



Laser Safety - Classification according to IEC/EN 60825-1

Overview of the Risk Potential for Laser Safety Classes

Class	Safe Situation	Unsafe Situation
Class 1	Safe, even when looking into the beam for a long time, also safe when using optical instruments	XXX
Class 1 M	Safe, for viewing the beam directly with the naked eye	Viewing using optical instruments
Class 2	Safe for accidental viewing of the direct beam, even using optical instruments	Deliberately staring into the beam (longer than 0.25 seconds)
Class 2M	Safe for accidental viewing with the naked eye	Deliberately staring into the beam (longer than 0.25 seconds) or accidental viewing whilst using optical instruments
Class 3R	As Class 2 and 2 dependent on wave length for "brief" exposure.	As Class 2 and 1 dependent on wave length, slightly increased risk, particularly in the event of longer exposure (grey zone)
Class 3B	Viewing of diffuse reflection, exposure to the skin	Accidental exposure of the direct beam to the eyes
Class 4	Safe outside of the hazard area	Accidental exposure of the eyes or the skin due to direct or diffuse reflected exposure
As the potential hazard increases as the Class increases, higher classes do not include the "unsafe situations" of the lower classes, i.e. that which is "not safe" for Class 2, is also "not safe" for Class 4 and is therefore listed separately. On the other hand the safe situations for the higher classes can also be applied to the lower safety classes (that which is safe for Class 4, is also safe for Class 2).		

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