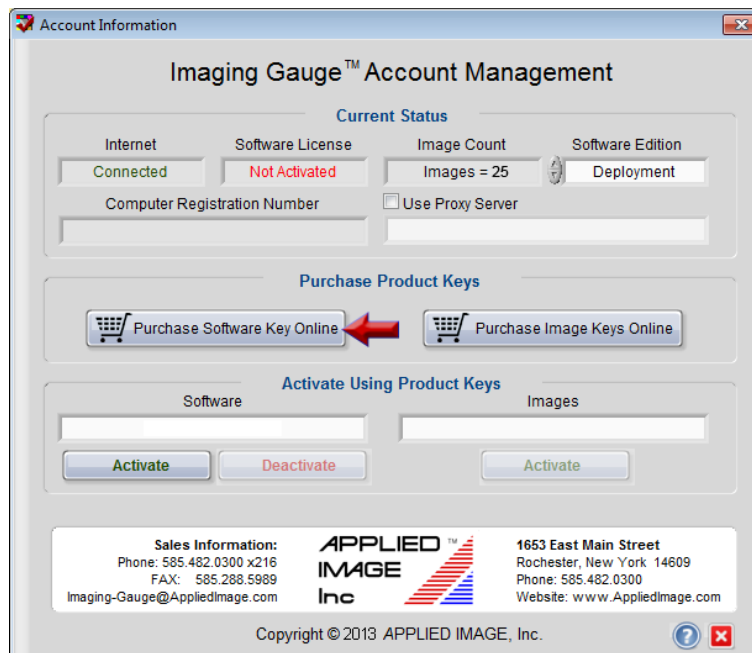
Tutorial 5: Managing the Account

There are three main functions of the Account Manager interface: Activating the software, Adding Images Actuations and De-Activating the software. These functions are demonstrated sequentially in this tutorial. The tutorial assumes a new installation of the software.

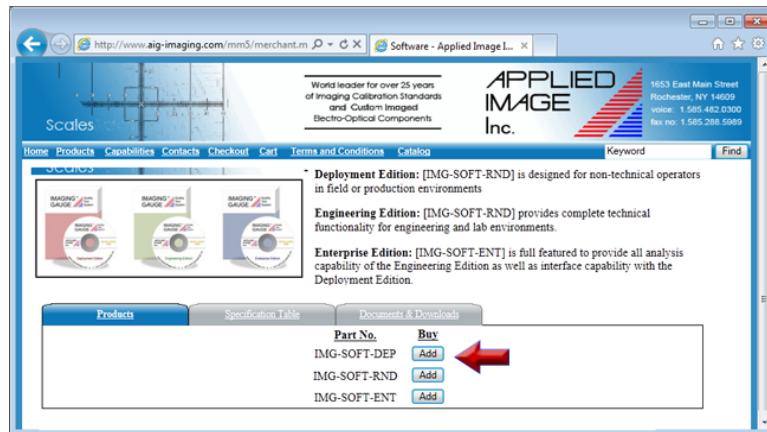
1. Select **Account Information**.



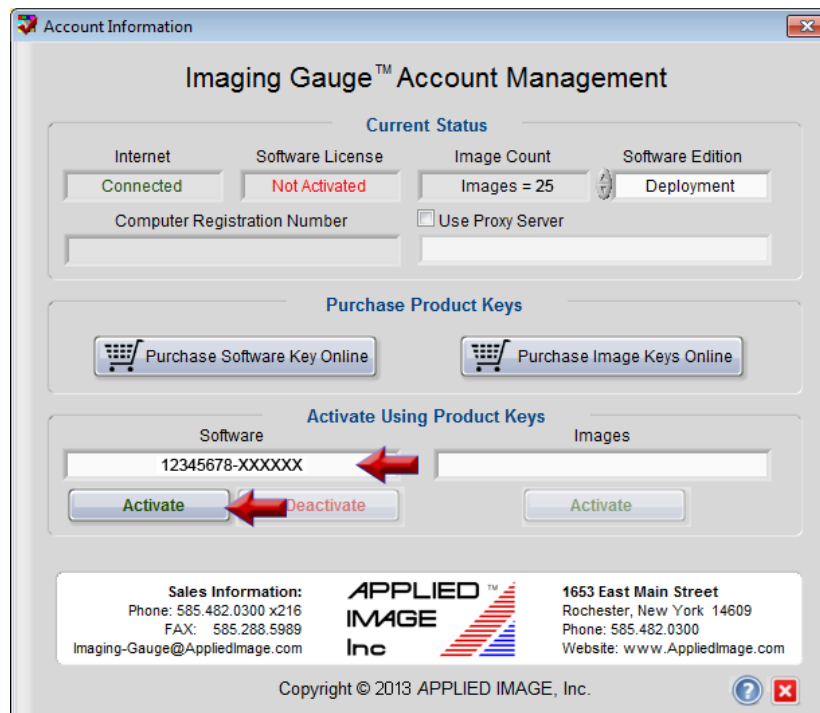
2. Select the **Purchase Software Key Online** button.



