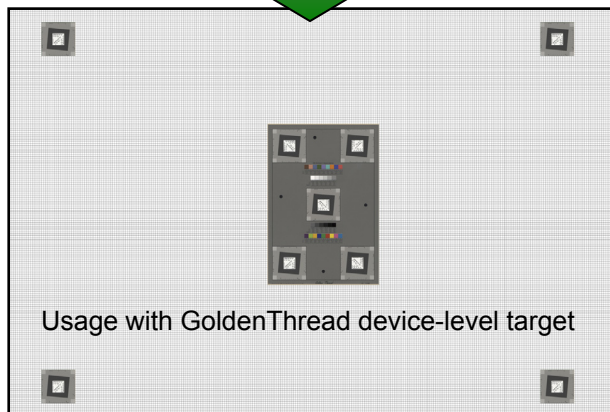
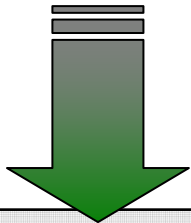




SFR Analyzer™ includes four (2" x 2") targets and analysis software. The system is designed to evaluate wide Field-of-View imaging applications which require resolution information outside the range of the GoldenThread™ device-level targets.

SFR Analyzer™ has implemented ISO 12233, authored by Don Williams, for the measurement of resolution. Both targets are evaluated for horizontal and vertical resolution in all color channels.



- ✓ Slanted-edge resolution features are created on high-resolution silver halide paper by **Applied Image**, the world leader in image quality targets.
- ✓ Resolution features include visual analysis checks to allow crossover from existing methods.

- ✓ **SFR Analyzer™** can be used as a standalone tool or in conjunction with the GoldenThread image analysis system to fully characterize the resolution performance of your system.
- ✓ Individual targets are placed and analyzed anywhere in your system's Field-of-View.

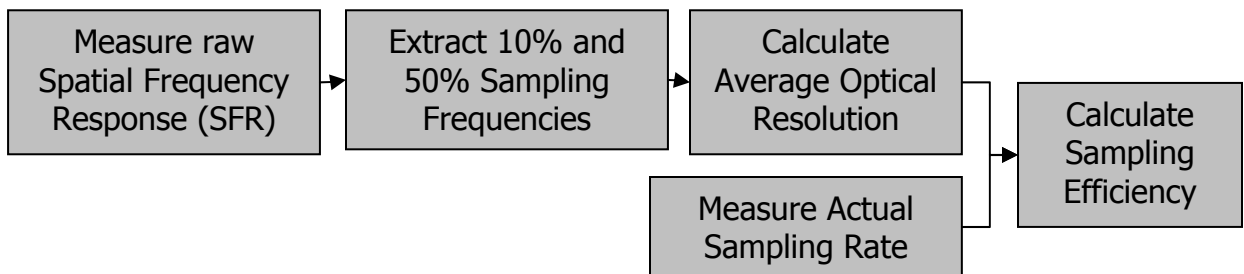


## SFR Analysis Details

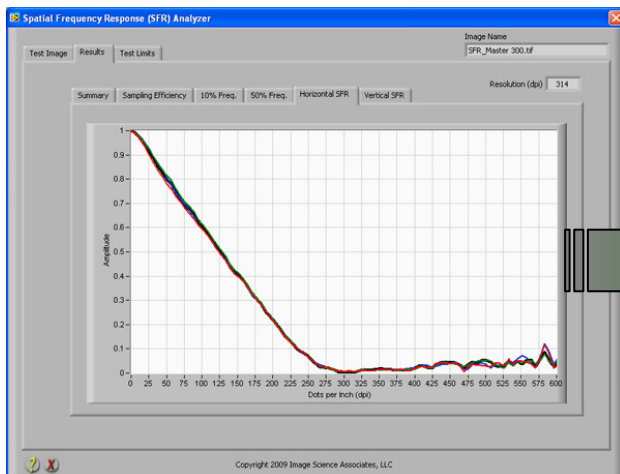
ISA's method of analyzing and reporting critical Spatial Frequency Response (SFR) performance metrics is the product of years of research and development conducted for the **Federal Agencies Digitization Guidelines Initiative\***.

