Application Note

AN010: Coating Reflectivity

Introduction

AgilOptics provides a range of specialized coatings that can be applied to any of our deformable mirrors. This application note contains graphs of coating reflectivity data supplied by vendors or measured using a spectrophotometer.

Available Coatings

AgilOptics' typical coatings are listed below. Custom coatings, other than those listed in this document, can be added to any mirror. Contact AgilOptics for delivery and pricing.

Coating Types

- HR – High Reflectivity
- AR – Anti-Reflective

Wavelengths

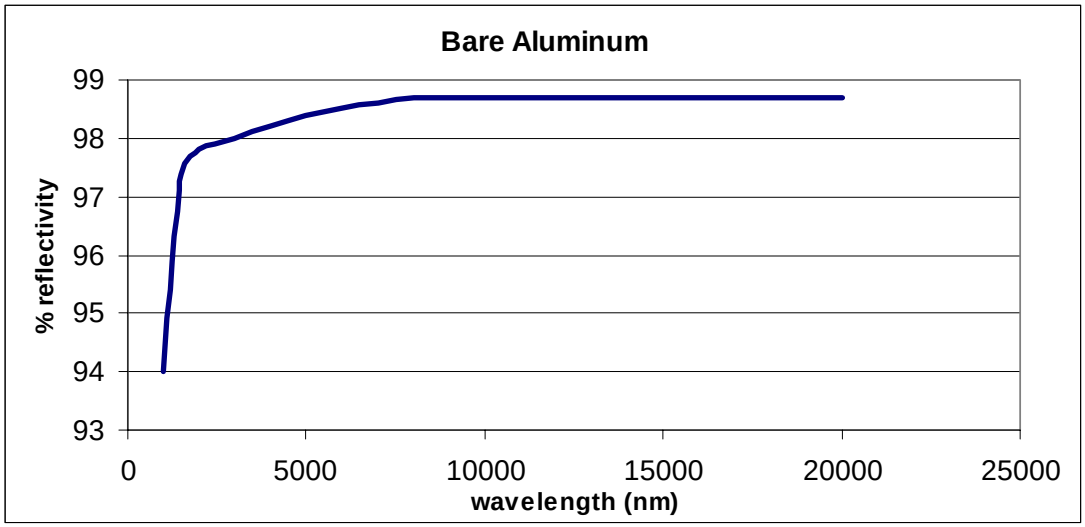
Multi-Wavelength Coatings

- Vis – Broad-band visible spectrum
- Al – Standard
- AgProt – Protected (Enhanced) Silver
- Au – Gold

