

Calibration Plate

STANDARD SIZE TYPE

180 x 180 x 3 mm.
431 x 355 x 3 mm.
609 x 508 x 4.8 mm.
711 x 609 x 4.8 mm.
812 x 609 x 4.8 mm.

SIZE TOLERANCE

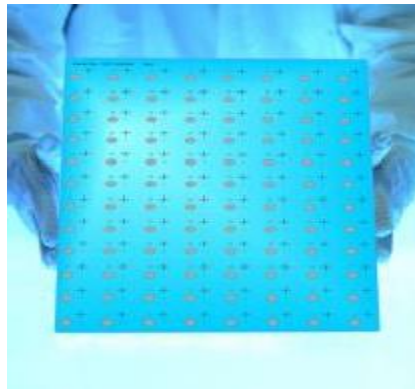
+/- 0.8 mm

THICKNESS TOLERANCE

+/- 0.1 mm

FLATNESS

180 x 180 : 10um (+/- 3um)
Etc. : 40um (+/- 3um)



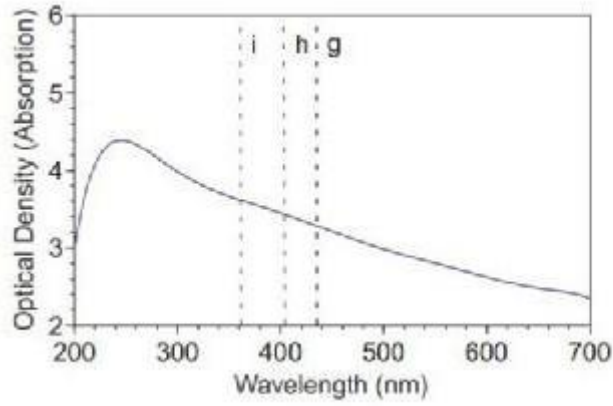
This is a precision machine calibration plate containing a series of dots placed very accurately in precise locations, whose position can be captured by camera or video and relayed back to the system drive to ensure that the machine guides/drives/rails are correctly calibrated for position. The dots are placed on a multiple of a 25mm grid, making it easy to calculate any discrepancies found after calibrating. Each grid will be supplied with then excel spreadsheet giving the positions, and the header of the grid has text markings allowing you to write your own references as required.

The dots are imaged in low reflective chrome pattern - or even a black chrome pattern - which is hard and durable and allows for regular cleaning of the plate. The grid is supplied with a measured calibration certificate that is traceable back to NIST standards. Each plate is individually marked with a serial number. Each plate will be supplied with a spreadsheet giving positions, tolerances and temperature co-efficient.

Specifications

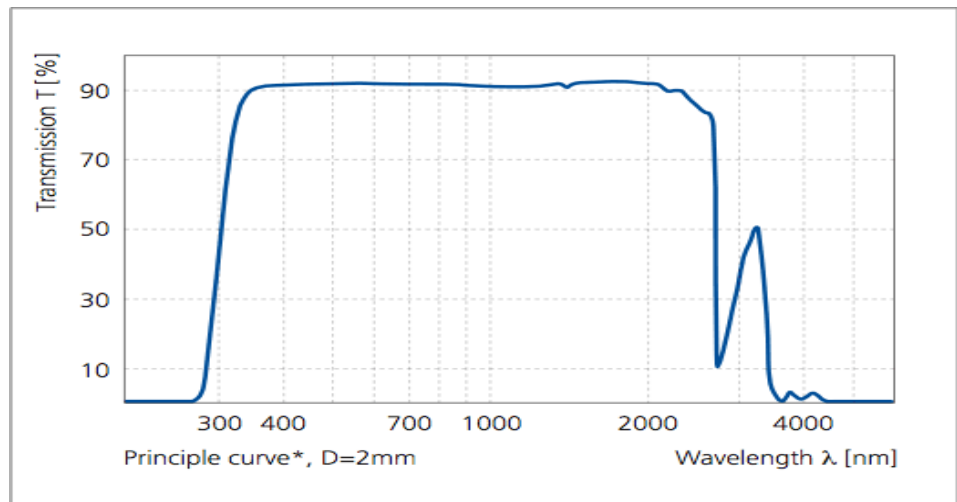
- **MATERIAL:** Soda Lime Glass
- **COATING:** Chrome Oxide 0.1um
- **REFLECTIVITY:** Low reflective 11% @ 436nm
- **DENSITY:** > OD3 @ 436 nm g-line
- **MIN CD:** 200um
- **RESOLUTION:** Class 3
- **POSITIONING:** +/- 1.0mm
- **ACCURACY:** = 0.8 + (L in MM * 0.005) um
- **PACKAGING:** Individual Plastic Case
- **DEFECT SPEC:** Standard in house

TRANSMISSION OF LIGHT THROUGH CHROME

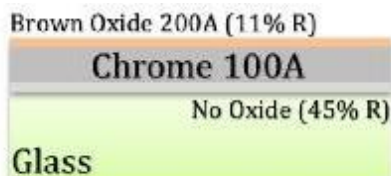
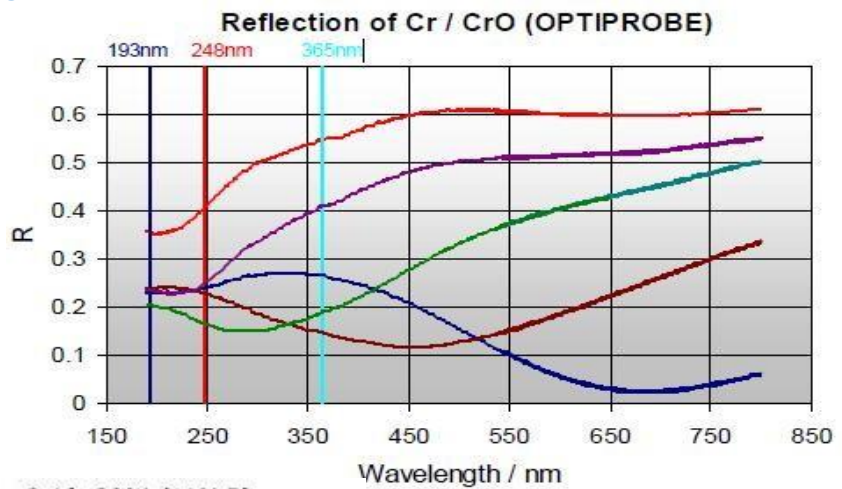


Optical Density 5 = 0.001% transmission
 Optical Density 4 = 0.01% transmission
 Optical Density 3 = 0.1% transmission

TRANSMISSION OF LIGHT THROUGH SODA LIME



REFLECTIVITY



Low Reflective Plate OD3

PATTERN

Each plate type has a pattern of 4 different targets, allowing for different resolution camera's to capture them at different zoom levels.

Target 1: Dot size, 10mm

Target 2: Dot size, 1mm

Target 3: Dot size, 0.2 mm

Target 4: Crosshair, 10mm with 0.2mm stroke width

