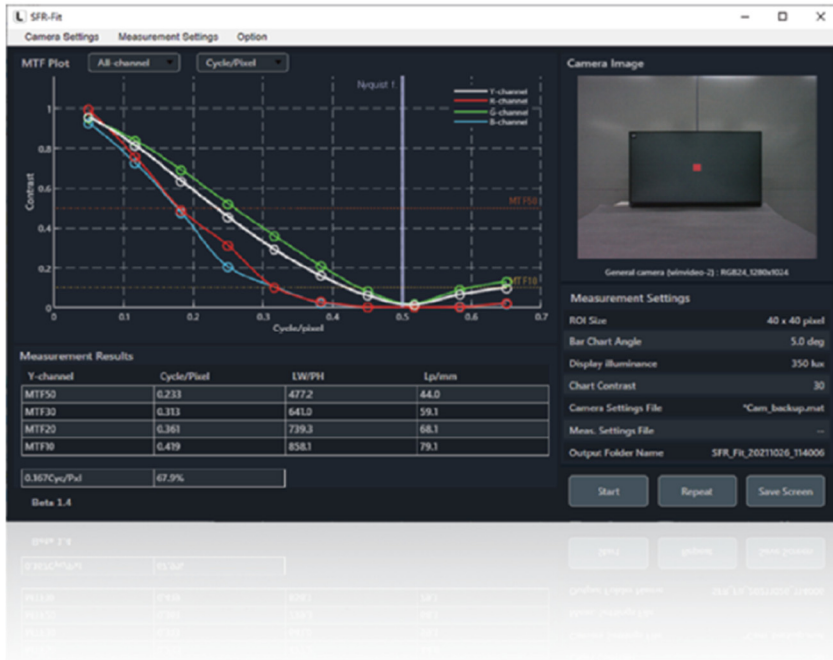


Leader



SFR-Fit

MTF Measurement Software

Software for measuring the spatial frequency response (SFR) of cameras

Overview

SFR-Fit is camera resolution measurement software that measures MTF (Modulation Transfer Function), which indicates spatial frequency characteristics. MTF is the spatial frequency characteristic that expresses how faithfully the contrast of the subject for imaging target can be reproduced, and is the most important measurement item for evaluating camera performance. Conventional MTF measurement methods are generally the slanted edge method based on ISO12233 or the sine wave method using the Siemens Star chart. Since SFR-Fit generates a test pattern according to the image, it can handle images with large distortions and digitally processed images such as sharpness, which were difficult to measure with conventional methods.

Feature

➤ Resistant to noise and image processing

Since the sine wave contrast method is used as the measurement method, it is not easily affected by image noise, and it is possible to measure images that have undergone digital processing such as sharpness and compression with excellent reproducibility.

➤ Compatible with fisheye and ultra-wide-angle cameras

Analysis of distortion of images such as fisheye lenses and correct the distortion of the test pattern. The test pattern generates multiple bar charts with different spatial frequencies and displays them on the display while switching for each spatial frequency. This feature allows you to measure MTF without being affected by image distortion. SFR-Fit automatically performs everything from distortion analysis to measurement, making it easy to measure the MTF of ultra-wide-angle cameras such as fisheye cameras, which has been difficult to measure in the past.

➤ Show test pattern on display

After displaying a checkerboard chart for analyzing image distortion, bar charts are displayed by switching each spatial frequency.

➤ Freely place test charts

Since the display is used for the test chart and a test pattern is generated for each measurement, the position of the camera to be inspected and the test chart can be freely arranged. Convenience has improved since there is no need to prepare a test chart that matches the inspection target.

*1 Placement conditions apply.



➤ MTF can be easily measured

The equipment required for measurement is only a PC with SFR-Fit installed and a display used as a test chart. After connecting the camera to be inspected and completing the software settings, the MTF can be measured simply by pressing the start button.

➤ Local MTF measurements are possible

Since the bar chart is switched for each spatial frequency, the measurement area (ROI) is miniaturized and it is possible to measure the partial MTF. For example, you can arbitrarily set the measurement points such as the center of the image and the image height of 40% or 80%.

➤ The measurement area can be easily set by mouse operation

The measurement area can be set by simply clicking and dragging the measurement area (ROI) to the desired location on the image. It is also possible to set by entering numerical values.

➤ Placement of measurement equipment

Since a test pattern is generated according to the measurement point, it is possible to measure the MTF around a camera with a wide angle of view.

