

The Model LS-150-3CP shown above is a 350W, 150mm (6") diameter beam, highly collimated UV Lightsource System. Typical systems come configured with either a Regulated or an Intensitycontrolling Powersupply System, Digital Shutter Controller, UV Shield and Exhaust Module.

#### **Standard Features...**

- · Uniform Lightsource Systems
- · Highly Collimated Exposure Beams
- · High Output Mid and Deep UV versions
- · 150mm Diameter Beam
- · Power-adjustable Powersupply Systems
- Exposure Control from 0.1 sec. to 999.9 sec.
- · High Reliability, Low Maintenance Design
- · Operation /Maintenance Manual

#### **Optional Features...**

- · Square Beam Versions
- · Mid and Deep UV Versions
- · Wideband Near-to-Deep UV Versions
- Intensity-controlling Powersupply Systems
- · 200W to 2,000W Systems

#### **Typical Intensities...**

- 15 20 mW/cm<sup>2</sup> (365nm) at 200W
- 50 60 mW/cm<sup>2</sup> (405nm) at 200W
- 25 30 mW/cm<sup>2</sup> (365nm) at 350W
- 50 60 mW/cm<sup>2</sup> (405nm) at 350W
- 35 40 mW/cm<sup>2</sup> (365nm) at 500W
- 70 80 mW/cm<sup>2</sup> (405nm) at 500W

# **GENERAL INFORMATION...**

**Bachur & Associates** offers a line of cost effective, collimated Near UV, Mid UV and Deep UV Exposure Systems having exceptional uniformity and outstanding performance.

These systems are engineered to be used for high resolution patterning as well as for the enhancement of photolithographic processes employed by the Semiconductor and Microelectronics Industries. These exposure systems are designed for both production and R&D applications.

## Near, Mid and Deep UV

Systems are available with a variety of standard and optional features including round and square beams to 450mm (18"), intensity-controlling powersupply systems, and up to 3,500W capability.

## The Optical System...

The system's exposure optics employ a proven, high performance optic train that employs an elliptical reflector, dielectric heat removing primary and secondary mirrors, dual multi-element optical integrator elements and collimating optics. This type of optical integrator design produces non-coherent radiation that virtually eliminates the detrimental effects of diffraction.

### **Beam Uniformity...**

**Bachur & Associates offers several different versions of lightsource systems. Standard models deliver beam uniformity of better than +/- 5%.** 

Versions with greater uniformity are also available. The Output Spectrums...

### Systems are available with outputs in the Deep UV, Mid UV and Near UV spectrums. All systems are capable of producing substantial levels of intensity in all spectrums.

## **Applications Include...**

- · Very Fine Line Patterning
- · PCM Processes
- · Photoresist Stabilization
- · Edge Bead Exposure
- Process Enhancement
- · Image Reversal· Photo Etching



The Model LS-150-20C2 shown above is a 2,000W, 150mm (6") diameter beam UV Lightsource System.

Typical systems come configured with either a Regulated Power-adjustable or an optional intensity-controlling **Powersupply System, Digital Shutter Controller, UV Shield and Exhaust** Module.

### **Standard Features...**

- · Very Uniform Beam
- · Collimated Exposure Beams
- · High Output Mid and Deep UV versions
- · 150mm Diameter Beams
- Power-adjustable Powersupply Systems
- · Exposure Control from 0.1 sec. to 999.9 sec.
- · High Reliability, Low Maintenance Design
- · Operation/Maintenance Documentation

#### **Optional Features...**

- Square Beam Versions
- Mid and Deep UV Versions
- · Wideband Near-to-Deep UV Versions
- Intensity-controlling Powersupply Systems
- · 350W, 500W, 1,000W and 2,000W Systems

## **Typical Intensities...**

- 65 70 mW/cm<sup>2</sup> (365nm) at 1,000W
- 120 130 mW/cm<sup>2</sup> (405nm) at 1,000W
- 120 130 mW/cm<sup>2</sup> (365nm) at 2,000W
- 220 240 mW/cm<sup>2</sup> (405nm) at 2,000W

# **GENERAL INFORMATION...**

**Bachur & Associates** offers a line of cost effective, collimated Near UV, Mid UV and Deep UV Exposure Systems having exceptional uniformity and outstanding performance.

These systems are engineered to be used for high resolution patterning as well as for the enhancement of photolithographic processes employed by the Semiconductor and Microelectronics Industries. These exposure systems are designed for both production and R&D applications.

# Near, Mid and Deep UV

Systems are available with a variety of standard and optional features including round and square beam to 450mm (18"), intensity-controlling powersupply systems, and up to 3,500W capability.