3. Select the **Add** button to purchase an Activation Key for the software. This can be skipped if you already have an activation key.

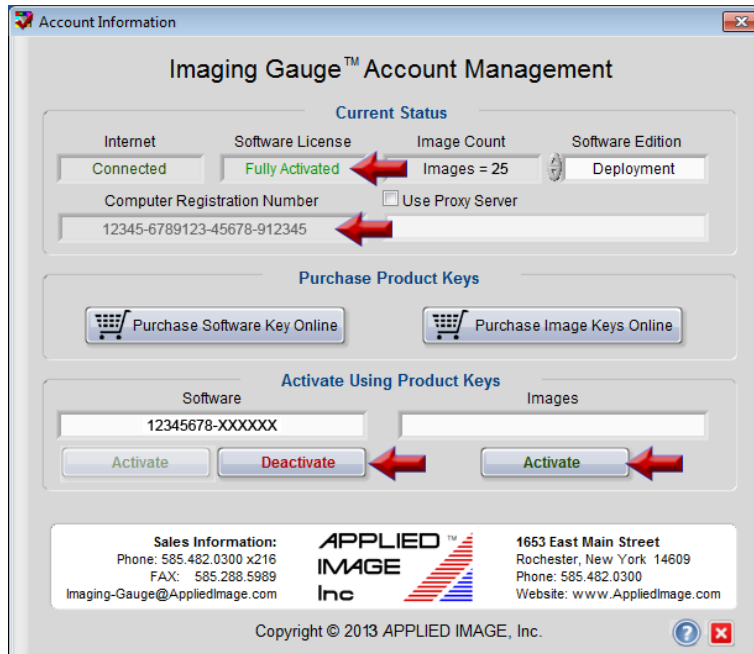


4. Enter the Activation Key that was sent when the software was purchased. Select **Activate**

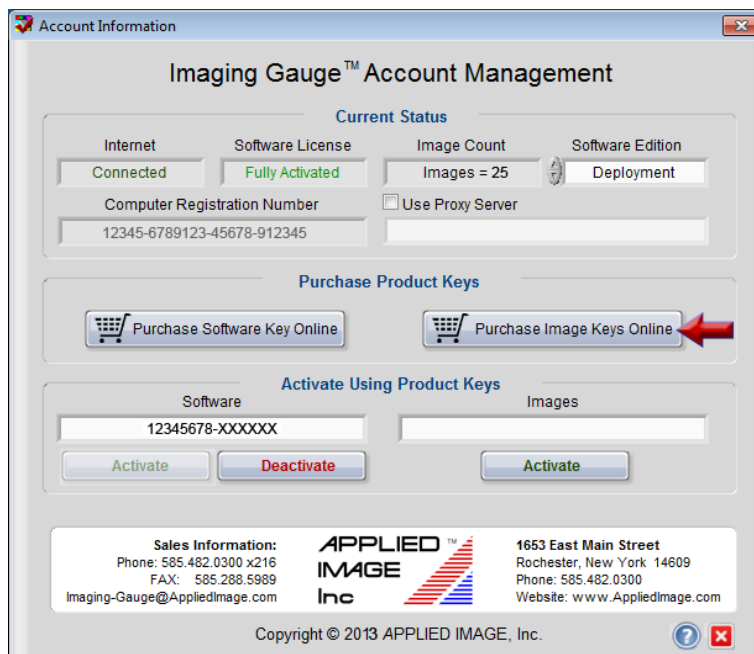


5. Note the following changes:

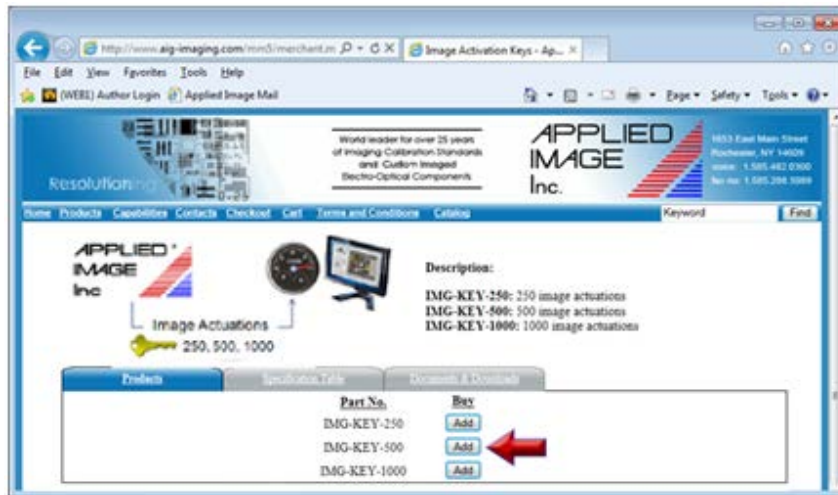
- Software License changes from "Not Activated" to "Fully Activated"
- Computer Registration Number is assigned
- **Deactivate** button is enabled
- **Activate** button for Image Keys is enabled



