- STANDARD AND BEST TOLERANCES -

for reference only as PFG constantly strives to exceed customer expectations
NOTE: “Best” tolerances are typically cost drivers and may require longer delivery times

Diameters
Standard: ±0.05 mm
Best: ±0.010 mm for thick edge parts (5+ mm), +0/-0.015 for thin edges (<5mm)

Center Thickness
Standard: ±0.1mm
Best: ±0.025 mm

Sags
Standard: ±0.05 mm
Best: ±0.010 mm

Clear Aperture (minimum)
Standard: 85%
Best: 0.5 mm or more from edge of finished lens

Radius (larger of the 2)
Standard: ±8 fringes of ±0.1% of radius
Best: ±1 fringe power or ±0.003 mm

Irregularity at 633nm
Standard: 0.5 fringe from test plate reading or interferometers
Best: 0.2 fringe reading from interferometer only – 0.1 fringe possible, dependent on geometry

Lens Centering (larger of the 2)
Standard: 0.01 mm ETD or 1 arc-minute deviation
Best: 0.003 mm ETD or 10 arc-seconds deviation

Wedge Prism
Standard: ±30 arc-seconds TIA
Best: ±10 arc-seconds TIA

Bevels
Standard: 0.5 mm max. face
Best: 0.25 mm max. face possible, dependent on geometry

Scratch-Dig
Standard: 60-40
Best: 10-5 possible, major cost driver

Surface Roughness
Standard: 15 Angstroms
Best: 5 Angstroms possible, dependent on material type and geometry