

 **Concave Broadband Metallic Mirrors**
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Concave Broadband Metallic Mirrors

Concave mirrors are used for focusing, collecting, and imaging with no chromatic aberration. They can be used to manipulate laser beams or other broadband sources. $3\lambda/2$ surface accuracy ensures excellent image quality and small focused spots.

- Concave mirrors with no chromatic aberration
- UV, visible, and IR metallic coatings
- Effective focal lengths from 12.5 to 1000 mm
- Borofloat 33® substrates

[See All Features](#)


Compare	Model	Availability	Price
	05DC100AL.2 Concave Mirror, Broadband Metallic, 12.7 mm, 50 mm Focal Length, 250-600 nm	In Stock	\$148.05 USD
	05DC100ER.1 Concave Mirror, Broadband Metallic, 12.7 mm, 50 mm Focal Length, 450-700 nm	In Stock	\$137.55 USD
	05DC100ER.2 Concave Mirror, Broadband Metallic, 50 mm Focal Length, 480-20,000 nm	In Stock	\$173.25 USD
	05DC200AL.2 Concave Mirror, Broadband Metallic, 100 mm Focal Length, 250-600 nm	In Stock	\$148.05 USD
	05DC200ER.1 Concave Mirror, Broadband Metallic, 12.7 mm, 100 mm Focal Length, 450-700 nm	In Stock	\$137.55 USD
	05DC200ER.2 Concave Mirror, Broadband Metallic, 100 mm Focal Length, 480-20,000 nm	In Stock	\$173.25 USD
	05DC25AL.2 Concave Mirror, Broadband Metallic, 12.5 mm Focal Length, 250-600 nm	In Stock	\$169.05 USD
	05DC25ER.1 Concave Mirror, Broadband Metallic, 12.7 mm, 12.5 mm Focal Length, 450-700 nm	In Stock	\$158.55 USD
	05DC25ER.2 Concave Mirror, Broadband Metallic, 12.5 mm Focal Length, 480-20,000 nm	In Stock	\$222.60 USD
	05DC500AL.2 Concave Mirror, Broadband Metallic, 250 mm Focal Length, 250-600 nm	In Stock	\$154.35 USD

Notes:
[For flat broadband metallic mirrors, click here](#)

Specifications

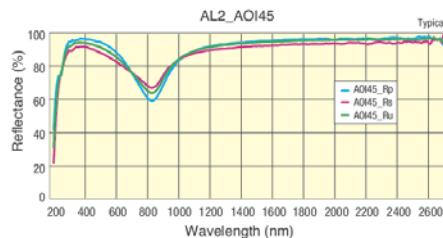
Mirror Shape	Concave	Thickness Tolerance	± 0.25 mm
Material	Borofloat® 33	Diameter Tolerance	+0/-0.13 mm
Angle of Incidence	0-15°	Clear Aperture	\geq central 80% of diameter
Surface Accuracy, Power	1.5λ @ 632.8 nm	Wedge	≤ 0.025 mm edge thickness variation
Surface Accuracy, Irregularity	$\lambda/4$ @ 632.8 nm	Chamfers	0.25-0.76 mm face width
Surface Quality	40-20 scratch-dig	Chamfers Angle Tolerance	$45^\circ \pm 15^\circ$
Back Surface	Fine ground	Cleaning	See How to Clean Optics

Concave Broadband Metallic Mirrors Features

Borofloat® 33 Substrates

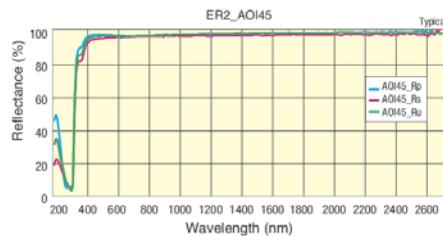
Borofloat 33 is a high quality borosilicate glass that offers low thermal expansion and high thermal shock resistance. Its material properties and moderate cost make Borofloat 33 an ideal substrate for general purpose applications. For more information, please see our Optical Materials technical note.

Enhanced Aluminum UV Coating



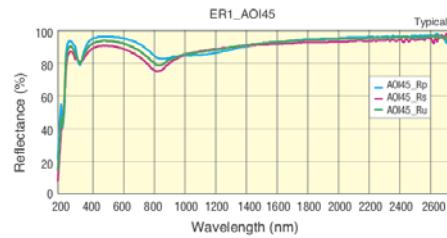
Our AL.2 UV enhanced aluminum coating is a durable, broadband UV reflector with average reflectivity greater than 90% from 250 – 600 nm. The aluminum film is overcoated with UV transparent magnesium fluoride to prevent oxidation of the metal.

Protected Silver VIS-IR Coating



Our ER.2 protected silver coating is composed of a low emissivity silver film fully encapsulated by a multilayer dielectric stack to prevent oxidation. This coating has excellent broadband reflectivity in the IR, while maintaining very good performance in the visible and near IR. Average reflectivity is greater than 96% from 480 – 1100 nm and greater than 98.5% from 1.1 – 20 µm. This silver mirror is a favorite for Ultrafast scientists who want an inexpensive option.

Enhanced Aluminum VIS-NIR Coating



Our ER.1 enhanced aluminum coating may be used wherever a broadband visible and near infrared reflector is needed. A multilayer dielectric stack deposited over the aluminum film boosts reflectance and improves the durability of the coating. Average reflectivity is greater than 93% from 450-700 nm.

Accessories

Mirror Mounts

Compare	Description	Drawings, CAD & Specs	Avail.	Price
	M05 Mirror Mount, 0.5 in., Keying Pin Holes, 2 Hex Actuators		Show	\$34.65 USD
	U50-A Mirror Mount, ULTIMA®, Clear Edge, 0.5 in., (3) 80-TPI Allen-Keys		5 Weeks	\$99.75 USD
	SU100-F2K Mirror Mount, Suprema®, 1.0 in, Two 100 TPI Locking Knob Actuators		In Stock	\$145.95 USD
	9807 Mirror Mount, Classic, Center, 1.0 in., 3 Knobs		In Stock	\$127.05 USD
	U200-A2K Mirror Mount, ULTIMA®, Clear Edge, 2.0 in., 2 Locking Knobs		In Stock	\$215.25 USD