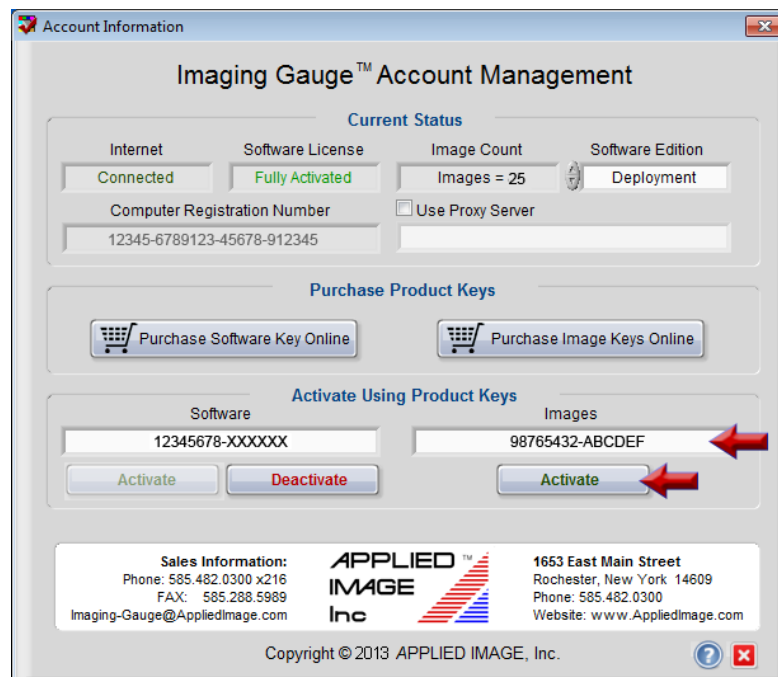
6. Select the **Purchase Image Keys Online** button.



7. Select **Add** to purchase an activation key for images. Note: image activations are also included as part of annual subscriptions. This step can be skipped if you already have image activation keys.

