

# UV Lamps

## Standard Operating Procedure

Lab: Beckman 3724 & Beckmen 3710

Department:

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### Section 1: Overview

Type of SOP:  Process  Hazardous Material  Hazardous Class of Materials  Equipment

#### Synopsis:

This SOP describes proper use of UV lamps. Intelli-ray 400 (The long life 400 or 600-Watt metal halide type lamp and parabolic reflector illuminate an 8 x 6 inch curing area with evenly distributed 115mW/cm<sup>2</sup> (400W) or 175mW/cm<sup>2</sup> (600W) UVA light (320–390nm))



### Section 2: Risk Assessment Summary (Hazards and control measures)

#### Materials:

Material (name, CAS #, other ID)	Hazards
none	None
none	None

#### Relevant References for Material Hazards:

none

Hazardous Conditions:

Invisible UV light – 365 nm

- Reddening of the skin, blistering of the skin, first or second degree burns, darkening of the skin;
- Photokeratitis (welders flash) is inflammation of the cornea: symptoms include watery eyes and blurry vision, itchiness and pain;
- Photoconjunctivitis is inflammation of the membrane on the outside of the eye: symptoms include watery discharge and discomfort

Technique Hazards:

Personal Protective Equipment

*UV-blocking goggles, Gloves*

Engineering Controls

**Section 3: Procedures**

Handheld Lamps in Room 3724

1. Place your samples under the UV lamp
2. open it by pushing the green button on the back of the body
3. Place an aluminum foil around it to prevent hazardous effect to other users of the lab
4. When the UV light is on, you should be able to see blue or purple color light as well. After finishing the usage
5. Switch off the Lamp also by pushing the green button
6. Ensure that the light is never pointed at anyone's eyes.

Box UV Flood Lamp in Room 3710

1. Open the door and place the samples inside
2. The height of the mesh can be adjusted as needed
3. UV-blocking goggles are kept above the lamp – ensure that they have OD > 3 for 365nm and put them on. Close the door and ensure that aluminum foil is covering the edges of the door
4. Turn on the system by flicking the switch at the top and rear of the system
5. Wait 2 minutes for warm-up. Press 'mode'. Type the power level (50%-100%) press 'enter'. Type the exposure time and press 'enter'
6. Wait for the exposure to complete, then turn off the system by flicking the back switch
7. Samples can then be removed
8. Make sure that the goggles are returned to the top of the lamp.

**Section 4: Waste Disposal/Cleanup**

- All waste generated during centrifugation should be disposed of in a properly labeled container. For guidance on disposal procedures, see the “Waste Management” menu on the [DRS webpage](#).

### **Section 5: Emergency Response**

*Switch off the equipment immediately and seek help from doctors*

### **Section 6: Additional Information**

- *Resource: [http://www.uvm.edu/safety/lab/hazards-of-ultraviolet-radiation#Identify Hazards](http://www.uvm.edu/safety/lab/hazards-of-ultraviolet-radiation#Identify_Hazards)*