To specify resolution performance, SFR curves are analyzed for 10% and 50% frequency positions. These are further distilled to the average optical resolution and, finally, the sampling efficiency which is calculated based on the measured spatial resolution of the image and the optical resolution.

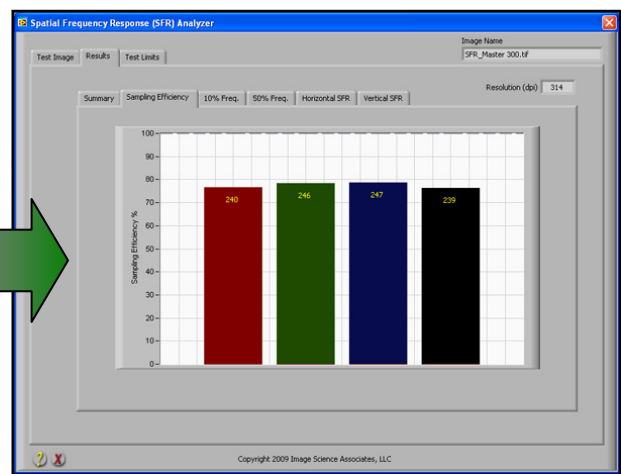
\* For more information, visit: [www.digitizationguidelines.gov/stillimages/organizations.html](http://www.digitizationguidelines.gov/stillimages/organizations.html)



All data from the raw SFR curves to the Sampling Efficiency are presented and saved in easily accessible formats. The raw SFR data can be imported to an Excel template that automatically formats the data into Excel charts.



