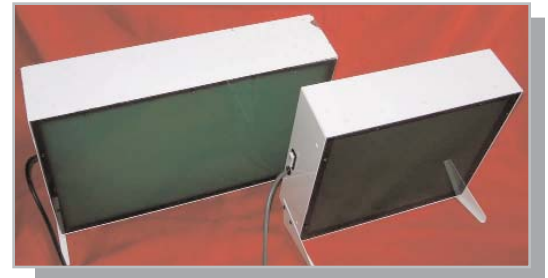




UNILAMP MS SERIES



Shown: UniLamp UL-30 and UL-16

A complete line of MONOCHROMATIC GREEN LAMPS, UNILAMPS are used for testing optical parts. Their light is highly visible in room light because of its color. And their low cost and long life make them practical to have at several plant inspection stations.

The purpose of the UNILAMP AND FLAT is to look at polished surfaces and observe their flatness, down to a very fine perfection. It is generally useful only on surfaces which are, or can be brought to a fairly good polish and are flat to better than .0005 inch per inch surface.

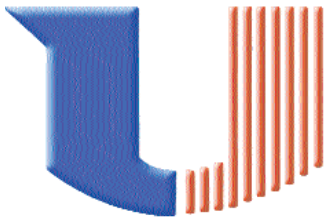
Using the UNILAMP AND FLAT consists of wiping the surface clean, placing the flat on top of the surface or vice versa, and illuminating it with the UNILAMP. The operator should look at the surface, with the lamp arranged so the reflection of the lamp is seen in the surface. In the surface will appear dark and light lines or fringes, in a pattern which

varies somewhat when the surfaces are pressed slightly from above. This pattern is the pattern of contours of the surface, like the contour map of the terrain. Perfect flatness can produce uniform brightness. Slight variation from flatness produces several fringes, which run along the contour of the specimen surface. Greater variation produces more fringes. The method is very sensitive because the height between fringes, on the specimen surface, is only 11 millionths of an inch. Therefore, a bump that is 50 millionths of an inch (half of a tenth) will show as four concentric rough circles. It takes 9 fringes to read one tenth of a thousandth of an inch. This number becomes an important unit of surface variation.

FIELDS OF USE FOR EACH SIZE UNILAMP

UL-6	For general testing and inspection, up to 4" diameter flats. For convenience on engineers' desks, demonstrations, and work in the field.
UL-12	For general testing and inspection up to 8" flats. For optimum combination of brightness, capacity and portability.
UL-16	For general testing and inspection, up to 12" flats. For convenient suspension above the work.
UL-30	For two operators, or for simultaneous comparison standards, to 12" flats. For suspension horizontally above the work.
UL-60	For very large optics, or many simultaneous optics, including comparisons. For wide-angle visibility, and across the room, or two operators. For demonstrations before technical groups.
UL-80	For illuminating a whole four-foot bench, in general inspection, three operators. For lot testing, comparison and standards. For suspension horizontally above the work

For more information or to place an order contact us via email info@universalphotonics.com or call 800.645.7173
UNIVERSAL PHOTONICS INCORPORATED • 495 WEST JOHN STREET • HICKSVILLE, NY 11801 • 516.935.4000



**UNIVERSAL
PHOTONICS**
INCORPORATED

UNILAMP MS SERIES

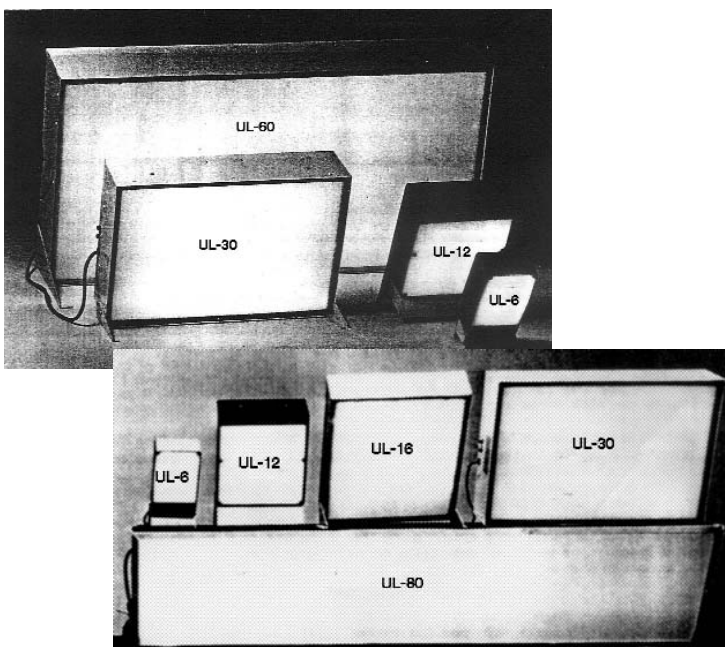
Each lamp contains two fluorescent bulbs without coating, except the smallest which has one U-shaped bulb. The window is two plastic sheets. One is a diffusing white. The other is transparent green, to pass only the green line, 5461A, of the mercury spectrum present. Each UNILAMP is provided with a three-wire cord and with tilting base or feet, to product about 25-degree tilt forward. The larger lamps may also be easily suspended by chains, above the work surface.



Shown: UniLamp UL-12 and UL-6

UNILAMP SPECIFICATIONS

	WATTS	WINDOW SIZE	BRIGHTNESS	VARIATION OVER USEFULL WINDOW	CASE SIZE	MATERIAL	WEIGHT
UL-6	6	3-1/2 x 5"	1.0	+ 1.3 db	2 x 3-1/2 x 6-1/4	Grey Plastic	2 lbs.
UL-12	12	7 x 7"	0.75	+ 0.55 db	3 x 7-1/2 x 8-1/2	Black Plastic	4 lbs.
UL-16	16	10-1/4 x 11-3/4"	0.64	+ 0.8 db	3-1/2 x 12-1/2 x 11	White Alumin.	4.5 lbs.
UL-30	30	11 x 17"	0.64	+ 0.7 db	3 x 19 x 12	White Alumin.	7 lbs.
UP-60	60	17 x 35"	0.47	+ 0.7 db	6 x 36 x 18	White Alumin.	19 lbs.
UL-80	80	11 x 47"	0.72	+ 0.8 db	9 x 12 x 48	White Alumin.	20.5 lbs.



OTHER USES OF UNILAMP

Instruments such as spectrometers and spectrographs can be easily calibrated, using the four visible and two invisible main lines from the source, with green filter removed. These lines, known to an accuracy of 1A, are as follows: Visible: violet 4046A, green 5461A, yellow 5790A. Ultraviolet: 3663A. Infrared: 7346A. Operators wear goggles. Fabry-Perot etalons can be illuminated using the green line, or other mercury line selected.

For more information or to place an order contact us via email info@universalphotonics.com or call 800.645.7173
UNIVERSAL PHOTONICS INCORPORATED • 495 WEST JOHN STREET • HICKSVILLE, NY 11801 • 516.935.4000