

**Control Measures for the Four Laser Classes**

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|  **Control Measure**  | **Classification**  |
| Administrative and procedural Controls  | **1**  | **2**  | **3a**  | **3b** | **4**  |
| Standard Operating Procedures (4.4.1)  | - | - | -  | • | ♦ |
| Output Emission Limitations (4.4.2)  | - | - | LSO Determination  |
| Education and Training (4.4.3)  | - | • | • | ♦ | ♦ |
| Authorized Personnel (4.4.4)  | - | - | -  | ♦ | ♦ |
| Alignment Procedures (4.4.5)  | - | ♦ | ♦ | ♦ | ♦ |
| Protective Equipment (4.6)  | - | - | -  | • | ♦ |
| Spectator (4.4.6)  | - | - | -  | • | ♦ |
| Service Personnel (4.4.7)  | Δ **MPE**  | Δ **MPE**  | Δ **MPE**  | ♦ | ♦ |
| Demonstration with General Public (4.5.1)  | **MPE~**  | ♦ | ♦ | ♦ | ♦ |
| Laser Optical Fiber Systems (4.5.2)  | **MPE**  | **MPE**  | **MPE**  | ♦ | ♦ |
| Laser Robotic Installations (4.5.3)  | - | - | -  | ♦ **NHZ**  | ♦ **NHZ**  |
| Eye Protection (4.6.2)  | - | - | -  | • **MPE**  | ♦ **MPE**  |
| Protective Windows (4.6.6)  | - | - | -  | • **NHZ**  | ♦ **NHZ**  |
| Protective Barriers and Curtains (4.6.4)  | - | - | -  | • | • |
| Skin Protection (4.6.6)  | - | - | -  | ♦ **MPE**  | ♦ **MPE**  |
| Other Protective Equipment (4.6.7)  | Use may be required  |
| Warning Signs and Labels (4.7) (Design Requirements)  | -  | •  | • | ♦  | ♦  |
| Service and Repairs (4.4.7)  | LSO Determination  |
| Modification and Laser Systems (4.1.2)  | LSO Determination  |

**♦- Shall**

**• - Should**

**- - No requirement**

Δ- **Shall if enclosed Class 3b or Class 4**

**MPE** - **Shall if MPE is exceeded**

**NHZ** - **Nominal Hazard Zone analysis required**

**~** - **Applicable only to UV and IR Lasers (4.5.1.2)**

Updated on 12/02/2015