

## Risk Assessment Form for Class 3B and 4 Lasers

Class 3B and Class 4 lasers can cause serious eye injury if the beam is accidentally viewed either directly or by specular reflections. Diffuse reflections of a high-powered CLASS 4 laser beam can cause permanent eye damage. High-powered laser beams, CLASS 4, can burn exposed skin and ignite flammable materials. Laser equipment can pose hazards associated with high voltage. Proposed experiments must be risk assessed to determine the hazards and risks involved. Based on the risk assessment the safety measures and risk management must be adhered to as set out in the laser guidance document.

<b>S1</b>	<b>Assessor Name</b>	<b>Email:</b>	<b>Assessment Number</b>
<b>Department/Room</b>		<b>Tel:</b>	<b>Date of Assessment</b>

<b>S2</b>	<b>DESCRIPTION OF THE EXPERIMENT INVOLVING LASER(S)</b> Please provide a brief description of the experiment

<b>S3</b>	<b>LASER SPECIFICATIONS:</b>		
	<b>Laser 1</b>	<b>Laser 2</b>	<b>Laser 3</b>
<b>LASER CLASS 3B or 4</b>			
<b>Manufacturer</b>			
<b>Model</b>			
<b>Type of Emission CW or Pulsed</b>			
<b>Maximum Power (mW)</b>			
<b>Wavelength Range (nm or <math>\mu\text{m}</math>)</b>			
<b>Wavelength in Use (nm or <math>\mu\text{m}</math>)</b>			
<b>Beam shape (circular, square, ellipse)</b>			
<b>Diameter or dimensions (mm)</b>			
<b>Beam Divergence (milli-radians)</b>			

S4 Hazards, Risk, and Control Measures		
Hazards	Risk	Controls
	<input type="checkbox"/> HIGH <input type="checkbox"/> MED <input type="checkbox"/> LOW	
	<input type="checkbox"/> HIGH <input type="checkbox"/> MED <input type="checkbox"/> LOW	
	<input type="checkbox"/> HIGH <input type="checkbox"/> MED <input type="checkbox"/> LOW	
	<input type="checkbox"/> HIGH <input type="checkbox"/> MED <input type="checkbox"/> LOW	
	<input type="checkbox"/> HIGH <input type="checkbox"/> MED <input type="checkbox"/> LOW	
	<input type="checkbox"/> HIGH <input type="checkbox"/> MED <input type="checkbox"/> LOW	
	<input type="checkbox"/> HIGH <input type="checkbox"/> MED <input type="checkbox"/> LOW	

S5 PERSONS WHO MAY BE AT RISK		
	Name	Registered Laser User YES/NO
1		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
2		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
3		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
4		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
5		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A

S8 LASER SAFETY			
List the laser safety goggles intended to be used for, the type of emission D I R M, and the scale number stating the code LB for full or R for alignment protection.			
Manufacturer	Wavelength	DIRM	Scale No.

**EMERGENCY ACTION**

In event of an emergency it is important to understand the control measures listed below.

Fire	<ul style="list-style-type: none"> <li>✓ Switch off the power supply to the laser if it is safe to do so</li> <li>✓ Do not put yourself in danger</li> <li>✓ Activate the fire alarm</li> <li>✓ As long as it does not compromise your safety you can attempt to extinguish the fire with the appropriate equipment provided</li> <li>✓ Evacuate to an assembly point</li> </ul>
Laser Eye Injury	<ul style="list-style-type: none"> <li>✓ If an accident occurs seek help from a colleague/LSO.</li> <li>✓ Press the emergency button to disable laser systems</li> <li>✓ Call 3929, to request the emergency services</li> <li>✓ Even if you think your injury is very minor you should go to the Accident &amp; Emergency, Royal Victoria Eye and Ear Hospital, Adelaide Road Dublin 2. Telephone (+353) 1 6644600</li> </ul>

**ALL ACCIDENTS/INCIDENTS MUST BE REPORTED TO THE LASER SAFETY OFFICER, AND THE UNIVERSITY SAFETY OFFICER!**

**A list of trained first aiders is posted in the laboratory.**

**A list of emergency exits, fire extinguisher locations, eye wash location and assembly points are listed I the laboratory.**

**SIGNATURES**

<b>Responsible Person Signature</b>	<b>Date</b>
<b>Signature of Authorising Officer (Laser Safety Officer)</b>	<b>Date</b>