### The Optical System...

The system's exposure optics employ a proven, high performance optic train that employs an elliptical reflector, dielectric heat removing primary and secondary mirrors, dual multi-element optical integrator elements and collimating optics. This type of optical integrator design produces non-coherent radiation that virtually eliminates the detrimental effects of diffraction.

### **Beam Uniformity...**

**Bachur & Associates offers several different versions** of lightsource systems. Standard models deliver beam uniformity of better than +/- 5%.

Versions with greater uniformity are also available.

# The Output Spectrums...

Systems are available with output spectrums in the Deep UV, Mid UV and Near UV. All systems are capable of producing substantial levels of intensity. **Applications Include...** 

- · Very Fine Line Patterning
- · PCM Processes
- Photoresist Curing and Stabilization
- · Edge Bead Exposur
- Image Reversal
- · Photo Etching



The Model LS-150S-20C2 shown above is a 2,000W, 150mm (6") square beam UV Lightsource System.

Typical systems come configured with either a Regulated or optional intensitycontrolling Powersupply System, Digital Shutter Controller, UV Shield and **Exhaust Module.** 

#### LS-150S Features...

- · Uniform Lightsource Systems
- Highly Collimated Exposure Beams
- · High Output Near UV Beam
- · 150mm x 150mm Beam
- · Laser-aligned Optical System
- · Power-adjustable Powersupply Systems
- · Exposure Control from 0.1 up to 999.9 sec.
- · High Reliability, Low Maintenance Design
- · Operation/Maintenance Documentation

#### **Optional Features...**

- · Round or Square Beam Versions
- Mid and Deep UV Versions
- · Wideband Near-to-Deep UV Versions
- · Intensity-controlling Powersupply Systems
- · 350W, 500W, 1,000W and 2,000W Systems

## **Typical Intensities...**

- 25 30 mW/cm<sup>2</sup> at 365nm (1,000W)
- 50 60 mW/cm<sup>2</sup> at 405nm (1,000W)
- 50 60 mW/cm<sup>2</sup> at 365nm (2,000W)
- 100 120 mW/cm<sup>2</sup> at 405nm (2,000W)

# **GENERAL INFORMATION...**

**Bachur & Associates** offers a line of cost effective, highly collimated Near UV, Mid UV and Deep UV Exposure Systems having exceptional uniformity and outstanding performance.

These systems are engineered to be used for high resolution patterning as well as for the enhancement of photolithographic processes employed by the Semiconductor and Microelectronics Industries. These exposure systems are designed for both production and R&D applications.

# Near, Mid and Deep UV

Systems are available with a variety of standard and optional features including round and square beam to 450mm (18"), intensity-controlling powersupply systems, and up to 3,500W capability.

### The Optical System...

The system's exposure optics employ a proven, high performance optic train that employs an elliptical reflector, dielectric heat removing primary and secondary mirrors, dual multi-element optical integrator elements and collimating optics. This type of optical integrator design produces non-coherent radiation that virtually eliminates the detrimental effects of diffraction.

#### **Beam Uniformity...**

**Bachur & Associates offers several different versions** of lightsource systems. Standard models deliver beam uniformity of better than +/- 5%.

Versions with greater uniformity are also available.

### The Output Spectrums...

Systems are available with outputs in the Deep UV, Mid UV and Near UV spectrums. All systems are capable of producing substantial levels of intensity in all spectrums.

## **Applications Include...**

- · Very Fine Line Patterning
- · PCM Processes
- · Photoresist Stabilization
- · Edge Bead Exposure
- · Image Reversal
- · Photo Etching



The Model LS-200FS-5C2 shown above is a 500W, 200mm (8") square beam, highly collimated UV Lightsource System. Typical systems come configured with either a Regulated or optional intensitycontrolling Powersupply System, Digital Shutter Controller, UV Shield and **Exhaust Module.** 

#### LS-200FS Features...

- · Uniform Lightsource Systems
- Highly Collimated Exposure Beams
- · High Output Near UV Beam
- · 200mm x 200mm Beam
- · Power-adjustable Powersupply Systems
- · Exposure Control from 0.1 up to 999.9 sec.
- · High Reliability, Low Maintenance Design
- · Operation/Maintenance Documentation

#### **Optional Features...**

- · Round or Square Beam Versions
- · Mid and Deep UV Versions
- · Wideband Near-to-Deep UV Versions
- · Intensity-controlling Powersupply Systems
- · 350W, 500W, 1,000W and 2,000W Systems

#### **Typical Intensities...**

- 13 17 mW/cm<sup>2</sup> at 365nm (500W)
- 25 35 mW/cm<sup>2</sup> at 405nm (500W)
- 25 30 mW/cm<sup>2</sup> at 365nm (1,000W)
- 50 60 mW/cm<sup>2</sup> at 405nm (1,000W)
- 45 55 mW/cm<sup>2</sup> at 365nm (2,000W)
- 90 100 mW/cm<sup>2</sup> at 405nm (2,000W)

## **GENERAL INFORMATION...**

**Bachur & Associates** offers a line of cost effective, highly collimated Near UV, Mid UV and Deep UV Exposure Systems having exceptional uniformity and outstanding performance.

