

TrueTest™ Software

Applications

- Production-level inspection for final test and quality assurance
- Subassembly testing and quality control throughout the manufacturing supply chain
- Component-level testing and quality control
- Display testing for R&D and production

Benefits

- Part-to-part, line-to-line, and location-to-location consistency
- Reduced production costs and product returns
- Addresses each stage of the production sequence thanks to a comprehensive library of tests
- Easy-to-use operator interface to simplify production-line applications
- Enables detailed, quantitative process monitoring and quality control

Automated Visual Inspection Application Software for Quality Testing and Defect Detection

When testing the quality of illuminated components and displays, or looking for defects in assemblies and surfaces, multiple tests may need to be performed to inspect products for a range of evaluation criteria. TrueTest™ Software equips any ProMetric® Imaging Colorimeter or Photometer to be used for in-line inspection, providing:

- A comprehensive set of predefined tests
- A flexible framework that allows you to apply a single test or sequence of tests as needed, quickly and efficiently
- A pass/fail report with as much detail as you need

TrueTest software automates display testing by controlling test patterns on a device under test, synchronizing the connected ProMetric Imaging Colorimeter with onboard analysis, and then presenting the measurement results relative to user defined pass/fail criteria. The software automatically aligns displays and removes moiré, eliminating the need for precise display positioning during testing and increasing the accuracy and repeatability of the tests.

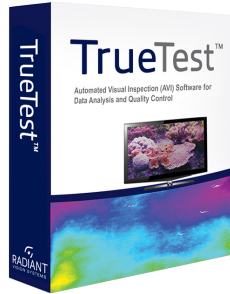
TrueTest supports multiple software application modules that allow testing of display brightness, brightness uniformity, color, and color uniformity. TrueTest also detects and identifies display point and line defects, mura defects (blemishes), and quantifies individual types of mura & overall display performance on a JND (Just Noticeable Difference) scale.

TrueTest is highly flexible for use in any production environment. It allows integration of user-defined and generated tests, and can be operated in both Administrator and Operator modes to control changes to test parameters and criteria. TrueTest can be controlled via an API or serial command interface for integration with other production systems.

TrueTest can be used with any Radiant Vision Systems ProMetric Imaging Colorimeter or Photometer, so multiple options are available to achieve the optimal pixel resolution, dynamic range, and cost for any application.

TrueTest™

Automated Visual Inspection Software



Key Features

- User-controlled test sequences and pass/fail criteria
- Comprehensive library of test algorithms
- Automatic active-area alignment and moiré removal
- Integrated report generator
- High-speed operation through simultaneous image capture and analysis
- Operator interface for simple and secure operation by production workers
- Works with all ProMetric® Imaging Colorimeters and Photometers.
- Automatic image export with analysis overlay (file saved to local computer)

Specifications

TrueTest Application Software

- A comprehensive set of predefined tests
- A flexible framework that allows you to apply a single test or sequence of test as needed, quickly and efficiently
- A pass / fail report with as much detail as you need

Five Main Components

- Test library
- Test sequencer
- Test manager (user-defined test parameters and pass/fail settings)
- Test execution, automated
- Report generator

Test Library

Provided with TrueTest, covers standard quality tests and defect detection, including:

- | | |
|------------------------------|-------------------------|
| • ANSI Brightness | • Focus Uniformity |
| • ANSI Color Uniformity | • Gradient |
| • Autofocus | • Line Defects |
| • AutoPOI | • Particle Defects |
| • Checkerboard Contrast | • Pixel Defects |
| • Chromaticity | • Points of Interest |
| • Color Edge Mura | • Polarizer Deformation |
| • Color Mura | • Random Mura |
| • Compare Points of Interest | • Sequential Contrast |
| • Diagonal Pattern Mura | • Spot Pattern Mura |
| • Distortion | • Uniformity |

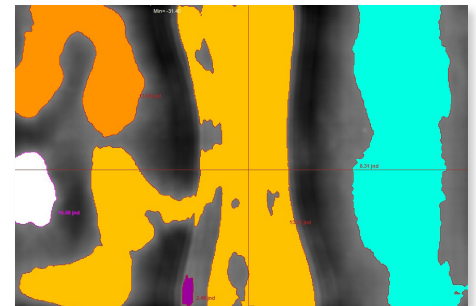
Optional Test Library* *Available with TrueMURA™ License Code:

- | | |
|----------------------|----------------|
| • Black Mura | • Edge Mura |
| • Blob Analysis | • LED Mura |
| • Butterfly Mura | • Line Mura |
| • Corner Light | • Spot Mura |
| • Diagonal Line Mura | • TrueMURATest |

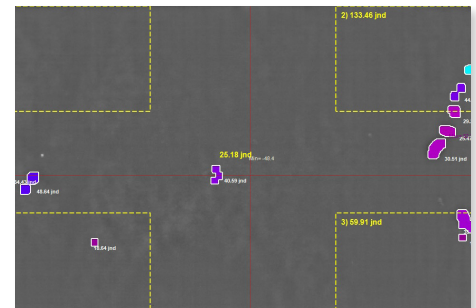
Support

TrueTest is supported worldwide by Radiant Vision Systems global technical support team and our distributor network.

Specifications subject to change without notice,



Polarizer Deformation Analysis



Black Mura Analysis

TrueTest™ Software System Requirements

- ProMetric® Imaging Colorimeter or Photometer, or ProMetric I-SC Solution
- Windows® 10, 64 bit
- 16-32 GB RAM
- Additional system requirements vary by camera. See hardware specification sheet.



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