

Annexure-A
Technical Specifications of
Laser diodes, Optical Filters and Laser Safety Eyewears

1. Laser diodes

Sr. No.	Specifications	Values and Remark
1	Central wavelength of Laser Diode	660 ± 10 nm
2	Colour of output light	Red
3	Connection	Bulkhead (wall mount) type FC Receptacle
4	Max. output power (after FC connected external optical fiber)	10 mw in the optical fiber of core diameter 9 µm and Numerical Aperture 0.11
5	In-built monitoring photodiode	Required
6	Operating temperature	+ 10 °C to +50 °C
7	Test report	The operating current, the threshold current, the monitor current at 10mW output power with 9/125 fiber

2. Optical Bandpass Filters

Sr. No.	Specifications	Values and Remark
1	Type of Optical Filter	Bandpass filter
2	Bandwidth of filter	10 ± 2 nm
3	Central wavelength of filter	Matching with the above laser diodes
4	Out-of-band blocking	1 x 10 ⁻⁴ avg. from X-ray to FIR
5	Mounting type	In anodized aluminium ring
6	Diameter of filter with mounting ring	12.5 mm + 0/-0.25 mm
7	Diameter of usable area of filter	9.0 mm or more
8	Surface quality	80-50 (Per MIL-PRF-13830B)

3. Laser Safety Eyewears

Sr. No.	Specifications	Values and Remark
1	Wavelength of laser to be blocked	650-670 nm
2	Power of the laser	20 mw
3	Type of goggle	Alignment type
4	Laser power after goggle	< 1mw for faint visibility of light
5	Material	Polycarbonate