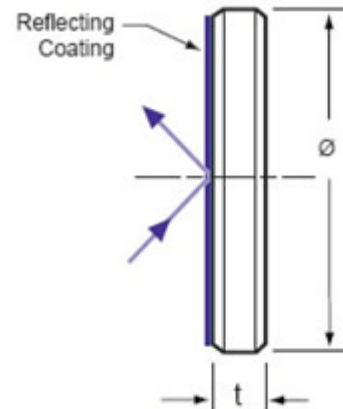


LASER-LINE MIRRORS

The laser mirrors are dielectric reflectors providing an optimised performance at stated wavelengths. The high polishing quality is important for low wave front distortion, low scattering and high damage threshold. All mirrors designed to work at 45 degrees.

Standard Specifications:

Optical Material:	BK7, Fused Silica
Dimension Tolerance:	+0.0,-0.15mm
Clear Aperture:	>90%
Angular Tolerance:	±30 arc minutes
Surface Quality:	20-10 scratch and dig
Wavefront Distortion:	$\lambda/10$ at 632.8nm
Rear Surface Quality	Commercial Polish
Bevel:	<0.25mm X 45



Coating Specifications:

Technology:	Electron Beam Multilayer Dielectric
Adhesion & Durability:	Per MIL-C-675A, Insoluble in lab solvent
Clear Aperture:	> 85% of diameter central
Damage Threshold:	5 J/cm ² , 8 nsec pulse, 1064nm typical
Angle of Incidence:	45 Degrees

Standard For Laser line Mirrors:

Wavelength(nm)	Laser Type	Reflectance % (s+p)/2	Product Number		
			D12.7x3mm	D25.4x6mm	D50.8x8mm
488-515	Ar+	>99.5	UQT-HLMB0101	UQT-HLMB0201	UQT-HLMB0301
527-532	YAG 2H	>99.5	UQT-HLMB0102	UQT-HLMB0202	UQT-HLMB0302
589	Dye	>99.5	UQT-HLMB0103	UQT-HLMB0203	UQT-HLMB0303
633-670	HeNe+Diode	>99.5	UQT-HLMB0104	UQT-HLMB0204	UQT-HLMB0304
780	Diode	>99.5	UQT-HLMB0105	UQT-HLMB0205	UQT-HLMB0305
760-840	Ti:Sa	>99	UQT-HLMB0106	UQT-HLMB0206	UQT-HLMB0306
852	Diode	>99.5	UQT-HLMB0107	UQT-HLMB0207	UQT-HLMB0307
1047-1064	YAG	>99.5	UQT-HLMB0108	UQT-HLMB0208	UQT-HLMB0308
1300-1320	YAG	>99.5	UQT-HLMB0109	UQT-HLMB0209	UQT-HLMB0309
1520-1570	Diode	>99.5	UQT-HLMB0110	UQT-HLMB0210	UQT-HLMB0310

Standard For Dual Laser line Mirrors:

Wavelength(nm)	Laser Type	Reflectance % (s+p)/2	Product Number		
			D12.7x3mm	D25.4x6mm	D50.8x8mm
532+1064	YAG 1H+2H	>99.5	UQT-DLMB0101	UQT-DLMB0201	UQT-DLMB0301
633+1064	YAG 1H+2H	>99.5	UQT-DLMB0102	UQT-DLMB0202	UQT-DLMB0302

Please Contact [ultiQuest](#) for other dimensions in prototype and production quantities.

NOTES!

- ➔ The coated surface of the mirror that rear surface is polished is indicated with an arrow on the side of substrate.
- ➔ Reflectance of laser line mirrors are different according to the polarization of input beams. S-polarization has the high reflectance and the wide reflective bandwidth compared with p-polarization. The reflectance in the specifications list is that of random polarization or $(p\text{-polarization reflectance} + s\text{-polarization reflectance}) / 2$.
- ➔ The reflectance curves are based on actual measurements and may be different with production lots.
- ➔ The surface flatness is the reflected wavefront distortion of the surface before coating.
- ➔ Be sure to wear laser safety goggles when checking optical path and adjusting optical axis.