

Quick Test™ Model II Features

Fast: The Quick Test™ system performs rapid one-touch QC tests on small format display modules.

Easy to use: Quick Test™ verifies critical optical performance parameters of the display in an easy to use automated fashion. The graphical user interface allows the operator to select a pre-defined test configuration, start, and stop the test.

Flexible: The test engineer is able to edit the test configuration through a password protected interface. The test engineer can skip selected test steps, set pass/fail limits, create new test steps, and change test parameters. He can also create new test reports in MS Excel format.

Automated operation: The operator places a pre-loaded tray, containing the display, on Quick Test's sliding drawer. The drawer closes and places the display in a controlled lighting environment. The system energizes the display and performs the selected series of tests. The results are compared to stored test limits and the system indicates the pass/fail status of the display, while the measurement results are logged to a database. The drawer opens, the operator rapidly swaps trays, and the test process repeats.

Accurate: Quick Test employs three sensors, each optimized for specific measurement tasks. A high sensitivity spectrometer with a cooled back-thinned CCD provides the highest measurement accuracy throughout the color gamut for luminance, contrast and color measurements; a CCD camera provides rapid uniformity measurements; and, Westar's proven Temporal Response Detector (TRD-100A) uses a PMT to provide accurate flicker and response time measurement.

Key Measurements

- **Brightness**
- **Contrast**
- **Color**
- **Uniformity**
- **Cross-talk**
- **Color Gamut**
- **Flicker**
- **Response time**
- **Cross-talk**
- **Gamma**
- **Voltage and Current (optional)**
- **Reflective/ Transflective (optional)**



Quick Test Model II Includes:

- Control PC with Quick Test™ Software
- LCD Monitor
- Light-safe test enclosure
- Semi-automated material handling system
- Integrated sensor suite
 - Spectrometer
 - CCD camera
 - PMT flicker and response time detector
- Active temperature control
- Test trays (optional)
- Westar T-Drive™ SD-100 universal small format display drive system

Quick Test™ Model II Specification

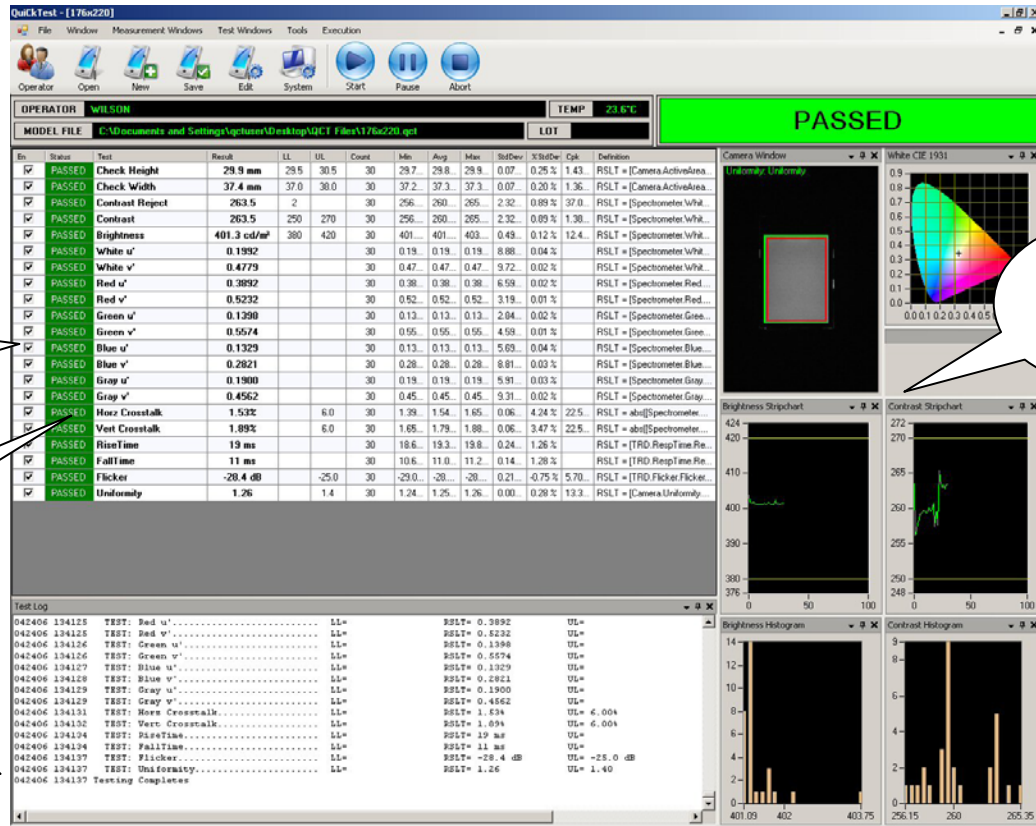
Instrument Specifications	
Spectrometer	
Luminance Accuracy	+/-3%, illuminant A
Luminance repeatability	+/-0.5% (>1cd/m ²)
Color accuracy	+/-0.003 (u',v') illuminant A
Color repeatability	+/- 0.001 (u',v') (>1 cd/m ²)
Spot size	3.5mm dia (others available)
Spectral range	380 to 780nm
Spectral resolution	<4nm FWHM
CCD Camera	
Resolution	640x480, 12-bit
Uniformity repeatability	+/-2%
PMT Response Time Detector	
Detector response time	<50us
Response time repeatability	+/-2%
Flicker accuracy	+/-1Hz
Flicker amplitude	+/-5%

Material Handling	
Type	pneumatic sliding drawer
Display fixture	replaceable tray
System to tray interconnect	pneumatic pogo pins
Max signals (std. config)	66
Max display size	5"x5"
Load/unload time	<2sec

Control PC	
Operating system	Windows XP Professional
Processor / memory	check with Westar for latest
Monitor	1280x1024, LCD

QuiCk Test™ Software	
Test execution control	start, pause, abort
Test status	pass / fail
Test parameter file	test settings, pass/fail limits, display drive settings
Test Report	user configurable in Excel format
Test history log	test time, parameter, measured value
Test statistics	CPk, min, max, avg, std dev.
Access levels	operator / test engineer
Database interface	ODBC compliant

Environment / Physical	
Power	115/220 VAC, 50-60Hz
Air	8CFM @ 90psi
Operating temperature	20 to 30 C
Dimensions	23"(d)x19"(w)x28"(h)
Weight	approx. 30kg



Quick Test™

Easy to Use

Software Interface

User configurable test sequence

Test step status

Test history log

User configurable charting