ELC-251

The New Generation of Black Light Inspection Lamps

The Electro-Lite ELC-251 Black Light system is regarded as the new standard in Black Light inspection technology. It delivers higher performance and more capability than any other Black Light system. Its superior ultraviolet source provides unmatched capability in fluorescent inspection applications. The ultra-high intensity output makes it ideal for detecting low-level fluorescence in brightly-lighted areas.

The ELC-251 comes standard with a 250-Watt custom designed metal halide gas pressure lamp, generating an unprecedented average intensity of 15,000 $\mu W/cm^2$ at a distance of 15 inches. The advanced ultraviolet energy, coupled with state-of-the-art electronics, makes it the standard against which all other Black Light systems will be measured. The ELC-251 adds a new dimension to the Black Light inspection environment, resulting in superior defect resolution. Producing a 45° beam, the visible light emitted is less than two-foot candles. The ultraviolet wavelength emitted is filtered to peak at a safe 365nm. An efficient air filtered cooling system assures years of trouble free operation, even in adverse environments.

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The ELC-251 is driven by the ELC-2541, lightweight (3.5 lbs.) switching electronic power supply, incorporating a stabilized power control; the lamp fluctuation is less than 1%. Intelligent electronics enables worldwide usage from 90V AC to 264V AC, 50-400Hz.

The ELC-251 is supplied with a 15-foot secondary cable, connecting the handheld light module to the power supply. Constructed of aerospace materials for rugged dependability and long life, this incredibly powerful inspection lamp weighs only 3 pounds. During operation the ELC-251 housing remains cool to the touch, and no heat guards are required.

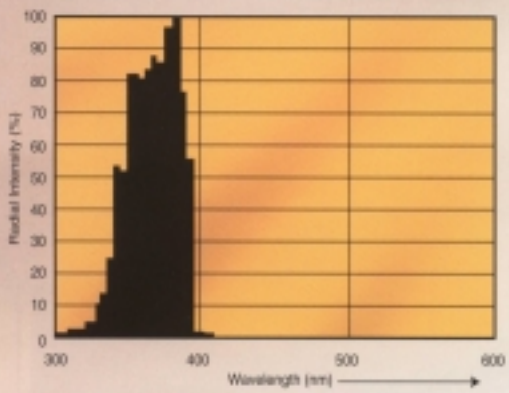
Inspection Applications

Since this powerful 250-Watt system is precision-engineered to produce the maximum ultraviolet light intensity, it is ideal for non-destructive testing (NDT) and quality assurance (QA) inspection. The ELC-251 will meet and exceed MIL-Spec for FPI and MPI. Other inspection applications include hydrocarbon detection, inspection of conformal coating, product cleanliness inspection, solder flux detection, leak detection, petroleum testing and mineralogy.

Ultraviolet Light Curing Applications

The 365nm wavelength produced by the ELC-251, coupled with its 250W lamp output, makes this system a highly efficient curing system for applications involving UV cured resins.

Filtered UV Spectral Distribution



Features & Benefits

- Meets Military and Commercial Specifications
- Compact, Portable, Lightweight, and Well Balanced
- Lightweight, solid-state Electronic Power Supply
- Low Visible Light Emission
- Air Filtered Cooling System
- Engineered for Longer Lamp Life

Specifications

Autoranging Input: 90V AC to 264V AC, 50-400 Hz,
Solid State Power Supply (specify line voltage when ordering)
Lamp Input Power: 250-Watts
Lamp: 250-Watt Metal Halide gas pressure
Lamp Life: 500 hours minimum
Lamp Emission Window: 3.75" x 6" (9.6cm x 15.4cm)
Warm-up Time: 2-3 minutes
Restrike Time: 1-2 minutes
Lamp Module Weight: 3 lbs. (1.4kg)
Power Supply Weight: 3.5 lbs. (1.6kg)
Lamp Module Cable: 15 ft. (450cm)

Accessories/Spare Parts

82216	UV replacement lamp
84003	Replacement fan filter (two per package)
82226	Replacement ELC-251 Lamp Module (common to all voltages)
82236	Replacement ELC-2541 100V power supply
82237	Replacement ELC-2541 117V power supply
82238	Replacement ELC-2541 220V power supply
82239	Replacement ELC-2541 240V power supply
83008	7 amp fuse (2 required)
82141	UVA-Shield UV Protective Eyeware with side shields (Fluorescence Inspection)
82134	UV/Visible light Protective Eyeware, Clip-On style (UV curing)
82138	UV/Visible light Protective Eyeware, Standard Frame (UV curing)
82140	Optilux 20/20, UV/Visible light Protective Eyeware with side shields (UV curing)

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