SPECTROLINE®

MAXIMA™ ML-3500 Series

Ultra-High Intensity UV-A Lamps

Feature state-of-the-art Micro Discharge Light (MDL) technology with user-friendly design!

- ✔ Produce up to 10 times the UV-A output of conventional HID inspection lamps
- ✔ ML-3500S spot configuration works even in direct sunlight, and has a steady-state intensity of 50,000 µW/cm^2 at 15"
- ✔ Environmentally friendly
- ✔ Virtually no emission of harmful UV-B at 15"
- ✔ Instant on
- ✔ Very low visible light emission of under 2 foot-candles (20 lux) to ensure compliance with military and aerospace industry specifications (ML-3500D and ML-3500FL versions)

ISO 9001:2000
CERTIFIED COMPANY

The only lamp that offers the widest choices to suit your specific application!

The MAXIMA ML-3500 Series Consists of:

- ML-3500S ultra-high intensity spot lamp
- ML-3500D diffused spot lamp
- ML-3500FL high-output flood lamp
- ML-3500C UV curing lamp
- 120V, 230V, 240V and 100V AC-operated lamps
- 12V DC portable lamp

MAXIMA™ ML-3500 Series

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Optimal efficiency

The MAXIMA ML-3500 series lamps employ Micro Discharge Light (MDL) technology. The ML-3500S spot configuration produces a steady-state UV-A intensity of 50,000 $\mu W/cm^2$ at 15" (38cm) — up to *10 times* the output of conventional High Intensity Discharge (HID) inspection lamps! Ideal for fluorescent leak detection and for applications where very high output UV is required.

Effective outdoors, even in sunlight

The ultra-high UV intensity of the MAXIMA ML-3500S lamp **exposes the smallest defects, cracks, flaws and leaks** that previously evaded detection until they become major problems. As a result, inspections are more comprehensive and accurate.

Ideal for Non-Destructive Testing

A flood (ML-3500FL) or diffusing filter (ML-3500D) configuration is recommended for fluorescent penetrant and magnetic particle inspections (FPI and MPI).

Integral bulb/reflector assembly

When replacing the bulb or filter in competitors' lamps, exposed wiring can be a serious shock hazard due to residual current. To eliminate this risk, the MAXIMA ML-3500 series lamps' bulb/reflector assembly is designed as a single integral unit with "unexposed" circuitry. The unique design also makes bulb replacement easy (a new bulb/reflector assembly can be installed with just a $^1/_4$ turn). This helps maintain the original output level by providing the benefit of a new reflector whenever the bulb is replaced.

Prefocused bulb

The bulb/reflector used in the MAXIMA ML-3500 series lamps is prefocused at the factory to ensure peak performance. This prevents the loss of output power that may occur due to incorrect, off-center bulb installation during bulb replacement.

Unique diffusing filter

Due to the ultra-high UV-A intensity of the MAXIMA ML-3500 series lamps, UV fade of fluorescent penetrants will occur within the "hot spot" of the ML-3500S focused beam configuration after prolonged exposure. The 2F350 diffusing filter, which comes with the ML-3500D lamp, will effectively diffuse the hot spot over a broader area and will significantly lengthen the time before UV fade occurs. A high output flood bulb configuration (ML-3500FL) is also available.

Resistant to magnetic fields

Interference from magnetic fields can shut off conventional HID lamps, causing frustrating warm-up delays before restart. The MAXIMA ML-3500 series lamps are not affected by magnetic fields and thus offer the advantage of a continuous, uninterrupted inspection process.

Safe handling

The MAXIMA ML-3500 series lamps never get hot. A special engineering polymer is used to make the lamp's housing and the contoured handle. In addition, the handle is positioned away from the housing. This allows the entire lamp to remain cool during use to protect against accidental burn injury.

Instant on/off/restrike

The last MAXIMA ML-3500 series lamps' solid-state ballast offers "instant on" capability. This eliminates the warm up and cool off waiting time (up to 5 minutes) of conventional HID lamps. The ballast also protects against voltage fluctuations that can affect the lamp's performance.

Environmentally friendly

The state-of-the-art MDL bulb used in the MAXIMA ML-3500 series contains *97% less mercury than is found in standard HID bulbs.*

Super rugged and shock resistant

The lamp head and housing are constructed of a tough engineering polymer to protect against dents, cracks and scratches. To reduce shock hazard, MAXIMA ML- 3500 series lamps come equipped with a 5-wire secondary cord and fully enclosed ballast.

Lightweight, portable, ergonomic design

The lamp head measures only $7^1/_2$ inches (19 cm) long and weighs just $2^1/_2$ lbs (1.1kg). The power cord exits directly from the bottom of the contoured pistol-grip handle, resulting in better balance. An on/off switch is conveniently positioned on the handle. The primary and secondary cords are both 8-feet (2.5 m) long.

Easy maintenance

Flexible, silicone-rubber filter holder can be removed easily without tools for bulb/reflector or filter replacement.

POWERFUL! SAFE! EASY TO USE!

