

# QCToolbox.com Specifications Sheet

<http://www.qctoolbox.com>

## Microscope Colorimeter CR-241



### Ultra-Small 0.3mm -1.8mm View Area

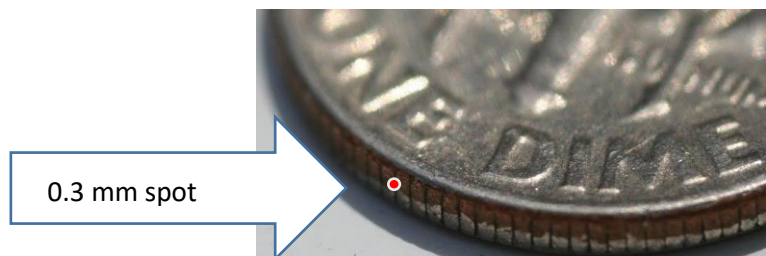
The CR-241 enables accurate color measurement of extremely small objects. Similar to a microscope in design, the CR-241 has a SLR (single-lens-reflex) microscope viewing system and a specimen stage which can be moved up and down for focusing or side to side and front to back for accurate specimen positioning. Measurements are performed without touching the specimen, so wet, soft, or fragile specimens pose no problems. The measuring area can be easily switched between 0.3mm in diameter and 1.8mm in diameter as desired. The CR-241 features a 45/0 illuminating and viewing geometry with 360-degree ring illumination. Designed for small specimens. The CR-241's data processor provides a wide range of functions, including choice of five different color notations, measurement of absolute color or color difference, statistical calculations, and data printout.

### APPLICATION EXAMPLES

- **Pharma – Color dot pregnancy tests, small pill color.**
- **Electronics – Color codes on small wires.**
- **Medical – Analysis skin cancer, biopsies,**
- **Museums – artifacts, bird feather classification, historical paint chips,**
- **Print – print letters, laser print, pixels.**
- **Agriculture – individual cereal grains such as rice and corn, infestations, leaf diseases.**

**The CR-241 is no longer produced.** We obtained several instruments in excellent condition and refurbished the units in our Color Laboratory in Fort Myers Florida. Our instruments have new calibration tile and a new ISO 17025 certificate. This certification confirms the units are accurate within color space. Limited number of instruments.

**SPOT SIZE** A dime is 1 mm thick. This instrument can measure a spot 1/3 the thickness of a dime



**Non-Contact Measurement-**

Measurements are taken without touching the surface, allowing measurements of wet, fragile, or soft specimens..

**Selectable Measuring Areas of  $\varnothing$  0.3mm and  $\varnothing$  1.8mm-**

Either measuring area can be selected by sliding a control on the side of the CR-241. Indications for both measuring areas are shown in viewfinder.

**High Accuracy-**

Double-beam feedback system ensures accurate measurements. The illumination provided by the high-efficiency pulsed xenon arc lamp is monitored directly and any variations in light output are automatically compensated.

**Five Color Notations-**

Absolute color values can be calculated in any of five color notations: Yxy, L\*a\*b\*, L\*C\*H°, Munsell (Illuminant C only), and colorimetric densities Dx Dy Dz, Color difference in  $\Delta$  (Yxy),  $\Delta$  (L\*a\*b\*),  $\Delta$ (L\*C\*H°),  $\Delta$  E\*ab, or  $\Delta$ (DxDyDz).

**Memory Space-**

Data for up to 20 calibration surfaces and up to 20 target colors can be stored for each measuring area. Memory space is also provided for up to 300 sets of measurement data; this memory space can be divided into 20 pages as desired.

**Built-in Printer-**

The CR-241 also has a built-in thermal dot printer for printing measurement data or the results.

**Statistical Calculations-**

The CR-241 can automatically perform statistical calculations on data in memory for each measurement area and color space to determine the maximum, minimum, mean, and standard deviation values.

**Calibration and Certification -**

A new calibration tile CR-A43 is provided with traceability to JIC, DIN and NIST. A current ISO17025 certification is provided assuring color measurements are accurate. .

**Warranty-**

The CR-241 is warranted by Janda Corporation for six month period after the instrument is placed in service. .



**Janda Corporation QCtoolbox.com**

**3345 North Key Drive #44, North Fort Myers, FL 33903 Tel 410-263-2223 Fax 410-975-4636**

**Email: Janda@JandaCorp.net**