

Richardson Gratings™ 500 Grooves, 12.5 x 12.5mm, 560nm, Plane Ruled Reflection Grating

See More by [Richardson Gratings™](#)



Richardson Gratings™ High Precision Plane Ruled Reflective Diffraction Gratings



Stock **#37-122** 7 In Stock

-

1

+

£124⁰⁰

ADD TO CART

Volume Pricing	
Qty 1-9	£124.00 each
Qty 10-24	£111.60 each
Need More?	Request Quote

i Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Type:

Reflective Diffraction Grating

Master Reference:

1350	
Physical & Mechanical Properties	
12.5 x 12.5 ±0.1	Dimensions (mm):
	Clear Aperture (%):
>90	
Ruled Grating	Construction:
	Length (mm):
12.50	
6.00 ±0.5	Thickness (mm):
	Width (mm):
12.50	
Centering of Ruled Area on Substrate (mm):	
±1	
Alignment of Grooves to Edge (°):	
±0.15	
Groove Spacing Tolerance (%):	
<0.05	
Optical Properties	
Groove Density (grooves/mm):	
500	
Wavelength Range (nm):	
350 - 1200	
Blaze Wavelength (nm):	
560 ±25	
Blaze Angle (°):	
8	
Peak Efficiency, Typical (%):	
77	
Coating:	
Aluminium	
Substrate: ☐	
Float Glass	
Reflected Wavefront, RMS:	
λ/4	
Polarization:	
S and P	
Spectral Order (m):	
1	
Regulatory Compliance	
Certificate of Conformance:	
View	

Need different specs or modifications?

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Product Details

- Excellent Efficiency at Blaze Wavelength and Blaze Angle
- Superior Dimensional Tolerances
- Ideally Suited for Spectroscopic Applications
- Custom Sizes Available

Richardson Gratings™ High Precision Plane Ruled Reflective Diffraction Gratings are designed for consistent, predictable performance. The gratings are manufactured from highly accurate masters to provide a high level of repeatability to simplify OEM system designs by reducing the need for tedious alignment adjustments. With λ/4 reflected wavefronts and up to 90% diffraction efficiency, these gratings are specified to meet the needs of the most demanding applications such as high-resolution spectroscopy. Richardson Gratings™ High Precision Plane Ruled Reflective Diffraction Gratings feature bare aluminum coatings, allowing for options that range from 250 to 10,000nm with excellent peak efficiencies. Custom sizes available on request.

Note: The surface of these gratings is very sensitive and should never be touched when handling the optic. If cleaning is required to remove dust particles, non-contact cleaning using clean compressed air is recommended.

Technical Information



Special Handling

These optics require special handling to avoid damage and ensure long-term performance. Proper handling, cleaning, and storage are essential to maintain optical quality. Explore our [Optics Cleaning Resources](#) for step-by-step guides and best practices. For personalized assistance, [Email us](#) or [Chat](#) with our technical support team.



Component Handling Tools