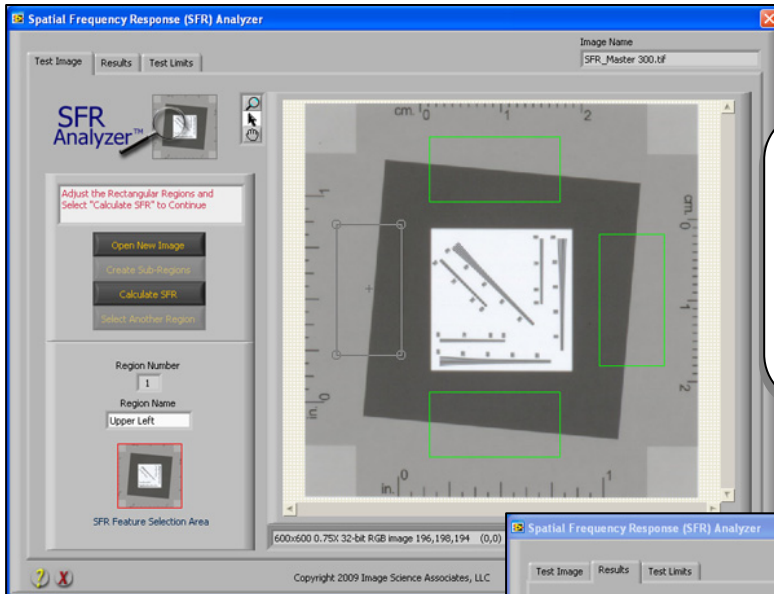
Raw SFR Curves



Sampling Efficiency

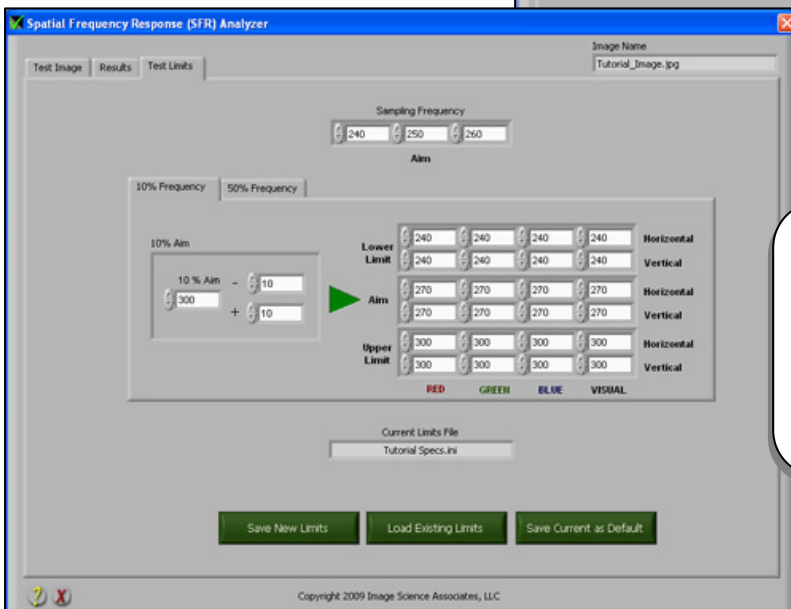
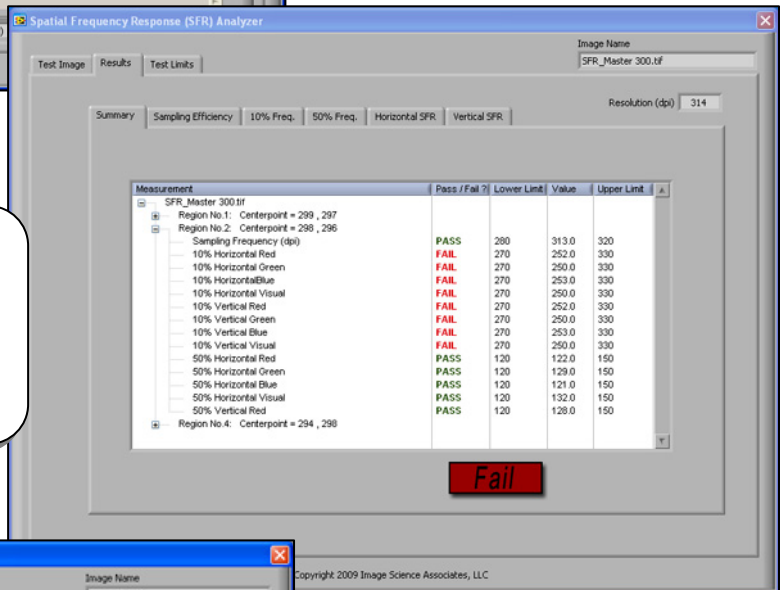


# Software User Interface Features



The user interface is designed to enable operators to quickly and easily assess system resolution. On-screen instructions step operators through the analysis process. Tutorials and "Help" screens are also available for more assistance.

Immediate pass/fail feedback is displayed to the operators. A summary tree for each SFR target shows high-level results while details can be quickly obtained by tabbing through the chart tabs.



Setting resolution aims and tolerances is enabled with an interface panel to input specs by color, direction and frequency. Specs are saved to a text-editable file that can be easily exchanged between customers and suppliers.



# Interested?

Visit our website at  
**www.ImageScienceAssociates.com** to  
sign up for an informational Webex seminar.

Or call us toll free at 1-888-801-6626



## Other Products from Image Science Associates

### Micro and Nano Color Palettes

The Micro-Check Color Palette Kit includes two 30-patch color targets and analysis software. These targets are intended for extremely small field-of-view applications where color accuracy is required. The colors are identical to those used in the GoldenThread™ system.

Target sizes are: 1 5/8" x 1 3/8" and 9/16" x 13/16"



### GoldenThread™ Analysis System

The GoldenThread™ System includes two "Gold Standard" quality targets that incorporate all the necessary features to specify and assess the quality of your imaging system, including:

- Spatial Frequency Response and color plane registration
- Opto-Electronic Conversion Function (OECF), color neutrality, and noise
- Color encoding accuracy
- All data is saved to individual reports in Microsoft Excel and to appended reports in a Microsoft Access database



### X-Large and X-small Object Targets

Object level targets are also available in 4.6" and 18.5" versions for extra-small and extra-large fields of view. These targets are identical to the standard object target except for their size.

