

[See all 37 Products in Family](#)

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

See More by [Richardson Gratings™](#)



Richardson Gratings™ High Precision Plane Ruled Reflective Diffraction Gratings



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

-

1

+

C\$217<sup>00</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-9        | C\$217.00 each                |
| Qty 10-24      | C\$195.30 each                |
| Need More?     | <a href="#">Request Quote</a> |

Product Downloads

| General                        |                   |
|--------------------------------|-------------------|
| Reflective Diffraction Grating | Type:             |
| 1264                           | 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: |

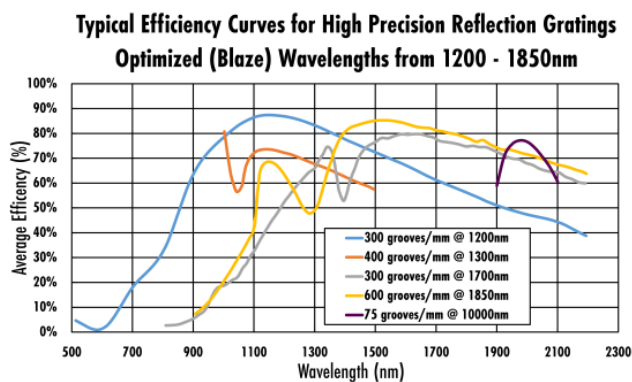
## Product Details

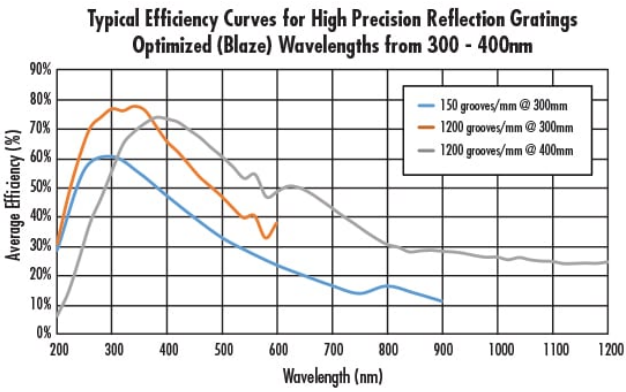
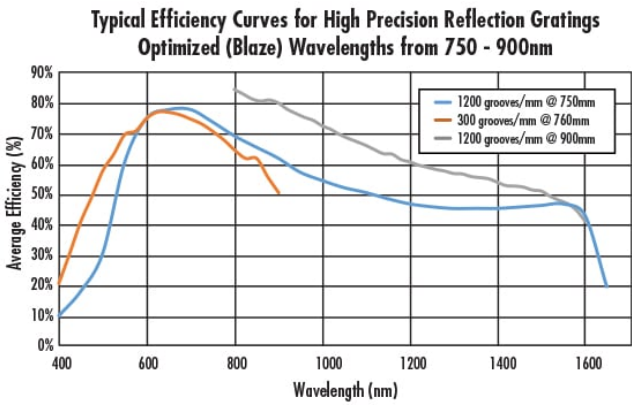
- Excellent Efficiency at Blaze Wavelength and Blaze Angle
- Superior Dimensional Tolerances
- Ideally Suited for Spectroscopic Applications
- Custom Sizes Available

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](#).