

Copiers and Scanners

Aperture & Reflector Lamps for Copiers & Scanners

Our lamps feature extremely high brightness and are ideally suited for office automation equipment such as copiers and scanners and manufacturing CCD camera vision inspection systems. Lamps have specially blended phosphor coatings to produce the required output in the visible to the ultraviolet range, as required by the equipment manufacturer.



Eraser Lamp

A copying machine, including a photosensitive drum; a corona charger; an exposure device for exposing the photosensitive drum to an optical image of an original; a developing unit for developing a toner image on the photosensitive drum; a transfer corona charger for transferring the developed toner image to copy paper; a device for mechanically separating the imaged copy paper from the photosensitive drum; and a system for cleaning the drum after the image transfer, which includes an eraser lamp disposed adjacent to the copy paper

delivery side of the transfer corona charger at a position for illuminating copy paper from the rear side upon image transfer, and a control unit for controlling the operation of the transfer corona charger and the eraser lamp; assures smooth separation of copy paper after image transfer and efficient transport of the paper.

LCDL Lighting manufactures standard and custom aperture and reflector lamps from the highest-quality materials for scanners, copiers, facsimile machines, [machine vision](#), sorting equipment for production lines and other imaging devices around the world.

Our reflector and aperture lamps are designed to control the direction of light and increase the intensity. The use of aperture lamps in scanning and other applications continues to multiply with increasing emphasis on greater precision.

In imaging devices such as scanners, copiers and facsimile machines, light from a linear fluorescent light is applied to an original "hard copy", and reflected light from the original is read as information. The fluorescent linear light source will need be replaced periodically since the quantity of light emitted from the light source is reduced over time.

T5, T8 and T12 Lamps – Technical and Performance Specifications

- Outside Diameter Range: T5 (15.9mm); T8 (25.4mm); T12 (38.1mm)
- Length: 4" – 96"
- Special: 97" – 120"
- Radius Bend: bends as tight as 6 mm radius (on glass centerline) to 25mm
- Shapes: "U", "C", "L", "S", "M" and multi-bend serpentine shapes
- Colors: Virtually any, as required and specified by the customer
- Aperture & Reflector Opening Angles: typically 15 – 180 deg.
- Technology: HCFL (6mm to 38mm) or CCFL (2mm to 8mm)
- Operating Lifetime: Thousands of hours for aperture lamps depending on driving current (amps)
- Operating Environment: Commercial, industrial, military and space environments (-55°C to +85°C with thermal management)
- Manufacturing Process: LCDL (LCD Lighting) proprietary

Custom Shapes

LCD Lighting can design custom shapes to meet any OEM design specifications.

Custom Colors

Readily available colors include: cool white, warm white, daylight, blue, green, red, and hundreds of tri-band (R-G-B) and multi-phosphor blends. We also provide ultraviolet and infrared phosphors. Colors can be blended to produce the precise desired spectral requirements in a wide range within the visible spectrum. Please visit our [High CRI](#) page for more information.



Harness Assemblies Available

We can work with OEMs to make connections for their specific applications. Please visit or [Lamp Sub-Assembly](#) page for more information about our value-added solutions.

Aperture & Reflector Options

Our apertures and reflectors can be tailor-made for OEM unique design needs. Customization includes:

- Diameters as small as 3mm, depending upon the design of the lamp.
- Apertures added to bent lamps.
- Standard phosphors can be blended for customization, matching your exact color requirements in a wide range within the visible spectrum. Standard colors include cool white, warm white, daylight, blue, green, red, ultraviolet, infrared, and tri-band.
- Custom etch and special end caps are available. [Ceramic end caps](#) improve appearance and make installation easier.

Please visit our [Aperture and Reflector](#) page for more information.