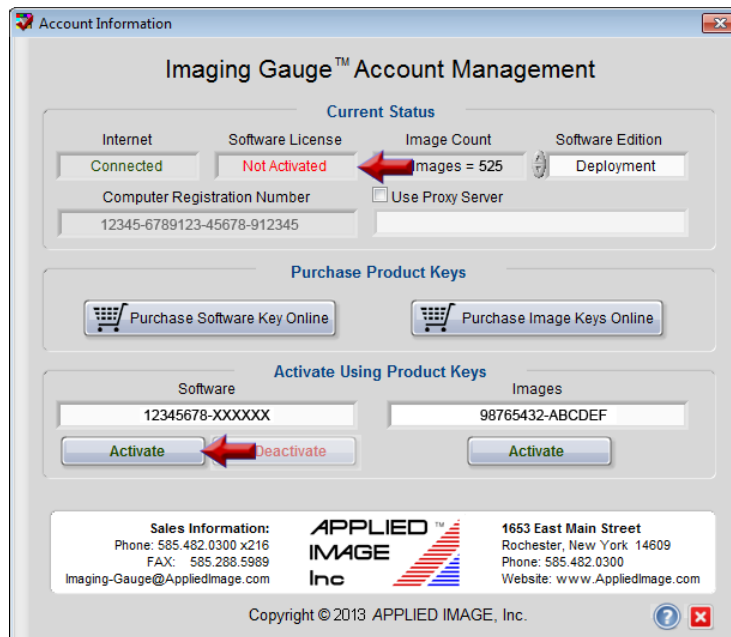


8. Enter the Activation Key to add images and select **Activate**. Note that the Image Count increases from 25 to 525.

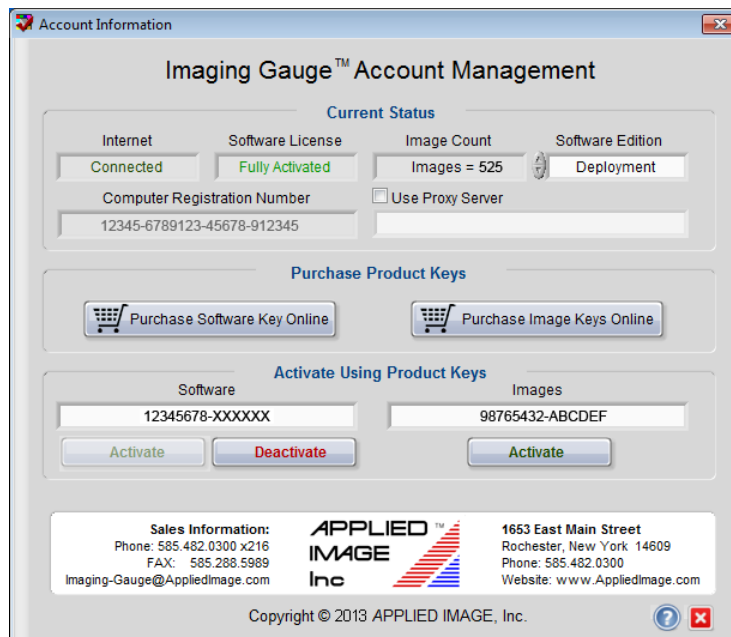


9. To deactivate the software license for use on another computer, select **Deactivate**. Note following changes:

- Software License changes from "Fully Activated" to "Not Activated"
- **Activate** button for software is enabled



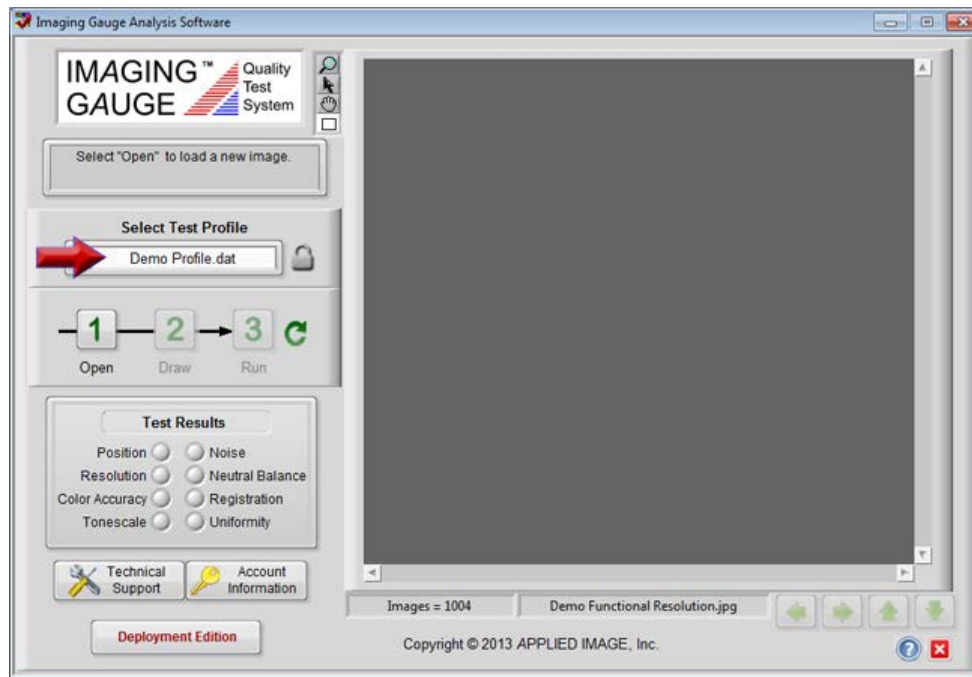
10. Select **Activate** to re-activate to software and continue to operate.