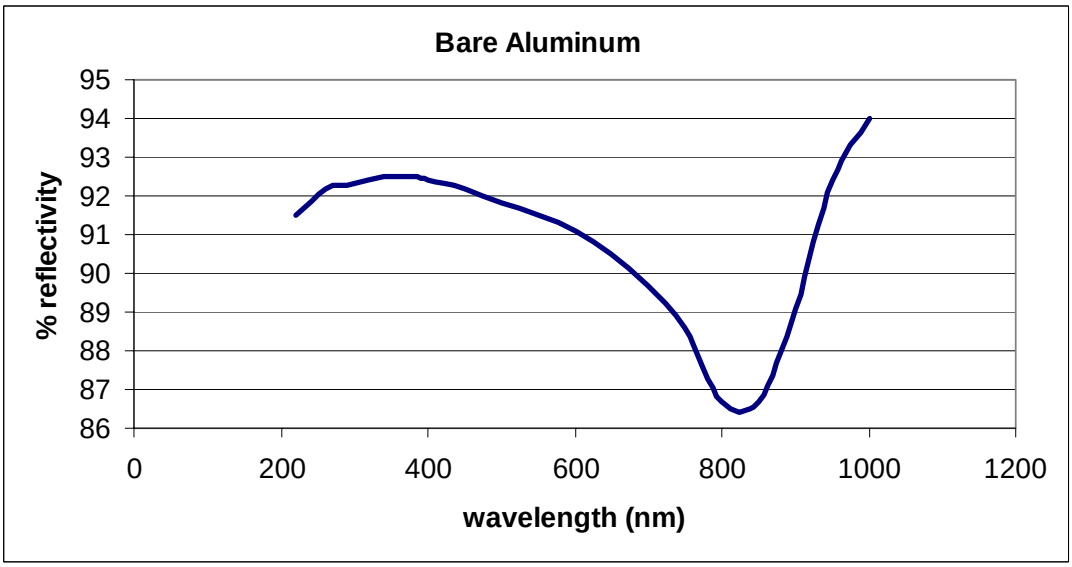
Single Wavelength Coatings

- 1315nm
- 1064nm
- 800nm
- 633nm
- 349nm
- 266nm

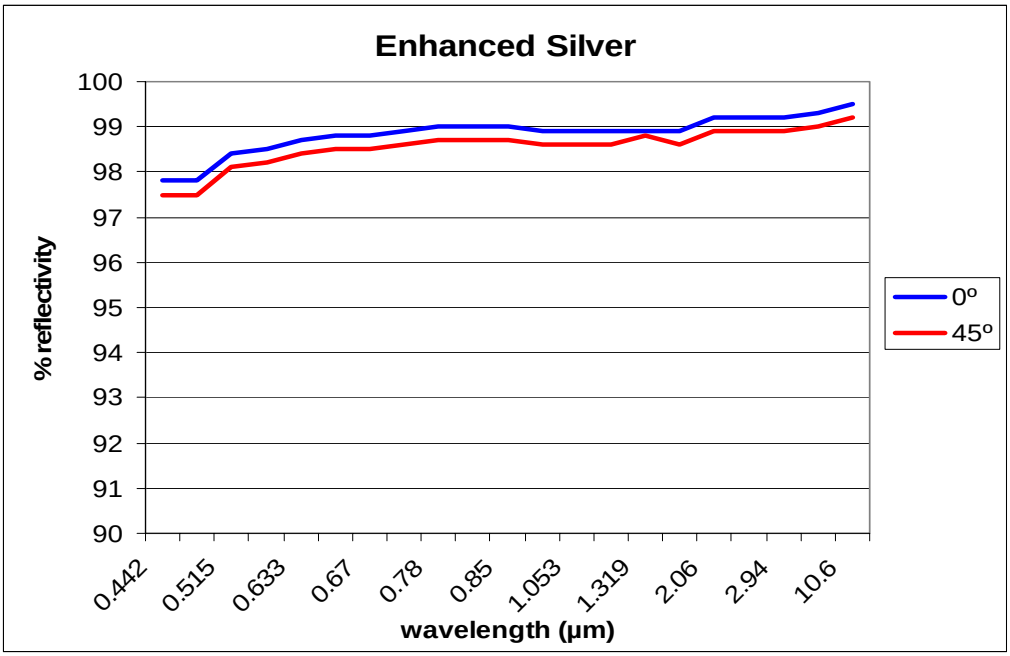
Reflectivity Data



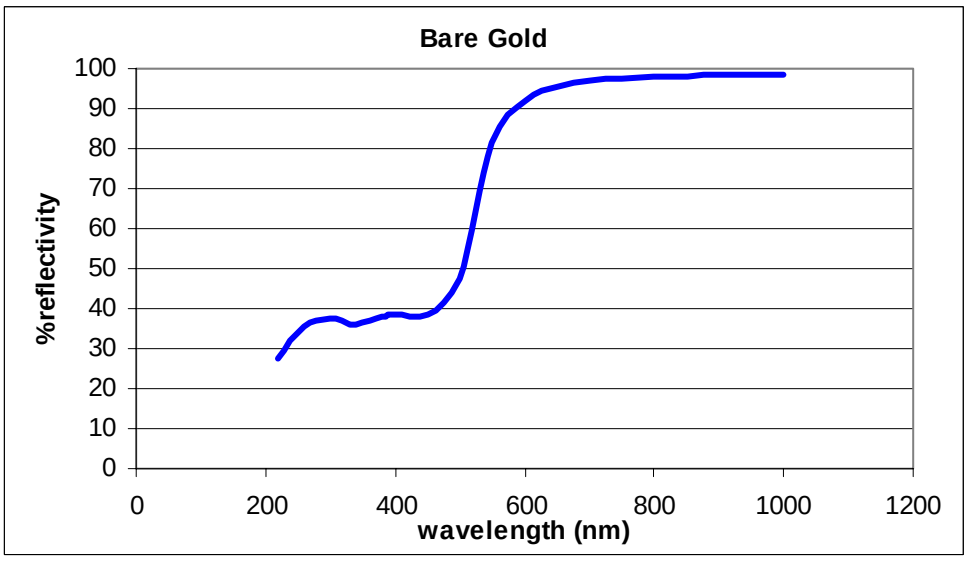
Graph 1



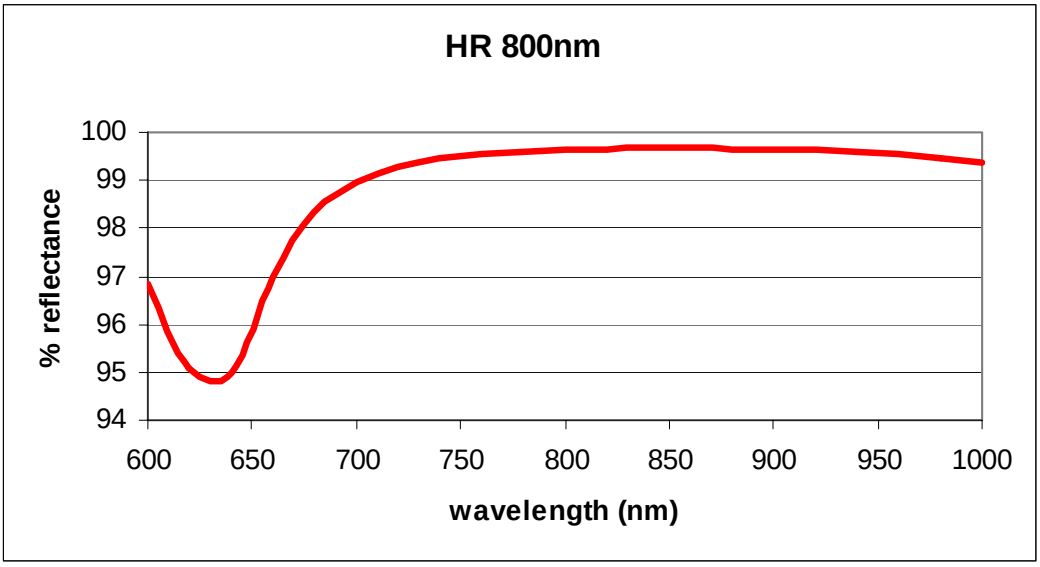
Graph 2



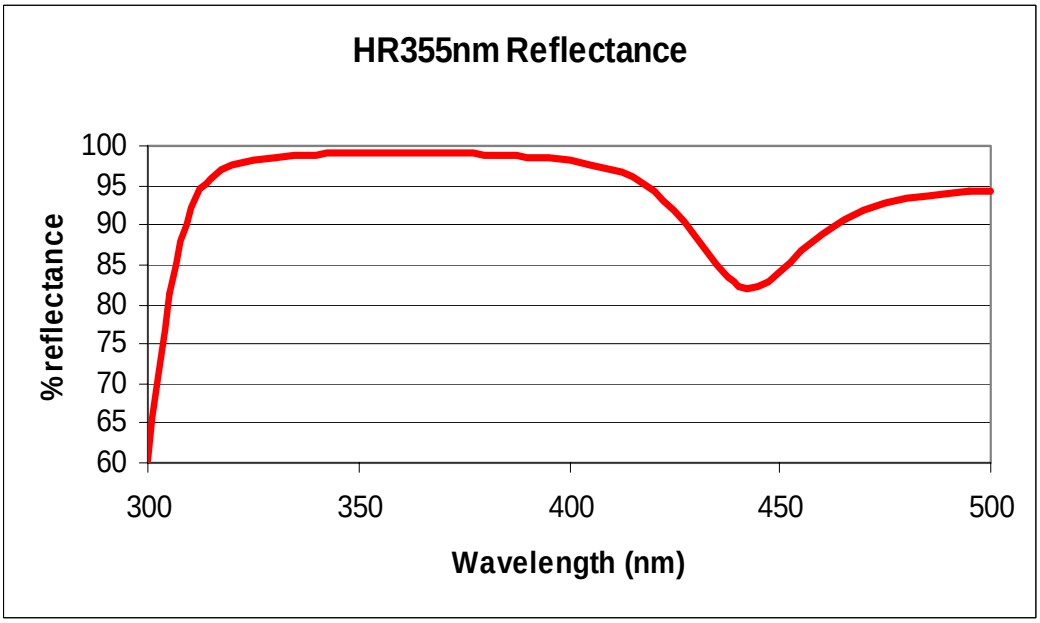
Graph 3



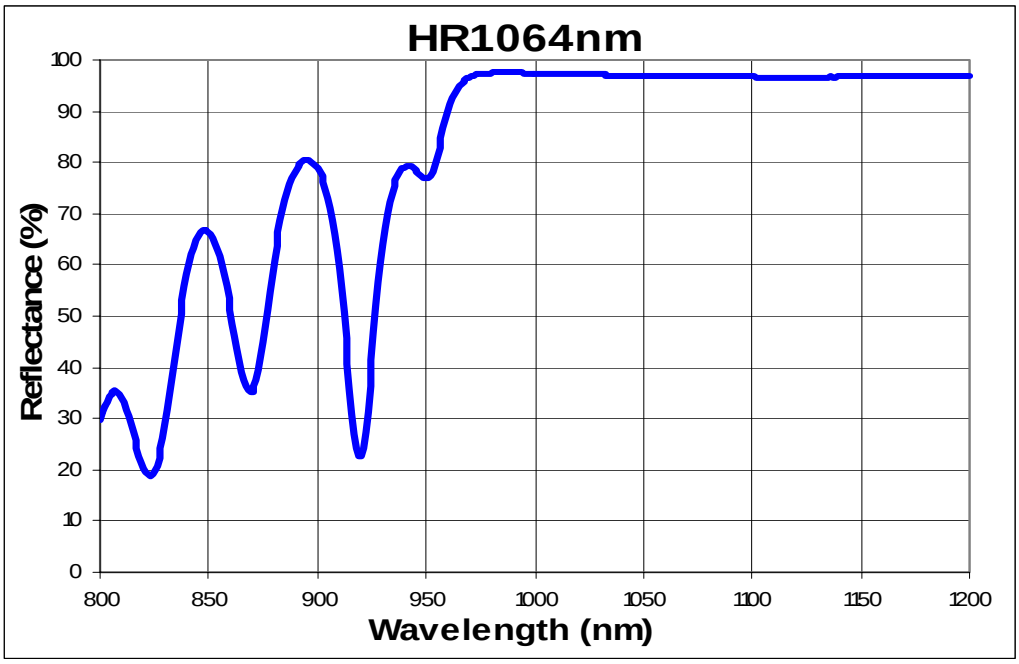
Graph 4



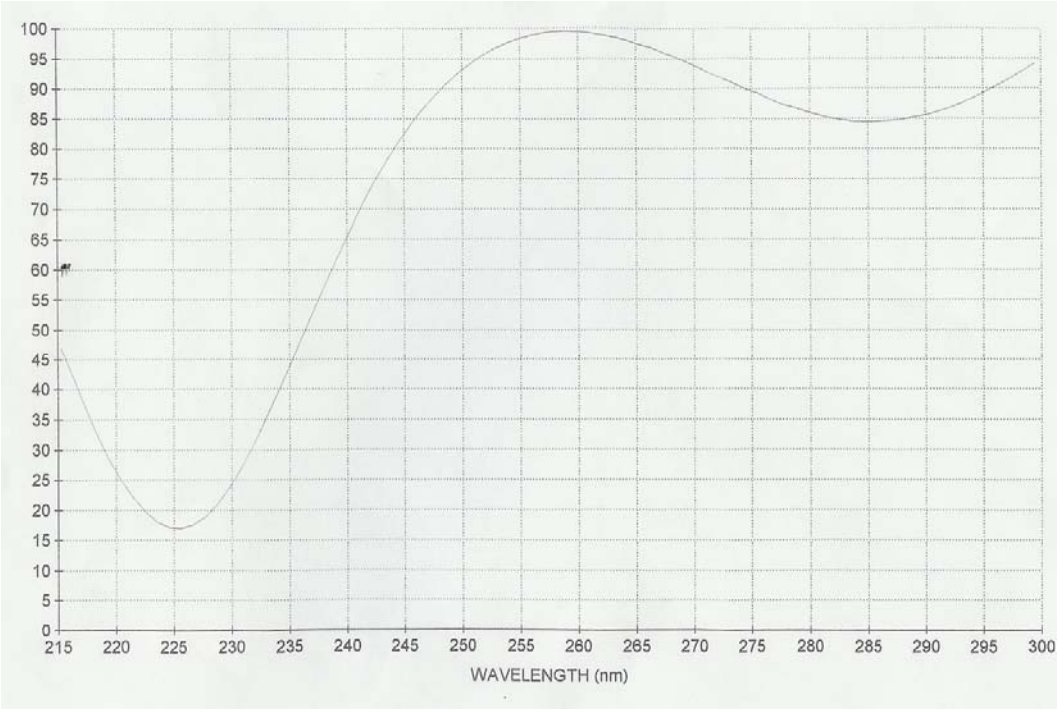
Graph 5 – HR800nm



Graph 6 – HR355nm



Graph 7 – HR1064nm



Graph 8 - HR 266nm

What Can Deformable Mirrors Do?

- Correct Optical Aberrations
- Laser Beam Shaping
- Optical Image Enhancement

Deformable mirrors are revolutionizing laser and optical systems by replacing static components with dynamic optics. Deformable mirrors (DM) are adaptive optics with dynamic faces able to optimize or change the characteristics of reflected light for a specific application. With time-varying control, a DM can focus a beam at several different points at different times or it can replace a lens in an optical system. Deformable Mirrors can improve optical images in telescopes, cameras, and other imaging systems.

For further information and discussion about how deformable mirrors work and how they will solve your optical problems see the manuals for HVDD, Clarifi, and the application notes available on the Web.

http://www.agiloptics.com/app_notes.htm

http://www.agiloptics.com/downloads.htm