



**THE NEW LED 80 RING LIGHT REPRESENTS A NEW STANDARD** IN LED MICROSCOPE RING LIGHTS FROM TECHNIQUIP, AN INDUSTRY LEADER IN INNOVATIVE "MADE IN THE USA" PRODUCTS.

## NEW - THE LED 80 RING ILLUMINATOR



**Designed and manufactured to the exacting standards that have made TechniQuip an industry leader in microscopy ring lights, the LED 80 delivers powerful, microscope-quality white light from our highly-engineered LED array.**

Populated by eighty high-brightness white LED's, the LED 80 is divided into an inner and outer ring. Each ring contains four segments of ten LED's each. Each ring and LED segment can be independently boosted, dimmed, or turned on and off by the advanced LED controller. The LED controller is included with the LED 80. TechniQuip's advanced LED 80 controller offers PWM control for maximum color stability at all dimming levels. Designed to deliver consistent illuminance over wide range of working distances, the new energy-efficient LED 80 is ideal for a wide variety of microscope applications.

CNC-machined from a block of aluminum alloy 6061 T6, the sturdy housing of the LED 80 offers superior mass for thermal control. The machined housing is vented with slots to allow heat transfer from the multilayer printed circuit board into which the LED's are machine-mounted for precision placement. These engineering techniques result in optimal thermal management and outstanding optical performance in a rugged, attractive package. The TechniQuip LED 80 is ROHS compliant and shares a distinctive industrial design.

The LED 80 delivers the performance you expect from TechniQuip in a rugged, long life, compact ring light. Manufactured in TechniQuip's own Pleasanton, California factory, the LED 80 is backed by the great service and warranty that have made TechniQuip the first choice for OEM equipment, semiconductor fabs, machine vision, laboratories, and other "mission critical" applications.

# LED 80 RINGLIGHT PRODUCT FEATURES

360° shadow-free illumination	Built and tested in the USA
80 high brightness LEDs	Supplied with controller and universal power supply
6500° K CCT (approx). Other color temperatures available	At just over 4" diameter and just over 1" thickness the LED 80 offers the most compact profile on the market
Machined aluminum alloy housing for durability	The multi-function controller adjusts the intensity and controls 8 x 10 LED segments
Universal power 100-240VAC 50/60Hz	3 point soft tipped mount for secure mount. Can mount to larger diameter microscopes
Silent, no vibration operation	Standard model fits 1.25" - 2.6" (32-66mm) lenses
Energy Efficient: Maximum power consumption 18 watts	High Power: Provides illuminance equivalent to 150 watt halogen illuminator coupled to fiber optic ring light
The LED 80 works with entire line of TechniQuip's AN style microscope adapters	The LED 80 ring can be detached from its cable when a microscope needs to be moved
The LED 80 uses a standard HDMI cable, the most compact cable on the market for this application	Private labeling available upon request

## PHOTOMETRICS

Working Distance (inches)	TYPICAL ILLUMINANCE (Footcandles)			
	Flourescent Ring	LED 40 Ring	LED 80 Ring	150 watt Fiber Optic Ring
3.5	1020	4010	<b>4280</b>	10030
4.0	850	4030	<b>5300</b>	8230
4.5	700	3600	<b>5800</b>	6450
5.0	570	3120	<b>5700</b>	5400
5.5	500	2650	<b>5400</b>	4400
6.0	140	2190	<b>5010</b>	4020

The inner and outer rings of LEDs in the LED80 are set at different angles to create more uniform illumination across a wide range of working distances (total illuminance varies less than 10% when moving from a 4 inch working distance to a 6 inch working distance).

The LED80 is particularly well suited to applications where the working distance is between 3.5 and 7 inches.

*Application Note: Setting the working distance too close will result in a dark spot in the center of the field of illumination – as the working distance is increased this will be replaced by a bright spot until the field is evenly illuminated by all 80 LEDs – this point and beyond are the ideal working distances for even illumination. Shift the ringlight up and down on the microscope as necessary to obtain this result.*

## TECHNIQUIP CUSTOM SOLUTIONS IN LIGHT

TechniQuip engineers and manufactures precision lighting devices using LED, Fluorescent, Xenon, Metal Halide, and Halogen technologies. We offer a complete line of fiber optic cables and assemblies for transporting light. Our standard products can be seen online at [www.techniquip.com](http://www.techniquip.com). Most orders ship the same day and we guarantee all our products. Call or e-mail us today at 888-414-0789 or [blue@techniquip.com](mailto:blue@techniquip.com).



*A proud tradition of sales and service for more than 36 years.*