End of Tutorial

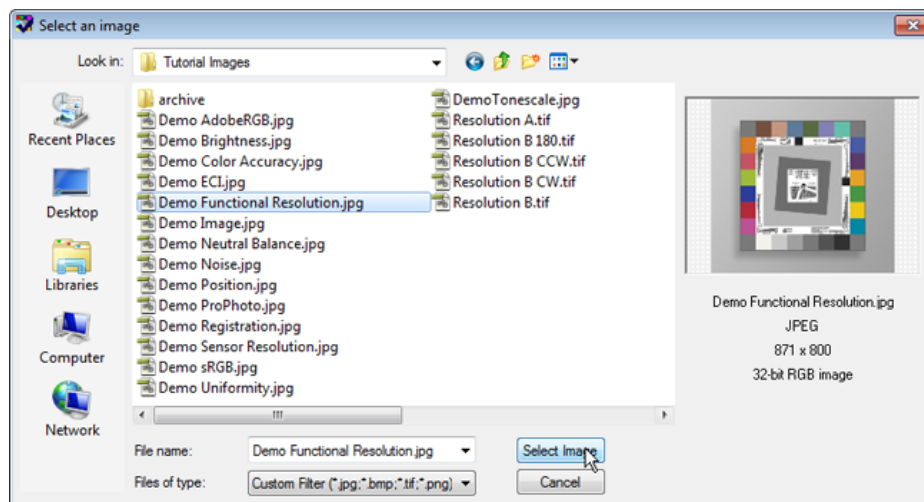
Tutorial 6: Viewing Summary Results

1. Select "**Demo Profile.dat**" from the Profile Drop-Down list.

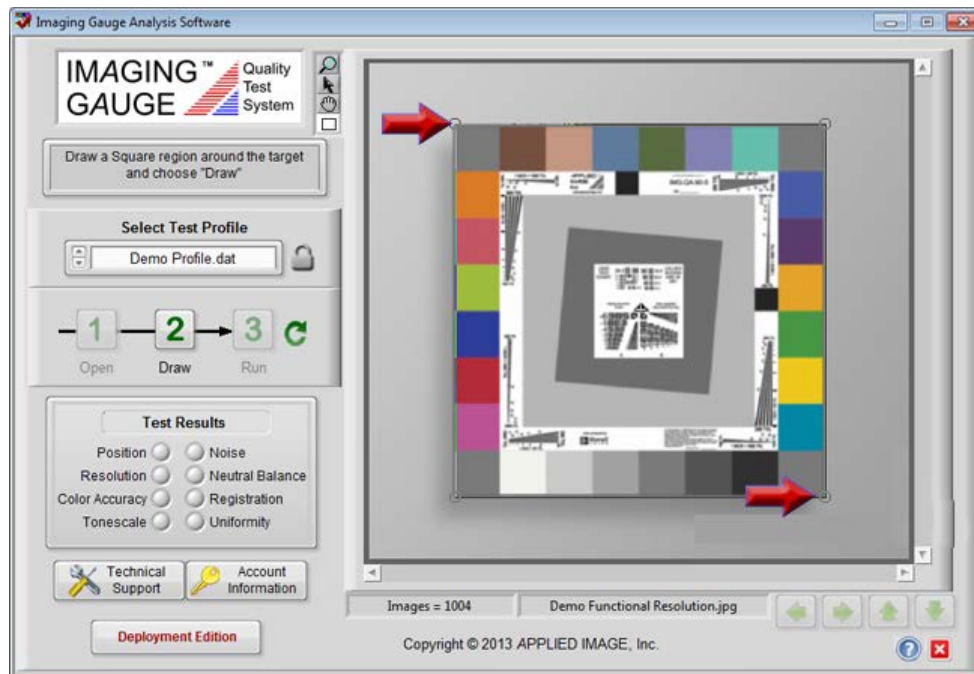


2. Select the **Open** button  to open an image.

3. Select "**Demo Functional Resolution.jpg**" from the dialog box.

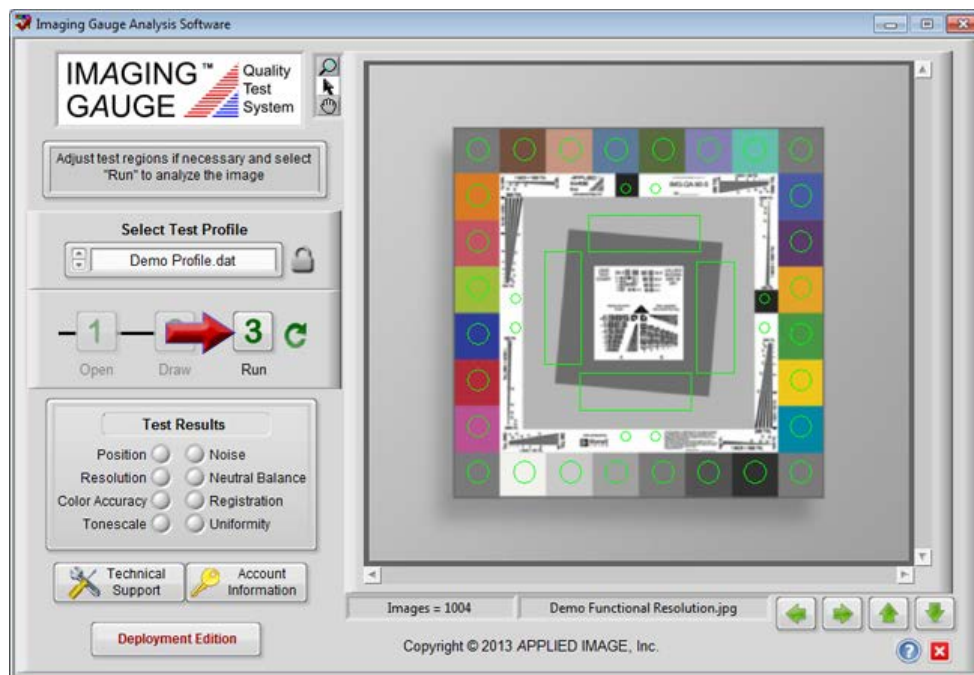



4. Press and hold the mouse from the upper left corner to the lower right corner of the target as shown.



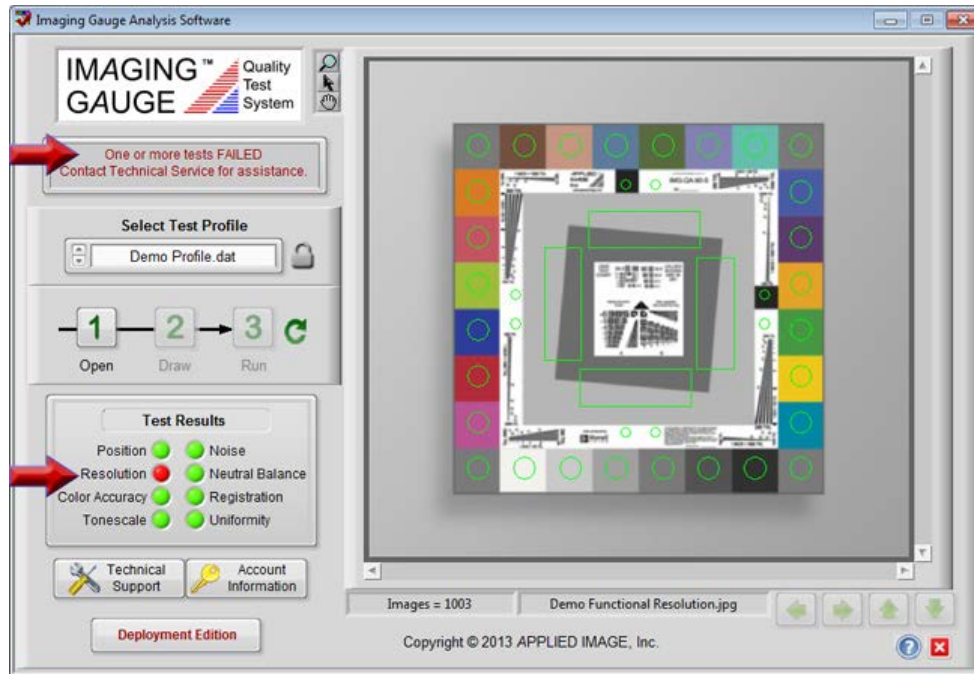
