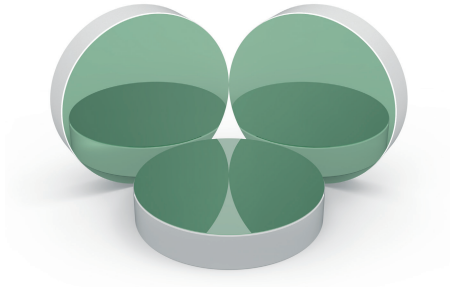
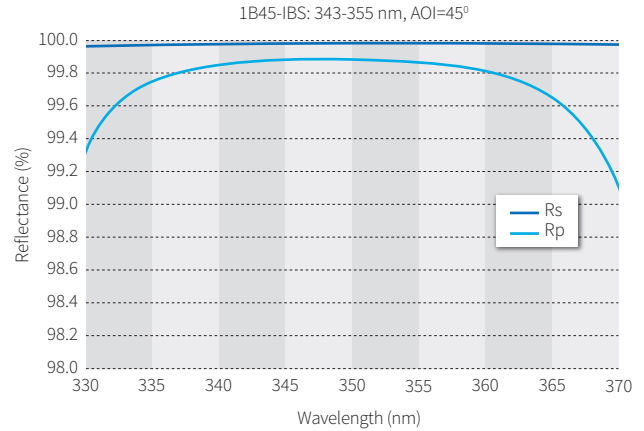


# Low Loss HR Mirrors



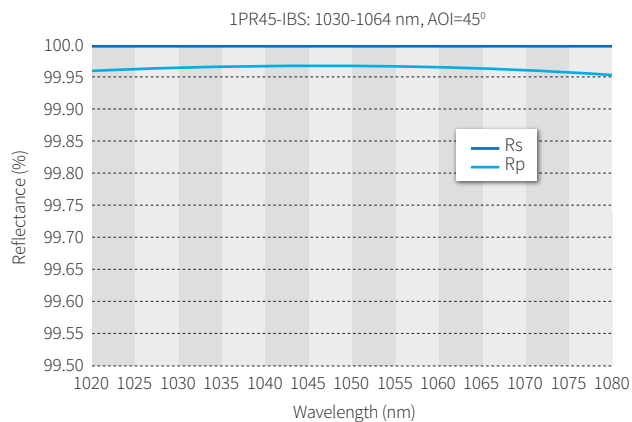
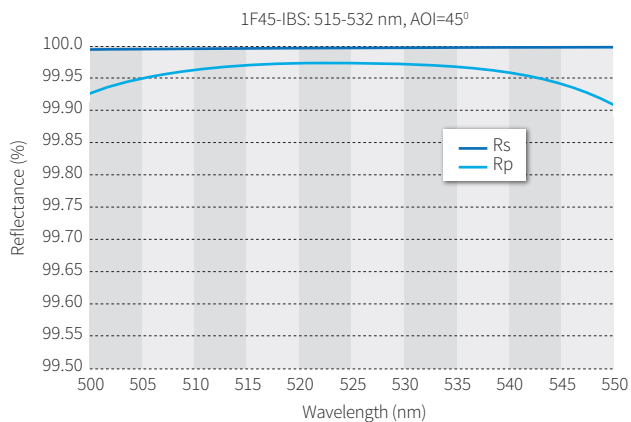
## Description

Low Loss HR mirrors are essential in laser systems where the lowest possible losses are required. Mirrors are manufactured with advanced sputtering technology reach extremely high-quality specifications. Such thin films feature higher density and durability than e-beam coatings, making them resistant to environmental conditions such as heat, humidity and pressure. Mirrors reach highest reflectance (>99.9%) in a certain wavelength range and angles of incidence (AOI). Furthermore, scattering is minimized which is usually a limiting factor for high reflectivity.



## Features

- Resistant to environmental conditions
- Wide-angle (AOI=0-50°) mirrors are available
- Mass production capabilities: >500 pcs of Ø25.4 mm substrates per single batch
- Reflectance higher than 99.9%
- Typical surface flatness, P-V:  $< \lambda/8$  @ 632.8 nm
- Laser damage threshold up to  $17 \text{ J/cm}^2$  @ 1064 nm, 10 ns, 10 Hz



### Typical items\*

Wavelength, nm	Reflectance, %	Substrate material	Dimensions, mm	Product ID for AOI=0°
515-532	>99.94	UVFS	Ø25.4x5	1-OS-2-0254-5-[1F00-IBS]
1030-1064	>99.95	UVFS	Ø25.4x5	1-OS-2-0254-5-[1PR00-IBS]
	<b>Reflectance s/p, %</b>			<b>Product ID for AOI=45°</b>
343-355	>99.9/>99.7	UVFS	Ø25.4x5	1-OS-2-0254-5-[1B45-IBS]
515-532	>99.97/>99.93	UVFS	Ø25.4x5	1-OS-2-0254-5-[1F45-IBS]
1030-1064	>99.97/>99.93	UVFS	Ø25.4x5	1-OS-2-0254-5-[1PR45-IBS]
				<b>Product ID for AOI=0°-45°</b>
355	>99.9/>99.6	UVFS	Ø12.7x6	1-OS-2-0127-6-[1B45-IBS]-0-45
1027-1033	>99.9/>99.8	UVFS	Ø25.4x6	1-OS-2-0254-6-[1P45-IBS]-0-45

\* Customized Low Loss HR Mirrors are available on request.

\*\* “p” stands for value of reflected p polarization at 45°, “s” stands for value of reflected s polarization beam at 45°.