

OnColor QC Multi-Angle

Product Technical Data Sheet

Windows 7 & 8 compatible

Windows Graphical User Interface

4 Quadrant User Screen	The main screen of OnColor™ QC lets you choose what data to display and where; design and save your own personal desktop or customize several for different customers or different test procedures
5 Report Screens	Displays your color data in various formats. Choose from Color Plot, Spectral Plot, Statistics, Tolerances, or Multi Quadrant screen. All are customizable for the job at hand
Keyboard Shortcuts, Hot Spots, Tool Tips	These tools combine everything you want to do in a single keystroke or double click of the mouse. Cursor over your trials to display the name. Right click to select, edit, delete, or hide it.
Intuitive Navigation	You'll find all of the options easily and quickly following basic Windows program flow

Report Screens

Color Plot	Displays colorimetric and delta data for each angle in graphical and tabular format along with color patches, visual assessments, pass/fail, and any selected color indices at selected angles. Data and plots for up to 6 angles at one time. 3D graphics with rotation in absolute or delta mode.
Multiple Angle Display	Colorimetric data displayed up to six (6) angles at a time with either 2D or 3D plots.
Spectral Plot	Displays spectral data (%R, %T, K/S, or A) in graphical and tabulated format; add the spectrum bar or grid for additional impact; graph either a single sample or multiple samples in absolute or difference mode for selected angles. Display multiple curves in multiple colors.
Statistics Plot	Plots all selected trials by selected angle in a Trend chart, Bar chart, or Histogram; displays the mean, standard deviation, and variance of the data set; add color simulation of each trial for visual effect; combine this report with the Sort option to find for example the lightest trial in the group; Plot of angle vs. L*, a*, b* DE or other parameters to view color travel
Tolerance Plot	Use this report to establish and display tolerances for each standard at each angle. Choose from widely accepted elliptical tolerances, box tolerances, DE only, or use the proprietary algorithms to generate a "best fit" tolerance based on your batch history data. Use the asymmetrical tolerance feature to offset the tolerance from the center and "favor" a certain direction in color space. Determine SPC using standard deviation and box tolerancing method
Data Table	Lists colorimetric data for all of your trials on one report screen in spreadsheet format. Customize the screen to include only those fields that you need. Can include Pass/Fail, Deltas, Absolute values, indices, job tags, and color patches. Copy your data to Windows Clipboard in a single keystroke.

Color Parameters and Indices

Illuminants and Observers	Observer: CIE 2° and 10° Standard Observers Illuminants: CIE Standard Illuminants A, C, D65, D50, D75; CIE fluorescent Illuminants: F2, F6, F7, F8, F10, F11, and F12; Ultralume U5000, Horizon
Color Spaces/Color Difference	CIE L*a*b*, CIE L*C*h*, CIE L*u*v*, CIE XYZ (Yxy), Hunter lab, FMC-2, CMC, CIE 2000, CIE 94, GE-PQS, Audi, DIN99, DIN 6175, Munsell HVC
Indices	<p>Strength: Apparent, Chromatic at λ max or user selected, equal apparent, tristimulus, pseudo-tristimulus, DE at equal strength</p> <p>Metamerism: CIE, DIN 6172</p> <p>Whiteness: CIE, ASTM E313, Berger, Taube, Stensby, Hunter, Ganz- Griesser,</p> <p>Tint: CIE, ASTM E313, Ganz-Griesser</p> <p>Yellowness: ASTM D1925, ASTM E313, DIN 6167</p> <p>Brightness: ISO 2470, TAPPI, TAPPI 452</p> <p>ISO Textile: Stain test ISO 105.A04 (E), Gray scale ISO 105.A05.2, Standard Depth ISO 105.A06, Red stain dye test</p> <p>Chromaticity: Dominant wavelength and excitation purity; Rx, Ry, Rz; NBS 100, NBS 200</p> <p>Opacity: Infinite thickness (paper backing), contrast (89% tile backing)</p> <p>Haze: ASTM D1003 Correlated Haze, Z%</p> <p>Gloss: % gloss</p> <p>Measurement Parameters: Date, Time, Sensor, Status, UV %</p> <p>Averaging Statistics: Range, standard deviation, variance, total count</p> <p>Shade Sorting: 555</p> <p>Flop Index, (for multi-angle spectros)</p> <p>Sparkle and Graininess (for BYK Mac)</p>