5. Choose the **Draw** button **2** to continue.

6. Inspect the location of all inspections regions and use the adjustment buttons to move all regions, if necessary. To move Individual regions, press and hold the left-mouse button, then drag the region to the new location. Release the button.

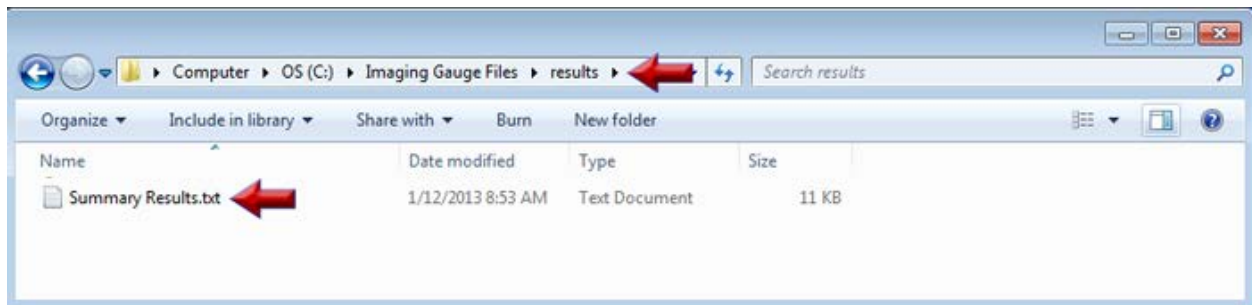


7. Select the **Run** button  when all regions are positioned properly.

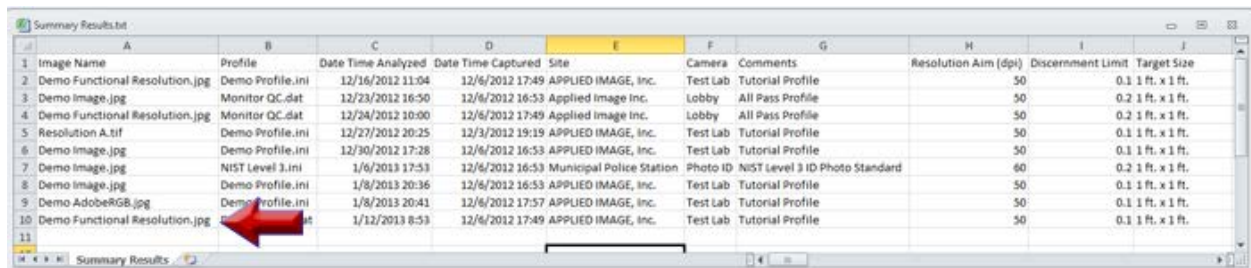
8. Note that the Resolution result failed.



