

## High Resolution Microscope Checker Board



High Resolution Microscope Checker Board, #37-540

Stock **#37-540** **1 In Stock**

⊖ 1 ⊕ **A\$3,008<sup>00</sup>**

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Volume Pricing	
Qty 1-4	<b>A\$3,008.00</b> each
Qty 5+	<b>A\$2,858.08</b> each
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### Product Downloads

### Physical & Mechanical Properties

**Dimensions (mm):**  
10 x 10 x 1

**Construction:**  
Stainless Steel, 75 x 25 x 1.5mm, microscope slide format

**Pattern:**  
Checkerboard 9.0 x 9.0mm<sup>2</sup> of 180 x 180 squares of 50 x 50μm<sup>2</sup> size

**Pattern Tolerance:**  
100nm/cm = 10<sup>-5</sup>

## Optical Properties

**Fused Silica** w/Chrome deposit      **Substrate:**

**Optical Density OD (Average):**  
OD>7 @ 400nm, 6 @ 550nm, 4.5 @ 750nm, 3.6 @ 1000nm

**Spectral Range:**  
200 - 2000nm

## Regulatory Compliance

**Compliant**      **RoHS 2015:**

**View**      **Certificate of Conformance:**

**Compliant**      **Reach 233:**

## Product Details

- Small Pattern Sizes - 100nm and 3300 lp/mm
- Composed using High-Precision E-Beam Lithography
- Negative Pattern Design

High Resolution Microscopy Slide Targets are designed using high-precision e-beam lithography. The patterns are etched on a 10 × 10mm<sup>2</sup> fused silica substrate with broad spectral transmission (DUV-VIS-NIR), on which a chromium layer of high optical density is applied. By removing the chromium layer, patterns are created in sizes down to 100nm. High Resolution Microscopy Slide Targets provide excellent dimensional stability and are mounted in a metal microscope slide holder. The negative patterns on each target allow the structures to be transparent, while the background is blocked by a chrome layer.

### High Res Microscopy USAF Target

High Res Microscopy USAF Targets easily determine the resolution limit of an objective in transmitted light and consists of 59 line patterns with 7.5 to 3300 lp/mm in horizontal and vertical alignment. This target also features 5 pinholes with diameters between 4.0-0.25µm, which allows for detailed characterization of micro-imaging optics.

### High Res Microscopy Star Target

High Res Microscopy Star Targets consist of 5 Siemens stars and show the peculiarity that the tapered segments in the center of the stars are precisely manufactured to a minimum width of 150nm. This target is ideal for the determining the resolution of microscope objectives with very high numerical apertures.

### High Res Microscopy Checker Board

High Res Microscopy Checker Board features a total size of 9.0 x 9.0mm<sup>2</sup> out of 50 x 50µm<sup>2</sup> squares. The checker board is ideal for testing of image skew and curvature, along with determining image quality due to the straight and sharp edges.