

Richardson Gratings™ 1200 Grooves, 12.5 x 12.5mm, 400nm, Plane Ruled Reflection Grating

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Richardson Gratings™ High Precision Plane Ruled Reflective Diffraction Gratings



Stock **#37-125** **5 In Stock**

-

1

+

£124<sup>00</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-9        | £124.00 each                  |
| Qty 10-24      | £111.60 each                  |
| Need More?     | <a href="#">Request Quote</a> |

!

 Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Type:

Reflective Diffraction Grating

Master Reference:

| Physical & Mechanical Properties |                                            |
|----------------------------------|--------------------------------------------|
| 12.5 x 12.5 ±0.1                 | Dimensions (mm):                           |
| >90                              | Clear Aperture (%):                        |
| Ruled Grating                    | Construction:                              |
| 12.50                            | Length (mm):                               |
| 6.00 ±0.5                        | Thickness (mm):                            |
| 12.50                            | Width (mm):                                |
| ±1                               | Centering of Ruled Area on Substrate (mm): |
| ±0.15                            | Alignment of Grooves to Edge (°):          |
| <0.05                            | Groove Spacing Tolerance (%):              |
| Optical Properties               |                                            |
| 1200                             | Groove Density (grooves/mm):               |
| 200 - 1600                       | Wavelength Range (nm):                     |
| 400 ±25                          | Blaze Wavelength (nm):                     |
| 14                               | Blaze Angle (°):                           |
| 82                               | Peak Efficiency, Typical (%):              |
| Aluminium                        | Coating:                                   |
| Float Glass                      | Substrate: <input type="checkbox"/>        |
| λ/4                              | Reflected Wavefront, RMS:                  |
| Unpolarized                      | Polarization:                              |
| 1                                | Spectral Order (m):                        |
| Regulatory Compliance            |                                            |
| <a href="#">View</a>             | Certificate of Conformance:                |

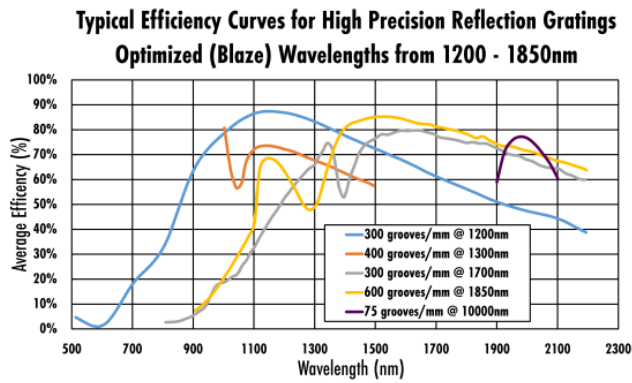
## Product Details

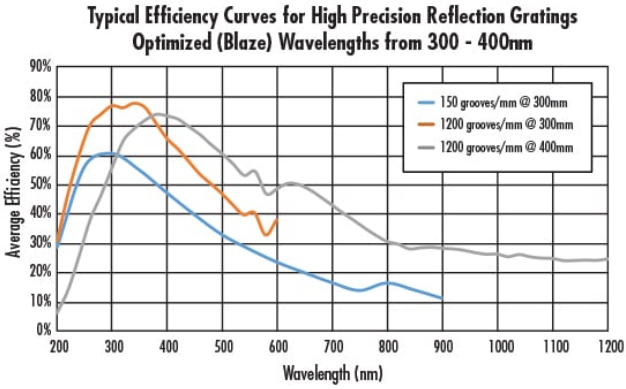
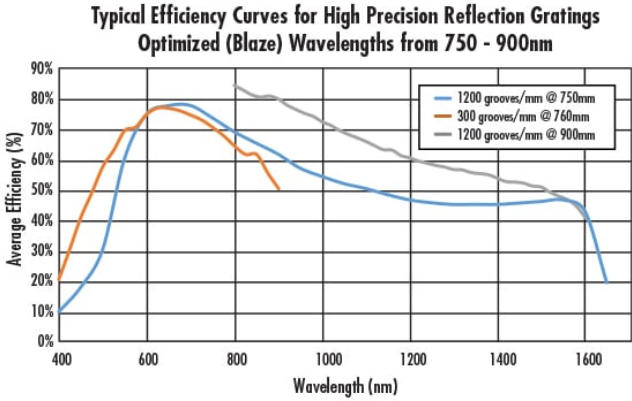
- Excellent Efficiency at Blaze Wavelength and Blaze Angle
- Superior Dimensional Tolerances
- Ideally Suited for Spectroscopic Applications
- Custom Sizes Available

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

## Custom

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](#).