



Class 1	Does not emit harmful levels of radiation during normal operation.
	Typically: Visible radiation, Continuous Wave (CW) with power levels < 0.4 μW.
	None.
	None.
Class 1M	The maximum exposure duration limit for viewing is assumed to be no more than 30,000 seconds; in the IR region (> 0.7 μm)
	Does not emit harmful levels of radiation during normal operation unless viewed with optics.
	See above.
	Do not view directly with optical instruments.
	None.
Class 2	Two conditions exist that present a hazard when viewed through optics: 1) If a beam is diverging, and a lens is placed within 100mm of the aperture to focus the beam into the eye; 2) If a beam has a large diameter, and a lens is used to increase the amount of laser light entering the eye.
	Capable of creating eye damage through chronic exposure.
	Emits accessible laser light in the visible wavelength region (0.4 to 0.7 μm). Radiant power level emitted is above 0.4 μW but less than 1 mW.
	Do not stare into the beam.
Class 2M	None.
	Natural eye aversion response provides adequate protection.
	See above.
	Can exceed 1 mW if the beam is highly divergent or the beam diameter is large so only a small proportion of the light enters the eye.
	Do not stare into beam or view with optical instruments.
Class 3R	None.
	None.
	Considered safe for momentary viewing except in the case of optics.
	Invisible (< 0.4 μm and > 0.7 μm) and visible (0.4-0.7 μm) radiation emission. Restricted to 1-5 mW in power.
	CAUTION: Avoid direct eye exposure.
Class 3B	None.
	Presents a hazard if eye is focused and stable. Not a diffuse viewing hazard or fire hazard.
	Will cause injury upon direct viewing of the beam and specular reflections. Not normally a fire hazard or diffuse viewing hazard unless done under conditions of intentional staring within the diffuse hazard distance.
	Invisible emission: Restricted to 125 mJ per pulse and 5-500 mW CW in < 0.25 seconds. Visible emission: Restricted to 30 mJ per pulse and 5-500 mW CW in < 0.25 seconds.
	WARNING: Avoid exposure to beam.
Class 4	Specific controls must be in place to operate a Class 3B laser, including training for operators and laser safety eyewear use. Requirements may be reduced if the laser is enclosed.
	Hazardous to the eye and skin under any viewing conditions if viewing directly, specularly, or within the diffuse reflection safety distance. This laser class can also produce laser generated air contaminants (LGACs) and potentially hazardous laser plasma radiation.
	All lasers > 500 mW or 125 mJ per pulse in < 0.25 seconds.
	DANGER: Avoid eye or skin exposure to direct or scattered radiation.
	Specific controls must be in place to operate a Class 4 laser, including training for operators, laser safety eyewear, Standard Operating Procedures, and area warning devices. Requirements may be reduced if the laser is enclosed.