MaxMirror Common Specifications

Property	Value	Comment
Wavelength Range	350-1100 nm	*All specifications apply*
Wide Angle of Incidence Range	0-50°	Range over which Wide Angle Reflectivity specifications are met
Wide Angle Reflectivity	> 98.5%	For unpolarized light
	> 98.0%	For “s” polarization
	> 98.0%	For “p” polarization
Standard Angle of Incidence	45.0 ± 2.5° 0.0 ± 5.0°	Range over which Standard Reflectivity specifications are met
Standard Reflectivity	> 99.0%	For unpolarized light
	> 98.5% (> 99% typical)	For “s” polarization
	> 98.5% (> 99% typical)	For “p” polarization
Laser Damage Threshold	1 J/cm² @ 355 nm 2 J/cm² @ 532 nm 6 J/cm² @ 1064 nm	~ 10 ns pulse width.
Substrate Material	NBK7 or better	
Coating Type	“Hard” ion-beam-sputtered	
Clear Aperture	> 80% of Outer Diameter	
Outer Diameter	25.0 or 25.4 or 50.8 mm + 0.0 / − 0.25 mm	
Thickness	9.52 ± 0.25 mm	Nominally 3/8”
Mirror Side Surface Flatness	See table above	Measured at λ = 633 nm
Mirror Side Surface Quality	20-10 scratch-dig (standard grade) or 40-20 (S-grade)	Measured within clear aperture
Mirror Side Bevel	0.75 mm maximum	
Pulse Dispersion	The MaxMirror will not introduce appreciable pulse broadening for most laser pulses that are > 1 picosecond; however, pulse distortion is likely for significantly shorter laser pulses, including femtosecond pulses.	
Reliability and Durability	Ion-beam-sputtered, hard-coating technology with unrivaled filter life. MaxMirror ultra-broadband mirrors are rigorously tested and proven to MIL-STD-810F and MIL-C-48497A environmental standards.	