

## Appendix A

### Technical Standards for Prescription Eyeglasses

Inspection Procedure	Tolerance	Testing Procedure
Surface Curvatures	+/- 0.50 D from request	Lens Gauge (clock)
Refractive Power (diopters) Sphere and Cylinder	0.00 +/- 0.06 Over 0.00 to 6.00 +/- 0.12 Over 6.12 to 12.00 +/- 0.18 Over 12.00 +/- 0.25	Power measured in principal meridian on a standard lens meter at the optical center as specified.
Cylinder Axis (diopters)	0.12 to 0.37 +/- 3degrees Over 0.37 to 1.00 +/- 2 degrees Over 1.00 +/- 1 degrees	Axis shall be determined in relation to the cutting or mounting line.
Optical Center Location and Prism Power	Vertical or Horizontal imbalance to not exceed +/- 0.25 prism diopters for each lens or +/- 0.50 prism diopters total	Lenses shall be measured at the specified reference point (optical center).
Multifocal Segment Power	Within +/- 0.12 diopter	Power measured on a standard lens meter.
Multifocal Segment Size	Within +/- 0.50 mm of the size specified. Pair must be symmetrical on visual inspection.	Segment to be measured on segment side of lens.
Multifocal Segment Height	Within +/- 0.50 mm of the height specified	Measured from the apex of the bevel to the highest portion of the segment on the convex side of the lens (relative to box measurement)
Surface Defects	No waves, pits, scratches, watermarks, grayness shall be acceptable	Lenses inspected by grazing incident light beam from clear 40 watt incandescent light bulb with lens 12 inches from the light source
Internal Imperfections	No bubbles, aberrations or striae	As above.
Impact Resistant Dress Eyewear Lenses	All dress impact resistant lenses must have an appropriate optical center thickness for the type material used in its manufacture.	It is recognized that current impact resistant glass lenses do not meet CSA impact resistance requirements. Consumers must be informed when a lens is dispensed that does not meet the standard.
Impact Resistant Occupational Protective Lenses	Tolerance for power, size, etc., shall meet minimum thickness edge or centre of 3.0 mm or less where allowed by CSA standard.	Shall meet the requirements of CSA Z94.3-92 (including safety trademark when indicated).
Warpage	Curves in the principle meridians of the mounted lens must be within +/- 0.50 diopter of the design specification of the lens.	Curves shall be measured with a lens gauge (clock)
Thickness	As specified within +/- 0.2 mm	Thickness Gauge (calipers).