



Model 66570 UV/Visible/IR Test Station

Electro Optical Industries introduces a new, first of its kind, Test Station. The Model 66570 UV/Visible/Infrared Test System was specifically designed to satisfy the emerging test requirements of new sensor systems as well as the current UV/Visible and IR imaging systems. It is a fully integrated system which provides both Infrared and UV/Visible Sensor Testing capability. When combined with EOI's EO TestLAB Software it offers semi-automated (operator in the loop) and automated testing. This system incorporates a number of unique capabilities not previously available, allowing testing to levels an order of magnitude beyond previous technology.



The Model 66570 includes a 12" Clear Aperture, 60" Focal Length Collimator, 16 Position Target Slide, Differential Temperature Source, Visible and UV Source and Control Computer.

Collimator -Designed for Broadband Spectral Application covering Ultraviolet, Visible and Infrared test requirements. The all reflective system offers one eighth wave RMS performance in the Visible. The Mirrors are coated with a protected Aluminum coating for optimum reflectance throughout the wavelength range of the 0.24 to 14 micrometers.

16 Position Slide - The XYZ Target Positioner can electronically, precision align any combination of IR and UV/Visible 2" x 2" Targets. Having 16 Targets always available improves test repeatability while reducing time and labor to interchange Targets and/or Target Wheels. The "Z" axis movement stage allows focusing of Targets as needed or preprogramming focus stored in the controller memory for automatic focus adjustment during testing.

Range Simulator - Targets can be presented to UUT at simulated ranges from 200 meters to infinity, while automatically adjusting for varying ambient temperatures.

Differential Thermometer - Features Set Point and Display Resolution of 0.001°C with a stability of 0.001°C. This unique, High Performance, capability satisfies new MRTD requirements in testing at levels less than 10 millikelvin. See separate Data Sheet for complete Specifications.

Visible Source - The Visible Integrating Sphere Light Source provides variable Luminance (Std A) from 0 to 10,000 foot Lamberts. The System is calibrated to NIST traceable Color Temperature of 2950 ± 25K and is coated with PTFE (Teflon) and provides a 98% Uniformity across the 4" Diameter Exit Port. See separate Data Sheet for complete Specifications. An optional Source utilizes Xenon Short Arc Lamps in combination with spectral filters to provide D65, D50 and Std A Illuminants.

Ultraviolet Source - The UV Source is an addition to the Integrating Sphere and provides variable radiance output from 0 to 1.0mw/cm² /um/sr. The UV Source is radiated into the Collimator through the Integrating Sphere Exit Port. A point source aperture is utilized with the UV output to measure Point Source Spread (Blooming). Non-ozone generating sources are used to minimize degradation of the optical system.

Test Software & Control Computer - Model 66570 includes a full suite of easy to use, EO TestLAB Software to automate the IR and UV/Visible Sensor Tests. The Suite provides semi to fully automated testing, that is operated manually from the front panels of the source controller or via IEEE 488 interface and the Control Computer. See separate Data Sheet for complete list of Tests and Specifications.