9. Navigate to the file is located in the **C:\Imaging Gauge Files\Results** folder.

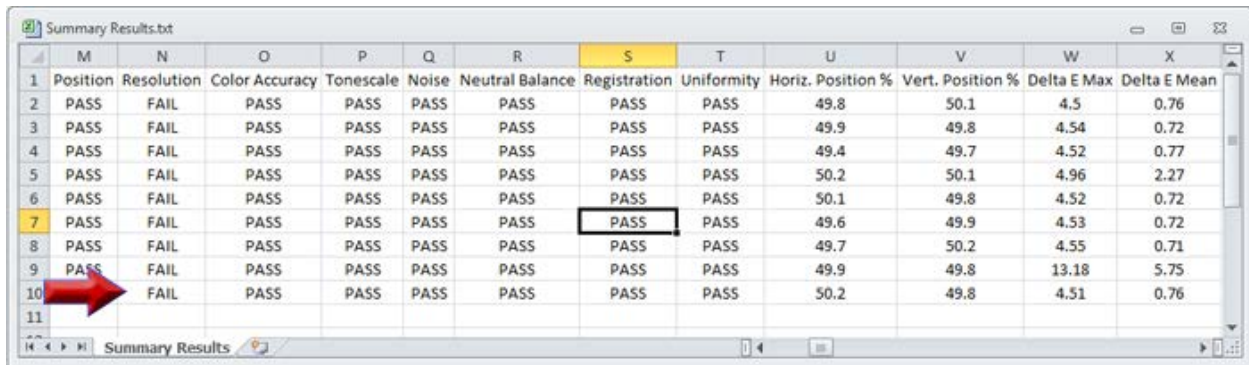


10. Open the **Summary Results.txt** file into a spreadsheet editor such as Microsoft Excel®. Use the scroll bar to view all data saved for both files. Close the **Summary Results.txt** file. Note: this file is formatted as a spreadsheet and is difficult to read with a standard text editor such as Notepad.



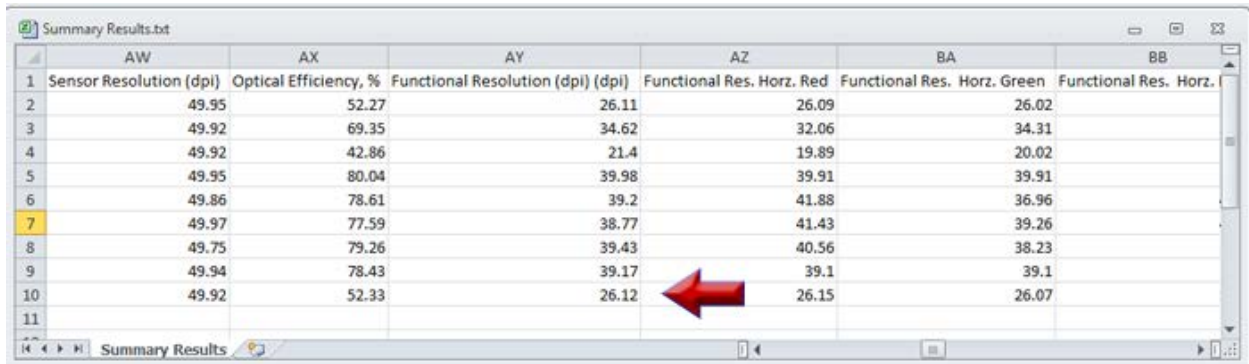
	A	B	C	D	E	F	G	H	I	J
1	Image Name	Profile	Date Time Analyzed	Date Time Captured	Site	Camera	Comments	Resolution Aim (dpi)	Discernment Limit	Target Size
2	Demo Functional Resolution.jpg	Demo Profile.ini	12/16/2012 11:04	12/6/2012 17:49	APPLIED IMAGE, Inc.	Test Lab	Tutorial Profile	50	0.1 1 ft. x 1 ft.	
3	Demo Image.jpg	Monitor QC.dat	12/23/2012 16:50	12/6/2012 16:53	Applied Image Inc.	Lobby	All Pass Profile	50	0.2 1 ft. x 1 ft.	
4	Demo Functional Resolution.jpg	Monitor QC.dat	12/24/2012 10:00	12/6/2012 17:49	Applied Image Inc.	Lobby	All Pass Profile	50	0.2 1 ft. x 1 ft.	
5	Resolution A.tif	Demo Profile.ini	12/27/2012 20:25	12/3/2012 19:19	APPLIED IMAGE, Inc.	Test Lab	Tutorial Profile	50	0.1 1 ft. x 1 ft.	
6	Demo Image.jpg	Demo Profile.ini	12/30/2012 17:28	12/6/2012 16:53	APPLIED IMAGE, Inc.	Test Lab	Tutorial Profile	50	0.1 1 ft. x 1 ft.	
7	Demo Image.jpg	NIST Level 3.ini	1/6/2013 17:53	12/6/2012 16:53	Municipal Police Station	Photo ID	NIST Level 3 ID Photo Standard	60	0.2 1 ft. x 1 ft.	
8	Demo Image.jpg	Demo Profile.ini	1/8/2013 20:36	12/6/2012 16:53	APPLIED IMAGE, Inc.	Test Lab	Tutorial Profile	50	0.1 1 ft. x 1 ft.	
9	Demo AdobeRGB.jpg	Demo Profile.ini	1/8/2013 20:41	12/6/2012 17:57	APPLIED IMAGE, Inc.	Test Lab	Tutorial Profile	50	0.1 1 ft. x 1 ft.	
10	Demo Functional Resolution.jpg	Demo Profile.ini	1/12/2013 8:53	12/6/2012 17:49	APPLIED IMAGE, Inc.	Test Lab	Tutorial Profile	50	0.1 1 ft. x 1 ft.	