Measurement Options

Instruments	Works with most multi-angle color instruments offered by major manufacturers including X-Rite, KM CM-512m3, and BYK Mac
Calibration and Instrument Setup	Manages the calibration and configuration of the instrument for SCI/SCE, UV inclusion and calibration, aperture settings, reflectance mode, etc. Selectable calibration interval. Green tile test for validation of calibration.
Averaging	Sample averaging with mean, standard deviation, variance, range, min and max; flexible or fixed number of readings; timed measurement loops; “undo” feature lets you repeat the last reading; average last “N” trials
Naming Options	Numerous naming options provide many ways to document your readings; use auto naming to establish and apply a naming scheme for each trial; notes, job ID’s, and alternate names give many options to tag each reading as needed
Trial Utilities	Use these utilities to manage your angular data or customize a report: Sort, edit, hide, unhide, delete, find. Select any trial and use the “switch” option to make it the standard; or derive a new standard by averaging the selected trials
Measurement Modes	Provide flexibility for the task at hand. Choose between normal, multi-angle, multi-status, opacity & reflectivity, or haze & diffuse transmittance modes; Hitch calibration mode allows you to tie readings from two different instruments together.

Data Management

Batch History Files	A basic OnColor™ save-set file consists of one color standard, color tolerances for multiple illuminants, color parameters and an unlimited number of trials. These files can also be configured to hold multiple standards and tolerances for single-angle, multi-angle, or multi-status instruments
Batch History Files with Multiple Standards	Ability to store multiple standards within the same data file allowing the user to evaluate “special effect” data as it relates to each standard at each angle
Database of Standards	The library of color standards is contained in a MS Access .MDB file. Use this file to manage your color standards or search for the closest shade.
Database of Standards Search Engine	The Database of Standards supports the storage of multi-angle data with a powerful “search engine” provided to find the closest matches on <i>angular data</i> . In addition, data angles can be <i>weighted</i> to define a search criterion that works best for your application!
Workspaces	Tired of other people jumping in on the system? Claim your own workspace to store and manage all of the files in a project
Spreadsheet	Easy and flexible options to save your data to a spreadsheet. Just click on the data you want to export and send it to a text file to be read by Excel or many other spreadsheet and word processing programs.
Report Property Templates	Report Property files let you customize screen layouts according to your personal preferences or the job at hand. Save multiple profiles and change the “skin” of your screen in a single click.

Advanced Features

Unlimited Angle Support	OnColor™ supports an unlimited number of angles for <i>each</i> sample. Software architecture designed to handle “additional angles” as new instruments are developed!
Password Security	Secure your data and comply with ISO and TQM regulations by assigning the privileges and features accessible by operators using the 3 levels: administrator, manager, worker
Macros	Automate repetitive or complex tasks by guiding operators through special test procedures; screen prompts give detailed instructions on what to do next
Send Mail	Send color data worldwide directly from OnColor via your email program, email the screen capture, or send the data in spreadsheet form
Print Labels	Print a label for your sample or standard on a Dymo Label printer of L*a*b*, deltas, indices, job ID’s along with an optional bar code

Unmatched Support & Training

eTraining	Internet based eTraining and support; schedule your own private web conference for troubleshooting or special problems
Help	Extensive context sensitive Help files are built right into the program to guide you through any task
On-Site	On-site installation and training is available to help you get up and running fast and easily

Minimum system requirements: PC running Windows 7 or 8; USB port for hardlock; communications port for instrument connection; color printer and/or Dymo LabelWriter desirable