BATTERY-OPERATED VERSION

Included:
CC-350 rugged carrying case
UVS-30 UV-absorbing glasses

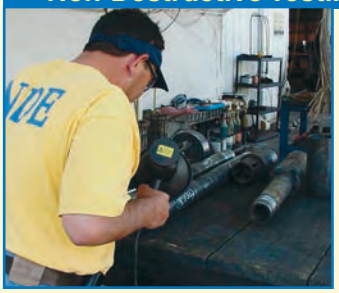
MAXIMA ML-3500MS, ML-3500MD, ML-3500MFL

— each includes a 12-volt, 7 amp/hr rechargeable battery that will operate the lamp for 2 full hours. The DC battery pack can be attached to the ballast housing, making it easy to transport. This version can also be AC operated via an interchangeable power cord. A battery recharger is included. 120V, 230V, 240V and 100V versions are available.

Also available:

Fully retractable flying reel with 35-foot cord for convenient on-line inspection; multi-position locking ratchet easily secures electrical cord at desired length.

Non-Destructive Testing and Quality Control



MAXIMA ML-3500 series lamps can be used in bright light to expose cracks and other defects. Photos: *Courtesy of Tech Service Products, Los Angeles, CA*

Fluorescent Leak Detection

High-performance MAXIMA ML-3500S can be used with fluorescent dyes on assembly lines to detect leaks in engine oil (gasoline/diesel), fuel (gasoline/diesel), ATF, power steering, coolant, hydraulic and air conditioning systems.

UV Curing

Crystal and glass being UV-adhesive bonded using MAXIMA ML-3500C.

Photo: *Courtesy of Slee Corporation, Chicago, IL*

Other Applications

Detecting Voids in Coatings • Entertainment/ Stage Lighting • Display Applications • Industrial Applications • Hydrocarbon Contamination Detection

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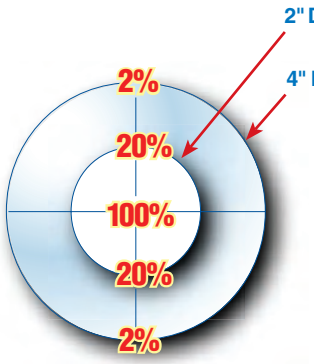
UV-A IRRADIANCE PROFILE OF MAXIMA ML-3500 SERIES LAMPS

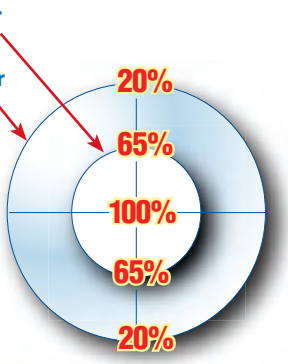


Model ML-3500S

Spot

Steady-state intensity
50,000 µW/cm^2 at 15 inches

• *For all applications, other than NDT*

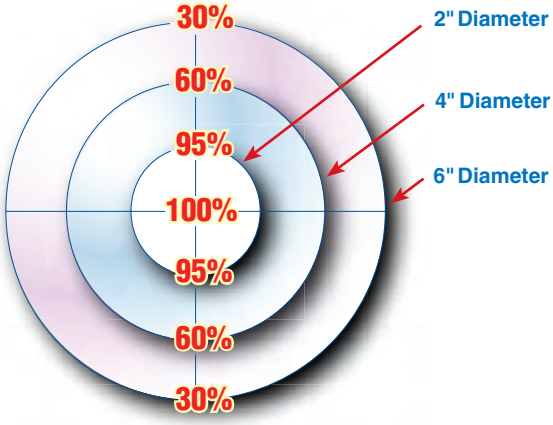


Model ML-3500D

Spot with diffusing filter (2F350)

Steady-state intensity
14,000 µW/cm^2 at 15 inches

• *Ideal for NDT applications*



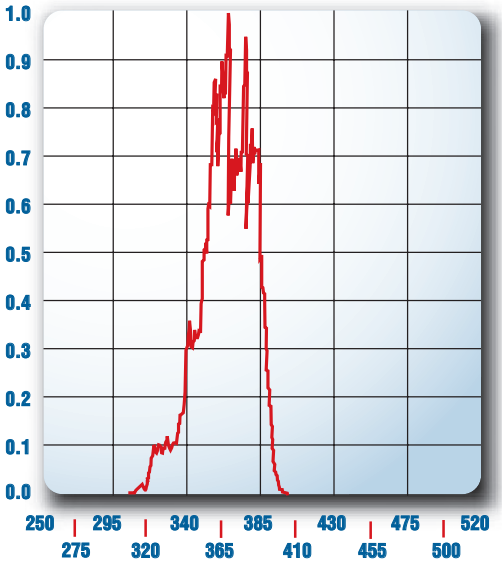
Model ML-3500FL

Flood

Steady-state intensity
4,500 µW/cm^2 at 15 inches

• *Ideal for NDT applications*

Normalized UV Irradiance



Wavelength (nm)

Virtually no emission of harmful UV-B (312nm) at 15 inches

Specifications

Steady-state UV-A intensity:

ML-3500S: 50,000 µW/cm^2 at 15" (38cm)
ML-3500D: 14,000 µW/cm^2 at 15" (38cm)
ML-3500FL: 4,500 µW/cm^2 at 15" (38cm)
ML-3500C: 90,000 µW/cm^2 at 15" (38cm) — for curing

Total weight:	6.1 lbs (2.8 kg)
Lamp head:	2.5 lbs (1.1 kg)
Ballast:	3.6 lbs (1.6 kg)
Cord length:	8 ft (2.4 m) primary, 8 ft secondary
Ballast type:	solid state
Bulb type:	micro discharge light (MDL)
Average rated life of bulb:	2,000 hours

Parts and service readily available.

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