11. Scroll over and notice that the Resolution result has been recorded as Fail.



	M	N	O	P	Q	R	S	T	U	V	W	X
1	Position	Resolution	Color Accuracy	Tonescale	Noise	Neutral Balance	Registration	Uniformity	Horiz. Position %	Vert. Position %	Delta E Max	Delta E Mean
2	PASS	FAIL	PASS	PASS	PASS	PASS	PASS	PASS	49.8	50.1	4.5	0.76
3	PASS	FAIL	PASS	PASS	PASS	PASS	PASS	PASS	49.9	49.8	4.54	0.72
4	PASS	FAIL	PASS	PASS	PASS	PASS	PASS	PASS	49.4	49.7	4.52	0.77
5	PASS	FAIL	PASS	PASS	PASS	PASS	PASS	PASS	50.2	50.1	4.96	2.27
6	PASS	FAIL	PASS	PASS	PASS	PASS	PASS	PASS	50.1	49.8	4.52	0.72
7	PASS	FAIL	PASS	PASS	PASS	PASS	PASS	PASS	49.6	49.9	4.53	0.72
8	PASS	FAIL	PASS	PASS	PASS	PASS	PASS	PASS	49.7	50.2	4.55	0.71
9	PASS	FAIL	PASS	PASS	PASS	PASS	PASS	PASS	49.9	49.8	13.18	5.75
10	PASS	FAIL	PASS	PASS	PASS	PASS	PASS	PASS	50.2	49.8	4.51	0.76
11												

12. Scroll further and notice that the measurement values have been saved. These results are sent to the Technical Support contact when using the Technical Support Interface panel.



	AW	AX	AY	AZ	BA	BB
1	Sensor Resolution (dpi)	Optical Efficiency, %	Functional Resolution (dpi) (dpi)	Functional Res. Horiz. Red	Functional Res. Horiz. Green	Functional Res. Horiz.
2	49.95	52.27	26.11	26.09	26.02	
3	49.92	69.35	34.62	32.06	34.31	
4	49.92	42.86	21.4	19.89	20.02	
5	49.95	80.04	39.98	39.91	39.91	
6	49.86	78.61	39.2	41.88	36.96	
7	49.97	77.59	38.77	41.43	39.26	
8	49.75	79.26	39.43	40.56	38.23	
9	49.94	78.43	39.17	39.1	39.1	
10	49.92	52.33	26.12	26.15	26.07	
11						

End of Tutorial

APPLIED IMAGE, Inc.



APPLIED IMAGE is a world leader in the field of Custom Opto-Imaged components and Standard Calibration tools. We achieved this distinction because of our wide range of unique capabilities, many years of experience, and our quality assurance & control processes.

At APPLIED IMAGE, quality is assured at each stage of the production process from design & engineering through final production. This commitment to engineering excellence, combined with controlled environmental facilities, NIST traceable standards, and a highly qualified staff assures you that our products will meet or exceed your original specifications. And we've gone the extra step, using ISO Certification guidelines and National Laboratory Calibration Standards, to assure that our systems are in compliance with your unique needs.

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