These systems are engineered to be used for high resolution patterning as well as for the enhancement of photolithographic processes employed by the Semiconductor and Microelectronics Industries. These exposure systems are designed for both production and R&D applications.

# Near, Mid and Deep UV

Systems are available with a variety of standard and optional features including round and square beam to 450mm (18"), intensity-controlling powersupply systems, and up to 3,500W capability.

#### The Optical System...

The system's exposure optics employ a proven, high performance optic train that employs an elliptical reflector, dielectric heat removing primary and secondary mirrors, dual multi-element optical integrator elements and collimating optics. This type of optical integrator design produces non-coherent radiation that virtually eliminates the detrimental effects of diffraction.

#### **Beam Uniformity...**

**Bachur & Associates offers several different versions** of lightsource systems. Standard models deliver beam uniformity of better than +/- 5%.

Versions with greater uniformity are also available.

## The Output Spectrums...

Systems are available with outputs in the Deep UV, Mid UV and Near UV spectrums. All systems are capable of producing substantial levels of intensity in all spectrums.

## **Applications Include...**

- · Very Fine Line Patterning
- · PCM Processes
- · Photoresist Stabilization
- · Edge Bead Exposure
- · Image Reversal
- · Photo Etching



The Model LS-250S shown above is a 2,000W, 250mm x 250mm (10" x 10") square beam UV Lightsource System. Systems come configured with either a Regulated or an (optional) intensitycontrolling Powersupply System, Digital Shutter Controller, UV Shield and Exhaust Module.

#### LS-250S Features...

- · Uniform Lightsource Systems
- · Highly Collimated Exposure Beams
- · High Output Near UV versions
- · 250 x 250 Square Beam
- · Laser-aligned Optical System
- · Power-adjustable Powersupply Systems
- Exposure Control from 0.1 up to 999.9 sec.
- · High Reliability, Low Maintenance Design
- · Operation/Maintenance Documentation

#### **Optional Features...**

- · Round and Rectangular Beam Versions
- · Wideband UV Versions
- · Intensity-controlling Powersupply Systems
- . 1,000W, 2,000W and 3,500W Systems

## **Typical Intensities...**

- 13 16 mW/cm<sup>2</sup> (365nm) at 1,000W
- 25 30 mW/cm<sup>2</sup> (405nm) at 1,000W
- 25 30 mW/cm<sup>2</sup> (365nm) at 2,000W
- 50 100 mW/cm<sup>2</sup> (405nm) at 2,000W

## **GENERAL INFORMATION...**

**Bachur & Associates** offers a line of cost effective, collimated Near UV, Mid UV and Deep UV Exposure Systems having exceptional uniformity and outstanding performance.

These systems are engineered to be used for high resolution patterning as well as for the enhancement of photolithographic processes employed by the Semiconductor and Microelectronics Industries. These exposure systems are designed for both production and R&D applications.

# Near, Mid and Deep UV

Systems are available with a variety of standard and optional features including round and square beam to 450mm (18"), intensity-controlling powersupply systems, and up to 3,500W capability.

### The Optical System...

The system's exposure optics employ a proven, high performance optic train that employs an elliptical reflector, dielectric heat removing primary and secondary mirrors, dual multi-element optical integrator elements and collimating optics. This type of optical integrator design produces non-coherent radiation that virtually eliminates the detrimental effects of diffraction.

#### **Beam Uniformity...**

**Bachur & Associates offers several different versions of lightsource systems. Standard models deliver beam uniformity of better than +/- 5%.** 

Versions with greater uniformity are also available. The Output Spectrums...

Systems are available with outputs in the Deep UV, Mid UV and Near UV spectrums. All systems are capable of producing substantial levels of intensity in all spectrums.

## **Applications Include...**

- · Very Fine Line Patterning
- · Photoresist Stabilization
- · Edge Bead Exposure
- · Photoresist Modification
- · Process Enhancement
- · Image Reversal· Photo Etching