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Oriel-Flood Exposure- Standard Operating Procedure

Badger Name: K3 Flood Expose Oriel
Model: 8095
Location: Keller-Bay 3

Revision: 4
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1. **Description**

    1.1. The Oriel is a flood exposure system that produces a collimated and uniform beam of

    the UV light in the 350 - 450 nm region of the spectrum and is ideal for exposure of

    many photoresists. Most of the undesired light is filtered by internal optics.

2. **Safety**

    2.1. Avoid exposure to the direct, reflected or diffused UV light from the lamp.

    2.2. Wear UV glasses when the lamp is ON.

    2.3. Do not touch the lamp.

3. **Restrictions/Requirements**

    3.1. The volts/amperes cannot be adjusted.

4. **Setup**

    4.1. Check to see that the lamp is on by flipping the shutter toggle switch to OPEN.

    4.2. The lamp stays ON; the shutters for the lamp open and close exposing the sample to UV

    light. If the lamp is not on, press the black START button and wait 30 minutes for the

    bulb to warm before continuing.

    4.3. The lamp current can be read either in Volts or Amperes. Move the switch to the

    desired method.

5. **Operating Instructions**

    5.1. Remove the black movable screen and set it aside.

    5.2. Load the sample, centering it on the middle of the X-sign.

    5.3. Replace the moveable black screen.

    5.4. Flip the shutter toggle switch to OPEN and start timing the exposure.

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5.5. Flip the shutter toggle switch to CLOSE when exposure time is complete.

5.6. Remove the moveable black screen and remove the sample.

5.7. Replace the moveable black screen.

6. **Problems/Troubleshooting**

6.1. If the lamp does not turn on after restarting the lamp, it may need to be replaced.

6.2. Notify the process staff.