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# Richardson Gratings™ 150 Grooves, 12.5 x 12.5mm, 300nm, Plane Ruled Reflection Grating

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Richardson Gratings™ High Precision Plane Ruled Reflective Diffraction Gratings



Stock **#37-117** 4 In Stock

-

1

+

₹10,432

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| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1+         | ₹10,432 each                  |
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Product Downloads

General

Type:

Reflective Diffraction Grating

Master Reference:

1524

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 |                                     |
| 150                | Groove Density (grooves/mm):        |
|                    |                                     |
| 200 - 900          | Wavelength Range (nm):              |
|                    |                                     |
| 300 ±25            | Blaze Wavelength (nm):              |
|                    |                                     |
| 1.2                | Blaze Angle (°):                    |
|                    |                                     |
| 61                 | 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: |
|                                     |                             |
| United States                       | Country of Origin:          |
|                                     |                             |
| Edmund Optics India Private Limited | Imported By:                |
|                                     |                             |

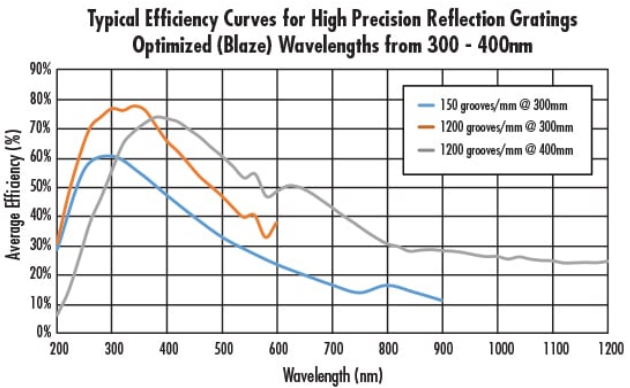
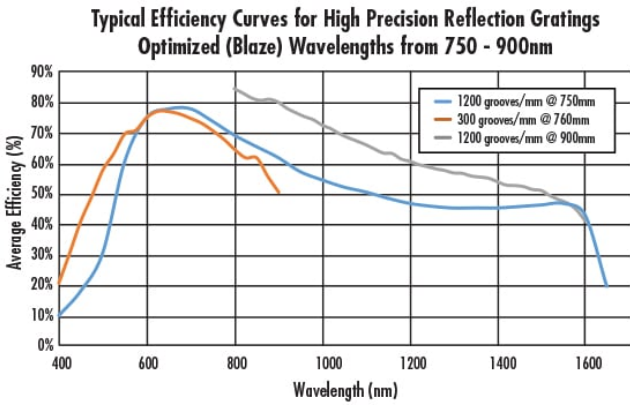
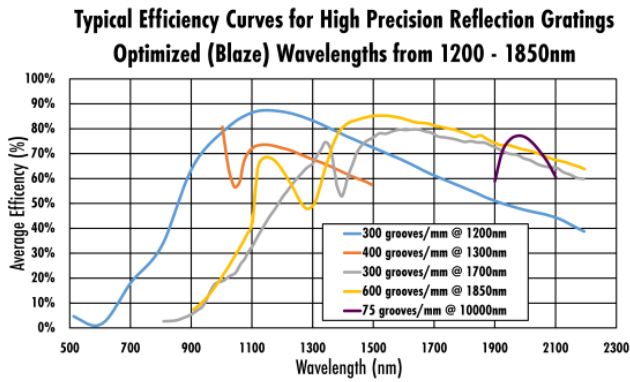
## Product Details

- 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](#).